TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 9, 2009

Mr. Steven Ramsey, P.E.
City of New Braunfels
424 South Castell Avenue
New Braunfels, TX 78130

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Oak Run Pedestrian Bridge; Located approximately 1050 feet northeast of the intersection of Timber Hollow and State Highway 46; 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
Edwards Aquifer Protection Program ID No. 0003.04; Investigation No. 707371; Regulated Entity No. RN102749306

Dear Mr. Ramsey:

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 Vickrey & Associates, Inc. on behalf of City of New Braunfels on October 23, 2008. Final review of the WPAP was completed after additional material was received on January 2, 2009. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The original approval for Subdivision Plans for Oak Run (EAPP ID No. -1210.00) was issued by Texas Department of Water Resources on December 5, 1983. The proposed subdivision consisted of 232 acres to be used for single and multi-family homes. Sewage service was to be provided by the New Braunfels Utilities Gruene Road Sewage Treatment Plant.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 0.34 acres. It will include the replacement of an existing concrete sidewalk/low water crossing connecting the Oak Run Subdivision to the Oak Run Sixth Grade Center with a bridge. The impervious cover will be 0.09 acres (26.5 percent of

the 0.34 acres). There will be no new impervious cover generated by this project. The proposed bridge impervious cover will replace the impervious cover currently in place (the sidewalk). No wastewater will be generated by this project.

PERMANENT POLLUTION ABATEMENT MEASURES

Based on the approval for the Run Oak Subdivision issued by letter dated December 5, 1983, no permanent treatment of stormwater runoff for the proposed bridge is required. However, post construction areas located on both sides of the bridge will be revegetated to 70 percent cover.

GEOLOGY

According to the geologic assessment included with the application, the outcropping geologic formation mapped at the site consists of the Person Formation of the Cretaceous Edwards Group. Three man-made features in bedrock were observed on the central portion of the site. Two existing sewer manholes (features S-1 and S-3) and a storm water outfall (S-2) were observed just to the west of the existing concrete sidewalk. The San Antonio Regional Office site assessment conducted on December 11, 2008 revealed the site conditions to be generally as described in the geologic assessment.

SPECIAL CONDITIONS

I. The applicant shall provide all contractors with a copy of pages 1-35 through 1-60 of TCEQ TGM RG-348 (2005) as a guide for soil stabilization practices and assure that any soil stabilization is performed in accordance with these practices and the approved plan.

II. Unless an exception is requested, justified with documentation as equivalent protection, and approved, the "industry standard" for temporary BMPs to be used for activities regulated by 30 TAC 213 are described in RG-348 (2005), and shall be used.

III. This approval letter is being issued for regulated activities (as defined in Chapter 213) and for best management practices presented in the application. This approval does not constitute a water right permit or authorization from the TCEQ Dam Safety Program. Failure to obtain all necessary authorizations could result in enforcement actions. For more information on Water Rights Permits, please refer to:

http://www.tceq.state.tx.us/permitting/water_supply/water_rights/wr_amiregulated.html

For more information on the Dam Safety program, please refer to:

http://www.tceq.state.tx.us/compliance/field_ops/dam_safety/damsafetyprog.html

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

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

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

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

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

After Completion of Construction:

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

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

transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

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

21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

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

If you have any questions or require additional information, please contact Agnieszka Hobson of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4075.

Sincerely,

Mark R. Vickery, P.G.
Executive Director
Texas Commission on Environmental Quality

MRV/AMH/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Mr. Kenneth Rogers, P.E., Vickrey & Associates, Inc.
Mr. James Klein, City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County
Ms. Velma Reyes Danielson, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

WATER POLLUTION ABATEMENT PLAN

FOR

OAK RUN PEDESTRIAN BRIDGE

NEW BRAUNFELS, TEXAS

Prepared For:

City of New Braunfels

Job No. 2162-003-039

October 2008
Revised January 2009

VICKREY & ASSOCIATES, Inc.
CONSULTING ENGINEERS

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 22, 2009
Corrected July 8, 2009

Mr. Steven Ramsey, P.E.
City of New Braunfels
424 South Castell Avenue
New Braunfels, TX 78130

Re: EDWARDS AQUIFER, Comal County
PROJECT: Oak Run Pedestrian Bridge, Edwards Aquifer Protection Program (EAPP) Project No. 0003.05;
Regulated Entity No.: RN102749306; Investigation No. 759290
TYPE: Solution Feature/Sensitive Feature; 30 Texas Administrative Code (TAC) §213.5(f)(2); Edwards Aquifer Protection Program

Dear Mr. Ramsey:

The Texas Commission on Environmental Quality (TCEQ) received a plan which addresses protection of a solution feature encountered in an excavation cut for the pedestrian bridge foundation for the above referenced project. It was submitted on behalf of the City of New Braunfels by Vickrey & Associates, Inc. and received by the San Antonio Regional Office on June 16, 2009. Additional information was received on June 19, 2009. Feature location and assessment are outlined in Table I below.

TABLE I

Type of Solution Feature	Feature dimensions	Location	Case*/ sensitivity
Feature No. S-1	0.5'x0.8'x3.5'	Floor of excavation for westernmost bent structure.	sensitive

* For SCS & Storm Sewer lines, see TABLE II (enclosed). For other types of utility excavations, "Case" is not applicable.

A representative of the San Antonio Region office did not conduct an on site investigation. The engineered resolution submitted for this feature is described in the Solution Feature Discovery

Notification Form and the enclosed Request to Seal the Feature (Attachment 3). The solution feature will be filled with rock to approximately 18-inches below the existing surface at the bottom of the excavation, followed by an 18-inch layer of concrete to the level of the excavation bottom. Based on the proposed protection measures provided by Ms. Susan D. Landreth, P.E., the feature protection plan is approved with the following conditions:

1. The location of the solution feature shall be shown on the "as-built" plans.

2. Any concrete or concrete encasement shall meet or exceed City of New Braunfels specifications for minimum thickness and compression strength.

3. The treatment method is designed to address environmental concerns related to surface water infiltration and is not intended to address structural integrity issues.

Should clarification of this letter be desired or if we may be of any other assistance, please contact Ms. Agnieszka Hobson of our San Antonio Regional office at 210/403-4075. Please reference project number 0003.04.

Sincerely,

Lynn M. Bumguardner
Water Section Work Leader
San Antonio Regional Office

LMB/AMH/eg

Enclosures: Table II (Minimum Standards for Closing Solution Features in Sewer Line Trenches)
Request to Seal Feature (Attachment 3)
Approximate Location of Feature S-1 Map

cc with Enclosures:
Ms. Susan D. Landreth, P.E., Vickrey & Associates, Inc.
Mr. James Klein, City of New Braunfels
Mr. Thomas H. Hornseth, P.E., Comal County
Ms. Velma Reyes Danielson, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

EDWARDS AQUIFER PROTECTION PROGRAM - TCEQ

Minimum Protective Standards for Sewer Line and Storm Sewer Trenches

(from Edwards Aquifer Guidance Document 96.004, Effective 8/11/98)

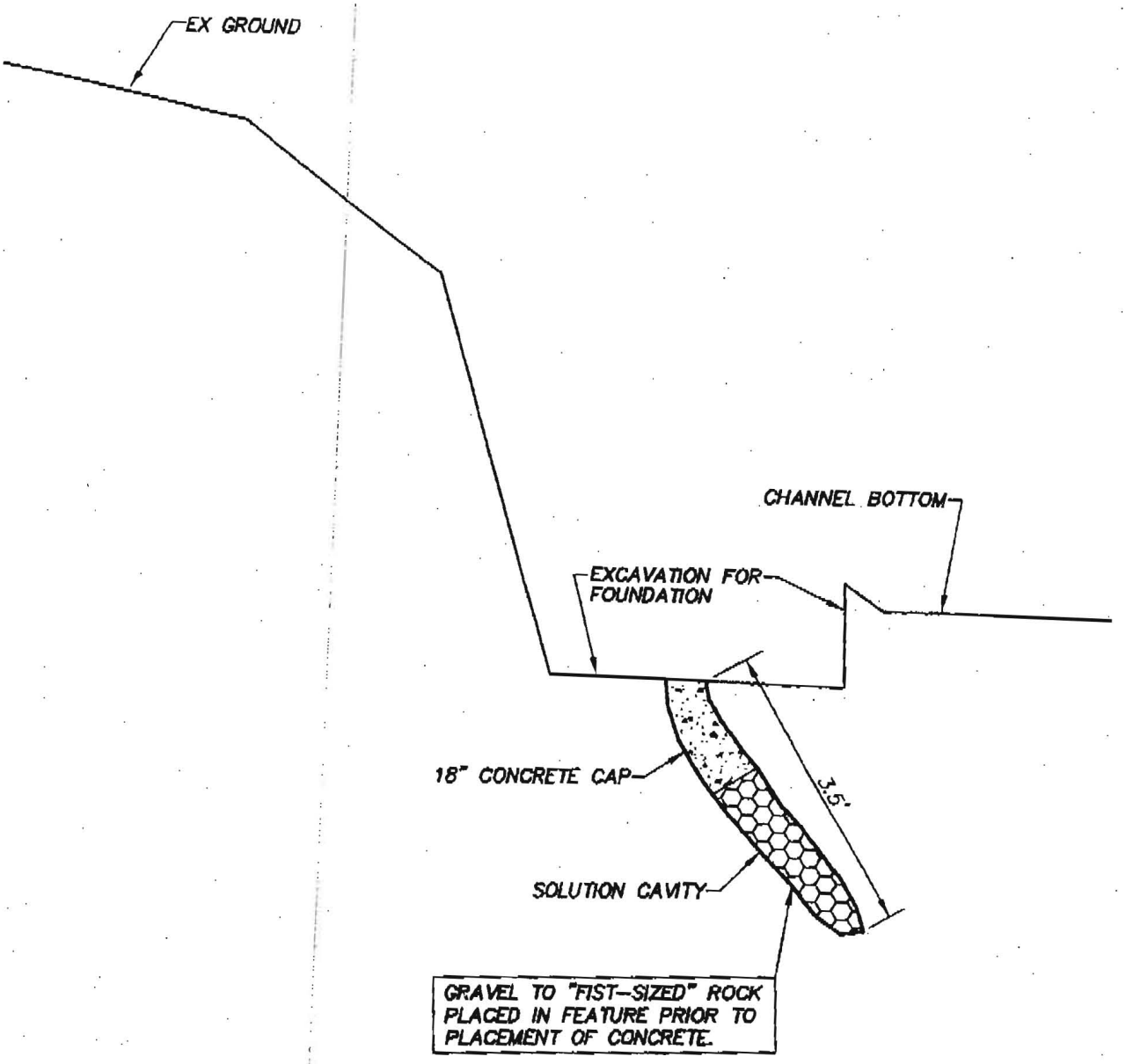
Case	Description	Concern	Treatment	Notification/Approval
1	Sensitive feature is less than or equal to six (6) inches in all directions and is located above the embedment of the pipe. All rock within and surrounding the feature is sound.	Not environmental nor pipe integrity	No abatement required.	None required.
2	Sensitive feature is either larger than six (6) inches in at least one direction or is located within the level of the pipe embedment. No portion of the sensitive feature may intersect the plane of trench floor. All rock within and surrounding the feature is sound.	Environmental	The sensitive feature shall be filled with concrete. Gravel to "fist sized" rock or sacks of gravel may be placed in feature prior to placement of the concrete as long as a minimum of eighteen (18) inches of concrete is used to close the feature. minimum).	Requires notification and prior written approval from TCEQ.
3	Sensitive feature intersects the plane of the trench floor is less than four (4) feet in any direction. All rock within and surrounding the feature is sound.	Environmental	Sensitive feature shall be filled with concrete. Gravel to "fist sized" rock or sacks of gravel may be placed in feature prior to placement of concrete at least eighteen (18) inches of concrete is used to close the feature. The sewer line or storm sewer lines shall be concrete encased for width of the sensitive feature plus a minimum of five (5) feet on either end. The encasement shall provide a minimum of six (6) inches of concrete on all sides of the pipe and shall have a compression strength of at least two thousand five hundred (2,500) psi (28-day strength). The concrete may be steel reinforced.	Requires notification and prior written approval from TCEQ.
4	Sensitive feature intersects the plane of the trench floor and any opening in trench floor is greater than four (4) feet in any direction or the trench floor is unstable.	Environmental & Structural	Requires an engineered resolution at least as protective as Case 3 above. Additional protective measures, including rerouting of line, may be required.	Requires notification and prior written approval from TCEQ.

All plans submitted to the TCEQ regional office shall have a signed and dated seal of a Texas licensed Professional Engineer. All plans will be reviewed on a case-by-case basis and additional protective measures or additional information may be required.

ATTACHMENT 3
Request to Seal Feature

During construction of the pedestrian bridge for Oak Run a solution cavity was discovered in the excavation for foundation of the westernmost bent. We are requesting to permanently seal this feature.

As shown on the attached exhibit, the solution cavity will be filled with rock to approximately 18-inches below the existing surface at the bottom of the excavation, followed by an 18-inch layer of concrete to the level of the excavation bottom.



SOLUTION CAVITY PROFILE
N.T.S.

OAK RUN PEDESTRIAN BRIDGE

SOLUTION CAVITY FILL
FEATURE S-1

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway San Antonio, Texas 78216
Telephone: (210) 349-3271

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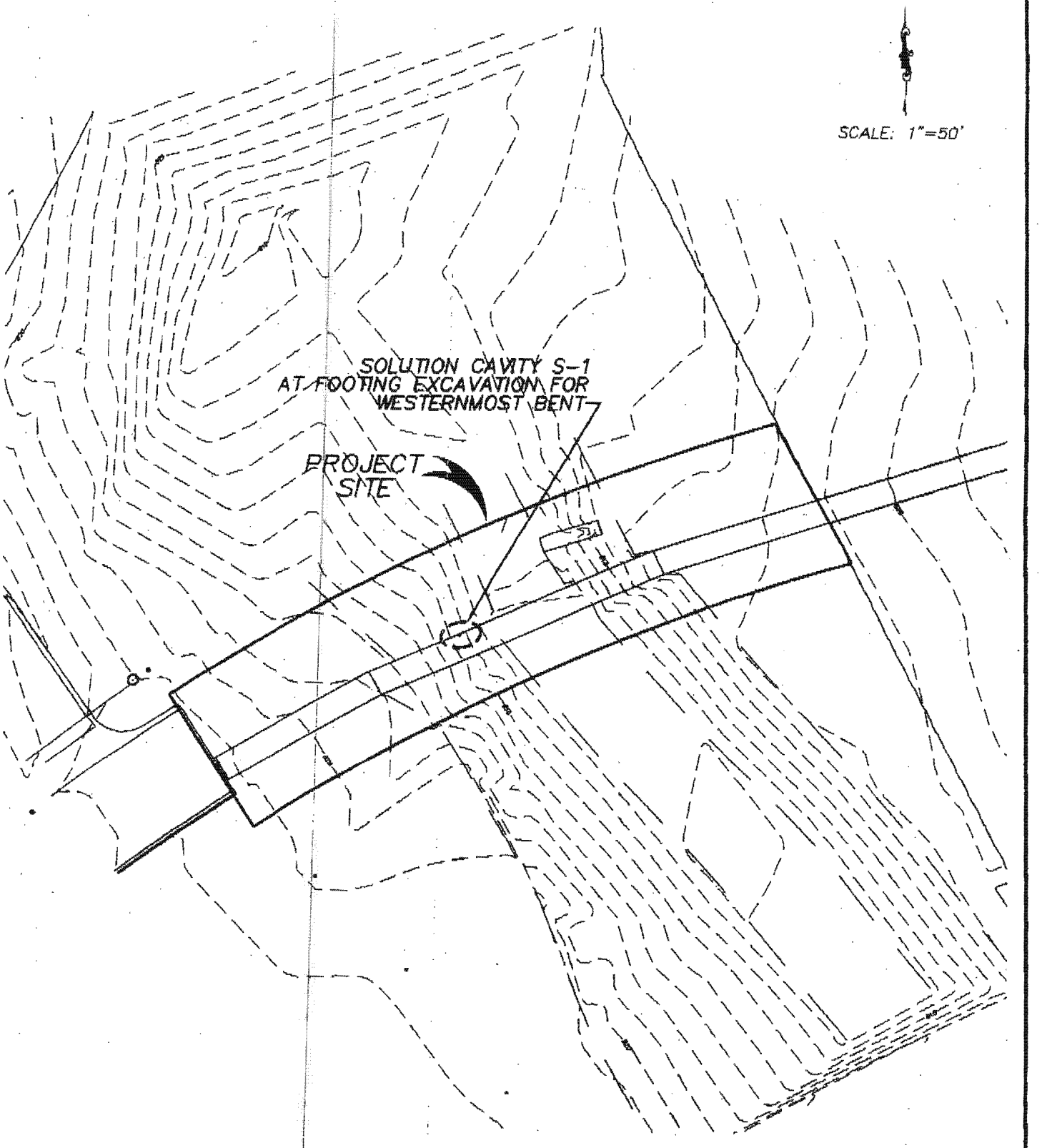

OAK RUN PEDESTRIAN BRIDGE

GEOLOGICAL SITE MAP

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway San Antonio, Texas 78216
Telephone: (210) 349-3271

6/18/09

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 22, 2009

Mr. Steven Ramsey, P.E.
City of New Braunfels
424 South Castell Avenue
New Braunfels, TX 78130

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Type of Solution Feature	Feature dimensions	Location	Case*/ sensitivity
Feature No. S-1	0.5'x0.8'x3.5'	Floor of excavation for east embankment abutment.	sensitive

* For SCS & Storm Sewer lines, see TABLE II (enclosed). For other types of utility excavations, "Case" is not applicable.

A representative of the San Antonio Region office did not conduct an on site investigation. The engineered resolution submitted for this feature is described in the Solution Feature Discovery Notification Form and the enclosed Request to Seal the Feature (Attachment 3). The solution feature will be filled with rock to approximately 18-inches below the existing surface at the bottom of the

excavation, followed by an 18-inch layer of concrete to the level of the excavation bottom. Based on the proposed protection measures provided by Ms. Susan D. Landreth, P.E., the feature protection plan is approved with the following conditions:

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Should clarification of this letter be desired or if we may be of any other assistance, please contact Ms. Agnieszka Hobson of our San Antonio Regional office at 210/403-4075. Please reference project number 0003.04.

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Water Section Work Leader
San Antonio Regional Office

LMB/AMH/eg

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cc with Enclosures:
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Mr. James Klein, City of New Braunfels
Mr. Thomas H. Homseth, P.E., Comal County
Ms. Velma Reyes Danielson, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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(from Edwards Aquifer Guidance Document 96.004, Effective 8/11/98)

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All plans submitted to the TCEQ regional office shall have a signed and dated seal of a Texas licensed Professional Engineer. All plans will be reviewed on a case-by-case basis and additional protective measures or additional information may be required.

ATTACHMENT 3
Request to Seal Feature

During construction of the pedestrian bridge for Oak Run a solution cavity was discovered in the excavation for foundation of the westernmost bent. We are requesting to permanently seal this feature.

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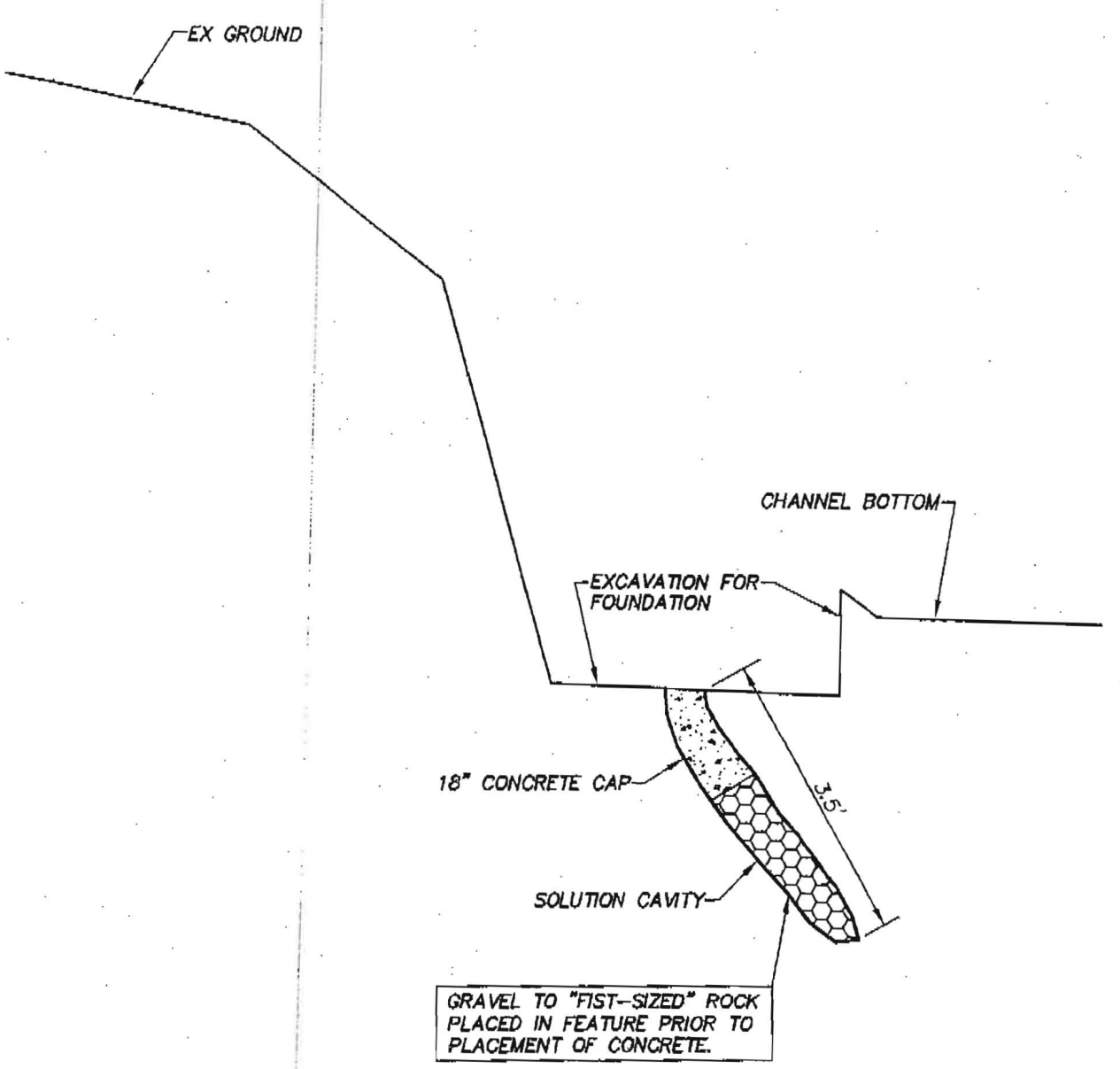

SOLUTION CAVITY PROFILE
N.T.S.

OAK RUN PEDESTRIAN BRIDGE

SOLUTION CAVITY FILL
FEATURE S-1

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway San Antonio, Texas 78216
Telephone: (210) 349-3271

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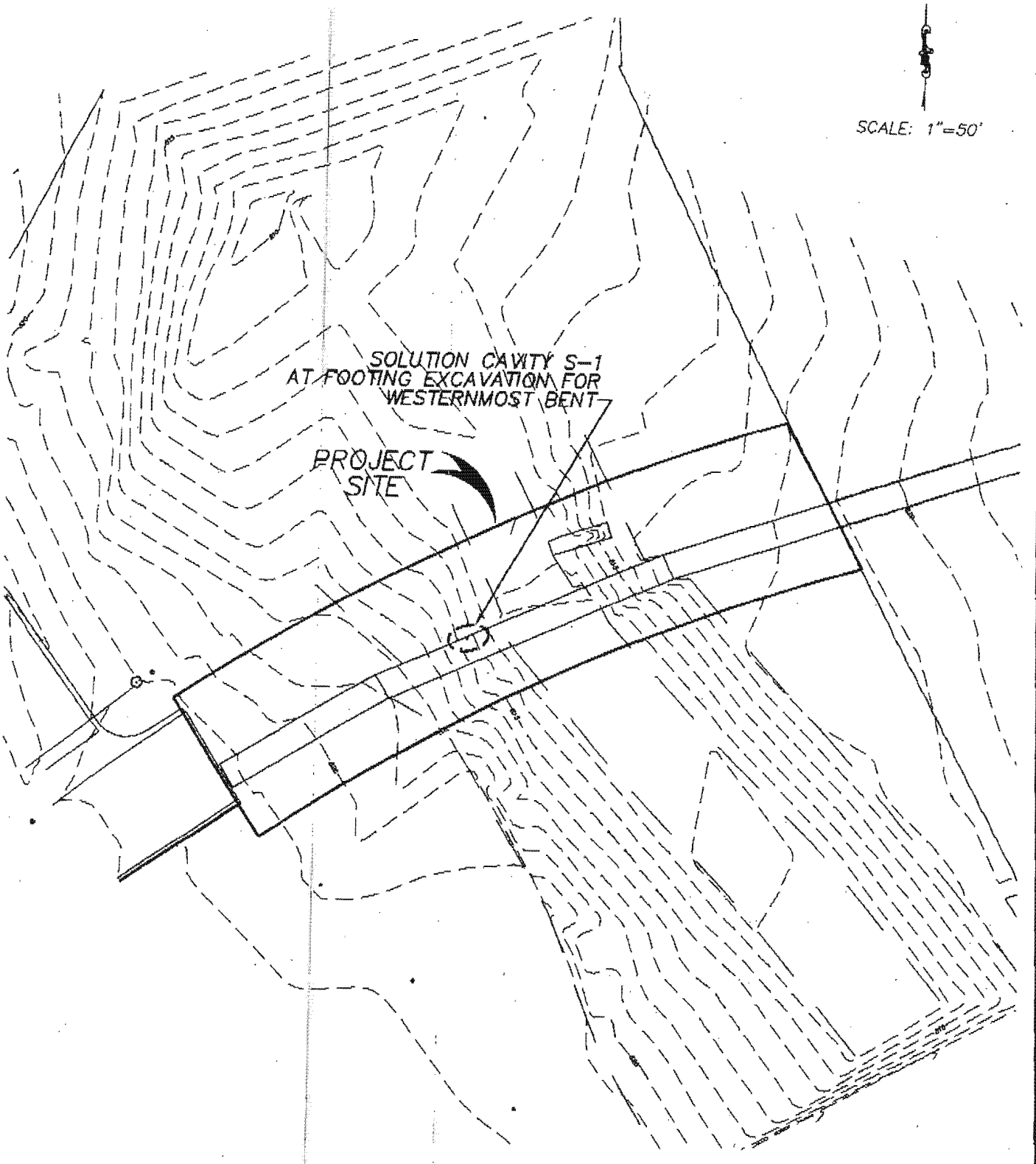

OAK RUN PEDESTRIAN BRIDGE

GEOLOGICAL SITE MAP

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway San Antonio, Texas 78216
Telephone: (210) 349-3271

6/18/08

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WATER POLLUTION ABATEMENT PLAN

FOR

OAK RUN PEDESTRIAN BRIDGE

NEW BRAUNFELS, TEXAS

Prepared For:

City of New Braunfels

Prepared By:

Vickrey & Associates, Inc.
12940 Country Parkway
San Antonio, Texas 78216
Voice: (210) 349-3271
Fax: (210) 349-2561

Job No. 2162-003-039

October 2008
Revised January 2009

General Information Form
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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge
COUNTY: Comal STREAM BASIN: Blieders Creek

EDWARDS AQUIFER: X RECHARGE ZONE
_____ TRANSITION ZONE

PLAN TYPE: X WPAP _____ AST _____ EXCEPTION
_____ SCS _____ UST _____ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Steven Ramsey, P.E.
Entity: City of New Braunfels
Mailing Address: 424 South Castell Ave.
City, State: New Braunfels, Texas Zip: 78130
Telephone: (830) 221-4020 FAX: (830) 608-2109

Agent/Representative (if any):

Contact Person: Kenneth Rogers, P.E., C.F.M.
Entity: Vickrey & Associates, Inc.
Mailing Address: 12940 Country Pkwy.
City, State: San Antonio, Texas Zip: 78216
Telephone: (210) 349-3271 FAX: (210) 349-2561

2. X This project is inside the city limits of City of New Braunfels
_____ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of
_____
_____ This project is not located within any city's limits or ETJ.

3. 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.

The site is located approximately 1050 feet northeast of the intersection of Timber Hollow and State Highway 46.

4. X **ATTACHMENT A – ROAD MAP.** A road map showing directions to and the location of the project site is attached at the end of this form.

5. X **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP.** A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached behind this sheet. The map(s) should clearly show:
X Project site
X USGS Quadrangle Name(s).
X Boundaries of the Recharge Zone (and Transition Zone, if applicable)
X Drainage path from the project to the boundary of the Recharge Zone.

6. X 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. **The TCEQ must be able to inspect the project site or the application will be returned.**

7. X **ATTACHMENT C - PROJECT DESCRIPTION**. Attached at the end of this form is a detailed narrative description of the proposed project.

8. 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)
X Other: Undeveloped (cleared) with the exception of an existing concrete sidewalk
____

PROHIBITED ACTIVITIES

9. X 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).

10. X 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

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

X	For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.
____	For an Organized Sewage Collection System Plans and Modifications, the total linear footage of all collection system lines.
____	For a UST Facility Plan or an AST Facility Plan, the total number of tanks or piping systems.
____	A Contributing Zone Plan.
____	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.

12. 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)
X	San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

13. X Submit one (1) original and three (3) copies of the completed application to the appropriate regional office for distribution by the TCEQ to the local municipality or county, groundwater conservation districts, and the TCEQ's Central Office.

14. X 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.

____ No person shall commence any regulated activity until the Contributing Zone Plan for the activity has been filed with the executive director.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

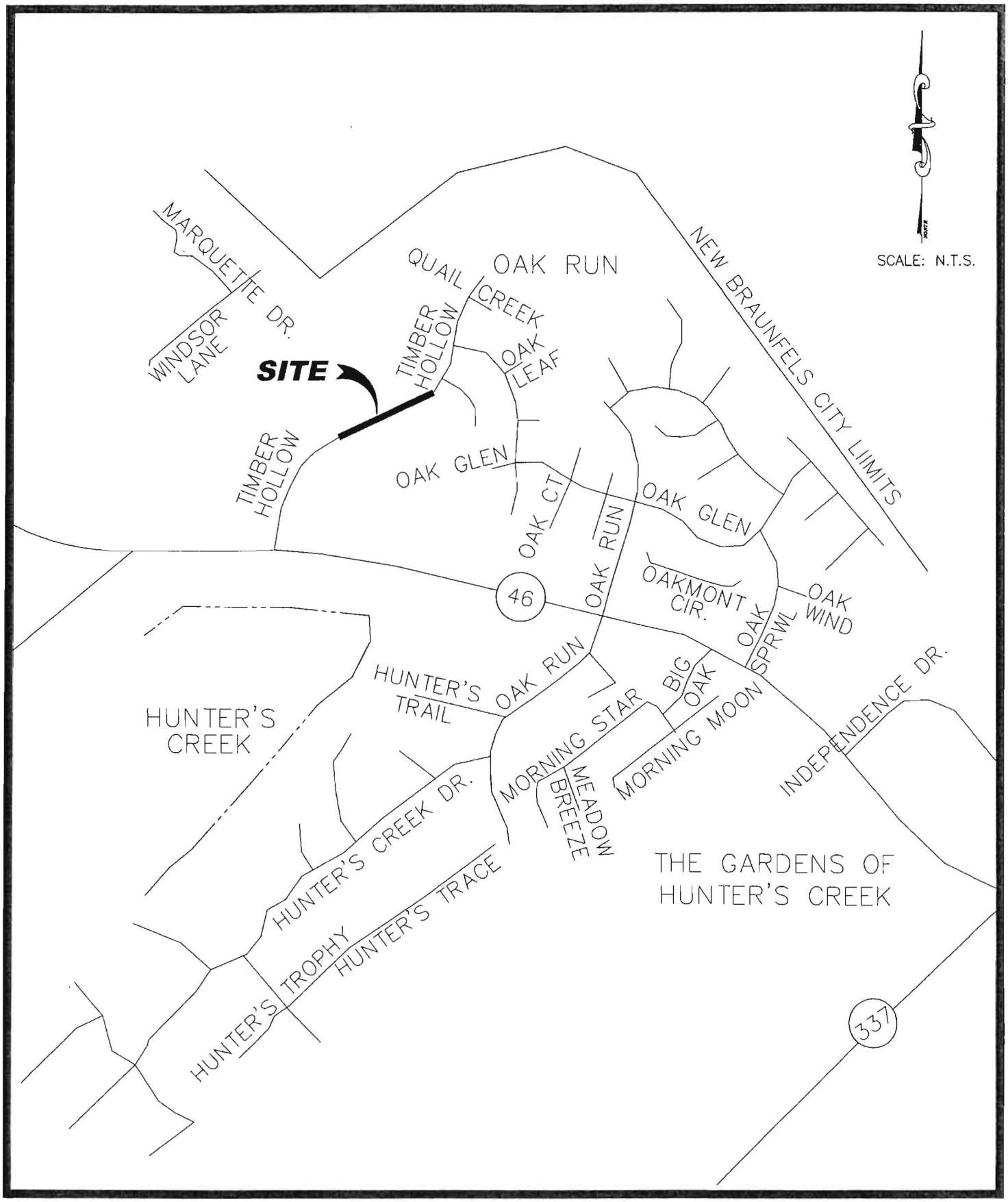
Date

X James C Klein
Signature of Customer/Agent

X 10-6-08
Date

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.



OAK RUN PEDESTRIAN BRIDGE

LOCATION MAP

ATTACHMENT: A DATE: AUGUST 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

N:\2102-003\dwg\sk_location map exh.dwg

ATTACHMENT C

Project Description

The Oak Run Pedestrian Bridge is planned to replace an existing concrete sidewalk low water crossing which allows pedestrian access to the Oak Run Sixth Grade Center from the Oak Run subdivision. The existing concrete sidewalk is ten (10) feet wide, and splits two (2) residential properties on the north side of the crossing. This low water pedestrian crossing floods during normal storm events, which impedes access to the Oak Run Center. The concrete sidewalk will be removed in the location where the pedestrian bridge is to replace it. The watershed in which the pedestrian bridge is to be constructed consists of 562 acres. This watershed flows into Tributary 6, which is a tributary to Blieders Creek. The project site currently consists of 0.09 acres of impervious cover (<1%), which will remain the same at the completion of the project. There will be no required TSS load removal as a result of this.

SCALE: 1"=2000'

LEGEND

STORMWATER RUN OFF PATH

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS

SITE

OAK RUN PEDESTRIAN BRIDGE

EDWARDS RECHARGE ZONE MAP

ATTACHMENT: B DATE: OCTOBER 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

SCALE: 1"=2000'

LEGEND

STORMWATER RUN OFF PATH

RECHARGE ZONE

TRANSITION ZONE

NOT OVER AQUIFER

NEW BRAUNFELS (BM 623)

MISSOURI PACIFIC

MISSOURI KANSAS TEXAS

OAK RUN PEDESTRIAN BRIDGE

EDWARDS RECHARGE ZONE MAP

ATTACHMENT: B DATE: OCTOBER 2008

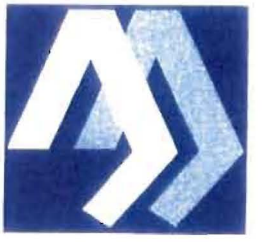
VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

GEOLOGIC ASSESSMENT

For:

Water Pollution Abatement Plan
Oak Run Pedestrian Bridge
Oak Run near State Highway 46
New Braunfels, Comal County, Texas



ARIAS & ASSOCIATES
Geotechnical · Environmental · Testing

Prepared for:

City of New Braunfels
C/O Vickrey & Associates, LLC
12940 Country Parkway
San Antonio, Texas 78216
ATTN: Mr. Kenneth Rogers

Job Number 08-4176
September 2008

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

REGULATED ENTITY NAME: **Oak Run Pedestrian Bridge, New Braunfels, Texas**

TYPE OF PROJECT: X WPAP __ AST __ SCS __ UST

LOCATION OF PROJECT: X Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. X Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Rumple-Comfort association, undulating	C	0.5-1.0

* 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.

3. X A **STRATIGRAPHIC COLUMN** is attached at the end of this form that shows formations, members, and thicknesses. The outcropping unit should be at the top of the stratigraphic column.

4. X A **NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY** is attached at the end of this form. The description must include a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure, and karst characteristics of the site.

5. X Appropriate **SITE GEOLOGIC MAP(S)** are attached:

The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1" : 400'

Applicant's Site Plan Scale 1" = 20'
Site Geologic Map Scale 1" = 20'
Site Soils Map Scale (if more than 1 soil type) 1" = _____'

6. Method of collecting positional data:
   X Global Positioning System (GPS) technology.
   ___ Other method(s).

7. X The project site is shown and labeled on the Site Geologic Map.

8. X Surface geologic units are shown and labeled on the Site Geologic Map.

9. X Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
   ___ Geologic or manmade features were not discovered on the project site during the field investigation.

10. X The Recharge Zone boundary is shown and labeled, if appropriate.

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

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

ADMINISTRATIVE INFORMATION

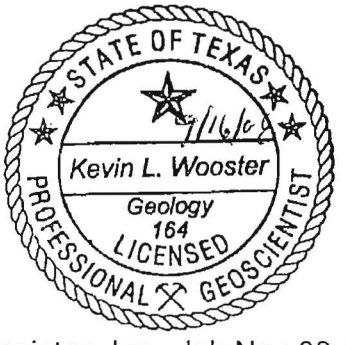
12. X One (1) original and three (3) copies of the completed assessment has been provided.

Date(s) Geologic Assessment was performed:

Date(s) August 27, 2008

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.

Kevin L. Wooster, P.G.
Print Name of Geologist



Telephone 210-308-5884

Fax 210-308-8731

Kevin L. Wooster
Signature of Geologist

September16, 2008
Date

Representing: Arias & Associates, Inc., Job No.: 08-4176
(Name of Company)

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

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

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Oak Run Pedestrian Bridge, New Braunfels, Texas

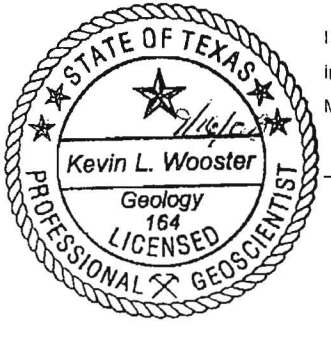
LOCATION							FEATURE CHARACTERISTICS													EVALUATION			PHYSICAL SETTING		
1A	1B *			1C*			2A	2B	3	4			5	5A	6	7	8A	8B	9	10			11		12
FEATURE ID	LATITUDE			LONGITUDE			FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY			CATCHMENT AREA (ACRES)		TOPOGRAPHY
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds				X	Y	Z		10						<40	>40		<1.6	>1.6	
S-1	29	43	25.9	98	10	21.1	MB	30	Kep	2.0	2.0		Sewer manhole				F	5	35	X				X	Drainage
S-2	29	43	26.1	98	10	21.4	MB	30	Kep	2.0	3.0		Storm Drain outfall				F	5	35	X				X	Drainage
S-3	29	43	25.6	98	10	22.4	MB	30	Kep	2.0	2.0		Sewer manhole				F	5	35	X				X	Drainage

* DATUM: NAD 83

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity h = Horizontal Feature	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.

Kevin L. Wooster

Date: August 27, 2008

Sheet 1 of 1

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

FEATURE LOCATION TABLE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

	Latitude			Longitude					
Feature No.	Deg	Min	Sec	Deg	Min	Sec	Type	Date	Measured By
S-1	29	43	25.9	98	10	21.1	MB	8/27/08	K.Wooster
S-2	29	43	26.1	98	10	21.4	MB	8/27/08	K.Wooster
S-3	29	43	25.6	98	10	22.4	MB	8/27/08	K.Wooster

SOIL NARRATIVE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

The site lies along a second order tributary to Blieders Creek. An existing concrete pedestrian low water crossing allows pedestrian access to the Oak Run Sixth Grade Center from the Oak Run Subdivision. The existing concrete sidewalk is 10 feet wide and splits two (2) residential properties on the north side of the crossing. This low water pedestrian crossing floods during normal storm events, which impedes the access to the Oak Run Center (Vickery & Associates, 2007).

Native soils remaining at the site consist of black and brown calcareous stony clay. The clay includes rock fragments ranging in size to pebbles. Although the clay content of the soils would tend to impede the downward flow of water, in areas where the rock fragments are more abundant, the water infiltration would increase.

The soils on the site are typical of those found on the Edwards plateau and hill country. They range up to a maximum thickness of about one-half to one foot in some areas. Soils and vegetation cover most of the south and east portions of the site. There are areas of rock outcrops on the east and west sides of the concrete walkway, along the drainage.

According to the U.S.D.A. Soil Survey of Comal and Hays Counties, Texas, dated 1984, the natural surface soils have been mapped as within one primary soil group. Rumple Comfort association (RUD) soils are mapped within the site, hillsided sloping to a second-order tributary to Blieders Creek.

The RUD soils are typically shallow to moderately deep soils consisting of dark reddish brown very cherty clay loam with limestone fragments. Overall soil depth is typically 14 inches. RUD soils are well drained and moderately slow permeability with a very low available water capacity and shallow rooting depth. Runoff is moderate and the hazard of water erosion is moderate.

STRATIGRAPHIC COLUMN

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

Hydrogeologic subdivision			Group formation or member			Hydro-logic fuction	Thick-ness (feet)	Lithology	Cavern develop-ment	Porosity / permeability type
Quaternary			Terrace Deposits			CU	0-30	Gravel and sand	None	High porosity / high permeability
Upper Cretaceous	Upper Confining Unit		Austin Group			CU	130-150	White to gray limestone	None	Low porosity / low permeability
			Eagle Ford Group			CU	30-50	Buff, light gray, dense mudstone	None	Low porosity / low permeability
			Buda Limestone			CU	40-50	Brown flaggy shale and argillaceous limestone	None	Low porosity / low permeability
			Del Rio Clay			CU	40-50	Blue-green to yellow-brown clay	None	None / primary upper confining unit
Lower Cretaceous	I		Georgetown Formation			CU	10	Reddish-brown, gray to light tan marly limestone	None	Low porosity / low permeability
	II	Edwards aquifer	Edwards Group	Person Fm.	Cyclic & marine members undivided	AQ	80-100	Mudstone to packstone; miliolid grainstone; chert	Many sub-surface	Laterally extensive; water yielding
	III				Leached & col-lapsed members	AQ	80-100	Crystalline limestone; mudstone to grainstone; chert collapsed breccia	Extensive lateral devel-opment; large rooms	Majority not fabric / one of the most permeable
	IV				Regional dense member	CU	20-24	Dense, argillaceous mudstone	Very few; only vertical fracture enlargement	Not fabric / low permeability; vertical barrier
	V			Kainer Fm.	Grainstone member	AQ	50-60	Miliolid grainstone; mudstone to wackestone; chert	Few	Not fabric / recrystal-lization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Probably extensive cave devel.	Majority fabric / one of the most permeable
	VII				Dolomitic member	AQ	110-130	Mudstone to grainstone; crystalline limestone; chert	Caves rela-ted to struc-ture or bed-ding planes	Mostly not fabric; some bedding plane fabric / water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone; mudstone and miliolid grainstone	Large lateral caves at surface	Fabric; stratigraph-ically controlled / large conduit flow at surface; no permea-bility in subsurface
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350-500	Yellowish tan, thinly bedded limestone and marl	Some sur-face cave development	Some water product-ion at evaporite beds / relatively impermeable

Reference: U.S.G.S. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas; Water-Resources Investigations Report 94-4117

Note: CU = Confining Unit; AQ = Aquifer

— — Indicates Upper Most Surface Bedrock Formation

GEOLOGY NARRATIVE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

The outcropping geologic formation mapped at the Site consists of the Person Formation of the Cretaceous Edwards Group, according to the San Antonio Sheet of the Geologic Atlas of Texas (BEG, 1983) and U.T. Bureau of Economic Geology (E.W. Collins, 1993). This formation is generally up to 200 feet thick or more, and consist of limestone and marlstone, and forms the upper portion of the Edwards Group.

The entire portion of the site lies within the 100-year floodplain. Most of the site was covered with soil and grass, with a few rock outcrops visible. Much of the visible rock at the site was exposed within the floor of the drainage way.

There was no evidence of structural faulting or fracturing observed in the field. There were no solution features found. Some of the rock showed varying signs of mostly weathered appearance. There were no open vugs observed.

According to the literature (USGS, 1988), there are no major mapped faults near the site. No karst features were noted during the site reconnaissance.

Three man-made features in bedrock were observed on the central portion of the site. Two existing sewer manholes (features S-1 and S-3) and a storm sewer outfall (S-2) were observed just to the west of the existing concrete sidewalk.

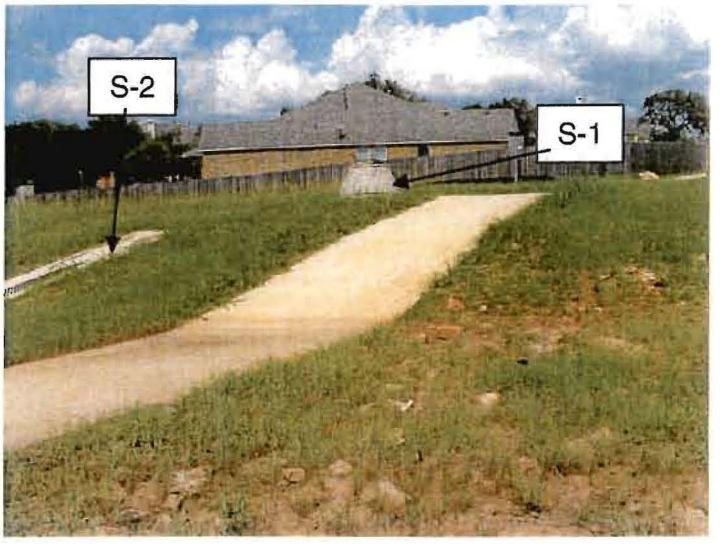
Potential for fluid movement to the aquifer is low due to absence of karst and structural features, along with very low permeability soil cover.

FEATURE NARRATIVE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

Three features found are described as follows:

S-1 and S-2: These features are an existing sanitary sewer manhole and a storm water sewer outfall. The features are surrounded by concrete surface completion pads that are in good shape without any open pathways observed between the features and native ground.



S-3: This feature is an existing sanitary sewer manhole. The feature was surrounded by concrete surface completion pad that is in good shape without any open pathways observed between the feature and native ground.

REFERENCES

Barnes V.L. 1983, Geologic Atlas of Texas, San Antonio, Sheet, Bureau of Economic Geology, The University of Texas at Austin, Texas.

Collins, E.W., 1993. Geology of New Braunfels West Quadrangle, Comal County, Texas, Open File Map, 0298-413. Bureau of Economic Geology, The University of Texas at Austin, Texas.

Small, T.A. and Hanson, J.A. 1994. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas. U.S. Geol. Survey, Water – Resources Investigations Report 94-4117. 8 pp., Plate, Fig., Table.

Texas Commission on Environmental Quality, (TCEQ), Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge Zone, TCEQ-0585-Instructions (Rev. 10-01-04).

United States Department of Agriculture. 1984 Soil Survey of Comal and Hays Counties, Texas, Natural Resource Conservation Service.

United States Department of Agriculture. Urban Hydrology for Small Watersheds, Technical Release No. 55.,Appendix A. Natural Resource Conservation Service, <http://www.info.usda.gov/CED/ftp/CED/tr55.pdf > July, 1986.

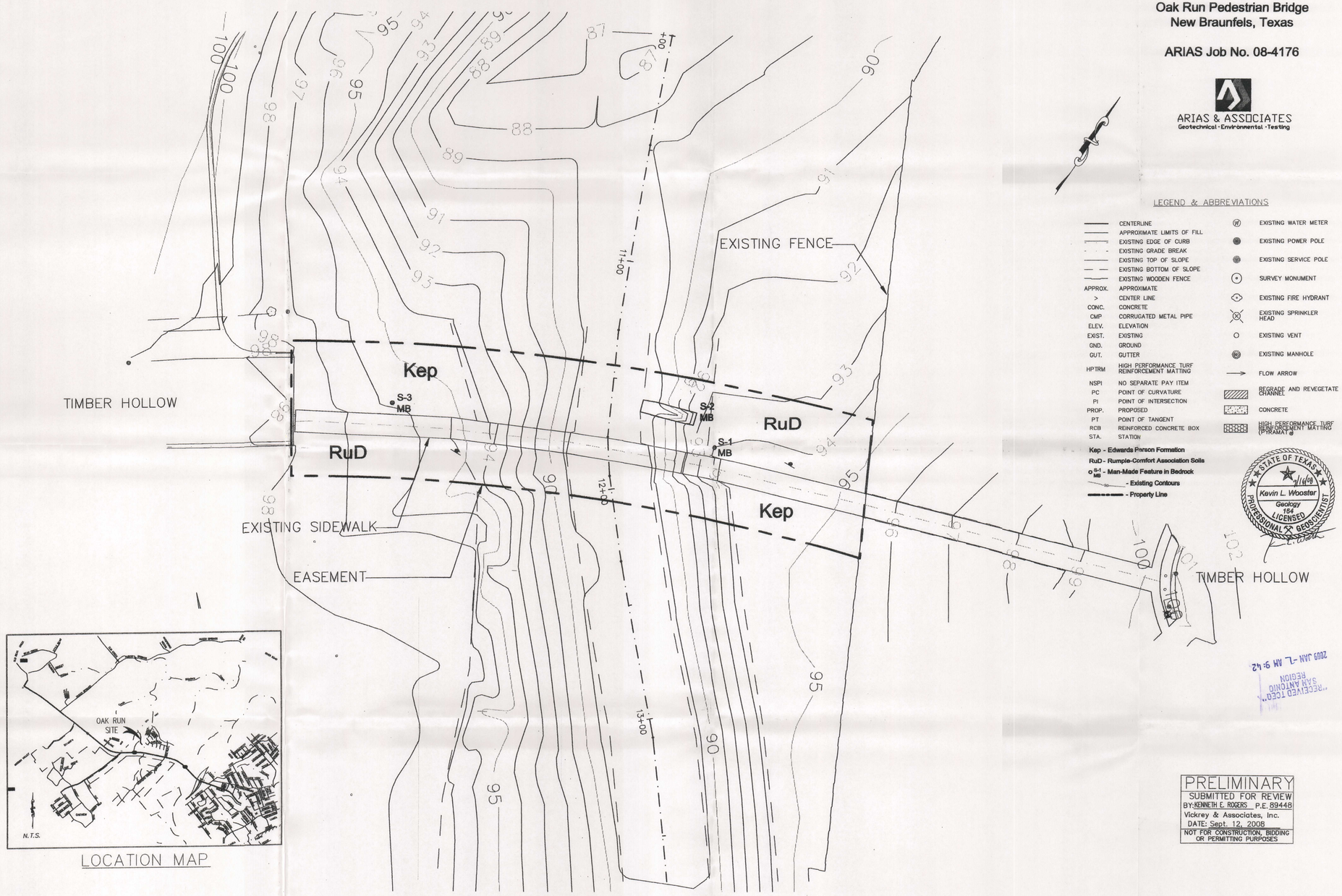
United Stated Geologic Survey, Rev. 1994. Sattler Quadrangle. USGS, Denver, Colorado.

Vickrey & Associates, LLC, November 2007, Project Summary for City of New Braunfels, Oak Run Roadway and Drainage.

Site Geologic Map
Oak Run Pedestrian Bridge
New Braunfels, Texas

ARIAS Job No. 08-4176

ARIAS & ASSOCIATES
Geotechnical · Environmental · Testing



LOCATION MAP

LEGEND & ABBREVIATIONS

	CENTERLINE
	APPROXIMATE LIMITS OF FILL
	EXISTING EDGE OF CURB
	EXISTING GRADE BREAK
	EXISTING TOP OF SLOPE
	EXISTING BOTTOM OF SLOPE
	EXISTING WOODEN FENCE
APPROX.	APPROXIMATE
>	CENTER LINE
CONC.	CONCRETE
CMP	CORRUGATED METAL PIPE
ELEV.	ELEVATION
EXIST.	EXISTING
GND.	GROUND
GUT.	GUTTER
HPTRM	HIGH PERFORMANCE TURF REINFORCEMENT MATTING
NSPI	NO SEPARATE PAY ITEM
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PROP.	PROPOSED
PT	POINT OF TANGENT
RCB	REINFORCED CONCRETE BOX
STA.	STATION

W	EXISTING WATER METER
	EXISTING POWER POLE
	EXISTING SERVICE POLE
	SURVEY MONUMENT
	EXISTING FIRE HYDRANT
	EXISTING SPRINKLER HEAD
O	EXISTING VENT
	EXISTING MANHOLE
	FLOW ARROW
	REGRADE AND REVEGETATE CHANNEL
	CONCRETE
	HIGH PERFORMANCE TURF REINFORCEMENT MATTING (PYRAMAT®)

Kep - Edwards Person Formation
RuD - Rumple-Comfort Association Soils
S-1 MB - Man-Made Feature in Bedrock
- Existing Contours
- Property Line

STATE OF TEXAS
9/16/09
Kevin L. Wooster
Geology
164
LICENSED
PROFESSIONAL GEOSCIENTIST

RECEIVED TCEQ
2009 JAN -7 AM 9:42
SAN ANTONIO REGION

PRELIMINARY
SUBMITTED FOR REVIEW
BY: KENNETH E. ROGERS P.E. 89448
Vickrey & Associates, Inc.
DATE: Sept. 12, 2008
NOT FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

REVISION		
NO.	DATE	DESCRIPTION
1		
2		
3		
4		

CITY OF NEW BRAUNFELS
DEPARTMENT OF PUBLIC WORKS

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL / ENVIRONMENTAL / SURVEY
12340 Country Parkway San Antonio, Texas 78216
Voice:(210) 349-3271 Fax:(210) 349-2581 www.vickreynet.com
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DRAINAGE IMPROVEMENT
OAK RUN SITE LAYOUT
NEW BRAUNFELS, TEXAS

DATE: 07/29/2008
SCALE
Vertical 1" =
Horizontal 1" = 20'(H)
0 10 20 30

SHEET 1 OF 1
PROJ NO. 2162-003

$TIME$
$DATE$
$FILE$

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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge

REGULATED ENTITY INFORMATION

1. The type of project is:
   ____ Residential: # of Lots: ____
   ____ Residential # of Living Unit Equivalents ____
   ____ Commercial
   ____ Industrial
   X Other: Capital Improvement, Pedestrian Bridge

2. Total site acreage (size of property): 0.34

3. Projected population: None

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

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0.00	÷ 43,560 =	0.00
Parking	0.00	÷ 43,560 =	0.00
Other paved surfaces	3,900	÷ 43,560 =	0.09
Total Impervious Cover	3,900	÷ 43,560 =	0.09
Total Impervious Cover ÷ Total Acreage x 100 =			26.5%

5. X **ATTACHMENT A - Factors Affecting Water Quality.** A description of any factors that could affect surface water and groundwater quality is provided at the end of this form.

6. X 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.
N/A – Not 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 description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on 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

N/A – No Wastewater to be Generated by the Proposed Project

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

_____ % Domestic	_____	gallons/day
_____ % Industrial	_____	gallons/day
_____ % Commingled	_____	gallons/day
TOTAL	_____	gallons/day

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. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.

    _____ 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 _____ Dos Rios 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 through 27 must be included on the Site Plan.

17. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 20'

18. 100-year floodplain boundaries

X 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):
Hydraulic analysis of the Blieders Creek Tributary 6, submitted to the City of New Braunfels and performed by Vickrey & Associates, Inc., dated 5/13/08

19. _____ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.

X The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

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 30 TAC §238.

X 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 and possibly sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled.

X No **sensitive and possibly sensitive** geologic or manmade features were identified in the Geologic Assessment.

_____ **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. Geologic or manmade features were found and are shown and labeled.

_____ **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. No geologic or manmade features were found.

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

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

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

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

26. N/A Surface waters (including wetlands).

27. _____ Locations where stormwater discharges to surface water or sensitive features.
X There will be no discharges to surface water or sensitive features.

ADMINISTRATIVE INFORMATION

28. X One (1) original and three (3) copies of the completed application have been provided.

29. X Any modification of this WPAP will require TCEQ executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

Signature of Customer/Agent

10-6-08
Date

ATTACHMENT A

Factors Affecting Water Quality

Various construction activities may affect the quality of stormwater originating on the proposed site during and after the development process. The factor that may possibly affect water quality on the site is oil/grease from construction machinery. The Total Suspended Solids (TSS) from the site will not be increased with the pedestrian bridge construction. However, BMPs, both temporary and permanent, have been designed on the basis of the Technical Guidance manual to treat an amount of groundwater runoff as to not adversely affect water quality entering into any surface water or groundwater.

ATTACHMENT B

Volume and Character of Stormwater

The project site is currently undeveloped with the exception of an existing concrete sidewalk. The pre-construction runoff for the 100-year storm event for the entire 562-acre drainage area in which the site is loated is approximately 3150 cfs, and the post-construction runoff is expected to remain the same. The impervious cover created by the bridge is nearly identical to that of the concrete side wall which is being removed.

The site on which the bridge will be constructed consists of 0.34 acres. The current sidewalk on the site contains 0.09 acres of impervious cover. The sidewalk will be demolished and replaced with a pedestrian bridge which will also contain 0.09 acres of impervious cover. The rain water intercepted by the pedestrian bridge will flow into Blieders Creek. The pre-construction and post-construction runoff coefficient is 0.65 in both cases.

Temporary Stormwater Section
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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge

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:

   _____ Aboveground storage tanks with a cumulative storage capacity of less that 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.

   __X__ Fuels and hazardous substances will not be stored on-site.

2. __X__ **ATTACHMENT A - Spill Response Actions.** A description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is provided at the end of this form.

3. __X__ 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. __X__ **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.

SEQUENCE OF CONSTRUCTION

5. __X__ **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 provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. __X__ 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: 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. __X__ **ATTACHMENT D - Temporary Best Management Practices and Measures.** A description of the TBMPs and measures that will be used during and after construction are provided at the end of this form. For each activity listed in the sequence of construction, include appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

__X__ 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 has been provided in the attachment at the end of this form.

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

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

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

d. 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.

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 provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

9. __X__ **ATTACHMENT F - Structural Practices.** Describe 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. Placement of structural practices in floodplains has been avoided.

10. X **ATTACHMENT G - Drainage Area Map.** A drainage area map is provided at the end of this form to support the following requirements.

_____ 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.

X 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.

11. N/A **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 has 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 provided as at the end of this form.

12. X **ATTACHMENT I - Inspection and Maintenance for BMPs.** A plan for the inspection of temporary BMPs and measures and for their timely maintenance, repair, and, if necessary, retrofit is provided at the end of this form. A description of documentation procedures and recordkeeping practices is included in the plan.

13. X 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 indicates a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. X 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. X 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. X 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. X **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 at the end of this form.

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

ADMINISTRATIVE INFORMATION

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

21. X 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. X 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.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

X James C Klein
Signature of Customer/Agent

X 10-6-08
Date

ATTACHMENT A

1.4.16 Spill Prevention and Control

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

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

(1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spills must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.

(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).

(4) Establish a continuing education program to indoctrinate new employees.

(5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

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 runon 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. See the waste management BMPs in this section for specific information.

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:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

(7) 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 are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

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 runon 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 oils 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 runon 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 spill/leaks.

ATTACHMENT B

Potential Sources of Contamination

During construction of this site, it is possible that there will be oil/grease and silt accumulation on the project site due to the equipment used to construct the pedestrian bridge. Excavation for the pedestrian bridge construction and demolition of the existing sidewalk will create silt on the project site. The use of grass filter strips will control the amount of silt leaving the site.

ATTACHMENT C

Sequence of Major Activities

The sequence of major activities for each unit of construction with the approximate total disturbed area is as follows:

- Installation of Temporary Best Management Practices on the Project Site (0.34 acres)
- Removal of Existing Sidewalk (0.09 acres)
- Construction of Pedestrian Bridge (0.09 acres)
- Final Site Grading and Cleanup (0.34 acres)

ATTACHMENT D

Temporary Best Management Practices and Measures

Temporary BMP's will be provided for the construction site. Upgradient flow will be allowed to maintain its natural flow during the construction stage of this project. A construction exit will be created at the west side of the site and will provide access via Timber Hollow. A rock filter berm and silt fence will be installed downstream of the construction area. Spill prevention measures will be utilized at all times. The silt fence filter fabric shall be anchored six (6) inches into the soil. The rock filter berm and silt fence shall be monitored weekly, as well as after any storm event for any failures or problems associated with silt build up. The water and suspended soils will be collected as the water flows across the project site. The existing native grasses will be left undisturbed in areas not under construction.

a. A rock filter berm and silt fence will be installed on the downstream boundary of the site to prevent pollution of surface water, groundwater or stormwater that originates upgradient of the site.

b. A construction exit will be installed on the western side of the project, providing access to the site via Timber Hollow. A storage and refueling area, if needed, will be designated on the site upstream of the silt fencing.

c. To prevent pollutants from entering surface streams, sensitive features, or the aquifer, the silt fence and rock filter berm mentioned in item b above will be installed. If discovered, sensitive features will be protected using hay bale dikes, sand bag berms or other methods acceptable to TCEQ.

d. To maintain flow to naturally occurring sensitive features in the event that any are discovered during inspections or construction, the hay bale dikes or sand bag berms mentioned in item c above will be installed. If a feature must be sealed, when possible the feature will be filled with boulders and gravel and capped with concrete.

ATTACHMENT E

Request to Seal Features

There are no geological features present on the site which would require sealing.

ATTACHMENT F

Structural Practices

A rock filter berm and silt fences will be used onsite to trap sediments and pollutants from leaving the areas of construction. Stabilized construction exits will be used onsite to prevent runoff, sediments, and pollutants from leaving the construction site. Structural practices will be placed within the 100-year floodplain as necessary.

Structural BMP specifications are behind this sheet.

Silt Fence

Description

This item shall consist of providing and placing a filter fabric fence including maintenance of the fence, removal of accumulated silt and removal of the fence upon completion of the project.

Materials

(1) Fabric

(a) General: The filter fabric shall be of nonwoven polypropylene, polyethylene or polyamide thermoplastic fibers with non-raveling edges. The fabric shall be non-biodegradable, inert to most soil chemicals, ultraviolet resistant, unaffected by moisture or other weather conditions, and permeable to water while retaining sediment. The filter fabric shall be supplied in rolls a minimum of 36 inches wide.

(b) Physical Requirements: The fabric shall meet the following requirements when sampled and tested in accordance with the methods indicated.

Physical Properties	Method	Requirements
Fabric Weight: (oz/sy)	TEX-616-J	4.5 minimum
Water Flow Rate: (gal/sq. ft/minute)	TEX-616-J	40 maximum
Equivalent Opening Size: US	CW-02215, US Army	40 to 100
Standard sieve. (number)	Corps of Engineers	
Mullen Burst Strength: (psi)	ASTM D 3786	300 minimum
Ultraviolet Resistance;	ASTM D 1682	70 minimum
Strength retention: (%)		

(2) Posts: Posts shall be painted or galvanized steel Tee or Y-posts with anchor plates, not less than 5 feet in length with a minimum weight of 1.3 pounds per foot with a minimum Brinell Hardness of 143. Hangers shall be adequate to secure fence and fabric to posts. Posts and anchor plates shall conform to ASTM A 702.

(3) Wire Fence: Wire fence shall be welded wire fabric 2x4-W1. 0xW1.0 and shall conform to REINFORCING STEEL.

Construction Methods

The silt fence fabric shall be securely attached to the posts and the wire support fence with the bottom 12 inches of the filter material buried in a trench a minimum of 6 inches deep and 6 inches wide to prevent sediment form passing under the fence. When the silt fence is constructed on impervious material, a 12 inch flap of fabric shall be extended upstream from the bottom of the silt fence and weighted to limit particulate loss. No horizontal joints will be allowed in the filter fabric. Vertical joints shall be overlapped a minimum of 12 inches with the ends sewn or otherwise securely tied.

The silt fence shall be a minimum of 24 inches high. Posts shall be embedded a minimum of 12 inches in the ground, placed a maximum of 8 feet apart and set on a slight angle toward the

anticipated runoff source. When directed by the Engineer, posts shall be set at specified intervals to support concentrated loads.

The silt fence shall be repaired, replaced, and/or relocated when necessary or as directed by the Engineer. Accumulated silt shall be removed when it reaches a depth of 6 inches.

Measurement

The work performed and the materials furnished under this item will be measured by the linear foot of "Silt Fence", complete in place.

Payment

The work performed and materials furnished and measured as provided under "Measurement" will be paid for at the unit price bid per linear foot of "Silt Fence". The price shall be full compensation for furnishing, hauling and placing all materials, labor, tools, equipment and incidentals necessary to complete the work including inspecting, repairing, replacing and relocating the fence, removal of silt and removal and disposal of all materials at the completion of construction in and revegetation of disturbed areas.

Payment will be made under:

Silt Fence for Erosion Control – Per Linear Foot.

END

Stabilized Construction Exit

Description

This item involves constructing a stabilized pad of crushed stone located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or deposition of sediment onto public right-of-way.

Materials

Aggregate for construction shall conform to the following gradation:

Table 1: Aggregate Gradation Chart (TEX 401-A, Percent Retained)

8 inch	5 inch	2 inch
0	90-100	100

Construction Methods

All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the excavation and construction of the entrance as indicated. The entrance shall not drain onto the public right-of-way or leave the construction site.

When necessary, vehicle wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sand bags, gravel, boards, silt fence or other approved methods.

The entrance shall be maintained in a condition which will prevent tracking or disposition of sediment onto public right-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. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.

Measurement

Acceptable work performed as prescribed in this item will be measured by unit of each stabilized construction entrance installed.

Payment

Work performed and materials furnished under this item shall be paid for at the unit price bid per each.

Payment, when included as a contract pay item, will be made under:

Stabilized Construction Entrance – Per Each

Rock Filter Dams

Description

This Item shall govern for the materials to be furnished and for the installation, maintenance and removal of rock filter dams of the dimensions shown on the plans. The rock filter dams shall be constructed at the locations shown on the plans and as directed by the Engineer. This Item will be used during construction to control erosion and sedimentation.

Materials

Unless otherwise specified, all aggregate used for the construction of the rock filter dams shall be hard, durable, clean, open-graded, and shall naturally resist crumbling, flaking and eroding. Aggregate gradation shall be 3 to 6 inches for rock filter dams Types 1, 2 and 4 and shall be 4 to 8 inches for Type 3.

The galvanized steel wire mesh and tie wires for Types 2 and 3 shall be a minimum 20 gauge unless specified otherwise on the plans.

For Type 4: Steel wire mesh shall utilize a double twisted hexagonal weave; mesh opening shall be a nominal 2.50" x 3.25"; steel wire for netting shall be 0.0866" (U.S. Gauge No. 13) minimum; steel wire for selvedges and corners shall be 0.1063" (U.S. Gauge No. 110 minimum; and binding or tie wire shall be 0.0866" (U.S. Gauge No. 13) minimum.

Unless otherwise specified, the sandbag material shall be made of polypropylene, polyethylene or polyamide woven fabric, minimum unit weight four (4) ounces per square yard, Mullen burst strength exceeding 300 psi and ultraviolet stability exceeding 70 percent. The sandbag size shall be 24 to 30 inches in length, 16 to 18 inches in width, six (6) to eight (8) inches thick and weight 90 to 125 pounds. The sand shall be course grade.

Construction Methods

Trees, brush, stumps and other objectionable material shall be removed and disposed of as necessary so as not to interfere with the construction of the filter dams.

The filter dams shall be constructed according to the following criteria unless otherwise shown on the plans:

(1) Type 1 (non-reinforced)

Height –	18 inches minimum, measured vertically from existing ground to top of filter dam.
Top Width –	2 feet minimum
Slopes –	2:1 maximum

(2) Type 2 (reinforced)

Height –	18 inches minimum, measured vertically from existing ground to top of filter dam.
Top Width –	2 feet minimum
Slopes–	2:1 maximum

The aggregate shall be placed on the galvanized wire mesh to the lines, height and slopes specified without resulting in undue voids, and to the satisfaction of the Engineer. The mesh shall be folded at the upstream side over the aggregate and secured to itself on the downstream side. The mesh shall be attached to itself with wire ties, hog rings, or as directed by the Engineer.

(3) Type 3 (reinforced)

Height – 36 inches minimum, measured vertically from existing ground to top of filter dam.

Top Width – 2 feet minimum

Slopes – 2:1 maximum

The aggregate shall be placed on the galvanized wire mesh to the lines, height and slopes specified without resulting in undue voids, and to the satisfaction of the Engineer. The mesh shall be folded at the upstream side over the aggregate and secured to itself on the downstream side. The mesh shall be attached to itself with wire ties, hog rings, or as directed by the Engineer.

(4) Type 4 (Sack Gabions)

Sack gabions are supplied folded flat, packed in bundles. Single sacks shall be removed from the bundle, unfolded flat on the ground, and all kinks and bends stepped out.

For vertical filling, the two sides edge wires are connected by using the lacing wire in a "single loop – double loop" pattern on a 4" to 5" spacing. At one end, the "end lacing rod" must be pulled tight, wrapped around the end and twisted 4 times. At the filling end, the rod shall be pulled tight, cut, leaving about 6" length and twisted 4 times.

For horizontal filling, the sack shall be placed flat in a filling trough, filled with stone and then sides connected as described above. The ends shall be secured as described above.

Lifting and placing shall be accomplished by placing a No. 6 rebar (or equal) 5' long in the mesh, perpendicularly to the longitudinal axis and close to the knot of one end. Lifting should be made from the central point. Sack gabions shall conform to existing contours.

(5) Type 5. Type 5 as shown on the plans.

Maintenance

The area upstream from the filter dams shall be maintained in a condition which will allow sediment to be removed following the runoff of a rainfall event. When the silt reaches a depth equal to 1/3 the height of the dam or 1 foot, whichever is less, the Contractor shall remove the accumulated sediment and dispose of it at an approved site in a manner that will not contribute to additional siltation. The filter dams shall be reshaped as needed and as directed by the Engineer.

The filter dams shall be maintained in place until all upstream areas are adequately stabilized. When the special Specification, "Temporary Erosion, Sedimentation and Water Pollution Prevention and Control" is in the contract, stabilization shall be as described in Subarticle 4.C of that specification. The area beneath the filter dams and area damaged by the removal process shall then be stabilized by the Contractor using appropriate methods as approved by the Engineer.

Measurement

This Item will be measured by the linear foot or by the cubic yard, as shown on the plans. When measured by the linear foot, measurement will be along the centerline of the top of the dam. When measured by the cubic yard, measurement will be the volume for rock computed in its final position by the method of average end areas or in vehicles at the point of delivery. The measured volume will include sandbags, if they are used.

Each time the Engineer directs that the filter dam (or portions thereof) be removed or removed and replaced, it will be measured for payment.

Payment

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement", will be paid for at the unit price bid for "Rock Filter Dams", of the type specified. This price shall be full compensation for furnishing all material; finish backfill and grading; lacing; and for all tools, equipment, labor and incidentals necessary for the construction and maintenance (except as shown below) of the filter dams.

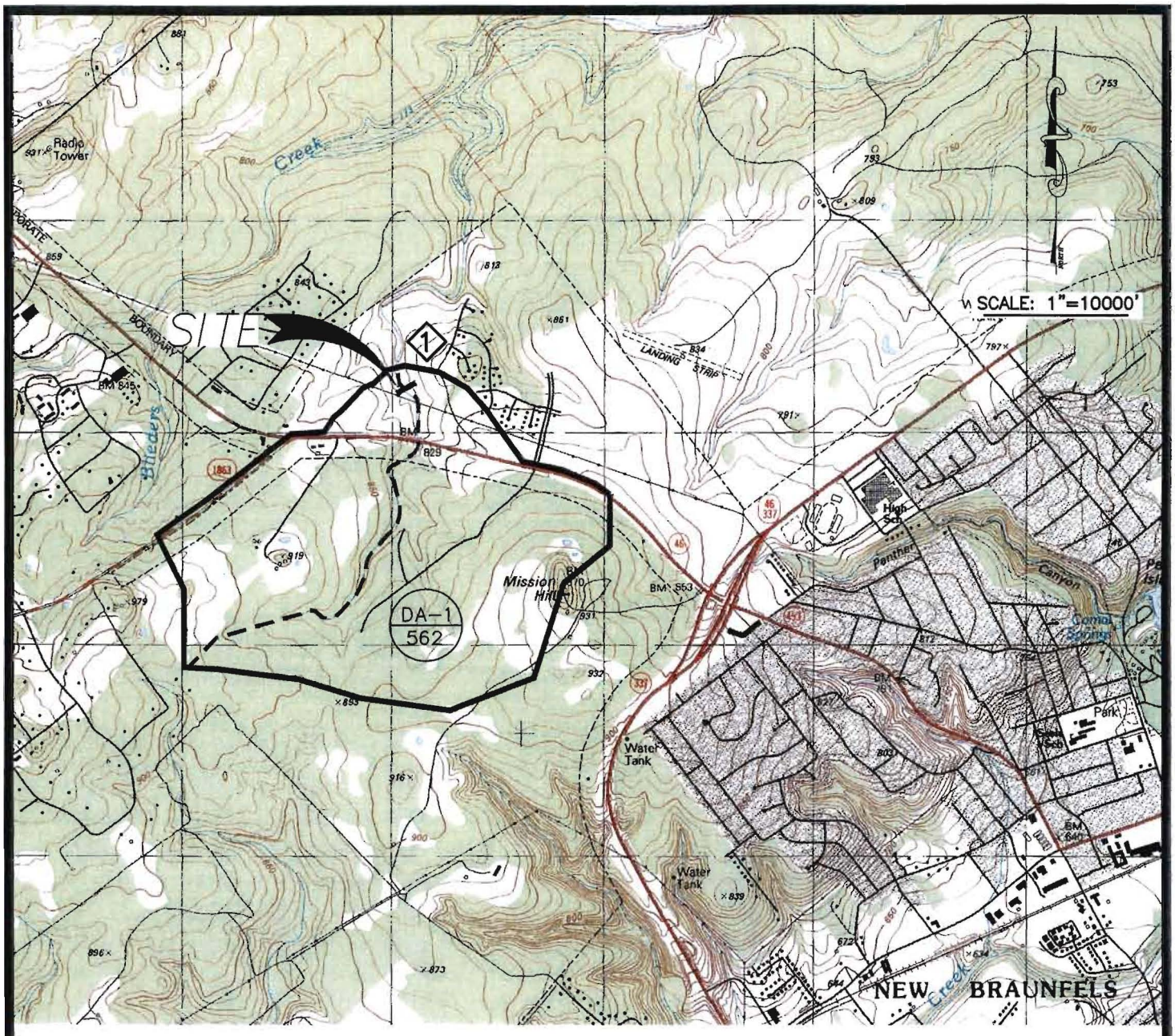
When the Engineer directs that the rock filter dam installation (or portions thereof) be replaced, payment will be made at the unit price bid for "Rock Filter Dams (Remove and Replace)", of the type specified. This price shall be full compensation for the removal and replacement of the rock filter dam and for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.

The removal of accumulated sediment deposits, as described under "Maintenance", will be measured and paid for under the pertinent bid items of the Special Specification, "Earthwork for Erosion Control".

The work performed in the final removal of the rock filter dam installation as described under "Maintenance" and measured as provided above will be paid for at the unit price bid for "Rock Filter Dam (Remove) of the type specified. This price shall be full compensation for removing the dam from the existing location and properly disposing of it and for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.

Stabilization (as described under "Maintenance") will be measured and paid for under the various pertinent bid items.

End



OAK RUN PEDESTRIAN BRIDGE
Runoff and Tc Calculations for 562 acres draining to site

Existing Runoff Flow Rates Drainage Area												
REFERENCE POINT	Drainage Areas	C	Drainage Area (ac)	Tc (min)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(100) (in/hr)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(100) (cfs)
1	1	0.83	562	43	2.98	3.44	4.13	5.41	1388.28	1605.71	2117.79	3152.54
Proposed/Ultimate Runoff Flow Rates Drainage Area												
REFERENCE POINT	Drainage Areas	C	Drainage Area (ac)	Tc (min)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(100) (in/hr)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(100) (cfs)
1	1	0.83	562	43	2.98	3.44	4.13	5.41	1388.28	1605.71	2117.79	3152.54

Rainfall Intensities based on City of San Antonio Unified Development Code Table 504-2

OAK RUN PEDESTRIAN BRIDGE

DRAINAGE AREA MAP

USGS MAP NO. 299830

HELOTES QUADRANGLE

ATTACHMENT: G DATE: OCTOBER 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

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ATTACHMENT H

Temporary Sediment Pond(s) Plans and Calculations

A temporary sediment pond will not be necessary due to the minimal site disturbance associated with this project.

ATTACHMENT I

Inspection and Maintenance for BMPs

The temporary BMP's will be scheduled for inspection and repair at weekly intervals and following any rainfall event that is greater than one-half (½) inch. The Contractor is responsible for logging all inspections, rainfall events, and repairs. The Contractor is responsible for cleaning up any sediment that is released onto the sidewalks after any rainfall event. The following forms shall be used for inspection and maintenance reports that are required to be kept on the project site by the contractor.

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

_____

_____

_____

_____

REASONS FOR CHANGES:

_____

_____

_____

_____

INSPECTOR'S SIGNATURE:_____ DATE:_____

INSPECTIONS

DATE OF INSPECTION	CONTROL INSPECTED	OBSERVATIONS	COMPLIANCE WITH SWPPP		INSPECTOR'S SIGNATURE	TITLE/ QUALIFICATIONS
			YES	NO		

RECORD OF CONSTRUCTION ACTIVITY

DATE STARTED	DATE ENDED	TYPE OF ACTIVITY	CONTROL MEASURES	INSPECTOR SIGNATURE	TITLE/ COMPANY

NON-STORMWATER DISCHARGES

DATE	INSPECTOR	TITLE	COMPANY	DISHARGE TYPE	POLLUTION CONTROL MEASURE

CONSTRUCTION MATERIALS

DATE STORED ONSITE	DATE REMOVED FROM SITE	DESCRIPTION	INSPECTOR'S SIGNATURE	TITLE	COMPANY

STABILIZATION RECORD

CONSTRUCTION/GRADING		STABILIZATION			SIGNATURE		
DATE BEGAN	DATE ENDED	DATE BEGAN	AREA OF SITE STABILIZATION	TYPE OF STABILIZATION USED	INSPECTOR	TITLE	COMPANY

RAINFALL DATA

DATE OF RECORDED RAINFALL	AMOUNT OF RAINFALL (INCHES)	SIGNATURE OF INSPECTOR	TITLE/COMPANY

SUBCONTRACTOR RESPONSIBILITIES

DATE	SUBCONTRACTOR COMPANY	CONSTRUCTION ACTIVITY TO BE PERFORMED	DESCRIPTION OF POLLUTION PREVENTION RESPONSIBILITY	INITIALS	
				SUBCONTRACTOR	CONTRACTOR

ATTACHMENT J

Schedule of Interim and Permanent Soil Stabilization Practices

Stabilization measures (temporary seeding) 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 ceases 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.

Slopes that are steeper than 3:1 will be covered with appropriate soil stabilization matting as described in the Technical Guidance Manual (Section 1.3.9) to prevent loss of soil and seed. Permanent seeding of individually disturbed areas shall be performed when infrastructure construction has been completed. Permanent sodding and mulching of landscape areas shall occur at or near the completion of project (RG-348, Section 1.3.10, 1.3.11). During construction, contractors shall, to the maximum extent possible, limit their construction activities to areas of construction as noted on the plans in an attempt to preserve as much natural vegetation as possible.

Contractor shall keep records onsite with the SWPPP which tracks dates of major grading activities as well as when construction activities temporarily or permanently cease on a portion of the site and when stabilization measures are initiated.

SEDIMENTATION AND EROSION CONTROLS

A. SILT FENCING

(1) Fences are to be constructed along level contours.
(2) The ends of the fence shall be turned upstream to prevent bypass of stormwater.
(3) Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of one foot.
(4) The toe of the silt fence shall be trenched in with a spade or mechanical trencher, so that the downslope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g. pavement) weight fabric flap with washed gravel on uphill side to prevent flow under fence.
(5) 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.
(6) 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 shall be a 6" double overlap, securely fastened where ends of
(7) Inspection shall be made weekly or after each rainfall. Repair or replacement shall be made promptly
(8) Accumulated silt shall be removed when it reaches a depth of 6 inches. The silt shall be disposed of in an approved site and in such a manner as to not contribute to the additional siltation.

B. TEMPORARY DIVERSION DIKE

(1) Maximum depth of flow at the dike shall be 1 foot.
(2) Side slopes of the diversion dike shall be 3:1 or flatter.
(3) Minimum width of the embankment at the top shall be 2 feet.
(4) Minimum embankment height shall be 18 inches as measured from the toe of slope on the upgrade side of the berm.
(5) The dikes shall remain in place until all disturbed areas which are protected by the dike are permanently stabilized unless other controls are put into place to protect the site.
(6) Compacted earth dikes require stabilization immediately upon placement so as not to contribute to the problem they are addressing.
(7) All diversion dikes shall have positive drainage to an outlet.
(8) Dikes must be inspected on a regular basis to determine if silt is building up behind the dike, or if erosion is occurring on the face of the dike. Silt shall be removed in a timely manner. If erosion is occurring on the face of the dike, the slopes of the face shall be stabilized.

C. INTERCEPTOR SWALE

(1) Maximum depth of flow in the swale shall be 1 foot.
(2) The minimum bottom width of the swale shall be 2 feet.
(3) Side slopes of the swale shall be 3:1 or flatter.
(4) Minimum design channel freeboard shall be 6 inches.
(5) Swales must maintain positive grade to an acceptable outlet.
(6) Interceptor swales must be stabilized immediately upon excavation so as not to contribute to the erosion problem they are addressing.
(7) All trees, brush, stumps, obstructions and other material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.
(8) All earth removed and not needed in construction shall be disposed of in an approved spoils site.
(9) Inspection must be made after each rain event to locate and repair any damage to the channel or to clear debris or other obstructions so as not to diminish flow capacity. Damages which result from normal construction activities shall be repaired at the end of each work day.

D. VEGETATIVE FILTER STRIPS/BUFFERS

(1) Preserve natural vegetation or plantings in clumps, blocks, or strips.
(2) All unstable steep slopes should be left in natural vegetation.
(3) Clearing limits should be fenced or flagged to keep all equipment and construction debris out of the natural areas.
(4) Keep all excavations outside the drip line of trees and shrubs.
(5) Keep debris and extra soil out of the buffer area to limit damage due to burying and smothering.
(6) The minimum width of a vegetative buffer used for sediment control should be 50 feet.
(7) Vegetative buffers and filter strips should be inspected until healthy vegetation is established. Routine maintenance such as mowing, fertilizing, irrigation and/or weed and pest control shall depend on the type of vegetation established. Any disturbed areas shall be revegetated to 70% of the original conditions upon completion of the project.

E. SANDBAG BERM

(1) Minimum height shall be 18 inches.
(2) Minimum width of the berm shall be 18 inches at the top and 48 inches measured at the bottom.
(3) Maximum side slopes shall be 2:1.
(4) The ends of the berm shall be turned upgrade or shall tie into natural grades to prevent bypass of stormwater.
(5) Sandbags should be stacked in at least three rows abutting each other, and in staggered arrangement.
(6) Inspections should be made on a daily basis and after each rain event. The sandbags shall be reshaped or replaced as needed during the inspection. Silt should be removed when it reaches a depth of six (6) inches.

F. STONE OUTLET SEDIMENT TRAP

(1) Minimum width of the embankment at the top shall be 3 feet perpendicular to the flow.
(2) Minimum embankment slope shall be 3:1.
(3) Maximum embankment height shall be 2 feet as measured from the toe of slope to the crest of the stone outlet. The height of the compacted earth embankment shall be one foot higher than the crest of the outlet.
(4) Sediment shall be removed and the area directly behind the berm shall be re-graded to its original dimensions at such point when the capacity of impoundment has been reduced to one-half of its original storage capacity.
(5) The stone outlet structure should be inspected frequently and after each major rain event to check for clogging of the void spaces between stones. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

G. STABILIZED CONSTRUCTION EXIT

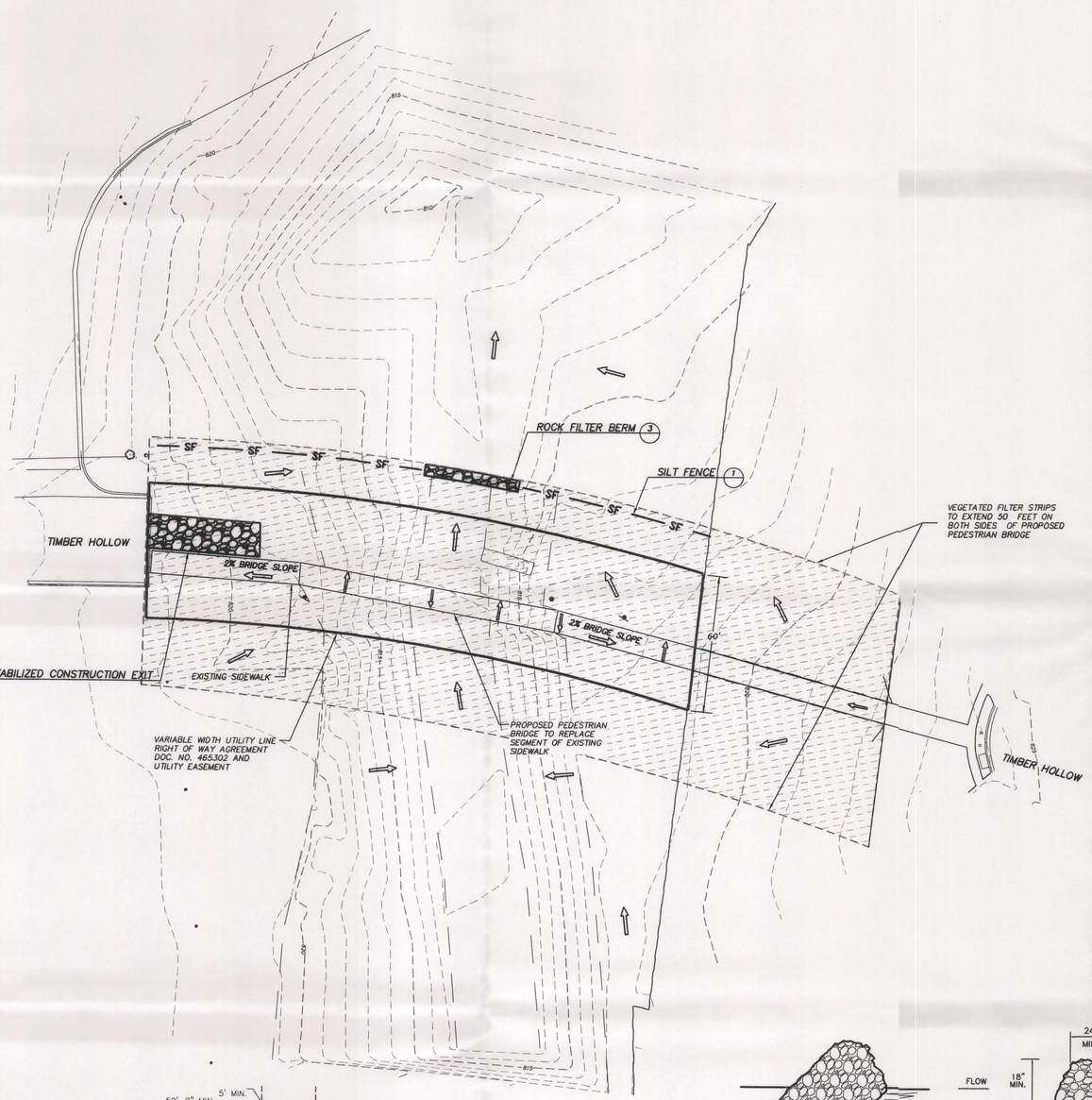
(1) Stone size – 3 to 5 inches crushed rock.
(2) Length – as effective, but not less than 50 feet, unless depth of lot is less than 150 feet from edge of pavement where length must only be 30 feet.
(3) Thickness – not less than 8 inches.
(4) Width – not less than full width of all points of ingress or egress.
(5) Washing – when necessary, wheels shall be cleaned to remove sediment prior to entrance onto public roadway. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
(6) Maintenance – the entrance shall be maintained in condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and repair and/or clean out of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway, must be removed immediately.
(7) Drainage – entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

ADDITIONAL NOTES:

(1) Upon completion of construction all disturbed areas shall be revegetated to 70% of existing conditions in accordance with the SWPPP and TPDES requirements.
(2) This project will not use any off-site material, waste/borrow/fill, or equipment storage areas.
(3) This site will not have any locations where storm water discharges directly to a surface water body.

PRE-CONSTRUCTION RUNOFF COEF. "C"	POST-CONSTRUCTION RUNOFF COEF. "C"
0.65	0.65

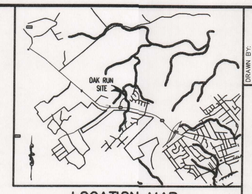
AREA DISTURBED (ACRES)	AREA UNDISTURBED (ACRES)	TOTAL AREA (ACRES)
0.37	0	0.37

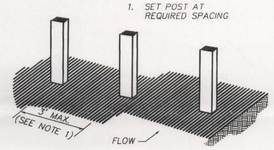


2 STABILIZED CONSTRUCTION EXIT
N.T.S.

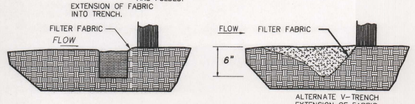
ROCK BERM NOTES:
1. USE ONLY OPEN GRADED ROCK 100 to 200 mm (4 to 8") DIAMETER FOR STREAM FLOW CONDITIONS. USE OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE). ROCK BERMS IN CHANNEL APPLICATIONS SHALL BE ANCHORED FIRMLY INTO THE SUBSTRATE A MINIMUM OF 150 mm (6 ") WITH T-POSTS OR WITH 15M OR 20M (#5 OR #6) REBAR, WITH MAXIMUM SPACING APART OF 1.2 m (48") ON CENTER.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6 ") WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE-SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 150 mm (6").
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

3 ROCK FILTER BERM
NTS





GENERAL NOTES:
1. POSTS TO BE SET AT 3-FOOT MAXIMUM SPACING. IF FACTORY PRE ASSEMBLED FENCE WITH SUPPORT NETTING IS USED, SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.



1 SILT FENCE
N.T.S.

"RECEIVED TCEQ" SAN ANTONIO REGION
2009 JAN -2 AM 9:42

PROPERTY DESCRIPTION:
OAK RUN PEDESTRIAN BRIDGE
0.34 OF THE 0.37 ACRES FROM LOT 72A, BLOCK 1 FROM THE OAK RUN SUBDIVISION UNIT 18

NO.	DATE	REVISIONS
1	12/31/08	REVISED SEDIMENTATION & EROSION CONTROLS, VEGETATED FILTER STRIP & SILT FENCING DETAIL
2		
3		
4		

DRAWN BY:
CHECKED BY:
APPROVED BY:
FILE NO.
FILE LOCATION:

STATE OF TEXAS
KENNETH E. ROGERS
89448
LICENSED
PROFESSIONAL ENGINEER
12/31/08

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway
San Antonio, Texas 78216
Voice: (210) 349-3271 Fax: (210) 349-2561

PREPARED FOR:
CITY OF NEW BRAUNFELS
DEPARTMENT OF PUBLIC WORKS

STORM WATER POLLUTION PREVENTION PLAN
PEDESTRIAN BRIDGE
NEW BRAUNFELS, TEXAS

OCTOBER 2008

SCALE
Vertical 1" =
Horizontal 1" = 30'
0 15 30 45

SHEET	OF
1	1

PROJ NO. 2162-003

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Permanent Stormwater Section
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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge

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

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

2. X 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.

   X 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 provided below:

   _____
   _____
   _____
   _____

3. X 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.

4. X 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.

   _____ This site will be used for low density single-family residential development and has 20% or less impervious cover.

   _____ This site will be used for low density single-family residential development but has more than 20% impervious cover.

   X This site will not be used for low density single-family residential development.

5. X 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.** This 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 found at the end of this form.

_____ This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

__X__ This site will not be used for multi-family residential developments, schools, or small business sites.

6. **ATTACHMENT B - BMPs for Upgradient Stormwater.**

__X__ 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 identified as **ATTACHMENT B** at the end of this form.

_____ If no surface water, groundwater or stormwater originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form.

_____ If 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, an explanation is provided as **ATTACHMENT B** at the end of this form.

7. **ATTACHMENT C - BMPs for On-site Stormwater.**

__X__ 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 identified as **ATTACHMENT C** at the end of this form.

_____ If 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, an explanation is provided as **ATTACHMENT C** at the end of this form.

8. __X__ **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 provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" or "possibly sensitive" has been addressed.

9. __X__ 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.

__X__ The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.

_____ **ATTACHMENT E - Request to Seal Features.** A request to seal a naturally-occurring "sensitive" or "possibly sensitive" feature, that includes a justification as to why no reasonable and practicable alternative exists, is found at the end of this form. A request and justification has been provided for each feature.

10. __X__ **ATTACHMENT F - Construction Plans.** Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information have been signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed permanent BMPs and measures are provided at the end of this form. Design Calculations, TCEQ Construction Notes, all man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.

11. __X__ **ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is provided at the end of this form. The plan has been prepared and certified by the engineer designing the permanent BMPs and measures. The plan has been signed by the owner or responsible party. The plan includes procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofits as well as a discussion of record keeping procedures.

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

    _____ Pilot-scale field testing (including water quality monitoring) may be required for BMPs that are not contained in technical guidance recognized by or prepared by the executive director.

    __N/A__ **ATTACHMENT H – Pilot-Scale Field Testing Plan.** A plan for pilot-scale field testing is provided at the end of this form.

13. __X__ **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 provided at the end of this form. 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.

Responsibility for maintenance of permanent BMPs and measures after construction is complete.

14. __X__ 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.

15. __X__ 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.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

X James C Klein
Signature of Customer/Agent

X 10-6-03
Date

ATTACHMENT B

BMPs for Upgradient Stormwater

Upgradient stormwater will be permitted to maintain a natural flow path during all phases of the project. The stormwater runoff flows to Tributary 6, a tributary of Blieders Creek. Temporary BMP's will include the installation of a rock filter berm and silt fencing on the downstream boundary of the project to prevent contamination of Upgradient stormwater, and the creation of a stabilized construction exit on the western boundary of the project site with access to Timber Hollow. Permanent BMP's will be executed by the use of vegetative filter strips (resodding) of the entire project site at the completion of construction.

ATTACHMENT C

BMPs for Onsite Stormwater

The Oak Run Pedestrian Bridge proposes approximately 0.09 acres of impervious cover; the proposed impervious cover will be replacing existing impervious cover. The TCEQ TSS Removal Calculations worksheet shows that the required TSS removal resulting from the proposed development (L_m) is 0 lbs. The natural grasses downstream of the project and the resodding of the area disturbed by construction activity will perform the function of grass filter strips and be sufficient for this project. See Attachment F for details.

ATTACHMENT D

BMPs for Surface Streams

There are no recharge features on this site. The project is located with Tributary 6, which is a tributary of Blieders Creek. Vegetative filter strips (grass sodding) will be used on the entire site as a permanent BMP. Temporary BMPs will include silt fencing, which will be installed on the downstream boundary of the site, and a construction exit, which will be placed along the western boundary of the site adjacent to Timber Hollow.

Texas Commission on Environmental Quality

ATTACHMENT F

TSS Removal Calculations 02-20-2008

Project Name: Oak Run Pedestrian Bridge
Date Prepared: 12/30/2008

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

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

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Comal	
Total project area included in plan * =	0.37	acres
Predevelopment impervious area within the limits of the plan* =	0.00	acres
Total post-development impervious area within the limits of the plan* =	0.12	acres
Total post-development impervious cover fraction * =	0.32	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	108	lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 1

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

Drainage Basin/Outfall Area No. =	1	
Total drainage basin/outfall area =	0.37	acres
Predevelopment impervious area within drainage basin/outfall area=	0.00	acres
Post-development impervious area within drainage basin/outfall area=	0.12	acres
Post-development impervious fraction within drainage basin/outfall area=	0.32	
$L_{M\ THIS\ BASIN}$ =	108	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = VF abbreviation
Removal efficiency = 85 percent

BMP Code:	BMP Type:
AQ	Aqualogic™ Cartridge Filter
BR	Bioretention
CS	Contech StormFilter
CW	Constructed Wetland
ED	Extended Detention
GS	Grassy Swale
RI	Retention / Irrigation
SF	Sand Filter
VF	Vegetative Filter Strip
WB	Wet Basin
WV	Wet Vault

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

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

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	0.37	acres
A_I =	0.12	acres
A_P =	0.25	acres
L_R =	120	lbs

ATTACHMENT G

OAK RUN PEDESTRIAN BRIDGE

MAINTENANCE SCHEDULE FOR VEGETATIVE FILTER STRIP

OAK RUN PEDESTRIAN BRIDGE
1050 feet northeast of the intersection of Timber Hollow and State Highway 46
New Braunfels, Texas 78130

REQUIRED MAINTENANCE

Once a vegetated area is well established, little additional maintenance is generally necessary. The key to establishing a viable vegetated feature is the care and maintenance it receives in the first few months after it is planted. Once established, all vegetated BMPs require some basic maintenance to insure the health of the plants, including:

Pest Management:

The insects and weeds shall not be controlled with insecticides or herbicides. This project shall be naturally controlled and the selection of applicable plants shall be necessary.

Seasonal Mowing and Lawn Care:

If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetative filter strip areas. Regular mowing should also include weed control practices; however, herbicides shall be used. Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of this site can help assure a dense and healthy vegetative cover.

Inspection:

Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

Debris & Litter Removal:

Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.

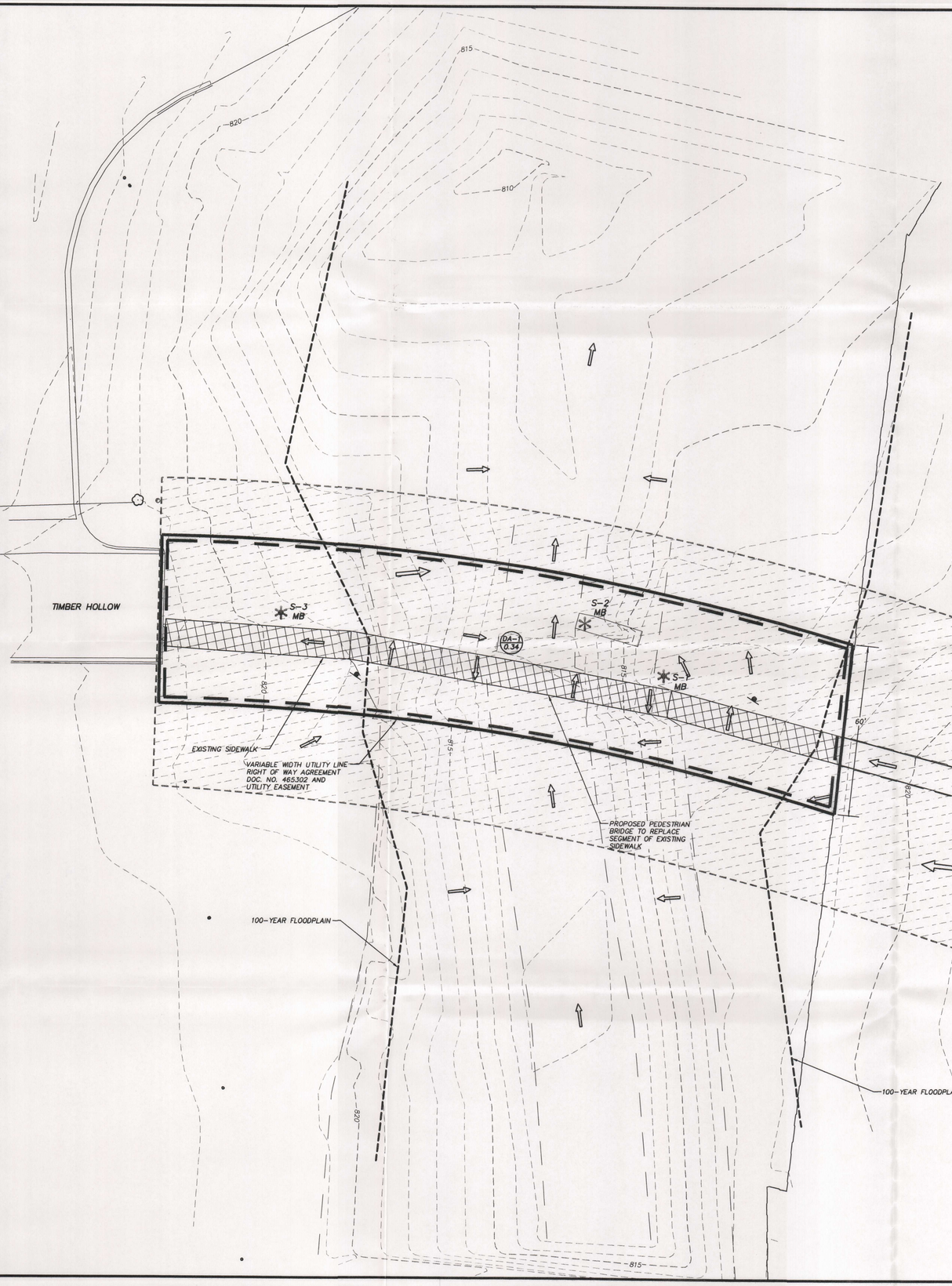
City Engineer
10-17-08

Sediment Removal:

Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.

Grass Reseeding and Mulching:

A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting, should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established.



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:

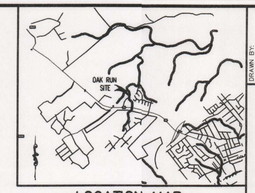
A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

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



LOCATION MAP
NOT TO SCALE

SCALE
1"=20'

LEGEND

- VEGETATED FILTER STRIPS (GRASS SODDING-0.64 ACRES)
- IMPERVIOUS COVER
- UNDISTURBED AREA
- S-1 MB — MANMADE FEATURE IN BEDROCK
- DISTURBED AREAS
- PROJECT BOUNDARY
  DRAINAGE AREAS
  DA-1 0.34 ACRES

PROPERTY DESCRIPTION:
0.34 OF THE 0.37 ACRES FROM LOT 72A, BLOCK 1 FROM THE OAK RUN SUBDIVISION UNIT 18

"RECEIVED TCEQ" SAN ANTONIO REGION 2009 JAN -1 AM 9:43

NO	DATE	DESCRIPTION
4		
3		
2		
1	12/31/08	REVISED VEGETATED FILTER STRIP AREA

REVISIONS
DRAWN BY:
CHECKED BY:
APPROVED BY:
FILE NO.
FILE LOCATION:

STATE OF TEXAS
KENNETH E. ROGERS
89448
LICENSED
PROFESSIONAL ENGINEER
12/31/08

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway
San Antonio, Texas 78216
Voice:(210) 349-3271 Fax:(210) 349-2581

PREPARED FOR:
CITY OF NEW BRAUNFELS
TEXAS
PUBLIC WORKS

WATER POLLUTION ABATEMENT PLAN
PEDESTRIAN BRIDGE

NEW BRAUNFELS, TEXAS

OCTOBER 2008

SCALE
Vertical 1" =
Horizontal 1" = 20'
0 10 20 30

SHEET 1 OF 1

PROJ NO. 2162-003

ATTACHMENT I

Measures for Minimizing Surface Stream Contamination

The flow from the site will pass through vegetative filter strips and then continue through Tributary 6, which contributes to Blieders Creek. The runoff from the project site will maintain the same path before and after construction. The flow velocities before and after construction will remain the same; and, therefore, will not have an impact on the creek's natural flow conditions.

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

I, James Klein
Print Name

City Engineer
Title - Owner/President/Other

of City of New Braunfels
Corporation/Partnership/Entity Name

have authorized Kenneth Rogers, P.E.
Print Name of Agent/Engineer

of Vickrey & Associates, Inc.
Print Name of Firm

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

I also understand that:

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

2. For applicants 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.

Jan C Klein — 10-17-08
Applicant's Signature — Date

THE STATE TEXAS §

County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared James C. Kein believed by 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 17th day of October, 2008.

MICHAEL A. RESENDEZ
Notary Public
State of Texas
Comm. Exp. 07-15-2011

Michael A Resendez
NOTARY PUBLIC

MY COMMISSION EXPIRES: 07-15-2011

Texas Commission on Environmental Quality
Edwards Aquifer Protection Plan
Application Fee Form

NAME OF PROPOSED REGULATED ENTITY: Oak Run Pedestrian Bridge
REGULATED ENTITY LOCATION: 1050 feet northeast of the intersection of Timber Hollow and State Hwy 46
NAME OF CUSTOMER: City of New Braunfels
CONTACT PERSON: Steven Ramsey, P.E. PHONE: (830) 221-4020
(Please Print)

Customer Reference Number (if issued): CN _____ (nine digits)
Regulated Entity Reference Number (if issued): RN _____ (nine digits)

AUSTIN REGIONAL OFFICE (3373) ☐ Hays ☐ Travis ☐ Williamson

SAN ANTONIO REGIONAL OFFICE (3362) ☒ Bexar ☐ Comal ☐ Medina ☐ Kinney ☐ Uvalde

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 (Check One)

☐ **AUSTIN REGIONAL OFFICE**

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

☒ **SAN ANTONIO REGIONAL OFFICE**

☐ **Overnight Delivery to TCEQ:**
TCEQ – Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
512/239-0347

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	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	0.34 Acres	$3,000.00
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	$

X _____ 10-6-08
Signature Date

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.

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Application Fee Schedule
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 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. Attachments — Describe Any Attachments: *(ex. Title V Application, Waste Transporter Application, etc.)*

☒ Yes ☐ No — WPAP Application and WPAP Plans

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 600722102		RN

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)

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

☐ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☐ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:			
☐ Corporation	☐ Individual	☐ Sole Proprietorship- D.B.A	
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☐ Other:

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)* — *If new Customer, enter previous Customer below* — *End Date:*

10. Mailing Address:

City | State | ZIP | ZIP + 4

11. Country Mailing Information *(If outside USA)* — 12. E-Mail Address *(if applicable)*

13. Telephone Number ( ) - — 14. Extension or Code — 15. Fax Number *(if applicable)* ( ) -

16. Federal Tax ID *(9 digits)* — 17. TX State Franchise Tax ID *(11 digits)* — 18. DUNS Number *(if applicable)* — 19. TX SOS Filing Number *(if applicable)*

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

21. Independently Owned and Operated?
☐ Yes ☐ No

SECTION III: Regulated Entity Information

22. 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 ☐ No Change** *(See below)*

**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

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

Oak Run Pedestrian Bridge

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	Unassigned						
	City		State		ZIP		ZIP + 4	
25. Mailing Address:	City of New Braunfels						
	424 South Castell Ave.						
	City	New Braunfels	State	TX	ZIP	78130	ZIP + 4	1747

26. E-Mail Address:	planning@nbtexas.org	
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(830) 221-4020		(830) 608-2109

30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)	33. Secondary NAICS Code (5 or 6 digits)
1540		237310	

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

Pedestrian Bridge

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	1050 feet northeast of the intersection of Timber Hollow and State Highway 46

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78130

37. Latitude (N) In Decimal:	29.723972		38. Longitude (W) In Decimal:	-98.172167	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	26.3	98	10	19.80

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 or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Industrial Hazardous Waste	☐ Municipal Solid Waste
☐ New Source Review – Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS	☐ Sludge
☐ Stormwater	☐ Title V – Air	☐ Tires	☐ Used Oil	☐ Utilities
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	City of New Braunfels	41. Title:	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 221-4020		(830) 608-2109	sramsey@nbtexas.org

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 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	City of New Braunfels	Job Title:	~~Director of Public Works~~ City Engineer
Name *(In Print)*:	~~Steven Ramsey~~, P.E. James C Klein	Phone:	(830) 221-4020
Signature:	X James C Klein	Date:	10-6-08

City of New Braunfels

VENDOR NUMBER 649

DATE 09/25/2008

CHECK NUMBER 144534

DATE	INVOICE NUMBER	PO NUMBER	DESCRIPTION	$ AMOUNT
09/23/2008	09232008		WPAP FOR COMPLAINCE	3,000.00

TX COMMISSION ON ENVIRONM 649 3,000.00

THIS CHECK IS VOID WITHOUT A BLUE AND GREEN BACKGROUND AND AN ARTIFICIAL WATERMARK ON THE BACK - HOLD AT AN ANGLE TO VIEW

City of New Braunfels

P.O. BOX 311747
NEW BRAUNFELS, TEXAS 78131-1747

JP Morgan ChaseBank
New Braunfels, Texas
32-61/1110

VENDOR NUMBER	DATE	CHECK NUMBER	NET AMOUNT
649	09/25/2008	144534	$***3,000.00

PAY THREE THOUSAND AND 00/100 DOLLARS

TO THE ORDER OF
TX COMMISSION ON ENVIRONMENTAL
QUALTIY (TCEQ)
P O BOX 13088
AUSTIN TX 78711-3088

BORDER CONTAINS MICROPRINTING

⑈0144534⑈ ⑆111000614⑆ 058000120 2⑈

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 29, 2008

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: Oak Run Pedestrian Bridge, located approximately 1050 feet northeast of the Timber Hollow and State Highway 46 intersection, New Braunfels, Comal County, Texas
PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
EAPP File No.: 3.04

Dear Mr. Hornseth:

The enclosed WPAP application received on October 23, 2008, 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.

Please forward your comments to this office by November 22, 2008.

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

Lynn M. Bumguardner
Water Section Work Leader
San Antonio Regional Office

LMB/eg

WATER POLLUTION ABATEMENT PLAN

FOR

OAK RUN PEDESTRIAN BRIDGE

NEW BRAUNFELS, TEXAS

Prepared For:

City of New Braunfels

Job No. 2162-003-039

October 2008

VICKREY & ASSOCIATES, Inc.
CONSULTING ENGINEERS

WATER POLLUTION ABATEMENT PLAN

FOR

OAK RUN PEDESTRIAN BRIDGE

NEW BRAUNFELS, TEXAS

Prepared For:

City of New Braunfels

Prepared By:

Vickrey & Associates, Inc.
12940 Country Parkway
San Antonio, Texas 78216
Voice: (210) 349-3271
Fax: (210) 349-2561

Job No. 2162-003-039

October 2008

General Information Form
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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge
COUNTY: Comal STREAM BASIN: Blieders Creek

EDWARDS AQUIFER: X RECHARGE ZONE
_____ TRANSITION ZONE

PLAN TYPE: X WPAP _____ AST _____ EXCEPTION
_____ SCS _____ UST _____ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Steven Ramsey, P.E.
Entity: City of New Braunfels
Mailing Address: 424 South Castell Ave.
City, State: New Braunfels, Texas Zip: 78130
Telephone: (830) 221-4020 FAX: (830) 608-2109

Agent/Representative (if any):

Contact Person: Kenneth Rogers, P.E., C.F.M.
Entity: Vickrey & Associates, Inc.
Mailing Address: 12940 Country Pkwy.
City, State: San Antonio, Texas Zip: 78216
Telephone: (210) 349-3271 FAX: (210) 349-2561

2. X This project is inside the city limits of City of New Braunfels
_____ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of
_____
_____ This project is not located within any city's limits or ETJ.

3. 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.

The site is located approximately 1050 feet northeast of the intersection of Timber Hollow and State Highway 46.

4. X **ATTACHMENT A – ROAD MAP.** A road map showing directions to and the location of the project site is attached at the end of this form.

5. X **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP.** A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached behind this sheet. The map(s) should clearly show:
X Project site
X USGS Quadrangle Name(s).
X Boundaries of the Recharge Zone (and Transition Zone, if applicable)
X Drainage path from the project to the boundary of the Recharge Zone.

6. X 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. **The TCEQ must be able to inspect the project site or the application will be returned.**

7. X **ATTACHMENT C - PROJECT DESCRIPTION**. Attached at the end of this form is a detailed narrative description of the proposed project.

8. 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)
X Other: Undeveloped (cleared) with the exception of an existing concrete sidewalk
_____

PROHIBITED ACTIVITIES

9. X 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).

10. X 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

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

X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.

____ For an Organized Sewage Collection System Plans and Modifications, the total linear footage of all collection system lines.

____ For a UST Facility Plan or an AST Facility Plan, the total number of tanks or piping systems.

____ A Contributing Zone Plan.

____ 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.

12. 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)

X San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

13. X Submit one (1) original and three (3) copies of the completed application to the appropriate regional office for distribution by the TCEQ to the local municipality or county, groundwater conservation districts, and the TCEQ's Central Office.

14. X 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.

____ No person shall commence any regulated activity until the Contributing Zone Plan for the activity has been filed with the executive director.

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:

James C. Klein - City Engineer
Print Name of Customer/Agent

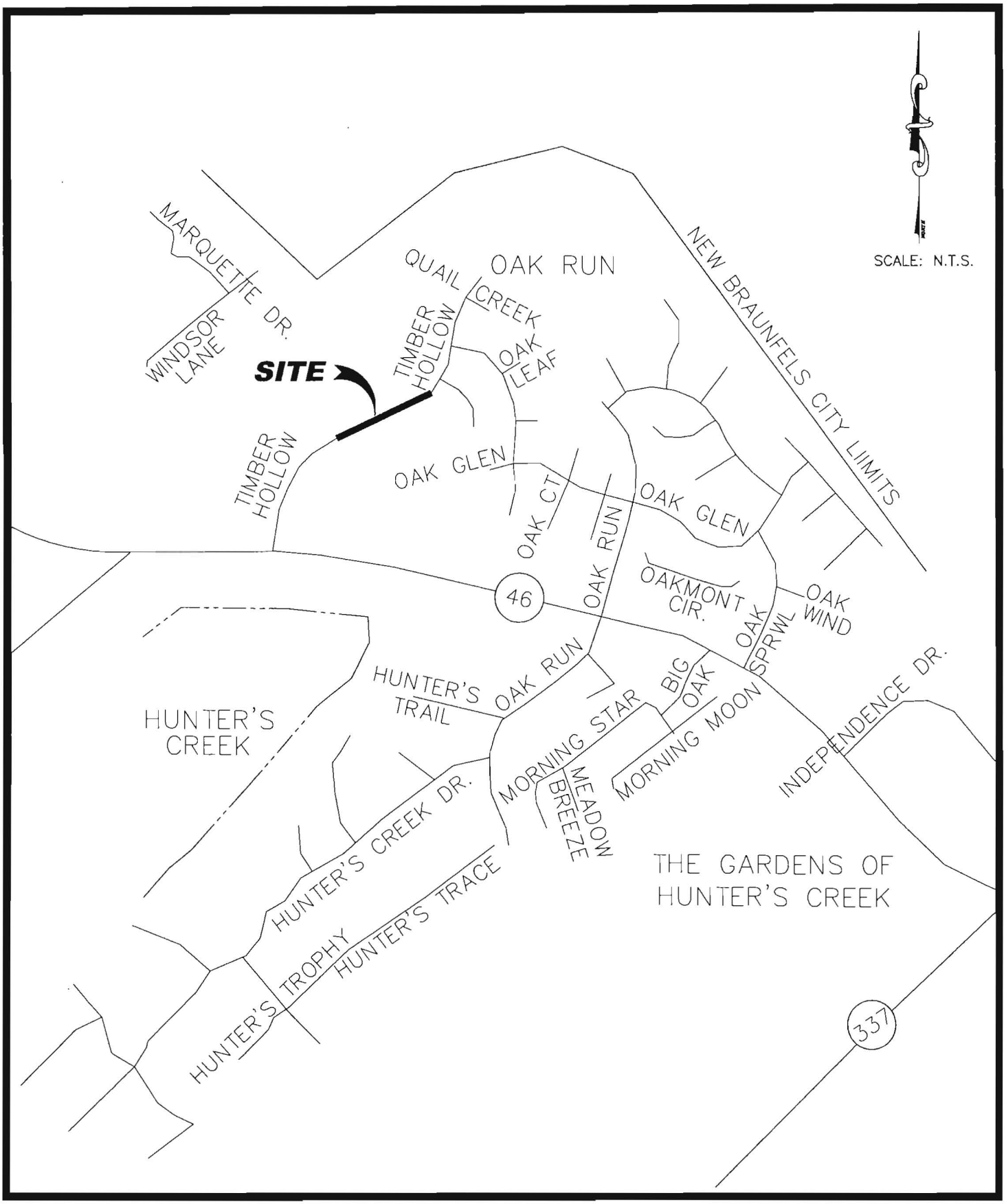
_____
Date

X James C Klein
Signature of Customer/Agent

X 10-6-08
Date

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.



OAK RUN PEDESTRIAN BRIDGE

LOCATION MAP

ATTACHMENT: A DATE: AUGUST 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

N:\2162-003\dwg\sk_location map exh.dwg

SCALE: 1"=2000'

LEGEND

STORMWATER RUN OFF PATH

RECHARGE ZONE

TRANSITION ZONE

NOT OVER AQUIFER

SITE

NEW BRAUNFELS

OAK RUN PEDESTRIAN BRIDGE

EDWARDS RECHARGE ZONE MAP

ATTACHMENT: B DATE: OCTOBER 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

SCALE: 1"=2000'

LEGEND

STORMWATER RUN OFF PATH

RECHARGE ZONE

TRANSITION ZONE

NOT OVER AQUIFER

NEW BRAUNFELS

MISSOURI KANSAS TEXAS

MISSOURI PACIFIC

OAK RUN PEDESTRIAN BRIDGE

EDWARDS RECHARGE ZONE MAP

ATTACHMENT: B DATE: OCTOBER 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

ATTACHMENT C

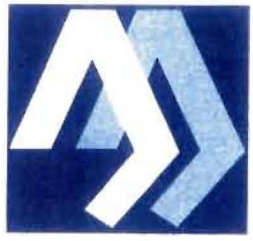
Project Description

The Oak Run Pedestrian Bridge is planned to replace an existing concrete sidewalk low water crossing which allows pedestrian access to the Oak Run Sixth Grade Center from the Oak Run subdivision. The existing concrete sidewalk is ten (10) feet wide, and splits two (2) residential properties on the north side of the crossing. This low water pedestrian crossing floods during normal storm events, which impedes access to the Oak Run Center. The concrete sidewalk will be removed in the location where the pedestrian bridge is to replace it. The watershed in which the pedestrian bridge is to be constructed consists of 562 acres. This watershed flows into Tributary 6, which is a tributary to Blieders Creek. The project site currently consists of 0.09 acres of impervious cover (<1%), which will remain the same at the completion of the project. There will be no required TSS load removal as a result of this.

GEOLOGIC ASSESSMENT

For:

Water Pollution Abatement Plan
Oak Run Pedestrian Bridge
Oak Run near State Highway 46
New Braunfels, Comal County, Texas



ARIAS & ASSOCIATES
Geotechnical • Environmental • Testing

Prepared for:

City of New Braunfels
C/O Vickrey & Associates, LLC
12940 Country Parkway
San Antonio, Texas 78216
ATTN: Mr. Kenneth Rogers

Job Number 08-4176
September 2008

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

REGULATED ENTITY NAME: **Oak Run Pedestrian Bridge, New Braunfels, Texas**

TYPE OF PROJECT: X WPAP __ AST __ SCS __ UST

LOCATION OF PROJECT: X Recharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. X Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE.**

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Rumple-Comfort association, undulating	C	0.5-1.0

* 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.

3. X A **STRATIGRAPHIC COLUMN** is attached at the end of this form that shows formations, members, and thicknesses. The outcropping unit should be at the top of the stratigraphic column.

4. X A **NARRATIVE DESCRIPTION OF SITE SPECIFIC GEOLOGY** is attached at the end of this form. The description must include a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure, and karst characteristics of the site.

5. X Appropriate **SITE GEOLOGIC MAP(S)** are attached:

The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1" : 400'

Applicant's Site Plan Scale 1" = 20'
Site Geologic Map Scale 1" = 20'
Site Soils Map Scale (if more than 1 soil type) 1" = ____'

6. Method of collecting positional data:
   X Global Positioning System (GPS) technology.
   __ Other method(s).

7. X The project site is shown and labeled on the Site Geologic Map.

8. X Surface geologic units are shown and labeled on the Site Geologic Map.

9. X Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
   __ Geologic or manmade features were not discovered on the project site during the field investigation.

10. X The Recharge Zone boundary is shown and labeled, if appropriate.

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

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

ADMINISTRATIVE INFORMATION

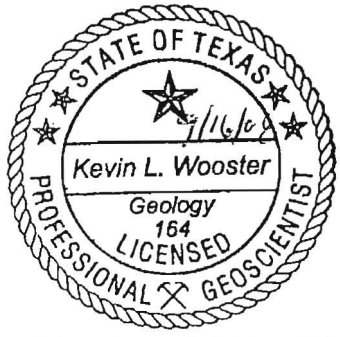
12. X One (1) original and three (3) copies of the completed assessment has been provided.

Date(s) Geologic Assessment was performed:

Date(s) August 27, 2008

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.

Kevin L. Wooster, P.G.
Print Name of Geologist



Telephone 210-308-5884

Fax 210-308-8731

Kevin L. Wooster
Signature of Geologist

September16, 2008
Date

Representing: Arias & Associates, Inc., Job No.: 08-4176
(Name of Company)

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

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GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Oak Run Pedestrian Bridge, New Braunfels, Texas

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)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds				X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29	43	25.9	98	10	21.1	MB	30	Kep	2.0	2.0		Sewer manhole				F	5	35	X			X	Drainage
S-2	29	43	26.1	98	10	21.4	MB	30	Kep	2.0	3.0		Storm Drain outfall				F	5	35	X			X	Drainage
S-3	29	43	25.6	98	10	22.4	MB	30	Kep	2.0	2.0		Sewer manhole				F	5	35	X			X	Drainage

* DATUM: NAD 83

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity h = Horizontal Feature	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

STATE OF TEXAS
Kevin L. Wooster
Geology
164
LICENSED
PROFESSIONAL GEOSCIENTIST

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.

Kevin L. Wooster

Date: August 27, 2008

Sheet 1 of 1

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

FEATURE LOCATION TABLE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

	Latitude			Longitude					
Feature No.	Deg	Min	Sec	Deg	Min	Sec	Type	Date	Measured By
S-1	29	43	25.9	98	10	21.1	MB	8/27/08	K.Wooster
S-2	29	43	26.1	98	10	21.4	MB	8/27/08	K.Wooster
S-3	29	43	25.6	98	10	22.4	MB	8/27/08	K.Wooster

SOIL NARRATIVE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

The site lies along a second order tributary to Blieders Creek. An existing concrete pedestrian low water crossing allows pedestrian access to the Oak Run Sixth Grade Center from the Oak Run Subdivision. The existing concrete sidewalk is 10 feet wide and splits two (2) residential properties on the north side of the crossing. This low water pedestrian crossing floods during normal storm events, which impedes the access to the Oak Run Center (Vickery & Associates, 2007).

Native soils remaining at the site consist of black and brown calcareous stony clay. The clay includes rock fragments ranging in size to pebbles. Although the clay content of the soils would tend to impede the downward flow of water, in areas where the rock fragments are more abundant, the water infiltration would increase.

The soils on the site are typical of those found on the Edwards plateau and hill country. They range up to a maximum thickness of about one-half to one foot in some areas. Soils and vegetation cover most of the south and east portions of the site. There are areas of rock outcrops on the east and west sides of the concrete walkway, along the drainage.

According to the U.S.D.A. Soil Survey of Comal and Hays Counties, Texas, dated 1984, the natural surface soils have been mapped as within one primary soil group. Rumple Comfort association (RUD) soils are mapped within the site, hillsided sloping to a second-order tributary to Blieders Creek.

The RUD soils are typically shallow to moderately deep soils consisting of dark reddish brown very cherty clay loam with limestone fragments. Overall soil depth is typically 14 inches. RUD soils are well drained and moderately slow permeability with a very low available water capacity and shallow rooting depth. Runoff is moderate and the hazard of water erosion is moderate.

STRATIGRAPHIC COLUMN

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

Hydrogeologic subdivision			Group formation or member			Hydro-logic fuction	Thick-ness (feet)	Lithology	Cavern develop-ment	Porosity / permeability type
Quaternary			Terrace Deposits			CU	0-30	Gravel and sand	None	High porosity / high permeability
Upper Cretaceous	Upper Confining Unit		Austin Group			CU	130-150	White to gray limestone	None	Low porosity / low permeability
			Eagle Ford Group			CU	30-50	Buff, light gray, dense mudstone	None	Low porosity / low permeability
			Buda Limestone			CU	40-50	Brown flaggy shale and argillaceous limestone	None	Low porosity / low permeability
			Del Rio Clay			CU	40-50	Blue-green to yellow-brown clay	None	None / primary upper confining unit
Lower Cretaceous	I		Georgetown Formation			CU	10	Reddish-brown, gray to light tan marly limestone	None	Low porosity / low permeability
	II	Edwards aquifer	Edwards Group	Person Fm.	Cyclic & marine members undivided	AQ	80-100	Mudstone to packstone; miliolid grainstone; chert	Many sub-surface	Laterally extensive; water yielding
	III				Leached & col-lapsed members	AQ	80-100	Crystalline limestone; mudstone to grainstone; chert collapsed breccia	Extensive lateral devel-opment; large rooms	Majority not fabric / one of the most permeable
	IV				Regional dense member	CU	20-24	Dense, argillaceous mudstone	Very few; only vertical fracture enlargement	Not fabric / low permeability; vertical barrier
	V			Kainer Fm.	Grainstone member	AQ	50-60	Miliolid grainstone; mudstone to wackestone; chert	Few	Not fabric / recrystal-lization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Probably extensive cave devel.	Majority fabric / one of the most permeable
	VII				Dolomitic member	AQ	110-130	Mudstone to grainstone; crystalline limestone; chert	Caves rela-ted to struc-ture or bed-ding planes	Mostly not fabric; some bedding plane fabric / water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone; mudstone and miliolid grainstone	Large lateral caves at surface	Fabric; stratigraph-ically controlled / large conduit flow at surface; no permea-bility in subsurface
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350-500	Yellowish tan, thinly bedded limestone and marl	Some sur-face cave development	Some water product-ion at evaporite beds / relatively impermeable

Reference: U.S.G.S. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas; Water-Resources Investigations Report 94-4117

Note: CU = Confining Unit; AQ = Aquifer

— — Indicates Upper Most Surface Bedrock Formation

GEOLOGY NARRATIVE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

The outcropping geologic formation mapped at the Site consists of the Person Formation of the Cretaceous Edwards Group, according to the San Antonio Sheet of the Geologic Atlas of Texas (BEG, 1983) and U.T. Bureau of Economic Geology (E.W. Collins, 1993). This formation is generally up to 200 feet thick or more, and consist of limestone and marlstone, and forms the upper portion of the Edwards Group.

The entire portion of the site lies within the 100-year floodplain. Most of the site was covered with soil and grass, with a few rock outcrops visible. Much of the visible rock at the site was exposed within the floor of the drainage way.

There was no evidence of structural faulting or fracturing observed in the field. There were no solution features found. Some of the rock showed varying signs of mostly weathered appearance. There were no open vugs observed.

According to the literature (USGS, 1988), there are no major mapped faults near the site. No karst features were noted during the site reconnaissance.

Three man-made features in bedrock were observed on the central portion of the site. Two existing sewer manholes (features S-1 and S-3) and a storm sewer outfall (S-2) were observed just to the west of the existing concrete sidewalk.

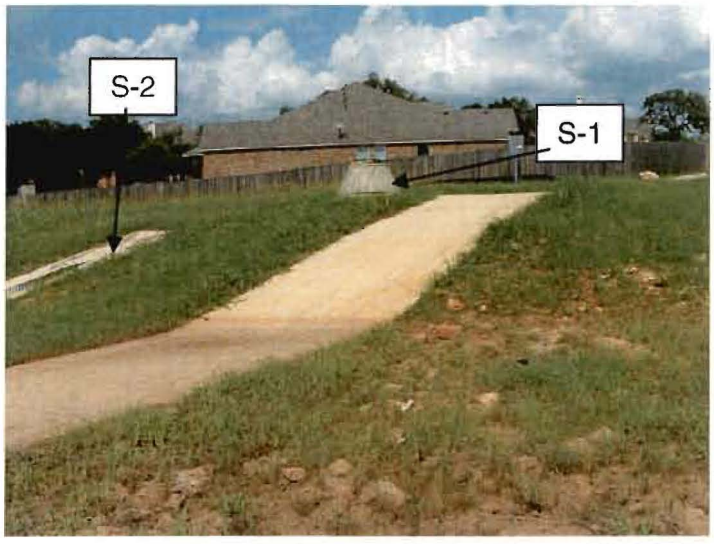
Potential for fluid movement to the aquifer is low due to absence of karst and structural features, along with very low permeability soil cover.

FEATURE NARRATIVE

WPAP GEOLOGIC ASSESSMENT
OAK RUN PEDESTRIAN BRIDGE
OAK RUN NEAR STATE HIGHWAY 46
NEW BRAUNFELS, TEXAS

Three features found are described as follows:

S-1 and S-2: These features are an existing sanitary sewer manhole and a storm water sewer outfall. The features are surrounded by concrete surface completion pads that are in good shape without any open pathways observed between the features and native ground.



S-3: This feature is an existing sanitary sewer manhole. The feature was surrounded by concrete surface completion pad that is in good shape without any open pathways observed between the feature and native ground.

REFERENCES

Barnes V.L. 1983, Geologic Atlas of Texas, San Antonio, Sheet, Bureau of Economic Geology, The University of Texas at Austin, Texas.

Collins, E.W., 1993. Geology of New Braunfels West Quadrangle, Comal County, Texas, Open File Map, 0298-413. Bureau of Economic Geology, The University of Texas at Austin, Texas.

Small, T.A. and Hanson, J.A. 1994. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas. U.S. Geol. Survey, Water – Resources Investigations Report 94-4117. 8 pp., Plate, Fig., Table.

Texas Commission on Environmental Quality, (TCEQ), Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge Zone, TCEQ-0585-Instructions (Rev. 10-01-04).

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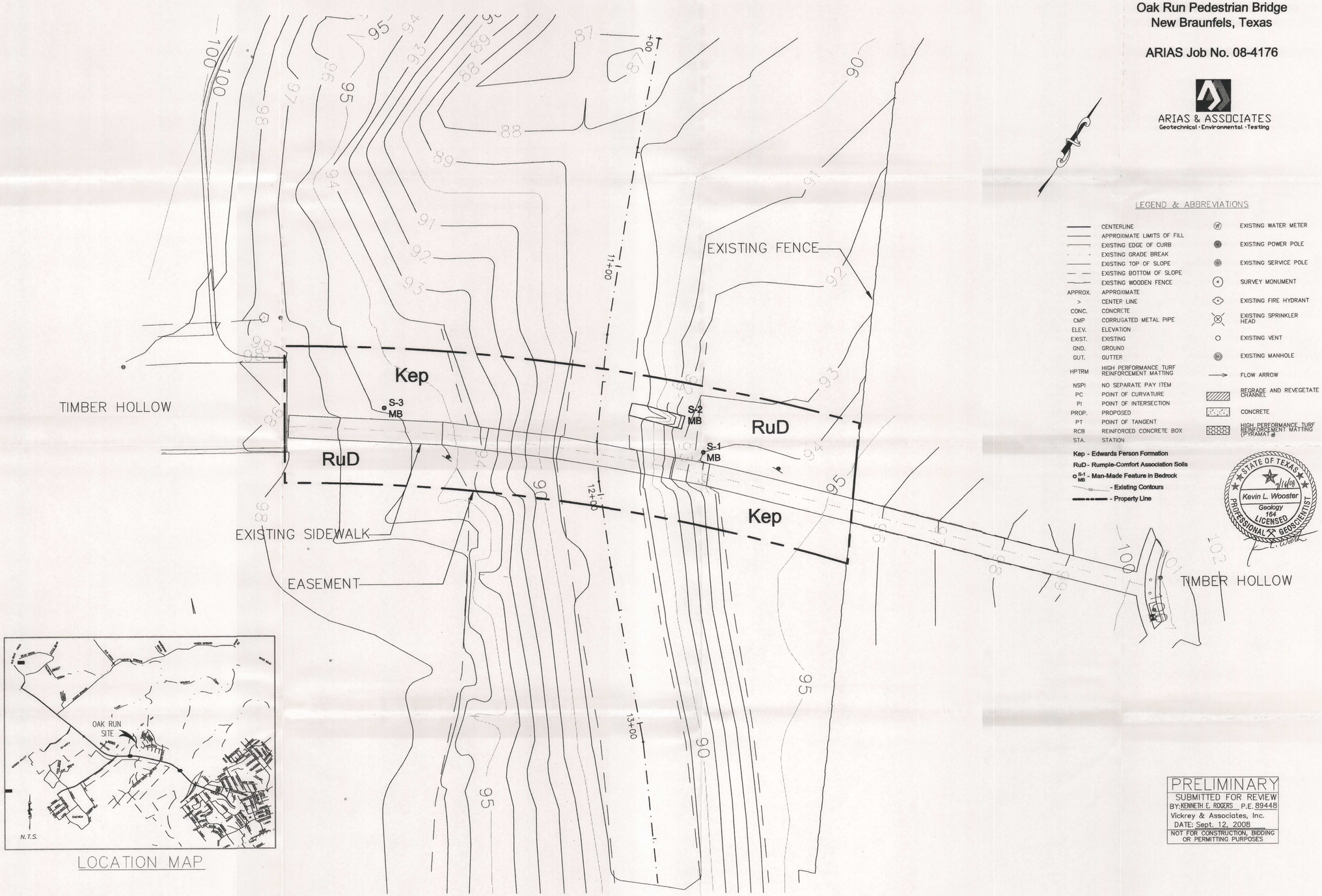
Site Geologic Map
Oak Run Pedestrian Bridge
New Braunfels, Texas

ARIAS Job No. 08-4176

ARIAS & ASSOCIATES
Geotechnical · Environmental · Testing



LOCATION MAP

LEGEND & ABBREVIATIONS

	CENTERLINE
	APPROXIMATE LIMITS OF FILL
	EXISTING EDGE OF CURB
	EXISTING GRADE BREAK
	EXISTING TOP OF SLOPE
	EXISTING BOTTOM OF SLOPE
	EXISTING WOODEN FENCE
APPROX.	APPROXIMATE
>	CENTER LINE
CONC.	CONCRETE
CMP	CORRUGATED METAL PIPE
ELEV.	ELEVATION
EXIST.	EXISTING
GND.	GROUND
GUT.	GUTTER
HPTRM	HIGH PERFORMANCE TURF REINFORCEMENT MATTING
NSPI	NO SEPARATE PAY ITEM
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PROP.	PROPOSED
PT	POINT OF TANGENT
RCB	REINFORCED CONCRETE BOX
STA.	STATION

W	EXISTING WATER METER
	EXISTING POWER POLE
	EXISTING SERVICE POLE
	SURVEY MONUMENT
	EXISTING FIRE HYDRANT
	EXISTING SPRINKLER HEAD
	EXISTING VENT
	EXISTING MANHOLE
	FLOW ARROW
	REGRADE AND REVEGETATE CHANNEL
	CONCRETE
	HIGH PERFORMANCE TURF REINFORCEMENT MATTING (PYRAMAT®)

Kep - Edwards Person Formation
RuD - Rumple-Comfort Association Soils
S-1 MB - Man-Made Feature in Bedrock
90 - Existing Contours
- Property Line

STATE OF TEXAS
1/16/09
Kevin L. Wooster
Geology
164
LICENSED
PROFESSIONAL GEOSCIENTIST

PRELIMINARY
SUBMITTED FOR REVIEW
BY: KENNETH E. ROGERS P.E. 89448
Vickrey & Associates, Inc.
DATE: Sept. 12, 2008
NOT FOR CONSTRUCTION, BIDDING OR PERMITTING PURPOSES

NO.	DATE	REASON / DESCRIPTION
1		
2		
3		
4		

CITY OF NEW BRAUNFELS
DEPARTMENT OF PUBLIC WORKS

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL / ENVIRONMENTAL / SURVEY
12940 Country Parkway San Antonio, Texas 78216
Voice:(210) 349-3271 Fax:(210) 340-2581 www.vickreynet.com

DRAINAGE IMPROVEMENT
OAK RUN SITE LAYOUT
NEW BRAUNFELS, TEXAS

DATE: 07/29/2008

SCALE
Vertical 1" = 10'(H)
Horizontal 1" = 20'(H)
0 10 20 30

SHEET 1 OF 1

PROJ NO. 2162-003

$DATE$ $TIME$
$FILE$

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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge

REGULATED ENTITY INFORMATION

1. The type of project is:
   ____ Residential: # of Lots: ____
   ____ Residential # of Living Unit Equivalents ____
   ____ Commercial
   ____ Industrial
   X Other: Capital Improvement, Pedestrian Bridge

2. Total site acreage (size of property): 0.34

3. Projected population: None

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

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0.00	÷ 43,560 =	0.00
Parking	0.00	÷ 43,560 =	0.00
Other paved surfaces	3,900	÷ 43,560 =	0.09
Total Impervious Cover	3,900	÷ 43,560 =	0.09
Total Impervious Cover ÷ Total Acreage x 100 =			.02%

5. X **ATTACHMENT A - Factors Affecting Water Quality.** A description of any factors that could affect surface water and groundwater quality is provided at the end of this form.

6. X 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.
N/A – Not 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 description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on 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

N/A – No Wastewater to be Generated by the Proposed Project

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

_____ % Domestic	_____	gallons/day
_____ % Industrial	_____	gallons/day
_____ % Commingled	_____	gallons/day
TOTAL	_____	gallons/day

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. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.

_____ 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 _____Dos Rios 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 through 27 must be included on the Site Plan.

17. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = 20'

18. 100-year floodplain boundaries

__X__ 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):
Hydraulic analysis of the Blieders Creek Tributary 6, submitted to the City of New Braunfels and performed by Vickrey & Associates, Inc., dated 5/13/08

19. _____ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.

__X__ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

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 30 TAC §238.

__X__ 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 and possibly sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled.

X No **sensitive and possibly sensitive** geologic or manmade features were identified in the Geologic Assessment.

_____ **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. Geologic or manmade features were found and are shown and labeled.

_____ **ATTACHMENT D - Exception to the Required Geologic Assessment.** An exception to the Geologic Assessment requirement is requested and explained in ATTACHMENT D provided at the end of this form. No geologic or manmade features were found.

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

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

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

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

26. N/A Surface waters (including wetlands).

27. _____ Locations where stormwater discharges to surface water or sensitive features.
X There will be no discharges to surface water or sensitive features.

ADMINISTRATIVE INFORMATION

28. X One (1) original and three (3) copies of the completed application have been provided.

29. X Any modification of this WPAP will require TCEQ executive director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

Signature of Customer/Agent

10-6-08
Date

ATTACHMENT A

Factors Affecting Water Quality

Various construction activities may affect the quality of stormwater originating on the proposed site during and after the development process. The factor that may possibly affect water quality on the site is oil/grease from construction machinery. The Total Suspended Solids (TSS) from the site will not be increased with the pedestrian bridge construction. However, BMPs, both temporary and permanent, have been designed on the basis of the Technical Guidance manual to treat an amount of groundwater runoff as to not adversely affect water quality entering into any surface water or groundwater.

ATTACHMENT B

Volume and Character of Stormwater

The project site is currently undeveloped with the exception of an existing concrete sidewalk. The pre-construction runoff for the 100-year storm event for the entire 562-acre drainage area in which the site is loated is approximately 3150 cfs, and the post-construction runoff is expected to remain the same. The impervious cover created by the bridge is nearly identical to that of the concrete side wall which is being removed.

The site on which the bridge will be constructed consists of 0.34 acres. The current sidewalk on the site contains 0.09 acres of impervious cover. The sidewalk will be demolished and replaced with a pedestrian bridge which will also contain 0.09 acres of impervious cover. The rain water intercepted by the pedestrian bridge will flow into Blieders Creek. The pre-construction and post-construction runoff coefficient is 0.65 in both cases.

Temporary Stormwater Section
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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge

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:

   _____ Aboveground storage tanks with a cumulative storage capacity of less that 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.

   __X__ Fuels and hazardous substances will not be stored on-site.

2. __X__ **ATTACHMENT A - Spill Response Actions**. A description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is provided at the end of this form.

3. __X__ 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. __X__ **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.

SEQUENCE OF CONSTRUCTION

5. __X__ **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 provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. __X__ 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: 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. __X__ **ATTACHMENT D - Temporary Best Management Practices and Measures.** A description of the TBMPs and measures that will be used during and after construction are provided at the end of this form. For each activity listed in the sequence of construction, include appropriate control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

__X__ 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 has been provided in the attachment at the end of this form.

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

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

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

d. 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.

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 provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

9. __X__ **ATTACHMENT F - Structural Practices.** Describe 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. Placement of structural practices in floodplains has been avoided.

10. X **ATTACHMENT G - Drainage Area Map**. A drainage area map is provided at the end of this form to support the following requirements.

_____ 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.

X 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.

11. N/A **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 has 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 provided as at the end of this form.

12. X **ATTACHMENT I - Inspection and Maintenance for BMPs.** A plan for the inspection of temporary BMPs and measures and for their timely maintenance, repair, and, if necessary, retrofit is provided at the end of this form. A description of documentation procedures and recordkeeping practices is included in the plan.

13. X 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 indicates a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.

14. X 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. X 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. X 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. ___X___ **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 at the end of this form.

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

ADMINISTRATIVE INFORMATION

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

21. ___X___ 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. ___X___ 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.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

James C Klein
Signature of Customer/Agent

10-6-08
Date

ATTACHMENT A

1.4.16 Spill Prevention and Control

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

The following steps will help reduce the stormwater impacts of leaks and spills:

Education

(1) Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spills must be reported to the TCEQ. Information available in 30 TAC 327.4 and 40 CFR 302.4.

(2) Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).

(4) Establish a continuing education program to indoctrinate new employees.

(5) Have contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

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 runon 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. See the waste management BMPs in this section for specific information.

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:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

(7) 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 are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

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 runon 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 oils 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 runon 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 spill/leaks.

ATTACHMENT B

Potential Sources of Contamination

During construction of this site, it is possible that there will be oil/grease and silt accumulation on the project site due to the equipment used to construct the pedestrian bridge. Excavation for the pedestrian bridge construction and demolition of the existing sidewalk will create silt on the project site. The use of grass filter strips will control the amount of silt leaving the site.

ATTACHMENT C

Sequence of Major Activities

The sequence of major activities for each unit of construction with the approximate total disturbed area is as follows:

- Installation of Temporary Best Management Practices on the Project Site (0.34 acres)
- Removal of Existing Sidewalk (0.09 acres)
- Construction of Pedestrian Bridge (0.09 acres)
- Final Site Grading and Cleanup (0.34 acres)

ATTACHMENT D

Temporary Best Management Practices and Measures

Temporary BMP's will be provided for the construction site. Upgradient flow will be allowed to maintain its natural flow during the construction stage of this project. A construction exit will be created at the west side of the site and will provide access via Timber Hollow. A rock filter berm and silt fence will be installed downstream of the construction area. Spill prevention measures will be utilized at all times. The silt fence filter fabric shall be anchored four (4) inches into the soil. The rock filter berm and silt fence shall be monitored weekly, as well as after any storm event resulting in one-half inch (½") or greater of rainfall, for any failures of the silt fence or problems associated with silt build up. The water and suspended soils will be collected as the water flows across the project site. The existing native grasses will be left undisturbed in areas not under construction.

a. A rock filter berm and silt fence will be installed on the downstream boundary of the site to prevent pollution of surface water, groundwater or stormwater that originates upgradient of the site.

b. A construction exit will be installed on the western side of the project, providing access to the site via Timber Hollow. A storage and refueling area, if needed, will be designated on the site upstream of the silt fencing.

c. To prevent pollutants from entering surface streams, sensitive features, or the aquifer, the silt fence and rock filter berm mentioned in item b above will be installed. If discovered, sensitive features will be protected using hay bale dikes, sand bag berms or other methods acceptable to TCEQ.

d. To maintain flow to naturally occurring sensitive features in the event that any are discovered during inspections or construction, the hay bale dikes or sand bag berms mentioned in item c above will be installed. If a feature must be sealed, when possible the feature will be filled with boulders and gravel and capped with concrete.

ATTACHMENT E

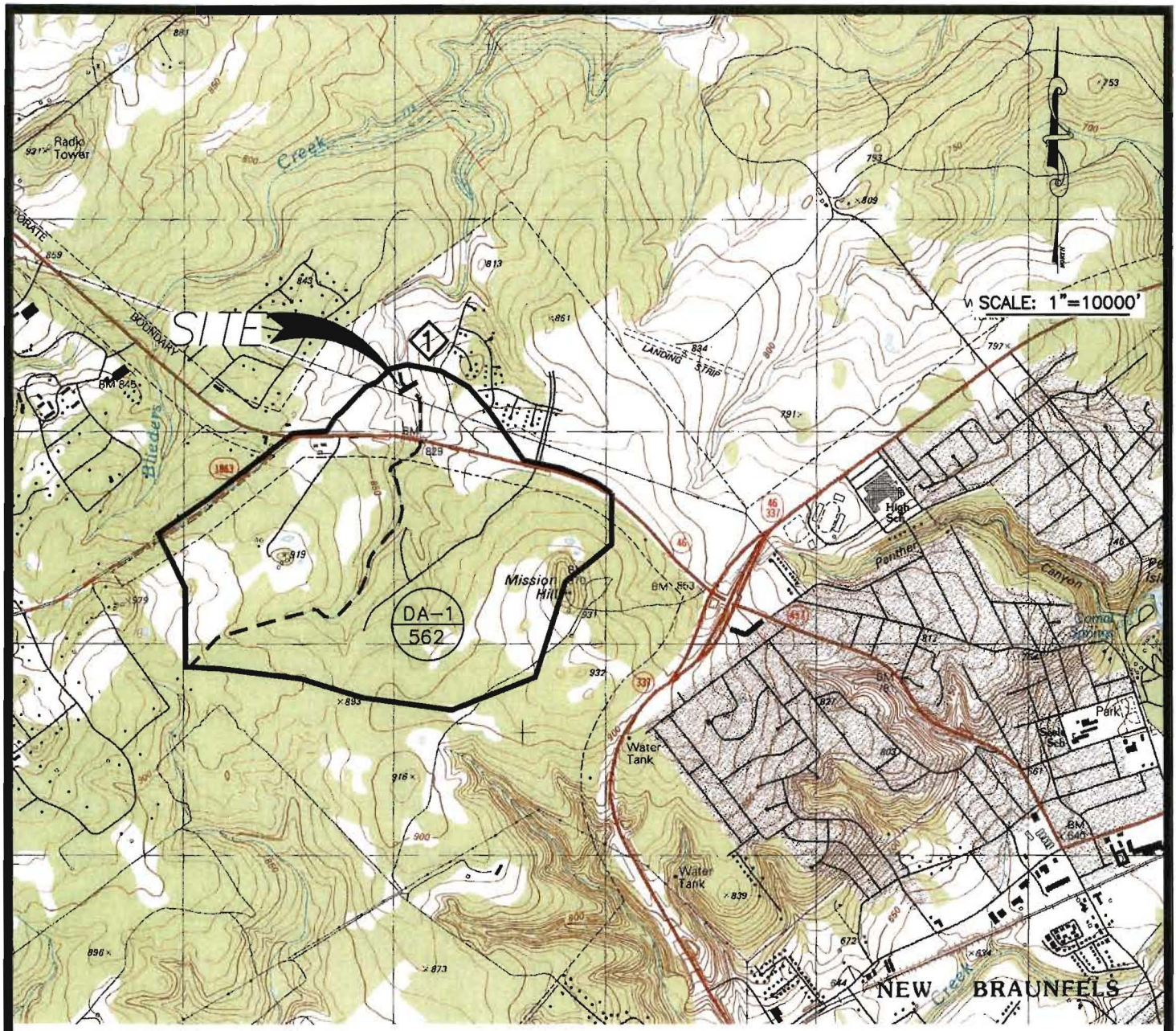
Request to Seal Features

There are no geological features present on the site which would require sealing.

ATTACHMENT F

Structural Practices

A rock filter berm and silt fences will be used onsite to trap sediments and pollutants from leaving the areas of construction. Stabilized construction exits will be used onsite to prevent runoff, sediments, and pollutants from leaving the construction site. Structural practices will be placed within the 100-year floodplain as necessary.



OAK RUN PEDESTRIAN BRIDGE
Runoff and Tc Calculations for 562 acres draining to site

Existing Runoff Flow Rates Drainage Area												
REFERENCE POINT	Drainage Areas	C	Drainage Area (ac)	Tc (min)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(100) (in/hr)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(100) (cfs)
1	1	0.83	562	43	2.98	3.44	4.13	5.41	1388.28	1605.71	2117.79	3152.54
Proposed/Ultimate Runoff Flow Rates Drainage Area												
REFERENCE POINT	Drainage Areas	C	Drainage Area (ac)	Tc (min)	I(5) (in/hr)	I(10) (in/hr)	I(25) (in/hr)	I(100) (in/hr)	Q(5) (cfs)	Q(10) (cfs)	Q(25) (cfs)	Q(100) (cfs)
1	1	0.83	562	43	2.98	3.44	4.13	5.41	1388.28	1605.71	2117.79	3152.54

Rainfall Intensities based on City of San Antonio Unified Development Code Table 504-2

OAK RUN PEDESTRIAN BRIDGE

DRAINAGE AREA MAP

USGS MAP NO. 299830

HELOTES QUADRANGLE

ATTACHMENT: B DATE: OCTOBER 2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS

12940 Country Parkway San Antonio, Texas 78216
Telephone: (210)349-3271

ATTACHMENT H

Temporary Sediment Pond(s) Plans and Calculations

A temporary sediment pond will not be necessary due to the minimal site disturbance associated with this project.

ATTACHMENT I

Inspection and Maintenance for BMPs

The temporary BMP's will be scheduled for inspection and repair at weekly intervals and following any rainfall event that is greater than one-half (½) inch. The Contractor is responsible for logging all inspections, rainfall events, and repairs. The Contractor is responsible for cleaning up any sediment that is released onto the sidewalks after any rainfall event. The following forms shall be used for inspection and maintenance reports that are required to be kept on the project site by the contractor.

SEDIMENTATION AND EROSION CONTROLS

A. DESIGN CRITERIA

(1) Fences are to be constructed along level contours.

(2) The ends of the fence shall be turned upstream to prevent bypass of stormwater.

(3) Steel posts which support the silt fence shall be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of one foot.

(4) The toe of the silt fence shall be trenched in with a spade or mechanical trencher, so that the downslope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g. pavement). weight fabric flap with washed gravel on uphill side to prevent flow under fence.

(5) 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.

(6) 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 shall be a 6" double overlap, securely fastened where ends of

(7) Inspection shall be made weekly or after each rainfall. Repair or replacement shall be made promptly

(8) Accumulated silt shall be removed when it reaches a depth of 6 inches. The silt shall be disposed of in an approved site and in such a manner as to not contribute to the additional siltation.

B. TEMPORARY DIVERSION DIKE

(1) Maximum depth of flow at the dike shall be 1 foot.

(2) Side slopes of the diversion dike shall be 3:1 or flatter.

(3) Minimum width of the embankment at the top shall be 2 feet.

(4) Minimum embankment height shall be 18 inches as measured from the toe of slope on the upgrade side of the berm.

(5) The dikes shall remain in place until all disturbed areas which are protected by the dike are permanently stabilized unless other controls are put into place to protect the site.

(6) Compacted earth dikes require stabilization immediately upon placement so as not to contribute to the problem they are addressing.

(7) All diversion dikes shall have positive drainage to an outlet.

(8) Dikes must be inspected on a regular basis to determine if silt is building up behind the dike, or if erosion is occurring on the face of the dike. Silt shall be removed in a timely manner. If erosion is occurring on the face of the dike, the slopes of the face shall be stabilized.

C. INTERCEPTOR SWALE

(1) Maximum depth of flow in the swale shall be 1 foot.

(2) The minimum bottom width of the swale shall be 2 feet.

(3) Side slopes of the swale shall be 3:1 or flatter.

(4) Minimum design channel freeboard shall be 6 inches.

(5) Swales must maintain positive grade to an acceptable outlet.

(6) Interceptor swales must be stabilized immediately upon excavation so as not to contribute to the erosion problem they are addressing.

(7) All trees, brush, stumps, obstructions and other material shall be removed and disposed of so as not to interfere with the proper functioning of the swale.

(8) All earth removed and not needed in construction shall be disposed of in an approved spoils site.

(9) Inspection must be made after each rain event to locate and repair any damage to the channel or to clear debris or other obstructions so as not to diminish flow capacity. Damages which result from normal construction activities shall be repaired at the end of each work day.

D. HAY BALE DIKE

(1) Each hay bale shall be placed into an excavated trench having a depth of 4 inches and a width just wide enough to accommodate the bales themselves.

(2) Hay bales shall be installed in such a way that there is no space between to allow for any kind of seepage.

(3) Individual bales shall be held in place by no less than two wood or steel stakes driven a minimum distance of 6 inches into undisturbed ground, with the first stake driven at an angle toward the previously installed bale.

(4) The ends of the dike shall be turned upgrade to prevent bypass of stormwater.

(5) Inspection shall be weekly or after each rainfall event and repair or replacement shall be made promptly as needed by the contractor.

(6) When silt reaches a depth of 6 inches, it shall be removed and disposed of in an approved sit.

(7) Hay bales shall be replaced if there are signs of degradation such as straw located downstream from the bales, structural deficiencies due to rotting straw in the bale or other signs of deterioration. Sediment should be removed from behind the bales when it reaches a depth of approximately 6 inches. If the bales become clogged, they should be replaced immediately.

E. SANDBAG BERM

(1) Minimum height shall be 18 inches.

(2) Minimum width of the berm shall be 18 inches at the top and 48 inches measured at the bottom.

(3) Maximum side slopes shall be 2:1.

(4) The ends of the berm shall be turned upgrade or shall tie into natural grades to prevent bypass of stormwater.

(5) Sandbags should be stacked in at least three rows abutting each other, and in staggered arrangement.

(6) Inspections should be made on a daily basis and after each rain event. The sandbags shall be reshaped or replaced as needed during the inspection. Silt should be removed when it reaches a depth of six (6) inches.

F. STONE OUTLET SEDIMENT TRAP

(1) Minimum width of the embankment at the top shall be 3 feet perpendicular to the flow.

(2) Minimum embankment slope shall be 3:1.

(3) Maximum embankment height shall be 2 feet as measured from the toe of slope to the crest of the stone outlet. The height of the compacted earth embankment shall be one foot higher than the crest of the outlet.

(4) Sediment shall be removed and the area directly behind the berm shall be regraded to its original dimensions at such point when the capacity of impoundment has been reduced to one-half of its original storage capacity.

(5) The stone outlet structure should be inspected frequently and after each major rain event to check for clogging of the void spaces between stones. If the aggregate appears to be silted in such that efficiency is diminished, the stone should be replaced.

G. SEDIMENT BASIN

(1) Maximum drainage area contributing to the basin shall be 100 acres.

(2) Deposited sediment shall be removed when the storage capacity of the basin has been depleted by one-half.

(3) Minimum width of the embankment at the top shall be 8 feet.

(6) The basin outlet structure and emergency spillway (if present) should be checked frequently and after each major rain event to check for damage.

H. STABILIZED CONSTRUCTION EXIT

(1) Stone size – 3 to 5 inches crushed rock.

(2) Length – as effective, but not less than 50 feet, unless depth of lot is less than 150 feet from edge of pavement where length must only be 30 feet.

(3) Thickness – not less than 8 inches.

(4) Width – not less than full width of all points of ingress or egress.

(5) Washing – when necessary, wheels shall be cleaned to remove sediment prior to entrance onto public roadway. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.

(6) Maintenance – the entrance shall be maintained in condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway, must be removed immediately.

(7) Drainage – entrance must be properly graded or incorporate a drainage swale to prevent runoff from leaving the construction site.

ADDITIONAL NOTES:

(1) Upon completion of construction all disturbed areas shall be revegetated to 70% of existing conditions in accordance with the SWPPP and TPDES requirements.

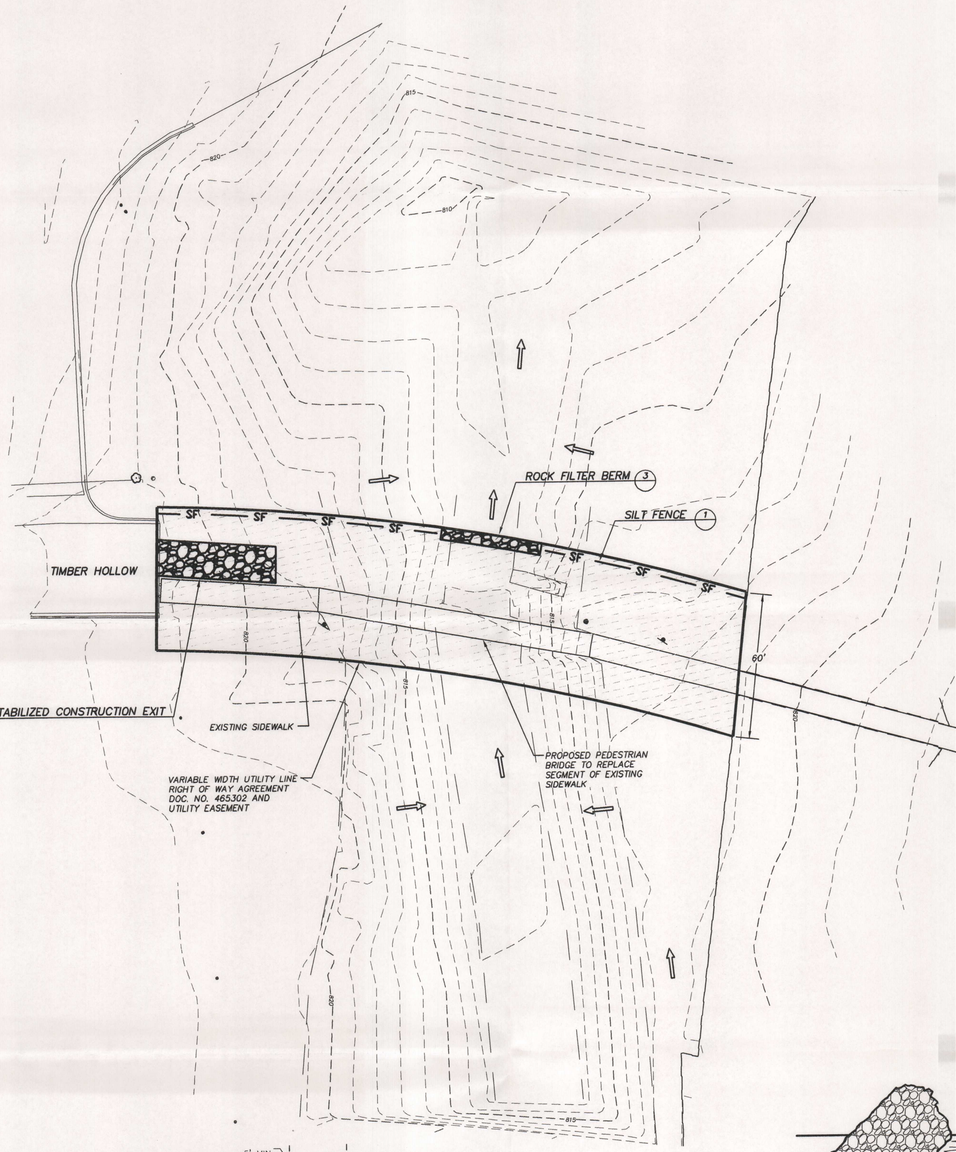
(2) This project will not use any off-site material, waste/borrow/fill, or equipment storage areas.

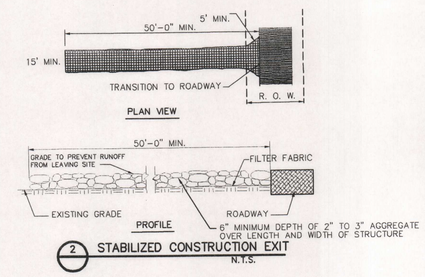
(3) This site is not located adjacent to any surface waters.

(4) This site will not have any locations where storm water discharges directly to a surface water body.

PRE-CONSTRUCTION RUNOFF COEF. "C"	POST-CONSTRUCTION RUNOFF COEF. "C"
0.65	0.65

AREA DISTURBED (ACRES)	AREA UNDISTURBED (ACRES)	TOTAL AREA (ACRES)
0.34	0	0.34





2 STABILIZED CONSTRUCTION EXIT
N.T.S.

LEGEND

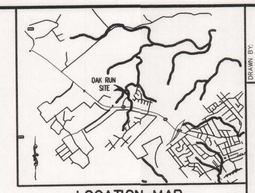
SF — SILT FENCE

820 — EXISTING CONTOURS

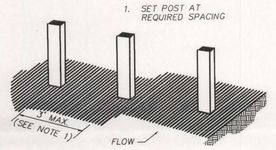
EXISTING FLOW ARROW

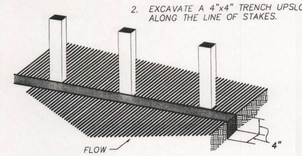
VEGETATIVE FILTER STRIPS (GRASS SODDING–0.34 ACRES)

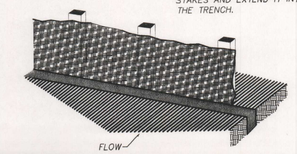
SCALE
1"=30'

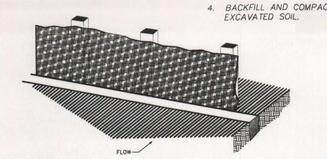


LOCATION MAP
NOT TO SCALE



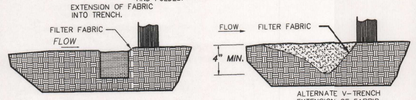




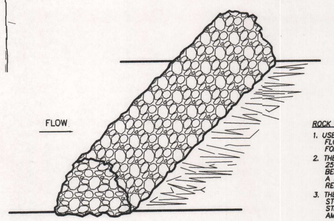


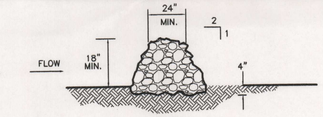
GENERAL NOTES:

1. POSTS TO BE SET AT 3-FOOT MAXIMUM SPACING. IF FACTORY PRE ASSEMBLED FENCE WITH SUPPORT NETTING IS USED. SPACING OF POST MAY BE INCREASED TO 8 FEET MAXIMUM.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHOULD BE OVERLAPPED 6 INCHES AT THE POSTS, AND FOLDED.



1 SILT FENCE
N.T.S.





SECTION

ROCK BERM NOTES:

1. USE ONLY OPEN GRADED ROCK 100 to 200 mm (4 to 8") DIAMETER FOR STREAM FLOW CONDITIONS. USE OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 1.2 mm (20 GAUGE). ROCK BERMS IN CHANNEL APPLICATIONS SHALL BE ANCHORED FIRMLY INTO THE SUBSTRATE A MINIMUM OF 150 mm (6") WITH T-POSTS OR WITH 15M OR 20M (#5 OR #6) REBAR, WITH MAXIMUM SPACING APART OF 1.2 m (48") ON CENTER.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE-SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 150 mm (6").
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

3 ROCK FILTER BERM
NTS

PROPERTY DESCRIPTION:
OAK RUN PEDESTRIAN BRIDGE
0.34 OF THE 0.37 ACRES FROM LOT 72A, BLOCK 1 FROM THE OAK RUN SUBDIVISION UNIT 18

NO.	DATE	DESCRIPTION
4		
3		
2		
1		

REVISIONS

DRAWN BY:
CHECKED BY:
APPROVED BY:
FILE NO.
FILE LOCATION:

STATE OF TEXAS
KENNETH E. ROGERS
89448
LICENSED
PROFESSIONAL ENGINEER
5/17/09

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway
San Antonio, Texas 78216
Voice (210) 349-3211 Fax (210) 349-2561

PREPARED FOR:
CITY OF NEW BRAUNFELS
BENJAMIN C. WOOD
PUBLIC WORKS

STORM WATER POLLUTION PREVENTION PLAN
PEDESTRIAN BRIDGE
NEW BRAUNFELS, TEXAS

OCTOBER 2009

SCALE
Vertical 1" =
Horizontal 1" = 30'
0 15 30 45

SHEET 1 OF 1

PROJ NO. 2162-003

DRAWING FILE NAME: G:\2162-003\dwg\Sht-SCS.dwg

ATTACHMENT I

Inspection and Maintenance for BMPs

The temporary BMP's will be scheduled for inspection and repair at two-week intervals and following any rainfall event that is greater than one-half (½) inch. The Contractor is responsible for logging all inspections, rainfall events, and repairs. The Contractor is responsible for cleaning up any sediment that is released onto the sidewalks after any rainfall event. The following forms shall be used for inspection and maintenance reports that are required to be kept on the project site by the contractor.

STORM WATER POLLUTION PREVENTION PLAN

INSPECTION AND MAINTENANCE REPORT

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

_____

_____

_____

_____

REASONS FOR CHANGES:

_____

_____

_____

_____

INSPECTOR'S SIGNATURE:_____ DATE:_____

Silt Fence

Description

This item shall consist of providing and placing a filter fabric fence including maintenance of the fence, removal of accumulated silt, and removal of the fence upon completion of the project.

Materials

1. Fabric

   a. General: The filter fabric shall be of nonwoven polypropylene, polyethylene, or polyamide thermoplastic fibers with non-raveling edges. The fabric shall be non-biodegradable, inert to most soil chemicals, ultraviolet resistant, unaffected by moisture or other weather conditions, and permeable to water while retaining sediment. The filter fabric shall be supplied in rolls a minimum of 36 inches wide.

   b. Physical Requirements: The fabric shall meet the following requirements when sampled and tested in accordance with the methods indicated.

Physical Properties	Method	Requirements
Fabric Weight (oz/sy)	TEX-616-J	4.5 minimum
Water Flow Rate (gal/sq. ft/minute)	TEX-616-J	40 maximum
Equivalent Opening Size (US)	CW-02215, US Army	40 to 100
Standard sieve (number)	Corps of Engineers	
Mullen Burst Strength (psi)	ASTM D 3786	300 minimum
Ultraviolet Resistance	ASTM D 1682	70 minimum
Strength retention (%)		

2. Posts: Posts shall be painted or galvanized steel T- or Y-posts with anchor plates, not less than 5 feet in length with a minimum weight of 1.3 pounds per foot with a minimum Brinell Hardness of 143. Hangers shall be adequate to secure fence and fabric to posts. Posts and anchor plates shall conform to ASTM A 702.

3. Wire Fence: Wire fence shall be welded wire fabric 2x4-W1. 0xW1.0 and shall conform to REINFORCING STEEL.

Construction Methods

The silt fence fabric shall be securely attached to the posts and the wire support fence with the bottom 12 inches of the filter material buried in a trench a minimum of 6 inches deep and 6 inches wide to prevent sediment form passing under the fence. When the silt fence is constructed on impervious material, a 12-inch flap of fabric shall be extended upstream from the bottom of the silt fence and weighted to limit particulate loss. No horizontal joints will be allowed

in the filter fabric. Vertical joints shall be overlapped a minimum of 12 inches with the ends sewn or otherwise securely tied.

The silt fence shall be a minimum of 24 inches high. Posts shall be embedded a minimum of 12 inches in the ground, placed a maximum of 8 feet apart and set on a slight angle toward the anticipated runoff source. When directed by the Engineer, posts shall be set at specified intervals to support concentrated loads.

The silt fence shall be repaired, replaced, and/or relocated when necessary or as directed by the Engineer. Accumulated silt shall be removed when it reaches a depth of 6 inches.

Measurement

The work performed and the materials furnished under this item will be measured by the linear foot of "Silt Fence," complete in place.

Payment

The work performed and materials furnished and measured as provided under "Measurement" will be paid for at the unit price bid per linear foot of "Silt Fence." The price shall be full compensation for furnishing, hauling and placing all materials, labor, tools, equipment and incidentals necessary to complete the work, including inspecting, repairing, replacing and relocating the fence, removal of silt and removal and disposal of all materials at the completion of construction, and revegetation of disturbed areas.

Payment will be made under:

Silt Fence for Erosion Control – Per Linear Foot.

END

Stabilized Construction Exit

Description

This item involves constructing a stabilized pad of crushed stone located at any point where traffic will be entering or leaving a construction site to or from a public right-of-way, street, alley, sidewalk or parking area. The purpose of a stabilized construction entrance is to reduce or eliminate the tracking or deposition of sediment onto public right-of-way.

Materials

Aggregate for construction shall conform to the following gradation:

Table 1: Aggregate Gradation Chart (TEX 401-A, Percent Retained)

8 inch	5 inch	2 inch
0	90-100	100

Construction Methods

All trees, brush, stumps, obstructions and other objectionable material shall be removed and disposed of so as not to interfere with the excavation and construction of the entrance as indicated. The entrance shall not drain onto the public right-of-way or leave the construction site.

When necessary, vehicle wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse through use of sand bags, gravel, boards, silt fence or other approved methods.

The entrance shall be maintained in a condition which will prevent tracking or disposition of sediment onto public right-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. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.

Measurement

Acceptable work performed as prescribed in this item will be measured by unit of each stabilized construction entrance installed.

Payment

Work performed and materials furnished under this item shall be paid for at the unit price bid per each. Payment, when included as a contract pay item, will be made under:

Stabilized Construction Entrance – Per Each

Rock Filter Dams

Description

This Item shall govern for the materials to be furnished and for the installation, maintenance and removal of rock filter dams of the dimensions shown on the plans. The rock filter dams shall be constructed at the locations shown on the plans and as directed by the Engineer. This Item will be used during construction to control erosion and sedimentation.

Materials

Unless otherwise specified, all aggregate used for the construction of the rock filter dams shall be hard, durable, clean, open-graded, and shall naturally resist crumbling, flaking and eroding. Aggregate gradation shall be 3 to 6 inches for rock filter dams Types 1, 2 and 4 and shall be 4 to 8 inches for Type 3.

The galvanized steel wire mesh and tie wires for Types 2 and 3 shall be a minimum 20gauge unless specified otherwise on the plans.

For Type 4: Steel wire mesh shall utilize a double twisted hexagonal weave; mesh opening shall be a nominal 2.50" x 3.25"; steel wire for netting shall be 0.0866" (U.S. Gauge No. 13) minimum; steel wire for selvedges and corners shall be 0.1063" (U.S. Gauge No. 110 minimum; and binding or tie wire shall be 0.0866" (U.S. Gauge No. 13) minimum.

Unless otherwise specified, the sandbag material shall be made of polypropylene, polyethylene or polyamide woven fabric, minimum unit weight four (4) ounces per square yard, Mullen burst strength exceeding 300 psi and ultraviolet stability exceeding 70 percent. The sandbag size shall be 24 to 30 inches in length, 16 to 18 inches in width, six (6) to eight (8) inches thick and weight 90 to 125 pounds. The sand shall be course grade.

Construction Methods

Trees, brush, stumps and other objectionable material shall be removed and disposed of as necessary so as not to interfere with the construction of the filter dams.

The filter dams shall be constructed according to the following criteria unless otherwise shown on the plans:

1. Type 1 (non-reinforced)

   Height - 18 inches minimum, measured vertically from existing ground to top of filter dam.
   Top Width - 2 feet minimum
   Slopes - 2:1 maximum

2. Type 2 (reinforced)

   Height - 18 inches minimum, measured vertically from existing ground to top of filter dam.
   Top Width - 2 feet minimum
   Slopes - 2:1 maximum

The aggregate shall be placed on the galvanized wire mesh to the lines, height and slopes specified without resulting in undue voids, and to the satisfaction of the Engineer. The mesh shall be folded at the upstream side over the aggregate and secured to itself on the downstream side. The mesh shall be attached to itself with wire ties, hog rings, or as directed by the Engineer.

3. Type 3 (reinforced)

   Height - 36 inches minimum, measured vertically from existing ground to top of filter dam.
   Top Width - 2 feet minimum
   Slopes - 2:1 maximum

   The aggregate shall be placed on the galvanized wire mesh to the lines, height and slopes specified without resulting in undue voids, and to the satisfaction of the Engineer. The mesh shall be folded at the upstream side over the aggregate and secured to itself on the downstream side. The mesh shall be attached to itself with wire ties, hog rings, or as directed by the Engineer.

4. Type 4 (Sack Gabions)

   Sack gabions are supplied folded flat, packed in bundles. Single sacks shall be removed from the bundle, unfolded flat on the ground, and all kinks and bends stepped out.

   For vertical filling, the two sides edge wires are connected by using the lacing wire in a "single loop – double loop" pattern on a 4" to 5" spacing. At one end, the "end lacing rod" must be pulled tight, wrapped around the end and twisted 4 times. At the filling end, the rod shall be pulled tight, cut, leaving about 6" length and twisted 4 times.

   For horizontal filling, the sack shall be placed flat in a filling trough, filled with stone and then sides connected as described above. The ends shall be secured as described above.

   Lifting and placing shall be accomplished by placing a No. 6 rebar (or equal) 5' long in the mesh, perpendicularly to the longitudinal axis and close to the knot of one end. Lifting should be made from the central point. Sack gabions shall conform to existing contours.

5. Type 5. Type 5 as shown on the plans.

Maintenance

The area upstream from the filter dams shall be maintained in a condition which will allow sediment to be removed following the runoff of a rainfall event. When the silt reaches a depth equal to 1/3 the height of the dam or one (1) foot, whichever is less, the Contractor shall remove the accumulated sediment and dispose of it at an approved site in a manner that will not contribute to additional siltation. The filter dams shall be reshaped as needed and as directed by the Engineer.

The filter dams shall be maintained in place until all upstream areas are adequately stabilized. When the special Specification, "Temporary Erosion, Sedimentation and Water Pollution Prevention and Control" is in the contract, stabilization shall be as described in Subarticle 4.C of that specification. The area beneath the filter dams and area damaged by the removal process shall then be stabilized by the Contractor using appropriate methods as approved by the Engineer.

Measurement

This Item will be measured by the linear foot or by the cubic yard, as shown on the plans. When measured by the linear foot, measurement will be along the centerline of the top of the dam. When measured by the cubic yard, measurement will be the volume for rock computed in its final position by the method of average end areas or in vehicles at the point of delivery. The measured volume will include sandbags, if they are used.

Each time the Engineer directs that the filter dam (or portions thereof) be removed or removed and replaced, it will be measured for payment.

Payment

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement", will be paid for at the unit price bid for "Rock Filter Dams", of the type specified. This price shall be full compensation for furnishing all material; finish backfill and grading; lacing; and for all tools, equipment, labor and incidentals necessary for the construction and maintenance (except as shown below) of the filter dams.

When the Engineer directs that the rock filter dam installation (or portions thereof) be replaced, payment will be made at the unit price bid for "Rock Filter Dams (Remove and Replace)", of the type specified. This price shall be full compensation for the removal and replacement of the rock filter dam and for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.

The removal of accumulated sediment deposits, as described under "Maintenance", will be measured and paid for under the pertinent bid items of the Special Specification, "Earthwork for Erosion Control".

The work performed in the final removal of the rock filter dam installation as described under "Maintenance" and measured as provided above will be paid for at the unit price bid for "Rock Filter Dam (Remove) of the type specified. This price shall be full compensation for removing the dam from the existing location and properly disposing of it and for all manipulations, labor, tools, equipment and incidentals necessary to complete the work.

Stabilization (as described under "Maintenance") will be measured and paid for under the various pertinent bid items.

End

INSPECTIONS

DATE OF INSPECTION	CONTROL INSPECTED	OBSERVATIONS	COMPLIANCE WITH SWPPP		INSPECTOR'S SIGNATURE	TITLE/ QUALIFICATIONS
			YES	NO		

RECORD OF CONSTRUCTION ACTIVITY

DATE STARTED	DATE ENDED	TYPE OF ACTIVITY	CONTROL MEASURES	INSPECTOR SIGNATURE	TITLE/ COMPANY

NON-STORMWATER DISCHARGES

DATE	INSPECTOR	TITLE	COMPANY	DISHARGE TYPE	POLLUTION CONTROL MEASURE

CONSTRUCTION MATERIALS

DATE STORED ONSITE	DATE REMOVED FROM SITE	DESCRIPTION	INSPECTOR'S SIGNATURE	TITLE	COMPANY

STABILIZATION RECORD

CONSTRUCTION/GRADING		STABILIZATION			SIGNATURE		
DATE BEGAN	DATE ENDED	DATE BEGAN	AREA OF SITE STABILIZATION	TYPE OF STABILIZATION USED	INSPECTOR	TITLE	COMPANY

RAINFALL DATA

DATE OF RECORDED RAINFALL	AMOUNT OF RAINFALL (INCHES)	SIGNATURE OF INSPECTOR	TITLE/COMPANY

SUBCONTRACTOR RESPONSIBILITIES

DATE	SUBCONTRACTOR COMPANY	CONSTRUCTION ACTIVITY TO BE PERFORMED	DESCRIPTION OF POLLUTION PREVENTION RESPONSIBILITY	INITIALS	
				SUBCONTRACTOR	CONTRACTOR

ATTACHMENT J

Schedule of Interim and Permanent Soil Stabilization Practices

Stabilization measures (temporary seeding) 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 ceases 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. Slopes that are steeper than 3:1 will be covered with appropriate soil stabilization matting as described in the Technical Guidance Manual to prevent loss of soil and seed. Permanent seeding of individually disturbed areas shall be performed when infrastructure construction has been completed. Permanent sodding and mulching of landscape areas shall occur at or near the completion of project. During construction, contractors shall, to the maximum extent possible, limit their construction activities to areas of construction as noted on the plans in an attempt to preserve as much natural vegetation as possible.

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

REGULATED ENTITY NAME: Oak Run Pedestrian Bridge

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

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

2. X 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.

   X 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 provided below:

   _____

   _____

   _____

   _____

3. X 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.

4. X 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.

   _____ This site will be used for low density single-family residential development and has 20% or less impervious cover.

   _____ This site will be used for low density single-family residential development but has more than 20% impervious cover.

   X This site will not be used for low density single-family residential development.

5. X 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.** This 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 found at the end of this form.

_____ This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.

__X__ This site will not be used for multi-family residential developments, schools, or small business sites.

6. **ATTACHMENT B - BMPs for Upgradient Stormwater.**

__X__ 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 identified as **ATTACHMENT B** at the end of this form.

_____ If no surface water, groundwater or stormwater originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form.

_____ If 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, an explanation is provided as **ATTACHMENT B** at the end of this form.

7. **ATTACHMENT C - BMPs for On-site Stormwater.**

__X__ 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 identified as **ATTACHMENT C** at the end of this form.

_____ If 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, an explanation is provided as **ATTACHMENT C** at the end of this form.

8. __X__ **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 provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" or "possibly sensitive" has been addressed.

9. __X__ 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.

__X__ The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.

_____ **ATTACHMENT E - Request to Seal Features.** A request to seal a naturally-occurring "sensitive" or "possibly sensitive" feature, that includes a justification as to why no reasonable and practicable alternative exists, is found at the end of this form. A request and justification has been provided for each feature.

10. X **ATTACHMENT F - Construction Plans.** Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information have been signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed permanent BMPs and measures are provided at the end of this form. Design Calculations, TCEQ Construction Notes, all man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.

11. X **ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is provided at the end of this form. The plan has been prepared and certified by the engineer designing the permanent BMPs and measures. The plan has been signed by the owner or responsible party. The plan includes procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofits as well as a discussion of record keeping procedures.

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

____ Pilot-scale field testing (including water quality monitoring) may be required for BMPs that are not contained in technical guidance recognized by or prepared by the executive director.

N/A **ATTACHMENT H – Pilot-Scale Field Testing Plan.** A plan for pilot-scale field testing is provided at the end of this form.

13. X **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 provided at the end of this form. 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.

Responsibility for maintenance of permanent BMPs and measures after construction is complete.

14. X 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.

15. X 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.

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:

James C Klein - City Engineer
Print Name of Customer/Agent

X [signature] 10-6-08
Signature of Customer/Agent Date

ATTACHMENT B

BMPs for Upgradient Stormwater

Upgradient stormwater will be permitted to maintain a natural flow path during all phases of the project. The stormwater runoff flows to Tributary 6, a tributary of Blieders Creek. Temporary BMP's will include the installation of a rock filter berm and silt fencing on the downstream boundary of the project to prevent contamination of Upgradient stormwater, and the creation of a stabilized construction exit on the western boundary of the project site with access to Timber Hollow. Permanent BMP's will be executed by the use of vegetative filter strips (resodding) of the entire project site at the completion of construction.

ATTACHMENT C

BMPs for Onsite Stormwater

The Oak Run Pedestrian Bridge proposes approximately 0.09 acres of impervious cover. This equals to less than one percent (1%) of total impervious cover. No TSS is being produced since the total impervious cover of the project is not being increased. The natural grasses downstream of the project and the resodding of the area disturbed by construction activity will perform the function of grass filter strips and be sufficient for this project. See the attached calculations for details.

ATTACHMENT D

BMPs for Surface Streams

There are no recharge features on this site. The project is located with Tributary 6, which is a tributary of Blieders Creek. Vegetative filter strips (grass sodding) will be used on the entire site as a permanent BMP. Temporary BMPs will include silt fencing, which will be installed on the downstream boundary of the site, and a construction exit, which will be placed along the western boundary of the site adjacent to Timber Hollow.

Texas Commission on Environmental Quality

ATTACHMENT F

TSS Removal Calculations 02-20-2008

Project Name: Oak Run Pedestrian Bridge
Date Prepared: 8/25/2008

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

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

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased lo
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Comal	
Total project area included in plan * =	562.00	acres
Predevelopment impervious area within the limits of the plan * =	0.09	acres
Total post-development impervious area within the limits of the plan * =	0.09	acres
Total post-development impervious cover fraction * =	0.00	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	0	lbs.

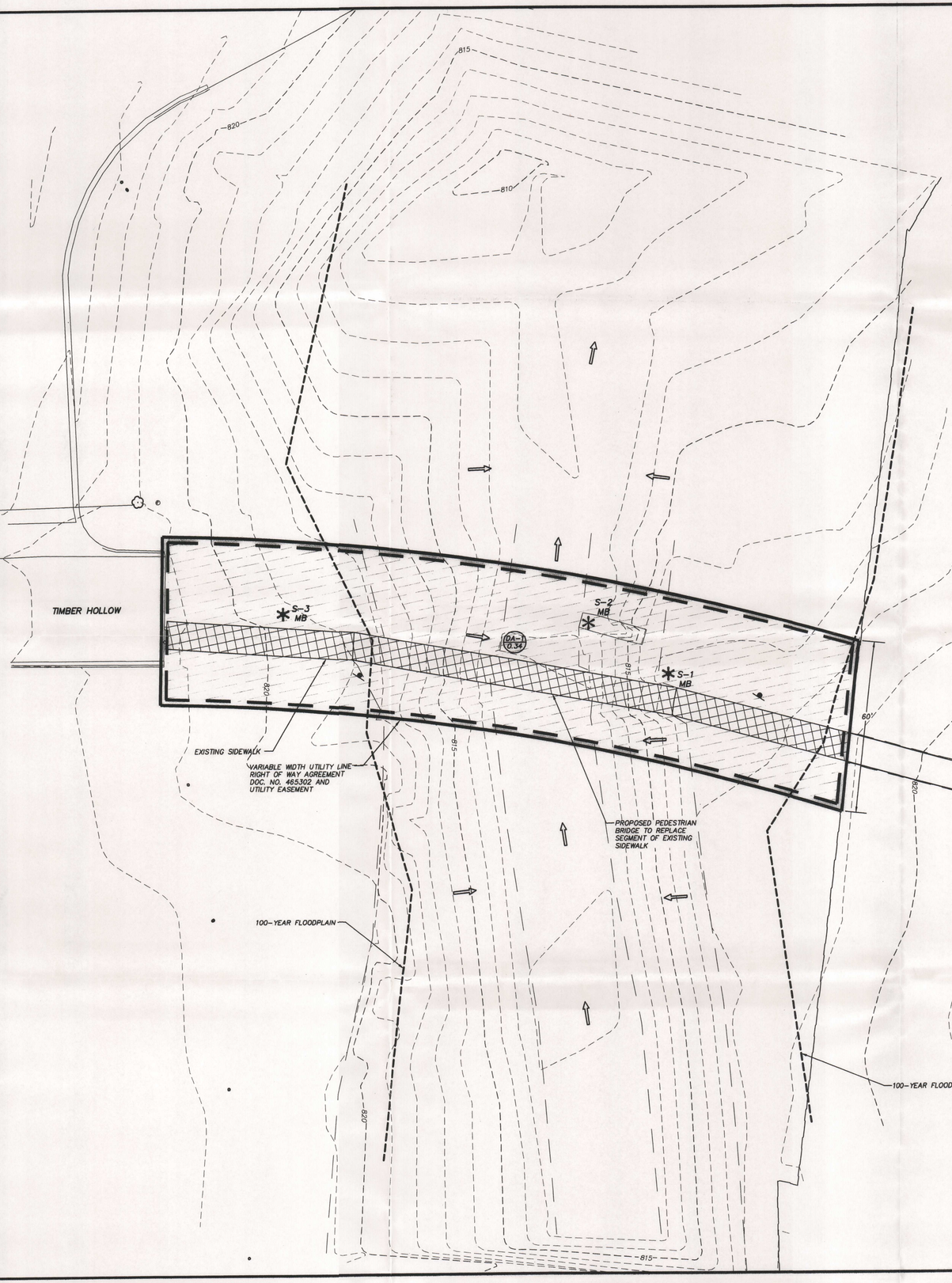
* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 1

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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	562.00	acres
Predevelopment impervious area within drainage basin/outfall area =	0.09	acres
Post-development impervious area within drainage basin/outfall area =	0.09	acres
Post-development impervious fraction within drainage basin/outfall area =	0.00	
$L_{M\ THIS\ BASIN}$ =	0	lbs.



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:

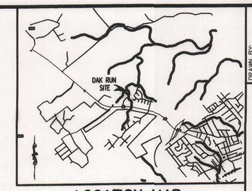
A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

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



LOCATION MAP
NOT TO SCALE

SCALE
1"=20'

LEGEND

- DRAINAGE AREAS DA-1 0.34 ACRES (VEGETATIVE FILTER STRIPS - GRASS SODDING)
- IMPERVIOUS COVER
- UNDISTURBED AREA
- *S-1 MB — MANMADE FEATURE IN BEDROCK
- DISTURBED AREAS
- PROJECT BOUNDARY

PROPERTY DESCRIPTION:
OAK RUN PEDESTRIAN BRIDGE
0.34 OF THE 0.37 ACRES FROM
LOT 72A, BLOCK 1 FROM THE
OAK RUN SUBDIVISION UNIT 18

NO.	DATE	DESCRIPTION
4		
3		
2		
1		

REVISIONS

DRAWN BY:
CHECKED BY:
APPROVED BY:
FILE NO:
FILE LOCATION:

STATE OF TEXAS
KENNETH E. ROGERS
89448
LICENSED
PROFESSIONAL ENGINEER
©2008

VICKREY & ASSOCIATES, INC.
CONSULTING ENGINEERS
12940 Country Parkway
San Antonio, Texas 78216
Voice:(210) 349-3271 Fax:(210) 349-2561

PREPARED FOR:
CITY OF NEW BRAUNFELS
DEPARTMENT OF
PUBLIC WORKS

WATER POLLUTION ABATEMENT PLAN
PEDESTRIAN BRIDGE
NEW BRAUNFELS, TEXAS

OCTOBER 2008

SCALE
Vertical 1" =
Horizontal 1" = 20'
0 10 20 30

SHEET 1 OF 1

PROJ NO. 2162-003

DRAWING FILE NAME: N:\2162-003\dwg\WPAP.dwg

ATTACHMENT G OAK RUN PEDESTRIAN BRIDGE

MAINTENANCE SCHEDULE FOR VEGETATIVE FILTER STRIP

OAK RUN PEDESTRIAN BRIDGE
1050 feet northeast of the intersection of Timber Hollow and State Highway 46
New Braunfels, Texas 78130

REQUIRED MAINTENANCE

Once a vegetated area is well established, little additional maintenance is generally necessary. The key to establishing a viable vegetated feature is the care and maintenance it receives in the first few months after it is planted. Once established, all vegetated BMPs require some basic maintenance to insure the health of the plants, including:

Pest Management:

The insects and weeds shall not be controlled with insecticides or herbicides. This project shall be naturally controlled and the selection of applicable plants shall be necessary.

Seasonal Mowing and Lawn Care:

If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetative filter strip areas. Regular mowing should also include weed control practices; however, herbicides shall be used. Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of this site can help assure a dense and healthy vegetative cover.

Inspection:

Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

Debris & Litter Removal:

Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.

Jason Fowler
City Engineer
10-17-08

Sediment Removal:

Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.

Grass Reseeding and Mulching:

A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting, should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the vegetation is initially established.

ATTACHMENT I

Measures for Minimizing Surface Stream Contamination

The flow from the site will pass through vegetative filter strips and then continue through Tributary 6, which contributes to Blieders Creek. The runoff from the project site will maintain the same path before and after construction. The flow velocities before and after construction will remain the same; and, therefore, will not have an impact on the creek's natural flow conditions.

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

I, James Klein
Print Name

City Engineer
Title - Owner/President/Other

of City of New Braunfels
Corporation/Partnership/Entity Name

have authorized Kenneth Rogers, P.E.
Print Name of Agent/Engineer

of Vickrey & Associates, Inc.
Print Name of Firm

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

I also understand that:

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

2. For applicants 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.

James C Klein — 10-17-08
Applicant's Signature — Date

THE STATE TEXAS §

County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared James C. Kein believed by 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 17th day of October, 2008.

MICHAEL A. RESENDEZ
Notary Public
State of Texas
Comm. Exp. 07-15-2011

Michael A Resendez
NOTARY PUBLIC

MY COMMISSION EXPIRES: 07-15-2011

Texas Commission on Environmental Quality
Edwards Aquifer Protection Plan
Application Fee Form

NAME OF PROPOSED REGULATED ENTITY: Oak Run Pedestrian Bridge

REGULATED ENTITY LOCATION: 1050 feet northeast of the intersection of Timber Hollow and State Hwy 46

NAME OF CUSTOMER: City of New Braunfels

CONTACT PERSON: Steven Ramsey, P.E. (Please Print) PHONE: (830) 221-4020

Customer Reference Number (if issued): CN _____ (nine digits)

Regulated Entity Reference Number (if issued): RN _____ (nine digits)

AUSTIN REGIONAL OFFICE (3373) ☐ Hays ☐ Travis ☐ Williamson

SAN ANTONIO REGIONAL OFFICE (3362) ☒ Bexar ☐ Comal ☐ Medina ☐ Kinney ☐ Uvalde

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 (Check One)

☐ **AUSTIN REGIONAL OFFICE**

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

☒ **SAN ANTONIO REGIONAL OFFICE**

☐ **Overnight Delivery to TCEQ:**
TCEQ – Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
512/239-0347

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	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	0.34 Acres	$3,000.00
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	$

X _____ 10-6-08
Signature Date

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.

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Application Fee Schedule
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 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. Attachments — Describe Any Attachments: *(ex. Title V Application, Waste Transporter Application, etc.)*

☒ Yes ☐ No — WPAP Application and WPAP Plans

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 600722102		RN

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)

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

☐ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ Voluntary Cleanup Applicant ☐ Other: _____

7. General Customer Information

☐ New Customer ☐ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State) ☐ No Change**

If "No Change" and Section I is complete, skip to Section III – Regulated Entity Information.

8. Type of Customer:			
☐ City Government	☐ County Government	☐ Federal Government	☐ State Government
☐ Other Government	☐ General Partnership	☐ Limited Partnership	☐ Other:

9. Customer Legal Name *(If an individual, print last name first: ex: Doe, John)* — *If new Customer, enter previous Customer below* — *End Date:*

10. Mailing Address:

City | State | ZIP | ZIP + 4

11. Country Mailing Information *(if outside USA)* — 12. E-Mail Address *(if applicable)*

13. Telephone Number ( ) - — 14. Extension or Code — 15. Fax Number *(if applicable)* ( ) -

16. Federal Tax ID *(9 digits)* — 17. TX State Franchise Tax ID *(11 digits)* — 18. DUNS Number *(if applicable)* — 19. TX SOS Filing Number *(if applicable)*

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

21. Independently Owned and Operated?
☐ Yes ☐ No

SECTION III: Regulated Entity Information

22. 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 ☐ No Change** *(See below)*

**If "NO CHANGE" is checked and Section I is complete, skip to Section IV, Preparer Information.

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

Oak Run Pedestrian Bridge

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	Unassigned							
	City		State		ZIP		ZIP + 4	
25. Mailing Address:	City of New Braunfels							
	424 South Castell Ave.							
	City	New Braunfels	State	TX	ZIP	78130	ZIP + 4	1747

26. E-Mail Address:	planning@nbtexas.org		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*	
(830) 221-4020		(830) 608-2109	
30. Primary SIC Code (4 digits)	31. Secondary SIC Code (4 digits)	32. Primary NAICS Code (5 or 6 digits)	33. Secondary NAICS Code (5 or 6 digits)
1540		237310	

34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*

Pedestrian Bridge

Questions 34 – 37 address geographic location. Please refer to the instructions for applicability.

35. Description to Physical Location:	1050 feet northeast of the intersection of Timber Hollow and State Highway 46

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78130

37. Latitude (N) In Decimal:	29.723972		38. Longitude (W) In Decimal:	-98.172167	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	26.3	98	10	19.80

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 or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

☐ Dam Safety	☐ Districts	☒ Edwards Aquifer	☐ Industrial Hazardous Waste	☐ Municipal Solid Waste
☐ New Source Review – Air	☐ OSSF	☐ Petroleum Storage Tank	☐ PWS	☐ Sludge
☐ Stormwater	☐ Title V – Air	☐ Tires	☐ Used Oil	☐ Utilities
☐ Voluntary Cleanup	☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:

SECTION IV: Preparer Information

40. Name:	City of New Braunfels	41. Title:	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 221-4020		(830) 608-2109	sramsey@nbtexas.org

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 9 and/or as required for the updates to the ID numbers identified in field 39.

(See the Core Data Form instructions for more information on who should sign this form.)

Company:	City of New Braunfels	Job Title:	~~Director of Public Works~~ City Engineer		
Name *(In Print)*:	~~Steven Ramsey~~, P.E. James C Klein			Phone:	(830) 221-4020
Signature:	X James C Klein			Date:	10-6-08

City of New Braunfels

VENDOR NUMBER 649

DATE 09/25/2008

CHECK NUMBER 144534

DATE	INVOICE NUMBER	PO NUMBER	DESCRIPTION	$ AMOUNT
09/23/2008	09232008		WPAP FOR COMPLAINCE	3,000.00

TX COMMISSION ON ENVIRONM 649 3,000.00

THIS CHECK IS VOID WITHOUT A BLUE AND GREEN BACKGROUND AND AN ARTIFICIAL WATERMARK ON THE BACK. HOLD AT AN ANGLE TO VIEW.

City of New Braunfels

P.O. BOX 311747
NEW BRAUNFELS, TEXAS 78131-1747

JP Morgan ChaseBank
New Braunfels, Texas
32-61/1110

VENDOR NUMBER	DATE	CHECK NUMBER	NET AMOUNT
649	09/25/2008	144534	$***3,000.00

PAY THREE THOUSAND AND 00/100 DOLLARS

TO THE ORDER OF
TX COMMISSION ON ENVIRONMENTAL
QUALTIY (TCEQ)
P O BOX 13088
AUSTIN TX 78711-3088

BORDER CONTAINS MICROPRINTING

⑈0144534⑈ ⑆111000614⑆ 058000120 2⑈