GALLEGOS ENGINEERING, INC.
Firm No. F-003084

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

CONTRIBUTING ZONE PLAN (CZP)

PROJECT NAME:

SERENITY OAKS, UNIT 6
Comal County, TX

FOR:

REGULATED ACTIVITIES ON THE CONTRIBUTING ZONE TO THE EDWARDS AQUIFER 30 TAC §213.24(1)

PREPARED BY:

Richard M. Gallegos, P.E.

GALLEGOS ENGINEERING, INC.

FIRM REGISTRATION # F-003084
P.O. Box 690067
San Antonio, TX 78269
rg@gallegoseng.com

DATE: JANUARY 12, 2025

Table of Contents

Serenity Oaks Subdivision, Unit 6 – Contributing Zone Plan

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: Serenity Oaks, Unit 6						**2. Regulated Entity No.:1064755122**			
3. Customer Name: Gale Estates, LLC						**4. Customer No.: 603643685**			
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):**			66.64
9. Application Fee:	$6,500		**10. Permanent BMP(s):**			NA			
11. SCS (Linear Ft.):	NA		**12. AST/UST (No. Tanks):**			NA			
13. County:	Comal		**14. Watershed:**			Guadalupe River			

Application Distribution

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

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

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

Austin Region			
County:	**Hays**	**Travis**	**Williamson**
Original (1 req.)	___	___	___
Region (1 req.)	___	___	___
County(ies)	___	___	___
Groundwater Conservation District(s)	___Edwards Aquifer Authority ___Barton Springs/ Edwards Aquifer ___Hays Trinity ___Plum Creek	___Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	___Austin ___Buda ___Dripping Springs ___Kyle ___Mountain City ___San Marcos ___Wimberley ___Woodcreek	___Austin ___Bee Cave ___Pflugerville ___Rollingwood ___Round Rock ___Sunset Valley ___West Lake Hills	___Austin ___Cedar Park ___Florence ___Georgetown ___Jerrell ___Leander ___Liberty Hill ___Pflugerville ___Round Rock

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	_1_	___	___	___
Region (1 req.)	___	_1_	___	___	___
County(ies)	___	_1_	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	_1_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. Richard M. Gallegos, P.E
Print Name of Customer/Authorized Agent January 12, 2025
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):	

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.

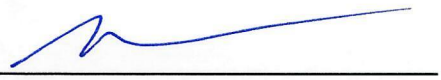
Signature

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: Richard M. Gallegos

Date: January 12, 2025

Signature of Customer/Agent:



Regulated Entity Name: Serenity Oaks Subdivision, Unit 6

Project Information

1. County: Comal
2. Stream Basin: Guadalupe
3. Groundwater Conservation District (if applicable): NA
4. Customer (Applicant):

   Contact Person: Jason Gale
   Entity: Gale Estates, LLC
   Mailing Address: 15315 San Pedro
   City, State: San Antonio, Texas Zip: 78232
   Telephone: 210-4905237 Fax: 210-490-0913
   Email Address: acs1@satx.rr.com

5. Agent/Representative (If any):

Contact Person: Richard M. Gallegos, P.E.
Entity: Gallegos Engineering, Inc.
Mailing Address: PO Boc 690067
City, State: San Antonio, Texas Zip: 78269
Telephone: 210-641-0812 Fax: NA
Email Address: rg@gallegoseng.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 _____.
☐ 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.

Located 2.4 miles east on Rebecca Ck. Rd. from intersection of Hwy 281 North of Spring Branch, TX, Rt. 1.2 miles south-southeast on Rayner Ranch Blvd.

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: 42
☐ Residential: # of Living Unit Equivalents: _____
☐ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 66.64 Acres

    Total disturbed area: 66.64 Acres

14. Estimated projected population: 105

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	126,000	÷ 43,560 =	2.89
Parking	63,000	÷ 43,560 =	1.44
Other paved surfaces	221,700	÷ 43,560 =	5.09
Total Impervious Cover	410,700	÷ 43,560 =	9.43

Total Impervious Cover 9.43 **÷ Total Acreage** 66.64 **X 100 =** 14.2**% 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			
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" = 400'.

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): _____.

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.

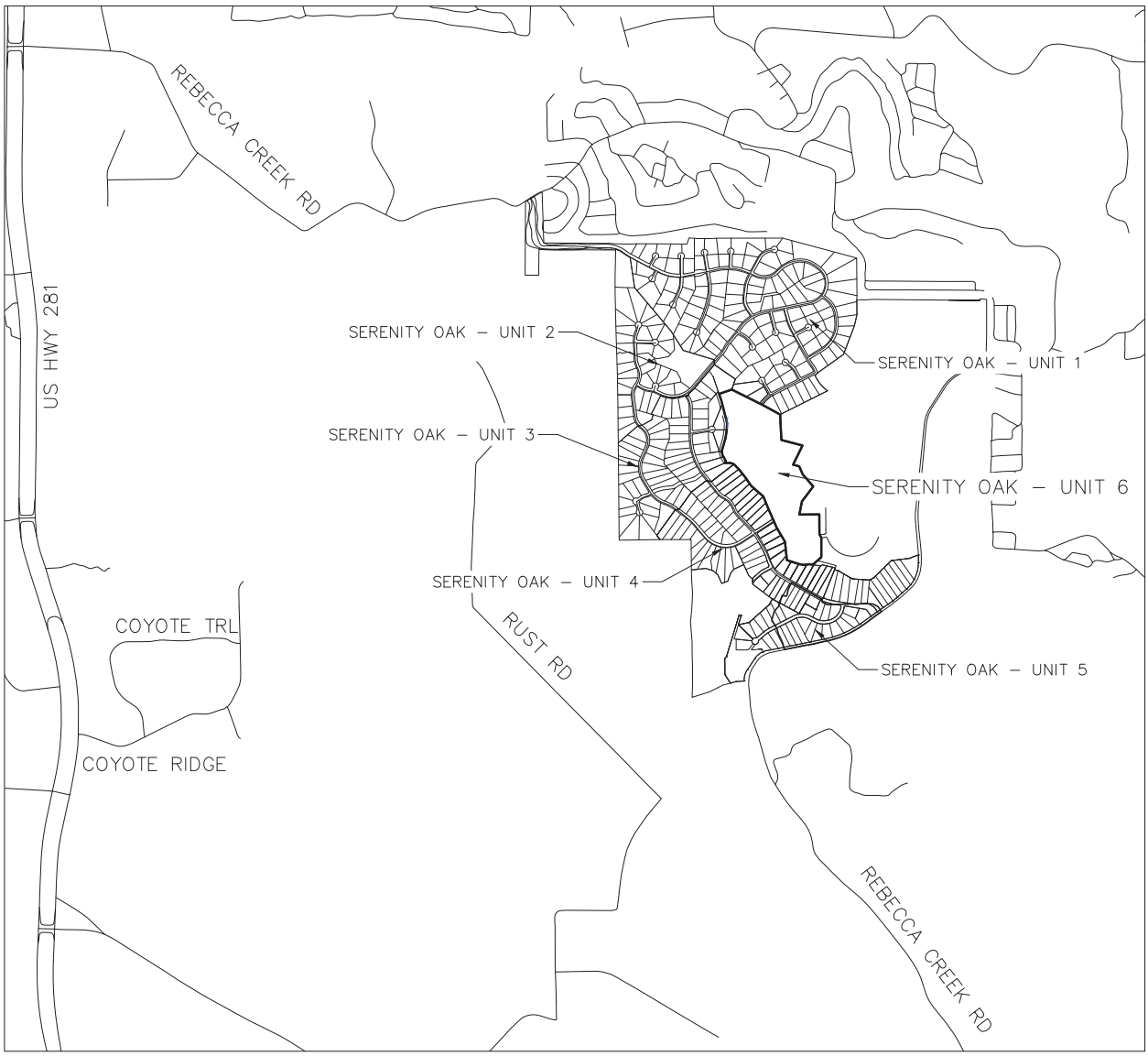
Administrative Information

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.



SHEET | OF |

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

LOCATION MAP

GALE ESTATES, L.L.C.

FIRM REGISTRATION #F-002884
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	04/12/23	G.V.	G.V.	R.M.

Edwards Aquifer Recharge Zone and Contributing Zone Map
Edwards Aquifer Authority Rule Chapter 713

STATE OF TEXAS
TEXAS WATER DEVELOPMEMT BOARD

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

FISCHER
QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

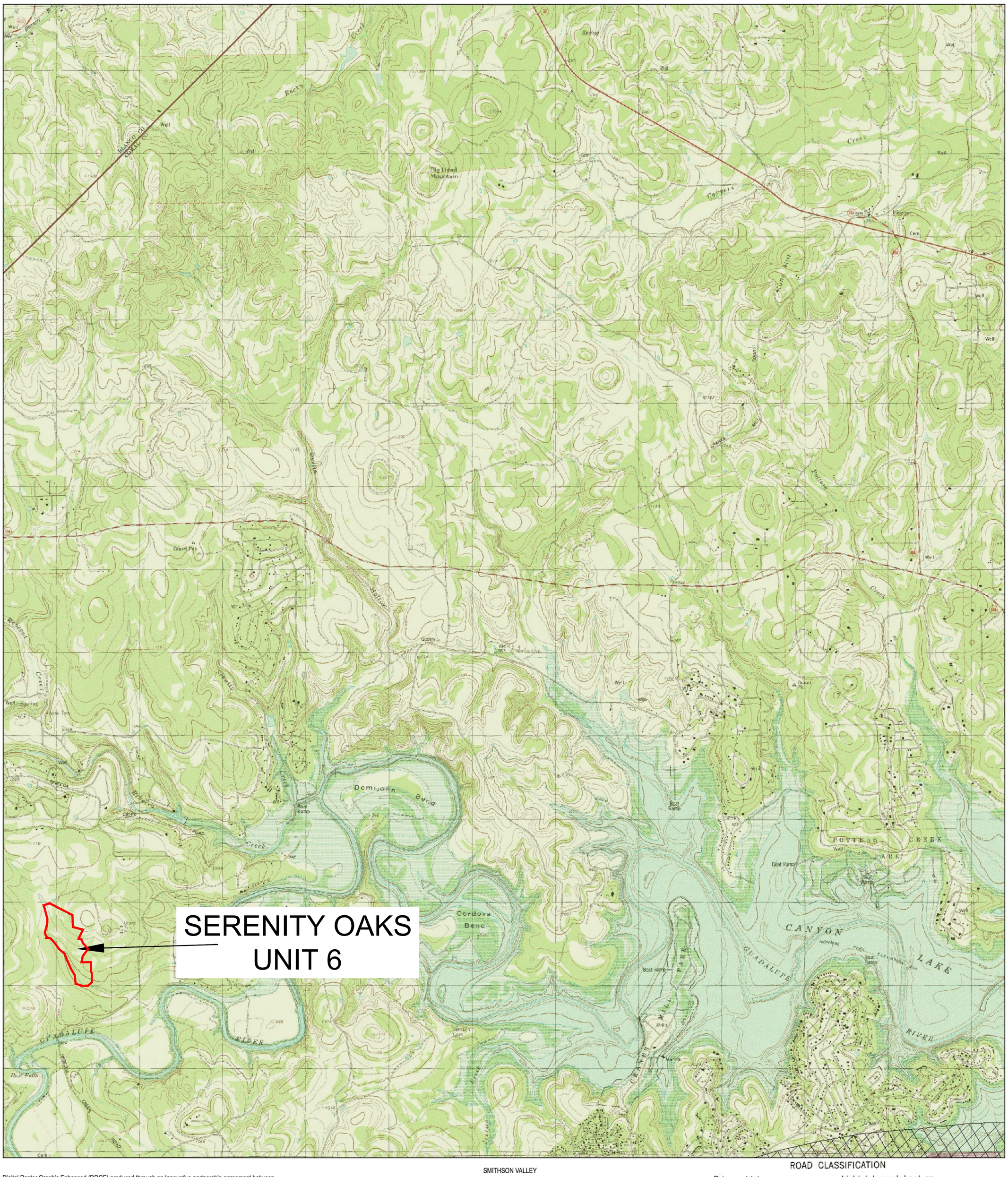
BLANCO

PAYTON

ROUGH HOLLOW

SPRING BRANCH

DEVILS BACKBONE


Pig Head Mountain
Rocky Creek
Spring
Creek
Gravel Pits
Demijohn Bend
Cordova Bend
Boat Ramp
Boat Ramp
Boat Ramp

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

PROJECT NARRATIVE
SERENITY OAKS, UNIT 6

The subject 66.64 acres is presently raw hill country land which is to be developed into 42 Single-Family Residential Lots. Canyon Lake Water Supply will own and maintain the community water system supplying potable water to said lots.

The initial construction will consist of 3,695 l.f. of street constructed to Comal County specifications (22' of pavement width over a 60' ROW) and related drainage structural concrete. This amounts to 221,700 s.f. of street pavement or 5.09 acres of impervious cover. Driveways and/or sidewalks account for another 63,000 s.f. or 1.44 acres.

The ultimate construction will be that of 42 Single Family Homes Averaging approximately 3,000 s.f. each. These structural rooftops will be approximately equal to 126,000 s.f. or 2.89 acres of impervious cover.

The grand total impervious cover is, therefore, 410,700 s.f. (9.43 acres) or 14.2% of the 66.64 acre subdivision. Consequently, as per TCEQ rule 30 TAC §213.4(g), there will be no permanent BMPs since this is to be a Single-family Residential Subdivision with less than 20% impervious cover. **Based on this low impervious cover we request an exception to any Permanent BMPs**.

ATTACHMENT C

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

FACTORS AFFECTING SURFACE WATER QUALITY
SERENITY OAKS, UNIT 6

The following are factors that could affect surface groundwater quality both during and after construction.

1. During construction contamination could come from oil, grease, diesel or gasoline drippings from construction equipment and also from the process of excavation materials and grading. If fuel or a hazardous substance spill occurs, the contaminated soil will be removed and placed in an impervious container to be disposed offsite at an approved disposal location.
2. The placement of excavated materials will have appropriately sized erosion and sedimentation controls placed downgradient.
3. After construction is complete, the potential sources of contamination would be from sediments brought onsite by vehicles, fuel, oil and grease from vehicles, fertilizers used for lawn care and pesticides used by the individual homeowners.

ATTACHMENT D

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

VOLUME AND CHARACTER OF STORMWATER
SERENITY OAKS, UNIT 6

The stormwater runoff for the preconstruction conditions of these 66.64 acres would be across rocky soil, with native vegetation consisting of grasses, brush and trees. These precondition flows, proceed south and southeasterly along existing swales. A completed earthen detention pond and existing swales transfer the runoff to the Rebecca Creek and ultimately the Guadalupe River.

The proposed Single-Family Residential subdivision will generate an insignificant increase in stormwater runoff, which after exiting each residential lot; will be carried by roadside ditches, drainage pipe, improved earthen channels to the south of this development to existing swales on developer owned property, eventually to the Guadalupe River.

After construction there will be inconsequential amount of sediment and chemicals carried from this project.

See Attachment "X", Page CZP 1 and 2, Drainage Area Map with Runoff Calculations for Post Developed Stormwater flows. Pre Developed flows were used to design an existing (and Comal County approved) detention basin upstream from this unit. These Pre Condition flows were computed using large drainage areas encompassing the total watershed for the pond and are irrelevant to flows needed for designing the channels and pipe crossings for this unit and are, therefore, individually calculated or shown.

ATTACHMENT E

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

OSSF SUITABILITY LETTER FROM AUTHORIZED AGENT
SERENITY OAKS, UNIT 6

An on-site sewage facility (OSSF) will be provided for each residential lot in this subdivision as a means of sewage disposal. A permit for each individual OSSF will be issued after approval by Comal County engineer's Office, the licensing authority.

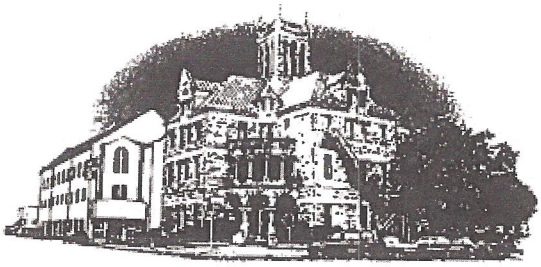
The "OSSF Suitability Letter" from Comal County for the Subdivision follows this page.

Each lot must obtain a permit from the Comal County Assistant County Engineer, to construct an OSSF. This requires that each system is designed by either a licensed professional engineer or a registered sanitarian and installed by a licensed installer. The design and installation shall be in compliance with 30 TAC §285.

Signed:_____

Richard M. Gallegos, P.E. 01/12/25
Authorized Agent

ATTACHMENT F



Comal County

OFFICE OF COMAL COUNTY ENGINEER

August 30, 2023

Mr. Scott Armstrong
Via e-mail: acs1@satx.rr.com

Re: Serenity Oaks Unit 6 within Comal County, Texas

Dear Mr. Armstrong:

We are in receipt of your August 29, 2023 application for the referenced proposed subdivision. We approved your application (see attached).

If you have any questions or need additional information, please contact our office.

Sincerely,

Robert Boyd, P.E.
Comal County Assistant Engineer

cc: Jen Crownover, County Commissioner Precinct No. 4

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

2023-100013

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

Date: August 22, 2023

Subdivision Name: Serenity Oaks, Unit 6

Owner's Name: Gale Estates LLC

Address: 15315 San Pedro, San Antonio, Tx 78232

Phone #: 210-494-6405

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

Total Fee: $ 310.00

Received by: Kg

Make Check Payable to Comal County

According to TAC §285.4(c), persons proposing residential subdivisions, manufactured housing communities, multi-unit residential developments, business parks, or other similar structures that use OSSFs for sewage disposal shall submit planning materials, prepared by a professional engineer or professional sanitarian, for these developments to the permitting authority and receive approval prior to submitting an OSSF application:

- An overall site plan
- Topographic map
- 100-year floodplain map
- Soil survey
- Location of water wells
- Locations of easements as identified in TAC §285.91(10) (relating to Tables)
- A complete report detailing the types of OSSFs to be considered and their compatibility with area-wide drainage and groundwater
- A comprehensive drainage plan
- Edwards Aquifer requirements that are pertinent to the proposed OSSF
- If the proposed development includes restaurants or buildings with food service establishments, the planning materials must show adequate land area for doubling the land needed for the treatment units

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

Applicant/Agent Signature

Date of Review (must be within 45 days of receipt): 8/30/23

☑ Approved

☐ Denied

Reason(s) for Denial: _____

Reviewer: _____, D.R.

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

Revised August 2010

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

ALTERNATIVE SECONDARY CONTAINMENT METHODS
SERENITY OAKS, UNIT 6

NOT APPLICABLE TO THIS PLAN.

ATTACHMENT G

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

A.S.T. CONTAINMENT STRUCTURE DRAWINGS
SERENITY OAKS, UNIT 6

NOT APPLICABLE TO THIS PLAN.

ATTACHMENT H

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

20% OR LESS IMPERVIOUS COVER WAIVER
SERENITY OAKS, UNIT 6

I hereby certify that Serenity Oaks Subdivision, Unit 6 is being developed as Single-Family Residential with a total purposed impervious cover of less than 20%.

Signed:_____

Richard M. Gallegos, P.E. 01/12/25
Authorized Agent

ATTACHMENT I

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

EXEMPTION FROM PERMANENT BMPs
SERENITY OAKS, UNIT 6
For Upgradient Stormwater

Serenity Oaks Subdivision, Unit 6 is by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is allowed since it is to be a Single-Family Residential Development and the total impervious cover, including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 66.64 acres.

The total proposed impervious cover of 14.2% is calculated on page 2, Section A. of the Contributing Zone Plan Application for Regulated Activities.

Storm waters generated upgradient and flowing across this site are from large Single Family Residential tracts and present no negative contaminants. These flows will be opposed by silt fencing and/or rock berms in conjunction with those generated onsite. Although clean storm water has a potential to become contaminated as it flows downstream over soil.

ATTACHMENT J

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

EXEMPTION FROM PERMANENT BMPs
SERENITY OAKS, UNIT 6
For On-Site Stormwater

Serenity Oaks Subdivision, Unit 6 is by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is allowed since it is to be a Single-Family Residential Development and the total impervious cover, including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 66.64 acres.

The total proposed impervious cover of 14.2% is calculated on page 2, Section A. of the Contributing Zone Plan Application for Regulated Activities. Drawings supporting calculation of this percentage may be seen on Sheet CZP 2, as part of Attachment "X".

ATTACHMENT K

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

EXEMPTION FROM PERMANENT BMPs
SERENITY OAKS, UNIT 6
For Surface Streams

Serenity Oaks Subdivision, Unit 6 is by TCEQ rule, exempt from providing permanent BMPs for stormwater control. This exemption is allowed since it is to be a Single-Family Residential Development and the total impervious cover, including housing, streets, drives, sidewalks and all other impervious structures, cover less than 20% of the total 66.64 acres.

The total proposed impervious cover of 14.2% is calculated on page 2, Section A. of the Contributing Zone Plan Application for Regulated Activities. Drawings supporting calculation of this percentage may be seen on Sheet CZP 2, as part of Attachment “X”.

ATTACHMENT L

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

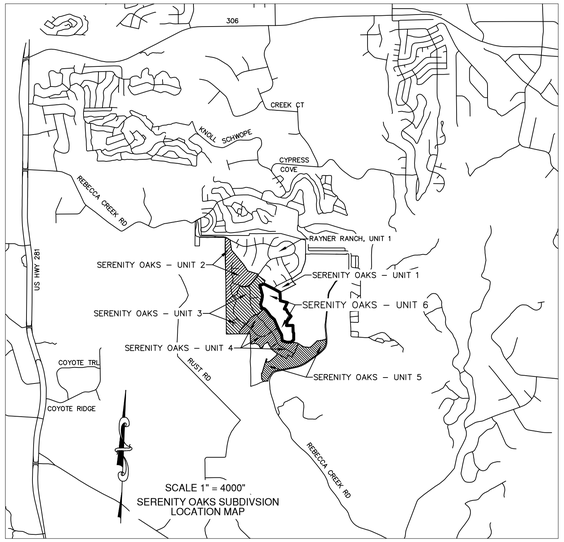
CONSTRUCTION PLANS
SERENITY OAKS, UNIT 6
For Permanent BMPs

Serenity Oaks Subdivision, Unit 6 is by TCEQ rule, exempt from providing permanent BMPs for stormwater control. Therefore, no BMP construction plans are provided.

However, installation instructions are provided in Attachment "X", Page CZP 2.

ATTACHMENT M

STREET AND DRAIN
CIVIL CONSTRUCTION PLANS
FOR
SERENITY OAKS SUBDIVISION UNIT 6



SCALE 1" = 4000'
SERENITY OAKS SUBDIVISION
LOCATION MAP

SHEET INDEX

SHEET INDEX

PREPARED FOR:

GALE ESTATES, LLC
15315 SAN PEDRO
SAN ANTONIO, TEXAS 78232
(210) 494-5237

PREPARED BY:

FIRM REGISTRATION # F-003084

GALLEGOS ENGINEERING, INC.

SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED
PROFESSIONAL ENGINEER

June 1, 2023

GENERAL NOTES

1. THE CONTRACTOR SHALL INFORM AND COORDINATE HIS EFFORT WITH CANYON LAKE WATER SERVICE COMPANY FOR CONNECTING TO EXISTING WATER MAINS. CONTRACTOR SHALL VERIFY EXISTING PIPE MATERIALS AND CLASSES PRIOR TO PURCHASING CONNECTION FITTINGS. CONTRACTOR SHALL OBTAIN A WATER CONNECTION PERMIT TO TIE INTO THE EXISTING WATER MAIN BEFORE THE START OF CONSTRUCTION.

2. ALL EXCESS TRENCH EXCAVATION MATERIAL SHALL BE DISPOSED OF ON SITE IN A TIMELY MANNER. THE CONTRACTOR SHALL PROPERLY SCHEDULE OPERATIONS EACH DAY SO AS TO ACCOMPLISH BACKFILL (COMPACTION) AND REMOVAL OF EXCESS MATERIALS AND PLACE BASE MATERIAL AT THE END OF EACH DAYS WORK AT LEAST ONE (1) HOUR BEFORE SUNDOWN, NO OPEN HOLES OR TRENCHES WILL BE ALLOWED OVERNIGHT WITHIN A PUBLIC RIGHT-OF-WAY. CONTRACTOR SHALL COMPLY WITH ALL CITY REQUIREMENTS FOR WORK WITHIN PUBLIC STREET RIGHTS-OF-WAY.

3. OWNER OCCUPANCY OF THE WATER SYSTEMS SHALL BE GOVERNED BY THE RULES FOR OWNER'S RIGHT TO OCCUPANCY IN ACCORDANCE WITH ANY APPLICABLE REQUIREMENTS OF THE CITY. REQUIRED INSPECTIONS AND TESTS SHALL HAVE BEEN SUCCESSFULLY COMPLETED AND RECORDED PRIOR TO OCCUPANCY. PRIOR TO OCCUPANCY BY THE OWNER, THE CONTRACTOR SHALL PROVIDE OPERATION AND MAINTENANCE OF THE SYSTEM INSTALLED WITHIN THE RIGHTS-OF-WAY AND EASEMENTS OF THIS PROJECT.

4. THE CONTRACTOR SHALL REFERENCE AND COORDINATE WITH MECHANICAL, ELECTRICAL, LANDSCAPE, IRRIGATION AND PLUMBING (MEP) PLANS FOR PRECISE UTILITY SERVICE LOCATIONS. INSTALLATION SHALL MEET ALL CITY CODE AND UTILITY COMPANY REQUIREMENTS.

5. CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL/SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFE AND PROPER REMOVAL AND LAWFUL DISPOSAL OF ALL TRASH AND DEBRIS IN ACCORDANCE WITH APPLICABLE CODES AND CITY REGULATIONS.

7. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL WASTE MATERIALS UPON PROJECT COMPLETION.

8. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL TRAFFIC CONTROL DEVICES, LIGHTING, OR WARNING CONTROL DEVICES USED OR REQUIRED TO COMPLETE WORK.

9. ALL SPOIL AND OTHER UNSUITABLE MATERIAL FROM THIS PROJECT SHALL BE DISPOSED ON SITE BY THE CONTRACTOR AT THEIR EXPENSE IN ACCORDANCE WITH LOCAL, STATE, & FEDERAL REGULATIONS. NO WORK OR MATERIALS SHALL BE STARTED OR PLACED WITHIN THE 100-YEAR FLOODPLAIN WITH PRIOR APPROVAL.

10. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER OF ANY AND ALL CONFLICTS OR DISCREPANCIES OF THESE PLANS.

11. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNERS, THE ARCHITECT AND THE ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF THE WORK ON THIS PROJECT, EXCEPTING FROM LIABILITY ARISING FROM SOLE NEGLIGENCE OF THE OWNER, ARCHITECT OR ENGINEER.

12. BARRICADES AND WARNING SIGNS SHALL CONFORM TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) AND GENERALLY BE LOCATED TO AFFORD MAXIMUM PROTECTION TO THE PUBLIC AS WELL AS CONSTRUCTION PERSONNEL AND EQUIPMENT AND TO ASSURE AN EXPEDITIOUS TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION. THE SIGNS SHALL BE COORDINATED WITH SEQUENCE OF CONSTRUCTION.

13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC CONTROL IN ACCORDANCE WITH TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) STANDARDS. THE CONTRACTOR SHALL ESTABLISH A TRAFFIC ROUTING PLAN FOR CONSTRUCTION MATERIALS EQUIPMENT AND ALL OTHER SHIPMENTS INTO AND AWAY FROM THE SITE WHICH IS ACCEPTABLE TO THE CITY OFFICIALS. ONCE THIS PLAN IS ESTABLISHED, THE CONTRACTOR SHALL IMPLEMENT THE CONTROLS DICTATED THEREIN.

14. THE CONTRACTOR SHALL SAWCUT ANY EXISTING CURB & GUTTER, ASPHALT, CONCRETE, ETC. TO RECEIVE ALL NEW WORK AND TO FACILITATE ALL DEMOLITIONS.

15. THE CONTRACTOR SHALL REPAIR ANY AND ALL DAMAGED PAVING OR OTHER SURFACE FEATURES DUE TO THE CONTRACTOR'S CONSTRUCTION ACTIVITIES. REPAIR OR REPLACEMENT SHALL BE AT THE CONTRACTORS EXPENSE.

16. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SECURITY TO PROTECT HIS OWN PROPERTY, MATERIALS, EQUIPMENT AND WORK IN PROGRESS.

17. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS WITHIN THE WORK SITE, INCLUDING SOIL CONDITIONS, IN THE FIELD BEFORE COMMENCING WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPORT ANY DISCREPANCIES TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.

18. COMAL COUNTY SHALL HAVE ACCESS TO PARTS OF THE PROJECT DURING ALL PHASES OF CONSTRUCTION ACTIVITY. CONTRACTOR SHALL CONTINUOUSLY MONITOR CONSTRUCTION OPERATIONS AND COOPERATE WITH THE COUNTY TO MINIMIZE INCONVENIENCES TO THE PUBLIC USE OF THE ADJACENT BUSINESSES. THE CONTRACTOR SHALL CONFINE OPERATIONS TO SUCH AN AREA AS TO PREVENT WORKERS, MATERIALS OR EQUIPMENT INTO AREAS OCCUPIED OR USED BY THE ADJACENT BUSINESSES OR THE PUBLIC.

19. CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE BUILDING CODES AND REGULATIONS FOR CONSTRUCTION AS WELL AS SAFETY CODES AND INSPECTION PROVISIONS APPLICABLE TO THIS PROJECT.

20. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER AND ADEQUATE PROTECTION OF ALL LANDSCAPING AND TREES WHERE DEMOLITION WILL OCCUR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT IF DAMAGE IS CAUSED DURING DEMOLITION OR CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.

21. CONTACT COUNTY PUBLIC WORKS DEPT. 48 HOURS PRIOR TO ANY CONCRETE PLACEMENT WITHIN CITY RIGHT-OF-WAY TO MAKE ARRANGEMENTS FOR INSPECTION.

22. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSTALLED BY THE CONTRACTOR PRIOR TO CONSTRUCTION, MAINTAINED DURING CONSTRUCTION AND REMOVED BY THE CONTRACTOR IMMEDIATELY FOLLOWING THE FINAL PROJECT ACCEPTANCE.

23. THE PLACEMENT OF EROSION AND SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH T.C.E.Q. GUIDELINES. A COPY OF THE APPROVED SWPPP SHALL BE PROVIDED TO THE CITY PRIOR TO CONSTRUCTION.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING ALL DIMENSION/CONSTRUCTION CONTROL THROUGHOUT THE DURATION OF THE PROJECT WORK. THE CONTRACTOR SHALL AT HIS OWN COST VERIFY ALL DIMENSIONS, ELEVATIONS AND CONTROL USED FOR THE PROJECT WHICH MAY IMPACT THE CONTRACTOR'S PERFORMANCE ON THE WORK. ALL COST OF REPLACEMENT OF EXISTING SURVEY OR PROPERTY CONTROL DUE TO THE CONTRACTOR'S WORK SHALL BE BORNE BY THE CONTRACTOR.

25. THE CONTRACTOR IS REQUIRED TO VERIFY PROJECT ELEVATIONS.

26. CONTRACTOR SHALL MAINTAIN ADEQUATE DRAINAGE THROUGHOUT THE DURATION OF THE PROJECT WORK. THE CONTRACTOR SHALL RESHAPE, REGRADE AND RESTORE ANY DRAINAGE ROUTES THAT WERE DISTURBED DURING CONSTRUCTION SO AS NOT TO IMPEDE DRAINAGE.

27. PRIOR TO FINAL ACCEPTANCE, THE SITE SHALL BE CHECKED FOR CONFORMANCE TO FINAL GRADES BY THE CONTRACTOR.

28. ALL CONSTRUCTION DEBRIS, TRASH AND UNSUITABLE MATERIAL SHALL BE DISPOSED OF IN APPROVED CONTAINERS AND REMOVED TO AN APPROVED SPOIL DISPOSAL SITE BY THE CONTRACTOR.

29. THE PROJECT HAS NO TEMPORARY OR PERMANENT SPOIL OR TRASH DISPOSAL AREAS. ALL SPOILS AND TRASH ARE CONSIDERED PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE ON A DAILY BASIS. THE CONTRACTOR SHALL DISPOSE OF ALL WASTES TO A LICENSED LANDFILL AS REGULATED AND PERMITTED BY CURRENT LAW AND REGULATIONS.

30. ALL EXISTING GRADES INSIDE THE CONSTRUCTION LIMITS LINE NOT AFFECTED BY CONSTRUCTION SHALL REMAIN EXCEPT AS REQUIRED FOR POSITIVE DRAINAGE FROM SITE.

31. CONTRACTOR SHALL PROVIDE MINIMAL GRADING FOR POSITIVE DRAINAGE OF WATER AWAY FROM BUILDINGS AND FOR ADEQUATE DRAINAGE OF WATER FROM SITE AS REQUIRED.

32. CONTRACTOR SHALL BE RESPONSIBLE FOR AQUIRING ALL PERMITS, TESTS, APPROVALS, AND ACCEPTANCES REQUIRED TO COMPLETE CONSTRUCTION OF THE PROJECT.

33. DUE TO FEDERAL REGULATION TITLE 49, PART 192.181, GAS UTILITY MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.

34. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UNDERGROUND UTILITIES AND DRAINAGE STRUCTURES WHETHER SHOWN ON PLANS OR NOT.

35. ALL CONSTRUCTION, UNLESS OTHERWISE NOTED SHALL CONFORM TO THE COMAL COUNTY PUBLIC WORKS STANDARD SPECIFICATIONS FOR CONSTRUCTION AND IS SUBJECT TO INSPECTIONS AND APPROVAL BY THE COUNTY.

36. BIDDERS ARE NOTIFIED TO MAKE SUBSURFACE INVESTIGATIONS WHERE THE AREA IS KNOWN TO CONTAIN POOR SOILS. ALL EXCAVATION SHALL BE UNCLASSIFIED REGARDLESS OF MATERIAL ENCOUNTERED. NO ADDITIONAL PAYMENT WILL BE MADE FOR WATER, SAND, GRAVEL, OR OTHER UNSTABLE CONDITIONS ENCOUNTERED IN THE EXCAVATION.

37. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS ON GRADES NECESSARY FOR CONSTRUCTION OF THIS PROJECT.

38. REFER TO GEOTECHNICAL REPORT FOR SUBSURFACE INFORMATION AND CONSTRUCTION GUIDELINES.

39. CONTRACTOR MUST CALL THE TEXAS ONE CALL SYSTEM BEFORE DIGGING, DRILLING, OR BLASTING. 48 HOURS PRIOR TO SUCH ACTIVITIES. (DIAL 811)

40. ALL HANDICAP RAMPS, SIGNS, SYMBOLS, AND PAINTED SURFACES MUST CONFORM TO THE LATEST A.D.A. REQUIREMENTS. ALL RAMPS AND SLOPES SHALL ALSO CONFORM TO THE LATEST A.D.A. REQUIREMENTS.

41. BARRICADES AND TRAFFIC CONTROL ARE SUBSIDIARY ITEMS. INCLUDE IN BASE BID PHASE.

GRADING NOTES

1. BOUNDARY AND TOPOGRAPHIC INFORMATION WITHIN PROPOSED RIGHT-OF-WAYS WAS TAKEN FROM A SURVEY BY ACS INC. LAND SURVEYING.

2. NEW FINISHED CONTOURS SHOWN ARE TOP OF PAVING IN AREAS TO RECEIVE PAVEMENT AND TOP OF TOPSOIL IN AREAS TO BE SEEDED.

3. TOPSOIL AND SEEDING OF ALL DISTURBED AREA IS THE SITE CONTRACTOR'S RESPONSIBILITY. SITE GRADING CONTRACTOR SHALL PLACE ALL TOPSOIL REQUIRED IN CURBED ISLANDS AND IN LANDSCAPED AREAS.

   a. ROUGH GRADE ELEVATIONS SHALL BE AS FOLLOWS:

      I. 4" BELOW FINISHED CONTOURS IN SEEDED AREAS.
      II. 18" BELOW FINISHED CONTOURS IN CONCRETE PAVED AREAS.
      III. 8" BELOW THE SIDEWALK AREAS.

4. DIMENSIONS ON BUILDINGS ARE FOR GRADING PURPOSES ONLY AND ARE NOT TO BE USED TO LAYOUT FOOTINGS.

5. REFER TO STRUCTURAL DRAWINGS FOR FOUNDATION INFORMATION.

6. GRADING CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OR FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. CONTRACTOR SHALL PAY ALL COSTS IN CONNECTION WITH THE ALTERATION OR RELOCATION OF THE FACILITIES. CONTRACTOR TO RAISE OR LOWER TOPS OF EXISTING MANHOLES AS REQUIRED TO MATCH FINISHED GRADES.

7. GRADING CONTRACTOR SHALL COOPERATE AND WORK WITH ALL OTHER CONTRACTORS PERFORMING WORK ON THIS PROJECT TO INSURE PROPER AND TIMELY COMPLETION OF THIS PROJECT.

8. THE GRADING CONTRACTOR SHALL USE WHATEVER MEASURES ARE REQUIRED TO PREVENT SILT AND CONSTRUCTION DEBRIS FROM FLOWING ONTO ADJACENT PROPERTIES. CONTRACTOR SHALL COMPLY WITH ALL LOCAL EROSION AND SILTATION ORDINANCES. CONTRACTOR TO REMOVE ALL TEMPORARY EROSION CONTROL STRUCTURES UPON COMPLETION OF PERMANENT DRAINAGE FACILITIES AND NOT BEFORE ALL AREAS DRAINING INTO THESE STRUCTURES ARE SUFFICIENTLY STABILIZED.

9. FOR ANY WORK ON THE COUNTY RIGHT-OF-WAY, THE GRADING CONTRACTOR SHALL NOT STORE MATERIAL, EXCESS DIRT OR EQUIPMENT IN THE RIGHT-OF-WAY. THE PAVEMENT SHALL BE KEPT FREE FROM ANY MUD OR EXCAVATION WASTE FROM TRUCKS OR OTHER EQUIPMENT. ON COMPLETION OF WORK ALL EXCESS

10. MATERIAL SHALL BE REMOVED FROM THE RIGHT-OF-WAY. A QUALIFIED SOILS LABORATORY SHALL BE ON-SITE DURING EXCAVATION TO DETERMINE THE SUITABILITY OF THE EXISTING SUB-GRADE AND EXISTING ON-SITE MATERIAL PRIOR TO BEGINNING MAY FILLING OPERATIONS.

11. GRADING CONTRACTOR SHALL TAKE ALL AVAILABLE PRECAUTIONS TO CONTROL DUST. CONTRACTOR TO CONTROL DUST BY SPRINKLING, OR BY OTHER METHODS AS DIRECTED BY ENGINEER AND/OR OWNER'S REPRESENTATIVE AT NOT ADDITIONAL COST TO OWNER.

12. GRADING CONTRACTOR TO COMPLY WITH ALL STATE AND LOCAL SEDIMENT CONTROL AND AIR POLLUTION ORDINANCES OR RULES. BEFORE ANY MACHINE WORK IS DONE, CONTRACTOR SHALL STAKE OUT AND MARK THE ITEMS ESTABLISHED BY THE SITE PLAN. CONTROL POINTS SHALL BE PRESERVED AT ALL TIMES DURING THE COURSE OF THE PROJECT. ARCHITECT MUST APPROVE STAKED ITEMS PRIOR TO CONSTRUCTION.

13. CONTRACTOR TO COORDINATE ALL WORK WITH OTHER UTILITY INSTALLATIONS NOT COVERED IN PLANS (ELECTRIC, TELEPHONE, GAS, CABLE, ETC.) AND ALLOW FOR THEIR OPERATIONS AND CONSTRUCTION TO BE PERFORMED.

14. EXISTING UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

NOTE:
CONTRACTOR TO FIELD VERIFY LOCATIONS OF ALL EXISTING UTILITY LINES, VALVES, AND APPURTENANCES.
(NO SEPARATE PAY ITEM)

UTILITY LOCATION

THE EXISTING UTILITIES AS SHOWN ARE FROM INFORMATION PROVIDED BY THE UTILITY COMPANIES AND FIELD OBSERVATIONS. HOWEVER, NOT ALL EXISTING UTILITY LINES HAVE NOT BEEN FIELD LOCATED, AND ARE SHOWN IN THE APPROXIMATE LOCATION FOR THE CONVENIENCE OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING EXCAVATION, AND TO NOTIFY THE OWNERS OF THOSE UTILITIES AT LEAST FORTY-EIGHT HOURS IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT OR SUPPORT ALL EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED TO THE CURRENT STANDARDS OF THE OWNER OF THE UTILITY AT THE EXPENSE OF THE CONTRACTOR.

TRENCH EXCAVATION PROTECTION

CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/GEOTECHNICAL//SAFETY/EQUIPMENT CONSULTANT, IF ANY SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO DEVELOP THE CONTRACTOR'S PLANS TO IMPLEMENT THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S PLAN SHALL PROVIDE FOR ADEQUATE TRENCH SAFETY SYSTEMS THAT COMPLY WITH AS MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR OF CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL DEVELOP AND IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED
PROFESSIONAL ENGINEER

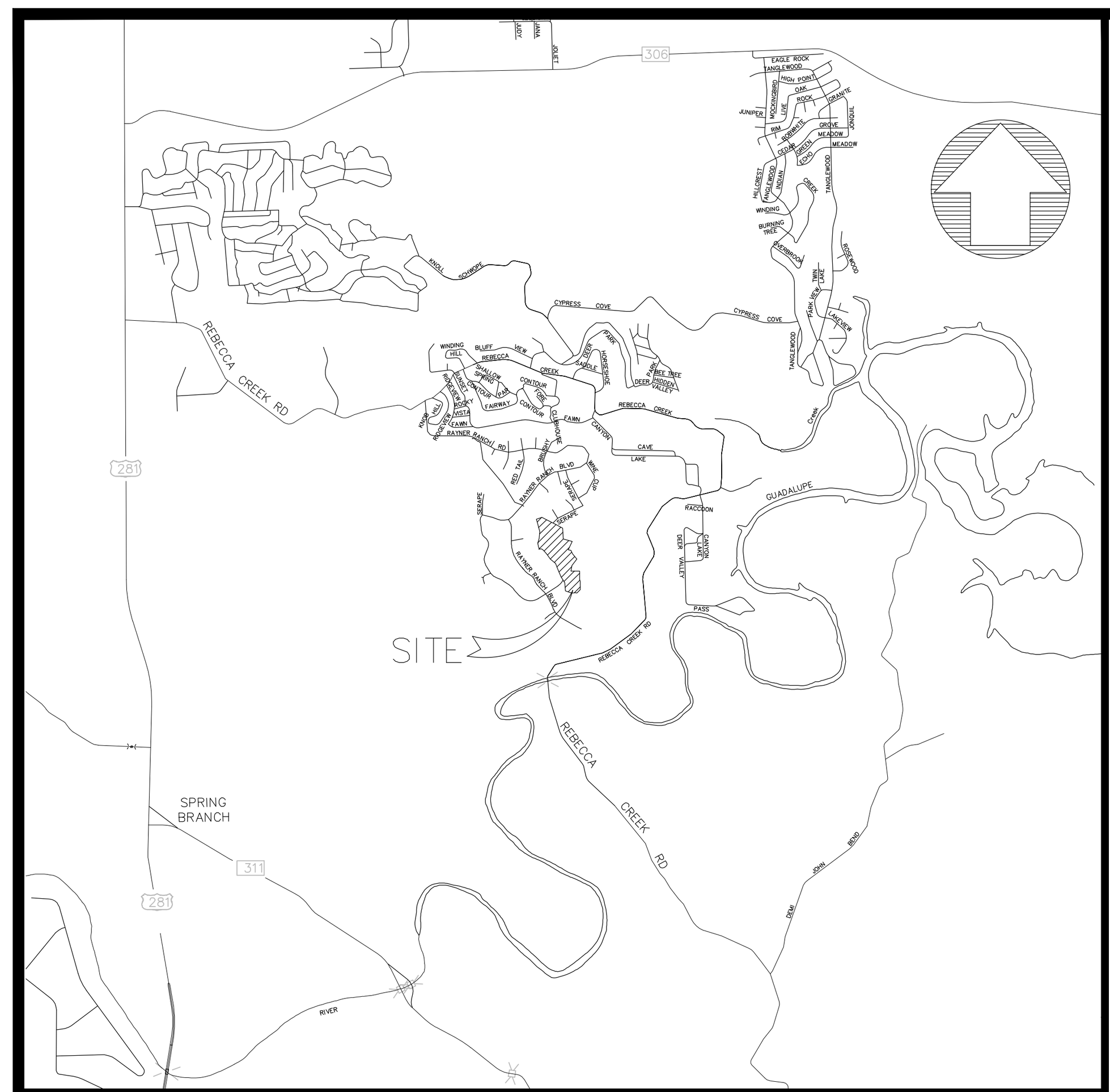
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

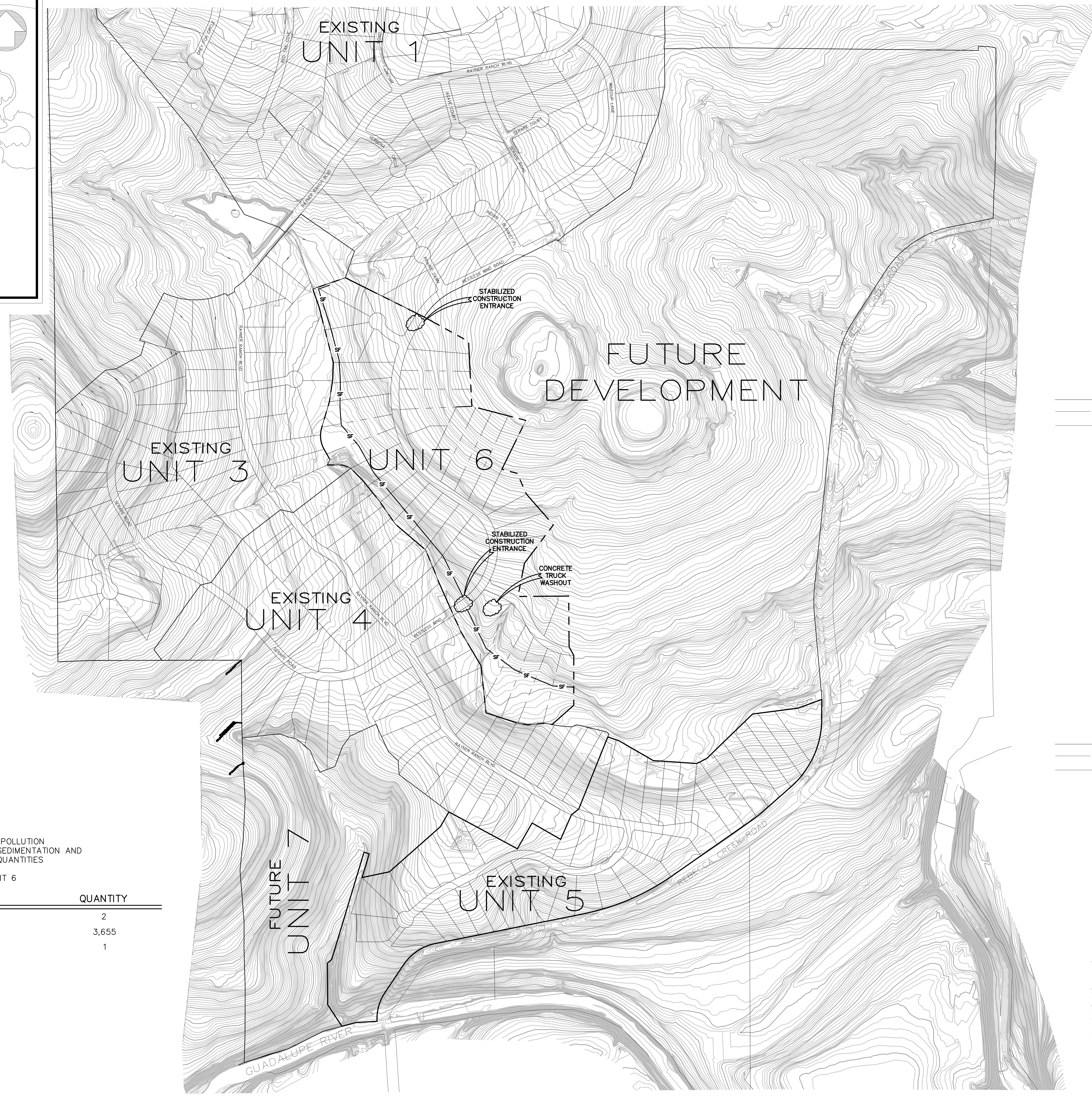
STREET AND DRAINAGE PLANS
GENERAL NOTES
GALE ESTATES, L.L.C.

SHEET 2
OF 24

S:\Projects\00-GENERAL\00-ACS Serenity Unit 6\gei Plans\S02-U6-GEN NOTES.dwg

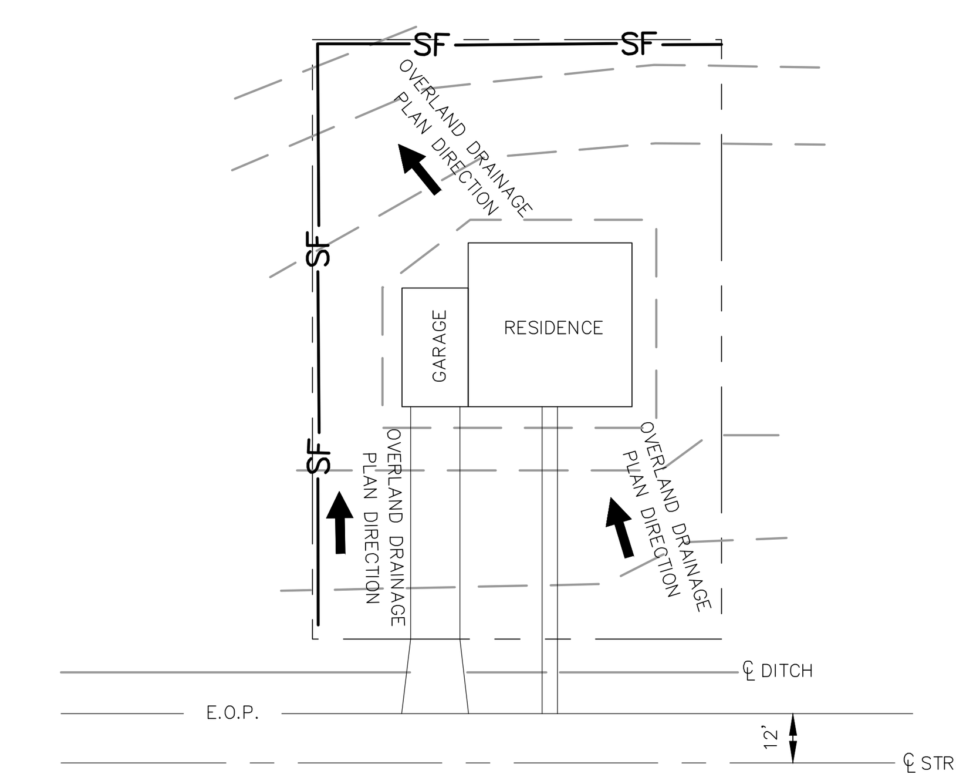


LOCATION MAP
NOT TO SCALE

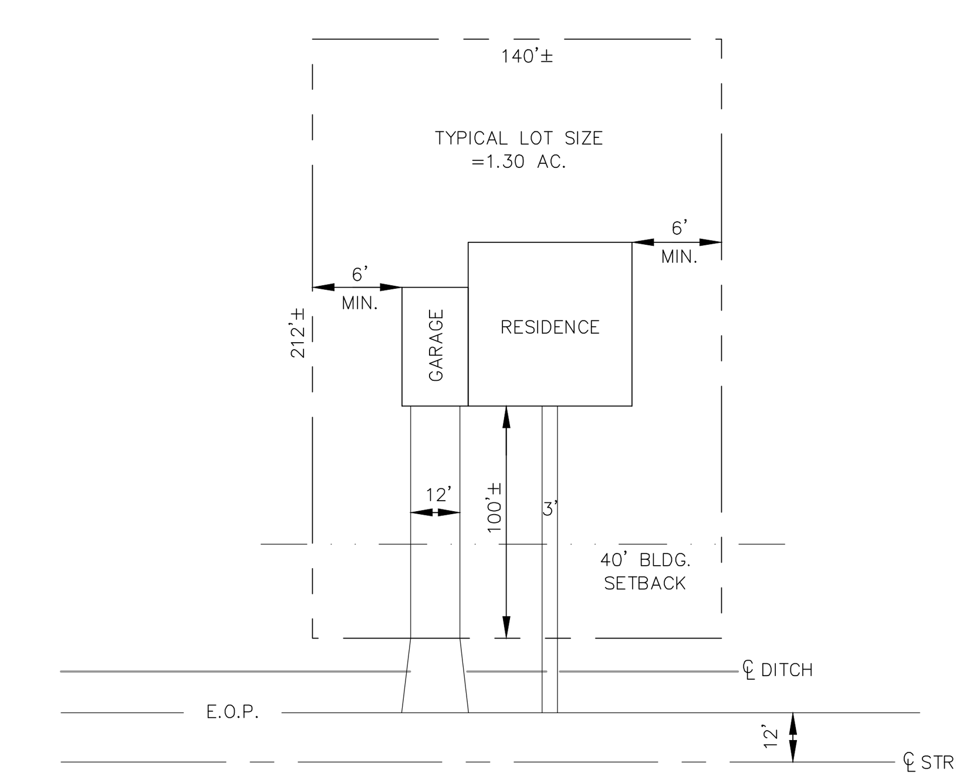


GRAPHIC SCALE

(IN FEET)
1 inch = 400 ft.



TYPICAL LOT EROSION/SEDIMENT CONTROL DETAIL
NOT TO SCALE



TYPICAL LOT DETAIL
NOT TO SCALE

ESTIMATED STORM WATER POLLUTION
PREVENTION PLAN & TEMPORARY SEDIMENTATION AND
EROSION CONTROL PLAN QUANTITIES

SERENITY OAKS, UNIT 6

ITEM	UNIT	QUANTITY
STABILIZED CONSTRUCTION ENTRANCE	EACH	2
SILT FENCE	L.F.	3,655
CONCRETE TRUCK WASHOUT	EACH	1

IMPERVIOUS COVER CALCS.

RESIDENCE	±-,--- S.F.
GARAGE	±--- S.F.
DRIVEWAY	±-,--- S.F.
WALK	±--- S.F.
TOTAL	±-,--- S.F.

SUBDIVISION TOTAL: 42 LOTS X -,--- S.F.
= ---,--- S.F.

STREET PAVEMENT TOTAL: --,--- S.F.

SUB-TOTAL IMPERVIOUS COVER: ---,--- S.F. = -.-- ACRES

TOTAL ACREAGE FOR UNIT 6: 66.64 ACRES

TOTAL IMPERVIOUS COVER FOR UNIT 6: -.--%

S:\Projects\00-GENERAL\00-AGS Serenity Unit 6\gei Plans\S03-U6-SWPPP.dwg

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STORM WATER POLLUTION PREVENTION PLAN

GALE ESTATES, L.L.C.

SITE DESCRIPTION

PROJECT: SERENITY OAKS SUBDIVISION UNIT 6

A PROPOSED SINGLE FAMILY RESIDENTIAL DEVELOPMENT LOCATED IN THE COUNTY OF COMAL, LOCATED OFF RESTLESS WIND ROAD.

PROJECT DESCRIPTION:

THE CONSTRUCTION OF STREETS, DRAINAGE, WATER, AND UTILITY FACILITIES NECESSARY FOR THE DEVELOPMENT OF A SINGLE-FAMILY RESIDENTIAL SUBDIVISION.

MAJOR SOIL DISTURBING ACTIVITIES:

ACTIVITIES ASSOCIATED WITH STREET, DRAIN, & UTILITY CONSTRUCTION-TRENCHING, STOCKPILING SPOILS AND EXCAVATION.

TOTAL PROJECT AREA: ± 66.64 ACRES

TOTAL AREA TO BE DISTURBED: ± 66.64 ACRES

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.62

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER:

THE SOIL TYPE(S) ON SITE ARE AS FOLLOWS:

1. ROCK WITH SOME TOP SOIL.

NAME OF RECEIVING WATERS: TRIBUTARY OF GUADALUPE RIVER

SITE DESCRIPTION

SOIL STABILIZATION PRACTICES:

- ____ TEMPORARARY SEEDING
- ____ PERMANENT PLANTING, SODDING, OR SEEDING
- ____ MULCHING
- ____ SOIL RETENTION BLANKET
- ____ BUFFER ZONES
- _X_ PRESERVATIVE OF NATURAL RESOURCES

OTHER: _____

STRUCTURAL PRACTICES:

- _X_ SILT FENCES
- ____ HAY BALES
- _X_ ROCK BERMS
- ____ DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- ____ DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- ____ DIVERSION, DIKE AND SWALE COMBINATIONS
- ____ PIPE SLOPE DRAINS
- ____ PAVED FLUMES
- _X_ ROCK BEDDING AT CONSTRUCTION EXIT
- ____ TIMBER MATTING AT CONSTRUCTION EXIT
- ____ CHANNEL LINERS
- ____ SEDIMENT TRAPS
- ____ SEDIMENT BASINS
- ____ CURB INLET GRAVEL FILTER
- ____ STONE OUTLET STRUCTURES
- ____ CURBS AND GUTTERS
- ____ STORM SEWERS
- ____ VELOCITY CONTROL DEVICES

OTHER: _____

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

STRUCTURAL PRACTICES, AS APPLICABLE, WILL BE INSTALLED PRIOR TO EACH PHASE OF THE PROJECT AND MAINTAINED DURING THE CONSTRUCTION OF THAT PHASE. SOIL STABILIZATION PRACTICES WILL CLOSELY FOLLOW COMPLETION AND ACCEPTANCE OF CONSTRUCTION FOR EACH PROJECT PHASE.

STORM WATER MANAGEMENT:

THE CONTRACTOR WILL INSTALL AND MAINTAIN SEDIMENTATION AND EROSION CONTROL MEASURES AS SPECIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN, TEMPORARY SEDIMENTATION & ERROSION CONTROL PLAN, AND AS DIRECTED BY AUTHORIZED OFFICIALS.

CONTRACTOR TO PLACE EXCAVATED MATERIAL ON THE HIGH SIDE OF THE TRENCH.

OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT.

INSPECTION:

AN INSPECTION WILL BE PERFORMED BY THE CONTRACTOR EVERY 2 WEEKS AS WELL AS AFTER EVERY HALF INCH OR MORE OF RAIN (AS RECORDED ON A NON-FREEZING RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE). THE CONTROLS WILL BE REVISED AS NECESSARY.

WASTE MATERIALS:

ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN A METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION, AND THE TRASH WILL BE HUALED TO A LOCAL DUMP. NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING):

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS:

PAINTS, ACIDS FOR CLEANING MASONARY SURFACES, CLEANING SOLVENTS ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE SPILL COORDINATOR SHOULD BE CONTACTED IMMEDIATELY.

SANITARY WASTE:

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

OFFSITE VEHICLE TRACKING:

- ____ HAUL ROADS DAMPENED FOR DUST CONTROL
- ____ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- ____ EXCESS DIRT ON ROAD REMOVED DAILY
- _X_ STABILIZED CONSTRUCTION ENTRANCE

OTHER: _____

REMARKS: _____

OWNER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONAL 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 SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER _____ DATE _____

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I INDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION PLAN.

SIGNATURE (CONTRACTOR) _____ DATE _____

REVISIONS				
NO.	DATE	DESCRIPTION	BY	
PROJ. #	U6-SER	DATE:	06/01/23	
DSN. BY:	R.M.G.	DWN. BY:	S.G.	CHKD. BY: R.M.G.

FIRM REGISTRATION # F-003884
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS P.E. 86916 JUNE 1, 2023. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS * RICHARD M. GALLEGOS 86916 * LICENSED PROFESSIONAL ENGINEER

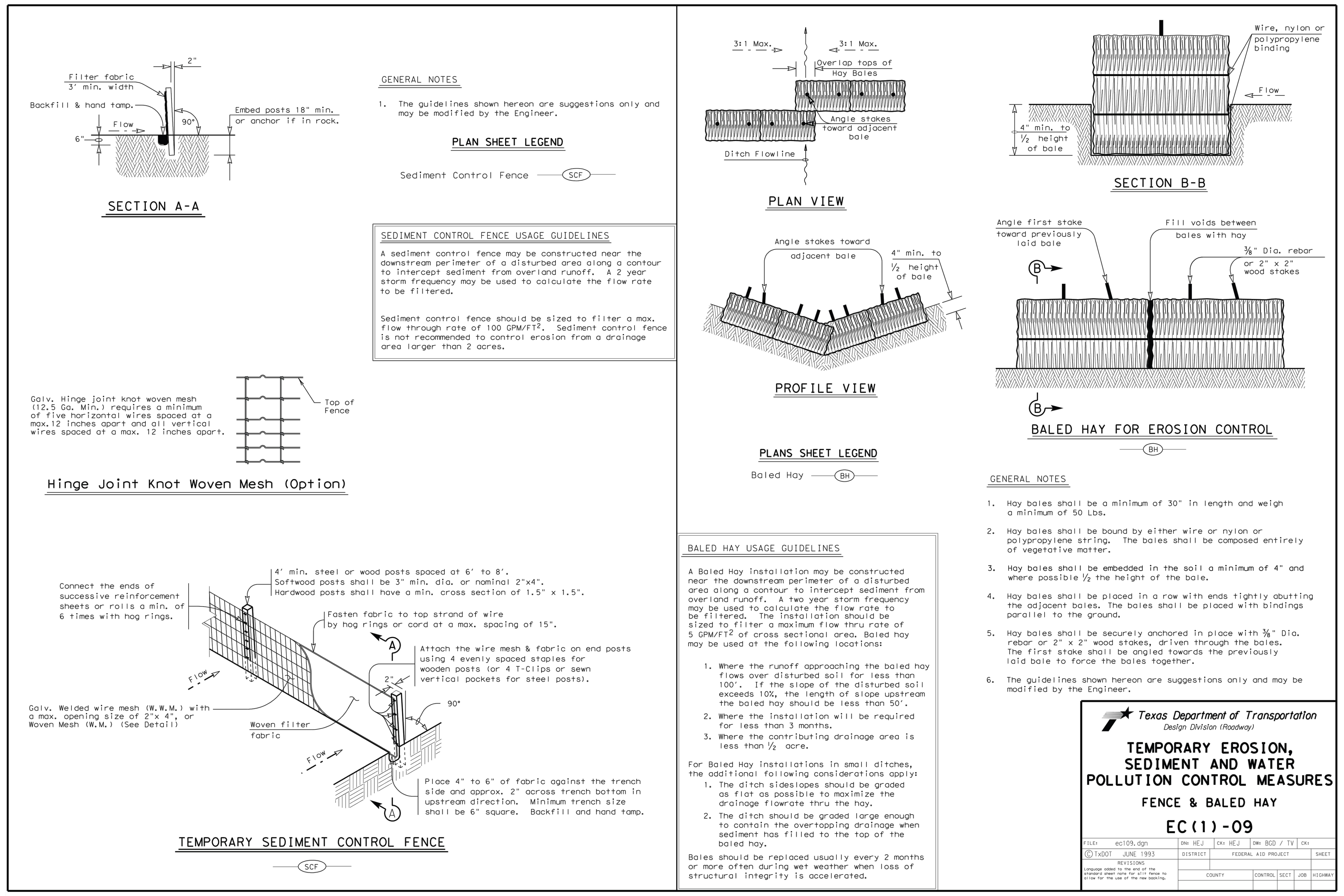
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

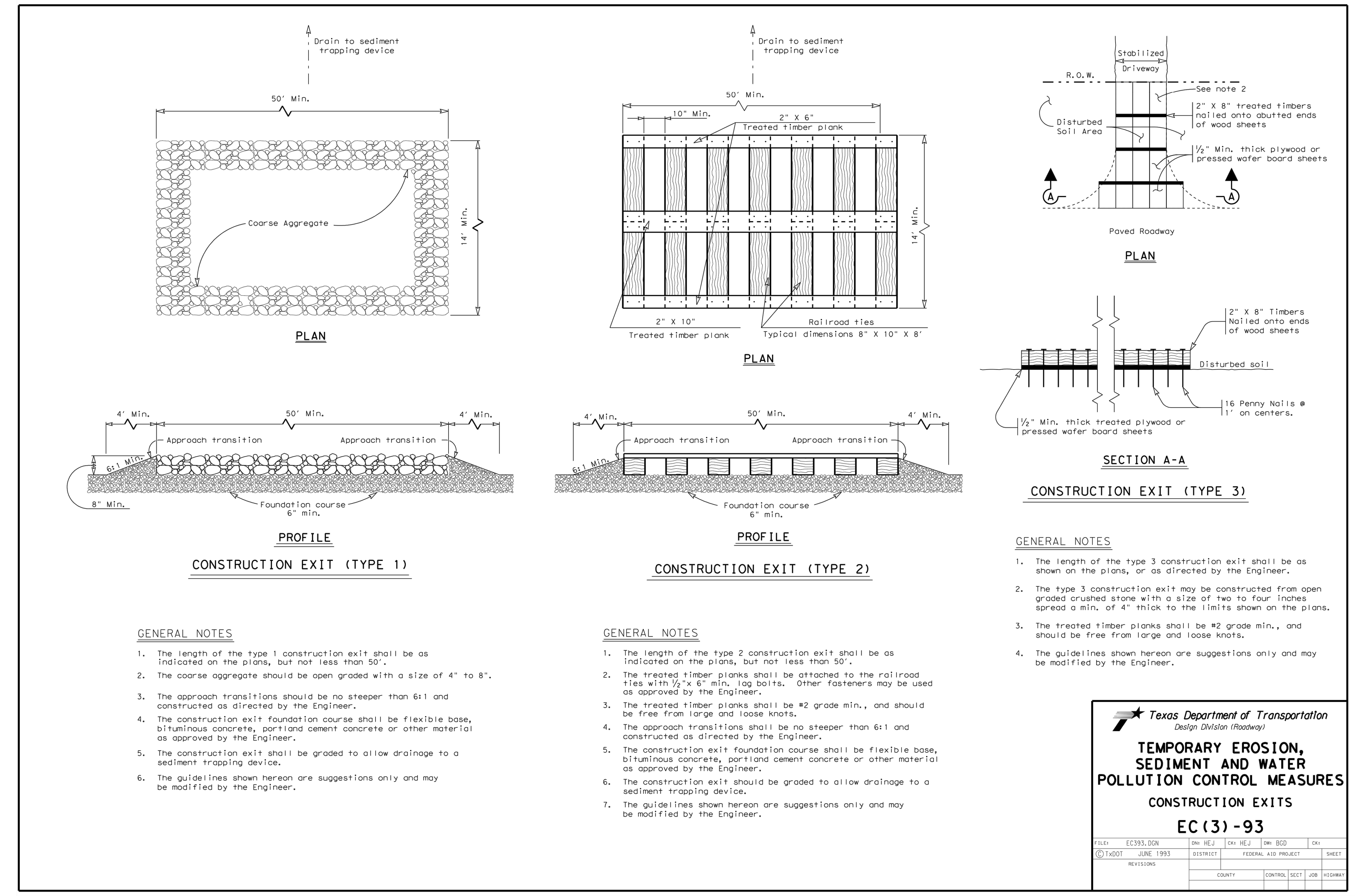
STORM WATER POLLUTION PREVENTION PLAN

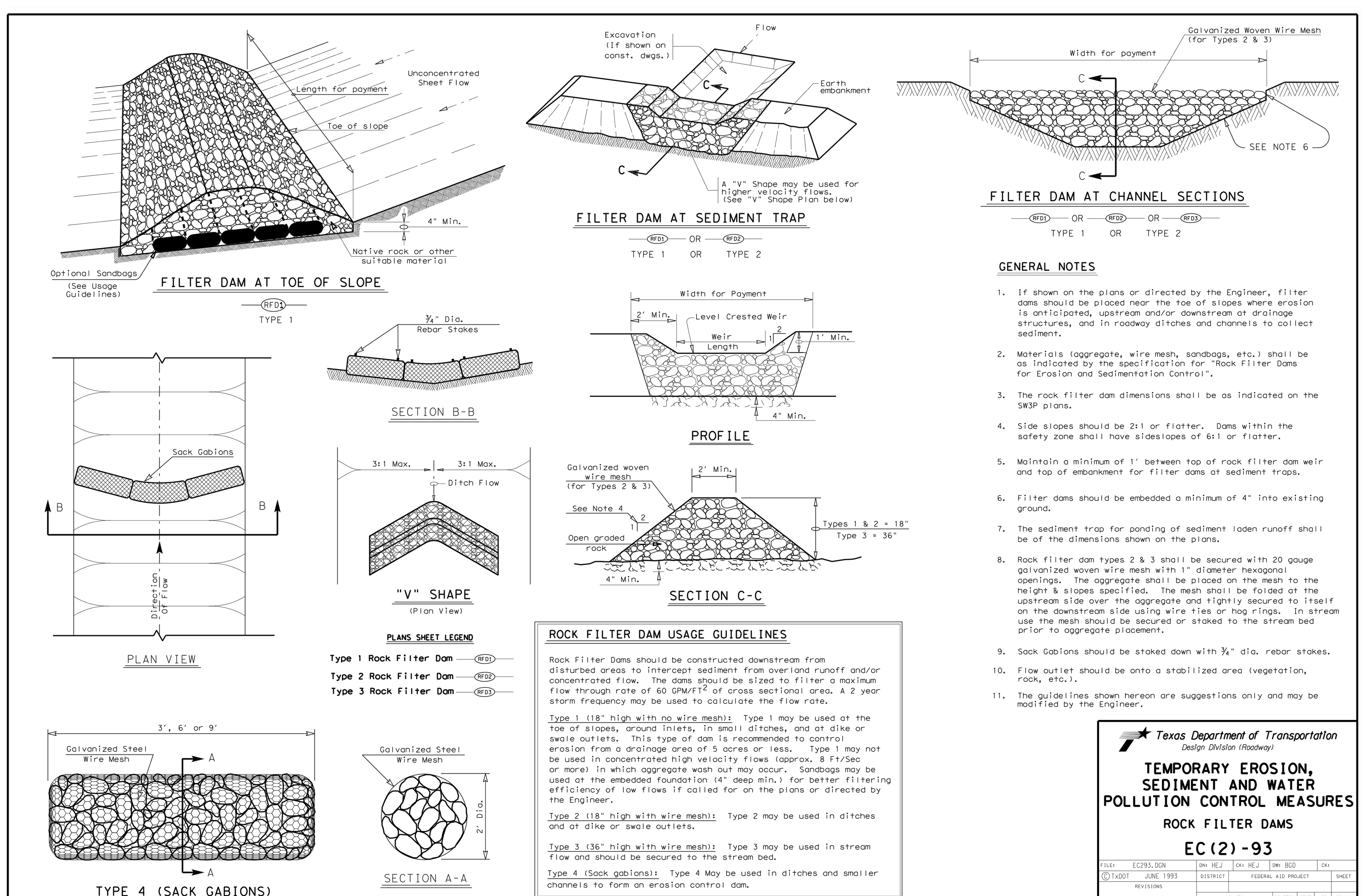
GALE ESTATES, L.L.C.

SHEET 4 OF 24

S:\Projects\UG-GENERAL\UG-ACS Serenity Unit 6\gal Plans\SW4-UG-SWPPP NAR.dwg







GENERAL NOTES

1. Do not disturb vegetated areas (trees, grass, weeds, brush, etc.) any more than necessary for construction.
2. Construction entrance/exit location and concrete washout pit to be determined in the field.
3. Storm Water Pollution Prevention Controls may need to be modified in the field to accomplish the desired effect.
4. Restrict entry/exit to the project site to designated locations by use of adequate fencing, if necessary.
5. All Storm Water Pollution Prevention Controls are to be maintained and in working conditions at all times.
6. Storm water pollution prevention structures should be constructed within the site boundaries.
7. As soon as practical, all disturbed soil that will not be covered by impervious cover such as house slab, sidewalks, and driveway will be stabilized.
8. This is a performance based plan. Actual field conditions may require different placement of erosion control measures. Contractor will be responsible for proper placement of erosion control devices to prevent contamination from leaving the construction site.

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

SWPPP & GRADING PLAN DETAIL SHEET
GALE ESTATES, L.L.C.

SHEET 5 OF 24

S:\Projects\00-GENERAL\00-AGS Serenity Unit 6\gel Plans\S05-U6-SWPPP DETS.dwg

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED PROFESSIONAL ENGINEER

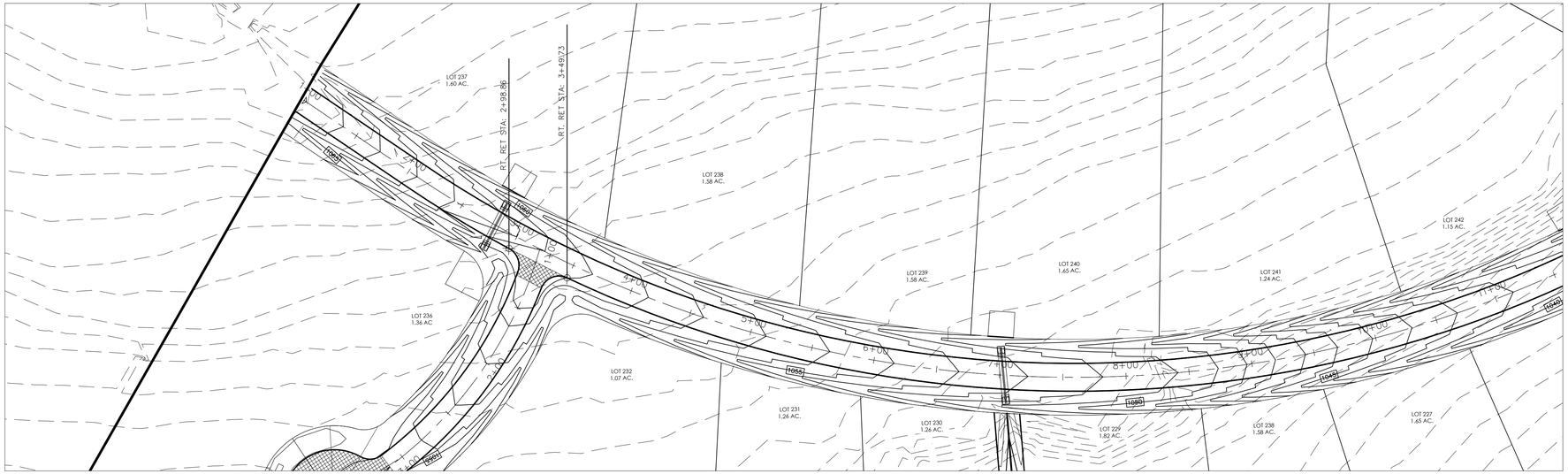
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

PROJECT LAYOUT

GALE ESTATES, L.L.C.

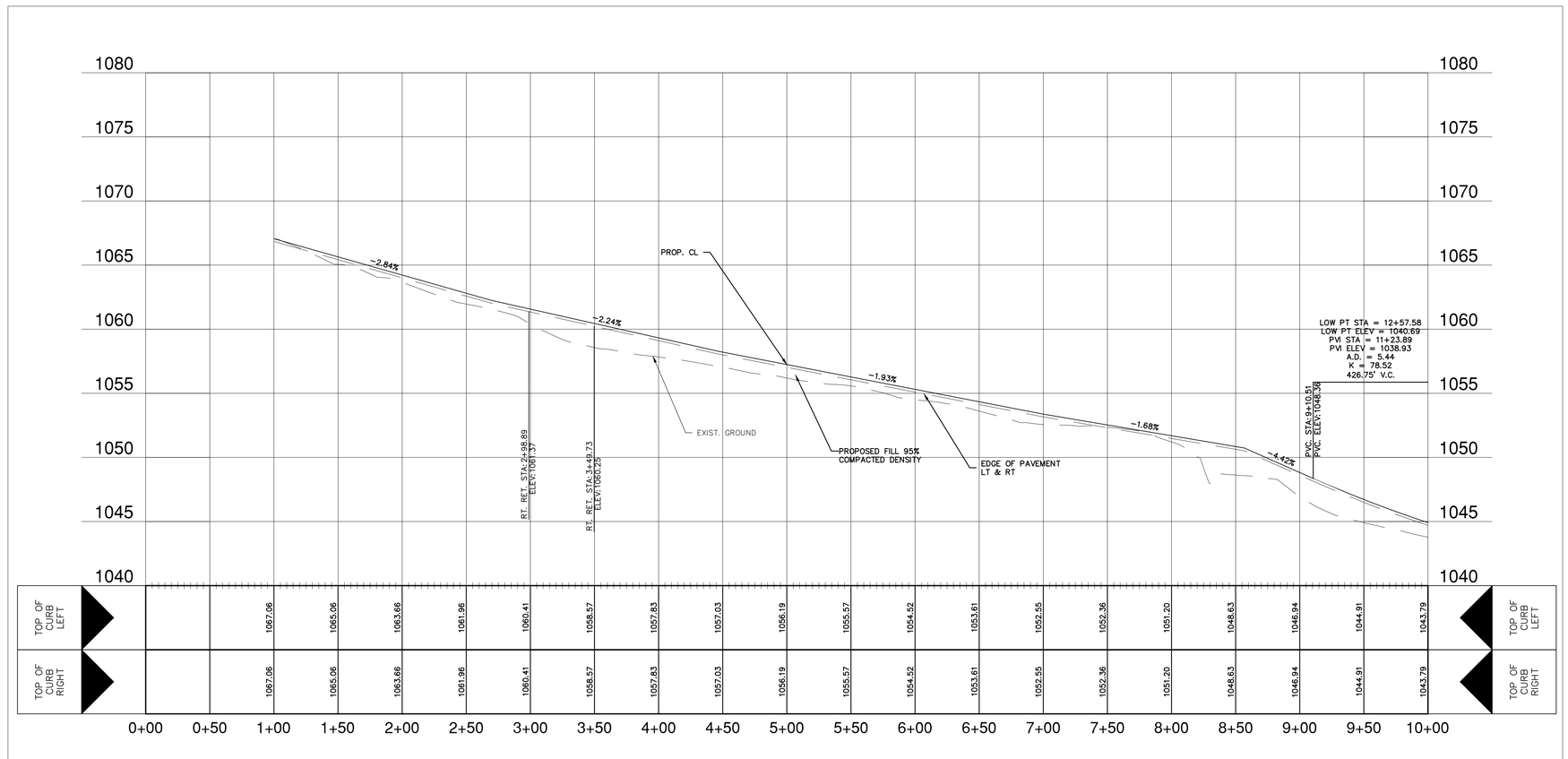
SHEET 6 OF 24

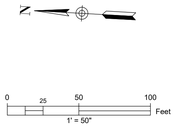
S:\Projects\00-GENERAL\00-AGS Serenity Unit 6\gel Plans\S06-U6-GRD-LAYOUT.dwg



RESTLESS WIND
(STA. 1+00.00 TO 10+00.00)

HORIZONTAL SCALE 1" = 50' H
VERTICAL SCALE: 1" = 5' V





LEGEND

PROPERTY LINE
EXISTING CONTOUR 640
PROPOSED CONTOUR 650
STREET CENTERLINE
FLOW ARROW
WASHOUT CROWN

NOTE:
CONTRACTOR IS TO MATCH EXISTING CURB, SIDEWALK, AND PAVEMENT ELEVATIONS

STREET SELECT FILL NOTE:

FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2.5 AND A PI MAXIMUM OF 20. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # U6-SER | DATE: 04/12/23 | DSN. BY: G.V. | DWN. BY: G.V. | CHKD. BY: R.M.

FIRM REGISTRATION # F-003864
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2021
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

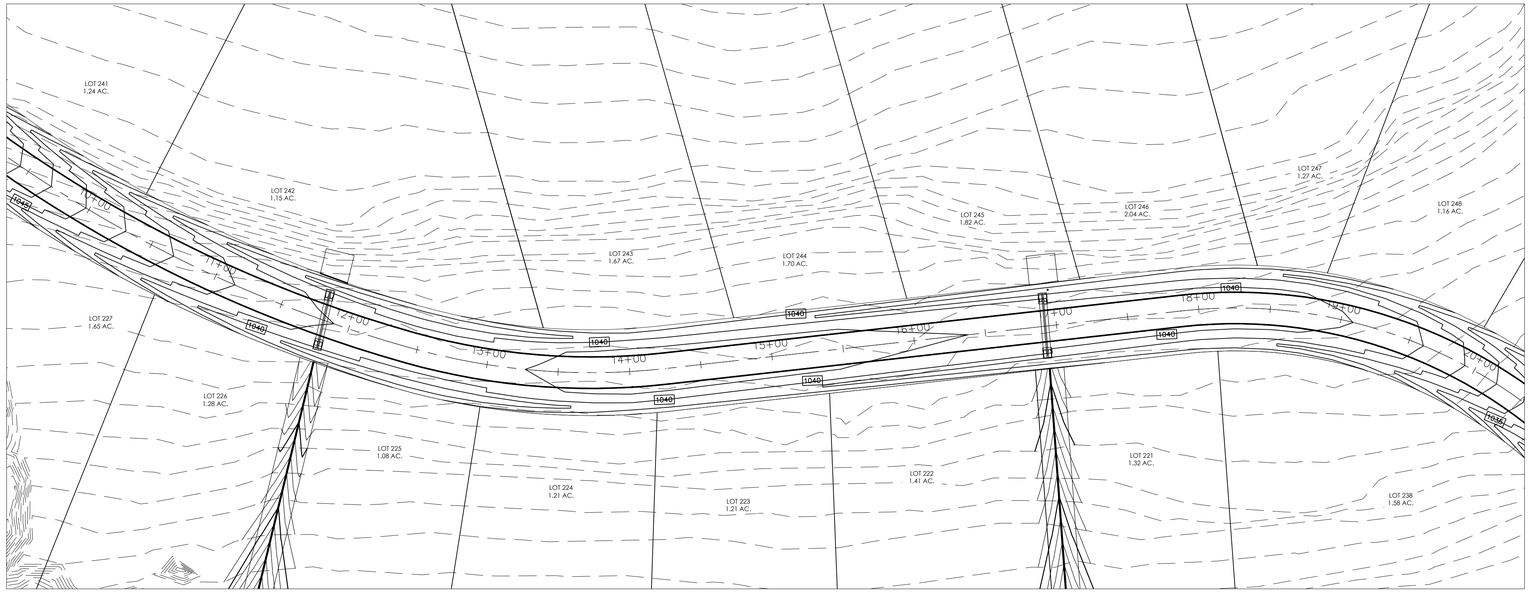
STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STREET PLAN AND PROFILE
RESTLESS WIND 1+00 - 10+00

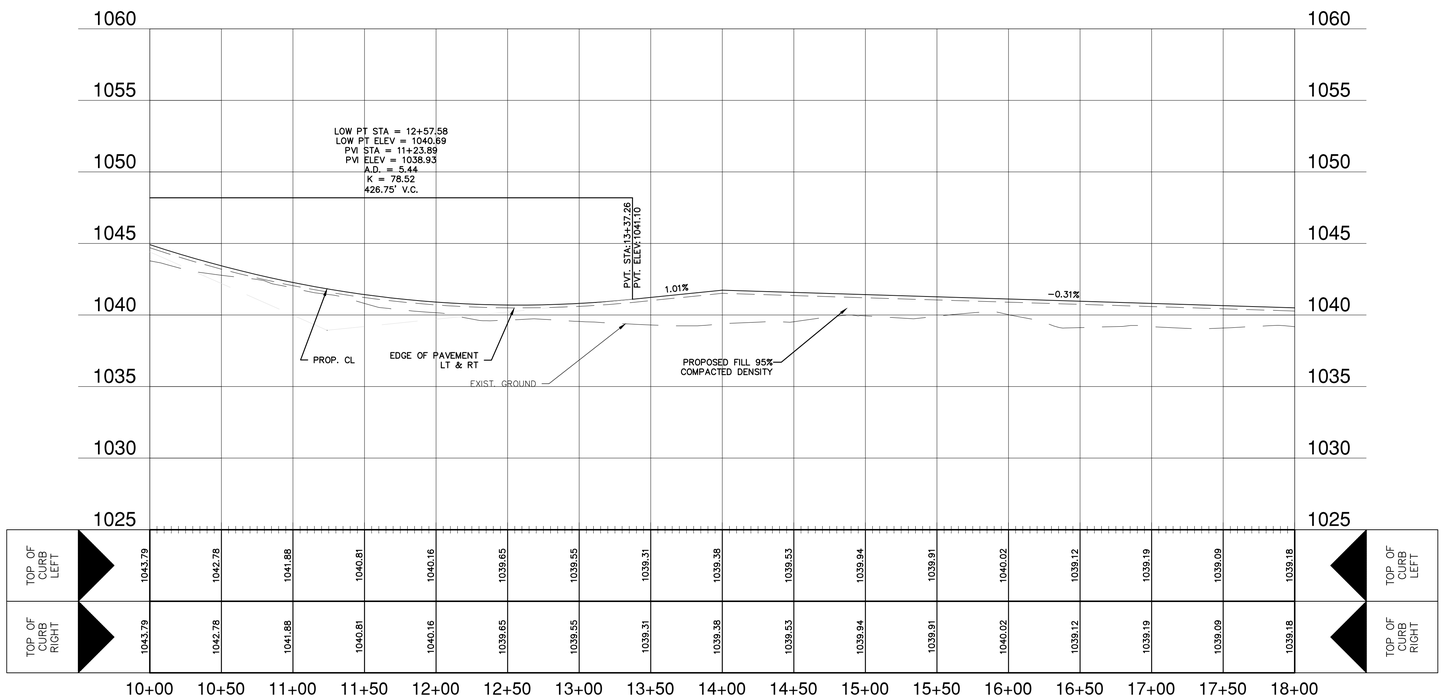
GALE ESTATES, L.L.C.

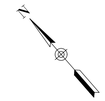
SHEET 7
OF 24



RESTLESS WIND
(STA. 10+00.00 TO 18+00.00)

HORIZONTAL SCALE 1" = 50' H
VERTICAL SCALE: 1" = 5' V





0 25 50 100 Feet
1:50

LEGEND

PROPERTY LINE
EXISTING CONTOUR 640
STREET CENTERLINE
FLOW ARROW
WASHOUT CROWN

NOTE:
CONTRACTOR IS TO MATCH EXISTING CURB, SIDEWALK, AND PAVEMENT ELEVATIONS

STREET SELECT FILL NOTE:

FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2.5 AND A PI MAXIMUM OF 20. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #: U6-SER
DATE: 04/12/23
DSN. BY: G.V.
DWN. BY: G.V.
CHKD. BY: R.M.

FIRM REGISTRATION # F-003864
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2021
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

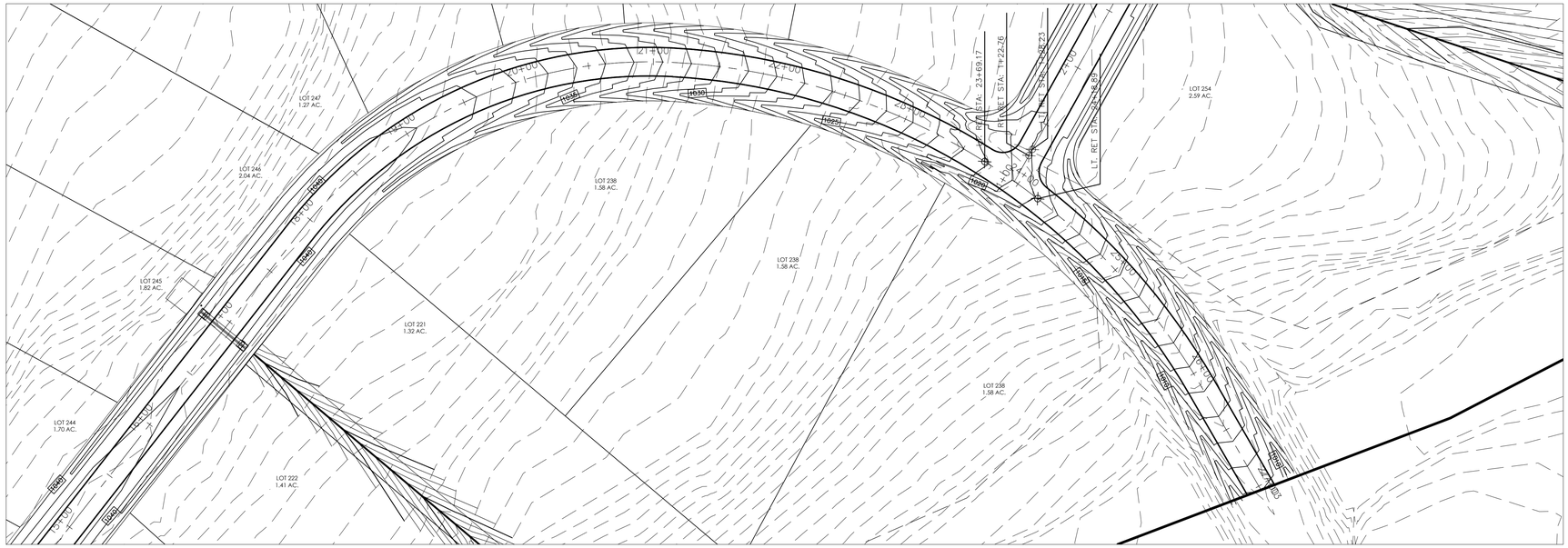
STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STREET PLAN AND PROFILE
RESTLESS WIND 10+00 - 18+00

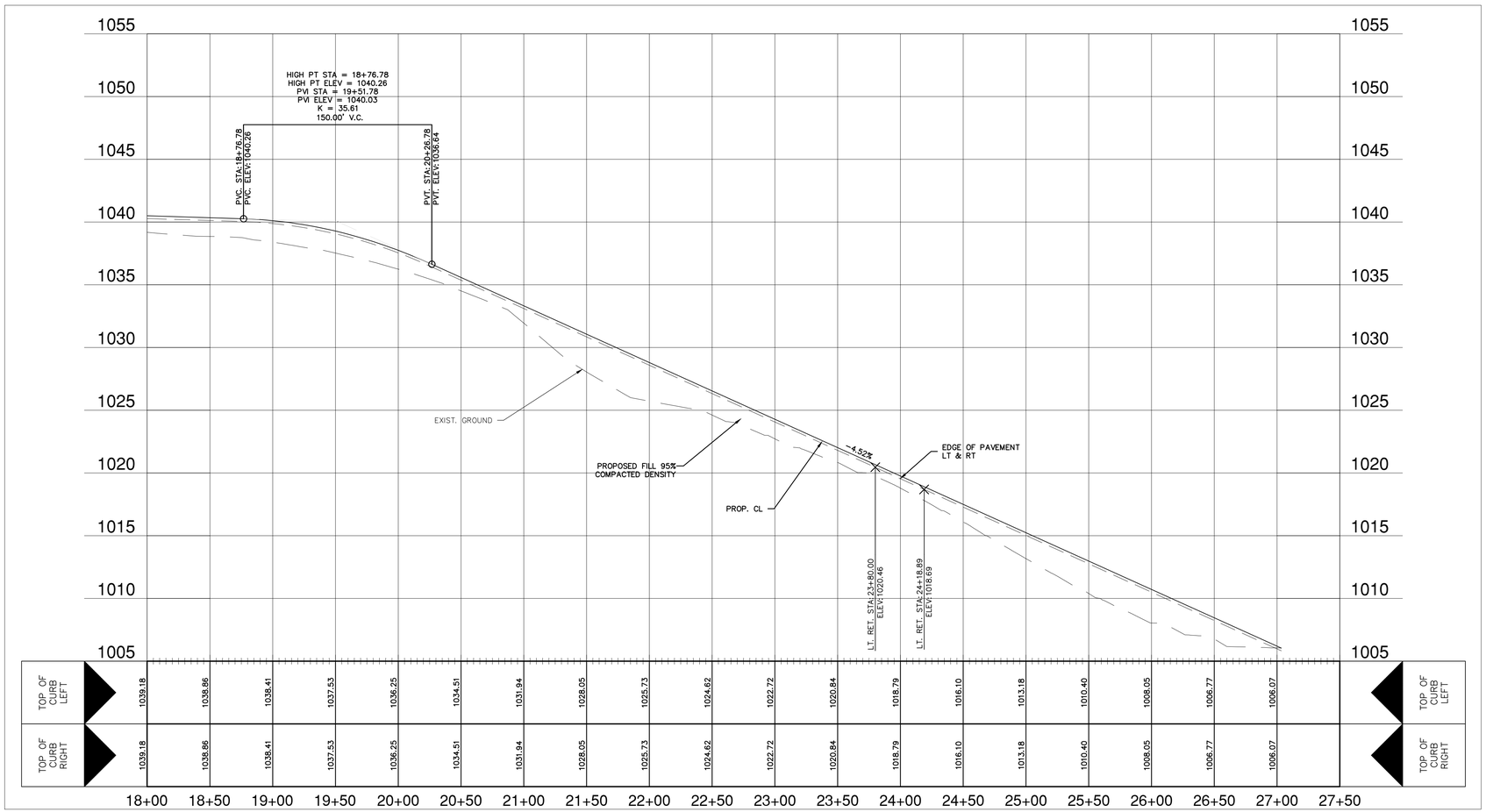
GALE ESTATES, L.L.C.

SHEET 8
OF 24



RESTLESS WIND
(STA. 18+00.00 TO 27+03.00)

HORIZONTAL SCALE 1" = 50' H
VERTICAL SCALE: 1" = 5' V



0 25 50 100 Feet
1" = 50'

LEGEND

PROPERTY LINE
EXISTING CONTOUR — 640 —
STREET CENTERLINE
FLOW ARROW
WASHOUT CROWN

0000.00 = RETURN ELEVATION

NOTE:
CONTRACTOR IS TO MATCH EXISTING CURB, SIDEWALK, AND PAVEMENT ELEVATIONS

STREET SELECT FILL NOTE:

FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2.5 AND A PI MAXIMUM OF 20. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

REVISIONS					
NO.	DATE	DESCRIPTION	BY		

PROJ. #:	DATE:	DSN. BY:	DWN. BY:	CHKD. BY:
U6-SER	04/12/23	G.V.	G.V.	R.M.

FIRM REGISTRATION # F-003884
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2021
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

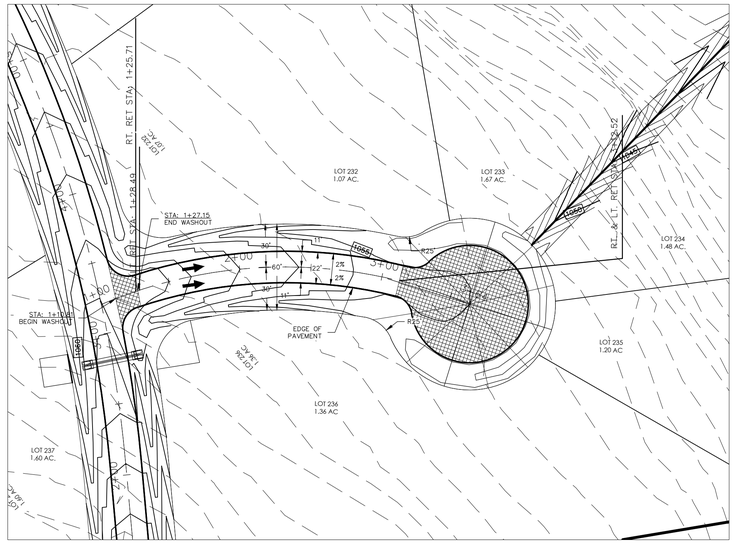
STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STREET PLAN AND PROFILE
RESTLESS WIND 18+00 - 27+03

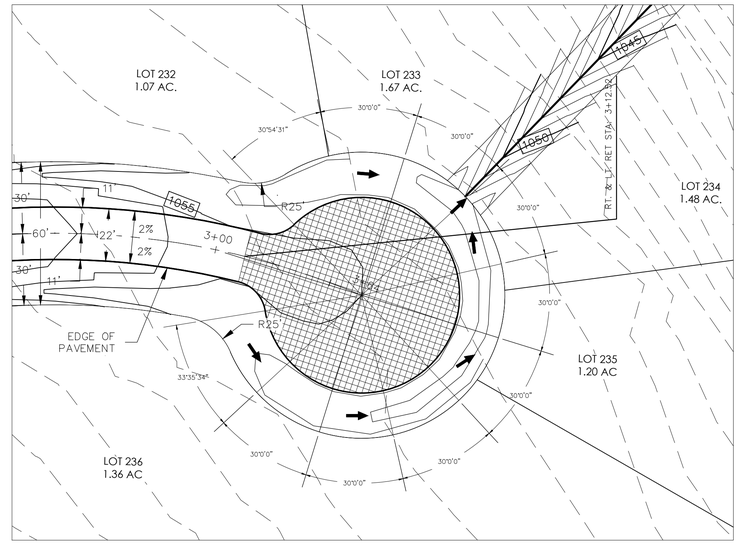
GALE ESTATES, L.L.C.

SHEET 9
OF 24



AUTUMN GLEN TRL
(STA. 1+00.00 TO 3+64.00)

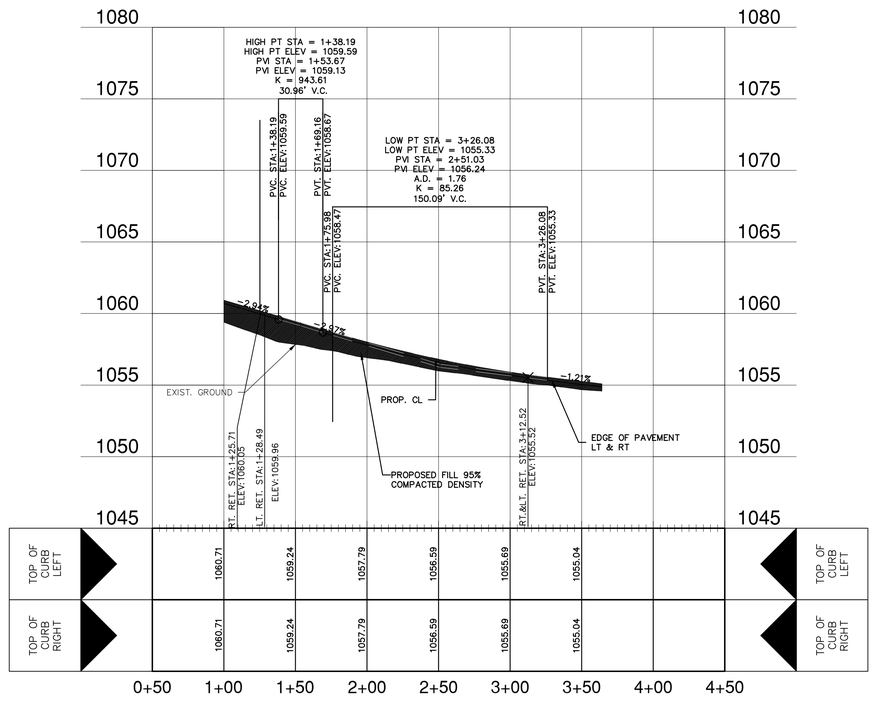
HORIZONTAL SCALE 1" = 50' H
VERTICAL SCALE: 1" = 5' V



AUTUMN GLEN TRAIL

CUL-DE-SAC DETAIL

(SCALE: 1"=30')



0 25 50 100 Feet
1" = 50'

LEGEND

PROPERTY LINE
EXISTING CONTOUR — — — — 640 — — — — —
STREET CENTERLINE — — — — —
WASHOUT CROWN

0000.00 = RETURN ELEVATION

NOTE:
CONTRACTOR IS TO MATCH EXISTING CURB, SIDEWALK, AND PAVEMENT ELEVATIONS

STREET SELECT FILL NOTE:

FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2.5 AND A PI MAXIMUM OF 20. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #	U6-SER
DATE:	04/12/23
DSN. BY:	G.V.
DWN. BY:	G.V.
CHKD. BY:	R.M.

FIRM REGISTRATION # F-003864
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2021 ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

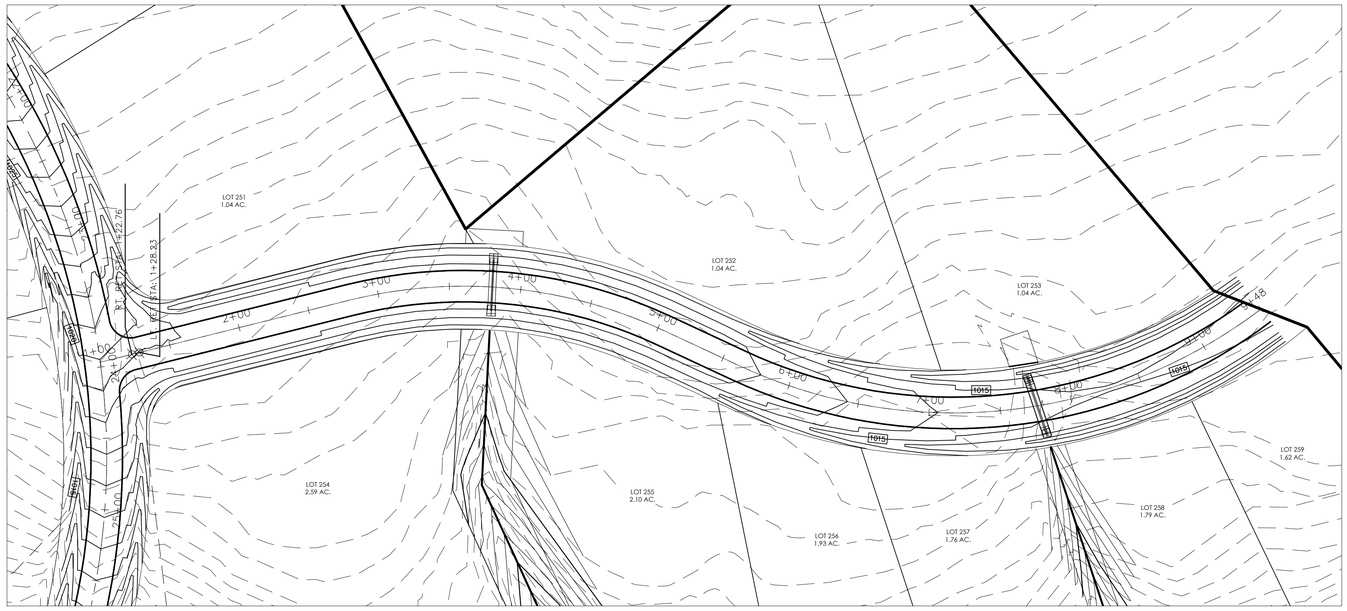
STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STREET PLAN AND PROFILE
AUTUMN GLEN TRAIL 1+00 - 3+64

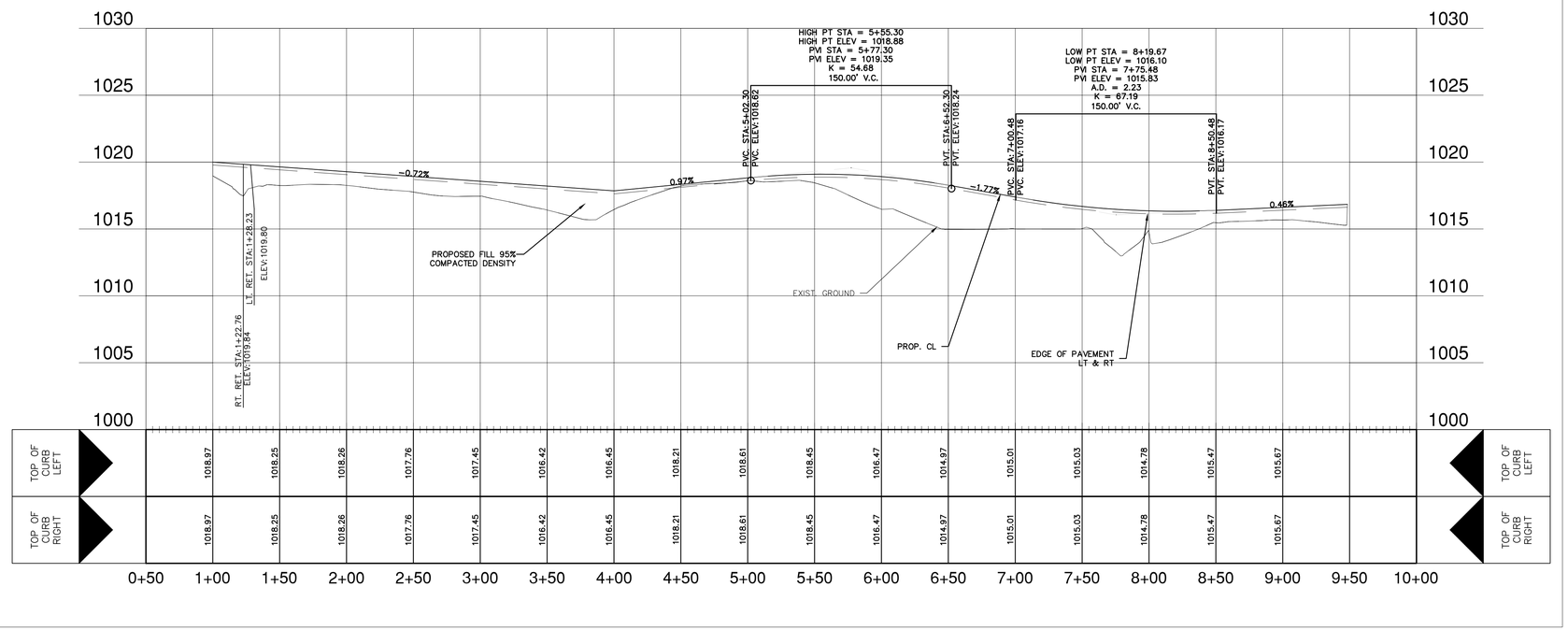
GALE ESTATES, L.L.C.

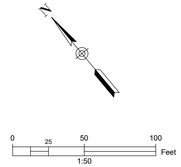
SHEET 10
OF 24



DAWN CREST DR.
(STA. 1+00.00 TO 9+48.00)

HORIZONTAL SCALE 1" = 50' H
VERTICAL SCALE: 1" = 5' V





LEGEND

PROPERTY LINE
EXISTING CONTOUR — 640 —
STREET CENTERLINE
FLOW ARROW
WASHOUT CROWN

0000.00 = RETURN ELEVATION

NOTE:
CONTRACTOR IS TO MATCH EXISTING CURB, SIDEWALK, AND PAVEMENT ELEVATIONS

STREET SELECT FILL NOTE:

FILL MATERIAL SHOULD BE NATIVE ON-SITE MATERIAL, FREE OF DELETERIOUS MATERIAL WITH A MINIMUM CBR VALUE OF 2.5 AND A PI MAXIMUM OF 20. THE GRAVEL SIZE SHOULD NOT EXCEED 3 INCHES IN DIAMETER. LIME APPLICATION RATE SHOULD BE RE-EVALUATED FOR THE FILL MATERIAL. THE MATERIAL SHOULD BE PLACED AS PER APPLICABLE CITY OR COUNTY GUIDELINES.

TRENCH EXCAVATION SAFETY PROTECTION:

CONTRACTOR AND/ OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURAL DESIGN/ GEOTECHNICAL/ SAFETY/EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND ANY AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITES WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND /OR PROCEDURES FOR THE PROJECT DESCRIBED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR'S IMPLEMENTATION OF THESE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLY WITH AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

REVISIONS					
NO.	DATE	DESCRIPTION	BY		
PROJ. #: U6-SER	DATE: 04/12/23	DSN. BY: G.V.	DWN. BY: G.V.	CHKD. BY: R.M.	

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2021
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

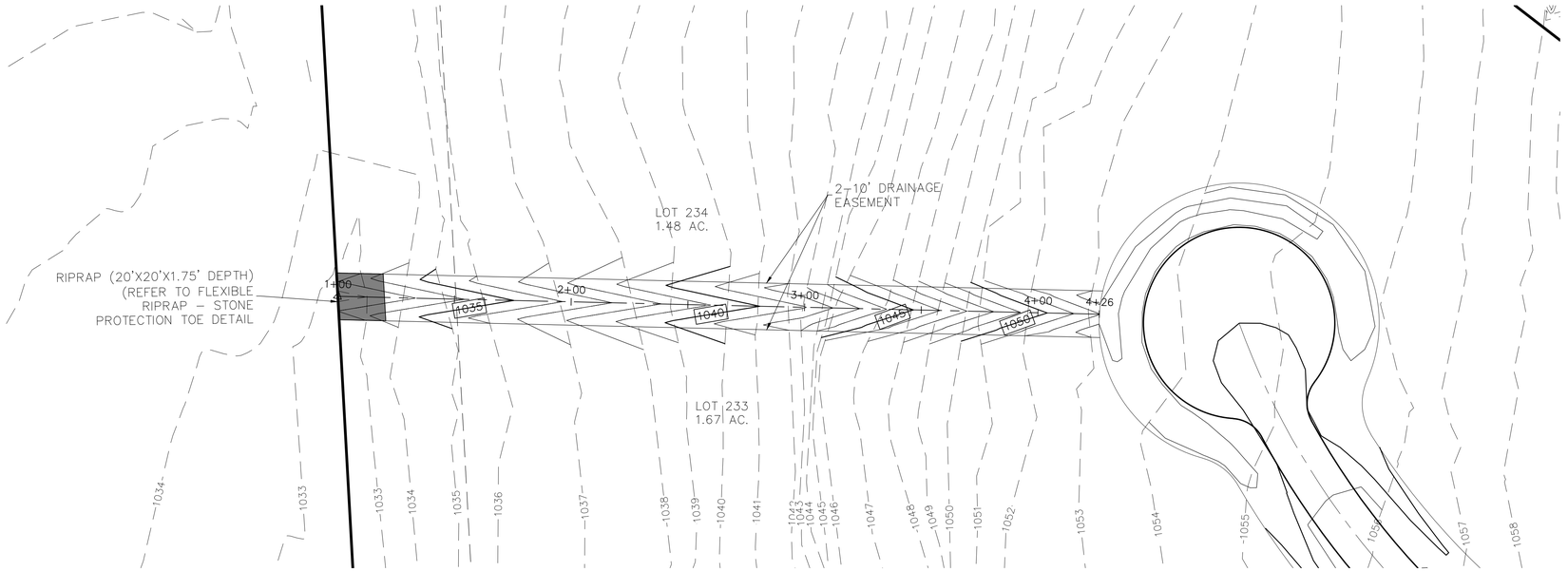
STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STREET PLAN AND PROFILE
DAWN CREST DRIVE 1+00 - 9+46

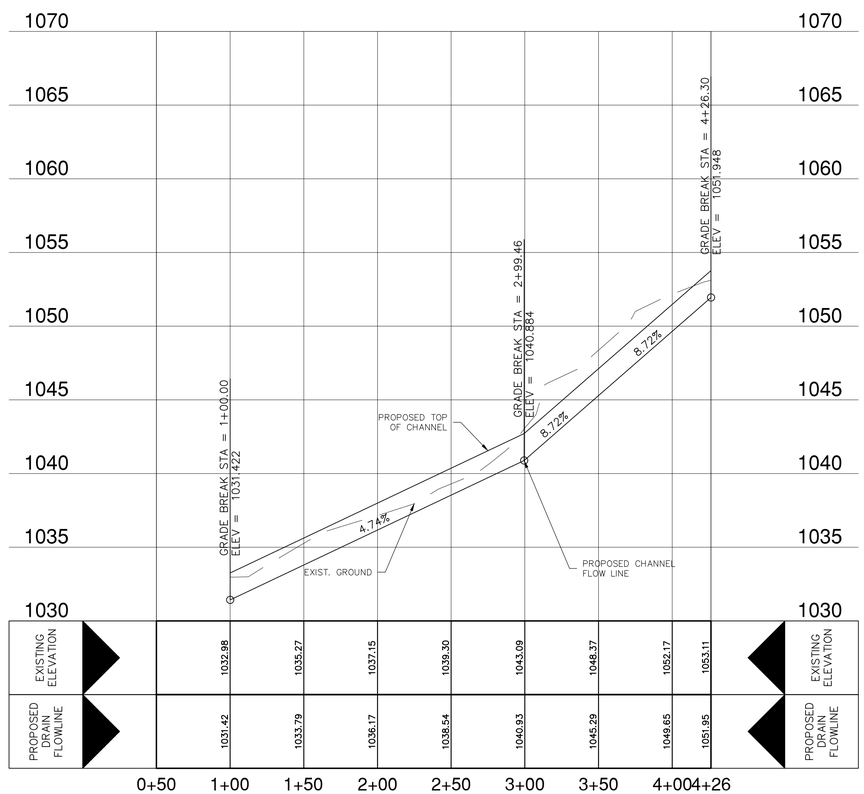
GALE ESTATES, L.L.C.

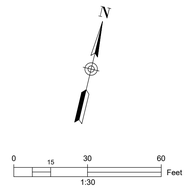
SHEET 11
OF 24



CHANNEL A
(STA. 1+00.00 TO 4+26.30)

HORIZONTAL SCALE 1" = 30' H (PLAN VIEW)
HORIZONTAL SCALE 1" = 50' H (PROFILE VIEW)
VERTICAL SCALE: 1" = 5' V



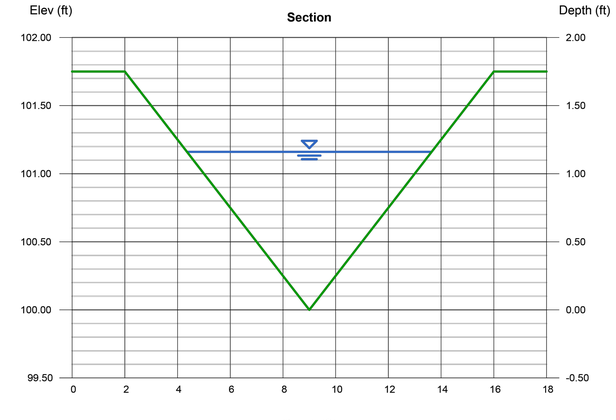


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Apr 12 2023

20' Earthen Channel (233&234) @4.74%

Triangular		**Highlighted**	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 1.16
Total Depth (ft)	= 1.75	Q (cfs)	= 33.27
		Area (sqft)	= 5.38
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 6.18
Slope (%)	= 4.74	Wetted Perim (ft)	= 9.57
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.34
		Top Width (ft)	= 9.28
Calculations		EGL (ft)	= 1.75
Compute by:	Known Q		
Known Q (cfs)	= 33.27		

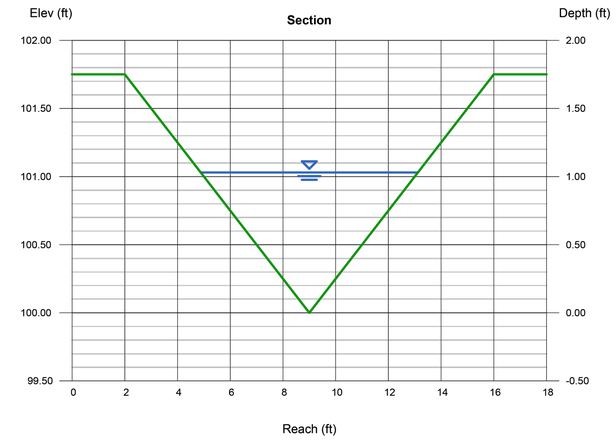


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Apr 12 2023

20' Earthen Channel (233&234) @8.72%

Triangular		**Highlighted**	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 1.03
Total Depth (ft)	= 1.75	Q (cfs)	= 33.27
		Area (sqft)	= 4.24
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.84
Slope (%)	= 8.72	Wetted Perim (ft)	= 8.49
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.34
		Top Width (ft)	= 8.24
Calculations		EGL (ft)	= 1.99
Compute by:	Known Q		
Known Q (cfs)	= 33.27		



REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # U6-SER | DATE: 04/12/23 | DSN. BY: G.V. | DWN. BY: G.V. | CHKD. BY: R.M.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

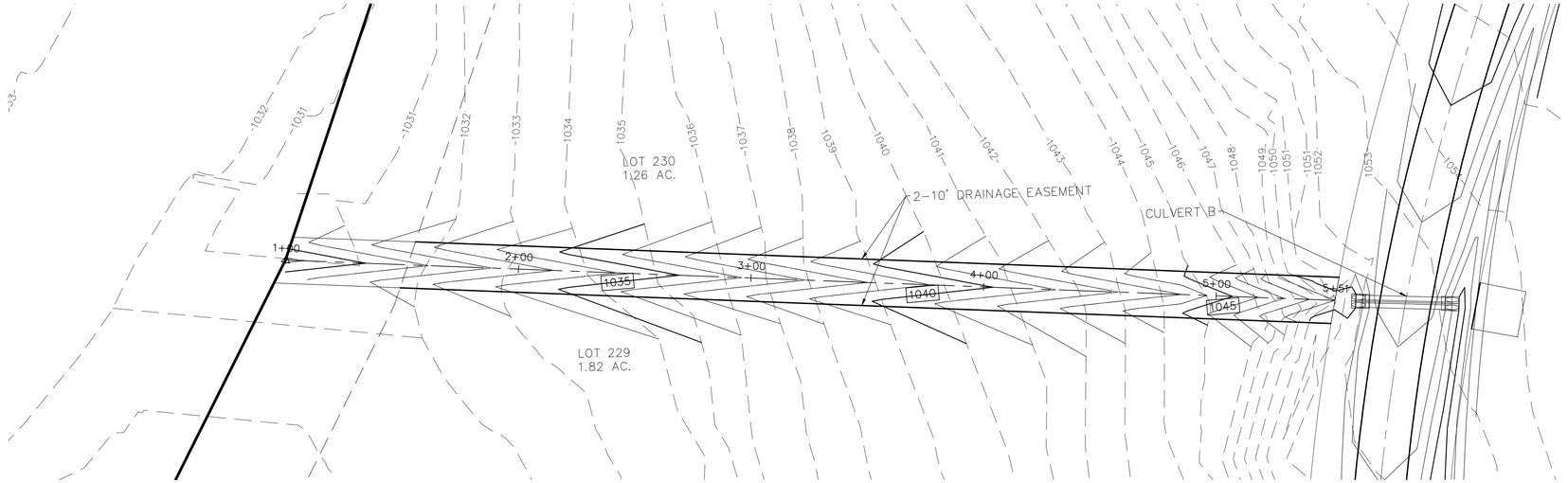
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD W. GALLEGOS, P.E. 86916 ON JUNE 1, 2021.
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS · RICHARD W. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CHANNEL A PLAN & PROFILE
STA 1+00 – STA 4+26.30

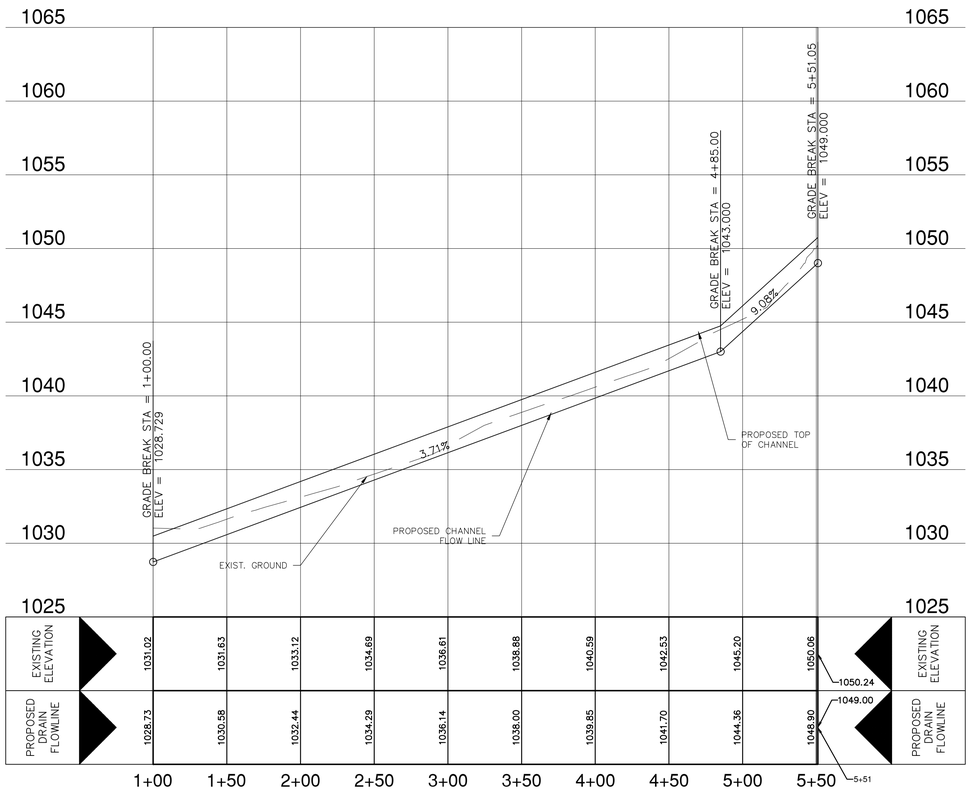
GALE ESTATES, L.L.C.

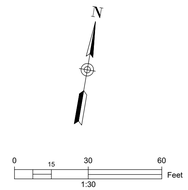
SHEET 12
OF 24



CHANNEL B
(STA. 1+00.00 TO 5+51.05)

HORIZONTAL SCALE 1" = 30' H (PLAN VIEW)
HORIZONTAL SCALE 1" = 50' H (PROFILE VIEW)
VERTICAL SCALE: 1" = 5' V



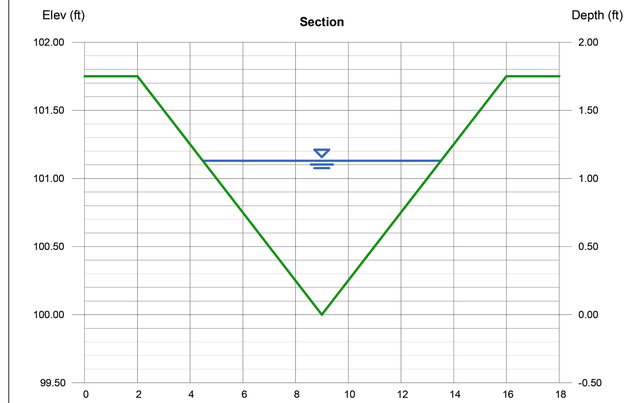


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, May 16 2023

20' Earthen Channel (229&230) @3.71%

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 1.13
Total Depth (ft)	= 1.75	Q (cfs)	= 27.76
		Area (sqft)	= 5.11
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 5.44
Slope (%)	= 3.71	Wetted Perim (ft)	= 9.32
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.25
		Top Width (ft)	= 9.04
Calculations		EGL (ft)	= 1.59
Compute by:	Known Q		
Known Q (cfs)	= 27.76		

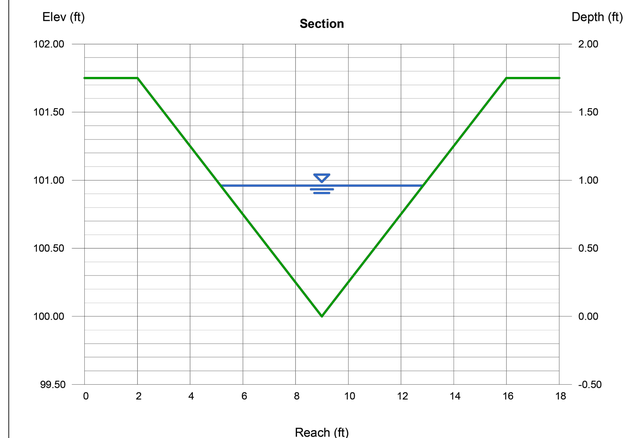


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Tuesday, May 16 2023

20' Earthen Channel (229&230) @9.08%

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 0.96
Total Depth (ft)	= 1.75	Q (cfs)	= 27.76
		Area (sqft)	= 3.69
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.53
Slope (%)	= 9.08	Wetted Perim (ft)	= 7.92
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.25
		Top Width (ft)	= 7.68
Calculations		EGL (ft)	= 1.84
Compute by:	Known Q		
Known Q (cfs)	= 27.76		



NO.	DATE	REVISIONS	BY

PROJ. # U6-SER | DATE: 04/12/23 | DSN. BY: G.V. | DWN. BY: G.V. | CHKD. BY: R.M.

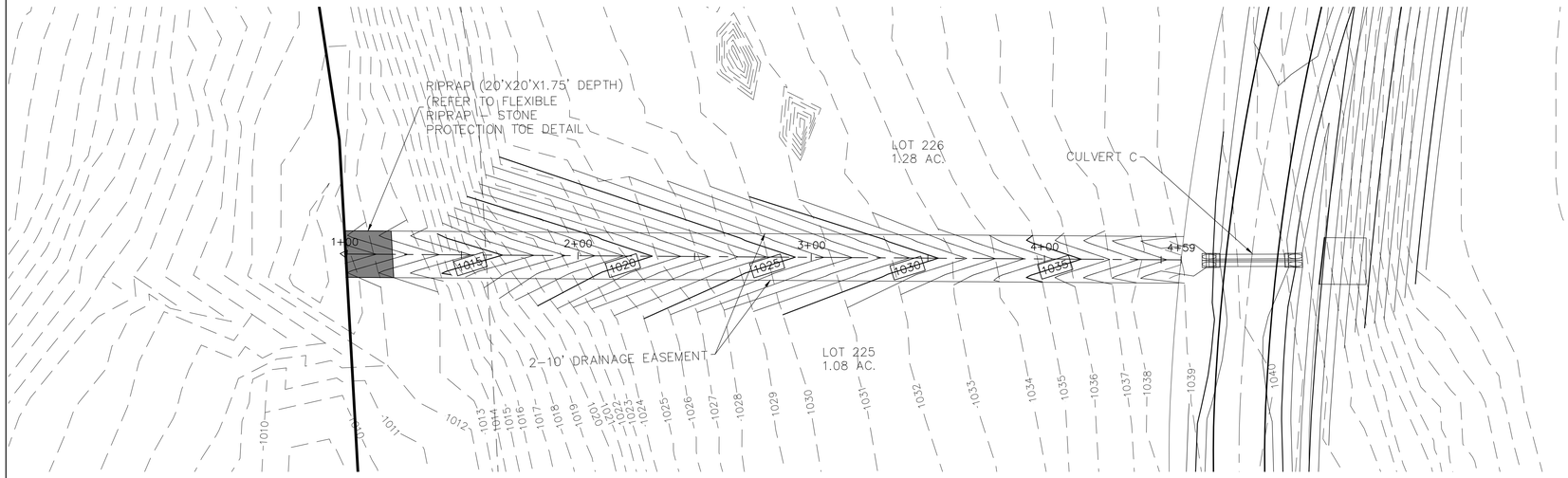
FIRM REGISTRATION # F-003004
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 ON JUNE 1, 2021.
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

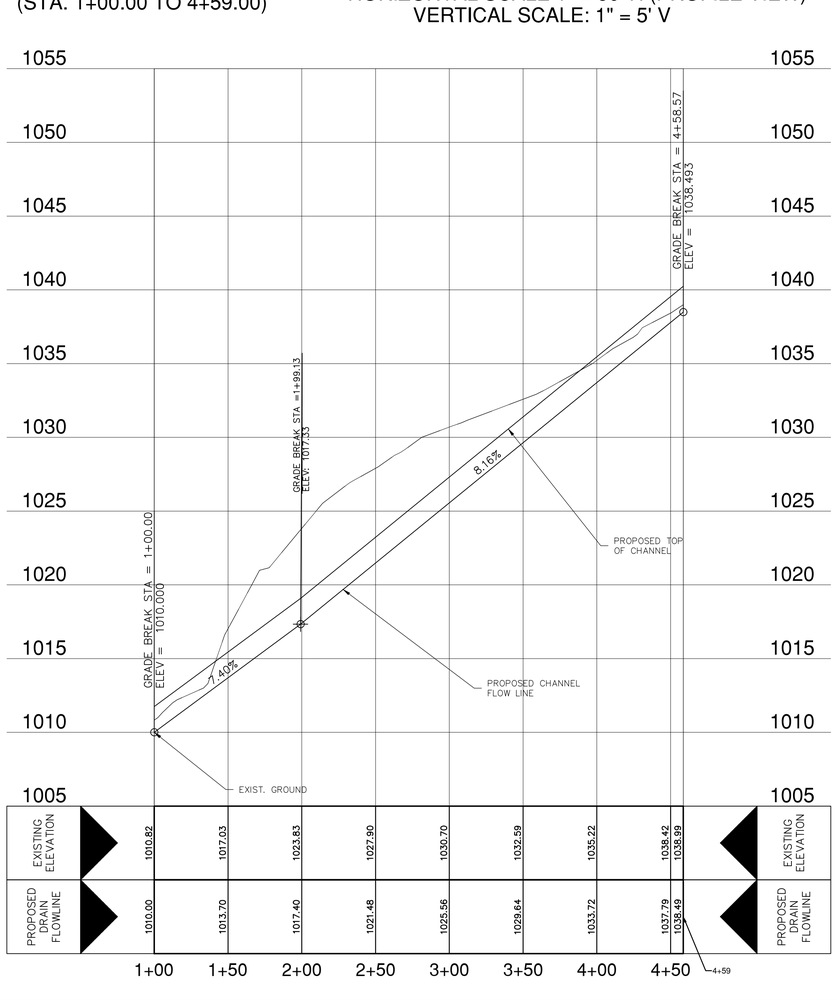
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CHANNEL B PLAN & PROFILE
STA 1+00 – STA 5+51.05
GALE ESTATES, L.L.C.

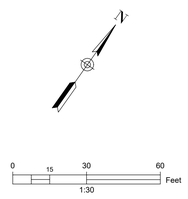
SHEET 13
OF 24



CHANNEL C
(STA. 1+00.00 TO 4+59.00)

HORIZONTAL SCALE 1" = 30' H (PLAN VIEW)
HORIZONTAL SCALE 1" = 50' H (PROFILE VIEW)
VERTICAL SCALE: 1" = 5' V



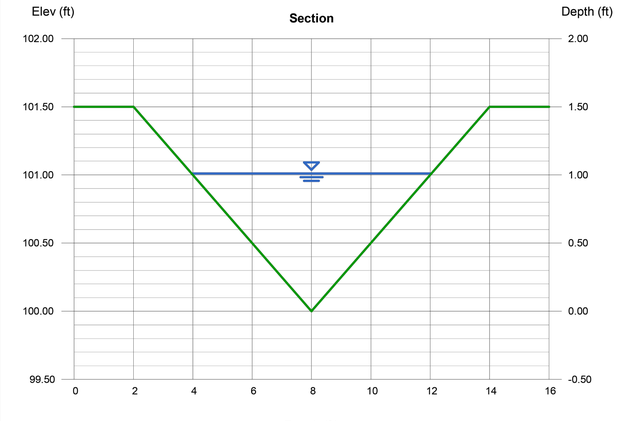


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Apr 12 2023

20' Earthen Channel (225&226) @7.40%

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 1.01
Total Depth (ft)	= 1.50	Q (cfs)	= 28.86
		Area (sqft)	= 4.08
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.07
Slope (%)	= 7.40	Wetted Perim (ft)	= 8.33
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.27
		Top Width (ft)	= 8.08
Calculations		EGL (ft)	= 1.79
Compute by:	Known Q		
Known Q (cfs)	= 28.86		

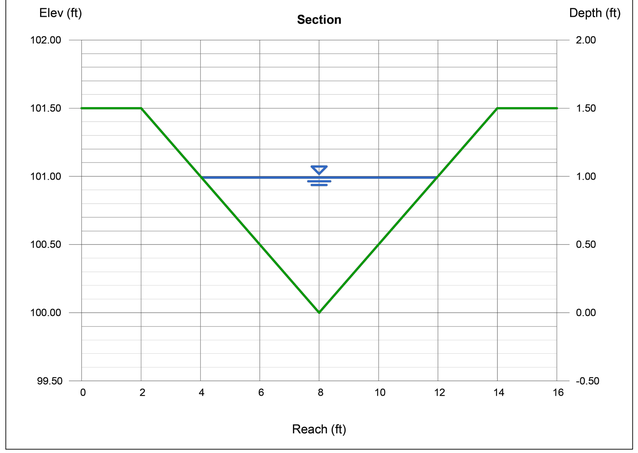


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Apr 12 2023

20' Earthen Channel (225&226) @8.16%

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 0.99
Total Depth (ft)	= 1.50	Q (cfs)	= 28.86
		Area (sqft)	= 3.92
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.36
Slope (%)	= 8.16	Wetted Perim (ft)	= 8.16
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.27
		Top Width (ft)	= 7.92
Calculations		EGL (ft)	= 1.83
Compute by:	Known Q		
Known Q (cfs)	= 28.86		



NO.	DATE	REVISIONS	BY

PROJ. #	DATE	DSN. BY:	DWN. BY:	CHKD. BY:
06-SER	04/12/23	G.V.	G.V.	R.M.

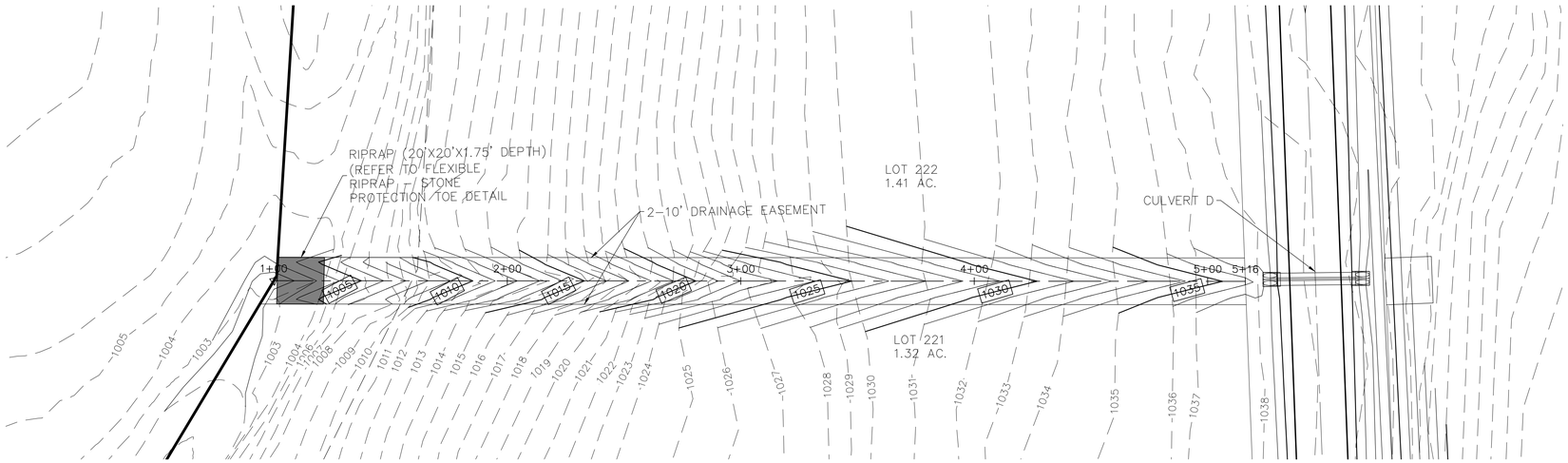
FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 ON JUNE 1, 2021. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS RICHARD M. GALLEGOS 86916 LICENSED PROFESSIONAL ENGINEER

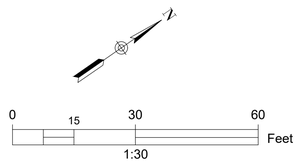
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CHANNEL C PLAN & PROFILE
STA 1+00 – STA 4+59.00
GALE ESTATES, L.L.C.

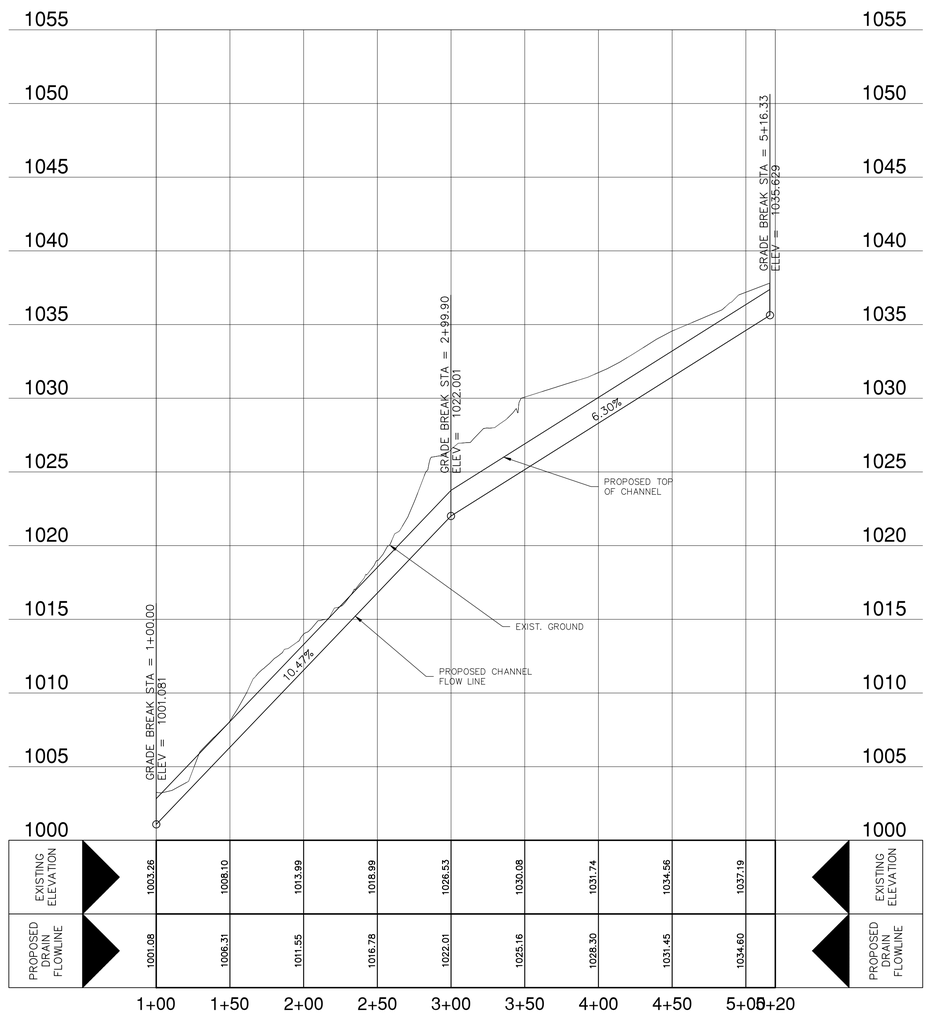
SHEET 14
OF 24



CHANNEL D
(STA. 1+00.00 TO 5+16.33)

HORIZONTAL SCALE 1" = 30' H (PLAN VIEW)
HORIZONTAL SCALE 1" = 50' H (PROFILE VIEW)
VERTICAL SCALE: 1" = 5' V



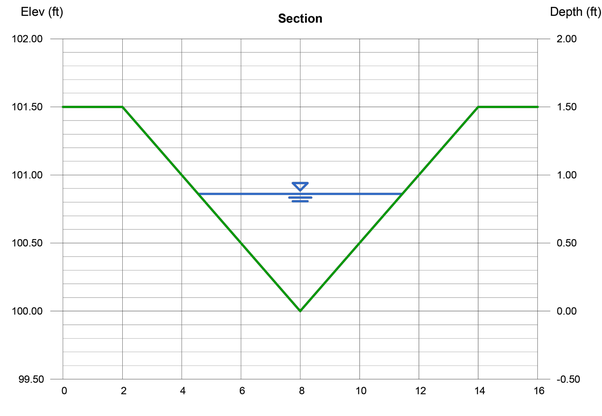


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. — Wednesday, Apr 12 2023

20' Earthen Channel (221&222) @6.30%

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 0.86
Total Depth (ft)	= 1.50	Q (cfs)	= 17.43
		Area (sqft)	= 2.96
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 5.89
Slope (%)	= 6.30	Wetted Perim (ft)	= 7.09
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.04
		Top Width (ft)	= 6.88
Calculations		EGL (ft)	= 1.40
Compute by:	Known Q		
Known Q (cfs)	= 17.43		

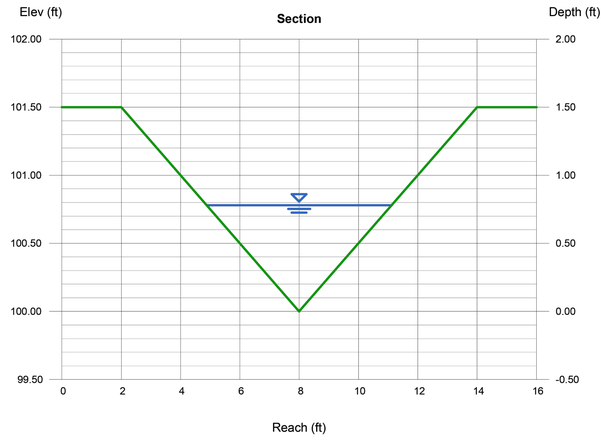


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. — Wednesday, Apr 12 2023

20' Earthen Channel (221&222) @10.47

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 0.78
Total Depth (ft)	= 1.50	Q (cfs)	= 17.43
		Area (sqft)	= 2.43
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.16
Slope (%)	= 10.47	Wetted Perim (ft)	= 6.43
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.04
		Top Width (ft)	= 6.24
Calculations		EGL (ft)	= 1.58
Compute by:	Known Q		
Known Q (cfs)	= 17.43		



NO.	DATE	REVISIONS	BY

PROJ. # U6-SER | DATE: 04/12/23 | DSN. BY: G.V. | DWN. BY: G.V. | CHKD. BY: R.M.

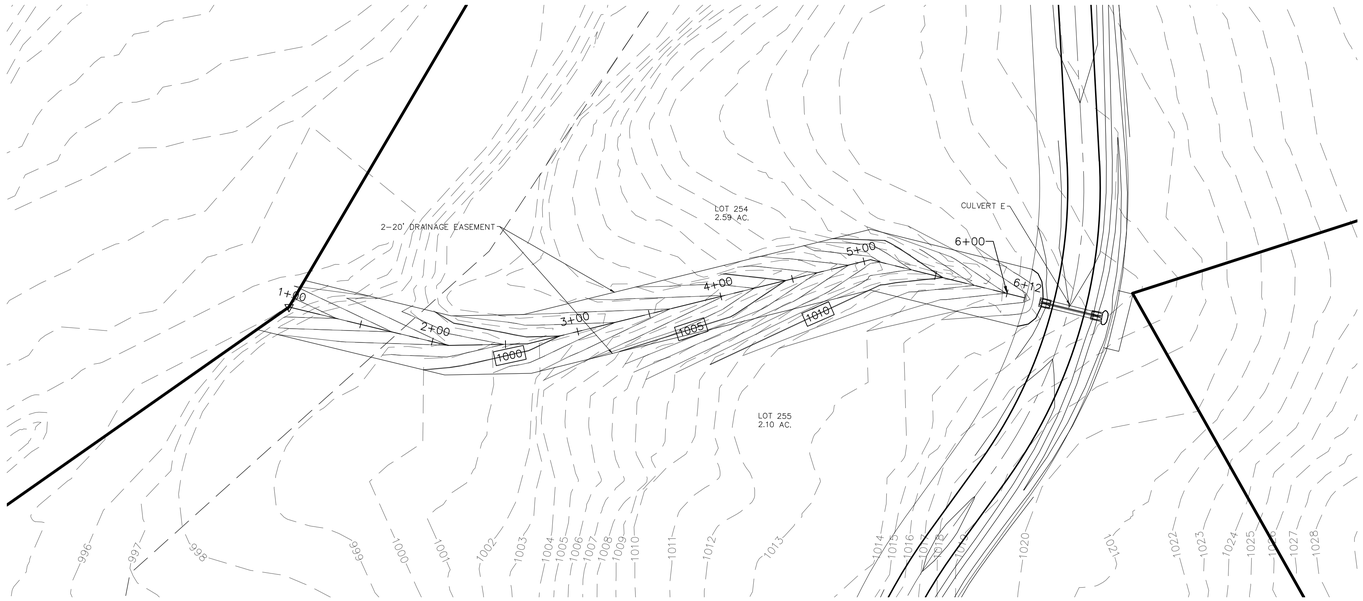
FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 ON JUNE 1, 2021.
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

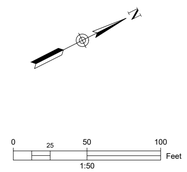
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CHANNEL D PLAN & PROFILE
STA 1+00 - STA 5+16.33
GALE ESTATES, L.L.C.

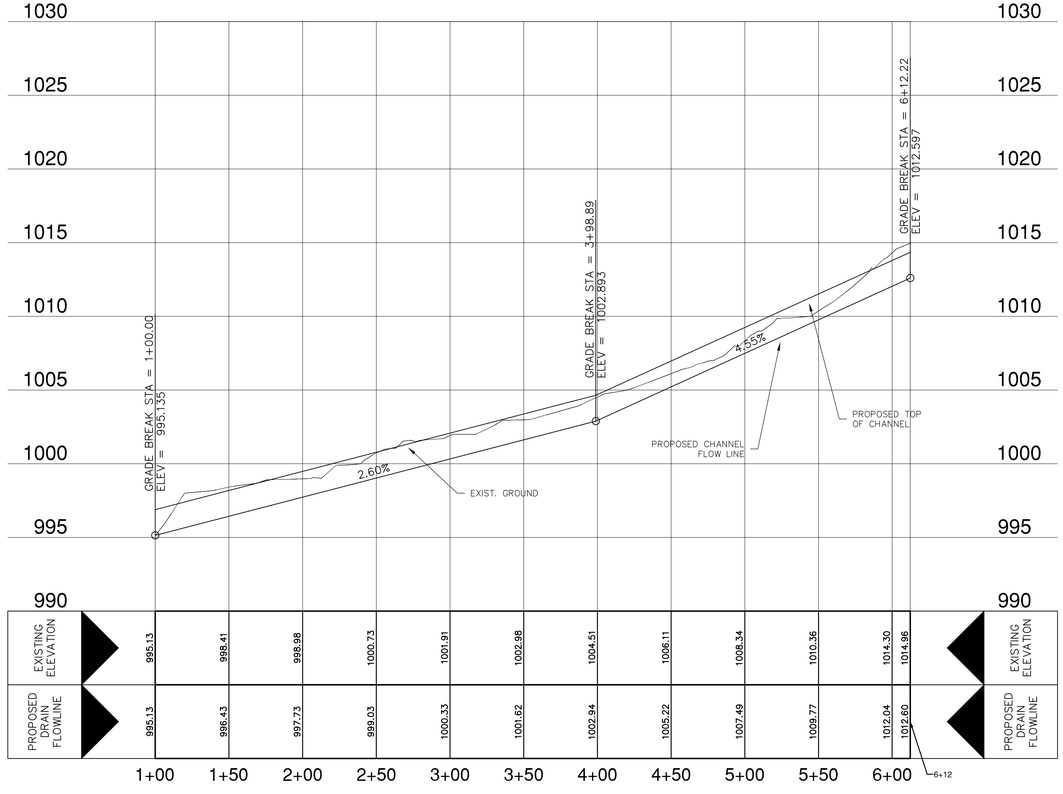
SHEET 15
OF 24



CHANNEL E
(STA. 1+00.00 TO 6+12.17)

HORIZONTAL SCALE 1" = 50' H (PLAN VIEW)
HORIZONTAL SCALE 1" = 50' H (PROFILE VIEW)
VERTICAL SCALE: 1" = 5' V



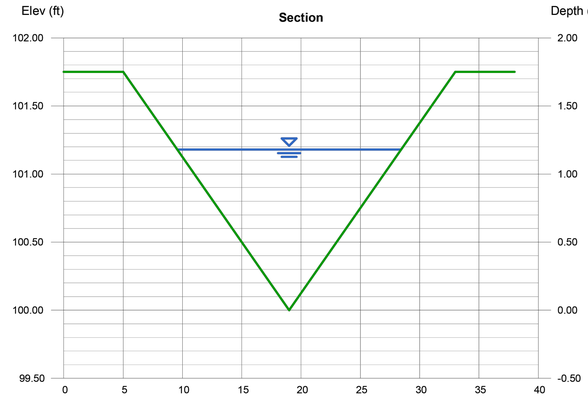


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. — Wednesday, Apr 12 2023

40' Earthen Channel (254&255) @4.55%

Triangular		**Highlighted**	
Side Slopes (z:1)	= 8.00, 8.00	Depth (ft)	= 1.18
Total Depth (ft)	= 1.75	Q (cfs)	= 52.64
		Area (sqft)	= 11.14
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 4.73
Slope (%)	= 2.60	Wetted Perim (ft)	= 19.03
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.22
		Top Width (ft)	= 18.88
Calculations		EGL (ft)	= 1.53
Compute by:	Known Q		
Known Q (cfs)	= 52.64		

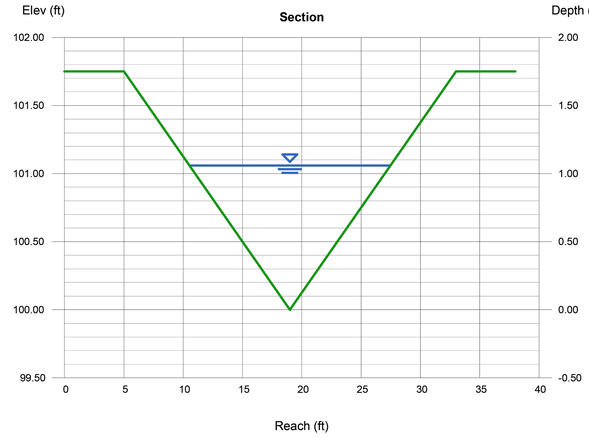


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. — Monday, Apr 17 2023

28' Earthen Channel (254&255) @4.55%

Triangular		**Highlighted**	
Side Slopes (z:1)	= 8.00, 8.00	Depth (ft)	= 1.06
Total Depth (ft)	= 1.75	Q (cfs)	= 52.64
		Area (sqft)	= 8.99
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 5.86
Slope (%)	= 4.55	Wetted Perim (ft)	= 17.09
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.22
		Top Width (ft)	= 16.96
Calculations		EGL (ft)	= 1.59
Compute by:	Known Q		
Known Q (cfs)	= 52.64		



REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. # U6-SER | DATE: 04/12/23 | DSN. BY: G.V. | DWN. BY: G.V. | CHKD. BY: R.M.

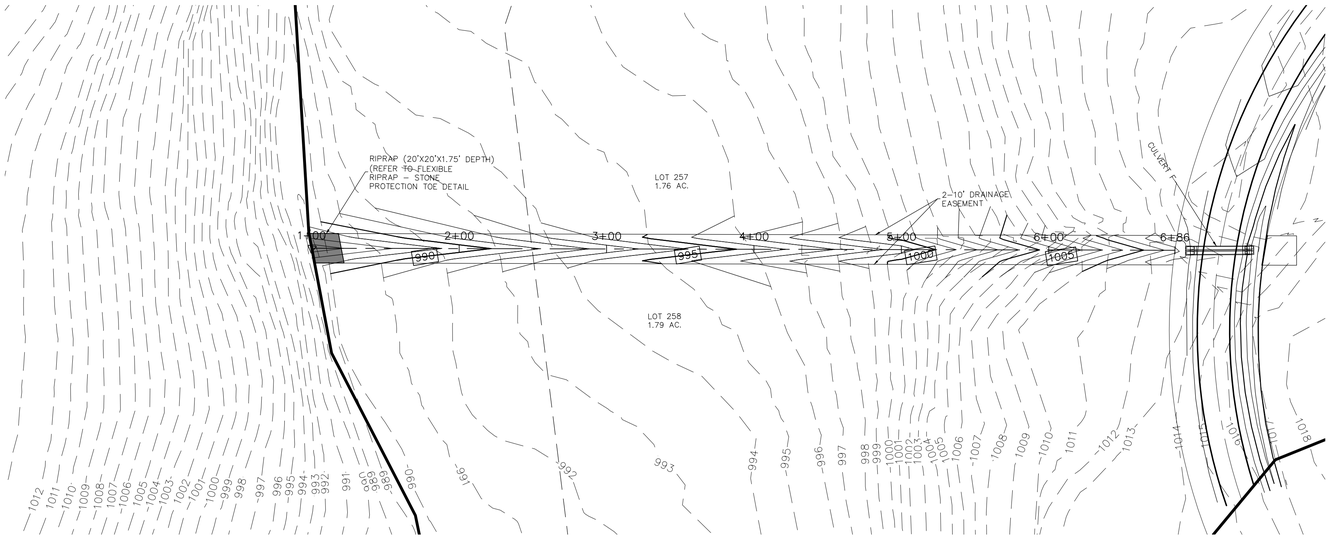
FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD W. GALLEGOS P.E. 86916 ON JUNE 1, 2021.
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS — RICHARD W. GALLEGOS — 86916 — PROFESSIONAL ENGINEER

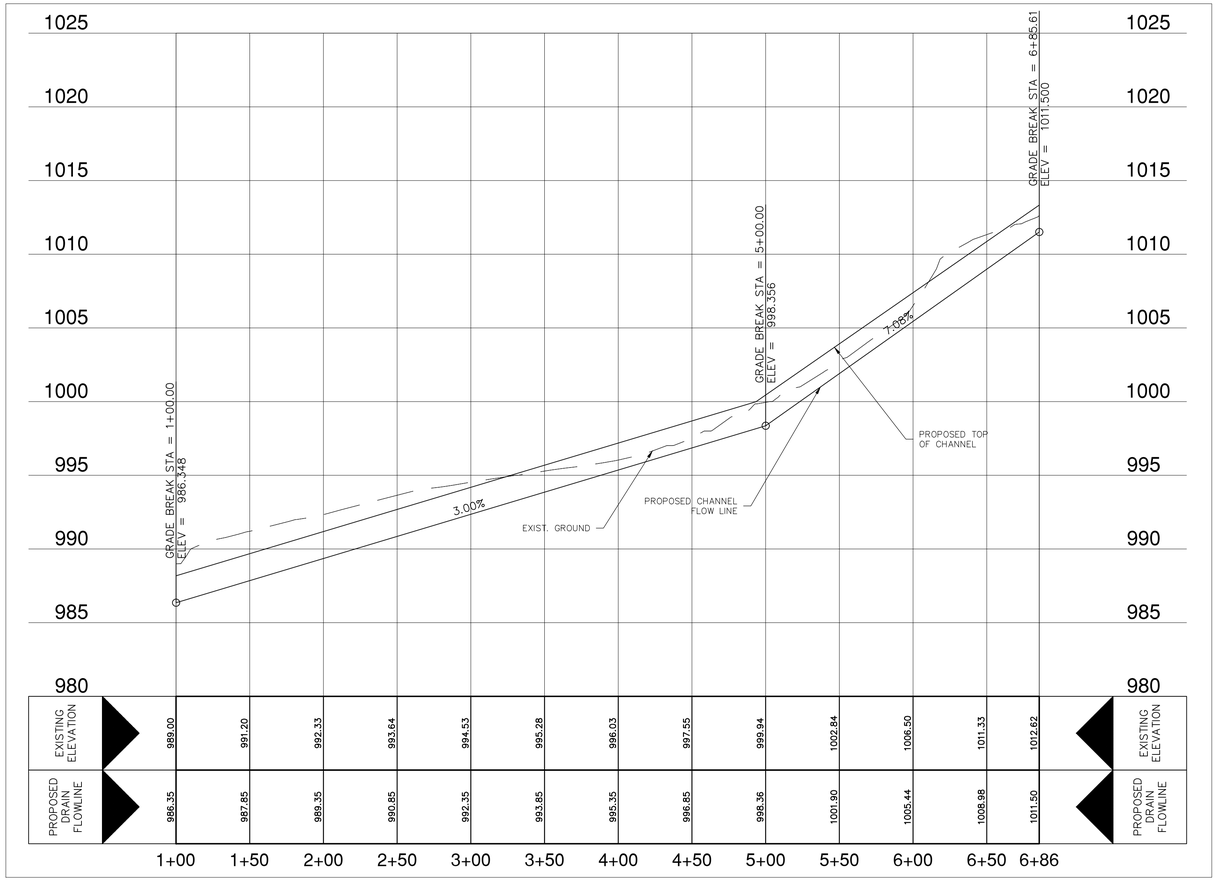
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CHANNEL E PLAN & PROFILE
STA 1+00 – STA 6+12.17
GALE ESTATES, L.L.C.

SHEET 16
OF 24



CHANNEL A
(STA. 1+00.00 TO 6+86.00)

HORIZONTAL SCALE 1" = 50' H (PLAN VIEW)
HORIZONTAL SCALE 1" = 50' H (PROFILE VIEW)
VERTICAL SCALE: 1" = 5' V

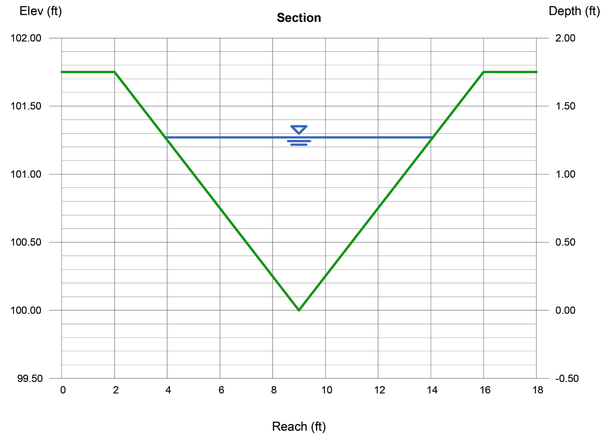


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. — Wednesday, Apr 12 2023

20' Earthen Channel (257&258) @3.00%

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 1.27
Total Depth (ft)	= 1.75	Q (cfs)	= 34.07
		Area (sqft)	= 6.45
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 5.28
Slope (%)	= 3.00	Wetted Perim (ft)	= 10.47
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.36
		Top Width (ft)	= 10.16
Calculations		EGL (ft)	= 1.70
Compute by:	Known Q		
Known Q (cfs)	= 34.07		

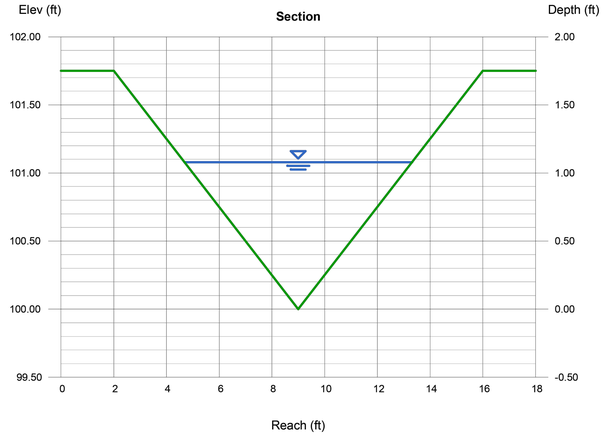


Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. — Monday, May 15 2023

20' EARTHEN CHANNEL 257&258 @7.08

Triangular		Highlighted	
Side Slopes (z:1)	= 4.00, 4.00	Depth (ft)	= 1.08
Total Depth (ft)	= 1.75	Q (cfs)	= 34.07
		Area (sqft)	= 4.67
Invert Elev (ft)	= 100.00	Velocity (ft/s)	= 7.30
Slope (%)	= 7.08	Wetted Perim (ft)	= 8.91
N-Value	= 0.035	Crit Depth, Yc (ft)	= 1.36
		Top Width (ft)	= 8.64
Calculations		EGL (ft)	= 1.91
Compute by:	Known Q		
Known Q (cfs)	= 34.07		



NO.	DATE	REVISIONS	PROJ. #	DATE:	DSN. BY:	DWN. BY:	CHKD. BY:
			U6-SER	04/12/23	G.V.	G.V.	R.M.

FIRM REGISTRATION # F-003084

GALLEGOS ENGINEERING, INC.

SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

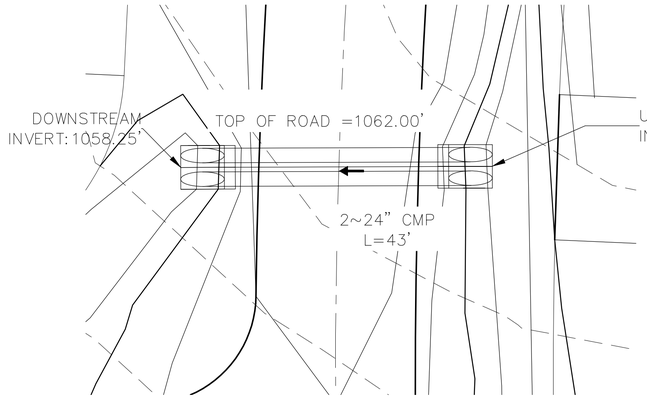
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 ON JUNE 1, 2021.
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED PROFESSIONAL ENGINEER

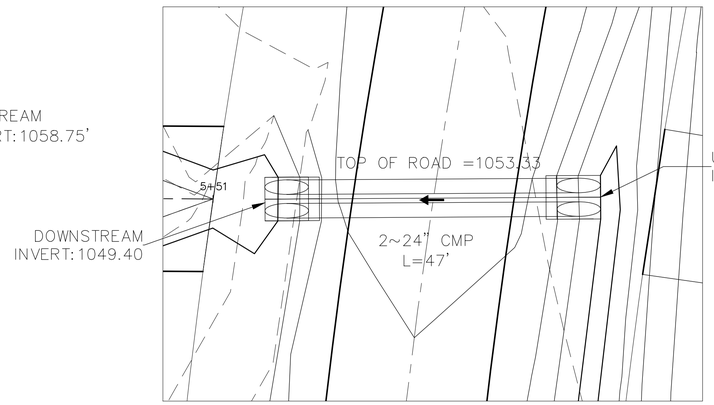
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CHANNEL A PLAN & PROFILE
STA 1+00 – STA 6+86.00
GALE ESTATES, L.L.C.

SHEET 17
OF 24

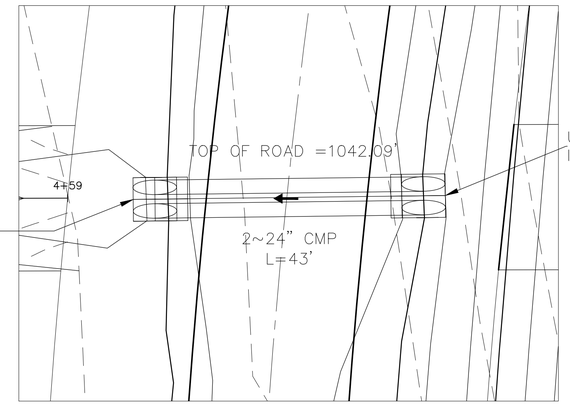
CULVERT A - RESTLESS WIND - STA. 2+81



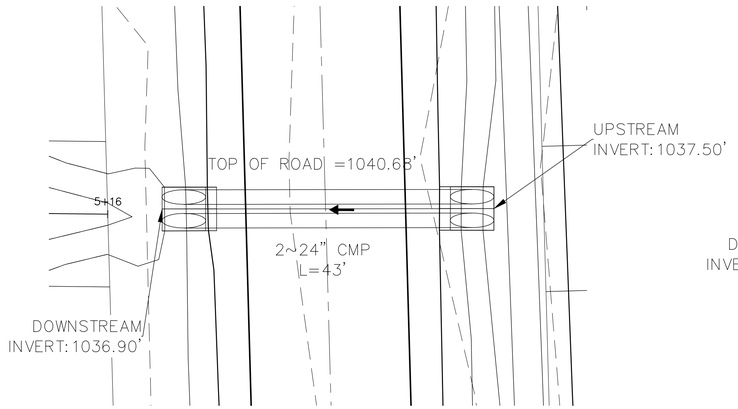
CULVERT B - RESTLESS WIND - STA. 7+.01



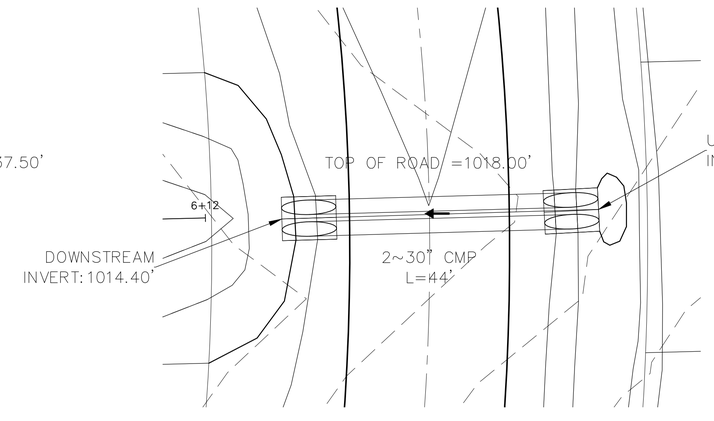
CULVERT C - RESTLESS WIND - STA. 11+81



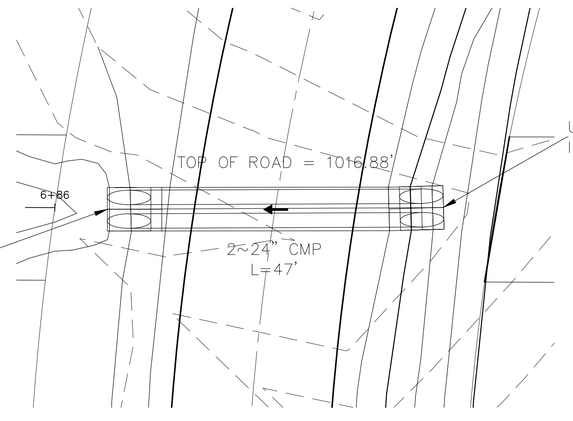
CULVERT D - RESTLESS WIND - STA. 16+92

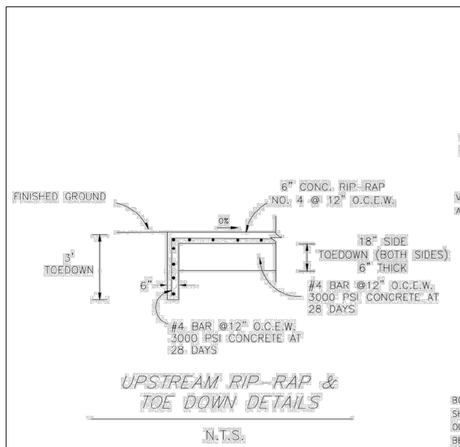


CULVERT E - DAWN CREST DR - STA. 3+80



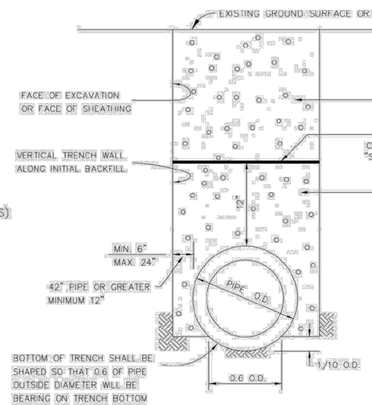
CULVERT F - DAWN CREST DR. - STA. 7+76



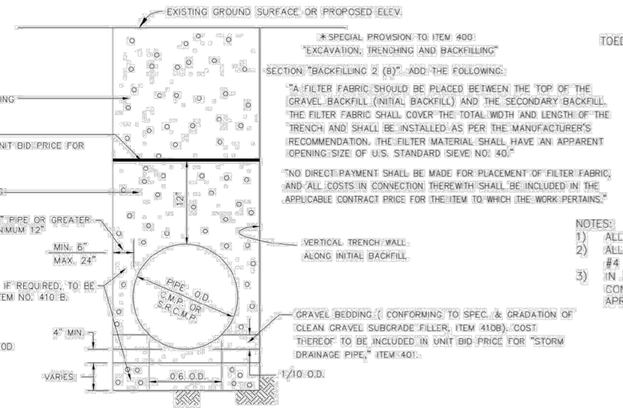


UPSTREAM RIP-RAP & TOE DOWN DETAILS

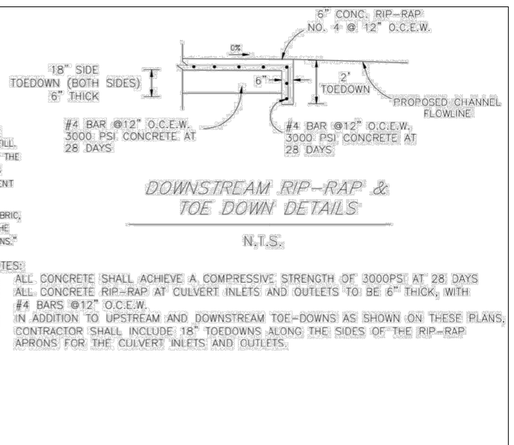
N.T.S.



TYPICAL DETAIL



TYPICAL DETAIL FOR C.M.P. & S.R.C.M.P.



DOWNSTREAM RIP-RAP & TOE DOWN DETAILS

N.T.S.

NOTES:
1) ALL CONCRETE SHALL ACHIEVE A COMPRESSIVE STRENGTH OF 3000PSI AT 28 DAYS
2) ALL CONCRETE RIP-RAP AT CULVERT INLETS AND OUTLETS TO BE 6" THICK, WITH #4 BARS @12" O.C.E.W.
3) IN ADDITION TO UPSTREAM AND DOWNSTREAM TOE-DOWNS AS SHOWN ON THESE PLANS, CONTRACTOR SHALL INCLUDE 18" TOEDOWNS ALONG THE SIDES OF THE RIP-RAP APRONS FOR THE CULVERT INLETS AND OUTLETS.

PIPE BEDDING & BACKFILL DETAILS

NOT TO SCALE

NO.	DESCRIPTION	DATE	BY

REVISIONS

PROJ. #: U6-SER | DATE: 04/12/23 | DGN. BY: G.V. | DWN. BY: G.V. | CHKD. BY: R.M.

FIRM REGISTRATION # F-003884
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS P.E. 86916 JUNE 1, 2021

ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

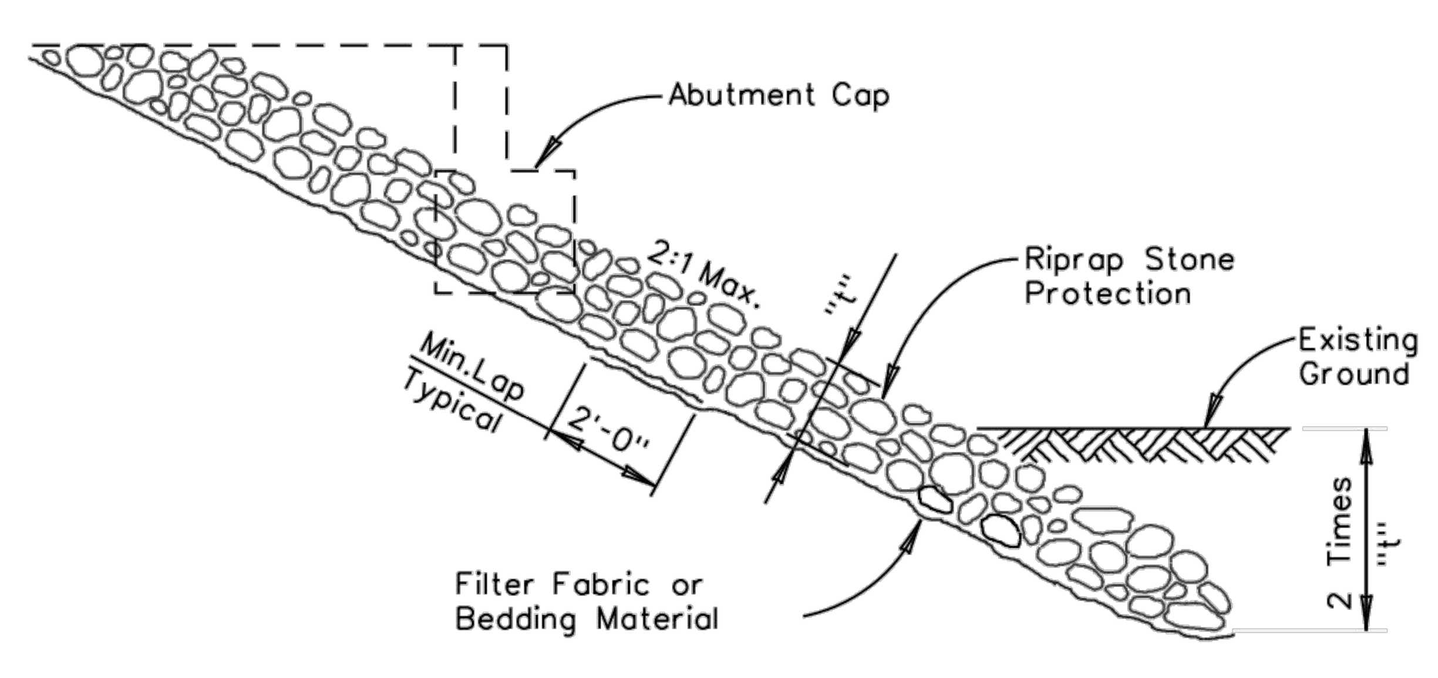
STATE OF TEXAS RICHARD M. GALLEGOS 86916 LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
CULVERT CROSSING DETAILS
CULVERTS A,B,C,D,E,F

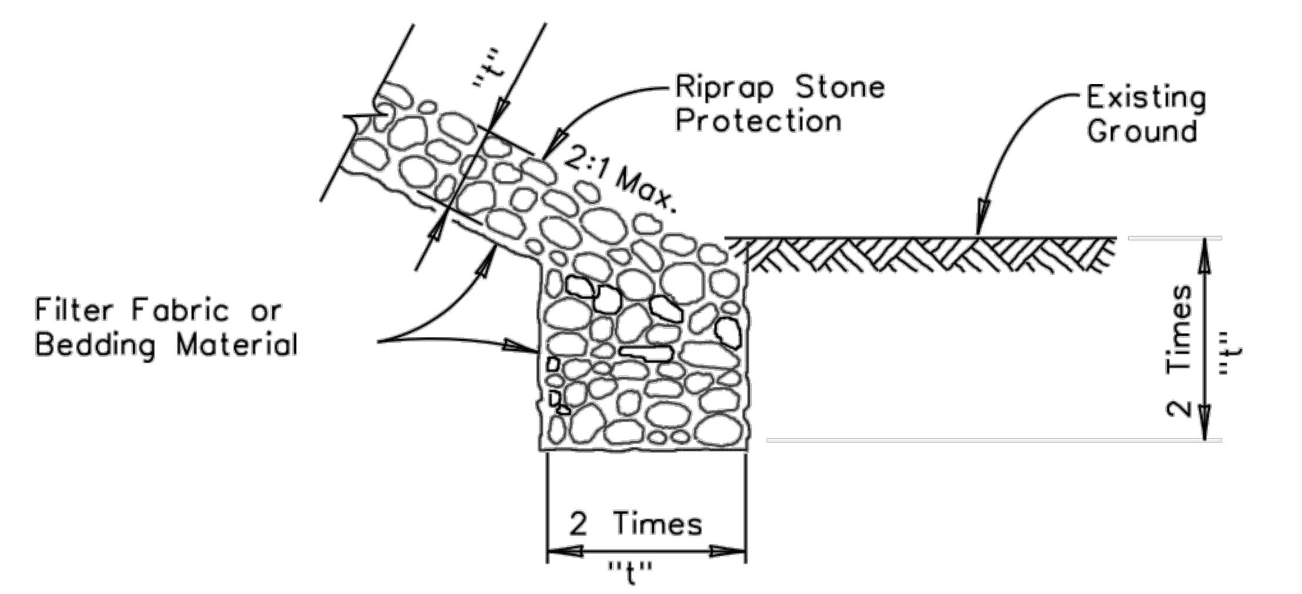
GALE ESTATES, L.L.C.

SHEET 18
OF 24

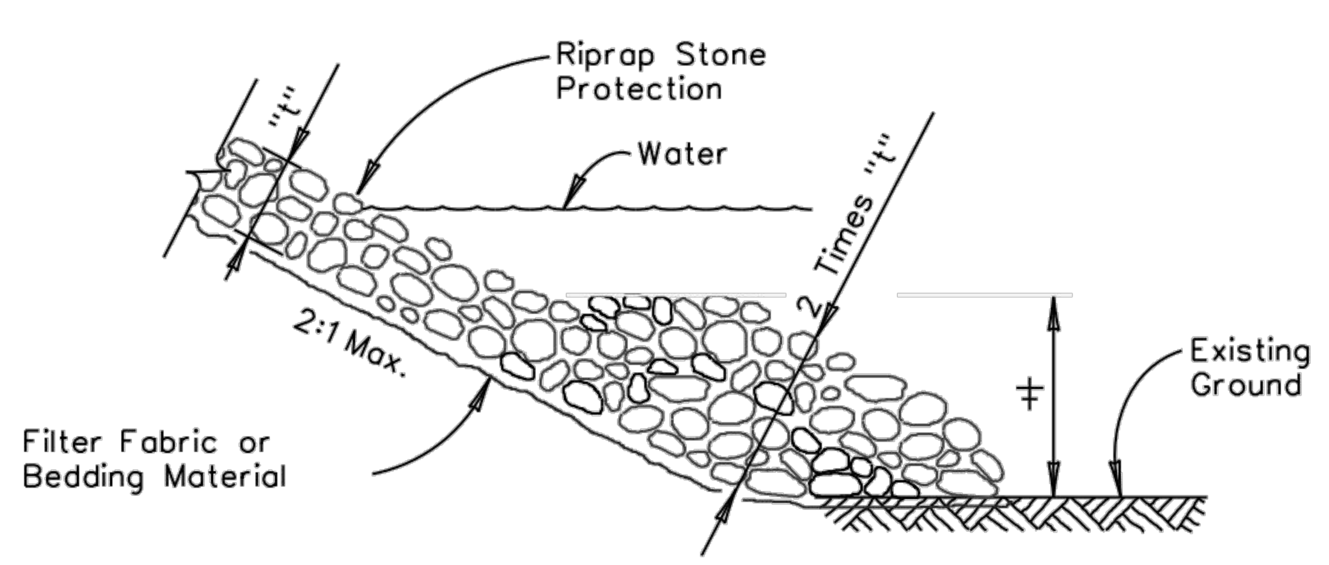
EMBANKMENT



TOE DETAIL ①



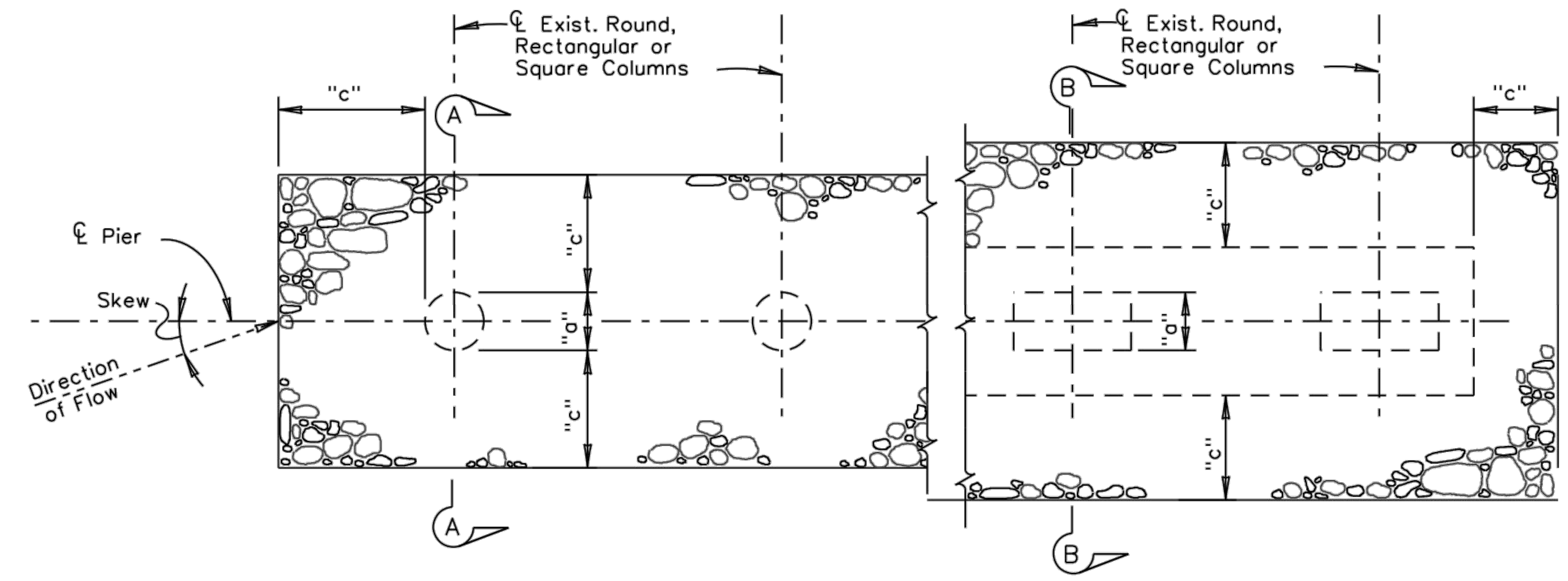
TOE DETAIL ①
(ALTERNATE)



TOE DETAIL ①
UNDER WATER

‡ 2 times the thickness ("t") or maximum expected scour considering site history if available.

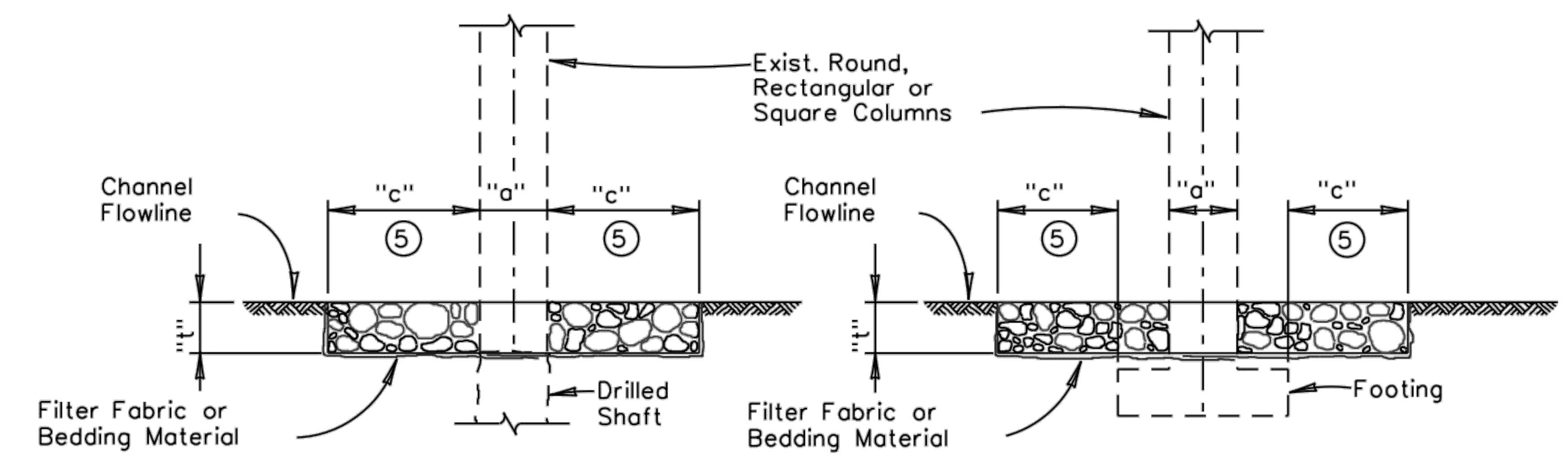
PIER



COLUMN ON DRILLED SHAFT OR PILING

COLUMN ON SPREAD FOOTING

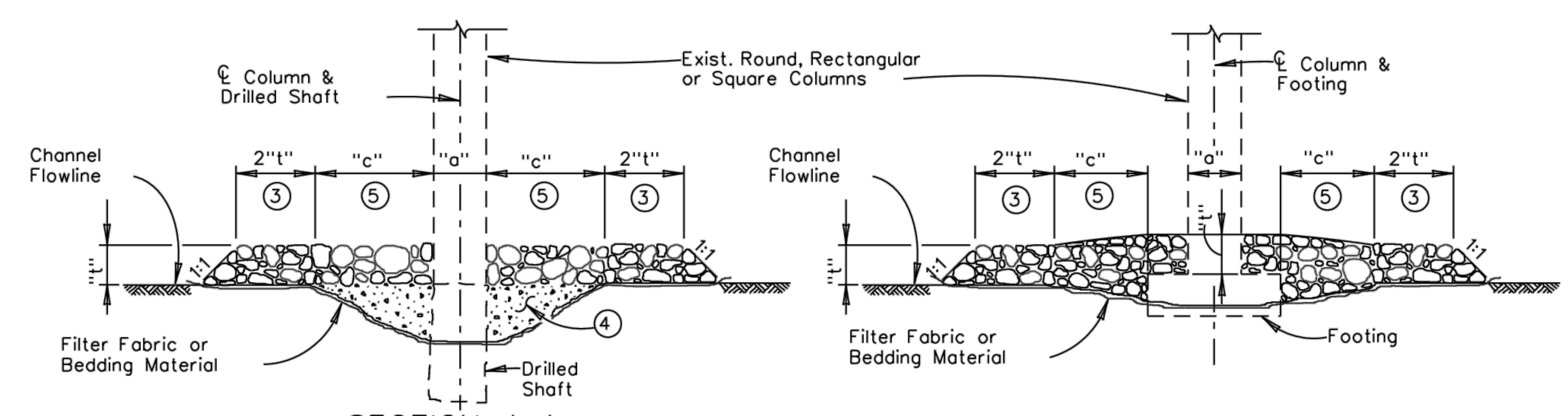
PLAN VIEW



SECTION A-A

SECTION B-B

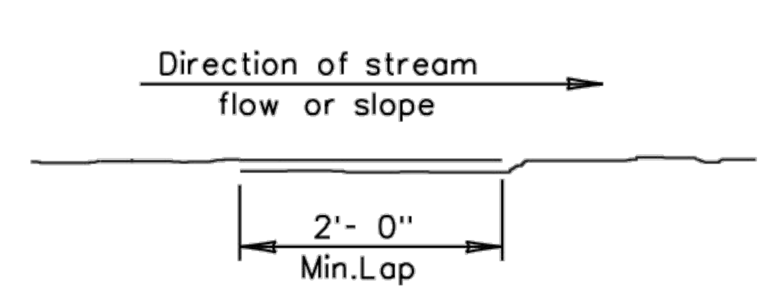
ELEVATION



SECTION A-A

SECTION B-B

ELEVATION UNDER WATER OR SCOUR CRITICAL



FILTER FABRIC LAP

NOTES:

① Toe required at all boundaries of stone protection except where placed next to a structure such as an abutment or pier.

② Bedding material is not required if filter fabric is used. Filter Fabric will be Type 2 (6 oz/sy) as per DMS 6200.

③ In areas where excavation in the channel will exacerbate scour, an additional width of stone protection is required as shown.

④ Scour damage may be filled with a material having a gradation equal to the bedding material but will not be more coarse than stone protection being placed, as specified in item 432 "RIPRAP", approval of the engineer is required.

⑤ Surface of stone protection will slope away from the pier, but not exceed 2:1.

GENERAL NOTES:

Refer to item 432 for the gradation of stone protection and bedding material, alternate gradations are not permitted. Placement of stone protection will not be performed in a manner that will cause segregation such as dumping or pushing material in place.

See Layout for limits and thickness of riprap specified, design table provided below is a guide for the designer. All work will be performed in accordance with item 432.

DESIGN TABLE:

Minimum specific gravity for stone protection is 2.40 Minimum thickness permissible is 12 inches, channel velocities (V) for a given thickness and gradation will not exceed the limits indicated in the table below.

"t" - Thickness of revetment
"a" - Column width
Skew - Angle between direction of flow and center of pier
"c" - 2"a"/cos (skew)
"v" - Stream velocity

	REVETMENT TYPE		
	ABUTMENT OR CHANNEL BANK	PIER	
		RECT.NOSE	ROUND NOSE
"t" in.	"v"(max.) ft/s	"v"(max.) ft/s	"v"(max.) ft/s
12	5.8	6.0	6.8
15	6.5	6.8	7.7
18	7.1	7.2	8.2
21	7.7	7.7	8.7
24	8.2	7.8	8.8
30	9.2	9.1	10.3

SAN ANTONIO DISTRICT STANDARD

© 2007 Texas Department of Transportation
San Antonio District (Structural Design)

FLEXIBLE RIPRAP
STONE PROTECTION
EMBANKMENTS
AND PIERS

FRR (SP)

T:Engdata/Standards/StoneProtect.dgn
ORIGINAL DRAWING DATE: SEPT.2007
PREPARED BY AND FOR USE OF TxDoT.

DN.: JHK	REVISIONS 09-01-08	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
CK.: JGD	- -	SAT	6		
DW.: MRM	- -	COUNTY	CONTROL	SECTION	JOB	HIGHWAY
CK.: JHK	- -				

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

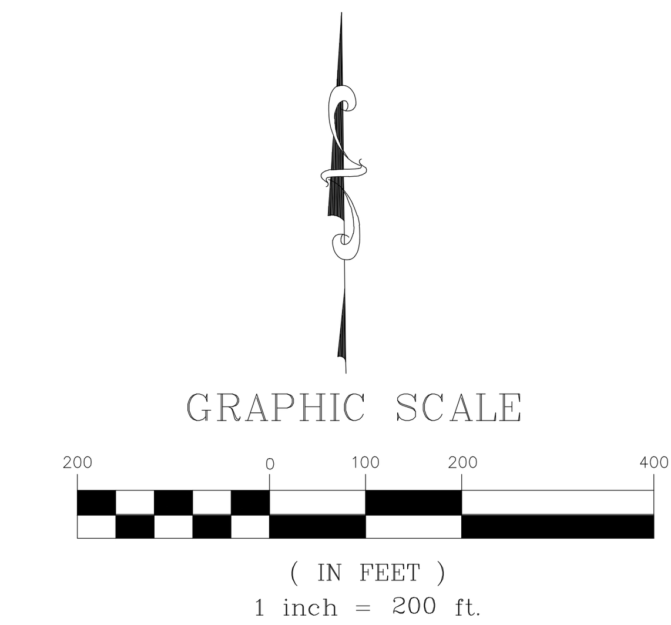
STATE OF TEXAS RICHARD M. GALLEGOS 86916 LICENSED PROFESSIONAL ENGINEER

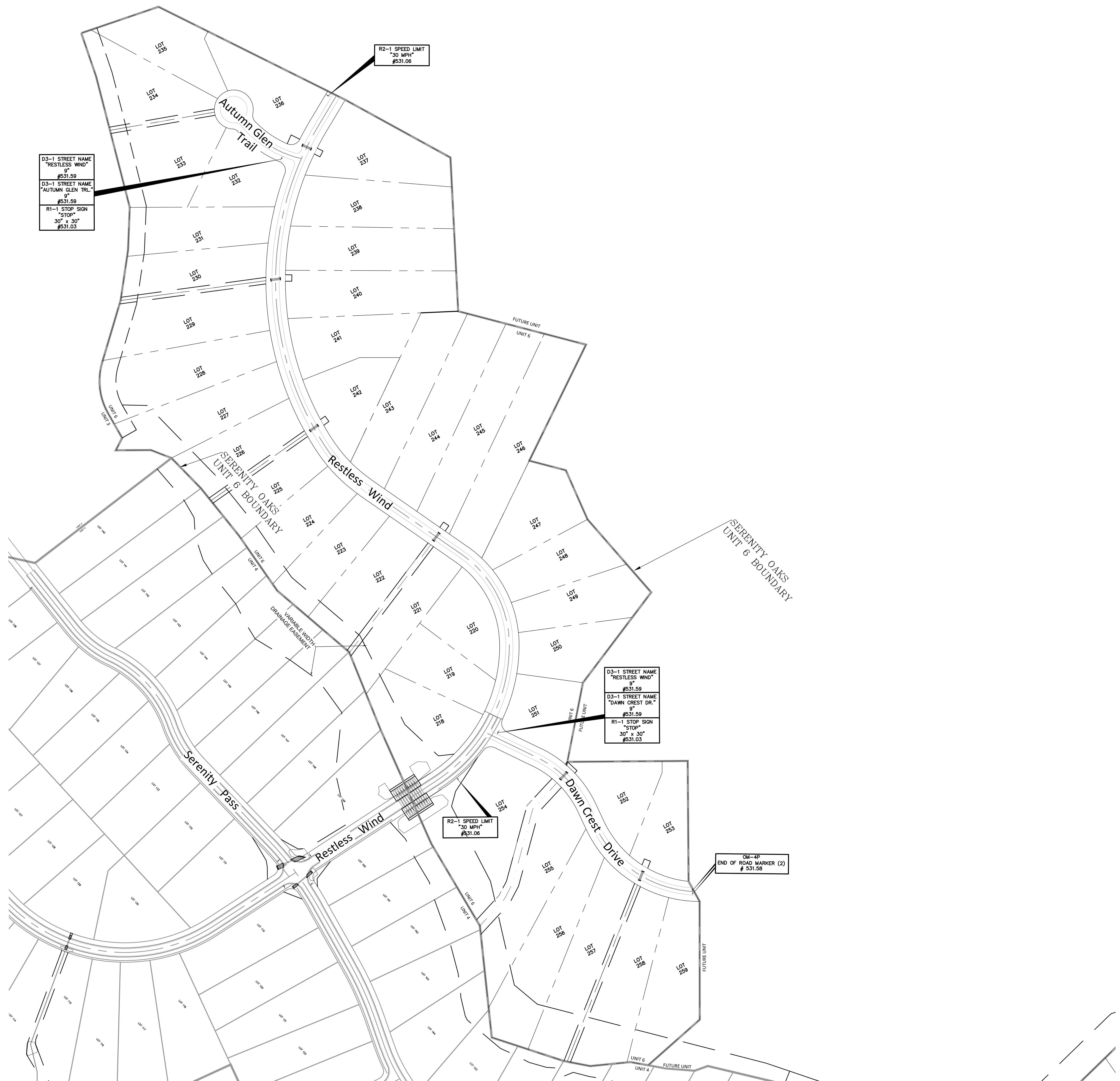
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

RIPRAP DETAILS

GALE ESTATES, L.L.C.

S:\Projects\00-GENERAL\00-AGS Serenity Unit 6\gel Plans\S19-U6-GRD-RIPRAP DETS.dwg





NOTES

1. ALL TRAFFIC SIGNS SHALL BE MANUFACTURED AND INSTALLED ACCORDING TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (T.M.U.T.C.D.).
2. INSTALL SIGNS SUCH THAT THEIR VIEW IS NOT BLOCKED BY LOW HANGING VEGETATION, UTILITY POLES, OTHER TRAFFIC SIGNS, ETC.
3. ALL PAVEMENT MARKINGS SHALL COMPLY WITH THE T.M.U.T.C.D.
4. ALL PERMANENT REGULATORY AND WARNING SIGNS ARE TO BE PROVIDED AND INSTALLED BY THE DEVELOPER TO COUNTY SPECIFICATIONS. COMAL COUNTY WILL INSTALL STREET NAME PLATES.

SIGNING AND PAVEMENT MARKING PLAN NOTES

1. COMAL COUNTY WILL INSTALL COUNTY ROAD SIGNS AND INVOICE THE OWNER. THE CONTRACTOR IS TO INSTALL ALL TxDOT SIGNS AND PAVEMENT MARKINGS. ALL ROAD SIGNS AND PAVEMENT MARKINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED ENGINEERING PLANS. THE COUNTY WILL INSPECT ALL SIGNS AT FINAL INSPECTION.
2. THE CONTRACTOR SHALL INSTALL ALL PAVEMENT MARKINGS IN ACCORDANCE WITH APPROVED ENGINEERING PLANS. THE CONTRACTOR SHALL NOTIFY THE COUNTY AT LEAST 24 HOURS PRIOR TO THE INSTALLATION OF ALL SEALER AND PAVEMENT MARKINGS. THE COUNTY WILL INSPECT ALL MARKINGS AT FINAL APPLICATION.

SIGN QUANTITIES

DESCRIPTION	QUANTITY
(R1–1) STOP	EACH 2
(R2–1) SPEED LIMIT	EACH 2
(D3–1) 9" STREET NAME	EACH 4
(OM–4P) END OF ROAD MARKER	EACH 2

REVISIONS		
NO.	DATE	DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6–SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

TRAFFIC SIGNAGE PLAN
GALE ESTATES, L.L.C.

SIGN SUPPORT DESCRIPTIVE CODES

(Descriptive Codes correspond to project estimate and quantities sheets)

SM RD SGN ASSM TY XXXXX(X)XX(X-XXXX)

Post Type

FRP = Fiberglass Reinforced Plastic Pipe (see SMD(FRP))
TWT = Thin-Walled Tubing (see SMD(TWT))
10BWG = 10 BWG Tubing (see SMD(SLIP-1) to (SLIP-3))
S80 = Schedule 80 Pipe (see SMD(SLIP-1) to (SLIP-3))

Number of Posts (1 or 2)

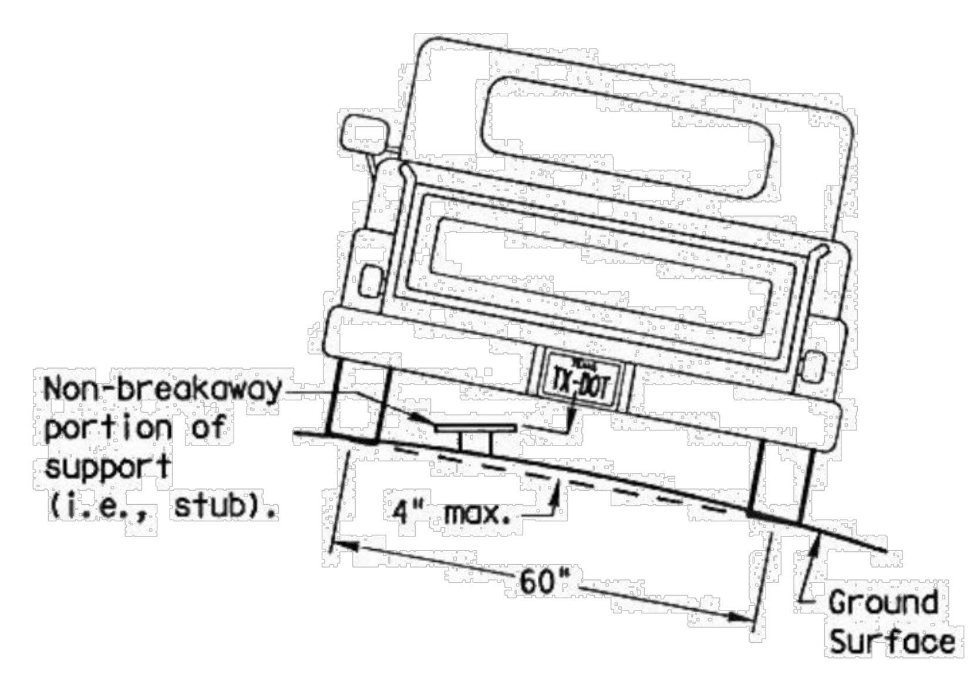
Anchor Type

UA = Universal Anchor - Concreted (see SMD(FRP) and (TWT))
UB = Universal Anchor - Bolted down (see SMD(FRP) and (TWT))
WS = Wedge Anchor Steel - (see SMD(TWT))
WP = Wedge Anchor Plastic (see SMD(TWT))
SA = Slipbase - Concreted (see SMD(SLIP-1) to (SLIP-3))
SB = Slipbase - Bolted Down (see SMD(SLIP-1) to (SLIP-3))

Sign Mounting Designation

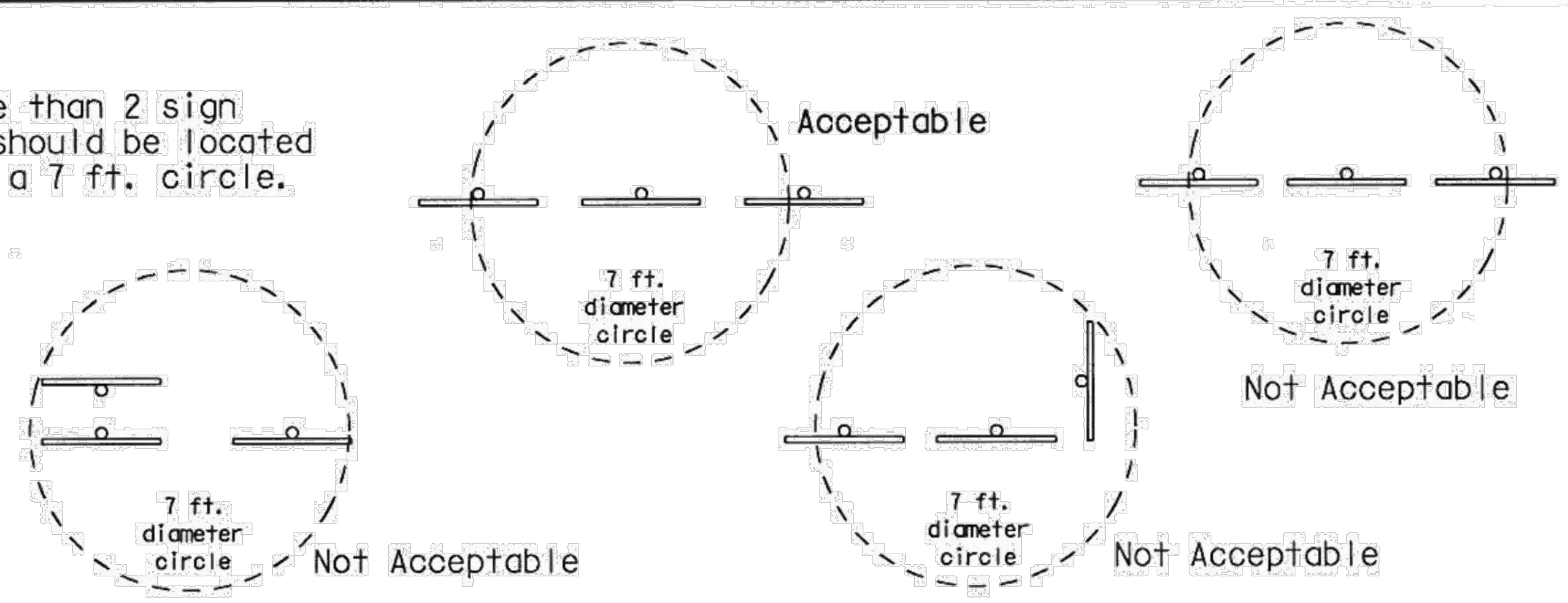
P = Prefab. "Plain" (see SMD(SLIP-1) to (SLIP-3), (TWT), (FRP))
T = Prefab. "T" (see SMD(SLIP-1) to (SLIP-3), (TWT))
U = Prefab. "U" (see SMD(SLIP-1) to (SLIP-3))
IF REQUIRED
1EXT or 2EXT = Number of Extensions (see SMD(SLIP-1) to (SLIP-3), (TWT))
BM = Extruded Wind Beam (see SMD(SLIP-1) to (SLIP-3))
WC = 1.12 #/ft Wing Channel (see SMD(SLIP-1) to (SLIP-3))
EXAL = Extruded Aluminum Sign Panels (see SMD(SLIP-3))

REQUIRED CLEARANCE FOR BREAKAWAY SUPPORT

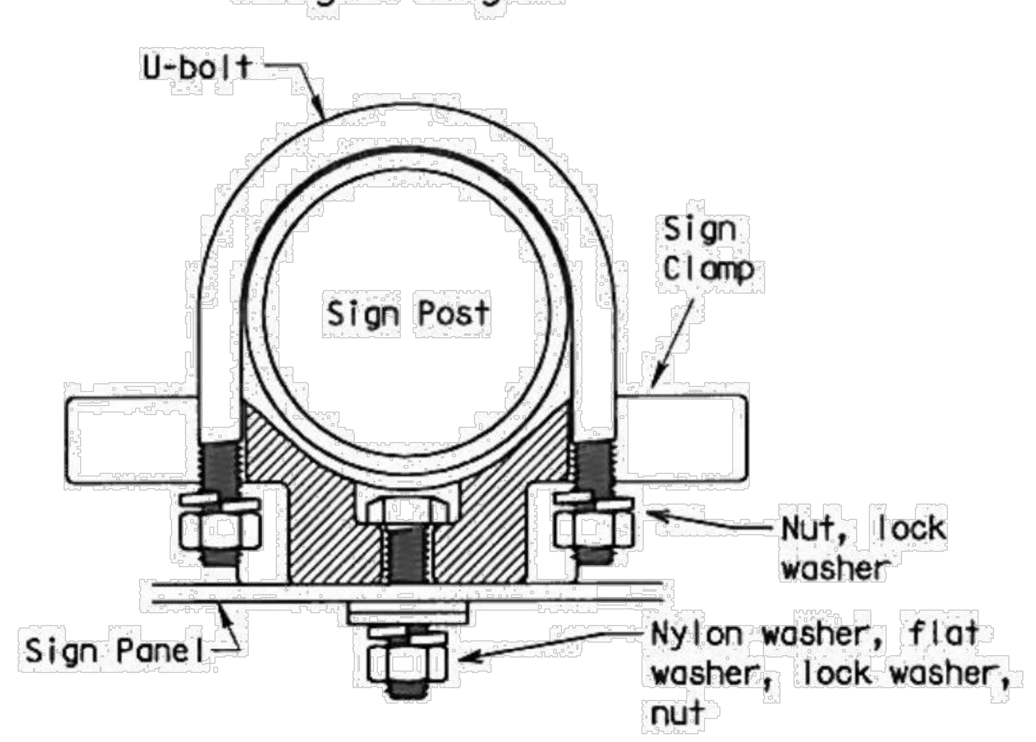


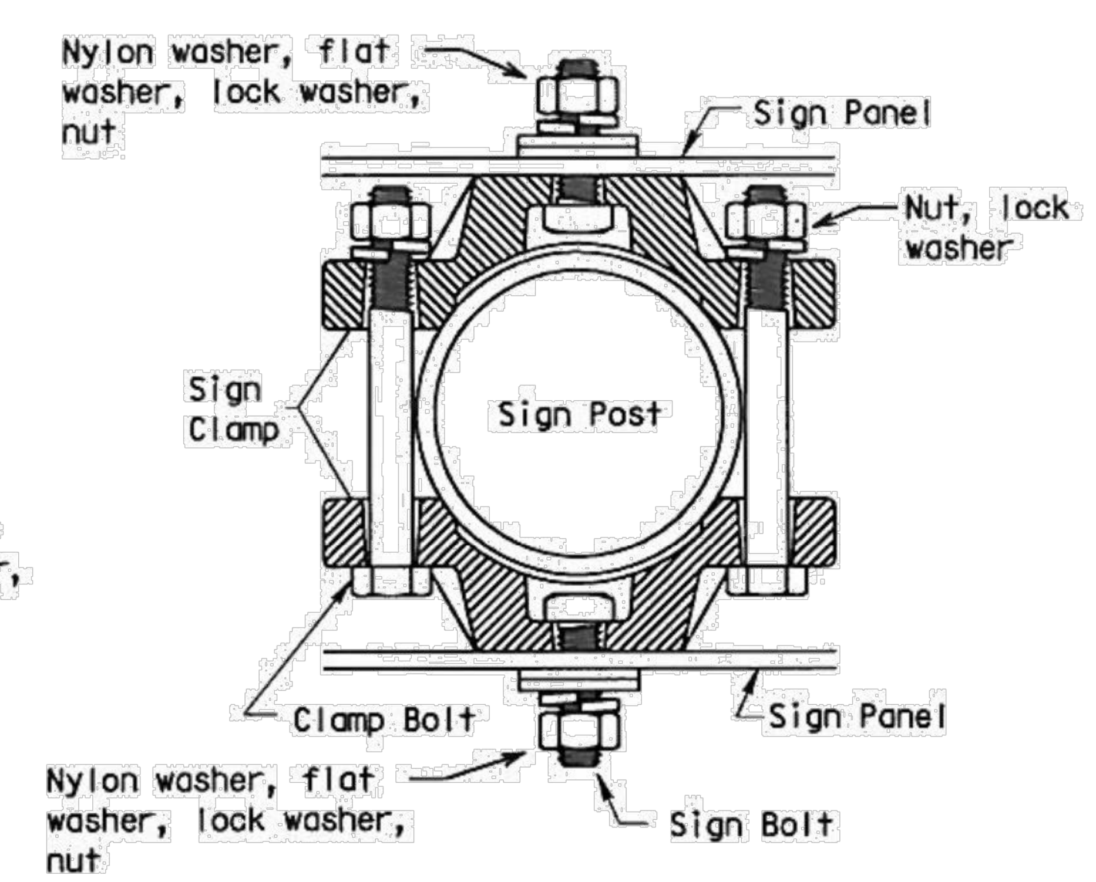
To avoid vehicle undercarriage snagging, any substantial remains of a breakaway support, when it is broken away, should not project more than 4 inches above a 60-inch chord (i.e., typical space between wheel paths).

No more than 2 sign posts should be located within a 7 ft. circle.



TYPICAL SIGN ATTACHMENT DETAIL





Bolts used to mount sign panels to the clamp are 5/16-18 UNC galvanized square head with nut, nylon washer, flat washer and lock washer. The bolt length is 1 inch for aluminum.

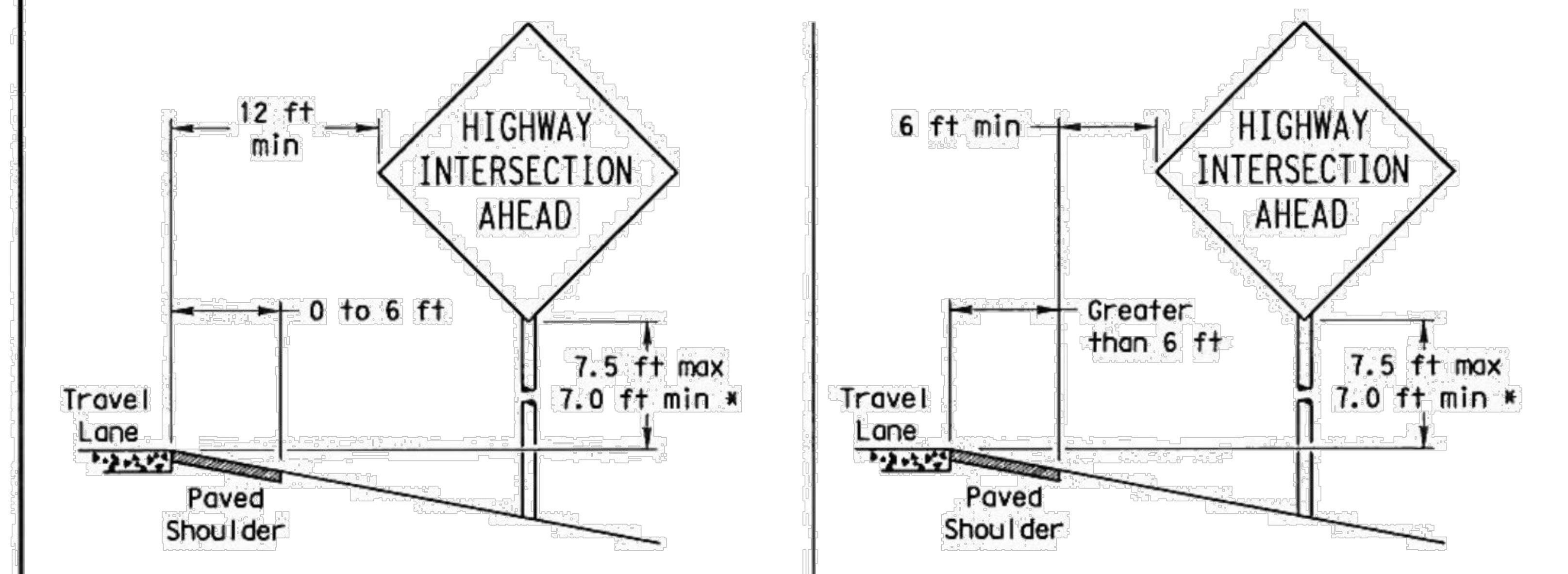
When two sign clamps are used to mount signs back-to-back, use a 5/16-18 UNC galvanized hex head per ASTM A307 with nut and helical-spring lock washer. The approximate bolt lengths for various post sizes and sign clamp types are given in the table at right. The bolt length may need to be adjusted depending upon field conditions.

Sign clamps may be either the specific size clamp or the universal clamp.

Pipe Diameter	Approximate Bolt Length	
	Specific Clamp	Universal Clamp
2" nominal	3"	3 or 3 1/2"
2 1/2" nominal	3 or 3 1/2"	3 1/2 or 4"
3" nominal	3 1/2 or 4"	4 1/2"

SIGN LOCATION

PAVED SHOULDERS



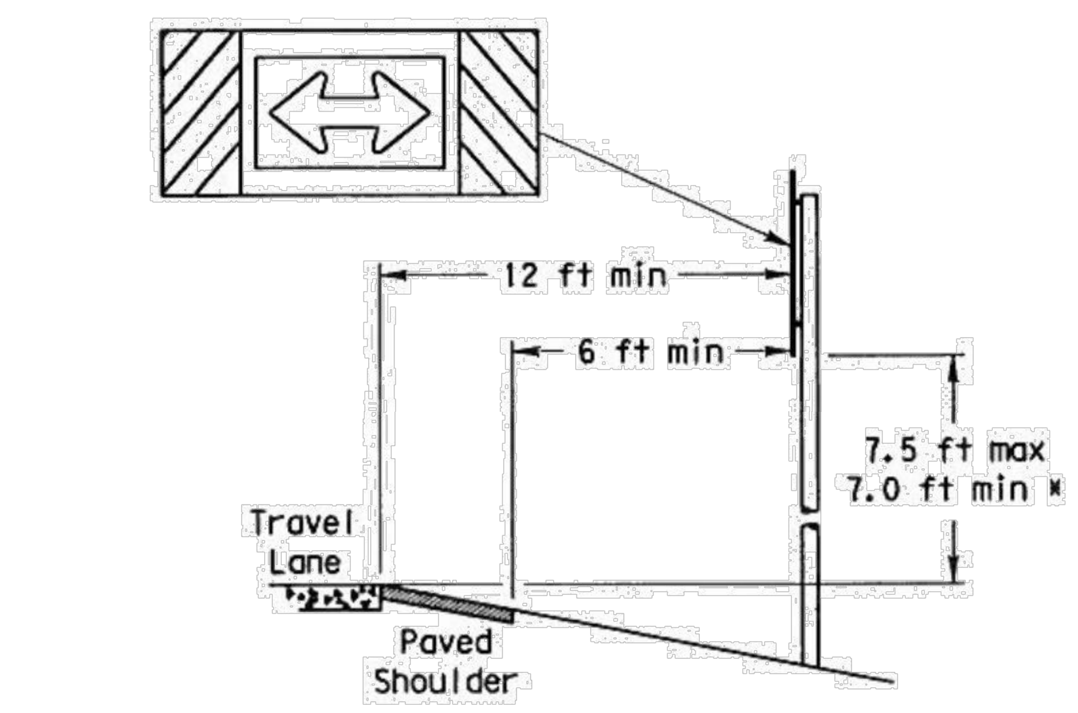
LESS THAN 6 FT. WIDE

When the shoulder is 6 ft. or less in width, the sign must be placed at least 12 ft. from the edge of the travel lane.

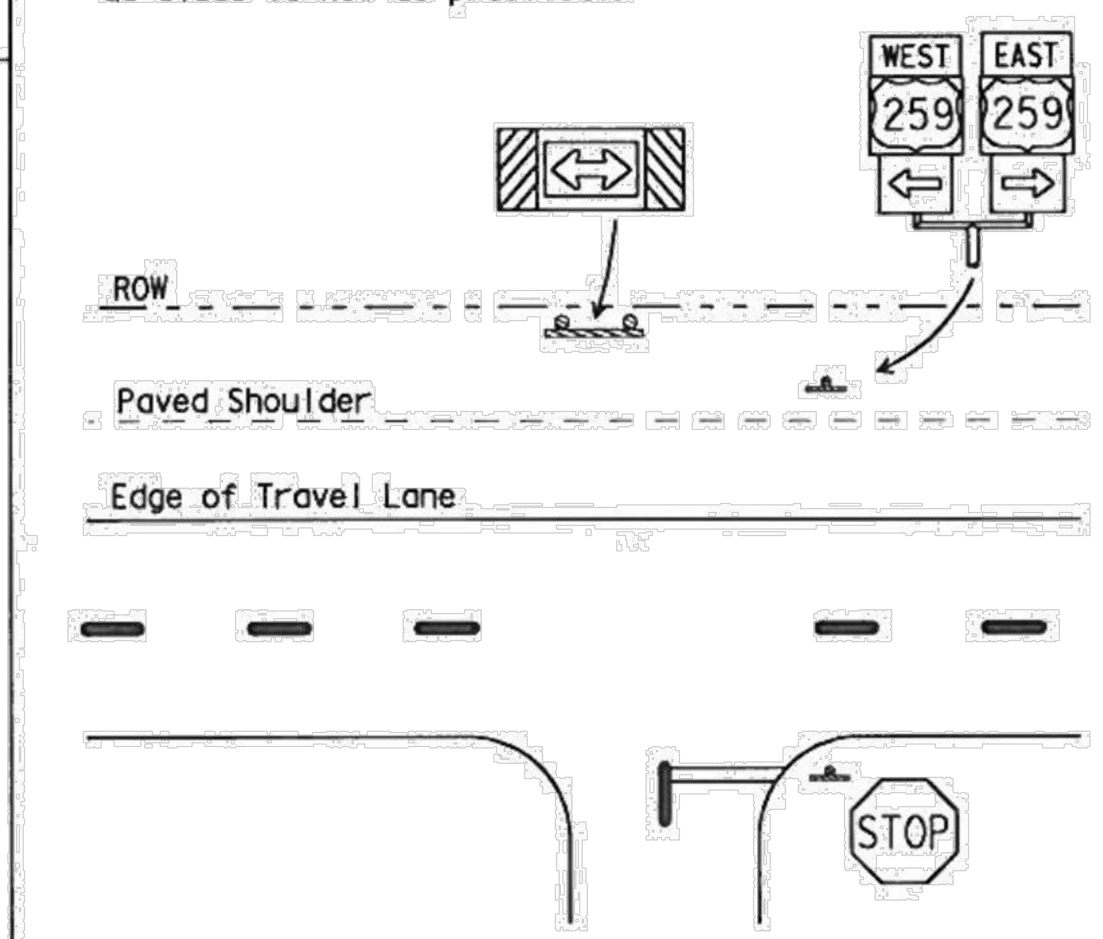
GREATER THAN 6 FT. WIDE

When the shoulder is greater than 6 ft in width, the sign must be placed at least 6 ft. from the edge of the shoulder.

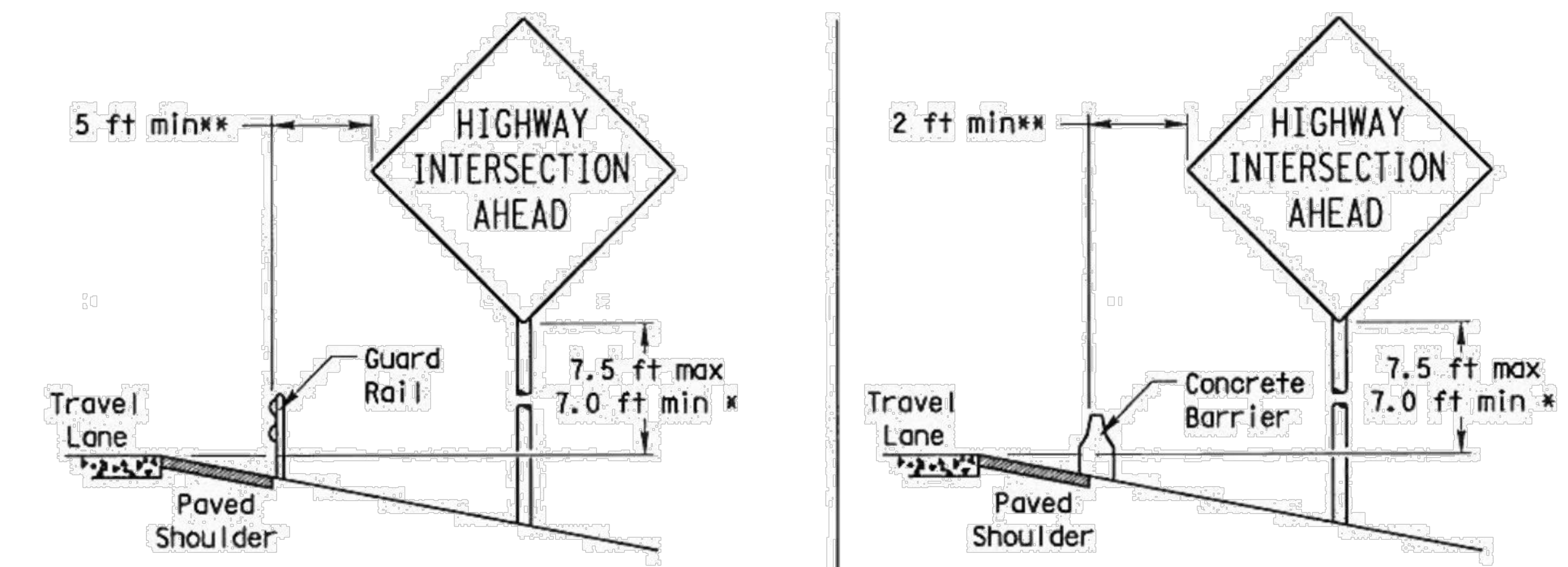
T-INTERSECTION



When this sign is needed at the end of a two-lane, two way roadway, the right edge of the sign should be in line with the centerline of the roadway. Place as close to ROW as practical.



BEHIND BARRIER

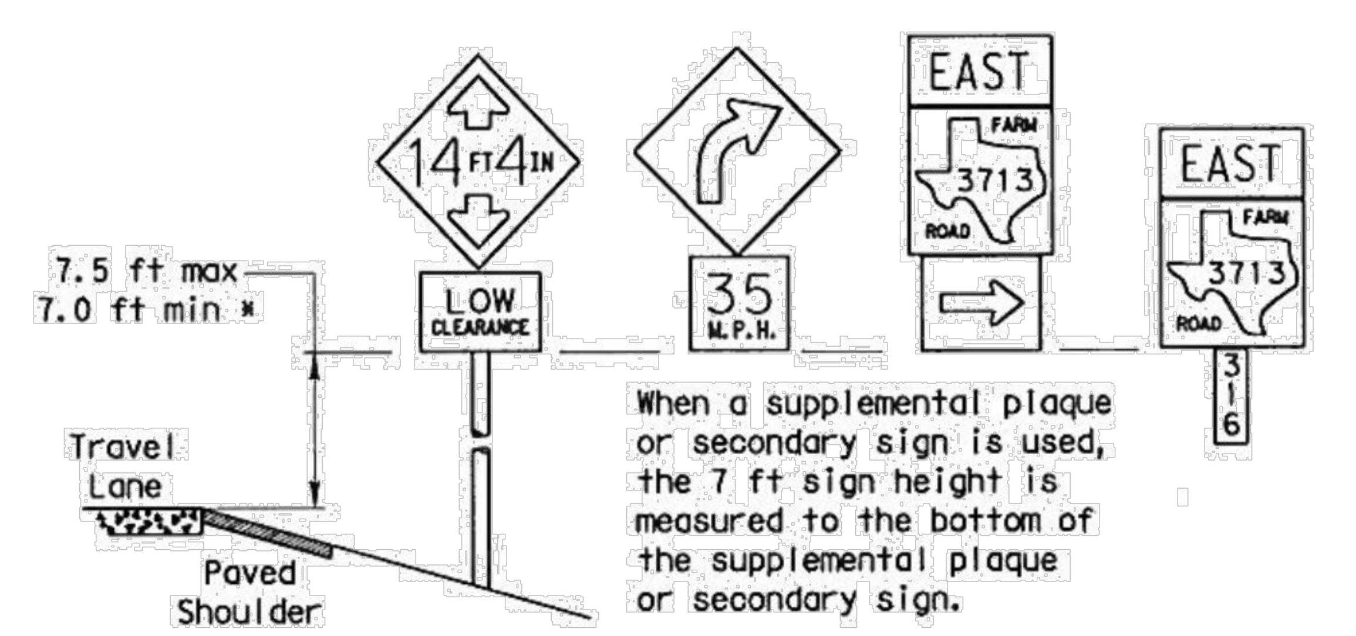


BEHIND GUARDRAIL

BEHIND CONCRETE BARRIER

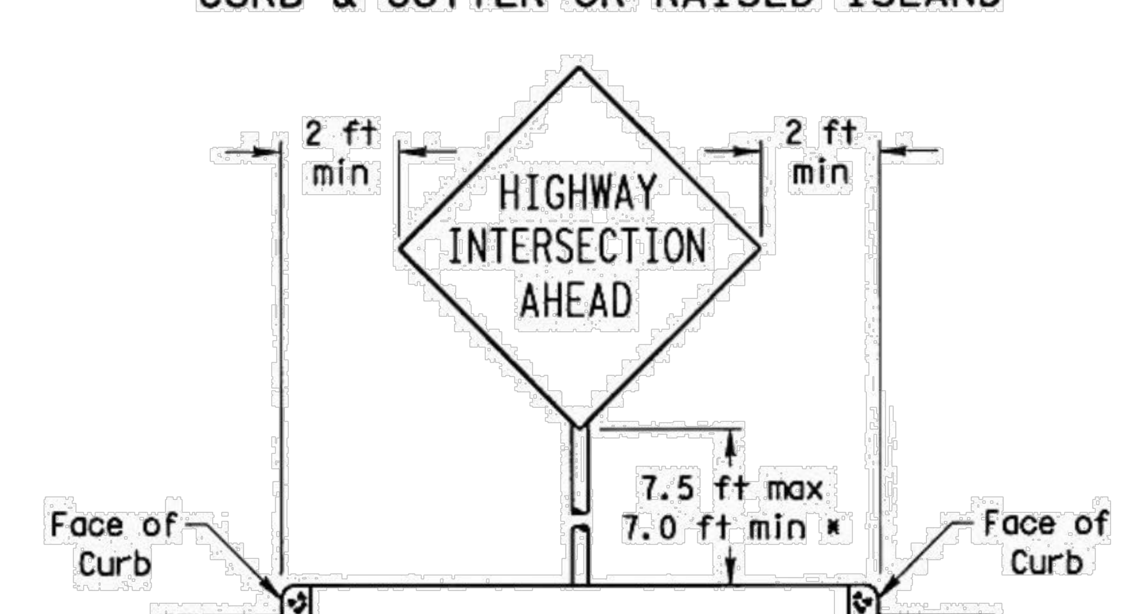
**Sign clearance based on distance required for proper guard rail or concrete barrier performance.

SIGNS WITH PLAQUES



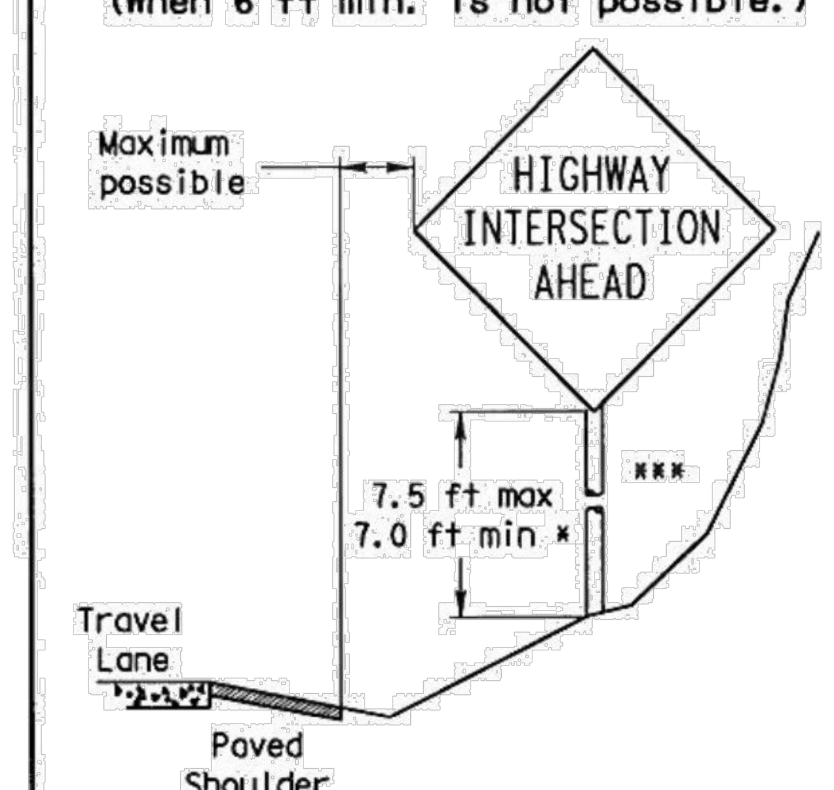
When a supplemental plaque or secondary sign is used, the 7 ft sign height is measured to the bottom of the supplemental plaque or secondary sign.

CURB & GUTTER OR RAISED ISLAND



RESTRICTED RIGHT-OF-WAY

(When 6 ft min. is not possible.)



Right-of-way restrictions may be created by rocks, water, vegetation, forest, buildings, a narrow island, or other factors.

In situations where a lateral restriction prevents the minimum horizontal clearance from the edge of the travel lane, signs should be placed as far from the travel lane as practical.

*** Post may be shorter if protected by guardrail or if Engineer determines the post could not be hit due to extreme slope.

* Signs shall be mounted using the following condition that results in the greatest sign elevation:

(1) a minimum of 7 to a maximum of 7.5 feet above the edge of the travel lane or

(2) a minimum of 7 to a maximum of 7.5 feet above the grade at the base of the support when sign is installed on the backslope.

The maximum values may be increased when directed by the Engineer.

See the Traffic Operations Division website for detailed drawings of sign clamps, Triangular Slipbase System components and Wedge Anchor System components.

The website address is:
http://www.txdot.gov/publications/traffic.htm

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS GENERAL NOTES & DETAILS

SMD(GEN)-08

FILE:	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
REVISIONS 9-08	CONT	SECT	JOB	HIGHWAY
	DIST	COUNTY		SHEET NO.

26A

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #: U6-SER | DATE: 06/01/23 | DGN. BY: R.M.G. | DWN. BY: S.G. | CHKD. BY: R.M.G.

GALLEGOS ENGINEERING, INC.
FIRM REGISTRATION # F-003884
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

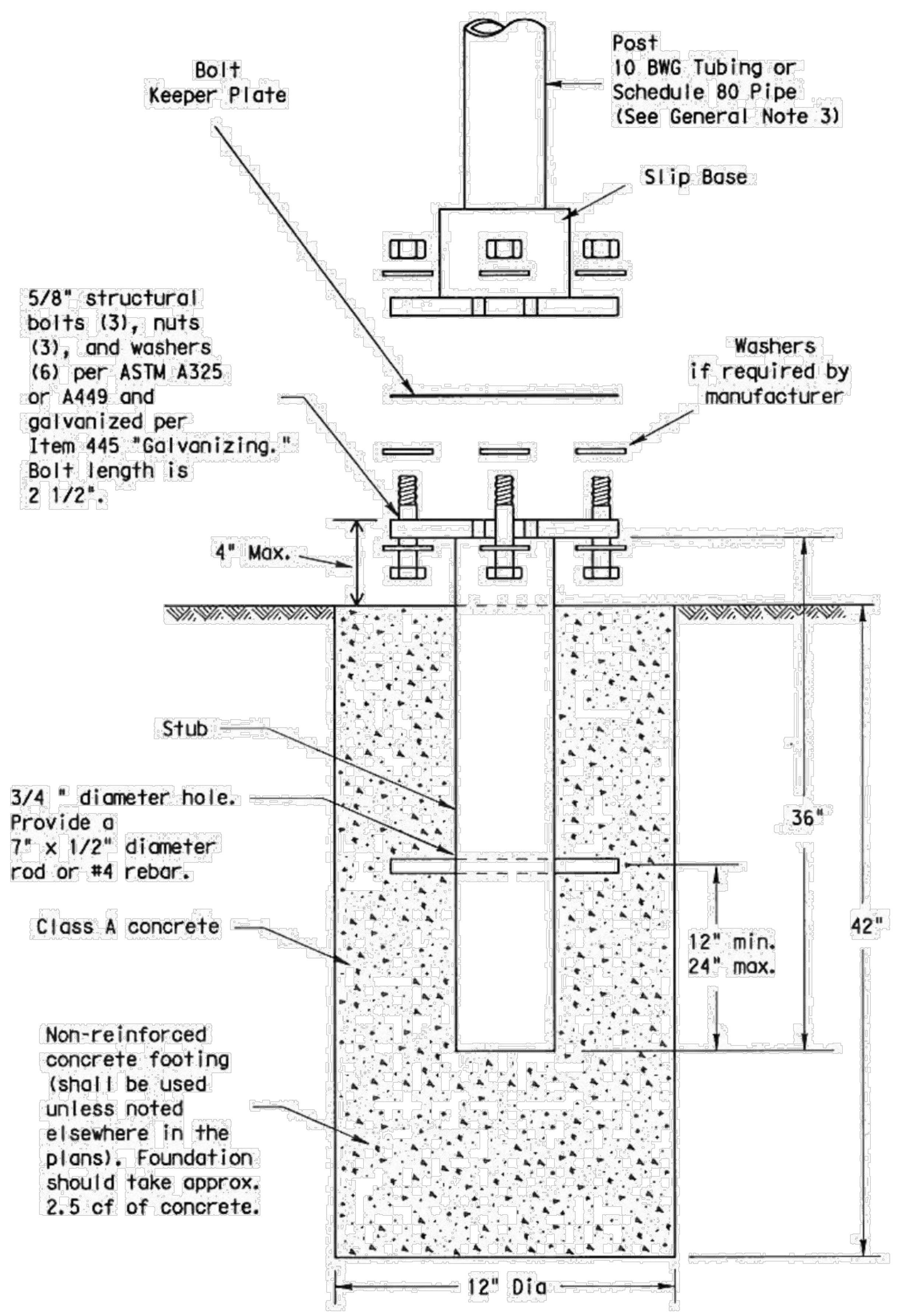
STATE OF TEXAS RICHARD M. GALLEGOS 86916 LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS
SIGN MOUNTING GENERAL DETAILS
GALE ESTATES, L.L.C.

SHEET 21 OF 24

S:\Projects\00-GENERAL\00-AGS Serenity Unit 6\gal Plans\S21-U6-GRD-SIGN DETAILS Gen.dwg

TRIANGULAR SLIPBASE INSTALLATION GENERAL REQUIREMENTS



SM RD SGN ASSM TY XXXXX(X)SA(X-XXXX)

NOTE

There are various devices approved for the Triangular Slipbase System. Please reference the Material Producer List for approved slip base systems. http://www.txdot.gov/business/producer_list.htm The devices shall be installed per manufacturers' recommendations. Installation procedures shall be provided to the Engineer by Contractor.

GENERAL NOTES:

1. Slip base shall be permanently marked to indicate manufacturer. Method, design, and location of marking are subject to approval of the TxDOT Traffic Standards Engineer.
2. Material used as post with this system shall conform to the following specifications:
   10 BWG Tubing (2.875" outside diameter)
   - 0.134" nominal wall thickness
   - Seamless or electric-resistance welded steel tubing or pipe
   - Steel shall be HSLAS Gr 55 per ASTM A1011 or ASTM A1008
   - Other steels may be used if they meet the following:
     - 55,000 PSI minimum yield strength
     - 70,000 PSI minimum tensile strength
     - 20% minimum elongation in 2"
   - Wall thickness (uncoated) shall be within the range of 0.122" to 0.138"
   - Outside diameter (uncoated) shall be within the range of 2.867" to 2.883"
   - Galvanization per ASTM A123 or ASTM A653 G210. For precoated steel tubing (ASTM A653), recoat tube outside diameter weld seam by metallizing with zinc wire per ASTM B833.

   Schedule 80 Pipe (2.875" outside diameter)
   - 0.276" nominal wall thickness
   - Steel tubing per ASTM A500 Gr C
   - Other seamless or electric-resistance welded steel tubing or pipe with equivalent outside diameter and wall thickness may be used if they meet the following:
     - 46,000 PSI minimum yield strength
     - 62,000 PSI minimum tensile strength
     - 21% minimum elongation in 2"
   - Wall thickness (uncoated) shall be within the range of 0.248" to 0.304"
   - Outside diameter (uncoated) shall be within the range of 2.855" to 2.895"
   - Galvanization per ASTM A123
3. See the Traffic Operations Division website for detailed drawings of sign clamps and Texas Universal Triangular Slipbase System components. The website address is:
   http://www.txdot.gov/publications/traffic.htm
4. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.

ASSEMBLY PROCEDURE

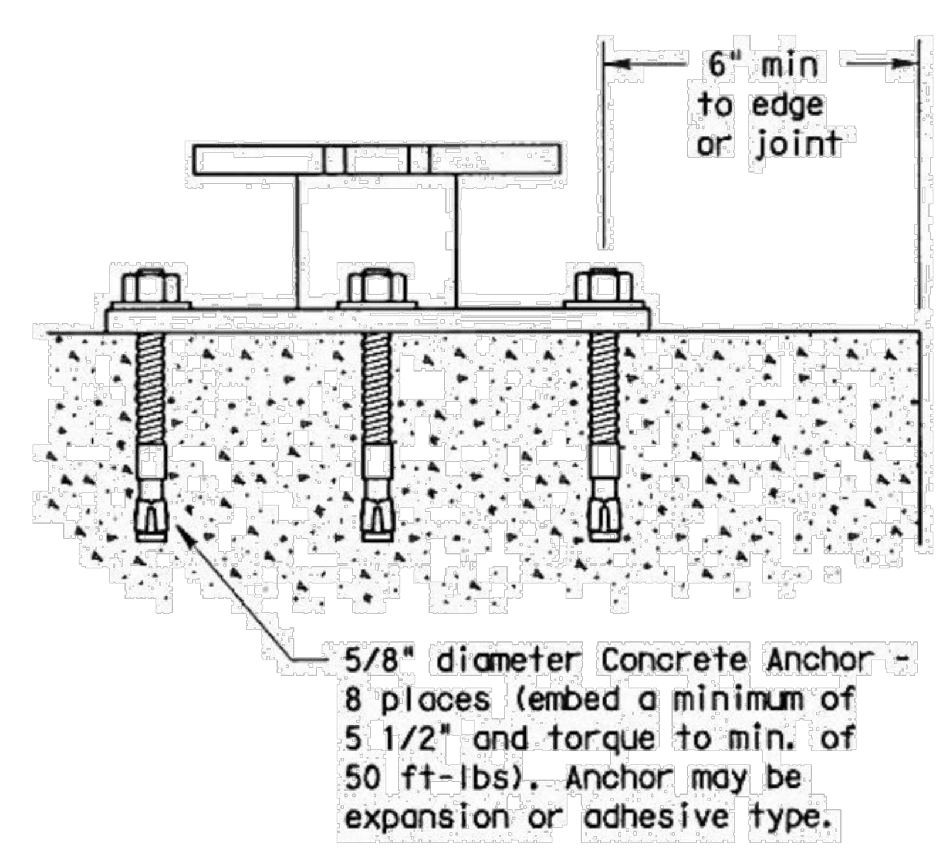
Foundation

1. Prepare 12-inch diameter by 42-inch deep hole. If solid rock is encountered, the depth of the foundation may be reduced such that it is embedded a minimum of 18 inches into the solid rock.
2. The Engineer may permit batches of concrete less than 2 cubic yards to be mixed with a portable, motor-driven concrete mixer. For small placements less than 0.5 cubic yards, hand mixing in a suitable container may be allowed by Engineer. Concrete shall be Class A.
3. Push the pipe end of the slip base stub into the center of the concrete. Rotate the stub back and forth while pushing it down into the concrete to assure good contact between the concrete and stub. Continue to work the stub into the concrete until it is between 2 to 4 inches above the ground.
4. Plumb the stub. Allow a minimum of 4 days to set, unless otherwise directed by the Engineer.
5. The triangular slipbase system is multidirectional and is designed to release when struck from any direction.

Support

1. Cut support so that the bottom of the sign will be 7 to 7.5 feet above the edge of the travelway (i.e., edge of the closest lane) when slip plate is below the edge of pavement or 7 to 7.5 feet above slip plate when the slip plate is above the edge of the travelway. The cut shall be plumb and straight.
2. Attach sign to support using connections shown. When multiple signs are installed on the same support, ensure the minimum clearance between each sign is maintained. See SMD(SLIP-2) for clearances based on sign types.

CONCRETE ANCHOR



SM RD SGN ASSM TY XXXXX(X)SB(X-XXXX)

Concrete anchor consists of 5/8" diameter stud bolt with UNC series bolt threads on the upper end. Heavy hex nut per ASTM A563, and hardened washer per ASTM F436. The stud bolt shall have a minimum yield and ultimate tensile strength of 50 and 75 KSI, respectively. Nuts, bolts and washers shall be galvanized per Item 445, "Galvanizing." Adhesive type anchors shall have stud bolts installed with Type III epoxy per DMS-6100, "Epoxies and Adhesives." Adhesive anchors may be loaded after adequate epoxy cure time per the manufacturer's recommendations. Top of bolt shall extend at least flush with top of the nut when installed. The anchor, when installed in 4000 psi normal-weight concrete with a 5 1/2" minimum embedment, shall have a minimum allowable tension and shear of 3900 and 3100 psi, respectively.

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS
SMALL ROADSIDE SIGNS
TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-1)-08

© TxDOT July 2002	DN: TXDOT	CK: TXDOT	DW: TXDOT	CK: TXDOT	
REVISIONS 9-08	CONT	SECT	JOB	HIGHWAY	
	DIST	COUNTY		SHEET NO.	

26B

REVISIONS		
NO.	DATE	DESCRIPTION

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

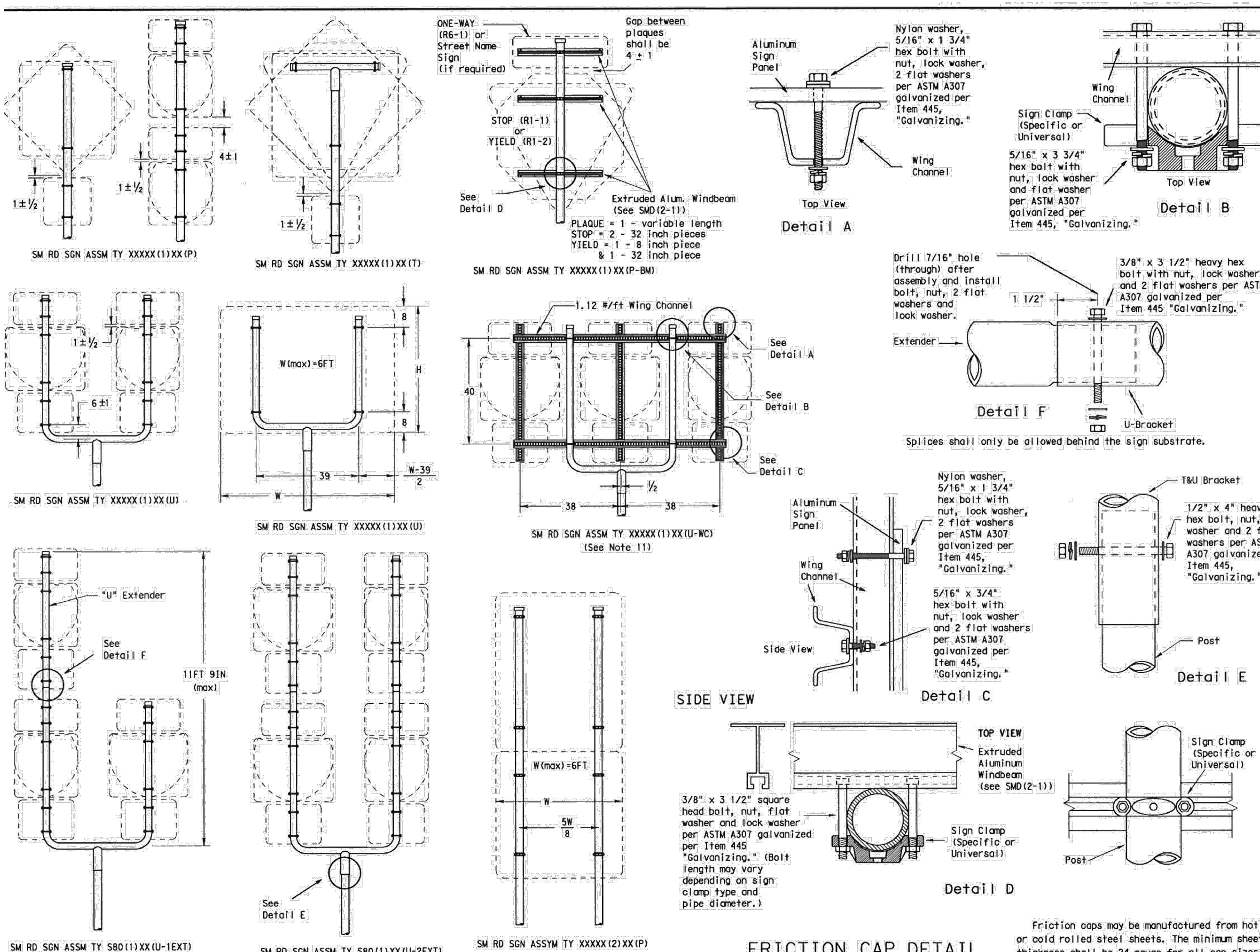
THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

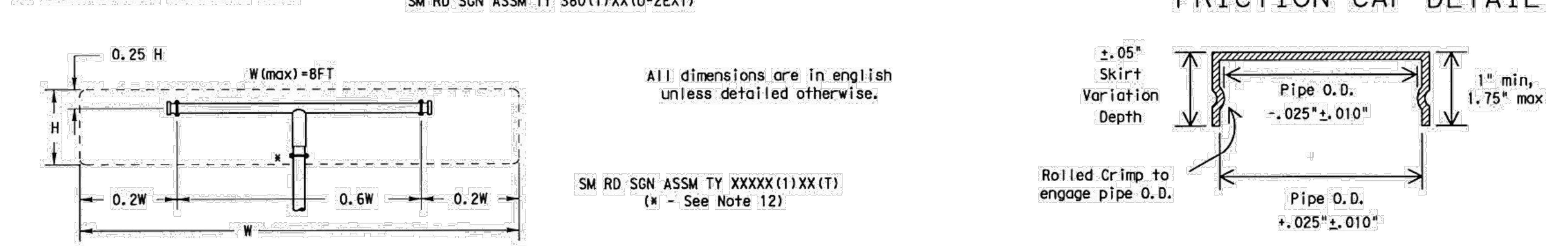
STATE OF TEXAS — RICHARD M. GALLEGOS 86916 — LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

SIGN MOUNTING SLIP 1 DETAILS

GALE ESTATES, L.L.C.





Friction caps may be manufactured from hot rolled or cold rolled steel sheets. The minimum sheet metal thickness shall be 24 gauge for all cap sizes.

The rim edges shall be reasonably straight and smooth. Caps shall be sized and formed in such a manner as to produce a drive-on friction fit and have no tendency to rock when seated on the pipe. The depth shall be sufficient to give positive protection against entrance of rainwater. They shall be free of sharp creases or indentations and show no evidence of metal fracture.

Caps shall have an electrodeposited coating of zinc in accordance with the requirements of ASTM B633 Class FE/ZN 8.

GENERAL NOTES:

1.

SIGN SUPPORT	# OF POSTS	MAX. SIGN AREA
10 BWG	1	16 SF
10 BWG	2	32 SF
Sch 80	1	32 SF
Sch 80	2	64 SF

2. The Engineer may require that a Schedule 80 post be used in place of a 10 BWG where a sign height is abnormally high due to a fill slope.
3. Sign supports shall not be spliced except where shown. Sign support posts shall not be spliced.
4. Aluminum sign blanks shall conform to Departmental Material Specifications DMS-7110 and shall have the following minimum thicknesses: 0.080 for signs less than 7.5 sq. ft., 0.100 for signs 7.5 to 15 sq. ft., and 0.125 for signs greater than 15 sq. ft.
5. Signs that require specific supports due to reasons in addition to windloading are indicated on the "REQUIRED SUPPORT" table on this sheet.
6. For horizontal rectangular signs fabricated from flat aluminum, T-brackets are used for signs 24 inches or less in height. U-brackets are used for signs of greater height.
7. When two triangular slipbase supports are used to support a single sign, they shall not be "rigidly" connected to each other except through the sign panel. This will allow each support to act independently when impacted by an errant vehicle.
8. Wing channel shall meet ASTM A 1011 SS Gr 50 and be galvanized per ASTM A 123.
9. Excess pipe, wing channel, or windbeam shall be cut off so that it does not extend beyond the sign panel (i.e., excess support shall not be visible when the sign is viewed from the front.) Repair galvanized coating at cut support ends per Item 445, "Galvanizing."
10. Additional route markers may be added vertically, provided the total sign area does not exceed the maximum allowable amount per Note 1.
11. Additional sign clamp required on the "T-bracket" post for 24 inch height signs. Place the clamp 3 inches above bottom of sign when possible.
12. Post open ends shall be fitted with Friction Caps.
13. Sign blanks shall be the sizes and shapes shown on the plans.

REQUIRED SUPPORT

	SIGN DESCRIPTION	SUPPORT
Regulatory	48-inch STOP sign (R1-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	60-inch YIELD sign (R1-2)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	48x16-inch ONE-WAY sign (R6-1)	TY 10BWG(1)XX(T) TY 10BWG(1)XX(P-BM)
	36x48, 48x36, and 48x48-inch signs	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
Warning	48x48-inch signs (diamond or square)	TY 10BWG(1)XX(T)
	48x60-inch signs	TY S80(1)XX(T)
	48-inch Advance School X-ing sign (S1-1)	TY 10BWG(1)XX(T)
	48-inch School X-ing sign (S2-1)	TY 10BWG(1)XX(T)
	Large Arrow sign (W1-6 & W1-7)	TY 10BWG(1)XX(T)

Texas Department of Transportation
Traffic Operations Division

SIGN MOUNTING DETAILS SMALL ROADSIDE SIGNS TRIANGULAR SLIPBASE SYSTEM

SMD(SLIP-2)-08

9-08	REVISIONS	DN: TXDOT	CK: TXDOT	DW: TXDOT · CK: TXDOT
		CONT · SECT	JOB	HIGHWAY
		DIST	COUNTY	SHEET NO.

26C

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #: U6-SER · DATE: 06/01/23 · DGN. BY: R.M.G. · DWN. BY: S.G. · CHKD. BY: R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

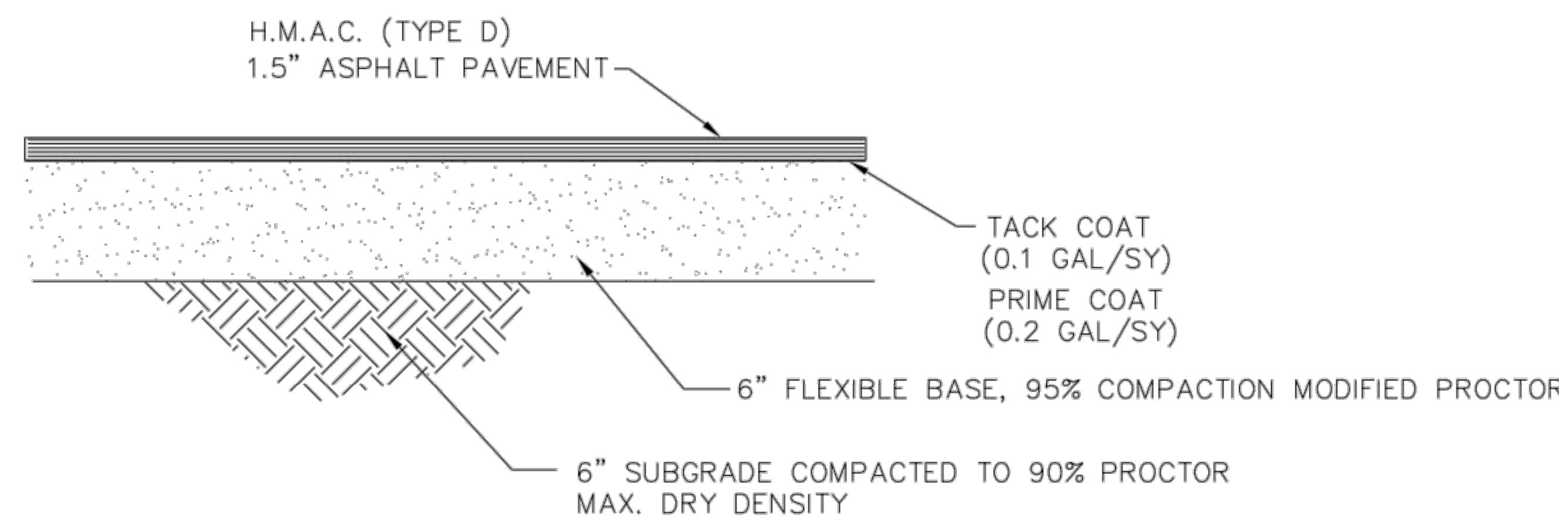
STATE OF TEXAS · RICHARD M. GALLEGOS · 86916 · LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

SIGN MOUNTING SLIP 2 DETAILS

GALE ESTATES, L.L.C.

S:\Projects\00-GENERAL\00-AGS Serenity Unit 6\gel Plans\S23-U6-GRD-SIGN DETAILS SLIP 2.dwg



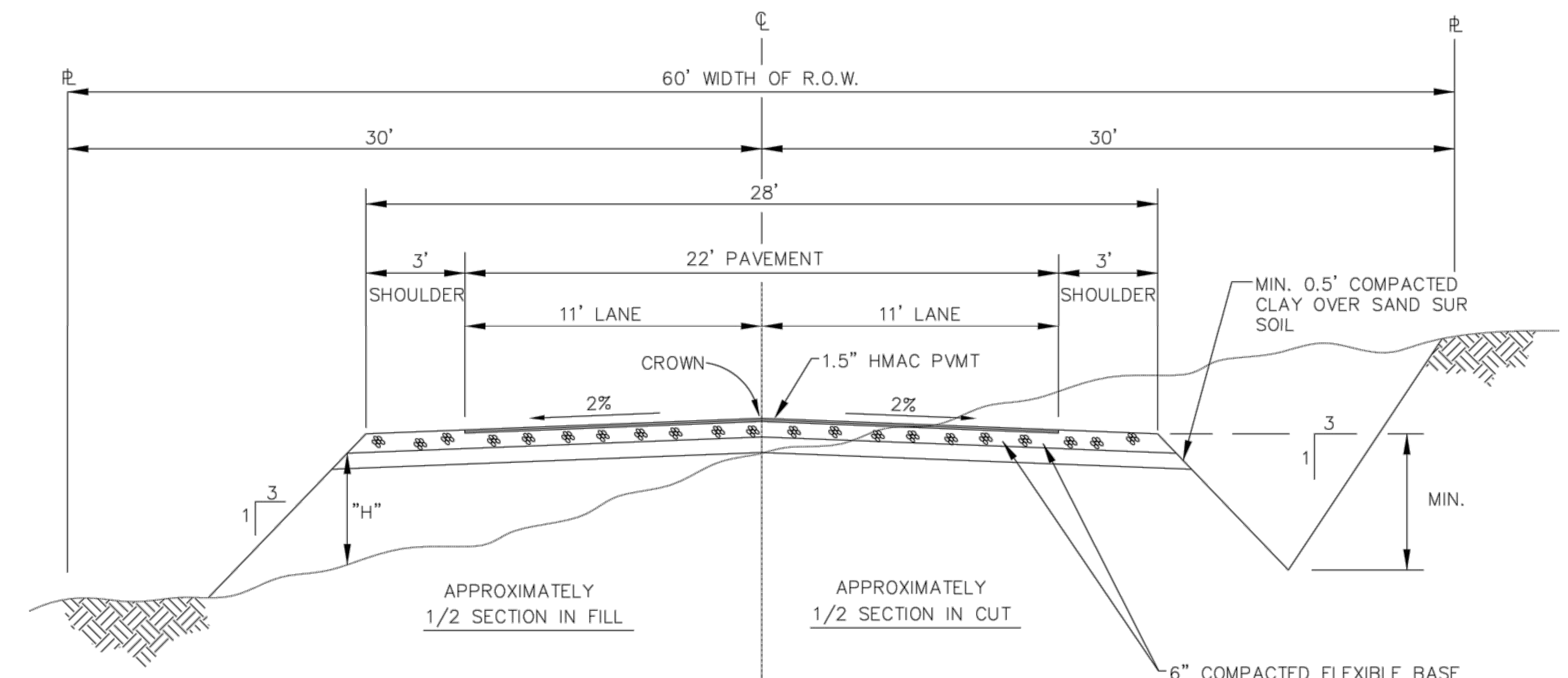
LOCAL STREET

PAVEMENT MATERIAL	THICKNESS, (IN)
TYPE D, HOT MIX ASPHALTIC CONCRETE, TXDOT ITEM 340	1.5
TACK COAT – TXDOT ITEM 340 – 0.1 GALLONS PER SQUARE YARD	–
PRIME COAT – TXDOT ITEM 310 – 0.2 GALLONS PER SQUARE YARD	–
CRUSHED LIMESTONE BASE, TXDOT ITEM 247, TYPE A, GRADE 1 OR 2	6

*28 POUNDS LIME PER SQUARE YARD

REGULAR ASPHALT PAVEMENT SECTION DETAIL

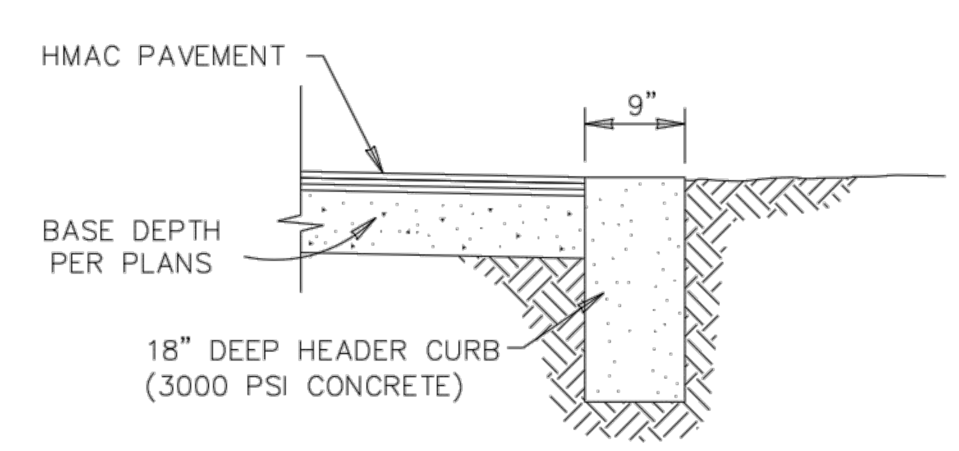
N.T.S.



NOTE:
MINIMUM PAVEMENT SURFACE SHALL BE 1.5 INCH THICK A.C. PAVEMENT, ¾" THICK 2-COURSE PENETRATION PAVEMENT, OR APPROVED EQUAL.

TYPICAL STREET SECTION

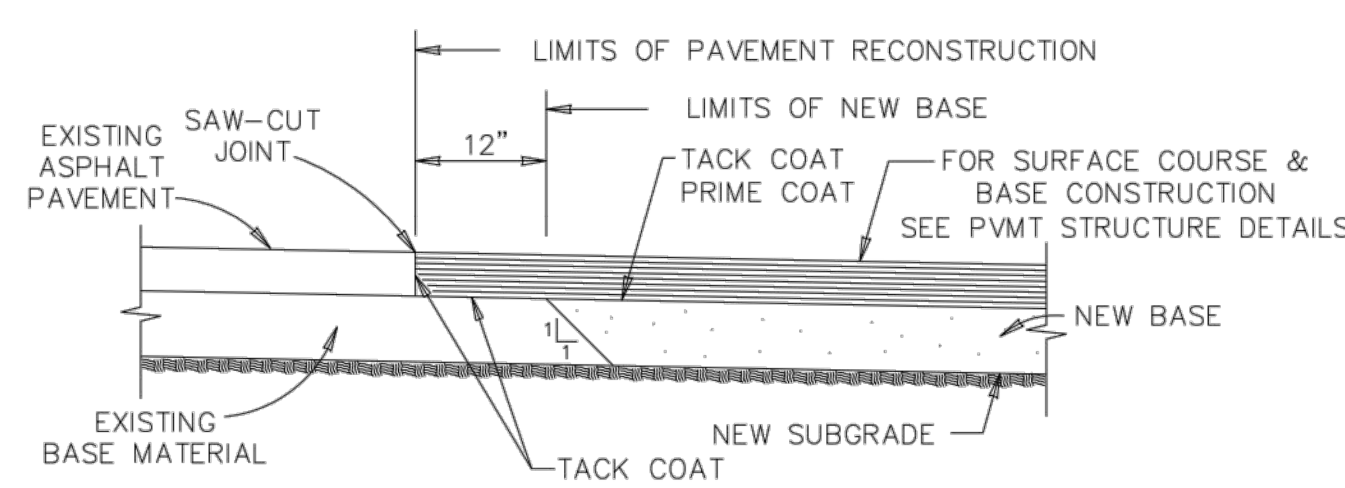
N.T.S.



* PROVIDE HEADER CURB PER PLANS.

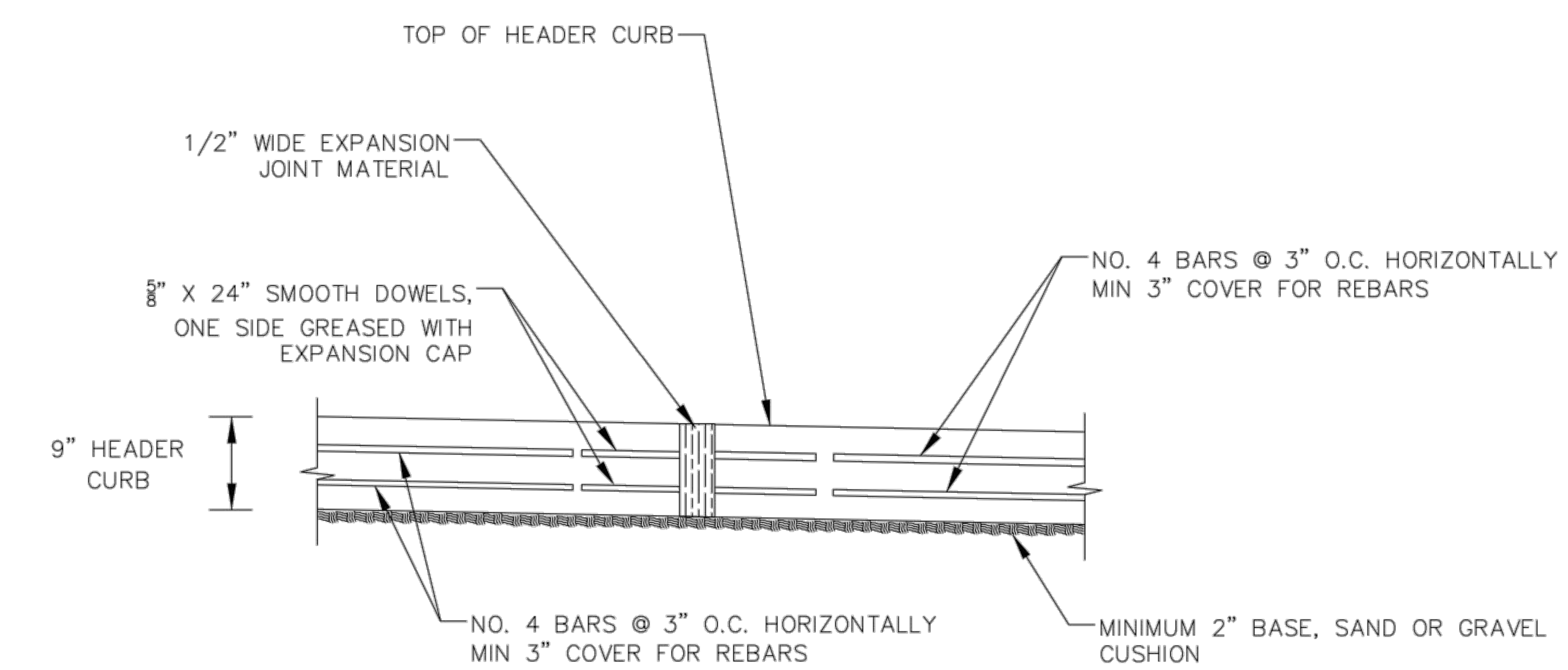
HEADER CURB

N.T.S.



PAVEMENT JUNCTION DETAILS

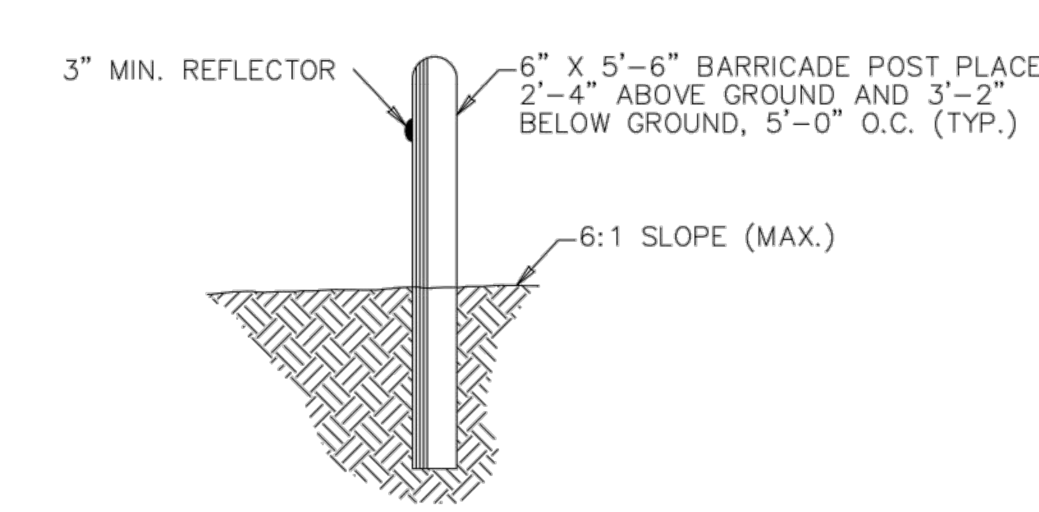
N.T.S.



HEADER CURB EXPANSION JOINT DETAILS

N.T.S.

GENERAL NOTES :
1) ALL CONSTRUCTION SHALL CONFORM TO THE COMAL COUNTY SUBDIVISION REGULATIONS.
2) FILL TO BE PLACED IN LIFTS, PER COMAL COUNTY SUBDIVISION REGULATIONS.



TIMBER POST DETAIL

N.T.S.

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	06/01/23	R.M.G.	S.G.	R.M.G.

FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED
PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

GENERAL DETAILS

GALE ESTATES, L.L.C.

SHEET 24 OF 24

S:\Projects\00-GENERAL\00-ACG Serenity Unit 6\gel Plans\S24-U5-GRD-GEN DETAILS.dwg

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: Richard M. Gallegos, P.E.

Date: January 12, 2025

Signature of Customer/Agent:

Regulated Entity Name: Serenity Oaks Subdivision, Unit 6

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: Un-Named Tributaries of the Guadalupe River

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.

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

PILOT-SCALE FIELD TESTING PLAN
SERENITY OAKS, UNIT 6

NOT APPLICABLE TO THIS PLAN.

ATTACHMENT O

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

MINIMIZING SURFACE STREAM CONTAMINATION
SERENITY OAKS, UNIT 6

The pre-developed condition flows, proceed south and southeasterly to existing swales and improved earthen channels to the Guadalupe River south-southeast of this tract. A CMP Culvert transfer the runoff across proposed subdivision streets to improved earthen channels and seasonal tributaries of the Guadalupe River. This Unit utilizes an existing detention basin sized for the remainder of the Development to maintain storm flows to pre-construction conditions.

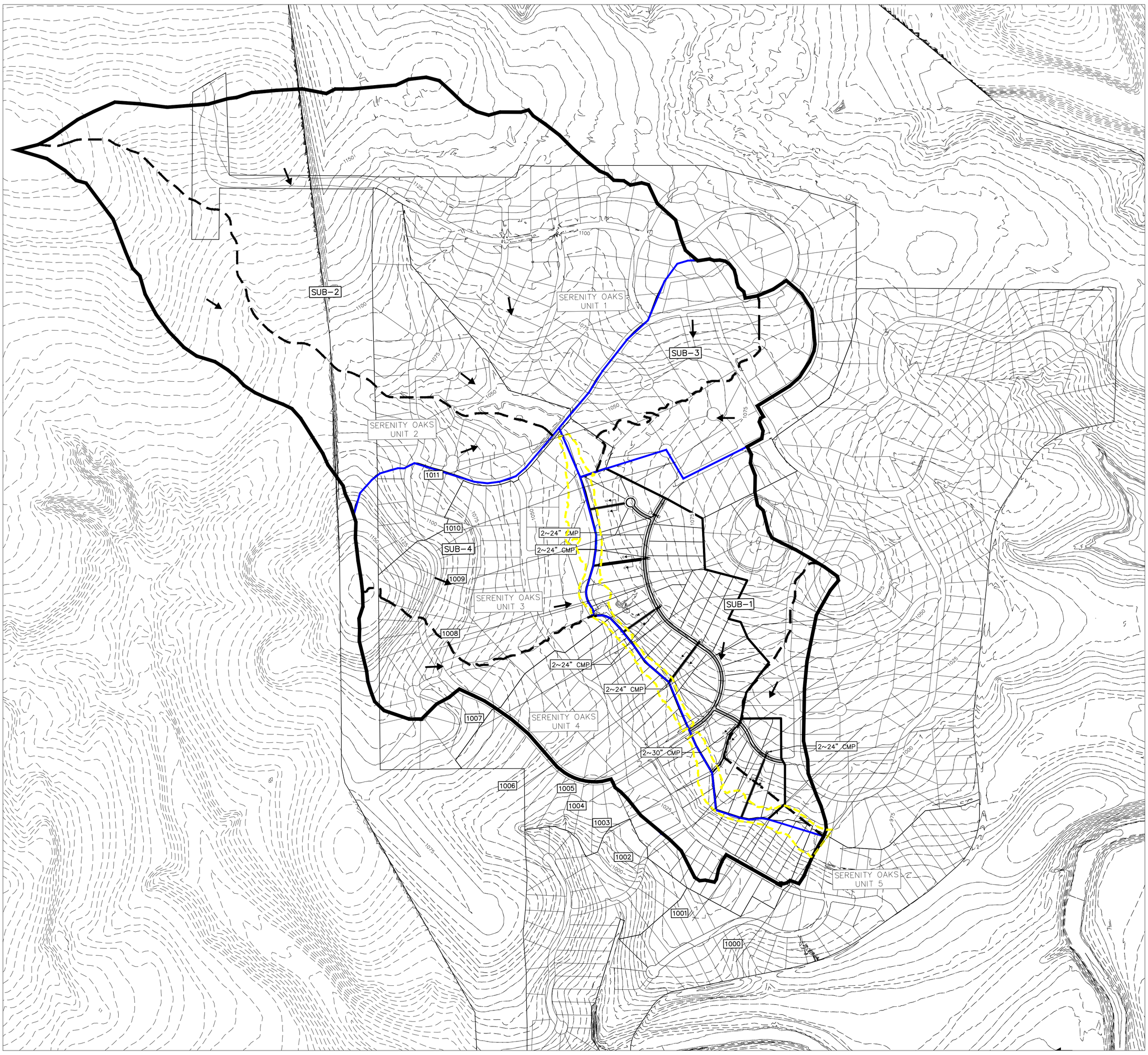
The proposed Single-Family Residential Subdivision will generate an insignificant increase in stormwater runoff, which after exiting each residential lot; will be carried by roadside ditches and drainage pipe to the two aforementioned tributaries and on in a southerly direction to the Guadalupe.

All post-developed surface runoff is to be directed to the roadside ditches of the proposed streets and then to earthen channels.

All silt bearing or otherwise contaminated stormwater discharge will be treated at the point source by pertinent TCEQ recommended TBMPs until all pavement is in place and areas to have permanent vegetation are restored.

See Attachment ”X”, Page CZP 1, Drainage Area Map and Exhibit 2 for the total 100-year inundation line based on calculations for Pre & Post Developed Stormwater flows.

ATTACHMENT P



Watershed	Area (ac)	CN (unitless)	LAG (min)	Intensities (in/hr) 10	25	100	Flow (cfs) 10	25	100
ULTIMATE									
Sub-1	333.37	77.46	41.90	6.83	8.96	13.10	225.45	323.62	515.55
Sub-2	31.23	79.05	103.44	6.83	8.96	13.10	384.83	544.23	855.72
Sub-3	103.51	79.07	6+	6.83	8.96	13.10	118.16	165.66	258.27
Sub-4	114.47	78.34	40.22	6.83	8.96	13.10	346.82	489.41	767.63

HEC-RAS Plan: 100-YR ULT River: GT62 Reach: REACH 1 Profile: 100 YR. ULT UNI

Reach	River Sta	Profile	Q Total (cfs)	Min Ch El (ft)	W.S. Elev (ft)	Crit W.S. (ft)	E.G. Elev (ft)	E.G. Slope (ft/ft)	Vel Chnl (ft/s)	Flow Area (sq ft)	Top Width (ft)	Froude # Chl
REACH 1	1011	100 YR. ULT UNI	1934.70	1038.67	1040.11	1040.11	1040.86	0.022180	6.47	277.53	181.99	1.19
REACH 1	1010	100 YR. ULT UNI	1934.70	1034.81	1037.59	1037.59	1038.33	0.011118	9.39	335.10	225.13	1.02
REACH 1	1009	100 YR. ULT UNI	1934.70	1031.33	1034.44	1034.44	1035.08	0.009935	9.08	381.47	264.05	0.96
REACH 1	1008	100 YR. ULT UNI	1934.70	1028.58	1029.52	1029.52	1030.09	0.026561	7.20	320.70	284.56	1.32
REACH 1	1007	100 YR. ULT UNI	1934.70	1008.00	1011.43	1012.72	1015.14	0.029375	16.88	153.22	86.88	1.69
REACH 1	1006	100 YR. ULT UNI	1934.70	1003.28	1007.55	1007.55	1008.63	0.007759	10.09	311.18	168.09	0.90
REACH 1	1005	100 YR. ULT UNI	1934.70	999.16	1001.41	1001.91	1003.21	0.030689	13.55	202.33	121.10	1.63
REACH 1	1004.55		Culvert									
REACH 1	1004	100 YR. ULT UNI	1934.70	998.23	1000.56	1001.00	1002.05	0.029098	12.51	217.33	132.62	1.56
REACH 1	1003	100 YR. ULT UNI	1934.70	995.00	998.87	998.87	999.60	0.007361	9.13	379.65	224.53	0.86
REACH 1	1002	100 YR. ULT UNI	1934.70	992.26	996.26	996.39	997.00	0.007587	9.16	410.30	320.81	0.87
REACH 1	1001	100 YR. ULT UNI	1934.70	988.78	990.46	990.50	991.12	0.021462	9.27	323.36	263.37	1.30
REACH 1	1000	100 YR. ULT UNI	1934.70	983.00	985.39	985.39	985.95	0.011695	8.82	403.56	318.60	1.02

CHANNEL 233-234 "A-A": 20' EARTHEN TRIANGULAR (4.74% SLOPE) CAPACITY = 101.5 CFS (FULL) **REFERENCE CHANNEL PLANS**
Q(10) ULTIMATE = 33.27 CFS

CHANNEL 233-234 "A-A": 20' EARTHEN TRIANGULAR (8.72% SLOPE) CAPACITY = 137.7 CFS (FULL)
Q(10) ULTIMATE = 33.27 CFS

CHANNEL 229-230 "B-B": 20' EARTHEN TRIANGULAR (3.75% SLOPE) CAPACITY = 90.29 CFS (FULL)
Q(10) ULTIMATE = 25.17 CFS

CHANNEL 225-226 "C-C": 20' EARTHEN TRIANGULAR (7.40% SLOPE) CAPACITY = 84.08 CFS (FULL)
Q(10) ULTIMATE = 28.86 CFS

CHANNEL 225-226 "C-C": 20' EARTHEN TRIANGULAR (8.16% SLOPE) CAPACITY = 88.29 CFS (FULL)
Q(10) ULTIMATE = 28.86 CFS

CHANNEL 221-222 "D-D": 20' EARTHEN TRIANGULAR (6.30% SLOPE) CAPACITY = 77.58 CFS (FULL)
Q(10) ULTIMATE = 17.43 CFS

CHANNEL 221-222 "D-D": 20' EARTHEN TRIANGULAR (10.47% SLOPE) CAPACITY = 100.0 CFS (FULL)
Q(10) ULTIMATE = 17.43 CFS

CHANNEL 254-255 "E-E": 28' EARTHEN TRIANGULAR (2.60% SLOPE) CAPACITY = 152.6 CFS (FULL)
Q(10) ULTIMATE = 52.64 CFS

CHANNEL 254-255 "E-E": 28' EARTHEN TRIANGULAR (4.55% SLOPE) CAPACITY = 201.9 CFS (FULL)
Q(10) ULTIMATE = 52.64 CFS

CHANNEL 257-258 "F-F": 20' EARTHEN TRIANGULAR (3.00% SLOPE) CAPACITY = 80.78 CFS (FULL)
Q(10) ULTIMATE = 34.07 CFS

CHANNEL 257-258 "F-F": 20' EARTHEN TRIANGULAR (5.11% SLOPE) CAPACITY = 105.4 CFS (FULL)
Q(10) ULTIMATE = 34.07 CFS

N

0 250 500 1000 Feet
1" = 500'

LEGEND

- PROPERTY LINE
- EXISTING CONTOUR 690
- OVERALL WATERSHED
- SUB-WATERSHED
- TC PATH
- COSA STORM DRAIN
- 1% F.C. ANNUAL CHANCE INUNDATION ZONE PER EVER ENGINEERING
- FLOW ARROW (EXISTING)
- RIVER STATION 1000

SHEET ___ OF ___

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

ULTIMATE CONDITIONS MAP

GALE ESTATES, L.L.C.

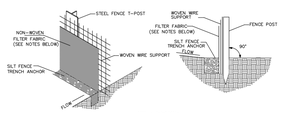
FIRM REGISTRATION # F-003084
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

REVISIONS

NO.	DATE	DESCRIPTION	BY

PROJ. #:	DATE:	DGN. BY:	DWN. BY:	CHKD. BY:
U6-SER	04/12/23	G.V.	G.V.	R.M.

LOCATION MAP
NOT TO SCALE



SILT FENCE

GENERAL NOTES:
- The maximum height of the filter fabric should range between 18 and 36 inches above the ground surface (depending on the amount of upslope ponding expected).
- Posts should be spaced 8 to 10 feet apart when a woven wire support fence is used and not more than 6 feet apart when extra strength filter fabric (without a woven wire support fence) is used. The posts should be embedded a minimum of 18 inches.
- A trench should be excavated 4 to 8 inches wide and 4 to 12 inches deep along the upslope side of the line of posts.
- If standard strength filter fabric is to be used, the optional woven wire support fence should be fastened to the upslope side of the posts. Extend the woven wire support to the bottom of the trench. The filter fabric should be fastened using 4 evenly spaced ties or staples to the woven wire support fence, and 8 to 20 inches of the fabric should be laid into the trench.
- Extra strength filter fabric does not require a woven wire support fence. Fastened the filter fabric directly to the posts and extend 8 to 20 inches of the fabric into the trench.
- Where joints in the filter fabric are required, the filter fabric should be spliced together only at a support post, with a minimum 6 inch overlap and securely sealed.
- Do not attach filter fabric to trees.
- Backfill the anchor trench with compacted soil or 0.75 inch minimum diameter gravel placed over the filter fabric.
- Remove silt fence when the construction site is completely stabilized.
- Inspect silt fences daily during periods of prolonged rainfall, immediately after each rainfall event, and weekly during periods of no rainfall. Make any required repairs immediately.
- Sediment must be removed when it reaches a depth of 6". Take care to avoid damaging the fence during cleanout.
- Silt fences should not be removed until the upslope area has been permanently stabilized. Contaminated sediment deposits must be removed and disposed of off-site in accordance with applicable regulations. Uncontaminated sediment deposits remaining in place after the silt fence has been removed should be dressed to conform with the existing grade, and stabilized.
- Place silt fence along a line of uniform elevation, perpendicular to the direction of flow.

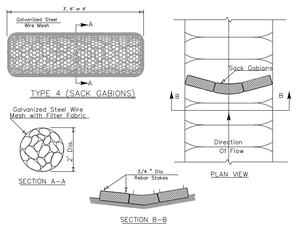
MATERIALS:
- Fence posts ma be either 4' min. steel or wood posts spaced at 6' to 8'. Softwood shall be 3" min. dia. or nominal 2" x 4". Hard wood posts shall have a min. cross section 1.5" x 1.5".
- Synthetic filter fabric should be a pervious sheet of polypropylene, nylon, polyester, or polyethylene yarn conforming to the requirements below:

SYNTHETIC FILTER FABRIC REQUIREMENTS

Physical Property	Requirements
Minimum Weight	3.5 ounces per square yard (ASTM 3776-84)
Min. Mullen Burst Strength	200 lbs per square inch (ASTM 3786-87)
Maximum flow through rate	150 GPM/SF of frontal area (ASTM 4491-85)

- Burlap of 10 ounces per square yard of fabric can also be used.
- The filter fabric should be purchased in continuous rolls to minimize joints.

MAINTENANCE:
- Inspect regularly and after every storm. Make any repairs necessary to ensure the measure is in good working order.
- Sediment should be removed and the structure restored to its original dimensions when sediment has accumulated to a depth of 6".
- Clean or remove and replace the stone filter or filter fabric if they become clogged.
- Inlet protection should remain in place and operational until the drainage area is stabilized.

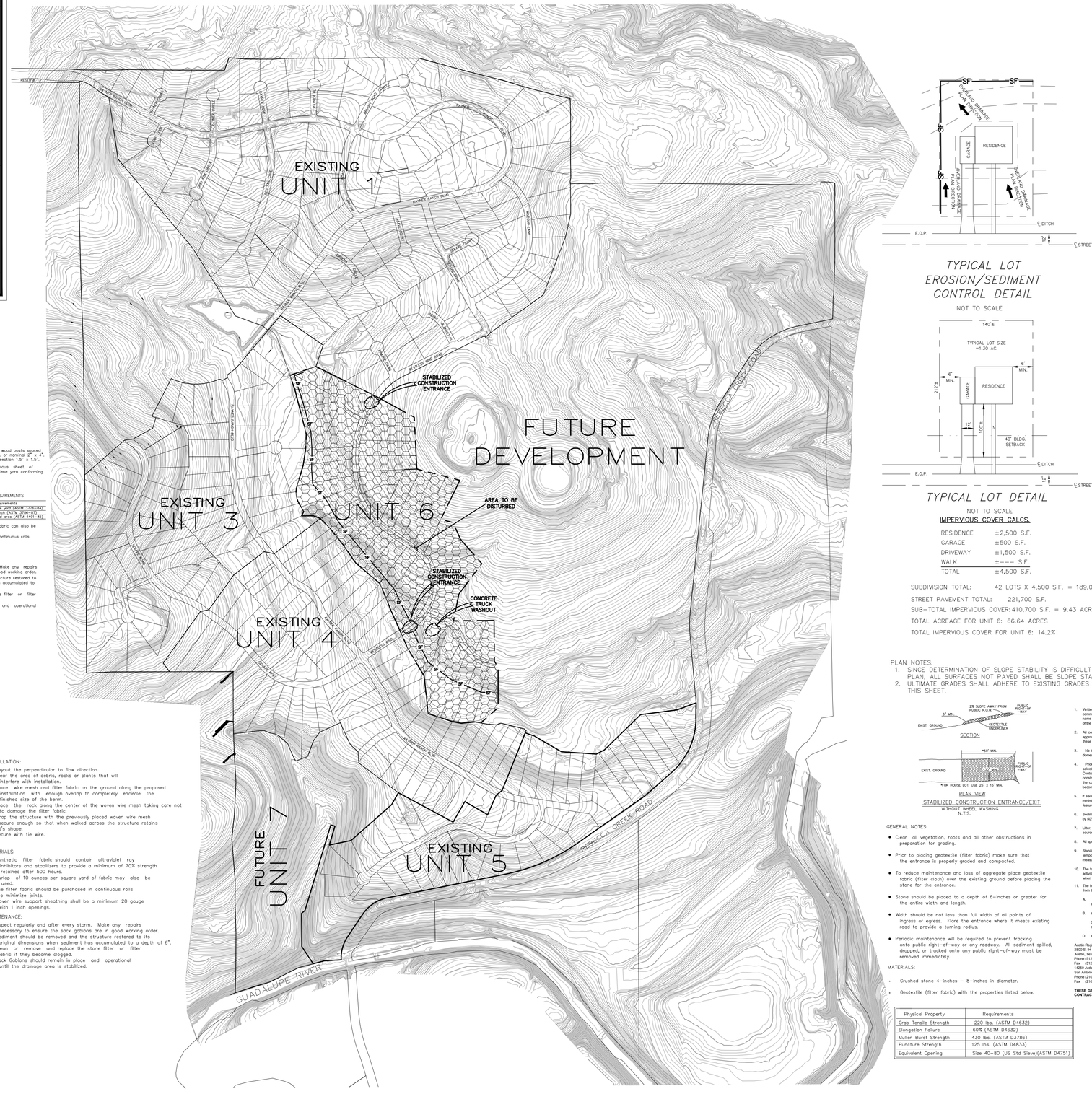


GENERAL NOTES:
- The top of the sack gabions should be level and oriented perpendicular to the direction of flow.
- Filter fabric material shall be fastened to woven wire support.
- Filter fabric material should meet the following specifications: Resistant to ultraviolet light, Fabric should be non-woven geotextile with minimum weight of 3.5 ounces per square yard, minimum mullen burst strength of 200 pounds per square inch and a flow through rate of 120 gallons per minute per square foot of frontal area.
- Stone size: ±4"–8" open graded crushed limestone.
- Inspect weekly or after each rainfall event and repair or replace as needed
- When silt reaches a depth of 6 inches or more above natural ground, silt shall be removed and disposed in an approved manner that will not contribute to resiltation. Contaminated sediment must be removed and disposed of off-site in accordance with applicable regulations.
- Remove sack gabions after construction site is completely stabilized.

INSTALLATION:
- Layout the perpendicular to flow direction.
- Clear the area of debris, rocks or plants that will interfere with installation.
- Place wire mesh and filter fabric on the ground along the proposed installation with enough overlap to completely encircle the finished size of the berm.
- Place the rock along the center of the woven wire mesh taking care not to damage the filter fabric.
- Wrap the structure with the previously placed woven wire mesh secure enough so that when walked across the structure retains it's shape.
- Secure with tie wire.

MATERIALS:
- Synthetic filter fabric should contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 70% strength retained after 500 hours.
- Burlap of 10 ounces per square yard of fabric may also be used.
- The filter fabric should be purchased in continuous rolls to minimize joints.
- Woven wire support sheathing shall be a minimum 20 gauge with 1 inch openings.

MAINTENANCE:
- Inspect regularly and after every storm. Make any repairs necessary to ensure the sack gabions are in good working order.
- Sediment should be removed and the structure restored to its original dimensions when sediment has accumulated to a depth of 6".
- Clean or remove and replace the stone filter or filter fabric if they become clogged.
- Sack Gabions should remain in place and operational until the drainage area is stabilized.


EXISTING UNIT 1
EXISTING UNIT 3
EXISTING UNIT 4
FUTURE UNIT 6
FUTURE UNIT 7
EXISTING UNIT 5
FUTURE DEVELOPMENT
STABILIZED CONSTRUCTION ENTRANCE
AREA TO BE DISTURBED
STABILIZED CONSTRUCTION ENTRANCE
CONCRETE TRUCK WASHOUT
SF
REBECCA CREEK ROAD
GUADALUPE RIVER
RANGE RANCH BLVD
BRIDGEWOOD CIRCLE
SUNRISE RIDGE
HERON CREST
HERON CREST CIR
HERON CREST CT
HERON CREST PL
HERON CREST TRL
HERON CREST WAY
HERON CREST CV
HERON CREST DR
HERON CREST LN
HERON CREST PT
HERON CREST RUN
HERON CREST TER
HERON CREST VW
HERON CREST WALK
HERON CREST XING
HERON CREST ALY
HERON CREST BND
HERON CREST CRK
HERON CREST GLN
HERON CREST HL
HERON CREST MDW
HERON CREST PASS
HERON CREST PATH
HERON CREST PKWY
HERON CREST RDG
HERON CREST SQ
HERON CREST TRCE
HERON CREST VLY
HERON CREST WAY
HERON CREST WLK
HERON CREST WOOD
HERON CREST XRD
HERON CREST ZZ
HERON CREST ZZZ
HERON CREST ZZZZ
HERON CREST ZZZZZ
HERON CREST ZZZZZZ
HERON CREST ZZZZZZZ
HERON CREST ZZZZZZZZ
HERON CREST ZZZZZZZZZ
HERON CREST ZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ
HERON CREST Z

GALLEGOS ENGINEERING, INC.
Firm No. F-003084

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH
210-641-2037 FAX

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

PROJECT NAME:

SERENITY OAKS, UNIT 6
Comal County, TX

PREPARED FOR:

Gale Estates, LLC
15315 San Pedro
San Antonio, TX 78232

PREPARED BY:

Richard M. Gallegos, P.E.

GALLEGOS ENGINEERING, INC.

FIRM REGISTRATION # F-003084
P.O. Box 690067
San Antonio, TX 78269
rg@gallegoseng.com

DATE: JULY 25, 2023

LARGE CONSTRUCTION SITE NOTICE

FOR THE
Texas Commission on Environmental Quality (TCEQ)
Stormwater Program

TPDES GENERAL PERMIT TXR150000

"PRIMARY OPERATOR" NOTICE

This notice applies to construction sites operating under Part II.E.3. of the TPDES General Permit Number TXR150000 for discharges of stormwater runoff from construction sites equal to or greater than five acres, including the larger common plan of development. The information on this notice is required in Part III.D.2. of the general permit. Additional information regarding the TCEQ stormwater permit program may be found on the internet at:

http://www.tceq.state.tx.us/nav/permits/wq_construction.html

Site-Specific TPDES Authorization Number:	585774
Operator Name:	GALE ESTATES, LLC
Contact Name and Phone Number:	JASON GALE (210) 494-5237
Project Description: *Physical address or description of the site's location, and estimated start date and projected end date, or date that disturbed soils will be stabilized.*	SERENITY OAKS, UNIT 6, 66.64 AC., COMAL CO., 2.4 mi. East from intersection of Hwy 281 & Rebecca Crk. Rd., Rt. 1.2 mi. on Rayner Ranch Rd.; End of construction December 2025.
Location of Stormwater Pollution Prevention Plan:	

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Construction General Permit Stormwater Pollution Prevention Plan (SWP3) Worksheets
December 2013

Texas Pollutant Discharge Elimination Systems (TPDES)

Construction Stormwater General Permit (TXR150000)

Stormwater Pollution Prevention Plan (SWP3)

Company: GALE ESTATES, LLC

Role: DEVELOPER

Project Name: SERENITY OAKS, UNIT 6

and/or Other Operators:

Plan Date: July 2023

Table of Contests

Certification Page

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

Sign as required by30 TAC 305.128

Signed: _____ Date:07/25/2023

JASON GALE
OFFICER

If plan is shared by more than one entity:

Signed: _____ Date: TPDES#:_____

name
title

Signed: _____ Date: TPDES#:_____

name
title

Signed: _____ Date: TPDES#:_____

name
title

Primary Operators

GALE ESTATES, LLC

_____

_____

Site Description

Section 1

Nature of Construction and List of Pollutants

Part III, Sect. F.1. (a)

Description of the general nature of construction activities:

Construction of residential streets and drainage channels to serve 42 large residential lots.
Pollutant: Oil and grease.
Source: Construction equipment and trucks.
Pollutant: Sediment. Source: Disturbed soil.

Part III, Sect. F.1. (b)

List of ALL potential pollutants and their sources:

Potential Pollutants	*Source*
Oil, Grease, Diesel Fuel & Gasoline.	Construction Equipment on or near areas to be cleared, graded and/or excavated.
Sediment	Stormwater runoff from areas cleared, graded and/or excavated.
Asphalt Cement (CRS-2 Cationic Emulsified Asphalt) for Double Penetration Seal Coat Aggregate Binder.	Road Surfaces.
Concrete Truck Wash Out.	Concrete Residential Slab & Drainage Riprap.

Section 2

Construction Schedule

Part III Sect. F.1. (c)

Description of the intended schedule, or a sequence of the major activities that will be disturbing soil for the major portions of the site. Add or subtract rows as needed.

Name of Operator	*Phase of Project Projected dates Month/year*	*Activity Disturbing Soil clearing, excavation, etc.*	*Location on-site where activity will be conducted*	*Acreage being disturbed*

Section 3

Acreage, Material Storage, and Soil Type

Part III, Sect. F.1. (d)

The total acreage of the entire property and the total acreage where construction activity will occur. Include off-site material storage areas, overburden and stockpiles of dirt or aggregates, and borrow areas.

Material Storage	*Material (s)*	*Acreage*	*Location*
Off-site	**None**	**0**	
On-site	**Crushed Rd. Base**	**2.75**	**Lots 254-256 or Contractor Preference**
Overburden/Stockpiles of Dirt	**None**	**0**	
Borrow Areas	**Rocky Overburden**	**1.8**	**Improved Drain Channels**
Other areas used as part of the project	**None**	**0**	
Total acreage of project property:	**66.64**	**Total acreage of disturbed soil:**	**5.75**

Part III Sect. F.1. (e)

Description of the soil type (e.g., loamy, clayey, sandy, rocky) or the quality of any discharge from the site.

Section 4

Location Map

Part III Sect. F.1. (f)

Attached Map

Section 5

Detailed Site Map(s)

Part III Sect. F.1.g (i)-(viii)

Attach Map(s)

Section 6

Site Description – Support Facilities

Part III Sect. F.1. (h)

A description of the activities and their locations of any asphalt plants, concrete batch plants or other activity supporting this construction site.

Facility	*Description*	*Location*
Asphalt Plant	**Asphalt Cement (CRS-2 Cationic Emulsified Asphalt) for Double Penetration Seal Coat Aggregate Binder.**	**Delivered daily from refinery.**
Concrete Batch Plant	**Drainage Structure & House Slab Readymix Concrete.**	**Delivered daily from local commercial batch plants. Such as Ingram Readymix.**
Other Support Activity	**MC-30 Rd. Base Prime Coat**	**Delivered & Distributed as Needed.**

Part III Sect. F.1. (i)

List of receiving waters at or near the site that will be disturbed or that will receive discharges from the project's disturbed areas.

Name of Receiving	*Will Receiving Water Be Disturbed?*	*Location of Receiving water*
Guadalupe River	**No**	**Near Rebecca Creek Rd. Crossing.**

Section 7

Copies of Construction General Permit (CGP) TXR150000 or description of location of CGP NOI, certificate, and/or site notice

Best Management Practices

Section 8

Best Management Practices (BMPs) Erosion and Sediment Controls

Part III Section F.2.a.(i)-(ii) and F.2. (c)

Description of Erosion and Sediment Controls designed to retain sediment. Add as many rows as needed.

BMPs Installed	***Location(s) On-Site***	***Inspection/Maintenance Schedule***	***Modifications/Replacement Activities***
Silt Fence	See Plans	Bi-weekly & after each 2" or great Rain Event.	Replace all damaged & washed out fence.
Rock Berms	See Plans	Monthly	Replace when blocked by sediment to a depth of 1'.
Stabilized Construction Entrance/Exit	See Plans	Weekly	Replace when silt reaches the top course of aggregate.
Sack Gabion	See Plans	Monthly	Replace when blocked by sediment to a depth of 1'.

Are there sedimentation basins or traps?* *If yes, list the measures taken to reduce the pollutants transported off-site by pumping activities.*	***Yes*** ☒	***No*** ☐
Prevention Measure	***Location On-Site***	***Implementation Date***
Per BMP Best Practices	Channel	Prior to Construction

* Part III Section F.6. (c) Sediment must be removed from sediment traps and basins no later than the time that the design capacity has been reduced by 50 percent.

Section 9

BMPs, Off-Site Transfer of Pollutant Controls

Part III Section F.2.a. (iii)

List of good housekeeping practices implemented to limit the off-site transport of litter, construction debris, and construction materials.

Litter Controls:	
Good Housekeeping Activity	***Location(s) On-Site***
Street ROW clearing & burning. Provided no "Burn Ban" is in effect.	**On site within ROWs.**
Construction Debris Controls:	
Good Housekeeping Activity	***Location(s) On-Site***
Wrecked Conc. Forms & CMP remnants.	**Removed from site weekly.**
Construction Material Controls:	
Good Housekeeping Activity	***Location(s) On-Site***
Scrap Building materials.	**Each Home Builder to remove from site Monthly.**

Section 10

BMPs, Stabilization and Erosion Control Practices

Part III Section F.2.b. (i)

Stabilization and erosion control practices may include, but are not limited to: establishing temporary or permanent vegetation, mulching, geotextiles, sod stabilization, vegetative buffer strips, and protecting existing trees and vegetation. List practices used where they are located, when they will be implemented, and whether they are temporary (interim) or permanent.

Stabilization Practices	*Location On-Site*	*Implementation Date*	*Interim or Permanent*
Install Geotextile Fabric	**Under Stabilized Construction Entrance**	**Per Contractor**	**Temporary (Interim)**

Section 11

Dates of Major Grading Activities and Construction Stoppage

Part III Section F.2.b. (ii) (A)-(C), (iii)

If you do not list activities below, either attach documentation or state where records for the activities can be accessed:

Documentation attached? Yes ☐ No ☐

Where can documentation be found (if not included in SWP3)?
Contact Person Phone Number

Dates when major grading activities will occur and locations on-site:

Activity	*Location*	*Dates when Activity is Scheduled*
See Section 2		

Dates when construction activity will temporarily or permanently cease:

Location on-site	*Date activity is to be stopped*	*Temporary or Permanent?*	*Stabilization Initiation Date*
August 2024			

Section 12

Sediment Control Practices

Part III Section F.2. (c)

Will the project disturb 10 acres or more at one time? Yes ☐ No ☒

If yes, is it feasible to install a sediment basin? Yes ☐ No ☒

Calculate the volume of runoff from a 2-year, 24 hour storm event. Volume of sediment basin:

In determining feasibility have you considered (attach any additional justification in determining feasibility):

Site Factor	*Considered?*	*Site Factor*	*Considered?*
Site Soils	Rock	Precipitation pattern	
Slope	4 to 5 % Avg.	Site geometry	
Available area		Site vegetation	
Public safety		Geotechnical factors	
Groundwater depth		Infiltration capacity	
Other? (list)		Other? (list)	

Based on above information, sedimentation basin will ☐ be used ***OR*** ☐ is not feasible.

If a sediment basin is not feasible, list of alternative structural control practices that will be used:

Article II. Structural Control	*Used? Yes/No*	*Location On-Site*
A series of smaller sediment basins	Yes ☐ No ☐	
Silt fences	Yes ☒ No ☐	
Vegetative buffer strips	Yes ☐ No ☐	
Sediment traps	Yes ☐ No ☐	
Other (list): Rock Berms	Yes X No ☐	
Other (list):	Yes ☐ No ☐	
Other (list):	Yes ☐ No ☐	
Other (list):	Yes ☐ No ☐	

Section 13

Permanent Stormwater Controls

Part III Section F.3

The following measures will be constructed to control post-construction runoff:

Control Measure	*Location on Project Site*	*Control runoff from what areas*

Section 14

Other Stormwater Controls

Part III Section F.4. (a)

Control to minimize dust generation and off-site tracking of sediment:

Control Practice Used	*Location(s) On-Site*
Stabilized Construction Entrance/Exit	Restless Wind
Site Contractor's Water Truck	Job Site

Part III Section F.4. (b)

The following construction and waste materials will be stored on-site:

Materials Stored On-Site	*Average Amount Stored*	*Location On-Site*	*Controls Used to Prevent Pollutants*
Crushed Limestone Base	Unknown	Lot 254	Silt Fence Around Stockpile.

Other Stormwater Controls

Part III Section F.4. (c)- (d)

Describe pollutant sources from areas other than construction (make additional copies of this worksheet as needed):

Type of pollutant source	*Pollutant(s)*	*Control(s) or measure(s) used to minimize pollutants*
Site Work Contractor	Traffic generated road dust	Site Work Contractor will have

Type of pollutant source	*Pollutant(s)*	*Control(s) or measure(s) used to minimize pollutants*
		a water truck available for dust control.

Describe the velocity dissipation devices that will be placed at discharge locations and/or along the length of any outfall channels:

Dissipation Device (hay bales, silt fence, pond, etc.)	*Outfall Discharging to (MS4, bar ditch, creek/stream)*	*At Outfall or Channel (distance interval for channel)*

Section 15

Inspection of Controls Worksheets/Report

Part III Section F.7.

Complete this worksheet every seven days; **OR**, every 14 days and within 24 hours of a 2 inch rainfall event, and retain in your SWP3.

Inspector (name/title): **Inspection Date:** **Day:** **Time:** **am/pm**

Scope of inspection: 14 Day Inspection ☐ or Weekly Inspection ☐

Day of week normally conducted: _____ 0.5 inch Rainfall Event ☐

Inspection Type:	*Inspected? (Y/N)*	*Areas of Concern (Describe in detail in the narrative section)*
Disturbed Soil Areas	Yes ☐ No☐	
Material Storage Areas	Yes ☐ No☐	
Structural Controls	Yes☐ No☐	
Sediment & Erosion Controls	Yes☐ No☐	
Entrance(s) and Exit(s)	Yes☐ No ☐	

Discharges:

Nature of discharge (silt, gravel, sand, other pollutant)	*Location on-site discharge*

Inspection of Controls Worksheets (contd.)

Part III Section F.7.

Best Management Practices Inspected: Add additional rows if needed.

BMP and Location	*OK (no action required)*	*BMP failed (describe failure)*	*Required Maintenance (describe corrective actions needed)*
	☐		
	☐		
	☐		
	☐		
	☐		
	☐		

Additional BMPs Needed

Location	Best Management Practice	Replacing Existing BMP?

Inspection Narrative Description/Certification

Part III Section F.7.

Complete this worksheet every seven days; **OR**, every 14 days and within 24 hours of a 2 inch rainfall event and retain in your SWP3.

Describe the inspector's qualifications to conduct the inspections:

Describe how your inspection was conducted:

Describe all incidents of non-compliance (i.e. major discharges, BMP failures):

"I certify that the facility or site is in compliance with the stormwater pollution prevention plan and this permit."

I further certify that I am authorized to sign this report under TCEQ rules at 30 TAC 305.128 (relating to Signatories to Reports)

Name/Title: Date:

Section 16

Eligible Non-Stormwater Discharges (listed in Part II.3. [a]-[h])

Part III, Sect. F.8

Eligible Non-stormwater Discharge	*Used? Yes/No*	*Pollution Prevention Measure(s)*	*Implementation Date*
Fire Fighting Activities	Yes☐ No☐		
Fire Hydrant Flushing	Yes☐ No☐		
Washing of Vehicles, Buildings, or Pavement without detergents or soap (see description in Part II.3.[c])	Yes☐ No☐		
Dust Control	Yes☐ No☐		
Potable Water Sources (water line flushing)	Yes☐ No☐		
Air Conditioning Condensate	Yes☐ No☐		
Uncontaminated Ground/Spring Water	Yes☐ No☐		
Other? (List)	Yes☐ No☐		

List any other non-stormwater discharge permitted by a separate NPDES, TPDES, or TCEQ Permit.

Non-stormwater Discharge	*Pollution Prevention Measure*	*Implementation Date*

Section 17

Stormwater Runoff from Concrete Batch Plants

Part IV

See Instructions for information regarding Concrete Batch Plants associated with Construction Projects.

Section 18

Concrete Truck Washout Requirements

Part V

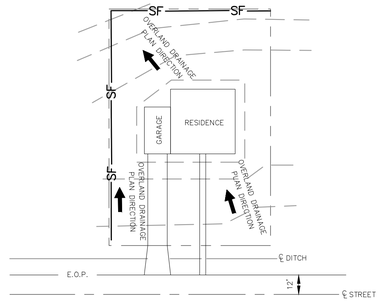
Location of concrete washout area on site and description of BMPs established to prevent the concrete wash out water from contributing to groundwater contamination or entering the waters of the state.

LOCATION MAP
NOT TO SCALE

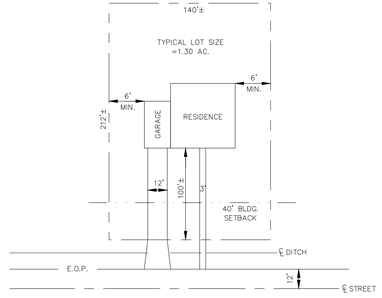
GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 inch = 400 ft.



TYPICAL LOT
EROSION/SEDIMENT
CONTROL DETAIL
NOT TO SCALE



TYPICAL LOT DETAIL
NOT TO SCALE

ESTIMATED STORM WATER POLLUTION
PREVENTION PLAN & TEMPORARY SEDIMENTATION AND
EROSION CONTROL PLAN QUANTITIES

SERENITY OAKS, UNIT 6

ITEM	UNIT	QUANTITY
STABILIZED CONSTRUCTION ENTRANCE	EACH	2
SILT FENCE	L.F.	3,655
CONCRETE TRUCK WASHOUT	EACH	1

IMPERVIOUS COVER CALCS.

RESIDENCE	±2,500 S.F.
GARAGE	±500 S.F.
DRIVEWAY	±1,500 S.F.
WALK	±--- S.F.
TOTAL	±4,500 S.F.

SUBDIVISION TOTAL: 42 LOTS X 4,500 S.F. = 189,000 S.F.

STREET PAVEMENT TOTAL: 221,700 S.F.

SUB-TOTAL IMPERVIOUS COVER: 410,700 S.F. = 9.43 ACRES

TOTAL ACREAGE FOR UNIT 6: 66.64 ACRES

TOTAL IMPERVIOUS COVER FOR UNIT 6: 14.2%

REVISIONS						
NO.	DATE	DESCRIPTION	BY			
PROJ. #	U6-SER	DATE	01/12/25	DSN. BY:	R.M.G.	
				DWN. BY:	S.G.	
				CHKD. BY:	R.M.G.	

FIRM REGISTRATION # F-003884
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JANUARY 12, 2025
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS
RICHARD M. GALLEGOS
86916
LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

STORM WATER POLLUTION PREVENTION PLAN

GALE ESTATES, L.L.C.

SHEET 3 OF 24

S:\Projects\00-GENERAL\00-ACS Serenity Unit 6\Cad Plans\S-U6-TPBP.dwg

SITE DESCRIPTION

PROJECT: SERENITY OAKS SUBDIVISION UNIT 6

A PROPOSED SINGLE FAMILY RESIDENTIAL DEVELOPMENT LOCATED IN THE COUNTY OF COMAL, LOCATED OFF RESTLESS WIND ROAD.

PROJECT DESCRIPTION:

THE CONSTRUCTION OF STREETS, DRAINAGE, WATER, AND UTILITY FACILITIES NECESSARY FOR THE DEVELOPMENT OF A SINGLE-FAMILY RESIDENTIAL SUBDIVISION.

MAJOR SOIL DISTURBING ACTIVITIES:

ACTIVITIES ASSOCIATED WITH STREET, DRAIN, & UTILITY CONSTRUCTION-TRENCHING, STOCKPILING SPOILS AND EXCAVATION.

TOTAL PROJECT AREA: ± 66.64 ACRES

TOTAL AREA TO BE DISTURBED: ± 66.64 ACRES

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.62

EXISTING CONDITION OF SOIL & VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER:

THE SOIL TYPE(S) ON SITE ARE AS FOLLOWS:

1. ROCK WITH SOME TOP SOIL.

NAME OF RECEIVING WATERS: TRIBUTARY OF GUADALUPE RIVER

SITE DESCRIPTION

SOIL STABILIZATION PRACTICES:

- ____ TEMPORARARY SEEDING
- ____ PERMANENT PLANTING, SODDING, OR SEEDING
- ____ MULCHING
- ____ SOIL RETENTION BLANKET
- ____ BUFFER ZONES
- _X_ PRESERVATIVE OF NATURAL RESOURCES

OTHER: _____

STRUCTURAL PRACTICES:

- _X_ SILT FENCES
- ____ HAY BALES
- _X_ ROCK BERMS
- ____ DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- ____ DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- ____ DIVERSION, DIKE AND SWALE COMBINATIONS
- ____ PIPE SLOPE DRAINS
- ____ PAVED FLUMES
- _X_ ROCK BEDDING AT CONSTRUCTION EXIT
- ____ TIMBER MATTING AT CONSTRUCTION EXIT
- ____ CHANNEL LINERS
- ____ SEDIMENT TRAPS
- ____ SEDIMENT BASINS
- ____ CURB INLET GRAVEL FILTER
- ____ STONE OUTLET STRUCTURES
- ____ CURBS AND GUTTERS
- ____ STORM SEWERS
- ____ VELOCITY CONTROL DEVICES

OTHER: _____

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

STRUCTURAL PRACTICES, AS APPLICABLE, WILL BE INSTALLED PRIOR TO EACH PHASE OF THE PROJECT AND MAINTAINED DURING THE CONSTRUCTION OF THAT PHASE. SOIL STABILIZATION PRACTICES WILL CLOSELY FOLLOW COMPLETION AND ACCEPTANCE OF CONSTRUCTION FOR EACH PROJECT PHASE.

STORM WATER MANAGEMENT:

THE CONTRACTOR WILL INSTALL AND MAINTAIN SEDIMENTATION AND EROSION CONTROL MEASURES AS SPECIFIED IN THE STORM WATER POLLUTION PREVENTION PLAN, TEMPORARY SEDIMENTATION & ERROSION CONTROL PLAN, AND AS DIRECTED BY AUTHORIZED OFFICIALS.

CONTRACTOR TO PLACE EXCAVATED MATERIAL ON THE HIGH SIDE OF THE TRENCH.

OTHER EROSION AND SEDIMENT CONTROLS:

MAINTENANCE:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT.

INSPECTION:

AN INSPECTION WILL BE PERFORMED BY THE CONTRACTOR EVERY 2 WEEKS AS WELL AS AFTER EVERY HALF INCH OR MORE OF RAIN (AS RECORDED ON A NON-FREEZING RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE). THE CONTROLS WILL BE REVISED AS NECESSARY.

WASTE MATERIALS:

ALL WASTE MATERIAL WILL BE COLLECTED AND STORED IN A METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION, AND THE TRASH WILL BE HUALED TO A LOCAL DUMP. NO CONSTRUCTION WASTE MATERIAL WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING):

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS:

PAINTS, ACIDS FOR CLEANING MASONARY SURFACES, CLEANING SOLVENTS ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION, OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE SPILL COORDINATOR SHOULD BE CONTACTED IMMEDIATELY.

SANITARY WASTE:

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE UNITS AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

OFFSITE VEHICLE TRACKING:

- ____ HAUL ROADS DAMPENED FOR DUST CONTROL
- ____ LOADED HAUL TRUCKS TO BE COVERED WITH TARPAULIN
- ____ EXCESS DIRT ON ROAD REMOVED DAILY
- _X_ STABILIZED CONSTRUCTION ENTRANCE

OTHER: _____

REMARKS: _____

OWNER'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONAL 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 SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OWNER _____ DATE _____

CONTRACTOR'S CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT I INDERSTAND THE TERMS AND CONDITIONS OF THE GENERAL TEXAS POLLUTANT DISCHARGE ELIMINATION SYSTEM (TPDES) PERMIT THAT AUTHORIZES THE STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY FROM THE CONSTRUCTION SITE IDENTIFIED AS PART OF THIS CERTIFICATION PLAN.

SIGNATURE (CONTRACTOR) _____ DATE _____

REVISIONS				
NO.	DATE	DESCRIPTION	BY	
PROJ. #	U6-SER	DATE:	06/01/23	
DSN. BY:	R.M.G.	DWN. BY:	S.G.	CHKD. BY: R.M.G.

FIRM REGISTRATION # F-003884
GALLEGOS ENGINEERING, INC.
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS P.E. 86916 JUNE 1, 2023. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS A VIOLATION OF THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS * RICHARD M. GALLEGOS 86916 * LICENSED PROFESSIONAL ENGINEER

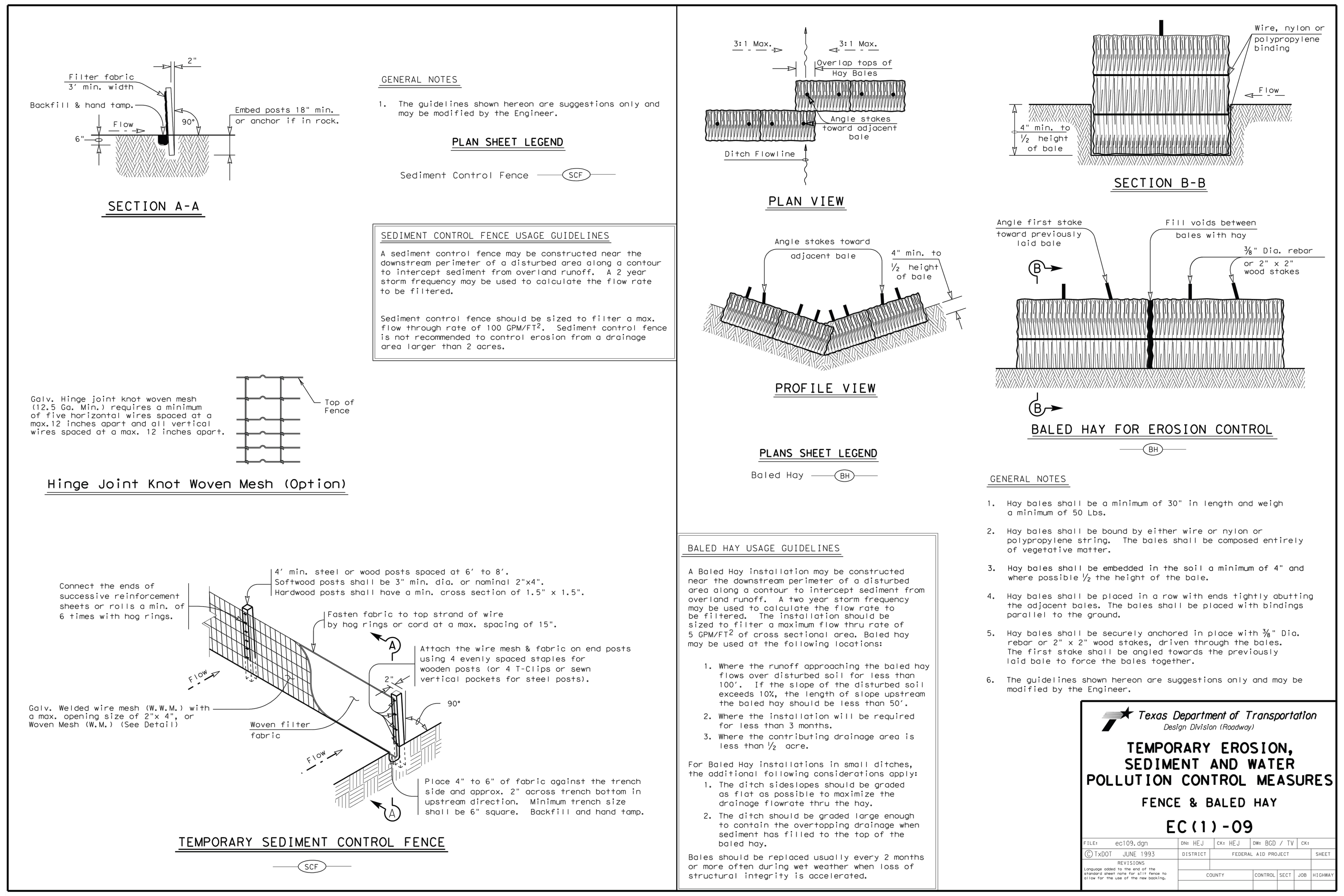
SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

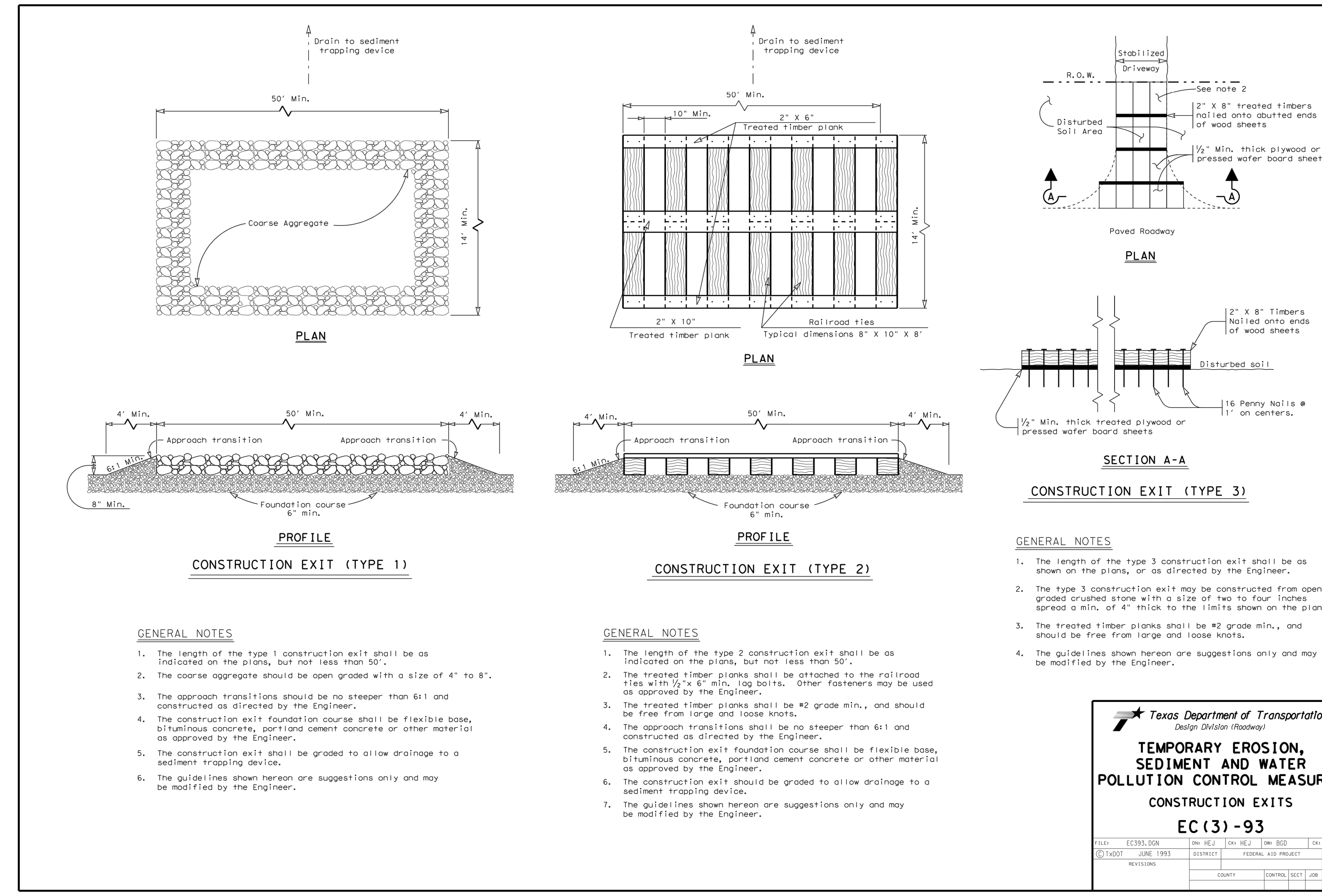
STORM WATER POLLUTION PREVENTION PLAN

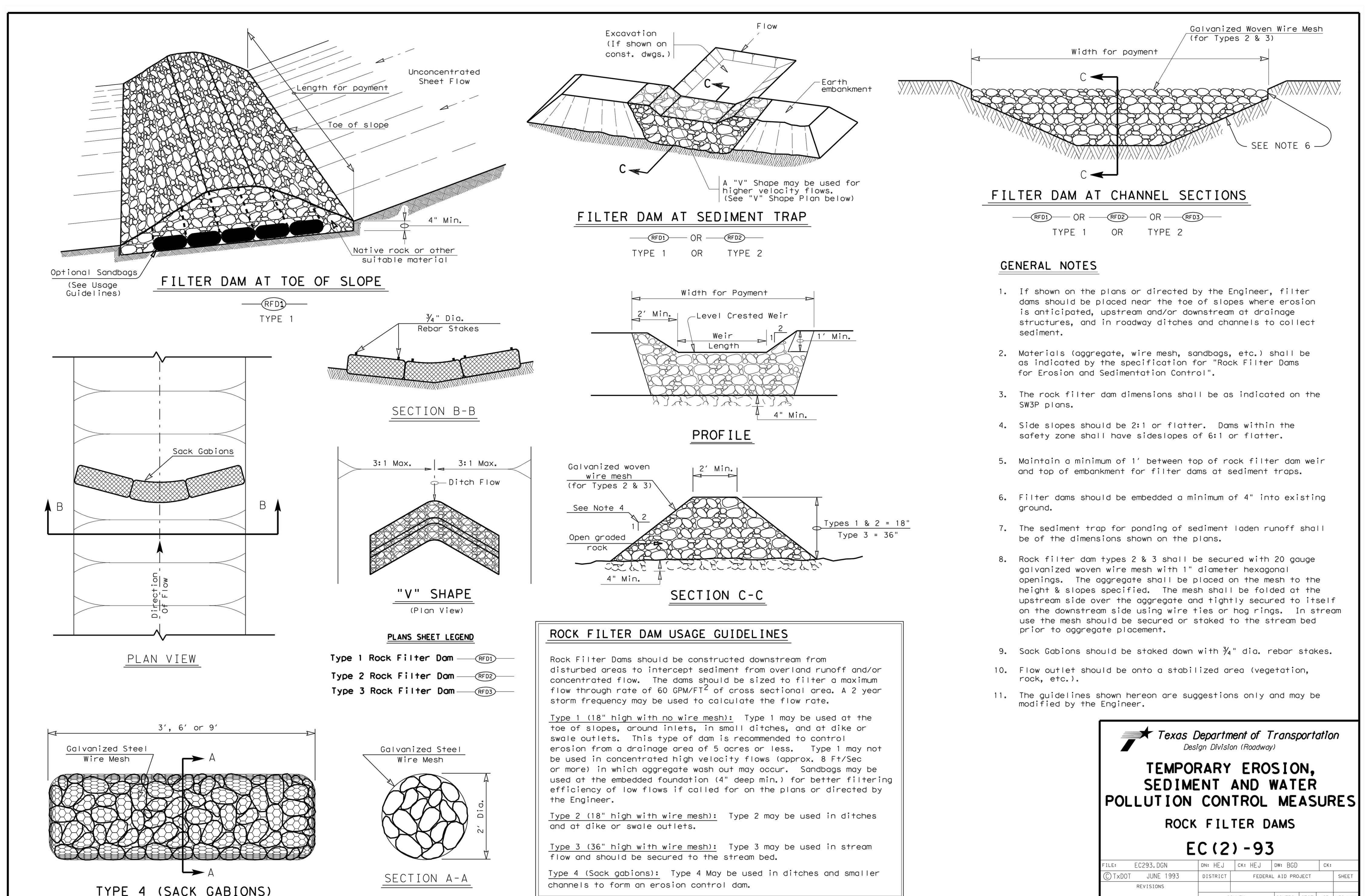
GALE ESTATES, L.L.C.

SHEET 4 OF 24

S:\Projects\UG-GENERAL\UG-ACS Serenity Unit 6\gal Plans\SW4-UG-SWPPP NAR.dwg







GENERAL NOTES

1. Do not disturb vegetated areas (trees, grass, weeds, brush, etc.) any more than necessary for construction.
2. Construction entrance/exit location and concrete washout pit to be determined in the field.
3. Storm Water Pollution Prevention Controls may need to be modified in the field to accomplish the desired effect.
4. Restrict entry/exit to the project site to designated locations by use of adequate fencing, if necessary.
5. All Storm Water Pollution Prevention Controls are to be maintained and in working conditions at all times.
6. Storm water pollution prevention structures should be constructed within the site boundaries.
7. As soon as practical, all disturbed soil that will not be covered by impervious cover such as house slab, sidewalks, and driveway will be stabilized.
8. This is a performance based plan. Actual field conditions may require different placement of erosion control measures. Contractor will be responsible for proper placement of erosion control devices to prevent contamination from leaving the construction site.

NO.	DATE	REVISIONS DESCRIPTION	BY

PROJ. #: U6-SER | DATE: 06/01/23 | DGN. BY: R.M.G. | DWN. BY: S.G. | CHKD. BY: R.M.G.

GALLEGOS ENGINEERING, INC.
FIRM REGISTRATION # F-003084
SAN ANTONIO, TEXAS www.gallegoseng.com PH: 210.641.0812

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY RICHARD M. GALLEGOS, P.E. 86916 JUNE 1, 2023
ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT

STATE OF TEXAS ★ RICHARD M. GALLEGOS 86916 LICENSED PROFESSIONAL ENGINEER

SERENITY OAKS SUBDIVISION, UNIT 6
COMAL COUNTY, TEXAS

SWPPP & GRADING PLAN DETAIL SHEET

GALE ESTATES, L.L.C.

SHEET 5 OF 24

Texas Commission on Environmental Quality

Construction Notice of Intent

Site Information (Regulated Entity)

What is the name of the site to be authorized?	Serenity Oaks Subdivision, Unit 6
Does the site have a physical address?	No
Because there is no physical address, describe how to locate this site:	2.4 MI E OF HWY 281 ON REBECCA CRK RD 1.2 ON RAYNO
City	Spring Branch
State	TX
ZIP	78070
County	COMAL
Latitude (N) (##.######)	29.89676
Longitude (W) (-###.######)	-98.37012
Primary SIC Code	1521
Secondary SIC Code	
Primary NAICS Code	236115
Secondary NAICS Code	

Regulated Entity Site Information

What is the Regulated Entity's Number (RN)?	RN106475122
What is the name of the Regulated Entity (RE)?	SERENITY OAKS UNIT 3
Does the RE site have a physical address?	No
Because there is no physical address, describe how to locate this site:	2.4 MI E OF HWY 281 ON REBECCA CRK RD 1.4 ON RAYNO
City	SPRING BRANCH
State	TX
ZIP	78070
County	COMAL
Latitude (N) (##.######)	
Longitude (W) (-###.######)	
Facility NAICS Code	236115
What is the primary business of this entity?	SINGLE FAMILY RESIDENTIAL

Customer (Applicant) Information

How is this applicant associated with this site?	Operator
What is the applicant's Customer Number (CN)?	CN603643685
Type of Customer	Corporation

Full legal name of the applicant:

Legal Name	Gale Estates, LLC

Texas SOS Filing Number	800739775
Federal Tax ID	
State Franchise Tax ID	32023056974
State Sales Tax ID	
Local Tax ID	
DUNS Number	
Number of Employees	0-20
Independently Owned and Operated?	Yes
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

Responsible Authority Contact

Organization Name	Gale Estates, LLC
Prefix	MR
First	Jason
Middle	
Last	Gale
Suffix	
Credentials	
Title	President

Responsible Authority Mailing Address

Enter new address or copy one from list:	
Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	15315 SAN PEDRO AVE
Routing (such as Mail Code, Dept., or Attn:)	
City	SAN ANTONIO
State	TX
ZIP	78232
Phone (###-###-####)	2104945237
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	acs1@satx.rr.com

Application Contact

Person TCEQ should contact for questions about this application:

Same as another contact?	
Organization Name	Gallegos Engineering Inc
Prefix	MR
First	Richard

Middle	
Last	Gallegos
Suffix	
Credentials	PE
Title	President
Enter new address or copy one from list:	

Mailing Address

Address Type	Domestic
Mailing Address (include Suite or Bldg. here, if applicable)	101 FAWN DR
Routing (such as Mail Code, Dept., or Attn:)	
City	SHAVANO PARK
State	TX
ZIP	78231
Phone (###-###-####)	2106410812
Extension	
Alternate Phone (###-###-####)	
Fax (###-###-####)	
E-mail	rg@gallegoseng.com

CNOI General Characteristics

1) Is the project or site located on Indian Country Lands?	No
2) Is the project or site associated to a facility that is licensed for the storage of high-level radioactive waste by the United States Nuclear Regulatory Commission under 10 CFR Part 72?	No
3) Is your construction activity associated with an oil and gas exploration, production, processing, or treatment, or transmission facility?	No
4) Is the project or site associated to a quarrying facility that is located within either the John Graves Scenic Riverway or Coke Stevenson Scenic Riverway, as defined in 30 TAC 311.71?	No
5) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?	1521
6) If applicable, what is the Secondary SIC Code(s)?	
7) What is the total number of acres that the construction project or site will disturb under the control of the primary operator?	66.64
8) What is the construction project or site type?	Single-family residential
9) Is the project part of a larger common plan of development or sale?	Yes
10) What is the estimated start date of the project?	01/14/2025
11) What is the estimated end date of the project?	12/31/2025
12) Will concrete truck washout be performed at the site?	Yes

13) What is the name of the first water body(s) to receive the stormwater runoff or potential runoff from the site?	Tributary of Guadalupe River
14) What is the segment number(s) of the classified water body(s) that the discharge will eventually reach?	1806
15) Is the discharge into a Municipal Separate Storm Sewer System (MS4)?	No
16) 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
16.1) I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented.	Yes
17) I certify that a stormwater pollution prevention plan (SWP3) has been developed, will be implemented prior to construction, and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the general permit TXR150000. Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3 provided all obligations are confirmed by at least one operator.	Yes
18) I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000).	Yes
19) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.	Yes

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

January 14, 2025

Dear Applicant:

Re: TPDES General Permit for Construction Stormwater Runoff (TXR150000)
Notice of Intent Authorization

Your Notice of Intent (NOI) application for authorization under the general permit for discharge of stormwater associated with construction activities has been received. Pursuant to authorization from the Executive Director of the Texas Commission on Environmental Quality, the Division Deputy Director of the Water Quality Division has issued the enclosed Certificate.

Please refer to the attached certificate for the authorization number that was assigned to your project/site and the effective date. Please use this number to reference this project/site for future communications with the Texas Commission on Environmental Quality (TCEQ).

Authorization under the Edwards Aquifer Protection Program is required before construction can begin where the site is located within the Edwards Aquifer Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone. See https://www.tceq.texas.gov/permitting/eapp/viewer.html for additional information.

It is the responsibility of the Operator to notify the TCEQ Stormwater Processing Center of any change in address supplied on the original Notice of Intent by submitting a Notice of Change.

A Notice of Termination must be submitted when permit coverage is no longer needed.

For questions related to processing of your application you may contact the Stormwater Processing Center by email at SWPERMIT@tceq.texas.gov or by telephone at (512) 239-3700. If you have any technical questions regarding the general permit, you may contact the stormwater technical staff by email at SWGP@tceq.texas.gov or by telephone at (512) 239-4671. Also, you may obtain information on the stormwater web site at https://www.tceq.texas.gov/permitting/stormwater.

Sincerely,

Robert Sadlier, Deputy Director

Water Quality Division

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
Texas Pollutant Discharge Elimination System
Stormwater Construction General Permit

The Notice of Intent (NOI) for the facility listed below was received on January 14, 2025. The intent to discharge stormwater associated with construction activity under the terms and conditions imposed by the Texas Pollutant Discharge Elimination System (TPDES) stormwater Construction General Permit (CGP) TXR150000 is acknowledged. Your facility's unique TPDES CGP stormwater authorization number is:

TXR1516TH

Coverage Effective: January 14, 2025

The TCEQ's stormwater CGP requires certain stormwater pollution prevention and control measures, possible monitoring and reporting, and periodic inspections. Among the conditions and requirements of this permit, you must have prepared and implemented a stormwater pollution prevention plan (SWP3) that is tailored to your construction site. As a facility authorized to discharge under the stormwater CGP, all terms and conditions must be complied with to maintain coverage and avoid possible penalties.

Project/Site Information:
RN106475122
Serenity Oaks Subdivision Unit 6
2.4 Mi E of Hwy 281 On Rebecca Crk Rd 1.2 On Rayno
Spring Branch, TX 78070
Comal County

Operator:
CN603643685
Gale Estates, LLC
15315 San Pedro Ave
San Antonio, TX 78232

This CGP and all authorizations expire on March 5, 2028, unless otherwise amended. If you have any questions related to processing of your application, you may contact the Stormwater Processing Center by **email at** SWPERMIT@tceq.texas.gov **or by telephone at (512) 239-3700**. For technical issues, you may contact the stormwater technical staff by **email at** SWGP@tceq.texas.gov **or by telephone at (512) 239-4671**. Also, you may obtain information on the TCEQ web site at https://www.tceq.texas.gov/goto/wq-dpa. A copy of this document should be kept with your SWP3.

Issued Date: January 14, 2025

FOR THE COMMISSION

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

I Jason Gale,
Print Name

President,
Title - Owner/President/Other

of Gale Estates, LLC,
Corporation/Partnership/Entity Name

have authorized Richard M. Gallegos, P.E.
Print Name of Agent/Engineer

of Gallegos Engineering, Inc.
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

1-2-2025
Date

THE STATE OF Texas §

County of Bexar §

BEFORE ME, the undersigned authority, on this day personally appeared Jason Gale known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that (s)he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 2nd day of January, 2025.

LIDIA S. ORTEGA
Notary Public, State of Texas
Comm. Expires 02-07-2027
Notary ID 125995226

Lidia S. Ortega
NOTARY PUBLIC

Lidia S. Ortega
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 02-07-2027

Application Fee Form

Texas Commission on Environmental Quality
Name of Proposed Regulated Entity: SERENITY OAKS SUBDIVISION, UNIT 6
Regulated Entity Location: 15315 SAN PEDRO, SAN ANTONIO, TX 78232
Name of Customer: GALE ESTATES, LLC
Contact Person: JASON GALE Phone: 210-494-5237
Customer Reference Number (if issued):CN 603643685
Regulated Entity Reference Number (if issued):RN 105893432

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	66.64 Acres	$ 6,500
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	1 Each	$
Extension of Time	Each	$

Signature: _____ Date: January 12, 2025

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

GALLEGOS ENGINEERING, INC.

P.O. BOX 690067
SAN ANTONIO, TEXAS 78269

210-641-0812 PH

January 12, 2025

CHECK OR PAYMENT FOR CZP REVIEW
SERENITY OAKS, UNIT 6

Payment will be made via online payment per TCEQ website.

Section 7

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 603643685		**RN 106475122**

SECTION II: Customer Information

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

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

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

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

Gale Estates, 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)*
		208039985	

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 ☐ Other:
☐ Occupational Licensee ☐ Responsible Party ☐ VCP/BSA Applicant

15. Mailing Address:	15315 San Pedro							
	City	San Antonio	**State**	TX	**ZIP**	78232	**ZIP + 4**	3719

16. Country Mailing Information *(if outside USA)*	**17. E-Mail Address** *(if applicable)*
	acs1@satx.rr.com

18. Telephone Number	19. Extension or Code	20. Fax Number *(if applicable)*
(210) 494-5237		(210) 494-0913

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.)*

Serenity Oaks Subdivision, Unit 6

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

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

25. Description to Physical Location:	Located 2.4 miles east on Rebecca Ck. Rd. from intersection of Hwy 281 North of Spring Branch, TX, Rt. 1.2 miles south-southeast on Rayner Ranch Blvd.

26. Nearest City	State	Nearest ZIP Code
Spring Branch	TX	78070

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

27. Latitude (N) In Decimal:	29.89676N		28. Longitude (W) In Decimal:	98.37012W	
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

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)
1521	None	236115	None

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

General Contractors - Single-Family Home

34. Mailing Address:	**Gale Estates, LLC**							
	15315 San Pedro							
	City	**San Antonio**	**State**	**TX**	**ZIP**	**78232**	**ZIP + 4**	**3719**

35. E-Mail Address:	**acs1@satx.rr.com**

36. Telephone Number	37. Extension or Code	38. Fax Number *(if applicable)*
(210) 494-5237		**(210) 494-913**

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:	Richard M. Gallegos, P.E.	**41. Title:**	President

42. Telephone Number	**43. Ext./Code**	**44. Fax Number**	**45. E-Mail Address**
(210) 641-0812		( ) -	rg@gallegoseng.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:	Gallegos Engineering, Inc.	**Job Title:**	President
Name *(In Print):*	Richard M. Gallegos	**Phone:**	(210) 641- **0812**
Signature:		**Date:**	1/12/25