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

January 2, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer; Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; 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. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

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 Comal County on behalf of Comal County on October 24, 2007. Final review of the WPAP was completed after additional material was received on December 13th, 28th, and January 2, 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

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

The subject site consists of six tracts totaling 46.503 acres summarized in the table below.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03

2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	7.58
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	2.262	36.94
			Circular Animal Run	0.253	
			Extension Amphitheater	0.530	
			Road Department Stockpile	2.487	
			Extension Proposed Barn	0.060	
			Extension Oval Animal Run	0.174	
			Extension Green House	0.047	
			Extension Gazebo	0.004	
			Extension Meeting Room	0.047	
			Extension Potting Shed	0.009	
Total (proposed)				7.39	42.10
Total		46.503		19.58	42.10

* - There was 0.925 acres of existing impervious cover located within Tract 6 prior to the regulation of impervious cover on 03/21/90. In a modification approved by letter dated October 24, 2003 (after regulation of impervious cover), 0.591 acres of impervious cover was added to the 0.925 acres. Therefore, there is currently 1.516 acres of existing impervious cover located within the 20 acres of Tract 6 which includes 0.925 acres that pre-dates the requirement for treatment of stormwater runoff.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 20 acres. It will include improvements to the agricultural barn, the show arena, the road paving material stockpile area, the meeting room, and include a parking lot expansion, a potting shed and greenhouse, gazebo, and an amphitheater. The increase in impervious cover will be 5.872 acres. The total impervious cover will be 7.388 acres (36.94% of 20 acres).

With the proposed commercial project, the total impervious cover for the contiguous 46.503 acres owned by Comal County is 19.58 acres (42.10%).

According to a letter dated, May 28, 2003, signed by Mr. Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

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 vegetative filter strips will be constructed to treat 5,801 pounds of total suspended solids (TSS) from an increase in impervious cover of 5.872 acres within a drainage area of 20 acres (see Table I above). They are designed in accordance with the 2005 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices."

- The engineered vegetated filer strip extends along the entire length of the contributing area;
- The slope does not exceed 20%;
- The minimum dimension of the filter strip (in the direction of flow) is not less than 15 feet;
- The maximum width (in the direction of flow) of the contributing impervious area does not exceed 72 feet;
- The minimum vegetated cover is 80%;
- The contributing area to the filter strip is relatively flat so that runoff is distributed evenly to the vegetated area without the use of a level spreader;
- The vegetated filter strip is free of gullies or rills that can concentrate overland flow.

The approved measures 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, dated May 20, 2003, there are seven geologic or manmade features located on the 46.503 acre project site. Six of the seven features were located within the 20 acre drainage area of this modification. All features were assessed as having sensitivities of less than 40. No features were re-assessed. A site inspection was conducted on August 4, 2003 for a previous modification. The investigation report states that the site was as described by the geologic assessment, and no additional geologic or manmade features were observed. The San Antonio Regional Office did not conduct a site inspection for this submittal.

SPECIAL CONDITIONS

I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.

II. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated October 24, 2003.

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

IV. 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.

V. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

VI. 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.

VII. Construction of the above said project is approved. Use of the vegetative filter strip as wastewater treatment and disposal unit is not authorized by this letter. Discharge of waste material into the engineered filter strip from the agricultural barn represents an unauthorized discharge. Animals may not occupy the agricultural barn until proper authorization has been obtained from the TCEQ Water Quality Division – Standards, Assessments, and CAFO Permitting. Submit to the San Antonio Regional Office documentation authorizing this discharge within 30 days of receipt of the authorization. Any physical or operational change of the

permanent water pollution abatement measures shall be subject to the requirements of §213.4(j) with regards to modifications of previously approved plans.

VIII. Discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, are not authorized by this letter, and shall be disposed of properly.

IX. Treating stormwater runoff from material stockpiles is a non-standard use of vegetative filter strips. Provide an annual evaluation on the effectiveness of the vegetative filter strips treating the material stockpiles, due on the anniversary date of this letter. After 3 years of evaluation and successful usage, you may petition the TCEQ for suspension of this requirement.

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.

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 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.

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. One water well exists onsite. 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 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 Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/JJ/eg

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

cc: Mr. Bruce Boyer, P.E. City of New Braunfels
Mr. Tom Hornseth, Comal County
Ms. Velma Danielson, Edwards Aquifer Authority
TCEQ Central Records, MC 212 Building F

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

RECEIVED

MAY 30 2014

COUNTY ENGINEER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 23, 2014

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Comal County Road Department, located at 195 David Jonas Drive, New Braunfels, Texas
PLAN TYPE: Application for a Modification of an Approved Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213

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.

Please forward your comments to this office by June 23, 2014.

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

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

May 23, 2014

RECEIVED

MAY 30 2014

COUNTY ENGINEER

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Comal County Road Department, located at 195 David Jonas Drive, New Braunfels, Texas
PLAN TYPE: Application for a Modification of an Approved Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213

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.

Please forward your comments to this office by June 23, 2014.

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

Modification of a Previously Approved Plan Checklist

✓ General Information Form (*TCEQ-0587*)
- ATTACHMENT A - Road Map
- ATTACHMENT B - USGS / Edwards Recharge Zone Map
- ATTACHMENT C - Project Description

✓ Geologic Assessment Form (*TCEQ-0585*)
- ATTACHMENT A - Geologic Assessment Table, *TCEQ-0585-Table*
- Comments to the Geologic Assessment Table
- ATTACHMENT B - Soil Profile and Narrative of Soil Units
- ATTACHMENT C - Stratigraphic Column
- ATTACHMENT D - Narrative of Site Specific Geology
- Site Geologic Map(s)
- Table or list for the position of features' latitude/longitude (if mapped using GPS)

TCEQ-R13
MAY 20 2014
SAN ANTONIO

✓ Modification of a Previously Approved Plan (*TCEQ-0590*)
- ATTACHMENT A - Original Approval Letter and Approved Modification Letters
- ATTACHMENT B - Narrative of Proposed Modification
- ATTACHMENT C - Current Site Plan of the Approved Project

✓ Application Form (appropriate for the modification)
- Aboveground Storage Tank Facility Plan (*TCEQ-0575*)
- Organized Sewage Collection System Plan (*TCEQ-0582*)
- Underground Storage Tank Facility Plan (*TCEQ-0583*)
- Water Pollution Abatement Plan Application Form (*TCEQ-0584*)
- Lift Station / Force Main System Application (*TCEQ-0624*)

✓ Temporary Stormwater Section (*TCEQ-0602*), if necessary
- ATTACHMENT A - Spill Response Actions
- ATTACHMENT B - Potential Sources of Contamination
- ATTACHMENT C - Sequence of Major Activities
- ATTACHMENT D - Temporary Best Management Practices and Measures
- ATTACHMENT E - Request to Temporarily Seal a Feature, if sealing a feature
- ATTACHMENT F - Structural Practices
- ATTACHMENT G - Drainage Area Map
- ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations
- ATTACHMENT I - Inspection and Maintenance for BMPs
- ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices

✓ Permanent Stormwater Section (*TCEQ-0600*), if necessary
- ATTACHMENT A - 20% or Less Impervious Cover Waiver, if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site
- ATTACHMENT B - BMPs for Upgradient Stormwater
- ATTACHMENT C - BMPs for On-site Stormwater
- ATTACHMENT D - BMPs for Surface Streams
- ATTACHMENT E - Request to Seal Features, if sealing a feature
- ATTACHMENT F - Construction Plans
- ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan
- ATTACHMENT H - Pilot-Scale Field Testing Plan, if BMPs not based on *Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs*
- ATTACHMENT I -Measures for Minimizing Surface Stream Contamination

Modification of a Previously Approved Plan Checklist (continued)

- ✓ Agent Authorization Form (*TCEQ-0599)*, if application submitted by agent
- ✓ Application Fee Form (*TCEQ-0574*)
- ✓ Check Payable to the "Texas Commission on Environmental Quality"
- ✓ Core Data Form (*TCEQ-10400)*

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: Comal County Road Department
COUNTY: Comal STREAM BASIN: Guadalupe

EDWARDS AQUIFER: ☑ RECHARGE ZONE
__ TRANSITION ZONE

PLAN TYPE: ☑ WPAP __ AST __ EXCEPTION
__ SCS __ UST ☑ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Sherman Krause
Entity: Comal County
Mailing Address: 150 N. Seguin St.
City, State: New Braunfels, TX Zip: 78130
Telephone: (830) 221-1100 FAX: (830) 608-2026

Agent/Representative (If any):

Contact Person: Robert Boyd, P.E.
Entity: Comal County
Mailing Address: 195 David Jonas Drive
City, State: New Braunfels, TX Zip: 78132
Telephone: (830) 608-2090 FAX: (830) 608-2009

2. __ This project is inside the city limits of _____.
☑ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of New Braunfels, Texas.
__ 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.

From New Braunfels, take SH 46 past FM 2722 approximately 1mile to the Comal County Road Department on the south side of SH 46.

4. ☑ **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. ☑ **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:

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

6. ☑ 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. ☑ **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)
__ Other: _____

PROHIBITED ACTIVITIES

9. ☑ 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. ☑ 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:

☑ 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 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)

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

13. ☑ 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.

14. ☑ 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.

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:

Robert Boyd, P.E.

Print Name of Customer/Agent

Signature of Customer/Agent

5/15/14

Date

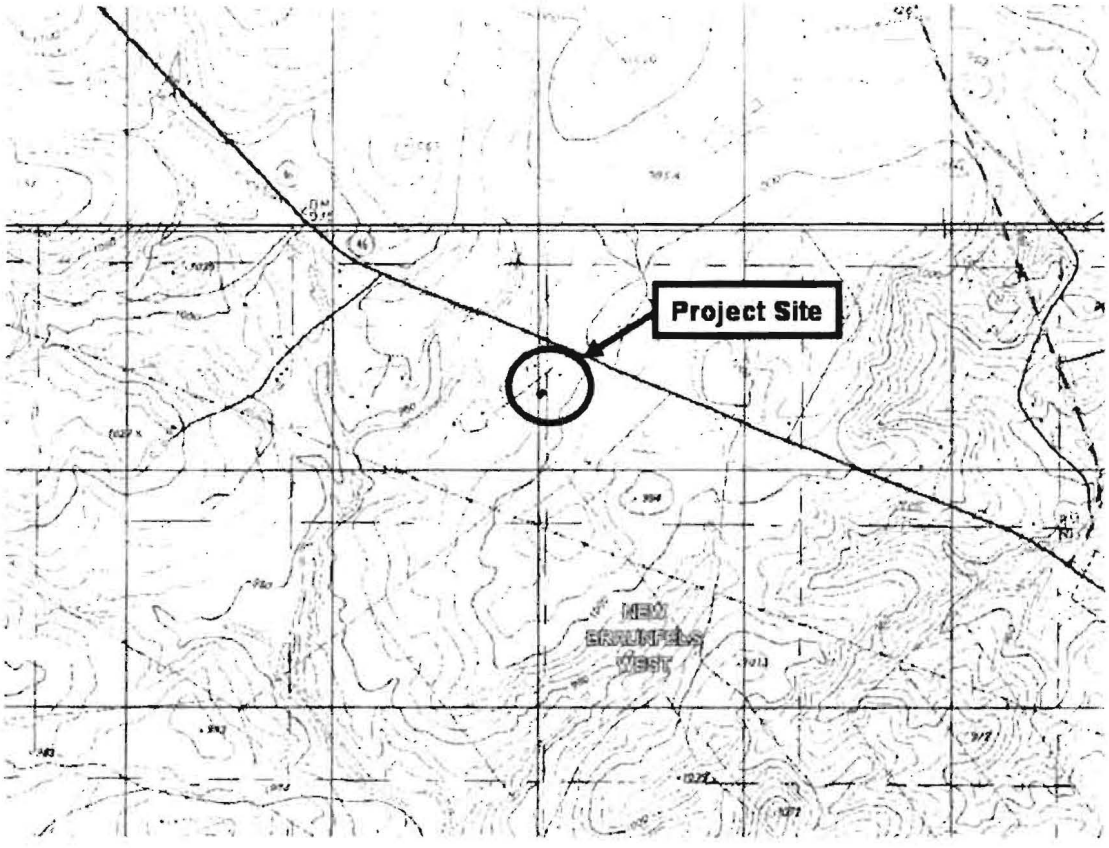
If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

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.

Attachment A



Attachment B – USGS / Edwards Recharge Zone Map



The entire area is in the Edwards Aquifer Recharge Zone.

TCEQ-0587 Attachment C – Project Description

The Comal County Road Department is proposing to do the following:

Modify the existing sedimentation/filtration basin to an AquaLogic™ Cartridge System for Drainage Area #2 (16.964 acres) and Drainage Area #3 (9.539 acres) with 100% impervious cover.

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

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION

REGULATED ENTITY NAME: 46.53 Acres - Comal County (195 David Jonas Drive & Hwy. 46)

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

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

PROJECT INFORMATION

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

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

	Soil Units, Infiltration Characteristics & Thickness		
	Soil Name	Group*	Thickness (feet)
N/2	(RUD) Rumple-Comfort Assoc.	C/D	2.0 +
S/2	(RUD) Rumple-Comfort Assoc.	C/D	0.5

*** Soil Group Definitions (Abbreviated)**

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

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

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

5. XX 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" = 4066'
Site Geologic Map Scale	1" = 200'
Site Soils Map Scale (if more than 1 soil type)	1" = 200'

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

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

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

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

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

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

XX There are 1 (#) 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.
XX 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.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: May 12 - 20, 2003
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.

David Seagraves
Print Name of Geologist

(210) 377-1603
Telephone

Fax


Signature of Geologist

May 20, 2003
Date

Representing: "Independent Consultant"
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer Protection Program, please contact us at 512/939-2929 (Austin) or 210/403-4024 (San Antonio).

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.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SITE SPECIFIC GEOLOGY

The on-site geological unit is the Person Formation of the Edwards Group as identified by field investigation and referenced by the Hydrogeologic Subdivisions Map of the U.S.G.S. Water-Resources Investigations Report 94-4117, Comal County, Texas and the Geologic Map of the New Braunfels, Texas 30X60 Minute Quadrangle (Scale 1: 100,000) Bureau of Economic Geology, 2000.
No exposures of the Person Fm. were noted on the northern portion (15 acres) of the site. This is due to a thick soil cover. The only feature (S-7), a closed depression found within this portion of the site is possibly the result of man-made activities.
The southern portion (20 acres) of the site was formerly utilized as a horse stable with pens and contains a residence. There is less soil cover (possibly due to over grazing) and greater amounts of limestone floatrock on the southern portion resulting in exposures of the Person Fm.. These exposures are typically discontinuous, linear (10-20 feet long and greater) clay-filled fractured beds along slight breaks in slope and parallel to contour. Overall, the trend of the fractures are random, although the bearings of some long axes range from N70E to N85E. Offset fractures are approximately perpendicular to the long axes. These features appear to be the result of weathering. One exception is found in feature (S-5), which appears to be solution fracturing and is devoid of clay infilling and vegetation. Feature (S-5) is located within the centerline of a secondary drainage way and could be limited to the exposed bed without extending downward into the underlying limestone bed. Another area of note which was not listed on the Geologic Assessment Table is a larger area (100 x 150') of clay filled fractured rock which did not fit the similar pattern typical of this site. I recommend that this area be monitored if any future development is planned over this area. There were a few areas were the top of beds were exposed with sealed fractures and some vugs were also noted which were the result of weathering. Essentially, the site consisted of fine grained, medium beds of limestone. Overall slope is 1 to 3 percent towards the northwest. No other major karstic or structural features were noted on the site. Adjacent to the site, there are three large sink hole features approximately 1,000 feet to the east, northeast and north. The site is between two major fault complexes, the first one is the Hueco Springs Fault and is approximately 2,500 feet to the southeast, and the second one is the Bat Cave Fault and is approximately 5,000 feet to the northwest.
Overall, surface conditions within the northern portion of the site appear to have the ability to impede fluid movement into the subsurface. Whereas, surface conditions within the southern portion appear to have the ability to impede fluid movement into the subsurface at a lesser extent.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SOIL UNIT

The on-site soil consists of a reddish brown very cherty clay loam. The northern portion of the complex extension (15 acres) has a thickness of at least two feet of this soil type with greater amounts of chert gravel. Previous use of the northern portion was as crop land and has a good grass cover and cleared of all trees. Whereas, the southern portion (20 acres) consists of a thinner soil profile, on average, 6 inches with limestone floatrock and less chert fragments. The soil has also infilled the interstices of exposed fractured limestone beds. Grass cover within the southern portion is sparse to moderate with a moderate tree cover consisting predominantly of oaks.

The on-site soil is classified as the (RUD) Rumple-Comfort association, undulating as referenced by the S.C.S. Soil Survey of Comal County, Texas (1984).

The S.C.S. Hydrologic Soil Groups - Technical Release No. 55, Appendix A has the Rumple soil listed as a Soil Group "C" soil, and is defined as soils having a slow infiltration rate when thoroughly wetted. The Comfort soil is listed as a Soil Group "D" soil, and is defined as soils having a very slow infiltration rate when thoroughly wetted.

The northern portion of the site also contains a greater percentage of the (TaB) Tarpley clay within the Rumple-Comfort association. The Tarpley clay soil type was not listed in the Technical Release No. 55, but should be assumed to be in Soil Group "D".

Overall, both soil types appear to have the ability to impede fluid movement into the subsurface.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

Site-Specific Stratigraphic Column

EDWARDS GROUP	Person Formation:	100 to 150 feet thick (approximate), medium to massive beds of mudstone to grainstone limestone, with chert fragments and some fossils. Upper part eroded.
	Kainer Formation:	350 feet thick (approximate), medium to massive bedded limestones
- - -

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

COMMENTS

S-1 (MB) Water well, active.

S-2 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

S-3 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

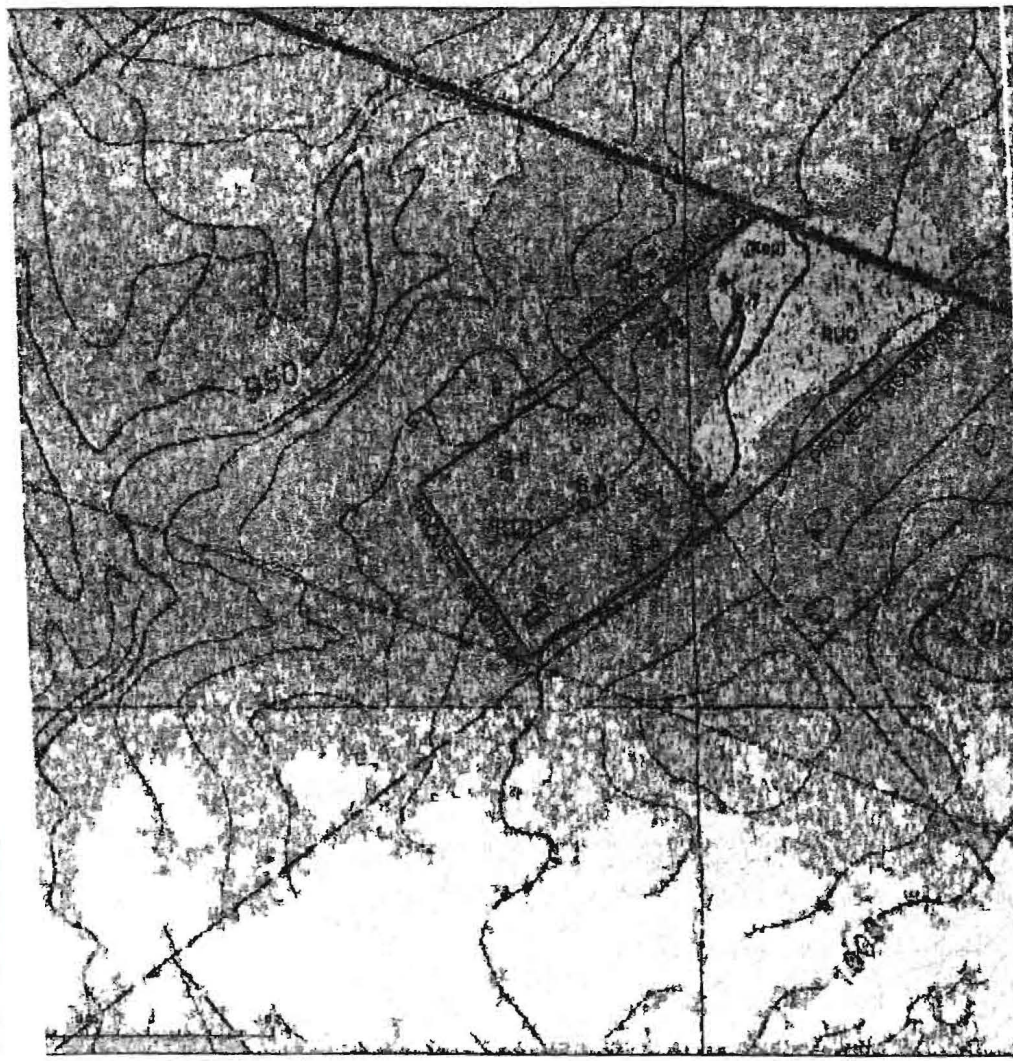
S-4 (MB) Excavation, slight excavation into the slope to provide a level area for horse training. The excavation resulted in a three sided face with one corner being approximately 3 feet below natural grade. Also, the deepest portion has become a closed depression. Fine material covers the entire base which impedes fluid movement downward. A few hairline fractures were noted along the face of the excavation.

S-5 (SF) fractured rock within the centerline of a minor drainageway, devoid of clay infilling and vegetation. Fractures appear to be within an individual bed and it was difficult to ascertain if the fractures continued downward into the underlying bed.

S-6 (CD) possible remnant of tree clearing. Several inches of ~~soil~~ and leaves within the base over bedrock.

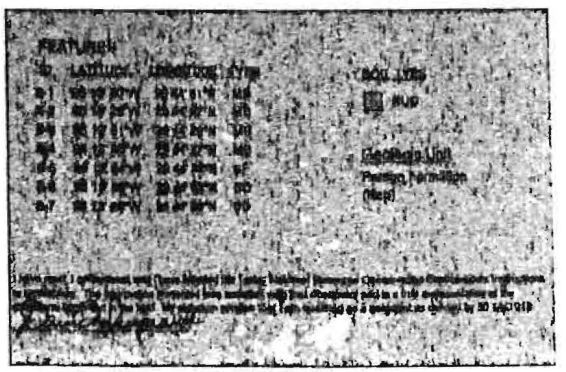
S-7 (CD) possible remnant of terracing (former crop land) and/or adjacent development, built up parking lot for the Comal County Road Department Complex. The long axis of the closed depression is parallel to existing contours.

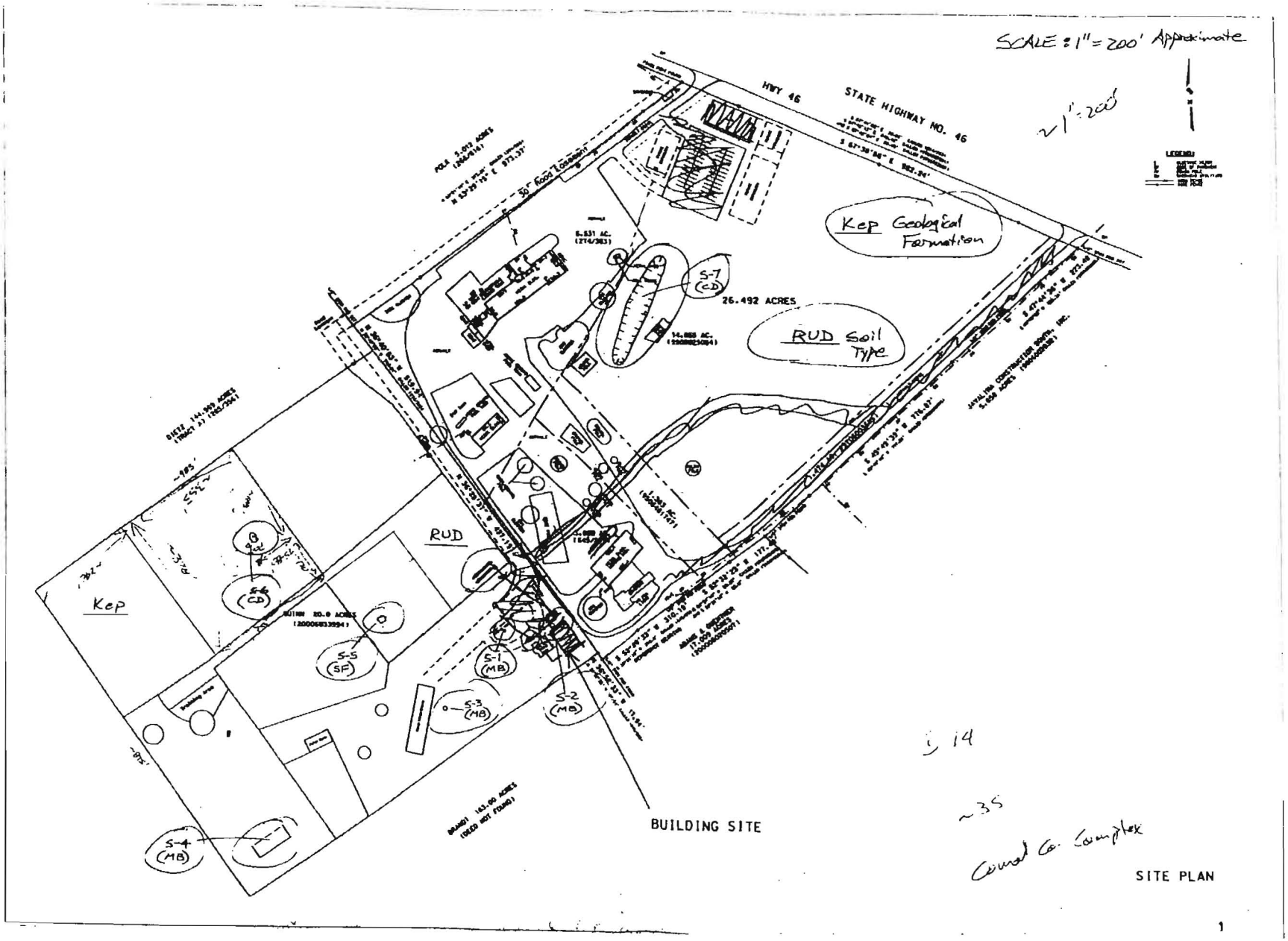
COMAL COUNTY PROJECT - GEOLOGIC ASSESSMENT










SCALE = 1" = 200' Approximate
≈ 1" : 200'
HWY 46
STATE HIGHWAY NO. 46
Kep Geological Formation
RUD Soil Type
26.492 ACRES
RUD
Kep
S-7 (CD)
S-6 (CD)
S-5 (SF)
S-1 (MB)
S-2 (MB)
S-3 (MB)
S-4 (MB)
BUILDING SITE
~14
~35
Conrad Co. Complex

SITE PLAN

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION

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			MB	30	Kep									5	35	✓		✓		HILLSIDE
S-2			MB	30	Kep									5	35	✓		✓		HILLSIDE
S-3			MB	30	Kep									5	35	✓		✓		HILLSIDE
S-4			MB	30	Kep									9	39	✓			✓	HILLSIDE
S-5			SF	20	Kep	15	10	1	RANDOM		1	0.33	C	19	39	✓			✓	DRAINAGE
S-6			CD	5	Kep	11	5.5	1					O	10	15	✓		✓		HILLSIDE
S-7			CD	5	Kep	200	50	1.25					F	5	10	✓			✓	HILLSIDE

* DATUM:

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

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

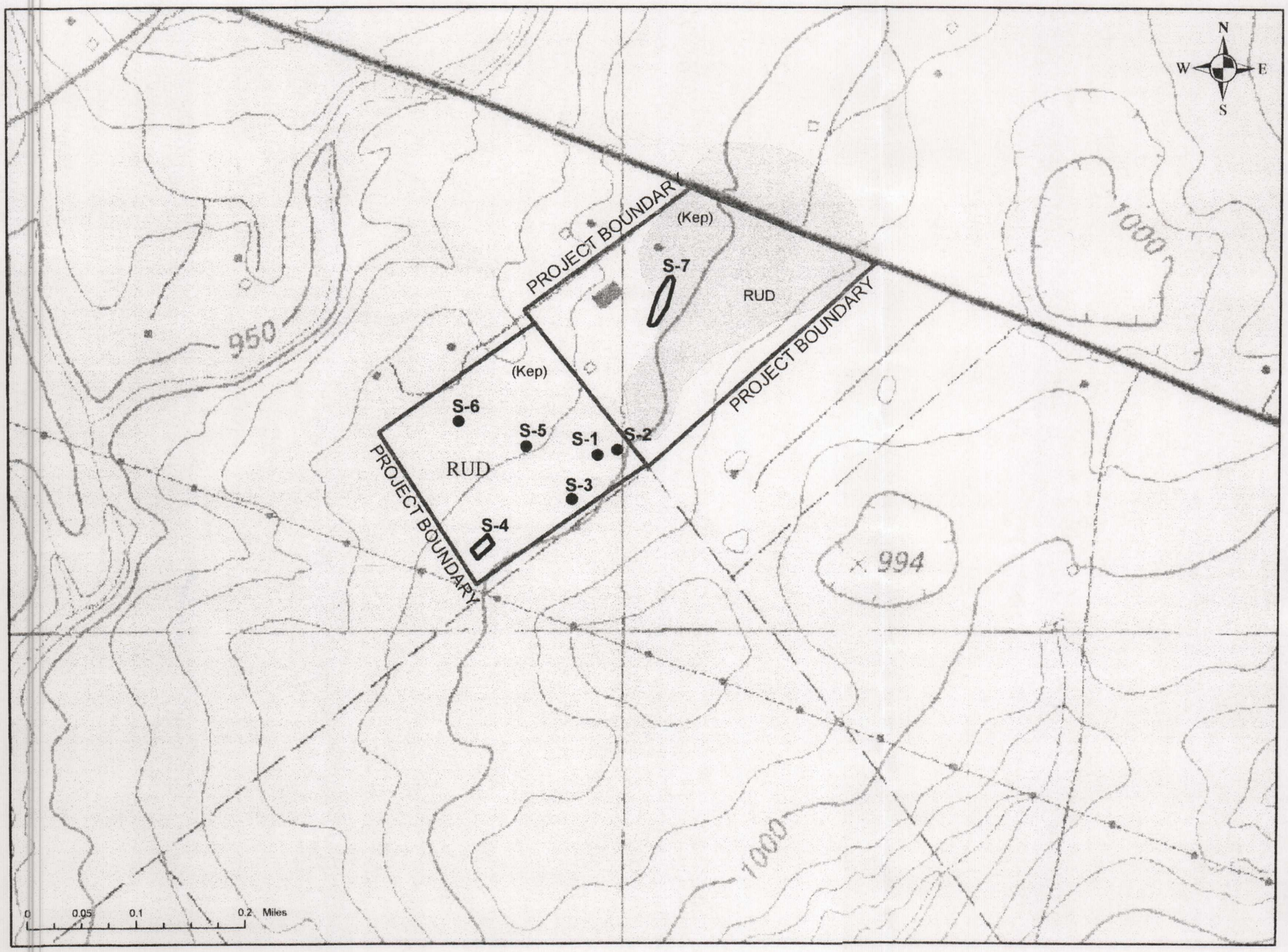
Dennis Hengraves

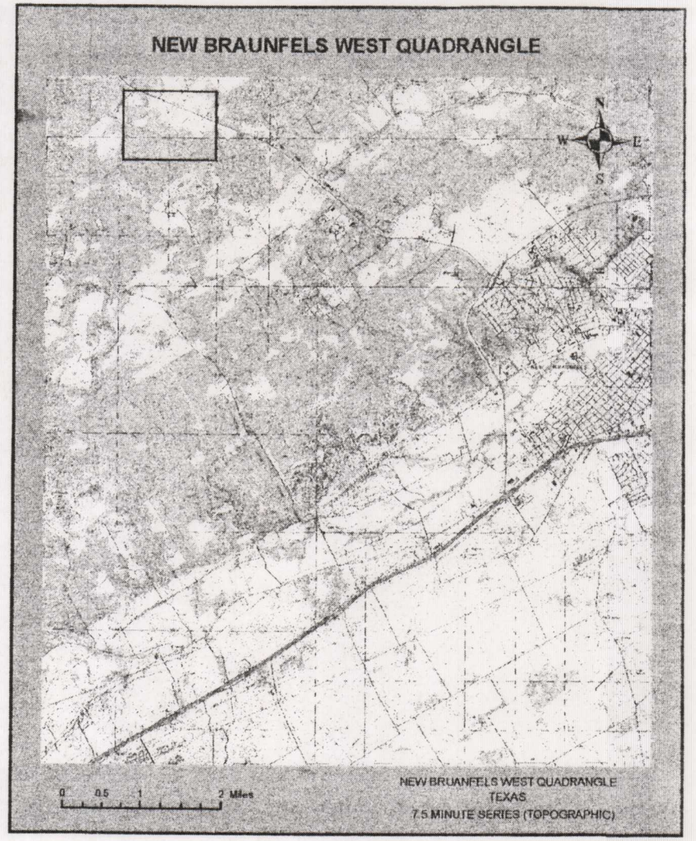
Date MAY 20, 2003

Sheet 1 of 1

TNRCC-0585-Table (Rev. 5-1-02)

COMAL COUNTY PROJECT - GEOLOGIC ASSESSMENT





FEATURES

ID	LATITUDE	LONGITUDE	TYPE
S-1	98 13' 30"W	29 44' 31"N	MB
S-2	98 13' 29"W	29 44' 32"N	MB
S-3	98 13' 31"W	29 44' 29"N	MB
S-4	98 13' 36"W	29 44' 27"N	MB
S-5	98 13' 34"W	29 44' 32"N	SF
S-6	98 13' 38"W	29 44' 33"N	CD
S-7	98 13' 26"W	29 44' 39"N	CD

SOIL TYPE

RUD

Geologic Unit

Person Formation
(Kep)

I have read, I understood, and I have followed the Texas Natureal 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.

Laurie Hargraves

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. Current Regulated Entity Name: Comal County Road Department
Original Regulated Entity Name: Comal County Road Department
Assigned Regulated Entity Numbers (RN): 1) New Braunfels, Texas, 2) _____, 3) _____

X The applicant has not changed and the Customer Number (CN) is: CN 600647275
___ The applicant has changed. A new Core Data Form has been provided.

2. X **Attachment A: Original Approval Letter and Approved Modification Letters:** A copy of the original approval letter and copies any letters approving modification are found at the end of this form.

3. A modification of a previously approved plan in requested for (check 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;
___ 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	46.503	46.503
Type of Development	Industrial	Industrial
Number of Residential Lots	N/A	N/A
Impervious Cover (acres)	19.58	19.58
Impervious Cover (%)	42.10	42.10
Permanent BMPs	Partial Sedimentation/Filtration Basin	AquaLogic Cartridge System
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. X **Attachment B: Narrative of Proposed Modification.** A narrative description of the nature of the proposed modification is provided at the end of this form. It discusses what was approved, including previous modifications, and how this proposed modification will change the approved plan.

6. X **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 provided at the end of this form. A site plan detailing the changes proposed in the submitted modification is required elsewhere.

   X 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. N/A The acreage of the approved plan has increased. A Geologic Assessment has been provided for the new acreage.

   X Acreage has not been added to **or** removed from the approved plan.

8. X 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.

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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

5/15/14
Date

Attachment "A"

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2003

Mr. Thomas H. Hornseth, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas, 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Engineers Office; Located at 195 David Jonas Drive; 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 Protection Program File No. -309.01, Investigation No. 148617

Dear Mr. Hornseth:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project you submitted to the San Antonio Regional Office on behalf of Comal County on June 4, 2003. Final review of the WPAP submittal was completed after additional material was received on August 22, 2003, and September 12, 2003. 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, modification to a plan, or exception. 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% of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The subject site consists of six tracts totaling 46.503 acres summarized in the table below, and illustrated on Exhibit "A" (enclosed).

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33[1]	77.03
2	1986	3.050	Office & shop Buildings		
	Total	9.581	Storage Yards	3.05[2]	
3	1995	1.383	Storage Yards	1.383[3]	100.0
4	1997	1.474	Access road to county recycling operation	0.581	39.42
5	1999	14.065	Approximately 1.5 acres of mulching operation	0	0.00
5A			Proposed JP & Road	2.189	15.56
6	2003	20.00	Road, barn, shed, house	0.925	4.63
6A			Extension Offices	0.591	-----
Tracts 1 - 5		26.503	-----	11.533	43.51
Tracts 6 & 6A		20.00	-----	1.516	7.58
Total		46.503	-----	13.049	28.06

1 Includes 0.728 acres of impervious cover approved by TNRCC letter dated 10/6/93, and treated by 1.19 acres of vegetated filters. Also includes 0.608 acres of recently paved impervious cover located north of the office and west of the main entrance driveway.

2 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved, and existed prior to regulation of impervious cover on 3/21/90.

3 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved.

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 46.503 acres and will have the following parameters:

- The proposed new construction will include buildings for the Comal County Justice of the Peace, with office space for a Constable, Adult Probation and Addressing/GIS staff; the Comal County Extension Service; and an access road.
- The total impervious cover for the 46.503 acre project site is summarized in the table above.
- According to a letter dated, May 28, 2003, signed by Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the 46.503 acre site (see enclosed WPAP Site Plan) after construction, the impervious cover (0.925 acres) in Drainage Area #1 (20 acres) will use existing downgradient vegetation, a sedimentation/filtration basin will be provided for Drainage Areas #2 (16.964 acres) and #3 (9.539 acres). The individual treatment components will consist of:

Drainage Area #2: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.75 inch of stormwater run-off from 16.964 acres with 100% impervious cover, providing a total capture volume of 55,421 cubic feet. The filtration system will consist of:

1. 4,160 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

Drainage Area #3: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first one inch of stormwater run-off from 9.539 with 100% impervious cover, providing a total capture volume of 41,552 cubic feet. The filtration system will consist of:

1. 3,120 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

GEOLOGY

According to the geologic assessment included with the submittal, there are seven geologic or manmade features located on the 46.503 acre project site. All features were assessed as having sensitivities of less than

40. The San Antonio Regional Office site inspection of August 4, 2003, revealed that the site is as described by the geologic assessment and no additional geologic or manmade features were observed.

SPECIAL CONDITIONS

I. Based on the August 4, 2003 on-site inspection of the project site, Commission records indicate that construction of two paved parking areas were actually initiated on or before August 4, 2003, and that other site development and construction activities have already been conducted. It was determined that approximately 2,450 square feet of pavement not included in previous WPAPs was constructed without the prior approval of the water pollution abatement plan for the project, as required by Commission rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the WPAP modification, as provided by this letter, shall not absolve the applicant of any prior violations of Commission rules related to this project, and shall not necessarily preclude the Commission from pursuing appropriate enforcement actions and administrative penalties associated with such violations, as provided in 30 TAC §213.10 of Commission rules.

II. The sedimentation/filtration basins are designed in accordance with the 1999 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices." The basins will incorporate sedimentation and filtration as described above.

III. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

IV. The TCEQ does not agree with Comal County's assertion that because Watershed #1 has less than 20% impervious cover and the extension service functions as an educational facility, that it is exempt from the requirements of a WPAP. Watershed #1 is part of the 46.503 acre site and the total impervious cover of 28.06%.

The existing downgradient vegetation within Watershed #1 will be accepted as treatment of stormwater runoff from the associated impervious cover. Prior to any construction within Watershed #1 not approved by this letter, a modification to the WPAP must be submitted with appropriate application fees.

V. Because stormwater treatment was proposed within Watershed #3, prior to any construction not approved by this letter within Watershed #3, appropriate construction plans must be submitted to the TCEQ to determine that no other sources of pollution are associated with the project.

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. 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 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. One well exists on 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.

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 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 John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/jkm/eg

Enclosure:
1. Exhibit "A" (Site acreage map, Document# 9706003685)
2. WPAP Site Plan
3. Deed Recordation Affidavit, Form TCEQ-0625
4. Change in Responsibility for Maintenance or Permanent BMPs-Form TCEQ-10263

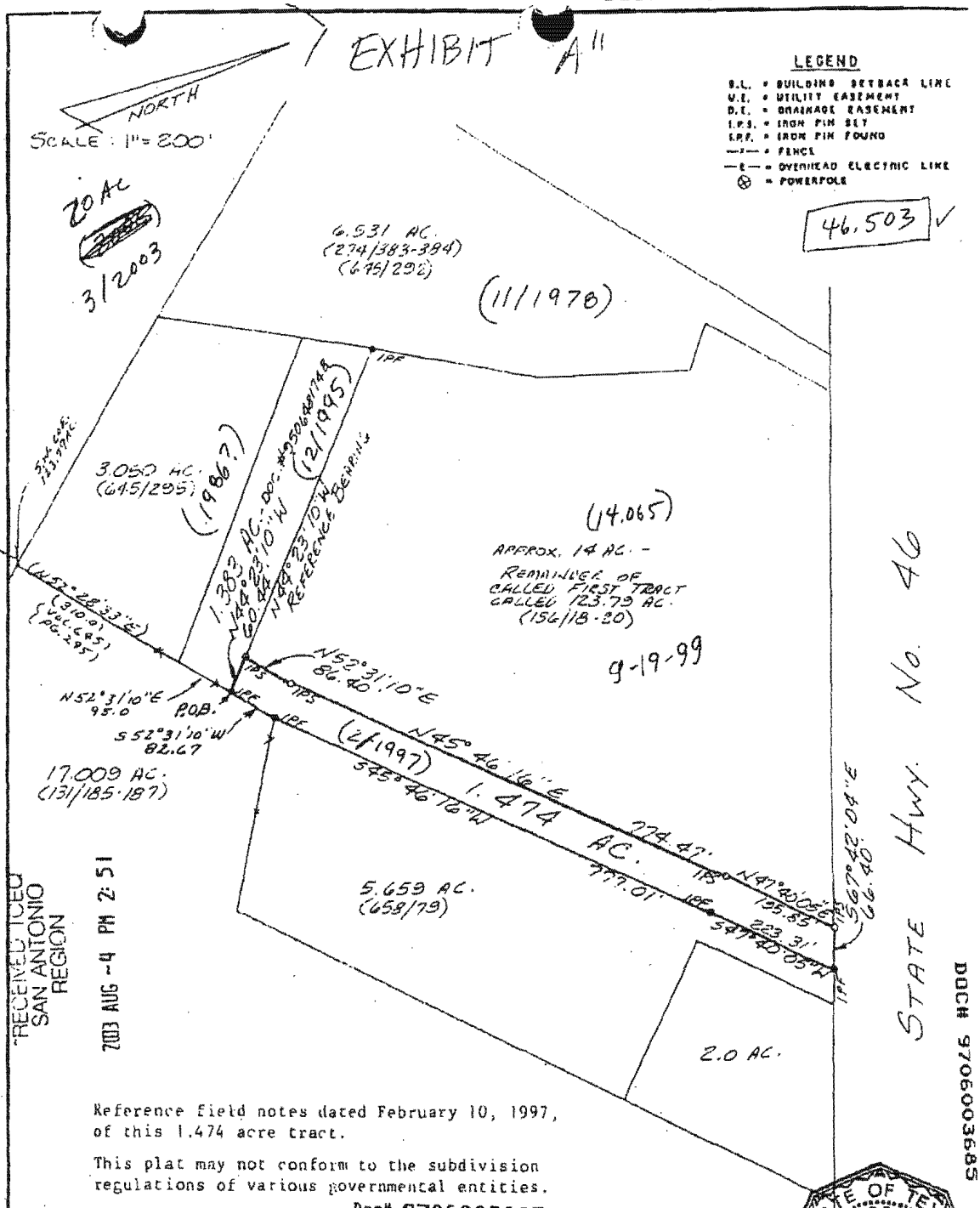
cc w/enclosures 1& 2:

Mr. John Bohuslav, TXDOT San Antonio District
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

Attachment "A"

DOC# 9706003685

EXHIBIT "A"



RECEIVED ICED
SAN ANTONIO
REGION
2003 AUG -4 PM 2:51

Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

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.

Jay Streater
COUNTY CLERK
COMAL COUNTY, TEXAS

Doc# 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAS
REGISTERED
RICHARD A. GOODWIN
4089
PROFESSIONAL
LAND SURVEYOR

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-9585

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

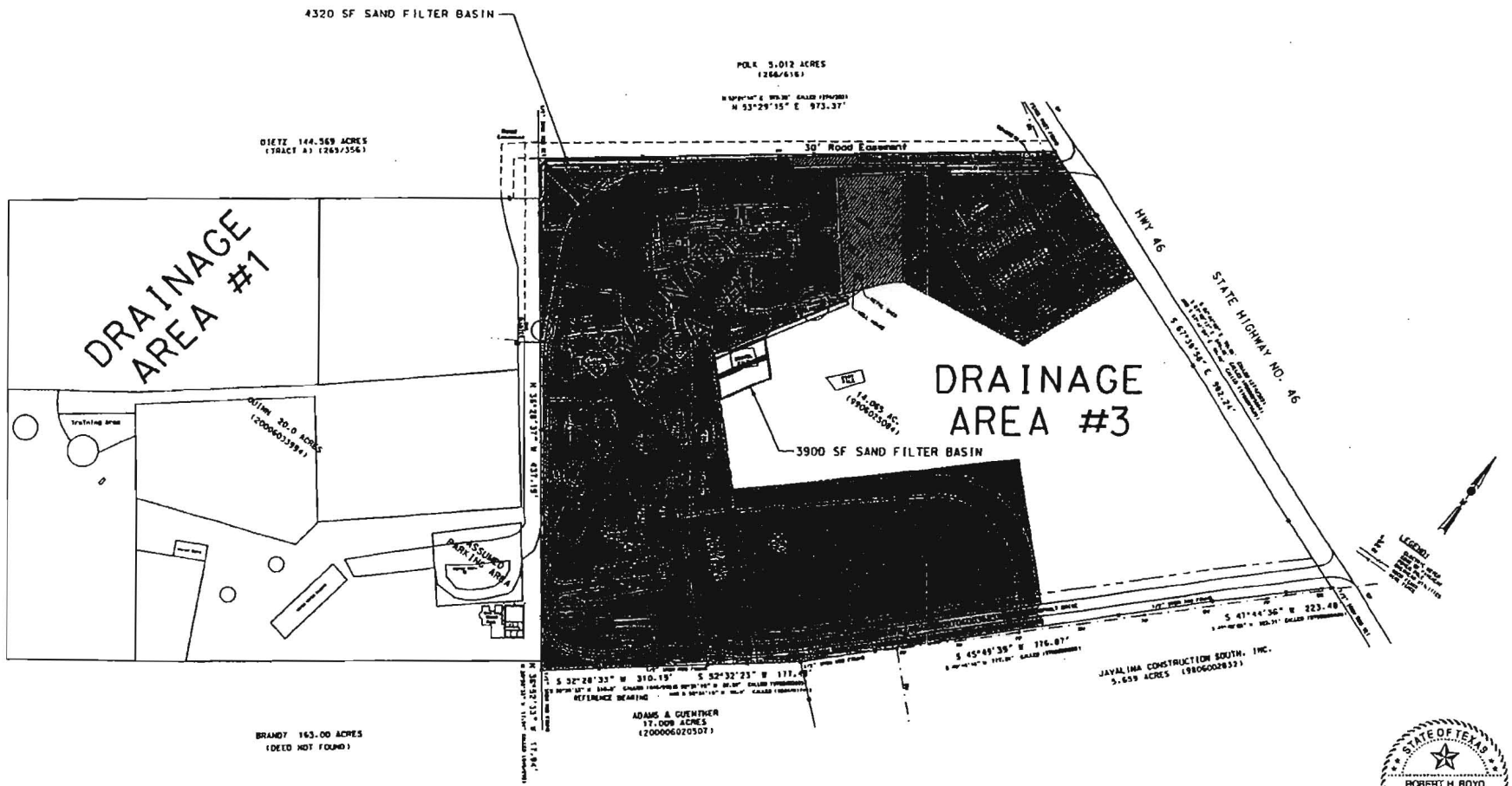
STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February, 1997 A. D.

R A Goodwin

DOC# 9706003685



STATE OF TEXAS
ROBERT H. BOYD
91702
LICENSED
PROFESSIONAL ENGINEER

9/10/13

195 David Jonas Drive New Braunfels, TX 78132 Phone: (830) 608-2090 Fax: (830) 608-2009	COMAL COUNTY ENGINEER'S OFFICE WPAP SITE PLAN	Date: 8/14/03	REVISIONS		SCALE: ~~1"=200'~~
			No.	Date:	
		Drawn by: RHB			
		Checked by: THH			Sheet 1 of 1

.\WPAP\WPAP Site Plan.dgn Sep. 08, 2003 16:28:29

Attachment "A"

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

January 2, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer; Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; 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. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

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 Comal County on behalf of Comal County on October 24, 2007. Final review of the WPAP was completed after additional material was received on December 13th, 28th, and January 2, 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

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

The subject site consists of six tracts totaling 46.503 acres summarized in the table below.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03

2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	7.58
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	2.262	36.94
			Circular Animal Run	0.253	
			Extension Amphitheater	0.530	
			Road Department Stockpile	2.487	
			Extension Proposed Barn	0.060	
			Extension Oval Animal Run	0.174	
			Extension Green House	0.047	
			Extension Gazebo	0.004	
			Extension Meeting Room	0.047	
			Extension Potting Shed	0.009	
Total (proposed)				7.39	42.10
Total		46.503		19.58	42.10

* - There was 0.925 acres of existing impervious cover located within Tract 6 prior to the regulation of impervious cover on 03/21/90. In a modification approved by letter dated October 24, 2003 (after regulation of impervious cover), 0.591 acres of impervious cover was added to the 0.925 acres. Therefore, there is currently 1.516 acres of existing impervious cover located within the 20 acres of Tract 6 which includes 0.925 acres that pre-dates the requirement for treatment of stormwater runoff.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 20 acres. It will include improvements to the agricultural barn, the show arena, the road paving material stockpile area, the meeting room, and include a parking lot expansion, a potting shed and greenhouse, gazebo, and an amphitheater. The increase in impervious cover will be 5.872 acres. The total impervious cover will be 7.388 acres (36.94% of 20 acres).

With the proposed commercial project, the total impervious cover for the contiguous 46.503 acres owned by Comal County is 19.58 acres (42.10%).

According to a letter dated, May 28, 2003, signed by Mr. Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

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 vegetative filter strips will be constructed to treat 5,801 pounds of total suspended solids (TSS) from an increase in impervious cover of 5.872 acres within a drainage area of 20 acres (see Table I above). They are designed in accordance with the 2005 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices."

- The engineered vegetated filer strip extends along the entire length of the contributing area;
- The slope does not exceed 20%;
- The minimum dimension of the filter strip (in the direction of flow) is not less than 15 feet;
- The maximum width (in the direction of flow) of the contributing impervious area does not exceed 72 feet;
- The minimum vegetated cover is 80%;
- The contributing area to the filter strip is relatively flat so that runoff is distributed evenly to the vegetated area without the use of a level spreader;
- The vegetated filter strip is free of gullies or rills that can concentrate overland flow.

The approved measures 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, dated May 20, 2003, there are seven geologic or manmade features located on the 46.503 acre project site. Six of the seven features were located within the 20 acre drainage area of this modification. All features were assessed as having sensitivities of less than 40. No features were re-assessed. A site inspection was conducted on August 4, 2003 for a previous modification. The investigation report states that the site was as described by the geologic assessment, and no additional geologic or manmade features were observed. The San Antonio Regional Office did not conduct a site inspection for this submittal.

SPECIAL CONDITIONS

I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.

II. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated October 24, 2003.

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

IV. 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.

V. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

VI. 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.

VII. Construction of the above said project is approved. Use of the vegetative filter strip as wastewater treatment and disposal unit is not authorized by this letter. Discharge of waste material into the engineered filter strip from the agricultural barn represents an unauthorized discharge. Animals may not occupy the agricultural barn until proper authorization has been obtained from the TCEQ Water Quality Division – Standards, Assessments, and CAFO Permitting. Submit to the San Antonio Regional Office documentation authorizing this discharge within 30 days of receipt of the authorization. Any physical or operational change of the

permanent water pollution abatement measures shall be subject to the requirements of §213.4(j) with regards to modifications of previously approved plans.

VIII. Discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, are not authorized by this letter, and shall be disposed of properly.

IX. Treating stormwater runoff from material stockpiles is a non-standard use of vegetative filter strips. Provide an annual evaluation on the effectiveness of the vegetative filter strips treating the material stockpiles, due on the anniversary date of this letter. After 3 years of evaluation and successful usage, you may petition the TCEQ for suspension of this requirement.

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.

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 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.

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. One water well exists onsite. 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 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 Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/JJ/eg

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

cc: Mr. Bruce Boyer, P.E. City of New Braunfels
Mr. Tom Hornseth, Comal County
Ms. Velma Danielson, Edwards Aquifer Authority
TCEQ Central Records, MC 212 Building F

TCEQ-0590 Attachment B – Narrative of Proposed Modification

Comal County applied for and obtained approval for a Water Pollution Abatement Plan in October 2003. This plan was for three drainage areas:

- Drainage Area #1 was 20 acres used existing downgradient vegetation to treat stormwater runoff.

- Drainage Area #2 was 16.964 acres and used a sedimentation/filtration basin that was constructed in 2004 to treat stormwater runoff and was designed to treat 100% impervious cover in Drainage Area #2.

- Drainage Area #3 was 9.539 acres and was proposed to be treated by a sedimentation/filtration basin that has yet to be built since no development within Drainage Area #3 has occurred.

Comal County applied for and obtained approval for a Modification to a Previously Approved Water Pollution Abatement Plan in January 2008. The plan did not modify Drainage Area #2 or Drainage Area #3. However, it did modify Drainage Area #1 by implementing Engineered Filter Strips to treat stormwater runoff in Drainage Area #1.

The intent of this proposed modification is to combine Drainage Area #2 and Drainage Area #3 by modifying the sedimentation/filtration basin constructed in 2004 to a AquaLogic Cartridge System that will be sized to handle 100% impervious cover in Drainage Area #2 and Drainage Area #3. No modifications will be made to Drainage Area #1.

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: Comal County Road Department

REGULATED ENTITY INFORMATION

1. The type of project is:
   - ___ Residential: # of Lots: _____
   - ___ Residential: # of Living Unit Equivalents: _____
   - ___ Commercial
   - ☑ Industrial
   - ___ Other: _____

2. Total site acreage (size of property): 46.503

3. Projected population: 100

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	274,733	÷ 43,560 =	6.307
Parking	336,632	÷ 43,560 =	7.728
Other paved surfaces	241,540	÷ 43,560 =	5.545
Total Impervious Cover	852,905	÷ 43,560 =	19.58
Total Impervious Cover ÷ Total Acreage x 100 =			42.10

5. ☑ **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. ___ 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:

__% Domestic	_____ gallons/day
100 % Industrial	1012 gallons/day
__% Commingled	_____ gallons/day

TOTAL 1012 gallons/day

15. Wastewater will be disposed of by:

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

☑ **ATTACHMENT C - Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.

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

__ Sewage Collection System (Sewer Lines):

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

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

__ The SCS was previously submitted on New Braunfels, Texas.

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

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

__ existing.
__ proposed.

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

SITE PLAN REQUIREMENTS

Items 17 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" = N/A '.

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. 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 N/A (#) 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.** An exception to the Geologic Assessment requirement is requested and explained at the end of this form.

22. N/A 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. N/A Locations where soil stabilization practices are expected to occur.

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

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

ADMINISTRATIVE INFORMATION

28. ☑ 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.

29. ☑ Any modification of this WPAP will require 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

5/15/14
Date

Attachment A

Factors Affecting Water Quality

Factors that could affect surface water and groundwater quality are regulated substances (according to the definition of regulated substance by the Edwards Aquifer Authority) as well as oils and fuels that may leak from construction vehicles on the site.

Attachment B

Volume and Character of Stormwater

The site lies within the watershed of the Guadalupe River and the entire tract is uniformly sloped in a general northwesterly direction.

The following stormwater runoff estimates were calculated using the Rational Method and standard engineering practices for time of concentration and runoff coefficient values. Flowrates are based on a 25-year rainfall event.

Overall Drainage Area: 46.503 acres

Runoff Coefficient "C"

Land Type	Classification	"C"
A	Rolling Cultivated/Grazed Clay Soils:	.70
B	Rolling Commercial/Paved Clay Soils	.90

Composite "C"

Existing Conditions

19.58 acres developed and 26.923 acres undeveloped

$[(0.90)(19.58) + (0.70)(26.923)]/46.503 = 0.78$

Proposed Conditions

19.58 acres developed and 26.923 acres undeveloped

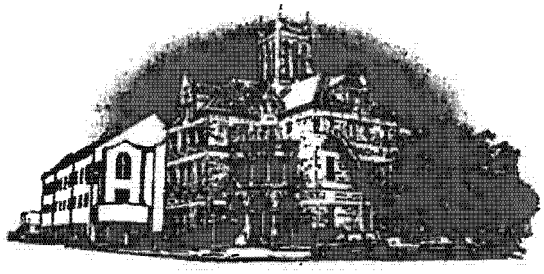
$[(0.90)(19.58) + (0.70)(26.923)]/46.503 = 0.78$

Time of Concentration "t_c": 12 minutes - existing development
Time of Concentration "t_c": 12 minutes - proposed development

Intensity "I" 8.57 in/hr – existing (TxDOT Hydraulic Manual)
8.57 in/hr – proposed

Flowrate Q=CIA
Existing $Q_{25} = (.78)(8.57)(46.503) = 298.90$ cfs
Proposed $Q_{25} = (.78)(8.57)(46.503) = 298.90$ cfs

The character of the stormwater is not expected to change significantly from the existing conditions. We are proposing no new impervious cover, however, we are designing the AquaLogic Cartridge system to handle 100% impervious cover from Drainage Area #2 and Drainage Area #3, a total of 26.503 acres.



Comal County

OFFICE OF COMAL COUNTY ENGINEER

April 21, 2014

Mr. Sherman Krause
Comal County Judge
150 N. Seguin Ave.
New Braunfels, TX 78132

Re: Modification to a Previously Approved WPAP for the Comal County Road Department, within Comal County, Texas

Dear Mr. Krause:

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

- The Geologic Assessment, prepared by David Seagraves, P.G.
- The Water Pollution Abatement Plan, prepared by the Comal County Engineer's Office

Moreover, according to TAC §285.41(b), the owner of the referenced site, must inform, in writing, each prospective purchaser, lessee, or renter of the following:

- All lots within the Comal County Road Department are subject to the terms and conditions of TAC §285.40-42;
- A Permit to Construct is required from Comal County before an OSSF can be constructed at the Comal County Road Department;
- A License to Operate is required from Comal County before an OSSF can be operated at the Comal County Road Department;
- That an application for a water pollution abatement plan, as defined in TAC §213, has been made, whether it has been approved, and if any restrictions or conditions have been placed on that approval; and

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

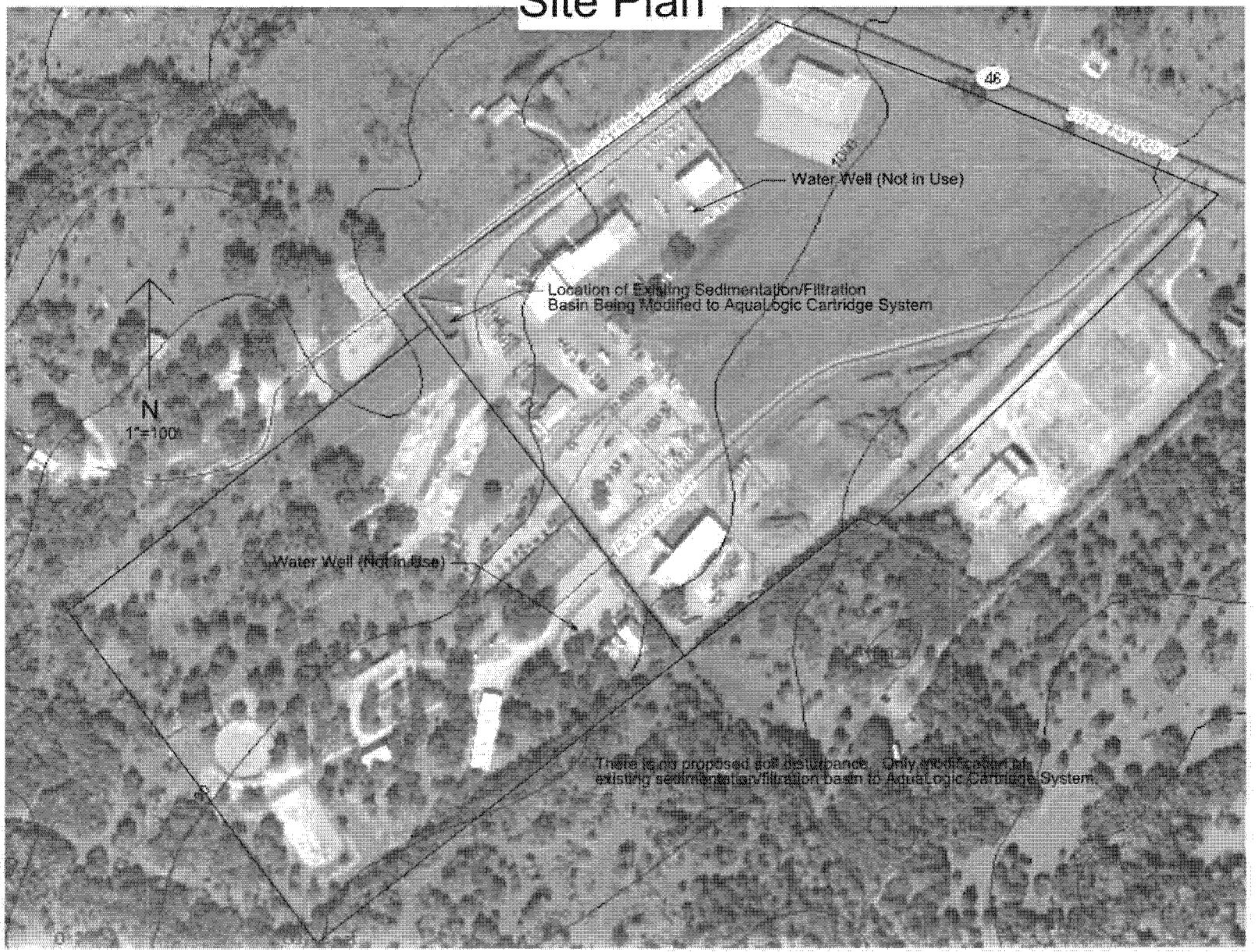
the TCEQ San Antonio office, has reviewed and approved a plan proposed to protect the feature, the structural integrity of the OSSF, and the water quality of the aquifer. The plan shall be sealed, signed, and dated by a professional engineer.

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

Sincerely,

Robert Boyd, P.E.
Comal County Assistant Engineer

Site Plan


46
Water Well (Not in Use)
Location of Existing Sedimentation/Filtration
Basin Being Modified to AquaLogic Cartridge System
N
1"=100'
Water Well (Not in Use)
There is no proposed soil disturbance. Only modification of
existing sedimentation/filtration basin to AquaLogic Cartridge System.

Temporary Stormwater Section
for Regulated Activities
on the Edwards Aquifer Recharge Zone
and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(l) and (G); Effective June 1, 1999

REGULATED ENTITY NAME: Comal County Road Department

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.

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

2. ☑ **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. ☐ **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. N/A **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. ☑ 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: Guadalupe River via Bleiders 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. N/A **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, 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.

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

9. N/A **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. ☑ **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.

___ 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. N/A **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. ☑ 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. ☑ 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. N/A **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. ☑ 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.

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:

Robert Boyd, P.E.

Print Name of Customer/Agent

Signature of Customer/Agent

5/15/14

Date

Attachment A – Spill Response Actions

A description of the measures to be taken to contain any spill of hazardous substances is provided in the Spill Prevention Control and Countermeasure Plan, which is attached as part of this Attachment. This plan follows the steps outlined in section 1.4.16, Spill Prevention and Control, of RG-348 in the following ways:

1) Education (See Section 6G):

   All new employees that use oil based products as part of their job are required to have a spill prevention training to instruct them in the operation of fuel equipment and handling of oil products to prevent accidental spills.

   Spill prevention is discussed at yearly briefings.

   The County Engineer is the designated person accountable for spill prevention at the Comal County Road Department.

2) General Measures:

   The hazardous materials and wastes are in containers that are protected from vandalism by a security gate that encompasses the entire 46.503 acres. During non-business hours, two electronic gates are closed to protect the entire site.

   Cleanup materials are stockpiled in the main mechanic building that is readily accessible.

   All tanks that hold hazardous or waste material are located in areas that have secondary containment to protect from stormwater runon during rainfall.

   Spills will be contained and then cleaned up with absorbent material.

   Used clean up materials, contaminated materials and recovered spill material are disposed of in conformance with applicable BMPs.

   Water used for cleaning and decontamination do not enter storm drains or watercourses due to the fact that no storm drains exist on site. In addition, all tanks have secondary containment to prevent any spillage from entering drainage facilities.

   MSDS sheets, in addition to proper storage, cleanup, and spill reporting instruction for hazardous materials are stored on project site.

   Waste storage areas are clean, well organized, and equipped with ample cleanup supplies. Perimeter controls, containment structures and covers are inspected and maintained as necessary.

3) Cleanup:

Leaks and spills are cleaned up immediately.

Rags are use for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for large spills.

4) Minor Spills:

Minor spills are cleaned up using the following method:

The spread of the spill is contained using perimeter controls that are periodically inspected.

Clean the contaminated area and the contaminated materials (i.e absorbent materials used for cleanup) are disposed of properly.

5) Semi-Significant Spills:

Semi-significant spill are cleaned up using the following method:

The spread of the spill is contained using perimeter controls that are periodically inspected.

Road Superintendent is notified immediately.

Spill cleaned up using absorbent materials.

Contaminated materials are disposed of properly.

If the spill occurs during rain, to be conservative, cover the spill with tarps or other material to prevent contaminating runoff.

6) Significant/Hazardous Spills

Significant/hazardous spills are cleaned up using the following method:

Notify the TCEQ by telephone as soon as possible and within 24 hours at 210-490-3096 between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224.

Follow up telephone reporting with a written report.

7) Vehicle and Equipment Maintenance

Maintenance of all vehicles occurs onsite in a designated area located away from drainage courses.

Each vehicle has an annual Preventative Maintenance Inspection to ensure that it is running properly. Each vehicle is checked daily for leaks.

Secondary containment, such as a drain pan or drop cloth, is used when removing or changing fluids.

Waste fluids are promptly transferred to waste fluid containers.

Oil filters and waste oil is disposed of properly.

Cracked batteries are disposed of properly.

8) Vehicle and Equipment Fueling

Fueling occurs on site in a designated area away from drainage courses.

"Topping off" fuel tanks is discouraged.

Absorbent materials are used to clean up minor spills around the fueling station.

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

FOR

Comal County Road Department
195 David Jonas Drive
New Braunfels, Texas 78132

Original Date of Plan: June 14, 2000
Date of Last Plan Amendment/P.E. Certification: June 14, 2000
Date of Last Plan Review: N/A (new facility)

Designated person accountable for spill prevention:
Thomas Hornseth
Comal County Engineer

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

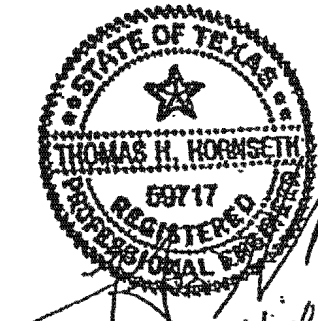
Engineer: THOMAS H. HORNSETH

Signature:

Registration Number: 59717 TX

State: TEXAS

Date: 6-14-00



6-14-00

SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR Part 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every three years. As a result of this review and evaluation, Comal County Road Department will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of the review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. 7-7-03	
2.	

MANAGEMENT APPROVAL

Comal County Road Department is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating and implementation of this Spill Prevention Control and Countermeasures Plan.

Authorized Facility Representative: THOMAS H. HORNSEth Signature:

Title: COMAL COUNTY ENGINEER

TABLE OF CONTENTS

1.	FACILITY OWNER (Parent Corporation) and OPERATOR		
	A.	Address and Telephone	1
	B.	Facility Operator, Address and Telephone	1
2.	FACILITY CONTACTS		1
3.	FACILITY DESCRIPTION		
	A.	Facility Operations	1
	B.	Facility Storage	2
	C.	Distance to Navigable Waters and Adjoining Shorelines and Flow Path	2
4.	SPILL HISTORY		2
5.	POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL		3
6.	PREVENTION MEASURES PROVIDED		
	A.	Drainage Control	4
	B.	Bulk Storage Tanks/Secondary Containment	4
	C.	Facility Transfer Operations	5
	D.	Facility Tank Car and Truck Loading/Unloading Operations	6
	E.	Inspections/Record Keeping	7
	F.	Site Security	7
	G.	Personnel Training and Spill Prevention Procedures	7
	H.	Spill Control Equipment	8
	I.	Emergency Contacts	8

FIGURES

FIGURE 1 Facility Layout and Surface Drainage Diagram

APPENDICES

APPENDIX 1 Secondary Containment Calculations for Diked Storage Areas

APPENDIX 2 Certification of the Applicability of the Substantial Harm Criteria Checklist

APPENDIX 3 Facility Inspection Report

1. **FACILITY OWNER (Parent Corporation) and OPERATOR:**

A. Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

B. Facility Operator Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

2. **FACILITY CONTACTS:**

Name	Title	Telephone
Thomas Hornseth	County Engineer	(830) 608-2090
Dana Schmitt	Assistant Engineer	(830) 608-2090

3. **FACILITY DESCRIPTION:**

A. Facility Operations:

Comal County Road Department is a local county government facility in Comal County, Texas. Personnel at the facility include office staff, maintenance shop mechanics, road construction and maintenance crews. Hours of operation are 8:00 a.m. to 4:30 p.m., 5 days a week.

There is a 15,000-gallon, double-walled, aboveground storage tank at the facility that is partitioned into two compartments. It has a capacity of 5,000 gallons diesel fuel and 10,000 gallons unleaded gasoline. The tank was installed 4/17/00.

The fuel tank is used for county vehicles only. Access to the system is controlled by a key-based fuel management system. The facility receives products from a local fuel distributor by tanker truck.

Other smaller tanks at the facility are used to store new and used oil products and emulsified asphalt for roadwork. Drums of oil products are stored in a shed near the shop.

B. Facility Storage:

Aboveground Storage Tanks

Tank ID	Volume	Contents
1	15,000 gallons	Partitioned into 2 compartments
	[5,000 gallons	Diesel Fuel]
	[10,000 gallons	Unleaded Gasoline]
2	300 gallons	waste oil
3	500 gallons	new oil
4	10,000 gallons	emulsified asphalt

Drums/Containers	Volume	Contents
3 Drums	55 gallons each	oil
1 Drum	55 gallons	kerosene
1 Drum	55 gallons	automatic transmission fluid

Total: 26,075 gallons

C. Distance to Navigable Waters and Adjoining Shorelines and Flow Path:

The Comal County Road Department site is located approximately 1000 feet east of an unnamed dry creek in Comal County. There are no storm drains at the site.

4. **SPILL HISTORY:**

No spill events have occurred at this facility.

5. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

Source	Type of Failure	Volume	Rate (gallon/hr)	Direction of Flow	Containment
Aboveground Storage Tanks					
#1 Diesel/ Gasoline	Leakage	15,000 gal	Rate will vary	Built-in secondary tank containment	15,000 gal
#2 Waste Oil	Leakage	300 gal	Rate will vary	Within containment area	300 gal
#3 New Oil	Leakage	500 gal	Rate will vary	Inside shop	Absorbent material
#4 Emulsion	Leakage	10,000 gal	Rate will vary	On concrete slab	Absorbent material
Fuel Delivery Operations					
Fuel truck unloading	Spill	Less than 15 gal	Rate will vary	Within remote spill container	15 gallon
Other Storage					
New and used motor oil	Leakage; drum rupture	55 gal	55 gal/ hour	Within containment area	359 gallon
Aboveground piping	Leakage; valve failure	5 gal	5 gal/hour	Within curb area	656 gallon

6. **PREVENTION MEASURES PROVIDED:**

A. Drainage Control

(I) Drainage from diked storage areas:

Tank 2 has a concrete containment structure. Water or spilled oil can be removed by pump and taken to the wash rack area to be filtered and recycled.

Tank 4 has an earthen berm surrounding the tank to contain any spilled material.

Drums are stored in a shed surrounded by a containment curb; no water accumulates there.

(II) Valves used on diked storage areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iii) Plan drainage systems from undiked areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iv) Final discharge of drainage:

There are no storm drains at the facility and the secondary containment for the tanks prevents any discharge of oil from the facility.

(v) Facility drainage systems and equipment:

There is a wash rack area to filter and recycle any oily water with zero discharge.

B. Bulk Storage Tanks/Secondary Containment

(I) Tank compatibility with its contents:

All tank materials are suitably impervious to the fuels being stored. Tank 1 is also ballistics resistant and designed to exceed a U.L. 2-hour fire test.

(ii) Diked area construction and containment volume for storage tanks:

See Appendix 1 for containment calculations. Tank 1 is located on a concrete slab with a 2" curb. Tank 2 is inside a concrete containment structure. Tank 4 is surrounded by an earthen berm. The drums of oil products are stored in a covered shed that has a curb around the perimeter.

(iii) Diked area, inspection and drainage of rainwater:

Any water that is collected in the diked areas is inspected for spilled oil before draining. Any oily water can be removed by pump and taken to the wash rack area to be filtered and recycled.

(iv) Corrosion protection of buried metallic storage tanks:

There are no buried tanks at this facility.

(v) Corrosion protection of partially buried metallic tanks

There are no partially buried tanks at this facility.

(vi) Aboveground tank periodic integrity testing:

The aboveground storage tanks are inspected annually using the inspection report in Appendix 2. The tanks are visually inspected at each fuel transaction for signs of deterioration, or any leaks.

(vii) Control of leakage through internal heating coils:

The tanks at this facility are not equipped with heating coils.

(viii) Tank installation fail-safe engineered:

Tank 1 is equipped with an overfill prevention valve that limits filling of the tank to 90% capacity. This tank is equipped with electronic tank level monitors; a sensor is in place to detect the presence of any liquid in the interstitial space of the double walled, two-compartment tank.

(ix) Observation of disposal facilities for effluent discharge:

This facility has no disposal processes that discharge effluents into navigable water.

(x) Visible oil leak corrections from tank seams and gaskets:

Any visible oil leaks are reported to the plant operator and promptly corrected.

(xi) Appropriate position of mobile or portable oil storage tanks:

Portable drums are located inside a covered storage shed. There is a curb in place to control any spills.

C. Facility Transfer Operations

(i) Buried piping installation protection and examination:

There is no buried piping at this facility.

(ii) Not-In-service and standby service terminal connections:

When a pipeline is not in service it is capped.

(iii) Pipe supports design:

Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

(iv) Aboveground valve and pipeline examination:

The Comal County Road Department fuel system has single-wall steel product piping, equipped with mechanical in-line leak detectors. All piping is aboveground and is examined during inspections. Operating personnel continuously inspect valves and piping.

(v) Aboveground piping protection from vehicular traffic:

All aboveground piping, hoses, and dispensers are located inside steel ballards and within a curbed concrete slab. They are not at risk of impact from vehicular traffic.

D. Facility Tank Car and Truck Loading/Unloading Operations

(i) Loading/unloading procedures meet DOT regulations:

Comal County Road Department requires all drivers making fuel deliveries to comply with DOT regulations and facility standard operating procedures.

(ii) Secondary containment for vehicles adequate:

The fuel tank area is designed with curbing and remote fill spill containers to provide spill containment protection.

(iii) Warning or barrier system for vehicles:

A Comal County employee is present to observe each fueling operation to assure that fuel tanker personnel completely disconnects transfer lines before departure.

(iv) Vehicles examined for lowermost drainage outlets before leaving:

A Comal County employee is present to observe each fueling operation to assure that there is no leakage while the tanker truck is in transit.

E. Inspection/Record Keeping

Facility inspection procedures:

Inspections will be conducted annually starting June 2000 and records of these inspections will be documented and signed by the inspector or plant manager. During the inspections, all tanks, containment structures, valves, piping and other equipment is inspected. The checklist used for these inspections can be found in Appendix 2.

Length of time records kept:

Inspection, training and tank integrity testing are retained for three or more years.

F. Site Security

(i) Fencing

A locked gate secures the facility when it is not open for regular operation.

(ii) Flow valves locked

All tank valves are secured.

(iii) Starter controls locked

Access to the fuel products limited to authorized personnel and is controlled by a key system.

(iv) Pipeline loading/unloading connections securely capped:

Pipeline connections are securely capped when they are not in use.

(v) Lighting adequate to detect spills:

The aboveground fuel tank area is lighted adequately to detect spills and to discourage acts of vandalism.

G. Personnel Training and Spill Prevention Procedures

(i) Personnel instructions:

All new employees that use oil based products as part of their job are required to have a spill prevention training to instruct them in the operation of fuel equipment and handling of oil products to prevent accidental spills.

(ii) Designated person accountable for spill prevention:

The County Engineer is the designated person accountable for spill prevention at the Comal County Road Department.

(iii) Spill prevention briefings:

Spill prevention is discussed at yearly briefings.

H. Spill Control Equipment

Spill Control equipment on site includes granular absorbent material, brooms and shovels. Spill equipment is stored in the shop.

I. Emergency Contacts

National Response Center	1-800-424-8802
Tom Hornseth, County Engineer	(830) 608-2090
Service Station Constructors and Fuel Systems	(210) 493-3277
Tri State Service and Testing	(210) 493-4329

FIGURE 1

Facility Layout and Surface Drainage Diagram

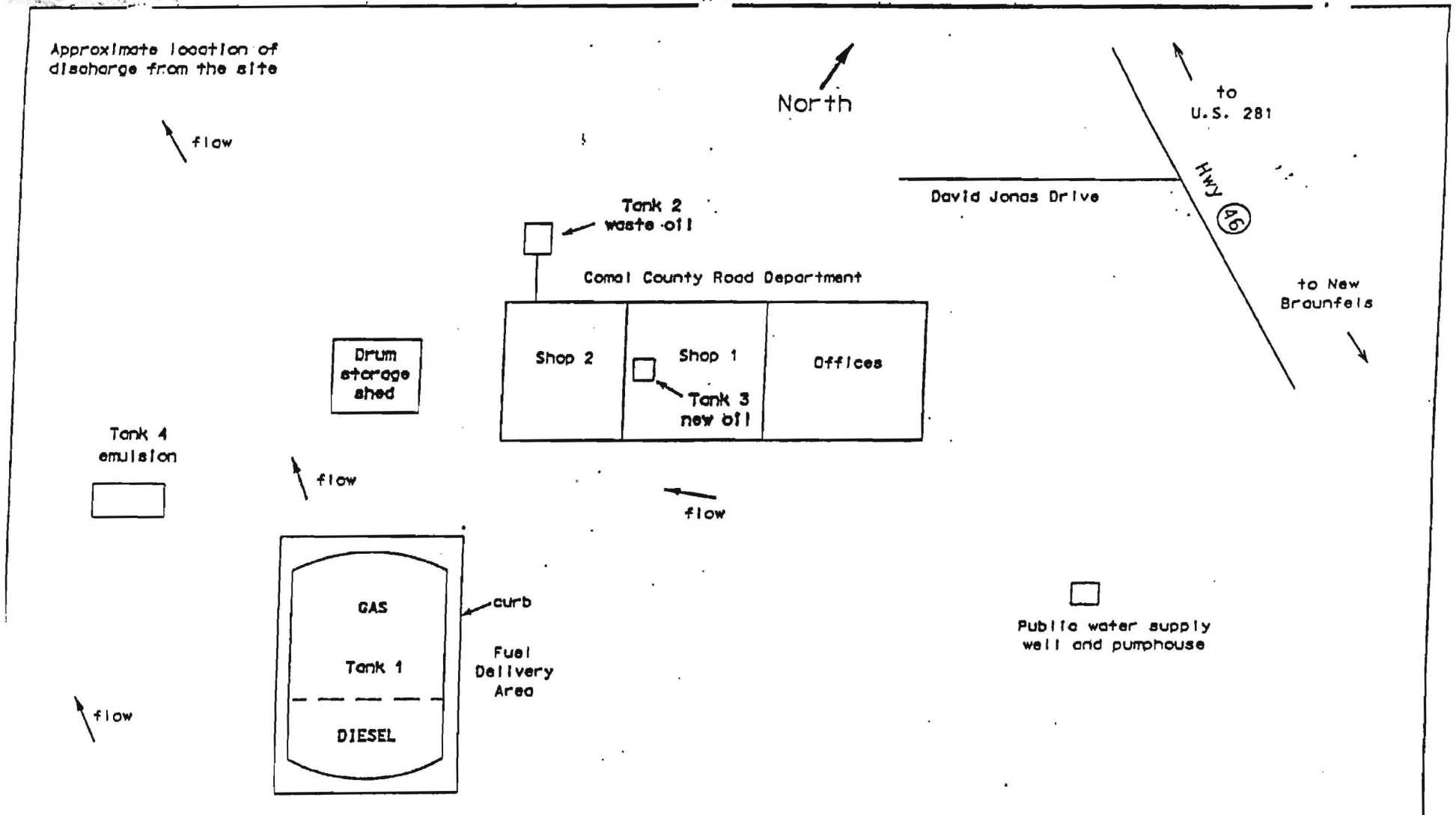


Figure 1 – Facility Layout and Drainage Diagram
Comal County Road Department
(Not to Scale)

APPENDIX 1

Secondary Containment Calculations for Diked Storage Areas

Containment Calculation for Tank #1

Tank 1 has built-in secondary containment for the contents of the tank. There is a containment curb surrounding the tank for any leakage outside the tank

Curb Area = 35 feet X 15 feet = 525 square feet

Total Containment Volume = Curb Area X Curb Height
= 525 square feet X 0.167 feet
= 87.7 cubic feet = 656 gallons

Containment Calculation for Tank #2

Required Containment Volume = 110 % of tank volume
= 300 gallons X 1.1 = 330 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 330 gallons X 0.1337 cu. ft./gallon = 44.1 cu. ft.

Available Diked Area = 5.5 feet X 7 feet = 38.5 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (44.1 cu. ft.) ÷ (38.5 sq. ft)
= 1.15 feet or 13.7 inches

Actual height of concrete wall around Tank 2 is 4 feet

Containment Calculation for Tank #4

Required Containment Volume = 110 % of tank volume
= 10,000 gallons X 1.1 = 11,000 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 11,000 gal. X 0.1337 cu. ft./gal. = 1470.7 cu. ft.

Available Diked Area = 24 feet X 27 feet = 648 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (1470.7 cu. ft.) ÷ (648 sq. ft)
= 2.3 feet

Necessary height of earthen berm around Tank 4 is 2 1/2 feet

Containment Calculation for Drum Storage Shed

Curb Area = 12 feet X 12 feet = 144 square feet

Total Containment Volume = Curb Area X Curb Height
= 144 square feet X 0.333 feet
= 48 cubic feet = 359 gallons

APPENDIX 2

Certification of the Applicability of the Substantial Harm Criteria Checklist

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Comal County Road Department

FACILITY ADDRESS: 195 David Jonas Drive

New Braunfels, TX 78132

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ No X

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ No X

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in attachment C-III, Appendix C, 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.
   Yes _____ No X

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   Yes _____ No X

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes _____ No X

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

THOMAS H. HORNSETH
Name (please type or print)

Signature

COMAL CO. ENGINEER
Title

6-14-00
Date

from 40 CFR 112 Appendix C, Attachment C-II

[1]If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2]For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

APPENDIX 3

Facility Inspection Report

Facility Inspection Report

Date: _____ Time: _____ Inspector: _____	X=Satisfactory NA=Not Applicable 0=Repair or Adjustment Required C=See comment under Remarks/Recommendations

Drainage

____ Any noticeable oil sheen on runoff.

____ Containment area drainage valves are closed and locked.

____ Oil/water separator systems working properly.

____ Effluent from oil/water separator inspected.

____ No visible oil sheen in containment area.

____ No standing water in containment area.

ASTs

____ Tank surfaces checked for signs of leakage.

____ Tank condition good (no rusting, corrosion, pitting).

____ Bolts, rivets, or seams are not damaged.

____ Tank foundation intact.

____ Level gauges and alarms working properly.

____ Vents are not obstructed.

____ Valves, flanges, and gaskets are free from leaks.

____ Containment walls are intact.

Pipelines

____ No signs of corrosion damage to pipelines or supports.

____ Buried pipelines are not exposed.

____ Out-of-service pipes capped.

____ Signs/barriers to protect pipelines from vehicles are in place.

____ No leaks at valves, flanged, or other fittings.

Truck Loading/Unloading Area

____ No standing water in rack area.

____ Warning signs posted.

____ No leaks in hoses.

____ Drip pans not overflowing.

____ Catch basins free of contamination.

____ Containment curbing or trenches intact.

____ Connections are capped or blank-flanged.

Security

____ Fence and gates intact.

____ Gates have locks.

____ ASTs locked when not in use.

____ Starter controls for pumps locked when not in use.

____ Lighting is working properly.

Training

____ Spill prevention briefing held.

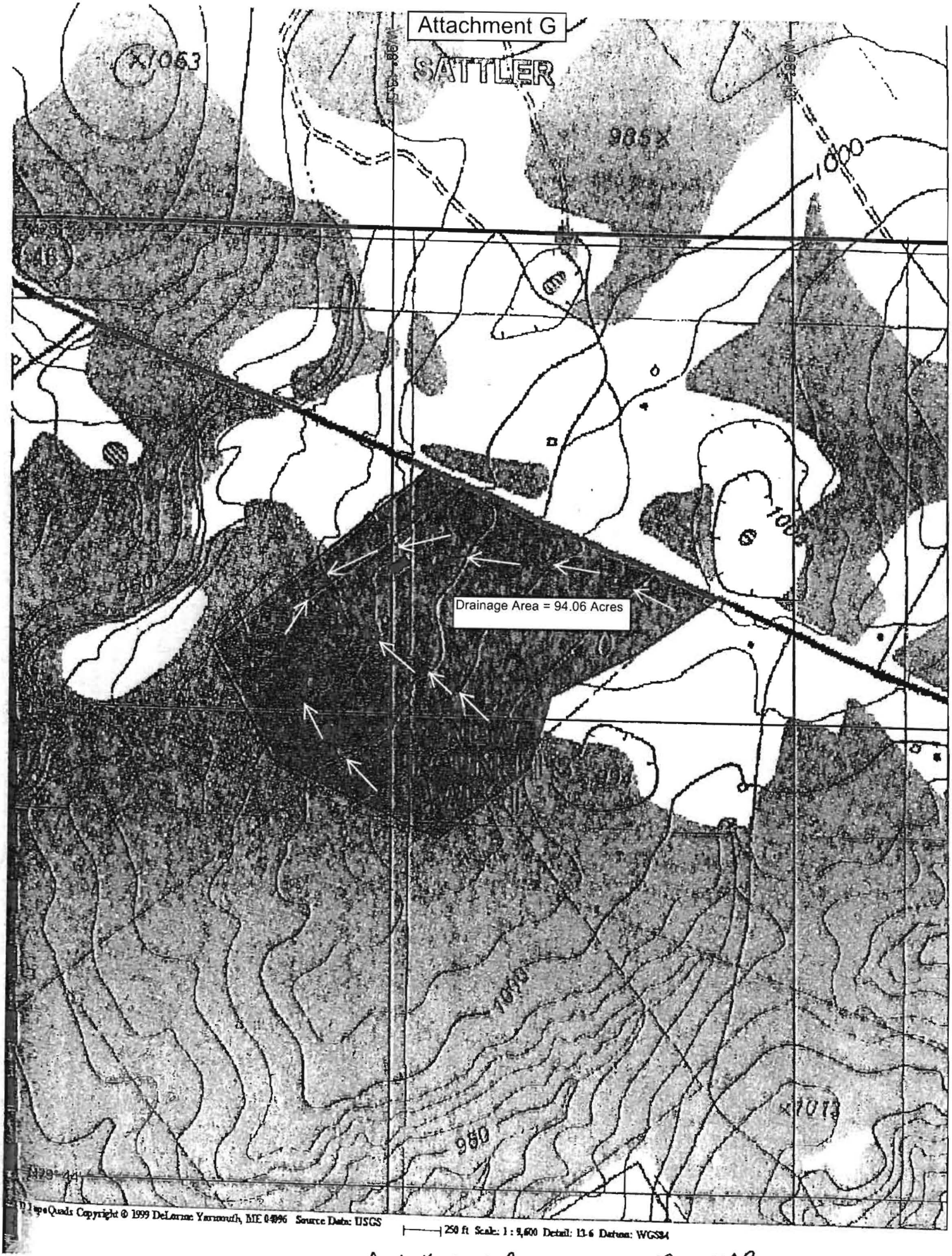
____ Training records are in order.

Remarks/Recommendations:

_____

_____

_____


Attachment G
SATTLER
Drainage Area = 94.06 Acres
DeLorme Yarmouth, ME 04096 Source Data: USGS
250 ft Scale: 1 : 9,600 Detail: 13-6 Datum: WGS84

Permanent Stormwater Section

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

REGULATED ENTITY NAME: Comal County Road Department

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

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

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

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

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

   _____

   _____

   _____

   _____

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.

4. N/A 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.

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

5. N/A 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.

__ 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.

__ 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.**

☑ 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. ☑ **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.

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

N/A 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. ☑ **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. ☑ 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. ☑ 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:

Robert Boyd, P.E.

Print Name of Customer/Agent

Signature of Customer/Agent

5/15/14

Date

Attachment B

BMPs for Upgradient Stormwater

Based on the topographic map of the area, there is approximately 7.659 acres of land upgradient of the site that will produce stormwater that will flow across the site. This stormwater that will flow across the site will have been treated by BMPs located on the 7.659 acres of land upgradient of the site. Therefore, the only runoff that will be treated will be stormwater that falls on the 26.503 acres in question.

Attachment C

BMPs for On-site Stormwater

Improvements within Drainage Areas #2 and 3:

The existing and proposed improvements within Drainage Areas #2 and 3 will be treated by an AquaLogic Cartridge System. Construction Plans were prepared according to the TCEQ Technical Guidance Manual (TGM).

Attachment D – BMPs for Surface Streams

The Permanent BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is an AquaLogic Cartridge System.

TCEQ-0600 Attachment F
Construction Plans

Improvements within Drainage Areas #2 and 3:

As stated in the Narrative of Proposed Modification, the intent of this proposed modification is to combine Drainage Area #2 and Drainage Area #3 by modifying the sediementation/filtration basin constructed in 2004 to a AquaLogic Cartridge System that will be sized to handle 100% impervious cover in Drainage Area #2 and Drainage Area #3. No modifications will be made to Drainage Area #1.

The calculations for determining the load removed for this catchment area by the proposed BMP, the total capture volume required, and the size of the required sedimentation chamber and filter canister basin area are attached. These calculations are based on the TCEQ Technical Guidance Manual.

The plans to modify the existing sedimentation/filtration basin to an AquaLogic Cartridge System are also provided as an attachment.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Comal County Road Department
Date Prepared: 3/24/2014

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

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

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

where:

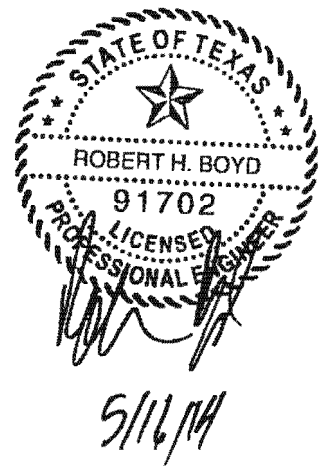
$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

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

County =	Comal	
Total project area included in plan * =	26.50	acres
Predevelopment impervious area within the limits of the plan * =	11.53	acres
Total post-development impervious area within the limits of the plan* =	26.50	acres
Total post-development impervious cover fraction * =	1.00	
P =	33	inches
$L_{M\ TOTAL\ PROJECT}$ =	**13437**	lbs.

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

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



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

Drainage Basin/Outfall Area No. = 1

Total drainage basin/outfall area =	26.50	acres
Predevelopment impervious area within drainage basin/outfall area =	11.53	acres

Post-development impervious area within drainage basin/outfall area = 26.50 acres
Post-development impervious fraction within drainage basin/outfall area = 1.00
$L_{M\ THIS\ BASIN}$ = **13440** lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Aqualogic Cartridge Filter
Removal efficiency = **95** percent

Aqualogic Cartridge Filter
Bioretention
Contech StormFilter
Constructed Wetland
Extended Detention
Grassy Swale
Retention / Irrigation
Sand Filter
Stormceptor
Vegetated Filter Strips
Vortechs
Wet Basin
Wet Vault

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

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

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

A_C = 26.50 acres
A_I = 26.50 acres
A_P = **0.00** acres
L_R = **28748** lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ = 13440 lbs.

F = **0.47**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**0.38**	inches
Post Development Runoff Coefficient =	**0.82**	
On-site Water Quality Volume =	**30078**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	0.00	acres
Off-site Impervious cover draining to BMP =	0.00	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**6016**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**36093**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

7. Retention/Irrigation System Designed as Required in RG-348 Pages 3-42 to 3-46

Required Water Quality Volume for retention basin =	**NA**	cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate =	N/A	in/hr	Enter determined permeability rate or assumed value of 0.1
Irrigation area =	**NA**	square feet	
	NA	acres	

8. Extended Detention Basin System Designed as Required in RG-348 Pages 3-46 to 3-51

Required Water Quality Volume for extended detention basin =	**NA**	cubic feet

9. Filter area for Sand Filters Designed as Required in RG-348 Pages 3-58 to 3-63

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin =	**NA**	cubic feet

Minimum filter basin area =	**NA**	square feet	
Maximum sedimentation basin area =	**NA**	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	**NA**	square feet	For maximum water depth of 8 feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	**NA**	cubic feet	
Minimum filter basin area =	**NA**	square feet	
Maximum sedimentation basin area =	**NA**	square feet	For minimum water depth of 2 feet
Minimum sedimentation basin area =	**NA**	square feet	For maximum water depth of 8 feet

10. Bioretention System — Designed as Required in RG-348 — Pages 3-63 to 3-65

Required Water Quality Volume for Bioretention Basin =	**NA**	cubic feet

11. Wet Basins — Designed as Required in RG-348 — Pages 3-66 to 3-71

Required capacity of Permanent Pool =	**NA**	cubic feet	Permanent Pool Capacity is 1.20 times the WQV
Required capacity at WQV Elevation =	**NA**	cubic feet	Total Capacity should be the Permanent Pool Capacity plus a second WQV.

12. Constructed Wetlands — Designed as Required in RG-348 — Pages 3-71 to 3-73

Required Water Quality Volume for Constructed Wetlands =	**NA**	cubic feet

13. AquaLogic™ Cartridge System — Designed as Required in RG-348 — Pages 3-74 to 3-78

** 2005 Technical Guidance Manual (RG-348) does not exempt the required 20% increase with maintenance contract with AquaLogic™.

Required Sedimentation chamber capacity =	**36093**	cubic feet
Filter canisters (FCs) to treat WQV =	**83.06**	cartridges
Filter basin area (RIA_F) =	**166.12**	square feet

14. Stormwater Management StormFilter® by CONTECH

Required Water Quality Volume for Contech StormFilter System = **NA** cubic feet

THE SIZING REQUIREMENTS FOR THE FOLLOWING BMPs / LOAD REMOVALS ARE BASED UPON FLOW RATES - NOT CALCULATED WATER QUALITY VOLUMES

15. Grassy Swales Designed as Required in RG-348 Pages 3-51 to 3-54

Design parameters for the swale:

Drainage Area to be Treated by the Swale = A =		acres
Impervious Cover in Drainage Area =		acres
Rainfall intensity = i =	1.1	in/hr
Swale Slope =		ft/ft
Side Slope (z) =		
Design Water Depth = y =		ft
Weighted Runoff Coefficient = C =	#DIV/0!	

A_{CS} = cross-sectional area of flow in Swale =	#DIV/0!	sf
P_W = Wetted Perimeter =	#DIV/0!	feet
R_H = hydraulic radius of flow cross-section = A_{CS}/P_W =	#DIV/0!	feet
n = Manning's roughness coefficient =	0.2	

15A. Using the Method Described in the RG-348

Manning's Equation: $Q = \frac{1.49}{n} A_{CS} R_H^{2/3} S^{0.5}$

$b = \frac{0.134 \times Q}{y^{1.67} S^{0.5}} - zy$ = #DIV/0! feet

Q = CiA = #DIV/0! cfs

To calculate the flow velocity in the swale:

V (Velocity of Flow in the swale) = Q/A_{CS} = #DIV/0! ft/sec

To calculate the resulting swale length:

L = Minimum Swale Length = V (ft/sec) * 300 (sec) = #DIV/0! feet

If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters must be modified and the solver rerun.

15B. Alternative Method using Excel Solver

Design Q = CiA =	#DIV/0!	cfs		
Manning's Equation Q =	0.00	cfs	Error 1 =	#DIV/0!
Swale Width=	6.00	ft		

Instructions are provided to the right (green comments).

Flow Velocity	#DIV/0!	ft/s
Minimum Length =	#DIV/0!	ft

Instructions are provided to the right (blue comments).

Design Width =		ft		
Design Discharge =	0.00	cfs	Error 2 =	#DIV/0!
Design Depth =	0.33	ft		
Flow Velocity =	#DIV/0!	cfs		
Minimum Length =	#DIV/0!	ft		

If any of the resulting values do not meet the design requirement set forth in RG-348, the design parameters may be modified and the solver rerun.
If any of the resulting values still do not meet the design requirement set forth in RG-348, widening the swale bottom value may not be possible.

16. Vegetated Filter Strips Designed as Required in RG-348 Pages 3-55 to 3-57

There are no calculations required for determining the load or size of vegetative filter strips.
The 80% removal is provided when the contributing drainage area does not exceed 72 feet (direction of flow) and
the sheet flow leaving the impervious cover is directed across 15 feet of engineered filter strips with maximum slope of 20% or
across 50 feet of natural vegetation with a maximum slope of 10%. There can be a break in grade as long as no slope exceeds 20%.

If vegetative filter strips are proposed for an interim permanent BMP, they may be sized as described on Page 3-56 of RG-348.

17. Wet Vaults — Designed as Required in RG-348 — Pages 3-30 to 3-32 & 3-79

Required Load Removal Based upon Equation 3.3 = **NA** lbs

First calculate the load removal at 1.1 in/hour

RG-348 Page 3-30 Equation 3.4: Q = CiA

C = runoff coefficient for the drainage area = 0.90 C = Runoff Coefficient = $0.546 (IC)^2 + 0.328 (IC) + 0.03$
i = design rainfall intensity = 1.1 in/hour
A = drainage area in acres = 1 acres

Q = flow rate in cubic feet per second = 0.99 cubic feet/sec

RG-348 Page 3-31 Equation 3.5: $V_{OR} = Q/A$

Q = Runoff rate calculated above = 0.99 cubic feet/sec
A = Water surface area in the wet vault = 150 square feet

V_{OR} = Overflow Rate = 0.01 feet/sec

Percent TSS Removal from Figure 3-1 (RG-348 Page 3-31) = 53 percent

Load removed by Wet Vault = #VALUE! lbs

If a bypass occurs at a rainfall intensity of less than 1.1 in/hours
Calculate the efficiency reduction for the actual rainfall intensity rate

Actual Rainfall Intensity at which Wet Vault bypass Occurs = 0.5 in/hour

Fraction of rainfall treated from Figure 3-2 RG-348 Page 3-32 = 0.75 percent
Efficiency Reduction for Actual Rainfall Intensity = 0.83 percent

Resultant TSS Load removed by Wet Vault = #VALUE! lbs

18. Permeable Concrete — Designed as Required in RG-348 — Pages 3-79 to 3-83

PERMEABLE CONCRETE MAY ONLY BE USED ON THE CONTRIBUTING ZONE

19. BMPs Installed in a Series — Designed as Required in RG-348 — Pages 3-32

Michael E. Barrett, Ph.D., P.E. recommended that the coefficient for E_2 be changed from 0.5 to 0.65 on May 3, 2006

$E_{TOT} = [1 - ((1 - E_1) X (1 - 0.65E_2) x (1 - 0.25E_3))] X 100 =$	0.00	percent	NET EFFICIENCY OF THE BMPs IN THE SERIES
EFFICIENCY OF FIRST BMP IN THE SERIES = E_1 =		percent	
EFFICIENCY OF THE SECOND BMP IN THE SERIES = E_2 =		percent	
EFFICIENCY OF THE THIRD BMP IN THE SERIES = E_3 =		percent	

THEREFORE, THE NET LOAD REMOVAL WOULD BE:
(A_I AND A_P VALUES ARE FROM SECTION 3 ABOVE)

$L_R = E_{TOT} X P X (A_I X 34.6 X A_P X0.54) =$ 0.00 lbs

20. Stormceptor

Required TSS Removal in BMP Drainage Area=	**NA**	lbs
Impervious Cover Overtreatment=	0.0000	ac
TSS Removal for Uncaptured Area =	0.00	lbs
BMP Sizing		
Effective Area =	NA	EA
Calculated Model Size(s) =	#N/A	
Actual Model Size (if multiple values provided in Calculated Model Size or if you are choosing a larger model size) =	0	Model Size
Surface Area =	#N/A	ft^2
Overflow Rate =	#VALUE!	V_{or}
Rounded Overflow Rate =	#VALUE!	V_{or}
BMP Efficiency % =	#VALUE!	%
L_R Value =	#VALUE!	lbs
TSS Load Credit =	#VALUE!	lbs
Is Sufficient Treatment Available? (TSS Credit ≥ TSS Uncapt.)	#VALUE!	
TSS Treatment by BMP (LM + TSS Uncapt.) =	#VALUE!	

21. Vortech

Required TSS Removal in BMP Drainage Area=	**NA**	lbs
Impervious Cover Overtreatment=	0.0000	ac

TSS Removal for Uncaptured Area =	0.00	lbs

BMP Sizing

Effective Area =	NA	EA
Calculated Model Size(s) =	#N/A	
Actual Model Size (if choosing larger model size) =	Vx1000	Pick Model Size
Surface Area =	7.10	ft^2
Overflow Rate =	#VALUE!	V_{or}
Rounded Overflow Rate =	#VALUE!	V_{or}
BMP Efficiency % =	#VALUE!	%
L_R Value =	#VALUE!	lbs
TSS Load Credit =	#VALUE!	lbs
Is Sufficient Treatment Available? (TSS Credit $\geq$ TSS Uncapt.)	#VALUE!	
TSS Treatment by BMP (LM + TSS Uncapt.) =	#VALUE!	

Attachment G

Inspection, Maintenance, Repair and Retrofit Plan

Project Name: Comal County Engineer's Office (Drainage Areas #2 and #3)

AquaLogic Cartridge Filter System

During the first year of operation and after large storms, inspect filter system monthly to ensure proper operation and provide maintenance personnel with a feel for the operational characteristics of the filter. After the first year of operation, inspect after every significant rainfall event and as needed based on first year's experience.

Sediment Removal:	Remove sediment from the inlet structure, sediementation chamber and filtration chamber after each rainfall event. Sediment removal from the filtration basin is accomplished by removal and replacement of the filter cartridge set. Sediments found adhering to sidewall surfaces should be removed at least every quarter.
Media Replacement:	Filter cartridges should be replaced after 2 significant rainfall events or when the drawdown time ***exceeds 48 hours***. The geotextile wrapping around the filter canisters should be inspected each time the filters are changed and should be replaced if damage or permanent clogging is observed.
Debris and Litter Removal:	Debris and litter will accumulate near the sedimentation basin outlet device and should be removed during regular clean-up operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control valve.
Filter Underdrain:	Clean the underdrain piping network to remove any sediment buildup at least every two years, or as needed to maintain the design drawdown time.
Bladder Control Valve:	The bladder control valve should be checked for proper operation in automatic and manual mode at least once per quarter. Should any operational problems be found, repairs or replacement should be completed immediately.
Filter Canisters:	Clean the filter canisters at least once per quarter. Replace any damaged canisters immediately.
Controls:	Verify that all controls are functioning correctly at least once per month and after each rainfall event. Repair or replace any components that are inoperative.
Security Fencing:	Check and verify that the BMP facility site is secure at least once per month. Any site found to be insecure should be made secure immediately.

Responsible Party for Maintenance:	Comal County Road Department
Address:	195 David Jonas Drive
City, State Zip:	New Braunfels, Texas 78132-3760
Telephone Number:	(830) 608-2090

Signature of Responsible Party: _____ Date: 5/16/14

Attachment I – Measures for Minimizing Surface Stream Contamination

The measures that will be used to avoid or minimize surface stream contamination due to the changes in the way the water enters a stream as a result of the construction and development will be the maintenance of downstream vegetation. The maintenance of downstream vegetation will address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity. In addition to the maintenance of downstream vegetation, the AquaLogic basin that will greatly decrease the overall run-off from the entire 46.503 acre site.

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

I Sherman Krause,
Print Name

County Judge,
Title - Owner/President/Other

of Comal County,
Corporation/Partnership/Entity Name

have authorized Robert Boyd, P.E.
Print Name of Agent/Engineer

of the Comal County Engineer's Office
Print Name of Firm

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

I also understand that:

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

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

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

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

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

SIGNATURE PAGE:

Applicant's Signature

MAY 15 2014
Date

THE STATE OF TEXAS §

County of COMAL §

BEFORE ME, the undersigned authority, on this day personally appeared Sherman Krause 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 15 day of May 2014.

NOTARY PUBLIC

CHRISTY RULE
Notary Public, State of Texas
My Commission Expires
NOVEMBER 05, 2015

Christy Rule
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11·5·15

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

NAME OF PROPOSED REGULATED ENTITY: Comal County Road Department
REGULATED ENTITY LOCATION: New Braunfels, TX
NAME OF CUSTOMER: Comal County
CONTACT PERSON: Robert Boyd, P.E. PHONE: (830) 608-2090
(Please Print)

Customer Reference Number (if issued): CN 600647275 (nine digits)

Regulated Entity Reference Number (if issued): RN 102460730 (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	46.503	Acres	$ 8,000
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

5/15/14
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

To the Comal County Treasurer,
out of the
COMAL COUNTY GENERAL OPERATING ACCOUNT

When countersigned by the Treasurer payable at
Frost Bank
New Braunfels, TX

98-0
1140

Warrant Check

082181
NO.

Pay ********EIGHT THOUSAND & 00/100 $ $8,000.00

being the amount allowed by the Commissioners' Court out of the above named Fund

Witness my hand and seal of said Court at New Braunfels, Texas this 8TH day of May 20 14

to the order of
TCEQ - CASHIER
REVENUES SECTION
PO BOX 13088
AUSTIN, TEXAS 78711-3088

David Smith
County Auditor

County Treasurer

Void if not presented for payment within 90 days
and valid unless countersigned by County Treasurer

THIS DOCUMENT CONTAINS A VOID PANTOGRAPH, MICROPRINTING IN THIS WARNING BORDER AND AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW.

⑈082181⑈ ⑆114000093⑆ 39000716⑈

THE COUNTY OF COMAL
New Braunfels, Texas

NON-NEGOTIABLE
Please detach and keep this statement

Check # 82181-CO 082181

DATE OF INVOICE	INVOICE NO.	DESCRIPTION	AMOUNT
04/28/14	4/28/2014	WATER POLLUTION ABATEMENT PLAN, CONTRIBUTING Z	$ 8,000.00
		Amount Due	$ 8,000.00

This Warrant check is in payment of the account detailed in the above statement and when detached and paid becomes a receipt in full.

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 — Modification to Previously Approved WPAP

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 600647275		RN 102460730

SECTION II: Customer Information

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

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:

City | State | ZIP | ZIP + 4

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

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

13. Telephone Number ( ) -

14. Extension or Code

15. Fax Number *(if applicable)* ( ) -

16. Federal Tax ID *(9 digits)*

17. TX State Franchise Tax ID *(11 digits)*

18. DUNS Number *(if applicable)*

19. TX SOS Filing Number *(if applicable)*

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

21. Independently Owned and Operated?
☐ Yes ☐ No

SECTION III: Regulated Entity Information

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

☐ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information ☑ No Change** *(See below)*

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

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

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*							
	City		State		ZIP		ZIP + 4	
25. Mailing Address:							
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:			
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*	
( ) -		( ) -	

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)

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

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

35. Description to Physical Location:			
36. Nearest City	County	State	Nearest ZIP Code

37. Latitude (N) In Decimal:			38. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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: ROBERT BOYD, P.E.		41. Title: ASSISTANT COUNTY ENGINEER	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 608-2090		(830) 608-2009	boydr@co.comal.tx.us

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:	COMAL COUNTY	Job Title:	COMAL COUNTY ASSISTANT ENGINEER
Name *(In Print)*:	ROBERT BOYD	Phone:	(830) 608-2090
Signature:		Date:	5/20/14

Exhibit "A"

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

January 2, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; 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. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

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 Comal County on behalf of Comal County on October 24, 2007. Final review of the WPAP was completed after additional material was received on December 13th, 28th, and January 2, 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

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

The subject site consists of six tracts totaling 46.503 acres summarized in the table below.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03

2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	7.58
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	2.262	36.94
			Circular Animal Run	0.253	
			Extension Amphitheater	0.530	
			Road Department Stockpile	2.487	
			Extension Proposed Barn	0.060	
			Extension Oval Animal Run	0.174	
			Extension Green House	0.047	
			Extension Gazebo	0.004	
			Extension Meeting Room	0.047	
			Extension Potting Shed	0.009	
Total (proposed)				7.39	42.10
Total		46.503		19.58	42.10

* - There was 0.925 acres of existing impervious cover located within Tract 6 prior to the regulation of impervious cover on 03/21/90. In a modification approved by letter dated October 24, 2003 (after regulation of impervious cover), 0.591 acres of impervious cover was added to the 0.925 acres. Therefore, there is currently 1.516 acres of existing impervious cover located within the 20 acres of Tract 6 which includes 0.925 acres that pre-dates the requirement for treatment of stormwater runoff.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 20 acres. It will include improvements to the agricultural barn, the show arena, the road paving material stockpile area, the meeting room, and include a parking lot expansion, a potting shed and greenhouse, gazebo, and an amphitheater. The increase in impervious cover will be 5.872 acres. The total impervious cover will be 7.388 acres (36.94% of 20 acres).

With the proposed commercial project, the total impervious cover for the contiguous 46.503 acres owned by Comal County is 19.58 acres (42.10%).

According to a letter dated, May 28, 2003, signed by Mr. Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

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 vegetative filter strips will be constructed to treat 5,801 pounds of total suspended solids (TSS) from an increase in impervious cover of 5.872 acres within a drainage area of 20 acres (see Table I above). They are designed in accordance with the 2005 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices."

- The engineered vegetated filer strip extends along the entire length of the contributing area;
- The slope does not exceed 20%;
- The minimum dimension of the filter strip (in the direction of flow) is not less than 15 feet;
- The maximum width (in the direction of flow) of the contributing impervious area does not exceed 72 feet;
- The minimum vegetated cover is 80%;
- The contributing area to the filter strip is relatively flat so that runoff is distributed evenly to the vegetated area without the use of a level spreader;
- The vegetated filter strip is free of gullies or rills that can concentrate overland flow.

The approved measures 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, dated May 20, 2003, there are seven geologic or manmade features located on the 46.503 acre project site. Six of the seven features were located within the 20 acre drainage area of this modification. All features were assessed as having sensitivities of less than 40. No features were re-assessed. A site inspection was conducted on August 4, 2003 for a previous modification. The investigation report states that the site was as described by the geologic assessment, and no additional geologic or manmade features were observed. The San Antonio Regional Office did not conduct a site inspection for this submittal.

SPECIAL CONDITIONS

I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.

II. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated October 24, 2003.

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

IV. 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.

V. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

VI. 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.

VII. Construction of the above said project is approved. Use of the vegetative filter strip as wastewater treatment and disposal unit is not authorized by this letter. Discharge of waste material into the engineered filter strip from the agricultural barn represents an unauthorized discharge. Animals may not occupy the agricultural barn until proper authorization has been obtained from the TCEQ Water Quality Division – Standards, Assessments, and CAFO Permitting. Submit to the San Antonio Regional Office documentation authorizing this discharge within 30 days of receipt of the authorization. Any physical or operational change of the

permanent water pollution abatement measures shall be subject to the requirements of §213.4(j) with regards to modifications of previously approved plans.

VIII. Discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, are not authorized by this letter, and shall be disposed of properly.

IX. Treating stormwater runoff from material stockpiles is a non-standard use of vegetative filter strips. Provide an annual evaluation on the effectiveness of the vegetative filter strips treating the material stockpiles, due on the anniversary date of this letter. After 3 years of evaluation and successful usage, you may petition the TCEQ for suspension of this requirement.

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.

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 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.

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. One water well exists onsite. 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 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 Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/JJ/eg

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

cc: Mr. Bruce Boyer, P.E. City of New Braunfels
Mr. Tom Hornseth, Comal County
Ms. Velma Danielson, Edwards Aquifer Authority
TCEQ Central Records, MC 212 Building F

Doc# 200306042288

EXHIBIT "B"

VOL 274 PAGE 383

173894

FILED FOR RECORD
1970 NOV -9 PM 3:05
COUNTY CLERK COMAL COUNTY
BY Dorothy P. Lambert 5.00

WARRANTY DEED

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF COMAL §

That we, CALVIN A HEIDRICH and wife, HELLEN L. HEIDRICH of the County of Comal and the State of Texas, for and in consideration of the sum of TEN ($10.00) DOLLARS and other valuable consideration to the undersigned paid by the grantees herein named, the receipt of which is hereby acknowledged, have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto the County of Comal and State of Texas, all of the following described real property in Comal County, Texas, to-wit:

Being 6.531 acres of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271 and also being out of a 123.79 acre tract (Called First Tract), and being described in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas and being more particularly described as follows;

Beginning at an iron pin set in the Southwest R.O.W. line of State Highway No. 46, said point being N 67° 44' 00" W 1266.38 feet (Record) from the most Easterly corner of above referenced tract, for a corner of this tract;

Thence S 43° 21' 14" W 238.77 feet to an iron pin set for an interior corner of this tract;

Thence S 50° 09' 12" E 80.72 feet to an iron pin set for a corner of this tract;

Thence S 20° 08' 25" W 250.96 feet to an iron pin set for a corner of this tract;

Thence S 31° 12' 04" W 275.10 feet to an iron pin set for a corner of this tract;

Thence S 29° 58' 53" W 275.10 feet to an iron pin set in a Southwest fence line of above referenced tract, for the South corner of this tract;

Thence N 36° 40' 53" W 519.94 feet along said South west fence line to a steel fence post, for the West corner of this tract;

Thence N 53° 21' 14" E 973.36 feet along an existing fence line to an iron pin found in the South west R.O.W. line of State Highway No. 46, for the North corner of this tract;

Thence S 67° 44' 00" E 70.06 feet along said R.O W. line to the place of beginning and containing 6.531 acres of land more or less.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging,

unto the said grantee, their heirs and assigns forever; and we do hereby bind ourselves, our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

EXECUTED THIS 8th day of November, A.D., 1978.

Calvin A. Heidrich
CALVIN A HEIDRICH

Helen L. Heidrich
HELEN L. HEIDRICH

THE STATE OF TEXAS
COUNTY OF COMAL

Before me, the undersigned authority, on this day personally appeared CALVIN A. HEIDRICH and HELEN L. HEIDRICH, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office on this the 8th day of November, A.D. 1978.

Kathleen M. Wagner
Notary Public in and for
Comal County, Texas

Doc# 200306042288

0645 0292

FILED FOR RECORD
1988 SEP -2 AM 9:21
ROSIE BOSENBURY
COUNTY CLERK COMAL COUNTY
BY Dorothy Lautsch
D/C

332424

CORRECTION WARRANTY DEED

THE STATE OF TEXAS * KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF COMAL *

That we, CALVIN A. HEIDRICH and wife, HELLEN L. HEIDRICH herein called grantors, for and in consideration of the sum of TEN ($10.00) DOLLARS cash and other valuable consideration in hand paid by The County of Comal and State of Texas, hereinafter called Grantees, the receipt and sufficiency of which is hereby acknowledged and confessed, have granted, sold and conveyed, and by these presents do grant, sell and convey unto the said Grantees, the Following described property, to-wit:

Being 6.531 acres of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271 and also being out of a 123.79 acre tract (Called First Tract), and being described in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas and being more particularly described as follows:

Beginning at an iron pin set in the Southwest R.O.W. line of State Highway No. 46, said point being N 67° 44'00" W 1266.38 feet (Record) from the most Easterly corner of above referenced tract, for a corner of this tract;

Thence S 53° 21' 14" W 238.77 feet to an iron pin set for an interior corner of this tract;

THENCE S 50° 09' 12" E 80.72 feet to an iron pin set for a corner of this tract;

THENCE S 20° 08' 25" W 250.96 feet to an iron pin set for a corner of this tract;

THENCE S 31° 12' 04" W 275.10 feet to an iron pin set for a corner of this tract;

THENCE S 29° 58' 53" W 353.55 feet to an iron pin set in a Southwest fence line of above referenced tract, for the South corner of this tract;

THENCE N 36° 40' 53" W 519.84 feet along said Southwest fence line to a steel fence post, for the West corner of this tract;

THENCE N 53° 21' 14" E 973.36 feet along an existing fence line to an iron pin found in the Southwest R.O.W. line of State Highway No. 46, for the North corner of this tract.

THENCE S 67° 44' 00" E 70.06 feet along said R.O.W. line to the place of beginning and containing 6.531 acres of land more or less.

This deed is made in place of and as a Dead of Correction of a Deed executed by Grantors herein to Grantees dated November 9, 1978, Vol. 158, pages 18-20 of the Deed Records of Comal County, Texas, wherein by error or mistake the field notes had incorrectly stated the dimensions of the tract and this instrument is made by Grantors and accepted by Grantees in order to correct said mistake, and in all other respects conforming said former Deed.

To have and to hold the above described premises, together with, all and singular, the rights and appurtenances thereto in anywise belonging unto the said Grantees and Grantees' assigns forever.

Grantor does Hereby bind Grantors, and Grantors' assigns to warrant and forever defend, all and singular, the said premises unto the said Grantees, and Grantees' assigns against any person whomsoever claiming or to claim the same or any part thereof.

EXECUTED THIS 1st day of September, 1988.

Calvin A. Heidrich

CALVIN A. HEIDRICH

Hellen L. Heidrich

HELLEN L. HEIDRICH

0645 0293

0645 0294

THE STATE OF TEXAS
COUNTY OF COMAL

Before me, the undersigned authority, on this day personlly appeared CALVIN A. HEIDRICH and HELLEN L. HEIDRICH, known to me to be the persons whose names are subscribed to the forsgoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office on this the 1st day of September, A.D., 1988.

Ginny Eanes
NOTARY PUBLIC

Ginny Eanes, Notary Public
My Commission Expires on 10-12-91

Doc# 200306042288

EXHIBIT "C"

FILED FOR RECORD
1988 SEP -2 AM 9:21
ROSIE BOSENBURY
COUNTY CLERK COMAL COUNTY
BY Margie E. Laubach
M/C

332425

WARRANTY DEED

THE STATE OF TEXAS)(
)(KNOW ALL MEN BY THESE PRESENTS
COUNTY OF COMAL)(

That we, CALVIN A. HEIDRICH and wife HELEN HEIDRICH of Comal County and State of Texas for and in consideration of the sum of Ten ($10.00) Dollars and other valuable consideration of the undersigned paid by the grantee herein named, the receipt of which is hereby acknowledged, have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto the County of Comal, State of Texas, all of the following described real property in Comal County, Texas to-wit:

0645 0295

Being 3.050 acres of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being 3.050 acres of land out of that certain called 123.79 acre "First Tract" conveyed by Kermit E. Heidrich to Calvin Heidrich by deed dated June 13, 1967 and recorded in Volume 156 on pages 18-20 of the Deed Records of Comal County, Texas, and described more particularly by metes and bounds as follows:

BEGINNING at an iron pin set at a corner post in the Southwest line of the A.M. Holbrook Survey No. 423, the Northeast line of the S. Washburn Survey No. 486, Abstract No. 663, for the West corner of a 17.009 acre tract of land conveyed by Erhard J. Heidrich, et ux to Donald P. Guenther, et ux by deed dated November 12, 1962 and recorded in Volume 131 on pages 185-187 of the Deed Records of Comal County, Texas, for a South corner of the above described Calvin Heidrich 123.79 acre tract, for the South corner of the herein described 3.050 acre tract;

THENCE with the fence, the Southwest line of the said Holbrook Survey, the Northeast line of the said Washburn Survey, the Southwest line of the said 123.79 acre tract, N. 36° 52' 33" W 17.94 to a nail found, the called for North corner of the said Washburn Survey, the called for East corner of the F. Michel Survey No. 653, Abstract No. 400, for the East corner of a 20.000 acre tract of land conveyed by Clifford Henry Dietz and wife to Wayne Pooley and wife by deed dated Sept. 19, 1985 and recorded in Volume 470 on pages 239-241 of the Deed Records of Comal County, Texas;

THENCE continuing with the fence, the Southwest line of the said Holbrook Survey, the Northeast line of the said Michel Survey, the Southwest line of the said 123.79 acre tract, the Northeast line of the said Wayne Pooley 20.000 acre tract, N. 36° 28' 37" W. 437.19 feet to an iron pin found, set for the South corner of a 6.531 acre tract of land conveyed by Calvin A. Heidrich and wife to Comal County, Texas by deed dated November 8, 1978 and recorded in Volume 274 on pages 383-384 of the Deed Records of Comal County, Texas, for the West corner of this tract;

THENCE with the Southeast line of the said Comal County 6.531 acre tract, N. 29° 58' 53" W. 232.49 feet to an iron pin set for the North corner of this tract;

THENCE severing the said Calvin Heidrich tract, S. 46° 36' 41" E. 550.91 feet to an iron pin set in the fence, a Southeast line of the said 123.79 acre tract, a Northwest line of the said 17.009 acre tract, for the East corner of this tract;

THENCE with the fence, a Southeast line of the said 123.79 acre tract, a Northwest line of the said 17.009 acre tract, S. 52° 28' 33" W. 310.00 feet to the Place of Beginning.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging, unto the said grantee, its grantees and assigns forever; and we do bind ourselves, our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantee, its grantees and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

EXECUTED THIS 1st day of September, 1988.

Calvin A. Heidrich
CALVIN A. HEIDRICH

Helen Heidrich
HELEN HEIDRICH

THE STATE OF TEXAS
COUNTY OF

Before me the undersigned authority, on this day personally appeared CALVIN A. HEIDRICH known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office on this the 1st day of Sept, 1988.

NOTARY PUBLIC IN AND FOR
COUNTY, STATE OF TEXAS

My commission expires: 10-12-91

THE STATE OF TEXAS
COUNTY OF COMAL

Before me the undersigned authority on this day personally appeared HELEN HEIDRICH who is known to me as the person whose name is subscribed to the foregoing instrument and acknowledged to me that she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office on this the 1st day of Sept 1988

NOTARY PUBLIC IN AND FOR
COUNTY, STATE OF TEXAS

My commission expires: 10-12-91

Doc# 200306042288

EXHIBIT "D"

~~DOC# 9506481748~~

WARRANTY DEED

4/C

DATE:

GRANTOR: Calvin A. Heidrich and wife Helen Heidrich

GRANTOR'S MAILING ADDRESS: 4836 Highway 46 West
New Braunfels, Texas 78132

GRANTEE: COUNTY OF COMAL, TEXAS

GRANTEE'S MAILING ADDRESS: 150 North Sequin Ave, Suite 301
New Braunfels, TX 78130

CONSIDERATION: TEN AND NO/100 ($10.00) and other good and valuable consideration.

PROPERTY (including any improvements)

BEING a 1.383 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, in Comal County, Texas, and being out of a tract called First Tract, called 123.79 acres, conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 46° 36′ 41" W along the Northeast line of a tract of 3.050 acres described in Volume 645, Page 295 of the Official Public Records of Comal County, Texas, said 1.383 acre tract being more particularly by Exhibit "A" attached hereto and made part hereof for all purposes.

Reservations from and Exceptions to Conveyance and Warranty:

This conveyance is made expressly subject to all easements, restrictions, right of way, conditions, exceptions, reservations and covenants of whatsoever nature of record, if any, and also to the zoning laws and other restrictions, regulations, ordinances and statutes of municipal or other governmental authorities applicable to and enforceable against the above described premises.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and

Doc# 200306042288

~~DOC# 9506481748~~

conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and to hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor hereby binds Grantor and Grantor's heirs, executors, administrators, successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successor's and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to warranty.

When the context requires, singular nouns and pronouns include the plural.

Calvin A. Heidrich

Helen Heidrich

THE STATE OF TEXAS ()

COUNTY OF COMAL ()

This instrument was acknowledged before me on the 20th day of December, 1995, by Calvin A. Heidrich and Helen Heidrich for the purposes and considerations therein stated.

JANINE E. ELLINGTON
NOTARY PUBLIC
State of Texas
Comm. Exp. 02-01-97

Janine E. Ellington
JANINE E. ELLINGTON
Notary Public, State of Texas

After recording return to:

Comal County Road Department
4931 Hwy 46 W.
New Braunfels, Texas 78132

DOC# 20030042288

S. CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS - SURVEYORS
410 N. SEGUIN STREET
NEW BRAUNFELS, TEXAS 78130-5085

TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
AMERICAN SOCIETY OF CIVIL ENGINEERS

TEXAS SURVEYORS ASSOCIATION
TELEPHONE: (210) 625-8555

~~DOC# 9506481748~~

EXHIBIT "A"

FIELD NOTES FOR A 1.383 ACRE TRACT

Being a 1.383 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, in Comal County, Texas, and being out of a tract called First Tract, called 123.79 acres, conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 46° 36' 41" W along the Northeast line of a tract of 3.050 acres described in Volume 645, Page 295 of the Official Public Records of Comal County, Texas, said 1.383 acre tract being more particularly described as follows:

BEGINNING: At an iron pin found in a Southeast line of the above referenced tract, for the South corner of this tract, said point being the East corner of a tract of 3.050 acres out of the above referenced tract, said 3.050 acre tract described in Volume 645, Page 295 of the Official Public Records of Comal County, Texas, said Point of Beginning also being N 52° 28' 33" E 310.0 feet (record call in Volume 645, Page 295) from the Southwest corner of the above referenced tract;

THENCE: Into the above referenced tract, along the Northeast line of said 3.050 acre tract, N 46° 36' 41" W 550.91 feet to an iron pin found at the North corner of said 3.050 acre tract, lying in the Southeast line of a tract called 6.531 acres conveyed to Comal County Texas and described in Volume 274, Pages 383-384 of the Deed Records of Comal County, Texas, and also described in a Correction Warranty Deed recorded in Volume 645, Page 292 of the Official Public Records of Comal County, Texas, for the West corner of this tract;

THENCE: Along the Southeast line of said 6.531 acre tract, N 29° 56' 11" E 120.17 feet to an iron pin found at a corner of said 6.531 acre tract, for the North corner of this tract;

THENCE: Across the remainder of the above referenced tract, S 44° 23' 10" E 594.39 feet to an iron pin set in a Southeast line of the above referenced tract, a Northwest line of a tract called 17.009 acres recorded in Volume 131, Pages 185-187 of the Deed Records of Comal County, Texas, for the East corner of this tract, an iron pin found at a North corner of said 17.009 acre tract bears N 52° 31' 10" E 82.67 feet;

Doc# 200306042288

~~Doc# 9506481748~~

Page 2: 1.383 Acre Tract

THENCE: Along said Southeast line and Northwest line, S 52° 31' 10" W 95.00 feet to the Point of Beginning and containing 1.383 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, December 11, 1995. Reference plat prepared this same date of this 1.383 acre tract.



Richard A. Goodwin, RPLS #4069

Job #95677

Doc# 9506481748
Pages: 4
Date : 12-20-1995
Time : 10:18:44 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

~~Doc# 9506481748~~

DOC# 200306042288

EXHIBIT "E"

~~DOC# 9706003685~~

WARRANTY DEED

5/C

DATE:

GRANTOR: Calvin A. Heidrich and wife Hellen Heidrich

GRANTOR'S MAILING ADDRESS: 4836 Highway 46 West
New Braunfels, Texas 78132

GRANTEE: COUNTY OF COMAL, TEXAS

GRANTEE'S MAILING ADDRESS: 150 North Seguin Ave. Suite 301
New Braunfels, Texas 78130

CONSIDERATION: TEN AND NO/100 ($10.00) and other good and valuable consideration.

PROPERTY (including any improvements)

BEING a 1.474 acre tract of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271 in Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, said 1.474 acre tract being more particularly described by metes and bounds in Exhibit "A" attached hereto and made part hereof for all purposes.

Reservations from and Exceptions to Conveyance and Warranty:

This conveyance is made expressly subject to all easements, restrictions, right of way, conditions, exceptions, reservations and covenants of whatsoever nature of record, if any, and also to the zoning laws and other restrictions, regulations, ordinances and statutes of municipal or other governmental authorities applicable to and enforceable against the above described premises.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have

and to hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor hereby binds Grantor and Grantor's heirs, executors, administrators, successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successor's and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to warranty.

When the context requires, singular nouns and pronouns include the plural.

Calvin A. Heidrich

Calvin A. Heidrich

Hellen Heidrich

Hellen Heidrich

THE STATE OF TEXAS ()

COUNTY OF COMAL ()

This instrument was acknowledged before me on the 20th day of February, 1997, by Calvin A. Heidrich and Hellen Heidrich for the purposes and considerations therein stated.

RUBY A. CASTILLEJA
NOTARY PUBLIC
State of Texas
Comm. Exp. 11-25-2000

Ruby A. Castilleja

Ruby A. Castilleja

Notary Public, State of Texas

After recording return to:

Comal County Road Department
4931 Hwy 46 W.
New Braunfels, Texas 78132

Doc# 200306042288

S. CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS - SURVEYORS
410 N. SEGUIN STREET
NEW BRAUNFELS, TEXAS 78130-5085

~~DOC# 9706003685~~

TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
AMERICAN SOCIETY OF CIVIL ENGINEERS

TEXAS SURVEYORS ASSOCIATION
TELEPHONE: (210) 625-8555

WATER SYSTEMS • SEWER SYSTEMS • SUBDIVISIONS • LAND PLANNING • STREETS • DRAINAGE • SURVEYING

FIELD NOTES
FOR
A 1.474 ACRE TRACT

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271 in Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 44° 23' 10" W between iron pins found along the Northeast line of a 1.383 acre tract described in Doc# 9506481748 of the Official Public Records of Comal County, Texas, said 1.474 acre tract of land being more particularly described as follows:

BEGINNING: At an iron pin found at the East corner of said 1.383 acre tract, lying in a Southeast line of the above referenced tract, for the South corner of this tract, said point being N 52° 28' 33" E 310.0 feet (record call in Volume 645, Page 295) and N 52° 31' 10" E 95.0 feet from the Southwest corner of the above referenced 123.79 acre tract;

THENCE: Along the Northeast line of said 1.383 acre tract, N 44° 23' 10" W 60.44 feet to an iron pin set in same, for the West corner of this tract;

THENCE: N 52° 31' 10" E 86.40 feet, an iron pin set, N 45° 46' 16" E 774.47 feet, an iron pin set, and N 47° 40' 05" E 195.85 feet to an iron pin set in the Southwest fenced line of State Highway No. 46, for the North corner of this tract;

THENCE: Along said Southwest line, S 67° 42' 04" E 66.40 feet to an iron pin found for the East corner of this tract, said point also being the North corner of a tract of 5.659 acres described in Volume 658, Page 79 of the Official Public Records of Comal County, Texas;

THENCE: Along the Northwest line of said 5.659 acre tract, S 47° 40' 05" W 223.31 feet, an iron pin found and S 45° 46' 16" W 777.01 feet to an iron pin found at fence corner for the West corner of said 5.659 acre tract, the North corner of a tract of 17.009 acres described in Volume 131, Pages 185-187 of the Deed Records of Comal County, Texas, for a corner of this tract;

EXHIBIT "A"

DOC# 9706003685

Page 2: 1.474 Acre Tract

THENCE: Along a Southeast line of the above referenced 123.79 acre tract, a Northwest line of said 17.009 acre tract, S 52° 31' 10" W 82.67 feet to the Point of Beginning and containing 1.474 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, February 10, 1997. Reference plat prepared this same date of this 1.474 acre tract.



R A Goodwin

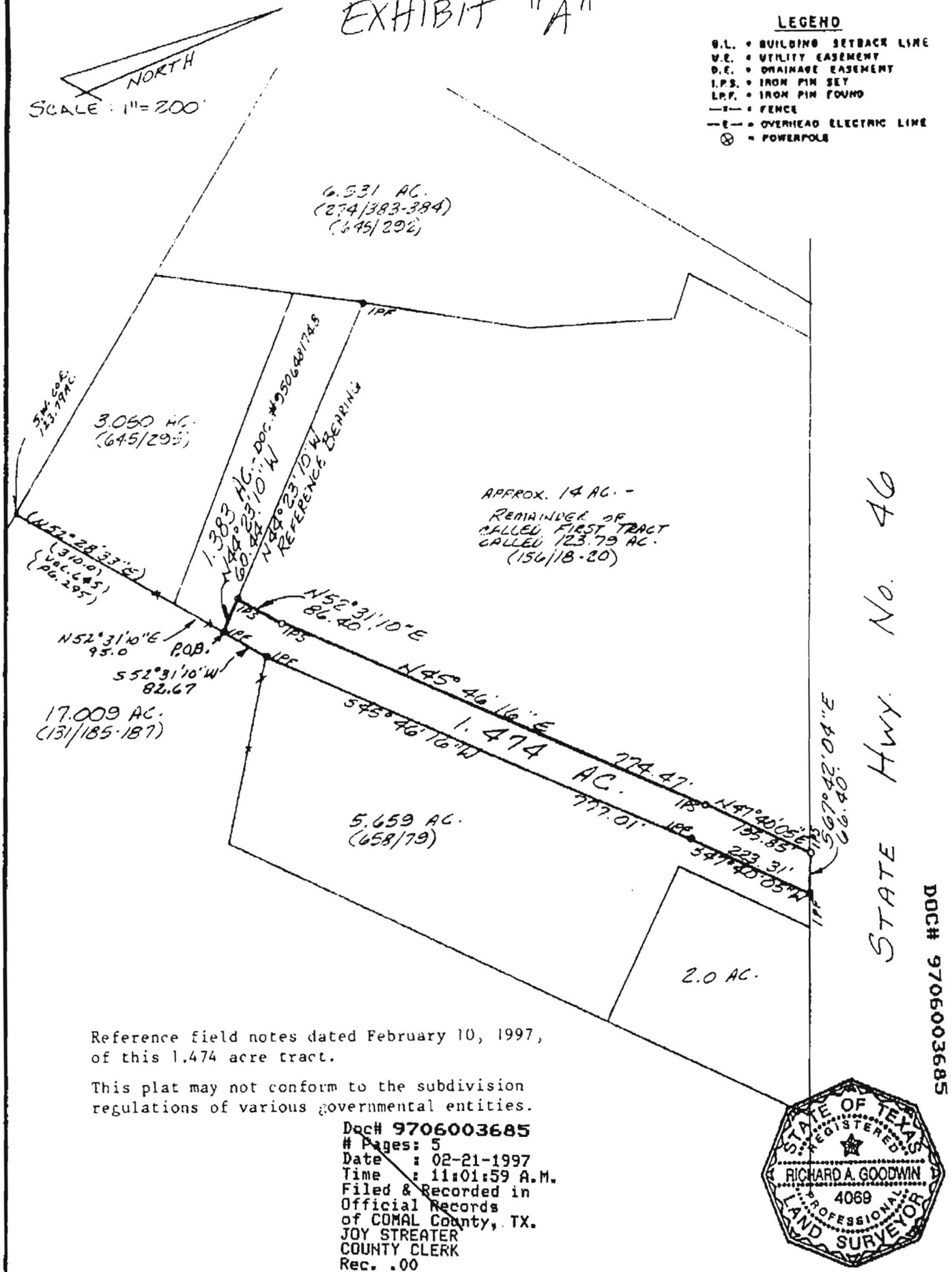
Richard A. Goodwin, RPLS #4069

Job #97023

Doc# 200306042288

~~DOC# 9706003685~~

EXHIBIT "A"



Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

Doc# 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAS
REGISTERED
RICHARD A. GOODWIN
4069
PROFESSIONAL
LAND SURVEYOR

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-8555

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February 19 97 A.D.

DOC# 9706003685

Doc# 200306042288

S. CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS - SURVEYORS
410 N. SEGUIN STREET
NEW BRAUNFELS, TEXAS 7813~~Doc# 9906025084~~

TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
AMERICAN SOCIETY OF CIVIL ENGINEERS

TEXAS SURVEYORS ASSOCIATION
TELEPHONE: (830) 625-8555 • FAX: (830) 625-8556

WATER SYSTEMS • SEWER SYSTEMS • SUBDIVISIONS • LAND PLANNING • STREETS • SURVEYING

FIELD NOTES
FOR
A 14.065 ACRE TRACT

Being a 14.065 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, being part of a tract of land called 123.79 acres described in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 44° 23' 10" W between iron pins found along the Northeasterly line of a tract of land called 1.383 acres described in Doc# 9506481748 of the Official Public Records of Comal County, Texas, said 14.065 acre tract of land surveyed under the supervision of Richard A. Goodwin, RPLS #4069, S. Craig Hollmig, Inc., and being more particularly described as follows:

BEGINNING: At a ½" iron pin found for the West corner of a tract of land called 1.474 acres described in Doc# 9706003685 of the Official Public Records of Comal County, Texas, being in the Northeasterly line of said 1.383 acre tract, and being N 52° 28' 33" E 310.0 feet (record call in Volume 645, Page 295), N 52° 31' 10" E 95.0 feet, and N 44° 23' 10" W 60.44 feet from the Southwest corner of the above referenced 123.79 acre tract, for the South corner and Point of Beginning of this tract;

THENCE: Along the Northeasterly line of said 1.383 acre tract, N 44° 23' 10" W 533.95 feet to a 3/8" iron pin found for the North corner of said 1.383 acre tract, being in the Southeasterly line of a tract of land called 6.531 acres described in Volume 645, Page 292 of the Official Public Records of Comal County, Texas, for the West corner of this tract;

THENCE: Along the Southeasterly line of said 6.531 acre tract, the Northwesterly line of this tract, N 31° 18' 46" E 274.93 feet, a ½" iron pin set, N 20° 12' 28" E 250.90 feet, a 3/8" iron pin found, N 49° 46' 33" W 80.56 feet to a 3/8" iron pin found, and N 53° 28' 46" E 238.52 feet to a 3/8" iron pin found in the Southeasterly line of State Highway 46, for the most Easterly corner of said 6.531 acre tract, for the North corner of this tract;

THENCE: Along the Southwesterly line of State Highway 46, S 67° 40' 13" E 845.46 feet to a ½" iron pin set in same, for the North corner of said 1.474 acre tract, for the East corner of this tract;

Doc# 200306042288

Doc# 9906025084

THENCE: Along the Northwesterly line of said 1.474 acre tract, S 47° 40' 05" W 195.85 feet, a ½" iron pin set, S 45° 46' 16" W 774.47 feet, a ½" iron pin found, and S 52° 31' 10" W 86.40 feet to the Point of Beginning and containing 14.065 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, August 6, 1999. Reference plat prepared this same date of this 14.065 acre tract.



Richard A. Goodwin, RPLS #4069

Job #99446

Doc# 9906025084
Pages 4
Date 9/16/99 3:24:49 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $15.00

Doc# 9906025084

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

When the context requires, singular nouns and pronouns include the plural.

CALVIN HEIDRICH

HELLEN L. HEIDRICH

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF COMAL §

This instrument was acknowledged before me on September 16, 1999, by CALVIN HEIDRICH and HELLEN L. HEIDRICH.

LAURA R. RAUCH
Notary Public, State of Texas
My Commission Expires
AUG. 5, 2001

Notary Public, State of Texas

PREPARED IN THE OFFICE OF:

Steven G. Lawrence P.C.
114 W. Glenview, #205
San Antonio, Texas 78228

AFTER RECORDING RETURN TO:

Comal County
150 N. Seguin, #307
New Braunfels, Texas 78130

Doc# 200306042288

EXHIBIT "F"

WARRANTY DEED

~~Doc# 9906025084~~

Date: September 15, 1999

Grantor: CALVIN HEIDRICH and HELLEN L. HEIDRICH

Grantor's Mailing Address (including county):

4836 HWY 46
New Braunfels, Texas 78130
Comal County

Grantee: COMAL COUNTY, TEXAS

Grantee's Mailing Address (including county):

150 N Seguin, #307
New Braunfels, Texas 78130
Comal County

Consideration: TEN AND NO/100 DOLLARS and other good and valuable consideration.

Property (including any improvements):

Being 14.000 acres of land, more or less, out of the A.M. Holbrook Survey No. 423, Abstract 271, in Comal County, Texas, being more particularly described on Exhibit "A" attached hereto and made a part hereof for all purposes.

Reservations From and Exceptions to Conveyance and Warranty:

Easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded instruments, other than liens and conveyances, that affect the property; taxes for the current year, the payment of which Grantee assumes.

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully

NBCLT
99-0-9783

Doc# 200306042288

Doc# 200306000534

EXHIBIT "G"

FILED BY
ALAMO TITLE

GF# 1400072

WARRANTY DEED

Date: March 7, 2003

Grantor: JACK G. QUINN and wife, KELLEE D. QUINN

Grantor's Mailing Address (including county):

315 Rock Hill Trail
New Braunfels, Comal County, Texas, 78132

Grantee: COMAL COUNTY, TEXAS

Grantee's Mailing Address (including county):

199 Main Plaza
New Braunfels, Comal County, Texas, 78130

Consideration: TEN AND NO/100 DOLLARS and other good and valuable consideration.

Property (including any improvements):

SEE EXHIBIT "A" AND EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF FOR ALL PURPOSES.

Reservations From and Exceptions to Conveyance and Warranty:

Easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded instruments, other than liens and conveyances, that affect the property; taxes for the current year, the payment of which Grantee assumes.

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty.

When the context requires, singular nouns and pronouns include the plural.

JACK G. QUINN

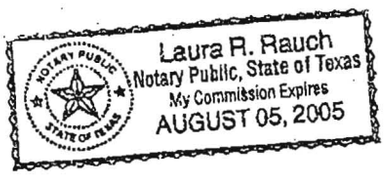
KELLEE QUINN

Doc# ~~200305008334~~
Doc# 200306042288

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF COMAL §

This instrument was acknowledged before me on March 7, 2003, by JACK G. QUINN and wife, KELLEE QUINN.



Laura L Rauch
Notary Public, State of Texas

AFTER RECORDING RETURN TO:

Comal County, Texas
199 Main Plaza
New Braunfels, Texas 78130

Doc# 200306008534

Doc# 200306042288

Doc# 200006033994

EXHIBIT "A"

RECORDER'S MEMORANDUM - COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photo copy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

20.0 ACRE TRACT

All that certain tract or parcel of land containing 20.0 acres in the Comal County, Texas, out of F. Michel Survey No. 653, Abstract 400, being the same tract of land described in conveyance from Clifford Henry Dietz, et ux to Wayne Pooley and wife, Susan Pooley, of record in Volume 470, Pages 239-241, Deed Records of Comal County, Texas.

Said 20.0 acre tract, being more particularly described by metes and bounds as follows;

BEGINNING: at a ½" iron pin found on the Southwest boundary line of the County of Comal, 6.531 acre tract, of record in Volume 274, Page 383, Deed Records of Comal County, Texas, at the East corner of Clifford Henry Dietz, 19.19 acre tract, of record in Volume 218, Page 498, Deed Records of Comal County, Texas and same being the East corner of Clifford Henry Dietz, remaining portion of a 144.569 acre tract, of record in Volume 265, Page 356, Deed Records of Comal County, Texas, for the North corner of this herein described tract;

THENCE: South 37 deg. 16 min. 27 sec. East; a distance of 881.61 feet to a ½" iron pin set stamped "Seguin 1776" on the Southwest boundary line of the County of Comal, 3.050 acre tract, of record in Volume 645, Page 295, Official Public Records of Comal County, Texas at the East corner of said Michel Survey, same being the North corner of the S. Washburn Survey 486, Abstract 663 and also being the North corner of Agnes Brandt, 163.00 acre tract, of record in Volume 200, page 470, Deed Records of Comal County, Texas, for the East corner of this herein described tract;

THENCE: along with the common line between said Michel Survey and said Washburn Survey and also being the Northwest boundary line of said Brandt, 163.00 acre tract, the following courses and distances:
South 53 deg. 05 min. 19 sec. West, a distance of 669.63 feet to a ½" iron pin found and
South 52 deg. 55 min. 41 sec. West, a distance of 327.58 feet to a ½" iron pin found at a corner of said Dietz, remaining portion of 144.569 acre tract, for the South corner of this herein described tract;

THENCE: North 37 deg. 16 min. 38 sec. West, a distance of 867.35 feet to a ½" iron pin set with cap stamped "Seguin 1776" at the South corner of said Dietz, 19.19 acre tract and same being a corner of said Dietz, remaining portion of 144.569 acre tract, for the West corner of this herein described tract;

THENCE: North 52 deg. 13 min. 00 sec. East, a distance of 997.28 feet along with the Southeast boundary line of said Dietz, 19.19 acre tract to the POINT OF BEGINNING.

Bearing Basis – North 52 deg. 13 min. 00 sec. East – from the Northwest boundary line of said 20.0 acre tract of record in Volume 470, Page 239-241, Deed Records of Comal County, Texas.

RECORDER'S MEMORANDUM – COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photocopy, discolored paper, etc. All blackouts, additions and changes were present at the time the instrument was filed and recorded.

Doc# 200306042280

~~Doc# 200306008534~~

EXHIBIT "B"

~~Doc# 200006033994~~

(Continued)

RECORDER'S MEMORANDUM - COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photo copy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

EASEMENT NO. 1:
BEGINNING at an iron pin set for the east corner of this road easement, the north corner of a 1.00 acre tract from which the east corner of the called 144.569 acre tract, the east corner of the Michel Survey, the north corner of the S. Washburn Survey No. 486, A-663, bears S 37° 02' E 208.71 feet;

THENCE with the northwest line of the called 1.0 acre tract, S 53° 08' W 30.0 feet to a point marking the south corner of this thirty foot road easement;

THENCE with the southwest line of this road easement, N 37° 02' W 778.09 feet to a point marking the west corner of this thirty foot road easement;

THENCE N 53° 00' E 30.0 feet to a point marking the north corner of this thirty foot road easement situated in the northeast line of the called 144.569 acre tract, the common line between the Michel Survey and the A. M. Holbrook Survey No. 423, A-271, and situated at the end of an existing thirty foot lane;

THENCE with the northeast line of the called 144.569 acre tract, the common line between the Michel and Holbrook Surveys, S 37° 00' E at 30.0 feet the southeast line of the existing thirty foot lane and in all 105.5 feet to an iron pin found and S 37° 02' E 672.59 feet to the PLACE OF BEGINNING.

EASEMENT NO. 2;
BEING a 30.0 foot road easement and right-of-way traversing that certain tract of land conveyed by Kermit E. Heidrich to Calvin Heidrich by deed dated June 13, 1967, and recorded in Volume 156, Pages 18-20, Deed Records of Comal County, Texas, and said easement and right-of-way being more particularly described by metes and bounds as follows, to-wit:

BEGINNING at an iron stake in the Southwest line of the Alva M. Holbrook Survey No. 423, placed for the Southeast corner of the Daniel B. Puckett et ux 81.66 acre tract;

THENCE N 36° 48' W with the Southwest line of said 81.66 acre tract 30 feet to a stake;

THENCE N 53° 25' E., parallel to and 30 feet distant from the Southeast line of said 81.66 acre tract, 956.04 feet to a stake in the Southwest line of State Highway No. 46;

THENCE S 67° 44' E, with the Southwest line of said Highway 35.02 feet to an iron stake at the Northeast corner of said 81.8 acre tract;

THENCE S 53° 25' W, with the southeast line of said 81.66 acre tract, 974 feet to the place of beginning, according to a survey made on the ground by A. M. Moellering, RPS No. 1260, on July 14, 1973;

Doc# 200006033994
Pages 4
Date: 11/1/00 3:08:01 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $15.00

Doc# 200306008534
Pages 4
03/10/2003 02:24:05 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $15.00

RECORDER'S MEMORANDUM - COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photo copy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

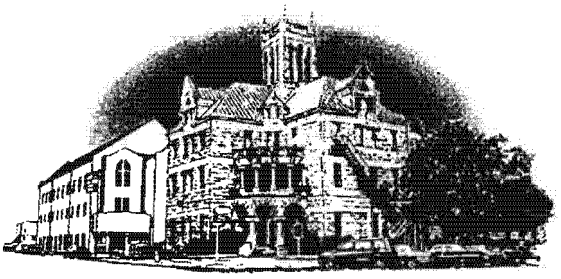
~~Doc# 200006033994~~

Doc# 200306008534

Doc# 200306042280
Pages 4
12/12/2003 01:57:17 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER

STATE OF TEXAS

Filed and Recorded
Official Public Records
Joy Streater, County Clerk



Comal County

OFFICE OF COMAL COUNTY ENGINEER

February 28, 2008

Texas Commission on Environmental Quality
Region 13
14250 Judson Road
San Antonio, Texas 78711-4480

Re: Comal County Road Department WPAP

We are writing this letter to comply with standard condition No. 2 for the referenced WPAP. Included is the recorded affidavit and approval letter. If you have any questions concerning this letter or its attachments please call me at 830/608-2090.

Thank you for your assistance,

Sincerely,

Carl Tepe
Environmental Health Inspector
Comal County

195 David Jonas Drive • New Braunfels, Texas 78130 • (830) 608-2090 FAX (830) 608-2009

Honorable Joy Streater, County Clerk

Comal County TX
150 N. Seguin, Suite 101
New Braunfels, TX 78130
(830) 620-5516

Receipt for Services

Cashier CASHONE **Batch #** 15523

Date: 02/28/2008 **Time:** 09:29:46AM

Customer Name COMAL COUNTY ENVIROMENTAL ENGINEER'S OFFICE
195 DAVID JONAS RD
NEW BRAUNFELS, TX 78131

Date	Instrument No	Document Type	Transaction Type	GF Number	Pg/Amt
2/28/2008 9:29:46AM	200806008015	AFFIDAVIT			32
				Total:	**$0.00**
		Fee Total:			**$0.00**

32
C

200806008015 02/28/2008 09:29:46 AM AFFIDAVIT 1/32

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of Comal §

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

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

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

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the Texas Commission on Environmental Quality (TCEQ) on January 2, 2007.

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

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

Tract	Recording Information	Exhibit (Attached)
6.531 Acres	Volume 274 Pages 383-384 Volume 645 Pages 292-294	B
3.050 Acres	Volume 645 Pages 295-297	C
1.383 Acres	DOC# 9506481748	D
1.474 Acres	DOC# 9706003685	E
14.065 Acres	DOC# 9906025084	F
20.000 Acres	DOC# 200306008534	G

LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this 21 day of Feb, 2008.

Crystal L. Gottfried
NOTARY PUBLIC

CRYSTAL L. GOTTFRIED
Notary Public State of Texas
My Comm. Exp. 11-15-2011

THE STATE OF Texas §

County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared Danny Scheel 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 21 day of February 2008

CRYSTAL L. GOTTFRIED
Notary Public State of Texas
My Comm. Exp. 11-15-2011

Crystal L. Gottfried
NOTARY PUBLIC

Crystal L. Gottfried
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 11-15-2011

TCEQ-0625 (Rev. 10/01/04)

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*

RECEIVED
OCT 2 6 2007
COUNTY ENGINEER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2007

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Comal County Road Department's 46.503 acres, located on State Highway 46, 1 mile past FM 2722, New Braunfels, Texas
PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
San Antonio Region File Number: -309.05

Dear Mr. Hornseth:

The enclosed WPAP 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.

Please forward your comments to this office by November 23, 2007.

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



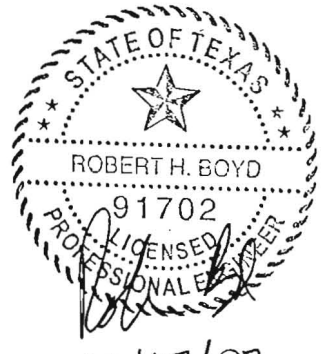
Comal County

OFFICE OF COMAL COUNTY ENGINEER

RECEIVED
OCT 2 6 2007
COUNTY ENGINEER

OCT 2 4 2007
SAN ANTONIO

Modification of Previously Approved Water Pollution Abatement Plan for the Comal County Road Department's 46.503 Acres October 2, 2007



10/17/07

Modification of a Previously Approved Plan Checklist

RECEIVED
OCT 26 2007
COUNTY ENGINEER

✓ General Information Form (*TCEQ-0587*)
- ATTACHMENT A - Road Map
- ATTACHMENT B - USGS / Edwards Recharge Zone Map
- ATTACHMENT C - Project Description

✓ Geologic Assessment Form (*TCEQ-0585*)
- ATTACHMENT A - Geologic Assessment Table, *TCEQ-0585-Table*
- Comments to the Geologic Assessment Table
- ATTACHMENT B - Soil Profile and Narrative of Soil Units
- ATTACHMENT C - Stratigraphic Column
- ATTACHMENT D - Narrative of Site Specific Geology
- Site Geologic Map(s)
- Table or list for the position of features' latitude/longitude (if mapped using GPS)

✓ Modification of a Previously Approved Plan (*TCEQ-0590*)
- ATTACHMENT A - Original Approval Letter.
- ATTACHMENT B - Narrative of Proposed Modification.
- ATTACHMENT C - Site Plan.

✓ Temporary Stormwater Section (*TCEQ-0602*), if necessary
- ATTACHMENT A - Spill Response Actions
- ATTACHMENT B - Potential Sources of Contamination
- ATTACHMENT C - Sequence of Major Activities
- ATTACHMENT D - Temporary Best Management Practices and Measures
- ATTACHMENT E - Request to Temporarily Seal a Feature, if sealing a feature
- ATTACHMENT F - Structural Practices
- ATTACHMENT G - Drainage Area Map
- ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations
- ATTACHMENT I - Inspection and Maintenance for BMPs
- ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices

✓ Permanent Stormwater Section (*TCEQ-0600*), if necessary
- ATTACHMENT A - 20% or Less Impervious Cover Waiver, if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site
- ATTACHMENT B - BMPs for Upgradient Stormwater
- ATTACHMENT C - BMPs for On-site Stormwater
- ATTACHMENT D - BMPs for Surface Streams
- ATTACHMENT E - Request to Seal Features, if sealing a feature
- ATTACHMENT F - Construction Plans
- ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan
- ATTACHMENT H - Pilot-Scale Field Testing Plan, if BMPs not based on *Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs*
- ATTACHMENT I -Measures for Minimizing Surface Stream Contamination

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

✓ Fee Application Form (*TCEQ-0574*)

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

✓ Core Data Form (*TCEQ-10400*)

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: Comal County Engineers Office
COUNTY: Comal STREAM BASIN: Guadalupe

EDWARDS AQUIFER: ✓ RECHARGE ZONE
__ TRANSITION ZONE

PLAN TYPE: ✓ WPAP __ AST __ EXCEPTION
__ SCS __ UST ✓ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Robert H. Boyd, P.E.
Entity: Comal County
Mailing Address: 195 David Jonas Drive
City, State: New Braunfels, Texas Zip: 78132
Telephone: (830) 608-2090 FAX: (830) 608-2009

Agent/Representative (If any):

Contact Person: _____
Entity: _____
Mailing Address: _____
City, State: _____ Zip: _____
Telephone: _____ FAX: _____

2. __ This project is inside the city limits of _____.
✓ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of New Braunfels, Texas.
__ 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.

From New Braunfels, take US46 West past FM 2722 approximately 1 mile to the Comal County Road Department on the South side of the road.

4. ✓ 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. ✓ 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:

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

6. ✓ 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. ✓ **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)
- ___ Other: _____

PROHIBITED ACTIVITIES

9. ✓ 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. ___ 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:

✓ 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)

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

13. ✓ 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. ✓ 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:

Robert H. Boyd, P.E.

Print Name of Customer/Agent



Signature of Customer/Agent

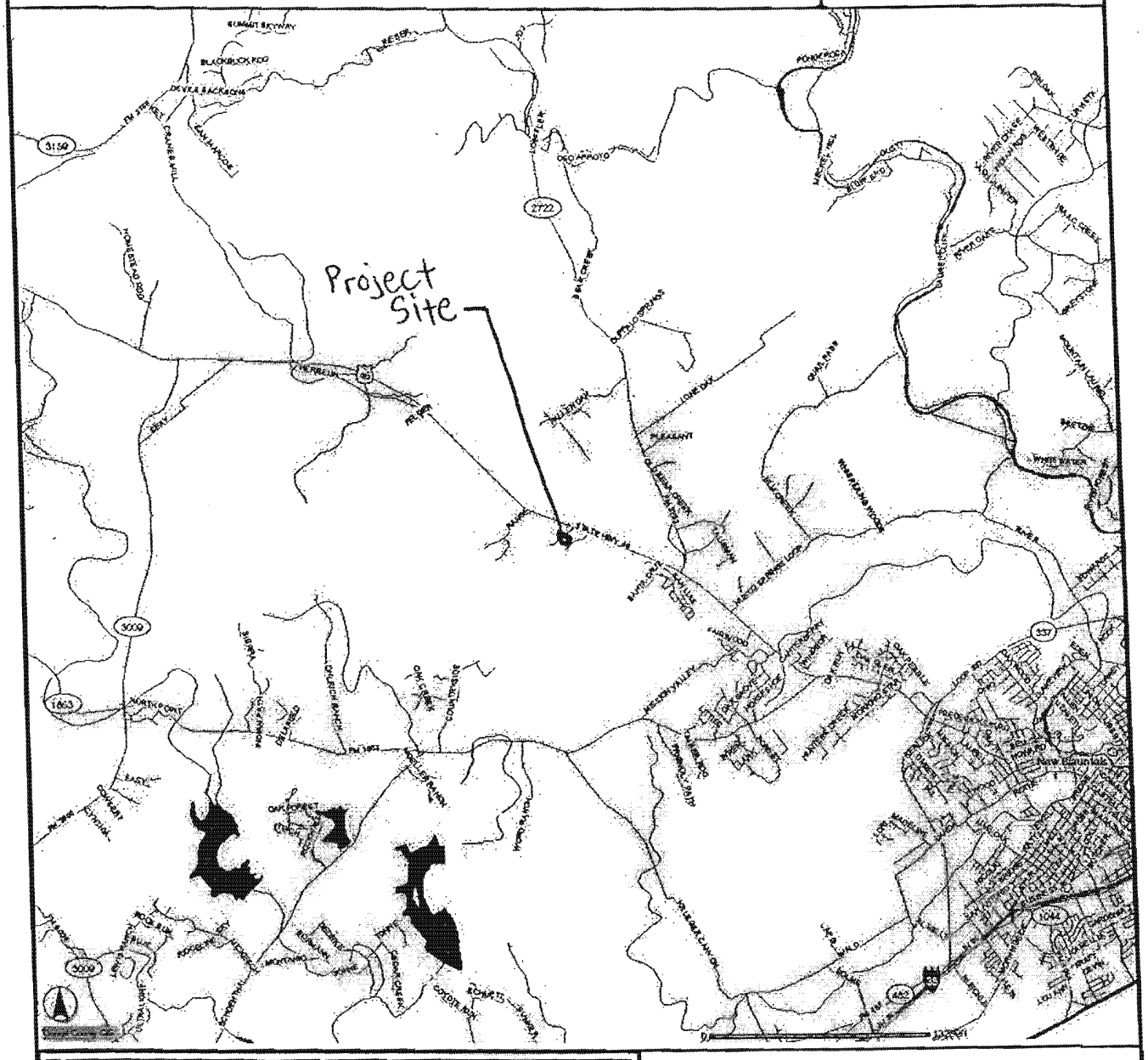
10/1/07

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.

Attachment A - Road Map



Copyright 2004
Comal County GIS
195 David Jonas
New Braunfels, TX 78130

Comal County

DISCLAIMER : This is a product of the Comal County GIS Department. The data depicted here have been developed with extensive cooperation from other county departments, as well as other federal, state and local governments agencies.Comal County expressly disclaims responsibility for damages or liability that may arise from the use of this map.

PROPRIETARY INFORMATION: Any resale of this information is prohibited, except in accordance with a licensing agreement.

Legend

- County Boundary
- Private Schools
- Public Schools
- Police Stations
- Fire Stations
- County Assets
- Daycares
- Streets
- Buildings
- 2 Ft. Contours
- Streams
- Lakes
- Council Districts
- Zip Codes



D Topo Quads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84



TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84



3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84



TOPO! TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

Attachment C – Project Description

The Comal County Road Department is proposing to do the following:

1) Construct a new agricultural barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion. (See WPAP Site Plan)
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

1) Front End Loaders
2) Dump Trucks
3) Bobcats
4) Bulldozers

Items 4-7 will give the extension office more space to hold education classes to Comal County residents.

Items 8 and 9 will be used along with existing vegetation to treat storm water runoff from items 1-7.

Items 1-9 will give Drainage Area 1 a total of 5.542 acres of impervious cover including existing improvements. With the proposed improvements to Drainage Area 1 the Comal County's 46.503 acres impervious cover will be increased from 28.06% to 38.52%. Total impervious cover will be 17.91 acres respectively.

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

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION

REGULATED ENTITY NAME: ~~61.55~~ 46.503 Acres - Comal County (195 David Jonas Drive & Hwy. 46)

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

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

PROJECT INFORMATION

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

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

	Soil Units, Infiltration Characteristics & Thickness		
	Soil Name	Group*	Thickness (feet)
N/2	(RUD) Rumple-Comfort Assoc.	C/D	2.0 +
S/2	(RUD) Rumple-Comfort Assoc.	C/D	0.5

* Soil Group Definitions (Abbreviated)

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

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

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

5. XX 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" = 4000'
Site Geologic Map Scale	1" = 200'
Site Soils Map Scale (if more than 1 soil type)	1" = 200'

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

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

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

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

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

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

   XX There are 1 (#) 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.
   - XX 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.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: May 12 - 20, 2003
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.

David Seagraves
Print Name of Geologist

(210) 377-1603
Telephone

Fax


Signature of Geologist

May 20, 2003
Date

Representing: "Independent Consultant"
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer Protection Program, please contact us at 512/939-2929 (Austin) or 210/403-4024 (San Antonio).

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.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SITE SPECIFIC GEOLOGY

The on-site geological unit is the Person Formation of the Edwards Group as identified by field investigation and referenced by the Hydrogeologic Subdivisions Map of the U.S.G.S. Water-Resources Investigations Report 94-4117, Comal County, Texas and the Geologic Map of the New Braunfels, Texas 30X60 Minute Quadrangle (Scale 1: 100,000) Bureau of Economic Geology, 2000.

No exposures of the Person Fm. were noted on the northern portion (15 acres) of the site. This is due to a thick soil cover. The only feature (S-7), a closed depression found within this portion of the site is possibly the result of man-made activities.

The southern portion (20 acres) of the site was formerly utilized as a horse stable with pens and contains a residence. There is less soil cover (possibly due to over grazing) and greater amounts of limestone floatrock on the southern portion resulting in exposures of the Person Fm.. These exposures are typically discontinuous, linear (10-20 feet long and greater) clay-filled fractured beds along slight breaks in slope and parallel to contour. Overall, the trend of the fractures are random, although the bearings of some long axes range from N70E to N85E. Offset fractures are approximately perpendicular to the long axes. These features appear to be the result of weathering. One exception is found in feature (S-5), which appears to be solution fracturing and is devoid of clay infilling and vegetation. Feature (S-5) is located within the centerline of a secondary drainage way and could be limited to the exposed bed without extending downward into the underlying limestone bed. Another area of note which was not listed on the Geologic Assessment Table is a larger area (100 x 150') of clay filled fractured rock which did not fit the similar pattern typical of this site. I recommend that this area be monitored if any future development is planned over this area. There were a few areas were the top of beds were exposed with sealed fractures and some vugs were also noted which were the result of weathering. Essentially, the site consisted of fine grained, medium beds of limestone. Overall slope is 1 to 3 percent towards the northwest. No other major karstic or structural features were noted on the site. Adjacent to the site, there are three large sink hole features approximately 1,000 feet to the east, northeast and north. The site is between two major fault complexes, the first one is the Hueco Springs Fault and is approximately 2,500 feet to the southeast, and the second one is the Bat Cave Fault and is approximately 5,000 feet to the northwest.

Overall, surface conditions within the northern portion of the site appear to have the ability to impede fluid movement into the subsurface. Whereas, surface conditions within the southern portion appear to have the ability to impede fluid movement into the subsurface at a lesser extent.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SOIL UNIT

The on-site soil consists of a reddish brown very cherty clay loam. The northern portion of the complex extension (15 acres) has a thickness of at least two feet of this soil type with greater amounts of chert gravel. Previous use of the northern portion was as crop land and has a good grass cover and cleared of all trees. Whereas, the southern portion (20 acres) consists of a thinner soil profile, on average, 6 inches with limestone floatrock and less chert fragments. The soil has also infilled the interstices of exposed fractured limestone beds. Grass cover within the southern portion is sparse to moderate with a moderate tree cover consisting predominantly of oaks.

The on-site soil is classified as the (RUD) Rumple-Comfort association, undulating as referenced by the S.C.S. Soil Survey of Comal County, Texas (1984).

The S.C.S. Hydrologic Soil Groups - Technical Release No. 55, Appendix A has the Rumple soil listed as a Soil Group "C" soil, and is defined as soils having a slow infiltration rate when thoroughly wetted. The Comfort soil is listed as a Soil Group "D" soil, and is defined as soils having a very slow infiltration rate when thoroughly wetted.

The northern portion of the site also contains a greater percentage of the (TaB) Tarpley clay within the Rumple-Comfort association. The Tarpley clay soil type was not listed in the Technical Release No. 55, but should be assumed to be in Soil Group "D".

Overall, both soil types appear to have the ability to impede fluid movement into the subsurface.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

Site-Specific Stratigraphic Column

EDWARDS GROUP

Person Formation: 100 to 150 feet thick (approximate), medium to massive beds of mudstone to grainstone limestone, with chert fragments and some fossils. Upper part eroded.

Kainer Formation: 350 feet thick (approximate), medium to massive bedded limestones

- -

Glen Rose Formation: (Upper Member) 350 to 500 feet thick (approximate) thin to medium bedded limestone and marl.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

COMMENTS

S-1 (MB) Water well, active.

S-2 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

S-3 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

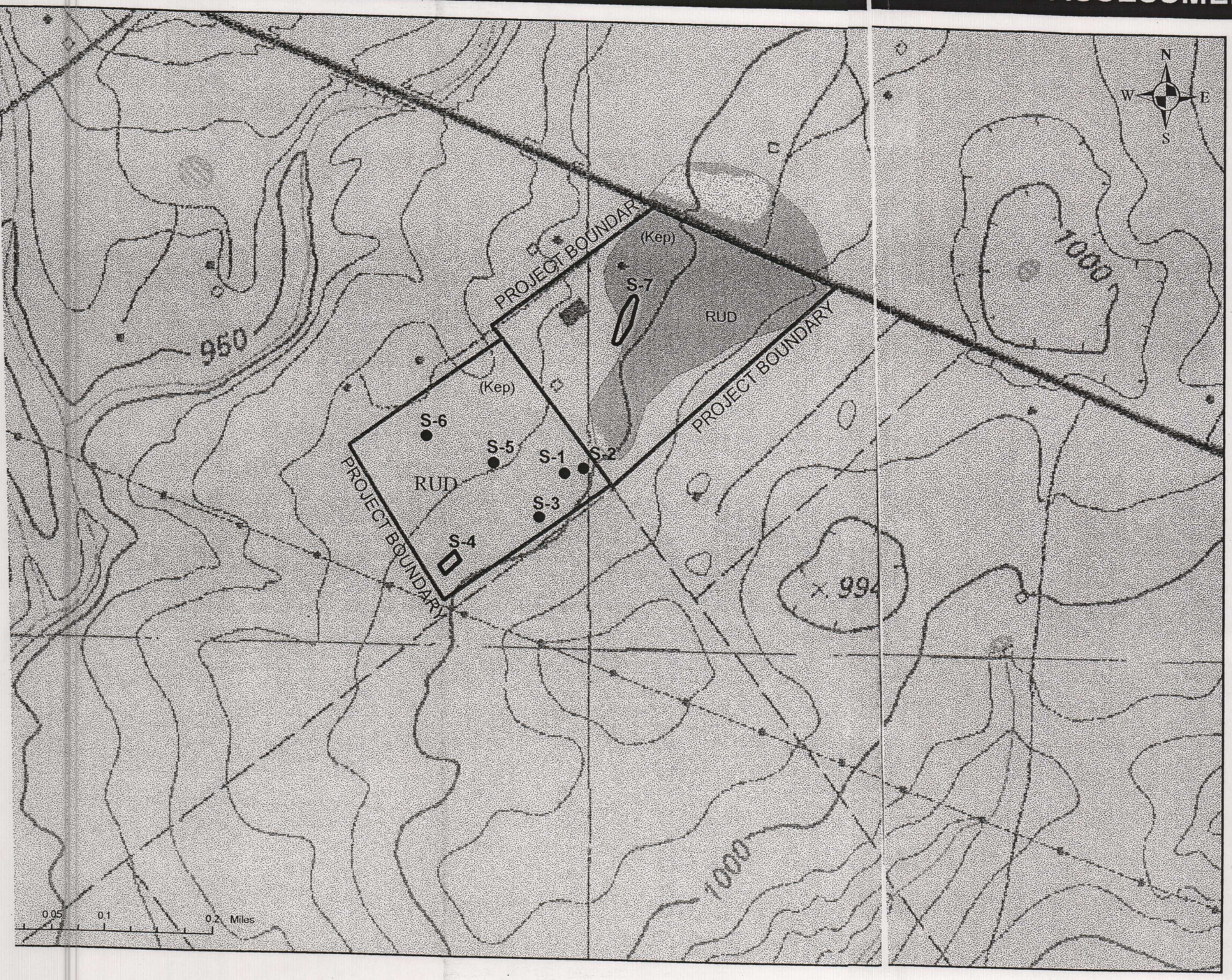
S-4 (MB) Excavation, slight excavation into the slope to provide a level area for horse training. The excavation resulted in a three sided face with one corner being approximately 3 feet below natural grade. Also, the deepest portion has become a closed depression. Fine material covers the entire base which impedes fluid movement downward. A few hairline fractures were noted along the face of the excavation.

S-5 (SF) fractured rock within the centerline of a minor drainageway, devoid of clay infilling and vegetation. Fractures appear to be within an individual bed and it was difficult to ascertain if the fractures continued downward into the underlying bed.

S-6 (CD) possible remnant of tree clearing. Several inches of ~~soil~~ and leaves within the base over bedrock.

S-7 (CD) possible remnant of terracing (former crop land) and/or adjacent development, built up parking lot for the Comal County Road Department Complex. The long axis of the closed depression is parallel to existing contours.

COMAL COUNTY PROJECT - GEOLOGIC ASSESSMENT





FEATURES

ID	LATITUDE	LONGITUDE	TYPE
S-1	98 13' 30"W	29 44' 31"N	MB
S-2	98 13' 29"W	29 44' 32"N	MB
S-3	98 13' 31"W	29 44' 29"N	MB
S-4	98 13' 36"W	29 44' 27"N	MB
S-5	98 13' 34"W	29 44' 32"N	SF
S-6	98 13' 38"W	29 44' 33"N	CD
S-7	98 13' 26"W	29 44' 39"N	CD

SOIL TYPE

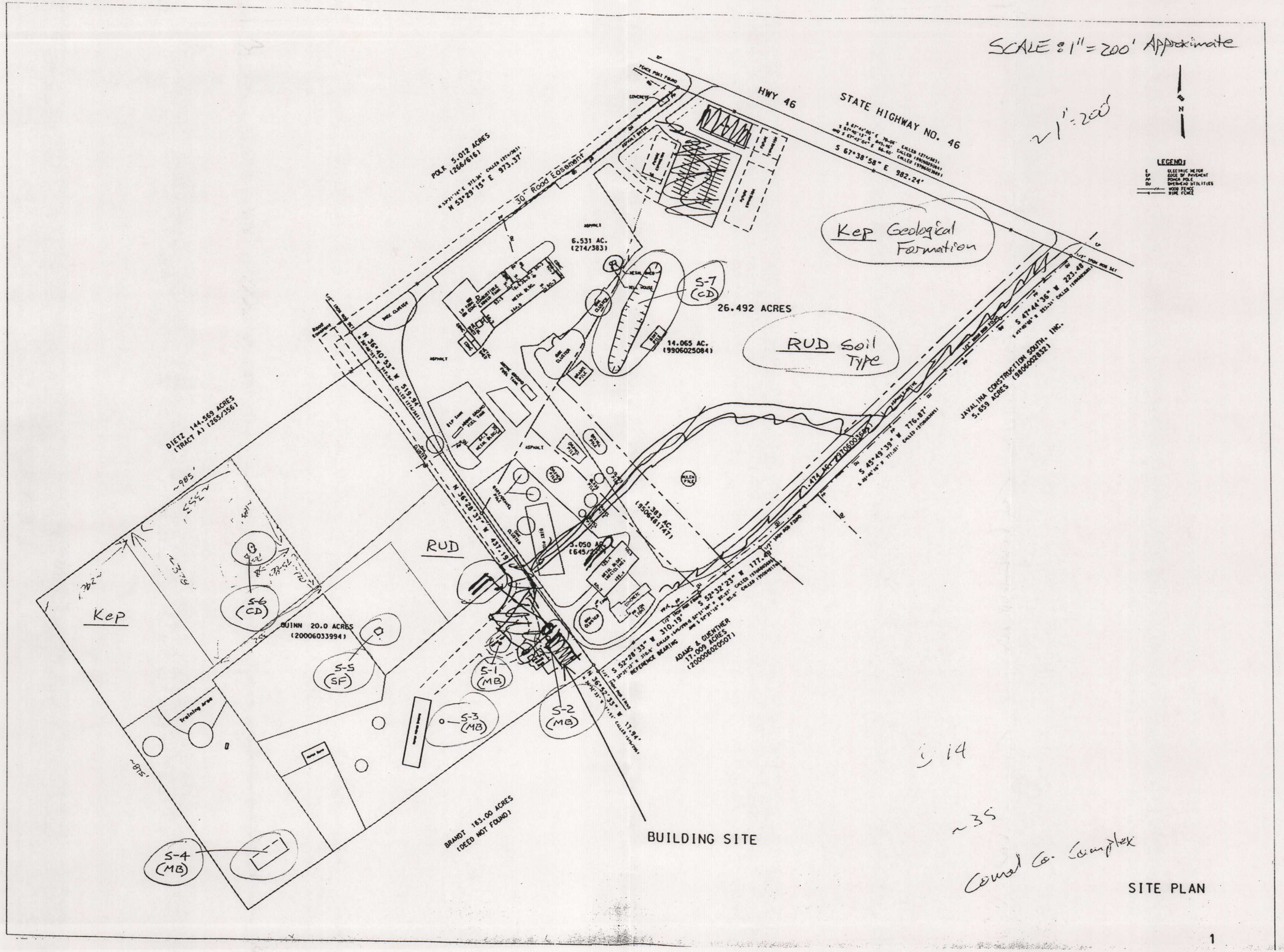
RUD

Geologic Unit

Person Formation (Kep)

I have read, I understood, and I have followed the Texas Natureal 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

David Hengraves


SCALE: 1" = 200' Approximate
~1" = 200'
HWY 46
STATE HIGHWAY NO. 46
S 67°38'58" E 982.24'
LEGEND:
POLK 5.012 ACRES (266/616)
N 53°29'15" E 973.37'
30' Road Easement
6.531 AC. (274/383)
Kep Geological Formation
S-7 (CD)
26.492 ACRES
14.065 AC. (9906025084)
RUD Soil Type
S 47°44'36" W 223.48'
JAVALINA CONSTRUCTION SOUTH, INC. 5.659 ACRES (9806002832)
DIETZ 144.569 ACRES (TRACT A) (265/356)
N 36°40'53" W 519.94'
N 36°28'37" W 437.19'
1.383 AC. (9506481747)
S 45°49'39" W 776.87'
RUD
Kep
S-6 (CD)
QUINN 20.0 ACRES (20006033994)
S-5 (SF)
S-1 (MB)
S-2 (MB)
S-3 (MB)
S-4 (MB)
S 52°28'33" W 310.19'
REFERENCE BEARING
ADAMS & GUENTHER 17.009 ACRES (200006020507)
BRANDT 163.00 ACRES (DEED NOT FOUND)
BUILDING SITE
~985'
~518'
~14
~35
Comal Co. Complex

SITE PLAN

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION

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			MB	30	Kep									5	35	✓		✓		HILLSIDE	
S-2			MB	30	Kep									5	35	✓		✓		HILLSIDE	
S-3			MB	30	Kep									5	35	✓		✓		HILLSIDE	
S-4			MB	30	Kep									9	39	✓			✓	HILLSIDE	
S-5			SF	20	Kep	15	10	1	RANDOM		1	0.33	C	19	39	✓			✓	DRAINAGE	
S-6			CD	5	Kep	11	5.5	1					O	10	15	✓		✓		HILLSIDE	
S-7			CD	5	Kep	200	50	1.25					F	5	10	✓			✓	HILLSIDE	

* DATUM:

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

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

Dawn Hengraves

Date MAY 20, 2003

Sheet 1 of 1

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: Comal County Engineers Office
2. Original Regulated Entity Name: Comal County Engineers Office
3. ✓ **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)

   — 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.

5. ✓ **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:	WPAP ✓ SCS __ UST __ AST __
Size:	46.503 acres
Population:	
Wastewater Volume:	gal/day
Sewer Pipe:	linear ft
Hydrocarbon Storage:	# of tanks
Impervious Cover:	28.06 %

7. Proposed Modification:

Type:	WPAP ✓ SCS __ UST __ AST __
Size:	46.503 acres
Population:	
Wastewater Volume:	gal/day
Sewer Pipe:	linear ft
Hydrocarbon Storage:	# of tanks
Impervious Cover:	38.52 %

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. ✓ 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/3/07
Date

ATTACHMENT A

RECEIVED
OCT 27 2003
COUNTY ENGINEER

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2003

Mr. Thomas H. Hornseth, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas, 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Engineers Office; Located at 195 David Jonas Drive; 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 Protection Program File No. -309.01, Investigation No. 148617

Dear Mr. Hornseth:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project you submitted to the San Antonio Regional Office on behalf of Comal County on June 4, 2003. Final review of the WPAP submittal was completed after additional material was received on August 22, 2003, and September 12, 2003. 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, modification to a plan, or exception. 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% of the construction has commenced on the project or an extension of time has been requested.*

RECEIVED
OCT 2 7 2003
COUNTY ENGINEER

BACKGROUND

The subject site consists of six tracts totaling 46.503 acres summarized in the table below, and illustrated on Exhibit "A" (enclosed).

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1 2	1978 1986 Total	6.531 3.050 9.581	Pavement	4.33[1]	77.03
			Office & shop Buildings		
			Storage Yards	3.05[2]	
3	1995	1.383	Storage Yards	1.383[3]	100.0
4	1997	1.474	Access road to county recycling operation	0.581	39.42
5	1999	14.065	Approximately 1.5 acres of mulching operation	0	0.00
5A			Proposed JP & Road	2.189	15.56
6	2003	20.00	Road, barn, shed, house	0.925	4.63
6A			Extension Offices	0.591	-----
Tracts 1 - 5		26.503	-----	11.533	43.51
Tracts 6 & 6A		20.00	-----	1.516	7.58
Total		46.503	-----	13.049	28.06

1 Includes 0.728 acres of impervious cover approved by TNRCC letter dated 10/6/93, and treated by 1.19 acres of vegetated filters. Also includes 0.608 acres of recently paved impervious cover located north of the office and west of the main entrance driveway.

2 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved, and existed prior to regulation of impervious cover on 3/21/90.

3 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved.

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

Doc# 200306042288
RECEIVED
OCT 27 2003
COUNTY ENGINEER

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 46.503 acres and will have the following parameters:

- The proposed new construction will include buildings for the Comal County Justice of the Peace, with office space for a Constable, Adult Probation and Addressing/GIS staff; the Comal County Extension Service; and an access road.
- The total impervious cover for the 46.503 acre project site is summarized in the table above.
- According to a letter dated, May 28, 2003, signed by Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the 46.503 acre site (see enclosed WPAP Site Plan) after construction, the impervious cover (0.925 acres) in Drainage Area #1 (20 acres) will use existing downgradient vegetation, a sedimentation/filtration basin will be provided for Drainage Areas #2 (16.964 acres) and #3 (9.539 acres). The individual treatment components will consist of:

Drainage Area #2: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.75 inch of stormwater run-off from 16.964 acres with 100% impervious cover, providing a total capture volume of 55,421 cubic feet. The filtration system will consist of:

1. 4,160 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

Drainage Area #3: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first one inch of stormwater run-off from 9.539 with 100% impervious cover, providing a total capture volume of 41,552 cubic feet. The filtration system will consist of:

1. 3,120 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

GEOLOGY

According to the geologic assessment included with the submittal, there are seven geologic or manmade features located on the 46.503 acre project site. All features were assessed as having sensitivities of less than

40. The San Antonio Regional Office site inspection of August 4, 2003, revealed that the site is as described by the geologic assessment and no additional geologic or manmade features were observed.

SPECIAL CONDITIONS

I. Based on the August 4, 2003 on-site inspection of the project site, Commission records indicate that construction of two paved parking areas were actually initiated on or before August 4, 2003, and that other site development and construction activities have already been conducted. It was determined that approximately 2,450 square feet of pavement not included in previous WPAPs was constructed without the prior approval of the water pollution abatement plan for the project, as required by Commission rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the WPAP modification, as provided by this letter, shall not absolve the applicant of any prior violations of Commission rules related to this project, and shall not necessarily preclude the Commission from pursuing appropriate enforcement actions and administrative penalties associated with such violations, as provided in 30 TAC §213.10 of Commission rules.

II. The sedimentation/filtration basins are designed in accordance with the 1999 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices." The basins will incorporate sedimentation and filtration as described above.

III. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

IV. The TCEQ does not agree with Comal County's assertion that because Watershed #1 has less than 20% impervious cover and the extension service functions as an educational facility, that it is exempt from the requirements of a WPAP. Watershed #1 is part of the 46.503 acre site and the total impervious cover of 28.06%.

The existing downgradient vegetation within Watershed #1 will be accepted as treatment of stormwater runoff from the associated impervious cover. Prior to any construction within Watershed #1 not approved by this letter, a modification to the WPAP must be submitted with appropriate application fees.

V. Because stormwater treatment was proposed within Watershed #3, prior to any construction not approved by this letter within Watershed #3, appropriate construction plans must be submitted to the TCEQ to determine that no other sources of pollution are associated with the project.

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. 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 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. One well exists on 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.

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 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 John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/jkm/eg

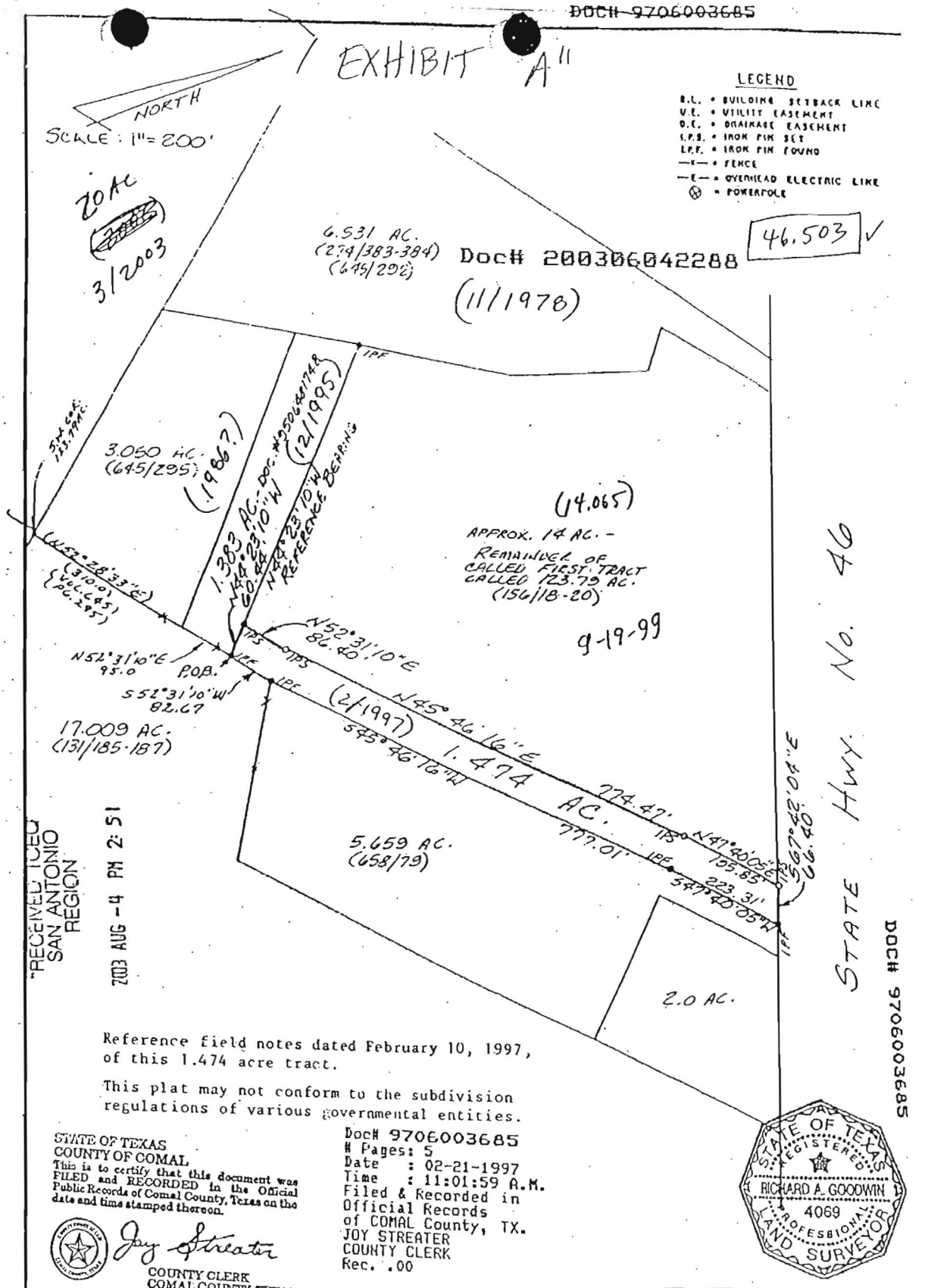
Enclosure:
1. Exhibit "A" (Site acreage map, Document# 9706003685)
2. WPAP Site Plan
3. Deed Recordation Affidavit, Form TCEQ-0625
4. Change in Responsibility for Maintenance or Permanent BMPs-Form TCEQ-10263

cc w/enclosures 1& 2:

Mr. John Bohuslav, TXDOT San Antonio District
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

DOC# 9706003685

EXHIBIT "A"



RECEIVED IN
SAN ANTONIO
REGION
2003 AUG -4 PM 2:51

Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

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
COMAL COUNTY, TEXAS

Doc# 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAL
REGISTERED
RICHARD A. GOODWIN
4069
PROFESSIONAL
LAND SURVEYOR

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-8555

STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February, 1997 A. D.

R A Goodwin

Attachment B

Narrative of Proposed Modification to Drainage Area 1

The Comal County Road Department is proposing to do the following:

1) Construct a new barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion.
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

The equipment that will be used in the proposed Barn and Arena will include:

- Washing Stations
- Animal Clippers (ex. Sheep Shears)
- Automatic animal watering system.
- Intercom System with Loud Speaker (Arena Only)
- Rain Harvesting System (Barn Only)

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

- Hydraulic Dump Trucks
- Front End Loaders
- Bobcats

The materials that will be stored in the proposed stock pile will include

- Base Material
- Gravel
- Asphalt
- Paving Materials

Item 4 will give the extension office more space to hold education classes to Comal County residents.

- Septic System and Drain Field

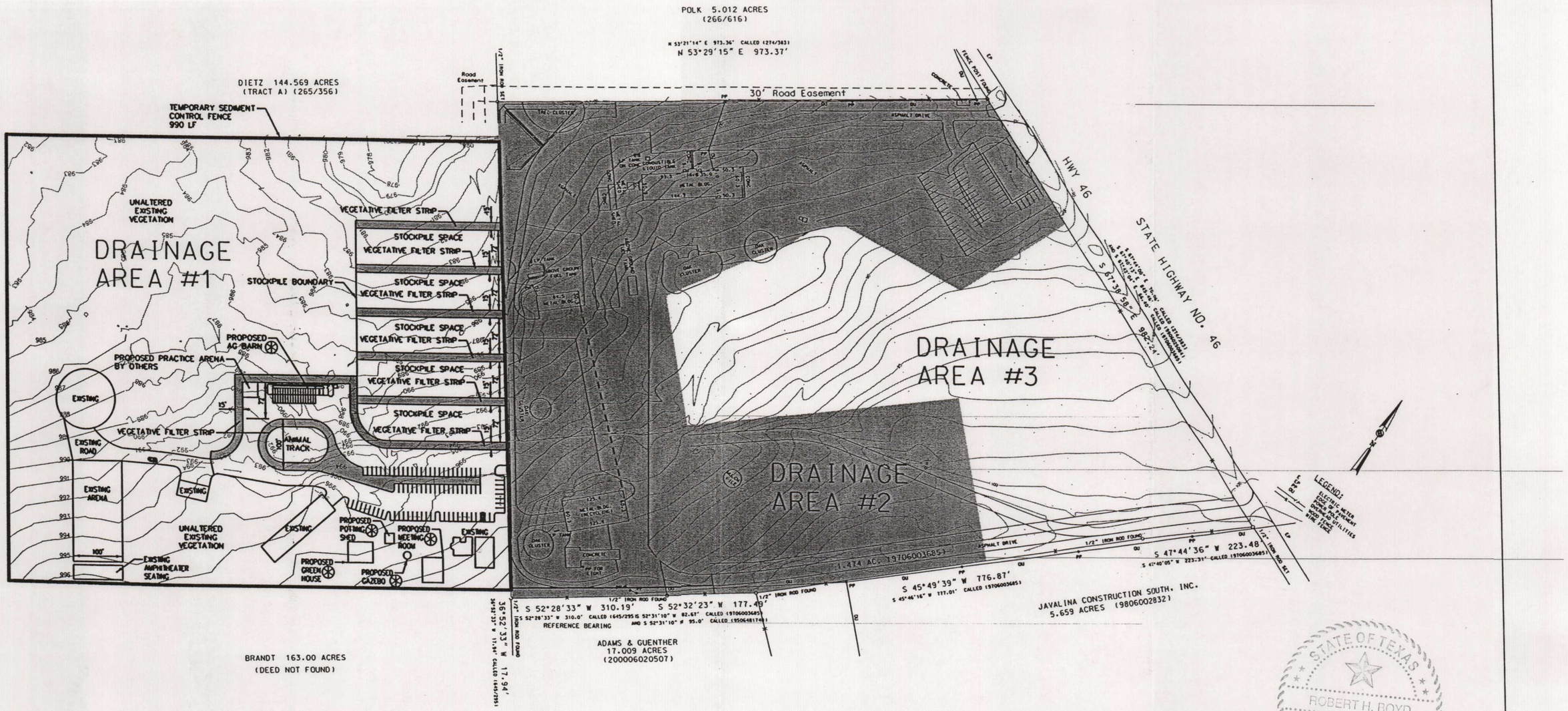
The modification to the approved WPAP will include engineered filter strips as well as existing vegetation to treat storm water runoff from items 1-9.

The subject site consists of six (6) tract totaling 46.503 acres summarized on the attached table.

Proposed Modifications to Previously Approved Water Pollution Abatement Plan

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03%
2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00%
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42%
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	19.59%
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
6	2003	20.00	Pavement/Parking Lot	2.262	29.06%
			Road Department Stockpile	2.401	
			Proposed Extension Proposed Barn **	0.000	
			Proposed Extension Oval Animal Run	0.174	
			Proposed Extension Green House **	0.000	
			Proposed Extension Gazebo **	0.000	
			Proposed Extension Meeting Room **	0.000	
			Proposed Extension Potting Shed **	0.000	
			Existing Meeting Room	0.051	
			Extension Existing House/Barn/Storage/Road	0.925	
TOTAL		46.503	—	17.91	38.52%

** Buildings Utilizing Rainwater Harvesting System



LEGEND

VEGETATIVE FILTER STRIP

⊛ BUILDINGS UTILIZING RAINWATER HARVESTING SYSTEMS

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

STATE OF TEXAS
ROBERT H. BOYD
91702
LICENSED
PROFESSIONAL ENGINEER

10/23/07

Comal County Road Department 195 David Jonas Drive New Braunfels, TX 78132 Phone: (830) 608-2090 Fax: (830) 608-2009	COMAL COUNTY ENGINEER'S OFFICE WPAP SITE PLAN	Date: 09/07/2007 Drawn by: STS Checked by: RHB	REVISIONS No. / Date:	SCALE: 1"=200' Sheet 1 of 1

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: Comal County Engineer's Office

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.

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

2. ✓ **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. ✓ **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. ✓ **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. ✓ 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: Guadalupe River via Bleiders 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.** 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, 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.

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

9. ✓ **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. ✓ **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.

✓ 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. ✓ **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. ✓ 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. ✓ 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. ✓ 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 at the end of this form.

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.

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:

Robert H. Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/1/07
Date

Attachment A – Spill Response Actions

A description of the measures to be taken to contain any spill of hazardous substances is provided in the Spill Prevention Control and Countermeasure Plan, which is attached as part of this Attachment. This plan follows the steps outlined in section 1.4.16, Spill Prevention and Control, of RG-348 in the following ways:

1) Education (See Section 6G):

   All new employees that use oil based products as part of their job are required to have a spill prevention training to instruct them in the operation of fuel equipment and handling of oil products to prevent accidental spills.

   Spill prevention is discussed at yearly briefings.

   The County Engineer is the designated person accountable for spill prevention at the Comal County Road Department.

2) General Measures:

   The hazardous materials and wastes are in containers that are protected from vandalism by a security gate that encompasses the entire 46.503 acres. During non-business hours, two electronic gates are closed to protect the entire site.

   Cleanup materials are stockpiled in the main mechanic building that is readily accessible.

   All tanks that hold hazardous or waste material are located in areas that have secondary containment to protect from stormwater runon during rainfall.

   Spills will be contained and then cleaned up with absorbent material.

   Used clean up materials, contaminated materials and recovered spill material are disposed of in conformance with applicable BMPs.

   Water used for cleaning and decontamination do not enter storm drains or watercourses due to the fact that no storm drains exist on site. In addition, all tanks have secondary containment to prevent any spillage from entering drainage facilities.

   MSDS sheets, in addition to proper storage, cleanup, and spill reporting instruction for hazardous materials are stored on project site.

   Waste storage areas are clean, well organized, and equipped with ample cleanup supplies. Perimeter controls, containment structures and covers are inspected and maintained as necessary.

3) Cleanup:

Leaks and spills are cleaned up immediately.

Rags are use for small spills on paved surfaces, a damp mop for general cleanup, and absorbent materials for large spills.

4) Minor Spills:

Minor spills are cleaned up using the following method:

The spread of the spill is contained using perimeter controls that are periodically inspected.

Clean the contaminated area and the contaminated materials (i.e absorbent materials used for cleanup) are disposed of properly.

5) Semi-Significant Spills:

Semi-significant spill are cleaned up using the following method:

The spread of the spill is contained using perimeter controls that are periodically inspected.

Road Superintendent is notified immediately.

Spill cleaned up using absorbent materials.

Contaminated materials are disposed of properly.

If the spill occurs during rain, to be conservative, cover the spill with tarps or other material to prevent contaminating runoff.

6) Significant/Hazardous Spills

Significant/hazardous spills are cleaned up using the following method:

Notify the TCEQ by telephone as soon as possible and within 24 hours at 210-490-3096 between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224.

Follow up telephone reporting with a written report.

7) Vehicle and Equipment Maintenance

Maintenance of all vehicles occurs onsite in a designated area located away from drainage courses.

Each vehicle has an annual Preventative Maintenance Inspection to ensure that it is running properly. Each vehicle is checked daily for leaks.

Secondary containment, such as a drain pan or drop cloth, is used when removing or changing fluids.

Waste fluids are promptly transferred to waste fluid containers.

Oil filters and waste oil is disposed of properly.

Cracked batteries are disposed of properly.

8) Vehicle and Equipment Fueling

Fueling occurs on site in a designated area away from drainage courses.

"Topping off" fuel tanks is discouraged.

Absorbent materials are used to clean up minor spills around the fueling station.

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

FOR

Comal County Road Department
195 David Jonas Drive
New Braunfels, Texas 78132

Original Date of Plan: June 14, 2000
Date of Last Plan Amendment/P.E. Certification: June 14, 2000
Date of Last Plan Review: N/A (new facility)

Designated person accountable for spill prevention:
Thomas Hornseth
Comal County Engineer

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

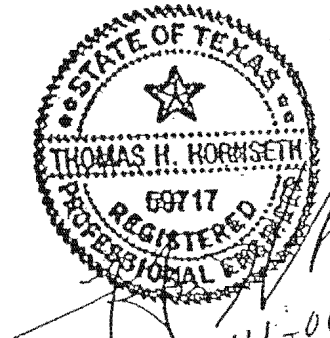
Engineer: THOMAS H. HORNSETH

Signature:

Registration Number: 59717 TX

State: TEXAS

Date: 6-14-00



6-14-00

SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR Part 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every three years. As a result of this review and evaluation, Comal County Road Department will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of the review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. 7-7-03	
2. _____	_____

MANAGEMENT APPROVAL

Comal County Road Department is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating and implementation of this Spill Prevention Control and Countermeasures Plan.

Authorized Facility Representative: THOMAS H. HORNSEY Signature:

Title: COMAL COUNTY ENGINEER

TABLE OF CONTENTS

1. FACILITY OWNER (Parent Corporation) and OPERATOR
   - A. Address and Telephone 1
   - B. Facility Operator, Address and Telephone 1

2. FACILITY CONTACTS 1

3. FACILITY DESCRIPTION
   - A. Facility Operations 1
   - B. Facility Storage 2
   - C. Distance to Navigable Waters and Adjoining Shorelines and Flow Path 2

4. SPILL HISTORY 2

5. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL 3

6. PREVENTION MEASURES PROVIDED
   - A. Drainage Control 4
   - B. Bulk Storage Tanks/Secondary Containment 4
   - C. Facility Transfer Operations 5
   - D. Facility Tank Car and Truck Loading/Unloading Operations 6
   - E. Inspections/Record Keeping 7
   - F. Site Security 7
   - G. Personnel Training and Spill Prevention Procedures 7
   - H. Spill Control Equipment 8
   - I. Emergency Contacts 8

FIGURES

FIGURE 1 Facility Layout and Surface Drainage Diagram

APPENDICES

APPENDIX 1 Secondary Containment Calculations for Diked Storage Areas

APPENDIX 2 Certification of the Applicability of the Substantial Harm Criteria Checklist

APPENDIX 3 Facility Inspection Report

1. **FACILITY OWNER (Parent Corporation) and OPERATOR:**

A. Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

B. Facility Operator Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

2. **FACILITY CONTACTS:**

Name	Title	Telephone
Thomas Hornseth	County Engineer	(830) 608-2090
Dana Schmitt	Assistant Engineer	(830) 608-2090

3. **FACILITY DESCRIPTION:**

A. Facility Operations:

Comal County Road Department is a local county government facility in Comal County, Texas. Personnel at the facility include office staff, maintenance shop mechanics, road construction and maintenance crews. Hours of operation are 8:00 a.m. to 4:30 p.m., 5 days a week.

There is a 15,000-gallon, double-walled, aboveground storage tank at the facility that is partitioned into two compartments. It has a capacity of 5,000 gallons diesel fuel and 10,000 gallons unleaded gasoline. The tank was installed 4/17/00.

The fuel tank is used for county vehicles only. Access to the system is controlled by a key-based fuel management system. The facility receives products from a local fuel distributor by tanker truck.

Other smaller tanks at the facility are used to store new and used oil products and emulsified asphalt for roadwork. Drums of oil products are stored in a shed near the shop.

B. Facility Storage:

Aboveground Storage Tanks

Tank ID	Volume	Contents
1	15,000 gallons	Partitioned into 2 compartments
	[5,000 gallons	Diesel Fuel]
	[10,000 gallons	Unleaded Gasoline]
2	300 gallons	waste oil
3	500 gallons	new oil
4	10,000 gallons	emulsified asphalt

Drums/Containers	Volume	Contents
3 Drums	55 gallons each	oil
1 Drum	55 gallons	kerosene
1 Drum	55 gallons	automatic transmission fluid

Total: 26,075 gallons

C. Distance to Navigable Waters and Adjoining Shorelines and Flow Path:

The Comal County Road Department site is located approximately 1000 feet east of an unnamed dry creek in Comal County. There are no storm drains at the site.

4. **SPILL HISTORY:**

No spill events have occurred at this facility.

5. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

Source	Type of Failure	Volume	Rate (gallon/hr)	Direction of Flow	Containment
Aboveground Storage Tanks					
#1 Diesel/ Gasoline	Leakage	15,000 gal	Rate will vary	Built-in secondary tank containment	15,000 gal
#2 Waste Oil	Leakage	300 gal	Rate will vary	Within containment area	300 gal
#3 New Oil	Leakage	500 gal	Rate will vary	Inside shop	Absorbent material
#4 Emulsion	Leakage	10,000 gal	Rate will vary	On concrete slab	Absorbent material
Fuel Delivery Operations					
Fuel truck unloading	Spill	Less than 15 gal	Rate will vary	Within remote spill container	15 gallon
Other Storage					
New and used motor oil	Leakage; drum rupture	55 gal	55 gal/ hour	Within containment area	359 gallon
Aboveground piping	Leakage; valve failure	5 gal	5 gal/hour	Within curb area	656 gallon

6. PREVENTION MEASURES PROVIDED:

A. Drainage Control

(i) Drainage from diked storage areas:

Tank 2 has a concrete containment structure. Water or spilled oil can be removed by pump and taken to the wash rack area to be filtered and recycled.

Tank 4 has an earthen berm surrounding the tank to contain any spilled material.

Drums are stored in a shed surrounded by a containment curb; no water accumulates there.

(ii) Valves used on diked storage areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iii) Plan drainage systems from undiked areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iv) Final discharge of drainage:

There are no storm drains at the facility and the secondary containment for the tanks prevents any discharge of oil from the facility.

(v) Facility drainage systems and equipment:

There is a wash rack area to filter and recycle any oily water with zero discharge.

B. Bulk Storage Tanks/Secondary Containment

(i) Tank compatibility with its contents:

All tank materials are suitably impervious to the fuels being stored. Tank 1 is also ballistics resistant and designed to exceed a U.L. 2-hour fire test.

(ii) Diked area construction and containment volume for storage tanks:

See Appendix 1 for containment calculations. Tank 1 is located on a concrete slab with a 2" curb. Tank 2 is inside a concrete containment structure. Tank 4 is surrounded by an earthen berm. The drums of oil products are stored in a covered shed that has a curb around the perimeter.

(iii) Diked area, inspection and drainage of rainwater:

Any water that is collected in the diked areas is inspected for spilled oil before draining. Any oily water can be removed by pump and taken to the wash rack area to be filtered and recycled.

(iv) Corrosion protection of buried metallic storage tanks:

There are no buried tanks at this facility.

(v) Corrosion protection of partially buried metallic tanks

There are no partially buried tanks at this facility.

(vi) Aboveground tank periodic integrity testing:

The aboveground storage tanks are inspected annually using the inspection report in Appendix 2. The tanks are visually inspected at each fuel transaction for signs of deterioration, or any leaks.

(vii) Control of leakage through internal heating coils:

The tanks at this facility are not equipped with heating coils.

(viii) Tank installation fail-safe engineered:

Tank 1 is equipped with an overfill prevention valve that limits filling of the tank to 90% capacity. This tank is equipped with electronic tank level monitors; a sensor is in place to detect the presence of any liquid in the interstitial space of the double walled, two-compartment tank.

(ix) Observation of disposal facilities for effluent discharge:

This facility has no disposal processes that discharge effluents into navigable water.

(x) Visible oil leak corrections from tank seams and gaskets:

Any visible oil leaks are reported to the plant operator and promptly corrected.

(xi) Appropriate position of mobile or portable oil storage tanks:

Portable drums are located inside a covered storage shed. There is a curb in place to control any spills.

C. Facility Transfer Operations

(i) Buried piping installation protection and examination:

There is no buried piping at this facility.

(ii) Not-in-service and standby service terminal connections:

When a pipeline is not in service it is capped.

(iii) Pipe supports design:

Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

(iv) Aboveground valve and pipeline examination:

The Comal County Road Department fuel system has single-wall steel product piping, equipped with mechanical in-line leak detectors. All piping is aboveground and is examined during inspections. Operating personnel continuously inspect valves and piping.

(v) Aboveground piping protection from vehicular traffic:

All aboveground piping, hoses, and dispensers are located inside steel ballards and within a curbed concrete slab. They are not at risk of impact from vehicular traffic.

D. Facility Tank Car and Truck Loading/Unloading Operations

(i) Loading/unloading procedures meet DOT regulations:

Comal County Road Department requires all drivers making fuel deliveries to comply with DOT regulations and facility standard operating procedures.

(ii) Secondary containment for vehicles adequate:

The fuel tank area is designed with curbing and remote fill spill containers to provide spill containment protection.

(iii) Warning or barrier system for vehicles:

A Comal County employee is present to observe each fueling operation to assure that fuel tanker personnel completely disconnects transfer lines before departure.

(iv) Vehicles examined for lowermost drainage outlets before leaving:

A Comal County employee is present to observe each fueling operation to assure that there is no leakage while the tanker truck is in transit.

E. Inspection/Record Keeping

Facility inspection procedures:

Inspections will be conducted annually starting June 2000 and records of these inspections will be documented and signed by the inspector or plant manager. During the inspections, all tanks, containment structures, valves, piping and other equipment is inspected. The checklist used for these inspections can be found in Appendix 2.

Length of time records kept:

Inspection, training and tank integrity testing are retained for three or more years.

F. Site Security

(i) Fencing

A locked gate secures the facility when it is not open for regular operation.

(ii) Flow valves locked

All tank valves are secured.

(iii) Starter controls locked

Access to the fuel products limited to authorized personnel and is controlled by a key system.

(iv) Pipeline loading/unloading connections securely capped:

Pipeline connections are securely capped when they are not in use.

(v) Lighting adequate to detect spills:

The aboveground fuel tank area is lighted adequately to detect spills and to discourage acts of vandalism.

G. Personnel Training and Spill Prevention Procedures

(i) Personnel instructions:

All new employees that use oil based products as part of their job are required to have a spill prevention training to instruct them in the operation of fuel equipment and handling of oil products to prevent accidental spills.

(ii) Designated person accountable for spill prevention:

The County Engineer is the designated person accountable for spill prevention at the Comal County Road Department.

(iii) Spill prevention briefings:

Spill prevention is discussed at yearly briefings.

H. Spill Control Equipment

Spill Control equipment on site includes granular absorbent material, brooms and shovels. Spill equipment is stored in the shop.

I. Emergency Contacts

National Response Center	1-800-424-8802
Tom Hornseth, County Engineer	(830) 608-2090
Service Station Constructors and Fuel Systems	(210) 493-3277
Tri State Service and Testing	(210) 493-4329

FIGURE 1

Facility Layout and
Surface Drainage Diagram

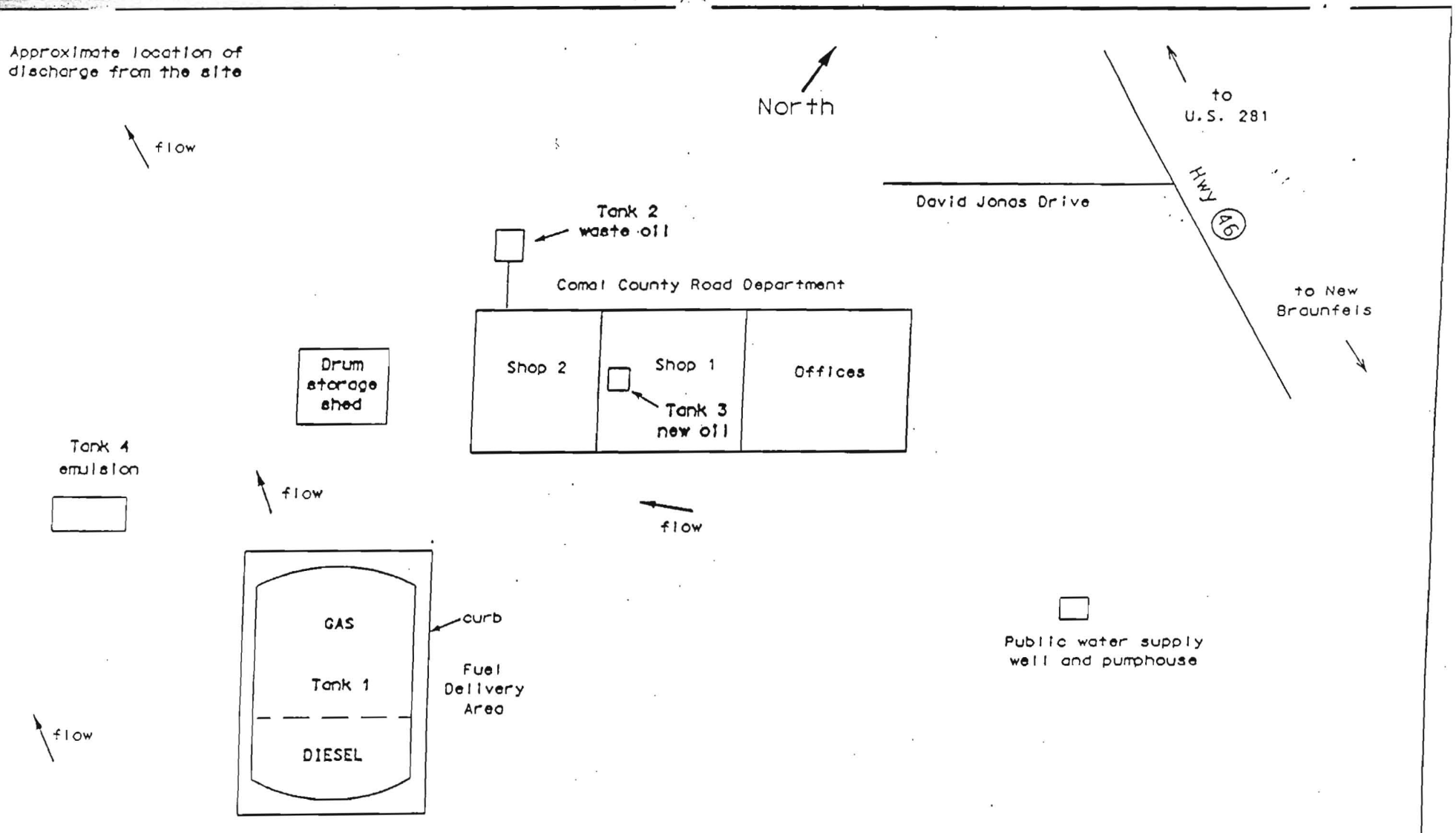


Figure 1 – Facility Layout and Drainage Diagram
Comal County Road Department
(Not to Scale)

APPENDIX 1

Secondary Containment Calculations for Diked Storage Areas

Containment Calculation for Tank #1

Tank 1 has built-in secondary containment for the contents of the tank. There is a containment curb surrounding the tank for any leakage outside the tank

Curb Area = 35 feet X 15 feet = 525 square feet

Total Containment Volume = Curb Area X Curb Height
= 525 square feet X 0.167 feet
= 87.7 cubic feet = 656 gallons

Containment Calculation for Tank #2

Required Containment Volume = 110 % of tank volume
= 300 gallons X 1.1 = 330 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 330 gallons X 0.1337 cu. ft./gallon = 44.1 cu. ft.

Available Diked Area = 5.5 feet X 7 feet = 38.5 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (44.1 cu. ft.) ÷ (38.5 sq. ft)
= 1.15 feet or 13.7 inches

Actual height of concrete wall around Tank 2 is 4 feet

Containment Calculation for Tank #4

Required Containment Volume = 110 % of tank volume
= 10,000 gallons X 1.1 = 11,000 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 11,000 gal. X 0.1337 cu. ft./gal. = 1470.7 cu. ft.

Available Diked Area = 24 feet X 27 feet = 648 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (1470.7 cu. ft.) ÷ (648 sq. ft)
= 2.3 feet

Necessary height of earthen berm around Tank 4 is 2 1/2 feet

Containment Calculation for Drum Storage Shed

Curb Area = 12 feet X 12 feet = 144 square feet

Total Containment Volume = Curb Area X Curb Height
= 144 square feet X 0.333 feet
= 48 cubic feet = 359 gallons

APPENDIX 2

Certification of the Applicability of the Substantial Harm Criteria Checklist

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Comal County Road Department

FACILITY ADDRESS: 195 David Jonas Drive

New Braunfels, TX 78132

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ No __X__

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ No __X__

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in attachment C-III, Appendix C, 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.
   Yes _____ No __X__

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   Yes _____ No __X__

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes _____ No __X__

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

THOMAS H. HOENSETH
Name (please type or print)

Signature

COMAL CO. ENGINEER
Title

6-14-00
Date

from 40 CFR 112 Appendix C, Attachment C-II

---

[1]If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2]For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

APPENDIX 3

Facility Inspection Report

Facility Inspection Report

Date: _____

Time: _____

Inspector: _____

X=Satisfactory
NA=Not Applicable
0=Repair or Adjustment Required
C=See comment under Remarks/Recommendations

Drainage

____ Any noticeable oil sheen on runoff.

____ Containment area drainage valves are closed and locked.

____ Oil/water separator systems working properly.

____ Effluent from oil/water separator inspected.

____ No visible oil sheen in containment area.

____ No standing water in containment area.

ASTs

____ Tank surfaces checked for signs of leakage.

____ Tank condition good (no rusting, corrosion, pitting).

____ Bolts, rivets, or seams are not damaged.

____ Tank foundation intact.

____ Level gauges and alarms working properly.

____ Vents are not obstructed.

____ Valves, flanges, and gaskets are free from leaks.

____ Containment walls are intact.

Pipelines

____ No signs of corrosion damage to pipelines or supports.

____ Buried pipelines are not exposed.

____ Out-of-service pipes capped.

____ Signs/barriers to protect pipelines from vehicles are in place.

____ No leaks at valves, flanged, or other fittings.

Truck Loading/Unloading Area

____ No standing water in rack area.

____ Warning signs posted.

____ No leaks in hoses.

____ Drip pans not overflowing.

____ Catch basins free of contamination.

____ Containment curbing or trenches intact.

____ Connections are capped or blank-flanged.

Security

____ Fence and gates intact.

____ Gates have locks.

____ ASTs locked when not in use.

____ Starter controls for pumps locked when not in use.

____ Lighting is working properly.

Training

____ Spill prevention briefing held.

____ Training records are in order.

Remarks/Recommendations:

_____

_____

_____

Attachment B – Potential Sources of Contamination

Surface water could be impacted by storm water runoff from areas of disturbed soils within the two construction sites of the project. Potential sources of contamination include:

Removal of top soils and surface vegetation, and;

Placement of road construction materials, and;

Portable Restroom Facilities, and;

Trash and debris associated with all construction projects.

Attachment C – Sequence of Major Activities

The sequence of major events for each of the projects is listed below:

Barn

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- construction of foundation and driveway
- erection of metal building
- finishing of interior of building
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 0.060 acres

County Extension Office

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- erection of metal buildings
- finishing of interior building
- construction of parking lot
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.106 acres

Road Department Stockpile

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- paving of stock pile area
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.401 acres

Attachment D – Temporary Best Management Practices and Measures

Temporary storm water best management practices will include:

- maintenance of vegetation (existing trees, bushes and grasses) in discharge areas for erosion and sediment control
- construction and maintenance of temporary storm water filtration fencing and rock berms

These BMPs are shown on the attached drawing. They will be used for the following phases of construction:

Barn:

The proposed barn will be constructed immediately upon approval of this WPAP. The length of time of construction for the barn is expected to be 6 months. The temporary BMP for this sequence of construction will be the construction and maintenance of rock berms and the maintenance of existing vegetation. The drainage area is less than 5 acres and the slope within the drainage area is less than 30%.

County Extension Office:

The extension office construction will occur in the future (approximately 5-10 years after approval of this WPAP). When the construction occurs, it will last for approximately 12 months. The temporary BMP for this sequence of construction will be the construction and maintenance of silt fence. The drainage area is approximately 0.8 acres and the slope within the drainage area is less than 20%. The drainage area is being treated by 335 lf of silt fence.

Road Department Stockpile:

The road department stockpile will be constructed approximately 12 months after approval of this WPAP. The length of time of construction will be approximately 2 months. The temporary BMP for this sequence of construction will be the construction and maintenance of rock berms and maintenance of existing vegetation. The drainage area is less than 5 acres and the slope within the drainage area is less than 30%.

The proposed temporary BMPs will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMP for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. Following is information required as part of Attachment D:

a. Based on the topographic map of the area, there is approximately 18.769 acres of land up gradient of the site that will produce storm water that will flow across the site. This storm water that will flow across the site will have been treated by existing vegetation located on the 18.769 acres up gradient of the site. Therefore,

the only runoff that will be treated will be storm water that falls on the 20.000 acres in question.

b. The maintenance of vegetation in discharge areas will act as a filter to surface water that originates on-site. The temporary storm water filtration fencing will cause storm water that originates on site to be filtered through the filtration fencing and keep all sediment on-site.
c. The vegetation and filtration fencing will prevent pollutants from entering surface streams, sensitive features, or the aquifer by filtering the on-site storm water before entering surface streams, sensitive features, or the aquifer.
d. The vegetation and filtration fencing will, to the maximum extent practicable, maintain flow to naturally-occurring features. They will do so by filtering the water and allowing it to maintain is naturally-occurring flow, instead of diverting it in an unnatural direction.

POLK 5.012 ACRES
(266/616)

N 53°21'14" E 973.36' CALLED (274/383)
N 53°29'15" E 973.37'

DIETZ 144.569 ACRES
(TRACT A) (265/356)

30' Road Easement

HWY 46

STATE HIGHWAY NO. 46

S 67°39'58" E 982.24'

ROCK FILTER DAM
560 LF

UNALTERED
EXISTING
VEGETATION

VEGETATIVE FILTER STRIP

STOCKPILE SPACE

DRAINAGE
AREA #1

STOCKPILE BOUNDARY

ROCK FILTER DAM
260 LF

PROPOSED
AG BARN

PROPOSED PRACTICE ARENA
BY OTHERS

EXISTING

EXISTING
ROAD

EXISTING
ARENA

ANIMAL
TRACK

EXISTING WELL
FENCES

PROPOSED
POTTING
SHED

PROPOSED
MEETING
ROOM

PROPOSED
GAZEBO

PROPOSED
GREEN
HOUSE

EXISTING
AMPHITHEATER
SEATING

SEDIMENT CONTROL FENCE
335 LF

EXISTING WELL AND ELEVATED
STORAGE TANK

DRAINAGE
AREA #3

DRAINAGE
AREA #2

1.474 AC. (9706003685)

S 52°28'33" W 310.19'
S 52°20'33" W 310.0' CALLED (645/295)
REFERENCE BEARING

S 52°32'23" W 177.49'
S 52°31'10" W 82.67' CALLED (9706003685)
AND S 52°31'10" W 95.0' CALLED (9506481740)

S 45°49'39" W 776.87'
S 45°46'16" W 777.01' CALLED (9706003685)

S 47°44'36" W 223.48
S 47°40'05" W 223.31' CALLED (9706003685)

1/2" IRON ROD FOUND

ADAMS & GUENTHER
17.009 ACRES
(200006020507)

JAVALINA CONSTRUCTION SOUTH, INC.
5.659 ACRES (9806002832)

BRANDT 163.00 ACRES
(DEED NOT FOUND)

LEGEND:
ELECTRIC METER
ELECTRIC BOX
POWER POLE W/ TRANSFORMER
WOOD POLE W/ UTILITIES
WIRE FENCE

LEGEND

VEGETATIVE FILTER STRIP

BUILDINGS UTILIZING RAINWATER HARVESTING SYSTEMS

TEMPORARY ROCK FILTER DAMS

TEMPORARY SEDIMENT CONTROL FENCE

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

NO FLOOD PLAIN IS FOUND ON SITE.

SLOPES DO NOT EXCEED 7%

STATE OF TEXAS
ROBERT H. BOYD
91702
LICENSED
PROFESSIONAL ENGINEER

10/23/07

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
WPAP SITE PLAN

Date: 09/07/2007
Drawn by: STS
Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

Attachment F – Structural Practices

Structural practices shall be the placement of filtration fencing and rock filter dams on the downstream end of disturbed areas. (See 11"x17" Plan Sheets in Attachment D).

Rock filter dams will be placed as shown on plans at the start of construction on the Proposed Ag Barn and Road Department Stockpile.

Sediment Control Fence will be placed as shown on plans at the start of construction on the Proposed Extension Service Buildings.

The silt fence and rock berms will be constructed according to Section 1.4.3 and 1.4.5 from RG-348, respectively. These sections are included as part of Attachment F for the contractor's use during construction.

1.4.3 Silt Fence

A silt fence is a barrier consisting of geotextile fabric supported by metal posts to prevent soil and sediment loss from a site. When properly used, silt fences can be highly effective at controlling sediment from disturbed areas. They cause runoff to pond, allowing heavier solids to settle out. If not properly installed, silt fences are not likely to be effective. A schematic illustration of a silt fence is shown in Figure 1-26.

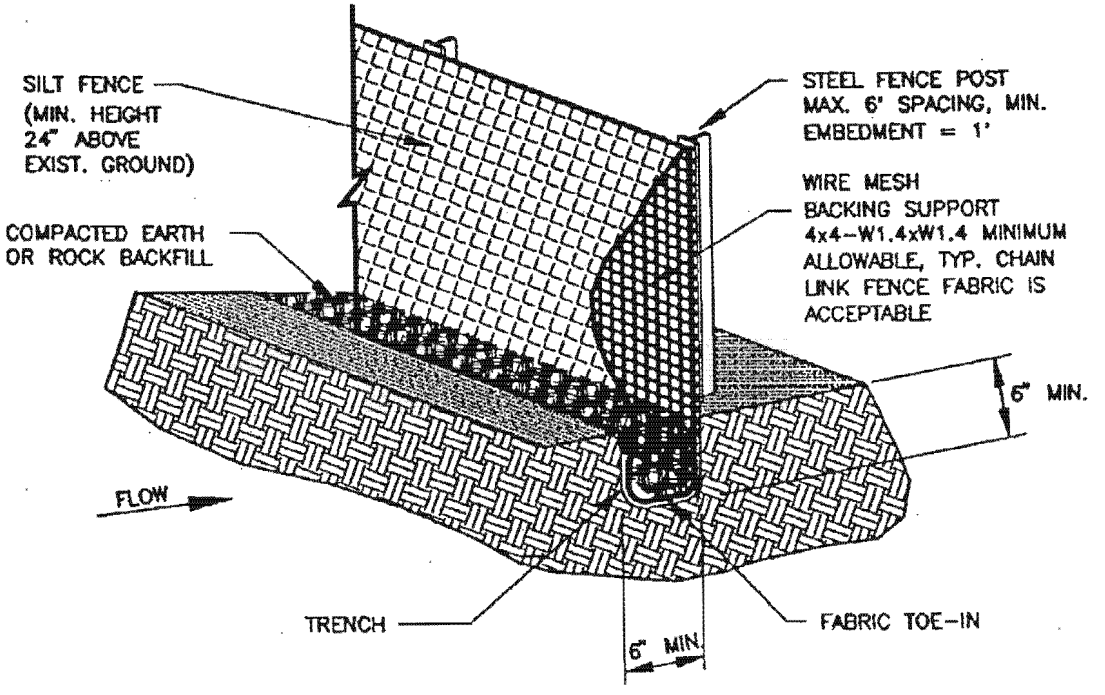


Figure 1-26 Schematic of a Silt Fence Installation (NCTCOG, 1993b)

The purpose of a silt fence is to intercept and detain water-borne sediment from unprotected areas of a limited extent. Silt fence is used during the period of construction near the perimeter of a disturbed area to intercept sediment while allowing water to percolate through. This fence should remain in place until the disturbed area is permanently stabilized. Silt fence should not be used where there is a concentration of water in a channel or drainage way. If concentrated flow occurs after installation, corrective action must be taken such as placing a rock berm in the areas of concentrated flow.

Silt fencing within the site may be temporarily moved during the day to allow construction activity provided it is replaced and properly anchored to the ground at the end of the day. Silt fences on the perimeter of the site or around drainage ways should not be moved at any time.

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/in^2, 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 Y-bar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft^2, 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.

Common Trouble Points:

(1) Fence not installed along the contour causing water to concentrate and flow over the fence.

(2) Fabric not seated securely to ground (runoff passing under fence)

(3) Fence not installed perpendicular to flow line (runoff escaping around sides)

(4) Fence treating too large an area, or excessive channel flow (runoff overtops or collapses fence)

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.

1.4.5 Rock Berms

The purpose of a rock berm is to serve as a check dam in areas of concentrated flow, to intercept sediment-laden runoff, detain the sediment and release the water in sheet flow. The rock berm should be used when the contributing drainage area is less than 5 acres. Rock berms are used in areas where the volume of runoff is too great for a silt fence to contain. They are less effective for sediment removal than silt fences, particularly for fine particles, but are able to withstand higher flows than a silt fence. As such, rock berms are often used in areas of channel flows (ditches, gullies, etc.). Rock berms are most effective at reducing bed load in channels and should not be substituted for other erosion and sediment control measures farther up the watershed.

Materials:

(1) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.

(2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:

(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openings.

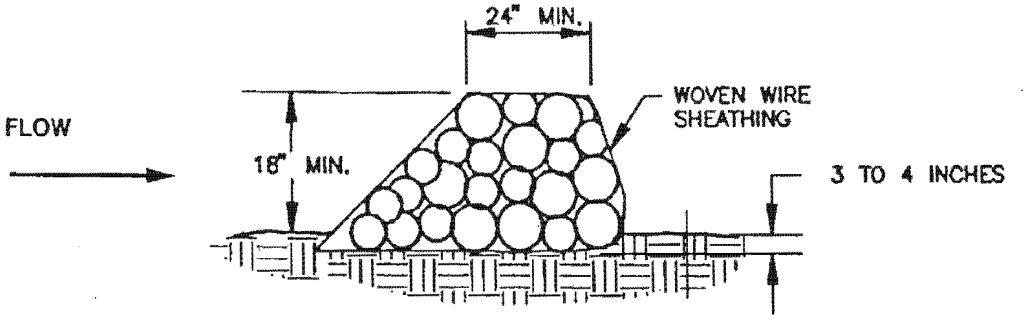
(2) Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.

(3) Place the rock along the sheathing as shown in the diagram (Figure 1-28), to a height not less than 18".

(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.

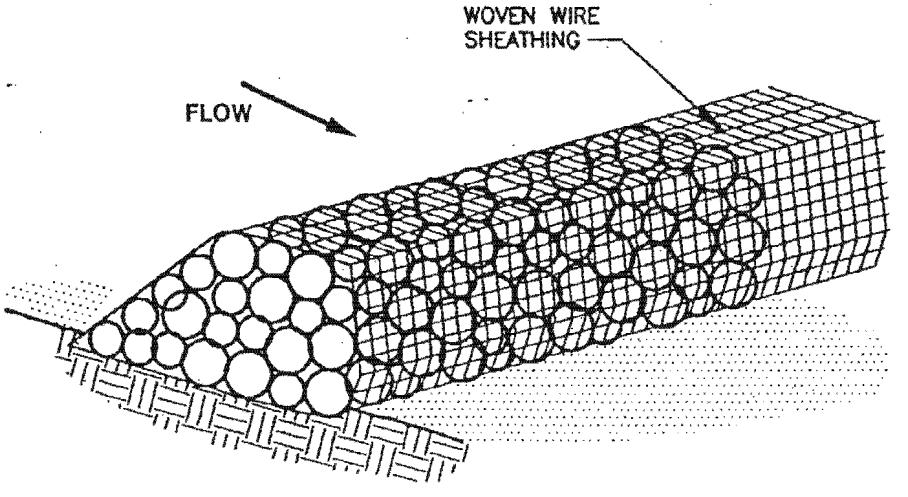
(5) Berm should be built along the contour at zero percent grade or as near as possible.

(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.



CROSS SECTION

N.T.S.



ISOMETRIC PLAN VIEW

N.T.S.

Figure 1-28 Schematic Diagram of a Rock Berm (NCTCOG, 1993)

Common Trouble Points:

(1) Insufficient berm height or length (runoff quickly escapes over the top or around the sides of berm)

(2) Berm not installed perpendicular to flow line (runoff escaping around one side)

Inspection and Maintenance Guidelines:

(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made.

(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.

(3) Repair any loose wire sheathing.

(4) The berm should be reshaped as needed during inspection.

(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.

(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

1.4.6 High Service Rock Berms

A high service rock berm should be designated in areas of important environmental significance such as in steep canyons or above permanent springs, pools, recharge features, or other environmentally sensitive areas that may require a higher level of protection. This type of sediment barrier combines the characteristics of a silt fence and a rock berm to provide a substantial level of sediment reduction and a sturdy enough barrier to withstand higher flows. The drainage area to this device should not exceed 5 acres and the slope should be less than 30%.

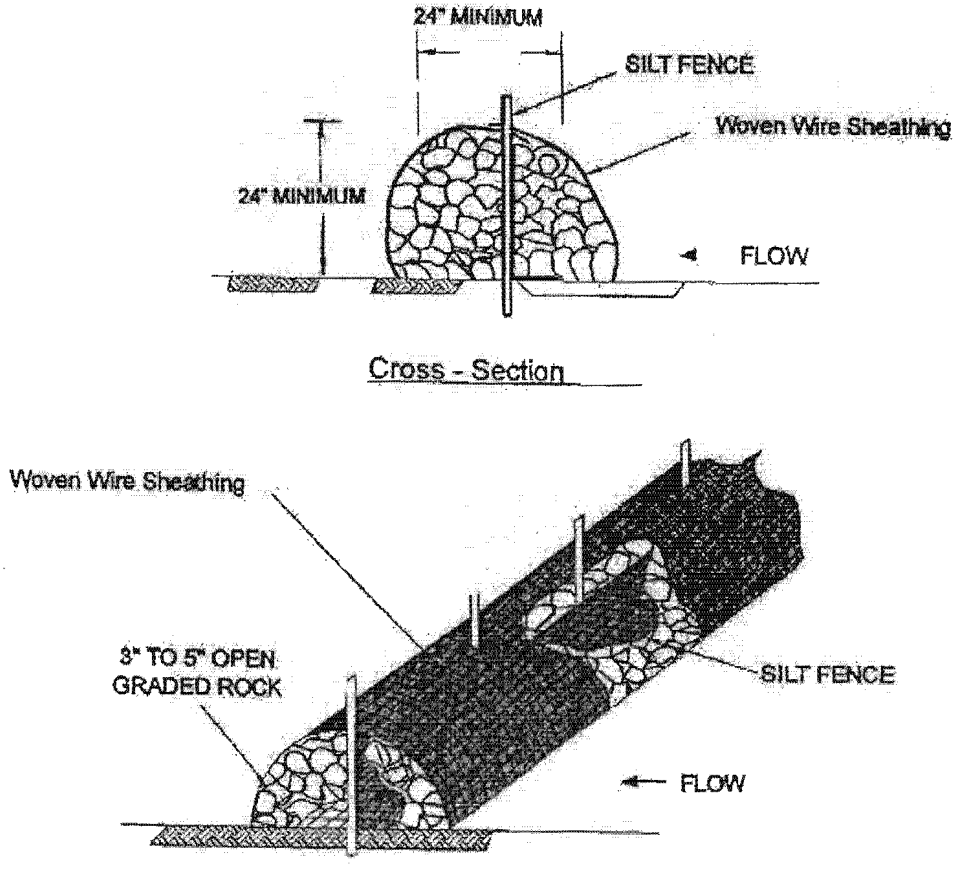


Figure 1-29 Schematic Diagram of High Service Rock Berm (LCRA, 1998)

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/in^2, 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 Y-bar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft^2, and Brindell hardness exceeding 140. Rebar (either #5 or #6) may also be used to anchor the berm.

(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

(4) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.

(5) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:

(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1-inch openings.

(2) Install the silt fence along the center of the proposed berm placement, as with a normal silt fence described in Section 2.4.3.

(3) Place the rock along the sheathing on both sides of the silt fence as shown in the diagram (Figure 1-29), to a height not less than 24 inches. Clean, open graded 3-5" diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rock may be used.

(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.

(5) The high service rock berm should be removed when the site is revegetated or otherwise stabilized or it may remain in place as a permanent BMP if drainage is adequate.

Common Trouble Points:

(1) Insufficient berm height or length (runoff quickly escapes over top or around sides of berm).

(2) Berm not installed perpendicular to flow line (runoff escaping around one side).

(3) Internal silt fence not anchored securely to ground (high flows displacing berm).

(4) When installed in streambeds, they often result in diversion scour, so their use in this setting is not recommended.

Inspection and Maintenance Guidelines:

(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made on rock berm.

(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt of in an approved manner.

(3) Repair any loose wire sheathing.

(4) The berm should be reshaped as needed during inspection.

(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.

(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Attachment I – Inspection and Maintenance for BMP's

Silt Fence:

Comal County shall inspect the condition of the silt fence on a weekly basis and after any rainfall events to ensure they are functioning properly.

Comal County shall remove sediment when buildup reaches 6 inches.

Comal County shall make any necessary repairs immediately.

Comal County will document any changes, due to on-site conditions, on the WPAP site plan. Documentation shall show changes made, date, person responsible, and reason changes were made.

Person responsible for erosion and sedimentation control and maintenance is Robert Boyd, P.E., the Comal County Assistant Engineer.

Rock Berms:

Comal County shall inspect the condition of the rock berms on a weekly basis and after any rainfall events to ensure they are functioning properly.

Comal County shall remove sediment when buildup reaches 6 inches.

Comal County shall make any necessary repairs immediately.

Comal County will document any changes, due to on-site conditions, on the WPAP site plan. Documentation shall show changes made, date, person responsible, and reason changes were made.

Person responsible for erosion and sedimentation control and maintenance is Robert Boyd, P.E., the Comal County Assistant Engineer.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

SOIL STABILIZATION PRACTICES:

___ Hydromulching
___ Temporary Seeding
___ Permanent Planting, Sodding, or Seeding
___ Mulching
___ Soil Retention Blanket
___ Buffer Zones
_X_ Preservation of Natural Resources

Other: Disturbed areas on which construction activity has ceased permanently shall be stabilized within 14 days unless activities are scheduled to resume and done within 21 days.

STRUCTURAL PRACTICES:

_X_ Silt Fences
___ Hay Bales
___ Gravel Filtration Bags
_X_ Rock Berms
___ Diversion, Interceptor, or Perimeter Dikes
___ Diversion, Interceptor, or Perimeter Swales
___ Diversion Dike and Swale Combinations
___ Pipe Slope Drains
___ Paved Flumes
___ Rock Bedding at Construction Exit (Stabilized Entrance)
___ Timber Matting at Construction Exit (Stabilized Entrance)
___ Channel Liners
___ Sediment Traps
___ Sediment Basins
___ Storm Inlet Sediment Trap
___ Stone Outlet Structures
___ Curbs and Gutters
___ Storm Sewers
___ Velocity Control Structures
___ Geotextiles

Other: _____



D.Topo Quads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

250 ft Scale: 1 : 9,600 Detail: 13-6 Datum: WGS84

ATTACHMENT C - DRAINAGE AREA MAP

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: Comal County Engineer's Office

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

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

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

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

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

   _____

   _____

   _____

   _____

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.

4. n/a 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.

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

5. n/a 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.

__ 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.

✓ 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.**

✓ 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. ✓ **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.

__ 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. ✓ **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. ✓ **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. ✓ 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. ✓ **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. ✓ 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. ✓ 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/1/07
Date

Attachment B

BMPs for Upgradient Stormwater

Based on the topographic map of the area, there is approximately 18.769 acres of land upgradient of the site that will produce stormwater that will flow across the site. This stormwater that will flow across the site will have been treated by existing vegetation located on the 18.769 acres upgradient of the site. Furthermore; the increase in impervious cover to the site has reduced its time of concentration. Due to the reduction in time of concentration, the site's stormwater and Total Suspended Solids (TSS), will have been removed before stormwater produced upgradient can have a negative impact. Therefore, the only runoff that will be treated will be stormwater that falls on the 20.000 acres in question.

Using the Rational Method our site including the 18.769 acres upgradient has a flow of 53 cfs of runoff during a 25-year storm event. With the proposed improvements we can expect to see an increase of 199 cfs of runoff during the 25-year storm event for a total of 252 cfs respectively. In computing the runoff for the pre and post conditions a C-Factor of 0.3 and 0.7 were used. The times of concentrations for pre and post conditions were calculated to be 37.95 minutes and 9.99 minutes respectively. The TxDOT Hydraulic Design Manual and Texas Highway Department Hydraulic Manual were used to calculate runoff.

Description: Pre-Development Conditions

Landuse: C

A=	38.769	Acres
C=	0.3	**
L=	2276.709	ft
$ELEV_1$=	1040	ft
$ELEV_2$=	990	ft
I_{25}=	4.59	
b_{25}=	87	
e_{25}=	0.766	
d_{25}=	8.6	
t_c=	37.95	min
SLOPE=	2.2	%
VELOCITY	1	ft/s

Q_{25}= 53 CFS

** See TxDOT Hydraulic Manual Table V

	Slope in Percent		
Landuse	0-3	4-7	8-11
W	1.1	0.9	1.1
PS	1.8	1.9	2.1
C	2.2	2.1	2.6
PV	6.2	5.5	6.7

Description: Post-Development Conditions

Landuse: C

A=	38.769	Acres
C=	0.7	**
L=	2276.709	ft
$ELEV_1$=	1040	ft
$ELEV_2$=	990	ft
I_{25}=	9.27	
b_{25}=	87	
e_{25}=	0.766	
d_{25}=	8.6	
t_c=	9.99	min
SLOPE=	2.2	%
VELOCITY	3.8	ft/s

Q_{25}= 252 CFS

** See TxDOT Hydraulic Manual Table V

Attachment C

BMPs for On-site Stormwater

Improvements within Drainage Area #1:

The proposed improvements within Drainage Area #1 will be treated by proposed engineered filter strips. Construction Plans were prepared according to the TCEQ Technical Guidance Manual (TGM).

Attachment D – BMPs for Surface Streams

The Permanent BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer are engineered filter strips.

Attachment F

Construction Plans

Improvements within Drainage Area #1:

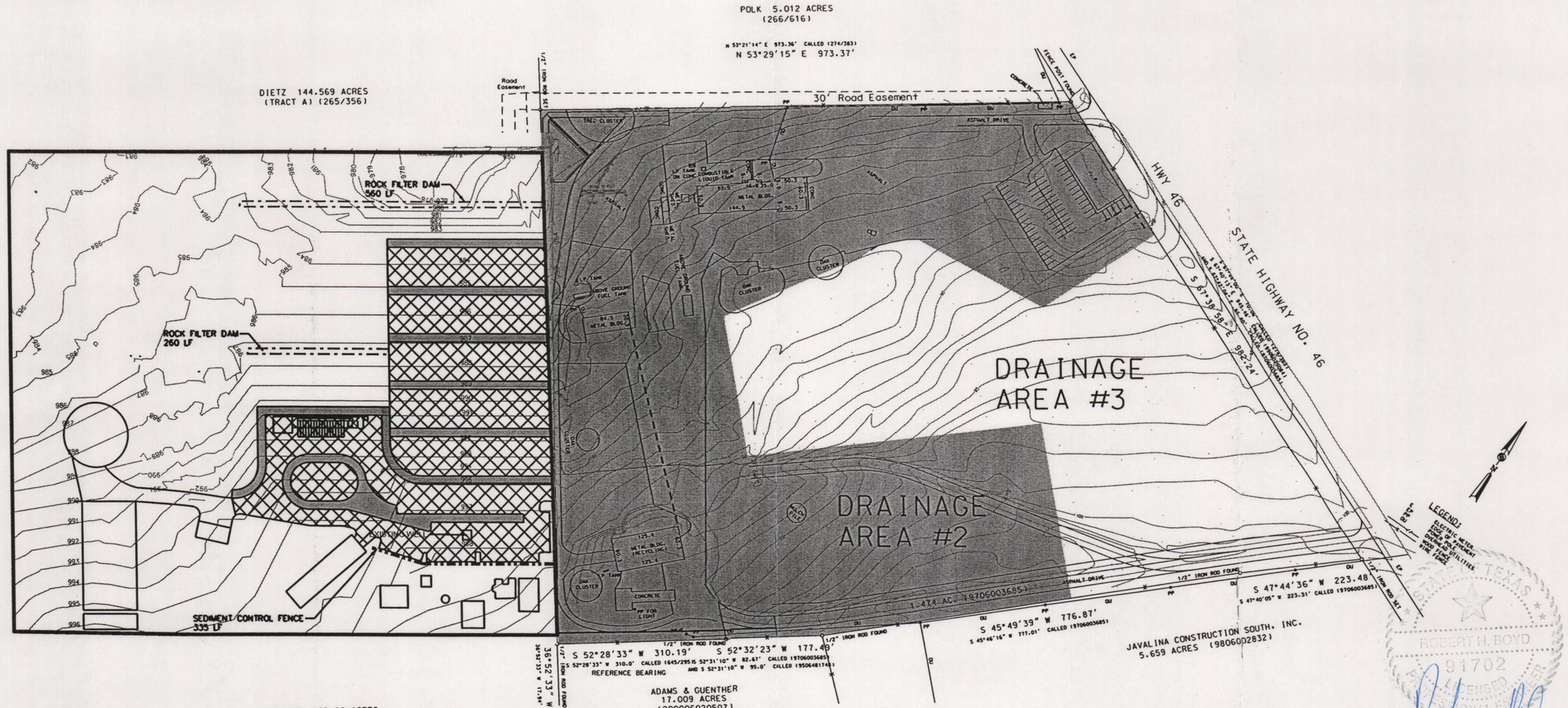
As stated in the Narrative of Proposed Modification, the proposed improvements in Drainage Area #1 will be treated by engineered filter strips according to the TCEQ's Technical Guidance on Best Management Practices over the Edwards Aquifer Recharge Zone. According to that same publication:

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 level; otherwise runoff will tend to form a channel in the low spot. A level spreader should not be used to distribute runoff to an engineered filter strip.
7) Filter strips should be landscaped after other portions of the project are completed.

In the WPAP that was approved on October 24, 2003, Drainage Area #1 was 20.000 acres, and had 0.925 acres of impervious cover. In the future, the area will have 5.813 acres of impervious cover. Runoff from proposed impervious cover will be treated using engineered filter strips. The engineered filter strips do meet the requirements as listed above in the following ways.

1) All engineered filter strips are a minimum of 15 feet.
2) Engineered filter strips will run along the entire length of contributing areas.
3) Maximum width of impervious cover in the direction of flow is 72 feet.
4) Vegetation coverage is at least 80% of the proposed interim vegetative filter strip.

The proposed improvements to the extension service, including; the proposed agricultural barn, gazebo, meeting room, potting shed, and greenhouse will be utilizing rain water harvesting systems. Therefore; TSS from these proposed improvements will enter the rainwater harvesting system instead of the ground.



NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL (TGM) SECTIONS 3.2.4 AND 3.4.6.

SEDIMENT CONTROL FENCE AND ROCK FILTER DAMS SHALL CONFORM TO THE (TGM) SECTIONS SECTIONS 1.4.3, 1.4.5, AND 1.4.6.

NO FLOOD PLAIN IS FOUND ON SITE.

PROPOSED SLOPES DO NOT EXCEED 7%

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD 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 BOTH SIDES).

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED FILTER STRIPS IS 80%.

CONTINUED

3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THATTHE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.

4. THE AREA TO BE USED FOR THE STIP 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 THE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. THE TOP EDGE OF FILTER STRIP SHOULD BE LANDSCAPED AFTER OTHER PORTIONS OF THE PROJECT ARE COMPLETE.

LEGEND

- VEGETATIVE FILTER STRIP
- CONTRIBUTING IMPERVIOUS COVER
- TEMPORARY ROCK FILTER DAMS
- TEMPORARY SEDIMENT CONTROL FENCE

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
PROPOSED TOPO

Date: 09/07/2007
Drawn by: STS
Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

Attachment G

Inspection, Maintenance, Repair and Retrofit Plan

Project Name: Comal County Engineer's Office (Drainage Area #1)

Engineered Filter Strip

Weekly — The project site shall be checked for accumulation of debris and trash. The debris and trash shall be removed.

Monthly — The vegetation growth in the vegetated filter strip 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".

Annually — The vegetation shall be inspected and additional native grasses planted as necessary.

After Rainfall — To maintain vegetative cover over this area, the area shall be checked after each rainfall occurrence to insure that the area drains within 6 hours after the storm is over. If it does not drain within this time, corrective measures will be instituted.

Following any required maintenance, the surface areas shall be raked and leveled to restore the system to its designed condition.

"Proper" disposal of accumulated silt shall be accomplished by following the TCEQ guidelines and specifications.

An amended copy of this document shall be provided to the TCEQ within thirty (30) days of any changes to the following information.

Responsible Party for Maintenance:	Comal County Road Department
Address:	195 David Jonas Drive
City, State Zip:	New Braunfels, Texas 78132-3760
Telephone Number:	(830) 608-2090

Signature of Responsible Party: _____ Date: 10/3/07

Attachment I – Measures for Minimizing Surface Stream Contamination

The measures that will be used to avoid or minimize surface stream contamination due to the changes in the way the water enters a stream as a result of the construction and development will be the maintenance of downstream vegetation. The maintenance of downstream vegetation will address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity. In addition to the maintenance of downstream vegetation, the sedimentation/filtration basin that was constructed in 2003 has greatly decreased the overall run-off from the entire 46.503 acre site. Therefore, by performing the regulated activity on the 20.00 acres, the overall increase of runoff from the site is still less than the runoff prior to 2003.

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

I Danny Scheel,
Print Name

County Judge
Title - Owner/President/Other

of Comal County
Corporation/Partnership/Entity Name

have authorized Robert Boyd, P.E.
Print Name of Agent/Engineer

of the Comal County Engineers Office
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.

Jay Millikin
Acting County Judge

Applicant's Signature

10-11-07
Date

THE STATE OF Texas §

County of Comal §

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

GIVEN under my hand and seal of office on this 11th day of October, 2007.

Deborah Braman
NOTARY PUBLIC

DEBORAH BRAMAN
Notary Public, State of Texas
My Commission Expires 04-28-2009

Deborah Braman
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-28-09

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

NAME OF PROPOSED REGULATED ENTITY: Comal County
REGULATED ENTITY LOCATION: New Braunfels, Texas
NAME OF CUSTOMER: Comal County

CONTACT PERSON: Robert Boyd, P.E. (Please Print) PHONE: (830) 608-2090

Customer Reference Number (if issued): CN 600647275 (nine digits)
Regulated Entity Reference Number (if issued): RN 102460730 (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	46.503	Acres	$ 5,000.00
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

10/16/07
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

To the Comal County Treasurer
out of the
COMAL COUNTY GENERAL OPERATING ACCOUNT

When countersigned by the Treasurer payable at
Frost Bank
New Braunfels, TX

30-9
1140

023774

Warrant Check

NO.

Pay ***\

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: Modified WPAP

2. Attachments: ☒ Yes ☐ No

Describe Any Attachments: (ex. Title V Application, Waste Transporter Application, etc.): Modified Water Pollution Abatement Plan

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 600647275		RN 102460730

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy): 10/3/2007

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:

City	State	ZIP	ZIP + 4

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

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

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

20. Number of Employees	21. Independently Owned and Operated?
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ 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)

24. Street Address of the Regulated Entity: (No P.O. Boxes)							
	City		State		ZIP		ZIP + 4	
25. Mailing Address:							
	City		State		ZIP		ZIP + 4	
26. E-Mail Address:							
27. Telephone Number		28. Extension or Code		29. Fax Number (if applicable)			
( ) -				( ) -			
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)			
34. What is the Primary Business of this entity? (Please do not repeat the SIC or NAICS description.)							

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

35. Description to Physical Location:					
36. Nearest City		County		State	Nearest ZIP Code
37. Latitude (N) In Decimal:			38. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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 Tires
☐ Stormwater	☐ Title V – Air	☐ Used Oil	☐ Utilities	☐ Voluntary Cleanup
☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:	☐ Other:

SECTION IV: Preparer Information

40. Name:	Robert Boyd, P.E.	41. Title:	Comal County Assistant Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 608-2090		(830) 608-2009	boydro@co.comal.tx.us

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:	Comal County	Job Title:	Assistant County Engineer
Name (In Print):	Robert Boyd	Phone:	(830) 608-2090
Signature:		Date:	10/3/2007



Comal County

OFFICE OF COMAL COUNTY ENGINEER

November 12, 2003

Mr. John Mauser
Texas Commission on Environmental Quality
14250 Judson Rd.
San Antonio, Texas 78233-4480

Re: Comal County Engineer's Office Proof of Recordation of Notice in Comal County Deed Records

Dear Mr. Mauser:

Attached is a copy of the Deed Recordation Affidavit that was approved on November 6, 2003. This is in response to Standard Condition Number 2 in the TCEQ Approval Letter dated October 24, 2003. If you have any questions or need additional information, please do not hesitate to call.

Sincerely,

Robert H. Boyd, P.E.
Assistant Comal County Engineer

Attachments a/s

195 David Jonas Drive • New Braunfels, Texas 78130 • (830) 608-2090 FAX (830) 608-2009

Receipt# 117365

JOY STREATER
COUNTY CLERK
COMAL COUNTY
150 N SEGUIN #101
NEW BRAUNFELS, TX
78130-
(830) 620-5513

NO CHARGE TRANSACTION

Doc# 200306042288 Pgs: 37
Doc Type: ED WTR RGT

Total	$	0.00
Change Due	$	0.00
Balance	$	0.00

Total Documents: 1
Total Fees: 0

Client Name GENERAL PUBLIC
Filed By COMAL COUNTY ROAD DEPT/BETTY LIEN
11/12/2003 01:57:17 PM

Cashier: TERRI

Doc# 200306042288

3/C

DEED RECORDATION AFFIDAVIT
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of Comal §

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

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

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

(3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the TEXAS NATURAL RESOURCE CONSERVATION COMMISSION (TNRCC) on October 24, 2003.

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

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

Tract	Recording Information	Exhibit (Attached)
6.531 Acres	Volume 274 Pages 383-384 Volume 645 Pages 292-294	B
3.050 Acres	Volume 645 Pages 295-297	C
1.383 Acres	DOC# 9506481748	D
1.474 Acres	DOC# 9706003685	E
14.065 Acres	DOC# 9906025084	F
20.000 Acres	DOC# 200306008534	G

Danny Scheel
LANDOWNER-AFFIANT

SWORN AND SUBSCRIBED TO before me, on this 6th day of Nov, 2003

Deborah Braman
NOTARY PUBLIC

THE STATE OF TEXAS §

County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared Danny Scheel 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 6th day of Nov, 2003.

Deborah Braman
NORATRY PUBLIC

DEBORAH BRAMAN
Notary Public, State of Texas
My Commission Expires Apr. 26, 2005

Deborah Braman
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-26-05

Doc# 200306042288

EXHIBIT "A"

RECEIVED
OCT 27 2003
COUNTY ENGINEER

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2003

Mr. Thomas H. Hornseth, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas, 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Engineers Office; Located at 195 David Jonas Drive; 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 Protection Program File No. -309.01, Investigation No. 148617

Dear Mr. Hornseth:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project you submitted to the San Antonio Regional Office on behalf of Comal County on June 4, 2003. Final review of the WPAP submittal was completed after additional material was received on August 22, 2003, and September 12, 2003. 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, modification to a plan, or exception. 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% of the construction has commenced on the project or an extension of time has been requested.*

Doc# 200306042288

RECEIVED
OCT 27 2003
COUNTY ENGINEER

BACKGROUND

The subject site consists of six tracts totaling 46.503 acres summarized in the table below, and illustrated on Exhibit "A" (enclosed).

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1 2	1978 1986 Total	6.531 3.050 9.581	Pavement	4.33[1]	77.03
			Office & shop Buildings		
			Storage Yards	3.05[2]	
3	1995	1.383	Storage Yards	1.383[3]	100.0
4	1997	1.474	Access road to county recycling operation	0.581	39.42
5	1999	14.065	Approximately 1.5 acres of mulching operation	0	0.00
5A			Proposed JP & Road	2.189	15.56
6	2003	20.00	Road, barn, shed, house	0.925	4.63
6A			Extension Offices	0.591	-----
Tracts 1 - 5		26.503	-----	11.533	43.51
Tracts 6 & 6A		20.00	-----	1.516	7.58
Total		46.503	-----	13.049	28.06

1 Includes 0.728 acres of impervious cover approved by TNRCC letter dated 10/6/93, and treated by 1.19 acres of vegetated filters. Also includes 0.608 acres of recently paved impervious cover located north of the office and west of the main entrance driveway.

2 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved, and existed prior to regulation of impervious cover on 3/21/90.

3 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved.

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

Doc# 200306042288

RECEIVED

OCT 2 7 2003

COUNTY ENGINEER

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 46.503 acres and will have the following parameters:

- The proposed new construction will include buildings for the Comal County Justice of the Peace, with office space for a Constable, Adult Probation and Addressing/GIS staff; the Comal County Extension Service; and an access road.
- The total impervious cover for the 46.503 acre project site is summarized in the table above.
- According to a letter dated, May 28, 2003, signed by Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the 46.503 acre site (see enclosed WPAP Site Plan) after construction, the impervious cover (0.925 acres) in Drainage Area #1 (20 acres) will use existing downgradient vegetation, a sedimentation/filtration basin will be provided for Drainage Areas #2 (16.964 acres) and #3 (9.539 acres). The individual treatment components will consist of:

Drainage Area #2: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.75 inch of stormwater run-off from 16.964 acres with 100% impervious cover, providing a total capture volume of 55,421 cubic feet. The filtration system will consist of:

1. 4,160 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

Drainage Area #3: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first one inch of stormwater run-off from 9.539 with 100% impervious cover, providing a total capture volume of 41,552 cubic feet. The filtration system will consist of:

1. 3,120 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

GEOLOGY

According to the geologic assessment included with the submittal, there are seven geologic or manmade features located on the 46.503 acre project site. All features were assessed as having sensitivities of less than

40. The San Antonio Regional Office site inspection of August 4, 2003, revealed that the site is as described by the geologic assessment and no additional geologic or manmade features were observed.

SPECIAL CONDITIONS

I. Based on the August 4, 2003 on-site inspection of the project site, Commission records indicate that construction of two paved parking areas were actually initiated on or before August 4, 2003, and that other site development and construction activities have already been conducted. It was determined that approximately 2,450 square feet of pavement not included in previous WPAPs was constructed without the prior approval of the water pollution abatement plan for the project, as required by Commission rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the WPAP modification, as provided by this letter, shall not absolve the applicant of any prior violations of Commission rules related to this project, and shall not necessarily preclude the Commission from pursuing appropriate enforcement actions and administrative penalties associated with such violations, as provided in 30 TAC §213.10 of Commission rules.

II. The sedimentation/filtration basins are designed in accordance with the 1999 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices." The basins will incorporate sedimentation and filtration as described above.

III. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

IV. The TCEQ does not agree with Comal County's assertion that because Watershed #1 has less than 20% impervious cover and the extension service functions as an educational facility, that it is exempt from the requirements of a WPAP. Watershed #1 is part of the 46.503 acre site and the total impervious cover of 28.06%.

The existing downgradient vegetation within Watershed #1 will be accepted as treatment of stormwater runoff from the associated impervious cover. Prior to any construction within Watershed #1 not approved by this letter, a modification to the WPAP must be submitted with appropriate application fees.

V. Because stormwater treatment was proposed within Watershed #3, prior to any construction not approved by this letter within Watershed #3, appropriate construction plans must be submitted to the TCEQ to determine that no other sources of pollution are associated with the project.

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

Doc# 200306042288

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. 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 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. One well exists on 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.

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 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 John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/jkm/eg

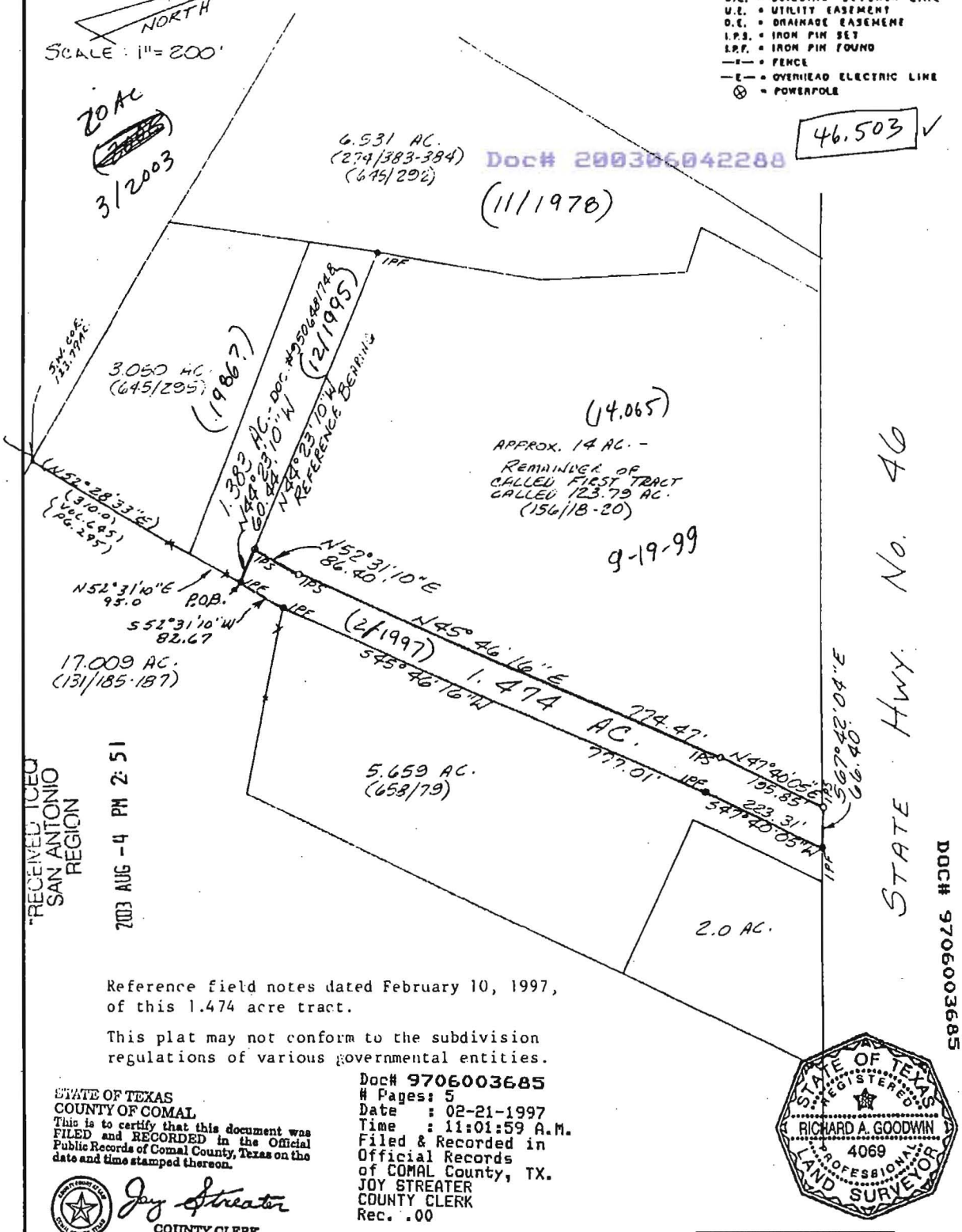
Enclosure:
1. Exhibit "A" (Site acreage map, Document# 9706003685)
2. WPAP Site Plan
3. Deed Recordation Affidavit, Form TCEQ-0625
4. Change in Responsibility for Maintenance or Permanent BMPs-Form TCEQ-10263

cc w/enclosures 1& 2:

Mr. John Bohuslav, TXDOT San Antonio District
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

~~DOC# 9706003685~~

EXHIBIT "A"



RECEIVED ICEO SAN ANTONIO REGION
2003 AUG -4 PM 2:51

Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

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
COMAL COUNTY, TEXAS

Doc# 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in Official Records of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAS
REGISTERED
RICHARD A. GOODWIN
4069
PROFESSIONAL
LAND SURVEYOR

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-8555

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

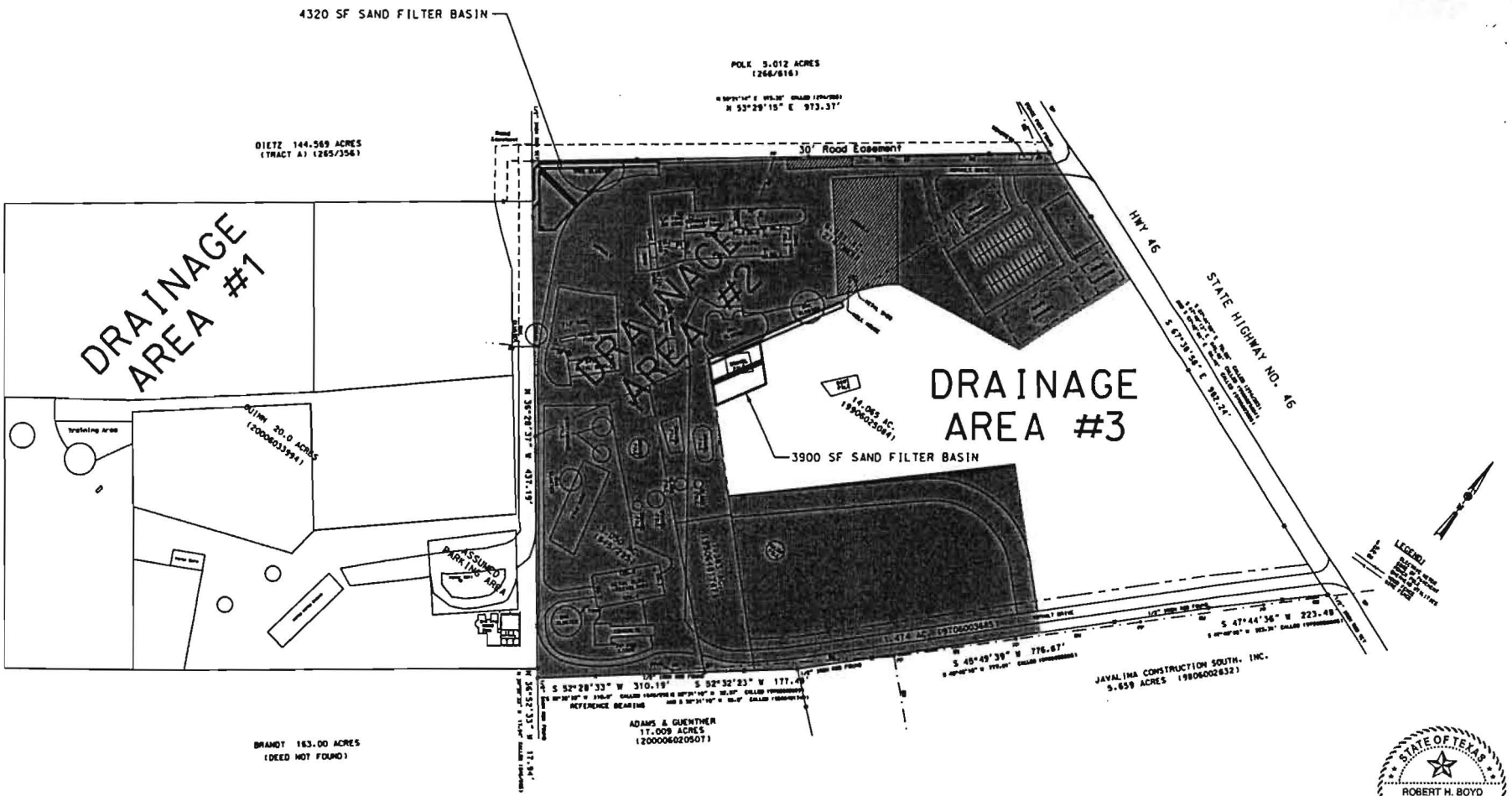
STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February, 1997 A. D.

R A Goodwin

97023



STATE OF TEXAS
ROBERT H. BOYD
91702
LICENSED PROFESSIONAL ENGINEER
9/10/13

195 David Jonas Drive New Braunfels, TX 78132 Phone: (830) 608-2090 Fax: (830) 608-2009	COMAL COUNTY ENGINEER'S OFFICE WPAP SITE PLAN	Date: 8/14/03 Drawn by: RHB Checked by: THH	REVISIONS No. / Date:	SCALE: ~~1"=200'~~ Sheet 1 of 1

...\WPAP\WPAP Site Plan.dgn Sep. 08, 2003 16:28:29

RECEIVED
OCT 27
COUNTY ENGINEER

Doc# 200306042288

Doc# 200306042288

DEED RECORDATION AFFIDAVIT
Edwards Aquifer Protection Plan

THE STATE OF TEXAS §

County of _____ §

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

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

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

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

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 _____ County, Texas, and the legal description of the property is as follows:

_____
LANDOWNER-AFFIANT

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

_____
NOTARY PUBLIC

THE STATE OF _____ §

County of _____ §

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

GIVEN under my hand and seal of office on this __ day of _____, ____.

_____
NOTARY PUBLIC

_____
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

Doc# 200306042288

CHANGE IN RESPONSIBILITY FOR MAINTENANCE ON PERMANENT BEST MANAGEMENT PRACTICES AND MEASURES

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

Applicant: _____

Project Name: _____

Site Address: _____

City, Texas, Zip: _____

County: _____

Approval Letter Date: _____

BMPs for the project: _____

New Responsible Party: _____

Name of contact: _____

Mailing Address: _____

City, State: _____ Zip: _____

Telephone: _____ FAX: _____

_____ _____

Signature of New Responsible Party Date

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

Doc# 200306042288

EXHIBIT "B"

VOL 274 PAGE 383

173894

WARRANTY DEED

FILED FOR RECORD
1970 NOV -9 PM 3:05
COUNTY CLERK, COMAL COUNTY
BY Dorothy P. Lambert 5.00

THE STATE OF TEXAS §
§ KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF COMAL §

That we, CALVIN A HEIDRICH and wife, HELLEN L. HEIDRICH of the County of Comal and the State of Texas, for and in consideration of the sum of TEN ($10.00) DOLLARS and other valuable consideration to the undersigned paid by the grantees herein named, the receipt of which is hereby acknowledged, have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto the County of Comal and State of Texas, all of the following described real property in Comal County, Texas, to-wit:

Being 6.531 acres of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271 and also being out of a 123.79 acre tract (Called First Tract), and being described in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas and being more particularly described as follows;

Beginning at an iron pin set in the Southwest R.O.W. line of State Highway No. 46, said point being N 67° 44' 00" W 1266.38 feet (Record) from the most Easterly corner of above referenced tract, for a corner of this tract;

Thence S 43° 21' 14" W 238.77 feet to an iron pin set for an interior corner of this tract;

Thence S 50° 09' 12" E 80.72 feet to an iron pin set for a corner of this tract;

Thence S 20° 08' 25" W 250.96 feet to an iron pin set for a corner of this tract;

Thence S 31° 12' 04" W 275.10 feet to an iron pin set for a corner of this tract;

Thence S 29° 58' 53" W 275.10 feet to an iron pin set in a Southwest fence line of above referenced tract, for the South corner of this tract;

Thence N 36° 40' 53" W 519.94 feet along said South west fence line to a steel fence post, for the West corner of this tract;

Thence N 53° 21' 14" E 973.36 feet along an existing fence line to an iron pin found in the South west R.O.W. line of State Highway No. 46, for the North corner of this tract;

Thence S 67° 44' 00" E 70.06 feet along said R.O W. line to the place of beginning and containing 6.531 acres of land more or less.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging,

Doc# 200306042288

unto the said grantee, their heirs and assigns forever; and we do hereby bind ourselves, our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantee, its successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

EXECUTED THIS 8th day of November, A.D., 1978.

Calvin A. Heidrich
CALVIN A HEIDRICH

Helen L. Heidrich
HELEN L. HEIDRICH

THE STATE OF TEXAS
COUNTY OF COMAL

Before me, the undersigned authority, on this day personally appeared CALVIN A. HEIDRICH and HELEN L. HEIDRICH, known to me to be the persons whose names are subscribed to the foregoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office on this the 8th day of November, A.D. 1978.

Kathleen M. Wagner
Notary Public in and for
Comal County, Texas

NOTARY PUBLIC

Doc# 200306042288

0645 0292

FILED FOR RECORD
1988 SEP -2 AM 9:21
ROSIE BOSENBURY
COUNTY CLERK COMAL COUNTY
BY Dorothy B Laubach
D/C

332424

CORRECTION WARRANTY DEED

THE STATE OF TEXAS * KNOW ALL MEN BY THESE PRESENTS:

COUNTY OF COMAL *

That we, CALVIN A. HEIDRICH and wife, HELLEN L. HEIDRICH herein called grantors, for and in consideration of the sum of TEN ($10.00) DOLLARS cash and other valuable consideration in hand paid by The County of Comal and State of Texas, hereinafter called Grantees, the receipt and sufficiency of which is hereby acknowledged and confessed, have granted, sold and conveyed, and by these presents do grant, sell and convey unto the said Grantees, the Following described property, to-wit:

Being 6.531 acres of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271 and also being out of a 123.79 acre tract (Called First Tract), and being described in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas and being more particularly described as follows:

Beginning at an iron pin set in the Southwest R.O.W. line of State Highway No. 46, said point being N 67° 44'00" W 1266.38 feet (Record) from the most Easterly corner of above referenced tract, for a corner of this tract;

Thence S 53° 21' 14" W 238.77 feet to an iron pin set for an interior corner of this tract;

THENCE S 50° 09' 12" E 80.72 feet to an iron pin set for a corner of this tract;

THENCE S 20° 08' 25" W 250.86 feet to an iron pin set for a corner of this tract;

THENCE S 31° 12' 04" W 275.10 feet to an iron pin set for a corner of this tract;

THENCE S 29° 58' 53" W 353.55 feet to an iron pin set in a Southwest fence line of above referenced tract, for the South corner of this tract;

THENCE N 38° 40' 53" W 519.84 feet along said Southwest fence line to a steel fence post, for the West corner of this tract;

THENCE N 53° 21' 14" E 973.38 feet along an existing fence line to an iron pin found in the Southwest R.O.W. line of State Highwey No. 46, for the North corner of this tract.

THENCE S 87° 44' 00" E 70.08 feet along said R.O.W. line to the place of beginning and containing 8.531 acres of land more or less.

This deed is made in place of and as a Deed of Correction of a Deed executed by Grantors herein to Grantees dated November 9, 1978, Vol. 158, pages 18-20 of the Deed Records of Comal County, Texas, wherein by error or mistake the field notes had incorrectly stated the dimensions of the tract and this instrument is made by Grantors and accepted by Grantees in order to correct said mistake, and in all other respects conforming said former Deed.

To have and to hold the above described premises, together with, all and singular, the rights and appurtenances thereto in anywise belonging unto the said Grantees and Grantees' assigns forever.

Grantor does Hereby bind Grantors, and Grantors' assigns to warrant and forever defend, all and singular, the said premises unto the said Grantees, and Grantees' assigns against any person whomsoever claiming or to claim the same or any part thereof.

EXECUTED THIS 1st day of September, 1988.

Calvin A. Heidrich

CALVIN A. HEIDRICH

Hellen L. Heidrich

HELLEN L. HEIDRICH

Doc# 200306042288

THE STATE OF TEXAS
COUNTY OF COMAL

Before me, the undersigned authority, on this day personlly appeared CALVIN A. HEIDRICH and HELLEN L. HEIDRICH, known to me to be the persons whose names are subscribed to the forsgoing instrument, and acknowledged to me that they executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office on this the 1st day of September, A.D., 1988.

NOTARY PUBLIC

Ginny Eanes, Notary Public
My Commission Expires on 10-12-91

Doc# 200306042288

EXHIBIT "C"

FILED FOR RECORD
1988 SEP -2 AM 9:21
ROSIE BOSENBURY
COUNTY CLERK COMAL COUNTY
BY Dorothy B. Laubach
N/C

332425

WARRANTY DEED

THE STATE OF TEXAS)(

)(KNOW ALL MEN BY THESE PRESENTS

COUNTY OF COMAL)(

That we, CALVIN A. HEIDRICH and wife HELEN HEIDRICH of Comal County and State of Texas for and in consideration of the sum of Ten ($10.00) Dollars and other valuable consideration of the undersigned paid by the grantee herein named, the receipt of which is hereby acknowledged, have GRANTED, SOLD AND CONVEYED, and by these presents do GRANT, SELL AND CONVEY unto the County of Comal, State of Texas, all of the following described real property in Comal County, Texas to-wit:

0645 0295

Being 3.050 acres of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being 3.050 acres of land out of that certain called 123.79 acre "First Tract" conveyed by Kermit E. Heidrich to Calvin Heidrich by deed dated June 13, 1967 and recorded in Volume 156 on pages 18-20 of the Deed Records of Comal County, Texas, and described more particularly by metes and bounds as follows:

BEGINNING at an iron pin set at a corner post in the Southwest line of the A.M. Holbrook Survey No. 423, the Northeast line of the S. Washburn Survey No. 486, Abstract No. 663, for the West corner of a 17.009 acre tract of land conveyed by Erhard J. Heidrich, et ux to Donald P. Guenther, et ux by deed dated November 12, 1962 and recorded in Volume 131 on pages 185-187 of the Deed Records of Comal County, Texas, for a South corner of the above described Calvin Heidrich 123.79 acre tract, for the South corner of the herein described 3.050 acre tract;

THENCE with the fence, the Southwest line of the said Holbrook Survey, the Northeast line of the said Washburn Survey, the Southwest line of the said 123.79 acre tract, N. 36° 52' 33" W 17.94 to a nail found, the called for North corner of the said Washburn Survey, the called for East corner of the F. Michel Survey No. 653, Abstract No. 400, for the East corner of a 20.000 acre tract of land conveyed by Clifford Henry Dietz and wife to Wayne Pooley and wife by deed dated Sept. 19, 1985 and recorded in Volume 470 on pages 239-241 of the Deed Records of Comal County, Texas;

THENCE continuing with the fence, the Southwest line of the said Holbrook Survey, the Northeast line of the said Michel Survey, the Southwest line of the said 123.79 acre tract, the Northeast line of the said Wayne Pooley 20.000 acre tract, N. 38° 28' 37" W. 437.19 feet to an iron pin found, set for the South corner of a 6.531 acre tract of land conveyed by Calvin A. Heidrich and wife to Comal County, Texas by deed dated November 8, 1978 and recorded in Volume 274 on pages 383-384 of the Deed Records of Comal County, Texas, for the West corner of this tract;

THENCE with the Southeast line of the said Comal County 6.531 acre tract, N. 29° 58' 53" W. 232.49 feet to an iron pin set for the North corner of this tract;

THENCE severing the said Calvin Heidrich tract, S. 48° 36' 41" E. 550.91 feet to an iron pin set in the fence, a Southeast line of the said 123.79 acre tract, a Northwest line of the said 17.009 acre tract, for the East corner of this tract;

THENCE with the fence, a Southeast line of the said 123.79 acre tract, a Northwest line of the said 17.009 acre tract, S. 52° 28' 33" W. 310.00 feet to the Place of Beginning.

TO HAVE AND TO HOLD the above described premises, together with all and singular the rights and appurtenances thereto in anywise belonging, unto the said grantee, its grantees and assigns forever; and we do bind ourselves, our heirs, executors and administrators to WARRANT AND FOREVER DEFEND all and singular the said premises unto the said grantee, its grantees and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof.

EXECUTED THIS 1st day of September, 1988.

Calvin A. Heidrich
CALVIN A. HEIDRICH

Helen Heidrich
HELEN HEIDRICH

Doc# 200306042288

THE STATE OF TEXAS
COUNTY OF

Before me the undersigned authority, on this day personally appeared CALVIN A. HEIDRICH known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office on this the 1st day of Sept, 1988.

Notary Public in and for
County, State of Texas

My commission expires: 10-12-91

THE STATE OF TEXAS
COUNTY OF COMAL

Before me the undersigned authority on this day personally appeared HELEN HEIDRICH who is known to me as the person whose name is subscribed to the foregoing instrument and acknowledged to me that she executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office on this the 1st day of Sept 1988

Notary Public in and for
County, State of Texas

My commission expires: 10-12-91

Doc# 200306042288

EXHIBIT "D"

~~Doc# 9506481748~~

WARRANTY DEED

4/C

DATE:

GRANTOR: Calvin A. Heidrich and wife Helen Heidrich

GRANTOR'S MAILING ADDRESS: 4836 Highway 46 West
New Braunfels, Texas 78132

GRANTEE: COUNTY OF COMAL, TEXAS

GRANTEE'S MAILING ADDRESS: 150 North Sequin Ave, Suite 301
New Braunfels, TX 78130

CONSIDERATION: TEN AND NO/100 ($10.00) and other good and valuable consideration.

PROPERTY (including any improvements)

BEING a 1.383 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, in Comal County, Texas, and being out of a tract called First Tract, called 123.79 acres, conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 46° 36' 41" W along the Northeast line of a tract of 3.050 acres described in Volume 645, Page 295 of the Official Public Records of Comal County, Texas, said 1.383 acre tract being more particularly by Exhibit "A" attached hereto and made part hereof for all purposes.

Reservations from and Exceptions to Conveyance and Warranty:

This conveyance is made expressly subject to all easements, restrictions, right of way, conditions, exceptions, reservations and covenants of whatsoever nature of record, if any, and also to the zoning laws and other restrictions, regulations, ordinances and statutes of municipal or other governmental authorities applicable to and enforceable against the above described premises.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and

Doc# 200306042288

~~Doc# 9506481748~~

conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and to hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor hereby binds Grantor and Grantor's heirs, executors, administrators, successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successor's and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to warranty.

When the context requires, singular nouns and pronouns include the plural.

Calvin A. Heidrich

Helen Heidrich

THE STATE OF TEXAS ()

COUNTY OF COMAL ()

This instrument was acknowledged before me on the 20th day of December, 1995, by Calvin A. Heidrich and Helen Heidrich for the purposes and considerations therein stated.

JANINE E. ELLINGTON
NOTARY PUBLIC
State of Texas
Comm. Exp. 02-01-97

Janine E. Ellington
JANINE E. ELLINGTON
Notary Public, State of Texas

After recording return to:

Comal County Road Department
4931 Hwy 46 W.
New Braunfels, Texas 78132

Doc# 200306042288

S. CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS - SURVEYORS
410 N. SEGUIN STREET
NEW BRAUNFELS, TEXAS 78130-5085

TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
AMERICAN SOCIETY OF CIVIL ENGINEERS

TEXAS SURVEYORS ASSOCIATION
TELEPHONE: (210) 625-8555

~~DOC# 9506481748~~

EXHIBIT "A"

FIELD NOTES FOR A 1.383 ACRE TRACT

Being a 1.383 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, in Comal County, Texas, and being out of a tract called First Tract, called 123.79 acres, conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 46° 36' 41" W along the Northeast line of a tract of 3.050 acres described in Volume 645, Page 295 of the Official Public Records of Comal County, Texas, said 1.383 acre tract being more particularly described as follows:

BEGINNING: At an iron pin found in a Southeast line of the above referenced tract, for the South corner of this tract, said point being the East corner of a tract of 3.050 acres out of the above referenced tract, said 3.050 acre tract described in Volume 645, Page 295 of the Official Public Records of Comal County, Texas, said Point of Beginning also being N 52° 28' 33" E 310.0 feet (record call in Volume 645, Page 295) from the Southwest corner of the above referenced tract;

THENCE: Into the above referenced tract, along the Northeast line of said 3.050 acre tract, N 46° 36' 41" W 550.91 feet to an iron pin found at the North corner of said 3.050 acre tract, lying in the Southeast line of a tract called 6.531 acres conveyed to Comal County Texas and described in Volume 274, Pages 383-384 of the Deed Records of Comal County, Texas, and also described in a Correction Warranty Deed recorded in Volume 645, Page 292 of the Official Public Records of Comal County, Texas, for the West corner of this tract;

THENCE: Along the Southeast line of said 6.531 acre tract, N 29° 56' 11" E 120.17 feet to an iron pin found at a corner of said 6.531 acre tract, for the North corner of this tract;

THENCE: Across the remainder of the above referenced tract, S 44° 23' 10" E 594.39 feet to an iron pin set in a Southeast line of the above referenced tract, a Northwest line of a tract called 17.009 acres recorded in Volume 131, Pages 185-187 of the Deed Records of Comal County, Texas, for the East corner of this tract, an iron pin found at a North corner of said 17.009 acre tract bears N 52° 31' 10" E 82.67 feet;

Doc# 200306042288

~~DOC# 9506481748~~

THENCE: Along said Southeast line and Northwest line, S 52° 31' 10" W 95.00 feet to the Point of Beginning and containing 1.383 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, December 11, 1995. Reference plat prepared this same date of this 1.383 acre tract.



Richard A. Goodwin, RPLS #4069

Job #95677

Doc# 9506481748
Pages: 4
Date : 12-20-1995
Time : 10:18:44 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

~~DOC# 9506481748~~

Doc# 200306042288

EXHIBIT "E"

~~DOC# 9706003685~~

WARRANTY DEED

5/C

DATE:

GRANTOR: Calvin A. Heidrich and wife Hellen Heidrich

GRANTOR'S MAILING ADDRESS: 4836 Highway 46 West
New Braunfels, Texas 78132

GRANTEE: COUNTY OF COMAL, TEXAS

GRANTEE'S MAILING ADDRESS: 150 North Seguin Ave. Suite 301
New Braunfels, Texas 78130

CONSIDERATION: TEN AND NO/100 ($10.00) and other good and valuable consideration.

PROPERTY (including any improvements)

BEING a 1.474 acre tract of land out of the A.M. Holbrook Survey No. 423, Abstract No. 271 in Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, said 1.474 acre tract being more particularly described by metes and bounds in Exhibit "A" attached hereto and made part hereof for all purposes.

Reservations from and Exceptions to Conveyance and Warranty:

This conveyance is made expressly subject to all easements, restrictions, right of way, conditions, exceptions, reservations and covenants of whatsoever nature of record, if any, and also to the zoning laws and other restrictions, regulations, ordinances and statutes of municipal or other governmental authorities applicable to and enforceable against the above described premises.

Grantor, for the consideration and subject to the reservations from and exceptions to conveyance and warranty, grants, sells, and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have

~~Doc# 9706003685~~

and to hold it to Grantee, Grantee's heirs, executors, administrators, successors, or assigns forever. Grantor hereby binds Grantor and Grantor's heirs, executors, administrators, successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successor's and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to warranty.

When the context requires, singular nouns and pronouns include the plural.

Calvin A. Heidrich

Calvin A. Heidrich

Hellen Heidrich

Hellen Heidrich

THE STATE OF TEXAS ()

COUNTY OF COMAL ()

This instrument was acknowledged before me on the 20th day of February, 1997, by Calvin A. Heidrich and Hellen Heidrich for the purposes and considerations therein stated.

RUBY A. CASTILLEJA
NOTARY PUBLIC
State of Texas
Comm. Exp. 11-25-2000

Ruby A. Castilleja

Ruby A. Castilleja

Notary Public, State of Texas

After recording return to:

Comal County Road Department
4931 Hwy 46 W.
New Braunfels, Texas 78132

Doc# 200306042288

S. CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS - SURVEYORS
410 N. SEGUIN STREET
NEW BRAUNFELS, TEXAS 78130-5083

TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
AMERICAN SOCIETY OF CIVIL ENGINEERS

TEXAS SURVEYORS ASSOCIATION
TELEPHONE: (210) 625-8555

~~DOC# 9706003685~~

WATER SYSTEMS • SEWER SYSTEMS • SUBDIVISIONS • LAND PLANNING • STREETS • DRAINAGE • SURVEYING

FIELD NOTES
FOR
A 1.474 ACRE TRACT

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271 in Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 44° 23' 10" W between iron pins found along the Northeast line of a 1.383 acre tract described in Doc# 9506481748 of the Official Public Records of Comal County, Texas, said 1.474 acre tract of land being more particularly described as follows:

BEGINNING: At an iron pin found at the East corner of said 1.383 acre tract, lying in a Southeast line of the above referenced tract, for the South corner of this tract, said point being N 52° 28' 33" E 310.0 feet (record call in Volume 645, Page 295) and N 52° 31' 10" E 95.0 feet from the Southwest corner of the above referenced 123.79 acre tract;

THENCE: Along the Northeast line of said 1.383 acre tract, N 44° 23' 10" W 60.44 feet to an iron pin set in same, for the West corner of this tract;

THENCE: N 52° 31' 10" E 86.40 feet, an iron pin set, N 45° 46' 16" E 774.47 feet, an iron pin set, and N 47° 40' 05" E 195.85 feet to an iron pin set in the Southwest fenced line of State Highway No. 46, for the North corner of this tract;

THENCE: Along said Southwest line, S 67° 42' 04" E 66.40 feet to an iron pin found for the East corner of this tract, said point also being the North corner of a tract of 5.659 acres described in Volume 658, Page 79 of the Official Public Records of Comal County, Texas;

THENCE: Along the Northwest line of said 5.659 acre tract, S 47° 40' 05" W 223.31 feet, an iron pin found and S 45° 46' 16" W 777.01 feet to an iron pin found at fence corner for the West corner of said 5.659 acre tract, the North corner of a tract of 17.009 acres described in Volume 131, Pages 185-187 of the Deed Records of Comal County, Texas, for a corner of this tract;

EXHIBIT "A"

Page 2: 1.474 Acre Tract

THENCE: Along a Southeast line of the above referenced 123.79 acre tract, a Northwest line of said 17.009 acre tract, S 52° 31' 10" W 82.67 feet to the Point of Beginning and containing 1.474 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, February 10, 1997. Reference plat prepared this same date of this 1.474 acre tract.

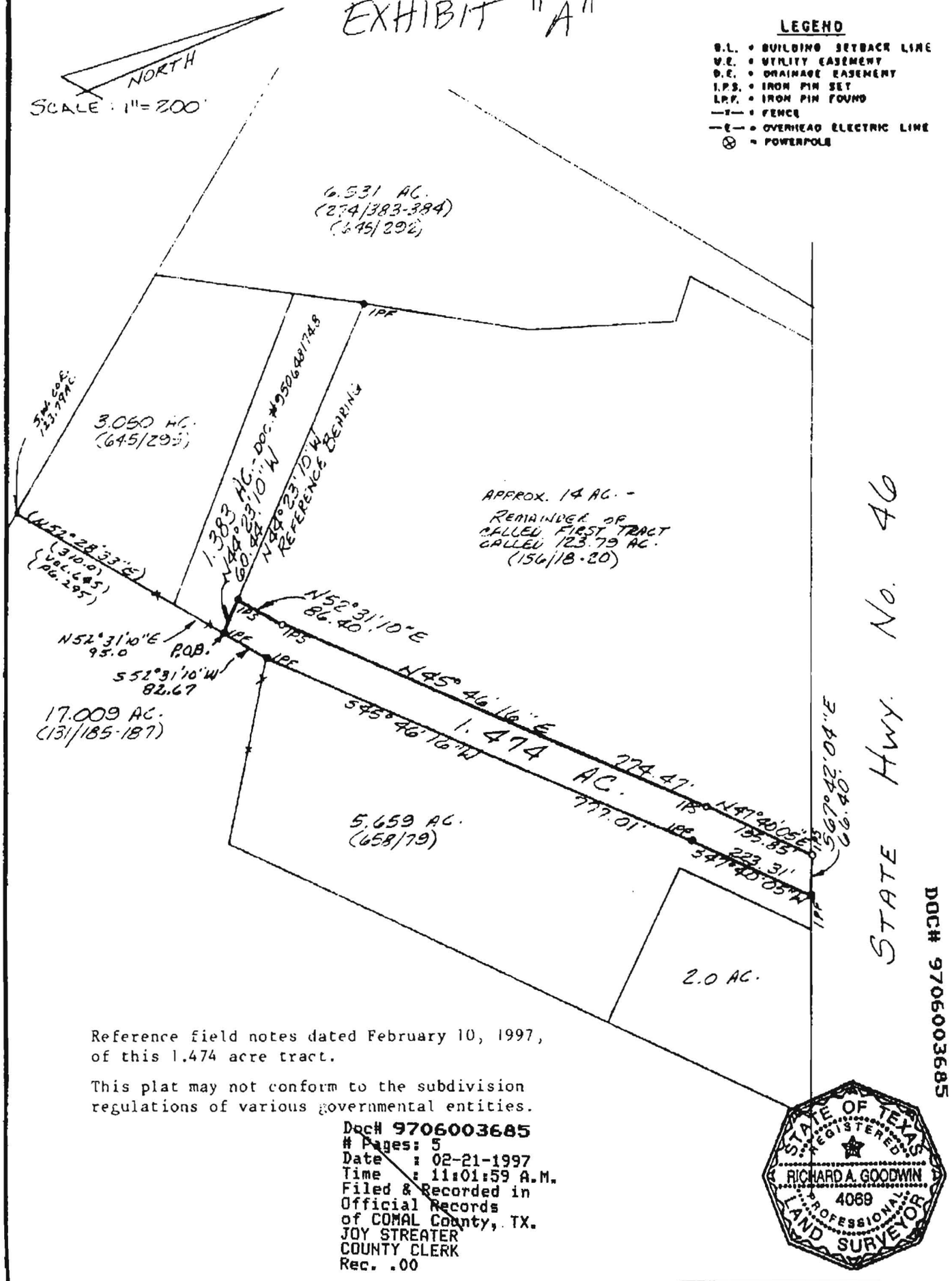


Richard A. Goodwin, RPLS #4069

Job #97023

Doc# 200306042288
DOC# 9706003685

EXHIBIT "A"



Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

DocH 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAS
REGISTERED
RICHARD A. GOODWIN
4069
PROFESSIONAL
LAND SURVEYOR

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-8555

STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February 19 97 A. D.

Doc# 200306042288

S. CRAIG HOLLMIG, INC.
CONSULTING ENGINEERS - SURVEYORS
410 N. SEGUIN STREET
NEW BRAUNFELS, TEXAS 7813~~Doc# 9906025084~~

TEXAS SOCIETY OF PROFESSIONAL ENGINEERS
AMERICAN SOCIETY OF CIVIL ENGINEERS

TEXAS SURVEYORS ASSOCIATION
TELEPHONE: (830) 625-8555 • FAX: (830) 625-8556

WATER SYSTEMS • SEWER SYSTEMS • SUBDIVISIONS • LAND PLANNING • STREETS • SURVEYING

FIELD NOTES
FOR
A 14.065 ACRE TRACT

Being a 14.065 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, being part of a tract of land called 123.79 acres described in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas, and all bearings referred to in this description are rotated to and referenced to a bearing of N 44° 23' 10" W between iron pins found along the Northeasterly line of a tract of land called 1.383 acres described in Doc# 9506481748 of the Official Public Records of Comal County, Texas, said 14.065 acre tract of land surveyed under the supervision of Richard A. Goodwin, RPLS #4069, S. Craig Hollmig, Inc., and being more particularly described as follows:

BEGINNING: At a ½" iron pin found for the West corner of a tract of land called 1.474 acres described in Doc# 9706003685 of the Official Public Records of Comal County, Texas, being in the Northeasterly line of said 1.383 acre tract, and being N 52° 28' 33" E 310.0 feet (record call in Volume 645, Page 295), N 52° 31' 10" E 95.0 feet, and N 44° 23' 10" W 60.44 feet from the Southwest corner of the above referenced 123.79 acre tract, for the South corner and Point of Beginning of this tract;

THENCE: Along the Northeasterly line of said 1.383 acre tract, N 44° 23' 10" W 533.95 feet to a 3/8" iron pin found for the North corner of said 1.383 acre tract, being in the Southeasterly line of a tract of land called 6.531 acres described in Volume 645, Page 292 of the Official Public Records of Comal County, Texas, for the West corner of this tract;

THENCE: Along the Southeasterly line of said 6.531 acre tract, the Northwesterly line of this tract, N 31° 18' 46" E 274.93 feet, a ½" iron pin set, N 20° 12' 28" E 250.90 feet, a 3/8" iron pin found, N 49° 46' 33" W 80.56 feet to a 3/8" iron pin found, and N 53° 28' 46" E 238.52 feet to a 3/8" iron pin found in the Southeasterly line of State Highway 46, for the most Easterly corner of said 6.531 acre tract, for the North corner of this tract;

THENCE: Along the Southwesterly line of State Highway 46, S 67° 40' 13" E 845.46 feet to a ½" iron pin set in same, for the North corner of said 1.474 acre tract, for the East corner of this tract;

Doc# 200306042288

Doc# 9906025084

THENCE: Along the Northwesterly line of said 1.474 acre tract, S 47° 40' 05" W 195.85 feet, a ½" iron pin set, S 45° 46' 16" W 774.47 feet, a ½" iron pin found, and S 52° 31' 10" W 86.40 feet to the Point of Beginning and containing 14.065 acres of land, more or less.

The foregoing field notes represent the results of an on-the-ground survey made under my supervision, August 6, 1999. Reference plat prepared this same date of this 14.065 acre tract.



Richard A. Goodwin, RPLS #4069

Job #99446

Doc# 9906025084
Pages 4
Date 9/16/99 3:24:49 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $15.00

Doc# 9906025084

Doc# 200306042288

Doc# 9906025084

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

When the context requires, singular nouns and pronouns include the plural.

CALVIN HEIDRICH

HELLEN L. HEIDRICH

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF COMAL §

This instrument was acknowledged before me on September 16, 1999, by CALVIN HEIDRICH and HELLEN L. HEIDRICH.

LAURA R. RAUCH
Notary Public, State of Texas
My Commission Expires
AUG. 5, 2001

Notary Public, State of Texas

PREPARED IN THE OFFICE OF:

Steven G. Lawrence P.C.
114 W. Glenview, #205
San Antonio, Texas 78228

AFTER RECORDING RETURN TO:

Comal County
150 N. Seguin, #307
New Braunfels, Texas 78130

Doc# 200306042288

EXHIBIT "F"

4
1
T

WARRANTY DEED

~~Doc# 9906025084~~

Date: September 15, 1999

Grantor: CALVIN HEIDRICH and HELLEN L. HEIDRICH

Grantor's Mailing Address (including county):

4836 HWY 46
New Braunfels, Texas 78130
Comal County

Grantee: COMAL COUNTY, TEXAS

Grantee's Mailing Address (including county):

150 N Seguin, #307
New Braunfels, Texas 78130
Comal County

Consideration: TEN AND NO/100 DOLLARS and other good and valuable consideration.

Property (including any improvements):

Being 14.000 acres of land, more or less, out of the A.M. Holbrook Survey No. 423, Abstract 271, in Comal County, Texas, being more particularly described on Exhibit "A" attached hereto and made a part hereof for all purposes.

Reservations From and Exceptions to Conveyance and Warranty:

Easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded instruments, other than liens and conveyances, that affect the property; taxes for the current year, the payment of which Grantee assumes.

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully

NBCLT
99-0-9783

Doc# 200306042288

EXHIBIT "G"

Doc# 200306000534

FILED BY
ALAMO TITLE

GF# 14000472

WARRANTY DEED

Date: March 7, 2003

Grantor: JACK G. QUINN and wife, KELLEE D. QUINN

Grantor's Mailing Address (including county):

315 Rock Hill Trail
New Braunfels, Comal County, Texas, 78132

Grantee: COMAL COUNTY, TEXAS

Grantee's Mailing Address (including county):

199 Main Plaza
New Braunfels, Comal County, Texas, 78130

Consideration: TEN AND NO/100 DOLLARS and other good and valuable consideration.

Property (including any improvements):

SEE EXHIBIT "A" AND EXHIBIT "B" ATTACHED HERETO AND MADE A PART HEREOF FOR ALL PURPOSES.

Reservations From and Exceptions to Conveyance and Warranty:

Easements, rights-of-way, and prescriptive rights, whether of record or not; all presently recorded instruments, other than liens and conveyances, that affect the property; taxes for the current year, the payment of which Grantee assumes.

Grantor, for the consideration, receipt of which is acknowledged, and subject to the reservations from and exceptions to conveyance and warranty, grants, sells and conveys to Grantee the property, together with all and singular the rights and appurtenances thereto in any wise belonging, to have and hold it to Grantee, Grantee's heirs, executors, administrators, successors or assigns forever. Grantor binds Grantor and Grantor's heirs, executors, administrators and successors to warrant and forever defend all and singular the property to Grantee and Grantee's heirs, executors, administrators, successors and assigns against every person whomsoever lawfully claiming or to claim the same or any part thereof, except as to the reservations from and exceptions to conveyance and warranty.

When the context requires, singular nouns and pronouns include the plural.

JACK G. QUINN

KELLEE QUINN

~~Doc# 200306008334~~
Doc# 200306042288

ACKNOWLEDGMENT

STATE OF TEXAS §
§
COUNTY OF COMAL §

This instrument was acknowledged before me on March 7, 2003, by JACK G. QUINN and wife, KELLEE QUINN.



Notary Public, State of Texas

AFTER RECORDING RETURN TO:

Comal County, Texas
199 Main Plaza
New Braunfels, Texas 78130

Doc# 200306000534

Doc# 200306042288

Doc# 200006033994

EXHIBIT "A"

RECORDER'S MEMORANDUM - COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photo copy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

20.0 ACRE TRACT

All that certain tract or parcel of land containing 20.0 acres in the Comal County, Texas, out of F. Michel Survey No. 653, Abstract 400, being the same tract of land described in conveyance from Clifford Henry Dietz, et ux to Wayne Pooley and wife, Susan Pooley, of record in Volume 470, Pages 239-241, Deed Records of Comal County, Texas.

Said 20.0 acre tract, being more particularly described by metes and bounds as follows;

BEGINNING: at a ½" iron pin found on the Southwest boundary line of the County of Comal, 6.531 acre tract, of record in Volume 274, Page 383, Deed Records of Comal County, Texas, at the East corner of Clifford Henry Dietz, 19.19 acre tract, of record in Volume 218, Page 498, Deed Records of Comal County, Texas and same being the East corner of Clifford Henry Dietz, remaining portion of a 144.569 acre tract, of record in Volume 265, Page 356, Deed Records of Comal County, Texas, for the North corner of this herein described tract;

THENCE: South 37 deg. 16 min. 27 sec. East; a distance of 881.61 feet to a ½" iron pin set stamped "Seguin 1776" on the Southwest boundary line of the County of Comal, 3.050 acre tract, of record in Volume 645, Page 295, Official Public Records of Comal County, Texas at the East corner of said Michel Survey, same being the North corner of the S. Washburn Survey 486, Abstract 663 and also being the North corner of Agnes Brandt, 163.00 acre tract, of record in Volume 200, page 470, Deed Records of Comal County, Texas, for the East corner of this herein described tract;

THENCE: along with the common line between said Michel Survey and said Washburn Survey and also being the Northwest boundary line of said Brandt, 163.00 acre tract, the following courses and distances:
South 53 deg. 05 min. 19 sec. West, a distance of 669.63 feet to a ½" iron pin found and
South 52 deg. 55 min. 41 sec. West, a distance of 327.58 feet to a ½" iron pin found at a corner of said Dietz, remaining portion of 144.569 acre tract, for the South corner of this herein described tract;

THENCE: North 37 deg. 16 min. 38 sec. West , a distance of 867.35 feet to a ½" iron pin set with cap stamped "Seguin 1776" at the South corner of said Dietz, 19.19 acre tract and same being a corner of said Dietz, remaining portion of 144.569 acre tract, for the West corner of this herein described tract;

THENCE: North 52 deg. 13 min. 00 sec. East, a distance of 997.28 feet along with the Southeast boundary line of said Dietz, 19.19 acre tract to the POINT OF BEGINNING.

Bearing Basis – North 52 deg. 13 min. 00 sec. East – from the Northwest boundary line of said 20.0 acre tract of record in Volume 470, Page 239-241, Deed Records of Comal County, Texas.

RECORDER'S MEMORANDUM – COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photocopy, discolored paper, etc. All blackouts, additions and changes were present at the time the instrument was filed and recorded.

Doc# 200306042288

Doc# 200306008534

EXHIBIT "B"

Doc# 200006033994

(Continued)

RECORDER'S MEMORANDUM - COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photo copy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

EASEMENT NO. 1:
BEGINNING at an iron pin set for the east corner of this road easement, the north corner of a 1.00 acre tract from which the west corner of the called 144.569 acre tract, the east corner of the Michel Survey, the north corner of the S. Washburn Survey No. 486, A-663, bears S 37° 02' E 208.71 feet;

THENCE with the northwest line of the called 1.0 acre tract, S 53° 08' W 30.0 feet, to a point marking the south corner of this thirty foot road easement;

THENCE with the southwest line of this road easement, N 37° 02' W 778.09 feet to a point marking the west corner of this thirty foot road easement;

THENCE N 53° 00' E 30.0 feet to a point marking the north corner of this thirty foot road easement situated in the northeast line of the called 144.569 acre tract, the common line between the Michel Survey and the A. M. Holbrook Survey No. 423, A-271, and situated at the end of an existing thirty foot lane;

THENCE with the northeast line of the called 144.569 acre tract, the common line between the Michel and Holbrook Surveys, S 37° 00' E at 30.0 feet the southeast line of the existing thirty foot lane and in all 105.5 feet to an iron pin found and S 37° 02' E 672.59 feet to the PLACE OF BEGINNING.

EASEMENT NO. 2;
BEING a 30.0 foot road easement and right-of-way traversing that certain tract of land conveyed by Kermit E. Heidrich to Calvin Heidrich by deed dated June 13, 1967, and recorded in Volume 156, Pages 18-20, Deed Records of Comal County, Texas, and said easement and right-of-way being more particularly described by metes and bounds as follows, to-wit:

BEGINNING at an iron stake in the Southwest line of the Alva M. Holbrook Survey No. 423, placed for the Southeast corner of the Daniel B. Puckett et ux 81.66 acre tract;

THENCE N 36° 48' W with the Southwest line of said 81.66 acre tract 30 feet to a stake;

THENCE N 53° 25' E., parallel to and 30 feet distant from the Southeast line of said 81.66 acre tract, 956.04 feet to a stake in the Southwest line of State Highway No. 46;

THENCE S 67° 44' E, with the Southwest line of said Highway 35.02 feet to an iron stake at the Northeast corner of said 81.8 acre tract;

THENCE S 53° 25' W, with the southeast line of said 81.66 acre tract, 974 feet to the place of beginning, according to a survey made on the ground by A. M. Moellering, RPS No. 1260, on July 14, 1973;

Doc# 200006033994
Pages 4
Date: 11/1/00 3:08:01 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $15.00

Doc# 200306008534
Pages 4
03/18/2003 02:24:05 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $15.00

RECORDER'S MEMORANDUM - COMAL COUNTY
At the time of recordation, this instrument was found to be inadequate for the best photographic reproduction because of illegibility, carbon or photo copy, discolored paper, etc. All blockouts, additions and changes were present at the time the instrument was filed and recorded.

Doc# 200006033994

Doc# 200306008534

Doc# 200306042288
Pages 37
11/12/2003 01:57:17 PM
Filed & Recorded in
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $0.00

Doc# 200306

STATE OF TEXAS

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

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 2, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; 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. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

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 Comal County on behalf of Comal County on October 24, 2007. Final review of the WPAP was completed after additional material was received on December 13th, 28th, and January 2, 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

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

The subject site consists of six tracts totaling 46.503 acres summarized in the table below.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	7.58
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	2.262	36.94
			Circular Animal Run	0.253	
			Extension Amphitheater	0.530	
			Road Department Stockpile	2.487	
			Extension Proposed Barn	0.060	
			Extension Oval Animal Run	0.174	
			Extension Green House	0.047	
			Extension Gazebo	0.004	
			Extension Meeting Room	0.047	
			Extension Potting Shed	0.009	
Total (proposed)				7.39	42.10
Total		46.503		19.58	42.10

* - There was 0.925 acres of existing impervious cover located within Tract 6 prior to the regulation of impervious cover on 03/21/90. In a modification approved by letter dated October 24, 2003 (after regulation of impervious cover), 0.591 acres of impervious cover was added to the 0.925 acres. Therefore, there is currently 1.516 acres of existing impervious cover located within the 20 acres of Tract 6 which includes 0.925 acres that pre-dates the requirement for treatment of stormwater runoff.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 20 acres. It will include improvements to the agricultural barn, the show arena, the road paving material stockpile area, the meeting room, and include a parking lot expansion, a potting shed and greenhouse, gazebo, and an amphitheater. The increase in impervious cover will be 5.872 acres. The total impervious cover will be 7.388 acres (36.94% of 20 acres).

With the proposed commercial project, the total impervious cover for the contiguous 46.503 acres owned by Comal County is 19.58 acres (42.10%).

According to a letter dated, May 28, 2003, signed by Mr. Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

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 vegetative filter strips will be constructed to treat 5,801 pounds of total suspended solids (TSS) from an increase in impervious cover of 5.872 acres within a drainage area of 20 acres (see Table I above). They are designed in accordance with the 2005 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices."

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

- The engineered vegetated filer strip extends along the entire length of the contributing area;
- The slope does not exceed 20%;
- The minimum dimension of the filter strip (in the direction of flow) is not less than 15 feet;
- The maximum width (in the direction of flow) of the contributing impervious area does not exceed 72 feet;
- The minimum vegetated cover is 80%;
- The contributing area to the filter strip is relatively flat so that runoff is distributed evenly to the vegetated area without the use of a level spreader;
- The vegetated filter strip is free of gullies or rills that can concentrate overland flow.

The approved measures 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, dated May 20, 2003, there are seven geologic or manmade features located on the 46.503 acre project site. Six of the seven features were located within the 20 acre drainage area of this modification. All features were assessed as having sensitivities of less than 40. No features were re-assessed. A site inspection was conducted on August 4, 2003 for a previous modification. The investigation report states that the site was as described by the geologic assessment, and no additional geologic or manmade features were observed. The San Antonio Regional Office did not conduct a site inspection for this submittal.

SPECIAL CONDITIONS

I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.

II. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated October 24, 2003.

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

IV. 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.

V. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

VI. 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.

VII. Construction of the above said project is approved. Use of the vegetative filter strip as wastewater treatment and disposal unit is not authorized by this letter. Discharge of waste material into the engineered filter strip from the agricultural barn represents an unauthorized discharge. Animals may not occupy the agricultural barn until proper authorization has been obtained from the TCEQ Water Quality Division – Standards, Assessments, and CAFO Permitting. Submit to the San Antonio Regional Office documentation authorizing this discharge within 30 days of receipt of the authorization. Any physical or operational change of the

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

permanent water pollution abatement measures shall be subject to the requirements of §213.4(j) with regards to modifications of previously approved plans.

VIII. Discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, are not authorized by this letter, and shall be disposed of properly.

IX. Treating stormwater runoff from material stockpiles is a non-standard use of vegetative filter strips. Provide an annual evaluation on the effectiveness of the vegetative filter strips treating the material stockpiles, due on the anniversary date of this letter. After 3 years of evaluation and successful usage, you may petition the TCEQ for suspension of this requirement.

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.

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 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.

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.

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

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. One water well exists onsite. 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

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

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.

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 Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/JJ/eg

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

cc: Mr. Bruce Boyer, P.E. City of New Braunfels
Mr. Tom Hornseth, Comal County
Ms. Velma Danielson, Edwards Aquifer Authority
TCEQ Central Records, MC 212 Building F

Deed Recordation Affidavit
Edwards Aquifer Protection Plan

RECEIVED
JAN 0 7 2008
COUNTY ENGINEER

THE STATE OF TEXAS §

County of _____ §

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

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

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

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

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

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

_____
LANDOWNER-AFFIANT

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

_____
NOTARY PUBLIC

THE STATE OF _____ §

County of _____ §

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

GIVEN under my hand and seal of office on this __ day of _____, _____.

_____
NOTARY PUBLIC

_____
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

FILE COPY

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

January 2, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer; Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; 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. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

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 Comal County on behalf of Comal County on October 24, 2007. Final review of the WPAP was completed after additional material was received on December 13th, 28th, and January 2, 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

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

The subject site consists of six tracts totaling 46.503 acres summarized in the table below.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03

2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	7.58
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	2.262	36.94
			Circular Animal Run	0.253	
			Extension Amphitheater	0.530	
			Road Department Stockpile	2.487	
			Extension Proposed Barn	0.060	
			Extension Oval Animal Run	0.174	
			Extension Green House	0.047	
			Extension Gazebo	0.004	
			Extension Meeting Room	0.047	
			Extension Potting Shed	0.009	
Total (proposed)				7.39	42.10
Total		46.503		19.58	42.10

* - There was 0.925 acres of existing impervious cover located within Tract 6 prior to the regulation of impervious cover on 03/21/90. In a modification approved by letter dated October 24, 2003 (after regulation of impervious cover), 0.591 acres of impervious cover was added to the 0.925 acres. Therefore, there is currently 1.516 acres of existing impervious cover located within the 20 acres of Tract 6 which includes 0.925 acres that pre-dates the requirement for treatment of stormwater runoff.

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 20 acres. It will include improvements to the agricultural barn, the show arena, the road paving material stockpile area, the meeting room, and include a parking lot expansion, a potting shed and greenhouse, gazebo, and an amphitheater. The increase in impervious cover will be 5.872 acres. The total impervious cover will be 7.388 acres (36.94% of 20 acres).

With the proposed commercial project, the total impervious cover for the contiguous 46.503 acres owned by Comal County is 19.58 acres (42.10%).

According to a letter dated, May 28, 2003, signed by Mr. Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

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 vegetative filter strips will be constructed to treat 5,801 pounds of total suspended solids (TSS) from an increase in impervious cover of 5.872 acres within a drainage area of 20 acres (see Table I above). They are designed in accordance with the 2005 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices."

- The engineered vegetated filer strip extends along the entire length of the contributing area;
- The slope does not exceed 20%;
- The minimum dimension of the filter strip (in the direction of flow) is not less than 15 feet;
- The maximum width (in the direction of flow) of the contributing impervious area does not exceed 72 feet;
- The minimum vegetated cover is 80%;
- The contributing area to the filter strip is relatively flat so that runoff is distributed evenly to the vegetated area without the use of a level spreader;
- The vegetated filter strip is free of gullies or rills that can concentrate overland flow.

The approved measures 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, dated May 20, 2003, there are seven geologic or manmade features located on the 46.503 acre project site. Six of the seven features were located within the 20 acre drainage area of this modification. All features were assessed as having sensitivities of less than 40. No features were re-assessed. A site inspection was conducted on August 4, 2003 for a previous modification. The investigation report states that the site was as described by the geologic assessment, and no additional geologic or manmade features were observed. The San Antonio Regional Office did not conduct a site inspection for this submittal.

SPECIAL CONDITIONS

I. The holder of the approved Edwards Aquifer WPAP must comply with all provisions of 30 TAC Chapter 213 and all best management practices and measures contained in the application.

II. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated October 24, 2003.

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

IV. 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.

V. All sediment and/or media removed from the water quality basin during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335, as applicable.

VI. 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.

VII. Construction of the above said project is approved. Use of the vegetative filter strip as wastewater treatment and disposal unit is not authorized by this letter. Discharge of waste material into the engineered filter strip from the agricultural barn represents an unauthorized discharge. Animals may not occupy the agricultural barn until proper authorization has been obtained from the TCEQ Water Quality Division – Standards, Assessments, and CAFO Permitting. Submit to the San Antonio Regional Office documentation authorizing this discharge within 30 days of receipt of the authorization. Any physical or operational change of the

~~Animal~~ Animal waste to be disposed of on landfill.

permanent water pollution abatement measures shall be subject to the requirements of §213.4(j) with regards to modifications of previously approved plans.

VIII. Discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, are not authorized by this letter, and shall be disposed of properly.

IX. Treating stormwater runoff from material stockpiles is a non-standard use of vegetative filter strips. Provide an annual evaluation on the effectiveness of the vegetative filter strips treating the material stockpiles, due on the anniversary date of this letter. After 3 years of evaluation and successful usage, you may petition the TCEQ for suspension of this requirement.

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.

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 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.

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. One water well exists onsite. 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 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 Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/JJ/eg

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

cc: Mr. Bruce Boyer, P.E. City of New Braunfels
Mr. Tom Hornseth, Comal County
Ms. Velma Danielson, Edwards Aquifer Authority
TCEQ Central Records, MC 212 Building F

Original

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

RECEIVED
JAN 02 2007
COUNTY ENGINEER

December 28, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; New Braunfels, Texas
TYPE OF PLAN: Request for the Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer;
Edwards Aquifer Protection Program ID No. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

We are in receipt of the additional information you have submitted on the above-referenced project for the WPAP modification and are in the process of technically reviewing the additional information. Before we can proceed with our review, the following comments relating to the application must be addressed.

1. The following table has been composed using information from the previous approval letter dated 10/24/03, and information submitted with the WPAP application on 10/24/07. It appears that the total of 6.144 acres from lot 6 does not include acreages (0.925 and 0.591) from the 2003 submittal. Please confirm the impervious cover and impervious cover percent for lot 6 and for the 46.503 acre site, and modify parts of the application as necessary.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03
2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	

RECEIVED
JAN 0 2 2007
COUNTY ENGINEER

			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	?
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	**2.262**	?
			Circular Animal Run	**0.253**	
			Extension Amphitheater	**0.530**	
			Road Department Stockpile	**2.487**	
			Extension Proposed Barn	**0.060**	
			Extension Oval Animal Run	**0.174**	
			Extension Green House	**0.047**	
			Extension Gazebo	**0.004**	
			Extension Meeting Room	**0.047**	
			Extension Potting Shed	**0.009**	
			Existing Extension House/Barn/Storage*	**0.220**	
			Existing Meeting Room*	**0.051**	
			Total for 2007 submittal	**6.144**	
Total (proposed)				18.33	?
Total		46.503		18.33	?

2. Also, discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, and are not authorized. Please explain the intended method of disposal for the pesticides and herbicides from this operation. Include the quantities expected to be routinely used in the operation.

We ask that you submit one original and three copies of the amended materials to supplement the WPAP modification to this office by no later than **7 days from the date of this letter** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn. If you have any questions or require additional information, please contact Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

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

LMB/JJ/eg

fc: Mr. Robert Boyd, P.E., Comal County Engineers Office, (830) 608-2009

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

December 28, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; New Braunfels, Texas
TYPE OF PLAN: Request for the Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer;
Edwards Aquifer Protection Program ID No. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

We are in receipt of the additional information you have submitted on the above-referenced project for the WPAP modification and are in the process of technically reviewing the additional information. Before we can proceed with our review, the following comments relating to the application must be addressed.

1. The following table has been composed using information from the previous approval letter dated 10/24/03, and information submitted with the WPAP application on 10/24/07. It appears that the total of 6.144 acres from lot 6 does not include acreages (0.925 and 0.591) from the 2003 submittal. Please confirm the impervious cover and impervious cover percent for lot 6 and for the 46.503 acre site, and modify parts of the application as necessary.

Table I

Tract	Acquired	Acres	Type of Impervious cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03
2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	

			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	House/Barn/Storage*	0.925	?
			Meeting Room*	0.591	
6	2007	20.00	Pavement/Parking Lot	**2.262**	?
			Circular Animal Run	**0.253**	
			Extension Amphitheater	**0.530**	
			Road Department Stockpile	**2.487**	
			Extension Proposed Barn	**0.060**	
			Extension Oval Animal Run	**0.174**	
			Extension Green House	**0.047**	
			Extension Gazebo	**0.004**	
			Extension Meeting Room	**0.047**	
			Extension Potting Shed	**0.009**	
			Existing Extension House/Barn/Storage*	~~**0.220**~~ 0.925	
			Existing Meeting Room*	~~**0.051**~~ 0.591	
			Total for 2007 submittal	**6.144**	
Total (proposed)				18.33	?
Total		46.503		18.33	?

2. Also, discharges of pesticides or herbicides from operation of the greenhouse may be subject to the TWC §26.121, and are not authorized. Please explain the intended method of disposal for the pesticides and herbicides from this operation. Include the quantities expected to be routinely used in the operation.

We ask that you submit one original and three copies of the amended materials to supplement the WPAP modification to this office by no later than **7 days from the date of this letter** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn. If you have any questions or require additional information, please contact Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

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

LMB/JJ/eg

fc: Mr. Robert Boyd, P.E., Comal County Engineers Office, (830) 608-2009

Buddy Garcia, *Chairman*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*

RECEIVED
OCT 2 6 2007
COUNTY ENGINEER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2007

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Comal County Road Department's 46.503 acres, located on State Highway 46, 1 mile past FM 2722, New Braunfels, Texas
PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
San Antonio Region File Number: -309.05

Dear Mr. Hornseth:

The enclosed WPAP 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.

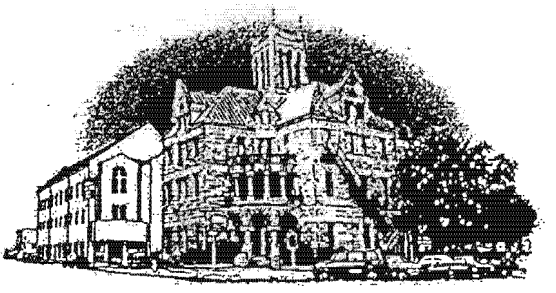
Please forward your comments to this office by November 23, 2007.

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



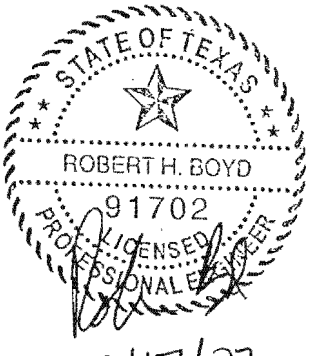
Comal County

OFFICE OF COMAL COUNTY ENGINEER

RECEIVED
OCT 2 6 2007
COUNTY ENGINEER

OCT 2 4 2007
SAN ANTONIO

Modification of Previously Approved Water Pollution Abatement Plan for the Comal County Road Department's 46.503 Acres October 2, 2007



10/17/07

Modification of a Previously Approved Plan Checklist

RECEIVED
OCT 2 6 2007
COUNTY ENGINEER

✓ General Information Form (*TCEQ-0587*)
- ATTACHMENT A - Road Map
- ATTACHMENT B - USGS / Edwards Recharge Zone Map
- ATTACHMENT C - Project Description

✓ Geologic Assessment Form (*TCEQ-0585*)
- ATTACHMENT A - Geologic Assessment Table, *TCEQ-0585-Table*
- Comments to the Geologic Assessment Table
- ATTACHMENT B - Soil Profile and Narrative of Soil Units
- ATTACHMENT C - Stratigraphic Column
- ATTACHMENT D - Narrative of Site Specific Geology
- Site Geologic Map(s)
- Table or list for the position of features' latitude/longitude (if mapped using GPS)

✓ Modification of a Previously Approved Plan (*TCEQ-0590*)
- ATTACHMENT A - Original Approval Letter.
- ATTACHMENT B - Narrative of Proposed Modification.
- ATTACHMENT C - Site Plan.

✓ Temporary Stormwater Section (*TCEQ-0602*), if necessary
- ATTACHMENT A - Spill Response Actions
- ATTACHMENT B - Potential Sources of Contamination
- ATTACHMENT C - Sequence of Major Activities
- ATTACHMENT D - Temporary Best Management Practices and Measures
- ATTACHMENT E - Request to Temporarily Seal a Feature, if sealing a feature
- ATTACHMENT F - Structural Practices
- ATTACHMENT G - Drainage Area Map
- ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations
- ATTACHMENT I - Inspection and Maintenance for BMPs
- ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices

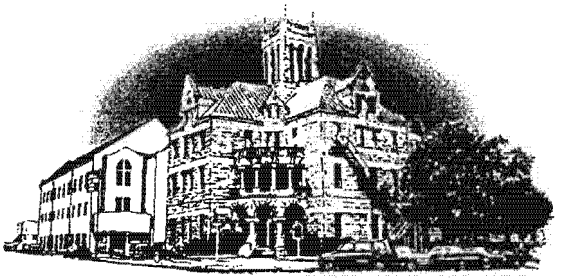
✓ Permanent Stormwater Section (*TCEQ-0600*), if necessary
- ATTACHMENT A - 20% or Less Impervious Cover Waiver, If project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site
- ATTACHMENT B - BMPs for Upgradient Stormwater
- ATTACHMENT C - BMPs for On-site Stormwater
- ATTACHMENT D - BMPs for Surface Streams
- ATTACHMENT E - Request to Seal Features, if sealing a feature
- ATTACHMENT F - Construction Plans
- ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan
- ATTACHMENT H - Pilot-Scale Field Testing Plan, if BMPs not based on *Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs*
- ATTACHMENT I -Measures for Minimizing Surface Stream Contamination

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

✓ Fee Application Form (*TCEQ-0574*)

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

✓ Core Data Form (*TCEQ-10400*)



Comal County

OFFICE OF COMAL COUNTY ENGINEER

December 13, 2007

Ms. Lynn M. Bumguardner
Water Section Work Leader
Texas Commission on Environmental Quality
14250 Judson Rd.
San Antonio, Texas 78233-4480

Re: Amending of Water Pollution Abatement Plan within Comal County, Texas

Dear Ms. Bumguardner:

On November 30, 2007 we received a response to our Water Pollution Abatement Plan modification application. We have the following responses to your comments:

1. TCEQ-0587 Attachment C: Modify to include the amounts (in acres) of existing impervious cover and impervious cover added with this modification for drainage area #1. Also include the proposed rainwater harvesting systems.

   Re: TCEQ-0587 Attachment C was modified to include the existing impervious cover for drainage area 1. (1.506 acres) Rainwater harvesting systems are no longer proposed for the WPAP modification. See revised TCEQ-0600 Attachment F for details.

2. TCEQ-0590 Attachment B: Provide an updated table which includes those impervious acreages to be treated by the rainwater harvesting system.

   Re: TCEQ-0590 Attachment B was modified. Rainwater harvesting systems are no longer proposed for the WPAP modification. See revised TCEQ-0600 Attachment F for details.

3. The disturbed area stated in TCEQ-0602 is .060 + 2.106 + 2.401 = 4.567 acres. It appears that the proposed impervious cover addition will have an area greater that the 4.567 acres identified as being disturbed. Please verify and update TCEQ-0602 if necessary.

   Re: TCEQ-0602 Attachment C was modified. There will be approximately 9.396 acres of disturbed soil.

4. TCEQ-0600 Attachment F: Please explain how the engineered vegetated filter strips will conform to all aspects of the RG-348 section 3.4.6.

Re: TCEQ-0600 Attachment F has been modified. Engineered filter strips will conform to all aspects of RG-348 section 3.4.6.

5. If rainwater harvesting systems are proposed, please provide design criteria, plan sheets, and calculations demonstrating TSS removal and irrigation area for each rainwater harvesting system proposed, which will demonstrate conformity to RG-348 section 3.4.3. Include a site plan demonstration the calculated irrigation areas. Please modify attachments B, D, F, G, and I in TCEQ-0600 to include discussion of the systems.

   Re: Rainwater harvesting systems are no longer proposed for the WPAP modification. See revised TCEQ-0600 Attachment F for details.

If you have any questions, or need additional information, please do not hesitate to call us.

Sincerely,

Robert Boyd, P.E.
Comal County Assistant Engineer

TCEQ-0587 Attachment C – Project Description

The Comal County Road Department is proposing to do the following:

1) Construct a new agricultural barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion. (See WPAP Site Plan)
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

1) Front End Loaders
2) Dump Trucks
3) Bobcats
4) Bulldozers

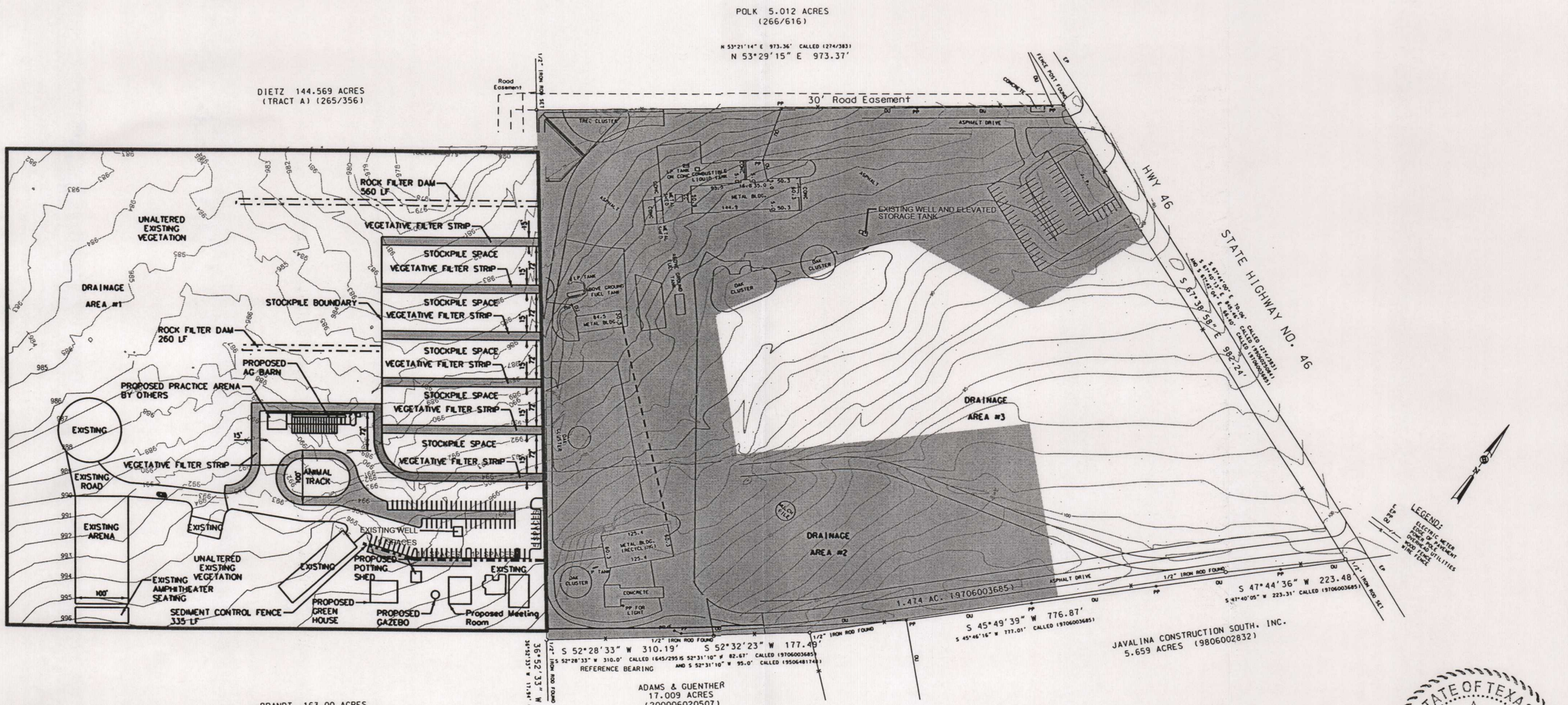
Items 4-7 will give the extension office more space to hold education classes to Comal County residents.

Items 8 and 9 will be used along with existing vegetation to treat storm water runoff from items 1-7.

Existing impervious cover for drainage area 1 is 1.516 acres. Items 1-9 will give Drainage Area 1 a total of 6.144 acres of impervious cover including existing improvements. With the proposed improvements to Drainage Area 1 the Comal County's 46.503 acres of impervious cover will be increased from 28.06% to 39.42%. Total impervious cover will be 18.33 acres respectively.

TCEQ-0590 Attachment B

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03
2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	20.25
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
			Mechanic Building Parking Lot	0.092	
6	2003	20.00	Pavement/Parking Lot	2.262	30.71
			Circular Animal Run	0.253	
			Extension Amphitheater	0.530	
			Road Department Stockpile	2.487	
			Extension Proposed Barn	0.060	
			Extension Oval Animal Run	0.174	
			Extension Green House	0.047	
			Extension Gazebo	0.004	
			Extension Meeting Room	0.047	
			Extension Potting Shed	0.009	
			Existing Meeting Room	0.051	
			Extension Existing House/Barn/Storage	0.220	
TOTAL		**46.503**	------	**18.33**	**39.43**



LEGEND

VEGETATIVE FILTER STRIP

TEMPORARY ROCK FILTER DAMS

TEMPORARY SEDIMENT CONTROL FENCE

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

NO FLOOD PLAIN IS FOUND ON SITE.

SLOPES DO NOT EXCEED 7%

STATE OF TEXAS
ROBERT H. BOYD
91702
LICENSED
PROFESSIONAL ENGINEER
12/13/07

Comal County Road Department 195 David Jonas Drive New Braunfels, TX 78132 Phone: (830) 608-2090 Fax: (830) 608-2009	COMAL COUNTY ENGINEER'S OFFICE WPAP SITE PLAN	Date: 09/07/2007 Drawn by: STS Checked by: RHB	REVISIONS No. / Date:	SCALE: 1"=200' Sheet 1 of 1

TCEQ-0602 Attachment C – Sequence of Major Activities

The sequence of major events for each of the projects is listed below:

Barn

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- construction of foundation and driveway
- erection of metal building
- finishing of interior of building
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 1.656 acres

County Extension Office

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- erection of metal buildings
- finishing of interior building
- construction of parking lot
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.756 acres

Road Department Stockpile

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- paving of stock pile area
- final grading, landscaping and seeding

Estimated area of disturbed earth = 4.984 acres

TCEQ-0600 Attachment F
Construction Plans

Improvements within Drainage Area #1:

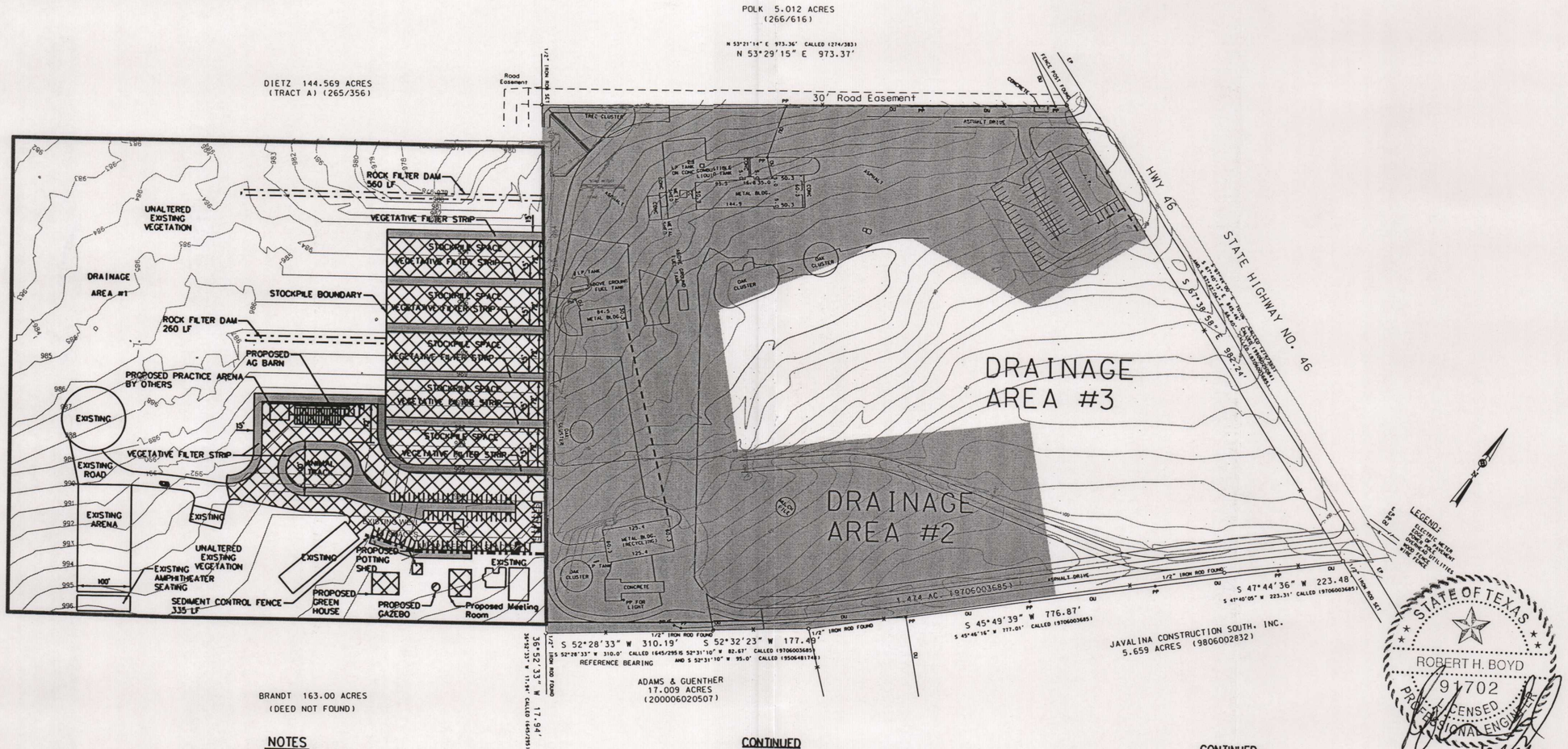
As stated in the Narrative of Proposed Modification, the proposed improvements in Drainage Area #1 will be treated by engineered filter strips according to the TCEQ's Technical Guidance on Best Management Practices over the Edwards Aquifer Recharge Zone. According to that same publication:

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 level; otherwise runoff will tend to form a channel in the low spot. A level spreader should not be used to distribute runoff to an engineered filter strip.
7) Filter strips should be landscaped after other portions of the project are completed.

In the WPAP that was approved on October 24, 2003, Drainage Area #1 was 20.000 acres, and had 0.925 acres of impervious cover. In the future, the area will have 6.142 acres of impervious cover. Runoff from proposed impervious cover will be treated using engineered filter strips. The engineered filter strips do meet the requirements as listed above in the following ways.

1) The filter strip will extend along the entire length of the contributing area and the slope will not exceed 20%. The minimum dimension of the filter strip (in the direction of flow) will be no less than 15 feet. The maximum width (in the direction of flow) of the contributing impervious area will not exceed 72 feet.
2) The minimum vegetated cover for engineered strips will be kept at or above 80%.
3) The area contributing runoff to the engineered filter strip will be relatively flat so that the runoff is distributed evenly to the vegetated area. Level spreaders will not be used.
4) The area to be used for the strip will be free of gullies and rills that can concentrate overland flow.

5) The top edge of the filter strip along the pavement will be constructed 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 will be level.
7) Filter strips will be landscaped after other portions of the project are completed.



STATE OF TEXAS
ROBERT H. BOYD
91702
LICENSED
PROFESSIONAL ENGINEER
12/13/07

NOTES

VEGETATIVE FILTER STRIPS WILL BE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL (TGM) SECTIONS 3.2.4 AND 3.4.6.

SEDIMENT CONTROL FENCE AND ROCK FILTER DAMS SHALL CONFORM TO THE (TGM) SECTIONS SECTIONS 1.4.3, 1.4.5, AND 1.4.6.

NO FLOOD PLAIN IS FOUND ON SITE.

PROPOSED SLOPES DO NOT EXCEED 7%

CONTINUED

1. THE FILTER STRIP WILL EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE WILL NOT EXCEED 20%. THE MINIMUM DIMENSION OF THE FILTER STRIP (IN THE DIRECTION OF FLOW) IS NO LESS THAN 15 FEET. THE MAXIMUM WIDTH (IN THE DIRECTION OF FLOW) OF THE CONTRIBUTING IMPERVIOUS AREA DOES NOT EXCEED 72 FEET.

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED FILTER 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.

CONTINUED

4. THE AREA TO BE USED FOR THE STRIP WILL 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 THE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. THE TOP EDGE OF THE FILTER STRIP WILL BE LEVEL, OTHERWISE RUNOFF WILL FORM A CHANNEL IN THE LOW SPOT.

7. THE TOP EDGE OF FILTER STRIP SHOULD BE LANDSCAPED AFTER OTHER PORTIONS OF THE PROJECT ARE COMPLETE.

LEGEND

- VEGETATIVE FILTER STRIP
- CONTRIBUTING IMPERVIOUS COVER
- TEMPORARY ROCK FILTER DAMS
- TEMPORARY SEDIMENT CONTROL FENCE

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
PROPOSED TOPO

Date: 09/07/2007
Drawn by: STS
Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

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

SHAWN
-ORIGINAL

RECEIVED
DEC 0 6 2007
COUNTY ENGINEER

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 3, 2007

Mr. Robert H. Boyd, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Road Department; Located at 195 David Jonas Drive; New Braunfels, Texas
TYPE OF PLAN: Request for the Modification of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer;
Edwards Aquifer Protection Program ID No. -0309.05; Investigation No. 599725; Regulated Entity No. RN102460730

Dear Mr. Boyd:

We are in the process of technically reviewing the WPAP modification you submitted on the above-referenced project. Before we can proceed with our review, the following comments relating to the application must be addressed.

1. TCEQ-0587 Attachment C: Modify to include the amounts (in acres) of existing impervious cover and impervious cover added with this modification for drainage area #1. Also include the proposed rainwater harvesting systems.

2. TCEQ-0590 Attachment B: Provide an updated table which includes those impervious acreages to be treated by the rainwater harvesting system.

3. The disturbed area stated in TCEQ-0602 is .060 + 2.106 + 2.401 = 4.567 acres. It appears that the proposed impervious cover addition will have an area greater than the 4.567 acres identified as being disturbed. Please verify, and update TCEQ-0602 if necessary.

4. TCEQ-0600 Attachment F: Please explain how the engineered vegetated filter strips will conform to all aspects of the RG-348 section 3.4.6.

5. If rainwater harvesting systems are proposed, please provide design criteria, plan sheets, and calculations demonstrating TSS removal and irrigation area for each rainwater harvesting system proposed, which will demonstrate conformity to RG-348 section 3.4.3.

RECEIVED
DEC 0 6 2007
COUNTY ENGINEER

Include a site plan demonstrating the calculated irrigation areas. Please modify attachments B, D, F, G, and I in TCEQ-0600 to include a discussion of the system(s).

We ask that you submit one original and three copies of the amended materials to supplement the WPAP modification to this office by no later than **14 days from the date of this letter** to avoid denial of the plan. If the response to this notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, a second notice will be sent to you requiring a response within 7 days from the notice date. If the response to the second notice is not recieved, is incomplete or inadequate, or provides new information that is incomplete or inadaquate, the application will be denied unless you provide written notification that the application is being withdrawn. Please note that the application fee will be forfeited if the plan is not withdrawn.

If you have any questions or require additional information, please contact Jason Jupe of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4023.

Sincerely,

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

LMB/JJ/eg

fc: Mr. Robert Boyd, P.E., Comal County Engineers Office, (830) 608-2009

PLACEMENT OF CONCERN ON COMMISSIONERS' COURT AGENDA

IN ORDER TO ENSURE THAT AN ITEM IS LISTED ON THE AGENDA AS REQUIRED BY THE OPEN MEETINGS ACT, THE FOLLOWING PROCEDURES SHALL BE FOLLOWED:

The person (petitioner) requesting placement of his/her concern on the agenda will complete this form and present it to the Commissioner having primary interest or whose Precinct may be involved/affected no later than noon (12:00p) of the fourth working day (usually Friday) prior to the date of the Commissioners' Court meeting when the item is to be considered. Items not acted upon/disapproved by a Commissioner may be submitted to the County Judge for further consideration. All related information which is used by Commissioners' Court shall be attached to form at the time of initial submission. Unsigned and/or undated requests cannot be considered.

RECEIVED
OCT 15 2007
COUNTY ENGINEER

From: (Petitioner)	To: (Commissioner/County Judge)
THOMAS H. HORNSETH, COUNTY ENGINEER	COUNTY JUDGE DANNY SCHEEL

PETITIONER WOULD LIKE THE FOLLOWING ITEM LISTED ON THE (CHECK APPROPRIATE BOX)

☐ **WORKSHOP AGENDA** (When consensus or direction is needed; and/or information to be presented) Note wording for agenda:

2nd Agenda

☑ **ACTION AGENDA** (When formal approval/authorization is needed.) Note wording for agenda:

Review Modified Water Pollution Abatement Plan for the Comal County Engineers Office and authorize the Assistant County Engineer to represent Comal County for the purpose of submitting Plan to the Texas Commission on Environmental Quality.

Date action is needed: 10-11-07

NOTE: **Contract, lease, and/or policy has been reviewed by the County Attorney and comments dated** _____ **are attached. Affected Department Heads were notified on** _____.

IF REQUESTED ACTION INVOLVES ANY NEED FOR IMMEDIATE OR FUTURE FUNDING, COMPLETE THE FOLLOWING:

☐ **Funds are already budgeted, but a line item transfer is necessary. A budget amendment request has been signed by the County Auditor and is attached. Note amount and specify department and line item.**

_____

_____

☐ **Funds are not budgeted. A budget amendment request has been signed by the County Auditor and is attached. Specify amount and any authority (order, policy, statute) that may apply regarding your request.**

_____

_____

Signature of Petitioner:	Date: 10-2-07
Signature of County Judge/Commissioner: Jan Kennedy	Date: 10-4-07

Commissioners' Court Hearing Date: 10-11-07
Agenda Item Number: _____

COMAL COUNTY
TAKINGS IMPACT ASSESSMENT CHECKLIST

Complete this form for any county action that involves the adoption of a regulation, policy, guideline, court resolution or order.

Project/Regulation Name: Review Modified Water Pollution Abatement Plan for the Comal County Engineers Office and authorize the Assistant County Engineer to represent Comal County for the purpose of submitting Plan to the Texas Commission on Environmental Quality.

County Department: Comal County Engineer's Office

Contact Person and Phone Number: Thomas H. Hornseth, P.E. 830-608-2090

Type of TIA Performed: SHORT TIA OR FULL TIA. Circle one after answering the questions in Sections II, III and IV below.

I. Stated Purpose

State briefly the purpose of the proposed action. This explanation generally will be no more than one paragraph.

As stated above

II. Potential Effect on Private Real Property.

1. **Does the county action require a physical invasion, occupation or dedication of private real property?**

   Yes_____ **No** ✔

2. **Does the county action limit or restrict a private real property right, even partially or temporarily?**

   Yes_____ **No** ✔

If you answered no to both, this TIA has been completed. Check "No Impact on Private Real Property" in Section VII. If you answered yes to either question, go to Section III.

III Exemptions

If you answer yes to any question, attach a written explanation to this checklist.

1. **Is the action taken to fulfill an obligation mandated by state or federal law?**

   Yes_____ No_____

2. **Is the action taken to prohibit or restrict a public or private nuisance?**

   Yes_____ No_____

3. **Is the action taken to prevent a grave and immediate threat to life or property?**

   Yes_____ No_____

4. **Is the action (1) taken in response to a real and substantial threat to public health and safety, (2) designed to significantly advance the health and safety purpose, and (3) one that does not impose a greater burden than necessary to achieve the health and safety purpose?**

   Yes_____ No_____

5. **Is the action taken to regulate construction in a floodplain?**

   Yes_____ No_____

6. **Is the action taken to regulate on-site sewage facilities?**

   Yes_____ No_____

7. **Is the action a formal exercise of the power of eminent domain?**

   Yes_____ No_____

8. **Is the action taken pursuant to the county's statutory authority to prevent waste or protect rights of owners of interest in groundwater?**

   Yes_____ No_____

9. **Is the action taken for the purpose of regulating water safety, hunting, fishing, or control of nonindigenous or exotic aquatic resources?**

   Yes_____ No_____

10. Is the action taken an appraisal of property for purposes of ad valorem taxation?

Yes_____ No._____

If you answered yes to any question in Section III, this TIA has been completed. Check "Proposed Action is Exempt" in Section VII below. If you answered no to all questions in Section III, STOP. Consult with the Criminal District Attorney's Office and be prepared to provide or explain how to obtain the information and analysis requested below.

IV. Analysis of Purpose, Burdens and Benefits

1. Referring to the purpose of the county action in Section I above, state how the action achieves or advances its purpose.

2. Describe the benefits to society resulting from the county action.

3. Describe the burdens that may be imposed on private real property by the county action.

In assessing the proposed action for its potential to burden private real property, Consider the following:

1. Whether the proposed action will result indirectly or directly in a permanent or temporary physical occupation of private real property;

2. Whether the proposed action requires a property owner to dedicate property or grant an easement;

3. Whether the proposed action deprives the owner of all economically viable use of his property;

4. Whether the proposed action denies the owner the right to possess his real property, enjoy it, exclude others from it or sell it; and

5. Whether the proposed action will serve to reduce the market value of the owner's property.

V. Alternatives

1. Describe alternative actions that could accomplish the same purpose as the proposed action.

2. Would these alternatives impose a lesser burden on the property which is the subject of the proposed action?

3. State whether the alternative actions would constitute a taking.

VI. Potential Impact on Value

1. Will the county action reduce the market value of any parcel of private real property by 25% or more?

   Yes_____ No _____

   Please explain how you reached this conclusion, including whether a real estate appraiser or other expert consultant was consulted or should be consulted.

If the answer to Question 1 is "Yes", the proposed action could constitute a taking of the affected property. The county should estimate the amount that the property value will be reduced, and consider that prior to taking the proposed action.

VII. Conclusion

✔ No Impact on Private Real Property

_____ Proposed Action is Exempt

_____ Proposed Action Fully Assessed for Potential Impact on Private Property

Prepared by: _____ Date: 10-2-07

Reviewed by: _____ Date: 10-5-07

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

I Danny Scheel,
Print Name

County Judge
Title - Owner/President/Other

of Comal County
Corporation/Partnership/Entity Name

have authorized Robert Boyd, P.E.
Print Name of Agent/Engineer

of the Comal County Engineers Office
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.

Jay P Millikin

Applicant's Signature

Jay Millikin
Acting County Judge

10-11-07
Date

THE STATE OF Texas §

County of Comal §

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

GIVEN under my hand and seal of office on this 11th day of October, 2007

Deborah Braman

NOTARY PUBLIC

DEBORAH BRAMAN
Notary Public, State of Texas
My Commission Expires 04-28-2009

Deborah Braman

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-28-09



Comal County

OFFICE OF COMAL COUNTY ENGINEER

Modification of Previously Approved Water Pollution Abatement Plan for the Comal County Road Department's 46.503 Acres October 2, 2007

Comal County Engineer's Office, 195 David Jonas Dr. New Braunfels TX. 78130

Modification of a Previously Approved Plan Checklist

✓ General Information Form (*TCEQ-0587*)
- ATTACHMENT A - Road Map
- ATTACHMENT B - USGS / Edwards Recharge Zone Map
- ATTACHMENT C - Project Description

✓ Geologic Assessment Form (*TCEQ-0585*)
- ATTACHMENT A - Geologic Assessment Table, *TCEQ-0585-Table*
- Comments to the Geologic Assessment Table
- ATTACHMENT B - Soil Profile and Narrative of Soil Units
- ATTACHMENT C - Stratigraphic Column
- ATTACHMENT D - Narrative of Site Specific Geology
- Site Geologic Map(s)
- Table or list for the position of features' latitude/longitude (if mapped using GPS)

✓ Modification of a Previously Approved Plan (*TCEQ-0590*)
- ATTACHMENT A - Original Approval Letter.
- ATTACHMENT B - Narrative of Proposed Modification.
- ATTACHMENT C - Site Plan.

✓ Temporary Stormwater Section (*TCEQ-0602*), if necessary
- ATTACHMENT A - Spill Response Actions
- ATTACHMENT B - Potential Sources of Contamination
- ATTACHMENT C - Sequence of Major Activities
- ATTACHMENT D - Temporary Best Management Practices and Measures
- ATTACHMENT E - Request to Temporarily Seal a Feature, if sealing a feature
- ATTACHMENT F - Structural Practices
- ATTACHMENT G - Drainage Area Map
- ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations
- ATTACHMENT I - Inspection and Maintenance for BMPs
- ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices

✓ Permanent Stormwater Section (*TCEQ-0600*), if necessary
- ATTACHMENT A - 20% or Less Impervious Cover Waiver, if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site
- ATTACHMENT B - BMPs for Upgradient Stormwater
- ATTACHMENT C - BMPs for On-site Stormwater
- ATTACHMENT D - BMPs for Surface Streams
- ATTACHMENT E - Request to Seal Features, if sealing a feature
- ATTACHMENT F - Construction Plans
- ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan
- ATTACHMENT H - Pilot-Scale Field Testing Plan, if BMPs not based on *Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs*
- ATTACHMENT I -Measures for Minimizing Surface Stream Contamination

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

✓ Fee Application Form (*TCEQ-0574*)

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

✓ Core Data Form (*TCEQ-10400*)

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: Comal County Engineers Office
COUNTY: Comal STREAM BASIN: Guadalupe

EDWARDS AQUIFER: ✓ RECHARGE ZONE
__ TRANSITION ZONE

PLAN TYPE: ✓ WPAP __ AST __ EXCEPTION
__ SCS __ UST ✓ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Robert H. Boyd, P.E.
Entity: Comal County
Mailing Address: 195 David Jonas Drive
City, State: New Braunfels, Texas Zip: 78132
Telephone: (830) 608-2090 FAX: (830) 608-2009

Agent/Representative (If any):

Contact Person: _____
Entity: _____
Mailing Address: _____
City, State: _____ Zip: _____
Telephone: _____ FAX: _____

2. __ This project is inside the city limits of _____.
✓ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of New Braunfels, Texas.
__ 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.

From New Braunfels, take US46 West past FM 2722 approximately 1 mile to the Comal County Road Department on the South side of the road.

4. ✓ **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. ✓ **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:

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

6. ✓ 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. ✓ **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)
— Other: _____

PROHIBITED ACTIVITIES

9. ✓ 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. — 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:

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

13. ✓ 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. ✓ 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:

Robert H. Boyd, P.E.

Print Name of Customer/Agent

Signature of Customer/Agent

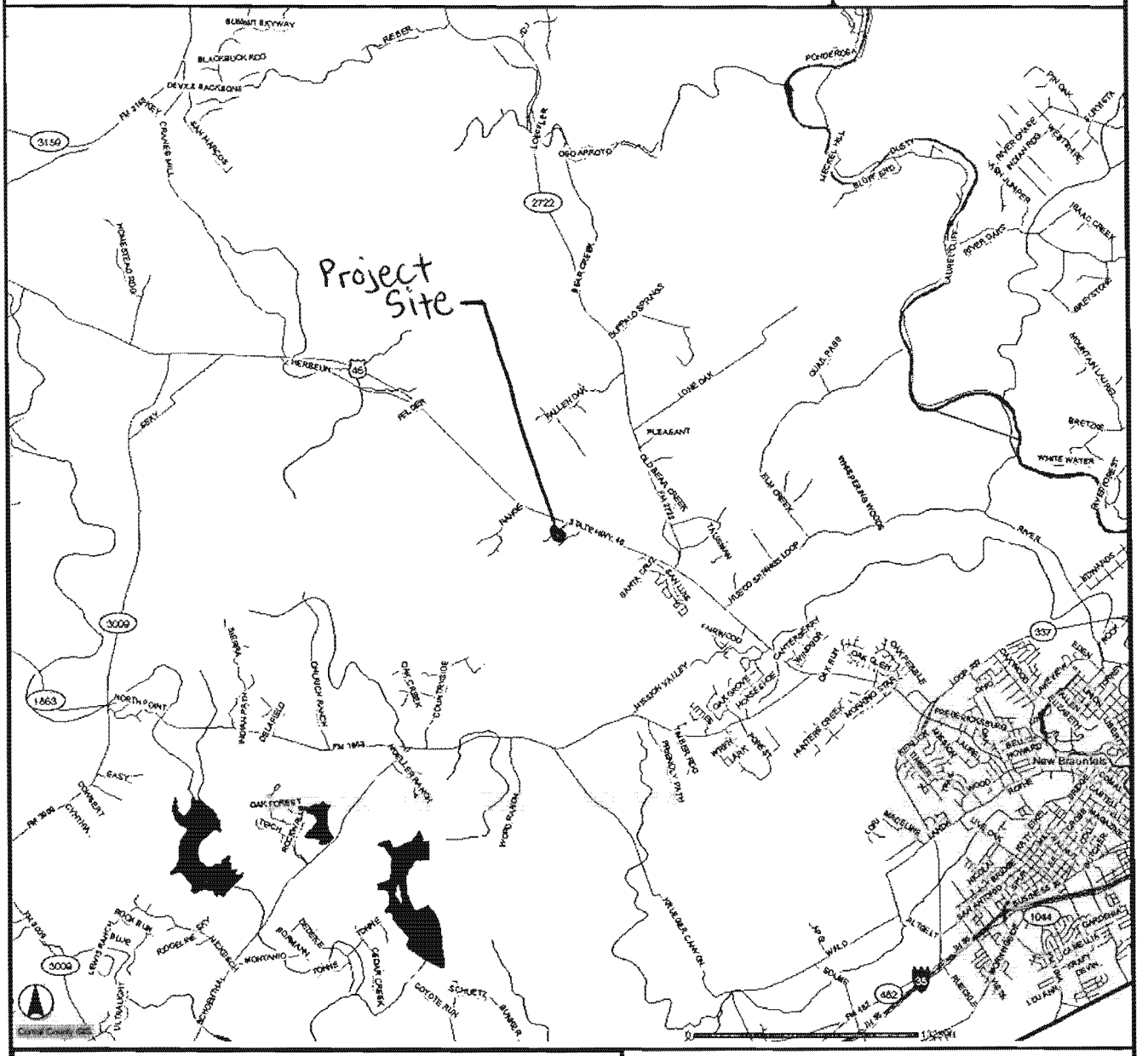
10/1/07

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.

Attachment A - Road Map



Copyright 2004
Comal County GIS
195 David Jonas
New Braunfels, TX 78130



Comal County

DISCLAIMER : This is a product of the Comal County GIS Department. The data depicted here have been developed with extensive cooperation from other county departments, as well as other federal, state and local governments agencies.Comal County expressly disclaims responsibility for damages or liability that may arise from the use of this map.

PROPRIETARY INFORMATION: Any resale of this information is prohibited, except in accordance with a licensing agreement.

Legend

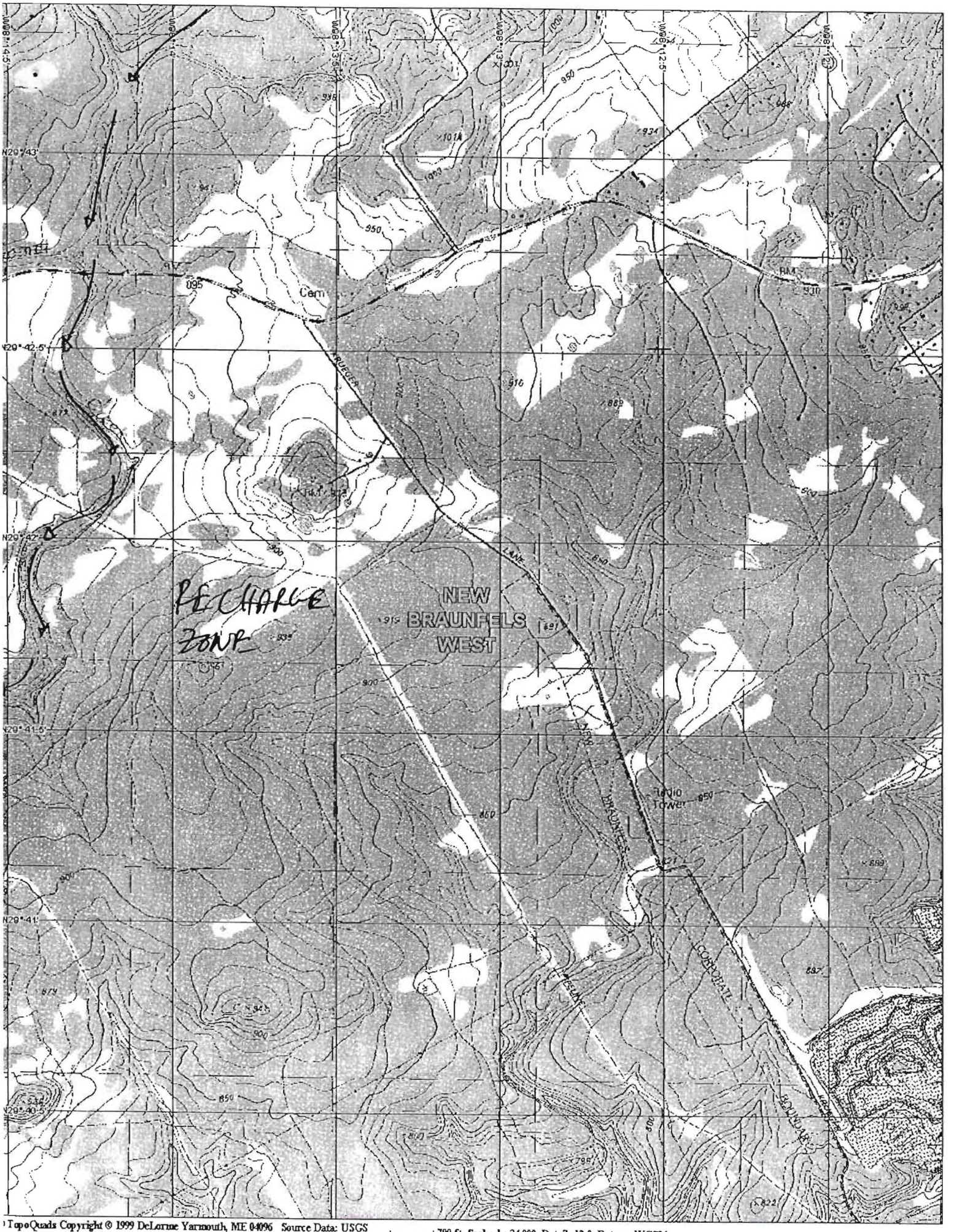
- County Boundary
- Private Schools
- Public Schools
- Police Stations
- Fire Stations
- County Assets
- Daycares
- Streets
- Buildings
- 2 Ft. Contours
- Streams
- Lakes
- Council Districts
- Zip Codes



D Topo Quads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

(1)

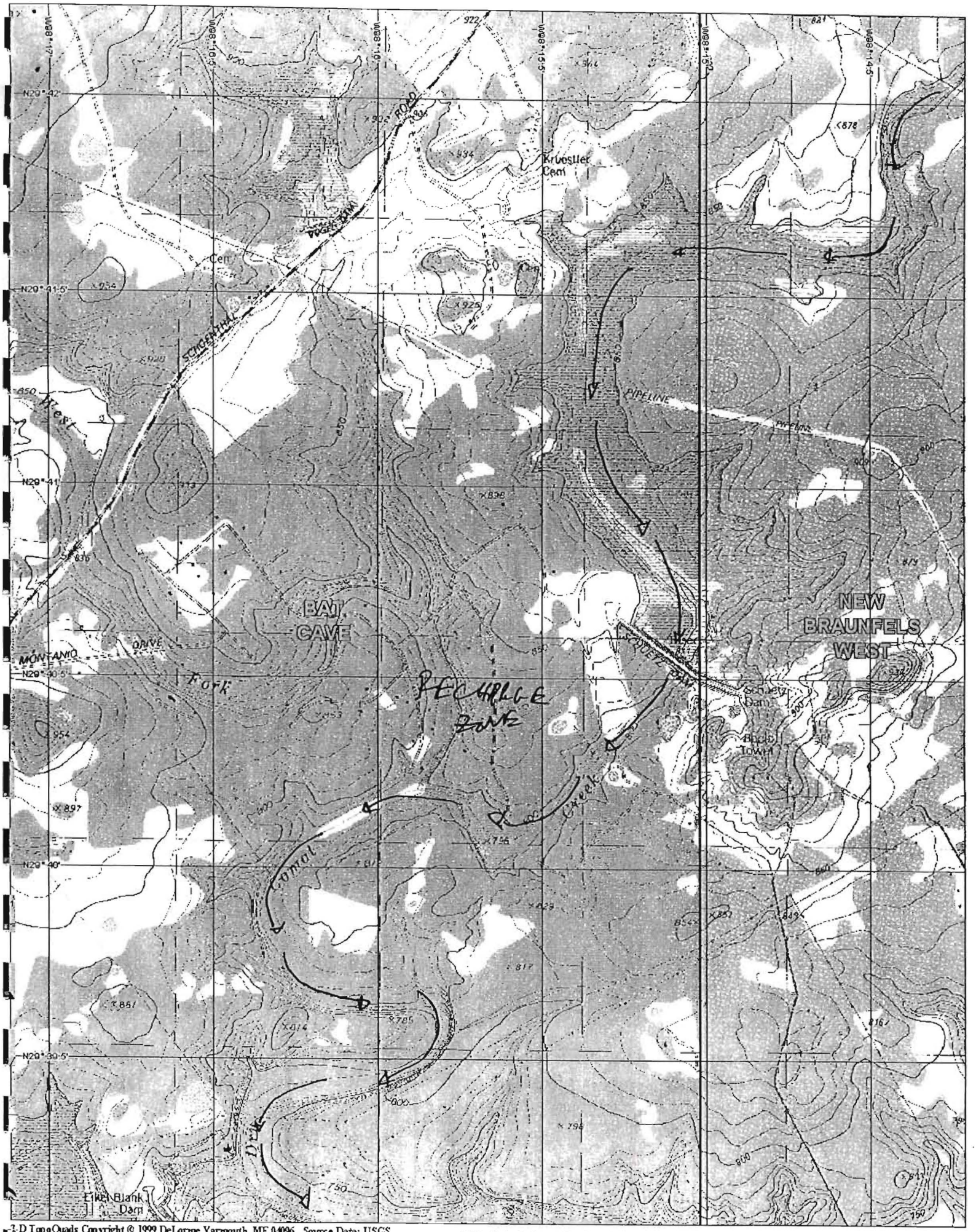


TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

(2)

ATTACHMENT B

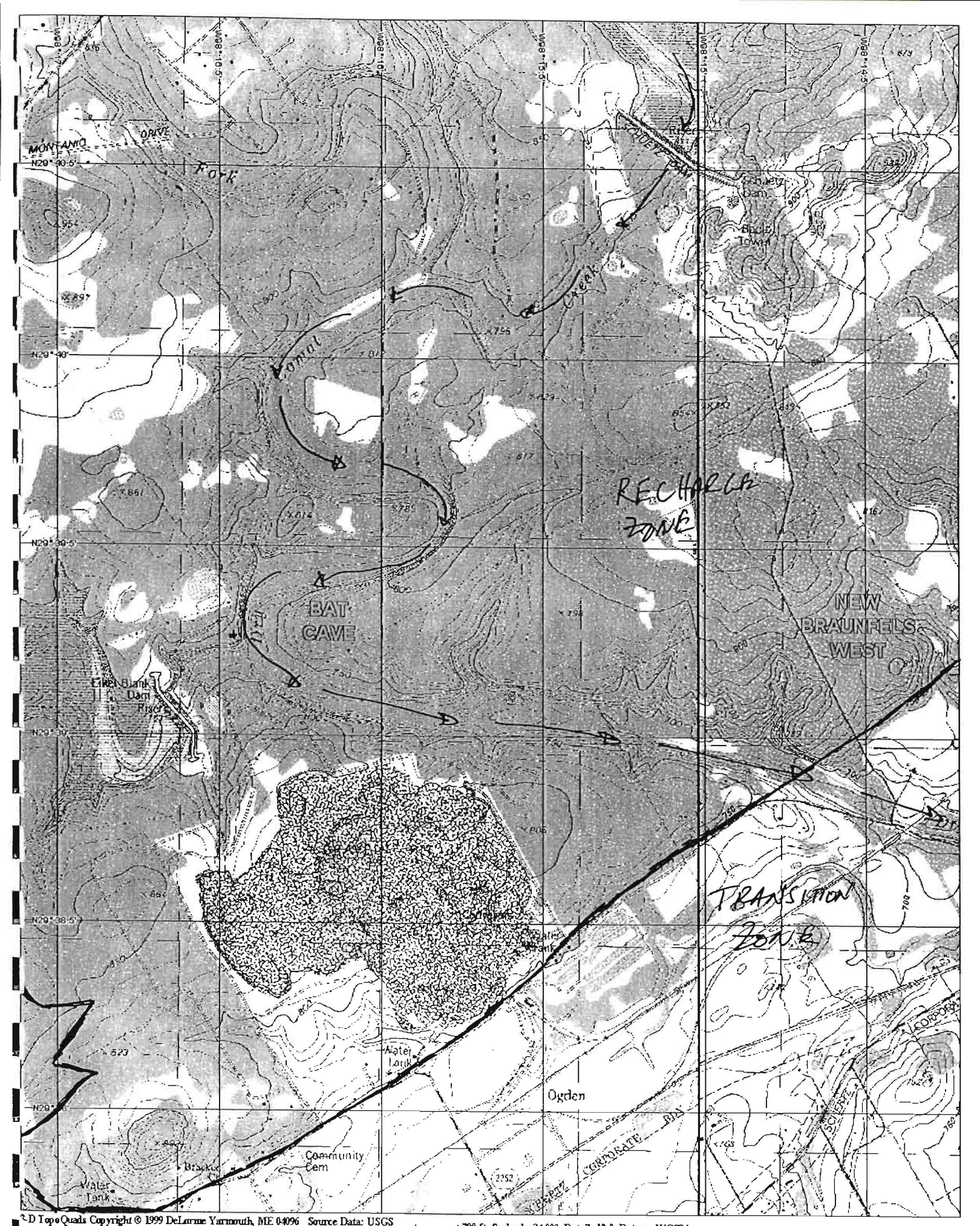


3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

Att R

(3)



2-D Topo Quads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

Att B

Attachment C – Project Description

The Comal County Road Department is proposing to do the following:

1) Construct a new agricultural barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion. (See WPAP Site Plan)
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

1) Front End Loaders
2) Dump Trucks
3) Bobcats
4) Bulldozers

Items 4-7 will give the extension office more space to hold education classes to Comal County residents.

Items 8 and 9 will be used along with existing vegetation to treat storm water runoff from items 1-7.

Geologic Assessment

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

REGULATED ENTITY NAME: COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
61.33 Acres - Comal County (195 David Jonas Drive & Hwy. 46)
46.513

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

LOCATION OF PROJECT: XXRecharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

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

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

	Soil Units, Infiltration Characteristics & Thickness		
	Soil Name	Group*	Thickness (feet)
N/2	(RUD) Rumple-Comfort Assoc.	C/D	2.0 +
S/2	(RUD) Rumple-Comfort Assoc.	C/D	0.5

*** Soil Group Definitions (Abbreviated)**

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

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

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

5. XX 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" = 4000'
Site Geologic Map Scale 1" = 538'
Site Soils Map Scale (if more than 1 soil type) 1" = 538'

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

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

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

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

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

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

XX There are 1 (#) 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.
XX 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.

ADMINISTRATIVE INFORMATION

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

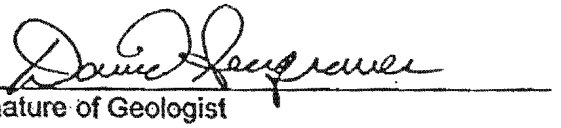
Date(s) Geologic Assessment was performed: May 12 - 20, 2003
Date(s)

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.

David Seagraves
Print Name of Geologist

(210) 377-1603
Telephone

Fax


Signature of Geologist

May 20, 2003
Date

Representing: "Independent Consultant"
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer Protection Program, please contact us at 512/939-2929 (Austin) or 210/403-4024 (San Antonio).

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.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SITE SPECIFIC GEOLOGY

The on-site geological unit is the Person Formation of the Edwards Group as identified by field investigation and referenced by the Hydrogeologic Subdivisions Map of the U.S.G.S. Water-Resources Investigations Report 94-4117, Comal County, Texas and the Geologic Map of the New Braunfels, Texas 30X60 Minute Quadrangle (Scale 1: 100,000) Bureau of Economic Geology, 2000.

No exposures of the Person Fm. were noted on the northern portion (15 acres) of the site. This is due to a thick soil cover. The only feature (S-7), a closed depression found within this portion of the site is possibly the result of man-made activities.

The southern portion (20 acres) of the site was formerly utilized as a horse stable with pens and contains a residence. There is less soil cover (possibly due to over grazing) and greater amounts of limestone floatrock on the southern portion resulting in exposures of the Person Fm.. These exposures are typically discontinuous, linear (10-20 feet long and greater) clay-filled fractured beds along slight breaks in slope and parallel to contour. Overall, the trend of the fractures are random, although the bearings of some long axes range from N70E to N85E. Offset fractures are approximately perpendicular to the long axes. These features appear to be the result of weathering. One exception is found in feature (S-5), which appears to be solution fracturing and is devoid of clay infilling and vegetation. Feature (S-5) is located within the centerline of a secondary drainage way and could be limited to the exposed bed without extending downward into the underlying limestone bed. Another area of note which was not listed on the Geologic Assessment Table is a larger area (100 x 150') of clay filled fractured rock which did not fit the similar pattern typical of this site. I recommend that this area be monitored if any future development is planned over this area. There were a few areas were the top of beds were exposed with sealed fractures and some vugs were also noted which were the result of weathering. Essentially, the site consisted of fine grained, medium beds of limestone. Overall slope is 1 to 3 percent towards the northwest. No other major karstic or structural features were noted on the site. Adjacent to the site, there are three large sink hole features approximately 1,000 feet to the east, northeast and north. The site is between two major fault complexes, the first one is the Hueco Springs Fault and is approximately 2,500 feet to the southeast, and the second one is the Bat Cave Fault and is approximately 5,000 feet to the northwest.

Overall, surface conditions within the northern portion of the site appear to have the ability to impede fluid movement into the subsurface. Whereas, surface conditions within the southern portion appear to have the ability to impede fluid movement into the subsurface at a lesser extent.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SOIL UNIT

The on-site soil consists of a reddish brown very cherty clay loam. The northern portion of the complex extension (15 acres) has a thickness of at least two feet of this soil type with greater amounts of chert gravel. Previous use of the northern portion was as crop land and has a good grass cover and cleared of all trees. Whereas, the southern portion (20 acres) consists of a thinner soil profile, on average, 6 inches with limestone floatrock and less chert fragments. The soil has also infilled the interstices of exposed fractured limestone beds. Grass cover within the southern portion is sparse to moderate with a moderate tree cover consisting predominantly of oaks.
The on-site soil is classified as the (RUD) Rumple-Comfort association, undulating as referenced by the S.C.S. Soil Survey of Comal County, Texas (1984).
The S.C.S. Hydrologic Soil Groups - Technical Release No. 55, Appendix A has the Rumple soil listed as a Soil Group "C" soil, and is defined as soils having a slow infiltration rate when thoroughly wetted. The Comfort soil is listed as a Soil Group "D" soil, and is defined as soils having a very slow infiltration rate when thoroughly wetted.
The northern portion of the site also contains a greater percentage of the (TaB) Tarpley clay within the Rumple-Comfort association. The Tarpley clay soil type was not listed in the Technical Release No. 55, but should be assumed to be in Soil Group "D".
Overall, both soil types appear to have the ability to impede fluid movement into the subsurface.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

Site-Specific Stratigraphic Column

EDWARDS GROUP

Person Formation:	100 to 150 feet thick (approximate), medium to massive beds of mudstone to grainstone limestone, with chert fragments and some fossils. Upper part eroded.
Kainer Formation:	350 feet thick (approximate), medium to massive bedded limestones

- -

Glen Rose Formation: (Upper Member)	350 to 500 feet thick (approximate) thin to medium bedded limestone and marl.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

COMMENTS

S-1 (MB) Water well, active.

S-2 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

S-3 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

S-4 (MB) Excavation, slight excavation into the slope to provide a level area for horse training. The excavation resulted in a three sided face with one corner being approximately 3 feet below natural grade. Also, the deepest portion has become a closed depression. Fine material covers the entire base which impedes fluid movement downward. A few hairline fractures were noted along the face of the excavation.

S-5 (SF) fractured rock within the centerline of a minor drainageway, devoid of clay infilling and vegetation. Fractures appear to be within an individual bed and it was difficult to ascertain if the fractures continued downward into the underlying bed.

S-6 (CD) possible remnant of tree clearing. Several inches of ~~soil~~ and leaves within the base over bedrock.

S-7 (CD) possible remnant of terracing (former crop land) and/or adjacent development, built up parking lot for the Comal County Road Department Complex. The long axis of the closed depression is parallel to existing contours.

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION

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			MB	30	Kep									5	35	✓		✓		HILLSIDE
S-2			MB	30	Kep									5	35	✓		✓		HILLSIDE
S-3			MB	30	Kep									5	35	✓		✓		HILLSIDE
S-4			MB	30	Kep									9	39	✓			✓	HILLSIDE
S-5			SF	20	Kep	15	10	1	RANDOM		1	0.33	C	19	39	✓			✓	DRAINAGE
S-6			CD	5	Kep	11	5.5	1					O	10	15	✓		✓		HILLSIDE
S-7			CD	5	Kep	200	50	1.25					F	5	10	✓			✓	HILLSIDE

* DATUM:

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

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.

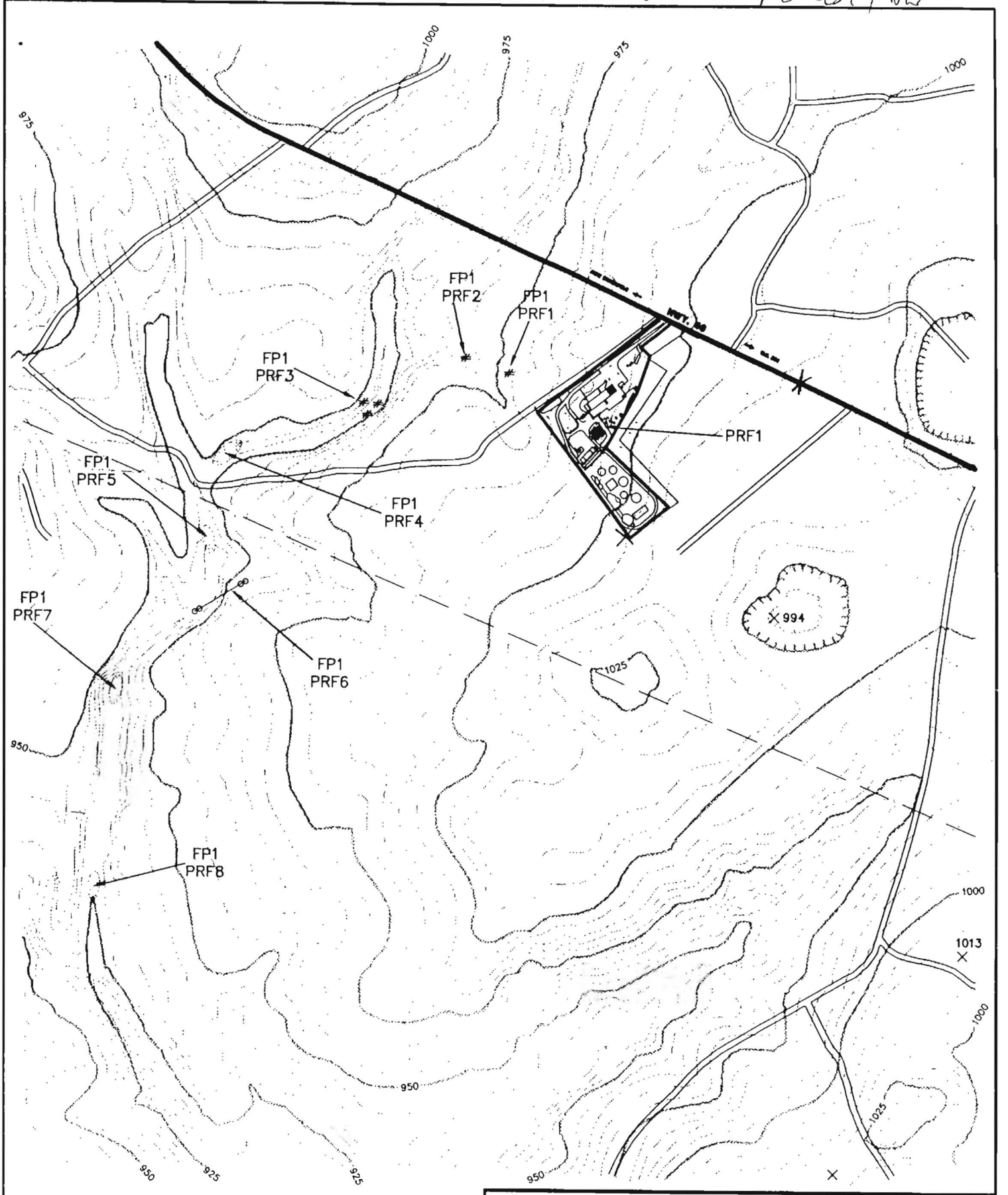
My signature certifies that I am qualified as a geologist as defined by 30 TAC 213

David Hargraves

Date MAY 20, 2003

Sheet 1 of 1

62 - SATTLER SW NB WEST / NW



COMAL COUNTY ROAD DEPARTMENT

SITE PLAN

ALAMO CONSULTING ENGINEERING & SURVEYING, INC.

SCALE: 1" = 800'
DRAWN BY RW
TRACED BY
CHECKED BY PAS
JOB NO. 070900-00-00
SHEET OF
FILE NO.
PAGE OF

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: Comal County Engineers Office
2. Original Regulated Entity Name: Comal County Engineers Office
3. ✓ **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)

__ 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.

5. ✓ **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:	WPAP ✓ SCS __ UST __ AST __
Size:	46.503 acres
Population:	
Wastewater Volume:	gal/day
Sewer Pipe:	linear ft
Hydrocarbon Storage:	# of tanks
Impervious Cover:	28.06 %

7. Proposed Modification:

Type:	WPAP ✓ SCS __ UST __ AST __
Size:	46.503 acres
Population:	
Wastewater Volume:	gal/day
Sewer Pipe:	linear ft
Hydrocarbon Storage:	# of tanks
Impervious Cover:	38.52 %

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. ✓ 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/3/07
Date

DOCK 2003004E00

ATTACHMENT A

RECEIVED

OCT 27 2003

COUNTY ENGINEER

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2003

Mr. Thomas H. Hornseth, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas, 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Engineers Office; Located at 195 David Jonas Drive; 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 Protection Program File No. -309.01, Investigation No. 148617

Dear Mr. Hornseth:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project you submitted to the San Antonio Regional Office on behalf of Comal County on June 4, 2003. Final review of the WPAP submittal was completed after additional material was received on August 22, 2003, and September 12, 2003. 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, modification to a plan, or exception. 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% of the construction has commenced on the project or an extension of time has been requested.*

RECEIVED
OCT 2 7 2003
COUNTY ENGINEER

BACKGROUND

The subject site consists of six tracts totaling 46.503 acres summarized in the table below, and illustrated on Exhibit "A" (enclosed).

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1 2	1978 1986 Total	6.531 3.050 9.581	Pavement	4.33[1]	77.03
			Office & shop Buildings		
			Storage Yards	3.05[2]	
3	1995	1.383	Storage Yards	1.383[3]	100.0
4	1997	1.474	Access road to county recycling operation	0.581	39.42
5	1999	14.065	Approximately 1.5 acres of mulching operation	0	0.00
5A			Proposed JP & Road	2.189	15.56
6	2003	20.00	Road, barn, shed, house	0.925	4.63
6A			Extension Offices	0.591	-----
Tracts 1 - 5		26.503	-----	11.533	43.51
Tracts 6 & 6A		20.00	-----	1.516	7.58
Total		46.503	-----	13.049	28.06

1 Includes 0.728 acres of impervious cover approved by TNRCC letter dated 10/6/93, and treated by 1.19 acres of vegetated filters. Also includes 0.608 acres of recently paved impervious cover located north of the office and west of the main entrance driveway.

2 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved, and existed prior to regulation of impervious cover on 3/21/90.

3 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved.

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

Doc# 200306042288
RECEIVED
OCT 2 7 2003
COUNTY ENGINEER

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 46.503 acres and will have the following parameters:

- The proposed new construction will include buildings for the Comal County Justice of the Peace, with office space for a Constable, Adult Probation and Addressing/GIS staff; the Comal County Extension Service; and an access road.
- The total impervious cover for the 46.503 acre project site is summarized in the table above.
- According to a letter dated, May 28, 2003, signed by Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the 46.503 acre site (see enclosed WPAP Site Plan) after construction, the impervious cover (0.925 acres) in Drainage Area #1 (20 acres) will use existing downgradient vegetation, a sedimentation/filtration basin will be provided for Drainage Areas #2 (16.964 acres) and #3 (9.539 acres). The individual treatment components will consist of:

Drainage Area #2: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.75 inch of stormwater run-off from 16.964 acres with 100% impervious cover, providing a total capture volume of 55,421 cubic feet. The filtration system will consist of:

1. 4,160 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

Drainage Area #3: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first one inch of stormwater run-off from 9.539 with 100% impervious cover, providing a total capture volume of 41,552 cubic feet. The filtration system will consist of:

1. 3,120 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

GEOLOGY

According to the geologic assessment included with the submittal, there are seven geologic or manmade features located on the 46.503 acre project site. All features were assessed as having sensitivities of less than

40. The San Antonio Regional Office site inspection of August 4, 2003, revealed that the site is as described by the geologic assessment and no additional geologic or manmade features were observed.

SPECIAL CONDITIONS

I. Based on the August 4, 2003 on-site inspection of the project site, Commission records indicate that construction of two paved parking areas were actually initiated on or before August 4, 2003, and that other site development and construction activities have already been conducted. It was determined that approximately 2,450 square feet of pavement not included in previous WPAPs was constructed without the prior approval of the water pollution abatement plan for the project, as required by Commission rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the WPAP modification, as provided by this letter, shall not absolve the applicant of any prior violations of Commission rules related to this project, and shall not necessarily preclude the Commission from pursuing appropriate enforcement actions and administrative penalties associated with such violations, as provided in 30 TAC §213.10 of Commission rules.

II. The sedimentation/filtration basins are designed in accordance with the 1999 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices." The basins will incorporate sedimentation and filtration as described above.

III. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

IV. The TCEQ does not agree with Comal County's assertion that because Watershed #1 has less than 20% impervious cover and the extension service functions as an educational facility, that it is exempt from the requirements of a WPAP. Watershed #1 is part of the 46.503 acre site and the total impervious cover of 28.06%.

The existing downgradient vegetation within Watershed #1 will be accepted as treatment of stormwater runoff from the associated impervious cover. Prior to any construction within Watershed #1 not approved by this letter, a modification to the WPAP must be submitted with appropriate application fees.

V. Because stormwater treatment was proposed within Watershed #3, prior to any construction not approved by this letter within Watershed #3, appropriate construction plans must be submitted to the TCEQ to determine that no other sources of pollution are associated with the project.

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. 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 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. One well exists on 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.

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 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 John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/jkm/eg

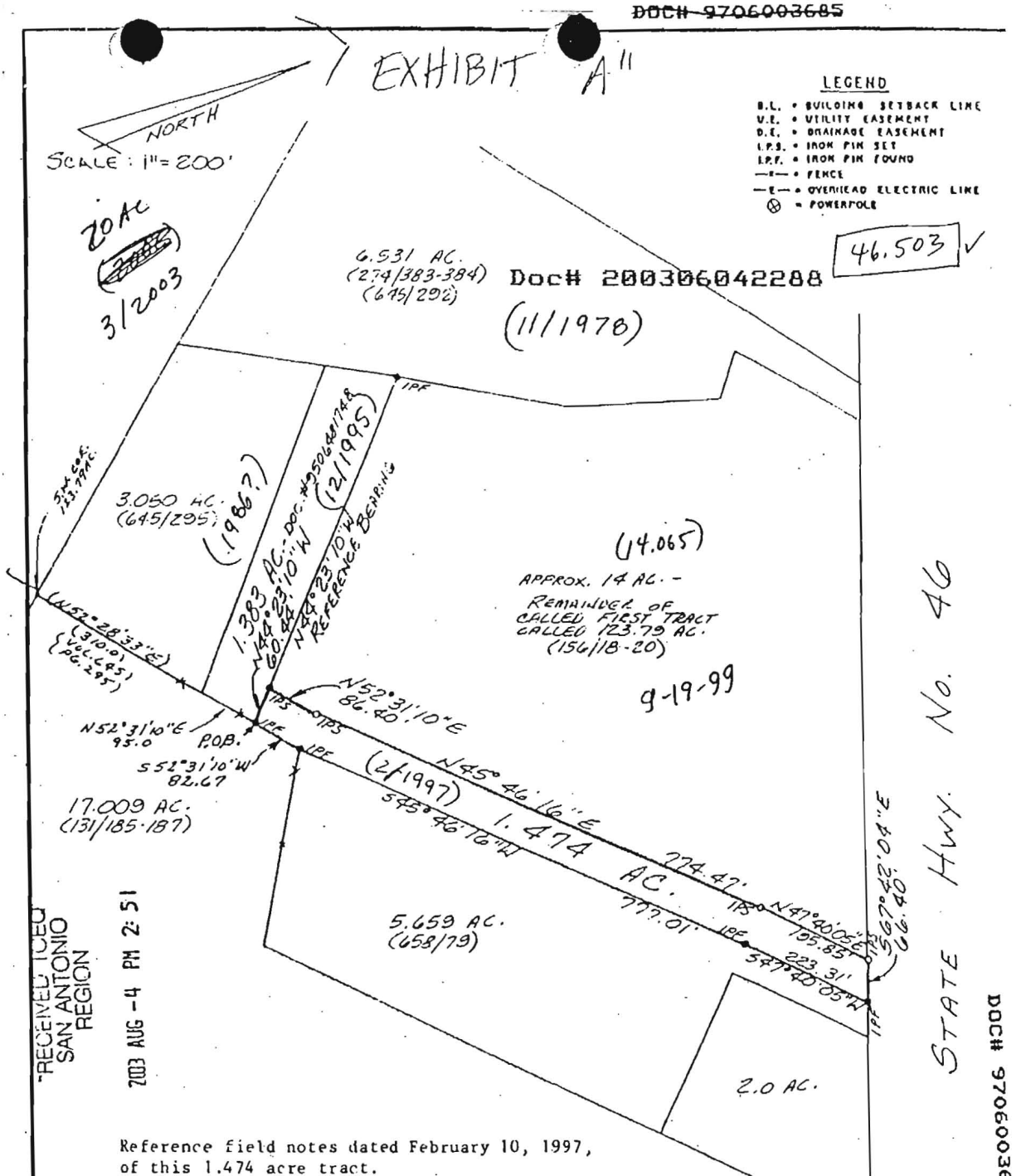
Enclosure:
1. Exhibit "A" (Site acreage map, Document# 9706003685)
2. WPAP Site Plan
3. Deed Recordation Affidavit, Form TCEQ-0625
4. Change in Responsibility for Maintenance or Permanent BMPs-Form TCEQ-10263

cc w/enclosures 1& 2:

Mr. John Bohuslav, TXDOT San Antonio District
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

~~DOC# 9706003685~~

EXHIBIT "A"



RECEIVED ICED
SAN ANTONIO
REGION
2003 AUG -4 PM 2:51

Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

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
COMAL COUNTY, TEXAS

Doc# 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAS
REGISTERED
RICHARD A. GOODWIN
4069
PROFESSIONAL
LAND SURVEYOR

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-8555

STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February, 1997 A. D.

R A Goodwin

97023

Attachment B

Narrative of Proposed Modification to Drainage Area 1

The Comal County Road Department is proposing to do the following:

1) Construct a new barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion.
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

The equipment that will be used in the proposed Barn and Arena will include:

- Washing Stations
- Animal Clippers (ex. Sheep Shears)
- Automatic animal watering system.
- Intercom System with Loud Speaker (Arena Only)
- Rain Harvesting System (Barn Only)

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

- Hydraulic Dump Trucks
- Front End Loaders
- Bobcats

The materials that will be stored in the proposed stock pile will include

- Base Material
- Gravel
- Asphalt
- Paving Materials

Item 4 will give the extension office more space to hold education classes to Comal County residents.

- Septic System and Drain Field

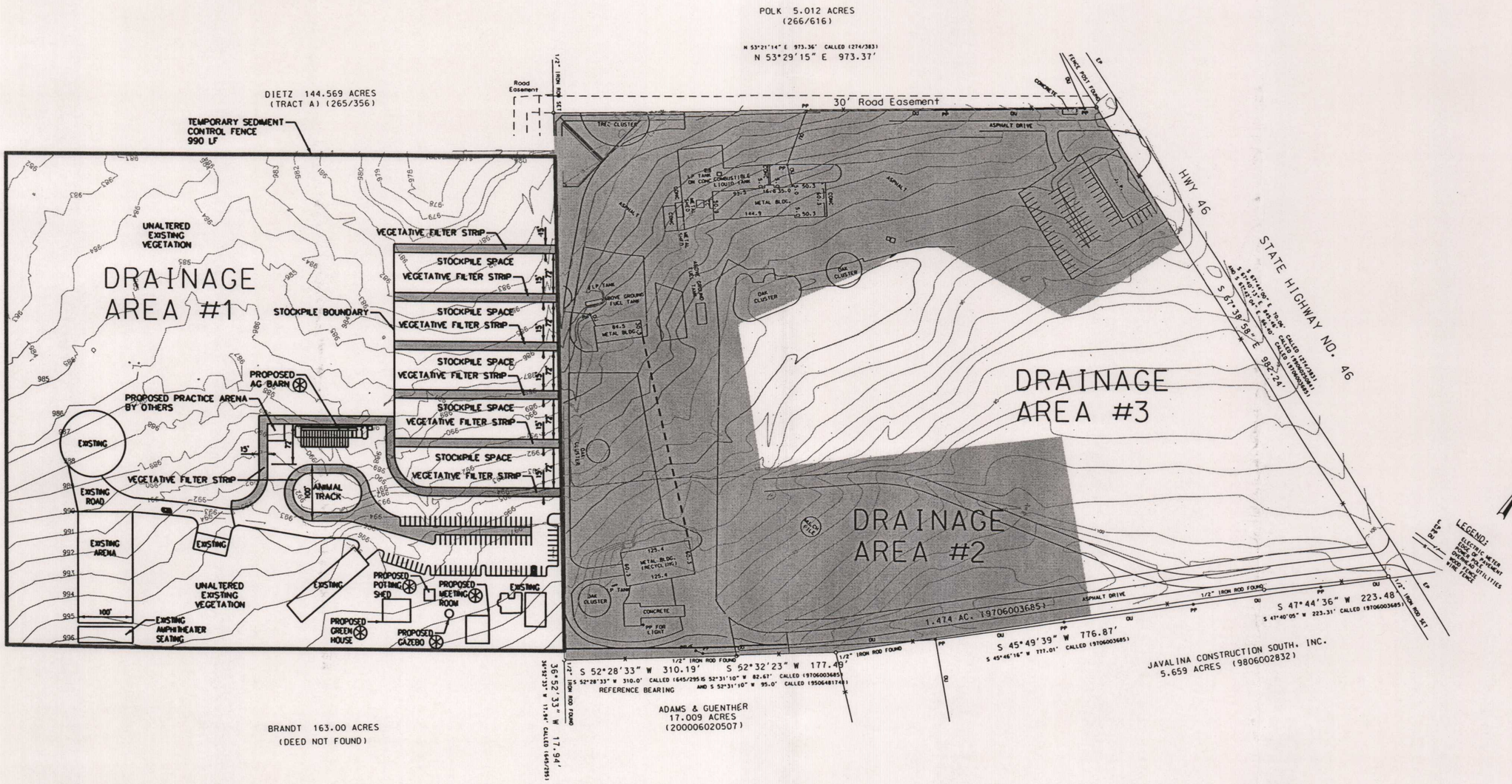
The modification to the approved WPAP will include engineered filter strips as well as existing vegetation to treat storm water runoff from items 1-9.

The subject site consists of six (6) tract totaling 46.503 acres summarized on the attached table.

Proposed Modifications to Previously Approved Water Pollution Abatement Plan

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03%
2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00%
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42%
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	19.59%
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
6	2003	20.00	Pavement/Parking Lot	2.262	29.06%
			Road Department Stockpile	2.401	
			Proposed Extension Proposed Barn **	0.000	
			Proposed Extension Oval Animal Run	0.174	
			Proposed Extension Green House **	0.000	
			Proposed Extension Gazebo **	0.000	
			Proposed Extension Meeting Room **	0.000	
			Proposed Extension Potting Shed **	0.000	
			Existing Meeting Room	0.051	
			Extension Existing House/Barn/Storage/Road	0.925	
TOTAL		**46.503**	----	**17.91**	**38.52%**

** Buildings Utilizing Rainwater Harvesting System



LEGEND

VEGETATIVE FILTER STRIP

⊛ BUILDINGS UTILIZING RAINWATER HARVESTING SYSTEMS

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
WPAP SITE PLAN

Date: 09/07/2007
Drawn by: STS
Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

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: Comal County Engineer's Office

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.

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

2. ✓ **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. ✓ **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. ✓ **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. ✓ 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: Guadalupe River via Bleiders 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.** 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, 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.

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

9. ✓ **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. ✓ **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.

✓ 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. ✓ **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. ✓ 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. ✓ 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. ✓ 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 at the end of this form.

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

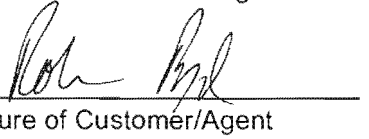
20. ✓ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.

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.

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:

Robert H. Boyd, P.E.
Print Name of Customer/Agent



Signature of Customer/Agent

10/1/07
Date

Attachment A – Spill Response Actions

A description of the measures to be taken to contain any spill of hazardous substances is provided in the Spill Prevention Control and Countermeasure Plan, which is attached as part of this Attachment.

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

FOR

Comal County Road Department

195 David Jonas Drive
New Braunfels, Texas 78132

Original Date of Plan: June 14, 2000
Date of Last Plan Amendment/P.E. Certification: June 14, 2000
Date of Last Plan Review: N/A (new facility)

Designated person accountable for spill prevention:
Thomas Hornseth
Comal County Engineer

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

Engineer: THOMAS H. HORNSETH

Signature:

Registration Number: 59717 TX

State: TEXAS

Date: 6-14-00



6-14-00

SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR Part 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every three years. As a result of this review and evaluation, Comal County Road Department will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of the review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. 7-7-03	
2.	

MANAGEMENT APPROVAL

Comal County Road Department is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating and implementation of this Spill Prevention Control and Countermeasures Plan.

Authorized Facility Representative: THOMAS H. HORNSETH Signature:

Title: COMAL COUNTY ENGINEER

TABLE OF CONTENTS

1.	FACILITY OWNER (Parent Corporation) and OPERATOR		
	A.	Address and Telephone	1
	B.	Facility Operator, Address and Telephone	1
2.	FACILITY CONTACTS		1
3.	FACILITY DESCRIPTION		
	A.	Facility Operations	1
	B.	Facility Storage	2
	C.	Distance to Navigable Waters and Adjoining Shorelines and Flow Path	2
4.	SPILL HISTORY		2
5.	POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL		3
6.	PREVENTION MEASURES PROVIDED		
	A.	Drainage Control	4
	B.	Bulk Storage Tanks/Secondary Containment	4
	C.	Facility Transfer Operations	5
	D.	Facility Tank Car and Truck Loading/Unloading Operations	6
	E.	Inspections/Record Keeping	7
	F.	Site Security	7
	G.	Personnel Training and Spill Prevention Procedures	7
	H.	Spill Control Equipment	8
	I.	Emergency Contacts	8

FIGURES

FIGURE 1 Facility Layout and Surface Drainage Diagram

APPENDICES

APPENDIX 1 Secondary Containment Calculations for Diked Storage Areas

APPENDIX 2 Certification of the Applicability of the Substantial Harm Criteria Checklist

APPENDIX 3 Facility Inspection Report

1. **FACILITY OWNER (Parent Corporation) and OPERATOR:**

A. Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

B. Facility Operator Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

2. **FACILITY CONTACTS:**

Name	Title	Telephone
Thomas Hornseth	County Engineer	(830) 608-2090
Dana Schmitt	Assistant Engineer	(830) 608-2090

3. **FACILITY DESCRIPTION:**

A. Facility Operations:

Comal County Road Department is a local county government facility in Comal County, Texas. Personnel at the facility include office staff, maintenance shop mechanics, road construction and maintenance crews. Hours of operation are 8:00 a.m. to 4:30 p.m., 5 days a week.

There is a 15,000-gallon, double-walled, aboveground storage tank at the facility that is partitioned into two compartments. It has a capacity of 5,000 gallons diesel fuel and 10,000 gallons unleaded gasoline. The tank was installed 4/17/00.

The fuel tank is used for county vehicles only. Access to the system is controlled by a key-based fuel management system. The facility receives products from a local fuel distributor by tanker truck.

Other smaller tanks at the facility are used to store new and used oil products and emulsified asphalt for roadwork. Drums of oil products are stored in a shed near the shop.

B. Facility Storage:

Aboveground Storage Tanks

Tank ID	Volume	Contents
1	15,000 gallons	Partitioned into 2 compartments
	[5,000 gallons	Diesel Fuel]
	[10,000 gallons	Unleaded Gasoline]
2	300 gallons	waste oil
3	500 gallons	new oil
4	10,000 gallons	emulsified asphalt

Drums/Containers	Volume	Contents
3 Drums	55 gallons each	oil
1 Drum	55 gallons	kerosene
1 Drum	55 gallons	automatic transmission fluid

Total: 26,075 gallons

C. Distance to Navigable Waters and Adjoining Shorelines and Flow Path:

The Comal County Road Department site is located approximately 1000 feet east of an unnamed dry creek in Comal County. There are no storm drains at the site.

4. SPILL HISTORY:

No spill events have occurred at this facility.

5. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

Source	Type of Failure	Volume	Rate (gallon/hr)	Direction of Flow	Containment
Aboveground Storage Tanks					
#1 Diesel/ Gasoline	Leakage	15,000 gal	Rate will vary	Built-in secondary tank containment	15,000 gal
#2 Waste Oil	Leakage	300 gal	Rate will vary	Within containment area	300 gal
#3 New Oil	Leakage	500 gal	Rate will vary	Inside shop	Absorbent material
#4 Emulsion	Leakage	10,000 gal	Rate will vary	On concrete slab	Absorbent material
Fuel Delivery Operations					
Fuel truck unloading	Spill	Less than 15 gal	Rate will vary	Within remote spill container	15 gallon
Other Storage					
New and used motor oil	Leakage; drum rupture	55 gal	55 gal/ hour	Within containment area	359 gallon
Aboveground piping	Leakage; valve failure	5 gal	5 gal/hour	Within curb area	656 gallon

6. PREVENTION MEASURES PROVIDED:

A. Drainage Control

(i) Drainage from diked storage areas:

Tank 2 has a concrete containment structure. Water or spilled oil can be removed by pump and taken to the wash rack area to be filtered and recycled.

Tank 4 has an earthen berm surrounding the tank to contain any spilled material.

Drums are stored in a shed surrounded by a containment curb; no water accumulates there.

(ii) Valves used on diked storage areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iii) Plan drainage systems from undiked areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iv) Final discharge of drainage:

There are no storm drains at the facility and the secondary containment for the tanks prevents any discharge of oil from the facility.

(v) Facility drainage systems and equipment:

There is a wash rack area to filter and recycle any oily water with zero discharge.

B. Bulk Storage Tanks/Secondary Containment

(i) Tank compatibility with its contents:

All tank materials are suitably impervious to the fuels being stored. Tank 1 is also ballistics resistant and designed to exceed a U.L. 2-hour fire test.

(ii) Diked area construction and containment volume for storage tanks:

See Appendix 1 for containment calculations. Tank 1 is located on a concrete slab with a 2" curb. Tank 2 is inside a concrete containment structure. Tank 4 is surrounded by an earthen berm. The drums of oil products are stored in a covered shed that has a curb around the perimeter.

(iii) Diked area, inspection and drainage of rainwater:

Any water that is collected in the diked areas is inspected for spilled oil before draining. Any oily water can be removed by pump and taken to the wash rack area to be filtered and recycled.

(iv) Corrosion protection of buried metallic storage tanks:

There are no buried tanks at this facility.

(v) Corrosion protection of partially buried metallic tanks

There are no partially buried tanks at this facility.

(vi) Aboveground tank periodic integrity testing:

The aboveground storage tanks are inspected annually using the inspection report in Appendix 2. The tanks are visually inspected at each fuel transaction for signs of deterioration, or any leaks.

(vii) Control of leakage through internal heating coils:

The tanks at this facility are not equipped with heating coils.

(viii) Tank installation fail-safe engineered:

Tank 1 is equipped with an overfill prevention valve that limits filling of the tank to 90% capacity. This tank is equipped with electronic tank level monitors; a sensor is in place to detect the presence of any liquid in the interstitial space of the double walled, two-compartment tank.

(ix) Observation of disposal facilities for effluent discharge:

This facility has no disposal processes that discharge effluents into navigable water.

(x) Visible oil leak corrections from tank seams and gaskets:

Any visible oil leaks are reported to the plant operator and promptly corrected.

(xi) Appropriate position of mobile or portable oil storage tanks:

Portable drums are located inside a covered storage shed. There is a curb in place to control any spills.

C. Facility Transfer Operations

(i) Buried piping installation protection and examination:

There is no buried piping at this facility.

(ii) Not-in-service and standby service terminal connections:

When a pipeline is not in service it is capped.

(iii) Pipe supports design:

Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

(iv) Aboveground valve and pipeline examination:

The Comal County Road Department fuel system has single-wall steel product piping, equipped with mechanical in-line leak detectors. All piping is aboveground and is examined during inspections. Operating personnel continuously inspect valves and piping.

(v) Aboveground piping protection from vehicular traffic:

All aboveground piping, hoses, and dispensers are located inside steel ballards and within a curbed concrete slab. They are not at risk of impact from vehicular traffic.

D. Facility Tank Car and Truck Loading/Unloading Operations

(i) Loading/unloading procedures meet DOT regulations:

Comal County Road Department requires all drivers making fuel deliveries to comply with DOT regulations and facility standard operating procedures.

(ii) Secondary containment for vehicles adequate:

The fuel tank area is designed with curbing and remote fill spill containers to provide spill containment protection.

(iii) Warning or barrier system for vehicles:

A Comal County employee is present to observe each fueling operation to assure that fuel tanker personnel completely disconnects transfer lines before departure.

(iv) Vehicles examined for lowermost drainage outlets before leaving:

A Comal County employee is present to observe each fueling operation to assure that there is no leakage while the tanker truck is in transit.

E. Inspection/Record Keeping

Facility inspection procedures:

Inspections will be conducted annually starting June 2000 and records of these inspections will be documented and signed by the inspector or plant manager. During the inspections, all tanks, containment structures, valves, piping and other equipment is inspected. The checklist used for these inspections can be found in Appendix 2.

Length of time records kept:

Inspection, training and tank integrity testing are retained for three or more years.

F. Site Security

(i) Fencing

A locked gate secures the facility when it is not open for regular operation.

(ii) Flow valves locked

All tank valves are secured.

(iii) Starter controls locked

Access to the fuel products limited to authorized personnel and is controlled by a key system.

(iv) Pipeline loading/unloading connections securely capped:

Pipeline connections are securely capped when they are not in use.

(v) Lighting adequate to detect spills:

The aboveground fuel tank area is lighted adequately to detect spills and to discourage acts of vandalism.

G. Personnel Training and Spill Prevention Procedures

(i) Personnel instructions:

All new employees that use oil based products as part of their job are required to have a spill prevention training to instruct them in the operation of fuel equipment and handling of oil products to prevent accidental spills.

(ii) Designated person accountable for spill prevention:

The County Engineer is the designated person accountable for spill prevention at the Comal County Road Department.

(iii) Spill prevention briefings:

Spill prevention is discussed at yearly briefings.

H. Spill Control Equipment

Spill Control equipment on site includes granular absorbent material, brooms and shovels. Spill equipment is stored in the shop.

I. Emergency Contacts

National Response Center	1-800-424-8802
Tom Hornseth, County Engineer	(830) 608-2090
Service Station Constructors and Fuel Systems	(210) 493-3277
Tri State Service and Testing	(210) 493-4329

FIGURE 1

Facility Layout and
Surface Drainage Diagram

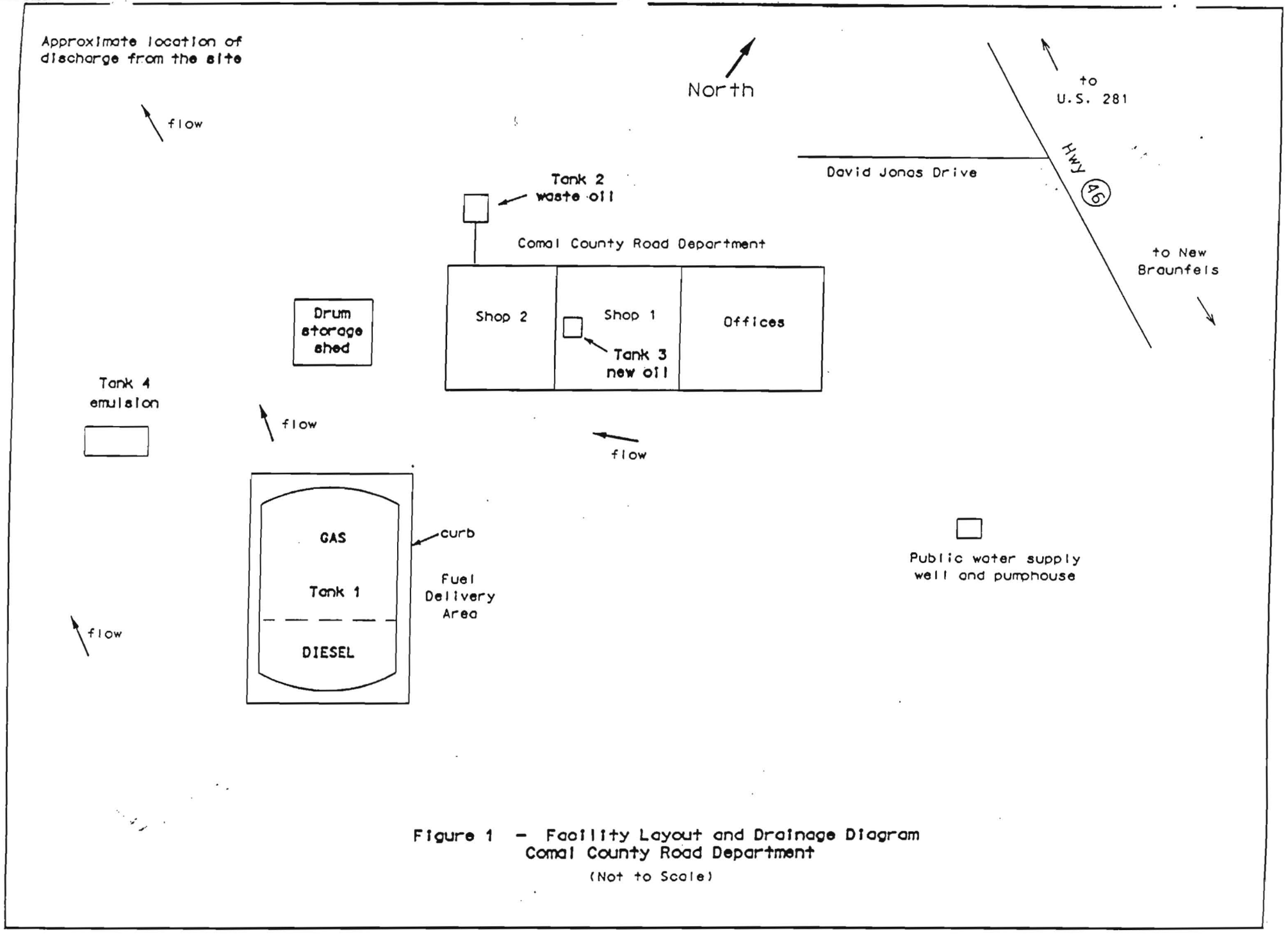


Figure 1 - Facility Layout and Drainage Diagram
Comal County Road Department
(Not to Scale)

APPENDIX 1

Secondary Containment Calculations for Diked Storage Areas

Containment Calculation for Tank #1

Tank 1 has built-in secondary containment for the contents of the tank. There is a containment curb surrounding the tank for any leakage outside the tank

Curb Area = 35 feet X 15 feet = 525 square feet

Total Containment Volume = Curb Area X Curb Height
= 525 square feet X 0.167 feet
= 87.7 cubic feet = 656 gallons

Containment Calculation for Tank #2

Required Containment Volume = 110 % of tank volume
= 300 gallons X 1.1 = 330 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 330 gallons X 0.1337 cu. ft./gallon = 44.1 cu. ft.

Available Diked Area = 5.5 feet X 7 feet = 38.5 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (44.1 cu. ft.) ÷ (38.5 sq. ft)
= 1.15 feet or 13.7 inches

Actual height of concrete wall around Tank 2 is 4 feet

Containment Calculation for Tank #4

Required Containment Volume = 110 % of tank volume
= 10,000 gallons X 1.1 = 11,000 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 11,000 gal. X 0.1337 cu. ft./gal. = 1470.7 cu. ft.

Available Diked Area = 24 feet X 27 feet = 648 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (1470.7 cu. ft.) ÷ (648 sq. ft)
= 2.3 feet

Necessary height of earthen berm around Tank 4 is 2 1/2 feet

Containment Calculation for Drum Storage Shed

Curb Area = 12 feet X 12 feet = 144 square feet

Total Containment Volume = Curb Area X Curb Height
= 144 square feet X 0.333 feet
= 48 cubic feet = 359 gallons

APPENDIX 2

Certification of the Applicability of the Substantial Harm Criteria Checklist

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Comal County Road Department

FACILITY ADDRESS: 195 David Jonas Drive

New Braunfels, TX 78132

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ No __X__

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ No __X__

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in attachment C-III, Appendix C, 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.
   Yes _____ No __X__

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   Yes _____ No __X__

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes _____ No __X__

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

THOMAS H. HORNSETH
Name (please type or print)

Signature

COMAL CO. ENGINEER
Title

6-14-00
Date

from 40 CFR 112 Appendix C, Attachment C-II

[1]If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2]For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

APPENDIX 3

Facility Inspection Report

Facility Inspection Report

Date: _____

Time: _____

Inspector: _____

X=Satisfactory
NA=Not Applicable
0=Repair or Adjustment Required
C=See comment under Remarks/Recommendations

Drainage

____ Any noticeable oil sheen on runoff.

____ Containment area drainage valves are closed and locked.

____ Oil/water separator systems working properly.

____ Effluent from oil/water separator inspected.

____ No visible oil sheen in containment area.

____ No standing water in containment area.

ASTs

____ Tank surfaces checked for signs of leakage.

____ Tank condition good (no rusting, corrosion, pitting).

____ Bolts, rivets, or seams are not damaged.

____ Tank foundation intact.

____ Level gauges and alarms working properly.

____ Vents are not obstructed.

____ Valves, flanges, and gaskets are free from leaks.

____ Containment walls are intact.

Pipelines

____ No signs of corrosion damage to pipelines or supports.

____ Buried pipelines are not exposed.

____ Out-of-service pipes capped.

____ Signs/barriers to protect pipelines from vehicles are in place.

____ No leaks at valves, flanged, or other fittings.

Truck Loading/Unloading Area

____ No standing water in rack area.

____ Warning signs posted.

____ No leaks in hoses.

____ Drip pans not overflowing.

____ Catch basins free of contamination.

____ Containment curbing or trenches intact.

____ Connections are capped or blank-flanged.

Security

____ Fence and gates intact.

____ Gates have locks.

____ ASTs locked when not in use.

____ Starter controls for pumps locked when not in use.

____ Lighting is working properly.

Training

____ Spill prevention briefing held.

____ Training records are in order.

Remarks/Recommendations:

_____

_____

_____

Attachment B – Potential Sources of Contamination

Surface water could be impacted by storm water runoff from areas of disturbed soils within the two construction sites of the project. Potential sources of contamination include:

Removal of top soils and surface vegetation, and;

Placement of road construction materials.

Attachment C – Sequence of Major Activities

The sequence of major events for each of the projects is listed below:

Barn

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- construction of foundation and driveway
- erection of metal building
- finishing of interior of building
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 0.060 acres

County Extension Office

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- erection of metal buildings
- finishing of interior building
- construction of parking lot
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.106 acres

Road Department Stockpile

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- paving of stock pile area
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.401 acres

Attachment D – Temporary Best Management Practices and Measures

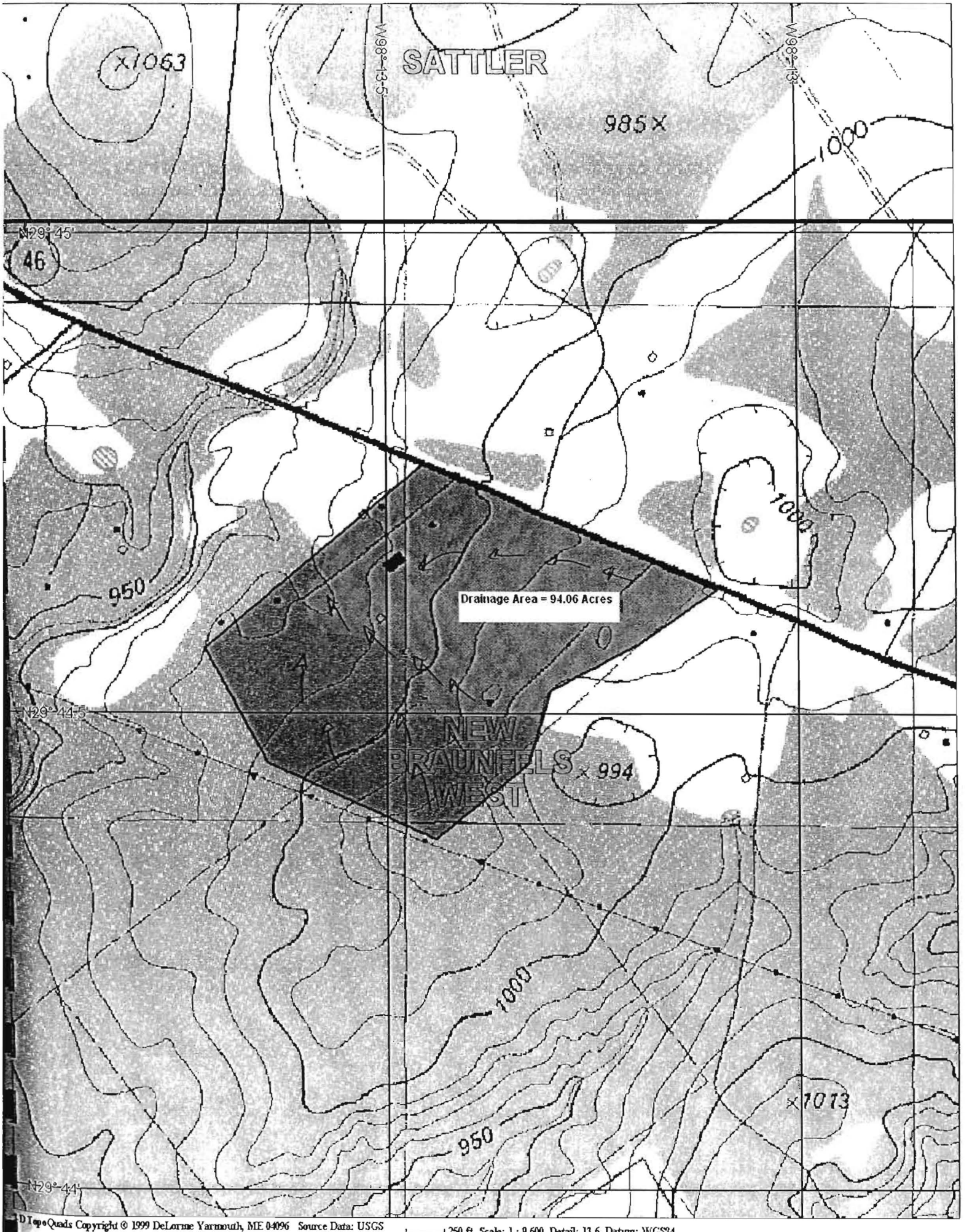
Temporary storm water best management practices will include:

- maintenance of vegetation (existing trees, bushes and grasses) in discharge areas for erosion and sediment control
- construction and maintenance of temporary storm water filtration fencing around the perimeter of all areas of disturbed soil.

a. Based on the topographic map of the area, there is approximately 13.871 acres of land up gradient of the site that will produce storm water that will flow across the site. This storm water that will flow across the site will have been treated by existing vegetation located on the 13.871 acres up gradient of the site. Therefore, the only runoff that will be treated will be storm water that falls on the 20.000 acres in question.
b. The maintenance of vegetation in discharge areas will act as a filter to surface water that originates on-site. The temporary storm water filtration fencing will cause storm water that originates on site to be filtered through the filtration fencing and keep all sediment on-site.
c. The vegetation and filtration fencing will prevent pollutants from entering surface streams, sensitive features, or the aquifer by filtering the on-site storm water before entering surface streams, sensitive features, or the aquifer.
d. The vegetation and filtration fencing will, to the maximum extent practicable, maintain flow to naturally-occurring features. They will do so by filtering the water and allowing it to maintain is naturally-occurring flow, instead of diverting it in an unnatural direction.

Attachment F – Structural Practices

Structural practices shall be the placement of filtration fencing on the downstream end of disturbed areas.



ATTACHMENT C - DRAINAGE AREA MAP

Attachment I – Inspection and Maintenance for BMP's

Comal County shall inspect the condition of the perimeter filtration fencing on a weekly basis and after any rainfall events to ensure they are functioning properly.

Comal County shall make any necessary repairs immediately.

Comal County will document any changes, due to on-site conditions, on the WPAP site plan. Documentation shall show changes made, date, person responsible, and reason changes were made.

Person responsible for erosion and sedimentation control and maintenance is Robert Boyd, P.E., the Comal County Assistant Engineer.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

SOIL STABILIZATION PRACTICES:

___ Hydromulching
___ Temporary Seeding
___ Permanent Planting, Sodding, or Seeding
___ Mulching
___ Soil Retention Blanket
___ Buffer Zones
_X_ Preservation of Natural Resources

Other: Disturbed areas on which construction activity has ceased permanently shall be stabilized within 14 days unless activities are scheduled to resume and done within 21 days.

STRUCTURAL PRACTICES:

_X_ Silt Fences
___ Hay Bales
___ Gravel Filtration Bags
___ Rock Berms
___ Diversion, Interceptor, or Perimeter Dikes
___ Diversion, Interceptor, or Perimeter Swales
___ Diversion Dike and Swale Combinations
___ Pipe Slope Drains
___ Paved Flumes
___ Rock Bedding at Construction Exit (Stabilized Entrance)
___ Timber Matting at Construction Exit (Stabilized Entrance)
___ Channel Liners
___ Sediment Traps
___ Sediment Basins
___ Storm Inlet Sediment Trap
___ Stone Outlet Structures
___ Curbs and Gutters
___ Storm Sewers
___ Velocity Control Structures
___ Geotextiles

Other: _____

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

REGULATED ENTITY NAME: Comal County Engineer's Office

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

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

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

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

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

   _____

   _____

   _____

   _____

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.

4. n/a 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.

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

5. n/a 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.

___ 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.

✓ 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.**

✓ 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.

___ 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. ✓ **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. ✓ **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. ✓ 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. n/a **ATTACHMENT I -Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is 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. ✓ 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. ✓ 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/1/07
Date

Attachment B

BMPs for Upgradient Stormwater

Based on the topographic map of the area, there is approximately 13.871 acres of land upgradient of the site that will produce stormwater that will flow across the site. This stormwater that will flow across the site will have been treated by existing vegetation located on the 13.871 acres upgradient of the site. Therefore, the only runoff that will be treated will be stormwater that falls on the 20.000 acres in question.

Attachment C

BMPs for On-site Stormwater

Improvements within Drainage Area #1:

The proposed improvements within Drainage Area #1 will be treated by proposed engineered filter strips. Construction Plans were prepared according to the TCEQ Technical Guidance Manual (TGM).

Attachment F

Construction Plans

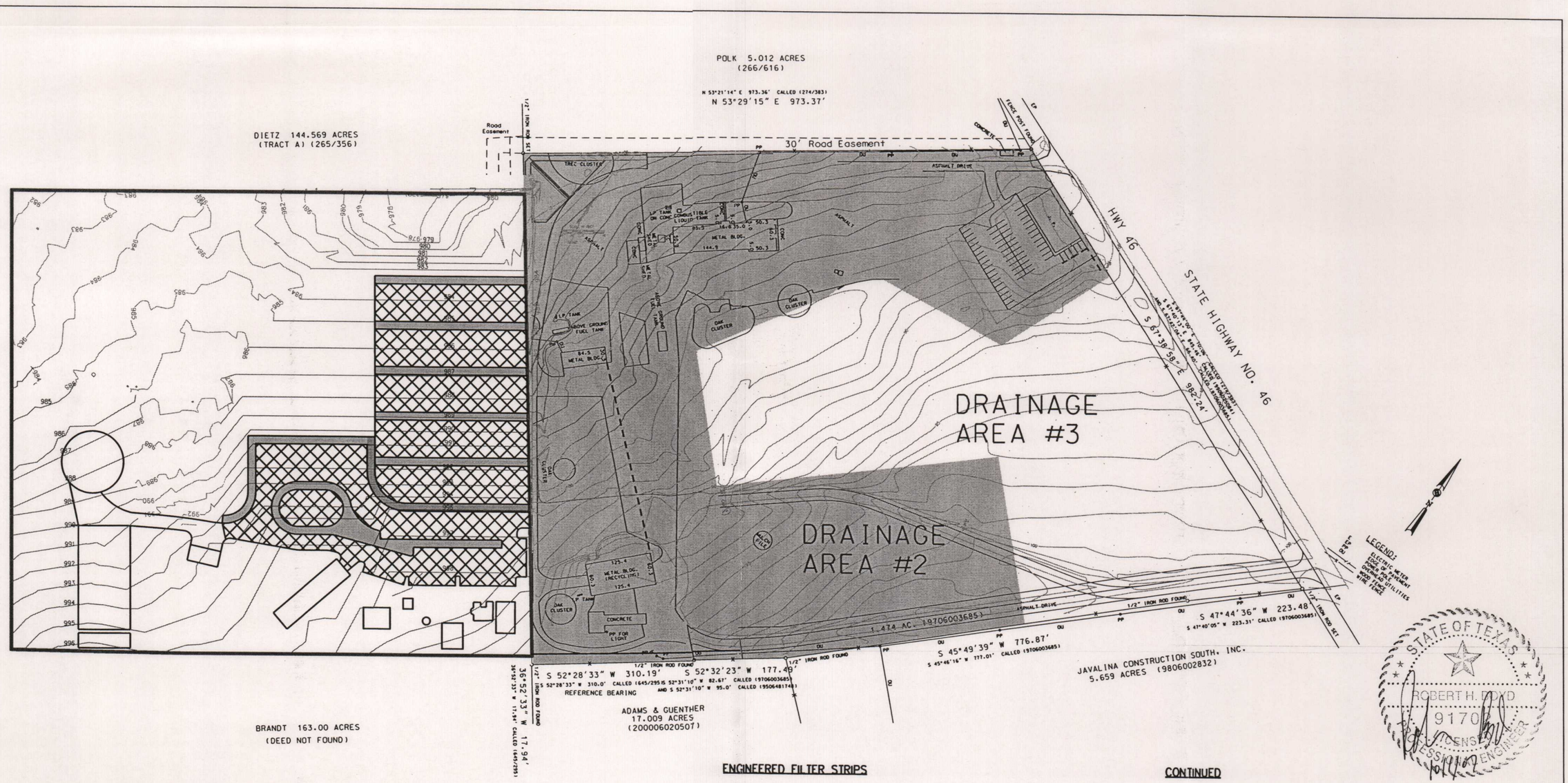
Improvements within Drainage Area #1:

As stated in the Narrative of Proposed Modification, the proposed improvements in Drainage Area #1 will be treated by engineered filter strips according to the TCEQ's Technical Guidance on Best Management Practices over the Edwards Aquifer Recharge Zone. According to that same publication:

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 level; otherwise runoff will tend to form a channel in the low spot. A level spreader should not be used to distribute runoff to an engineered filter strip.
7) Filter strips should be landscaped after other portions of the project are completed.

In the WPAP that was approved on October 24, 2003, Drainage Area #1 was 20.000 acres, and had 0.925 acres of impervious cover. In the future, the area will have 5.813 acres of impervious cover. Runoff from proposed impervious cover will be treated using engineered filter strips. The engineered filter strips do meet the requirements as listed above in the following ways.

1) All engineered filter strips are a minimum of 15 feet.
2) Engineered filter strips will run along the entire length of contributing areas.
3) Maximum width of impervious cover in the direction of flow is 72 feet.
4) Vegetation coverage is at least 80% of the proposed interim vegetative filter strip.



STATE OF TEXAS
ROBERT H. BOYD
9170
LICENSED
PROFESSIONAL ENGINEER
10/11/07

LEGEND

VEGETATIVE FILTER STRIP

CONTRIBUTING IMPERVIOUS COVER

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD 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 BOTH SIDES).

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED FILTER STRIPS IS 80%

CONTINUED

3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THATTHE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.

4. THE AREA TO BE USED FOR THE STIP 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 THE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. THE TOP EDGE OF FILTER STRIP SHOULD BE LANDSCAPED AFTER OTHER PORTIONS OF THE PROJECT ARE COMPLETE.

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
PROPOSED TOPO

Date: 09/07/2007

Drawn by: STS

Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

Attachment G

Inspection, Maintenance, Repair and Retrofit Plan

Project Name: Comal County Engineer's Office (Drainage Area #1)

Engineered Filter Strip

Weekly — The project site shall be checked for accumulation of debris and trash. The debris and trash shall be removed.

Monthly — The vegetation growth in the vegetated filter strip 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".

Annually — The vegetation shall be inspected and additional native grasses planted as necessary.

After Rainfall — To maintain vegetative cover over this area, the area shall be checked after each rainfall occurrence to insure that the area drains within 6 hours after the storm is over. If it does not drain within this time, corrective measures will be instituted.

Following any required maintenance, the surface areas shall be raked and leveled to restore the system to its designed condition.

"Proper" disposal of accumulated silt shall be accomplished by following the TCEQ guidelines and specifications.

An amended copy of this document shall be provided to the TCEQ within thirty (30) days of any changes to the following information.

Responsible Party for Maintenance:	Comal County Road Department
Address:	195 David Jonas Drive
City, State Zip:	New Braunfels, Texas 78132-3760
Telephone Number:	(830) 608-2090

Signature of Responsible Party: _____ Date: 10/3/07

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

I Danny Scheel,
Print Name

County Judge
Title - Owner/President/Other

of Comal County
Corporation/Partnership/Entity Name

have authorized Robert Boyd, P.E.
Print Name of Agent/Engineer

of the Comal County Engineers Office
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

THE STATE OF Texas §

County of Comal §

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

GIVEN under my hand and seal of office on this ___ day of _____, ____.

_____

NOTARY PUBLIC

_____

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

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

NAME OF PROPOSED REGULATED ENTITY: Comal County
REGULATED ENTITY LOCATION: New Braunfels, Texas
NAME OF CUSTOMER: Comal County

CONTACT PERSON: Robert Boyd, P.E. PHONE: (830) 608-2090
(Please Print)

Customer Reference Number (if issued): CN 600647275 (nine digits)
Regulated Entity Reference Number (if issued): RN 102460730 (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	46.503	Acres	$ 5,000.00
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 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

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 **Modified WPAP**

2. Attachments	Describe Any Attachments: *(ex. Title V Application, Waste Transporter Application, etc.)*
☒Yes ☐No	Modified Water Pollution Abatement Plan

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 600647275		RN 102460730

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy) 10/3/2007

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:							
	City		State		ZIP		ZIP + 4

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

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

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

20. Number of Employees	21. Independently Owned and Operated?
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ 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)*

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*								
	City		State		ZIP		ZIP + 4	
25. Mailing Address:								
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:		
27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
( ) -		( ) -

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)

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

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

35. Description to Physical Location:			
36. Nearest City	County	State	Nearest ZIP Code

37. Latitude (N) In Decimal:			38. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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 Tires
☐ Stormwater	☐ Title V – Air	☐ Used Oil	☐ Utilities	☐ Voluntary Cleanup
☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:	☐ Other:

SECTION IV: Preparer Information

40. Name:	Robert Boyd, P.E.	41. Title:	Comal County Assistant Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 608-2090		(830) 608-2009	boydro@co.comal.tx.us

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:	Comal County	Job Title:	Assistant County Engineer
Name *(In Print)*:	Robert Boyd	Phone:	(830) 608-2090
Signature:		Date:	10/3/2007

COPY

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

I Danny Scheel,
Print Name

County Judge
Title - Owner/President/Other

of Comal County
Corporation/Partnership/Entity Name

have authorized Robert Boyd, P.E.
Print Name of Agent/Engineer

of the Comal County Engineers Office
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.

Jay Millikin
Acting County Judge

Applicant's Signature

10-11-07
Date

THE STATE OF Texas §

County of Comal §

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

GIVEN under my hand and seal of office on this 11th day of October, 2007

Deborah Braman
NOTARY PUBLIC

DEBORAH BRAMAN
Notary Public, State of Texas
My Commission Expires 04-28-2009

Deborah Braman
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 4-28-09



Comal County

OFFICE OF COMAL COUNTY ENGINEER

Modification of Previously Approved Water Pollution Abatement Plan for the Comal County Road Department's 46.503 Acres October 2, 2007

Comal County Engineer's Office, 195 David Jonas Dr. New Braunfels TX. 78130

Modification of a Previously Approved Plan Checklist

✓ General Information Form (*TCEQ-0587*)
- ATTACHMENT A - Road Map
- ATTACHMENT B - USGS / Edwards Recharge Zone Map
- ATTACHMENT C - Project Description

✓ Geologic Assessment Form (*TCEQ-0585*)
- ATTACHMENT A - Geologic Assessment Table, *TCEQ-0585-Table*
- Comments to the Geologic Assessment Table
- ATTACHMENT B - Soil Profile and Narrative of Soil Units
- ATTACHMENT C - Stratigraphic Column
- ATTACHMENT D - Narrative of Site Specific Geology
- Site Geologic Map(s)
- Table or list for the position of features' latitude/longitude (if mapped using GPS)

✓ Modification of a Previously Approved Plan (*TCEQ-0590*)
- ATTACHMENT A - Original Approval Letter.
- ATTACHMENT B - Narrative of Proposed Modification.
- ATTACHMENT C - Site Plan.

✓ Temporary Stormwater Section (*TCEQ-0602*), if necessary
- ATTACHMENT A - Spill Response Actions
- ATTACHMENT B - Potential Sources of Contamination
- ATTACHMENT C - Sequence of Major Activities
- ATTACHMENT D - Temporary Best Management Practices and Measures
- ATTACHMENT E - Request to Temporarily Seal a Feature, if sealing a feature
- ATTACHMENT F - Structural Practices
- ATTACHMENT G - Drainage Area Map
- ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations
- ATTACHMENT I - Inspection and Maintenance for BMPs
- ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices

✓ Permanent Stormwater Section (*TCEQ-0600*), if necessary
- ATTACHMENT A - 20% or Less Impervious Cover Waiver, if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site
- ATTACHMENT B - BMPs for Upgradient Stormwater
- ATTACHMENT C - BMPs for On-site Stormwater
- ATTACHMENT D - BMPs for Surface Streams
- ATTACHMENT E - Request to Seal Features, if sealing a feature
- ATTACHMENT F - Construction Plans
- ATTACHMENT G - Inspection, Maintenance, Repair and Retrofit Plan
- ATTACHMENT H - Pilot-Scale Field Testing Plan, if BMPs not based on *Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs*
- ATTACHMENT I -Measures for Minimizing Surface Stream Contamination

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

✓ Fee Application Form (*TCEQ-0574*)

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

✓ Core Data Form (*TCEQ-10400*)

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: Comal County Engineers Office
COUNTY: Comal STREAM BASIN: Guadalupe

EDWARDS AQUIFER: ✓ RECHARGE ZONE
__ TRANSITION ZONE

PLAN TYPE: ✓ WPAP __ AST __ EXCEPTION
__ SCS __ UST ✓ MODIFICATION

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Robert H. Boyd, P.E.
Entity: Comal County
Mailing Address: 195 David Jonas Drive
City, State: New Braunfels, Texas Zip: 78132
Telephone: (830) 608-2090 FAX: (830) 608-2009

Agent/Representative (If any):

Contact Person: _____
Entity: _____
Mailing Address: _____
City, State: _____ Zip: _____
Telephone: _____ FAX: _____

2. __ This project is inside the city limits of _____.
✓ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of New Braunfels, Texas.
__ 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.

From New Braunfels, take US46 West past FM 2722 approximately 1 mile to the Comal County Road Department on the South side of the road.

4. ✓ **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. ✓ **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:

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

6. ✓ 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. ✓ **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)
- ___ Other: _____

PROHIBITED ACTIVITIES

9. ✓ 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. ___ 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:

✓ 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)

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

13. ✓ 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.

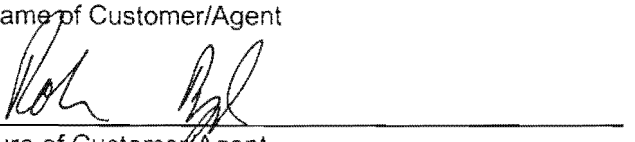
14. ✓ No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the executive director.

___ 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:

Robert H. Boyd, P.E.

Print Name of Customer/Agent



Signature of Customer/Agent

10/1/07

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.

Attachment A - Road Map



Copyright 2004
Comal County GIS
195 David Jonas
New Braunfels, TX 78130

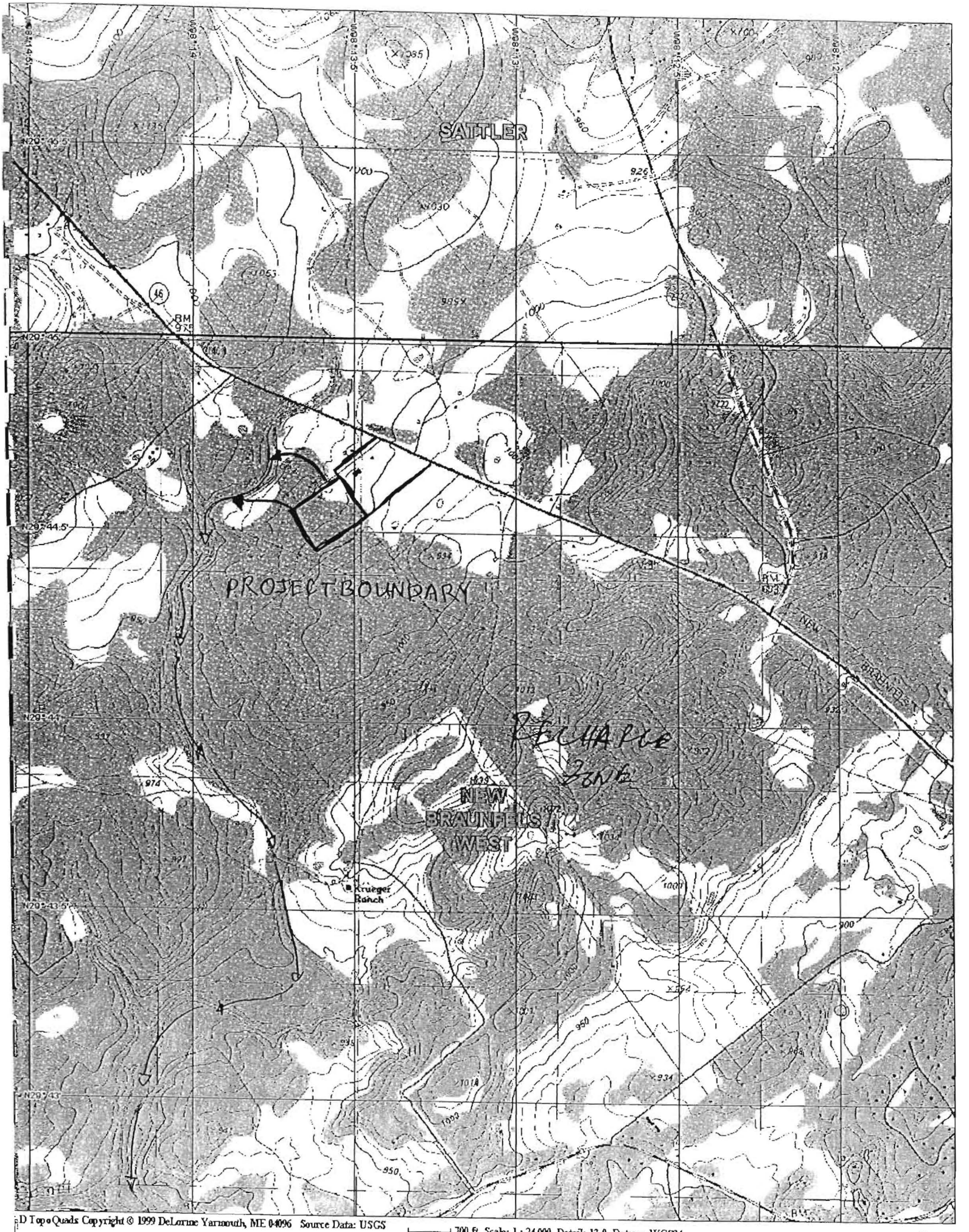
Comal County

DISCLAIMER : This is a product of the Comal County GIS Department. The data depicted here have been developed with extensive cooperation from other county departments, as well as other federal, state and local governments agencies.Comal County expressly disclaims responsibility for damages or liability that may arise from the use of this map.

PROPRIETARY INFORMATION: Any resale of this information is prohibited, except in accordance with a licensing agreement.

Legend

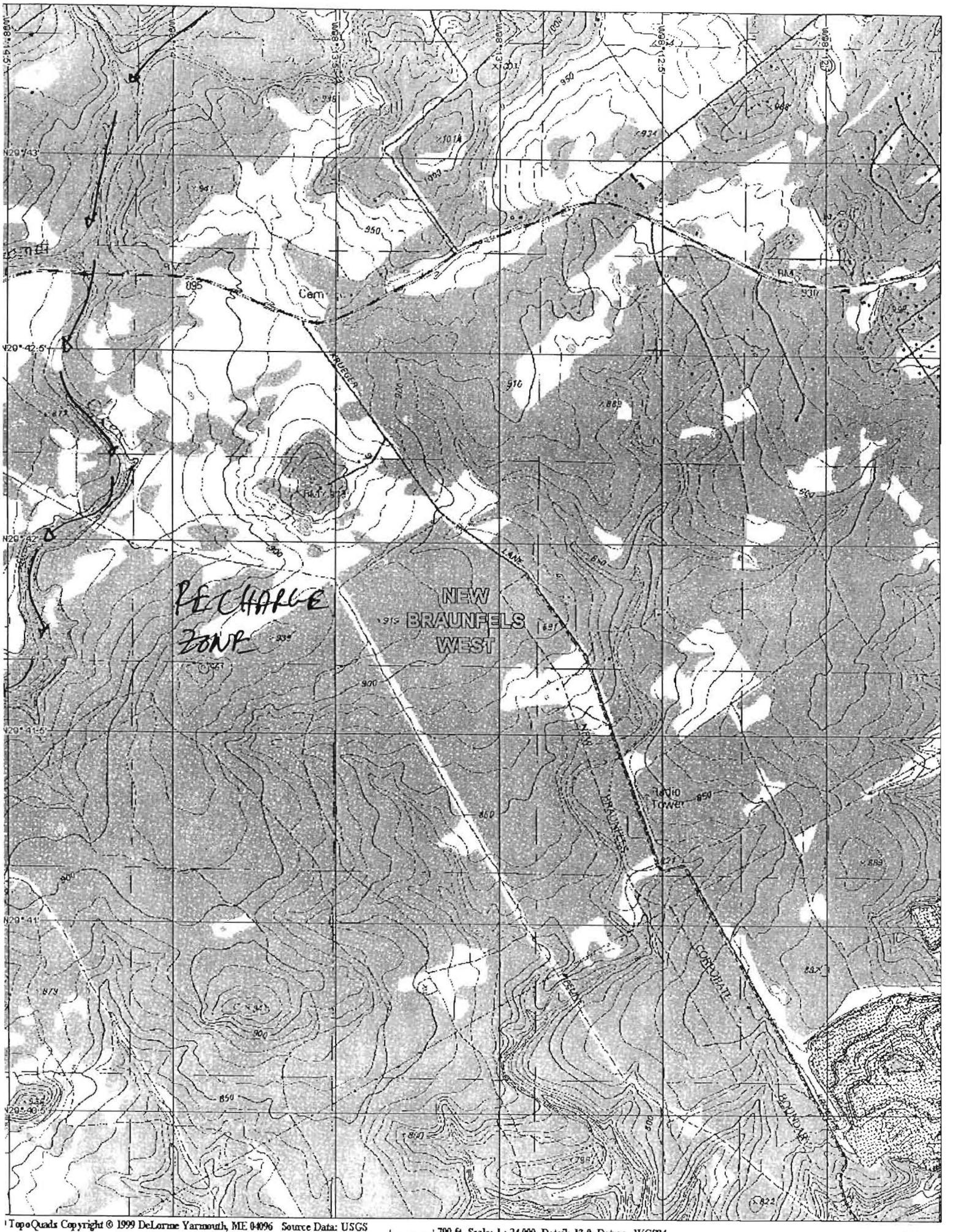
- County Boundary
- Private Schools
- Public Schools
- Police Stations
- Fire Stations
- County Assets
- Daycares
- Streets
- Buildings
- 2 Ft. Contours
- Streams
- Lakes
- Council Districts
- Zip Codes



D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

(1)

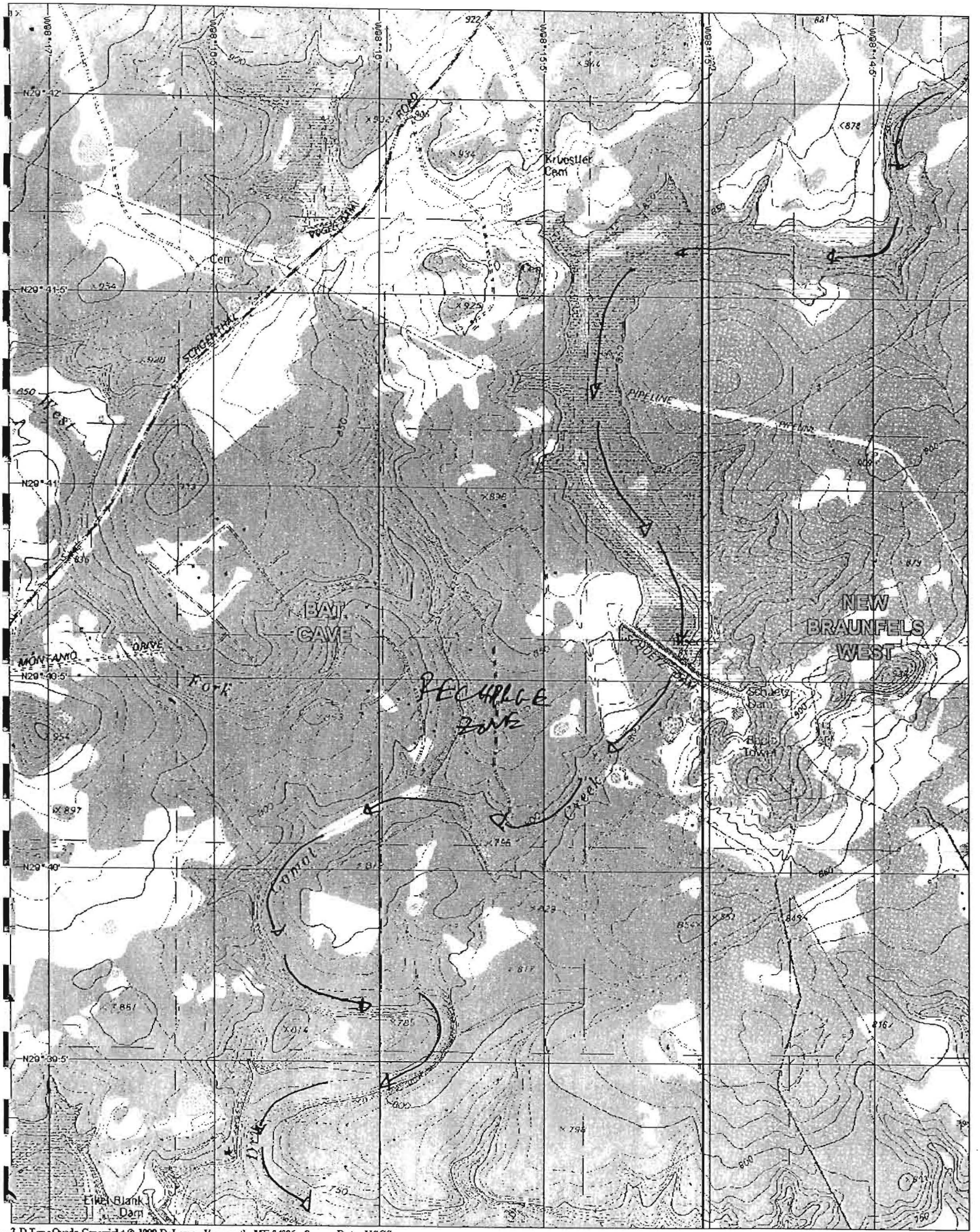


TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

(2)

ATTACHMENT B

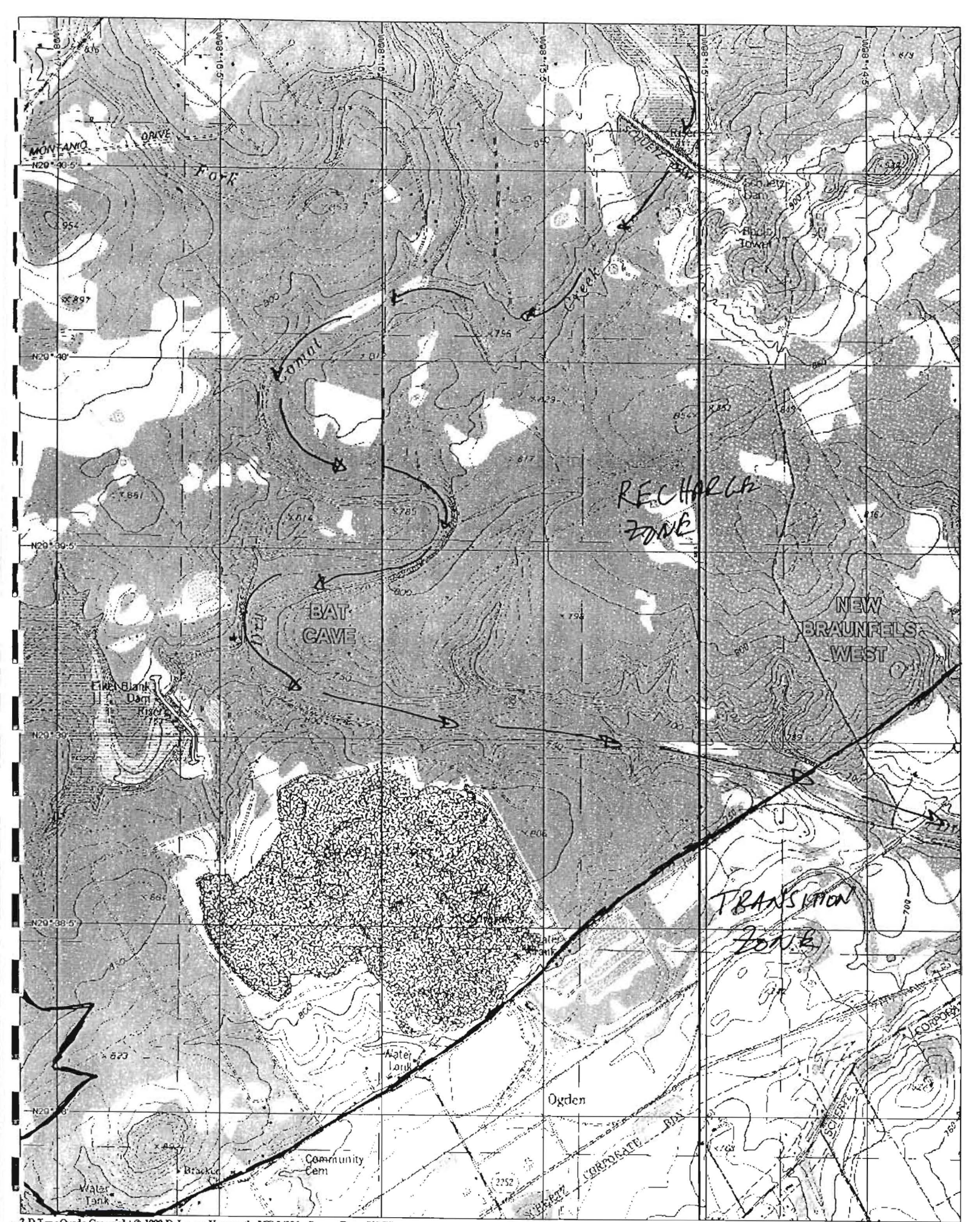


2-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

Att A

(3)



2D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 Source Data: USGS

700 ft Scale: 1 : 24,000 Detail: 13-0 Datum: WGS84

ATT B

Attachment C – Project Description

The Comal County Road Department is proposing to do the following:

1) Construct a new agricultural barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion. (See WPAP Site Plan)
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

1) Front End Loaders
2) Dump Trucks
3) Bobcats
4) Bulldozers

Items 4-7 will give the extension office more space to hold education classes to Comal County residents.

Items 8 and 9 will be used along with existing vegetation to treat storm water runoff from items 1-7.

Geologic Assessment

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

REGULATED ENTITY NAME: COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
61.55 Acres - Comal County (195 David Jonas Drive & Hwy. 46)
46.503

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

LOCATION OF PROJECT: XXRecharge Zone __ Transition Zone __ Contributing Zone within the Transition Zone

PROJECT INFORMATION

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

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

	Soil Units, Infiltration Characteristics & Thickness		
	Soil Name	Group*	Thickness (feet)
N/2	(RUD) Rumple-Comfort Assoc.	C/D	2.0 +
S/2	(RUD) Rumple-Comfort Assoc.	C/D	0.5

*** Soil Group Definitions (Abbreviated)**

A. Soils having a high infiltration rate when thoroughly wetted.

B. Soils having a moderate infiltration rate when thoroughly wetted.

C. Soils having a slow infiltration rate when thoroughly wetted.

D. Soils having a very slow infiltration rate when thoroughly wetted.

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

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

5. XX 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" = 4060'
Site Geologic Map Scale	1" = 538'
Site Soils Map Scale (if more than 1 soil type)	1" = 538'

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

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

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

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

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

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

XX There are 1 (#) 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.
XX 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.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: May 12 - 20, 2003
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.

David Seagraves
Print Name of Geologist

(210) 377-1603
Telephone

Fax


Signature of Geologist

May 20, 2003
Date

Representing: "Independent Consultant"
(Name of Company)

If you have questions on how to fill out this form or about the Edwards Aquifer Protection Program, please contact us at 512/939-2929 (Austin) or 210/403-4024 (San Antonio).

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.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SITE SPECIFIC GEOLOGY

The on-site geological unit is the Person Formation of the Edwards Group as identified by field investigation and referenced by the Hydrogeologic Subdivisions Map of the U.S.G.S. Water-Resources Investigations Report 94-4117, Comal County, Texas and the Geologic Map of the New Braunfels, Texas 30X60 Minute Quadrangle (Scale 1: 100,000) Bureau of Economic Geology, 2000.

No exposures of the Person Fm. were noted on the northern portion (15 acres) of the site. This is due to a thick soil cover. The only feature (S-7), a closed depression found within this portion of the site is possibly the result of man-made activities.

The southern portion (20 acres) of the site was formerly utilized as a horse stable with pens and contains a residence. There is less soil cover (possibly due to over grazing) and greater amounts of limestone floatrock on the southern portion resulting in exposures of the Person Fm.. These exposures are typically discontinuous, linear (10-20 feet long and greater) clay-filled fractured beds along slight breaks in slope and parallel to contour. Overall, the trend of the fractures are random, although the bearings of some long axes range from N70E to N85E. Offset fractures are approximately perpendicular to the long axes. These features appear to be the result of weathering. One exception is found in feature (S-5), which appears to be solution fracturing and is devoid of clay infilling and vegetation. Feature (S-5) is located within the centerline of a secondary drainage way and could be limited to the exposed bed without extending downward into the underlying limestone bed. Another area of note which was not listed on the Geologic Assessment Table is a larger area (100 x 150') of clay filled fractured rock which did not fit the similar pattern typical of this site. I recommend that this area be monitored if any future development is planned over this area. There were a few areas were the top of beds were exposed with sealed fractures and some vugs were also noted which were the result of weathering. Essentially, the site consisted of fine grained, medium beds of limestone. Overall slope is 1 to 3 percent towards the northwest. No other major karstic or structural features were noted on the site. Adjacent to the site, there are three large sink hole features approximately 1,000 feet to the east, northeast and north. The site is between two major fault complexes, the first one is the Hueco Springs Fault and is approximately 2,500 feet to the southeast, and the second one is the Bat Cave Fault and is approximately 5,000 feet to the northwest.

Overall, surface conditions within the northern portion of the site appear to have the ability to impede fluid movement into the subsurface. Whereas, surface conditions within the southern portion appear to have the ability to impede fluid movement into the subsurface at a lesser extent.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

SOIL UNIT

The on-site soil consists of a reddish brown very cherty clay loam. The northern portion of the complex extension (15 acres) has a thickness of at least two feet of this soil type with greater amounts of chert gravel. Previous use of the northern portion was as crop land and has a good grass cover and cleared of all trees. Whereas, the southern portion (20 acres) consists of a thinner soil profile, on average, 6 inches with limestone floatrock and less chert fragments. The soil has also infilled the interstices of exposed fractured limestone beds. Grass cover within the southern portion is sparse to moderate with a moderate tree cover consisting predominantly of oaks.

The on-site soil is classified as the (RUD) Rumple-Comfort association, undulating as referenced by the S.C.S. Soil Survey of Comal County, Texas (1984).

The S.C.S. Hydrologic Soil Groups - Technical Release No. 55, Appendix A has the Rumple soil listed as a Soil Group "C" soil, and is defined as soils having a slow infiltration rate when thoroughly wetted. The Comfort soil is listed as a Soil Group "D" soil, and is defined as soils having a very slow infiltration rate when thoroughly wetted.

The northern portion of the site also contains a greater percentage of the (TaB) Tarpley clay within the Rumple-Comfort association. The Tarpley clay soil type was not listed in the Technical Release No. 55, but should be assumed to be in Soil Group "D".

Overall, both soil types appear to have the ability to impede fluid movement into the subsurface.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

Site-Specific Stratigraphic Column

EDWARDS GROUP	Person Formation:	100 to 150 feet thick (approximate), medium to massive beds of mudstone to grainstone limestone, with chert fragments and some fossils. Upper part eroded.
	Kainer Formation:	350 feet thick (approximate), medium to massive bedded limestones

- -

Glen Rose Formation: (Upper Member)	350 to 500 feet thick (approximate) thin to medium bedded limestone and marl.

COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION
195 David Jonas Drive & Hwy. 46
35 Acres - Comal County

COMMENTS

S-1 (MB) Water well, active.

S-2 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

S-3 (MB) Septic tank and associated subsurface wastewater disposal drainfield.

S-4 (MB) Excavation, slight excavation into the slope to provide a level area for horse training. The excavation resulted in a three sided face with one corner being approximately 3 feet below natural grade. Also, the deepest portion has become a closed depression. Fine material covers the entire base which impedes fluid movement downward. A few hairline fractures were noted along the face of the excavation.

S-5 (SF) fractured rock within the centerline of a minor drainageway, devoid of clay infilling and vegetation. Fractures appear to be within an individual bed and it was difficult to ascertain if the fractures continued downward into the underlying bed.

S-6 (CD) possible remnant of tree clearing. Several inches of ~~soil~~ and leaves within the base over bedrock.

S-7 (CD) possible remnant of terracing (former crop land) and/or adjacent development, built up parking lot for the Comal County Road Department Complex. The long axis of the closed depression is parallel to existing contours.

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: COMAL COUNTY ROAD DEPARTMENT COMPLEX EXTENSION

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			MB	30	Kep									5		35	✓		✓		HILLSIDE
S-2			MB	30	Kep									5		35	✓		✓		HILLSIDE
S-3			MB	30	Kep									5		35	✓		✓		HILLSIDE
S-4			MB	30	Kep									9		39	✓			✓	HILLSIDE
S-5			SF	20	Kep	15	10	1	RANDOM		1	0.33	C	19		39	✓			✓	DRAINAGE
S-6			CD	5	Kep	11	5.5	1					O	10		15	✓		✓		HILLSIDE
S-7			CD	5	Kep	200	50	1.25					F	5		10	✓			✓	HILLSIDE

* DATUM:

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

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.

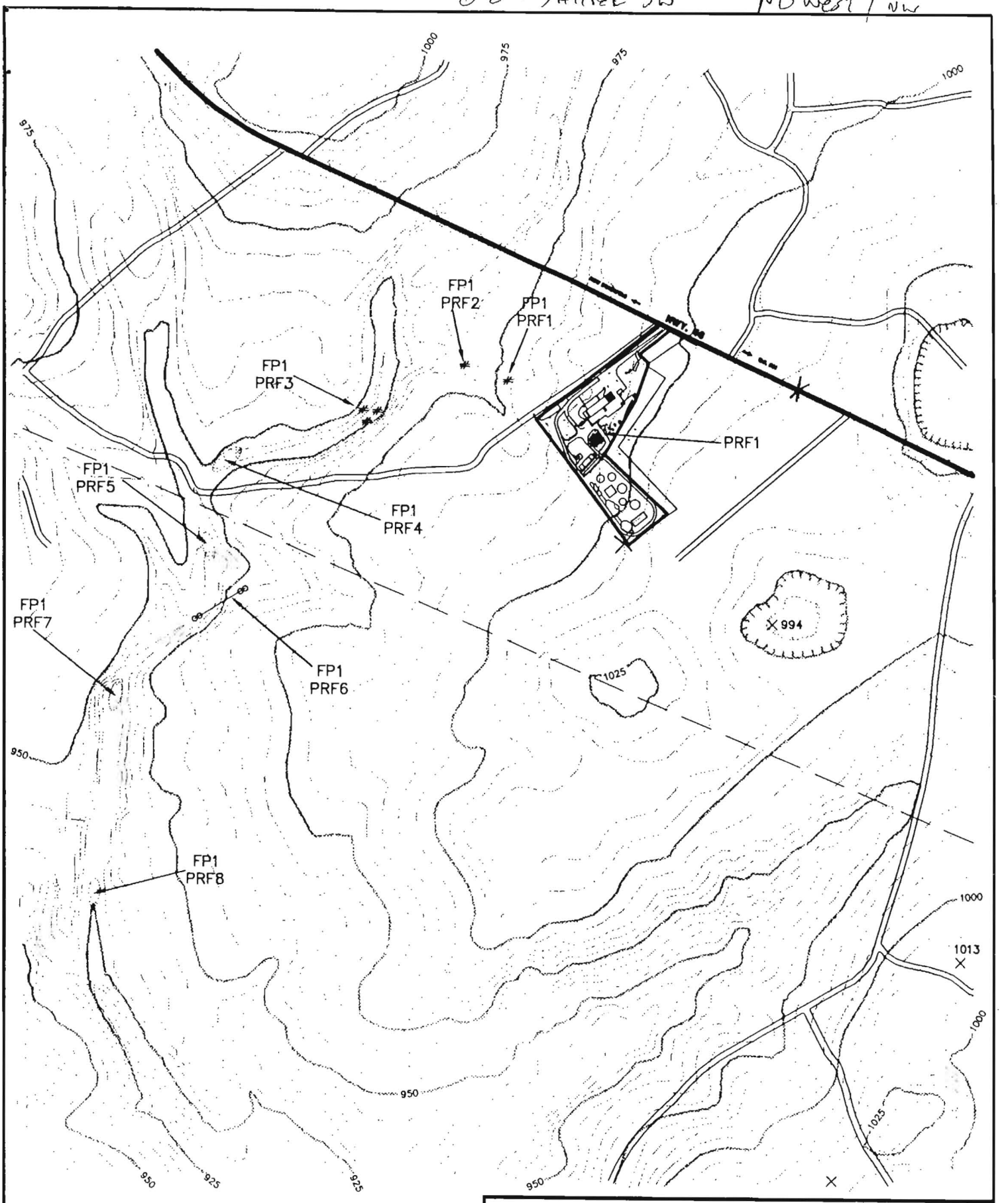
My signature certifies that I am qualified as a geologist as defined by 30 TAC 213

Daniel Hengraves

Date MAY 20, 2003

Sheet 1 of 1

62 - SATTLER SW NB WEST / NW



COMAL COUNTY ROAD DEPARTMENT

SITE PLAN

SCALE: 1" = 800'
DRAWN BY RW
TRACED BY
CHECKED BY PAS
JOB NO.070900-00-00
SHEET OF
FILE NO.
PAGE OF

ALAMO CONSULTING ENGINEERING & SURVEYING, INC.

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: Comal County Engineers Office
2. Original Regulated Entity Name: Comal County Engineers Office
3. ✓ **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)

   __ 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.

5. ✓ **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:	WPAP ✓ SCS __ UST __ AST __
Size:	46.503 acres
Population:	
Wastewater Volume:	gal/day
Sewer Pipe:	linear ft
Hydrocarbon Storage:	# of tanks
Impervious Cover:	28.06 %

7. Proposed Modification:

Type:	WPAP ✓ SCS __ UST __ AST __
Size:	46.503 acres
Population:	
Wastewater Volume:	gal/day
Sewer Pipe:	linear ft
Hydrocarbon Storage:	# of tanks
Impervious Cover:	38.52 %

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. ✓ 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/3/07
Date

DOCU 20030842000

ATTACHMENT A

RECEIVED

OCT 27 2003

COUNTY ENGINEER

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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 24, 2003

Mr. Thomas H. Hornseth, P.E.
Comal County
195 David Jonas Drive
New Braunfels, Texas, 78132

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Comal County Engineers Office; Located at 195 David Jonas Drive; 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 Protection Program File No. -309.01, Investigation No. 148617

Dear Mr. Hornseth:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project you submitted to the San Antonio Regional Office on behalf of Comal County on June 4, 2003. Final review of the WPAP submittal was completed after additional material was received on August 22, 2003, and September 12, 2003. 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, modification to a plan, or exception. 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% of the construction has commenced on the project or an extension of time has been requested.*

RECEIVED
OCT 27 2003
COUNTY ENGINEER

BACKGROUND

The subject site consists of six tracts totaling 46.503 acres summarized in the table below, and illustrated on Exhibit "A" (enclosed).

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1 2	1978 1986 Total	6.531 3.050 9.581	Pavement	4.33[1]	77.03
			Office & shop Buildings		
			Storage Yards	3.05[2]	
3	1995	1.383	Storage Yards	1.383[3]	100.0
4	1997	1.474	Access road to county recycling operation	0.581	39.42
5	1999	14.065	Approximately 1.5 acres of mulching operation	0	0.00
5A			Proposed JP & Road	2.189	15.56
6	2003	20.00	Road, barn, shed, house	0.925	4.63
6A			Extension Offices	0.591	-----
Tracts 1 - 5		26.503	-----	11.533	43.51
Tracts 6 & 6A		20.00	-----	1.516	7.58
Total		46.503	-----	13.049	28.06

1 Includes 0.728 acres of impervious cover approved by TNRCC letter dated 10/6/93, and treated by 1.19 acres of vegetated filters. Also includes 0.608 acres of recently paved impervious cover located north of the office and west of the main entrance driveway.

2 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved, and existed prior to regulation of impervious cover on 3/21/90.

3 Storage yards for road base, crushed limestone and sand. Areas are paved and unpaved.

One 10,000 gallon above ground storage tank (AST) and one 500 gallon AST were approved by letter dated October 12, 1993. One 15,000 gallon replacement AST was approved by letter dated March 20, 2000.

Doc# 200306042288
RECEIVED
OCT 27 2003
COUNTY ENGINEER

PROJECT DESCRIPTION

The proposed commercial project will have an area of approximately 46.503 acres and will have the following parameters:

- The proposed new construction will include buildings for the Comal County Justice of the Peace, with office space for a Constable, Adult Probation and Addressing/GIS staff; the Comal County Extension Service; and an access road.
- The total impervious cover for the 46.503 acre project site is summarized in the table above.
- According to a letter dated, May 28, 2003, signed by Thomas H. Hornseth, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

To prevent pollution of stormwater runoff originating on-site or up-gradient of the site and potentially flowing across and off the 46.503 acre site (see enclosed WPAP Site Plan) after construction, the impervious cover (0.925 acres) in Drainage Area #1 (20 acres) will use existing downgradient vegetation, a sedimentation/filtration basin will be provided for Drainage Areas #2 (16.964 acres) and #3 (9.539 acres). The individual treatment components will consist of:

Drainage Area #2: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first 0.75 inch of stormwater run-off from 16.964 acres with 100% impervious cover, providing a total capture volume of 55,421 cubic feet. The filtration system will consist of:

1. 4,160 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

Drainage Area #3: The partial sedimentation/filtration basin is designed in accordance with the 1999 edition of the TNRCC's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices," and is sized to capture the first one inch of stormwater run-off from 9.539 with 100% impervious cover, providing a total capture volume of 41,552 cubic feet. The filtration system will consist of:

1. 3,120 square feet of sand, which is 18 inches thick,
2. an underdrain piping wrapped with geotextile membrane, and
3. an impervious liner.

GEOLOGY

According to the geologic assessment included with the submittal, there are seven geologic or manmade features located on the 46.503 acre project site. All features were assessed as having sensitivities of less than

40. The San Antonio Regional Office site inspection of August 4, 2003, revealed that the site is as described by the geologic assessment and no additional geologic or manmade features were observed.

SPECIAL CONDITIONS

I. Based on the August 4, 2003 on-site inspection of the project site, Commission records indicate that construction of two paved parking areas were actually initiated on or before August 4, 2003, and that other site development and construction activities have already been conducted. It was determined that approximately 2,450 square feet of pavement not included in previous WPAPs was constructed without the prior approval of the water pollution abatement plan for the project, as required by Commission rules (30 TAC Chapter 213). Therefore, the applicant is hereby advised that the after-the-fact approval of the WPAP modification, as provided by this letter, shall not absolve the applicant of any prior violations of Commission rules related to this project, and shall not necessarily preclude the Commission from pursuing appropriate enforcement actions and administrative penalties associated with such violations, as provided in 30 TAC §213.10 of Commission rules.

II. The sedimentation/filtration basins are designed in accordance with the 1999 edition of the TCEQ's "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices." The basins will incorporate sedimentation and filtration as described above.

III. All sediment and or media removed from the partial sedimentation/filtration basins during maintenance activities shall be properly disposed of according to 30 TAC 330 or 30 TAC 335 as applicable.

IV. The TCEQ does not agree with Comal County's assertion that because Watershed #1 has less than 20% impervious cover and the extension service functions as an educational facility, that it is exempt from the requirements of a WPAP. Watershed #1 is part of the 46.503 acre site and the total impervious cover of 28.06%.

The existing downgradient vegetation within Watershed #1 will be accepted as treatment of stormwater runoff from the associated impervious cover. Prior to any construction within Watershed #1 not approved by this letter, a modification to the WPAP must be submitted with appropriate application fees.

V. Because stormwater treatment was proposed within Watershed #3, prior to any construction not approved by this letter within Watershed #3, appropriate construction plans must be submitted to the TCEQ to determine that no other sources of pollution are associated with the project.

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. 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 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. One well exists on 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.

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 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 John Mauser of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210/403-4024.

Sincerely,

Bobby D. Caldwell

for Margaret Hoffman
Executive Director
Texas Commission on Environmental Quality

MH/jkm/eg

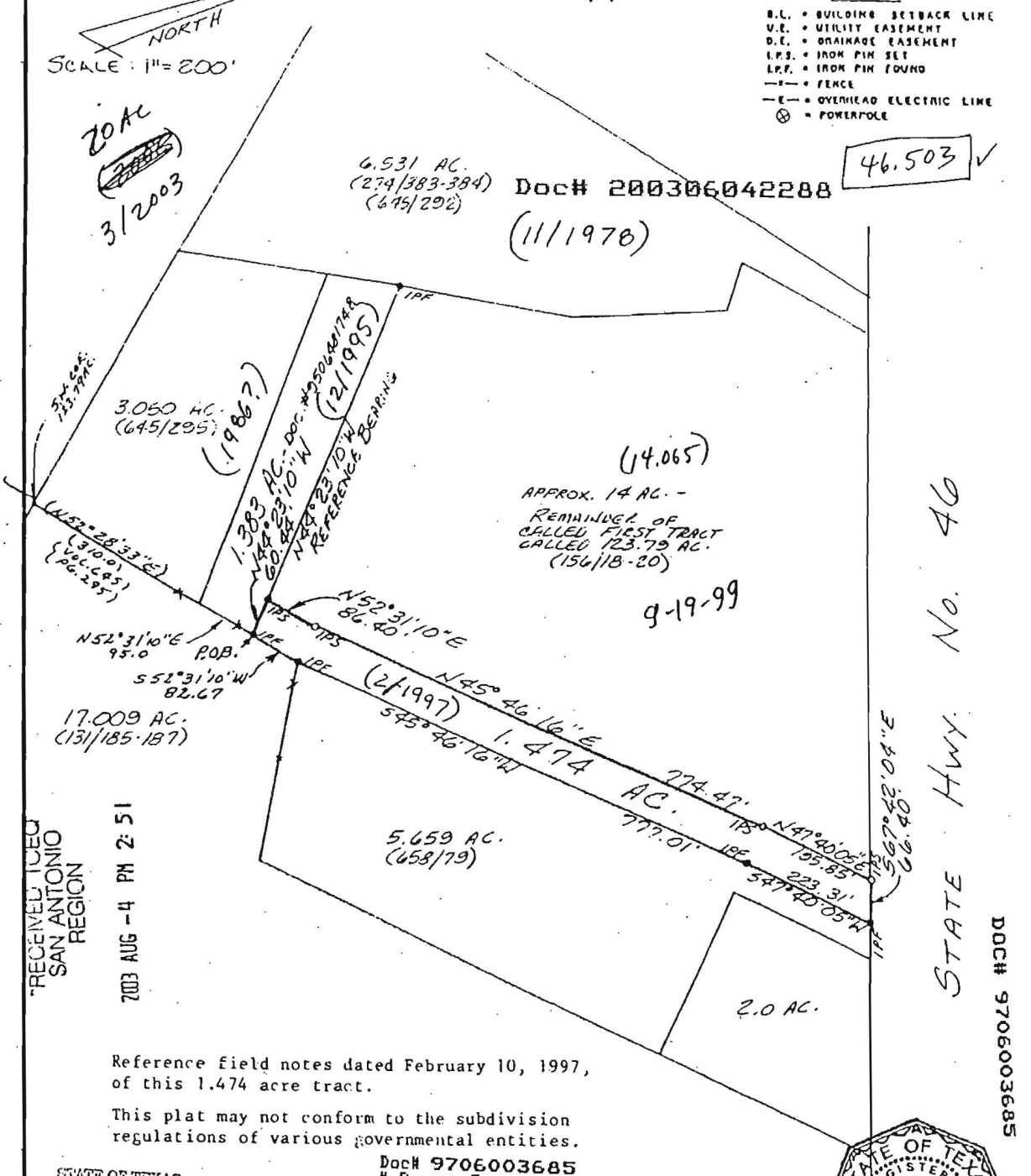
Enclosure:
1. Exhibit "A" (Site acreage map, Document# 9706003685)
2. WPAP Site Plan
3. Deed Recordation Affidavit, Form TCEQ-0625
4. Change in Responsibility for Maintenance or Permanent BMPs-Form TCEQ-10263

cc w/enclosures 1& 2:

Mr. John Bohuslav, TXDOT San Antonio District
Mr. Greg Ellis, Edwards Aquifer Authority
TCEQ Central Records MC 212

~~DOC# 9706003685~~

EXHIBIT "A"



Reference field notes dated February 10, 1997, of this 1.474 acre tract.

This plat may not conform to the subdivision regulations of various governmental entities.

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
COMAL COUNTY, TEXAS

Doc# 9706003685
Pages: 5
Date : 02-21-1997
Time : 11:01:59 A.M.
Filed & Recorded in
Official Records
of COMAL County, TX.
JOY STREATER
COUNTY CLERK
Rec. .00

STATE OF TEXAS
REGISTERED
RICHARD A. GOODWIN
4069
PROFESSIONAL
LAND SURVEYOR

Being a 1.474 acre tract of land out of the A. M. Holbrook Survey No. 423, Abstract No. 271, Comal County, Texas, and being out of a tract called 123.79 acres conveyed to Calvin Heidrich by Deed recorded in Volume 156, Pages 18-20 of the Deed Records of Comal County, Texas.

S. CRAIG HOLLMIG, INC.
410 N. SEGUIN
NEW BRAUNFELS, TX 78130
(210) 625-8555

STATE OF TEXAS
COUNTY OF COMAL

I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE ABOVE PLAT IS TRUE AND CORRECT ACCORDING TO AN ACTUAL SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND THAT THERE ARE NO VISIBLE EASEMENTS OR ENCROACHMENTS OF BUILDINGS ON ADJOINING PROPERTY AND THAT ALL BUILDINGS ARE WHOLLY LOCATED ON THIS PROPERTY EXCEPT AS SHOWN ABOVE.

This 10th day of February, 1997 A. D.

R A Goodwin

97023

Attachment B

Narrative of Proposed Modification to Drainage Area 1

The Comal County Road Department is proposing to do the following:

1) Construct a new barn to hold small livestock for students in a 4-H group.
2) Construct a new show arena with seating to showcase livestock.
3) Construct stock pile area to hold paving materials for road department.
4) Construct a new meeting room for agricultural education.
5) Expand existing parking lot to facilitate expansion.
6) Construct a new potting shed and green house for various plants.
7) Construct a new gazebo for rest and break area.
8) Construct engineered filter strips (See WPAP Site Plan) in various areas to treat storm water runoff.
9) Regrade parts of Drainage Area 1 (See WPAP Proposed Contours) to effectively utilize proposed engineering filter strips.

Items 1 and 2 above will be used to provide much needed space for the Comal County youth to hold and show their livestock.

The equipment that will be used in the proposed Barn and Arena will include:

- Washing Stations
- Animal Clippers (ex. Sheep Shears)
- Automatic animal watering system.
- Intercom System with Loud Speaker (Arena Only)
- Rain Harvesting System (Barn Only)

Item 3 above will give the road department more space to hold paving and earth materials.

The equipment that will be used in the proposed stock pile will include:

- Hydraulic Dump Trucks
- Front End Loaders
- Bobcats

The materials that will be stored in the proposed stock pile will include

- Base Material
- Gravel
- Asphalt
- Paving Materials

Item 4 will give the extension office more space to hold education classes to Comal County residents.

- Septic System and Drain Field

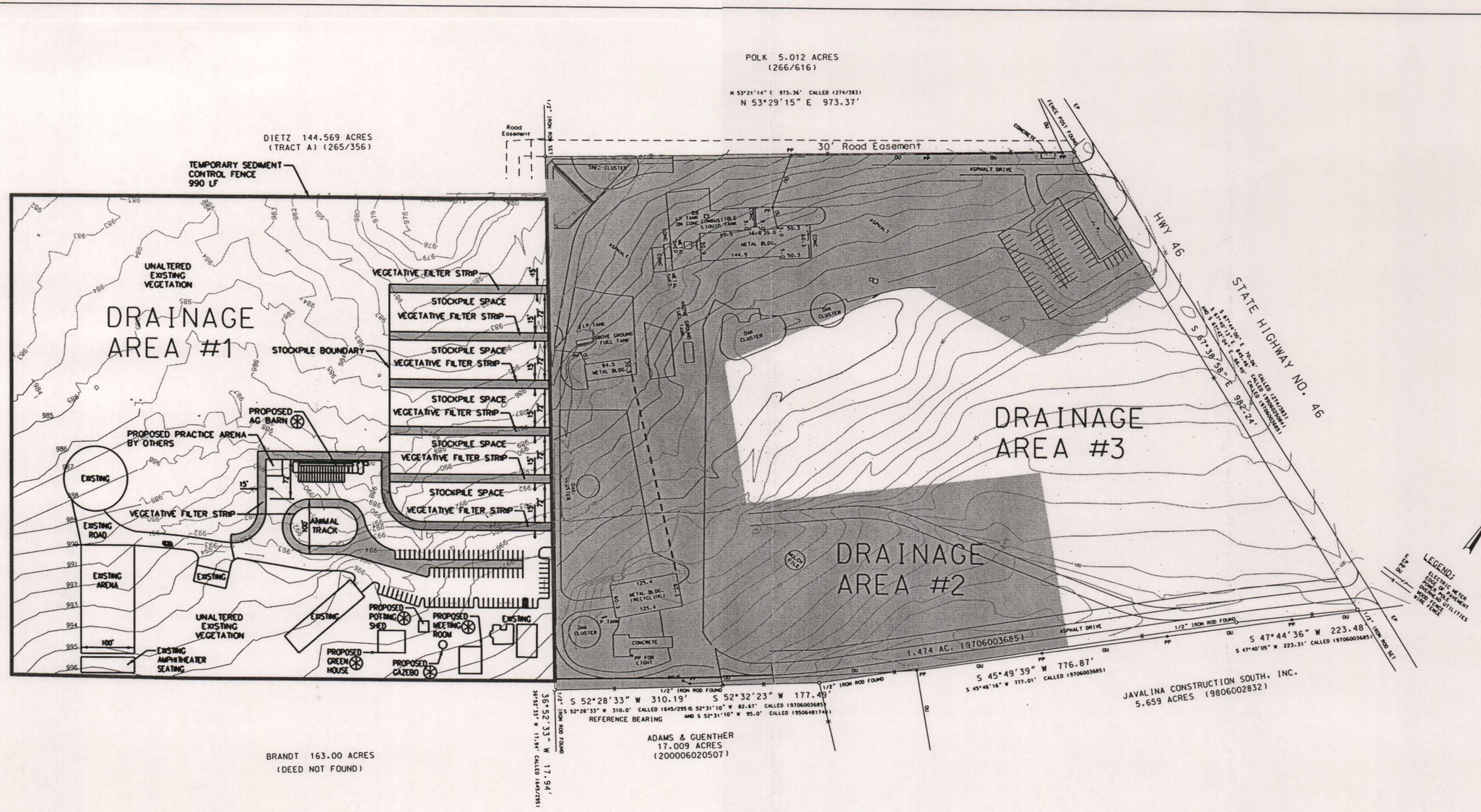
The modification to the approved WPAP will include engineered filter strips as well as existing vegetation to treat storm water runoff from items 1-9.

The subject site consists of six (6) tract totaling 46.503 acres summarized on the attached table.

Proposed Modifications to Previously Approved Water Pollution Abatement Plan

Tract	Acquired	Acres	Type of Impervious Cover	Impervious Cover (Acres)	Impervious Cover (Percent)
1	1978	6.531	Pavement	4.33	77.03%
2	1986	3.05	Office & Shop Buildings		
	Total	9.581	Storage Yards	3.05	
3	1995	1.383	Storage Yards	1.383	100.00%
4	1997	1.474	Access Road to County Recycling Operation	0.581	39.42%
5	1999	14.065	Approximately 1.5 Acres of Mulching Operation	0	19.59%
			JP & Parking Lot	1.044	
			Road to Recycling	1.712	
6	2003	20.00	Pavement/Parking Lot	2.262	29.06%
			Road Department Stockpile	2.401	
			Proposed Extension Proposed Barn **	0.000	
			Proposed Extension Oval Animal Run	0.174	
			Proposed Extension Green House **	0.000	
			Proposed Extension Gazebo **	0.000	
			Proposed Extension Meeting Room **	0.000	
			Proposed Extension Potting Shed **	0.000	
			Existing Meeting Room	0.051	
			Extension Existing House/Barn/Storage/Road	0.925	
TOTAL		**46.503**	——	**17.91**	**38.52%**

** Buildings Utilizing Rainwater Harvesting System



LEGEND

VEGETATIVE FILTER STRIP

⊛ BUILDINGS UTILIZING RAINWATER HARVESTING SYSTEMS

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
WPAP SITE PLAN

Date: 09/07/2007
Drawn by: STS
Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

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: Comal County Engineer's Office

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.

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

2. ✓ **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. ✓ **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. ✓ **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. ✓ 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: Guadalupe River via Bleiders 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.** 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, 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.

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

9. ✓ **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. ✓ **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.

✓ 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. T**emporary 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. ✓ **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. ✓ 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. ✓ 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. ✓ 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 at the end of this form.

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.

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:

Robert H. Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/1/07
Date

Attachment A – Spill Response Actions

A description of the measures to be taken to contain any spill of hazardous substances is provided in the Spill Prevention Control and Countermeasure Plan, which is attached as part of this Attachment.

SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

FOR

Comal County Road Department
195 David Jonas Drive
New Braunfels, Texas 78132

Original Date of Plan: June 14, 2000
Date of Last Plan Amendment/P.E. Certification: June 14, 2000
Date of Last Plan Review: N/A (new facility)

Designated person accountable for spill prevention:
Thomas Hornseth
Comal County Engineer

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.

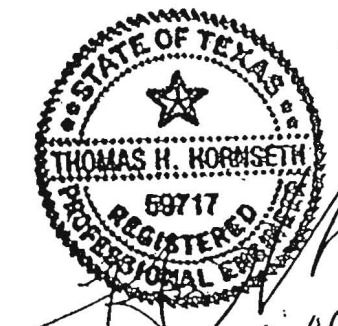
Engineer: THOMAS H. HORNSETH

Signature:

Registration Number: 59717 TX

State: TEXAS

Date: 6-14-00



6-14-00

SPILL PREVENTION CONTROL AND COUNTERMEASURE COMPLIANCE INSPECTION PLAN REVIEW PAGE

In accordance with 40 CFR Part 112.5(b), a review and evaluation of this SPCC Plan is conducted at least once every three years. As a result of this review and evaluation, Comal County Road Department will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been field-proven at the time of the review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

Review Dates	Signature
1. 7-7-03	
2. _____	_____

MANAGEMENT APPROVAL

Comal County Road Department is committed to the prevention of discharges of oil to navigable waters and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating and implementation of this Spill Prevention Control and Countermeasures Plan.

Authorized Facility Representative: THOMAS H. HORNSEY Signature:

Title: COMAL COUNTY ENGINEER

TABLE OF CONTENTS

1.	FACILITY OWNER (Parent Corporation) and OPERATOR		
	A.	Address and Telephone	1
	B.	Facility Operator, Address and Telephone	1
2.	FACILITY CONTACTS		1
3.	FACILITY DESCRIPTION		
	A.	Facility Operations	1
	B.	Facility Storage	2
	C.	Distance to Navigable Waters and Adjoining Shorelines and Flow Path	2
4.	SPILL HISTORY		2
5.	POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL		3
6.	PREVENTION MEASURES PROVIDED		
	A.	Drainage Control	4
	B.	Bulk Storage Tanks/Secondary Containment	4
	C.	Facility Transfer Operations	5
	D.	Facility Tank Car and Truck Loading/Unloading Operations	6
	E.	Inspections/Record Keeping	7
	F.	Site Security	7
	G.	Personnel Training and Spill Prevention Procedures	7
	H.	Spill Control Equipment	8
	I.	Emergency Contacts	8

FIGURES

FIGURE 1 Facility Layout and Surface Drainage Diagram

APPENDICES

APPENDIX 1 Secondary Containment Calculations for Diked Storage Areas

APPENDIX 2 Certification of the Applicability of the Substantial Harm Criteria Checklist

APPENDIX 3 Facility Inspection Report

1. **FACILITY OWNER (Parent Corporation) and OPERATOR:**

A. Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

B. Facility Operator Address and Telephone:

Comal County Road Department
195 David Jonas Drive
New Braunfels, TX 78132
(830) 608-2090

2. **FACILITY CONTACTS:**

Name	Title	Telephone
Thomas Hornseth	County Engineer	(830) 608-2090
Dana Schmitt	Assistant Engineer	(830) 608-2090

3. **FACILITY DESCRIPTION:**

A. Facility Operations:

Comal County Road Department is a local county government facility in Comal County, Texas. Personnel at the facility include office staff, maintenance shop mechanics, road construction and maintenance crews. Hours of operation are 8:00 a.m. to 4:30 p.m., 5 days a week.

There is a 15,000-gallon, double-walled, aboveground storage tank at the facility that is partitioned into two compartments. It has a capacity of 5,000 gallons diesel fuel and 10,000 gallons unleaded gasoline. The tank was installed 4/17/00.

The fuel tank is used for county vehicles only. Access to the system is controlled by a key-based fuel management system. The facility receives products from a local fuel distributor by tanker truck.

Other smaller tanks at the facility are used to store new and used oil products and emulsified asphalt for roadwork. Drums of oil products are stored in a shed near the shop.

B. Facility Storage:

Aboveground Storage Tanks

Tank ID	Volume	Contents
1	15,000 gallons	Partitioned into 2 compartments
	[5,000 gallons	Diesel Fuel]
	[10,000 gallons	Unleaded Gasoline]
2	300 gallons	waste oil
3	500 gallons	new oil
4	10,000 gallons	emulsified asphalt

Drums/Containers	Volume	Contents
3 Drums	55 gallons each	oil
1 Drum	55 gallons	kerosene
1 Drum	55 gallons	automatic transmission fluid

Total: 26,075 gallons

C. Distance to Navigable Waters and Adjoining Shorelines and Flow Path:

The Comal County Road Department site is located approximately 1000 feet east of an unnamed dry creek in Comal County. There are no storm drains at the site.

4. SPILL HISTORY:

No spill events have occurred at this facility.

5. POTENTIAL SPILL PREDICTIONS, VOLUMES, RATES, AND CONTROL

Source	Type of Failure	Volume	Rate (gallon/hr)	Direction of Flow	Containment
Aboveground Storage Tanks					
#1 Diesel/ Gasoline	Leakage	15,000 gal	Rate will vary	Built-in secondary tank containment	15,000 gal
#2 Waste Oil	Leakage	300 gal	Rate will vary	Within containment area	300 gal
#3 New Oil	Leakage	500 gal	Rate will vary	Inside shop	Absorbent material
#4 Emulsion	Leakage	10,000 gal	Rate will vary	On concrete slab	Absorbent material
Fuel Delivery Operations					
Fuel truck unloading	Spill	Less than 15 gal	Rate will vary	Within remote spill container	15 gallon
Other Storage					
New and used motor oil	Leakage; drum rupture	55 gal	55 gal/ hour	Within containment area	359 gallon
Aboveground piping	Leakage; valve failure	5 gal	5 gal/hour	Within curb area	656 gallon

6. PREVENTION MEASURES PROVIDED:

A. Drainage Control

(i) Drainage from diked storage areas:

Tank 2 has a concrete containment structure. Water or spilled oil can be removed by pump and taken to the wash rack area to be filtered and recycled.

Tank 4 has an earthen berm surrounding the tank to contain any spilled material.

Drums are stored in a shed surrounded by a containment curb; no water accumulates there.

(ii) Valves used on diked storage areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iii) Plan drainage systems from undiked areas:

The curb area around Tank 1 can be drained if water accumulates. Drain plugs are normally in place to contain any liquid that collects.

(iv) Final discharge of drainage:

There are no storm drains at the facility and the secondary containment for the tanks prevents any discharge of oil from the facility.

(v) Facility drainage systems and equipment:

There is a wash rack area to filter and recycle any oily water with zero discharge.

B. Bulk Storage Tanks/Secondary Containment

(i) Tank compatibility with its contents:

All tank materials are suitably impervious to the fuels being stored. Tank 1 is also ballistics resistant and designed to exceed a U.L. 2-hour fire test.

(ii) Diked area construction and containment volume for storage tanks:

See Appendix 1 for containment calculations. Tank 1 is located on a concrete slab with a 2" curb. Tank 2 is inside a concrete containment structure. Tank 4 is surrounded by an earthen berm. The drums of oil products are stored in a covered shed that has a curb around the perimeter.

(iii) Diked area, inspection and drainage of rainwater:

Any water that is collected in the diked areas is inspected for spilled oil before draining. Any oily water can be removed by pump and taken to the wash rack area to be filtered and recycled.

(iv) Corrosion protection of buried metallic storage tanks:

There are no buried tanks at this facility.

(v) Corrosion protection of partially buried metallic tanks

There are no partially buried tanks at this facility.

(vi) Aboveground tank periodic integrity testing:

The aboveground storage tanks are inspected annually using the inspection report in Appendix 2. The tanks are visually inspected at each fuel transaction for signs of deterioration, or any leaks.

(vii) Control of leakage through internal heating coils:

The tanks at this facility are not equipped with heating coils.

(viii) Tank installation fail-safe engineered:

Tank 1 is equipped with an overfill prevention valve that limits filling of the tank to 90% capacity. This tank is equipped with electronic tank level monitors; a sensor is in place to detect the presence of any liquid in the interstitial space of the double walled, two-compartment tank.

(ix) Observation of disposal facilities for effluent discharge:

This facility has no disposal processes that discharge effluents into navigable water.

(x) Visible oil leak corrections from tank seams and gaskets:

Any visible oil leaks are reported to the plant operator and promptly corrected.

(xi) Appropriate position of mobile or portable oil storage tanks:

Portable drums are located inside a covered storage shed. There is a curb in place to control any spills.

C. Facility Transfer Operations

(i) Buried piping installation protection and examination:

There is no buried piping at this facility.

(ii) Not-in-service and standby service terminal connections:

When a pipeline is not in service it is capped.

(iii) Pipe supports design:

Pipe supports are properly designed to minimize abrasion and corrosion and allow for expansion and contraction.

(iv) Aboveground valve and pipeline examination:

The Comal County Road Department fuel system has single-wall steel product piping, equipped with mechanical in-line leak detectors. All piping is aboveground and is examined during inspections. Operating personnel continuously inspect valves and piping.

(v) Aboveground piping protection from vehicular traffic:

All aboveground piping, hoses, and dispensers are located inside steel ballards and within a curbed concrete slab. They are not at risk of impact from vehicular traffic.

D. Facility Tank Car and Truck Loading/Unloading Operations

(i) Loading/unloading procedures meet DOT regulations:

Comal County Road Department requires all drivers making fuel deliveries to comply with DOT regulations and facility standard operating procedures.

(ii) Secondary containment for vehicles adequate:

The fuel tank area is designed with curbing and remote fill spill containers to provide spill containment protection.

(iii) Warning or barrier system for vehicles:

A Comal County employee is present to observe each fueling operation to assure that fuel tanker personnel completely disconnects transfer lines before departure.

(iv) Vehicles examined for lowermost drainage outlets before leaving:

A Comal County employee is present to observe each fueling operation to assure that there is no leakage while the tanker truck is in transit.

E. Inspection/Record Keeping

Facility inspection procedures:

Inspections will be conducted annually starting June 2000 and records of these inspections will be documented and signed by the inspector or plant manager. During the inspections, all tanks, containment structures, valves, piping and other equipment is inspected. The checklist used for these inspections can be found in Appendix 2.

Length of time records kept:

Inspection, training and tank integrity testing are retained for three or more years.

F. Site Security

(i) Fencing

A locked gate secures the facility when it is not open for regular operation.

(ii) Flow valves locked

All tank valves are secured.

(iii) Starter controls locked

Access to the fuel products limited to authorized personnel and is controlled by a key system.

(iv) Pipeline loading/unloading connections securely capped:

Pipeline connections are securely capped when they are not in use.

(v) Lighting adequate to detect spills:

The aboveground fuel tank area is lighted adequately to detect spills and to discourage acts of vandalism.

G. Personnel Training and Spill Prevention Procedures

(i) Personnel instructions:

All new employees that use oil based products as part of their job are required to have a spill prevention training to instruct them in the operation of fuel equipment and handling of oil products to prevent accidental spills.

(ii) Designated person accountable for spill prevention:

The County Engineer is the designated person accountable for spill prevention at the Comal County Road Department.

(iii) Spill prevention briefings:

Spill prevention is discussed at yearly briefings.

H. Spill Control Equipment

Spill Control equipment on site includes granular absorbent material, brooms and shovels. Spill equipment is stored in the shop.

I. Emergency Contacts

National Response Center	1-800-424-8802
Tom Hornseth, County Engineer	(830) 608-2090
Service Station Constructors and Fuel Systems	(210) 493-3277
Tri State Service and Testing	(210) 493-4329

FIGURE 1

Facility Layout and Surface Drainage Diagram

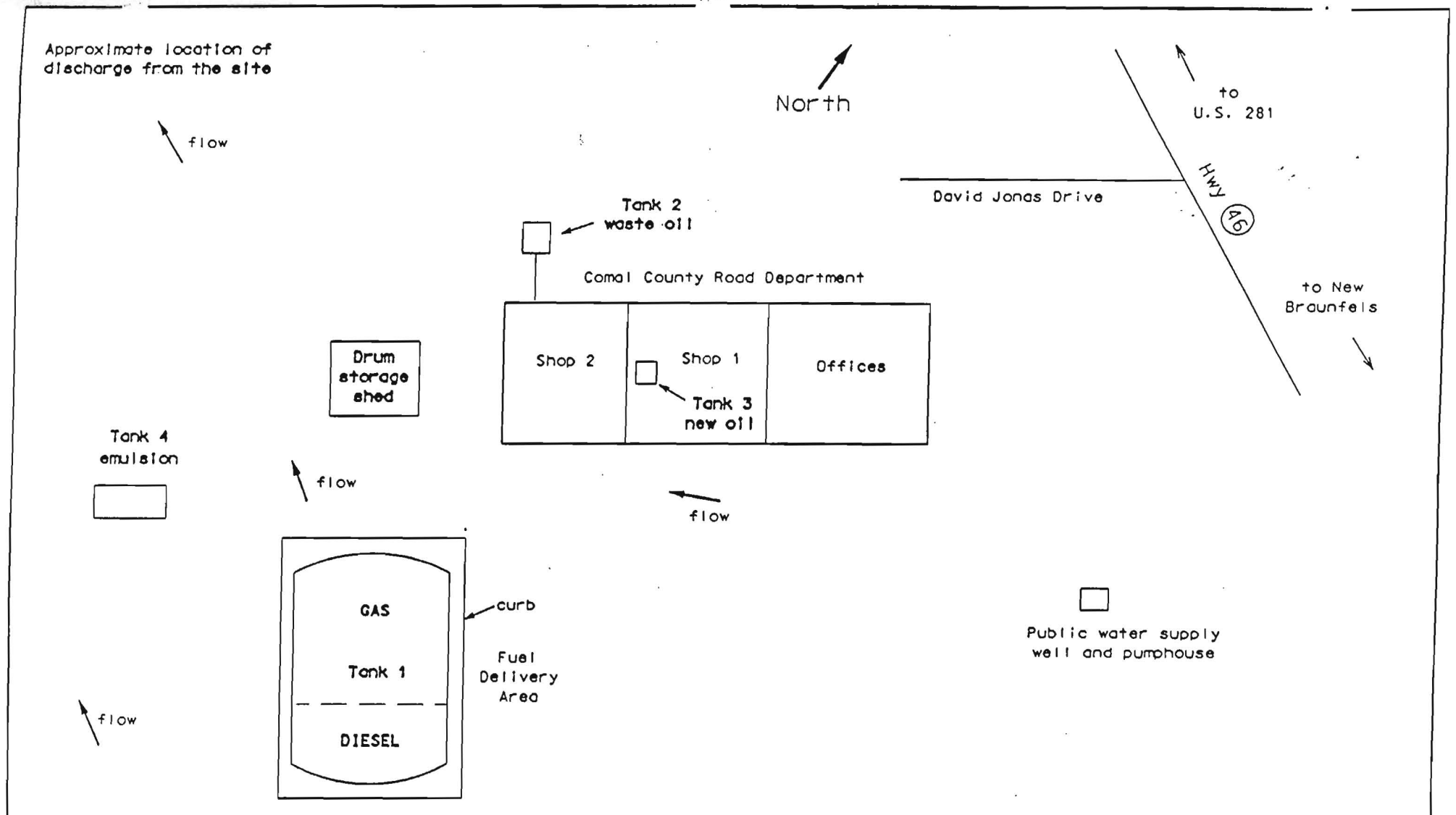


Figure 1 - Facility Layout and Drainage Diagram
Comal County Road Department
(Not to Scale)

APPENDIX 1

Secondary Containment Calculations for Diked Storage Areas

Containment Calculation for Tank #1

Tank 1 has built-in secondary containment for the contents of the tank. There is a containment curb surrounding the tank for any leakage outside the tank

Curb Area = 35 feet X 15 feet = 525 square feet

Total Containment Volume = Curb Area X Curb Height
= 525 square feet X 0.167 feet
= 87.7 cubic feet = 656 gallons

Containment Calculation for Tank #2

Required Containment Volume = 110 % of tank volume
= 300 gallons X 1.1 = 330 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 330 gallons X 0.1337 cu. ft./gallon = 44.1 cu. ft.

Available Diked Area = 5.5 feet X 7 feet = 38.5 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (44.1 cu. ft.) ÷ (38.5 sq. ft)
= 1.15 feet or 13.7 inches

Actual height of concrete wall around Tank 2 is 4 feet

Containment Calculation for Tank #4

Required Containment Volume = 110 % of tank volume
= 10,000 gallons X 1.1 = 11,000 gallons

Minimum Containment Vol. = Required Containment Vol. X 0.1337 cu. ft./gal.
= 11,000 gal. X 0.1337 cu. ft./gal. = 1470.7 cu. ft.

Available Diked Area = 24 feet X 27 feet = 648 sq. ft.

Required Height of Dike Walls = (Minimum Containment Vol.) ÷ (Diked Area)
= (1470.7 cu. ft.) ÷ (648 sq. ft)
= 2.3 feet

Necessary height of earthen berm around Tank 4 is 2 1/2 feet

Containment Calculation for Drum Storage Shed

Curb Area = 12 feet X 12 feet = 144 square feet

Total Containment Volume = Curb Area X Curb Height
= 144 square feet X 0.333 feet
= 48 cubic feet = 359 gallons

APPENDIX 2

Certification of the Applicability of the Substantial Harm Criteria Checklist

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

FACILITY NAME: Comal County Road Department

FACILITY ADDRESS: 195 David Jonas Drive

New Braunfels, TX 78132

1. Does the facility transfer oil over water to or from vessels and does the facility have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes _____ No __X__

2. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and does the facility lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes _____ No __X__

3. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the formula in attachment C-III, Appendix C, 40 CFR 112 or a comparable formula) such that a discharge from the facility could cause injury to fish and wildlife and sensitive environments? For further description of fish and wildlife and sensitive environments, see Appendices I, II, and III to DOC/NOAA's "Guidance for Facility and Vessel Response Environments" (Section 10, Appendix E, 40 CFR 112 for availability) and the applicable Area Contingency Plan.
   Yes _____ No __X__

4. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and is the facility located at a distance (as calculated using the appropriate formula (Attachment C-III, Appendix C, 40 CFR 112 or a comparable formula[1]) such that a discharge from the facility would shut down a public drinking water intake[2]?
   Yes _____ No __X__

5. Does the facility have a total oil storage capacity greater than or equal to 1 million gallons and has the facility experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes _____ No __X__

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

THOMAS H. HORNSETH
Name (please type or print)

Signature

COMAL CO. ENGINEER
Title

6-14-00
Date

from 40 CFR 112 Appendix C, Attachment C-II

---

[1]If a comparable formula is used, documentation of the reliability and analytical soundness of the comparable formula must be attached to this form.

[2]For the purposes of 40 CFR Part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR 143.2(c).

APPENDIX 3

Facility Inspection Report

Facility Inspection Report

Date: _____

Time: _____

Inspector: _____

X=Satisfactory
NA=Not Applicable
0=Repair or Adjustment Required
C=See comment under Remarks/Recommendations

Drainage

____ Any noticeable oil sheen on runoff.

____ Containment area drainage valves are closed and locked.

____ Oil/water separator systems working properly.

____ Effluent from oil/water separator inspected.

____ No visible oil sheen in containment area.

____ No standing water in containment area.

ASTs

____ Tank surfaces checked for signs of leakage.

____ Tank condition good (no rusting, corrosion, pitting).

____ Bolts, rivets, or seams are not damaged.

____ Tank foundation intact.

____ Level gauges and alarms working properly.

____ Vents are not obstructed.

____ Valves, flanges, and gaskets are free from leaks.

____ Containment walls are intact.

Pipelines

____ No signs of corrosion damage to pipelines or supports.

____ Buried pipelines are not exposed.

____ Out-of-service pipes capped.

____ Signs/barriers to protect pipelines from vehicles are in place.

____ No leaks at valves, flanged, or other fittings.

Truck Loading/Unloading Area

____ No standing water in rack area.

____ Warning signs posted.

____ No leaks in hoses.

____ Drip pans not overflowing.

____ Catch basins free of contamination.

____ Containment curbing or trenches intact.

____ Connections are capped or blank-flanged.

Security

____ Fence and gates intact.

____ Gates have locks.

____ ASTs locked when not in use.

____ Starter controls for pumps locked when not in use.

____ Lighting is working properly.

Training

____ Spill prevention briefing held.

____ Training records are in order.

Remarks/Recommendations:

_____

_____

_____

Attachment B – Potential Sources of Contamination

Surface water could be impacted by storm water runoff from areas of disturbed soils within the two construction sites of the project. Potential sources of contamination include:

Removal of top soils and surface vegetation, and;

Placement of road construction materials.

Attachment C – Sequence of Major Activities

The sequence of major events for each of the projects is listed below:

Barn

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- construction of foundation and driveway
- erection of metal building
- finishing of interior of building
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 0.060 acres

County Extension Office

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- erection of metal buildings
- finishing of interior building
- construction of parking lot
- construction of on-site sewage facility
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.106 acres

Road Department Stockpile

- clearing of topsoil
- development of subgrade and drainage
- placement of crushed limestone base material
- paving of stock pile area
- final grading, landscaping and seeding

Estimated area of disturbed earth = 2.401 acres

Attachment D – Temporary Best Management Practices and Measures

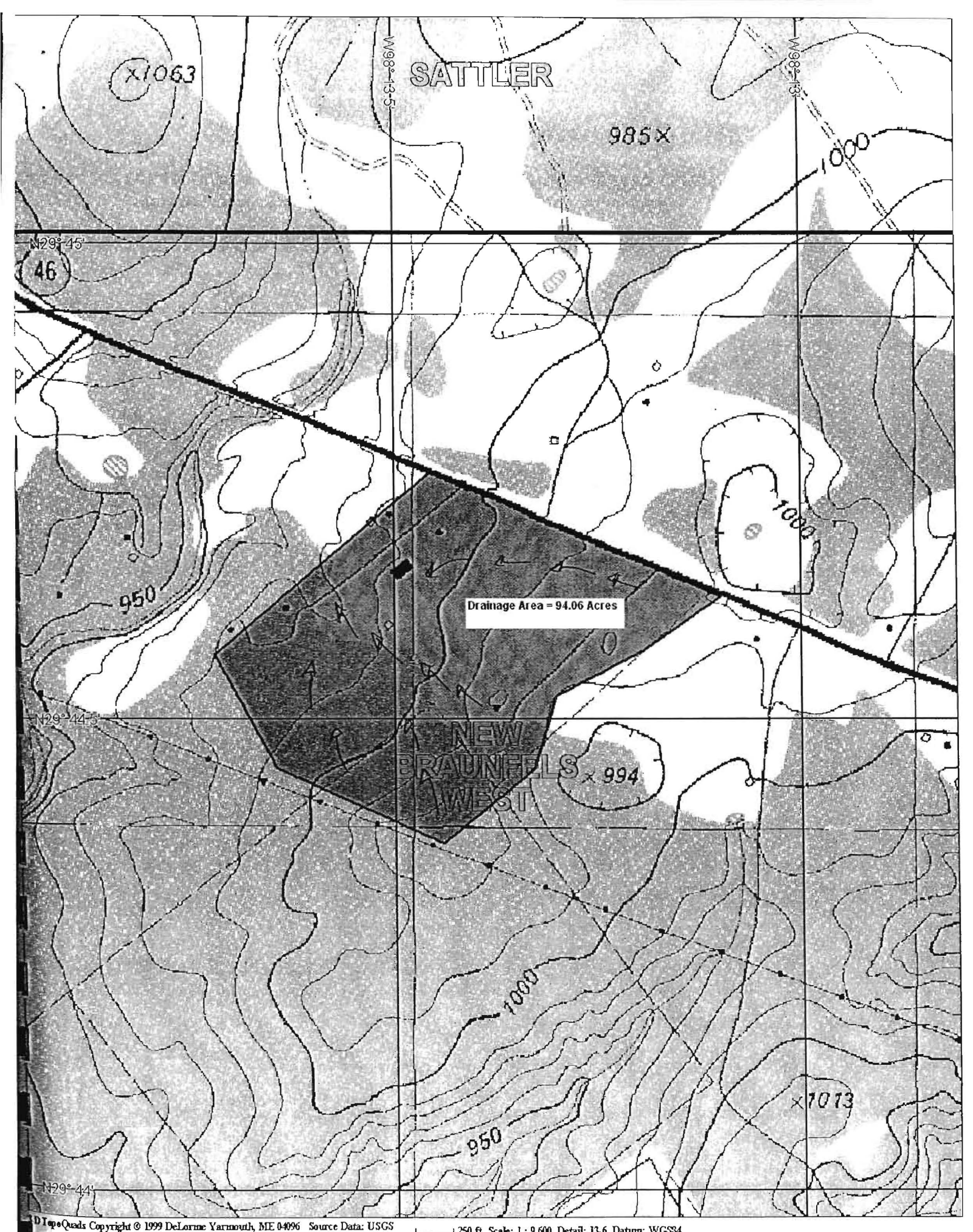
Temporary storm water best management practices will include:

- maintenance of vegetation (existing trees, bushes and grasses) in discharge areas for erosion and sediment control
- construction and maintenance of temporary storm water filtration fencing around the perimeter of all areas of disturbed soil.

a. Based on the topographic map of the area, there is approximately 13.871 acres of land up gradient of the site that will produce storm water that will flow across the site. This storm water that will flow across the site will have been treated by existing vegetation located on the 13.871 acres up gradient of the site. Therefore, the only runoff that will be treated will be storm water that falls on the 20.000 acres in question.
b. The maintenance of vegetation in discharge areas will act as a filter to surface water that originates on-site. The temporary storm water filtration fencing will cause storm water that originates on site to be filtered through the filtration fencing and keep all sediment on-site.
c. The vegetation and filtration fencing will prevent pollutants from entering surface streams, sensitive features, or the aquifer by filtering the on-site storm water before entering surface streams, sensitive features, or the aquifer.
d. The vegetation and filtration fencing will, to the maximum extent practicable, maintain flow to naturally-occurring features. They will do so by filtering the water and allowing it to maintain is naturally-occurring flow, instead of diverting it in an unnatural direction.

Attachment F – Structural Practices

Structural practices shall be the placement of filtration fencing on the downstream end of disturbed areas.



ATTACHMENT C - DRAINAGE AREA MAP

Attachment I – Inspection and Maintenance for BMP's

Comal County shall inspect the condition of the perimeter filtration fencing on a weekly basis and after any rainfall events to ensure they are functioning properly.

Comal County shall make any necessary repairs immediately.

Comal County will document any changes, due to on-site conditions, on the WPAP site plan. Documentation shall show changes made, date, person responsible, and reason changes were made.

Person responsible for erosion and sedimentation control and maintenance is Robert Boyd, P.E., the Comal County Assistant Engineer.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Practices

SOIL STABILIZATION PRACTICES:

___ Hydromulching
___ Temporary Seeding
___ Permanent Planting, Sodding, or Seeding
___ Mulching
___ Soil Retention Blanket
___ Buffer Zones
_X_ Preservation of Natural Resources

Other: Disturbed areas on which construction activity has ceased permanently shall be stabilized within 14 days unless activities are scheduled to resume and done within 21 days.

STRUCTURAL PRACTICES:

_X_ Silt Fences
___ Hay Bales
___ Gravel Filtration Bags
___ Rock Berms
___ Diversion, Interceptor, or Perimeter Dikes
___ Diversion, Interceptor, or Perimeter Swales
___ Diversion Dike and Swale Combinations
___ Pipe Slope Drains
___ Paved Flumes
___ Rock Bedding at Construction Exit (Stabilized Entrance)
___ Timber Matting at Construction Exit (Stabilized Entrance)
___ Channel Liners
___ Sediment Traps
___ Sediment Basins
___ Storm Inlet Sediment Trap
___ Stone Outlet Structures
___ Curbs and Gutters
___ Storm Sewers
___ Velocity Control Structures
___ Geotextiles

Other: _____

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: Comal County Engineer's Office

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

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

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

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

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

   _____

   _____

   _____

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.

4. n/a 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.

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

5. n/a 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.

___ 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.

✓ 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.**

✓ 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.

___ 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. ✓ **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. ✓ **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. ✓ 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. n/a **ATTACHMENT I -Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is 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. ✓ 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. ✓ 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:

Robert Boyd, P.E.
Print Name of Customer/Agent

Signature of Customer/Agent

10/1/07
Date

Attachment B

BMPs for Upgradient Stormwater

Based on the topographic map of the area, there is approximately 13.871 acres of land upgradient of the site that will produce stormwater that will flow across the site. This stormwater that will flow across the site will have been treated by existing vegetation located on the 13.871 acres upgradient of the site. Therefore, the only runoff that will be treated will be stormwater that falls on the 20.000 acres in question.

Attachment C

BMPs for On-site Stormwater

Improvements within Drainage Area #1:

The proposed improvements within Drainage Area #1 will be treated by proposed engineered filter strips. Construction Plans were prepared according to the TCEQ Technical Guidance Manual (TGM).

Attachment F

Construction Plans

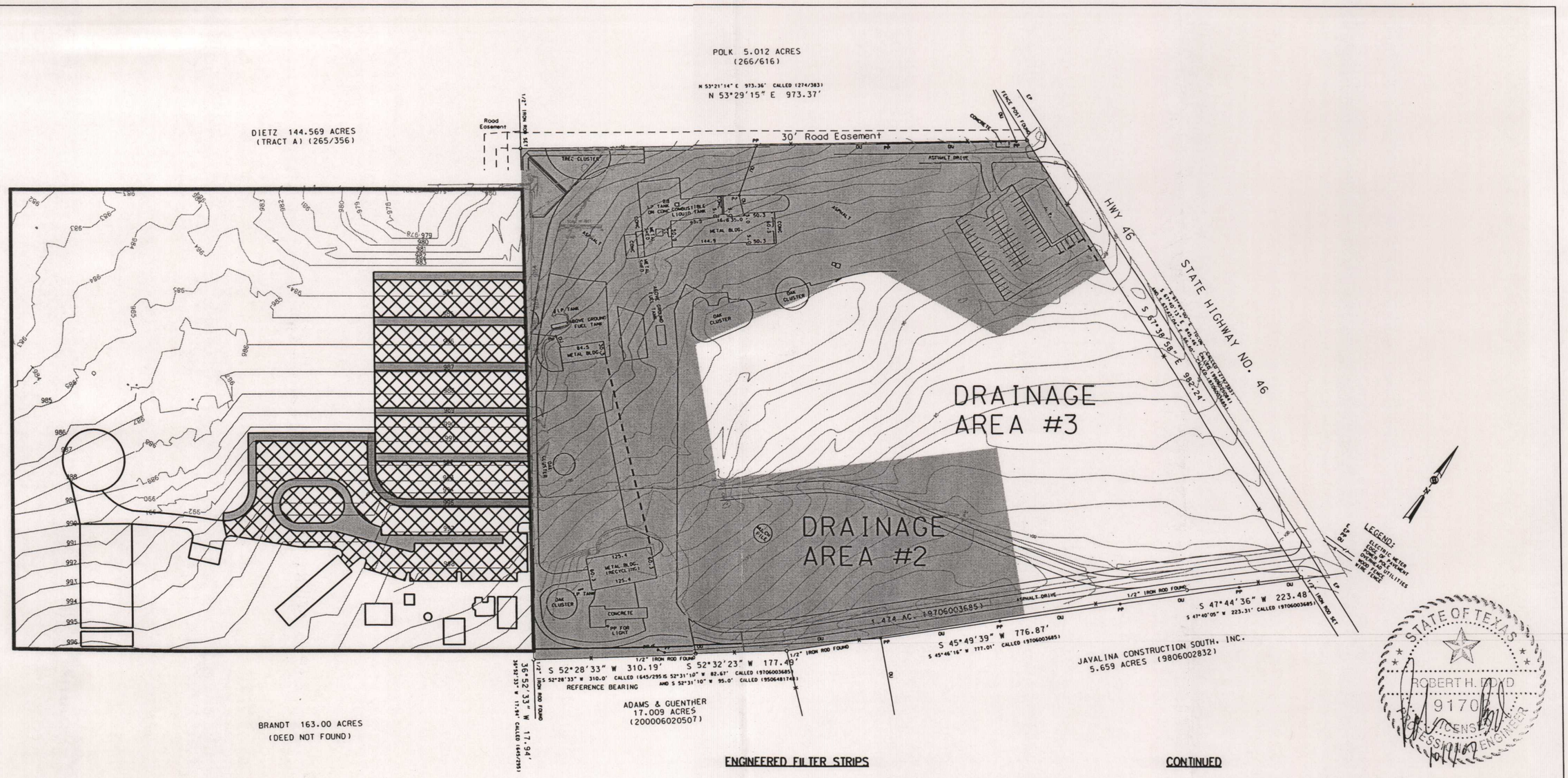
Improvements within Drainage Area #1:

As stated in the Narrative of Proposed Modification, the proposed improvements in Drainage Area #1 will be treated by engineered filter strips according to the TCEQ's Technical Guidance on Best Management Practices over the Edwards Aquifer Recharge Zone. According to that same publication:

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 level; otherwise runoff will tend to form a channel in the low spot. A level spreader should not be used to distribute runoff to an engineered filter strip.
7) Filter strips should be landscaped after other portions of the project are completed.

In the WPAP that was approved on October 24, 2003, Drainage Area #1 was 20.000 acres, and had 0.925 acres of impervious cover. In the future, the area will have 5.813 acres of impervious cover. Runoff from proposed impervious cover will be treated using engineered filter strips. The engineered filter strips do meet the requirements as listed above in the following ways.

1) All engineered filter strips are a minimum of 15 feet.
2) Engineered filter strips will run along the entire length of contributing areas.
3) Maximum width of impervious cover in the direction of flow is 72 feet.
4) Vegetation coverage is at least 80% of the proposed interim vegetative filter strip.



LEGEND

VEGETATIVE FILTER STRIP

CONTRIBUTING IMPERVIOUS COVER

NOTES

VEGETATIVE FILTER STRIPS WERE PLACED ACCORDING TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL SECTIONS 3.2.4 AND 3.4.6.

ENGINEERED FILTER STRIPS

1. THE FILTER STRIP SHOULD EXTEND ALONG THE ENTIRE LENGTH OF THE CONTRIBUTING AREA AND THE SLOPE SHOULD 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 BOTH SIDES).

2. THE MINIMUM VEGETATED COVER FOR ENGINEERED FILTER STRIPS IS 80%

CONTINUED

3. THE AREA CONTRIBUTING RUNOFF TO A FILTER STRIP SHOULD BE RELATIVELY FLAT SO THATTHE RUNOFF IS DISTRIBUTED EVENLY TO THE VEGETATED AREA WITHOUT THE USE OF A LEVEL SPREADER.

4. THE AREA TO BE USED FOR THE STIP 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 THE RUNOFF WOULD TRAVEL ALONG THE TOP OF THE FILTER STRIP, RATHER THAN THROUGH IT.

6. THE TOP EDGE OF FILTER STRIP SHOULD BE LANDSCAPED AFTER OTHER PORTIONS OF THE PROJECT ARE COMPLETE.

Comal County
Road Department
195 David Jonas Drive
New Braunfels, TX 78132
Phone: (830) 608-2090
Fax: (830) 608-2009

COMAL COUNTY ENGINEER'S OFFICE
PROPOSED TOPO

Date: 09/07/2007
Drawn by: STS
Checked by: RHB

REVISIONS	
No.	Date:

SCALE: 1"=200'

Sheet 1 of 1

STATE OF TEXAS
ROBERT H. BOND
91701
LICENSED
PROFESSIONAL ENGINEER
10/11/07

Attachment G

Inspection, Maintenance, Repair and Retrofit Plan

Project Name: Comal County Engineer's Office (Drainage Area #1)

Engineered Filter Strip

Weekly — The project site shall be checked for accumulation of debris and trash. The debris and trash shall be removed.

Monthly — The vegetation growth in the vegetated filter strip 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".

Annually — The vegetation shall be inspected and additional native grasses planted as necessary.

After Rainfall — To maintain vegetative cover over this area, the area shall be checked after each rainfall occurrence to insure that the area drains within 6 hours after the storm is over. If it does not drain within this time, corrective measures will be instituted.

Following any required maintenance, the surface areas shall be raked and leveled to restore the system to its designed condition.

"Proper" disposal of accumulated silt shall be accomplished by following the TCEQ guidelines and specifications.

An amended copy of this document shall be provided to the TCEQ within thirty (30) days of any changes to the following information.

Responsible Party for Maintenance:	Comal County Road Department
Address:	195 David Jonas Drive
City, State Zip:	New Braunfels, Texas 78132-3760
Telephone Number:	(830) 608-2090

Signature of Responsible Party: _____ Date: 10/3/07

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

I Danny Scheel,
Print Name

County Judge
Title - Owner/President/Other

of Comal County
Corporation/Partnership/Entity Name

have authorized Robert Boyd, P.E.
Print Name of Agent/Engineer

of the Comal County Engineers Office
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

THE STATE OF Texas §

County of Comal §

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

GIVEN under my hand and seal of office on this ____ day of _____, ____.

_____

NOTARY PUBLIC

_____

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

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

NAME OF PROPOSED REGULATED ENTITY: Comal County
REGULATED ENTITY LOCATION: New Braunfels, Texas
NAME OF CUSTOMER: Comal County

CONTACT PERSON: Robert Boyd, P.E. PHONE: (830) 608-2090
(Please Print)

Customer Reference Number (if issued): CN 600647275 (nine digits)
Regulated Entity Reference Number (if issued): RN 102460730 (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	46.503	Acres	$ 5,000.00
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 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

TCEQ

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 **Modified WPAP**

2. Attachments	Describe Any Attachments: *(ex. Title V Application, Waste Transporter Application, etc.)*
☒ Yes ☐ No	Modified Water Pollution Abatement Plan

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 600647275		RN 102460730

SECTION II: Customer Information

5. Effective Date for Customer Information Updates (mm/dd/yyyy)	10/3/2007

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:							
	City		State		ZIP		ZIP + 4

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

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

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

20. Number of Employees	21. Independently Owned and Operated?
☐ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher	☐ 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)*

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*							
	City		State		ZIP		ZIP + 4	
25. Mailing Address:							
	City		State		ZIP		ZIP + 4	
26. E-Mail Address:							

27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
( ) -		( ) -

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)

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

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

35. Description to Physical Location:			
36. Nearest City	County	State	Nearest ZIP Code

37. Latitude (N) In Decimal:			38. Longitude (W) In Decimal:		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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 Tires
☐ Stormwater	☐ Title V – Air	☐ Used Oil	☐ Utilities	☐ Voluntary Cleanup
☐ Waste Water	☐ Wastewater Agriculture	☐ Water Rights	☐ Other:	☐ Other:

SECTION IV: Preparer Information

40. Name:	Robert Boyd, P.E.	41. Title:	Comal County Assistant Engineer

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(830) 608-2090		(830) 608-2009	boydro@co.comal.tx.us

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:	Comal County	Job Title:	Assistant County Engineer
Name *(In Print)*:	Robert Boyd	Phone:	(830) 608-2090
Signature:		Date:	10/3/2007