TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 25, 2013

Mr. Thad Rutherford
Southstar at Vintage Oaks, LLC
6060 North Central Expressway, Suite 138
Dallas, TX 75206

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Vintage Oaks at the Vineyard, Unit 7; Located 0.1 miles east of Highway 46 and S. Cranes Mill Road; City of 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

Investigation No. 1103634; Regulated Entity No. RN106852734; Additional ID No. 13-13071802

Dear Mr. Rutherford:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by M&S Engineering on behalf of Southstar at Vintage Oaks, LLC on July 18, 2013. Final review of the WPAP was completed after additional material was received on September 17, 2013 and September 19, 2013. 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.*

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 82.35 acres. It will include 9 single family residential dwellings, driveways, and paved surfaces. The impervious cover will be 3.45 acres (4.19 percent). As proposed, all 9 lots are assumed 20,280 square feet per lot of

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

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

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

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

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

<u>During Construction:</u>

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

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

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

13. "No well exist on site." All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and

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

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

Sincerely,

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

LMB/MR/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Mr. Heath Woods, P.E., M&S Engineering, L.L.C.
Mr. Charlie Thomas, P.E., City Engineer, City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

July 22, 2013

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: Vintage Oaks at the Vineyard Unit 7, located 0.1 miles east of Highway 46 and S Cranes Mill Road, New Braunfels, Texas

PLAN TYPE: Application for Approval of a Water Pollution Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
EAPP File No. and Regulated Entity No.: RN106852734

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 August 22, 2013.

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

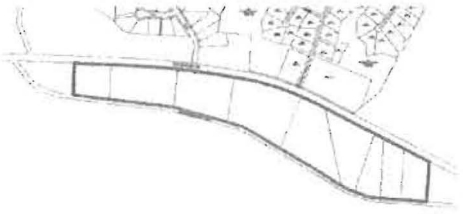
Sincerely

Todd Jones
Water Section Work Leader
San Antonio Regional Office

TJ/eg

WATER POLLUTION ABATEMENT PLAN

Vintage Oaks at the Vineyard, Unit 7



Prepared for:

Thad Rutherford
Southstar at Vintage Oaks, LLC
6060 North Central Expressway, Suite 138
Dallas, Tx. 75206

Prepared by:

M & S ENGINEERING
ENGINEERS | PLANNERS | SURVEYORS

M&S Engineering Project Number: 7013BSW001

Prepared by:
Heath Woods, P.E.
M&S Engineering, L.L.C.
Texas Registered Engineering Firm F-1394

Main Office:
Mailing:
Post Office Box 970
Spring Branch, Texas 78070
Telephone: 830/228-5446
Facsimile: 830/885-2170
Physical:
6477 FM 311
Spring Branch, Texas 78070
Web: www.msengr.com

Branch Office:
Mailing:
Post Office Box 391
McQueeney, Texas 78123
Physical:
274 Riverview Road
McQueeney, Texas 78123

May 2013

TCEQ Core Data Form

TCEQ Use Only

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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)*

[X] 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.)*

[X] Yes [ ] No WPAP

3. Customer Reference Number *(if issued)*

CN 604123554

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

4. Regulated Entity Reference Number *(if issued)*

RN

SECTION II: Customer Information

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

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

[X] 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) [X] No Change**

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

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

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

10. Mailing Address:

City	State	ZIP	ZIP + 4

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

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

13. Telephone Number ( ) -

14. Extension or Code

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

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

20. Number of Employees

[ ] 0-20 [ ] 21-100 [ ] 101-250 [ ] 251-500 [ ] 501 and higher

21. Independently Owned and Operated?

[ ] Yes [ ] No

SECTION III: Regulated Entity Information

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

[X] 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)*

VINTAGE OAKS AT THE VINEYARD UNIT 7

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*								
	City	NEW BRAUNFELS	State	TEXAS	ZIP	781302	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)
1521	6552	236115	237210

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

Residential Subdivision

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

35. Description to Physical Location:	This site is located along Highway 46, approximately 0.1 miles east of the intersection with S. Cranes Mill Road.

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

37. Latitude (N) In Decimal:	29.7764		38. Longitude (W) In Decimal:	-98.2687	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	46	35	98	16	7

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:

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SECTION IV: Preparer Information

40. Name:	Lance Klein, P.E., P.H., C.F.M.		41. Title:	Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(830) 228 - 5446		(830) 885 - 2170	lklein@msengr.com	

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 9 and/or as required for the updates to the ID numbers identified in field 39.

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

Company:	M&S Engineering	Job Title:	Agent - Engineer
Name *(In Print)*:	Heath L. Woods, P.E.	Phone:	(830) 228 - 5446
Signature:	Heath L. Woods	Date:	7/15/13

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: Vintage Oaks at the Vineyard, Unit 7
COUNTY: Comal STREAM BASIN: Dry Comal Creek

EDWARDS AQUIFER: X RECHARGE ZONE
__ TRANSITION ZONE

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

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CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Thad Rutherford
Entity: Southstar at Vintage Oaks, LLC
Mailing Address: 6060 North Central Expressway, Suite 138
City, State: Dallas, TX Zip: 75240
Telephone: (305) 476-1515 FAX: N/A

Agent/Representative (If any):

Contact Person: Heath L. Woods, P.E.
Entity: M&S Engineering, LLC
Mailing Address: 6477 FM 311
City, State: Spring Branch, Tx. Zip: 78070
Telephone: (830) 228-5446 FAX: (830) 885-2170

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

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

The property is located 0.1 miles east of Hwy 46 and S. Cranes Mill Rd in Comal County Texas

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

5. X **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached behind this sheet. The map(s) should clearly show:

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

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

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

8. Existing project site conditions are noted below:
__ Existing commercial site
__ Existing industrial site
__ Existing residential site
__ Existing paved and/or unpaved roads
__ Undeveloped (Cleared)
X Undeveloped (Undisturbed/Uncleared)
__ Other: _____

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PROHIBITED ACTIVITIES

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

(1) waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
(2) new feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
(3) land disposal of Class I wastes, as defined in 30 TAC §335.1;
(4) the use of sewage holding tanks as parts of organized collection systems; and
(5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

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

(1) waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
(2) land disposal of Class I wastes, as defined in 30 TAC §335.1; and
(3) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

ADMINISTRATIVE INFORMATION

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

X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site where regulated activities will occur.
__ For an Organized Sewage Collection System Plans and Modifications, the total linear

footage of all collection system lines.

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

__ A request for an exception to any substantive portion of the regulations related to the protection of water quality.

__ A request for an extension to a previously approved plan.

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

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

13. X Submit one (1) original and 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. X No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

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:

Heath L. Woods
Print Name of Customer/Agent

Heath L. Woods
Signature of Customer/Agent

6/6/13
Date

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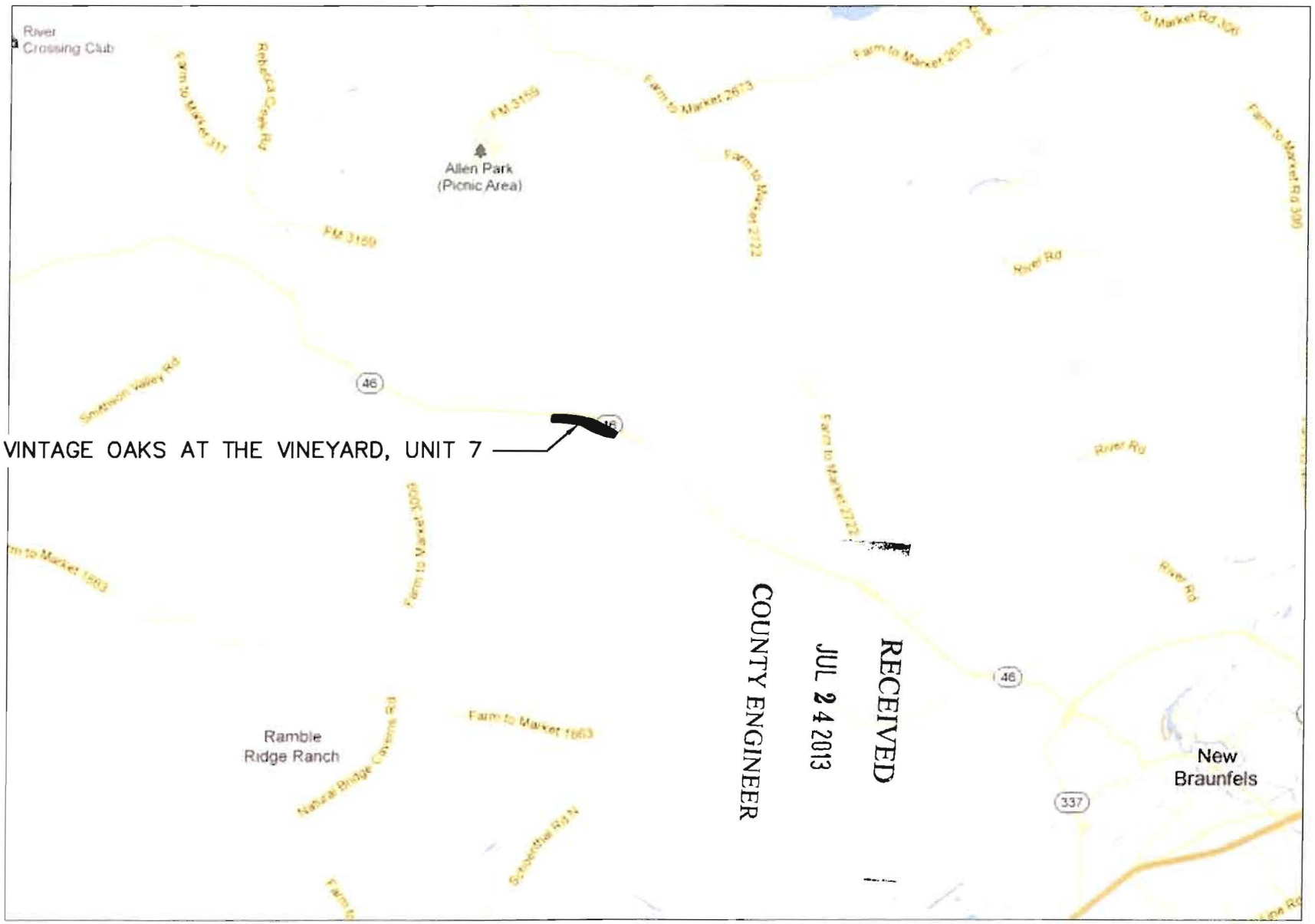
If you have questions on how to fill out this form or about the Edwards Aquifer protection program, please contact us at 210/490-3096 for projects located in the San Antonio Region or 512/339-2929 for projects located in the Austin Region.

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

ATTACHMENT A – ROAD MAP



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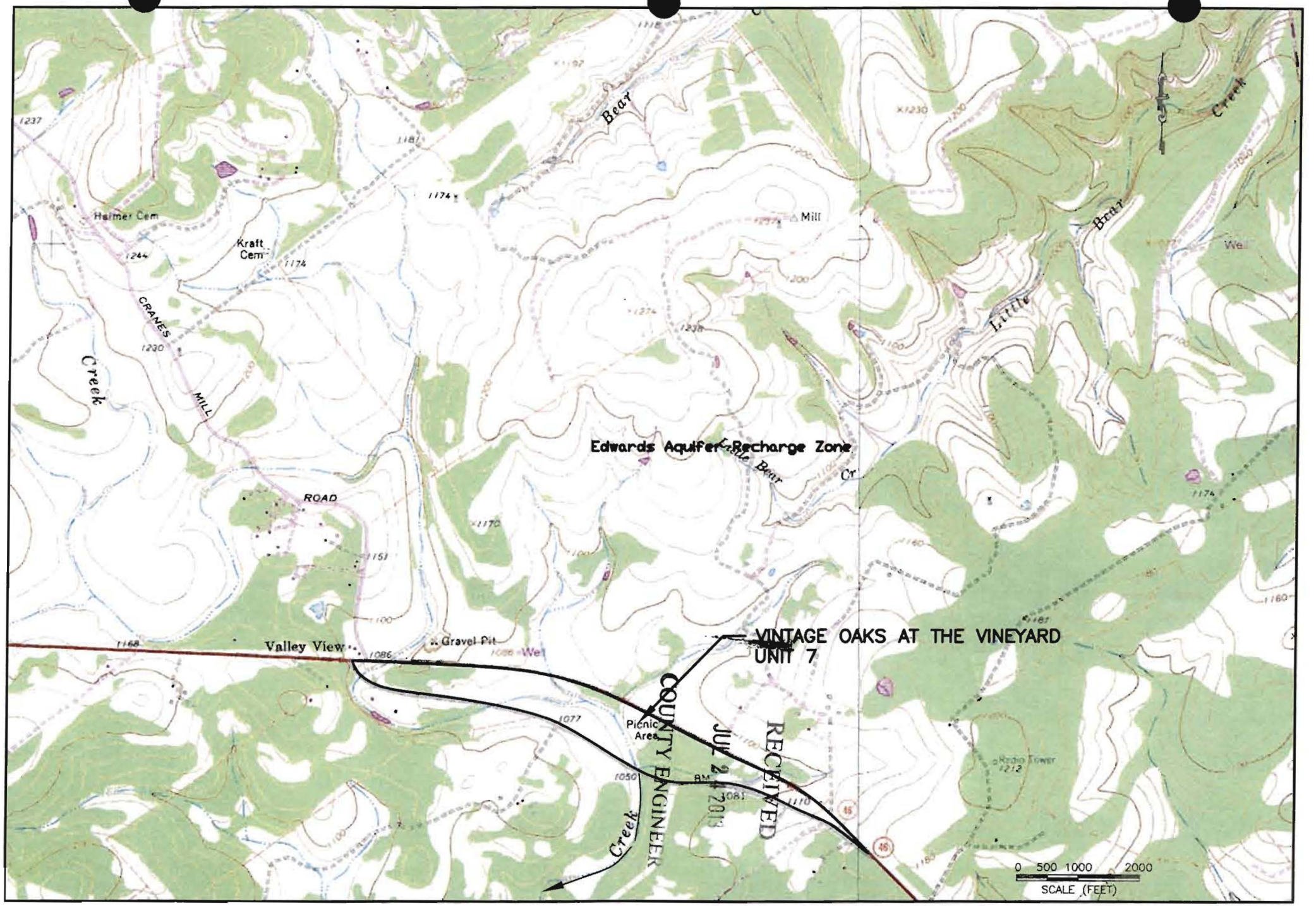
Attachment B

USGS/Edwards Recharge Zone Map

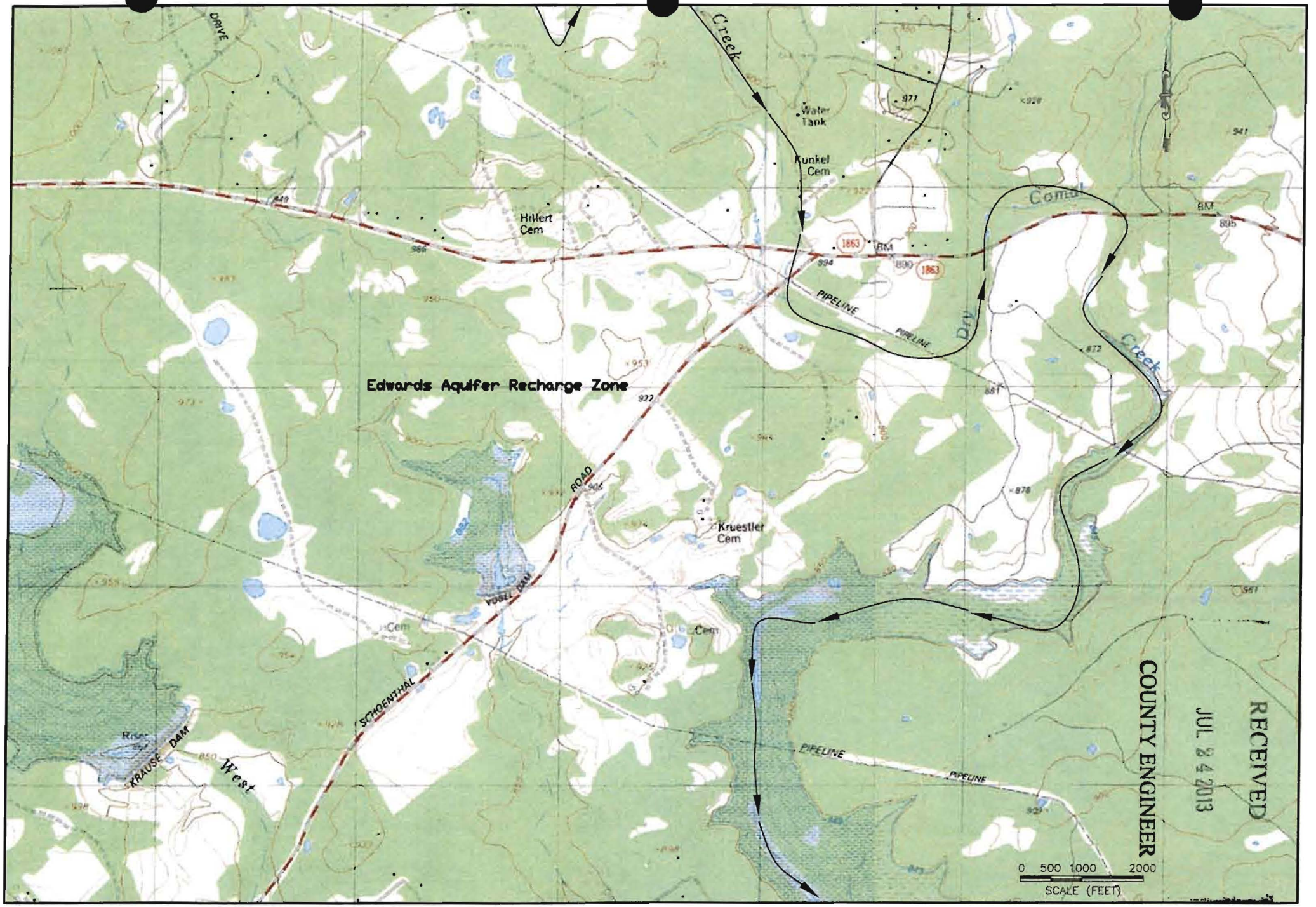


SHEET 1 OF 4

Vintage Oaks at the Vineyard Unit 7

Scale: 1" = 2000'

USGS / Edwards Aquifer Recharge Zone Map
Smithson Valley and Sattler Quad Sheets

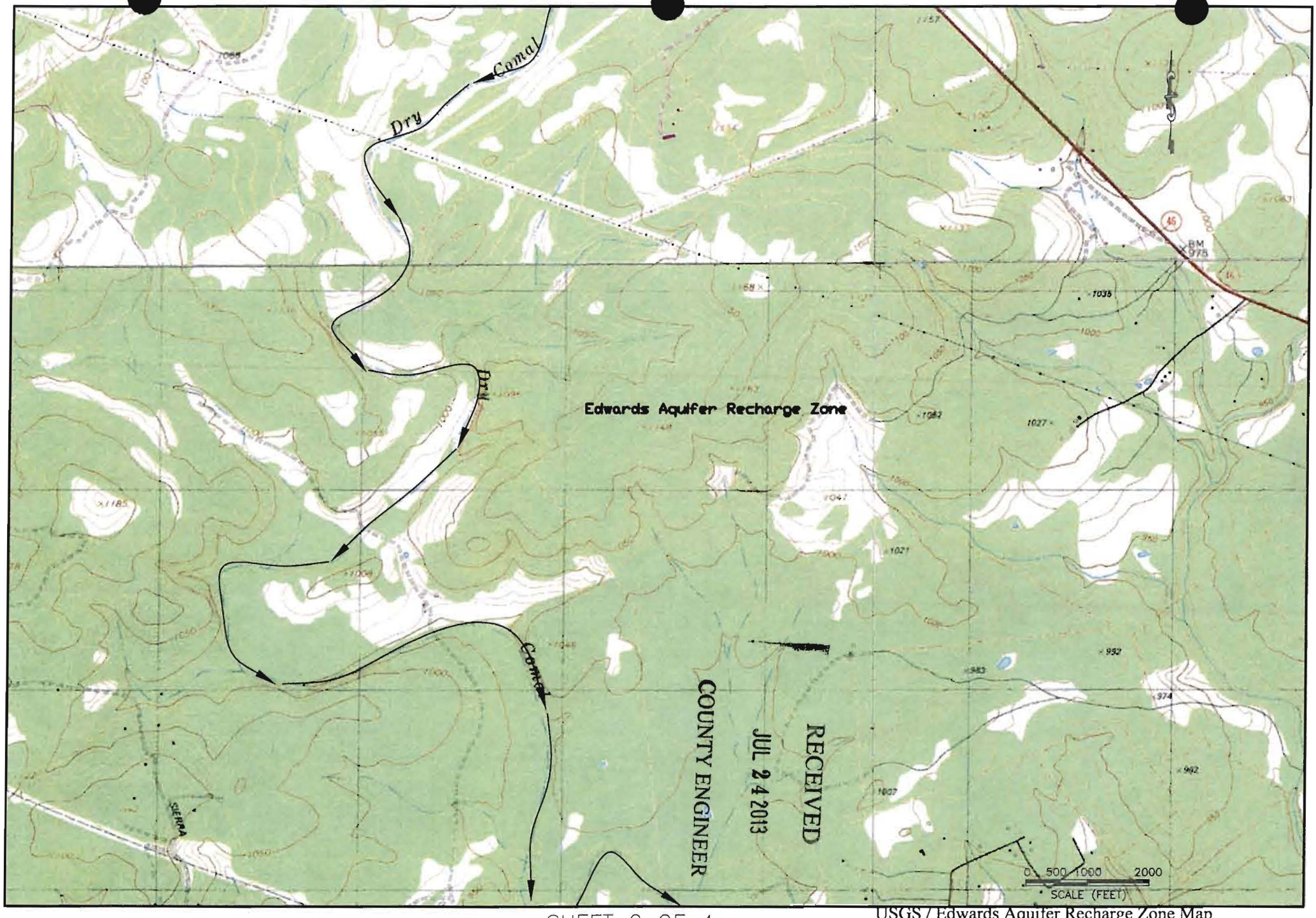


SHEET 3 OF 4

Vintage Oaks at the Vineyard Unit 7

Scale: 1" = 2000'

USGS / Edwards Aquifer Recharge Zone Map
New Braunfels West and Bat Cave Quad Sheets



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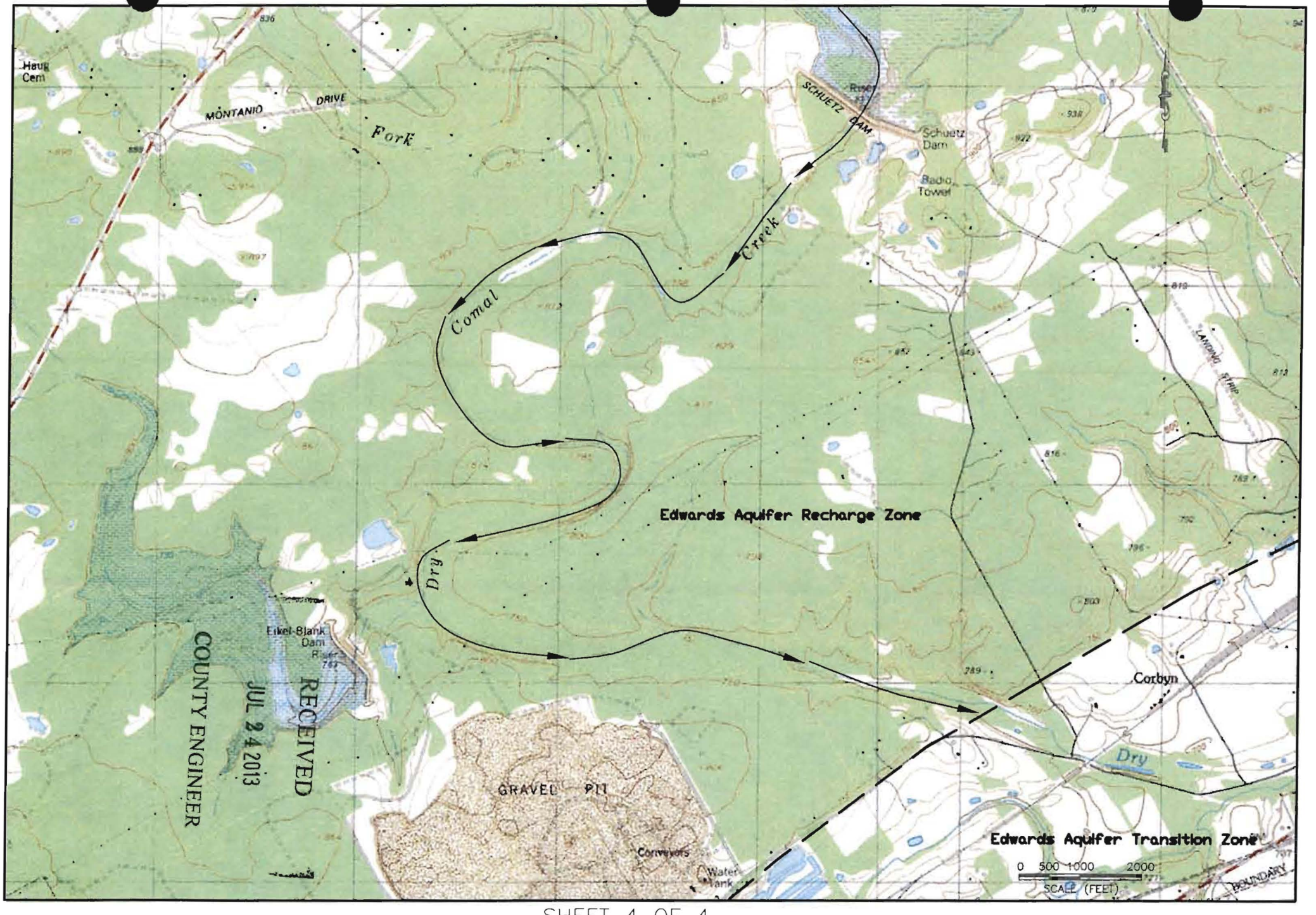
SHEET 2 OF 4

Vintage Oaks at the Vineyard Unit 7

Scale: 1" = 2000'

USGS / Edwards Aquifer Recharge Zone Map
Smithson Valley, Sattler, New Braunfels West
and Bat Cave Quad Sheets



SHEET 4 OF 4

Vintage Oaks at the Vineyard Unit 7

Scale: 1" = 2000'

USGS / Edwards Aquifer Recharge Zone Map
New Braunfels West and Bat Cave Quad Sheets

Attachment C

Project Description

PROJECT DESCRIPTION

The project is currently an undeveloped tract of land proposed to be a Single Family Residential Subdivision, located on 82.35 acres, approximately 0.1 miles east of the intersection of State Highway 46 and S. Cranes Mill Road. The site would ultimately include approximately 9 five acre (+) single-family residential lots. 6.13 acres will be dedicated to Hwy 46 right-of-way. In addition, a portion of the subdivision falls in floodplain and will be regulated by FEMA. There are no proposed streets as the site has frontage of Hwy 46 and Herbelin Road.

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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: Vintage Oaks at The Vineyards Unit 7

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

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

PROJECT INFORMATION

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

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Comfort-Rock outcrop complex, undulating (CrD)	B	0-3'
Tarpley clay 1 to 3% slopes (TaB)	B	2-5'
Rumble-Comfort association, undulating (RUD)	B	2.5-3.5'

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

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

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

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

Applicant's Site Plan Scale 1" = 400 '
Site Geologic Map Scale 1" = 400 '
Site Soils Map Scale (if more than 1 soil type) 1" = _____ '

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

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

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

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

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

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

   __ There are ___(#) (plugged geotech borings) and 1 water well present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
      __ The (borings) wells are not in use and have been properly abandoned.
      __ The wells are not in use and will be properly abandoned.
      __ The wells are in use and comply with 16 TAC Chapter 76.
   _X_ There are no wells or test holes of any kind known to exist on the project site.

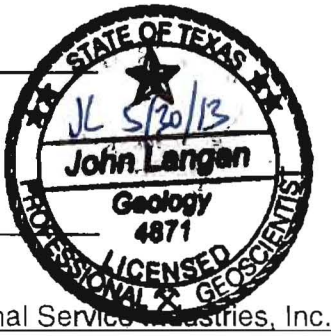
ADMINISTRATIVE INFORMATION

12. _X_ 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.

Date(s) Geologic Assessment was performed: May 23, 2013
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 Chapter 213.

John Langan
Print Name of Geologist



210/616-2119
Telephone

210/342-9401
Fax

Signature of Geologist

May 30, 2013
Date

Representing: Professional Service Industries, Inc.
(Name of Company)

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

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

GEOLOGIC ASSESSMENT

For

VINTAGE OAKS AT THE VINEYARDS UNIT 7
HIGHWAY 46
COMAL COUNTY, TEXAS

Prepared for

M&S ENGINEERING LTD.
6477 F.M. 311, P.O. BOX 970
SPRING BRANCH, TEXAS 78070

Prepared by

Professional Service Industries, Inc.
7400 Blanco Road, Suite 257
San Antonio, Texas 78216
Telephone (210) 616-2119

PSI PROJECT NO.: 435- 1408

May 30, 2013

Information To Build On
Engineering • Consulting • Testing

May 30, 2013

M&S Engineering, Ltd.
6477 F.M. 311, P.O. Box 970
Spring Branch, Texas 78070

Attn: Mr. Heath Woods, P.E.

Re: Geologic Assessment
Vintage Oaks at The Vineyard Unit 7
Approximate 82.35-Acre Tract
Highway 46, Comal County, Texas
PSI Project No. 435-1334

Dear Mr. Woods:

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

AUTHORIZATION

Authorization to perform this assessment was given by a signed copy of PSI Proposal No. 95390 between M&S Engineering, Ltd. and PSI dated May 8, 2013.

PROJECT DESCRIPTION

The subject site is located on the south side of Highway 46, east of Cranes Mill Road, in Comal County, Texas. The approximate 82.35-acre tract is an elongated parcel of undeveloped land paralleling Highway 46 that is gently rolling, with varying topographic slopes. Dry Comal Creek drains the central portion of the property, with the western portion having a general slope to the east, while the eastern portion of the property slopes to the west, towards Dry Comal Creek. The site vegetation consists primarily of native grasses, ashe juniper, live oak, cedar elm and persimmon trees, with abundant mountain laurel, agarita, and prickly pear cactus.

REGIONAL GEOLOGY

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the

Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations in excess of 1,400' feet above sea level in the northwestern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. Elevations at the Vintage Oaks at the Vineyard Unit 7 site range from approximately 1,110 and 1,100 feet above mean sea level in the east and west corners of the property, respectively, to approximately 1,050 feet above mean sea level in the east-central portion of the tract, along Herbelin Road.

Stratigraphy and Structure

Rocks at the site are members of the Lower Cretaceous Edwards Kainer Formation. The western portion of the site has outcrops of the Walnut, or Basal Nodular Member of the Kainer Formation, which is characterized by shaly, nodular limestone that is considered regionally as a lower confining unit, but locally can be water-bearing through dissolution along bedding planes. The thickness ranges from 20 to 70 feet. The Bear Creek Fault traverses the tract in a northeast-southwest direction, with the downthrown side to the east having the Dolomitic Member of the Kainer Formation at the surface. This unit is composed of mudstone to grainstone, cherty limestone and dolomite, with abundant *toucasia* fossils. Cavern development is related to faults, fractures and bedding planes. The thickness ranges from 110 to 140 feet. The site is covered with a thin veneer of soil, and a few large vuggy and fractured rock outcrops are exposed at the site. According to "The Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County Texas" written by the USGS, the Kainer Formation ranges between 260 and 310 feet thick and forms the lower member of the Edwards Group, beneath the Person Formation which compromises the Edwards Aquifer, a federally-designated sole source aquifer for the region.

No sensitive features scoring more than 40 points on the F-0585 form were observed on the subject tract. The western portion of the site had man-made features including several excavations/quarry areas on the central and far western portions of the tract, while the eastern portion of the site had larger fractured and vuggy rock outcrops related to stream drainages.

SITE INVESTIGATION

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

SUMMARY

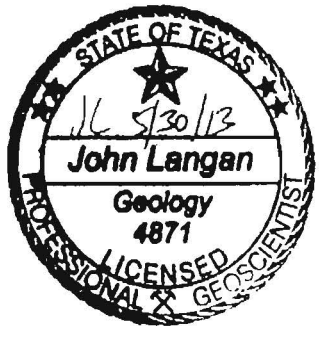
No sensitive features were noted on the subject tract. The western portion of the site had man-made features including several excavations/quarry areas on the central and far western portions of the tract, while the eastern portion of the site had larger fractured and vuggy rock outcrops related to stream drainages. Please note that subtle features, buried or obscured from view, may be present on the tract. It is possible that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. If caves, sinkholes, or solution cavities are encountered during future clearing/construction activities, please contact our office for additional assistance.

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

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

John Langan, P.G.
Environmental Department Manager



psi

WARRANTY

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

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

STRATIGRAPHIC COLUMN

Vintage Oaks at The Vineyard Unit 7
Approximate 82.35-Acre Tract
Highway 46
Comal County, Texas

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Georgetown Formation	2-20'	Light tan limestone identified by proximity to Del Rio clay and diagnostic marker fossil: *waconella wacoensis* brachiopod; low porosity and permeability development.
Person Formation	170-204'	Limestones and dolomites, extensive porosity development in "honeycomb sections, interbedded with massive recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations.
Kainer Formation	260-310'	Hard, miliolid limestones, overlying calcified dolomites and dolomite. Leached evaporitic "Kirschberg" zone of very porous and permeable collapse breccia formed by the dissolution of gypsum. Includes the basal nodular (Walnut) bed, the lowermost member of the formation
Glen Rose Limestone (upper)	350-500	Yellowish-tan thinly bedded limestone and marl. Alternating beds of varying hardness erodes to "stairstep" topography. Marine fossils common.

SOILS NARRATIVE

According to the Soil Survey of Comal County, published by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Extension Service, reissued in 1984, the soils beneath the subject property have been classified as Comfort-Rock outcrop complex, undulating (CrD), Tarpley clay, 1 to 3% slopes (TaB), and Rumple-Comfort association, undulating (RUD).

Comfort-Rock outcrop complex, undulating (CrD) – shallow, well drained, moderate permeability, very low available water capacity, moderate hazard of water erosion; Comfort extremely stony clay makes up between 49 and 95% of the Comfort-Rock outcrop series, and indurated rock outcrop and soil less than 4 inches deep make up 5 to 36% of the complex. Typically, the surface layer is dark brown extremely stony soil about 6 inches thick. Cobbles, stones and "float" rock comprise about 45% of the surface. The subsoil extends to about 13 inches, and overlies the fractured limestone parent material. Comfort soil is well-drained, with slow to medium surface runoff, slow permeability, and very low water capacity.

Tarpley clay, 1 to 3% slopes are shallow, gently sloping soils on uplands of the Edwards Plateau. The soil is usually 6 to 24 inches thick, dark brown, neutral and non-calcareous throughout. The soil is well drained, with medium surface runoff, slow permeability, with very low available water capacity. Water erosion is a moderate hazard, and it is mainly used as rangeland, but moderately suited for crop or pastureland, and habitat for wildlife such as deer, turkey and quail.

Rumple-Comfort association, undulating are shallow and moderately deep soils on Edwards Plateau uplands, with convex or plane slopes. The soil is mildly alkaline and non-calcareous throughout, and is generally 2.5-3.5 feet thick, with the underlying parent material an indurated, fractured limestone. The soil is well drained, with medium surface runoff, with moderately slow permeability and very low available water capacity. This complex is used for rangeland or wildlife habitat, as it is not suited for cultivated crops or pasture.

SITE GEOLOGIC NARRATIVE

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations in excess of 1,400' feet above sea level in the northwestern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. Elevations at the Vintage Oaks at the Vineyard Unit 7 site range from approximately 1,110 and 1,100 feet above mean sea level in the east and west corners of the property, respectively, to approximately 1,050 feet above mean sea level in the east-central portion of the tract, along Herbelin Road.

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of the Bear Creek Fault, in the Walnut/Basal Nodular Member with limited porosity with no obvious pathways to the subsurface, and thus were not sensitive. Features S-10 through S-13 were fractured and vuggy fractured rock outcrops located to the east of the Bear Creek Fault, and thus in the Dolomitic Member of the Kainer Formation. While these features did have higher infiltration ratings than the features to the west of the fault, they did not rate over 40 points on the geologic assessment table.

SITE INVESTIGATION

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

SUMMARY

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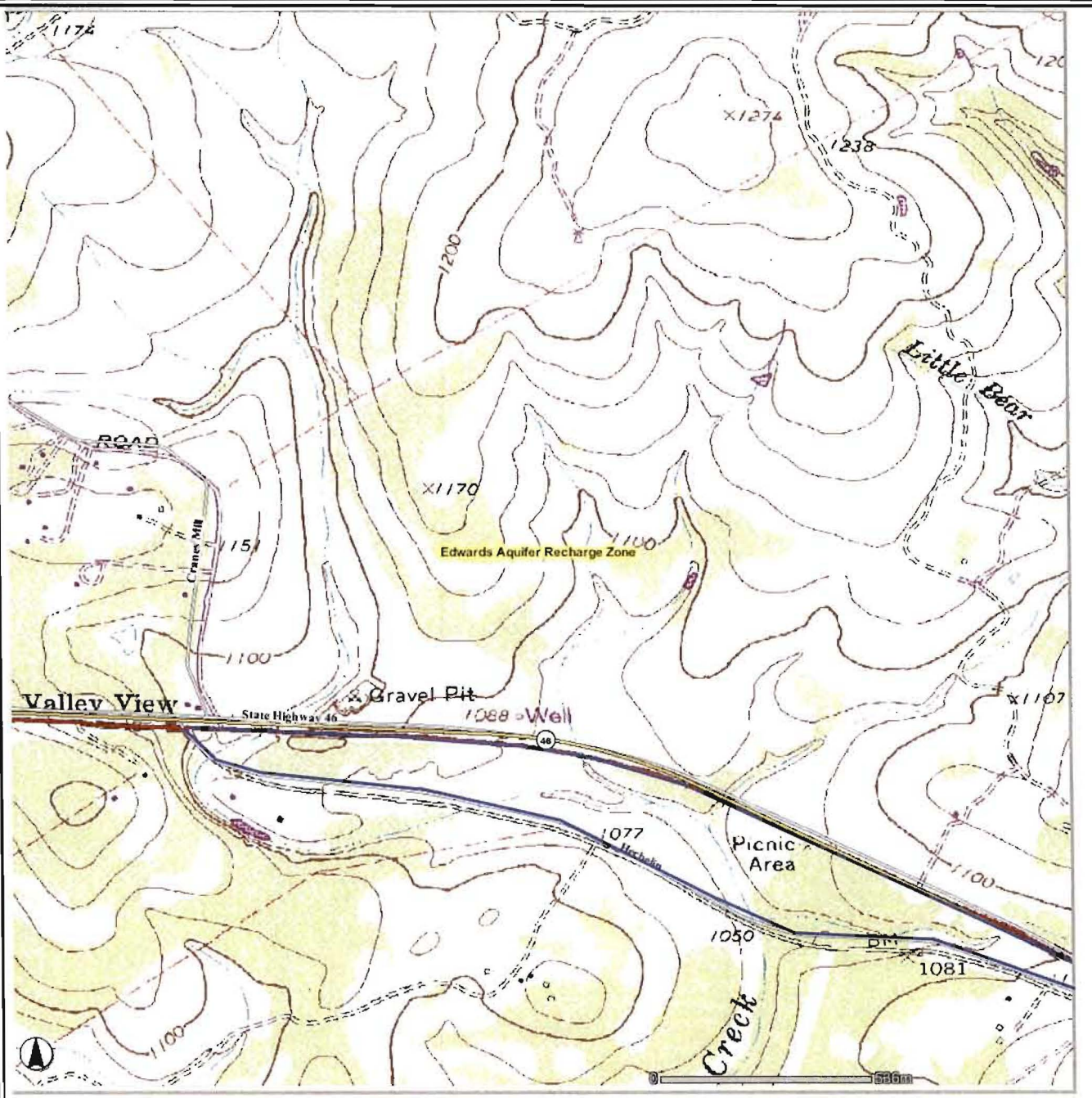


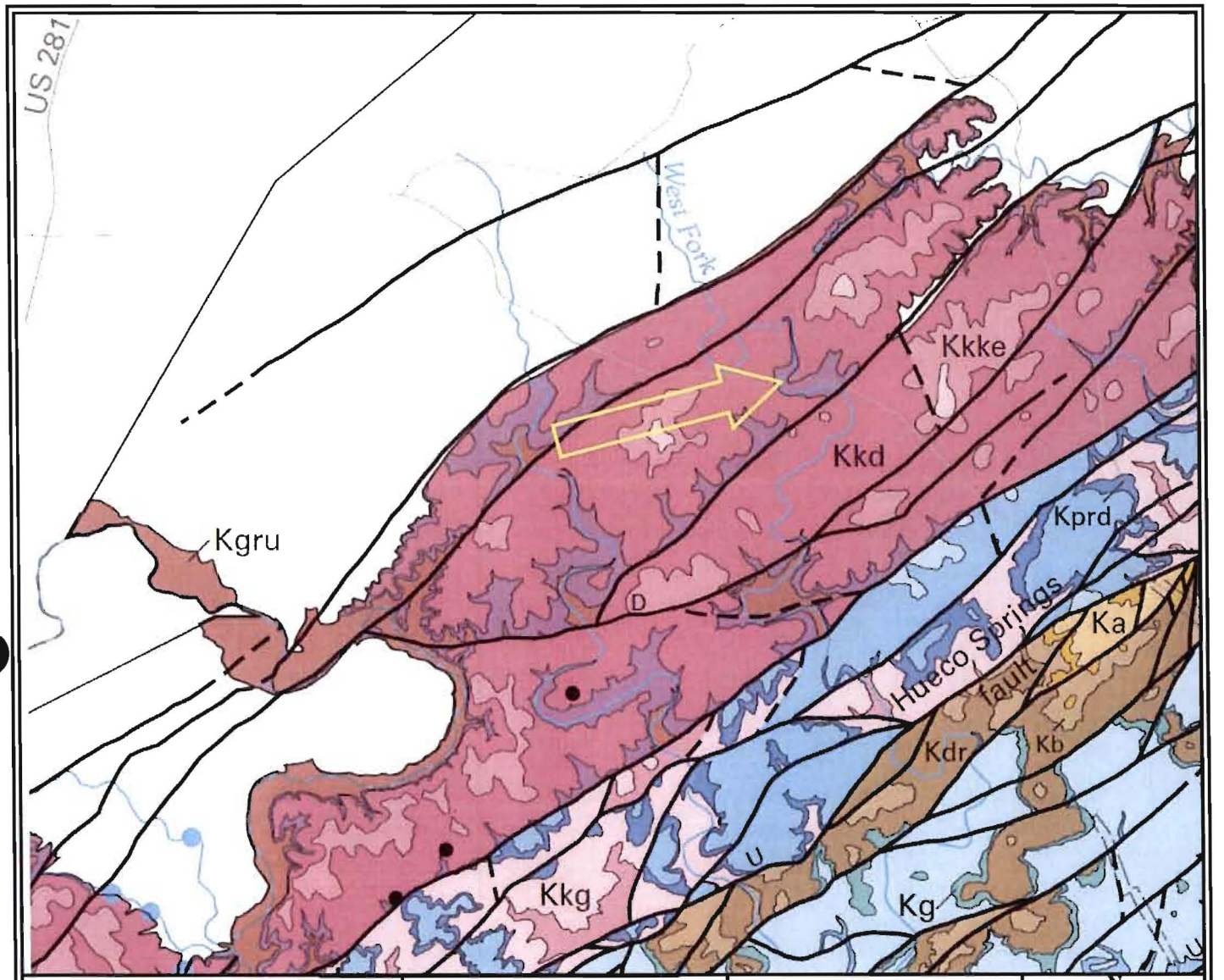
psi Information To Build On
Engineering • Consulting • Testing
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Vintage Oaks at The Vineyards Unit 7
Highway 46
Comal County,Texas

PROJECT NO.:435-1408

Topographic Map/Edwards Aquifer Recharge Zone Map

N



PSI Information To Build On
Engineering • Consulting • Testing
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Vintage Oaks at The Vineyards Unit 7
Comal County,Texas

PROJECT NO.:435-1408

Geologic Map of Edwards Aquifer Recharge Zone, South-Central Texas

(USGS, 2005)

LOCATION MAP
NOT TO SCALE

SCALE:
1" = 400' HORIZONTAL

LEGEND

U / D	FAULT LINE
	BOUNDARY LINE
	FLOOD PLAIN
S-27	ROCK OUTCROP
	BOULDER FLOAT
Kek	LOWER CRETACEOUS EDWARDS KAINER FORMATION
Kw	LOWER CRETACEOUS WALNUT MEMBER OF KAINER FM

GEOLOGIC ASSESSMENT
for
VINTAGE OAKS AT THE VINEYARD
UNIT 7

STATE OF TEXAS
John Langan
Geologist
4671

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

REVISIONS:

JOB NO. 04351408
FILE: 04351408-01
DATE: 05/30/13
DESIGN: -
DRAWN: J LEAL
CHECKED: J LANGAN
SHEET 1 OF 1

GEOLOGIC ASSESSMENT TABLE — PROJECT NAME: Vintage Oaks at the Vineyard Unit 7

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)	CODE	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29-46-20	98-16-29	MB	30	Kw	200	150	6					N	5	35	X			X	Hillside
S-2	29-46-18	98-16-19	MB	30	Kw	200	60	5					N	5	35	X			X	Hillside
S-3	29-46-19	98-16-12	MB	30	Kw	585	150	12					N	5	35	X			X	Floodplain
S-4	29-46-19	98-16-5	MB	30	Kw	250	75	3						5	35	X			X	Hillside
S-5	29-46-14	98-16-00	MB	30	Kw	100	60	3					F	8	38	X			X	Floodplain
S-6	29-46-46	98-15-59	O	5	Kw	500	180	12	E-W		0.3	0.2	C,F	30	35	X			X	Floodplain
S-7	29-46-19	98-15-58	O	5	Kw	50	20	2			0.1	0.1	F	15	20	X			X	Floodplain
S-8	29-46-15	98-15-53	O	5	Kw	250	75	5	E-W		2	0.1	C	25	30	X			X	Floodplain
S-9	29-46-15	98-15-48	O	5	Kek	250	50	6	NW-SE		0.3	0.1	C,F	25	30	X			X	Floodplain
S-10	29-46-8	98-15-45	O	5	Kek	260	50	5			0.2	0.1	O	10	15	X			X	Floodplain
S-11	29-46-4	98-15-42	O	5	Kek	300	50	8	E-W		0.2	0.1	C,F	25	30	X			X	Floodplain
S-12	29-46-6	98-15-32	O	5	Kek	200	70	4			0.2	0.1	O	10	15	X			X	Hillside
S-13	29-46-3	98-15-22	O	5	Kek	375	30	8	E-W		0.4	0.1	C, F	25	30	X			X	Streambed
S-14	29-46-13	98-15-50.5	F	20	Kek	950	10	50	NE-SW	10			F	8	38	X			X	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 Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

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

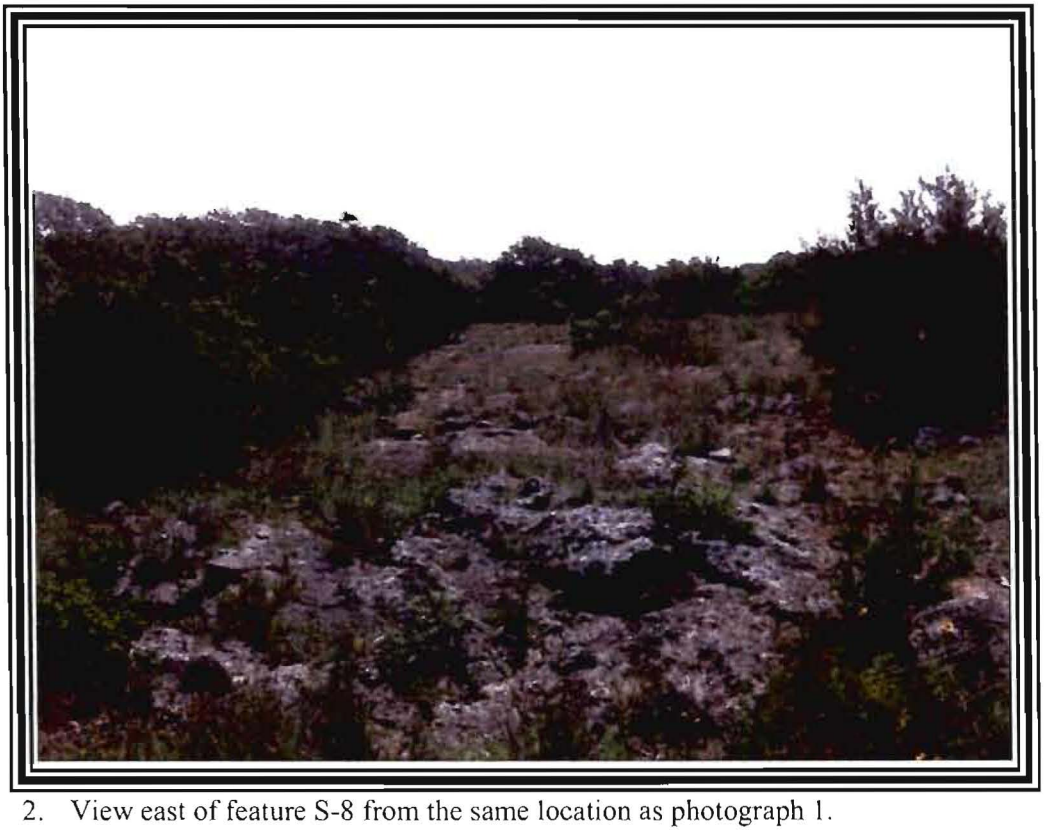
Date: May 23, 2013

Sheet ___1___ of ___1___

STATE OF TEXAS
JL 5/30/13
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST

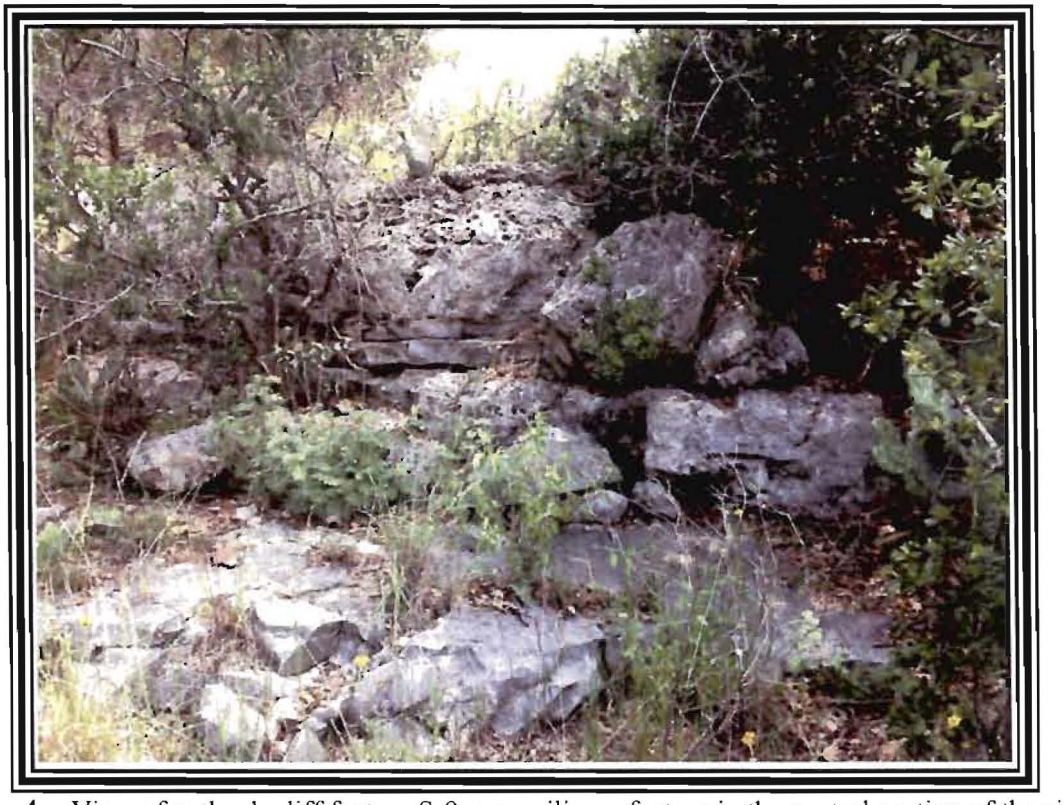
TCEQ-0585-Table (Rev. 10-01-04)

1. View west of outcrop feature S-8, an extensive fractured rock outcrop in the north-central portion of the site at 29-46-15, 98-15-51.



2. View east of feature S-8 from the same location as photograph 1.

3. View of rock in feature S-8 showing polygonal mudcracks, suggesting supratidal depositional environment.

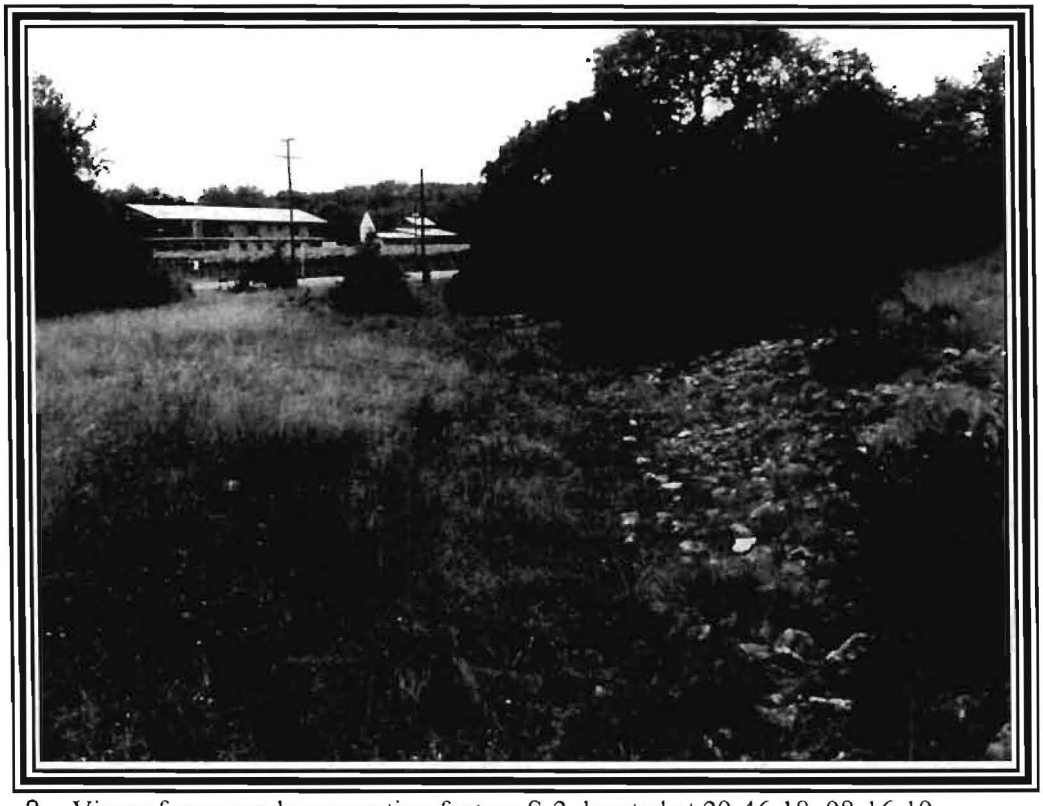


4. View of cutbank cliff feature S-9, a curvilinear feature in the central portion of the site.

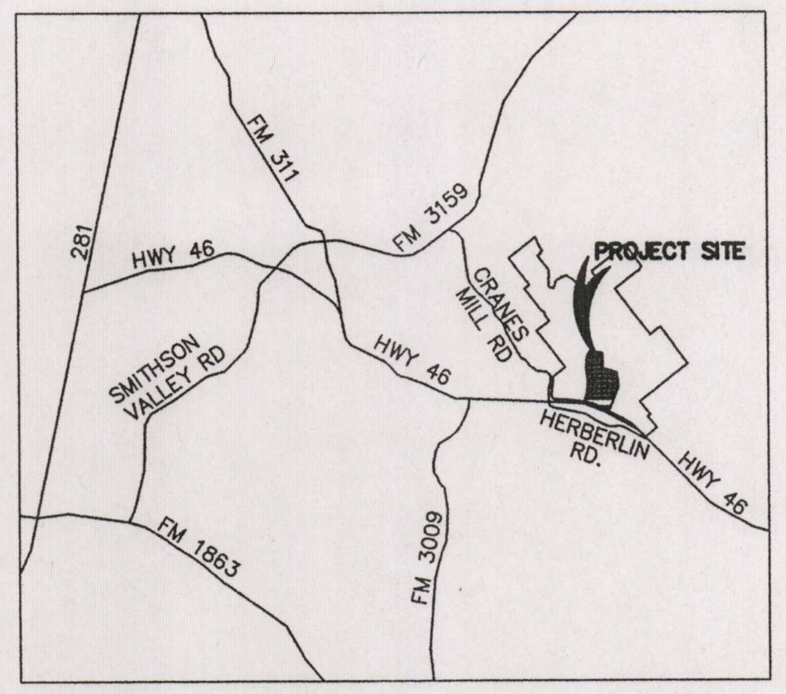
5. View of drainage feature S-10, a vuggy fractured rock outcrop just north of Herbelin Road.

6. View of man-made quarry feature S-3, in the northwestern portion of Unit 7.

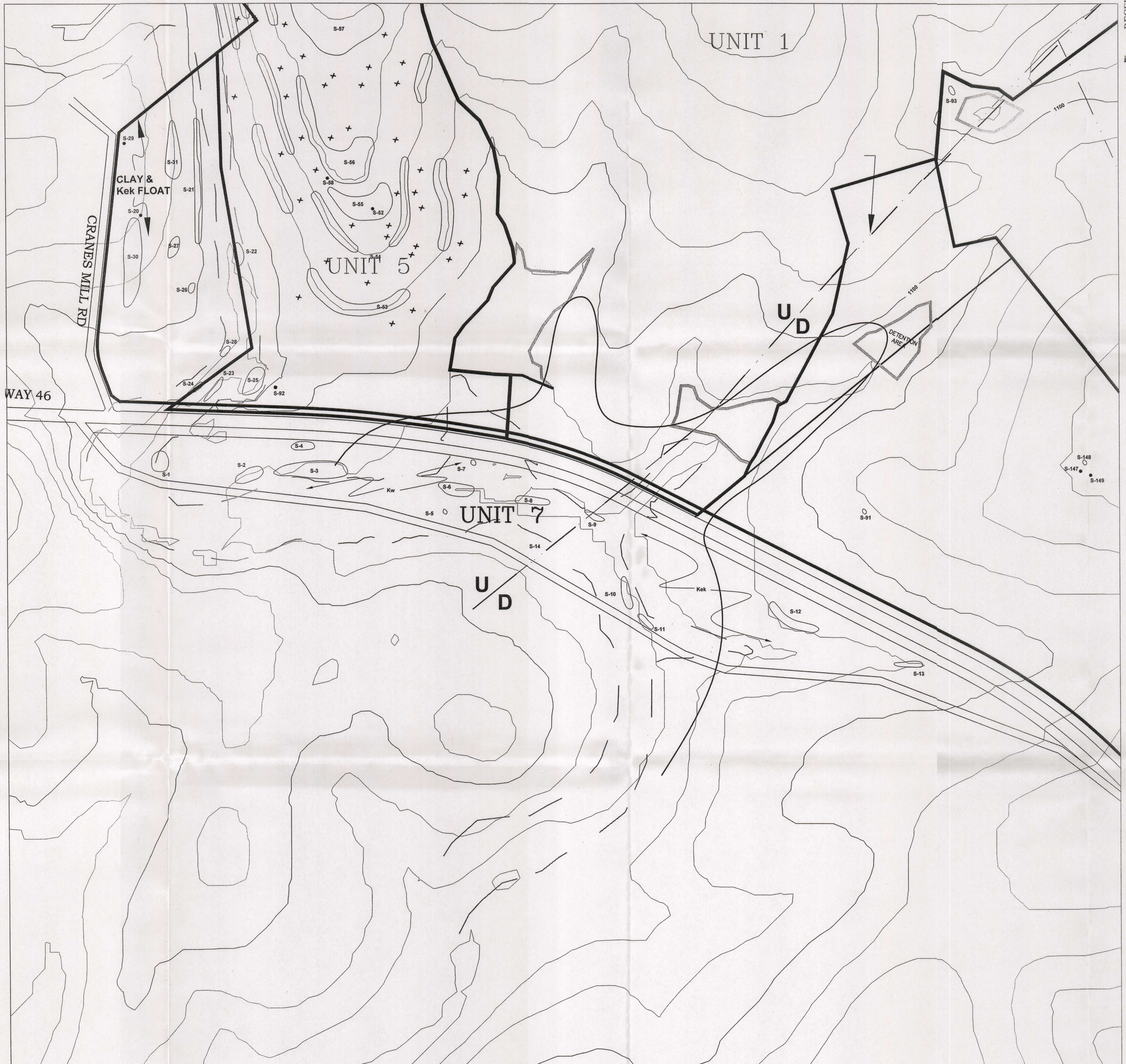
7. View of man-made excavation feature S-1, at the far northwestern corner of Unit 7.



8. View of man-made excavation feature S-2, located at 29-46-18; 98-16-19.



LOCATION MAP
NOT TO SCALE



RECEIVED
JUL 24 2013
COUNTY ENGINEER

SCALE:
1" = 400' HORIZONTAL

TCEQ-R13
JUL 18 2013
SAN ANTONIO

LEGEND

- FAULT LINE
- BOUNDARY LINE
- FLOOD PLAIN
- ROCK OUTCROP (S-27)
- BOULDER FLOAT
- Kek — LOWER CRETACEOUS EDWARDS KAINER FORMATION
- Kw — LOWER CRETACEOUS WALNUT MEMBER OF KAINER FM

GEOLOGIC ASSESSMENT for VINTAGE OAKS AT THE VINEYARD UNIT 7

STATE OF TEXAS — John Langan — Geology 4871 — LICENSED PROFESSIONAL GEOSCIENTIST

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

REVISIONS:

JOB NO. 04351408
FILE: 04351408-01
DATE: 05/30/13
DESIGN: -
DRAWN: J LEAL
CHECKED: J LANGAN
SHEET 1 OF 1

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
WATER POLLUTION ABATEMENT PLAN
GENERAL CONSTRUCTION NOTES

1. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.

3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.

5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.

6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E.G., FUGITIVE SEDIMENT IN STREET BEING WASHED INTO SURFACE STREAMS OR SENSITIVE FEATURES BY THE NEXT RAIN).

7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.

8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.

10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

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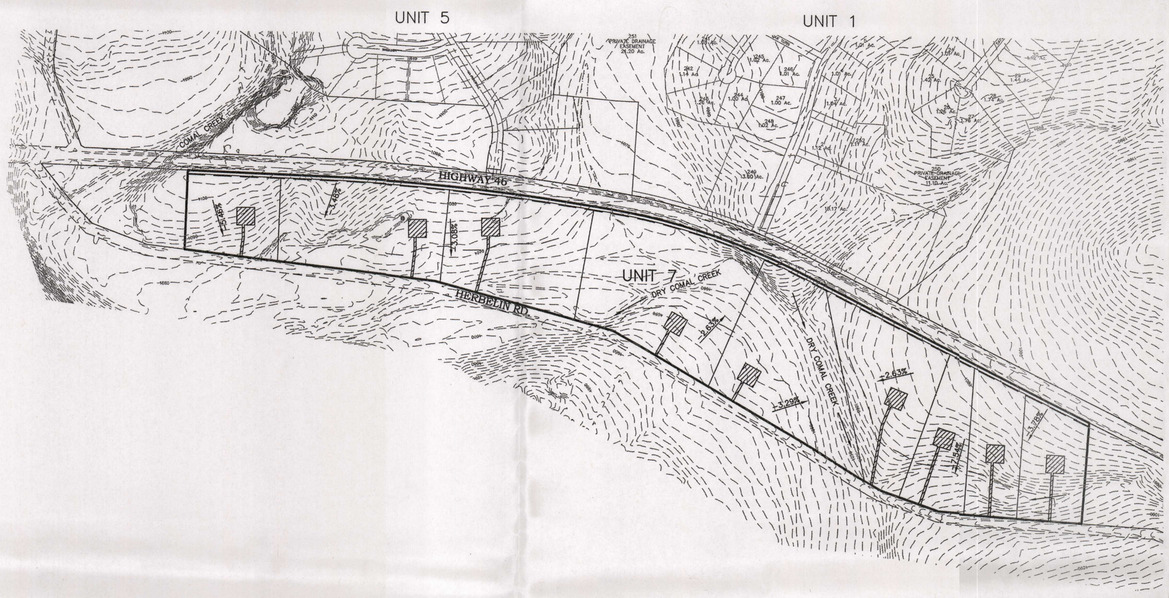
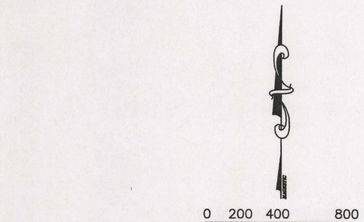
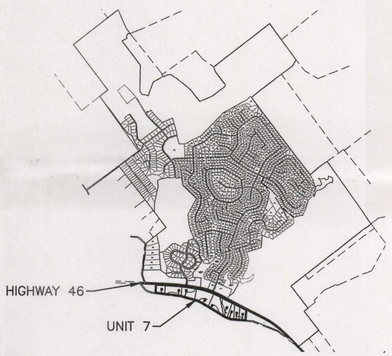
THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.







VINTAGE OAKS AT THE VINEYARD
OVERVIEW MAP
1" = 4000'

TCEQ-R13
JUL 18 2013
SAN ANTONIO

LEGEND:

- EXIST PROPERTY BOUNDARY
- 300 — EXIST CONTOUR
- 4.8% EXIST WATER FLOW DIRECTION
- POTENTIAL AREA OF DISTURBANCE (ACTUAL LOCATION TO BE DETERMINED BY LOT OWNER)

SITE FEATURES:

ALL SITE FEATURES SHOWN HAVE BEEN EVALUATED AND ARE NOT CLASSIFIED AS BEING SENSITIVE. THESE SITE FEATURES DO NOT REQUIRE A BUFFER ZONE.

SOIL DISTURBANCE NOTE

NO CONSTRUCTION IS PLANNED PRIOR TO SALE OF LOTS.

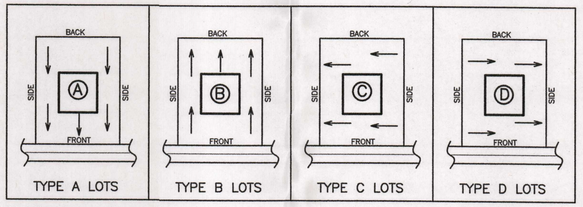
SOIL DISTURBANCES WILL OCCUR TO CLEARING, GRUBBING, AND GRADING OF AREAS TO BE USED FOR THE BUILDING PADS, DRIVEWAY, UTILITY INSTALLATION, AND LANDSCAPE PREPARATION. THE REMAINING PORTIONS OF THE SITE NOT INVOLVED IN ANY OF THESE ACTIVITIES WILL REMAIN UNDISTURBED.

SOIL STABILIZATION NOTE

TEMPORARY EROSION CONTROL MEASURES WILL BE USED TO STABILIZE DISTURBED AREAS (REFER TO EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL FOR CONSTRUCTION OF EROSION CONTROL MEASURES). TRAFFIC WILL BE ROUTED AROUND THESE AREAS TO REDUCE THE EXTENT OF DISTURBED AREAS BY REDUCING SEDIMENT LOADS TO SURFACE WATER.

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

MULCHING/MATS CAN BE USED TO PROTECT THE DISTURBED AREAS WHILE VEGETATION BECOMES ESTABLISHED.



THE TYPICAL DRAINAGE PATTERN OF EACH LOT WILL BE BE DETERMINED BY THE EXISTING CONTOURS. ALL DRAINAGE OF LOTS WILL FLOW AWAY FROM BUILDING PAD.

REVISIONS

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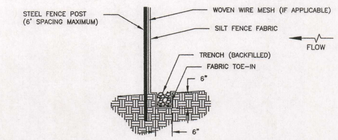
LICENSED PROFESSIONAL ENGINEER
7/16/13

VINTAGE OAKS AT THE VINEYARD UNIT 7

WATER POLLUTION ABATEMENT PLAN
SITE PLAN

JOB: 13BSW001
DATE: MAY 2013
SCALE: 1" = 400'
INTERNAL REVIEW:
DESIGN: BM
PEER:
PM:
DM: AH
OTHER:

SHEET: 1 OF 3



NOTES:

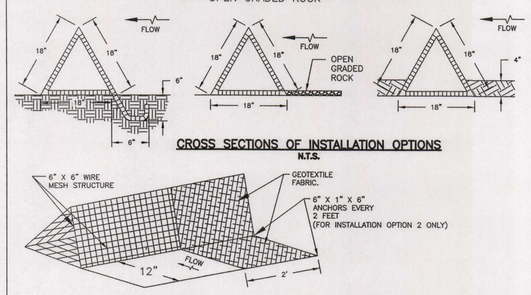
1. TRIANGULAR SEDIMENT FILTER DIKES MAY BE SUBSTITUTED FOR SILT FENCE IN AREAS WHERE INSTALLATION OF SILT FENCE IS NOT POSSIBLE OR WHERE VEHICLE ACCESS MUST BE MAINTAINED PROVIDED THE CONTRIBUTING DRAINAGE AREA IS LESS THAN ONE ACRE.
2. SILT FENCE MATERIAL SHOULD BE POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN OR NONWOVEN FABRIC. THE FABRIC WIDTH SHOULD BE 36 INCHES, WITH A MINIMUM UNIT WEIGHT OF 4.5 OZ/YD, MULLEN BURST STRENGTH EXCEEDING 190 LB/IN², ULTRAVIOLET STABILITY EXCEEDING 70%, AND A MINIMUM APPARENT OPENING SIZE OF U.S. SIEVE NO. 30.
3. 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/FT², AND BRINDELL HARDNESS EXCEEDING 140.
4. WOVEN WIRE BACKING IS REQUIRED IN THE EDWARDS AQUIFER RECHARGE AND CONTRIBUTING ZONE; OPTIONAL ELSEWHERE. WOVEN WIRE BACKING TO SUPPORT THE FABRIC SHOULD BE GALVANIZED 2"X4" WELDED WIRE, 12 GAUGE MINIMUM.
5. SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOURS AS CLOSE AS POSSIBLE. THE ENDS SHOULD BE CURVED UPSTREAM TO CREATE AN AREA OF WATER IMPOUNDMENT AND PREVENT FLOW FROM ESCAPING AROUND THE FENCE.
6. 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 AND SPACED NOT MORE THAN 6 FEET ON CENTER.
7. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CAN NOT BE TREATED IN (E.G., PAVEMENT OR ROCK OUTCROP) WEIGHT FABRIC FLAP WITH 3" OF WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
8. 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.
9. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POSTS OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. WHERE ENDS MEET, OVERLAP FABRIC 3-FEET AND SECURELY FASTEN.

MAINTENANCE AND REMOVAL:

12. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.
13. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE. THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.

SILT FENCE

EXHIBIT A1



NOTES:

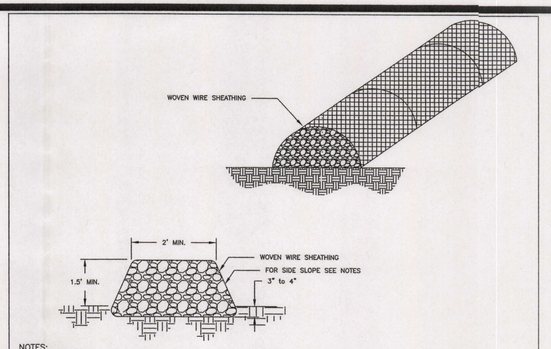
1. DIKES MAY BE MOVED TO ALLOW VEHICLE TRAFFIC, THEN REINSTALLED TO MAINTAIN SEDIMENT CONTROL.
2. GEOTEXTILE FABRIC SHOULD BE THE SAME SPECIFICATIONS AS USED IN FOR SILT FENCES.
3. THE DIKE STRUCTURE SHOULD BE 6 GAUGE 6" X 6" WIRE MESH FOLDED INTO TRIANGULAR FORM 18" ON EACH SIDE, WRAPPED IN GEOTEXTILE FABRIC.
4. DIKES SHALL BE PLACED IN A ROW PARALLEL TO CONTOURS, WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
5. FILTER FABRIC SHOULD LAP OVER ENDS 6" TO COVER DIKE TO DIKE JUNCTION; EACH JUNCTION SHOULD BE SECURED BY SHOAT RINGS.
6. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
7. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 3"-5" OPEN GRADED ROCK, OR TOED-IN 6" WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 4".
8. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 6 INCH WIRE STAPLES ON 2 FOOT CENTERS ON BOTH EDGES AND SKIRT, OR STAKED USING ⅜ INCH DIAMETER REBAR WITH TEE ENDS.

MAINTENANCE AND REMOVAL:

9. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF SIX INCHES, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
10. AFTER THE DEVELOPMENT SITE IS COMPLETELY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN NOTE 8 ABOVE.

TRIANGULAR FILTER DIKE

EXHIBIT A2



NOTES:

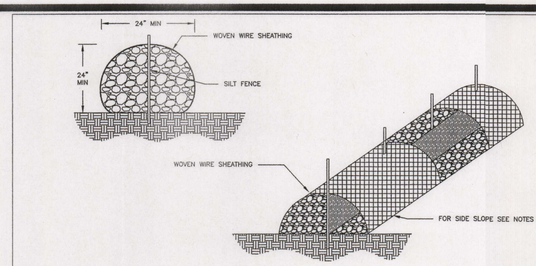
1. USE ONLY CLEAN, OPEN GRADED ROCK 5-8 INCH DIAMETER FOR STREAM FLOW CONDITIONS; USE OPEN GRADED ROCK 3-5 INCHES DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED.
3. THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP.
4. FOR INSTALLATIONS IN ACTIVE STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
5. ROCK BERMS PLACED IN STATE RIGHT OF WAY WILL BE INSTALLED WITH A MAXIMUM SLOPE OF 6:1 OR FLATTER FOR ALL SLOPES PARALLEL TO THE FRONTAGE ROAD EDGE OF PAVEMENT.

MAINTENANCE AND REMOVAL:

6. REPAIR ANY LOOSE WIRE SHEATHING.
7. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION
8. THE STONE AND/OR FABRIC CORE - WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
9. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
10. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

ROCK BERM

EXHIBIT A3



NOTES:

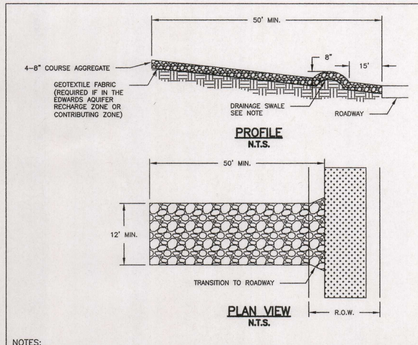
1. SILT FENCE FABRIC, FENCE POSTS, AND WOVEN WIRE MATERIAL SHOULD BE AS SPECIFIED IN THE SILT FENCE DETAIL.
2. BERM WOVEN WIRE SHEATHING AND ROCK FILL SHOULD BE AS SPECIFIED IN THE ROCK BERM DETAIL.
3. LAY OUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE.
4. INSTALL THE SILT FENCE ALONG THE CENTER OF THE PROPOSED BERM PLACEMENT, AS WITH A NORMAL SILT FENCE.
5. PLACE THE ROCK ALONG THE SHEATHING ON BOTH SIDES OF THE SILT FENCE AS SHOWN, TO A HEIGHT NOT LESS THAN 24 INCHES.
6. 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.
7. ROCK BERMS PLACED IN STATE RIGHT OF WAY WILL BE INSTALLED WITH A MAXIMUM SLOPE OF 6:1 OR FLATTER FOR ALL SLOPES PARALLEL TO THE FRONTAGE ROAD PAVEMENT.

MAINTENANCE AND REMOVAL:

8. 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.
9. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE ON ROCK BERM.
10. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT OF IN AN APPROVED MANNER.
11. REPAIR ANY LOOSE WIRE SHEATHING.
12. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
13. 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.
14. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

HIGH SERVICE ROCK BERM

EXHIBIT A4



NOTES:

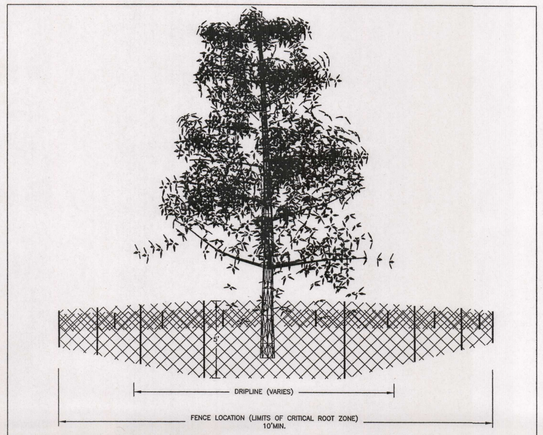
1. THE AGGREGATE SHOULD CONSIST OF 4 TO 8 INCH WASHED STONE OVER A STABLE FOUNDATION WITH A MINIMUM THICKNESS OF 8 INCHES.
2. IF THE SLOPE TOWARDS THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE 8 INCHES HIGH WITH 3:1 (H:V) SIDESLOPES ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
3. THE GEOTEXTILE FABRIC SHOULD BE DESIGNED SPECIFICALLY FOR USE AS A SOIL FILTRATION MEDIA WITH AN APPROXIMATE WEIGHT OF 6 OX/YD², A MULLEN BURST RATING OF 140 LB/IN², AND AN EQUIVALENT OPENING SIZE GREATER THAN A NUMBER 50 SIEVE.
4. THE MINIMUM WIDTH OF THE ENTRANCE SHOULD BE 12 FT OR THE FULL WIDTH OF THE EXIT ROADWAY, WHICHEVER IS GREATER.
5. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.
6. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH 4 INCH MINIMUM CRUSHED STONE OR COMMERCIAL RACK WHICH DRAINS TO A SEDIMENT TRAP OR BASIN.

MAINTENANCE:

7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
8. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

STABILIZED CONSTRUCTION ENTRANCE

EXHIBIT A5

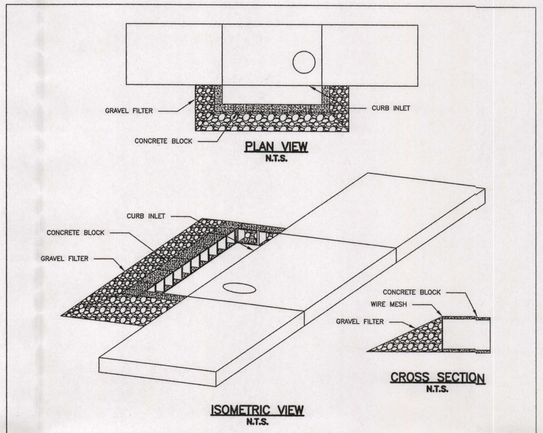


NOTES:

1. CRITICAL ROOT ZONE RADIUS = 1 FT. PER INCH OF TRUNK DIAMETER
2. IF LIMITS OF CONSTRUCTION ENCROACH ON CRITICAL ROOT ZONE, USE THE MODIFIED PLAN VIEW.
3. IF ANY PORTION OF FENCE RADIUS IS LESS THAN 5', ADD 8' HIGH BOARDS STRAPPED TO TRUNK.
4. FENCE SHOULD BE REPAIRED OR REPLACED AS NECESSARY.

TREE PROTECTION CONSTRUCTION FENCE

EXHIBIT A6



NOTES:

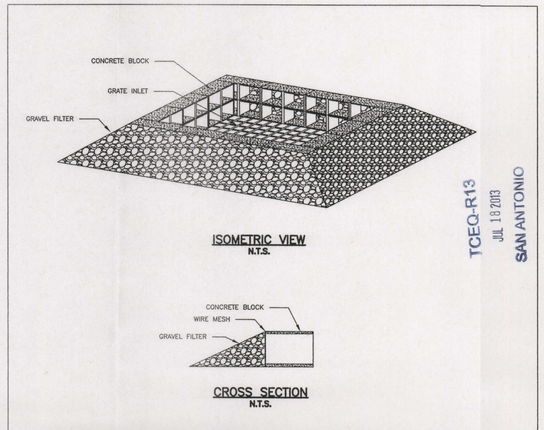
1. TWO CONCRETE BLOCKS SHOULD BE PLACED ON THEIR SIDES ABUTTING THE CURB AT EITHER SIDE OF THE INLET OPENING.
2. A 2" X 4" STUD SHOULD BE CUT AND PLACED THROUGH THE OUTER HOLES OF EACH SPACER BLOCK TO HELP KEEP THE FRONT BLOCKS IN PLACE.
3. CONCRETE BLOCKS SHOULD BE PLACED ON THEIR SIDES ACROSS THE FRONT OF THE INLET AND ABUTTING THE SPACER BLOCKS AS SHOWN ABOVE.
4. WIRE MESH WITH 1/2" OPENINGS SHOULD BE PLACED OVER THE OUTSIDE VERTICAL FACE OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS.
5. COARSE AGGREGATE SHOULD BE PILED AGAINST THE WIRE TO THE TOP OF THE BARRIER.

MAINTENANCE:

6. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT S THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND/OR REPLACED.

BLOCK AND GRAVEL CURB INLET FILTER

EXHIBIT A7



NOTES:

1. PLACE CONCRETE BLOCKS LENGTHWISE ON THEIR SIDES IN A SINGLE ROW AROUND THE PERIMETER OF THE INLET, WITH THE ENDS OF ADJACENT BLOCKS ABUTTING. THE HEIGHT OF THE BARRIER CAN BE VARIED, DEPENDING ON DESIGN NEEDS, BY STACKING COMBINATIONS OF 4-INCH, 8-INCH AND 12-INCH WIDE BLOCKS. THE BARRIER OF BLOCKS SHOULD BE BETWEEN 12 AND 24 INCHES HIGH.
2. WIRE MESH SHOULD BE PLACED OVER THE OUTSIDE VERTICAL FACE OF THE CONCRETE BLOCKS TO PREVENT STONE FROM BEING WASHED THROUGH THE HOLES IN THE BLOCKS. WIRE MESH WITH 1/2-INCH OPENINGS SHOULD BE USED.
3. STONE SHOULD BE PILED AGAINST THE WIRE TO THE TOP OF THE BLOCK BARRIER.

MAINTENANCE:

4. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONE MUST BE PULLED AWAY FROM THE BLOCKS, CLEANED AND/OR REPLACED.

BLOCK AND GRAVEL DROP INLET FILTER

EXHIBIT A8

TCEQ-R13
JUL 18 2013
SAN ANTONIO

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LICENSED PROFESSIONAL ENGINEER
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VINTAGE OAKS AT THE VINEYARD UNIT 7

WATER POLLUTION ABATEMENT PLAN DETAILS

JOB: 13BSW001
DATE: MAY 2013
SCALE: N.T.S.

INTERNAL REVIEW:
DESIGN: BBM
PEER:
PM:
DM:
OTHER:

SHEET: 3 OF 3

Date: Jul 03, 2013, 8:30am User ID: bmendez
File: S:\Active Projects\13BSW001 VOV Unit 7\Dwg\13BSW001-WPAP-DTL-001.dwg

0 200 400 800
SCALE (FEET)

LEGEND:

- EXIST UNIT BOUNDARY
- EXIST RIGHT-OF-WAY
- EXIST LOT LINE
- EXIST EDGE OF PAVEMENT
- 300 EXIST CONTOUR
- PROP DRAINAGE AREA

TCEQ-R13
JUL 19 2013
SAN ANTONIO

VINTAGE OAKS AT THE VINEYARD
DRAINAGE OVERVIEW MAP
1" = 4000'

REVISIONS

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STATE OF TEXAS
LANCE KLEIN
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LICENSED PROFESSIONAL ENGINEER
7/3/13

VINTAGE OAKS AT THE VINEYARD UNIT 7

WATER POLLUTION ABATEMENT PLAN
DRAINAGE AREA MAP

JOB: 13BSW001
DATE: MAY 2013
SCALE: 1" = 400'
INTERNAL REVIEW:
DESIGN:
PEER: BGM
PM:
DM:
OTHER:

SHEET: 2 OF 3

Date: Jul 03, 2013, 8:28am User ID: bmendez
File: S:\Active Projects\13BSW001 VOV Unit 7\dwg\13BSW001-WPAP-DA-001.dwg

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: Vintage Oaks at the Vineyard, Unit 7

REGULATED ENTITY INFORMATION

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

2. Total site acreage (size of property): 82.35 Ac.

3. Projected population: 23

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	256,000	÷ 43,560 =	0.83
Parking (Driveways)	204,800	÷ 43,560 =	0.66
Other paved surfaces	225,844	÷ 43,560 =	0.73
Total Impervious Cover	686,644	÷ 43,560 =	2.22
Total Impervious Cover ÷ Total Acreage x 100 =			2.70 %

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

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

FOR ROAD PROJECTS ONLY
Complete questions 7-12 if this application is exclusively for a road project.

7. Type of project:
   - ___ TXDOT road project.
   - ___ County road or roads built to county specifications.
   - ___ City thoroughfare or roads to be dedicated to a municipality.
   - ___ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:
   - ___ Concrete
   - ___ Asphaltic concrete pavement
   - ___ Other: ___

9. Length of Right of Way (R.O.W.): _____ feet.
Width of R.O.W.: _____ feet.
L x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

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

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

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

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

13. X **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	0 gallons/day
__% Industrial	0 gallons/day
__% Commingled	0 gallons/day
TOTAL	0 gallons/day

15. Wastewater will be disposed of by:
X **On-Site** Sewage Facility (OSSF/Septic Tank):
X **ATTACHMENT C - Suitability Letter from Authorized Agent.** An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.
Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

__ Sewage Collection System (Sewer Lines):
__ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
__ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.
__ The SCS was previously submitted on _____.

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

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

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

SITE PLAN REQUIREMENTS

Items 17 through 27 must be included on the Site Plan.

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

18. 100-year floodplain boundaries
X Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
__ No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s):
Flood Insurance Rate Map Community Panel No. 48091C0245F, Effective date September 02, 2009

19. __ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
X The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.

20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
_ There are 0 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
__ The wells are not in use and have been properly abandoned.
__ The wells are not in use and will be properly abandoned.
__ The wells are in use and comply with 16 TAC §76.
X There are no wells or test holes of any kind known to exist on the project site.

21. Geologic or manmade features which are on the site:
X 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. X The drainage patterns and approximate slopes anticipated after major grading activities.

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

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

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

26. X Surface waters (including wetlands).

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

ADMINISTRATIVE INFORMATION

28. 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.

29. X 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:

Heath L. Woods
Print Name of Customer/(Agent)

Heath L. Woods — 6/6/13
Signature of Customer/Agent — Date

Factors Affecting Water Quality

Factors Affecting Water Quality

Potential sources of pollution that may be expected to affect the quality of storm water discharges from the site during residential home construction include:

- Soil erosion due to clearing of site.
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
- Hydrocarbons from asphalt paving.
- Trash and litter from construction workers and material wrappings.
- Concrete truck washout.
- Tar, fertilizers, cleaning solvents, detergents, and petroleum based products.

Potential sources of pollution that may be expected to affect the quality of storm water discharges from the site after development include:

- Oil, grease fuel and hydraulic fluid contamination from vehicle drippings.
- Dirt and dust from vehicles.
- Trash and litter.

Volume and Character of Stormwater

Volume and Character of Stormwater

The overall contributing drainage area for Unit 7 of this project is comprised of 13 sub-basins which total to approximately 5,000 acres. The stormwater runoff for the pre-project conditions of Unit 7 would be across rocky soil, with native grasses. The site has an average slope ranging from 2% to 12%. Using SCS methods peak discharges for each sub-basin were calculated. A summary of the pre- and post-project conditions follows.

10-Year Pre- and Post-Project Stormwater Data

Sub-Basin	Pre-Project Curve Number	Post-Project Curve Number	Pre-Project Discharge	Post-Project Discharge
			(cfs)	(cfs)
1-1A	73	73	2,831	2,831
1-1B	73	79	582	687
1-2	80	80	326	326
1-3	71	73	382	407
1-4A	75	79	451	503
1-4B	71	83	300	412
1-4C	71	83	504	697
1-5	84	84	216	216
1-6	84	84	474	474
1-7	79	79	360	360
1-7A	80	80	158	158
1-8	79	79	624	624
1-9	80	80	115	115

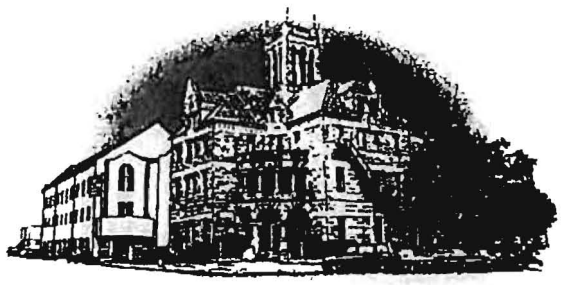
100-Year Pre- and Post-Project Stormwater Data

Sub-Basin	Pre-Project Curve Number	Post-Project Curve Number	Pre-Project Discharge	Post-Project Discharge
			(cfs)	(cfs)
1-1A	73	73	5,627	5,627
1-1B	73	79	1,141	1,260
1-2	80	80	591	591
1-3	71	73	776	807
1-4A	75	79	862	917
1-4B	71	83	600	723
1-4C	71	83	1,016	1,225
1-5	84	84	379	379
1-6	84	84	826	826

1-7	79	79	668	668
1-7A	80	80	285	285
1-8	79	79	1144	1144
1-9	80	80	210	210

The characteristics of the post-project stormwater generated onsite will be influenced by site features that generate non-point pollution. This non-point pollution will include oil and grease from the paved areas, suspended solids, sedimentation, and nutrients for lawn care, and possible pesticides and herbicides. The stormwater runoff will flow across pervious areas of rocky soil, with native grasses before discharging into the Dry Comal Creek.

Suitability Letter from Authorized Agent



Comal County

OFFICE OF COMAL COUNTY ENGINEER

July 12, 2013

Mr. Heath Woods, P.E.
M&S Engineering, LLC
P.O. Box 970
Spring Branch, TX 78070

Re: Vintage Oaks at the Vineyard Unit 7 On-Site Sewage Facility Suitability Letter, within Comal County, Texas

Dear Mr. Woods:

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 on June 28, 2011:

- The Geologic Assessment, prepared by Professional Service Industries, Inc.
- The Water Pollution Abatement Plan, prepared by M&S Engineering, LLC

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

- All lots within Vintage Oaks at the Vineyard Unit 7 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 in Vintage Oaks at the Vineyard Unit 7;
- A License to Operate is required from Comal County before an OSSF can be operated in Vintage Oaks at the Vineyard Unit 7;
- 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

cc: Scott Haag, Comal County Commissioner Precinct No. 2
Betty Lien, Comal County Subdivision Coordinator

Attachment D

Exception to the Required Geologic Assessment

Not Applicable

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: Vintage Oaks at the Vineyard, Unit 7

POTENTIAL SOURCES OF CONTAMINATION
Examples: Fuel storage and use, chemical storage and use, use of asphaltic products, construction vehicles tracking onto public roads, and existing solid waste.

1. Fuels for construction equipment and hazardous substances which will be used during construction:

__ Aboveground storage tanks with a cumulative storage capacity of less that 250 gallons will be stored on the site for less than one (1) year.
__ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
__ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An **Aboveground Storage Tank Facility Plan** application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
X Fuels and hazardous substances will not be stored on-site.

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

3. X Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.

4. X **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.
__ There are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. X **ATTACHMENT C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. X Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Dry Comal Creek

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

on the site plan.

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

   X TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information has been provided in the attachment at the end of this form

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

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

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

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

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

   ___ **ATTACHMENT E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

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

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

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

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

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

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

11. N/A **ATTACHMENT H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure has been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are provided as at the end of this form.

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

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

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

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

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

SOIL STABILIZATION PRACTICES

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

17. X **ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for the site is attached at the end of this form.

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

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

ADMINISTRATIVE INFORMATION

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

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

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

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

Heath L Woods
Print Name of Customer/Agent

Heath L. Woods
Signature of Customer/Agent

6/6/13
Date

Spill Response Actions

Spill Response Action

Spill Prevention and Control

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

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

Education

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

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

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

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

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

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, and substances listed under 40 CFR parts 110, 117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.

(2) Store hazardous materials and wastes in covered containers and protect form vandalism.

(3) Place a stockpile of spill cleanup materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well organized, and equipment with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.

(2) Use a rag for small spills on paved surfaces, a damp mop for general mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.

(3) Never hose down or bury dry material spills. Clean up as much as the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent material on small spills rather than hosing down or burying the spill.

(3) Absorbent material should be promptly removed and disposed of properly.

(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled material.

(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately:

(1) Contain spread of the spill

(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

(4) If the spill occurs in dirt areas, immediately contain the spill be constructing an earthen dike. Dig up and properly dispose of contaminated soil.

(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110, 119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

(3) Notification should first be made by telephone and followed up with a written report.

(4) He services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the County Sheriff Office, Fire Departments, etc.

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

Vehicle and Equipment Fueling

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately.

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycle drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/leaks.

Potential Sources of Contamination

Potential Sources of Contamination

1. Oil, grease, fuel and hydraulic contamination from construction equipment and vehicle leakage.
   Remedy: Lubrication and fueling will be preformed in a designated area. This area will be monitored daily for contamination.

2. Miscellaneous trash and litter form construction workers.
   Remedy: Designated receptacles will be strategically located and workers will be directed to deposit trash there.

3. Construction debris.
   Remedy: Debris will be collected weekly and deposited in bins for offsite disposal. Situations requiring immediate attention will be handled on a case by case basis.

4. Asphalt products.
   Remedy: After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to maintain and asphalt wash-off should and unexpected rain occurs. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.

Sequence of Major Activities

Sequence of Major Activities

1. Residential home construction, including building pads, driveways, and landscaping
   Residential Lots: 2.07 acres disturbed
   (Assumed 10,000 sq. ft. disturbed area per lot.)

Temporary Best Management Practices and Measures

Temporary Best Management Practices and Measures

All TBMPs will be installed prior to the beginning of site preparation and construction activities as per the Storm Water Pollution Prevention Plan. The TBMPs will remain in place and will be maintained until all construction has ceased and a perennial vegetative cover with a density of 70 percent has been established.

a. Silt fences and rock berms will be used to protect disturbed soils during construction in order to prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

b. Silt fences and rock berms will be used to protect disturbed soils during construction in order to 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 200-foot radius natural buffer zone adjacent to and upgradient of sensitive features will remain undisturbed so that rainfall may continue to enter the feature. The natural vegetated areas will ensure that pre-development stormwater quantity and quality will continue to recharge the aquifer via the feature. Rock berms will be placed downgradient of all construction activities so that potentially contaminated stormwater may be treated before leaving the sited and entering downstream surface water.

d. No construction will occur within a 200-foot radius of naturally-occurring sensitive features. The vegetative buffer zone will serve as both TMBP and BMP for the sensitive features. In the case that construction activities occur upgradient of a sensitive feature (greater than the 200-foot radius) the disturbed soils will be protected from erosion by silt fences as outlined above.

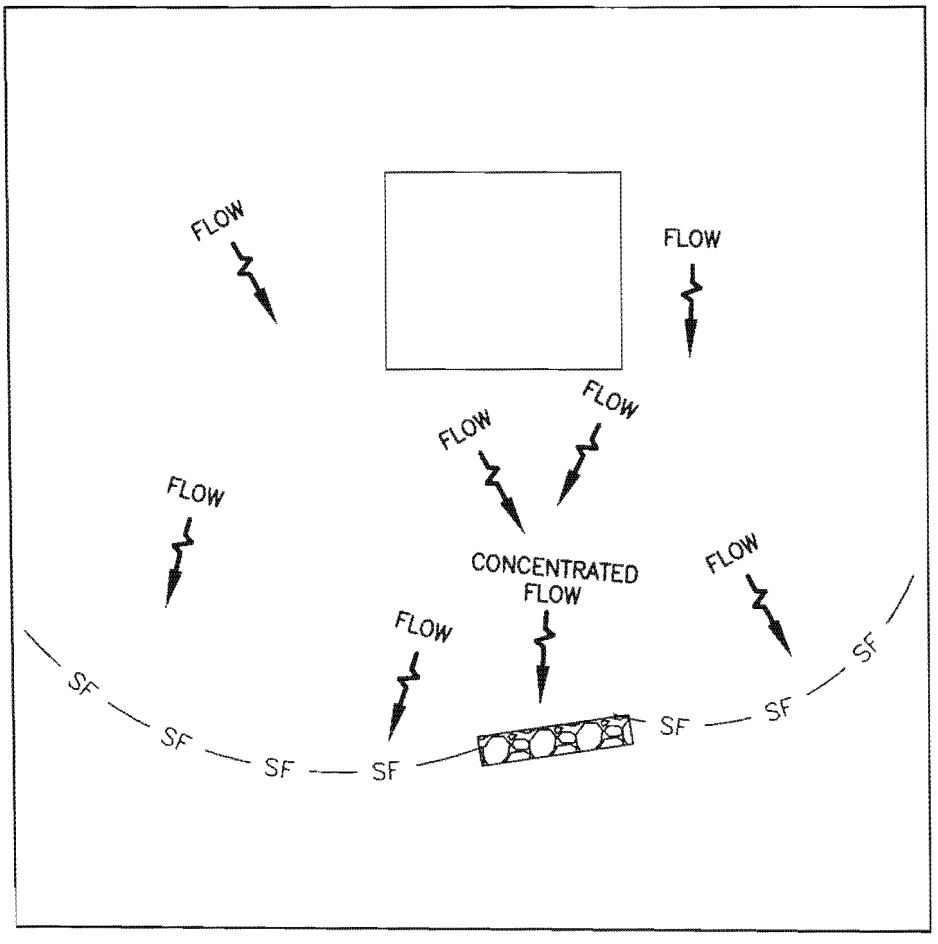
Request to Temporarily Seal a Feature

Request to Temporarily Seal a Feature

NOT APPLICABLE

Structural Practices

The structural practices that will limit runoff discharge of pollutants form exposed areas of the site will be the use of the drainage easements, rock berms, silt fences, and stabilized construction entrance as determined by the residential lot contractors to prevent the excavated material from leaving the site.



LEGEND

- PROPERTY LINE
- SF — SILT FENCE
- ROCK BERM
- BUILDING
- DISTURBED AREA
- FLOW DIRECTION

NOTES:

1. EACH PROPERTY OWNER IS RESPONSIBLE FOR ENSURING A STORM WATER POLLUTION PREVENTION PLAN IS DEVELOPED AND IMPLEMENTED IN ACCORDANCE WITH THE TPDES GENERAL PERMIT TXR150000. THIS PLAN MUST INCLUDE THE DESIGN AND PLACEMENT OF APPROPRIATE TEMPORARY CONTROLS SUCH AS SILT FENCE AND ROCK BERMS.
2. IF THE AVERAGE IMPERVIOUS COVER PER LOT EXCEEDS THE ASSUMPTIONS DESCRIBED IN THE APPROVED EDWARDS AQUIFER PLAN, A MODIFICATION TO THE PLAN MUST BE APPROVED PRIOR TO CONSTRUCTION.
3. THIS DETAIL PROVIDES GENERAL GUIDANCE FOR THE PLACEMENT OF CONTROLS. THESE CONTROLS SHOULD BE TAILORED TO FIT THE SPECIFIC ONSITE CONDITIONS AND THE PROPOSED CONSTRUCTION.
4. SILT FENCE SHOULD BE INSTALLED DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE ENDS OF THE FENCE SHOULD BE CURVED UPHILL TO CREATE AN IMPOUNDMENT AREA. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
5. ROCK BERMS SHOULD BE INSTALLED IN AREAS OF CONCENTRATED FLOW WITH DRAINAGE AREA NOT TO EXCEED 5 ACRES.

SOIL STABILIZATION NOTES:

6. TEMPORARY EROSION CONTROL MEASURES WILL BE USED TO STABILIZE DISTURBED AREAS. TRAFFIC WILL BE ROUTED AROUND THESE AREAS TO REDUCE THE EXTENT OF DISTURBED AREAS BY REDUCING SEDIMENT LOADS TO SURFACE WATER.
7. BARE SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.
8. MULCHING/MATS CAN BE USED TO PROTECT THE DISTURBED AREAS WHILE VEGETATION BECOMES ESTABLISHED.

SCALE - NTS	TYPICAL LOT PLAN FOR TEMPORARY BMPS	M & S ENGINEERING, LLC. ENGINEERS AND PLANNERS
DATE - DEC 2009		
DRAWN - SRJ		
SHEET - 1 of 1		

MAIN OFFICE
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FAX * (830) 885-2170

BRANCH OFFICE
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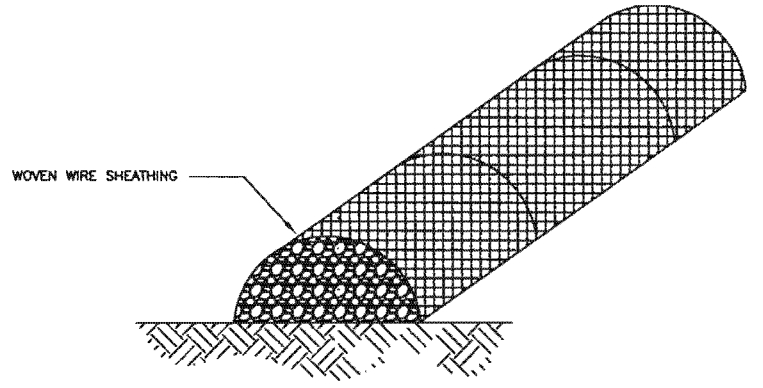
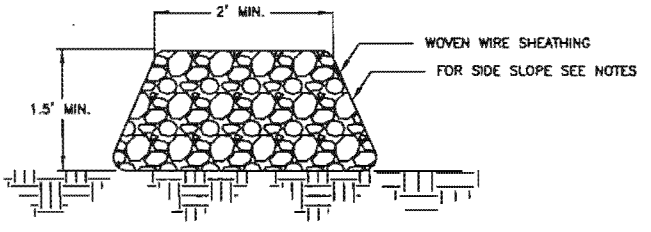
McQUEENEY, TEXAS 78123





NOTES:

1. USE ONLY CLEAN, OPEN GRADED ROCK 4–8 INCH DIAMETER FOR STREAM FLOW CONDITIONS; USE OPEN GRADED ROCK 3–5 INCHES DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE GALVANIZED.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE, AND/OR FABRIC CORE–WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASED TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE–THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE SERVICE ROCK BERMS, SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 6 INCHES.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

ROCK BERM

EXHIBIT B1

SCALE – NTS	
DATE – MAY 2013	
DRAWN – BGM	
SHEET – 1 OF 1	

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M & S ENGINEERING, L.L.C.
ENGINEERS, PLANNERS, AND SURVEYORS
TEXAS REGISTERED ENGINEERING FIRM F-1384

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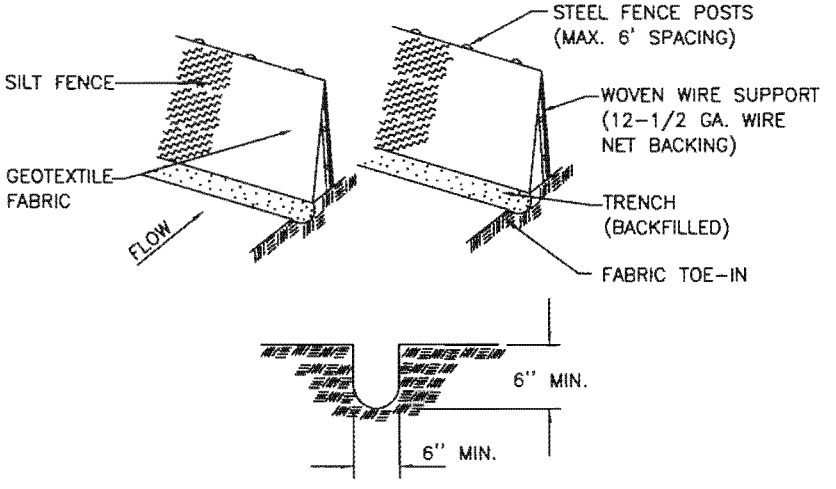
McQUEENEY, TEXAS 78123
387 WEST MILL STREET
NEW BRAUNFELS, TEXAS 78130



TRENCH CROSS-SECTION

NOTES:

1. STEELPOSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CAN NOT BE TREATED (e.g. pavement) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. 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.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

SILT FENCE

SILT FENCE NOTE:
SILT FENCE WILL BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FT OF FENCE. (AS REQUIRED BY TCEQ RG-348, INSTALLATION: ITEM 2)

EXHIBIT B2

SCALE - NTS	
DATE - MAY 2013	
DRAWN - BGM	
SHEET - 1 OF 1	

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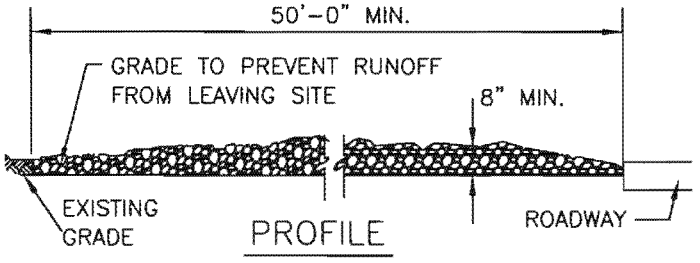
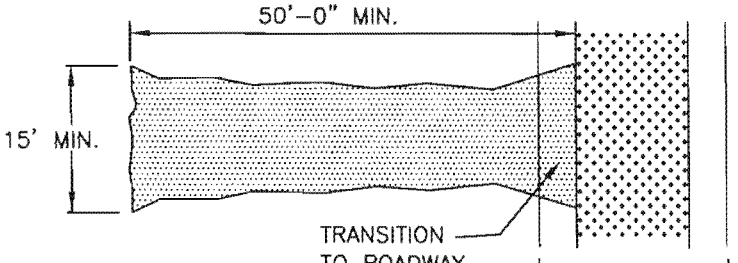


PROFILE



PLAN VIEW

NOTES:

1. STONE SIZE- 3 TO 5 INCH OPEN GRADED ROCK.

2. LENGTH- AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.

3. THICKNESS- NOT LESS THAN 8 INCHES.

4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.

5. WASHING-WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED STRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.

6. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

7. DRAINAGE- ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

STABILIZED CONSTRUCTION ENTRANCE

EXHIBIT B3

SCALE - NTS
DATE - MAY 2013
DRAWN - BGM
SHEET - 1 OF 1

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Attachment G

Drainage Area Map

Temporary sediment basins, silt fences and rock berm are not applicable due to no infrastructure.

Attachment H

Temporary Sediment Pond(s) Plans and Calcualtions

Temporary Sediment Pond(s) Plans and Calculations

NOT APPLICABLE

Inspection and Maintenance of BMPs

Inspection and Maintenance for BMPs

The BMPs for the construction of this project will be the use of rock berms and silt fencing. The following inspection and maintenance procedures will be implemented:

1. Stabilized Construction Entrance/Exit, Silt fencing and rock berms must be in place prior to the start of construction and will remain in place until construction has been complete and the site stabilized from further erosion.

2. The contractor will inspect the rock berms and silt fencing at least once a week and within 24 hours of a storm of 0.5 inches or more in depth. The contractor will repair or replace any damaged TBMPs. The contractor shall correct damage or deficiencies as soon as practical after the inspection but no later than 7 days after the inspection.

3. Contractor will place trench excavation on the upgradient side of the trench.

4. All soil, sand, gravel, and excavated material stockpiled on-site will have appropriately sized silt fencing placed upgradient and down gradient.

5. The contractor will keep a record of the weekly inspections, noting the condition of the rock berms, silt fencing and construction entrance and any corrective action taken to maintain the erosion control structures. In addition to the inspection and maintenance reports, the operator should keep records of the construction activity on-site, in particular, the following information should be kept.

    A. The dates when major grading activities occur in a particular area.

    B. The dates when construction activities cease in an area, temporarily or permanently.

    C. The dates when an area is stabilized, temporarily or permanently.

    D. Records to be maintained in SWPPP.

Schedule of Interim and Permanent Soil Stabilization Practices

Schedule of Interim and Permanent Soil Stabilization Practices

The schedule of interim and permanent soil stabilization will be as follows:

1. Much of the excavation for this project will be in solid rock, helping to minimize the amount of loose soil which has the potential to become suspended in runoff and washed downstream.

2. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporary or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently cease in precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

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: Vintage Oaks at the Vineyard, Unit 7

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

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

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

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

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

   _____

   _____

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

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

   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.

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

__ **ATTACHMENT A - 20% or Less Impervious Cover Waiver.** This site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is found at the end of this form.

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

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

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

__ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is identified as **ATTACHMENT B** at the end of this form.

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

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

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

__ 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.

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 C** at the end of this form.

8. X **ATTACHMENT D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" has been addressed.

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

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

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

10. X **ATTACHMENT F - Construction Plans.** Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information have been signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed permanent BMPs and measures are provided at the end of this form. Design Calculations, TCEQ

Construction Notes, all man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.

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

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

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

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

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

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

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

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

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

Heath L. Woods
Print Name of Customer/Agent

Heath L. Woods
Signature of Customer/Agent

6/6/13
Date

20% or Less Impervious Cover Waiver

Attachment A

20% Or Less Impervious Cover Waiver

NOT APPLICABLE

BMPs for Ungradient Stormwater

BMPs for Upgradient Stormwater

The upgradient stormwater would continue to be accepted onto the project site. The stormwater runoff from the areas that are immediately upgradient of the site are currently undeveloped. No BMPs are required because there will be no construction.

BMPs for On-site Stormwater

Attachment C

BMPs for On-Site Stormwater

The proposed Vintage Oaks at the Vineyard, Unit 7 is less than 20% impervious cover, therefore no permanent BMP is required for the runoff entering the Dry Comal Creek.

BMPs for Surface Streams

BMPs for Surface Streams

The proposed Vintage Oaks at the Vineyard, Unit 7 is less than 20% impervious cover, therefore not filtration is required for the runoff the Dry Comal Creek.

According to the geologic assessment, there were no sensitive features identified on this site that required permanent filtration BMPs.

Request to Seal Features

Request To Seal Features

NOT APPLICABLE

Construction Plans

Attachment F

Construction Plans

NOT APPLICABLE

Inspection, Maintenance, Repair and Retrofit Plan

Attachment G

Inspection, Maintenance, Repair, And Retrofit Plan

NOT APPLICABLE

Pilot-Scale Field Testing Plan

Attachment H

Pilot-Scale Field Testing Plan

NOT APPLICABLE

Measures for Minimizing Surface Stream Contamination

Attachment I

Measures for Minimizing Surface Stream Contamination

Onsite storm water discharges will not be increased as part of the proposed residential construction.

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

I Thad Rutherford,
Print Name

Senior Vice President of Operations,
Title - Owner/President/Other

of Southstar at Vintage Oaks, LLC,
Corporation/Partnership/Entity Name

have authorized Heath L. Woods
Print Name of Agent/Engineer

of M & S Engineering
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

6/4/13
Date

THE STATE OF TEXAS §

County of DALLAS §

BEFORE ME, the undersigned authority, on this day personally appeared Thad Rutherford 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 6 day of June, 2013

NOTARY PUBLIC

LAURA L. FICCO

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

LAURA L. FICCO
Notary Public, State of Texas
My Commission Expires
June 29, 2016

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

NAME OF PROPOSED REGULATED ENTITY: Vintage Oaks at the Vineyard, Unit 7
REGULATED ENTITY LOCATION: 0.1 miles east of Hwy 46 and S. Cranes Mill Rd. intersection
NAME OF CUSTOMER: Thad Rutherford, Southstar at Vintage Oaks, LLC
CONTACT PERSON: Heath L. Woods, P.E. PHONE: (830) 228-5446
(Please Print)

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

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

Austin Regional Office (3373) ☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362) ☐ Bexar ☒ Comal ☐ Medina ☐ Kinney ☐ Uvalde

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

☐ **Austin Regional Office**

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

☒ **San Antonio Regional Office**

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

Site Location (Check All That Apply): ☐ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	Size		Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling		Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	82.35	Acres	$ 6,500
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential		Acres	$
Sewage Collection System		L.F.	$
Lift Stations without sewer lines		Acres	$
Underground or Aboveground Storage Tank Facility		Tanks	$
Piping System(s)(only)		Each	$
Exception		Each	$
Extension of Time		Each	$

Heath L Woods — 6/6/13
Signature — Date

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

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

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

Water Pollution Abatement Plans and Modifications
Contributing Zone Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

PROJECT	FEE
Exception Request	$500

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$150

Pollutant Calculations

In This Section

TSS Removal and BMP Sizing Calculations

NOT APPLICABLE

TCEQ
Protecting Texas by Reducing and Preventing Pollution

F A X T R A N S M I T T A L

DATE: **September 18, 2013**

NUMBER OF PAGES *(including this cover sheet):* **2**

TO: Name **Mr. Thad Rutherford**
Organization **Southstar at Vintage Oaks, LLC**
FAX Number **214-753-4639**

TO: Name **Mr. Heath L. Woods, P.E.**
Organization **M&S Engineering, LLC**
FAX Number **830-885-2170**

FROM: TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Name **Monica Reyes**
Division/Region **EAPP/San Antonio**
Telephone Number **210-403-4012**
FAX Number **210-545-4329**

NOTES:

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Vintage Oaks at the Vineyard, Unit 7; Located approximately 0.1 miles east of Hwy 46 and S. Cranes Mill Road; Comal County, Texas

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

Edwards Aquifer Protection Program ID No. 3200.00; Investigation No. 1103634; Regulated Entity No. RN106852734; Additional ID No. 13-13071802

Dear Mr. Woods:

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

Water Pollution Abatement Plan Application (TCEQ-0584) Comment:

1. Item #4-Please correct Square Foot column.

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: Vintage Oaks at the Vineyard, Unit 7

REGULATED ENTITY INFORMATION

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

2. Total site acreage (size of property): 82.35 Ac.

3. Projected population: 23

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	89,734	÷ 43,560 =	2.06
Parking (Driveways)	28,750	÷ 43,560 =	0.66
Other paved surfaces	31,799	÷ 43,560 =	0.73
Total Impervious Cover	150,283	÷ 43,560 =	3.45
Total Impervious Cover ÷ Total Acreage x 100 =			4.19 %

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

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

FOR ROAD PROJECTS ONLY

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

7. Type of project:
   - ___ TXDOT road project.
   - ___ County road or roads built to county specifications.
   - ___ City thoroughfare or roads to be dedicated to a municipality.
   - ___ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:
   - ___ Concrete
   - ___ Asphaltic concrete pavement
   - ___ Other: ___

M & S ENGINEERING, LLC
ENGINEERS I PLANNERS I SURVEYORS

6477 FM 311 I PO BOX 970
SPRING BRANCH, TX 78070
830.228.5446 PH I 830.885.2170 FX
FIRM F-1394
WWW.MSENGR.COM

September 9, 2013

Monica Reyes
EAPP/San Antonio Region
14250 Judson Rd.
San Antonio, TX. 78233

RE: Vintage Oaks at the Vineyard – Unit 7

Dear Monica,

M&S Engineering is submitting the Vintage Oaks at the Vineyard Unit 7 WPAP. This letter is to address the technical review comments dated September 4, 2013 relating to the application and how we addressed each comment:

Geological Assessment Comments:

1. Location map updated to show project location.
2. Soil unit shown on GA.
3. No infill as feature is man-made excavation/quarry, so the 585 Table will be revised with "N" on the infill heading;
4. Edited lat-long to correct 29-46-46 to 29-46-16.
5. Lat-longs for both are good, but map representation of S-4 needs to move to the east, It is corrected.

Water Pollution Abatement Plan Application Comments:

1. Item #4 corrected.
2. Scale verified and correct.
3. WPAP plan updated as requested.
4. WPAP plan updated as requested.

Temporary Stormwater Application Comments:

1. In item #2, item #1 revised.
2. #5 updated with additional information.
3. Item #5 updated.

If you have any questions or require additional information, please give me or Heath Woods a call at (830) 228-5446.

Sincerely,

Brian Mendez
M & S Engineering, L.L.C.

Vehicle and Equipment Fueling

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately.

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycle drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses to prevent runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/leaks.

Sequence of Major Activities

1. Residential home construction, including building pads, water well, septic, driveways, and landscaping.

   Residential Lots: 4.19 acres disturbed
   (Assumed 20,280 sq. ft. disturbed area per lot, including driveways and paved surfaces)

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: Vintage Oaks at the Vineyard, Unit 7

REGULATED ENTITY INFORMATION

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

2. Total site acreage (size of property): 82.35 Ac.

3. Projected population: 23

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	256,000	÷ 43,560 =	2.06
Parking (Driveways)	204,800	÷ 43,560 =	0.66
Other paved surfaces	225,844	÷ 43,560 =	0.73
Total Impervious Cover	686,644	÷ 43,560 =	2.22
Total Impervious Cover ÷ Total Acreage x 100 =			4.19 %

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

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

FOR ROAD PROJECTS ONLY

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

7. Type of project:
   - ___ TXDOT road project.
   - ___ County road or roads built to county specifications.
   - ___ City thoroughfare or roads to be dedicated to a municipality.
   - ___ Street or road providing access to private driveways.

8. Type of pavement or road surface to be used:
   - ___ Concrete
   - ___ Asphaltic concrete pavement
   - ___ Other: _____

GEOLOGIC ASSESSMENT

For

VINTAGE OAKS AT THE VINEYARDS UNIT 7
HIGHWAY 46
COMAL COUNTY, TEXAS

Prepared for

M&S ENGINEERING LTD.
6477 F.M. 311, P.O. BOX 970
SPRING BRANCH, TEXAS 78070

Prepared by

Professional Service Industries, Inc.
7400 Blanco Road, Suite 257
San Antonio, Texas 78216
Telephone (210) 616-2119

PSI PROJECT NO.: 435- 1408

May 30, 2013

Information To Build On
Engineering • Consulting • Testing

May 30, 2013

M&S Engineering, Ltd.
6477 F.M. 311, P.O. Box 970
Spring Branch, Texas 78070

Attn: Mr. Heath Woods, P.E.

Re: Geologic Assessment
Vintage Oaks at The Vineyard Unit 7
Approximate 82.35-Acre Tract
Highway 46, Comal County, Texas
PSI Project No. 435-1334

Dear Mr. Woods:

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

AUTHORIZATION

Authorization to perform this assessment was given by a signed copy of PSI Proposal No. 95390 between M&S Engineering, Ltd. and PSI dated May 8, 2013.

PROJECT DESCRIPTION

The subject site is located on the south side of Highway 46, east of Cranes Mill Road, in Comal County, Texas. The approximate 82.35-acre tract is an elongated parcel of undeveloped land paralleling Highway 46 that is gently rolling, with varying topographic slopes. Dry Comal Creek drains the central portion of the property, with the western portion having a general slope to the east, while the eastern portion of the property slopes to the west, towards Dry Comal Creek. The site vegetation consists primarily of native grasses, ashe juniper, live oak, cedar elm and persimmon trees, with abundant mountain laurel, agarita, and prickly pear cactus.

REGIONAL GEOLOGY

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the

Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations in excess of 1,400' feet above sea level in the northwestern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. Elevations at the Vintage Oaks at the Vineyard Unit 7 site range from approximately 1,110 and 1,100 feet above mean sea level in the east and west corners of the property, respectively, to approximately 1,050 feet above mean sea level in the east-central portion of the tract, along Herbelin Road.

Stratigraphy and Structure

Rocks at the site are members of the Lower Cretaceous Edwards Kainer Formation. The western portion of the site has outcrops of the Walnut, or Basal Nodular Member of the Kainer Formation, which is characterized by shaly, nodular limestone that is considered regionally as a lower confining unit, but locally can be water-bearing through dissolution along bedding planes. The thickness ranges from 20 to 70 feet. The Bear Creek Fault traverses the tract in a northeast-southwest direction, with the downthrown side to the east having the Dolomitic Member of the Kainer Formation at the surface. This unit is composed of mudstone to grainstone, cherty limestone and dolomite, with abundant *toucasia* fossils. Cavern development is related to faults, fractures and bedding planes. The thickness ranges from 110 to 140 feet. The site is covered with a thin veneer of soil, and a few large vuggy and fractured rock outcrops are exposed at the site. According to "The Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County Texas" written by the USGS, the Kainer Formation ranges between 260 and 310 feet thick and forms the lower member of the Edwards Group, beneath the Person Formation which compromises the Edwards Aquifer, a federally-designated sole source aquifer for the region.

No sensitive features scoring more than 40 points on the F-0585 form were observed on the subject tract. The western portion of the site had man-made features including several excavations/quarry areas on the central and far western portions of the tract, while the eastern portion of the site had larger fractured and vuggy rock outcrops related to stream drainages.

SITE INVESTIGATION

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

SUMMARY

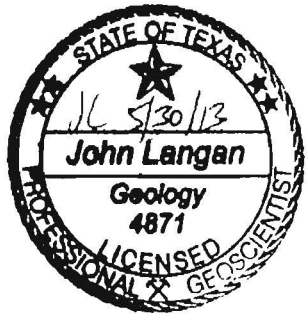
No sensitive features were noted on the subject tract. The western portion of the site had man-made features including several excavations/quarry areas on the central and far western portions of the tract, while the eastern portion of the site had larger fractured and vuggy rock outcrops related to stream drainages. Please note that subtle features, buried or obscured from view, may be present on the tract. It is possible that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. If caves, sinkholes, or solution cavities are encountered during future clearing/construction activities, please contact our office for additional assistance.

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

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

John Langan, P.G.
Environmental Department Manager



WARRANTY

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

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

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: Vintage Oaks at The Vineyards Unit 7

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

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

PROJECT INFORMATION

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

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Comfort-Rock outcrop complex, undulating (CrD)	B	0-3'
Tarpley clay 1 to 3% slopes (TaB)	B	2-5'
Rumble-Comfort association, undulating (RUD)	B	2.5-3.5'

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

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

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

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

Applicant's Site Plan Scale	1" = 400 '
Site Geologic Map Scale	1" = 400 '
Site Soils Map Scale (if more than 1 soil type)	1" = _____ '

6. Method of collecting positional data:
   - X Global Positioning System (GPS) technology.
   - __ Other method(s).
7. X The project site is shown and labeled on the Site Geologic Map.
8. X Surface geologic units are shown and labeled on the Site Geologic Map.
9. X Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
   - __ Geologic or manmade features were not discovered on the project site during the field investigation.
10. __ The Recharge Zone boundary is shown and labeled, if appropriate.
11. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):
    - __ There are ___(#) (plugged geotech borings) and 1 water well present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
      - __ The (borings) wells are not in use and have been properly abandoned.
      - __ The wells are not in use and will be properly abandoned.
      - __ The wells are in use and comply with 16 TAC Chapter 76.
    - X There are no wells or test holes of any kind known to exist on the project site.

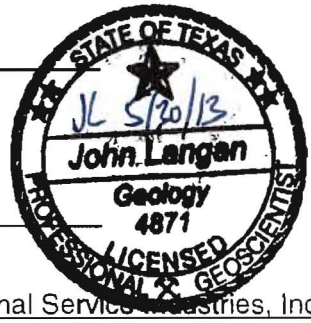
ADMINISTRATIVE INFORMATION

12. X 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.

Date(s) Geologic Assessment was performed: May 23, 2013
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 Chapter 213.

John Langan
Print Name of Geologist



210/616-2119
Telephone

210/342-9401
Fax

Signature of Geologist

May 30, 2013
Date

Representing: Professional Service Industries, Inc.
(Name of Company)

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

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

STRATIGRAPHIC COLUMN

Vintage Oaks at The Vineyard Unit 7
Approximate 82.35-Acre Tract
Highway 46
Comal County, Texas

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Georgetown Formation	2-20'	Light tan limestone identified by proximity to Del Rio clay and diagnostic marker fossil: *waconella wacoensis* brachiopod; low porosity and permeability development.
Person Formation	170-204'	Limestones and dolomites, extensive porosity development in "honeycomb sections, interbedded with massive recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations.
Kainer Formation	260-310'	Hard, miliolid limestones, overlying calcified dolomites and dolomite. Leached evaporitic "Kirschberg" zone of very porous and permeable collapse breccia formed by the dissolution of gypsum. Includes the basal nodular (Walnut) bed, the lowermost member of the formation
Glen Rose Limestone (upper)	350-500	Yellowish-tan thinly bedded limestone and marl. Alternating beds of varying hardness erodes to "stairstep" topography. Marine fossils common.

SOILS NARRATIVE

According to the Soil Survey of Comal County, published by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Extension Service, reissued in 1984, the soils beneath the subject property have been classified as Comfort-Rock outcrop complex, undulating (CrD), Tarpley clay, 1 to 3% slopes (TaB), and Rumple-Comfort association, undulating (RUD).

Comfort-Rock outcrop complex, undulating (CrD) – shallow, well drained, moderate permeability, very low available water capacity, moderate hazard of water erosion; Comfort extremely stony clay makes up between 49 and 95% of the Comfort-Rock outcrop series, and indurated rock outcrop and soil less than 4 inches deep make up 5 to 36% of the complex. Typically, the surface layer is dark brown extremely stony soil about 6 inches thick. Cobbles, stones and "float" rock comprise about 45% of the surface. The subsoil extends to about 13 inches, and overlies the fractured limestone parent material. Comfort soil is well-drained, with slow to medium surface runoff, slow permeability, and very low water capacity.

Tarpley clay, 1 to 3% slopes are shallow, gently sloping soils on uplands of the Edwards Plateau. The soil is usually 6 to 24 inches thick, dark brown, neutral and non-calcareous throughout. The soil is well drained, with medium surface runoff, slow permeability, with very low available water capacity. Water erosion is a moderate hazard, and it is mainly used as rangeland, but moderately suited for crop or pastureland, and habitat for wildlife such as deer, turkey and quail.

Rumple-Comfort association, undulating are shallow and moderately deep soils on Edwards Plateau uplands, with convex or plane slopes. The soil is mildly alkaline and non-calcareous throughout, and is generally 2.5-3.5 feet thick, with the underlying parent material an indurated, fractured limestone. The soil is well drained, with medium surface runoff, with moderately slow permeability and very low available water capacity. This complex is used for rangeland or wildlife habitat, as it is not suited for cultivated crops or pasture.

SITE GEOLOGIC NARRATIVE

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations in excess of 1,400' feet above sea level in the northwestern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. Elevations at the Vintage Oaks at the Vineyard Unit 7 site range from approximately 1,110 and 1,100 feet above mean sea level in the east and west corners of the property, respectively, to approximately 1,050 feet above mean sea level in the east-central portion of the tract, along Herbelin Road.

Stratigraphy and Structure

Rocks at the site are members of the Lower Cretaceous Edwards Kainer Formation. The western portion of the site has outcrops of the Walnut, or Basal Nodular Member of the Kainer Formation, which is characterized by shaly, nodular limestone that is considered regionally as a lower confining unit, but locally can be water-bearing through dissolution along bedding planes. The thickness ranges from 20 to 70 feet. The Bear Creek Fault traverses the tract in a northeast-southwest direction, with the downthrown side to the east having the Dolomitic Member of the Kainer Formation at the surface. This unit is composed of mudstone to grainstone, cherty limestone and dolomite, with abundant *toucasia* fossils. Cavern development is related to faults, fractures and bedding planes. The thickness ranges from 110 to 140 feet. The site is covered with a thin veneer of soil, and a few large vuggy and fractured rock outcrops are exposed at the site. According to "The Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County Texas" written by the USGS, the Kainer Formation ranges between 260 and 310 feet thick and forms the lower member of the Edwards Group, beneath the Person Formation which compromises the Edwards Aquifer, a federally-designated sole source aquifer for the region.

No sensitive features scoring more than 40 points on the F-0585 form were observed on the subject tract. The western portion of the site had man-made features including several excavations/quarry areas on the central and far western portions of the tract, while the eastern portion of the site had larger fractured and vuggy rock outcrops related to stream drainages. Features S-1 through S-5 were man-made excavations/gravel pits/quarries in bedrock, in the relatively dense Walnut or Basal Nodular Member of the Kainer Formation, and thus did not rate as potentially sensitive recharge features. Features S-6 through S-9 were varying sized outcrops of fractured rock outcrops in drainages on the site, to the west

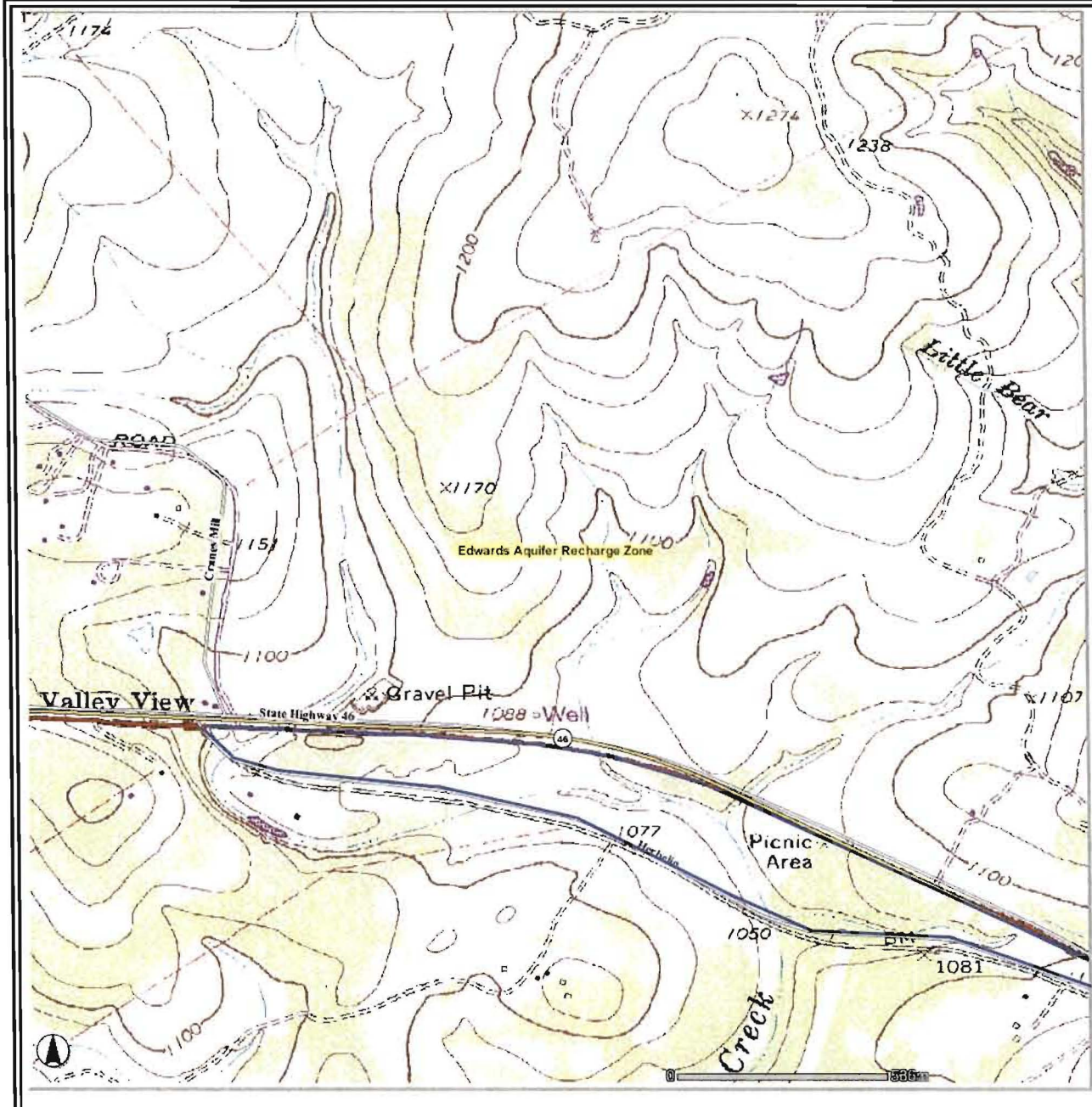
of the Bear Creek Fault, in the Walnut/Basal Nodular Member with limited porosity with no obvious pathways to the subsurface, and thus were not sensitive. Features S-10 through S-13 were fractured and vuggy fractured rock outcrops located to the east of the Bear Creek Fault, and thus in the Dolomitic Member of the Kainer Formation. While these features did have higher infiltration ratings than the features to the west of the fault, they did not rate over 40 points on the geologic assessment table.

SITE INVESTIGATION

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

SUMMARY

No sensitive features were noted on the subject tract. Man-made features included several excavations/quarry areas on the central and western portions of the tract. Please note that subtle features, buried or obscured from view, may be present on the tract. It is possible that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. If caves, sinkholes, or solution cavities are encountered during future clearing/construction activities, please contact our office for additional assistance.



PSI *Information To Build On*
Engineering • Consulting • Testing

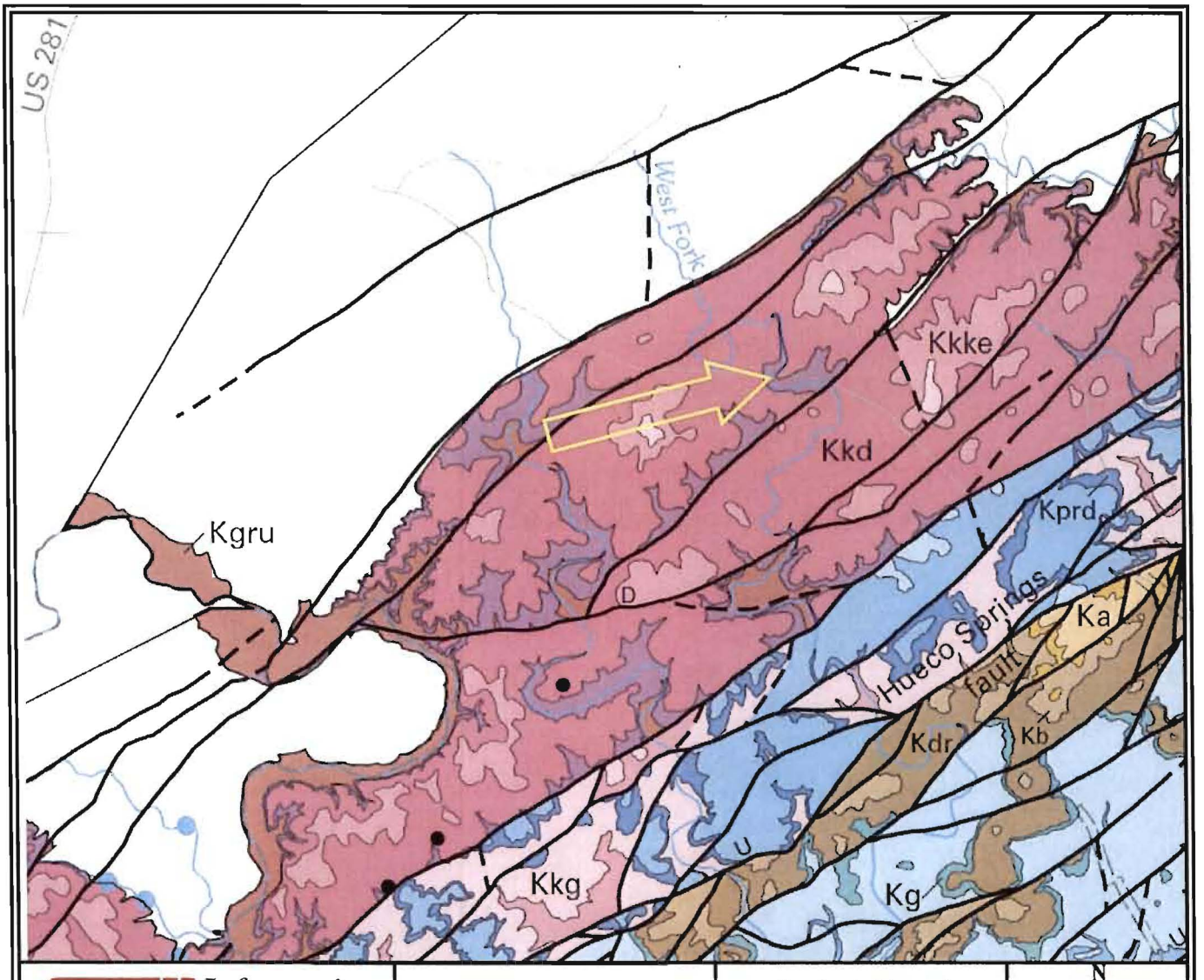
PSI, Inc.
3 Burwood Lane
San Antonio, Texas 78216

PROJECT NAME:
Vintage Oaks at The Vineyards Unit 7
Highway 46
Comal County,Texas

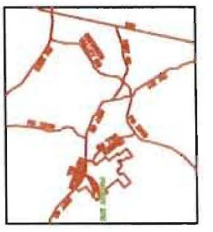
PROJECT NO.:435-1408

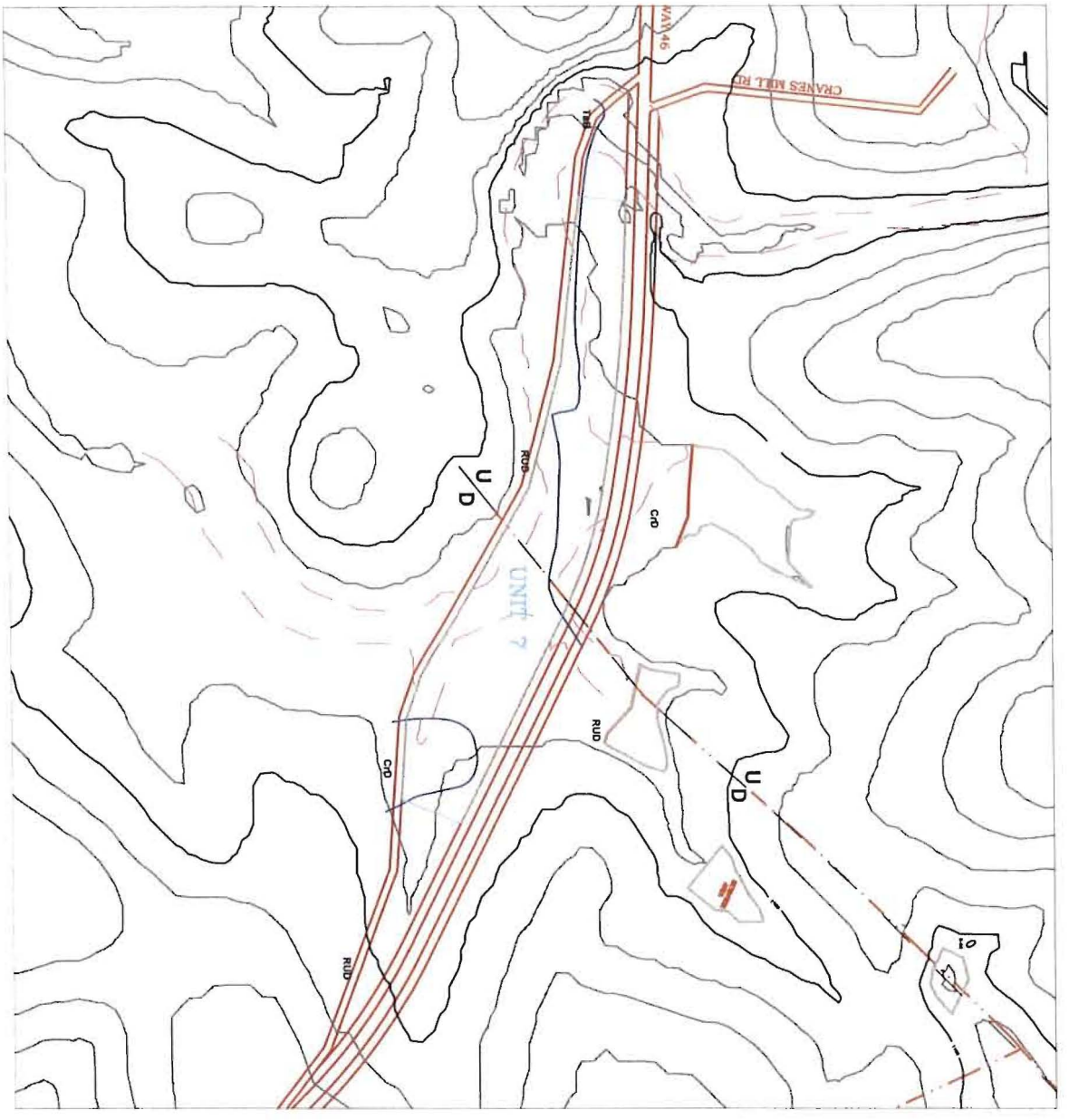
Topographic Map/Edwards Aquifer Recharge Zone Map

N



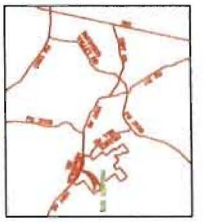
psi *Information To Build On* ***Engineering • Consulting • Testing*** PSI, Inc. 3 Burwood Lane San Antonio, Texas 78216	**PROJECT NAME:** Vintage Oaks at The Vineyards Unit 7 Comal County,Texas PROJECT NO.:435-1408	**Geologic Map of Edwards Aquifer Recharge Zone, South-Central Texas** (USGS, 2005)	N

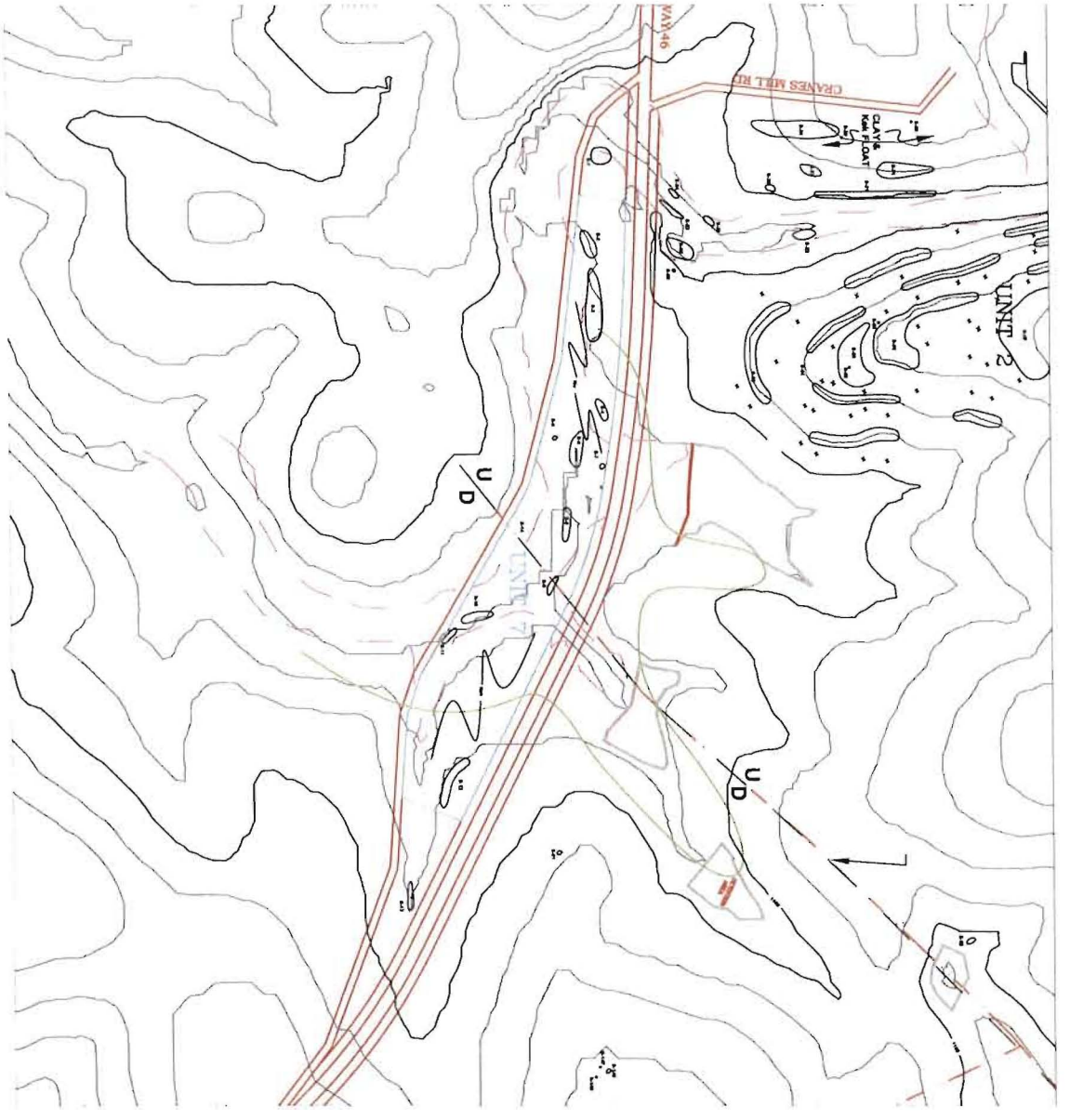




psi Information To Build On
Engineering Consulting Testing
THREE BURWOOD LANE
SAN ANTONIO, TEXAS 78216

SOILS MAP
for
VINTAGE OAKS AT THE VINEYARD
UNIT 7





LEGEND

SCALE:
1" = 400' HORIZONTAL

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

GEOLOGIC ASSESSMENT
for
VINTAGE OAKS AT THE VINEYARD
UNIT 7

GEOLOGIC ASSESSMENT TABLE			PROJECT NAME: Vintage Oaks at the Vineyard Unit 7																
LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DIP	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29-46-20	98-16-29	MB	30	Kw	200	150	6					N	5	35	X			X	Hillside
S-2	29-46-18	98-18-19	MB	30	Kw	200	60	5					N	5	35	X			X	Hillside
S-3	29-46-18.5	98-16-12.5	MB	30	Kw	585	150	12					N	5	35	X			X	Floodplain
S-4	29-46-19	98-16-5	MB	30	Kw	250	75	3					N	5	35	X			X	Hillside
S-5	29-46-14	98-16-00	MB	30	Kw	100	60	3					F	8	38	X			X	Floodplain
S-6	29-46-16	98-15-59	O	5	Kw	500	180	12	E-W		0.3	0.2	C,F	30	35	X			X	Floodplain
S-7	29-46-19	98-15-58	O	5	Kw	50	20	2			0.1	0.1	F	15	20	X			X	Floodplain
S-8	29-46-15	98-15-53	O	5	Kw	250	75	5	E-W		2	0.1	C	25	30	X			X	Floodplain
S-9	29-46-15	98-15-48	O	5	Kek	250	50	6	NW-SE		0.3	0.1	C,F	25	30	X			X	Floodplain
S-10	29-46-8	98-15-45	O	5	Kek	260	50	5			0.2	0.1	O	10	15	X			X	Floodplain
S-11	29-46-4	98-15-42	O	5	Kek	300	50	8	E-W		0.2	0.1	C,F	25	30	X			X	Floodplain
S-12	29-46-6	98-15-32	O	5	Kek	200	70	4			0.2	0.1	O	10	15	X			X	Hillside
S-13	29-46-3	98-15-22	O	5	Kek	375	30	8	E-W		0.4	0.1	C, F	25	30	X			X	Streambed
S-14	29-46-13	98-15-50.5	F	20	Kek	950	10	50	NE-SW	10			F	8	38	X			X	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 Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

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

Date: September 5, 2013

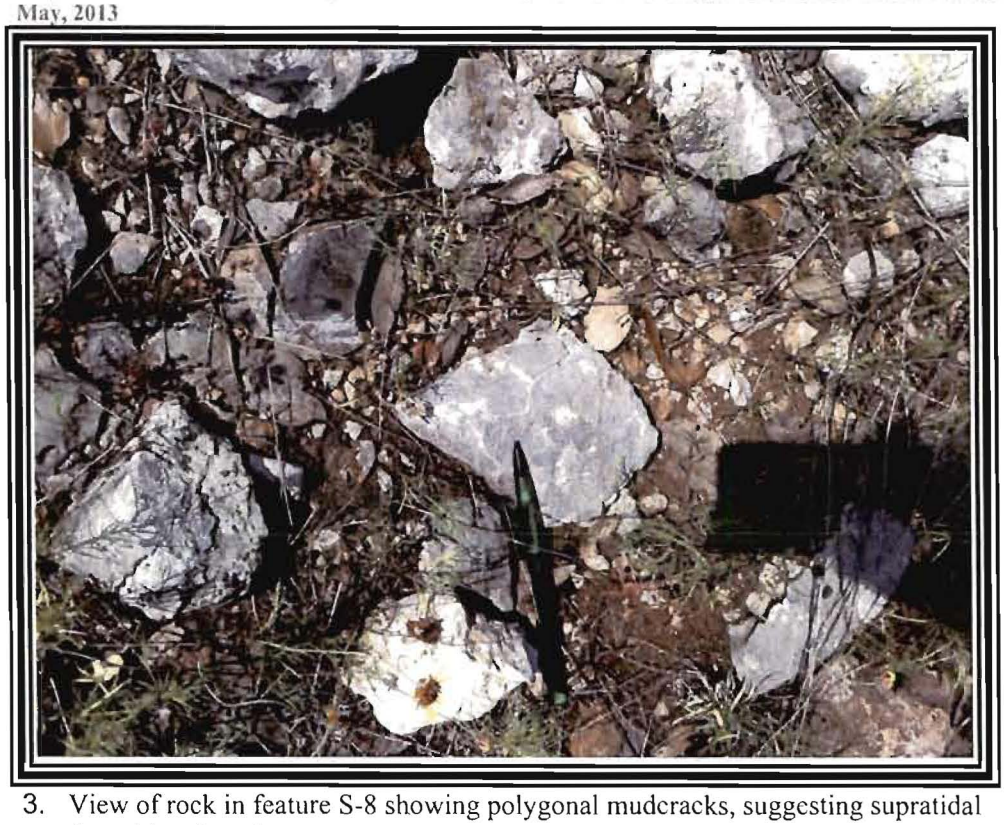
Sheet ___1___ of ___1___

STATE OF TEXAS
JL 9/5/13
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST

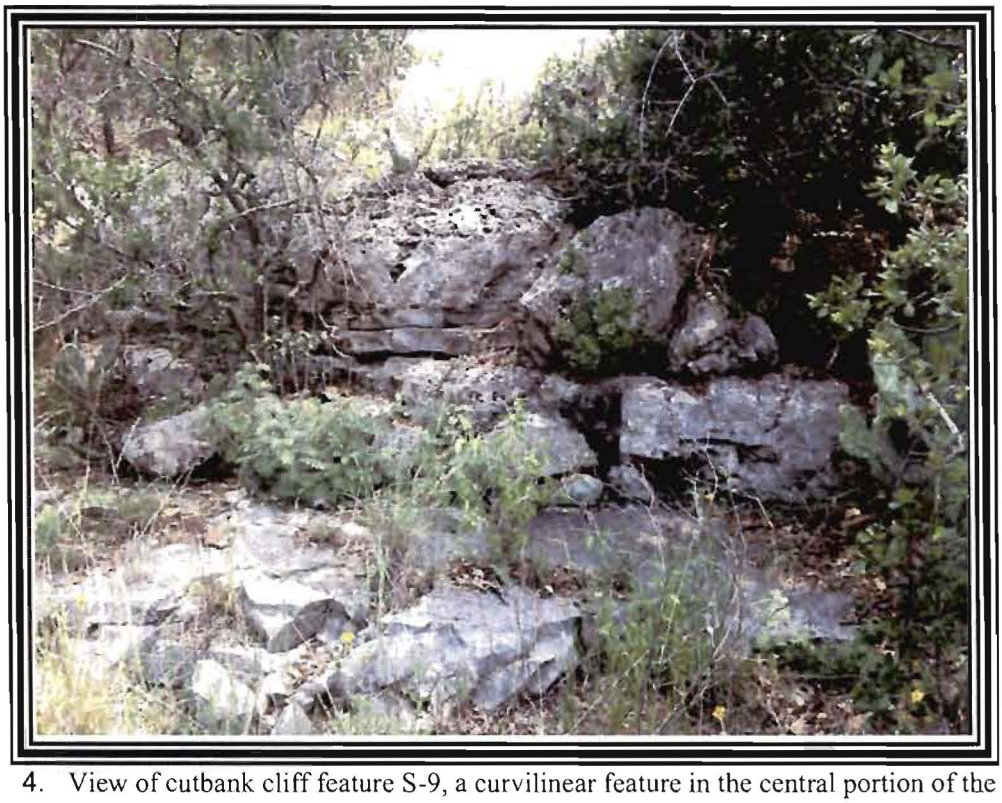
TCEQ-0585-Table (Rev. 10-01-04)

1. View west of outcrop feature S-8, an extensive fractured rock outcrop in the north-central portion of the site at 29-46-15, 98-15-51.

2. View east of feature S-8 from the same location as photograph 1.



3. View of rock in feature S-8 showing polygonal mudcracks, suggesting supratidal depositional environment.

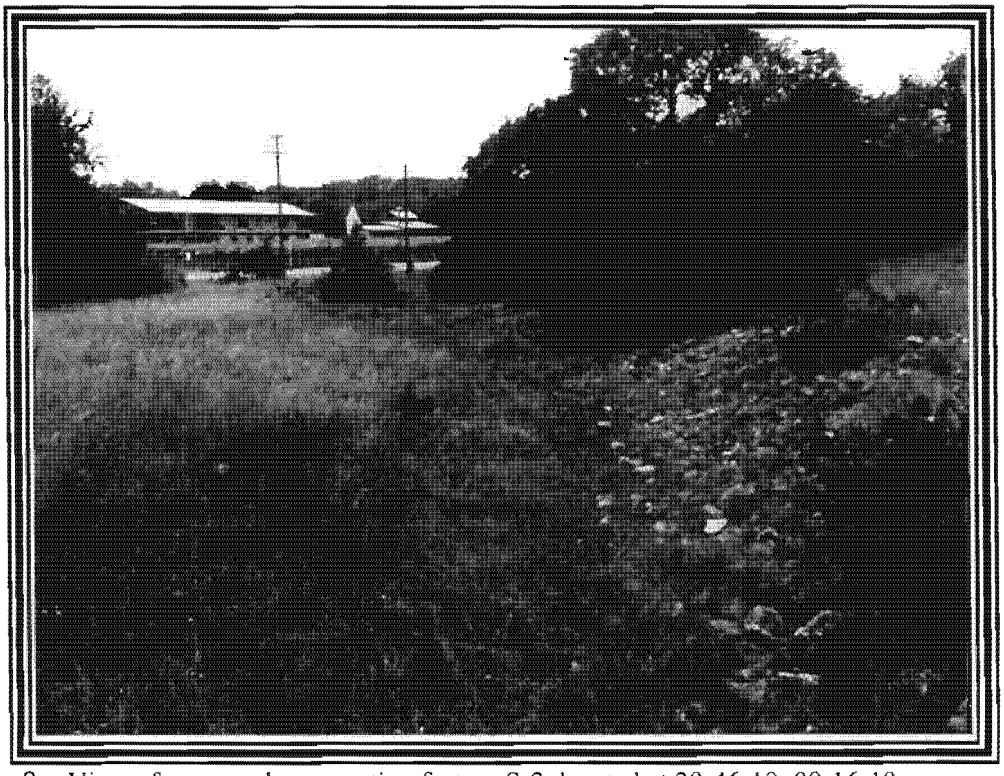


4. View of cutbank cliff feature S-9, a curvilinear feature in the central portion of the site.

5. View of drainage feature S-10, a vuggy fractured rock outcrop just north of Herbelin Road.

6. View of man-made quarry feature S-3, in the northwestern portion of Unit 7.

7. View of man-made excavation feature S-1, at the far northwestern corner of Unit 7.



8. View of man-made excavation feature S-2, located at 29-46-18; 98-16-19.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 25, 2013

Mr. Thad Rutherford
Southstar at Vintage Oaks, LLC
6060 North Central Expressway, Suite 138
Dallas, TX 75206

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Vintage Oaks at the Vineyard, Unit 7; Located 0.1 miles east of Highway 46 and S. Cranes Mill Road; City of 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

Investigation No. 1103634; Regulated Entity No. RN106852734; Additional ID No. 13-13071802

Dear Mr. Rutherford:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP Application for the above-referenced project submitted to the San Antonio Regional Office by M&S Engineering on behalf of Southstar at Vintage Oaks, LLC on July 18, 2013. Final review of the WPAP was completed after additional material was received on September 17, 2013 and September 19, 2013. 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.*

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 82.35 acres. It will include 9 single family residential dwellings, driveways, and paved surfaces. The impervious cover will be 3.45 acres (4.19 percent). As proposed, all 9 lots are assumed 20,280 square feet per lot of

impervious cover. According to a letter dated, July 12, 2013, signed by Robert Boyd, P.E., with Comal County, the site in the development is acceptable for the use of on-site sewage facilities.

PERMANENT POLLUTION ABATEMENT MEASURES

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

GEOLOGY

According to the geologic assessment, the western portion of the site is located on the Dolomitic member and the eastern portion is located on the Basal Nodular member of the Kainer Formation. Fourteen (14) features were identified during the assessment. Features S-1 through S-5 are man-made excavations in bedrock, S-6 through S-9 are fractured rock outcrop, S-10 through S-13 are fractured vuggy rock outcrop, and S-14 is a fault. All features were rated as not sensitive by the project geologist. The San Antonio Regional Office site assessment conducted on September 5, 2013 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

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

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.
5. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved

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

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

<u>During Construction:</u>

10. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
11. This approval does not authorize the installation of temporary aboveground storage tanks on this project. If the contractor desires to install a temporary aboveground storage tank for use during construction, an application to modify this approval must be submitted and approved prior to installation. The application must include information related to tank location and spill containment. Refer to Standard Condition No. 6, above.
12. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
13. "No well exist on site." All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and

Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

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

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

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

Sincerely,

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

LMB/MR/eg

Enclosure: Deed Recordation Affidavit, Form TCEQ-0625

cc: Mr. Heath Woods, P.E., M&S Engineering, L.L.C.
Mr. Charlie Thomas, P.E., City Engineer, City of New Braunfels
Mr. Thomas Hornseth, P.E., Comal County
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 11, 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: Vintage Oaks at the Vineyard Unit 1; located on the east side of the intersection of State Hwy 46 and Cranes Mill Road in Comal County, Texas
PLAN TYPE: Application for Approval of a Water Pollution Abatement Plan (WPAP) 30 Texas Administration Code (TAC) Chapter 213; Edwards Aquifer Protection Program
San Antonio Region File Number: 2562.01

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 10, 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.

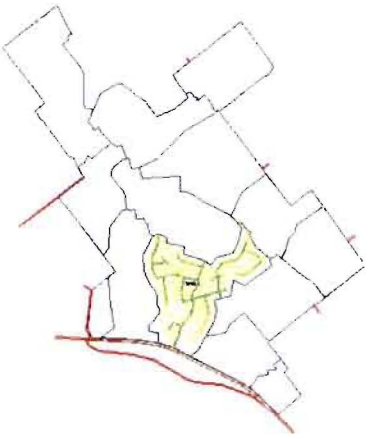
Sincerely,

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

LMB/eg

MODIFICATION OF A PREVIOUSLY APPROVED WATER POLLUTION ABATEMENT PLAN

FOR



Vintage Oaks at the Vineyard
Unit - 1

Prepared for:

Bluegreen Southwest Land, Inc.
P.O. Box 986
Wimberley, Texas 78676

Prepared by:

M & S
ENGINEERING, LTD
Engineers, Planners, Surveyors

Main Office:
P. O. Box 970
Spring Branch, Texas 78070
830/980-4112
830-885-2170 FAX

Branch Office:
P. O. Box 391
McQueeney, Texas 78123
830-560-3200
830-560-3203 FAX

October 2007

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 12, 2007

Mr. Clint Krause
L. D. KRAUSE CONSTRUCTION COMPANY
1731 Ole Dutchman Road, Unit 2
New Braunfels, Texas 78133

Re: Portable Rock Crushing Plant, Serial No. 407365
Vintage Oaks Development, SR 46, Comal County
TCEQ Regulated Entity No. RN105194583, Customer Number CN600620520

Dear Mr. Krause:

This is to acknowledge receipt of the notification for the Tier II Portable Rock Crusher to be located on the north side of SR 46, approximately seven miles west of Loop 337 and one mile east of S. Cranes Mill Road in Comal County. Based on the information presented, and a site review conducted on April 4, 2007, it has been determined that authorization can be granted to construct and operate this facility at the proposed site.

This authorization is contingent upon continued compliance with the terms of the Standard Permit for Temporary Rock Crushers. Any changes to the representations must have prior written approval from a delegated representative of the executive director. You are reminded that the Crusher must comply with the performance test requirements found in 40 CFR Part 60, Subpart OOO.

We appreciate your cooperation in this matter. If you have any questions, please feel free to contact Ms. Bernice Beck at (210)403-4034.

Sincerely,

Rick Hite

Rick Hite
Air Section Manager
San Antonio Regional Office

RH/bb

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: Vintage Oaks At The Vineyard – Unit 1
COUNTY: Comal STREAM BASIN: Dry Comal Creek

EDWARDS AQUIFER: _X_ RECHARGE ZONE
___ TRANSITION ZONE

PLAN TYPE: ___ WPAP ___ AST ___ EXCEPTION
___ SCS ___ UST _X_ MODIFICATION

TCEQ-R13
OCT 11 2007
SAN ANTONIO

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Jack Dean
Entity: Bluegreen Southwest Land, Inc.
Mailing Address: P.O. Box 986
City, State: Wimberley, Texas Zip: 78676
Telephone: (512) 847-5483 FAX: (512) 847-9414

Agent/Representative (If any):

Contact Person: Keith Strimple, P.E.
Entity: M & S Engineering, LTD.
Mailing Address: P.O. Box 970
City, State: Spring Branch, Texas Zip: 78070
Telephone: (830) 228-5446 FAX: (830) 885-2170

2. ___ 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.

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

The property is located on the east side of the intersection with State Hwy 46 and Cranes Mill Road in Comal County, Texas.

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

5. _X_ **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is

attached behind this sheet. The map(s) should clearly show:

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

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

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

8. Existing project site conditions are noted below:

___ Existing commercial site
___ Existing industrial site
___ Existing residential site
X Existing paved and/or unpaved roads
___ Undeveloped (Cleared)
X Undeveloped (Undisturbed/Uncleared)
___ Other:

PROHIBITED ACTIVITIES

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

(1) waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
(2) new feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
(3) land disposal of Class I wastes, as defined in 30 TAC §335.1;
(4) the use of sewage holding tanks as parts of organized collection systems; and
(5) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

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

(1) waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);
(2) land disposal of Class I wastes, as defined in 30 TAC §335.1; and
(3) new municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

ADMINISTRATIVE INFORMATION

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

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

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

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

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

14. X No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the executive director.
X 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:

Keith Strimple, P.E.
Print Name of ~~Customer~~/Agent

Signature of ~~Customer~~/Agent

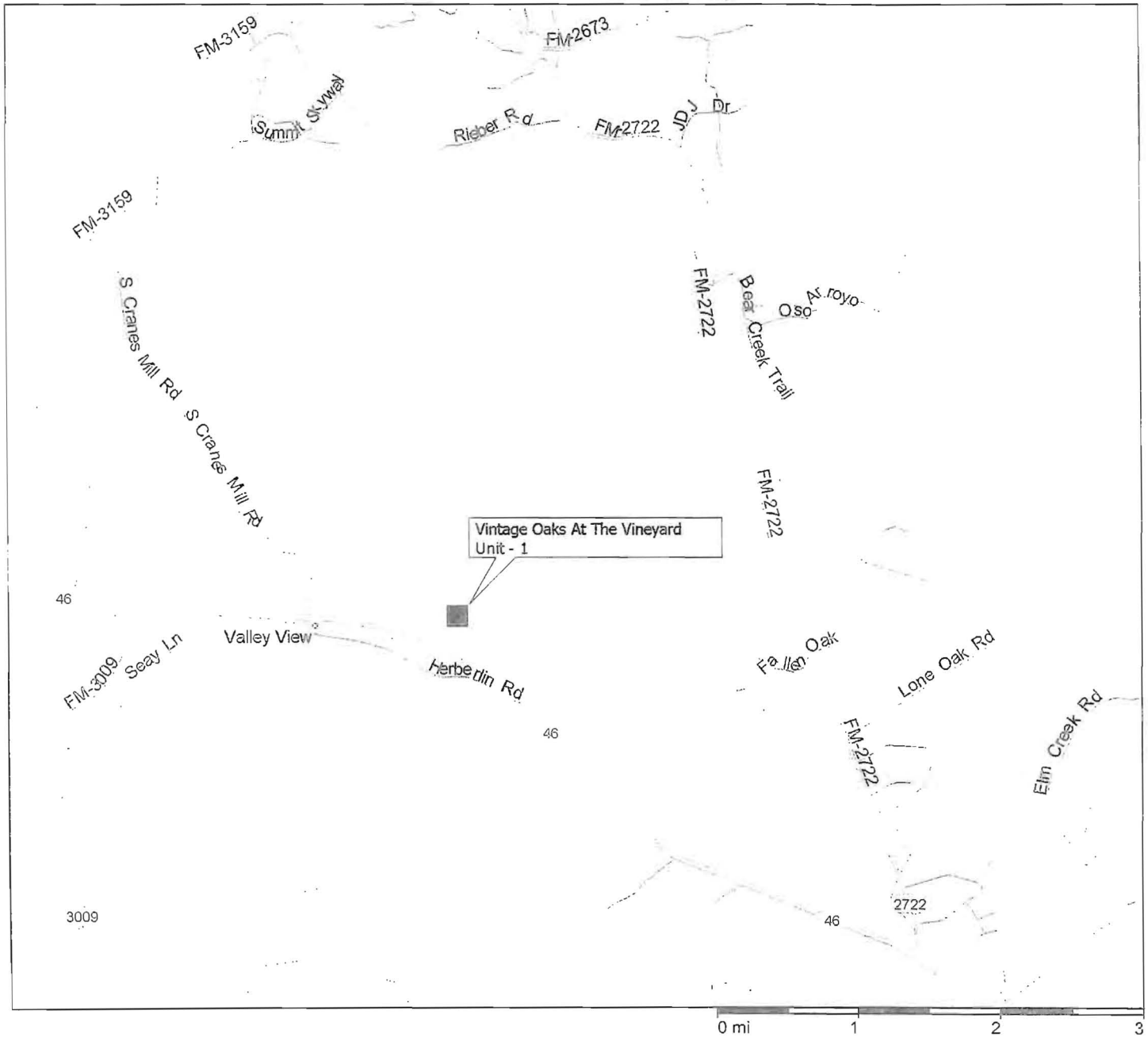
10/11/07
Date

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.

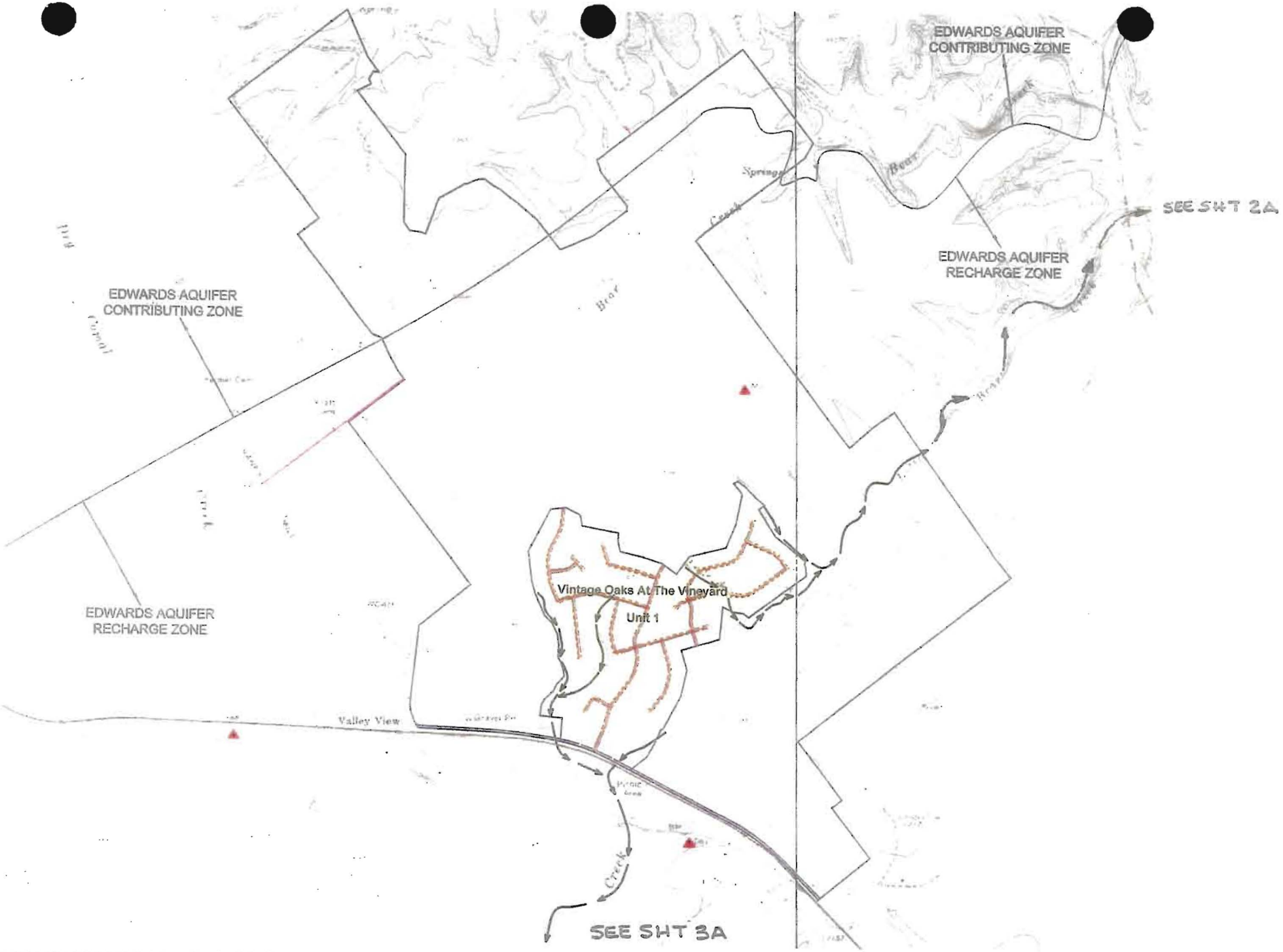
Individuals are entitled to request and review their personal information that the agency gathers on its forms. They may also have any errors in their information corrected. To review such information, contact us at 512/239-3282.

Road Map

Attachment A - Road Map



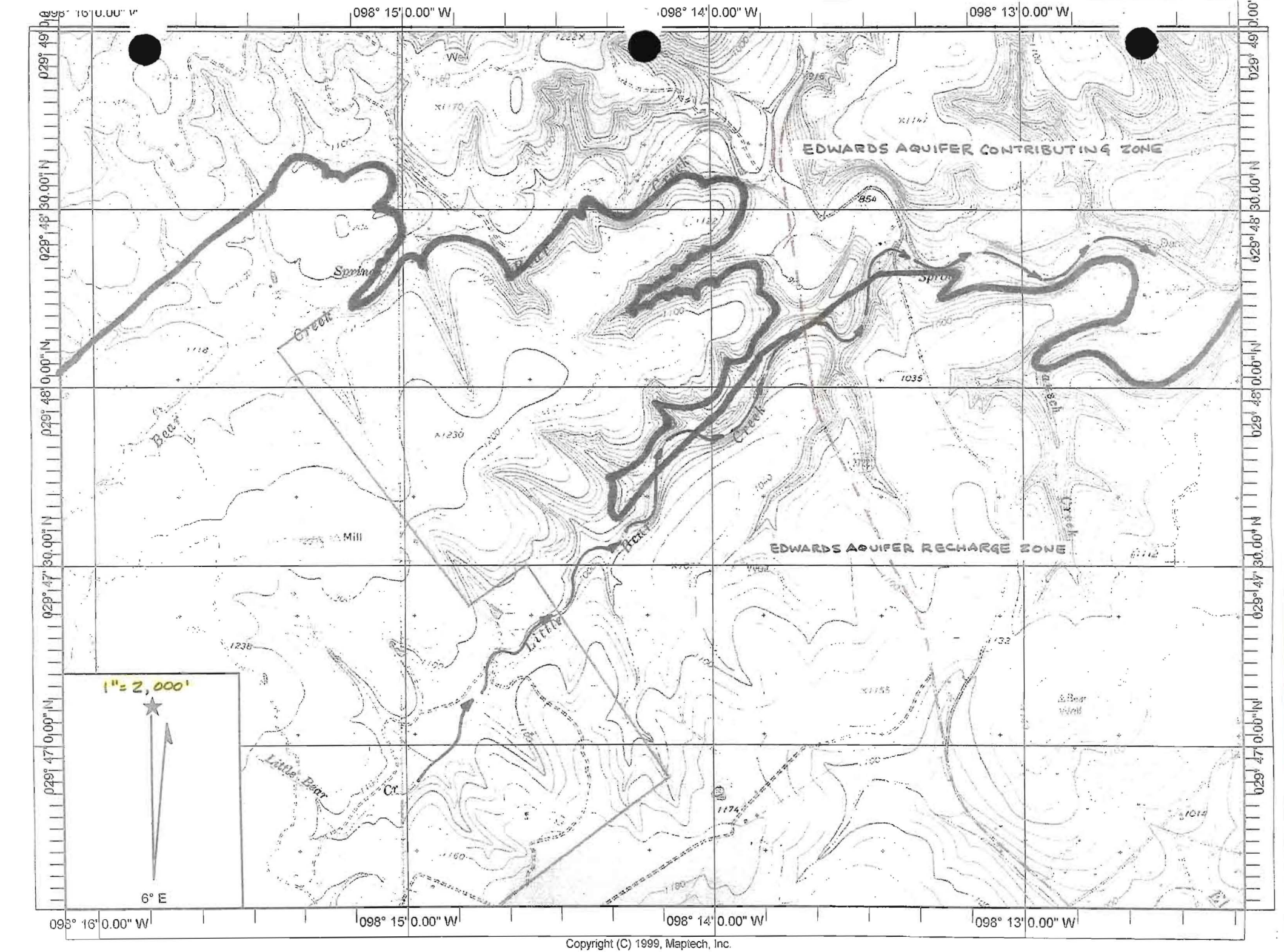
USGS/Edwards Recharge Zone Map

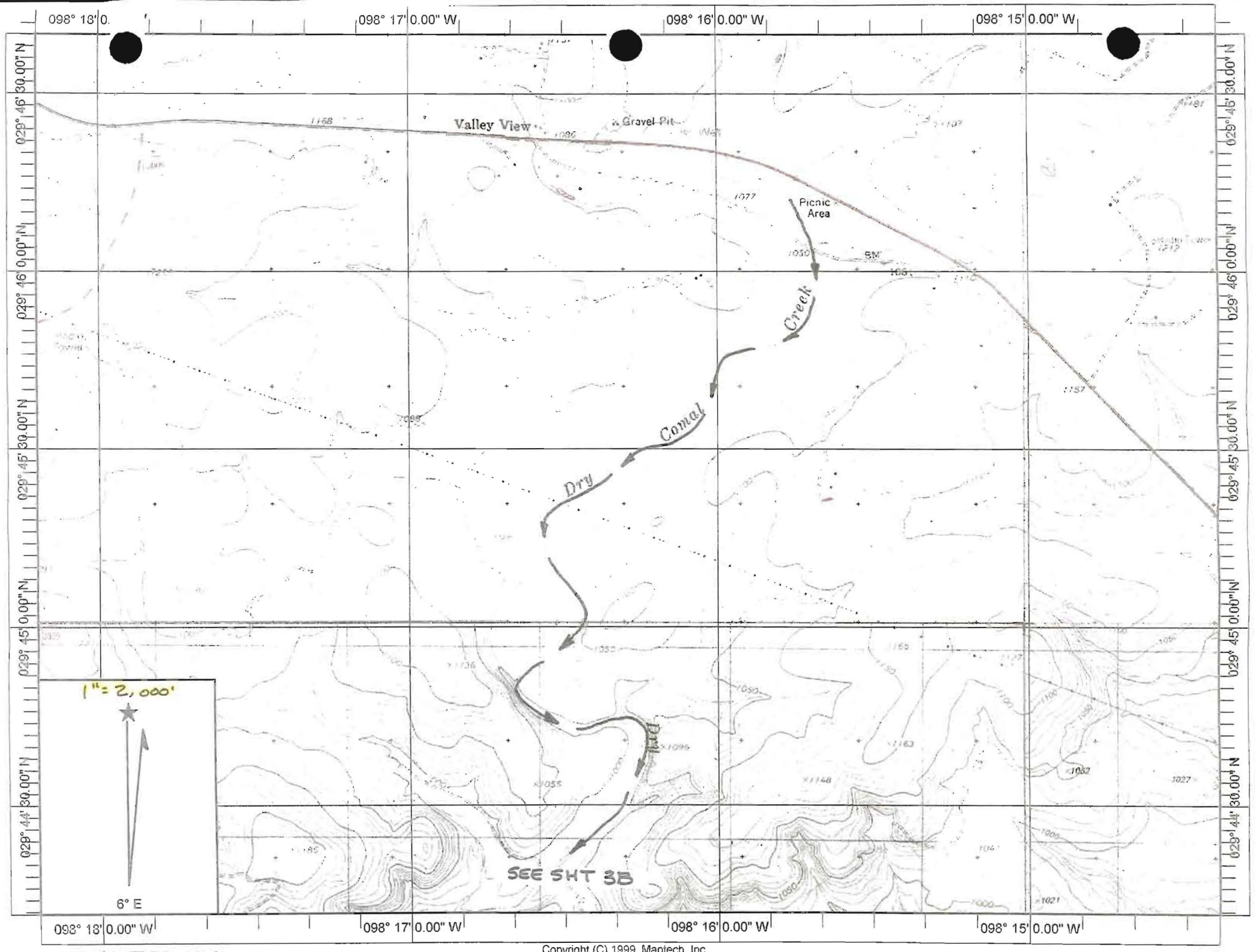


Vintage Oaks At The Vineyard - Unit 1

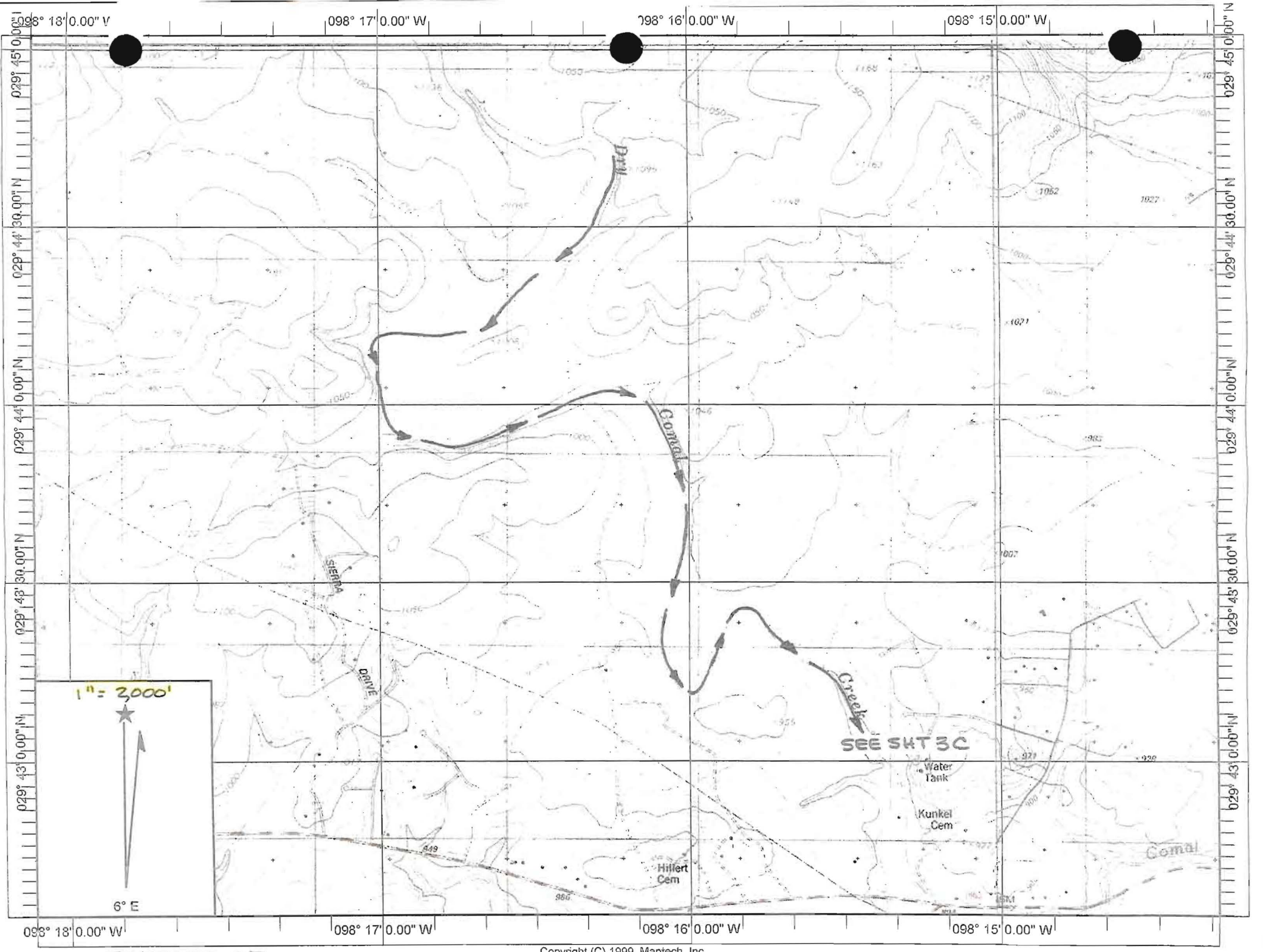
USGS / Edwards Aquifer Recharge Zone Map / Smithson Valley and Sattler Quad Sheets

SCALE: 1" = 2,000'





SHEET 3A



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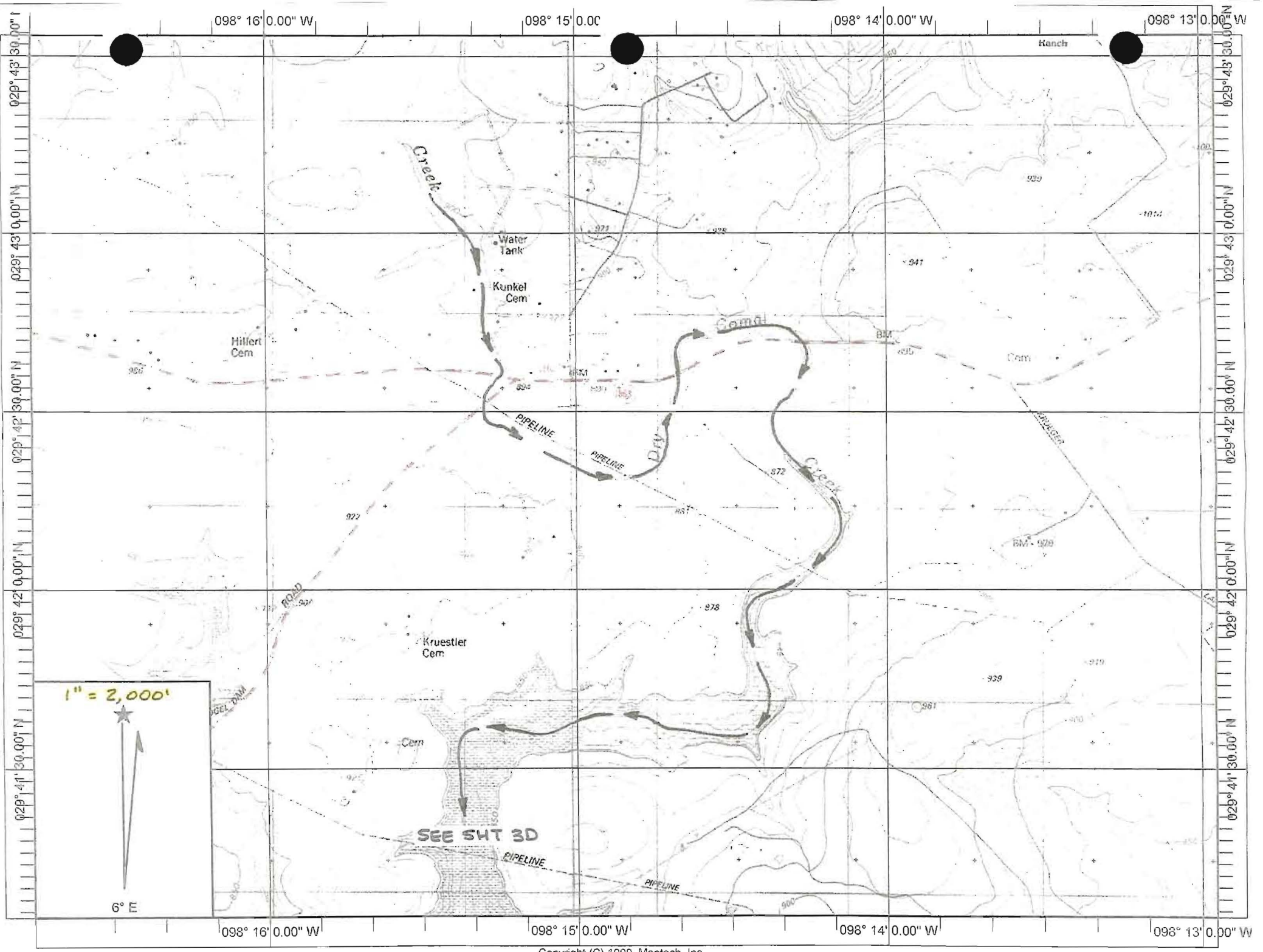
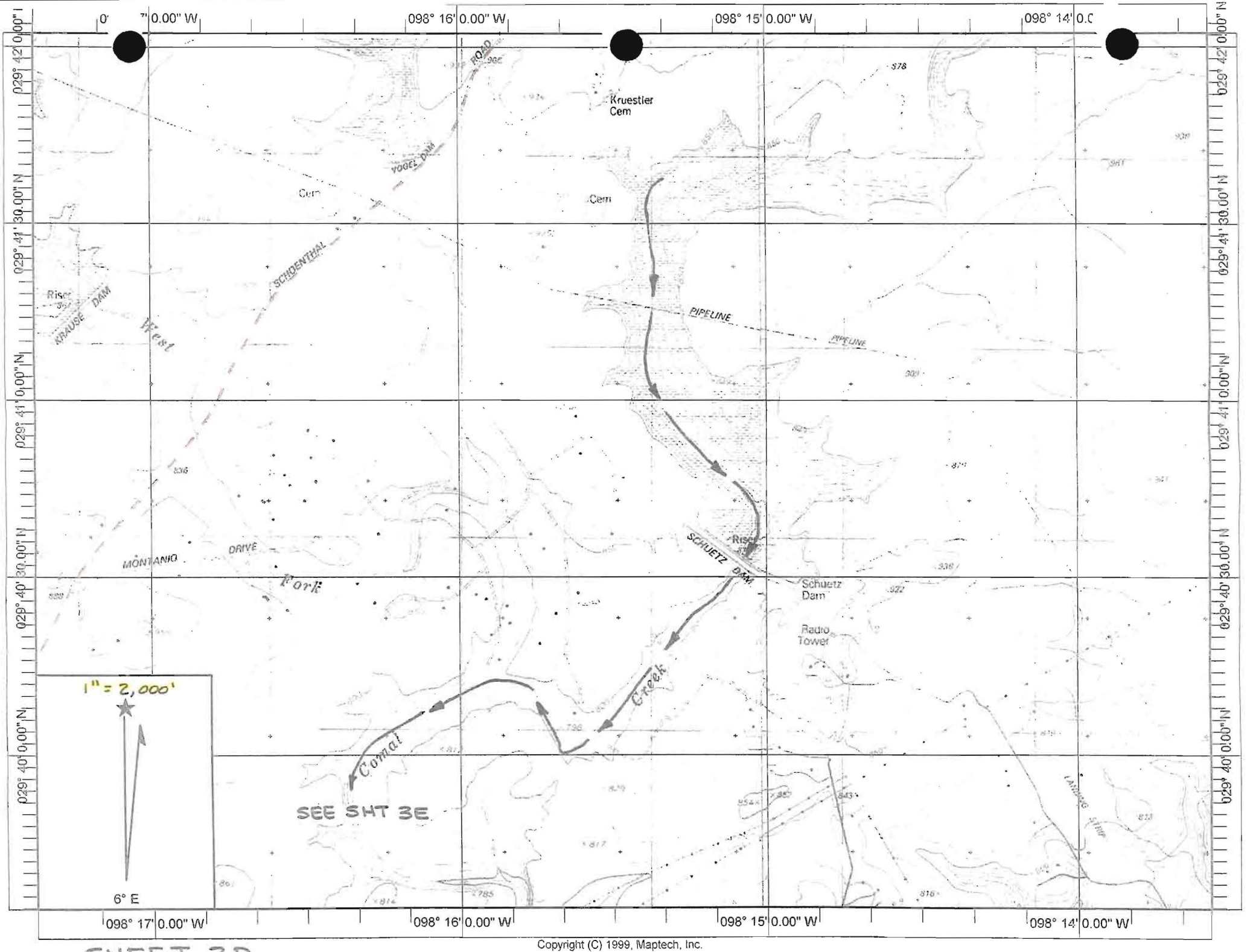
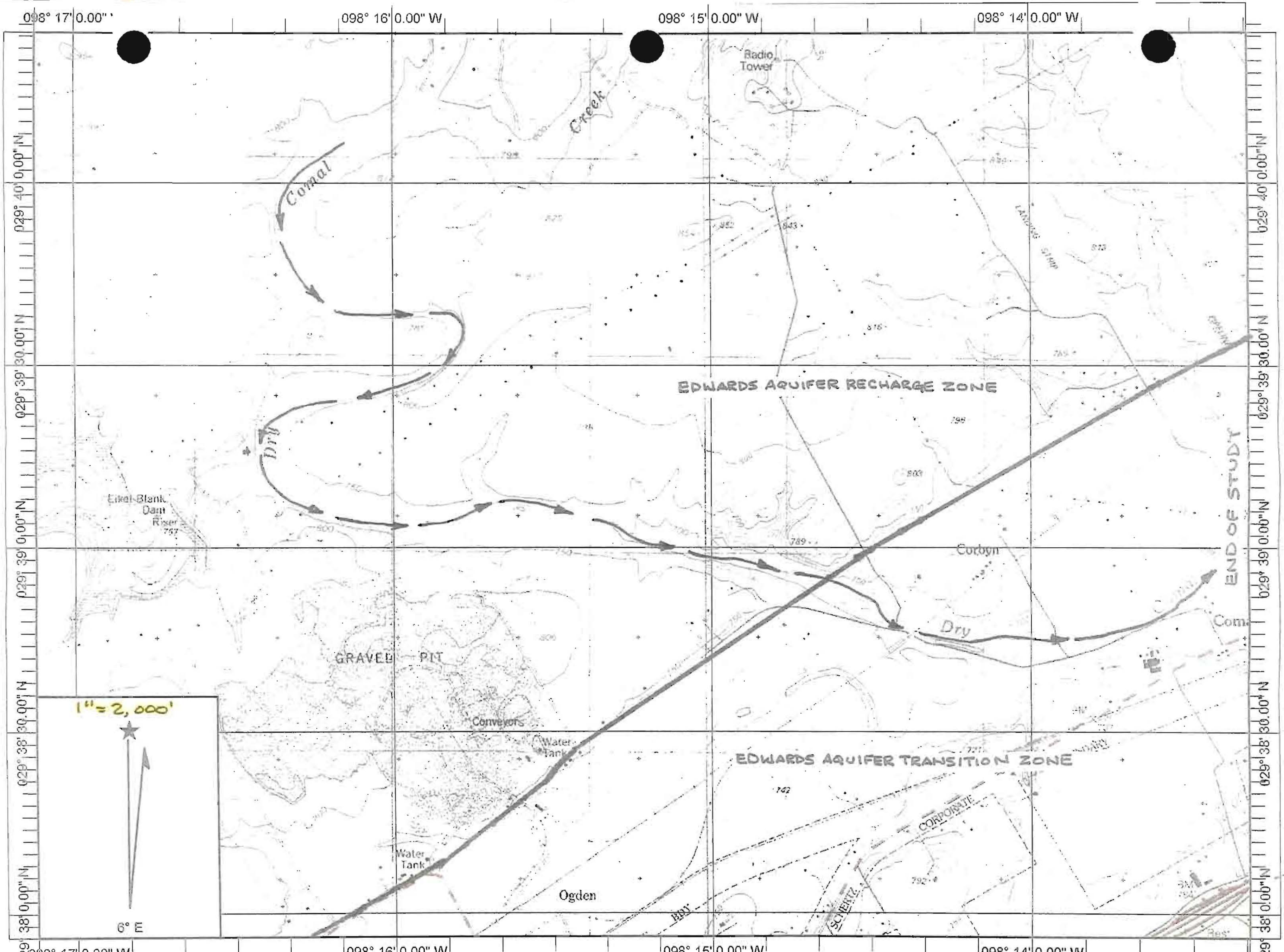


SHEET 3C



SHEET 3D



SHEET 3E

Project Description

PROJECT DESCRIPTION

The project is proposed to be a Single Family Residential Subdivision, located on 397.69 acres, approximately 3300 feet east of the intersection of State Highway 46 and Cranes Mill Road. The site would ultimately include approximately 24 acres of drain & access R.O.W., 320 acres of single-family residential lots, and 47 acres of street dedication.

The north, northwest, and southern most portions of the site slopes generally towards that Dry Comal Creek. The northeastern portion of this site slopes generally towards Little Bear Creek. The proposed site is less than 20% impervious cover and thus requires no treatment for the run-off.

PSI Information To Build On
Engineering • Consulting • Testing

June 30, 2006

M&S Engineering, Ltd.
6477 F.M. 311, P.O. Box 970
Spring Branch, Texas 78070

Attn: Mr. Keith Strimple, P.E.

Re: Geologic Assessment
Vintange Oaks at the Vineyard Unit 1 Approximate 389-Acre Tract
Highway 46
Comal County, Texas
PSI Project No. PO-435-6G010

Dear Mr. Strimple:

In accordance with our agreement dated June 12, 2006, Professional Service Industries, Inc. (PSI) has performed a Geologic Assessment (GA) of the above referenced property. Please find one bound and three unbound copies of the final report enclosed.

Thank you for choosing PSI as your consultant for this project. If you have any questions, or if we can be of additional service, please call us at (210) 342-9377.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

John Langan, P.G.
Senior Environmental Scientist

Enclosures

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: Vintage Oaks at The Vineyard Unit #1

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

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

PROJECT INFORMATION

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

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

Soil Units, Infiltration Characteristics & Thickness		
Soil Name	Group*	Thickness (feet)
Comfort- Rock outcrop complex, Undulating	C	1
Rumple-Comfort Assn. undulationg	C	1-2
Eckrant-rock outcrop complex, steep	C	1

* Soil Group Definitions (Abbreviated)

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

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

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

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

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

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

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

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

Applicant's Site Plan Scale 1" = 400 '
Site Geologic Map Scale 1" = 400 '
Site Soils Map Scale (if more than 1 soil type) 1" = _____ '

6. Method of collecting positional data:

X Global Positioning System (GPS) technology.
__ Other method(s).

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

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

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

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

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

X There are 2 (#) 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.
X The wells are not in use and will be properly abandoned. (S-3) S-22 will be used for water supply
__ The wells are in use and comply with 16 TAC Chapter 76.
__ There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: 6/15-6/28/2006
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 Chapter 213.

John Langan — Print Name of Geologist

210/342-9377 — Telephone

210/342-5727 — Fax

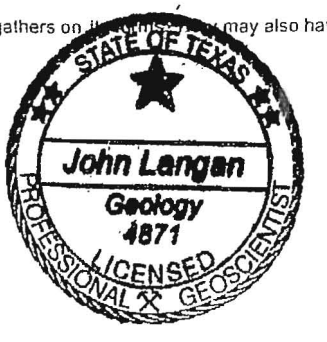
Signature of Geologist

6/30/2006 — Date

Representing: PSI
(Name of Company)

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

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



STRATIGRAPHIC COLUMN

Vintage Oaks at the Vineyard Unit 1
Approximate 389-Acre Tract
Highway 46
Comal County, Texas

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Georgetown Formation	<10'	Light tan limestone identified by proximity to Del Rio clay and diagnostic marker fossil: *waconella wacoensis* brachiopod; low porosity and permeability development.
Person Formation	180-224'	Limestones and dolomites, extensive porosity development in "honeycomb sections, interbedded with massive recrystallized limestones with more limited permeabilities (especially Regional Dense Member separating the Person and Kainer Formations.
Kainer Formation	260-310'	Hard, miliolid limestones, overlying calcified dolomites and dolomite. Leached evaporitic "Kirschberg" zone of very porous and permeable collapse breccia formed by the dissolution of gypsum. Overlies the basal nodular (Walnut) bed.

PSI Information To Build On
Engineering • Consulting • Testing

June 30, 2006

M&S Engineering, Ltd.
6477 F.M. 311, P.O. Box 970
Spring Branch, Texas 78070

Attn: Mr. Keith Strimple, P.E.

Re: Geologic Assessment
Vintange Oaks at the Vineyard Unit 1 Approximate 389-Acre Tract
Highway 46
Comal County, Texas
PSI Project No. PO-435-6G010

Dear Mr. Strimple:

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

AUTHORIZATION

Authorization to perform this assessment was given by a signed copy of PSI Proposal No. PO-435-6G0156 between M&S Engineering, Ltd. dated June 12, 2006.

PROJECT DESCRIPTION

The subject site is located on the north side of Highway 46, approximately one and a half miles east of F.M. 3009 in Comal County, Texas. The tract is an approximate 389-acre, irregularly shaped parcel of undeveloped land that is hilly, with rugged, occasionally steep slopes that dip in all directions. Unnamed tributaries to the Dry Comal Creek drain the property in a southerly direction, towards Highway 46. The site vegetation consists primarily of native grasses, ashe juniper, live oak, burr oak, cedar elm and persimmon trees, with abundant mountain laurel, agarita, and prickly pear cactus.

REGIONAL GEOLOGY

Physiography

Comal County lies within two physiographic provinces, the Edwards Plateau and the Blackland Prairie. Most of Comal County lies within the Edwards Plateau, which is characterized by rugged and hilly terrain, with elevations up to 1,300' feet above sea level in the northern portion of the county. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Comal County and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from about 650 feet to 1100 feet above sea level. The regional dip of the lower Cretaceous rocks in Comal County is 15 feet per mile towards the southeast. The faults are predominantly normal, down-to-the Gulf Coast, with near vertical throws. Elevations at the Vintage Oaks at the Vineyard, Unit 1 Tract range from approximately 1,235 feet above mean sea level in the northwestern corner of the tract to approximately 1,060 feet above mean sea level in the southeast portion of the tract.

Stratigraphy and Structure

Rocks at the site are members of the Lower Cretaceous Edwards Kainer Formation. The site is covered with a thin veneer of soil, and large expanses of vuggy and fractured rock outcrops are exposed throughout the site, especially in the northeast portion. According to United States Geologic Survey (USGS) maps reviewed as part of this assessment, the northeast-southwest trending Bear Creek Fault have been mapped on the site. In general, the streams contained large amounts of boulders, gravel and vuggy/fractured to relatively dense Edwards Kainer outcrops. According to "The Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Outcrop, Comal County Texas" written by the USGS, the Kainer Formation ranges between 260 and 310 feet thick and forms the lower member of the Edwards Group, beneath the Person Formation which compromises the Edwards Aquifer, a federally-designated sole source aquifer for the region.

SITE INVESTIGATION

The site investigation was performed by systematically traversing the subject tract, and

mapping fractured or vuggy rock outcrops, closed depressions, sinkholes, caves, or indications of fault/fracture zones. Several closed depressions and solution cavities were observed on the site, and one small cave was noted in the northeast portion of the tract. As stated previously, numerous outcrops of Kainer Formation were observed throughout the site, on hilltops and hillsides, with varying degrees of fracturing and indications of interconnectedness, such as vugs, solution cavities or fractured rock zones. The purpose of the site investigation was to delineate features with recharge potential that may warrant special protection or consideration. The results of the site investigation are included in the attached TCEQ report format.

SUMMARY

Sensitive recharge features that scored higher than 40 points on the TCEQ scoring system were noted on the subject tract. These features included a monitor or test well, solution cavities, a cave, and an extensive outcrop several hundred feet long.

The monitor well, feature S-22, is reportedly slated to be used as a production well, but did not appear to have bentonite grout by the surface casing as shown in photograph 24. Features S-37 and S-38, a sinkhole and solution cavity, respectively, are located on the eastern portion of the site. The combination of feature type points (20) and higher relative infiltration rates due to fracturing or vugs, resulted in "sensitive" designations. Feature S-39 is a cave on the eastern portion of the site, and part of an extensive zone of vuggy, fractured rock outcrop identified as feature S-40. The downhole extent of the cave was not defined, as thick vegetation prevented accessibility. It is possible that rock breakdown obscured one or more additional passages in this feature. Feature S-40 is an extensive, fractured vuggy rock outcrop that extends from an east-west drainage feature in the northeast portion of the site, in a southerly direction down to the cave (S-39). The drainage feature likely directs water into this feature's numerous fractures and vugs during precipitation events. Feature S-46 is an isolated sinkhole, also on the eastern portion of the site, which also scored a sensitive rating due to the combination of feature points and relative infiltration rates. The preponderance of sensitive features on the eastern portion of the subject site may be related to the proximity of the mapped Bear Creek Fault, as movement can result in fracture zones and porosity development in the vicinity of faults.

The grass on the subject site is fairly tall, 1 to 3 feet high. Please note that subtle features, obscured from view, may be present in the grassy areas. It is also likely that clearing/construction activities will reveal the presence of features currently hidden by thick vegetation and/or soil cover. Should any caves, sinkholes, or solution cavities be encountered during future clearing/construction activities, please contact our office for additional assistance.

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

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Phil Rasor, P.G.
Project Manager

John Langan, P.G.
Senior Environmental Scientist

psi

WARRANTY

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

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

SOILS NARRATIVE

According to the Soil Survey of Comal County, published by the United States Department of Agriculture, Soil Conservation Service, in cooperation with the Texas Agricultural Extension Service, reissued in 1984, indicated the soils beneath the subject property have been classified as Comfort-Rock outcrop complex, undulating (CrD), Rumple-Comfort association, undulating (RUD) and Eckrant-Rock outcrop complex, steep (ErG). Comfort extremely stony clay makes up between 49 and 95% of the series, and indurated rock outcrop and soil less than 4 inches deep make up 5 to 36% of the complex. Typically, the surface layer is dark brown extremely stony soil about 6 inches thick. Cobbles, stones and "float" rock comprise about 45% of the surface. The subsoil extends to about 13 inches, and overlies the fractured limestone parent material. Comfort soil is well-drained, with slow to medium surface runoff, slow permeability, and very low water capacity.

Eckrant-Rock outcrop complex, steep is similar in profile, but are found on long, narrow slopes on high hills and ridges and along escarpments. The surface layer of Eckrant soil is very dark gray extremely stony clay about 10 inches thick. The lower portion of the surface layer is up to 75% stones and cobbles, and overlies the fractured limestone parent material.

Rumple-Comfort association consists of shallow and moderately deep soils on uplands in the Edwards Plateau Land Resource Area. The surface layer of Rumple soil is dark reddish brown very cherty clay loam about 10 inches thick. The stoniness increases with depth, becoming about 75% cobbles and stone between 14 and 28 inches in depth. The surface layer of Comfort soil was described above. This association is well drained, with medium surface runoff, slow permeability and very low water capacity. These soils are best suited for range and wildlife habitat.

psi Information To Build On Engineering Consulting Testing THREE BURWOOD LANE SAN ANTONIO, TEXAS 78216	REGIONAL GEOLOGIC MAP	VINTAGE OAKS AT THE VINEYARD UNIT 1 HIGHWAY 46 COMAL COUNTY, TEXAS	DATE: 06/30/06 DRAWN BY: J. LEAL PROJECT #: 435- 6G010 DRAWING NAME: 435- 6G010-04

SCALE: NONE

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

OVERVIEW AERIAL PHOTO

VINTAGE OAKS AT THE VINEYARD UNIT 1

HIGHWAY 46
COMAL COUNTY, TEXAS

DATE:	06/30/06
DRAWN BY:	J. LEAL
PROJECT #:	435- 6G010
DRAWING NAME:	435- 6G010-03

SCALE:
1" = 400' HORIZONTAL

LEGEND

U / D	FAULT LINE
	BOUNDARY LINE
	FLOOD PLAIN
S-27	ROCK OUTCROP
	BOULDER FLOAT
Kek	LOWER CRETACEOUS EDWARDS KANIER FORMATION

STATE OF TEXAS
J. Scott Kuykendall
Geology
3348
LICENSED
PROFESSIONAL GEOSCIENTIST

TCEQ-R13
OCT 11 2007
SAN ANTONIO

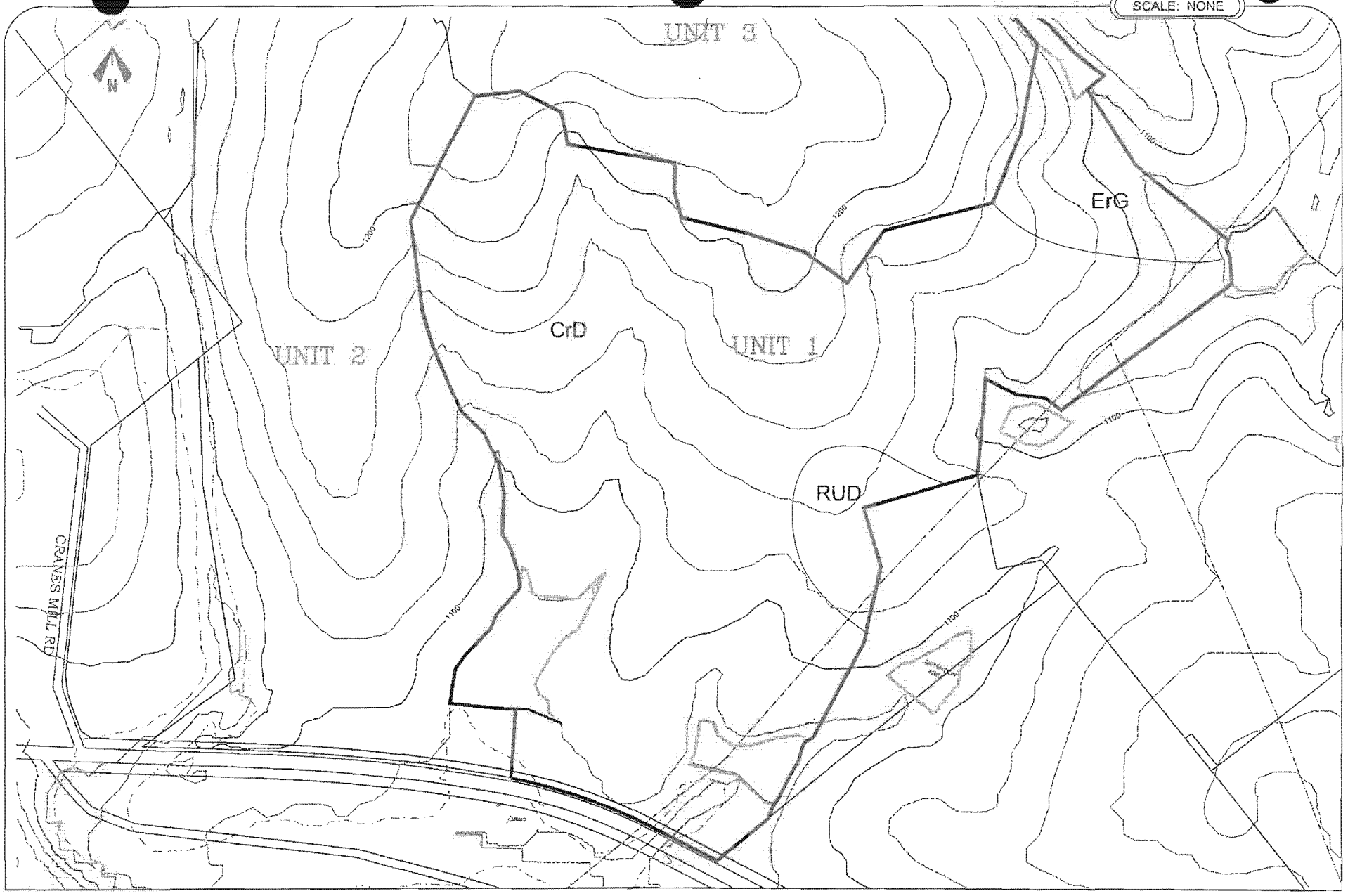
GEOLOGIC ASSESSMENT
for
VINTAGE OAKS AT THE VINEYARD
UNIT 1

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

REVISIONS:

JOB NO. 4356G010
FILE: ~
DATE: 06/30/06
DESIGN: ~
DRAWN: J LEAL
CHECKED: J LANGAN
SHEET 1 OF 1

SCALE: NONE



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

SOILS MAP

VINTAGE OAKS AT THE VINEYARD

HIGHWAY 46
COMAL COUNTY, TEXAS

DATE:	06/30/06
DRAWN BY:	J. LEAL
PROJECT #:	435- 6G010
DRAWING NAME:	435- 6G010-02

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Vintage Oaks at the Vineyard Unit 1 Geologic Assessment

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)	ROSE	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	≥40	<1.6	≥1.6	
S-1	29-46-56	98-15-56	O	5	Kek	50	25	2	E-W		2	0.1	O	10	15	X		X		Hillside
S-2	29-47-00	98-15-58	O	5	Kek	350	50	4	NW-SE		3	0.2	F	15	20	X		X		Hillside
S-3	29-47-08	98-15-58	MB	30	Kek	1	1	>100					X	5	35	X		X		Hilltop
S-4	29-47-7	98-15-58	O	5	Kek	75	30	2			3	0.2	O	15	20	X		X		Hilltop
S-5	29-46-57	98-16-2.5	O	5	Kek	190	30	3			3	0.1	O	15	20	X		X		Hillside
S-6	29-47-2.5	98-16-1	CD	5	Kek	3	3	1					F	20	25	X		X		Hillside
S-7	29-47-3.4	98-16-0.4	CD	5	Kek	7	4	1.5					F	20	25	X		X		Hillside
S-8	29-47-0.5	98-16-1.2	CD	5	Kek	10	10	2					F	20	25	X		X		Hillside
S-9	29-46-59	98-16-05	O	5	Kek	40	25	3			2	0.1	F	15	20	X		X		Streambed
S-10	29-46-5	98-16-4.5	O	5	Kek	270	40	4			3	0.2	F	20	25	X		X		Streambed
S-11	29-46-50	98-16-2.4	O	5	Kek	100	20	3			2	0.1	F	15	20	X		X		Streambed
S-12	29-46-47	98-16-1	O	5	Kek	375	50	5			4	0.2	F	25	30	X		X		Streambed
S-13	29-46-43	98-15-58	O	5	Kek	150	30	3			3	0.1	F	15	20	X		X		Streambed
S-14	29-46-35	98-15-57	O	5	Kek	240	20	3			3	0.2	F	20	25	X		X		Streambed
S-15	29-46-36	98-15-48	MB	30	Kek	150	75	4					F	5	35	X			X	Streambed
S-16	29-46-23	98-15-0.2	O	5	Kek	120	15	2			0.1	0.1	F	10	15	X		X		Streambed
S-17	29-46-24	98-15-36	MB	30	Kek	100	50	5					F	5	35	X		X		Streambed

* 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 Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

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

Date 6/30/06

Sheet 1 of 3

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

STATE OF TEXAS
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Vintage Oaks at the Vineyard Unit 1 Geologic Assessment

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DIP 10	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z								<40	>40	<1.6	>1.6	
S-18	29-46-50	98-15-44	O	5	Kek	150	100	4			3	0.1	F	20	25	X		X		Hillside
S-19	29-46-54	98-15-41	MB	30	Kek	150	125	5					F	5	35	X		X		Hillside
S-20	29-46-59	98-15-36	CD	5	Kek	10	8	1.5					F	20	25	X		X		Hillside
S-21	29-47-1	98-15-44	O	5	Kek	150	40	6			1	0.1	F	15	20	X		X		Streambed
S-22	29-46-23	98-15-42	MB	30	Kek	1	1	>100					X	30	60		X	X		Hillside
S-23	29-46-55	98-15-44	O	5	Kek	550	75	6			3	0.25	O	25	30	X		X		Hillside
S-24	29-46-57	98-15-48	O	5	Kek	325	40	5			1	0.1	F	15	20	X		X		Streambed
S-25	29-46-50	98-15-47	O	5	Kek	190	30	4			3	0.2	F	20	25	X		X		Streambed
S-26	29-46-60	98-16-00	CD	5	Kek	8	6	1					F	15	20	X		X		Hillside
S-27	29-47-5	98-15-52	O	5	Kek	175	30	4			3	0.1	F	20	25	X		X		Streambed
S-28	29-47-1	98-15-50	O	5	Kek	220	35	6			2	0.2	F	25	30	X		X		Streambed
S-29	29-46-50	98-15-34	CD	5	Kek	8	6	1					F	25	30	X		X		Hillside
S-30	29-46-53	98-15-33	CD	5	Kek	6	6	1.5					F	25	30	X		X		Hillside
S-31	29-46-56	98-15-35	CD	5	Kek	7	5	1.5					F	25	30	X		X		Hillside
S-32	29-46-59	98-15-28	O	5	Kek	200	60	9			3	0.2	O	25	30	X		X		Hillside
S-33	29-47-13	98-15-12	O	5	Kek	125	15	4			3	0.1	O	20	25	X		X		Streambed
S-34	29-46-51	98-15-38	O	5	Kek	300	50	5			2	0.2	F	25	30	X		X		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

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V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
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Date 6/30/06

Sheet 2 of 3

STATE OF TEXAS
John Langan
Geology
4871
LICENSED
PROFESSIONAL GEOSCIENTIST

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

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Vintage Oaks at the Vineyard Unit 1 Geologic Assessment

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-35	29-46-58	98-15-16	CD	5	Kek	4	3	1					F	20	25	X		X		Hillside
S-36	29-46-52	98-15-19	CD	5	Kek	10	8	1					F	20	25	X		X		Hillside
S-37	29-46-51	98-15-16	SH	20	Kek	15	8	5					C	30	50		X		X	Streambed
S-38	29-46-48	98-15-10	SC	20	Kek	2	2	2					C	30	50		X	X		Streambed
S-39	29-46-55	98-15-11	C	30	Kek	10	10	6					C	30	60		X	X		Hillside
S-40	29-47-03	98-15-10	Z	30	Kek	700	350	25			4	0.3	C	30	60		X		X	Streambed
S-41	29-46-33	98-15-48	O	5	Kek	25	20	6			3	0.1	F	20	25	X		X		Streambed
S-42	29-46-29	98-15-47	CD	5	Kek	8	6	1					F	20	25	X		X		Hillside
S-43	29-46-41	98-15-43	O	5	Kek	450	300	8			4	0.2	O	30	35	X		X		Hillside
S-44	29-46-47	98-15-48	O	5	Kek	700	75	30	N-S		4	0.25	O	30	35	X		X		Streambed
S-45	29-46-38	98-15-48	O	5	Kek	75	25	5	N-S		3	0.2	O	25	30	X		X		Streambed
S-46	29-46-58	98-15-04	SH	20	Kek	2.5	2	3					O	20	40		X	X		Hillside
S-47	29-46-26	98-16-00	O	5	Kek	150	20	3	N-50-E		0.2	0.1	O	15	20	X		X		Streambed
S-48	29-46-29	98-15-34	F	20	Kek				NE-SW					15	35	X			X	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
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My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

Date 9-20-07

Sheet 3 of 3

STATE OF TEXAS
J Scott Kuykendall
Geology
3346
LICENSED
PROFESSIONAL GEOSCIENTIST

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

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: Vintage Oaks at the Vineyard – Unit 1
2. Original Regulated Entity Name: Vintage Oaks at the Vineyard – Unit 1
3. X **ATTACHMENT A - Original Approval Letter.** A copy of the original approval letter and copies of any letters approving modifications are found at the end of this form.

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

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

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

6. Original Project:

Type:	WPAP X SCS __ UST __ AST
Size:	397.69 acres
Population:	249
Wastewater Volume:	_____ gal/day
Sewer Pipe:	_____ linear ft
Hydrocarbon Storage:	_____ # of tanks
Impervious Cover:	15.43 %

7. Proposed Modification:

Type:	WPAP X SCS __ UST __ AST __
Size:	397.69 acres
Population:	249
Wastewater Volume:	_____ gal/day
Sewer Pipe:	_____ linear ft
Hydrocarbon Storage:	_____ # of tanks
Impervious Cover:	15.43 %

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

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

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

Keith C. Strimple, P.E., C.F.M.
Print Name of Customer/Agent

Signature of Customer/Agent Date 9/24/07

Original Approval Letter

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 18, 2006

Mr. Jack Dean
Bluegreen Southwest Land, Inc.
P.O. Box 986
Wimberley, TX 78676

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Vintage Oaks at the Vineyard - Unit 1; Located on the east side of the intersection with State Hwy 46 and Cranes Mill Road in Comal County, Texas
TYPE OF PLAN: Request for Approval of a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program ID No. 2562.00
Regulated Entity No. RN105024830
Investigation No. 510677

Dear Mr. Dean:

The Texas Commission on Environmental Quality (TCEQ) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by M&S Engineering, Ltd. on behalf of Bluegreen Southwest Land, Inc. on August 16, 2006. 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.*

PROJECT DESCRIPTION

The proposed residential project will have an area of approximately 397.69 acres. It will include approximately 320 acres of single-family residential lots, 47 acres of streets, and 24 acres of drain and access right-of-way. The impervious cover will be 61.38 acres (15.43 percent). According to a letter dated August 7, 2006, 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

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

GEOLOGY

According to the geologic assessment included with the application, 48 features were identified at the site and 6 were assessed as sensitive (S-22, S-37, S-38, S-40, S-46, and S-39). The San Antonio Regional Office did not conduct a site investigation.

SPECIAL CONDITIONS

1. Since this single-family residential subdivision will have less than 20% impervious cover, an exemption from permanent BMPs is approved. If the percentage of impervious cover ever increases above 20% or the land use changes, the exemption for the whole site as described in the Water Pollution Abatement Plan may no longer apply and the property owner must notify the San Antonio Regional Office of these changes.

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

3. Any use of this property, other than the use described in this letter shall require notification to the TCEQ San Antonio Regional Office and may require submittal and approval of a WPAP or modification.

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

5. All protective setbacks and "natural buffers" shall be measured from the perimeter of the sensitive features.

6. Separation distances specified in Chapter 5, Section 5.1.2 of the Edwards Aquifer Rules: Technical Guidance on Best Management Practices (July 2005) will be observed for the following S-22, S-37, S-38, S-40, S-46, and S-39. Additionally, these separation distances will also apply to any sensitive features discovered during construction activities. "The natural buffer around a feature should extend a minimum of 50 feet in all directions. Where the boundary of the drainage area to the feature lies more than 50 feet from the feature, the buffer should extend to the boundary of the drainage area or 200 feet, which ever is less."

7. Separation distances specified in 30 Texas Administrative Code 285, On-site Sewage Facilities (OSSFs) Subchapter I, Section 285.91, Table X, and Subchapter E, shall apply to the features S-22, S-37, S-38, S-40, S-46, and S-39. Additionally, these separation distances will also apply to any sensitive features discovered during construction activities. (Also see Standard Condition #9).

8. Separation distances specified in 30 Texas Administrative Code 290, Subchapter D, Rules and Regulations for Public Water Systems, shall apply to feature S-22.

9. The sensitive geologic features (S-22, S-37, S-38, S-40, S-46, and S-39) shall be recorded on the plat of the property with the appropriate separation distances specified in 30 TAC Chapter 285 and the associated natural buffers described in Special Condition VI as well as in Chapter 5 of the document

Edwards Aquifer Rules: Technical Guidance on Best Management Practices (July 2005). Two copies of the recorded plat shall be provided to the TCEQ's San Antonio Office within 90 days of the date of this letter.

10. A Texas Licensed Professional Engineer must certify in writing that the permanent BMPs or measures provided for the protection of the six sensitive features were provided as proposed. A certification letter must be submitted to the San Antonio Regional Office within 30 days of completing the OSSF Installation on each lot where the following features are located: S-22, S-37, S-38, S-40, S-46, and S-39.

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

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

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

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

If you have any questions or require additional information, please contact Agnieszka Hobson of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210.403.4075.

Sincerely,

Bobby D. Caldwell

for Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/amh

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

fc: Mr. Keith Strimple, P.E., M&S Engineering, Ltd.
Mr. Tom Hornseth, Comal County
cc: Mr. Robert J. Potts, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

Doc# 200606050791
Pages 6
12/01/2006 1:45PM
Official Records of
COMAL COUNTY
JOY STREATER
COUNTY CLERK
Fees $36.00

Joy Streater

Doc# 200606050791

Deed Recordation Affidavit
Edward Aquifer Protection Plan

6/5

Doc# 200606050791

THE STATE OF TEXAS §

County of Hays §

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

(1) That Bluegreen Southwest One, L.P., is the owner of 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 EWARDS AQUIFER PROTECTION PLAN for said real property was approved by the Texas Commission on Environmental Quality (TCEQ) on September 18, 2006.

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

BEING A 399.31 ACRE TRACT OF LAND OUT OF THE JOSE MARIA TEJERINO SURVEY NO.349, ABSTRACT NO. 616 AND THE CCSD AND RGNGRR SURVEY NO. 841, ABSTRACT NO. 695 IN COMAL COUNTY, TEXAS AND BEING OUT OF A 2127.66 ACRETRACT CONVEYED TO BLEUGREEN SOUTHWEST ONE. L.P. AND RECORDED IN DOCUMENT NO. 200606016591 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY, TEXAS AND A 169.862 ACRE TRACT CONVEYED TO BLUEGREEN SOUTHWEST ONE, L.P., AND RECORDED IN DOCUMENT NO 200606016590 OF THE OFFICIAL PUBLIC RECORDS OF COMAL COUNTY TEXAS.

BLUEGREEN SOUTHWEST ONE, L.P.
By and through its General Partner,
BLUEGREEN SOUTHWEST LAND, INC.

By: _____
Jack H. Dean, Vice President

SWORN AND SUBSCRIBED TO before me, on the 26th day of September, 2006

Sherry Wilson
Notary Public

THE STATE OF TEXAS §

County of Hays §

BEFORE ME, the undersigned authority, on this day personally appeared Jack H. Dean 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 26th day of September, 2006

NOTARY PUBLIC STATE OF TEXAS
SHERRY WILSON
Notary Public, State of Texas
My Commission Expires Nov. 14, 2007

Sherry Wilson
NOTARY PUBLIC

Sherry Wilson
Typed or printed Name of Notary

MY COMMISSION EXPIRES: Nov. 14, 2007

Attachment B

Narrative of Proposed Modification

Attachment B – Narrative of Proposed Modification

The change made to the approved WPAP is associated with the erosion control. A site plan was originally provided with erosion controls that were not situated in a position to provide optimum sediment control. The enclosed revised site plan meets state requirements of ¼ acre disturbed drainage area for 100 feet of silt fence and places the silt fences in a more efficient manner. The silt fences contain all sediment onsite with the disturbances covered in the approved WPAP.

The other change made to the site plan is the revised dimensions of sensitive feature #40. PSI preformed a GA for the entire property for the future units and revised this feature accordingly.

PSI Information To Build On
Engineering • Consulting • Testing

October 1, 2007

M&S Engineering, Ltd.
6477 F.M. 311, P.O. Box 970
Spring Branch, Texas 78070

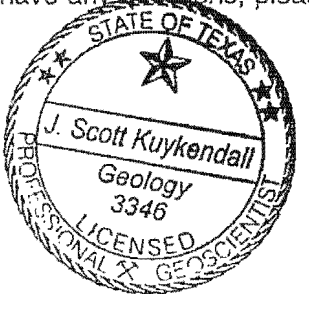
Attn: Mr. Keith Strimple, P.E.

Re: Geologic Assessment-Feature S-40 Reassessment
Vintage Oaks at the Vineyard Unit 1 Approximate 389-Acre Tract
Highway 46
Comal County, Texas
PSI Project No. PO-435-6G010

Dear Mr. Strimple:

Professional Service Industries, Inc. (PSI) has re-evaluated feature S-40, a vuggy fractured rock zone located at the referenced property. While this outcrop is extensively fractured and vuggy, it does not have the horizontal extent as originally mapped. The original interpretation of this feature should not have used the "zone" designation for the extent of the outcrop. It is PSI's judgment that an outcrop of the Edwards Kainer Formation may be considered a "zone" when extensively fractured, vuggy, and in an area likely to receive preferential flow, but that this designation is not appropriate if the outcrop extends to upland areas and is less fractured and vuggy and not as likely to receive infiltration.

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



Respectfully submitted,
PROFESSIONAL SERVICE INDUSTRIES, INC.

Scott Kuykendall, P.G.
Project Manager

John Langan
Environmental Department Manager

Attachment C

Site Plan

SOIL DISTURBANCE NOTE

SOIL DISTURBANCES WILL OCCUR DUE TO CLEARING, GRUBBING, AND GRADING OF AREAS TO BE USED FOR ROADS, ROAD RIGHT-OF-WAYS, AND DETENTION FACILITIES. DISTURBANCES WILL ALSO OCCUR DURING THE HOME BUILDING PROCESS. THESE DISTURBANCES CAN BE ATTRIBUTED TO, BUT NOT LIMITED TO, CLEARING AND GRUBBING RELATED TO BUILDING PAD, DRIVEWAY, AND LANDSCAPE PREPARATION.

A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE INSTALLED TO PROVIDE A STABLE ENTRANCE/EXIT CONDITION FROM THE CONSTRUCTION SITE TO KEEP MUD AND SEDIMENT OFF PUBLIC ROADWAYS (REFER TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL FOR CONSTRUCTION INFORMATION).

SOIL STABILIZATION NOTE

TEMPORARY EROSION CONTROL MEASURES WILL BE USED TO STABILIZE DISTRUBED AREAS (REFER TO THE EDWARDS AQUIFER TECHNICAL GUIDANCE MANUAL FOR CONSTRUCTION OF EROSION CONTROL MEASURES). TRAFFIC WILL BE ROUTED AROUND THESE AREAS TO REDUCE THE EXTENT OF DISTURBED AREAS BY REDUCING SEDIMENT LOADS TO SURFACE WATER.

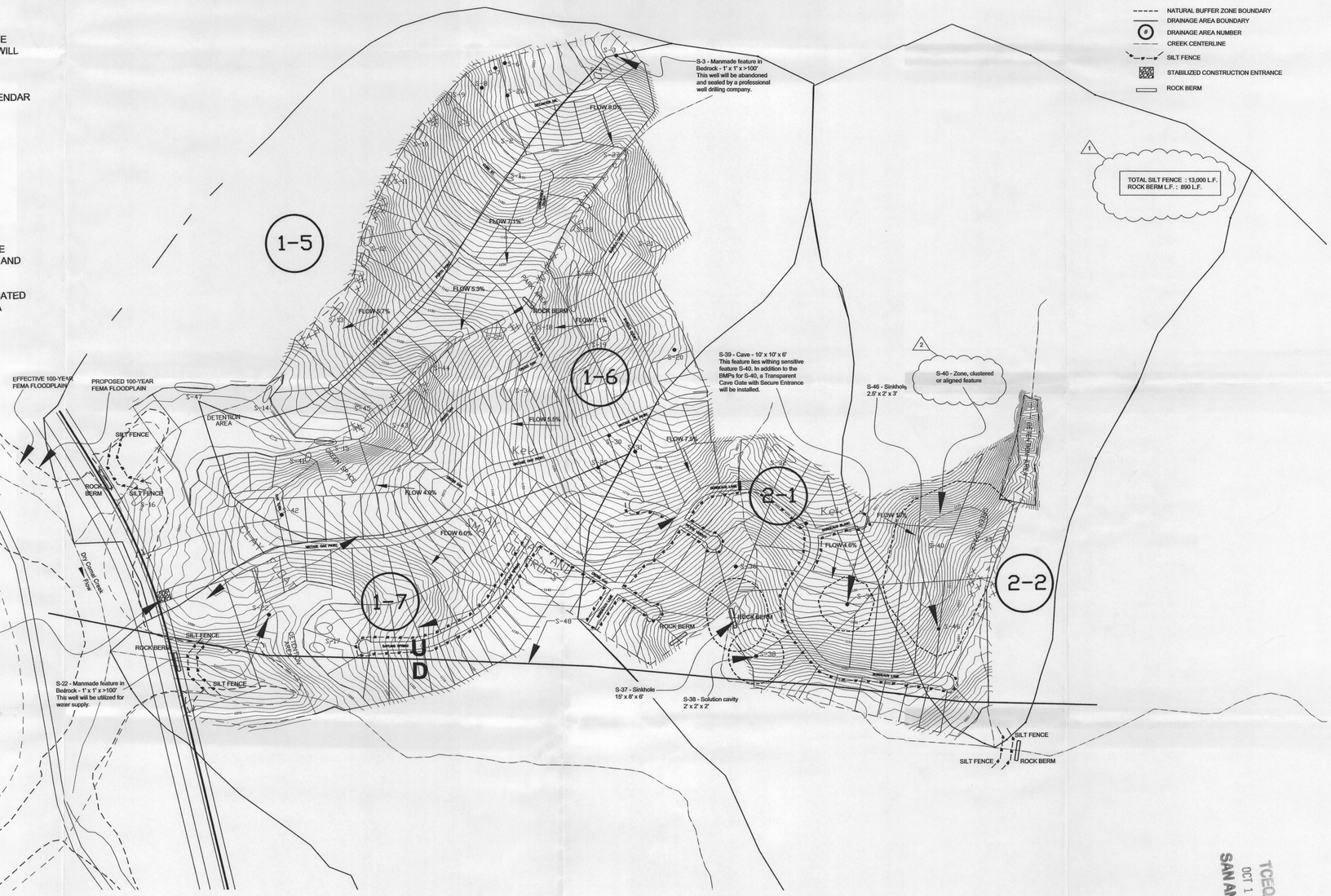
BARE SOILS SHOULD BE SEEDED OR OTHERWISE STABILIZED WITHIN 14 CALENDAR DAYS AFTER FINAL GRADING OR WHERE CONSTRUCTION ACTIVITY HAS TEMPORARILY CEASED FOR MORE THAN 21 DAYS.

MULCHING/MATS CAN BE USED TO PROTECT THE DISTRUBED AREA WHILE VEGETATION BECOMES ESTABLISHED.

NATURAL BUFFER ZONE NOTE

NATIVE GRASSES, FORBS AND TREES ADJACENT TO AND UPGRADIENT OF SENSITIVE FEATURES WILL REMAIN UNDISTRUBED SO THAT RAINFALL MAY CONTINUE TO ENTER THE FEATURE. THE NATURAL VEGETATED AREAS WILL ENCOMPASS A TWO HUNDRED (200) FOOT RADIUS FROM THE CENTER OF THE FEATURE IN ORDER TO MAINTAIN PRE-DEVELOPMENT RECHARGE QUANTITY AND QUALITY.

WHEN ALL OR A PROTION OF THE BUFFER FOR A SENSITIVE FEATURE IS LOCATED WITHIN THE YARD OF A RESIDENTIAL TRACT, IT SHOULD BE SEPARATED BY A BARRIER, SUCH AS A FENCE, FROM CONVENTIONAL LANDSCAPING AND MAINTAINED IN THE NATURAL STATE.



M&S ENGINEERING, LTD.
ENGINEERS, PLANNERS AND SURVEYORS

BRANCH OFFICE
P.O. BOX 391 78123
McQUEENEY, TEXAS
PHONE # (830) 560-3200
FAX # (830) 560-3203

MAIN OFFICE
P.O. BOX 970 78070
SPRING BRANCH, TEXAS
PHONE # (830) 228-5446
FAX # (830) 885-2170

REVISIONS
1 09-20-07 : REVISED SILT FENCE AND ROCK BERM TO UNIT 1.
2 09-20-07 : REVISED S-40 BASED ON INFORMATION.

KEITH C. STRIMPLE 66212 REGISTERED PROFESSIONAL ENGINEER
9/24/07

Vintage Oaks At The Vineyard Unit 1

Site Plan

DESIGNED BY: LEK
CHECKED BY: KCS
DRAWN BY: HJS
JOB: 6NSW001
DATE: 7-27-06
SCALE: SCALE

SHEET: 1 OF 1

TCEQ-R13
OCT 11 2007
SAN ANTONIO

Date: Sep. 24, 2007, 10:45am User ID: bmendez
File: S:\Active Projects\6NSW001 Rompel Ranch Subdivision\Reports\TCEQ REPORTS\Unit 1\Site Plan for Sensitive Features.dwg

Vintage Oaks at the Vineyard - Unit 1

Temporary BMP Calculations

Description	Disturbed Area	Linear Feet of Silt Fence
Structures and Parking	28.58	11,433
Streets	32.80	13,120

Home and driveway construction on individual lots account for 47% of the total disturbed area of the development. The Temporary BMPs for these construction activities will be installed and removed at varying stages in the development of this unit. Average square footage of house and driveway was assumed for each lot and a total linear feet of silt fence was calculated using the 100 foot per 0.25 acres. The minimun amount of silt fence required would be 11,433 feet. Property owners and contractors are required to install silt fence on each lot as construction begins and are therefore responsible for the treatment of the stormwater from their private property.

The required amount of silt fence necessary during street construction will be 13,120 feet. Silt fence will be placed around downslope portions of the disturbed areas in order to temporarily treat surface water from sedimentation due to street construction.

In This Section

TCEQ-0602
Temporary Stormwater Section

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

Attachment F
Structural Practices

Attachment G
Drainage Area Map

Attachment H
Temporary Sediment Pond(s) Plans and Calculations

Attachment I
Inspection and maintenance of BMPs

Attachment J
Schedule of Interim and Permanent Soil Stabilization Practices

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: VINTAGE OAKS AT THE VINEYARD – UNIT 1

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 than 250 gallons will be stored on the site for less than one (1) year.

___ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.

___ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.

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

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

3. N/A Temporary aboveground storage tank systems of 250 gallons or core 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 features.

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

___ The are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. X **ATTACHMENT C – Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.

6. X Name the receiving water(s) at or near the site which will be disturbed or which will receive charges from disturbed areas of the project: Dry Comal Creek and Little Bear Creek

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

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

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

_X_ TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information has been provided in the attachment at the end of this form.

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

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

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

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

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

___ **ATTACHMENT E – Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is provided at the end of this form. The request includes justification as to why no reasonable and practicable alternative exists for each feature.

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

9. _X_ **ATTACHMENT F – Structural Practices.** Describe the structure practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site. Placement of structural practices in floodplains has been avoided.

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

___ For areas that 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 he construction area.

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

11. N/A **ATTACHMENT H – Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure has been prepared by or under the direct supervision of a Texas Licensed Profession Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are provided as at the end of this form.

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

13. X All control measures must be properly selected, installed, and maintained in accordance with the manufacturers specifications and good engineering practices. If periodic inspections by the applicant to the executive director, or other information indicates a control has been used inappropriately, or incorrectly, the applicant must replace or notify the control for site situations.

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

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

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

SOIL STABILIZATION PRACTICES

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

17. _X_ **ATTACHMENT J – Schedule of Interim and Permanent Soil Stabilization Practices.** A schedule of the interim and permanent soil stabilization practices for he site is attached at the end of this form.

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

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

ADMINISTRATIVE INFORMATION

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

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

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

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

Keith Strimple, P.E.
Print Name of ~~Customer~~/ Agent

Signature of ~~Customer~~/ Agent

8/7/04
Date

Spill Response Actions

1.4.16 Spill Prevention and Control

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

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

Education

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

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

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

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

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

General Measures

(1) To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.

(2) Store hazardous materials and wastes in covered containers and protect from vandalism.

(3) Place a stockpile of spill cleanup materials where it will be readily accessible.

(4) Train employees in spill prevention and cleanup.

(5) Designate responsible individuals to oversee and enforce control measures.

(6) Spills should be covered and protected from stormwater runon during rainfall to the extent that it doesn't compromise clean up activities.

(7) Do not bury or wash spills with water.

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.

(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.

(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.

(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.

(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.

(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMPs in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.

(2) Use absorbent materials on small spills rather than hosing down or burying the spill.

(3) Absorbent materials should be promptly removed and disposed of properly.

(4) Follow the practice below for a minor spill:

(5) Contain the spread of the spill.

(6) Recover spilled materials.

(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately:

(1) Contain spread of the spill.

(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.

(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.

(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.

(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.

(3) Notification should first be made by telephone and followed up with a written report.

(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

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

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately

(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.

(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.

(5) Place drip pans or absorbent materials under paving equipment when not in use.

(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.

(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.

(9) Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runon of stormwater and the runoff of spills.

(2) Discourage "topping off" of fuel tanks.

(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Potential Sources of Contamination

Potential Sources of Contamination

1. Oil, grease, fuel and hydraulic contamination from construction equipment and vehicle leakage.
   Remedy: Lubrication and fueling will be preformed in a designated area. This area will be monitored daily for contamination.

2. Miscellaneous trash and litter form construction workers.
   Remedy: Designated receptacles will be strategically located and workers will be directed to deposit trash there.

3. Construction debris.
   Remedy: Debris will be collected weekly and deposited in bins for offsite disposal. Situations requiring immediate attention will be handled on a case by case basis.

4. Asphalt products.
   Remedy: After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup should an unexpected rain occur. For the duration of the asphalt product curing time, the contractor will maintain standby personnel and equipment to maintain and asphalt wash-off should and unexpected rain occurs. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain.

Sequence of Major Activities

Sequence of Major Activities

1. Site Preparation:
   Site preparation will include the clearing, grubbing, and grading of construction areas. These areas include right of way preparation for streets and roads, drainage easements, and excavation of proposed detention areas. Additionally, residential lots will undergo limited site preparation for building pads, driveways, and landscaping.

2. Construction:
   Construction activities will consist of constructing buildings, driveways, parking areas, streets, utilities, landscaping and site cleanup, including removal of excess materials. An approximate area of 66 acres will be disturbed during the construction of streets and roads. Approximately 34 acres could be disturbed during the construction of homes /buildings. In addition, approximately 20 acres will be disturbed due to excavation and re-grading of detention areas.

Attachment D

Temporary Best Management Practices and Measures

Temporary Best Management Practices and Measures

All TBMPs will be installed prior to the beginning of site preparation and construction activities as per the Storm Water Pollution Prevention Plan. The TBMPs will remain in place and will be maintained until all construction has ceased and a perennial vegetative cover with a density of 70 percent has been established.

a. Silt fences and rock berms will be used to protect disturbed soils during construction in order to prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.

b. Silt fences and rock berms will be used to protect disturbed soils during construction in order to 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 200-foot radius natural buffer zone adjacent to and upgradient of sensitive features will remain undisturbed so that rainfall may continue to enter the feature. The natural vegetated areas will ensure that pre-development stormwater quantity and quality will continue to recharge the aquifer via the feature. Rock berms will be placed downgradient of all construction activities so that potentially contaminated stormwater may be treated before leaving the sited and entering downstream surface water.

d. No construction will occur within a 200-foot radius of naturally-occurring sensitive features. The vegetative buffer zone will serve as both TMBP and BMP for the sensitive features. In the case that construction activities occur upgradient of a sensitive feature (greater than the 200-foot radius) the disturbed soils will be protected from erosion by silt fences as outlined above.

Attachment E

Request to Temporarily Seal a Feature

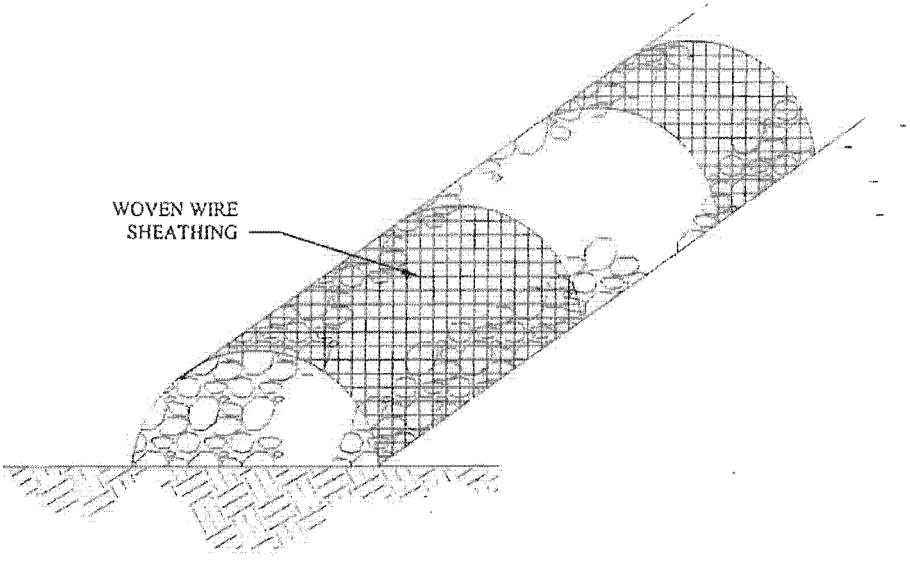
Request to Temporarily Seal a Feature

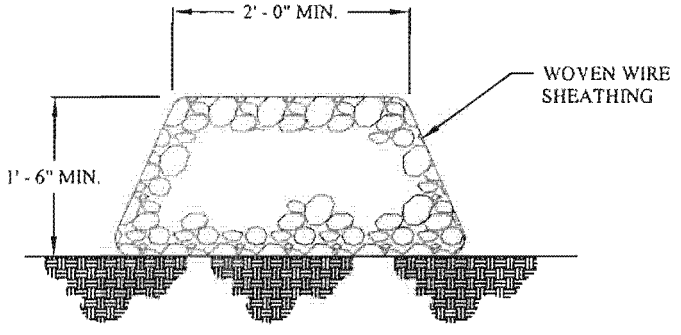
NOT APPLICABLE

Structural Practices

Structural Practices

The structural practices that will limit runoff discharge of pollutants form exposed areas of the site will be the use of the water trenches, rock berms, silt fences, and stabilized construction entrance to prevent the excavated material from leaving the site.





NOTES:

1. USE ONLY OPEN GRADED ROCK 4-8 INCH DIAMETER FOR STREAM FLOW CONDITIONS; USE OPEN GRADED ROCK 3-5 INCHES DIAMETER FOR OTHER CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENINGS AND MINIMUM WIRE DIAMETER OF 20 GAUGE.
3. THE ROCK BERM SHALL BE INSPECTED WEEKLY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE - WOVEN WIRE SHEATHING, SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. WHEN SILT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR ONE FOOT, WHICHEVER IS LESS, THE SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CREATE A SILTATION PROBLEM.
5. DAILY INSPECTION SHALL BE MADE ON SEVERE SERVICE ROCK BERMS; SILT SHALL BE REMOVED WHEN ACCUMULATION REACHES 6 INCHES.
6. WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

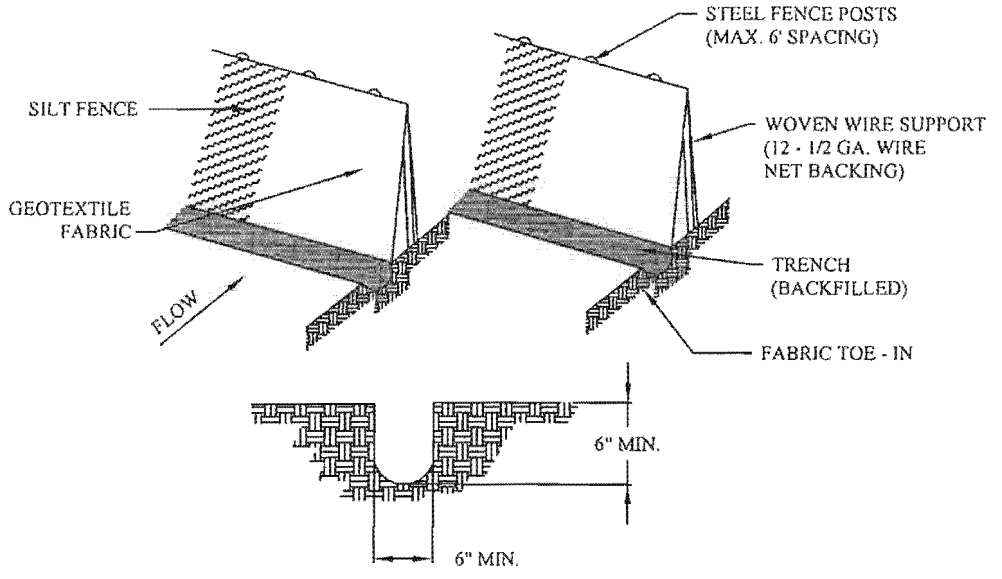
ROCK BERM

EXHIBIT B1

SCALE - NTS	T.P.D.E.S. STORM WATER POLLUTION PREVENTION PLAN	M & S ENGINEERING, LTD. ENGINEERS AND PLANNERS
DATE - APRIL 2005		
DRAWN - PJM		
SHEET - 1 of 1		

MAIN OFFICE
P.O. BOX 970
SPRING BRANCH, TEXAS 78070
PHONE * (830) 228-5446
FAX * (830) 885-2170

BRANCH OFFICE
P.O. BOX 391
McQUEENEY, TEXAS 78123
PHONE * (830) 560-3200
FAX * (830) 560-3203



TRENCH CROSS-SECTION

NOTES:

1. STEEL POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF ONE FOOT.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CAN NOT BE TREATED IN (e.g. pavement) WEIGHT FABRIC FLAP WITH WASHED GRAVEL ON UPHILL SIDE TO PREVENT FLOW UNDER FENCE.
3. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POSTS OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 6 INCHES. THE SILT SHALL BE DISPOSED OF IN AN APPROVED SITE AND IN SUCH A MANNER AS TO NOT CONTRIBUTE TO ADDITIONAL SILTATION.

SILT FENCE

EXHIBIT B2

LE - NTS	T.P.D.E.S. STORM WATER POLLUTION PREVENTION PLAN	M & S ENGINEERING, LTD. ENGINEERS AND PLANNERS
TE - APRIL 2005		
DRAWN - PJM		
SHEET - 1 of 1		

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SPRING BRANCH, TEXAS 78070
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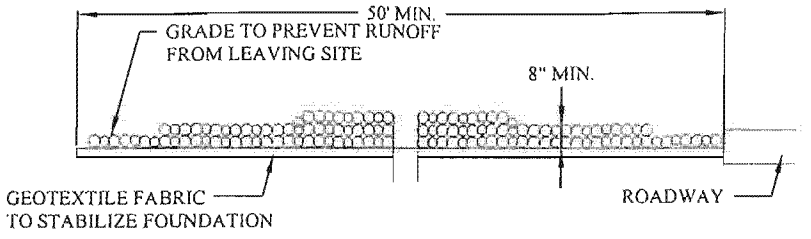
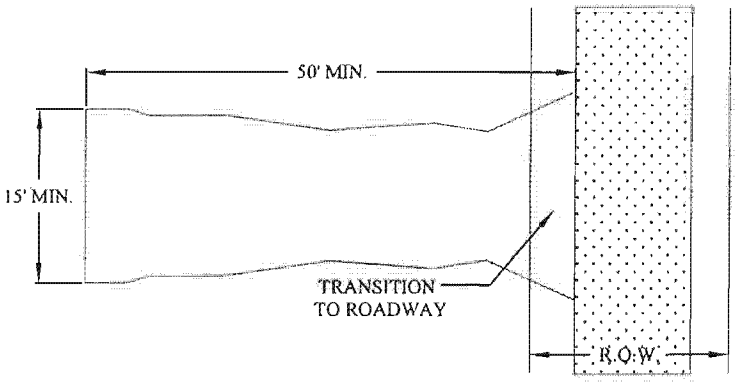


PROFILE
N.T.S.



PLAN VIEW
N.T.S.

NOTES:

1. STONE SIZE - 4 TO 8 INCH OPEN GRADED ROCK.
2. LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
3. THICKNESS - NOT LESS THAN 8 INCHES.
4. WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. WASHING - WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE USING APPROVED METHODS.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAYS. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
8. DRAINAGE - ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

STABILIZED CONSTRUCTION ENTRANCE

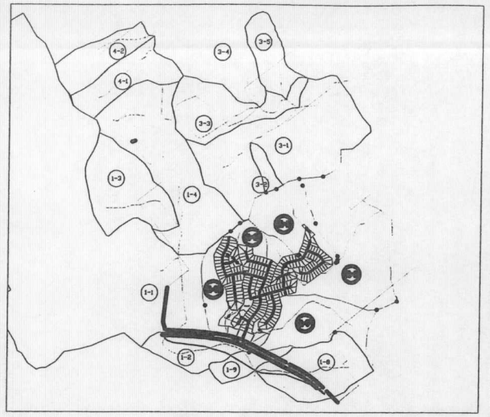
EXHIBIT B3

SCALE - NTS	T.P.D.E.S. STORM WATER POLLUTION PREVENTION PLAN	M & S ENGINEERING, LTD. ENGINEERS AND PLANNERS
DATE - APRIL 2005		MAIN OFFICE: P.O. BOX 970, SPRING BRANCH, TEXAS 78070, PHONE * (830) 228-5446, FAX * (830) 885-2170
DRAWN - PJM		BRANCH OFFICE: P.O. BOX 391, McQUEENEY, TEXAS 78123, PHONE * (830) 560-3200, FAX * (830) 560-3203
SHEET - 1 of 1		

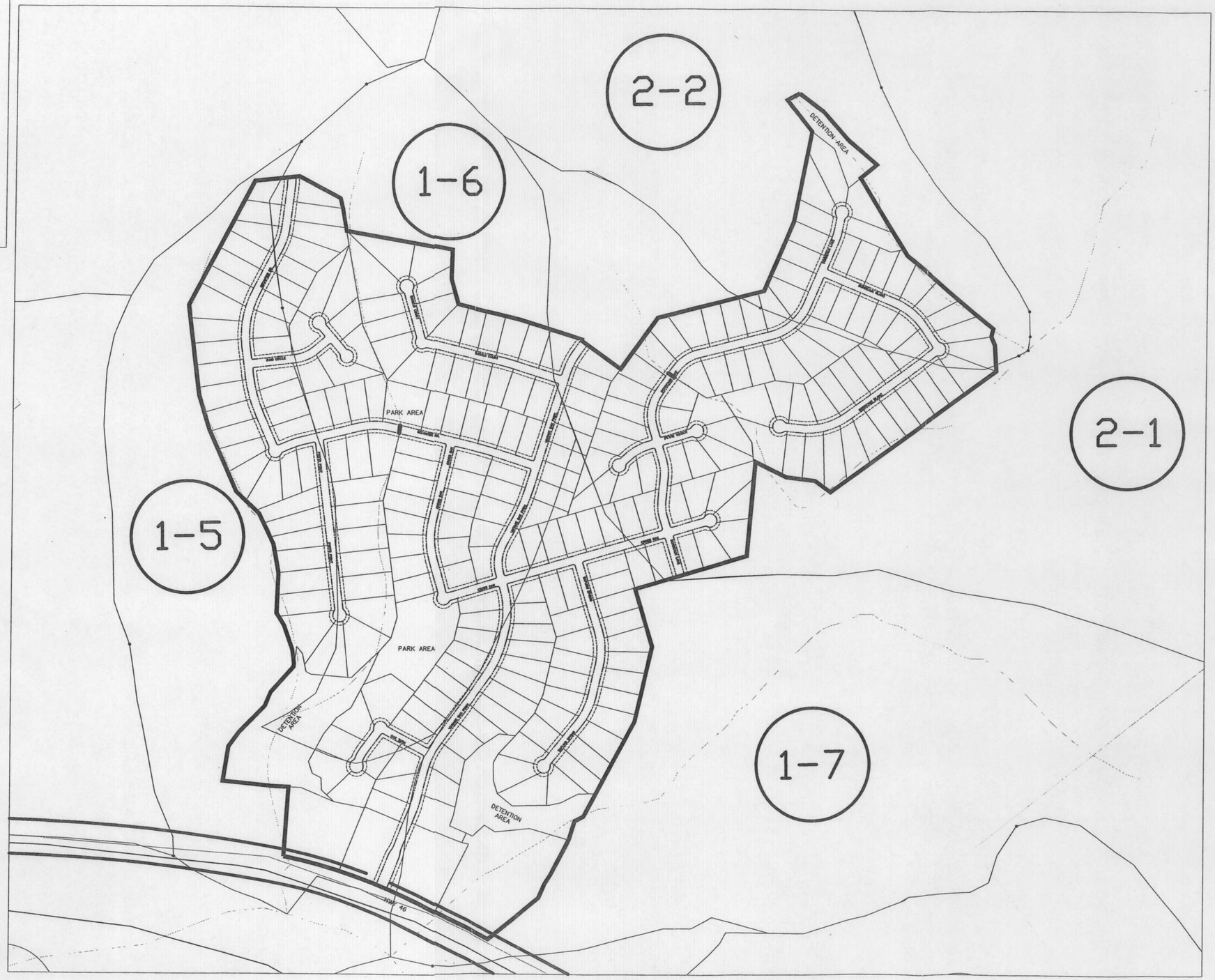
Attachment G

Drainage Area Map

Attachment G



Site Map



Drainage Area Map

M&S ENGINEERING, LTD.
ENGINEERS AND PLANNERS

MAIN OFFICE
P.O. BOX 970
SPRING BRANCH, TEXAS 78070
PHONE # (830) 228-5446
FAX # (830) 885-2170

BRANCH OFFICE
P.O. BOX 391
McQUEENEY, TEXAS 78123
PHONE # (830) 560-3200
FAX # (830) 560-3203

REVISIONS

Vintage Oaks At The Vineyard
Unit 1
Drainage Areas

DESIGNED BY: LK
CHECKED BY: HW
DRAWN BY: HJS
JOB: 6BSW001
DATE: 07-18-06
NOTES:

SHEET: 1 OF 1

K:\ALL CIVIL - new\6BSW001 Rompel Ranch Subdivision\dwg\Inundation Studies\Map of Inundation Study for reports.dwg

Temporary Sediment Pond(s) Plans and Calculations

Temporary Sediment Pond(s) Plans and Calculations

NOT APPLICABLE

Attachment I

Inspection and maintenance of BMPs

Inspection and Maintenance for BMPs

The BMPs for the construction of this project will be the use of rock berms, silt fencing, gravel filter bags, stabilized construction entrance and the utility trenches. The following inspection and maintenance procedures will be implemented:

1. Sift fencing, rock berms, and construction entrances must be in place prior to the start of construction and will remain in place until construction has been complete and the site stabilized from further erosion.

2. The contractor will inspect the rock berms, silt fencing and construction entrance at least once a week and within 24 hours of a storm of 0.5 inches or more in depth. The contractor will repair or replace any damaged TBMPs. The contractor shall correct damage or deficiencies as soon as practical after the inspection but no later than 7 days after the inspection.

3. Contractor will place trench excavation on the upgradient side of the trench.

4. All soil, sand, gravel, and excavated material stockpiled on-site will have appropriately sized silt fencing placed upgradient and down gradient.

5. The contractor will keep a record of the weekly inspections, noting the condition of the rock berms, silt fencing and construction entrance and any corrective action taken to maintain the erosion control structures. In addition to the inspection and maintenance reports, the operator should keep records of the construction activity on-site, in particular, the following information should be kept.

    A. The dates when major grading activities occur in a particular area.

    B. The dates when construction activities cease in an area, temporarily or permanently.

    C. The dates when an area is stabilized, temporarily or permanently.

    D. Records to be maintained in SWPPP.

Attachment J

Schedule of Interim and Permanent Soil Stabilization Practices

Schedule of Interim and Permanent Soil Stabilization Practices

The schedule of interim and permanent soil stabilization will be as follows:

1. Once construction of the project has commenced, the construction activity is planned to continue until the project is complete. The water, electrical, cable TV and telephone trenches will be excavated. The trenches will then be re-excavated and the water, electrical, cable TV and telephone lines will be installed. This work is intended to continue until all the lines are installed. The utility lines are located within the project boundaries as shown on the site plan. As soon as the underground utilities are installed, the road base will be installed and compacted providing the interim soil stabilization for the paved area and the permanent soil stabilization for the parking areas. Once the individual residential buildings are built and landscaped this will provide permanent soil stabilization for the building areas.

2. Much of the excavation for this project will be in solid rock, helping to minimize the amount of loose soil which has the potential to become suspended in runoff and washed downstream.

3. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporary or permanently ceased. Where the initiation of stabilization measures by the 14^{th} day after construction activity temporary or permanently cease in precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14^{th} day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

Agent Authorization Form

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

I **Jack Dean**,
Print Name

Vice President
Title Owner/President/Other

of **Bluegreen Southwest Land, Inc.**
Corporation/Partnership/Entity Name

have authorized **Keith Strimple, P.E.**
Print Name of Agent/Engineer

of **M & S Engineering, Ltd.**
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. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and the forms must accompany the completed application.

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

4. For applicants who are not the property owner, but who have the right to control and possess and control the property, additional authorization is required from the owner.

BLUEGREEN SOUTHWEST LAND, INC

VP

Applicant's Signature

8/1/06

Date

THE STATE OF TX §

County of Hays §

BEFORE ME, the undersigned authority, on this day personally appeared Jack H. Dean 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 1st day of August, 06.

Michele R. Lindsey

NOTARY PUBLIC

Michele R. Lindsey

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 5/7/09

NOTARY PUBLIC STATE OF TEXAS

MICHELE R. LINDSEY
NOTARY PUBLIC
State of Texas
My Commission Expires May 07, 2009

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

NAME OF PROPOSED REGULATED ENTITY: **Vintage Oaks At The Vineyard- Unit 1**
REGULATED ENTITY LOCATION: **Approximately 3,815 feet East Of intersection of State Hwy 46 & Cranes Mill Road**
NAME OF CUSTOMER: **Bluegreen Southwest Land, Inc.**
CONTACT PERSON: **Keith Strimple, P.E.** PHONE: **830-228-5446**
(Please Print)

Customer Reference Number (if issued): CN 602609984 (nine digits)
Regulated Entity Reference Number (if issued): RN _____ (nine digits)

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

SAN ANTONIO REGIONAL OFFICE (3362)
~ Bexar
X Comal
~ Kinney
~ Medina
~ Uvalde

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE TEXAS 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):

X **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	397.69 Acres	$5,000
Water Pollution Abatement, Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature

8/15/04
Date

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

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

I **Jack Dean**,
Print Name

Vice President
Title Owner/President/Other

of **Bluegreen Southwest Land, Inc.**
Corporation/Partnership/Entity Name

have authorized **Keith Strimple, P.E.**
Print Name of Agent/Engineer

of **M & S Engineering, Ltd.**
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4. For applicants who are not the property owner, but who have the right to control and possess and control the property, additional authorization is required from the owner.

BLUEGREEN SOUTHWEST LAND, INC

VP

Applicant's Signature

8/1/06

Date

THE STATE OF TX §

County of Hays §

BEFORE ME, the undersigned authority, on this day personally appeared Jack H. Dean 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 1st day of August, 06.

Michele R. Lindsey

NOTARY PUBLIC

Michele R. Lindsey

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 5/7/09

NOTARY PUBLIC STATE OF TEXAS

MICHELE R. LINDSEY
NOTARY PUBLIC
State of Texas
My Commission Expires May 07, 2009

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

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REGULATED ENTITY LOCATION: **Approximately 3,815 feet East of intersection of State Hwy 46 & Cranes Mill Road.**
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(Please Print)

Customer Reference Number (if issued): CN 602609984 (nine digits)
Regulated Entity Reference Number (if issued): RN _____ (nine digits)

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~ Hays
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~ Williamson

SAN ANTONIO REGIONAL OFFICE (3362)
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X Comal
~ Kinney
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~ 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):

X **SAN ANTONIO REGIONAL OFFICE**

~ **Mailed to TCEQ**:
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12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
512/239-0347

Type of Plan	Size	Fee Due
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Water Pollution Abatement, Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature

Date 06/5/07

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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)

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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

M & S ENGINEERING MANAGEMENT, INC. 18323

M & S Engineering Management, Inc.
P.O. Box 970
Spring Branch, TX 78070
(830) 228-5446

BROADWAY BANK
SAN ANTONIO, TX 78217
88-2193/1140 2900

18323

Five thousand dollars + no/100

DATE 10-2-07

AMOUNT $5000.00

PAY TO THE ORDER OF Texas Commission on Environmental Quality

AUTHORIZED SIGNATURE

Heritage Oaks - Unit 1

"018323" :114021933: "0391190"

Security features. Details on back.

TCEQ Core Data Form

TCEQ Use Only

If you have questions on how to fill out this form or about our Central Registry, please contact us at 512-239-5175.

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.

SECTION I: General Information

1. Reason for Submission *Example: new wastewater permit; IHW registration; change in customer information; etc.*
WATER POLLUTION ABATEMENT PLAN

2. Attachments ☐ Yes ☑ No

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

3. Customer Reference Number-*if issued*
CN 602609984 *(9 digits)*

4. Regulated Entity Reference Number-*if issued*
RN *(9 digits)*

SECTION II: Customer Information

5. Customer Role *(Proposed or Actual)* – As It Relates to the Regulated Entity Listed on This Form

Please check one of the following: ☑ Owner ☐ Operator ☐ Owner and Operator
☐ Occupational Licensee ☐ Volunteer Cleanup Applicant ☐ Other: _____

TCEQ Use Only ☐ Superfund ☐ PST ☐ Respondent

6. General Customer Information
☐ New Customer ☐ Change to Customer Information ☐ Change in Regulated Entity Ownership ☑ No Change*
*If "No Change" and Section I is complete, skip to Section III - Regulated Entity Information.

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

8. Customer Name *(If an individual, please print last name first)* *If new name, enter previous name:*

9. Mailing Address: _____

City	State	ZIP	ZIP + 4

10. Country Mailing Information *if outside USA*

11. E-Mail Address *if applicable*

12. Telephone Number ( ) -

13. Extension or Code

14. Fax Number *if applicable* ( ) -

15. Federal Tax ID *(9 digits)*

16. State Franchise Tax ID Number *if applicable*

17. DUNS Number *if applicable (9 digits)*

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

19. Independently Owned and Operated?
☐ YES ☐ NO

SECTION III: Regulated Entity Information

20. General Regulated Entity Information
☑ New Regulated Entity ☐ Change to Regulated Entity Information ☐ No Change*
*If "No Change" and Section I is complete, skip to Section IV - Preparer Information.

21. Regulated Entity Name *(If an individual, please print last name first)*
VINTAGE OAKS AT THE VINEYARD - UNIT 1

22. Street Address:			
(No P.O. Boxes)			
City	State	ZIP	ZIP + 4
23. Mailing Address **P.O. BOX 986**			
City **WIMBERLEY**	State **TX**	ZIP **78676**	ZIP + 4 **0896**

24. E-Mail Address:

25. Telephone Number	26. Extension or Code	27. Fax Number *if applicable*
(512) 847 - 5483		(512) 847 - 9414

28. Primary SIC Code *(4 digits)*	29. Secondary SIC Code *(4 digits)*	30. Primary NAICS Code *(5 or 6 digits)*	31. Secondary NAICS Code *(5 or 6 digits)*
6552		237210	

32. What is the Primary Business of this entity? *(Please do not repeat the SIC or NAICS description.)*
SINGLE FAMILY RESIDENTIAL SUBDIVISION

Questions 33 - 37 address geographic location. Please refer to the instructions for applicability.

33. County: COMAL

34. Description of Physical Location
ALONG THE NORTH RIGHT-OF-WAY LINE OF STATE HWY 46, APPROXIMATELY 3300' (FT) EAST OF THE INTERSECTION OF STATE HWY 46 AND CRANES MILL ROAD.

35. Nearest City	State	Nearest ZIP
NEW BRAUNFELS	TX	78132

36. Latitude (N)			37. Longitude (W)		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	46	20	98	15	57

38. TCEQ Programs In Which This Regulated Entity Participates *Not all programs have been listed. Please add to this list as needed. If you don't know or are unsure, please mark "unknown."*

☐ Animal Feeding Operation	☐ Petroleum Storage Tank	☐ Water Rights
☐ Title V – Air	☐ Wastewater Permit	☑ STORMWATER
☐ Industrial & Hazardous Waste	☐ Water Districts	☐
☐ Municipal Solid Waste	☐ Water Utilities	☐ Unknown
☐ New Source Review - Air	☐ Licensing - TYPE(s)	

SECTION IV: Preparer Information

39. Name	40. Title
HARRY SCHLESSMAN	SR. DESIGNER

41. Telephone Number	42. Extension or Code	43. Fax Number *if applicable*
(830) 228 - 5446	155	(830) 885 - 2170

44. E-Mail Address: hschlessman@msengr.com