PANDA EXPRESS ROUND ROCK

Water Pollution Abatement Plan Modification





July 25, 2024

Ms. Monica Reyes Texas Commission on Environmental Quality (TCEQ) Region 11 12100 Park 35 Circle, Bldg A, Rm 179 Austin, TX 78753

Re: Panda Express Round Rock Water Pollution Abatement Plan Modification

Dear Ms. Reyes:

Please find included herein the Panda Express Round Rock Water Pollution Abatement Plan Modification. This Water Pollution Abatement Plan Modification has been prepared in accordance with the regulations of the Texas Administrative Code (30 TAC 213) and current policies for development over the Edwards Aquifer Recharge Zone.

This Water Pollution Abatement Plan Modification applies to an approximate 1.04-acre site as identified by the project 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 (\$4,000) 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 Consulting Engineers, LLC

Mitchell

Shelly Mitchell, P.E. Vice President

Attachments



H:\Projects\515\06\01\301 Construction Documents\Documents\Reports\WPAP\Word\240718a1.docx

PANDA EXPRESS ROUND ROCK

Water Pollution Abatement Plan Modification



July 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 <u>30 TAC 213</u>.

Administrative Review

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

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

- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

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

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name:				2. Regulated Entity No.:					
3. Customer Name:					4. Customer No.:				
5. Project Type: (Please circle/check one)	New		Modification		Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Resider	ntial	Non-residentia			8. Sit	e (acres):		
9. Application Fee:			10. P	10. Permanent BMP(s):			s):		
11. SCS (Linear Ft.):			12. AST/UST (No. Tanks):			nks):			
13. County:			14. W	14. Watershed:					

Application Distribution

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

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

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

Austin Region				
County:	Hays	Travis	Williamson	
Original (1 req.)		_		
Region (1 req.)		_	_	
County(ies)		—		
Groundwater Conservation District(s)	Edwards Aquifer Authority Barton Springs/ Edwards Aquifer Hays Trinity Plum Creek	Barton Springs/ Edwards Aquifer	NA	
City(ies) Jurisdiction	Austin Buda Dripping Springs Kyle Mountain City San Marcos Wimberley Woodcreek	Austin Bee Cave Pflugerville Rollingwood Round Rock Sunset Valley West Lake Hills	Austin Cedar Park Florence Georgetown Jerrell Leander Liberty Hill Pflugerville ↓Round Rock	

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

TCEQ-20705 (Rev. 02-17-17)

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.

Print Name of Customer/Authorized Agent

Signature of Customer/Authorized Agent

07/26/2024 Date

**FOR TCEQ INTERNAL USE ONLY	**		
Date(s)Reviewed:	Date Ad	ministratively Complete:	
Received From:	Correct I	Number of Copies:	
Received By:	Distribu	tion Date:	
EAPP File Number:	Complex	к:	
Admin. Review(s) (No.):	No. AR I	Rounds:	
Delinquent Fees (Y/N):	Review 7	Time Spent:	
Lat./Long. Verified:	SOS Cus	stomer Verification:	
Agent Authorization Complete/Notarized (Y/N):	Fee	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):	Check:	Signed (Y/N):	
Core Data Form Incomplete Nos.:		Less than 90 days old (Y/N):	

GENERAL INFORMATION FORM (TCEQ-0587)

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: <u>Shelly Mitchell P.E.</u> Date: <u>07/26/2024</u>

Signature of Customer/Agent:

Shelly Mitchell

Project Information

- 1. Regulated Entity Name: Panda Express Round Rock
- 2. County: Williamson
- 3. Stream Basin: Brushy Creek
- 4. Groundwater Conservation District (If applicable): N/A
- 5. Edwards Aquifer Zone:



6. Plan Type:

\ge	WPAP
	SCS

Modification

TCEQ-0587 (Rev. 02-11-15)

	UST	Exception Request
7.	Customer (Applicant):	
	Contact Person: <u>Daren Nix</u> Entity: <u>RCP 620 Great Oaks, LP</u> Mailing Address: <u>106 E 6th St, Ste 900-178</u> City, State: <u>Austin, TX</u> Telephone: <u>(512) 537-4663</u> Email Address: <u>dnix@risecpre.com</u>	Zip: <u>78701</u> FAX:
8.	Agent/Representative (If any):	
	Contact Person: <u>Shelly Mitchell, P.E.</u> Entity: <u>Pape-Dawson Consulting Engineers, LLC</u> Mailing Address: <u>10801 N moPac Expy, Bldg 3 - Ste</u> City, State: <u>Austin, Texas</u> Telephone: <u>(512) 454-8711</u> Email Address: <u>smitchell@pape-dawson.com</u>	<u>200</u> Zip: <u>78759</u> FAX:
9.	Project Location:	
	 The project site is located inside the city limits of The project site is located outside the city limits jurisdiction) of <u>Round Rock</u>. The project site is not located within any city's 	s but inside the ETJ (extra-territorial
10.	The location of the project site is described below detail and clarity so that the TCEQ's Regional st boundaries for a field investigation.	
	From TCEQ's Office, take Park 35 Cir to I-35 Fro 275 Loop N for approximately 0.8 miles. Tu Merge onto TX-1 Loop N and travel north fo travel for 0.6 miles. Turn left onto S Great O 300 ft NE of the RM 620 and Great Oaks Dr	rn left onto W Parmer Ln for 1.2 miles. or 3.5 miles. Exit on O'Connor Dr and Daks Dr. The project site is located approx
11.	Attachment A – Road Map. A road map showi project site is attached. The project location an the map.	-
12.	Attachment B - USGS / Edwards Recharge Zone USGS Quadrangle Map (Scale: 1" = 2000') of the The map(s) clearly show:	• • • •
	Project site boundaries.	

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

- 13. The TCEQ must be able to inspect the project site or the application will be returned. Sufficient survey staking is provided on the project to allow TCEQ regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment.
 - \boxtimes Survey staking will be completed by this date: <u>12/15/2022</u>
- 14. Attachment C Project Description. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:
 - Area of the site Offsite areas Impervious cover Permanent BMP(s)
 - Richard Site use
 - Site history
 - Previous development
 - Area(s) to be demolished
- 15. Existing project site conditions are noted below:
 - Existing commercial site
 - Existing industrial site
 - Existing residential site
 - Existing paved and/or unpaved roads
 - Undeveloped (Cleared)
 - Undeveloped (Undisturbed/Uncleared)
 - Other: _____

Prohibited Activities

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

- 17. I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:
 - (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
 - (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and
 - (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

- For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
- A request for an exception to any substantive portion of the regulations related to the protection of water quality.
- A request for an extension to a previously approved plan.
- 19. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

TCEQ cashier

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

- 20. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 21. No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

ATTACHMENT A

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification





ATTACHMENT A Road Map

ATTACHMENT B

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification



· · -



USGS/EDWARDS RECHARGE ZONE MAP

ATTACHMENT C

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

Attachment C – Project Description

The Panda Express Round Rock Water Pollution Abatement Plan Modification (WPAP MOD) is a modification of the previously approved Great Oaks Crossing WPAP (ID 11003485), which approved a commercial project with four (4) buildings on four (4) lots with associated parking, drive aisles, sidewalks, and utility improvements on an approximately 4.32-acre site. This 1.04-acre Panda Express lot proposes the construction of a retail building with associated drives and utilities, located approx 300 ft NE of the RM 620 and Great Oaks Drive intersection, in Round Rock, Williamson County, Texas. The site is undeveloped and lies within the Brushy Creek watershed. There were no naturally occurring sensitive features identified in the Geologic Assessment.

This WPAP proposes additional clearing, grading, excavation, installation of utilities and drainage improvements, one (1) retail building and associated parking and drives. The Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) existing, previously approved wet basin (11-15031801), which was designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Approximately 0.83 acres of impervious cover, or 79.8% of the 1.04-acre project limits, are proposed for construction in this WPAP. Please see the Treatment Summary table in the exhibits section of this application. The existing wet basin was approved and constructed to treat 11.91 ac of impervious cover for the overall site. Upon construction of this plan, the overall impervious cover will be 10.29 ac which will comply with the approved treatment capacity.

Potable water service is to be provided by the Brushy Creek Municipal Utility District. The proposed development will generate approximately 3,788 gallons per day (average flow) of domestic wastewater based on the assumption of 14 LUEs (14 LUE x 270 GPD/LUE = 3,780 GPD). Wastewater will be disposed of by conveyance to the existing Brushy Creek MUD Regional Water Recycling Center.



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.

Print Name of Geologist: Mark T. Adams

Telephone: (512) 347-9000

Date: <u>11/9/2022</u>

Fax: <u>(512) 306-0974</u>



- 1. Date(s) Geologic Assessment was performed: <u>11/1/22</u>
- 2. Type of Project:

imes	WPAP
	SCS

AST
UST

3. Location of Project:

Recharge Zone

Transition Zone

Contributing Zone within the Transition Zone

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

Table 1 - Soil Units, InfiltrationCharacteristics and Thickness

Soil Name	Group*	Thickness(feet)
Georgetown stony clay loam, 1 to 3		
percent slopes	D	1.66-2.33

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'

9. Method of collecting positional data:

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

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

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

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

- 13. The Recharge Zone boundary is shown and labeled, if appropriate.
- 14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
 - There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
 - The wells are not in use and have been properly abandoned.
 -] The wells are not in use and will be properly abandoned.
 - The wells are in use and comply with 16 TAC Chapter 76.
 - \square There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

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



TABLE OF CONTENTS

1.0	INTRODUCTION	. 2
2.0	PROJECT INFORMATION	. 2
3.0	INVESTIGATION METHODS	3
4.0	SITE SPECIFIC SOILS AND GEOLOGY	.3
5.0	SUMMARY OF FINDINGS	5
6.0	REFERENCES	.7

LIST OF ATTACHMENTS

ATTA	CHMENT A
	Site Maps (Figures 1-3)
ATTA	CHMENT B 13
	Geologic Table Geologic and Manmade Feature Map (Figure 4) Feature Descriptions and Recommendations
ATTA	CHMENT C
	Historia Aprial Dhotographs

Historic Aerial Photographs



November 2022

Geologic Assessment for the 4.55-Acre Great Oaks Crossing Tract located in Williamson County, Texas

1.0 INTRODUCTION

The Texas Commission on the Environmental Quality (TCEQ) regulates activities that have the potential to pollute the Edwards Aquifer through the Edwards Aquifer Protection Program. Projects meeting a certain criterion over the Edwards Aquifer Recharge Zone must submit an Edwards Aquifer Protection Plan (EAPP).

The purpose of this report is to identify all potential pathways for contaminant movement to the Edwards Aquifer and provide sufficient geologic information so that the appropriate Best Management Practices (BMPs) can be proposed in the Edwards Aquifer Protection Plan (EAPP). This report complies with the requirements of Title 30, Texas Administrative Code (TAC) Chapter 213 relating to the protection of the Edwards Aquifer Recharge Zone. Per the Rules, the Geologic Assessment must be completed by a Geologist licensed according to the Texas Geoscience Practice Act.

2.0 PROJECT INFORMATION

The 4.55-Acre Great Oaks Crossing Tract, hereafter referred to as the subject area or site, is located northeast of the intersection of Ranch to Market (RM) Road 620 and Great Oaks Drive in the extraterritorial jurisdiction (ETJ) of Round Rock, Williamson County, Texas (**Attachment A, Figure 1**). Pedestrian investigations of the 4.55-acre tract were performed on November 1, 2022, by Andrew Marlow, G.I.T., and Anna Ozelius, under the supervision of Mark Adams, P.G. with **aci consulting**.

This report is intended to satisfy the requirements for a Geologic Assessment, which shall be included as a component of a Water Pollution Abatement Plan (WPAP). The site is approximately 4.55 acres in total. The proposed site use is for restaurants and retail. The scope of the report consists of a site reconnaissance, field survey, and review of existing data and reports. Features identified during the field survey were ranked utilizing the Texas Commission on Environmental Quality (TCEQ) matrix for Edwards Aquifer



Recharge Zone features. The ranking of the features will determine their viability as "sensitive" features.

3.0 INVESTIGATION METHODS

The following investigation methods and activities were used to develop this report:

- Review of existing files and literature to determine the regional geology and any known caves associated with the project area;
- Review of past geological field reports, cave studies, and correspondence regarding the existing geologic features on the project area, if available;
- Site reconnaissance by a registered professional geologist to identify and examine caves, recharge features, and other significant geological structures;
- Evaluation of collected field data and a ranking of features using the TCEQ Ranking Table 0585 for the Edwards Aquifer Recharge Zone; and
- Review of historic aerial photographs to determine if there are any structural features present, and to determine any past disturbances on the subject property.

4.0 SOILS AND GEOLOGY

The following includes a site-specific description of the soils, geologic stratigraphy, geologic structure, and karstic characteristics as they relate to the Edwards aquifer. Also included in this section is a review of historic aerials for presence of geologic changes or changes to manmade features in bedrock.

<u>Soils</u>

According to the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (2022), one soil unit occurs within the project alignment:

• GsB – Georgetown stony clay loam, 1 to 3 percent slopes

The Georgetown component makes up 90 percent of the map unit. Slopes are 1 to 3 percent. This component is on broad ridges on dissected plateaus. The parent material consists of clayey residuum weathered from limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not



ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. **This soil does not meet hydric criteria**. Hydrologic Soil Group: D

Geologic Stratigraphy

According to the *Geologic Atlas of Texas, Austin Sheet,* one geologic unit occurs within the subject area (**Attachment A, Figure 2**). These units and a description by Barnes (1981) are as follows:

• Edwards Limestone (Ked)

"Limestone, dolomite, and chert; limestone aphanitic to fine grained, massive to thin bedded, hard brittle, in part rudistids biostromes, much miliolid biosparite; dolomite fine to very fine grained, porous, medium gray to grayish brown; chert, nodules and plates common, varies in amount from bed to bed, some intervals free of chert, mostly white to light gray; in zone of weathering considerably recrystallized ,"honeycombed," and cavernous forming an aquifer; forms flat areas and plateaus bordered by scarps; thickness 60-350 feet, thins northward"

Site-Specific Stratigraphic Column

Formation	Members	Thickness (Barnes 1981)					
Edwards Limestone	Edwards Limestone	60-350 feet					

Geologic Structure

The geologic strata associated with the Edwards Aquifer include the Georgetown Limestone Formation of the Washita Group, the Edwards Limestone Group which is interfingered with the Comanche Peak Formation, followed by the Walnut formation, and finally the Glen Rose Formation of the Trinity Group. These Groups dip gently to the southeast and are a characterized by the Balcones Fault Escarpment, a zone of en echelon normal faults downthrown to the southeast. Locally, the dominant structural trend of faults within the area is 25°, as evidenced by the mapped fault patterns (**Attachment A**,



Figure 3). Thus, all features that have a trend ranging from 10° to 40° are considered "on trend" and were awarded the additional 10 points in the Geologic Assessment Table.

Karstic Characteristics

In limestone landscapes, karst is expressed by erratically developed cavernous porosity from dissolution of bedrock as water combined with weak acids moves through the subsurface. Karst terrains are typical of the Edwards Limestone, occurring across a vast region of Central Texas, including the Balcones Fault Escarpment. The features produced by karst processes include, but are not limited to, sinkholes, solution cavities, solution enlarged fractures, and caves. These features can eventually provide conduits for fluid movement such as surface water runoff, as "point recharge" to the Edwards Aquifer. Faults and manmade features within bedrock can also provide conduits for point recharge in many cases.

According to Edwards aquifer zone map produced by the TCEQ (2005), the entire subject area is within the northern segment of the Edwards aquifer Recharge Zone. Thus, all karst features identified as sensitive within the project limits have the potential to be point recharge features into the Edwards aquifer.

Review of Historic Aerials

Aerial photographs were reviewed for the site, and it was determined that the site was used as undeveloped or agricultural land since before the first aerial dated 1941(**Attachment C**). An ancillary agricultural structure for an off-site rural residence can first be seen in the 1954 aerial. FM 620 has been resurfaced and Great Oaks Drive first appears in the 1981 aerial. O'Connor Drive and additional rural roads first appear in the 1995 aerial. Commercial and residential developments to the north and west of the site appear in the 2004 aerial. A continuance for Great Oaks Drive to the south appears by the 2010 aerial. Residential and commercial buildings first appear to the north, south, and west in the 2004 aerial and continuously appear throughout the 2020 aerial.

5.0 SUMMARY OF FINDINGS

This report documents the findings of a geologic assessment conducted by **aci consulting** personnel on November 1, 2022. Twenty-four features (manmade features in bedrock, karst, and non-karst features) were noted on the site. Comprehensive descriptions and recommendations for each feature can be found in **Attachment B**. Based on assessment



of each feature, it was determined that there are zero sensitive karst features on the subject property. Twenty-three features were man-made features in bedrock, and the remaining naturally occurring feature was determined to be non-sensitive.



6.0 REFERENCES

- Barnes, V.E. (project director) et. al., 1981. Geologic Atlas of Texas, Austin Sheet. The University of Texas at Austin, Bureau of Economic Geology. Scale 1:250,000
- (SCS) Soil Conservation Survey. 1983. Soil Survey of Williamson County, Texas. United States Department of Agriculture. Texas Agriculture Experiment Station.
- (TCEQ) Texas Commission on Environmental Quality. 2004. Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones. October 1, 2004. Austin, Texas.
- (TCEQ) Texas Commission on Environmental Quality. 2005. "Edwards Aquifer Protection Program, Chapter 213 Rules - Recharge Zone, Transition Zone, Contributing Zone, and Contributing Zone within the Transition Zone." Map. Digital data. September 1, 2005. Austin, Texas.
- (TWDB) Texas Water Development Board. 2022. Water Data Interactive Groundwater Data Viewer. Accessed on November 8, 2022. Available at: http://www2.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer
- (USDA NRCS) U.S. Department of Agriculture Natural Resources Conservation Service. 2022. WebSoilSurvey.com. Soil Survey Area: Williamson County, Texas. Date accessed: November 8, 2022.



ATTACHMENT A

Site Maps



Great Oaks Crossing GA Figure 1: Site Location Map aci Project No.: 22-22-122 November 2022



Great Oaks Crossing GA Figure 2: Site Geology Map aci Project No.: 22-22-122 November 2022



Great Oaks Crossing GA Figure 3: Regional Trend Map aci Project No.: 22-22-122 November 2022



ATTACHMENT B

Geologic Table Geologic and Manmade Feature Map (Figure 4) Feature Descriptions and Recommendations

GEOLOGIC ASSESSMENT TABLE PROJECT NAME: Great Oaks Crossing																				
LOCATION				FEATURE CHARACTERISTICS									EVALUATION			PHY	SICAL	SETTING		
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	10	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	DIMENSIONS (FEET)		TREND D (DEGREES) M		DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	AL SENSITIVITY		, CATCHMENT AREA (ACRES)		TOPOGRAPHY
						х	Y	Z		10						<40	<u>>40</u>	<1.6	<u>>1.6</u>	
MB01	30.49448	97.723684	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB02	30.494331	97.723769	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB03	30.494322	97.72378	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB04	30.494379	97.724018	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB05	30.494692	97.724133	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB06	30.494627	97.724563	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB07	30.49464	97.724609	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB08	30.494556	97.724406	MB	30	Ked	I	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB09	30.494163	97.723914	MB	30	Ked	I	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
F01	30.494129	97.724112	CD	5	Ked	4	3	0.5	-	-	-	-	C,O	8	13	Х		Х		Hillside
MB10	30.494184	97.724929	MB	30	Ked	I	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB11	30.494182	97.724939	MB	30	Ked	I	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB12	30.493805	97.724166	MB	30	Ked	I	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB13	30.493765	97.724185	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB14	30.493649	97.724279	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
*[DATUM: NAD 198	83 State Plane 420	03			-														
2A TYPE	PE TYPE 2B POINTS 8A INFILLING																			
С	Cave				30		N	None	, exposed	bedr	ock									
SC	Solution cavity				20		C Coarse - cobbles, breakdown, sand, gravel													
SF	Solution-enlarge	d fracture(s)			20		0	Loose	e or soft m	nud o	r soil, or	ganics, le	aves, stic	ks, dark colo	rs					
F	Fault				20		F	Fines	, compact	ed cl	ay-rich s	sediment,	soil profile	e, gray or rec	d colors					
0	Other natural be	drock features		 F Fines, compacted clay-rich sediment, soil profile, gray or red colors V Vegetation. Give details in narrative description 																
МВ	Manmade featur	e in bedrock			30		FS	Flows	tone, cem	nents	, cave d	eposits	-							
SW	Swallow hole				30		х	Other	materials	5										
SH	Sinkhole				20		r													
CD	Non-karst closed	I depression			5		12 TOPOGRAPHY													
z	Zone, clustered of	or aligned features	;		30		Cli	ff, H	illtop. H	Hills	ide, [Draina	ae, Flo	odplain,	Strea	amb	ed			

I have read, I understood, and I have followed the Texas Comparison of Haveron entry Quality's Instructions to Geologists. The information presented here complies with that document such as a geologistic and drined by an AC Charten 13. Mark T. ADAMS GEOLOGY No. 1835 CENSED

TCEQ-0585-Table (Rev. 10-01-04)
GEOLOGIC ASSESSMENT TABLE PROJECT NAME: Great Oaks Crossing																				
	LOCATIO	N				FE/	ATUF	RE C	HARAC	TEF	RISTIC	;s			EVAL	LUAT	ION	PHY	SICAL	SETTING
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9	1	0	1	1	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS (FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY		ENT AREA RES)	TOPOGRAPHY
						х	Y	Z		10						<40	<u>>40</u>	<1.6	<u>>1.6</u>	
MB15	30.493607	97.724276	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB16	30.493777	97.725213	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB17	30.493356	97.724997	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB18	30.493636	97.725354	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB19	30.493611	97.725337	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB20	30.493635	97.725274	MB	30	Ked	-	-	-	-	-	-	-	-	10	40		Х	Х		Hillside
MB21	30.493457	97.725186	MB	30	Ked	I	-	1	-	-	-	-	-	10	40		Х	Х		Hillside
MB22	30.493297	97.725029	MB	30	Ked	-	-	-	-	-	•	-	-	10	40		Х	Х		Hillside
MB23	30.49311	97.724663	MB	30	Ked	I	-	1	-	-	-	-	-	10	40		Х	Х		Hillside
		83 State Plane 420)3																	
2A TYPE		TYPE		21	B POINTS						8	A INFILLI	ING							
С	Cave				30		Ν	None	, exposed	bed	ock									
SC	Solution cavity				20		С	Coars	se - cobble	es, br	eakdow	n, sand, g	gravel							
SF	Solution-enlarge	d fracture(s)			20		0	Loose	e or soft m	nud o	r soil, or	rganics, le	eaves, stic	ks, dark colo	rs					
F	Fault	.,			20 F Fines, compacted clay-rich sediment, soil profile, gray or red colors															
0	Other natural be	drock features			5		v		-		-		description							
МВ	Manmade featur	e in bedrock			30		FS	•	stone, cerr				•							
SW	Swallow hole				30		X Other materials													
SH	Sinkhole				20															
CD	Non-karst closed	depression			5							12 TO	POGRAP	HY					1	
z	Zone, clustered of	or aligned features			30		Cli	ff. H	illtop. H	Hills	ide. [Draina	ae. Fla	odplain,	Strea	ambe	əd		1	

1 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 are is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist at defined by 24 FaC chapter 213. Date 11/9/22
MARK T. ADAMS
Sheet _2_ of _2_
04)

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



Great Oaks Crossing GA Figure 4: Geologic Feature Map

aci Project No.: 22-22-122 November 2022



GPS: N. 30.49448 W. 97.723684

This feature is a manmade feature in bedrock (a belowground utility access point) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB01



GPS: N. 30.4494331 W. 97.723769

This feature is a manmade feature in bedrock (a utility pole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB02



GPS: N. 30.493422 W. 97.72378

This feature is a manmade feature in bedrock (a PVC utility marker) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB03



GPS: N. 30.494379 W. 97.724018

This feature is a manmade feature in bedrock (a drilled hole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB04



GPS: N. 30.494692 W. 97.724133

This feature is a manmade feature in bedrock (a drilled hole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB05



GPS: N. 30.494627 W. 97.724563

This feature is a manmade feature in bedrock (a drilled hole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB-06



GPS: N. 30.49464 W. 97.724609

This feature is a manmade feature in bedrock (a utility pole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB07



GPS: N. 30.494556 W. 97.42446

This feature is a manmade feature in bedrock (a drilled hole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB08.



GPS: N. 30.494163 W. 97.723914

This feature is a manmade feature in bedrock (a PVC utility marker) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB09



F01 GPS: N. 30.494129 W. 97.724112

This feature is non-karst closed depression approximately four feet wide, three feet long, and a half foot deep. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is grasses and one cobble. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 8 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.

Recommendation: This feature is likely non-sensitive, and no further action is required.



Photo of F01



GPS: N. 30.494184 W. 97.724929

This feature is a manmade feature in bedrock (a utility pole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB10



GPS: N. 30.494182 W. 97.724939

This feature is a series of manmade features in bedrock (utility poles) consisting of seven poles with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of an MB11 utility pole





Photo of additional cut MB11 utility poles



GPS: N. 30.493805 W. 97.724166

This feature is a manmade feature in bedrock (gas pipeline) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB12 utility marker.



GPS: N. 30.493765 W. 97.724185

This feature is a manmade feature in bedrock (water utilities) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB13



GPS: N. 30.493649 W. 97.724279

This feature is a manmade feature in bedrock (a PVC utility marker) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB14 utility marker



GPS: N. 30.493607 W. 97.724276

This feature is a manmade feature in bedrock (utility poles) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB15



GPS: N. 30.493777 W. 97.725213

This feature is a manmade feature in bedrock (a utility pole) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB16



GPS: N. 30.493356 W. 97.724997

This feature is a manmade feature in bedrock (a water meter) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB17



GPS: N. 30.493636 W. 97.725354

This feature is a manmade feature in bedrock (electric utilities) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB18



GPS: N. 30.493611 W. 97.725337

This feature is a manmade feature in bedrock (electric utilities) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB20



GPS: N. 30.493635 W. 97.725274

This feature is a series of manmade features in bedrock for a neighborhood entrance sign. Water and electric utilities were noted along with a stone structure and a sidewalk. The dimensions are unknown. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB20



GPS: N. 30.493457 W. 97.725186

This feature is series of a manmade features in bedrock (water utilities) with unknown dimensions. Four access points were noted. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of a utility access point for MB21



GPS: N. 30.493297 W. 97.725029

This feature is a manmade feature in bedrock (a utility marker) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB22



GPS: N. 30.49311 W. 97.724663

This feature is a manmade feature in bedrock (utility access points) with unknown dimensions. The feature is located in the Edwards Limestone and is positioned on a hillside. Infill material is unknown. The feature has no trend, and a drainage area of less than 1.6 acres. In using Figure 1 in Instructions to Geologists, it was determined that this feature has an infiltration rate of 30 points due to its status as a manmade feature in bedrock in order to bring it to the attention of the project engineer.



Photo of MB23

MODIFICATION OF A PREVIOUSLY APPROVED WATER POLLUTION ABATEMENT PLAN (TCEQ-0590)

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: <u>Shelly Mitchell, P.E.</u> Date: 07/26/2024

Signature of Customer/Agent: Shelly Mikneel

Project Information

1. Current Regulated Entity Name: <u>Panda Express Round Rock</u> Original Regulated Entity Name: <u>Great Oaks Crossing</u> Regulated Entity Number(s) (RN): 111661732

Edwards Aquifer Protection Program ID Number(s): 11003485

The applicant has not changed and the Customer Number (CN) is: 606106011

The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

2. Attachment A: Original Approval Letter and Approved Modification Letters. A copy of the original approval letter and copies of any modification approval letters are attached.

3. A modification of a previously approved plan is requested for (check all that apply):

Physical or operational modification of any water pollution abatement structure(s)
including but not limited to ponds, dams, berms, sewage treatment plants, and
diversionary structures;

Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

Development of land previously identified as undeveloped in the original water pollution abatement plan;

Physical modification of the approved organized sewage collection system;

Physical modification of the approved underground storage tank system;

Physical modification of the approved aboveground storage tank system.

4. Summary of Proposed Modifications (select plan type being modified). If the approved plan has been modified more than once, copy the appropriate table below, as necessary, and complete the information for each additional modification.

WPAP Modification	Approved Project	Proposed Modification
Summary		
Acres	<u>Commercial</u>	<u>N/A</u>
Type of Development	<u>N/A</u>	
Number of Residential		<u>0.83</u>
Lots	<u>3.022</u>	<u>79.8</u>
Impervious Cover (acres)	<u>69.9</u>	Water Quality Pond
Impervious Cover (%	Water Quality Pond	
Permanent BMPs		
Other	<u>1.04</u>	
<u>4.32</u>	Commercial	
SCS Modification	Approved Project	Proposed Modification
Summary		
Linear Feet		
Pipe Diameter		
Other		

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

- 5. Attachment B: Narrative of Proposed Modification. A detailed narrative description of the nature of the proposed modification is attached. It discusses what was approved, including any previous modifications, and how this proposed modification will change the approved plan.
- 6. Attachment C: Current Site Plan of the Approved Project. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.

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

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

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

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

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

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

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

- 7. The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.
 - Acreage has not been added to or removed from the approved plan.

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

ATTACHMENT A

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





TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 2, 2015

Mr. David Bodenman President Highland 620 Land Investment, Ltd. 211 E. 7th St., Ste. 709 Austin, Texas 78701

Re: Edwards Aquifer, Williamson County

NAME OF PROJECT: Highland Horizon Block N and O Improvements; Located south of the RM 620 and Great Oaks Dr. intersection; Round Rock, Texas

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

Edwards Aquifer Protection Program ID No. 11-15031801; Investigation No. 1240745; Regulated Entity No. RN108174459

Dear Mr. Bodenman:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP for the above-referenced project submitted to the Austin Regional Office by HD Engineering on behalf of Highland 620 Land Investment, Ltd. on March 18, 2015. Final review of the WPAP was completed after additional material was received on June 19, 22, 23, and 29, 2015. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

BACKGROUND

Highland Horizon Block N and O Improvement Project is a re-plat of the Highland Horizon Phase I single-family residential development. The first WPAP and SCS were received on October 24, 2007. A site assessment investigation was conducted on November 20, 2006. The WPAP application included a request to seal two sensitive features. The request was denied and the application was subsequently withdrawn on December 22, 2006. Mr. David Bodenman Page 2 July 2, 2015

On May 3, 2007, the Region Office received a request to seal certain geologic features and to propose setbacks around other sensitive features. The exception included a geologic assessment for the entire Highland Horizon Subdivision on the 193 acre tract. A June 28, 2007, a letter was issued, which established buffers for some sensitive geologic features and authorized sealing of two sensitive geologic features (EAPP ID: 11-07050302).

On July 13, 2007, the Region Office received the WPAP and SCS applications for Highland Horizon Phase I. The WPAP and SCS approvals were issued on September 11, 2007, (EAPP ID: 11-06102402B and 11-06102402C, respectively).

On January 2, 2008, the Region Office was notified that sensitive features encountered while trenching for utilities. On February 1, 2008, a letter was sent to the applicant on approving the mitigation methods described in the geologic report.

On January 10, 2008, the Region Office was notified that sensitive features encountered while trenching for utilities. On March 6, 2008, a letter was sent to the applicant approving the mitigation methods described in the geologic report.

On March 31, 2008, the Region Office was notified that sensitive features encountered on March 27, 2008 during the construction of the water quality pond. On April 21, 2008, a letter was sent to the applicant approving the mitigation methods described in the geologic report.

On March 31, 2008, the Region Office was notified that a sensitive feature encountered on March 29, 2008 during the construction of the water quality pond. On April 28, 2008, a letter was sent to the applicant approving the mitigation methods described in the geologic report.

PROJECT DESCRIPTION

Highland Horizon Block N and O Improvement Project is a proposed commercial development on a 26.02 acre tract located south of RM 620 and Great Oaks Drive intersection in the City of Round Rock, Texas. The project includes a combined 12 lots located on Blocks O and N. Block O has four lots for the commercial development on a re-platted 9.84 acres; and Block N has eight lots for commercial development on 14.86 acres, and a lot for a water quality /detention pond on 1.31 acres. The proposed regulated activities include the construction of driveways; a combination water quality / detention pond; water lines, storm sewer lines, and wasterwater lines; and fill material stock piles. The proposed driveway construction in Block N is 1.22 acres of impervious cover, and drains to the proposed wet basin located in lot 9. The proposed driveway construction in Block O is 0.35 acres of impervious cover, and drains to an existing wet basin that was approved in the Highland Horizon Phase I WPAP.

Temporary Best Management Practices (BMPs) will be maintained to minimize sediment discharges and other pollutants until construction is completed. The proposed project is entirely within the Edwards Aquifer Recharge Zone, and within the Lake Creek watershed. No part of the proposed project is located within the 100-yr floodplain.

WPAP or WPAP Modification application(s) will be submitted for the rooftops, parking, and other paved surfaces for future development of the individual commercial lots.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or up-gradient of the site and partially flowing across and off site after construction, an existing wet basin, and the proposed wet basin were designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005) to treat

Mr. David Bodenman Page 3 July 2, 2015

The proposed wet basin will treat construction of driveways within Block N with an impervious cover of 1.22 acres and a required TSS removal of 1,062 lbs. The proposed wet basin was designed to treat the maximum build out of the Block N with a drainage area of 14.86 acres, and an impervious cover limitation of 80% (11.91 acres). This results in a required Total Suspended Solids (TSS) removal of 10,349 lbs. The proposed wet basin required total capture volume is 51,047 cu. ft. with a water quality volume of 42,540 cu. ft. The proposed wet basin provided total capture volume is 51,358 cu. ft. with a water quality volume of 44,117 cu. ft.

The existing wet basin will treat construction of driveways within Block O with an impervious cover of 0.35 acres has a required TSS removal of 305 lbs. The maximum build out of Block O with a drainage area of 9.44 acres has an impervious cover limitation of 80% (7.55 acres). The existing wet basin is designed for the maximum build out of Highland Horizon Phase I, and the maximum build out of Block O having a total drainage area of 73.5 acres, and an impervious cover of 31.4. This results in a required Total Suspended Solids (TSS) removal of 27,331 lbs. The existing wet basin required total capture volume is 133,820 cu. ft. with a water quality volume of 111,517 cu. ft. The provided permanent storage volume is 146,831 cu. ft., and a total volume is 268,426 cu. ft.

Areas Treated by the Existing Wet Basin	Impervious Cover to Existing Wet Basin (ac.)	TSS Removed by Existing Wet Basin (lbs.)
Highland Horizon Phase I	23.65	20,585
Block O Proposed Drives	0.35	305
Future Maximum Build Out of Block O (Structures / Parking)	7.20	6,267
Total =	31.20	27,157

The following table is a summary of impervious cover and TSS treatment by the existing wet basin for the approved Highland Horizon Phase I, the proposed project, and future build out of Block O.

The approved measures exceed the required 80% removal of increased TSS load caused by the proposed project for the construction of driveways in Highland Horizon Block N and Block O as presented by Mr. H. D. Roye, P.E. of HD Engineering.

GEOLOGY

The geologic assessment (GA) of the Highland Horizons tract included in the application was performed on multiple dates: June 2-8, 2005; April 17-18, November 30, December 19-20, 2006; and June 27, 2007 by Stan Reece, P.G. of ACI Consulting. The GA covered a 193 acre tract and two transects properties. The site is located in the Edwards Aquifer Recharge Zone and is underlain by Member No. 1 (Basal Unit) of the Edwards Limestone, which consists of mostly hard, thick to thin bedded, fine-grained limestone, with some dolomitic. Soil series mapped in the project vicinity are in the Eckrant-Georgetown association. These soils are shallow to moderately deep, calcareous and non-calcareous, stony, cobbly and loamy soils that form over limestone bedrock. The three soil types on the property include: Eckrant extremely stony clay (EeB) (0.90 ft. thick), Eckrant rock outcrop complex (ErE) (0.75 ft. thick), and Georgetown stony clay loam (GsB) (0.70 ft. thick), which are classified with very slow infiltration when thoroughly wetted.

A total of 36 geologic features were identified and assessed within the entire 198 acre tract.
Mr. David Bodenman Page 4 July 2, 2015

Said five features are F-19 "Underdeveloped Cave" (75 ft. radius setback); grouped F-23 "Vericose Cave", F-24 sinkhole, and F-25 solution cavity (75 ft. radius setback); and F-30 solution-enlarged fracture, which was approved to be sealed (EAPP ID: 11-07050302). Setbacks will include physical barriers and sediment controls such as rock berms and/or silt fences, prior to commencing construction.

On March 10, 2014, the Region conducted a site assessment to observe features, which included Vericose Cave. As a result of observations made during the assessment, controls were installed at Vericose Cave to mitigate erosion issues. On May 29, 2015, the Region conducted a site assessment and determined that the site generally appeared as described in the GA. Construction had not commenced.

SPECIAL CONDITIONS

- I. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.
- II. Concrete washout activity is prohibited on Highland Horizon Block N and O Improvements proposed project.
- III. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.
- IV. WPAP or WPAP Modification application(s) is required prior to conducting regulated activity that is not included in this WPAP approval for Highland Horizon Block N and O Improvements proposed project.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

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

Mr. David Bodenman Page 6 July 2, 2015

- 15. 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.
- 16. 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:

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

Mr. David Bodenman Page 5 July 2, 2015

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

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

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until-such responsibility is legally transferred to another person or entity.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the Austin Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. 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.
- 14. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips sediment traps, rock berms, silt fence

Mr. David Bodenman Page 7 July 2, 2015

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Mr. Boyd Guthrie of the Edwards Aquifer Protection Program of the Austin Regional Office at 512-339-2929.

Sincerely, all Pumph

Carolyn Runyon, Water Section Manager Austin Region Office Texas Commission on Environmental Quality

CDR/btg

- Enclosures: Deed Recordation Affidavit, TCEQ-0625 Change in Responsibility for Maintenance of Permanent BMPs, Form TCEQ-10263
- cc: Mr. H. D. Roye, P.E., HD Engineering Ms. Alysha Girard, P.E., Storm Water Manager, City of Round Rock The Honorable Dan A. Gattis, County Judge, Williamson County TCEQ Central Records, Building F, MC 212

Jon Niermann, *Chairman* Emily Lindley, *Commissioner* Bobby Janecka, *Commissioner* Erin E. Chancellor, *Interim Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 6, 2023

Mr. Daren Nix RCP 620 Great Oaks, LP 106 E. 6th Street, Ste 900-178 Austin, TX 78701

Re: Edwards Aquifer, Williamson County NAME OF PROJECT: Great Oaks Crossing; Located Southeast of RM 620 and Great Oaks Drive intersection; City of Round Rock ETJ, Texas TYPE OF PLAN: Request for Modification of an Approved Water Pollution Abatement Plan (WPAP) and Modification of an Approved Organized Sewage Collection System (SCS); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Regulated Entity No. RN111661732; Additional ID No. 11003485 and 11003486

Dear Mr. Nix:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP and SCS applications for the above-referenced project submitted to the Austin Regional Office by Eli Engineering, PLLC on behalf of RCP 620 Great Oaks, LP on February 8, 2023. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed, and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

This property was originally platted in 2015 as part of the Highland Horizon Phase IV as Lot 1 and Lot 2 in Block N (4.55-acres). These two lots were re-platted as fours lots (1, 1A, 2 and 2A totaling 4.55-acres with 0.23-acres out of Lot 2A constructed as Little Oak Drive in 2015. This reduces the on-site new site area to 4.32-acres. Highland Horizon Block N and O Improvements was approved July 2, 2015 (11-15031801). One wet basin was approved to treat 10,349 pounds of Total Suspended Solids (TSS) from the overall 14.86-acre site with 11.91-acres of impervious cover.

TCEQ Region 11 • P.O. Box 13087 • Austin, Texas 78711-3087 • 512-339-2929 • Fax 512-339-3795

Mr. Daren Nix Page 2 April 6, 2023

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 4.32-acres with 3.022acres of proposed impervious cover (69.90-percent). It will include four buildings on four lots with associated parking, drive aisles, sidewalks, and utility improvements.

The proposed sewage collection system will consist of 162 linear feet 6-inch diameter PVC SDR 26 gravity sewer main (ASTM D-3034), manholes, and appropriate appurtenances for the commercial development.

The system will be connected to an existing City of Round Rock wastewater line for conveyance to the Brushy Creek MUD Regional Water Recycling Center for treatment and disposal. The project is located within the City of Round Rock ETJ and will conform to all applicable codes, ordinances, and requirements of the City of Round Rock.

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 approved wet basin (11-15031801), designed using the TCEQ technical guidance document, <u>Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005)</u>, will be utilized to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 2,629 pounds of TSS generated from the 3.022-acres of impervious cover. This development represents the last area to be approved in the 2015 approval with the total TSS removal capacity originally approved (10,349 pounds) exceeding the current total load of 9,496 pounds generated from 10.91 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

GEOLOGY

According to the geologic assessment included with the application, the site is underlain by the Edwards Formation. No sensitive features were identified by the project geologist. The site assessment conducted on March 30, 2023, revealed the site was generally as described in the geologic assessment.

SPECIAL CONDITIONS

- I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated July 2, 2015.
- II. It is emphasized that where wastewater lines must bridge faults, caverns, sinkholes, or solution features the lines shall be constructed in a manner that will maintain the structural integrity of the pipe. When such sensitive features area encountered, 30 TAC §213.5(f)(2) requires that all regulated activities near the feature must be immediately suspended and the owner/developer shall immediately notify the Austin Regional Office. Additionally, when such geologic features are encountered which are bridged by construction, the location and extend of those features must be assessed by a geologist and must be reported to the Austin Regional Office in writing within two working days of discovery as required by 30 TAC §213.5(c)(3)(K). Construction may not resume in the area of the feature until the executive director has reviewed and approved the methods proposed to protect the aquifer from any potential adverse impacts. See Standard Condition 10 below.
- III. By the responsible engineer's dated signature and seal on the Engineering Design Report attached to the submitted application, all information therein accurately reflects the information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer in accordance with the requirements of 30 TAC 213.5 (c) and Chapter 217.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

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

Mr. Daren Nix Page 4 April 6, 2023

During Construction:

- 10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213 and Chapter 217. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity, upon which that person or entity shall assume responsibility for all provisions and conditions of this approval.
- 11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
- 12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the Austin Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
- 13. No wells exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
- 14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
- 15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
- 16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
- 17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.
- 18. No part of the system shall be used as a holding tank for a pump-and-haul operation.

After Completion of Construction:

19. 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 Austin Regional Office within 30 days of site completion.

Mr. Daren Nix Page 5 April 6, 2023

- 20. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through Austin Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
- 21. Certification by a Texas Licensed Professional Engineer of the testing of sewage collection systems required by 30 TAC Chapter 213 and Chapter 217 shall be submitted to the San Antonio Regional Office within 30 days of test completion and prior to the new sewage collection system being put into service. The certification should include the project name as it appeared on the approved application, the program ID number, and two copies of a site plan sheet(s) indicating the wastewater lines and manholes that were tested and are being certified as complying with the appropriate regulations. The engineer must certify in writing that all wastewater lines have passed all required testing to the appropriate regional office within 30 days of test completion and prior to use of the new collection system. Should any test result fail to meet passing test criteria and then subsequently pass testing, the result(s) and an explanation of what repair, adjustment, or other means were taken to facilitate a subsequent passing result shall be provided.
- 22. Every five years after the initial certification, the sewage collection system shall be retested. Any lines that fail the test must be repaired and retested. Certification that the system continues to meet the requirements of 30 TAC Chapter 213 and Chapter 217 shall be submitted to the Austin Regional Office. The certification should include the project name as it appeared on the approved application, the program ID number and two copies of a site plan sheet(s) indicating the wastewater lines and manholes that were tested and are being certified as complying with the appropriate regulations. Should any test result fail to meet passing test criteria, and then subsequently pass testing, the result(s) and an explanation of what repair, adjustment, or other means were taken to facilitate a subsequent passing result shall be provided.
- 23. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.
- 24. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the Austin Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
- 25. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

Mr. Daren Nix Page 6 April 6, 2023

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact the Edwards Aquifer Protection Program Austin Regional Office at 512-339-2929.

Sincerely, Lillian Butter

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

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

cc: Mr. Gary Eli Jones, PE, Eli Engineering, PLLC

ATTACHMENT B

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

Attachment B – Narrative of Proposed Modification

The Panda Express Round Rock Water Pollution Abatement Plan Modification (WPAP MOD) is a modification of the previously approved Great Oaks Crossing WPAP (ID 11003485), which approved a commercial project with four (4) buildings on four (4) lots with associated parking, drive aisles, sidewalks, and utility improvements on an approximately 4.32-acre site. This 1.04-acre Panda Express lot proposes the construction of a retail building with associated drives and utilities, located approx 300 ft NE of the RM 620 and Great Oaks Drive intersection, in Round Rock, Williamson County, Texas. The site is undeveloped and lies within the Brushy Creek watershed. There were no naturally occurring sensitive features identified in the Geologic Assessment.

This WPAP proposes additional clearing, grading, excavation, installation of utilities and drainage improvements, one (1) retail building and associated parking and drives. The Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) existing, previously approved wet basin (11-15031801), which was designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site. Approximately 0.83 acres of impervious cover, or 79.8% of the 1.04-acre project limits, are proposed for construction in this WPAP. Please see the Treatment Summary table in the exhibits section of this application. The existing wet basin was approved and constructed to treat 11.91 ac of impervious cover for the overall site. Upon construction of this plan, the overall impervious cover will be 10.29 ac which will comply with the approved treatment capacity.

Potable water service is to be provided by the Brushy Creek Municipal Utility District. The proposed development will generate approximately 3,788 gallons per day (average flow) of domestic wastewater based on the assumption of 14 LUEs (14 LUE x 270 GPD/LUE = 3,780 GPD). Wastewater will be disposed of by conveyance to the existing Brushy Creek MUD Regional Water Recycling Center.



ATTACHMENT C



WATER POLLUTION ABATEMENT PLAN APPLICATION FORM (TCEQ-0584)

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Shelly Mitchell, P.E.

Date: 07/26/2024

Signature of Customer/Agent:

Shelly Mitchell

Regulated Entity Name: Panda Express Round Rock

Regulated Entity Information

- 1. The type of project is:
 - Residential: Number of Lots:_____
 Residential: Number of Living Unit Equivalents:_____
 Commercial
 Industrial
 Other:_____
- 2. Total site acreage (size of property): 1.04
- 3. Estimated projected population: N/A
- 4. The amount and type of impervious cover expected after construction are shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	2,784	÷ 43,560 =	0.06
Parking	8,262	÷ 43,560 =	0.19
Other paved surfaces	25,122	÷ 43,560 =	0.58
Total Impervious Cover	36,168	÷ 43,560 =	0.83

Table 1 - Impervious Cover Table

Total Impervious Cover $0.83 \div$ Total Acreage $1.04 \times 100 = 79.8\%$ Impervious Cover

- 5. Attachment A Factors Affecting Surface Water Quality. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
- 6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

TXDOT road project.

County road or roads built to county specifications.

City thoroughfare or roads to be dedicated to a municipality.

Street or road providing access to private driveways.

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

Concrete Asphaltic concrete pavement Other:

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

Width of R.O.W.: _____ feet. L x W = _____ $Ft^2 \div 43,560 Ft^2/Acre = _____ acres.$

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.L x W = ____ $Ft^2 \div 43,560 Ft^2/Acre = ____ acres.Pavement area _____ acres \div R.O.W. area _____ acres x 100 = ____% impervious cover.$

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

A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

<u>100</u> % Domestic	Gallons/day
% Industrial	Gallons/day
% Commingled	
<u>3,780</u> Gallons/day	
TOTAL gallons/day <u>3,780 (14 LUE x 270 GPD/LUE</u>)	1

15. Wastewater will be disposed of by:

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

Attachment C - Suitability Letter from Authorized Agent. An on-site sewage facility
will be used to treat and dispose of the wastewater from this site. The appropriate
licensing authority's (authorized agent) written approval is attached. It states that
the land is suitable for the use of private sewage facilities and will meet or exceed
the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285
relating to On-site Sewage Facilities.

Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

Sewage Collection System (Sewer Lines):

🛛 Pri	ivate service laterals	from the wastewater	generating f	acilities will be c	onnected
to	an existing SCS.				

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

] The SCS was previously submitted on_____.

The SCS was submitted with this application.

The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

The sewage collection system will convey the wastewater to the <u>Brushy Creek MUD</u> <u>Regional Water Recycling Center</u> (name) Treatment Plant. The treatment facility is:

\times	Existing.
	Proposed

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = <u>40</u>'.

18. 100-year floodplain boundaries:

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

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

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): <u>DFIRM Digital Flood Insurance Rate Map for Williamson County, Texas</u> <u>Panel No. 48491C0630F, Dated 12/20/2019</u>

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

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

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

] There are	(#) wells present on the project site and the locations are shown and
labeled. (Ch	eck all of the following that apply)

The wells are not in use and have been properly abandoned.

The wells are not in use and will be properly abandoned.

The wells are in use and comply with 16 TAC §76.

 \boxtimes There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:

All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

No sensitive geologic or manmade features were identified in the Geologic Assessment.

Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.

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

N/A

- 27. Locations where stormwater discharges to surface water or sensitive features are to occur.
 - There will be no discharges to surface water or sensitive features.
- 28. 🛛 Legal boundaries of the site are shown.

Administrative Information

- 29. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 30. Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

ATTACHMENT A

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

Attachment A – Factors Affecting Water Quality

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site during construction include:

- Soil erosion due to the clearing of the site;
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings;
- Hydrocarbons from asphalt paving operations;
- Miscellaneous trash and litter from construction workers and material wrappings;
- Concrete truck washout.
- Potential overflow/spills from portable toilets

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site after development include:

- Oil, grease, fuel and hydraulic fluid contamination from vehicle drippings;
- Dirt and dust which may fall off vehicles; and
- Miscellaneous trash and litter.



ATTACHMENT B

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

Attachment B – Volume and Character of Stormwater

Stormwater runoff will increase as a result of this development. For a 25-year storm event, the overall project will generate approximately 9.6 cfs. The runoff coefficient for the site changes from approximately 0.25 before development to 0.70 after development. Values are based on the Rational Method using runoff coefficients per the City of Round Rock Development Code.



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: Shelly Mitchell, P.E.

Date: 07/26/2024

Signature of Customer/Agent:

Shelly Mitchell

Regulated Entity Name: Panda Express Round Rock

Project Information

Potential Sources of Contamination

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

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

The following fuels and/or hazardous substances will be stored on the site: <u>construction</u> <u>staging area</u>

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

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

TCEQ-0602 (Rev. 02-11-15)

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

- Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
- Fuels and hazardous substances will not be stored on the site.
- 2. Attachment A Spill Response Actions. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3. Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 4. Attachment B Potential Sources of Contamination. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

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

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

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

6. Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: <u>Brushy Creek</u>

Temporary Best Management Practices (TBMPs)

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

7. X 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.
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.
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.
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 used in combination with other erosion and sediment controls within each 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 at area.

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

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

Soil Stabilization Practices

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

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

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

Administrative Information

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

ATTACHMENT A

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

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.



PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

- 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

PANDA EXPRESS ROUND ROCK Water Pollution Abatement Plan Modification

Attachment B – Potential Sources of Contamination

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,	Contractor to incorporate into regular safety
and substances listed under 40 CFR parts 110, 117,	meetings, a discussion of spill prevention and
and 302 used or stored temporarily on site.	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.	site to encourage proper trash disposal.
Construction debris.	 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
Attachment C – Sequence of Major Activities

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 TBMPs, clearing and grubbing of vegetation where applicable. This will disturb approximately 1.04 acres. The second is construction that will include:

Installation of utilities and drainage improvements – approx. 0.80 ac

Construction of the retail building - approx. 0.06

Construction and paving of parking - approximately 0.19 ac

Construction and paving drives - approx. 0.58 AC,

Site cleanup - approximately 1.04 acres.



ATTACHMENT D

Attachment D – Temporary Best Management Practices and Measures

a. 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 cross 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 rock berms with silt fencing downgradient from areas of concentrated stormwater flow for temporary erosion control, (3) Installation of gravel bags and drain inlet protection at inlets and downgradient areas of construction activities for sediment control (4) installation of stabilized construction entrance/exit(s) to reduce the dispersion of sediment from the site, and (5) 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.

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 and rock berms with silt fence for secondary protection, 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>

No more than ten (10) acres will be disturbed with these proposed improvements. 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	.=	Corrective Action Required	
Prevention	Inspected ir Compliance	Description	Date
Measure	omp	(use additional sheet if necessary)	Completed
	= 0	(_
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			

_ A brief statement describing the qualifications of the inspector is included in this SWP3.

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

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

Inspector's Name

Inspector's Signature

Date

PROJECT MILESTONE DATES

Date when major site grading activities begin:

Construction Activity		Date
Installation of BMPs		
Dates when construction activities temporarily or perma	nently	cease on all or a portion of the proje
Construction Activity		Date
Dates when stabilization measures are initiated:		
Stabilization Activity		Date
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: Shelly Mitchell, P.E.

Date: 07/26/2024

Signature of Customer/Agent

Shelly Mitchell

Regulated Entity Name: Panda Express Round Rock

Permanent Best Management Practices (BMPs)

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

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



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

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

N/A

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

N/A

- 4. Where a site is used for low density single-family residential development and has 20 % or less impervious cover, other permanent BMPs are not required. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
 - The site will be used for low density single-family residential development and has 20% or less impervious cover.
 - The site will be used for low density single-family residential development but has more than 20% impervious cover.
 - The site will not be used for low density single-family residential development.
- 5. The executive director may waive the requirement for other permanent BMPs for multifamily residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.
 - Attachment A 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
 - The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
 - The site will not be used for multi-family residential developments, schools, or small business sites.
- 6. Attachment B BMPs for Upgradient Stormwater.

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

11.	Attachment G - Inspection, Maintenance, Repair and Retrofit Plan. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
	 Prepared and certified by the engineer designing the permanent BMPs and measures Signed by the owner or responsible party Procedures for documenting inspections, maintenance, repairs, and, if necessary
	retrofit A discussion of record keeping procedures
\boxtimes	N/A
12. 🗌	Attachment H - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
\boxtimes	N/A
	Attachment I -Measures for Minimizing Surface Stream Contamination. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.

N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

14. The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.

N/A

15. A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

🖂 N/A

ATTACHMENT B

Attachment B – BMPs for Upgradient Stormwater

No upgradient stormwater crosses the project limits.

The Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) existing, approved wet basin (ID 11-15031801), which was designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.



ATTACHMENT C

Attachment C – BMPs for On-Site Stormwater

The Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) existing, approved wet basin (ID 11-15031801), which was designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.



ATTACHMENT D

Attachment D – BMPs for Surface Streams

The Permanent Best Management Practices (PBMPs) for stormwater treatment is one (1) existing, approved wet basin (ID 11-15031801), which was designed in accordance with the TCEQ's Technical Guidance Manual (TGM) RG-348 (2005) to remove 80% of the increase in Total Suspended Solids (TSS) from the site.



ATTACHMENT F

Attachment F – Construction Plans

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



ATTACHMENT I

Attachment I – Measures for Minimizing Surface Stream Contamination

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 Aguifer Protection Program

Edwards Aquiter Protection Program Relating to 30 TAC Chapter 213 Effective June 1, 1999

1	Daren Nix
	Print Name
	Owner
	Title - Owner/President/Other
of	RCP 620 Great Oaks, LP Corporation/Partnership/Entity Name
have authorized	Pape-Dawson Consulting Engineers, LLC
	Print Name of Agent/Engineer
of	Pape-Dawson Consulting Engineers, LLC
	Print Name of Firm
to represent and est a	we the head of the above named Corresponding. Dertherable, or East

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

-2324 Date



TCEQ-0599 (Rev 04/01/2010)



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

GIVEN under my hand and seal of office on this 13 day of July , 2024

NOTARY PUBLIC

Lesuie Mohme Typed or Printed Name of Notary

MY COMMISSION EXPIRES. 09 - 14 - 2027

Page 2 of 2

APPLICATION FEE FORM (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: <u>Panda Express Round Rock</u> Regulated Entity Location: <u>Approx 300 ft NE of RM 620 and Great Oaks Dr intersection, Round</u> <u>Rock, TX</u> Name of Customer: <u>RCP 620 Great Oaks, LP</u> Contact Person: <u>Daren Nix</u> Phone: (512) 537-4663 Customer Reference Number (if issued):CN <u>606106011</u> Regulated Entity Reference Number (if issued):RN <u>111661732</u> **Austin Regional Office (3373)** Hays Williamson Travis

San Antonio Regional Office (3362)

Bexar	Medina	Uvalde
Comal	🗌 Kinney	

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

Austin Regional Office	San Antonio Regional Office
Mailed to: TCEQ - Cashier	Overnight Delivery to: TCEQ - Cashier
Revenues Section	12100 Park 35 Circle
Mail Code 214	Building A, 3rd Floor
P.O. Box 13088	Austin, TX 78753

(512)239-0357

Site Location (Check All That Apply):

Austin, TX 78711-3088

🔀 Recharge Zone	Contributing Zone	Transi	ition Zone
Type of I	Plan	Size	Fee Due
Water Pollution Abatement Pla	an, Contributing Zone		
Plan: One Single Family Reside	ntial Dwelling	Acres	\$
Water Pollution Abatement Pla	an, Contributing Zone		
Plan: Multiple Single Family Re	sidential and Parks	Acres	\$
Water Pollution Abatement Pla	an, Contributing Zone		
Plan: Non-residential		1.04 Acres	\$ 4,000
Sewage Collection System		L.F.	\$
Lift Stations without sewer line	es	Acres	\$
Underground or Aboveground	Storage Tank Facility	Tanks	\$

Type of Plan	Size	Fee Due
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$
Shelly Mikhell		
Signature: Date	e: 07/26/2024	

Application Fee Schedule

Texas Commission on Environmental Quality

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	Fee
Exception Request	\$500
Extension of Time Requests	
Project	Fee
Extension of Time Request	\$150
CORE DATA FORM (TCEQ-10400)



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

		sion (If other is c				,	/				
New Pe	rmit, Regis	tration or Authori	zation (Core I	Data Fo	rm should be	e submi	tted with	the p	rogram applicatio	n.)	
Renewa	Renewal (Core Data Form should be submitted with the renewal form)				n)	Oth	ner				
2. Customer	Reference	e Number <i>(if iss</i>	ued)		this link to se		3. Regul	lated	Entity Reference	e Number <i>(i</i>	if issued)
CN 6061	06011				for CN or RN numbers in RN 111661732			51732			
SECTION	II: Cu	stomer Info	ormation								
4. General C	ustomer Ir	formation	5. Effective	e Date fo	or Custome	r Inforn	nation U	pdate	s (mm/dd/yyyy)		
New Cust		ne (Verifiable wit		•	to Customer			ller of	Change in Public Accounts)	Regulated E	Entity Ownership
							•		,	rrent and	active with the
		State (SOS)	-	•			•				
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John) If new Customer, enter previous Customer below:											
620 RCP	Great Oa	aks, LP									
7. TX SOS/C	PA Filing I	Number	8. TX State	e Tax ID (11 digits)			9. Federal Tax ID (9 digits) 10.			10. DUN	S Number (if applicable)
11. Type of C	Customer:	Corporati	ion		🗌 Indivic	lual		Par	tnership: 🗌 Gener	al 🗌 Limited	
Government:	City 🗌 C	County 🗌 Federal 🗌	State 🗌 Othe	er Sole Proprietors			torship 🗌 Other:				
12. Number					<u> </u>		13. Independently Owned and Operated?			ted?	
0-20	21-100	101-250	251-500) 501 and higher Yes No							
14. Custome	e r Role (Pro	posed or Actual) -	- as it relates to	the Reg	ulated Entity I	listed on	this form.	Pleas	e check one of the	following	
Owner		Operat			Owner &	•					
	nal License	e 🗌 Respo	nsible Party		Voluntar	ry Clear	nup Appli	cant	Other:		
15. Mailing Address:											
Add(000.	City			St	ate		ZIP			ZIP + 4	
16. Country	Mailing Inf	ormation (if outsi	de USA)	1	I	17. E	-Mail Ad	dress	(if applicable)		
			·								
18. Telephor	ne Number	,		19. Ex	tension or	Code			20. Fax Numbe	r (if applicat	ole)
()	-								()	-	

SECTION III: Regulated Entity Information

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

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

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

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

Panda Express Round Rock

23. Street Address of the Regulated Entity:									
<u>(No PO Boxes)</u>	City		State		ZIP		ZIP + 4		
24. County	William	son							
Enter Physical Location Description if no street address is provided.									

25. Description to Physical Location:	Approx 300 ft NE of RM 620 and Great Oaks Dr intersection									
26. Nearest City						State			Nea	rest ZIP Code
Round Rock					TX			786	517	
27. Latitude (N) In Decin	nal:	30.495021	-	28. L	ongitud	e (W) In D	ecimal:	-97.7	2299	99
Degrees	Minutes		Seconds	Degre	es		Minutes	1		Seconds
79. Primary Sill Code (4 digits) 30. Secondary Sill Code (4 digits)			31. Primary NAICS Code (5 or 6 digits)			32. Secondary NAICS Code (5 or 6 digits)				
1542	16	23		236220			237110			
33. What is the Primary	Business c	f this entity?	(Do not repeat the SIC	or NAICS des	cription.)					
Commercial Buildi	ng									
				1006 E 6 th	St, Ste	900-178				
34. Mailing										
Address:										
	City	Austin	State	ТХ	ZIP		78701	ZIP) + 4	
35. E-Mail Address			dnix@risecpre.com							
36. Telepho	one Numbe	r	37. Extension or Code 38				38. Fax Number <i>(if applicable)</i>			
(512) 537-4663							() -		

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

Dam Safety	Districts	Edwards Aquifer	Emissions Inventory Air	Industrial Hazardous Waste
Municipal Solid Waste	New Source Review Air	OSSF 0	Petroleum Storage Tank	D PWS
Sludge	Storm Water	Title V Air	Tires	Used Oil
Voluntary Cleanup	Waste Water	U Wastewater Agriculture	U Water Rights	Other:

SECTION IV: Preparer Information

40. Name:	Jean Autrey	v, P.E., CESSWI			41. Title:	Project Manager
42. Tele	phone Number	43. Ext./Code	44. Fax Num	nber	45. E-Mail	Address
(210)	375-9000		()	-	jautrey@	pape-dawosn.com

SECTION V: Authorized Signature

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

Company:	Pape-Dawson Consulting Engineers, LLC	Job Title:	Vice Pres	sident	
Name (In Print):	Shelly Mitchell, P.E.			Phone:	(512) 454- 8711
Signature:	Shelly Mitmeel			Date:	07/26/2024

POLLUTANT LOAD AND REMOVAL CALCULATIONS

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Panda Express RR Date Prepared: 7/24/2024

Pages 3-27 to 3-30

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 spreadshee

1. The Required Load Reduction for the total project:

otal project:	Calculations from RG-348
Page 3-29 Equation 3.3: L _M =	27.2(A _N x P)
	Required TSS removal resu

Page 3-29 Equation 3.3: L _M =	27.2(A _N x P)		U	
			ulting from the proposed developm area for the project	ent = 80% of increased lo
	Average anni			
	· · · · · · · · · · · · · · · · · · ·		,	
Site Data: Determine Required Load Removal Based on the Entire Project County =	Williamson			
Total project area included in plan * =	1.04	acres		
Predevelopment impervious area within the limits of the plan * =	0.00	acres		
Total post-development impervious area within the limits of the plan* = Total post-development impervious cover fraction * =		acres		
P =	32	inches		1110000
				TE OF TEL
L _{M TOTAL PROJECT} =	722	lbs.		STATIST
* The values entered in these fields should be for the total project area.				
Number of drainage basins / outfalls areas leaving the plan area =	1			*
				SHELLY MITCHELL
2. Drainage Basin Parameters (This information should be provided for eac	h basin):			
				103662
Drainage Basin/Outfall Area No. =	Lot 1B			
Total drainage basin/outfall area =	14.92	acres		CENSE
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres		SONAL EN
Post-development impervious area within drainage basin/outfall area = Post-development impervious fraction within drainage basin/outfall area =		acres		07/26/2024
L _{m This Basin} =		lbs.		
				Shall. Alizhad
3. Indicate the proposed BMP Code for this basin.				Shelly Mitchell
Proposed BMP =	Wet Basin			$\left(\right)$
Removal efficiency =		percent		
4. Online the Mandaum TOOL and Damaned (1.) for this Designer Davis but		MD T		
<u>4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by t</u>	ne selected B	MP Type.		
RG-348 Page 3-33 Equation 3.7: L _R =	(BMP efficien	icy) x P x (A _i x	(34.6 + A _P x 0.54)	
			a in the BMP catchment area	
			in the BMP catchment area the BMP catchment area	
			is catchment area by the proposed	BMP
Ň			2 1 1	
A _c =	14.92	acres		
A ₁ =		acres		
A _P =		acres		
L _R =	10670	lbs		
5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall a	area			
- Calculate Fraction of Annual Ration to Front the aranage Suchry Calculate				
Desired L _{M THIS BASIN} =	8956	lbs.		
F -	0.04			
F =	0.84			
6. Calculate Capture Volume required by the BMP Type for this drainage ba	sin / outfall a	rea.	Calculations from RG-348	Pages 3-34 to 3-36
Rainfall Depth =	1.26	inches		
Post Development Runoff Coefficient =	0.50	and the factor		
On-site Water Quality Volume =	33814	cubic feet		
	Calculations 1	from RG-348	Pages 3-36 to 3-37	
Off-site area draining to BMP =	0.00	acres		
Off-site Impervious cover draining to BMP =	0.00	acres		
Impervious fraction of off-site area = Off-site Runoff Coefficient =				
Off-site Rufor Coefficient = Off-site Water Quality Volume =		cubic feet		
Storage for Sediment =				
Total Capture Volume (required water quality volume(s) x 1.20) =	40577	cubic feet		
11. Wet Basins	Designed as	Required in R	G-348 Pages 3-6	6 to 3-71

40577 Required capacity of Permanent Pool = Required capacity at WQV Elevation =

 40577
 cubic feet
 Permanent Pool Capacity is 1.20 times the WQV

 74391
 cubic feet
 Total Capacity should be the Permanent Pool Capacity plus a second WQV.

EXHIBITS

PANDA EXPRESS ROUND ROCK 105 DEER RIDGE DR., ROUND ROCK, TEXAS, 78681 **CIVIL CONSTRUCTION PLANS**

THIS PROJECT IS LOCATED IN THE LAKE CREEK-BRUSHY CREEK WATERSHED WHICH IS CLASSIFIED AS COMMERCIAL AS PER THE DATE OF THIS SUBMITTAL. THIS PROJECT IS NOT LOCATED IN THE CONTRIBUTING ZONE TO THE EDWARDS AQUIFER RECHARGE ZONE AS DEFINED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY. NO PORTION OF THIS TRACT IS WITHIN A FLOOD HAZARD AREA AS SHOWN ON FEDERAL FLOOD INSURANCE ADMINISTRATION FIRM COMMUNITY PANEL NUMBER 48491C0630F EFFECTIVE DATE DECEMBER 20, 2019.

THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR ITS REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY & ALL DAMAGES CAUSED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY & ALL UNDERGROUND UTILITIES. LEGAL DESCRIPTION: LOT 1B BLOCK N, REPLAT OF LOT 1 AND LOT 2, BLOCK N, HIGHLAND HORIZON, PHASE IV, A SUBDIVISION IN WILLIAMSON COUNTY, ACCORDING TO THE MAP OR REPLAT THEREOF, RECORDED UNDER DOCUMENT NO. 2023048608 OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS. TOTAL LIMITS OF CONSTRUCTION ACREAGE = 1.04 AC.

ZONING = ROUND ROCK ETJPRINCIPIAL STREET = DEER RIDGE DRIVE

MUNICIPAL UTILITY DISTRICT: BRUSHY CREEK M.U.D.

OWNER

RCP 620 GREAT OAKS LP 106 E 6TH ST. STE. 900–178 AUSTIN, TX 78701 PHONE: (512) 507-3500 CONTACT: DARREN NIX

DEVELOPER:

PANDA EXPRESS, INC. 1683 WALNUT GROVE AVE, ROSEMEAD, CA 91770 PHONE: (626) 799-9898 CONTACT: DENNIS STONE

ENGINEER: PAPE-DAWSON ENGINEERS 10801 N MOPAC EXPY BLDG 3 #200 AUSTIN, TEXAS 78759 PHONE: (512) 454-8711 CONTACT: SHELLY MITCHELL

SURVEYOR: PAPE-DAWSON ENGINEERS, INC. 10801 N MOPAC EXPY BLDG 3 #200 AUSTIN, TEXAS 78759 PHONE: (512) 454-8711 CONTACT: PARKER J GRAHAM

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.

ARCHITECT:

HEIGHTS VENTURE 1111 N LOOP W, STE. 800 HOUSTON, TX 77008 PHONE: (281)757-4101 EMAIL: MICHELE.SEE@HVA.CC CONTACT: MICHELE SEE

MEP: JAMES F. TURNER ENGINEERS

8340 MEADOW ROAD STE. 160 DALLAS, TX 75231 PHONE: (469) 581-8243 CONTACT: NICHOLAS POLCARI, P.E.



STRUCTURAL:

JAMES F. TURNER ENGINEERS 8340 MEADOW ROAD STE. 160 DALLAS, TX 75231 PHONE: (469) 581-8243 CONTACT: NICHÓLAS POLCARI, P.E. LOCATION MAP SCALE: 1"=1000'

PREPARED FOR:

PANDA EXPRESS, INC. 1683 WALNUT GROVE AVE, ROSEMEAD, CA 91770

JULY 15, 2024



10801 N MOPAC EXPY, BLDG 3, STE 200 I AUSTIN, TX 78759 I 512.454.8711 TEXAS ENGINEERING FIRM #470 I TEXAS SURVEYING FIRM #10028801



SHEET INDEX

SHEET TITLE	SHEET NO.	SHEET DESCRIPTION
CIVIL COVER SHEET	01	C01.0
GENERAL NOTES	02	C01.1
FINAL PLAT (1 OF 2)	03	C02.0
FINAL PLAT (2 OF 2)	04	C02.1
EXISTING CONDITION & DEMOLITION PLAN	05	C02.2
SITE & PAVING PLAN	06	C03.0
FIRE PROTECTION PLAN	07	C03.1
OVERALL UTILITY PLAN	08	C04.0
EXISTING GREAT OAKS CROSSING DRAINAGE PLAN	09	C05.1
EXISTING GREAT OAKS CROSSING DRAINAGE CALCS	10	C05.2
EXISTING GREAT OAKS CROSSING POND PLAN	11	C05.3
EXISTING DRAINAGE AREA MAP	12	C05.4
PROPOSED DRAINAGE AREA MAP	13	C05.5
PROPOSED GREAT OAKS CROSSING DRAINAGE PLAN	14	C05.6
STORM DRAIN PLAN	15	C05.7
GRADING PLAN	16	C05.8
EROSION & SEDIMENTATION CONTROL PLAN	17	C06.0
EROSION & SEDIMENTATION CONTROL DETAILS	18	C07.0
SITE DETAILS	19	C07.1
UTILITY DETAILS (1 OF 2)	20	C07.2
UTILITY DETAILS (2 OF 2)	21	C07.3
STORM DETAILS	22	C07.4

	SUBDIVISION AND BUILDING ADOPTED BY THE CITY OF
7E 7E 7 F CHELL 2 ENC	I, SHELLY MITCHELL, DO HE HEREIN COMPLIES WITH ALL HEREBY ACKNOWLEDGE THA CONSTITUTES A VIOLATION ADMINISTRATIVE PENALTIES SUBMITTED E
	PAPE-DAWSON ENGINEERS SHELLY MITCHELL, P.E. VICE PRESIDENT
	ALL RESPONSIBILITY FOR T PREPARED THEM. IN ACCES

, SHELLY MITCHELL, DO HEREBY CERTIFY THAT THE PUBLIC WORKS AND DRAINAG MPROVEMENTS DESCRIBED HEREIN HAVE BEEN DESIGNED IN COMPLIANCE WITH TH SUBDIVISION AND BUILDING REGULATION ORDINANCES AND STORMWATER DRAINAGE ADOPTED BY THE CITY OF ROUND ROCK, TEXAS.	Ē	

HELL, DO HEREBY CERTIFY THAT THE ENGINEERING WORK BEING SUBMITTED ES WITH ALL THE PROVISIONS OF THE TEXAS ENGINEERING PRACTICE ACT. WLEDGE THAT ANY MISREPRESENTATION REGARDING THIS CERTIFICATION VIOLATION OF THE ACT, AND MAY RESULT IN CRIMINAL, CIVIL AND/OR PENALTIES AGAINST ME, AS AUTHORIZED BY THE ACT.

MITTED BY:	Shelly Mitchell
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07/26/2024
DATE

DATE

DATE

C01.0

sheet_01 OF 22

BILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN ACCEPTING THESE PLANS, THE CITY OF ROUND ROCK MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER. ACCEPTED FOR CONSTRUCTION:

CITY OF R PLANNING		ROCK DEVELOPMENT	SERVICES	DEPARTMENT
SAM BASS	5 FIRE	DEPARTMENT		

C. ш ſ \mathbf{O}

GENERAL CONSTRUCTION NOTES

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK
- (CORR) DESIGN AND CONSTRUCTION STANDARDS (DACS) SPECIFICATIONS MANUAL 2. ANY EXISTING UTILITIES, PAVEMENT, CURBS, SIDEWALKS, STRUCTURES, TREES, ETC (NOT PLANNED FOR DEMOLITION OR REMOVAL) THAT ARE DAMAGED OR REMOVED, (NOT PLANNED FOR DEMOLITION OR REMOVAL) THAT ARE DAMAGED OR REMOVED, SHALL BE REPAIRED, OR REPLACED, AT THE CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION ACTIVITIES. ANY DISCREPANCIES WITH THE CONSTRUCTION PLANS FOUND IN THE FIELD SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ENGINEER WHO SHALL BE RESPONSIBLE FOR REVISING THE PLANS AS APPROPRIATE. FAILURE TO COMPLETE THIS STEP PRIOR TO
- COMMENCEMENT OF CONSTRUCTION MAY RESULT IN SIGNIFICANT DELAYS AND/OR EXPENDITURES FOR WHICH THE CITY SHALL NOT BE HELD LIABLE. 4. MANHOLE FRAMES, COVERS, VALVES, CLEANOUTS, ETC. SHALL BE RAISED TO FINISHED GRADE PRIOR TO FINAL PAVING CONSTRUCTION. 5. THE CONTRACTOR SHALL PROVIDE THE CITY OF ROUND ROCK WITH A 48-HOUR
- NOTICE BEFORE BEGINNING EACH PHASE OF CONSTRUCTION. TELEPHONE (512) 1218-5428 (PLANNING AND DEVELOPMENT SERVICES DEPARTMENT - PDS)
 6. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE REVEGETATED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THIS INCLUDES ANY AREAS LOCATED OUTSIDE OF THE DEFINED LIMITS OF CONSTRUCTION (LOC), IN RIGHTS-OF-WAY (ROW), OR LOCATED ON ADJACENT PROPERTIES. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL
- PROPERTIES. REVEGETATION OF ALL DISTURBED OR EXPOSED AREAS SHALL CONSIST OF SODDING OR SEEDING, AT THE CONTRACTOR'S DISCREPANCY, AS OUTLINED IN THE CITY'S DESIGN AND CONSTRUCTION STANDARDS. THE TYPE OF REVEGETATION PROVIDED MUST BE EQUIVALENT TO OR EXCEED THE TYPE OF VEGETATION PRESENT PRIOR TO CONSTRUCTION.
 PRIOR TO ANY CONSTRUCTION, A PRE-CONSTRUCTION MEETING SHALL BE HELD BETWEEN THE CITY OF ROUND ROCK, THE DESIGN ENGINEER, THE CONTRACTOR, SUBCONTRACTORS, OTHER UTILITY COMPANIES, AND ANY AFFECTED PARTIES OR OTHER ENTITY THE CITY OR DESIGN ENGINEER DEEM NECESSARY.
 THE CONTRACTOR AND THE DESIGN ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE PLANS. CHANGES TO APPROVED, CONSTRUCTION-STAMPED PLANS WILL REQUIRE A REVISION FROM THE DESIGN ENGINEER THAT IS APPROVED BY THE CITY PRIOR TO FIELD USE. THE DESIGN ENGINEER SHALL FURNISH THE CITY OF ROUND ROCK ACCURATE "AS-BUILT"
- ENGINEER SHALL FURNISH THE CITY OF ROUND ROCK ACCURATE "AS-BUILT" RECORD DRAWINGS FOLLOWING COMPLETION OF ALL CONSTRUCTION. THESE "AS-BUILT" RECORD DRAWINGS SHALL MEET WITH THE SATISFACTION OF THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT PRIOR TO FINAL ACCEPTANCE OF THE
- PROJECT.
 9. THE CITY OF ROUND ROCK SHALL NOT BE PETITIONED FOR ACCEPTANCE UNTIL ALL NECESSARY EASEMENT DOCUMENTS HAVE BEEN SIGNED AND RECORDED.
 10. WHENEVER CONSTRUCTION ACTIVITIES ARE TAKING PLACE WITHIN AN EXISTING EASEMENT, THE CONTRACTOR SHALL CONFINE THEIR WORK TO WITHIN THE BOUNDS OF SAID EASEMENT. PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL TRASH AND DEBRIS WITHIN ANY PERMANENT OR TEMPORARY EASEMENTS. CLEAN-UP SHALL BE TO THE SATISFACTION OF THE CITY OF POLY ON THE CONTRACTOR AND (OR THE CITY ENCINEER OF ROUND ROCK CIVIL INSPECTOR AND/OR THE CITY ENGINEER. 11. PRIOR TO ANY CONSTRUCTION, THE CONTRACTOR SHALL APPLY FOR AND SECURE ALL PROPER PERMITS FROM THE APPROPRIATE AUTHORITIES.
- 12. AVAILABLE PERMANENT BENCHMARKS (CITY OF ROUND ROCK DATUM) WITH VERTICAL DATUM INFORMATION THAT MAY BE UTILIZED FOR THE CONSTRUCTION OF THIS PROJECT AND ARE DESCRIBED AS FOLLOWS:

BENCHMARK 1: GRID N: 10152920.12 GRID S: 3117916.03 ELEV: 821.29' NAVD88 (GEOID03)

TRENCH SAFETY NOTES

- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH, IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL, SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJECT SHALL BE PROVIDED AS PART OF A PACKAGE REQUIRED PRIOR TO THE PRE-CONSTRUCTION MEETING AND ANY CONSTRUCTION ACTIVITIES.
 IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN PERSONS ARE IN TRENCHES 4 FEET DEEP OR MORE, ADEQUATE MEANS OF EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED IN SUCH A MANNER AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
 IF TRENCH SAFETY SYSTEM DETAILS WERE NOT PROVIDED IN THE PLANS BECAUSE TRENCHES WERE ANTICIPATED TO BE LESS THAN 5 FEET IN DEPTH BUT, DURING CONSTRUCTION, IT IS FOUND THAT TRENCHES ARE IN FACT 5 FEET OR MORE IN DEPTH (OR) TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE 1. IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S.
- DEPTH (OR) TRENCHES LESS THAN 5 FEET IN DEPTH ARE IN AN AREA WHERE HAZARDOUS GROUND MOVEMENT IS EXPECTED, ALL CONSTRUCTION SHALL CEASE, THE TRENCHED AREA SHALL BE BARRICADED AND THE DESIGN ENGINEER NOTIFIED IMMEDIATELY. CONSTRUCTION SHALL NOT RESUME UNTIL APPROPRIATE TRENCH SAFETY SYSTEM DETAILS, AS DESIGNED BY A PROFESSIONAL ENGINEER, ARE SUBMITTED TO THE CITY OF ROUND ROCK FOR REVIEW AND APPROVAL.

AMERICANS WITH DISABILITIES ACT

THE CITY OF AUSTIN HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATIONS ONLY. THE APPLICANT, PROPERTY OWNER, AND OCCUPANT OF THE PREMISES ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND ITS USE.

NCUMENT 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

STREET AND DRAINAGE NOTES

- GENERAL PUBLIC. MAXIMUM DENSITY TO WITHIN 3" OF TOP OF CURB. MATERIAL USED SHALL BE
- 30" BELOW SUBGRADE.

STREET NAME	STATIONING

ACCEPTED GEOTECHNICAL REPORT.

FIELD DENSITY CONTROL REQUIREMENTS		
SOIL	DENSITY, PERCENT	MOISTURE
PI<15	>=98% D _A AND ≤105% D _A	N/A
15 <pi>35</pi>	>=98% D _A AND ≤102% D _A	<= W _{OPT} + 3%
35 <pi< td=""><td>≻= 95% D_A AND ≤ 100% D_A</td><td><= W_{OPT} + 3%</td></pi<>	≻= 95% D _A AND ≤ 100% D _A	<= W _{OPT} + 3%

 ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR, AND THEY SHALL BE GIVEN A MINIMUM 24-HOUR NOTICE PRIOR TO ANY TESTING.
 PUBLIC ROADWAYS CONSTRUCTED AS PART OF ANY DEVELOPMENT PERMIT SHALL BE FREE FROM DEFECTS, PATCHES, OR REPAIRS PRIOR TO ACCEPTANCE BY THE CITY OF ROUND ROCK. ROADWAYS SHALL HAVE A CLEAR SURFACE FREE FROM ANY GOUGES, MARRING, OR CRACKING TO BE CONSIDERED SUITABLE TO THE CITY OF ROUND ROCK TRANSPORTATION DEPT. NO NEW ROADWAYS SHALL BE ACCEPTED UNTIL ALL CONSTRUCTION TRAFFIC RELATED TO THIS OR ANY ASSOCIATED PERMIT HAS CEASED, AND THE ROADWAY IS OPEN TO AND EXCLUSIVELY USED BY THE HAS CEASED, AND THE ROADWAY IS OPEN TO AND EXCLUSIVELY USED BY THE 3. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAIN A MINIMUM OF 95%

PRIMARILY GRANULAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST DIMENSION. THE REMAINING 3" SHALL BE CLEAN TOPSOIL FREE FROM ALL CLUMPS AND SUITABLE FOR SUSTAINING PLANT LIFE.
THE DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT INCLUDING GAS, ELECTRIC, TELEPHONE, CABLE TV, WATER SERVICES, ETC. SHALL BE A MINIMUM OF 30" PELOW SUBCRADE

30" BELOW SUBGRADE.
5. STREET RIGHTS-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE INDICATED. HOWEVER, IN NO CASE SHALL THE WIDTH OF RIGHT-OF-WAY AT 1/4" PER FOOT SLOPE BE LESS THAN 10 FEET UNLESS A SPECIFIC REQUEST FOR AN ALTERNATE GRADING SCHEME IS SUBMITTED TO AND APPROVED BY THE CITY OF ROUND ROCK PLANNING AND DEVELOPMENT SERVICES DEPARTMENT.
6. BARRICADES, BUILT TO CITY OF ROUND ROCK STANDARDS, SHALL BE CONSTRUCTED ON ALL DEAD-END STREETS AND, AS NECESSARY, DURING CONSTRUCTION TO MAINTAIN JOB AND PUBLIC SAFETY.
7. ALL DEINFORCED, CONCRETE DIPE (RCP), SHALL BE MINIMUM CLASS, UL, ALL DUBLIC

ALL REINFORCED CONCRETE PIPE (RCP) SHALL BE MINIMUM CLASS ILL. ALL PUBLIC RCP SHALL BE A MINIMUM OF 18-INCHES IN DIAMETER.
 THE SUBGRADE MATERIAL FOR THE STREETS SHOWN HEREIN WAS TESTED BY TERRACON PROJECT NO, AC245034 ON THIS DATE: MAY 10, 2024 AND THE PAVING SECTIONS DESIGNED IN ACCORDANCE WITH THE CURRENT CITY OF ROUND ROCK DESIGN CRITERIA. THE PAVING SECTIONS ARE TO BE CONSTRUCTED AS FOLLOWS:

FLEX-BASE THICKNESS	HMAC BASE THICKNESS	LIME SLAB THICKNESS
THICHALEGO		

THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS MADE DURING PREPARATION OF THE ACCEPTED GEOTECHNICAL REPORT. ANY ADJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH REVISION OF THE CONSTRUCTION PLANS AND ADDENDUM TO ANY

. WHERE PLASTICITY INDEX (PI) IS OVER 20, SUBGRADES MUST BE STABILIZED UTILIZING A METHOD ACCEPTABLE TO THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT. THE GEOTECHNICAL ENGINEER SHALL RECOMMEND AN APPROPRIATE SUBGRADE STABILIZATION IF SULFATES ARE DETERMINED TO BE PRESENT. WHEN UTILIZING LIME FOR SOIL STABILIZATION, PLACEMENT SHALL BE IN THE FORM OF LIME SLURRY, NOT PELLETS.

CITY OF ROUND ROCK WATER AND WASTEWATER NOTES

- 1. ALL TESTING SHALL BE DONE BY AN INDEPENDENT LABORATORY AT THE OWNER'S EXPENSE. ANY RETESTING SHALL BE PAID FOR BY THE CONTRACTOR. A CITY INSPECTOR SHALL BE PRESENT DURING ALL TESTS. TESTING SHALL BE COORDINATED WITH THE CITY INSPECTOR, AND THEY SHALL BE GIVEN A MINIMUM 24-HOUR NOTICE PRIOR TO ANY TESTING.
- 2. PIPE MATERIAL FOR WATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 200), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). WATER SERVICES (2" OR LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200 PSI, DR 9). 3. PIPE MATERIAL FOR PRESSURE WASTEWATER MAINS SHALL BE PVC (AWWA C-900, MIN. CLASS 150), SDR26 HIGHER PRESSURE RATED (160 PSI), OR DUCTILE IRON (AWWA C-100, MIN. CLASS 200). PIPE MATERIAL FOR GRAVITY WASTEWATER
- MAINS SHALL BE SDR26 PVC, PVC (ASTM D2241 OR D3034, MAX. DR-26), DUCTILE IRON (AWWA C-100, MIN. CLASS 200).
 UNLESS OTHERWISE ACCEPTED BY THE PLANNING AND DEVELOPMENT SERVICES DEPARTMENT, MINIMUM DEPTH OF COVER FOR ALL LINES OUTSIDE OF THE PAVED AREAS SHALL BE 42" BELOW FINISHED GRADE AND 30"BELOW SUBGRADE FOR ALL
- LINES LOCATED IN PAVED AREAS. 5. ALL FIRE HYDRANT AND SPRINKLER LEADS SHALL BE DUCTILE IRON PIPE (AWWA C-100, MIN. CLASS 200).

- C-100, MIN. CLASS 200).
 ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE WRAPPED WITH A MINIMUM OF 8-MIL POLYETHYLENE AND SEALED WITH DUCT TAPE OR EQUAL ACCEPTED BY THE CITY OF ROUND ROCK CIVIL INSPECTOR.
 THE CONTRACTOR SHALL CONTACT THE CITY OF ROUND ROCK INSPECTOR TO COORDINATE UTILITY TIE-INS AND NOTIFY THEM AT LEAST 48 HOURS PRIOR TO CONNECTING TO ANY EXISTING LINES.
 ALL MANHOLES SHALL BE CONCRETE WITH CAST IRON RING AND COVER. ALL MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL HAVE BOLTED COVERS. CORE CONNECTIONS TO FIBERGLASS MANHOLES ARE PROHIBITED.
 THE CONTRACTOR MUST OBTAIN A BULK WATER PERMIT OR PURCHASE AND INSTALL A WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A COPY OF THIS PERMIT MUST ALWAYS BE POSSESSED BY ANY PARTIES WHO UTILIZE WATER. CONTACT WATER DISTRIBUTION AT (512) 801-4435 FOR ADDITIONAL WATER. CONTACT WATER DISTRIBUTION AT (512) 801-4435 FOR ADDITIONAL
- INFORMATION. 10. LINE FLUSHING, OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER, MUST BE SCHEDULED A MINIMUM (10) DAYS IN ADVANCE WITH THE CITY OF ROUND ROCK CIVIL INSPECTOR. THE CONTRACTOR, AT HIS EXPENSE, SHALL PERFORM STERILIZATION OF ALL POTABLE WATER LINES CONSTRUCTED AND SHALL PROVIDE ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED ALL EQUIPMENT (INCLUDING TEST GAUGES), SUPPLIES (INCLUDING CONCENTRATED CHLORINE DISINFECTING MATERIAL), AND NECESSARY LABOR REQUIRED FOR THE STERILIZATION PROCEDURE. THE STERILIZATION PROCEDURE SHALL BE MONITORED BY THE CITY OF ROUND ROCK CIVIL INSPECTOR. WATER SAMPLES WILL BE COLLECTED BY THE CITY OF ROUND ROCK TO VERIFY EACH TREATED LINE HAS ATTAINED AN INITIAL CHLORINE CONCENTRATION OF 50 PPM. WHERE MEANS OF FLUSHING IS NECESSARY, THE CONTRACTOR, AT HIS EXPENSE, SHALL PROVIDE FLUSHING DEVICES AND REMOVE SAID DEVICES PRIOR TO FINAL ACCEPTANCE BY THE CITY OF POLIND POCK
- THE CITY OF ROUND ROCK.
 SAMPLING TAPS SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE FOR CITY PERSONNEL. AT THE CONTRACTOR'S REQUEST, AND IN THEIR PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BE COLLECTED BY THE CITY OF ROUND ROCK NOT LESS THAN (24) HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF THE CONCENTRATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY. THE CONTRACTOR SHALL SUPPLY A CHECK OR MONEY ORDER, PAYABLE TO THE CITY OF ROUND ROCK, TO COVER THE FEE CHARGED FOR TESTING EACH WATER SAMPLE. FEE AMOUNTS MAY BE OBTAINED BY CONTACTING THE CITY OF ROUND ROCK ENVIRONMENTAL SERVICES
- OBTAINED BY CONTACTING THE CITY OF ROUND ROCK ENVIRONMENTAL SERVICES LABORATORY AT (512) 218-5561 OR WATERLAB@ROUNDROCKTEXAS.GOV. 2. THE CONTRACTOR, AT THEIR EXPENSE, SHALL PERFORM QUALITY TESTING FOR ALL WASTEWATER PIPE INSTALLED AND PRESSURE PIPE HYDROSTATIC TESTING OF ALL WATERLINES CONSTRUCTED. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT (INCLUDING PUMPS AND GAUGES), SUPPLIES, AND LABOR NECESSARY TO PERFORM THESE TESTS. QUALITY AND PRESSURE TESTING SHALL BE MONITORED BY THE CITY OF ROUND ROCK CIVIL INSPECTOR. 5 THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF ROUND ROCK 12.
- 13. THE CONTRACTOR SHALL COORDINATE TESTING WITH THE CITY OF ROUND ROCK CIVIL INSPECTOR AND PROVIDE NO LESS THAN (24) HOURS OF NOTICE PRIOR TO PERFORMING STERILIZATION, QUALITY TESTING, OR PRESSURE TESTING.
- THE CONTRACTOR (OR SUBCONTRACTORS) SHALL NOT OPEN OR CLOSE ANY VALVES UNLESS DIRECTED TO DO SO BY CITY OF ROUND ROCK PERSONNEL.
 ALL VALVE BOXES AND COVERS SHALL BE CAST IRON.
 ALL WATER SERVICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE PPROPRIATELY MARKED AS FOLLOWS:

WATER SERVICE – "W" ON TOP OF CURB (BLUE COLOR) WASTEWATER SERVICE – "S" ON TOP OF CURB VALVE – "V" ON FACE OF CURB

- 17. TOOLS FOR MARKING THE CURB SHALL BE PROVIDED BY THE CONTRACTOR. OTHER APPROPRIATE MEANS OF MARKING SERVICE AND VALVE LOCATIONS SHALL BE PROVIDED IN AREAS WITHOUT CURBS. SUCH MEANS OF MARKING SHALL BE AS SPECIFIED BY THE DESIGN ENGINEER AND APPROVED BY THE CITY OF ROUND
- 18. CONTACT THE CITY OF ROUND ROCK UTILITIES AND ENVIRONMENTAL SERVICES (UES) DEPARTMENT FOR ASSISTANCE IN DETERMINING EXISTING WATER AND WASTEWATER LOCATIONS.
- 19. THE CITY OF ROUND ROCK FIRE DEPARTMENT SHALL BE NOTIFIED (48) HOURS
- THE CITY OF ROUND ROCK FIRE DEPARTMENT SHALL BE NOTIFIED (48) HOURS PRIOR TO THE TESTING OF ANY BUILDING SPRINKLER PIPING SO THAT THEY MAY BE PRESENT TO MONITOR SUCH TESTING.
 SAND, AS DESCRIBED IN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND WASTEWATER LINES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND, IN LIEU OF SAND, A NATURALLY OCCURRING OR MANUFACTURED STONE MATERIAL CONFORMING TO ASTM C33 FOR STONE QUALITY AND MEETING THE FOLLOWING GRADATION SPECIFICATION:

<u>SIEVE SIZE</u>	PERCENT RETAINED BY WEIGHT
1/2"	0
3/8"	0-2
#4	40-85
# 10	90–100

- 21. THE CONTRACTOR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY LINES MAY HAVE TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS (7AM - 4 PM) AND POSSIBLY BETWEEN 12 AM AND 6 AM. 22. ALL WASTEWATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TEXAS
- COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) REGULATIONS, 30 TAC CHAPTER 213 AND 217, AS APPLICABLE. ALL WATER CONSTRUCTION SHALL BE IN ACCORDANCE WITH TCEQ REGULATIONS, 30 TAC CHAPTER 290. WHENEVER TCEQ AND CITY OF ROUND ROCK SPECIFICATIONS CONFLICT, THE MORE STRINGENT SHALL APPLY.

TRAFFIC MARKING NOTES

- N WHICH THEY ARE APPLIED.

- ACCEPTABLE FOR FIRE ACCESS ROADS/DRIVES.

- SHALL NOT BE LESS THAN 13'-6". GREATER THAN (5) STORIES BELOW GRADE PLANE
- MODELING SIGNAGE.
- OFFICIAL.

SURVEY NOTES

. DATE OF TREE SURVEY- JUNE, 2024. PAPE-DAWSON ENGINEERS IN JUNE 2024.

ANY METHODS, STREET MARKINGS AND SIGNAGE NECESSARY FOR WARNING MOTORISTS, WARNING PEDESTRIANS, OR DIVERTING TRAFFIC DURING CONSTRUCTION SHALL CONFORM TO THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS (TMUTCD), LATEST EDITION. ALL PAVEMENT MARKINGS, MARKERS, PAINT, TRAFFIC BUTTONS, TRAFFIC CONTROLS, AND SIGNS SHALL BE INSTALLED IN ACCORDANCE WITH THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES AND, THE TEXAS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, LATEST EDITIONS.

EROSION AND SEDIMENTATION CONTROL NOTES

EROSION CONTROL MEASURES, SITE WORK, AND RESTORATION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF ROUND ROCK DESIGN AND CONSTRUCTION

STANDARDS (DACS) AND CODE OF ORDINANCES. ALL SLOPES SHALL BE SODDED OR SEEDED WITH APPROVED GRASS, GRASS MIXTURES, OR GROUND COVER THAT IS SUITABLE TO THE AREA AND THE SEASON

IN WHICH THEY ARE APPLIED.
3. SILT FENCES, ROCK BERMS, SEDIMENTATION BASINS, AND SIMILARLY RECOGNIZED TECHNIQUES AND MATERIALS SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT POINT SOURCE SEDIMENTATION LOADING OF DOWNSTREAM FACILITIES. INSTALLATION AND CONDITION SHALL BE REGULARLY INSPECTED BY THE CITY OF ROUND ROCK FOR EFFECTIVENESS. ADDITIONAL MEASURES MAY BE REQUIRED IF, IN THE OPINION OF THE CITY ENGINEER, THEY ARE WARRANTED.
4. ALL TEMPORARY EROSION CONTROL MEASURES SHALL NOT BE REMOVED UNTIL REVEGETATION HAS BEEN ESTABLISHED AND APPROVAL RECEIVED FROM THE CIVIL INSPECTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN ALL TEMPORARY EROSION CONTROL STRUCTURES AND TO REMOVE ALL ONCE APPROVED TO DO SO BY THE CIVIL INSPECTOR.
5. ALL MUD, DIRT, ROCKS, DEBRIS, ETC., SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON EXISTING PAVED STREETS, DRIVES AND AREAS USED BY THE PUBLIC SHALL BE CLEANED UP IMMEDIATELY.

CITY OF ROUND ROCK FIRE DEPARTMENT NOTES

GENERAL: ALL DEVELOPMENTS SHALL COMPLY WITH THE CURRENT FIRE CODE, APPENDICES, AND ANY LOCAL AMENDMENTS AS ADOPTED BY THE CITY OF ROUND

2. COMBUSTIBLE MATERIALS ON-SITE: ALL-WEATHER ACCESS ROADS/DRIVES (ASPHALT/CONCRETE CAPABLE OF SUPPORTING 80,000 LB. APPARATUS LOADING) SHALL BE CONSTRUCTED, AND ALL WATER LINES SHALL BE TESTED AND FIRE HYDRANTS IN-SERVICE, PRIOR TO BRINGING COMBUSTIBLE MATERIALS (WOOD, PACKAGING, PLASTICS, ETC.) ON ANY JOB SITE. BASE MATERIAL IS NOT

3. FIRE LANES: FIRE APPARATUS ACCESS ROADS/DRIVES SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF (20) FEET. WHERE TRAFFIC IS TWO-WAY DIRECTIONAL, BUILDINGS EXCEED (30) FEET OR THREE STORIES IN HEIGHT, TOTAL BUILDING AREA EXCEEDS 62,000 SQUARE FEET, OR WHERE HYDRANTS ARE LOCATED ALONG THE FIRE ACCESS ROADS, THE MINIMUM WIDTH SHALL BE (26) FEET. IF RAISED CURBING OR MEDIANS COMPROMISE MINIMUM WIDTH, CURBING SHALL BE MOUNTABLE AND RAISED AREA SHALL CONTAIN NO OBSTRUCTIONS SUCH AS LANDSCAPING, SIGNAGE, GROUND-MOUNTED EQUIPMENT, ETC. ALL-WEATHER SURFACE: THE PAVEMENT STRUCTURE FOR FIRE ACCESS ROADS (DRIVES MUST BE ALL- WEATHER SUBFACE (ASPHALT (CONCRETE) DESIGNED

ROADS/DRIVES MUST BE ALL- WEATHER SURFACE (ASPHALT/CONCRETE) DESIGNED TO SUPPORT AN 80,000 LB. APPARATUS LOADING. GRADE: THE GRADE THROUGH THE FIRE LANE ACCESS SHALL NOT EXCEED 7% AND NO GRADE BREAKS SHALL EXCEED 3%. TURNING RADII: TURNING RADII SHALL BE A MINIMUM OF 25-FTT INSIDE AND

50-FT OUTSIDE AS MEASURED FROM FACE-OF-CURB (WHEN PRESENT) OR ON DRIVABLE, PAVED SURFACE. VERTICAL CLEARANCE: THE VERTICAL CLEARANCE OVER A DESIGNATED FIRE LANE

SHALL NOT BE LESS INAN 13-0. EMERGENCY RESPONDER RADIO COVERAGE: ADEQUATE EMERGENCY RESPONDER RADIO COVERAGE SHALL BE REQUIRED FOR ALL NEW BUILDINGS. A PRE-ENHANCEMENT RADIO SURVEY SHALL BE REQUIRED AT THE 80% CONSTRUCTION PHASE FOR CERTAIN BUILDING TYPES BASED ON THE SIZE OF THE DUBLING DEFINITION FOR CERTAIN BUILDING TYPES BASED ON THE SIZE OF THE BUILDING. PRE- ENHANCEMENT RADIO SURVEY REQUIREMENTS INCLUDE THE FOLLOWING BUILDING TYPES:

WOOD FRAMED CONSTRUCTION GREATER THAN 50,000 SF CONCRETE OR METAL FRAMED CONSTRUCTION GREATER THAN 25,000 SF REQUIRED FIRE FLOWS: A PROJECT'S MINIMUM FIRE FLOW FOR THE LARGEST BUILDING SHALL BE MEASURED AT (20) PSI RESIDUAL PRESSURE THAT IS AVAILABLE FOR FIREFIGHTING PER THE FLOWS ON TABLES B105.1 OR B105.2 OF THE INTERNATIONAL FIRE CODE (IFC), APPENDIX B. DISCLAIMER: IT IS THE RESPONSIBILITY OF THE DEVELOPER AND ENGINEER TO ENSURE THESE MINIMUM FIRE FLOW REQUIREMENTS FOR THE SITE ARE MET VIA FLOW TESTING AND WATER

10. SPRINKER SYSTEMS: BUILDINGS EQUIPPED WITH ANY FIRE DEPARTMENT CONNECTIONS (FDC) SHALL HAVE A FIRE HYDRANT LOCATED WITHIN 100' OF THE FDC (REMOTE FDC IS PERMISSIBLE). FDC SHALL BE IDENTIFIED ON THE SITE VIA

11. GATES: IF GATES ARE PROVIDED ALONG ANY FIRE ACCESS ROAD/DRIVE, MINIMUM PASSABLE WDTH SHALL NOT BE LESS THAN (20) FEET AND SHALL COMPLY WITH IFC APPENDIX D AND ROUND ROCK CODE OF ORDINANCES REGARDING EMERGENCY ACCESS SYSTEMS. GATES WILL REQUIRE A KNOX-BOX®KEY BOX THAT SHALL CONTAIN KEYS TO GAIN NECESSARY ACCESS AS REQUIRED BY THE FIRE CODE

2. EXISTING AERIAL CONTOUR INFORMATION SHOWN IS AT ONE (1) FOOT INTERVALS. THE CONTOURS ARE COMPUTER GENERATED USING FIELD DATA BY

IELLY MITCHE 103662 CENSE 07/26/202 Shelly Mitchell 0 SS ΖK E-DA **Z** с, П OOK Ĩ ROUND **K**, TEXAS ഗ ш $\dot{\frown}$ Ž S EXPRES: Ш Ζ ш (Г Ш \square AN Ω C01.1JOB NO. 51506-01 DATE JULY 2024 DESIGNER DS CHECKED DRAWN VKE SHEET 02 OF 22











PROPOSED TCEQ POLLUTANT CALCULATIONS			
e Data: Determine Required Load Removal Based on the Entire Project	:t		
County =	Williamson		
Total project area included in plan * =	14.92	acres	
Predevelopment impervious area within the limits of the plan * =	0.00	acres	
otal post-development impervious area within the limits of the plan* =	10.29	acres	
Total post-development impervious cover fraction * =	0.69		
P =	32	inches	
L _{M TOTAL PROJECT} =	8956	lbs.	
-M TOTAL PROJECT	0000	100.	

TCEQ WPAP 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.

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- 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.
- 5. 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. IF 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.
- 6. 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.
- 7. 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;
- C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

DOCIMENT HAS REEN PRODUCED FROM MATERIAL THAT WAS STORED AND /OR TRANSWITTED FLECTRONICALLY AND MAY HAVE BEEN INADVERTENTLY ALTERED. RELY ONLY ON FINAL HARDCOPY MATERIALS REARING THE CONSULTANT'S ORIGINAL SIGNATURE AND SEAL

RANCH TO MARKET 620 (RIGHT-OF-WAY VARIES) ±148 LF TRIANGULAR FILTER DIKE - -- -----C) ±86 LF OF TEMPORARY TFD FOR DRIVEWAY REGRADING. CONTRACTOR TO EXTEND TFD-AS NECESSARY TO MAINTAIN _ ACCESS OF PRIVATE DRIVE 50' BUILDING SETBACK DOC. NO. 2015065500 WATER FACILITIES EASEMENT DOC. NO. 2023048608 817 DOC. NO. 2023050914 (0.P.R.) (O.P.R.W.C) ±11 LF TRIANGULAR FILTER DIKE $\langle \langle \rangle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \langle \rangle \rangle \langle \rangle \langle$ Δ · Δ PROPOSED BUILDING (13) 2,784 SF FFE = 818.00' Gr LOT 1A, REPLAT OF LOT 1 AND 2, BLOCK N HIGHLAND HORIZON, PHASE IV, CALLED 0.825 ACRE TRACT LOT 2A, REPLAT OF LOT 1 AND 2, DOCUMENT NO. 2015065500 BLOCK N LOT 1B, REPLAT OF LOT 1 (O.P.R.W.C.) G HIGHLAND HORIZON, PHASE IV, AND 2, BLOCK N CALLED 1.540 ACRE TRACT HIGHLAND HORIZON, PHASE IV DOCUMENT NO. 2015065500 CALLED 1.039 ACRE TRACT (O.P.R.W.C.) DOCUMENT NO. 2015065500 > (O.P.R.W.C.) $\overline{}$ \mathbf{S} PROPOSED TEMPORARY STAGING AND STORAGE AREA -+ 329 LF SILT FENCE 0.054 AC PRIVATE - PROPOSED STABILIZED UTILITY EASEMENT CONSTRUCTION ENTRANCE DOC. NO. 2023050912 (O.P.R.W.C) PROPOSED CONCRETE 8/24 ВГР WASHOUT PIT →±21 LF SILT FENCE 0.359 AC WATERLINE EASEMENT DOC. NO. 2015095187 -±73 LF TRIANGULAR FILTER DIKE 10' PUE (PER PLAT) 81∢ DOC. NO. 2015065500 -_____ (0.P.R.W.C) -DEER RIDGE DRIVE JOINT ACCESS EASEMENT DOC. NO. 2015065499 🖂 (1.204 AC JOINT USE ACCESS EASEMENT) ____ DOC. NO. 2015065499 (O.P.R.W.C) (O.P.R.W.C) 1.671 AC DRAINAGE EASEMENT DOC. NO. 2015058846 (O.P.R.W.C) 0.314 AC WASTEWATER EASEMENT = DOC .NO. 2015058847 (O.P.R.W.C)



	2"X4"-W1.4XW1.4 WIRE FABRIC STRUCTURE
	INLET CROSS_SEC
	NOTES: 1. WHERE MINIMUM CLEARANCES CAUSE TRAI 1" X 4" BOARD SECURED WITH CONCRET HOLD THE FILTER DIKE IN PLACE. UPON CHEMICAL SANDING AGENT AND APPLY NO. 2. A SECTION OF FILTER FABRIC SHALL BE ENGINEER OR DESIGNATED REPRESENTATIV HOG RINGS AT THIS LOCATION. 3. DAILY INSPECTION SHALL BE MADE BY TH DEPTH REACHES 2". 4. CONTRACTOR SHALL MONITOR THE PERFOR INLET PROTECTIONS SHALL BE REMOVED / INLET PROTECTIONS SHALL BE REMOVED / RECORD SIGNED COPY ON FILE AT PUBLIC WORKS APPROVED 03-25-11 DATE THE ARCHITECT/ENGINEER ASSUMES THE ARCHITECT/ENGINEER ASSUMES
-0.1049	USE OF THE DETAIL (NOT TO SCALE)
File: H: Projects/515/06/01/301 construction documents/Civil/DT51506-01.dwg	NOTES: 1. STEEL POSTS WHICH SUPPORT THE SILT F ANTICIPATED RUNOFF SOURCE. POST MUS 2. THE TOE OF THE SILT FENCE SHALL BE DOWNSLOPE FACE OF THE TRENCH IS FLA BE TRENCHED IN (E.G. PAVEMENT) WEIGHT UNDER FENCE. 3. THE TRENCH MUST BE A MINIMUM OF 6 II FABRIC TO BE LAID IN THE GROUND AND 4. SILT FENCE SHALL BE SECURELY FASTEMED 15. SICURELY FASTENED TO THE STEEL FEI 5. INSPECTION SHALL BE MADE WEEKLY OR A MADE PROMPTLY AS NEEDED. 6. SILT FENCE SHALL BE REMOVED WHEN TH STORM FLOW OR DRAINAGE. 7. ACCUMULATED SILT SHALL BE REMOVED WHEN TH STORM FLOW OR DRAINAGE. 8. SILT FENCE SHALL BE REMOVED WHEN TH STORM FLOW OR DRAINAGE. 9. ACCOUNDATED SILT SHALL BE REMOVED WA DISPOSED OF IN AN APPROVED SITE AND 8. SILT FENCE SHALL BE REMOVED AS SOON RECORD SIGNED COPY ON FILE AT PUBLIC WORKS APPROVED 03-25-11 DATE THE ARCHTREC/FINGINEER ASSUMES RESPONSIBILITY FOR THE APPROPRIATE USE OF THIS DETAIL (NOT TO SCALE)

