Colliers
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Water Pollution Abatement Plan

August 12, 2025

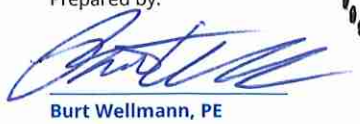
Stone Oak Commercial GHE

0.15 miles Northeast of the Intersection of Stone Oak Pkwy and Canyon Golf Rd.

Prepared for:

Texas Commission on
Environmental Quality
Attn: Edwards Aquifer Protection
Program

Prepared by:



8/12/25

Burt Wellmann, PE
Regional Discipline leader
License No. 100256

Colliers Engineering & Design
3421 Paesanos Pkwy, Ste. 200 San
Antonio TX 78231
Main: 877 627 3772
Colliersengineering.com

Project No. 205-56-01

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Texas Commission on Environmental Quality

Edwards Aquifer Application Cover Page

Our Review of Your Application

The Edwards Aquifer Program staff conducts an administrative and technical review of all applications. The turnaround time for administrative review can be up to 30 days as outlined in 30 TAC 213.4(e). Generally administrative completeness is determined during the intake meeting or within a few days of receipt. The turnaround time for technical review of an administratively complete Edwards Aquifer application is 90 days as outlined in 30 TAC 213.4(e). Please know that the review and approval time is directly impacted by the quality and completeness of the initial application that is received. In order to conduct a timely review, it is imperative that the information provided in an Edwards Aquifer application include final plans, be accurate, complete, and in compliance with 30 TAC 213.

Administrative Review

1. Edwards Aquifer applications must be deemed administratively complete before a technical review can begin. To be considered administratively complete, the application must contain completed forms and attachments, provide the requested information, and meet all the site plan requirements. The submitted application and plan sheets should be final plans. Please submit one full-size set of plan sheets with the original application, and half-size sets with the additional copies.

   To ensure that all applicable documents are included in the application, the program has developed tools to guide you and web pages to provide all forms, checklists, and guidance. Please visit the below website for assistance: http://www.tceq.texas.gov/field/eapp.

2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.

3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.

4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

   An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.

6. If the geologic assessment was completed before October 1, 2004 and the site contains “possibly sensitive” features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.

2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.

4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: Stone Oak Commercial GHE						**2. Regulated Entity No.:**			
3. Customer Name: Gordan Hartman						**4. Customer No.:** 604277806			
5. Project Type: **(Please circle/check one)**	(New)		Modification			Extension		Exception	
6. Plan Type: **(Please circle/check one)**	(WPAP)	CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: **(Please circle/check one)**	Residential		(Non-residential)			**8. Site (acres):**		21.77	
9. Application Fee:	$6,500		**10. Permanent BMP(s):**			N/A			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Bexar		**14. Watershed:**			Upper Salado Creek			

Application Distribution

Instructions: Use the table below to determine the number of applications required. One original and one copy of the application, plus additional copies (as needed) for each affected incorporated city, county, and groundwater conservation district are required. Linear projects or large projects, which cross into multiple jurisdictions, can require additional copies. Refer to the "Texas Groundwater Conservation Districts within the EAPP Boundaries" map found at:

http://www.tceq.texas.gov/assets/public/compliance/field_ops/eapp/EAPP%20GWCD%20map.pdf

For more detailed boundaries, please contact the conservation district directly.

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	__	__	__
Region (1 req.)	__	__	__
County(ies)	__	__	__
Groundwater Conservation District(s)	__Edwards Aquifer Authority __Barton Springs/ Edwards Aquifer __Hays Trinity __Plum Creek	__Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	__Austin __Buda __Dripping Springs __Kyle __Mountain City __San Marcos __Wimberley __Woodcreek	__Austin __Bee Cave __Pflugerville __Rollingwood __Round Rock __Sunset Valley __West Lake Hills	__Austin __Cedar Park __Florence __Georgetown __Jerrell __Leander __Liberty Hill __Pflugerville __Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	__	__	__	__	__
Region (1 req.)	__	__	__	__	__
County(ies)	__	__	__	__	__
Groundwater Conservation District(s)	__ Edwards Aquifer Authority __Trinity-Glen Rose	__Edwards Aquifer Authority	__Kinney	__EAA __Medina	__EAA __Uvalde
City(ies) Jurisdiction	__Castle Hills __Fair Oaks Ranch __Helotes __Hill Country Village __Hollywood Park X San Antonio (SAWS) __Shavano Park	__Bulverde __Fair Oaks Ranch __Garden Ridge __New Braunfels __Schertz	NA	__San Antonio ETJ (SAWS)	NA

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review. Burt Wellmann, P.E. Print Name of Customer/Authorized Agent
Signature of Customer/Authorized Agent — Date: 8/8/25

FOR TCEQ INTERNAL USE ONLY				
Date(s)Reviewed:		Date Administratively Complete:		
Received From:		Correct Number of Copies:		
Received By:		Distribution Date:		
EAPP File Number:		Complex:		
Admin. Review(s) (No.):		No. AR Rounds:		
Delinquent Fees (Y/N):		Review Time Spent:		
Lat./Long. Verified:		SOS Customer Verification:		
Agent Authorization Complete/Notarized (Y/N):		Fee Check:	Payable to TCEQ (Y/N):	
Core Data Form Complete (Y/N):			Signed (Y/N):	
Core Data Form Incomplete Nos.:			Less than 90 days old (Y/N):	

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GENERAL INFORMATION SECTION

General Information Form

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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

Print Name of Customer/Agent: Burt Wellmann P.E.

Date: 8/8/25

Signature of Customer/Agent:

Project Information

1. Regulated Entity Name: Stone Oak Commercial GHE
2. County: Bexar
3. Stream Basin: _____
4. Groundwater Conservation District (If applicable): _____
5. Edwards Aquifer Zone:

   [X] Recharge Zone
   [ ] Transition Zone

6. Plan Type:

   [X] WPAP
   [ ] SCS
   [ ] Modification
   [ ] AST
   [ ] UST
   [ ] Exception Request

7. Customer (Applicant):

Contact Person: Gordon V. Hartman
Entity: Gordon Hartman Investments, Inc
Mailing Address: 5210 Thousand Oaks, Ste. 1318
City, State: San Antonio, Tx Zip: 78233
Telephone: 210-490-1798 FAX: _____
Email Address: Jaime@GordonHartman.com

8. Agent/Representative (If any):

Contact Person: Burt Wellmann P.E.
Entity: Colliers Engineering and Design
Mailing Address: 3421 Paesanos Pkwy, #200
City, State: San Antonio, Tx Zip: 78231
Telephone: 210-979-8444 FAX: _____
Email Address: Burt.wellmann@collierseng.com

9. Project Location:

☒ The project site is located inside the city limits of San Antonio.
☐ The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
☐ The project site is not located within any city's limits or ETJ.

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

0.15 Miles NW from the Intersection of Stone Oak Pkwy and Canyon Golf Rd

11. ☒ **Attachment A – Road Map**. A road map showing directions to and the location of the project site is attached. The project location and site boundaries are clearly shown on the map.

12. ☒ **Attachment B - USGS / Edwards Recharge Zone Map**. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') of the Edwards Recharge Zone is attached. The map(s) clearly show:

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

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

☒ Survey staking will be completed by this date: Already Completed

14. [X] **Attachment C – Project Description**. Attached at the end of this form is a detailed narrative description of the proposed project. The project description is consistent throughout the application and contains, at a minimum, the following details:

- [X] Area of the site
- [X] Offsite areas
- [X] Impervious cover
- [X] Permanent BMP(s)
- [X] Proposed site use
- [X] Site history
- [X] Previous development
- [X] Area(s) to be demolished

15. Existing project site conditions are noted below:

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

Prohibited Activities

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

(1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);

(2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;

(3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;

(4) The use of sewage holding tanks as parts of organized collection systems; and

(5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).

(6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

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

(1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

(2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and

(3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

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

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

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

20. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

21. ☒ 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.

Road Map

See Exhibit 1

USGS MAP

See Exhibit 5

PROJECT DESCRIPTION

The Stone Oak Commercial GHE project is located approximately 0.15 miles northwest of the intersection of Stone Oak Parkway and Canyon Golf Road in the City of San Antonio, Bexar County, Texas. The site lies entirely within the Edwards Aquifer Recharge Zone and falls within the North Salado Creek watershed on the Bulverde USGS quadrangle. According to FEMA Flood Insurance Rate Map (FIRM) #48029C0140G, dated September 29, 2010, a portion of the property lies within the 100-year floodplain.

The total site area is 21.77 acres. Approximately 4.93 acres of land, situated outside the 100-year floodplain, will be graded. No impervious cover is proposed as part of this Water Pollution Abatement Plan (WPAP). The scope of work includes grading and subsequent revegetation of disturbed areas. All disturbed areas will be stabilized through seeding or sodding, and at least 85 percent vegetative cover must be established prior to acceptance by the City of San Antonio.

Construction activities will disturb areas within the designated limits and will be subject to Texas Pollutant Discharge Elimination System (TPDES) requirements. A Storm Water Pollution Prevention Plan (SWPPP) will be maintained on-site, and temporary Best Management Practices (BMPs) will be implemented to control erosion and sedimentation.

No regulated quantities of hazardous materials will be stored on the property. The project scope is limited to grading and BMP installation; there are currently no plans for further development of the site.

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EXHIBIT 1

TCEQ SITE PLAN

Colliers Engineering & Design

www.colliersengineering.com

AERIAL LOCATION MAP

FOR

STONE OAK COMMERCIAL GHE

SAN ANTONIO, BEXAR COUNTY, TEXAS

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STATE REQUIRED FILE NUMBER

FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

Colliers Engineering & Design

HOLMDEL (Headquarters)
101 Crawfords Corner Road,
Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950

COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
1"-500'	06/10/25	MT	RA

PROJECT NUMBER:	DRAWING NAME:
2053503	AERIAL LOCATION MAP

SHEET TITLE: FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 1 OF 1

By: MAKS.TARASZEWSKI

xhibits\CAD\Aerial location Map.dwg\Layout1

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EXHIBIT 2

EROSION CONTROL DETAILS

LEGAL DESCRIPTION

BEING A TRACT OR PARCEL CONTAINING 21.77 ACRES OF LAND SITUATED IN THE L.C. GROTHAUS SURVEY, ABSTRACT NO. 930 AND B.S. & F. SURVEY, ABSTRACT NO. 115, BEXAR COUNTY TEXAS, BEING A PORTION OF A CALLED 24.3001 ACRE TRACT DESCRIBED TO GORDON HARTMAN INVESTMENTS, INC. IN DEED RECORDED IN DOCUMENT NUMBER (DOC. NO.) 20080060868 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS. ESTABLISHING LOT 155, BLOCK 1, N.C.B. 19218

COORDINATION NOTE:

1. CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. CONTACT SPECTRUM TO COORDINATE CABLE TV SERVICE. 1-800-222-5355.
3. CONTACT AT&T TO COORDINATE TELEPHONE SERVICE. 1-800-225-5288.
4. CONTACT CITY PUBLIC SERVICE TO PLAN ELECTRICAL SERVICES. (210)-353-2222.
5. CONTACT CITY PUBLIC SERVICE TO PLAN GAS SERVICES. (210)-353-2222.
6. CONTACT SAN ANTONIO WATER SYSTEMS TO PLAN WATER SERVICES. (210)-704-7297.
7. CONTACT SAN ANTONIO WATER SYSTEMS TO PLAN SANITARY SEWER SERVICES. (210)-704-7297.

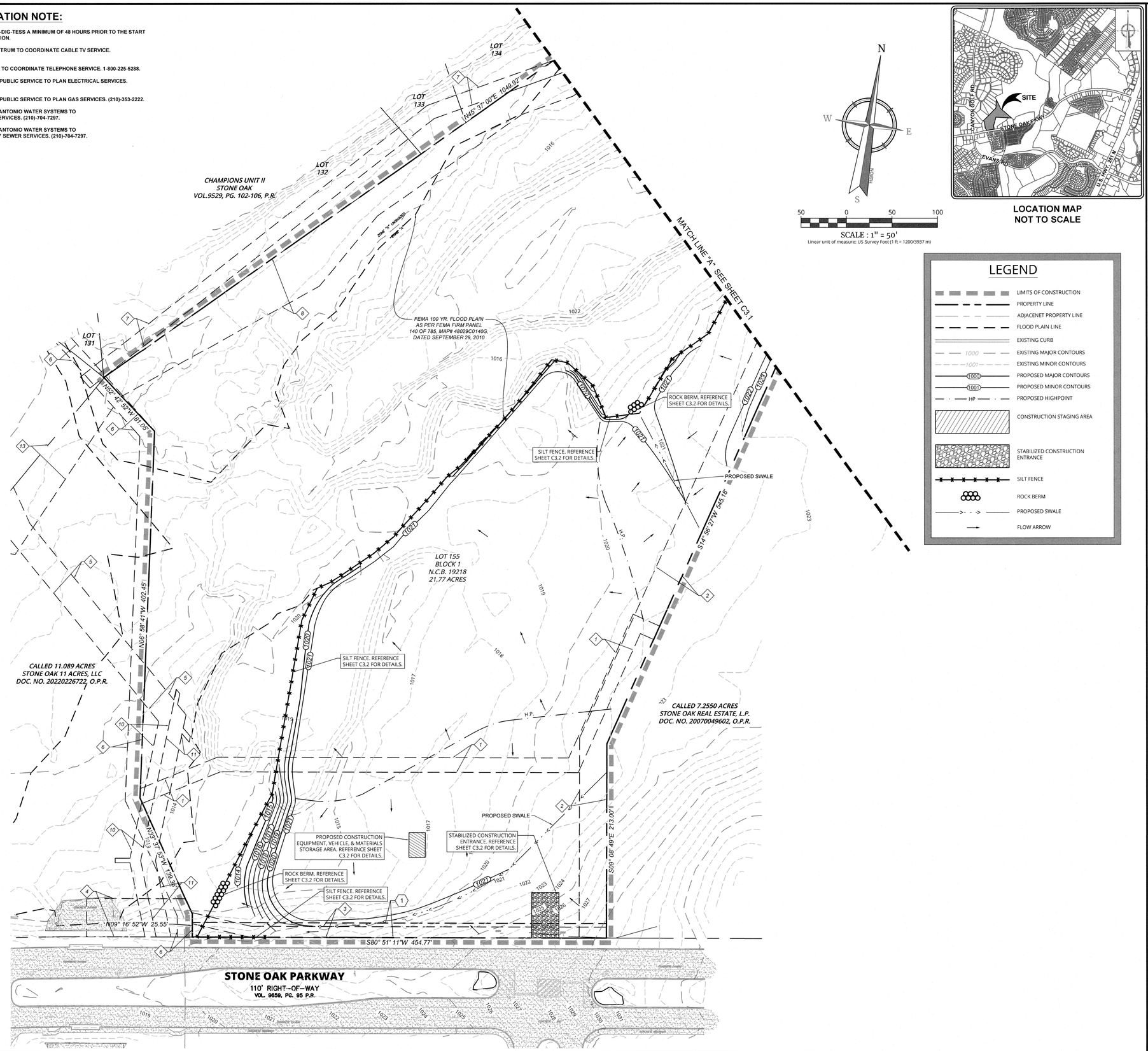
KEY NOTES

1. 16' SANITARY SEWER EASEMENT (VOL. 12724, PG. 1108, O.P.R.)
2. 30' SETBACK EASEMENT (VOL. 11287, PG. 1351, O.P.R.)
3. 12' WIDE PERMENANT SANITARY SEWER EASEMENT (VOL. 16237, PG. 800, O.P.R.)
4. 0.1107 OF AN ACRE DRAINAGE EASEMENT (VOL. 13761, PG. 871, O.P.R.)
5. 28' ELECTRIC EASEMENT W/ ANCHOR EASEMENT (VOL. 3991, PG. 536)
6. 16' SANITARY SEWER EASEMENT (VOL. 9518, PG. 209, D.P.R.)
7. 16' SANITARY SEWER EASEMENT (VOL. 9516, PG. 104-107, O.P.R.)
8. 1.744 ACRES VARIABLE WIDTH ELECTRIC EASEMENT (VOL. 16036, PG. 599, O.P.R.)
9. 16' SANITARY SEWER EASEMENT AS DEPICTED ON (VOL. 9529, PG. 105, P.R.) (NO RECORD FOUND)
10. 12' ELECTRIC EASEMENT (VOL. 3991, PG. 588, O.P.R.)
11. 16' ELECTRIC EASEMENT (VOL. 3991, PG. 536, O.P.R.)
12. VARIABLE WIDTH ELECTRIC EASEMENT (VOL. 16036, PG. 608, O.P.R.)
13. VARIABLE WIDTH ELECTRIC EASEMENT (VOL. 16036, PG. 569, O.P.R.)
14. 16' ELECTRIC, GAS, TELEPHONE, AND CABLE T.V. EASEMENT

CAUTION!!: THE CONTRACTOR SHALL BE REQUIRED TO LOCATE ALL PUBLIC OR PRIVATE UTILITIES INCLUDING BUT NOT LIMITED TO: WATER, SEWER, TELEPHONE AND FIBER OPTIC LINES, SITE LIGHTING ELECTRIC, SECONDARY ELECTRIC, PRIMARY ELECTRICAL DUCTBANKS, LANDSCAPE IRRIGATION FACILITIES, AND GAS LINES. ANY UTILITY CONFLICTS THAT ARISE SHOULD BE COMMUNICATED TO THE ENGINEER IMMEDIATELY AND PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL CONTACT 1-800-DIG-TESS A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE REPAIR SHALL BE AT CONTRACTOR'S SOLE EXPENSE WHETHER THE UTILITY IS SHOWN ON THESE PLANS OR NOT.

SURVEY CONTACT NOTE:
CONTACT COREY CAMPBELL, RPLS WITH COLLIERS ENGINEERING & DESIGN AT (210) 979-8444 FOR CONSTRUCTION STAKING SERVICES ON THIS PROJECT.

SW3P MODIFICATIONS		
DATE	SIGNATURE	DESCRIPTION



50 0 50 100

SCALE : 1" = 50'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

LOCATION MAP
NOT TO SCALE

LEGEND

- LIMITS OF CONSTRUCTION
- PROPERTY LINE
- ADJACENET PROPERTY LINE
- FLOOD PLAIN LINE
- EXISTING CURB
- 1000 — EXISTING MAJOR CONTOURS
- 1001 — EXISTING MINOR CONTOURS
- 1000 — PROPOSED MAJOR CONTOURS
- 1001 — PROPOSED MINOR CONTOURS
- HP — PROPOSED HIGHPOINT
- CONSTRUCTION STAGING AREA
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- PROPOSED SWALE
- FLOW ARROW

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www.colliersengineering.com

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FOR STATE SPECIFIC DIRECT PHONE NUMBERS VISIT: WWW.CALL811.COM

REV	DATE	DRAWN BY	DESCRIPTION

STATE OF TEXAS
BURT P. WELLMANN
100256
LICENSED PROFESSIONAL ENGINEER

7/15/25

BURT P. WELLMANN
TEXAS LICENSED PROFESSIONAL ENGINEER
LICENSE NUMBER: 100256
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

GRADING & EROSION CONTROL IMPROVEMENTS

FOR

STONE OAK COMMERCIAL GHE - PUD PLAT#25-11800259

SAN ANTONIO
BEXAR COUNTY
TEXAS

Colliers Engineering & Design
SAN ANTONIO (KFW)
3421 Paesanos Parkway, Suite 103
San Antonio, TX 78231
Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/03/2025	HM	RA

PROJECT NUMBER: 205-56-01

DRAWING NAME: C3.0-C3.1-EROS2055601

SHEET TITLE: EROSION CONTROL PLAN

SHEET NUMBER: C3.0

LEGAL DESCRIPTION

BEING A TRACT OR PARCEL CONTAINING 21.77 ACRES OF LAND SITUATED IN THE L.C. GROTHAUS SURVEY, ABSTRACT NO. 930 AND B.S. & F. SURVEY, ABSTRACT NO. 115, BEXAR COUNTY TEXAS, BEING A PORTION OF A CALLED 24.3001 ACRE TRACT DESCRIBED TO GORDON HARTMAN INVESTMENTS, INC. IN DEED RECORDED IN DOCUMENT NUMBER (DOC. NO.) 20080060868 OF THE OFFICIAL PUBLIC RECORDS OF BEXAR COUNTY, TEXAS. ESTABLISHING LOT 155, BLOCK 1, N.C.B. 19218

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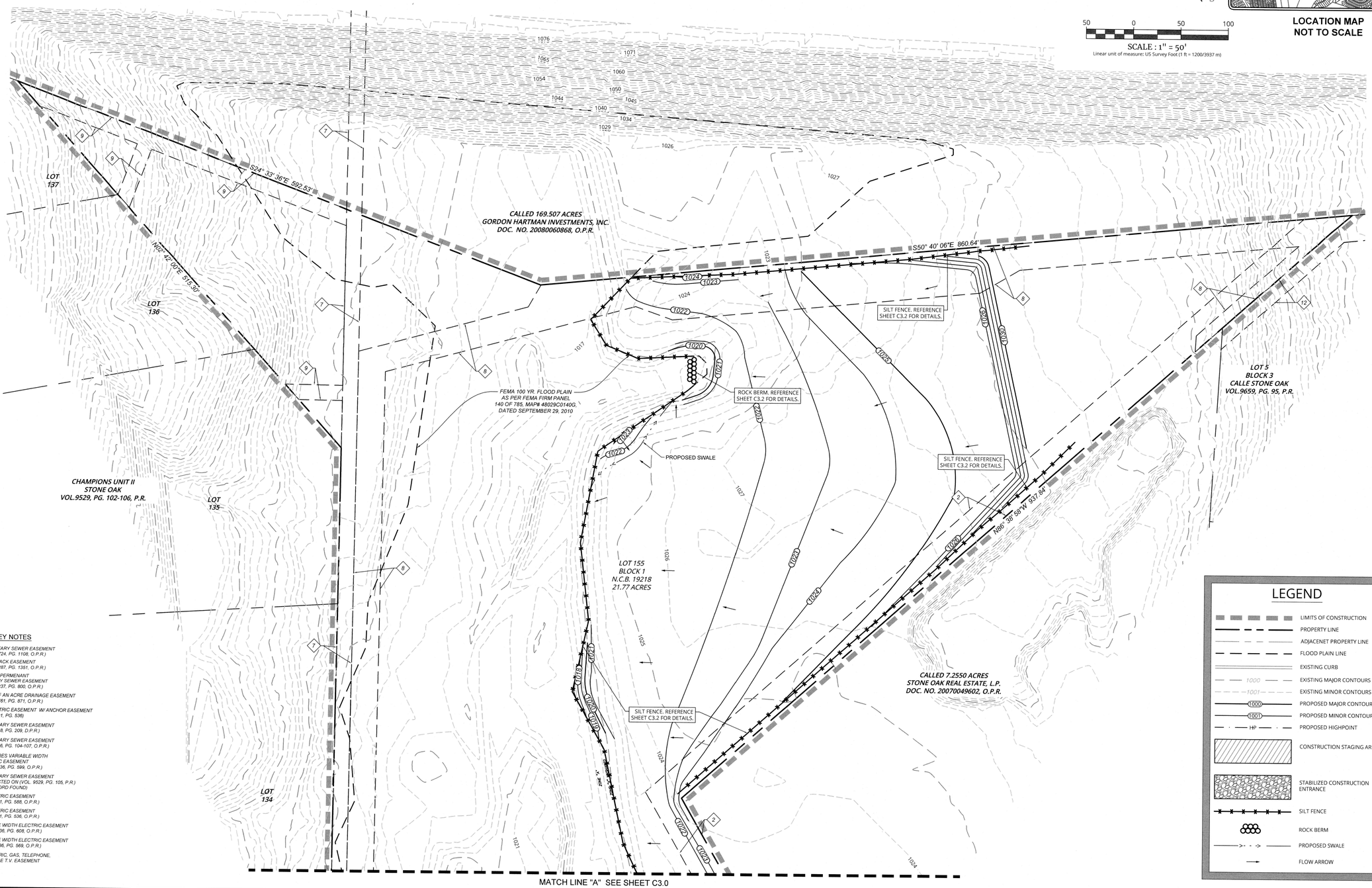
SW3P MODIFICATIONS		
DATE	SIGNATURE	DESCRIPTION

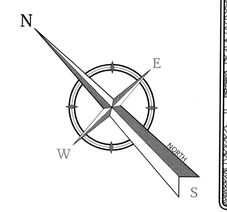


KEY NOTES

1. 16' SANITARY SEWER EASEMENT (VOL. 12724, PG. 1108, O.P.R.)
2. 30' SETBACK EASEMENT (VOL. 11287, PG. 1351, O.P.R.)
3. 12' WIDE PERMENANT SANITARY SEWER EASEMENT (VOL. 16237, PG. 800, O.P.R.)
4. 0.1107 OF AN ACRE DRAINAGE EASEMENT (VOL. 13761, PG. 871, O.P.R.)
5. 28' ELECTRIC EASEMENT W/ ANCHOR EASEMENT (VOL. 3991, PG. 536)
6. 16' SANITARY SEWER EASEMENT (VOL. 9518, PG. 209, D.P.R.)
7. 16' SANITARY SEWER EASEMENT (VOL. 9516, PG. 104-107, O.P.R.)
8. 1.744 ACRES VARIABLE WIDTH ELECTRIC EASEMENT (VOL. 16036, PG. 599, O.P.R.)
9. 16' SANITARY SEWER EASEMENT AS DEPICTED ON (VOL. 9529, PG. 105, P.R.) (NO RECORD FOUND)
10. 12' ELECTRIC EASEMENT (VOL. 3991, PG. 588, O.P.R.)
11. 16' ELECTRIC EASEMENT (VOL. 3991, PG. 536, O.P.R.)
12. VARIABLE WIDTH ELECTRIC EASEMENT (VOL. 16036, PG. 608, O.P.R.)
13. VARIABLE WIDTH ELECTRIC EASEMENT (VOL. 16036, PG. 569, O.P.R.)
14. 16' ELECTRIC, GAS, TELEPHONE, AND CABLE T.V. EASEMENT

LEGEND

- LIMITS OF CONSTRUCTION
- PROPERTY LINE
- ADJACENET PROPERTY LINE
- FLOOD PLAIN LINE
- EXISTING CURB
- 1000 EXISTING MAJOR CONTOURS
- 1001 EXISTING MINOR CONTOURS
- 1000 PROPOSED MAJOR CONTOURS
- 1001 PROPOSED MINOR CONTOURS
- HP PROPOSED HIGHPOINT
- CONSTRUCTION STAGING AREA
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE
- ROCK BERM
- PROPOSED SWALE
- FLOW ARROW



LOCATION MAP
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LICENSE NUMBER: 100256
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909 - TBPLS Firm#: 10194550

GRADING & EROSION CONTROL IMPROVEMENTS

FOR

STONE OAK COMMERCIAL
GHE - PUD
PLAT#25-11800259

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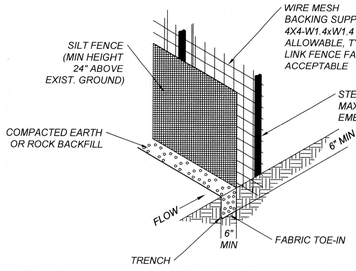
AS SHOWN	04/03/2025	HM	RA
PROJECT NUMBER: 205-56-01	DRAWING NAME: C3.0-C3.1-ERO5205601		

SHEET TITLE:
EROSION CONTROL PLAN

SHEET NUMBER:
C3.1

M:\PROJECTS\205\205601\dwg\C3.1 EROSION CONTROL PLAN By:HMARTINEZ



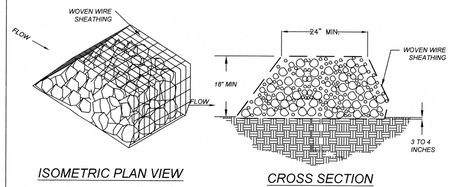
ISOMETRIC PLAN VIEW

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.

Installation:
(1) Steel posts, which support the silt fence, should be installed on a slight angle toward the anticipated runoff source. Post must be embedded a minimum of 1- foot deep and spaced not more than 8 feet on center. Where water concentrates, the maximum spacing should be 6 feet.
(2) Lay out fencing down-slope of disturbed area, following the contour as closely as possible. The fence should be sited so that the maximum drainage area is ¼ acre\ 00 feet of fence.
(3) The toe of the silt fence should be trenched in with a spade or mechanical trencher, so that the down- slope face of the trench is flat and perpendicular to the line of flow. Where fence cannot be trenched in (e.g., pavement or rock outcrop), weight fabric flap with 3 inches of pea gravel on uphill side to prevent flow from seeping under fence.
(4) The trench must be a minimum of 6 inches deep and 6 inches wide to allow for the silt fence fabric to be laid in the ground and backfilled with compacted material.
(5) Silt fence should be securely fastened to each steel support post or to woven wire, which is in turn attached to the steel fence post. There should be a 3-foot overlap, securely fastened where ends of fabric meet.
(6) Silt fence should be removed when the site is completely stabilized so as not to block or impede stone flow or drainage.

Inspection and Maintenance Guidelines:
(1) Inspect all fencing weekly, and after any rainfall.
(2) Remove sediment when buildup reaches 6 inches.
(3) Replace any torn fabric or install a second line of fencing parallel to the torn section.
(4) Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
(5) When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

SILT FENCE



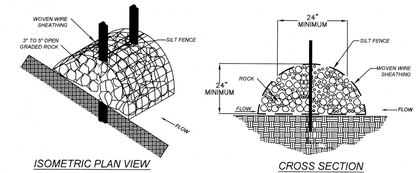
ISOMETRIC PLAN VIEW CROSS SECTION

Materials:
(1) The berm structure should be, secured with a woven wire sheathing having maximum opening of 1 inch and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(2) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

Installation:
(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1 inch openings.
(2) Berm should have a top width of 2 feet minimum with side slopes being 2:1 (H:V) or flatter.
(3) Place the rock along the sheathing as shown in the diagram Figure 1-28), to a height not less than 18".
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, airl the berm retains its shape when walked upon.
(5) Berm should be built along the contour at zero percent grade or as near as possible.
(6) The ends of the berm should be tied into existing upslope grade and the berm should be buried in a trench approximately 3 to 4 inches deep to prevent failure of the control.

Inspection and Maintenance Guidelines:
(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

ROCK BERM



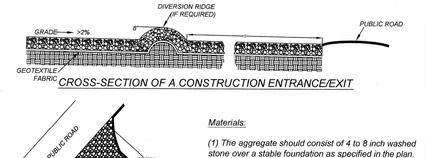
ISOMETRIC PLAN VIEW CROSS SECTION

Materials:
(1) Silt fence material should be polypropylene, polyethylene or polyamide woven or nonwoven fabric. The fabric width should be 36 inches, with a minimum unit weight of 4.5 oz/yd, mullen burst strength exceeding 190 lb/in2, ultraviolet stability exceeding 70%, and minimum apparent opening size of U.S. Sieve No. 30.
(2) Fence posts should be made of hot rolled steel, at least 4 feet long with Tee or Ybar cross section, surface painted or galvanized, minimum nominal weight 1.25 lb/ft2, and Brindell hardness exceeding 140. Rebar (either #5 or #6) may also be used to anchor the berm.
(3) Woven wire backing to support the fabric should be galvanized 2" x 4" welded wire, 12 gauge minimum.
(4) The berm structure should be secured with a woven wire sheathing having maximum opening of 1 inch. and a minimum wire diameter of 20 gauge galvanized and should be secured with shoat rings.
(5) Clean, open graded 3- to 5-inch diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rocks may be used.

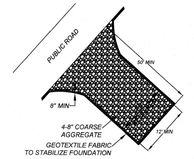
Installation:
(1) Lay out the woven wire sheathing perpendicular to the flow line. The sheathing should be 20 gauge woven wire mesh with 1-inch openings.
(2) Install the silt fence along the center of the proposed berm placement, as with a normal silt fence described in Section 2.4.3.
(3) Place the rock along the sheathing on both sides of the silt fence as shown in the diagram (figure 1-29), to a height not less than 24 inches. Clean, open graded 3- 5" diameter rock should be used, except in areas where high velocities or large volumes of flow are expected, where 5- to 8-inch diameter rock may be used.
(4) Wrap the wire sheathing around the rock and secure with tie wire so that the ends of the sheathing overlap at least 2 inches, and the berm retains its shape when walked upon.
(5) The high service rock berm should be removed when the site is revegetated or otherwise stabilized or it may remain in place as a permanent BMP if drainage is adequate.

Inspection and Maintenance Guidelines:
(1) Inspection should be made weekly and after each rainfall by the responsible party. For installations in streambeds, additional daily inspections should be made on rock berm.
(2) Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt of in an approved manner.
(3) Repair any loose wire sheathing.
(4) The berm should be reshaped as needed during inspection.
(5) The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
(6) The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

HIGH SERVICE ROCK BERM



CROSS-SECTION OF A CONSTRUCTION ENTRANCE/EXIT



TEMPORARY CONSTRUCTION ENTRANCE/EXIT

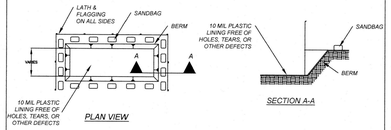
Materials:

(1) The aggregate should consist of 4 to 8 inch washed stone over a stable foundation as specified in the plan.
(2) The aggregate should be placed with a minimum thickness of 8 inches.
(3) The geotextile fabric should be designed specifically for use as a soil filtration media with an approximate weight of 6 oz/yd2, a mullen burst rating of 140 lb/in2, and an equivalent opening size greater than a number 50 sieve.
(4) If a washing facility is required, a level area with a minimum of 4 inch diameter washed stone or commercial rack should be included in the plans. Divert wastewater to a sediment trap or basin.

Installation: (North Carolina, 1993)
(1) Avoid curves on public roads and steep slopes. Remove vegetation and other objectionable material from the foundation area. Grade crown foundation for positive drainage.
(2) The minimum width of the entrance/exit should be 12 feet or the full width of exit roadway, whichever is greater.
(3) The construction entrance should be at least 50 feet long.
(4) If the slope toward the road exceeds 2%, construct a ridge, 6 to 8 inches high with 3:1 (H:V) side slopes, across the foundation approximately 15 feet from the entrance to divert runoff away from the public road.
(5) Place geotextile fabric and grade foundation to improve stability, especially where wet conditions are anticipated.
(6) Place stone to dimensions and grade shown on plans. Leave surface smooth and slope for drainage.
(7) Divert all surface runoff and drainage from the stone pad to a sediment trap or basin.
(8) Install pipe under pad as needed to maintain proper public road drainage.

Inspection and Maintenance Guidelines:
(1) The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair andlor cleanout of any measures used to trap sediment.
(2) All sediment spilled, dropped, washed or tracked onto public rights-of-way should be removed immediately by contractor.
(3) When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-way.
(4) When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
(5) All sediment should be prevented from entering any storm drain, ditch or water course by using approved methods.

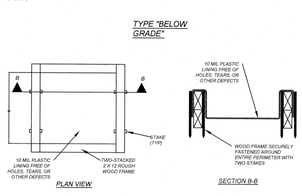
STABILIZED CONSTRUCTION ENTRANCE / EXIT



PLAN VIEW

SECTION A-A

TYPE "BELOW GRADE"



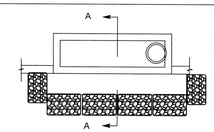
PLAN VIEW SECTION B-B

TYPE "ABOVE GRADE"

GENERAL NOTES:

- *DETAIL ABOVE ILLUSTRATES MINIMUM DIMENSIONS. PIT CAN BE INCREASED IN SIZE DEPENDING ON EXPECTED FREQUENCY OF USE.*
- *WASHOUT PIT SHALL BE LOCATED IN AN AREA EASILY ACCESSIBLE TO CONSTRUCTION TRAFFIC.*
- *WASHOUT PIT SHALL NOT BE LOCATED IN AREAS SUBJECT TO INUNDATION FROM STORM WATER RUNOFF AND AT LEAST 50 FEET FROM SENSITIVE FEATURES, STORM DRAINS, OPEN DITCHES, STREETS, OR STREAMS.*

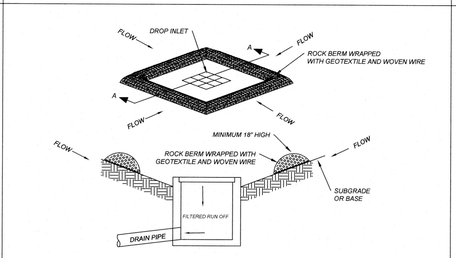
CONCRETE TRUCK WASHOUT PIT



GENERAL NOTES:

- *ALL STORM DRAINAGE SYSTEMS INLETS SHOULD FILTER RUNOFF BEFORE THE WATER IS DISCHARGED INTO STREAMS OR ONTO ADJACENT PROPERTIES. UNLESS TREATMENT IS PROVIDED ELSEWHERE.*
- *IF NO ADDITIONAL DOWNSTREAM TREATMENT EXISTS, THE MAXIMUM DRAINAGE AREA TRIBUTARY TO AN AREA DRAIN INSTALLED WITH A GRAVEL FILTER SHOULD BE ONE ACRE.*
- *ALL CURB INLET GRAVEL FILTERS SHOULD BE INSPECTED AND REPAIRED AFTER EACH RUNOFF EVENT. SEDIMENT SHOULD BE REMOVED WHEN MATERIAL IS WITHIN THREE INCHES OF THE TOP OF THE CONCRETE BLOCKS. PERIODICALLY, THE GRAVEL SHOULD BE RAKED TO INCREASE INFILTRATION AND FILTERING OF RUNOFF WATERS.*

CURB INLET PROTECTION GRAVEL FILTER BAGS

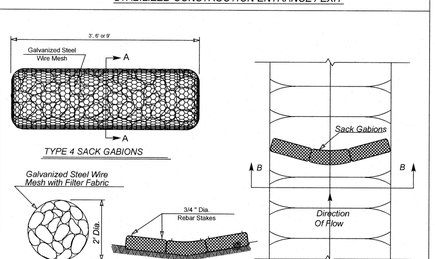


CROSS-SECTION A-A

GENERAL NOTES:

- *USE OPEN GRADED CLEAN STONE.*
- *THE ROCK SHOULD BE ENCLOSED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 1 INCH OPENING AND MINIMUM WIRE DIAMETER OF 20 GAUGE AND WRAPPED IN GEOTEXTILE WITH 300 PSI BURST STRENGTH FILTER FABRIC.*
- *INSPECTION SHOULD BE MADE FREQUENTLY ON SEVERE SERVICE ROCK BERMS. SILT SHOULD BE REMOVED WHEN ACCUMULATION REACHES 4 INCHES OR MORE.*
- *WHEN THE SITE IS COMPLETELY STABILIZED, THE BERM AND ACCUMULATED SILT SHOULD BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.*

GRATE INLET PROTECTION

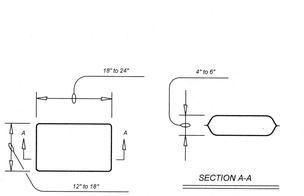


TYPE 4 SACK GABIONS SECTION A-A SECTION B-B PLAN VIEW

GENERAL NOTES:

- *THE TOP OF THE SACK GABIONS SHOULD BE LEVEL AND ORIENTED PERPENDICULAR TO THE DIRECTION OF FLOW.*
- *FILTER FABRIC MATERIAL SHALL BE FASTENED TO WOVEN WIRE SUPPORT.*
- *FILTER FABRIC MATERIAL SHOULD MEET THE FOLLOWING SPECIFICATIONS: RESISTANT TO ULTRAVIOLET LIGHT. FABRIC SHOULD BE NON-WOVEN GEOTEXTILE WITH MINIMUM WEIGHT OF 3.5 OUNCES PER SQUARE YARD. MINIMUM MULLEN BURST STRENGTH OF 200 POUNDS PER SQUARE INCH AND A FLOW THRU RATE OF 120 GALLONS PER MINUTE PER SQUARE FOOT OF FRONTAL AREA.*
- *STONE SIZE: #4"-8" OPEN GRADED CRUSHED LIMESTONE.*
- *INSPECT WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACE AS NEEDED.*
- *WHEN SILT REACHES A DEPTH OF 6 INCHES OR MORE ABOVE NATURAL GROUND, SILT SHALL BE REMOVED AND DISPOSED IN AN APPROVED MANNER THAT WILL NOT CONTRIBUTE TO RESLTATION. CONTAMINATED SEDIMENT MUST BE REMOVED AND DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS.*

TYPE 4 SACK GABIONS

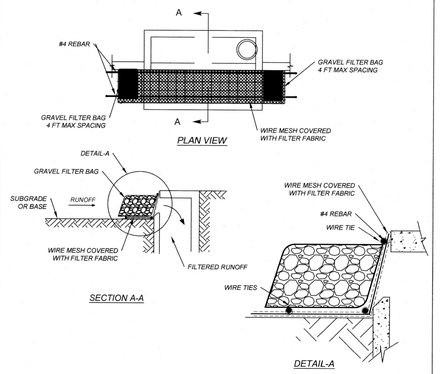


SECTION A-A

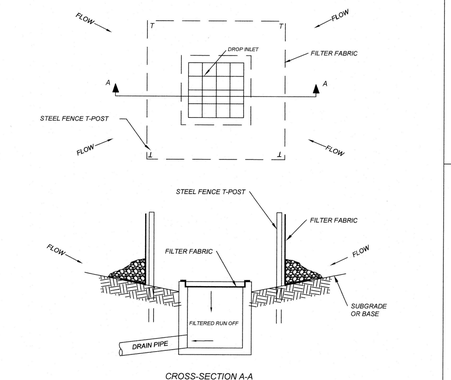
GENERAL NOTES:

- *THE FILTER BAG MATERIAL SHALL BE MADE OF POLYPROPYLENE, POLYETHYLENE OR POLYAMIDE WOVEN FABRIC, MIN UNIT WEIGHT OF 4 OUNCES/SY, MULLEN BURST STRENGTH EXCEEDING 300 PSI AND ULTRAVIOLET STABILITY EXCEEDING 70%.*
- *THE FILTER BAG SHALL BE FILLED WITH CLEAN, MEDIUM TO COARSE GRAVEL (0.31 TO 0.75 INCH DIAMETER).*

GRAVEL FILTER BAG DETAIL



CURB INLET PROTECTION (ALRTERNATE)

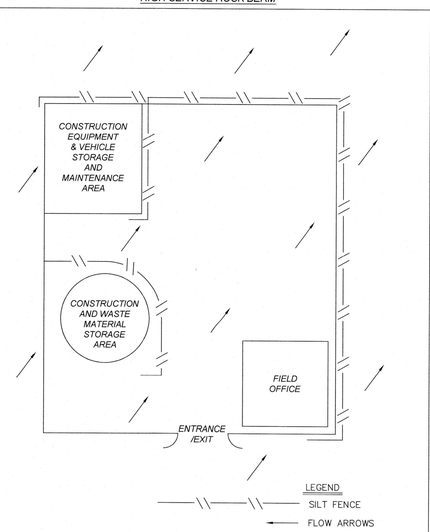


CROSS-SECTION A-A

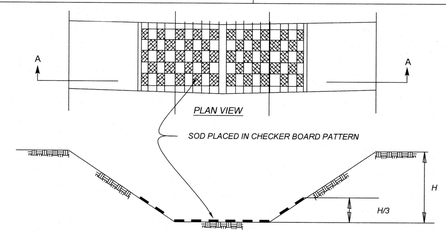
GENERAL NOTES:

- *ALL MATERIALS AND ERECTION PROCEDURES WILL BE THE SAME AS DESCRIBED IN THE STANDARD SILT FENCE REQUIREMENTS.*

GRATE INLET PROTECTION (ALRTERNATE)



TYPICAL CONSTRUCTION STAGING AREA



SECTION A-A

- *CHANNEL TO BE STABILIZED WITH SOD PLACED IN A CHECKER BOARD PATTERN TON THE CHANNEL BOTTOM AND ON THE SIDES UP TO 1/3 THE DEPTH OF CHANNEL.*

CHANNEL LINING

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GRADING & EROSION CONTROL IMPROVEMENTS
FOR
STONE OAK COMMERCIAL
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SAN ANTONIO
BEXAR COUNTY
TEXAS

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Phone: 210.979.8444
COLLIERS ENGINEERING & DESIGN, INC.
TBPE Firm#: F-14909
TBPLS Firm#: 10194550

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/03/2025	HM	RA

PROJECT NUMBER:	DRAWING NAME:
205-56-01	C3.2-EROS-DTLS2055601

SHEET TITLE:
EROSION CONTROL DETAILS

SHEET NUMBER:
C3.2

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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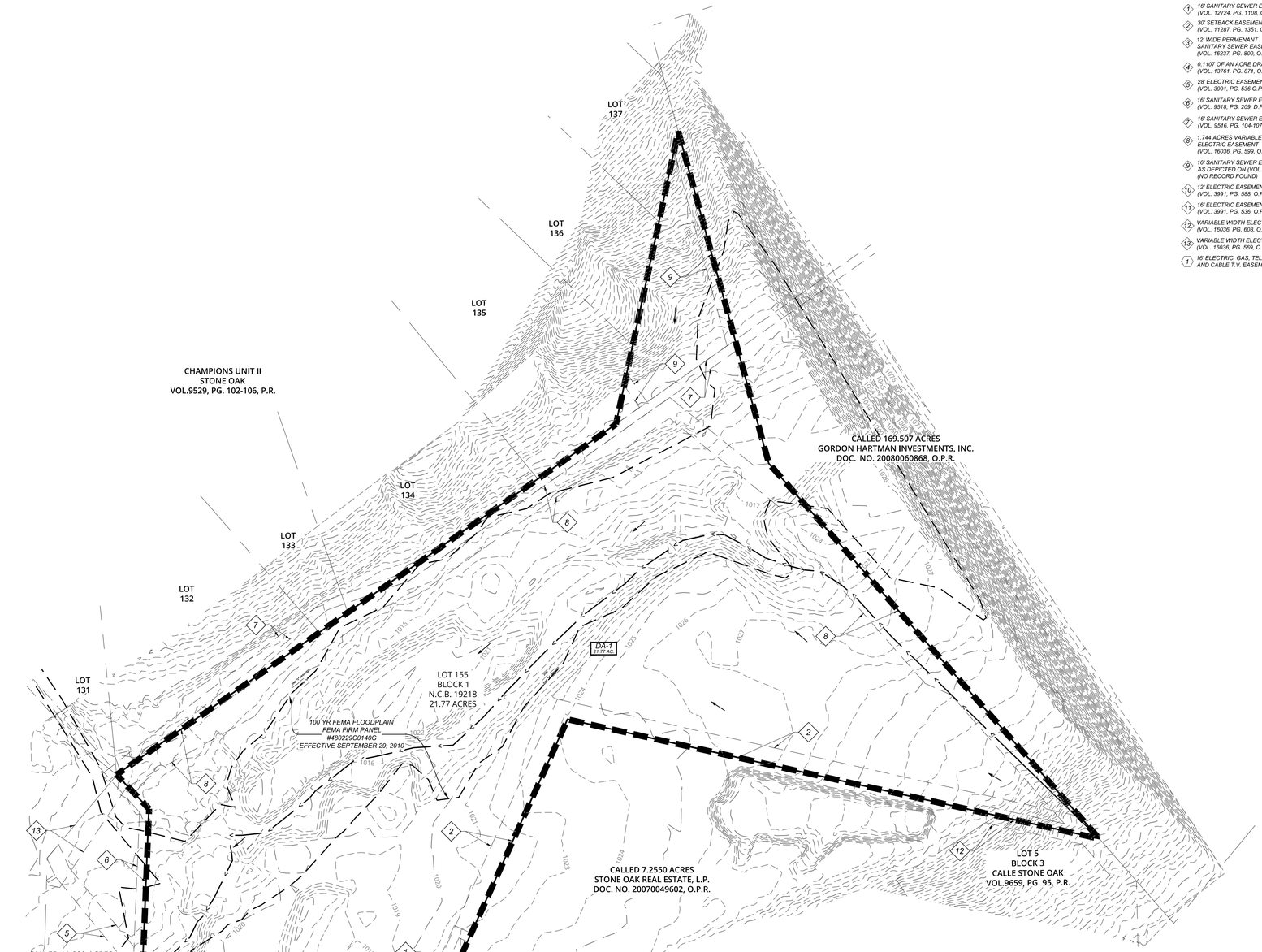
EXHIBIT 3

EXISTING, PROPOSED & ULTIMATE DRAINAGE MAPS



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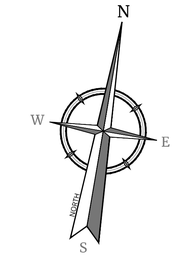

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SCALE : 1" = 100'

Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

LOCATION MAP
NOT TO SCALE

LEGEND

- STUDY POINT
- DRAINAGE AREA BOUNDARY
- 1000 EXISTING MAJOR CONTOURS
- 1001 EXISTING MINOR CONTOURS
- FLOW ARROW
- TIME OF CONCENTRATION FLOW LINE

EXISTING CONDITIONS

Time Of Concentration Calculation - SCS TR-55 Method

Drainage Area	SHEET FLOW					SHALLOW CONCENTRATED FLOW					CHANNEL FLOW					TOTAL
	n	L (ft)	P_2 (in)	s %	T_t(min)	Paved/Unpaved	V (ft/s)	L (ft)	s (%)	T_t(min)	Flow Type	V (ft/s)	L (ft)	s (%)	T_t(min)	T_t(min)
1	0.4	200	3.86	13.69	16	Short-Grass	1.71	494	2.94	5	Grass Waterway	0.8837	1588	0.30	30	**51**

EXISTING CONDITIONS:

Study Point	AREA	(Acres)	C	T_{over} (min)	Carryover	T_{5} (min)	T_{25} (min)	T_{100} (min)	I_5 (in/hr)	I_{25} (in/hr)	I_{100} (in/hr)	Q_5 (ft^3/s)	Q_{25} (ft^3/s)	Q_{100} (ft^3/s)
1	DA-1	21.77	0.49	16.00		5.00	30.00	51	2.700	3.730	4.660	28.80	39.79	49.71

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LICENSE NUMBER: 100256
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AS SHOWN	04/03/2025	HM	RA

PROJECT NUMBER: 205-56-01

DRAWING NAME: EXISTING CONDITIONS

SHEET TITLE: *EXISTING CONDITIONS DRAINAGE AREA MAP*

SHEET NUMBER: *EX. 1*

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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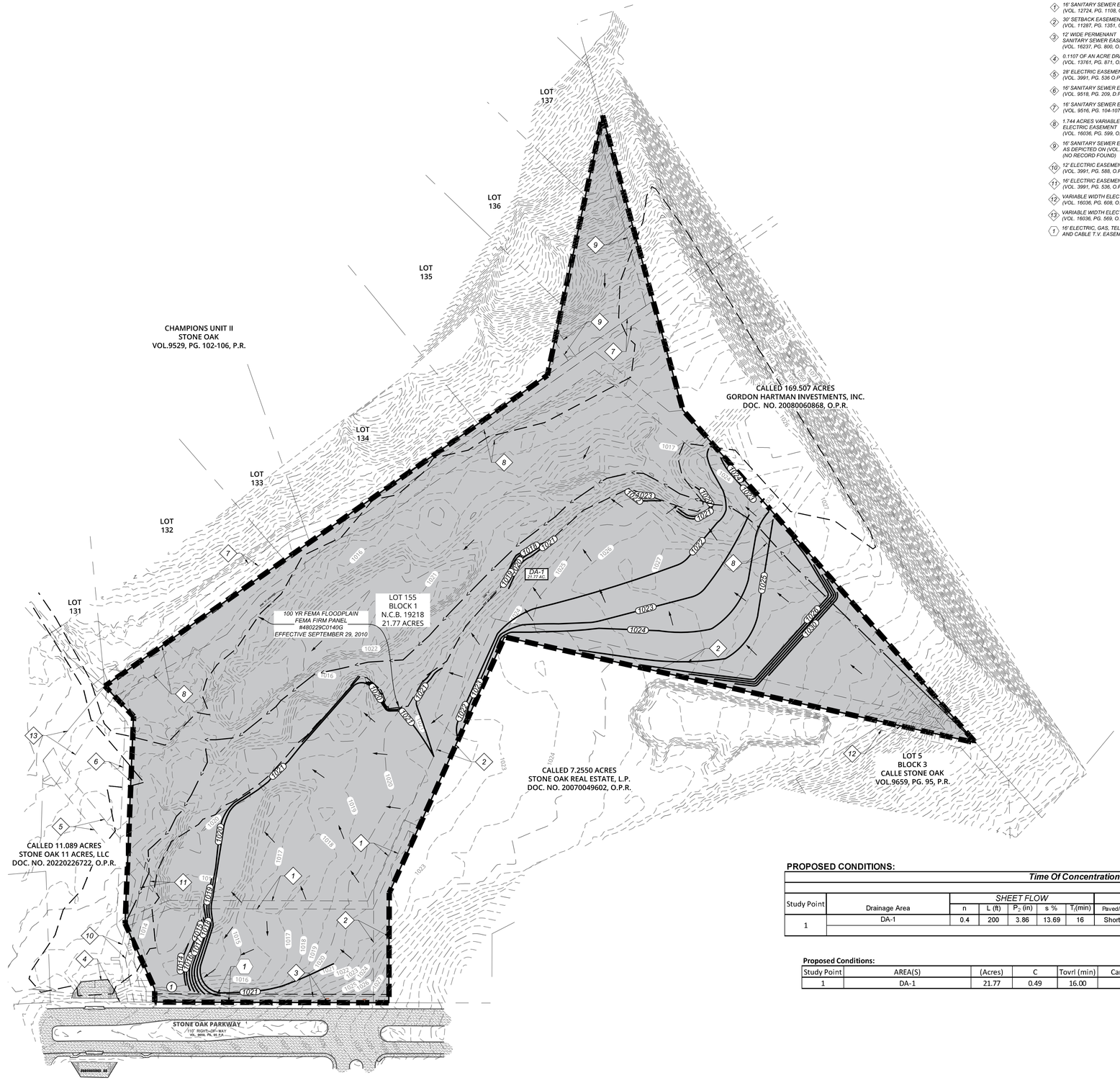

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SCALE : 1" = 100'
Linear unit of measure: US Survey Foot (1 ft = 1200/3937 m)

LOCATION MAP
NOT TO SCALE

LEGEND

- STUDY POINT
- DRAINAGE AREA BOUNDARY
- 1000 EXISTING MAJOR CONTOURS
- 1001 EXISTING MINOR CONTOURS
- 1000 PROPOSED MAJOR CONTOURS
- 1001 PROPOSED MINOR CONTOURS
- FLOW ARROW
- PROPOSED SITE
- TIME OF CONCENTRATION FLOW LINE

PROPOSED CONDITIONS:

Time Of Concentration Calculation - SCS TR-55 Method

Study Point	Drainage Area	SHEET FLOW					SHALLOW CONCENTRATED FLOW					CHANNEL FLOW					TOTAL
		n	L (ft)	P_2 (in)	s %	T_t(min)	Paved/Unpaved	V (ft/s)	L (ft)	s (%)	T_t(min)	Flow Type	V (ft/s)	L (ft)	s (%)	T_t(min)	T_t(min)
1	DA-1	0.4	200	3.86	13.69	16	Short-Grass	1.65	494	2.75	5	Grass Waterway	0.8837	1588	0.30	30	
												Grass Waterway	0.8837	0	0.30	0	51

Proposed Conditions:

Study Point	AREA(S)	(Acres)	C	Tovrl (min)	Carryover	Tsc (min)	Tch (min)	Ttot (min)	I5 (in/hr)	I25 (in/hr)	I100 (in/hr)	Q5 (ft3/s)	Q25 (ft3/s)	Q100 (ft3/s)
1	DA-1	21.77	0.49	16.00		5.00	30.00	51	2.700	3.730	4.660	28.80	39.79	49.71

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AS SHOWN	04/03/2025	HM	RA

PROJECT NUMBER: 205-56-01
DRAWING NAME: PROPOSED CONDITIONS

SHEET TITLE:
PROPOSED CONDITIONS DRAINAGE AREA MAP

SHEET NUMBER:
EX. 1

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

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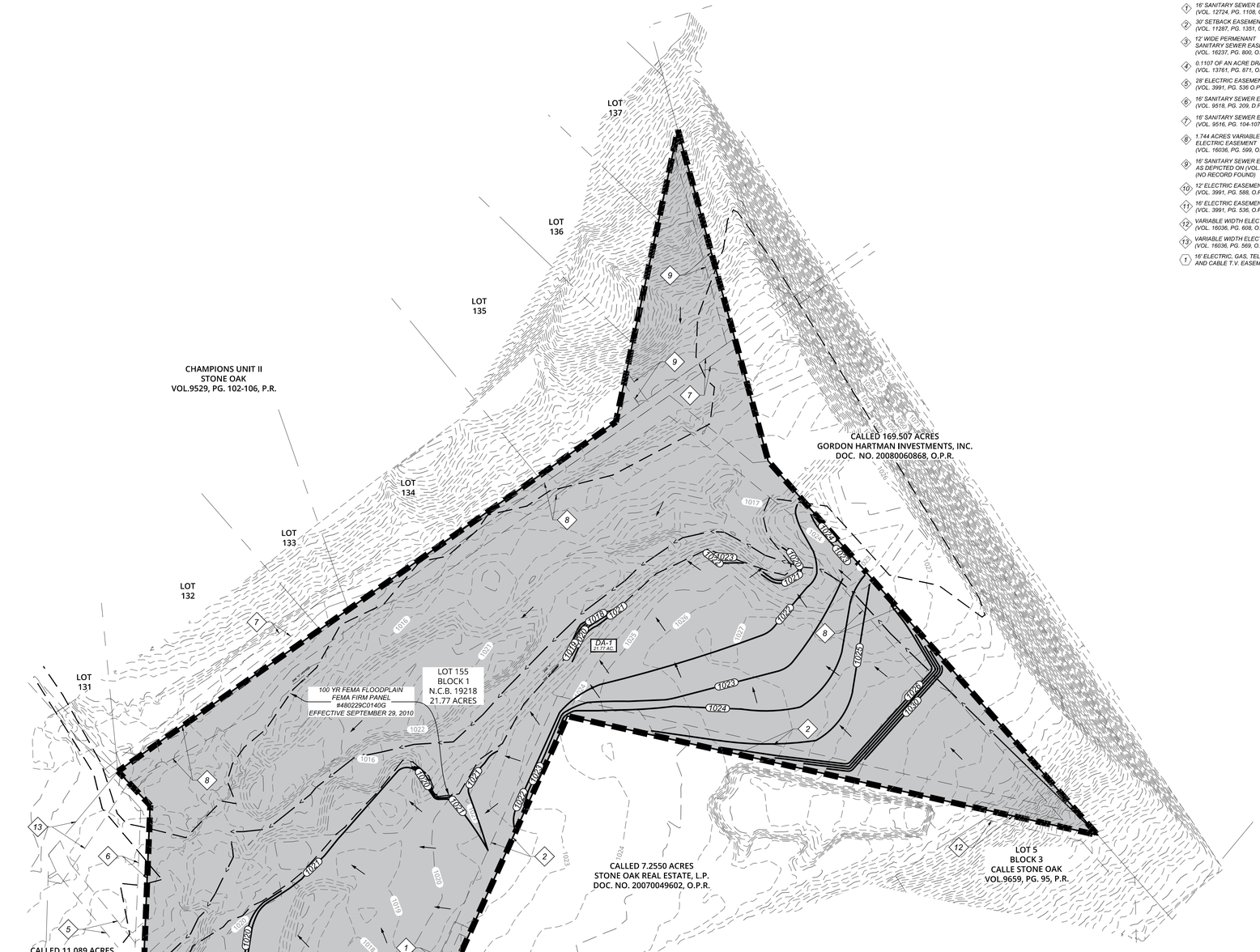

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ULTIMATE CONDTIONS

Time Of Concentration Calculation - SCS TR-55 Method

Drainage Area	SHEET FLOW					SHALLOW CONCENTRATED FLOW					CHANNEL FLOW					TOTAL
	n	L (ft)	P_2 (in)	s %	T_t(min)	Paved/Unpaved	V (ft/s)	L (ft)	s (%)	T_t(min)	L (ft)	Mannings	R(ft)	s (%)	T_t(min)	T_t(min)
1A	0.4	200	3.86	13.69	15.771	Unpaved	2.6805	494	2.76	3.072	1588	0.018	0.4045	0.30	10.673	**29.516**

ULTIMATE CONDITIONS

HYDROLOGY SUMMARY - RATIONAL METHOD

Study Point	Drainage Area	(Acres)	C	$T_{carryover}$ (min)	T_{over} (min)	T_{sc} (min)	T_{ch} (min)	T_{tot} (min)	I_5 (in/hr)	I_{25} (in/hr)	I_{100} (in/hr)	Q_5 (ft^3/s)	Q_{25} (ft^3/s)	Q_{100} (ft^3/s)
1A	DA-1	21.77	0.95		15.77	3.07	10.67	29.52	3.69	5.06	6.30	76.30	104.72	130.36

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PROJECT NUMBER:	DRAWING NAME:
205-56-01	ULTIMATE CONDITIONS

SHEET TITLE:
ULTIMATE CONDITIONS DRAINAGE AREA MAP

SHEET NUMBER:
EX. 1

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EXHIBIT 4

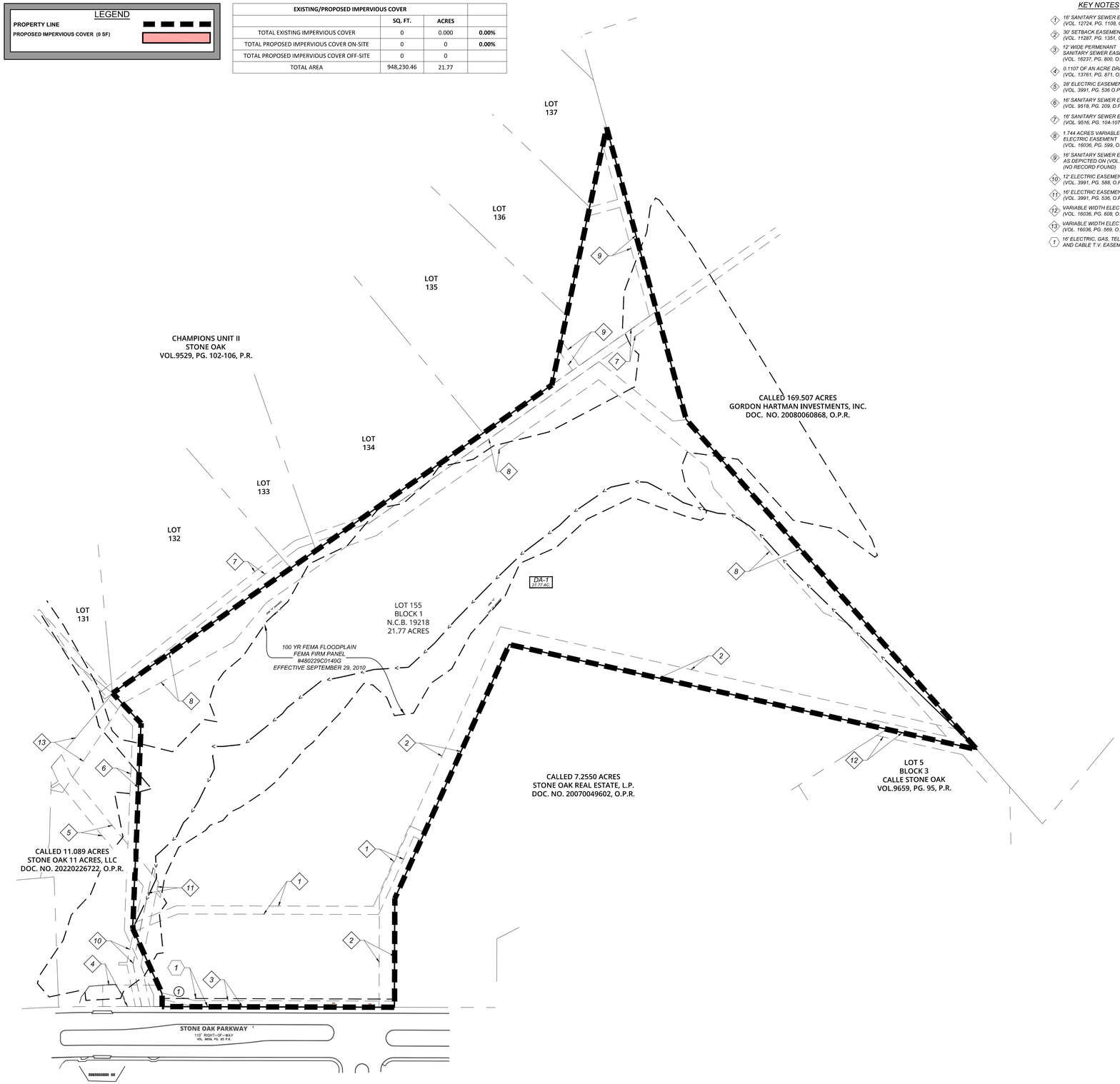
IMPERVIOUS COVER

LEGEND

PROPERTY LINE

PROPOSED IMPERVIOUS COVER (0 SF)

EXISTING/PROPOSED IMPERVIOUS COVER			
	SQ. FT.	ACRES	
TOTAL EXISTING IMPERVIOUS COVER	0	0.000	0.00%
TOTAL PROPOSED IMPERVIOUS COVER ON-SITE	0	0	0.00%
TOTAL PROPOSED IMPERVIOUS COVER OFF-SITE	0	0	
TOTAL AREA	948,230.46	21.77	



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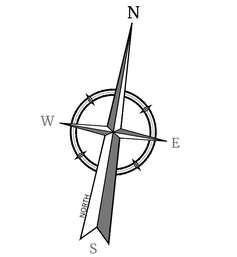

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LOCATION MAP
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SCALE:	DATE:	DRAWN BY:	CHECKED BY:
AS SHOWN	04/03/2025	HM	RA

PROJECT NUMBER: 205-56-01

DRAWING NAME: PROPOSED IMPERVIOUS COVER1

SHEET TITLE: *PROPOSED IMPERVIOUS COVER*

SHEET NUMBER: *EX. 1*

NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

X:\Jobs\CAD\PROPOSED IMPERVIOUS COVER1.dwg PROPOSED IMPERVIOUS COVER By: HMARTINEZ

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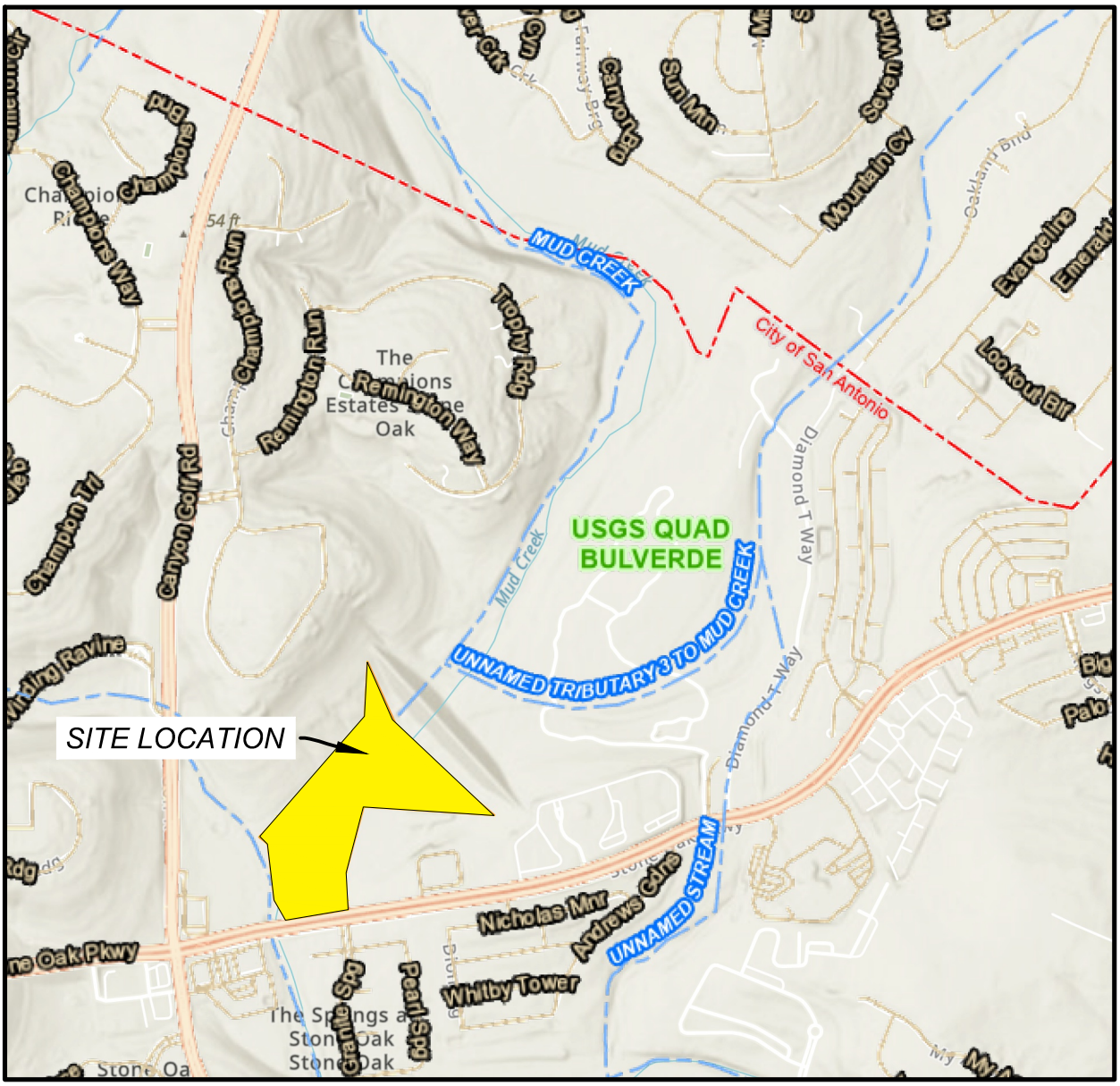
EXHIBIT 5

USGS MAP



By: MAKS.TARASZEWSKI

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HOLMDEL (Headquarters)
101 Crawfords Corner Road, Suite 3400
Holmdel, NJ 07733
Phone: 732.383.1950
COLLIERS ENGINEERING & DESIGN, INC. DOING BUSINESS AS MASER CONSULTING

SCALE:	DATE:	DRAWN BY:	CHECKED BY:
1":1000'	06/10/25	MT	RA

PROJECT NUMBER:	DRAWING NAME:
2053503	USGS MAP

SHEET TITLE: USGS MAP
FIELD BOOK: XX PAGE: XX

SHEET NUMBER: 1 OF 1

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PROJECT DESCRIPTION

The Stone Oak Commercial GHE project is situated 0.15 miles Northwest of the intersection of Stone Oak Pkwy and Canyon Golf Rd. in the City of San Antonio, Bexar County, TX, within the Edwards Aquifer Recharge Zone. This project falls within the north Salado Creek watershed and the Bulverde USGS quad. Notably, the property is entirely encompassed by the Edwards Aquifer Recharge Zone and does fall partly within the 100-year floodplain, as verified by the FEMA Flood Insurance Rate Map (FIRM) #48029C0140G, dated September 29, 2010.

The total site area is 21.77 acres. The grading on the site will encompass approximately 4.93 ac of land situated outside of the FEMA 100 yr. floodplain. There will be no impervious cover addition proposed with this WPAP. The work encompasses dirt work outside of the floodplain and re-vegetation upon completion of the dirt work. Any disturbed areas will be vegetated by seeding or sodding. Eighty-five percent of the disturbed surface area must have established vegetation before the city of San Antonio will accept.

The subject site will be disturbed during construction activities within the limits of construction. These activities will be subject to TPDES requirements. A Storm Water Pollution Prevention Plan will be maintained for the site and temporary BMP's will be implemented to prevent erosion and sedimentation.

There will not be any storage of regulated quantities of hazardous materials. The scope of work includes grading and installation of BMP's there is currently no plan to develop the site further.

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WATER POLLUTION ABATEMENT PLAN APPLICATION SECTION

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

To the best of my knowledge, the responses to this form accurately reflect all information requested concerning the proposed regulated activities and methods to protect the Edwards Aquifer. This **Water Pollution Abatement Plan Application Form** is hereby submitted for TCEQ review and Executive Director approval. The form was prepared by:

Print Name of Customer/Agent: Burt Wellmann P.E.

Date: 8/8/25

Signature of Customer/Agent:

Regulated Entity Name: Colliers Engineering & Design

Regulated Entity Information

1. The type of project is:

   ☐ Residential: Number of Lots:_____
   ☐ Residential: Number of Living Unit Equivalents:_____
   ☒ Commercial
   ☐ Industrial
   ☐ Other:_____

2. Total site acreage (size of property): 21.77

3. Estimated projected population:_____

4. The amount and type of impervious cover expected after construction are shown below:

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	0	÷ 43,560 =	0
Parking	0	÷ 43,560 =	0
Other paved surfaces	0	÷ 43,560 =	0
Total Impervious Cover	0	÷ 43,560 =	0

Total Impervious Cover 0 **÷ Total Acreage** 0 **X 100 =** 0 **% Impervious Cover**

5. ☒ **Attachment A - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.

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 x W = _____ Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

10. Length of pavement area: _____ feet.

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

11. ☐ A rest stop will be included in this project.

    ☐ A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

13. ☒ **Attachment B - Volume and Character of Stormwater**. A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on the 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:

0 % Domestic	0 Gallons/day
0 % Industrial	0 Gallons/day
0 % Commingled	0 Gallons/day
TOTAL 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 from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.
- ☐ Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

☐ Sewage Collection System (Sewer Lines):

- ☐ Private service laterals from the wastewater generating facilities will be connected to an existing SCS.
- ☐ Private service laterals from the wastewater generating facilities will be connected to a proposed SCS.

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

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

☐ Existing.
☐ Proposed.

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

Site Plan Requirements

Items 17 – 28 must be included on the Site Plan.

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

Site Plan Scale: 1" = 1:500'.

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): _____

19. ☒ The layout of the development is shown with existing and finished contours at appropriate, but not greater than ten-foot contour intervals. Lots, recreation centers, buildings, roads, open space, etc. are shown on the plan.

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

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

☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

☐ The wells are not in use and have been properly abandoned.
☐ The wells are not in use and will be properly abandoned.
☐ The wells are in use and comply with 16 TAC §76.

☒ 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 geologic or manmade features identified in the Geologic Assessment are shown and labeled.
☐ No sensitive geologic or manmade features were identified in the Geologic Assessment.
☐ **Attachment D - Exception to the Required Geologic Assessment**. A request and justification for an exception to a portion of the Geologic Assessment is attached.

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. [ ] Locations where soil stabilization practices are expected to occur.

26. [ ] Surface waters (including wetlands).

    [X] N/A

27. [ ] Locations where stormwater discharges to surface water or sensitive features are to occur.

    [X] There will be no discharges to surface water or sensitive features.

28. [X] Legal boundaries of the site are shown.

Administrative Information

29. [X] Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

30. [X] Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Factors Affecting Water Quality

Materials that are anticipated to be used on site that could be a potential source of contamination include the following:

During construction:

1. Miscellaneous construction trash and debris
2. Soil erosion and sedimentation due to construction activity

(This is not intended to be a all-inclusive list)

All practical Management practices will be used to reduce the risk of spills and other exposure of any contaminant to surface or groundwater.

Volume and Character of Stormwater

See Exhibit 3

Suitability Letter From Authorized Agent

Not applicable. No wastewater lines will be built.

Exception to the Required Geologic Assessment

Not applicable, Geological assessment attached, check additional attachment A.

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AGENT AUTHORIZATION FORM

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

I Gordon Hartman,
Print Name

Owner,
Title - Owner/President/Other

of Gordon Hartman Investments, Inc,
Corporation/Partnership/Entity Name

have authorized Burt Wellmann
Print Name of Agent/Engineer

of Colliers Engineering & Design
Print Name of Firm

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

I also understand that:

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

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

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

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

5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:

Applicant's Signature

8/12/25
Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Gordan Hartman 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 12 day of August, 2025.

JAIME L JOHNSON
Notary ID #126828423
My Commission Expires
March 6, 2029

NOTARY PUBLIC

Jaime L Johnson
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 3/6/2029

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APPLICATION FEE FORM

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Stone oak Commercial GHE

Regulated Entity Location: 0.15 miles northeast of the intersection Stone Oak Pwky and Canyon Golf rd

Name of Customer: Gordon Hartman Investments, Inc

Contact Person: Gordon Hartman Phone: 210-490-1798

Customer Reference Number (if issued):CN 604277806

Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☐ Travis ☐ Williamson

San Antonio Regional Office (3362)

☒ Bexar ☐ Medina ☐ Uvalde

☐ Comal ☐ Kinney

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

☐ Austin Regional Office

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

☒ San Antonio Regional Office

☐ Overnight Delivery to: TCEQ - Cashier
12100 Park 35 Circle
Building A, 3rd Floor
Austin, TX 78753
(512)239-0357

Site Location (Check All That Apply):

☒ Recharge Zone ☐ Contributing Zone ☐ Transition Zone

Type of Plan	*Size*	*Fee Due*
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	21.77 Acres	$ 6,500
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 8/12/25

Application Fee Schedule

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

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

Project	*Project Area in Acres*	*Fee*
One Single Family Residential Dwelling	< 5	$650
Multiple Single Family Residential and Parks	< 5 5 < 10 10 < 40 40 < 100 100 < 500 ≥ 500	$1,500 $3,000 $4,000 $6,500 $8,000 $10,000
Non-residential (Commercial, industrial, institutional, multi-family residential, schools, and other sites where regulated activities will occur)	< 1 1 < 5 5 < 10 10 < 40 40 < 100 ≥ 100	$3,000 $4,000 $5,000 $6,500 $8,000 $10,000

Organized Sewage Collection Systems and Modifications

Project	*Cost per Linear Foot*	*Minimum Fee-Maximum Fee*
Sewage Collection Systems	$0.50	$650 - $6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

Project	*Cost per Tank or Piping System*	*Minimum Fee-Maximum Fee*
Underground and Aboveground Storage Tank Facility	$650	$650 - $6,500

Exception Requests

Project	*Fee*
Exception Request	$500

Extension of Time Requests

Project	*Fee*
Extension of Time Request	$150

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TEMPORARY STORMWATER SECTION

Temporary Stormwater Section

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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

Print Name of Customer/Agent: Burt Wellmann P.E.

Date: 8/8/25

Signature of Customer/Agent:

Regulated Entity Name: Colliers Engineering & Design

Project Information

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:

   ☐ The following fuels and/or hazardous substances will be stored on the site: _____

   These fuels and/or hazardous substances will be stored in:

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

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

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

☒ Fuels and hazardous substances will not be stored on the site.

2. ☒ **Attachment A - Spill Response Actions**. A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.

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**. A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

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 attached.

   ☐ For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.

   ☐ For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.

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: Mud 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**. 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 is attached:

- [X] 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.
- [X] 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.
- [X] A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
- [X] A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.

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

   - [ ] **Attachment E - Request to Temporarily Seal a Feature**. A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
   - [X] There will be no temporary sealing of naturally-occurring sensitive features on the site.

9. [X] **Attachment F - Structural Practices**. A description of 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 is attached. Placement of structural practices in floodplains has been avoided.

10. [X] **Attachment G - Drainage Area Map**. A drainage area map supporting the following requirements is attached:

    - [ ] 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.

[X] There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. Erosion and sediment controls other than sediment basins or sediment traps within each disturbed drainage area will be used.

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 have 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 attached.

    [X] N/A

12. [X] **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.

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

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

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

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

Soil Stabilization Practices

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

17. [X] **Attachment J - Schedule of Interim and Permanent Soil Stabilization Practices**. A schedule of the interim and permanent soil stabilization practices for the site is attached.

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

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

Administrative Information

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

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

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

Spill Response Actions

If there is an accidental spill on site, the contractor shall respond with appropriate action. The contractor will be required to contact the owner and in turn the owner will contact the TCEQ in the event of a spill on site. In addition to the following guidance, reference the latest version of TCEQ's Technical Guidance Manual (TGM) RG-348 Section 1.4.16.

Cleanup

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

Minor Spills

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

Semi-Significant Spills

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

Spills should be cleaned up immediately:

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

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

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

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

Vehicle and Equipment Maintenance

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

2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately.
3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
5. Place drip pans or absorbent materials under paving equipment when not in use.

6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute stormwater. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
9. Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

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

Potential Sources of Contamination

During Construction

1. Miscellaneous trash and little from construction workers
2. Construction Debris
3. Silt leaving site

Sequence of Major Events

Intended Schedule or Sequence of Major events

1. Installation of BMP's
2. Begin earthwork/grading
3. Finish earthwork/grading
4. Establish Vegetation on site for stabilization
5. Site Clean Up and removal of BMP's

Temporary Best Management Practices and Measures

A: Temporary BMPs will be installed prior to soil disturbing construction activity. Silt fencing will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. Inlet protection will be placed on all inlets. A temporary construction entrance will be placed on site to reduce vehicle "tracking" onto adjoining streets. A construction staging area will be used for equipment storage and vehicle maintenance.

BMPs for this project will protect surface water or groundwater from turbid water, phosphorus, sediment, oil, and other contaminants, which may mobilize in storm water flows by slowing the flow of runoff to allow sediment and suspended solid to settle out of the runoff.

Practices may also be implemented on site for interim and permanent stabilization. Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of existing trees and vegetation, and other similar measures.

B: The BMPs for this project are designed to allow water to pass through after sedimentation has occurred. Existing flow patterns will be maintained to any naturally-occurring sensitive features that are discovered during construction

Request to Temporarily Seal a Feature

There will be no temporary sealing of any naturally occurring features on site.

Structural Practices

Structural BMPs will be used to limit runoff discharge of pollutants from exposed areas of the site. BMPs will be installed prior to soil disturbing construction activity. Silt fencing will be placed along the down-gradient sides of the property to prevent silt from escaping the construction area. A temporary construction entrance will be placed at the site entry/exit point to reduce tracking onto adjoining streets. A construction staging area will be used onsite to perform all vehicle maintenance and for equipment and material storage. Rock berms will also be added to mitigate the erosion and sediment leaving the site. The location of all structural temporary BMP's is shown on the site plan (**Exhibit 2**) and details and specifications. Which can be found at the Beginning section of this report under the appropriate tab.

Drainage Area Map

An existing drainage area map and proposed/ultimate drainage area map are included with this report as **EXHIBIT 3**. The exhibits can be found at the beginning section of this report

Temporary Sediment Pond(s) Plans and Calculations

For this project, there are no disturbed areas over 10 acres within a common drainage watershed. Therefore, no temporary sediment ponds are proposed.

Inspection and Maintenance for BMP's

MAINTENANCE

All temporary and permanent erosion and sediment control BMPs will be maintained and repaired as needed to assure continued performance of their intended function. All maintenance and repair of BMPs will be conducted in accordance with manufacturers' specifications.

All temporary erosion and sediment control BMPs will be removed within 30 days after final site stabilization is achieved or after the temporary BMPs are no longer needed. Trapped sediment will be removed or stabilized on site. Disturbed soil areas resulting from removal of BMPs or vegetation will be permanently stabilized as soon as possible.

Erosion and sediment controls are designed to prevent soil erosion and sediment migration offsite, to the extent practicable, which may result from construction activity. This design considers local topography, soil type, and rainfall.

Control measures must be installed and maintained according to the manufacturer's specifications. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permitee must replace or modify the control for site situations.

If sediment ponds are utilized the sediment must be removed from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize off-site impacts, and whenever feasible, prior to the next rain event.

The controls must be installed, maintained, and operated in a manner that will limit, to the extent practicable, offsite transport of litter, construction debris, and construction materials.

INSPECTIONS

An inspection will be performed by the qualified personnel, as designated by the permitee, on a weekly basis and after any rainfall event. An inspection and maintenance report shall be made per inspection. An inspection form has been included in this report and in the SWPPP. Based on the inspection results, the controls shall be corrected before the next scheduled inspection.

A log of inspection results will be maintained on-site and will include the name of the inspector, date, major observations, and necessary corrective measures. Reports of maintenance and inspection activities will be maintained on-site, in conformance with the TPDES permit conditions. Reports must identify any incidents of non-compliance. Where a report does not identify any incidents of non-compliance, the report must contain a certification that the facility or site is in compliance with the SWPPP. This report must be signed by the responsible party.

Major observations shall, at a minimum, include the following:

- The locations of discharges of sediment or other pollutants from the site;
- Locations of BMPs that need to be maintained;
- Locations of BMPs that failed to operate as designed or proved inadequate for a particular location; and
- Location where additional BMPs are needed.

All needed repairs or modifications will be reported to the contractors to permit the timely implementation of required actions. Necessary repairs of modifications will be implemented within seven days of inspection. The SWPPP will be modified within seven days to reflect any modifications to measures as a result of inspection.

The SWPPP must be amended whenever there is a change in design, construction, operation or maintenance that has a significant effect on the discharge of pollutants to the waters of the United States that was not addressed in the SWPPP.

The SWPPP must be amended when inspections or investigations by site operations, local, state or federal officials indicate that the SWPPP is proving ineffective in eliminating or significantly minimizing pollutants from the construction site or otherwise is not achieving the general objectives of controlling pollutants in storm water discharges associated with construction activity.

INSPECTION FORM

NAME OF INSPECTOR _____
(Inspector must attach a brief summary of qualifications to this report.)

DATE _____

BEST MANAGEMENT PRACTICES (BMPs)

☐ **Vegetative Buffers**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

☐ **Soil Covering** *(Including mulch and temporary vegetation)*
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

☐ **Outlet Protection**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

☐ **Sediment Control Basins**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

☐ **Silt Fence**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Stabilized Entrances/Exits**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Construction Staging Areas**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Inlet Protection**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Gravel Filter Bags**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Vegetated Filter Strip**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

☐ **Concrete Truck Washout Pit**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Trash Receptacles**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **General Site Cleanliness**
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Other** _____
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Other** _____
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

_____

_____

☐ **Other** _____
☐ In Compliance ☐ Out of Compliance ☐ Not Applicable
Comments/Maintenance Required: _____

MAJOR OBSERVATIONS

At a minimum, inspector shall note any evidence of erosion, sediment discharges from the site, BMPs requiring maintenance, BMPs requiring modification, and any additional BMPs required.

CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

"I further certify I am an authorized signatory in accordance with the provisions of 30 TAC §305.128."

INSPECTOR NAME/SIGNATURE

DATE

OWNER NAME/SIGNATURE

DATE

Schedule of Interim and Permanent Soil Stabilization

Construction practices shall disturb the minimal amount of existing ground cover as required for land clearing, grading, and construction activity for the shortest amount of time possible to minimize the potential of erosion and sedimentation from the site. Existing vegetation shall be maintained and left in place until it is necessary to disturb for construction activity. For this project the following stabilization practices will be implemented:

1. **Hydraulic Mulch and Seeding**: Disturbed areas subject to erosion shall be stabilized with hydraulic mulch and/or seeded and watered to provide interim stabilization. For areas that are not to be sodded as per the project landscaping plan, a minimum of 85% vegetative cover will be established to provide permanent stabilization.
2. **Sodding and Wood Mulch**: As per the project landscaping plan, Sodding and wood mulch will be applied to landscaped areas to provide permanent stabilization prior to project completion.

Records of the following shall be maintained by the permitee in the attached Project Timeline:

a) The dates when major grading activities occur;
b) The dates when construction activities temporarily or permanently cease on a portion of the site; and
c) The dates when stabilization measures are initiated.

Stabilization measures must be initiated as soon as practical in portions of the site where construction activities have temporarily or permanently ceased, and except as provided in the following, must be initiated no more that fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased:

Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures must be initiated as soon as practical.

Where construction activity on a portion of the site is temporarily ceased and earth disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of the site.

In arid areas (areas with an average rainfall of 0–10 inches), semiarid areas (areas with an average annual rainfall of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonably arid conditions, stabilization measures must be initiated as soon as practical. For interim stabilization during drought conditions best management practices will be implemented. These may include but are not limited to geotextile blankets and matting, hydromulch, diversion structures and/or structural controls such as silt fence and rock berms. These BMPs are to be maintained in accordance with the inspection/maintenance schedule provided in Attachment I.

PROJECT TIMELINE

DATES WHEN MAJOR GRADING ACTIVITES OCCUR	
Date	Construction Activity
09/1/2025	Installation of BMP's
10/15/2025	Begin dirt work

DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE	
Date	Construction Activity
10/15/2025	BMP installation
11/15/2025	End of dirt work

DATES WHEN STABILIZATION MEASURES ARE INITIATED	
Date	Construction Activity
11/15/2025	Begin vegetation for stabilization
12/1/2025	End vegetation

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PERMANENT STORMWATER SECTION

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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

Print Name of Customer/Agent: Burt Wellmann P.E.

Date: 8/8/25

Signature of Customer/Agent

Regulated Entity Name: Colliers Engineering & Design

Permanent Best Management Practices (BMPs)

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

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

   ☒ N/A

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

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

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

☒ N/A

3. ☐ 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.

   ☒ N/A

4. 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.

   ☐ The site will be used for low density single-family residential development and has 20% or less impervious cover.
   ☐ The site will be used for low density single-family residential development but has more than 20% impervious cover.
   ☒ The site will not be used for low density single-family residential development.

5. 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**. The 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 attached.
   ☐ The site will be used for multi-family residential developments, schools, or small business sites but has more than 20% impervious cover.
   ☒ The 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 attached.

☐ No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

☒ 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, and an explanation is attached.

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 attached.

   ☒ 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, and an explanation is attached.

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 attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.

   ☒ N/A

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 feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.

   ☐ **Attachment E - Request to Seal Features**. A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.

10. ☐ **Attachment F - Construction Plans**. All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:

    ☐ Design calculations (TSS removal calculations)
    ☐ TCEQ construction notes
    ☐ All geologic features
    ☐ All proposed structural BMP(s) plans and specifications

    ☒ N/A

11. ☐ **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan**. A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:

    ☐ Prepared and certified by the engineer designing the permanent BMPs and measures
    ☐ Signed by the owner or responsible party
    ☐ Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
    ☐ A discussion of record keeping procedures

    ☒ N/A

12. ☐ **Attachment H - Pilot-Scale Field Testing Plan**. Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.

    ☒ N/A

13. ☐ **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 attached. 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.

    ☒ N/A

Responsibility for Maintenance of Permanent BMP(s)

Responsibility for maintenance of best management practices and measures after construction is complete.

14. ☐ 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.

    ☒ N/A

15. ☐ 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.

    ☒ N/A

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CORE DATA FORM

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy)

☐ New Customer ☒ Update to Customer Information ☐ Change in Regulated Entity Ownership
☐ Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)

The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).

6. Customer Legal Name *(If an individual, print last name first: eg: Doe, John)* | *If new Customer, enter previous Customer below:*

Gordon Hartman Investments, Inc.

7. TX SOS/CPA Filing Number	**8. TX State Tax ID** (11 digits)	**9. Federal Tax ID** (9 digits)	**10. DUNS Number** *(if applicable)*

11. Type of Customer: ☒ Corporation ☐ Individual Partnership: ☐ General ☐ Limited

Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other: Fondation

12. Number of Employees

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

13. Independently Owned and Operated?

☐ **Yes** ☒ **No**

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

☒ Owner ☐ Operator ☐ Owner & Operator
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant ☐ Other:

15. Mailing Address:

5210 Thousand Oaks, Ste 1318

City	San Antonio	**State**	TX	**ZIP**	78233	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*

18. Telephone Number	**19. Extension or Code**	**20. Fax Number** *(if applicable)*

(210) 490-1798		( ) -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information *(If 'New Regulated Entity" is selected, a new permit application is also required.)*

☒ New Regulated Entity ☐ Update to Regulated Entity Name ☐ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated, in order to meet TCEQ Core Data Standards (removal of organizational endings such as Inc, LP, or LLC).

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

Stone Oak Commerical GHE

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City		**State**		**ZIP**		**ZIP + 4**	
24. County								

If no Street Address is provided, fields 25-28 are required.

25. Description to Physical Location:	0.15 miles NE of the intersection of Stone Oak Pkwy and Canyon Golf Rd				
26. Nearest City			**State**	**Nearest ZIP Code**	
San Antonio			Tx	78258	

Latitude/Longitude are required and may be added/updated to meet TCEQ Core Data Standards. (Geocoding of the Physical Address may be used to supply coordinates where none have been provided or to gain accuracy).

27. Latitude (N) In Decimal:	29.644092		**28. Longitude (W) In Decimal:**	-98.478735	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
26	38	38.73	98	28	43.45

29. Primary SIC Code (4 digits)	**30. Secondary SIC Code** (4 digits)	**31. Primary NAICS Code** (5 or 6 digits)	**32. Secondary NAICS Code** (5 or 6 digits)
1794			

33. What is the Primary Business of this entity? *(Do not repeat the SIC or NAICS description.)*

Grading

34. Mailing Address:								
	5120 Thousand Oaks, Ste 1318							
	City	**San Antonio**	**State**	**TX**	**ZIP**	**78233**	**ZIP + 4**	
35. E-Mail Address:	**Jamie@GordonHartman.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(210) 490-1798		( ) -

39. TCEQ Programs and ID Numbers Check all Programs and write in the permits/registration numbers that will be affected by the updates submitted on this form. See the Core Data Form instructions for additional guidance.

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

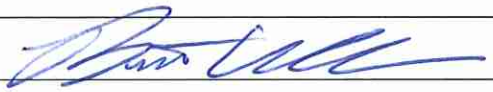
SECTION IV: Preparer Information

40. Name:	Burt Wellmann	41. Title:	Regional Discipline leader

42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(210) 979-8444		( ) -	Burtwellmann@collierseng.com

SECTION V: Authorized Signature

46. By my signature below, I certify, to the best of my knowledge, that the information provided in this form is true and complete, and that I have signature authority to submit this form on behalf of the entity specified in Section II, Field 6 and/or as required for the updates to the ID numbers identified in field 39.

Company:	Colliers Engineering and Design	Job Title:	Regional Discipline leader	
Name *(In Print)*:	Burt Wellmann		Phone:	(210) 979- 8444
Signature:			Date:	8/8/25

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Additional Attachment A

Geologic Assessment

Colliers Engineering & Design

Geologic Assessment

Pursuant to The Texas Commission on Environmental Quality Standard Practice

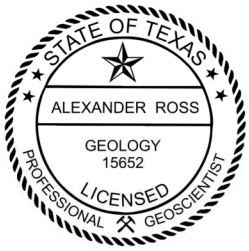
For "Geologic Assessments" (Title 30 Texas Administrative Code (TAC), Part 1, Chapter 213; Texas Water Code, §26.401; and Texas Occupations Code, Chapter 1002)

April 28, 2025

Stone Oak Commercial GHE

Located northeast of the intersection of Canyon Golf Road and Stone Oak Parkway, San Antonio, Bexar County, Texas 78258

Colliers Engineering & Design Project Number: 25002948A



Prepared for:

Hartman Gordon Investments, Inc.
1202 W Bitters Road Ste. 1200,
San Antonio, TX 78216-8088

Prepared by:

Alexander S. Ross
State of Texas, Professional Geoscientist
License No. 15652

Ezra C. Urigwe
State of Texas, Associate Geoscientist

Colliers Engineering & Design
3421 Paesanos Parkway,
San Antonio, Texas 78231
Main: 210 979 8444
Colliersengineering.com

Project No. 25002948A

Colliers Engineering & Design

Table of Contents

Narrative Description of Site Geology | Attachment C

INTRODUCTION

Colliers Engineering & Design was contacted by Hartman Gordon Investments, Inc. to conduct a Geologic Assessment for the Stone Oak Commercial GHE project. The project site is located northeast of the intersection of Canyon Golf Road and Stone Oak Parkway, San Antonio, Bexar County, Texas 78258 (i.e., subject property, project site, or site). Bexar County Appraisal District (BCAD) reflects the subject property by the following: *Bexar Parcel:* 1041155; *Owner*: HARTMAN GORDON INVESTMENTS INC.

METHODOLOGY

Colliers Engineering & Design conducted a geologic assessment for the property on March 18th and 19th, 2025. The pedestrian survey was completed by walking parallel transects spaced approximately 50 foot spacing under the regulatory guidance by the TCEQ in the *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones (Rev. 10-01-04).* Closer spacing was used in areas where vegetation inhibited clear observation. Observed potential karst features (i.e., topographic depressions, holes, and animal burrows) were carefully examined for evidence of subsurface extent. The features were also probed and checked for the presence of air flow, which may indicate the presence of a subsurface void space. The locations of identified features were recorded with a handheld GPS unit. The locations of identified features were recorded with a handheld GPS unit with accuracy of +/- 5 feet, and photo-documented.

SITE DESCRIPTION

The subject property is comprised of a single parcel, represented by BCAD property ID: 1041155. The subject property is comprised of approximately 21.7661-ac of vacant land. Planned development for the site includes commercial and residential use. According to BCAD property information, approximately 40 percent of the site is mapped as floodplain as of date of report. The legal description for the parcel is provided below:

- BCAD ID 1041155: *NCB 19218 BLK LOT P-26 (13.96 AC) & P-27B (7.8061 AC)*

Background

Based on a review of historical aerial photography, the project site appears to have existed as undeveloped, rural land prior to the early 1970s. Contour elevations in the surrounding area slope toward the central region of the site, culminating in topographic lows within Mud Creek. The surface topography of the region is marked by hilly terrain, karst, and tall rugged hills of limestone. Beginning in the 1970s, aerial imagery depicts the construction of Salado Creek Watershed Dam No. 8 to the east of the project site. According to published data for the dam, Salado Creek WS Dam No. 8 was designed by the USDA Natural Resources Conservation Service and completed in 1973. The 70-foot-tall earth dam serves as a vital piece of flood risk reduction infrastructure for the surrounding area.

Historical aerial imagery from 1986 depicts land disturbance on a large area near the center of the subject property. The disturbance appears to have been in conjunction with the development of adjoining properties and thoroughfares. Beginning in the 1990s, residential development for the Estates at Champions Run occurs to the north. In 2005, the southwestern region of the project site undergoes land clearing activity. Following this event, aerial imagery from 2009 appears to depict the import of non-native fill for the construction of a berm on the eastern zone of the project site. Various piles of mixed debris composed of rock material, boulders, and tires were observed within boundaries of the subject property. This material may have been disposed of on the project site in conjunction with construction efforts for the Salado Creek Dam No. 8. Additionally, rocky material may have been emplaced along the bank of Mud Creek to direct stormwater flow. According to aerial imagery, the subject property appears to have remained undisturbed between 2014 and 2025.

Geologic Setting

The subject property is located within the **Recharge Zone** of the Edwards Aquifer. The overall potential for fluid migration to the Edwards Aquifer in this area has been characterized as low to intermediate. Regarding bedrock lithology, the site lies within the dolomitic member of the Kainer Formation (referred to as Kek or Kkd in **Attachment A and D**), the basal nodular member of the Kainer Formation (referred to as Kek or Kkbn), and the cavernous member of the Glen Rose Formation (referred to as Kgr or Kgrc). The dolomitic member of the Kainer Formation is dominantly composed of massively bedded, light gray crystalline limestone. Lithology consists of hard, dense mudstone, wackestone, and dolomitic limestone. Chert is

common within the upper section of the unit and presents as beds or large nodules. The dolomitic member of the Kainer formation is generally 100 to 130 feet thick near the project site. Cavern development within the Kkd is commonly related to the structure of the bedding planes within the formation. Rudists are found abundantly throughout the bedded unit. The basal nodular member of the Kainer Formation is composed of shaly, nodular and mottled limestone, and burrowed mudstone. Lithology consists of dolomitic limestone, wackestone, and packstone. Field indicators of the Kkbn include bioturbation, stylolites, and foraminifera fossils. The basal nodular member of the Kainer formation is generally 50 to 60 feet thick near the project site. Cavern development within the Kkbn commonly prorogates as lateral caves. Finally, the cavernous member of the Glen Rose Formation is composed of heavily bioturbated mudstone, wackestone, and argillaceous limestone. The unit is generally 90 to 120 feet thick. Cavern development within the unit occurs as fractures and caves.

The surrounding area exhibits a dominant fault trend of N46°E, based on the average of the trends of faults within the surrounding area and from published maps (Stein & Ozuna, 1995; Barnes, 1961; Clark, 2023). Hydrologically, porosity of the formations mapped on the site varies include both fabric selective and non-fabric selective classifications. The fabric selective porosity consists of interparticle, intergranular, intercrystalline, moldic, burrow, and bedding plane porosity. The non-fabric selective porosity consists of vug, fracture, and cave porosity (Maclay and Small, 1976). Bioturbated beds contribute to higher rates of porosity due to interconnected void space within the formations. Each of the units mapped within the property boundary may be water bearing or may have void space characterized by deep vertical pits, caves, or chambers. Field reconnaissance conducted by CED did not readily identify caves, sinkholes, or potential habitat for endemic species at surface level.

Following tectonic activity and subsequent erosion in the Cretaceous period, south central Texas experienced submersion by marine transgression in the Late Cretaceous. As a result, the Kainer and the Glen Rose Formation was deposited. Consequently, marine marker fossils can be found within both formations - including *Toucasia* sp., *Dictyoconus walnutensis*, and other rudists. The contact between the dolomitic member of the Kainer and the overlying Kirschberg Evaporite Member is conformable. The cavernous member of the Glen Rose Formation conformably underlies the Kainer Formation.

Karst Zone

According to United States Fish and Wildlife Service (USFWS) karst zone maps, the subject property wholly lies within **Karst Zone 1**, which is defined as areas known to contain endangered karst invertebrate species. Karst Zone 1 includes areas known to contain endangered cave fauna. In accordance with USFWS guidelines (published in 2015), a karst feature survey is required within Karst Zones 1, 2, and 3 to identify any karst features which may contain potential karst invertebrate habitat. The subject property lies within the Stone Oak Karst Fauna Region (KFR). The nearest critical habitat unit (CHU) is located roughly 700-feet northeast of the subject property. This CHU is identified as Unit 21, for the listed species beetle (*Rhadine exilis).* Notably, another CHU is located about 0.65-miles to the southwest. The CHU is identified as Unit 12, for the listed species beetle (*Rhadine exilis).* Limiting conditions identified during site reconnaissance that may affect the ability to identify karst features included dense vegetation, suspect imported fill material, and surficial land disturbance which limited and/or altered observation of the ground surface in certain areas.

Soils Table

Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986).

Table 1: Soil Description Summary

Soil Name	Group	Thickness (feet)
Eckrant-Rock outcrop association, 8 to 30 percent slopes (TaD)	D	0-3
Krum clay, 1 to 5 percent slopes (Kr)	C	1-5

Soil Group Classifications

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

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

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

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

The Eckrant series consists of well drained, moderately slowly permeable soils that are very shallow to shallow over indurated limestone bedrock. These nearly level to very steep soils formed in residuum derived from limestone and occur on summits, shoulders, and backslopes of ridges on dissected plateaus (USDA, 2018). The Krum series consists of very deep to clayey alluvium, well drained soils that formed in calcareous clayey alluvium derived from interbedded chalk and marl. These nearly level to moderately sloping soils are on risers and treads of stream terraces on river valleys and dissected plains (USDA, 2018). In areas where natural soil was exposed, the soil resembled the descriptions in the soil surveys and whose descriptions are listed above.

FEATURES

The following outlines features identified on the subject property by site reconnaissance and review of published geological literature. Examples of the features are described below, and photographs are provided in the appendices.

S-1: Geologic Feature: *Fault*. According to published geologic maps (Clark et al., 2023) for the Bexar County area, a fault oriented N46°E is mapped on the central region of the subject property. Apparent bedrock outcrops of the Kainer Formation and the Glen Rose Formation were compared in the field to determine the location of the fault line. Evidence of the fault was not readily observed on the project site during site reconnaissance due to dense vegetation and ground cover. Although the fault was not exposed within boundaries of the subject property, faults may be associated with bedrock damage zones that may influence fluid transmissivity. Therefore, the probability for rapid infiltration into bedrock for this feature is characterized as low to intermediate. (Location: 29°38'45.30"N 98°28'38.90 W).

S-2: Geologic Feature: *Inferred Fault*. According to published geologic maps (Clark et al., 2023) for the Bexar County area, an inferred fault oriented N75°W is mapped on the central region of the Subject property. Apparent bedrock outcrops of the Kainer Formation and the Glen Rose Formation were compared in the field to determine the location of the fault line. Evidence of the fault was not readily observed on the project site during site reconnaissance due to dense vegetation and ground cover. Although the fault was not

exposed within boundaries of the subject property, faults may be associated with bedrock damage zones that may influence fluid transmissivity. Therefore, the probability for rapid infiltration into bedrock for this feature is characterized as low to intermediate. (Location: 29°3846.24"N 98°28139.78"W).

S-3: Manmade feature in bedrock (MB). Feature is an existing sanitary sewer line that is not located beneath pavement. The utility has been trenched through bedrock and backfilled with a mix of fine and coarse material that may contribute to higher permeability rates than surrounding undisturbed areas. Approximately 3546.95 linear feet of buried sewer line spans the subject property. Notably, eleven sanitary manholes were observed within the boundaries of the property during site reconnaissance. The locations of each of the manholes are depicted in Attachment D. The sewer line is buried and the likelihood of storm water migrating through the trenches into the Edwards Aquifer is considered unlikely. Therefore, the probability of rapid infiltration is low.

S-4: Solution cavity. Feature is rimmed on all sides within bedrock, and measures approximately ten inches long and five inches wide. Void space within the feature travels horizontally inward for about three feet. Feature terminates to compact rock and soils within. No airflow or indication of moisture was observed within the feature. Considering the size of the feature, its placement near a hilltop, and horizontal orientation; fluid migration and infiltration rate has been characterized as low.

S-5: Solution-enlarged fracture. Feature appears to have initially formed from the dissolution of the bedding plane surrounding a solution cavity. Feature measures approximately twenty inches long and five inches at widest. Surface probing concluded that the feature terminates in compact soil. No airflow indicated. Fluid migration and infiltration rate has been characterized as low.

S-6: Solution cavity. Feature is an apparent solution cavity that is rimmed on all sides by limestone or float rock. Opening measures ten inches in length and five inches in width. Passageway travels approximately eighteen inches downward before terminating in compact soil and leaf litter. Airflow or indication of moisture was not readily observed within the feature. Considering the size and placement of the feature within a floodplain, fluid migration and infiltration rate has been characterized as low to intermediate.

S-7: Solution cavity. Feature has a triangular opening and is encapsulated on two sides by bedrock. Each side of the opening measures nearly thirteen inches. Main passageway travels 77° E and terminates into compact soils at depth. Soil filling in the solution cavity may indicate rapid infiltration. However, considering

the size and placement of the feature within a floodplain, fluid migration and infiltration rate has been characterized as low to intermediate.

S-8: Solution cavity. Feature is a solution cavity rimmed on all sides with limestone, conglomerates, or sediment clasts. The opening measures roughly fourteen inches around. Main axis of the feature travels a foot inward before terminating in cobbles. No airflow or indication of moisture was observed within the feature. Soil filling in the solution cavity may indicate rapid infiltration. However, considering the size and placement of the feature within a presumptive drainage, fluid migration and infiltration rate has been characterized as low to intermediate.

S-9: Non-karst closed depression. Feature measures approximately thirty feet long and fifteen feet wide. The depression may have formed as a result of the growth of a large oak tree near the center that exploited void space between float rock. The feature did not appear to be formed by karst processes and is not bedrock floored. Therefore, fluid migration rate to the Edwards Aquifer has been characterized as low.

S-10: Other natural bedrock features. Feature is a weathered fracture set observed at the base of Mud Creek outcrop. Site reconnaissance determined the dominant trend of the joints are oriented N34°E. The feature exists on exposed bedrock and infiltration rate is considered low.

S-11: Other natural bedrock features. Feature is a conjugate fracture set identified on the creek bed. The conjugate shear fractures make an angle of about 70° with one another and 35° with the principal stress axis (σ1). Conjugate fractures are a field indicator of opposite senses of shearing between faults. The feature exists on exposed bedrock and infiltration rate is considered low.

S-12: Non-karst closed depression. Feature is located on the western region of the Subject property, and measures approximately eight feet round. The depression appeared to have been formed from historical land disturbance. The feature did not appear to be formed by karst processes and is not bedrock floored. Therefore, fluid migration rate to the Edwards Aquifer has been characterized as low.

S-13: Non-karst closed depression. Feature is located on the western region of the Subject property, and measures about twenty feet round. The depression appeared to have been formed the roots of an oak tree. The feature did not appear to be formed by karst processes and is not bedrock floored. Therefore, fluid migration rate to the Edwards Aquifer has been characterized as low.

CONCLUSIONS

According to United States Fish and Wildlife Service (USFWS) karst zone maps, the subject property wholly lies within **Karst Zone 1**, which is defined as areas known to contain endangered karst invertebrate species. CED has conducted a geologic assessment on March 18th and 19th, 2025, pursuant to The Texas Commission on Environmental Quality Standard Practice for "Geologic Assessments" (Title 30 Texas Administrative Code (TAC), Part 1, Chapter 213; Texas Water Code, §26.401; and Texas Occupations Code, Chapter 1002).

A total of thirteen features were identified during the geologic assessment. A certain geologic fault, an inferred geologic fault, a sanitary sewer line, four solution cavities, one solution-enlarged fracture, three non-karst closed depressions, and two natural bedrock features were identified as notable features encountered during the geologic assessment. Limiting conditions encountered during site reconnaissance that may affect the ability to identify karst features included dense vegetation, and imported material and rock debris, which limited observations of the ground surface and subsurface in certain areas. The possibility of additional features hidden beneath existing soil stratum is possible. In the event features are encountered during construction activity, work should cease, and the Texas Commission on Environmental Quality (TCEQ) should be notified to further evaluate features prior to proceeding.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) FORM 0585 – TCEQ-0585) Rev. 02-11-15

Geologic Assessment

Texas Commission on Environmental Quality

For Regulated Activities on The Edwards Aquifer Recharge/transition Zones and Relating to 30 TAC §213.5(b)(3), Effective June 1, 1999

To ensure that the application is administratively complete, confirm that all fields in the form are complete, verify that all requested information is provided, consistently reference the same site and contact person in all forms in the application, and ensure forms are signed by the appropriate party.

Note: Including all the information requested in the form and attachments contributes to more streamlined technical reviews.

Signature

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

Print Name of Geologist: Alexander S. Ross, P.G.

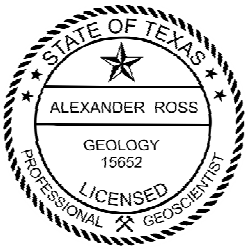
Telephone: (856) 242-2036

Fax: (210) 979-8441

Date: 4/28/2025

Representing: Colliers Engineering & Design, TBPE Firm #9513 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: Stone Oak Commercial GHE

Project Information

1. Date(s) Geologic Assessment was performed: March 18th and 19th, 2025
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☒ Recharge Zone
   - ☐ Transition Zone
   - ☐ Contributing Zone within the Transition Zone

4. ☒ **Attachment A - Geologic Assessment Table**. Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)

Soil Name	Group*	Thickness(feet)
Krum clay, 1 to 5 percent slopes (Kr)	C	1-5
Eckrant-Rock outcrop association, 8 to 30 percent slopes (TaD)	D	0-3

** Soil Group Definitions (Abbreviated)*

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

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

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

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

6. ☒ **Attachment B – Stratigraphic Column**. A stratigraphic column showing formations, members, and thicknesses is attached. The outcropping unit, if present, should be at the top of the stratigraphic column. Otherwise, the uppermost unit should be at the top of the stratigraphic column.

7. ☒ **Attachment C – Site Geology**. A narrative description of the site specific geology including any features identified in the Geologic Assessment Table, a discussion of the potential for fluid movement to the Edwards Aquifer, stratigraphy, structure(s), and karst characteristics is attached.

8. ☒ **Attachment D – Site Geologic Map(s)**. The Site Geologic Map must be the same scale as the applicant's Site Plan. The minimum scale is 1": 400'

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

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.

☐ Other method(s). Please describe method of data collection: _____

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
12. ☒ 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.

13. ☒ The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.

    ☐ There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☐ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

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

Administrative Information

15. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.

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GEOLOGIC ASSESSMENT TABLE | ATTACHMENT A

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Stone Oak Commercial GHE

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
S-1	**29°38'45.30"N**	**98°28'38.90"W**	F	20	Kek/Kgr	1454.15	-	-	N46°E	0	-	-	C,O,F,V	10	30	X		X		Floodplain
S-2	**29°38'46.24"N**	**98°28'39.78"W**	F	20	Kek/Kgr	310.85	-	-	N75°W	0	-	-	C,O,F,V	5	25	X		X		Floodplain
S-3	**29°38'47.64"N**	**98°28'39.66"W**	MB	30	Kek/Kgr	3546.95	0.66/0.83/2.0	-	-	0	-	-	C,O,F	5	35	X		X		Hillside
S-4	**29°38'55.50"N**	**98°28'36.08"W**	SC	20	Kgr	0.84	0.42	3.00	-	0	-	-	C,O	5	25	X		X		Hillside
S-5	**29°38'48.62"N**	**98°28'32.58"W**	SF	20	Kek	1.66	0.42	-	-	0	-	-	O,V	5	25	X		X		Drainage
S-6	**29°38'46.49"N**	**98°28'38.95"W**	SC	20	Kgr	0.84	0.42	1.50	-	0	-	-	C,O	5	25	X		X		Floodplain
S-7	**29°38'41.68"N**	**98°28'42.12"W**	SC	20	Kek	1.08	1.08	2.00	N77°E	0	-	-	C,O,V	10	30	X		X		Floodplain
S-8	**29°38'39.83"N**	**98°28'42.43"W**	SC	20	Kek	1.16	1.16	-	-	0	-	-	C,O	10	30	X		X		Drainage
S-9	**29°38'39.58"N**	**98°28'41.92"W**	CD	5	Kek	30.00	15.00	3.50	-	0	-	-	O,V	5	10	X		X		Drainage
S-10	**29°38'38.26"N**	**98°28'43.55"W**	O	5	Kek	-	-	-	N34°E	0	-	-	O,V	5	10	X		X		Streambed
S-11	**29°38'38.67"N**	**98°28'43.68"W**	O	5	Kek	-	-	-	N30°E/N40°W	0	-	-	N	5	10	X		X		Streambed
S-12	**29°38'41.55"N**	**98°28'44.71"W**	CD	5	Kek	8.00	8.00	2.00	-	0	-	-	O,V	5	10	X		X		Drainage
S-13	**29°38'43.04"N**	**98°28'44.97"W**	CD	5	Kek	20.00	20.00	2.00	-	0	-	-	O,V	5	10	X		X		Floodplain

* DATUM: NAD 83

2A TYPE	TYPE	2B POINTS
C	Cave	30
SC	Solution cavity	20
SF	Solution-enlarged fracture(s)	20
F	Fault	20
O	Other natural bedrock features	5
MB	Manmade feature in bedrock	30
SW	Swallow hole	30
SH	Sinkhole	20
CD	Non-karst closed depression	5
Z	Zone, clustered or aligned features	30

8A INFILLING	
N	None, exposed bedrock
C	Coarse - cobbles, breakdown, sand, gravel
O	Loose or soft mud or soil, organics, leaves, sticks, dark colors
F	Fines, compacted clay-rich sediment, soil profile, gray or red colors
V	Vegetation. Give details in narrative description
FS	Flowstone, cements, cave deposits
X	Other materials

12 TOPOGRAPHY
Cliff, Hilltop, Hillside, Drainage, Floodplain, Streambed

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

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

Date

Sheet __1__ of __1__

Attachment A

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

Colliers Engineering & Design

STRATIGRAPHIC COLUMN | ATTACHMENT B

Stone Oak Commercial GHE

Stratigraphic Column

[Hydrogeologic subdivisions modified from Maclay and Small (1976); groups, formations and members modified from Rose (1972); lithology modified from Dunham (1962); and porosity type modified from
Choquette and Pray (1970); CU, confining unit; AQ, aquifer]

Hydrogeologic subdivision			Group, formation, or member			Hydrologic function	Thickness (feet)	Lithology	Field Identification	Cavern development	Porosity/permeability type
Quaternary	Pleistocene		Fluviatile terrace deposits			N/A	5 - 70	Sand, silt, clay, rounded to angular limestone in various proportions; siliceous, coarse; chert and dolomite	Alluvium; lithic sand and silt to sandy gravel	None	Generally porous, moderate to high permeability
Upper Cretaceous	Upper Confining Units		Austin Chalk			CU; rarely AQ	130-150	White to light-tan to gray limestone; chalk and marl; sparsely glauconitic	White, chalky limestone; *Pycnodonte aucella Inoceramus subquadratus*	Rare	Low porosity; rare water production from fractures/ low permeability
			Eagle Ford Group			CU	30-50	Brown, flaggy shale and argillaceous limestone	Thin flagstones; petroliferous	None	Primary porosity lost/low permeability
			Buda Limestone			CU	40-50	Buff, light gray, dense mudstone	Limestone with calcite-filled veins	Minor surface karst	Low porosity/low permeability
			Del Rio Clay			CU	40-50	Blue-green to yellow-brown clay	Fossiliferous; Ilymatogyra arietina	None	None/primary upper confining unit
Lower Cretaceous	I	*Edwards Aquifer*	Georgetown Formation (Kgt)			Karst AQ; non-karst CU	2-20	Reddish-brown, gray to light tan marly limestone	Marker fossil; *Waconella wacoensis*	None	Low porosity/low permeability
	II		*Edwards Group*	*Person Formation (Kep)*	Cyclic and marine members, undivided	AQ	80-90	Mudstone to packstone; *miliolid* grainstone; chert	Thin graded cycles; massive beds to relatively thin beds; crossbeds	Many subsurface; might be associated with earlier karst development	Laterally extensive; both fabric and not fabric/water-yielding
	III				Leached and collapsed members, undivided	AQ	70-90	Crystalline limestone; mudstone to grainstone; chert; collapsed breccia	Bioturbated iron-stained beds separated by massive limestone beds; stromatolitic limestone	Extensive lateral development; large rooms	Majority not fabric/one of the most permeable
	IV				Regional dense member	CU	20-24	Dense, argillaceous mudstone	Wispy iron-oxide stains	Very few; only vertical fracture enlargement	Not fabric/low permeability; vertical barrier
	V			*Kainer Formation (Kek)*	Grainstone member	AQ	50-60	*Miliolid* grainstone; mudstone to wackestone; chert	White crossbedded grainstone	Few	Not fabric/recrystallization reduces permeability
	VI				Kirschberg evaporite member	AQ	50-60	Highly altered crystalline limestone; chalky mudstone; chert	Boxwork voids, with neospar and travertine frame	Probably extensive cave development	Majority fabric selective/one of the most permeable
	VII				Dolomite member	AQ	110-130	Mudstone to grainstone; crystalline limestone; chert	Massively bedded light gray, *Toucasia* abundant	Caves related to structure or bedding planes	Mostly not fabric; some bedding plane fabric/water-yielding
	VIII				Basal nodular member	Karst AQ; not karst CU	50-60	Shaly, nodular limestone mudstone and miliolid grainstone	Massive, nodular and mottled, *Exogyra texana*	Large lateral caves at surface; a few caves near Cibolo Creek	Fabric; stratigraphically controlled/large conduit now at surface; no permeability in subsurface
	Lower confining unit		Upper member of the Glen Rose Limestone			CU; evaporite beds AQ	350 – 500	Yellowish-tan, thinly bedded limestone and marl	Stair-step topography; alternating limestone and marl	Some surface cave development	Some water production at evaporite beds/ relatively impermeable

(Modified from Small and Hanson, 1994)

ATTACHMENT A

Geologic Framework and Hydrogeologic Characteristics for the Subject Property based on published data highlighted above.

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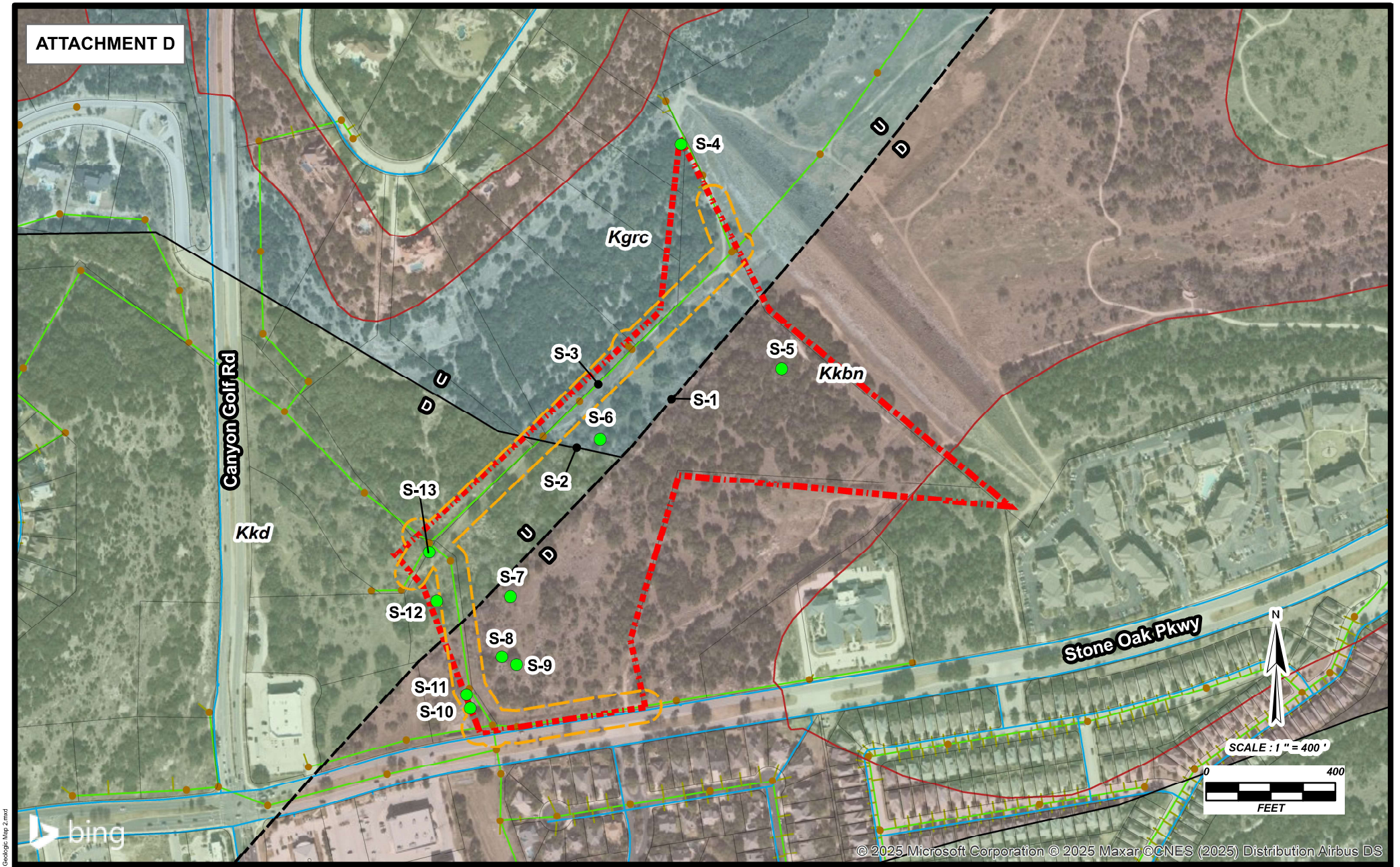
SITE GEOLOGIC MAP | ATTACHMENT D

ATTACHMENT D



Prepared for:
Gordon Hartman Family Foundation
5210 Thousand Oaks Dr. Ste. 1318,
San Antonio, TX 78233

Prepared By:

San Antonio Office
3421 Paesanos Pkwy #200
San Antonio, TX 78231
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Colliers Engineering & Design

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY - GEOLOGIC ASSESSMENT

Subject Property/Site	Geologic Group or Formation	Geologic Faults and Contacts
Identified Features	Kgrc	Type
50-ft Sewer Envelope	Kkbn	contact-certain
SAWS Sewer Manholes	Kkd	fault-certain
SAWS Fire Hydrants		fault-inferred
SAWS Water Mains		
SAWS Sewer Mains		

SITE GEOLOGIC MAP

STONE OAK COMMERCIAL GHE

BEXAR COUNTY, TEXAS

DATE	PROJ NUMBER	DRAWN BY
March 2025	25002948A	E.U.

Date: Mar 20, 2025, 5:27:23 PM User ID: eulrigue
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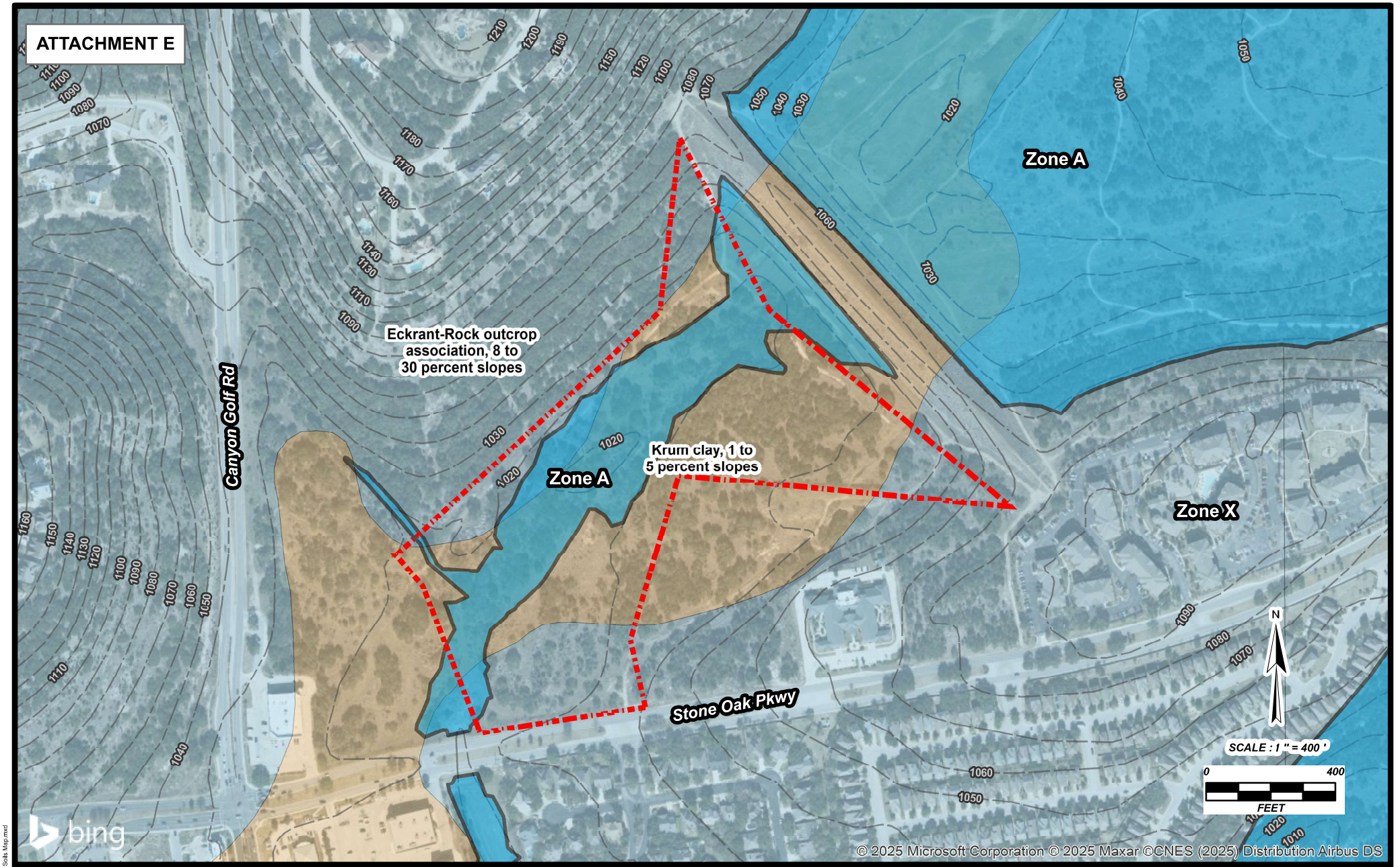
SITE SOILS MAP | ATTACHMENT E

ATTACHMENT E



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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY - GEOLOGIC ASSESSMENT

Subject Property/Site

Bulverde Quadrangle Contours

Bexar County Soils
- Eckrant-Rock outcrop association, 8 to 30 percent slopes
- Krum clay, 1 to 5 percent slopes

FEMA Flood Zones
- A
- AE
- AH
- AO
- X

SITE SOILS MAP

STONE OAK COMMERCIAL GHE

BEXAR COUNTY, TEXAS

DATE	PROJ NUMBER	DRAWN BY
March 2025	25002948A	E.U.

Date: Mar 20, 2025, 5:26:21 PM User ID: eulrigue
File: O:\Users\EUrigue\Stone Oak Commercial GA\Data\SCF\Site Soils Map.mxd

Colliers Engineering & Design

SITE PHOTOGRAPHS

COLLIERS ENGINEERING & DESIGN
3421 PAESANOS PKWY
SAN ANTONIO TEXAS, 78231
MAIN: 210.974.8444
COLLIERSENGINEERING.COM

PROJECT NAME:	SITE LOCATION:	PROJECT NO.:
STONE OAK COMMERCIAL GHE	**SAN ANTONIO, TEXAS**	**25002948A**

Photo No. 1	
Description: A southeastern view of the Subject Property (shown right) and adjoining Salado Creek Watershed SCS Site 8 (shown left).	

Photo No. 2	
Description: A southeast view of the earth dam as seen from its crest.	

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PROJECT NAME:	SITE LOCATION:	PROJECT NO.:
STONE OAK COMMERCIAL GHE	**SAN ANTONIO, TEXAS**	**25002948A**

Photo No. 3

Description:
S-1: A topographic low observed along a geologic fault line. The resulting sedimentary basin has been obscured by vegetation growth and the importation of rocky material (shown on the right).

Photo No. 4

Description:
Rocky material placed on site following the construction of adjoining properties and the diversion of Mud Creek.

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PROJECT NAME:
STONE OAK COMMERCIAL GHE

SITE LOCATION:
SAN ANTONIO, TEXAS

PROJECT NO.:
25002948A

Photo No. 5	
Description: Stormwater outlet pipe observed on the northernmost region of the subject property.	

Photo No. 6	
Description: S-3: One of eleven sanitary sewer manholes observed along the sewer line existing on site.	

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PROJECT NAME:	SITE LOCATION:	PROJECT NO.:
STONE OAK COMMERCIAL GHE	SAN ANTONIO, TEXAS	25002948A

Photo No. 7	
Description: S-4: Horizontal solution cavity observed near the base of a large rock mass. Passageway travels approximately 3 feet in.	

Photo No. 8	
Description: A wide-angle view of the previous feature.	

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PROJECT NAME:	SITE LOCATION:	PROJECT NO.:
STONE OAK COMMERCIAL GHE	SAN ANTONIO, TEXAS	25002948A

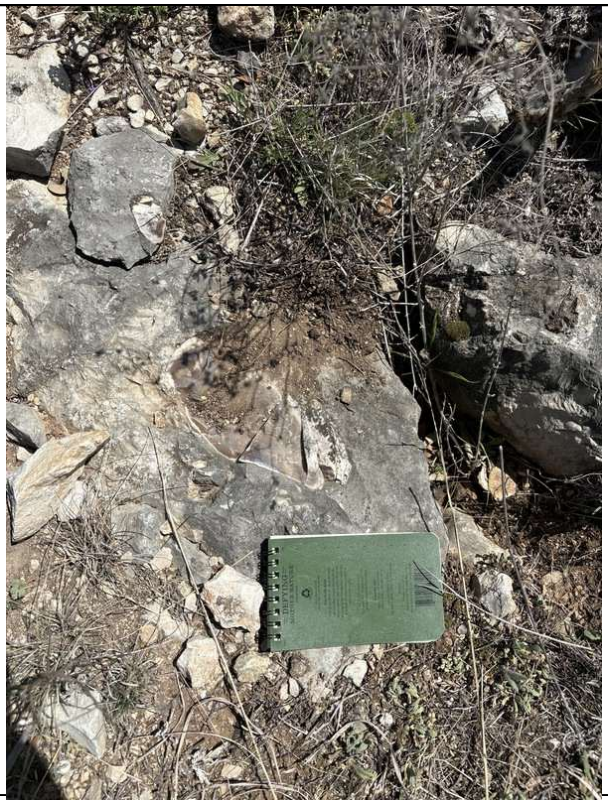
Photo No. 9	
Description: A chert nodule pictured center image within a host rock of the dolomitic member of the Kainer Formation.	

Photo No. 10	
Description: Weathered stylolite patterns observed on a dolomitic rock face.	

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PROJECT NAME:
STONE OAK COMMERCIAL GHE

SITE LOCATION:
SAN ANTONIO, TEXAS

PROJECT NO.:
25002948A

Photo No. 11	
Description: S-5: A solution enlarged fracture formed from the dissolution of the bedding plane surrounding a solution cavity.	

Photo No. 12	
Description: Natural area identified within the floodplain center property.	

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PROJECT NO.:
25002948A

Photo No. 13	
Description: S-6: Apparent solution cavity that is rimmed on all sides by limestone or float rock. Passageway travels approximately 18 inches downward.	

Photo No. 14	
Description: Interior of feature shown to terminate in soil and leaf litter.	

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Photo No. 15	
Description: Open field observed on the northern region of the subject property.	

Photo No. 16	
Description: Outcrop photo showing non-fabric selective fracture porosity of the upper member of the Glen Rose Formation.	

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Photo No. 17	
Description: Karren observed on a carbonate rock face located on the eastern region of the site.	

Photo No. 18	
Description: A bedrock outcrop of the Basal Nodular member of the Kainer Formation. A geologic contact was identified east of this outcrop, outside of the property boundary.	

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Photo No. 19	
Description: A bedrock outcrop of the Dolomitic member of the Kainer formation, identified approximately 20 feet east of the previous picture.	

Photo No. 20	
Description: A small, vertical void identified within a rock mass on the project site. Though karstic in nature, the size does not constitute as a significant feature.	

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Photo No. 21	
Description: S-7: A solution cavity with triangular opening. Main passageway travels 77° E and terminates in soils two feet in.	

Photo No. 22	
Description: A wide-angle view of the feature.	

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Photo No. 23	
Description: Rock material presumed to have been placed on the Subject Property to divert stormwater flow and reduce flood risk.	

Photo No. 24	
Description: Two large pieces of float rock separated by loose cobbles. Vertical pathway between the rocks travels downward three feet before termination in loose cobbles and organic litter.	

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Photo No. 25	
Description: A wide-angle view of the previous extent.	

Photo No. 26	
Description: S-8: Feature is a solution cavity rimmed on all sides with limestone, conglomerates, or sediment clasts. Measures approximately 14 inches around.	

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Photo No. 27	
Description: A closer view of the previous feature. Main axis travels approximately 12 inches before terminating in cobbles.	

Photo No. 28	
Description: Tires and rocky material emplaced along the bank of Mud Creek to direct stormwater flow.	

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Photo No. 29	
Description: Large boulders, loose cobbles, and other rocky debris identified along the bank of Mud Creek.	

Photo No. 30	
Description: S-9: Feature is a NKCD measuring 30 feet by 15 feet. Main axis oriented due north.	

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Photo No. 31	
Description: Bedrock outcrop of the Basal Nodular member of the Kainer Formation observed on the creek bed.	

Photo No. 32	
Description: S-10: View of a fracture set observed at the base of Mud Creek. Dominant trend of joints oriented N34°E.	

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Photo No. 33	
Description: A closer view of the previous feature. A collection of small solution fractures and cavities have been exploited by plant material.	

Photo No. 34	
Description: S-11: Conjugate fracture set identified on the creek bed. The conjugate shear fractures make an angle of ~ 70° with one another and 35° with the principal stress axis (σ1).	

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Photo No. 35	
Description: S-12: Non-karst closed depression identified on the western region of the Subject Property. The feature was approximately 8 feet round and appeared to have been formed from historical land disturbance.	

Photo No. 36	
Description: S-13: Feature is a NKCD formed by a tree. Feature measures approximately 20 feet round.	

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Photo No. 37	
Description: Overhead electrical distribution lines observed on the western region of the Subject Property.	

Photo No. 38	
Description: View of the concrete drainage channel located southwest of the Subject Property.	

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