Contributing Zone Plan

Permit Application

Sandstone Residential Subdivision

9223 Sandstone St

Austin, TX 78737

Prepared for:

JOLLY'S Development Group LLC

10204 Oak Grove Cir

Austin, TX 78736-7747

Prepared by:

SAXON LOOMIS
CONSULTING GROUP

2216 College Avenue Austin, Texas 78704
Phone: (512) -826-3711
F-19735 TBPE FIRM REGISTRATION NO.

Contributing Zone Plan Checklist

x **Edwards Aquifer Application Cover Page (TCEQ-20705)**

x **Contributing Zone Plan Application (TCEQ-10257)**

Attachment A - Road Map
Attachment B - USGS Quadrangle Map
Attachment C - Project Narrative
Attachment D - Factors Affecting Surface Water Quality
Attachment E - Volume and Character of Stormwater
Attachment F - Suitability Letter from Authorized Agent (if OSSF is proposed)
Attachment G - Alternative Secondary Containment Methods (if AST with an alternative method of secondary containment is proposed)
Attachment H - AST Containment Structure Drawings (if AST is proposed)
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Attachment O - Pilot-Scale Field Testing Plan, if BMPs not based on Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs
Attachment P - Measures for Minimizing Surface Stream Contamination

– **Storm Water Pollution Prevention Plan (SWPPP)**

-OR-

x **Temporary Stormwater Section (TCEQ-0602)**

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

x **Copy of Notice of Intent (NOI)**

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

- [x] **Application Fee Form (TCEQ-0574)**
- [x] **Check Payable to the "Texas Commission on Environmental Quality"**
- [x] **Core Data Form (TCEQ-10400)**

TCEQ-20705 Attachments

Edwards Aquifer Application Cover

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: Sandstone Residential Subdivision					**2. Regulated Entity No.:** RN111806766				
3. Customer Name: JOLLY'S Development Group LLC					**4. Customer No.:** CN606180057				
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):**			9.999 AC
9. Application Fee:	$3,000.0		**10. Permanent BMP(s):**			Retention/Irrigation Pond			
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**			N/A			
13. County:	Travis		**14. Watershed:**			Slaughter 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.)	___	_1_	___
Region (1 req.)	___	_2_	___
County(ies)	___	_1_	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	_1_Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	_1_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 ___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.
Thomas Loomis, P.E. Print Name of Customer/Authorized Agent
 09/17/2023 Signature of Customer/Authorized Agent Date

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):	

TCEQ-10257 Attachments

Contributing Zone Plan Application

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), 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 **Contributing Zone Plan Application** is hereby submitted for TCEQ review and Executive Director approval. The application was prepared by:

Print Name of Customer/Agent: Thomas Loomis. P.E.

Date: 9/17/2023

Signature of Customer/Agent:

Regulated Entity Name: Sandstone Residential Subdivision

Project Information

1. County: Travis
2. Stream Basin: Slaughter Creek
3. Groundwater Conservation District (if applicable): #87 - Southwestern Travis County GCD- 11/5/2019
4. Customer (Applicant):

   Contact Person: J.J. Clark
   Entity: JOLLY'S Development Group LLC
   Mailing Address: 10204 Oak Grove Cir
   City, State: Austin Zip: 78736-7747
   Telephone: (512) 650-5455 Fax: N/A

Email Address: tfc.inc@gmail.com

5. Agent/Representative (If any):

Contact Person: Thomas Loomis. P.E.
Entity: Saxon Loomis Consulting Group
Mailing Address: 2216 College Avenue
City, State: Austin Zip: 78704
Telephone: (512) 917-7265 Fax: _____
Email Address: Tom.loomis@saxonloomis.com

6. Project Location:

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

7. ☐ The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

The physicall address of the project is 9223 Sandstone Stree. Which is 2277 ft. south from the intersection of Ledgstone Terrace and Honeycom DR at the end of Sandstone St. The Lat is 30°13'4.68"N and Long is 97°55'36.12"W

8. ☒ **Attachment A - Road Map**. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.

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

☒ Project site boundaries.
☒ USGS Quadrangle Name(s).

10. ☐ **Attachment C - Project Narrative**. A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:

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

11. Existing project site conditions are noted below:

☐ Existing commercial site
☐ Existing industrial site
☐ Existing residential site
☐ Existing paved and/or unpaved roads
☒ Undeveloped (Cleared)
☐ Undeveloped (Undisturbed/Not cleared)
☐ Other: _____

12. The type of project is:

☒ Residential: # of Lots: 9
☐ Residential: # of Living Unit Equivalents: _____
☐ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 9.999 Acres

    Total disturbed area: 9.999 Acres

14. Estimated projected population: N/A

15. The amount and type of impervious cover expected after construction is complete is shown below:

Table 1 - Impervious Cover

Impervious Cover of Proposed Project	***Sq. Ft.***	***Sq. Ft./Acre***	***Acres***
Structures/Rooftops	32,000.00	÷ 43,560 =	0.735
Parking	3,200.00	÷ 43,560 =	0.073
Other paved surfaces	46,111.00	÷ 43,560 =	1.059
Total Impervious Cover	81,311.00	÷ 43,560 =	1.867

Total Impervious Cover 81,311.00 **÷ Total Acreage** 43,5556.44 **X 100 =** 18.67**% Impervious Cover**

16. ☒ **Attachment D - Factors Affecting Surface Water Quality**. A detailed description of all factors that could affect surface water quality is attached. If applicable, this includes the location and description of any discharge associated with industrial activity other than construction.

17. ☒ Only inert materials as defined by 30 TAC 330.2 will be used as fill material.

For Road Projects Only

Complete questions 18 - 23 if this application is exclusively for a road project.

☒ N/A

18. 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.

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

    ☐ Concrete
    ☐ Asphaltic concrete pavement
    ☐ Other: _____

20. Right of Way (R.O.W.):

    Length of R.O.W.: _____ feet.
    Width of R.O.W.: _____ feet.
    L x W = ____Ft^2 ÷ 43,560 Ft^2/Acre = _____ acres.

21. Pavement Area:

    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.

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

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

23. ☐ 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

24. ☒ **Attachment E - 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 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

25. ☒ Wastewater is to be discharged in the contributing zone. Requirements under 30 TAC §213.6(c) relating to Wastewater Treatment and Disposal Systems have been satisfied.

☐ N/A

26. Wastewater will be disposed of by:

☒ On-Site Sewage Facility (OSSF/Septic Tank):

☐ **Attachment F - 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):

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

☐ Existing.
☐ Proposed.

☒ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

Complete questions 27 - 33 if this project includes the installation of AST(s) with volume(s) greater than or equal to 500 gallons.

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
1			
2			
3			

AST Number	*Size (Gallons)*	*Substance to be Stored*	*Tank Material*
4			
5			

Total x 1.5 = _____ Gallons

28. ☐ The AST will be placed within a containment structure that is sized to capture one and one-half (1 1/2) times the storage capacity of the system. For facilities with more than one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

    ☐ **Attachment G - Alternative Secondary Containment Methods**. Alternative methods for providing secondary containment are proposed. Specifications showing equivalent protection for the Edwards Aquifer are attached.

29. Inside dimensions and capacity of containment structure(s):

Table 3 - Secondary Containment

Length (L)(Ft.)	*Width(W)(Ft.)*	*Height (H)(Ft.)*	*L x W x H = (Ft3)*	*Gallons*

Total: _____ Gallons

30. Piping:

☐ All piping, hoses, and dispensers will be located inside the containment structure.
☐ Some of the piping to dispensers or equipment will extend outside the containment structure.
☐ The piping will be aboveground
☐ The piping will be underground

31. ☐ The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of: _____.

32. ☐ **Attachment H - AST Containment Structure Drawings**. A scaled drawing of the containment structure is attached that shows the following:

☐ Interior dimensions (length, width, depth and wall and floor thickness).
☐ Internal drainage to a point convenient for the collection of any spillage.
☐ Tanks clearly labeled
☐ Piping clearly labeled

☐ Dispenser clearly labeled

33. ☐ Any spills must be directed to a point convenient for collection and recovery. Spills from storage tank facilities must be removed from the controlled drainage area for disposal within 24 hours of the spill.

    ☐ In the event of a spill, any spillage will be removed from the containment structure within 24 hours of the spill and disposed of properly.

    ☐ In the event of a spill, any spillage will be drained from the containment structure through a drain and valve within 24 hours of the spill and disposed of properly. The drain and valve system are shown in detail on the scaled drawing.

Site Plan Requirements

Items 34 - 46 must be included on the Site Plan.

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

    Site Plan Scale: 1" = 40'.

35. 100-year floodplain boundaries:

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

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

    The 100-year floodplain boundaries are based on the following specific (including date of material) sources(s): FEMA MAP PANEL NO. 48453C0560J, JANUARY 1, 2020.

36. ☒ 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, etc. are shown on the site plan.

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

37. ☒ A drainage plan showing all paths of drainage from the site to surface streams.

38. ☒ The drainage patterns and approximate slopes anticipated after major grading activities.

39. ☒ Areas of soil disturbance and areas which will not be disturbed.

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

41. ☒ Locations where soil stabilization practices are expected to occur.

42. ☐ Surface waters (including wetlands).

    ☒ N/A

43. ☒ Locations where stormwater discharges to surface water.

    ☐ There will be no discharges to surface water.

44. ☐ Temporary aboveground storage tank facilities.

    ☒ Temporary aboveground storage tank facilities will not be located on this site.

45. ☐ Permanent aboveground storage tank facilities.

    ☒ Permanent aboveground storage tank facilities will not be located on this site.

46. ☒ Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

Practices and measures that will be used during and after construction is completed.

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

    ☐ N/A

48. ☐ 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

49. ☒ 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

50. 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.

51. 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 I - 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.

52. ☒ **Attachment J - 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.

53. ☐ **Attachment K - 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.

54. ☐ **Attachment L - BMPs for Surface Streams**. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.

☒ N/A

55. ☒ **Attachment M - Construction Plans**. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

☐ N/A

56. ☒ **Attachment N - Inspection, Maintenance, Repair and Retrofit Plan**. A site and BMP specific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan fulfills all of the following:

☒ Prepared and certified by the engineer designing the permanent BMPs and measures
☒ Signed by the owner or responsible party
☒ Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
☒ Contains a discussion of record keeping procedures

☐ N/A

57. ☐ **Attachment O - 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

58. ☒ **Attachment P - 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 result in water quality degradation.

☐ N/A

Responsibility for Maintenance of Permanent BMPs and Measures after Construction is Complete.

59. ☒ 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.

60. ☒ 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.

Administrative Information

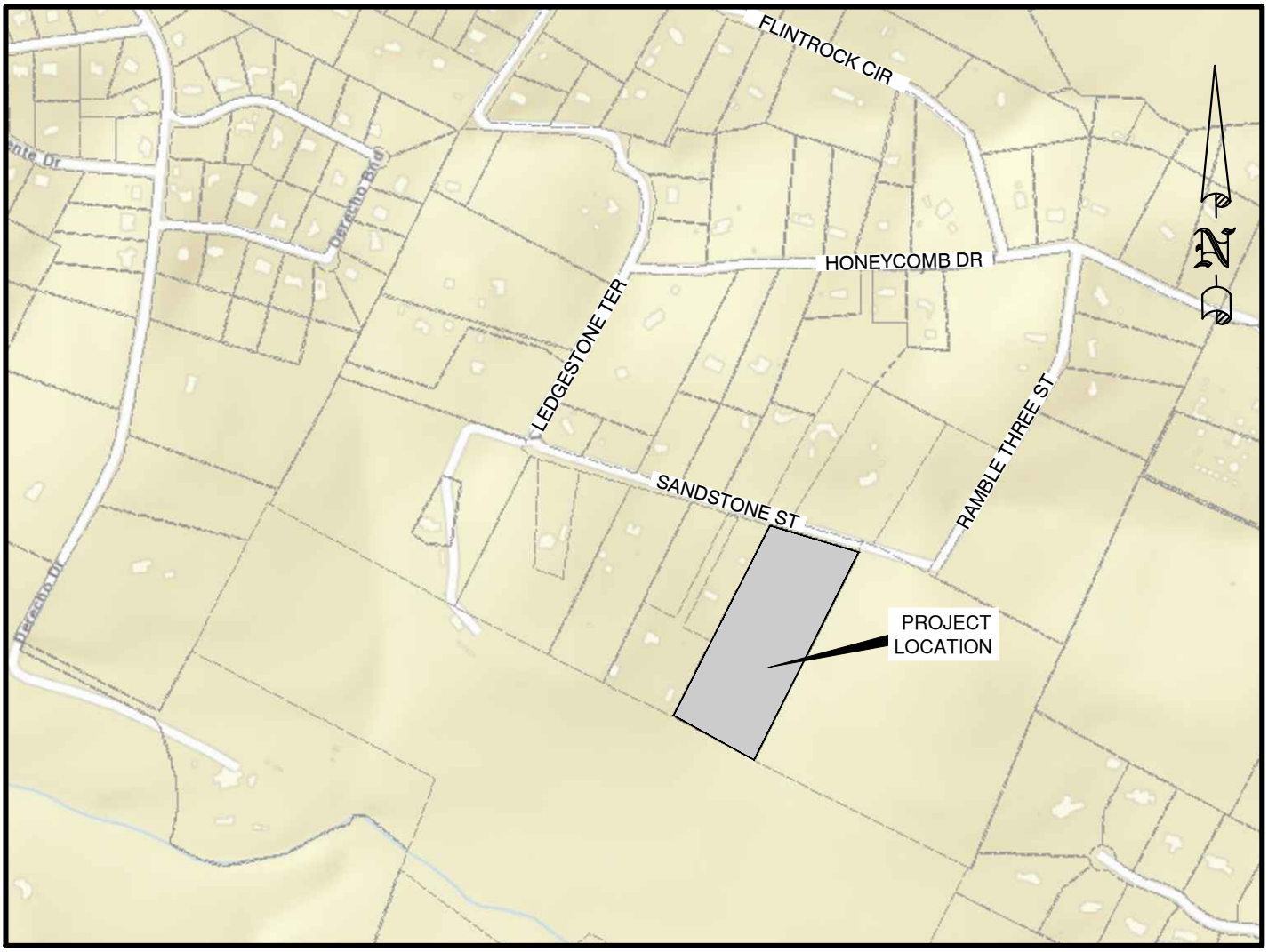
61. ☒ Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.

62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

63. ☒ The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.

☒ The Temporary Stormwater Section (TCEQ-0602) is included with the application.

Attachment A – Road Map



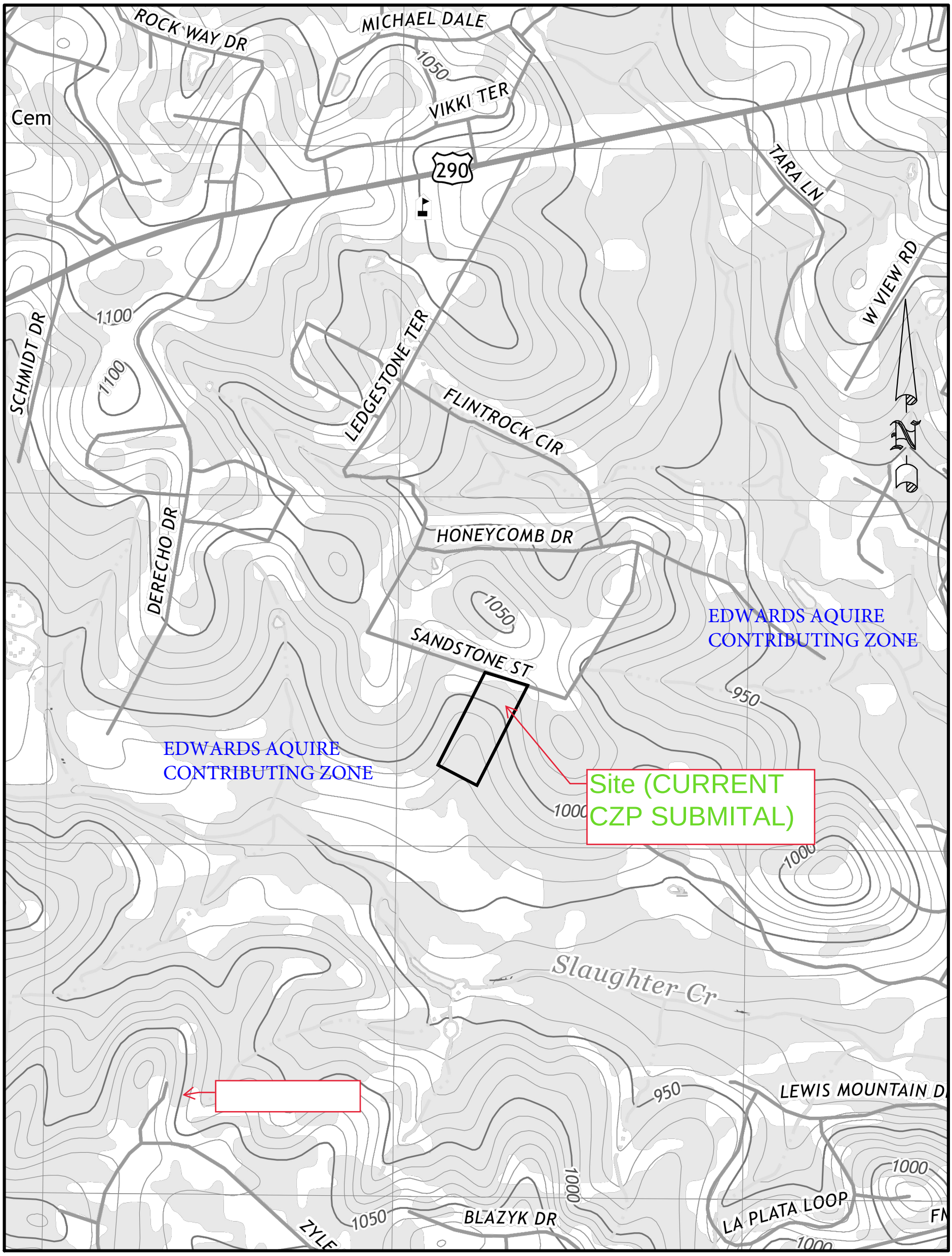
MAP ID: 041557

LOCATION MAP
NTS

ATTACHMENT A
LOCATION MAP
SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE ST, AUSTIN, TX 78737

SAXON LOOMIS
CONSULTING GROUP
2216 College Ave.
Austin, Texas 78704
Phone: (512) 550-0500
TBPE
Firm Registration
No. F-19735

Attachment B– USGS Quadrangle Map



USGS QUADRANGLE MAP
9223 SANDSTONE ST
AUSTIN , TEXAS 78737

SAXON LOOMIS
CONSULTING GROUP
2216 College Ave.
Austin, Texas 78704
Phone: (512) 550-0500
TBPE
Firm Registration
No. F-19735

Attachment C- Project Narrative

The proposed project is located at 9223 Sandstone Street, Austin, Texas 78737 and in the 2-mile ETJ of the City of Austin. Presently, this 9.999-acres site is undeveloped. The proposed subdivision is a nine-lot subdivision with the goal of constructing single-family residences on each lot. The proposed impervious cover for each lot will be up to 7,000 sf. The maximum total impervious cover percentage for the property as a whole will be less than 20 %.

The original tract of land is undeveloped land. The site area is 9.999 acres, and the total disturbed area is 4.57 acres. The predeveloped impervious cover was 0 sq.ft. the total proposed impervious cover will be 1.867 acres, which is 18.67%. The impervious cover summary has been provided in contributing zone plan application, Table 1- Impervious cover.

Three offsite and onsite drainage areas drain to and within this project site. The total offsite drainage area is 40.13 acres. These flows drain onto the subject property in a generally diffuse manner (sheet flow). This site is not located within the floodplain boundaries of any FEMA-mapped creek or local creek with a significant drainage area.

Attachment D – Factors Affecting Water Quality

Potential sources of pollution that may be expected to affect the quality of the stormwater discharges from the construction site include the following:

- Soil erosion due to the clearing of the site for roads, buildings, and drainage structures.
- Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
- Hydrocarbons from asphalt paving operations.
- Miscellaneous trash and litter from construction.
- Concrete truck washout.

Attachment E – Volume and Character of Stormwater

Stormwater runoff will increase as a result of this overall development.

For a 10-year storm event, the proposed subdivision has an existing total flow of 47.10 cfs, and after full development will generate approximately 62.4 cfs of runoff.

For a 100-year storm event, the proposed subdivision has an existing total flow of 88.2 cfs, and after full development will generate approximately 111.3 cfs of runoff.

Design flow rates utilized in this investigation represent existing watershed conditions for subbasins draining to and within the subject property. Hydrologic modeling in support of this investigation was performed using the U.S. Corps of Engineers hydrologic model HEC-HMS (Version 4.9).

Model parameters were developed as follows:

- Watershed CN values were derived based on the area-weighted presence of the multiple soil types (and their corresponding hydrologic soils group designations) located within each of the individual modeled sub-basins.

- The 100-year design rainfall volume was input to the model using a Frequency Storm distribution and the Atlas 14 100-yr rainfall volume (12.8 inches for the 24-hour 100-yr storm).

- Times of concentration were developed using methodologies provided in USDA TR-55 reflecting sheet flow, shallow concentrated flow, and channelized flow lengths and velocities.

Attachment F- Suitability Letter from Authorized Agent (if OSSF is proposed)

Attachment G - Alternative Secondary Containment Methods.

N/A

Attachment H - AST Containment Structure Drawings

N/A

Attachment I - 20% or Less Impervious Cover Waiver

N/A

Attachment J – BMPs for Upgradient Stormwater

This CZP submittal for this project is located within the Contributing Zone of the Edwards Aquifer. Upgradient stormwater enters the site from the north, west and east via two existing tributaries running southeasterly and northwest through the site. The stormwater is then conveyed to an existing stream that is a tributary of Slaughter Creek.

All upgradient stormwater is conveyed around the proposed development and into the tributary of Slaughter Creek through sheet flow. See Drainage Plans in the Construction Plans for more details and drainage calculations.

Attachment K – BMPs for On-Site Stormwater

The area included in the CZP application is for the Sandstone Residential Subdivision. This site is used for low density, single-family residential development and has an impervious cover of 20% or less. Therefore, BMPs for on-site stormwater are not required, as specified in TAC Chapter 213.5. However, a Retention/Irrigation system is being used to treat the proposed impervious cover for the site.

Attachment L – BMPs for Surface Streams

N/A

Attachment M – Construction Plans

See Attached Construction Plans

Attachment N – Inspection, Maintenance, Repair and Retrofit Plan

Inspections

Designated and qualified person(s) shall inspect BMPs every seven days, and within 24 hours after a storm event greater than 0.5 inches of rainfall. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of the Storm Water TPDES data for a period of three years after the date of the inspection. A copy of the Inspection Report Form is provided in the Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion. (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, and (6) concrete truck rinse-out pit for signs of potential failure. Deficiencies noted during the inspection will be corrected and documented within seven (7) calendar days following the inspection or before the next anticipated storm event if practicable.

Attachment O - Pilot-Scale Field Testing Plan, if BMPs not based on Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs

N/A

Attachment P – Measures for Minimizing Surface Stream Contamination

All flows on site and from off-site are conveyed to tributaries of Slaughter Creek itself, through natural grass swales. Along with the 20% or less impervious cover for the site at full development, contamination of surface streams should be minimized.

TCEQ-0602 Attachments

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: Thomas Loomis. P.E.

Date: 9/17/2023

Signature of Customer/Agent:

Regulated Entity Name: Sandstone Residential Subdivision

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: Slaughter 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:

☒ 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.

☒ 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.

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

☒ 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.

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

9. ☒ **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. ☒ **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.

☐ 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.

☒ N/A

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

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

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

Soil Stabilization Practices

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

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

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

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

Administrative Information

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

21. ☒ If any geologic or manmade features, such as caves, faults, sinkholes, etc., are discovered, all regulated activities near the feature will be immediately suspended. The appropriate 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. ☒ 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.

TCEQ-0602 Attachments

Sandstone Residential Subdivision

Temporary Stormwater Section

Attachment A - Spill Response Actions

Attachment A - Spill Response Actions

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

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

Education

1. Be aware that different materials pollute in different amounts. Make sure that each employee knows what a "significant spill" is for each material they use, and what is the appropriate response for "significant" and "insignificant" spills. Employees should also be aware of when spills must be reported to the TCEQ. Information is available in 30 TAC 327.4 and 40 CFR 302.4.
2. Educate employees and subcontractors on potential dangers to humans and the environment from spills and leaks.
3. Hold regular meetings to discuss and reinforce appropriate disposal procedures (incorporate into regular safety meetings).
4. Establish a continuing education program to indoctrinate new employees.
5. Have a contractor's superintendent or representative oversee and enforce proper spill prevention and control measures.

General Measures

1. To the extent that the work can be accomplished safely, spills of oil, petroleum, products, substances listed under 40 CFR parts 110, 117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
2. Store hazardous materials and waste in covered containers and protect from vandalism.
3. Place a stockpile of spill cleanup materials where it will be readily accessible.
4. Train employees in spill prevention and cleanup.
5. Designate responsible individuals to oversee and enforce control measures.
6. Spills should be covered and protected from stormwater runoff during rainfall to the extent that is don’t compromise cleanup activities.
7. Do not bury or wash spills with water.
8. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMP's.
9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.

10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.
12. Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

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

Minor Spills

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

Semi-Significant Spills

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

Spills should be cleaned up immediately using the following steps:

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 the spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

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. 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.
2. Notification should first be made by telephone and followed up with a written report.
3. The services of a spill's contractor or a Haz-Mat team should be obtained immediately. Construction personnel should not attempt to clean up until the appropriate and qualified staff have arrived at the job site.
4. Other agencies which may need to be consulted include, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
5. More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tceq.texas.gov/response/

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 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 them 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 the 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) The store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all of 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 run on of stormwater and the runoff of spills.

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

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

Attachment B - Potential Sources of Contamination

Attachment B - Potential Sources of Contamination

Potential Source:	Asphalt products were used on this project.
Preventative Measure:	After placement of asphalt, emulsion or coatings, the contractor will be responsible for immediate cleanup, should unexpected rain occur. For the duration of the asphalt curing time, the contractor will maintain standby personnel and equipment to contain any asphalt wash-off, should an unexpected rain occur. The contractor will be instructed not to place asphalt products on the ground within 48 hours of a forecasted rain event.

Potential Source:	Oil, grease, fuel, and hydraulic fluid contamination from construction equipment and vehicle drippings
Preventative Measure:	Vehicle maintenance, when possible, will be performed within the construction staging areas.

Potential Source:	Miscellaneous trash and litter from construction
Preventative Measure:	Trash containers will be placed throughout the site to encourage proper trash disposal.

Potential Source:	Construction debris
Preventative Measure:	Construction debris will be monitored daily by contractors. Debris will be collected weekly and placed in disposal bins. Situations requiring immediate attention will be addressed on a case-by-case basis.

Attachment C - Sequence of Major Activities

Attachment C - Sequence of Major Activities

The sequence of major activities will be based on the following:

- Installation of Erosion/Sedimentation Controls (approx. 3.42 AC)
- Installation of underground utilities (approx. 0.37 AC)
- Revegetation of disturbed areas (approx. 3.42 AC)
- Removal and proper disposal of erosion/sedimentation controls once permanent vegetation is established (approx. 3.42 AC)

Please refer to the Erosion and Sedimentation Control Plan for measures to be implemented throughout the construction phase.

Attachment D - Temporary Best Management Practices and Measures

Attachment D - Temporary Best Management Practices and Measures

Upgradient water will be intercepted through channels along the west and east side of the property and directed to a tributary of Slaughter Creek. Silt fences and rock berms will be placed along the channel.

Temporary measures are intended to provide a method of slowing the flow or runoff from the construction site in order to allow sediment and suspended solids to settle out of the water. By containing the sediment and solids within the site, they will not enter surface streams and/or sensitive features.

BMP measures utilized in this plan are intended to allow storm water to continue downstream after passing through for treatment. This will allow stormwater runoff to continue downstream to any existing sensitive features.

Site Preparation:

The clearing and grading of the land will disturb the largest area of soil, so erosion control measures will be installed as the first step in construction. The methodology for pollution prevention of all on-site stormwater will include a) the erection of silt fences along the downgradient boundary of the construction activities, b) installation of rock berms with silt fence covering downgradient from areas of concentrated stormwater flow, c) installation of stabilized construction entrances to reduce the dispersion of sediment from the site, and d) installation of a construction staging area.

Construction:

All installed erosion control measures will be inspected, and if necessary, repaired before any additional construction begins, as well as periodically throughout the construction process. The contractor will be responsible for all maintenance of erosion control measures, as well as the installation of all remaining on-site control measures, including the concrete truck washout, as necessary.

Attachment E - Request to Temporarily Seal a Feature

N/A

Attachment F - Structural Practices

Attachment F - Structural Practices

The following structural measures will be installed prior to the initiation of site construction:

- Silt fences along the downstream boundary of all construction activity, and rock berms with silt fence covering for secondary protection.
- Installation of stabilized construction entrances and construction staging areas
- Installation of concrete truck washout pits, as required.

Attachment G - Drainage Area Map

SEE CONSTRUCTION PLANS

Attachment H - Temporary Sediment Pond(s) Plans and Calculations

N/A

Attachment I - Inspection and Maintenance for BMPs

Attachment I - Inspection and Maintenance for BMPs

Inspections

Designated and qualified person(s) shall inspect BMPs every seven days, and within 24 hours after a storm event greater than 0.5 inches of rainfall. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations, and actions taken as a result of the inspection shall be recorded and maintained as part of the Storm Water TPDES data for a period of three years after the date of the inspection. A copy of the Inspection Report Form is provided in the Storm Water Pollution Prevention Plan.

As a minimum, the inspector shall observe: (1) significant disturbed areas for evidence of erosion. (2) storage areas for evidence of leakage from the exposed stored materials, (3) structural controls (rock berm outlets, silt fences, drainage swales, etc.) for evidence of failure or excess siltation (over 6 inches deep), (4) vehicle exit point for evidence of off-site sediment tracking, (5) vehicle storage areas for signs of leaking equipment or spills, and (6) concrete truck rinse-out pit for signs of potential failure. Deficiencies noted during the inspection will be corrected and documented within seven (7) calendar days following the inspection or before the next anticipated storm event if practicable.

Project Name:_____ Customer Name:_____

Permit Number: TXR15_____ Date of Inspection:_____

SWPPP INSPECTION CHECKLIST
CONSTRUCTION ACTIVITIES

Inspection Frequency: (**Every 7 Days, 14 Day or Post Rain**) _____ Post Significant Rain Fall: N/A / Rainfall Amount: _____ Is Inspector qualified to perform inspections? **Yes** Are inspector qualifications present in SWPPP? **Yes** Was the entire site inspected? _____ (If no, please list conditions limiting the scope of the inspection)

Location of outfall(s) _____

General Note:

_____

_____

Please note if the following areas or controls were observed in compliance during the course of the inspection, if not, see list in BMP's working section:

Do the following items comply with SWPPP regulation?	**Yes / No Note Corrective Action Taken**
Copy of the NOI with the SWPPP?	
Construction Site Notice posted at entrance(s) to Site? Copy of NOI poste at the site entrance(s)?	
Do storage areas show signs of erosion?	
Do disturbed areas show signs of erosion?	
Are there signs of erosion at outfalls?	
BMPs working properly? (if no, make detailed list of issue locations in area of concern/corrective action section below)	
Do BMPs need maintenance? (if yes, make detailed list of issue locations in area of concern/corrective action section below)	
Are new BMPs required on-site?	
Did the site map / BMP map get updated?	

Project Name:_____ Customer Name:_____

Permit Number: TXR15_____ Date of Inspection:_____

Control	Complaint (Yes – No – N/A)
Construction Exit	
Concrete Washout	
Trash Receptacles	
Portable Toilets	
Material Storage Area	
Waste Storage Area	
Silt Fence	
Rock Berm	
Sediment Traps	
Drainage Channels	

Control	Complaint (Yes – No – N/A)
Outfall/Outlet Protections	
Inlet Protection	
Vegetated Buffer Strips	
Detention Pond	
Filtration Pond	
Retention Pond	
Tree Protection	
Geo-Textiles	
Site Stabilization	
No off-site discharge	

Inspector Qualifications (Additionally included in the SWPPP)

_____ (Qualified Inspector)

-
-
-
-
- Qualified Inspector for Storm Water Inspections in accordance with TCEQ and EPA Regulations

"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 the 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 this 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 have read and understand the information laid out in the SWPPP for this site, TPDES regulations and the rules and regulations governing TCEQ storm water inspections.

_____ _____ _____

Name Title Date

Project Name: _____ Customer Name:_____
Permit Number: TXR15_____ Date of Inspection:_____

Areas of Concern/Corrective Action

	Issue	Location	Corrective Action	Action	Date
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					

Silt Fence (SF) Rock Berm (RB) Construction Exit (SCE) Concrete Washout CWO) Inlet Protection (IP) Vegetated Buffer (VB)

Discharged Pollutant Comments (Location, possible causes, etc.):

Issue	Location	Corrective Action	Action	Date

Attachment J – Schedule of Interim and Permanent Soil Stabilization

Attachment J – Schedule of Interim and Permanent Soil Stabilization

STABILIZATION PRACTICES

Installation and utilization of stabilization measures will begin as soon as practicable in any portion of the site where construction activities have either temporarily or permanently ceased. Stabilization measures must be initiated immediately, where construction activities have temporarily ceased and will not resume for a period exceeding 14 calendar days. The term “immediately” is used to define the deadline for initiating stabilization measures. In the context of this requirement, “immediately” means as soon as practicable, but no later than the end of the next workday, following the day when the earth- disturbing activities have temporarily or permanently ceased. Temporary / Interim stabilization methods should be utilized in situations where development and/or construction practices have ceased temporarily, and permanent stabilization methods should be utilized after development and/or construction activities have been completed.

Disturbed areas to receive paving, landscape treatment and turfing shall be covered by erosion control blankets. All other rough graded slopes, disturbed ground surfaces and discharge channels shall receive seeding with native seed mix and then covered by erosion control blankets or straw mulching or other approved BMP. Stockpiled materials shall be seeded and covered by soil erosion blankets. A storm water perimeter control device shall be established at a minimum distance of 10 feet from the toe of the stockpile. The materials excavated from utility trenching shall be protected from up gradient storm run- on. The excavated materials shall be covered by erosion control blankets.

TEMPORARY STABILIZATION

Temporary (Interim) Stabilization

Seed Specification: INTERIM SEEDING: N/A

Temporary vegetation - establishment of natural grassy areas that are intended to l be re- disturbed during later phases of construction or development. Temporary vegetation is usually accomplished by spreading rapidly growing grass via the process of hydro-seeding or hydro-mulching.

Mulching - the process of spreading a ground layer of chipped wood or brush to protect disturbed and unstable topsoil against erosion by storm water runoff by slowing run-off velocities, promoting sediment deposition, filtering sediment, and promoting increased ground infiltration rates. Mulching also provides the added benefits of reducing soil water loss, which is beneficial when attempting to establish

newly planted vegetation. Applied in thicker layers and the size of mulch chips, mulching can also be used to prevent erosion on areas of steeper slopes.**Geo-textiles** - Geo-textiles (i.e., fiber matting, coir, filter fabrics) are porous materials or ground coverings which allow storm water run-off to pass through but block the passage of most sediment and larger suspended particles. Geo-textiles matting can be used on newly seeded slopes to lessen seed and soil loss, or next to riprap to prevent run-off from washing out the soil beneath.

Vegetative buffer strips - areas where vegetation has been left undisturbed or where vegetation has been re-established, typically in long, narrow strips. Buffer strip areas retard the speed of storm water runoff, promote sediment filtration, increase ground infiltration, and improve site aesthetics. Vegetative buffer strips are extremely effective on steep, unstable slopes, or within floodplains, and along the bank slopes of waterways.

Tree Protection - is a required practice by most regulatory agencies. Only trees of certain sizes are required to be protected. Refer to your specific governing jurisdiction for specific regulations. However, even if tree protection is not required, regulated practice is still and important and cost-effective erosion control method. (reference: **Preservation of mature vegetation** for specific details)

Preservation of mature vegetation - provides a natural buffer zone and promotes improved storm water run-off quality by helping minimize topsoil erosion as well as providing cost effective aesthetic benefits. Established, mature vegetation can withstand and tolerate heavier storm events than newly planted vegetation, due to a deeper, more established root system. It is necessary that preservation of existing, mature vegetation be planned for in advance of site construction. Areas to be preserved should be clearly marked and possibly even barricaded to prevent damage during construction.

Interim Stabilization Practices:	When Implemented:	Located:	Purpose:	In Use:
Temporary Vegetation	Throughout site development	N/A	Temporary vegetation growth is recommended to reduce soil erosion in areas that are not actively under development.	**NO**
Mulching	Throughout site development	N/A	Mulching is utilized to reduce top-soil erosion and to prevent soil water loss. This method can be used in planted/landscaped areas to prevent soil movement and water loss until vegetation is well established.	**NO**
Geo-textiles	Throughout site development	N/A	Geo-textiles (i.e. matting, Curlex) can be used to temporarily stabilize soil in areas where it is not feasible to utilize mulching or temporary vegetation	**NO**

Vegetative Buffer Strips	Throughout site development	Located at perimeters of the site and along natural creek beds	Vegetative buffer strips will be utilized throughout the site for both drainage and aesthetic purposes, as well as for the secondary benefits of improved water quality due to sediment deposition and improved infiltration.	**NO**
Tree Protection	Throughout site development	Located around all desirable trees to be retained, per plan	Desirable trees throughout the site are to be protected during and after construction to promote both water quality and aesthetics.	**YES**
Preservation of Existing Mature Vegetation	Throughout site development	Desirable existing vegetation to be preserved throughout the site, per plan	Desirable existent mature vegetation (i.e. under-story) is to be preserved throughout the site to promote water quality via sediment deposition and improved infiltration.	**YES**

PERMANENT STABILIZATION

Permanent Stabilization

Permanent drainage structures, including concrete curbs and gutters, concrete pavement, asphalt pavement, drainage swales, drainage ditch, turfing, vegetative strips, concrete culvert, and pipe culvert will provide permanent erosion control at this project site. After initial stabilization, the Contractor shall inspect the site once a month until project acceptance as been granted by the Customer Representative/Contract Manager. Unsatisfactory stabilized areas shall be future stabilized at the request of the Customer Representative/Contract Manager. Final or permanent stabilization shall be in accordance with the specification sections: [2300 Earthwork], [02916 Mulching for erosion control],[02921 Seeding],[02922 Sodding],[02923 Sprigging],[02919 Topsoil], [02924 Seeding] and [02925or 02926 Establishment of Turf].

Seed Specification: PERMANENT SEEDING: Permanent stabilization to be according to site specific re- stabilization / landscape plan and / or the San Antonio Ordinances.

Permanent vegetation - the process of establishing a permanent vegetative ground cover that helps reduce topsoil erosion by holding and stabilizing soil particles, which in turn slows storm water run-off velocity, promotes ground infiltration, promoting sediment deposition, and by providing secondary aesthetic benefits. Permanent vegetation is established by planting and seeding in areas where the soil needs stabilization due to existing soil structure, texture, or steeper grade slopes. Permanent vegetation can include trees, grasses, and shrubs.

Mulching - the process of spreading a ground layer of chipped wood or brush to protect disturbed and unstable topsoil against erosion by storm water runoff by slowing run-off velocities, promoting sediment deposition, filtering sediment, and promoting increased ground infiltration rates. Mulching also provides the added benefits of reducing soil water loss, which is beneficial when attempting to establish newly planted vegetation. Applied in thicker layers and the size of mulch chips, mulching can also be used to prevent erosion on areas of steeper slopes.

Geo-textiles - Geo-textiles (i.e. fiber matting, coir, filter fabrics) are porous materials or ground coverings which allow storm water run-off to pass through, but block the passage of most sediment and larger suspended particles. Geo-textiles matting can be used on newly seeded slopes to lessen seed and soil loss, or next to riprap to prevent run-off from washing out the soil beneath.

Sod stabilization - the practice of installing grass sod strips or squares over a disturbed or unprotected topsoil surface to provide instant protection of soil from the erosive forces of storm water run-off. Sod stabilization is an effective and feasible practice in areas where construction activities are complete increasing the chances that the grass cover will have the opportunity to become established. This measure requires maintenance such as the installation of sub-sod topsoil and frequent watering to promote sod growth.

Hydro-mulch/seeding stabilization - the practice of applying seed mixtures hydraulically with paper or wood mulch material over a disturbed or unprotected topsoil surface to provide vegetative protection of soil from the erosive forces of storm water run-off. Hydro- mulch/seeding stabilization is an effective and feasible practice in areas where construction activities are complete increasing the chances that the grass cover will have the opportunity to become established. This measure requires maintenance such as the placement of topsoil and frequent watering to promote sod growth.

Vegetative buffer strips - areas where vegetation has been left undisturbed or where vegetation has been re-established, typically in long, narrow strips. Buffer strip areas retard the speed of storm water runoff, promote sediment filtration, increase ground infiltration, and improve site aesthetics. Vegetative buffer

Paved or impervious surfaces - provides permanent stabilization by protecting soil from exposure of impact erosion by rainfall with a layer of concrete, asphalt, or other impervious cover.

Preservation of mature vegetation - provides a natural buffer zone and promotes improved storm water run-off quality by helping minimize topsoil erosion as well as providing cost effective aesthetic benefits. Established, mature vegetation can withstand and tolerate heavier storm events than newly planted vegetation, due to a deeper, more established root system. It is necessary that preservation of existing, mature vegetation be planned for in advance of site construction. Areas to be preserved should be clearly marked and possibly even barricaded to prevent damage during construction.

Permanent Stabilization Practices:	**When Implemented:**	**Located:**	**Purpose:**	**In Use:**
Permanent Vegetation (i.e. grasses, shrubbery, trees)	Installed during the last phase of site development	To be located throughout site, per plan	Installation of permanent vegetation is a method of reducing and preventing soil erosion, improved infiltration and increases site aesthetics.	**YES**
Mulching	Installed during the last phase of site development	N/A	Mulching is utilized to reduce topsoil erosion and to prevent soil water loss. This method can be used in planted/landscaped areas to prevent soil movement and water loss until vegetation is well established.	**NO**
Geo-textiles	Installed during the last phase of site development	To be located in areas of significant soil disturbance	Geo-textiles are utilized to reduce soil erosion and promote vegetation growth in high slope and/or high water flow areas.	**NO**
Sod Stabilization	Installed during the last phase of site development	To be located throughout the site, per landscaping plan	Sod stabilization is used to establish a complete and instant vegetative ground cover in an effort to prevent topsoil erosion.	**YES**
Hydro-mulch/Seeding	Installed during the last phase of site development	To be used throughout the site, per landscaping plan	Hydro-mulch/seeding stabilization is used to establish a complete vegetative ground cover in an effort to prevent topsoil erosion.	**YES**

Stabilization				
Vegetative Buffer Strips	Installed during the last phase of site development	To be located at perimeter of site	Vegetative buffer strips will be utilized throughout the site for both drainage and aesthetic purposes, as well as for the secondary benefits of improved water quality due to sediment deposition and improved infiltration.	**NO**
Paved and/or Impervious Surfaces	Installed during the last phase of site development	Throughout the site	Areas where structural concrete are located within the site; minimize and prevent erosion at those locations	**YES**
Preservation of Existing Mature Vegetation	Installed during the last phase of site development	Located at perimeters of site	Desirable existent mature vegetation (i.e. under-story) is to be preserved throughout the site to promote water quality via sediment deposition and improved infiltration.	**YES**

Copy of Notice of Intent (NOI)

TCEQ Office Use Only
Permit No.:
RN:
CN:
Region:

RESET FORM

Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity under TPDES General Permit (TXR050000)

IMPORTANT:

- Use the **INSTRUCTIONS** to fill out each question in this form.
- Use the **CHECKLIST** to make certain all you filled out all required information. Incomplete applications **WILL** delay approval or result in automatic denial.
- Once processed your permit can be viewed at http://www5.tceq.texas.gov/wq_dpa/

ePERMITS: Sign up now for online NOI: https://www6.tceq.texas.gov/steers/
Pay a $100 reduced application fee by using ePermits.

APPLICATION FEE:

- You must pay the **$200** Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
  - Go to https://www6.tceq.texas.gov/epay/
  - Select Fee Type: GENERAL PERMIT INDUSTRIAL STORMWATER DISCHARGE NOI APPLICATION
- **Provide your payment information below, for verification of payment:**

☒ Mailed — Check/Money Order No.: _____
Name Printed on Check: _____

☐ EPAY — Voucher No.: _____
Is the Payment Voucher copy attached? ☐ Yes

RENEWAL: Is this NOI a Renewal of an existing General Permit Authorization? (Note: A permit cannot be renewed after November 14, 2011.)

☐ Yes The Permit number is: TXR05_____
(If a permit number is not provided, a new number will be assigned.)
☒ No

1) OPERATOR (applicant)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? You may search for your CN at:
http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=cust.CustSearch
CN 606180057

b) What is the Legal Name of the entity (applicant) applying for this permit?
Sandstone Residential Subdivision
(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)

c) What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in TAC 305.44(a).
Prefix (Mr. Ms Miss): Mr.
First/Last Name: J.J. Clark Suffix:
Title: President Credential:

d) What is the Operator Contact's (Responsible Authority) contact information and mailing address as recognized by the US Postal Service (USPS)? You may verify the address at: http://zip4.usps.com/zip4/welcome.jsp
Phone #: (512) 650-5455 ext: Fax #:
Mailing Address: 10204 Oak Grove Cir
Internal Routing (Mail Code, Etc.):
City: Austin State: TX ZIP Code: 78736
E-mail Address: tfc.inc@gmail.com
If outside USA: Territory: Country Code: Postal Code:

e) Indicate the type of Customer (The instructions will help determine your customer type):

☐ Individual	☐ Limited Partnership	☐ Sole Proprietorship-DBA
☐ Joint Venture	☐ General Partnership	☒ Corporation
☐ Trust	☐ Estate	☐ Federal Government
☐ State Government	☐ County Government	☐ City Government
☐ Other Government		

f) Independent Operator? ☒ Yes ☐ No
(If governmental entity, subsidiary, or part of a larger corporation, check "No".)

g) Number of Employees:
☒ 0-20; ☐ 21-100; ☐ 101-250; ☐ 251-500; or ☐ 501 or higher

h) Customer Business Tax and Filing Numbers:
(REQUIRED for Corporations and Limited Partnerships. Not Required for Individuals, Government, or Sole Proprietors)
State Franchise Tax ID Number:
Federal Tax ID:
Texas Secretary of State Charter (filing) Number:
DUNS Number (if known):

2) ANNUAL BILLING CONTACT

The Operator is responsible for paying the annual fee. The annual fee will be assessed to permits active on September 1 of each year. TCEQ will send a bill to the address provided in this section. The Operator is responsible for terminating the permit when it is no longer needed.

Is the billing address the same as the applicant address identified above?

☐ Yes, go to Section 3). ☒ No, complete section below

Prefix (Mr. Ms Miss): Mr.
First/Last Name: Thomas Loomis Suffix:
Title: Project Manager Credential:
Organization Name: Saxon Loomis Consulting Group

Phone No.: (512) 917-7265 Extension:
Fax No.: E-mail: tom.loomis@saxonloomis.com
Mailing Address: 2216 College Ave
Internal Routing (Mail Code, Etc.):
City: Austin State: TX ZIP Code: 78704
Mailing Information if outside USA
Territory: Country Code: Postal Code:

3) APPLICATION CONTACT

If TCEQ needs additional information regarding this application, who should be contacted?

Prefix (Mr. Ms Miss): Mr.
First/Last Name: Thomas Loomis Suffix:
Title: Project Manager Credential:
Organization Name: Saxon Loomis Consulting Group
Phone No.: (512) 917-7265 Extension:
Fax No.: E-mail: tom.loomis@saxonloomis.com
Mailing Address: 2216 College Ave
Internal Routing (Mail Code, Etc.):
City: Austin State: TX ZIP Code: 78704
Mailing Information if outside USA
Territory: Country Code: Postal Code:

4) REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

If the site of your business is part of a larger business site or if other businesses were located at this site before yours, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch.

If the site is found, provide the assigned Regulated Entity Reference Number and provide the information for the site to be authorized through this application below. The site information for this authorization may vary from the larger site information.

a) TCEQ issued RE Reference Number (RN): RN 111806766

b) Name of project or site (the name known by the community where located):
SANDSTONE RESIDENTIAL SUBDIVISION

c) In your own words, briefly describe the primary business of the Regulated Entity: (Do not repeat the SIC and NAICS code): single-family residential use

d) County (or counties if > 1) Travis County

e) Latitude: 30°13'5.00" Longitude: 97°55'36.36"

f) Does the site have a physical address?

☒ Yes, complete Section A for a physical address.
☐ No, complete Section B for site location information.

Section A: Enter the physical address for the site.

Verify the address with USPS. If the address is not recognized as a delivery address, provide the address as identified for overnight mail delivery, 911 emergency or other online map tools to confirm an address.

Physical Address of Project or Site:
Street Number: 9223 Street Name: Sandstone Street
City: Austin State: Texas ZIP Code: 78737

Section B: Enter the site location information.

If no physical address (Street Number & Street Name), provide a written location access description to the site. (Ex.: located 2 miles west from intersection of Hwy 290 & IH35 accessible on Hwy 290 South)

City where the site is located or, if not in a city, what is the nearest city:

State: ZIP Code where the site is located:

5) GENERAL CHARACTERISTICS

a) Is the project/site located on Indian Country Lands?

☐ Yes - If the answer is Yes, you must obtain authorization through EPA, Region VI.
☒ No

b) What is the Primary SIC Code that is within the range listed and corresponds with the selected Activity or Sector in the general permit?
Primary SIC Code 1522

c) If applicable, what is the Secondary SIC Code(s):
If the secondary SIC Code(s) is one of 1411, 1422, 1423, 1429, 1442, 1446, 1474, 1475, 1479, 1481, or 1499, the following certification is required to qualify for coverage under this general permit:
I certify that this application does not include any discharges from quarries located in the John Graves Scenic Riverway, in the Brazos River Basin, in Palo Pinto or Parker County, Texas, as described in Texas Water Code, Subchapter 26.553. ☐ Yes

d) What is the Sector(s) that applies to the industrial activity at your facility? The Sector(s) must correspond to the primary SIC Code(s) listed above.

☐ Sector A	☐ Sector G	☐ Sector M	☐ Sector S	☐ Sector Y
☐ Sector B	☐ Sector H	☐ Sector N	☐ Sector T	☐ Sector Z
☐ Sector C	☐ Sector I	☐ Sector O	☐ Sector U	☐ Sector AA
☐ Sector D	☐ Sector J	☐ Sector P	☐ Sector V	☐ Sector AB
☐ Sector E	☐ Sector K	☐ Sector Q	☐ Sector W	☐ Sector AC
☐ Sector F	☐ Sector L	☐ Sector R	☐ Sector X	

☐ Sector AD: For Sector AD a copy of the letter from TCEQ requiring coverage under this general permit must be included with this NOI or coverage may be denied.

e) If applicable, select the Activity Code(s) that corresponds with the Sector, or if seeking coverage based on federal effluent guidelines, select the qualifying activity type(s).

☐ HZ	☐ Wet decking water
☐ SE	☐ Phosphate Fertilizers
☐ LF	☐ Mining of Sand, Gravel, or Crushed Stone
☐ TW	☐ Cement Manufacturing Materials
	☐ Asphalt Emulsion

f) What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site? Onion Creek

g) What is the segment number(s) of the classified water body(s) that the discharge will eventually reach? 1427

h) Are any of the surface water body(s) receiving the discharge or potential discharge on the latest EPA-approved CWA 303(d) list of impaired waters? ☐ Yes ☒ No

If the answer is Yes, what is the name of the impaired water body(s)?

i) Do any of the surface water body(s) receiving the discharge or potential discharge have an EPA-approved or established total maximum daily load (TMDL)? ☐ Yes ☒ No

j) Does the discharge or potential discharge flow to an MS4? ☐ Yes ☒ No
If the answer is Yes, provide the name of the MS4 operator:

Note: The general permit requires you to send a copy of the NOI to the MS4 operator.

k) Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer as defined in 30 TAC Chapter 213? ☐ Yes ☒ No

If the answer is Yes, the following certification is required:

I certify that a copy of the agency approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) will either be included or referenced in the Storm water Pollution Prevention Plan before discharge can begin. ☐ Yes

6) CERTIFICATION

Check Yes to the certifications below. Failure to indicate Yes to ***ALL*** items may result in denial of coverage under the general permit.

a) I certify that I have obtained a copy and understand the terms and conditions of the general permit TXR050000. ☒ Yes

b) I certify that the activities at this site qualify for coverage under the general permit TXR050000. ☒ Yes

c) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed. ☒ Yes

d) I understand that permits active on September 1st of each year will be assessed an Annual Water Quality Fee. ☒ Yes

e) I certify that a Stormwater Pollution Prevention Plan has been prepared and implemented as required in the general permit. ☒ Yes

f) I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas. ☒ Yes

Operator Certification:

I, J.J. Clark (Typed or printed name) President (Title)

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 that I am authorized under 30 Texas Administrative Code 305.44 to sign and submit this document, and can provide documentation in proof of such authorization upon request.

Signature: _____ (*Use blue ink*) Date: 9/21/2023

NOTICE OF INTENT CHECKLIST

TXR050000

- Did you complete everything? Use this checklist to be sure!
- Are you ready to mail your form to TCEQ? Go to the General Information Section of the Instructions for mailing addresses.

This checklist is for use by the operator to ensure a complete application. Missing information may result in denial of coverage under the general permit. (See NOI process description in the Instructions)

Application Fee:

If paying by Check:

- ☑ Check was mailed **separately** to the TCEQs Cashier's Office. (See Instructions for Cashier's address and Application address.)
- ☐ Check number and name on check is provided in this application.

If using ePay:

- ☐ The voucher number is provided in this application or a copy of the voucher is attached.

OPERATOR INFORMATION - Confirm each item is complete:

- ☑ Customer Number (CN) issued by TCEQ Central Registry
- ☑ Legal name as filed to do business in Texas (Call TX SOS 512/463-5555)
- ☑ Name and title of responsible authority signing the application
- ☑ Mailing address is complete & verifiable with USPS. www.usps.com
- ☑ Phone numbers/e-mail address
- ☑ Type of operator (entity type)
- ☑ Independent operator
- ☑ Number of employees
- ☑ For corporations or limited partnerships – Tax ID and SOS filing numbers
- ☑ Billing contact and address is complete & verifiable with USPS. www.usps.com

REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE - Confirm each item is complete:

- ☑ Regulated Entity Reference Number (RN) (if site is already regulated by TCEQ)
- ☑ Site/project name/regulated entity
- ☑ Latitude and longitude http://www.tceq.texas.gov/gis/sqmaview.html
- ☑ County
- ☑ Site/project physical address. Please do not use a rural route or post office box
- ☑ Business description

GENERAL CHARACTERISTICS - Confirm each item is complete:

- ☑ Indian Country Lands –the facility is not on Indian Country Lands
- ☑ Standard Industrial Classification (SIC) Code www.osha.gov/oshstats/sicser.html
- ☑ Sector is selected
- ☑ Activity code if applicable
- ☑ Receiving water body
- ☐ Segment number
- ☑ Impaired water body
- ☑ TMDL – EPA approved or established
- ☑ MS4 operator
- ☑ Edwards Aquifer rules

CERTIFICATION

- ☑ Certification statements have been checked indicating "Yes"
- ☑ Signature meets 30 Texas Administrative Code (TAC) §305.44 and is original.

Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity under TPDES General Permit (TXR050000)

General Information and Instructions

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

BY REGULAR U.S. MAIL
Texas Commission on
Environmental Quality
Storm water Processing Center
(MC228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on
Environmental Quality
Storm water Processing Center
(MC228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact List:

Application – status and form questions:	*512/239-3700, swpermit@tceq.texas.gov*
Technical questions:	*512/239-4671, swgp@tceq.texas.gov*
Environmental Law Division:	*512/239-0600*
Records Management - obtain copies of forms:	*512/239-0900*
Reports from databases (as available):	*512/239-DATA (3282)*
Cashier's office:	*512/239-0357 or 512/239-0187*

Notice of Intent Process:

When your NOI is received by the program, the form will be processed as follows:

1) **Administrative Review:** Each item on the form will be reviewed for a complete response. In addition, the operator's legal name must be verified with Texas Secretary of State as valid and active (if applicable). The address(s) on the form must be verified with the US Postal service as receiving regular mail delivery. Never give an overnight/express mailing address.

2) **Notice of Deficiency:** If an item is incomplete or not verifiable as indicated above, a notice of deficiency (NOD) will be mailed to the operator. The operator will have 30 days to respond to the NOD. The response will be reviewed for completeness.

3) **Acknowledgment of Coverage:** An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.

   -or-

   Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

For NOIs submitted **electronically** provisional coverage under the general permit begins immediately following confirmation of receipt of the NOI form by the TCEQ.

For **paper** NOIs provisional coverage under the general permit begins **7 days after a completed NOI is postmarked for delivery** to the TCEQ.

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using key word TXR050000.

General Permit Forms

The Notice of Intent (NOI), Notice of Termination (NOT), and Notice of Change (NOC) (including instructions) are available in Adobe Acrobat PDF format on the TCEQ web site http://www.tceq.texas.gov.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be submitted no later than 10 days prior to the change in Operator status.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. After final acknowledgment of coverage under the general permit, the program will assign a Customer Number and Regulated Entity Number.

You can find the information on the Central Registry web site at http://www12.tceq.texas.gov/crpub/index.cfm. You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Additional ID". Capitalize all letters in the permit number.

The Customer (Permittee) is responsible for providing consistent information to the TCEQ, and for updating all CN and RN data for all authorizations as changes occur. For General Permits, a Notice of Change form must be submitted to the program area.

Fees associated with a General Permit

The general permit refers to two different fees that apply to the operator. Payment of the fees may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

Application Fee: This fee is required to be paid at the time the NOI is submitted. Failure to submit payment at the time the application is filed will cause delays in acknowledgment or denial of coverage under the general permit.

Mailed Payments:

Payment must be mailed under separate cover at one of the addresses below using the attached Application Fee submittal form. (DO NOT SEND A COPY OF THE NOI WITH THE APPLICATION FEE SUBMITTAL FORM)

BY REGULAR U.S. MAIL
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, TX 78711-3088

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

ePAY Electronic Payment: https://www6.tceq.texas.gov/epay/

When making the payment you must select Water Quality, and then select the fee category "General Permit Industrial Stormwater Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

Annual Water Quality Fee: This fee is assessed to operators with an active authorization under the general permit on September 1 of each year. The operator will receive an invoice for payment of the annual fee in December of each year. The payment will be due 30 days from the invoice date. A 5% penalty will be assessed if the payment is received by TCEQ after the due date. Annual fee assessments cannot be waived as long as the authorization under the general permit is active on September 1. It is important for the operator to submit a Notice of Termination (NOT) when coverage under the general permit is no longer required. A NOT is effective on the postmarked date of mailing the form to TCEQ. It is recommended that the NOT be mailed using a method that documents the date mailed and received by TCEQ.

Mailed Payments:
You must return your payment with the billing coupon provided with the billing statement.

ePAY Electronic Payment:
Go to https://www6.tceq.texas.gov/epay/
You must enter your account number provided at the top portion of your billing statement. Payment methods include Mastercard, Visa, and electronic check payment (ACH). A single transaction over $1000 can only be made by ACH.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

Renewal of General Permit. Dischargers holding active authorizations under the expired General Permit are required to submit a NOI to continue coverage. The existing permit number is required. If the permit number is not provided or has been terminated, expired, or denied a new permit number will be issued.

1. Operator (Applicant)

a) Enter assigned Customer Number (CN)
TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. **This is not a permit number, registration number, or license number**.
If this customer has not been assigned a CN, leave the space for the CN blank.
If this customer has already been assigned this number, enter the permittee's CN.

b) Legal Name
Provide the current legal name of the permittee, as authorized to do business in Texas. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at 512/463-5555, for more information related to filing in Texas. If filed in the county where doing business, provide a copy of the legal documents showing the legal name.

c) Person Signing Application
Provide information about person signing section 6) Certification.

d) Operator Contact's Mailing Address and Contact Information
Provide a complete mailing address for receiving mail from the TCEQ. The address must be verifiable with the US Postal Service at http://www.usps.com for regular mail delivery (not overnight express mail). If you find that the address is not verifiable using the USPS web search, please indicate the address is used by the USPS for regular mail delivery.

The area code and phone number should provide contact to the operator. Leave Extension blank if not applicable.

The fax number and e-mail address are optional and should correspond to the operator.

e) Type of Customer (Entity Type)
Check only one box that identifies the type of entity. Use the descriptions below to identify the appropriate entity type. Note that the selected entity type also indicates the name that must be provided as an applicant for a permit, registration or authorization.

Sole Proprietorship – DBA
A sole proprietorship is a customer that is owned by only one person and has not been incorporated. This business may:

- be under the person's name
- have its own name (doing business as or d.b.a.)
- have any number of employees

If the customer is a Sole Proprietorship or DBA, the 'legal name' of the individual business 'owner' must be provided. The DBA name is not recognized as the 'legal name' of the entity. The DBA name may be used for the site name (regulated entity).

Individual (or DBA)
An individual is a customer who has not established a business, but conducts an activity that needs to be regulated by the TCEQ.

Partnership

- A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). A Limited Partnership or Limited Liability Partnership (Partnership) is required to file with the Texas Secretary of State. A General Partnership or Joint Venture is not required to register with the state.
- **Partnership (Limited Partnership or Limited Liability Partnership):** A limited partnership is defined in the Act as a partnership formed by two or more persons under the provisions of Section 3 of the Uniform Limited Partnership Act (Art. 6132a, Revised Civil Statutes of Texas) and having as members one or more general partners and one or more limited partners. The limited partners as such are not bound by the obligations of the partnership. Limited partners may not take part in the day-to-day operations of the business. A Limited Partnership must file with the Texas Secretary of State. A registered limited liability partnership is a general or limited partnership that is registered with the Texas Secretary of State. The partnership's name must contain the words "Registered Limited Liability Partnership" or the abbreviation "L.L.P." as the last words or letters of its name.
- **General Partnership:** A general partner may or may not invest, participates in running the partnership and is liable for all acts and debts of the partnership and any member of it. A General Partnership does not have limited partners. For a General Partnership, there is no registration with the state or even written

agreement necessary for a general partnership to be formed. The legal definition of a partnership is generally stated as "an association of two or more persons to carry on as co-owners a business for profit" (Revised Uniform Partnership Act § 101 [1994]).

- **Joint Venture:** A joint venture is but another name for a special partnership. It might be distinguished from a general partnership in that the latter is formed for the transaction of a general business, while a joint venture is usually limited to a single transaction. That is, a joint venture is a special combination of persons in the nature of a partnership engaged in the joint prosecution of a particular transaction for mutual benefit or profit.

Corporation

A customer meets all of these conditions:

- is a legally incorporated entity under the laws of any state or country
- is recognized as a corporation by the Texas Secretary of State
- has proper operating authority to operate in Texas.
- The corporation's 'legal name' as filed with the Texas Secretary of State must be provided as applicant. An 'assumed' name of a corporation is not recognized as the 'legal name' of the entity.

Government

Federal, state, county, or city government (as appropriate)
The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the applicant. A department name or other description of the organization should not be included as a part of the 'legal name' as applicant.

Trust or Estate

A trust and an estate are fiduciary relationships governing the trustee/executor with respect to the trust/estate property.

Other Government

A utility district, water district, tribal government, college district, council of governments, or river authority. Write in the specific type of government.

Other

The customer does not fit any of the above descriptions. Enter a short description of the type of customer in the blank provided.

f) Independent Entity

Check No if this customer is a subsidiary, part of a larger company, or is a governmental entity. Otherwise, check Yes.

g) Number of Employees

Check one box to show the number of employees for this customer's entire company, at all locations. This is not necessarily the number of employees at the site named in the application.

h) Customer Business Tax and Filing Numbers

These are required for Corporations and Limited Partnerships. These are not required for Individuals, Government, and Sole Proprietors.

State Franchise Tax ID Number
Corporations and limited liability companies that operate in Texas are issued a franchise tax identification number. If this customer is a corporation or limited liability company, enter this number here.

Federal Tax ID
All businesses, except for some small sole proprietors, individuals, or general partnerships should have a federal taxpayer identification number (TIN). Enter this number here. Use no prefixes, dashes, or hyphens. Sole proprietors, individuals, or general partnerships do not need to provide a federal tax ID.

TX SOS Charter (filing) Number
Corporations and Limited Partnerships required to register with the Texas Secretary of State are issued a charter or filing number. You may obtain further information by calling SOS at 512/463-5555.

DUNS Number
Most businesses have a DUNS (Data Universal Numbering System) number issued by Dun and Bradstreet Corp. If this customer has one, enter it here.

2. ANNUAL BILLING CONTACT

An annual fee is assessed to each operator holding an active authorization under the general permit on September 1 of each year.

Provide the complete mailing address where the annual fee invoice should be mailed. Verify the address with the USPS. It must be an address for delivery of regular mail, not overnight express mail. Also, provide a phone number of the operator's representative responsible for payment of the invoice.

If this address is outside the United States, enter the territory name, country code, and any non-ZIP mailing codes or other non–U.S. Postal Service features here. If this address is inside the United States, leave these spaces blank.

3. APPLICATION CONTACT

Provide the name, title and communication information of the person that TCEQ can contact for additional information regarding this application.

4. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) Regulated Entity Reference Number (RN)
A number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. If this regulated entity has not been assigned an RN, leave this space blank.

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: http://www12.tceq.texas.gov/crpub/index.cfm?fuseaction=regent.RNSearch

If the site is found, provide the assigned Regulated Entity Reference Number (RN) and provide the information for the site to be authorized through this application. The site information for this authorization may vary from the larger site information.

An example is a chemical plant where a unit is owned or operated by a separate corporation that is accessible by the same physical address of your unit or facility. Other examples include industrial parks identified by one common address but different corporations have control of defined areas within the site. In both cases, an RN would be assigned for the physical address location and the permitted sites would be identified separately under the same RN.

b) Site/Project Name/Regulated Entity
Provide the name of the site as known by the public in the area where the site is located. The name you provide on this application will be used in the TCEQ Central Registry as the Regulated Entity name.

c) Description of Activity Regulated
In your own words, briefly describe the primary business that you are doing that requires this authorization. Do not repeat the SIC Code description.

d) County
Identify the county or counties in which the regulated entity is located.

e) Latitude and Longitude
Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to:
http://www.tceq.texas.gov/gis/sqmaview.html or http://msrmaps.com/advfind.aspx

f) Site/Project (RE) Physical Address/Location Information
Enter the complete address for the site in Section A if the address can be validated through the US Postal Service. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Please do not use a rural route or post office box for a site location.
If a site does not have an address that includes a street (or house) number and street name, enter NO ADDRESS for the street name in Section A. In Section B provide a complete written location description. For example: "The site is located 2 miles west from intersection of Hwy 290 & IH35, located on the southwest corner of the Hwy 290 South bound lane."
Provide the city (or nearest city) and zip code of the facility location.

5. GENERAL CHARACTERISTICS

a) Indian Country Lands
If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA, Region VI, Dallas. Do not submit this form to TCEQ.

b) Primary Standard Industrial Classification (SIC) Code
Provide the SIC Code that is within the range listed and corresponds with the selected Activity or Sector in the General Permit. It is possible that a Primary SIC Code relates to the overall operation of the business and is not a specific SIC Code that relates to the particular Storm water activity. Please enter the SIC Code for the industrial activity that qualifies for coverage under the general permit as the Primary SIC Code.

For Industrial activities with Primary or Secondary SIC Codes 1411, 1422, 1423, 1429, 1442, 1446, 1474, 1475, 1479, 1481, or 1499 and within Palo Pinto or Parker counties, provisional coverage will begin upon submittal of the NOI, however, the application will be reviewed by the program to determine eligibility. Approval is not automatic. Coverage under TPDES General Permit TXG500000 or an Individual Permit may be required. Contact the Stormwater and Pretreatment Team at (512)239-4671 for further information. Application status may be viewed at http://www5.tceq.texas.gov/wq_dpa/.

General Permit TXR050000 defines the industrial activity sectors listed on the NOI on the basis of SIC and activity codes. For more information, go to the TCEQ web site at: www.tceq.state.tx.us . Search for key word 'TXR050000' and select "Am I Regulated?" web page. For help with SIC Codes, go to: http://www.osha.gov/pls/imis/sicsearch.html

c) Secondary SIC Code
For help with SIC codes go to http://www.osha.gov/pls/imis/sicsearch.html

For Industrial activities with Secondary SIC Codes 1411, 1422, 1423, 1429, 1442, 1446, 1474, 1475, 1479, 1481, or 1499 and within Palo Pinto or Parker counties, certification that this application does not include any discharges from quarries located in the John Graves Scenic Riverway, in the Brazos River Basin, as described in Texas Water Code, Subchapter 26.553 is required. Contact the Stormwater and Pretreatment Team at (512)239-4671 for further information.

d) Industrial Activity Sector
General Permit TXR050000 defines the 30 industrial activity sectors listed on the form on the basis of SIC and activity codes.

The need for a permit, and the eligibility for coverage under this general permit, is determined either by a facility's primary SIC code or by an Industrial Activity Code that is described in this general permit.

Sectors of industrial activity are divided into sub-sectors and further defined by SIC codes in the general permit. Operators of facilities with a primary SIC code that is included in the general permit must obtain authorization for discharges of stormwater associated with industrial activity and are eligible for coverage under this general TPDES permit.

Sector AD is used to provide permit coverage for facilities that are designated by the executive director as needing a permit to control pollution related to stormwater discharges and that do not meet the description of an industrial activity covered by Sectors A-AC. A facility that is not otherwise listed in the general permit is not eligible to apply for coverage under AD unless directed to do so in writing by the executive director. A copy of the letter from TCEQ will be required with the NOI.

For more information, go to the TCEQ web site at: www.tceq.texas.gov. Search for key word 'TXR050000' and select "Am I Regulated" web page.

e) Activity Code or Qualifying Activity Type
If any of the following narrative descriptions pertain to your facility, provide the appropriate activity code. This item is not applicable if the facility is defined under a Sector.

HZ: Hazardous waste treatment, storage, or disposal facilities, including those that are operating under interim status or a permit under Subtitle C of RCRA;

LF: Landfills, land application sites, and open dumps that receive or have received any industrial wastes, including those that are subject to regulation under Subtitle D of RCRA;

SE: Steam electric power generating facilities, including coal handling sites;

TW: Treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage.

If the facility generates or discharges stormwater from one of the following sources that is regulated by federal effluent limitations guidelines at 40 CFR Parts 400 through 471, and the industrial activity is described as the Secondary SIC Code, coverage is still attainable by selecting one of the Industrial Activity Types:

• **Wet Decking Water** - Described in the Wet Storage Subcategory (Subpart I) of the Timber Products Processing Point Source Category (40 CFR Part 429).

• **Phosphate Fertilizers** - Stormwater runoff that has come into contact with any raw materials, intermediate product, finished product, by-product or waste from areas of industrial activity described by SIC code 2874 (Phosphatic Fertilizers), as described in the Phosphate Subcategory (Subpart A) of the Fertilizer Manufacturing Point Source Category (40 CFR Part 418.)

• **Asphalt Emulsion** - Stormwater runoff from asphalt paving and roofing emulsion production areas, as described in the Asphalt Emulsion Subcategory of the Paving and Roofing Materials (Tars and Asphalt) Manufacturing Point Source Category (40 CFR § 443.13).

• **Cement Manufacturing Materials** - Stormwater runoff from cement manufacturing facilities (i.e., stormwater runoff from a process area, that has come into contact with raw materials, intermediate products, finished products, by-products, material storage piles or waste materials), as described in the Material Storage Piles Runoff Subcategory of the Cement Manufacturing Point Source Category (40 CFR § 411.32).

• **Mining of Sand, Gravel, or Crushed Stone** - Stormwater and non-contaminated groundwater seepage from Construction Sand and Gravel mining operations (SIC 1442), Industrial Sand mining operations (SIC 1446), or Crushed Stone mining operations (SIC 1422 – 1429) (40 CFR Part 436).

f) Identify the water body the stormwater discharge or potential discharge will reach. The stormwater may be discharged directly to a receiving stream or through a MS4 from your site. It eventually reaches a receiving water body such as a local stream or lake, possibly via a drainage ditch. You must provide the name of the water body that receives the discharge from the site (a local stream or lake).

g) Identify the classified segment number. Go to the link to find the segment number of the classified water body where wastewater will flow
http://www.tceq.texas.gov/compliance/monitoring/water/quality/data/wqm/viewer/viewer.html
You may also find the segment number in TCEQ publication GI-316 .

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:
0100 (Canadian River Basin)
0200 (Red River Basin)
0300 (Sulfur river Basin)
0400 (Cypress Creek Basin)
0500 (Sabine River Basin)

Call 512/239-4671 for further assistance

h) Identify any surface water bodies receiving discharges or potential discharges from the facility that are on the latest EPA-approved CWA § 303(d) list of impaired waters.
EPA approved CWA 303d list of impaired waters can be found at: http://www.tceq.texas.gov/waterquality/assessment/305_303.html. Provide the name or segment number of the impaired classified water body. Completed TMDL projects can be viewed at: http://www.tceq.texas.gov/waterquality/tmdl/nav/tmdlprogramprojects.html#completed-projects.
i) Indicate if the discharge or potential discharge flows to a water body that has an EPA-approved or established TMDL. See the general permit requirements for Impaired Water Bodies and Total Maximum Daily Load (TMDL).

j) Identify the MS4 Operator if the stormwater discharge is into an MS4. Provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, or utility district, but possibly can be another form of government. The General permit requires you to send a copy of the NOI to the MS4 operator. For assistance, you may call the technical staff at 512/239-4671.

k) Discharges to the Edwards Aquifer Recharge Zone
See maps on the TCEQ website to determine if the site is located within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer at: http://www.tceq.texas.gov/field/eapp/viewer.html.

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required. The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

The certification must be answered "yes" for coverage under the general permit.

6. CERTIFICATIONS

Failure to indicate "Yes" to ALL of the certification items may result in denial of coverage under the general permit.

The certification must bear an original signature of a person meeting the signatory requirements specified under 30 Texas Administrative Code (TAC) §305.44.

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been

delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.
If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512/239-0600.

30 Texas Administrative Code
§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

(1) For a corporation, the application shall be signed by a responsible corporate officer. For purposes of this paragraph, a responsible corporate officer means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding $25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures. Corporate procedures governing authority to sign permit or post-closure order applications may provide for assignment or delegation to applicable corporate positions rather than to specific individuals.

(2) For a partnership or sole proprietorship, the application shall be signed by a general partner or the proprietor, respectively.

(3) For a municipality, state, federal, or other public agency, the application shall be signed by either a principal executive officer or a ranking elected official. For purposes of this paragraph, a principal executive officer of a federal agency includes the chief executive officer of the agency, or a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., regional administrator of the EPA).

Texas Commission on Environmental Quality
General Permit Payment Submittal Form

Use this form to submit your Application Fee only if you are mailing your payment.

- Complete items 1 through 5 below:
- Staple your check in the space provided at the bottom of this document.
- Do not mail this form with your NOI form.
- Do not mail this form to the same address as your NOI.

Mail this form and your check to:

BY REGULAR U.S. MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
P.O. Box 13088
Austin, TX 78711-3088

BY OVERNIGHT/EXPRESS MAIL

Texas Commission on Environmental Quality
Financial Administration Division
Cashier's Office, MC-214
12100 Park 35 Circle
Austin, TX 78753

Fee Code: GPA	General Permit: TXR050000

1. Check / Money Order No: _____
2. Amount of Check/Money Order: _____
3. Date of Check or Money Order: _____
4. Name on Check or Money Order: _____
5. NOI INFORMATION

   If the check is for more than one NOI, list each Project/Site (RE) Name and Physical Address exactly as provided on the NOI. DO NOT SUBMIT A COPY OF THE NOI WITH THIS FORM AS IT COULD CAUSE DUPLICATE PERMIT ENTRIES.

   See Attached List of Sites (If more space is needed, you may attach a list.)

   Project/Site (RE) Name: _____

   Project/Site (RE) Physical Address:

   _____

Staple Check in This Space

TCEQ-0599 Attachments

Agent Authorization Form

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

I J.J. Clark,
Print Name

President
,
Title - Owner/President/Other

of JOLLY'S DEVELOPMENT GROUP LLC,
Corporation/Partnership/Entity Name

have authorized THOMAS LOOMIS. PE
Print Name of Agent/Engineer

of SAXON LOOMIS CONSULTING GROUP
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

Date 9/22/2023

THE STATE OF TEXAS §

County of TRAVIS §

BEFORE ME, the undersigned authority, on this day personally appeared J.S. Clark 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 22 day of September, 2023.

CEZARY SAXON
Notary ID #133138111
My Commission Expires
June 3, 2025

NOTARY PUBLIC

CEZARY SAXON
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: JUNE 3, 2025

TCEQ-0599 Attachments

Application Fee Form (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: Sandstone Residential Subdivision
Regulated Entity Location: 9223 Sandstone St, Austin, TX 78737
Name of Customer: JOLLY'S DEVELOPMENT GROUP LLC
Contact Person: J.J. Clark Phone: (512)-650-5455
Customer Reference Number (if issued):CN CN606180057
Regulated Entity Reference Number (if issued):RN RN111806766

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	9.999 Acres	$ 3,000
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 10/18/2023

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

Check Payable to the "Texas Commission on Environmental Quality"

TCEQ-10400 Attachments

Core Data Form (TCEQ-10400)

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 606180057		**RN 111806766**

SECTION II: Customer Information

4. General Customer Information | **5. Effective Date for Customer Information Updates** (mm/dd/yyyy) 9/19/2023

☒ 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:*

Jolly's Development Group LLC

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:

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:

10204 Oak Grove Cir

City	Austin	**State**	TX	**ZIP**	78736	**ZIP + 4**	

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
N/A	tfc.inc@gmail.com

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

(512) 650-5455		( ) -

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.)*

Sandstone Residential Subdivision

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:	9223 Sandstone Street, Austin, TX 78737 (1366 ft East of Ledgestone Terrace and Sandstone Street Intersection)				
26. Nearest City			**State**		**Nearest ZIP Code**
Austin			TX		78737

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:			**28. Longitude (W) In Decimal:**		
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
30	13	5	97	55	36.36

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)
1522			

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

34. Mailing Address:	**10204 Oak Grove Cir**							
	City	**Austin**	**State**	**TX**	**ZIP**	**78736**	**ZIP + 4**	
35. E-Mail Address:	**tfc.inc@gmail.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 650-5455		( ) -

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:	Thomas Loomis	**41. Title:**	Project Manager

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(512 **)** 917-7265		**( )** -	tom.loomis@saxonloomis.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:	Saxon Loomis Consulting Group	**Job Title:**	Project Manager
Name *(In Print):*	Thomas Loomis	**Phone:**	**(** 512 **)** 917- **7265**
Signature:		**Date:**	9/18/2023

CONSTRUCTION PLANS
(SANDSTONE RESIDENTIAL SUBDIVISION)

SANDSTONE RESIDENTIAL SUBDIVISION
CONSTRUCTION PLANS

9223 SANDSTONE ST
AUSTIN, TX 78737

SITE INFORMATION:

LEGAL DESCRIPTION:
ABS 222 SUR 68 DELATULLE R ACR 9.999

FLOODPLAIN NOTE:
NO PORTION OF THIS SITE IS WITHIN THE 100 YEAR FLOODPLAIN AS PER FEMA MAP PANEL NO. 48453C0560J, JANUARY 1, 2020.

THIS FLOOD STATEMENT DOES NOT IMPLY THAT THE PROPERTY AND/OR THE STRUCTURES THEREON WILL BE FREE FROM FLOODING OR FLOOD DAMAGE. THIS FLOOD STATEMENT SHALL NOT CREATE LIABILITY ON THE PART OF THE SURVEYOR OR ENGINEER.

WATERSHED NOTE:
THIS PROPERTY IS LOCATED IN THE ONION CREEK-COLORADO RIVER WATERSHED, ONION CREEK-COLORADO RIVER IS A SUBURBAN WATERSHED.

PROJECT INFORMATION

9 RESIDENTIAL LOTS
TOTAL ACREAGE: 9.99 AC
AREA IN STREETS: 1.08 AC

GENERAL NOTES:

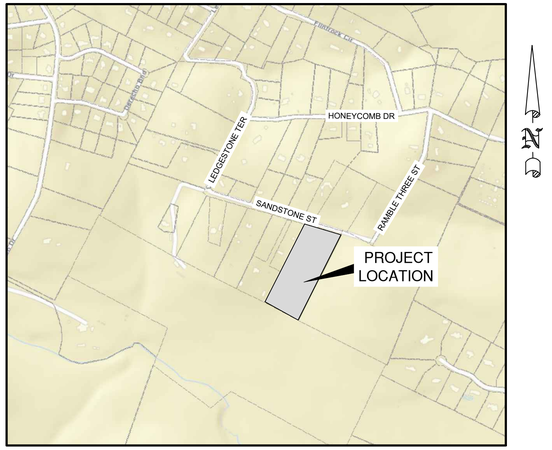
1. BEFORE BEGINNING CONSTRUCTION ACTIVITIES ON A SUBDIVISION LOT, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND, WHEN APPLICABLE, OBTAIN AND IMPLEMENT A STORM WATER POLLUTION PREVENTION PLAN (SWP3). THE SWP3 REQUIRES IMPLEMENTATION OF TEMPORARY AND PERMANENT BEST MANAGEMENT PRACTICES, INCLUDING EROSION AND SEDIMENT CONTROLS, FOR PROTECTION OF STORM WATER RUNOFF QUALITY, IN ACCORDANCE WITH THE TRAVIS COUNTY CODE.
2. ELECTRIC SERVICE WILL BE PROVIDED BY PEDERNALES ELECTRIC COOPERATIVE.
3. PEDERNALES ELECTRIC COOPERATIVE HAS THE RIGHT TO PRUNE AND/OR REMOVE TREES, SHRUBBERY AND OTHER OBSTRUCTIONS TO THE EXTENT NECESSARY TO KEEP THE EASEMENTS CLEAR. PEDERNALES ELECTRIC COOPERATIVE WILL PERFORM ALL TREE WORK IN COMPLIANCE WITH TRAVIS COUNTY LAND DEVELOPMENT CODE.
4. THE OWNER/DEVELOPER OF THIS SUBDIVISION/LOT SHALL PROVIDE PEDERNALES ELECTRIC COOPERATIVE WITH ANY EASEMENT AND/OR ACCESS REQUIRED, IN ADDITION TO THOSE INDICATED, FOR THE INSTALLATION AND ONGOING MAINTENANCE OF OVERHEAD AND UNDERGROUND ELECTRIC FACILITIES. THESE EASEMENTS AND/OR ACCESS ARE REQUIRED TO PROVIDE ELECTRIC SERVICE TO THE BUILDING AND WILL NOT BE LOCATED SO AS THE CAUSE THE SITE TO BE OUT OF COMPLIANCE WITH TRAVIS COUNTY LAND DEVELOPMENT CODE.
5. A TRAVIS COUNTY SITE DEVELOPMENT PERMIT IS REQUIRED PRIOR TO ANY SITE DEVELOPMENT.
6. THE OWNER OF THIS SUBDIVISION, AND HIS OR HERS SUCCESSORS OR ASSIGNS, ASSUMES RESPONSIBILITY FOR PLANS FOR CONSTRUCTION OF SUBDIVISION IMPROVEMENTS WHICH COMPLY WITH APPLICABLE CODES AND REQUIREMENTS OF TRAVIS COUNTY. THE OWNER UNDERSTANDS AND ACKNOWLEDGES THAT PLAT VACATION OR REPLATTING MAY BE REQUIRED, AT THE OWNER'S SOLE EXPENSE, IF PLANS TO CONSTRUCT THIS SUBDIVISION DO NOT COMPLY WITH SUCH CODES AND REQUIREMENTS.
7. NO OBJECTS, INCLUDING BUT NOT LIMITED BUILDINGS, FENCES, OR LANDSCAPING SHALL BE ALLOWED IN A DRAINAGE EASEMENT EXCEPT APPROVED BY TRAVIS COUNTY.
8. PROPERTY OWNER AND/OR HIS/HER ASSIGNS SHALL PROVIDE ACCESS TO THE DRAINAGE EASEMENT AS MAY BE NECESSARY AND SHALL NOT PROHIBIT ACCESS BY TRAVIS COUNTY FOR INSPECTION OR MAINTENANCE OF SAID EASEMENT.
9. ALL DRAINAGE EASEMENTS ON PRIVATE PROPERTY SHALL BE MAINTAINED BY THE OWNER AND/OR HIS/HER ASSIGNS.
10. WATER SERVICE WILL BE PROVIDED BY HAZY HILL WATER DISTICT AKA SPICEWOOD UTILITY, OR INDIVIDUAL ON-SITE WELLS, WASTEWATER SERVICE WILL BE PROVIDED BY ON-SITE SEWAGE FACILITIES.
11. NO STRUCTURE SHALL BE OCCUPIED UNTIL CONNECTED TO AN APPROVED PRIVATE INDIVIDUAL SEWAGE DISPOSAL SYSTEM AND UNTIL WATER SATISFACTORY HUMAN CONSUMPTION IS AVAILABLE FROM A SOURCE IN ADEQUATE AND SUFFICIENT SUPPLY.
12. THIS SUBDIVISION IS NOT WITHIN AN ETJ OF ANY MUNICIPALITY.
13. AT&T IS THE TELEPHONE SERVICE PROVIDER FOR THIS SUBDIVISION.
14. PROPOSED LOTS ARE FOR RESIDENTIAL USE.
15. AS DEPICTED THE SETBACK AREA IDENTIFIED FOR EACH WATERWAY IS A PROTECTIVE EASEMENT THAT MUST REMAIN UNDEVELOPED AND ACTIVITIES MUST BE LIMITED WITHIN THE EASEMENT. THE PROTECTIVE EASEMENT MUST REMAIN FREE OF CONSTRUCTION, DEVELOPMENT, AND OTHER ALTERATIONS EXCEPT WHEN SPECIFICALLY APPROVED IN A TRAVIS COUNTY DEVELOPMENT PERMIT.
16. THIS SUBDIVISION IS SUBJECT TO THE LOWER COLORADO RIVER AUTHORITY (LCRA) HIGHLAND LAKES WATERSHED ORDINANCE. WRITTEN NOTIFICATIONS AND/OR PERMITS ARE REQUIRED PRIOR TO COMMENCEMENT OF ANY DEVELOPMENT ACTIVITES.
17. EXTENSION OF HART HOLLOW DRIVE WILL BE A PRIVATE STREET WITH AN ELECTRONIC GATE. PRIVATE SIDEWALK FOR THIS ROADWAY EXTENSION TO BE DEVELPED IN ACCORDANCE WITH TRAVIS COUNTY CODE.

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF MANOR AND TRAVIS COUNTY ESD NO. 12 MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER. REVIEW OF THE SUBMITTED MATERIALS DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR ORDINANCE COMPLIANCE BY THE CITY AND/OR COUNTY ENGINEER.

THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR ASSUMES ALL LIABILITY FOR ANY DAMAGE THAT MAY RESULT IN NOT CORRECTLY LOCATING UTILITIES.

TRAVIS COUNTY REVISION BLOCK:

NO.	REVISION DESCRIPTION	REVIEWED BY:	DATE



LOCATION MAP
NTS

SUBMITTED FOR APPROVAL BY:

STATE OF TEXAS
CEZARY SAXON
119794
LICENSED
PROFESSIONAL ENGINEER

CEZARY SAXON P.E. — 7/18/2023 DATE

OWNER:
JOLLYS DEVELOPMENT GROUP LLC
10204 OAK GROVE CIR
AUSTIN, TX 78736-7747
CONTACT:
PHONE: (512) 650-5455

ENGINEER:

SAXON LOOMIS
CONSULTING GROUP
2216 COLLEGE AVENUE AUSTIN, TEXAS
78704
PHONE: (512) 660-0500
F-19735 TBPE FIRM REGISTRATION NO.

Sheet List Table	
Sheet Number	Sheet Title
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2	GENERAL NOTES
3	EXISTING CONDITIONS
4	SITE PLAN
5	EXISTING DRAINAGE AREA MAP
6	PROPOSED DRAINAGE AREA MAP
7	DETENTION POND DETAILS
8	UTILTIY PLAN
9	EROSION CONTROL PLAN
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11	WATERLINE PLAN AND PROFILE
12	FIRE PROTECTION SITE EXHIBIT
13	WATER QUALITY IRRIGATION PLAN 1 OF 3
14	WATER QUALITY IRRIGATION PLAN 2 OF 3
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16	ON-SITE SEWAGE TREATMENT SYSTEM FEASIBILITY REPORT 1 OF 2
17	ON-SITE SEWAGE TREATMENT SYSTEM FEASIBILITY REPORT 2 OF 2
18	CONSTRUCTION DETAILS 1 OF 2
19	CONSTRUCTION DETAILS 2 OF 2

APPLICATION DATE: 7-18-2023

SITE DEVELOPMENT PERMIT NUMBER: SP-_____

APPROVED BY: _____
TEXAS DEPARTMENT OF TRANSPORTATION DATE

APPROVED BY: _____
PEDERNALES FIRE DEPARTMENT DATE

APPROVED BY: _____
HAZY HILLS WATER SUPPLY CORPORATION DATE

APPROVED BY: _____
TRAVIS COUNTY TRANSPORTATION AND NATURAL RESOURCES DATE

APPROVED BY: _____
DEVELOPMENT PERMIT NUMBER DATE

SANDSTONE RESIDENTIAL SUBDIVISION
SITE PLAN PERMIT

DATE: JULY, 2023

GENERAL NOTES

EXHIBIT 482.301B TRAVIS COUNTY STANDARD CONSTRUCTION NOTES FOR SITE DEVELOPMENT

1. EACH DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.302(G), AND EACH DRAINAGE STRUCTURE OR SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL, UNLESS OTHER DESIGN CRITERIA ARE APPROVED BY TRAVIS COUNTY.
2. BEFORE BEGINNING ANY CONSTRUCTION, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND POST THE DEVELOPMENT PERMIT, THE TCEQ SITE NOTICE, AND ANY OTHER REQUIRED PERMITS AT THE JOB SITE.
3. CONSTRUCTION MAY NOT TAKE PLACE WITHIN TRAVIS COUNTY RIGHT-OF-WAY UNTIL AFTER THE OWNER HAS SUBMITTED A TRAFFIC CONTROL PLAN TO TRAVIS COUNTY AND OBTAINED WRITTEN APPROVAL OF THE TRAFFIC CONTROL PLAN FROM TRAVIS COUNTY.
4. THE CONTRACTOR AND PRIMARY OPERATOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION AND THE SWP3 IN THESE APPROVED PLANS. THE CONTRACTOR AND PRIMARY OPERATOR SHALL REQUEST TRAVIS COUNTY INSPECTION AT SPECIFIC MILESTONES IN THE SEQUENCE OF THE CONSTRUCTION OF THE SITE DEVELOPMENT CORRESPONDING TO THE PRIORITY INSPECTIONS SPECIFIED IN CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS. DEVELOPMENT OUTSIDE THE LIMITS OF CONSTRUCTION SPECIFIED IN THE APPROVED PERMIT AND CONSTRUCTION PLANS IS PROHIBITED.
5. BEFORE BEGINNING ANY CONSTRUCTION, ALL STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS SHALL BE MET, AND THE FIRST PHASE OF THE TEMPORARY EROSION CONTROL (ESC) PLAN INSTALLED WITH A SWP3 INSPECTION REPORT UPLOADED TO MYPERMITNOW.ORG. ALL SWP3 AND ESC PLAN MEASURES AND PRIMARY OPERATOR SWP3 INSPECTIONS MUST BE PERFORMED BY THE PRIMARY OPERATOR IN ACCORDANCE WITH THE APPROVED PLANS AND SWP3 AND ESC PLAN NOTES THROUGHOUT THE CONSTRUCTION PROCESS.
6. BEFORE STARTING CONSTRUCTION, THE OWNER OR CONTRACTOR OR THEIR DESIGNATED REPRESENTATIVES SHALL SUBMIT A REQUEST VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY TO REQUEST AND SCHEDULE A MANDATORY PRECONSTRUCTION CONFERENCE AND ESC INSPECTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF OR TNR STORM WATER MANAGEMENT PROGRAM STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383.
7. THE CONTRACTOR SHALL KEEP TRAVIS COUNTY TNR ASSIGNED INSPECTION STAFF CURRENT ON THE STATUS OF SITE DEVELOPMENT AND UTILITY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY TRAVIS COUNTY AND REQUEST PRIORITY INSPECTIONS THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY IN ACCORDANCE WITH THE SPECIFIC MILESTONES IN THE CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS.
8. CONTOUR DATA SOURCE: ______________________________
9. FILL MATERIAL MUST BE MANAGED AND DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS SPECIFIED IN THE APPROVED PLANS, SWP3, AND THE TRAVIS COUNTY CODE. THE CONTRACTOR SHALL STOCKPILE FILL AND CONSTRUCTION MATERIALS ONLY IN THE AREAS DESIGNATED ON THE APPROVED PLANS AND NOT WITHIN THE 0.2 PERCENT ANNUAL CHANCE FLOODPLAIN OR THE 1 PERCENT ANNUAL CHANCE FLOODPLAIN, WATERWAY SETBACK, CRITICAL ENVIRONMENTAL FEATURE SETBACK, OR OUTSIDE THE LIMITS OF CONSTRUCTION. DISPOSAL OF SOLID WASTE MATERIALS, AS DEFINED BY STATE LAW (E.G., LITTER, TIRES, DECOMPOSABLE WASTES, ETC.) IS PROHIBITED IN PERMANENT FILL SITES.
10. BEFORE DISPOSING ANY EXCESS FILL MATERIAL OFF-SITE, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR DOCUMENTATION THAT DEMONSTRATES THAT ALL REQUIRED PERMITS FOR THE PROPOSED DISPOSAL SITE LOCATION, INCLUDING TRAVIS COUNTY, TCEQ NOTICE, AND OTHER APPLICABLE DEVELOPMENT PERMITS, HAVE BEEN OBTAINED. THE OWNER OR PRIMARY OPERATOR MUST REVISE THE SWP3 AND ESC PLAN IF HANDLING OR PLACEMENT OF EXCESS FILL ON THE CONSTRUCTION SITE IS REVISED FROM THE EXISTING SWP3. IF THE FILL DISPOSAL LOCATION IS OUTSIDE TRAVIS COUNTY OR DOES NOT REQUIRE A DEVELOPMENT PERMIT, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR THE SITE ADDRESS, CONTACT INFORMATION FOR THE PROPERTY OWNER OF THE FILL
11. THE DESIGN ENGINEER IS RESPONSIBLE FOR THE ADEQUACY OF THE CONSTRUCTION PLANS. IN REVIEWING THE CONSTRUCTION PLANS, TRAVIS COUNTY WILL RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
12. IN THE EVENT OF ANY CONFLICTS BETWEEN THE CONTENT IN THE SWP3 SITE NOTEBOOK AND THE CONTENT IN THE CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY, THE CONSTRUCTION PLANS SHALL TAKE PRECEDENCE.
13. A MINIMUM OF TWO SURVEY BENCHMARKS SHALL BE SET, INCLUDING DESCRIPTION, LOCATION, AND ELEVATION; THE BENCHMARKS SHOULD BE TIED TO A TRAVIS COUNTY CONTROL BENCHMARK WHEN POSSIBLE.
14. ANY EXISTING PAVEMENT, CURBS, SIDEWALKS, OR DRAINAGE STRUCTURES WITHIN COUNTY RIGHT-OF-WAY WHICH ARE DAMAGED, REMOVED, OR SILTED, WILL BE REPAIRED BY THE CONTRACTOR AT OWNER OR CONTRACTOR'S EXPENSE BEFORE APPROVAL AND ACCEPTANCE OF THE CONSTRUCTION BY TRAVIS COUNTY.
15. CALL THE TEXAS EXCAVATION SAFETY SYSTEM AT 8-1-1 AT LEAST 2 BUSINESS DAYS BEFORE BEGINNING EXCAVATION ACTIVITIES.
16. ALL STORM SEWER PIPES SHALL BE CLASS III RCP, UNLESS OTHERWISE NOTED.
17. CONTRACTOR IS REQUIRED TO OBTAIN A UTILITY INSTALLATION PERMIT IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.901(A)(3) BEFORE ANY CONSTRUCTION OF UTILITIES WITHIN ANY TRAVIS COUNTY RIGHT-OF-WAY.
18. THIS PROJECT IS LOCATED ON FLOOD INSURANCE RATE MAP 48453C0190H.
19. TEMPORARY STABILIZATION MUST BE PERFORMED IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.
20. PERMANENT SITE STABILIZATION/RE-VEGETATION MUST BE PERFORMED IMMEDIATELY IN ALL SITE AREAS WHICH ARE AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED IN THE APPROVED PLANS FOR PHASED RE-VEGETATION, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.
21. ALL TREES WITHIN THE RIGHT-OF-WAY AND DRAINAGE EASEMENTS SHALL BE SAVED OR REMOVED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS. TRAVIS COUNTY TREE PRESERVATION STANDARDS IN TRAVIS COUNTY CODE SECTION 482.973, INCLUDING INSTALLATION AND MAINTENANCE OF ALL SPECIFIED TREE PROTECTION MEASURES, MUST BE FOLLOWED DURING CONSTRUCTION.
22. AN ENGINEER'S CONCURRENCE LETTER IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.953 MUST BE SUBMITTED VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE. THE ENGINEER'S CONCURRENCE LETTER MUST BE SUBMITTED BEFORE THE CONTRACTOR OR PRIMARY OPERATOR REQUESTS A FINAL INSPECTION BY TRAVIS COUNTY.
23. SITE IMPROVEMENTS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE ENGINEER'S CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY. NON-CONFORMANCE WITH THE APPROVED PLANS WILL DELAY FINAL INSPECTION APPROVAL BY THE COUNTY UNTIL PLAN CONFORMANCE IS ACHIEVED OR ANY REQUIRED PLAN REVISIONS ARE APPROVED.
24. FINAL SITE STABILIZATION. ALL AREAS DISTURBED BY THE CONSTRUCTION MUST BE PERMANENTLY REVEGETATED AND ALL TEMPORARY SEDIMENT CONTROLS AND ACCUMULATED SEDIMENTATION MUST BE REMOVED BEFORE THE COUNTY WILL ISSUE A CERTIFICATE OF COMPLIANCE FOR FINAL SITE STABILIZATION AS PART OF FINAL INSPECTION AND PROJECT COMPLETION. A DEVELOPERS CONTRACT, AS DESCRIBED IN THE SWP3 AND ESC NOTES SHEET MAY BE EXECUTED WITH TRAVIS COUNTY FOR CONDITIONAL ACCEPTANCE OF A PROJECT FOR WHICH HAS ESC FISCAL SECURITY POSTED AND FOR WHICH ALL ITEMS ARE COMPLETE

CONSTRUCTION SEQUENCING:

1. INSTALL CONSTRUCTION FENCING, STABILIZED CONSTRUCTION ENTRANCE, TEMPORARY EROSION CONTROLS AND TREE PROTECTION FENCING PER THE APPROVED EROSION AND SEDIMENTATION CONTROL/TREE PROTECTION PLAN.
2. THE CONTRACTOR SHALL ARRANGE AND COORDINATE ACCEPTABLE MEETING TIMES FOR AN ON-SITE PRE- CONSTRUCTION MEETING WITH THE OWNER, PROJECT ENGINEER, RELEVANT CONTRACTORS, RELEVANT UTILITY REPRESENTATIVES, AND THE CITY ENGINEER. AT THIS MEETING, THE CITY SHALL VERIFY THAT ALL EROSION AND SEDIMENT CONTROLS AND TREE PROTECTION ARE IN PLACE, THAT CONSTRUCTION DRAWINGS AND THE SWPPP ARE LOCATED ON SITE, AND THAT THE SWPPP PERMITS HAVE BEEN ISSUED. THE CITY MAY THEN ISSUE THE SUBDIVISION IMPROVEMENT PERMIT.
3. DELIVER APPROVED ROUGH-CUT SHEETS TO THE CITY PRIOR TO CLEARING AND GRUBBING.
4. ROUGH CUT WATER QUALITY AND DETENTION PONDS. PONDS MUST BE FUNCTIONAL AND INTERCEPT SITE RUN-OFF.
5. ROUGH GRADE STREETS. NO DEVELOPMENT OF EMBANKMENT WILL BE PERMITTED AT THIS TIME.
6. INSTALL ALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.
7. DELIVER STORM SEWER CUT SHEETS TO THE CITY.
8. BEGIN INSTALLATION OF STORM SEWER LINES. UPON COMPLETION, RESTORE AS MUCH DISTURBED AREA AS POSSIBLE, PARTICULARLY CHANNELS AND LARGE OPEN AREAS.
9. DELIVER FINAL GRADE CUT SHEETS TO THE CITY.
10. REGRADE STREETS TO SUBGRADE.
11. ENSURE THAT ALL UNDERGROUND UTILITY CROSSINGS ARE COMPLETED. LAY FIRST COURSE BASE MATERIAL ON ALL STREETS.
12. INSTALL CURB AND GUTTER OR RIBBON CURB.
13. LAY FINAL BASE COURSE ON ALL STREETS.
14. LAY ASPHALT OR CONCRETE. NO STREET CUTS WILL BE ALLOWED AFTER THE FINAL PAVEMENT SURFACE COURSE HAS BEEN PLACED.
15. COMPLETE ALL UNDERGROUND INSTALLATIONS WITHIN THE R.O.W.
16. COMPLETE FINAL GRADING AND RESTORATION OF DETENTION AND WATER QUALITY PONDS.
17. OBTAIN CITY APPROVAL OF TOPSOIL PRIOR TO PLACING SEED, SOD, MATTING OR HYDROMULCH.
18. COMPLETE PERMANENT EROSION CONTROL AND RESTORATION OF SITE VEGETATION.
19. REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROLS.
20. COMPLETE ANY NECESSARY FINAL DRESS UP OF ALL DISTURBED AREAS.
21. PROJECT ENGINEER SUBMITS AS-BUILT DRAWINGS AND A LETTER OF CONCURRENCE STATING THE PROJECT WAS CONSTRUCTED PER THE APPROVED PLANS.

UTILITY COMPANIES:

CONTRACTORS MUST BE ABLE TO CERTIFY THAT ALL UTILITY COMPANIES HAVE BEEN NOTIFIED AT LEAST FORTY- EIGHT (48) HOURS IN ADVANCE OF PROPOSED CUTS OR TRENCHES IN THE STREET RIGHT-OF-WAYS OR PUBLIC UTILITY EASEMENTS, AND THAT UTILITY LINES IN THE IMMEDIATE VICINITY OF THE PROJECT HAVE BEEN IDENTIFIED AND, IF NECESSARY, LOCATED AND MARKED ON THE GROUND AT A SITE BEFORE YOU DIG IN ANY PUBLIC UTILITY EASEMENT OR STREET RIGHT-OF-WAY. "ONE-CALL" THROUGH THE CITY OF AUSTIN OR SOUTHWESTERN BELL DOES NOT COVER ALL OF THE UTILITY COMPANIES IN THE CITY OF LAKEWAY. *THE TEXAS ONE-CALL* SYSTEM DOES. THE FOLLOWING IS A LIST OF THE UTILITY SERVICE PROVIDERS:

SOUTHWESTERN BELL
FOR PRE-CONSTRUCTION MEETINGS FOR ALL DEVELOPMENT IN LAKEWAY PROPER CALL 870-5185
FOR PRE-CONSTRUCTION MEETINGS FOR DEVELOPMENT ALONG RR 620 (INCLUDING ETJ) CALL 870-5214. FOR UTILITY LINE LOCATION CALL 1-800-344-8377

AUSTIN ENERGY
FOR PRE-CONSTRUCTION MEETINGS CALL 505-7649 FOR UTILITY LINE LOCATION CALL 505-7542

PEDERNALES ELECTRIC COOP., INC.
FOR PRE-CONSTRUCTION MEETINGS CALL 219-2602 EXT. 7420 FOR UTILITY LINE LOCATION CALL 1-800 344-8377

TIME WARNER CABLE
FOR PRE-CONSTRUCTION MEETINGS CALL 485-6433 FOR UTILITY LINE LOCATION CALL 485-6356

LAKEWAY MUNICIPAL UTILITY DISTRICT
FOR PRE-CONSTRUCTION MEETINGS CALL 261-6222 EXT 10 FOR UTILITY LINE LOCATION CALL 261-6222 EXT 10

HURST CREEK MUNICIPAL UTILITY DISTRICT
FOR PRE-CONSTRUCTION MEETINGS CALL 261-6281 FOR UTILITY LINE LOCATION CALL 261-6281

TRAVIS COUNTY WATER CONTROL AND IMPROVEMENT DISTRICT #17
FOR PRE-CONSTRUCTION MEETINGS CALL 266-1111 EXT 13 FOR UTILITY LINE LOCATION CALL 266-1111 EXT 10

THE TEXAS RAILROAD COMMISSION
LP GAS DIVISION CALL 936-4268 (FOR ALL SUBDIVISIONS WITH 10 OR MORE LOTS TO BE SERVED WITH PROPANE)

TEMPORARY EROSION AND SEDIMENTATION NOTES:

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION). SEE SHEET 5 FOR EROSION/SEDIMENTATION CONTROL DETAILS. NOTE: T POSTS ARE TO BE SPACED 5' APART ON CENTER.
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL/TREE PROTECTION PLAN. NO EROSION CONTROLS SHALL BE PLACED BEYOND THE PROPERTY LINES OF THE SITE UNLESS WRITTEN PERMISSION HAS BEEN OBTAINED FROM ADJACENT PROPERTY OWNERS.
3. THE CONTRACTOR IS REQUIRED TO INSPECT THE CONTROLS AT WEEKLY INTERVALS AND AFTER SIGNIFICANT RAINFALL EVENTS TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES.
4. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSING CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.
5. ANY DIRT, MUD, ROCKS, DEBRIS, ETC., THAT IS SPILLED, TRACKED, OR OTHERWISE DEPOSITED ON ANY EXISTING PAVED STREET SHALL BE CLEANED UP IMMEDIATELY.
6. THE CODE ENFORCEMENT OFFICER, CITY ENGINEER OR DESIGNATED CITY INSPECTOR HAS THE AUTHORITY TO REQUIRE ADDITIONAL EROSION/SEDIMENTATION CONTROLS OR TREE PROTECTION BEFORE OR DURING CONSTRUCTION.
7. PRIOR TO CONSTRUCTION ALL TREES OVER ROADWAYS AND CONSTRUCTION AREAS MAY BE TRIMMED TO 13½- FEET IN HEIGHT.
8. ALL FABRIC FOR EROSION/SEDIMENTATION CONTROLS SHALL BE A MINIMUM OF 6-OZ PER SQUARE FOOT.

PERMANENT EROSION AND SEDIMENTATION NOTES:

1. ALL DISTURBED AREAS SHALL BE RESTORED TO THE HARD SURFACE OF THE STREET AS NOTED BELOW.
2. SOD OR AN APPROVED EROSION CONTROL MATTING SHALL BE INSTALLED ON ALL DISTURBED AREAS WITH A FINISHED GRADE OF 4:1 TO 2:1. SLOPES GREATER THAN 2:1 SHALL BE STRUCTURALLY STABILIZED UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
3. ALL DISTURBED AREAS ON THE ENTIRE PROJECT (SUCH AS AREAS THAT HAVE BEEN DRIVEN ON, GRADED, USED FOR STORAGE OF ANYTHING AND ARE NOT IN THE EXACT CONDITION THAT EXISTED PRIOR TO CONSTRUCTION) SHALL HAVE A MINIMUM OF THREE (3) INCHES OF TOPSOIL PLACED PRIOR TO REVEGETATION.
4. TOPSOIL SHALL BE CLEAN, FRIABLE, FERTILE SOIL WITH A RELATIVELY HIGH EROSION RESISTANCE, FREE OF OBJECTIONABLE MATERIALS INCLUDING ROOTS AND ROCKS LARGER THAN ONE (1) INCH. TOPSOIL SHALL NOT CONTAIN CALICHE OR LIMESTONE. TOPSOIL SHALL BE READILY ABLE TO SUPPORT THE GROWTH OF PLANTING, SEEDING AND SODDING, AS ACCEPTED BY THE CITY.
5. A MINIMUM OF THREE (3) INCHES OF TOPSOIL SHALL BE PLACED IN ALL DRAINAGE CHANNELS AND HIGH VELOCITY EROSION CONTROL MATTING SHALL BE PLACED ON THE CHANNEL BOTTOM AND UP THE SLOPE TO AN ELEVATION OF A MINIMUM OF 6" ABOVE THE 100-YEAR FLOOD PLAIN.
6. PRIOR TO THE PLACEMENT OF SOD, SEED, EROSION CONTROL MATTING OR HYDROMULCH, THE CONTRACTOR SHALL CONTACT THE CITY AND REQUEST AN ON-SITE INSPECTION OF THE TOPSOIL. FAILURE TO GET THIS INSPECTION/APPROVAL CAN CAUSE THE TOPSOIL AND VEGETATION TO BE REPLACED.
7. THE SEEDING FOR PERMANENT EROSION CONTROL SHALL BE APPLIED OVER AREAS DISTURBED BY CONSTRUCTION AS FOLLOWS:
   a. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH A COMBINATION OF TWO (2) POUND PER 1000 SQUARE FEET OF UNHULLED BERMUDA AND TEN (10) POUNDS PER 1000 SQUARE FEET OF WINTER RYE WITH PURITY OF 95% WITH 90% GERMINATION.
   b. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF EIGHT (8) POUNDS PER 1000 SQUARE FEET WITH A PURITY OF 95% WITH 85% GERMINATION.
8. FERTILIZER SHALL HAVE AN ANALYSIS OF 15-15-15 AND SHALL BE APPLIED AT THE RATE OF 100 POUNDS PER ACRE.
9. IMMEDIATELY UPON COMPLETION OF HYDROMULCHING OPERATIONS, THE CONTRACTOR SHALL FURNISH TO THE CITY OR DESIGN ENGINEER A COPY OF A WRITTEN CERTIFICATION FROM THE HYDROMULCH APPLICATOR STATING THE AMOUNTS OF SEED AND FERTILIZER APPLIED. THE CERTIFICATION SHALL CONTAIN THE NAME, ADDRESS AND PHONE NUMBER OF THE APPLICATOR AND BE SIGNED BY THE APPLICATOR. NO CERTIFICATE OF ACCEPTANCE SHALL BE ISSUED WITHOUT THE REQUIRED CERTIFICATION.
10. THE PLANTED AREA SHALL BE IRRIGATED OR SPRINKLED IN A MANNER THAT WILL NOT ERODE THE TOPSOIL, BUT WILL SUFFICIENTLY SOAK THE SOIL TO A DEPTH OF SIX INCHES. THE IRRIGATION SHALL OCCUR AT A MINIMUM OF SEVEN (7) DAY INTERVALS DURING THE FIRST TWO MONTHS. RAINFALL OCCURRENCES OF ½ INCH OR MORE SHALL POSTPONE THE WATERING SCHEDULE FOR ONE WEEK.
11. MULCH TYPE USED SHALL BE EITHER CELLULOSE FIBER, APPLIED AT A RATE OF 2,000 POUNDS PER ACRE, OR WOOD FIBER MULCH, APPLIED AT A RATE OF 2,500 POUNDS PER ACRE.
12. RESTORATION SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH 95% COVERAGE, PROVIDED NO BARE SPOTS LARGER THAN 9 SQUARE FEET EXIST. GRASS MUST BE DEEP GREEN IN COLOR TO BE ACCEPTABLE; BROWN GRASS IS THE SAME AS NO GRASS.
13. WHEN REQUIRED, NATIVE GRASS SEEDING SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL.
14. ALL CONSTRUCTED AND ALTERED DRAINAGE CHANNELS SHALL BE STABILIZED AND VEGETATED IMMEDIATELY AFTER FINAL GRADING.

SAXON LOOMIS CONSULTING GROUP

TBPE Firm Registration No. F-19735

CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

GENERAL NOTES

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED PROFESSIONAL ENGINEER
07/18/2023

PLAN STATUS

DATE	DESCRIPTION

CS	CB/AO	TGL/CS
DESIGN	DRAWN	CHKD

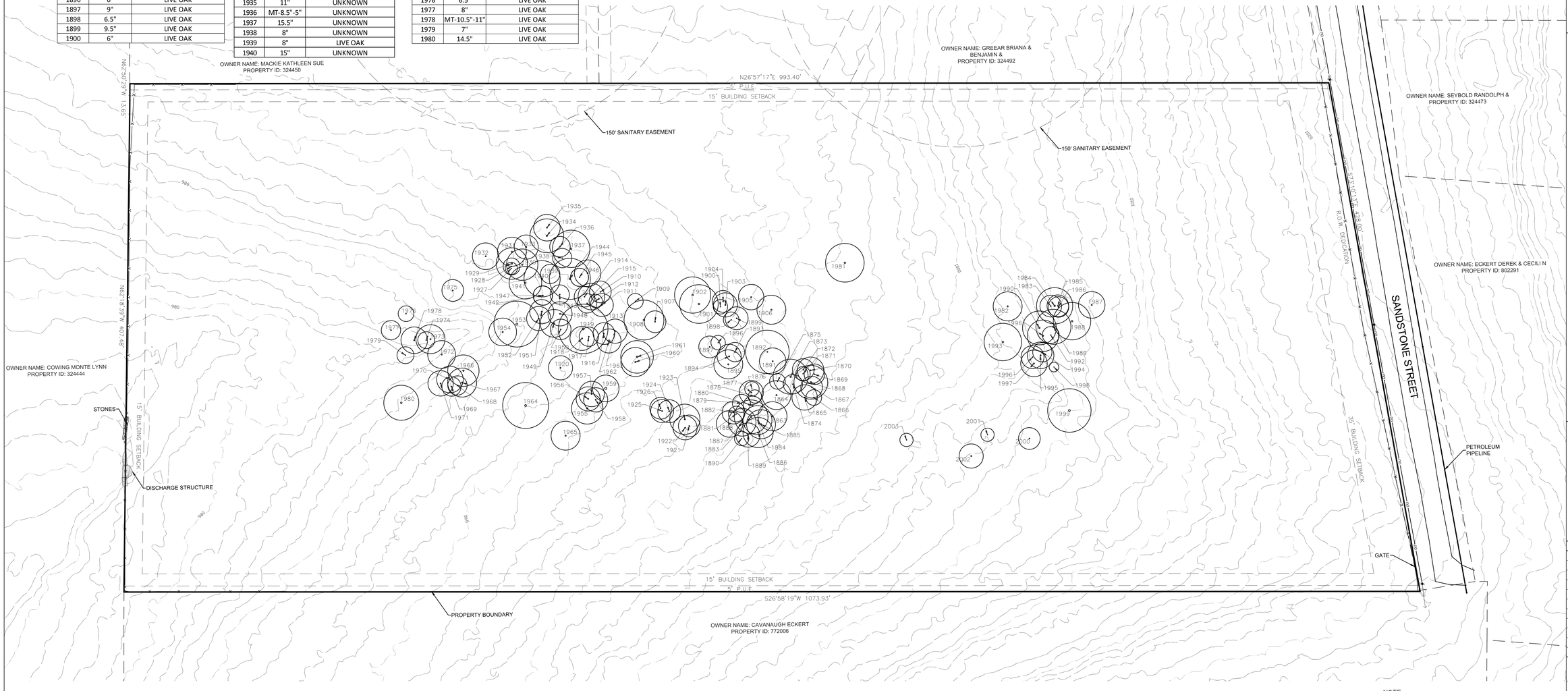
JOB No.

DATE : JULY 2023

NOT FOR CONSTRUCTION

TREES TABLE

TAG	SIZE	SPECIES
1863	12"	LIVE OAK
1864	12"	LIVE OAK
1865	10.5"	LIVE OAK
1866	6.5"	LIVE OAK
1867	9"	LIVE OAK
1868	14"	LIVE OAK
1869	8.8"	LIVE OAK
1870	MT-11"-7.5"	LIVE OAK
1871	6"	LIVE OAK
1872	9"	LIVE OAK
1873	14.5"	LIVE OAK
1874	8"	LIVE OAK
1875	6.5"	LIVE OAK
1876	6"	LIVE OAK
1877	10"	LIVE OAK
1878	5.5"	LIVE OAK
1879	7.5"	LIVE OAK
1880	8"	LIVE OAK
1881	6.5"	LIVE OAK
1882	MT-9.5"-8.5"	LIVE OAK
1883	14"	LIVE OAK
1884	12"	LIVE OAK
1885	MT-12"-7"	LIVE OAK
1886	12.5"	LIVE OAK
1887	11.5"	LIVE OAK
1888	11"	LIVE OAK
1889	MT-10"-9.5"	LIVE OAK
1890	6"	LIVE OAK
1891	11"	LIVE OAK
1892	18"	LIVE OAK
1893	8"	LIVE OAK
1894	MT-10"-10"	LIVE OAK
1895	12"	LIVE OAK
1896	6"	LIVE OAK
1897	9"	LIVE OAK
1898	6.5"	LIVE OAK
1899	9.5"	LIVE OAK
1900	6"	LIVE OAK
1901	MT-16"-12"	LIVE OAK
1902	MT-15"-12"	LIVE OAK
1903	10"	LIVE OAK
1904	9"	LIVE OAK
1905	MT-10.5"-6"	LIVE OAK
1906	MT-12"-13"	LIVE OAK
1907	MT-9"-7.5"	UNKNOWN
1908	16.5"	UNKNOWN
1909	MT-6.5"-6"	UNKNOWN
1910	9"	UNKNOWN
1911	9.5"	UNKNOWN
1912	5.5"	UNKNOWN
1913	8"	UNKNOWN
1914	8.5"	UNKNOWN
1915	11"	UNKNOWN
1916	9"	UNKNOWN
1917	8"	UNKNOWN
1918	10"	UNKNOWN
1919	20.5"	UNKNOWN
1920	10"	UNKNOWN
1921	9"	LIVE OAK
1922	MT-10"-7"	LIVE OAK
1923	12.5"	LIVE OAK
1924	9.5"	LIVE OAK
1925	9.5"	LIVE OAK
1926	9"	LIVE OAK
1927	5"	UNKNOWN
1928	7"	UNKNOWN
1929	13"	LIVE OAK
1930	13"	LIVE OAK
1931	12"	LIVE OAK
1932	MT-11"-7.5"	LIVE OAK
1933	MT-10"-3.5"	UNKNOWN
1934	MT-10"-14"	UNKNOWN
1935	11"	UNKNOWN
1936	MT-8.5"-5"	UNKNOWN
1937	15.5"	UNKNOWN
1938	8"	UNKNOWN
1939	8"	LIVE OAK
1940	15"	UNKNOWN
1941	13.5"	LIVE OAK
1942	8"	UNKNOWN
1943	MT-8"-6"	UNKNOWN
1944	17"	LIVE OAK
1945	7.5"	LIVE OAK
1946	11"	LIVE OAK
1947	8"	UNKNOWN
1948	10"	UNKNOWN
1949	11.5"	UNKNOWN
1950	8.5"	UNKNOWN
1951	10"	UNKNOWN
1952	10"	UNKNOWN
1953	MT-11.5"-19"	LIVE OAK
1954	11.5"	LIVE OAK
1955	13"	LIVE OAK
1956	10"	LIVE OAK
1957	10.5"	LIVE OAK
1958	10"	LIVE OAK
1959	11"	LIVE OAK
1960	12"	LIVE OAK
1961	13.5"	LIVE OAK
1962	10"	LIVE OAK
1963	10"	LIVE OAK
1964	19"	LIVE OAK
1965	12"	LIVE OAK
1966	13"	LIVE OAK
1967	12"	LIVE OAK
1968	8"	LIVE OAK
1969	8"	LIVE OAK
1970	11"	LIVE OAK
1971	MT-10.5"-9.5"	LIVE OAK
1972	11.5"	LIVE OAK
1973	12"	LIVE OAK
1974	7"	LIVE OAK
1975	9"	LIVE OAK
1976	6.5"	LIVE OAK
1977	8"	LIVE OAK
1978	MT-10.5"-11"	LIVE OAK
1979	7"	LIVE OAK
1980	14.5"	LIVE OAK
1981	16"	LIVE OAK
1982	MT-11"-12"	LIVE OAK
1983	9"	LIVE OAK
1984	15"	LIVE OAK
1985	9"	LIVE OAK
1986	8.5"	LIVE OAK
1987	11"	LIVE OAK
1988	15.5"	LIVE OAK
1989	MT-10"-14.5"	LIVE OAK
1990	14"	LIVE OAK
1991	MT-11"-13"	LIVE OAK
1992	7"	LIVE OAK
1993	15.5"	LIVE OAK
1994	8"	LIVE OAK
1995	11"	LIVE OAK
1996	9.5"	LIVE OAK
1997	MT-10.5"-11"	LIVE OAK
1998	4"	WHITE OAK
1999	MT-18"-15.5"	WHITE OAK
2000	MT-9"-5.5"	LIVE OAK
2001	5.5"	LIVE OAK
2002	10"	LIVE OAK
2003	MT-4.5"-5.5"	LIVE OAK



0 40' 80'

SCALE: 1" = 40'

LEGEND

- 504 — EXISTING CONTOUR
- PROPERTY BOUNDARY
- LOT LINES
- CHAIN LINK FENCE
- POWER POLE
- GUY WIRE
- XX — EXISTING TREE

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EXISTING CONDITIONS

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9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED PROFESSIONAL ENGINEER

07/18/2023

PLAN STATUS	
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JOB No.	
DATE : JULY 2023	
SHEET 3 OF 19	

NOT FOR CONSTRUCTION

SUMMARY TABLE

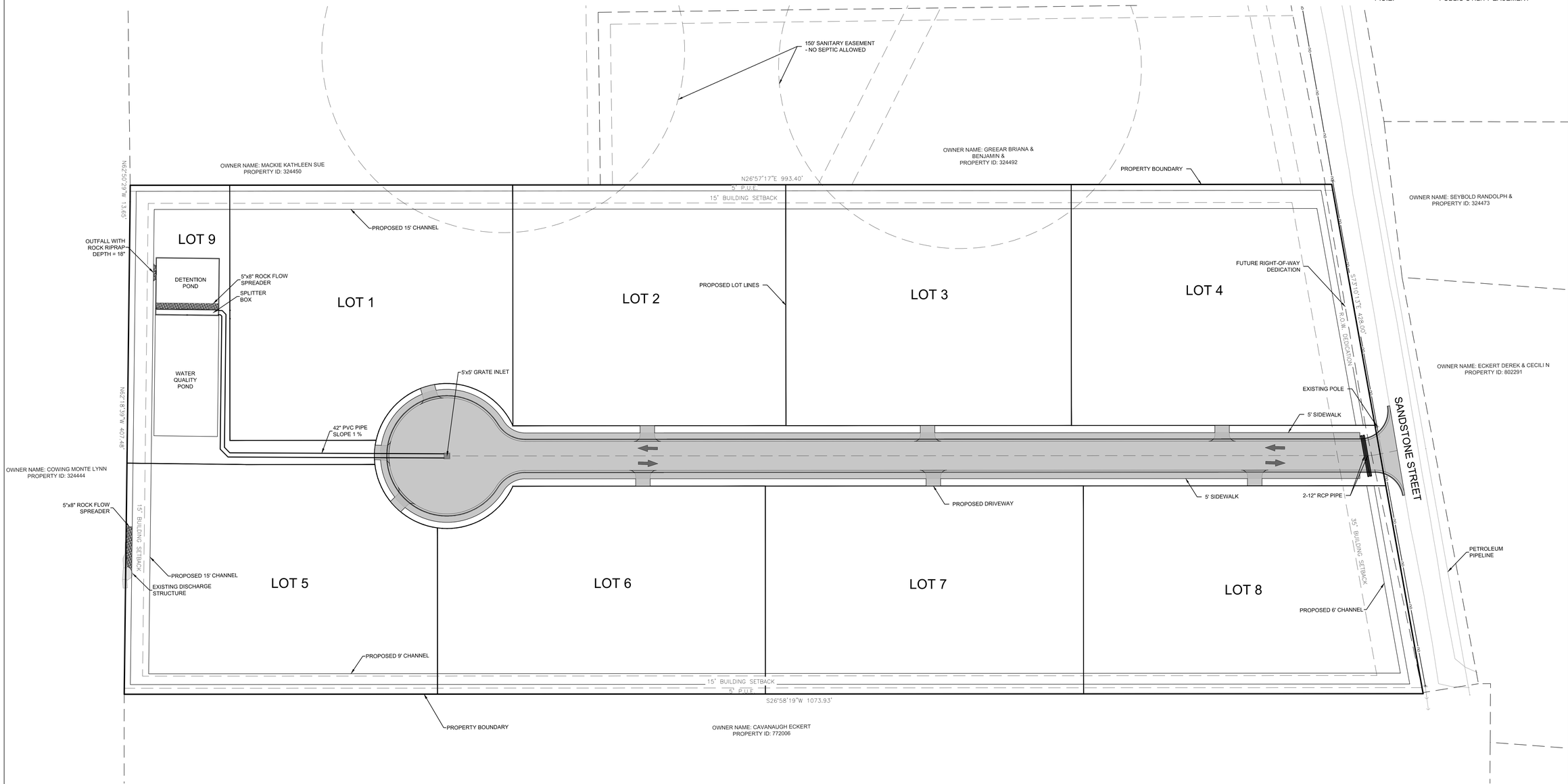
LOT NUMBER	AREA (AC)	FRONTAGE (FT)
1	1.040	144
2	1.032	227
3	1.080	236
4	1.067	251
5	1.080	79
6	1.033	283
7	1.038	263
8	1.048	250
9	0.498	20

0 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- LOT LINES
- PROPOSED LOT LINES
- PROPOSED ROAD AND DRIVEWAY
- POWER POLE
- GUY WIRE
- P.U.E. PUBLIC UTILITY EASEMENT



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SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

SITE PLAN

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED PROFESSIONAL ENGINEER

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PLAN STATUS

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JOB No.

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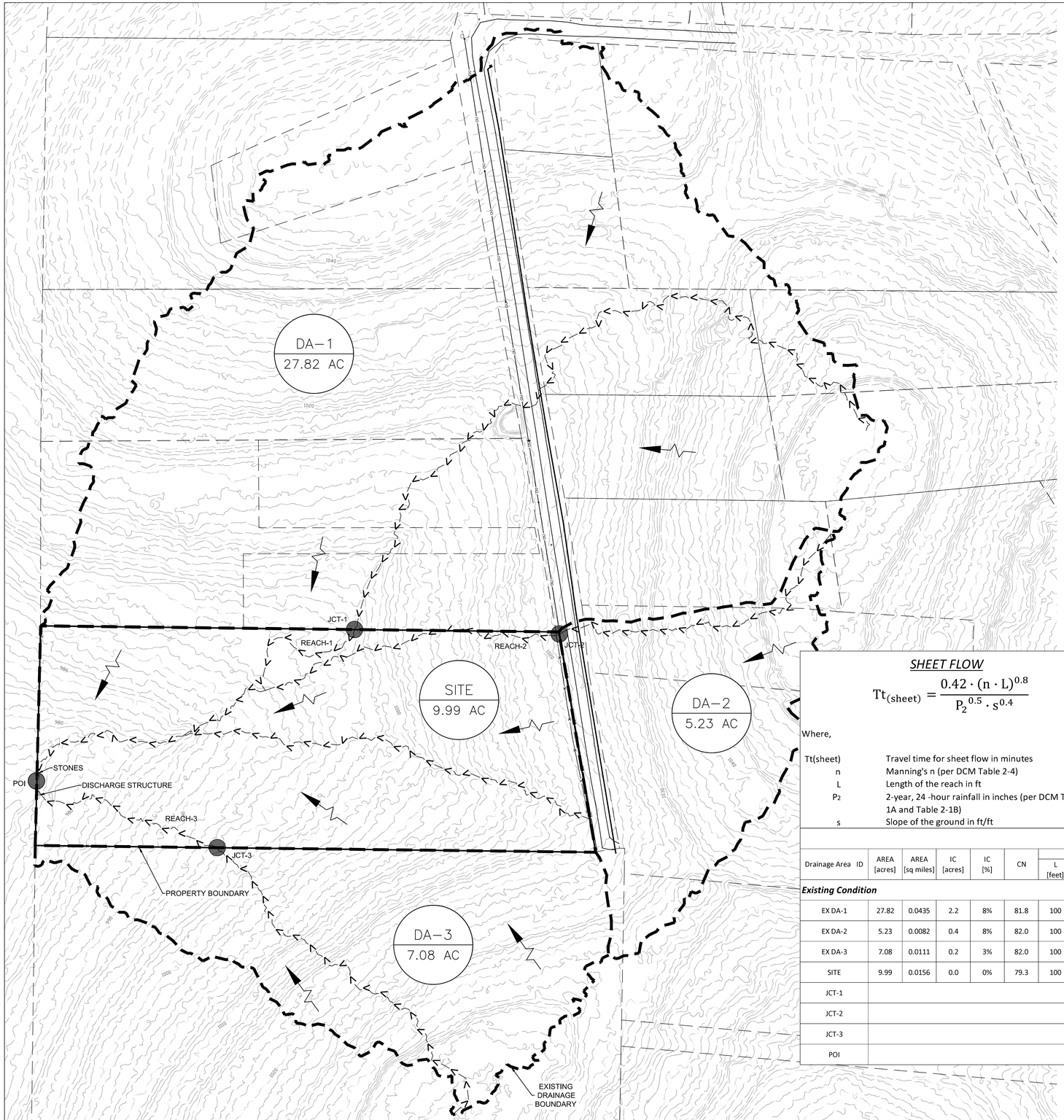
SHEET 4 OF 19

NOT FOR CONSTRUCTION



0 100' 200'

SCALE: 1" = 100'

LEGEND

- EXISTING CONTOUR
- PROPERTY BOUNDARY
- LOT LINES
- CHAIN LINK FENCE
- POWER POLE
- GUY WIRE
- EXISTING DRAINAGE BOUNDARY
- TIME OF CONCENTRATION
- DA–X / X.XX AC — DRAINAGE AREA NAME / AREA (ACRE)
- POI — POINT OF INTEREST
- FLOW ARROW

SHEET FLOW

$$Tt_{(sheet)} = \frac{0.42 \cdot (n \cdot L)^{0.8}}{P_2{}^{0.5} \cdot s^{0.4}}$$

Where,

Tt(sheet)	Travel time for sheet flow in minutes
n	Manning's n (per DCM Table 2-4)
L	Length of the reach in ft
P_2	2-year, 24 -hour rainfall in inches (per DCM Table 2-1A and Table 2-1B)
s	Slope of the ground in ft/ft

SHALLOW CONCENTRATED FLOW

(Unpaved) $$Tt_{(shallow)} = \frac{L}{60 \cdot 16.1345 \cdot s^{0.5}}$$

(Paved) $$Tt_{(shallow)} = \frac{L}{60 \cdot 20.3282 \cdot s^{0.5}}$$

Where,

Tt(shallow)	Travel time for shallow concentrated flow in minutes
L	Length of the reach in ft
s	Slope of the ground in ft/ft

CHANNEL OR STORM DRAIN FLOW

$$Tt_{(channel)} = \sum \frac{L_i}{60 \cdot V_i}$$

Where

Tt(channel)	Total flow travel time through the channel, min
Li	The i-th channel segment length in ft
Vi	The average flow velocity within the ith channel segment, ft/s

Hydrologic Parameters and Results

Drainage Area ID	AREA [acres]	AREA [sq miles]	IC [acres]	IC [%]	CN	Sheet Flow L [feet]	Sheet Flow n	Sheet Flow s [ft/ft]	Sheet Flow v [ft/s]	Sheet Flow Tt [min]	Shallow Conc. Flow L [feet]	Shallow Conc. Flow n	Shallow Conc. Flow s [ft/ft]	Shallow Conc. Flow v [ft/s]	Shallow Conc. Flow Tt [min]	Open Channel Flow L [feet]	Open Channel Flow v [ft/s]	Open Channel Flow Tt [min]	Tc [min]	SCS UH LAG TIME [min]	Q100 (cfs)	Q25 (cfs)	Q10 (cfs)	Q2 (cfs)
Existing Condition																								
EX DA-1	27.82	0.0435	2.2	8%	81.8	100	0.3	0.04	0.14	12.1	1000	0.3	0.05	3.6	4.7	606.0	5.0	2.0	18.8	11.3	239.3	173.9	133.4	73.0
EX DA-2	5.23	0.0082	0.4	8%	82.0	100	0.3	0.03	0.12	13.9	594	0.3	0.06	3.9	2.5	0.0	0.0	0.0	16.4	9.8	48.1	35.0	26.9	14.7
EX DA-3	7.08	0.0111	0.2	3%	82.0	100	0.3	0.03	0.13	13.3	745	0.3	0.06	3.9	3.1	0.0	0.0	0.0	16.4	9.9	64.5	46.8	35.8	19.4
SITE	9.99	0.0156	0.0	0%	79.3	100	0.3	0.05	0.16	10.5	1000	0.3	0.04	3.1	5.4	180.4	5.0	0.6	16.4	9.9	88.2	62.8	47.1	24.2
JCT-1																					239.3	173.9	133.4	73.0
JCT-2																					48.1	35.0	26.9	14.7
JCT-3																					88.2	62.8	47.1	24.2
POI																					433.1	313.7	239.7	129.6

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AUSTIN, TEXAS 78704
Phone: (512) 660-0500

EXISTING DRAINAGE AREA MAP

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

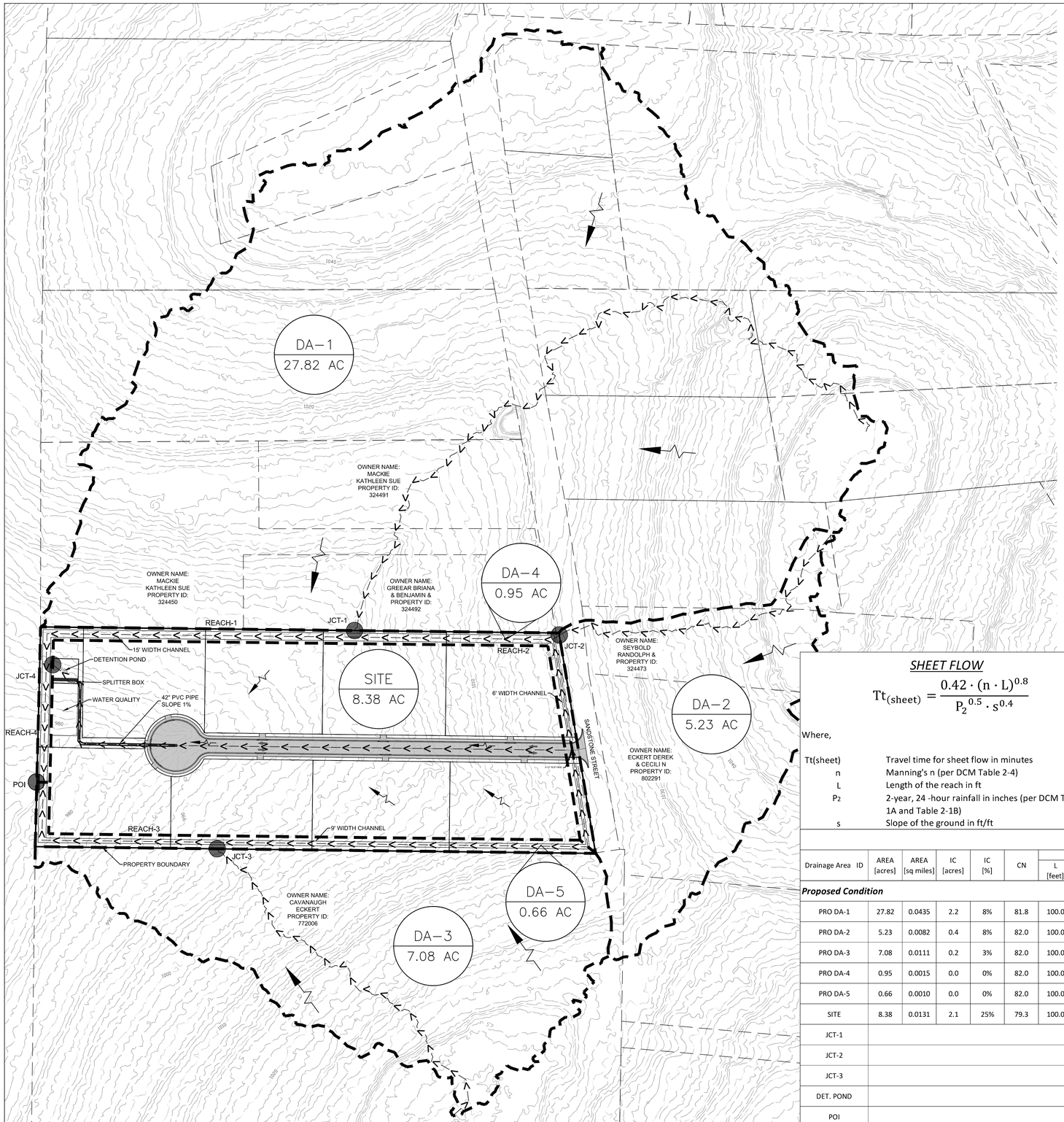
STATE OF TEXAS · CEZARY SAXON · 119794 · REGISTERED PROFESSIONAL ENGINEER
07/18/2023

PLAN STATUS

DATE	DESCRIPTION
CS DESIGN	CB/AO DRAWN / TGL/CS CHKD
JOB No.	
DATE : JULY 2023	

SHEET 5 OF 19

NOT FOR CONSTRUCTION



0 100' 200'

SCALE: 1" = 100'

LEGEND

- EXISTING CONTOUR
- PROPERTY BOUNDARY
- LOT LINES
- CHAIN LINK FENCE
- POWER POLE
- GUY WIRE
- EXISTING DRAINAGE BOUNDARY
- TIME OF CONCENTRATION
- DA–X / X.XX AC — DRAINAGE AREA NAME / AREA (ACRE)
- POI — POINT OF INTEREST
- FLOW ARROW

SHEET FLOW

$$Tt_{(sheet)} = \frac{0.42 \cdot (n \cdot L)^{0.8}}{P_2^{0.5} \cdot s^{0.4}}$$

Where,

Tt(sheet)	Travel time for sheet flow in minutes
n	Manning's n (per DCM Table 2-4)
L	Length of the reach in ft
P_2	2-year, 24 -hour rainfall in inches (per DCM Table 2-1A and Table 2-1B)
s	Slope of the ground in ft/ft

SHALLOW CONCENTRATED FLOW

(Unpaved) $$Tt_{(shallow)} = \frac{L}{60 \cdot 16.1345 \cdot s^{0.5}}$$

(Paved) $$Tt_{(shallow)} = \frac{L}{60 \cdot 20.3282 \cdot s^{0.5}}$$

Where,

Tt(shallow)	Travel time for shallow concentrated flow in minutes
L	Length of the reach in ft
s	Slope of the ground in ft/ft

CHANNEL OR STORM DRAIN FLOW

$$Tt_{(channel)} = \sum \frac{L_i}{60 \cdot V_i}$$

Where

Tt(channel)	Total flow travel time through the channel, min
Li	The i-th channel segment length in ft
Vi	The average flow velocity within the ith channel segment, ft/s

Hydrologic Parameters and Results

Drainage Area ID	AREA [acres]	AREA [sq miles]	IC [acres]	IC [%]	CN	Sheet Flow L [feet]	Sheet Flow n	Sheet Flow s [ft/ft]	Sheet Flow v [ft/s]	Sheet Flow Tt [min]	Shallow Conc. Flow L [feet]	Shallow Conc. Flow n	Shallow Conc. Flow s [ft/ft]	Shallow Conc. Flow v [ft/s]	Shallow Conc. Flow Tt [min]	Open Channel Flow L [feet]	Open Channel Flow v [ft/s]	Open Channel Flow Tt [min]	Tc [min]	SCS UH LAG TIME [min]	Q100 (cfs)	Q25 (cfs)	Q10 (cfs)	Q2 (cfs)
Proposed Condition																								
PRO DA-1	27.82	0.0435	2.2	8%	81.8	100.0	0.3	0.04	0.14	12.1	1000.0	0.3	0.05	3.6	4.7	606.0	5.0	2.0	18.8	11.3	239.3	173.9	133.4	73.0
PRO DA-2	5.23	0.0082	0.4	8%	82.0	100.0	0.3	0.03	0.12	13.9	594.4	0.3	0.06	3.9	2.5				16.4	9.8	48.1	35	26.9	14.7
PRO DA-3	7.08	0.0111	0.2	3%	82.0	100.0	0.3	0.03	0.13	13.3	744.6	0.3	0.06	3.9	3.1				16.4	9.9	64.5	46.8	35.8	19.4
PRO DA-4	0.95	0.0015	0.0	0%	82.0	100.0	0.016	0.01	0.92	1.8						1571.0	5.0	5.2	7.0	4.2	11.7	8.4	6.5	3.5
PRO DA-5	0.66	0.0010	0.0	0%	82.0	100.0	0.016	0.04	1.52	1.1						1070.7	5.0	3.6	4.7	2.8	8.5	6.1	4.7	2.6
SITE	8.38	0.0131	2.1	25%	79.3	100.0	0.02	0.04	1.31	1.3						994.1	5.0	3.3	4.6	2.8	111.3	80.9	62.4	35.1
JCT-1																					239.3	173.9	133.4	73.0
JCT-2																					48.1	35	26.9	14.7
JCT-3																					64.5	46.8	35.8	19.4
DET. POND																					107.0	77.1	58.8	32.3
POI																					404.4	294.6	226.5	124.6

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TBPE Firm Registration No. F-19735

CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

PROPOSED DRAINAGE AREA MAP

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED
PROFESSIONAL ENGINEER
07/18/2023

PLAN STATUS

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DESIGN	DRAWN CHKD

JOB No.

DATE : JULY 2023

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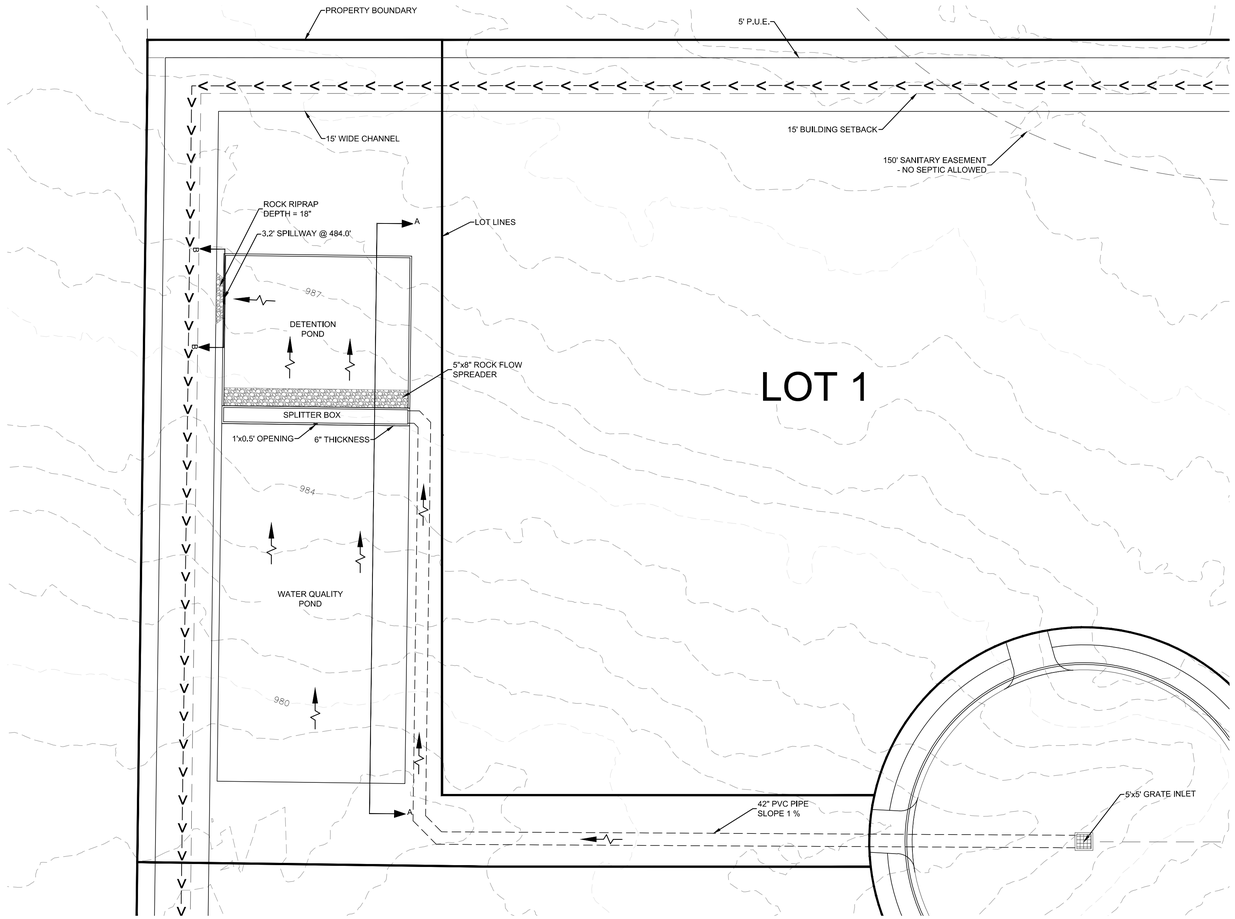
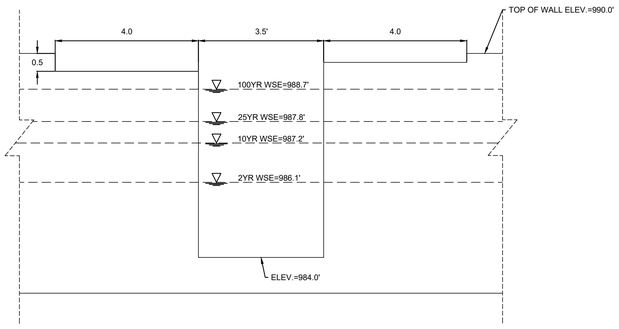
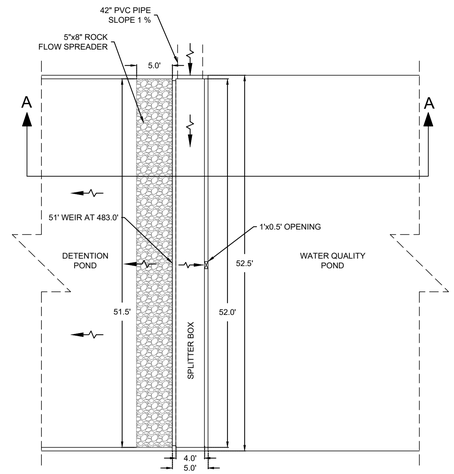




WEIR SECTION (DETENTION POND)
SCALE: 1" = 2'

Detention Pond Outlets		
Spillway	3.2' @ Elev (Ft.)	984.00

Stage Storage Discharge Table (Detention Pond)					
Elev (Ft)	Area (Ac.)	Stage (ft msl)	Average Area (Sq.Ft.)	Incremental Storage (CF)	Cummulative Storage (CF)
984.00	0.0514	0.00	0.00	-	-
985.00	0.0514	2240.69	1120.35	1,120.35	1,120.35
986.00	0.0514	2240.69	2240.69	2,240.69	3,361.04
987.00	0.0514	2240.69	2240.69	2,240.69	5,601.73
988.00	0.0514	2240.69	2240.69	2,240.69	7,842.42
989.00	0.0514	2240.69	2240.69	2,240.69	10,083.12



SPLITTER BOX DETAIL

MAINTENANCE NOTE:

A. MAINTENANCE RESPONSIBILITIES.

STORMWATER CONTROL MEASURES SHALL BE MAINTAINED BY THE PROPERTY OWNER.

B. MAINTENANCE REQUIREMENTS--DESIGN AND CONSTRUCTION.

THE DESIGN OF DRAINAGE FACILITIES (INCLUDING BUT NOT LIMITED TO HEADWALLS, OPEN CHANNELS, STORM SEWERS, AREA INLETS, AND DETENTION, RETENTION AND STORMWATER CONTROL MEASURES AND THEIR APPURTENANCES) SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1.2.4.E OF THE DRAINAGE CRITERIA MANUAL. IN ADDITION, SCMS SHALL COMPLY WITH THE FOLLOWING CONSTRUCTION REQUIREMENTS:

1. SEDIMENT REMOVED DURING CONSTRUCTION OF A DETENTION, OR WATER QUALITY FACILITIES MAY BE DISPOSED OF ON-SITE IF PROPERLY STABILIZED ACCORDING TO THE PRACTICES OUTLINED IN THE EROSION AND SEDIMENTATION CONTROL CRITERIA FOUND IN SECTION 1.4.0 OF THIS MANUAL. AFTER THE CITY OF AUSTIN HAS ACCEPTED A STORMWATER FACILITY DISPOSAL OF SEDIMENT MUST BE AT AN APPROVED LANDFILL.
2. DURING CONSTRUCTION OF SCMS, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE MAINTAINED.
3. IF RUNOFF IS TO ENTER THE SAND FILTRATION CHAMBER OF A WATER QUALITY CONTROL FACILITY PRIOR TO COMPLETION OF SITE CONSTRUCTION AND REVEGETATION, INSPECTION AND MAINTENANCE OF ALL TEMPORARY EROSION/SEDIMENTATION CONTROLS ARE REQUIRED, AS DESCRIBED IN THE ENVIRONMENTAL CRITERIA MANUAL SECTION 1.4.4, TO PREVENT HEAVY SEDIMENT LOADS CAUSED BY HOME CONSTRUCTION FROM CLOGGING THE FILTRATION MEDIA.
4. IN ALL CASES, TREES SHALL BE PRESERVED ACCORDING TO THE REQUIREMENTS OF SECTION 3 OF THE ENVIRONMENTAL CRITERIA MANUAL. THE ACCESS DRIVE AND STAGING AREA SHALL BE DESIGNED TO PRESERVE TREES 8" (INCHES) IN DIAMETER AND GREATER TO THE MAXIMUM EXTENT POSSIBLE. TREES 8" IN DIAMETER AND LARGER SHALL BE SURVEYED AND SHOWN FOR THE PROPOSED ACCESS EASEMENT AT THE TIME OF CONSTRUCTION PLAN PERMITTING.
5. FOR FILTRATION SYSTEMS THE DESIGN MEDIA DEPTH MUST BE VERIFIED, ACCOUNTING FOR CONSOLIDATION. IF INSUFFICIENT DEPTH IS PRESENT, ADDITIONAL MEDIA MUST BE ADDED AND PRE-SOAKED UNTIL THE DESIGN DEPTH IS ACHIEVED. PRE-SOAKING – APPLY 5--10 GALLONS OF WATER PER SQUARE FOOT OF MEDIA AREA WITHIN ONE HOUR.
6. RETAINING WALLS – RETAINING WALLS WITHIN SCMS REQUIRE WATER-TIGHTNESS. WATER-TIGHTNESS IN RETAINING WALLS IS ESSENTIAL TO THE FUNCTION OF THE STRUCTURE. WATERSTOPS SHALL BE PROVIDED DURING CONSTRUCTION OF EXPANSION JOINTS IN RETAINING WALLS PER STANDARD SPECIFICATION 414S, CONCRETE RETAINING WALLS.

C. MAJOR MAINTENANCE REQUIREMENTS.

1. THE FOLLOWING MAINTENANCE ACTIVITIES SHALL BE PERFORMED ON ALL SCMS, IN ADDITION TO THE REQUIREMENTS LISTED FOR THE INDIVIDUAL SCM TYPES, TO ENSURE PROPER FUNCTION:

A) ACCUMULATED PAPER, TRASH AND DEBRIS SHALL BE REMOVED EVERY SIX (6) MONTHS OR AS NECESSARY TO MAINTAIN PROPER OPERATION.

B) STRUCTURAL INTEGRITY SHALL BE MAINTAINED AT ALL TIMES. BASINS AND ALL APPURTENANCES SHALL BE INSPECTED ANNUALLY, OR MORE FREQUENTLY IF SPECIFIED, AND REPAIRS SHALL BE MADE IF NECESSARY. WHEN MAINTENANCE OR REPAIRS ARE PERFORMED, THE SCM SHALL BE RESTORED TO THE ORIGINAL LINES AND GRADES.

C) CORRECTIVE MAINTENANCE SHALL OCCUR:

I. ANY TIME DRAWDOWN OF THE WATER QUALITY VOLUME DOES NOT OCCUR WITHIN NINETY-SIX (96) HOURS (I.E., NO STANDING WATER IS ALLOWED), UNLESS A GREATER MAXIMUM DRAWDOWN TIME IS SPECIFIED IN THE PLANS.

II. FOR DETENTION PONDS ONLY, ANY TIME DRAWDOWN DOES NOT OCCUR WITHIN TWENTY-FOUR (24) HOURS.

D) THE INLET AND OUTLET OF SCMS SHALL BE MAINTAINED UNIMPEDED IN ORDER TO CONVEY FLOW AT ALL TIMES. OBSERVED BLOCKAGES TO THE INLET AND OUTLET, DUE TO VEGETATION, SEDIMENT, DEBRIS, OR ANY OTHER CAUSE, SHALL BE REMOVED.

E) NO UNVEGETATED AREA SHALL EXCEED TEN (10) SQUARE FEET. THIS PERFORMANCE REQUIREMENT APPLIES TO THE ENTIRE POND INCLUDING THE POND BOTTOM, SIDE SLOPES, AND AREAS ADJACENT TO THE POND, AND IS INTENDED TO LIMIT EROSION.

F) THE MINIMUM VEGETATION HEIGHT SHALL BE FOUR (4) INCHES IN THE SCM AND ALL APPURTENANCES, INCLUDING THE TOE OF THE BERM OR WALL OUTSIDE THE SCM, WHERE APPLICABLE.

G) SEDIMENT BUILD-UP SHALL BE REMOVED:

I. WHEN THE ACCUMULATION EXCEEDS SIX (6) INCHES IN SPLITTER BOXES, WET WELLS AND BASINS.

II. WHEN SEDIMENT TRAPS ARE FULL.

III. WHEN SEDIMENT, OF ANY AMOUNT, CAUSES STANDING WATER CONDITIONS OR REDUCES BASIN STORAGE BY MORE THAN 10%.

H) WHEN SEDIMENT IS REMOVED, THE FOLLOWING REQUIREMENTS APPLY:

I. IRRIGATION SHALL BE PROVIDED, AS NEEDED, UNTIL VEGETATION IS ESTABLISHED (WELL ROOTED). SEE SECTION 1.6.3.D, IRRIGATION GUIDELINES.

II. THE DESIGN DEPTH OF THE FILTRATION MEDIA SHALL BE VERIFIED. SEE SECTION 1.6.3.B.5.

III. TILLING OF THE FILTRATION MEDIUM IS NOT ALLOWED.

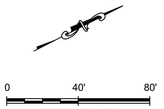
2. SEDIMENTATION AND FILTRATION SCMS:

II. VEGETATION WITHIN THE SCM SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME, EXCEPT AS CALLED FOR IN THE DESIGN.

III. VEGETATION THAT IS MOWED OR CUT SHALL BE REMOVED FROM THE SCM.

3. DETENTION BASINS.

A. VEGETATION WITHIN THE BASIN SHALL NOT EXCEED EIGHTEEN (18) INCHES IN HEIGHT AT ANY TIME.

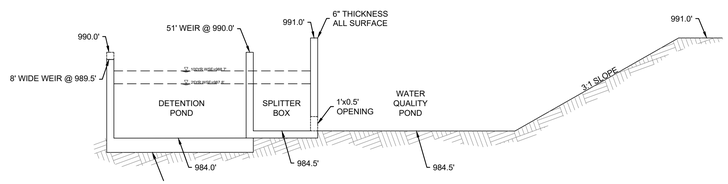


LEGEND

- PROPERTY BOUNDARY
- LOT LINES
- PROPOSED LOT LINES
- TC LINE
- FLOW ARROW

NOTE:

1. All DISTURBED AREAS SHALL BE REVEGETATED WITH NATIVE VEGETATION. THE NATIVE GRASS SEEDING AND PLANTING SHALL COMPLY WITH ITEM NO. 609S - NATIVE SEEDING AND PLANTING FOR RESTORATION 1-4-16 OF CITY OF AUSTIN STANDARD SPECIFICATIONS.
2. ALL EARTHEN EMBANKMENTS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH COA STANDARD SPECIFICATIONS.
3. EARTHEN EMBANKMENT SIDE SLOPES SHALL BE NO STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL.
4. EXPANSION JOINTS ON FREESTANDING WALLS SHALL HAVE WATERTIGHT SEALS AS NEEDED.



SECTION A-A
SCALE: 1" = 5'

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CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

DETENTION POND DETAILS

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED
PROFESSIONAL ENGINEER
07/18/2023

PLAN STATUS

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CS	CB/AO	TGL/CS
DESIGN	DRAWN	CHKD

JOB No.

DATE : JULY 2023

NOT FOR CONSTRUCTION

EROSION CONTROL NOTES:

1. THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING THE SIZE, TYPE, AND LOCATION OF ANY UNDERGROUND, SURFACE, AND AERIAL UTILITIES OR OTHER EXISTING FEATURES IS NOT GUARANTEED TO BE EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM (1-800-344-8377) FOR EXISTING UTILITY LOCATIONS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION. THE CONTRACTOR SHALL ALSO BE FULLY RESPONSIBLE FOR FIELD VERIFYING LOCATIONS AND ELEVATIONS OF ALL EXISTING UTILITIES AFFECTED BY THIS PROJECT'S CONSTRUCTION, IN ORDER TO AVOID DAMAGING THOSE UTILITIES, AND SHALL IMMEDIATELY ARRANGE FOR REPAIR AND RESTORATION OF CONTRACTOR-DAMAGED UTILITIES, TO THE SATISFACTION OF THE UTILITY COMPANY, AT THE EXPENSE OF THE CONTRACTOR.
2. THE CONTRACTOR SHALL CONTACT SAXON CONSULTING WITH ANY ITEMS ON THESE PLANS THAT NEED CLARIFICATION OR ANY FIELD CONDITIONS THAT ARE NOT CONSISTENT WITH THESE PLANS.
3. THE CONTRACTOR SHALL USE CARE AND NOT DAMAGE ANY EXISTING SIDEWALKS, DRIVES, STREETS, OR OTHER FEATURES, THAT ARE NOT PART OF THIS PROJECT. ANY CONTRACTOR DAMAGE SHALL BE REPAIRED TO THE OWNER'S SATISFACTION, AT THE CONTRACTOR'S EXPENSE.
4. SEE GENERAL NOTES FOR EROSION AND SEDIMENTATION CONTROL NOTES.
5. SEE CONSTRUCTION DETAILS FOR EROSION CONTROL AND TREE PROTECTION DETAILS.
6. ADEQUATE 6-INCH BARRIERS BETWEEN ALL VEHICULAR USE AREAS AND ADJACENT LANDSCAPE AREAS, SUCH AS CONCRETE CURBS OR WHEEL STOPS ARE REQUIRED AND MUST COMPLY WITH CITY OF AUSTIN (COA) ENVIRONMENTAL CRITERIA MANUAL (ECM) SECTION 2.4.7.
7. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREAS NEED TO BE STABILIZED BY REVEGETATION MATTING PER COA ECM 1.4.4.B.3, SECTION 5.1.
8. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER COA ECM 1.4.5.A, OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
9. CONTRACTOR TO CLEAN UP SPOILS THAT MIGRATE ONTO MONTOPOLIS DRIVE A MINIMUM OF ONCE DAILY PER COA ECM 1.4.4.D.4.
10. NON-HARD SURFACE AREAS OF DISTURBANCE TO BE REVEGETATED PER COA STANDARDS.
11. THE ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS.
12. A PRE-CONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCES.
13. WHERE CONSTRUCTION ACTIVITIES ARE TO OCCUR WITHIN THE CRITICAL ROOT ZONE OF TREES TO BE PRESERVED, THE DEMOLITION IS TO BE CONSTRUCTED WITH HAND TOOLS.
14. IF DISTURBED AREA IS NOT TO BE WORKED ON FOR MORE THAN 14 DAYS, DISTURBED AREANEEDS TO BE STABILIZED BY REVEGETATION, MULCH, TARP OR REVEGETATION MATTING. [ECM 1.4.4.B.3, SECTION 5, I.]
15. ENVIRONMENTAL INSPECTOR HAS THE AUTHORITY TO ADD AND/OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE TO KEEP PROJECT IN-COMPLIANCE WITH THE CITY OF AUSTIN RULES AND REGULATIONS. [LDC 25-8-183]
16. CONTRACTOR SHALL UTILIZE DUST CONTROL MEASURES DURING SITE CONSTRUCTION SUCH AS IRRIGATION TRUCKS AND MULCHING AS PER ECM 1.4.5(A), OR AS DIRECTED BY THE ENVIRONMENTAL INSPECTOR.
17. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY. [ECM 1.4.4.D.4]
18. FOR AREA WHERE FINAL GRADE EXCEED 2:1 SLOPE, REVEGETATION IS REQUIRED AND ADDITIONALLY, EITHER PROVIDE EROSION CONTROL MATTING ON THE SLOPES OR 18" MULCH SOCK AT THE TOP AND BASE OF THE SLOPES TO PREVENT RUNOFF AND SEDIMENT TRANSPORT UNTIL PERMANENT VEGETATIVE STABILIZATION HAS GROWN TO A MINIMUM 1.5 INCHES AND THERE ARE NO BARE SPOTS GREATER THAN 10 SQUARE FEET.
19. THE CONTRACTOR WILL CLEAN UP SPOILS THAT MIGRATE ONTO THE ROADS A MINIMUM OF ONCE DAILY.

CONCRETE WASHOUT NOTES:

1. CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE. THE CONCRETE WASHOUT AREA SHALL BE ENTIRELY SELF-CONTAINED.
2. CONTRACTOR SHALL DETERMINE THE ACTUAL LAYOUT AND LOCATION IN THE FILED. THE WASHOUT SHALL HAVE SUFFICIENT VOLUME TO CONTAIN A LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS, INCLUDING BUT NOT LIMITED TO, OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.
3. WASHOUT AREA SHALL BE INSPECTED TOGETHER WITH OTHER EROSION AND SEDIMENT CONTROL MEASURES.
4. HARDENED CONCRETE WASTE SHALL BE REMOVED AND DISPOSED OF IN A MANNER CONSISTENT WITH ALL APPLICABLE LAWS, REGULATIONS AND GUIDELINES.

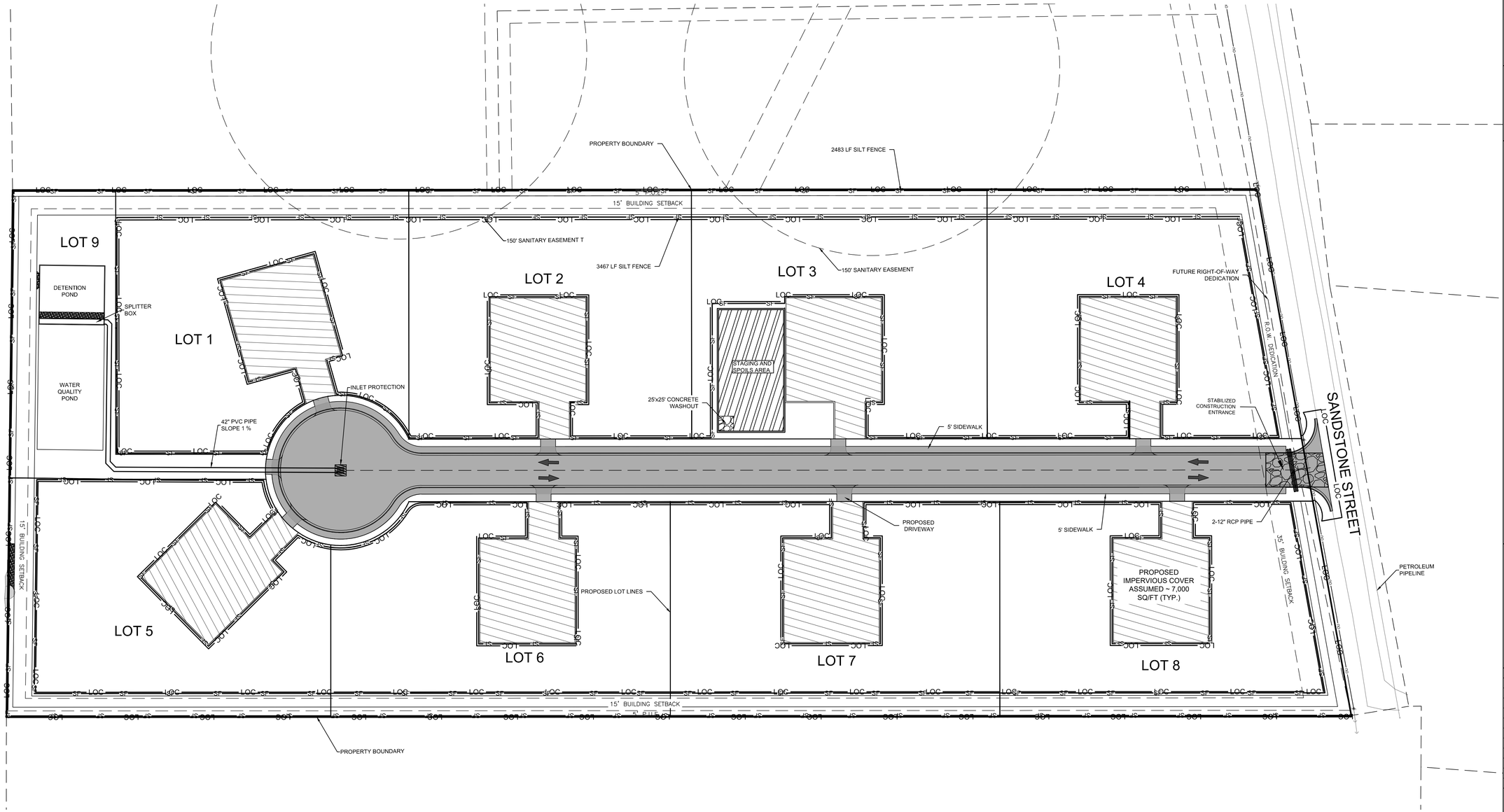
EROSION & SEDIMENTATION CONTROLS SUMMARY	
ITEM	QUANTITY
INLET PROTECTION	1
SILT FENCE	5950.0 LF
12" MULCH	-
TREE PROTECTION	-
STABILIZED CONSTRUCTION ENTRANCE	1 EA
LIMITS OF CONSTRUCTION	4.57 AC

0 40' 80'

SCALE: 1" = 40'

LEGEND

- PROPERTY BOUNDARY
- LOT LINES
- PROPOSED LOT LINES
- PROPOSED ROAD AND DRIVEWAY
- POWER POLE
- GUY WIRE
- LOC — LIMIT OF CONSTRUCTION
- SF — SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- STAGING AND SPOILS AREA
- CONCRETE WASHOUT AREA
- PROPOSED IMPERVIOUS COVER (ASSUMED ~ 7,000 SQ/FT PER LOT)



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CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

EROSION CONTROL PLAN

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED PROFESSIONAL ENGINEER

07/18/2023

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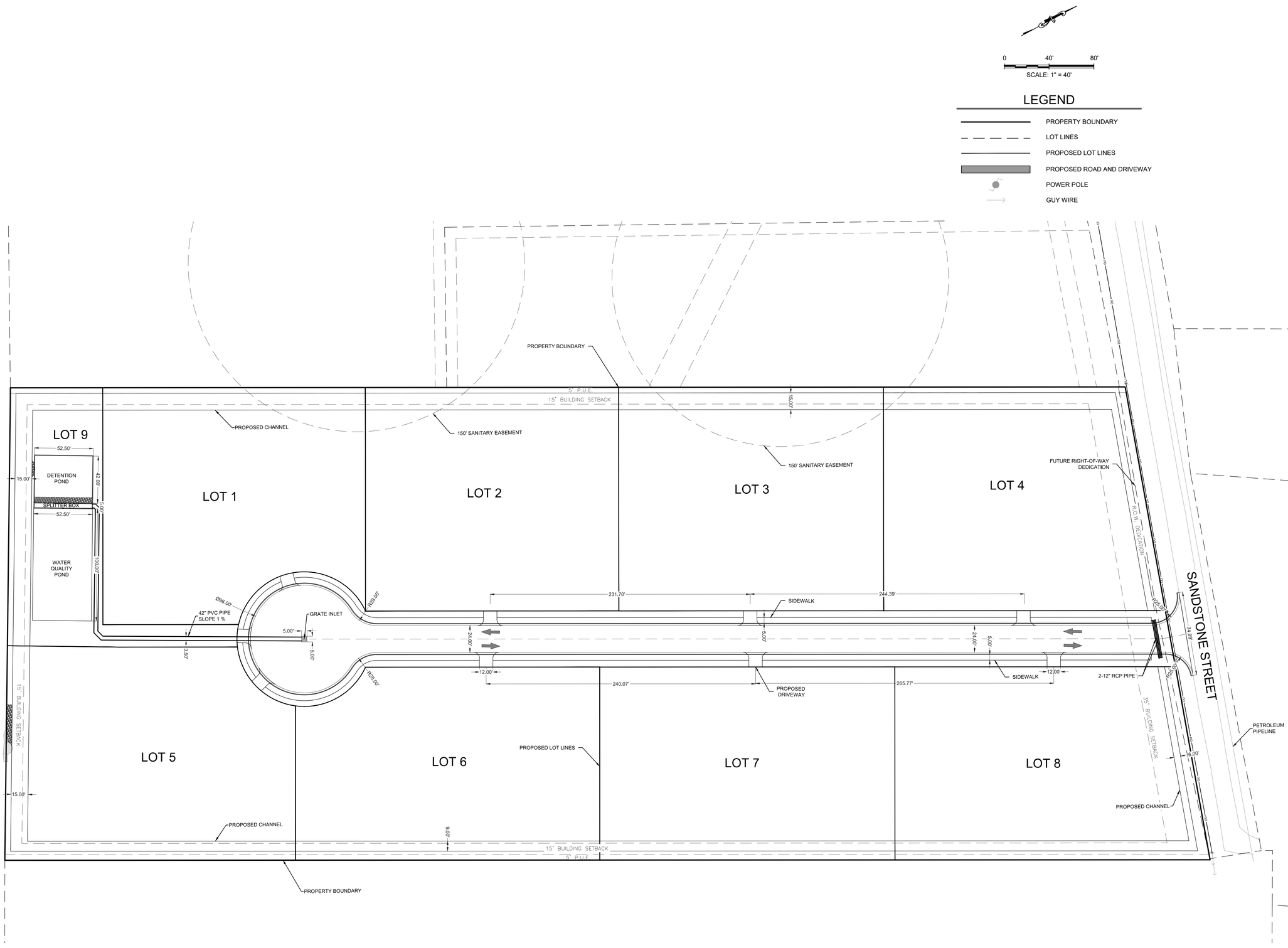
SHEET 9 OF 19



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CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

DIMENSIONAL CONTROL PLAN

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
R.119794
REGISTERED PROFESSIONAL ENGINEER
07/18/2023

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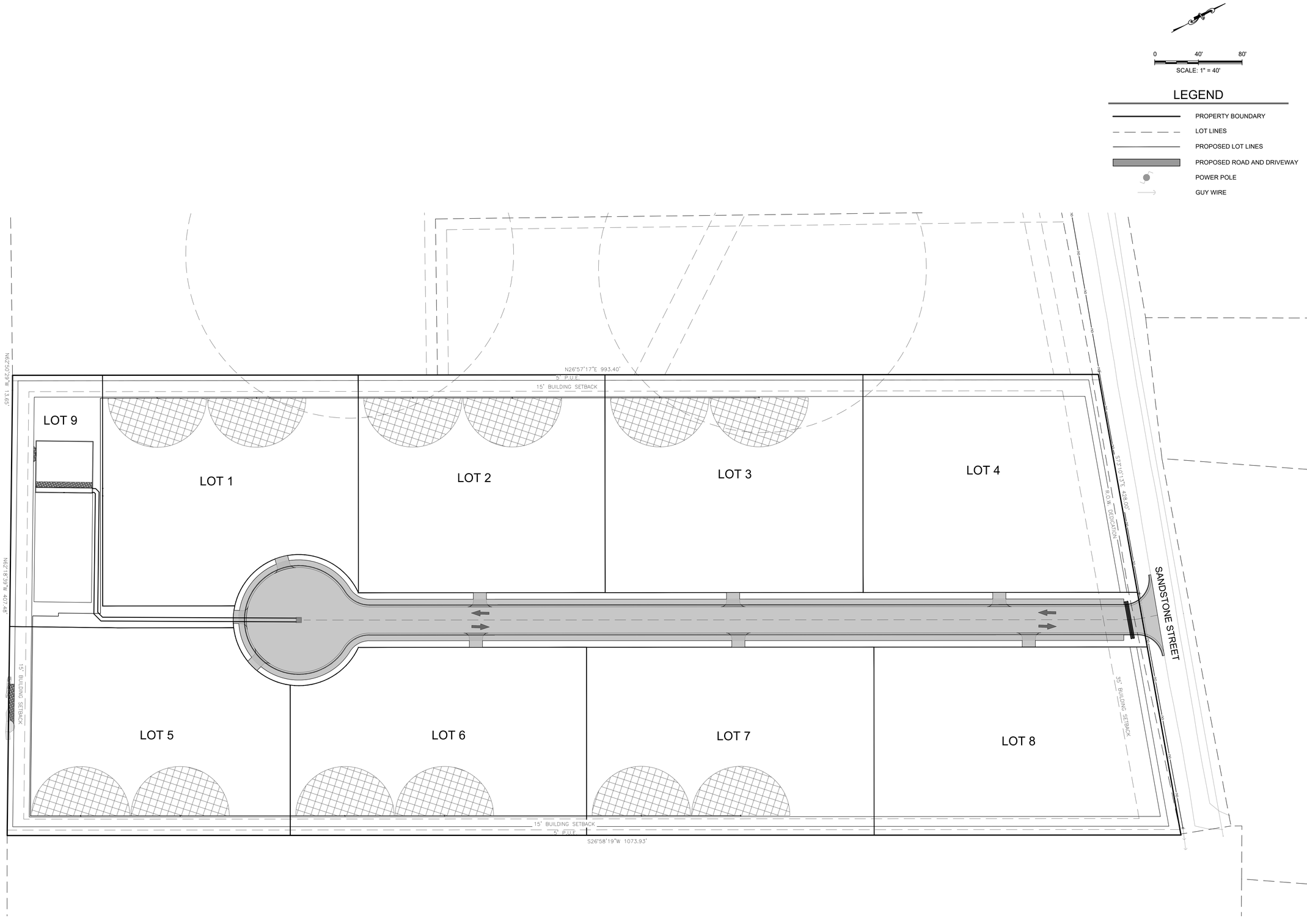

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SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

WATER QUALITY IRRIGATION PLAN
1 OF 3

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
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APPENDIX R-5

RETENTION/IRRIGATION POND CALCULATIONS FOR DEVELOPMENT PERMITS

DRAINAGE AREA DATA

Drainage Area to Contol (DA)	8.380 ac	365017 sf
Drainage Area Impervious Cover	1.676 ac	73003 sf
Drainage Area Impervious Cover	20 %	
Capture Depth (CD)	0.5 inch	

WATER QUALITY CONTROL CALCULATIONS

25-Yr Peak Flow Rate to Control (Q25)	80.9 cfs	
100-Yr Peak Flow Rate to Control (Q100)	111.3 cfs	
	Required	**Provided**
Water Quality Volume (WQV = CD*DA*3630)	15209 cf	
Retention Pond Volume	15209 cf	17622 cf
Water Quality Elevation	991.00 ft	991.00 ft
Elevation of Splitter/Overflow Weir (min. WQ elevation	990.00 ft	990.00 ft
Length of Splitter Weir		50 ft
Required Head to Pass Q100	max. 1 ft	0.76 ft
Pond Freeboard Provided to Pass Q100	min. 0.25 ft	0.24 ft

IRRIGATION AREA CALCULATIONS

Soil permeability	minimum	0.03 inch/hou	0.20 inch/hou
Pond drawdown time	maximum	72 hour	31.0 hour
Irrigation rate			0.18 inch/hou
Irrigation area		34072 sf	38170 sf

Single zone irrigation system

RETENTION POND

Stage ft	Area sf	Storage cf	Cumulative storage cf
984.00	1056	0	0
985.00	1575	1310	1310
986.00	2166	1865	3174
987.00	2829	2492	5666
988.00	3564	3191	8856
989.00	4371	3962	12818
990.00	**5250**	**4805**	**17622**
991.00	6201	5720	23342

PERCOLATION TEST

Top elevation	ground level
Hole depth	12 inch
Hole diameter	18 inch
Elevation at the beginning of the test	12.00 inch
Elevation at the end of the test	9 inch
Time	10 min
Test results	0.30 inch/min
Test results	18.00 inch/hour

SPRINKLER PERFORMANCE DATA

Flow	5.9 GPM
Number	12 -
Radius	45 ft
Nozzle	3
Pressure	30 PSI

PIPE FRICTION HEAD DETERMINATION

Pipe Friction Head Determination, Supply Pipe West

Pipe length Feet	Pipe diameter Inch	Flow rate GPM	Head loss Feet
287	2	35.4	7.15
91	2	29.5	1.62
143	2	23.6	1.68
91	2	17.7	0.63
135	2	11.8	0.44
91	2	5.9	0.08

Friction loss in supply pipe: 11.59

Pipe Friction Head Determination, Supply Pipe East

Pipe length Feet	Pipe diameter Inch	Flow rate GPM	Head loss Feet
255	2	35.4	6.35
91	2	29.5	1.62
151	2	23.6	1.77
91	2	17.7	0.63
180	2	11.8	0.59
91	2	5.9	0.08

Friction loss in supply pipe: 11.04

Pressure loss on pipeline	22.63	ft
20% for joints, elbows, tees, ect.	4.53	ft
Pressure on sprinkler head	69.30	ft
Elevation change	25.00	ft
Total system head	121.46	ft

PUMP

Design flow	70.80	GPM
Total dynamic head	121.46	ft

Pumps must be selected to operate within 20% of their best operating efficiency. Equivalent pump may be used with designer and inspector approval.

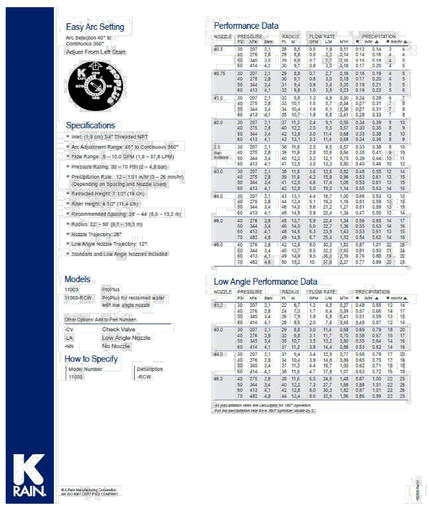
FILT STATION OPERATION LEVELS

Lift station bottom	980.00
Pump "OFF"	981.50
Inlet from water quality pond	982.00
High water level alarm	990.00

PIPE FROM POND TO LIFT STATION CALCULATIONS

Pipe diameter	6.00	inch
Pipe slope	1.00	%
Pipe roughness	0.01	-
Pipe discharge	0.73	cf/s
Pipe discharge	327	gpm

SPRINKLER



SPRINKLER

PUMP NOTES

1. The retention basin must be emptied within 72-hours after a rain event ends. Emptying of the retention basin must not begin sooner than 12 hours after the end of the rainfall event. The flow rate of the pumps (gpm) shall be designed with either a 30 hour or 60 hour drawdown time (30 hrs for single zone irrigation systems and 60 hrs for multi-zone).
2. Plug valves must be located outside the wet well on the discharge side of each pump to isolate the pumps for maintenance and for throttling if necessary. Butterfly valves and gate valves must not be used.
3. Check valve(s) must be provided to prevent backflow from the irrigation system back into the pump well.
4. The pumps must alternate on start up. The control logic must allow the system to operate normally with only one pump in service.
5. A manual control must be provided so both pumps can be turned on if necessary.
6. A high/low-pressure pump shut off system (to detect line clogging or breaking) shall be installed in the pump discharge piping. As an alternative, an amp draw (overloads) or other equivalent monitoring device may be used.
7. Float controls or submersible transducers must be provided to control operation of the pumps. Three control settings must be used: (1) one for starting the pump, (2) one for shutting off the pump at the normal low water level, and (3) one for back up shut off of the pump in case the first shut-off fails.
8. An alarm system shall be provided consisting of a red light located at a height of at least five feet above the ground level at the wet well. The alarm shall activate when:
- The water level is below the primary shutoff float and the pump has not turned off.
- The high/low-pressure pump shut off switch has been activated.
- Any other pump failures or system shut down indicated by control panel. The alarm must be vandal proof and weather resistant. If the system is to be privately maintained, a sign must be placed at the wet well clearly displaying the name and phone number of a responsible party that may be contacted if the alarm is activated.
- A green "pump run light" shall be provided which is activated any time a pump is running. The green light should be located directly adjacent to the red alarm light.

SPRINKLERS

All sprinkler heads must have full or partial circle rotor pop-up heads and must be capable of delivering the required rate of irrigation over the designated area in a uniform manner. Sprinkler heads should have purple caps to indicate non-potable water. Irrigation must not occur beyond the limits of the designated irrigation area. Partial circle sprinkler heads must be used as necessary to prevent irrigation beyond the designated limits. Sprinkler heads must be capable of passing solids that may pass through the intake. Sprinkler heads must be flush mounted and encased within a 2 feet × 2 feet concrete housing capable of protecting the head from mowing and service equipment.

VEGETATION

The irrigation area must have native vegetation or be restored or re-established with native vegetation, unless approved by the engineer. These areas must not receive any fertilizers, pesticides, or herbicides. If landscaped areas are used for irrigation, fertilizers, pesticides, or herbicides must not be applied to those areas and this limitation must be outlined in the Integrated Pest Management (IPM) plan.

SOIL REPLACEMENT

1. The irrigation area must be replaced for soil contain a minimum of 12 inches of soil with the minimum 0.03 inch per hour permeability rate.
2. Replaced soil shall meet the requirements of Standard Specification 601S, Salvaging and Placing Topsoil
3. The condition, type, structure, and quality of the soil shall be conducive to infiltration and to plant growth

SAXON LOOMIS CONSULTING GROUP
TBPE Firm Registration No. F-19735
CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

WATER QUALITY IRRIGATION PLAN
2 OF 3

SANDSTONE RESIDENTIAL SUBDIVISION
9223 SANDSTONE STREET, AUSTIN, TX 78737

STATE OF TEXAS
CEZARY SAXON
119794
REGISTERED
PROFESSIONAL ENGINEER
07/18/2023

PLAN STATUS	
DATE	DESCRIPTION
CS	CB/AO TGL/CS
DESIGN	DRAWN CHKD
JOB No.	
DATE : JULY 2023	
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IRRIGATION TIMING

1. The retention basin must be emptied within 72-hours after a rain event ends. And must be initiated no sooner than 12 hours after the rain event ceases.
2. The irrigation controller must be set to provide alternating, equivalent irrigation and rest periods until the basin is emptied.
3. The time of irrigation on any area must not exceed the rest time. Continuous application on any area must not exceed two hours.
4. An adjustable rain sensor must be provided which will normally be set to temporarily halt irrigation during rainfalls exceeding one half inch. The rain sensor must be able to interrupt irrigation (stop pumps) in the event of subsequent rain events prior to emptying basin. The 12 hours pump delay may initiate after the rain sensor senses the rain event has terminated.
5. Irrigation must not occur on land with slopes greater than 10%.

PIPING AND VALVES

1. All irrigation system distribution and lateral piping (i.e. from the pumps to the spray heads) must be Schedule 40 purple PVC. All pipes and electrical bundles passing beneath driveways or paved areas must be sleeved with PVC Class 200 pipe with solvent welded joints. Sleeve diameter must equal twice that of the pipe or electrical bundle. Buried piping must be marked with detectable marking tape labeled "CAUTION: BURIED NON-POTABLE WATER LINE BELOW".
2. All valves must be designed specifically for sediment bearing water, and be of appropriate design for the intended purpose. All remote control, gate, and quick coupling valves must be located in ten-inch or larger plastic valve boxes with purple caps. All pipes and valves must be marked to indicate that they contain non-potable water. All piping must be buried to protect it from weather and vandalism. The depth and method of burial must be adequate to protect the pipe from vehicular traffic such as maintenance equipment. Velocities in all pipelines should be sufficient to prevent settling of solids. The irrigation design and layout must be integrated with the tree protection plan and presented as part of the Site Plan or Subdivision Construction Plan.
3. Systems must include a plug valve to allow flushing at the end of every line.

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Phone: (512) 660-0500

WATER QUALITY IRRIGATION PLAN
3 OF 3

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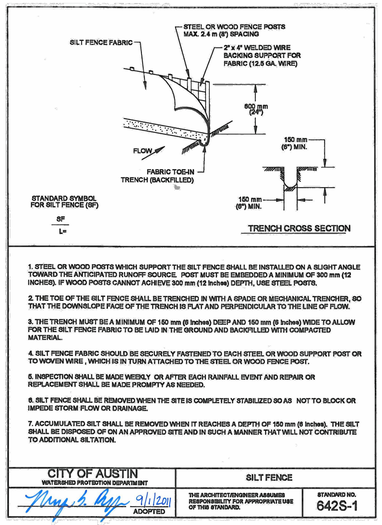


1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 Inches) DEPTH, USE STEEL POSTS.

2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.

3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 Inches) DEEP AND 150 mm (6 Inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.

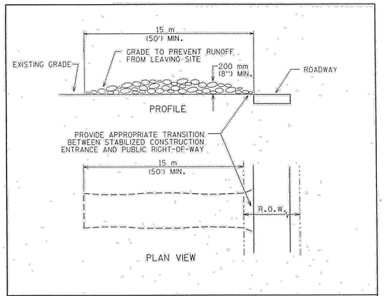
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.

5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

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

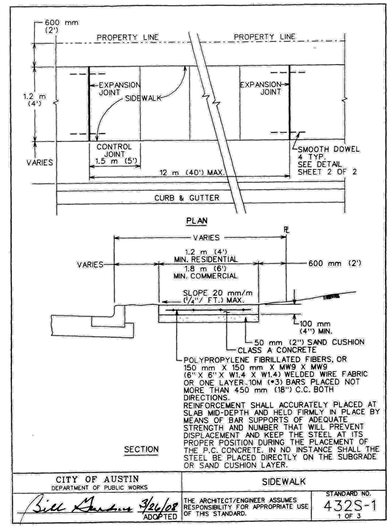
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 Inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	SILT FENCE	
ADOPTED 9/1/2004	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1

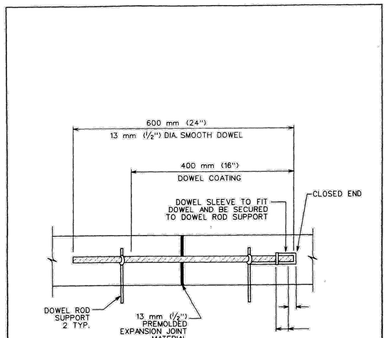


NOTES:
1. STONE SIZE: 75-125 mm (3-5") OPEN GRADED ROCK.
2. LENGTH: AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
3. THICKNESS: NOT LESS THAN 200 mm (8").
4. WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
5. WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC ROADWAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE AND DRAINS INTO AN APPROVED TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
6. MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AS WELL AS REPAIR AND CLEAN OUT OF ANY MEASURE DEVICES USED TO TRAP SEDIMENT. ALL SEDIMENTS THAT IS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.
7. DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

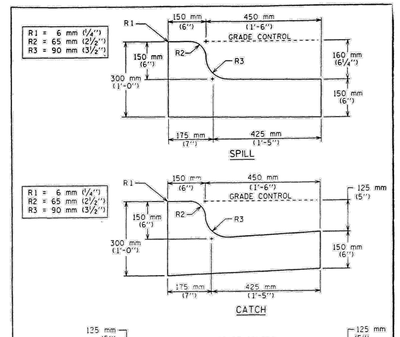
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	STABILIZED CONSTRUCTION ENTRANCE	
ADOPTED 5/23/06	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
ADOPTED 9/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 1 OF 3



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
ADOPTED 9/26/08	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 2 OF 3



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION	CURB AND GUTTER SECTION	
ADOPTED 9/28/99	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 430S-1

CONCRETE WASHOUT

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT	4-SIDED AREA INLET	
ADOPTED 5/13/2010	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	STANDARD NO. 508S-9

SAXON LOOMIS CONSULTING GROUP
TBPE Firm Registration No. F-19735
CEZARY SAXON, PE
SAXON LOOMIS CONSULTING GROUP
2216 COLLEGE AVE.
AUSTIN, TEXAS 78704
Phone: (512) 660-0500

CONSTRUCTION DETAILS 1 OF 2

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