TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

October 10, 2012

Mr. Michael L. Schoenfeld
DHJB Development, LLC
13000 US Highway 290 W
Austin, Texas 78737

Re: Edwards Aquifer, Comal County

NAME OF PROJECT: Johnson Ranch; Located at the northeast corner of the intersection of US 281 and FM 1863; Bulverde, Texas

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

Edwards Aquifer Protection Program ID No. 2702.04; Investigation No. 1029039; Regulated Entity No. RN105332522

Dear Mr. Schoenfeld:

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 Loomis Austin, Inc. on behalf of DHJB Development, LLC on August 20, 2012. Final review of the WPAP was completed after additional material was received on September 28, 2012. As presented to the TCEQ, the Temporary and Permanent Best Management Practices (BMPs) and construction plans were prepared by a Texas Licensed Professional Engineer to be in general compliance with the requirements of 30 TAC Chapter 213. These planning materials were sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore, based on the engineer's concurrence of compliance, the planning materials for construction of the proposed project and pollution abatement measures are hereby approved subject to applicable state rules and the conditions in this letter. The applicant or a person affected may file with the chief clerk a motion for reconsideration of the executive director's final action on this Edwards Aquifer Protection Plan. A motion for reconsideration must be filed no later than 23 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

BACKGROUND

The original Johnson ranch WPAP was approved by letter dated October 24, 2007 for a 751.3 acre site. Construction was to include a main collector road, residential streets and 12 single family lots. The impervious cover was to be 4.44 acres (0.59 percent).

PROJECT DESCRIPTION

The proposed modification includes 287.75 acres with 382 residential lots. Impervious cover accounts for 52.52 acres (18.25 percent). The current modification includes Unit 1, Phases 1 and 2, Unit 2, Unit 3, Unit 4 and Unit 5. Only Unit 1, Phases 1 and 2 are within the Recharge Zone. Units 2 through 5 are within the Contributing Zone. Project wastewater will be disposed of by conveyance to the proposed Johnson Ranch Municipal Utility District Water Recycling Center.

PERMANENT POLLUTION ABATEMENT MEASURES

Since this low density development will not have more than 20 percent impervious cover, an exemption from permanent BMPs is approved.

GEOLOGY

According to the geologic assessment included with the application, the site is within the Glen Rose Formation, but is defined as Recharge Zone due to special conditions. The geologic assessment reports that nearly all of the Recharge Zone portion of the property is covered by alluvium and, as a result, no geologic features were observed. The San Antonio Regional Office site assessment conducted on October 2, 2012 revealed that the site was generally as described in the application.

SPECIAL CONDITIONS

I. This modification is subject to all Special and Standard Conditions listed in the WPAP approval letter dated October 24, 2007.

II. Please be aware that 30 TAC 213.8(4) prohibits the use of sewage holding tanks as part of an organized sewer collection system.

STANDARD CONDITIONS

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

Prior to Commencement of Construction:

4. Within 60 days of receiving written approval of an Edwards Aquifer Protection Plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall

be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TCEQ-0625) that you may use to deed record the approved WPAP is enclosed.

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

<u>During Construction:</u>

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

executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.

13. One well exists within the Contributing Zone portion of the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
14. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
15. Intentional discharges of sediment laden water are not allowed. If dewatering becomes necessary, the discharge will be filtered through appropriately selected best management practices. These may include vegetated filter strips, sediment traps, rock berms, silt fence rings, etc.
16. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
17. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

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

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

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

This action is taken under authority delegated by the Executive Director of the Texas Commission on Environmental Quality. If you have any questions or require additional information, please contact Dianne Pavlicek, P.G., of the Edwards Aquifer Protection Program of the San Antonio Regional Office at 210-403-4074.

Sincerely,

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

LB/DP/eg

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

cc: Ms. Jacy M. Warwick, P.E., Loomis Austin, Inc.
Mr. Thomas H. Hornseth, P.E., Comal County
The Honorable Bill Krawietz, City of Bulverde
Mr. Roland Ruiz, Edwards Aquifer Authority
TCEQ Central Records, Building F, MC 212

LOOMIS | PARTNERS

emailed

September 28, 2012

Dianne Pavlicek, P.G.
TCEQ Edwards Aquifer Protection Program
San Antonio Region
14250 Judson Rd
San Antonio, TX 78233-4480

RE: Johnson Ranch WPAP Modification

Ms. Pavlicek,

This letter is submitted on behalf of the owner, DHJ Development, LLC, in support of the WPAP Modificaiton for Johnson Ranch in response to comments issued September 24, 2012.

1. Please revise Project Description (Attachment C/General Information Form) to include reference to the actual modificaiton including Unit1 (Phases 1 and 2), Unit 2, Unit 3, Unit 4 and Unit 5 for clarification to reader. Revising the Attachment B (General Information From) map to show the location of Units 1 through 5 would be most helpful to the reader.

Response: Attachments B and C of the General Information Form have been revised as requested and are attached.

2. The Geologic Assessment done by Kemble White, Ph.D, P.G., requires revision to clarify that the Recharge Zone at this site consists of alluvium covered Glen Rose Formation, not alluvium covered Edwards Group. The Cibolo Creek watercourse and associated alluvium was designated as Recharge Zone in the mid 1970's where it is flowing on the Glen Rose Formation, since the watercourse contributes significant recharge to the Edwards downstream (Leon Byrd, TCEQ, Austin, TX personal communication, September 21, 2012). Please revise all portions of the Geologic Assessment pertaining to the Recharge Zone segment of the property to reflect how the Recharge Zone is defined along the Cibolo Creek watercourse.

Response: An email has been sent to Mr. White, requesting this revision, and including the TCEQ reviewer.

3. Please comment on how future development will maintain the existing less than 20% impervious cover so that Permanent Best Management Practices will not be required.

Response: The portion of Johnson Ranch that drains toward the Recharge Zone (all areas included in this WPAP Modification) will be limited to 20% impervious cover as the BMP method. The remaining portions of the tract, all located within the Contributing Zone, will

not be limited to 20% impervious cover, and will have permanent BMPS, including water quality ponds) designed to treat all future development.

If you have any questions or require additional information, please call me at (512) 327-1180, extension 124, or send email to jwarwick@loomis-partners.com.

Thank you,

Jacy M. Warwick, P.E.

Loomis Partners

Attachment C – Project Description

The Johnson Ranch is a 751.3 acre low density residential development located in Comal County, TX, within the City of Bulverde ETJ. The site has approximately 113 acres of Edwards Aquifer Recharge Zone located on the south portion, with an additional 212 acres of land draining towards the Recharge Zone. The remainder of the site is located in the Edwards Aquifer Contributing Zone.

Johnson Ranch originally obtained a Water Pollution Abatement Plan permit for the entire 751.3 acres in August 2007, with the permitted construction consisting of Phase 1A and the Johnson Ranch Elementary School (WPAP obtained by others). The construction of this subdivision will occur in phases, and each now each subsequent construction phase will be submitted either as a modification to the original Water Pollution Abatement Plan (consisting of any construction within the 325 acres in the Recharge Zone drainage area) or new a Contributing Zone Permit (and subsequent modifications) for all construction within the remaining 426.3 acres of Contributing Zone.

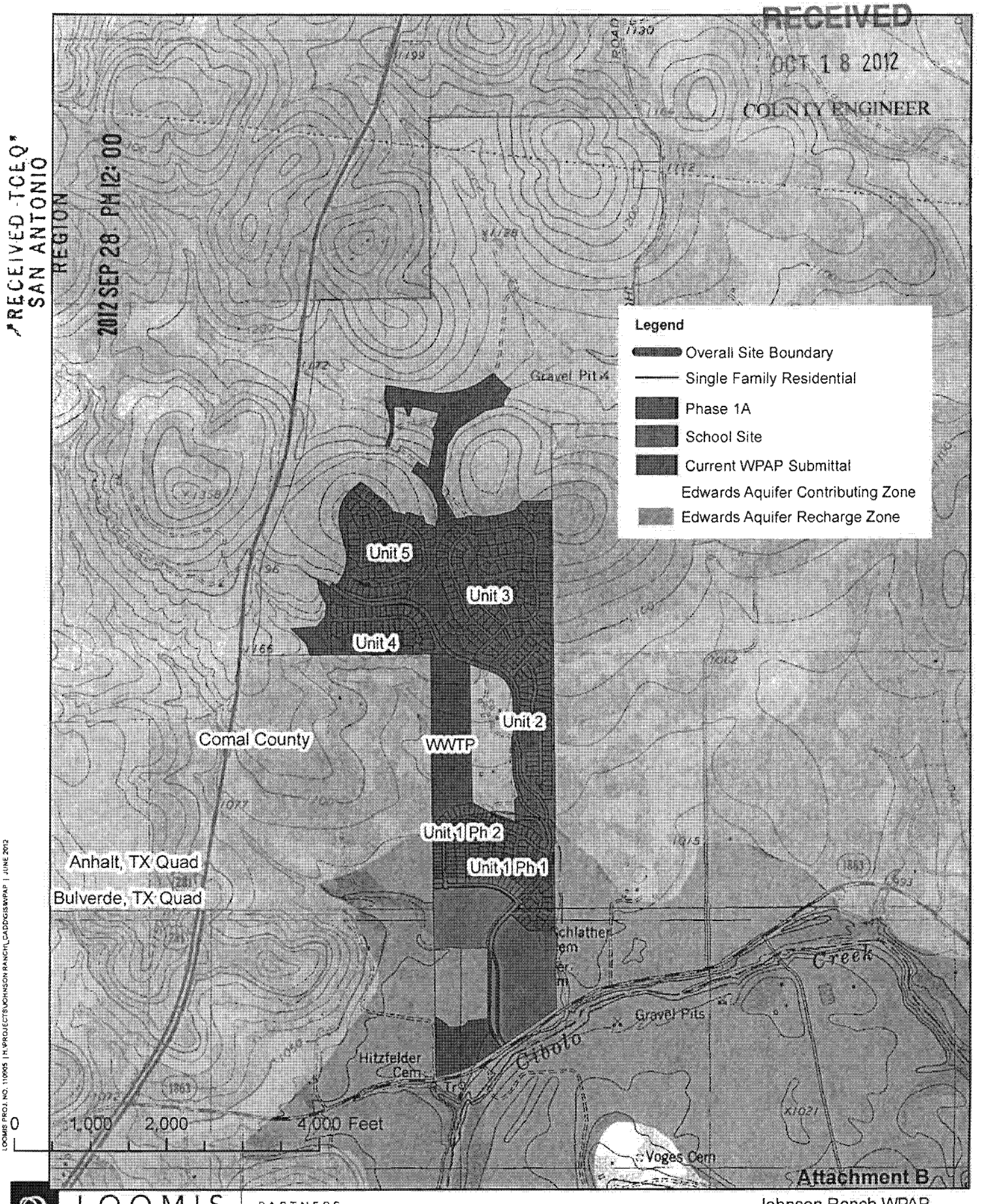
The current WPAP modification will include Units 1, Phases 1 and 2, Unit 2, Unit 3, Unit 4, and Unit 5. These sections are labeled on Attachment B, USGS 7.5 Minute Quad of the Edwards Aquifer Recharge Zone.

Potable water will be provided by Johnson Ranch Municipal Utility District, under an agreement with GBRA. Approximately 47,300 gallons per day (peak flow) of domestic wastewater is anticipated to be generated by the entire development after completion, and will be disposed of by conveyance to the proposed Johnson Ranch Municipal Utility District's Water Recycling Center.

The drainage system includes a storm sewer system in and along the residential streets, and a ditch system along both sides of the collector road.

As specified in TAC Chapter 213.5(b)(4)(D)(ii)(III) where a site is used for low density single-family development and has 20% impervious cover or less, other permanent BMPs are not required.

Official 7.5 Minute USGS Quadrangle Map of the Edwards Recharge Zone



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Attachment B

LOOMIS PARTNERS

Johnson Ranch WPAP

Edwards Aquifer Recharge Zone Map

Response to item #2:

(From Kemble White, Ph.D., P.G., originally received via email on 9/28/2012)

Here's a point of clarification regarding Edwards aquifer recharge and the Johnson Ranch site. The site sits on a rather unique area within the TCEQ regulatory boundary of the recharge zone. Whereas almost all of the delineated recharge zone consists of contiguous mapped outcrops of Edwards and Georgetown limestones, the linear extension of the recharge zone boundary along Cibolo Creek is primarily underlain by the Glen Rose limestone which is typically associated with the Trinity Aquifer. There is a growing body of research suggesting communication between these aquifers, but Cibolo Creek provided some of the first compelling field evidence. Recharge to the Trinity aquifer in the area occurs primarily in the lower Cibolo Creek valley (upstream of Johnson Ranch) between Boerne and Camp Bullis where the karstic portion of the lower Glen Rose limestone is exposed in the creek bed. In that location, most of the non-flood stage base flow of Cibolo Creek is diverted underground through caves and sinkholes. (See: TWDB Report 273 Ground-Water Availability of the Lower Cretaceous Formations in the Hill Country of South-Central Texas, by John B. Ashworth, January 1983) This recharge area is the justification for Cibolo Creek being included in the Edwards Aquifer recharge zone despite the absence of Edwards strata. Hydrologic connectivity is assumed since the Trinity and the Edwards are juxtaposed with one another along faults in the down gradient (coastward) direction.

By contrast, Johnson Ranch is located in the upper portion of the Upper Glen Rose Limestone, which is less altered by karst processes and not generally known for rapid infiltration of surface water. Recent assessments of the vulnerability of ground water to contamination in Northern Bexar County determined that stratigraphically equivalent Upper Glen Rose outcrop across Cibolo Creek from the site was predominantly in the lowest of seven vulnerability categories used in the study. With respect to the Edwards aquifer the hydrologic significance of Johnson Ranch is that runoff leaving the site could reach the main portion of the recharge zone through Cibolo Creek several miles downstream.

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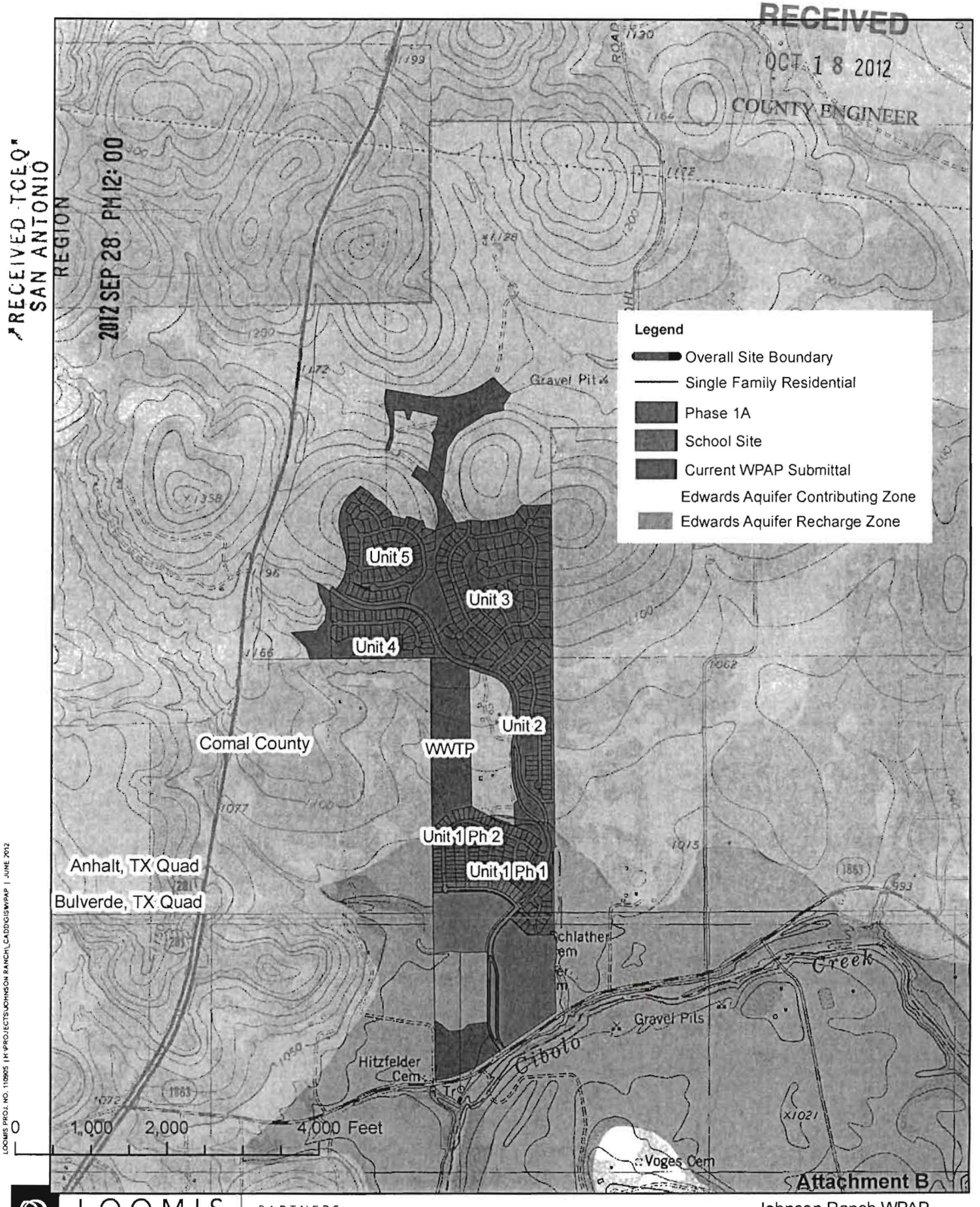

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LOOMIS PARTNERS

Johnson Ranch WPAP

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