# 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 N	ame: Sa	an Gab	oriel Pa	rk Ph.	3	2. Regulated Entity No.: RN102727799					
3. Customer Name: (	eorgeto	own	<b>4. Customer No.:</b> CN600412043								
5. Project Type: (Please circle/check one)	New		Modification			Exter	nsion	Exception			
6. Plan Type: (Please circle/check one)	WPAP	CZP(	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures		
7. Land Use: (Please circle/check one)	Resider	ntial (	Non-r	residen	tial		8. Sit	e (acres):	40.55		
9. Application Fee:	\$650		10. P	ermai	nent I	BMP(s	s):	n/a			
11. SCS (Linear Ft.):	333		12. A	ST/US	ST (No	o. Tar	nks):	n/a			
13. County:	William	ison	14. W	aters	hed:			San Gabriel River			

# **Application Distribution**

Г

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

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

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

Ausun Kegion												
County:	Hays	Travis	Williamson									
Original (1 req.)												
Region (1 req.)			_1_									
County(ies)		_	_1_									
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 1_Georgetown Jerrell Leander Liberty Hill Pflugerville Round Rock									

Austin Region

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								

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.

Addison Skrla		
Print Name of Customer/Authorized Agent		
Addison Sk. Q	7/20/23	
Signature of Customer/Authorized Agent	Date	

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

# **General Information Form**

**Texas Commission on Environmental Quality** 

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

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

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

# Signature

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

Print Name of Customer/Agent: Addison Skrla, PE, CFM

Date: 7/15/23

Signature of Customer/Agent:

Addison Skl

# **Project Information**

- 1. Regulated Entity Name: San Gabriel Park Ph. 3
- 2. County: Williamson
- 3. Stream Basin: San Gabriel River
- 4. Groundwater Conservation District (If applicable):
- 5. Edwards Aquifer Zone:

$\times$	Recharge Zone
	Transition Zone

6. Plan Type:

	WPAP	AST
X	SCS	UST UST
	Modification	Exception Request

7. Customer (Applicant):

Contact Person: <u>Dave Melaas</u> Entity: <u>City of Georgetown</u> Mailing Address: <u>300 Industrial Avenue</u> City, State: <u>Georgetown, Texas</u> Telephone: <u>512-390-3595</u> Email Address: <u>dave.melaas@georgetown.org</u>

Zip: <u>78626</u> FAX: \_\_\_\_\_

8. Agent/Representative (If any):

Contact Person: <u>Addison Skrla, PE, CFM</u> Entity: <u>Kasberg, Patrick & Associates, LP</u> Mailing Address: <u>800 South Austin Avenue</u> City, State: <u>Georgetown, Texas</u> Telephone: <u>512-819-9478</u> Email Address: <u>askrla@kpaengineers.com</u>

Zip: <u>78626</u> FAX:

9. Project Location:

The project site is located inside the city limits of <u>Georgetown, Texas</u>.

The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of \_\_\_\_\_\_.

The project site is not located within any city's limits or ETJ.

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

<u>The project is located in the San Gabriel Park in Georgetown, Texas. The address of the</u> park is 445 E. Morrow Street. The park is adjacent to the San Gabriel River, and is east of the intersection of E. Morrow Street and N. Austin Avenue in downtown <u>Georgetown.</u>

- 11. Attachment A Road Map. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.
- 12. X Attachment B USGS / Edwards Recharge Zone Map. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

Project site boundaries.

USGS Quadrangle Name(s).

Boundaries of the Recharge Zone (and Transition Zone, if applicable).

Drainage path from the project site to the boundary of the Recharge Zone.

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

- Survey staking will be completed by this date: <u>\*Survey staking will not be completed</u> <u>until construction begins (which will not start until this application is approved). If TCEQ</u> <u>wishes to make a site visit before, please contact us and we will be happy to arrange.</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
  - $\ge$  Permanent BMP(s)
  - Proposed site use
  - Site history
  - Previous development
  - Area(s) to be demolished
- 15. Existing project site conditions are noted below:
  - Existing commercial site
  - Existing industrial site
  - Existing residential site
  - Existing paved and/or unpaved roads
  - Undeveloped (Cleared)
  - Undeveloped (Undisturbed/Uncleared)
  - Other: Existing Park

# **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:

### 

 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.  $\square$  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 B - USGS/Edwards Recharge Zone Map



County of Williamson, Texas Parks & Wildlife, Esri, HERE, Garmin, INCREMENT P, Intermap, USGS, METI/NASA, EPA, USDA, TCEQ

#### **General Information Form**

#### **TCEQ-0587**

#### Attachment C

#### **Project Description**

The San Gabriel Park Phase 3 Improvements project is located in the eastern half of the San Gabriel Park, just north of downtown Georgetown, Texas. The park is bordered offsite by San Gabriel River to the south, and residential/commercial to the north. The existing park has paved roadways, parking, pedestrian trails, playscapes, and recreational park buildings. The proposed project consists of improving existing parking areas, adding a skate park and splash pad, removing and replacing an existing public restroom facility, improving existing pedestrian trails, and expanding the large grass park area by replacing existing impervious cover with pervious grass and vegetation.

There is an existing wastewater collection system in place which, at this location, is serving the City of Georgetown Recreation Center and an existing public restroom facility in the park area. The proposed park improvements, including the skate park, would conflict with the alignment of the existing wastewater line, so this project proposes to re-route a small portion of the wastewater line to avoid this conflict and to provide service to the newly located public restroom facility. The site plan displaying these improvements is included as an attachment to Section TCEQ-0582.

The project is located within the Edwards Aquifer Recharge Zone. The park was originally constructed prior to the TCEQ regulations for Water Pollution Abatement Plans, and therefore is partially not covered by an existing WPAP or permanent BMPs other than the vegetated filtering done by the park grassland itself. As noted previously, a portion of the project is covered under an existing WPAP (existing WPAP approved November 2007; Edwards Aquifer Protection Program ID No. 07092701) and an application to modify the existing WPAP has been submitted to TCEQ.

The project site is within the City of Georgetown city limits and there is no groundwater conservation district within the proposed project site.



Cambrian Environmental 4422 Packsaddle Pass Suite 204 Austin, TX 78745

Tel (512) 663-0156

www.cambrianenvironmental.com

# Narrative Description of Site Specific Geology for the City of Georgetown San Gabriel Park, Georgetown, Williamson County, Texas

Prepared for

The City of Georgetown- Parks & Recreation Department

Prepared by Cambrian Environmental

March 2015

### NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY FOR THE CITY OF GEORGETOWN SAN GABRIEL PARK, GEORGETOWN, WILLIAMSON COUNTY, TEXAS

Prepared for

### THE CITY OF GEORGETOWN PARKS & RECREATION DEPARTMENT 1101 N. College Street Georgetown, Texas 78626

Prepared by

Craig Crawford, P.G.

#### **CAMBRIAN ENVIRONMENTAL**

4422 Pack Saddle Pass Suite 204 Austin, Texas 78745 www.cambrianenvironmental.com TBPG Firm Registration #50484



March 17, 2015

# **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: Craig Crawford, PG

Telephone: 512.705.5541

UST

Fax:

Date: 17 March 2015

Representing: <u>Cambrian Environmental</u> (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: City of Georgetown - San Gabriel Park

# **Project Information**

- 1. Date(s) Geologic Assessment was performed: February 25 & 26, March 6 2015
- 2. Type of Project:

$\times$	WPAP
	SCS

3. Location of Project:

Recharge Zone
 Transition Zone
 Contributing Zone within the Transition Zone

TCEQ-0585 (Rev.02-11-15)



1 of 3

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

Soil Name	Group*	Thickness(feet)
Doss (DoC)	С	<2
Eckrant (EaD)	D	<2
Oakalla (Oa,Oc)	В	>5
Queeny (QuC)	D	>5
Sunev (SuA,SuB)	В	>5

# Table 1 - Soil Units, InfiltrationCharacteristics and Thickness

\* Soil Group Definitions (Abbreviated)

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

Applicant's Site Plan Scale: 1" = \_\_\_\_' Site Geologic Map Scale: 1" = <u>600</u>' Site Soils Map Scale (if more than 1 soil type): 1" = <u>650</u>'

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.

TCEQ-0585 (Rev.02-11-15)

2 of 3

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

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

- 13. The Recharge Zone boundary is shown and labeled, if appropriate.
- 14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

There are  $\underline{3}$  (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)

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

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

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

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

### Administrative Information

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

GEOL	OGIC ASSE	SSMENT T	PROJECT NAME: City of Georgetown San Gabriel Park																		
	LOCATIC	N				FEA	TUR	ECI	IARACT	ER	ISTICS	3			EV	ALUAT	ION	N PHYSICAL SET			
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9		10	11		12	
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	NSIONS (	(FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ITIVITY	CATCHN (AC	IENT AREA (RES)	TOPOGRAPHY	
						х	Y	Z		10						<40	<u>&gt;40</u>	<1.6	<u>&gt;1.6</u>		
F1	30.65238	-97.67325	CD	5	Qt	1	2	0.5					F,V	15	20	Х			Х	Floodplain	
F2	30.6547	-97.66725	CD	5	Qt	1.5	3	0.5					F,V	15	20	Х			Х	Floodplain	
F3	30.65158	-97.66768	CD	5	Qal	1	1	0.5					F,V	15	20	Х			Х	Floodplain	
F4	30.6516	-97.66811	CD	5	Qal	2	3	1					F,V	15	20	Х			х	Floodplain	
F5	30.65089	-97.66614	SF	20	Kgt	1.5	1	0.75					N	15	35	Х			Х	Floodplain	
F6	30.65065	-97.66656	SF	20	Kgt	0.75	0.6	0.5					N	15	35	X			Х	Floodplain	
F7	30.65019	-97.66747	0	5	Kgt								N	15	20	Х			Х	Floodplain	
F8	30.64994	-97.66773	SF	20	Kgt	3	0.3	0.5					N	15	35	Х			Х	Floodplain	
F9	30.6499	-97.66782	SF	20	Kgt	2	1	0.3					N	15	35	Х			Х	Floodplain	
F10	30.64768	-97.67104	0	5	Qal								N	35	40		Х	~	Х	Floodplain	
F11	30.64772	-97.674	0		Qt	5	5						Х	10	15	Х			Х	Floodplain	
F12	30.64606	-97.67484	CD	5	Qal	1.5	3	0.5					F,V	15	20	X			Х	Floodplain	
F13	30.6461	-97.67162	CD	5	Kgt	0.5	0.5	0.5					F,V	15	20	Х			Х	Floodplain	
F14	30.64631	-97.67159	0	5	Kgt								N	15	20	Х			Х	Floodplain	
F16	30.65005	-97.66886	MB	30	Qal								Х	20	50		х		Х	Floodplain	

#### \* DATUM: NAD83

0/1101	1. 10,000		-	
2A TYPE	ТҮРЕ	2B POINTS		8A INFILLING
С	Cave	30	N	None, exposed bedrock
SC	Solution cavity	20	С	Coarse - cobbles, breakdown, sand, gravel
SF	Solution-enlarged fracture(s)	20	0	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fault	20	F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
0	Other natural bedrock features	5	v	Vegetation. Give details in narrative description
MB	Manmade feature in bedrock	30	FS	Flowstone, cements, cave deposits
SW	Swallow hole	30	х	Other materials
SH	Sinkhole	20		
CD	Non-karst closed depression	5		12 TOPOGRAPHY
z	Zone, clustered or aligned features	30	Cliff	f, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 17 March 2015 Sheet \_1\_ of \_2\_



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

GEOL	OGIC ASSE	ESSMENT T	ABLE			PROJECT NAME: City of Georgetown San Gabriel Park														
	LOCATIC	<b>N</b>				FE/	TUR	RE CI	HARAC	<b>FER</b>	ISTICS	6			EV	ALUAT	TION	PH	YSICA	L SETTING
1A	1B *	1C*	2A	2B	3		4		5	5A	6	7	8A	8B	9		10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIME	INSIONS	(FEET)	TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENS	ΙΤΙνΙΤΥ	CATCHN (AC	IENT AREA	TOPOGRAPHY
						Х	Y	Z		10						<40	<u>&gt;40</u>	<1.6	<u>&gt;1.6</u>	
F17	30.65002	-97.67026	MB	30	Qal									20	50		X		Х	Floodplain
F19	30.64796	-97.6739	MB	30	Qt									20	50		X		Х	Floodplain
F26	30.65462	-97.66502	MB	30	Qt									20	50		X		х	Floodplain
F29	30.64994	-97.66878	0	5	Qgt									35	40		X		х	Floodplain
F30	30.65037	-97.66843	0	5	Qgt									35	40		Х		х	Floodplain
F31	30.65039	-97.66796	0	5	Qal									35	40		X		х	Floodplain
F32	30.65071	-97.66788	0	5	Qal									35	40		Х		х	Floodplain
F33	30.64544	-97.67236	0	5	Kgt									15	20	Х			х	Floodplain
F34	30.64555	-97.6723	0	5	Kgt									15	20	Х			х	Floodplain
F35	30.64561	-97.67226	0	5	Kgt							_		15	20				х	Floodplain
F36	30.6461	-97.67181	0	5	Kgt									15	20				х	Floodplain
F37	30.64664	-97.67136	0	5	Kgt									15	20				Х	Floodplain
F38	30.65036	-97.66717	0	5	Kgt									15	20				Х	Floodplain

#### \* DATUM: NAD83

2A TYPE	E TYPE	2B POINTS		8A INFILLING
С	Cave	30		N None, exposed bedrock
SC	Solution cavity	20		C Coarse - cobbles, breakdown, sand, gravel
SF	Solution-enlarged fracture(s)	20		O Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fault	20		F Fines, compacted clay-rich sediment, soil profile, gray or red colors
0	Other natural bedrock features	5		V Vegetation. Give details in narrative description
MB	Manmade feature in bedrock	30		FS Flowstone, cements, cave deposits
SW	Swallow hole	30		X Other materials
SH	Sinkhole	20		
CD	Non-karst closed depression	5	[	12 TOPOGRAPHY
Z	Zone, clustered or aligned features	30		Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

mich

Date 17 March 2015 Sheet \_\_2\_ of \_\_2\_



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

# NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY FOR THE CITY OF GEORGETOWN SAN GABRIEL PARK, GEORGETOWN, WILLIAMSON COUNTY, TEXAS

#### **INTRODUCTION**

This narrative Geologic Assessment accompanies the Texas Commission on Environmental Quality (TCEQ) Geologic Assessment form TCEQ-0585 completed for the City of Georgetown San Gabriel Park ("the property"). The project area is located approximately 0.25 miles east of Interstate Highway (IH) 35, at the intersection of N Austin Avenue and Stadium Drive, Georgetown, Williamson County, Texas (Figure 1).

#### METHODOLOGY

A Cambrian Environmental Registered Professional Geoscientist (License # 10791) and a karst technician conducted field surveys for a Geologic Assessment on 25 February 2015, 26 February 2015, and 6 March 2015. The pedestrian survey was completed by walking parallel transects spaced approximately 50 feet apart as directed by the TCEQ in the Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04). Closer spacing was used where vegetation or man-made features inhibited clear observation. All potential karst features, including depressions, holes, and animal burrows, were carefully examined for evidence of subsurface extent. A number of techniques were used for this effort, including probing with a digging implement to determine the thickness and consistency of fill material and feeling for the presence of air flow, which may indicate the presence of a sub-surface void space. Other techniques included making observations of any notable characteristics of the feature site such as the presence of various types of vegetation or a semi-circular burrow mound produced by the activities of small mammals. In describing springs and water well features, we utilized state well information from the Texas Water Development Board. We also conducted due diligence activities as called for under the City of Georgetown Edwards Aquifer Recharge Zone Water Quality Ordinance ("the Ordinance").

#### RESULTS

#### <u>Soils</u>

Soils on the property are mapped within the Doss (DoC), Eckrant (EaD), Oakalla (Oa and Oc), Queeny (QuC), and Sunev (SuA and SuB) series soils.<sup>1</sup> The Doss series soils are within the "C" classification of the hydrologic soil groups. Type "C" soils have a slow infiltration rate (high runoff potential) when thoroughly wet. The Oakalla and Sunev series soils are within the "B" classification of the hydrologic soil groups. Type "B" soils have a moderate infiltration rate (moderate runoff potential) when thoroughly wet. The Queeny series soils are within the "D" classification of the hydrologic soil groups. Type "B" soils have a moderate infiltration rate (moderate runoff potential) when thoroughly wet. The Queeny series soils are within the "D" classification of the hydrologic soil groups. Type "D" soils have a very slow infiltration rate (very high runoff potential) when thoroughly wet.

#### **Geology**

The property is located entirely within the Edwards Aquifer Recharge Zone. The rock lithology outcropping on the property is Cretaceous in age and consists of the Georgetown Limestone (Kgt), and much of the property is blanketed by a deposit of Quaternary terrace and alluvial deposits (Qt and Qal). The geology

<sup>&</sup>lt;sup>1</sup> United States Department of Agriculture, Soil Conservation Service, Soil Survey of Williamson County, Texas, 1983.

of the property has mapped most recently at a useful scale by Collins (2005) and we find his interpretation of the geology to be generally accurate.<sup>2</sup>

Recharge into the aquifer primarily occurs in areas where the Edwards Group and upper confining units are exposed at the surface. Most recharge is from direct infiltration via precipitation and streamflow loss. Recharge occurs predominantly along secondary porosity features such as faults, fractures, and karst features (caves, solution cavities, sinkholes, etc.). Karst features are commonly formed along joints, fractures, and bedding plane surfaces in the Edwards Group.

#### Site Hydrogeologic Assessment

Although the property is entirely within the Edwards Aquifer Recharge Zone, very little outcropping bedrock was observed. Bedrock outcrops were only observed along the banks of the San Gabriel River. In the absence of discrete recharge features, the likelihood of recharge occurring within the project area and contributing to the main body of the Edwards Aquifer is thought to be low. However, precipitation events significant enough to initiate runoff will drain towards the San Gabriel River and flow downstream where some recharge could occur through fractures or karst features that may be present in the channel bed of the river. Also, the five spring outlets identified below may function as estavelles. An estavelle is a spring that can reverse flow due to relative changes in the elevation of groundwater potentials. Generally, estavelles are located on creeks or rivers, and when the water level of the stream is high (e.g. during flood stage), surface water may be able to directly recharge the aquifer.

#### **<u>City of Georgetown Ordinance</u>**

The spring buffer requirements in the Ordinance Section are as follows:

A Spring Buffer is established within 164 feet (or 50 meters) of the approximate center of a Spring outlet in the EARZ that is identified in a Geologic Assessment. The Spring Buffer shall not include pre-existing development.

No Regulated Activities may be conducted within the Spring Buffer except for the following and subject to stated restrictions:

- a. Properly permitted maintenance of existing improvements;
- b. Scientific monitoring of water quality;
- c. Fences above the normal high water mark of a Stream if such fences comply with applicable floodplain regulations;
- d. Subject to Stream Buffer limitations, below, parks and open space development limited to trails, benches, trash cans and pet waste facilities; provided that trails shall not be located within the ordinary high water mark of a stream and shall be limited to trails for walking, jogging and non-motorized biking; and
- e. Wastewater infrastructure installed roughly parallel to a stream provided that such infrastructure is installed on the side of the stream opposite the Spring and is installed no closer than 25 feet from the Bank of the Stream; provided that wastewater infrastructure shall not cross a Stream associated with a Spring within the Spring Buffer.

<sup>&</sup>lt;sup>2</sup> Collins, E.W., 2005, Geologic Map of the West Half of the Taylor 30x60 Quadrangle: Central Texas Urban Corridor, Encompassing Round Rock, Georgetown, Salado, Briggs, Liberty Hill, and Leander. Bureau of Economic Geology, The University of Texas at Austin. Austin Texas 78713-8924.

The FEMA 1% floodplain (100-year floodplain) for the San Gabriel River occurs on the north section of the property and south of the property. The stream buffer requirements in the are as follows:

For streams draining 640 acres or more the boundaries of the stream buffer coincide with the boundaries of the FEMA 1% floodplain or a calculated 1% floodplain, or whichever is smaller. In the absence of a FEMA floodplain and a calculated floodplain, the stream buffer under this subsection (c) shall be a minimum of 500 feet wide with at least 200 feet from the centerline of the stream.

If a property owner only controls one side of the stream, then the minimum buffer shall be 250 feet from the centerline of the stream, or along the FEMA 1% floodplain or a calculated 1% floodplain, if available.

All regulated activities within the recharge zone must follow water quality best management practices, and development of the property will need to comply with the water quality protection measures as outlined in the Ordinance.

#### **Feature Descriptions**

- F-1 The feature consists of a non-kart closed depression measuring approximately 1 foot by 2 feet by 6 inches deep. The interior of the feature is lined with soil and vegetation. The feature appears to be associated with past land clearing activities.
- F-2 The feature consists of a non-kart closed depression measuring approximately 1.5 feet by 3 feet by 6 inches deep. The interior of the feature is lined with soil and vegetation. The feature appears to be associated with past land clearing activities.
- F-3 The feature consists of a non-kart closed depression measuring approximately 1 foot by 1 foot by 6 inches deep. The interior of the feature is lined with soil and vegetation. The feature appears to be associated with past land clearing activities.
- F-4 The feature consists of a non-kart closed depression measuring approximately 2 feet by 3 feet by 1 foot deep. The interior of the feature is lined with soil and vegetation. The feature appears to be associated with past land clearing activities.
- F-5 The feature consists of a solution-enlarged fracture measuring approximately 1.5 feet by 1 foot by 8 inches deep.
- F-6 The feature consists of a solution-enlarged fracture measuring approximately 8 inches by 5 inches by 6 inches deep. The feature is a vertical fracture and lies below an alluvial deposit from which water is seeping. A travertine deposit occurs below the feature.
- F-7 The feature consists of a seep on the south bank of the San Gabriel River that occurs in close proximity to the fork in the river. The feature lies below an alluvial deposit from which water is seeping. A travertine deposit occurs next to and below the feature.
- F-8 The feature consists of a solution-enlarged fracture measuring approximately 3 feet by 2 inches and 6 inches deep. The feature is a vertical fracture and lies below an alluvial layer from which water is be seeping. A travertine deposit occurs below the feature.

- F-9 The feature consists of a horizontal fracture measuring approximately 2 feet by 1 foot and lies below an alluvial deposit from which water is be seeping.
- F-10 The feature is a spring that emerges from the north bank of the San Gabriel River. The bank has been subject to erosion. The spring effectively serves as an aquifer discharge point, and may periodically be associated with aquifer recharge during periods of low water storage.
- F-11 The feature consists of a concrete cylinder, and was perhaps used as a water storage tank.
- F-12 The feature consists of a non-kart closed depression measuring approximately 1.5 feet by 3 feet by 6 inches deep. The interior of the feature is lined with soil and vegetation. The feature appears to be associated with past land clearing activities.
- F-13 The feature consists of a non-kart closed depression measuring approximately 6 inches by 6 inches by 6 inches deep. The feature is lined with soil, limestone cobbles, and organic debris. The space between the cobbles has been further altered by the actions of burrowing mammals.
- F-14 The feature consists of a leaky seep on the south bank of the San Gabriel River that occurs in close proximity to the fork in the river. The feature lies below an alluvial layer from which water may be seeping.
- F-16 The feature consists of a water well (State Well #5819806).
- F-17 The feature consists of a water well (State Well #5819805).
- F-19 The feature consists of a water well (State Well #5819820) The TWDB WIID database indicates that this well number relates to a test hole). No actual well was observed due to restricted access surrounding the water storage tank.
- F-26 The feature consists of a drilled hole with a PVC liner pipe, and may be the result of previous water well drilling activities, or perhaps the installation of a monitoring well. The TWDB WIID database had no information for this well.
- F-29 The feature is a spring that emerges from the north bank of the San Gabriel River. No discrete outlet can be seen due to the presence of a rock retainer wall. The spring effectively serves as an aquifer discharge point, and may periodically be associated with aquifer recharge during periods of low water storage.
- F-30 The feature is a spring that emerges from the north bank of the San Gabriel River. No discrete outlet can be seen due to the presence of a rock retaining wall. The spring effectively serves as an aquifer discharge point, and may periodically be associated with aquifer recharge during periods of low water storage.
- F-31 The feature is a spring that emerges from the north bank of the San Gabriel River. This portion of the bank has been subject to erosion. The spring effectively serves as an aquifer discharge point, and may periodically be associated with aquifer recharge during periods of low water storage.
- F-32 The feature is a spring that emerges from the north bank of the San Gabriel River. No natural outlet point can be seen due to the presence of a rock retaining wall. The spring effectively serves as an aquifer discharge point, and may periodically be associated with aquifer recharge during periods of low water storage.

- F-33 The feature consists of a leaky seep on the south bank of the San Gabriel River that just beyond the fork in the river. The feature lies below an alluvial layer from which water may be seeping.
- F-34 The feature consists of a leaky seep on the south bank of the San Gabriel River that occurs just beyond the fork in the river. The feature lies below an alluvial layer from which water may be seeping.
- F-35 The feature consists of a leaky seep on the south bank of the San Gabriel River that occurs just beyond the fork in the river. The feature lies below an alluvial layer from which water may be seeping.
- F-36 The feature consists of a leaky seep on the south bank of the San Gabriel River that occurs just beyond the fork in the river. The feature lies below an alluvial layer from which water may be seeping.
- F-37 The feature consists of a leaky seep that emerges through an existing retaining wall.
- F-38 The feature consists of a leaky seep on the south bank of the San Gabriel River. The feature lies below an alluvial layer from which water may be seeping.

# Stratigraphic Column for the City of Georgetown San Gabriel Park Property

\*Shaded areas represent lithologies underlying the project area

S	Kbu	Buda Limestone	
pper aceou	Kdr	Del Rio Clay	
Cret	Kgt	Georgetown Limestone	
Lower Sretaceous	Ked	Edwards Limestone	Edwards Aquifer
0	Кср	Comanche Peak Limestone	
	Kwa	Walnut Formation	





San Gabriel Park Master Geologic Assessment. 03/11/2015. MC



# **Organized Sewage Collection System Application**

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

For Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(c), 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.

#### Regulated Entity Name: San Gabriel Park Phase 3

 Attachment A – SCS Engineering Design Report. This Engineering Design Report is provided to fulfill the requirements of 30 TAC Chapter 217, including 217.10 of Subchapter A, §§217.51 – 217.70 of Subchapter C, and Subchapter D as applicable, and is required to be submitted with this SCS Application Form.

### **Customer Information**

 The entity and contact person responsible for providing the required engineering certification of testing for this sewage collection system upon completion (including private service connections) and every five years thereafter to the appropriate TCEQ region office pursuant to 30 TAC §213.5(c) is:

 Contact Person: Dave Melaas

 Entity: City of Georgetoown

 Mailing Address: 300 Industrial Avenue

 City, State: Georgetown, TX
 Zip: 78626

 Telephone: 512-390-3595
 Fax: \_\_\_\_\_

 Email Address: dave.melaas@georgetown.org

 The appropriate regional office must be informed of any changes in this information within 30 days of the change.

3. The engineer responsible for the design of this sewage collection system is:

Contact Person: Addison Skrla, PE, CFM Texas Licensed Professional Engineer's Number: 137146 Entity: Kasberg, Patrick & Associates, LP Mailing Address: 800 South Austin Avenue City, State: Georgetown, TX Zip: 78626 Telephone: 512-819-9478 Fax: Email Address: askrla@kpaengineers.com

# **Project Information**

4. Anticipated type of development to be served (estimated future population to be served, plus adequate allowance for institutional and commercial flows):

	Residential: Number of single-family lots:
	Multi-family: Number of residential units:
$\boxtimes$	Commercial
	Industrial
	Off-site system (not associated with any development)
	Other:

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

<u>100</u> % Domestic	<u>2500</u> gallons/day
% Industrial	gallons/day
% Commingled	gallons/day
Total gallons/day: <u>2500</u>	

- 6. Existing and anticipated infiltration/inflow is <u>250</u> gallons/day. This will be addressed by:
- 7. A Water Pollution Abatement Plan (WPAP) is required for construction of any associated commercial, industrial or residential project located on the Recharge Zone.

The WPAP application for this development was approved by letter dated \_\_\_\_\_. A copy of the approval letter is attached.

The WPAP application for this development was submitted to the TCEQ on 3/15/2023, but has not been approved.

A WPAP application is required for an associated project, but it has not been submitted. There is no associated project requiring a WPAP application.

8. Pipe description:

#### Table 1 - Pipe Description

Pipe Diameter(Inches)	Linear Feet (1)	Pipe Material (2)	Specifications (3)
6	333	PVC	ASTM D3034/SDR 26

#### Total Linear Feet: 333

- (1) Linear feet Include stub-outs and double service connections. Do not include private service laterals.
- (2) Pipe Material If PVC, state SDR value.
- (3) Specifications ASTM / ANSI / AWWA specification and class numbers should be included.

9. The sewage collection system will convey the wastewater to the San Gabriel WWTP (name) Treatment Plant. The treatment facility is:

$\times$	Existing
	Proposed

10. All components of this sewage collection system will comply with:

$\boxtimes$	The City of <u>Geo</u>
	Other, Specific

orgetown standard specifications. ne City of <u>Georgetown</u> standard sp ther. Specifications are attached.

11. 🖂 No force main(s) and/or lift station(s) are associated with this sewage collection system.

A force main(s) and/or lift station(s) is associated with this sewage collection system and the Lift Station/Force Main System Application form (TCEQ-0624) is included with this application.

# Alignment

- 12. There are no deviations from uniform grade in this sewage collection system without manholes and with open cut construction.
- 13. There are no deviations from straight alignment in this sewage collection system without manholes.

Attachment B - Justification and Calculations for Deviation in Straight Alignment without Manholes. A justification for deviations from straight alignment in this sewage collection system without manholes with documentation from pipe manufacturer allowing pipe curvature is attached.

For curved sewer lines, all curved sewer line notes (TCEQ-0596) are included on the construction plans for the wastewater collection system.

# Manholes and Cleanouts

14. 🕅 Manholes or clean-outs exist at the end of each sewer line(s). These locations are listed below: (Please attach additional sheet if necessary)

Line	Shown on Sheet	Station	Manhole or Clean- out?
1	C26 Of 34	1+00	MH
2	C26 Of 34	1+64	MH
2	C26 Of 34	2+57	MH
3	C26 Of 34	3+60	MH
	Of		
	Of		
	Of		

#### **Table 2 - Manholes and Cleanouts**

Line	Shown on Sheet	Station	Manhole or Clean- out?
	Of		
	Of		
	Of		

- 15. Manholes are installed at all Points of Curvature and Points of Termination of a sewer line.
- 16. The maximum spacing between manholes on this project for each pipe diameter is no greater than:

Pipe Diameter (inches)	Max. Manhole Spacing (feet)
6 - 15	500
16 - 30	800
36 - 48	1000
≥54	2000

- Attachment C Justification for Variance from Maximum Manhole Spacing. The maximum spacing between manholes on this project (for each pipe diameter used) is greater than listed in the table above. A justification for any variance from the maximum spacing is attached, and must include a letter from the entity which will operate and maintain the system stating that it has the capability to maintain lines with manhole spacing greater than the allowed spacing.
- 17. All manholes will be monolithic, cast-in-place concrete.
  - The use of pre-cast manholes is requested for this project. The manufacturer's specifications and construction drawings, showing the method of sealing the joints, are attached.

# Site Plan Requirements

### Items 18 - 25 must be included on the Site Plan.

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

```
Site Plan Scale: 1" = <u>20</u>'.
```

- 19. The Site Plan must include the sewage collection system general layout, including manholes with station numbers, and sewer pipe stub outs (if any). Site plan must be overlain by topographic contour lines, using a contour interval of not greater than ten feet and showing the area within both the five-year floodplain and the 100-year floodplain of any drainage way.
- 20. Lateral stub-outs:
  - igtimes The location of all lateral stub-outs are shown and labeled.
    - No lateral stub-outs will be installed during the construction of this sewer collection system.

- 21. Location of existing and proposed water lines:
  - $\bigotimes$  The entire water distribution system for this project is shown and labeled.
  - If not shown on the Site Plan, a Utility Plan is provided showing the entire water and sewer systems.
  - There will be no water lines associated with this project.

### 22. 100-year floodplain:

- After construction is complete, no part of this project will be in or cross a 100-year floodplain, either naturally occurring or manmade. (Do not include streets or concrete-lined channels constructed above of sewer lines.)
- After construction is complete, all sections located within the 100-year floodplain will have water-tight manholes. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

#### Table 3 - 100-Year Floodplain

Line	Sheet	Station
	of	to

#### 23. 5-year floodplain:

- After construction is complete, no part of this project will be in or cross a 5-year floodplain, either naturally occurring or man-made. (Do not include streets or concrete-lined channels constructed above sewer lines.)
- After construction is complete, all sections located within the 5-year floodplain will be encased in concrete or capped with concrete. These locations are listed in the table below and are shown and labeled on the Site Plan. (Do not include streets or concrete-lined channels constructed above sewer lines.)

Table 4 - 5-Year Floodplair
-----------------------------

Line	Sheet	Station
	of	to

- 24.  $\square$  Legal boundaries of the site are shown.
- 25. The *final plans and technical specifications* are submitted for the TCEQ's review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.

#### Items 26 - 33 must be included on the Plan and Profile sheets.

26. All existing or proposed water line crossings and any parallel water lines within 9 feet of sewer lines are listed in the table below. These lines must have the type of pressure rated pipe to be installed shown on the plan and profile sheets. Any request for a variance from the required pressure rated piping at crossings must include a variance approval from 30 TAC Chapter 290.

There will be no water line crossings.

There will be no water lines within 9 feet of proposed sewer lines.

#### Table 5 - Water Line Crossings

Line	Station or Closest Point	Crossing or Parallel	Horizontal Separation Distance	Vertical Separation Distance
3		crossing	n/a	9'

#### 27. Vented Manholes:

- No part of this sewer line is within the 100-year floodplain and vented manholes are not required by 30 TAC Chapter 217.
  - A portion of this sewer line is within the 100-year floodplain and vented manholes will be provided at less than 1500 foot intervals. These water-tight manholes are listed in the table below and labeled on the appropriate profile sheets.
- A portion of this sewer line is within the 100-year floodplain and an alternative means of venting shall be provided at less than 1500 feet intervals. A description of the alternative means is described on the following page.

A portion of this sewer line is within the 100-year floodplain; however, there is no interval longer than 1500 feet located within. No vented manholes will be used.

Line	Manhole	Station	Sheet		

#### Table 6 - Vented Manholes

Line	Manhole	Station	Sheet

28. Drop manholes:

There are no drop manholes associated with this project.

Sewer lines which enter new or existing manholes or "manhole structures" higher than 24 inches above the manhole invert are listed in the table below and labeled on the appropriate profile sheets. These lines meet the requirements of 30 TAC §217.55(I)(2)(H).

#### Table 7 - Drop Manholes

Line	Manhole	Station	Sheet

29. Sewer line stub-outs (For proposed extensions):

The placement and markings of all sewer line stub-outs are shown and labeled.

No sewer line stub-outs are to be installed during the construction of this sewage collection system.

### 30. Lateral stub-outs (For proposed private service connections):

The placement and markings of all lateral stub-outs are shown and labeled.

No lateral stub-outs are to be installed during the construction of this sewage collection system.

31. Minimum flow velocity (From Appendix A)

Assuming pipes are flowing full; all slopes are designed to produce flows equal to or greater than 2.0 feet per second for this system/line.

32. Maximum flow velocity/slopes (From Appendix A)

Assuming pipes are flowing full, all slopes are designed to produce maximum flows of less than or equal to 10 feet per second for this system/line.

Attachment D – Calculations for Slopes for Flows Greater Than 10.0 Feet per Second. Assuming pipes are flowing full, some slopes produce flows which are greater than 10 feet per second. These locations are listed in the table below. Calculations are attached.

Line	Profile Sheet	Station to Station	FPS	% Slope	Erosion/Shock Protection

#### Table 8 - Flows Greater Than 10 Feet per Second

33. Assuming pipes are flowing full, where flows are ≥ 10 feet per second, the provisions noted below have been made to protect against pipe displacement by erosion and/or shock under 30 TAC §217.53(I)(2)(B).

Concrete encasement shown on appropriate Plan and Profile sheets for the locations listed in the table above.

 Steel-reinforced, anchored concrete baffles/retards placed every 50 feet shown on appropriate Plan and Profile sheets for the locations listed in the table above.
 N/A

# Administrative Information

- 34. The final plans and technical specifications are submitted for TCEQ review. Each sheet of the construction plans and specifications are dated, signed, and sealed by the Texas Licensed Professional Engineer responsible for the design on each sheet.
- 35. Standard details are shown on the detail sheets, which are dated, signed, and sealed by the Texas Licensed Professional Engineer, as listed in the table below:

Standard Details	Shown on Sheet
Lateral stub-out marking [Required]	of
Manhole, showing inverts comply with 30 TAC §217.55(I)(2) [Required]	of
Alternate method of joining lateral to existing SCS line for potential future connections [Required]	of
Typical trench cross-sections [Required]	of
Bolted manholes [Required]	of
Sewer Service lateral standard details [Required]	of
Clean-out at end of line [Required, if used]	of
Baffles or concrete encasement for shock/erosion protection [Required, if flow velocity of any section of pipe >10 fps]	of
Detail showing Wastewater Line/Water Line Crossing [Required, if crossings are proposed]	of
Mandrel detail or specifications showing compliance with 30 TAC §217.57(b) and (c) [Required, if Flexible Pipe is used]	of

### Table 9 - Standard Details

Standard Details	Shown on Sheet
Drop manholes [Required, if a pipe entering a manhole is more than 24 inches above manhole invert]	of

- 36. All organized sewage collection system general construction notes (TCEQ-0596) are included on the construction plans for this sewage collection system.
- 37. All proposed sewer lines will be sufficiently surveyed/staked to allow an assessment prior to TCEQ executive director approval. If the alignments of the proposed sewer lines are not walkable on that date, the application will be deemed incomplete and returned.
  - Survey staking was completed on this date: <u>TBD</u>
- 38. 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.
- 39. Any modification of this SCS application will require TCEQ approval, prior to construction, and may require submission of a revised application, with appropriate fees.

# 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 **Organized Sewage Collection System Application** is hereby submitted for TCEQ review and executive director approval. The system was designed in accordance with the requirements of 30 TAC §213.5(c) and 30 TAC §217 and prepared by:

Print Name of Licensed Professional Engineer: Addison Skrla, PE, CFM

Date: <u>7/15/23</u>

Place engineer's seal here:



Signature of Licensed Professional Engineer:

Addison Sk Q

# Appendix A-Flow Velocity Table

*Flow Velocity (Flowing Full)* All gravity sewer lines on the Edwards Aquifer Recharge Zone shall be designed and constructed with hydraulic slopes sufficient to give a velocity when flowing full of not less than 2.0 feet per second, and not greater than 10 feet per second. The grades shown in the following table are based on Manning's formula and an n factor of 0.013 and shall be the minimum and maximum acceptable slopes unless provisions are made otherwise.

Pipe Diameter(Inches)	% Slope required for minimum flow velocity of 2.0 fps	% Slope which produces flow velocity of 10.0 fps
6	0.50	12.35
8	0.33	8.40
10	0.25	6.23
12	0.20	4.88
15	0.15	3.62
18	0.11	2.83
21	0.09	2.30
24	0.08	1.93
27	0.06	1.65
30	0.055	1.43
33	0.05	1.26
36	0.045	1.12
39	0.04	1.01
>39	*	*

#### Table 10 - Slope Velocity

\*For lines larger than 39 inches in diameter, the slope may be determined by Manning's formula (as shown below) to maintain a minimum velocity greater than 2.0 feet per second when flowing full and a maximum velocity less than 10 feet per second when flowing full.

$$v = \frac{1.49}{n} \times R_h^{0.67} \times \sqrt{S}$$

Figure 1 - Manning's Formula

Where:

v = velocity (ft/sec)
n = Manning's roughness coefficient
(0.013)
Rh = hydraulic radius (ft)
S = slope (ft/ft)

San Gabriel Park Phase 3

City of Georgetown

Texas Commission on Environmental Quality

Submittal for

**Edwards Aquifer Protection Plan** 

Supplemental Final Engineering Design Report

July 2023

CN: CN600412043

Zip: 78626



### **Final Design Engineering Report**

### San Gabriel Park Phase 3, Georgetown, Texas

The engineering firm Kasberg, Patrick & Associates, LP on behalf of the City of Georgetown, Texas is submitting this engineering report for the proposed collection system. This report is provided to fulfill the requirements of 30 TAC Chapter 217, specifically as required by 217.10.

(1) Map of the proposed service area is provided below (shown in blue). The anticipated type of development to be served is public recreational park. Beyond the proposed project serving these park improvements, there is not a future planned expansion for this area. The existing City of Georgetown Recreation Center and San Gabriel Park area are already served by existing wastewater infrastructure and this project proposes to slightly reroute the existing collection system to avoid conflict with park improvement elements.



(2) Topographical features of the current, proposed service area are shown on above map and on Exhibit G in the SCS Plan submittal. The future service area is not applicable for the reasons sated in (1) above.

- (3) This project consists of park improvements and the replacement of an existing public restroom facility. While the service area is not intended to increase, the project proposes to reroute the existing wastewater line to avoid proposed park improvements. To be conservative, a design flow was determined based on the proposed construction of a public restroom (although replacing an existing one) and public park improvements. Assumed flow determination factors are:
  - Recreational Park: 5 gallons per person per day (TAC217(a)(3) Table B.1),
  - Increase in average park attendance of no more than 500 persons per day, and
  - This yields 2,500 gallons per day.
- (4) Minimum and maximum grades are the same. The minimum and maximum grade for the proposed 6-inch wastewater pipe is 0.5%. The size of pipe is 6-inch diameter. The type of pipe is PVC SDR 26 meeting ASTM D3034 specifications. Using Manning's Equation with these parameters, the flow capacity is 256,588 gpd, which exceeds the design flow (2,500 gpd) by more than 100 times.
- (5) Manning's equation was used for determining the minimum and maximum velocities for the proposed 6-inch wastewater pipe. Manning's n value is assumed to be 0.013. Based on a 6-inch diameter pipe with a slope of 0.5%, the velocity is calculated to be 2.03 fps which is lies between the 2.0 fps minimum and 10.0 fps maximum and is acceptable.
- (6) The proposed wastewater system's effect on the associated existing wastewater system capacity is minimal. A 6-inch WWL at minimum slope of 0.006 ft./ft. yields a capacity of 280,000 gpd. The existing system is a short segment of 4-inch wastewater collection system upstream of the proposed wastewater reroute, with the remaining downstream system comprising of 8-inches or greater and is therefore sufficient to serve the very minimal increase to the service area (park improvements). As noted above, there is an existing public restroom facility that is being replaced with the proposed restroom, showing that the capacity of the existing system to serve a public restroom at this location is in place.
- (7) The existing and anticipated inflow and infiltration is conservatively taken to be 10% of the design flow, therefore 250 gpd. The hydraulic effect of the inflow and infiltration on the proposed system will be minimal due to the 6-inch diameter pipe at 0.5% slope with a capacity noted in (4) above. No infiltration flow rate monitoring was conducted for this small wastewater extension project. Abatement measures will be accomplished by using sealed joints at each pipe joint and gasket seal at the existing manhole connection.

- (8) The ability of the existing trunk interceptor to handle the proposed increase in flows is acceptable due to the very small amount of flow noted in (3) and (6) above.
- (9) The receiving wastewater treatment facility is the San Gabriel WWTP which has a sufficient capacity to handle the anticipated peak design flow rate state in (3) above.
- (10) There are four (4) proposed manholes for this wastewater rerouting project. The existing 4" WWL will be tied into a proposed manhole, where the proposed 333 linear feet of 6" WWL will route around park improvements with a manhole at each alignment change. The fourth proposed manhole will be placed to tie into the existing 6" wastewater line. The expected depth of each manhole is less than six feet. According to the American Concrete Pipe Association (ACPA), the maximum allowable depth of a typical precast concrete round manhole is in excess of 530 feet. For this project, based on industry standards and operational experiences, a 6-foot deep round manhole will be structurally sound if manufactured and installed per ASTM C478, ASTM C497 and construction specifications.
- (11) There is no area within this project that is not initially served by the existing collection system, and any proposed park improvements have been demonstrated to be within service capacity as described above. The proposed project is to minimally reroute the existing collection system to avoid proposed park improvements and to connect to the new location for the restroom facility. No future plans for expansion of the service area exist for this project.
- (12) No lift stations are proposed for this small wastewater extension project. Existing lift stations are adequate to handle the small increase in design flows stated in (3) above.
- (13) The contractor is required to comply with US Occupational Safety and Health Administration regulations. OSHA regulations address concerns related to ventilation, entrances, working areas and explosion prevention. The contractor is required to provide a trench safety plan prior to commencing construction. Fuel storage is not allowed on this project. No blasting is allowed on this project.

7/20/23

Date

Prepared by:

Addison Skl



Addison Skrla, P.E., CFM

Kasberg, Patrick & Associates, LP



# **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: Addison Skrla, PE, CFM

Date: 3/10/23

Signature of Customer/Agent:

# Addison Skl

Regulated Entity Name: Georgetown Recreation Center Expansion/San Gabriel Park Ph. 3

## **Project Information**

## Potential Sources of Contamination

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

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

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

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

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

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

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

# Sequence of Construction

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

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

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

6. Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: <u>San Gabriel River</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.
8.		The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
		Attachment E - Request to Temporarily Seal a Feature. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
		site.
9.		Attachment F - Structural Practices. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10.	$\boxtimes$	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.
		$\boxtimes$ 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.
		disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

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

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

# Soil Stabilization Practices

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

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

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

# Administrative Information

- 20.  $\square$  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

### **Spill Response Actions**

This project will prohibit the storage of hazardous substances, fuels, or oils on the project site and require they are stored at an approved offsite facility. The construction of the roadway and sidewalks will require the use of several types of equipment that will be fueled at an approved location off-site. This will present a slight risk of hydrocarbon or hazardous substance spills. In the event of such spills the contaminated area will be sealed using existing dirt or crushed limestone base material. This material will then be collected and disposed at an approved hazardous material location. All proper authorities will be notified as soon as the spill is discovered. The emergency response phone number for TCEQ is 1-800-832-8224. The National Spill Response Hotline is 800-424-8802.

### Attachment B

### **Potential Sources of Contamination**

The only potential source of contamination for the project during construction is that of the construction equipment. However, as previously mentioned, no fuels or hazardous substances will be stored on-site. In the case of a spill, the Spill Response Action of this report will be utilized.

### Attachment C

### **Sequence of Major Activities**

The sequence of major activities in the disturbance of the natural terrain will be as follows:

- 1. Install all of the temporary water pollution and abatement control measures (silt fence, inlet protection, and rock berm). (Total Area Affected: 0.40 acres)
- 2. Remove existing elements, reconstruct proposed road improvements and construct sidewalk and storm sewer system connections. (Total Area Affected: 0.40 acres. Temporary BMP: Silt Fence, Inlet Protection, & Rock Berm Installed for Full Extent of Activity)
- 3. Remove temporary water pollution and abatement control measures. (Total Area Affected: Full Site 0.40 Acres)

The project site (San Gabriel Park) is currently in use. As can be seen on the construction plans, the temporary control measures will be installed at the beginning of the project and remain throughout the entirety of the project until completion.

### Attachment D

### **Temporary Best Management Practices and Measures**

The temporary best management practices that will be utilized for the construction of this project are silt fence, rock berm, and concrete washouts when necessary. The existing drainage contours for San Gabriel Park Ph. 3 project show site flow to the area where silt fence, inlet protection, and rock berm will be installed. Temporary BMPs will be employed and maintained for the duration of time for construction and establishment of vegetation of disturbed soils.

The project area consists of large grass area, storm sewer draining to an existing water quality pond, and offsite ditches conveying stormwater runoff. Offsite and downstream of site runoff is largely grassy areas. In order to add extra protection during construction, silt fence and rock berm will be used to allow immediate stormwater runoff protective response from any unforeseen circumstances. The strategically placed silt fences will mitigate potential sediment runoff during the brief time soil exposure due to construction activity. The silt fence will be placed on the downstream gradient sides to mitigate and prevent pollution from leaving the site (from water originating onsite). The silt fence will slow the runoff, allowing the storm water to flow through the geotextile fabric and filter out sediment or other contaminants before passing through to the other side. Additionally, a rock berm will be installed downstream of proposed and existing culvert to mitigate any potentially erosive forces for areas downstream and offsite of the proposed project.

A concrete washout area (if needed) will also be utilized. The location will be determined by the contractor prior to the beginning of construction. Other temporary BMPs such as filter dikes are not expected, but may be used if deemed required during construction.

Through this best management practice and measures, all storm water leaving the site should be maintained to the maximum extent possible to its natural (current) stabilized state. With the limited project construction site size and expected storm water flow patterns towards silt fence, inlet protection, and rock berms, the storm water flows leaving the temporary BMPs around the site should not impact the flows to any sensitive features around the area.

### Attachment E

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

There will be no temporary sealing of a feature anticipated or proposed for this project.

### Attachment F

### **Structural Practices**

Due to the nature and layout of this project, structural practices are not practical. The use of silt fence, as well as the installation of inlet protection and the rock berms, will be the most effective way to mitigate unexpected sediment and erosion control from storm water runoff during construction.

Temporary Stormwater Section TCEQ-0602

Attachment G

Drainage Area Map

![](_page_54_Figure_0.jpeg)

![](_page_55_Figure_0.jpeg)

![](_page_56_Figure_0.jpeg)

### Attachment H

# **Temporary Sediment Pond**

There will be no temporary sediment pond for this project.

### Attachment I

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

The contractor will be required to maintain, repair, or retrofit all temporary Best Management Practices (BMPs) through the duration of the project. The contractor will be required to inspect the BMPs at weekly intervals and after rainfall events as specified by the Erosion And Sediment Control Notes. The project inspector, from the City of Georgetown, will also inspect the BMPs to ensure they are in proper working condition. If any BMP is found to be unacceptable, the inspector will notify the contractor to remedy the problem immediately. Specific temporary BMP inspection and maintenance requirements are listed below. Construction notes for these BMPs, as well as additional notes can be found in the plan set details. Additionally, while they are not expected to be required, notes for other temporary BMPs such as filter dikes have also been included in the construction notes in the case they are deemed required during construction.

#### Silt Fence, Inlet Protection & Tree Protection

- Inspect all fencing weekly and after any rainfall event.
- Remove sediment when buildup reaches 6 inches.
- Replace any torn fabric.
- Replace or repair any sections crushed or collapsed in the course of construction activity.
- Fencing will be removed after construction is complete.

### Concrete Washout

- The below ground concrete washout area will be constructed before construction commences.
- The washout area will be cleaned on a daily basis. All sediment, wastes, etc. will be removed from the site by the contractor.
- When necessary, repairs will be made to the washout area.
- The washout area will be removed after construction is complete.

### Rock Berm

- Inspect rock berm weekly and after any rainfall event.
- Remove sediment when buildup reaches 6 inches.
- Repair, relocate or replace material in rock berm as necessary.
- Replace or repair any portion that may be damaged in the course of construction activity.
- Remove rock berm after construction and revegetation is complete.

### Attachment J

### Schedule of Interim and Permanent Soil Stabilization Practices

When evaluating the existing site conditions, limited project scope, nature, time of risk exposure and layout of this project, extensive temporary soil stabilization practices are impractical. The disturbance of topsoil for the majority of the project will be limited, at relatively shallow depths, and shallow slopes. For this reason, the main soil stabilization practice that will be implemented during (and after construction) will be the silt fence, rock berm and the establishment of permanent vegetation on all areas of soil disturbance. As the location of the San Gabriel Park primarily drains to offsite ditches or open field, permanent grass vegetation of disturbed soils will be implemented throughout the area. However, during construction, silt fence will also be utilized to stabilize the soil in areas where final grading is yet to be completed. Once final grading is complete, permanent vegetation will be established. This vegetation will help both in stabilizing the soil during and after construction, as well as in reducing the risk of sediment or dust contamination from the project site.

	Agent Authorization Form For Required Signature Edwards Aquifer Protection Program Relating to 30 TAC Chapter 213 Effective June 1, 1999	
I	Dave Melaas	
	Print Name Park Development Manager	
	Title - Owner/President/Other	,
of	City of Georgetown Corporation/Partnership/Entity Name	,
have authorized	Addison Skrla, PE Print Name of Agent/Engineer	
of	KPA Engineers, LP Print Name of Firm	

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

I also understand that:

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

SIGNATURE PAGE:

Applicant's Signature

3.13.2003

Date

THE STATE OF Texas §

County of Williamson §

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

GIVEN under my hand and seal of office on this <u>13</u> day of <u>March</u>, <u>2023</u>.

milling JILL KELLUM Notary Public, State of Texas Comm. Expires 12-16-2024

Notary ID 125145378

NOTARY PUBLIC Jill Kellum

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 12-16-2024

# **Application Fee Form**

Texas Commission on Environmental Quality			
Name of Proposed Regulated Entit	y: <u>San Gabriel Park P</u> ł	<u>n. 3</u>	
Regulated Entity Location: Georget	<u>cown, Texas</u>		
Name of Customer: City of George	town		
Contact Person: Addison Skrla, PE,	<u>CFM</u> Pho	ne: <u>512-819-9478</u>	
Customer Reference Number (if iss	sued):CN		
Regulated Entity Reference Number	er (if issued):RN	_	
Austin Regional Office (3373)			
Hays	Travis	⊠w	illiamson
San Antonio Regional Office (3362	.)		
Bexar	Medina		valde
 Comal	 Kinney		
Application fees must be paid by cl	neck, certified check,	or money order, payab	le to the <b>Texas</b>
Commission on Environmental Qu	ality. Your canceled	check will serve as you	r receipt. <b>This</b>
form must be submitted with you	<b>r fee payment</b> . This p	payment is being subm	itted to:
🖂 Austin Regional Office 🛛 🗌 San Antonio Regional Office			office
Mailed to: TCEQ - Cashier		Overnight Delivery to: TCEQ - Cashier	
Revenues Section	:	12100 Park 35 Circle	
Mail Code 214	I	Building A, 3rd Floor	
P.O. Box 13088		Austin, TX 78753	
Austin, TX 78711-3088		(512)239-0357	
Site Location (Check All That Apply	y):		
🔀 Recharge Zone	Contributing Zone	e 🗌 Transi	tion Zone
Type of Plan		Size	Fee Due
Water Pollution Abatement Plan, C	Contributing Zone		
Plan: One Single Family Residential	Dwelling	Acres	\$
Water Pollution Abatement Plan, C	Contributing Zone		
Plan: Multiple Single Family Reside	ntial and Parks	Acres	\$
Water Pollution Abatement Plan, C	Contributing Zone		
Plan: Non-residential	Acres	\$	
Sewage Collection System	333 L.F.	\$ 650 (min)	
Lift Stations without sewer lines	Acres	\$	
Underground or Aboveground Stor	Tanks	\$	
Piping System(s)(only)		Each	\$
Exception		Each	\$
Extension of Time		Each	\$
	10000		

Signature: \_\_\_\_\_\_

Date: <u>7/15/23</u>

# **Application Fee Schedule**

Texas Commission on Environmental Quality

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

### Water Pollution Abatement Plans and Modifications

### Contributing Zone Plans and Modifications

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

### **Organized Sewage Collection Systems and Modifications**

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

# Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

#### **Exception Requests**

Project	Fee
Exception Request	\$500

### **Extension of Time Requests**

Project	Fee
Extension of Time Request	\$150

![](_page_64_Picture_1.jpeg)

# **TCEQ Core Data Form**

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

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

<b>1. Reason for Submission</b> (If other is checked please describe in space provided.)								
New Permit, Registration or Authorization (Core Data I	New Permit, Registration or Authorization ( <i>Core Data Form should be submitted with the program application.</i> )							
Renewal (Core Data Form should be submitted with the	Renewal (Core Data Form should be submitted with the renewal form)       Other							
	•							
2. Customer Reference Number (if issued)	Follow this link to search	3. Regulated Entity Reference Number (if issued)						
for CN or PN pumbers in								
CN 600412043	RN 102727799							

## **SECTION II: Customer Information**

4. General Cu	General Customer Information         5. Effective Date for Customer Information Updates (mm/dd/yyyy)											
New Customer       Update to Customer Information       Change in Regulated Entity Ownership         Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)												
The Custome	r Name su	bmitted here may b	e updated a	utomaticall	y base	d on	what is cu	urrent	and active	with th	e Texas Secr	etary of State
(SOS) or Texa	(SOS) or Texas Comptroller of Public Accounts (CPA).											
6. Customer	Legal Nam	<b>e</b> (If an individual, prii	nt last name fil	rst: eg: Doe, Jo	ohn)			<u>If new</u>	v Customer, e	enter pre	evious Custom	er below:
City of Georget	own											
7. TX SOS/CP	A Filing Nu	umber	8. TX State	<b>Tax ID</b> (11 di	gits)			<b>9. Fe</b> (9 dig	<b>deral Tax II</b> its)	D	<b>10. DUNS I</b> applicable) 089592372	Number (if
11. Type of C	ustomer:	Corporat	ion				🗌 Individ	vidual Partnership: 🗌 General 🗌 Limi			eral 🗌 Limited	
Government:	🛛 City 🗌 🕻	County 🗌 Federal 🗌	Local 🗌 State	e 🗌 Other			Sole Pr	oprieto	rship	🗌 Otł	ner:	
12. Number o	of Employ	ees						13. lr	ndependen	tly Owi	ned and Ope	erated?
0-20	21-100	] 101-250 🛛 251-	500 🗌 501	and higher				🛛 Ye	es [	No		
14. Customer	<b>Role</b> (Pro	oosed or Actual) – <i>as it</i>	t relates to the	Regulated En	tity list	ed on	this form. I	Please d	heck one of	the follo	wing	
⊠Owner □Occupationa	al Licensee	Operator     Responsible Par	ty D	wner & Operat VCP/BSA Appl	tor licant				Other:			
15. Mailing	300 Indus	strial Avenue										
Address:												
	City	Georgetown		State	ТΧ		ZIP	78626 <b>ZIP + 4</b>				
16. Country M	Mailing Inf	ormation (if outside	USA)			17. E-Mail Address (if applicable)						
						askrla@kpaengineers.com						
18. Telephone Number 19. Extension or				n or C	ode 20. Fax Number (if applicable)							

( ) -	(	)	-
-------	---	---	---

( ) -

# **SECTION III: Regulated Entity Information**

21. General Regulated En	tity Informa	<b>tion</b> (If 'New Reg	gulated	Entity" is select	ed, a new pe	ermit applicat	tion is als	o required.)		
New Regulated Entity	Update to	Regulated Entity	Name	🛛 Update to	Regulated I	Entity Inform	ation			
The Regulated Entity Nan as Inc, LP, or LLC).	ne submitte	d may be upda	ted, in	order to mee	t TCEQ Cor	e Data Stan	ndards (r	removal of or	rganization	al endings such
22. Regulated Entity Nam	e (Enter name	e of the site wher	re the re	egulated action	is taking pla	ce.)				
San Gabriel River Park										
23. Street Address of the Regulated Entity:	445 E. Morr	ow Street								
(No PO Boxes)	City	Georgetown		State	ТХ	ZIP	78626		ZIP + 4	
24. County										
		If no Stree	et Addı	ress is provid	ed, fields 2	5-28 are re	quired.			
25. Description to										
Physical Location:	Physical Location:									
26. Nearest City							State		Nea	rest ZIP Code
Latitude/Longitude are roused to supply coordinate	equired and es where noi	may be added, ne have been p	/updat provide	ted to meet To d or to gain a	CEQ Core D ccuracy).	ata Standa	rds. (Ge	ocoding of th	ne Physical .	Address may be
Latitude/Longitude are roused to supply coordinate	equired and es where noi al:	may be added, 1e have been p	/updat provide	ted to meet To d or to gain a	CEQ Core D ccuracy). 28. Lo	ata Standa ongitude (W	rds. (Geo /) In Dec	ocoding of th	ne Physical .	Address may be
Latitude/Longitude are re used to supply coordinate 27. Latitude (N) In Decima Degrees	equired and es where nor al: Minutes	may be added, ne have been p	<b>/updat</b> provided Second	<b>ted to meet To d or to gain a</b> ds	CEQ Core D cccuracy).	ata Standa ongitude (W	rds. (Geo /) In Dec	ocoding of th cimal: Minutes	ne Physical .	Address may be Seconds
Latitude/Longitude are re used to supply coordinate 27. Latitude (N) In Decima Degrees	equired and es where nor al: Minutes	may be added, ne have been p	/updat provided Second	ted to meet To d or to gain a ds	CEQ Core D iccuracy). 28. Lo Degre	ata Standa ongitude (W	rds. (Ged /) In Dec	ocoding of th cimal: Minutes	ne Physical .	Address may be Seconds
Latitude/Longitude are re used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code	equired and es where nor al: Minutes 30.	may be added, ne have been p Secondary SIC	/updat provided Second Code	ted to meet To d or to gain a ds	CEQ Core D accuracy). 28. Lo Degre 31. Primar (5 or 6 digit	ata Standa ongitude (W es y NAICS Co	rds. (Geo V) In Dec	ocoding of the cimal: Minutes 32. Seco	ndary NAIC	Address may be Seconds CS Code
Latitude/Longitude are ra used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits)	equired and es where nor al: Minutes 30. (4 di	may be added, ne have been p Secondary SIC gits)	/updat provided Second Code	ted to meet To d or to gain a ds	CEQ Core D iccuracy). 28. Lo Degre 31. Primar (5 or 6 digit	ongitude (W es y NAICS Co	rds. (Ged I) In Dec	ocoding of the cimal: Minutes 32. Seco (5 or 6 dig	ndary NAIC	Address may be Seconds
Latitude/Longitude are ra used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits)	equired and es where nor al: Minutes 30. (4 di	may be added, ne have been p Secondary SIC gits)	/updat provided Second	ted to meet To d or to gain a ds	CEQ Core D (ccuracy). 28. Lo Degre 31. Primar (5 or 6 digit	ata Standa ongitude (W es y NAICS Co	rds. (Geo /) In Dec	ocoding of the cimal: Minutes 32. Seco (5 or 6 dig	ndary NAIC	Address may be Seconds
Latitude/Longitude are re used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits) 33. What is the Primary E	al: Minutes 30. (4 di	may be added, ne have been p Secondary SIC gits) his entity? (D	Vupdat provided Second Code	ted to meet To d or to gain a ds	CEQ Core D iccuracy). 28. Lo Degre 31. Primar (5 or 6 digit	ata Standa ongitude (W es y NAICS Co iption.)	rds. (Geo /) In Dec	cocoding of the cimal: Minutes 32. Seco (5 or 6 dig	ndary NAIC	Address may be Seconds CS Code
Latitude/Longitude are re used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits) 33. What is the Primary E Public Parks & Recreation	equired and es where nor al: Minutes 30. (4 di Business of t	may be added, ne have been p Secondary SIC gits) his entity? (D	Vupdat provided Second Code	ted to meet To d or to gain a ds	CEQ Core D iccuracy). 28. Lo Degre 31. Primar (5 or 6 digit	ata Standa ongitude (W es y NAICS Co s) iption.)	rds. (Geo	Cimal: Minutes 32. Seco (5 or 6 dig	ndary NAIC	Address may be Seconds Seconds
Latitude/Longitude are re used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits) 33. What is the Primary E Public Parks & Recreation 34. Mailing	equired and es where nor al: Minutes 30. (4 di Business of the 300 Indust	may be added, ne have been p Secondary SIC gits) his entity? (Da rial Avenue	Second Code	ted to meet To d or to gain a ds	CEQ Core D iccuracy). 28. Lo Degre 31. Primar (5 or 6 digit	ata Standa ongitude (W es y NAICS Co iption.)	rds. (Geo	ocoding of the cimal: Minutes 32. Seco (5 or 6 dig	ndary NAIC	Address may be Seconds Seconds
Latitude/Longitude are re- used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits) 33. What is the Primary E Public Parks & Recreation 34. Mailing Address:	al: Minutes 30. (4 di Business of the 300 Indust	may be added, he have been p Secondary SIC gits) his entity? (Da rial Avenue	Vupdat rovided Second Code	ted to meet Ti d or to gain a ds	CEQ Core D accuracy). 28. Ld Degre 31. Primar (5 or 6 digit	ata Standa ongitude (M es y NAICS Co s)	rds. (Ged /) In Dec de	ocoding of the simal: Minutes 32. Seco (5 or 6 dig	ndary NAIC	Address may be Seconds CS Code
Latitude/Longitude are re- used to supply coordinate 27. Latitude (N) In Decima Degrees 29. Primary SIC Code (4 digits) 33. What is the Primary E Public Parks & Recreation 34. Mailing Address:	equired and es where nor al: Minutes 30. (4 di Business of the 300 Indust City	may be added, ne have been p Secondary SIC gits) his entity? (Da rial Avenue	Second Code	ted to meet To d or to gain a ds ds epeat the SIC or State	CEQ Core D iccuracy). 28. Lo Degre 31. Primar (5 or 6 digit NAICS descri	ata Standa ongitude (W es y NAICS Co iption.)	rds. (Ged /) In Dec de de	ocoding of the simal: Minutes 32. Seco (5 or 6 dig	ndary NAIC gits)	Address may be Seconds Seconds
Latitude/Longitude are re- used to supply coordinate         27. Latitude (N) In Decima         Degrees         29. Primary SIC Code         (4 digits)         33. What is the Primary E         Public Parks & Recreation         34. Mailing         Address:         35. E-Mail Address:	equired and es where nor al: Minutes 30. (4 di Business of the 300 Indust City askr	may be added, ne have been p Secondary SIC gits) his entity? (Da rial Avenue Georgetown la@kpaengineer	Second Code	ted to meet To d or to gain a dds dds epeat the SIC or State	CEQ Core D iccuracy). 28. Lo Degre 31. Primar (5 or 6 digit NAICS descro	ata Standa ongitude (W es y NAICS Co iption.)	rds. (Ged /) In Dec de de	ocoding of the cimal: Minutes 32. Seco (5 or 6 dig	ndary NAIC gits)	Address may be Seconds CS Code

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

( ) -

) -

(

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

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

40. Name:	Addison Skrla,	P.E.		41. Title:	Professional Engineer	
42. Telephone	Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
( 512 ) 819-9478	:		( ) -	askrla@kpae	ngineers.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:	Kasberg, Patrick & Associates, LP	Job Title:	Project En	gineer	
Name (In Print):	Addison Skrla			Phone:	( 512 ) 819- <b>9478</b>
Signature:	Addison Skl			Date:	9/9/2023