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

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 16, 2008

Mr. Gary Woods
Cordova Bend, Ltd.
755 Mulberry, Suite 600
San Antonio, Texas 78212

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Cordova Bend, Unit 1-R; Located on the south side of Canyon Lake off of Demi John Bend Road, approximately 5 mile north of FM 311; Comal County, Texas
TYPE OF PLAN: Request for Modification of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer
Edwards Aquifer Protection Program ID No.: 2448.01; Investigation No.: 706818
Regulated Entity No.: RN104807938

Dear Mr. Woods:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the request for modification of the approved CZP for the above-referenced project submitted to the San Antonio Regional Office by Pro-Tech Engineering Group on behalf of Cordova Bend, Ltd. on October 17, 2008. Final review of the CZP was completed after additional material was received on November 25, 2008 and December 8, 2008. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

This 748 acre tract was approved by letter dated April 12, 2006 for the development of 118 single-family residences and related roads and driveways. The proposed modification is for increasing the lots in Unit 1 from 118 to 165, and the impervious cover from 24.0 acres (3%) to 34.0 acres (5%). Unit 1R will be composed of 69 lots (originally 22 lots) on 243 acres with 9.10 acres of impervious cover (3.75% of 243 acres).

PROJECT DESCRIPTION

The proposed single-family residential project (Unit 1-R) will have an area of approximately 243 acres. It will include 69 single family residences and related roads and driveways. The impervious cover for Unit 1-R will be 9.10 acres (3.75 percent of 243 acres). According to a letter dated, December 15, 2005, 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.

SITE ASSESSMENT write out Date

A site assessment investigation was conducted on 11/17/08. The paved roads, a sales office, and the community park had been constructed as previously approved. One house had been constructed in the subdivision, but it was unoccupied. No active construction was observed. All previously disturbed soil appeared to have been stabilized by vegetation.

PERMANENT POLLUTION ABATEMENT MEASURES

Since this single-family residential project will not have more than 20 percent impervious cover, an exemption from permanent BMPs is approved.

SPECIAL CONDITIONS

I. 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 format (Deed Recordation Affidavit, TCEQ-0625A) that you may use to deed record the approved CZP is enclosed.

II. This modification is subject to all Special and Standard Conditions listed in the CZP approval letter dated April 12, 2006.

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

STANDARD CONDITIONS

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

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

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

Prior to Commencement of Construction:

4. 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 Contributing Zone Plan and this notice of approval shall be maintained at the project location until all regulated activities are completed.

5. Any modification to the activities described in the referenced CZP 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.

6. 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 name of the approved plan and file number for the regulated activity, the date on which the regulated activity will commence, and the name of the prime contractor with the name and telephone number of the contact person.

7. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved Storm Water Pollution Prevention Plan (SWPPP) 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.

<u>During Construction:</u>

8. During the course of regulated activities related to this project, the applicant or his 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 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 significantly reduced. 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).

10. 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.

11. 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.

12. 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.

13. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 5, above.

After Completion of Construction:

14. Owners of permanent BMPs and measures must insure that the 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 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. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TCEQ-10263) is enclosed.

16. Upon legal transfer of this property, the new owner(s) is required to comply with all terms of the approved Contributing Zone Plan. If the new owner intends to commence any new regulated activity on the site, a new Contributing Zone 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. A Contributing Zone Plan approval or extension will expire and no extension will be granted if more than 50% of the total construction has not been completed within ten years from the initial approval of a plan. A new Contributing Zone 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,

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

MRV/JKM/eg

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

cc: Mr. Kelly Kilber, P.E., Pro-Tech Engineering Group, Inc
Mr. Tom Hornseth, P.E., Comal County
Mr. Velma Danielson, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

PRO-TECH
ENGINEERING
GROUP
INCORPORATED

100 E. San Antonio St. Suite 100
San Marcos, TX 78666-5568

512 / 353-3335
FAX 512 / 396-0224

December 4, 2008

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COUNTY ENGINEER

Mr. John Mauser
Texas Commission on Environmental Quality
Region 13 – San Antonio
14250 Judson Road
San Antonio, TX 78233-4480

RE: Contributing Zone Plan
Cordova Bend Unit One R
Comal County, Texas
RN 104807938

Mr. Mauser:

Enclosed is the schedule of the interim and permanent stabilization procedures associated with the varying construction activities. Records shall be maintained of dates when grading activities occur; dates when construction temporarily or permanently cease; and the dates when stabilization procedures begin. These stabilization measures shall occur within 14 days of activities ceases.

As shown on the site plan, there is no storm water that originates up gradient and flows across the site. There will be no installation of temporary sediment ponds for this project as there will be no drainage area that has more than 3 acres of disturbed area. Sediment control measures shall consist of vegetative filter strips and rock berms until permanent stabilization is established.

If you have any questions or need any additional information, please call convenience.

Respectfully
PRO-TECH ENGINEERING GROUP

Richard McDaniel

Enclosures

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Major soil disturbing events and Intended Sequence & Timing

Cordova Bend Unit One R

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Schedule of Implementation / Major Grading Activities

- All schedules for site stabilization implementation and major grading activities are included in the inspection reports and erosion control notebook attached to this plan.

All phasing limits are detailed on the site plan. This site will have a waste concrete wash out area.

- Refer to map section for list / location of required BMPS and controls.
- If for any reason the location or type of control or procedures will be different from the plan / maps must be amended immediately to reflect the change(s).

Roadway, Utility, Drainage Infrastructure Development Activity/Phase

- Install Sediment and Erosion Control BMPS
- Clearing, Grubbing and Grading
- Excavate Streets
- Excavate and Install Wet Underground Utility Lines
- Grade & Form Roadways, Install Curbs & Gutters
- Install Road Base
- Pave Roadways
- Stabilization of Site/Re-vegetation-Landscaping
- Removal of Temporary BMPS

† Timing of construction activities may vary. Construction site activities are recorded in the inspection reports. The location of storage areas, spoil piles, portable toilets, concrete washout pits, and construction trash dumpsters, containers or roll-offs are indicated on inspection map

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Structural Practices and Controls

This SWPPP includes a description of structural practices and controls (BMPS) to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. The specific design capacities for each structural control listed are available in the erosion control design notes attached to this plan. If periodic inspections indicate that a control has been used inappropriately, or incorrectly, the permitee ("Owner/Operator") must replace or modify the control for site situations.

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Structures Used to Divert Storm Water

Structures	Present	Not Present
Diversion Dike		Not Present
Pipe Slope Drain		Not Present
Rock Berms	Present	

Structures Used to Store Storm Water

Structures	Present	Not Present
Detention Basin		Not Present
Retention Basin		Not Present
Sedimentation Pond		Not Present

Permanent Controls

Controls	Present	Not Present
Permanent Vegetation	Present	
Interceptor Swale		Not Present
Diversion Dike		Not Present
Detention Basin		Not Present
Sedimentation Pond		Not Present

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Erosion and Sediment Controls

- Installation of Structural Erosion Controls

Permanent and temporary structural erosion and sedimentation controls will be installed at this facility before soil-disturbing activities begin onsite. For example, silt fencing; rock dams, stabilized construction entrances, detention ponds, temporary sediment ponds and other site-specific BMPS must be installed to prevent offsite sediment transport.

- Vegetative Stabilization Techniques

Naturally occurring grass and vegetation should be left onsite until the structure is completed to provide a natural vegetative filter strip to prevent pollution from leaving site. Once construction is complete, landscaping, grass and sod should be installed to stabilize the site. Establishment of 70 percent original ground coverage is required for final stabilization.

- Sediment Removal Protocols (Roadways)

Sediment in street and roadways will be swept up on a regular basis by street sweeping, shoveling or other techniques. Sediment collected from storm sewer inlets, ditches, curbs and roadways will be disposed of in operator's vacant lots or stabilized area.

- Sediment Removal Protocols (Detention Ponds)

Remove sediment from detention ponds (where present) when sediment reaches 50 percent of design capacity or at the end of construction activities.

- Silt Fence Maintenance (if present)

Built up sediment will be removed when it reaches one half the height of the fence. Collected sediment will be disposed of in operator's vacant lots or stabilized area.

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Temporary Controls / BMPS

BMPS	Present	Not Present
Water used to control dust during construction roadways	X	
Mulch		X
Concrete Wash Area	X	
Stabilized Construction Entrance(s)	X	
Regular Trash Pickup	X	
Properly Store & Use Hazardous Chemicals	X	
Contain Wash Waters Onsite	X	
Sweep Street as Needed	X	
Maintain Existing Vegetation - Tree Protection	X	
Vehicle Maintenance Onsite		X
Rock Dams		X
Silt Fence		X
Cover, Maintain Storm Sewer Inlet		X
Secondary Containment - Petroleum Tanks		X
All Utility Trenches & Cuts Backfilled Each Day	X	
Perimeter Fencing		X
Rock Berm	X	
Diversion Dike		X
Sedimentation Pond		X
Pipe Slope Drain		X
Hay Bale Dike		X
Erosion Control Matting		X
Sandbag Berm		X
Traffic Barricade for Lot Access		X
Rock Barricades		X
Curb Trench		X
Sand-Filled Filter Bags at Storm Sewer Inlet		X

Post-Construction Controls
(Required when sediment or other pollutants leaving the site will exceed pre-development levels)

Controls	Present	Not Present
Permanent Vegetation	Present	
Interceptor Swale		Not Present
Retention Basin		Not Present
Diversion Dike		Not Present
Detention Basin		Not Present
Sedimentation Pond		Not Present

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Stabilization Practices

This SWPP includes a description of interim and permanent stabilization practices for this site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized.

Description of Interim Stabilization Practices

Stabilization practices may include but are not limited to:

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- Temporary Vegetation
- Permanent Vegetation
- Mulching
- Geo textiles
- Sod Stabilization
- Vegetative Buffer Strips
- Tree Protection

(Use of impervious surfaces should be avoided)

Permanent / Temporary Dates for End of Construction Activities

Dates for permanent and temporary end of construction activities are listed in the permit information, inspection reports and the controls listed above.

Velocity Dissipation Devices

Velocity dissipation devices shall be placed at discharge locations and along the length of an outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained or protected in order to eliminate significant changes in the hydrological regime of the receiving water. Refer to structural controls listed above. For location refer to erosion and sedimentation maps.

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Concrete Wash Out Area

- Direct discharges of concrete truck wash out to surface water in the state, including discharge to storm sewers, is prohibited by the general permit.
- Concrete truck wash out water shall be discharged to areas at the construction site where structural controls have been established, or to areas that have minimal slope that allow infiltration and filtering of wash out water to prevent direct discharge to surface waters.
- Wash out of concrete trucks during rainfall events shall be minimized.
- The SWP3 shall include concrete wash out areas on the associated map.

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Controls Used to Prevent Solid Materials

- Any trash containers onsite will be covered and leak proof.
- Any roll off trash container will be utilized to control construction debris and trash generated onsite.
- Any dumpsters used to supplement trash roll off capacity must be covered.
- A daily management practice should be established in order to facilitate construction trash and debris.
- All waste containers will be emptied regularly.

Control Measures for Support Activities

- Support activities are not planned for this project.

Controls Used to Minimize Off-Site Tracking

- Stabilized Construction Entrance (Crushed rock or grass mesh)
- Sweep Street as Needed

Limit all access to the construction site by vehicles to the street unless onsite access is needed for delivery of materials or to perform tasks such as blowing insulation etc through a controlled access point. This access point needs to be covered with crushed rock or grass mesh that will minimize offsite tracking and dust generation by vehicles.

Fugitive Sediment

If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off site impacts (e.g., fugitive sediment in street could be washed into storm sewers by the next rain and/or pose a safety hazard to users of public streets).

Sediment Removal

Sediment must be removed from sediment traps, sedimentation ponds and other controls designed to control the flow of sediment from leaving the site. The sediment should be removed and replaced to adjacent lots when design capacity has been reduced by 50%.

Spill Response / Hazardous Waste Management Plan

Material	Reportable Quantity	Released To
Gasoline/Engine Degreasers	100 lbs	Water / Land / Air
Antifreeze	100 lbs / 13 gallons	Land
Freon	1 lb	Air
Battery Acid	100 lbs	Water / Land
Hydraulic and Brake Fluid	25 gallons	Land
Engine Fuel and Oils	25 gallons	Land
Hydraulic and Brake Fluid	Visible Sheen	Water
Engine Fuel and Oils	Visible Sheen	Water

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Spill Response Protocols

- Report all spills and leaks immediately to the "Owner".
- There will be no punishment or discipline issued in relation to the reporting of spills or leaks.
- If a reportable quantity is released start containment and clean up measures.
- The following points of contact must be notified in the event that any reportable quantity is released:

Hazardous Waste Management Practices

- Paints, thinners and solvents used by contractors will be removed on a daily basis in the contractors' vehicle stored and secured inside a structure. Proper disposal of all waste products and empty containers will be accomplished by their removal from the site by the contractor.
- All fuel storage and site fueling areas attached to this project will have dikes or other means of secondary containment constructed around them. Such structures will be constructed in accordance with good engineering practices.
- A controlled storage facility will be used to store all chemicals or fertilizers used on site. All chemicals to be removed from the site by contractor on a daily basis.

EPA National Response Center	1-800-424-8802
TCEQ	1-800-832-8224 / 512-239-2454
Paragon Environmental Services	512-527-0048

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Applicable State and Local Plans

Edwards Aquifer Recharge / Contributing Zone

- This project is located in the Edwards Aquifer Contributing Zone.
- A CZP has been filed with TCEQ.

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Wetland or Special Aquatic Sites

- There are no known wetland or special aquatic sites on this project.

Consistency with the Texas Coastal Management Program

The Texas Coastal Management Program boundary covers part or all of the following Texas Counties: Aransas, Brazoria, Calhoun, Cameron, Chambers, Galveston, Harris, Jackson, Jefferson, Kennedy, Kleberg, Matagorda, Nueces, Orange, Refugio, San Patricio, Victoria and Willacy. This project is not within the boundaries of any of these counties and therefore not subject to the requirements of the Texas Coastal Management Program.

Local, Tribal and State Regulations

This Storm Water Pollution Prevention Plan will be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment and erosion site plans or site permits, or Storm Water Management site plans or site permits. There is no known additional state, local or tribal requirements at this time. In accordance with local ordinance portable toilets will be provided.

Endangered Species Information

Threatened / Endangered or Critical Habitat in Proximity?

- None.

Measures to Protect Threatened or Endangered Species or Critical Habitat

- None.

Special Features

- None noted.

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Maintenance

All controls and stabilization practices shall be inspected as stipulated within this plan and maintained in accordance with the design parameters set forth by the TCEQ. If site inspections identify BMPS that are not operating effectively, maintenance shall be performed before the next scheduled inspection or as necessary to maintain the continued effectiveness of storm water controls.

Maintenance procedures for approved Non-Storm Water Discharges

- Air conditioning condensate from the construction trailer during construction.
- Water used to control dust during development on roadways under construction.
- Waters used to wash vehicles including: waters from the washing of concrete trucks which must be contained onsite, other vehicles must be washed down in areas where wash waters can be contained onsite. All vehicle washing must be accomplished without the use of any type of detergents.
- If ground water is encountered during excavation it will be pumped out onto the ground and not allowed to directly discharge. Waters from foundation or footing drains will be handled in the same manner provided they are not contaminated with process materials such as solvents.
- Potable water sources including waterline flushing to ensure lines are clean and have residual chlorine. All routine external building wash down will be done without the use of detergents.
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled has been removed) and where detergents are not used. Roadways and flatwork will be pressure washed on a regular basis. No chemicals are used and all leaks or spills will be cleaned up.
- New hydrant installation includes; flushing of the fire hydrants to ensure lines are clean and have residual chlorine. Discharges from fire fighting activities will occur only in case of emergency.
- A registered waste management company will collect wastes from the portable toilets on a regular basis. Spilled or leaked sanitary effluent will be cleaned up as soon as possible. Prevent effluent from leaving site and/or entering drainage conveyances.

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Rock Berms and silt fences for sediment traps will be constructed where shown on Drainage Map. All disturbed areas not covered with impervious material will be revegatated with Rye-Bermuda grass mix immediately after completion of the grading. These areas will be prepared, seeded and watered by approved methods. Drainage Map shows guidelines for the restoration of grassed areas.

The following is an approximate chronological listing of the construction Activities and the Temporary Erosion Controls to be utilized during each activity.

CONSTRUCTION ACTIVITY	TEMPORARY EROSION CONTROL
Clearing and grubbing street right-of-way, rough grading of roads	Install rock berms, and silt fences and stabilized construction entrances.
Installation of water distribution system	No additional erosion controls necessary
Installation of drainage structures	No additional erosion controls necessary
Installation of base material	No additional erosion controls necessary
Installation of asphalt pavement	Seed disturbed areas immediately upon completion
Completion of construction	Remove sediment traps only after new seed has established permanent growth.

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November 24, 2008

Mr. John Mauser
Texas Commission on Environmental Quality
Region 13 – San Antonio
14250 Judson Road
San Antonio, TX 78233-4480

RE: Contributing Zone Plan
Cordova Bend Unit One R
Comal County, Texas
RN 104807938

Mr. Mauser:

As per your fax transmittal dated November 17, 2008, enclosed please find one original and three copies of the Contributing Zone Plan application for the above referenced project. Also enclosed are four copies of the site plan. The information on the SWPPP will be submitted shortly by PES Storm Water consultants.

If you have any questions or need any additional information, please call convenience.

Respectfully
PRO-TECH ENGINEERING GROUP

Richard McDaniel

Enclosures

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FAX TRANSMITTAL

11/17/08 NUMBER OF PAGES (Including this cover sheet) 5

TO:
NAME **Mr. Richard McDaniel**
ORGANIZATION **Pro-Tech Engineering Group, Inc**
FAX Number **512/386-0224**

NAME **Mr. Gary Woods**
ORGANIZATION **Cordova Bend, LTD**
FAX NUMBER **210/821-5860**

FROM TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
NAME J M **John Mauser**
Division/Region **San Antonio Regional Office – Edwards Program**
Telephone Number **210/403-4024**
FAX Number **210/545-4329**

NOTES:

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Cordova Bend, Unit 1-R; Located on the south side of Canyon Lake off of Demi John Bend Road, approximately 5 mile north of FM 311; Comal County, Texas
TYPE OF PLAN: Request for Modification of a Contributing Zone Plan (CZP); 30 Texas Administrative Code (TAC) Chapter 213 Subchapter B Edwards Aquifer
Edwards Aquifer Protection Program ID No. 2448.01; Investigation No. 706818; Regulated Entity No. RN104807938

Dear Mr. Kilber:

We are in the process of technically reviewing the CZP application you submitted on the above-referenced project. Before we can proceed with our review, the following comments relating to the application must be addressed.

Form TCEQ 10257:

Question 2: Provide the fax number for the applicant.

Question 34: On the site plan, provide the approximate slopes.

Question 47: The response provided does not address the issue of preventing pollutants from entering surface streams. Provide an appropriate response.

Question 49: The response provided does not address the issue of preventing pollution of stormwater that originates upgradient from the site and flows across the site.

Question 58: This question references 30 TAC 213.24(1 – 5). Please indicate where in the

Contributing Zone Plan Application
for Regulated Activities
on the Contributing Zone to the Edwards Aquifer
and Relating to 30 TAC §213.24(1), Effective June 1, 1999

Regulated Entity Name: CORDOVA BEND, UNIT ONER

County: COMAL Stream Basin: GUDALUPE RIVER

1. X Regulated activities on this site will disturb at least 5 acres.
__ Regulated activities on this site will disturb less than 5 acres and are part of a larger common plan of development or sale with the potential to disturb cumulatively five or more acres.

2. Customer (Applicant):

Contact Person: GARY V WOODS
Entity: CORDOVA BEND, LTD
Mailing Address: 755 MULBERRY, SUITE 600
City, State: SAN ANTONIO, TX Zip: 78212
Telephone: 210-821-6523 FAX: 210-821-5860

Agent/Representative (If any):

Contact Person: KELLY KILBER , P.E.

Title: PRESIDENT
Entity: PRO-TECH ENGINEERING GROUP, INC

Mailing Address: 100 E. SAN ANTONIO, STE 100
City, State: SAN MARCOS, TX Zip: 78666
Telephone: 512-353-3335 FAX: 512-396-0224

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SAN ANTONIO REGION

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

4. The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

5. X **ATTACHMENT A - Road Map.** A road map showing directions to and the location of the project site is found as at the end of this form.

6. X **ATTACHMENT B - USGS Quadrangle Map.** A copy of the a USGS Quadrangle Map (Scale: 1" = 2000') is found at the end of this form. The map(s) clearly shows:
X Project site boundaries.
X USGS Quadrangle Name(s).

7. X **ATTACHMENT C - Project Narrative.** A detailed narrative description of the proposed project is found at the end of this form.

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)
   - X Undeveloped (Undisturbed/Uncleared)
   - ___ Other:

PROJECT INFORMATION

9. The type of project is:
   - X Residential: # of Lots: **69**
   - ___ Residential: # of Living Unit Equivalents:
   - ___ Commercial
   - ___ Industrial
   - ___ Other:

10. Total project area (size of site): **242.80** Acres
    Total disturbed area: 10 Acres

11. Projected population: **173**

12. The amount and type of impervious cover expected after construction is complete is shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	69@3250=224,250	÷ 43,560 =	5.1
Parking	69@2000=138,000	÷ 43,560 =	3.2
Other paved surfaces	1,488@22=32,736	÷ 43,560 =	0.8
Total Impervious Cover	394,986	÷ 43,560 =	9.1
		Total Impervious Cover ÷ Total Acreage x 100 =	4 %

13. X **ATTACHMENT D - Factors Affecting Surface Water Quality.** A description of factors that could affect surface water quality is found as at the end of this form. If applicable, this should included the location and description of any discharge associated with industrial activity other than construction.

14. X Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

FOR ROAD PROJECTS ONLY
Complete questions 15-20 if this application is exclusively for a road project.

15. 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.

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

__ Concrete
__ Asphaltic concrete pavement
__ Other:

17. 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.

18. 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.

19. __ A rest stop will be included in this project.
__ A rest stop will **not** be included in this project.

20. __ 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

21. X **ATTACHMENT E - 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 found at the end of this form. The estimates of stormwater runoff quality and quantity are based on area and type of impervious cover. The runoff coefficient of the site for both pre-construction and post-construction conditions is included.

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

22. Wastewater will be disposed of by:

X On-Site Sewage Facility (OSSF/Septic Tank):
ATTACHMENT F - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's written approval is provided at the end of this form. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities, or it identifies those areas that are not suitable for the use of private sewage facilities. The system will be designed by a licensed professional engineer or a registered sanitarian and installed by a licensed installer in compliance with 30 TAC §285.

__ Sewage Collection System (Sewer Lines):
Wastewater is to be disposed of by conveyance to the _____ (name) treatment plant for treatment and disposal. The treatment facility is :
__ existing.
__ proposed.

__ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

FOR PERMANENT ABOVEGROUND STORAGE TANKS (ASTs) > 500 GALLONS
Complete questions 23-29 if this project includes the installation of AST(s) with volume(s) greater than 500 gallons.

23. Tanks and substance stored:

AST Number	Size (Gallons)	Substance to be Stored	Tank Material
1			
2			
3			
4			
5			
Total		x 1.5 =	gallons

24. ___ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

___ **ATTACHMENT G - Alternative Secondary Containment Methods.** Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are found at the end of this form.

25. Inside dimensions and capacity of containment structure(s):

Length (L) (Ft.)	Width (W) (Ft.)	Height (H) (Ft.)	L x W x H = (Ft^3) Gallons
Total			

26. ___ All piping, hoses, and dispensers will be located inside the containment structure.

___ Some of the piping to dispensers or equipment will extend outside the containment structure.

___ The piping will be aboveground

___ The piping will be underground

27. ___ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of _____.

28. **ATTACHMENT H - AST Containment Structure Drawings.** A scaled drawing of the containment structure is found at the end of this form that shows the following:

___ Interior dimensions (length, width, depth and wall and floor thickness).
___ Internal drainage to a point convenient for the collection of any spillage.
___ Tanks clearly labeled
___ Piping clearly labeled
___ Dispenser clearly labeled

29. Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

___ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.
___ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

SITE PLAN

Items 30 through 41 must be included on the Site Plan.

30. The Site Plan must have a minimum scale of 1" = 400'.
Site Plan Scale: 1" = **300** '.

31. 100-year floodplain boundaries

X Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
___ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):

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

33. **X** A drainage plan showing all paths of drainage from the site to surface streams.

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

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

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

37. **X** Locations where soil stabilization practices are expected to occur.

38. X Surface waters (including wetlands).

39. X Locations where stormwater discharges to surface water.
__ There will be no discharges to surface water.

40. __ Temporary aboveground storage tank facilities.
X Temporary aboveground storage tank facilities will not be located on this site.

41. __ Permanent aboveground storage tank facilities.
__ Permanent aboveground storage tank facilities will not be located on this site.

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

42. N/A Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.

43. N/A 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

44. N/A 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.

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

X 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.

46. 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 I - 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.

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

47. **ATTACHMENT J - 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 provided as **ATTACHMENT J** 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 J** at the end of this form.

X If permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT J** at the end of this form.

48. **ATTACHMENT K - 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 provided as **ATTACHMENT K** at the end of this form.

X 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 K** at the end of this form.

49. **X** **ATTACHMENT L - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams is provided at the end of this form.

50. **N/A** **ATTACHMENT M - 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 proposed structural measures, and appropriate details must be shown on the construction plans.

51. **N/A** **ATTACHMENT N - 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.

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

53. **X** **ATTACHMENT P - 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.

54. **N/A** 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.

55. **N/A** 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.

ADMINISTRATIVE INFORMATION

56. **X** One (1) original and three (3) copies of the complete application has been provided.

57. **X** Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

58. **X** The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

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 **CONTRIBUTING ZONE PLAN APPLICATION** is hereby submitted for TCEQ review and Executive Director approval. The application

was prepared by:

Print Name of Customer/Agent

KELLY KILBER, P.E., AGENT

Signature of Customer/Agent

11-21-08

Date

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

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

ATTACHMENT C Modification

Cordova Bend Unit OneR is a 243 acre Single Family Residential Development located on Canyon Lake in Comal County, Texas. The site varies in elevation from 740 feet to approximately 1300 feet and is located in the Guadalupe River watershed.

The nature of the construction activities will consist of building approximately 1,488 linear feet of asphalt roads to service 69 lots ranging in size from 1 to 25 acres. Approximately 2 acres of road right-of-way will be cleared and grubbed. The clearing and grubbing operation will consist of the complete removal above and below ground surface of all trees, stumps, brush, vegetation and objectionable debris. There is not expected to be any spoil piles stored on site. Existing drainage patterns will not be altered.

ATTACHMENT D

Activities associated with the construction of roads may affect surface water quality. The measures by which these activities will be monitored are contained in the Stormwater Pollution Prevention Plan. After construction automobile traffic, pesticides and fertilizers in this subdivision could have an affect on water quality.

ATTACHMENT E

The volume and character of stormwater runoff is not expected to change with this project. "C" factors for predevelopment and post development to be 0.40. This development proposes approximately 3% impervious cover and will utilize an open road section with roadside ditches. These ditches will act as buffer areas to surrounding property to filter sediment and other constituents which may be washed off of roadway pavements. In addition, all natural drainage patterns will be maintained and erosion controls will be installed with all culverts to minimize erosion due to flow concentration.

ATTACHEMENT J

There is no drainage storm water that originates up gradient from the site and flows across the site.

ATTACHEMENT K

No permanent BMPs are required for this project. The proposed land use is single family residential and the proposed impervious cover is less than 20%.

ATTACHMENT L

Drainage structures to have concrete rip-rap headwalls and disturbed areas by construction to be revegetated. Grassy swales will be the primary storm water conveyance.

ATTACHMENT M

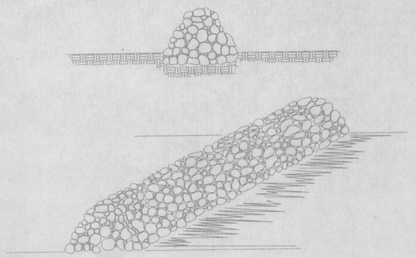
No permanent BMPs are required for this project. The proposed land use is single family residential and the proposed impervious cover is less than 20%.

ATTACHMENT N

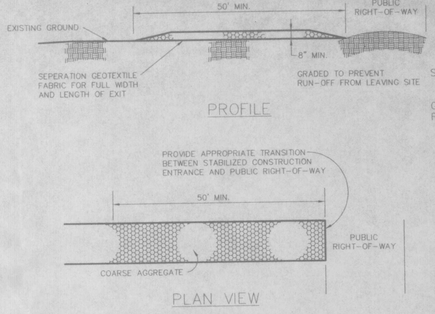
No permanent BMPs are required for this project. The proposed land use is single family residential and the proposed impervious cover is less than 20%.

ATTACHMENT P

No permanent BMPs are required for this project. The proposed land use is single family residential and the proposed impervious cover is less than 20%. Concrete headwalls will be constructed downstream and upstream of all drainage structures



ROCK BERM



GENERAL NOTES:

1. Stone size unless otherwise specified, aggregate shall conform to Grade 1 for corse aggregates under Specification No. 403 "Concrete for Structures."
2. Length as effective, but not less than fifty (50) feet.
3. Thickness not less than eight (8) inches.
4. Width not less than full width of all points of ingress or egress.
5. Washing when necessary, wheels will be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sand bags, gravel, boards or other approved method.
6. Maintenance the entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.

STABILIZED CONSTRUCTION ENTRANCE

N.T.S.

TRENCH CROSS-SECTION

GENERAL NOTES:

STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.

THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TREATED IN (E.G. PAVEMENT), WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.

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.

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.

INSPECTION SHALL BE MADE BI WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRUBUTE TO ADDITIONAL SILTATION.

STANDARD SYMBOL — SF —

SILT FENCE

N.T.S.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
CONTRIBUTING ZONE PLAN
GENERAL CONSTRUCTION NOTES

1. Written construction notification must be given to the appropriate TCEQ regional office no later than 48 hours prior to commencement of the regulated activity. Information must include the date on which the regulated activity will commence, the name of the approved plan for the regulated activity, and the name of the prime contractor and the name and telephone number of the contact person.

2. All contractors conducting regulated activities associated with this project must be provided with complete copies of the approved Contributing Zone Plan and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractors are required to keep on-site copies of the approved plan and approval letter.

3. No temporary aboveground hydrocarbon and hazardous substance storage tank system is installed within 150 feet of a domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. Prior to commencement of construction, all temporary erosion and sedimentation (E&S) control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. Controls specified in the SWPPP section of the approved Edwards Aquifer Contributing Zone Plan are required during construction. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. The controls must remain in place until disturbed areas are revegetated and the areas have become permanently stabilized.

5. 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).

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

7. 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).

8. All spoils (excavated material) generated from the project site and stored on-site must have proper E&S controls installed.

9. 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 possible.

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

11. The holder of any approved Edward Aquifer protection plan must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

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

B: any change in the nature or character of the regulated activity from that which was originally approved or a change which would significantly impact the ability of the plan to prevent pollution of the Edwards Aquifer;

C: any development of land previously identified as undeveloped in the original water pollution abatement plan.

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

San Antonio Regional Office
14250 Judson Road
San Antonio, Texas 78233-44802
Phone (210) 490-3096
Fax (210) 545-4329

General Notes:

1. All Best Management Practices to be installed and maintained in accordance with the publication "EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL" published June 20, 2005.
2. A vegetative buffer strip a minimum of 50' in width shall be maintained adjacent to all areas disturbed by construction activities. Any areas where construction prevents the buffer strip width from being maintained shall have silt fence installed to replace the vegetative buffer.
3. Existing drainage patterns and slopes are not to be altered.
4. Major areas of soil disturbance and limits of construction are esstablished as a 200 foot strip centered on street ROW and channel excavation.
5. Future soil distrubance on lots for home construction. Location of these areas to be by lot owners at time of construction.
6. Location of soil stabilization practices to be at drainge structures. Concrete headwalls to be installed at inlet and outlets of these structures.
7. Upon completion of earthmoving activity, all disturbed areas will be immediatley seeded with bermuda grass or other appropriate seed. This activity will be done prior to paving or subgrade treatment.

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COUNTY ENGINEER

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LEGEND

XXXXX ROCK BERM

DRAINAGE BASIN BOUNDARY

CONSTRUCTION ENTRANCE

—SF—SF— SILT FENCE

DRAINAGE FLOW ARROW

General Notes:

1. All Best Management Practices to be installed and maintained in accordance with the publication "Complying with the Edward's Aquifer Rules: Technical Guidance on Best Management Practices" published in June 2005.
2. A vegetative buffer strip a minimum of 50' in width shall be maintained adjacent to all areas disturbed by construction activities. Any areas where construction prevents the buffer strip width from being maintained shall have silt fence installed to replace the vegetative buffer.

Typical Lot Construction
Not to Scale
(Construction By Others)

C1

CONCRETE HEADWALL DETAIL

TOPOGRAPHICAL INFORMATION FURNISHED BY GEODETIX, INC.
1802 N.E.LOOP 410, SUITE 500, SAN ANTONIO, TX. 78217

CORDOVA BEND AT CANYON LAKE Unit One R

Comal County, Texas

CONTRIBUTING ZONE PLAN AND EROSION CONTROLS

PRO-TECH ENGINEERING GROUP INCORPORATED
100 E. San Antonio St., Suite 100
San Marcos, TX. 78666
(512) 353-3335

STATE OF TEXAS KELLY KILDEE 74167 LICENSED PROFESSIONAL ENGINEER

REVISED AUGUST 11, 2008

J.O. 14773	SCALE 1"=300'	DATE JUNE 2, 2008	SHEET 6 OF 7