TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 21, 2020

Mr. James H. Japhet
Brandt Ranch NB LLC
4372 N. Loop 1604 W. Suite 206
San Antonio, Texas 78249

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Brandt Ranch; Located on the south side of State Highway 46 approximately one mile west of FM2722; ETJ of New Braunfels, Texas

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

Regulated Entity No. RN108863002; Additional ID No. 13001088

Dear Mr. Japhet:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification application for the above-referenced project submitted to the San Antonio Regional Office by KFW Engineers, Inc. on behalf of Brandt Ranch NB LLC on March 12, 2020. Final review of the WPAP Modification was completed after additional material was received on April 27, 2020 and May 13, 2020. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The Brandt Ranch, a 423.76-acre ranch was originally approved on April 15, 2016 for 306 single family residential lots with an impervious cover of 83.79-acres (19.77 percent). Clearing started but construction was not completed, and the south half of the property has been sold.

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 211.56 acres. It will include 150 single family homes, driveways, flush concrete curbs, asphalt drives and utilities. The impervious cover will be 41.99-acres (19.85 percent). According to a letter dated October 15, 2015, signed by Mr. Robert Boyd, PE with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

This single-family residential project will not have more than 20 percent impervious cover.

GEOLOGY

According to the geologic assessment included with the application, the site lies on the Person Formation. One manmade feature, a small pond; two non-sensitive vuggy fractured rock zones and three non-sensitive inferred faults were identified by the project geologist. The site assessment conducted on May 19, 2020 revealed the site was generally as described in the geologic assessment.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated April 15, 2016.

II. The applicant requested a waiver to the requirement for other permanent BMPs for this residential project because the development will have less than 20 percent impervious cover. Based on the TCEQ's review of the proposed activities and the site conditions, the required waiver is hereby granted. If the percent impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site as described in the Water Pollution Abatement Plan may no longer apply and the property owner must notify the San Antonio Regional Office of these changes.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

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

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature

and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

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

<u>After Completion of Construction:</u>

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

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

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

Sincerely,

Robert Sadlier, Section Manager
Edwards Aquifer Protection Program
Texas Commission on Environmental Quality

RCS/dv

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

cc: Mr. Nicholas Reynolds, P.E., KFW Engineers, Inc.
Mr. Roland Ruiz, Edwards Aquifer Authority
Mr. Thomas H. Hornseth, PE, Comal County
Mr. H. L. Saur, Comal Trinity Groundwater Conservation District
Mr. Mark Enders, City of New Braunfels

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of _____ §

BEFORE ME, the undersigned authority, on this day personally appeared _____ who, being duly sworn by me, deposes and says:

(1) That my name is _____and that I own the real property described below.

(2) That said real property is subject to an EDWARDS AQUIFER PROTECTION PLAN which was required under the 30 Texas Administrative Code (TAC) Chapter 213.

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the Texas Commission on Environmental Quality (TCEQ) on _____.

A copy of the letter of approval from the TCEQ is attached to this affidavit as Exhibit A and is incorporated herein by reference.

(4) The said real property is located in _____ County, Texas, and the legal description of the property is as follows:

_____
LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this __ day of _____, ____.

_____
NOTARY PUBLIC

THE STATE OF _____ §

County of _____ §

BEFORE ME, the undersigned authority, on this day personally appeared _____ 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 __ day of _____, ____.

_____
NOTARY PUBLIC

_____
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

Change in Responsibility for Maintenance on Permanent Best Management Practices and Measures

The applicant is no longer responsible for maintaining the permanent best management practice (BMP) and other measures. The project information and the new entity responsible for maintenance is listed below.

Customer: _____

Regulated Entity Name: _____

Site Address: _____

City, Texas, Zip: _____

County: _____

Approval Letter Date: _____

BMPs for the project: _____

New Responsible Party: _____

Name of contact: _____

Mailing Address: _____

City, State: _____ Zip: _____

Telephone: _____ FAX: _____

_____ _____

Signature of New Responsible Party Date

I acknowledge and understand that I am assuming full responsibility for maintaining all permanent best management practices and measures approved by the TCEQ for the site, until another entity assumes such obligations in writing or ownership is transferred.

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

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

KFW ENGINEERS

WATER POLLUTION ABATEMENT PLAN MODIFICATION

BRANDT RANCH

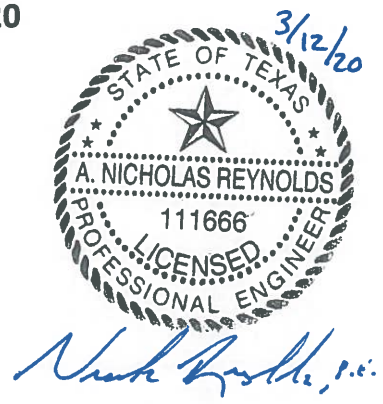
LOCATION: 1.0 MILE NORTHWEST OF THE

HIGHWAY 46 AND FM 2722 INTERSECTION

KFW Job #: 423-01-03

Date Submitted: **OCTOBER 2015**

Revised: **MARCH 2020**



By: A. NICHOLAS REYNOLDS, P.E.

162 W MILL ST, NEW BRAUNFELS, TX 78130 • P: 830.220.6042 • KFWENGINEERS.COM • TBPE FIRM #9513

March 12, 2020

KFW
ENGINEERS + SURVEYING

Edwards Aquifer Group
TCEQ Region 13
14250 Judson Rd.
San Antonio, Texas 78233-4480

Re: Brandt Ranch – 1.0 Mile Northwest of the
Hwy 46 & FM 2722 Intersection
Water Pollution Abatement Plan Modification

To Whom It May Concern:

Attached is one (1) original and one (1) copy of the Water Pollution Abatement Plan Modification for the above referenced project including the appropriate review fees ($8,000). This application has been prepared according to the guidelines set forth in 30 TAC Chapter 213 Subchapter B. Please review the application for completeness and compliance with the applicable regulations for development over the Recharge Zone of the Edwards Aquifer. Upon acceptance, we request that written approval be provided to our office.

Thank you for your time and consideration in this matter. Should you have any questions or need further information please feel free to contact me.

Sincerely,
KFW Engineers,

A. Nicholas Reynolds, P.E.
Project Manager

Attachments:
1 – Original Water Pollution Abatement Plan Modification
1 – Digital Copy of the Water Pollution Abatement Plan Modification

162 West Mill Street, New Braunfels TX 78130 • Phone: (210) 979-8444 • Fax: (210) 979-8441 • www.kfwengineers.com

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

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

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

Mid-Review Modifications

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

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

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

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

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

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

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

1. Regulated Entity Name: Brandt Ranch						**2. Regulated Entity No.:** RN108863002			
3. Customer Name: Brandt Ranch NB LLC. / Japhet III, LLC.						**4. Customer No.:** CN605063536			
5. Project Type: (Please circle/check one)	New		Modification ☑			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP ☑	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential ☑		Non-residential			**8. Site (acres):**			211.56
9. Application Fee:	$8000		**10. Permanent BMP(s):**			N/A			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Comal		**14. Watershed:**			Dry Comal Creek & Blieders Creek			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	_x_	___	___	___
Region (1 req.)	___	_x_	___	___	___
County(ies)	___	_x_	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	_x_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 _x_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.
A. NICHOLAS REYNOLDS Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 3/12/20

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

KFW
ENGINEERS

GENERAL INFORMATION SECTION

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: A. Nicholas Reynolds, P.E.

Date: 03/12/2020

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Brandt Ranch
2. County: Comal
3. Stream Basin: Dry Comal Creek & Blieders Creek
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

   Contact Person: James H. Japhet
   Entity: Brandt Ranch NB LLC. / Japhet III, LLC.
   Mailing Address: 4372 N. Loop 1604 W. STE. 206
   City, State: San Antonio, TX Zip: 78249
   Telephone: 210-448-0800 FAX: (210) 448-0805
   Email Address: jhjaphet@yahoo.com

8. Agent/Representative (If any):

   Contact Person: A. Nicholas Reynolds, P.E.
   Entity: KFW Engineers
   Mailing Address: 162 W Mill St
   City, State: TX Zip: 78130
   Telephone: (830) 220-6042 FAX: (210) 979-8441
   Email Address: nreynolds@kfwengineers.com

9. Project Location:

   ☐ The project site is located inside the city limits of _____.
   ☒ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of New Braunfels, TX.
   ☐ 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.

    From San Antonio, take I-35 north to New Braunfels, exit Highway 46. Take Highway 46 west toward Boerne. The project site is located on Highway 46, approximately 1.0 mile past the Highway 46 and FM 2722 intersection.

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. ☒ **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: _____

14. ☒ **Attachment C – Project Description**. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ Previous development
☒ Area(s) to be demolished

15. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☒ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Uncleared)
☐ Other: _____

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

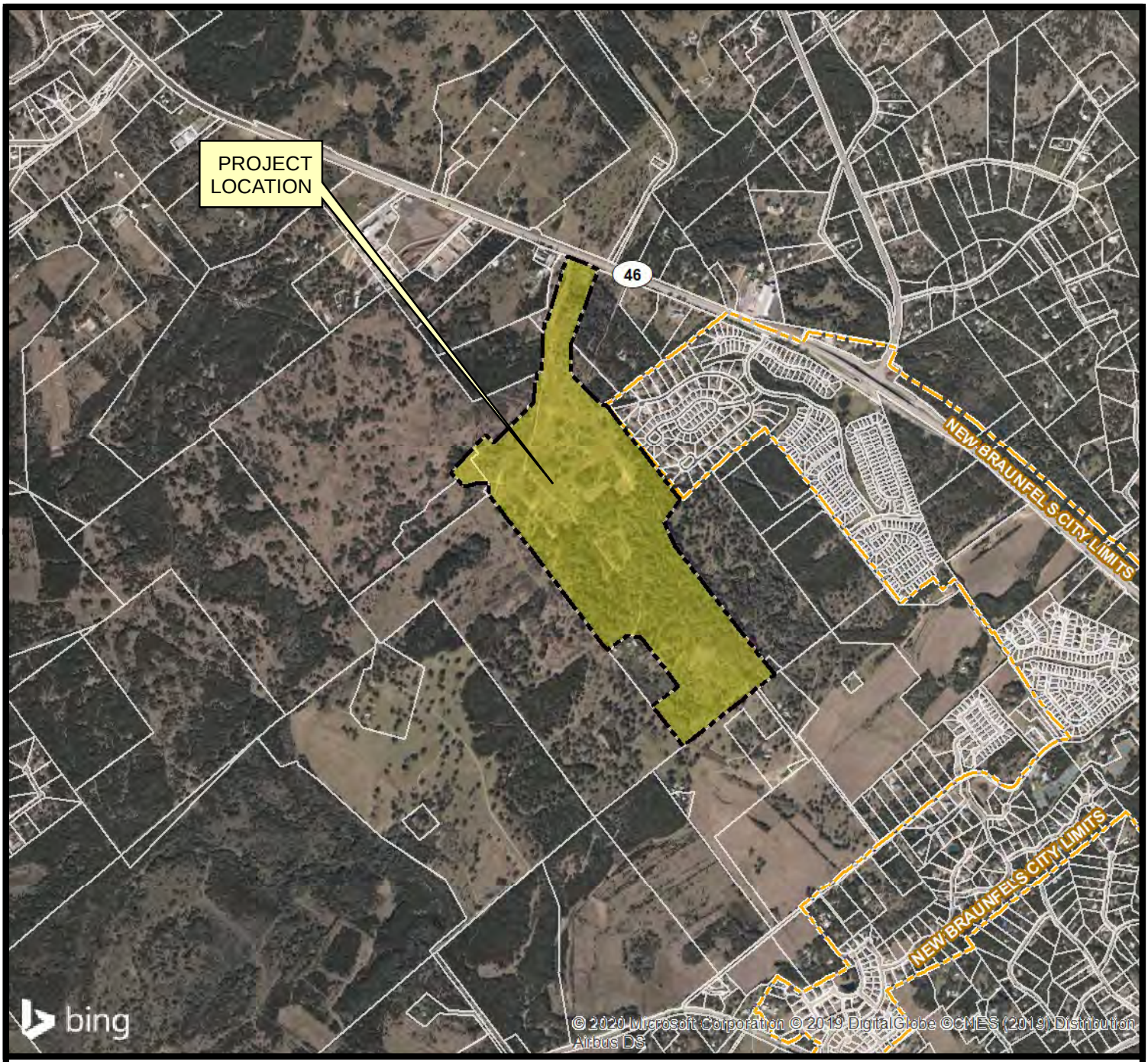
- ☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
- ☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
- ☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
- ☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
- ☐ A request for an extension to a previously approved plan.

19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

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

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

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.



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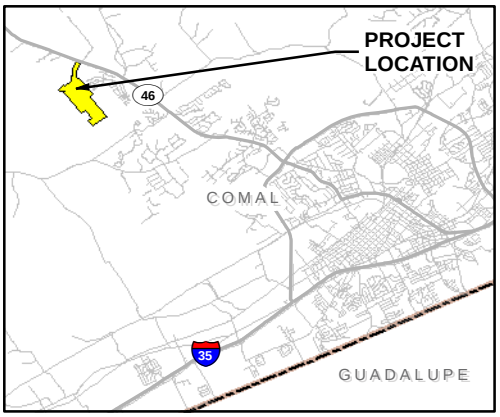
0 2,000 4,000 6,000

FEET



LOCATION MAP
(N.T.S.)

KFW ENGINEERS + SURVEYING
FIRM# 9513 FIRM# 10122300
14603 HUEBNER RD. BLDG. 40 PHONE (210) 979-8444
SAN ANTONIO, TEXAS 78230 FAX (210) 979-8441

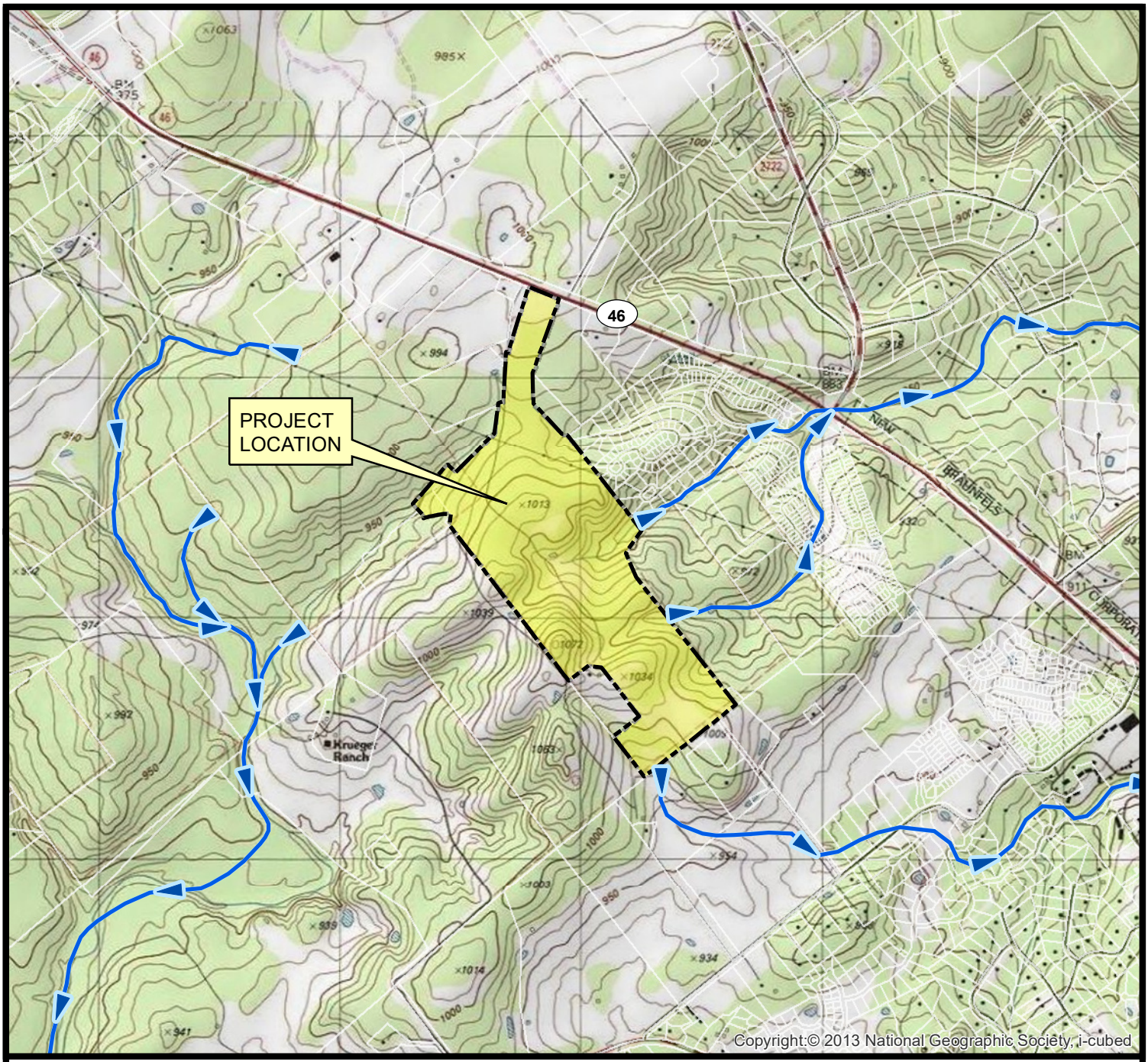
BRANDT RANCH

WATER POLLUTION ABATEMENT PLAN
AERIAL & LOCATION MAP

REVISIONS:	ISSUE DATE:
JOB NO. 423-01-02	
DATE: January 2020	DESIGNER:
DRAWN: K.K.	CHECKED: O.E.

SHEET: ATT. A

Date: Jan 31, 2020, 9:36:18 AM User ID: mgerzer
File: N:\423\01\02\Design\Exhibits\GIS\EX1\5x11\5-WPAP-Aerial_Location_Map.mxd



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FEET

NOTE:
FOR FULL DRAINAGE PATH, PLEASE REFER TO EDWARDS AQUIFER RECHARGE ZONE MAP.

KFW ENGINEERS + SURVEYING
FIRM# 9513 FIRM# 10122300
14603 HUEBNER RD. BLDG. 40 PHONE (210) 979-8444
SAN ANTONIO, TEXAS 78230 FAX (210) 979-8441

BRANDT RANCH

WATER POLLUTION ABATEMENT PLAN

USGS QUADRANGLE - NEW BRAUNFELS WEST

REVISIONS: ISSUE DATE:

JOB NO. 423-01-02

DATE: February 2020 DESIGNER:

DRAWN: K.K. CHECKED: O.E.

SHEET: ATT. B

Date: Feb 17, 2020, 9:01:53 AM User ID: mgenzer
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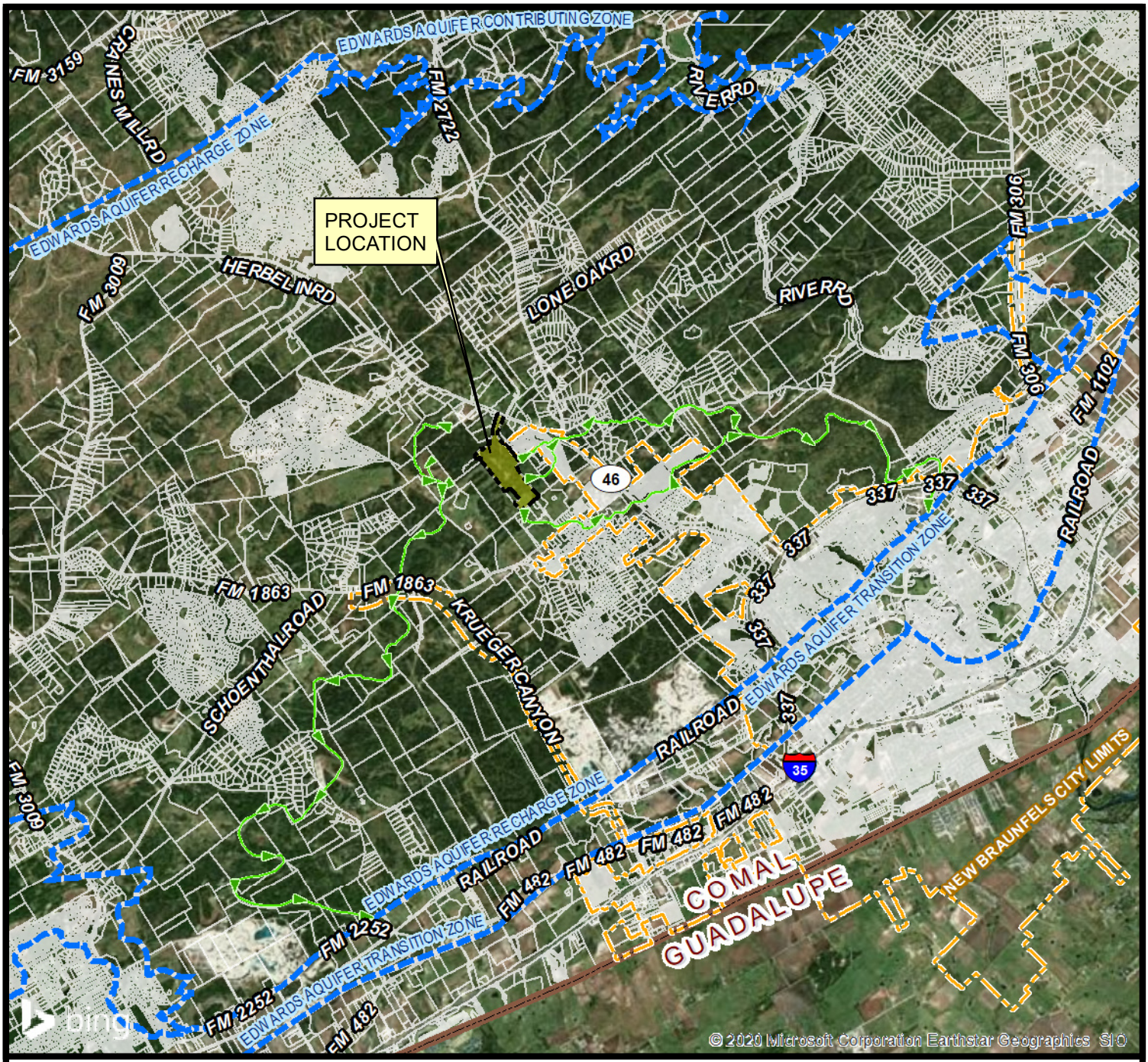

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SCALE : 1 " = 10,000 '

0 10,000 20,000 30,000

FEET

KFW ENGINEERS + SURVEYING
FIRM# 9513 FIRM# 10122300
14603 HUEBNER RD. BLDG. 40 PHONE (210) 979-8444
SAN ANTONIO, TEXAS 78230 FAX (210) 979-8441

BRANDT RANCH
WATER POLLUTION ABATEMENT PLAN
EDWARDS AQUIFER RECHARGE ZONE MAP

REVISIONS:	ISSUE DATE:
JOB NO. 423-01-02	
DATE: February 2020	DESIGNER:
DRAWN: K.K.	CHECKED: O.E.

SHEET: ATT. B

Date: Feb 17, 2020, 8:55:06 AM User ID: mgenzer
File: N:\423\01\02\Design\Exhibits\GIS\EX150315-WPAP-Recharge_Zone_Map.mxd

PROJECT DESCRIPTION

The Brandt Ranch Subdivision is located approximately 0.75 miles northwest from the intersection of Highway 46 and FM 2722. The existing undeveloped land is used for agricultural purposes and limited demolition of existing agricultural facilities is anticipated. Brandt Ranch is a 211.57 acre subdivision that will have 151 single family residential lots. The project site is located within the Dry Comal and Blieders Creek watersheds, and the New Braunfels West USGS quadrangle. The property lies outside the New Braunfels city limits but within the ETJ. Brandt Ranch is located within the Edwards Aquifer Recharge Zone and no portion of the site contains the 100-YR floodplain per FEMA firm panel # 48091C0430F.

The existing topography contains a ridgeline that divides drainage into the northeast and southwest with grades ranging from 1% to 20%. The portion of the site draining northeast ultimately drains into Blieders Creek. The portion of the site draining southwest ultimately drains into Dry Comal Creek. The site consists of medium dense grass and moderate tree canopy cover.

The existing soils on the site consist of Comfort-Rock outcrop complex, undulating (CrD), Medlin-Eckrant, undulating (MEC), Real Gravel Loam, 1 to 8 percent slopes (RaD), and Rumple-Comfort, undulating (RUD). The pre-development runoff coefficient for the site is 0.38 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2 before the current revision. Temporary BMP's for the construction activities will include: silt fence, rock berms, tree protection, stabilized construction entrance/exit, concrete washout area and existing vegetation. All on-site temporary BMP's will be designed in accordance with the TCEQ Technical Guidance Manual.

There is a total of 39.93 acres or 18.87% impervious cover proposed on the site which consists of structures, private driveways, concrete flush curbs, and asphalt pavement. See attached sheet for impervious cover calculations. The project site is less than 20% impervious cover and therefore, no permanent BMP's are proposed for the project. The post-development runoff coefficient for this site is 0.50 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-3 before the current revison.

BRANDT RANCH SUBDIVISION
IMPERVIOUS COVER CALCULATIONS

PHASE	TOTAL AREA (AC.)	LOTS	AVG LOT SIZE (AC.)	AVG PAD SIZE (SF)	TOTAL PAD SIZE (SF)	AVG DRIVEWAY (SF)	TOTAL DRIVEWAY (SF)	SIDEWALK AREA (WIDTH VARIES)	PAVEMENT AREA (SF)	TOTAL IMPERVIOUS (SF)
1	84.44	58	1	7000	406000	1200	69600	N/A	259111.0	734711.0
2	66.75	48	1	7000	336000	1200	57600	N/A	111184.4	504784.4
3	60.37	44	1	7000	308000	1200	52800	N/A	138896.9	499696.9
TOTALS	**211.56**	**150**	**3**	**21000**	**1050000**	**3600**	**180000**	**0**	**509192.3**	**1739192.3**

OVERALL ACRES IMPERVIOUS: **39.93**
OVERALL % IMPERVIOUS: **18.87%**

KFW ENGINEERS

GEOLOGIC ASSESSMENT SECTION

GEOLOGIC ASSESSMENT

For the

BRANDT RANCH
APPROXIMATE 211-ACRE TRACT
HIGHWAY 46 NEAR INTERSECTION WITH FM 2722
COMAL COUNTY, TEXAS 78132

Prepared for

KFW Engineers & Surveying
162 W. Mill Street
New Braunfels, Texas 78130

Prepared by

Professional Service Industries, Inc.
Three Burwood Lane
San Antonio, Texas 78216
Telephone (210) 342-9377

PSI PROJECT NO.: 435-4368

February 19, 2020

3 Burwood Lane
San Antonio, TX 78216
phone: (210) 342-9377

intertek.com/building
psiusa.com

February 20, 2020

KFW Engineers & Surveying
162 West Mill Street
New Braunfels, Texas 78130

Attn: Mr. A. Nicholas Reynolds, P.E., CFM, Project Manager

Re: Geologic Assessment Update
Brandt Ranch Up
Approximate 211-Acre Tract
State Highway 46 Near the Intersection with FM 2722
Comal County, Texas 78132
PSI Project No.: 435-4368

Dear Mr. Reynolds:

Professional Service Industries, Inc. (PSI) has completed a geologic recharge assessment update for the above referenced project in compliance with the Texas Commission on Environmental Quality (TCEQ) requirements for regulated developments located on the Edwards Aquifer Recharge Zone (EARZ). The purpose of this report is to describe surficial geologic units and identify the locations and extent of significant recharge features present in the development area.

AUTHORIZATION

Authorization to perform this assessment was given via authorization of PSI proposal no. 302999 on February 17, 2020.

PROJECT DESCRIPTION

The approximate 211-acre site is located to the west/southwest of the intersection of SH 46 and FM 2722 several miles west of New Braunfels, Texas. The site is almost entirely undeveloped although an abandoned old residence with several outbuildings and an apparent old hunting camp shack. The site is partially covered by trees (mostly oak and juniper), shrubbery, and grasses. Some of the southern and central areas of the site have been cleared of vegetation and some clearing of juniper has taken place in the more vegetated areas. A small manmade pond is located in the north-central area of the site. Rock outcrops are sparse across the site and are found primarily in drainages and on a few relatively flat hilltops. Limestone float was somewhat common in topographically high areas in the western portion of the site. Limited natural recharge features were found including a few fractured and vuggy rock zones. Faulting is obvious at the site given the exposure of several formations including the Austin Chalk, Eagle Ford Shale, Buda Limestone, Del Rio Clay as well as the Person Formation of the Edwards Group. Although the faults themselves were generally covered by vegetation, soil, gravel etc., the traces could be inferred due to the outcrops of the various formations. In general, Edwards Group formations (Person) are found on the northern portion of the site, and younger formations (primarily Austin Chalk) are found in the southern portion of the site. Other than the manmade pond, no recharge features were found in areas where post-Edwards Group formations are exposed.

REGIONAL GEOLOGY

Physiography

According to available information from the TCEQ and the Edwards Aquifer Authority as well as the site reconnaissance, the underlying stratigraphy consists of the Lower Cretaceous Person Formation of the Edwards Group in the northern areas of the site while the remainder of the site is underlain by the Upper Cretaceous Austin Chalk, Eagle Ford Shale, Buda Limestone, and Del Rio Clay Formations. *Exogyra arietina* was found in the exposed areas of the Del Rio Clay. A series of northeast trending faults are mapped traversing the middle portions of the site. The faults appear to be downthrown to the southeast with the Upper Cretaceous Formations being present in distinct fault blocks. Bedrock outcrops at the site are relatively sparse with most being associated with the Person with a few Buda and Austin Chalk bedrock exposures. Limestone boulder float was common in the Person areas.

The Austin Chalk consists of chalk and marl and made up of microgranular calcite with foraminifera microfossils and calcareous nannoplankton; forms ledges, gray to white in color, alternates with marl and bentonitic seams, with pyrite nodules and abundant marine fossils including pelecypods and ammonites.

The Eagle Ford Group consists of shale and limestone, with silty shale in the upper part, the middle part consists of a silty limestone grading into a calcareous siltstone, flaggy, medium gray, weathering to a pale yellowish brown. The shales, siltstones and fine-grained sandstones are interstratified with marine limestones and bentonites indicative of a near shore depositional environment.

The Buda Limestone is a fine-grained, massive, poorly bedded to nodular in outcrop. It is bioclastic, commonly glauconitic, pyritiferous, and weathers to a dark gray to brown, with abundant pelecypods. Field characteristics include nodular, porcelaneous limestone with calcite-filled veins, but no common fossils. The upper Buda is generally hard and dense and may have conchoidal fracturing. The lower Buda tends to be chalkier. The thickness ranges from 40-90 feet.

The Del Rio Clay is calcareous and gypsiferous, with pyrite common, with a blocky structure that weathers to light gray or yellowish gray. The characteristic marine megafossil, *Ilmatogyra arietina* (formerly *exogyra arietina*) is diagnostic and widespread throughout the formation.

The Person Formation ranges in thickness from 180 to 224 feet and forms the upper formation of the Edwards Group. The Person Formation and the underlying Kainer Formation compromises the Edwards Aquifer, a federally designated sole source aquifer for the region.

SITE INVESTIGATION

The site investigation was performed by systematically traversing the subject tract, and mapping any fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

SUMMARY

Relatively few natural recharge features were identified and included two vuggy and fractured rock

zones, and inferred fault traces. One manmade feature was observed, a small pond. If caves, sinkholes, solution cavities, or manmade features are encountered during future clearing/construction activities, please contact our office for additional assistance.

We appreciate this opportunity to be of service to you. If you have any questions, please do not hesitate to contact our office.

Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, INC.

John Langan, P.G.
Environmental Department Manager

WARRANTY

The field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for a general geological recharge assessment of this site. PSI warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted geologic methods, only for the site described in this report. These methods have been developed to provide the client with information regarding apparent indications of existing or potential conditions relating to the subject site and are necessarily limited to the conditions observed at the time of the site visit and research. This report is also limited to the information available at the time it was prepared. In the event additional information is provided to PSI following the report, it will be forwarded to the client in the form received for evaluation by the client. There is a possibility that conditions may exist which could not be identified within the scope of the assessment or which were not apparent during the site visit. PSI believes that the information obtained from others during the review of public information is reliable; however, PSI cannot warrant or guarantee that the information provided by others is complete or accurate.

This report has been prepared for the exclusive use of KFW Engineers & Surveying for the site discussed herein. Reproductions of this report cannot be made without the expressed approval of KFW Engineers & Surveying. The general terms and conditions under which this assessment was prepared apply solely to KFW Engineers & Surveying. No other warranties are implied or expressed.

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: John Langan

Telephone: 210/342-9377

Date: 2/19/20

Fax: 210/342-9401

Representing: PSI TBPG No. 50128 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Brandt Ranch Tract

Project Information

1. Date(s) Geologic Assessment was performed: 2012
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Comfort-Rock outcrop complex, undulating (CrD)	B	1-2
Medlin-Eckrant association, undulating (MEC)	B	1-2
Real gravelly loam, 1 to 8 percent slopes (RaD)		
Rumple-Comfort association, undulating (RUD)	B	1-2

** 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" = 200'
   Site Geologic Map Scale: 1" = 200'
   Site Soils Map Scale (if more than 1 soil type): 1" = 200'

9. Method of collecting positional data:

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

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

11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

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

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

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) 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.

STRATIGRAPHIC COLUMN

Brandt Ranch Tract
State Highway 46 Near the Intersection with FM 2722
Comal County, Texas

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Austin Chalk	325-420	Chalk and marl, microgranular calcite with foraminifera microfossils and calcareous nannoplankton; forms ledges, gray to white in color, alternates with marl and bentonitic seams, with pyrite nodules and abundant marine fossils including pelecypods and ammonites
Eagle Ford Group	25-45	Shale and limestone, with silty shale in the upper part, the middle part consists of a silty limestone grading into a calcareous siltstone, flaggy, medium gray, weathering to a pale yellowish brown.
Buda Limestone	45	Fine-grained, massive, poorly bedded to nodular, bioclastic, commonly glauconitic, pyritiferous, weathers to a dark gray to brown, with abundant pelecypods
Del Rio Clay	40-70	Calcareous and gypsiferous, with pyrite common, with a blocky structure that weathers to light gray or yellowish gray. The characteristic marine megafossil, *Ilmatogyra arietina* (formerly *exogyra arietina*) is widespread throughout the formation.
Georgetown Formation	2-20’	Light tan limestone identified by proximity to Del Rio clay and diagnostic marker fossil: *waconella wacoensis* brachiopod; low porosity and permeability development.
Person Formation	170-204’	Limestones and dolomites, extensive porosity development in “honeycomb sections, interbedded with massive recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations.

SOILS NARRATIVE

According to the Soil Survey for Comal County, Texas, the subject property is underlain by the following soils:

- Comfort-Rock outcrop complex, undulating (CrD) – shallow, well drained, moderate permeability, very low available water capacity, moderate hazard of water erosion, chalk fragments
- Medlin-Eckrant association, undulating (MEC) – very shallow, calcareous, moderately alkaline, well drained, rapid surface runoff, moderately to very slow permeability, very low to high water holding capacity, slight to severe hazard of water erosion, overlies limestone
- Real gravelly loam, 1 to 8 percent slopes (RaD) – shallow, well drained, rapid surface runoff, extremely stony, moderate permeability, very low available water capacity, slight hazard of water erosion, overlies platy chalk
- Rumple-Comfort association, undulating (RUD) – shallow to moderately deep, very stony, noncalcareous, well drained, medium surface runoff, moderately slow to slow permeability, very low available water capacity, moderate hazard of water erosion, overlies limestone

SITE GEOLOGIC NARRATIVE

Physiography

According to available information from the TCEQ and the Edwards Aquifer Authority as well as the site reconnaissance, the underlying stratigraphy consists of the Lower Cretaceous Person Formation of the Edwards Group in the northern areas of the site while the remainder of the site is underlain by the Upper Cretaceous Austin Chalk, Eagle Ford Shale, Buda Limestone, and Del Rio Clay Formations. *Exogyra arietina* was found in the exposed areas of the Del Rio Clay. A series of northeast trending faults are mapped traversing the middle portions of the site. The faults appear to be downthrown to the southeast with the Upper Cretaceous Formations being present in distinct fault blocks. Bedrock outcrops at the site are relatively sparse with most being associated with the Person with a few Buda and Austin Chalk bedrock exposures. Limestone boulder float was common in the Person areas.

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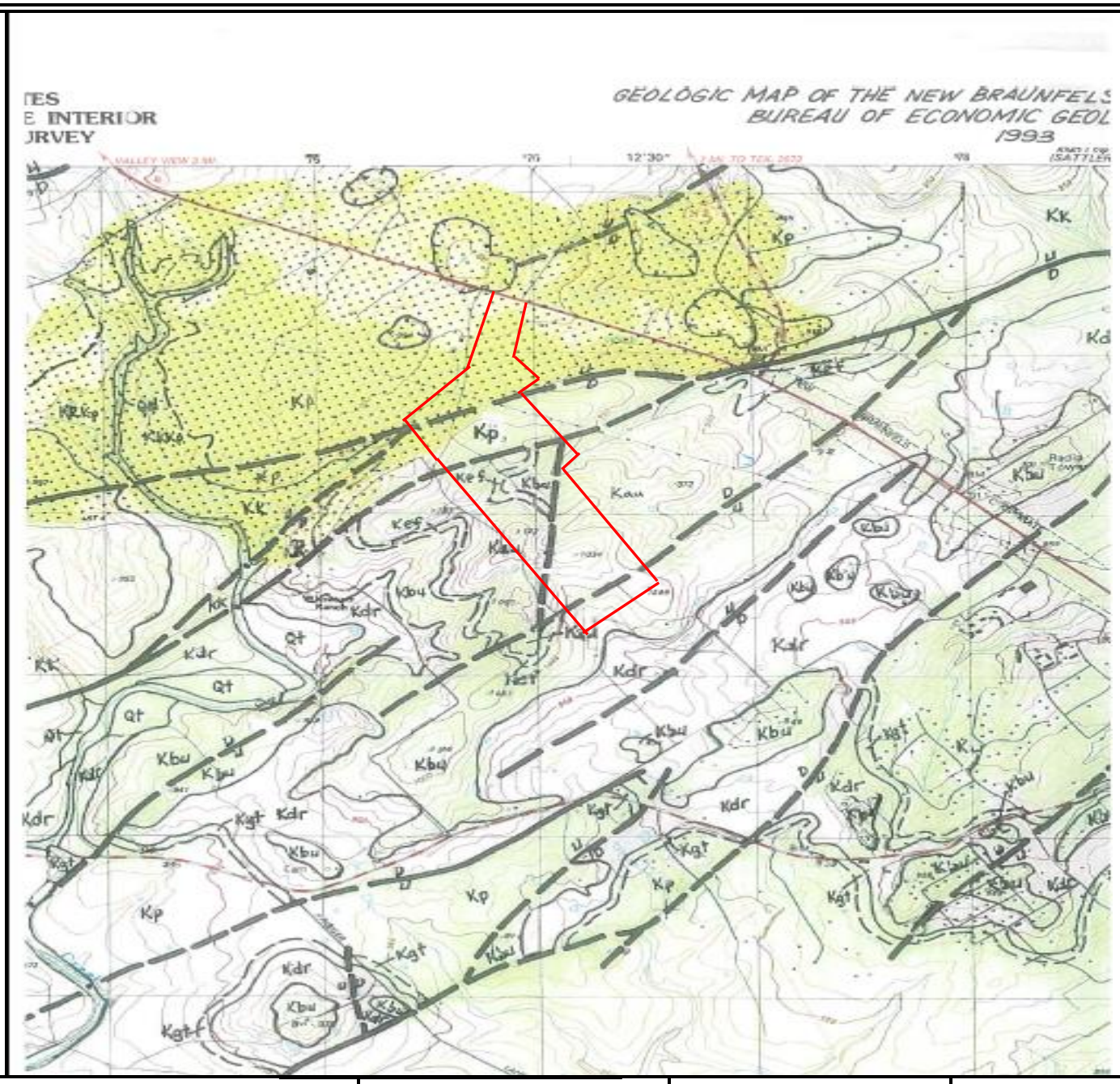
SUMMARY

Relatively few natural recharge features were identified and included two vuggy and fractured rock

zones, and inferred fault traces. One manmade feature was observed, a small pond. If caves, sinkholes, solution cavities, or manmade features are encountered during future clearing/construction activities, please contact our office for additional assistance.



intertek psi

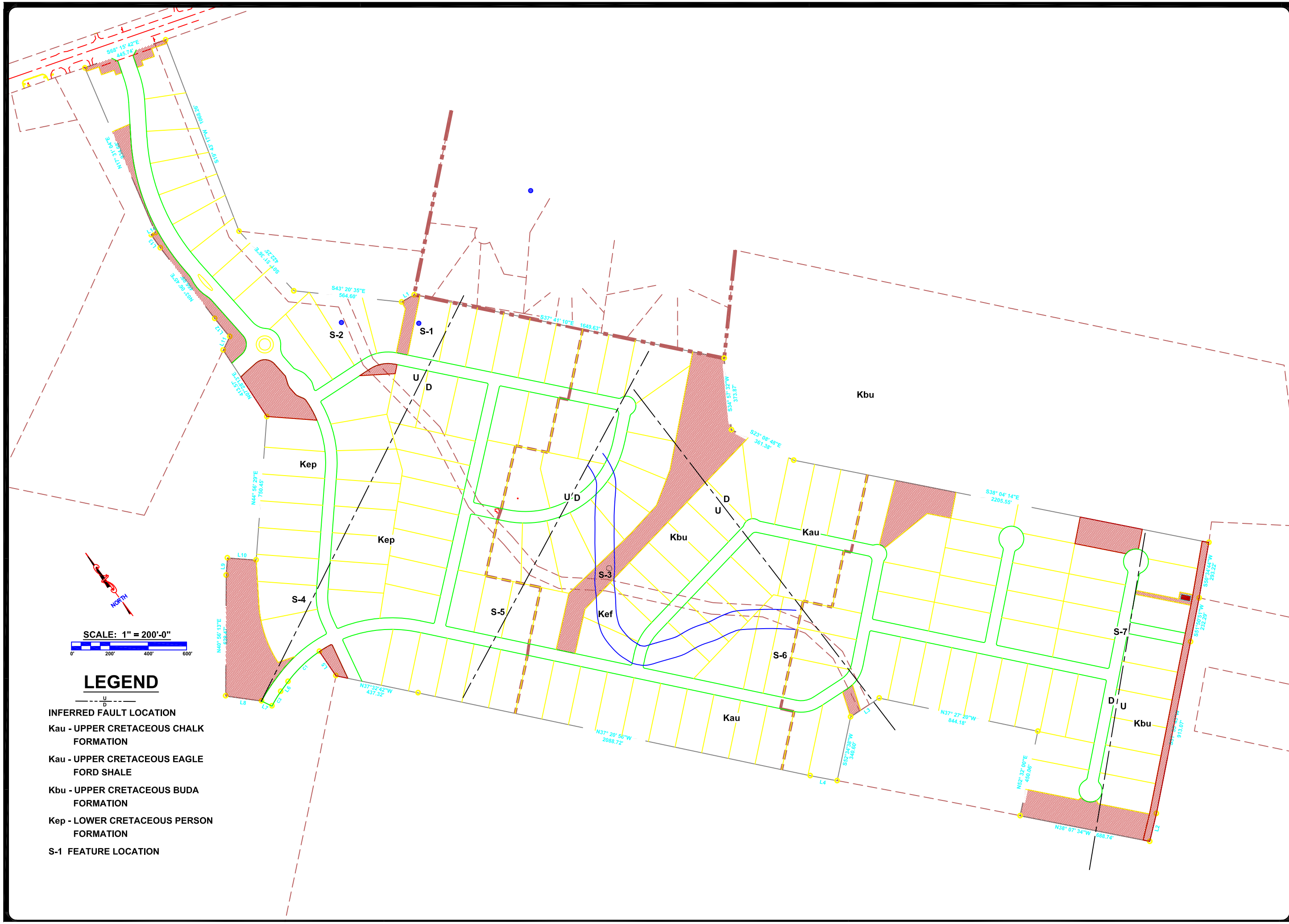
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Brandt Ranch-Approx 211-Acre Tract
Highway 46
Comal County, Texas

PROJECT NO.:435-4368

New Braunfels West, Texas Geologic Map
1993
Bureau of Economic Geology
From E.W. Collins (1993) modified from King (1957) and Abbott (1973)

N



LEGEND

U / D — INFERRED FAULT LOCATION

Kau - UPPER CRETACEOUS CHALK FORMATION

Kau - UPPER CRETACEOUS EAGLE FORD SHALE

Kbu - UPPER CRETACEOUS BUDA FORMATION

Kep - LOWER CRETACEOUS PERSON FORMATION

S-1 FEATURE LOCATION

GEOLOGIC ASSESSMENT
for
BRANDT RANCH TRACT
HWY 46
COMAL COUNTY, TEXAS

STATE OF TEXAS
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST
2/20/20

psi
Information To Build On
Engineering • Consulting • Testing
THREE BURWOOD LANE
SAN ANTONIO, TEXAS 78216

REVISIONS:

JOB NO. 04354368
FILE: 04354368.01
DATE: 02/20/2020
DESIGN: --
DRAWN: J LEAL
CHECKED:
SHEET 1 OF 1

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Brandt Ranch Tract-Highway 46

LOCATION			FEATURE CHARACTERISTICS												EVALUATION	PHYSICAL 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	DIMENSIONS (FEET)			TREND (DEGREES)	DIP 10	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z								<40	≥40	<1.6	≥1.6	
S-1	29-44-9.5	98-12-51.5	O	5	Kep	120	60	2			3		F	10	15	X		X		Hillside
S-2	29-44-12.4	98-12-55.3	O	5	Kep	150	150	4			3		F	10	15	X		X		Hillside
S-3	29-43-58.9	98-12-56.2	MB/pond	30	Kef	110	70	7					F	2	32	X		X		Hillside
S-4	29-44-10.8	98-13-3.3	F	20	Kep	>3000	20	>100					F	15	35	X			X	Hillside
S-5	29-44-2	98-12-55.2	F	20	Kep	>2000	20	>200					F	15	35	X			X	Drainage
S-6	29-43-55.5	98-12-48.5	F	20	Kau	>3000	20	>100					F	15	35	X			X	Drainage
S-7	29-43-36.7	98-12-37.8	F	20	Kbu	1625	20	>100					F	15	35	X			X	Hillside

* DATUM:_____

2A TYP	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

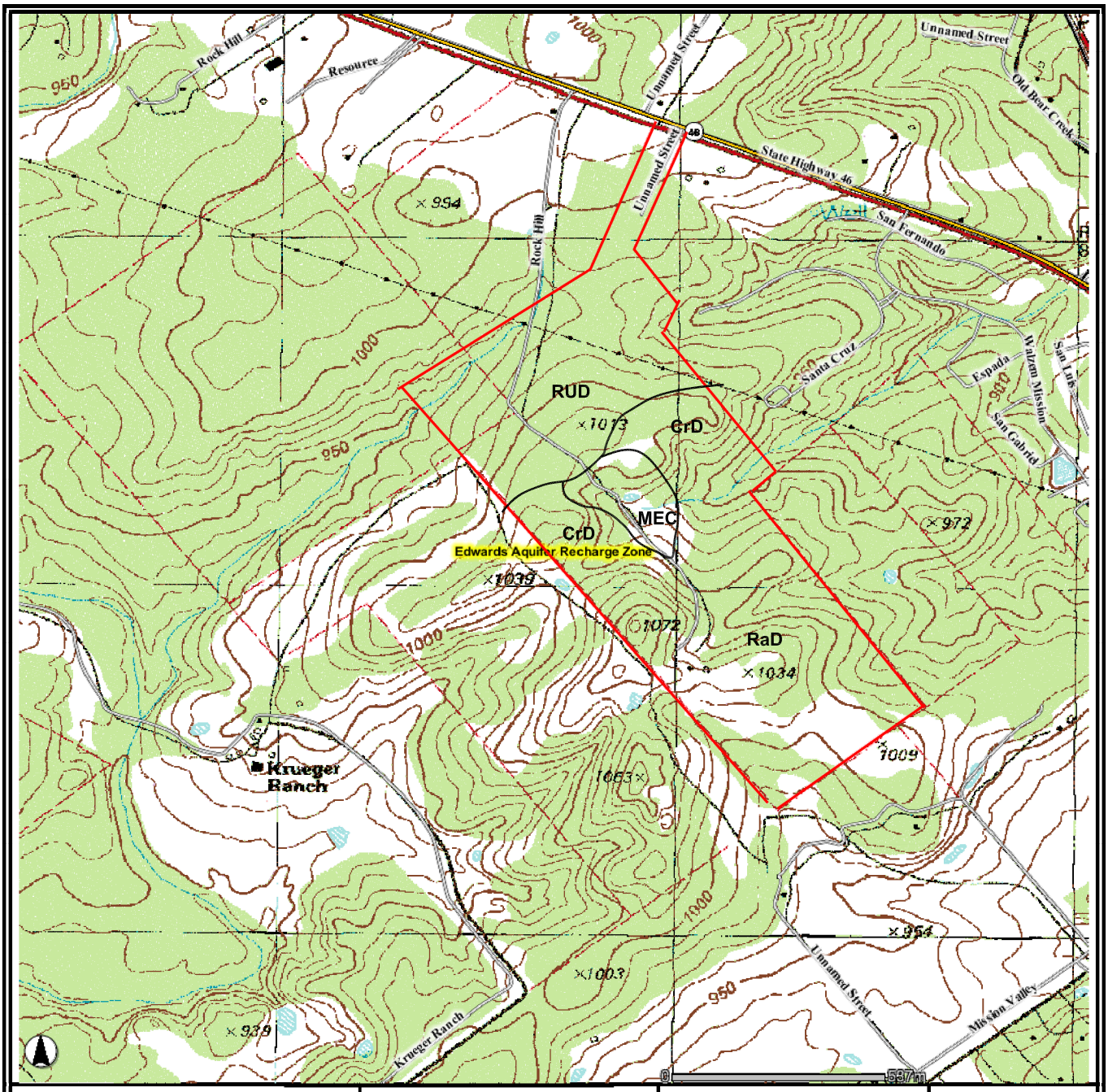
I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

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

Date: February 18, 2020

Sheet ___1___ of ___1___

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



intertek psi

PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

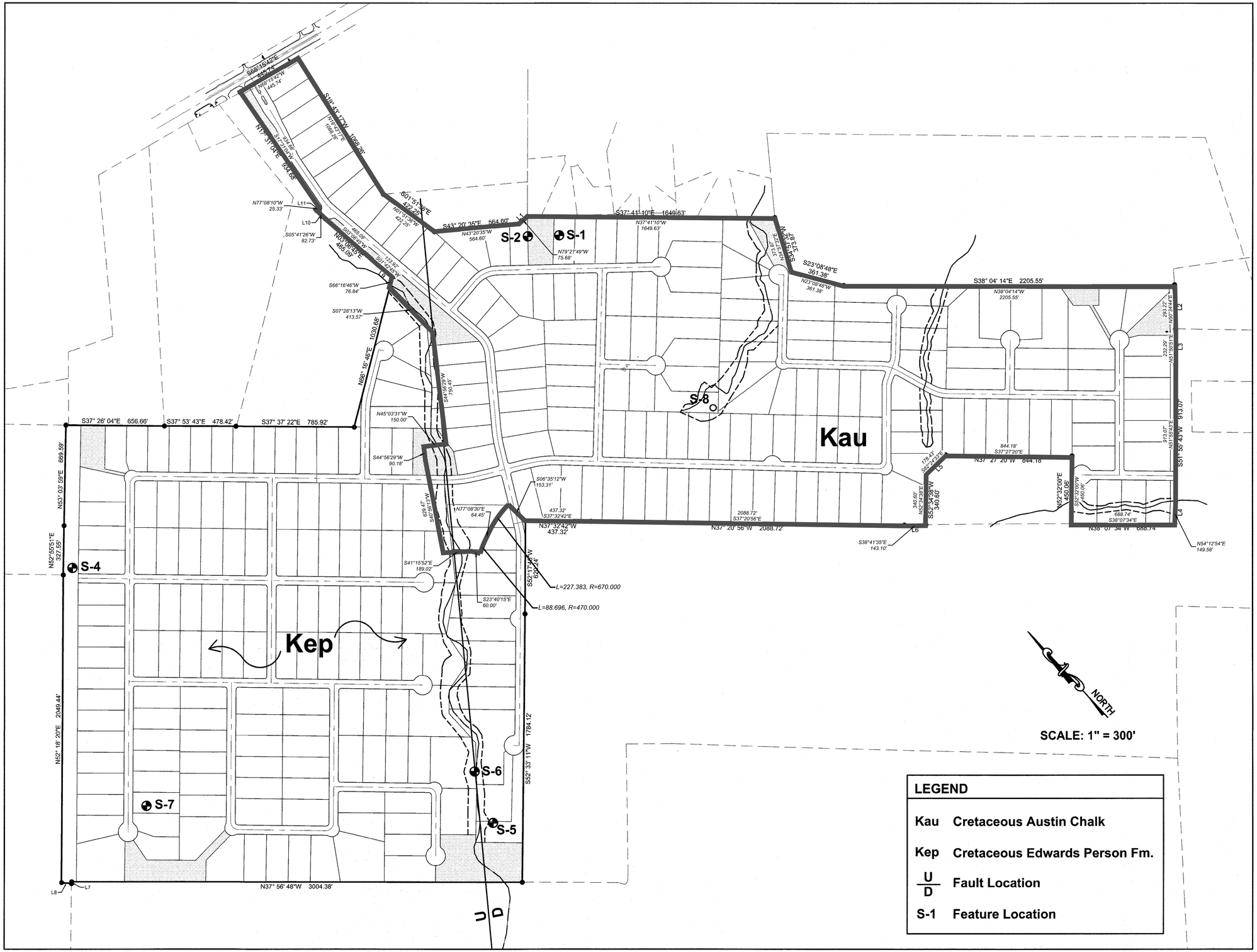
PROJECT NAME:
Brandt Ranch
Approximate 211-Acre Tract
Highway 46
Comal County, Texas

PROJECT NO.:435-4368

SOILS MAP

USGS "New Braunfels West, Texas" Topographic Maps/Edwards Aquifer Recharge Zone Map

N



SCALE: 1" = 300'

LEGEND

Kau	Cretaceous Austin Chalk
Kep	Cretaceous Edwards Person Fm.
U/D	Fault Location
S-1	Feature Location

psi Information To Build On
Engineering • Consulting • Testing
3 BURWOOD LANE
SAN ANTONIO, TEXAS 78216

BRANDT RANCH

COMAL COUNTY

STATE OF TEXAS
2/22/16
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST

GEOLOGICAL ASSESSMENT

DATE:	02.21.16
PROJECT #:	0435-2321
DWG. NAME:	2015-035

KFW ENGINEERS

MODIFICATION OF A PREVIOUSLY APPROVED PLAN SECTION

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: A. Nicholas Reynolds

Date: 03/12/2020

Signature of Customer/Agent:

Project Information

1. Current Regulated Entity Name: Brandt Ranch
   Original Regulated Entity Name: Brandt Ranch
   Regulated Entity Number(s) (RN): 108863002
   Edwards Aquifer Protection Program ID Number(s): 13000014
   ☐ The applicant has not changed and the Customer Number (CN) is: _____
   ☒ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

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

3. A modification of a previously approved plan is requested for (check all that apply):
   - ☐ Physical or operational modification of any water pollution abatement structure(s) including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
   - ☒ Change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
   - ☐ Development of land previously identified as undeveloped in the original water pollution abatement plan;
   - ☐ Physical modification of the approved organized sewage collection system;
   - ☐ Physical modification of the approved underground storage tank system;
   - ☐ Physical modification of the approved aboveground storage tank system.

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

WPAP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	423.76	211.56
Type of Development	Resedential	Resedential
Number of Residential Lots	306	150
Impervious Cover (acres)	83.79	39.93
Impervious Cover (%	19.77	18.87
Permanent BMPs	NA	NA
Other	NA	NA

SCS Modification Summary	***Approved Project***	***Proposed Modification***
Linear Feet	N/A	N/A
Pipe Diameter	N/A	N/A
Other	N/A	N/A

AST Modification Summary	*Approved Project*	*Proposed Modification*
Number of ASTs	N/A	N/A
Volume of ASTs	N/A	N/A
Other	N/A	N/A

UST Modification Summary	*Approved Project*	*Proposed Modification*
Number of USTs	N/A	N/A
Volume of USTs	N/A	N/A
Other	N/A	N/A

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

6. ☒ **Attachment C: Current Site Plan of the Approved Project**. A current site plan showing the existing site development (i.e., current site layout) at the time this application for modification is attached. A site plan detailing the changes proposed in the submitted modification is required elsewhere.
   - ☐ The approved construction has not commenced. The original approval letter and any subsequent modification approval letters are included as Attachment A to document that the approval has not expired.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was constructed as approved.
   - ☐ The approved construction has commenced and has been completed. Attachment C illustrates that the site was **not** constructed as approved.
   - ☒ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was constructed as approved.
   - ☐ The approved construction has commenced and has **not** been completed. Attachment C illustrates that, thus far, the site was **not** constructed as approved.

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

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

ORIGINAL APPROVAL LETTER AND APPROVED MODIFICATION LETTERS

12/c

201606016909 04/26/2016 12:55:30 PM 1/12

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §
County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared James Japhet who, being duly sworn by me, deposes and says:

(1) That my name is James Japhet and that I own the real property described below.

(2) That said real property is subject to an EDWARDS AQUIFER PROTECTION PLAN which was required under the 30 Texas Administrative Code (TAC) Chapter 213.

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the Texas Commission on Environmental Quality (TCEQ) on April 15, 2016.

A copy of the letter of approval from the TCEQ is attached to this affidavit as Exhibit A and is incorporated herein by reference.

(4) The said real property is located in Comal County, Texas, and the legal description of the property is as follows:

Being a 423.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michel Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175 and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas.

James Japhet
LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this 20 day of April, 2016.

Dorothy Mitchell
NOTARY PUBLIC

DOROTHY MITCHELL
NOTARY PUBLIC-STATE OF TEXAS
COMM. EXP. 03-10-2018
NOTARY ID 129740789

THE STATE OF Texas §
County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared James Japhet 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 20 day of April, 2016.

Dorothy Mitchell
NOTARY PUBLIC

Dorothy Mitchell
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 3/10/2018

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 15, 2016

Mr. James Japhet
RR-1604 Ltd. /Japhet III, LLC
3602 Paesanos Parkway, Suite 106
Shavano Park, Texas 78212

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Brandt Ranch; Located on the south side of State Highway 46 approximately one mile west of FM2722; New Braunfels, Texas

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

Regulated Entity No. RN108863002; Additional ID No. 13000014

Dear Mr. Japhet:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the above-referenced project submitted to the San Antonio Regional Office by KFW Engineers and Surveying on behalf of RR-1604 Ltd. /Japhet III, LLC on January 21, 2016. Final review of the WPAP was completed after additional material was received on March 23, 2016, and April 6, 2016. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 423.76 acres. It will include 306 single family residential lots, with private driveways, concrete curbs, and asphalt pavement. The impervious cover will be 83.79 acres (19.77 percent). According to a letter dated, October 15, 2015, signed by Mr. Robert Boyd, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

This single-family residential project will not have more than 20 percent impervious cover.

GEOLOGY

According to the geologic assessment included with the application, the site is located on the Austin Chalk, Eagle Ford Shale, Buda Limestone, and Del Rio Clay of the Person and Kainer Formations. Seven geologic features, and one manmade feature were noted in the assessment by the project geologist. One geologic feature (S-5, sinkhole) was assessed as sensitive by the project geologist. The San Antonio Regional Office site assessment conducted on March 16, 2016 revealed that the site was generally as described in the application.

Natural buffers are proposed for the sensitive feature. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffer. Trash will be removed from Feature S-5 and a natural buffer will be maintained around it. The natural buffer will extend at least 200 feet upgradient of the surface extent of the sinkhole. In other directions, the natural buffer will extend at least 50 feet from the surface extent of the sinkhole. Physical barriers and sediment controls such as fencing and silt fences are required at the edges of these buffers prior to the commencement of construction.

SPECIAL CONDITION

Since this project will not have more than 20 percent impervious cover, an exemption from additional permanent BMPs is approved. If the percent impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site as described in the property boundaries required by §213.4(g), may no longer apply and the property owner must notify the appropriate regional office of these changes.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during

construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

During Construction:

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

13. No well exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent.

Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

<u>After Completion of Construction:</u>

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.

19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional

Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

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

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Monica Reyes of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4012.

Sincerely,

Lynn Bumguardner, Water Section Manager
San Antonio Region
Texas Commission on Environmental Quality

LB/MR/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Mr. Blaine Lopez, P.E., KFW Engineers and Surveying
Mr. Robert Camareno, City Manager, City of New Braunfels
Mr. George Wissman, Comal Trinity Groundwater Conservation District
Mr. Thomas H. Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

HMT
ENGINEERING & SURVEYING

410 N. Seguin Ave.
New Braunfels, TX 78130
HMTNB.COM
830.625.8555 • FAX: 830.625.8556
TBPE FIRM F-10961

METES AND BOUNDS DESCRIPTION
FOR A
423.7 ACRE TRACT OF LAND

Being a 423.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michel Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175 and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas, said 423.7 acre tract of land being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "MDS") found in a Southwesterly right-of-way line of State Highway 46, being a Northeasterly corner of said 24.700 acre tract of land, common with the Northwest corner of a tract of land called 24.780 acres, described in Document Number 200706019677, Official Public Records, Comal County, Texas, for a Northerly corner of this herein described tract of land;

THENCE along the common line of said 24.700 acre tract, said 24.780 acre tract, S 19°44'10" W a distance of 1068.39 feet to a 60D nail found in a 10" cedar fence post for a corner of this herein described tract;

THENCE through said 24.700 acre tract, along a Northeasterly line of this tract, the following calls:

S 01°51'11" E a distance of 422.11 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 43°22'08" E a distance of 564.91 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 79°14'57" E a distance of 75.65 feet to a 1/2" iron pin found in the Southeastern line of said 24.700 acre tract, for a Northerly corner of said 388.65 acre tract, the West corner of a tract of land called 170.338 acres, described in Document Number 9906015426, Official Public Records, Comal County, Texas, for a corner of this herein described tract;

THENCE along the Northeast line of said 388.65 acre tract, a Southwest line of said 170.338 acre tract, and the Northeast line of this tract, S 37°43'38" E, a distance of 1649.29 feet to a 1/2" iron pin found for a corner of said 388.65 acre tract, being in a Northwest line of the remainder of a called 72.22 acre tract (Tract One), described in Document Number 201006017373, Official Public Records, Comal County, Texas, for a corner of this herein described tract;

THENCE along the Southwesterly line of said 72.22 acre tract, the Easterly line of said 388.65 acre tract, and the Easterly line of this tract, the following calls:

S 34°56'04" W a distance of 375.09 feet to a 60D nail found in a 8" cedar fence post for a corner of this herein described tract;

S 23°10'14" E a distance of 361.12 feet to a 60D nail found in a 10" cedar fence post for a corner of this herein described tract;

S 38°04'46" E a distance of 2206.22 feet to a 60d nail found in an 8" cedar fence post for the East corner of said 388.65 acre tract, a South corner of a called 0.49 acre tract, described in Document Number 200306047838, Official Public Records, Comal County, Texas, in the Northwest line of a called 8.42 acre tract, described in Document Number 200206016074, Official Public Records, Comal County, Texas, for the most Easterly corner of this herein described tract;

THENCE along the Southeasterly line of said 388.65 acre tract, the Northwesterly line of said 8.42 acre tract, and the Southeasterly line of this tract, S 50°38'49" W a distance of 293.97 feet to a 60D nail found in a cedar fence post for a corner of this herein described tract;

THENCE continuing along the Southeasterly line of said 388.65 acre tract, the Northwesterly line of the remainder of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas, and the Southeasterly line of this tract the following calls:

S 51°53'59" W a distance of 232.44 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 51°59'46" W a distance of 912.75 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 54°02'11" W a distance of 149.59 feet to a 60D nail found in an 8" cedar fence post for the South corner of said 388.65 acre tract, an interior corner of said 204.63 acre tract, for the most Southerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, a Northeasterly line of said 204.63 acre tract, N 38°05'45" W a distance of 668.98 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

THENCE through said 388.65 acre tract the following calls:

N 52°33'40" E a distance of 450.00 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 37°26'20" W a distance of 844.23 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 82°26'20" W a distance of 178.58 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 52°33'40" W a distance of 340.46 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner in the Southwesterly line of said 388.65 acre tract, common with the Northeasterly line of the remainder of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas;

THENCE along said common line the following calls:

N 38°39'27" W a distance of 142.85 feet to a 60D nail found in a fence post for a corner of this herein described tract;

N 37°20'16" W a distance of 2089.08 feet to a 60D nail found in a fence post for a corner of this herein described tract;

N 37°29'50" W a distance of 437.90 feet to a 60D nail found in a 10" cedar fence post found for an interior corner of said 388.65 acre tract, the North corner of said 204.63 acre tract, for a corner of this herein described tract;

THENCE along a Southerly line of said 388.65 acre tract, a Northwesterly line of said 204.63 acre tract, and a Southerly line of this tract the following calls:

S 52°12'20" W, a distance of 620.43 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 52°33'05" W a distance of 1786.08 feet to a 60D nail found in a 7" cedar fence post for a Southerly corner of said 388.65 acre tract, the West corner of said 204.63 acre tract, being in a Northeast line of a called 514.36 acre tract, described in Document Number 9806007947, Official Public Records, Comal County, Texas, for a Southerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, a Northeasterly line of said 514.36 acre tract, and a Southwesterly line of this tract, N 37°56'01" W, a distance of 3004.12 feet to 30D nail found in an old fence post for an interior corner of this tract, an interior corner of the said 388.65 acre tract, a Northeast corner of said 514.36 acre tract, for an interior corner of this herein described tract;

THENCE along a Southeasterly line of said 388.65 acre tract, a Northwesterly line of said 514.36 acre tract, S 60°40'31" W a distance of 12.11 feet to a 60D nail found in an old fence post for a Southwesterly corner of said 388.65 acre tract, a Northerly corner of said 514.36 acre tract, and a Westerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, N 32°14'57" W a distance of 66.46 feet to a 60D nail found in an old fence post for the West corner of said 388.65 acre tract, being in the Southeast line of the remainder of said 144.569 acre tract described in Volume 265, Page 356, Deed Records, Comal County, Texas, for the West corner of this herein described tract;

THENCE along a Northwesterly line of said 388.65 acre tract, a Southeasterly line of the remainder of said 114.569 acre tract, and a Northwesterly line of this tract, N 52°18'23" E a distance of 2047.64 feet to a 1/2" iron pin found for a South corner of a called 20.0 acre tract of land described in Document Number 200306008534, Official Public Records, Comal County, Texas, for a Northerly corner of this herein described tract;

THENCE continuing along the Northwesterly line of said 388.65 acre tract, a Southeasterly line of said 20.0 acre tract, and the Northwesterly line of this tract, N 52°53'45" E a distance of 327.58 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner of this herein described tract;

THENCE continuing along the Northwesterly line of said 388.65 acre tract, the Southeast line of said 20.0 acre tract, and the Northwesterly line of this tract, N 53°03'23" E a distance of 669.64 feet to a 1/2" iron pin (with cap stamped "HMT") found for the most Northerly corner of said 388.65 acre tract, the most Easterly corner of said 20.0 acre tract, being in the Westerly line of a called 3.050 acre tract, described in Volume 645, Page 295, Official Public Records, Comal County, Texas, and for a Northerly corner of this herein described tract;

THENCE along a Northeasterly line of said 388.65 acre tract, the Southwest line of said 3.050 acre tract, and a Northeasterly line of this tract, S 37°25'58" E, passing at a distance of 18.03 feet a found 1/2" iron pin for the most Southerly corner of said 3.050 acre tract, for the most Westerly corner of a called 17.009 acre tract recorded in Document Number 200306013611, Official Public Records, Comal County, Texas, continuing along the Southwesterly line of said 17.009 acre tract, in all a total distance of 656.87 feet to a 3/8" iron pin found for the most Southerly corner of said 17.009 acre tract, common with a Northwesterly corner of a called 32.138 acre tract described in Volume 972, Page 411, Official Public Records, Comal County, Texas, and for a corner of this herein described tract;

THENCE continuing along the Northeasterly line of said 388.65 acre tract, the Southwesterly line of said 32.138 acre tract, S 37°49'42" E, a distance of 476.86 feet to a 60D nail found in a fence post for the most Southerly corner of said 32.138 acre tract, the most Westerly corner of the remainder of a called 23 acre tract described in Volume 842, Page 116, Official Public Records, Comal County, Texas, and for a corner of this herein described tract;

THENCE along the Northeasterly line of said 388.65 acre tract, the Southwesterly line of said 23 acre tract, and a Northeasterly line of this tract, S 37°36'17" E a distance of 788.03 feet to a 60D nail found in a fence post for the most Southerly corner of the remainder of said 23 acre tract, the most Westerly corner of the aforementioned 24.717 acre tract, for a corner of this herein described tract;

THENCE along a Northwesterly line of said 24.717 acre tract, the Southeast line of said 23 acre tract, and a Northwesterly line of this tract, N 66°10'23" E a distance of 1033.69 feet to a 60D nail found in a 10" cedar fence post for the most Northerly corner of said 24.717 acre tract, a Southeast corner of said 23 acre tract, a Southwest corner of the aforementioned 24.700 acre tract, for a corner of this herein described tract;

THENCE along a Northwest line of said 24.700 acre tract, a Southeast line of said 23 acre tract, and the Northwesterly line of this tract, the following calls:

N 00°58'44" E a distance of 122.00 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

N 03°06'44" E a distance of 465.00 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner of this herein described tract, said pin being in the Westerly line of said 24.700 acre tract, and in the Easterly line of a called 3.488 acre tract described in Volume 842, Page 114, Official Public Records, Comal County, Texas;

THENCE along a Westerly line of said 24.700 acre tract, the Easterly line of said 3.488 acre tract, and the Westerly line of a portion of this tract the following calls:

N 05°40'02" E a distance of 82.63 feet to a 60D nail found in a fence post for a corner of the herein described tract;

S 76°53'14" E a distance of 25.28 feet to a 60D nail found in a fence post for a corner of the herein described tract;

N 17°31'21" E a distance of 933.90 feet to a 60D nail found in a fence post for the most Northerly corner of said 24.700 acre tract, a Northeasterly corner of said 3.488 acre tract, in the Southwest right-of-way line of State Highway 46, for the most Northerly corner of this herein described tract;

THENCE along a Northerly line of said 24.700 acre tract, the Southwest right-of-way line of State Highway 46, and a Northeasterly line of this tract, S 68°24'35" E a distance of 445.52 feet to the POINT OF BEGINNING and containing 423.7 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), North American Datum 1983.

Surveyed this the 19th day of March, 2013.

Reference survey of said 423.7 acre tract of land prepared this same date.

STATE OF TEXAS
REGISTERED
MARK F. CONLAN
6342
PROFESSIONAL
LAND SURVEYOR

Mark F. Conlan
Registered Professional Land Surveyor No. 6342

S:\!Projects\!Title Surveys\Washburn, S\423.7ac & 60' Inl. Eng- Center for Christian Growth\423.7 AC M&B.doc

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
04/26/2016 12:55:30 PM
CASHTHREE 12 Page(s)
201606016909
Bobbie Koepp

KFW ENGINEERS

NARRATIVE OF PROPOSED MODIFICATION

NARRATIVE OF PROPOSED MODIFICATION

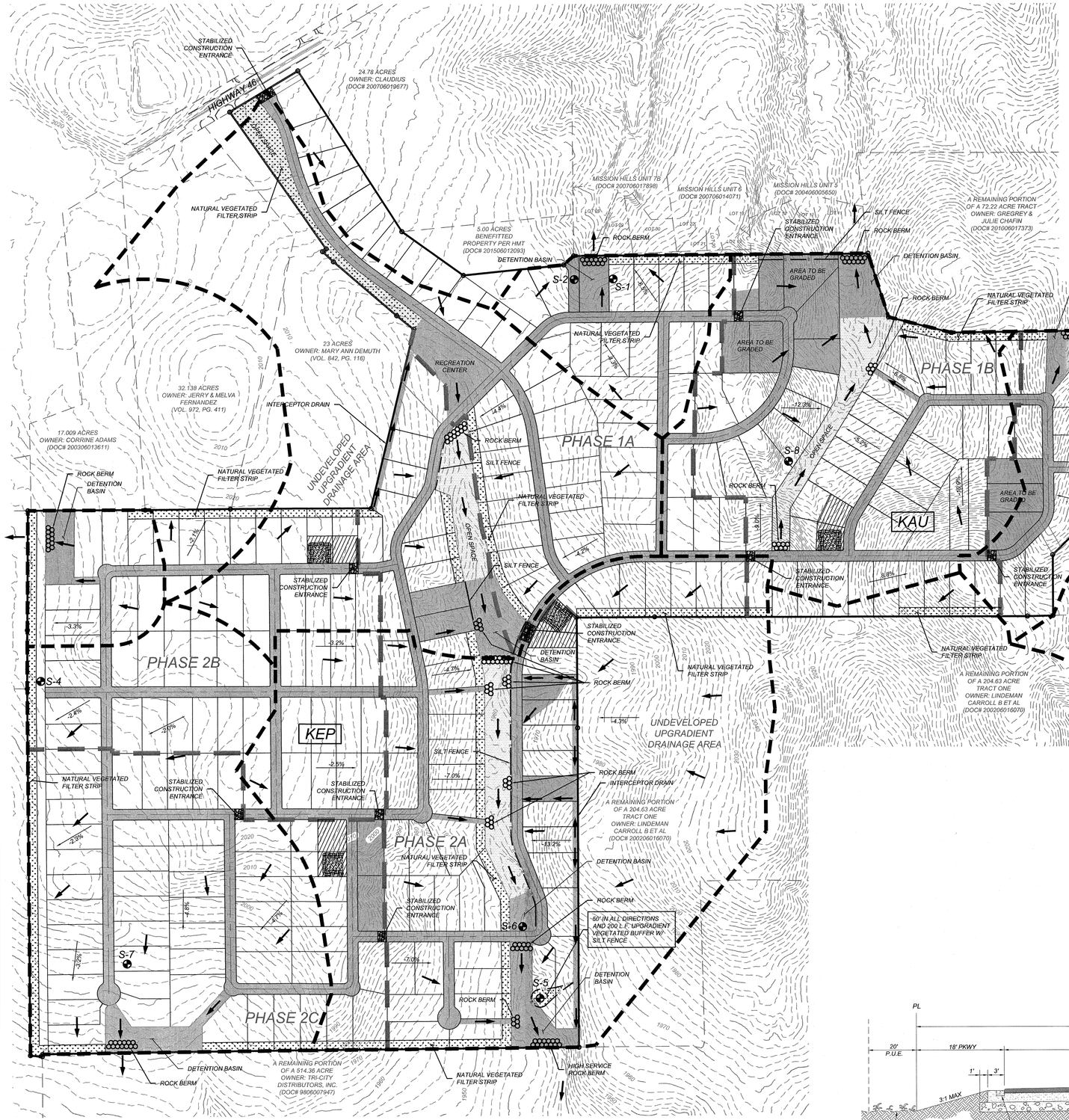
The Brandt Ranch Subdivision is an undeveloped 211.56-acre tract that lies within Comal County, TX, and is located within the Edwards Aquifer Recharge Zone. Project wastewater will be disposed of by septic.

The original project site was 423.76 acres and is now being reduced to 211.56 acres. The subject tract of land is currently covered under the previously approved "Brandt Ranch" Water Pollution Abatement Plan. The original WPAP proposed less than 20% impervious cover, and therefore did not propose any permanent BMPs.

This modification still proposes less than 20% impervious cover, and therefore does not propose any permanent BPM's. The subject site will be disturbed during construction activities within the limits of construction. These activities will be subject to TPDES requirements. A Storm Water Pollution Prevention Plan will be maintained for the site and temporary BMP's will be implemented to prevent erosion and sedimentation until completion of the permanent BMP.

KFW
ENGINEERS

CURRENT SITE PLAN OF THE APPROVED PROJECT



LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS (1130)
- PROJECT LIMITS
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE TRUCK WASHOUT PIT
- SILT FENCE
- ROCK BERM
- AREAS TO BE DISTURBED AND SOIL STABILIZATION WITH SODDING AND LANDSCAPING
- FLOW ARROW
- NATURAL VEGETATED FILTER STRIP
- BASIN DRAINAGE AREAS
- INLET WITH PROTECTION (GRAVEL FILTER BAGS)
- SENSITIVE RECHARGE FEATURE (S-3)

CONSTRUCTION NOTES:

1. THE AREA WITHIN THE BUFFERS SURROUNDING ANY SENSITIVE FEATURE SHALL BE A CONSTRUCTION FREE ZONE AND ARE TO BE MAINTAINED IN A NATURAL STATE TO THE MAXIMUM PRACTICAL EXTENT AND MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND SEDIMENTATION WITHIN THE BUFFER LIMITS DURING CONSTRUCTION.
2. THE TEMPORARY BMPs SHOWN ON THIS PLAN ARE FOR DISTURBANCE REQUIRED FOR CONSTRUCTION OF STREETS, DRAINS, AND UTILITIES. FUTURE DISTURBANCE WITHIN THE LOTS FOR HOUSE CONSTRUCTION WILL BE PART OF A SEPARATE STORMWATER POLLUTION PREVENTION PLAN FOR TEMPORARY BEST MANAGEMENT PRACTICES.
3. ALL DISTURBED AREA TO BE STABILIZED.
4. ANY AREAS NOT SHOWN TO BE DISTURBED ON THIS PLAN ARE TO REMAIN UNDISTURBED.
5. PROPOSED ROAD CONTOURS NOT SHOWN FOR CLARITY. VERTICAL ROAD ALIGNMENT WILL GENERALLY FOLLOW EXISTING GROUND AN ALL CUT/FILL SLOPES WILL BE CONTAINED WITHIN THE RIGHT OF WAY UNLESS SHOWN OTHERWISE. SEE TYPICAL STREET SECTION ON THIS SHEET FOR PROPOSED STREET DIMENSIONS.

LOCATION MAP
NOT-TO-SCALE

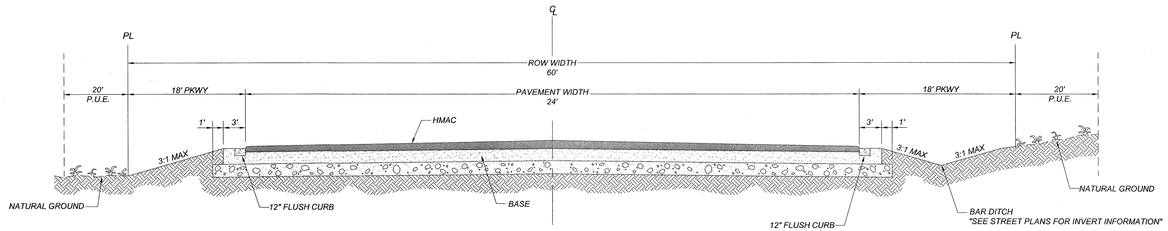
SCALE : 1"=300'
0' 300' 900' 600'

TCEQ-0592 (Rev. 3/15/07)
Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. If sediment escapes the construction site, off_site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
2800 S. IH 35, Suite 100
Austin, Texas 78704-5712
Phone(512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329



TYPICAL 60' R.O.W. STREET SECTION
(NOT TO SCALE)

KFW ENGINEERS + SURVEYING
14803 Hiaibner Rd, Bldg 40, San Antonio, TX 78230
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPE Firm # 3613 • TBPLS Firm # 10122300

ISSUE DATE

REVISIONS

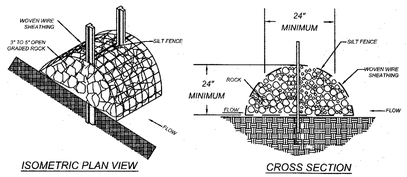
STATE OF TEXAS
BLAINE P. LOPEZ
92685
LICENSED PROFESSIONAL ENGINEER
4/6/16

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN

JOB NO. 423-01-02
DATE: MAY 2015
DRAWN: OE CHECKED: BL

SHEET NUMBER:
EX-1.0

Date: Apr 05, 2016, 5:54pm User ID: oespinosa
File: P:\423\01\02\Design\Civil\WPAP\WPAP423t102.dwg



ISOMETRIC PLAN VIEW CROSS SECTION

Materials:

(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140. Rebar (either #5 or #6) may also be used to anchor the berm.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.
(4) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch. and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(5) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

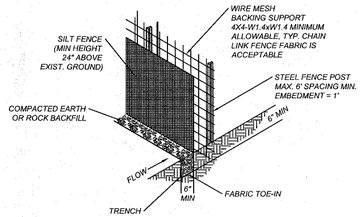
Installation:

(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1-inch openings.
(2) Install the silt fence along the center of the proposed berm placement, as with a normal silt fence described in Section 2.4.3.
(3) Place the rock along the sheathing on both sides of the silt fence as shown in the diagram (figure 1-29), to a height not less than 24 inches. Clean, open graded 3- 5" diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rock may be used.
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.
(5) The high service rock berm should be removed when the site is revegetated or otherwise stabilized or it may remain in place as a permanent BMP if drainage is adequate.

Inspection and Maintenance Guidelines:

(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made on rock berm.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt of in an approved manner.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

HIGH SERVICE ROCK BERM



ISOMETRIC PLAN VIEW

Materials:

(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

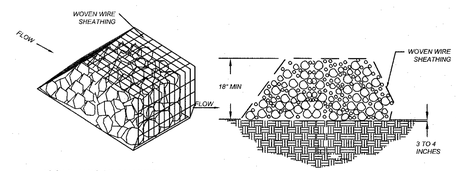
Installation:

(1) Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1- foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.
(2) Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is ¼ acre/l 00 feet of fence.
(3) The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down- slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.
(4) The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
(5) Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.
(6) Silt fence should be removed when the site is completely stabilized so as not to block or impede stone flow or drainage.

Inspection and Maintenance Guidelines:

(1) Inspect all fencing weekly, and after any rainfall.
(2) Remove sediment when buildup reaches 6 inches.
(3) Replace any torn fabric or install a second line of fencing parallel to the torn section.
(4) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
(5) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

SILT FENCE



ISOMETRIC PLAN VIEW CROSS SECTION

Materials:

(1) The berm structure should be. secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

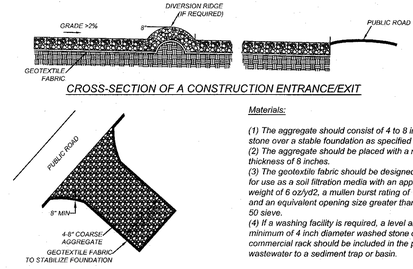
Installation:

(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openings.
(2) Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.
(3) Place the rock along the sheathing as shown in the diagram Figure 1-28), to a height not less than 18".
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, airl the berm retains its shape when walked upon.
(5) Berm should be built along the contour at zero percent grade or as near as possible.
(6) The ends of the berm should be tied into existing upstope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the control.

Inspection and Maintenance Guidelines:

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

ROCK BERM



CROSS-SECTION OF A CONSTRUCTION ENTRANCE/EXIT

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

Materials:

(1) The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.
(2) The aggregate should be placed with a minimum thickness of 8 inches.
(3) The geotextile fabric should be designed specifically for use as a soil filtration media with an approximate weight of 6 oz/yd2, a mullen burst rating of 140 lb/in2, and an equivalent opening size greater than a number 50 sieve.
(4) If a washing facility is required, a level area with a minimum of 4 inch diameter washed stone or commercial rack should be included in the plans. Divert wastewater to a sediment trap or basin.

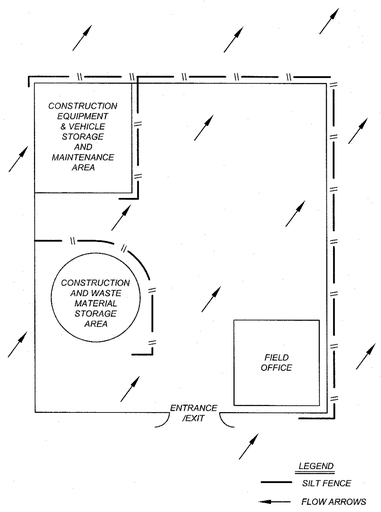
Installation: (North Carolina, 1993)

(1) Avoid curves on public roads and steep slopes. Remove vegetation and other objectionable material from the foundation area. Grade crown foundation for positive drainage.
(2) The minimum width of the entrance/exit should be 12 feet or the full width of exit roadway, whichever is greater.
(3) The construction entrance should be at least 50 feet long.
(4) If the slope toward the road exceeds 2%, construct a ridge, 6 to 8 inches high with 3:1 (H:V) side slopes, across the foundation approximately 15 feet from the entrance to divert runoff away from the public road.
(5) Place geotextile fabric and grade foundation to improve stability, especially where wet conditions are anticipated.
(6) Place stone to dimensions and grade shown on plans. Leave surface smooth and slope for drainage.
(7) Divert all surface runoff and drainage from the stone pad to a sediment trap or basin.
(8) Install pipe under pad as needed to maintain proper public road drainage.

Inspection and Maintenance Guidelines:

(1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment.
(2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
(4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
(5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

STABILIZED CONSTRUCTION ENTRANCE / EXIT



TYPICAL CONSTRUCTION STAGING AREA

GENERAL NOTES:

- *DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.*
- *WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.*
- *WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.*

CONCRETE TRUCK WASHOUT PIT

KFW
ENGINEERS + SURVEYING
14803 Huebner Rd, Bldg 40, San Antonio, TX 78230
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPE Firm # 3613 • TBPLS Firm # 10122300

ISSUE DATE

REVISIONS

STATE OF TEXAS
BLAINE P. LOPEZ
92685
LICENSED
PROFESSIONAL ENGINEER
10/29/15

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN DETAILS

JOB NO. 423-01-02
DATE: MAY 2015
DRAWN: OE CHECKED: BL

SHEET NUMBER:
EX-1.1

KFW
ENGINEERS

WATER POLLUTION ABATEMENT PLAN APPLICATION SECTION

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: A. Nicholas Reynolds

Date: 03/12/2020

Signature of Customer/Agent:

Regulated Entity Name: Brandt Ranch

Regulated Entity Information

1. The type of project is:

   ☒ Residential: Number of Lots:150
   ☒ Residential: Number of Living Unit Equivalents:150
   ☐ Commercial
   ☐ Industrial
   ☐ Other:____

2. Total site acreage (size of property):211.56

3. Estimated projected population:450 = (150 x 3)

4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	1,050,000	÷ 43,560 =	24.10
Parking	180,000	÷ 43,560 =	4.13
Other paved surfaces	509192.3	÷ 43,560 =	11.68
Total Impervious Cover	1739192.3	÷ 43,560 =	39.93

Total Impervious Cover 39.93 ÷ **Total Acreage** 211.56 **X 100 =** 18.87**% Impervious Cover**

5. ☒ **Attachment A - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

6. ☒ Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

   ☐ TXDOT road project.
   ☐ County road or roads built to county specifications.
   ☐ City thoroughfare or roads to be dedicated to a municipality.
   ☐ Street or road providing access to private driveways.

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

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

10. Length of pavement area: _____ feet.

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

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

    ☐ A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

__x__% Domestic	45,000Gallons/day
_____% Industrial	_____Gallons/day
_____% Commingled	_____Gallons/day

TOTAL gallons/day 45,000 = (150 EDU x 300 gpd/EDU)

15. Wastewater will be disposed of by:

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

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

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

☐ Sewage Collection System (Sewer Lines):

☐ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.

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

☐ The SCS was previously submitted on_____.

☐ The SCS was submitted with this application.

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

☐ The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☐ Existing.
☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 300'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA FIRM MAP NUMBER 48091C0430F DATE-SEPTEMBER 2, 2009.

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

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

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

☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

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

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

☒ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment.** A request and justification for an exception to a portion of the Geologic Assessment is attached.

22. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

23. ☒ Areas of soil disturbance and areas which will not be disturbed.

24. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. ☒ Locations where soil stabilization practices are expected to occur.

26. ☐ Surface waters (including wetlands).

    ☒ N/A

27. ☒ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☐ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

FACTORS AFFECTING WATER QUALITY

Materials that are anticipated to be used on site that could be a potential source of contamination include the following:

During Construction:

1. Concrete and Masonry Materials
2. Wood, plastic, and metal Materials
3. Tar and hydrocarbons from paving operations
4. Oil, Grease, fuel, and hydraulic fluid from construction equipment and vehicle drippings
5. Fertilizers, Herbicides, and Pesticides
6. Cleaning solutions and detergents
7. Miscellaneous construction trash and debris
8. Soil erosion and sedimentation due to construction activity

Ultimate Use:

1. Pollutants generated from vehicles utilizing the roadways
2. Fertilizers, Herbicides, and pesticides used to maintain landscaping and lawns
3. Miscellaneous trash and debris generated from the public
4. Dumping of Hazardous Materials into the storm drainage system by the general public

(This is not intended to be an all inclusive list)

All practical management practices will be used to reduce the risk of spills and other exposure of any contaminant to surface or groundwater.

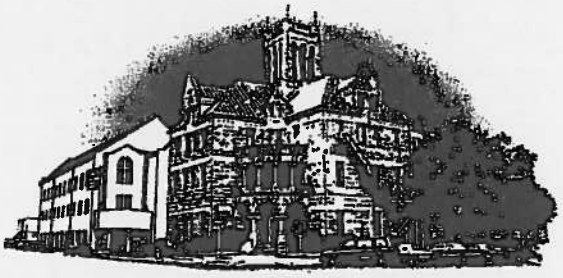
VOLUME AND CHARACTER OF STORMWATER

The proposed Brandt Ranch Subdivision consists of 211.56 acres. The existing topography contains a ridgeline that divides drainage into the northeast and southwest with grades ranging from 1% to 20%. The portion of the site draining northeast ultimately drains into Blieders Creek. The portion of the site draining southwest ultimately drains into Dry Comal Creek. Upgradient drainage is intercepted and directed to existing natural lows. The site consists of medium dense grass and moderate tree canopy cover. The existing soils on the site consist of Comfort-Rock outcrop complex, undulating (CrD), Medlin-Eckrant, undulating (MEC), Real Gravel Loam, 1 to 8 percent slopes (RaD), and Rumple-Comfort, undulating (RUD). The pre-development runoff coefficient for the site is 0.38 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2 (2015 DCM). The existing flow patterns drain naturally into six (6) defined lows located throughout the site. The pre-development runoff values for the 25-yr events for the site are shown in the drainage area map provided with form TCEQ-0602, Attachment G.

The proposed Brandt Ranch site will have a total impervious cover of 39.93 acres or 18.87% and will consist of structures, concrete driveways, concrete flush curbs, and asphalt pavement. The post-development runoff composite coefficient for this site is 0.50 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2 (2015 DCM). The site has been divided into six (6) on-site drainage areas which will maintain the existing flow patterns throughout the site. The post-development runoff values for the 25-yr storm events for the site are shown in the drainage area map provided with form TCEQ-0602, Attachment G. The rainfall intensities used to calculate storm water runoff produced by the site were obtained from the City of New Braunfels Drainage and Erosion Control Manual Section 4.2 Table 4-1 (2015 DCM).

Permanent BMP’s are not required for this development since the overall impervious cover is less than 20%. All future site improvements will utilize existing drainage patters to ensure that proposed development will not produce a significant adverse impact to other properties, habitable structures, or drainage systems downstream.

SUITABILITY LETTER FROM AUTHORIZED AGENT



Comal County

OFFICE OF COMAL COUNTY ENGINEER

October 15, 2015

Mr. Omar Espinosa, E.I.T.
KFW Engineers & Surveying
14603 Huebner Rd., Bldg. 40
San Antonio, TX 78230

Re: Brandt Ranch On-Site Sewage Facility Suitability Letter, within Comal County, Texas

Dear Mr. Espinosa:

In accordance with TAC §213.5(b)(4)(F)(ii), Comal County has found that the entire referenced site (except for areas listed below) is suitable for the use of private sewage facilities and will meet the special requirements for on-site sewage facilities located on the Edwards Aquifer recharge zone as specified in TAC §285.40-42 based on the following information submitted to our office on October 15, 2015:

- The Geologic Assessment, prepared by Professional Service Industries, Inc.
- The Water Pollution Abatement Plan, prepared by KFW Engineers & Surveying

Areas that are not Suitable

The Geologic Assessment identified 1 recharge feature as sensitive. Below is a list of said sensitive feature:

Feature ID	Latitude	Longitude
S-5	29° 43'57.1"	98° 13'31.4"

In accordance with TAC §285.91, Table X, Minimum Required Separation Distances for soil absorption systems, unlined ET beds, surface application (edge of spray area), and drip irrigation disposal systems are not suitable within 150' of these sensitive features. Furthermore, tanks, lined ET beds and sewer pipe with watertight joints are not allowed within 50' of these sensitive features.

Finally, according to TAC §285.42(a), if any recharge feature, not listed above, is discovered during construction of an OSSF, all regulated activities near the feature shall be suspended immediately. The owner shall immediately notify the TCEQ San Antonio office of the discovery of the feature. All activities regulated under TAC §213 shall not proceed near the feature until Comal County, in conjunction with the TCEQ San Antonio office, has reviewed and approved a plan proposed to protect

the feature, the structural integrity of the OSSF, and the water quality of the aquifer. The plan shall be sealed, signed, and dated by a professional engineer.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

Robert Boyd, P.E.
Comal County Assistant Engineer

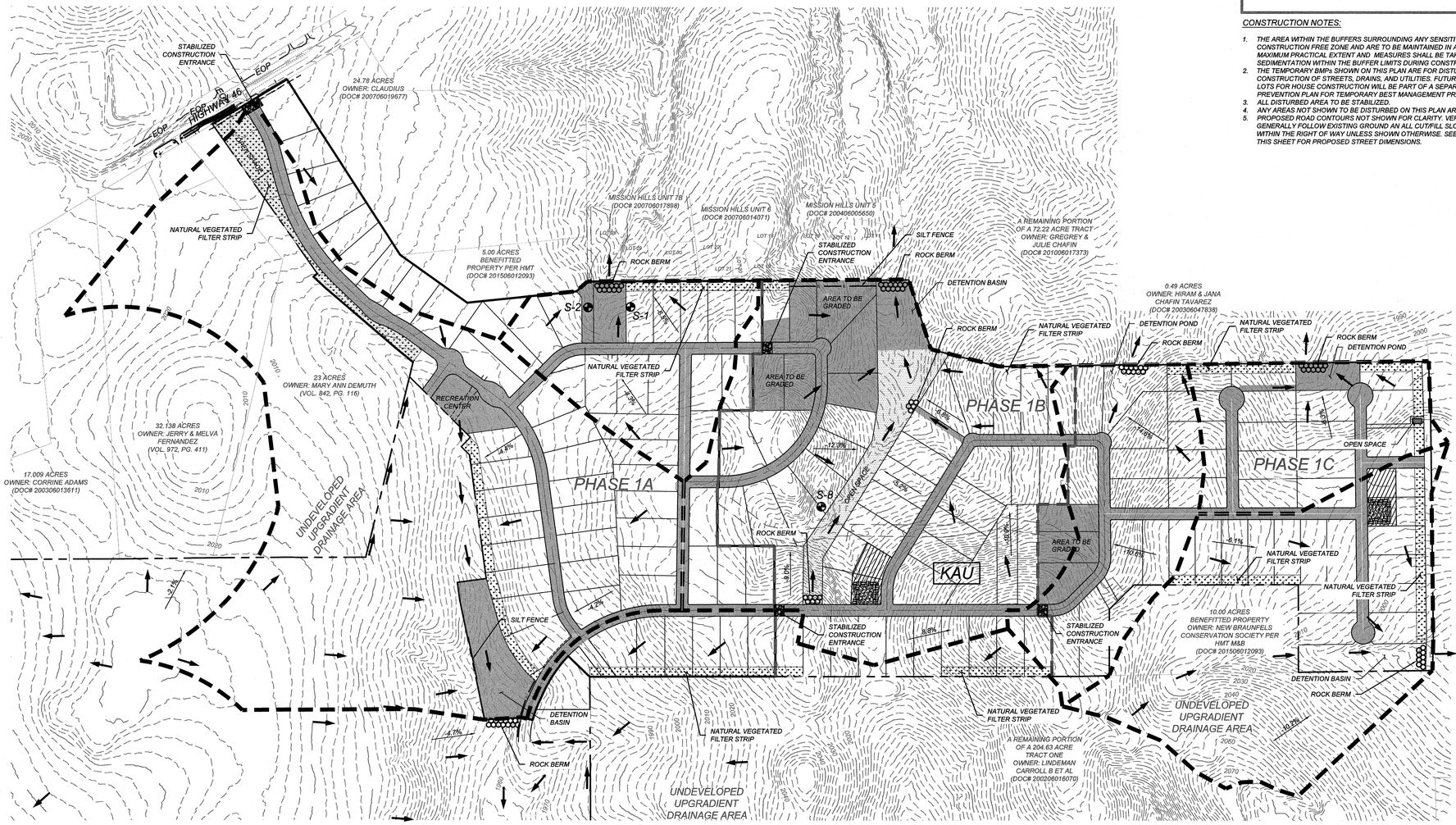
cc: Scott Haag, Comal County Commissioner Precinct No. 2

EXCEPTION TO THE REQUIRED GEOLOGIC ASSESSMENT

Not applicable. Geologic Assessment is attached.

KFW
ENGINEERS

TEMPORARY STORMWATER SECTION



LEGEND

- PROPOSED CONTOURS
- 1130 — EXISTING CONTOURS
- PROJECT LIMITS
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE TRUCK WASHOUT PIT
- SILT FENCE
- ROCK BERM
- AREAS TO BE DISTURBED AND SOIL STABILIZATION WITH SODDING AND LANDSCAPING
- FLOW ARROW
- NATURAL VEGETATED FILTER STRIP
- BASIN DRAINAGE AREAS
- INLET WITH PROTECTION (GRAVEL FILTER BAGS)
- SENSITIVE RECHARGE FEATURE
- S-3

CONSTRUCTION NOTES:

1. THE AREA WITHIN THE BUFFERS SURROUNDING ANY SENSITIVE FEATURE SHALL BE A CONSTRUCTION FREE ZONE AND ARE TO BE MAINTAINED IN A NATURAL STATE TO THE MAXIMUM PRACTICAL EXTENT AND MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND SEDIMENTATION WITHIN THE BUFFER LIMITS DURING CONSTRUCTION.
2. THE TEMPORARY BMPs SHOWN ON THIS PLAN ARE FOR DISTURBANCE REQUIRED FOR CONSTRUCTION OF STREETS, DRAINS, AND UTILITIES. FUTURE DISTURBANCE WITHIN THE LOTS FOR HOUSE CONSTRUCTION WILL BE PART OF A SEPARATE STORMWATER POLLUTION PREVENTION PLAN FOR TEMPORARY BEST MANAGEMENT PRACTICES.
3. ALL DISTURBED AREA TO BE STABILIZED.
4. ANY AREAS NOT SHOWN TO BE DISTURBED ON THIS PLAN ARE TO REMAIN UNDISTURBED.
5. PROPOSED ROAD CONTOURS NOT SHOWN FOR CLARITY. VERTICAL ROAD ALIGNMENT WILL GENERALLY FOLLOW EXISTING GROUND AN ALL CUTFILL SLOPES WILL BE CONTAINED WITHIN THE RIGHT OF WAY UNLESS SHOWN OTHERWISE. SEE TYPICAL STREET SECTION ON THIS SHEET FOR PROPOSED STREET DIMENSIONS.

LOCATION MAP
NOT-TO-SCALE

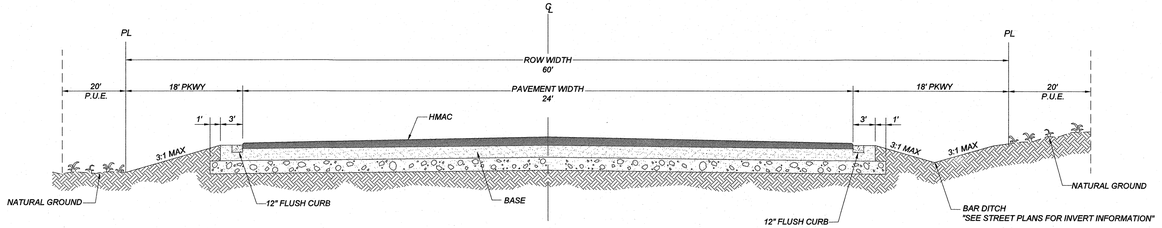
SCALE : 1"=300'
0' 300' 900' 600'

TCEQ-0592 (Rev. 3/15/07)
Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. If sediment escapes the construction site, off_site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    - A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    - B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    - C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
2800 S. IH 35, Suite 100
Austin, Texas 78704-5712
Phone(512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329



TYPICAL 60' R.O.W. STREET SECTION
(NOT TO SCALE)

KFW ENGINEERS + SURVEYING
162 W Mill St., New Braunfels, Tx, 78130
Phone #: (830) 220-6042 • Fax #: (830) 627-6097
TBPE Firm #: 9513 • TBPLS Firm #: 10122300

ISSUE DATE

REVISIONS

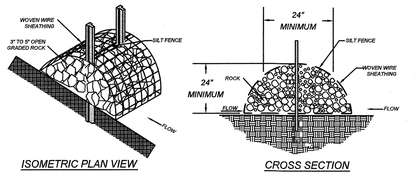
2/10/20
STATE OF TEXAS
NICHOLAS REYNOLDS
111666
LICENSED
PROFESSIONAL ENGINEER

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN MOD

JOB NO. 205123-01-02
DATE: NOVEMBER 2018
DRAWN: OE CHECKED: BW

SHEET NUMBER:

Date: Mar 11, 2020, 4:40pm User ID: tvoter
File: U:\Projects\423\01\03 Design\Exhibits\WPAP MOD\SNSP.dwg



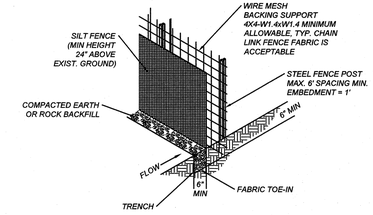
ISOMETRIC PLAN VIEW CROSS SECTION

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140. Rebar (either #5 or #6) may also be used to anchor the berm.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.
(4) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch. and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(5) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:
(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1-inch openings.
(2) Install the silt fence along the center of the proposed berm placement, as with a normal silt fence described in Section 2.4.3.
(3) Place the rock along the sheathing on both sides of the silt fence as shown in the diagram (figure 1-29), to a height not less than 24 inches. Clean, open graded 3- 5" diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rock may be used.
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.
(5) The high service rock berm should be removed when the site is revegetated or otherwise stabilized or it may remain in place as a permanent BMP if drainage is adequate.

Inspection and Maintenance Guidelines:
(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made on rock berm.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt of in an approved manner.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

HIGH SERVICE ROCK BERM



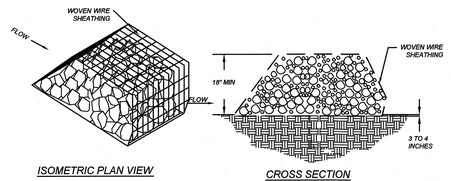
ISOMETRIC PLAN VIEW

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

Installation:
(1) Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1- foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.
(2) Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is ¼ acre/ 00 feet of fence.
(3) The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down- slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.
(4) The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
(5) Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.
(6) Silt fence should be removed when the site is completely stabilized so as not to block or impede stone flow or drainage.

Inspection and Maintenance Guidelines:
(1) Inspect all fencing weekly, and after any rainfall.
(2) Remove sediment when buildup reaches 6 inches.
(3) Replace any torn fabric or install a second line of fencing parallel to the torn section.
(4) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
(5) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

SILT FENCE



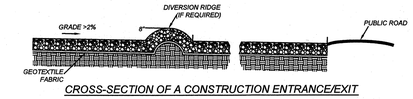
ISOMETRIC PLAN VIEW CROSS SECTION

Materials:
(1) The berm structure should be. secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

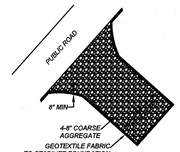
Installation:
(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openings.
(2) Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.
(3) Place the rock along the sheathing as shown in the diagram Figure 1-28), to a height not less than 18".
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, airt the berm retains its shape when walked upon.
(5) Berm should be built along the contour at zero percent grade or as near as possible.
(6) The ends of the berm should be tied into existing upslope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the control.

Inspection and Maintenance Guidelines:
(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

ROCK BERM



CROSS-SECTION OF A CONSTRUCTION ENTRANCE/EXIT



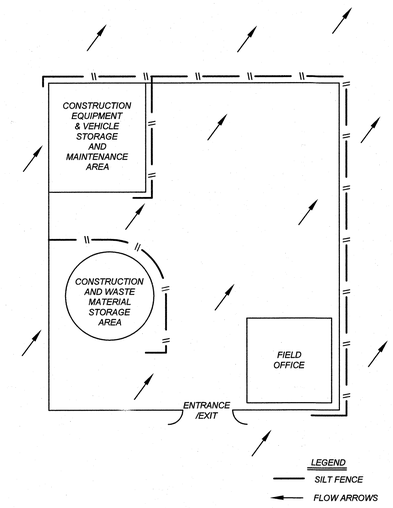
Materials:
(1) The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.
(2) The aggregate should be placed with a minimum thickness of 8 inches.
(3) The geotextile fabric should be designed specifically for use as a soil filtration media with an approximate weight of 6 oz/yd2, a mullen burst rating of 140 lb/in2, and an equivalent opening size greater than a number 50 sieve.
(4) If a washing facility is required, a level area with a minimum of 4 inch diameter washed stone or commercial rack should be included in the plans. Divert wastewater to a sediment trap or basin.

TEMPORARY CONSTRUCTION ENTRANCE/EXIT

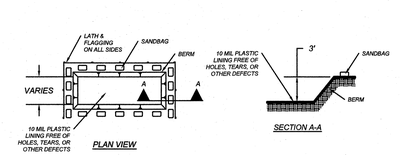
Installation: (North Carolina, 1993)
(1) Avoid curves on public roads and steep slopes. Remove vegetation and other objectionable material from the foundation area. Grade crown foundation for positive drainage.
(2) The minimum width of the entrance/exit should be 12 feet or the full width of exit roadway, whichever is greater.
(3) The construction entrance should be at least 50 feet long.
(4) If the slope toward the road exceeds 2%, construct a ridge, 6 to 8 inches high with 3:1 (H:V) side slopes, across the foundation approximately 15 feet from the entrance to divert runoff away from the public road.
(5) Place geotextile fabric and grade foundation to improve stability, especially where wet conditions are anticipated.
(6) Place stone to dimensions and grade shown on plans. Leave surface smooth and slope for drainage.
(7) Divert all surface runoff and drainage from the stone pad to a sediment trap or basin.
(8) Install pipe under pad as needed to maintain proper public road drainage.

Inspection and Maintenance Guidelines:
(1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment.
(2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
(4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
(5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

STABILIZED CONSTRUCTION ENTRANCE / EXIT

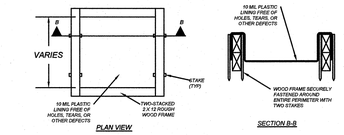


TYPICAL CONSTRUCTION STAGING AREA



PLAN VIEW SECTION A-A

TYPE "BELOW GRADE"



PLAN VIEW SECTION B-B

TYPE "ABOVE GRADE"

GENERAL NOTES:

- *DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.*
- *WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.*
- *WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.*

CONCRETE TRUCK WASHOUT PIT

KFW
ENGINEERS + SURVEYING
182 W Mill St., New Braunfels, Tx. 78130
Phone #: (830) 224-5428 Fax #: (830) 627-3937
TBPE Firm #: 9513 TBPLS Firm #: 10123500

ISSUE DATE

REVISIONS

3/16/20
STATE OF TEXAS
A. NICHOLAS REYNOLDS
111666
LICENSED
PROFESSIONAL ENGINEER

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN DETAILS

JOB NO. 205123-02-02
DATE: NOVEMBER 2018
DRAWN: OE CHECKED: BM

SHEET NUMBER:

Date: Mar 09, 2020, 12:49pm User ID: lvetter
Files: U:\Projects\423.001\03 Design\Exhibits\WPAP MOD\SWSP.dwg

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: A. Nicholas Reynolds

Date: 03/12/2020

Signature of Customer/Agent:

Regulated Entity Name: Brandt Ranch

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: Tributary to Dry Comal Creek & Tributary to Blieders Creek

Temporary Best Management Practices (TBMPs)

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

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

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

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

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

   ☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

   ☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

    ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

    ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

    ☒ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

    ☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

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

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

SPILL RESPONSE ACTIONS

If there is an accidental spill on site, the contractor shall respond with appropriate action. The contractor will be required to contact the owner and in turn the owner will contact the TCEQ in the event of a spill on site. In addition to the following guidance, reference the latest version of TCEQ's Technical Guidance Manual (TGM) RG-348 Section 1.4.16.

General Measures

1. To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
2. Store hazardous materials and wastes in covered containers and protect from vandalism.
3. Place a stockpile of spill cleanup materials where it will be readily accessible.
4. Train employees in spill prevention and cleanup.
5. Designate responsible individuals to oversee and enforce control measures.
6. Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean-up activities.
7. Do not bury or wash spills with water.
8. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
12. Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

1. Clean up leaks and spills immediately.
2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. Specific spill response procedures are outlined below for each spill category (Minor – Hazardous).

Minor Spills

1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
2. Use absorbent materials on small spills rather than hosing down or burying the spill.
3. Absorbent materials should be promptly removed and disposed of properly.
4. Follow the practice below for a minor spill:
   - Contain the spread of the spill.
   - Recover spilled materials.
   - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

1. Contain spread of the spill.
2. Notify the project foreman immediately.
3. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

1. Notify the TCEQ by telephone as soon as possible and within 24 hours at (512)339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
3. Notification should first be made by telephone and followed up with a written report.
4. The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
5. Other agencies which may need to be consulted include, but not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

Vehicle and Equipment Maintenance

1. If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately
3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
5. Place drip pans or absorbent materials under paving equipment when not in use.
6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
9. Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
2. Discourage "topping off" of fuel tanks.
3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

POTENTIAL SOURCES OF CONTAMINATION

During Construction:

1. Oil, grease, fuel, and hydraulic fluid contamination from construction equipment and vehicle dripping.
2. Hydrocarbons from paving operations.
3. Miscellaneous trash and litter from construction workers and material wrappings.
4. Construction debris.
5. Silt leaving the site.

Ultimate Use:

1. Pollutants from vehicles utilizing the roadways
2. Stormwater runoff contamination from fertilizers, herbicides, and pesticides used to maintain landscaping and lawns.
3. Dumping of hazardous materials into the storm drain system by the general public.

SEQUENCE OF MAJOR ACTIVITIES

Intended Schedule or Sequence of Major Activities:

1. Mobilization of the contractor's equipment.

2. Installation of temporary BMP's as described in attachment "D" of this section.

3. Site clearing and grubbing activities for streets, drains, detention ponds, and utilities.
    a. Phase 1: 19.08
    b. Phase 2: 9.60 Acres
    c. Phase 3: 11.25 Acres

4. Rough subgrade preparation: earthwork, grading, street and drainage excavation and embankment
    a. Phase 1: 11.94 Acres
    b. Phase 2: 5.79 Acres
    c. Phase 3: 6.92 Acres

5. Construction of Detention Ponds
    a. Phase 1: 5.09 Acres
    b. Phase 2: 0.00 Acres
    c. Phase 3: 0.00 Acres

6. Trenching and installation of utilities
    a. Phase 1: 0.53 Acres
    b. Phase 2: 0.17 Acres
    c. Phase 3: 0.28 Acres

7. Final street prep, curbing, and paving activities
    a. Phase 1: 5.95 Acres
    b. Phase 2: 2.55 Acres
    c. Phase 3: 3.19 Acres

8. Home construction
    a. Phase 1: 11.11 Acres
    b. Phase 2: 9.04 Acres
    c. Phase 3: 8.28 Acres

9. Construction of Park
    a. Phase 1: 0.00 Acres
    b. Phase 2: 0.00 Acres
    c. Phase 3: 0.00 Acres

10. Topsoil, irrigation and landscaping
    a. Phase 1: 29 Acres
    b. Phase 2: 24 Acres
    c. Phase 3: 22.5 Acres

11. Site cleanup and removal of temporary BMP's

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

A: A majority of the upgradient runoff will be intercepted by earthen swales along the property lines and directed to the natural lows and treated within the subdivision. The upgradient drainage area flowing onto the site is undeveloped and vegetation is well established so additional sedimentation is not anticipated to originate from upstream. The selection of the onsite BMP's has taken into account the additional runoff volume from the upgradient area.

B: Temporary BMPs will be installed prior to soil disturbing construction activity. Silt fencing and natural vegetated buffers will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. Rock berms will be placed in the drainage lows where runoff is concentrated. A temporary construction entrance will be placed at the site entry/exit point to reduce tracking onto adjoining streets. A construction staging area will be used onsite to perform all vehicle maintenance and for equipment and material storage. A concrete truck washout pit will be placed on site to provide containment and easier clean up of waste from concrete operations.

Practices may also be implemented on site for interim and permanent stabilization. Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, and other similar measures.

C: Silt fence and vegetated buffer will be used to prevent sediment-laden runoff from entering sensitive features on this site.

D: The flow to the natural sensitive features on this site, to a maximum practical extent, will not be disturbed. No clearing, excavation or grading will occur within the buffer zone of the sensitive feature. If another naturally-occurring sensitive feature is identified during construction all activity will be stopped and the contractor should notify TCEQ.

REQUEST TO TEMPORARILY SEAL A FEATURE

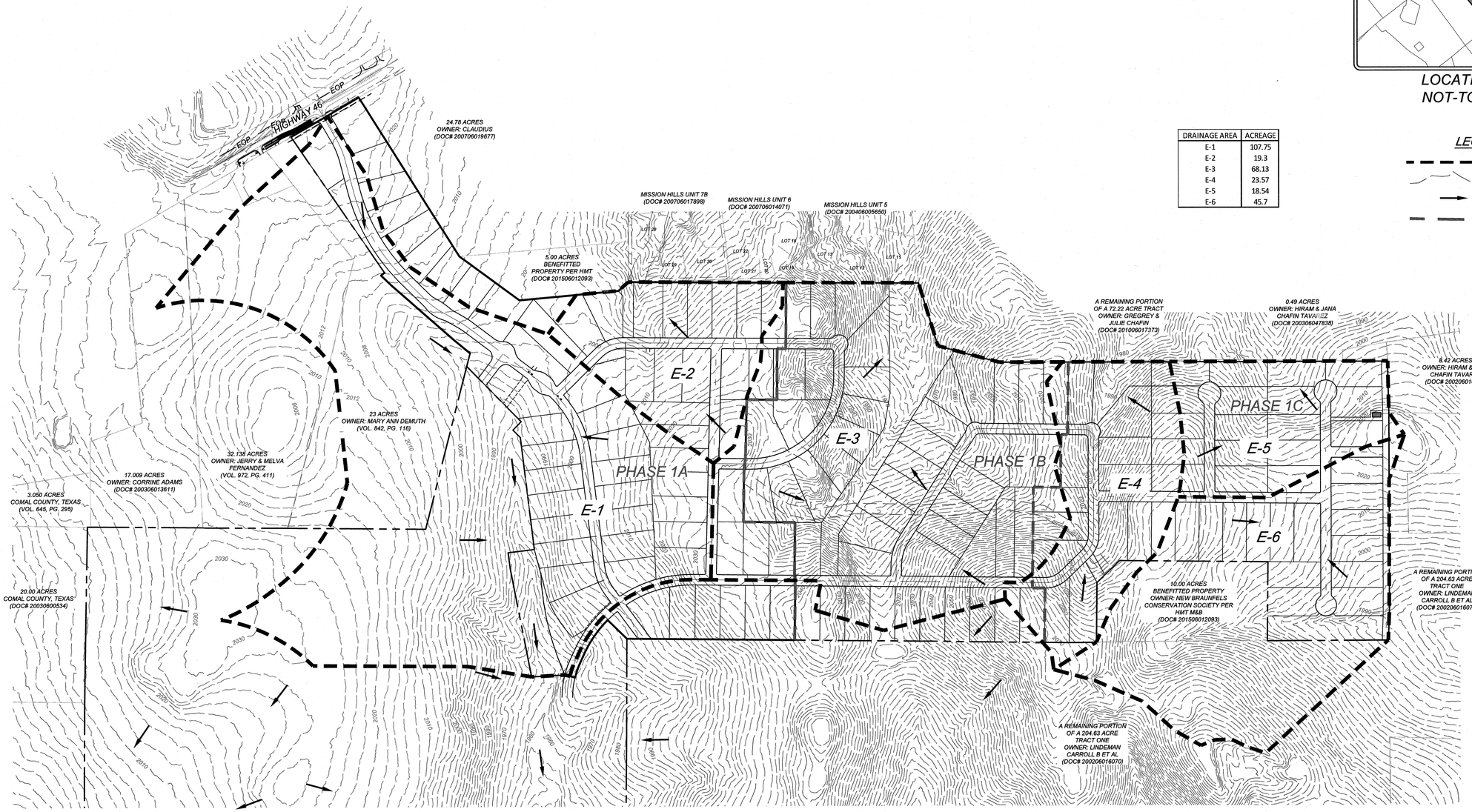
There will be no temporary sealing of any naturally occurring features on site.

STRUCTURAL PRACTICES

Structural BMPs will be used to limit runoff discharge of pollutants from exposed areas of the site. BMPs will be installed prior to soil disturbing construction activity. Natural vegetative buffers and silt fencing will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. A temporary construction entrance will be placed at the site entry/exit point to reduce tracking onto adjoining streets. A construction staging area will be used onsite to perform all vehicle maintenance and for equipment and material storage. A concrete truck washout pit will be placed on site to provide containment and easier clean up of waste from concrete operations. The location of all structural temporary BMP's is shown on the Site Plan, **EX-1.0** and details and specifications are provided in **EX-1.1** which can be found at the end of this report under the appropriate tab.

DRAINAGE AREA MAP

A drainage area map is included with this report as **Attachment G**.



DRAINAGE AREA	ACREAGE
E-1	107.75
E-2	19.3
E-3	68.13
E-4	23.57
E-5	18.54
E-6	45.7

LEGEND

= DRAINAGE AREA

= CONTOURS

= FLOW ARROW

= PHASE LINE

KFW ENGINEERS + SURVEYING
162 W Mill St. New Braunfels, Tx. 78130
Phone #: (830) 225-8042 - Fax #: (830) 627-8097
TBPE Firm #: 8513 - TBPLS Firm #: 10122300

ISSUE DATE

REVISIONS

STATE OF TEXAS
NICHOLAS REYNOLDS
111666
LICENSED
PROFESSIONAL ENGINEER
3/10/20

BRANDT RANCH

EXISTING CONDITIONS DRAINAGE MAP

JOB NO. 205423-02-02
DATE: NOVEMBER 2015
DRAWN: JA CHECKED: BW

SHEET NUMBER:

ATT. G

Date: Mar 11, 2020, 4:31pm User ID: tvoter
File: U:\Projects\423\01\03 Design\Exhibits\WPAP MOD\DRAINAGE AREA MAP.dwg

TEMPORARY SEDIMENT POND(S) PLANS AND CALCULATIONS

Temporary sediment basin and/or traps are not proposed; however other temporary BMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

INSPECTION AND MAINTENANCE FOR BMP'S

MAINTENANCE

All temporary and permanent erosion and sediment control BMPs will be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair of BMPs will be conducted in accordance with manufacturers' specifications.

All temporary erosion and sediment control BMPs will be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment will be removed or stabilized on site. Disturbed soil areas resulting from removal of BMPs or vegetation will be permanently stabilized as soon as possible.

Erosion and sediment controls are designed to prevent soil erosion and sediment migration offsite, to the extent practicable, which may result from construction activity. This design considers local topography, soil type, and rainfall.

Control measures must be installed and maintained according to the manufacturer's specifications. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permitee must replace or modify the control for site situations.

Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts, and whenever feasible, prior to the next rain event.

The controls must be installed, maintained, and operated in a manner that will limit, to the extent practicable, offsite transport of litter, construction debris, and construction materials.

INSPECTIONS

An inspection will be performed by the qualified personnel, as designated by the permitee, on a weekly basis and after any rainfall event. An inspection and maintenance report shall be made per inspection. An inspection form has been included in this report. Based on the inspection results, the controls shall be corrected before the next scheduled inspection.

A log of inspection results will be maintained on-site and will include the name of the inspector, date, major observations, and necessary corrective measures. Reports of maintenance and inspection activities will be maintained on-site, in conformance with the TPDES permit conditions. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must

contain a certification that the facility or site is in compliance with the WPAP. This report must be signed by the responsible party.

Major observations shall, at a minimum, include the following:

The locations of discharges of sediment or other pollutants from the site;

Locations of BMPs that need to be maintained;

Locations of BMPs that failed to operate as designed or proved inadequate for a particular location;

Location where additional BMP's are needed;

All needed repairs or modifications will be reported to the contractors to permit the timely implementation of required actions. Necessary repairs of modifications will be implemented within seven days of inspection. The WPAP will be modified within seven days to reflect any modifications to measures as a result of inspection.

The WPAP must be amended whenever there is a change in design, construction, operation or maintenance that has a significant effect on the discharge of pollutants to the waters of the United States that was not addressed in the WPAP.

The WPAP must be amended when inspections or investigations by site operations, local, state or federal officials indicate that the WPAP is proving ineffective in eliminating or significantly minimizing pollutants from the construction site or otherwise is not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity.

INSPECTION FORM

Project Name: **Owner (s)/Operator (s):** **Permit Numbers(s):** **Inspection Date:**	*NOT APPLICABLE*	*IN COMPLIANCE*	*NEEDS CORRECTION*	*COMMENTS*
RECORD KEEPING				
SWP3 Current				
NOI and Permit Posted				
BEST MANAGEMENT PRACTICES (BMPs)				
Vegetative Buffers				
Soil Covering(Including mulch and temporary vegetation)				
Outlet Protection				
Sediment Control Basins				
Silt Fence				
Stabilized Entrances/Exits				
Construction Staging Areas				
Inlet Protection				
Gravel Filter Bags				
Vegetated Filter Strip				
Concrete Truck Washout Pit				
Trash Receptacles				
General Site Cleanliness				
Other _____				
Other _____				
Other _____				

MAJOR OBSERVATIONS

_____

_____

_____

CERTIFICATION

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

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

INSPECTOR NAME/SIGNATURE: DATE:

(Inspector must attach a brief summary of qualifications to this report.)

OWNER NAME/SIGNATURE: DATE:

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

Construction practices shall disturb the minimal amount of existing ground cover as required for land clearing, grading, and construction activity for the shortest amount of time possible to minimize the potential of erosion and sedimentation from the site. Existing vegetation shall be maintained and left in place until it is necessary to disturb for construction activity. For this project the following stabilization practices will be implemented:

1. Hydraulic Mulch and Seeding: Disturbed areas subject to erosion shall be stabilized with hydraulic mulch and/or seeded and watered to provide interim stabilization. For areas that are not to be sodded as per the project landscaping plan, a minimum of 85% vegetative cover will be established to provide permanent stabilization.

2. Sodding and Wood Mulch: As per the project landscaping plan, Sodding and wood mulch will be applied to landscaped areas to provide permanent stabilization prior to project completion.

Records of the following shall be maintained by the permitee in the attached Project Timeline:

a) The dates when major grading activities occur;

b) The dates when construction activities temporarily or permanently cease on a portion of the site;

c) The dates when stabilization measures are initiated.

Stabilization measures must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in the following, must be initiated no more that fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased:

Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.

Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site. In arid areas (areas with an average rainfall of 0-10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical.

PROJECT TIMELINE

DATES WHEN MAJOR GRADING ACTIVITIES OCCUR	
Date	Construction Activity

DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE	
Date	Construction Activity

DATES WHEN STABILIZATION MEASURES ARE INITIATED	
Date	Stabilization Activity

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PERMANENT STORMWATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: A. Nicholas Reynolds

Date: 03/12/2020

Signature of Customer/Agent

Regulated Entity Name: Brandt Ranch

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A

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

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

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

☒ N/A

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

   ☒ N/A

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

   ☒ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☐ The site will not be used for low density single-family residential development.

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

   ☐ **Attachment A - 20% or Less Impervious Cover Waiver**. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.
   ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☒ The site will not be used for multi-family residential developments, schools, or small business sites.

6. ☒ **Attachment B - BMPs for Upgradient Stormwater**.

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.

☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

7. ☒ **Attachment C - BMPs for On-site Stormwater**.

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

8. ☒ **Attachment D - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

☐ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

☐ **Attachment E - Request to Seal Features**. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☐ **Attachment F - Construction Plans**. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

☐ Design calculations (TSS removal calculations)

☐ TCEQ construction notes

☐ All geologic features

☐ All proposed structural BMP(s) plans and specifications

☒ N/A

11. ☐ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

    ☐ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☐ Signed by the owner or responsible party
    ☐ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    ☐ A discussion of record keeping procedures

    ☒ N/A

12. ☐ **Attachment H - Pilot-Scale Field Testing Plan.** Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

13. ☐ **Attachment I -Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☒ N/A

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

    ☒ N/A

20% OR LESS IMPERVIOUS COVER WAIVER

Not applicable.

BMP'S FOR UP-GRADIENT STORMWATER

Please refer to the Drainage Area Map provided with form TCEQ-0602, Attachment G. An interceptor drain will be constructed to channelize upgradient runoff to the natural low. The upgradient drainage area is undeveloped and does not contain impervious cover. These areas were not included in the impervious cover calculations for the site. At the time the upgradient areas are developed they will need to prepare a water pollution abatement plan and implement permanent BMP’s to treat the stormwater runoff prior to entering this site.

BMP'S FOR ON-SITE STORMWATER

The site will be used for low density single-family residential development and has less than 20% impervious cover, therefore BMPs are not required.

BMP'S FOR SURFACE STREAMS

There are no existing surface streams located within the site, therefore additional BMP's are not required.

REQUEST TO SEAL A FEATURE

No sensitive features will be requested to be sealed.

CONSTRUCTION PLANS

Not Applicable.

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

The owner is aware of their maintenance obligation and agrees to keep accurate records of the sensitive feature buffer zone. These records are to include the name and address of parties performing the maintenance, dates and duration of maintenance, and any problems encountered with the functioning of the buffer zone.

See the attached Inspection and Maintenance Plan for specific details of this program.

Inspection and Maintenance Plan

The attached inspection and maintenance plan outlines the procedures necessary to maintain the performance of the Permanent Best Management Practices for this project.

It is the responsibility of the owner to contract with a representative to provide the inspections and maintenance as outlined in the plan for the duration of the project. The owner will maintain this responsibility until it is assumed or transferred to another entity in writing. If the property is leased or sold, the responsibility for the maintenance will be required to be transferred through the lease agreement, binding covenants, closing documents, or other binding legal instrument.

SENSITIVE FEATURE BUFFER ZONES

Sensitive feature buffer zones must be inspected at least once per year. With each inspection, any damage to the barrier of the buffer zone (fence, etc.) must be identified and repaired immediately. Any degradation of the natural vegetation within the buffer zone must be identified and measure should be taken to prevent further degradation.

RECORD KEEPING

A binder containing all of the maintenance records for each type of permanent BMP is to be kept by the owner.

I, the owner, have read and understand the requirements of the attached Inspection and Maintenance Plan for the proposed Permanent Best Management Practices for my project. I acknowledge that I will maintain responsibility for the implementation and execution of the plan until the responsibility is transferred to or assumed by another party in writing through a binding legal instrument.

10.29.15

Owner: RR-1604 Ltd. / Japhet III, LLC. Date
By: James H. Japhet

PILOT-SCALE FIELD TESTING PLAN

Not Applicable.

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Contamination of surface streams will be kept at a minimum during construction by implementing temporary BMP's such as silt fencing, rock berms and vegetated strips. All disturbed areas will be re-vegetated as a soon as practical. This development will utilize detention ponds to reduce increased stormwater runoff flow to pre-development conditions, therefore flows and velocities will not increase as a result of this development.

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AGENT AUTHORIZATION FORM

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

I James H. Japhet,
Print Name

Member,
Title - Owner/President/Other

of Brandt Ranch NB LLC. / Japhet III, LLC.,
Corporation/Partnership/Entity Name

have authorized KFW Engineers Representatives
Print Name of Agent/Engineer

of KFW Engineers
Print Name of Firm

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

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

3-11-20
Date

THE STATE OF TEXAS §

County of BEXAR §

BEFORE ME, the undersigned authority, on this day personally appeared JAMES JAPHET 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 11th day of March, 2020.

NOTARY PUBLIC

Typed or Printed Name of Notary

SUSAN J. BRAUN
Notary Public, State of Texas
Comm. Expires 10-20-2021
Notary ID 3093681

MY COMMISSION EXPIRES: _____

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APPLICATION FEE FORM

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Brandt Ranch
Regulated Entity Location: Approx. 1.0 miles NW from the intersection of HWY 46 and FM2722
Name of Customer: Brandt Ranch NB LLC. / Japhet III, LLC.
Contact Person: James H. Japhet Phone: 210-448-0800
Customer Reference Number (if issued):CN 605063536
Regulated Entity Reference Number (if issued):RN 108863002

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☒ Comal ☐ Kinney

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

☐ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	211.56 Acres	$ 8,000.00
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____

Date: 03/03/2020

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

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CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN 605063536		RN 108863002

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy): 03/12/2020

☐ 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 Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* — *If new Customer, enter previous Customer below:*

Japhet III, LLC.

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0801506928	32045638189	45-4054445	

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees ☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated? ☒ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following:*

☐ Owner ☐ Operator ☒ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address: 4372 N. Loop 1604 W. STE. 206

City	State	ZIP	ZIP + 4
San Antonio	TX	78249	1201

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	japhetoffices@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(210) 448-0800		( ) -

SECTION III: Regulated Entity Information

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

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

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

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

Brandt Ranch

23. Street Address of the Regulated Entity: *(No PO Boxes)*							
	City		State		ZIP		ZIP + 4	
24. County	Comal						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	This site is located approximately 1.0 mile northwest from the intersection of HWY 46 and FM 2722

26. Nearest City	State	Nearest ZIP Code
New Braunfels	TX	78132

27. Latitude (N) In Decimal:	29.74	28. Longitude (W) In Decimal:	98.22

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	44	16	98	13	03

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
1521		236115	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Single Family Residential

34. Mailing Address:	4372 N. Loop 1604 W. STE. 206							
	City	San Antonio	State	TX	ZIP	78249	ZIP + 4	1201

35. E-Mail Address:	japhetoffices@gmail.com

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(210) 448-800		( ) -

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
		WPAP Mod		
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	A. Nicholas Reynolds, P.E.	41. Title:	Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 979-8444	460	( ) -	nreynolds@kfwengineers.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:	KFW Engineers	Job Title:	Project Manager	
Name *(In Print)* :	A. Nicholas Reynolds		Phone:	(210) 979-8444
Signature:			Date:	3/12/20

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

1. Reason for Submission *(If other is checked please describe in space provided.)*

☒ New Permit, Registration or Authorization *(Core Data Form should be submitted with the program application.)*

☐ Renewal *(Core Data Form should be submitted with the renewal form)* ☐ Other

2. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number *(if issued)*
CN		RN 108863002

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	03/12/2020

☒ 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 Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)*	*If new Customer, enter previous Customer below:*
Brandt Ranch NB LLC.	

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number *(if applicable)*
0802182784	32056766937	37-1795239	

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees ☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated? ☐ Yes ☐ No

14. Customer Role (Proposed or Actual) – *as it relates to the Regulated Entity listed on this form. Please check one of the following:*

☐ Owner ☐ Operator ☒ Owner & Operator

☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:	4372 N. Loop 1604 W. Ste. 206						
	City	San Antonio	State	TX	ZIP	78249	ZIP + 4	1201

16. Country Mailing Information *(if outside USA)*	17. E-Mail Address *(if applicable)*
	japhetoffices@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(210) 448-0800		( ) -

SECTION III: Regulated Entity Information

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

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☒ Update to Regulated Entity Information

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

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

Brandt Ranch

23. Street Address of the Regulated Entity: *(No PO Boxes)*							
	City		State		ZIP		ZIP + 4	
24. County	Comal						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	This site is located approximately 1.0 mile northwest from the intersection of HWY 46 and FM 2722

26. Nearest City	State	Nearest ZIP Code
New Braunfels	TX	78132

27. Latitude (N) In Decimal:	29.74	28. Longitude (W) In Decimal:	98.22

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	44	16	98	13	03

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
1521		236115	

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Single Family Residential

34. Mailing Address:	4372 N. Loop 1604 W. Ste. 206							
	City	San Antonio	State	TX	ZIP	78249	ZIP + 4	1201

35. E-Mail Address:	japhetoffices@gmail.com

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(210) 448-800		( ) -

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
		WPAP Mod		
☐ Municipal Solid Waste	☐ New Source Review Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	A. Nicholas Reynolds, P.E.	41. Title:	Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 979-8444	460	( ) -	nreynolds@kfwengineers.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:	KFW Engineers	Job Title:	Project Manager	
Name *(In Print)* :	A. Nicholas Reynolds		Phone:	(210) 979-8444
Signature:			Date:	3/12/20

FILED AND RECORDED

Instrument Number: *201506012093*

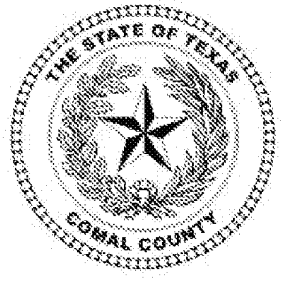
Recording Fee: 113.00

Number Of Pages: 23

Filing and Recording Date: 04/06/2015 1:01PM

Deputy: LAURA JENDRUSCH

I hereby certify that this instrument was FILED on the date and time stamped hereon and RECORDED in the OFFICIAL PUBLIC RECORDS of Comal County, Texas.



Bobbie Koepp

Bobbie Koepp, County Clerk
Comal County, Texas

NOTICE: It is a crime to intentionally or knowingly file a fraudulent court record or instrument with the clerk.

DO NOT DESTROY - *Warning, this document is part of the Official Public Record.*

(3)
22+1 +17names
TM

Notice of confidentiality rights: If you are a natural person, you may remove or strike any or all of the following information from any instrument that transfers an interest in real property before it is filed for record in the public records: your Social Security number or your driver's license number.

14051759

SPECIAL WARRANTY DEED

Executed on March 30, 2015, however, to be effective as of March 31, 2015.

Grantor:

C. FREDERICK CLUDIUS, TRUSTEE
(an undivided 14% interest in the 398.983 acre tract and a 100% interest in the 24.717 acre tract) for the benefit of those entitled to the interest of Elvira Rauch Branch, Deceased
4339 W. State Hwy 46
New Braunfels, TX 78132

VANESSA MILLER, TRUSTEE
(an undivided 14% interest in the 398.983 acre tract)
12010 Las Vegas
San Antonio, TX 78233

LONNIE E. CHUNN
(an undivided 12% interest in the 398.983 acre tract)
210 Lee Barton Dr. #308
Austin, TX 78704

ROBERT S. TRUDEAU
(an undivided 12% interest in the 398.983 acre tract)
9601 McAllister Freeway
San Antonio, TX 78216

JERRY FRANK JONES
(an undivided 8% interest in the 398.983 acre tract)
400 W. 15th t., Suite 975
Austin, TX 78701

JIMMY JACOBS HOLDINGS, LLC - SERIES 107
(an undivided 12% interest in the 398.983 acre tract)
4411 South IH 35, Suite 100
Georgetown, TX 78626

C. FREDERICK CLUDIUS, TRUSTEE
(an undivided 28% interest in the 398.983 acre tract) for the benefit of Jennifer Cludius, Jeffrey D. Barganier, Debra Morgan, Karen Barganier, Michael Roy Rauch, San Juanita Michelle Rauch Canizales and Dorothy Rauch Torres
4339 W. State Hwy 46
New Braunfels, TX 78132

Grantee:	JAPHET III, LLC 3602 Paesanos Pkwy. #106 Shavano Park, TX 78231	(an undivided 52.8% interest)
	RR-1604, LTD. and RRHJ, LTD. 3602 Paesanos Pkwy. #106 Shavano Park, TX 78231	(an undivided 47.2% interest)

Consideration: Cash and other valuable consideration.

Property (including any improvements): Being a 423.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michel Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175 and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas, said 423.7 acre tract of land being more particularly described by metes and bounds in ***Exhibit "A"*** attached.

Recitals: Disputes concerning ownership of a 388.65 acre tract of land described in the deed recorded as Document #200206028760, Official Public Records of Comal County, Texas, and a 24.7 acre tract of land described in the deed recorded in Vol. 103, Pages 175-177, Deed Records of Comal County, Texas (together, the "Agnes Brandt Property") were resolved by the Agreed Modified Final Order of Dismissal with Prejudice (the "Judgment") filed on April 12, 2012, in Cause No. 2010-PC-0305, Probate Court of Comal County, Texas, styled *Estate of Agnes Brandt, Deceased.* The Judgment divided the Agnes Brandt Property in accordance with the terms and provisions of a Compromise and Settlement Agreement signed by the parties to the litigation. The Property includes 398.983 acres, more or less, out of the Agnes Brandt Property (the "398.983 acre tract"), as well as all of a 24.717 acre tract conveyed to Elvira Rauch Branch by deed recorded in Vol. 103, Pages 173-174, Deed Records of Comal County, Texas (the "24.717 acre tract'). Those comprising Grantor intend hereby to convey their respective interests in the Property which are shown above.

Benefitted Property:

Tract 1: A 10.00 acre tract of land out of the G. Arnold Survey Number 436, Abstract Number 13, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document #200206028760, Official Public Records of Comal County, Texas, said 10.00 acre tract being more particularly described on ***Exhibit "B"*** attached.

Tract 2: A 5.00 acre tract of land out of the A.M. Holbrook Survey Number 423, Abstract Number 271, Comal County, Texas, and being a portion of a tract of land called 24.700 acres, described in Vol. 103, Page 175, Deed Records of Comal County, Texas, said 5.00 acre tract being more particularly described in ***Exhibit "C"*** attached.

Easement Property: A 7.60 acre tract out of the A.M. Holbrook Survey Number 436, Abstract No. 13, Comal County, Texas, being more particularly described on ***Exhibit "D"*** attached and depicted on ***Exhibit "D-1"*** attached.

Easement Purpose: For providing free and uninterrupted pedestrian and vehicular ingress and egress to and from the Benefitted Property, and portions thereof, to and from State Highway 46.

Reservations from Conveyance: For Grantor and Grantor's heirs, successors and assigns, in common with Grantee and Grantee's successors and assigns, a reservation of an easement over, upon and across the Easement Property for the Easement Purpose, and for the benefit of the Benefitted Property, and portions thereof, together with all and singular the rights and appurtenances thereto, in accordance with the terms and conditions set forth below.

Exceptions to Conveyance and Warranty:

1. Easement to New Braunfels Utilities Board of Trustees dated August 18, 2005, recorded in Document No. 200506030940, Official Public Records of Comal County, Texas, and as shown on survey dated August 19, 2013, prepared by Mark F. Conlan RPLS No. 6342.

2. Right of ingress and egress in favor of others to and from grave sites/cemetery located on the Property.

3. Standby fees and taxes for 2015 and subsequent years, the payment of which Grantee assumes; and subsequent assessments for this and prior years due to change(s) in land usage, ownership, or both, the payment of which Grantee assumes.

4. Rights of lessee under a grazing lease this date assigned to Grantee.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee and Grantee's successors and assigns forever. Grantor binds Grantor and Grantor's successors to warrant and forever defend all and singular the Property to Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, when the claim is made by, through or under Grantor, but not otherwise. Grantor's warranty is several and not joint. The warranty of each of those comprising Grantor is limited to that person or entity's interest in the Property set out under the defined term "Grantor". Grantor C. Frederick Cludius, Trustee and Grantor Vanessa Miller, Trustee (i) act only in a fiduciary capacity as trustee and (ii) their respective warranties are limited to that capacity and do not bind them either personally or their heirs, executors, administrators or personal representatives. This conveyance is to those comprising Grantee in the respective undivided interests set out in the defined term "Grantee" above.

The following terms and conditions apply to the easement:

1. Character of Easement. The easement reserved is appurtenant to, and runs with, the Benefitted

Property, and portions thereof, whether or not such easement is referenced in any conveyance of the Benefitted Property, and/or any portion thereof.

2. Duration of Easement. The easement is perpetual provided, however, at such time as ingress and egress to and from Tract 1 of the Benefitted Property and portions thereof, to and from State Highway 46, is provided by streets or roads constructed in accordance with applicable laws, codes and/or ordinances and shown on a recorded plat as a public or private road and "stubbed out" to Tract 1 of the Benefitted Property, the easement will automatically terminate. Furthermore, and without limiting the generality of the foregoing provisions of this paragraph, as platted streets or roads are constructed to the standards of the governing authority with jurisdiction, the portion or portions of the easement that are no longer necessary, because ingress and egress is provided by such platted and constructed streets and roads, will also terminate automatically, the same as if it had been released and extinguished by Grantor and the owners of the Benefitted Property. If requested by Grantee, Grantor will execute releases of such portions of the easement no longer necessary at the request and expense of Grantee. Grantor warrants that it has the exclusive right to grant and/or terminate the easement, as provided herein.

3. Exclusiveness of Easement. The easement is non-exclusive, however, Grantor shall not have the right to convey any further interest in and to the Easement, except with respect to conveyances of the Benefitted Property.

4. Improvement and Maintenance. Improvement and maintenance of the Easement Property will be at the sole expense of Grantee as provided herein. The Easement Property must be maintained in a neat and clean condition, free and clear of obstacles and obstructions until such time as permanent, platted roads have been constructed to governmentally required standards providing access to the Benefitted Property. Grantee's maintenance obligations will cease as to those portions of the Easement Property which are platted as public or private roadways and improved as required by the City of New Braunfels or Comal County, Texas, whichever has jurisdiction. Grantee has the right to construct roads, together with any and all culverts, bridges, drainage ditches, utility facilities and similar improvements and facilities relating thereto over or under all or any portion of the Easement Property, all matters concerning or relating to said road and related facilities, their configuration and the construction thereof to be in accordance with standards and requirements of the City of New Braunfels or Comal County, whichever has jurisdiction over platting. Grantee, and Grantee's successors, assigns and contractors must conduct development of the Property to minimize obstructions and the duration thereof on the Easement Property and to restore Grantor's access (via automobiles) as soon as reasonably possible. Upon the written request of Grantee, the owners of the fee of the Benefitted Property must execute or join in the execution of, easements for water, drainage and/or utility facilities (including cable/data lines) over or under the Easement Property and subdivision plats, without any obligation for cost, provided all utilities are "stubbed out" to each tract of the Benefitted Property, ready for connection at the cost of the owner of each such tract.

5. Grantee's Rights. Grantee and Grantee's successors, assigns and contractors, have the right to use and enjoy the surface of the Easement Property for all purposes which do not interfere with or interrupt the use or enjoyment of the easement.

6. Binding Effect. This instrument is binding upon and inures to the benefit of the parties hereto and their respective heirs, executors, representatives, successors and assigns.

7. Choice of Law. This instrument is subject to and governed by the laws of the State of Texas, excluding any conflicts-of-law rule or principle that might refer the construction or interpretation of this instrument to the laws of another state. Each party hereby submits to the jurisdiction of the state and federal courts in the State of Texas and to venue in Comal County, Texas.

8. Counterparts. This instrument may be executed in any number of counterparts with the same effect as if all signatory parties had signed the same document. All counterparts will be construed together and constitute one and the same instrument.

9. Effect of Waiver of Consent. No waiver or consent, express or implied, by any party to or of any breach or default by any party in the performance by such party of its obligations hereunder may be deemed or construed to be a consent or waiver to or of any other breach or default in the performance by such party of the same or any other obligations of such party hereunder. Failure on the part of a party to complain of any act of any party or to declare any party in default, irrespective of how long such failure continues, does not constitute a waiver by such party of its rights hereunder until the applicable statute of limitation period has run.

10. Further Assurances. In connection with this instrument as well as all transactions contemplated by this instrument, each signatory party hereto agrees to execute and deliver such additional documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out and perform all of the terms, provisions and conditions of this instrument and all such transactions.

11. Integration. This instrument contains the complete agreement between the parties and cannot be varied except by the written agreement of the parties. The parties agree that there are no oral agreements, understandings, representations or warranties which are not expressly set forth herein.

12. Legal Construction. In case any one or more of the provisions contained in this instrument is for any reason determined to be invalid, illegal or unenforceable in any respect, to the extent such invalidity or unenforceability does not destroy the basis of the bargain among the parties, such invalidity, illegality or unenforceability will not affect any other provision hereof and this instrument will be construed as if such invalid, illegal or unenforceable provision had never been contained herein. Whenever required by the context, as used in this instrument, the singular number includes the plural and the neuter includes the masculine or feminine gender, and vice versa. Headings appearing in this instrument are for convenience of reference only and are not intended, to any extent or for any purpose, to limit or define the text of any paragraph. This instrument may not be construed more or less favorably between the parties by reason of authorship or origin of language.

13. Notices. Any notice or communication required or permitted hereunder will be deemed to be delivered, whether actually received or not, three days after being deposited in the United States mail, postage fully prepaid, registered or certified mail, so shown, and if not so shown, then at the last known address according to the records of the party delivering the notice. Notice given in any other manner will be effective only if and when received by the addressee. Any address for notice may be changed by written notice

delivered as provided herein.

14. Time. Time is of the essence. Unless otherwise specified, all references to "days" means and refers to calendar days. In the event the date for performance of any obligation hereunder falls on a Saturday, Sunday or Texas legal banking holiday, then that obligation will be performable on the next following day.

15. Indemnity. Grantee agrees to indemnify, defend and hold harmless Grantor and Grantor's heirs, executors, administrators, successors and assigns from and against all liability, damages, suits, actions, costs and expenses of whatsoever nature (including reasonable attorney's fees) to persons or property caused by or arising out of any substantial and prolonged interference with the Easement Property except as set forth in Paragraph 4 herein. Grantee's indemnity obligations hereunder terminate when the easement terminates.

16. Equitable Rights of Enforcement. In the event of any substantial and prolonged interference or threatened interference with the easement, other than temporary obstructions referenced in Paragraph 4 herein, such easement may be enforced by restraining orders and injunctions (temporary or permanent) prohibiting such interference and commanding compliance hereof, which restraining orders and injunctions may be obtainable upon proof of the existence of such interference or threatened interference, other than temporary interference, and without the necessity of proof of inadequacy of legal remedies or irreparable harm, and only by the parties hereto or those benefitted hereby; provided, however, nothing herein may be deemed to be an election of remedies or a waiver of any other rights or remedies available at law or in equity.

C. FREDERICK CLUDIUS, TRUSTEE, under Trust Agreement dated September 14, 2012, amended October 31, 2012 and Trust Agreement dated September 24, 2012

VANESSA MILLER, TRUSTEE, under Trust Agreement dated December 26, 2014

LONNIE E. CHUNN

ROBERT S. TRUDEAU

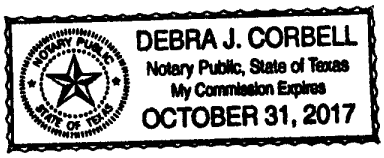
[The signatures of JERRY FRANK JONES and JIMMY JACOBS HOLDINGS, LLC – SERIES 107, with acknowledgments, are on following pages]

JERRY FRANK JONES

THE STATE OF TEXAS §

COUNTY OF Travis §

This instrument was acknowledged before me on March 30, 2015, by JERRY FRANK JONES.



Notary Public, State of Texas

JIMMY JACOBS HOLDINGS, LLC – SERIES 107

By: _____

James H. Jacobs, President

THE STATE OF TEXAS §

COUNTY OF WILLIAMSON §

This instrument was acknowledged before me on March 31st, 2015, by James H. Jacobs, President of JIMMY JACOBS HOLDINGS, LLC - SERIES 107, on behalf of same and in the capacity herein stated.

_____

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by C. FREDERICK CLUDIUS, TRUSTEE, under Trust Agreement dated September 14, 2012, amended October 31, 2012 and Trust Agreement dated September 24, 2012, on behalf of said Trusts.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by VANESSA MILLER, TRUSTEE, under Trust Agreement dated December 26, 2014, on behalf of said Trust.

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

Notary Public, State of Texas

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by LONNIE E. CHUNN.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by ROBERT S. TRUDEAU.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

NOTICE OF CONFIDENTIALITY RIGHTS: IF YOU ARE A NATURAL PERSON, YOU MAY REMOVE OR STRIKE ANY OF THE FOLLOWING INFORMATION FROM THIS INSTRUMENT BEFORE IT IS FILED FOR RECORD IN THE PUBLIC RECORDS: YOUR SOCIAL SECURITY NUMBER OR YOUR DRIVER'S LICENSE NUMBER.

WARRANTY DEED

DATE: September 14, 2017

GRANTOR: JAPHET III, LLC

GRANTOR'S MAILING ADDRESS (INCLUDING COUNTY):

4372 N. Loop 1604 W. #206
San Antonio, Bexar County, Texas 78249

GRANTEE: BRANDT RANCH NB, LLC

GRANTEE'S MAILING ADDRESS (INCLUDING COUNTY):

4372 N. Loop 1604 W. #206
San Antonio, Bexar County, Texas 78249

CONSIDERATION:

Ten and No/100 Dollars ($10.00) and other good and valuable consideration.

PROPERTY (INCLUDING ANY IMPROVEMENTS):

Being a 223.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michael Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175, and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas, said 223.7 acre tract of land being more particularly described in Metes and Bounds Description attached hereto as Exhibit "A."

RESERVATIONS FROM AND EXCEPTIONS TO CONVEYANCE AND WARRANTY:

All effective and enforceable restrictions, reservations, conditions, covenants, and easements of record in the Official Public Records of Real Property of Comal County, Texas.

Current taxes have been prorated and shall be assumed by Grantee.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, GRANTS, SELLS, and CONVEYS to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators, and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors, and assigns against every person

whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty.

When this Deed is executed by more than one person, or when the Grantee is more than one person, the instrument shall read as though pertinent verbs, nouns and pronouns were exchanged correspondingly, and when executed by or to a legal entity other than a natural person, the words "heirs, executors and administrators" or "heirs and assigns" shall be construed to mean "successors and assigns." Reference to any gender shall include either gender and in the case of a legal entity other than a natural person, shall include the neuter gender, all as the case may be.

JAPHET III, LLC

By: _____
James H. Japhet, Manager

STATE OF TEXAS §
§
COUNTY OF BEXAR §

This instrument was acknowledged before me on the 14th day of September, 2017, by James H. Japhet, Manager of JAPHET III, LLC.

SUSAN J. BRAUN
Notary Public, State of Texas
My Commission Expires
October 20, 2017

_____
NOTARY PUBLIC, STATE OF TEXAS

PREPARED IN THE LAW OFFICES OF:

JOHNSON, CHRISTOPHER, JAVORE
& COCHRAN, INC.
5802 IH-10 West
San Antonio, Texas 78201

RETURN TO:

Brandt Ranch NB, LLC
4372 N. Loop 1604 W. #206
San Antonio, Texas 78249

HMT
ENGINEERING & SURVEYING

410 N. Seguin Ave.
New Braunfels, TX 78130
HMTNB.COM
830.625.8555 • FAX: 830.625.8556
TBPE FIRM F-10961

METES AND BOUNDS DESCRIPTION
FOR A
223.7 ACRE TRACT OF LAND
(TRACT 1)

Being a 223.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michel Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175 and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas, said 223.7 acre tract of land being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "HMT") set in the Southwesterly right-of-way line of State Highway 46, being the Northeasterly corner of a called 3.488 acre tract described in Volume 842, Page 114, Official Public Records, Comal County, Texas, common with the Northwesterly corner of said 24.700 acre tract, from which a TXDOT Type II R.O.W. Monument bears N 68°15'33" W a distance of 965.98 feet;

THENCE along the Southwesterly right-of-way line of State Highway 46, common with the Northwesterly line of said 24.700 acre tract, S 68°15'33" E a distance of 445.70 feet to a point for the Northeast corner of this herein described tract, from which a TXDOT Type II R.O.W. Monument bears S 68°15'33" E a distance of 588.31 feet, and a 1/2" iron pin found marking the Northwest corner of a tract of land called 24.780 acres, described in Document Number 200706019677, Official Public Records, Comal County, Texas, bears N 19°43'14" E a distance of 0.21 feet;

THENCE along the common line of said 24.700 acre tract, said 24.780 acre tract, S 19°43'18" W a distance of 1068.32 feet to a 60D nail found in a 10" cedar fence post for a corner of this herein described tract;

THENCE through said 24.700 acre tract, along a Northeasterly line of this tract, the following calls:

S 01°51'25" E a distance of 422.10 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 43°20'24" E a distance of 564.73 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 79°27'38" E a distance of 75.68 feet to a 1/2" iron pin found in the Southeastern line of said 24.700 acre tract, for a Northerly corner of said 388.65 acre tract, the West corner of a tract of land called 170.338 acres, described in Document Number 9906015426, Official Public Records, Comal County, Texas, for a corner of this herein described tract;

EXHIBIT "A"

THENCE along the Northeast line of said 388.65 acre tract, a Southwest line of said 170.338 acre tract, and the Northeast line of this tract, S 37°43'17" E, a distance of 1649.20 feet to a 1/2" iron pin found for a corner of said 388.65 acre tract, being in a Northwest line of the remainder of a called 72.22 acre tract (Tract One), described in Document Number 201006017373, Official Public Records, Comal County, Texas, for a corner of this herein described tract;

THENCE along the Southwesterly line of said 72.22 acre tract, the Easterly line of said 388.65 acre tract, and the Easterly line of this tract, the following calls:

S 34°57'07" W a distance of 374.96 feet to a 60D nail found in a 8" cedar fence post for a corner of this herein described tract;

S 23°09'37" E a distance of 361.36 feet to a 60D nail found in a 10" cedar fence post for a corner of this herein described tract;

S 38°04'03" E a distance of 2205.54 feet to a 60d nail found in an 8" cedar fence post for the East corner of said 388.65 acre tract, a South corner of a called 0.49 acre tract, described in Document Number 200306047838, Official Public Records, Comal County, Texas, in the Northwest line of a called 8.42 acre tract, described in Document Number 200206016074, Official Public Records, Comal County, Texas, for the most Easterly corner of this herein described tract;

THENCE along the Southeasterly line of said 388.65 acre tract, the Northwesterly line of said 8.42 acre tract, and the Southeasterly line of this tract, S 50°33'53" W a distance of 293.07 feet to a 60D nail found in a cedar fence post for a corner of this herein described tract;

THENCE continuing along the Southeasterly line of said 388.65 acre tract, the Northwesterly line of the remainder of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas, and the Southeasterly line of this tract the following calls:

S 51°52'07" W a distance of 232.44 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 51°55'50" W a distance of 913.07 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 54°12'59" W a distance of 149.60 feet to a 60D nail found in an 8" cedar fence post for the South corner of said 388.65 acre tract, an interior corner of said 204.63 acre tract, for the most Southerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, a Northeasterly line of said 204.63 acre tract, N 38°06'45" W a distance of 688.67 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

THENCE through said 388.65 acre tract the following calls:

N 52°33'17" E a distance of 450.00 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

N 37°26'43" W a distance of 844.23 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

N 82°26'43" W a distance of 178.58 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

S 52°33'17" W a distance of 340.46 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner in the Southwesterly line of said 388.65 acre tract, common with the Northeasterly line of the said remainder of a called 204.63 acre tract (Tract One);

THENCE along said common line the following calls:

N 38°44'34" W a distance of 143.17 feet to a 60D nail found in a fence post for a corner of this herein described tract;

N 37°20'48" W a distance of 2088.77 feet to a 60D nail found in a fence post for a corner of this herein described tract;

N 37°33'04" W a distance of 437.38 feet to a 60D nail found in a 10" cedar fence post found for an interior corner of said 388.65 acre tract, the North corner of said 204.63 acre tract, for a corner of this herein described tract;

THENCE through said 388.65 acre tract the following calls:

N 50°46'50" W a distance of 82.66 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner of this herein described tract;

N 38°15'25" E a distance of 126.19 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner of this herein described tract;

N 37°18'48" W a distance of 418.89 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner of this herein described tract;

N 51°09'39" E a distance of 133.46 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner of this herein described tract;

N 37°18'48" W a distance of 860.77 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner of this herein described tract;

N 51°45'45" E a distance of 60.01 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner of this herein described tract;

N 51°49'51" E a distance of 313.75 feet to a 1/2" iron pin (with cap stamped "HMT") set in the Southwest line of a called 23 acre tract described in Volume 842, Page 116, Official Public Records, Comal County, Texas, and for a corner of this herein described tract;

THENCE along the Northeasterly line of said 388.65 acre tract, the Southwesterly line of said 23 acre tract, S 37°37'19" E a distance of 250.13 feet to a 60D nail found in a fence post for the most Southerly corner of the remainder of said 23 acre tract, the most Westerly corner of the aforementioned 24.717 acre tract, for a corner of this herein described tract;

THENCE along a Northwesterly line of said 24.717 acre tract, the Southeast line of said 23 acre tract, and a Northwesterly line of this tract, N 66°16'37" E a distance of 1030.68 feet to a 60D nail found in a 10" cedar fence post for the most Northerly corner of said 24.717 acre tract, a Southeast corner of said 23 acre tract, a Southwest corner of the aforementioned 24.700 acre tract, for a corner of this herein described tract;

THENCE along a Northwest line of said 24.700 acre tract, a Southeast line of said 23 acre tract, and the Northwesterly line of this tract, the following calls:

N 01°43'38" E a distance of 123.81 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

N 03°06'52" E a distance of 465.17 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner of this herein described tract, said pin being in the Westerly line of said 24.700 acre tract, and in the Easterly line of a called 3.488 acre tract described in Volume 842, Page 114, Official Public Records, Comal County, Texas;

THENCE along a Westerly line of said 24.700 acre tract, the Easterly line of said 3.488 acre tract, and the Westerly line of a portion of this tract the following calls:

N 05°38'05" E a distance of 82.97 feet to a 60D nail found in a fence post for a corner of the herein described tract;

S 75°55'24" E a distance of 25.45 feet to a 60D nail found in a fence post for a corner of the herein described tract;

N 17°30'53" E a distance of 935.03 feet to the POINT OF BEGINNING and containing 223.7 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), North American Datum 1983.

Mark F. Conlan
Registered Professional Land Surveyor No. 6342

STATE OF TEXAS
REGISTERED
MARK F. CONLAN
6342
PROFESSIONAL
LAND SURVEYOR

S:\Projects\Title Surveys\Washburn, S\423.7 AC - 2 M&B\223.7 AC M&B CHECKED MM 06-08-15.doc

Filed and Recorded
Official Public Records
Bobbie Koepp, County Clerk
Comal County, Texas
09/18/2017 08:21:58 AM
TERRI 6 Pages(s)
201706042577

County Court of Comal County, Texas

Bobbie Koepp

KFW
SURVEYING

FIELD NOTES
FOR
A 211.56 ACRE TRACT

A **211.56 acre** tract of land, out of the A. Michel Survey Number 485, Abstract Number 394, A. Holbrook Survey Number 423, Abstract Number 271, F. Michel Survey Number 653 Abstract Number 400, S. Washburn Survey Number 486, Abstract Number 663, all of Comal County, Texas, being made up of a portion of a 223.7 acre tract, conveyed to Brandt Ranch, of record in Document Number 2017060042577, of the Official Public Records of Comal County, Texas, the portion of a 423.7 acre tract, conveyed to Japhet II, LLC; RR-1604, LTD. and RRHJ, LTD, of record in Document Number 201506019786, of the Official Public Records of Comal County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at a found ½" iron rod with a plastic cap stamped "HMT" in the southwest line of State Highway 46, a 100 foot right-of-way, for the northeast corner of a 3.488 acre tract, conveyed to Franklin Demuth, of record in Document Number 201506050153, of the Official Public Records of Comal County, Texas, the north corner of the 223.7 acre tract, and the tract described herein;

THENCE: S 68°15'42" E, along and with the common line of the right-of-way of State Highway 46 and the 223.7 acre tract, a distance of **445.74 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for the northwest corner of 24.780 acre tract, conveyed to Charles F. Claudius, of record in Document Number 201806003302 of the Official Public Records of Comal County, Texas, the northeast corner of the 223.7 acre tract, and the tract described herein;

THENCE: S 19°43'17" W, departing the southwest right-of-way line of Highway 46, along and with the common line of the 24.780 acre tract, and the 223.7 acre tract, a distance of **1068.26 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for the southwest corner of the 24.780 acre tract, the northwest corner of a 5.00 acre tract of land, conveyed to Charles F. Claudius, of record in Document Number 201803003302 of the Official Public Records of Comal County, Texas, an interior corner of the223.7 acre tract, and the tract described herein;

THENCE: S 01°51'36" E, along and with the common line of the 5.00 acre tract and the 223.7 acre tract, a distance of **422.25 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for the west corner of the 5.00 acre tract, an interior corner of the of the 223.7 acre tract and the tract described herein;

THENCE: S 43°20'35" E, along and with the common line of the 5.00 acre tract and the 223.7 acre tract, a distance of **564.60 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for the southwest corner of the 5.00 acre tract, an interior corner of the 223.7 acre tract and the tract described herein;

THENCE: S 79°27'49" E, along and with the southern line of the 5.00 acre tract, a distance of **75.68 feet** to a found ½" iron rod for the south corner of the 5.00 acre tract, and the northwest corner of Lot 28, of the Mission Hills Subdivision Unit 7B, a plat of record in Document Number 200706017898 of the Official Public Records of Comal County, Texas, an exterior corner of the 223.7 acre tract and the tract described herein;

THENCE: S 37°41'10" E, along and with the common line of the remaining portion of a 170.338 acre tract conveyed to Mission Hills LP, of record in Document Number 9906015426 of the Official Public Records of Comal County, Texas, Lot 13, Lot 12 and Lot 11 of the Mission Hills Ranch Subdivision Unit 5, a plat of record in Document Number 200406005650 of the Official Public Records of Comal County, Texas, and the 223.7 acre tract, a distance of **1649.63 feet** to a found ½" iron rod for the southwest corner of Lot 11,of the Mission Hills Ranch Subdivision Unit 5, a northwest corner of the remaining portion of a 72.22 acre tract of land, conveyed to Gregrey & Julie Chafin, of record in Document Number 201006017373, an exterior corner of the 223.7 acre tract, and the tract described herein;

THENCE: Along and with the common lines of the remaining portion of the 72.22 acre tract, a 0.49 acre tract, conveyed to Hiram & Jana Chafin Tavarez of record in Document Number 200306047838 of the Official Public Records of Comal County, Texas, and the 223.7 acre tract, the following three (**3**) courses;

1. **S 34°57'32" W,** a distance of **373.87 feet** to a found 60D cedar post for the west corner of the remaining portion of the 72.22 acre tract, an interior corner of the tract 223.7 acre tract and the tract described herein,
2. **S 23°08'48" E,** a distance of **361.38 feet** to a cedar post, for a northwest corner of the remaining portion of the 72.22 acre tract, an interior corner of the 223.7 acre tract and the tract described herein, and
3. **S 38°04'14" E,** a distance of **2205.55 feet** to a found nail in a cedar post, in the northwest line of an 8.42 acre tract, for the southwest corner of the 0.49 acre tract, the southeast corner of the 223.7 acre tract and of the tract described herein;

THENCE: Along and with the common lines of the 8.42 acre tract, a 1.09 acre tract conveyed to Hiram Tavarez & Jana L. Chafin Tavarez, of record in Document Number 200306047839 of the Official Public Records of Comal County, Texas, a 204.63 acre tract (Tract One), conveyed to Carrol B. Lindeman, Kristina Staats Lindeman, Kristi Lindeman Beabout and Wade C. Lindeman, of record in Document Numbers 200206016070, 201206041844 and 201206041845 of the Official Public Records of Comal County, Texas, and the remaining portion of the 223.7 acre track, the following five (**5**) courses:

1. **S 50°34'44" W,** a distance of **293.22 feet** to a found 60D nail, for the northwest corner of the 8.42 acre tract, the northeast corner of the 1.09 acre tract, an angle point of 223.7 acre tract and the tract described herein,
2. **S 51°50'51" W,** a distance of **232.29 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an angle point of the tract described herein,
3. **S 51°55'43" W,** a distance of **913.07 feet** to a found 60D nail in a wooden post, for an angle point of the 223.7 acre tract and the tract described herein,
4. **S 54°12'54" W,** a distance of **149.58 feet** to a found 60D nail in a wooden post, for the southwest corner of the tract described herein, and
5. **N 38°07'34" W,** a distance of **688.74 feet** to a found ½" iron rod with a plastic cap stamped "HMT" in the northeast line of the 204.63 acre tract for the southwest corner of a 10.00 acre tract conveyed to New Braunfels Conservation Society, Inc., of record in Document Number 201506012095 and an exterior corner of the tract described herein;

THENCE: Departing the northeast line of the remaining portion of the called 204.63 acre tract, along and with the common lines of the 10.00 acre tract, and the 223.7 acre tract, the following four (**4**) courses:

1. **N 52°32'00" E,** a distance of **450.06 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for an interior corner of the tract described herein,
2. **N 37°27'20" W,** a distance of **844.18 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for an interior corner of the tract described herein,
3. **N 82°24'33" W,** a distance of **178.43 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for an interior corner of tract described herein, and
4. **S 52°34'38" W,** a distance of **340.60 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for exterior corner of the tract described herein;

THENCE: Along and with the common lines of the remaining portion of the 204.63 acre tract, and the 223.7 acre tract, the following three (**3**) courses:

1. **N 38°41'35" W,** a distance of **143.10 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for an angle point of the tract described herein,
2. **N 37°20'56" W,** a distance of **2088.72 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for angle point of the tract described herein, and

3. **N 37°32'42" W,** a distance of **437.32 feet** to a found 60D nail in a wooden post, for the northwest corner of the remaining portion of the 204.63 acre tract, and the southeast corner of the remaining portion of the 423.7 acre tract, and an exterior corner of the tract described herein, from which a found ½ inch iron rod with a plastic cap stamped "HMT" in the northwest line of the 204.63 acre tract, bears S 52°17'45"W, a distance of 620.24 feet;

THENCE: N 06°35'12" E, into and across the 223.7 acre tract a distance of **153.31 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING" for a point of curvature to the left;

THENCE: Continuing into and across the remaining portion of a 423.7 acre tract, the following four (**4**) courses:

1. Along with a non-tangent curve to the **left**, having an arc of **227.38 feet**, a radius of **670.00** feet, a delta of **19°26'42"**, and a chord bears **S 86°51'51" W**, a distance of **226.29 feet** to a set 1/2" iron rod with Blue Plastic Cap Stamped "KFW Surveying", for a point of tangency of the tract described herein,
2. **S 77°08'30" W** a distance of **64.45 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for a point of curvature to the left,
3. Along with a curve to the **left**, having an arc of **88.70 feet**, a radius of **470.00 feet**, a delta of **10° 48' 45"**, and a chord bears **S 71°44'07" W**, a distance of **88.56 feet** to a set PK Nail with Washer Stamped "KFW SURVEYING", for a point of tangency of the tract described herein, and
4. **N 23°40'15 W** a distance of **60.00 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for a an exterior corner of the tract described herein;

THENCE: N 41°15'52" W, into and across the remaining portion of the 427.3 acre tract and along and with the southeast line of a 200 acre tract, conveyed to Board of Trustees of the New Braunfels Independent School District of record in Document Number 201906009101 of the Official Public Records of Comal County, Texas, at a distance of 65.70 feet, passing a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an interior corner of the 423.7 acre tract and an exterior corner in a south boundary line of the 200 acre tract, from which a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an angle point in a south boundary line of the 200 acre tract, bears S 52°33'11" W, a distance of 474.59 feet, and continuing a total a distance of **189.02 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", and an interior corner of the 200 acre tract, for an exterior corner of the 423.7 acre tract and the tract described herein;

THENCE: along and with the common lines of the 200 acre tract, the 423.7 acre tract and the 223.7 acre tract, the following eight (**8**) courses:

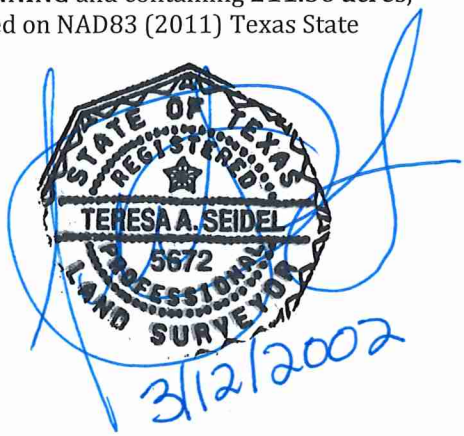
1. **N 40°56'13 E,** a distance of **629.47 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an angle point of the tract described herein,
2. **N 44°56'29" E,** distance of **90.18 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an exterior corner of the tract described herein,
3. **S 45°03'31 E,** a distance of **150.00 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an interior corner of the tract described herein,
4. **N 44°56'29 E,** a distance of **640.35 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an interior corner of the tract described herein,
5. **N 07°28'13 E,** a distance of **60.00 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an exterior corner of the tract described herein,
6. **S 83°35'42 E,** a distance of **66.99 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an interior corner of the tract described herein,
7. **N 7°28'13 E,** a distance of a distance of **26.13 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING", for an angle point of the tract described herein, and

8. **N 07°28'13 E,** a distance of a distance of **413.57 feet** to a set ½" iron rod with Blue Plastic Cap Stamped "KFW SURVEYING" in the south line of the 23 acre tract, conveyed to Franklin Demuth of record in Document Number 201506050153 of the Official Public Records of Comal County, Texas, for an interior corner of the 223.7 acre and the tract described herein, from which a found 60D in a north boundary line of the 200 acre tract for an interior angle point of the 200 acre tract, bears S 66°16'46" W, a distance of 953.84 feet;

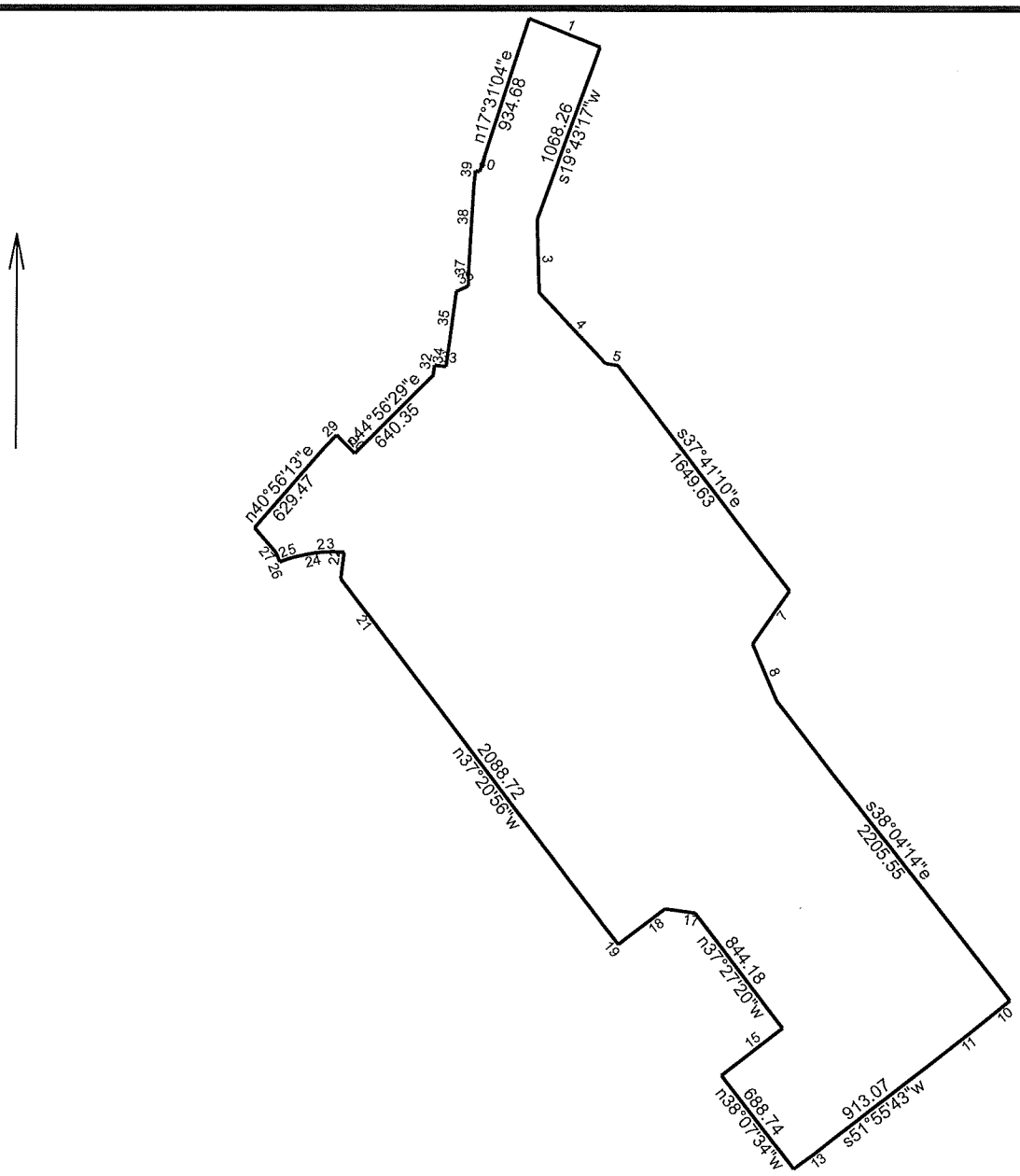
THENCE: N 66°16'46 E, along and with the southeast line of the 23 acre tract, a distance of **76.84 feet** to found 60D in a 10" cedar post, for the northeast corner of the 23 acre tract and an interior corner of the 223.7 acre tract and the tract described herein;

THENCE: Along and with the southeast and east lines of the 23 acre tract, and the 3.488 acre tract, the following five (**5**) courses;

1. **N 01°42'45 E,** a distance of **123.92 feet** to a found ½" iron rod with a plastic cap stamped "HMT" for an angle point of the 223.7 acre tract and the tract described herein,
2. **N 03°06'45 E,** a distance of **465.09 feet** to a found ½" iron rod with a plastic cap stamped "HMT", for an angle point of the 223.7 acre tract and the tract described herein,
3. **N 05°41'26 E,** a distance of **82.73 feet** to a found 3" metal fence post, for an exterior of the tract described herein,
4. **S 77°08'10 E,** a distance of **25.33 feet** to a found 3" metal fence post, for an interior corner of the tract described herein, and
5. **N 17°31'04 E,** a distance of **934.68 feet** to the **POINT OF BEGINNING** and containing **211.56 acres**, more or less, situated in Comal County, Texas. Bearings are based on NAD83 (2011) Texas State Plane South Central Zone, 4204.



Job No.: 15-043
Prepared by: KFW Surveying
Date: March 5, 2020
File: S:\Draw 2015\15-043 Las Fontanas\DOCS\211.56AC.doc



	3/4/2020
Scale: 1 inch= 1042 feet	File:

Tract 1: 211.5641 Acres, Closure: n46.1615e 0.01 ft. (1/999999), Perimeter=18494 ft.

01 s68.1542e 445.74
02 s19.4317w 1068.26
03 s01.5136e 422.25
04 s43.2035e 564.60
05 s79.2749e 75.68
06 s37.4110e 1649.63
07 s34.5732w 373.87
08 s23.0848e 361.38
09 s38.0414e 2205.55
10 s50.3444w 293.22
11 s51.5051w 232.29
12 s51.5543w 913.07
13 s54.1254w 149.58
14 n38.0734w 688.74
15 n52.3200e 450.06
16 n37.2720w 844.18
17 n82.2433w 178.43
18 s52.3438w 340.60
19 n38.4135w 143.10
20 n37.2056w 2088.72
21 n37.3242w 437.32
22 n06.3512e 153.31
23 Lt, r=670.00, arc=227.38, chord=s86.5151w 226.29
24 s77.0830w 64.45
25 Lt, r=470.00, arc=88.70, chord=s71.4407w 88.57
26 n23.4015w 60.00
27 n41.1552w 189.02
28 n40.5613e 629.47
29 n44.5629e 90.18
30 s45.0331e 150.00
31 n44.5629e 640.35
32 n07.2813e 60.00
33 s83.3542e 66.99
34 n07.2813e 26.13
35 n07.2813e 413.57
36 n66.1646e 76.84
37 n01.4245e 123.92
38 n03.0645e 465.09
39 n05.4126e 82.73
40 s77.0810e 25.33
41 n17.3104e 934.68

NOTES
1. BEARINGS ARE BASED ON THE STATE PLANE COORDINATE SYSTEM ESTABLISHED FOR THE TEXAS SOUTH CENTRAL ZONE 4204, NORTH AMERICAN DATUM (NAD) OF 1983.
2. NO TITLE COMMITMENT WAS PROVIDED.
3. REFERENCED PROPERTY IS IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SCALED FROM FEMA FLOOD MAP 430 OF 505, COMMUNITY PANEL NO. 48091C0430F, DATED SEPTEMBER 2, 2009.ALL CITY OF SAN ANTONIO AND BEXAR COUNTY ORDINANCES AND RESTRICTIONS.
4. THE TRACT SHOWN HEREON IS SUBJECT TO ALL COMAL COUNTY ORDINANCES AND RESTRICTIONS.
5. METES AND BOUNDS WERE PREPARED FOR THIS SURVEY.
6. SET IRON PINS ARE 1/2" DIAMETER REBAR WITH A BLUE CAP STAMPED "KFW SURVEYING".
8. ADJOINERS SHOWN HEREON ARE PER CURRENT COMAL COUNTY APPRAISAL DISTRICT RECORDS AND OFFICIAL PUBLIC RECORDS OF COUNTY COUNTY, TEXAS.

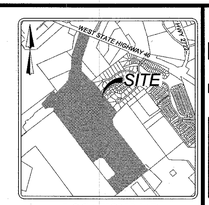
SYMBOL LEGEND

FIR	FOUND 1/2" IRON ROD OR AS NOTED
FCS	FOUND COTTON SPINDLE
FPK	FOUND PK NAIL
S60D	SET 60D
SIR	SET 1/2" IRON ROD WITH A BLUE CAP STAMPED "KFW SURVEYING"
SPK	SET PK NAIL
	BARBED WIRE FENCE
O.R.	OFFICIAL RECORDS OF COMAL COUNTY, TEXAS
O.P.R.	OFFICIAL PUBLIC RECORDS OF REAL PROPERTY OF COMAL COUNTY, TEXAS

Line Table		
LINE #	LENGTH	DIRECTION
L1	60.00	N07°28'13"E

Curve Table					
Curve #	LENGTH	RADIUS	DELTA	CHORD BRG	CHORD DIST
C1	227.38'	670.00'	019°26'42"	S86°51'51"W	226.29'
C2	88.70'	470.00'	010°48'45"	S71°44'07"W	88.56'

SCALE : 1"=300'
0' 300' 900'
600'



LOCATION MAP
NOT-TO-SCALE

STATE HIGHWAY 46 (100' RIGHT-OF-WAY)
20' WIDE UTILITY EASEMENT (DOC. 200506030940 O.P.R.)
PROPOSED VARIABLE WIDTH INGRESS / EGRESS AND PUBLIC UTILITY EASEMENT
7.60 ACRE ACCESS EASEMENT (DOC. 201506012093 O.P.R.)
S68° 15' 42"E 445.74'
P.O.B.
FIR - HMT
1.395 ACRES JERRY & MELVA FERNANDEZ (DOC. 9506476437 O.R.)
BARBED WIRE FENCE
N17° 31' 04"E 934.68'
S19° 43' 17"W 1068.26'
24.780 ACRES CHARLES F. CLAUDIUS (DOC. 201806003302 O.P.R.)
3.488 ACRES FRANKLIN DEMUTH (DOC. 201506050153 O.P.R.)
5.00 ACRES CHARLES F. CLAUDIUS (DOC. 201806003302 O.P.R.)
FENCE ONLINE WITH BOUNDARY LINE
S77° 08' 10"E 25.33'
FOUND 3" METAL FENCE POST
GATE
S01° 51' 36"E 422.25'
S43° 20' 35"E 564.60'
N03° 06' 45"E 465.09'
N05° 41' 26"E 82.73'
32.138 ACRES JERRY & MELVA FERNANDEZ (VOL. 972 PG. 411 O.R.)
N01° 42' 45"E 123.92'
N66° 16' 46"E 76.84'
N07° 28' 13"E 413.57'
N07° 28' 13"E 26.13'
S83° 35' 42"E 66.99'
L1
30' WATER AND ACCESS EASEMENT (DOC. NO. 201906009101 O.P.R.)
23 ACRES FRANKLIN DEMUTH (DOC. NO. 201506050153 O.P.R)
17.009 ACRES CORRINNE ADAMS (DOC. NO. 200306013611 O.R.)
30' TEMPORARY CONSTRUCTION EASEMENT (DOC. NO. 201906009101 O.P.R.)
S66° 16' 46"W 953.84'
S45° 03' 31"E 150.00'
N44° 56' 29"E 640.35'
FIR 3/8"
F60D IN 6" CEDAR POST
A. HOLBROOK SURVEY NO. 423 ABSTRACT NO. 271
A. MICHEL SURVEY NO. 485 ABSTRACT NO. 394
OSTENSIBLE LOCATION OF ORIGINAL SURVEY LINE
N44° 56' 29"E 90.18'
S40° 56' 13"E 629.47'
OSTENSIBLE LOCATION OF BOUNDARY LINE OF THE REMAINING PORTION OF 423.7 ACRES JAPHET III, LLC; RR-1604, LTD. AND RRHJ, LTD (DOC. NO. 201506019786 O.P.R.)
N08° 35' 12"E 153.31'
12" POST
GATE
C1
C2
65.70'
S77° 08' 30"W 64.45'
N23° 40' 15"W 60.00'
N41° 15' 52"W 189.02'
200 ACRES BOARD OF TRUSTEES OF THE NEW BRAUNFELS INDEPENDENT SCHOOL DISTRICT (DOC. NO. 201906009101 O.P.R.)
REMAINING PORTION OF 423.7 ACRES JAPHET III, LLC; RR-1604, LTD. AND RRHJ, LTD (DOC. NO. 201506019786 O.P.R.)
S52° 17' 45"W 620.24'
S52° 33' 11"W 474.59'
S. WASHBURN SURVEY NO. 400 ABSTRACT NO. 663
F. MICHEL SURVEY NO. 653 ABSTRACT NO. 486
7.60 ACRE ACCESS EASEMENT (DOC. NO. 201506012093 O.P.R.)
211.56 ACRES (9,215,755 SQ. FT.)
REMAINING PORTION OF 223.7 ACRES BRANDT RANCH NB, LLC (DOC. 201706042577 O.P.R.)
OSTENSIBLE LOCATION OF ORIGINAL SURVEY LINE
N37° 20' 56"W 2088.72'
BARBED WIRE FENCE
N37° 32' 42"W 437.32'
FENCE CROSSES BOUNDARY LINE
204.63 ACRES CARROLL B. LINDEMAN & KRISTINA STAATS LINDEMAN (DOC. NO. 200206016070 O.P.R.) KRISTI LINDEMAN BEABOUT (DOC. NO. 201206041844 O.P.R.) WADE C. LINDEMAN (DOC. NO. 201206041845 O.P.R.)
15' DRAINAGE EASEMENT (DOC. NO. 200706017898 O.R.)
MISSION HILLS RANCH SUBDIVISION UNIT 7B (DOC. NO. 200706017898 O.R.)
MISSION HILLS RANCH SUBDIVISION UNIT 6 (DOC. NO. 200706014071 O.R.)
MISSION HILLS RANCH SUBDIVISION UNIT 5 (DOC. NO. 200406005650 O.R.)
60' DRAINAGE EASEMENT MISSION HILLS RANCH SUBDIVISION - UNIT 5 (DOC. NO. 200406005650 O.R.)
20' DRAINAGE EASEMENT (DOC. NO. 200706017898 O.R.)
50' DRAINAGE EASEMENT (DOC. NO. 200706017898 O.R.)
FENCE CROSSES BOUNDARY LINE
S79° 27' 49"E 75.68'
BARBED WIRE FENCE
LOT 28
LOT 30
LOT 29
LOT 22
LOT 24
LOT 20
LOT 19
LOT 18
LOT 13
LOT 12
LOT 11
30' DRAINAGE EASEMENT (DOC. NO. 200706017898 O.R.)
15' DRAINAGE EASEMENT (DOC. NO. 200706017898 O.R.)
REMAINING PORTION OF 170.338 ACRES MISSION HILLS RANCH, LP (DOC NO. 9906015426)
S37° 41' 10"E 1649.63'
S34° 57' 32"W 373.87'
S23° 08' 48"E 361.38'
A REMAINING PORTION OF A CALLED 72.22 ACRES GREGREY & JULIE CHAFIN (DOC. NO. 201006011373 O.P.R.)
BARBED WIRE FENCE
F60D IN CEDAR POST
S38° 04' 14"E 2205.55'
0.49 ACRES HIRAM & JANA CHAFIN TAVAREZ (DOC. NO. 200306047838 O.R.)
8.42 ACRES HIRAM & JANA CHAFIN TAVAREZ (DOC. NO. 200206016074 O.R.)
FOUND MAG NAIL IN CEDAR POST
S50° 34' 44"W 293.22'
1.09 ACRES HIRAM TAVAREZ & JANA L CHAFIN TAVAREZ (DOC. NO. 200306047839 O.P.R.)
S51° 50' 51"W 232.29'
S51° 55' 43"W 913.07'
S54° 12' 54"W 149.58'
ORNAMENTAL FENCE
N37° 27' 20"W 844.18'
N82° 24' 33"W 178.43'
N52° 32' 00"E 450.06'
N38° 07' 34"W 688.74'
S52° 34' 38"W 340.60'
N38° 41' 35"W 143.10'
10.00 ACRES NEW BRAUNFELS CONSERVATION SOCIETY, INC. (DOC. NO. 201506012095 O.P.R.)

ANY COMPLAINTS REGARDING THE SERVICES YOU HAVE RECEIVED CAN BE DIRECTED TO:
THE TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS (TBPELS)
1917 S INTERSTATE 35, AUSTIN, TEXAS, 78741
PHONE: 512-440-7723; FAX: 512-442-1414; EMAIL: INFO@PELS.TEXAS.GOV

STATE OF TEXAS:
COUNTY OF BEXAR:

I, TERESA A. SEIDEL, DO HEREBY CERTIFY TO THAT THIS BOUNDARY SURVEY WAS PREPARED FROM AN ACTUAL SURVEY MADE ON THE GROUND BY PERSONS WORKING UNDER MY SUPERVISION. THE FIELDWORK WAS COMPLETED ON 01/07/2019.

STATE OF TEXAS REGISTERED TERESA A. SEIDEL 5672 PROFESSIONAL LAND SURVEYOR
3/12/2020

TERESA A. SEIDEL
REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5672
EMAIL:TSEIDEL@KFWENGINEERS.COM
DATE OF SURVEY: 3/12/2020
PROJECT NO.: 15-043

KFW SURVEYING
3421 Paesanos Pkwy, Suite 101, San Antonio, TX. 78231
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPLS Firm #: 10124300

REVISIONS
ISSUE DATE

Texas Board of Professional Engineers and Land Surveyors

BOUNDARY SURVEY OF

A 211.56 acre tract of land, out of the A. Michel Survey Number 485, Abstract Number 394, A. Holbrook Survey Number 423, Abstract Number 271, F. Michel Survey Number 653 Abstract Number 486, Abstract Number 663, all of Comal County, Texas, being made up of a portion of a 223.7 acre tract, conveyed to Brandt Ranch, of record in Document Number 201706004257, of the Official Public Records of Comal County, Texas, the portion of a 423.7 acre tract, conveyed to Japhet III, LLC; RR-1604, LTD, and RRHJ, LTD, of record in Document Number 201506019786, of the Official Public Records of Comal County, Texas.

JOB NO. 15-043
DATE: 3/12/2020
DRAWN: CAM CHECKED: TAS

SHEET NUMBER:
1 of 1

Date: Mar 12, 2020, 10:06am User ID: cmendoza
File: S:\Draw 2015\15-043 Las Fontanas\BS 15-043 Las Fontanas.dwg

HMT
ENGINEERING & SURVEYING

METES AND BOUNDS DESCRIPTION
FOR A
10.00 ACRE TRACT OF LAND

Being a 10.00 acre tract of land out of the G. Arnold Survey Number 436, Abstract Number 13, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document No. 200206028760, Official Public Records, Comal County, Texas, said 10.00 acre tract of land being more particularly described as follows:

COMMENCING at a nail in an 8" cedar post found for the South corner of said 388.65 acre tract, and an interior corner of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas;

THENCE along the Northwest line of said 388.65 acre tract, and the Southeast line of said 204.63 acre tract, N 38°05'45" W a distance of 688.98 feet to the POINT OF BEGINNING of this herein described 10.00 acre tract of land;

THENCE continuing along the common line of said 388.65 acre tract and said 204.63 acre tract, the following calls:

N 38°05'45" W a distance of 399.32 feet to a nail in a fence post found for a corner of this herein described tract;

N 38°39'28" W a distance of 571.35 feet to a 1/2" iron pin (with cap stamped "HMT") set for a West corner of this herein described tract, from which a nail in a fence post found marking a corner of said 388.65 acre tract bears, N 38°39'28" W a distance of 142.85 feet;

THENCE across said 388.65 acre tract, the following calls:

N 52°33'40" E a distance of 340.46 feet to a 1/2" iron pin (with cap stamped "HMT") set for a North corner of this herein described tract;

S 82°26'20" E a distance of 178.58 feet to a 1/2" iron pin (with cap stamped "HMT") set for a North corner of this herein described tract;

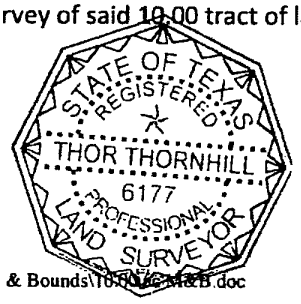
S 37°26'20" E a distance of 844.23 feet to a 1/2" iron pin (with cap stamped "HMT") set for an East corner of this herein described tract;

S 52°33'40" W a distance of 450.00 feet to the Point of Beginning and containing 10.00 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), NAD 83.

Surveyed this the 2nd day of April, 2012. Reference survey of said 10.00 tract of land prepared this same date.

Thor Thornhill
Registered Professional Land Surveyor No. 6177



S:\!Projects\Jimmy Jacobs - JMJ\JMJ001.201 - 438 acre tract\Survey\Metes & Bounds\10.00ac M&B.doc

HM&T
ENGINEERING & SURVEYING

METES AND BOUNDS DESCRIPTION
FOR A
5.00 ACRE TRACT OF LAND

Being a 5.00 acre tract of land out of the A.M. Holbrook Survey Number 423, Abstract Number 271, Comal County, Texas, and being a portion of a tract of land called 24.700 acres, described in Vol. 103, Pg. 175, Deed Records, Comal County, Texas, said 5.00 acre tract of land being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "MDS") found in the Northwest line of Resubdivision of Mission Hills Ranch, Unit 7B, plat of which is recorded in Document No. 200706017898, Map and Plat Records, Comal County, Texas, said iron pin found marking the East corner of said 24.700 acre tract, and the South corner of a called 24.780 acre tract, described in Document No. 200706019677, Official Public Records, Comal County, Texas;

THENCE along the Southeast line of said 24.700 acre tract, common with the Northwest line of said Mission Hills Ranch, Unit 7B, S 52°11'05" W a distance of 230.04 feet to a 1/2" iron pin (with cap stamped "MDS") found for the West corner of said Mission Hills Ranch, Unit 7B, for the most Southerly corner of this herein described 5.00 acre tract;

THENCE across said 24.700 acre tract, the following calls:

N 79°14'57" W a distance of 75.65 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 43°22'08" W a distance of 564.91 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 01°51'11" W a distance of 422.11 feet to a 60D nail in a fence post found for an interior corner of the aforementioned 24.700 acre tract, the West corner of the aforementioned 24.780 acre tract, and a North corner of this herein described 5.00 acre tract;

THENCE along the Northeast line of said 24.700 acre tract, and the Southwest line of said 24.780 acre tract, S 42°59'00" E a distance of 964.56 feet to the Point of Beginning and containing 5.00 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), NAD 83.

Surveyed this the 2nd day of April, 2012. Reference survey of said 5.00 tract of land prepared this same date.

STATE OF TEXAS
REGISTERED
THOR THORNHILL
6177
PROFESSIONAL
LAND SURVEYOR

Thor Thornhill
Registered Professional Land Surveyor No. 6177
S:\Projects\Jimmy Jacobs - JMJ\JMJ001.201 - 438 acre tract\Survey\Metes & Bounds 5.00 ac M&B.doc

EXHIBIT "C"

HMT
ENGINEERING & SURVEYING
410 N. Seguin Ave.
New Braunfels, TX 78130
HMTNB.COM
830.625.8555 · FAX· 830.625.8556
TBPE FIRM F-10961

METES & BOUNDS
FOR A
7.60 ACRE ACCESS EASEMENT

Being a 7.60 acre Access Easement out of the A.M. Holbrook Survey Number 423, Abstract Number 271, and the G. Arnold Survey Number 436, Abstract No. 13, Comal County, Texas, and being out of a tract of land called 24.700 acres, described in Vol. 103, Pg. 175, Deed Records, Comal County, Texas, a tract of land called 24.717 acres recorded in Vol. 103, Pg. 173, Deed Records, Comal County, Texas, and a tract of land called 388.65 acres recorded in Document No. 200206028760, Official Public Records, Comal County, Texas, said 7.60 acre Access Easement being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "MDS") found in a Southwesterly right-of-way line of State Highway 46, being an Northeasterly corner of said 24.700 acre tract of land, common with the Northwest corner of a tract of land called 24.780 acres, described in Document Number 200706019677, Official Public Records, Comal County, Texas, for a Northeasterly corner of this herein described 7.60 acre Access Easement;

THENCE South 19°44'10" West a distance of 1068.39 feet to a 60d nail in a 10" cedar fence post found for a corner;

THENCE South 01°51'11" East a distance of 422.11 feet to a point for a corner;

THENCE South 43°22'08" East a distance of 276.23 feet to a point for a corner;

THENCE South 17°51'19" West a distance of 352.81 feet to a point for a corner;

THENCE South 03°43'55" East a distance of 499.25 feet to a point for a corner;

THENCE South 13°20'46" West a distance of 432.74 feet to a point for a corner;

THENCE South 02°46'23" East a distance of 259.26 feet to a point for a corner;

THENCE South 00°25'47" West a distance of 199.17 feet to a point for a corner;

THENCE South 24°48'47" East a distance of 140.62 feet to a point for a corner;

THENCE South 46°17'46" East a distance of 237.91 feet to a point for a corner;

THENCE South 36°50'40" East a distance of 563.96 feet to a point for a corner;

THENCE South 46°13'42" East a distance of 272.03 feet to a point for a corner;

THENCE South 28°19'40" East a distance of 258.43 feet to a point for a corner;

THENCE South 06°58'41" East a distance of 218.86 feet to a point for a corner;

THENCE South 13°56'22" West a distance of 309.55 feet to a point for a corner;

THENCE North 82°26'20" West a distance of 60.37 feet to a point for a corner;

THENCE North 13°56'22" East a distance of 305.18 feet to a point for a corner;

THENCE North 06°58'41" West a distance of 196.47 feet to a point for a corner;

THENCE North 28°19'40" West a distance of 237.67 feet to a point for a corner;

THENCE North 46°13'42" West a distance of 267.50 feet to a point for a corner;

THENCE North 36°50'40" West a distance of 563.92 feet to a point for a corner;

THENCE North 46°17'46" West a distance of 244.33 feet to a point for a corner;

THENCE North 24°48'47" West a distance of 165.43 feet to a point for a corner;

THENCE North 00°25'47" East a distance of 210.93 feet to a point for a corner;

THENCE North 02°46'23" West a distance of 266.08 feet to a point for a corner;

THENCE North 13°20'46" East a distance of 432.23 feet to a point for a corner;

THENCE North 03°43'55" West a distance of 501.68 feet to a point for a corner;

THENCE North 17°51'19" East a distance of 328.74 feet to a point for a corner;

THENCE North 43°22'08" West a distance of 263.47 feet to a point for a corner;

THENCE North 01°51'11" West a distance of 456.30 feet to a point for a corner;

THENCE North 19°44'10" East a distance of 1081.77 feet to a point in the Southwesterly right-of-way line of State Highway 46, common with a Northeasterly line of the aforementioned 24.700 acre tract of land, for a Northwesterly corner of this herein described tract of land, from which a 60d nail found in a fence post marking the North corner of said 24.700 acre tract bears North 68°24'35" West, a distance of 385.49 feet;

THENCE along the Southwesterly right-of-way line of State Highway 46, common with a Northeasterly line of said 24.700 acre tract of land, South 68°24'35" East a distance of 60.03 feet to the POINT OF BEGINNING containing 7.60 acres of land in Comal County, Texas

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), NAD 83.

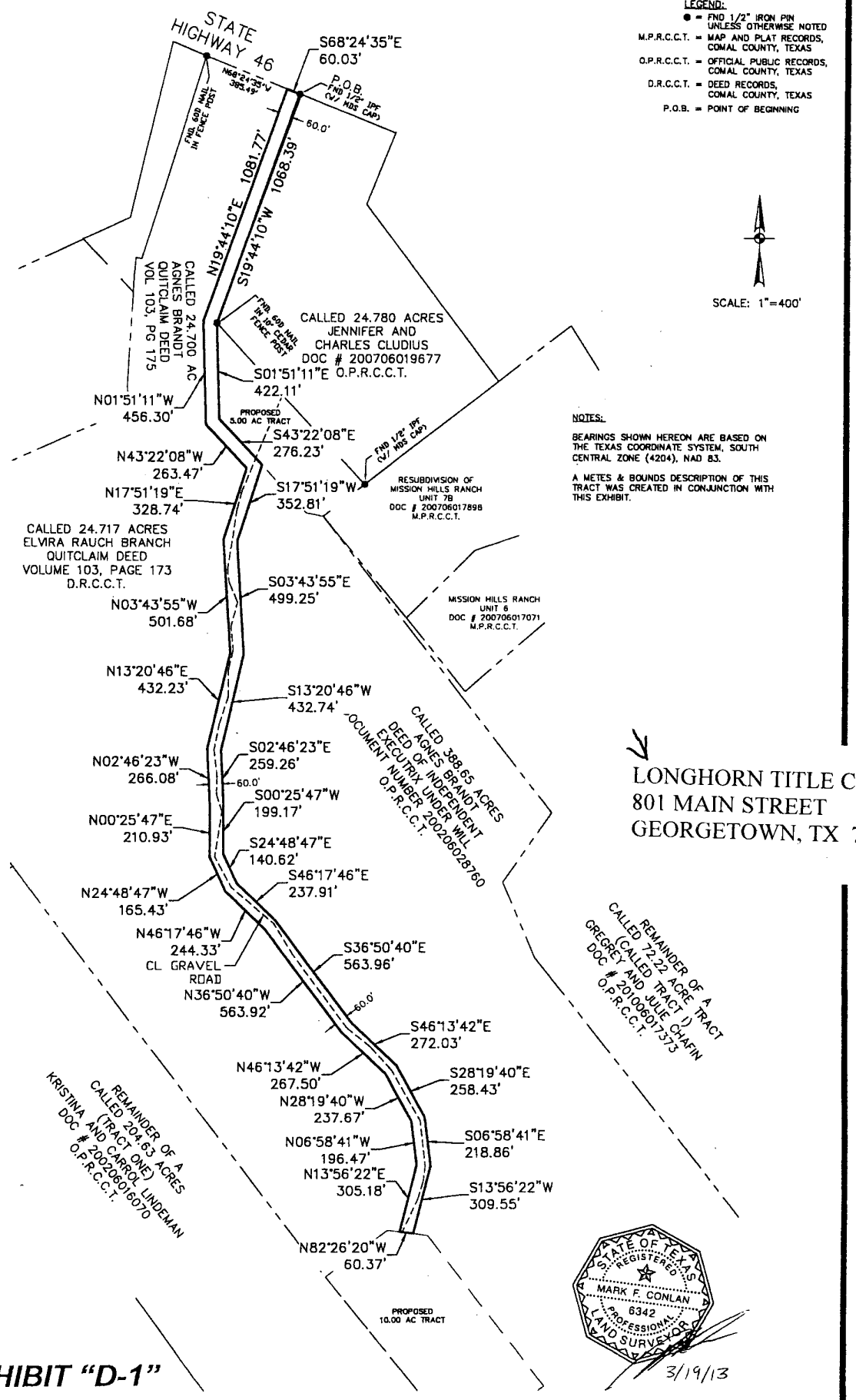
Surveyed this the 19th day of March, 2013.

Reference survey of said 7.60 acre Access Easement prepared this same date.

Mark F. Conlan
Registered Professional Land Surveyor No. 6342

S:\!Projects\!Title Surveys\Washburn, S\423.7ac & 60' Inl. Eng- Center for Christian Growth\Access Easement.doc

7.60 ACRE ACCESS EASEMENT



LONGHORN TITLE CO., INC.
801 MAIN STREET
GEORGETOWN, TX 78626

RETURN TO
Longhorn Title Co., Inc.

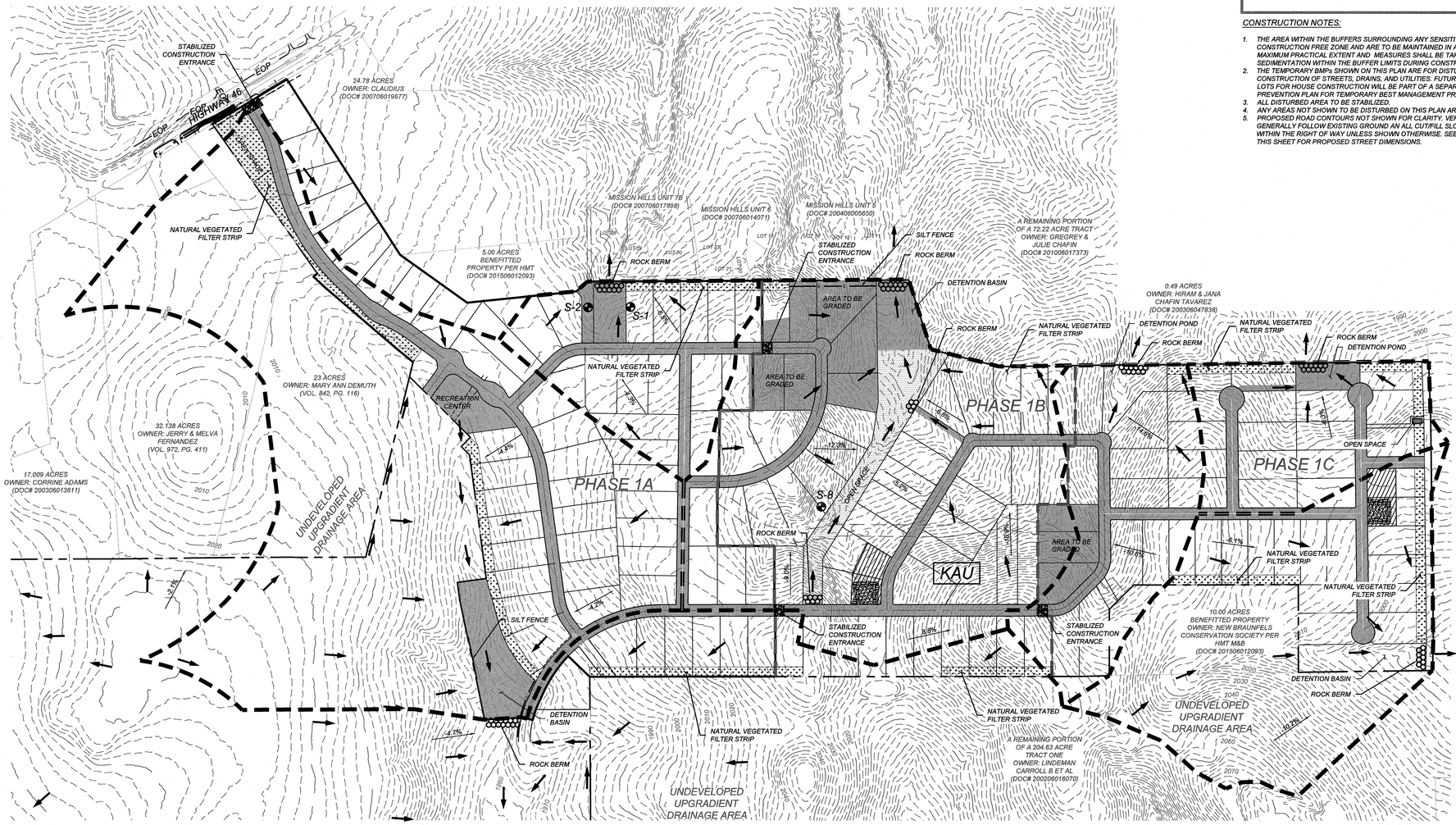
EXHIBIT "D-1"

13-199

Drawing Name: S:\Projects\Little Surveys\Weinbaum, S\LD_DOC & SU ML Log- Center for Land\Land Growth\WOLFELL SURVEYS.dwg User: mark Mar 19, 2013 9:08pm

KFW
ENGINEERS

EXHIBIT 1
TCEQ SITE PLAN



LEGEND

- PROPOSED CONTOURS
- 1130 — EXISTING CONTOURS
- PROJECT LIMITS
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE TRUCK WASHOUT PIT
- SILT FENCE
- ROCK BERM
- AREAS TO BE DISTURBED AND SOIL STABILIZATION WITH SODDING AND LANDSCAPING
- FLOW ARROW
- NATURAL VEGETATED FILTER STRIP
- BASIN DRAINAGE AREAS
- INLET WITH PROTECTION (GRAVEL FILTER BAGS)
- SENSITIVE RECHARGE FEATURE
- S-3

CONSTRUCTION NOTES:

1. THE AREA WITHIN THE BUFFERS SURROUNDING ANY SENSITIVE FEATURE SHALL BE A CONSTRUCTION FREE ZONE AND ARE TO BE MAINTAINED IN A NATURAL STATE TO THE MAXIMUM PRACTICAL EXTENT AND MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND SEDIMENTATION WITHIN THE BUFFER LIMITS DURING CONSTRUCTION.
2. THE TEMPORARY BMPs SHOWN ON THIS PLAN ARE FOR DISTURBANCE REQUIRED FOR CONSTRUCTION OF STREETS, DRAINS, AND UTILITIES. FUTURE DISTURBANCE WITHIN THE LOTS FOR HOUSE CONSTRUCTION WILL BE PART OF A SEPARATE STORMWATER POLLUTION PREVENTION PLAN FOR TEMPORARY BEST MANAGEMENT PRACTICES.
3. ALL DISTURBED AREA TO BE STABILIZED.
4. ANY AREAS NOT SHOWN TO BE DISTURBED ON THIS PLAN ARE TO REMAIN UNDISTURBED.
5. PROPOSED ROAD CONTOURS NOT SHOWN FOR CLARITY. VERTICAL ROAD ALIGNMENT WILL GENERALLY FOLLOW EXISTING GROUND AN ALL CUTFILL SLOPES WILL BE CONTAINED WITHIN THE RIGHT OF WAY UNLESS SHOWN OTHERWISE. SEE TYPICAL STREET SECTION ON THIS SHEET FOR PROPOSED STREET DIMENSIONS.

LOCATION MAP
NOT-TO-SCALE

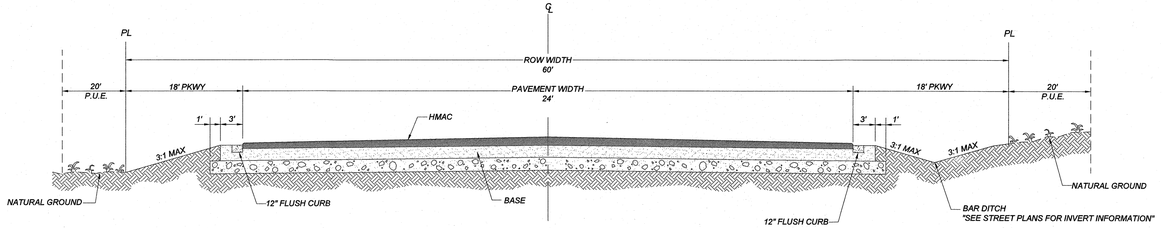
SCALE : 1"=300'
0' 300' 900' 600'

TCEQ-0592 (Rev. 3/15/07)
Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. If sediment escapes the construction site, off_site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    - A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    - B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    - C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
2800 S. IH 35, Suite 100
Austin, Texas 78704-5712
Phone(512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329



TYPICAL 60' R.O.W. STREET SECTION
(NOT TO SCALE)

KFW ENGINEERS + SURVEYING
162 W Mill St., New Braunfels, Tx, 78130
Phone #: (830) 220-6042 • Fax #: (830) 627-6097
TBPE Firm #: 9513 • TBPLS Firm #: 10122300

ISSUE DATE

REVISIONS

2/10/20
STATE OF TEXAS
NICHOLAS REYNOLDS
111666
LICENSED
PROFESSIONAL ENGINEER

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN MOD

JOB NO. 205123-01-02
DATE: NOVEMBER 2018
DRAWN: OE CHECKED: BW

SHEET NUMBER:

Date: Mar 11, 2020, 4:40pm User ID: tvoter
File: U:\Projects\423\01\03 Design\Exhibits\WPAP MOD\SNSP.dwg

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 15, 2016

Mr. James Japhet
RR-1604 Ltd. /Japhet III, LLC
3602 Paesanos Parkway, Suite 106
Shavano Park, Texas 78212

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Brandt Ranch; Located on the south side of State Highway 46 approximately one mile west of FM2722; New Braunfels, Texas

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

Regulated Entity No. RN108863002; Additional ID No. 13000014

Dear Mr. Japhet:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the above-referenced project submitted to the San Antonio Regional Office by KFW Engineers and Surveying on behalf of RR-1604 Ltd. /Japhet III, LLC on January 21, 2016. Final review of the WPAP was completed after additional material was received on March 23, 2016, and April 6, 2016. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 423.76 acres. It will include 306 single family residential lots, with private driveways, concrete curbs, and asphalt pavement. The impervious cover will be 83.79 acres (19.77 percent). According to a letter dated, October 15, 2015, signed by Mr. Robert Boyd, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

This single-family residential project will not have more than 20 percent impervious cover.

GEOLOGY

According to the geologic assessment included with the application, the site is located on the Austin Chalk, Eagle Ford Shale, Buda Limestone, and Del Rio Clay of the Person and Kainer Formations. Seven geologic features, and one manmade feature were noted in the assessment by the project geologist. One geologic feature (S-5, sinkhole) was assessed as sensitive by the project geologist. The San Antonio Regional Office site assessment conducted on March 16, 2016 revealed that the site was generally as described in the application.

Natural buffers are proposed for the sensitive feature. No regulated activities (such as construction or soil disturbing activities) will take place within the natural buffer. Trash will be removed from Feature S-5 and a natural buffer will be maintained around it. The natural buffer will extend at least 200 feet upgradient of the surface extent of the sinkhole. In other directions, the natural buffer will extend at least 50 feet from the surface extent of the sinkhole. Physical barriers and sediment controls such as fencing and silt fences are required at the edges of these buffers prior to the commencement of construction.

SPECIAL CONDITION

Since this project will not have more than 20 percent impervious cover, an exemption from additional permanent BMPs is approved. If the percent impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site as described in the property boundaries required by §213.4(g), may no longer apply and the property owner must notify the appropriate regional office of these changes.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during

construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

9. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. All borings less than 20 feet must be backfilled with cuttings from the boring. All borings must be backfilled or plugged within four (4) days of completion of the drilling operation. Voids may be filled with gravel.

<u>During Construction:</u>

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.

11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

13. No well exist on site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent.

Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.

15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.

16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.

19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional

KFW
ENGINEERS + SURVEYING

April 6, 2016

Ms. Monica Reyes
Texas Commission on Environmental Quality
14250 Judson Rd.
San Antonio, TX 78233

RECEIVED
APR 14 2016
COUNTY ENGINEER

Re: Brandt Ranch WPAP

Dear Ms. Reyes,

This letter is being submitted to your office in response to the comments we received from your office on March 28, 2016 regarding the above referenced project. The following is a listing of the comments received and our responses:

1. Where ever the drainage area to the edge of S-5 (sinkhole footprint) lies more than 50 feet from the feature, the buffer should extend to the boundary of the drainage area or 200 feet, whichever less.

   Response: Buffer area around feature S-5 has been revised as per your comments.

2. Since more than 10 ac will be disturbed at one time please provide Attachment H: Temporary Sediment Pond Plans and Calculations.

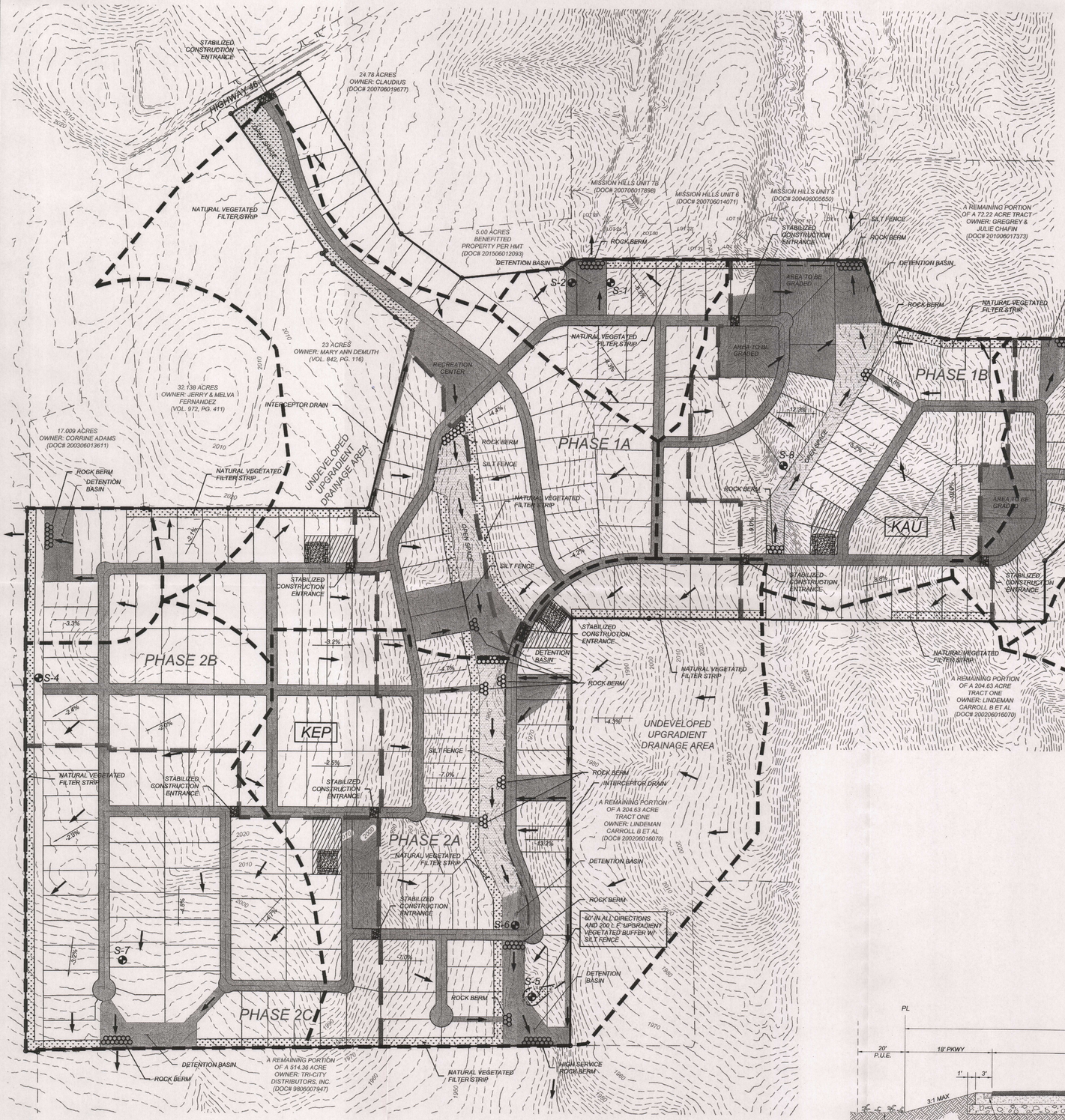
   Response: Included with this submittal is an exhibit showing detailed drainage areas and disturbed area. Temporary sediment pond plans and calculations are required if disturbed area exceeds 10 ac per drainage area. All drainage areas have less than 10 ac of disturbed area therefore sediment pond plans and calculations are not required.

No other changes have been made to the plat previously submitted other than those noted above. Attached to this response letter are the required copies of the updated documents. Should additional information be required, please call.

Sincerely,
KFW Engineers

Omar Espinosa, E.I.T.

TCEQ R-13 2016 APR 06 11:01

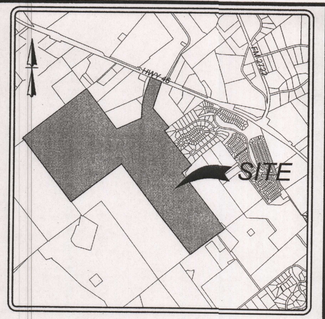


LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROJECT LIMITS
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE TRUCK WASHOUT PIT
- SILT FENCE
- ROCK BERM
- AREAS TO BE DISTURBED AND SOIL STABILIZATION WITH SODDING AND LANDSCAPING
- FLOW ARROW
- NATURAL VEGETATED FILTER STRIP
- BASIN DRAINAGE AREAS
- INLET WITH PROTECTION (GRAVEL FILTER BAGS)
- SENSITIVE RECHARGE FEATURE
- S-3

CONSTRUCTION NOTES:

1. THE AREA WITHIN THE BUFFERS SURROUNDING ANY SENSITIVE FEATURE SHALL BE A CONSTRUCTION FREE ZONE AND ARE TO BE MAINTAINED IN A NATURAL STATE TO THE MAXIMUM PRACTICAL EXTENT AND MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND SEDIMENTATION WITHIN THE BUFFER LIMITS DURING CONSTRUCTION.
2. THE TEMPORARY BMPs SHOWN ON THIS PLAN ARE FOR DISTURBANCE REQUIRED FOR CONSTRUCTION OF STREETS, DRAINS, AND UTILITIES. FUTURE DISTURBANCE WITHIN THE LOTS FOR HOUSE CONSTRUCTION WILL BE PART OF A SEPARATE STORMWATER POLLUTION PREVENTION PLAN FOR TEMPORARY BEST MANAGEMENT PRACTICES.
3. ALL DISTURBED AREA TO BE STABILIZED.
4. ANY AREAS NOT SHOWN TO BE DISTURBED ON THIS PLAN ARE TO REMAIN UNDISTURBED.
5. PROPOSED ROAD CONTOURS NOT SHOWN FOR CLARITY. YERTICAL ROAD ALIGNMENT WILL GENERALLY FOLLOW EXISTING GROUND AN ALL CUT/FILL SLOPES WILL BE CONTAINED WITHIN THE RIGHT OF WAY UNLESS SHOWN OTHERWISE. SEE TYPICAL STREET SECTION ON THIS SHEET FOR PROPOSED STREET DIMENSIONS.



LOCATION MAP
NOT-TO-SCALE

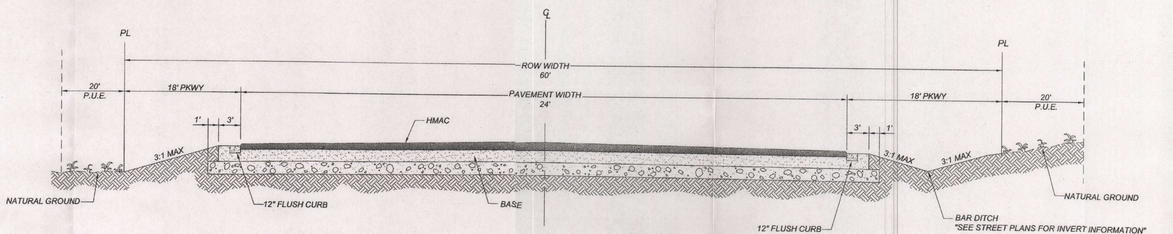
SCALE : 1"=300'
0' 300' 600' 900'

TCEQ-0592 (Rev. 3/15/07)
Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. If sediment escapes the construction site, off site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    - A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    - B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    - C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
2800 S. IH 35, Suite 100
Austin, Texas 78704-5712
Phone(512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329



TYPICAL 60' R.O.W. STREET SECTION
(NOT TO SCALE)

KFW
ENGINEERS + SURVEYING
14950 Heathrow Rd, Bldg #1, San Antonio, TX 78230
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPE Firm #: 9513 • TBPLS Firm #: 10122300

RECEIVED
APR 14 2016
COUNTY ENGINEER
TCEQ R-13 2016 APR 06 11:01

ISSUE DATE
REVISIONS

STATE OF TEXAS
BLAINE P. LOPEZ
92685
LICENSED PROFESSIONAL ENGINEER
4/6/16

WATER POLLUTION ABATEMENT PLAN

BRANDT RANCH

COMAL COUNTY

JOB NO. 423-01-02
DATE: MAY 2015
DRAWN: OE CHECKED: BL

SHEET NUMBER:
EX-1.0

Date: Apr 05, 2016, 5:54pm User ID: osephosa
File: P:\423\01\02\Design\Civil\WPAP\WPAP423012.dwg

KFW
ENGINEERS + SURVEYING

March 22, 2016

RECEIVED
MAR 30 2016
COUNTY ENGINEER

Ms. Monica Reyes
Texas Commission on Environmental Quality
14250 Judson Rd.
San Antonio, TX 78233

Re: Brandt Ranch WPAP

Dear Ms. Reyes,

This letter is being submitted to your office in response to the comments we received from your office on March 11, 2016 regarding the above referenced project. The following is a listing of the comments received and our responses:

1. What is the average impervious cover per residential lot?

   Response: The average impervious cover per residential lot is 8,200 sf. See Attached calculation sheet.

2. Show S-8 on Geologic Assessment Map.

   Response: The Geologic Site Plan has been updated as per your request. Included with this submittal is 1 original and 5 copies of the updated site plan.

3. Why is the buffer for sensitive feature S-5 not 50 feet in all directions and 200 feet upgradient?

   Response: The buffer zone was revised according to your comments and is now 50' in all directions.

4. Please add slope percent's to EX 1.0.

   Response: Slope percent's have been added to exhibit 1.0 as per your request. Included with this submittal is 1 original and 5 copies of the updated exhibit.

No other changes have been made to the plat previously submitted other than those noted above. Attached to this response letter are the required copies of the updated documents. Should additional information be required, please call.

Sincerely,
KFW Engineers

Omar Espinosa, E.I.T.

BRANDT RANCH SUBDIVISION

IMPERVIOUS COVER CALCULATIONS - ATTACHMENT C

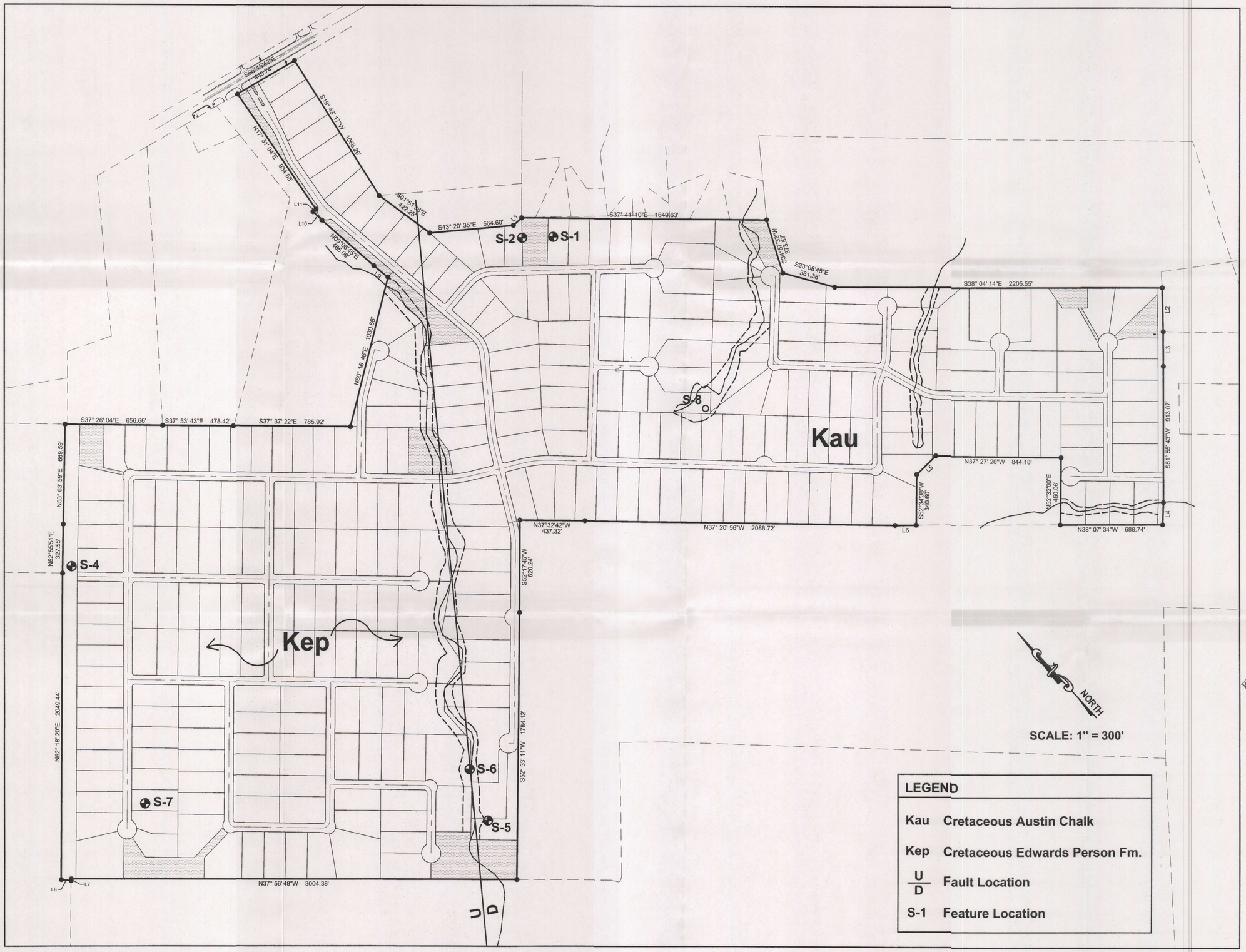
10/14/2015

PHASE	TOTAL AREA (AC.)	LOTS	AVG. LOT SIZE (AC.)	AVG PAD SIZE (SF)	TOTAL PAD SIZE (SF)	AVG DRIVEWAY (SF)	TOTAL DRIVEWAY (SF)	SIDEWALK AREA (WIDTH VARIES)	PAVEMENT AREA (SF)	TOTAL IMPERVIOUS (SF)
PHASE 1A	79.53	58	1.0	7,000	406,000	1,200	69,600	N/A	245,368	720,968.00
PHASE 1B	66.3	48	1.0	7,000	336,000	1,200	57,600	N/A	127,514	521,114.00
PHASE 1C	60.44	45	1.0	7,000	315,000	1,200	54,000	N/A	155,751	524,751.00
PHASE 2A	76.86	50	1.0	7,000	350,000	1,200	60,000	N/A	193,195	603,195.00
PHASE 2B	67.67	52	1.0	7,000	364,000	1,200	62,400	N/A	193,807	620,207.00
PHASE 2C	69.95	53	1.0	7,000	371,000	1,200	63,600	N/A	155,317	589,717.00
REC CENTER	2.51		2.51	10,000	10,000			N/A	60,000	70,000.00
TOTALS:	423.76	306		7,000	2,152,000		367,200	N/A	1,130,752	3,649,952.00

OVERALL ACRES IMPERVIOUS: 83.79
OVERALL % IMPERVIOUS: 19.77%

Total Average Lot Pad Size = 2,142,000 SF
Total Average Lot Driveway = 367,200 SF
Total Lots = 306 Lots

Average Lot Impervious Cover =	8,300 SF



LEGEND	
Kau	Cretaceous Austin Chalk
Kep	Cretaceous Edwards Person Fm.
U/D	Fault Location
S-1	Feature Location

RECEIVED
MAR 8 0 2016
COUNTY ENGINEER

psi Information To Build On
Engineering . Consulting . Testing
3 BURWOOD LANE
SAN ANTONIO, TEXAS 78216

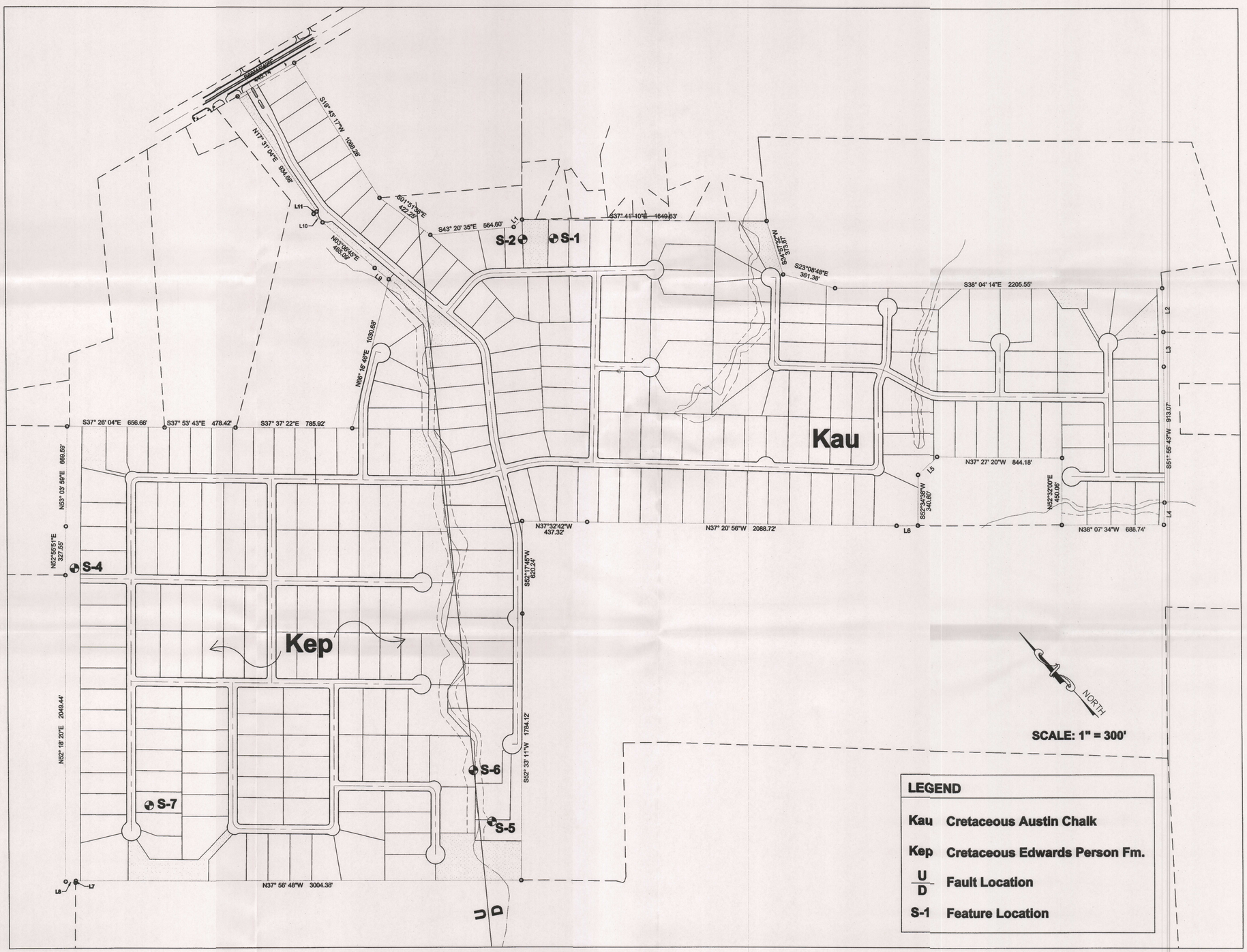
BRANDT RANCH

COMAL COUNTY

STATE OF TEXAS
JL 2/22/16
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST

GEOLOGICAL ASSESSMENT

DATE:	02.21.16
PROJECT #:	0435-2321
DWG. NAME:	2015-035



SCALE: 1" = 300'

LEGEND	
Kau	Cretaceous Austin Chalk
Kep	Cretaceous Edwards Person Fm.
U / D	Fault Location
S-1	Feature Location

PSI Information To Build On
Engineering • Consulting • Testing
3 BURWOOD LANE
SAN ANTONIO, TEXAS 78216

BRANDT RANCH

COMAL COUNTY

STATE OF TEXAS
John Langan
Geology
4871
LICENSED PROFESSIONAL GEOSCIENTIST

GEOLOGICAL ASSESSMENT

DATE:	07.01.15
PROJECT #:	0435-2321
DWG. NAME:	2015-035

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 21, 2016

Mr. Thomas H. Hornseth, P.E.
Comal County Engineer
195 David Jonas Drive
New Braunfels TX 78132-3710

Re: Edwards Aquifer, Comal County
PROJECT NAME: Brandt Ranch, located on the south side of State Highway 46 approximately one mile west of FM 2722, New Braunfels, Texas

PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program

Dear Mr. Hornseth:

The referenced application is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval. More information regarding this project may be obtained from the TCEQ Central Registry website at http://www.tceq.state.tx.us/permitting/central_registry/.

Please forward your comments to this office by February 21, 2016.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact the San Antonio Region Office at (210) 490-3096.

Sincerely

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

LSO
It's all in the delivery.

Airbill No. ZT351556

Lone Star Overnight
1-800-800-8984
www.lso.com

SHIP TO:
THOMAS HORNSETH PE
COMAL COUNTY ROAD DEPARTMENT
195 DAVID JONAS DRIVE
NEW BRAUNFELS, TX 78132
2104034021

From:
CYNTHIA VEGA
TCEQ REG 13
14250 JUDSON RD
SAN ANTONIO, TX 78233
2104034003

W SAT

LSO GROUND
END OF BUSINESS DAY DELIVERY

PRINT DATE: 1/22/2016
QUICKCODE: COMAL COUNTY RD WEIGHT: 3.00LBS
REF 1: ELAINE GROSENHEIDER 1D00V.0000

Fold on above line and place shipping label in pouch on package. Please be sure the barcodes and addresses can be read and scanned. Shipping Instructions

1. Fold this page along the horizontal line above.
2. Place this Airbill in the shipping label pouch on the package you are shipping. Please be sure the barcodes and addresses can be read and scanned.
3. To locate a drop box near you, click on **Find A Drop Box** from the home page main menu.
4. To schedule a pickup, click on **Request Pickup.**

WARNING: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your Lone Star Overnight account number.
This label is valid for use for 3 months from the date printed. Use of expired labels may result in delayed billing and / or additional research charges. LIMIT OF LIABILITY: We are not responsible for claims in excess of $100 for any reason unless you: 1) declare a greater value (not to exceed $25,000); 2) pay an additional fee; 3) and document your actual loss in a timely manner. We will not pay any claim in excess of the actual loss. We are not liable for any special or consequential damages. Additional limitations of liability are contained in our current Service Guide. If you ask us to deliver a package without obtaining a delivery signature, you release us of all liability for claims resulting from such service. NO DELIVERY SIGNATURE WILL BE OBTAINED FOR 8:30 AM DELIVERIES OR RESIDENTIAL DELIVERIES.

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

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

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and 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 to you:

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- 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 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 effected jurisdictions.

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

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

1. Regulated Entity Name: Brandt Ranch						**2. Regulated Entity No.:**			
3. Customer Name: RR-1604 Ltd. / Japhet III, LLC.						**4. Customer No.:**			
5. Project Type: (Please circle/check one)	New ☑		Modification			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP ☑	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential ☑		Non-residential			**8. Site (acres):**		423.76	
9. Application Fee:	$8000.00		**10. Permanent BMP(s):**			N/A			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Comal		**14. Watershed:**			Dry Comal Creek & Blieders Creek			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	X	___	___	___
Region (1 req.)	___	X	___	___	___
County(ies)	___	X	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	X 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 X 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.

BLAINE LOPEZ

Print Name of Customer/Authorized Agent

Blaine Lopez 10/26/15

Signature of Customer/Authorized Agent Date

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

October 15, 2015

KFW
ENGINEERS + SURVEYING

Ms. Lynn Bumguardner
TCEQ Region 13
14250 Judson Rd.
San Antonio, Texas 78233-4480

Re: Brandt Ranch
Water Pollution Abatement Plan

Dear Ms. Bumguardner:

Attached are one (1) original and four (4) copies of the Water Pollution Abatement Plan for the above referenced project including the appropriate review fees ($8,000). This application has been prepared according to the guidelines set forth in 30 TAC Chapter 213 Subchapter B. Please review the application for completeness and compliance with the applicable regulations for development over the Recharge Zone of the Edwards Aquifer. Upon acceptance, we request that written approval be provided to our office.

Thank you for your time and consideration in this matter. Should you have any questions or need further information please feel free to contact me.

Sincerely,
KFW Engineers,

Blaine Lopez, P.E.
Vice President

Attachments:
1 – Original Water Pollution Abatement Plan
4 – Copies of Water Pollution Abatement Plan

P:\423\01\01\Word\Reports\WPAP\1. F-0587 General Information Section\1. WPAP_Cover Letter.doc

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.

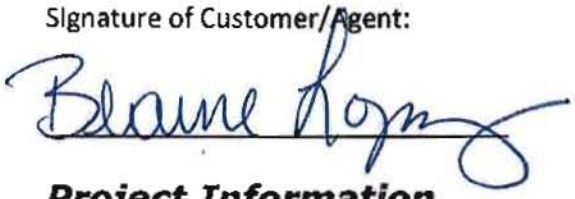
Signature

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: Blaine Lopez, P.E.

Date: 10/15/15

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Brandt Ranch
2. County: Comal
3. Stream Basin: Dry Comal Creek & Blieders Creek
4. Groundwater Conservation District (If applicable): N/A
5. Edwards Aquifer Zone:

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

   ☒ WPAP
   ☐ SCS
   ☐ Modification
   ☐ AST
   ☐ UST
   ☐ Exception Request

7. Customer (Applicant):

Contact Person: James H. Japhet
Entity: RR-1604 Ltd. / Japhet III, LLC.
Mailing Address: 3602 Paesanos Parkway #106
City, State: Shavano Park, TX Zip: 78231
Telephone: 210-448-0800 FAX: 210-448-0805
Email Address: jhjaphet@yahoo.com

8. Agent/Representative (If any):

Contact Person: Blaine Lopez, P.E.
Entity: KFW Engineers
Mailing Address: 14603 Huebner Rd. Bldg. 40
City, State: San Antonio, TX Zip: 78230
Telephone: (210) 979-8444 FAX: (210) 979-8441
Email Address: blopez@kfwengineers.com

9. Project Location:

☐ The project site is located inside the city limits of _____.
☒ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of New Braunfels, TX.
☐ 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.

From San Antonio, take I-35 north to New Braunfels, exit Highway 46. Take Highway 46 west toward Boerne. The project site is located on Highway 46, approximately 0.75 miles past the Highway 46 and FM 2722 intersection.

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. ☒ **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: _____

14. ☒ **Attachment C – Project Description.** Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

☒ Area of the site
☒ Offsite areas
☒ Impervious cover
☒ Permanent BMP(s)
☒ Proposed site use
☒ Site history
☒ Previous development
☒ Area(s) to be demolished

15. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☒ Existing paved and/or unpaved roads
☐ Undeveloped (Cleared)
☒ Undeveloped (Undisturbed/Uncleared)
☐ Other: _____

Prohibited Activities

16. ☒ I am aware that the following activities are prohibited on the Recharge Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

17. ☒ I am aware that the following activities are prohibited on the Transition Zone and are not proposed for this project:

(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

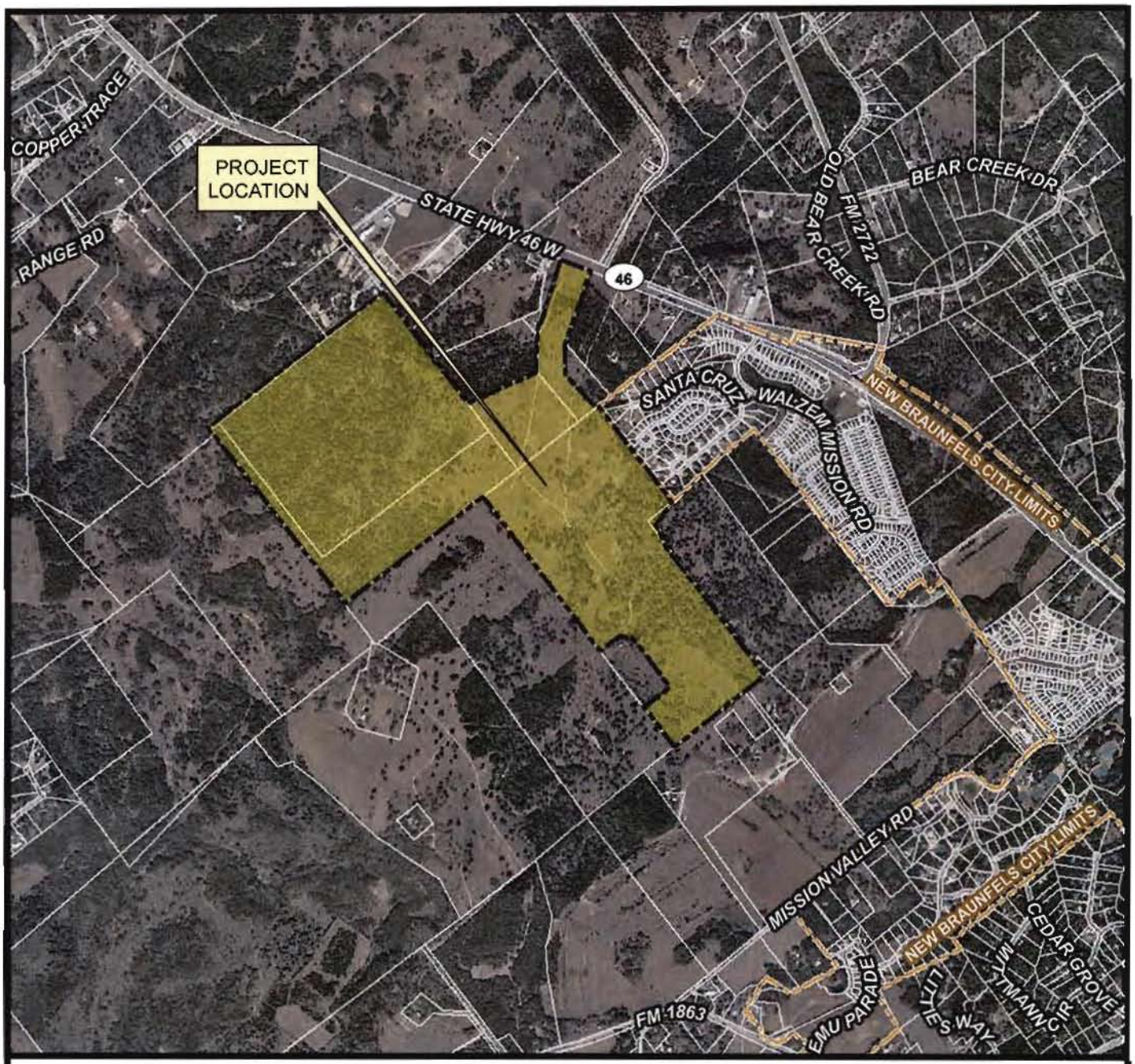
☒ For a Water Pollution Abatement Plan or Modification, the total acreage of the site where regulated activities will occur.
☐ For an Organized Sewage Collection System Plan or Modification, the total linear footage of all collection system lines.
☐ For a UST Facility Plan or Modification or an AST Facility Plan or Modification, the total number of tanks or piping systems.
☐ A request for an exception to any substantive portion of the regulations related to the protection of water quality.
☐ A request for an extension to a previously approved plan.

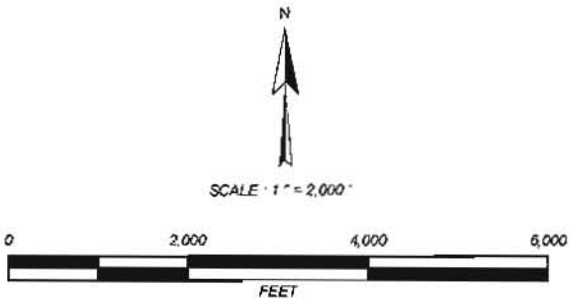
19. ☒ Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TCEQ is not required to consider the application until the correct fee is submitted. Both the fee and the Edwards Aquifer Fee Form have been sent to the Commission's:

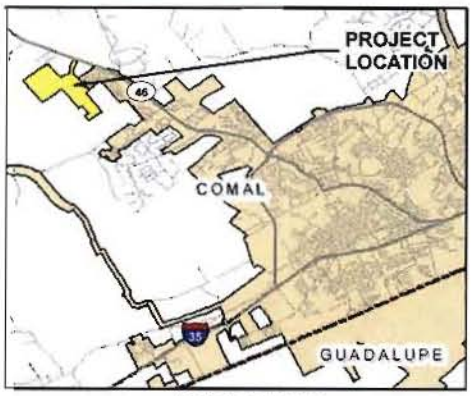
☐ TCEQ cashier
☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

21. ☒ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.







LOCATION MAP
(N.T.S.)

KFW
ENGINEERS + SURVEYING
FIRM# 9513 FIRM# 10122300
14603 HUEBNER RD. BLDG. 40
SAN ANTONIO, TEXAS 78230
PHONE (210) 979-8444
FAX (210) 979-8441

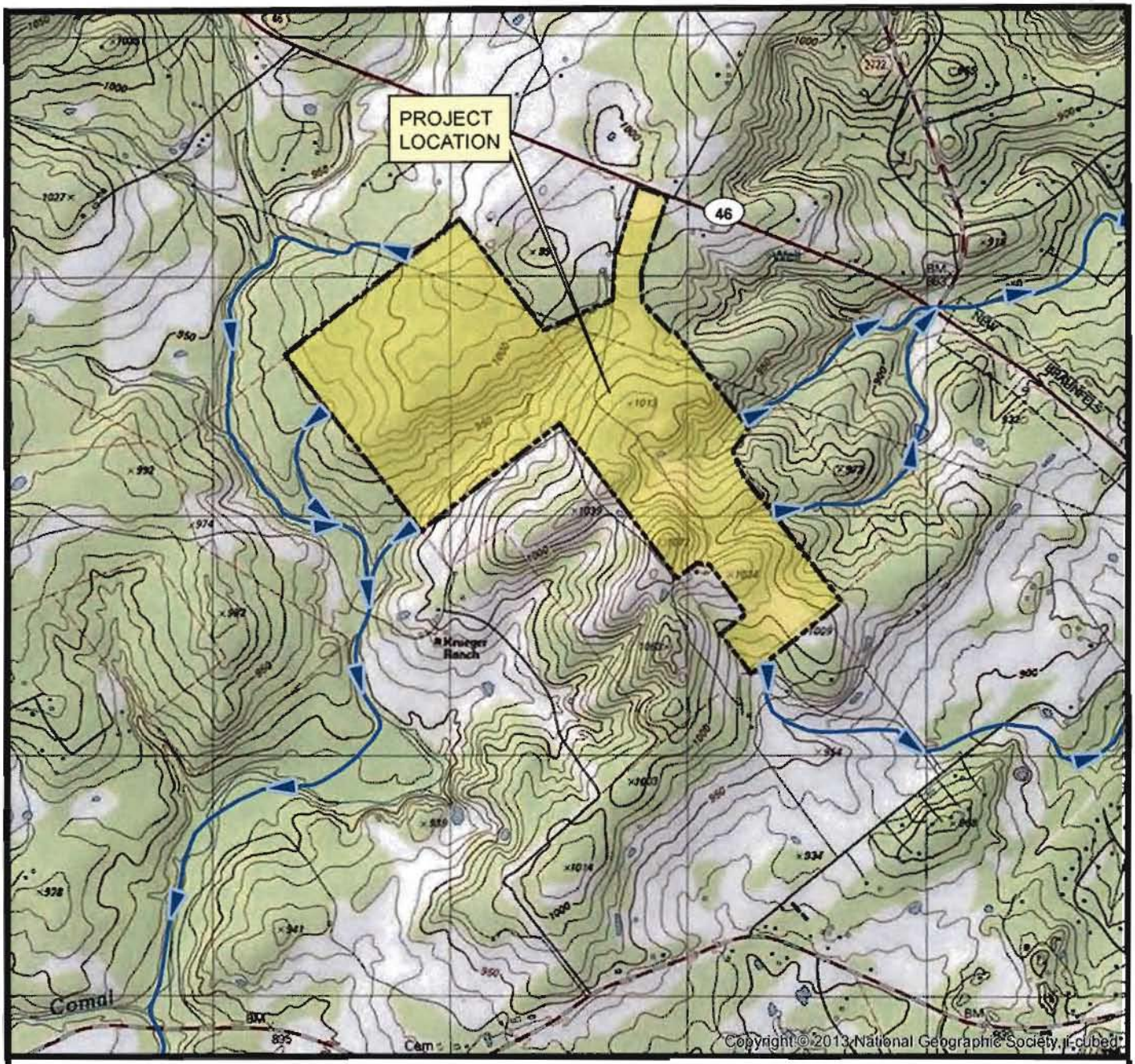
BRANDT RANCH

WATER POLLUTION ABATEMENT PLAN
AERIAL & LOCATION MAP

REVISIONS	ISSUE DATE

JOB NO. 423-01-02
DATE: June 2015 DESIGNER:
DRAWN: K.K. CHECKED: O.E.

SHEET: ATT. A



N

SCALE 1" = 2,000'

0 2,000 4,000 6,000

FEET

FOR FULL DRAINAGE PATH, PLEASE REFER TO EDWARDS AQUIFER RECHARGE ZONE MAP

KFW ENGINEERS + SURVEYING
FIRM# 9513 FIRM# 10122300
14603 HUEBNER RD, BLDG. 40 PHONE (210) 979-8444
SAN ANTONIO, TEXAS 78230 FAX (210) 979-8441

BRANDT RANCH

WATER POLLUTION ABATEMENT PLAN

USGS QUADRANGLE - NEW BRAUNFELS WEST

REVISIONS	ISSUE DATE

JOB NO 423-01-02

DATE: October 2015 DESIGNER:

DRAWN: K.K CHECKED: Q.E

SHEET: ATT. B

N

SCALE: 1" = 10,000'

0 10,000 20,000 30,000

FEET

KFW ENGINEERS + SURVEYING
FIRM# 9513 FIRM# 10122300
14603 HUEBNER RD, BLDG 40 PHONE (210) 979-8444
SAN ANTONIO, TEXAS 78230 FAX (210) 979-8441

BRANDT RANCH
WATER POLLUTION ABATEMENT PLAN
EDWARDS AQUIFER RECHARGE ZONE MAP

REVISIONS	ISSUE DATE:
JOB NO. 423-01-02	
DATE: October 2016	DESIGNER:
DRAWN: K.K	CHECKED: O.E

SHEET: ATT. B

PROJECT DESCRIPTION

The Brandt Ranch Subdivision is located approximately 0.75 miles northwest from the intersection of Highway 46 and FM 2722. The existing undeveloped land is used for agricultural purposes and limited demolition of existing agricultural facilities is anticipated. Brandt Ranch is a 423.76 acre subdivision that will have 306 single family residential lots. The project site is located within the Dry Comal and Blieders Creek watersheds, and the New Braunfels West USGS quadrangle. The property lies outside the New Braunfels city limits but within the ETJ. Brandt Ranch is located within the Edwards Aquifer Recharge Zone and no portion of the site contains the 100-YR floodplain per FEMA firm panel # 48091C0430F.

The existing topography contains a ridgeline that divides drainage into the northeast and southwest with grades ranging from 1% to 20%. The portion of the site draining northeast ultimately drains into Blieders Creek. The portion of the site draining southwest ultimately drains into Dry Comal Creek. The site consists of medium dense grass and moderate tree canopy cover.

The existing soils on the site consist of Comfort-Rock outcrop complex, undulating (CrD), Medlin-Eckrant, undulating (MEC), Real Gravel Loam, 1 to 8 percent slopes (RaD), and Rumple-Comfort, undulating (RUD). The pre-development runoff coefficient for the site is 0.38 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2. Temporary BMP's for the construction activities will include: silt fence, rock berms, tree protection, stabilized construction entrance/exit, concrete washout area and existing vegetation. All on-site temporary BMP's will be designed in accordance with the TCEQ Technical Guidance Manual.

There is a total of 83.79 acres or 19.77% impervious cover proposed on the site which consists of structures, private driveways, concrete flush curbs, and asphalt pavement. See attached sheet for impervious cover calculations. The project site is less than 20% impervious cover therefore no permanent BMP's are proposed for the project. The post-development runoff coefficient for this site is 0.50 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2.

BRANDT RANCH SUBDIVISION

IMPERVIOUS COVER CALCULATIONS - ATTACHMENT C

10/14/2015

PHASE	TOTAL AREA (AC.)	LOTS	AVG. LOT SIZE (AC.)	AVG PAD SIZE (SF)	TOTAL PAD SIZE (SF)	AVG DRIVEWAY (SF)	TOTAL DRIVEWAY (SF)	SIDEWALK AREA (WIDTH VARIES)	PAVEMENT AREA (SF)	TOTAL IMPERVIOUS (SF)
PHASE 1A	79.53	58	1.0	7,000	406,000	1,200	69,600	N/A	245,368	720,968.00
PHASE 1B	66.8	48	1.0	7,000	336,000	1,200	57,600	N/A	127,514	521,114.00
PHASE 1C	60.44	45	1.0	7,000	315,000	1,200	54,000	N/A	155,751	524,751.00
PHASE 2A	76.86	50	1.0	7,000	350,000	1,200	60,000	N/A	193,195	603,195.00
PHASE 2B	67.67	52	1.0	7,000	364,000	1,200	62,400	N/A	193,807	620,207.00
PHASE 2C	69.95	53	1.0	7,000	371,000	1,200	63,600	N/A	155,117	589,717.00
REC CENTER	2.51		2.51	10,000	10,000			N/A	60,000	70,000.00
TOTALS:	**423.76**	**306**		**7,000**	**2,152,000**		**367,200**	**N/A**	**1,130,752**	**3,649,952.00**

OVERALL ACRES IMPERVIOUS:	**83.79**
OVERALL % IMPERVIOUS:	**19.77%**

Information To Build On
Engineering • Consulting • Testing

GEOLOGIC ASSESSMENT

For the

APPROXIMATE 438-ACRE TRACT
STATE HIGHWAY 46 NEAR INTERSECTION
WITH FM 2722
COMAL COUNTY, TEXAS 78132

Prepared for

James H. Jacobs
1242 S. Austin Ave.
Georgetown, Texas 78626

Prepared by

Professional Service Industries, Inc.
Three Burwood Lane
San Antonio, Texas 78216
Telephone (210) 342-9377

PSI PROJECT NO.: 435955

January 12, 2016

PSI Information To Build On
Engineering • Consulting • Testing

January 12, 2016

KFW Engineers & Surveying
14603 Huebner Road, Bldg. 40
San Antonio, Texas 78230

Attn: Mr. Blaine Lopez, P.E.

Re: Geologic Assessment
Brandt Ranch
Approximate 438-Acre Tract
State Highway 46 Near the Intersection With FM 2722
Comal County, Texas 78132
PSI Project No.: 435955

Dear Mr. Lopez:

Professional Service Industries, Inc. (PSI) has completed a geologic recharge assessment for the above referenced project in compliance with the Texas Commission on Environmental Quality (TCEQ) requirements for regulated developments located on the Edwards Aquifer Recharge Zone (EARZ). The purpose of this report is to describe surficial geologic units and identify the locations and extent of significant recharge features present in the development area.

PROJECT DESCRIPTION

The approximate 438-acre site is located to the west/southwest of the intersection of SH 46 and FM 2722 several miles west of New Braunfels, Texas. The site is almost entirely undeveloped although an abandoned old residence with several outbuildings and an apparent old hunting camp shack. The site is partially covered by trees (mostly oak and juniper), shrubbery, and grasses. Some of the southern and central areas of the site have been cleared of vegetation and some clearing of juniper has taken place in the more vegetated areas. A small manmade pond is located in the east central area of the site. Rock outcrops are sparse across the site and are found primarily in drainages and on a few relatively flat hilltops. Limestone float was somewhat common in topographically high areas in the western portion of the site. Chert gravel covers most of the site except for the northwestern portion of the site. The chert gravel is very abundant in some areas and appears as a veneer across the landscape. The chert gravel appears to be a remnant of former Quaternary fluvial terrace deposits with only the gravel remaining. Several natural recharge features were found including a sinkhole in the southwestern area of the site and a few fractured and vuggy rock zones. Faulting is obvious at the site given the exposure of several formations including the Austin Chalk, Eagle Ford Shale, Buda Limestone, Del Rio Clay as well as the Person and Kainer Formations of the Edwards Group. Although the faults themselves were generally covered by vegetation, soil, gravel etc., the traces could be inferred due to the outcrops of the various formations. In general, Edwards Group formations (Person & Kainer) are found on the northern portion of the site, and younger formations (primarily Austin Chalk) are found in the southern portion of the site. The only sensitive feature observed at the site included the sinkhole. Other than the manmade pond, no recharge features were found in areas where post-Edwards Group formations are exposed.

REGIONAL GEOLOGY

Stratigraphy and Structure

According to available information from the TCEQ and the Edwards Aquifer Authority as well as the site reconnaissance, the underlying stratigraphy consists of the Lower Cretaceous Person and Kainer Formations of the Edwards Group in the northern areas of the site while the remainder of the site is underlain by the Upper Cretaceous Austin Chalk, Eagle Ford Shale, Buda Limestone, and Del Rio Clay Formations. *Exogyra arietina* was found in the exposed areas of the Del Rio Clay. A series of northeast trending faults crosses the middle portions of the site. The faults appear to be downthrown to the southeast with the Upper Cretaceous Formations being present in distinct fault blocks. Bedrock outcrops at the site are relatively sparse with most being associated with the Person and Kainer areas along with a few Buda and Austin Chalk bedrock exposures. Limestone boulder float was common in the Person and Kainer areas. Chert gravel covered most of the site as a remnant of Quaternary fluvial terrace deposits which have been previously removed by erosion leaving a veneer of gravel.

SITE INVESTIGATION

The site investigation was performed by systematically traversing the subject tract, and mapping any fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

SUMMARY

Relatively few natural recharge features were identified including a sinkhole, several vuggy and fractured rock zones, and inferred fault traces. One manmade feature was observed, a small pond. Only the sinkhole is considered sensitive. The manmade feature was the only recharge feature observed in the areas of the post-Edwards Group formations. If caves, sinkholes, solution cavities, or manmade features are encountered during future clearing/construction activities, please contact our office for additional assistance.

We appreciate this opportunity to be of service to you. If you have any questions, please do not hesitate to contact our office.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

John Langan, P.G.
Department Manager

WARRANTY

The field observations and research reported herein are considered sufficient in detail and scope to form a reasonable basis for a general geological recharge assessment of this site. PSI warrants that the findings and conclusions contained herein have been promulgated in accordance with generally accepted geologic methods, only for the site described in this report. These methods have been developed to provide the client with information regarding apparent indications of existing or potential conditions relating to the subject site and are necessarily limited to the conditions observed at the time of the site visit and research. This report is also limited to the information available at the time it was prepared. In the event additional information is provided to PSI following the report, it will be forwarded to the client in the form received for evaluation by the client. There is a possibility that conditions may exist which could not be identified within the scope of the assessment or which were not apparent during the site visit. PSI believes that the information obtained from others during the review of public information is reliable; however, PSI cannot warrant or guarantee that the information provided by others is complete or accurate.

This report has been prepared for the exclusive use of KFW Engineers & Surveying for the site discussed herein. Reproductions of this report cannot be made without the expressed approval of KFW Engineers & Surveying. The general terms and conditions under which this assessment was prepared apply solely to KFW Engineers & Surveying. No other warranties are implied or expressed.

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: John Langan Telephone: 210/342-9377

Date: 1/12/16 Fax: 210/342-9401

Representing: PSI TBPG No. 50128 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:

Regulated Entity Name: Brandt Ranch

Project Information

1. Date(s) Geologic Assessment was performed: 2/23-4/4/12
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table.** Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Comfort-Rock outcrop complex, undulating (CrD)	A	1-2
Medlin-Eckrant ass'n, undulating (MEC)	A	1-2
Real gravelly loam, 1 to 8 percent slopes (RaD)	A	1-2
Rumple-Comfort ass'n, undulating (RUD)	A	1-2

** 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" = 300'
   Site Geologic Map Scale: 1" = 300'
   Site Soils Map Scale (if more than 1 soil type): 1" = 300'

9. Method of collecting positional data:

11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

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

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

13. ☐ The Recharge Zone boundary is shown and labeled, if appropriate.

14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) 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.

STRATIGRAPHIC COLUMN

Brandt Ranch
Approximate 438-Acre Tract
State Highway 46 Near the Intersection With FM 2722
Comal County, Texas

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Austin Chalk Formation	350' – 580'	Chalk and marl, mostly microgranular, ledge forming, local bentonite seams, scattered pyrite nodules, some beds show large scale cross-stratification, can be highly fossiliferous
Eagle Ford Shale	30' – 75'	Shale with some siltstone, limestone and fine sand
Buda Limestone Formation	60' – 100'	Fine grained, bioclastic, hard, massive, poorly bedded to nodular, abundant pelecypods
Del Rio Formation	60' – 100'	Calcareous and gypsiferous clay, pyrite common, blocky, Exogyra arietina common
Person Formation	170' - 270'	Limestones and dolomites, extensive porosity development in "honeycomb sections, interbedded with massive recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations.
Kainer Formation	260' - 310'	Hard, miliolid limestones, overlying calcified dolomites and dolomite. Leached evaporitic "Kirschberg" zone of very porous and permeable collapse breccia formed by the dissolution of gypsum. Overlies the basal nodular (Walnut) bed.

SOILS NARRATIVE

According to the Soil Survey for Comal County, Texas, the subject property is underlain by the following soils:

- Comfort-Rock outcrop complex, undulating (CrD) – shallow, well drained, moderate permeability, very low available water capacity, moderate hazard of water erosion, chalk fragments
- Medlin-Eckrant association, undulating (MEC) – very shallow, calcareous, moderately alkaline, well drained, rapid surface runoff, moderately to very slow permeability, very low to high water holding capacity, slight to severe hazard of water erosion, overlies limestone
- Real gravelly loam, 1 to 8 percent slopes (RaD) – shallow, well drained, rapid surface runoff, extremely stony, moderate permeability, very low available water capacity, slight hazard of water erosion, overlies platy chalk
- Rumple-Comfort association, undulating (RUD) -- shallow to moderately deep, very stony, noncalcareous, well drained, medium surface runoff, moderately slow to slow permeability, very low available water capacity, moderate hazard of water erosion, overlies limestone

SITE GEOLOGIC NARRATIVE

Stratigraphy and Structure

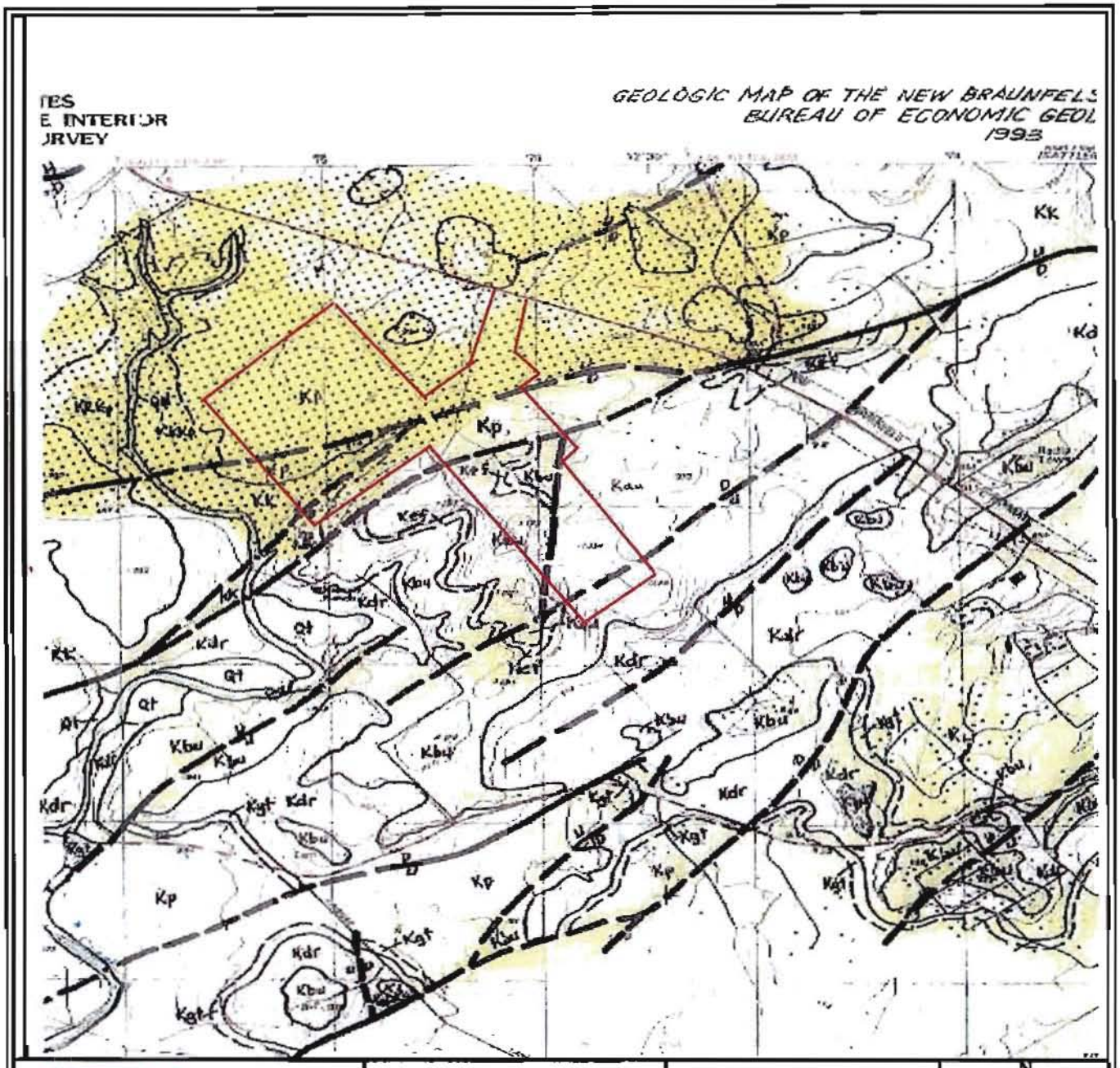
The underlying stratigraphy consists of the Lower Cretaceous Person and Kainer Formations of the Edwards Group in the northern areas of the site while the remainder of the site is underlain by the Upper Cretaceous Austin Chalk, Eagle Ford Shale, Buda Limestone, and Del Rio Clay Formations. The diagnostic fossil, *Exogyra arietina* was found in the exposed areas of the Del Rio Clay. A series of northeast trending faults crosses the middle portions of the site. The faults appear to be downthrown to the southeast with the Upper Cretaceous Formations being present in distinct fault blocks. Bedrock outcrops at the site are relatively sparse with most being associated with the Person and Kainer areas along with a few Buda and Austin Chalk bedrock exposures. Limestone boulder float was common in the Person and Kainer areas. Chert gravel covered most of the site as a remnant of Quaternary fluvial terrace deposits which have been previously removed by erosion leaving a veneer of gravel.

SITE INVESTIGATION

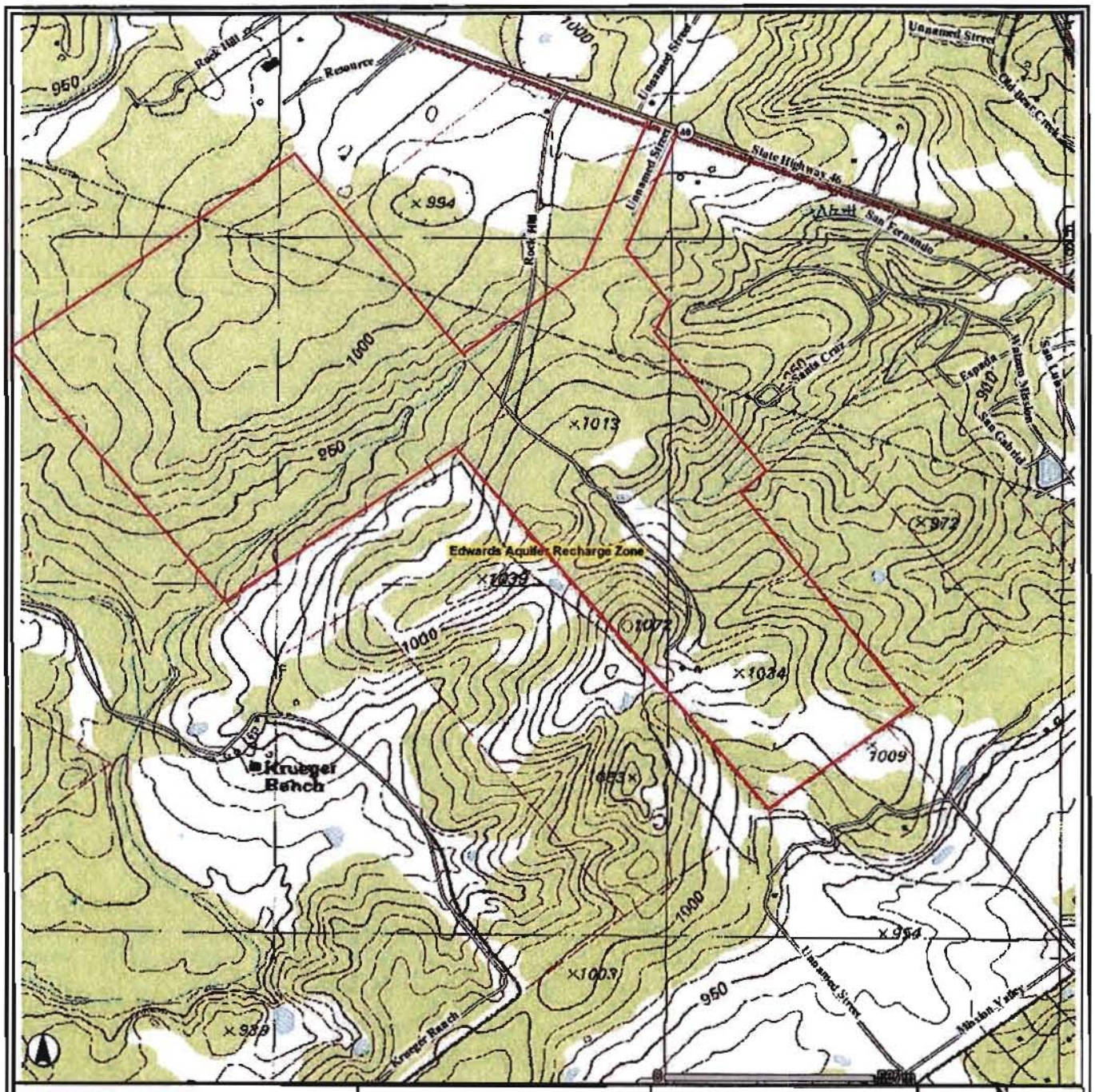
The site investigation was performed by systematically traversing the subject tract, and mapping any fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

SUMMARY

Relatively few natural recharge features were identified including a sinkhole, several vuggy and fractured rock zones, and inferred fault traces. One manmade feature was observed, a small pond. Only the sinkhole is considered sensitive. The manmade feature was the only recharge feature observed in the areas of the post-Edwards Group formations. If caves, sinkholes, solution cavities, or manmade features are encountered during future clearing/construction activities, please contact our office for additional assistance.



psi Information To Build On Engineering • Consulting • Testing PSI, Inc. 3 Burwood Lane San Antonio, Texas 78216	**PROJECT NAME:** Brandt Ranch-Approx 438-Acre Tract Highway 46 Comal County, Texas PROJECT NO.:435-2321	**Geologic Map** **1993** **Bureau of Economic Geology**	N



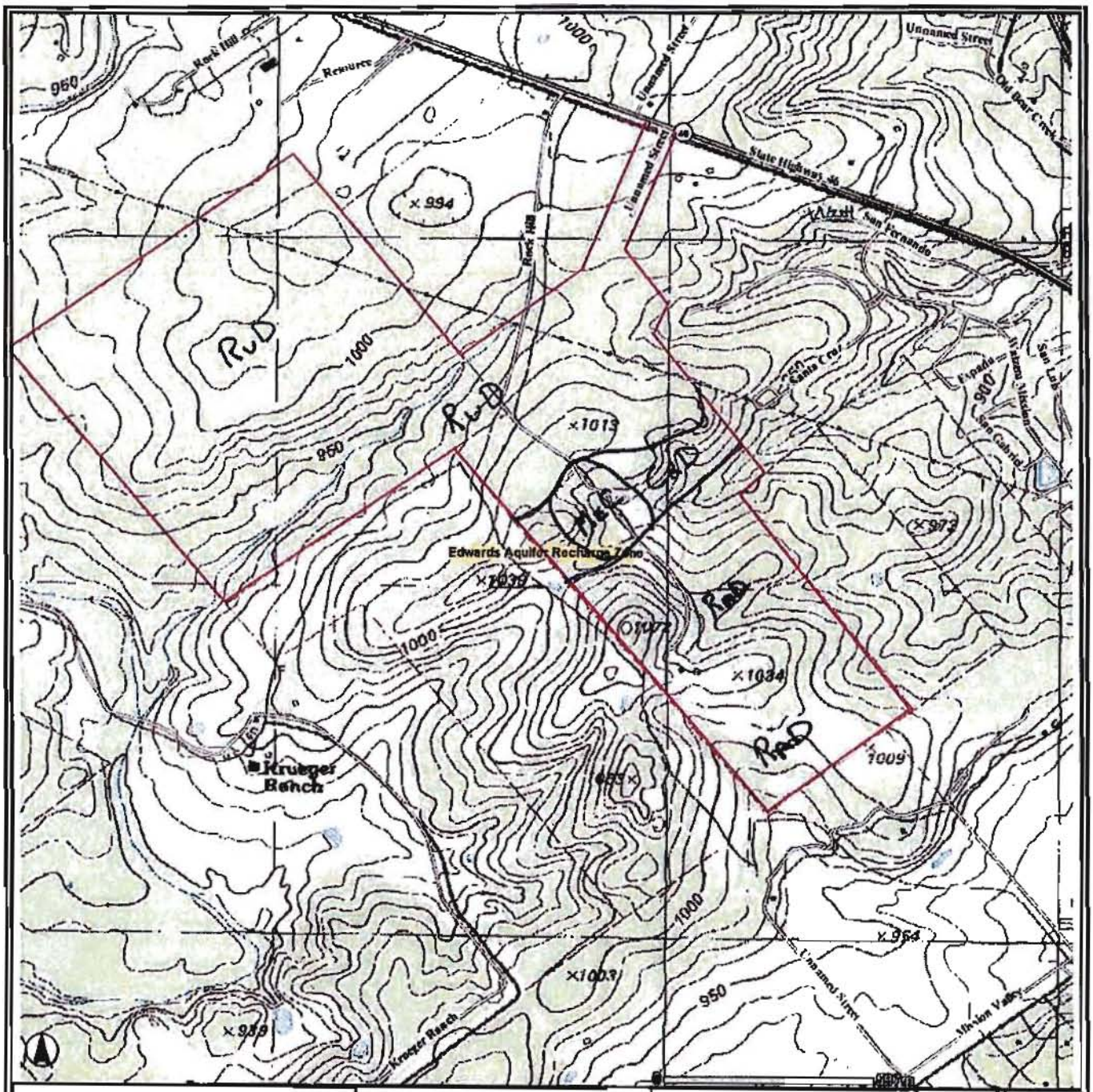
PSI Information To Build On
Engineering • Consulting • Testing
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Brandt Ranch-Approx 438-Acre Tract
Highway 46
Comal County, Texas

PROJECT NO.:435-2321

USGS "New Braunfels West, Texas" Topographic Maps/Edwards Aquifer Recharge Zone Map

N



psi Information To Build On
Engineering • Consulting • Testing
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Approximate 438-Acre Tract
Highway 46
Comal County, Texas

PROJECT NO.:435-955

SOILS MAP

USGS "New Braunfels West, Texas" Topographic Map

N

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Brandt Ranch-Approx 438-Ac Tract Highway 46

LOCATION			FEATURE CHARACTERISTICS													EVALUATION		PHYSICAL 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	DIMENSIONS (FEET)			TREND (DEGREES)	ROCK CODE	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	<1.6	≥1.6	
S-1	29-44-9.5	98-12-51.5	O	5	Kep	120	60	2			3		F	10	15	X		X		Hillside
S-2	29-44-12.4	98-12-55.3	O	5	Kep	150	150	4			3		F	10	15	X		X		Hillside
S-4	29-44-22.2	98-13-40.9	O	5	Kep	80	40	2			2		F	8	13	X		X		Hillside
S-5	29-43-53.1	98-13-31.4	SH	20	Kek	50	50	5					F	20	40		X		X	Drainage
S-6	29-43-57.1	98-13-26.7	F	20	Kek	>5000	20	>200						15	35	X			X	Drainage
S-7	29-44-12.2	98-13-45.3	O	5	Kep	100	75	2			2		F	10	15	X		X		Hillside
S-8	29-43-58.4	98-13-56.3	MB/pond	30	Kbu	110	75	7					F	3	33	X			X	Hillside

* DATUM:_____

2A TYP	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY

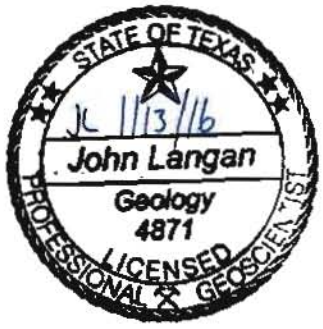
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here 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: February 24, 2012

Sheet ___1___ of ___1___



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

1. View northeast of adjacent property from the southeast corner of Property 72197 (173-acre portion) of the 438-acre site on Highway 46 in Comal County, Texas.

2. View northwest along the northeast property line of Property 72197 (173-acre portion) from the southeast corner.

3. View southwest along the southeast property line of Property 72197 (173-acre portion) from the southeast corner.

4. View south of adjacent undeveloped land from the southeast corner of Property 72197 (173-acre portion) from the southeast corner.

5. View of burial headstone with a date of 1900 near the southeast corner of Property 72197 (173-acre portion site).

6. View north-northeast of the site interior from the southwest corner of Property #71297 (173-acre portion) of the 438-acre site.

7. View northeast along the southeast property line of Property #71297 (173-acre portion) of the 438-acre site.

8. View south of adjacent undeveloped land from the southwest corner of Property #71297 (173-acre portion) of the 438-acre site.

9. View of debris and discarded materials near the old residential structure on the west side of Property #72197, located at 29-43-42.8; 98-12-5.

10. View of fairly new water well pump at the residence on the west side of Property #72197.

11. View of large amounts of metal, glass and plastic refuse & debris at the residence on the west side of Property # 72197. A second site visit indicated most of this material had been removed.

12. Another view of refuse and debris at the residence, the metal shed was full of this material. A second site visit indicated most of this material had been removed.

13. View of empty drums and fallen insulation in the barn near the residence on the west side of Property # 72197.

14. View southeast from the south-central portion of Property # 72197 showing thick soil with no outcrops, as this area is mapped as Upper Cretaceous Austin Chalk (Kau).

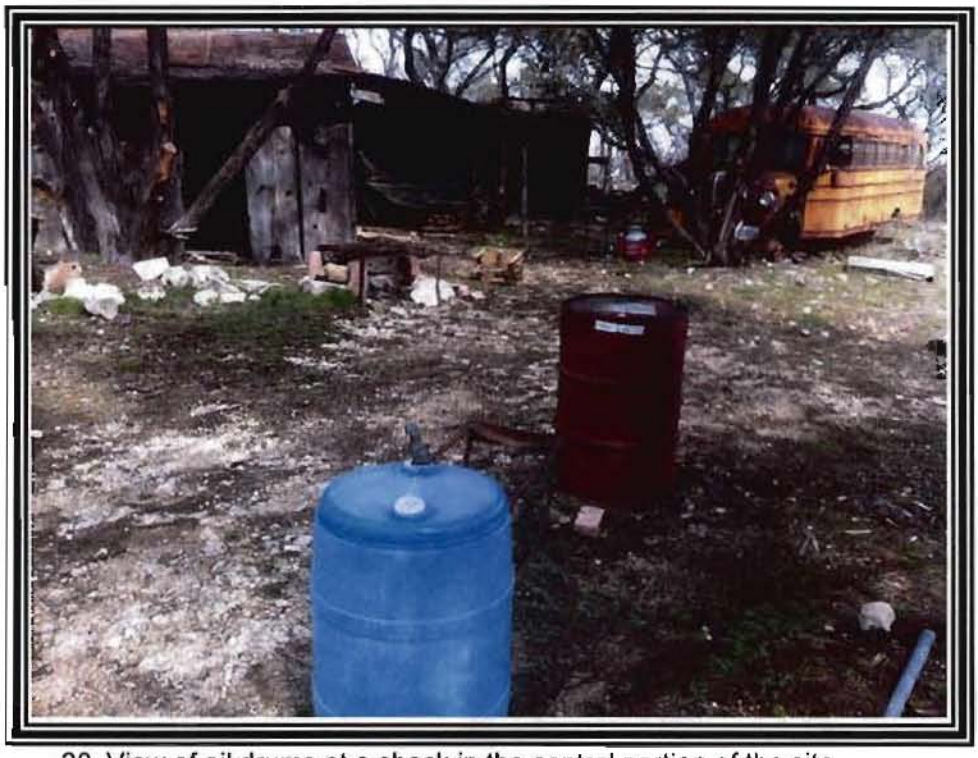
15. View northwest from the same location as Photograph 14.

16. View southeast along the southwest property line of Property # 72197, at the west corner with Property # 72681.

17. View east of the site interior from the west corner of Properties 72197 and 72681.

18. View southwest along the south-southeaster property line of No. 4; Property # 72681.

19. View north of Property 3 and 4 (Nos. 81045 and 72681, respectively), from the west corner of Properties 4 and 5.



20. View of oil drums at a shack in the central portion of the site.

21. View northeast of adjacent property from the north corner of Property 3, (81045 a 163-acre portion) of the 438-acre site on Highway 46 in Comal County, Texas.

22. View northwest from the north corner of Property 3, (81045 a 163-acre portion).

23. View southwest along the northeast property line of Property 3, (81045 a 163-acre portion) from the north corner.

24. View south of the site interior of Property 3 (81045) from the north corner.

25. View of sinkhole located near the southwest corner of Property 4 (72681) at 29-43-53.1; 98-13-31.4, in the Lower Cretaceous Edwards Kainer Fm. (Kek).

26. View south of adjacent property from the southwest corner of Property 4 (72681).

27. View northeast along the southeast property line of Property #4 72681 (51.65-acre portion) of the 438-acre site.

28. View north of the site interior from the southwest corner of Property 4.

29. View north-northwest along the west property line of Property 4, from the southwest corner.

30. View of ponded water in the north-central portion of the site, in Property 2 (72519, a 24.8-acre portion).

31. View north of adjacent undeveloped land from the northwest corner of Property 3 (81045, 163-acre portion of the 438-acre site.

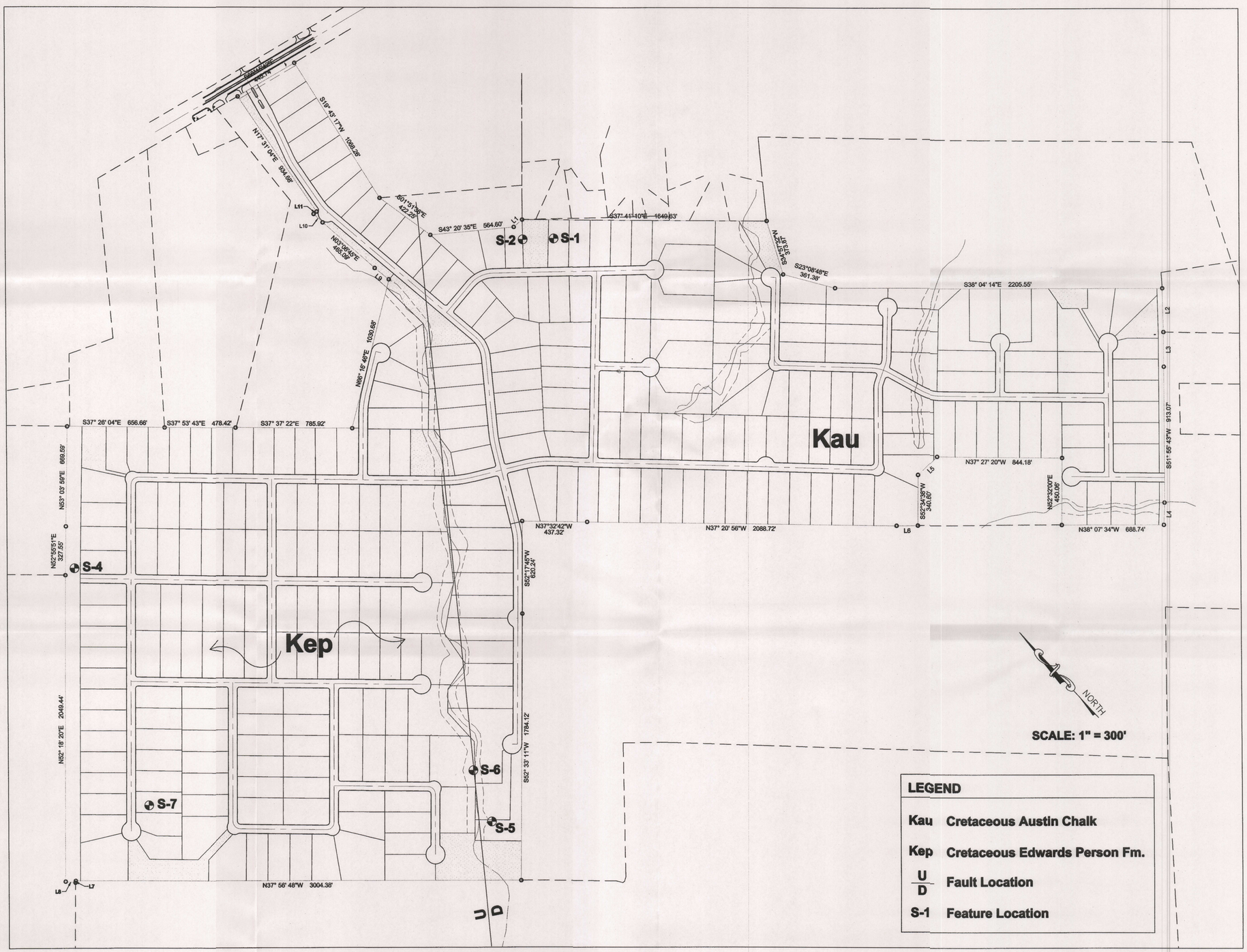
32. View northeast along the northwest property line of Property #3 81045 (163-acre portion) of the 438-acre site.

33. View of outcrop feature S-7, located at 29-44-12.2; 98-13-45.3, in the northwestern portion of Property 3.

34. View of Eagle Ford Shale (Kef) located on the eastern portion of Property 5.

35. View of outcrop feature S-4, located at 29-44-22.2; 98-13-40.9, on the northwestern property line of Property 4.

36. View southeast along the southwest property line from the northwest corner of Property 3.



SCALE: 1" = 300'

LEGEND	
Kau	Cretaceous Austin Chalk
Kep	Cretaceous Edwards Person Fm.
U / D	Fault Location
S-1	Feature Location

PSI Information To Build On
Engineering • Consulting • Testing
3 BURWOOD LANE
SAN ANTONIO, TEXAS 78216

BRANDT RANCH

COMAL COUNTY

STATE OF TEXAS
John Langan
Geology
4871
LICENSED PROFESSIONAL GEOSCIENTIST

GEOLOGICAL ASSESSMENT

DATE:	07.01.15
PROJECT #:	0435-2321
DWG. NAME:	2015-035

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Blaine Lopez, P.E.

Date: 10/15/15

Signature of Customer/Agent:

Regulated Entity Name: Brandt Ranch

Regulated Entity Information

1. The type of project is:

   ☒ Residential: Number of Lots:306
   ☒ Residential: Number of Living Unit Equivalents:306
   ☐ Commercial
   ☐ Industrial
   ☐ Other:_____

2. Total site acreage (size of property):423.76 Acres

3. Estimated projected population:918 (= 306 x 3)

4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	2,152,000	÷ 43,560 =	49.40
Parking	367,000	÷ 43,560 =	8.43
Other paved surfaces	1,130,752	÷ 43,560 =	25.96
Total Impervious Cover	3,649,752	÷ 43,560 =	83.79

Total Impervious Cover 83.79 ÷ **Total Acreage** 423.76 **X 100 =** 19.77**% Impervious Cover**

5. ☒ **Attachment A - Factors Affecting Surface Water Quality.** A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

6. ☒ Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

☐ TXDOT road project.
☐ County road or roads built to county specifications.
☐ City thoroughfare or roads to be dedicated to a municipality.
☐ Street or road providing access to private driveways.

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

☐ Concrete
☐ Asphaltic concrete pavement
☐ Other: _____

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

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

10. Length of pavement area: _____ feet.

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

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

☐ A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

__X__% Domestic	91,800Gallons/day
_____% Industrial	_____Gallons/day
_____% Commingled	_____Gallons/day

TOTAL gallons/day 91,800 (306 EDU x 300 gpd/EDU)

15. Wastewater will be disposed of by:

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

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

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

☐ Sewage Collection System (Sewer Lines):

☐ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.

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

☐ The SCS was previously submitted on_____.

☐ The SCS was submitted with this application.

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

☐ The sewage collection system will convey the wastewater to the _____ (name) Treatment Plant. The treatment facility is:

☐ Existing.
☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 300'.

18. 100-year floodplain boundaries:

☐ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☒ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA FIRM MAP NUMBER 48091C0430F DATE-SEPTEMBER 2, 2009.

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

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

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

☐ There are __ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

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

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

☒ All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment.** A request and justification for an exception to a portion of the Geologic Assessment is attached.

22. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

23. ☒ Areas of soil disturbance and areas which will not be disturbed.

24. ☒ Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.

25. ☒ Locations where soil stabilization practices are expected to occur.

26. ☐ Surface waters (including wetlands).

    ☒ N/A

27. ☒ Locations where stormwater discharges to surface water or sensitive features are to occur.

    ☐ There will be no discharges to surface water or sensitive features.

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

30. ☒ Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

FACTORS AFFECTING WATER QUALITY

Materials that are anticipated to be used on site that could be a potential source of contamination include the following:

During Construction:

1. Concrete and Masonry Materials
2. Wood, plastic, and metal Materials
3. Tar and hydrocarbons from paving operations
4. Oil, Grease, fuel, and hydraulic fluid from construction equipment and vehicle drippings
5. Fertilizers, Herbicides, and Pesticides
6. Cleaning solutions and detergents
7. Miscellaneous construction trash and debris
8. Soil erosion and sedimentation due to construction activity

Ultimate Use:

1. Pollutants generated from vehicles utilizing the roadways
2. Fertilizers, Herbicides, and pesticides used to maintain landscaping and lawns
3. Miscellaneous trash and debris generated from the public
4. Dumping of Hazardous Materials into the storm drainage system by the general public

(This is not intended to be an all inclusive list)

All practical management practices will be used to reduce the risk of spills and other exposure of any contaminant to surface or groundwater.

VOLUME AND CHARACTER OF STORMWATER

The proposed Brandt Ranch Subdivision consists of 423.76 acres. The existing topography contains a ridgeline that divides drainage into the northeast and southwest with grades ranging from 1% to 20%. The portion of the site draining northeast ultimately drains into Blieders Creek. The portion of the site draining southwest ultimately drains into Dry Comal Creek. Upgradient drainage is intercepted and directed to existing natural lows. The site consists of medium dense grass and moderate tree canopy cover. The existing soils on the site consist of Comfort-Rock outcrop complex, undulating (CrD), Medlin-Eckrant, undulating (MEC), Real Gravel Loam, 1 to 8 percent slopes (RaD), and Rumple-Comfort, undulating (RUD). The pre-development runoff coefficient for the site is 0.38 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2. The existing flow patterns drain naturally into eight (8) defined lows located throughout the site. The pre-development runoff values for the 25-yr events for the site are shown in the drainage area map provided with form TCEQ-0602, Attachment G.

The proposed Brandt Ranch site will have a total impervious cover of 83.79 acres or 19.77% and will consist of structures, concrete driveways, concrete flush curbs, and asphalt pavement. The post-development runoff composite coefficient for this site is 0.50 per the City of New Braunfels Drainage and Erosion Control Manual Section 5.3.2 Table 5-2. The site has been divided into nine (9) on-site drainage areas which will maintain the existing flow patterns throughout the site. The post-development runoff values for the 25-yr storm events for the site are shown in the drainage area map provided with form TCEQ-0602, Attachment G. The rainfall intensities used to calculate storm water runoff produced by the site were obtained from the City of New Braunfels Drainage and Erosion Control Manual Section 4.2 Table 4-1.

Permanent BMP's are not required for this development since the overall impervious cover is less than 20%. All future site improvements will utilize existing drainage patters to ensure that proposed development will not produce a significant adverse impact to other properties, habitable structures, or drainage systems downstream.

SUITABILITY LETTER FROM AUTHORIZED AGENT

Comal County

OFFICE OF COMAL COUNTY ENGINEER

October 15, 2015

Mr. Omar Espinosa, E.I.T.
KFW Engineers & Surveying
14603 Huebner Rd., Bldg. 40
San Antonio, TX 78230

Re: Brandt Ranch On-Site Sewage Facility Suitability Letter, within Comal County, Texas

Dear Mr. Espinosa:

In accordance with TAC §213.5(b)(4)(F)(ii), Comal County has found that the entire referenced site (except for areas listed below) is suitable for the use of private sewage facilities and will meet the special requirements for on-site sewage facilities located on the Edwards Aquifer recharge zone as specified in TAC §285.40-42 based on the following information submitted to our office on October 15, 2015:

- The Geologic Assessment, prepared by Professional Service Industries, Inc.
- The Water Pollution Abatement Plan, prepared by KFW Engineers & Surveying

Areas that are not Suitable

The Geologic Assessment identified 1 recharge feature as sensitive. Below is a list of said sensitive feature:

Feature ID	Latitude	Longitude
S-5	29° 43'57.1"	98° 13'31.4"

In accordance with TAC §285.91, Table X, Minimum Required Separation Distances for soil absorption systems, unlined ET beds, surface application (edge of spray area), and drip irrigation disposal systems are not suitable within 150' of these sensitive features. Furthermore, tanks, lined ET beds and sewer pipe with watertight joints are not allowed within 50' of these sensitive features.

Finally, according to TAC §285.42(a), if any recharge feature, not listed above, is discovered during construction of an OSSF, all regulated activities near the feature shall be suspended immediately. The owner shall immediately notify the TCEQ San Antonio office of the discovery of the feature. All activities regulated under TAC §213 shall not proceed near the feature until Comal County, in conjunction with the TCEQ San Antonio office, has reviewed and approved a plan proposed to protect

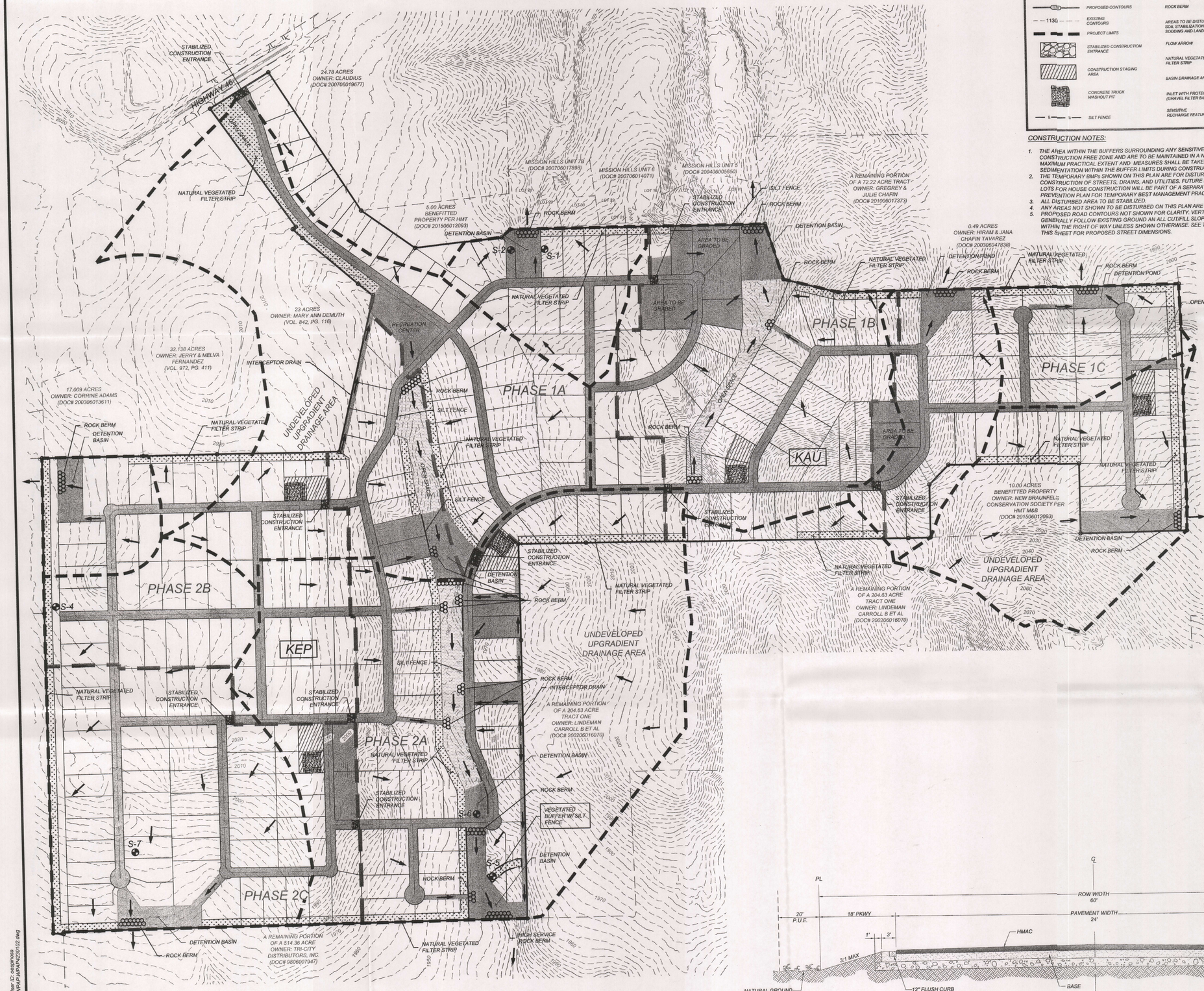
the feature, the structural integrity of the OSSF, and the water quality of the aquifer. The plan shall be sealed, signed, and dated by a professional engineer.

If you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

Robert Boyd, P.E.
Comal County Assistant Engineer

cc: Scott Haag, Comal County Commissioner Precinct No. 2

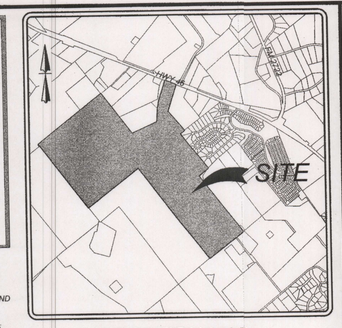


LEGEND

- PROPOSED CONTOURS
- EXISTING CONTOURS
- PROJECT LIMITS
- STABILIZED CONSTRUCTION ENTRANCE
- CONSTRUCTION STAGING AREA
- CONCRETE TRUCK WASHOUT PIT
- SILT FENCE
- ROCK BERM
- AREAS TO BE DISTURBED AND SOIL STABILIZATION WITH SODDING AND LANDSCAPING
- FLOW ARROW
- NATURAL VEGETATED FILTER STRIP
- BASIN DRAINAGE AREAS
- INLET WITH PROTECTION (GRAVEL FILTER BAGS)
- SENSITIVE RECHARGE FEATURE
- S-3

CONSTRUCTION NOTES:

1. THE AREA WITHIN THE BUFFERS SURROUNDING ANY SENSITIVE FEATURE SHALL BE A CONSTRUCTION FREE ZONE AND ARE TO BE MAINTAINED IN A NATURAL STATE TO THE MAXIMUM PRACTICAL EXTENT AND MEASURES SHALL BE TAKEN TO MINIMIZE EROSION AND SEDIMENTATION WITHIN THE BUFFER LIMITS DURING CONSTRUCTION.
2. THE TEMPORARY BMPs SHOWN ON THIS PLAN ARE FOR DISTURBANCE REQUIRED FOR CONSTRUCTION OF STREETS, DRAINS, AND UTILITIES. FUTURE DISTURBANCE WITHIN THE LOTS FOR HOUSE CONSTRUCTION WILL BE PART OF A SEPARATE STORMWATER POLLUTION PREVENTION PLAN FOR TEMPORARY BEST MANAGEMENT PRACTICES.
3. ALL DISTURBED AREA TO BE STABILIZED.
4. ANY AREAS NOT SHOWN TO BE DISTURBED ON THIS PLAN ARE TO REMAIN UNDISTURBED.
5. PROPOSED ROAD CONTOURS NOT SHOWN FOR CLARITY. VERTICAL ROAD ALIGNMENT WILL GENERALLY FOLLOW EXISTING GROUND AN ALL CUT/FILL SLOPES WILL BE CONTAINED WITHIN THE RIGHT OF WAY UNLESS SHOWN OTHERWISE. SEE TYPICAL STREET SECTION ON THIS SHEET FOR PROPOSED STREET DIMENSIONS.



LOCATION MAP
NOT-TO-SCALE

SCALE : 1"=300'

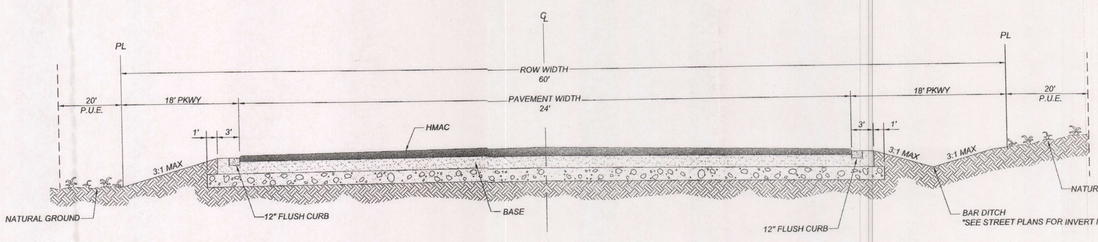
0' 300' 900' 600'

TCEQ-0592 (Rev. 3/15/07)
Texas Commission on Environmental Quality
Water Pollution Abatement Plan
General Construction Notes

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.
2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Water Pollution Abatement Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.
3. If any sensitive feature is discovered during construction, all regulated activities near the sensitive feature must be suspended immediately. The appropriate TCEQ regional office must be immediately notified of any sensitive features encountered during construction. The regulated activities near the sensitive feature may not proceed until the TCEQ has reviewed and approved the methods proposed to protect the sensitive feature and the Edwards Aquifer from any potentially adverse impacts to water quality.
4. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
5. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the temporary storm water section of the approved Edwards Aquifer Protection Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.
6. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
7. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake must be provided that can indicate when the sediment occupies 50% of the basin volume.
8. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).
9. All spoils (excavated material) generated from the project site must be stored on-site with proper E&S controls. For storage or disposal of spoils at another site on the Edwards Aquifer Recharge Zone, the owner of the site must receive approval of a water pollution abatement plan for the placement of fill material or mass grading prior to the placement of spoils at the other site.
10. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
11. The following records shall be maintained and made available to the TCEQ upon request: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
12. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:
    A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
    B. any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
    C. any development of land previously identified as undeveloped in the original water pollution abatement plan.

Austin Regional Office
2800 S. IH 35, Suite 100
Austin, Texas 78704-5712
Phone(512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-4480
Phone(210) 490-3096
Fax (210) 545-4329



TYPICAL 60' R.O.W. STREET SECTION
(NOT TO SCALE)

KFW ENGINEERS + SURVEYING
14603 Huebner Rd, Bldg 40, San Antonio, TX 78230
Phone #: (210) 979-8444 Fax #: (210) 979-8441
TBPE Firm #: 9513 - TBPLS Firm #: 10122300

ISSUE DATE

REVISIONS

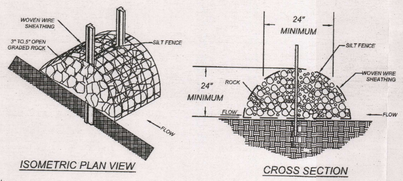
STATE OF TEXAS
BLAINE P. LOPEZ
92685
LICENSED PROFESSIONAL ENGINEER
12/16/15

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN

JOB NO. 423-01-02
DATE: MAY 2015
DRAWN: OE CHECKED: BL

SHEET NUMBER:
EX-1.0

Date: Dec 11, 2015, 11:30am User ID: oespinosa
File: P:\423\01\02\Design\Civil\WPAP\WPAP423t102.dwg



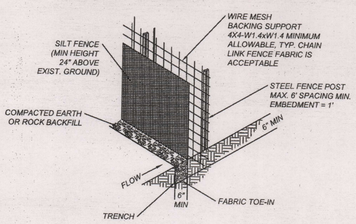
ISOMETRIC PLAN VIEW CROSS SECTION

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140. Rebar (either #5 or #6) may also be used to anchor the berm.
(3) Woven wire backing to support this fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.
(4) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch. and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(5) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:
(1) Lay out the wovan wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1-inch openings.
(2) Install the silt fence along the center of the proposed berm placement, as with a normal silt fence described in Section 2.4.3.
(3) Place the rock along the sheathing on both sides of the silt fence as shown in the diagram (figure 1-29), to a height not less than 24 inches. Clean, open graded 3- 5" diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rock may be used.
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.
(5) The high service rock berm should be removed when the site is revegetated or otherwise stabilized or it may remain in place as a permanent BMP if drainage is adequate.

Inspection and Maintenance Guidelines:
(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made on rock berm.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt of in an approved manner.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

HIGH SERVICE ROCK BERM



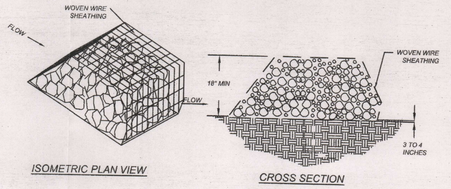
ISOMETRIC PLAN VIEW

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

Installation:
(1) Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1- foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.
(2) Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is ¼ acre/ 00 feet of fence.
(3) The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down- slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.
(4) The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
(5) Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.
(6) Silt fence should be removed when the site is completely stabilized so as not to block or impede stone flow or drainage.

Inspection and Maintenance Guidelines:
(1) Inspect all fencing weekly, and after any rainfall.
(2) Remove sediment when buildup reaches 6 inches.
(3) Replace any torn fabric or install a second line of fencing parallel to the torn section.
(4) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
(5) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

SILT FENCE



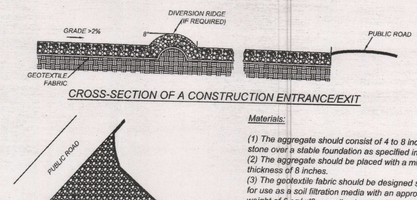
ISOMETRIC PLAN VIEW CROSS SECTION

Materials:
(1) The berm structure should be. secured with a woven wire sheathing having maximum opening of 1 inch and a mitimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:
(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openings.
(2) Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.
(3) Place the rock along the sheathing as shown in the diagram Figure 1-28), to a height not less than 18".
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, airt the berm retains its shape when walked upon.
(5) Berm should be built along the contour at zero percent grade or as near as possible.
(6) The ends of the berm should be tied into existing upslope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the control.

Inspection and Maintenance Guidelines:
(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

ROCK BERM



CROSS-SECTION OF A CONSTRUCTION ENTRANCE/EXIT

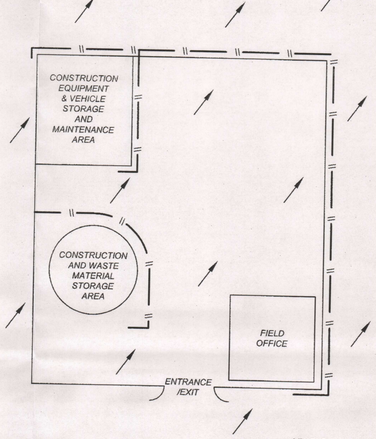
TEMPORARY CONSTRUCTION ENTRANCE/EXIT

Materials:
(1) The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.
(2) The aggregate should be placed with a minimum thickness of 8 inches.
(3) The geotextile fabric should be designed specifically for use as a soil filtration media with an approximate weight of 6 oz/yd2, a mullen burst rating of 140 lb/in2, and an equivalent opening size greater than a number 50 sieve.
(4) If a washing facility is required, a level area with a minimum of 4 inch diameter washed stone or commercial rock should be included in the plans. Divert wastewater to a sediment trap or basin.

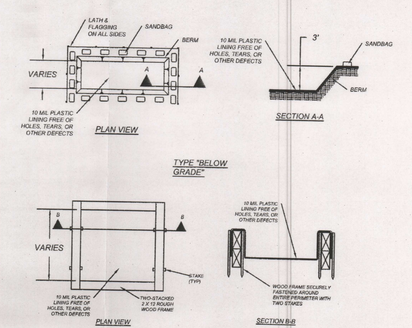
Installation: (North Caroline, 1993)
(1) Avoid curves on public roads and steep slopes. Remove vegetation and other objectionable material from the foundation area. Grade crown foundation for positive drainage.
(2) The minimum width of the entrance/exit should be 12 feet or the full width of exit roadway, whichever is greater.
(3) The construction entrance should be at least 50 feet long.
(4) If the slope toward the road exceeds 2%, construct a ridge, 6 to 8 inches high with 3:1 (H:V) side slopes, across the foundation approximately 15 feet from the entrance to divert runoff away from the public road.
(5) Place geotextile fabric and grade foundation to improve stability, especially where wet conditions are anticipated.
(6) Place stone to dimensions and grade shown on plans. Leave surface smooth and slope for drainage.
(7) Divert all surface runoff and drainage from the stone pad to a sediment trap or basin.
(8) Install pipe under pad as needed to maintain proper public road drainage.

Inspection and Maintenance Guidelines:
(1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment.
(2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
(4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
(5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

STABILIZED CONSTRUCTION ENTRANCE / EXIT



TYPICAL CONSTRUCTION STAGING AREA



GENERAL NOTES:

- DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
- WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
- WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.

CONCRETE TRUCK WASHOUT PIT

KFW
ENGINEERS + SURVEYING
14603 Huebner Rd, Bldg 40, San Antonio, TX 78230
Phone #: (210) 979-8444 • Fax #: (210) 979-8441
TBPE Firm # 4513 • TBPLS Firm # 10122300

ISSUE DATE

REVISIONS

STATE OF TEXAS
BLAINE P. LOPEZ
92685
LICENSED
PROFESSIONAL ENGINEER
10/29/15

BRANDT RANCH
COMAL COUNTY
WATER POLLUTION ABATEMENT PLAN DETAILS

JOB NO. 423-01-02
DATE: MAY 2015
DRAWN: OE CHECKED: BL

SHEET NUMBER:
EX-1.1

Date: Oct 29, 2015, 5:03pm User ID: OESPINOSA
File: P:\423\01\02\Design\Civil\WPAPHP\423101-02.dwg

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: Blaine Lopez, P.E.

Date: 10/15/15

Signature of Customer/Agent:

Regulated Entity Name: Brandt Ranch

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: Tributary to Dry Comal Creek & Tributary to Blieders Creek

Temporary Best Management Practices (TBMPs)

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

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

☒ A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

☒ A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.

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

☒ A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

8. ☒ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

   ☐ **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

   ☒ There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. ☒ **Attachment F - Structural Practices**. A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.

10. ☒ **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

   ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.

   ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.

   ☒ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

   ☐ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

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

11. ☐ **Attachment H - Temporary Sediment Pond(s) Plans and Calculations**. Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

☒ N/A

12. ☒ **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

13. ☒ All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. ☒ If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).

15. ☒ Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.

16. ☒ Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.

19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

20. ☒ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TCEQ Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TCEQ has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.

22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

SPILL RESPONSE ACTIONS

If there is an accidental spill on site, the contractor shall respond with appropriate action. The contractor will be required to contact the owner and in turn the owner will contact the TCEQ in the event of a spill on site. In addition to the following guidance, reference the latest version of TCEQ's Technical Guidance Manual (TGM) RG-348 Section 1.4.16.

General Measures

1. To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
2. Store hazardous materials and wastes in covered containers and protect from vandalism.
3. Place a stockpile of spill cleanup materials where it will be readily accessible.
4. Train employees in spill prevention and cleanup.
5. Designate responsible individuals to oversee and enforce control measures.
6. Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean-up activities.
7. Do not bury or wash spills with water.
8. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
12. Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

1. Clean up leaks and spills immediately.
2. Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
3. Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. Specific spill response procedures are outlined below for each spill category (Minor – Hazardous).

Minor Spills

1. Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
2. Use absorbent materials on small spills rather than hosing down or burying the spill.
3. Absorbent materials should be promptly removed and disposed of properly.
4. Follow the practice below for a minor spill:
   - Contain the spread of the spill.
   - Recover spilled materials.
   - Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

Semi-significant spills still can be controlled by the first responder along with the aid of other personnel such as laborers and the foreman, etc. This response may require the cessation of all other activities.

Spills should be cleaned up immediately:

1. Contain spread of the spill.
2. Notify the project foreman immediately.
3. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

1. Notify the TCEQ by telephone as soon as possible and within 24 hours at (512)339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
3. Notification should first be made by telephone and followed up with a written report.
4. The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
5. Other agencies which may need to be consulted include, but not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

Vehicle and Equipment Maintenance

1. If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately
3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
5. Place drip pans or absorbent materials under paving equipment when not in use.
6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
9. Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
2. Discourage "topping off" of fuel tanks.
3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

POTENTIAL SOURCES OF CONTAMINATION

During Construction:

1. Oil, grease, fuel, and hydraulic fluid contamination from construction equipment and vehicle dripping.
2. Hydrocarbons from paving operations.
3. Miscellaneous trash and litter from construction workers and material wrappings.
4. Construction debris.
5. Silt leaving the site.

Ultimate Use:

1. Pollutants from vehicles utilizing the roadways
2. Stormwater runoff contamination from fertilizers, herbicides, and pesticides used to maintain landscaping and lawns.
3. Dumping of hazardous materials into the storm drain system by the general public.

SEQUENCE OF MAJOR ACTIVITIES

Intended Schedule or Sequence of Major Activities:

1. Mobilization of the contractor's equipment.
2. Installation of temporary BMP's as described in attachment "D" of this section.
3. Site clearing and grubbing activities for streets, drains, detention ponds, and utilities. .
    a. PHASE 1A: 13.38 Acres
    b. PHASE 1B: 15.65 Acres
    c. PHASE 1C: 15.09 Acres
    d. PHASE 2A: 19.30 Acres
    e. PHASE 2B: 10.31 Acres
    f. PHASE 2C: 9.27 Acres
    g. Amenity Center: 2.51 Acres
4. Rough subgrade preparation: earthwork, grading, street and drainage excavation and embankment
    a. PHASE 1A: 10.99 Acres
    b. PHASE 1B: 13.83 Acres
    c. PHASE 1C: 10.30 Acres
    d. PHASE 2A: 15.45 Acres
    e. PHASE 2B: 8.66 Acres
    f. PHASE 2C: 6.91 Acres
    g. Amenity Center: 0 Acres
5. Construction of Detention Ponds
    a. PHASE 1A: 2.39 Acres
    b. PHASE 1B: 1.82 Acres
    c. PHASE 1C: 4.79 Acres
    d. PHASE 2A: 3.22 Acres
    e. PHASE 2B: 1.65 Acres
    f. PHASE 2C: 2.36 Acres
    g. Amenity Center: 0 Acres
6. Trenching and installation of utilities
    a. PHASE 1A: 2.75 Acres
    b. PHASE 1B: 1.44 Acres
    c. PHASE 1C: 1.71 Acres
    d. PHASE 2A: 2.15 Acres
    e. PHASE 2B: 2.16 Acres
    f. PHASE 2C: 1.73 Acres
    g. Amenity Center: 0.75 Acres
7. Final street prep, curbing, and paving activities
    a. PHASE 1A: 5.63 Acres
    b. PHASE 1B: 2.93 Acres
    c. PHASE 1C: 3.58 Acres
    d. PHASE 2A: 4.44 Acres

   e. PHASE 2B: 4.45 Acres
   f. PHASE 2C: 3.56 Acres
   g. Amenity Center: 1.25 Acres
8. Home construction
   a. PHASE 1A: 9.32 Acres
   b. PHASE 1B: 7.71 Acres
   c. PHASE 1C: 7.23 Acres
   d. PHASE 2A: 8.04 Acres
   e. PHASE 2B: 8.36 Acres
   f. PHASE 2C: 8.52 Acres
   g. Amenity Center: 0 Acres
9. Construction of Park
   a. PHASE 1A: 0 Acres
   b. PHASE 1B: 0 Acres
   c. PHASE 1C: 0 Acres
   d. PHASE 2A: 0 Acres
   e. PHASE 2B: 0 Acres
   f. PHASE 2C: 0 Acres
   g. Amenity Center: 2.51 Acres
10. Topsoil, irrigation and landscaping
   a. PHASE 1A: 29 Acres
   b. PHASE 1B: 24 Acres
   c. PHASE 1C: 22.5 Acres
   d. PHASE 2A: 25 Acres
   e. PHASE 2B: 26 Acres
   f. PHASE 2C: 26.5 Acres
   g. Amenity Center: 1.25 Acres
11. Site cleanup and removal of temporary BMP's

TEMPORARY BEST MANAGEMENT PRACTICES AND MEASURES

A: A majority of the upgradient runoff will be intercepted by earthen swales along the property lines and directed to the natural lows and treated within the subdivision. The upgradient drainage area flowing onto the site is undeveloped and vegetation is well established so additional sedimentation is not anticipated to originate from upstream. The selection of the onsite BMP's has taken into account the additional runoff volume from the upgradient area.

B: Temporary BMPs will be installed prior to soil disturbing construction activity. Silt fencing and natural vegetated buffers will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. Rock berms will be placed in the drainage lows where runoff is concentrated. A temporary construction entrance will be placed at the site entry/exit point to reduce tracking onto adjoining streets. A construction staging area will be used onsite to perform all vehicle maintenance and for equipment and material storage. A concrete truck washout pit will be placed on site to provide containment and easier clean up of waste from concrete operations.

Practices may also be implemented on site for interim and permanent stabilization. Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, and other similar measures.

C: Silt fence and vegetated buffer will be used to prevent sediment-laden runoff from entering sensitive features on this site.

D: The flow to the natural sensitive features on this site, to a maximum practical extent, will not be disturbed. No clearing, excavation or grading will occur within the buffer zone of the sensitive feature. If another naturally-occurring sensitive feature is identified during construction all activity will be stopped and the contractor should notify TCEQ.

REQUEST TO TEMPORARILY SEAL A FEATURE

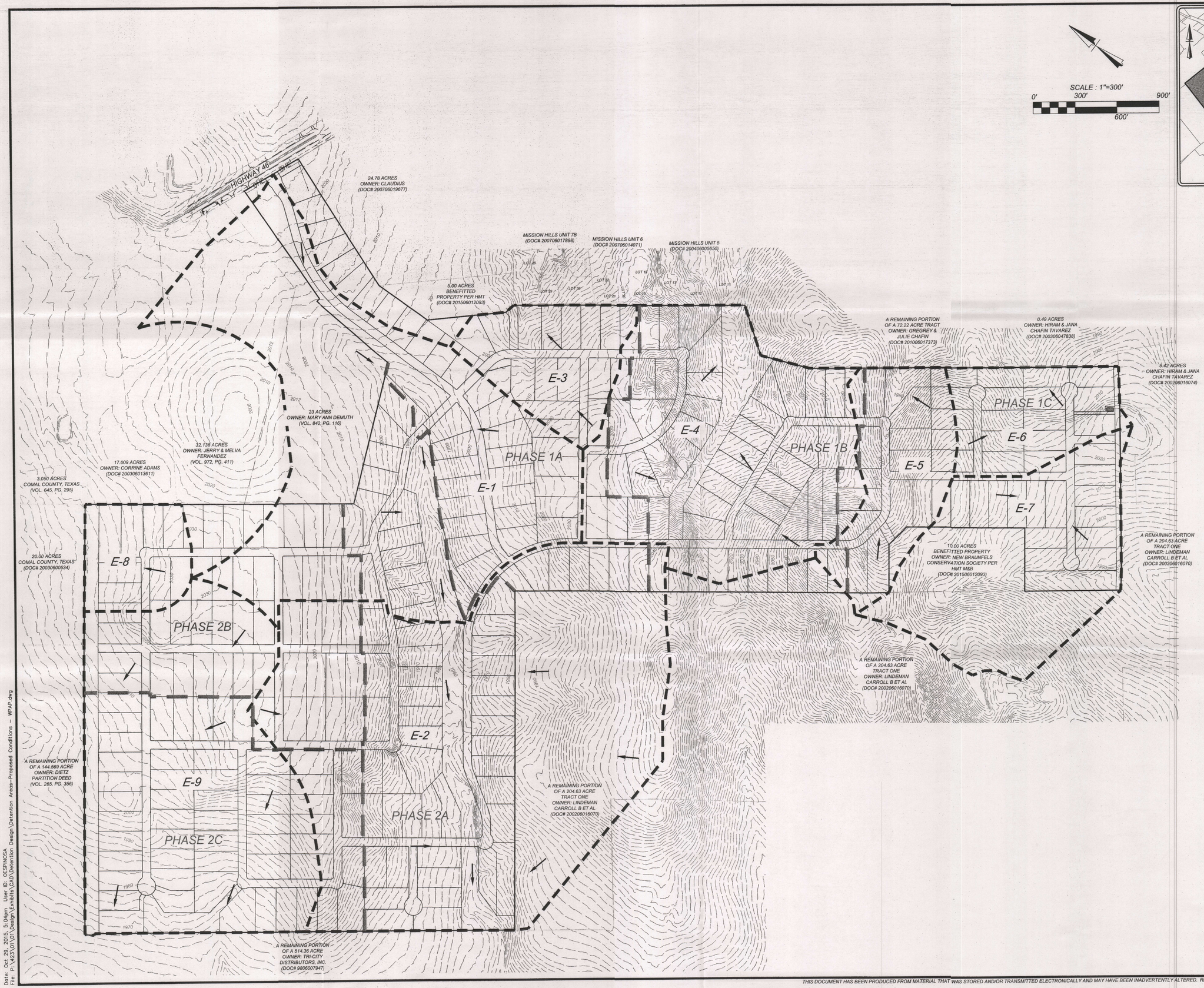
There will be no temporary sealing of any naturally occurring features on site.

STRUCTURAL PRACTICES

Structural BMPs will be used to limit runoff discharge of pollutants from exposed areas of the site. BMPs will be installed prior to soil disturbing construction activity. Natural vegetative buffers and silt fencing will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. A temporary construction entrance will be placed at the site entry/exit point to reduce tracking onto adjoining streets. A construction staging area will be used onsite to perform all vehicle maintenance and for equipment and material storage. A concrete truck washout pit will be placed on site to provide containment and easier clean up of waste from concrete operations. The location of all structural temporary BMP's is shown on the Site Plan, **EX-1.0** and details and specifications are provided in **EX-1.1** which can be found at the end of this report under the appropriate tab.

DRAINAGE AREA MAP

A drainage area map is included with this report as **Attachment G**.



DRAINAGE AREA	(Acres)
E1	19.06
E2	260.07
E3	19.58
E4	69.02
E5	23.44
E6	17.54
E7	46.69
E8	12.65
E9	79.29

KFW ENGINEERS + SURVEYING
14603 Huebner Rd, Bldg 40, San Antonio, TX 78230 • TBPE: F-1386
Phone (210) 979-8444 • Fax: (210) 979-8441 • TBPLS: F-10172500

ISSUE DATE

REVISIONS

BRANDT RANCH PHASE 1A
EXISTING CONDITIONS

JOB NO. 423-01-02
DATE: OCTOBER 2015
DRAWN: JA CHECKED: CL

SHEET NUMBER:

ATT. G

Date: Oct 29, 2015, 5:04pm User ID: OESPINOSA
File: P:\423\01\Design\Exhibits\CAD\Detention Design\Detention Areas-Proposed Conditions - WPAP.dwg

TEMPORARY SEDIMENT POND(S) PLANS AND CALCULATIONS

Temporary sediment basin and/or traps are not proposed; however other temporary BMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.

INSPECTION AND MAINTENANCE FOR BMP'S

MAINTENANCE

All temporary and permanent erosion and sediment control BMPs will be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair of BMPs will be conducted in accordance with manufacturers' specifications.

All temporary erosion and sediment control BMPs will be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment will be removed or stabilized on site. Disturbed soil areas resulting from removal of BMPs or vegetation will be permanently stabilized as soon as possible.

Erosion and sediment controls are designed to prevent soil erosion and sediment migration offsite, to the extent practicable, which may result from construction activity. This design considers local topography, soil type, and rainfall.

Control measures must be installed and maintained according to the manufacturer's specifications. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permitee must replace or modify the control for site situations.

Sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts, and whenever feasible, prior to the next rain event.

The controls must be installed, maintained, and operated in a manner that will limit, to the extent practicable, offsite transport of litter, construction debris, and construction materials.

INSPECTIONS

An inspection will be performed by the qualified personnel, as designated by the permitee, on a weekly basis and after any rainfall event. An inspection and maintenance report shall be made per inspection. An inspection form has been included in this report. Based on the inspection results, the controls shall be corrected before the next scheduled inspection.

A log of inspection results will be maintained on-site and will include the name of the inspector, date, major observations, and necessary corrective measures. Reports of maintenance and inspection activities will be maintained on-site, in conformance with the TPDES permit conditions. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must

contain a certification that the facility or site is in compliance with the WPAP. This report must be signed by the responsible party.

Major observations shall, at a minimum, include the following:

The locations of discharges of sediment or other pollutants from the site;

Locations of BMPs that need to be maintained;

Locations of BMPs that failed to operate as designed or proved inadequate for a particular location;

Location where additional BMP's are needed;

All needed repairs or modifications will be reported to the contractors to permit the timely implementation of required actions. Necessary repairs of modifications will be implemented within seven days of inspection. The WPAP will be modified within seven days to reflect any modifications to measures as a result of inspection.

The WPAP must be amended whenever there is a change in design, construction, operation or maintenance that has a significant effect on the discharge of pollutants to the waters of the United States that was not addressed in the WPAP.

The WPAP must be amended when inspections or investigations by site operations, local, state or federal officials indicate that the WPAP is proving ineffective in eliminating or significantly minimizing pollutants from the construction site or otherwise is not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity.

INSPECTION FORM

Project Name: **Owner (s)/Operator (s):** **Permit Numbers(s):** **Inspection Date:**	*NOT APPLICABLE*	*IN COMPLIANCE*	*NEEDS CORRECTION*	*COMMENTS*
RECORD KEEPING				
SWP3 Current				
NOI and Permit Posted				
BEST MANAGEMENT PRACTICES (BMPs)				
Vegetative Buffers				
Soil Covering(Including mulch and temporary vegetation)				
Outlet Protection				
Sediment Control Basins				
Silt Fence				
Stabilized Entrances/Exits				
Construction Staging Areas				
Inlet Protection				
Gravel Filter Bags				
Vegetated Filter Strip				
Concrete Truck Washout Pit				
Trash Receptacles				
General Site Cleanliness				
Other _____				
Other _____				
Other _____				

MAJOR OBSERVATIONS

_____

_____

_____

CERTIFICATION

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

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

INSPECTOR NAME/SIGNATURE: DATE:

(Inspector must attach a brief summary of qualifications to this report.)

OWNER NAME/SIGNATURE: DATE:

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION

Construction practices shall disturb the minimal amount of existing ground cover as required for land clearing, grading, and construction activity for the shortest amount of time possible to minimize the potential of erosion and sedimentation from the site. Existing vegetation shall be maintained and left in place until it is necessary to disturb for construction activity. For this project the following stabilization practices will be implemented:

1. Hydraulic Mulch and Seeding: Disturbed areas subject to erosion shall be stabilized with hydraulic mulch and/or seeded and watered to provide interim stabilization. For areas that are not to be sodded as per the project landscaping plan, a minimum of 85% vegetative cover will be established to provide permanent stabilization.

2. Sodding and Wood Mulch: As per the project landscaping plan, Sodding and wood mulch will be applied to landscaped areas to provide permanent stabilization prior to project completion.

Records of the following shall be maintained by the permitee in the attached Project Timeline:

a) The dates when major grading activities occur;

b) The dates when construction activities temporarily or permanently cease on a portion of the site;

c) The dates when stabilization measures are initiated.

Stabilization measures must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in the following, must be initiated no more that fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased:

Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.

Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site. In arid areas (areas with an average rainfall of 0-10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical.

PROJECT TIMELINE

DATES WHEN MAJOR GRADING ACTIVITIES OCCUR	
Date	Construction Activity

DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE	
Date	Construction Activity

DATES WHEN STABILIZATION MEASURES ARE INITIATED	
Date	Stabilization Activity

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Blaine Lopez, P.E.

Date: 10/15/15

Signature of Customer/Agent

Regulated Entity Name: Brandt Ranch

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A

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

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

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

☒ N/A

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

   ☒ N/A

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

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

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

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

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

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

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

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

6. ☒ **Attachment B - BMPs for Upgradient Stormwater.**

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.

☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

7. ☒ **Attachment C - BMPs for On-site Stormwater.**

☒ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.

☐ Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.

8. ☒ **Attachment D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

☐ N/A

9. ☒ The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.

☒ The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

☐ **Attachment E - Request to Seal Features.** A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☐ **Attachment F - Construction Plans.** All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

☐ Design calculations (TSS removal calculations)
☐ TCEQ construction notes
☐ All geologic features
☐ All proposed structural BMP(s) plans and specifications

☒ N/A

11. ☐ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan**. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

    ☐ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☐ Signed by the owner or responsible party
    ☐ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    ☐ A discussion of record keeping procedures

    ☒ N/A

12. ☐ **Attachment H - Pilot-Scale Field Testing Plan**. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

13. ☐ **Attachment I -Measures for Minimizing Surface Stream Contamination**. A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

    ☒ N/A

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

    ☒ N/A

20% OR LESS IMPERVIOUS COVER WAIVER

Not applicable.

BMP'S FOR UP-GRADIENT STORMWATER

Please refer to the Drainage Area Map provided with form TCEQ-0602, Attachment G. An interceptor drain will be constructed to channelize upgradient runoff to the natural low. The upgradient drainage area is undeveloped and does not contain impervious cover. These areas were not included in the impervious cover calculations for the site. At the time the upgradient areas are developed they will need to prepare a water pollution abatement plan and implement permanent BMP's to treat the stormwater runoff prior to entering this site.

BMP'S FOR ON-SITE STORMWATER

The site will be used for low density single-family residential development and has less than 20% impervious cover, therefore BMPs are not required.

BMP'S FOR SURFACE STREAMS

There are no existing surface streams located within the site, therefore additional BMP's are not required. Sensitive feature "S-5" will have a permanent buffer zone within the proposed drainage area. Septic spray will not be allowed within the permanent buffer zone. The pre-existing soil structure and vegetation will be used to prevent pollution from stormwater that originates on-site from entering the sensitive feature. Because "S-5" lies within a residential lot, a permanent fence will be constructed around the buffer zone to prevent conventional landscaping and maintain its natural state.

REQUEST TO SEAL A FEATURE

No sensitive features will be requested to be sealed.

CONSTRUCTION PLANS

Not Applicable.

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

The owner is aware of their maintenance obligation and agrees to keep accurate records of the sensitive feature buffer zone. These records are to include the name and address of parties performing the maintenance, dates and duration of maintenance, and any problems encountered with the functioning of the buffer zone.

See the attached Inspection and Maintenance Plan for specific details of this program.

Inspection and Maintenance Plan

The attached Inspection and maintenance plan outlines the procedures necessary to maintain the performance of the Permanent Best Management Practices for this project.

It is the responsibility of the owner to contract with a representative to provide the inspections and maintenance as outlined in the plan for the duration of the project. The owner will maintain this responsibility until it is assumed or transferred to another entity in writing. If the property is leased or sold, the responsibility for the maintenance will be required to be transferred through the lease agreement, binding covenants, closing documents, or other binding legal instrument.

SENSITIVE FEATURE BUFFER ZONES

Sensitive feature buffer zones must be inspected at least once per year. With each inspection, any damage to the barrier of the buffer zone (fence, etc.) must be identified and repaired immediately. Any degradation of the natural vegetation within the buffer zone must be identified and measure should be taken to prevent further degradation.

RECORD KEEPING

A binder containing all of the maintenance records for each type of permanent BMP is to be kept by the owner.

I, the owner, have read and understand the requirements of the attached Inspection and Maintenance Plan for the proposed Permanent Best Management Practices for my project. I acknowledge that I will maintain responsibility for the implementation and execution of the plan until the responsibility is transferred to or assumed by another party in writing through a binding legal instrument.

Owner: RR-1604 Ltd. / Japhet III, LLC. Date: 10.29.15
By: James H. Japhet

PILOT-SCALE FIELD TESTING PLAN

Not Applicable.

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Contamination of surface streams will be kept at a minimum during construction by implementing temporary BMP's such as silt fencing, rock berms and vegetated strips. All disturbed areas will be re-vegetated as a soon as practical. This development will utilize detention ponds to reduce increased stormwater runoff flow to pre-development conditions, therefore flows and velocities will not increase as a result of this development.

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

I **James H. Japhet**,
Print Name

Member,
Title - Owner/President/Other

of **RR-1604 Ltd./ Japhet III, LLC.**,
Corporation/Partnership/Entity Name

have authorized **Blaine Lopez, P.E.**
Print Name of Agent/Engineer

of **KFW Engineers**
Print Name of Firm

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

I also understand that:

1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to $10,000 per day per violation.

2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

5-27-15
Date

THE STATE OF TEXAS §

County of BEXAR §

BEFORE ME, the undersigned authority, on this day personally appeared JAMES JAPHET 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 27th day of May, 2015.

NOTARY PUBLIC

Typed or Printed Name of Notary

SUSAN J. BRAUN
Notary Public, State of Texas
My Commission Expires
October 20, 2017

MY COMMISSION EXPIRES: _____

December 9, 2015

Todd Jones
Water Section Work Leader
TCEQ San Antonio Region
14250 Judson Road
San Antonio, Texas 78233

Re: Development of 423.7 Acres of Land

Dear Mr. Jones:

This letter is being provided for authorization of permitting and performance of regulated activities within the limits of a 423.7 ac tract located on State Highway 46, 0.75 miles northwest from the intersection with FM 2722 more particularly described in Exhibit 1. The tract is divided into two parcels as shown in Exhibit 1. Japhet III, LLC, is the owner the 223.7 acre parcel more particularly described as Tract 1 in Exhibit 2. RR-1604, Ltd., is the owner of the remaining 200.0 acre parcel more particularly described as Tract 2 in the Exhibit 2.

RR-1604, Ltd., authorizes Japhet III, LLC to submit plans and take all actions necessary to develop their respective tracts identified in Exhibit 2, including but not limited to installation of streets, sewer lines, water lines, electric lines, drainage and all other activities necessary for the development of the infrastructure for a residential subdivision.

Japhet III, LLC

By: James H Japhet mgr
James H. Japhet, Manager

RR-1604, Ltd..
By its general partner
Japhet Properties, Inc.

By: James H Japhet Pres
James H. Japhet, President

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Brandt Ranch
Regulated Entity Location: Approx. 0.75 miles NW from the intersection of HWY 46 and FM2722
Name of Customer: RR-1604 Ltd. / Japhet III, LLC.
Contact Person: James H. Japhet Phone: (210) 448-0800
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN _____
Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☒ Comal ☐ Kinney

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

☐ Austin Regional Office
☐ Mailed to: TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☒ San Antonio Regional Office
☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	423.76 Acres	$ 8,000.00
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 10-29-15

Application Fee Schedule

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

1. Reason for Submission (If other is checked please describe in space provided.)

☒ New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)

☐ Renewal (Core Data Form should be submitted with the renewal form) ☐ Other

2. Customer Reference Number (if Issued)	Follow this link to search for CN or RN numbers in Central Registry**	3. Regulated Entity Reference Number (if Issued)
CN		RN

SECTION II: Customer Information

4. General Customer Information | 5. Effective Date for Customer Information Updates (mm/dd/yyyy)

☒ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership

☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John) | If new Customer, enter previous Customer below:

Japhet III, LLC.

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0801506928	32045638189	454054445	

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees ☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated? ☒ Yes ☐ No

14. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check one of the following:

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

15. Mailing Address:	3206 Paesanos Parkway #106							
	City	Shavano Park	State	TX	ZIP	78231	ZIP + 4	1278

16. Country Mailing Information (if outside USA)	17. E-Mail Address (if applicable)
	japhetoffices@gmail.com

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(210) 448 - 0800		( ) -

SECTION III: Regulated Entity Information

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

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

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

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

Brandt Ranch

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4	
24. County	Comal						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	This site is located 0.75 miles northwest from the intersection of HWY 45 and FM 2722				
26. Nearest City			State	Nearest ZIP Code	
New Braunfels			TX	78132	
27. Latitude (N) In Decimal:	29.74		28. Longitude (W) In Decimal:	98.22	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	44	16	98	13	03

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
1521		236115	

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)

Single Family Residential

34. Mailing Address:	3202 Paesanos Parkway #106						
	City	Shavano Park	State	TX	ZIP	78231	ZIP + 4	1278
35. E-Mail Address:	japhetoffices@gmail.com						

36. Telephone Number	37. Extension or Code	38. Fax Number (if applicable)
(210) 448 - 0800		( ) -

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	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name: Blaine Lopez, P.E.			41. Title: Vice President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 979 - 8444	14	( ) -	blopez@kfwengineers.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:	KFW Engineers	Job Title:	Vice President
Name(In Print):	Blaine Lopez	Phone:	(210) 979-8444
Signature:	Blaine Lopez	Date:	11/11/2015

TCEQ Core Data Form

TCEQ Use Only

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

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CN		RN

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4. 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 Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John)	If new Customer, enter previous Customer below:
RR-1604 Ltd.	

7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0015351110	32037859082	753033929	

11. Type of Customer:	☐ Corporation	☐ Individual	Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ State ☐ Other		☐ Sole Proprietorship	☐ Other:

12. Number of Employees	13. Independently Owned and Operated?
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☒ Yes ☐ No

14. Customer Role (Proposed or Actual) - as it relates to the Regulated Entity listed on this form. Please check one of the following:

☐ Owner ☐ Operator ☒ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other:

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

Brandt Ranch

23. Street Address of the Regulated Entity: (No PO Boxes)							
	City		State		ZIP		ZIP + 4	
24. County	Comal						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:	This site is located 0.75 miles northwest from the intersection of HWY 45 and FM 2722				
26. Nearest City			State	Nearest ZIP Code	
New Braunfels			TX	78132	

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Degrees	Minutes	Seconds		Degrees	Minutes	Seconds	
29	44	16		98	13	03	

29. Primary SIC Code (4 digits)	30. Secondary SIC Code (4 digits)	31. Primary NAICS Code (5 or 6 digits)	32. Secondary NAICS Code (5 or 6 digits)
1521		236115	

33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)
Single Family Residential

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	City	Shavano Park	State	TX	ZIP	78231	ZIP + 4	1278
35. E-Mail Address:	japhetoffices@gmail.com							

36. Telephone Number	37. Extension or Code	38. Fax Number (if applicable)
(210) 448 - 0800		( ) -

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	☐ PWS
☐ Sludge	☐ Storm Water	☐ Title V Air	☐ Tires	☐ Used Oil
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name: Blaine Lopez, P.E.			41. Title: Vice President
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 979 - 8444	14	( ) -	blopez@kfwengineers.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:	KFW Engineers	Job Title:	Vice President
Name(*In Print*):	Blaine Lopez	Phone:	(210) 979-8444
Signature:	Blaine Lopez	Date:	11/11/2015

(3)
22+1 +17names
TM

Notice of confidentiality rights: If you are a natural person, you may remove or strike any or all of the following information from any instrument that transfers an interest in real property before it is filed for record in the public records: your Social Security number or your driver's license number.

14051759

SPECIAL WARRANTY DEED

Executed on March 30, 2015, however, to be effective as of March 31, 2015.

Grantor:

C. FREDERICK CLUDIUS, TRUSTEE
(an undivided 14% interest in the 398.983 acre tract and a 100% interest in the 24.717 acre tract) for the benefit of those entitled to the interest of Elvira Rauch Branch, Deceased
4339 W. State Hwy 46
New Braunfels, TX 78132

VANESSA MILLER, TRUSTEE
(an undivided 14% interest in the 398.983 acre tract)
12010 Las Vegas
San Antonio, TX 78233

LONNIE E. CHUNN
(an undivided 12% interest in the 398.983 acre tract)
210 Lee Barton Dr. #308
Austin, TX 78704

ROBERT S. TRUDEAU
(an undivided 12% interest in the 398.983 acre tract)
9601 McAllister Freeway
San Antonio, TX 78216

JERRY FRANK JONES
(an undivided 8% interest in the 398.983 acre tract)
400 W. 15th t., Suite 975
Austin, TX 78701

JIMMY JACOBS HOLDINGS, LLC - SERIES 107
(an undivided 12% interest in the 398.983 acre tract)
4411 South IH 35, Suite 100
Georgetown, TX 78626

C. FREDERICK CLUDIUS, TRUSTEE
(an undivided 28% interest in the 398.983 acre tract) for the benefit of Jennifer Cludius, Jeffrey D. Barganier, Debra Morgan, Karen Barganier, Michael Roy Rauch, San Juanita Michelle Rauch Canizales and Dorothy Rauch Torres
4339 W. State Hwy 46
New Braunfels, TX 78132

Grantee:	JAPHET III, LLC 3602 Paesanos Pkwy. #106 Shavano Park, TX 78231	(an undivided 52.8% interest)
	RR-1604, LTD. and RRHJ, LTD. 3602 Paesanos Pkwy. #106 Shavano Park, TX 78231	(an undivided 47.2% interest)

Consideration: Cash and other valuable consideration.

Property (including any improvements): Being a 423.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michel Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175 and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas, said 423.7 acre tract of land being more particularly described by metes and bounds in ***Exhibit "A"*** attached.

Recitals: Disputes concerning ownership of a 388.65 acre tract of land described in the deed recorded as Document #200206028760, Official Public Records of Comal County, Texas, and a 24.7 acre tract of land described in the deed recorded in Vol. 103, Pages 175-177, Deed Records of Comal County, Texas (together, the "Agnes Brandt Property") were resolved by the Agreed Modified Final Order of Dismissal with Prejudice (the "Judgment") filed on April 12, 2012, in Cause No. 2010-PC-0305, Probate Court of Comal County, Texas, styled *Estate of Agnes Brandt, Deceased*. The Judgment divided the Agnes Brandt Property in accordance with the terms and provisions of a Compromise and Settlement Agreement signed by the parties to the litigation. The Property includes 398.983 acres, more or less, out of the Agnes Brandt Property (the "398.983 acre tract"), as well as all of a 24.717 acre tract conveyed to Elvira Rauch Branch by deed recorded in Vol. 103, Pages 173-174, Deed Records of Comal County, Texas (the "24.717 acre tract'). Those comprising Grantor intend hereby to convey their respective interests in the Property which are shown above.

Benefitted Property:

Tract 1: A 10.00 acre tract of land out of the G. Arnold Survey Number 436, Abstract Number 13, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document #200206028760, Official Public Records of Comal County, Texas, said 10.00 acre tract being more particularly described on ***Exhibit "B"*** attached.

Tract 2: A 5.00 acre tract of land out of the A.M. Holbrook Survey Number 423, Abstract Number 271, Comal County, Texas, and being a portion of a tract of land called 24.700 acres, described in Vol. 103, Page 175, Deed Records of Comal County, Texas, said 5.00 acre tract being more particularly described in ***Exhibit "C"*** attached.

Easement Property: A 7.60 acre tract out of the A.M. Holbrook Survey Number 436, Abstract No. 13, Comal County, Texas, being more particularly described on ***Exhibit "D"*** attached and depicted on ***Exhibit "D-1"*** attached.

Easement Purpose: For providing free and uninterrupted pedestrian and vehicular ingress and egress to and from the Benefitted Property, and portions thereof, to and from State Highway 46.

Reservations from Conveyance: For Grantor and Grantor's heirs, successors and assigns, in common with Grantee and Grantee's successors and assigns, a reservation of an easement over, upon and across the Easement Property for the Easement Purpose, and for the benefit of the Benefitted Property, and portions thereof, together with all and singular the rights and appurtenances thereto, in accordance with the terms and conditions set forth below.

Exceptions to Conveyance and Warranty:

1. Easement to New Braunfels Utilities Board of Trustees dated August 18, 2005, recorded in Document No. 200506030940, Official Public Records of Comal County, Texas, and as shown on survey dated August 19, 2013, prepared by Mark F. Conlan RPLS No. 6342.

2. Right of ingress and egress in favor of others to and from grave sites/cemetery located on the Property.

3. Standby fees and taxes for 2015 and subsequent years, the payment of which Grantee assumes; and subsequent assessments for this and prior years due to change(s) in land usage, ownership, or both, the payment of which Grantee assumes.

4. Rights of lessee under a grazing lease this date assigned to Grantee.

Grantor, for the Consideration and subject to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, grants, sells and conveys to Grantee the Property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee and Grantee's successors and assigns forever. Grantor binds Grantor and Grantor's successors to warrant and forever defend all and singular the Property to Grantee and Grantee's successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the Reservations from Conveyance and the Exceptions to Conveyance and Warranty, when the claim is made by, through or under Grantor, but not otherwise. Grantor's warranty is several and not joint. The warranty of each of those comprising Grantor is limited to that person or entity's interest in the Property set out under the defined term "Grantor". Grantor C. Frederick Cludius, Trustee and Grantor Vanessa Miller, Trustee (i) act only in a fiduciary capacity as trustee and (ii) their respective warranties are limited to that capacity and do not bind them either personally or their heirs, executors, administrators or personal representatives. This conveyance is to those comprising Grantee in the respective undivided interests set out in the defined term "Grantee" above.

The following terms and conditions apply to the easement:

1. Character of Easement. The easement reserved is appurtenant to, and runs with, the Benefitted

Property, and portions thereof, whether or not such easement is referenced in any conveyance of the Benefitted Property, and/or any portion thereof.

2. Duration of Easement. The easement is perpetual provided, however, at such time as ingress and egress to and from Tract 1 of the Benefitted Property and portions thereof, to and from State Highway 46, is provided by streets or roads constructed in accordance with applicable laws, codes and/or ordinances and shown on a recorded plat as a public or private road and "stubbed out" to Tract 1 of the Benefitted Property, the easement will automatically terminate. Furthermore, and without limiting the generality of the foregoing provisions of this paragraph, as platted streets or roads are constructed to the standards of the governing authority with jurisdiction, the portion or portions of the easement that are no longer necessary, because ingress and egress is provided by such platted and constructed streets and roads, will also terminate automatically, the same as if it had been released and extinguished by Grantor and the owners of the Benefitted Property. If requested by Grantee, Grantor will execute releases of such portions of the easement no longer necessary at the request and expense of Grantee. Grantor warrants that it has the exclusive right to grant and/or terminate the easement, as provided herein.

3. Exclusiveness of Easement. The easement is non-exclusive, however, Grantor shall not have the right to convey any further interest in and to the Easement, except with respect to conveyances of the Benefitted Property.

4. Improvement and Maintenance. Improvement and maintenance of the Easement Property will be at the sole expense of Grantee as provided herein. The Easement Property must be maintained in a neat and clean condition, free and clear of obstacles and obstructions until such time as permanent, platted roads have been constructed to governmentally required standards providing access to the Benefitted Property. Grantee's maintenance obligations will cease as to those portions of the Easement Property which are platted as public or private roadways and improved as required by the City of New Braunfels or Comal County, Texas, whichever has jurisdiction. Grantee has the right to construct roads, together with any and all culverts, bridges, drainage ditches, utility facilities and similar improvements and facilities relating thereto over or under all or any portion of the Easement Property, all matters concerning or relating to said road and related facilities, their configuration and the construction thereof to be in accordance with standards and requirements of the City of New Braunfels or Comal County, whichever has jurisdiction over platting. Grantee, and Grantee's successors, assigns and contractors must conduct development of the Property to minimize obstructions and the duration thereof on the Easement Property and to restore Grantor's access (via automobiles) as soon as reasonably possible. Upon the written request of Grantee, the owners of the fee of the Benefitted Property must execute or join in the execution of, easements for water, drainage and/or utility facilities (including cable/data lines) over or under the Easement Property and subdivision plats, without any obligation for cost, provided all utilities are "stubbed out" to each tract of the Benefitted Property, ready for connection at the cost of the owner of each such tract.

5. Grantee's Rights. Grantee and Grantee's successors, assigns and contractors, have the right to use and enjoy the surface of the Easement Property for all purposes which do not interfere with or interrupt the use or enjoyment of the easement.

6. Binding Effect. This instrument is binding upon and inures to the benefit of the parties hereto and their respective heirs, executors, representatives, successors and assigns.

7. Choice of Law. This instrument is subject to and governed by the laws of the State of Texas, excluding any conflicts-of-law rule or principle that might refer the construction or interpretation of this instrument to the laws of another state. Each party hereby submits to the jurisdiction of the state and federal courts in the State of Texas and to venue in Comal County, Texas.

8. Counterparts. This instrument may be executed in any number of counterparts with the same effect as if all signatory parties had signed the same document. All counterparts will be construed together and constitute one and the same instrument.

9. Effect of Waiver of Consent. No waiver or consent, express or implied, by any party to or of any breach or default by any party in the performance by such party of its obligations hereunder may be deemed or construed to be a consent or waiver to or of any other breach or default in the performance by such party of the same or any other obligations of such party hereunder. Failure on the part of a party to complain of any act of any party or to declare any party in default, irrespective of how long such failure continues, does not constitute a waiver by such party of its rights hereunder until the applicable statute of limitation period has run.

10. Further Assurances. In connection with this instrument as well as all transactions contemplated by this instrument, each signatory party hereto agrees to execute and deliver such additional documents and instruments and to perform such additional acts as may be necessary or appropriate to effectuate, carry out and perform all of the terms, provisions and conditions of this instrument and all such transactions.

11. Integration. This instrument contains the complete agreement between the parties and cannot be varied except by the written agreement of the parties. The parties agree that there are no oral agreements, understandings, representations or warranties which are not expressly set forth herein.

12. Legal Construction. In case any one or more of the provisions contained in this instrument is for any reason determined to be invalid, illegal or unenforceable in any respect, to the extent such invalidity or unenforceability does not destroy the basis of the bargain among the parties, such invalidity, illegality or unenforceability will not affect any other provision hereof and this instrument will be construed as if such invalid, illegal or unenforceable provision had never been contained herein. Whenever required by the context, as used in this instrument, the singular number includes the plural and the neuter includes the masculine or feminine gender, and vice versa. Headings appearing in this instrument are for convenience of reference only and are not intended, to any extent or for any purpose, to limit or define the text of any paragraph. This instrument may not be construed more or less favorably between the parties by reason of authorship or origin of language.

13. Notices. Any notice or communication required or permitted hereunder will be deemed to be delivered, whether actually received or not, three days after being deposited in the United States mail, postage fully prepaid, registered or certified mail, so shown, and if not so shown, then at the last known address according to the records of the party delivering the notice. Notice given in any other manner will be effective only if and when received by the addressee. Any address for notice may be changed by written notice

delivered as provided herein.

14. Time. Time is of the essence. Unless otherwise specified, all references to "days" means and refers to calendar days. In the event the date for performance of any obligation hereunder falls on a Saturday, Sunday or Texas legal banking holiday, then that obligation will be performable on the next following day.

15. Indemnity. Grantee agrees to indemnify, defend and hold harmless Grantor and Grantor's heirs, executors, administrators, successors and assigns from and against all liability, damages, suits, actions, costs and expenses of whatsoever nature (including reasonable attorney's fees) to persons or property caused by or arising out of any substantial and prolonged interference with the Easement Property except as set forth in Paragraph 4 herein. Grantee's indemnity obligations hereunder terminate when the easement terminates.

16. Equitable Rights of Enforcement. In the event of any substantial and prolonged interference or threatened interference with the easement, other than temporary obstructions referenced in Paragraph 4 herein, such easement may be enforced by restraining orders and injunctions (temporary or permanent) prohibiting such interference and commanding compliance hereof, which restraining orders and injunctions may be obtainable upon proof of the existence of such interference or threatened interference, other than temporary interference, and without the necessity of proof of inadequacy of legal remedies or irreparable harm, and only by the parties hereto or those benefitted hereby; provided, however, nothing herein may be deemed to be an election of remedies or a waiver of any other rights or remedies available at law or in equity.

C. FREDERICK CLUDIUS, TRUSTEE, under Trust Agreement dated September 14, 2012, amended October 31, 2012 and Trust Agreement dated September 24, 2012

VANESSA MILLER, TRUSTEE, under Trust Agreement dated December 26, 2014

LONNIE E. CHUNN

ROBERT S. TRUDEAU

[The signatures of JERRY FRANK JONES and JIMMY JACOBS HOLDINGS, LLC – SERIES 107, with acknowledgments, are on following pages]

JERRY FRANK JONES

THE STATE OF TEXAS §

COUNTY OF Travis §

This instrument was acknowledged before me on March 30, 2015, by JERRY FRANK JONES.

DEBRA J. CORBELL
Notary Public, State of Texas
My Commission Expires
OCTOBER 31, 2017

Notary Public, State of Texas

JIMMY JACOBS HOLDINGS, LLC – SERIES 107

By: _____
James H. Jacobs, President

THE STATE OF TEXAS §

COUNTY OF WILLIAMSON §

This instrument was acknowledged before me on March 31st, 2015, by James H. Jacobs, President of JIMMY JACOBS HOLDINGS, LLC - SERIES 107, on behalf of same and in the capacity herein stated.

_____
Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by C. FREDERICK CLUDIUS, TRUSTEE, under Trust Agreement dated September 14, 2012, amended October 31, 2012 and Trust Agreement dated September 24, 2012, on behalf of said Trusts.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by VANESSA MILLER, TRUSTEE, under Trust Agreement dated December 26, 2014, on behalf of said Trust.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by LONNIE E. CHUNN.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

THE STATE OF TEXAS §

COUNTY OF COMAL §

This instrument was acknowledged before me on March 31, 2015, by ROBERT S. TRUDEAU.

Notary Public, State of Texas

TAMRA WILSON
Notary Public, State of Texas
My Commission Expires
JULY 24, 2016

HMT
ENGINEERING & SURVEYING

410 N. Seguin Ave.
New Braunfels, TX 78130
HMTNB.COM
830.625.8555 · FAX: 830.625.8556
TBPE FIRM F-10961

METES AND BOUNDS DESCRIPTION
FOR A
423.7 ACRE TRACT OF LAND

Being a 423.7 acre tract of land out of the S. Washburn Survey Number 486, Abstract Number 663, the F. Michel Survey Number 653, Abstract Number 400, the G. Arnold Survey Number 436, Abstract Number 13, the A.M. Holbrook Survey Number 423, Abstract Number 271, and the H. Boheme Survey Number 447, Abstract Number 54, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document Number 200206028760, a portion of a tract of land called 24.700 acres, described in Volume 103, Page 175 and all of a tract of land called 24.717 acres, described in Volume 103, Page 173, all of the Official Public Records, Comal County, Texas, said 423.7 acre tract of land being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "MDS") found in a Southwesterly right-of-way line of State Highway 46, being a Northeasterly corner of said 24.700 acre tract of land, common with the Northwest corner of a tract of land called 24.780 acres, described in Document Number 200706019677, Official Public Records, Comal County, Texas, for a Northerly corner of this herein described tract of land;

THENCE along the common line of said 24.700 acre tract, said 24.780 acre tract, S 19°44'10" W a distance of 1068.39 feet to a 60D nail found in a 10" cedar fence post for a corner of this herein described tract;

THENCE through said 24.700 acre tract, along a Northeasterly line of this tract, the following calls:

S 01°51'11" E a distance of 422.11 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 43°22'08" E a distance of 564.91 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 79°14'57" E a distance of 75.65 feet to a 1/2" iron pin found in the Southeastern line of said 24.700 acre tract, for a Northerly corner of said 388.65 acre tract, the West corner of a tract of land called 170.338 acres, described in Document Number 9906015426, Official Public Records, Comal County, Texas, for a corner of this herein described tract;

THENCE along the Northeast line of said 388.65 acre tract, a Southwest line of said 170.338 acre tract, and the Northeast line of this tract, S 37°43'38" E, a distance of 1649.29 feet to a 1/2" iron pin found for a corner of said 388.65 acre tract, being in a Northwest line of the remainder of a called 72.22 acre tract (Tract One), described in Document Number 201006017373, Official Public Records, Comal County, Texas, for a corner of this herein described tract;

THENCE along the Southwesterly line of said 72.22 acre tract, the Easterly line of said 388.65 acre tract, and the Easterly line of this tract, the following calls:

S 34°56'04" W a distance of 375.09 feet to a 60D nail found in a 8" cedar fence post for a corner of this herein described tract;

S 23°10'14" E a distance of 361.12 feet to a 60D nail found in a 10" cedar fence post for a corner of this herein described tract;

S 38°04'46" E a distance of 2206.22 feet to a 60d nail found in an 8" cedar fence post for the East corner of said 388.65 acre tract, a South corner of a called 0.49 acre tract, described in Document Number 200306047838, Official Public Records, Comal County, Texas, in the Northwest line of a called 8.42 acre tract, described in Document Number 200206016074, Official Public Records, Comal County, Texas, for the most Easterly corner of this herein described tract;

THENCE along the Southeasterly line of said 388.65 acre tract, the Northwesterly line of said 8.42 acre tract, and the Southeasterly line of this tract, S 50°38'49" W a distance of 293.97 feet to a 60D nail found in a cedar fence post for a corner of this herein described tract;

THENCE continuing along the Southeasterly line of said 388.65 acre tract, the Northwesterly line of the remainder of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas, and the Southeasterly line of this tract the following calls:

S 51°53'59" W a distance of 232.44 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 51°59'46" W a distance of 912.75 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 54°02'11" W a distance of 149.59 feet to a 60D nail found in an 8" cedar fence post for the South corner of said 388.65 acre tract, an interior corner of said 204.63 acre tract, for the most Southerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, a Northeasterly line of said 204.63 acre tract, N 38°05'45" W a distance of 668.98 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

THENCE through said 388.65 acre tract the following calls:

N 52°33'40" E a distance of 450.00 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 37°26'20" W a distance of 844.23 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 82°26'20" W a distance of 178.58 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

S 52°33'40" W a distance of 340.46 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner in the Southwesterly line of said 388.65 acre tract, common with the Northeasterly line of the remainder of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas;

THENCE along said common line the following calls:

N 38°39'27" W a distance of 142.85 feet to a 60D nail found in a fence post for a corner of this herein described tract;

N 37°20'16" W a distance of 2089.08 feet to a 60D nail found in a fence post for a corner of this herein described tract;

N 37°29'50" W a distance of 437.90 feet to a 60D nail found in a 10" cedar fence post found for an interior corner of said 388.65 acre tract, the North corner of said 204.63 acre tract, for a corner of this herein described tract;

THENCE along a Southerly line of said 388.65 acre tract, a Northwesterly line of said 204.63 acre tract, and a Southerly line of this tract the following calls:

S 52°12'20" W, a distance of 620.43 feet to a 60D nail found in a fence post for a corner of this herein described tract;

S 52°33'05" W a distance of 1786.08 feet to a 60D nail found in a 7" cedar fence post for a Southerly corner of said 388.65 acre tract, the West corner of said 204.63 acre tract, being in a Northeast line of a called 514.36 acre tract, described in Document Number 9806007947, Official Public Records, Comal County, Texas, for a Southerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, a Northeasterly line of said 514.36 acre tract, and a Southwesterly line of this tract, N 37°56'01" W, a distance of 3004.12 feet to 30D nail found in an old fence post for an interior corner of this tract, an interior corner of the said 388.65 acre tract, a Northeast corner of said 514.36 acre tract, for an interior corner of this herein described tract;

THENCE along a Southeasterly line of said 388.65 acre tract, a Northwesterly line of said 514.36 acre tract, S 60°40'31" W a distance of 12.11 feet to a 60D nail found in an old fence post for a Southwesterly corner of said 388.65 acre tract, a Northerly corner of said 514.36 acre tract, and a Westerly corner of this herein described tract;

THENCE along a Southwesterly line of said 388.65 acre tract, N 32°14'57" W a distance of 66.46 feet to a 60D nail found in an old fence post for the West corner of said 388.65 acre tract, being in the Southeast line of the remainder of said 144.569 acre tract described in Volume 265, Page 356, Deed Records, Comal County, Texas, for the West corner of this herein described tract;

THENCE along a Northwesterly line of said 388.65 acre tract, a Southeasterly line of the remainder of said 114.569 acre tract, and a Northwesterly line of this tract, N 52°18'23" E a distance of 2047.64 feet to a 1/2" iron pin found for a South corner of a called 20.0 acre tract of land described in Document Number 200306008534, Official Public Records, Comal County, Texas, for a Northerly corner of this herein described tract;

THENCE continuing along the Northwesterly line of said 388.65 acre tract, a Southeasterly line of said 20.0 acre tract, and the Northwesterly line of this tract, N 52°53'45" E a distance of 327.58 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner of this herein described tract;

THENCE continuing along the Northwesterly line of said 388.65 acre tract, the Southeast line of said 20.0 acre tract, and the Northwesterly line of this tract, N 53°03'23" E a distance of 669.64 feet to a 1/2" iron pin (with cap stamped "HMT") found for the most Northerly corner of said 388.65 acre tract, the most Easterly corner of said 20.0 acre tract, being in the Westerly line of a called 3.050 acre tract, described in Volume 645, Page 295, Official Public Records, Comal County, Texas, and for a Northerly corner of this herein described tract;

THENCE along a Northeasterly line of said 388.65 acre tract, the Southwest line of said 3.050 acre tract, and a Northeasterly line of this tract, S 37°25'58" E, passing at a distance of 18.03 feet a found 1/2" iron pin for the most Southerly corner of said 3.050 acre tract, for the most Westerly corner of a called 17.009 acre tract recorded in Document Number 200306013611, Official Public Records, Comal County, Texas, continuing along the Southwesterly line of said 17.009 acre tract, in all a total distance of 656.87 feet to a 3/8" iron pin found for the most Southerly corner of said 17.009 acre tract, common with a Northwesterly corner of a called 32.138 acre tract described in Volume 972, Page 411, Official Public Records, Comal County, Texas, and for a corner of this herein described tract;

THENCE continuing along the Northeasterly line of said 388.65 acre tract, the Southwesterly line of said 32.138 acre tract, S 37°49'42" E, a distance of 476.86 feet to a 60D nail found in a fence post for the most Southerly corner of said 32.138 acre tract, the most Westerly corner of the remainder of a called 23 acre tract described in Volume 842, Page 116, Official Public Records, Comal County, Texas, and for a corner of this herein described tract;

THENCE along the Northeasterly line of said 388.65 acre tract, the Southwesterly line of said 23 acre tract, and a Northeasterly line of this tract, S 37°36'17" E a distance of 788.03 feet to a 60D nail found in a fence post for the most Southerly corner of the remainder of said 23 acre tract, the most Westerly corner of the aforementioned 24.717 acre tract, for a corner of this herein described tract;

THENCE along a Northwesterly line of said 24.717 acre tract, the Southeast line of said 23 acre tract, and a Northwesterly line of this tract, N 66°10'23" E a distance of 1033.69 feet to a 60D nail found in a 10" cedar fence post for the most Northerly corner of said 24.717 acre tract, a Southeast corner of said 23 acre tract, a Southwest corner of the aforementioned 24.700 acre tract, for a corner of this herein described tract;

THENCE along a Northwest line of said 24.700 acre tract, a Southeast line of said 23 acre tract, and the Northwesterly line of this tract, the following calls:

N 00°58'44" E a distance of 122.00 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner;

N 03°06'44" E a distance of 465.00 feet to a 1/2" iron pin (with cap stamped "HMT") found for a corner of this herein described tract, said pin being in the Westerly line of said 24.700 acre tract, and in the Easterly line of a called 3.488 acre tract described in Volume 842, Page 114, Official Public Records, Comal County, Texas;

THENCE along a Westerly line of said 24.700 acre tract, the Easterly line of said 3.488 acre tract, and the Westerly line of a portion of this tract the following calls:

N 05°40'02" E a distance of 82.63 feet to a 60D nail found in a fence post for a corner of the herein described tract;

S 76°53'14" E a distance of 25.28 feet to a 60D nail found in a fence post for a corner of the herein described tract;

N 17°31'21" E a distance of 933.90 feet to a 60D nail found in a fence post for the most Northerly corner of said 24.700 acre tract, a Northeasterly corner of said 3.488 acre tract, in the Southwest right-of-way line of State Highway 46, for the most Northerly corner of this herein described tract;

THENCE along a Northerly line of said 24.700 acre tract, the Southwest right-of-way line of State Highway 46, and a Northeasterly line of this tract, S 68°24'35" E a distance of 445.52 feet to the POINT OF BEGINNING and containing 423.7 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), North American Datum 1983.

Surveyed this the 19th day of March, 2013.

Reference survey of said 423.7 acre tract of land prepared this same date.

Mark F. Conlan
Registered Professional Land Surveyor No. 6342

S:\!Projects\!Title Surveys\Washburn, S\423.7ac & 60' Inl. Eng- Center for Christian Growth\423.7 AC M&B.doc

HMT
ENGINEERING SURVEYING

METES AND BOUNDS DESCRIPTION
FOR A
10.00 ACRE TRACT OF LAND

Being a 10.00 acre tract of land out of the G. Arnold Survey Number 436, Abstract Number 13, Comal County, Texas, and being a portion of a tract of land called 388.65 acres, described in Document No. 200206028760, Official Public Records, Comal County, Texas, said 10.00 acre tract of land being more particularly described as follows:

COMMENCING at a nail in an 8" cedar post found for the South corner of said 388.65 acre tract, and an interior corner of a called 204.63 acre tract (Tract One), described in Document Number 200206016070, Official Public Records, Comal County, Texas;

THENCE along the Northwest line of said 388.65 acre tract, and the Southeast line of said 204.63 acre tract, N 38°05'45" W a distance of 688.98 feet to the POINT OF BEGINNING of this herein described 10.00 acre tract of land;

THENCE continuing along the common line of said 388.65 acre tract and said 204.63 acre tract, the following calls:

N 38°05'45" W a distance of 399.32 feet to a nail in a fence post found for a corner of this herein described tract;

N 38°39'28" W a distance of 571.35 feet to a 1/2" iron pin (with cap stamped "HMT") set for a West corner of this herein described tract, from which a nail in a fence post found marking a corner of said 388.65 acre tract bears, N 38°39'28" W a distance of 142.85 feet;

THENCE across said 388.65 acre tract, the following calls:

N 52°33'40" E a distance of 340.46 feet to a 1/2" iron pin (with cap stamped "HMT") set for a North corner of this herein described tract;

S 82°26'20" E a distance of 178.58 feet to a 1/2" iron pin (with cap stamped "HMT") set for a North corner of this herein described tract;

S 37°26'20" E a distance of 844.23 feet to a 1/2" iron pin (with cap stamped "HMT") set for an East corner of this herein described tract;

S 52°33'40" W a distance of 450.00 feet to the Point of Beginning and containing 10.00 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), NAD 83.

Surveyed this the 2nd day of April, 2012. Reference survey of said 10.00 tract of land prepared this same date.

Thor Thornhill
Registered Professional Land Surveyor No. 6177

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HM&T
ENGINEERING & SURVEYING

METES AND BOUNDS DESCRIPTION
FOR A
5.00 ACRE TRACT OF LAND

Being a 5.00 acre tract of land out of the A.M. Holbrook Survey Number 423, Abstract Number 271, Comal County, Texas, and being a portion of a tract of land called 24.700 acres, described in Vol. 103, Pg. 175, Deed Records, Comal County, Texas, said 5.00 acre tract of land being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "MDS") found in the Northwest line of Resubdivision of Mission Hills Ranch, Unit 7B, plat of which is recorded in Document No. 200706017898, Map and Plat Records, Comal County, Texas, said iron pin found marking the East corner of said 24.700 acre tract, and the South corner of a called 24.780 acre tract, described in Document No. 200706019677, Official Public Records, Comal County, Texas;

THENCE along the Southeast line of said 24.700 acre tract, common with the Northwest line of said Mission Hills Ranch, Unit 7B, S 52°11'05" W a distance of 230.04 feet to a 1/2" iron pin (with cap stamped "MDS") found for the West corner of said Mission Hills Ranch, Unit 7B, for the most Southerly corner of this herein described 5.00 acre tract;

THENCE across said 24.700 acre tract, the following calls:

N 79°14'57" W a distance of 75.65 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 43°22'08" W a distance of 564.91 feet to a 1/2" iron pin (with cap stamped "HMT") set for a corner;

N 01°51'11" W a distance of 422.11 feet to a 60D nail in a fence post found for an interior corner of the aforementioned 24.700 acre tract, the West corner of the aforementioned 24.780 acre tract, and a North corner of this herein described 5.00 acre tract;

THENCE along the Northeast line of said 24.700 acre tract, and the Southwest line of said 24.780 acre tract, S 42°59'00" E a distance of 964.56 feet to the Point of Beginning and containing 5.00 acres of land in Comal County, Texas.

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), NAD 83.

Surveyed this the 2nd day of April, 2012. Reference survey of said 5.00 tract of land prepared this same date.

Thor Thornhill
Registered Professional Land Surveyor No. 6177
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STATE OF TEXAS
REGISTERED
THOR THORNHILL
6177
PROFESSIONAL
LAND SURVEYOR

EXHIBIT "C"

HMT
ENGINEERING & SURVEYING

410 N. Seguin Ave.
New Braunfels, TX 78130
HMTNB.COM
830.625.8555 · FAX· 830.625.8556
TBPE FIRM F-10961

METES & BOUNDS
FOR A
7.60 ACRE ACCESS EASEMENT

Being a 7.60 acre Access Easement out of the A.M. Holbrook Survey Number 423, Abstract Number 271, and the G. Arnold Survey Number 436, Abstract No. 13, Comal County, Texas, and being out of a tract of land called 24.700 acres, described in Vol. 103, Pg. 175, Deed Records, Comal County, Texas, a tract of land called 24.717 acres recorded in Vol. 103, Pg. 173, Deed Records, Comal County, Texas, and a tract of land called 388.65 acres recorded in Document No. 200206028760, Official Public Records, Comal County, Texas, said 7.60 acre Access Easement being more particularly described as follows:

BEGINNING at a 1/2" iron pin (with cap stamped "MDS") found in a Southwesterly right-of-way line of State Highway 46, being an Northeasterly corner of said 24.700 acre tract of land, common with the Northwest corner of a tract of land called 24.780 acres, described in Document Number 200706019677, Official Public Records, Comal County, Texas, for a Northeasterly corner of this herein described 7.60 acre Access Easement;

THENCE South 19°44'10" West a distance of 1068.39 feet to a 60d nail in a 10" cedar fence post found for a corner;

THENCE South 01°51'11" East a distance of 422.11 feet to a point for a corner;

THENCE South 43°22'08" East a distance of 276.23 feet to a point for a corner;

THENCE South 17°51'19" West a distance of 352.81 feet to a point for a corner;

THENCE South 03°43'55" East a distance of 499.25 feet to a point for a corner;

THENCE South 13°20'46" West a distance of 432.74 feet to a point for a corner;

THENCE South 02°46'23" East a distance of 259.26 feet to a point for a corner;

THENCE South 00°25'47" West a distance of 199.17 feet to a point for a corner;

THENCE South 24°48'47" East a distance of 140.62 feet to a point for a corner;

THENCE South 46°17'46" East a distance of 237.91 feet to a point for a corner;

THENCE South 36°50'40" East a distance of 563.96 feet to a point for a corner;

THENCE South 46°13'42" East a distance of 272.03 feet to a point for a corner;

THENCE South 28°19'40" East a distance of 258.43 feet to a point for a corner;

THENCE South 06°58'41" East a distance of 218.86 feet to a point for a corner;

THENCE South 13°56'22" West a distance of 309.55 feet to a point for a corner;

THENCE North 82°26'20" West a distance of 60.37 feet to a point for a corner;

THENCE North 13°56'22" East a distance of 305.18 feet to a point for a corner;

THENCE North 06°58'41" West a distance of 196.47 feet to a point for a corner;

THENCE North 28°19'40" West a distance of 237.67 feet to a point for a corner;

THENCE North 46°13'42" West a distance of 267.50 feet to a point for a corner;

THENCE North 36°50'40" West a distance of 563.92 feet to a point for a corner;

THENCE North 46°17'46" West a distance of 244.33 feet to a point for a corner;

THENCE North 24°48'47" West a distance of 165.43 feet to a point for a corner;

THENCE North 00°25'47" East a distance of 210.93 feet to a point for a corner;

THENCE North 02°46'23" West a distance of 266.08 feet to a point for a corner;

THENCE North 13°20'46" East a distance of 432.23 feet to a point for a corner;

THENCE North 03°43'55" West a distance of 501.68 feet to a point for a corner;

THENCE North 17°51'19" East a distance of 328.74 feet to a point for a corner;

THENCE North 43°22'08" West a distance of 263.47 feet to a point for a corner;

THENCE North 01°51'11" West a distance of 456.30 feet to a point for a corner;

THENCE North 19°44'10" East a distance of 1081.77 feet to a point in the Southwesterly right-of-way line of State Highway 46, common with a Northeasterly line of the aforementioned 24.700 acre tract of land, for a Northwesterly corner of this herein described tract of land, from which a 60d nail found in a fence post marking the North corner of said 24.700 acre tract bears North 68°24'35" West, a distance of 385.49 feet;

THENCE along the Southwesterly right-of-way line of State Highway 46, common with a Northeasterly line of said 24.700 acre tract of land, South 68°24'35" East a distance of 60.03 feet to the POINT OF BEGINNING containing 7.60 acres of land in Comal County, Texas

Bearings are based upon the Texas Coordinate System, South Central Zone (4204), NAD 83.

Surveyed this the 19th day of March, 2013.

Reference survey of said 7.60 acre Access Easement prepared this same date.

Mark F. Conlan
Registered Professional Land Surveyor No. 6342

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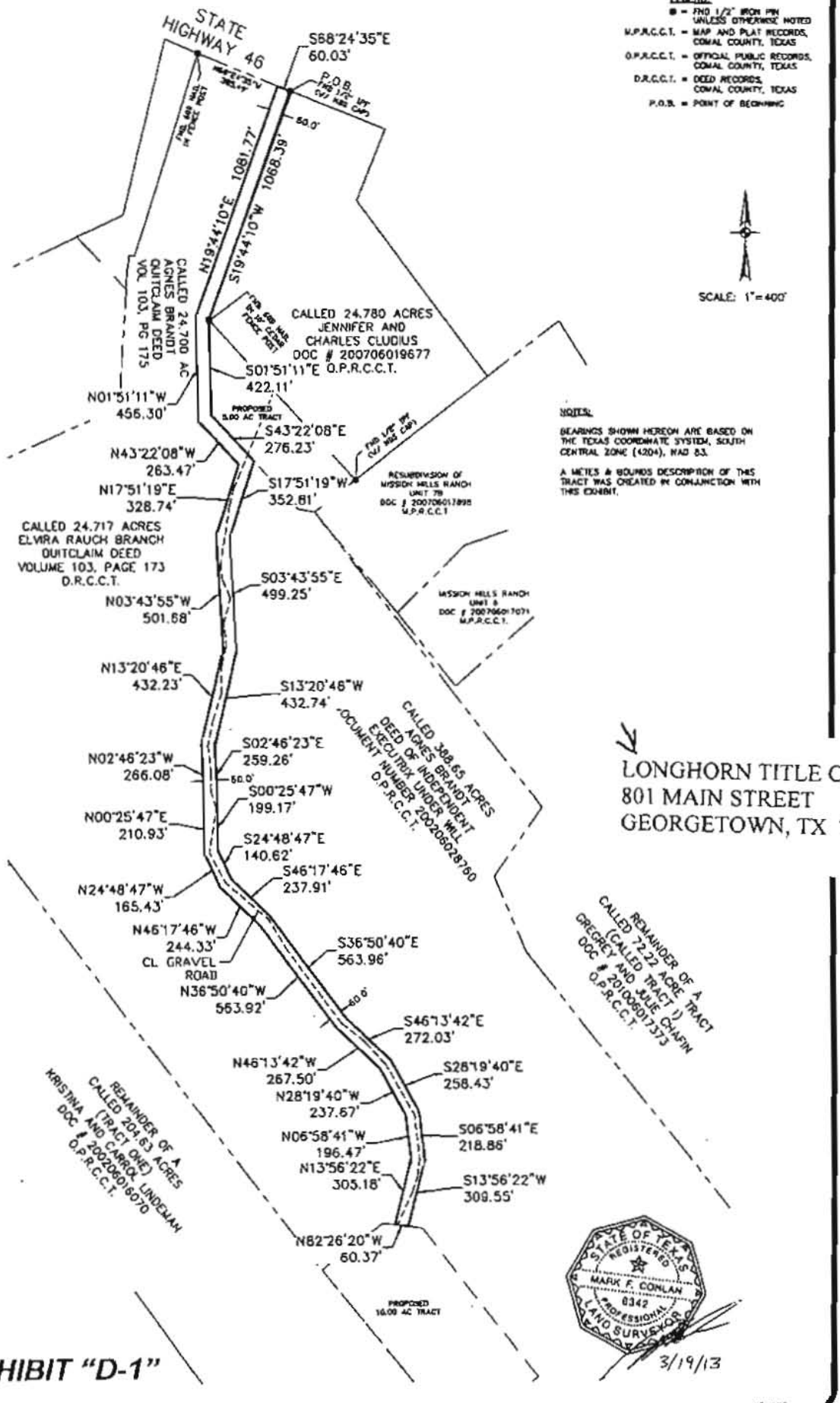
7.60 ACRE ACCESS EASEMENT



LONGHORN TITLE CO., INC.
801 MAIN STREET
GEORGETOWN, TX 78626

EXHIBIT "D-1"

13-199

RETURN TO
Longhorn Title Co., Inc.

FILED AND RECORDED

Instrument Number: *201506012093*

Recording Fee: 113.00

Number Of Pages: 23

Filing and Recording Date: 04/06/2015 1:01PM

Deputy: LAURA JENDRUSCH

I hereby certify that this instrument was FILED on the date and time stamped hereon and RECORDED in the OFFICIAL PUBLIC RECORDS of Comal County, Texas.

Bobbie Koepp

Bobbie Koepp, County Clerk
Comal County, Texas

NOTICE: It is a crime to intentionally or knowingly file a fraudulent court record or instrument with the clerk.

DO NOT DESTROY - *Warning, this document is part of the Official Public Record.*