TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

February 27, 2008

Mr. Carlos Sandoval
Laredo GFG Development, Ltd.
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Forest at Garden Ridge Unit IV; Located on Bat Cave Road near the intersection at Schoenthal Road ; Garden Ridge and San Antonio ETJ, 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. 2753.00; Investigation No. 614395; Regulated Entity No. RN105390637

Dear Mr. Sandoval:

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 Jacobs Carter Burgess, Inc. on behalf of Laredo GFG Development, Ltd. on January 8, 2008. Final review of the WPAP was completed after additional material was received on February 19, 2008 and February 21, 2008. As presented to the TCEQ, the Temporary Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The proposed single family residential project will have an area of approximately 107.1 acres. It will include approximately 103 lots, with supporting streets, utilities, and infrastructure. The impervious cover will be 18.83 acres (17.6%). Project wastewater will be disposed of by on-site sewage facilities. According to a letter dated, December 21, 2007, 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

Since this single-family residential project will not have more than 20 percent impervious cover, an exemption from permanent BMPs is approved. A detention pond is proposed on site to satisfy city requirements.

GEOLOGY

According to the geologic assessment included with the application, the center of the site is characterized by a grassy pasture in a low topographic area. The rest of the site is characterized by dense vegetation. The northwestern portion of the site is underlain by the Del Rio Clay, while the remainder of the site is underlain by the Buda Limestone.

According to the Geologic Assessment Table (TCEQ-0585) contained in the application there were six features identified on site. Three closed depressions, one solution cavity, and one inferred fault were all assessed as not sensitive. A water well (Feature S-2), not in use, was assessed as sensitive. The water well will be properly abandoned. The San Antonio Regional Office did not conduct a site assessment.

SPECIAL CONDITIONS

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

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

III. 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.

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

STANDARD CONDITIONS

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

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.

<u>During Construction:</u>

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

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

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

10. One 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.

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

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

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

After Completion of Construction:

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

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

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

17. An Edwards Aquifer protection plan approval or extension will expire and no extension will be granted if more than 50 percent of the total construction has not been completed within ten years

from the initial approval of a plan. A new Edwards Aquifer protection plan must be submitted to the San Antonio Regional Office with the appropriate fees for review and approval by the executive director prior to commencing any additional regulated activities.

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

If you have any questions or require additional information, please contact Javier Anguiano of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210) 403-4019.

Sincerely,

Glenn Shankle
Executive Director
Texas Commission on Environmental Quality

GS/JA/eg

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

cc: Mr. Mark Kastner, P.E., Jacobs Carter Burgess, Inc.
Mr. Tom Hornseth, P.E., Comal County
The Honorable Jay F. Feibelman, City of Garden Ridge
Ms. Velma Reyes Danielson, Edwards Aquifer Authority
TCEQ Central Records, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 21, 2012

Ms. Sandra Johnson
Forest of Garden Ridge IV
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Re: Edwards Aquifer Protection Program, Comal County

NAME OF PROJECT: Forest of Garden Ridge Unit IV; located on Bat Cave Road near the intersection at Schoenthal Road, Garden Ridge ETJ, Texas

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

Edwards Aquifer Protection Program File No. 2753.05, Investigation No. 988955
Regulated Entity Number: RN105390637

Dear Ms. Johnson:

On February 14, 2012, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is enclosed.

Date of Original Approval:	February 27, 2008
Date of Expiration:	February 27, 2010
Date Extension Request Received	Date of Extension Expiration
February 9, 2010	August 27, 2010
August 11, 2010	February 27, 2011

February 16, 2011	August 27, 2011
August 18, 2011	February 27, 2012
February 14, 2012	August 27, 2012

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on August 27, 2012. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

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

Sincerely,

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

MRV/YD/eg

cc: Mr. Steven Granado, P.E., Jacobs Engineering
Mr. Roy Goddard, City of Garden Ridge
Mr. Tom Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 8, 2011

Ms. Sandra Johnson
Forest of Garden Ridge IV
18618 Tuscany Stone, Suite 100
San Antonio, TX 78258

Re: Edwards Aquifer Protection Program, Comal County

Name of Project: Forest of Garden Ridge Unit IV; Located on Bat Cave road near the intersection at Schoenthal Road, Garden Ridge ETJ, Texas

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

Edwards Aquifer Protection Program San Antonio File No. 2753.03; Investigation No. 899412
Regulated Entity No. RN105390637

Dear Ms. Johnson:

On February 16, 2011, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration are as follows:

Date of Original Approval:	February 27, 2008
Date of Expiration:	February 27, 2010
Date Extension Request Received	Date of Extension Expiration
February 9, 2010	August 27, 2010
August 11, 2010	February 27, 2011
February 16, 2011	August 27, 2011

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activities or approved plan for the regulated activities have changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on August 27, 2011. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

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

Sincerely,

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

MRV/cf

cc: Mr. Billy Classen, P.E., Jacobs Engineering
Mr. Roy Goddard, City of Garden ridge
Mr. Tom Hornseth, P.E., Comal County
Mr. Karl Dreher, General Manager, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

September 20, 2010

Ms. Sandra Johnson
Forest of Garden Ridge IV
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Forest at Garden Ridge Unit IV; Located on Bat Cave Road near the intersection at Schoenthal Road, Garden Ridge ETJ, Texas
TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program File No. 2753.02, Investigation No. 849369
Regulated Entity Number: RN105390637

Dear Ms. Johnson:

On August 11, 2010, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is enclosed.

Date of Original Approval:	February 27, 2008
Date of Expiration:	February 27, 2010
Date Extension Request Received	Date of Extension Expiration
February 9, 2010	August 27, 2010
August 11, 2010	February 27, 2011

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or

modifications to the originally approved plan. This request for extension expires on February 27, 2011. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Ms. Stacy Tanner of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 403-4078.

Sincerely,

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

MRV/SMT/eg

cc: Mr. Billy K. Classen, P.E., Jacobs Engineering
Mr. Roy Goddard, City of Garden Ridge
Mr. Tom Hornseth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, MC 212

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

I A. Bradford Galo,
Print Name

Managing Partner,
Title - Owner/President/Other

of Laredo GFG Development, Ltd.,
Corporation/Partnership/Entity Name

have authorized Billy K. Classen, P.E.
Print Name of Agent/Engineer

of Jacobs 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 applicants who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.

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

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

Applicant's Signature

2/10/11
Date

THE STATE OF Texas §
County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared A Bradford Gale 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 10 day of February 2011

Adrienne B. Martinez
NOTARY PUBLIC

ADRIENNE B. MARTINEZ
MY COMMISSION EXPIRES
September 26, 2013

Adrienne B. Martinez
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 9-26-2013

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

NAME OF PROPOSED REGULATED ENTITY: Forest of Garden Ridge IV
REGULATED ENTITY LOCATION: Northwest of the intersection of Bat Cave Rd. and Blazing Star Trail
NAME OF CUSTOMER: Laredo GFG Development, Ltd.
CONTACT PERSON: Sandra Johnson PHONE: 210-497-3385 X115
(Please Print)

Customer Reference Number (if issued): CN 602612616 (nine digits)

Regulated Entity Reference Number (if issued): RN 105390637 (nine digits)

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

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

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

☐ **Austin Regional Office**

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

☒ **San Antonio Regional Office**

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

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

Type of Plan	Size	Fee Due
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$150.00

Signature

2/9/11
Date

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

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

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

Water Pollution Abatement Plans and Modifications
Contributing Zone Plans and Modifications

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

PROJECT	FEE
Exception Request	$500

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$150

TCEQ

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

☒ Yes ☐ No — WPAP Extension Request Forms

3. Customer Reference Number *(If Issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(If Issued)*
CN 602612616		RN 105390637

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COUNTY ENGINEER

SECTION II: Customer Information

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

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:

City | State | ZIP | ZIP + 4

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

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

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

20. Number of Employees

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

21. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

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

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

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

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

The Forest of Garden Ridge IV

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	18618 Tuscany Stone, Suite 100							
	City	San Antonio	**State**	TX	**ZIP**	78258	**ZIP + 4**	
25. Mailing Address:								
	City		**State**		**ZIP**		**ZIP + 4**	

26. E-Mail Address:	sandraj@galoproperties.com		
27. Telephone Number	**28. Extension or Code**	**29. Fax Number** *(if applicable)*	
(210) 497-3385	115	(210) 495-2587	
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)
9532	1521		

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

Residential Development

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COUNTY ENGINEER

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

35. Description to Physical Location:	Northwest of the intersection of Bat Cave Rd. and Blazing Star Trail

36. Nearest City	**County**	**State**	**Nearest ZIP Code**
Garden Ridge	Comal	TX	78266

37. Latitude (N) In Decimal:	29.6275501		**38. Longitude (W) In Decimal:**	-98.3148193	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	37	39	98	18	53

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

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

SECTION IV: Preparer Information

40. Name:	Billy K. Classen, P.E.	**41. Title:**	Project Manager

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

SECTION V: Authorized Signature

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

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

Company:	Laredo GFG Development, Ltd.	**Job Title:**	
Name *(In Print)*:		**Phone:**	(210)807 5115
Signature:		**Date:**	2/14/11

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FEB 25 2011
COUNTY ENGINEER

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

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

Regulated Entity Name: Forest of Garden Ridge IV

Customer (Applicant):	Laredo GFG Development, Ltd.		
Contact Person:	Sandra Johnson		
Entity:	Forest of Garden Ridge IV		
Mailing Address:	18618 Tuscany Stone, Suite 100		
City, State:	San Antonio, Texas	Zip:	78258
Telephone:	210-497-3385 X115	FAX:	210-495-2587
Agent:	Jacobs Engineering		
Contact Person:	Billy K. Classen, P.E.		
Mailing Address:	911 Central Parkway North, Suite 425		
City, State:	San Antonio, Texas	Zip:	78232
Telephone:	210-494-0088	FAX:	210-494-4525

2. X **ATTACHMENT A - Approval Letter or Extension Approval.** Attach a copy of the last approval letter or the last approved extension.
   Date of letter: September 20, 2010
   Expiration date: February 27, ~~2010~~ 2011

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

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

Sandra Johnson
Print Name of Customer/Agent

Signature of Customer/Agent

2/9/11
Date

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

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

Edwards Aquifer Protection Plan Extension Request

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

X ATTACHMENT A - Approval Letter or Extension Approval

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

X Application Fee Form (*TCEQ-0574*)

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

X Core Data Form (*TCEQ-10400*)

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 5, 2010

Ms. Sandra Johnson
Forest of Garden Ridge IV
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Forest at Garden Ridge Unit IV; Located on Bat Cave Road near the intersection at Schoenthal Road, Garden Ridge ETJ, Texas
TYPE OF PLAN: Request for Extension of Time to Commence Regulated Activities Authorized by a Water Pollution Abatement Plan (WPAP); 30 Texas Administrative Code (TAC) Chapter 213 Edwards Aquifer
Edwards Aquifer Protection Program File No. 2753.01, Investigation No. 792388
Regulated Entity Number: RN105390637

Dear Ms. Johnson:

On February 9, 2010, the Texas Commission on Environmental Quality (TCEQ) received your request for an extension of time to commence regulated activities related to the above referenced WPAP approval. The request has been reviewed for compliance with 30 TAC §213.4(h) and §213.13 which set forth the procedures for requesting an extension of time to commence regulated activities authorized by the approval and was found to be in general agreement with these procedures. Therefore, the request for an extension to the term of approval for the referenced project is granted. A summary of the dates of approval and expiration is enclosed.

Date of Original Approval:	February 27, 2008
Date of Expiration:	February 27, 2010
Date Extension Request Received	Date of Extension Expiration
February 9, 2010	August 27, 2010

The request and fee were received in compliance with 30 TAC §213.4(h) and §213.13. As indicated in the rules, an extension may not be granted if the proposed regulated activity or approved plan for the regulated activity has changed. As understood, there will be no changes or modifications to the originally approved plan. This request for extension expires on August 27, 2010. Should construction not commence before the end of the six (6) month period, another request for extension would be required to keep the Edwards Aquifer Protection Plan validated.

If you have any questions or require additional information, please contact Ms. Stacy Tanner of the Edwards Aquifer Protection Program with the San Antonio Regional Office at (210) 403-4078.

Sincerely,

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

MRV/SMT/adj

cc: Ms. Natasha Uhlrich, P.E., Jacobs Engineering
Mr. Roy Goddard, City of Garden Ridge
Mr. Tom Hornesth, P.E., Comal County
Mr. Karl J. Dreher, Edwards Aquifer Authority
TCEQ Central Records, MC 212

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 9, 2008

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

Re: Edwards Aquifer, Comal County
PROJECT NAME: Forest of Garden Ridge Unit IV, located on FM 2252 approximately 2 miles north of the intersection of FM 2252 and FM 3009, Garden Ridge, 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: 2754.00

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 February 8, 2008.

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

Sincerely

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

LMB/eg

WATER POLLUTION ABATEMENT PLAN

FOR

FOREST OF GARDEN RIDGE

IV

December 2007

JACOBS Carter Burgess

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

Water Pollution Abatement Plan Checklist

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

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

3 Water Pollution Abatement Plan Application Form (*TCEQ-0584)*
- ATTACHMENT A - Factors Affecting Water Quality
- ATTACHMENT B - Volume and Character of Stormwater
- ATTACHMENT C - Suitability Letter from Authorized Agent (if OSSF is proposed)
- ATTACHMENT D - Exception to the Required Geologic Assessment (if requesting an exception)
- Site Plan

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

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

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

7 Application Fee Form (*TCEQ-0574*)

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

9 Core Data Form (*TCEQ-10400)*

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

REGULATED ENTITY NAME: Forest of Garden Ridge IV
COUNTY: Comal STREAM BASIN: Cibolo Creek

EDWARDS AQUIFER:
X RECHARGE ZONE
X TRANSITION ZONE

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

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Carlos Sandavol
Entity: Laredo GFG Development, Ltd.
Mailing Address: 18618 Tuscany Stone, Suite 100
City, State: San Antonio, TX Zip: 78258
Telephone: (210) 497-3385 FAX: (210) 495-2587

Agent/Representative (If any):

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

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 Garden Ridge, TX.
__ This project is not located within any city's limits or ETJ.

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

Located on Fm 2252 approx. 2 miles N of the intersection of FM 2252 and FM 3009.

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:

PROHIBITED ACTIVITIES

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

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

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

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

ADMINISTRATIVE INFORMATION

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

X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site

where regulated activities will occur.

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

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

__ A Contributing Zone Plan.

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

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

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

__ TCEQ cashier

__ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)

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

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

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

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

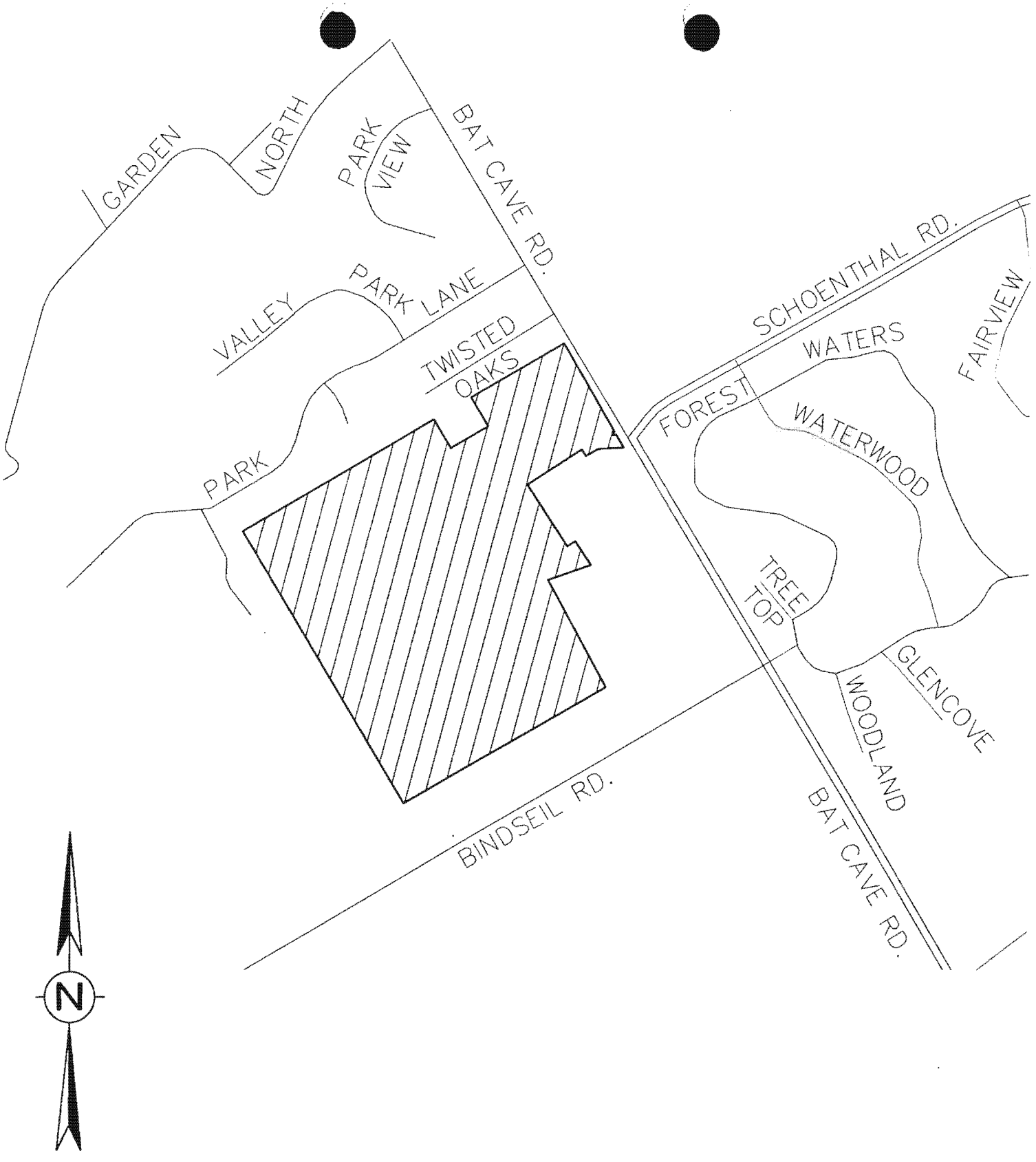
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **GENERAL INFORMATION FORM** is hereby submitted for TCEQ review. The application was prepared by:

Mark Kastner, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

Signature of Customer/Agent — Date: 12/19/07

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.



Carter :: Burgess

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

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

FOREST OF GARDEN RIDGE IV

LOCATION MAP

DRAWN BY: JDV CHECKED BY: JDV

DATE: 7/17/07 PROJECT NO.: 310302.022

SHEET 1 OF 1

ATTACHEMENT C – PROJECT DESCRIPTION

Form 0587

The Forest of Garden Ridge – Unit IV is a single family residential development situated on approximately 107.1 acres. The project is located off Bat Cave Rd. near the intersection at Schoenthal Rd, within the city limits of Garden Ridge, Comal County, Texas. A portion of the site lies within the Edwards Aquifer Recharge Zone, and the remainder of the site lies within the Edwards Aquifer Transition Zone. The proposed development consists of approximately 103 lots, with supporting streets, park area, and infrastructure. No portion of the proposed site lies within the limits of the 100-year floodplain.

The residential lots are a minimum of 0.75 acres. The impervious cover was calculated using a structure size of 3000 square feet with a driveway of 1700 square feet. As such, the amount of impervious cover increase for the site will be less than 20%, thus eliminating the need for permanent BMP's.

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BAT CAVE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

RECHARGE ZONE

RECHARGE ZONE

PROJECT SITE

TRANSITION ZONE

Mapped by the Army Map Service
Edited and published by the Geological Survey

Control by USGS, NOS/NOAA, and USCE

Topography by photogrammetric methods from aerial photographs taken 1952. Field annotated 1953. Revised by Geological Survey from aerial photographs taken 1966. Field checked 1967.

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

Fine red dashed lines indicate selected fence lines

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

UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

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

ROAD CLASSIFICATION

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

BAT CAVE, TEX.
N2937.5–W9815/7.5

1967
PHOTOREVISED 1973
AMS 6343 III-NE-SERIES V882

2 28-424

GEOLOGIC ASSESSMENT
(WPAP)

FOREST OF GARDEN RIDGE IV
107 ACRE TRACT
GARDEN RIDGE, TEXAS

FROST GEOSCIENCES, INC.
PROJECT NO.: FGS-E07 401
DECEMBER 5, 2007

Prepared exclusively for

Laredo GFG Development, Ltd.
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Jacobs Carter Burgess
911 Central Parkway North, Suite 425
San Antonio, Texas 78232

Frost GeoSciences
Construction Materials ▪ Forensics
Environmental ▪ Geotechnical

Frost GeoSciences
Construction Materials ▪ Forensics
Environmental ▪ Geotechnical

Frost Geosciences, Inc.
13402 Western Oak
Helotes, Texas 78023
Office (210)-372-1315
Fax (210)-372-1318

December 5, 2007

Laredo GFG Devlopment, Ltd.
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Attn: Mr. Carlos Sandavol

Jacobs Carter Burgess
911 Central Parkway North, Suite 425
San Antonio, Texas 78232

Attn: Ms. Natasha F. Ulrich

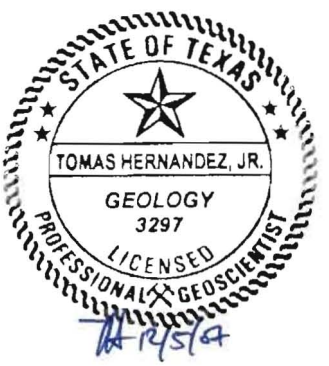
SUBJECT:
Geologic Assessment
Forest of Garden Ridge IV
107 Acre Tract
Garden Ridge, Texas
FGS Project Nº FGS-E07 401

Dear Mr. Sandavol:

Frost GeoSciences, Inc., (FGS) is pleased to submit the enclosed Geologic Assessment completed for the above referenced Site as it relates to 30 TAC §213.5(b)(3), effective September 11, 2003. Our investigation was conducted, and this report was prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04).

If you have any questions regarding this report, or if Frost GeoSciences, Inc. may be of additional assistance to you on this project, please feel free to call our office. It has been a pleasure to work with you and we wish to thank you for the opportunity to be of service to you on this project. We look forward to being of continued service.

We appreciate the opportunity to perform these services for Laredo GFG Development, Ltd. Please contact the undersigned if you have questions regarding this report.



Respectfully submitted,
Frost GeoSciences, Inc.

Tomas Hernandez, Jr., P.G.
Project Geologist

Copies Submitted: (6) Mr. Carlos Sandavol; Laredo GFG Development, Ltd.
(1) CD Copy

TABLE OF CONTENTS

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: Forest of Garden Ridge IV

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

LOCATION OF PROJECT: _X_ Recharge Zone __ Transition Zone _X_ 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 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	D	1-2
Medlin-Eckrant association	D	1-2
Krum clay	D	2-3

* 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" = 200 '
Site Geologic Map Scale	1" = 200 '
Site Soils Map Scale (if more than 1 soil type)	1" = 200 '

6. Method of collecting positional data:

_X_ Global Positioning System (GPS) technology.
____ Other method(s).

7. _X_ The 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 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 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 __1__(#) wells present on the Site and the locations are shown and labeled. (Check all of the following that apply.)
__ The wells are not in use and have been properly abandoned.
__ The wells are not in use and will be properly abandoned.
__ The wells are in use and comply with 16 TAC Chapter 76.

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

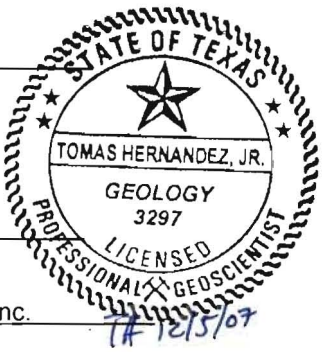
ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: November 30, 2007 and December 3, 2007
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.

Tomas Hernandez, Jr., P.G.
Print Name of Geologist



Signature of Geologist

210-372-1315
Telephone

210-372-1318
Fax

December 5, 2007
Date

Representing: Frost Geosciences, 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.

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GEOLOGIC ASSESSMENT TABLE | **PROJECT NAME: Forest of Garden Ridge IV**

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)	TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29° 38' 25.1"	98° 19' 12.1"	SC	20	Kbu	1	1	2					OF	5					Hilltop
S-2	29° 38' 20.4"	98° 19' 20.9"	MB	30	Kbu	4	3							10					Hilltop
S-3	29° 38' 6.37"	98° 19' 14.9"	CD	5	Kbu	3	3	1					OFC	5					Hillside
S-4	29° 38' 6.19"	98° 19' 24.1"	F	20	Kbu/Kdr	1,700	?	?	NE	10			F						Hillside
S-11	29° 38' 1.25"	98° 19' 17.6"	CD	5	Kbu	4	5	1.5					OFC	5					Hillside
S-12	29° 38' 5.9"	98° 19' 12.2"	CD	5	Kbu	4	4	1.5					OFC	5					Hillside

Datum: NAD 27

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, Floodplain, Streambed

STATE OF TEXAS
TOMAS HERNANDEZ, JR.
GEOLOGY
3297
LICENSED
PROFESSIONAL GEOSCIENTIST

I have read, I understood, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists.
The information presented here complies with that document and is a true representation of the conditions observed in the field.
My signature certifies that I am qualified as a geologist as defined by 30 TAC 213

Tomas Hernandez, Jr. P.G.

Date December 5, 2007

Sheet 1 of 1

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

12/5/07

STRATIGRAPHIC COLUMN

Hydrogeologic subdivision			Group, formation, or member			Hydrologic function	Thickness (feet)	Lithology	Field identification	Cavern development	Porosity/ permeability type
Upper Cretaceous	Upper confining unit		Taylor Group			CU	600	Clay; chalky limestone	Gray-brown clay; marly limestone	None	Low porosity/ low permeability
			Austin Group			CU; rarely AQ	130 – 150	White to light-tan to gray limestone	White, chalky limestone; *Pycnodonte aucella Inoceramus subquadratus*	None	Low porosity; rare water production from fractures/ low permeability
			Eagle Ford Group			CU	30 – 50	Brown, flaggy sandy shale and argillaceous limestone	Thin flagstones; petroliferous	None	Primary porosity lost/ low permeability
			Buda Limestone			CU	40 – 50	Buff, light-gray, dense mudstone	Porcelaneous limestone	Minor surface karst	Low porosity/ low permeability
			Del Rio Clay			CU	50 – 60	Blue-green to yellow-brown clay	Fossiliferous; *Hyatatogyra arietina*	None	None/primary upper confining unit
Lower Cretaceous	I	Edwards aquifer	Georgetown Formation			CU	40 – 60	Gray to light-tan, marly limestone	Marker fossil: *Waconella wacoensis*	None	Low porosity/ low permeability
	II		Edwards Group	Person Formation	Cyclic and marine members, undivided (4)	AQ	0 – 70	Mudstone to packstone; *miliolid* grainstone; chert	Boxwork vugs; light tan, massive; some *Toucasia*, *Caprinid*, and *Chondrodonta*	Many caves; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding; one of the most porous and permeable; essentially absent in Travis County
	III				Leached and collapsed members, undivided (4)	AQ	30 – 80	Crystalline limestone; mudstone to wackestone to *miliolid* grainstone; chert; collapsed breccia	Light-gray, bioturbated iron-stained beds separated by massive limestone beds; *Toucasia*, *Chondrodonta*	Extensive lateral development; large rooms	Majority not fabric/ one of the most porous and permeable
	IV				Regional dense member (3)	CU	20 – 30	Light-tan, dense, argillaceous mudstone	Wispy iron-oxide stains; *Pleuromya knowltoni*, *Ceratostreon texanum*	None; only vertical fracture enlargement	Not fabric/ low permeability; vertical barrier
	V			Kainer Formation	Grainstone member (2)	AQ	45 – 60	Light-gray, *miliolid* grainstone; mudstone to wackestone; chert	White crossbedded grainstone; *Toucasia*, *Turritella*, and *Chondrodonta*	Few caves	Not fabric/ recrystallization reduces permeability
	VI				Kirschberg evaporite member (1)	AQ	65 – 75	Light-grey, crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame; *Cladophyllia* and *Turritella*	Probably extensive cave development	Majority fabric/ one of the most porous and permeable
	VII				Dolomitic member (1)	AQ	110 – 150	Mudstone to grainstone; crystalline limestone; chert	Massively bedded, light gray, *Toucasia* abundant; *Dicyoconus walnutensis*, *Caprinid*	Caves related to structure or bedding planes	Mostly not fabric; some bedding-plane fabric/ water-yielding; locally permeable
	VIII				Basal nodular member	Karst AQ; not karst CU	45 – 60	Shaly, fossiliferous, nodular limestone; mudstone; *miliolid* grainstone	Massive, nodular and mottled; *Ceratostreon texanum*, *Dicyoconus walnutensis*, and *Texigryphaea*	Few caves	Fabric/low permeability
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350 – 500	Yellowish-tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds/ relatively impermeable

LOCATION

The Site is located at the intersection of Bat Cave Road and Schoenthal Road in Garden Ridge, Texas. The Site is approximately 107 acres in size. The center of the Site is located at approximately N29° 38' 11.85" Latitude and W98° 19' 19.81" Longitude (WGS 84).

METHODOLOGY

The Geologic Assessment was performed by Mr. Hugo Stolte, Mr. Brian Culver, Ms. Taylor Bickford, and Mr. Tomas Hernandez, Jr., P.G., with Frost GeoSciences, Inc., on November 30, 2007 and December 3, 2007. Frost GeoSciences, Inc. researched the geology of the area surrounding Site. The research included, but was not limited to, the Geologic Atlas of Texas, San Antonio Sheet, FEMA maps, Edwards Aquifer Recharge Zone Maps, USGS 7.5 Minute Quadrangle Maps, and the USDA Soil Survey of Bexar County, Texas.

After reviewing the available information, a field investigation was performed to identify any geologic or man made potential recharge features. A transect spacing of approximately 25 feet, or less depending on vegetation thickness, was used to inspect the project site. A 2005 aerial photograph, in conjunction with a hand held Garmin eTrex Summit Global Positioning System with an Estimated Potential Error ranging from 10 to 18 feet, was used to navigate on the property and identify the locations of potential recharge features, as recommended in the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The Geologic Assessment Form, Stratigraphic Column, and the Geologic Assessment Table have been filled with the appropriate information for this Site and are included on pages 1-4 of this report.

NARRATIVE DESCRIPTIVE OF SITE GEOLOGY

The Site center of the Site is dominated by a grassy pasture in a low topographic area. The remainder of the Site is dominated by a dense stand of vegetative cover consisting primarily of live oak, Texas persimmon and ash trees. Underlying the soil cover in the northwestern portion of the Site is the Del Rio Clay. The Del Rio Clay is a calcareous and gypsiferous, blocky medium gray clay. Typically, this formation becomes less calcareous and more gypsiferous near the upper contact. Often contains thin lenticular beds of highly calcareous siltstone. Pyrite nodules are common. Marine megafossils include abundant *Exogyra arientina* and other pelecypods. The Del Rio Clay weathers to light gray or yellowish gray. Overall thickness ranges from 60 to 120 feet.

Underlying the soil cover in the remainder of the Site is the Buda Limestone Formation. The Buda Limestone is a light gray to pale orange, fine grained, hard, massive, bioclastic limestone. This limestone is poorly bedded to nodular in the lower section and thinner bedded and argillaceous near the upper contact. It commonly contains glauconitic and pyritiferous zones, and burrows filled with chalky marl. Pelecypods are abundant throughout the section. The Buda Limestone weathers to dark gray or brown. Overall thickness ranges from 60 to 100 feet.

According to the Geologic Map of the New Braunfels, Texas, 30 X 60 minute Quadrangle published by the University of Texas At Austin Bureau of Economic Geology (2000), an inferred

fault exists across the southern portion of the Site. No visible faulting was observed during the field reconnaissance.

A water well was noted adjacent to the residential house on the northern portion of the Site. No other significant observations were noted across the project area during the site reconnaissance.

SITE SPECIFIC GEOLOGIC FEATURE DESCRIPTIONS

S-1 SC: Solution Cavity: A solution cavity, approximately 1 foot by 1 foot by 2 feet in size was observed on the northeastern portion of the Site. The SC appeared to be an animal burrow containing soil and organic infill material.

S-2 MB: Manmade feature in bedrock: Water well, located near the residential house on the northern portion of the property. If not utilized, this well must be plugged and abandoned in accordance with State law.

S-4 F: Fault: According to the Geologic Map of the New Braunfels, Texas, 30 X 60 minute Quadrangle published by the University of Texas At Austin Bureau of Economic Geology (2000), an inferred fault exists across the southern portion of the Site. No visible faulting was observed during the field reconnaissance.

S-3 CD" Closed Depression: A closed depression, approximately 3 feet by 3 feet by 1 foot in size was observed on the Site. The CD was observed as having soil and organic infill material.

S-11 CD" Closed Depression: A closed depression, approximately 4 feet by 5 feet by 2.5 feet in size was observed on the Site. The CD was observed as having soil and organic infill material. It appears as though the CD was a result of a tree or boulder pluck along a road.

S-12 CD" Closed Depression: A closed depression, approximately 4 feet by 4 feet by 1.5 feet in size was observed on the Site. The CD was observed as having soil and organic infill material. It appears as though the CD was a result of a tree or boulder pluck along a road.

Based on a visual inspection of the ground surface, the overall potential for fluid flow from the Site into the Edwards Aquifer appears to be low based on the appearance of the surface of the Site.

SOIL DESCRIPTION

The site has soil cover of approximately one to three feet, consisting of the following soil associations:

Comfort-Rock outcrop complex, 1 to 8 percent slopes (CrD) – The Comfort series consists of well drained, slowly permeable soils that formed in clayey residuum over dolomitic limestone rocks of the Lower Cretaceous period. These soils are on nearly level to sloping upland plateaus and ridges. Slopes range from 0 to 8 percent.

Krum Clay, 1 to 3 and 3 to 5 percent slopes (KrB, KrC) – The Krum series consists of very deep, well drained, moderately slowly permeable soils that formed in calcareous clayey sediments. These soils are on nearly level to moderately sloping terraces and lower slopes of valleys. Slopes range from 0 to 8 percent.

Medlin-Eckrant association, 1 to 8 and 8 to 30 percent slopes (MEC, MED) – The Medlin series consists of deep, well-drained, very slowly permeable soils that formed in clayey marine sediments. These soils are on narrow stream divides and slopes along drainage-ways. Slopes range from 1 to 20 percent. The Eckrant series consists of very shallow and shallow, well drained, moderately slow permeable soils formed in residuum over interbedded limestone, marls and chalk. These upland soils have slopes ranging from 0 to 60 percent.

RESEARCH

7.5 Minute Quadrangle Map Review

According to the USGS 7.5 Minute Quadrangle Map, Bat Cave, Texas, the elevation of the Site ranges from 880 feet to 1000 feet. These elevations are calculated above mean sea level (AMSL). Surface runoff from the Site appears to flow to the southwest towards Cibolo Creek.

Recharge / Transition Zone Map Review

According to the Official Edwards Aquifer Recharge Zone Map, USGS 7.5 Minute Quadrangle, Bat Cave, Texas Map, a portion of the western Site is located within the Recharge Zone of the Edwards Aquifer. The remainder of the Site is located in the Transition Zone of the Edwards Aquifer.

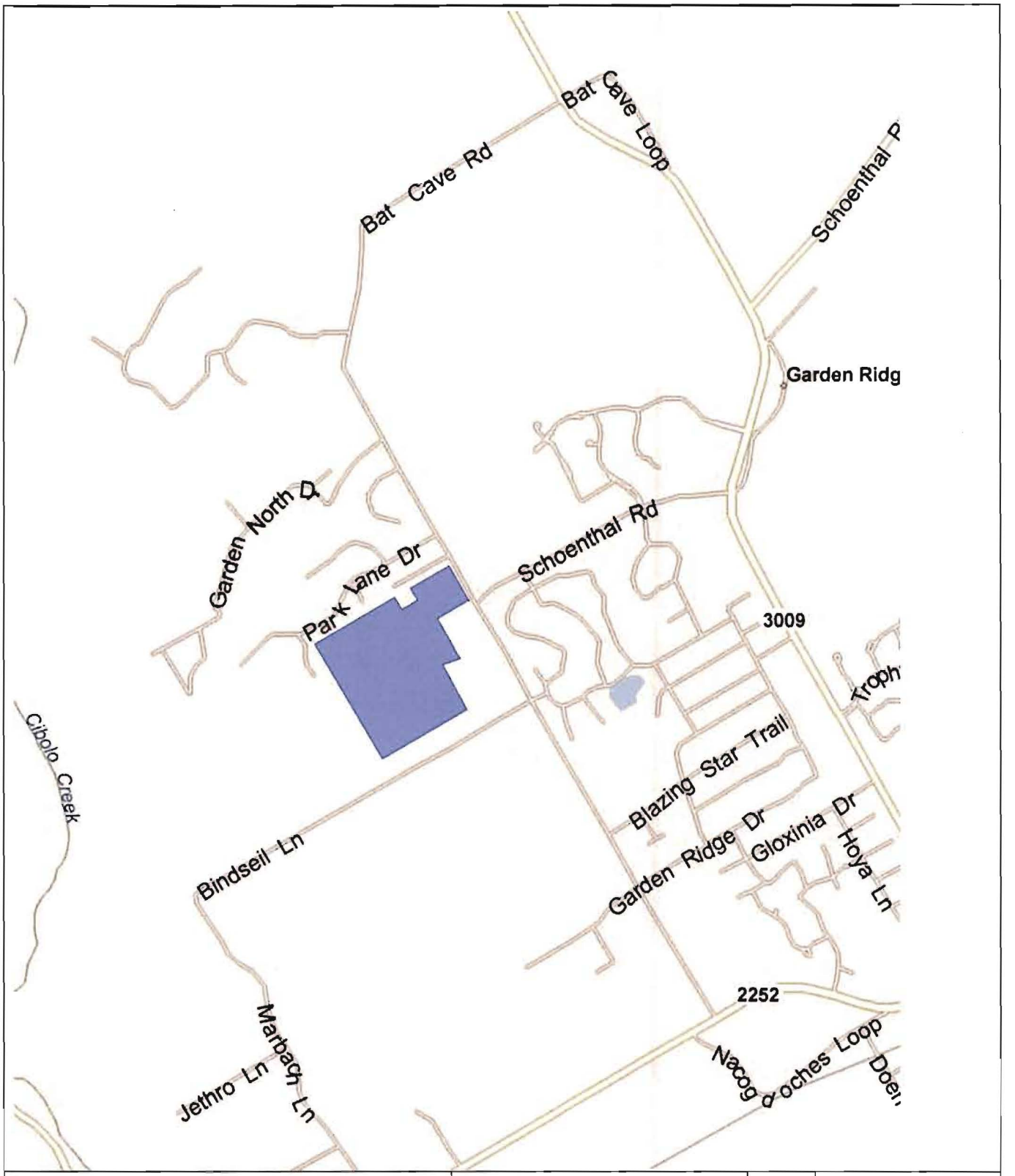
Floodplain Review

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for unincorporated areas of Comal County, Texas, Community Panel Number 4854630095 D (Revised July 17, 1995) was reviewed. The Site is located in Zone X. Zone X are areas determined to be outside the 500-year floodplain. The Site does not appear to be in a special flood zone.

REFERENCES

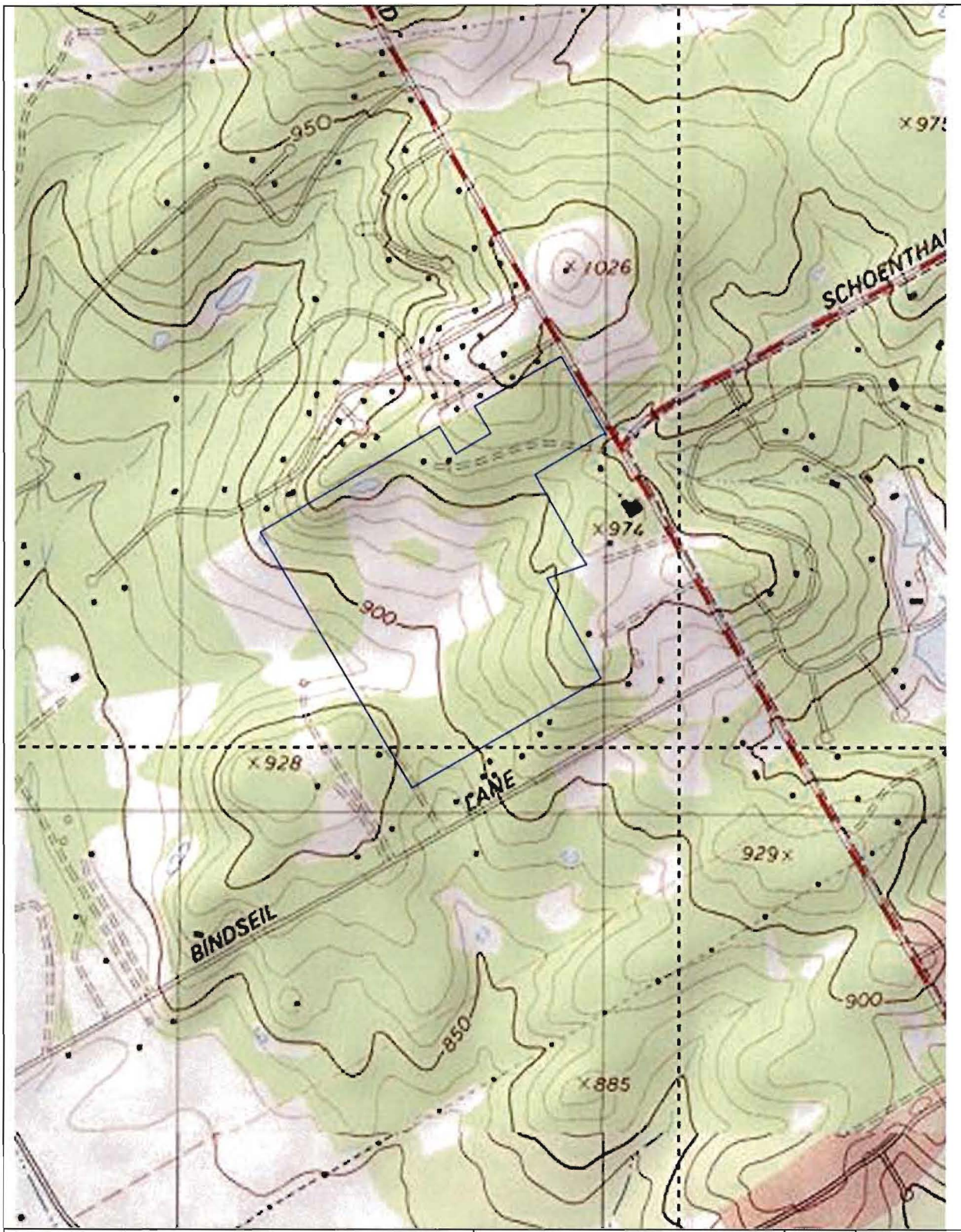
1. USGS 7.5 Minute Quadrangle Map, Helotes, Texas 1992.
2. Edwards Underground Water District Reference Map.
3. Official Edwards Aquifer Recharge Zone Map, Helotes, Texas.
4. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas.
5. US Geological Survey Water Resources Investigations 95-4306.
6. Geologic Atlas of Texas, San Antonio Sheet (1982), Bureau of Economic Geology.
7. Federal Emergency Management Agency (FEMA), February 16, 1996, Comal County, Texas and Incorporated Areas, Flood Insurance Rate Map (FIRM), Panel 4854630095D FEMA.
8. USDA Soil Conservation Service, Soil Survey website, http://websoilsurvey.nrcs.usda.gov/app/
9. TCEQ-0585-Instructions (Rev. 10-1-04). "Instructions to Geologists for Geologic"

FIGURES



VICINITY MAP	DRAWING NOT TO SCALE	N↑	FIGURE 3

FGS Project Nº FGS-E07401

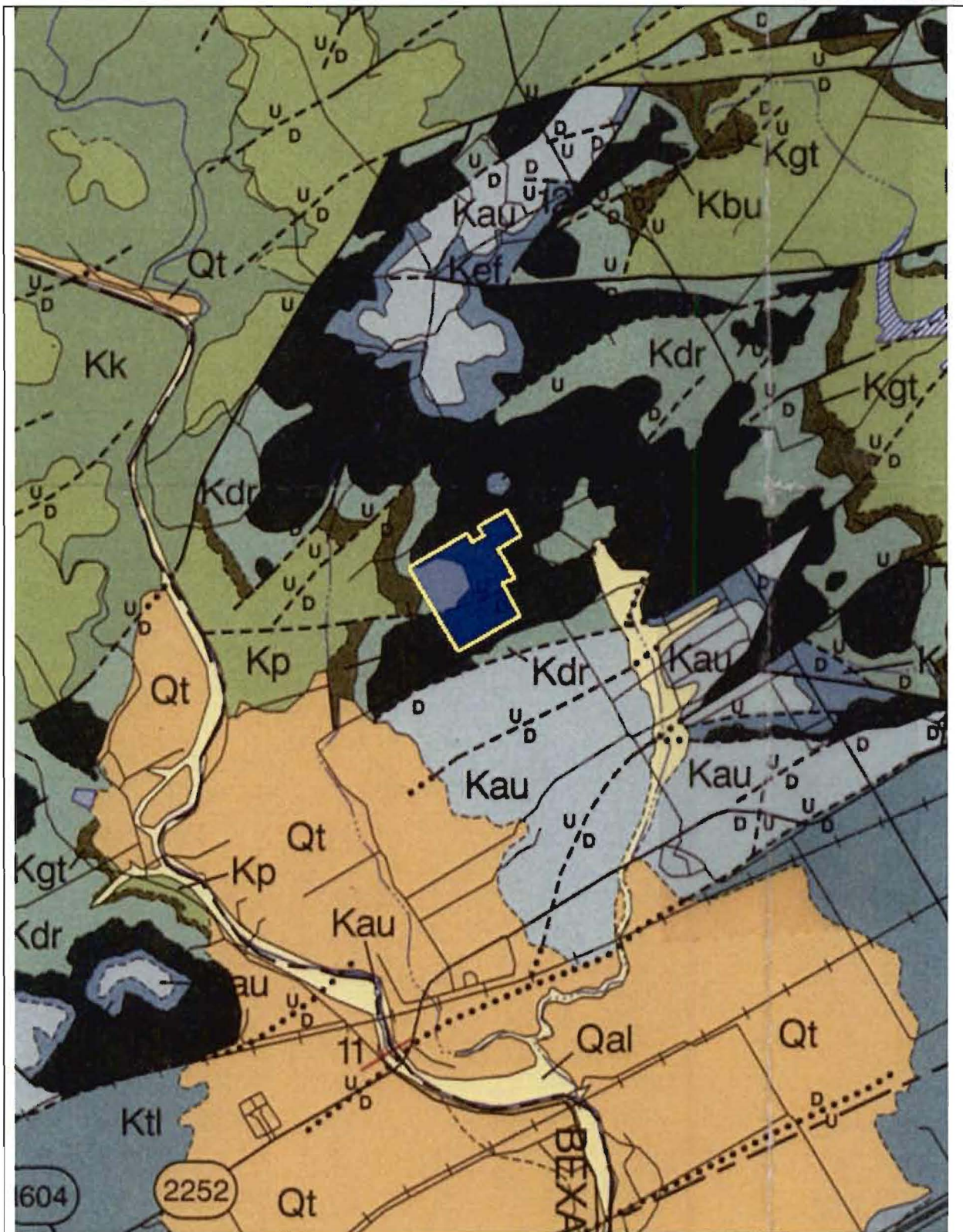


TOPOGRAPHIC MAP	DRAWING NOT TO SCALE	N↑	FIGURE 4

FGS Project Nº FGS-E07401

AERIAL PHOTOGRAPH	DRAWING NOT TO SCALE	N↑	FIGURE 5

FGS Project Nº FGS-E07401



GEOLOGIC MAP New Braunfels Quadrangle	DRAWING NOT TO SCALE	N↑	FIGURE 6

FGS Project Nº FGS-E07401

APPENDIX A

SITE PHOTOGRAPHS

Photo #1 – Photo view of S-1

Photo #2 – Photo view of S-2

Photo #3 – Photo view of S-3

Photo #4 – Photo view of S-11

Photo #5 – Photo shows the cleared material surrounding S-11

Photo #6 – Photo view of S-12

Photo #7 – Alternate photo view of S-12

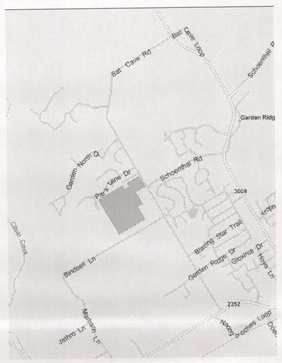
Photo #8 – Photo view is of the ground surface on the northwestern portion of the Site, the Del Rio Clay Formation

Photo #9 – Photo shows the grassy low towards the center of the Site; photo taken from the house

Photo #10 – Photo view is to the south across the grassy area

Photo #11 – Photo view is to the west across the grassy area.

Photo #12 – Photo view is of the wooded area characteristic of the perimeter of the Site



Location Map

Legend

MEC: Medlin-Eckrant association, 1 to 8 percent slopes

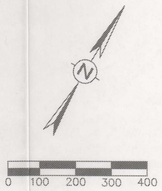
MED: Medlin-Eckrant association, 8 to 30 percent slopes

KrB: Krum clay, 1 to 3 percent slopes

KrC: Krum clay, 3 to 5 percent slopes

CrD: Comfort-Rock outcrop complex, 1 to 8 percent slopes

Site Boundary



0 100 200 300 400

Scale: 1" = 200'

REVISIONS:

STATE OF TEXAS
TOMAS HERNANDEZ, JR.
GEOLOGY
3297
LICENSED
PROFESSIONAL GEOLOGIST

Frost GeoSciences
Construction Materials • Forensics
Environmental • Geotechnical

Soil Map

Forest of Garden Ridge, IV
107 Acres
Garden Ridge, Texas

Site Geologic Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone

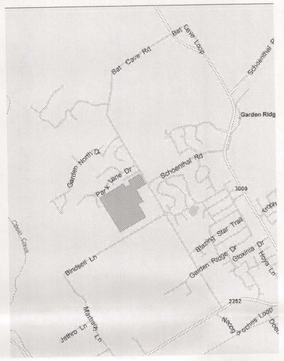
JOB NO. FGS-E07401

DATE 12/03/07

DESIGNER

CHECKED TH DRAWN TAB

SHEET 2 of 2



Location Map

Legend

Kdr - Del Rio Clay

Kbu - Buda Limestone

S# - Potential Recharge Feature
(Sensitive Features in Red)

(C) Cave

(SC) Solution Cavity

(SF) Solution-enlarged Fractures

(MB) Manmade Feature in Bedrock

(SW) Swallow Hole

(SH) Sinkhole

(CD) Non-karst Closed Depression

(Z) Zone, Clustered, or Aligned Features

Site Boundary

Edwards Aquifer Recharge Zone

Edwards Aquifer Contributing Zone Within Transition Zone

Inferred Fault
U = Upthrown Block
D = Downthrown Block

Geologic Formation Contact

Geologic Information Obtained From:
Geologic Map of New Braunfels, Texas
30 x 60 Minute Quadrangle (2000)

Recharge Information Obtained From:
Edwards Aquifer Recharge Zone Map, USGS
7.5 Minute Quadrangle, Bat Cave, Texas

0 100 200 300 400

Scale: 1" = 200'

REVISIONS:

STATE OF TEXAS
TOMAS HERNANDEZ, JR.
GEOLOGY
3297
LICENSED
PROFESSIONAL GEOSCIENTIST
12/7/07

Frost GeoSciences
Construction Materials • Forensics
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Site Geologic Map

Forest of Garden Ridge, IV
107 Acres
Garden Ridge, Texas

Site Geologic Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone

JOB NO. FGS-E07401

DATE 12/03/07

DESIGNER

CHECKED TH DRAWN TAB

SHEET 1 of 2

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: Forest of Garden Ridge IV

REGULATED ENTITY INFORMATION

1. The type of project is:
   - X Residential: # of Lots: 103
   - ___ Residential: # of Living Unit Equivalents:
   - ___ Commercial
   - ___ Industrial
   - ___ Other:

2. Total site acreage (size of property): Approximate overall site= 107.14 acres

3. Projected population: 361 residents

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	309,000	÷ 43,560 =	7.09
Parking	175,100	÷ 43,560 =	4.02
Other paved surfaces	336,238	÷ 43,560 =	7.72
Total Impervious Cover	820,338	÷ 43,560 =	18.83
Total Impervious Cover ÷ Total Acreage x 100 =			17.6%

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

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

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

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

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

__ Concrete
__ Asphaltic concrete pavement
__ Other:

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

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

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

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

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

13. **ATTACHMENT B - Volume and Character of Stormwater.** A description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

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

X	% Domestic	100 gallons/day (See Appendix)
__	% Industrial	_____ gallons/day
__	% Commingled	_____ gallons/day
	TOTAL	100 gallons/day

15. Wastewater will be disposed of by:
X **On-Site** Sewage Facility (OSSF/Septic Tank):
ATTACHMENT C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.
X 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" = 200 '.

18. 100-year floodplain boundaries

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

X No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): Panel 140 (Bexar County) Map No. 48029C8140 E
Dated: February 16, 1996

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

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

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

X There is 1 (#) well present on the project site and the locations are shown and labeled. (Check all of the following that apply)

__ The wells are not in use and have been properly abandoned.

__ The wells are not in use and will be properly abandoned.

__ The wells are in use and comply with 30 TAC §238.

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

21. Geologic or manmade features which are on the site:

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

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

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

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

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

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

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

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

26. NA Surface waters (including wetlands).

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

ADMINISTRATIVE INFORMATION

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

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

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

Mark Kastner, P.E.
Jacobs Carter Burgess
Print Name of Customer/Agent

Signature of Customer/Agent

12/19/07
Date

Attachment A – Factors Affecting Water Quality **Form 0584**

Potential Sources of Pollutants During Construction

1. Soil erosion due to construction.
2. Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
3. Hydrocarbons from asphalt paving operations.
4. Miscellaneous trash and debris from construction and material wrappings.

Potential Sources of Pollutants After Construction

1. Traffic related pollutants from cars, roads and driveways.
2. Improper disposal of trash.
3. Pesticides, herbicides and fertilizers.

Attachment B – Volume and Character of Stormwater **Form 0584**

The Forest of Garden Ridge Unit IV drains to three existing lows. These lows run into un-named tributaries of Cibolo Creek, and then into Cibolo Creek itself. The existing terrain of the site consists of un-developed pasture land with slopes ranging from 3%-7%. The stormwater runoff from the proposed development will surface flow off the lots and into the streets. The runoff will then be conveyed to the detention pond via an underground storm drain system. The detention pond will be designed to detain the overall stormwater increase for the site, in order to minimize adverse impact downstream. Onsite design uses the rational method to determine storm water flow rates, with C-values of 0.52 and 0.72 used for undeveloped and Residential developed conditions, respectively. The runoff intensities were calculated using the rainfall intensity constants provided by San Antonio UDC and City of Garden Ridge Ordinances. Reference sheet C2.0 and C3.0 for the drainage area maps and calculations for the existing and proposed conditions as described above.

Attachment C – Suitability Letter from Authorized Agent (OSSF) **Form 0584**

There will be septic systems required for the site. Reference the suitability letter from Comal County. The portion of the development within the Recharge Zone will maintain 1-acre sized lots. The remainder of the project located outside of the Recharge Zone will maintain 3/4-acre lots.

Comal County

OFFICE OF COMAL COUNTY ENGINEER

December 21, 2007

Mr. Mark Kastner, P.E.
Jacobs Carter Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, TX 78232-5065

Re: Forest of Garden Ridge – Unit IV Subdivision On-Site Sewage Facility Suitability Letter, within Comal County, Texas

Dear Mr. Kastner:

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. The portion of the referenced site that lies over the Edwards Aquifer Recharge Zone ("EARZ") will meet the special requirements for on-site sewage facilities located over the EARZ as specified in TAC §285.40-42. These findings are based on the following information submitted to our office on December 11, 2007:

- The Geologic Assessment, prepared by Frost Geosciences
- The Water Pollution Abatement Plan, prepared by Jacobs Carter Burgess

On a separate matter, according to TAC §285.4(c), persons proposing residential subdivisions within Comal County and using on-site sewage facilities (OSSFs) for sewage disposal are required to submit planning materials for the residential subdivision to Comal County. The planning materials shall be prepared by a professional engineer or professional sanitarian and shall include an overall site plan, topographic map, 100-year floodplain map, soil survey, location of water wells, locations of easements as identified in TAC §285.91(10) (relating to Tables), a complete report detailing the types of OSSFs to be considered and their compatibility with area-wide drainage and groundwater, and a comprehensive drainage plan. Comal County also asks for an existing improvements sketch and gate combination(s) in order to adequately inspect the site for use of OSSFs for sewage disposal. We have included Comal County's *Application for Licensing Authority Recommendation for Private Sewerage Facilities for a Proposed Subdivision* for your use.

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

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: Jay Millikin, Comal County Commissioner, Precinct No. 2
Betty Lien, Comal County Subdivision Coordinator

attachment a/s

Application for Licensing Authority Recommendation
for Private Sewerage Facilities for a Proposed Subdivision

Date: _____

Subdivision Name: _____

Owner's Name: _____

Address: _____

Phone #: _____

Fee Schedule:
5 or less tracts: $20/tract
6 or more tracts: $100 base fee + $5/tract

Total Fee: $_____

Received by: _____

Make check payable to Comal County

According to TAC §285.4(c), before the permit process for individual OSSFs can begin, persons proposing residential subdivisions, manufactured housing communities, multi-unit residential developments, business parks, or other similar uses within Comal County and using on-site sewage facilities (OSSFs) for sewage disposal are required to submit planning materials for these developments to Comal County, as the Authorized Agent of the Texas Commission on Environmental Quality (TCEQ). The planning materials shall be prepared by a professional engineer or professional sanitarian and shall include:

- an overall site plan
- topographic map
- 100-year floodplain map
- soil survey
- location of water wells
- locations of easements as identified in TAC §285.91(10) (relating to Tables)
- a complete report detailing the types of OSSFs to be considered and their compatibility with area-wide drainage and groundwater
- a comprehensive drainage plan

Comal County also asks for an existing improvements sketch and gate combination(s) in order to adequately inspect the site for use of OSSFs for sewage disposal.

_____
Applicant/Agent Signature

Date of Review (must be within 45 days of receipt): _____

☐ Approved

☐ Denied

Reasons for Denial: _____

_____

_____

_____

Reviewer: _____, D.R.

*** Note: This sheet shall be first with all planning materials listed above following behind.**

Attachment D – Exception to the Required Geologic Assessment **Form 0584**

This attachment does not apply to this submittal. An exception to the required Geologic Assessment is not requested. A Geologic Assessment was completed and included in this submittal.

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: Forest of Garden Ridge IV

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

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

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

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

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

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

SEQUENCE OF CONSTRUCTION

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

6. X 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: Cibolo Creek - JV - 4/8/08

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SOIL STABILIZATION PRACTICES

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

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

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

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

ADMINISTRATIVE INFORMATION

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

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

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

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

Mark Kastner, P.E.
Jacobs Carter Burgess
Print Name of Customer/Agent

Signature of Customer/Agent

12/6/07
Date

Attachment A – Spill Response Actions **Form 0602**

There will be no above ground fuel storage tanks allowed on this project. Equipment will be fueled using mobile fuel trucks as needed. There is a small chance of a fuel spill occurring due to leaking construction equipment or re-fueling operations. If a minor spill were to occur, the soil impacted would be removed from the site and properly disposed of in an approved landfill site. If a major spill were to occur, where the amounts spilled were equal to, or exceeding, the Reportable Quantity, RQ, as defined by EPA regulations 40 CFR Parts 110, 119, and 302 then the following steps will be taken.

The following steps will help reduce the stormwater impacts of leaks and spills, in accordance with the Technical Guidance on Best Management Practices, Section 1.4.16, pg(s) 1-118 – 1-121:

Education

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

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

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures

(incorporate into regular safety meetings).

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

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

General Measures

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

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

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

(4) Train employees in spill prevention and cleanup.

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

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

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

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.
(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.
(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMP's in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
(2) Use absorbent materials on small spills rather than hosing down or burying the spill.
(3) Absorbent materials should be promptly removed and disposed of properly.
(4) Follow the practice below for a minor spill:
(5) Contain the spread of the spill.
(6) Recover spilled materials.
(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately:

(1) Contain spread of the spill.
(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
(3) Notification should first be made by telephone and followed up with a written report.
(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

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

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately
(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
(5) Place drip pans or absorbent materials under paving equipment when not in use.
(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
(2) Discourage "topping off" of fuel tanks.
(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Attachment B – Potential Sources of Contamination **Form 0602**

Potential Sources of Pollutants During Construction

1. Soil erosion due to construction.
2. Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
3. Hydrocarbons from asphalt paving operations.
4. Miscellaneous trash and debris from construction and material wrappings.

Potential Sources of Pollutants After Construction

1. Traffic related pollutants from cars, roads and driveways.
2. Improper disposal of trash.
3. Pesticides, herbicides and fertilizers.

Attachment C – Sequence of Major Activities **Form 0602**

The initial phase of the construction of the Forest of Garden Ridge IV involves site preparation, which consists of clearing and grubbing of vegetation, excavation and grading within the 107 acre site. Temporary BMP's will be installed at this phase. This includes the installation of all rock berms and silt fencing.

The final phase shall include the construction of roads, waterlines, and drainage structures for the project within the cleared right-of-ways and easements. Reference sheet C4.0 for details of sequencing and installation of temporary pollution abatement measures. All disturbed soil areas shall be re-vegetated. There are no natural tributaries or creeks on this project however, the nearest receiving water for this site is Cibolo Creek.

Major Construction Activities and Sequencing

The major construction activities for this project will include and be sequenced as follows:

1. Establish Best Management Practices shall consist of the flowing:

   Silt fencing – installed perpendicular to flow along the downstream end of the entire limits of construction or retaining walls, whichever is applicable. Construction staging area and concrete washout pit -installed at locations that are easily accessible by large equipment and can be isolate or treated from on-site runoff.

   Temporary construction entrance – installed at all access points from the job site to existing streets.

   Rock filter berms – installed at all concentrated discharge points, whether natural or created, downstream of soil disturbance limits.
2. Initial clearing of the site for construction (107 ac).
3. Initial grading operations to achieve the general shape of the streets (15.5 ac).
4. Installation of underground water and storm drain utilities.
5. Construction of street pavement including backfill behind curbs (15.5 ac).
6. Final grading of lots and building pads (91.5 ac).
7. Construction (Pad-specific).

All applicable temporary measures for sediment control will be established during the first phase of construction. These measures will be maintained through construction of the final phase, and for a finite period of time after completion of the infrastructure to ensure establishment of permanent vegetation.

a.) Upgradient storm water sheet flows from the eastern boundary of the site. Upgradient storm water travels through the site via a defined low near the east boundary of the project. The upgradient drainage area is 7.52 aces and stretches about 1200 linear feet along the eastern boundary. The amount of runoff at any one location is minimal. Therefore, no silt fence will be installed along the eastern boundary to protect against upgradient storm water.

b.) Silt fencing, a construction staging area, a concrete truck washout pit, rock filter berms, and a temporary construction entrance / exit will be used in accordance with the latest edition TCEQ Technical Guidance Manual details and criteria, to prevent pollution of surface water and groundwater that originates on-site.

c.) Silt fences, a construction entrance / exit and a concrete truck washout pit shall be in place before the first phase of construction for the Forest of Garden Ridge – Unit IV project is to begin. The temporary construction entrance / exit, construction staging area and concrete wash out pit will prevent sediments from flowing into public right-of-ways and drainage easements. The fencing will be installed downstream of cut/fill areas. The locations of the silt fence were based on the criteria to limit the drainage area of disturbed soil to ¼ acres per 100 linear feet of fencing.

Rock filter will intercept any pollutants from entering the surfaces waters of Mud Creek. The locations of the rock berms were based on the criteria to limit the drainage area of disturbed soil to less than 5 acres. The placement of the temporary measures was based on the layout of streets and drains.

d.) No geologic features were identified for this project. The Temporary and Permanent Pollution Abatement measures for construction are included in this section.

Attachment E – Request to Temporarily Seal a Feature **Form 0602**

This attachment does not apply to this submittal. There will be no temporary sealing of sensitive features on the site. As noted on Attachment D, no features were identified on the site.

If a sensitive feature is encountered during construction, the contractor shall stop work immediately and notify the engineer. A registered geologist will be contacted to identify the sensitivity of the feature. At this time, the engineer shall submit to TCEQ a closure plan, if necessary.

Attachment F – Structural Practices **Form 0602**

The following structural measures will be installed prior to construction in accordance with the latest edition TCEQ Technical Guidance Manual details and criteria. Reference sheet C4.0 included in a sleeve at the rear of the Water Pollution Abatement Application.

a.) Installation of silt fences along the boundary of the road right-of-ways as displayed on the Stormwater Pollution Prevention Plan.

b.) Installation of a stabilized construction entrance/ exit located at the subdivision's access points as displayed on the Stormwater Pollution Prevention Plan.

c.) Installation of construction staging areas and concrete washout pit as displayed on the Stormwater Pollution Prevention Plan.

d.) Installation of rock berms as displayed on the Stormwater Pollution Prevention Plan.

Attachment G – Drainage Area Map **Form 0602**

The drainage patterns for the development are divided into 3 areas. Area A1 drains to the west of the property into the natural low which is an unnamed tributary of the Cibolo Creek, and consists of approximately 97.87 acres (sheet C2.0). Area A2 drains into an existing low near the south west corner of the site traveling under Bindseil Rd and continuing south and west until reaching Cibolo Creek. Area A3 drains east into an existing low traveling under Bat Cave Rd. and continuing east through the neighboring subdivision. The existing conditions C-values utilized for a large lot subdivision per the City of San Antonio UDC is 0.52. The proposed conditions C-values used for a large lot subdivision is 0.72.

Attachment H – Temporary Sediment Pond Plans and Calculations Form 0602

This attachment does not apply to this submittal. No temporary sediment ponds are required.

Attachment I – Inspection and Maintenance for BMPs **Form 0602**

Inspection

Designated and qualified person(s) should inspect the Pollution Control Measures every seven (7) days and after every storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations and actions that will be taken as a result of the inspection should be kept with the TPDES data for the project.

Construction Entrance / Exit and Construction Staging Area Maintenance

(1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or clean out of any measures used to trap sediment.

(2) All sediment spilled, dropped, washed or tracked on to public right-of-ways should be removed immediately be the contractor.

(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-ways.

(4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.

(5) All sediment should be prevented should be prevented from entering any storm drain, ditch or watercourse by using approved methods.

Silt Fence Maintenance

(1) Remove sediment when buildup reaches 6 inches.

(2) Replace any torn fabric or install a second line of fencing parallel to the torn section.

(3) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a location where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.

(4) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence

should be revegetated. The fence itself should be disposed of in an approved landfill.

Rock Berm Maintenance

(1) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.

(2) Repair any loose wire sheathing.

(3) The berm should be reshaped as needed during inspection.

(4) 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.

(5) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Inspection Reports

Name & Qualification of Inspector: _____

Date of Inspection: _____

Inspectors shall observe the following items on each inspection:

- Disturbed areas that have not been fully stabilized
- Areas used for storage of materials that are exposed to precipitation
- Control measures outlined in the site plan
- Locations where vehicles enter/exit the site

Inspectors shall denote if any corrective actions are required and when the action was completed.

Major Observations:

Corrective Actions Required:

Corrective Actions Performed:

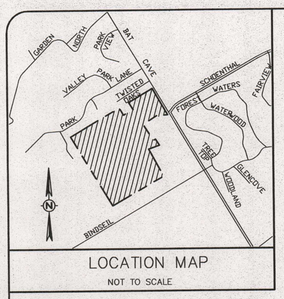
Signature Date

Attachment J – Schedule of Interim and Permanent Soil Stabilization **Form 0602**

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 ceased 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.

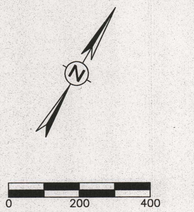
Where delays in construction activities extend beyond allowable time limits, the use of vegetative buffer strips will be used along the perimeter of dormant lots. Residential lots supply approximately 91 acres of the project site.

Hydromulching will be installed during delays in construction along the roadways and during lot grading to stabilize slopes. Street ROW occupies approximately 16 acres of the development.



LOCATION MAP

NOT TO SCALE



LEGEND

PROPERTY BOUNDARY

CITY OF GARDEN RIDGE CITY LIMIT

Forest of Garden Ridge - Unit IV Hydrology Existing Conditions

Point	Area ID	Area	"C" Value	T_c	I_{25}	I_{100}	Q_{25}	Q_{100}
1	A1	97.87	0.52	31	4.92	6.03	250.39	306.88
2	A2	17.71	0.52	19	5.96	7.20	54.89	66.31
3	A3	5.71	0.52	17	6.16	7.42	18.29	22.03

NO.	DATE	REVISION	BY

Carter :: Burgess

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

911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 558-2500 FAX (210) 558-2535

STATE OF TEXAS
NATASHA E. UHLRICH
89502
LICENSED PROFESSIONAL ENGINEER
1/8/08

OVERALL DRAINAGE AREA MAP EXISTING CONDITIONS

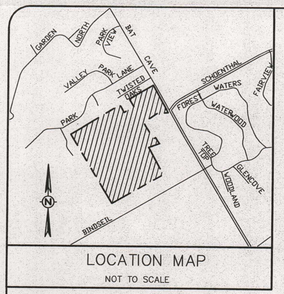
FOREST OF GARDEN RIDGE UNIT 4A

LAREDO GFG DEVELOPMENT, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/19/2007
DRAWN BY: SQV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 310203.022

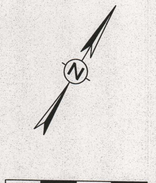
SHEET
C2.0
OF XX

Drawing Name: M:\310203.022 Forest of Garden Ridge Unit 4A\dwg\310203022-4A_DMO.dwg User: lebouf@j Jan 07, 2008 - 1:30pm



LOCATION MAP

NOT TO SCALE



LEGEND

PROPERTY BOUNDARY

CITY OF GARDEN RIDGE CITY LIMIT

Forest of Garden Ridge - Unit IV Hydrology Proposed Conditions								
Point	Area ID	Area	"C" Value	T_c	I_{25}	I_{100}	Q_{25}	Q_{100}
1	A1+A2+A3	93.53	0.72	29	5.08	6.21	342.10	418.19
2	A5	12.55	0.72	19	5.96	7.20	53.85	65.06
3	A4	5.03	0.72	18	6.06	7.31	21.95	26.47

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 484-3500 FAX (210) 484-3595

STATE OF TEXAS
NATASHA D. UHLRICH
89502
LICENSED PROFESSIONAL ENGINEER
1/9/08

OVERALL DRAINAGE AREA MAP PROPOSED CONDITIONS

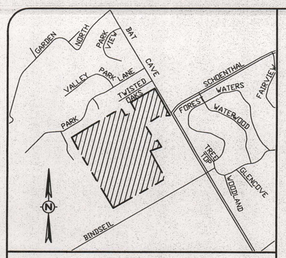
FOREST OF GARDEN RIDGE UNIT 4A

LAREDO GFG DEVELOPMENT, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/19/2007
DRAWN BY: SQV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 310203.022

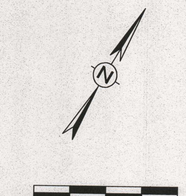
SHEET
C3.0
OF XX

Drawing Name: M:\310203.022 Forest of Garden Ridge Unit 4A\dwg\310203022-4A_DMO.dwg User: laboufaj Jan 07, 2008 - 1:30pm



LOCATION MAP

NOT TO SCALE



LEGEND

- PROPERTY BOUNDARY
- CITY OF GARDEN RIDGE CITY LIMIT
- LOC — LIMIT OF CONSTRUCTION
- SF — SILT FENCE
- ROCK BERM
- CONCRETE WASHOUT PIT
- STABILIZED CONSTRUCTION ENTRANCE/EXIT

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 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:

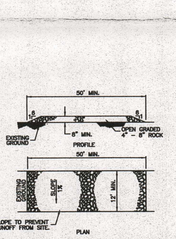
   A. any physical or operational modification of any water pollution abatement structure(s), including but not limited to ponds, dams, berms, sewage treatment plants, and diversionary structures;

   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.

San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

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



TEMPORARY CONSTR. ENTRANCE/EXIT

N.T.S.

TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTE

INSTALLATION

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVEGETATION AND OTEHR OBJECTIONABLE MATERIAL FROM TEH FOUNDATION AREA. GRADE OHN FOUNDATION FOR POSITIVE DRAINAGE.

2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 F OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.

3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEEING.

4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT JDGE, 6 TO 8 INCHES HIGH WITH 3:1 (h:v) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.

5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPRCTABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICPATED.

6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS.AVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.

7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STOPAD TO A SEDIMENT TRAP OR BASIN.

8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINNTAIN PROPERILIC ROAD DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES

1. THE ENTRANCE SHOULD BE MAINTAINED INA CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. THIS MAY REQUIRE EDIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR ANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTBLIC RIGHTS–OF–WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.

3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE MENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT–OF–WAY.

4. WHEN WASHING STONE IS REQUIRED, IT SHOULD BE DONE ON AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIT BASIN.

5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY SI DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

SILT FENCE NOTES

INSTALLATION

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLETOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1–FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.

2. LAYOUT FENCING DOWN–SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.

3. THE TOE OF THE SILT FENCE SHOULD BE TENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN–SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT OF FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.

4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3–FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.

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

INSPECTION AND MAINTENANCE GUIDELINES

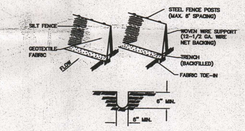
1. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.

2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.

3. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.

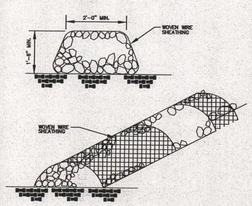
4. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.

5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.



SILT FENCE

N.T.S.



ROCK BERM

N.T.S.

CONCRETE TRUCK WASHOUT PIT

N.T.S.

GENERAL NOTES:

1. DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.
2. IF HAY BALES ARE USED, THEY SHALL BE PLACED IN ACCORDANCE WITH DETAILS SHOWN ON EXHIBIT FOR HAY BALES.
3. WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.
4. WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF.

GENERAL NOTES:

1. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT AND STORAGE AREA ARE TO BE DETERMINED IN THE FIELD. THEY ARE SHOWN ON THIS PLAN FOR ILLUSTRATION PURPOSES ONLY

2. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.

3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.

4. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.

5. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.

6. CONTRACTOR WILL BE RESPONSIBLE FILING ALL NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO TPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.

7. A COPY OF THIS PLAN AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.

8. 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.

ROCK BERM NOTES

INSTALLATION

1. LAYOUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.

2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.

3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM (SEE DETAIL), TO A HEIGHT NOT LESS THAN 18".

4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.

5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.

6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

INSPECTION AND MAINTENANCE GUIDELINES

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.

2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED AMNNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.

3. REPAIR ANY LOOSE WIRE SHEATHING.

4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.

5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULACATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.

6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232-1625
(210) 494-0088 Fax: (210) 494-4525

STATE OF TEXAS
NATASHA J. UHLRICH
89502
LICENSED PROFESSIONAL ENGINEER
12/8/08

TEMPORARY STORM WATER ABATEMENT PLAN

FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/20/2007
DRAWN BY: SQV
DESIGNED BY: JJI
CHECKED BY: JJI
REVIEWED BY: NFU
PROJECT NUMBER: 310203.022

SHEET C4.0

Drawing Name: M:\310203\022\1 Bat Cave \07–scrn\dwg\310203022_SWPPP.dwg Jan 07, 2008 - 3:48pm

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

REGULATED ENTITY NAME: Forest of Garden Ridge – Unit IV

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

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

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

   __ The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.
   __ A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is provided below

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

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. N/A The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be

recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

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

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

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

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

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

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

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

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

N/A The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-

occurring "sensitive" or "possibly sensitive" features on this site.

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

10. N/A **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. N/A **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. N/A The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

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

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

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

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:

Mark Kastner, P.E.
Jacobs Carter Burgess
Print Name of Customer/Agent

Signature of Customer/Agent

12/19/07
Date

Attachment A – 20% or Less Impervious Cover Waiver **Form 0600**

A waiver for 20% or less impervious cover does not apply to this submittal. While projected constructions will increase the impervious cover by less than 20% for the site, the project is Single Family Residential, and will not require a waiver.

Attachment B – BMPs for Upgradeint Stormwater **Form 0600**

Since the site has less than 20% impervious cover, permanent BMP are not required. Please refer to the Temporary BMP section of this report for details concerning proper erosion control protection.

Since the projected increase in impervious cover for the site is less than 20%, no onsite BMPs are required for pollution control. In the event the land plan changes, the project will be re-evaluated to determine increase in impervious cover. If anticipated impervious cover exceeds 20%, permanent onsite BMPs may be required, and will be determined at that time.

Attachment D – BMPs for Surface Streams **Form 0600**

Since the site has less than 20% impervious cover, permanent BMP are not required. Please refer to the Temporary BMP section of this report for details concerning proper erosion control protection. All storm water systems are designed to control erosive discharge. There are no sensitive geologic features on the site that need to be sealed to prevent pollution from entering them.

Attachment E – Request to Seal Features **Form 0600**

This attachment does not apply to our submittal. No geologic features were located on the site.

Attachment F – Construction Plans **Form 0600**

The site contains less than 20% impervious cover. No permanent BMPs are required

Permanent BMPs are not required for the site. Respective maintenance plans are not applicable.

Attachment H – Pilot-Scale Field Testing Plan **Form 0600**

This attachment does not apply to this submittal. The TCEQ Technical Guidance Manual (TGM) was used to design BMP measures on site, and therefore a Pilot-Scale Field Testing Plan is not required.

Attachment I – Measures for Minimizing Surface Stream Contamination Form 0600

During construction, silt fencing and rock berms will be utilized to control erosion onsite. Mulch will be applied during prolonged periods of inactivity. At the completion of construction, permanent vegetation will be established to further resist erosion.

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

I Carlos Sandoval,
Print Name

Project Manager
Title - Owner/President/Other

of Laredo GFG Development, Ltd.
Corporation/Partnership/Entity Name

have authorized Mark Kastner, P.E.
Print Name of Agent/Engineer

of Jacobs Carter Burgess
Print Name of Firm

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

I also understand that:

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

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

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

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

Carlos C. Sandoval 11-19-2007

Applicant's Signature Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Carlos C. Sandoval 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 19 day of November, 07.

Kara Lynn Kelley

NOTARY PUBLIC

KARA LYNN KELLEY
Notary Public, State of Texas
My Commission Expires
June 17, 2009

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

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

NAME OF PROPOSED REGULATED ENTITY: Forest of Garden Ridge IV
REGULATED ENTITY LOCATION: _____
NAME OF CUSTOMER: Laredo GFG Development, Ltd.

CONTACT PERSON: Carlos Sandoval PHONE: 210-497-3385
(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
- ☐ Kinney
- ☐ Medina
- ☐ Uvalde

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE Texas Commission on Environmental Quality. YOUR CANCELED CHECK WILL SERVE AS YOUR RECEIPT. **THIS FORM MUST BE SUBMITTED WITH YOUR FEE PAYMENT**. THIS PAYMENT IS BEING SUBMITTED TO (CHECK ONE):

☑ **SAN ANTONIO REGIONAL OFFICE**

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

☐ **AUSTIN REGIONAL OFFICE**

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

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement, Multiple Single Family Residential and Parks	107.1 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	$

Carlos C. Sandoval
Signature

11-19-2007
Date

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

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

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Application Fee Schedule
30 TAC §213.14 (effective 11/14/97) & 30 TAC §213.9 (effective 6/1/99)

Water Pollution Abatement Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	<5	$500
Multiple Single Family Residential and Parks	<5 5 < 10 10 < 50 ≥50	$1,000 $2,000 $3,000 $5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 ≥10	$2,000 $3,000 $4,000 $5,000

Organized Sewage Collection Systems and Modifications

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$500 - $5,000

Underground and Aboveground Storage Tank System Facility Plans and Modifications

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	$500	$500 - $5,000

Exception Requests

PROJECT	FEE
Exception Request	$250

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$100

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

NAME OF PROPOSED REGULATED ENTITY: Forest of Garden Ridge IV
REGULATED ENTITY LOCATION: _____
NAME OF CUSTOMER: Laredo GFG Development, Ltd.

CONTACT PERSON: Carlos Sandoval PHONE: 210-497-3385
(Please Print)

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- ☐ Bexar
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- ☐ Kinney
- ☐ Medina
- ☐ Uvalde

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☑ **SAN ANTONIO REGIONAL OFFICE**
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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, Multiple Single Family Residential and Parks	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	$

Carlos C. Sandoval
Signature

11-19-2007
Date

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Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
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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

LAREDO GFG DEVELOPMENT, LTD.
18618 TUSCANY STONE #100
SAN ANTONIO, TX, 78258

INTERNATIONAL BANK OF COMMERCE
San Antonio, TX
30-1328/1140

10018

11 28 2007

PAY TO THE
ORDER OF TCEQ

$*******5,000.00

****FIVE THOUSAND AND 0/100 DOLLARS DOLLARS

TCEQ
P. O. BOX 13089
Austin, TX, 78711-3089

MEMO

AUTHORIZED SIGNATURE

MF

⑈010018⑈ ⑆114013284⑆00109932016⑈

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

☐ Yes ☒ No

3. Customer Reference Number *(if issued)*	Follow this link to search for CN or RN numbers in Central Registry**	4. Regulated Entity Reference Number *(if issued)*
CN 602612616		RN

SECTION II: Customer Information

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

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

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

7. General Customer Information

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

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

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

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

10. Mailing Address:

City | State | ZIP | ZIP + 4

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

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

13. Telephone Number ( ) -

14. Extension or Code

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

16. Federal Tax ID *(9 digits)*

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

18. DUNS Number *(if applicable)*

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

20. Number of Employees

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

21. Independently Owned and Operated?

☐ Yes ☐ No

SECTION III: Regulated Entity Information

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

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

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

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

The Forest of Garden Ridge IV

24. Street Address of the Regulated Entity: *(No P.O. Boxes)*	~~18618 Tusca~~ Stone, Ste. 100 ~~-JV~~						
	City	San Antonio	State	TX	ZIP	78258	ZIP + 4	
25. Mailing Address:							
	City		State		ZIP		ZIP + 4	

26. E-Mail Address:	valeriem@galoproperties.com

27. Telephone Number	28. Extension or Code	29. Fax Number *(if applicable)*
(210) 497-3385	125	(210) 507-5168

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)
~~9532~~ 1521 ~~-JV~~	~~1521~~ ~~-JV~~	236115	

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

Residential Development

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

35. Description to Physical Location:	Northwest of the intersection of Bat Cave Rd and Blazing Star Trail

36. Nearest City	County	State	Nearest ZIP Code
Garden Ridge	Comal	TX	78266

37. Latitude (N) In Decimal:	29.6275501		38. Longitude (W) In Decimal:	-98.3148193	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
29	37	39	98	18	53

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form or the updates may not be made. If your Program is not listed, check other and write it in. See the Core Data Form instructions for additional guidance.

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

SECTION IV: Preparer Information

40. Name:	Mark Kastner, P.E.	41. Title:	Project Manager

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 494-0088		(210) 494-4525	mark.kastner@c-b.com

SECTION V: Authorized Signature

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

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

Company:	Jacobs Carter Burgess	Job Title:	Project Manager
Name *(In Print)* :	Mark Kastner, P.E.	Phone:	(210) 494-0088
Signature:		Date:	12/24/2008

Carter Burgess

February 15, 2007

Mr. Javier Anguiano
TCEQ San Antonio Regional Office
14250 Judson Rd.
San Antonio, TX 78233

Re: Forest of Garden Ridge IV- WPAP
EAPP No. 2753.00

Mr. Anguiano,

This letter is in response to comments dated February 13, 2008 for the above mentioned project. The following are our responses to these comments:

Comments Related to the Application

General Concerns:

1) TCEQ-0584 Item 20 and TCEQ -0585 Item 11 have been corrected to identify that the well is not in use and will be properly abandoned. Please see revised sheets.

TCEQ-0587 Concerns:

2) Attachment C has been amended to address the following issues:
   - Proposed total impervious cover and percentage for the site
   - Purpose of the proposed detention pond
   - Method of wastewater disposal

We have included an exhibit that gives a closer view of Lot 27. The lot has been land planned to run parallel to the Edwards Aquifer Recharge Zone alignment and therefore does not intersect or fall within the recharge zone's boundary. Please see attached subdivision plat.

TCEQ-0585 Concerns:

3) Columns 9, 10, and 11 on Geological Assessment (GA) Table have been completed. Please see revised Table.

TCEQ-0602 Concerns:

4) Attachment J has been revised to omit the second paragraph.

5) Item 7 states that BMP's and measures are needed to maintain flow to "naturally occurring" sensitive features and need to be addressed in Attachment D. However, the well identified in the Geologic Assessment as a "sensitive feature" refers to a man-made feature. Therefore this recommendation does not apply. However, it is the developer's intention to properly cap and plug the existing well per the standard requirements delineated by TCEQ and the Edwards Aquifer Authority. This has been notated on Attachment D.

6) The site map has been revised to better illustrate the construction phasing as the development is broken into 3 units. The 107 acre tract has been subdivided into Unit 4A, Unit 4B, and Unit 4C. Attachment C now describes the construction sequence of each unit. Each unit maintains less than 10 acres of disturbance. The largest portions of disturbed acreage are typically the clearing of street right-of-ways and easements. This subdivision will not have any mass grading of the lots. All three of the units will continue to employ the erosion and sediment controls normally utilized such as silt fencing, rock berms, Construction Wash-out Pits, etc... Please refer to revised site plan for unit boundary delineations and Attachment C for disturbed area acreages.

TCEQ-0600 Concerns:

7) Item 9 has been checked and an option has been selected.

Site Plan Concerns:

8) The site has been amended to include the flow arrows and percent slopes for all areas that will be graded and where final contours are shown. Please refer to Site Plan.

9) Please see responses to Tonkawa Pass questions below:

   (a) Our Client does not own the portion of land where Tonkawa Pass leaves our southern boundary to the proposed Bindseil Rd. intersection. However, the City of Garden Ridge is trying to obtain an easement from the current property owner in order to have that portion of Tonkawa Pass constructed. Ultimately it is the City of Garden Ridge's responsibility to develop the remaining portion of Tonkawa Pass and it should be considered independent of this development. This remaining portion of Tonkawa Pass is located outside of the Edwards Aquifer Recharge Zone

and Contributing Zone therefore it should not be necessary to have a WPAP Modification for this reason.

(b) As stated above, the City of Garden Ridge is in discussions with that land owner to acquire an easement through that property owner's land to connect Tonkawa Pass from our boundary to Bindseil Rd. To this date that land owner and the City have not finalized the access agreement to this future Right-Of-Way.

(c) Seeing as the this portion of Tonkawa Pass is not part of the Forest of Garden Ridge IV overall boundary, the impervious cover values of this road should not be considered as part of the impervious cover calculations of our development.

(d) The same argument can be made for the natural drainage patterns and required treatment for this portion of Tonkawa Pass.

10) We have added Silt Fencing on the downstream side of the construction exit, and concrete washout pit. Although the natural drainage area for this vicinity is relatively small this additional silt fencing will ensure that sediment will not exit the site onto Bat Cave Rd of the adjacent property. The Storm water Abatement Plan (Sheet C4.0) has been modified to reflect this change.

If you have any questions or concerns please contact me at 494-0088. Thank you for your continued assistance with this project.

Sincerely,
Jonathan D. Vargas
Land Development
JACOBS CARTER BURGESS

__ 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" = 200 '.

18. 100-year floodplain boundaries

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

X No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): Panel 140 (Bexar County) Map No. 48029C8140 E
Dated: February 16, 1996

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

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

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

X There is 1 (#) well 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.

__ The wells are in use and comply with 30 TAC §238.

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

21. Geologic or manmade features which are on the site:

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

6. Method of collecting positional data:

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

7. X The 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 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 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 1 (#) wells present on the 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.
   __ 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.

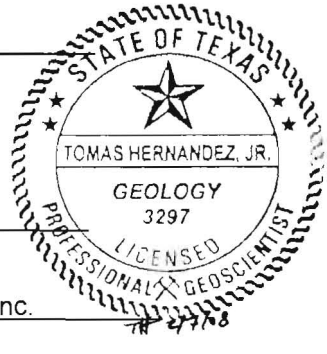
ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: November 30, 2007 and December 3, 2007
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.

Tomas Hernandez, Jr., P.G.
Print Name of Geologist



Signature of Geologist

Representing: Frost Geosciences, Inc.
(Name of Company)

210-372-1315
Telephone

210-372-1318
Fax

December 5, 2007
Date

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GEOLOGIC ASSESSMENT TABLE | **PROJECT NAME: Forest of Garden Ridge IV**

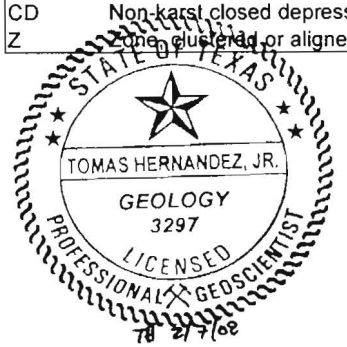
LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)	TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29° 38' 25.1"	98° 19' 12.1"	SC	20	Kbu	1	1	2					OF	5	25	X			X	Hilltop
S-2	29° 38' 20.4"	98° 19' 20.9"	MB	30	Kbu	4	3							10	40		X		X	Hilltop
S-3	29° 38' 6.37"	98° 19' 14.9"	CD	5	Kbu	3	3	1					OFC	5	10	X			X	Hillside
S-4	29° 38' 6.19"	98° 19' 24.1"	F	20	Kbu/Kdr	1,700	?	?	NE	10			F	5	35	X			X	Hillside
S-11	29° 38' 1.25"	98° 19' 17.6"	CD	5	Kbu	4	5	1.5					OFC	5	10	X			X	Hillside
S-12	29° 38' 5.9"	98° 19' 12.2"	CD	5	Kbu	4	4	1.5					OFC	5	10	X			X	Hillside

Datum: NAD 27

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, 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 213

Tomas Hernandez, Jr. P.G.

Date December 5, 2007

Sheet 1 of 1

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

ATTACHEMENT C – PROJECT DESCRIPTION **Form 0587**

The Forest of Garden Ridge – Unit IV is a single family residential development situated on approximately 107.1 acres. The project is located off Bat Cave Rd. near the intersection at Schoenthal Rd. within the city limits of Garden Ridge, Comal County, Texas. A portion of the site lies within the Edwards Aquifer Recharge Zone, and the remainder of the site lies within the Edwards Aquifer Transition Zone. The proposed development consists of approximately 103 lots, with supporting streets, park area, and infrastructure. No portion of the proposed site lies within the limits of the 100-year floodplain.

The residential lots are a minimum of 0.75 acres. The impervious cover was calculated using a structure size of 3000 square feet with a driveway of 1700 square feet. That yields a total of 820,338 square feet of impervious cover. When we compare that to the total acreage of the site the impervious cover percentage equals 17.6%. Therefore, the amount of impervious cover increased for the site will be less than 20%, thus eliminating the need for permanent BMP's.

As stated above the site is located within the city limits of Garden Ridge, Texas. This municipality requires on-site detention of storm water for all developments. This detention pond will serve the purpose of detaining the additional run off that is created by the increase in impervious cover by releasing that flow at a rate equal or less than existing conditions. The construction of the pond accomplishes this goal.

The City of Garden Ridge also allows lots that are 3/4 of an acre to sustain On- Site Sewerage Facilities (septic tank systems). The individual lots will be permitted for these septic systems by the Office of the Comal County Engineer.

recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

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

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

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

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

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

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

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

9. 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.

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

10. N/A **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. N/A **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. N/A The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

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

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

Attachment C – Sequence of Major Activities **Form 0602**

The initial phase of the construction of the Forest of Garden Ridge IV involves site preparation, which consists of clearing and grubbing of vegetation, excavation of street-right-of ways and minor grading of easements within the 107 acre site. Temporary BMP's will be installed at this phase. This includes the installation of all rock berms and silt fencing. It should be noted that the 107 acre development will have three units: Unit 4A, Unit 4B, and Unit 4C. Similar construction practices will be carried out with each unit. The standard sequence of construction should be: Initial clearing of Street Right-of Ways, Installation of Water and Storm Water Infrastructure, Construction of Street Pavement, Clearing of Utility Easements, and Clearing of Drainage Channels. There will not be any mass grading of the lots. During these processes measures will be taken to utilize silt fencing on the downstream end of the Street ROW's and Esmts to ensure sediment capture.

Each phase of construction is below the 10 acre requirement but will continue to implement the appropriate erosion and sediment controls. Reference sheet C4.0 for details of sequencing and installation of temporary pollution abatement measures. All disturbed soil areas shall be re-vegetated. There are no natural tributaries or creeks on this project however, the nearest receiving water for this site is Cibolo Creek.

Major Construction Activities and Sequencing

The major construction activities for this project will include and be sequenced as follows:

1. Establish Best Management Practices shall consist of the flowing:

Silt fencing – installed perpendicular to flow along the downstream end of the entire limits of construction or retaining walls, whichever is applicable. Construction staging area and concrete washout pit -installed at locations that are easily accessible by large equipment and can be isolate or treated from on-site runoff.

Temporary construction entrance – installed at all access points from the job site to existing streets.

Rock filter berms – installed at all concentrated discharge points, whether natural or created, downstream of soil disturbance limits.

The construction sequence is as follows:

Unit 4A

1. Excavation of Detention Pond. (1.64 ac.).
2. Initial clearing operations to achieve the general shape of the streets (6.05 ac).
2. Installation of underground water and storm drain utilities (6.05 ac.)
3. Construction of street pavement (6.05 ac).
4. Clearing of Utility Easements (1.56 ac).
5. Clearing of Drainage Channels (0.38 ac).

Unit 4B

1. Initial clearing operations to achieve the general shape of the streets (7.29 ac).
2. Installation of underground water and storm drain utilities (7.29ac.)
3. Construction of Street Pavement (7.29 ac).
4. Clearing of Utility Easements (1.83 ac).
5. Clearing of Drainage Channels (0.07 ac).

Unit 4C

1. Initial clearing operations to achieve the general shape of the streets (3.23 ac).
2. Installation of underground water and storm drain utilities (3.23 ac.)
3. Construction of street pavement (3.23 ac).
4. Clearing of Utility Easements (1.34 ac).

All applicable temporary measures for sediment control will be established during the first phase of construction. These measures will be maintained through construction of the final phase, and for a finite period of time after completion of the infrastructure to ensure establishment of permanent vegetation.

a.) Upgradient storm water sheet flows from the eastern boundary of the site. Upgradient storm water travels through the site via a defined low near the east boundary of the project. The upgradient drainage area is 7.52 aces and stretches about 1200 linear feet along the eastern boundary. The amount of runoff at any one location is minimal. Therefore, no silt fence will be installed along the eastern boundary to protect against upgradient storm water.

b.) Silt fencing, a construction staging area, a concrete truck washout pit, rock filter berms, and a temporary construction entrance / exit will be used in accordance with the latest edition TCEQ Technical Guidance Manual details and criteria, to prevent pollution of surface water and groundwater that originates on-site.

c.) Silt fences, a construction entrance / exit and a concrete truck washout pit shall be in place before the first phase of construction for the Forest of Garden Ridge – Unit IV project is to begin. The temporary construction entrance / exit, construction staging area and concrete wash out pit will prevent sediments from flowing into public right-of-ways and drainage easements. The fencing will be installed downstream of cut/fill areas. The locations of the silt fence were based on the criteria to limit the drainage area of disturbed soil to ¼ acres per 100 linear feet of fencing.

Rock filter will intercept any pollutants from entering the surfaces waters of Mud Creek. The locations of the rock berms were based on the criteria to limit the drainage area of disturbed soil to less than 5 acres. The placement of the temporary measures was based on the layout of streets and drains.

d.) A water well that was classified as a man-made sensitive feature was located on the project site. This existing well is not currently in use and will be properly capped and plugged per the governing TCEQ and EAA specifications. The Temporary and Permanent Pollution Abatement measures for construction are included in this section.

Attachment J – Schedule of Interim and Permanent Soil Stabilization Form 0602

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 ceased 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.

Hydromulching will be installed during delays in construction along the roadways and during lot grading to stabilize slopes. Street ROW occupies approximately 16 acres of the development. The residential lots supply approximately 91 acres of the project site.

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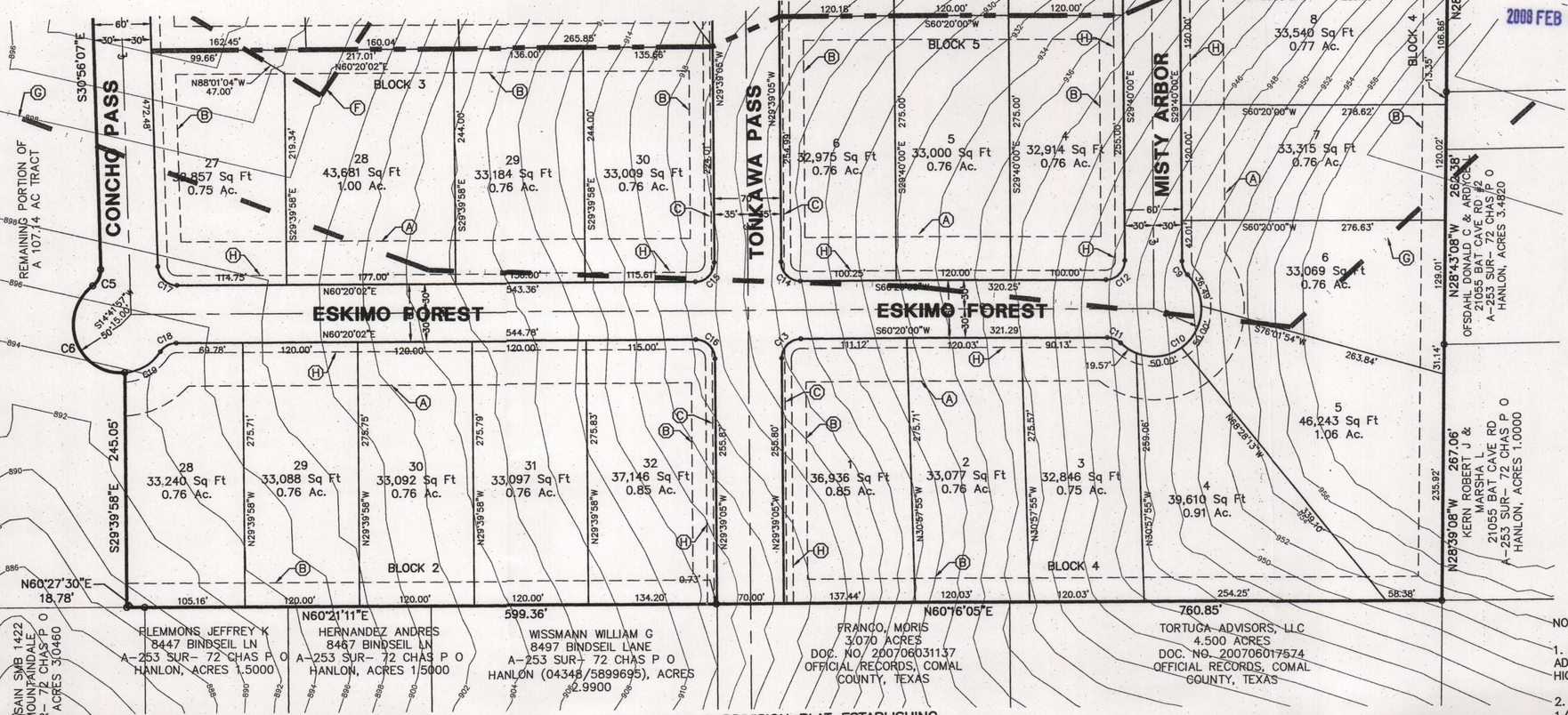
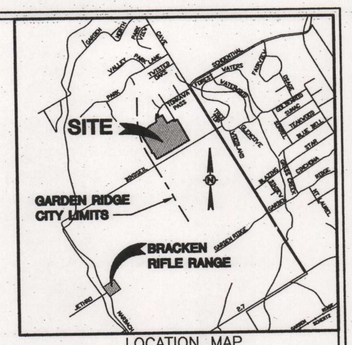
MATCHLINE A - SEE SHEET 1 OF 2





LOCATION MAP
1" = 4000'

LEGEND

- (17.45) CUL-DE-SAC DISTANCE
- ● IRON PIN FOUND
- ○ 1/2" IRON ROD W/ CAP SET
- R.O.W. RIGHT-OF-WAY
- EXISTING CONTOURS
- DRAINAGE PATH
- E,G,T,CA ELECTRIC, GAS, TELEPHONE & CABLE TELEVISION
- (A) 45' SETBACK LINE
- (B) 25' SETBACK LINE
- (C) 1' NON-ACCESS EASEMENT
- (D) 20' DRAINAGE ROW
- (E) VARIABLE WIDTH DRAINAGE EASEMENT TO EXPIRE UPON INCORPORATION OF FUTURE STREET R.O.W.
- (F) EDWARDS AQUIFER RECHARGE ZONE
- (F) EDWARDS AQUIFER CONTRIBUTING ZONE WINTHIN TRANSITION ZONE
- (H) 10' E.G.T.CA EASEMENT

NOTE:

1. OWNER/DEVELOPER IS RESPONSIBLE FOR PREVENTING ANY ADVERSE IMPACT TO THE EXISTING DRAINAGE SYSTEM WITHIN THE HIGHWAY RIGHT OF WAY.

2. ALL LOT CORNERS WILL BE MONUMENTED ON THE GROUND WITH 1/2" REBAR OR WITH OTHER STABLE MATERIAL AFTER ROAD AND UTILITY CONSTRUCTION IS COMPLETED AND PRIOR TO LOT SALES.

3. BEARING BASIS FOR THIS PLAT IS TEXAS STATE PLANE SOUTH CENTRAL GRID COORDINATES USING THE NAD83/HARN93 DATUM.

4. A REGIONAL DETENTION POND WILL BE BUILT PRIOR TO UNIT 4A. IN THE EVENT THAT THE REGIONAL POND IS NOT CONSTRUCTED, LOT 19, BLOCK 3 OF UNIT 4B WILL BE DESIGNATED AS THE DETENTION POND LOCATION, WITH REQUIRED SIZING AND DRAINAGE INFRASTRUCTURE TO BE DETERMINED AT THAT TIME. THIS DESIGNATION OF LOT 19, BLOCK 3 OF UNIT 4B IS NULL AND VOID WHEN THE REGIONAL DETENTION POND IS CONSTRUCTED.

5. DEVELOPER WILL MAINTAIN DRAINAGE BASIN AND FACILITIES UNTIL IT CAN BE CONVEYED TO THE HOMEOWNERS ASSOCIATION AT WHICH TIME THEY WILL ASSUME ALL MAINTENANCE RESPONSIBILITY.

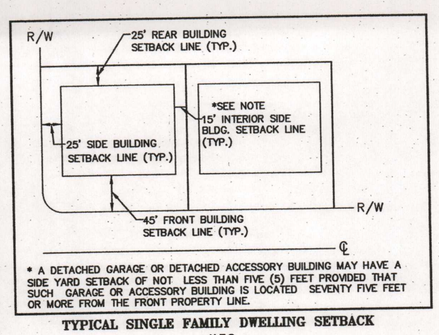
THE CITY ENGINEER OF THE CITY OF GARDEN RIDGE, COMAL COUNTY, TEXAS, HEREBY CERTIFIES THAT THIS SUBDIVISION PLAT CONFORMS TO ALL THE REQUIREMENTS OF THE SUBDIVISION REGULATIONS OF THE CITY AS TO WHICH HIS APPROVAL IS REQUIRED.

_____
CITY ENGINEER

PRELIMINARY SUBDIVISION PLAT ESTABLISHING

THE FOREST OF GARDEN RIDGE IV, UNIT 4B

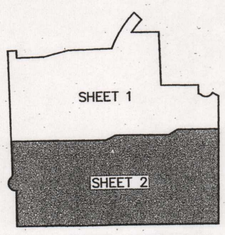
PLAT OF 37.01 ACRES OF LAND OUT OF A 107.14 ACRE (4,667,234 SQUARE FOOT), TRACT, BEING COMPRISED OF 106.00 ACRES OUT OF THE REMAINING PORTION OF A 160.0 ACRE TRACT CONVEYED TO CLARINE H. HEIMER BY EXECUTOR'S DEED RECORDED AS DOCUMENT # 200006012169 DATED APRIL 20, 2000 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS, AND 1.140 ACRES OUT OF A 5.00 ACRE TRACT, AS CONVEYED TO TRIUMPHANT LUTHERAN CHURCH, AS RECORDED IN DOCUMENT NO. 200206033002 OF THE OFFICIAL RECORDS OF COMAL COUNTY, TEXAS BEING SITUATED IN THE CHARLES P. HANLON SURVEY NO. 72, ABSTRACT NO. 253, BEING PARTIALLY IN THE CITY OF GARDEN RIDGE, COMAL COUNTY, TEXAS.



* A DETACHED GARAGE OR DETACHED ACCESSORY BUILDING MAY HAVE A SIDE YARD SETBACK OF NOT LESS THAN FIVE (5) FEET PROVIDED THAT SUCH GARAGE OR ACCESSORY BUILDING IS LOCATED SEVENTY FIVE FEET OR MORE FROM THE FRONT PROPERTY LINE.

TYPICAL SINGLE FAMILY DWELLING SETBACK
N.T.S.

0 50 100 150 200
SCALE: 1"=100'



SHEET INDEX
NOT-TO-SCALE

NOTE:
THE CITY OF GARDEN RIDGE AS A PART OF ITS ELECTRIC SYSTEM IS HEREBY DEDICATING THE EASEMENTS AND RIGHT-OF-WAY FOR ELECTRIC DISTRIBUTION AND SERVICE FACILITIES IN THE AREAS DESIGNATED ON THIS PLAT AS "ELECTRIC EASEMENT", "GAS EASEMENT", "ANCHOR EASEMENT", "SERVICE EASEMENT", "OVERHANG EASEMENT", "UTILITY EASEMENT", AND "TRANSFORMER EASEMENT", FOR THE PURPOSE OF INSTALLING, CONSTRUCTING, RECONSTRUCTING, MAINTAINING, REMOVING, INSPECTING, PATROLLING, AND ERECTING POLES, HANGING OR BURYING WIRES, CABLES, CONDUITS, OR TRANSFORMERS, EACH WITH ITS NECESSARY APPURTENANCES, TOGETHER WITH THE RIGHT OF INGRESS AND EGRESS OVER GRANTOR'S ADJACENT LAND, THE RIGHT TO RELOCATE SAID FACILITIES WITHIN SAID EASEMENT AND RIGHT-OF-WAY AREAS, AND THE RIGHT TO REMOVE FROM SAID LANDS ALL TREES OR PARTS THEREOF, OR OTHER OBSTRUCTIONS WHICH ENDANGER OR MAY INTERFERE WITH THE EFFICIENCY OF SAID LINES OR APPURTENANCES THERETO. IT IS AGREED AND UNDERSTOOD THAT NO BUILDINGS, CONCRETE SLABS, OR WALLS WILL BE PLACED WITHIN SAID EASEMENT AREAS. ANY CPS MONETARY LOSS RESULTING FROM MODIFICATIONS REQUIRED OF CPS EQUIPMENT, LOCATED WITHIN SAID EASEMENT, DUE TO GRADE CHANGES OR GROUND ELEVATION ALTERATIONS SHALL BE CHARGED TO THE PERSON OR PERSONS DEEMED RESPONSIBLE FOR SAID GRADE CHANGES OR GROUND ELEVATION ALTERATIONS. THIS PLAT DOES NOT AMEND, ALTER, RELEASE OR OTHERWISE AFFECT ANY EXISTING ELECTRIC, WATER, SEWER, DRAINAGE, TELEPHONE, CABLE EASEMENTS OR ANY OTHER EASEMENTS FOR UTILITIES UNLESS THE CHANGES TO SUCH EASEMENTS ARE DESCRIBED BELOW.

Carter Burgess
Consultants in Engineering, Surveying, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway N. Suite 425
San Antonio, Texas 78232
(210)494-0088 Fax (210)494-4525

DATE: 12/06/2007 JOB NO. 310203.022

STATE OF TEXAS
COUNTY OF BEXAR

I HEREBY CERTIFY THAT THIS PLAT IS TRUE AND CORRECT AND WAS PREPARED FROM AN ACTUAL SURVEY OF THE PROPERTY AND MADE UNDER MY SUPERVISION ON THE GROUND.

STATE OF TEXAS
COUNTY OF BEXAR

_____
REGISTERED PROFESSIONAL SURVEYOR

SWORN TO AND SUBSCRIBED BEFORE ME ON THE _____ DAY OF _____, 20____

_____
NOTARY PUBLIC

STATE OF TEXAS
COUNTY OF BEXAR

I HEREBY CERTIFY THAT PROPER ENGINEERING CONSIDERATION HAS BEEN GIVEN THIS PLAT TO THE MATTERS OF STREETS, LOTS AND DRAINAGE LAYOUT.

_____
REGISTERED PROFESSIONAL ENGINEER

STATE OF TEXAS
COUNTY OF BEXAR

SWORN TO AND SUBSCRIBED BEFORE ME ON THE _____ DAY OF _____, 20____

_____
NOTARY PUBLIC

STATE OF TEXAS
COUNTY OF BEXAR

THE OWNER OF THE LAND SHOWN IN THIS PLAT, AND WHOSE NAME IS SUBSCRIBED HERETO, AND IN PERSON OR THROUGH A DULY AUTHORIZED AGENT, DEDICATES TO GARDEN RIDGE, TEXAS, FOR USE OF THE PUBLIC FOREVER ALL STREETS, ALLEYS, PARKS, WATER COURSES, DRAINS, EASEMENTS, IN ALL OF THE AFORESAID PUBLIC PLACES AND ALL OTHER PUBLIC PLACES THEREON SHOWN FOR THE PURPOSE AND CONSIDERATION THEREIN EXPRESSED.

OWNER:
LAREDO GFG DEVELOPMENT, LTD.
18618 TUSCANY STONE SUITE 100
SAN ANTONIO, TEXAS 78258
PHONE (210) 497-3385
FAX (210) 495-2587

_____
OWNER

STATE OF TEXAS
COUNTY OF BEXAR

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED _____KNOWN TO ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT, AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATION THEREIN EXPRESSED, AND IN THE CAPACITY THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL OF OFFICE THIS _____ DAY OF _____, 20____.

_____
NOTARY PUBLIC

COUNTY OF COMAL

I, _____COUNTY CLERK OF SAID COUNTY, DO HEREBY CERTIFY THAT THE FOREGOING INSTRUMENT OF WRITING WITH ITS CERTIFICATE OF AUTHENTICATION WAS FILED FOR RECORDED IN MY OFFICE ON THIS _____, DAY OF _____, A.D. 20____, AT _____ ___.M. IN THE RECORDS OF DEEDS AND PLATS OF SAID COUNTY, IN BOOK VOLUME _____ ON PAGE _____. IN TESTIMONY WHEREOF, WITNESS MY HAND AND OFFICIAL SEAL OF OFFICE, THIS _____ DAY OF _____, A.D. 20_____.

BY: _____
COUNTY CLERK, COMAL COUNTY, TEXAS

RECEIVED
FEB 29 2008
COUNTY ENGINEER

STATE OF TEXAS
COUNTY OF BEXAR

SWORN TO AND SUBSCRIBED BEFORE ME ON THE _____ DAY OF _____, 20____

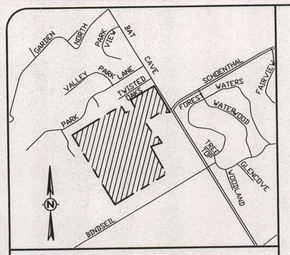
_____
NOTARY PUBLIC

THIS PLAT OF **THE FOREST OF GARDEN RIDGE IV, UNIT 4B** HAS BEEN SUBMITTED TO AND CONSIDERED BY THE CITY COUNCIL OF GARDEN RIDGE, TEXAS, AND IS HEREBY APPROVED BY SUCH COUNCIL.

DATED THIS _____ DAY OF _____, 20_____.

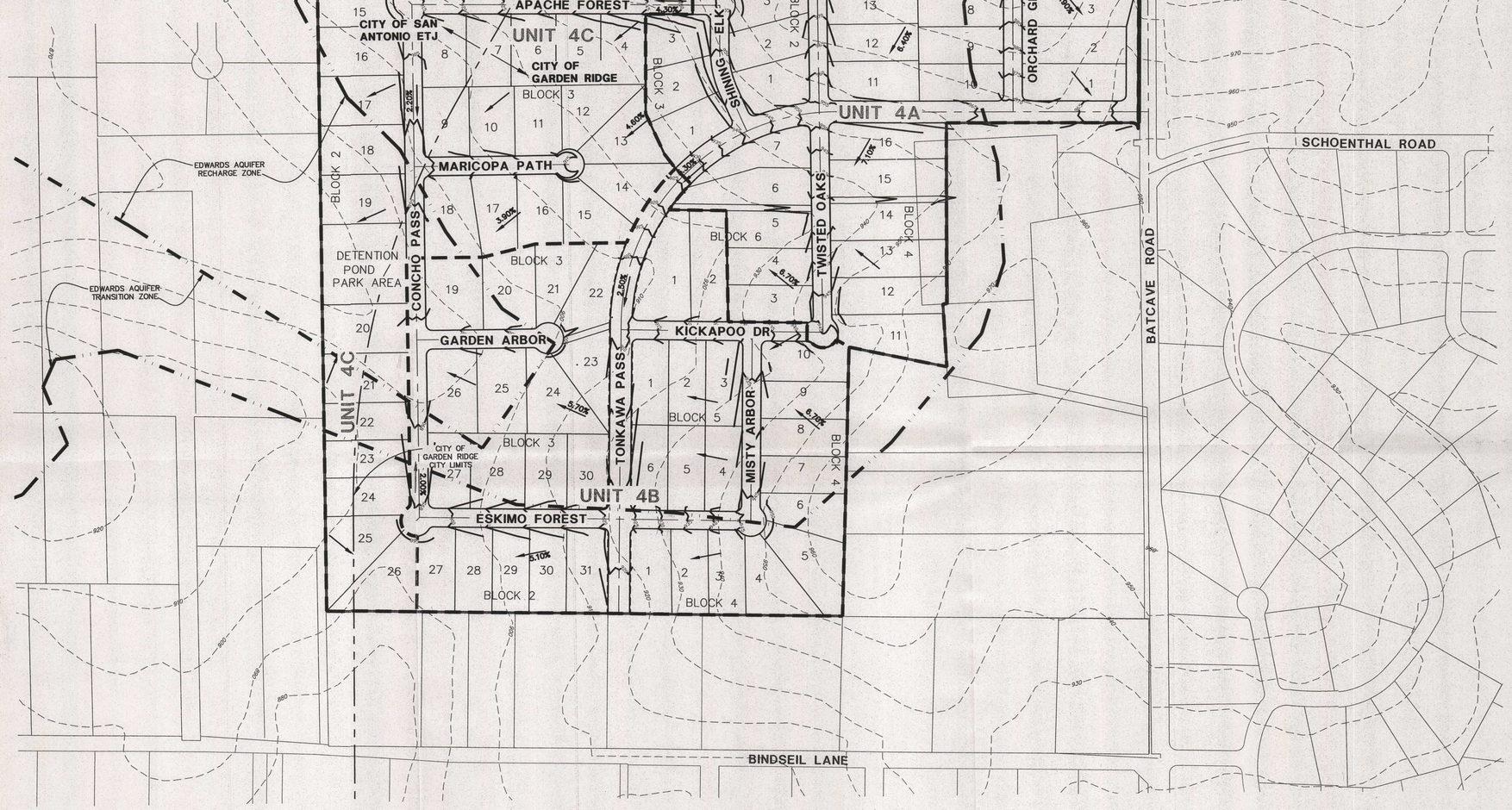
BY: _____
MAYOR

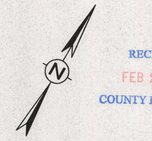
BY: _____
CITY SECRETARY



LOCATION MAP

NOT TO SCALE





RECEIVED
FEB 29 2008
COUNTY ENGINEER

LEGEND

- PROPERTY BOUNDARY
- CITY OF GARDEN RIDGE CITY LIMIT
- UNIT BOUNDARY

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.

San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

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

GENERAL NOTES:

1. ENTIRE SITE TO BE DISTURBED AND ALL DISTURBED SOIL TO BE STABILIZED.

2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT AND STORAGE AREA ARE TO BE DETERMINED IN THE FIELD. THEY ARE SHOWN ON SHEET C4.0 FOR ILLUSTRATION PURPOSES ONLY

3. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.

4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.

5. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.

6. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.

7. CONTRACTOR WILL BE RESPONSIBLE FILING ALL NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO TPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.

8. A COPY OF THE TEMPORARY STORMWATER ABATEMENT PLAN (REF. SHEET C4.0) AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.

9. 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.

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SAN ANTONIO
REGION

NO.	DATE	REVISION	BY
1	2/14/08	WPAP COMMENTS	JDV

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Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
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STATE OF TEXAS
NATASHA F. UHLRICH
89502
LICENSED PROFESSIONAL ENGINEER
2/29/08

PROPOSED SITE PLAN

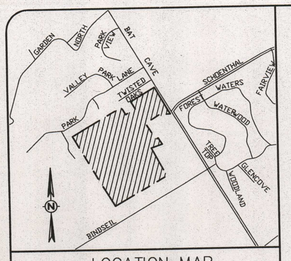
FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/20/2007
DRAWN BY: SGV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 31020.022

SHEET
C1.0

Drawing Name: M:\31020.022.1 Bat Cave 107-ccrh\dwg\31020322_Site.dwg Feb 18, 2008 - 2:16pm



LOCATION MAP

NOT TO SCALE

"RECEIVED TCEQ" SAN ANTONIO REGION 2008 FEB 19 PM 2:31

RECEIVED FEB 29 2008 COUNTY ENGINEER

0 200 400

LEGEND

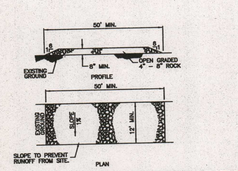
- PROPERTY BOUNDARY
- CITY OF GARDEN RIDGE CITY LIMIT
- LOC — LIMIT OF CONSTRUCTION
- SF — SILT FENCE
- ROCK BERM
- CONCRETE WASHOUT PIT
- STABILIZED CONSTRUCTION ENTRANCE/EXIT

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.

San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

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



TEMPORARY CONSTR. ENTRANCE/EXIT

N.T.S.

TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES

INSTALLATION

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTEHR OBJECTIONABLE MATERIAL FROM TEH FOUNDATION AREA. GRADE CRWIN FOUNDATION FOR POSITIVE DRAINAGE.
2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2% CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (H:V) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROV. STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS. LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINNTAIN PROPER PUBLIC ROAD DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES

1. THE ENTRANCE SHOULD BE MAINTAINED INA CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING STONE IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STRM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

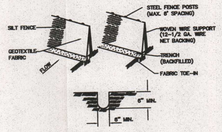
SILT FENCE NOTES

INSTALLATION

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLETOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER. WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
2. LAYOUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. the FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
3. THE TOE OF THE SILT FENCE SHOULD BE TENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT OF FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES

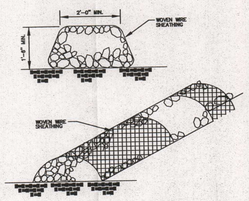
1. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.



TRENCH CROSS-SECTION

SILT FENCE

N.T.S.



ROCK BERM

N.T.S.

CONCRETE TRUCK WASHOUT PIT

N.T.S.

GENERAL NOTES:

1. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT AND STORAGE AREA ARE TO BE DETERMINED IN THE FIELD. THEY ARE SHOWN ON THIS PLAN FOR ILLUSTRATION PURPOSES ONLY
2. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.
4. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
6. CONTRACTOR WILL BE RESPONSIBLE FILING ALL NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO TPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.
7. A COPY OF THIS PLAN AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.
8. 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.

ROCK BERM NOTES

INSTALLATION

1. LAYOUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.
2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTIER.
3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM (SEE DETAIL), TO A HEIGHT NOT LESS THAN 18".
4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

INSPECTION AND MAINTENANCE GUIDELINES

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED AMNNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

NO.	DATE	BY
1	2/14/08	JDV
	ADDED SILT AT ENTRANCE	
	REVISION	

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Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
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San Antonio, Texas 78232
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STATE OF TEXAS
NATASHA F. OHLRICH
89502
LICENSED PROFESSIONAL ENGINEER
2/19/08

TEMPORARY STORM WATER ABATEMENT PLAN

FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/20/2007
DRAWN BY: SQV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 310203.022

SHEET
C4.0

Drawing Name: M:\310203.022.1 Bat Cave 107-acre\Dwg\310203022_SWPPP.dwg Feb 18, 2008 - 2:26pm

Carter::Burgess

LETTER OF TRANSMITTAL

Attention:	Javier Anguiano	Date:	2/20/08	Project No:	310203.022.1.0390
To:	TCEQ	Re:	Forest of Garden Ridge IV		
	14250 Judson Rd.				
	San Antonio Tx 78233		WPAP Deficiency Comments 1A		
	210-490-4019		EAPP No. 2753.00		

We are sending you these items via: 2 Hour Courier

COPIES	DATE	DESCRIPTION
1		Comments Email
5		Form 0600 Revisions
5		Revised Site Plan (C1.0)

☒	For approval	☐	For your use	☐	For review & comment

REMARKS: Javier, per the emailed comments we have revised Item 8 of Form 0600 and Attachment D of form 0600. Furthermore you will also find revised Site Plans per your comments. The attached documents replace the original documents submitted with the WPAP package. Any help you can lend to expedite the approval of the WPAP is greatly appreciated. Call me if you have any questions 403-5567.

Thank You Very Much.

SENDER: Jonathan D. Vargas, E.I.T.	TELEPHONE: 210-494-0088

Vargas, Jonathan D.

From: Javier Anguiano [JAnguian@tceq.state.tx.us]
Sent: Wednesday, February 20, 2008 3:38 PM
To: Vargas, Jonathan D.
Subject: Forest of Garden Ridge

Jonathan,

Additional information and some corrections are needed for the review of Forest of Garden Ridge (EAPP No. 2753.00).

Two issues:

- Item 5 on NOD 1 referenced the wrong form. It should have referenced Item 8 on TCEQ-0600 not TCEQ-0602. Please respond to Item 8 on TCEQ-0600.

- The site plan appears to mislabel the Contributing Zone and the Transition Zone Boundaries. Please amend the site plan as necessary.

Please submit one original and four copies of the amended materials to supplement the WPAP application.

If you have any questions please call me.

Thanks,

Javier Anguiano
Environmental Investigator
TCEQ San Antonio Region Office
14250 Judson Rd.
San Antonio, TX 78233
(210) 403-4019

recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

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

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

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

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

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

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

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.

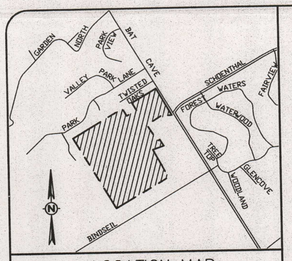
8. X **ATTACHMENT D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is provided at the end of this form. Each feature identified in the Geologic Assessment as "sensitive" or "possibly sensitive"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

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

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

Attachment D – BMPs for Surface Streams **Form 0600**

Since the site has less than 20% impervious cover, permanent BMP are not required. Please refer to the Temporary BMP section of this report for details concerning proper erosion control protection. All storm water systems are designed to control erosive discharge. A water well that was classified as a man-made sensitive feature was located on the project site. This existing well is not currently in use and will be properly capped and plugged per the governing TCEQ and EAA specifications.



LOCATION MAP

NOT TO SCALE

RECEIVED
FEB 29 2008
COUNTY ENGINEER

0 200 400

LEGEND

- PROPERTY BOUNDARY
- CITY OF GARDEN RIDGE CITY LIMIT
- UNIT BOUNDARY

Texas Commission on Environmental Quality
Water Pollution Abatement Plan
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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:
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    - 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.

San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

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

GENERAL NOTES:

1. ENTIRE SITE TO BE DISTURBED AND ALL DISTURBED SOIL TO BE STABILIZED.
2. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT AND STORAGE AREA ARE TO BE DETERMINED IN THE FIELD. THEY ARE SHOWN ON SHEET C4.0 FOR ILLUSTRATION PURPOSES ONLY
3. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.
4. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.
5. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.
6. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
7. CONTRACTOR WILL BE RESPONSIBLE FILING ALL NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO TPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.
8. A COPY OF THE TEMPORARY STORMWATER ABATEMENT PLAN (REF. SHEET C4.0) AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.
9. 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.

RECEIVED TCEQ
SAN ANTONIO
REGION
2008 FEB 21 AM 9:56

NO.	DATE	REVISION	BY
2	2/20/08	ADDED CONTRIBUTING ZONE WITHIN TRANSITION ZONE LABEL	JDV
1	2/14/08	ADDED PERCENT SLOPES TO FLOW ARROWS	JDV

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Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-4500 Fax (210) 494-4525

STATE OF TEXAS
NATASHA F. UHLRICH
89502
LICENSED PROFESSIONAL ENGINEER
2/20/08

PROPOSED SITE PLAN

FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/20/2007
DRAWN BY: SQV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 310203.022

SHEET
C1.0

Drawing Name: M:\310203.022\ Bat Cave 107--acre\dwg\310203022_Site.dwg Feb 20, 2008 - 4:45pm

EAPP No. 2753.00

Javier Anguiano - RE: Forest at Garden Ridge IV

From: "Vargas, Jonathan D." <Jonathan.Vargas@c-b.com>
To: "Javier Anguiano" <JAnguian@tceq.state.tx.us>
Date: 2/27/2008 11:01 AM
Subject: RE: Forest at Garden Ridge IV

Javier,

I just received this from the Geologist. I believe this will explain the concern that was raised. Please let me know if there is anything else we can facilitate you with to expedite the approval letter.

Thanks Again.

From: Javier Anguiano [mailto:JAnguian@tceq.state.tx.us]
Sent: Tuesday, February 26, 2008 10:29 AM
To: Vargas, Jonathan D.
Subject: Forest at Garden Ridge-GA

Jonathan,

I need one more piece of info. On the Geologic Assessment (GA), feature S-3 was classified as a closed depression, but no determination of as to what caused the depression was given, as was the cases in S-11 and S-12. Please provide an answer as to why feature S-3 is a non-karst feature.

Thanks,

Javier Anguiano
Environmental Investigator
TCEQ San Antonio Region Office
14250 Judson Rd.
San Antonio, TX 78233
(210) 403-4019

Frost GeoSciences
Construction Materials • Forensics
Environmental • Geotechnical

Frost Geosciences, Inc.
13402 Western Oak
Helotes, Texas 78023
***Office** (210)-372-1315*
***Fax** (210)-372-1318*

February 27, 2008

Jacobs Carter Burgess
Jonathan D. Vargas, E.I.T.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232

SUBJECT:
TCEQ Response Letter
Forest of Garden Ridge IV
107-Acre Tract
Garden Ridge, Texas
FGS Project Nº FGS-E07401

Dear Mr. Vargas:

The following paragraphs constitute a response to TCEQ comments issued to Jacobs Carter Burgess regarding the Geologic Assessment at the Forest of Garden Ridge. The comments from the TCEQ requested an explanation as to the origin of feature S-3, which was classified in the written geologic description as a closed depression. Similar features in the report, specifically S-11 and S-12, and their speculative origins were described. Here we will provide an answer as to why feature S-3 is a non-karst closed depression feature.

Feature S-3 is located on the Buda Formation, which lies above the Del Rio Clay. Both are upper confining units to the Edwards Aquifer. It is unclear, through surface observations, as to the origin of the non-karst closed depression. However, due to the feature's stratigraphic location, we believe the feature is not relevant to any significant discussion pertaining to recharge.

If you have any questions, please do not hesitate to contact us. We appreciate the opportunity to perform this service for you.

STATE OF TEXAS
TOMAS HERNANDEZ, JR.
GEOLOGY
3297
LICENSED
PROFESSIONAL GEOSCIENTIST

Respectfully submitted,
Frost GeoSciences, Inc.

Tomas Hernandez, Jr., P.G.
Project Manager

Copies to: Addressee (1 copy)

FILE COPY

Comal County

OFFICE OF COMAL COUNTY ENGINEER

December 21, 2007

Mr. Mark Kastner, P.E.
Jacobs Carter Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, TX 78232-5065

Re: Forest of Garden Ridge – Unit IV Subdivision On-Site Sewage Facility Suitability Letter, within Comal County, Texas

Dear Mr. Kastner:

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. The portion of the referenced site that lies over the Edwards Aquifer Recharge Zone ("EARZ") will meet the special requirements for on-site sewage facilities located over the EARZ as specified in TAC §285.40-42. These findings are based on the following information submitted to our office on December 11, 2007:

- The Geologic Assessment, prepared by Frost Geosciences
- The Water Pollution Abatement Plan, prepared by Jacobs Carter Burgess

On a separate matter, according to TAC §285.4(c), persons proposing residential subdivisions within Comal County and using on-site sewage facilities (OSSFs) for sewage disposal are required to submit planning materials for the residential subdivision to Comal County. The planning materials shall be prepared by a professional engineer or professional sanitarian and shall include an overall site plan, topographic map, 100-year floodplain map, soil survey, location of water wells, locations of easements as identified in TAC §285.91(10) (relating to Tables), a complete report detailing the types of OSSFs to be considered and their compatibility with area-wide drainage and groundwater, and a comprehensive drainage plan. Comal County also asks for an existing improvements sketch and gate combination(s) in order to adequately inspect the site for use of OSSFs for sewage disposal. We have included Comal County's *Application for Licensing Authority Recommendation for Private Sewerage Facilities for a Proposed Subdivision* for your use.

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

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: Jay Millikin, Comal County Commissioner, Precinct No. 2
Betty Lien, Comal County Subdivision Coordinator

attachment a/s

Application for Licensing Authority Recommendation
for Private Sewerage Facilities for a Proposed Subdivision

Date: _____

Subdivision Name: _____

Owner's Name: _____

Address: _____

Phone #: _____

Fee Schedule:
5 or less tracts: $20/tract
6 or more tracts: $100 base fee + $5/tract

Total Fee: $_____

Received by: _____

Make check payable to Comal County

According to TAC §285.4(c), before the permit process for individual OSSFs can begin, persons proposing residential subdivisions, manufactured housing communities, multi-unit residential developments, business parks, or other similar uses within Comal County and using on-site sewage facilities (OSSFs) for sewage disposal are required to submit planning materials for these developments to Comal County, as the Authorized Agent of the Texas Commission on Environmental Quality (TCEQ). The planning materials shall be prepared by a professional engineer or professional sanitarian and shall include:

- an overall site plan
- topographic map
- 100-year floodplain map
- soil survey
- location of water wells
- locations of easements as identified in TAC §285.91(10) (relating to Tables)
- a complete report detailing the types of OSSFs to be considered and their compatibility with area-wide drainage and groundwater
- a comprehensive drainage plan

Comal County also asks for an existing improvements sketch and gate combination(s) in order to adequately inspect the site for use of OSSFs for sewage disposal.

_____
Applicant/Agent Signature

Date of Review (must be within 45 days of receipt): _____

☐ Approved

☐ Denied

Reasons for Denial: _____

_____

_____

_____

Reviewer: _____, D.R.

*** Note: This sheet shall be first with all planning materials listed above following behind.**

Carter::Burgess

Engineering, Architecture
and Related Services

James I. Ingalls, E.I.T.

Land Development

210.494.0088 Main

911 Central Parkway North
Suite 425
San Antonio, Texas
78232-5052
Fax: 210.494.4525
james.ingalls@c-b.com
www.c-b.com

Carter::Burgess

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

LETTER OF TRANSMITTAL

Attention:	Robert Boyd	Date:	12/11/07	Project No:	310203. 022.1.0390
To:	Comal County Engineer's Office	Re:	Forest of Garden Ridge IV		
	195 David Jonas Drive				
	New Braunfels, Texas 78132		Septic Suitability		

We are sending you these items via: 2 hr Courier

COPIES	DATE	DESCRIPTION
1	12/11/07	Septic Suitability Letter Request
1	12/11/07	WPAP – Draft Copy

☐	For approval	☒	For your use	☐	For review & comment

REMARKS

SENDER: James Ingalls	TELEPHONE: 494-0088

M:\310203.022.1 Bat Cave 107-acre\docs\Transmittals\092107ValerieMorales.doc

WATER POLLUTION ABATEMENT PLAN

FOR

FOREST OF GARDEN RIDGE

UNIT IV

December 2007

JACOBS
Carter Burgess

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

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: Forest of Garden Ridge – Unit IV
COUNTY: Comal STREAM BASIN: _____

EDWARDS AQUIFER:
X RECHARGE ZONE
X TRANSITION ZONE

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

CUSTOMER INFORMATION

1. Customer (Applicant):

Contact Person: Carlos Sandavol
Entity: Laredo GFG Development, Ltd.
Mailing Address: 18618 Tuscany Stone, Suite 100
City, State: San Antonio, TX Zip: 78258
Telephone: (210) 497-3385 FAX: (210) 495-2587

Agent/Representative (If any):

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

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 Garden Ridge, TX.
__ This project is not located within any city's limits or ETJ.

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

Located on Fm 2252 approx. 2 miles N of the intersection of FM 2252 and FM 3009.

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:

PROHIBITED ACTIVITIES

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

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

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

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

ADMINISTRATIVE INFORMATION

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

X For a Water Pollution Abatement Plan and Modifications, the total acreage of the site

where regulated activities will occur.

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

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

__ A Contributing Zone Plan.

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

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

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

__ TCEQ cashier

__ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)

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

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

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

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

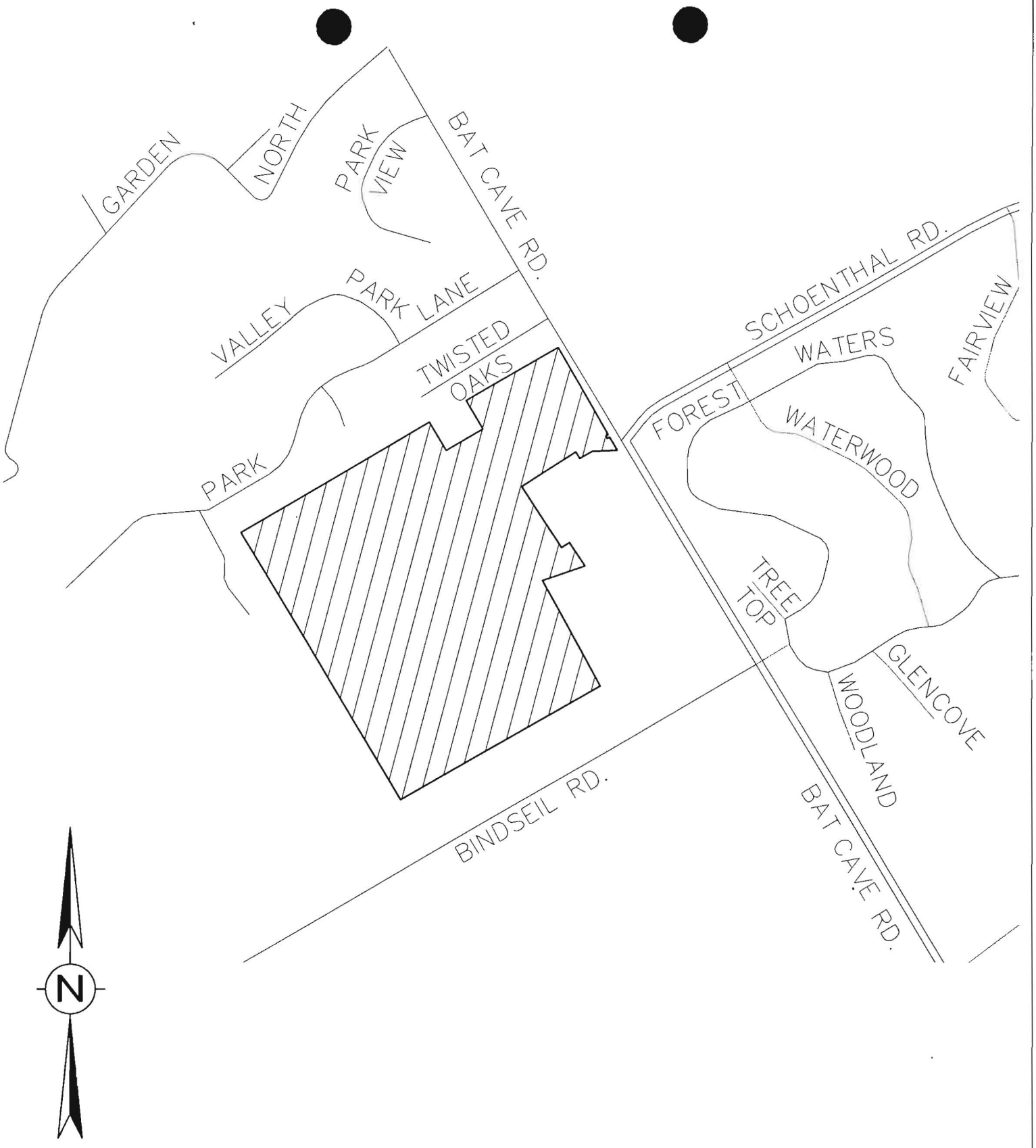
To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **GENERAL INFORMATION FORM** is hereby submitted for TCEQ review. The application was prepared by:

Mark Kastner, P.E.
Carter & Burgess, Inc.
Print Name of Customer/Agent

_____ _____
Signature of Customer/Agent 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.



Carter :: Burgess

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

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

FOREST OF GARDEN RIDGE IV

LOCATION MAP

DRAWN BY: JDV CHECKED BY: JDV

DATE: 7/17/07 PROJECT NO.: 310302.022

SHEET 1 OF 1

ATTACHEMENT C – PROJECT DESCRIPTION

Form 0587

The Forest of Garden Ridge – Unit IV is a single family residential development situated on approximately 107.1 acres. The project is located off Bat Cave Rd. near the intersection at Schoenthal Rd, within the city limits of Garden Ridge, Comal County, Texas. A portion of the site lies within the Edwards Aquifer Recharge Zone, and the remainder of the site lies within the Edwards Aquifer Transition Zone. The proposed development consists of approximately 103 lots, with supporting streets, park area, and infrastructure. No portion of the proposed site lies within the limits of the 100-year floodplain.

The residential lots are a minimum of 0.75 acres. The impervious cover was calculated using a structure size of 3000 square feet with a driveway of 1700 square feet. As such, the amount of impervious cover increase for the site will be less than 20%, thus eliminating the need for permanent BMP's.

GEOLOGIC ASSESSMENT
(WPAP)

FOREST OF GARDEN RIDGE IV
107 ACRE TRACT
GARDEN RIDGE, TEXAS

FROST GEOSCIENCES, INC.
PROJECT NO.: FGS-E07 401
DECEMBER 5, 2007

Prepared exclusively for

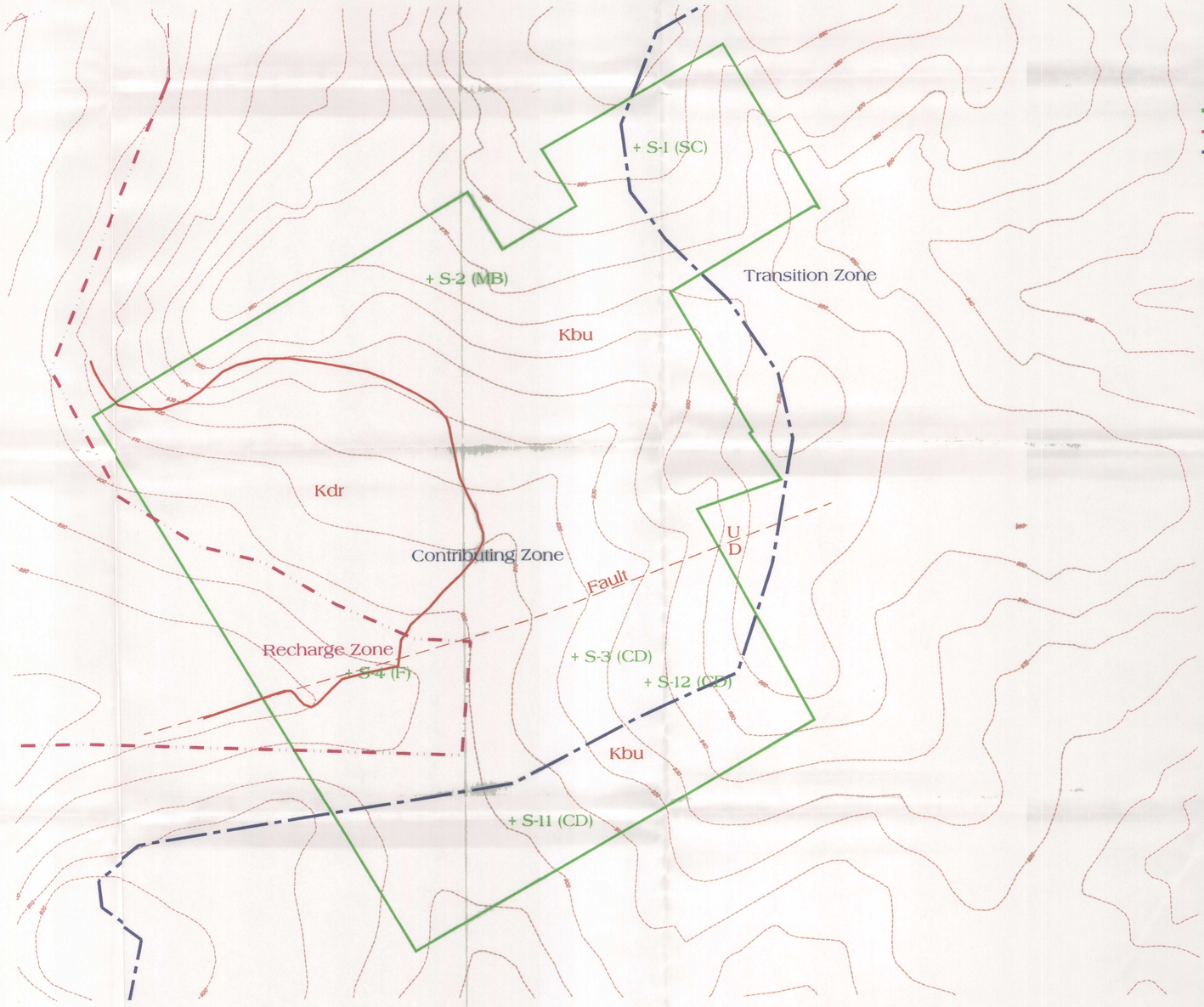
Laredo GFG Development, Ltd.
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Jacobs Carter Burgess
911 Central Parkway North, Suite 425
San Antonio, Texas 78232

Frost GeoSciences

Construction Materials ▪ Forensics
Environmental ▪ Geotechnical

Location Map



Legend

Kdr - Del Rio Clay

Kbu - Buda Limestone

S# - Potential Recharge Feature
(Sensitive Features in Red)

(C) Cave

(SC) Solution Cavity

(SF) Solution-enlarged Fractures

(MB) Manmade Feature in Bedrock

(SW) Swallow Hole

(SH) Sinkhole

(CD) Non-karst Closed Depression

(Z) Zone, Clustered, or Aligned Features

Site Boundary

Edwards Aquifer Recharge Zone

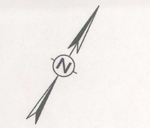
Edwards Aquifer Contributing Zone Within Transition Zone

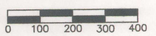
Inferred Fault
U = Upthrown Block
D = Downthrown Block

Geologic Formation Contact

Geologic Information Obtained From:
Geologic Map of New Braunfels, Texas
30 x 60 Minute Quadrangle (2000)

Recharge Information Obtained From:
Edwards Aquifer Recharge Zone Map, USGS
7.5 Minute Quadrangle, Rat Cave, Texas





Scale: 1" = 200'

REVISIONS:

Frost GeoSciences
Construction Materials • Forensics
Environmental • Geotechnical

Site Geologic Map

Forest of Garden Ridge, IV
107 Acres
Garden Ridge, Texas

Site Geologic Assessment (WPAP) for Regulated Activities / Development on the Edwards Aquifer Recharge / Transition Zone

JOB NO. FGS-E07401

DATE 12/03/07

DESIGNER

CHECKED TH DRAWN TAB

SHEET 1 of 2

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

BAT CAVE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

RECHARGE ZONE

RECHARGE ZONE

RECHARGE ZONE

PROJECT SITE

TRANSITION ZONE

Mapped by the Army Map Service
Edited and published by the Geological Survey

Control by USGS, NOS/NOAA, and USCE

Topography by photogrammetric methods from aerial photographs taken 1952. Field annotated 1953. Revised by Geological Survey from aerial photographs taken 1966. Field checked 1967.

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

Fine red dashed lines indicate selected fence lines

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

UTM GRID AND 1973 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24 000

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

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

QUADRANGLE LOCATION

ROAD CLASSIFICATION

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

BAT CAVE, TEX.
N2957.5—W9815/7.5

1967
PHOTOREVISED 1973
AMS 6343 III-SE-SERIES V882

2 08-424

Frost GeoSciences
Construction Materials • Forensics
Environmental • Geotechnical

Frost Geosciences, Inc.
13402 Western Oak
Helotes, Texas 78023
Office (210)-372-1315
Fax (210)-372-1318

December 5, 2007

Laredo GFG Devlopment, Ltd.
18618 Tuscany Stone, Suite 100
San Antonio, Texas 78258

Attn: Mr. Carlos Sandavol

Jacobs Carter Burgess
911 Central Parkway North, Suite 425
San Antonio, Texas 78232

Attn: Ms. Natasha F. Ulrich

SUBJECT:
Geologic Assessment
Forest of Garden Ridge IV
107 Acre Tract
Garden Ridge, Texas
FGS Project Nº FGS-E07 401

Dear Mr. Sandavol:

Frost GeoSciences, Inc., (FGS) is pleased to submit the enclosed Geologic Assessment completed for the above referenced Site as it relates to 30 TAC §213.5(b)(3), effective September 11, 2003. Our investigation was conducted, and this report was prepared in general accordance with the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04).

If you have any questions regarding this report, or if Frost GeoSciences, Inc. may be of additional assistance to you on this project, please feel free to call our office. It has been a pleasure to work with you and we wish to thank you for the opportunity to be of service to you on this project. We look forward to being of continued service.

We appreciate the opportunity to perform these services for Laredo GFG Development, Ltd. Please contact the undersigned if you have questions regarding this report.

Respectfully submitted,
Frost GeoSciences, Inc.

Tomas Hernandez, Jr., P.G.
Project Geologist

Copies Submitted: (6) Mr. Carlos Sandavol; Laredo GFG Development, Ltd.
(1) CD Copy

TABLE OF CONTENTS

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: Forest of Garden Ridge IV

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

LOCATION OF PROJECT: X Recharge Zone __ Transition Zone X 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 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	D	1-2
Medlin-Eckrant association	D	1-2
Krum clay	D	2-3

* 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" = 200 '
Site Geologic Map Scale	1" = 200 '
Site Soils Map Scale (if more than 1 soil type)	1" = 200 '

6. Method of collecting positional data:

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

7. X The 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 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 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 1 (#) wells present on the Site and the locations are shown and labeled. (Check all of the following that apply.)
   - The wells are not in use and have been properly abandoned.
   - The wells are not in use and will be properly abandoned.
   - The wells are in use and comply with 16 TAC Chapter 76.

   ___ 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: November 30, 2007 and December 3, 2007
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.

Tomas Hernandez, Jr., P.G.
Print Name of Geologist

210-372-1315
Telephone

210-372-1318
Fax

_____
Signature of Geologist

December 5, 2007
Date

Representing: Frost Geosciences, 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 TABLE | **PROJECT NAME: Forest of Garden Ridge IV**

LOCATION			FEATURE CHARACTERISTICS											EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11	12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)	TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	29° 38' 25.1"	98° 19' 12.1"	SC	20	Kbu	1	1	2					OF	5					Hilltop
S-2	29° 38' 20.4"	98° 19' 20.9"	MB	30	Kbu	4	3							10					Hilltop
S-3	29° 38' 6.37"	98° 19' 14.9"	CD	5	Kbu	3	3	1					OFC	5					Hillside
S-4	29° 38' 6.19"	98° 19' 24.1"	F	20	Kbu/Kdr	1,700	?	?	NE	10			F						Hillside
S-11	29° 38' 1.25"	98° 19' 17.6"	CD	5	Kbu	4	5	1.5					OFC	5					Hillside
S-12	29° 38' 5.9"	98° 19' 12.2"	CD	5	Kbu	4	4	1.5					OFC	5					Hillside

Datum: NAD 27

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, 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 213

Tomas Hernandez, Jr. P.G.

Date December 5, 2007

Sheet 1 of 1

STRATIGRAPHIC COLUMN

Hydrogeologic subdivision			Group, formation, or member			Hydrologic function	Thickness (feet)	Lithology	Field identification	Cavern development	Porosity/ permeability type
Upper Cretaceous	Upper confining unit		Taylor Group			CU	600	Clay, chalky limestone	Gray-brown clay; marly limestone	None	Low porosity/ low permeability
			Austin Group			CU; rarely AQ	130 – 150	White to light-tan to gray limestone	White, chalky limestone; *Pycnodonte aucella Inoceramus subquadratus*	None	Low porosity; rare water production from fractures/ low permeability
			Eagle Ford Group			CU	30 – 50	Brown, flaggy sandy shale and argillaceous limestone	Thin flaggy ones, petroliferous	None	Primary porosity lost/ low permeability
			Buda Limestone			CU	40 – 50	Buff, light-gray, dense mudstone	Porcelaneous limestone	Minor surface karst	Low porosity/ low permeability
			Del Rio Clay			CU	50 – 60	Blue-green to yellow-brown clay	Fossiliferous, *Ilymatogyra arietina*	None	None/primary upper confining unit
Lower Cretaceous	I	Edwards aquifer	Georgetown Formation			CU	40 – 60	Gray to light-tan, marly limestone	Marker fossil: *Waconella wacoensis*	None	Low porosity/ low permeability
	II		Edwards Group	Person Formation	Cyclic and marine members, undivided (4)	AQ	0 – 70	Mudstone to packstone; *miliolid* grainstone; chert	Boxwork vugs; light tan, massive; some *Toucasia*, *Caprinid*, and *Chondrodonta*	Many caves; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding; one of the most porous and permeable; essentially absent in Travis County
	III				Leached and collapsed members, undivided (4)	AQ	30 – 80	Crystalline limestone; mudstone to wackestone to *miliolid* grainstone; chert, collapsed breccia	Light-gray, bioturbated iron-stained beds separated by massive limestone beds; *Toucasia*, *Chandrodonta*	Extensive lateral development; large rooms	Majority not fabric/ one of the most porous and permeable
	IV				Regional dense member (3)	CU	20 – 30	Light-tan, dense, argillaceous mudstone	Wispy iron-oxide stains; *Pleuromya knowltam*, *Ceratostreon texanum*	None; only vertical fracture enlargement	Not fabric/ low permeability; vertical barrier
	V			Kainer Formation	Grainstone member (2)	AQ	45 – 60	Light-gray, *miliolid* grainstone; mudstone to wackestone; chert	White crossbedded grainstone; *Toucasia*, *Turritella*, and *Chondrodonta*	Few caves	Not fabric/ recrystallization reduces permeability
	VI				Kirschberg evaporite member (1)	AQ	65 – 75	Light-gray, crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame; *Cladophyllia* and *Turritella*	Probably extensive cave development	Majority fabric/ one of the most porous and permeable
	VII				Dolomitic member (1)	AQ	110 – 150	Mudstone to grainstone; crystalline limestone; chert	Massively bedded, light gray, *Toucasia* abundant; *Dictyoconus walnutensis*, *Caprinid*	Caves related to structure or bedding planes	Mostly not fabric; some bedding-plane fabric/ water-yielding; locally permeable
	VIII				Basal nodular member	Karst AQ; not karst CU	45 – 60	Shaly, fossiliferous, nodular limestone; mudstone; *miliolid* grainstone	Massive, nodular and mottled; *Ceratostreon texanum*, *Dictyoconus walnutensis*, and *Texigryphaea*	Few leaves	Fabric/low permeability
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350 – 500	Yellowish-tan, thinly bedded limestone and marl	Stair-step topography, alternating limestone and marl	Some surface cave development	Some water production at evaporite beds/ relatively impermeable

LOCATION

The Site is located at the intersection of Bat Cave Road and Schoenthal Road in Garden Ridge, Texas. The Site is approximately 107 acres in size. The center of the Site is located at approximately N29° 38' 11.85" Latitude and W98° 19' 19.81" Longitude (WGS 84).

METHODOLOGY

The Geologic Assessment was performed by Mr. Hugo Stolte, Mr. Brian Culver, Ms. Taylor Bickford, and Mr. Tomas Hernandez, Jr., P.G., with Frost GeoSciences, Inc., on November 30, 2007 and December 3, 2007. Frost GeoSciences, Inc. researched the geology of the area surrounding Site. The research included, but was not limited to, the Geologic Atlas of Texas, San Antonio Sheet, FEMA maps, Edwards Aquifer Recharge Zone Maps, USGS 7.5 Minute Quadrangle Maps, and the USDA Soil Survey of Bexar County, Texas.

After reviewing the available information, a field investigation was performed to identify any geologic or man made potential recharge features. A transect spacing of approximately 25 feet, or less depending on vegetation thickness, was used to inspect the project site. A 2005 aerial photograph, in conjunction with a hand held Garmin eTrex Summit Global Positioning System with an Estimated Potential Error ranging from 10 to 18 feet, was used to navigate on the property and identify the locations of potential recharge features, as recommended in the "Instructions to Geologists", TCEQ-0585-Instructions (Rev. 10-1-04). The Geologic Assessment Form, Stratigraphic Column, and the Geologic Assessment Table have been filled with the appropriate information for this Site and are included on pages 1-4 of this report.

NARRATIVE DESCRIPTIVE OF SITE GEOLOGY

The Site center of the Site is dominated by a grassy pasture in a low topographic area. The remainder of the Site is dominated by a dense stand of vegetative cover consisting primarily of live oak, Texas persimmon and ash trees. Underlying the soil cover in the northwestern portion of the Site is the Del Rio Clay. The Del Rio Clay is a calcareous and gypsiferous, blocky medium gray clay. Typically, this formation becomes less calcareous and more gypsiferous near the upper contact. Often contains thin lenticular beds of highly calcareous siltstone. Pyrite nodules are common. Marine megafossils include abundant *Exogyra arientina* and other pelecypods. The Del Rio Clay weathers to light gray or yellowish gray. Overall thickness ranges from 60 to 120 feet.

Underlying the soil cover in the remainder of the Site is the Buda Limestone Formation. The Buda Limestone is a light gray to pale orange, fine grained, hard, massive, bioclastic limestone. This limestone is poorly bedded to nodular in the lower section and thinner bedded and argillaceous near the upper contact. It commonly contains glauconitic and pyritiferous zones, and burrows filled with chalky marl. Pelecypods are abundant throughout the section. The Buda Limestone weathers to dark gray or brown. Overall thickness ranges from 60 to 100 feet.

According to the Geologic Map of the New Braunfels, Texas, 30 X 60 minute Quadrangle published by the University of Texas At Austin Bureau of Economic Geology (2000), an inferred

fault exists across the southern portion of the Site. No visible faulting was observed during the field reconnaissance.

A water well was noted adjacent to the residential house on the northern portion of the Site. No other significant observations were noted across the project area during the site reconnaissance.

SITE SPECIFIC GEOLOGIC FEATURE DESCRIPTIONS

S-1 SC: Solution Cavity: A solution cavity, approximately 1 foot by 1 foot by 2 feet in size was observed on the northeastern portion of the Site. The SC appeared to be an animal burrow containing soil and organic infill material.

S-2 MB: Manmade feature in bedrock: Water well, located near the residential house on the northern portion of the property. If not utilized, this well must be plugged and abandoned in accordance with State law.

S-4 F: Fault: According to the Geologic Map of the New Braunfels, Texas, 30 X 60 minute Quadrangle published by the University of Texas At Austin Bureau of Economic Geology (2000), an inferred fault exists across the southern portion of the Site. No visible faulting was observed during the field reconnaissance.

S-3 CD" Closed Depression: A closed depression, approximately 3 feet by 3 feet by 1 foot in size was observed on the Site. The CD was observed as having soil and organic infill material.

S-11 CD" Closed Depression: A closed depression, approximately 4 feet by 5 feet by 2.5 feet in size was observed on the Site. The CD was observed as having soil and organic infill material. It appears as though the CD was a result of a tree or boulder pluck along a road.

S-12 CD" Closed Depression: A closed depression, approximately 4 feet by 4 feet by 1.5 feet in size was observed on the Site. The CD was observed as having soil and organic infill material. It appears as though the CD was a result of a tree or boulder pluck along a road.

Based on a visual inspection of the ground surface, the overall potential for fluid flow from the Site into the Edwards Aquifer appears to be low based on the appearance of the surface of the Site.

SOIL DESCRIPTION

The site has soil cover of approximately one to three feet, consisting of the following soil associations:

Comfort-Rock outcrop complex, 1 to 8 percent slopes (CrD) – The Comfort series consists of well drained, slowly permeable soils that formed in clayey residuum over dolomitic limestone rocks of the Lower Cretaceous period. These soils are on nearly level to sloping upland plateaus and ridges. Slopes range from 0 to 8 percent.

Krum Clay, 1 to 3 and 3 to 5 percent slopes (KrB, KrC) – The Krum series consists of very deep, well drained, moderately slowly permeable soils that formed in calcareous clayey sediments. These soils are on nearly level to moderately sloping terraces and lower slopes of valleys. Slopes range from 0 to 8 percent.

Medlin-Eckrant association, 1 to 8 and 8 to 30 percent slopes (MEC, MED) – The Medlin series consists of deep, well-drained, very slowly permeable soils that formed in clayey marine sediments. These soils are on narrow stream divides and slopes along drainage-ways. Slopes range from 1 to 20 percent. The Eckrant series consists of very shallow and shallow, well drained, moderately slow permeable soils formed in residuum over interbedded limestone, marls and chalk. These upland soils have slopes ranging from 0 to 60 percent.

RESEARCH

7.5 Minute Quadrangle Map Review

According to the USGS 7.5 Minute Quadrangle Map, Bat Cave, Texas, the elevation of the Site ranges from 880 feet to 1000 feet. These elevations are calculated above mean sea level (AMSL). Surface runoff from the Site appears to flow to the southwest towards Cibolo Creek.

Recharge / Transition Zone Map Review

According to the Official Edwards Aquifer Recharge Zone Map, USGS 7.5 Minute Quadrangle, Bat Cave, Texas Map, a portion of the western Site is located within the Recharge Zone of the Edwards Aquifer. The remainder of the Site is located in the Transition Zone of the Edwards Aquifer.

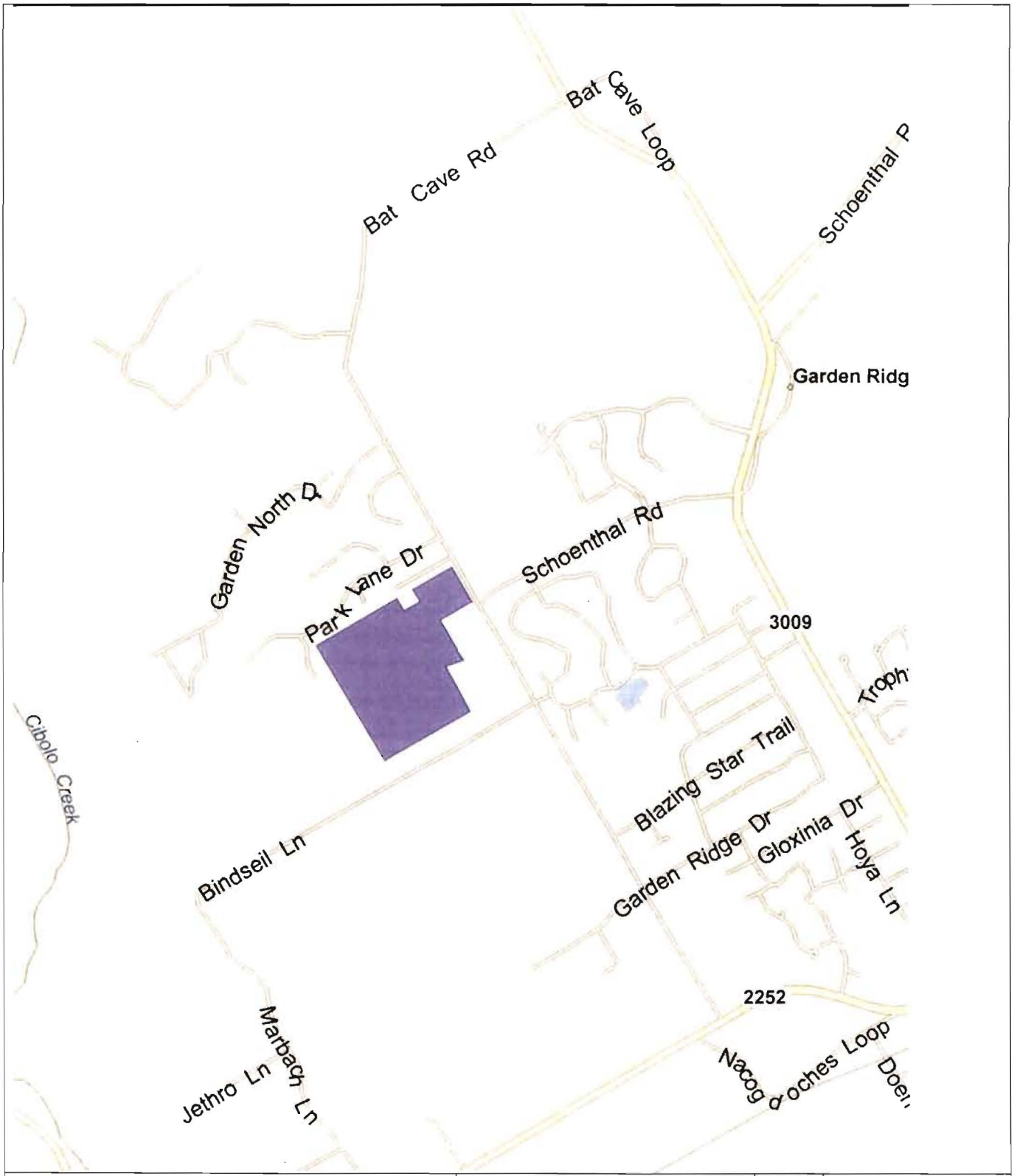
Floodplain Review

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map for unincorporated areas of Comal County, Texas, Community Panel Number 4854630095 D (Revised July 17, 1995) was reviewed. The Site is located in Zone X. Zone X are areas determined to be outside the 500-year floodplain. The Site does not appear to be in a special flood zone.

REFERENCES

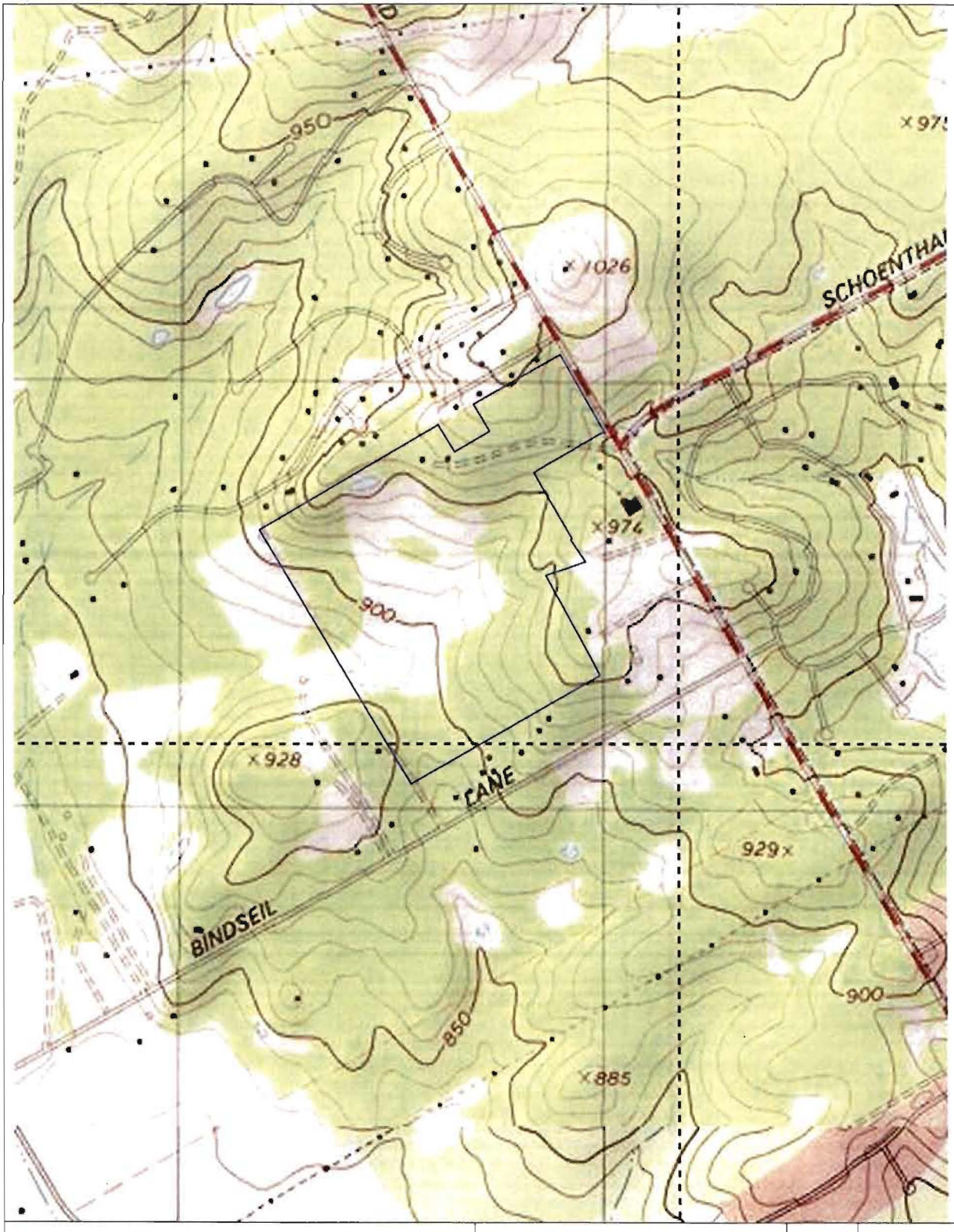
1. USGS 7.5 Minute Quadrangle Map, Helotes, Texas 1992.
2. Edwards Underground Water District Reference Map.
3. Official Edwards Aquifer Recharge Zone Map, Helotes, Texas.
4. Geologic Framework and Hydrogeologic Characteristics of the Edwards Aquifer Recharge Zone, Bexar County, Texas.
5. US Geological Survey Water Resources Investigations 95-4306.
6. Geologic Atlas of Texas, San Antonio Sheet (1982), Bureau of Economic Geology.
7. Federal Emergency Management Agency (FEMA), February 16, 1996, Comal County, Texas and Incorporated Areas, Flood Insurance Rate Map (FIRM), Panel 4854630095D FEMA.
8. USDA Soil Conservation Service, Soil Survey website, http://websoilsurvey.nrcs.usda.gov/app/
9. TCEQ-0585-Instructions (Rev. 10-1-04). "Instructions to Geologists for Geologic"

FIGURES



VICINITY MAP	DRAWING NOT TO SCALE	N↑	FIGURE 3

FGS Project Nº FGS-E07401

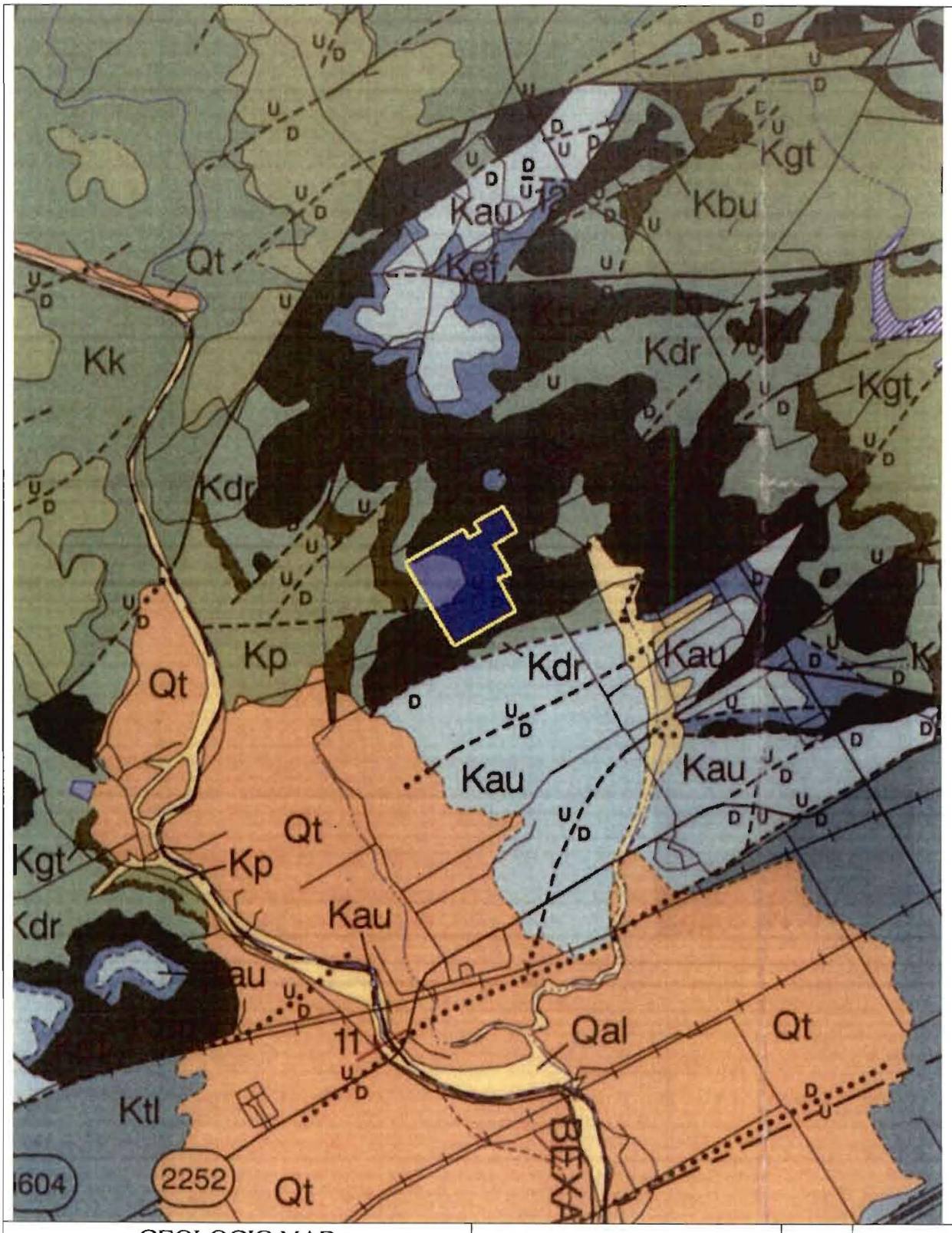


TOPOGRAPHIC MAP	DRAWING NOT TO SCALE	N↑	FIGURE 4

FGS Project Nº FGS-E07401

AERIAL PHOTOGRAPH	DRAWING NOT TO SCALE	N↑	FIGURE 5

FGS Project Nº FGS-E07401



GEOLOGIC MAP New Braunfels Quadrangle	DRAWING NOT TO SCALE	N↑	FIGURE 6

FGS Project Nº FGS-E07401

APPENDIX A

SITE PHOTOGRAPHS

Photo #1 – Photo view of S-1

Photo #2 – Photo view of S-2

Photo #3 – Photo view of S-3

Photo #4 – Photo view of S-11

Photo #5 – Photo shows the cleared material surrounding S-11

Photo #6 – Photo view of S-12

Photo #7 – Alternate photo view of S-12

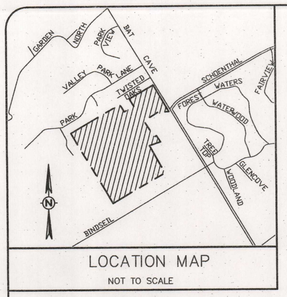
Photo #8 – Photo view is of the ground surface on the northwestern portion of the Site, the Del Rio Clay Formation

Photo #9 – Photo shows the grassy low towards the center of the Site; photo taken from the house

Photo #10 – Photo view is to the south across the grassy area

Photo #11 – Photo view is to the west across the grassy area.

Photo #12 – Photo view is of the wooded area characteristic of the perimeter of the Site



LOCATION MAP

NOT TO SCALE

Need proposed contours
Add flow arrows

* Note stating entirety of site will be disturbed
* Stabilization ALL is note
* Recharge Zone General Notes

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management, Planning and Related Services
Carter and Burgess, Inc.
811 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax: (210) 494-4525

PROPOSED SITE PLAN

FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/20/2007
DRAWN BY: SDV
DESIGNED BY: JH
CHECKED BY: JH
REVIEWED BY: MFU
PROJECT NUMBER: 310203.022

SHEET
C1.0

Drawing Name: M:\310203.022.1 Bat Cave 107-rock\dwg\310203022_Site.dwg Nov 20, 2007 - 2:55pm

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: Forest of Garden Ridge – Unit IV

REGULATED ENTITY INFORMATION

1. The type of project is:
   - X Residential: # of Lots: 103
   - ___ Residential: # of Living Unit Equivalents:
   - ___ Commercial
   - ___ Industrial
   - ___ Other:

2. Total site acreage (size of property): Approximate overall site= 107.14 acres

3. Projected population: N/A

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

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	309,000	÷ 43,560 =	7.09
Parking	175,100	÷ 43,560 =	4.02
Other paved surfaces	336,238	÷ 43,560 =	7.72
Total Impervious Cover	820,338	÷ 43,560 =	18.83
Total Impervious Cover ÷ Total Acreage x 100 =			17.6%

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

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

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

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

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

__ Concrete
__ Asphaltic concrete pavement
__ Other:

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

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

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

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

STORMWATER TO BE GENERATED BY THE PROPOSED PROJECT

13. **ATTACHMENT B - Volume and Character of Stormwater.** A description of the volume and character (quality) of the stormwater runoff which is expected to occur from the proposed project is provided at the end of this form. The estimates of stormwater runoff quality and quantity should be based on area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

WASTEWATER TO BE GENERATED BY THE PROPOSED PROJECT

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

X % Domestic	100 gallons/day	(See Appendix)
__ % Industrial	_____ gallons/day	
__ % Commingled	_____ gallons/day	
TOTAL	100 gallons/day	

15. Wastewater will be disposed of by:

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

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

X 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.

Verify that 3/4 acre can be used. JI

__ 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" = 200 '.

18. 100-year floodplain boundaries

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

X No part of the project site is located within the 100-year floodplain.

The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): Panel 140 (Bexar County) Map No. 48029C8140 E
Dated: February 16, 1996

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

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

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

__ There are _____(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

__ The wells are not in use and have been properly abandoned.

__ The wells are not in use and will be properly abandoned.

__ The wells are in use and comply with 30 TAC §238.

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

21. Geologic or manmade features which are on the site:

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

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

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

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

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

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

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

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

26. NA Surface waters (including wetlands).

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

ADMINISTRATIVE INFORMATION

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

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

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

Mark Kastner, P.E.
Jacobs Carter Burgess
Print Name of Customer/Agent

_____ _____
Signature of Customer/Agent Date

Attachment A – Factors Affecting Water Quality **Form 0584**

Potential Sources of Pollutants During Construction

1. Soil erosion due to construction.
2. Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
3. Hydrocarbons from asphalt paving operations.
4. Miscellaneous trash and debris from construction and material wrappings.

Potential Sources of Pollutants After Construction

1. Traffic related pollutants from cars, roads and driveways.
2. Improper disposal of trash.
3. Pesticides, herbicides and fertilizers.

Attachment B – Volume and Character of Stormwater **Form 0584**

The Forest of Garden Ridge Unit IV drains to three existing lows. These lows run into un-named tributaries of Cibolo Creek, and then into Cibolo Creek itself. The existing terrain of the site consists of un-developed pasture land with slopes ranging from 3%-7%. The stormwater runoff from the proposed development will surface flow off the lots and into the streets. The runoff will then be conveyed to the detention pond via an underground storm drain system. The detention pond will be designed to detain the overall stormwater increase for the site, in order to minimize adverse impact downstream. Onsite design uses the rational method to determine storm water flow rates, with C-values of 0.52 and 0.65 used for undeveloped and Residential developed conditions, respectively. The runoff intensities were calculated using the rainfall intensity constants provided by TxDOT for Comal County. Reference sheet C2.0 and C3.0 for the drainage area maps and calculations for the existing and proposed conditions as described above.

Attachment C – Suitability Letter from Authorized Agent (OSSF) **Form 0584**

There will be septic systems required for the site. Reference the suitability letter from Comal County.

Attachment D – Exception to the Required Geologic Assessment Form 0584

This attachment does not apply to this submittal. An exception to the required Geologic Assessment is not requested. A Geologic Assessment was completed and included in this submittal.

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: Forest of Garden Ridge – Unit IV

POTENTIAL SOURCES OF CONTAMINATION

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

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

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

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

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

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

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

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

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

   N/A The are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

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

6. N/A Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project:

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SOIL STABILIZATION PRACTICES

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

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

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

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

ADMINISTRATIVE INFORMATION

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

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

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

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

Natasha Uhlrich, P.E.
Jacobs Carter Burgess
Print Name of Customer/Agent

_____ _____
Signature of Customer/Agent Date

Attachment A – Spill Response Actions **Form 0602**

There will be no above ground fuel storage tanks allowed on this project. Equipment will be fueled using mobile fuel trucks as needed. There is a small chance of a fuel spill occurring due to leaking construction equipment or re-fueling operations. If a minor spill were to occur, the soil impacted would be removed from the site and properly disposed of in an approved landfill site. If a major spill were to occur, where the amounts spilled were equal to, or exceeding, the Reportable Quantity, RQ, as defined by EPA regulations 40 CFR Parts 110, 119, and 302 then the following steps will be taken.

The following steps will help reduce the stormwater impacts of leaks and spills, in accordance with the Technical Guidance on Best Management Practices, Section 1.4.16, pg(s) 1-118 – 1-121:

Education

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

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

(3) Hold regular meetings to discuss and reinforce appropriate disposal procedures

(incorporate into regular safety meetings).

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

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

General Measures

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

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

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

(4) Train employees in spill prevention and cleanup.

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

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

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

(8) Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.
(9) Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
(10) Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
(11) Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
(12) Keep waste storage areas clean, well organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

(1) Clean up leaks and spills immediately.
(2) Use a rag for small spills on paved surfaces, a damp mop for general cleanup, and absorbent material for larger spills. If the spilled material is hazardous, then the used cleanup materials are also hazardous and must be disposed of as hazardous waste.
(3) Never hose down or bury dry material spills. Clean up as much of the material as possible and dispose of properly. See the waste management BMP's in this section for specific information.

Minor Spills

(1) Minor spills typically involve small quantities of oil, gasoline, paint, etc. which can be controlled by the first responder at the discovery of the spill.
(2) Use absorbent materials on small spills rather than hosing down or burying the spill.
(3) Absorbent materials should be promptly removed and disposed of properly.
(4) Follow the practice below for a minor spill:
(5) Contain the spread of the spill.
(6) Recover spilled materials.
(7) Clean the contaminated area and properly dispose of contaminated materials.

Semi-Significant Spills

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

Spills should be cleaned up immediately:

(1) Contain spread of the spill.
(2) Notify the project foreman immediately.

(3) If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
(4) If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
(5) If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

(1) Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
(2) For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at (800) 424-8802.
(3) Notification should first be made by telephone and followed up with a written report.
(4) The services of a spills contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.
(5) Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.

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

Vehicle and Equipment Maintenance

(1) If maintenance must occur onsite, use a designated area and a secondary containment, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
(2) Regularly inspect onsite vehicles and equipment for leaks and repair immediately
(3) Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
(4) Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
(5) Place drip pans or absorbent materials under paving equipment when not in use.
(6) Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
(7) Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.

(8) Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
(9) Store cracked batteries in a non- leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

(1) If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the runoff of stormwater and the runoff of spills.
(2) Discourage "topping off" of fuel tanks.
(3) Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

Attachment B – Potential Sources of Contamination **Form 0602**

Potential Sources of Pollutants During Construction

1. Soil erosion due to construction.
2. Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
3. Hydrocarbons from asphalt paving operations.
4. Miscellaneous trash and debris from construction and material wrappings.

Potential Sources of Pollutants After Construction

1. Traffic related pollutants from cars, roads and driveways.
2. Improper disposal of trash.
3. Pesticides, herbicides and fertilizers.

The initial phase of the construction of the Forest of Garden Ridge – Unit IV involves site preparation, which consists of clearing and grubbing of vegetation, excavation and grading within the 107 acre site. Temporary BMP's will be installed at this phase. This includes the installation of all rock berms and silt fencing.

The final phase shall include the construction of roads, waterlines, and drainage structures for the project within the cleared right-of-ways and easements. Reference sheet C4.0 for details of sequencing and installation of temporary pollution abatement measures. All disturbed soil areas shall be re-vegetated.

Major Construction Activities and Sequencing

The major construction activities for this project will include and be sequenced as follows:

1. Establish Best Management Practices shall consist of the flowing:

   Silt fencing – installed perpendicular to flow along the downstream end of the entire limits of construction or retaining walls, whichever is applicable. Construction staging area and concrete washout pit -installed at locations that are easily accessible by large equipment and can be isolate or treated from on-site runoff.

   Temporary construction entrance – installed at all access points from the job site to existing streets.

   Rock filter berms – installed at all concentrated discharge points, whether natural or created, downstream of soil disturbance limits.
2. Initial clearing of the site for construction (107 ac).
3. Initial grading operations to achieve the general shape of the streets (15.5 ac).
4. Installation of underground water and storm drain utilities.
5. Construction of street pavement including backfill behind curbs (15.5 ac).
6. Final grading of lots and building pads (91.5 ac).
7. Construction (Pad-specific).

Attachment D – Temporary Best Management Practices and Measures Form 0602

All applicable temporary measures for sediment control will be established during the first phase of construction. These measures will be maintained through construction of the final phase, and for a finite period of time after completion of the infrastructure to ensure establishment of permanent vegetation.

a.) Upgradient storm water sheet flows from the eastern boundary of the site. Upgradient storm water travels through the site via a defined low near the east boundary of the project. The upgradient drainage area is 7.52 aces and stretches about 1200 linear feet along the eastern boundary. The amount of runoff at any one location is minimal. Therefore, no silt fence will be installed along the eastern boundary to protect against upgradient storm water.

b.) Silt fencing, a construction staging area, a concrete truck washout pit, rock filter berms, and a temporary construction entrance / exit will be used in accordance with the latest edition TCEQ Technical Guidance Manual details and criteria, to prevent pollution of surface water and groundwater that originates on-site.

c.) Silt fences, a construction entrance / exit and a concrete truck washout pit shall be in place before the first phase of construction for the Forest of Garden Ridge – Unit IV project is to begin. The temporary construction entrance / exit, construction staging area and concrete wash out pit will prevent sediments from flowing into public right-of-ways and drainage easements. The fencing will be installed downstream of cut/fill areas. The locations of the silt fence were based on the criteria to limit the drainage area of disturbed soil to ¼ acres per 100 linear feet of fencing.

Rock filter will intercept any pollutants from entering the surfaces waters of Mud Creek. The locations of the rock berms were based on the criteria to limit the drainage area of disturbed soil to less than 5 acres. The placement of the temporary measures was based on the layout of streets and drains.

d.) No geologic features were identified for this project. No wells were located during the Geologic Assessment Report. The Temporary and Permanent Pollution Abatement measures for construction are included in this section.

Attachment E – Request to Temporarily Seal a Feature — Form 0602

This attachment does not apply to this submittal. There will be no temporary sealing of sensitive features on the site. As noted on Attachment D, no features were identified on the site.

If a sensitive feature is encountered during construction, the contractor shall stop work immediately and notify the engineer. A registered geologist will be contacted to identify the sensitivity of the feature. At this time, the engineer shall submit to TCEQ a closure plan, if necessary.

Attachment F – Structural Practices **Form 0602**

The following structural measures will be installed prior to construction in accordance with the latest edition TCEQ Technical Guidance Manual details and criteria. Reference sheet C4.0 included in a sleeve at the rear of the Water Pollution Abatement Application.

a.) Installation of silt fences along the boundary of the road right-of-ways as displayed on the Stormwater Pollution Prevention Plan.

b.) Installation of a stabilized construction entrance/ exit located at the subdivision's access points as displayed on the Stormwater Pollution Prevention Plan.

c.) Installation of construction staging areas and concrete washout pit as displayed on the Stormwater Pollution Prevention Plan.

d.) Installation of rock berms as displayed on the Stormwater Pollution Prevention Plan.

Attachment G – Drainage Area Map **Form 0602**

The drainage patterns for the development are divided into 3 areas. The upgradient runoff is shown as a fourth drainage area on the Drainage Area Map for the Existing Conditions (sheet C2.0). This upgradient area is included in area A1 on the Drainage Area Map for the Proposed Conditions (sheet C3.0). Area A1 drains to the south west into an un-named tributary of Cibolo Creek. Area A2 drains into an existing low near the southern corner of the site traveling under Bindseil Rd and continuing south and west until reaching Cibolo Creek. Area A3 drains east into an existing low traveling under Bat Cave Rd. and continuing east through the neighboring subdivision.

Attachment H – Temporary Sediment Pond Plans and Calculations Form 0602

This attachment does not apply to this submittal. No temporary sediment ponds are required.

Attachment I – Inspection and Maintenance for BMPs **Form 0602**

Inspection

Designated and qualified person(s) should inspect the Pollution Control Measures every ~~fourteen~~ seven (~~14~~ 7) days and after every storm event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations and actions that will be taken as a result of the inspection should be kept with the TPDES data for the project.

Construction Entrance / Exit and Construction Staging Area Maintenance

(1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or clean out of any measures used to trap sediment.

(2) All sediment spilled, dropped, washed or tracked on to public right-of-ways should be removed immediately be the contractor.

(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-ways.

(4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.

(5) All sediment should be prevented should be prevented from entering any storm drain, ditch or watercourse by using approved methods.

Sediment Filter Structure Maintenance SILT FENCE:

(1) Remove sediment when buildup reaches 6 inches, ~~or install a second line of rock filter or fencing parallel to the old fence or old rock~~.

P copy all From p. 1-68 of TGM

(2) Replace any torn fabric, loose wire sheathing or install a second line of fencing parallel to the torn section.

(3) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a location where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.

(4) The structure should remain in place until all upstream areas are stabilized and accumulated silt removed.

Inspection Reports

Name & Qualification of Inspector: _____

Date of Inspection: _____

Inspectors shall observe the following items on each inspection:

- Disturbed areas that have not been fully stabilized
- Areas used for storage of materials that are exposed to precipitation
- Control measures outlined in the site plan
- Locations where vehicles enter/exit the site

Inspectors shall denote if any corrective actions are required and when the action was completed.

Major Observations:

Corrective Actions Required:

Corrective Actions Performed:

_____

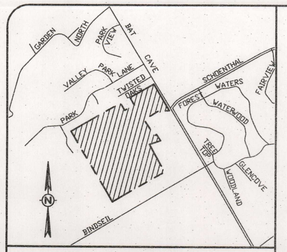
Signature Date

Attachment J – Schedule of Interim and Permanent Soil Stabilization **Form 0602**

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 ceased 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.

Where delays in construction activities extend beyond allowable time limits, the use of vegetative buffer strips will be used along the perimeter of dormant lots. Residential lots supply approximately 91 acres of the project site.

Hydromulching will be installed during delays in construction along the roadways and during lot grading to stabilize slopes. Street ROW occupies approximately 16 acres of the development.



LOCATION MAP

NOT TO SCALE

Forest of Garden Ridge - Unit IV Hydrology Existing Conditions								
Point	Area ID	Area	"C" Value	T_c	I_{25}	I_{100}	Q_{25}	Q_{100}
1	A1 + A4	97.33	0.52	14	7.88	9.82	398.83	496.85
2	A2	13.23	0.52	12	8.56	10.66	58.89	73.35
3	A3	5.72	0.52	10	9.27	11.55	27.57	34.34
4	A4	7.52	0.52	10	9.27	11.55	36.25	45.15

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
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San Antonio, Texas 78232
(210) 494-0088 FAX (210) 494-4825
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OVERALL DRAINAGE AREA MAP EXISTING CONDITIONS

FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/19/2007
DRAWN BY: SQV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 310203.022

SHEET
C2.0

Drawing Name: M:\310203.022.1 Bat Cave 107-ocon\dwg\310203f22_ODM.dwg Nov 20, 2007 - 2:14pm

Forest of Garden Ridge - Unit IV Hydrology Proposed Conditions

Point	Area ID	Area	"C" Value	T_c	I_{25}	I_{100}	Q_{25}	Q_{100}
1	A1	86.58	0.65	15	7.75	9.66	436.18	543.40
2	A2	23.87	0.65	11	8.77	10.92	136.02	169.43
3	A3	5.83	0.65	10	9.27	11.55	35.13	43.76

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NO. | DATE | REVISION | BY

OVERALL DRAINAGE AREA MAP PROPOSED CONDITIONS

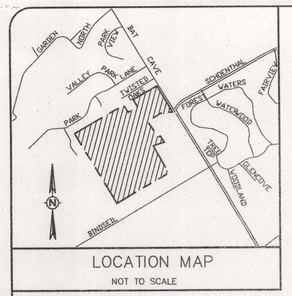
FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/19/2007
DRAWN BY: SGV
DESIGNED BY: JR
CHECKED BY: JR
REVIEWED BY: NCU
PROJECT NUMBER: 3102603.022

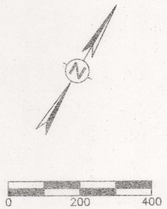
SHEET C3.0

Drawing Name: M:\3102603.022.1 Bat Cave 107-acre\dwg\3102603022_ODM.dwg Nov 20, 2007 - 2:13pm



LOCATION MAP

NOT TO SCALE



LEGEND

- PROPERTY BOUNDARY
- CITY OF GARDEN RIDGE CITY LIMIT
- LOC — LIMIT OF CONSTRUCTION
- SF — SILT FENCE
- ROCK BERM
- CONCRETE WASHOUT PIT
- STABILIZED CONSTRUCTION ENTRANCE/EXIT

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.

San Antonio Regional Office 14250 Judson Road San Antonio, Texas 78233-4480 Phone (210) 490-3096 Fax (210) 545-4329

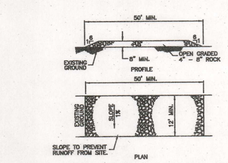
THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

CONCRETE TRUCK WASHOUT PIT

N.T.S.

GENERAL NOTES:

1. CONSTRUCTION ENTRANCE/EXIT LOCATION, CONCRETE WASHOUT PIT AND CONSTRUCTION EQUIPMENT AND STORAGE AREA ARE TO BE DETERMINED IN THE FIELD. THEY ARE SHOWN ON THIS PLAN FOR ILLUSTRATION PURPOSES ONLY
2. IF NECESSARY, CONTRACTOR MAY MODIFY STORMWATER CONTROLS TO ACHIEVE THE DESIRED INTENT. ANY CHANGES ARE TO BE NOTED, SIGNED AND DATED BY THE RESPONSIBLE PARTY IN THE TPDES BOOK.
3. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL STORMWATER CONTROLS.
4. REFER TO TPDES BOOK FOR THIS PROJECT FOR MORE INFORMATION/DETAILS.
5. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER OF ANY QUESTIONS REGARDING THE INTENT OF THIS PLAN.
6. CONTRACTOR WILL BE RESPONSIBLE FILING ALL NOI'S (NOTICE OF INTENT) AND NOT'S (NOTICE OF TERMINATION) FOR ALL PARTIES REQUIRED FOR THIS PROJECT. REFER TO TPDES FOR PROPER POSTING REQUIREMENTS AND DOCUMENTS.
7. A COPY OF THIS PLAN AND THE TPDES BOOK MUST REMAIN AT THE CONSTRUCTION SITE AT ALL TIMES.
8. 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.



TEMPORARY CONSTR. ENTRANCE/EXIT

N.T.S.

TEMPORARY CONSTRUCTION ENTRANCE/EXIT NOTES

INSTALLATION

1. AVOID CURVES ON PUBLIC ROADS AND STEEP SLOPES. REMOVE VEGETATION AND OTHER OBJECTIONABLE MATERIAL FROM TEH FOUNDATION AREA. GRADE CROWN FOUNDATION FOR POSITIVE DRAINAGE.
2. THE MINIMUM WIDTH OF THE ENTRANCE/EXIT SHOULD BE 12 FEET OR THE FULL WIDTH OF EXIT ROADWAY, WHICHEVER IS GREATER.
3. THE CONSTRUCTION ENTRANCE SHOULD BE AT LEAST 50 FEET LONG.
4. IF THE SLOPE TOWARD THE ROAD EXCEEDS 2%, CONSTRUCT A RIDGE, 6 TO 8 INCHES HIGH WITH 3:1 (h:v) SIDE SLOPES, ACROSS THE FOUNDATION APPROXIMATELY 15 FEET FROM THE ENTRANCE TO DIVERT RUNOFF AWAY FROM THE PUBLIC ROAD.
5. PLACE GEOTEXTILE FABRIC AND GRADE FOUNDATION TO IMPROVE STABILITY, ESPECIALLY WHERE WET CONDITIONS ARE ANTICIPATED.
6. PLACE STONE TO DIMENSIONS AND GRADE SHOWN ON PLANS LEAVE SURFACE SMOOTH AND SLOPE FOR DRAINAGE.
7. DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE STONE PAD TO A SEDIMENT TRAP OR BASIN.
8. INSTALL PIPE UNDER PAD AS NEEDED TO MAINTAIN PROPER PUBLIC ROAD DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES

1. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION, WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHOULD BE REMOVED IMMEDIATELY BY CONTRACTOR.
3. WHEN NECESSARY, WHEELS SHOULD BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
4. WHEN WASHING STONE IS REQUIRED, IT SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
5. ALL SEDIMENT SHOULD BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATER COURSE BY USING APPROVED METHODS.

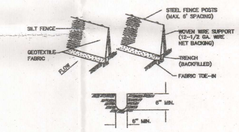
SILT FENCE NOTES

INSTALLATION

1. STEEL POSTS, WHICH SUPPORT THE SILT FENCE, SHOULD BE INSTALLED ON A SLIGHT ANGLETOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 1-FOOT DEEP AND SPACED NOT MORE THAN 8 FEET ON CENTER, WHERE WATER CONCENTRATES, THE MAXIMUM SPACING SHOULD BE 6 FEET.
2. LAYOUT FENCING DOWN-SLOPE OF DISTURBED AREA, FOLLOWING THE CONTOUR AS CLOSELY AS POSSIBLE. THE FENCE SHOULD BE SITED SO THAT THE MAXIMUM DRAINAGE AREA IS ¼ ACRE/100 FEET OF FENCE.
3. THE TOE OF THE SILT FENCE SHOULD BE TENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW. WHERE FENCE CANNOT BE TRENCHED IN (E.G., PAVEMENT OR ROCK OUTCROP), WEIGHT OF FABRIC FLAP WITH 3 INCHES OF PEA GRAVEL ON UPHILL SIDE TO PREVENT FLOW FROM SEEPING UNDER FENCE.
4. THE TRENCH MUST BE A MINIMUM OF 6 INCHES DEEP AND 6 INCHES WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
5. SILT FENCE SHOULD BE SECURELY FASTENED TO EACH STEEL SUPPORT POST OR TO WOVEN WIRE, WHICH IS IN TURN ATTACHED TO THE STEEL FENCE POST. THERE SHOULD BE A 3-FOOT OVERLAP, SECURELY FASTENED WHERE ENDS OF FABRIC MEET.
6. SILT FENCE SHOULD BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

INSPECTION AND MAINTENANCE GUIDELINES

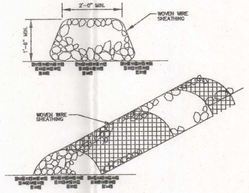
1. INSPECT ALL FENCING WEEKLY, AND AFTER ANY RAINFALL.
2. REMOVE SEDIMENT WHEN BUILDUP REACHES 6 INCHES.
3. REPLACE ANY TORN FABRIC OR INSTALL A SECOND LINE OF FENCING PARALLEL TO THE TORN SECTION.
4. REPLACE OR REPAIR ANY SECTIONS CRUSHED OR COLLAPSED IN THE COURSE OF CONSTRUCTION ACTIVITY. IF A SECTION IS OBSTRUCTING VEHICULAR ACCESS, CONSIDER RELOCATING IT TO A SPOT WHERE IT WILL PROVIDE EQUAL PROTECTION, BUT WILL NOT OBSTRUCT VEHICLES. A TRIANGULAR FILTER DIKE MAY BE PREFERABLE TO A SILT FENCE AT COMMON VEHICLE ACCESS POINTS.
5. WHEN CONSTRUCTION IS COMPLETE, THE SEDIMENT SHOULD BE DISPOSED OF IN A MANNER THAT WILL NOT CAUSE ADDITIONAL SILTATION AND THE PRIOR LOCATION OF THE SILT FENCE SHOULD BE REVEGETATED. THE FENCE ITSELF SHOULD BE DISPOSED OF IN AN APPROVED LANDFILL.



TRENCH CROSS-SECTION

SILT FENCE

N.T.S.



ROCK BERM

N.T.S.

ROCK BERM NOTES

INSTALLATION

1. LAYOUT THE WOVEN WIRE SHEATHING PERPENDICULAR TO THE FLOW LINE. THE SHEATHING SHOULD BE 20 GAUGE WOVEN WIRE MESH WITH 1 INCH OPENINGS.
2. BERM SHOULD HAVE A TOP WIDTH OF 2 FEET MINIMUM WITH SIDE SLOPES BEING 2:1 (H:V) OR FLATTER.
3. PLACE THE ROCK ALONG THE SHEATHING AS SHOWN IN THE DIAGRAM (SEE DETAIL), TO A HEIGHT NOT LESS THAN 18".
4. WRAP THE WIRE SHEATHING AROUND THE ROCK AND SECURE WITH TIE WIRE SO THAT THE ENDS OF THE SHEATHING OVERLAP AT LEAST 2 INCHES, AND THE BERM RETAINS ITS SHAPE WHEN WALKED UPON.
5. BERM SHOULD BE BUILT ALONG THE CONTOUR AT ZERO PERCENT GRADE OR AS NEAR AS POSSIBLE.
6. THE ENDS OF THE BERM SHOULD BE TIED INTO EXISTING UPSLOPE GRADE AND THE BERM SHOULD BE BURIED IN A TRENCH APPROXIMATELY 3 TO 4 INCHES DEEP TO PREVENT FAILURE OF THE CONTROL.

INSPECTION AND MAINTENANCE GUIDELINES

1. INSPECTION SHOULD BE MADE WEEKLY AND AFTER EACH RAINFALL BY THE RESPONSIBLE PARTY. FOR INSTALLATIONS IN STREAMBEDS, ADDITIONAL DAILY INSPECTIONS SHOULD BE MADE.
2. REMOVE SEDIMENT AND OTHER DEBRIS WHEN BUILDUP REACHES 6 INCHES AND DISPOSE OF THE ACCUMULATED SILT IN AN APPROVED AMNNER THAT WILL NOT CAUSE ANY ADDITIONAL SILTATION.
3. REPAIR ANY LOOSE WIRE SHEATHING.
4. THE BERM SHOULD BE RESHAPED AS NEEDED DURING INSPECTION.
5. THE BERM SHOULD BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED DUE TO SILT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
6. THE ROCK BERM SHOULD BE LEFT IN PLACE UNTIL ALL UPSTREAM AREAS ARE STABILIZED AND ACCUMULATED SILT REMOVED.

NO.	DATE	REVISION	BY

Carter :: Burgess
Consultants in Engineering, Architecture, Construction Management and Related Services
Carter and Burgess, Inc.
911 Central Parkway North, Suite 425
San Antonio, Texas 78232
(210) 494-0088 Fax (210) 494-4626

TEMPORARY STORM WATER ABATEMENT PLAN

FOREST OF GARDEN RIDGE IV

ABG ENTERPRISES, LTD.
18618 TUSCANY STONE, SUITE 100
SAN ANTONIO, TEXAS 78258

DATE: 11/20/2007
DRAWN BY: SQV
DESIGNED BY: JII
CHECKED BY: JII
REVIEWED BY: NFU
PROJECT NUMBER: 3102033.022

SHEET
C4.0

Drawing Name: M:\3102033.022.1 Bat Cave 107-acre\dwg\3102033022_SWPPP.dwg Nov 20, 2007 - 2:33pm

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

REGULATED ENTITY NAME: Forest of Garden Ridge – Unit IV

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

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

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

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

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

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. N/A The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be

recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

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

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

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

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

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

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

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

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

N/A The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-

occurring "sensitive" or "possibly sensitive" features on this site.

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

10. N/A **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. N/A **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. N/A The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

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

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

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

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:

Natasha Uhlrich, P.E.
Jacobs Carter Burgess
Print Name of Customer/Agent

_____ _____
Signature of Customer/Agent Date

Attachment A – 20% or Less Impervious Cover Waiver **Form 0600**

A waiver for 20% or less impervious cover does not apply to this submittal. While projected constructions will increase the impervious cover by less than 20% for the site, the project is Single Family Residential, and will not require a waiver.

Attachment B – BMPs for Upgradeint Stormwater **Form 0600**

Upgradient storm water sheet flows from the eastern boundary of the site. Upgradient storm water travels through the site via a defined low near the east boundary of the project. The upgradient drainage area is 7.52 aces and stretches about 1200 linear feet along the eastern boundary. The amount of runoff at any one location is minimal. Therefore, no silt fence will be installed along the eastern boundary to protect against upgradient storm water.

Since the projected increase in impervious cover for the site is less than 20%, no onsite BMPs are required for pollution control. In the event the land plan changes, the project will be re-evaluated to determine increase in impervious cover. If anticipated impervious cover exceeds 20%, permanent onsite BMPs may be required, and will be determined at that time.

Attachment D – BMPs for Surface Streams **Form 0600**

The stormwater from the site shall be treated with a combination of onsite silt fence, and rock berms around its perimeter. These pre-treatments will prevent pollution of surface streams and the Aquifer. All storm water systems are designed to control erosive discharge. There are no sensitive geologic features on the site that need to be sealed to prevent pollution from entering them.

Attachment E – Request to Seal Features **Form 0600**

This attachment does not apply to our submittal. No geologic features were located on the site.

Attachment F – Construction Plans **Form 0600**

The site contains less than 20% impervious cover. No permanent BMPs are required

Permanent BMPs are not required for the site. Respective maintenance plans are not applicable.

Attachment H – Pilot-Scale Field Testing Plan

Form 0600

This attachment does not apply to this submittal. The TCEQ Technical Guidance Manual (TGM) was used to design BMP measures on site, and therefore a Pilot-Scale Field Testing Plan is not required.

Attachment I – Measures for Minimizing Surface Stream Contamination Form 0600

During construction, silt fencing and rock berms will be utilized to control erosion onsite. Mulch will be applied during prolonged periods of inactivity. At the completion of construction, permanent vegetation will be established to further resist erosion.

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

I Carlos Sandoval,
Print Name

Project Manager
Title - Owner/President/Other

of Laredo GFG Development, Ltd.
Corporation/Partnership/Entity Name

have authorized Mark Kastner, P.E.
Print Name of Agent/Engineer

of Jacobs Carter Burgess
Print Name of Firm

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

I also understand that:

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

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

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

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

Carlos C. Sandoval 11-19-2007

Applicant's Signature Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Carlos C. Sandoval 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 19 day of November, 07.

Kara Lynn Kelley

NOTARY PUBLIC

KARA LYNN KELLEY
Notary Public, State of Texas
My Commission Expires
June 17, 2009

Typed or Printed Name of Notary

MY COMMISSION EXPIRES: _____

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

NAME OF PROPOSED REGULATED ENTITY: Forest of Garden Ridge IV
REGULATED ENTITY LOCATION: _____
NAME OF CUSTOMER: Laredo GFG Development, Ltd.

CONTACT PERSON: Carlos Sandoval PHONE: 210-497-3385
(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
- ☐ Kinney
- ☐ Medina
- ☐ Uvalde

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE Texas Commission on Environmental Quality. YOUR CANCELED CHECK WILL SERVE AS YOUR RECEIPT. **THIS FORM MUST BE SUBMITTED WITH YOUR FEE PAYMENT**. THIS PAYMENT IS BEING SUBMITTED TO (CHECK ONE):

☑ **SAN ANTONIO REGIONAL OFFICE**

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

☐ **AUSTIN REGIONAL OFFICE**

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

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement, Multiple Single Family Residential and Parks	Acres	$ 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	$

Carlos C. Sandoval
Signature

11-19-2007
Date

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

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

Texas Commission on Environmental Quality
Edwards Aquifer Protection Program
Application Fee Schedule
30 TAC §213.14 (effective 11/14/97) & 30 TAC §213.9 (effective 6/1/99)

Water Pollution Abatement Plans and Modifications

PROJECT	PROJECT AREA IN ACRES	FEE
One Single Family Residential Dwelling	<5	$500
Multiple Single Family Residential and Parks	<5 5 < 10 10 < 50 ≥50	$1,000 $2,000 $3,000 $5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 ≥10	$2,000 $3,000 $4,000 $5,000

Organized Sewage Collection Systems and Modifications

PROJECT	COST PER LINEAR FOOT	MINIMUM FEE MAXIMUM FEE
Sewage Collection Systems	$0.50	$500 - $5,000

Underground and Aboveground Storage Tank System Facility Plans and Modifications

PROJECT	COST PER TANK OR PIPING SYSTEM	MINIMUM FEE MAXIMUM FEE
Underground and Aboveground Storage Tank Facility	$500	$500 - $5,000

Exception Requests

PROJECT	FEE
Exception Request	$250

Extension of Time Requests

PROJECT	FEE
Extension of Time Request	$100