Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 26, 2015

RECEIVED

SEP 04 2015

COUNTY ENGINEER

Mr. David Thiel
Center for Christian Growth, Inc.
2549 Hwy. 46W
New Braunfels, Texas 78132

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: T Bar M Camp Improvements; Located 0.5 miles north of the intersection of FM 1863 and State Highway 46; New Braunfels, Texas

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

Investigation No.1261701; Regulated Entity No. RN102745502; Additional ID No. 13-15062501

Dear Mr. Thiel:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Modification application for the above-referenced project submitted to the San Antonio Regional Office by Moeller & Associates on behalf of Center for Christian Growth, Inc. on June 25, 2015. Final review of the WPAP Modification was completed after additional material was received on August 19, 2015, and August 24, 2015. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) were selected and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The T Bar M WPAP was originally approved by letter dated December 20, 2002. This approval included construction of two buildings, a cabin, four tennis courts, and associated parking areas.

Permanent treatment was provided by the construction of five (5) fifteen foot engineered vegetated filter strips. The total site area was 9.3 acres with 3.46 acres (37.2 percent) impervious cover.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 15.39 acres. It will include improvements including interior renovations to existing buildings, construction of new buildings, swimming pool, additional parking, grading for parking areas, building pad, utility service lines, and building infrastructure. The impervious cover will be 5.60 acres (36.4 percent). Project wastewater will be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the New Braunfels Utilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, three (3) Rooftop Rainwater Harvesting Systems and multiple 15 foot engineered Vegetative Filter Strips, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 3,105 pounds of TSS generated from the 5.60 acres of impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The individual treatment measures are listed in the table below.

Rainwater Harvesting System					
Tank No.	Impervious Area (ac.)	Req. Capture Volume (ft^3)	Design Capture Volume (ft^3)	Req. Irrigation Area (ft^2)	Design Irrigation Area (ft^2)
1	0.16	872	441	814	910
2			441	814	895
3	0.045	250	320	883	1,154
4	0.055	300	320	883	923

TSS Removal Summary						
BMP	Area	Contributing Area (ac)	Existing Impervious Cover (ac)	Proposed Impervious Cover (ac)	Req. TSS Removal (lb/yr)	Design TSS Removal (lb/yr)
VFS/ Rainwater Harvesting	1	5.88	0.14	2.86	2,441	2,477
None	2	6.94	2.41	1.71	0	0
VFS	3	1.34	0.25	0.89	574	574
Rainwater Harvesting	4	1.23	0	0.10	90	112

The vegetative filter strips will have a uniform slope of less than 20 percent, with a vegetated cover of at least 80 percent. The filter strips will be 15 feet wide (in the direction of flow), extend along the entire length of the contributing area with no obstructions to ensure stormwater flows through the filter strip.

GEOLOGY

According to the geologic assessment included with the application, the site is located over the Cyclic and Marine members of the Person formation. Five (5) non-sensitive features, S-1 (water line trench), S-2 (communications line utility trench), S-3 (sanitary sewer line utility trench), S-4 and S-5 (electric line utility trenches) were identified by Professional Geologists. The San Antonio Regional Office site assessment conducted on August 11, 2015 revealed the site was generally as described in the geologic assessment.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated December 20, 2002.

II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

III. All sediment removed from the Rainwater Harvesting System maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

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

<u>During Construction:</u>

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

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

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

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

18. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures were constructed as designed. The certification letter must be submitted to the San Antonio Regional Office within 30 days of site completion.
19. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.
20. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Edwards Aquifer protection plan. If the new owner intends to commence any new regulated activity on the site, a new Edwards Aquifer protection plan that specifically addresses the new activity must be submitted to the executive director. Approval of the plan for the new regulated activity by the executive director is required prior to commencement of the new regulated activity.

21. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.
22. At project locations where construction is initiated and abandoned, or not completed, the site shall be returned to a condition such that the aquifer is protected from potential contamination.

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

Sincerely,

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

LB/MR/eg

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

cc: Mr. Shane Klar P.E., Moeller & Associates
Mr. Charlie Thomas, P.E., City Engineer, City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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AUG 31 2015
COUNTY ENGINEER

MOELLER & ASSOCIATES
Engineering Solutions

LETTER OF TRANSMITTAL

ATTN: Monica Reyes	**DATE: 08/19/2015**
To: TCEQ	**RE: T Bar M**

WE ARE SENDING YOU ■ attached ☐ under separate cover the following:
☐ shop drawings ☐ prints ☐ standards ☐ specifications
☐ plans ☐ copy of letter ☐ ordinance ☐ other:

COPIES	ITEM	DESCRIPTION
1	Original	WPAP Resubmittal
4	Copies	WPAP Resubmittal

THESE ARE TRANSMITTED AS CHECKED BELOW:

■ for approval ☐ approved as submitted ☐ resubmit ☐ copies for approval
☐ for your use ☐ approved as noted ☐ submit ☐ copies for distribution
☐ as requested ☐ returned for corrections ☐ return ☐ corrected prints
☐ for review and comment ☐ other:

Signed

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MOELLER & ASSOCIATES
Engineering Solutions

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SAN ANTONIO
REGION
2015 AUG 19 AM 8:19

August 18, 2015

Ms. Monica Reyes
Edwards Aquifer Protection Division, Region 13 (San Antonio)
Texas Commission on Environmental Quality
14250 Judson Road
San Antonio, TX 78233-4480

RE: T Bar M Camp Improvements, Water Pollution Abatement Plan (WPAP)

This letter is in response to the fax dated August 14th, 2015 from TCEQ as it pertains to the request for approval of a Water Pollution Abatement Plan. The comments received are in italics and our responses are in bold.

Temporary Stormwater Seciton (TCEQ-0602) Comments:

1. *Attachment J: add information about when soil stabilization will occur. Please refer to section 1.2 under Site Stabilization of the Technical Guidance Manual RG-348.*
   Attachment J has been updated to provide the above referenced information.

2. *Will a concrete wash out area be used on the site? If so, please add to temporary BMP's.*
   There are no current plans for a concrete washout area.

Permanent Stormwater Seciton (TCEQ-0602) Comments:

3. *Attachment G: Permanent BMP's cannot be certified until after constructed. Please submit certification at that time.*
   The required Engineer certification will be provided at time of project completion. The certification provided in attachment G is only for the maintenance and monitoring procedures.

4. *Please provide amount of irrigation area required, TSS load calculations for the site, and for each drainage area with proposed impervious cover.*
   Additional information has been provided. See WPAP Site Plan.

Sheets and Exhibits Comments:

5. *Sheet #1*
   a) *Please add percent slope to flow arrows.*
      The above requested has been added. See WPAP Site Plan.

   b) *Please provide additional drainage arrows to the proposed VFS's.*
      The above requested has been added. See WPAP Site Plan.

MOELLER & ASSOCIATES
Engineering Solutions

c) Please outline project limits of areas 1, 2, 3.
The above requested has been added. See WPAP Site Plan.

d) Please provide and outline irrigation areas for each rainwater harvesting system.
Additional detail has been provided in additional plan sheets attached to this resubmittal.

Please accept these comments and revisions to the Water Pollution Abatement Plan for the referenced project. If you need additional information or have any questions, please do not hesitate to contact me.

Sincerely,

Shane Klar, P.E.
Attachments

ATTACHMENT "J"
Schedule of Interim and Permanent Soil Stabilization Practices

Bair soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

Areas which are disturbed by construction staging and storage areas will be hydro mulched with the appropriate seed mixture. Areas between the edge of pavement and property line will also by hydro mulched. There will be no fill slopes exceeding a 3:1 slope, and all fill slopes will be hydro mulched. Installation and acceptable mixtures of hydro mulch are as follows:

Materials:

Hydraulic Mulches: Wood fiber mulch can be applied alone or as a component of hydraulic matrices. Wood fiber applied alone is typically applied at the rate of 2,000 to 4,000 lb/acre. Wood fiber mulch is manufactured from wood or wood waste from lumber mills or from urban sources.

Hydraulic Matrices: Hydraulic matrices include a mixture of wood fiber and acrylic polymer or other tackifier as binder. Apply as a liquid slurry using a hydraulic application machine (i.e., hydro seeder) at the following minimum rates, or as specified by the manufacturer to achieve complete coverage of the target area: 2,000 to 4,000 lb/acre wood fiber mulch, and 5 to 10% (by weight) of tackifier (acrylic copolymer, guar, psyllium, etc.)

Bonded Fiber Matrix: Bonded fiber matrix (BFM) is a hydraulically applied system of fibers and adhesives that upon drying forms an erosion resistant blanket that promotes vegetation, and prevents soil erosion. BFMs are typically applied at rates from 3,000 lb/acre to 4,000 lb/acre based on the manufacturer's recommendation. A biodegradable BFM is composed of materials that are 100% biodegradable. The binder in the BFM should also be biodegradable and should not dissolve or disperse upon re-wetting. Typically, biodegradable BFMs should not be applied immediately before, during or immediately after rainfall if the soil is saturated. Depending on the product, BFMs typically require 12 to 24 hours to dry and become effective.

Seed Mixtures:

Dates	Climate	Species	(lb/ac.)
Sept. 1 to Nov. 30	Temporary Cool Season	Tall Fescue	4.0
		Oats	21.0
		Wheats	30.0
		Total	**55.0**
Sept. 1 to Nov. 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug. 31	Temporary Warm Season	Foxtail Millet	30.0

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Fertilizer: Fertilizer should be applied at the rate of 40 pounds of nitrogen and 40 pounds of phosphorus per acre, which is equivalent to about 1.0 pounds of nitrogen and phosphorus per 1000 square feet.

Installation:

(1) Prior to application, roughen embankment and fill areas by rolling with a crimping or punching type roller or by track walking. Track walking shall only be used where other methods are impractical.

(2) To be effective, hydraulic matrices require 24 hours to dry before rainfall occurs.

(3) Avoid mulch over spray onto roads, sidewalks, drainage channels, existing vegetation, etc.

TSS Removal Summary						
Basin	Contributing Area	Existing Imp. Cover	Proposed Imp. Cover	Req. TSS Removal (lbs)	Design TSS Removal (lbs)	BMP
1	5.88	0.14	2.86	2,441	2,477	VFS/Rainwater Harvesting
2	6.94	2.41	1.71	0	0	None
3	1.34	0.25	1.34	978	978	VFS
4	1.23	0.00	0.10	90	112	Rainwater Harvesting

0 100' 200'

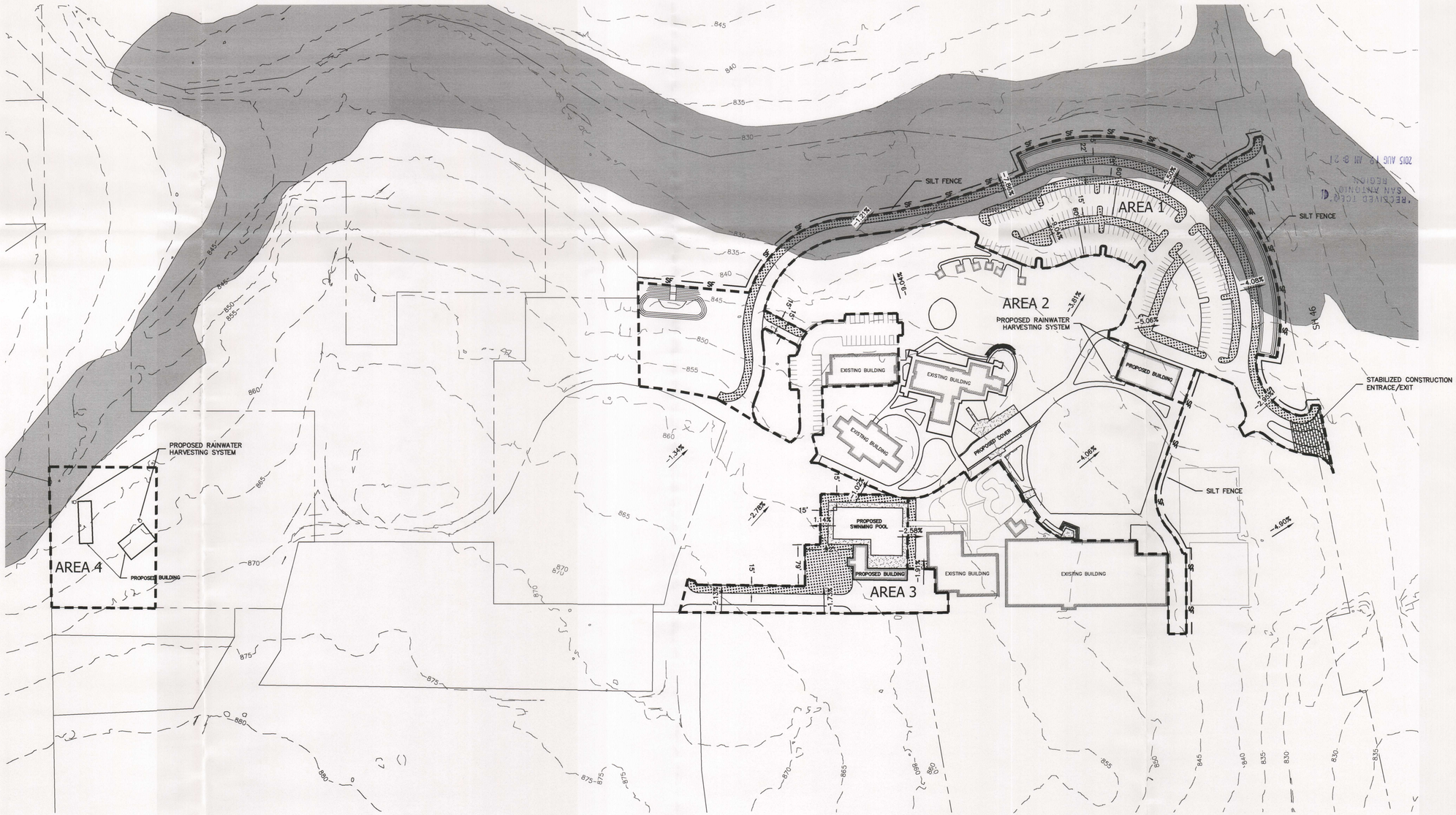
LEGEND

- SF SF — SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- 900 — EXISTING CONTOURS
- FLOW ARROWS
- PROJECT LIMITS
- VEGETATIVE FILTER STRIP
- 100 YR FLOODPLAIN

TOTAL PROJECT AREA	=	15.39 AC
EXISTING IMPERVIOUS AREA	=	2.80 AC
PROPOSED IMPERVIOUS AREA	=	5.60 AC
% IMPERVIOUS	=	36.4%

SOIL STABILIZATION NOTE

ALL DISTURBED SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITH 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.



Know what's below. Call before you dig.

STATE OF TEXAS — SHANE KLAR — 115810 — LICENSED PROFESSIONAL ENGINEER — 8/18/15

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions
1040 N. WALNUT AVE. STE B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7127 www.ma-tx.com
TBPE FIRM F-13351

WPAP SITE PLAN

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 1

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Drawing Name: N:\Projects\TBAR001.101 – TBarM Camp Expansion\Engineering Reports\WPAP\WPAP Site Plan & Details.dwg User: shaneklar Aug 18, 2015 – 6:59pm

AREA 4 Rainwater Harvesting Design Calculations

Building 1

Minimum Treatment Capacity: 250 ft^3, 1.870 gal (2,000 ft^2 building @ 1.5 in rainfall depth)

Provided Treatment Capacity 320 ft^3, 2,400 gal

Building 2

Minimum Treatment Capacity: 300 ft^3, 2,245 gal (2,400 ft^2 building @ 1.5 in rainfall depth)

Provided Treatment Capacity 320 ft^3, 2,400 gal

Active Irrigation Period: 168 hrs, 7 days

Tank 1 (S-1)

Volume = 2,400 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 686 gpd (0.48 gpm: use 1 sprinkler @ 0.92 gpm)

Tank 2 (S-2)

Volume = 2,400 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 686 gpd (0.48 gpm: use 1 sprinkler @ 0.92 gpm)

* Time to empty Tank 1 & Tank 2 = 43.5 hrs < 168 hr maximum

Req. Irrigation Area Tank 1 & 2= 883 ft^2
Provided Irrigation Area Tank 1= 1,154 ft^2
Provided Irrigation Area Tank 2= 923 ft^2

Sprinklers: **Rain Bird 3504-PC**

	Nozzle	Pressure (psi)	Pattern	Radius (ft)	Flow Rate (gpm)
S-1	1.0	35	180°	21'	0.92
S-2	1.0	35	180°	21'	0.92

Total Dynamic Head (TDH)

$TDH = H_p + H_e + H_f$

Pressure Head (H_p) = 81 ft (2.31 ft/psi)

Elevation Head (H_e) = 0 ft neglecting variable head over submersible pump

Friction Head (H_f) = $\frac{1.2(10.4397)(L)(Q)^{1.85}}{(C)^{1.85}(D)^{4.8655}} = 0.25ft$

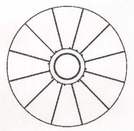
L = Length of pipe (ft)
C = Hazen-Williams coefficient (150 for SCH 40 PVC)
Q = Flow Rate (gpm)
D = Pipe Diameter (in)

TDH = 81.25 ft

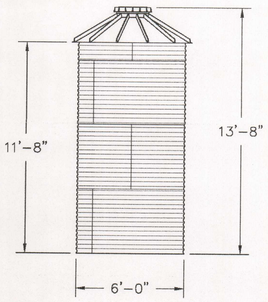
Pump Requirements: 0.92 gpm @ 81.25 ft TDH

* Timer shall be set to spray in intervals not to exceed 2 hours

Corrugations on roof panels are not shown for clarity.



PLAN



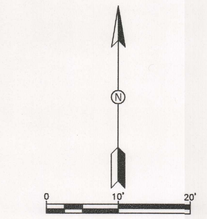
ELEVATION

	BY	DATE
DWN	IU	10/5/09
CKD	JH	10/5/09
ENG	JH	10/5/09

THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.

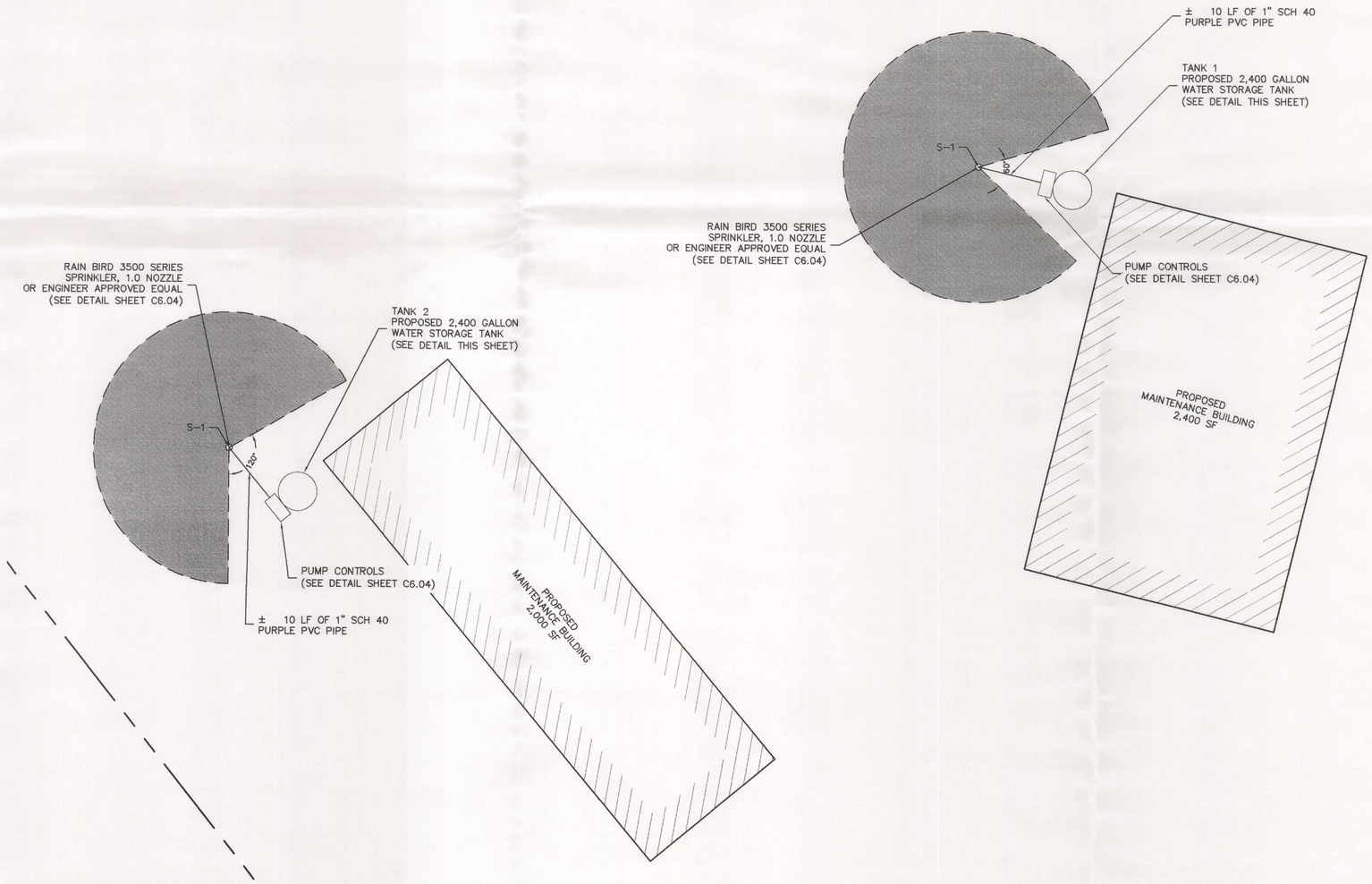
JOHN DEERE GREEN TECH
TEL: (800) 427-0778
FAX: (888) 447-9873
www.johndeeregreentech.com
CORGREEN WATER TANKS

TITLE: MODEL WH3-6-2.4 CORGREEN STEEL WATER STORAGE TANK NOMINAL CAPACITY - 2,400 GALLONS (U.S.)
DWG. NO. WH3-6-2.4 REV. NO. A
SIZE A SCALE 1/4"=1'-0" SHEET 1 OF 1



LEGEND

900 EXISTING CONTOUR
900 PROPOSED CONTOUR
DRAINAGE FLOW ARROW



1 MAINTENANCE BUILDINGS

Scale: 1:10

811 Know what's below. Call before you dig.

STATE OF TEXAS
SHANE KLAR
115810
LICENSED PROFESSIONAL ENGINEER

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions
1040 N. WALNUT AVE, STE. B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7727 www.mo-tx.com
TBPE FIRM F-13361

WATER QUALITY DETAILS

PERMIT SET

T BAR M CAMP IMPROVEMENTS

SHEET 2

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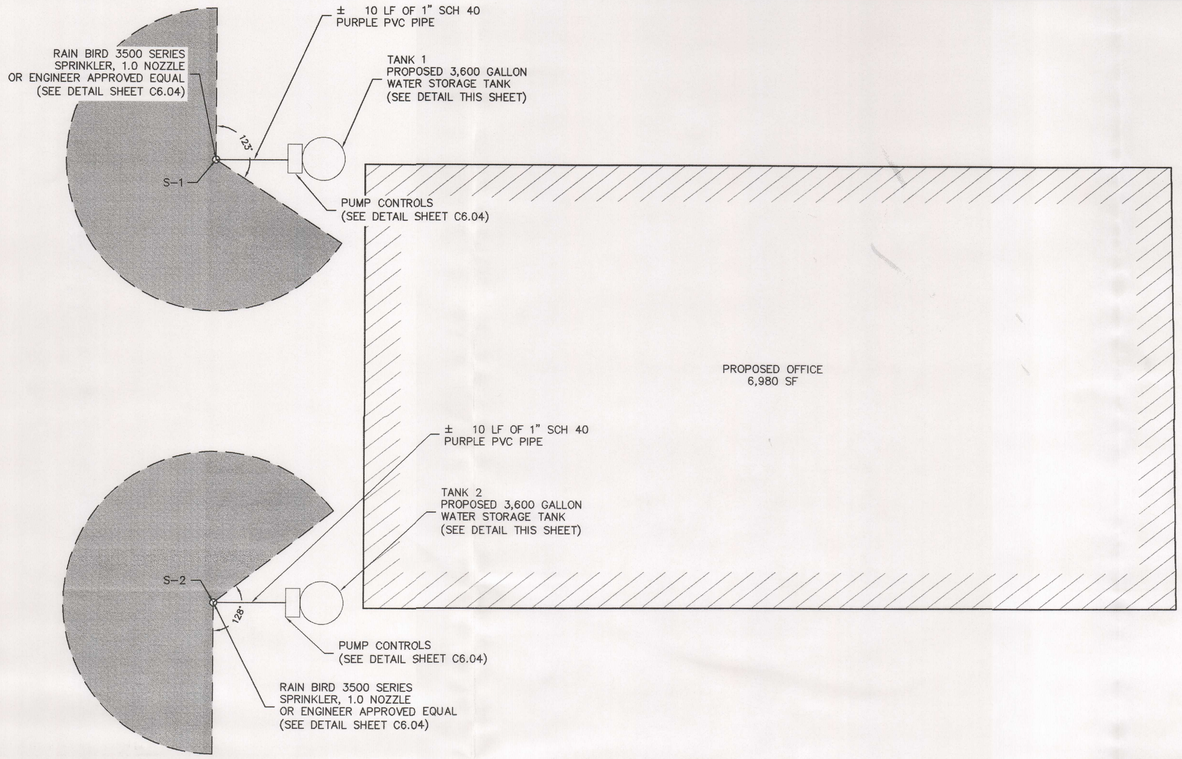
Drawing Name: N:\Projects\TBAR001.101 - TBarM Camp Expansion\Engineering Reports\WPAP\Rainwater Harvesting - Area 4.dwg User: shanek1or Aug 18, 2015 - 5:11pm



1 Proposed Office Rainwater Harvesting

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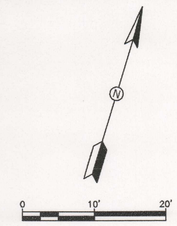
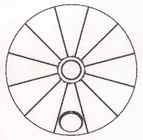


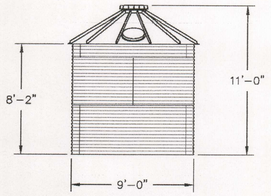
LEGEND

- 900 — EXISTING CONTOUR
- 900 — PROPOSED CONTOUR
- DRAINAGE FLOW ARROW

Corrugations on roof panels are not shown for clarity.



PLAN



ELEVATION

JOHN DEERE GREEN TECH		BY	DATE	TITLE: MODEL WH3-9-3.6 CORGREEN STEEL WATER STORAGE TANK NOMINAL CAPACITY – 3,600 GALLONS (U.S.)	
TEL: (800) 437-0778 FAX: (888) 447-9873 www.johndeeregreentech.com	DWN	IU	11/21/11		
CorGreen Water Tanks	CKD	JH	11/21/11	DWG. NO. WH3-9-3.6	REV. NO. B
	ENG	JH	11/21/11	SIZE A / SCALE 3/16"=1'-0"	SHEET 1 OF 1

THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.

AREA 1 Rainwater Harvesting Design Calculations					
Minimum Treatment Capacity:	872 ft^3, 6,525 gal (6,980 ft^2 building @ 1.5 in rainfall depth)				
Provided Treatment Capacity	882 ft^3, 7,200 gal				
Active Irrigation Period:	168 hrs, 7 days				
Tank 1 (S-1)					
Volume = 3,600 gal					
Time to Empty = 84 hrs					
Pump Flow to Empty = 1,028 gpd (0.71 gpm: use 1 sprinkler @ 0.92 gpm)					
Tank 2 (S-2)					
Volume = 3,600 gal					
Time to Empty = 84 hrs					
Pump Flow to Empty = 1,028 gpd (0.71 gpm: use 1 sprinkler @ 0.92 gpm)					
* Time to empty Tank 1 & Tank 2 = 65 hrs < 168 hr maximum					
Req. Irrigation Area Tank 1 & 2 = 814 ft^2					
Provided Irrigation Area Tank 1 = 910 ft^2					
Provided Irrigation Area Tank 2 = 895 ft^2					
Sprinklers: **Rain Bird 3504-PC**					
	Nozzle	Pressure (psi)	Pattern	Radius (ft)	Flow Rate (gpm)
S-1	1.0	35	180°	21'	0.92
S-2	1.0	35	180°	21'	0.92
Total Dynamic Head (TDH)					
TDH = $H_p + H_e + H_f$					
Pressure Head (H_p) = 81 ft (2.31 ft/psi)					
Elevation Head (H_e) = 0 ft	neglecting variable head over submersible pump				
Friction Head (H_f) =	$\frac{1.2(10.4397)(L)(Q)^{1.85}}{(C)^{1.85}(D)^{4.8655}} = 0.25ft$				
L = Length of pipe (ft)					
C = Hazen-Williams coefficient (150 for SCH 40 PVC)					
Q = Flow Rate (gpm)					
D = Pipe Diameter (in)					
TDH = 81.25 ft					
Pump Requirements: 0.92 gpm @ 81.25 ft TDH					
* Timer shall be set to spray in intervals not to exceed 2 hours					

811 Know what's below. Call before you dig.

STATE OF TEXAS
SHANE KLAR
115810
LICENSED PROFESSIONAL ENGINEER
8/18/15

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions
1040 N. WALNUT AVE. STE B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7127 www.ma-tx.com
TBPE FIRM F-13351

WATER QUALITY DETAILS

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 1 OF 3

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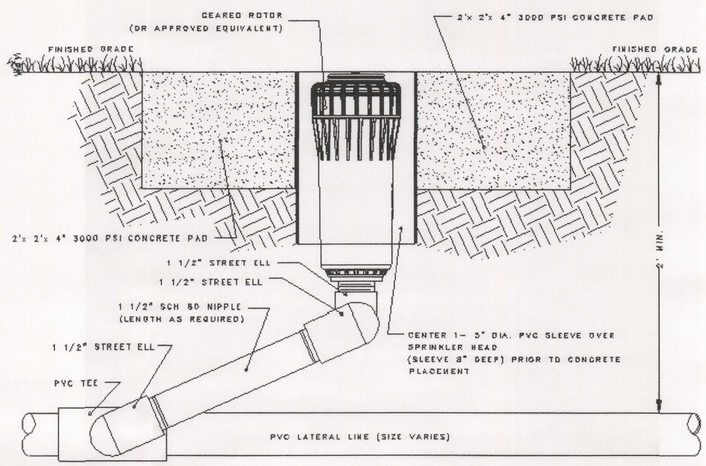
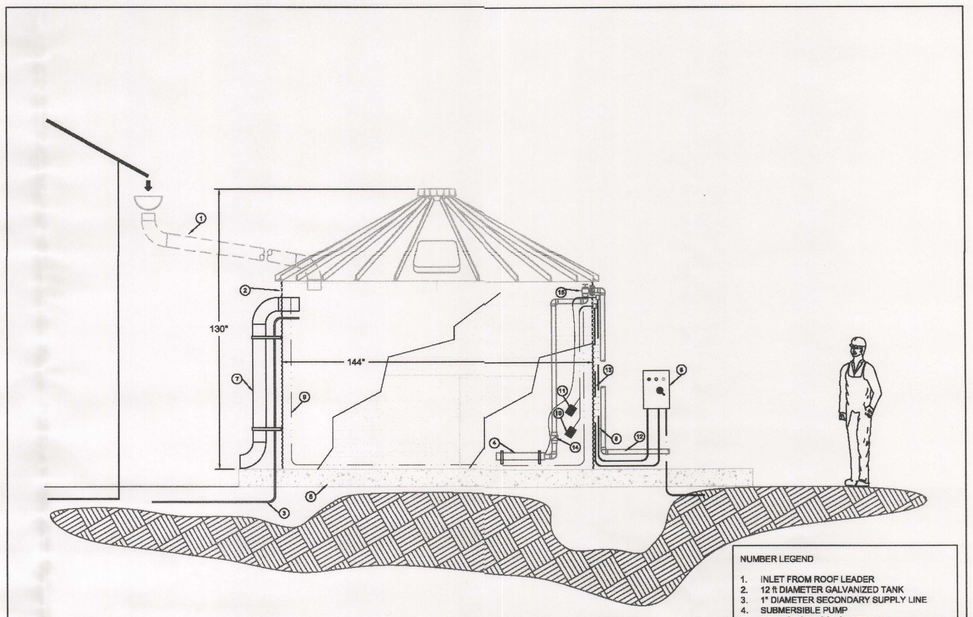
Drawing Name: N:\Projects\TBARM001.101 – TBarM Camp Expansion\Engineering Reports\WPAP\Rainwater Harvesting – Area 1.dwg User: shanek Aug 18, 2015 – 5:04pm



NOTES:
SPRINKLER HEADS SHOWN ON THIS THIS SHEET SHALL BE ROTOR SPRAY HEADS (OR APPROVED EQUIVALENT) 50 PSI, 34 GPH, NOZZLE 38 (RED .338" DIA.). THEY SHALL HAVE AN ANGLE ROTATION OF 227 (UNLESS OTHERWISE NOTED) AND 88' RADIUS.

SWING INSTALLATION DETAIL

NO SCALE



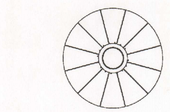
NUMBER LEGEND

1. INLET FROM ROOF LEADER
2. 12 ft DIAMETER GALVANIZED TANK
3. 1" DIAMETER SECONDARY SUPPLY LINE
4. SUBMERSIBLE PUMP
5. REINFORCED CONCRETE PAD
6. GT UL LISTED PUMP & RWH CONTROLLER
7. 6" DIAMETER HIGH LEVEL OVERFLOW
8. PUMP POWER SUPPLY
9. TANK MEMBRANE /FOOD GRADE LINER
10. LOW LEVEL FLOAT SWITCH
11. SECONDARY WATER SUPPLY FLOAT SWITCH
12. PUMP DISCHARGE LINE -SECURE TO TANK
13. CONTROL CONDUIT & WIRING
14. PUMP DISCHARGE UNION/FLANGE
15. PITLESS ADAPTER - LOCATE UNDER ACCESS HATCH

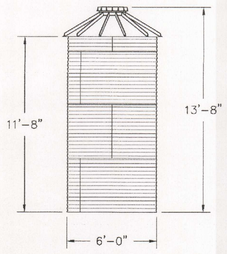
PROJECT:	JOHN DEERE GREEN TECH
	RAINWATER HARVESTING - GALVANIZED ABOVE GROUND GRAVITY FEED/SUB. PUMP TANK INSTALLATION
DRAWN: SFournier 7/25/09	FILE: GT RWH GRGALFILL SUBM 12.DWG
CHECK:	SIZE: A3 SCALE:
QUOTATION NO.*	DIMENSIONS IN: INCH
DO NOT SCALE DRAWING	

JOHN DEERE GREEN TECH
3 Chrysler - Irvine, CA 92618
TEL: (800) 427-0779
FAX: (949) 455-7492

Corrugations on roof panels are not shown for clarity.

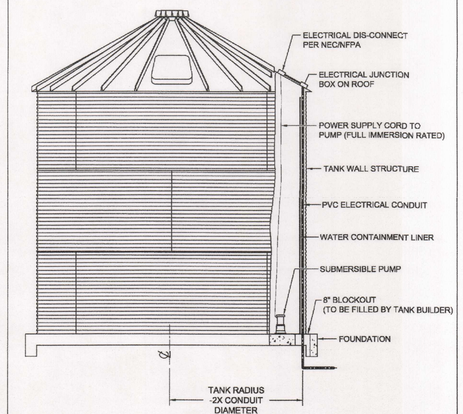


PLAN

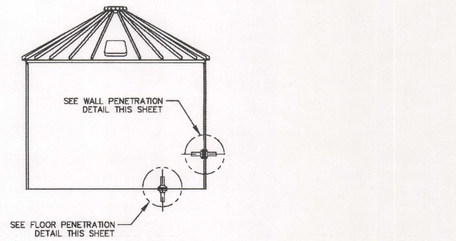


ELEVATION

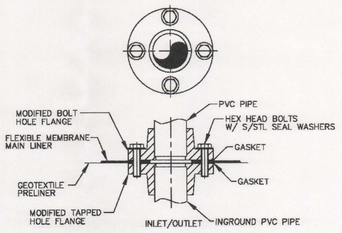
JOHN DEERE GREEN TECH		BY	DATE	TITLE
TEL: (800) 427-0779 FAX: (866) 447-9873 www.johndeergreentech.com	DWN	IU	10/5/09	MODEL WH3-6-2.4 CORGREEN STEEL WATER STORAGE TANK NOMINAL CAPACITY - 2,400 GALLONS (U.S.)
CorGreen WATER TANKS	CKD	JH	10/5/09	
	ENG	JH	10/5/09	DWG. NO. WH3-6-2.4 REV. NO. A
THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREON ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.				SIZE A SCALE 1/4"=1'-0" SHEET 1 OF 1



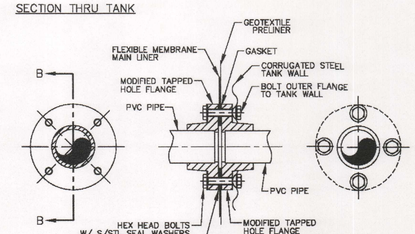
JOHN DEERE GREEN TECH		BY	DATE	TITLE
TEL: (800) 427-0779 FAX: (866) 447-9873 www.johndeergreentech.com	DWN	IU	3/19/11	ELECTRICAL CONNECTION FOR CORGREEN TANKS
CorGreen WATER TANKS	CKD	JH	3/19/11	
	ENG	JH	3/19/11	DWG NO. WH3-DM-ELECTRICAL CONNECTIONS REV NO. A
THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREON ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.				SIZE A SCALE 3/8"=1'-0" SHEET 1 OF 1



SECTION THRU TANK

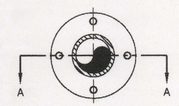


SECTION A-A



SECTION B-B

WALL PENETRATION DETAIL



FLOOR PENETRATION DETAIL

JOHN DEERE GREEN TECH		BY	DATE	TITLE
TEL: (800) 427-0779 FAX: (866) 447-9873 www.johndeergreentech.com	DWN	IU	3/18/10	WALL/FLOOR PENETRATION STANDARD PVC PENETRATION FLANGE SET
CorGreen WATER TANKS	CKD	JH	3/18/10	
	ENG	JH	3/18/10	DWG. NO. WH3-DM--STD PVC PENE FLANGE SET REV. NO. A
THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREON ARE PROPRIETARY TO Water Storage Tanks, Inc. AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF Water Storage Tanks, Inc.				SIZE B SCALE NONE SHEET 1 OF 1

Know what's below. Call before you dig.

STATE OF TEXAS
SHANE KLAR
115810
LICENSED PROFESSIONAL ENGINEER
8/18/15

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES
Engineering Solutions
1040 N. WALNUT AVE., STE. B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7227 www.mng-tx.com
TBPE FIRM # 13381

WATER QUALITY DETAILS

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 3

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Drawing Name: N:\Projects\TBAR001.101 - TBarM Comp Expansion\Engineering Reports\WPAP\WPAP Site Plan & Details.dwg User: shonekker Aug 18, 2015 - 4:10pm

RECEIVED

SEP 04 2015

COUNTY ENGINEER

MOELLER & ASSOCIATES
Engineering Solutions

LETTER OF TRANSMITTAL

ATTN: Monica Reyes	**DATE: 08/24/2015**
To: TCEQ	**RE: T Bar M**

WE ARE SENDING YOU
- ■ attached
- ☐ under separate cover the following:
- ☐ shop drawings
- ☐ prints
- ☐ standards
- ☐ specifications
- ☐ plans
- ☐ copy of letter
- ☐ ordinance
- ☐ other:

COPIES	ITEM	DESCRIPTION
1	Original	Updated Site Plan
4	Copies	Updated Site Plan

THESE ARE TRANSMITTED AS CHECKED BELOW:
- ■ for approval
- ☐ approved as submitted
- ☐ resubmit
- ☐ copies for approval
- ☐ for your use
- ☐ approved as noted
- ☐ submit
- ☐ copies for distribution
- ☐ as requested
- ☐ returned for corrections
- ☐ return
- ☐ corrected prints
- ☐ for review and comment
- ☐ other:

Signed Claire Cunningham

RECEIVED TCEQ
2015 AUG 24 AM 9:57
SAN ANTONIO
REGION

RECEIVED TCEQ
SAN ANTONIO REGION
2015 AUG 24 AM 9:57

TSS Removal Summary						
Basin	Contributing Area	Existing Imp. Cover	Proposed Imp. Cover	Req. TSS Removal (lbs)	Design TSS Removal (lbs)	BMP
1	5.88	0.14	2.86	2,441	2,477	VFS/Rainwater Harvesting
2	6.94	2.41	1.71	0	0	None*
3	1.34	0.25	0.89	574	574	VFS
4	1.23	0.00	0.10	90	112	Rainwater Harvesting

* The total impervious cover for this area is being reduced by 0.70 acres. Due to the decrease in total impervious cover no pemrmanent BMP's are proposed.

0 100' 200'

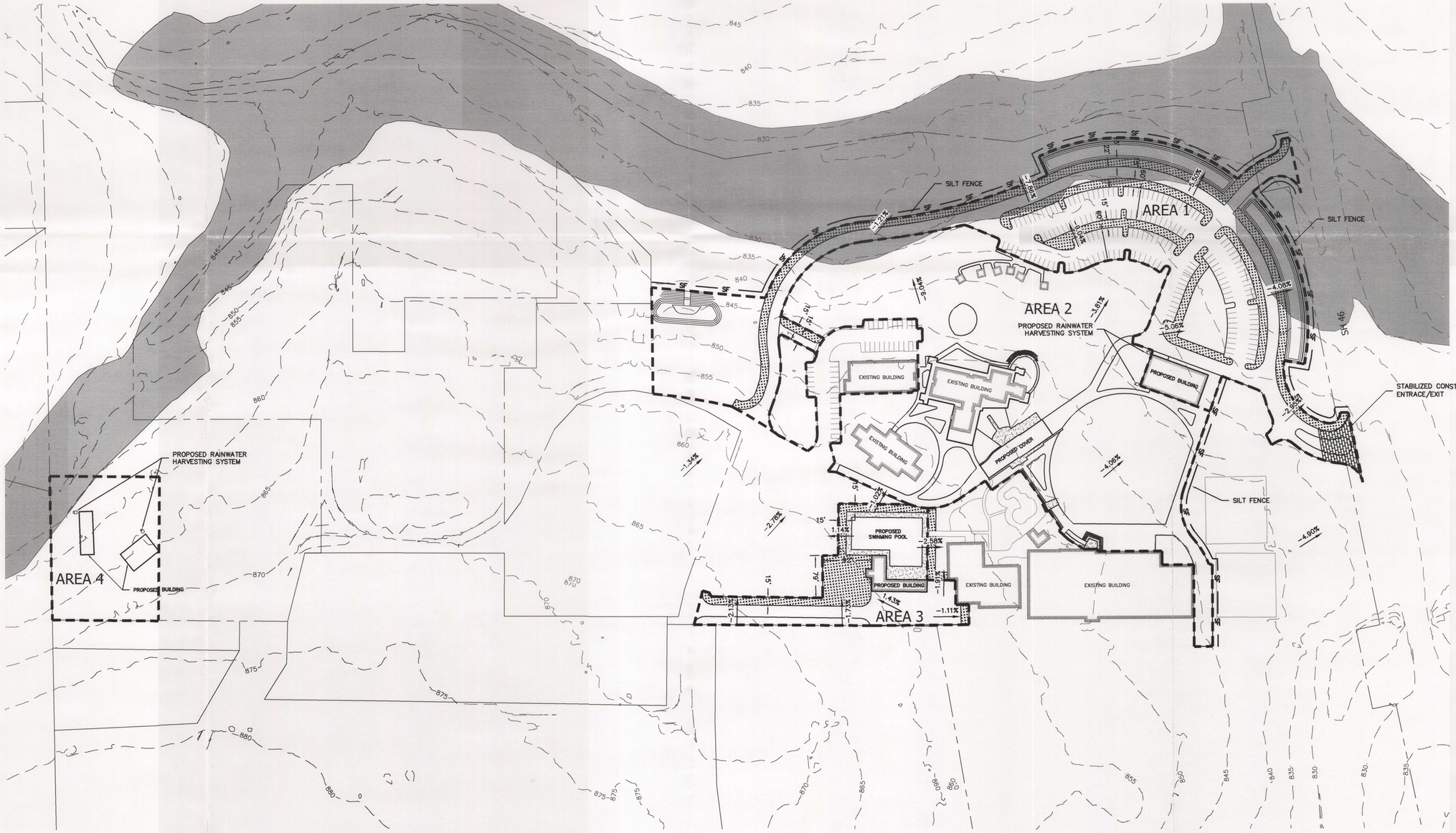
LEGEND

- SF SF — SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- — 900 — — EXISTING CONTOURS
- FLOW ARROWS
- PROJECT LIMITS
- VEGETATIVE FILTER STRIP
- 100 YR FLOODPLAIN

TOTAL PROJECT AREA	=	15.39 AC
EXISTING IMPERVIOUS AREA	=	2.80 AC
PROPOSED IMPERVIOUS AREA	=	5.60 AC
% IMPERVIOUS	=	36.4%

SOIL STABILIZATION NOTE

ALL DISTURBED SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITH 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.



Know what's below. Call before you dig.

SHANE KLAR 115810 LICENSED PROFESSIONAL ENGINEER

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions

WPAP SITE PLAN

T BAR M CAMP IMPROVEMENTS

SHEET 1 OF

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 29, 2015

RECEIVED
JUL 02 2015
COUNTY ENGINEER

Mr. Thomas H. Hornseth, P.E.
Comal County Engineer
195 David Jonas Drive
New Braunfels TX 78132-3710

Re: PROJECT NAME: T Bar M Camp Improvements, located on the south side of State Highway 46, approximately 0.5 miles north of the intersection at FM 1863, New Braunfels, Texas

PLAN TYPE: Application for a Water Pollution Abatement Plan (WPAP), 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program

Dear Mr. Hornseth:

The referenced application is being forwarded to you pursuant to the Edwards Aquifer Rules. The Texas Commission on Environmental Quality (TCEQ) is required by 30 TAC Chapter 213 to provide copies of all applications to affected incorporated cities and underground water conservation districts for their comments prior to TCEQ approval. More information regarding this project may be obtained from the TCEQ Central Registry website at http://www.tceq.state.tx.us/permitting/central_registry/.

Please forward your comments to this office by July 29, 2015.

The Texas Commission on Environmental Quality appreciates your assistance in this matter and your compliance efforts to ensure protection of the State's environment. If you or members of your staff have any questions regarding these matters, please feel free to contact the San Antonio Region Office at (210) 490-3096.

Sincerely

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

WATER POLLUTION ABATEMENT PLAN

RECEIVED
JUL 02 2015
COUNTY ENGINEER

FOR

TCEQ-R13
JUN 25 2015
SAN ANTONIO

T BAR M CAMP IMPROVEMENTS

PREPARED FOR

Texas Commission on Environmental Quality

Region 13 – San Antonio
14250 Judson Road
San Antonio, Texas 78233
210-490-3096 (office)
210-545-4329 (fax)

PREPARED BY

MOELLER & ASSOCIATES
Engineering Solutions

F-13351

Shane Klar, P.E.
1040 N. Walnut Ave., Ste B
New Braunfels, TX 78130

Prepared
June 25, 2015



TCEQ-R13
JUN 25 2015
SAN ANTONIO

Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

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

Administrative Review

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

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

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

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

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

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

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

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

Technical Review

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

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.
3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or if not withdrawn the application will be denied and the application fee will be forfeited.
4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

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

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

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

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

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

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

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

1. Regulated Entity Name: T Bar M						**2. Regulated Entity No.: 102745502**			
3. Customer Name: Center for Christian Growth, Inc.						**4. Customer No.:**			
5. Project Type: (Please circle/check one)	New		Modification			Extension		Exception	
6. Plan Type: (Please circle/check one)	WPAP	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		Non-residential			**8. Site (acres):**		15.39	
9. Application Fee:	$6,500.00		**10. Permanent BMP(s):**			Yes			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Comal		**14. Watershed:**			Blieders Creek			

Application Distribution

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

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

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

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

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	_X_	___	___	___
Region (1 req.)	___	_X_	___	___	___
County(ies)	___	_X_	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	_X_Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___San Antonio (SAWS) ___Shavano Park	___Bulverde ___Fair Oaks Ranch ___Garden Ridge _X_New Braunfels ___Schertz	NA	___San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.
Shane Klar Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent 6/25/15 Date

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

General Information Form

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Shane Klar, P.E.

Date: 6/24/15

Signature of Customer/Agent:



Project Information

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

   ☒ Recharge Zone
   ☐ Transition Zone

6. Plan Type:

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

7. Customer (Applicant):

Contact Person: David Thiel
Entity: Center for Christian Growth, Inc.
Mailing Address: 2549 Hwy. 46 W
City, State: New Braunfels, TX Zip: 78132-4731
Telephone: 830-625-2164 FAX: 830-620-4280
Email Address: dave@tbarmcamps.org

8. Agent/Representative (If any):

Contact Person: Shane Kalr, P.E.
Entity: Moeller & Associates
Mailing Address: 1040 N. Walnut Ave
City, State: New Braunfels, TX Zip: 78130
Telephone: 830-358-7127 FAX: 830-515-5611
Email Address: shaneklar@ma-tx.com

9. Project Location:

☒ The project site is located inside the city limits of New Braunfels.
☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
☐ The project site is not located within any city's limits or ETJ.

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

The project is located on the south side of State Highway 46 approximately 0.5 miles north of the intersection at FM 1863.

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

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

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

☐ Survey staking will be completed by this date: _____

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

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

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

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

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

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

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

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

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

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

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

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

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

Administrative Information

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

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

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

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

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

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



N

1 inch = 1,000 feet

T BAR M

LOCATION MAP

MOELLER & ASSOCIATES
Engineering Solutions

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS WEST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

SITE

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS

COMAL CO
GUADALUPE CO

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Produced by the United States Geological Survey
Revised in cooperation with the Texas Water Development Board

Control by USGS, NOS/NOAA, and USCE

Compiled by the Army Map Service by photogrammetric methods from aerial photographs taken 1956. Field checked 1958
Revised from aerial photographs taken 1986. Field checked 1987
Map edited 1988

Projection and 10,000-foot grid ticks: Texas coordinate system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 20 meters south and 28 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence and field lines generally visible on aerial photographs. This information is unchecked

UTM GRID AND 1988 MAGNETIC NORTH DECLINATION AT CENTER OF MAP
DIAGRAM IS APPROXIMATE

QUADRANGLE LOCATION

2998-413

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route · U. S. Route · State Route

NEW BRAUNFELS WEST, TEX.
29098-F2-TF-024
1988
DMA 6343 II NW–SERIES V822

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS EAST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS
(BM 623)

NEW BRAUNFELS
MUNICIPAL AIRPORT

LAKE DUNLAP

Produced by the United States Geological Survey in cooperation with the Defense Mapping Agency

Control by USGS and NOS/NOAA and USCE

Compiled from aerial photographs taken 1956. Revisions in purple and woodland compiled from aerial photographs taken 1986 and other sources and has been field checked. Map edited 1994
Conflicts may exist between some updated features and previously mapped contours

North American Datum of 1927 (NAD 27). Projection and 10 000-foot ticks : Texas Coordinate System, south central zone (Lambert Conformal Conic)
Blue 1000-meter Universal Transverse Mercator ticks, zone 14

North American Datum of 1983 (NAD 83) is shown by dashed corner ticks. The values of the shift between NAD 27 and NAD 83 for 7.5-minute intersections are obtainable from National Geodetic Survey NADCON software

UTM GRID AND 1994 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
SUPPLEMENTARY CONTOUR INTERVAL 5 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

RECEIVED
JUL 02 2015
COUNTY ENGINEER

TEXAS
QUADRANGLE LOCATION

2998-414

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

NEW BRAUNFELS EAST, TEX.
29098-F1-TF-024

1958
REVISED 1994
DMA 6343 II NE-SERIES V882

ATTACHMENT "C"
Project Description

T Bar M is a recreational camp currently in operation with camper housing, recreational facilities and associated parking and access roads. The proposed improvements include interior renovations to existing buildings, construction of new buildings, swimming pool, added parking to the north of the site and improvements to internal walks and paths. The improvements include removal and relocation of some existing impervious cover. Portions of the proposed improvements are items from previously approved plans. This modification directly addresses a WPAP from 2002.

The site is located within the New Braunfels city limits on the south side of State highway 46 approximately ½ mile north of the intersection at FM 1863. The site is served by New Braunfels Utilities for electric, water, and wastewater. The site is currently developed and operating under previously approved WPAP's.

The proposed improvements are divided into 4 separate areas. Area 1 is the only portion of the project that will not utilize previously approved BMP sizing. Area 2 is a reduction of impervious cover from improvements from past approved WPAP's that did not define areas of vegetation; however it is our opinion the net loss of impervious cover is an improved condition. Area 3 is a completion of the plan that we propose to modify. Area 4 is separate from the other 3 and with have self-contained Rainwater Harvesting systems for the proposed structures. Currently the project limits contains 2.80 acres of impervious cover and this plan proposed to take the 15.39 acre project area to a total of 5.60 acres of impervious cover.

The proposed construction will include minor grading for the parking areas and building pad, utility service lines, and building infrastructure.

According to the Flood Insurance Rate Map No. 48091C0430F & No. 48091C0435F, a small portion of the site is within the flood plain. The entire site drains to an unnamed tributary of Blieders creek. The proposed not previously accounted for in an approved WPPA will be captured and treated by rainwater harvesting systems while the rest of the site will drain to Vegetative Filter Strips. The Rainwater Harvesting System and the Vegetative Filter Strips will ensure the quality of water exiting without adversely affecting the downstream drainage patterns.

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Geologist: Richard V. Klar, P.G. Telephone: 210-699-9090

Date: June 24, 2015 Fax: 210-699-6426

Representing: Raba Kistner Environmental, Inc., TBPE Firm #3257 for Moeller & Associates
(Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: T Bar M

Project Information

1. Date(s) of Geologic Assessment was performed: June 15 and 16, 2015
2. Type of Project:

☒ WPAP ☐ AST
☐ SCS ☐ UST

3. Location of Project:

☒ Recharge Zone
☐ Transition Zone
☐ Contributing Zone within the Transition Zone

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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness (feet)
Comfort-Rock outcrop complex, undulating (CrD)	D	Veneer to 1.5 ft
Rumple-Comfort association, undulating (RUD)	C	1 to 2 ft

**Soil Group Definitions (Abbreviated)*

A. Soils having a high infiltration rate when thoroughly wetted.
B. Soils having a moderate infiltration rate when thoroughly wetted.
C. Soils having a slow infiltration rate when thoroughly wetted.
D. Soils having a very slow infiltration rate when thoroughly wetted.

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thickness is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s).** The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1":400'.

Applicant's Site Plan Scale: 1" = 100'
Site Geologic Map Scale: 1" = 100'
Site Soils Map Scale (if more than 1 soil type): 1" = 250'

9. Method of collecting positional data:

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

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

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

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

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

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

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

☐ There are _____(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
- ☐ The wells are not in use and have been properly abandoned.
- ☐ The wells are not in use and will be properly abandoned.
- ☐ The wells are not in use and comply with 16 TAC Chapter 76.

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

Administrative Information

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

ATTACHMENTS

ATTACHMENT A

GEOLOGIC ASSESSMENT TABLE (TCEQ-0585-TABLE)

COMMENTS TO GEOLOGIC ASSESSMENT TABLE

SOIL PROFILE

SITE SOILS MAP

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: *T Bar M, New Braunfels, Comal County, Texas*
(RKEI Project No. ASF15-092-00)

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
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	N29 43 26.9	W98 11 9.6	MB (W)	30	Kep	~1,732	2.0	~3-4					F/X	6	36	✓		✓		Hilltop
S-2	N29 43 24.2	W98 11 13.4	MB (COMM)	30	Kep	~66	3.0	~3-4					F/X	6	36	✓		✓		Hilltop
S-3	N29 43 33.8	W98 11 13.9	MB (SS)	30	Kep	~1,438	2.0	~8-10					F/X	8	38	✓		✓		Hilltop
S-4	N29 43 20.3	W98 11 8.4	MB (E)	30	Kep	~35	2.0	~2-3					F/X	6	36	✓		✓		Hilltop
S-5	N29 43 28.9	W98 11 15.2	MB (E)	30	Kep	~49	2.0	~2-3					F/X	6	36	✓		✓		Hilltop

*** DATUM:** ***NAD 83***

Features: COMM = Communications, E = Electric, SS = Sanitary Sewer, W = Water
Formation: Kep = Person Formation

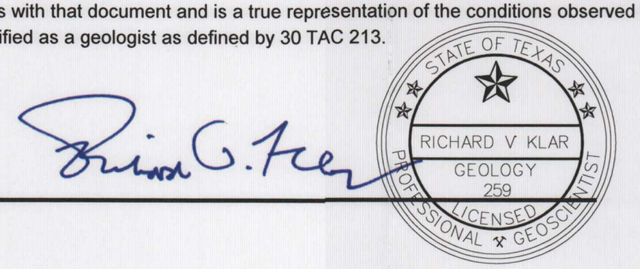
2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials: ***Granular bedding materials for utility lines (Features S-1 through S-5)***

12 TOPOGRAPHY

Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

I have read, I understood, and I have followed the Texas Natural Resource Conservation Commission'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 213.



Date: ***6-24-15***

Sheet ___1___ of ___1___

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

COMMENTS TO GEOLOGIC ASSESSMENT TABLE
T Bar M
New Braunfels, Comal County, Texas

The locations of the following features are indicated on the ***Site Geologic Map*** in Attachment D of this report.

Manmade Features (Utility Trenches)

Feature S-1 (MB):



Feature S-1 consists of a potable water line utility trench. On the basis of our observations, it is inferred that the trench hosting the utility line is installed 3-4 feet or more into the Person Formation (Kep). This trench enters the northeastern perimeter of the property from SH 46 and trends to the west where it branches off at three locations. The length of the utility trench within the project area is estimated on the order of 1,732 linear feet.

Feature S-2 (MB):



Feature S-2 consists of a communications line utility trench. On the basis of our observations, it is inferred that the trench hosting the utility line is installed 3-4 feet or more into the Kep. This feature enters the northeastern perimeter of the property from SH 46 and trends to the west along the southern boundary of the property. The utility was observed by junction boxes near the entrance to the property and behind the sports center building. The length of the utility trench within the project area is estimated on the order of 66 linear feet. In absence of confirmed utility location information, the general orientation, distance, and depth has been inferred.

Feature S-3 (MB):



Feature S-3 consists of a sanitary sewer line utility trench. On the basis of our observations, it is inferred that the trench hosting the utility line is installed 8-10 feet or more into the Kep. This trench enters the northeastern perimeter of the property, near the northern corner, from SH 46 and trends to the west/southwest where it branches off at three locations. The length of the utility trench within the project area is estimated on the order of 1,438 linear feet.

Features S-4 and S-5 (MB):



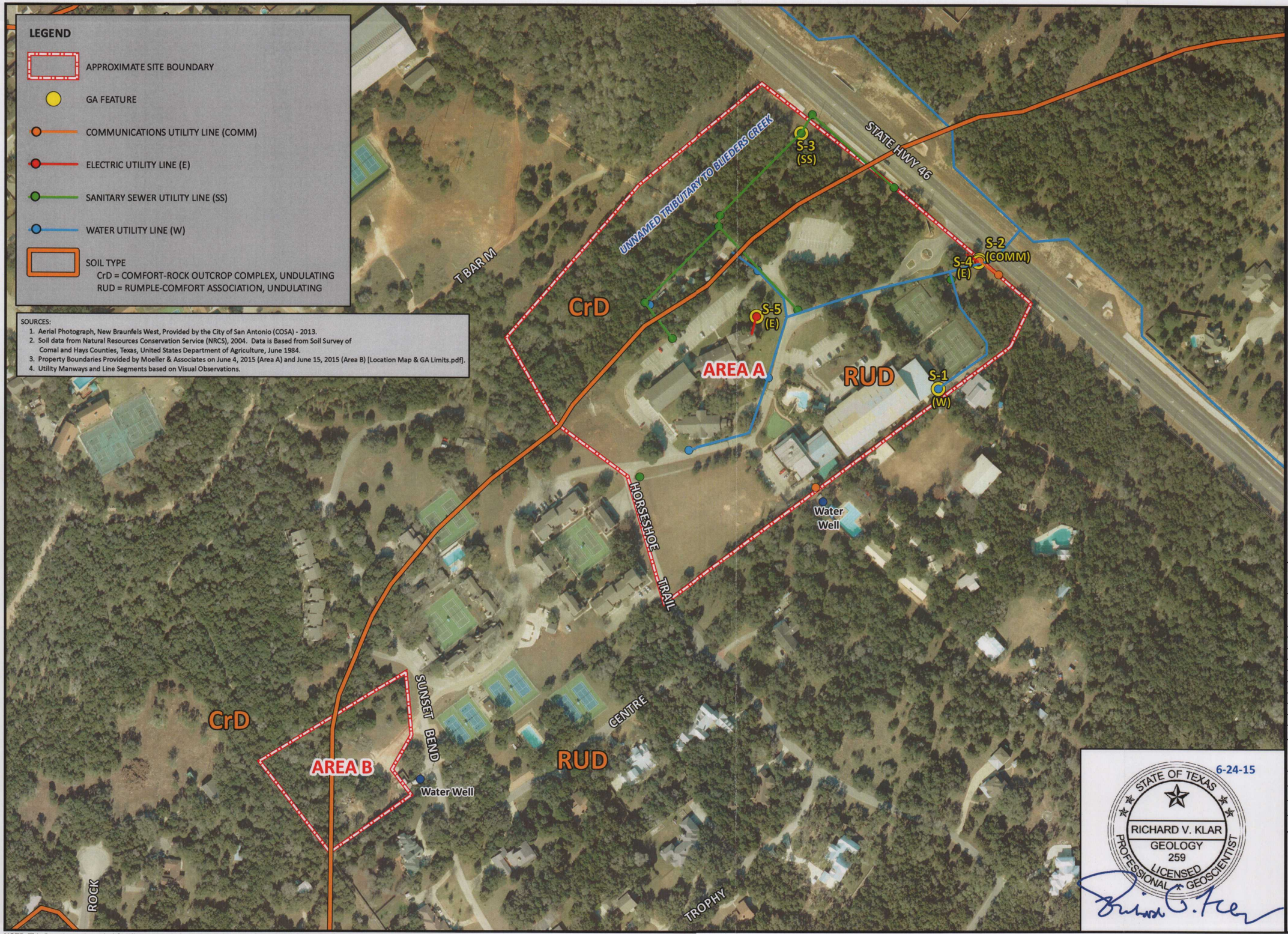
Features S-4 and S-5 consist of electric line utility trenches. On the basis of our observations, it is inferred that the trenches hosting the utility lines are installed 2-3 feet or more into the Kep. These trenches are located on the northeastern boundary of the property and near the center of the property. They were observed by utility junction boxes.

- Feature S-4: This trench starts at a junction box on the northeastern perimeter of the property, near the main entrance from SH 46. The trench branches trends towards the northwest to the entrance sign. The length of the utility trench within the project area is estimated on the order of 35 linear feet.
- Feature S-5: This trench starts at a junction box at the center of the property and extends to the southwest towards the hotel. The length of the utility trench within the project area is estimated on the order of 49 linear feet.

SOIL PROFILE
T Bar M
New Braunfels, Comal County, Texas

SOIL SERIES	THICKNESS ON SITE	DESCRIPTION
Comfort-Rock	**Veneer to 1.5 ft**	***Comfort-Rock outcrop complex, undulating (CrD):*** This complex comprises shallow clayey soils and limestone outcrop on side slopes, hilltops, and ridge tops in the Edwards Plateau. On average, Comfort soils make of 70% of the complex. Areas of limestone outcrop form narrow horizontal bands, and Comfort soils occur between the bands. The surface layer of the Comfort soil is dark brown, extremely stony clay, typically about 6 inches thick. Cobbles to 4 feet in diameter are abundant. Subsoil is dark reddish-brown clay, extremely stony and occurs to depths of about 13 inches. The Rock outcrop is dolomitic limestone that is barren of soil except in narrow fractures.
Rumple Comfort	**1 to 2 ft**	***Rumple-Comfort-association, undulating (RUD):*** Rumple soils make up about 60% of this association and are on broad ridge tops and side slopes. The surface layer is dark reddish brown very cherty clay loam about 10 inches thick with rounded chert, limestone cobbles and gravel cover about 20% of the surface. The subsoil is dark reddish brown very cherty clay to approximate depth of 14 inches and dark reddish brown extremely stony clay to a depth of about 28 inches. The surface layer of the Comfort soil is dark brown, neutral, extremely stony clay about 7 inches thick. The subsoil is dark reddish brown, mildly alkaline, extremely stony clay to a depth of 12 inches. The underlying material for both Rumple and Comfort soils is indurated fractured limestone fragments

The preceding table was prepared on the basis of information provided in the *Soil Survey of Comal and Hays Counties, Texas (1984)* in addition to field observations. Native soils mapped throughout the northern portion of the project Area A and west portion of the project Area B in closer proximity to Blieders Creek correspond to Comfort-Rock outcrop complex, undulating soils (CrD), as presented on the ***Site Soils Map***. Soils classified as the Rumple-Comfort association, undulating (RUD) are mapped throughout the remainder of Areas A and B. Each of the referenced soils are weakly-developed and relatively thin, occurring over weathered limestone units of the Person Formation. While both soil units exhibit low permeability, Rumple soils have a higher reported permeability than Comfort soils (0.2-0.6 inches/hour versus 0.06-0.2 inches/hour, respectively), which accounts for its Soil Group classification of "C" versus "D". Both the CrD and RUD soils are reported as having low to moderate shrink-swell potential.



NOTE: This Drawing is Provided for Illustration Only, May Not be to Scale and is Not Suitable for Design or Construction Purposes

RABA KISTNER ENVIRONMENTAL
Raba Kistner Environmental, Inc.
12821 West Golden Lane
San Antonio, Texas 78249
P 210 :: 699 :: 9090
F 210 :: 699 :: 6426
www.rkci.com
TBPE Firm Number 3257

SITE SOILS MAP

T BAR M

NEW BRAUNFELS, COMAL COUNTY, TEXAS

REVISIONS:

No.	DATE	DESCRIPTION

6-24-15

STATE OF TEXAS
RICHARD V. KLAR
GEOLOGY
259
LICENSED
PROFESSIONAL GEOSCIENTIST

PROJECT No.:	ASF15-092-00
ISSUE DATE:	06-24-15
DRAWN BY:	LAW
CHECKED BY:	CRM
REVIEWED BY:	RVK

N W E S

0 62.5 125 250 FEET

1 INCH = 250 FEET

ATTACHMENT B

STRATIGRAPHIC COLUMN

STRATIGRAPHIC COLUMN
T Bar M
New Braunfels, Comal County, Texas

STRATIGRAPHIC FORMATION	THICKNESS	DESCRIPTION
Alluvium (Qal)	Variable, 1-8 ft	Unit consists of clay, sand, silt, and gravel. **Patchy occurrences of alluvium observed within Blieders Creek tributary.**
Edwards Limestone (Ked) Person Formation (Kep)	180-224	Unit consists of gray to light tan marly limestone. Identified in the field by the presence of *Waconella wacoensis.*
Cyclic and Marine Members, undivided	80–100 ft	Unit consists of massive mudstone to packstone; *miliolid* grainstone; and chert. Identified in the field by cycles of massive beds to relatively thin beds. **Isolated exposures observed within the wooded areas of the SITE.**
Leached and Collapsed Members, undivided	80–100 ft	Unit consists of crystalline limestone, mudstone to grainstone and chert. Identified in the field by bioturbated iron-stained beds separated by massive limestone beds.
Regional Dense Member	20–24 ft	Unit consists of dense, argillaceous mudstone. Identified in the field by wispy iron-oxide stains.

Note: Stratigraphic Column adapted from Small and Hanson (1994).

ATTACHMENT C

NARRATIVE OF SITE SPECIFIC GEOLOGY

SITE GEOLOGY NARRATIVE
T Bar M
New Braunfels, Comal County, Texas

Introduction

The following discussion is a site-specific assessment of existing geological conditions and potential recharge features within the referenced project site. This assessment was performed by **Raba Kistner Environmental, Inc. (RKEI)** for Moeller & Associates, pursuant to applicable Edwards Aquifer Protection Program Rules as specified in *Title 30 of the Texas Administrative Code, Section 213 (30 TAC §213, effective April 24, 2008).* This assessment report is in the format required by the Texas Commission on Environmental Quality (TCEQ) for the Geologic Assessment portion of a Water Pollution Abatement Plan (WPAP) and was prepared in accordance with the revised *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (TCEQ-0585)*, which are applicable to submittals received by the TCEQ after October 1, 2004.

This geologic assessment report documents conditions observed by **RKEI** within the project boundaries on June 15 and 16, 2015.

Site Description

Site Location. The overall project includes land development activities proposed for T Bar M Ranch located in New Braunfels, Comal County, Texas. As defined for purposes of this project, there are two areas identified for this geologic assessment that will host construction activities associated with planned designated herein as Areas A and B, collectively referred to herein as SITE. Area A comprises approximately 22 acres of land that runs along State Highway 46 and extends back to Horseshoe Trail. Area B begins near Sunset Bend and is comprised of approximately 2.52 acres of land. The project boundaries for Areas A and B were provided by Moeller & Associates and are indicated on the attached ***Site Geologic Map***.

As defined herein, the project areas are fully located over the Edwards Aquifer Recharge Zone (EARZ) as defined based on official maps made available by the TCEQ. Given the locations within the EARZ, performance of a geologic assessment is required to facilitate planned construction activities pursuant to applicable Edwards Aquifer Protection Program (EAPP) rules. As presented on the attached ***Site Geologic Map,*** adjacent properties include summer camps, single-family and multi-family residential development and undeveloped land.

Topography and Drainage. The SITE generally consists of a gently sloping hillside characterized by hilltop topography, which is located in close proximity to an unnamed tributary to Blieders Creek. The elevation for Area A at the southwest end of the SITE near Horseshoe Trail is approximately 868 ft above mean sea level (MSL) and gently slopes downhill to the northeast to an elevation of approximately 820 ft MSL near State Highway 46, corresponding to the 100-year floodplain area for Blieders Creek tributary. The elevation for Area B is approximately 975 ft above MSL at the southeast corner sloping downhill to the northwest to an elevation of approximately 848 ft above MSL near Blieders Creek tributary.

As indicated by topographic contours presented on ***Site Geologic Map***, the surface drainage patterns for the majority of the SITE are locally to the north/northwest toward the unnamed tributary. Topographic contours were obtained from 7.5-Minute Series topographic map (i.e., New Braunfels West Quadrangle) prepared by the U.S. Geological Survey (USGS, 1992). The majority of drainage across the SITE occurs as sheet flow directed toward the unnamed tributary, which flows to the Soil Conservation Service Site 3 Reservoir associated with Blieders Creek. A review of Flood Insurance Rate Maps (FEMA, 2009) indicates that an approximate 3.9 acres of the northern portion of the SITE is located within a 100-yr floodplain area associated with the unnamed Blieders Creek tributary.

Historical Property Use. Although research pertaining to past SITE operations and historical land use activities was beyond the scope of this assessment, historical aerial imagery was reviewed to evaluate historical land use and the presence of lineations that could indicate the presence of a normal fault. The following aerial photographs were reviewed: 1995, 2005, 2008, and 2010. The aerial photograph from 1995 to 2010 indicates that the SITE was developed for its current use. The surrounding properties have remained unchanged since 1995 with State Highway 46 and single-family residential to the east, summer camps and a country club to the north, summer camps and single-family residential to the south.

Classification of Recharge Features: As further described herein, features identified at the SITE and discussed below include 5 manmade features (utility trenches). No naturally-occurring recharge features were identified within SITE boundaries. The significance of these features was assessed using definitions and guidance provided in *Instructions to Geologists (TCEQ-0585-Instructions, revised October 1, 2004)*. All features within the SITE that met the criteria presented in this reference were mapped. The characteristics of all mapped features and the assessments of these features, as defined by the TCEQ, are presented in the attached ***Geologic Assessment Table (TCEQ-0585***

Stratigraphy

As presented in the attached ***Stratigraphic Column***, information pertaining to the lithologies and thickness of geologic units underlying the SITE was primarily taken from Collins (2000) and Small and Hanson (1994). Collective published data referenced indicate that the SITE is underlain by Person Formation (Kep). As depicted on the ***Site Geologic Map***, the Kep is commonly divided into three distinct members: (i) Cyclic and Marine Member, undivided – mudstone to packstone, grainstone, and chert; (ii) Leached and Collapsed Member, undivided - unit includes crystalline limestone, mudstone to grainstone, and chert; and (iii) Regional Dense Member - unit consists of dense, carbonate mudstone. The total thickness of the Kep is on the order of 180 to 224 feet. The uppermost or Cyclic and Marine member of the Kep represents the portion of the Edwards Limestone directly underlying the west portion of the SITE to depths on the order of 80 to 100 ft. Based upon the work of Maclay (1995), this unit contains many open fractures and possesses low matrix permeability with total porosity on the order of 5 to 10%.

Structure

This SITE is located within the Balcones Fault Zone and as such possesses a distinct structural trend. This zone generally consists of a northeast-southwest trending, *en echelon* normal fault system, which juxtaposes Upper Cretaceous lithologies in the southeast with Lower Cretaceous lithologies in the northwest. As a result of this larger-scale, regional faulting, minor internal fault sequences and fractures exist within this zone which follow the same structural trend and accommodate localized displacement.

No evidence of faulting or displacement was noted during the assessment at the SITE. The nearest published fault is mapped approximately 1,500 ft northwest of the project limit as presented on the published geologic map prepared by Collins (2000). Based on review of published geologic references, this normal fault zone facilitates displacement, juxtaposing the younger Del Rio Clay formation to the northwest with older Edwards Limestone to the southeast.

Karst Feature

No karst features were identified on the property.

Non-Karst Closed Depressions

No non-karst closed depressions were mapped at the SITE.

Manmade Features

As presented on the ***Site Geologic Map***, a total of 5 manmade features was identified which may potentially serve to enhance the transmission of surface runoff to the subsurface. The features are existing utility trenches (i.e., water line, sanitary sewer line, communication line, and electric lines, respectively) that meet criteria for assessment as a manmade feature in bedrock. For all utility trenches (i.e., ***Features S-1 through S-5***), no surface expression, collapse/settlement of surface soils, or preferential flow towards these features was observed during SITE reconnaissance. Although some information regarding the location of existing potable water utility trenches was gleaned from a base map provided to **RKEI** by Moeller & Associates on June 15, 2015, the locations of remaining utility trenches are largely inferred, based on limited information provided by SITE maintenance staff and field observations of manway access points. The types or general classes of utility trench features are listed below:

- ***Feature S-1*** consists of potable water line utility trench.
- ***Feature S-2*** consists of communications line utility trench.
- ***Feature S-3*** consists of sanitary sewer line utility trench.
- ***Features S-4 and S-5*** consists of electric line utility trenches.

Although not directly observable, it is inferred that the utility trenches are backfilled in accordance with standard construction practices that include the use of structural fill soils (e.g., base course materials, limestone gravel, compacted clay soils, etc.) overlain by native or fill soils, depending upon location and surface improvements. The utility trenches were not observed in conjunction with any

naturally-occurring recharge features. Although the backfilled utility trenches may exhibit somewhat greater relative infiltration rate than the surrounding soil/rock strata underlying the project SITE, the manmade features are classified as not sensitive, having a low potential of transmitting fluids into the Edwards Aquifer. This classification is based upon the point assignment criteria presented in the ***Geologic Assessment Table (TCEQ-0585)*** and professional judgment.

Potential for Fluid Migration to the Edwards Aquifer

The majority of the SITE is overlain by clay soils having slow to moderate published infiltration rates. Based on our review of SITE geology, topography and drainage conditions, in addition to the results of our detailed mapping efforts, the overall potential for fluid movement (i.e. surface-derived flow) to the Edwards Aquifer via direct infiltration is considered to be low. The following assessment findings support this conclusion.

- No naturally-occurring features were identified within SITE boundaries attributed to karstification of limestone terrain or normal faulting.
- Manmade (utility trench) features were mapped throughout the SITE, but collectively classified as not sensitive based on application of point assignment criteria and professional judgment.

References

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

Collins, Edward W., 2000, Geologic Map of the New Braunfels, Texas, 30 x 60 Minute Quadrangle: Geologic Framework of an Urban-Growth Corridor along the Edwards Aquifer, South-Central Texas: Bureau of Economic Geology, The University of Texas at Austin, Austin, Texas.

Moeller & Associates (2015), Project Limits: *Location Map & GA Limits.pdf* provided to **RKEI** via email correspondence on 6/4/15 (Area A) and 6/15/15 (Area B).

National Flood Insurance Program, 2009, Flood Insurance Rate Map, Comal County, Texas and Incorporated Areas; Federal Emergency Management Agency, Maps 48091C0430F and 48091C0435F.

Small, T. A., and J. A. Hanson, 1994, Geologic framework and hydrogeologic characteristics of the Edwards Aquifer Outcrop, Comal County, Texas: USGS Water-Resources Investigations Report 94-4117.

TCEQ Edwards Aquifer Protection Program, 1998, Edwards Aquifer Recharge Zone Map, New Braunfels West Quadrangle; TNRCC, September 1998.

United States Geological Survey (USGS), 1992, New Braunfels West Quadrangle; USGS, Denver, Colorado.

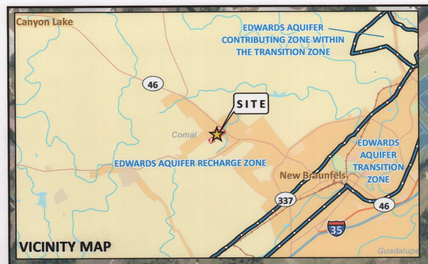
United States Department of Agriculture (USDA), 1962, Soil Survey of Comal and Hays Counties, Texas; USDA / Soil Conservation Service / Texas Agricultural Experiment Station, Issued June 1984.

United States Department of Agriculture (USDA), 1986, Urban Hydrology for Small Watersheds; USDA / Natural Resource Conservation Service, Technical Release (TR-) 55, June 1986.

ATTACHMENT D

SITE GEOLOGIC MAP

FEATURE POSITION TABLE
(GPS COORDINATES)



NOTE: This Drawing is Provided for Illustration Only, May Not be to Scale and is Not Suitable for Design or Construction Purposes

SOURCES:
1. Aerial Photograph, New Braunfels West, Provided by the City of San Antonio - 2013.
2. 10-Foot Topographic Contours Based on USGS Topographic Maps, New Braunfels West, Provided by Texas Natural Resources Information Syztem (TNRIS)
3. Geology from Collins, Geologic Map of the New Braunfels, Texas, 30x60 Quadrangle, Bureau of Economic Geology - 2000.
4. The SITE is located on the Edwards Aquifer Recharge Zone , TCEQ Edwards Aquifer Protection Program, Edwards Aquifer Recharge Zone Map, New Braunfels Wett Quadrangle - September 1998.
5. Only a portion of the SITE is within the 100-Year Floodplain for Blieders Creek; the remainder is located in Zone X (Area of Minimal Flood Hazard). Data reviewed from the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), Panel Nos. 48091C0430F and 48091C0435F - September 2009.
6. Utility Manways and Segments are Based on Visual Observations.
7. Property Boundaries Provided by Moeller & Associates on June 4, 2015 (Area A) and June 15, 2015 (Area B) [Location Map & GA Limits.pdf].

RABA KISTNER ENVIRONMENTAL
Raba Kistner Environmental, Inc.
12821 West Golden Lane
San Antonio, Texas 78249
www.rkci.com
P 210 :: 699 :: 9090
F 210 :: 699 :: 6426
TBPE Firm F-3257

6-24-15

STATE OF TEXAS
RICHARD V. KLAR
GEOLOGY
259
LICENSED
PROFESSIONAL GEOSCIENTIST

SITE GEOLOGIC MAP

T BAR M
NEW BRAUNFELS, COMAL COUNTY, TEXAS

REVISIONS

No.	DATE	DESCRIPTION

PROJECT No.: ASF15-092-00

ISSUE DATE:	06-24-15
DRAWN BY:	LAW
CHECKED BY:	CRM
REVIEWED BY:	RVK

N W E S

0 25 50 100 FEET

1 INCH = 100 FEET

FEATURE POSITION TABLE

T Bar M

New Braunfels, Comal County, Texas

RKEI Project No. ASF15-092-00

Feature Designation	Feature Type	Date Collected	North Latitude	West Longitude	UTM Northing (meters)	UTM Easting (meters)
S-1	Manmade feature in bedrock (Water Line)	6/15/2015	N29 43 26.9	W98 11 9.6	3288496	578726
S-2	Manmade feature in bedrock (Communications Line)	6/15/2015	N29 43 24.2	W98 11 13.4	3288411	578624
S-3	Manmade feature in bedrock (Sanitary Sewer Line)	6/15/2015	N29 43 33.8	W98 11 13.9	3288707	578609
S-4	Manmade feature in bedrock (Electric Line)	6/15/2015	N29 43 20.3	W98 11 8.4	3288293	578760
S-5	Manmade feature in bedrock (Electric Line)	6/15/2015	N29 43 28.9	W98 11 15.2	3288556	578575

NOTES:

1) Geographic coordinates are presented Degrees, Minutes, Decimal Seconds
2) Reference Datum is NAD 83
3) Data were collected utilizing a ***Garmin GPS 60cx Global Positioning System***
4) Horizontal Accuracy: RMS Value < 3 meter ground resolution
5) GPS data were collected by Chris Murray (**RKEI** Project Professional)
6) GPS coordinates correlate to the points on the map for each feature.

Modification of a Previously Approved Plan

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Shane Klar, P.E.

Date: 6/24/15

Signature of Customer/Agent:



Project Information

1. Current Regulated Entity Name: T Bar M
   Original Regulated Entity Name: T Bar M
   Regulated Entity Number(s) (RN): 102745502
   Edwards Aquifer Protection Program ID Number(s): 1899.00
   ☐ The applicant has not changed and the Customer Number (CN) is: _____
   ☒ The applicant or Regulated Entity has changed. A new Core Data Form has been provided.

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

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

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

WPAP Modification Summary	***Approved Project***	***Proposed Modification***
Acres	9.3	15.68
Type of Development	Commercial	Commercial
Number of Residential Lots	N/A	N/A
Impervious Cover (acres)	3.46	5.60
Impervious Cover (%	37.2%	36.4%
Permanent BMPs	Vegetatvie Filter Strip	VFS/Rainwater Harvesting
Other	____	____

SCS Modification Summary	***Approved Project***	***Proposed Modification***
Linear Feet	____	____
Pipe Diameter	____	____
Other	____	____

AST Modification Summary	*Approved Project*	*Proposed Modification*
Number of ASTs	_____	_____
Volume of ASTs	_____	_____
Other	_____	_____

UST Modification Summary	*Approved Project*	*Proposed Modification*
Number of USTs	_____	_____
Volume of USTs	_____	_____
Other	_____	_____

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

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

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

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

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 29, 2008

Mr. Scott Turpin
T Bar M Inc.
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: T Bar M; Located on the south side of State Highway 46 West approximately 0.5 mile north of the intersection of FM 1863 and State Highway 46 West; New Braunfels, Texas
TYPE OF PLAN: Request for Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program ID No.: 1899.01; Investigation No.: 656843; Regulated Entity No. RN102745502

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the request for modification of the approved WPAP for the above-referenced project submitted to the San Antonio Regional Office by Carter & Burgess, Inc. on behalf of T Bar M Inc. on April 29, 2008. Final review of the WPAP was completed after additional material was received on July 17, 2008 and July 25, 2008. As presented to the TCEQ, the Temporary and Permanent 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 commercial project site was previously approved by letter dated December 20, 2002. The 9.3 acres included the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover was to be 3.46 acres (37.2 percent). Project wastewater was to be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the City of New Braunfels.

The permanent pollution abatement measures consisted of five individual permanent vegetative filter strips, which were designed to meet the required 80 percent removal of the increased load in total suspended solids caused by the project. The table below summarized the permanent treatment:

Permanent Best Management Practices (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the addition of a restaurant building, roads and parking. The proposed site layout requires that some of the existing impervious cover (0.23 acres) be removed and restored to landscaping. The new proposed impervious cover added to the site will be 0.60 acres. The net increase of impervious cover will be 0.37 acres. The impervious cover for the 9.3 acres will become 3.83 acres (41.2 percent). Project wastewater will be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the City of New Braunfels.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, engineered vegetated filter strips, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 332 pounds of TSS generated from the 0.37 acres of net increase in impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The engineered vegetated filter strips will extend along the entire length of the contributing area;
The slope will not exceed 20%;
The minimum dimension of the filter strips (in the direction of flow will not be less than 15 feet;
The maximum width (in the direction of flow) of the contributing impervious area will not exceed 72 feet;
The minimum vegetated cover will be 80%;
The contributing area to the filter strip will be relatively flat so that runoff will be distributed evenly to the vegetated area without the use of a level spreader;
The vegetated filter strip will be free of gullies or rills that can concentrate overland flow.
The 3 foot river rock velocity dissipater receiving roof runoff from the proposed T Bar M Restaurant will be free of gullies or rills that can concentrate overland flow and potentially cause erosion to the engineered vegetated filter strip.

GEOLOGY

The outcropping geologic formation mapped at the site consists of the Person Formation of the Cretaceous Edwards Group. The site specifically lies in the outcrop of the Cyclic and Marine member. According to the geologic assessment included with the application seven features were identified at the site. Five of the features were manmade and ranked non-sensitive. A non-karst closed depression was ranked as non-sensitive and a solution cavity (S-4) was ranked as sensitive. Based on the information

submitted by the project engineer the sensitive feature is situated several hundred feet away from any improvements proposed in this modification. Regional Office did not conduct a site assessment.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated December 20, 2002.

II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

III. 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.

IV. 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.

V. No regulated activities shall take place within the vicinity (200 feet) of feature S-4 without determining the natural drainage area to the sensitive feature and providing appropriate natural buffers to protect the feature in accordance with TCEQ guidance.

STANDARD CONDITIONS

1. Pursuant to Chapter 7 Subchapter C of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

2. The holder of the approved Edwards Aquifer protection plan must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the approved plan. Additional and separate approvals, permits, registrations and/or authorizations from other TCEQ Programs (i.e., Stormwater, Water Rights, UIC) can be required depending on the specifics of the plan.

3. In addition to the rules of the Commission, the applicant may also be required to comply with state and local ordinances and regulations providing for the protection of water quality.

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this

notice of approval shall be maintained at the project location until all regulated activities are completed.

6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.

8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

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

<u>During Construction:</u>

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

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

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from

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

13. No 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.

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

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

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

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

regulated activity by the executive director is required prior to commencement of the new regulated activity.

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

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

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

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

cc: Mr. David McBeth, P.E., Carter & Burgess, Inc.
Mr. James C. Klein, P.E., 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

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

RECEIVED
OCT 0 1 2012
COUNTY ENGINEER

September 21, 2012

Mr Scott Turpin
T Bar M, Inc.
2549 Highway 46 W
New Braunfels Tx 78132-4731

Re: Edwards Aquifer Protection Program, Comal County

NAME OF PROJECT: T Bar M; Located 0.5 mile north of FM 1863 on the south side of Hwy. 46, New Braunfels, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.06, Investigation No. 1022399
Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On July 27, 2012, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is enclosed.

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011
July 11, 2011	January 29, 2012

January 13, 2012	July 29, 2012
July 27, 2012	January 29, 2013

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on January 29, 2013. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Yuliya Dunaway of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-490-3096.

Sincerely,

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

LMB/YD/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Tom Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, MC 212

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

RECEIVED
AUG 1 0 2012
COUNTY ENGINEER

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant):	T Bar M, Inc.		
Contact Person:	Scott Turpin		
Entity:	T Bar M, Inc.		
Mailing Address:	2549 Highway 46 West		
City, State:	New Braunfels, TX	Zip:	78132-4731
Telephone:	830-625-7738	FAX:	830-608-1765
Agent:			
Contact Person:			
Mailing Address:			
City, State:		Zip:	
Telephone:		FAX:	

2. x **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: February 29, 2012
   Expiration date: July 29, 2012

3. x This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. x A completed fee form is attached. The fee for a six-month extension of time is $150.

RECEIVED TCEQ
2012 JUL 27 PM 1:03
SAN ANTONIO
REGION

Scott Turpin
Print Name of Customer/Agent

Signature of Customer/Agent

7-20-12
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.

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 29, 2012

Mr. Scott Turpin
T Bar M, Inc.
2549 Highway 46 West
New Braunfels, TX 78132

Re: Edwards Aquifer Protection Program, Comal County

Name of Project: T Bar M; Located 0.5 mile north of FM 1863 on the south side of Hwy. 46, New Braunfels, Texas

Type of Plan: Request for the Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program San Antonio File No. 1899.05; Investigation No. 981238; Regulated Entity No. RN102745502

Dear Mr. Turpin:

On January 13, 2012, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011
July 11, 2011	January 29, 2012
January 13, 2012	July 29, 2012

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on July 29, 2012. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Charly Fritz of the Edwards Aquifer Protection Program with the San Antonio Office at (210) 403-4065.

Sincerely,

for

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

RECEIVED
AUG 10 2012
COUNTY ENGINEER

MRV/CEF/eg

cc: Mr. Karl Dreher, General Manager, Edwards Aquifer Authority
Mr. James Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
TCEQ Central Records, Building F, MC 212

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

NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 West, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: 830-625-7738
(Please Print)

Customer Reference Number (if issued): CN 600691752 (nine digits)

Regulated Entity Reference Number (if issued): RN 102745502 (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
512/239-1278

RECEIVED TCEQ
2012 JUL 27 PM 1:03
SAN ANTONIO
REGION

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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$ 150

Scott A Turpin
Signature

7-2012
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

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 600691752		RN 102745502

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:*
T Bar M, Inc., Attn: Scott Turpin		

10. Mailing Address: 2549 Highway 46 West

City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	4731

11. Country Mailing Information *(if outside USA)*	12. E-Mail Address *(if applicable)*
	sturpin@tbarm.com

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(830) 625-7738		(830) 608-1765

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)*
74-165888	17416588857		

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)*

T Bar M, Inc.

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 Hwy 46 West						
	City: New Braunfels	State: TX	ZIP: 78132	ZIP + 4:			
25. Mailing Address:	Same						
	City:	State:	ZIP:	ZIP + 4:			
26. E-Mail Address:	sturpin@tbarm.com						
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*					
(830) 625-7738		(830) 608-1765					
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)				
7011	7999	721214	71394				
34. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*							
resort, sports facility, meeting and dining facility							

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

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863				
36. Nearest City	County	State	Nearest ZIP Code		
New Braunfels	Comal	TX	78132		
37. Latitude (N) In Decimal:	29.724167	38. Longitude (W) In Decimal:	98.186944		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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:	Kelly Bailey	41. Title:	Executive Assistant
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 625-7738	207	(830) 608-1765	kelly@tbarm.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	T Bar M, Inc.	Job Title:	Owner
Name *(In Print)*:	Scott Turpin	Phone:	(830) 625-7738
Signature:	Scott a Turpin	Date:	7/20/2012

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

RECEIVED
MAR 07 2012
COUNTY ENGINEER

February 29, 2012

Mr. Scott Turpin
T Bar M, Inc.
2549 Highway 46 West
New Braunfels, TX 78132

Re: Edwards Aquifer Protection Program, Comal County

Name of Project: T Bar M; Located 0.5 mile north of FM 1863 on the south side of Hwy. 46, New Braunfels, Texas

Type of Plan: Request for the Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program San Antonio File No. 1899.05; Investigation No. 981238; Regulated Entity No. RN102745502

Dear Mr. Turpin:

On January 13, 2012, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011
July 11, 2011	January 29, 2012
January 13, 2012	July 29, 2012

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on July 29, 2012. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Charly Fritz of the Edwards Aquifer Protection Program with the San Antonio Office at (210) 403-4065.

Sincerely,

for

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

MRV/CEF/eg

cc: Mr. Karl Dreher, General Manager, Edwards Aquifer Authority
Mr. James Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
TCEQ Central Records, Building F, MC 212

RECEIVED
FEB 0 1 2012
COUNTY ENGINEER

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant):	T Bar M, Inc.	WPAP
Contact Person:	Scott Turpin	
Entity:	T Bar M, Inc.	
Mailing Address:	2549 Highway 46 West	
City, State:	New Braunfels, TX	Zip: 78132-4731
Telephone:	830-625-7738	FAX: 830-608-1765

Agent:		
Contact Person:		
Mailing Address:		
City, State:		Zip:
Telephone:		FAX:

2. x **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: September 15, 2011
   Expiration date: January 29, 2012

3. x This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. x A completed fee form is attached. The fee for a six-month extension of time is $150.

Scott Turpin
Print Name of Customer/Agent

Signature of Customer/Agent

1.23.12
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.

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SAN ANTONIO
REGION
2012 JAN 25 AM 11:10

RECEIVED
FEB 0 1 2012
COUNTY ENGINEER

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

NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 West, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: 830-625-7738
(Please Print)

Customer Reference Number (if issued): CN 600691752 (nine digits)

Regulated Entity Reference Number (if issued): RN 102745502 (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
512/239-1278

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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$ 150

Signature _____ Date 1.23.12

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)

RECEIVED
FEB 0 1 2012
COUNTY ENGINEER

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.

RECEIVED
FEB 0 1 2012
COUNTY ENGINEER

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

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 600691752		RN 102745502

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:*

T Bar M, Inc., Attn: Scott Turpin

10. Mailing Address: 2549 Highway 46 West

City	State	ZIP	ZIP + 4
New Braunfels	TX	78132	4731

11. Country Mailing Information *(if outside USA)*

12. E-Mail Address *(if applicable)*

sturpin@tbarm.com

13. Telephone Number	14. Extension or Code	15. Fax Number *(if applicable)*
(830) 625-7738		(830) 608-1765

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)*
74-165888	17416588857		

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)*

T Bar M, Inc.

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 Hwy 46 West							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	
25. Mailing Address:	Same							
	City		State		ZIP		ZIP + 4	

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COUNTY ENGINEER

26. E-Mail Address:	sturpin@tbarm.com

27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(830) 625-7738		(830) 608-1765

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)
7011	7999	721214	71394

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

resort, sports facility, meeting and dining facility

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

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		38. Longitude (W) In Decimal:	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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:	Kelly Bailey	41. Title:	Executive Assistant

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 625-7738	207	(830) 608-1765	kelly@tbarm.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	T Bar M, Inc.	Job Title:	Owner	
Name *(In Print)* :	Scott Turpin		Phone:	(830) 625-7738
Signature:			Date:	1/19/2012

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FEB 0 1 2012
COUNTY ENGINEER

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

August 30, 2011

Mr. Scott Turpin
T Bar M, Inc.
8201 Preston Rd.
Dallas, Texas 75225

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: T Bar M; Located on the south side of SH 46 West approximately 0.5 miles north of FM 1863 and SH 46; New Braunfels, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.04, Investigation No. 937673, Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On July 11, 2011, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is as follows.

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011
July 11, 2011	January 29, 2012

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FEB 0 1 2012
COUNTY ENGINEER

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on January 29, 2012. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Javier Anguiano of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 490-3096.

Sincerely,

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

MRV/JA/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

Copy 4

Edwards Aquifer Protection Plan Extension Request

RECEIVED
JUL 19 2011
COUNTY ENGINEER

X Extension Request for a Water Pollution Prevention Plan (*TCEQ-10260)*

X ATTACHMENT A - Approval Letter or Extension Approval

— Agent Authorization Form (*TCEQ-0599)*, if application submitted by agent

X Application Fee Form (*TCEQ-0574*)

X Check Payable to the "Texas Commission on Environmental Quality"

X Core Data Form (*TCEQ-10400*)

RECEIVED TCEQ
SAN ANTONIO
REGION
2011 JUL 11 PM 12: 25

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant):	T Bar M, Inc.		
Contact Person:	Scott Turpin		
Entity:	T Bar M, Inc.		
Mailing Address:	8201 Preston Rd.		
City, State:	Dallas, TX	Zip:	75225
Telephone:	214-692-4254	FAX:	830-608-1765
Agent:			
Contact Person:			
Mailing Address:			
City, State:		Zip:	
Telephone:		FAX:	

2. x **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: March 15, 2011
   Expiration date: July 29, 2011

3. x This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. x A completed fee form is attached. The fee for a six-month extension of time is $150.

"RECEIVED TCEQ"
2011 JUL 11 PM 12:25
SAN ANTONIO
REGION

Scott Turpin
Print Name of Customer/Agent

Signature of Customer/Agent

7-8-11
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.

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 15, 2011

Mr. Scott Turpin
T Bar M, Inc.
8201 Preston Rd.
Dallas, Texas 75225

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: T Bar M; Located on the south side of SH 46 West approximately 0.5 miles north of FM 1863 and SH 46; New Braunfels, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.03, Investigation No. 894489, Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On January 28, 2011, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is as follows.

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13.4 indicated in the rules, an extension may not be granted proposed regulated

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 15, 2011

Mr. Scott Turpin
T Bar M, Inc.
8201 Preston Rd.
Dallas, Texas 75225

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: T Bar M; Located on the south side of SH 46 West approximately 0.5 miles north of FM 1863 and SH 46; New Braunfels, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.03, Investigation No. 894489, Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On January 28, 2011, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is as follows.

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July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant):	T Bar M, Inc.		
Contact Person:	Scott Turpin		
Entity:	T Bar M, Inc.		
Mailing Address:	8201 Preston Rd.		
City, State:	Dallas, TX	Zip:	75225
Telephone:	214-692-4254	FAX:	830-608-1765
Agent:			
Contact Person:			
Mailing Address:			
City, State:		Zip:	
Telephone:		FAX:	

2. x **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: March 15, 2011
   Expiration date: July 29, 2011

3. x This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. x A completed fee form is attached. The fee for a six-month extension of time is $150.

RECEIVED TCEQ
2011 JUL 11 PM 12:25
SAN ANTONIO
REGION

Scott Turpin
Print Name of Customer/Agent

Signature of Customer/Agent

7-8-11
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.

approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on July 29, 2011. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Javier Anguiano of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 490-3096.

Sincerely,

for Richard Garcia

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

MRV/JA/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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If you have any questions or require additional information, please contact Javier Anguiano of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 490-3096.

Sincerely,

for Richard Garcia

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

MRV/JA/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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

NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 West, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: 214-692-4254
(Please Print)

Customer Reference Number (if issued): CN 600691752 (nine digits)

Regulated Entity Reference Number (if issued): RN 102745502 (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
512/239-1278

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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$ 150

Signature

7-8-11
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

T Bar M, Inc. 40023

VENDOR NO: 9534 NAME: TEXAS COMMISSION CHECK DATE: 7/7/2011

REFERENCE	INV DATE	INV DESCRIPTION	GROSS AMOUNT	DISCOUNT TAKEN	NET AMOUNT PAID
070711	7/7/2011	6324-08-06	150.00	0.00	150.00
		TOTAL >	150.00	0.00	150.00

THIS CHECK IS VOID WITHOUT A BLUE & RED BACKGROUND AND A TRUE WATERMARK - HOLD UP TO THE LIGHT TO VERIFY

T Bar M, Inc.
2549 Hwy 46 W
New Braunfels, TX 78132-3725
(830) 625-7738

Chase Bank of Texas - New Braunfels
111 West San Antonio Street
32-115/1110

40023

DATE 7/7/2011

AMOUNT *** 150.00

PAY One Hundred Fifty and 00/100******

TO THE ORDER OF
TEXAS COMMISSION
On Environmental Quality
14250 Judson Road
San Antonio, TX 78233
USA

Annabelle M Bailey

CHECK IS PRINTED ON SECURITY PAPER WHICH INCLUDES A MICROPRINT BORDER & FLUORESCENT FIBERS

⑈40023⑈ ⑆111000614⑆ ⑈0580024640 5⑈

TCEQ

TCEQ Core Data Form

TCEQ Use Only

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

SECTION I: General Information

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

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

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

2. Attachments **Describe Any Attachments:** *(ex. Title V Application, Waste Transporter Application, etc.)*

☐ Yes ☐ No

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 600691752		RN 102745502

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:*
T Bar M, Inc.		

10. Mailing Address: 8201 Preston Rd

City	Dallas	State	TX	ZIP	75225	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)*
(214) 692-4254		(830) 608-1765

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)*
74-165888	17416588857		

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)*

T Bar M, Inc.

24. Street Address of the Regulated Entity: (No P.O. Boxes)	2549 Hwy 46 West							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	
25. Mailing Address:	Same							
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:	sturpin@tbarm.com

27. Telephone Number	28. Extension or Code	29. Fax Number (if applicable)
(830) 625-7738		(830) 620-6018

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)
7011	7999	721214	71394

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

resort, sports facility, meeting and dining facility

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

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		38. Longitude (W) In Decimal:	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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:	Kelly Bailey	41. Title:	Accounting

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 625-7738	207	(830) 608-1765	kelly@tbarm.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	T Bar M, Inc.	Job Title:	Owner
Name *(In Print)*:	Scott Turpin	Phone:	(214) 692-4254
Signature:		Date:	7/8/2011

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 4, 2013

RECEIVED
FEB 19 2013
COUNTY ENGINEER

Mr. Scott Turpin
T Bar M, Inc.
2549 Highway 46 West
New Braunfels, Texas 78132

Re: Edwards Aquifer Protection Program, Comal County

NAME OF PROJECT: T Bar M; located 0.5 miles north of FM 1863 on the south side of Highway 46; New Braunfels, Texas.

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.07, Investigation No. 1055417
Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On January 14, 2013, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011
July 11, 2011	January 29, 2012
January 13, 2012	July 29, 2012
July 27, 2012	January 29, 2013

January 14, 2013	July 29, 2013

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on July 29, 2013. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Alex Grant of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4035.

Sincerely,

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

LMB/AG/eg

cc: Mr. Octavio Garza, P.E., City of New Braunfels
Mr. Tom Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

RECEIVED
JAN 24 2013
COUNTY ENGINEER

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant): T Bar M, Inc.
Contact Person: Scott Turpin
Entity: T Bar M, Inc.
Mailing Address: 2549 Highway 46 West
City, State: New Braunfels, TX Zip: 78132
Telephone: 830-625-7738 FAX: 830-608-1765

Agent:
Contact Person:
Mailing Address:
City, State: Zip:
Telephone: FAX:

2. X **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
Date of letter: September 21, 2012
Expiration date: January 29, 2012

3. X This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. X A completed fee form is attached. The fee for a six-month extension of time is $150.

Scott Turpin
Print Name of Customer/Agent

Signature of Customer/Agent

1.8.13
Date

2013 JAN 16 PM 1:15
RECEIVED TCEQ
SAN ANTONIO
REGION

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.

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JAN 24 2013
COUNTY ENGINEER

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 21, 2012

Mr Scott Turpin
T Bar M, Inc.
2549 Highway 46 W
New Braunfels Tx 78132-4731

Re: Edwards Aquifer Protection Program, Comal County

NAME OF PROJECT: T Bar M; Located 0.5 mile north of FM 1863 on the south side of Hwy. 46, New Braunfels, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.06, Investigation No. 1022399
Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On July 27, 2012, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is enclosed.

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011
July 11, 2011	January 29, 2012

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JAN 24 2013
COUNTY ENGINEER

January 13, 2012	July 29, 2012
July 27, 2012	January 29, 2013

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on January 29, 2013. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Yuliya Dunaway of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-490-3096.

Sincerely,

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

LMB/YD/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Tom Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, MC 212

RECEIVED

JAN 24 2013

COUNTY ENGINEER

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

NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 West, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: 830-625-7738
(Please Print)

Customer Reference Number (if issued): CN 600691752 (nine digits)

Regulated Entity Reference Number (if issued): RN 102745502 (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
512/239-1278

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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$ 150

Signature

1.8.13
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.

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RECEIVED
JAN 24 2013
COUNTY ENGINEER

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 Core Data Form

TCEQ Use Only

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

RECEIVED
JAN 24 2013
COUNTY ENGINEER

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 ☐Yes ☐No — Describe Any Attachments: *(ex. Title V Application, Waste Transporter Application, etc.)*

3. Customer Reference Number *(if issued)*: CN 600691752

Follow this link to search for CN or RN numbers in Central Registry**

4. Regulated Entity Reference Number *(if issued)*: RN 102745502

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)*: T Bar M, Inc., Attn: Scott Turpin
If new Customer, enter previous Customer below
End Date:

10. Mailing Address: 2549 Highway 46 West
City: New Braunfels State: TX ZIP: 78132 ZIP + 4: 4731

11. Country Mailing Information *(if outside USA)*:

12. E-Mail Address *(if applicable)*: sturpin@tbarm.com

13. Telephone Number: (830)625-7738
14. Extension or Code:
15. Fax Number *(if applicable)*: (830)608-1765

16. Federal Tax ID *(9 digits)*: 74-165888
17. TX State Franchise Tax ID *(11 digits)*: 17416588857
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)*: T Bar M, Inc.

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 Highway 46 West							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	4731
25. Mailing Address:	Same							
	City		State		ZIP		ZIP + 4	

RECEIVED
JAN 24 2013
COUNTY ENGINE

26. E-Mail Address:	sturpin@tbarm.com		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*	
(830)625-7738		(830)608-1765	

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)
7011	7999	721214	71394

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

Resort, Sports Facility, Meeting and Dining Facility

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

35. Description to Physical Location:	Southside of SH 46, 1/2 mile Northwest of the intersection of FM 1863		
36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167	38. Longitude (W) In Decimal:	98.186944

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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:	Amy Reynolds	41. Title:	Executive Assistant

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830)625-7738	223	(830)608-1765	amy@tbarm.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	TBar M, Inc.	Job Title:	Owner	
Name *(In Print)*:	Scott Turpin		Phone:	(830)625-7738
Signature:	Scott Turpin		Date:	1-8-13

3.) TCEQ-10257, #13 and #14 (Attachment D), state that there are no factors/activities at the high school that would affect surface or groundwater quality. Please discuss whether work on the sanitary sewer, spills of automotive fluids, activities at the AG Barn, storage and use of chemicals, or other activities may affect stormwater quality. ***Attachment D has been revised.***

4.) TCEQ-10257, #48 (Attachment K), notes that "storm water generated on site will be filtered using (3) sedimentation ponds with sand filter beds." It is understood that sand filtration will not be done, but that part of the stormwater generated at the high school will be treated with extended-detention basins. Please make the necessary corrections. ***Attachment K has been corrected.***

5.) TCEQ-10257, #50 (Attachment M) - Inconsistencies were found between the table on the site plan (CS100) and Project Information (TCEQ-10257, #s 10 & 12). CS100 shows 71.087% total impervious cover & 60 site acres. 42.8% total impervious cover, with a project area (size of site) of 91.6 acres, is shown under #s 10 & 12 of the Project Information. Please correct inconsistencies. ***The table provided on plan sheet CS100, OVERALL SITE PLAN has been corrected.***

5a.) Also the diagram of a gabion divider on CS503 incorrectly shows elements of a sand filtration basin and CG502 has a diagram of a 6" sand filtration shut-off valve and text of material specifications for a sand filter basin. Please remove the sand filter basin information and show how the hydraulic (discharge) controls for the extended-detention basins will be constructed (perforated-riser outlet). ***Plan sheets CG501, CG502, & CS503 GRADING DETAILS have been revised.***

6.) TCEQ-10257, #51 (Attachment N), discusses maintenance of sand filters and under-drain piping (parts of sand filtration basins). Please correct Attachment N to show appropriate inspection maintenance, repair, and retrofit of the proposed extended-detention basins. ***Attachment N has been corrected.***

Per your instruction, we are submitting one original and three copies of the amended materials to supplement the WPAP application.

RESPONSE LETTER PREPARED BY:

Gary E. Geraci, E.I.T.

PROJECT NARRATIVE

Introduction

The project site consists of multiple tracts comprising an approximate 92 acres gross site area in Comal County and is not currently zoned. Only 39.6 acres of the gross site are within the limits of construction.

The site is NOT within the limits of any 100 year flood plain and does NOT have a Critical Water Quality Zone. There are NO areas irrigated with wastewater.

The planned improvements consist of approximately 999,765 square feet (25.04 ac) of existing impervious cover such as concrete, asphalt, and buildings. Such existing improvements comprise the campus known as Smithson Valley High School. Approximately 273,937 square feet (6.29 ac) of said improvements are slated for demolition. New improvements, the Smithson Valley High School Additions and Renovations, consist of adding approximately 1,138,294 square feet (26.13 ac) of impervious cover. Existing, pre-developed impervious cover comprises approximately 25% of the gross site while proposed, post-developed impervious cover comprises approximately 47% of the site. The project is to begin as soon as possible (upon project approval) and is to be completed within 12 months (after site plan approval). The project will progress over two phases, Package A and Package B.

The entire site is located within the jurisdiction of the City of Spring Branch, Texas.

Drainage Area

There is NO existing 100 year flood plain over the gross site. The gross drainage basin is estimated to encompass approximately 164 acres. Upgradient offsite areas that generate flows running through the site are accounted for in the design of the site's storm water management plan. Offsite runoff originating from the northwest section of the drainage basin and runoff generated over the existing improvements currently drains offsite to established depressions and natural drainage swales located to the southwest and southeast of the site. Conveyance is via overland flow and through an established storm sewer system of pipe, catch basins and curb inlets but without any detention. Post-developed runoff will be routed offsite via the established overland flow channels, the existing storm sewer system, and a proposed storm sewerage system including detention ponds designed to attenuate post-developed flows leaving the site to pre-developed rates.

ATTACHMENT C
Project Narrative

Discussion of the Existing and Proposed Drainage Patterns

The existing site utilizes a storm water collection and conveyance system in its existing stormwater infrastructure but utilizes no on-site detention pond or TCEQ recommended BMP device. The pre-developed site, including offsite drainage areas, can be broken down into six (6), existing sub-basin drainage areas. See the EXISTING DRAINAGE AREA MAP, CG108 in the attached plan set. Runoff drains uncontrolled to several drainage ways located to the southeast, south, and southwest of the site. The existing drainage patterns will NOT be altered. Some of the site will continue to drain into the existing storm sewer system and/or the open concrete and/or grass lined drainage ways that run from west to east across the site. A majority of all post-developed impervious cover will be routed through a new storm sewer system and through three (3) new extended detention ponds.

There is NO floodplain modification proposed by this Site Plan.

The existing site is NOT contained within any known 100 year flood plains.

Discussion of Proposed Variances

There are NO variances proposed by this project.

Critical Environmental Features within the Project and Know Features within 150 feet of the Project

The surrounding area has been partially developed. A cursory review by the undersigned of the entire site area did NOT reveal any critical environmental features within the limits of construction. This area is located in the Contributing Zone of the Edward's Aquifer.

Tree Preservation Plan

Some existing trees are to be removed as a part of this project. The project site was an existing school site and there are significant trees within the limits of construction. Trees will also be planted around newly constructed parking areas to mitigate the loss of the existing trees.

Known Underground Storage Tanks

There are NO known underground storage tanks located within the project area and/or the entire 92 acre site area.

ATTACHMENT C
Project Narrative

FACTORS AFFECTING WATER QUALITY

The planned improvements consist of a 331,907 square foot High School Building Addition to the Current Building which is approximately 264,581 square feet. The existing parking lots will be expanded and parking areas will be added to create 923,864 square feet of total parking area. The on-site generated runoff is currently flowing unimpeded to a drainage way leading to Dripping Springs Creek. Both Existing and Proposed site generated runoff will be routed through a proposed on site storm sewerage system to capture runoff and route it through one of several proposed extended detention pond located in various areas on the site. The ponds will release flows at pre-development rates.

Factors that could affect surface water or groundwater quality:

- The character of the storm water would be classified as runoff associated with common commercial sites with buildings and parking lots and drives.
- Chemicals used or stored and related to chemistry, biology, agricultural, automotive and industrial technology laboratories will total less than the regulated quantity of 500 gallons. The cleanup of spills will be conducted in a manner to minimize the potential for impact to the environment.
- Activities relating to work on the sanitary sewer, spills of automotive fluids or other activities that might affect stormwater quality will be conducted in a manner to minimize the potential for impact to the environment.
- There are no other types of activities at a high school to affect the character of the storm water.

ATTACHMENT D
Factors Affecting Water Quality

BMPs FOR ONSITE STORMWATER

Proposed storm water generated on site will be filtered using three (3) extended detention ponds. A capture depth of:

- 0.41 inches was used to determine the filtration / sedimentation basin volume for Area 1 stormwater
- 0.40 inches was used to determine the filtration / sedimentation basin volume for Area 2 stormwater.

Stormwater runoff from Area 1 will be routed into two ponds located in the south area of the site and stormwater runoff from Area 2 will be routed to a pond in the northeast area of the site.

ATTACHMENT K
BMPs for Onsite Stormwater

Inspection, Maintenance, Repair and Retrofit Plan

Sedimentation Basins

Monthly: The vegetative growth in the basin shall be checked. The growth shall not exceed 18 inches in height.

Quarterly: The level of accumulated silt shall be checked. If depth of silt exceeds 6 inches, it shall be removed and disposed of "properly" and in an "approved" location.

The basin shall be checked for accumulation of debris and trash. The debris and trash shall be removed if excessive. All debris and trash shall be removed at least every six months.

Annually: The basin shall be inspected for structural integrity and repaired if necessary.

After Rainfall: The basin shall be checked after each rainfall occurrence to insure that it drains within 48 hours after the storm is over. If it does not drain within this time, corrective maintenance will be accomplished.

"Proper" disposal of accumulated silt shall be accomplished following Texas Commission on Environmental Quality and City of Springbranch/ Comal County guidelines and specifications.

An amended copy of this document will be provided to the Texas Commission on Environmental Quality within thirty (30) days of any changes in the following information

Responsible Party:	Thomas Bloxham
Entity	Comal Independent School District
Mailing Address	1404 IH 35 N
City, State, Zip Code	New Braunfels, Texas 78130
Telephone:	(830) 221-2039 FAX: (830)

Signature

2.5.05
Date

ATTACHMENT N
Inspection, Maintenance, Repair and Retrofit Plan

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Glenn Shankle, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 30, 2008

Mr. Thomas H. Hornseth, P.E.
Comal County Engineer
195 David Jonas Drive
New Braunfels TX 78132-3710

RECEIVED
MAY 0 5 2008
COUNTY ENGINEER

Re: Edwards Aquifer, Comal County
PROJECT NAME: T Bar M restaurant Building, located on the south side of State Highway 46 West approximately .05 miles north of the FM 1863 and State Highway 46 West intersection., 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.: 1899.01

Dear Mr. Hornseth:

The enclosed WPAP application received on April 29, 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 May 28, 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

RECEIVED
JUL 29 2010
COUNTY ENGINEER

Edwards Aquifer Protection Plan Extension Request

- [X] Extension Request for a Water Pollution Prevention Plan (*TCEQ-10260)*
- [X] ATTACHMENT A - Approval Letter or Extension Approval
- [ ] Agent Authorization Form (*TCEQ-0599)*, if application submitted by agent
- [X] Application Fee Form (*TCEQ-0574*)
- [X] Check Payable to the "Texas Commission on Environmental Quality"
- [X] Core Data Form (*TCEQ-10400*)



RECEIVED
JUL 2 9 2010
COUNTY ENGINEER

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant): T Bar M, Inc.

Contact Person: Scott Turpin

Entity: T Bar M, Inc

Mailing Address: 8201 Preston Rd

City, State: Dallas, TX 75225

Telephone: (214) 692-4254 FAX: (830) 608-1765

Agent:
Contact Person:
Mailing Address:
City, State: Zip:
Telephone: FAX:

2. X **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: July 28, 2008
   Expiration date: July 28, 2010

3. X This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. X A completed fee form is attached. The fee for a six-month extension of time is $150.

Scott Turpin
Print Name of Customer/Agent

Scott Turpin
Signature of Customer/Agent

July 22, 2010
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.

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JUL 29 2010
COUNTY ENGINEER

Exhibit A

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Bryan W. Shaw, Ph.D., *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 29, 2008

Mr. Scott Turpin
T Bar M Inc.
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: T Bar M; Located on the south side of State Highway 46 West approximately 0.5 mile north of the intersection of FM 1863 and State Highway 46 West; New Braunfels, Texas
TYPE OF PLAN: Request for Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program ID No.: 1899.01; Investigation No.: 656843; Regulated Entity No. RN102745502

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the request for modification of the approved WPAP for the above-referenced project submitted to the San Antonio Regional Office by Carter & Burgess, Inc. on behalf of T Bar M Inc. on April 29, 2008. Final review of the WPAP was completed after additional material was received on July 17, 2008 and July 25, 2008. As presented to the TCEQ, the Temporary and Permanent 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 commercial project site was previously approved by letter dated December 20, 2002. The 9.3 acres included the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover was to be 3.46 acres (37.2 percent). Project wastewater was to be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the City of New Braunfels.

The permanent pollution abatement measures consisted of five individual permanent vegetative filter strips, which were designed to meet the required 80 percent removal of the increased load in total suspended solids caused by the project. The table below summarized the permanent treatment:

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Permanent Best Management Practices (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the addition of a restaurant building, roads and parking. The proposed site layout requires that some of the existing impervious cover (0.23 acres) be removed and restored to landscaping. The new proposed impervious cover added to the site will be 0.60 acres. The net increase of impervious cover will be 0.37 acres. The impervious cover for the 9.3 acres will become 3.83 acres (41.2 percent). Project wastewater will be disposed of by conveyance to the existing Gruene Water Recycling Center owned by the City of New Braunfels.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent the pollution of stormwater runoff originating on-site or upgradient of the site and potentially flowing across and off the site after construction, engineered vegetated filter strips, designed using the TCEQ technical guidance document, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (2005), will be constructed to treat stormwater runoff. The required total suspended solids (TSS) treatment for this project is 332 pounds of TSS generated from the 0.37 acres of net increase in impervious cover. The approved measures meet the required 80 percent removal of the increased load in TSS caused by the project.

The engineered vegetated filter strips will extend along the entire length of the contributing area;
The slope will not exceed 20%;
The minimum dimension of the filter strips (in the direction of flow will not be less than 15 feet;
The maximum width (in the direction of flow) of the contributing impervious area will not exceed 72 feet;
The minimum vegetated cover will be 80%;
The contributing area to the filter strip will be relatively flat so that runoff will be distributed evenly to the vegetated area without the use of a level spreader;
The vegetated filter strip will be free of gullies or rills that can concentrate overland flow.
The 3 foot river rock velocity dissipater receiving roof runoff from the proposed T Bar M Restaurant will be free of gullies or rills that can concentrate overland flow and potentially cause erosion to the engineered vegetated filter strip.

GEOLOGY

The outcropping geologic formation mapped at the site consists of the Person Formation of the Cretaceous Edwards Group. The site specifically lies in the outcrop of the Cyclic and Marine member. According to the geologic assessment included with the application seven features were identified at the site. Five of the features were manmade and ranked non-sensitive. A non-karst closed depression was ranked as non-sensitive and a solution cavity (S-4) was ranked as sensitive. Based on the information

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submitted by the project engineer the sensitive feature is situated several hundred feet away from any improvements proposed in this modification. Regional Office did not conduct a site assessment.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated December 20, 2002.

II. All permanent pollution abatement measures shall be operational prior to occupancy of the facility.

III. 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.

IV. 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.

V. No regulated activities shall take place within the vicinity (200 feet) of feature S-4 without determining the natural drainage area to the sensitive feature and providing appropriate natural buffers to protect the feature in accordance with TCEQ guidance.

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

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notice of approval shall be maintained at the project location until all regulated activities are completed.

6. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.

7. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and program ID number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.

8. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. If a water quality pond is proposed, it shall be used as a sedimentation basin during construction. The TCEQ may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

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

<u>During Construction:</u>

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

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

12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from

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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.

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

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

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

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

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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

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

cc: Mr. David McBeth, P.E., Carter & Burgess, Inc.
Mr. James C. Klein, P.E., 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

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

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NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 W, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: (214) 692-4254
(Please Print)

Customer Reference Number (if issued): CN 600793111 (nine digits)

Regulated Entity Reference Number (if issued): RN **102745502** (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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$150

Signature

July 22, 2010
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.

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.

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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 Report and applicable attachments

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 600793111		RN 102745502

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) April 2008

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:*
T Bar M, Inc.		

10. Mailing Address:	8201 Preston Road						
	City	Dallas	State	TX	ZIP	75225	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)*
(214) 692-4254		(830) ~~625-5959~~ 608-1765

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)*
741658885	17416588857		

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)*

T Bar M, Inc

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 SH 46 West							
	City	New Braunfels	**State**	TX	**ZIP**	78132	**ZIP + 4**	
25. Mailing Address:	Same							
	City		**State**		**ZIP**		**ZIP + 4**	

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26. E-Mail Address:	sturpin@tbarm.com		
27. Telephone Number	**28. Extension or Code**	**29. Fax Number** *(if applicable)*	
(830) 625-7738		(830) 620-6018	
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)
7011	7999	721214	71394

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

resort, sports facilities, meeting and dining facilities

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

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	**County**	**State**	**Nearest ZIP Code**
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		**38. Longitude (W) In Decimal:**	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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:	David M McBeth , P.E.	**41. Title:**	Sr Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210) 494-0088	6352	(210) 494-4525	david.mcbeth@jacobs.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	Jacobs Carter Burgess	**Job Title:**	Project Engineer
Name *(In Print)* :	David McBeth	**Phone:**	(210) 494-0088
Signature:		**Date:**	4/24/2008

WATER POLLUTION ABATEMENT PLAN

FOR

T BAR M, INC.

RESTAURANT BUILDING

April 2008



Carter::Burgess

Consultants in Engineering, Architecture,
Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Ste. 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525
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2008 MAY -1 AM 11:00
REGION

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: T BAR M, INC.
COUNTY: Comal STREAM BASIN: Tributary to 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: Scott Turpin
Entity: T Bar M, Inc. / Center for Christian Growth
Mailing Address: 8201 Preston Road
City, State: Dallas, TX Zip: 75225
Telephone: (214) 692-4254 FAX: (830) 625-5959

Agent/Representative (If any):

Contact Person: David McBeth, P.E
Entity: Carter & Burgess, Inc.
Mailing Address: 911 Central Pkwy N, #425
City, State: San Antonio, TX Zip: 78232
Telephone: (210) 494-0088 FAX: (210) 494-4525

2. X This project is inside the city limits 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.

Located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West .

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: Existing Recreational Camp and Resort

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.

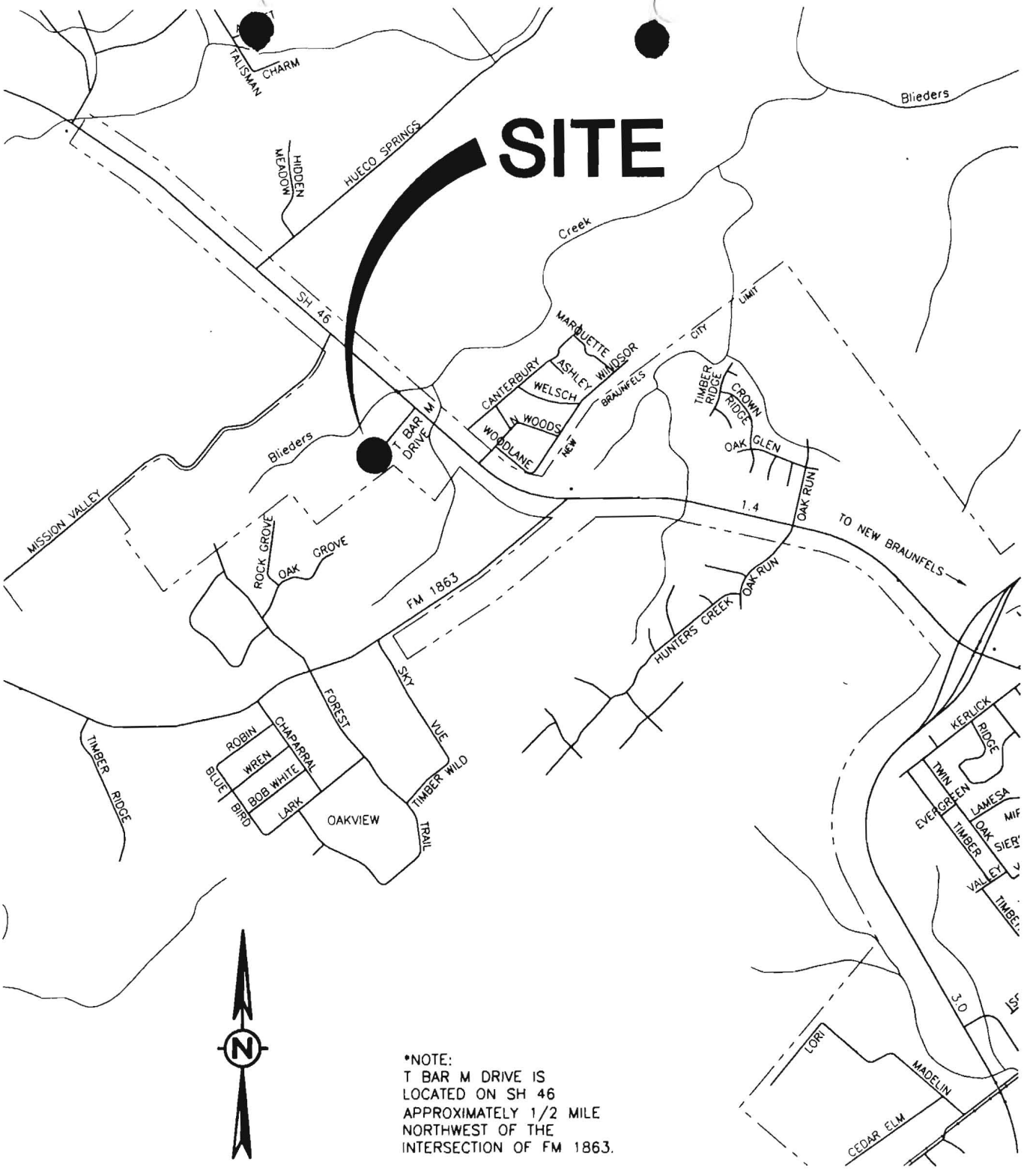
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **GENERAL INFORMATION FORM** is hereby submitted for TCEQ review. The application was prepared by:

David Mcbeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent — Date: 4/8/08

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.



*NOTE:
T BAR M DRIVE IS LOCATED ON SH 46 APPROXIMATELY 1/2 MILE NORTHWEST OF THE INTERSECTION OF FM 1863.

NOT-TO-SCALE

Drawing Name: M:\310627.012_T BAR M\dwg\LOCATION_MAP.dwg User: healthds Apr 23, 2008 - 5:56pm

Carter :: Burgess

Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.

911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4626
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T Bar M
LOCATION MAP

DRAWN BY: R.E.M. CHECKED BY: DM

DATE: 4/23/08 PROJECT NO.: 310627.012

SHEET 1 OF 1

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS WEST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

SH 46

PROJECT SITE

FM 1863

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS

Produced by the United States Geological Survey
Revised in cooperation with the Texas Water Development Board

Control by USGS, NOS/NOAA, and USCE

Compiled by the Army Map Service by photogrammetric methods from aerial photographs taken 1956. Field checked 1958
Revised from aerial photographs taken 1986. Field checked 1987
Map edited 1988

Projection and 10,000-foot grid ticks: Texas coordinate system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983 move the projection lines 20 meters south and 28 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence and field lines generally visible on aerial photographs. This information is unchecked

Gray tint indicates area in which only landmark buildings are shown

UTM GRID AND 1988 MAGNETIC NORTH DECLINATION AT CENTER OF MAP
DIAGRAM IS APPROXIMATE

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

QUADRANGLE LOCATION

2998-413

ROAD CLASSIFICATION

Primary highway, hard surface — Light-duty road, hard or improved surface
Secondary highway, hard surface — Unimproved road
Interstate Route · U. S. Route · State Route

NEW BRAUNFELS WEST, TEX.
29098-F2-TF-024

1988

DMA 6343 II NW-SERIES V822

* - * - TBARM1_PDF PAGE 1 - 4/30/2008 - 15:39

* - * - TBARM2.PDF PAGE 1 - 4/30/2008 - 15:39

Official Edwards Aquifer Recharge Zone Map
31 Texas Administrative Code Chapter 313
Subchapter A—San Antonio Region

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS EAST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS
(pop 6231)

NEW BRAUNFELS
MUNICIPAL AIRPORT

Freiheit

Clear Springs

Camp Willow

Barbarosa

Gruene

Thorn Hill

Goodwin

Rock Hill

Landa Park

Trail Park

Comal River

Alligator Creek

Long Creek

Dunlap Dam

Lake Dunlap

Guadalupe River

Mesquite

Cemetery

Mapped by the Army Map Service
Published for civil use by the Geological Survey

Control by USGS, NOS / NOAA, and USCE

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1956. Field check 1958

Polyconic projection. 1927 North American datum
10,000-foot grid based on Texas coordinate system, south central zone
1000-metre Universal Transverse Mercator grid ticks, zone 14, shown in blue

Revisions shown in purple compiled by the Geological Survey from aerial photographs taken 1973. This information not field checked

Purple tint indicates extension of urban areas

UTH GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24000

CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

TEXAS
QUADRANGLE LOCATION

2998-414

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

NEW BRAUNFELS EAST, TEX.

N2937.5—W9800/7.5

1958
PHOTOREVISED 1973
AMS 6343 II NE SERIES V882

26

ATTACHMENT C – PROJECT DESCRIPTION

T Bar M is a recreational camp and resort with cabins, hotel, tennis courts, cafeteria, baseball field, swimming pools and associated parking and access roads, etc, all approved under an existing WPAP. The site is located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West (see location map). The site has a low density and the rural characteristics are maintained throughout the facility. The proposed improvements will retain the rural setting, keeping much of the surrounding area undisturbed. This WPAP modification is for the addition of a restaurant building and roads/parking. The proposed layout requires that some of the existing impervious cover be removed and restored to landscaping. The existing impervious cover for the site is 3.46 acres. After proposed improvements are completed the impervious cover will be 3.83 acres. The proposed improvements will impact the site with a net increase of 0.37 acres of impervious cover. The area where the new proposed restaurant will be constructed is approximately 1 acre. Existing approved WPAP envelopes and approval dates are shown on Sheet EX1. The permanent BMP's have been designed to treat the net increase of impervious cover for the project site, which is approximately 0.37 acres. A summary of the impervious cover and the areas of treatment are in the tables below.

Impervious Area Summary		
Existing Impervious Area (Approved)	150,664 sf	3.46 ac
Proposed Impervious Area (After Modification)	166,781 sf	3.83 ac
Demolished Impervious Cover	10,018 sf	0.23 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac

Treatment Summary		
Treatment Area	16,553 sf	0.38 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac
Excess Area Treated	436 sf	0.01 ac

The site is located about 4 miles north of the Transition boundary and is within the Edwards Aquifer Recharge Zone in the New Braunfels West, Texas quadrangle. Based on the USGS Official Edwards Aquifer Recharge Zone Map, the site accepts approximately 3 acres of upgradient stormwater. The upgradient drainage area consists of undeveloped forested vegetation, open pasture land and 3 rural single family residences at the upper limits of the drainage area. The majority of this upgradient runoff is diverted along the property boundary northeasterly to Blieders Creek. The construction boundary within the site accepts less than 10% of this flow.. Vegetative filter strips will be used to treat stormwater runoff. Additionally, existing impervious cover will be treated to account for some of the proposed improvements. The on-site storm water drains through the site and into an un-named tributary of Blieders Creek on the south side of State Highway 46 West. The temporary and permanent BMP's will be constructed and maintained by T Bar M

The project limits are those areas within the T Bar M campus that will be disturbed to construct the new restaurant and parking areas, which will be approximately 1.0 acre.

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

PROJECT NAME: **Pool and Cabin Improvements – T Bar M Ranch**

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 **0 to 0.5** feet thick. In general, the soil present appears to have the ability to:

___ transmit fluid flow to the subsurface.
X impede fluid flow to the subsurface.

3. X **SOILS ATTACHMENT**. A narrative description of soil units and a soil profile, including thickness and hydrologic characteristics are attached at the end of this form.

4. 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.

5. 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.

6. 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" = **50** '
Site Geologic Map Scale 1" = **50** '

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

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

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

10. 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.

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

12. 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 §76.
X There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: **August 8, 2002**
Date(s)

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 213.

Jeffrey S. Neathery — **210-930-5959**
Print Name of Geologist — Telephone

210-930-6262
Fax

Signature of Geologist — **August 13, 2002**
Date

Representing: **Arias & Kezar**
(Name of Company)

Site Specific Soils

Most of the site has been previously developed. There are several structures, roads, parking areas and a baseball field. Native soils remaining at the site consist of black and brown calcareous 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 mobility would increase.

The soils on the site are typical of those found on the Edwards. They range up to a maximum thickness of about one half of a foot in some areas. Soils cover most of the undeveloped portions of the site. There are few areas of rock outcrops except for those in the creek area.

According to the U.S. Soil Conservation Service, the soils beneath the SITE are classified as Rumple-Comfort association, undulating.

This association consists of shallow and moderately deep soils on uplands in the Edwards Plateau. Rumple soils make up about 60 percent of the association. Comfort soils make up about 20 percent. The remainder consists mostly of Tarpley soils. These soils are well drained. Surface runoff is medium. Permeability is moderately slow in Rumple soils and slow in Comfort soils. Water erosion is a moderate hazard.

Overall, the soils will provide some protection to the underlying limestone. There are areas where the soil cover is very thin or absent and therefore, no protection exists.

Stratigraphic Column

Group	Formation	Member	Thickness (ft)
Edwards Limestone	Person	Cyclic and Marine	80-90
		Leached and Collapsed	70-90
		Regional Dense	20-24
	Kainer	Grainstone	50-60
		Kirschberg Evaporite	50-60
		Dolomitic	110-130
		Basil Nodular	50-60
Glen Rose Limestone	Upper Glen Rose		350-500

(From U.S.G.S., 1996)

Site Specific Geology

The site lies on the outcrop of the Person Formation of the Edwards Limestone. More specifically, the site lies on the outcrop of the Cyclic and Marine Member.

The undeveloped portion of the site lies along Hwy 46. This portion drains into Blieders Creek. Most of the exposed rock was found in the creek. No portion of the site lies within the 100-year floodplain. Most of the site was covered with soil. Few rock outcrops were visible. Much of the rock visible at the site was float, or weathered bedrock.

There was no evidence of structural faulting or fracturing observed in the field. There were no solution features found. Some of the float rock showed varying signs of pitting, especially in the creek area. There were no open vugs observed.

According to the literature (USGS, 1996), there are faults to the north and south of the site. No evidence of these faults were observed in the field.

Feature Comments

Feature S-1
This feature is hole that was dug to install a flagpole.

Feature S-2
This feature is hole that was dug to install a flagpole.

Feature S-3
This is an excavation made to repair a water line.

Feature S-4
This is a bedding plane feature approximately 5 feet up from the bottom of the creek..

Feature S-5
This is an erosion feature formed where water runs off the asphalt pavement and onto the ground. Some of the pavement itself has eroded.

Feature Locations

Feature	Latitude	Longitude
S-1	29° 43' 24.1"	98° 11' 18.5"
S-2	29° 43' 24.0"	98° 11' 18.6"
S-3	29° 43' 23.0"	98° 11' 15.7"
S-4	29° 43' 28.9"	98° 11' 06.6"
S-5	29° 43' 29.8"	98° 11' 11.1"

of and Cabin Improvements - T Bar M Ranch

FE	PHYSICAL SETTING												
1A			1B						1C	1D			1E
LOCATION	AREA (ACRES)		TOPOGRAPHY (2)						SUB-TOTAL	POTENTIAL RECHARGE			COMMENTS
	10	15	0	5	10	15	20						
	<20	>20	WALL	HILLTOP	HILLSIDE	FLOODPLAIN	STREAM BED			NONE/LOW <15	MODERATE 15-20	HIGH >20	YES
S-1				5					10	10			Yes
S-2				5					10	10			Yes
S-3				5					10	10			Yes
S-4	10					15			25			25	Yes
S-5				5					10	10			Yes

(1) C = 35ommission's Instructions to Geologists. The SC = 10, 3n of the conditions observed in the field.

(2) WALL
FLOODPL_____ Sheet 1 of 1
STREAM

TNRCC-0

References

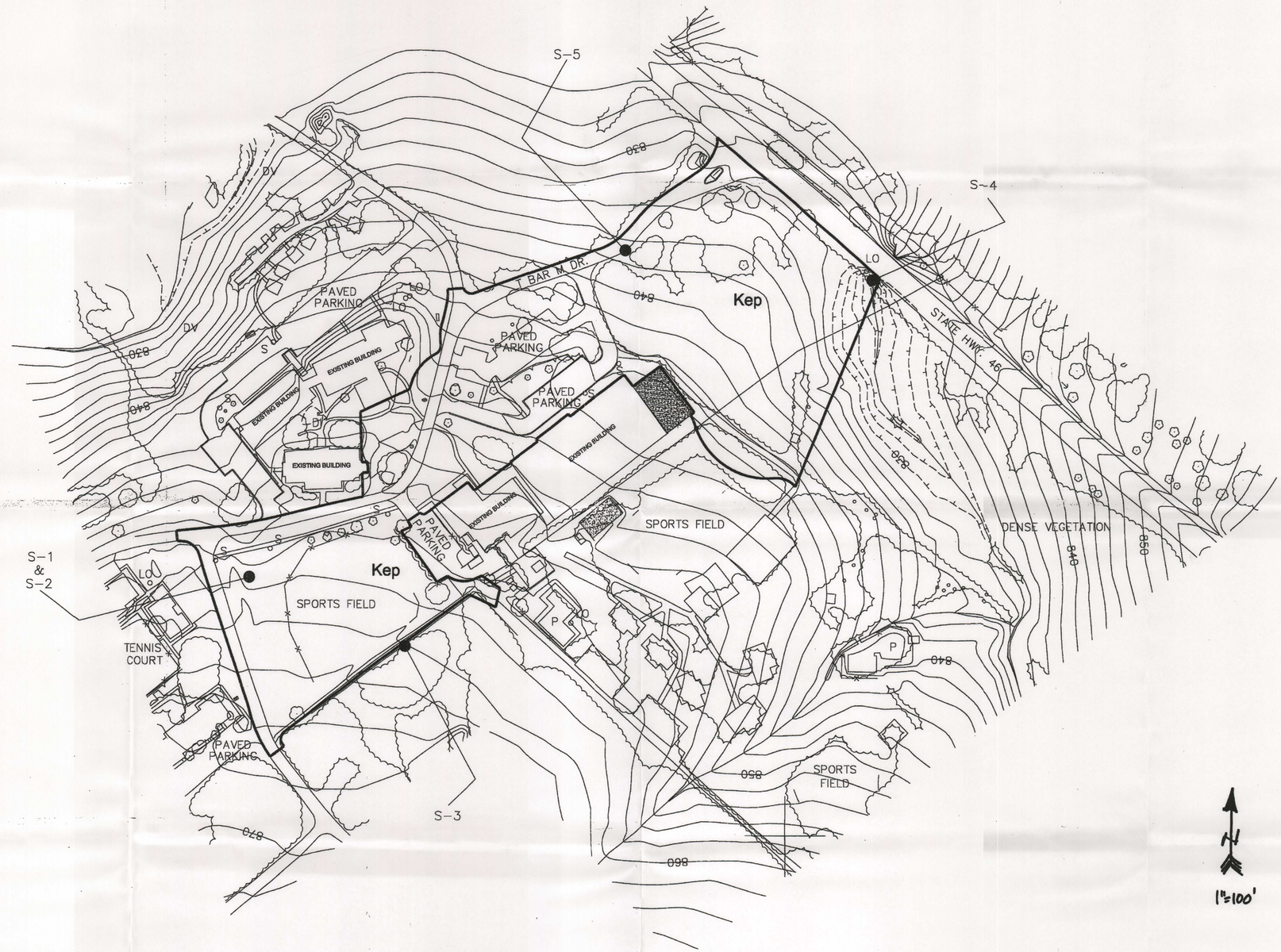
Federal Emergency Management Agency, (1991), *FIRM Flood Insurance Rate Map, Comal County, Texas and Unincorporated Areas*, Panel No. 485493 0100C, September 29, 1986.

Soil Conservation Service (1984), *Soil Survey, Comal and Hays Counties Texas*, US Departmentof Agriculture

Texas Natural Resource Conservation Commission (1999), *Instructions to Geologists*

U.S. Geological Survey (1994), *New Braunfels, West, Texas* 7.5 Minute Series (Topographic)

U.S. Geological Survey (1994), *Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas*, Water Resources Investigations Report 94-4117



Pool and Cabin Improvements T Bar M Inc. Center for Christian Growth 2549 HWY 46 West New Braunfels,Texas 78132	Site Geologic Map	ARIAS & KEZAR INC 10821 Gulfdale San Antonio, Texas 78216 (210)308-5884 Fax(210)308-8731

Modification of a Previously Approved Plan

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

1. Regulated Entity Name: **T BAR M, INC**
2. Original Regulated Entity Name: T Bar M, Inc. / Center for Christian Growth
3. X **ATTACHMENT A - Original Approval Letter.** A copy of the original approval letter and copies of any letters approving modifications are found at the end of this form.

4. A modification of a previously approved plan is requested for: (INDICATE ALL THAT APPLY)

   x physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;
   __ change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;
   x development of land previously identified as undeveloped in the original water pollution abatement plan;
   __ physical modification of the approved organized sewage collection system;
   __ physical modification of the approved underground storage tank system;
   __ physical modification of the approved aboveground storage tank system.

5. x **ATTACHMENT B - Narrative of Proposed Modification.** A narrative description of the nature of each proposed modification is provided at the end of this form.

6. Original Project:

Type:	X WPAP __ SCS __ UST __ AST
Size:	9.3 acres
Population:	N/A
Wastewater Volume:	4,200 gal/day
Sewer Pipe:	_____ linear ft
Hydrocarbon Storage:	_____ # of tanks
Impervious Cover:	37.2 %

7. Proposed Modification:

Type:	X WPAP __ SCS __ UST __ AST __
Size:	9.3 acres
Population:	N/A
Wastewater Volume:	5,700 gal/day
Sewer Pipe:	_____ linear ft
Hydrocarbon Storage:	_____ # of tanks
Impervious Cover:	41.2 %

8. **ATTACHMENT C - Site Plan.** A Site Plan showing the existing conditions of the site, the location of proposed modification(s), and, as applicable, geologic or man-made features, temporary erosion and sedimentation controls, and permanent BMPs is found at the end of this form.

9. x One (1) original and three (3) copies of a completed application has been provided.

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

Print Name of Customer/Agent

Signature of Customer/Agent

4/25/08
Date

Doc # 0306002418

6/C

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of Dallas §

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

(1) That my name is Scott A. Turpin and that T Bar M, Inc. owns the real property described below.

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

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the TEXAS NATURAL RESOURCE CONSERVATION COMMISSION (TNRCC) on December 20, 2002.

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

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

A portion of Lot 1, Block 1, T Bar M Ranch Commercial, being 56.626 acres of land.

T Bar M, Inc. by: Scott A. Turpin
LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this 16 day of January, 2003.

JUNE MAYFIELD
MY COMMISSION EXPIRES
November 17, 2005

June Mayfield
NOTARY PUBLIC

THE STATE OF Texas §

County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Scott A. Turpin known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 16th day of January, 2003

JUNE MAYFIELD
MY COMMISSION EXPIRES
November 17, 2005

June Mayfield
NOTARY PUBLIC

JUNE MAYFIELD
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11-17-2005

TNRCC-0625 (Rev. 5/01/02)

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 20, 2002

Mr. Scott Turpin
T Bar M, Inc./ Center for Christian Growth
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: T Bar M; Located at 2549 Highway 46 West; 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 File No.1899.00; Investigation No. 17611.

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Mr. Jeff Moeller, P.E. of Carter & Burgess, Inc. on behalf of T Bar M, Inc./ Center for Christian Growth on September 26, 2002. Final review of the application was completed after additional materials were submitted on December 9, 2002, and December 13, 2002. As presented to the TCEQ, the Temporary and Permanent 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 20 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover will be 3.46 acres (37.2% percent). Project wastewater will be disposed of by conveyance to the existing Gruene Waste Water Recycling Center owned by the City of New Braunfels.

Doc 0306002418

PERMANENT POLLUTION ABATEMENT MEASURES

Five individual permanent vegetative filter strips will be constructed to treat stormwater runoff. The individual treatment measures will consist of the following:

Permanent Best Management Practice (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

The approved measures are presented to meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

GEOLOGY

According to the geologic assessment included with the application, four possibly sensitive features and one not sensitive feature were identified on the proposed project site. The possibly sensitive features were described by the geologist as four man-made features and one solution cavity. The San Antonio Regional Office did conduct a site inspection on October 18, 2002. The site inspection revealed that the site geology is consistent with the geologic assessment and no additional features were noted.

SPECIAL CONDITIONS

I. All permanent pollution abatement measures shall be operational prior to commencement of any commercial operation for each phase of development.

II. The vegetative filtration areas are designed in accordance with the document *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (June 1999)*. The basins will incorporate sedimentation and filtration as described above.

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. 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.

3. 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.

4. 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.

5. 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 file 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.

6. 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.

7. All borings with depths greater than or equal to 20 feet must be plugged with non-shrink grout from the bottom of the hole to within three (3) feet of the surface. The remainder of the hole must be backfilled with cuttings from the boring. 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:

8. 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.

9. 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.

10. 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.

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

12. 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.

13. 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:

14. 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.

15. 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 the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

16. 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.

Doc# 200306002418

17. 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.

18. 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 Tom Gutierrez of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4025.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/TG/eg

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

cc: Mr. Jeff Moeller, P.E., Carter & Burgess, Inc.
Mr. John Bohuslav, TXDOT San Antonio District
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

Doc# 200306002418
Pages 6
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Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $19.00

STATE OF TEXAS
COUNTY OF COMAL

This is to certify that this document was FILED and RECORDED in the Official Public Records of Comal County, Texas on the date and time stamped thereon.

Joy Streater
COUNTY CLERK

Doc# 200306002418

ATTACHMENT B – NARRATIVE OF PROPOSED MODIFICATION

T Bar M is a recreational camp and resort with cabins, hotel, tennis courts, cafeteria, baseball field, swimming pools and associated parking and access roads, etc, all approved under an existing WPAP approved on December 20, 2002 for an area of 9.3 acres. The site is located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West (see location map). This WPAP modification is for the addition of a restaurant building and roads/parking. The proposed layout requires that some of the existing impervious cover be removed and restored to landscaping. The existing impervious cover for the site is 3.46 acres. After proposed improvements are completed the impervious cover will be 3.83 acres. The proposed improvements will impact the site with a net increase of 0.37 acres of impervious cover. The area where the new proposed restaurant will be constructed is approximately 1 acre. Existing approved WPAP envelopes and approval dates are shown on Sheet EX1. The permanent BMP's have been designed to treat the net increase of impervious cover for the project site, which is approximately 0.37 acres. A summary of the impervious cover and the areas of treatment are in the tables below.

Impervious Area Summary		
Existing Impervious Area (Approved)	150,664 sf	3.46 ac
Proposed Impervious Area (After Modification)	166,781 sf	3.83 ac
Demolished Impervious Cover	10,018 sf	0.23 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac

Treatment Summary		
Treatment Area	16,553 sf	0.38 ac
Net Increase in Impervious Cover	16,117 sf	0.37 ac
Excess Area Treated	436 sf	0.01 ac

The site is located about 4 miles north of the Transition boundary and is within the Edwards Aquifer Recharge Zone in the New Braunfels West, Texas quadrangle. Based on the USGS Official Edwards Aquifer Recharge Zone Map, the site accepts approximately 3 acres of upgradient stormwater. The upgradient drainage area consists of undeveloped forested vegetation, open pasture land and 3 rural single family residences at the upper limits of the drainage area. The majority of this upgradient runoff is diverted along the property boundary northeasterly to Blieders Creek. The construction boundary within the site accepts less than 10% of this flow.. Vegetative filter strips will be used to treat stormwater runoff. Additionally, existing impervious cover will be treated to account for some of the proposed improvements. The on-site storm water drains through the site and into an un-named tributary of Blieders Creek on the south side of State Highway 46 West. The temporary and permanent BMP's will be constructed and maintained by T Bar M

The project limits are those areas within the T Bar M campus that will be disturbed to construct the new restaurant and parking areas, which will be approximately 1.0 acre.

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: **T BAR M, INC. RESTAURANT BUILDING**

REGULATED ENTITY INFORMATION

1. The type of project is:
   - ___ Residential: # of Lots:
   - ___ Residential: # of Living Unit Equivalents:
   - ___ Commercial
   - ___ Industrial
   - X Other: Existing Resort Restaurant Expansion

2. Total site acreage (size of property): Approximate overall site= 9.3 acres
   (Area of site improvements = 1.1 acres)

3. Projected population: N/A

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

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	27,007	÷ 43,560 =	0.62±
Parking	49,777	÷ 43,560 =	1.14±
Other paved surfaces	89,997	÷ 43,560 =	2.07±
Total Impervious Cover	166,781	÷ 43,560 =	3.83±
Total Impervious Cover ÷ Total Acreage x 100 =			41.2%

Note: Although the overall site is 9.3 acres, only approximately 1.1 acres of the site will be disturbed by the construction of the proposed improvements. In addition, some areas of proposed improvements already have existing impervious cover that will be demolished prior to the construction of the new improvements. Therefore, while there is approximately 26,136 sf of impervious cover proposed with the project, the net addition of impervious cover is only approximately 16,117 sf, as stated in the project description. (Reference Attachment C-General Information Form)

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.

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

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

100 % Domestic	5,700 gallons/day (See Appendix)
__ % Industrial	_____ gallons/day
__ % Commingled	_____ gallons/day
TOTAL	5,700 gallons/day

Note: The addition of the restaurant will add approximately 1,500 gpd to the existing flow approved in the WPAP of 4,200 gpd.

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.

X Sewage Collection System (Sewer Lines):

X 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 Gruene Treatment Plant. The treatment facility is :

X existing.

__ proposed.

16. X 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" = 50 '.

18. 100-year floodplain boundaries

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

X 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): **Flood Insurance Rate Map (FIRM) Panel #4854930430F and Flood Insurance Rate Map (FIRM) Panel #4854930435F, Panel not printed-area in Zone X. Maps are currently in final approval process. The preliminary map date is March 10, 2006**

19. X 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.

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

David McBeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent

4/25/08
Date

Attachment A – Factors Affecting Water Quality

The development will consist of adding a restaurant, additional parking, and street. This development will produce little pollution due to the small amount of impervious cover being added to the site. Pollution may originate from ordinary cleaning chemicals, normal automobile wastes, and runoff from asphalt streets. In the case of a spill, proper procedures will be taken in accordance with "Complying with Edwards Aquifer Rules: Technical Guidance on Best Management Practices," revised July 2005.

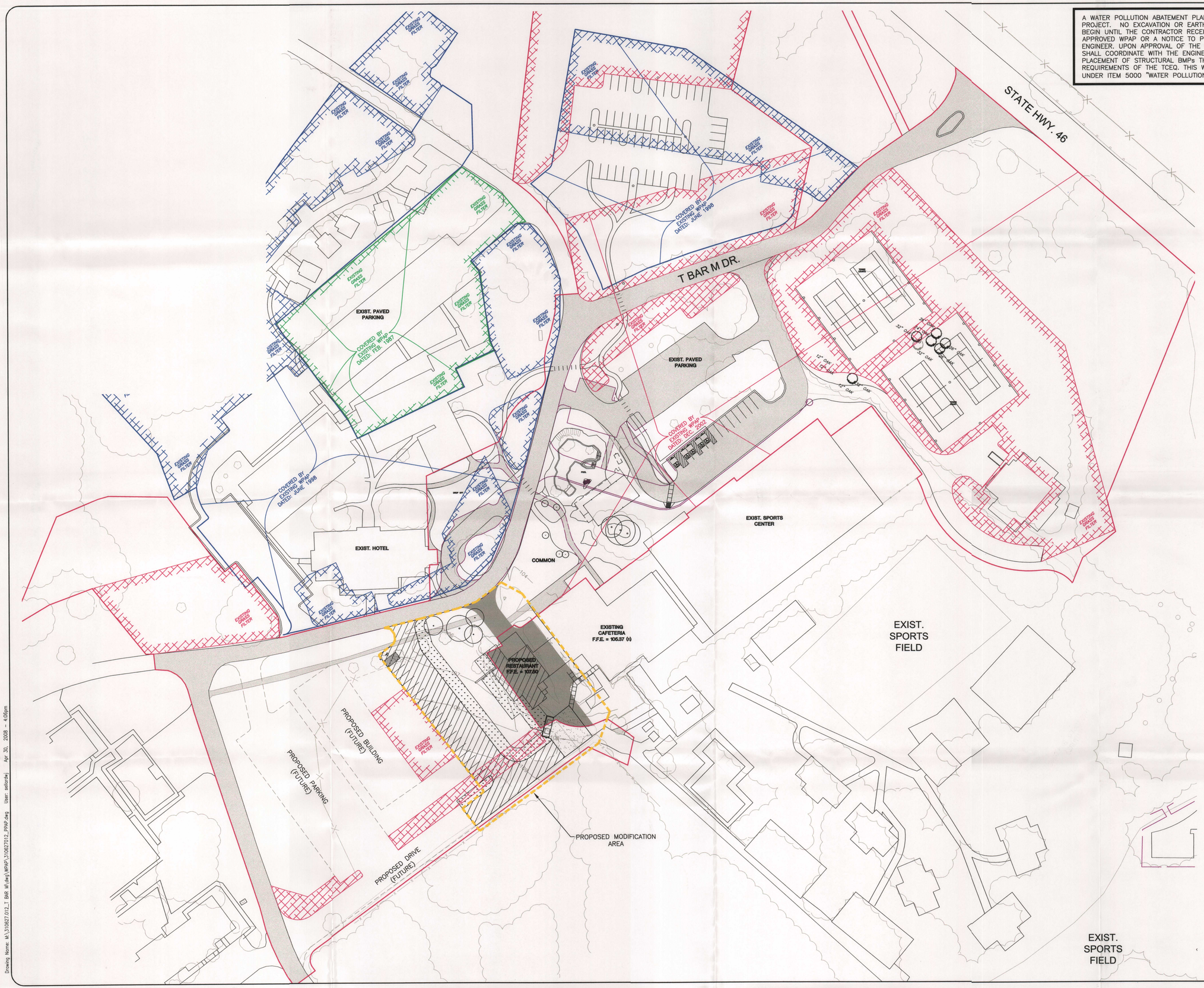
Attachment B – Volume and Character of Stormwater

The development of this site will result in a minimal increase in stormwater runoff. Runoff calculations for the watershed were performed using the Rational Method. The "C" value for the existing conditions is 59, and the "C" value for proposed conditions is 63. For the 100-year storm event, stormwater runoff increased by this 9.3 acre site from 86cfs to 95 cfs. This is an increase of 10%. For the 25-year storm event, stormwater runoff increased from 70 cfs to 78cfs. This is an increase of 11%. City of New Braunfels requires that the additional stormwater be detained and released at a rate not to exceed existing conditions.

Drainage patterns for the site will remain relatively unchanged. Low areas and swales will remain in their original condition, therefore offering natural vegetative filtering capabilities. In addition, permanent vegetative filter strips will be incorporated to offer treatment of runoff as detailed in the Permanent Stormwater Section.

Due to the fact that the majority of the drainage lows will remain in their natural condition and the net increase in impervious cover is 4% , the quality of stormwater runoff leaving the site will remain unchanged after incorporating appropriately sized temporary and permanent BMP's for the project.

A WATER POLLUTION ABATEMENT PLAN IS REQUIRED FOR THIS PROJECT. NO EXCAVATION OR EARTH MOVING ACTIVITIES MAY BEGIN UNTIL THE CONTRACTOR RECEIVES A COPY OF THE APPROVED WPAP OR A NOTICE TO PROCEED FROM THE ENGINEER. UPON APPROVAL OF THE WPAP, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR TYPE AND PLACEMENT OF STRUCTURAL BMPs THAT MEET THE REQUIREMENTS OF THE TCEQ. THIS WORK SHALL BE PAID FOR UNDER ITEM 5000 "WATER POLLUTION ABATEMENT PLAN".



LEGEND

VEGETATIVE FILTER STRIPS

GEOLOGIC FEATURES

NO.	DATE	REVISION	BY

Carter :: Burgess

Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.

911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525

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EXISTING APPROVED WATER POLLUTION ABATEMENT PLANS FOR SITE

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET
EX1

Drawing Name: M:\310627.012_T BAR M\dwg\WPAP\310627012_PPAP.dwg User: sellardwj Apr 30, 2008 - 4:06pm

* - * - TBARM_PDF PAGE 1 - 4/30/2008 - 15:39

AREA 1

Background Load Calculations

Site Area = 4.003ac
Existing Impervious Area = 0.246ac (6.1 % Imp)
Proposed Impervious Area = 1.203ac (30.0 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(.061)^2 + 0.328(0.061) + 0.030
Rv Exist = 0.052

Au = Site Area - Impervious Area
Au = 4.003ac - 0.246ac
Au = 3.757ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(3.757 x 0.54 + 0.246 x 0.052 x 38.4)
L=83.2

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.30)^2 + 0.328(0.30) + 0.030
Rv Prop = 0.178

L = A x P x Rv x 38.4
L = 4.003ac x 33 x 0.178 x 38.4
L = 902.9

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(902.9 - 83.2)
Lr = 655.8

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
655.8 = 902.9 x FS x 0.85
FS = 0.855

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.885 x 1.203
MF = 1.065ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 1.065ac/TA
TA = 0.64ac

Proposed Vegetative Filter Strips = 1.15ac

AREA 3

Background Load Calculations

Site Area = 0.411ac
Existing Impervious Area = 0.0ac (0.0 % Imp)
Proposed Impervious Area = 0.170ac (41.4 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.0)^2 + 0.328(0.0) + 0.030
Rv Exist = 0.030

Au = Site Area - Impervious Area
Au = 0.411ac - 0.0ac
Au = 0.411ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.411 x 0.54 + 0.0 x 0.030 x 38.4)
L=7.32

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.414)^2 + 0.328(0.414) + 0.030
Rv Prop = 0.259

L = A x P x Rv x 38.4
L = 0.411ac x 33 x 0.259 x 38.4
L = 134.9

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(134.9 - 7.32)
Lr = 102.1

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
102.1 = 134.9 x FS x 0.85
FS = 0.89

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.89 x 0.170
MF = 0.15ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.15ac/TA
TA = 0.09ac

Proposed Vegetative Filter Strips = 0.10ac

AREA 4

Background Load Calculations

Site Area = 1.157ac
Existing Impervious Area = 0.284ac (24.5 % Imp)
Proposed Impervious Area = 0.726ac (60.9 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.245)^2 + 0.328(0.245) + 0.030
Rv Exist = 0.143

Au = Site Area - Impervious Area
Au = 1.157ac - 0.284ac
Au = 0.873ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.873 x 0.54 + 0.284 x 0.143 x 38.4)
L=67.0

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.609)^2 + 0.328(0.609) + 0.030
Rv Prop = 0.432

L = A x P x Rv x 38.4
L = 1.192ac x 33 x 0.432 x 38.4
L = 652.5

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(652.5 - 67.0)
Lr = 468.4

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
468.4 = 652.5 x FS x 0.85
FS = 0.844

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.844 x 0.726
MF = 0.613ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.613ac/TA
TA = 0.37ac

Proposed Vegetative Filter Strips = 0.37ac

AREA 5

Background Load Calculations

Site Area = 0.383ac
Existing Impervious Area = 0.0ac (0.0 % Imp)
Proposed Impervious Area = 0.126ac (32.9 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.0)^2 + 0.328(0.0) + 0.030
Rv Exist = 0.030

Au = Site Area - Impervious Area
Au = 0.383ac - 0.0ac
Au = 0.383ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.383 x 0.54 + 0.0 x 0.030 x 38.4)
L=6.83

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.329)^2 + 0.328(0.329) + 0.030
Rv Prop = 0.197

L = A x P x Rv x 38.4
L = 0.383ac x 33 x 0.197 x 38.4
L = 95.6

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(95.6 - 6.83)
Lr = 71.0

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
71.0 = 95.6 x FS x 0.85
FS = 0.874

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.874 x 0.126
MF = 0.110ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.11ac/TA
TA = 0.066ac

Proposed Vegetative Filter Strips = 0.126ac

AREA 2

Background Load Calculations

Site Area = 3.352ac
Existing Impervious Area = 1.262ac (37.6 % Imp)
Proposed Impervious Area = 1.824ac (54.4 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.376)^2 + 0.328(0.376) + 0.030
Rv Exist = 0.231

Au = Site Area - Impervious Area
Au = 3.352ac - 1.262ac
Au = 2.09ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(2.09 x 0.54 + 1.262 x 0.231 x 38.4)
L=406.7

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(.544)^2 + 0.328(0.544) + 0.030
Rv Prop = 0.37

L = A x P x Rv x 38.4
L = 3.352ac x 33 x 0.37 x 38.4
L = 1571.6

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(1571.6 - 406.7)
Lr = 931.9

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
931.9 = 1571.6 x FS x 0.85
FS = 0.697

Minimum Fraction of Impervious Area that must be treated is.

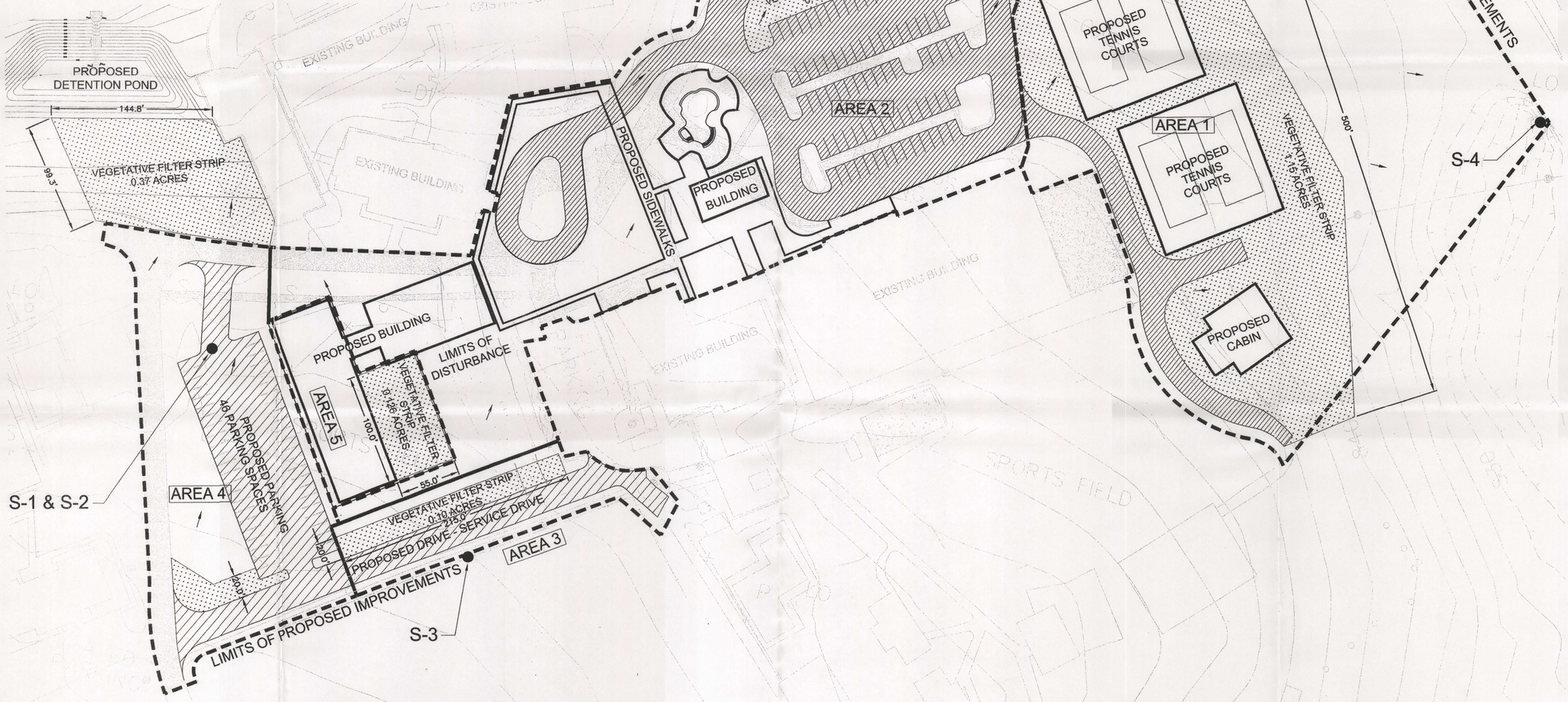
MF = FS x Proposed Impervious Area
MF = 0.697 x 1.824
MF = 1.271ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 1.271ac/TA
TA = 0.760ac

Proposed Vegetative Filter Strips = 0.77ac



SCALE:
1"=50'

NO.	DATE	REVISION	BY
1	12/09/02	REVISED PER TCEQ COMMENTS	TMS
2	12/11/02	REVISED PER TCEQ COMMENTS	TMS

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525
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JEFFREY D. MOELLER 88588 LICENSED PROFESSIONAL ENGINEER 12-11-02

PERMANENT PLAN

POOL AND CABIN IMPROVEMENTS
T BAR M, INC.

CENTER FOR CHRISTIAN GROWTH
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS 78132

DATE:	6-26-02
DRAWN BY:	JOS
DESIGNED BY:	TMS
CHECKED BY:	JDM
REVIEWED BY:	TMS
PROJECT NUMBER:	31-0147-000

SHEET

OF

Drawing Name: M:\31014\7.000 T Bar M\dwg\WPAP\PERMANENT PLAN.dwg Dec. 11, 2002 - 6:45pm

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: **T BAR M, INC./**

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. **N/A** 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.
   N/A The are no other potential sources 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 **~~N/A~~** 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: Bulgers 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, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

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

   __ **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is 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 manufacturers 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. N/A 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:

David McBeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent

4/3/09
Date

Attachment A – Spill Response Actions

There will be no above ground fuel storage tanks allowed on this project. Equipment will be fueled using mobile fuel trucks as needed. There is a small chance of a fuel spill occurring due to leaking construction equipment or re-fueling operations. If a minor spill were to occur, the soil impacted would be removed from the site and properly disposed of in an approved landfill site. If a major spill were to occur, where the amounts spilled were equal to, or exceeding, the Reportable Quantity, RQ, as defined by EPA regulations 40 CFR Parts 110, 119, and 302 then the following steps will be taken.

The following steps will help reduce the stormwater impacts of leaks and spills, in accordance with the Technical Guidance on Best Management Practices, Section 1.4.16, pg(s) 1-118 – 1-121:

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 spill 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, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
(2) Store hazardous materials and wastes in covered containers and protect from vandalism.
(3) Place a stockpile of spill cleanup materials where it will be readily accessible.
(4) Train employees in spill prevention and cleanup.
(5) Designate responsible individuals to oversee and enforce control measures.
(6) Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean up activities.
(7) Do not bury or wash spills with water.
(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.
(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 BMP's 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 runoff of stormwater and the runoff of spills.
(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately
(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
(5) Place drip pans or absorbent materials under paving equipment when not in use.
(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

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

Attachment B – Potential Sources of Contamination

Potential sources of contamination are construction equipment leaks, re-fueling spills and asphalt lay down operations, on-site trash, and port-o-lets. There are no other anticipated potential sources of contamination.

Attachment C – Sequence of Major Activities

Stages of Construction:
The following construction sequence will occur for the project:

1. Clearing and Grubbing – removal of concrete, pavement, fences, trees, stumps, brush and other debris within the limits of the project. Approximate disturbed area = 1.1 acres
2. Rough Grading – Cutting and filling of site area to prepare the access road and parking area pavement and construction. Approximate disturbed area = 0.4 acres
3. Construction of restaurant building. Approximate disturbed area = 0.1 acres
4. Utility Installation – There will be underground water, sanitary sewer, telephone and electric lines installed. Approximate disturbed area = 0.1 acres
5. Finished Grading – Final landscaping and asphalt pavement layers are installed. Approximate disturbed area = 1.0 acres
6. Establishment of permanent engineered vegetated filter strips and permanent revegetaion of all disturbed areas. Approximate disturbed area = 0.3 acres

Attachment D – Temporary BMPs and Measures

Soil disturbance will be limited to the building site, access road and parking. No soil disturbance will occur outside of the project limits. Silt fence will be placed on the down gradient side of the site to contain pollutants generated from on-site runoff. A stabilized construction entrance and exit will be installed at the entrance to the project site as shown on the Temporary Pollution Abatement Plan Sheet, to help eliminate contaminants from leaving the site during construction traffic. The temporary measures will be maintained throughout the project, therefore, reducing the potential of polluting streams and the aquifer.

A. Stormwater flow through vegetated areas upgradient of the project site will continue to be intercepted along the southeasterly edge of the project and directed northeasterly. Additional flows upgradient of the site that aren't intercepted will sheet flow northwesterly through the project site. Silt fence will be provided along the downstream side of the proposed parking area to contain pollutants and sediments generated from onsite runoff.

B. Stormwater originating onsite will sheet flow northwesterly through the site. Silt fence will be provided along the downstream side of the proposed parking area to contain pollutants and sediment generated from onsite runoff. A rock berm will be provided along T Bar M Drive as required to limit runoff velocities exiting the site. All of the low areas which collect storm water runoff will remain in a natural state acting as vegetative filter strips. A stabilized construction entrance/exit will be provided near the southerly driveway onto T Bar M Drive. The stabilized construction entrance/exit will reduce the sediment transport onto public roadways. A concrete washout area will be provided near the construction entrance/exit onto T Bar M Drive, which will reduce the amount of concrete waste entering the stormwater runoff. Construction traffic will be required to utilize T Bar M Drive to access Highway 46 and will be cleaned as necessary to prevent tracking of sediment onto Highway 46.

C. Stormwater generated by this project will be further treated as it leaves the project site and crosses a series of existing grassy swales. All of the low areas which collect storm water runoff will remain in a natural state acting as vegetative filter strips prior to the treated runoff entering surface streams, the aquifer or other sensitive features

D. There were no sensitive features identified in the Geologic Assessment. The naturally occurring possibly sensitive features that were identified in the Geologic Assessment will be protected during construction by temporarily diverting runoff away from the features or placing silt fence just upstream of the feature location.

Attachment E – Request to Temporarily Seal a Feature

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

Attachment F – Structural Practices

All temporary controls will be installed in accordance with the Technical Guidance on Best Management Practices (Chapter 1.4) and are shown on the Temporary Stormwater Plan.

The structural practices for this project site are described below:

- Silt fence will be provided along the downstream side of the proposed parking area to protect exposed soils and to prevent contamination from leaving the project site or flowing into the features identified in the Geologic Assessment.
- A rock berm will be provided along T Bar M Drive as required to limit stormwater velocities exiting the site.
- A stabilized construction entrance/exit will be provided near the southerly driveway onto T Bar M Drive. The stabilized construction entrance/exit will reduce the sediment transport onto the roadways.
- A concrete washout area will also be provided near the construction entrance/exit. The concrete washout area will reduce the amount of concrete waste entering the stormwater runoff.
- Construction traffic will be required to utilize T Bar M Drive to access Highway 46. T Bar M Drive will be cleaned as necessary to prevent tracking of sediment onto Highway 46.
- Stormwater generated by this project will be further treated as it leaves the project site and crosses a series of existing grassy swales. All of the low areas which collect storm water runoff will remain in a natural state therefore natural filtration will be allowed to occur

Attachment G – Drainage Area Map

The areas of soil disturbance is approximately 1.1 acres, therefore there will be no areas greater than 10 acres within a common drainage area.

See attached drainage area map.

Attachment H – Temporary Sediment Pond(s) Plans and Calculations

There will not be more than 10-acres of disturbed soil in a common drainage area that will occur at one time. Silt fence will be used for the small drainage areas and sheet flow runoff. No sediment ponds will be used on this project due to the minimal disturbance area.

Attachment I – Inspection and Maintenance for BMPs

Inspection and Maintenance Plan

- The contractor is required to inspect the controls and fences at weekly intervals and after any rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six inches. Contractor is required to maintain the construction exit in a condition that prevents soil from tracking onto public roads via construction equipment and traffic.
- TCEQ staff will be allowed full access to the property during construction of the project for inspecting controls and fences and to verify that the accepted plan is being utilized in the field. TCEQ staff has the right to speak with the contractor to verify plan changes and modifications.
- Any changes made to the location or type of controls shown on the accepted plans, due to onsite conditions, shall be documented on the site plan that is part of this Water Pollution Abatement Plan. No other changes shall be made unless approved by the TCEQ and the Design Engineer. Documentation shall clearly show changes made, date, and person responsible and reason change was made.

Owner's Information:

Owner: T Bar M, Inc. \ Center for Christian Growth
Contact: Scott Turpin
Phone #: (214) 692-4254
Address: 8201 Preston Road
Dallas, Texas 75225

Owner's Engineer:

Company: Carter & Burgess, Inc.
Contact: David McBeth, PE
Phone #: (210) 494-0088
Address: 911 Central Pkwy North, #425
San Antonio, Texas 78232

Person or Firm Responsible For Erosion/Sedimentation Control Maintenance:

Company: _____ Phone #:(___)
Contact:
Address:
_____

Signature of Responsible Party:_____

This portion of the form shall be filled out and signed by the responsible party prior to construction.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

There will be minimal disturbed soil due to construction operations that are not covered by pavement or buildings. The area is currently developed with parking and grass areas around the perimeter. Areas, which are disturbed by construction staging, and storage areas will be hydro mulched with the appropriate seed mixture. Areas between the edge of pavement and right-of-way line will also be hydro mulched if a soil layer exists. Areas within islands and the entrance will be landscaped with appropriate plants and mulched. There will be no fill slopes exceeding a 3:1 slope and all fill slopes will be hydro mulched.

Installation of hydro mulch is as follows:

1. Final grading must be completed and all necessary BMPs should be in place prior to the addition of hydro mulch.
2. Hydro mulch mixture shall be as recommended by the County Agriculture Extension Agent or as shown below for the specific time of year and whether or not irrigation will be utilized.
3. Hydro mulch shall be applied at a rate stipulated by the Extension Agent or as shown below and shall be applied in a uniform manner
4. Other types of seeding applications may be used by the Contractor if approved by the Design Engineer and TCEQ.
5. If blankets or matting are used, they shall conform to the Texas Department of Transportation specifications.

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 temporarily 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 with 21 days, temporary stabilization measures do not have to be initiated on that portion of the 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.

Dates	**Climate**	**Species**	**(lb/ac)**
Sept. 1 to Nov. 30	Temporary Cool Season	Tall Fescue	4.0
		Oats	21.0
		Wheat	30.0
		Total	**55.0**
Sept. 1 to Nov. 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug. 31	Temporary Warm Season	Foxtail Millet	30.0

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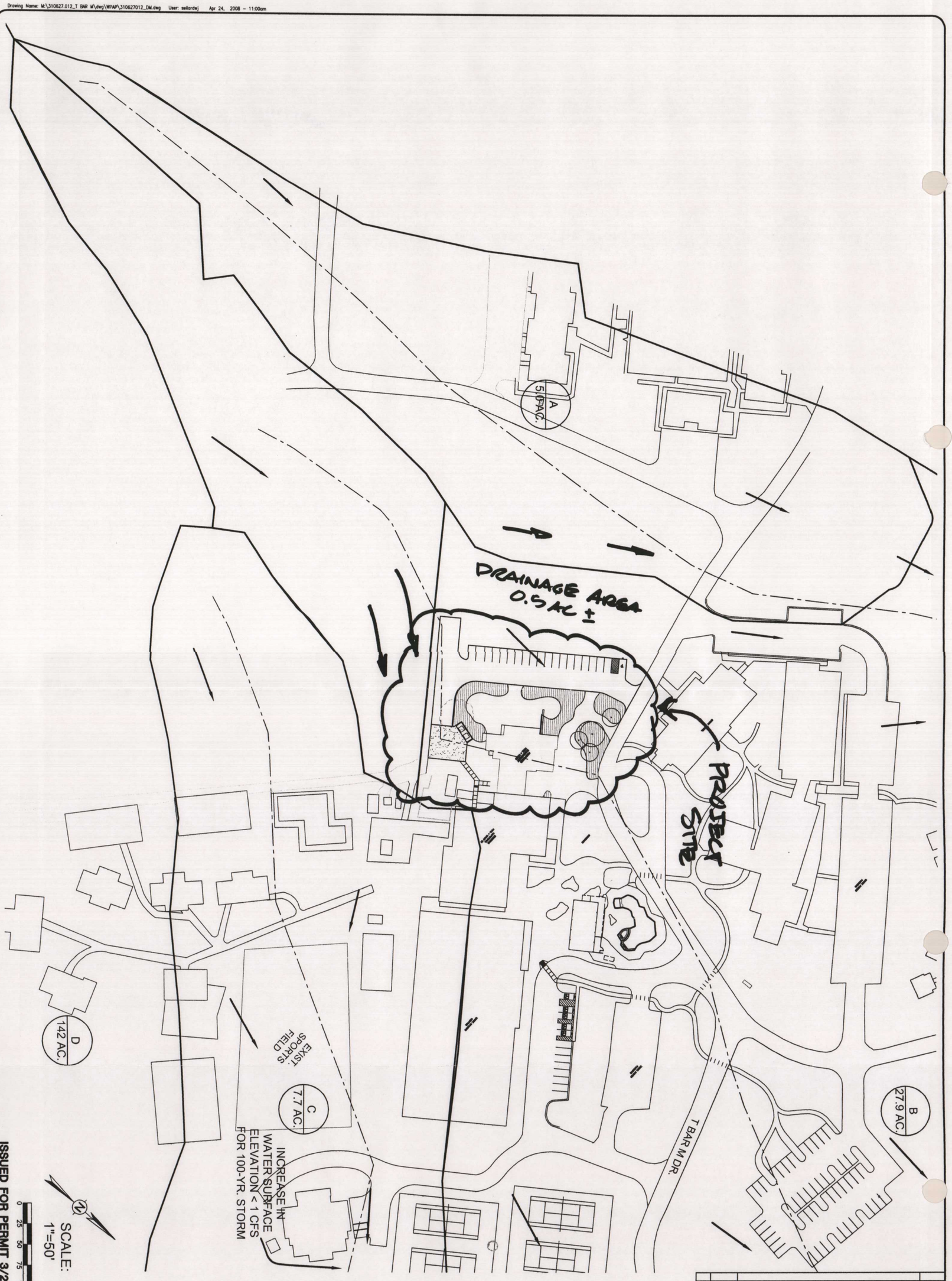

ISSUED FOR PERMIT 3/27/08

NO.	DATE	REVISION	BY

DATE:	10/12/07
DRAWN BY:	R.E.M.
DESIGNED BY:	R.E.M.
CHECKED BY:	GB
REVIEWED BY:	DM
PROJECT NUMBER:	310627.012

SHEET 4 OF 6

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

ONSITE DRAINAGE AREA MAP

Carter ▪ Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0060 Fax: (210) 494-0239
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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 1921 Cedar Bend, Suite 150 Austin, Texas 78758-5336 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

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

VEGETATIVE FILTER STRIPS

NATURAL FILTER STRIPS

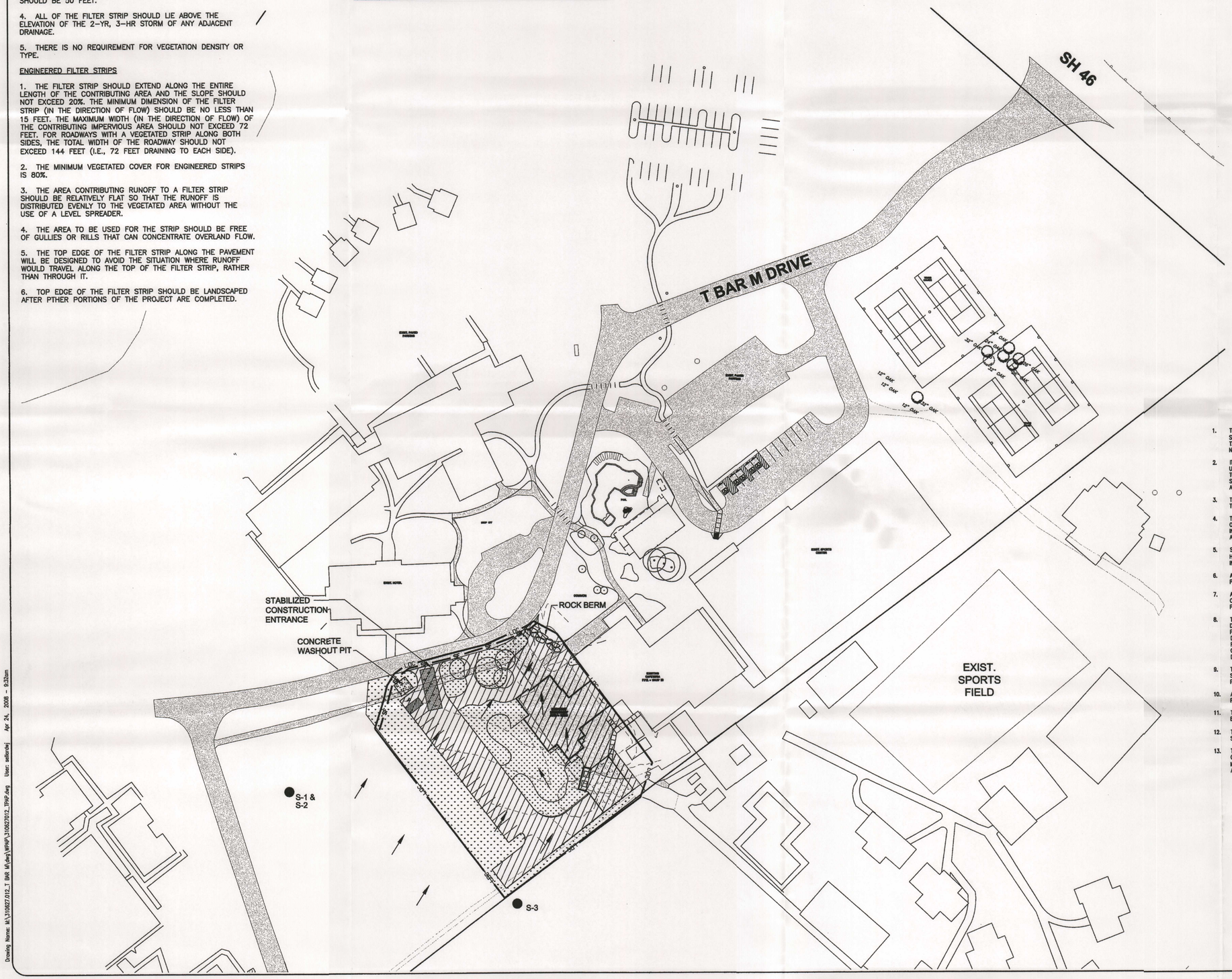
1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA.
2. THE SLOPE SHOULD NOT EXCEED 10%.
3. THE MINIMUM DIMENSION (IN THE DIRECTION OF FLOW) SHOULD BE 50 FEET.
4. ALL OF THE FILTER STRIP SHOULD LIE ABOVE THE ELEVATION OF THE 2-YR, 3-HR STORM OF ANY ADJACENT DRAINAGE.
5. THERE IS NO REQUIREMENT FOR VEGETATION DENSITY OR TYPE.

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD NOT EXCEED 20%. THE MINIMUM DIMENSION OF THE FILTER STRIP (IN THE DIRECTION OF FLOW) SHOULD BE NO LESS THAN 15 FEET. THE MAXIMUM WIDTH (IN THE DIRECTION OF FLOW) OF THE CONTRIBUTING IMPERVIOUS AREA SHOULD NOT EXCEED 72 FEET. FOR ROADWAYS WITH A VEGETATED STRIP ALONG BOTH SIDES, THE TOTAL WIDTH OF THE ROADWAY SHOULD NOT EXCEED 144 FEET (I.E., 72 FEET DRAINING TO EACH SIDE).
2. THE MINIMUM VEGETATED COVER FOR ENGINEERED STRIPS IS 80%.
3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THAT THE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.
4. THE AREA TO BE USED FOR THE STRIP SHOULD BE FREE OF GULLIES OR RILLS THAT CAN CONCENTRATE OVERLAND FLOW.
5. THE TOP EDGE OF THE FILTER STRIP ALONG THE PAVEMENT WILL BE DESIGNED TO AVOID THE SITUATION WHERE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.
6. TOP EDGE OF THE FILTER STRIP SHOULD BE LANDSCAPED AFTER PTHER PORTIONS OF THE PROJECT ARE COMPLETED.

A WATER POLLUTION ABATEMENT PLAN IS REQUIRED FOR THIS PROJECT. NO EXCAVATION OR EARTH MOVING ACTIVITIES MAY BEGIN UNTIL THE CONTRACTOR RECEIVES A COPY OF THE APPROVED WPAP OR A NOTICE TO PROCEED FROM THE ENGINEER. UPON APPROVAL OF THE WPAP, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR TYPE AND PLACEMENT OF STRUCTURAL BMPs THAT MEET THE REQUIREMENTS OF THE TCEQ. THIS WORK SHALL BE PAID FOR UNDER ITEM 5000 "WATER POLLUTION ABATEMENT PLAN".

NOTE:
T Bar M DR TO BE MAINTAINED TO PREVENT SEDIMENT/MUD FROM TRACKING ONTO HIGHWAY 46.



SCALE: 1"=50'

0 25 50 75 100

LEGEND

- EXISTING IMPERVIOUS COVER TO REMAIN
- EXISTING IMPERVIOUS COVER TO BE REMOVED
- PROPOSED IMPERVIOUS COVER
- AREAS WHERE SOIL STABILIZATION PRACTICES ARE TO OCCUR
- GEOLOGIC FEATURES
- —SF— PROPOSED SILT FENCE
- FLOW ARROW
- ROCK BERM
- —LOC— PROPOSED LIMITS OF CONSTRUCTION
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- CONCRETE TRUCK WASHOUT PIT

S.W.P.P.P. NOTES:

1. THE ESTIMATED AREA OF DISTURBANCE FOR THIS PROJECT IS 1.1 ACRES. THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH TPDES GENERAL PERMIT NO. TXR150000 AND POST A SIGNED CONSTRUCTION SITE NOTICE AT THE SITE, AS WELL AS FILE A COPY OF THAT NOTICE WITH THE CITY OF SAN ANTONIO AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION.
2. IT IS THE INTENT OF THE INFORMATION PROVIDED ON THIS SHEET AND WITHIN THE SPECIFICATIONS TO BE USED AS THE GENERAL GUIDELINES OF THE STORM WATER POLLUTION PREVENTION PLAN FOR THIS PROJECT TO ESTABLISH A MINIMUM BASIS OF COMPLIANCE WITH FEDERAL REGULATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN AND FOR ANY MODIFICATIONS REQUIRED TO OBTAIN THE TPDES PERMITS.
3. THE CONTRACTOR SHALL MAKE THE STORM WATER POLLUTION PREVENTION PLAN AVAILABLE, UPON REQUEST, TO TCEQ AND LOCAL AGENCIES.
4. THE CONTRACTOR MUST AMEND PLANS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, OR MAINTENANCE OF THE PLAN, OR WHEN THE EXISTING PLAN PROVES INEFFECTIVE. MODIFICATIONS, INCLUDING DESIGN AND ALL ADDITIONAL MATERIALS AND WORK, SHALL BE ACCOMPLISHED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. STABILIZATION MEASURES ARE TO BE INSPECTED AT A MINIMUM OF ONCE EVERY 7 DAYS AND WITHIN 24 HOURS AFTER ANY STORM EVENT GREATER THAN 1/2". REPAIRS TO INADEQUACIES REVEALED BY THE INSPECTION MUST BE IMPLEMENTED WITHIN 7 CALENDAR DAYS FOLLOWING THE INSPECTION.
6. AN INSPECTION REPORT THAT SUMMARIZES INSPECTION ACTIVITIES AND IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN SHALL BE RETAINED AND MADE PART OF THE PLAN.
7. ALL CONTRACTORS AND SUBCONTRACTORS IDENTIFIED IN THE PLAN MUST CERTIFY AS TO AN UNDERSTANDING OF THE NPDES GENERAL PERMIT BEFORE CONDUCTING ANY ACTIVITY IDENTIFIED IN THE POLLUTION PREVENTION PLAN.
8. THE CONTRACTOR SHALL ADOPT APPROPRIATE CONSTRUCTION SITE MANAGEMENT PRACTICES TO PREVENT THE DISCHARGE OF OILS, GREASE, PAINTS, GASOLINE, AND OTHER POLLUTANTS TO STORM WATER. APPROPRIATE PRACTICES CAN INCLUDE:
   DESIGNATING AREAS FOR EQUIPMENT MAINTENANCE AND REPAIR;
   REGULAR COLLECTION OF WASTES;
   CONVENIENTLY LOCATED WASTE RECEPTACLES; AND
   DESIGNATING AND CONTROLLING EQUIPMENT WASHDOWN.
9. THE CONTRACTOR SHALL AMEND OR MODIFY THIS PLAN AS REQUIRED BY CONSTRUCTION MEANS, METHODS AND SEQUENCE. MODIFICATIONS SHALL NOT COMPROMISE THE INTENT OF THE REQUIREMENTS OF THE LAW AND THIS PLAN. MODIFICATION SHALL NOT BE BASIS FOR ADDITIONAL COST TO THE OWNER.
10. AREAS OF CONSTRUCTION ELSEWHERE ON THE JOB SITE SHALL CONFORM TO THE DETAILS SHOWN ON THE PLANS.
11. THE CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION EXIT AT ALL TRAFFIC EXIT POINTS PRIOR TO EXITING ONTO ANY PAVED ROADWAY. EXIT SHALL BE CONSTRUCTED AS DETAILED ON THIS SHEET.
12. THE CONTRACTOR SHALL CONSTRUCT A SILT FENCE (SF) AT ALL LOCATIONS SHOWN ON PLANS. THE SF SHALL BE CONSTRUCTED AS DETAILED ON THIS SHEET.
13. THE CONTRACTOR SHALL DESIGNATE MATERIAL AND EQUIPMENT STORAGE AREAS MUTUALLY AGREED TO BY THE OWNER. THE STORAGE AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE AND THE SURFACE STABILIZED WITH A MINIMUM OF 2" OF CRUSHED ROCK OR GRAVEL. SILT FENCE SHALL BE INSTALLED AROUND THE STORAGE AREAS TO PREVENT ANY EROSION FROM LEAVING THE SITE.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 561-4000 Fax: (210) 494-4605
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STATE OF TEXAS — DAVID M. McBETH — 59223 — REGISTERED PROFESSIONAL ENGINEER

TEMPORARY WATER POLLUTION ABATEMENT PLAN

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE:	11/20/07
DRAWN BY:	R.E.M.
DESIGNED BY:	DM
CHECKED BY:	DM
REVIEWED BY:	DM
PROJECT NUMBER:	310627.012

SHEET 1 OF 6

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EROSION / SEDIMENTATION CONTROL:

This project is within the Edwards Aquifer Recharge Zone. All construction procedures within the scope of this contract shall comply with TCEQ regulations for construction work over the Edwards Aquifer Recharge Zone.

The TECQ requires erosion and sedimentation controls for construction over the Edwards Recharge Zone. Contractor shall provide erosion and sedimentation controls as noted on the project's plans. Contractor shall abide by all plan requirements.

At a minimum, these controls shall consist of rock berms and/or silt fences constructed parallel to and down gradient from the trenches. The rock berm or silt fences shall be installed in a manner such that any rainfall runoff shall be filtered. Hay bales shall not be used for temporary erosion and sedimentation controls.

All temporary erosion and sedimentation controls must be installed prior to construction and shall be maintained during construction by the contractor. The contractor shall remove the controls when vegetation is established and the construction area is stabilized per 31 TAC 313.5 (c)(12). Additional protection may be required if excessive solids are being discharged from the site.

All temporary erosion and sedimentation controls shall be removed by the contractor at final acceptance of the project by the owner/engineer.

Placement of temporary erosion and sedimentation controls shall be in accordance with the construction plans. Actual locations may vary slightly from the plans, but will be verified by the engineer/inspector in the field prior to construction. The contractor shall inspect the controls at weekly intervals and after every significant rainfall to insure disturbance of the structures has not occurred. Sediment deposited after a rainfall shall be removed from the site or placed in an engineer approved designated disposal area.

TELEPHONE LOCATOR

Note: "The existence and location of underground cable indicated on the plans are taken from the best records available and are not guaranteed to be accurate. Contractor to contact the telephone company cable locator 48 hours prior to excavation at 1-800-828-5127. Contractor has the responsibility to protect and support telephone company plant during construction."

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
1921 Cedar Bend, Suite 150
Austin, Texas 78758-5336
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

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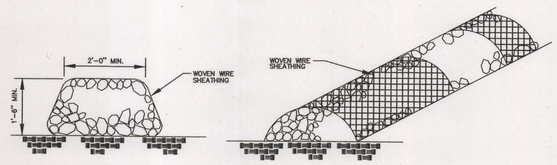
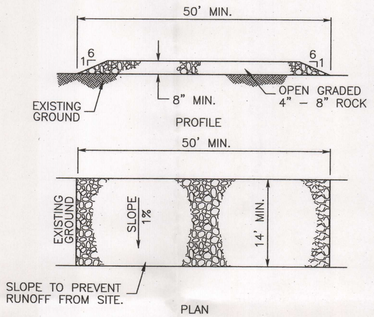


ROCK BERM
N.T.S.

GENERAL NOTES:

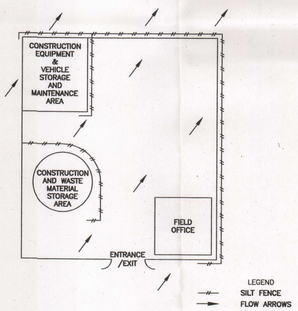
1. USE ONLY OPEN GRADED ROCK 3-5 INCHES DIAMETER.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE - WOVEN WIRE SHEATHING, 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 ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 6 INCHES.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.



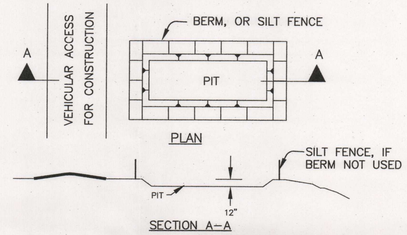
STABILIZED CONSTR. ENTRANCE
N.T.S.

GENERAL NOTES:

1. STONE SIZE - 4 TO 8 INCH OPEN ROCK.
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 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 SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A 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.



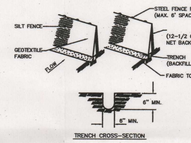
TYP. CONSTRUCTION STAGING AREA
N.T.S.



GENERAL NOTES:

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. IF SILT FENCE IS USED, FENCE SHALL BE PLACED IN ACCORDANCE WITH SILT FENCE DETAILS.
3. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
4. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

CONCRETE TRUCK WASHOUT PIT
N.T.S.



SILT FENCE
N.T.S.

WOVEN WIRE SUPPORT

NOTES:

1. 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.
2. 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 CAN NOT BE TREATED (e.g. pavement) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. 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.
4. TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. 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 ADDITIONAL SILTATION.
8. PROPERTIES OF GEOTEXTILE FABRIC SHALL HAVE A TENSILE STRENGTH OF 90 LBS., PUNCTURE RATING OF 60 LBS., MULLEN BURST RATING OF 280 PSI, AND APPARENT OPENING SIZE, U.S. SIEVE NO. 20.

GENERAL NOTES:

1. HOME BUILDING MATERIALS SHALL BE PLACED ON EACH INDIVIDUAL LOT BEHIND THE SILT FENCE. WHERE THIS IS NOT PRACTICAL, SILT FENCE SHALL BE PLACED DOWN GRADIENT OF THE BUILDING MATERIALS.
2. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.
4. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER FOR ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
6. THE CONTRACTOR WILL BE RESPONSIBLE FOR FILING ALL NOI's(NOTICE OF INTENT) AND NOT's (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO THE TPDES BOOK FOR THE NECESSARY FORMS.
7. A COPY OF THIS PLAN AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0799 Fax (210) 494-4825
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STATE OF TEXAS — DAVID M. MOBETH — 69723 — REGISTERED PROFESSIONAL ENGINEER

GENERAL NOTES AND DETAILS

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET 1

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: **T BAR M, INC./**

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.**

__ 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.

X 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. N/A **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. N/A 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.

N/A 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.

N/A **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.

__ **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:

David McBeth, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent

4/09/09
Date

Attachment A – 20% or Less Impervious Cover Waiver

Not Applicable.

Attachment B – BMPs for Upgradient Stormwater

The site is located about 4 miles north of the Transition boundary and is within the Edwards Aquifer Recharge Zone in the New Braunfels West, Texas quadrangle. Based on the USGS Official Edwards Aquifer Recharge Zone Map, the site accepts approximately 0.5 acres of upgradient stormwater. The upgradient drainage area consists of undeveloped forested vegetation, open pasture land at the upper limits of the drainage area. The majority of this upgradient runoff is diverted along the property boundary easterly to Blieders Creek. The construction boundary within the site accepts less than 10% of this flow. Vegetative filter strips will be used to treat stormwater runoff. In addition, existing impervious cover will be treated to account for some of the proposed improvements. The on-site storm water drains through the site and into an un-named tributary of Blieders Creek on the south side of State Highway 46.

Attachment C – BMPs for On-site Stormwater

Disturbed areas shall be hydromulched upon completion of construction to stabilize the soils. Areas designated as engineered filter strips will be sodded to enhance the establishment of the permanent filter strips. Reference the Temporary Pollution Abatement Plan sheet for areas where soil stabilization practices are expected to occur.

Attachment D – BMPs for Surface Streams

The BMPs that will be used to protect Blieders Creek will be the vegetative filter strips. S-1 & S-2, "possible sensitive" recharge features were identified as a manmade holes for flagpoles in the Geologic Assessment. They are located upstream of the improvements proposed in this WPAP and will not require protection. S-3 a "possible sensitive" recharge feature was identified as an excavated area made to repair a waterline in the Geologic Assessment. It is located upstream of the improvements proposed in this WPAP and will not require protection. S-4 and S-5, "possible sensitive" recharge features were identified as a bedding plane feature near the bottom of the creek and eroded pavement area respectively in the Geologic Assessment. They have been protected with vegetative filter strips for the former and the latter has been repaired and will not require protection

Attachment E – Request to Seal Features

Not applicable

Attachment G– Maintenance and Inspection Plan

Reference the Maintenance Plan and Schedule provided at the end of this section.

Attachment I – Measures for Minimizing Surface Stream Contamination

All surface streams will be protected from erosion by not allowing runoff to exceed existing velocities.

MAINTENANCE PLAN AND SCHEDULE
PERMANENT POLLUTION ABATEMENT MEASURES
T BAR M, INC.
RESTAURANT BUILDING

VEGETATIVE FILTER STRIPS

Maintenance and inspection of the vegetative filter strips is to be conducted in accordance with TCEQ Technical Guidance Manual (2005) Chapter 3.5.8, as described below.

- *Pest Management.* An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- *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 vegetated filter strip areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the 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 and 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.

- *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.

I acknowledge that I have read the above Maintenance Plan and Schedule for Permanent Pollution Abatement Measures.

Owner or Responsible Party

2/26/08
Date

VEGETATIVE FILTER STRIPS

NATURAL FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA.

2. THE SLOPE SHOULD NOT EXCEED 10%.

3. THE MINIMUM DIMENSION (IN THE DIRECTION OF FLOW) SHOULD BE 50 FEET.

4. ALL OF THE FILTER STRIP SHOULD LIE ABOVE THE ELEVATION OF THE 2–YR, 3–HR STORM OF ANY ADJACENT DRAINAGE.

5. THERE IS NO REQUIREMENT FOR VEGETATION DENSITY OR TYPE.

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD NOT EXCEED 20%. THE MINIMUM DIMENSION OF THE FILTER STRIP (IN THE DIRECTION OF FLOW) SHOULD BE NO LESS THAN 15 FEET. THE MAXIMUM WIDTH (IN THE DIRECTION OF FLOW) OF THE CONTRIBUTING IMPERVIOUS AREA SHOULD NOT EXCEED 72 FEET. FOR ROADWAYS WITH A VEGETATED STRIP ALONG BOTH SIDES, THE TOTAL WIDTH OF THE ROADWAY SHOULD NOT EXCEED 144 FEET (I.E., 72 FEET DRAINING TO EACH SIDE).

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED STRIPS IS 80%.

3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THAT THE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.

4. THE AREA TO BE USED FOR THE STRIP SHOULD BE FREE OF GULLIES OR RILLS THAT CAN CONCENTRATE OVERLAND FLOW.

5. THE TOP EDGE OF THE FILTER STRIP ALONG THE PAVEMENT WILL BE DESIGNED TO AVOID THE SITUATION WHERE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. TOP EDGE OF THE FILTER STRIP SHOULD BE LANDSCAPED AFTER OTHER PORTIONS OF THE PROJECT ARE COMPLETED.

A WATER POLLUTION ABATEMENT PLAN IS REQUIRED FOR THIS PROJECT. NO EXCAVATION OR EARTH MOVING ACTIVITIES MAY BEGIN UNTIL THE CONTRACTOR RECEIVES A COPY OF THE APPROVED WPAP OR A NOTICE TO PROCEED FROM THE ENGINEER. UPON APPROVAL OF THE WPAP, THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR TYPE AND PLACEMENT OF STRUCTURAL BMPs THAT MEET THE REQUIREMENTS OF THE TCEQ. THIS WORK SHALL BE PAID FOR UNDER ITEM 5000 "WATER POLLUTION ABATEMENT PLAN".



NOTE:
T Bar M DR TO BE MAINTAINED TO PREVENT SEDIMENT/MUD FROM TRACKING ONTO HIGHWAY 46.

LEGEND

- EXISTING IMPERVIOUS COVER TO REMAIN
- PROPOSED IMPERVIOUS COVER (TREATMENT)
- ENGINEERED VEGETATIVE FILTER STRIPS (SOILD SOD)
- GEOLOGIC FEATURES

NOTE:
CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC BARRICADES/CONTROL AS NEEDED.

IMPERVIOUS COVER SUMMARY

EXISTING IMPERVIOUS COVER TO BE REMOVED:	0.23 ACRES
PROPOSED IMPERVIOUS COVER:	0.60 ACRES
NET INCREASE IMPERVIOUS COVER:	0.37 ACRES
AREA TREATED BY ENGINEERED VEGETATED FILTER STRIP:	0.38 ACRES

SCALE: 1"=50'
0 25 50 75 100

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 447-4500 Fax (210) 447-4505

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STATE OF TEXAS · DAVID M. McBETH · 68223 · REGISTERED PROFESSIONAL ENGINEER

PERMANENT WATER POLLUTION ABATEMENT PLAN

NEW RESTAURANT

T Bar M RESORT
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS

DATE: 11/20/07
DRAWN BY: R.E.M.
DESIGNED BY: DM
CHECKED BY: DM
REVIEWED BY: DM
PROJECT NUMBER: 310627.012

SHEET 1

Drawing Name: M:\310627.012_T BAR M\dwg\WPAP\310627012_PPAP.dwg User: forleywp Apr 28, 2008 - 1:37pm

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

I, **Scott Turpin**,
Print Name

President
Title - Owner/President/Other

Of **T Bar M**
Corporation/Partnership/Entity Name

have authorized **David McBeth**
Print Name of Agent/Engineer

Of **Jacobs Carter Burgess**
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.

Applicant's Signature — Date: 2/26/08

THE STATE OF Texas §

County of Dallas §

BEFORE ME, the undersigned authority, on this day personally appeared Scott A. Turpin known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 26 day of February, 2008.

NOTARY PUBLIC June Maxfield Maxey

Typed or Printed Name of Notary JUNE MAXFIELD MAXEY

MY COMMISSION EXPIRES: 11-17-2009

June Maxfield Maxey
Notary Public, State of Texas
My Commission Expires:
November 17, 2009

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

NAME OF PROPOSED REGULATED ENTITY: **T BAR M, INC.**
REGULATED ENTITY LOCATION: **Located on the south side of State Highway 46 West approximately 1/2 mile north of the intersection of FM 1863 and State Highway 46 West**
NAME OF CUSTOMER: **T Bar M**
CONTACT PERSON: **Scott Turpin** PHONE: **(214) 692-4254**

Customer Reference Number (if issued): CN 600793111 (nine digits)
Regulated Entity Reference Number (if issued): RN 102745502 (nine digits)

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

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

☒ **SAN ANTONIO REGIONAL OFFICE**
☐ **Mailed to TCEQ**:
TCEQ - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

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

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement, Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement, Non-residential	**9.3 Acres**	**$ 4,000**
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature

4/25/00
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 §213.14 (effective 11/14/97) & 30 TAC §213.9 (effective 6/1/99)

Water Pollution Abatement Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	<5	$500
Multiple Single Family Residential and Parks	<5 5 < 10 10 < 50 ≥50	$1,000 $2,000 $3,000 $5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 ≥10	$2,000 $3,000 $4,000 $5,000

Organized Sewage Collection Systems and Modifications

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$500 - $5,000

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	$500	$500 - $5,000

Exception Requests

PROJECT	FEE
Exception Request	$250

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$100

T Bar M, Inc. 33785

VENDOR NO: 9534 NAME: TEXAS COMMISSION CHECK DATE: 3/31/2008

REFERENCE	INV DATE	INV DESCRIPTION	GROSS AMOUNT	DISCOUNT TAKEN	NET AMOUNT PAID
TBARM WPAP	3/31/2008	1318-08-06	4,000.00	0.00	4,000.00
		TOTAL >	4,000.00	0.00	4,000.00

THIS CHECK IS VOID WITHOUT A BLUE & RED BACKGROUND AND A TRUE WATERMARK - HOLD UP TO THE LIGHT TO VERIFY

T Bar M, Inc.
2549 Hwy 46 W
New Braunfels, TX 78132-3725
(830) 625-7738

Chase Bank of Texas - New Braunfels
111 West San Antonio Street
32-115/1110

33785

DATE 3/31/2008

AMOUNT *** 4,000.00

PAY Four Thousand and 00/100******

TO THE ORDER OF
TEXAS COMMISSION
On Environmental Quality
P.O.Box 13088
Austin,, TX 78711-3088
USA

Annabelle M Baily

CHECK IS PRINTED ON SECURITY PAPER WHICH INCLUDES A MICROPRINT BORDER & FLUORESCENT FIBERS

⑈33785⑈ ⑆111000614⑆ ⑈0580024640 5⑈

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 Report and applicable attachments

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 600793111		RN 102745502

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) April 2008

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:*

T Bar M, Inc.

10. Mailing Address: 8201 Preston Road

City	State	ZIP	ZIP + 4
Dallas	TX	75225	

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)*
(214) 692-4254		(830) 625-5959

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)*
741658885	17416588857		

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)*

T Bar M, Inc

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 SH 46 W						
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4
25. Mailing Address:	Same						
	City		State		ZIP		ZIP + 4

26. E-Mail Address:	sturpin@tbarm.com

27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(830) 625-7738		(830) 620-6018

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)
7011	7999	721214	71394

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

resort, sports facilities, meeting and dining facilities

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

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		38. Longitude (W) In Decimal:	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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

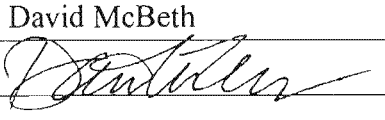
40. Name:	David M McBeth , P.E.	41. Title:	Sr Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 494-0088	6352	(210) 494-4525	david.mcbeth@jacobs.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	Jacobs Carter Burgess	**Job Title:**	Project Engineer
Name *(In Print)* :	David McBeth	**Phone:**	(210) 494-0088
Signature:		**Date:**	4/24/2008

Doc# 90306002418

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 20, 2002

Mr. Scott Turpin
T Bar M, Inc./ Center for Christian Growth
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: T Bar M; Located at 2549 Highway 46 West; 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 File No.1899.00; Investigation No. 17611.

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Mr. Jeff Moeller, P.E. of Carter & Burgess, Inc. on behalf of T Bar M, Inc./ Center for Christian Growth on September 26, 2002. Final review of the application was completed after additional materials were submitted on December 9, 2002, and December 13, 2002. As presented to the TCEQ, the Temporary and Permanent 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 20 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover will be 3.46 acres (37.2% percent). Project wastewater will be disposed of by conveyance to the existing Gruene Waste Water Recycling Center owned by the City of New Braunfels.

PERMANENT POLLUTION ABATEMENT MEASURES

Five individual permanent vegetative filter strips will be constructed to treat stormwater runoff. The individual treatment measures will consist of the following:

Permanent Best Management Practice (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

The approved measures are presented to meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

GEOLOGY

According to the geologic assessment included with the application, four possibly sensitive features and one not sensitive feature were identified on the proposed project site. The possibly sensitive features were described by the geologist as four man-made features and one solution cavity. The San Antonio Regional Office did conduct a site inspection on October 18, 2002. The site inspection revealed that the site geology is consistent with the geologic assessment and no additional features were noted.

SPECIAL CONDITIONS

I. All permanent pollution abatement measures shall be operational prior to commencement of any commercial operation for each phase of development.

II. The vegetative filtration areas are designed in accordance with the document *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (June 1999)*. The basins will incorporate sedimentation and filtration as described above.

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. 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.

3. 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.

4. 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.

5. 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 file 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.

6. 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.

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

<u>During Construction:</u>

8. 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.

9. 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.

10. 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.

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

12. 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.

13. 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:

14. 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.

15. 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 the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

16. 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.

Doc# 200306002418

17. 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.

18. 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 Tom Gutierrez of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4025.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/TG/eg

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

cc: Mr. Jeff Moeller, P.E., Carter & Burgess, Inc.
Mr. John Bohuslav, TXDOT San Antonio District
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

Doc# 200306002418
Pages 6
01/22/2003 12:29:12 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $19.00

STATE OF TEXAS
COUNTY OF COMAL

This is to certify that this document was FILED and RECORDED in the Official Public Records of Comal County, Texas on the date and time stamped thereon.

Joy Streater
COUNTY CLERK

Doc# 200306002418

ATTACHMENT "B"
Project Description

The owner has decided to complete the final phase of the approved WPAP dating back to 2002 attached to this section. In additional they wish to make some improvements to other areas of the camp as well. Below is a description of the proposed areas and how they correspond to treatment. Area 3 listed below is the continuation of the currently approved WPAP that is being modified.

The proposed improvements are divided into 4 separate areas. Area 1 is the only portion of the project that will not utilize previously approved BMP sizing. Area 2 is a reduction of impervious cover from improvements from past approved WPAP's that did not define areas of vegetation; however it is our opinion the net loss of impervious cover is an improved condition. Area 3 is a completion of the plan that we propose to modify. Area 4 is separate from the other 3 and with have self-contained Rainwater Harvesting systems for the proposed structures. Currently the project limits contains 2.80 acres of impervious cover and this plan proposed to take the 15.39 acre project area to a total of 5.60 acres of impervious cover.

AREA 1

Background Load Calculations

Site Area = 4.003ac
Existing Impervious Area = 0.246ac (6.1 % Imp)
Proposed Impervious Area = 1.203ac (30.0 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(.061)^2 + 0.328(0.061) + 0.030
Rv Exist = 0.052

Au = Site Area - Impervious Area
Au = 4.003ac - 0.246ac
Au = 3.757ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(3.757 x 0.54 + 0.246 x 0.052 x 38.4)
L=83.2

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.30)^2 + 0.328(0.30) + 0.030
Rv Prop = 0.178

L = A x P x Rv x 38.4
L = 4.003ac x 33 x 0.178 x 38.4
L = 902.9

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(902.9 - 83.2)
Lr = 655.8

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
655.8 = 902.9 x FS x 0.85
FS = 0.855

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.885 x 1.203
MF = 1.065ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 1.065ac/TA
TA = 0.64ac

Proposed Vegetative Filter Strips = 1.15ac

AREA 3

Background Load Calculations

Site Area = 0.411ac
Existing Impervious Area = 0.0ac (0.0 % Imp)
Proposed Impervious Area = 0.170ac (41.4 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.0)^2 + 0.328(0.0) + 0.030
Rv Exist = 0.030

Au = Site Area - Impervious Area
Au = 0.411ac - 0.0ac
Au = 0.411ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.411 x 0.54 + 0.0 x 0.030 x 38.4)
L=7.32

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.414)^2 + 0.328(0.414) + 0.030
Rv Prop = 0.259

L = A x P x Rv x 38.4
L = 0.411ac x 33 x 0.259 x 38.4
L = 134.9

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(134.9 - 7.32)
Lr = 102.1

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
102.1 = 134.9 x FS x 0.85
FS = 0.89

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.89 x 0.170
MF = 0.15ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.15ac/TA
TA = 0.09ac

Proposed Vegetative Filter Strips = 0.10ac

AREA 4

Background Load Calculations

Site Area = 1.157ac
Existing Impervious Area = 0.284ac (24.5 % Imp)
Proposed Impervious Area = 0.726ac (60.9 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.245)^2 + 0.328(0.245) + 0.030
Rv Exist = 0.143

Au = Site Area - Impervious Area
Au = 1.157ac - 0.284ac
Au = 0.873ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.873 x 0.54 + 0.284 x 0.143 x 38.4)
L=67.0

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.609)^2 + 0.328(0.609) + 0.030
Rv Prop = 0.432

L = A x P x Rv x 38.4
L = 1.192ac x 33 x 0.432 x 38.4
L = 652.5

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(652.5 - 67.0)
Lr = 468.4

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
468.4 = 652.5 x FS x 0.85
FS = 0.844

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.844 x 0.726
MF = 0.613ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.613ac/TA
TA = 0.37ac

Proposed Vegetative Filter Strips = 0.37ac

AREA 5

Background Load Calculations

Site Area = 0.383ac
Existing Impervious Area = 0.0ac (0.0 % Imp)
Proposed Impervious Area = 0.126ac (32.9 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.0)^2 + 0.328(0.0) + 0.030
Rv Exist = 0.030

Au = Site Area - Impervious Area
Au = 0.383ac - 0.0ac
Au = 0.383ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(0.383 x 0.54 + 0.0 x 0.030 x 38.4)
L=6.83

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(0.329)^2 + 0.328(0.329) + 0.030
Rv Prop = 0.197

L = A x P x Rv x 38.4
L = 0.383ac x 33 x 0.197 x 38.4
L = 95.6

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(95.6 - 6.83)
Lr = 71.0

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
71.0 = 95.6 x FS x 0.85
FS = 0.874

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.874 x 0.126
MF = 0.110ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 0.11ac/TA
TA = 0.066ac

Proposed Vegetative Filter Strips = 0.126ac

AREA 2

Background Load Calculations

Site Area = 3.352ac
Existing Impervious Area = 1.262ac (37.6 % Imp)
Proposed Impervious Area = 1.824ac (54.4 % Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(0.376)^2 + 0.328(0.376) + 0.030
Rv Exist = 0.231

Au = Site Area - Impervious Area
Au = 3.352ac - 1.262ac
Au = 2.09ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(2.09 x 0.54 + 1.262 x 0.231 x 38.4)
L=406.7

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(.544)^2 + 0.328(0.544) + 0.030
Rv Prop = 0.37

L = A x P x Rv x 38.4
L = 3.352ac x 33 x 0.37 x 38.4
L = 1571.6

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(1571.6 - 406.7)
Lr = 931.9

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
931.9 = 1571.6 x FS x 0.85
FS = 0.697

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.697 x 1.824
MF = 1.271ac

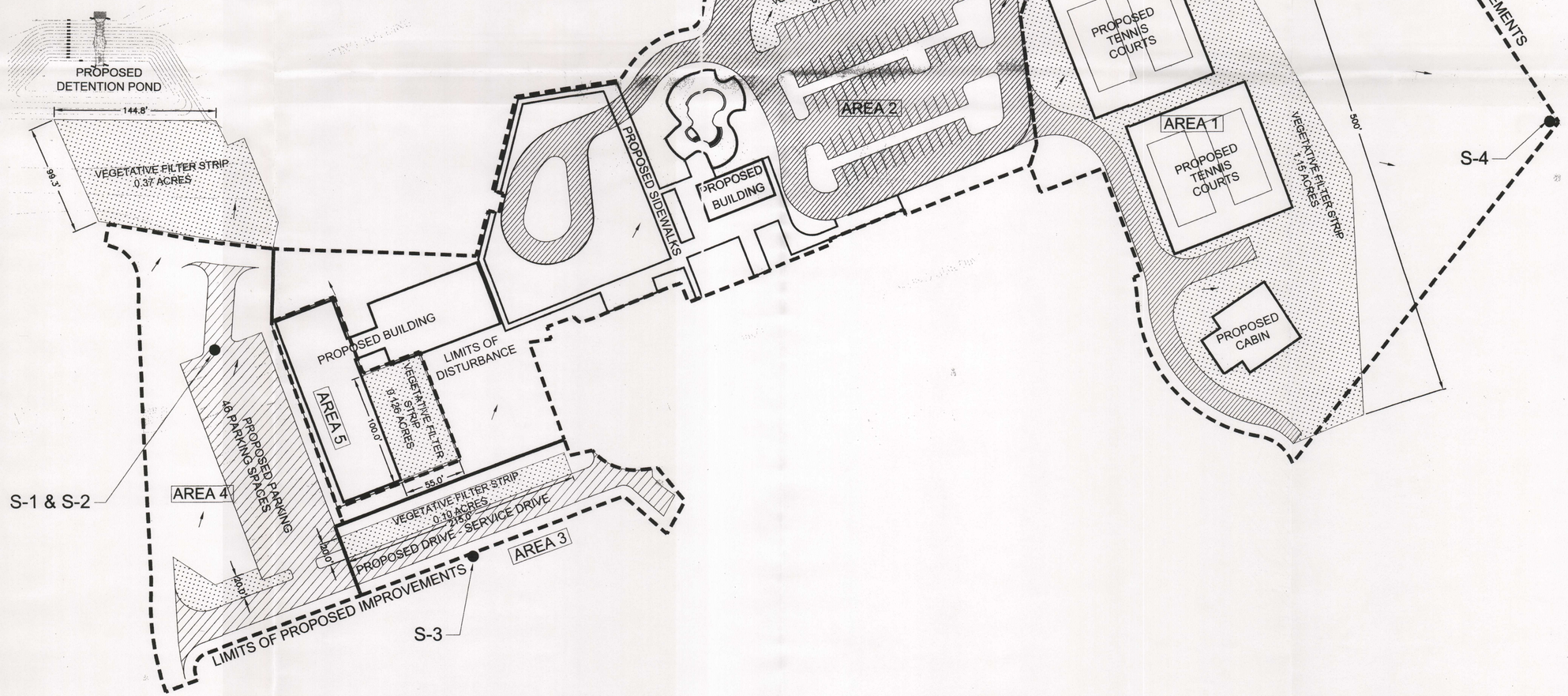
Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 1.271ac/TA
TA = 0.760ac

Proposed Vegetative Filter Strips = 0.77ac

BERMS SHALL BE PLACED AT ! 0 FT INTERVALS PERPENDICULAR] O THE TOP EDGE OF THE STRIP TO PREVI NT RUNOFF FROM BYPASSING THE FILTER STRIP.



SCALE:
1"=50'

NO.	DATE	REVISION	BY
1	12/09/02	REVISED PER TCEQ COMMENTS	TMS
2	12/11/02	REVISED PER TCEQ COMMENTS	TMS

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 400
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4626

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JEFFREY D. MOELLER 88588 LICENSED PROFESSIONAL ENGINEER 12/12/02

PERMANENT PLAN

POOL AND CABIN IMPROVEMENTS
T BAR M, INC.

CENTER FOR CHRISTIAN GROWTH
2549 HWY. 46 WEST
NEW BRAUNFELS, TEXAS 78132

DATE:	6-26-02
DRAWN BY:	JOS
DESIGNED BY:	TMS
CHECKED BY:	JDM
REVIEWED BY:	TMS
PROJECT NUMBER:	31-0147-000

SHEET
OF

"RECEIVED TCEQ" SAN ANTONIO REGION
2002 DEC 13 PM 2:00

Drawing Name: M:\31014700 T Bar M\Dwg\PWP\PERMANENT PLAN.dwg Dec 11, 2002 - 6:04pm

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Shane Klar, P.E

Date: 6/24/15

Signature of Customer/Agent:



Regulated Entity Name: _____

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property):15.39

3. Estimated projected population:85

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	16,220	÷ 43,560 =	0.37
Parking	124,575	÷ 43,560 =	2.86
Other paved surfaces	103,238	÷ 43,560 =	2.37
Total Impervious Cover	244,033	÷ 43,560 =	5.60

Total Impervious Cover 5.60 ÷ **Total Acreage** 15.39 **X 100 =** 36.4**% Impervious Cover**

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

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

For Road Projects Only

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

7. Type of project:

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

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

   ☐ Concrete
   ☐ Asphaltic concrete pavement
   ☐ Other: _____

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

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

10. Length of pavement area: _____ feet.

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

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

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

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

100% Domestic	4,200Gallons/day
_____% Industrial	_____Gallons/day
_____% Commingled	_____Gallons/day
TOTAL gallons/day 4,200	

15. Wastewater will be disposed of by:

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

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

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

☒ Sewage Collection System (Sewer Lines):

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

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

☐ The SCS was previously submitted on_____.

☐ The SCS was submitted with this application.

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

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

☒ Existing.
☐ Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 100'.

18. 100-year floodplain boundaries:

☒ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☐ No part of the project site is located within the 100-year floodplain.
The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): _____

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

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

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

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

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

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

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

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

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

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

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

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

26. ☐ Surface waters (including wetlands).

    ☒ N/A

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

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

28. ☒ Legal boundaries of the site are shown.

Administrative Information

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

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

ATTACHMENT "A"
Factors Affecting Water Quality

The development will consist of a 3 building structures totaling approximately 16,220 square feet, and associated parking with a Rainwater Harvesting System and Vegetative Filter Strips. This will result in minimal to no pollution from the site. Some pollution may originate from automobile wastes and cleaning chemicals which may have an effect on surface water by sediments leaving the site after a rainfall event.

ATTACHMENT "B"
Volume and Character of Stormwater

The development of this site will result in a minimal increase in stormwater run-off.. Onsite stormwater within the building area will be captured and treated by a Rainwater Harvesting System and the remaining parking and drives will drain to Vegetative Filter strips. All existing drainage patterns will remain.

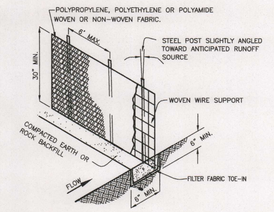
The drainage onsite will continue maintain existing drainage patterns.

ATTACHMENT "C"
Suitability Letter from Authorized Agent

There is no proposed OSSF.

ATTACHMENT "D"
Exception to the Required Geologic Assessment

No exception will be requested.



SILT FENCE

MATERIALS:

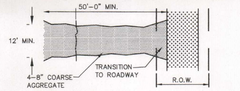
1. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN2, ULTRAVIOLET STABILITY EXCEEDING 70% AND MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
2. FENCE POSTS SHOULD BE MADE OF HOT ROLLED STEEL, AT LEAST 4 FEET LONG WITH TEE OR YBAR CROSS SECTION, SURFACE PAINTED OR GALVANIZED, MINIMUM NOMINAL WEIGHT 1.25 LB/FT2, AND BRINDELL HARDNESS EXCEEDING 140.
3. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2" X 4" WELDED WIRE, 12 GAUGE MINIMUM.

INSTALLATION:

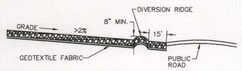
1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1— FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
2. LAY OUT FENCING DOWN—SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
3. THE TOE OF THE SILT FENCE SHOULD BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN—SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3—FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES:

1. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION OF FENCE IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.



PLAN VIEW



PROFILE

STABILIZED CONSTRUCTION ENTRANCE / EXIT

MATERIALS:

1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION AS SPECIFIED IN THE PLAN.
2. THE AGGREGATE SHOULD BE PLACED WITH A MINIMUM THICKNESS OF 8 INCHES.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OZ/YD2, A MULLEN BURST RATING OF 140 LB/IN2, AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. IF A WASHING FACILITY IS REQUIRED, A LEVEL AREA WITH A MINIMUM OF 4 INCH DIAMETER WASHED STONE OR COMMERCIAL RACK SHOULD BE INCLUDED IN THE PLANS. DIVERT WASTEWATER TO A SEDIMENT TRAP OR BASIN.

INSTALLATION:

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM THE FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES:

1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR LOWING OF SEDIMENT ONTO PUBLIC RIGHTS—OF—WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS—OF—WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT—OF—WAY.
4. WHEN WASHING IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

ROCK BERM

MATERIALS:

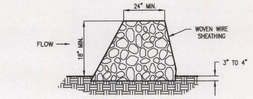
1. THE BERM STRUCTURE SHOULD BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM OPENING OF 11 INCH AND A MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED AND SHOULD BE SECURED WITH SHOAT RINGS.
2. CLEAN, OPEN GRADED 3 — 5 INCH DIAMETER ROCK SHOULD BE USED, EXCEPT IN AREAS WHERE HIGH VELOCITIES OR LARGE VOLUMES OF FLOW ARE EXPECTED, WHERE 5 — 8 INCH DIAMETERS ROCKS MAY BE USED.

INSTALLATION:

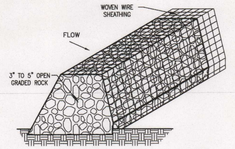
1. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS
2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER
3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM, TO A HEIGHT OF NOT LESS THAN 18 INCHES.
4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAPS AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

INSPECTION AND MAINTENANCE GUIDELINES:

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL. REPAIR OR REPLACEMENT SHOULD BE MADE PROMPTLY AS NEEDED BY CONTRACTOR.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6" AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.



CROSS SECTION



ISOMETRIC PLAN VIEW

HYDRAULIC MULCH

MATERIALS:

HYDRAULIC MULCHES: WOOD FIBER MULCH CAN BE APPLIED ALONE OR AS A COMPONENT OF HYDRAULIC MATRICES. WOOD FIBER APPLIED ALONE IS TYPICALLY APPLIED AT THE RATE OF 2,000 TO 4,000 LB/ACRE. WOOD FIBER MULCH IS MANUFACTURED FROM WOOD OR WOOD WASTE FROM LUMBER MILLS OR FROM URBAN SOURCES.

HYDRAULIC MATRICES: HYDRAULIC MATRICES INCLUDE A MIXTURE OF WOOD FIBER AND ACRYLIC POLYMER OR OTHER TACKIFIER AS BINDER. APPLY AS A LIQUID SLURRY USING A HYDRAULIC APPLICATION MACHINE (I.E., HYDRO SEEDER) AT THE FOLLOWING MINIMUM RATES, OR AS SPECIFIED BY THE MANUFACTURER TO ACHIEVE COMPLETE COVERAGE OF THE TARGET AREA: 2,000 TO 4,000 LB/ACRE WOOD FIBER MULCH, AND 5 TO 10% (BY WEIGHT) OF TACKIFIER (ACRYLIC COPOLYMER, GUAR, PSYLLIUM, ETC.)

BONDED FIBER MATRIX: BONDED FIBER MATRIX (BFM) IS A HYDRAULICALLY APPLIED SYSTEM OF FIBERS AND ADHESIVES THAT UPON DRYING FORMS AN EROSION RESISTANT BLANKET THAT PROMOTES VEGETATION, AND PREVENTS SOIL EROSION. BFMS ARE TYPICALLY APPLIED AT RATES FROM 3,000 LB/ACRE TO 4,000 LB/ACRE BASED ON THE MANUFACTURER'S RECOMMENDATION. A BIODEGRADABLE BFM IS COMPOSED OF MATERIALS THAT ARE 100% BIODEGRADABLE. THE BINDER IN THE BFM SHOULD ALSO BE BIODEGRADABLE AND SHOULD NOT DISSOLVE OR DISPERSE UPON RE—WETTING. TYPICALLY, BIODEGRADABLE BFMS SHOULD NOT BE APPLIED IMMEDIATELY BEFORE, DURING OR IMMEDIATELY AFTER RAINFALL IF THE SOIL IS SATURATED. DEPENDING ON THE PRODUCT, BFMS TYPICALLY REQUIRE 12 TO 24 HOURS TO DRY AND BECOME EFFECTIVE.

INSTALLATION:

1. PRIOR TO APPLICATION, ROUGHEN EMBANKMENT AND FILL AREAS BY ROLLING WITH A CRIMPING OR PUNCHING TYPE ROLLER OR BY TRACK WALKING. TRACK WALKING SHALL ONLY BE USED WHERE OTHER METHODS ARE IMPRACTICAL.
2. TO BE EFFECTIVE, HYDRAULIC MATRICES REQUIRE 24 HOURS TO DRY BEFORE RAINFALL OCCURS.
3. AVOID MULCH OVER SPRAY ONTO ROADS, SIDEWALKS, DRAINAGE CHANNELS, EXISTING VEGETATION, ETC.

INSPECTION AND MAINTENANCE GUIDELINES:

1. MULCHED AREAS SHOULD BE INSPECTED WEEKLY AND AFTER EACH RAIN EVENT TO LOCATE AND REPAIR ANY DAMAGE.
2. AREAS DAMAGED BY STORMS OR NORMAL CONSTRUCTION ACTIVITIES SHOULD BE REGRADED AND HYDRAULIC MULCH REAPPLIED AS SOON AS PRACTICAL.

SOIL STABILIZATION NOTE

ALL DISTURBED SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITH 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.

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

811 Know what's below. Call before you dig.

STATE OF TEXAS
SHANE KLAR
115810
LICENSED PROFESSIONAL ENGINEER
6/25/15

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES
Engineering Solutions
1040 N. WALNUT AVE. STE B, NEW BRAUNFELS, TX. 78130
PH: 830—358—7127 www.mo—tx.com
TBPE FIRM # 13951

WPAP DETAILS

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 2 OF 2

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Basin	Area (AC)	Exsitng Imp. Cover (ft^2)	Proposed Imp. Cover (ft^2)	BMP
1	5.88	6,050	124,575	VFS
2	6.94	105,095	76,483	NONE
3	1.34	10,979	58,513	VFS/Rainwater Harvesting
4	1.23	0	4,400	Rainwater Harvesting

0 100' 200'

LEGEND

- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE/EXIT
- 900 EXISTING CONTOURS
- FLOW ARROWS
- PROJECT LIMITS
- VEGETATIVE FILTER STRIP
- 100 YR FLOODPLAIN

TOTAL PROJECT AREA	=	15.39 AC
EXISTING IMPERVIOUS AREA	=	2.80 AC
PROPOSED IMPERVIOUS AREA	=	5.60 AC
% IMPERVIOUS	=	36.4%

SOIL STABILIZATION NOTE

ALL DISTURBED SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITH 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.



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NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions
1040 N. WALNUT AVE. STE B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7127 www.mo-tx.com
TBPE FIRM F-13351

WPAP SITE PLAN

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 1 OF 2

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Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

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

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

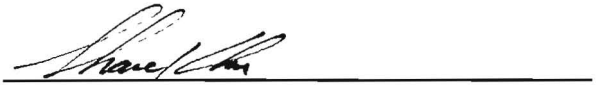
Signature

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

Print Name of Customer/Agent: Shane Klar, P.E.

Date: 6/24/15

Signature of Customer/Agent:



Regulated Entity Name: T Bar M

Project Information

Potential Sources of Contamination

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

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

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

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

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

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

☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

3. ☐ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. ☒ **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

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

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

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

6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Blieders Creek

Temporary Best Management Practices (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

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

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

LEGEND

- LIMITS OF DRAINAGE BASIN
- LIMITS OF SUB-DRAINAGE AREA
- TC — TC — TIME OF CONCENTRATION
- 900 — EXISTING CONTOURS
- 900 — PROPOSED CONTOURS
- FLOW ARROWS
- A / 9.0 — DRAINAGE BASIN LABEL / BASIN AREA (AC)
- A1 / 2.0 — SUB-DRAINAGE AREA LABEL / SUB-DRAINAGE AREA (AC)
- A1 — INLET LABEL
- A1 — ANALYSIS POINT LABEL

N

0 200' 400'

811 Know what's below. Call before you dig.

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions
1040 N. WALNUT AVE. STE B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7127 www.mo-tx.com
TBPE FIRM F-13351

DRAINAGE AREA MAP

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 1 OF 1

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Drawing Name: N:\Projects\TBAR001.101 - TBarM Camp Expansion\Engineering Reports\WPAP\Drainage Area Map.dwg User: shoneklor Jun 25, 2015 - 11:05am

ATTACHMENT "A"
Spill Response Actions

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, and substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.

(2) Store hazardous materials and wastes in covered containers and protect from vandalism.

(3) Place a stockpile of spill cleanup materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runoff during rainfall to the extent that it doesn't compromise clean up activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.

(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 BMP's 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 runoff of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

ATTACHMENT "B"
Potential Sources of Contamination

The only potential sources of contamination are construction equipment leaks, re-fueling spills, port-o-lets, and the total suspended solids (TSS) due to the construction activities on-site. There are no other anticipated potential sources of contamination.

ATTACHMENT "C"
Sequence of Major Activities

Stages of Construction:

1. Installation of temporary BMP's.
2. Minor site grading: This includes the removal of organic material and other debris within the proposed parking and building site. Approximate total disturbed area = not more than ½ the entire site at any given time.
3. Grading: Cutting and filling of the proposed site to prepare the site for parking and foundation construction. Approximate total disturbed area = not more than ½ the entire site at any given time.
4. Utility installation: All primary utility mains have already been installed and are available at the site. Sewer, water, gas, and electrical services will be installed at this time.
5. Finished grading: Final landscaping, Parking and building infrastructure are installed. Approximate total disturbed area = 5.80 acres.

ATTACHMENT "D"
Temporary BMP's and Measures

The following sequence will be followed for installing temporary BMP's:

1. Silt fence will be constructed on the downgradient side of proposed site.
2. A stabilized construction exit will be installed prior to any site work.

A. Silt Fence will be installed on the most downgradient side of the site and will reduce potential pollution from any stormwater that originates onsite or offsite. A stabilized construction exit will be constructed at the entrance of the site; this will reduce the amount of contaminants leaving the site.

B. Silt fence will be placed on the downgradient side of each proposed improvement to contain pollutants generated from onsite runoff. Disturbed areas will be seeded to replace destroyed vegetation. The existing vegetation located downgradient of each proposed improvement will work in conjunction with the silt fence, rock berms, and stabilized construction entrance to prevent pollution of water originating onsite and/or flowing offsite.

C. The proposed silt fences, and stabilized construction entrance constructed upgradient of the existing streams will prevent pollutants from entering them, as well as the aquifer. According to the Geologic Assessment, there are no sensitive features with the project boundary.

D. There were no sensitive features identified in the Geologic Assessment.

ATTACHMENT "E"
Request to Temporarily Seal a Feature

There will be no request to temporarily seal a feature.

ATTACHMENT "F"
Structural Practices

Stabilized Construction Exit and Silt fence will be used to protect disturbed soils and to prevent contamination from leaving the project site.

ATTACHMENT "G"
Drainage Area Map

See Drainage Area Map at the end of this section.

ATTACHMENT "H"
Temporary Sediment Pond Plans and Calculations

There will not be more than 10 acres of disturbed soil in one common drainage area that will occur at one time. Silt fence will be used for small drainage areas. No sediment ponds will be constructed due to the minimal amount of soil disturbance.

ATTACHMENT "I"
Inspection and Maintenance for BMP's

Inspection and Maintenance Plan

The contractor is required to inspect the control and fences at weekly intervals and after any rainfall events to insure that they are functioning properly. The contractor is required to document any changes on the Site Plan, documentation must include person performing task, task performed, and date. The contractor must also document if proper inspection measures have been taken while making changes. The person(s) responsible for maintenance controls and fences shall immediately make any necessary repairs to damaged areas.

Temporary Construction Entrance/Exit: The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto

public rights-of-way should be removed immediately by contractor. When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin. All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

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

TCEQ staff will be allowed full access to the property during construction of the project for inspecting controls and fences and to verify that the accepted plan is being utilized in the field. TCEQ staff has the right to speak with the contractor to verify plan changes and modifications.

Documentation: All scheduled inspection and maintenance measures made to the temporary BMPs must be documented clearly on the WPAP Site Plan showing inspection/maintenance measures performed, date, and person responsible for inspection and maintenance. Any changes made to the location or type of controls shown on the accepted plans, due to onsite conditions, shall be documented on the site plan that is part of this Water Pollution Abatement Plan. No other changes shall be made unless approved by TCEQ and the Design Engineer. Documentation shall clearly show changes made, date, person responsible for the change, and the reason for the change.

Owner's Information:

Owner:	Center For Christian Growth, Inc.
Contact:	David Thiel
Phone:	(830) 625-2164
Address:	2549 Hwy 46 W
	New Braunfels, Texas 78132

Design Engineer:

Company:	Moeller & Associates
Contact:	Shane Klar, P.E.
Phone:	(830) 358-7127
Address:	1040 N. Walnut Ave., Ste. B

T Bar M Improvements
Water Pollution Abatement Plan Modification

Temporary Stormwater Section

New Braunfels, Texas 78130

Person or Firm Responsible for Erosion/Sedimentation Control Maintenance:

Company: _____
Contact: _____
Phone: _____
Address: _____

Signature of Responsible Party: _____

This portion of the form shall be filled out and signed by the responsible party prior to construction.

ATTACHMENT "J"
Schedule of Interim and Permanent Soil Stabilization Practices

Areas which are disturbed by construction staging and storage areas will be hydro mulched with the appropriate seed mixture. Areas between the edge of pavement and property line will also by hydro mulched. There will be no fill slopes exceeding a 3:1 slope, and all fill slopes will be hydro mulched. Installation and acceptable mixtures of hydro mulch are as follows:

Materials:

Hydraulic Mulches: Wood fiber mulch can be applied alone or as a component of hydraulic matrices. Wood fiber applied alone is typically applied at the rate of 2,000 to 4,000 lb/acre. Wood fiber mulch is manufactured from wood or wood waste from lumber mills or from urban sources.

Hydraulic Matrices: Hydraulic matrices include a mixture of wood fiber and acrylic polymer or other tackifier as binder. Apply as a liquid slurry using a hydraulic application machine (i.e., hydro seeder) at the following minimum rates, or as specified by the manufacturer to achieve complete coverage of the target area: 2,000 to 4,000 lb/acre wood fiber mulch, and 5 to 10% (by weight) of tackifier (acrylic copolymer, guar, psyllium, etc.)

Bonded Fiber Matrix: Bonded fiber matrix (BFM) is a hydraulically applied system of fibers and adhesives that upon drying forms an erosion resistant blanket that promotes vegetation, and prevents soil erosion. BFMs are typically applied at rates from 3,000 lb/acre to 4,000 lb/acre based on the manufacturer's recommendation. A biodegradable BFM is composed of materials that are 100% biodegradable. The binder in the BFM should also be biodegradable and should not dissolve or disperse upon re-wetting. Typically, biodegradable BFMs should not be applied immediately before, during or immediately after rainfall if the soil is saturated. Depending on the product, BFMs typically require 12 to 24 hours to dry and become effective.

Seed Mixtures:

Dates	Climate	Species	(lb/ac.)
Sept. 1 to Nov. 30	Temporary Cool Season	Tall Fescue	4.0
		Oats	21.0
		Wheats	30.0
		Total	**55.0**
Sept. 1 to Nov. 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug. 31	Temporary Warm Season	Foxtail Millet	30.0

Fertilizer: Fertilizer should be applied at the rate of 40 pounds of nitrogen and 40 pounds of phosphorus per acre, which is equivalent to about 1.0 pounds of nitrogen and phosphorus per 1000 square feet.

Installation:

(1) Prior to application, roughen embankment and fill areas by rolling with a crimping or punching type roller or by track walking. Track walking shall only be used where other methods are impractical.

(2) To be effective, hydraulic matrices require 24 hours to dry before rainfall occurs.

(3) Avoid mulch over spray onto roads, sidewalks, drainage channels, existing vegetation, etc.

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

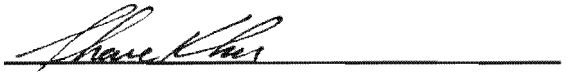
Signature

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

Print Name of Customer/Agent: Shane Klar, P.E.

Date: 6/24/15

Signature of Customer/Agent



Regulated Entity Name: T Bar M

Permanent Best Management Practices (BMPs)

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

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

   ☐ N/A

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

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

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

☐ N/A

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

   ☐ N/A

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

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

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

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

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

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

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

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

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

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

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

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

☒ N/A

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

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

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

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

☒ Design calculations (TSS removal calculations)
☒ TCEQ construction notes
☒ All geologic features
☒ All proposed structural BMP(s) plans and specifications

☐ N/A

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

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

☐ N/A

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

☒ N/A

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

☐ N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

☐ N/A

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

☐ N/A

ATTACHMENT "A"
20% or Less Impervious Cover Waiver

The proposed development at T Bar M will exceed 20% impervious cover and will not be used for multi-family residential developments, schools, or small business sites.

ATTACHMENT "B"
BMP's for Upgradient Stormwater

The stormwater generated upgradient of the site is minimal. Minor grading around proposed improvements will allow upstream runoff to be diverted away from areas being treated. Due to the rural nature of the development, stormwater originating upgradient will have minimal to no pollutant load. Most upgradient stormwater flows across grassy areas prior to reaching the proposed improvements.

ATTACHMENT "C"
BMP's for On-Site Stormwater

The permanent BMP's used to treat on-site stormwater runoff will be a Rainwater Harvesting System and Vegetative Filter Strips. Please refer to the WPAP Site Plan for areas of treatment and BMP structures used.

ATTACHMENT "D"
BMP's for Surface Streams

The Rainwater Harvesting System and Vegetative Filter Strips will be installed to prevent pollutants from entering surface streams and, ultimately, the aquifer. There were no sensitive features identified by the Geological Assessment.

The natural vegetation located downgradient of proposed improvements will provide additional filtration to help prevent pollution from entering streams, sensitive features, and the aquifer.

ATTACHMENT "G"
Inspection, Maintenance, Repair, and Retrofit Plan

Retention/Irrigation Maintenance and Monitoring Procedures

- *Inspections*. The irrigation system, including pumps, should be inspected and tested (or observed while in operation) to assure proper operation at least 6 times annually. Two of these inspections should occur during or immediately following wet weather. Any leaks, broken spray heads, or other malfunctions with the irrigation system should be repaired immediately. In particular, sprinkler heads must be checked to determine if any are broken, clogged, or not spraying

properly. All inspection and testing reports should be kept on site and accessible to inspectors.

- *Sediment Removal.* Remove sediment from splitter box, basin, and wet wells at least two times per year or when the depth reaches 3 inches.

- *Irrigation Areas.* To the greatest extent practicable, irrigation areas are to remain in their natural state. However, vegetation must be maintained in the irrigation area such that it does not impede the spray of water from the irrigation heads. Tree and shrub trimmings and other large debris should be removed from the irrigation area.
- *Mowing.* The upper stage, side slopes, and embankment of a retention basin must be mowed regularly to discourage woody growth and control weeds. Grass areas in and around basins must be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. When mowing is performed, a mulching mower should be used, or grass clippings should be caught and removed.

- *Debris and Litter Removal.* Debris and litter will accumulate near the basin pump and should be removed during regular mowing operations and inspections. Particular attention should be paid to floating debris that can eventually clog the irrigation system.

- *Erosion Control.* The pond side slopes and embankment may periodically suffer from slumping and erosion, although this should not occur often if the soils are properly compacted during construction. Regrading and revegetation may be required to correct the problems.

- *Nuisance Control.* Standing water or soggy conditions in the retention basin can create nuisance conditions for nearby residents. Odors, mosquitoes, weeds, and litter are all occasionally perceived to be problems. Most of these problems are generally a sign that regular inspections and maintenance are not being performed (e.g., mowing and debris removal).

- *Rainwater Evacuation.* The Rainwater Harvesting system tanks shall be emptied at least weekly.

Vegetative Filter Strips Maintenance and Monitoring Procedures

- *Pest Management* - An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- *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 vegetated filter strip areas. Regular mowing should also include weed control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the 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 and 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.

- *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

All surface streams will be protected from erosion by not allowing runoff to exceed existing velocities. The stormwater runoff for the property will be directed into the Aqualogic Filtration System and Vegetative Filter Strips where the pollutants will be removed.

Attachment "G"

Maintenance Plan for Rainwater Harvesting System

Rainwater Harvesting System Location: The Rainwater collection system will be located at the two proposed buildings at the southwest corner of the property along with two others near the center of the camp property. See attached plans.

Owner: Center For Christian Growth, Inc.
2549 Hwy 46 W
New Braunfels, Texas 78132-4731
Phone: (830) 625-2164

Rainwater Harvesting System Maintenance and Monitoring Procedures will be implemented to ensure that the proposed BMP functions as designed.

David Thiel

June 24, 2015

David Thiel (Date)
Center For Christian Growth, Inc.

I have reviewed the attached maintenance and monitoring procedures and to the best of my knowledge certify that, if they are followed as outlined, the Rainwater Harvesting System will function as designed.

6/24/15

Shane Klar, P.E.

Attachment "G"

Maintenance Plan for Vegetative Filter Strips

Location:	The vegetative filter strips will be located as shown in the plans attached to this permit.
Owner:	Center For Christian Growth, Inc. 2549 Hwy 46 W New Braunfels, Texas 78132-4731 Phone: (830) 625-2164

The Vegetative Filter Strip Maintenance and Monitoring Procedures will be implemented to ensure that the proposed BMP functions as designed.



June 24, 2015

David Thiel
Center For Christian Growth, Inc.

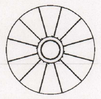
Date

I have reviewed the attached maintenance and monitoring procedures and to the best of my knowledge certify that, if they are followed as outlined, the Vegetative Filter Strips will function as designed.

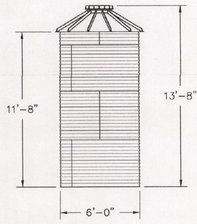
6/24/15

Shane Klar, P.E.

Corrugations on roof panels are not shown for clarity.



PLAN



ELEVATION

JOHN DEERE GREEN TECH		BY	DATE	TITLE: MODEL WH3-6-2.4
TEL: (800) 437-0779 FAX: (866) 447-8873 www.johndeerecorgreen.com	DWN	RJ	10/5/09	CORGREEN STEEL WATER STORAGE TANK
	CKD	JH	10/5/09	NOMINAL CAPACITY – 2,400 GALLONS (U.S.)
CorGreen WATER TANKS	ENG	JH	10/5/09	DWG. NO. WH3-6-2.4 REV. NO. A
	THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.			SIZE A SCALE 1/4"=1'-0" SHEET 1 OF 1

AREA 4 Rainwater Harvesting Design Calculations

Building 1
Minimum Treatment Capacity: 250 ft³, 1,870 gal (2,000 ft² building @ 1.5 in rainfall depth)
Provided Treatment Capacity 320 ft³, 2,400 gal
Building 2
Minimum Treatment Capacity: 300 ft³, 2,245 gal (2,400 ft² building @ 1.5 in rainfall depth)
Provided Treatment Capacity 320 ft³, 2,400 gal

Active Irrigation Period: 168 hrs, 7 days

Tank 1 (S-1)
Volume = 2,400 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 686 gpd (0.48 gpm: use 1 sprinkler @ 0.92 gpm)

Tank 2 (S-2)
Volume = 2,400 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 686 gpd (0.48 gpm: use 1 sprinkler @ 0.92 gpm)

* Time to empty Tank 2 = 43.5 hrs < 168 hr maximum
* Time to empty Tank 2 = 43.5 hrs < 168 hr maximum

Sprinklers: **Rain Bird 3504-PC**

	Nozzle	Pressure (psi)	Pattern	Radius (ft)	Flow Rate (gpm)
S-1	1.0	35	180°	21'	0.92
S-2	1.0	35	180°	21'	0.92

Total Dynamic Head (TDH)

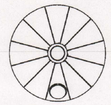
TDH = $H_e + H_e + H_f$
Pressure Head (H_e) = 81 ft (2.31 ft/psi)
Elevation Head (H_e) = 0 ft neglecting variable head over submersible pump
Friction Head (H_f) = $\frac{1.2(10.4397)(L)(Q)^{1.85}}{(C)^{1.85}(D)^{4.8655}} = 0.25$ft
L = Length of pipe (ft)
C = Hazen-Williams coefficient (150 for SCH 40 PVC)
Q = Flow Rate (gpm)
D = Pipe Diameter (in)

TDH = 81.25 ft

Pump Requirements: 0.92 gpm @ 81.25 ft TDH

* Timer shall be set to spray in intervals not to exceed 2 hours

Corrugations on roof panels are not shown for clarity.



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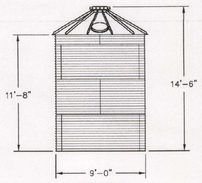


ELEVATION

JOHN DEERE GREEN TECH		BY	DATE	TITLE: MODEL WH3-9-5.3
TEL: (800) 437-0779 FAX: (866) 447-8873 www.johndeerecorgreen.com	DWN	RJ	11/21/11	CORGREEN STEEL WATER STORAGE TANK
	CKD	JH	11/21/11	NOMINAL CAPACITY – 5,300 GALLONS (U.S.)
CorGreen WATER TANKS	ENG	JH	11/21/11	DWG. NO. WH3-9-5.3 REV. NO. B
	THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.			SIZE A SCALE 3/16"=1'-0" SHEET 1 OF 1

AREA 1 Rainwater Harvesting Design Calculations

Minimum Treatment Capacity: 872 ft³, 6,525 gal (6,980 ft² building @ 1.5 in rainfall depth)
Provided Treatment Capacity 882 ft³, 7,200 gal

Active Irrigation Period: 168 hrs, 7 days

Tank 1 (S-1)
Volume = 3,600 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 1,028 gpd (137.5 gpm: use 1 sprinkler @ 0.92 gpm)

Tank 2 (S-2)
Volume = 3,600 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 1,028 gpd (137.5 gpm: use 1 sprinkler @ 0.92 gpm)

* Time to empty Tank 1 & Tank 2 = 163 hrs < 168 hr maximum

Sprinklers: **Rain Bird 3504-PC**

	Nozzle	Pressure (psi)	Pattern	Radius (ft)	Flow Rate (gpm)
S-1	1.0	35	180°	21'	0.92
S-2	1.0	35	180°	21'	0.92

Total Dynamic Head (TDH)

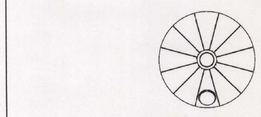
TDH = $H_e + H_e + H_f$
Pressure Head (H_e) = 81 ft (2.31 ft/psi)
Elevation Head (H_e) = 0 ft neglecting variable head over submersible pump
Friction Head (H_f) = $\frac{1.2(10.4397)(L)(Q)^{1.85}}{(C)^{1.85}(D)^{4.8655}} = 0.25$ft
L = Length of pipe (ft)
C = Hazen-Williams coefficient (150 for SCH 40 PVC)
Q = Flow Rate (gpm)
D = Pipe Diameter (in)

TDH = 81.25 ft

Pump Requirements: 0.92 gpm @ 81.25 ft TDH

* Timer shall be set to spray in intervals not to exceed 2 hours

Corrugations on roof panels are not shown for clarity.



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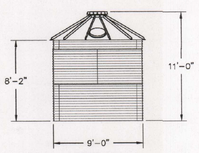

ELEVATION

JOHN DEERE GREEN TECH		BY	DATE	TITLE: MODEL WH3-9-3.6
TEL: (800) 437-0779 FAX: (866) 447-8873 www.johndeerecorgreen.com	DWN	RJ	11/21/11	CORGREEN STEEL WATER STORAGE TANK
	CKD	JH	11/21/11	NOMINAL CAPACITY – 3,600 GALLONS (U.S.)
CorGreen WATER TANKS	ENG	JH	11/21/11	DWG. NO. WH3-9-3.6 REV. NO. B
	THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.			SIZE A SCALE 3/16"=1'-0" SHEET 1 OF 1

AREA 2 Rainwater Harvesting Design Calculations

Minimum Treatment Capacity: 605 ft³, 4,525 gal (4,840 ft² building @ 1.5 in rainfall depth)

Provided Treatment Capacity 708 ft³, 5,300 gal

Active Irrigation Period: 168 hrs, 7 days

Tank 1 (S-1, S-2)
Volume = 5,300 gal
Time to Empty = 84 hrs
Pump Flow to Empty = 1,514 gpd (1.40 gpm: use 2 sprinklers @ 0.92 gpm)

* Time to empty Tank 1 = 48.0 hrs < 168 hr maximum

Sprinklers: **Rain Bird 3504-PC**

	Nozzle	Pressure (psi)	Pattern	Radius (ft)	Flow Rate (gpm)
S-1	1.0	35	180°	21'	0.92
S-2	1.0	35	180°	21'	0.92

Total Dynamic Head (TDH)

TDH = $H_e + H_e + H_f$
Pressure Head (H_e) = 81 ft (2.31 ft/psi)
Elevation Head (H_e) = 0 ft neglecting variable head over submersible pump
Friction Head (H_f) = $\frac{1.2(10.4397)(L)(Q)^{1.85}}{(C)^{1.85}(D)^{4.8655}} = 0.25$ft
L = Length of pipe (ft)
C = Hazen-Williams coefficient (150 for SCH 40 PVC)
Q = Flow Rate (gpm)
D = Pipe Diameter (in)

TDH = 81.25 ft

Pump Requirements: 0.92 gpm @ 81.25 ft TDH

* Timer shall be set to spray in intervals not to exceed 2 hours

811 Know what's below. Call before you dig.

STATE OF TEXAS
SHANE KLAR
115810
LICENSED PROFESSIONAL ENGINEER
6/25/15

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES Engineering Solutions
1040 N. WALNUT AVE., STE. B, NEW BRAUNFELS, TX. 78130
PH: 830-357-7777 www.moeller-tx.com
TBPE FIRM F-13351

WATER QUALITY DETAILS

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 1 OF 2

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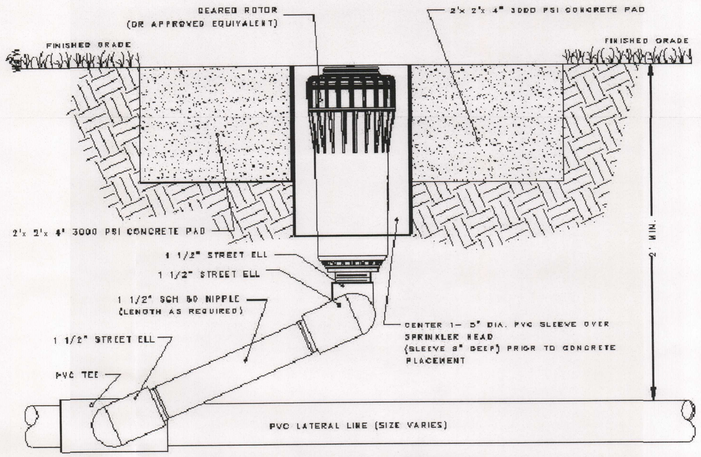
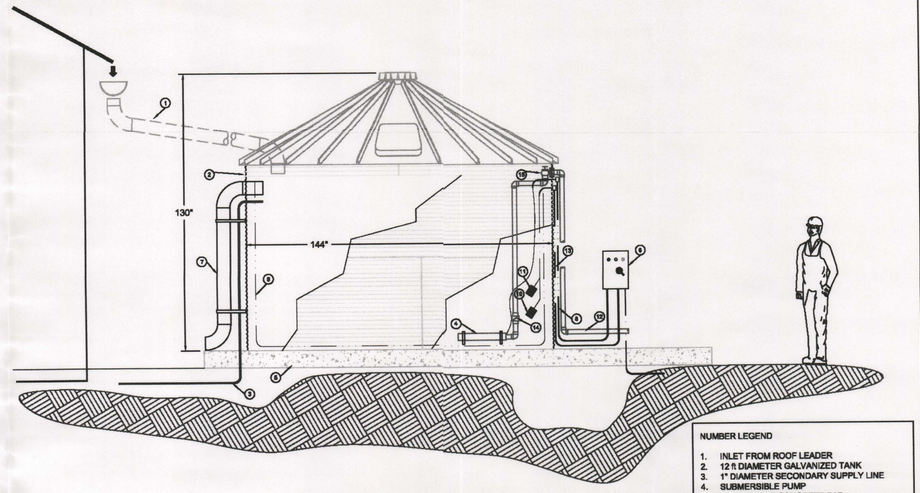
Drawing Name: N:\Projects\TBARO01.101 – TBarM Camp Expansion\Engineering Reports\WPAP\WPAP Site Plan & Details.dwg User: shonekkar Jun 25, 2015 – 11:46am



NOTES:
SPRINKLER HEADS SHOWN ON THIS THIS SHEET SHALL BE ROTOR SPRAY HEADS (OR APPROVED EQUIVALENT) 60 PSI, 34 GPM, NOZZLE 28 (RED .339" DIA.). THEY SHALL HAVE AN ANGLE ROTATION OF 227 (UNLESS OTHERWISE NOTED) AND 88' RADIUS.

SWING INSTALLATION DETAIL

NO SCALE

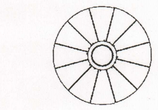


NUMBER LEGEND

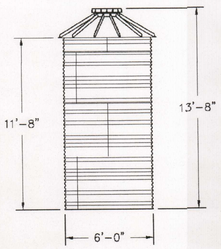
1. INLET FROM ROOF LEADER
2. 12 ft DIAMETER GALVANIZED TANK
3. 1" DIAMETER SECONDARY SUPPLY LINE
4. SUBMERSIBLE PUMP
5. REINFORCED CONCRETE PAD
6. GT UL LISTED PUMP & RWH CONTROLLER
7. 6" DIAMETER HIGH LEVEL OVERFLOW
8. PUMP POWER SUPPLY
9. TANK MEMBRANE /FOOD GRADE LINER
10. LOW LEVEL FLOAT SWITCH
11. SECONDARY WATER SUPPLY FLOAT SWITCH
12. PUMP DISCHARGE LINE -SECURE TO TANK
13. CONTROL CONDUIT & WIRING
14. PUMP DISCHARGE UNION/FLANGE
15. PITLESS ADAPTER - LOCATE UNDER ACCESS HATCH

PROJECT: JOHN DEERE GREEN TECH			
RAINWATER HARVESTING - GALVANIZED ABOVE GROUND GRAVITY FEED/SUB. PUMP TANK INSTALLATION			
DRAWN: SFournier	7/15/09	FILE: GT RWH GRSALFILL SUBM 12.DWG	JOHN DEERE GREEN TECH 3 Chrysler - Irvine, CA 92618 TEL: (800) 427-0778 FAX: (949) 455-7402
CHECK:		SIZE: A3 SCALE:	
QUOTATION NO.*		DIMENSIONS IN: INCH	
DO NOT SCALE DRAWING			

Corrugations on roof panels are not shown for clarity.

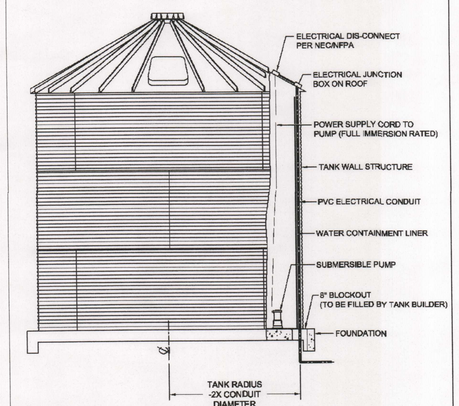


PLAN

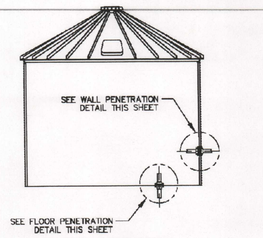


ELEVATION

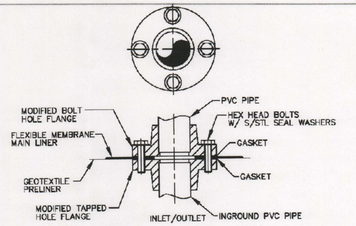
JOHN DEERE GREEN TECH		BY	DATE	TITLE: MODEL WH3-6-2.4 CORGREEN STEEL WATER STORAGE TANK NOMINAL CAPACITY - 2,400 GALLONS (U.S.)
TEL: (800) 427-0778 FAX: (800) 447-9973 www.johndeergreentech.com	DWN	IU	10/5/09	
	CKD	JH	10/5/09	
	ENG	JH	10/5/09	DWG. NO. WH3-6-2.4 REV. NO. A
CORGREEN WATER TANKS	THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.			SIZE A SCALE 1/4"=1'-0" SHEET 1 OF 1



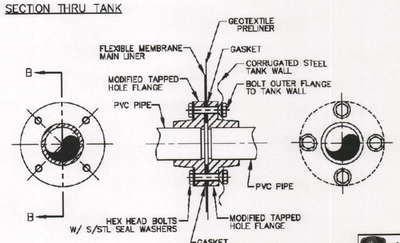
JOHN DEERE GREEN TECH		BY	DATE	TITLE: ELECTRICAL CONNECTION FOR CORGREEN TANKS
TEL: (800) 427-0778 FAX: (800) 447-9973 www.johndeergreentech.com	DWN	IU	3/19/11	
	CKD	JH	3/19/11	
	ENG	JH	3/19/11	DWG. NO. WH3-DM-ELECTRICAL CONNECTIONS REV. NO. A
CORGREEN WATER TANKS	THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF JOHN DEERE GREEN TECH.			SIZE A SCALE 3/8"=1'-0" SHEET 1 OF 1



SECTION THRU TANK



SECTION A-A



SECTION B-B



FLOOR PENETRATION DETAIL

WALL PENETRATION DETAIL

JOHN DEERE GREEN TECH		BY	DATE	TITLE: WALL/FLOOR PENETRATION STANDARD PVC PENETRATION FLANGE SET
TEL: (800) 427-0778 FAX: (800) 447-9973 www.johndeergreentech.com	DWN	IU	3/18/10	
	CKD	JH	3/18/10	
	ENG	JH	3/18/10	DWG. NO. WH3-DM--STD PVC PENE FLANGE SET REV. NO. A
CORGREEN WATER TANKS	THE DRAWING DEPICTED ON THIS PRINT AND THE INFORMATION CONTAINED HEREIN ARE PROPRIETARY TO JOHN DEERE GREEN TECH AND SHALL NOT BE USED IN WHOLE OR PART WITHOUT THE WRITTEN CONSENT OF Water Storage Tanks, Inc.			SIZE B SCALE NONE SHEET 1 OF 1

811 Know what's below. Call before you dig.

STATE OF TEXAS
SHANE KLAR
115810
LICENSED PROFESSIONAL ENGINEER
6/26/15

NO	DATE	ISSUES AND REVISIONS

MOELLER & ASSOCIATES
Engineering Solutions
1040 N. WALNUT AVE., STE. B, NEW BRAUNFELS, TX. 78130
PH: 830-358-7121 www.mna-tx.com
TBPE# F-13931

WATER QUALITY DETAILS

PERMIT SET

T BAR M CAMP IMPROVEMENTS

NEW BRAUNFELS, TX 78130

SHEET 2 OF 2

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Drawing Name: N:\Projects\TBARM01.101 - TBarM Camp Expansion\Engineering Reports\WP4P\WP4P Site Plan & Details.dwg User: shonekar Jun 25, 2015 - 11:48am

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

I, **David Thiel**,
Print Name

CEO/President,
Title - Owner/President/Other

of **Center For Christian Growth, Inc.**,
Corporation/Partnership/Entity Name

have authorized **Shane Klar, P.E.**
Print Name of Agent/Engineer

of **Moeller & Associates**
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.

David Thiel
Applicant's Signature

6/22/2015
Date

THE STATE OF Texas §

County of Comal §

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

GIVEN under my hand and seal of office on this 22 day of June, 2015

Martha Lynn Jaramillo
NOTARY PUBLIC

MARTHA LYNN JARAMILLO
Notary Public, State of Texas
My Commission Expires
April 12, 2018

Martha Lynn Jaramillo
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: April 12, 2018

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: T Bar M
Regulated Entity Location: 2549 Hwy. 46 W
Name of Customer: Center For Christian Growth, Inc.
Contact Person: Shane Klar, P.E. (Agent) Phone: 830-358-7127
Customer Reference Number (if issued):CN _____
Regulated Entity Reference Number (if issued):RN 102745502

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde
☒ Comal ☐ Kinney

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

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

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

Site Location (Check All That Apply):

☐ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	15.39 Acres	$ 6,500
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 6/25/15

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

TCEQ 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 Modification

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		RN 102745502

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) 6/24/2015

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:*

Center For Christian Growth, Inc. Attn: David Thiel

10. Mailing Address: 2549 Hwy. 46 W

City	State	ZIP	ZIP + 4
New Braunfels	TX	78132	4731

11. Country Mailing Information *(if outside USA)*

12. E-Mail Address *(if applicable)*: dave@tbarmcamps.org

13. Telephone Number: (830) 625-2164 **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)*
TaxExempt	17516719204		0048520101

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)*

T Bar M

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 Hwy. 46 W							
	City	New Braunfels	**State**	TX	**ZIP**	78132	**ZIP + 4**	4731
25. Mailing Address:	Same							
	City		**State**		**ZIP**		**ZIP + 4**	

26. E-Mail Address:	dave@tbarmcamps.org

27. Telephone Number	**28. Extension or Code**	**29. Fax Number** *(if applicable)*
(830) 625-2164		( ) -

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)
7032	7999	721214	71390

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

Sporting and Recreation Camp

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

35. Description to Physical Location:	The project is located on the south side of State Highway 46 approximately 0.5 miles north of the intersection at FM 1863.

36. Nearest City	**County**	**State**	**Nearest ZIP Code**
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.725216	**38. Longitude (W) In Decimal:**	-98.185716

Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	30.78	-98	11	8.58

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:	Shane Klar, P.E.	**41. Title:**	AuthorizedAgent

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(830) 358-7127		(830) 515-5611	shaneklar@ma-tx.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	Moeller & Associates	**Job Title:**	Engineer
Name *(In Print)* :	Shane Klar, P.E.	**Phone:**	(830) 358-7127
Signature:		**Date:**	6/25/15

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 20, 2002

Mr. Scott Turpin
T Bar M, Inc./ Center for Christian Growth
8201 Preston Road
Dallas, TX 75225

Re: Edwards Aquifer, Bexar County
NAME OF PROJECT: T Bar M; Located at 2549 Highway 46 West; 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 File No.1899.00; Investigation No. 17611.

Dear Mr. Turpin:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Mr. Jeff Moeller, P.E. of Carter & Burgess, Inc. on behalf of T Bar M, Inc./ Center for Christian Growth on September 26, 2002. Final review of the application was completed after additional materials were submitted on December 9, 2002, and December 13, 2002. As presented to the TCEQ, the Temporary and Permanent 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 20 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 9.3 acres. It will include the construction of two buildings, a cabin, four tennis courts, and associated parking areas. The impervious cover will be 3.46 acres (37.2% percent). Project wastewater will be disposed of by conveyance to the existing Gruene Waste Water Recycling Center owned by the City of New Braunfels.

PERMANENT POLLUTION ABATEMENT MEASURES

Five individual permanent vegetative filter strips will be constructed to treat stormwater runoff. The individual treatment measures will consist of the following:

Permanent Best Management Practice (Vegetative Filter Strips)					
Watershed	A	B	C	D	E
Filter Strip Area (acres)	1.15	0.77	0.10	0.37	0.126
Level spreading device	Yes	Yes	Yes	Yes	Yes
Contiguous with developed area	Yes	Yes	Yes	Yes	Yes
Area of development filter strip designed to treat (acres)	1.203	1.824	0.17	0.726	0.126

The approved measures are presented to meet the required 80 percent removal of the increased load in total suspended solids caused by the project.

GEOLOGY

According to the geologic assessment included with the application, four possibly sensitive features and one not sensitive feature were identified on the proposed project site. The possibly sensitive features were described by the geologist as four man-made features and one solution cavity. The San Antonio Regional Office did conduct a site inspection on October 18, 2002. The site inspection revealed that the site geology is consistent with the geologic assessment and no additional features were noted.

SPECIAL CONDITIONS

I. All permanent pollution abatement measures shall be operational prior to commencement of any commercial operation for each phase of development.

II. The vegetative filtration areas are designed in accordance with the document *Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (June 1999)*. The basins will incorporate sedimentation and filtration as described above.

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. 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.

3. 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.

4. 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.

5. 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 file 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.

6. 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.

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

<u>During Construction:</u>

8. 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.

9. 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.

10. 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.

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

12. 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.

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

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

14. 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.

15. 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 the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

16. 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.

17. 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.

18. 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 Tom Gutierrez of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4025.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/TG/eg

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

cc: Mr. Jeff Moeller, P.E., Carter & Burgess, Inc.
Mr. John Bohuslav, TXDOT San Antonio District
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

RECEIVED
MAR 23 2011
COUNTY ENGINEER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 15, 2011

Mr. Scott Turpin
T Bar M, Inc.
8201 Preston Rd.
Dallas, Texas 75225

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: T Bar M; Located on the south side of SH 46 West approximately 0.5 miles north of FM 1863 and SH 46; New Braunfels, Texas

TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer

Edwards Aquifer Protection Program File No. 1899.03, Investigation No. 894489, Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On January 28, 2011, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is as follows.

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011
January 28, 2011	July 29, 2011

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or

approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on July 29, 2011. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Javier Anguiano of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 490-3096.

Sincerely,

Richard Garcia

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

MRV/JA/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

WATER POLLUTION ABATEMENT PLAN APPLICATION

For

T Bar M, Inc.\CENTER FOR CHRISTIAN GROWTH

2549 HWY 46 WEST NEW BRAUNFELS, TEXAS 78132

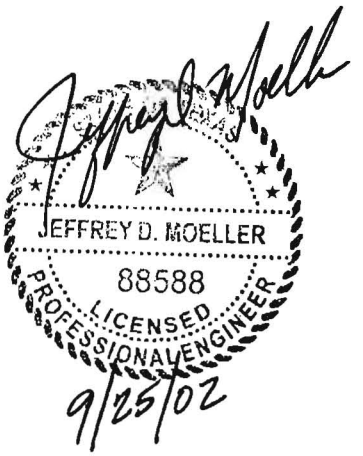
Submitted To:

Texas Commission on Environmental Quality
Region 13 - San Antonio
14250 Judson Road
San Antonio, Texas 78233-4480
210.490-3096
Fax 210.545-4329

Submitted By:

Carter & Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
210.494-0088
Fax 210.494-4525

September 25, 2002



Edwards Aquifer Protection Plan Extension Request

X Extension Request for a Water Pollution Prevention Plan (*TCEQ-10260*)

X ATTACHMENT A - Approval Letter or Extension Approval

__ Agent Authorization Form (*TCEQ-0599*), if application submitted by agent

X Application Fee Form (*TCEQ-0574*)

X Check Payable to the "Texas Commission on Environmental Quality"

X Core Data Form (*TCEQ-10400*)

RECEIVED
FEB 0 2 2011
COUNTY ENGINEER

TBM
WPAP

RECEIVED TCEQ
SAN ANTONIO
REGION
2011 JAN 28 PM 1:05

Extension Request for an
Edwards Aquifer Protection Plan
Relating to 30 TAC §213.4(g)
Effective June 1, 1999

1. Regulated Entity information. If requested by an agent, attach the agent authorization form.

Regulated Entity Name: T Bar M, Inc.

Customer (Applicant): T Bar M, Inc.

Contact Person: Scott Turpin

Entity: T Bar M, Inc

Mailing Address: 8201 Preston Rd

City, State: Dallas, TX 75225

Telephone: (214) 692-4254 FAX: (830) 608-1765

Agent:
Contact Person:
Mailing Address:
City, State: Zip:
Telephone: FAX:

2. X **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
Date of letter: October 19, 2010
Expiration date: Jan 29, 2011

3. X This extension request is submitted not earlier than sixty (60) days prior to the expiration date of an approved Edwards Aquifer protection plan or a previously approved extension.

4. X A completed fee form is attached. The fee for a six-month extension of time is $150.

RECEIVED TCEQ
2011 JAN 28 PM 1:06
SAN ANTONIO
REGION

Scott Turpin
Print Name of Customer/Agent

Scott Turpin
Signature of Customer/Agent

Jan 24, 2011
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.

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

R
11-1-10

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 19, 2010

Mr. Scott Turpin
T Bar M, Inc.
8201 Preston Rd.
Dallas, Texas 75225

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: T Bar M; Located on the south side of SH 46 West approximately 0.5 miles north of FM 1863 and SH 46; New Braunfels, Texas
TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program File No. 1899.02, Investigation No. 849297, Regulated Entity Number: RN102745502

Dear Mr. Turpin:

On July 22, 2010, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. Final review of the request was completed after additional material was received on October 4, 2010. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is enclosed.

Date of Original Approval:	July 29, 2008
Date of Expiration:	July 29, 2010
Date Extension Request Received	Date of Extension Expiration
July 22, 2010	January 29, 2011

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on January 29, 2011. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Javier Anguiano of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 403-4019.

Sincerely,

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

MRV/JA/eg

cc: Mr. James C. Klein, P.E., City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

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

NAME OF PROPOSED REGULATED ENTITY: T Bar M, Inc.
REGULATED ENTITY LOCATION: 2549 Hwy 46 W, New Braunfels, TX 78132
NAME OF CUSTOMER: T Bar M, Inc.
CONTACT PERSON: Scott Turpin PHONE: (214) 692-4254
(Please Print)

Customer Reference Number (if issued): CN 600691752 (nine digits)

Regulated Entity Reference Number (if issued): RN **102745502** (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	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$150

Scott Turpin
Signature

Jan 24, 2011
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

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 ☒ Yes ☐ No

Describe Any Attachments: *(ex. Title V Application, Waste Transporter Application, etc.)* WPAP Report and applicable attachments

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 600691752		RN 102745502

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) April 2008

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:*
T Bar M, Inc.		

10. Mailing Address:	8201 Preston Road						
	City	Dallas	State	TX	ZIP	75225	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)*
(214) 692-4254		(830) ~~625-5959~~ 608-1705

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)*
741658885	17416588857		

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)*

T Bar M, Inc

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	2549 SH 46 West							
	City	New Braunfels	State	TX	ZIP	78132	ZIP + 4	
25. Mailing Address:	Same							
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:	sturpin@tbarm.com	
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(830) 625-7738		(830) 620-6018

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)
7011	7999	721214	71394

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

resort, sports facilities, meeting and dining facilities

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

35. Description to Physical Location:	south side of SH 46, 1/2 mile northwest of the intersection of FM 1863

36. Nearest City	County	State	Nearest ZIP Code
New Braunfels	Comal	TX	78132

37. Latitude (N) In Decimal:	29.724167		38. Longitude (W) In Decimal:	98.186944	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	43	27	98	11	13

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:	David M McBeth , P.E.	41. Title:	Sr Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 494-0088	6352	(210) 494-4525	david.mcbeth@jacobs.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 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:	Jacobs Carter Burgess	Job Title:	Project Engineer
Name *(In Print)*:	David McBeth	Phone:	(210) 494-0088
Signature:		Date:	4/24/2008

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

PROJECT NAME: T Bar M

COUNTY: Comal STREAM BASIN: Blieders Creek

EDWARDS AQUIFER: X RECHARGE ZONE
__ TRANSITION ZONE

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

APPLICANT INFORMATION

1. Applicant:

Contact Person: Scott Turpin
Entity: T Bar M, Inc. / Center for Christian Growth
Mailing Address: 8201 Preston Road
City, State: Dallas, Texas Zip: 75225
Telephone: 214-692-4254 FAX: 830-625-5959

2. Agent/Representative (If any):

Contact Person: Jeff Moeller
Entity: Carter & Burgess, Inc.
Mailing Address: 911 Central Parkway North, Suite 425
City, State: San Antonio, Texas Zip: 78232
Telephone: 210-494-0088 FAX: 210-494-4525

PROJECT LOCATION

3. Site Address: 2549
Street: Highway 46 West
City: New Braunfels, Texas Zip: 78132

4. X This project is inside the city limits 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.

5. The location of the project site is described below. The description provides sufficient detail and clarity so that the TNRCC's Regional staff can easily locate the project and site boundaries for a field investigation.
Project is located within the limits of the existing T Bar M property located at 2549 Highway 46 West on the west side of New Braunfels.

6. 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.

7. 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.

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

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

10. 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: *Part of Resort Hotel development*

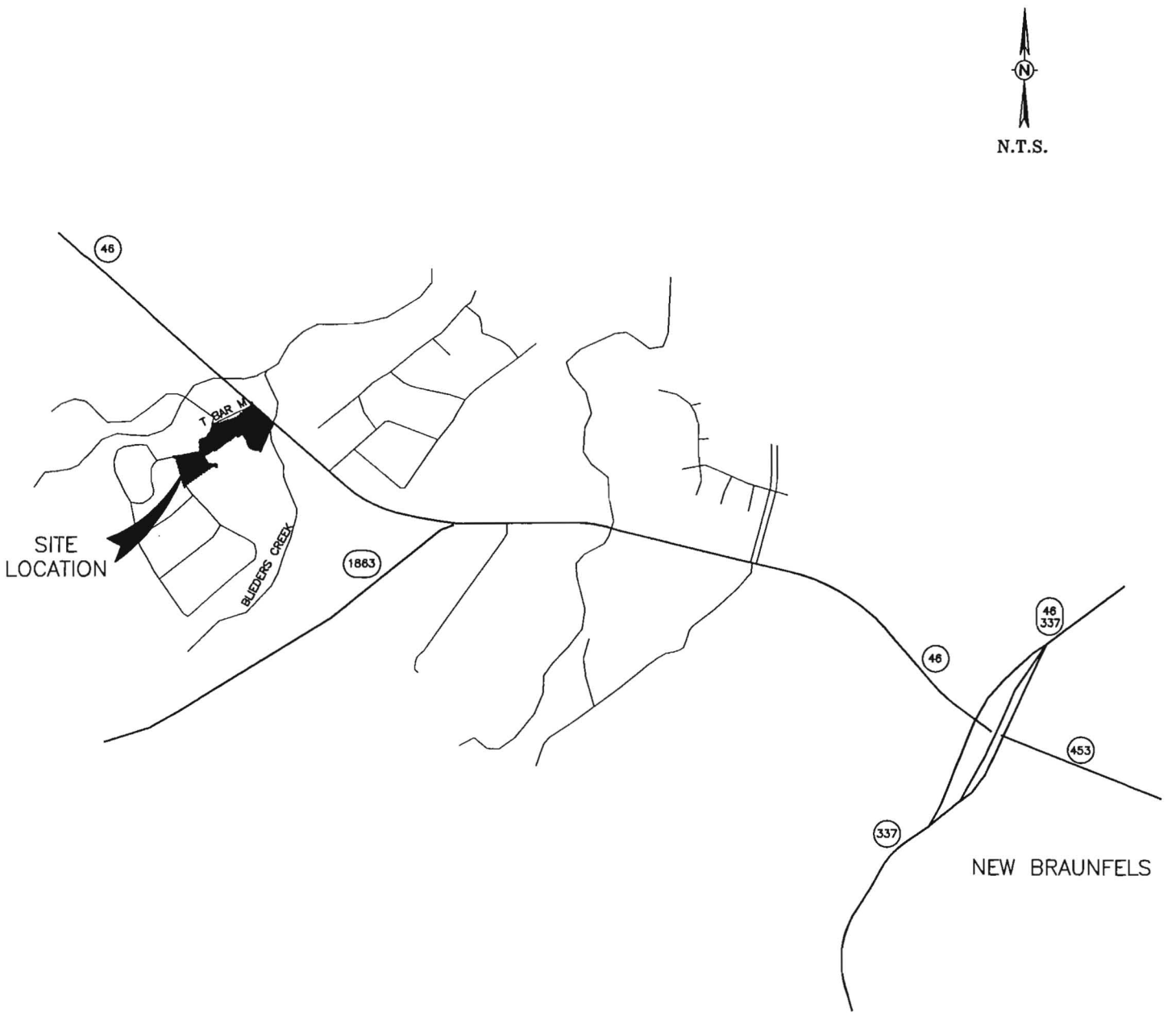
PROHIBITED ACTIVITIES

11. 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).

12. 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);



ATTACHMENT A
T Bar M
LOCATION MAP

Carter Burgess

Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525
© COPYRIGHT 2000 Carter and Burgess, Inc.

Attachment C – Project Description

T Bar M is located east of FM 1863 on the south side of Highway 46 (See Location Map). T Bar M is a recreational camp and resort with cabins, hotel, tennis courts, baseball field, etc, all approved under an existing WPAP. The site has a low density and the rural characteristics are maintained throughout the facility. The proposed improvements will retain the rural setting, keeping as much of the surrounding area undisturbed. This WPAP is for the addition of a swimming pool, tennis courts, cabin, and roads/parking. The proposed layout requires that some of the existing impervious cover be remove and restored to landscaping. The existing impervious cover for the site is 1.79 acres. After proposed improvements are completed the impervious cover will be 3.46 acres. Construction of this project as shown on the Site Plan will be phased. The phasing could occur over several years, dependent on the owner.

RECEIVED
DEC 29 1998
COUNTY ROAD DEPT.

Barry R. McBee, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

December 18, 1998

Mr. Scott Turpin
T-Bar-M, Inc.
8201 Preston Road, Suite 310 LB13
Dallas, TX 75225

Re: EDWARDS AQUIFER, Comal County
PROJECT: T-Bar-M, Inc., Project number 1096, Located on south side of Hwy 46 approximately 2 miles west of Loop 334, , New Braunfels, Texas
TYPE: Request for Approval of Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) §213.5(b); Edwards Aquifer Protection Program

Dear Mr. Turpin:

The Texas Natural Resource Conservation Commission (TNRCC) has completed their review of the request for modification of an approved WPAP for the referenced project that was submitted on behalf of T-Bar-M, Inc. by The Schultz Group and received by the San Antonio office on September 28, 1998.

PROJECT DESCRIPTION

This facility was previously approved by letter dated July 1, 1998. As presented, the proposed modification to the water pollution abatement plan will consist of relocation of buildings and asphalt drives. As presented, the revisions "do not change the approved Temporary Pollution or the Permanent Pollution Abatement Plans that were submitted and approved on July 1, 1998...", and "...there are no changes to the approved Organized Sewer Collection System (Approval letter dated May 28, 1998)."

APPROVAL

The plan for modifying this project has been reviewed for compliance with 30 TAC §213.5(b) which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan modification is in general agreement with 30 TAC §213.5(b); therefore, approval of the plan is hereby granted subject to the specific conditions listed below.
Failure to comply with any of the following conditions, the deed recordation requirement, or any other specific conditions of approval is a violation of these rules. Pursuant to §26.136 of the Texas Water Code, any violations of the Edwards Aquifer Rules may result in administrative penalties of up to $10,000 for each act of violation and for each day of violation.

SPECIAL CONDITIONS OF APPROVAL

1. If any potential sensitive features are encountered during construction, a geologist shall evaluate the significance of the features. The evaluation shall include representative photographs and a description of the feature forwarded to the San Antonio office. Construction in the vicinity of the features may only continue with written approval from the TNRCC.

2. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter of July 1, 1998.

3. All permanent pollution abatement measures shall be operational prior to completion of construction.

4. After completion of the project, submit as-built plans prepared by a Texas licensed professional engineer.

Should clarification of this letter be desired or if we may be of any other assistance, please contact John Mauser of our San Antonio Regional office at 210/403-4024. Please reference project number 1096.

Sincerely,

for Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resource Conservation Commission

JAS/JKM/eg

Enclosure: Deed Recordation Form

cc John Moy, The Schultz Group, Inc.
Harry Bennett, City of New Braunfels
Tom Hornseth, Comal County
Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations, Austin

Official Edwards Aquifer Recharge Zone Map
31 Texas Administrative Code Chapter 313
Subchapter A—San Antonio Region

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS EAST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

TRANSITION ZONE

NEW BRAUNFELS
(BM 623)

NEW BRAUNFELS MUNICIPAL AIRPORT

Mapped by the Army Map Service
Published for civil use by the Geological Survey

Control by USGS, NOS / NOAA, and USCE

Topography from aerial photographs by photogrammetric methods
Aerial photographs taken 1956. Field check 1958

Polyconic projection. 1927 North American datum
10,000-foot grid based on Texas coordinate system, south central zone
1000-metre Universal Transverse Mercator grid ticks, zone 14, shown in blue

Revisions shown in purple compiled by the Geological Survey from aerial photographs taken 1973. This information not field checked

Purple tint indicates extension of urban areas

UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
DASHED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

Primary highway, hard surface
Secondary highway, hard surface
Light-duty road, hard or improved surface
Unimproved road
Interstate Route
U. S. Route
State Route

TEXAS
QUADRANGLE LOCATION

2998-414

NEW BRAUNFELS EAST, TEX.

N2937.5—W9800/7.5

1958
PHOTOREVISED 1973
AMS 6343 II NE SERIES V882

INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1975

26

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

NEW BRAUNFELS WEST QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

TRANSITION ZONE

SITE

NEW BRAUNFELS

Produced by the United States Geological Survey
Revised in cooperation with the Texas Water Development Board
Control by USGS, NOS/NOAA, and USCE

Compiled by the Army Map Service by photogrammetric methods
from aerial photographs taken 1956. Field checked 1958
Revised from aerial photographs taken 1986. Field checked 1987
Map edited 1988

Projection and 10,000-foot grid ticks: Texas coordinate
system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 20 meters south and
28 meters east as shown by dashed corner ticks

Fine red dashed lines indicate selected fence and field lines
generally visible on aerial photographs. This information is unchecked

Gray tint indicates area in which only landmark buildings are shown

UTM GRID AND 1988 MAGNETIC NORTH
DECLINATION AT CENTER OF MAP
DIAGRAM IS APPROXIMATE

SCALE 1:24 000

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000 FEET
1 .5 0 1 MILES
1 .5 0 1 2 KILOMETERS
1000 0 1000 2000 METERS

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

TEXAS
QUADRANGLE LOCATION

2998-413

ROAD CLASSIFICATION

Primary highway, hard surface ..... Light-duty road, hard or improved surface ...
Secondary highway, hard surface ..... Unimproved road ...
Interstate Route U. S. Route State Route

NEW BRAUNFELS WEST, TEX.
29098-F2-TF-024

1988

DMA 6343 II NW–SERIES V822

● INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA—1988

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

PROJECT NAME: **Pool and Cabin Improvements – T Bar M Ranch**

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 **0 to 0.5** feet thick. In general, the soil present appears to have the ability to:

   ___ transmit fluid flow to the subsurface.
   X impede fluid flow to the subsurface.

3. X **SOILS ATTACHMENT**. A narrative description of soil units and a soil profile, including thickness and hydrologic characteristics are attached at the end of this form.

4. 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.

5. 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.

6. 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" = **50** '
   Site Geologic Map Scale 1" = **50** '

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

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

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

10. 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.

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

12. 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 §76.
X There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: **August 8, 2002**
Date(s)

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 213.

Jeffrey S. Neathery — **210-930-5959**
Print Name of Geologist — Telephone

210-930-6262
Fax

Signature of Geologist — **August 13, 2002**
Date

Representing: **Arias & Kezar**
(Name of Company)

Pool and Cabin Improvements - T Bar M Ranch

FEATUR	PHYSICAL SETTING												
1A	1 13			14					15	16			17
LOCATION	TYPE AREA (ACRES)			TOPOGRAPHY (2)					SUB-TOTAL	POTENTIAL RECHARGE			COM-MENTS
	5	10	15	0	5	10	15	20					
	10	<50	>50	WALL	HILLTOP	HILLSIDE	FLOODPLAIN	STREAM BED		NONE/LOW <15	MODERATE 15-20	HIGH >20	YES
S-1	M5				5				10	10			Yes
S-2	M5				5				10	10			Yes
S-3	M5				5				10	10			Yes
S-4	S	10					15		25			25	Yes
S-5	CS				5				10	10			Yes

(1) C = 35, CD)n Commission's Instructions to Geologists. The
SC = 10, SH = tation of the conditions observed in the field.

(2) WALL = V(
FLOODPLAIN /02
STREAM BED

Sheet 1 of 1

TNRCC-0585-

Site Specific Soils

Most of the site has been previously developed. There are several structures, roads, parking areas and a baseball field. Native soils remaining at the site consist of black and brown calcareous 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 mobility would increase.

The soils on the site are typical of those found on the Edwards. They range up to a maximum thickness of about one half of a foot in some areas. Soils cover most of the undeveloped portions of the site. There are few areas of rock outcrops except for those in the creek area.

According to the U.S. Soil Conservation Service, the soils beneath the SITE are classified as Rumple-Comfort association, undulating.

This association consists of shallow and moderately deep soils on uplands in the Edwards Plateau. Rumple soils make up about 60 percent of the association. Comfort soils make up about 20 percent. The remainder consists mostly of Tarpley soils. These soils are well drained. Surface runoff is medium. Permeability is moderately slow in Rumple soils and slow in Comfort soils. Water erosion is a moderate hazard.

Overall, the soils will provide some protection to the underlying limestone. There are areas where the soil cover is very thin or absent and therefore, no protection exists.

Stratigraphic Column

Group	Formation	Member	Thickness (ft)
Edwards Limestone	Person	Cyclic and Marine	80-90
		Leached and Collapsed	70-90
		Regional Dense	20-24
	Kainer	Grainstone	50-60
		Kirschberg Evaporite	50-60
		Dolomitic	110-130
		Basil Nodular	50-60
Glen Rose Limestone	Upper Glen Rose		350-500

(From U.S.G.S., 1996)

Site Specific Geology

The site lies on the outcrop of the Person Formation of the Edwards Limestone. More specifically, the site lies on the outcrop of the Cyclic and Marine Member.

The undeveloped portion of the site lies along Hwy 46. This portion drains into Blieders Creek. Most of the exposed rock was found in the creek. No portion of the site lies within the 100-year floodplain. Most of the site was covered with soil. Few rock outcrops were visible. Much of the rock visible at the site was float, or weathered bedrock.

There was no evidence of structural faulting or fracturing observed in the field. There were no solution features found. Some of the float rock showed varying signs of pitting, especially in the creek area. There were no open vugs observed.

According to the literature (USGS, 1996), there are faults to the north and south of the site. No evidence of these faults were observed in the field.

Feature Comments

Feature S-1
This feature is hole that was dug to install a flagpole.

Feature S-2
This feature is hole that was dug to install a flagpole.

Feature S-3
This is an excavation made to repair a water line.

Feature S-4
This is a bedding plane feature approximately 5 feet up from the bottom of the creek..

Feature S-5
This is an erosion feature formed where water runs off the asphalt pavement and onto the ground. Some of the pavement itself has eroded.

Feature Locations

Feature	Latitude	Longitude
S-1	29° 43' 24.1"	98° 11' 18.5"
S-2	29° 43' 24.0"	98° 11' 18.6"
S-3	29° 43' 23.0"	98° 11' 15.7"
S-4	29° 43' 28.9"	98° 11' 06.6"
S-5	29° 43' 29.8"	98° 11' 11.1"

References

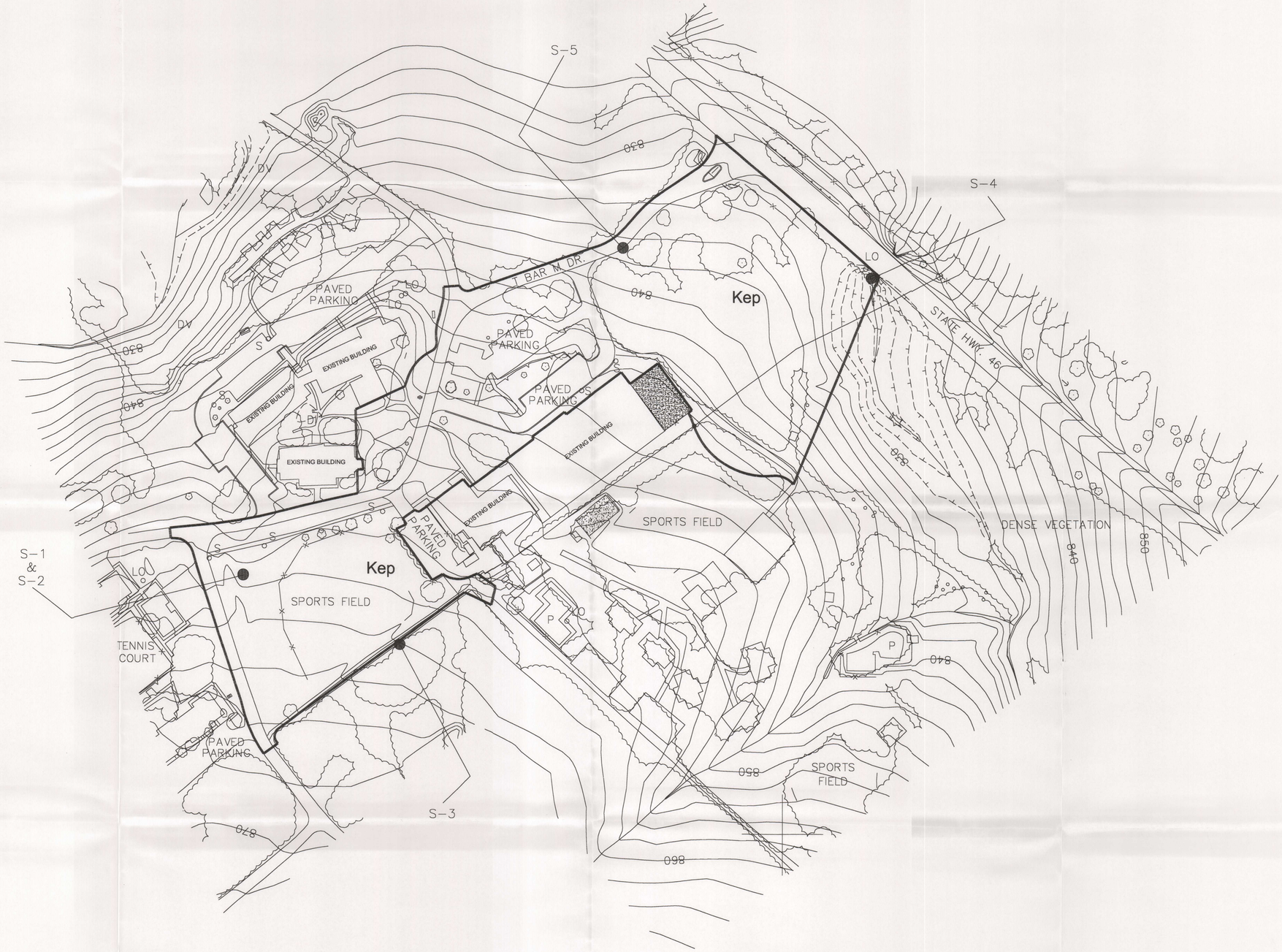
Federal Emergency Management Agency, (1991), *FIRM Flood Insurance Rate Map, Comal County, Texas and Unincorporated Areas*, Panel No. 485493 0100C, September 29, 1986.

Soil Conservation Service (1984), *Soil Survey, Comal and Hays Counties Texas*, US Departmentof Agriculture

Texas Natural Resource Conservation Commission (1999), *Instructions to Geologists*

U.S. Geological Survey (1994), *New Braunfels, West, Texas* 7.5 Minute Series (Topographic)

U.S. Geological Survey (1994), *Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County, Texas*, Water Resources Investigations Report 94-4117



Pool and Cabin Improvements
T Bar M Inc.
Center for Christian Growth
2549 HWY 46 West
New Braunfels,Texas 78132

Site Geologic Map

ARIAS & KEZAR INC
10821 Gulfdale
San Antonio, Texas 78216
(210)308-5884 Fax(210)308-8731

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

PROJECT NAME: T Bar M

PROJECT INFORMATION

1. The type of project is:
   - ___ Residential: # of Lots: ___
   - ___ Residential: # of Living Unit Equivalents: ___
   - ___ Commercial
   - ___ Industrial
   - X Other:

2. Total site acreage (size of property): 9.3

3. Projected population: 85

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	22,363	÷ 43,560 =	0.51
Parking	40,224	÷ 43,560 =	0.92
Other paved surfaces	88,077	÷ 43,560 =	2.02
Total Impervious Cover	150,664	÷ 43,560 =	3.46
Total Impervious Cover ÷ Total Acreage x 100 =			37.2%

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.

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 TNRCC 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 TNRCC.

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

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

100	% Domestic	4200 gallons/day
0	% Industrial	0 gallons/day
0	% Commingled	0 gallons/day
	TOTAL	4200 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 §285.
_X_ Sewage Collection System (Sewer Lines):
_X_ 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 Gruene Wastewater Treatment Plant. The treatment facility is:
  _X_ existing.
  ___ proposed.

16. _X_ 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" = _50_'.

18. 100-year floodplain boundaries
__ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
_X_ 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): ***Flood Insurance Rate Map (FIRM) Panel #485493-00002 C, Panel not printed-area in Zone C. Map Revised on May 15, 1991.***

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:
_X_ All **sensitive and possibly sensitive** geologic or manmade features identified in the Geologic Assessment are shown and labeled.
__ 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. NA 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 TNRCC 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 TNRCC review and executive director approval. The form was prepared by:

Jeff Moeller, P.E.
Print Name of Applicant/Owner/**Agent**

Signature of Applicant/Owner/**Agent** Date

Attachment A – Factors Affecting Water Quality

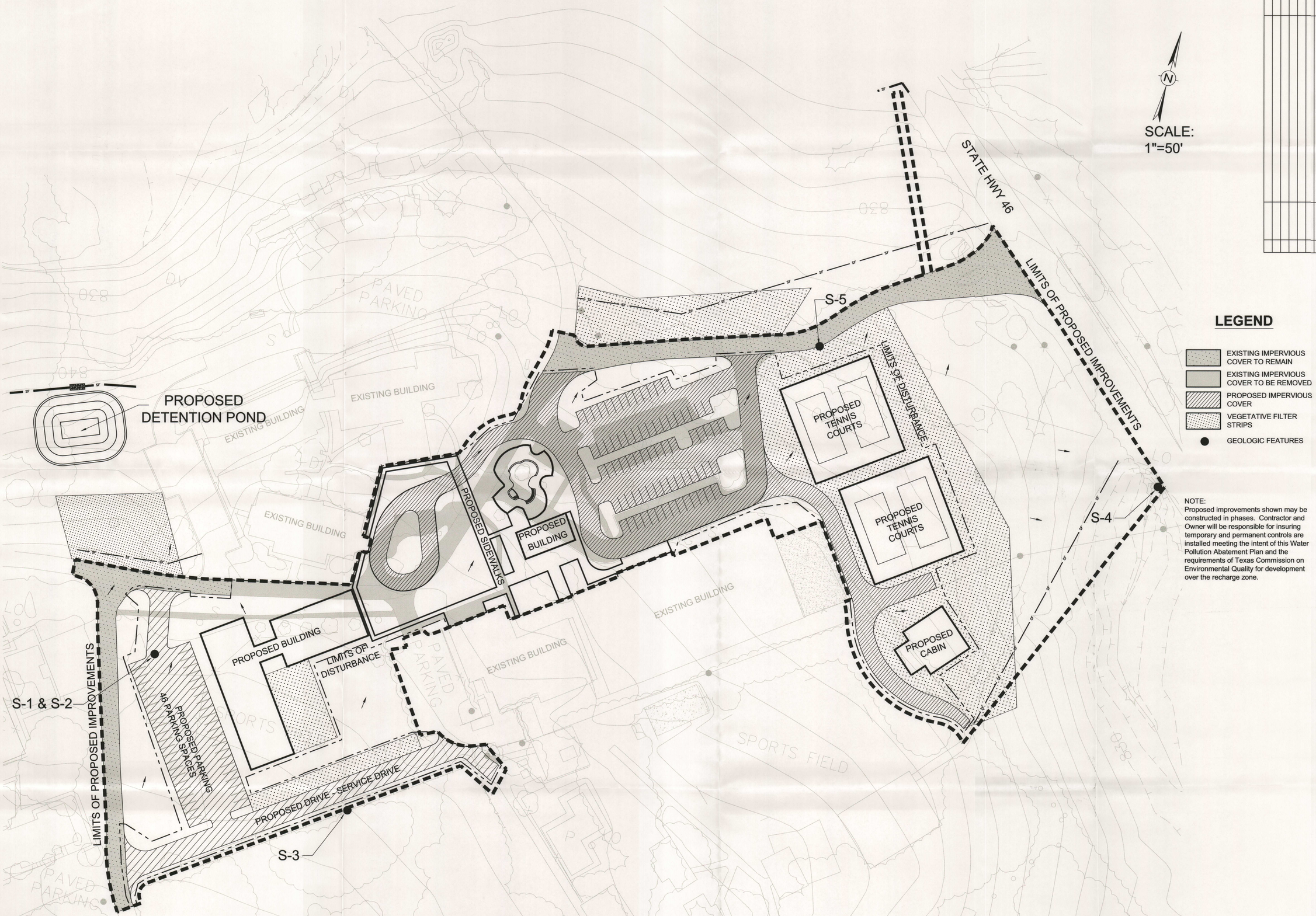
The development will consist of adding tennis courts, buildings, additional parking, and streets. This development will produce little to no pollution. Pollution may originate from ordinary cleaning chemicals, normal automobile wastes, and runoff from asphalt streets.

Attachment B – Volume and Character of Stormwater

The added improvements will result in more stormwater runoff. Runoff calculations for the watershed were performed using the Rational Method. The "C" value for the existing conditions is 59, and the "C" value for proposed conditions is 63. For the 100-year storm event, stormwater runoff increased from 132cfs to 141cfs. This is an increase of 6.8%. For the 25-year storm event, stormwater runoff increased from 108cfs to 116cfs. This is an increase of 7.4%. City of New Braunfels requires that the additional stormwater be detained and released at a rate not to exceed existing conditions.

Drainage patterns for the site will remain relatively unchanged. The project will have small areas of grading around proposed buildings and tennis courts, however the existing drainage patterns will remain unchanged. The proposed detention pond will be located in an existing swale to allow for discharging into a natural low, therefore reducing the potential of erosion.

Due to the type of proposed improvements and the use of temporary and permanent stormwater pollution control measures, the potential of increased pollutants is minimal.



NOTE:
Proposed improvements shown may be constructed in phases. Contractor and Owner will be responsible for insuring temporary and permanent controls are installed meeting the intent of this Water Pollution Abatement Plan and the requirements of Texas Commission on Environmental Quality for development over the recharge zone.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants In Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0068 Fax (210) 494-4626

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SITE PLAN

POOL AND CABIN IMPROVEMENTS
T Bar M, Inc.
CENTER FOR CHRISTIAN GROWTH
2549 HWY 46 WEST
NEW BRAUNFELS, TEXAS 78132

DATE:	6-26-02
DRAWN BY:	TMS
DESIGNED BY:	TMS
CHECKED BY:	JDM
REVIEWED BY:	
PROJECT NUMBER:	31-0147-000

SHEET

OF

Drawing Name: M:\31014700 T Bar M\dwg\WPAP\SITE-PLAN.dwg Sep 26, 2002 - 9:56cm

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

PROJECT NAME: T Bar M

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 TNRCC 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. n/a 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.
   __ The are no other potential sources 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.

__ 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, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TNRCC inspections, or during excavation, blasting, or construction.

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

__ **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is 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 record keeping practices is included in the plan.

13. _X_ All control measures must be properly selected, installed, and maintained in accordance with the manufacturers 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.

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 TNRCC Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TNRCC 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 TNRCC review and executive director approval. The application was prepared by:

Jeff Moeller
Print Name of Applicant/Owner/**Agent**

J M Moeller 9/25/02
Signature of Applicant/Owner/**Agent** Date

Attachment A – Spill Response Actions

There will be no above ground fuel storage tanks allowed on this project. Equipment will be fueled using mobile fuel trucks as needed. There is a small chance of a fuel spill occurring due to leaking construction equipment or re-fueling operations. If a minor spill were to occur, the soil impacted would be removed from the site and properly disposed of in an approved landfill site. If a major spill were to occur, where the amounts spilled were equal to, or exceeding, the Reportable Quantity, RQ, as defined by EPA regulations 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 then the following steps will be taken.

- Notify the National Response Center at (800) 424-8802 and the TNRCC San Antonio Regional Office at (210) 545-4329 immediately.
- Submit a written description of their release to the EPA and TNRCC Regional office providing the date and circumstances of the release and the steps to be taken to prevent another release
- Modify the WPAP and SWPPP to include the information listed above.

Attachment B – Potential Sources of Contamination

The only potential sources of contamination are construction equipment leaks, re-fueling spills and asphalt lay down operations. There are no other anticipated potential sources of contamination.

Attachment C – Sequence of Major Activities

Stages of Construction

1. Clearing and Grubbing – removal of trees, stumps, brush and other debris as required within the proposed disturbed area as defined in Site Plan. Approximate disturbed area = 5.5 acres
2. Rough Grading – Cutting and filling of streets and parking areas to prepare the sub-grade for pavement layers. Approximate disturbed area = 2.0 acres.
3. Prepare Building Pads – Excavation and place required material for building foundation. Approximated disturbed area is less than 1 acre.
4. Construction of Buildings – Install foundation, framing, and other required construction steps as required.
5. Utility Installation – There will be underground water, and sanitary sewer lateral installed for proposed buildings. Approximate disturbed area = less than 1 acres.
6. Finished Grading – Final landscaping and asphalt pavement layers are installed. Approximate disturbed area = 3 acres.
7. Construction of Tennis Courts and Pool – Tennis courts and pool will be installed with a disturbed area less than 0.75 acres.

Attachment D – Temporary BMPs and Measures

The area defined on the Site Map will be the only area that will be disturbed. All of the low areas, which collect storm water runoff, will remain in a natural state acting as vegetative filer strips. Grasses will be allowed to grow between the edge of pavement and parking areas will act as a filter for pavement runoff once established.

Silt fence will be place on the down gradient side of the site to contain pollutants and sediments generated from on-site runoff. Construction traffic will be required to use T Bar M Dr to access Highway 46. T Bar M Dr. will be cleaned and needed to prevent tracking of sediment onto Highway 46.

There where no sensitive features identified in the Geologic Assessment. The naturally occurring possibly sensitive features that were identified in the Geologic Assessment will be protected during construction by temporarily diverting runoff away from the features or placing silt fence just upstream of the feature location.

The following sequence will be followed for installing temporary BMPs:

1. Silt fence will be constructed on the downstream side of proposed roadways prior to beginning clearing and grubbing operations.
2. Measure taken to protect possibly sensitive recharge features.

Attachment E – Request to Temporarily Seal a Feature

No features will be temporarily sealed.

Attachment F – Structural Practices

Silt fence will be used to protect exposed soils and to prevent contamination from leaving the site or flowing into the features identified in the Geologic Assessment. Rock berms will be used downstream of the detention pond outlet to prevent sediment from leaving the site. The private asphalted road entering T Bar M will serve as the construction entrance. This road will be maintained as required to prevent construction vehicles from tracking mud onto Highway 46. Contractors will not be allowed to wash mud off of the road into downstream bar ditches. The majority of the area around the disturbed areas will remain in a natural condition; therefore, natural filtration will be allowed to occur.

Attachment H – Temporary Sediment Pond(s) Plans and Calculations

There will not be more than 10-acres of disturbed soil in a common drainage area that will occur at one time. Silt fence will be used for small drainage areas and sheet flow runoff.

Attachment I – Inspection and Maintenance for BMPs

Inspection and Maintenance Plan

- The contractor is required to inspect the controls and fences at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of controls and fences shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches six inches. Contractor is required to maintain the construction exit in a condition that prevents soil from tracking onto public roads via construction equipment and traffic.
- TNRCC staff will be allowed full access to the property during construction of the project for inspecting controls and fences and to verify that the accepted plan is being utilized in the field. TNRCC staff has the right to speak with the contractor to verify plan changes and modifications.
- Any changes made to the location or type of controls shown on the accepted plans, due to onsite conditions, shall be documented on the site plan that is part of this Water Pollution Abatement Plan. No other changes shall be made unless approved by the TNRCC and the Design Engineer. Documentation shall clearly show changes made, date, and person responsible and reason change was made.

Owner's Information:

Owner: T Bar M, Inc. Phone #: (214) 692-4254
Contact: Scott Turpin
Address: 8201 Preston Road
Dallas, Texas 75225

Owner's Engineer:

Company: Carter & Burgess, Inc. Phone #: (210) 494-0088
Contact: Jeff Moeller, P.E.
Address: 911 Central Pkwy North, #425
San Antonio, Texas 78232

Person or Firm Responsible For Erosion/Sedimentation Control Maintenance:

Company: _____ Phone #: _____
Contact: _____
Address: _____
_____

Signature of Responsible Party: _____

This portion of the form shall be filled out and signed by the responsible party prior to construction.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

There will be minimal disturbed soil due to construction operations that are not covered by pavement or buildings. The area is generally very rocky with a minimal amount of overlying soil. Areas, which are disturbed by construction staging, and storage areas will be hydro mulched with the appropriate seed mixture. Areas disturbed and outside paving or building areas will also be hydro mulched or landscaped. Installation of hydro mulch is as follows:

1. Final grading must be completed and all necessary BMPs should be in place prior to the addition of hydro mulch.
2. Hydro mulch mixture shall be as recommended by the County Agriculture Extension Agent or as shown below for the specific time of year and whether or not irrigation will be utilized.
3. Hydro mulch shall be applied at a rate stipulated by the Extension Agent or as shown below and shall be applied in a uniform manner
4. Other types of seeding applications may be used by the Contractor if approved by the Design Engineer and TNRCC.
5. If blankets or matting are used, they shall conform to the Texas Department of Transportation specifications.

Dates	**Climate**	**Species**	**(lb/ac)**
Sept. 1 to Nov. 30	Temporary Cool Season	Tall Fescue Oats Wheat **Total**	4.0 21.0 30.0 **55.0**
Sept. 1 to Nov. 30	Cool Season Legume	Hairy Vetch	8.0
May 1 to Aug. 31	Temporary Warm Season	Foxtail Millet	30.0

NO.	DATE	REVISION	BY

SHEET OF

DATE: 6-26-02
DRAWN BY: TMS
DESIGNED BY: TMS
CHECKED BY: JDM
REVIEWED BY:
PROJECT NUMBER: 31-0147-000

POOL AND CABIN IMPROVEMENTS
T Bar M, Inc.
CENTER FOR CHRISTIAN GROWTH
2549 HWY 46 WEST
NEW BRAUNFELS, TEXAS 78132

TEMPORARY PLAN

JEFFREY D. BOELLER
88588
LICENSED PROFESSIONAL ENGINEER
9/26/02

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525
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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

PROJECT NAME: T Bar M

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

   __ A technical guidance other than the TNRCC 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.**

__ 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.

_X_ 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, TNRCC 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 TNRCC 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.

__ **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 TNRCC review and executive director approval. The application was prepared by:

Jeff Moeller
Print Name of Applicant/Owner/**Agent**

Jeff Moeller 9/25/02
Signature of Applicant/Owner/**Agent** Date

Attachment A – 20% or Less Impervious Cover Waiver

The proposed development at T Bar M will exceed 20% impervious cover and will not be used for multi-family residential developments, schools, or small business sites.

Attachment B – BMPs for Upgradient Stormwater

The stormwater generated upgradient of the site is minimal. Minor grading around proposed improvements will allow upstream runoff to be diverted away from areas being treated. Due to the rural nature of the development, stormwater originating upgradient will have minimal to no pollutant load. Most upgradient stormwater flows across grassy areas prior to reaching the proposed improvements.

Attachment C – BMPs for On-site Stormwater

Vegetated Filter Strips will be used to treat the surface runoff generated from the additional impervious cover added by the proposed development. Pollution generated from the proposed impervious cover would include everyday pollutants generated by asphalt pavement and parking, including small amounts of oil from passenger cars. Water from back flushing the filter of the proposed pool will be discharged into an existing sanitary sewer line on the site.

Attachment D – BMPs for Surface Steams

The BMPs that will be used to protect Blieders Creek will be the vegetative filter strips. The following measure will be taken to protect the "possible sensitive" recharge features.

1. S-1 and S-2 are manmade holes that were dug to install a flagpole. These features are located within the proposed parking area and will be filled and closed with the installation of the parking lot.

2. S-3 was identified as an excavated area made to repair a water line. This feature is located upstream of the improvements proposed in this WPAP and will not require protection.

3. S-4 was identified as a bedding plane feature located near the bottom of the creek. The improvements proposed in this feature's watershed include a small section of street, cabin, and a portion of a tennis court. Vegetative filter strips will be placed down gradient of the improvements and upgradient of the feature.

4. S-5 was identified as an area eroded adjacent to an existing road caused by runoff. This area will be repaired to prevent moisture from reaching the base

material of the street and causing additional damage, and prevent water from standing adjacent to the road.

Attachment E – Request to Seal Features

The naturally occurring "possible sensitive" features will not be filled.

Attachment F – Construction Plans

A plan sheet titled "Permanent Plan" is included at the end of this report. This plan shows locations of all vegetative filter strips. The vegetative filter strips will be installed by someone specializing in landscaping to insure vegetation that will thrive in the area is installed. Areas designated, as vegetative filter strips on the Permanent Plan shall have a minimum of 4-inches of topsoil along with seeding or sod. A recommended seeding is as follows:

From September 15 to March 1, seeding shall be with a combination of 2 pounds per 1000 SF of unhulled Bermuda and 7 pounds per 1000 SF of Winter rye with a purity of 95% with 90% germination.

From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 2 pounds per 1000 SF with a purity of 95% with 85% germination.

A native seed mixture can be used as well as sod. Final stands of vegetation shall meet the requirements as set forth in the guidelines for vegetative filter strips and shall be capable of providing a dense, healthy vegetative cover. No construction plans for any other permanent BMP's is included, nor will they be used.

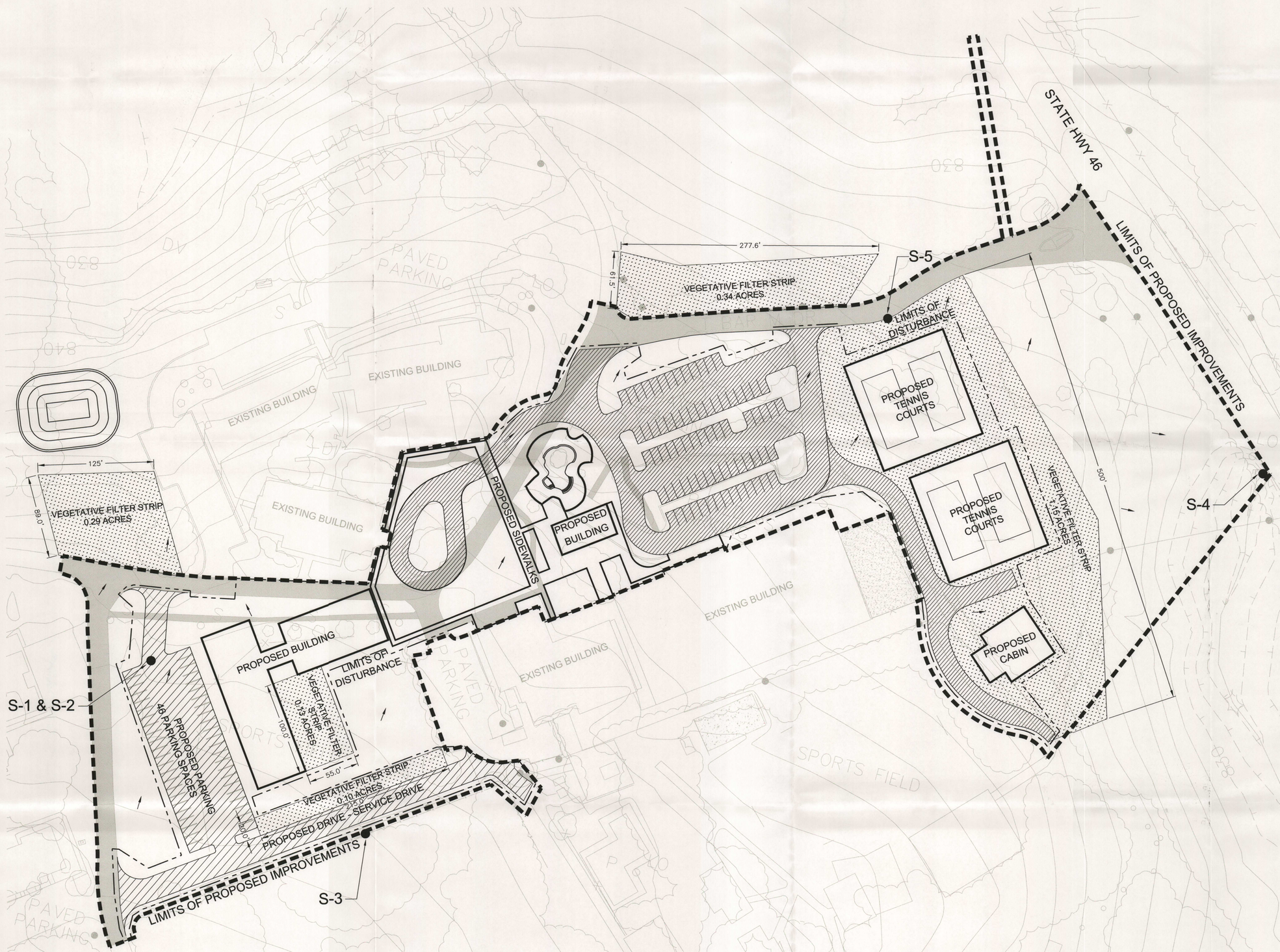
Attachment G – Inspection, Maintenance, Repair and Retrofit Plan

All vegetative filter strips will be maintained at regular intervals. Vegetation will not be allowed to exceed a height of 6-inches and will be cut regularly. Vegetative filter strips will be watered as required to maintain a healthy and dense stand. Bi-weekly inspections of the areas will be performed to ensure the vegetation is in a healthy state and has complete coverage. Repairs to damaged vegetation, or areas that die off, will be performed by removing any dead vegetation and replacing with 4-inches of topsoil and either seeds or sod of like vegetation. The newly planted area will be watered as needed to promote a quick stand of vegetation.

Attachment I – Measures for Minimizing Surface Stream Contamination

Installing the vegetative filter strips in the location shown on the Permanent Stormwater Plan will minimize the potential of pollutants from reaching Blieders Creek. Design plans will include a detention pond to prevent an increase in stormwater discharge rates.

The pond will be designed based on requirements set by the City of New Braunfels. All water entering the pond will have already been treated. This will protect the existing creek from increase flow rates, velocities and pollutants. Downstream areas from the detention pond will be protected to minimize erosion.



Background Load Calculations

Site Area = 9.35ac
Existing Impervious Area = 1.79ac (19% Imp)
Proposed Impervious Area = 3.46ac (37% Imp)

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Exist = 0.546(.19)^2 + 0.328(0.19) + 0.030
Rv Exist = 0.11

Au = Site Area - Impervious Area
Au = 9.35ac - 1.79ac
Au = 7.56ac

L=P(Au x 0.54 + Ad x Rv x 38.4)
L=33(7.56 x 0.54 + 1.79 x 0.11 x 38.4)
L=384

Post Development Load

Rv = 0.546(IC)^2 + 0.328(IC) + 0.030
Rv Prop = 0.546(.37)^2 + 0.328(0.37) + 0.030
Rv Prop = 0.23

L = A x P x Rv x 38.4
L = 9.35ac x 33 x 0.23 x 38.4
L = 2725

Required Reduction

Lr = 0.8(Post Dev. Load - Pre Dev. Load)
Lr = 0.8(2725 - 384)
Lr = 1873

FS = Fraction of Site Treated

Lr = Li x FS x (TSS Removal Efficiency)
1873 = 2725 x FS x 0.85
FS = 0.81

Minimum Fraction of Impervious Area that must be treated is.

MF = FS x Proposed Impervious Area
MF = 0.81 x 3.46
MF = 2.80ac

Required Treatment Area

Maximum Hydraulic Loading = 4.6ft^3/ft^2

MHL = P x MF/TA
4.6ft^3/ft^2 = 33in x 1ft/12in x 2.80ac/TA
TA = 1.67ac

Proposed Vegitative Filter Strips = 2.01ac

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4525

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STATE OF TEXAS
JEFFREY D. MOELLER
88588
LICENSED
PROFESSIONAL ENGINEER

PERMANENT PLAN

POOL AND CABIN IMPROVEMENTS
T Bar M, Inc.
CENTER FOR CHRISTIAN GROWTH

2549 HWY 46 WEST
NEW BRAUNFELS, TEXAS 78132

DATE: 6-26-02
DRAWN BY: JOS
DESIGNED BY: TMS
CHECKED BY: JDM
REVIEWED BY: TMS
PROJECT NUMBER: 31-0147-000

SHEET

OF

Drawing Name: M:\310147.000 T Bar M\dwg\WPAP\PERMANENT PLAN.dwg Sep 26, 2002 - 10:21am

AGENT AUTHORIZATION FORM
FOR REQUIRED SIGNATURE
EDWARDS AQUIFER PROTECTION PROGRAM
RELATING TO 30 TAC CHAPTER 213
EFFECTIVE JUNE 1, 1999

I Scott Turpin
Print Name

Partner
Title - Owner/President/Other

of T Bar M, Inc. / Center for Christian Growth
Corporation/Partnership/Entity Name

have authorized Jeff Moeller
Print Name of Agent/Engineer

of Carter & Burgess, 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 Natural Resource Conservation Commission (TNRCC) 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 TNRCC's approval letter. The TNRCC is authorized to assess administrative penalties of up to $10,000 per day per violation.

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

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

4. For applicants who are not the property owner, but who have the right to control and possess and control the property, additional authorization is required from the owner.

Applicant's Signature

Date 8/28/02

THE STATE OF TEXAS §

County of BEXAR §

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

GIVEN under my hand and seal of office on this 28 day of AUG., 02

NOTARY PUBLIC Brenda Robles

Typed or Printed Name of Notary BRENDA ROBLES

MY COMMISSION EXPIRES: July 26, 2004

BRENDA ROBLES
Notary Public, State of Texas
My Commission Expires July 26, 2004

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
EDWARDS AQUIFER PROTECTION PLAN
APPLICATION FEE FORM

NAME OF PROPOSED PROJECT: T Bar M
PROJECT LOCATION: 2549 Highway 46 West
NAME OF APPLICANT: T Bar M, Inc. / Center for Christian Growth
APPLICANT'S ADDRESS: 8201 Preston Road
CONTACT PERSON: Jeff Moeller PHONE: 494-0088
Please Print

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

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

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION. 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):

X **SAN ANTONIO REGIONAL OFFICE**
☐ **Mailed to TNRCC:**
TNRCC - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

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

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement, Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement, Non-residential	9.3 Acres	$ 4,000.00
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	$

Signature Jeff Moeller 9/25/02 Date

TNRCC-0574 (Rev. 6/1/99)

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

EDWARDS AQUIFER PROTECTION PLAN

APPLICATION FEE SCHEDULE

30 TAC §213.14 (effective 11/14/97) & 30 TAC §213.9 (effective 6/1/99)

WATER POLLUTION ABATEMENT PLANS AND MODIFICATIONS

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	<5	$500
Multiple Single Family Residential and Parks	<5 5 < 10 10 < 50 ≥50	$1,000 $2,000 $3,000 $5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 ≥10	$2,000 $3,000 $4,000 $5,000

ORGANIZED SEWAGE COLLECTION SYSTEMS AND MODIFICATIONS

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$500 - $5,000

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	$500	$500 - $5,000

EXCEPTION REQUESTS

PROJECT	FEE
Exception Request	$250

EXTENSION OF TIME REQUESTS

PROJECT	FEE
Extension of Time Request	$100