

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
John M. Baker, *Commissioner*
Jeffrey A. Saitas, *Executive Director*



TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

June 6, 2001

Mr. Edward Markline
Markline Properties
29890 Bulverde Lane
Bulverde, TX 78163

Re: Edwards Aquifer, Comal County
NAME OF PROJECT: Bulverde Air Park; 29890 Bulverde Lane; Bulverde, 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 File No. 1670.00

Dear Mr. Markline:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Mr. Keith Muhlestein on behalf of Markline Properties on March 30, 2001. The plan for modifying this project has been reviewed for compliance with 30 TAC §213.5(b) which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan modification is in general agreement with 30 TAC §213.5(b); therefore, approval of the plan is hereby granted subject to the specific condition listed below. 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 20 days after the date of this approval letter. *This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.*

PROJECT DESCRIPTION

The project site has an area of approximately 78.36 acres. The existing impervious cover, which includes all existing structures, runways, and taxiways, totals 12.00 acres. The previously constructed office building / hangar ("Hangar A") and associated parking, taxiway, and ramp of 2.48 acres is included in the existing 12 acres. Three additional hangars ("B", "C", and "D") are proposed to be constructed. Each hangar will cover 20,000 square feet and each will have an additional 20,000 square feet of associated taxiway. This proposed portion of the project will have an area of 2.75 acres. The impervious cover of the entire site will become 14.75 acres (18.82 percent). No wastewater will be generated by Hangars A, B, C, and D. An on-site sewage facility exists in the "Pilots Lounge" building. This facility was permitted on March 29, 1984, by G. R. Stahl, Comal Health Department Administrator.

PERMANENT POLLUTION ABATEMENT MEASURES

The applicant requested a waiver of the requirement for other permanent BMPs because the site will have less than 20 percent impervious cover. Based upon the TNRCC's review of the proposed activities, the geologic assessment, and the site conditions, the required waiver is hereby granted.

REPLY TO: REGION 13 • 14250 JUDSON RD. • SAN ANTONIO, TEXAS 78233-4480 • 210/490-3096 • FAX 210/545-4329

P.O. Box 13087 • Austin, Texas 78711-3087 • 512/239-1000 • Internet address: www.tnrcc.state.tx.us

printed on recycled paper using soy-based ink.

GEOLOGY

According to the geologic assessment included with the application, two possibly sensitive manmade features were identified on the site. The San Antonio Regional Office did not conduct a site assessment investigation.

SPECIAL CONDITIONS

- I. If the impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site may no longer apply and the property owner must notify the San Antonio Regional Office of these changes.
- II. As indicated in correspondence dated May 15, 2001, from Mr. Thomas H. Hornseth, P.E., Comal County Engineer, "This entire tract of land is located within a Special Flood Hazard Area; owners will be required to obtain a Comal County Floodplain Development Permit, at the Comal County Engineers Office, for all development including any type of structures, fill, and/or excavation."

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.
3. All contractors conducting regulated activities at the referenced project location shall be provided a copy of this notice of approval. At least one complete copy of the approved WPAP and this notice of approval shall be maintained at the project location until all regulated activities are completed.
4. Modification to the activities described in the referenced WPAP application following the date of approval may require the submittal of a plan to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval prior to initiating construction of the modifications.
5. The applicant must provide written notification of intent to commence construction, replacement, or rehabilitation of the referenced project. Notification must be submitted to the San Antonio Regional Office no later than 48 hours prior to commencement of the regulated activity. Written notification must include the date on which the regulated activity will commence, the name of the approved plan and file number for the regulated activity, and the name of the prime contractor with the name and telephone number of the contact person. The executive director will use the notification to determine if the approved plan is eligible for an extension.
6. Temporary erosion and sedimentation (E&S) controls, i.e., silt fences, rock berms, stabilized construction entrances, or other controls described in the approved WPAP, must be installed prior

to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. The TNRCC may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

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

During Construction:

8. During the course of regulated activities related to this project, the applicant or agent shall comply with all applicable provisions of 30 TAC Chapter 213, Edwards Aquifer. The applicant shall remain responsible for the provisions and conditions of this approval until such responsibility is legally transferred to another person or entity.
9. If any sensitive feature (caves, solution cavities, sink holes, etc.) is discovered during construction, all regulated activities near the feature must be suspended immediately. The applicant or his agent must immediately notify the San Antonio Regional Office of the discovery of the feature. Regulated activities near the feature may not proceed until the executive director has reviewed and approved the methods proposed to protect the feature and the aquifer from potentially adverse impacts to water quality. The plan must be sealed, signed, and dated by a Texas Licensed Professional Engineer.
10. Two wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.
11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain). Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50 percent. Litter, construction debris, and construction chemicals shall be prevented from becoming stormwater discharge pollutants.
12. The following records shall be maintained and made available to the executive director upon request: the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
13. Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, and construction activities will not resume within 21 days. When the initiation of stabilization measures by the 14th day is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable.

After Completion of Construction:

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

Mr. Edward Markline

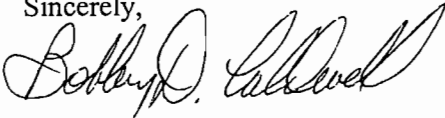
Page 4

June 6, 2001

15. The applicant shall be responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TNRCC-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 Lynn M. Bumgardner of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210)403-4023.

Sincerely,



Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resource Conservation Commission

JAS/LMB/eg

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

cc: Mr. Keith Muhlestein, Muhlestein and Associates
Mr. Bob Barton, City of Bulverde
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations

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Sincerely,



Jeffrey A. Saitas, P.E.

Executive Director

Texas Natural Resource Conservation Commission

JAS/LMB/eg

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Change in Responsibility for Maintenance on Permanent BMPs-Form TNRCC-10263

cc: Mr. Keith Muhlestein, Muhlestein and Associates
Mr. Bob Barton, City of Bulverde
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations

EDWARDS AQUIFER INFORMATION DATA ENTRY SHEET

RECDT: 12/9/1994

GENERAL INFORMATION:

Locate Existing Record

INSERT NEW RECORD

Edit

Region: 13 Received Date: 12/9/1994 Edwards ID: 94120901 SA#: 1670.00

Plan Type: PAP Residential or Commercial: COMMERCIAL S/C: 4581

REGULATED ENTITY/SITE/PROJECT INFORMATION

PRINT

RN # RN101908333 Reg Ent: BULVERDE AIR PARK

Address: 29890 BULVERDE LANE City: BULVERDE ST: TX Zip: 78163 Zip Ext: 2044

Loc: 29890 BULVERDE LANE

Phone: County: COMAL Latitude: Longitude:

CUSTOMER/OWNER INFORMATION

Type: OR

CN # CN601042724

Name: MARKLINE PROPERTIES INC Address: 29890 BULVERDE LANE

City: BULVERDE ST: TX Zip: 78163 Zip Ext: 2044 Phone: 8304382504

OWNER/APPLICANT INFORMATION

Type: OR Name: MARKLINE, EDWARD Address: 29890 BULVERDE LANE

City: SAN ANTONIO ST: TX Zip: 78163 Zip Ext: 2044 Phone: 8304382507

COMMENT:

PLAN INFORMATION

Fee Rec	Fee Amount	Plan Area	Ft Sewer	# Tanks	Pst Reg #	Type of Perm BMP	Agent	Phone #
3/30/2001	\$5,000.00	78.36			55126		MUHLSTEIN & ASSOCIATES	2105205807

LETTER INFORMATION

SA#	Plan Type	Distribution Date	Investigator	SAI	CCEDS Inv #	LETTER TYPE	DATE OF LETTER	RESPONSE DUE	RESPONSE RECEIVED
1670.00	PAP	12/9/1994	LBUMGUAR	12/19/1994		APP	6/6/2001		

COMPLIANCE

SA #	DEED RECORDATION	NOTICE OF CONSTRUCTION	30 DAY TESTING	5 YEAR TESTING	PBMP CERT	EXCAVATION CERTIFICATION	COMMENT
1,670.00	7/19/2001						

Regulated Entity Detail

Number: RN101908333

Name: BULVERDE AIR PARK

Status: ACTIVE

Status Date: 03/30/2002

Status Comment:

Street Address

Delivery: 29890 BULVERDE LN

City: BULVERDE

State: TX

Zip: 78163-2044

Customer and Mailing Addresses

Historical Customer

Customer			RE Mailing Address				Begin Date	End Date	Regulated Entity Compl Classification
Name	Number	Role	Delivery	City	State	Zip			
MARKLINE PROPERTIES INC	CN601042724	OWNER					07-24-1990		AVERAGE BY DE
R D THOMSON	CN601408347	OWNER					12-09-1994		AVERAGE BY DE

Geographic Location

Physical Location Description: 29890 BULVERDE LANE

Nearest City: BULVERDE

County: COMAL

State: TX

Location Zip: 78163

Latitude: 0-0-0

Longitude: 0-0-0

Industry Types

Code	Classification System	Name	Primary Flag
------	-----------------------	------	--------------

Electronic Communications

Customer		RE Electronic Communication		
Name	Number	Phone	Fax	E-Mail
MARKLINE PROPERTIES INC	CN601042724	830-438-2507		

Program Interests

Program	Regulated Entity Type	ID Type	Additional ID	Additional ID Status
PETROLEUM STORAGE TANK REGISTRATION	FACILITY	REGISTRATION	55126	ACTIVE
EDWARDS AQUIFER	SITE	REGISTRATION	13-94120901	ACTIVE
EDWARDS AQUIFER	SITE	REGISTRATION	13-94120902	ACTIVE
EDWARDS AQUIFER	SITE	REGISTRATION	13-94120902A	ACTIVE
EDWARDS AQUIFER	SITE	REGISTRATION	13-94120902B	ACTIVE
EDWARDS AQUIFER	SITE	REGISTRATION	1394120902B	CANCELLED

Site Classification

Program	Site Classification
PETROLEUM STORAGE TANK REGISTRATION	ABOVEGROUND STORAGE TANK - REGISTRATION
PETROLEUM STORAGE TANK REGISTRATION	UNDERGROUND STORAGE TANK - REGISTRATION

[Central Registry Help](#) [Central Registry Glossary](#)

Robert J. Huston, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Kathleen Hartnett White, *Commissioner*
Jeffrey A. Saitas, *Executive Director*



"RECEIVED TNRCC"
SAN ANTONIO
REGION

167000

2002 FEB 25 PM 2:47

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION

Protecting Texas by Reducing and Preventing Pollution

February 21, 2002

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

- 7000 0520 0023 2387 2652

Mr. Ed Markline, President
Markline Properties, Inc.
29890 Bulverde Lane
Bulverde, Texas 78163

Re: Notice of Compliance With Agreed Order
Markline Properties, Inc.
TNRCC EAPP ID Nos 90.00 and 144.00
Docket No. 2000-0252-MLM-E; Enforcement ID No. 14692

Dear Mr Markline:

This letter is to inform you that a review of Texas Natural Resource Conservation Commission (TNRCC) records concerning the above-referenced enforcement matter indicates that Markline Properties, Inc. has fulfilled the requirements of the Agreed Order effective on December 8, 2001. Specifically, Markline Properties, Inc. has paid the administrative penalty assessed in the Agreed Order. Based upon this, we conclude that your response has been satisfactory and no further action is necessary with respect to this enforcement matter at this time. This Order will terminate on December 8, 2006, provided you maintain compliance with all terms and conditions of the Order.

We appreciate your cooperation, and if we can be of any further assistance, please contact me at 512/239-0572.

Sincerely,

A handwritten signature in black ink, appearing to read "Sherry Smith", written over a horizontal line.

Sherry Smith, Coordinator
Enforcement Division

cc: Mr. Bobby Caldwell, Manager, Water Section, San Antonio Regional Office, TNRCC

Mr. Ed Markline
Page 2

bcc: Lynn Bumguardner, Investigator, San Antonio Regional Office
David Speaker, Staff Attorney, Litigation Division
Tim Haase, Supervisor, Multimedia MIS Team, Enforcement Division
Central Records, Building E, MC 200
Enforcement Division Reader File

EAPP / Dekar
1000
#1670
2001 JUN 22 PM 2:02
Markline Properties, Inc
PO Box 130
Bulverde, TX 78163

Texas Natural Resource Conservation Commission, Region 13
14250 Judson Rd
San Antonio, TX 78233-4480

July 19, 2001

Dear Sirs,

I am enclosing a copy of the document that was filed on July 11, 2001 at the Comal County Clerks office. This document was filed as required by paragraph 2 of Standard Conditions, of the June 6, 2001 letter from the Commission approving our WPAP.

Sorry about the quality of the copies, my machine is acting up.

Yours,

cc: Doc # 200106022363



Ed Markline
President

a/c

DEED RECORDATION AFFIDAVIT
 Edwards Aquifer Protection Plan

200 JUL 20 PM 2:22

STATE OF TEXAS §

BEFORE ME, the undersigned authority, on this day personally appeared Ed Markline who, being duly sworn to, depose and says:

- (1) That my name is ED MARKLINE and that I own the real property described below.
- (2) That said real property is subject to an EDWARDS AQUIFER PROTECTION PLAN which was required under the 30 Texas Administrative Code (TAC) Chapter 213.
- (3) That the EDWARDS AQUIFER PROTECTION PLAN for said real property was approved by the TEXAS NATURAL RESOURCE CONSERVATION COMMISSION (TNRCC) on JUNE 6, 2001.

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

- (1) The said real property is located in COMAL County, Texas, and the legal description of the property is as follows: SEE EXHIBIT B

[Signature]
 LANDOWNER/AFFIANT

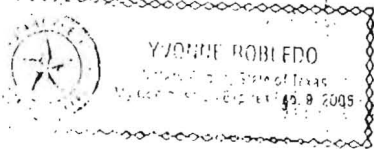


SWORN AND SUBSCRIBED TO before me on this 20th day of July, 2001.
[Signature]
 NOTARY PUBLIC

THE STATE OF Texas
 County of Comal

BEFORE ME, the undersigned authority, on this day personally appeared Ed Markline known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purposes and consideration therein expressed.

GIVEN under my hand and seal of office on this 20th day of July, 2001.



[Signature]
 NOTARY PUBLIC
Yvonne Robledo
 Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 2/9/05

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Edwards Aquifer Protection Program File No. 1670.00

Dear Mr. Markline:

The Texas Natural Resource Conservation Commission (TNRCC) has completed its review of the WPAP application for the referenced project submitted to the San Antonio Regional Office by Mr. Keith Muhlestein on behalf of Markline Properties on March 30, 2001. The plan for modifying this project has been reviewed for compliance with 30 TAC §213.5(b), which sets forth pollution abatement criteria for any development on the recharge zone of the Edwards Aquifer. The proposed water pollution abatement plan modification is in general agreement with 30 TAC §213.5(b); therefore, approval of the plan is hereby granted subject to the specific condition listed below. 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 20 days after the date of this approval letter. This approval expires two (2) years from the date of this letter unless, prior to the expiration date, more than 10 percent of the construction has commenced on the project or an extension of time has been requested.

PROJECT DESCRIPTION

The project site has an area of approximately 78.36 acres. The existing impervious cover, which includes all existing structures, runways, and taxiways, totals 12.00 acres. The previously constructed office building / hangar ("Hangar A") and associated parking, taxiway, and ramp of 2.48 acres is included in the existing 12 acres. Three additional hangars ("B", "C", and "D") are proposed to be constructed. Each hangar will be 20,000 square feet and each will have an additional 20,000 square feet of associated taxiway. This portion of the project will have an area of 2.75 acres. The impervious cover of the entire site will be 14.75 acres (18.82 percent). No wastewater will be generated by Hangars A, B, C, and D. An on-site wastewater treatment facility is located in the "Pilots Lounge" building. This facility was permitted on March 29, 1984, by the San Antonio Health Department Administrator.

PERMANENT POLLUTION ABATEMENT MEASURES

The applicant requested a waiver of the requirement for other permanent BMP's because the site will have less than 20 percent impervious cover. Based upon the TNRCC's review of the proposed activities, the geologic assessment, and the site conditions, the required waiver is hereby granted.

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GEOLOGY

According to the geologic assessment included with the application, two possibly sensitive manmade features were identified on the site. The San Antonio Regional Office did not conduct a site assessment investigation.

SPECIAL CONDITIONS

- I. If the impervious cover ever increases above 20 percent or the land use changes, the exemption for the whole site may no longer apply and the property owner must notify the San Antonio Regional Office of these changes.
- II. As indicated in correspondence dated May 15, 2001, from Mr. Thomas H. Hornbath, P.E., Comal County Engineer, "This entire tract of land is located within a Special Flood Hazard Area; owners will be required to obtain a Comal County Floodplain Development Permit, at the Comal County Engineers Office, for all development including any type of structure, fill and/or excavation."

STANDARD CONDITIONS

1. Pursuant to §26.136 of the Texas Water Code, any violations of the requirements in 30 TAC Chapter 213 may result in administrative penalties.

Prior to Commencement of Construction:

2. Within 60 days of receiving written approval of an Edwards Aquifer protection plan, the applicant must submit to the San Antonio Regional Office, proof of recordation of notice in the county deed records, with the volume and page number(s) of the county deed records of the county in which the property is located. A description of the property boundaries shall be included in the deed recordation in the county deed records. A suggested form (Deed Recordation Affidavit, TNRCC-0625) that you may use to deed record the approved WPAP is enclosed.

The contractors conducting regulated activities at the referenced project location shall be provided with a copy of the 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.

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 the 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 control measures, such as silt fences, rock berms, stabilized construction entrances, or other control described in the approved WPAP, must be installed prior to the start of construction.

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to construction and maintained during construction. Temporary E&S controls may be removed when vegetation is established and the construction area is stabilized. The TNRCC may monitor stormwater discharges from the site to evaluate the adequacy of temporary E&S control measures. Additional controls may be necessary if excessive solids are being discharged from the site.

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

During Construction

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

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

10. Two wells exist on the site. All water wells, including injection, dewatering, and monitoring wells must be in compliance with the requirements of the Texas Department of Licensing and Regulation under Title 16 TAC Chapter 76 (relating to Water Well Drillers and Pump Installers) and all other locally applicable rules, as appropriate.

11. If sediment escapes the construction site, the sediment must be removed at a frequency sufficient to minimize off-site 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 verification letter must be submitted to the San Antonio Regional Office within 30 days of the completion.

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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 owners association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. The regulated entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred. A copy of the transfer of responsibility must be filed with the executive director through the San Antonio Regional Office within 30 days of the transfer. A copy of the transfer form (TNRCC-10263) is enclosed.

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 Lynn M. Bungardner of the Edwards Aquifer Protection Program of the San Antonio Regional Office at (210)403-4023.

Sincerely,



Jeffrey A. Saitas, P.E.
Executive Director
Texas Natural Resources Conservation Commission

JAS/LMB/eg

Enclosure: Deed Recordation Affidavit, TNRCC-10263
Change in Responsibility for Maintaining Permanent BMP Form TNRCC-10263

cc: Mr. Keith Muhlestein, Muhlestein and Associates
Mr. Bob Barton, City of Bulverde
Mr. Tom Hornseth, Comal County
Mr. Greg Ellis, Edwards Aquifer Authority
TNRCC Field Operations

A description of 78.36 acres of land out of Survey Number 192, Guadalupe Herrera, Abstract Number 206 in Comal County, Texas. Said 78.36 acre tract of land being a portion of a 101.55 acre tract of land conveyed to Thompson's Depot Stores, Inc. recorded in Volume 234, Page 902 et. seq. of the Deed Records of Comal County, Texas. Said 78.36 acre tract is described by metes and bounds as a 82.49 acre tract of land save and except two tracts: Tract one being 1.01 acres; Tract two being 3.12 acres in aggregate containing 78.36 acres.

BEGINNING at a one half inch steel pin found for the southwest corner of the aforesaid 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902 of the Deed Records of Comal County, Texas.

THENCE with the East line of Bulverde Lane north 10° 27' 00" east a distance of 50.00 feet to a one half inch steel pin for the Southwest corner of a tract of land described in a deed to Charles M. Schelnick, recorded in Volume 263, Page 924, of the Deed Records of Comal County, Texas.

THENCE with the South line of said Charles M. Schelnick tract, South 79° 33' 00" east distance of 590.30 feet to a steel pin found for the southeast corner of said Charles Schelnick tract.

THENCE with the East line of said Charles M. Schelnick tract north 10° 27' 00" east passing at 150.00 feet its northeast corner in all a distance of 300.00 feet to a one-half inch steel pin set with plastic cap for a corner of his tract, and being the northeast corner of a tract of land described in a deed to Prop Jets, Inc., recorded Volume 695, Page 749 of the Deed Records of Comal County.

THENCE with the north line of said Prop Jets, Inc., tract north 79° 33' 00" west a distance of 295.00 feet to a one-half inch steel pin set with plastic cap for the Southeast corner of a tract of land described in a deed to Oak Air, Inc., recorded in Volume 589, Page 29 of the Deed Records of Comal County, Texas.

THENCE with the east line of said Oak Air, Inc., tract north 10° 27' 00" East a distance of 150.00 feet to a 4 1/2 inch steel fence corner post at the northeast corner of said Oak Air, Inc., tract.

THENCE with the north line of said Oak Air, Inc., tract north 79° 33' 00" West a distance of 170.30 to a one half inch steel pin set with plastic cap for the southeast corner of a tract of land described in a deed to Fred O. Hoese, recorded in Volume 903, Page 34, of the Deed Records of Comal County, Texas.

THENCE with the east line of said Fred O. Hoese tract north 10° 27' 00" east a distance of 80.00 feet to a one half inch steel pin set with cap for the northeast corner of said Fred O. Hoese tract.

THENCE with the North line of said Fred O. Hoese tract north 79° 33' 00" west a distance of 125.00 feet to a 4 1/2" steel fence corner post on the east line of Bulverde Lane a corner of this tract and being the northwest corner of said Fred O. Hoese tract.

THENCE with the east line of Bulverde Lane north 10° 27' 00" east a distance of 70 feet to a 4 1/2" steel fence post found at the southwest corner of a tract of land described in a deed to John D. Luther, recorded in Volume 468, Page 179 of the Deed Records of Comal County, Texas.

THENCE with the south line of said John Luther tract, south 79° 33' 00" east passing 125.30 feet its southeast corner, at 185.30 feet the southeast corner of a tract of land described in a deed to John Luther recorded in Volume 903, Page 82 at 245.30 feet the southeast corner of a tract of land described in a deed to Hanger Enterprises, recorded in Volume 346, Page 509, in all a distance of 295.30 feet to a one half inch steel pin for the southeast corner of a tract of land described in a deed to Robert Waldron, recorded in Volume 345, Page 563 of the Deed Records of Comal County, Texas.

THENCE with the east line of said Robert Waldron tract, north 10° 27' 00" east a distance of 115.00 feet to a one-half inch steel pin found for the northeast corner of said Robert Waldron tract.

of Comal County, Texas.

THENCE with the South line of said Charles M. Schelnick tract, South 79° 33' 00" east a distance of 590.30 feet to a steel pin found for the southeast corner of said Charles M. Schelnick tract.

THENCE with the East line of said Charles M. Schelnick tract north 10° 27' 00" east passing at 150.00 feet its northeast corner in all a distance of 300.00 feet to a one-half inch steel pin set with plastic cap for a corner of his tract, and being the northeast corner of a tract of land described in a deed to Prop Jets, Inc., recorded in Volume 695, Page 749 of the Deed Records of Comal County.

THENCE with the north line of said Prop-Jets, Inc., tract north 79° 33' 00" west a distance of 295.00 feet to a one-half inch steel pin set with plastic cap for the Southeast corner of a tract of land described in a deed to Oak Air, Inc., recorded in Volume 589, Page 29 of the Deed Records of Comal County, Texas.

THENCE with the east line of said Oak Air, Inc., tract north 10° 27' 00" East a distance of 150.00 feet to a 4 1/2 inch steel fence corner post at the northeast corner of said Oak Air, Inc., tract.

THENCE with the north line of said Oak Air, Inc., tract north 79° 33' 00" West a distance of 170.30 to a one half inch steel pin set with plastic cap for the southeast corner of a tract of land described in a deed to Fred O. Hoese, recorded in Volume 903, Page 34, of the Deed Records of Comal County, Texas.

THENCE with the east line of said Fred O. Hoese tract north 10° 27' 00" east a distance of 80.00 feet to a one half inch steel pin set with cap for the northeast corner of said Fred O. Hoese tract.

THENCE with the North line of said Fred O. Hoese tract north 79° 33' 00" west a distance of 125.00 feet to a 4 1/2" steel fence corner post on the east line of Bulverde Lane, a corner of this tract and being the northeast corner of said Fred O. Hoese tract.

THENCE with the east line of Bulverde Lane north 10° 27' 00" east a distance of 70.00 feet to a 4 1/2" steel fence post found at the southwest corner of a tract of land described in a deed to John D. Luther, recorded in Volume 458, Page 179 of the Deed Records of Comal County, Texas.

THENCE with the south line of said John Luther tract, south 79° 33' 00" east passing at 125.30 feet its southeast corner, at 185.30 feet the southeast corner of a tract of land described in a deed to John Luther recorded in Volume 903, Page 82 at 245.30 feet the southeast corner of a tract of land described in a deed to Hanger Enterprises, recorded in Volume 346, Page 509, in all a distance of 295.30 feet to a one half inch steel pin for the southeast corner of a tract of land described in a deed to Robert Waldron, recorded in Volume 345, Page 363 of the Deed Records of Comal County, Texas.

THENCE with the east line of said Robert Waldron tract, north 10° 27' 00" east a distance of 115.00 feet to a one-half inch steel pin found for the northeast corner, said Robert Waldron, tract;

THENCE with the north line of said Robert Waldron tract, north 79° 33' 00" West, passing at 50.00 feet its northwest corner at 110.00 feet the northwest corner of a tract of land to Hanger Enterprises, recorded in Volume 346, Page 509, at 170.00 feet the northwest corner of a tract of land described in a deed to John Luther as recorded in Volume 903, Page 82, in all a distance of 295.30 feet to a 4 1/2 inch steel post found on the east line of Bulverde Lane for a corner of this tract and being the northwest corner of a tract of land described in a deed to James R. Bobo, recorded as Document Number 9506472070 of the Deed Records of Comal County, Texas.

THENCE with the east line of Bulverde Lane north 10° 27' 00" east a distance of 185.00 feet to a one half inch steel pin set with cap for the common corner of a tract of land described in a deed R.D. Thompson, recorded in Volume 610, Page 269 and the southeast corner of a tract of land described in a deed to Edward J. Grosse recorded in Volume 610, Page 269.

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THENCE with the south line of said Edward J. Grose tract south 79° 33' 00" east passing at 125.30 feet the southwest corner of a tract of land described to C.J. Bitter recorded in Volume 350, Page 562 of the Deed Records of Comal County, in all a distance of 125.30 feet to a one half inch steel pin set with plastic cap for a corner of this tract and the common corner of a tract of land described in a deed to Mark P. Gainey, recorded in Volume 705, Page 685 and the southwest corner of a tract of land described in a deed to Robert T. Burns III recorded in Document Number 9706006997 of the Deed Records of Comal County, Texas.

THENCE with the east line of said R.D. Thompson tract, south 10° 27' 00" west a distance of 115.00 feet to a one half inch steel pin found for a corner of this tract and also being the southwest corner of a tract of land described in a deed to Mark P. Gainey, recorded in Volume 705, Page 685 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Mark P. Gainey south 79° 33' 00" east passing at 60.00' the southeast corner of said Mark P. Gainey tract and the southwest corner of a tract of land described in a deed to Jon P. Sanders, recorded in Volume 556, Page 141 all a distance of 170.00 feet to a steel pin found for a corner of this tract and the southeast corner of a tract of land described in a deed to Howard Haacker, recorded in Volume 497, Page 705 of the Deed Records of Comal County, Texas.

THENCE with the east line of said Howard Haacker tract, north 10° 27' 00" east passing at 115.00 feet its northeast corner in all a distance of 195.00 feet to a one half inch steel pin found for the northeast corner of a tract of land described in a deed to Karl W. Fox, Jr., recorded in Volume 347, Page 840 of the Deed Records of Comal County, Texas.

THENCE with the north line of said Karl W. Fox, Jr. tract, north 79° 33' 00" west passing at 50.00 feet its northwest corner, passing at 110.00 feet with the northwest corner of a tract of land described in a deed to Wesley Bailey, recorded in Volume 346, Page 501 at 170.00 feet the northwest corner of a tract of land described in a deed to C.J. Bitter recorded in Volume 350, Page 562 in all distance of 295.30 feet to a 4 1/2

inch steel fence post on the east line of Bulverde Lane for a corner of this tract and being the northwest corner of a tract of land described in a deed to Edward J. Grose, recorded in Volume 319, Page 41 of the Deed Records of Comal County, Texas.

THENCE with the east line of Bulverde Lane north 10° 27' 00" east a distance of 70.00 feet to a point for a corner of a tract of land described in a deed to Charlie Kuhn, recorded in Volume 909, Page 20 of the Deed Records of Comal County, Texas.

THENCE with the south line of a said Charlie Kuhn tract, south 79° 33' 00" east a distance of 295.00 feet to a one half inch steel pin found for the southeast corner said Charlie Kuhn tract.

THENCE with the east line of said Charlie Kuhn tract, north 10° 27' 00" east a distance of 100.00 feet to a one-half inch steel pin found for a corner of this tract and being the northeast corner of the said Charlie Kuhn tract.

THENCE with the north line of said Charlie Kuhn tract, north 79° 33' 00" west a distance of 295.00 feet to a one half inch steel pin set with plastic cap on the east line of Bulverde Lane for a corner of this tract and the northwest corner of the said Charlie Kuhn tract.

THENCE with the east line of Bulverde Lane and the west line of said 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 211, Page 902 of the Deed Records of Comal County, Texas, north 10° 27' 00" east a distance of 703.96 feet to a one half inch steel pin found for the southwest corner of a 3.008 tract of land described in a deed to Fred Hoese, recorded in Volume 315, Page 238 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Fred Hoese 3.008 acre tract south 79° 33' 00" east a distance of 588.45 feet to a one half inch steel pin found for a corner of this tract and being the southeast corner of said 3.008 acre tract.

THENCE with the east line of said Mark P. Gainey tract and the southeast corner of said Mark P. Gainey tract and the southeast corner of a tract of land described in a deed to Jon P. Sanders, recorded in Volume 556, Page 141 all a distance of 170.00 feet to a steel pin found for a corner of this tract and the southeast corner of a tract of land described in a deed to Howard Haecker, recorded in Volume 497, Page 705 of the Deed Records of Comal County, Texas.

THENCE with the east line of said Howard Haecker tract, North 10° 27' 00" east passing at 115.00 feet its northeast corner in all a distance of 195.00 feet to a one half inch steel pin found for the northeast corner of a tract of land described in a deed to Kermit W. Fox, Jr., recorded in Volume 347, Page 511 of the Deed Records of Comal County, Texas.

THENCE with the north line of said Kermit W. Fox, Jr. tract, north 79° 33' 00" west passing at 50.00 feet its northwest corner, passing at 110.00 feet with the northwest corner of a tract of land described in a deed to Wesley Bailey, recorded in Volume 347, Page 501 at 170.00 feet the northwest corner of a tract of land described in a deed to C.J. Bitter recorded in Volume 350, Page 562 in all distance of 295.30 feet to a 4 1/2 inch steel fence post on the east line of Bulverde Lane for a corner of this tract and being the northwest corner of a tract of land described in a deed to Edward J. Grose, recorded in Volume 319, Page 41 of the Deed Records of Comal County, Texas.

THENCE with the east line of Bulverde Lane north 10° 27' 00" east a distance of 70.00 feet to a point for a corner of a tract of land described in a deed to Charlie Kuhn recorded in Volume 909, Page 20 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Charlie Kuhn tract, south 79° 33' 00" east a distance of 295.00 feet to a one half inch steel pin found for the southeast corner of said Charlie Kuhn tract.

THENCE with the east line of said Charlie Kuhn tract, north 10° 27' 00" east a distance of 300.00 feet to a one-half inch steel pin found for a corner of this tract and being the northeast corner of the said Charlie Kuhn tract.

THENCE with the north line of said Charlie Kuhn tract, north 79° 33' 00" west a distance of 295.00 feet to a one half inch steel pin set with plastic cap on the east line of Bulverde Lane for a corner of this tract and the northwest corner of the said Charlie Kuhn tract.

THENCE with the east line of Bulverde Lane and the west line of said 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 23, Page 902 of the Deed Records of Comal County, Texas, north 10° 27' 00" east a distance of 301.36 feet to a one half inch steel pin found for the southwest corner of a 3.088 acre tract of land described in a deed to Fred Hoese, recorded in Volume 315, Page 218 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Fred Hoese 3.088 acre tract south 79° 34' 29" east a distance of 588.45 feet to a one half inch steel pin found for a corner of this tract also being the southeast corner of said 3.088 acre tract.

THENCE with the east line of said Fred Hoese 3.088 acre tract north 08° 22' 40" east passing at 639.86 feet the northeast corner of said 3.088 acre tract and the southeast corner of a 0.227 acre tract of land described in a deed to Fred Hoese, recorded in Volume 500, Page 614 passing at 891.41 feet the most northerly corner of said Fred Hoese 3.088 acre tract and the most southerly corner of a 0.213 acre tract described in a deed to Thompson's Inc., recorded in Volume 500, Page 611 in all a distance of 1151.42 feet to a one half inch steel pin set with plastic cap on the south line of the New Braunfels-Bulverde Road for the most northerly corner of this tract and also being the northwest corner of said Thompson's Inc. 0.213 acre tract.

THENCE with the south line of New Braunfels Boulevard Road and the north line of the 101.55 acre tract described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902 of the Deed Records of Comal County, Texas, south 65° 14' 39" east a distance of 510.57 feet to a one half inch steel pin found at the base of a 27 inch Live Oak Tree for a corner of this tract and the northwest corner of a tract of land described in a deed to Christy Cave, recorded in Volume 939, Page 391 of the Deed Records of Comal County, Texas.

THENCE continuing with the north line of said 101.55 acre tract of land the following

five calls: South 24° 25' 26" east a distance of 240.07 feet to a one half inch steel pin found; south 30° 52' 37" east a distance of 80.61 feet to a one half inch steel pin found; south 57° 59' 44" east a distance of 23.65 feet to a one half inch steel pin found; south 73° 46' 20" east a distance of 150.01 feet to a one half inch steel pin found and north 78° 11' 16" east a distance of 27.15 feet to a one half inch steel pin found for a point on the north line of said 101.55 acre tract and the common corner of said Christy Cave tract and the southwest corner of a tract of land described in a deed to Elise Lee Biesenbach recorded in Volume 963, Page 730 of the Deed Records of Comal County, Texas.

THENCE continuing with the north line of said Thompson Depot Stores, Inc., 101.55 acre tract and the south line of said Elsie Lee Biesenbach tract south 76° 12' 42" east a distance of 310.26 feet to a one half inch steel pin found for the most easterly corner of said 101.55 acre tract.

THENCE with the east line of said 101.55 acre tract of land conveyed to Thompson Depot Stores, Inc., recorded in Volume 234, Page 602 and the west line of a tract of land conveyed to El Tropicana, Inc., recorded in Volume 238, Page 944 of the Deed Records of Comal County, Texas the following three calls: south 07° 32' 14" west a distance of 870.92 feet to a one half inch steel pin found; south 08° 10' 41" west a distance of 832.05 feet to a punch mark in steel plate on rock wall found; south 08° 06' 08" west a distance of 633.65 feet to a one half inch steel pin found for the southeast corner of this tract and the southeast corner of said 101.55 acre tract;

THENCE with the south line of this tract and the south line of said 101.55 acre tract following two calls: south 50° 34' 01" west a distance of 674.22 feet to a one half inch steel pin found and north 35° 35' 11" east a distance of 1090.39 feet to the place of beginning. Bearing basis record as per Volume 234, Page 902, 1/2" steel pin found for the southwest corner to a one half inch steel pin found for the northwest corner.

TRACT I (SAVE AND EXCEPT)

a 1.01 acre tract of land out of Survey Number 192, Guadalupe Herrera, Abstract Number 206 in Comal County, Texas. Said 1.01 acre tract of land also being a portion of a 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902 of the Deed Records of Comal County, Texas. Said 1.01 acre tract also being the same tract of land described in a deed to Arnold J. Sivek, ux., recorded in Volume 301, Page 2 of the Deed Records of Comal County, Texas. Said 1.10 acre tract of land being more particularly described by notes and bounds as follows:

BEGINNING at a one half inch steel pin found for the southwest corner of this tract also being the southwest corner of a 101.55 acre tract of land described in a deed to Arnold J. Sivek. From said beginning point to the southwest corner of a 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902 et seq, bears north 79° 33' 00" west a distance of 650.30 feet and south 10° 00" east a distance of 50.00 feet.

THENCE with the west line of said 1.01 acre tract north 10° 27' 00" east a distance of 150.00 feet to a one half inch steel pin found for the northwest corner of this tract also being the northwest corner of said Arnold J. Sivek 1.01 acre tract.

found and north 78° 11' 15" east a distance of 27.15 feet to the common corner of said Christy Cave tract and the southwest corner of a tract of land described in a deed to Elise Lee Biesenbach recorded in Volume 963, Page 730 of the Deed Records of Comal County, Texas.

THENCE continuing with the north line of said Thompson Depot Stores, Inc., 101.55 acre tract and the south line of said Elise Lee Biesenbach tract south 76° 12' 42" east a distance of 310.26 feet to a one half inch steel pin found for the most easterly corner of said 101.55 acre tract.

THENCE with the east line of said 101.55 acre tract of land conveyed to Thompson Depot Stores, Inc., recorded in Volume 134, Page 604 and the west line of a tract of land conveyed to El Tropicana, Inc., recorded in Volume 233, Page 944 of the Deed Records of Comal County, Texas the following three calls: south 87° 32' 14" west a distance of 870.92 feet to a one half inch steel pin found; south 88° 10' 41" west a distance of 832.05 feet to a punch mark in steel plate on rock wall found; south 88° 06' 00" west a distance of 633.65 feet to a one half inch steel pin found for the southeast corner of this tract and the southeast corner of said 101.55 acre tract.

THENCE with the south line of this tract and the south line of said 101.55 acre tract following two calls: south 50° 34' 01" west a distance of 674.22 feet to a one half inch steel pin found and north 79° 35' 34" west a distance of 1090.39 feet to the place of beginning. Bearing basis: record as per Volume 234, Page 902; 1/2" steel pin found for the southwest corner to a one half inch steel pin found for the northwest corner.

TRACT I (SAVE AND EXCEPT)

a 1.01 acre tract of land out of Survey Number 192, Guadalupe Herrera, Abstract Number 206 in Comal County, Texas. Said 1.01 acre tract of land also being a portion of a 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902 et seq. of the Deed Records of Comal County, Texas. Said 1.01 acre tract also being the same tract of land described in a deed to Arnold J. Silvek, recorded in Volume 301, Page 2 of the Deed Records of Comal County, Texas. Said 1.01 acre tract of land being more particularly described by metes and bounds as follows:

BEGINNING at a one half inch steel pin found for the southwest corner of this tract also being the southwest corner of a 1.01 acre tract of land described in a deed to Arnold J. Silvek. From said beginning point the southwest corner of a 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902 et seq, bears north 79° 33' 00" west a distance of 650.30 feet and south 10° 00" east a distance of 50.00 feet.

THENCE with the west line of said 1.01 acre tract north 10° 27' 00" east a distance of 150.00 feet to a one half inch steel pin found for the northwest corner of this tract also being the northwest corner of said Arnold J. Silvek 1.01 acre tract.

THENCE with the north line of said 1.01 acre tract south 79° 33' 00" east a distance of 295.00 feet to a 1 1/2" inch steel fence corner post at the northeast corner of this tract and being the northeast corner of said Arnold J. Silvek 1.01 acre tract.

THENCE with the east line of said 1.01 acre tract south 10° 27' 00" west a distance of 150.00 feet to a 1 1/2" inch steel fence post found at the southeast corner of this tract and also being the southeast corner of said Arnold J. Silvek 1.01 acre tract.

THENCE with the south line of said 1.01 acre tract of land north 79° 33' 00" west a distance of 295.00 feet to the place of beginning.

TRACT II:

A 3.12 acre tract of land out of Survey Number 192, Guadalupe Herrera, Abstract Number 206 in Comal County, Texas. Said 3.12 acre tract of land also being a portion of a 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., recorded in Volume 234, Page 902, et. seq. of the Deed Records of Comal County, Texas. Said 3.12 acre tract of land being more particularly described by metes and bounds as follows:

BEGINNING at a one half inch steel pin found for the northwest corner of this tract, said point also being the northwest corner of a tract of land described in a deed to Richard J. Krawietz, et. ux., recorded in Volume 361, Page 790 of the Deed Records of Comal County, Texas. From said beginning point a one half inch steel pin found for the northeast corner of a 101.55 acre tract of land described in a deed to Thompson's Depot Stores, Inc., bears north 79° 33' 00" west a distance of 365.30 feet and south 10° 27' 00" east a distance of 1080.00 feet.

THENCE with the north line of said Richard J. Krawietz tract south 79° 33' 00" east passing at 112.50 feet its northeast corner in all a distance of 225.00 feet to a one half inch steel pin for the northeast corner of this tract and also being the northeast corner of a tract of land described in a deed to Richard J. Krawietz, recorded in Volume 601, Page 250 of the deed Records of Comal County, Texas.

THENCE with the east line of said Richard J. Krawietz tract south 10° 27' 00" west passing at 160.00 feet its southeast corner at 320.00 feet the southeast corner of a tract of land described in a deed to Dave Stilley recorded in Document Number 9606002629 at 480.00 feet the southeast corner of tract of land described in a deed to Basil R. Wilson recorded in Volume 703, Page 890 in all a distance of 650.00 feet to a one half inch steel pin found for the southeast corner of this tract, also being the southeast corner of a tract of land described in a deed to Mark Haag, recorded in Volume 290, Page 878 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Mark Haag tract north 79° 33' 00" west a distance of 175.00 feet to a one half inch steel pin found for a corner and north 34° 33' 00" west a distance of 70.71 feet to a steel pin found for the most westerly southwest corner of this tract and also being the most westerly southwest corner of said Mark Haag.

THENCE with the west line of said Mark Haag tract north 10° 27' 00" east a distance of 120.00 feet to a one half inch steel pin for the northwest corner of said Mark Haag tract and the southwest corner of a tract of land described in a deed to R.D. Thompson recorded in Volume 518, Page 173 of the Deed Records of Comal County, Texas.

THENCE with the north line of said R.D. Thompson tract and the south line of said R.D. Thompson tract south 79° 33' 00" east a distance of 112.50 feet to a one half inch steel pin found for the southeast corner of the R.D. Thompson tract and the southwest corner of a tract of land described in a deed to Basil R. Wilson recorded in Volume 703, Page 890 of the Deed Records of Comal County, Texas.

THENCE with the west line of said Basil R. Wilson north 10° 27' 00" east a distance of 80.00 feet to a one half inch steel pin found for the northeast corner of said R.D. Thompson tract and the southeast corner of a tract of land described in a deed to Ralph Crevoisier recorded in Volume 412, Page 159 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Ralph Crevoisier tract and the north line of said R.D. Thompson tract north 79° 33' 00" west a distance of 112.50 feet to a one half inch steel pin found for the southwest corner of said Ralph Crevoisier tract and the northwest corner of said R.D. Thompson Tract.

THENCE with the west line of said Ralph Crevoisier tract north 10° 27' 00" east passing at 80.00 feet its northwest corner, passing at 240.00 feet the northwest corner of a tract of land described in a deed to Richard J. Krawietz recorded in Volume 555, Page 75 in all a distance of 400.00 feet to the point of beginning.

THENCE with the north line of said Richard J. Krawietz tract south 79° 33' 00" east passing at 112.50 feet its northeast corner in all a distance of 225.00 feet to a one half inch steel pin for the northeast corner of this tract and also being the northeast corner of a tract of land described in a deed to Richard J. Krawietz, recorded in Volume 601, Page 250 of the deed Records of Comal County, Texas.

THENCE with the east line of said Richard J. Krawietz tract south 10° 27' 00" west passing at 160.00 feet its southeast corner at 320.00 feet the southeast corner of a tract of land described in a deed to Dave Stilley recorded in Document Number 9606002629 at 480.00 feet the southeast corner of tract of land described in a deed to Basil R. Wilson recorded in Volume 703, Page 890 in all a distance of 650.00 feet to a one half inch steel pin found for the southeast corner of this tract, also being the southeast corner of a tract of land described in a deed to Mark Haag, recorded in Volume 290, Page 878 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Mark Haag tract, north 79° 33' 00" west a distance of 112.50 feet to a one half inch steel pin found for a corner and north 34° 33' 00" west a distance of 70.71 feet to a steel pin found for the most westerly southwest corner of this tract and also being the most westerly southwest corner of said Mark Haag.

THENCE with the west line of said Mark Haag tract, north 10° 27' 00" east a distance of 120.00 feet to a one half inch steel pin for the northwest corner of said Mark Haag tract and the southwest corner of a tract of land described in a deed to R.D. Thompson recorded in Volume 618, Page 273 of the Deed Records of Comal County, Texas.

THENCE with the north line of said Mark Haag tract and the south line of said R.D. Thompson tract south 79° 33' 00" east a distance of 112.50 feet to a one half inch steel pin found for the southeast corner of the R.D. Thompson tract and the southwest corner of a tract of land described in a deed to Basil R. Wilson recorded in Volume 703, Page 890 of the Deed Records of Comal County, Texas.

THENCE with the west line of said Basil R. Wilson north 10° 27' 00" east a distance of 80.00 feet to a one half inch steel pin found for the northeast corner of said R.D. Thomson tract and the southeast corner of a tract of land described in a deed to Ralph Crevoisier recorded in Volume 412, Page 115 of the Deed Records of Comal County, Texas.

THENCE with the south line of said Ralph Crevoisier tract and the north line of said R.D. Thomson tract north 79° 33' 00" west a distance of 112.50 feet to a one half inch steel pin found for the southwest corner of said Ralph Crevoisier tract and the northwest corner of said R.D. Thomson tract.

THENCE with the west line of said Ralph Crevoisier tract north 10° 27' 00" east passing at 80.00 feet its northwest corner, passing at 210.00 feet the northwest corner of a tract of land described in a deed to Richard J. Krawietz recorded in Volume 585, Page 11 in all a distance of 400.00 feet to the point of beginning.

Doc# 200106022363

4 Pages

Date: 7/11/01 2:55:47 PM

Filed & Recorded in

Official Records of

COMAL COUNTY

JOY STREATER

COUNTY CLERK

Fee \$25.00

STATE OF TEXAS
COUNTY OF COMAL

This is to certify that this document was
FILED and RECORDED in the Official
Public Records of Comal County, Texas
on the date and time stamped thereon.

Joy Streater
COUNTY CLERK

Doc# 9706018845

4 Pages

Date: 7-09-11-1997

Time: 10:20:52 P.M.

Filed & Recorded in

Official Records

of COMAL COUNTY, TX.

JOY STREATER

COUNTY CLERK

Rec. \$ 19.00

Doc# 9706018845

TNRCC - CODE SHEET FOR EDWARDS AQUIFER INSPECTIONS

PROJECT NAME: BULVERDE AIR PARK PROJECT ID: 1670.00

REGION: 13 INVESTIGATOR LBUMGUAR

COUNTY CODE

TYPE OF INSPECTION

ZONE

<input type="checkbox"/> 015 Bexar	<input checked="" type="checkbox"/> 046 Comal	<input type="checkbox"/> SAI - Plan Review	<input checked="" type="checkbox"/> Recharge Zone
<input type="checkbox"/> 105 Hays	<input type="checkbox"/> 136 Kinney	<input type="checkbox"/> EAF - Follow-up	<input type="checkbox"/> Transition Zone
<input type="checkbox"/> 163 Medina	<input type="checkbox"/> 227 Travis	<input checked="" type="checkbox"/> N/A - No Inspection	<input type="checkbox"/> Contributing Zone
<input type="checkbox"/> 232 Uvalde	<input type="checkbox"/> 246 Williamson		

X REG REGION APPROVAL/DENIAL OF PLAN

TYPE APPLICATION:

TYPE PLAN:

FEE'S

\$5,000.00

<input checked="" type="checkbox"/> NEW	<input checked="" type="checkbox"/> WPA - Water Pollution Abatement	ACRES	78.36
<input type="checkbox"/> MOD - Modification	<input type="checkbox"/> SCS - Sewage Collection System	SCS LF	
<input type="checkbox"/> EXC - Exception	HHS - Hydrocarbon/Hazardous Substance: <input type="checkbox"/> AST <input type="checkbox"/> UST	# TANKS	
<input type="checkbox"/> XTEN -Extension	C ZONE		

Day 0 DATE RECEIVED 3/30/01 Perm: Basin ☐ Veg ☐ Mixed ☐ S-C ☐ None ☒

Day 30 DATE ADMINISTRATIVELY COMPLETE: 3/30/01 BY LBUMGUAR

RETURNED ☐ RESPONSE DUE (15 DAYS) ☐ RESPONSE REC'D ☐NA/01 Plan incomplete ☐ NA/02 Fee not Paid ☐ RESPONSE ADEQUATE ☐

Day 60 DATE TECHNICALLY ADEQUATE 6/5/01 BY LBUMGUAR

RETURNED ☐ RESPONSE DUE (30 Days) ☐ RESPONSE REC'D ☐(Deficiency Letter/Fac Sent, Requests for information with memo to file) RESPONSE ADEQUATE ☐

SAI DATE NONE

Day 90 LETTER DATE 6/6/01 APPROVED ☒ DENIED ☐ FAU - C ZONE DEFAULT ☐DAYS HELD BY TNRCC ☐ - DAYS WAITING ON APPLICANT 0 TOTAL REVIEW DAYS 68**INSP INSPECTION**FOL: ☐ CI ☐ CAVE ☐ DATE NOTIFIED (CAVE) ☐Day 0 DATE INSPECTED ☐ DATE CAVE PLAN RECEIVED ☐Day 60 DATE OF LETTER ☐ LETTER TYPE COM ☐ NOV ☐ NOE ☐ RIO ☐
(Cave letter due in 7 days) RESP DUE ☐ RESP REC'D ☐Day 60 DATE OF REPORT ☐ TYPE LAB SAMPLE ☐


NOTES:

TEC TECHNICAL ASSISTANCE/OTHER LETTERSDay 0 DATE OF REQUEST ☐ DATE RESPONSE DUE ☐Day 0 DATE OF LETTER ☐ DATE RESP RECD ☐RESP ADEQUATE ☐

RECEIVED--TNFCC

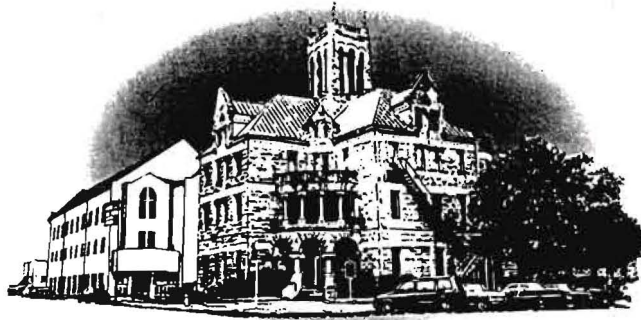
2001 MAR 30 PM 3:33

SAN ANTONIO REGION

MARKLINE PROPERTIES, INC. P. O. BOX 130 830-438-2507 BULVERDE, TX 78163		1158
<i>September 30, 2000</i>		88-2194/1149 07
PAY TO THE ORDER OF	<i>TNRC</i>	\$ 5,000.00
<i>Five Thousand and 00/100</i>		DOLLARS
 SECURITY STATE BANK & TRUST P.O. BOX 85 • BULVERDE, TEXAS 78163 • 210-438-4848		
FOR	<i>WPAP APPLICATION FEE</i>	<i>E. Markline</i>
⑆114921949⑆ 105 853 6⑈ 1158		

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Comal County

OFFICE OF COMAL COUNTY ENGINEER

May 15, 2001

Mr. John Mauser
T.N.R.C.C.
14250 Judson Road
San Antonio, TX 78233-4480

Re: W.P.A.P. submittal for Bulverde Airpark, within Comal County, Texas.

Dear Mr. Mauser:

We have reviewed the referenced W.P.A.P. submittal and would like for you to add the following comments to your approval letter:

"This entire tract of land is located within a Special Flood Hazard Area; owners will be required to obtain a Comal County Floodplain Development Permit, at the Comal County Engineers Office, for all development including any type of structures, fill, and/or excavation."

We have serious concerns about any type of development in this area and appreciate you submitting these comments in your approval. Please let us know if you have any comments or suggestions regarding any of the above.


Sincerely,

Thomas H. Hornseth, P.E.
Comal County Engineer

RECEIVED-TRCC

1001 MAR 30 PM 3:33

SAN ANTONIO REGION

MARKLINE PROPERTIES, INC. P. O. BOX 130 830-438-2507 BULVERDE, TX 78163		1158
<i>September 30, 19 2000</i>		88-2194/1149 07
PAY TO THE ORDER OF	<i>TRCC</i>	\$ 5,000.00
<i>Five Thousand 00/100</i>		DOLLARS
 SECURITY STATE BANK & TRUST P.O. BOX 85 • BULVERDE, TEXAS 78163 • 210-438-4848		
FOR	<i>WPAP APPLICATION FEE</i>	<i>E. Markline</i> MP
⑆114921949⑆ 105 853 6⑈ 1158		

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R-13

RECEIVED-TNRC

2001 MAR 30 PM 3: 32

SAN ANTONIO REGION

**BULVERDE AIRPARK
WATER POLLUTION ABATEMENT PLAN**

MUHLESTEIN & ASSOCIATES
ENVIRONMENTAL AND GEOLOGIC SERVICES

Bulverde Air Park

29890 Bulverde Lane, Bulverde Texas 78163

March 29, 2001

Executive Director
TNRCC
14250 Judson Road
San Antonio, TX 78233-4480

RE: Cover Letter for Bulverde Air Park WPAP

Dear Executive Director:

Muhlestein and Associates has completed a Water Pollution Abatement Plan and a Geologic Assessment for the above referenced site. This document follows the TNRCC guidance for the preparation and submittal of a WPAP.

Bulverde Air Park requests that the TNRCC review this document for administrative completeness and technical compliance.

Muhlestein and Associates is the Authorized Agent for the Bulverde Air Park WPAP. A signed copy of the Agent Authorization Form is attached in section 0599. For additional information and for any response to this WPAP application, contact Muhlestein and Associates at 12514 Rio Paloma, San Antonio 78249. (210) 520-5807

Sincerely,

A handwritten signature in black ink, appearing to read 'K. Muhlestein', with a stylized flourish at the end.

Keith Muhlestein, MS, REM
Muhlestein and Associates

MUHLESTEIN & ASSOCIATES

ENVIRONMENTAL AND GEOLOGIC SERVICES,
office (210) 520-5807

12514 Rio Paloma, San Antonio, TX 78249

September 24, 2000

Bulverde Air Park
29890 Bulverde Lane
Bulverde, Texas 78163

Attn: Edward Markline

Re: Geologic Recharge Assessment and Water Pollution Abatement Plan

Dear Mr. Markline:

INTRODUCTION

Muhlestein and Associates has completed a water pollution abatement plan and a geologic recharge assessment for the above referenced project in compliance with the Texas Natural Resource Conservation Commission (TNRCC) requirements for regulated developments located on the Edwards Aquifer Recharge Zone (EARZ). The purpose of this report is to describe surficial geologic units and identify the locations and extent of significant recharge features present in the development area.

AUTHORIZATION

Authorization to perform this assessment was given by a signed copy of the Agent Authorization Form (TNRCC-0599) between Muhlestein and Associates, and Markline Properties.

PROJECT DESCRIPTION

The Project site is an approximate 78.36-acre tract of undeveloped and developed land located north of Cibolo Creek on Indian Creek, roughly one mile west of US 281 in Comal County, Bulverde, Texas. The site has a very low topographic gradient to the east-southeast. The site vegetation consists primarily of grasses.

REGIONAL GEOLOGY

Physiography

The Edwards Plateau terrain is rugged and hilly, with elevations ranging from 1,000 feet to 1,900 feet above sea level. This area is underlain by beds of limestone that dip gently to the southeast. South of the Edwards Plateau is the Balcones Fault Zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast-southwest across Bexar and Comal Counties and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from 700 feet to 1,100 feet above sea level. The West Gulf Coastal Plain lies to the southeast of the Blackland Prairie, and is composed of relatively flat-lying beds of marl, clay and sandy clay. The elevation ranges from 450 feet to 700 feet above sea level, with a southeast regional dip. Elevations at the subject site range from approximately 1,075 feet to 1,095 feet above sea level.

Stratigraphy and Structure

No outcrops were noted on the subject site as it is a stream terrace covered with several feet of sediment. The underlying Formation is inferred from current USGS data to be the lowermost section of the upper Glen Rose in the Fossiliferous Zone and just above the Corbula bed. Further evidence of the Corbula bed was located in Cibolo creek to the south of the subject property.

SITE INVESTIGATION

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

SUMMARY

No sensitive features were located on the subject site. Should any caves, sinkholes, or solution cavities be encountered during future clearing/construction activities, please contact our office for additional assistance.

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

Respectfully submitted,

Muhlestein and Associates.

A handwritten signature in black ink, appearing to read 'K. Muhlestein', written in a cursive style.

Keith Muhlestein, MS, REM
Project Manager

WARRANTY

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

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

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

PROJECT NAME: Bolverde Air Park
COUNTY: Comal STREAM BASIN: Cibola

EDWARDS AQUIFER: ☒ RECHARGE ZONE
☐ TRANSITION ZONE

PLAN TYPE: ☒ WPAP ☐ AST ☐ EXCEPTION
☐ SCS ☐ UST ☐ MODIFICATION

APPLICANT INFORMATION

1. Applicant:

Contact Person: Edward Markline
Entity: Markline Properties
Mailing Address: 29890 Bolverde Lane
City, State: Bolverde, 78163 Zip: 78163
Telephone: (830) 438-2507 FAX: _____

2. Agent/Representative (If any):

Contact Person: Keith Muhlestein
Entity: Muhlestein + Associates
Mailing Address: 12514 Rio Paloma
City, State: San Antonio, Texas Zip: 78249
Telephone: (210) 520-5807 FAX: _____

PROJECT LOCATION

3. Site Address: Bolverde Air Park
Street: 29890 Bolverde Lane
City: Bolverde, Texas Zip: 78163

4. ☒ This project is inside the city limits of Bolverde, Texas
☐ This project is outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____
☐ This project is not located within any city's limits or ETJ.

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

One mile west of U.S. 281 on Bolverde Rd, then left on Bolverde Lane.

6. ☒ **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.
7. ☒ **ATTACHMENT B - USGS / EDWARDS RECHARGE ZONE MAP.** A copy of the official 7 1/2 minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached behind this sheet. The map(s) should clearly show:
- ☒ Project site.
 - ☒ USGS Quadrangle Name(s).
 - ☒ Boundaries of the Recharge Zone (and Transition Zone, if applicable).
 - ☒ Drainage path from the project to the boundary of the Recharge Zone.
8. ☒ Sufficient survey staking is provided on the project to allow TNRCC regional staff to locate the boundaries and alignment of the regulated activities and the geologic or manmade features noted in the Geologic Assessment. **The TNRCC must be able to inspect the project site or the application will be returned.**
9. ☒ **ATTACHMENT C - PROJECT DESCRIPTION.** Attached at the end of this form is a detailed narrative description of the proposed project.
10. Existing project site conditions are noted below:
- ☒ Existing commercial site
 - ☐ Existing industrial site
 - ☐ Existing residential site
 - ☐ Existing paved and/or unpaved roads
 - ☐ Undeveloped (Cleared)
 - ☐ Undeveloped (Undisturbed/Uncleared)
 - ☐ Other: _____

PROHIBITED ACTIVITIES

11. ☒ 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).
12. ☒ 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

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

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

14. Application fees are due and payable at the time the application is filed. If the correct fee is not submitted, the TNRCC 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:

- ☐ TNRCC cashier
- ☐ Austin Regional Office (for projects in Hays, Travis, and Williamson Counties)
- ☒ San Antonio Regional Office (for projects in Bexar, Comal, Kinney, Medina, and Uvalde Counties)

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

16. ☒ 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 TNRCC review. The application was prepared by:

Keith Mohlestein
Print Name of Applicant/Owner/Agent

[Signature]
Signature of Applicant/Owner/Agent

9/21/00
Date

Attachment A

Road Map

SUBJECT PROPERTY

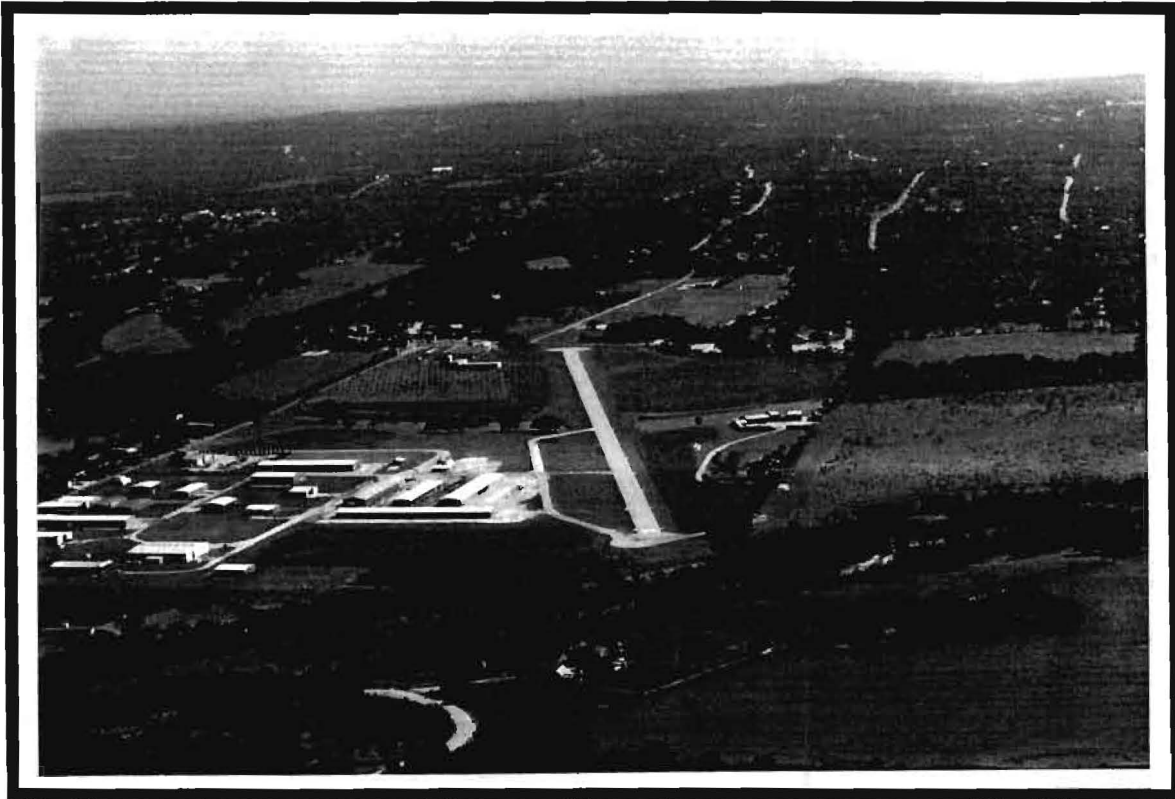
Location Map

N

N 



Looking in a northerly direction at the subject property



Looking in a northwesterly direction at the runway

Attachment C

DESCRIPTION OF PROJECT

Bulverde Air Park, located at 29890 Bulverde Lane, is situated on 78.36 acres, and is on the Edwards Aquifer Recharge Zone.

The Air Park has built a new hanger / office building. The hanger is comprised of seven aircraft bays and one office. The square footage of the building is 17,500. It is approximately 20 feet tall composed of metal studs, metal siding and metal roof. The foundation is steel reinforced concrete slab on grade. See site plan for location of hanger (A).

An additional 39,533 square feet of impervious cover was added as the parking lot in front of the new building as well as taxiway and ramp for aircraft traffic in and out of the hanger bays. The total impervious cover for that project was 57,033 square feet.

Bulverde Air Park plans to build three additional hangers for future development. No construction will commence prior to June 2002. Each of the three hangers will be built separately along with the associated taxiway servicing that hanger. No more than one hanger and associated taxiway will be built in any single calendar year. Each hanger will cover 20,000 square feet and will have an additional 20,000 square feet of taxiway associated with it. See the site plan for location of proposed hangers (B, C, and D). The proposed hangers will have steel reinforced concrete foundations on grade and metal roofs, similar to the existing hanger/office. The associated taxiways will be steel mesh reinforced concrete. The total impervious cover for this proposed project is 120,000 square feet or 2.75 acres.

The current impervious cover, which includes all existing structures, runways, and taxiways, totals 12.00 acres. Including the 2.75 acres of proposed hangers and associated taxiways, the total of impervious cover across the entire air park property becomes 14.75 acres. This can be expressed as 18.82 % of the entire property. An inventory of impervious cover is included in section 0584 as attachment E.

Attachment C

DESCRIPTION OF PROJECT
continued...

Standard aviation operations and maintenance activities occur in the new hanger. Various lubricants, solvents, fuel, and paints are used. A spray painting booth is in operation in the new hanger. An air permit was obtained for the painting operation and it complies with all State, Federal and local laws and regulations. Herbicides and pesticides are applied according to manufacturer specifications on the subject property when necessary. All wastes, including waste solvents and other chemical waste are disposed of by licensed waste haulers. At no time will any chemical be released to the environment in violation of Federal, State, or local laws, and regulations. Emergency spill kits have been placed throughout the property and in various buildings and are accessible as a measure to be taken to contain any accidental spill.

Bulverde Air Park endeavors to understand the issues involved in the protection of the Edwards Aquifer Recharge Zone and fully supports all appropriate measures to maintain the standard of quality set by the TNRCC.

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

PROJECT NAME: Bolverde Air Park

TYPE OF PROJECT: ☒ WPAP ☐ AST ☐ SCS ☐ UST

LOCATION OF PROJECT: ☒ Recharge Zone ☐ Transition Zone ☐ Contributing Zone within the Transition Zone

PROJECT INFORMATION

1. ☒ Geologic or manmade features are described and evaluated using the attached **GEOLOGIC ASSESSMENT TABLE**.
2. Soil cover on the project site is 5-15 feet thick. In general, the soil present appears to have the ability to:
☒ transmit fluid flow to the subsurface.
☐ impede fluid flow to the subsurface.
3. ☒ **SOILS ATTACHMENT**. A narrative description of soil units and a soil profile, including thickness and hydrologic characteristics are attached at the end of this form.
4. ☒ 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.
5. ☒ 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.
6. ☒ 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
Site Geologic Map Scale

1" = 400'
1" = 400'

7. Method of collecting positional data:
☐ Global Positioning System (GPS) technology.
☒ Other method(s).
8. ☒ The project site is shown and labeled on the Site Geologic Map.
9. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.

10. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
☐ Geologic or manmade features were not discovered on the project site during the field investigation.
11. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
12. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.):
☐ There are 2 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☒ The wells are in use and comply with 16 TAC §76.
☐ There are no wells or test holes of any kind known to exist on the project site.

ADMINISTRATIVE INFORMATION

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

Date(s) Geologic Assessment was performed: July 3, 2000
Date(s)

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. My signature certifies that I am qualified as a geologist as defined by 30 TAC 213.

Keith Muhlestein
Print Name of Geologist

(210) 520-5807
Telephone

[Signature]
Signature of Geologist

Fax
9/21/00
Date

Representing: Muhlestein + Associates
(Name of Company)

GEOLOGIC ASSESSMENT TABLE															PROJECT NAME:																										
FEATURE ID			FEATURE CHARACTERISTICS															PHYSICAL SETTING																							
1A	1B	1C	2	3			4	5	6		7				8				9			10	11	12			13				14				15	16		17			
LOCATION	TYPE (1)	POINTS	GEOLOGIC FORMATION	VERTICAL FEATURE (FEET)			HORIZONTAL FEATURE (FEET)	LENGTH & WIDTH (FEET)	TREND (C, CD, FR, FZ, SC, SH)		DENSITY (FR, VP)				APERTURE (FR, VR)				INFILTRATION (CD, FR, FZ, SC, SH, VR)				RELATIVE INFILTRATION RATE			SUB-TOTAL	SENSITIVITY			DRAINAGE AREA (ACRES)				TOPOGRAPHY (2)				SUB-TOTAL	POTENTIAL RECHARGE		COMMENTS
				C, CD, SC, SH			C, SC	FZ, FR, VR, Z		19	9	9	10	9	9	10	9	9	10	15	9	10	30					9	9	10	15	9	9	10	15	20					
				X	Y	Z	X	Y	Z		DIRECTION	DOMINANT	LDW	MODERATE	HIGH	SMALL	MEDIUM	LARGE	CEMENTED	FLINE	COARSE	HONEY	MODERATE/LOW	MODERATE	HIGH		NOT	POSITIVE	SENSITIVE												
S1	MM	35	Kgr																					35																	
S2	MM	35	Kgr																					35																	

(1) C = 35, CD = 10, FR = 0, FZ = 15, MM = 35,
SC = 10, SH = 20, VR = 0, ZONE = 35

(2) WALL = Vertical/near vertical wall above 100-yr floodplain
FLOODPLAIN = 100-yr floodplain
STREAM BED = Ordinary High Water Mark

I have read, understood, and followed the Texas Natural Resource Conservation Commission's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

[Signature]
Geologist signature

9/21/00
Date

Sheet 1 of 1

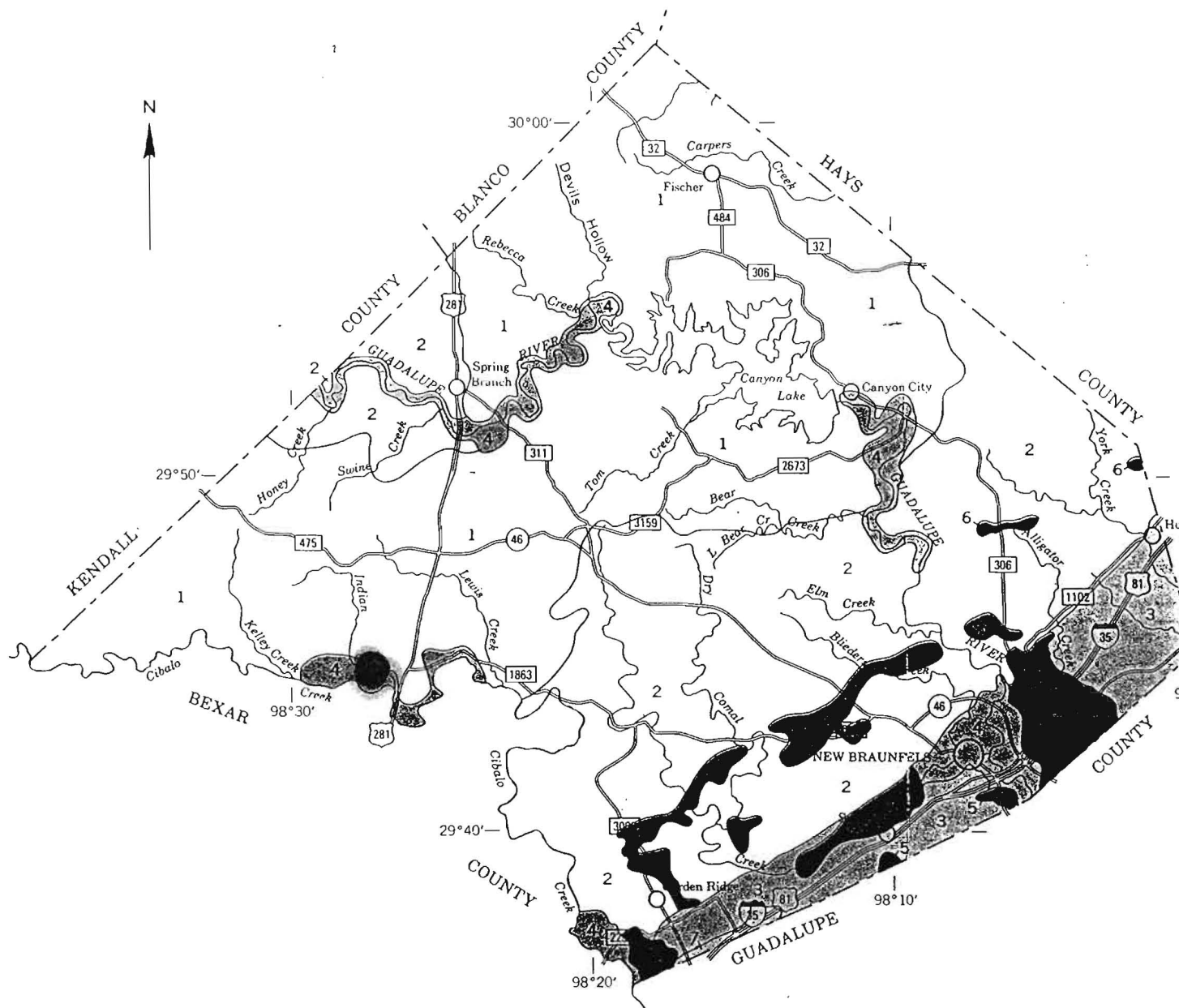
Geologic Assessment Table
Comments

Features S1 and S2 are manmade features. Features S1 and S2 are excavations located in the flow path of Indian Creek. S1 is located immediately to the west of the Airpark runway and drains under the runway through drainage pipes to feature S2. Feature S2 is located to the east of the runway, also in the flow path of Indian Creek.

The dimensions of feature S1 are approximately sixty feet wide by one hundred twenty feet long and five to eight feet deep when full. Feature S2 is approximately fifty feet wide by one hundred feet long and five to eight feet deep when full.

S1 has been lined with several inches of clay to prevent infiltration. This feature remains wet year round even in dry years, and typically contains several feet of water. Feature S2 has not been lined and does not retain water.

Drainage to these two feature comes from cultivated fields to the north and south as well as the flow from Indian Creek. Additional drainage comes from the runway and taxiways.



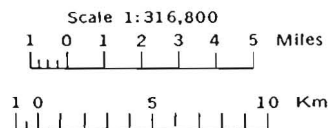
LEGEND

- | | |
|---|---|
| <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">1</div> <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">2</div> <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">3</div> <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">4</div> <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">5</div> <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">6</div> <div style="border: 1px solid black; width: 30px; height: 15px; display: flex; align-items: center; justify-content: center; margin-bottom: 5px;">7</div> | <p>BRACKETT-COMFORT-REAL: Shallow, undulating to steep soils over limestone or strongly cemented chalk; on uplands of Edwards Plateau</p> <p>COMFORT-RUMPLE-ECKRANT: Very shallow to moderately deep, undulating to steep and hilly soils over indurated limestone; on uplands of Edwards Plateau</p> <p>HEIDEN-HOUSTON BLACK: Deep, gently sloping to sloping soils over clay and shale; on uplands of Blackland Prairie</p> <p>LEWISVILLE-GRUENE-KRUM: Deep, shallow, and very shallow, nearly level to gently sloping soils over loamy, clayey, and gravelly sediments; on stream terraces and valley fills of Blackland Prairie and Edwards Plateau</p> <p>BRANYON-KRUM: Deep, nearly level to gently sloping soils over clayey sediments; on ancient stream terraces and valley fills of Blackland Prairie</p> <p>KRUM-MEDLIN-ECKRANT: Deep, very shallow, and shallow, undulating to steep and hilly soils over clay, shaley clay, and limestone; on stream terraces, valley fills, and uplands of Edwards Plateau</p> <p>AUSTIN-CASTEPHEN-HOUSTON BLACK: Shallow to deep, gently sloping to sloping soils over chalk or marly clay; on uplands of Blackland Prairie</p> |
|---|---|

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
TEXAS AGRICULTURAL EXPERIMENT STATION

GENERAL SOIL MAP

COMAL COUNTY, TEXAS



SOIL MAP



SOIL PROFILE

The site is covered by the Lewisville (LeA, LeB) silty clay. This is a deep, nearly level soil on plane to slightly convex slopes on stream terraces. The areas are irregular in shape and range from 5 to 500 acres in size. Typically, the surface layer is dark grayish brown, silty clay about 17 inches thick. The subsoil to a depth 36 inches is brown silty clay, and to a depth of 54 inches it is yellowish brown silty clay. The underlying material to a depth of 61 inches is brown silty clay. The soil is moderately alkaline and calcareous throughout.

The soil is well drained. Surface runoff is slow. Permeability is moderate. The availability of water capacity is high. The rooting zone is deep. Water erosion is a slight hazard.

Included with this soil in mapping are small areas of Krum, Branyon, Gruene, and Sunev soils. Also included are small areas of gently sloping Lewisville soils. The included soils make up less than 15 percent of a mapped area.

This soil is used mainly as cropland. In a few areas it is irrigated. This soil is well suited to use as irrigated and nonirrigated cropland. In some areas this soil is used for improved pasture and as rangeland.

For urban uses, the clayey texture, shrink-swell potential, moderate permeability, and low strength affecting roads and streets, and corrosivity to uncoated steel are limitations. The clayey texture is a limitation for recreational uses.

Geologic Period	Group		Member (zone)	Hydro- logic function	Thickness (feet)	Lithology	Field identification	Cavern development	Porosity/ permeability type	Aquifer
	Group	Formation								
Lower Cretaceous	Edwards Group	Kainer Formation	Basal nodular member	Karst AQ, not karst CU	50 – 60	Shaly, nodular limestone; mudstone and <i>niliolid</i> grainstone	Massive, nodular and mottled, <i>Exogyra</i> <i>texana</i>	Large lateral caves at surface; a few caves near Cibola Creek	Fabric; stratigraphically controlled/large conduit flow at surface; no permeability in subsurface	Edwards Aquifer
	Travis Peak Formation	Upper Glen Rose member	"Cavernous zone"	Aq, associated with fractures and karst; CU if not	120+	alternating and interfingering medium bedded mudstone, wackestone, packstone and local evaporites	Near contact with Edwards Limestone, Stair-step topography, devoid of fossils, local evaporite beds	Some caves below contact with Edwards Limestone. Caves associated with fractures and bedding planes.	At surface; fracture and cavern porosity, probably very permeable near contact with Edwards which decreases with depth	Upper Trinity Aquifer
			"Camp Bullis zone"	CU; AQ associated with karst, fractures	120-150	alternating and interfingering mudstones, clays, wackestone, packstones	Devoid of fossils, stair- step topography, evaporite bed at top of zone	Few caves	Interpartile porosity, fracture and some cavernous porosity, generally low permeability away from caves and solutionally enlarged fractures.	
			"Fossiliferous zone"	AQ; associated with bioherms CU: above and below bioherms	135-180	Thinly bedded mudstone; thin to medium bedded wackestone, packstone and locally thickly bedded rudist biostroms	Profuse amounts of <i>Orbitolina texana</i> , generally low relief, stair step topography not as well defined	Caves related to fractures and bedding planes in massive limestone unit	Both fabric and non fabric selective. Very good fracture, cavern, and moldic porosity within biostrom. The lower 90 ft very low porosity, primarily fracture related.	
		Lower Glen Rose member	AQ; in bioherms and evaporite bed, also associated with karst and fractures, CU elsewhere	320	Thickly bedded mudstone; thin to medium bedded mudstone, wackestone, packstone and clays. Evaporite bed at top composed of clays and grainstone (corbula bed)	Massive mudstones, Massive bioherms near top; below corbula bed	Caves in bioherms very large sinkholes in bioherms. Few caves below bioherm primarily associated with fracture enlargement	Both fabric and not fabric. Very good fracture, cavern, and moldic porosity within bioherms. Mudstones and marls primarily fracture porosity. Low permeability in mudstones and marls. Good permeability in bioherms.	Aquifer	Middle Trinity Aquifer
		Bexar member	CU	40-70	Sandstone, clay, shale, and sandy dolomite	*	*	Yields small amounts of water, usually saline		
		Cow Creek member	AQ	40-80	Sandy limestone and dolomite	*	*	Yields small to moderate amounts of water		
		Hammitt member	CU	50	sandy shale, some dolomitic limestone	*	*	Yields no water	Aquifer	
	Sligo member	AQ	100+	Sandy dolomitic limestone	*	*	Yields small to moderate amounts of water, fresh to slightly saline	Lower Trinity Aquifer		
	Hosston member	AQ	300+	Conglomerate, sandstone, claystone, shale, dolomite and limestone	*	*	Yields small to moderate amounts of water, fresh to slightly saline			

Attachment C

Stratigraphic Column

FORMATION	THICKNESS	LITHOLOGIC DESCRIPTION
Glen Rose upper	10'	Thinly bedded mudstone; thin to medium bedded wackestone, packstone and locally thickly bedded rudist biostomes.
Glen Rose lower	320'	Thickly bedded mudstone, thin to medium bedded mudstone, wackestone, packstone and clays. Evaporite bed at top composed of clays and grainstone (Corbula bed).

Attachment D
Narrative of Site Specific Geology

Site Investigation

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

Regional Geology

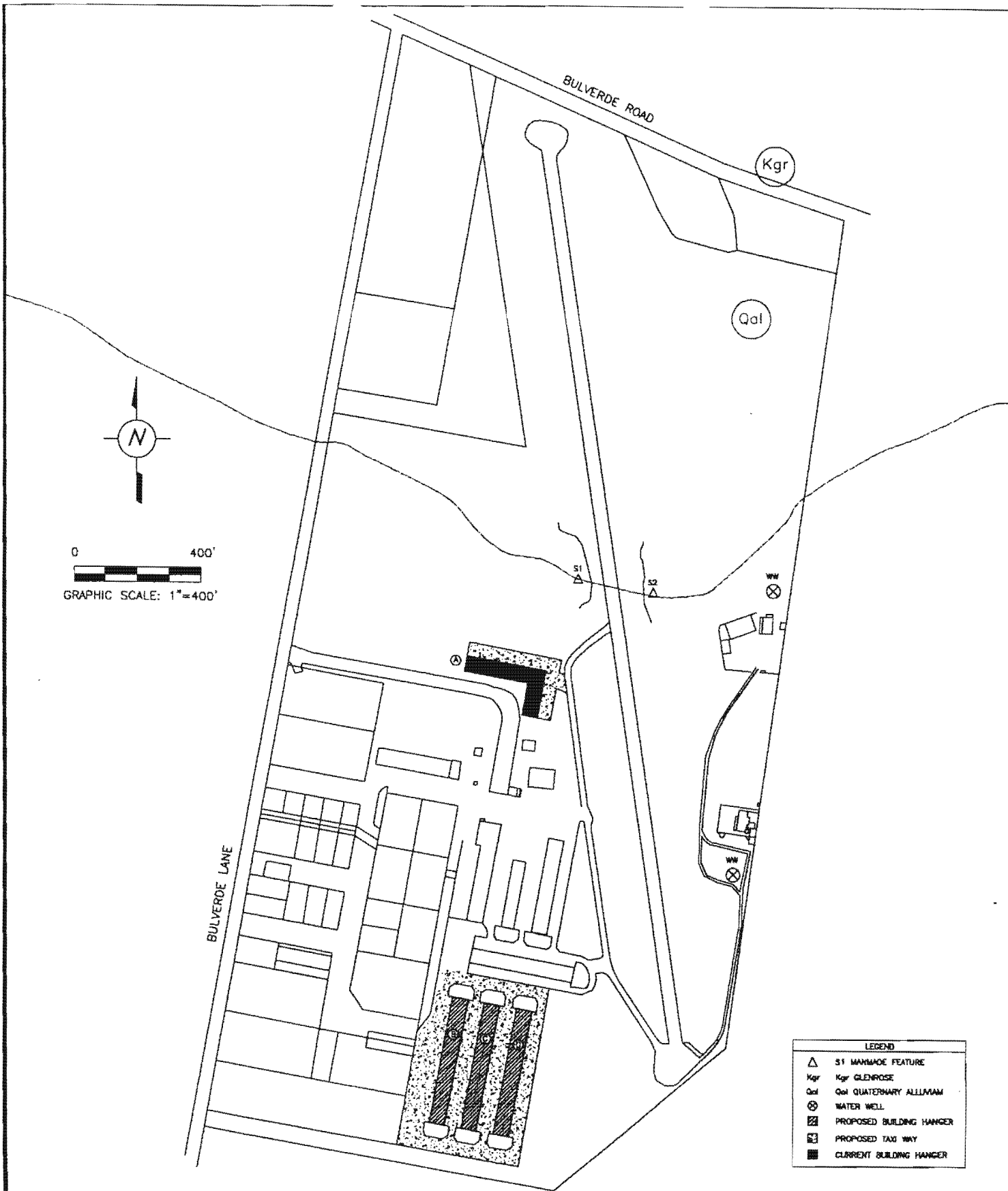
The Edwards Plateau terrain is rugged and hilly, with elevations ranging from 1,000 feet to 1,900 feet above sea level. Beds of limestone that dip gently to the southeast underlie this area. South of the Edwards Plateau is the Balcones Fault zone, which is also the northernmost limit of the Blackland Prairie. The Balcones Fault Zone extends northeast southwest across Bexar and Comal Counties and is composed of fault blocks of limestone, chalk, shale and marl. The undulating, hilly topography of the Blackland Prairie ranges in elevation from 700 feet to 1,100 feet above sea level. The West Gulf Coastal Plain lies to the southeast of the Blackland Prairie, and is composed of relatively flat-lying beds of marl, clay and sandy clay. The elevation ranges from 450 feet to 700 feet above sea level, with a southeast regional dip. Elevations at the subject site range from approximately 1,075 feet to 1,095 feet above sea level.

Attachment D
Narrative of Site Specific Geology
Continued...

Site Geology

No outcrops were noted on the subject site, as it is a stream terrace covered with five to fifteen feet of sediment. The underlying Formation is inferred from current USGS data to be the lowermost section of the upper Glen Rose in the Fossiliferous Zone and just above the Corbula bed.

The Glen Rose Formation is composed of limestone, dolomite, and marl as alternating resistant and recessive beds forming stairstep topography: limestone, aphanitic to fine grained, hard to soft and marly, light gray to yellowish gray; dolomite, fine grained, porous, yellowish brown; marine megafossils include molluscan steinkerns, rudistids, oyster, and echinoids. Upper part, Kg_{ru}, relatively thinner bedded more dolomitic, and less fossiliferous; thickness about four hundred feet. Lower part, Kg_{rl}, more massive, contains some rudistid reefs and at top Corbula bed, with abundant steinkerns of Corbula harveyi in an interval up to five feet thick; thickness about five hundred feet. Thickness of the Glen Rose Formation is about nine hundred feet.

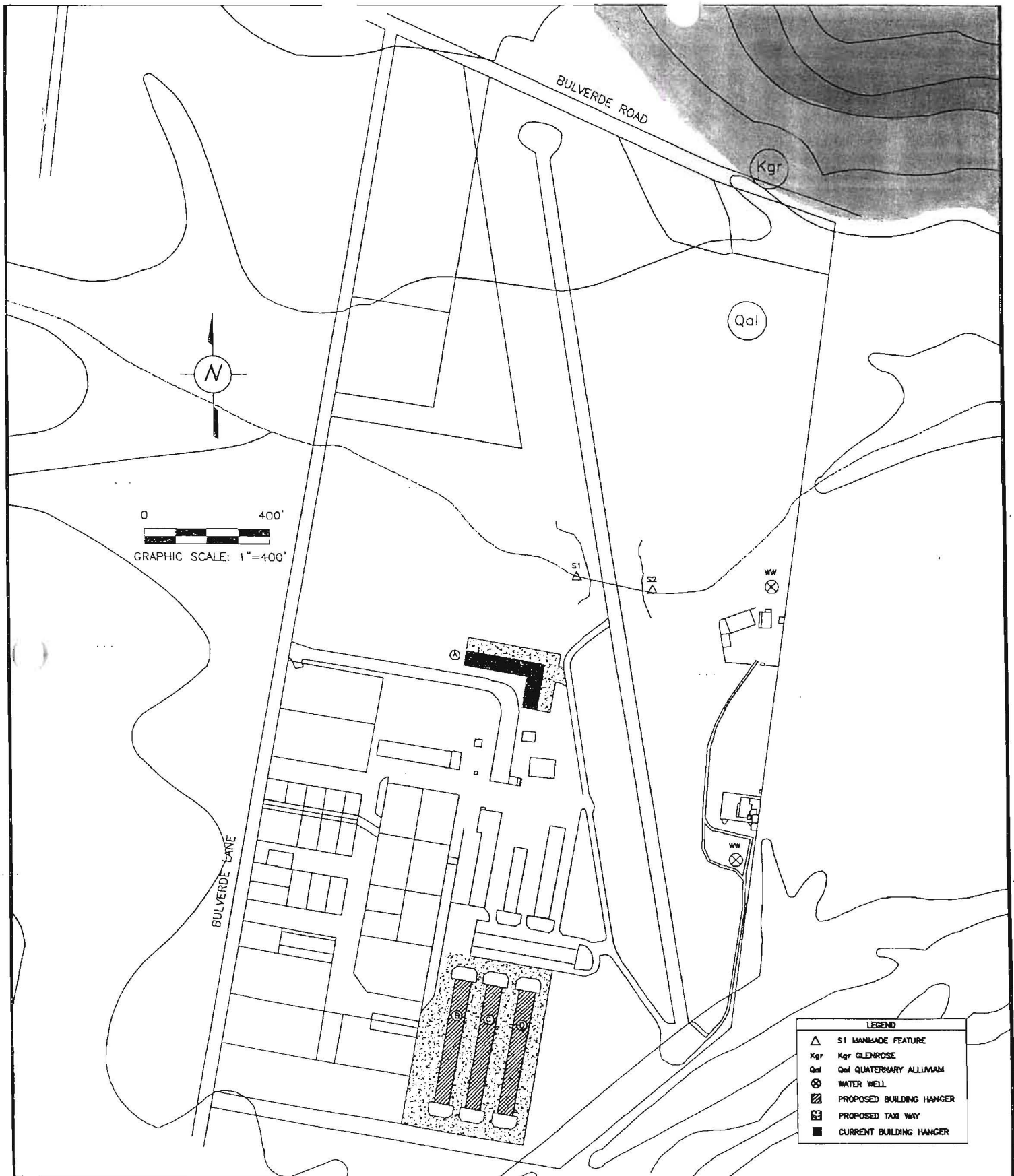


LEGEND	
	S1 MANMADE FEATURE
	Kgr GLENROSE
	Qal QUATERNARY ALLUVIUM
	WATER WELL
	PROPOSED BUILDING HANGER
	PROPOSED TAXI WAY
	CURRENT BUILDING HANGER

MUHLESTEIN & ASSOCIATES
 12514 Rte Paloma
 San Antonio, TX 78248
 (210) 520-5807

BULVERDE AIR PARK SITE PLAN

DATE:	3/20/01
SCALE:	1"=400'
DRAWN BY:	FTS
CHECKED:	KNM
FILE:	bul2



MUHLESTEIN & ASSOCIATES

12514 Rio Paloma
San Antonio, TX 78248
(210) 520-5807

BULVERDE AIR PARK
GEOLOGY MAP

DATE: 3/20/01

SCALE: 1"=400'

DRAWN BY: FTS

CHECKED: KNM

FILE: bul2

JOINS PANEL 0030

Air Park

RM 55-11

Cibola

BULVERDE
ROAD

Creek

ZONE A14

COMAL COUNTY
FIRM #485463 0055 D
55 OF 130

281

N

SCALE
1" EQUALS 800'

RM 55-10

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

PROJECT NAME: Bulverde Air Park

PROJECT INFORMATION

1. The type of project is:
☐ Residential: # of Lots: _____
☐ Residential: # of Living Unit Equivalents: _____
☒ Commercial
☐ Industrial
☐ Other: _____
2. Total site acreage (size of property): 78.36 acres
3. Projected population: 2
4. The amount and type of impervious cover expected after construction are shown below:
 ** see Attachment E for inventory of impervious cover.

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	77,500	÷ 43,560 =	1.779
Parking	6,033	÷ 43,560 =	0.138
Other paved surfaces	93,500	÷ 43,560 =	2.146
Total Impervious Cover	177,033	÷ 43,560 =	4.063
Total Impervious Cover ÷ Total Acreage x 100 =			5.18 %

5. ☒ **ATTACHMENT A - Factors Affecting Water Quality.** A description of any factors that could affect surface water and groundwater quality is provided at the end of this form.
6. ☒ Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

FOR ROAD PROJECTS ONLY

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

7. Type of project:
☐ TXDOT road project.
☐ County road or roads built to county specifications.
☐ City thoroughfare or roads to be dedicated to a municipality.
☐ Street or road providing access to private driveways.
8. Type of pavement or road surface to be used:

- ☐ Concrete
☐ Asphaltic concrete pavement
☐ Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.
 Width of R.O.W.: _____ feet.
 $L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$
10. Length of pavement area: _____ feet.
 Width of pavement area: _____ feet.
 $L \times W = \text{_____ Ft}^2 \div 43,560 \text{ Ft}^2/\text{Acre} = \text{_____ acres.}$
 Pavement area _____ acres \div R.O.W. area _____ acres $\times 100 = \text{_____ \%}$ 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 TNRCC 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 TNRCC.

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:
- | | |
|---------------------------------------|----------------------------|
| <input type="checkbox"/> % Domestic | _____ gallons/day |
| <input type="checkbox"/> % Industrial | _____ gallons/day |
| <input type="checkbox"/> % Commingled | _____ gallons/day |
| TOTAL | 0 _____ gallons/day |
15. Wastewater will be disposed of by:
☒ **On-Site Sewage Facility (OSSF/Septic Tank):**
ATTACHMENT C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater. The appropriate licensing authority's (authorized agent) written approval is provided at the end of this form. It states that the land is suitable for the use of an on-site sewage facility or identifies areas that are not suitable.
☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC §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. ☒ All private service laterals will be inspected as required in 30 TAC 213.5.
 *** N/A see # 14, 15, attach. C

SITE PLAN REQUIREMENTS

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

17. The Site Plan must have a minimum scale of 1" = 400'.
 Site Plan Scale: 1" = 400'.
18. 100-year floodplain boundaries
☒ Some part(s) of the project site is located within the 100-year floodplain. The floodplain is shown and labeled.
☐ No part of the project site is located within the 100-year floodplain.

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

FEMA Flood plain map, Comal County, Panel # 485463, July 17, 1995

19. ☐ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Show lots, recreation centers, buildings, roads, etc.
☒ The layout of the development is shown with existing contours. Finished topographic contours will not differ from the existing topographic configuration and are not shown.
20. All known wells (oil, water, unplugged, capped and/or abandoned, test holes, etc.):
☒ There are 2(#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)
☐ The wells are not in use and have been properly abandoned.
☐ 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:
☒ 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.

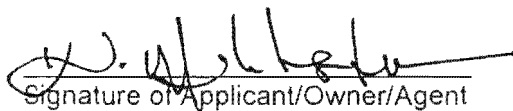
22. X The drainage patterns and approximate slopes anticipated after major grading activities.
23. X Areas of soil disturbance and areas which will not be disturbed.
24. X Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
25. X Locations where soil stabilization practices are expected to occur.
26. X 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 TNRCC 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 TNRCC review and executive director approval. The form was prepared by:

Keith Muhlestein, MS, REM
Print Name of Applicant/Owner/Agent


Signature of Applicant/Owner/Agent

9/21/00
Date

Attachment A.
Factors Affecting Water Quality

Runoff water quality is enhanced by several factors on the Bulverde Airpark property. Slow, low angle drainage, healthy vegetated ground cover, and limited impervious cover all play a part in the high quality of surface water flowing across this property.

Drainage from the project area is to the east and north into Indian Creek from the north half of the Airpark. On the south half of the Airpark, the surface slopes to the southeast and south toward Cibolo Creek. Native grasses that intercept a great deal of the runoff cover the Airpark. Water flowing across the site will encounter less than 20 percent impervious cover. This will allow the majority of runoff water to absorb straight into the soil.

The soil in this area is well drained and surface runoff is slow, while permeability is moderate allowing for significant absorption.

Absorption is further aided by the high percentage of healthy vegetated ground cover and terraced slopes. Low angle terraced slopes lead north away from the new building and eventually into the pond that is part of Indian Creek. The proposed hangers located toward the southern section of the property will also be located on low angle, nearly flat terrain with good ground cover aiding in the removal of any suspended solids.

Operations and maintenance activities at the Airpark include servicing aircraft. Various lubricants, solvents, fuels, and paints are used in these activities. A spray painting booth is operating with an Air Permit and complies with all State, Federal and local laws and regulations. Herbicides and pesticides are carefully applied on the subject property when necessary. All wastes, including waste solvents and other chemical waste are disposed of by licensed waste haulers. At no time will any chemical be released to the environment in violation of Federal, State, or local laws, and regulations. Emergency spill kits have been placed throughout the building in the event of an accidental spill.

Bulverde Air Park understands that the protection of the Edwards Aquifer Recharge Zone is of the highest priority and fully supports all appropriate measures to maintain the standard of quality set by the TNRCC. High water quality will be maintained on the Airpark property due to these various influencing factors and management procedures.

Attachment B

Volume and Character of Stormwater

Description of Volume:

Using the Rational Method for the determination of runoff:

$$Q = C i A$$

Where Q is runoff, C is runoff coefficient, i is intensity over time, and A is area:

$$Q = 0.085 \times 2.75 \text{ ft/yr.} \times 78.36 \text{ acres} = 18.316 \text{ acre feet / year, (pre-construction)}$$

$$Q = 0.093 \times 2.75 \text{ ft/yr.} \times 78.36 \text{ acres} = 20.040 \text{ acre feet / year, (hanger A)}$$

$$Q = 0.110 \times 2.75 \text{ ft/yr.} \times 78.36 \text{ acres} = 21.549 \text{ acre feet / year, (hangers B,C,D combined)}$$

Description of Character:

The pre-construction sediment load for the entire property on an annual basis is calculated to be 2358 pounds. This load uses the pre-construction runoff coefficient of 0.085. Using the post-Hanger (A) runoff coefficient of 0.093, the calculated annual sediment load is 2596 pounds. This represents a load differential of 238 pounds annually.


The three proposed Hangers (B,C,D) with their associated taxiways represent 18.8 percent impervious cover with a runoff coefficient of 0.110. The calculated annual load for the entire property with the proposed hangers is 3189 pounds.

Since each hanger and taxiway will be built separately with no more than one hanger and its associated taxiway being built in any single calendar year, it should be noted that the actual increase of sediment load is less than 200 pounds per year and only 100 pounds per construction project.

Four acres of vegetated cover receives the flow from the proposed hangers and taxiways. The sediment removal requirement of 80%, which amounts to only 80 pounds per project, will be easily exceeded.

Attachment C
On-Site Sewage Facility / Septic Tank

The project building does not have a restroom in it and therefore does not need an OSSF associated with it. The occupants of this building use the restroom in the Pilots Lounge building next door. An existing one thousand-gallon septic tank services the Pilots Lounge restroom. A copy of the Comal County Health Department Permit for this septic tank is attached below and was approved by Comal Health Department Administrator, G. R. Stahl. The Permit number is 66422, and is dated March 29, 1984.

Amount of Account <u>\$55.00</u>	COMAL COUNTY, TEXAS	Nº 66422
Amount Paid <u>\$55.00</u>	New Braunfels, Texas	
Balance Due \$		3-29-1984
Cash <input checked="" type="checkbox"/> Check <input type="checkbox"/> M.O. <input type="checkbox"/>		
Received of <u>R. S. Thompson</u>		\$ 55.00
The sum of <u>Fifty five dollars and no/100</u>		DOLLARS
Being for <u>41 SEPTICS 40.00 SUBDIVISION Outside Air Park</u>		
<u>41 BUILD 3 15.00 LOT BEK UNT</u>		
Department <u>1 WELL 5</u>		GAL 2-1000 SQ. FT. 1200
<u>G. R. STAHL, HEALTH DEPT</u>		<u>Backfill required</u>
COLLECTOR		TREASURER'S OFFICIAL RECEIPT

Attachment D

not applicable

Attachment E

Inventory of Impervious Cover

INVENTORY OF IMPERVIOUS COVER

1.	Total acreage of airpark	78.36 ac.	=	3413361.6 sq. ft.
2.	Current impervious cover	12.00 ac.	=	522720.0 sq. ft.
3.	Proposed additional cover	2.75 ac.	=	120000.0 sq. ft.
4.	Post development cover	14.75 ac.	=	642720.0 sq. ft.

PERCENTAGE IMPERVIOUS COVER

5.	Post Development Percent	18.82 %	=	14.75 ac.
6.	Percent Exempt	20%	=	15.67 ac.

THE CURRENT IMPERVIOUS COVER PLUS THE PROPOSED IMPERVIOUS COVER REMAINS BELOW 20 % OF THE ENTIRE AIRPARK PROPERTY AT 18.82% OR 14.75 ACRES OUT OF 78.36.

BREAKOUT OF PROPOSED IMPERVIOUS COVER

7.	Three Hangers @ 400' X 50' Each	= 20,000 sq. ft. Times 3 = 60,000 sq. ft.
8.	Taxiway From Hangers	= 20,000 sq. ft. Times 3 = 60,000 sq. ft.

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

PROJECT NAME: Bulverde Air Park

POTENTIAL SOURCES OF CONTAMINATION

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

1. Fuels for construction equipment and hazardous substances which will be used during construction:
 - ☐ Aboveground storage tanks with a cumulative storage capacity of less than 250 gallons will be stored on the site for less than one (1) year.
 - ☐ Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
 - ☐ Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An **Aboveground Storage Tank Facility Plan** application must be submitted to the appropriate regional office of the TNRCC prior to moving the tanks onto the project.
 - ☒ Fuels and hazardous substances will not be stored on-site.
2. ☒ **ATTACHMENT A - Spill Response Actions.** A description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is provided at the end of this form.
3. ☒ Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
4. ☐ **ATTACHMENT B - Potential Sources of Contamination.** Describe in an attachment at the end of this form any other activities or processes which may be a potential source of contamination.
 - ☒ There are no other potential sources of contamination.

SEQUENCE OF CONSTRUCTION

5. ☒ **ATTACHMENT C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is provided at the end of this form. For each activity described, an estimate of the total area of the site to be disturbed by each activity is given.
6. ☒ Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Cibola Creek

TEMPORARY BEST MANAGEMENT PRACTICES (TBMPs)

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

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

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

- a. A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
 - b. A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
 - c. A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
 - d. A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TNRCC inspections, or during excavation, blasting, or construction.
8. ☐ The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.

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

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

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

10.



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

- ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
- ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
- ☐ For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
- ☒ There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

11.



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

12.



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

13.



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

14.



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

15.



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

16.



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

SOIL STABILIZATION PRACTICES

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

17. ☒ **ATTACHMENT J - Schedule of Interim and Permanent Soil Stabilization Practices.**
A schedule of the interim and permanent soil stabilization practices for the site is attached at the end of this form.
18. ☒ Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
19. ☒ Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

ADMINISTRATIVE INFORMATION

20. ☐ All structural controls will be inspected and maintained according to the submitted and approved operation and maintenance plan for the project.
21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate TNRCC Regional Office shall be immediately notified. Regulated activities must cease and not continue until the TNRCC has reviewed and approved the methods proposed to protect the aquifer from any adverse impacts.
22. ☒ Silt fences, diversion berms, and other temporary erosion and sediment controls will be constructed and maintained as appropriate to prevent pollutants from entering sensitive features discovered during construction.

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

Keith Munkelstein
Print Name of Applicant/Owner/Agent

[Signature]
Signature of Applicant/Owner/Agent

3/10/01
Date

Attachment A

Spill Response Actions

Bulverde Airpark currently has a spill response plan that is in place for any hazardous materials release relating to the daily operations of the flight line and aircraft maintenance. The proposed construction activities will be subject to the same spill response plan. The plan includes preventative maintenance of all equipment and systems to ensure proper operations of all critical systems. Maintenance records are kept on all equipment and systems for the purpose of proper maintenance verification. The spill plan incorporates the use of easily accessible material safety data sheets (MSDS) which allows for an informed and appropriate level of response. Additional spill response preparations include the staging of absorbent materials to capture any fugitive spills. Spill abatement will be completed according to all State and Federal regulations and guidelines. Disposal of any contaminated materials, including soil, water and spill absorbent materials will be done in accordance with applicable State and Federal regulations and guidelines.

Attachment B

Potential Sources of Contamination

There are no additional sources of potential contamination associated with the proposed construction activities at this site.

Attachment C

Sequence of Major Activities

Construction for the three proposed hangers and associated taxiways will not begin prior to June 2002. One hanger is to be built at a time, followed by the associated taxiway. No more than one hanger and its adjoining taxiway will be built in any single calendar year.

Each of the three proposed 20,000 square foot hangers will be built separately. The associated 20,000 square foot taxiway servicing the hanger will be constructed shortly after the erection of the hanger.

No more than slightly over 20,000 square feet of ground will be disturbed at any point in time.

The construction will require grubbing and grading 20,000 sq. ft. for the foundation area first, followed in turn by 20,000 sq. ft. for the taxiway area, exposing disturbed soils to possible erosion. Erection of silt fences along the south and east sides of the disturbed soil will occur at this time. Silt fences will be monitored and maintained from this time to the completion of the construction project.

The immediate compaction and grading of stabilized base on these disturbed areas will minimize the potential for erosion to occur at this point. The preparation of the slab forms, followed by the pouring of the concrete slab and the erection of the hanger will remove the erosion potential. Electrical utilities will be laid alongside the taxiways and will not increase the soil disturbance area figures.

Attachment D

Temporary Best Management Practices and Measures

Erosion control measures include minimization of the disturbed area for the shortest time possible, and the stabilization of any disturbed soils. The proposed hanger construction will require the disturbance of only 20,000 square feet of level ground. Currently, the area to be developed has nearly zero slope, resulting in very low runoff velocities, thereby mobilizing only minor amounts of soil. Immediately upon removal of the sod, stabilized base will be graded and compacted into place. Due to the limited area of disturbance, short duration of exposure, level ground, and stabilized base being compacted over the disturbed soil, erosion is not expected to be a significant concern. Construction will be scheduled for late summer months, July or August, in which rainfall is typically lower. The higher daytime temperatures will also dry out exposed soils faster.

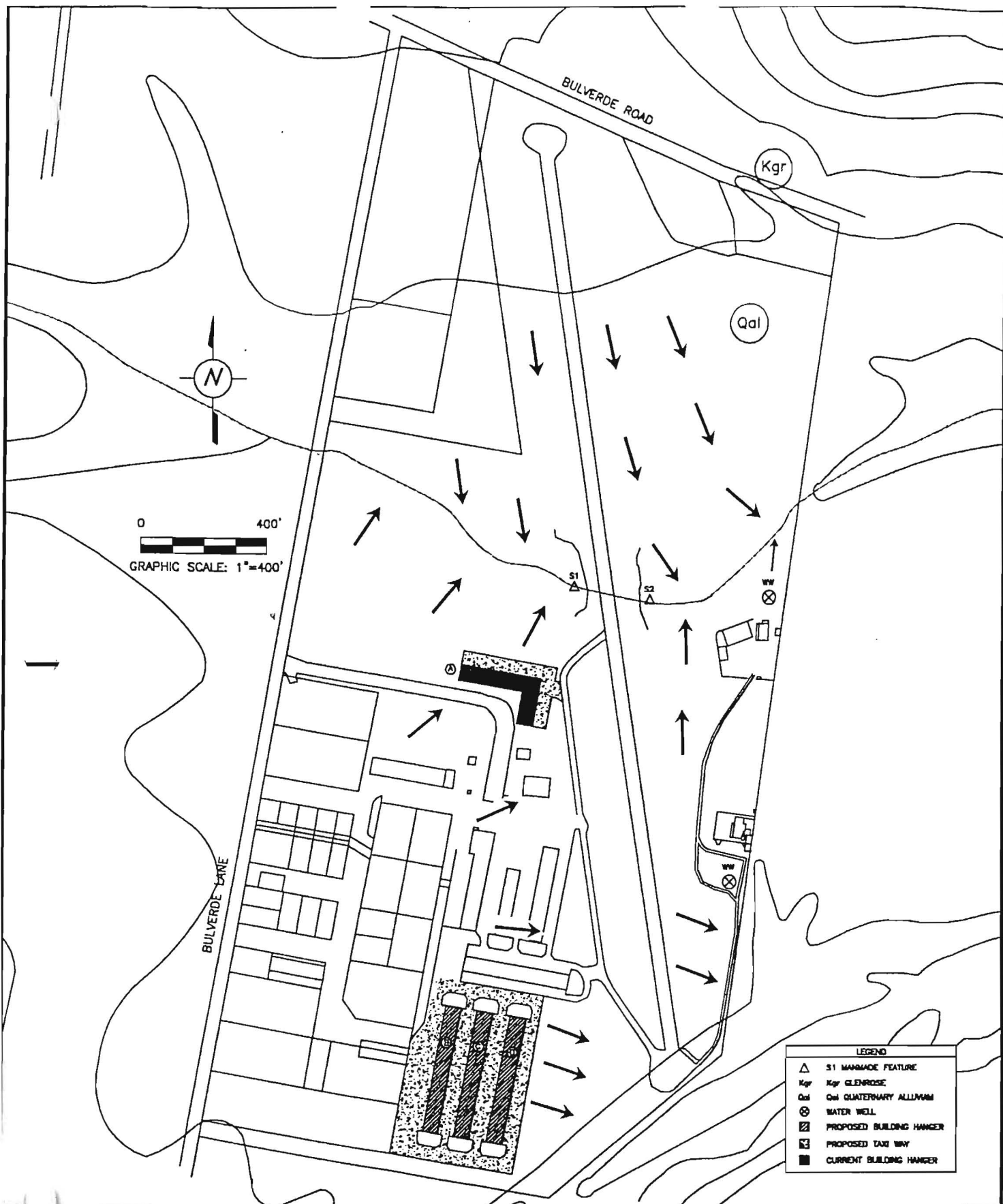
Drainage from the construction site is to the east-southeast and is not channeled. The area adjacent to the construction site to the east-southeast is covered with native grasses for several hundred feet. Beyond the grass buffer, further to the south, flow would eventually encounter rows of shrubs and trees. Any sediment that might get mobilized from the construction would be captured in the grass and vegetation buffer. As an added precaution, a silt fence will be installed along the south and east sides of the construction to intercept any mobilized sediment. Silt fences will be inspected daily and maintained as needed to ensure proper functionality and to remove any litter or construction debris that may accumulate.

Attachment G

Drainage Area Map

There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Each hanger, to be built separately, covers 20,000 square feet or 0.459 acres. The taxiway servicing each hanger will be an additional 0.459 acres and will be constructed after the completion of the associated hanger so that no more than 0.459 acres will be disturbed at any point in time. Sediment and erosion controls that are listed on attachment (I) will be used for sediment control of each 0.459 acre area to be disturbed.

Map on following page.



LEGEND	
	S1 MANMADE FEATURE
	Kgr GLENROSE
	Qal QUATERNARY ALLUVIUM
	WATER WELL
	PROPOSED BUILDING HANGER
	PROPOSED TAXI WAY
	CURRENT BUILDING HANGER

MUHLESTEIN & ASSOCIATES

12514 Rio Paloma
San Antonio, TX 78249
(210) 320-5607

BULVERDE AIR PARK DRAINAGE MAP

DATE: 3/20/01

SCALE: 1"=400'

DRAWN BY: FTS

CHECKED: KNM

FILE: bul2

Attachment I

Inspection and Maintenance for BMPs

The types of erosion and sediment controls reported in attachment D are listed below. The property owner on a daily basis will carry out the inspection and maintenance of these various controls. The property owner will inspect and oversee the entire construction project and will, in a timely and appropriate manner, facilitate any and all necessary alterations or adjustments to the control measures in place. Records of the condition and effectiveness of all BMPs will be kept by the property owner during and after the construction for verification that BMPs function as necessary. A written record of the inspections including time, date, conditions, and any alterations will be made part of the permanent construction documentation.

1. Erosion Control Measures:

- a. Minimization of disturbed area.
(area will be clearly flagged prior to construction)
- b. Minimization of time of disturbed soil exposure
(logistics of equipment, and materials will be prearranged)
- c. Control flow velocity
(slope will remain at a level grade)
- d. Stabilize soil
(stabilized base material will be compacted on disturbed area)
- e. Avoidance of rainy season
(Schedule construction for July or August)

2. Sediment Control Measures

- a. Vegetation buffer
(ensure vegetation remains in place and healthy)
- b. Silt fences
(ensure fences are functioning as needed, maintain and clean as necessary)

Attachment J

Schedule of Interim and Permanent Soil Stabilization Practices

Permanent BMPs are not required on this site due to impervious cover being below 20%.

All temporary BMPs will remain in place until such time as all sediments have been stabilized and construction activities have ceased. No other interim BMPs will be used.

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

PROJECT NAME: Bulverde Air Park

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

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

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

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

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

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

 ___ 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.
 X This site will not be used for low density single-family residential development.
5. X The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be

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

- ☒ **ATTACHMENT A - 20% or Less Impervious Cover Waiver.** This site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is found at the end of this form.
- ☐ This site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
- ☐ This site will not be used for multi-family residential developments, schools, or small business sites.

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

- ☐ A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is identified as **ATTACHMENT B** at the end of this form.
- ☐ If no surface water, groundwater or stormwater originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form.
- ☒ If permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, an explanation is provided as **ATTACHMENT B** at the end of this form .

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

- ☐ A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is identified as **ATTACHMENT C** at the end of this form.
- ☒ If permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, an explanation is provided as **ATTACHMENT C** at the end of this form.

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

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

- ☒ The permanent sealing of or diversion of flow from a naturally-occurring "sensitive" or "possibly sensitive" feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed for any naturally-occurring "sensitive" or "possibly sensitive" features on this site.
- ☐ **ATTACHMENT E - Request to Seal Features.** A request to seal a naturally-

occurring "sensitive" or "possibly sensitive" feature, that includes a justification as to why no reasonable and practicable alternative exists, is found at the end of this form. A request and justification has been provided for each feature.

10. NA **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, TNRCC Construction Notes, all man-made or naturally occurring geologic features, all proposed structural measures, and appropriate details must be shown on the construction plans.
- *see site plan.
11. NA **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. NA The TNRCC 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.
- *refer to 0602 temp BMPs

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

14. X The applicant is responsible for maintaining the permanent BMPs after construction until such time as the maintenance obligation is either assumed in writing by another entity having ownership or control of the property (such as without limitation, an owner's association, a new property owner or lessee, a district, or municipality) or the ownership of the property is transferred to the entity. Such entity shall then be responsible for maintenance until another entity assumes such obligations in writing or ownership is transferred.
15. X A copy of the transfer of responsibility must be filed with the executive director at the appropriate regional office within 30 days of the transfer if the site is for use as a multiple single-family residential development, a multi-family residential development, or a non-residential development such as commercial, industrial, institutional, schools, and other

sites where regulated activities occur.

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

KEITH MUHLESTEIN

Print Name of Applicant/Owner/Agent


Signature of Applicant/Owner/Agent

3/30/01

Date

Attachment A
Permanent Stormwater Section
20% Impervious Cover Waiver

An exemption to the permanent BMP requirement is requested based on the fact that Bulverde Air Park is a Small Business with a Sole Proprietor and no employees. The exemption request is further based on the low-density development on the subject property. The percentage of impervious cover is less than the twenty percent necessary for permanent BMPs installation.

Attachment B
BMPs for Upgradient Stormwater

Flow across the site of the proposed construction is limited to only minor runoff from adjacent undisturbed and vegetated land. Roads and taxiways divert the flow path away from the construction site. No BMPs are necessary for the upgradient stormwater in this area.

Attachment C
BMPs for On-site Stormwater

Permanent BMPs are not required for this project based on the low density development. The impervious cover is less than 20% across the entire 78.36 acre site. The Air Park also qualifies as a Small Business.

The flow from the area of the proposed hangers is received by three to four acres of low angle vegetated cover which will easily capture pollutants from the On-site Stormwater.

Attachment D
BMPs for Surface Streams

Pollution prevention on the recharge is crucial to the preservation of water quality throughout the region. Geologic features identified in the Geologic Assessment include two manmade excavations that are located in the path of Indian Creek. They are identified as S1 and S2 on the Site Plan and Drainage Map. Flow to these features is from cultivated fields to the north and south of the creek. Flow across the site will be filtered through the vegetated strips that border the creek and will remove pollutants prior to reaching any sensitive feature.

Attachment I
Measures for Minimizing Surface Stream Contamination

Flow across the site will be filtered through the vegetated strips that border the creeks and will remove pollutants prior to reaching any Surface Streams including Indian Creek and Cibolo Creek to the south. Several acres of vegetated, low angle ground will intercept all flow long before it has a chance to enter the nearby creeks. Pollution prevention on the recharge is crucial to the preservation of water quality throughout the region.

AGENT AUTHORIZATION FORM
FOR REQUIRED SIGNATURE
EDWARDS AQUIFER PROTECTION PROGRAM
RELATING TO 30 TAC CHAPTER 213
EFFECTIVE JUNE 1, 1999

I Edward Markline
Print Name

Owner/PRESIDENT
Title - Owner/President/Other

of Markline Properties, Inc.
Corporation/Partnership/Entity Name

have authorized Keith Muhlestein
Print Name of Agent/Engineer

of Muhlestein + Associates
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 Natural Resource Conservation Commission (TNRCC) 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 TNRCC's approval letter. The TNRCC is authorized to assess administrative penalties of up to \$10,000 per day per violation.
2. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and the forms must accompany the completed application.
3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TNRCC cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.

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

Edward Markline
Applicant's Signature

9/30/00
Date

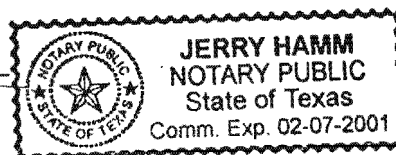
THE STATE OF Texas §

County of Comal §

BEFORE ME, the undersigned authority, on this day personally appeared Edward Markline 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 30 day of September, 2000

Jerry Hamm
NOTARY PUBLIC
Jerry Hamm
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 02-07-2001

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
EDWARDS AQUIFER PROTECTION PLAN
APPLICATION FEE FORM

NAME OF PROPOSED PROJECT: Bulverde Air Park
PROJECT LOCATION: 29890 Bulverde Lane,
NAME OF APPLICANT: Markline Properties, Inc.
APPLICANT'S ADDRESS: 29890 Bulverde Lane, Bulverde, TX 78163
CONTACT PERSON: Edward Markline PHONE: (830) 438-2507
Please Print

AUSTIN REGIONAL OFFICE (3373)

- ☐ Hays
☐ Travis
☐ Williamson

SAN ANTONIO REGIONAL OFFICE (3362)

- ☐ Bexar ☐ Medina
☒ Comal ☐ Uvalde
☐ Kinney

APPLICATION FEES MUST BE PAID BY CHECK, CERTIFIED CHECK, OR MONEY ORDER, PAYABLE TO THE TEXAS NATURAL RESOURCE CONSERVATION COMMISSION. 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 TNRCC:**
TNRCC - Cashier
Revenues Section
Mail Code 214
P.O. Box 13088
Austin, TX 78711-3088

☐ **AUSTIN REGIONAL OFFICE**

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

Type of Plan	Size	Fee Due
Water Pollution Abatement, One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement, Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement, Non-residential	78.36 Acres	\$ 5,000.-
Sewage Collection System	L.F.	\$
Lift Stations without sewer lines	Acres	\$
Underground or Aboveground Storage Tank Facility	Tanks	\$
Piping System(s)(only)	Each	\$
Exception	Each	\$
Extension of Time	Each	\$

Signature [Signature]

Date 9/21/00

TEXAS NATURAL RESOURCE CONSERVATION COMMISSION
EDWARDS AQUIFER PROTECTION PLAN
 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	\$1,000
	5 < 10	\$2,000
	10 < 50	\$3,000
	≥50	\$5,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1	\$2,000
	1 < 5	\$3,000
	5 < 10	\$4,000
	≥10	\$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

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

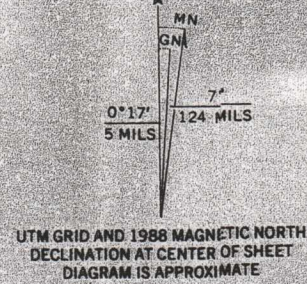
BULVERDE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey
Revised in cooperation with the Texas Water Development Board
Control by USGS and NOS/NOAA

Topography by the Army Map Service by photogrammetric methods
from aerial photographs taken 1952. Field checked 1953. Revised
by USGS from aerial photographs taken 1986. Field checked 1987.
Map edited 1988

Projection and 10,000-foot grid ticks: Texas
coordinate system, south central zone (Lambert conformal conic)
1000-meter Universal Transverse Mercator grid, zone 14
1927 North American Datum
To place on the predicted North American Datum 1983
move the projection lines 20 meters south and
29 meters east as shown by dashed corner ticks
Fine red dashed lines indicate selected fence lines
Red tint indicates areas in which only landmark buildings are shown



SCALE 1:24,000
CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U.S. Route
State Route



BULVERDE, TEX.
29098-F4-TF-024

2998-423

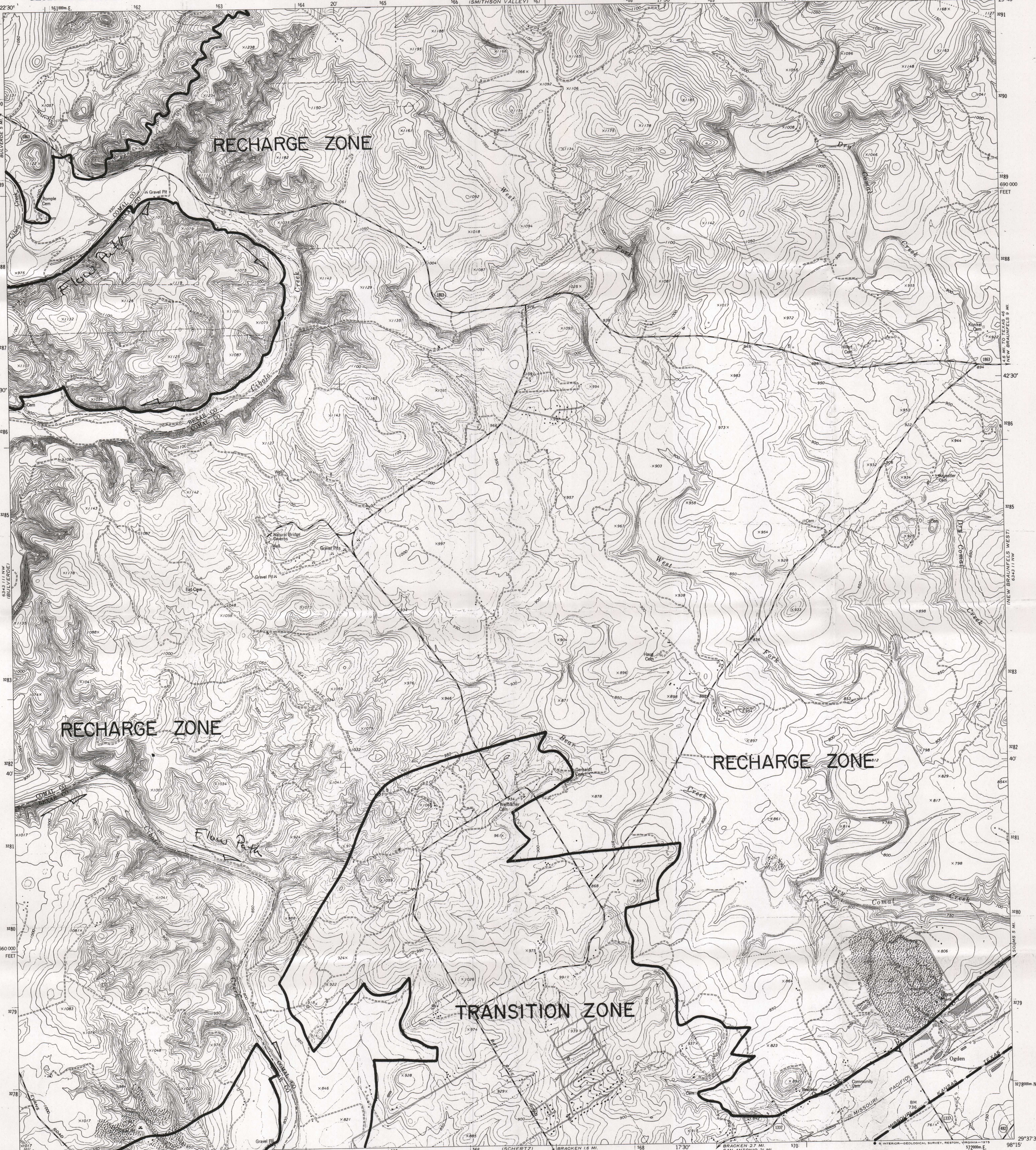
1988
DMA 8543 III NW-SERIES V882



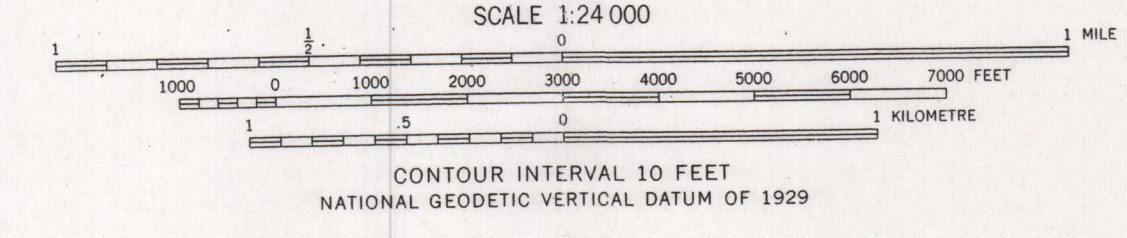
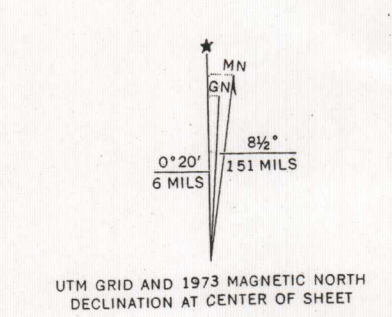
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

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

BAT CAVE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)



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



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

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

BAT CAVE, TEX.
N29375-W9815/7.5
1967
PHOTOREVISED 1973
AMS 6343 III NE-SERIES V882