Provence Phase 2, Section 3

Contributing Zone Plan

Texas Commission on Environmental Quality Edwards Aquifer Program

September 2025

Prepared for:

Masonwood HP II LLC

Project No. 2018-227.23

Moody Engineering, Inc.

Contributing Zone Plan Checklist

- **Edwards Aquifer Application Cover Page (TCEQ-20705)**
- **Contributing Zone Plan Application (TCEQ-10257)**

  Attachment A - Road Map
  Attachment B - USGS Quadrangle Map
  Attachment C - Project Narrative
  Attachment D - Factors Affecting Surface Water Quality
  Attachment E - Volume and Character of Stormwater
  Attachment F - Suitability Letter from Authorized Agent (if OSSF is proposed)
  Attachment G - Alternative Secondary Containment Methods (if AST with an alternative method of secondary containment is proposed)
  Attachment H - AST Containment Structure Drawings (if AST is proposed)
  Attachment I - 20% or Less Impervious Cover Declaration (if project is multi-family residential, a school, or a small business and 20% or less impervious cover is proposed for the site)
  Attachment J - BMPs for Upgradient Stormwater
  Attachment K - BMPs for On-site Stormwater
  Attachment L - BMPs for Surface Streams
  Attachment M - Construction Plans
  Attachment N - Inspection, Maintenance, Repair and Retrofit Plan
  Attachment O - Pilot-Scale Field Testing Plan, if BMPs not based on Complying with the Edwards Aquifer Rules: Technical Guidance for BMPs
  Attachment P - Measures for Minimizing Surface Stream Contamination

- **Storm Water Pollution Prevention Plan (SWPPP)**
- **Copy of Notice of Intent (NOI)**
- **Geologic Assessment**
- **Agent Authorization Form (TCEQ-0599), if application submitted by agent**
- **Application Fee Form (TCEQ-0574)**
- **Check Payable to the "Texas Commission on Environmental Quality"**
- **Core Data Form (TCEQ-10400)**
- **Letter Requesting Review of Compliance with Option OEM RG-348, Appendix A**

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: Provence Phase 2 Section 3						**2. Regulated Entity**			
3. Customer Name: Masonwood HP II LLC						**4. Customer No.:**			
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):**			39.15 acres
9. Application Fee:	$4,000		**10. Permanent BMP(s):**					Extended Detention Ponds, Batch Detention Pons, VFS	
11. SCS (Linear Ft.):	N/A		**12. AST/UST (No. Tanks):**					N/A	
13. County:	Travis		**14. Watershed:**					Little Barton Creek Watershed	

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

San Antonio Region					
County:	**Bexar**	**Comal**	**Kinney**	**Medina**	**Uvalde**
Original (1 req.)	___	___	___	___	___
Region (1 req.)	___	___	___	___	___
County(ies)	___	___	___	___	___
Groundwater Conservation District(s)	___ Edwards Aquifer Authority ___Trinity-Glen Rose	___Edwards Aquifer Authority	___Kinney	___EAA ___Medina	___EAA ___Uvalde
City(ies) Jurisdiction	___Castle Hills ___Fair Oaks Ranch ___Helotes ___Hill Country Village ___Hollywood Park ___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. Alan Putnam
Print Name of Customer/Authorized Agent   9/11/2025
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.

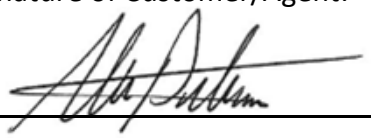
Signature

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: Alan Putnam, P.E.

Date: 9/03/2025

Signature of Customer/Agent:



Regulated Entity Name: Provence Phase 2, Section 3

Project Information

1. County: Travis
2. Stream Basin: Little Barton Creek
3. Groundwater Conservation District (if applicable): N/A
4. Customer (Applicant):

   Contact Person: Jack Meredith
   Entity: Masonwood HP II LLC
   Mailing Address: 4301 Westbank Dr, Bldg A, Ste 110
   City, State: Austin, TX Zip: 78746
   Telephone: 512-306-8300 Fax: _____
   Email Address: jack@mwdtx.com

5. Agent/Representative (If any):

Contact Person: Alan Putnam, P.E.
Entity: Moody Engineering, Inc.
Mailing Address: 9225 Bee Caves Road
City, State: Austin, TX Zip: 78733
Telephone: 512-502-8333 Fax: _____
Email Address: alan@moodyengineering.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.

The site is located in western Travis County, on the north side of Hamilton Pool Road, 0.5 miles north of the Hamilton Pool Road/Crumley Ranch Road intersection

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: 126
☐ Residential: # of Living Unit Equivalents: _____
☐ Commercial
☐ Industrial
☐ Other: _____

13. Total project area (size of site): 39.15 (does not include waterway areas within setbacks along adjacet creek) Acres

    Total disturbed area: 39.15 Acres

14. Estimated projected population: 400

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	350,658	÷ 43,560 =	8.05
Parking		÷ 43,560 =	
Other paved surfaces	236,967	÷ 43,560 =	5.44
Total Impervious Cover	587,625	÷ 43,560 =	13.49

Total Impervious Cover 13.49(after all homes are built) **÷ Total Acreage** 39.15 **X 100 =** 34.46**% 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 Travis County MUD No. 22 (name) Treatment Plant. The treatment facility is:

☐ Existing.
☒ Proposed.

☐ N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

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

☒N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

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

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

Total x 1.5 = _____ Gallons

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

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

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

Table 3 - Secondary Containment

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

Total: _____ Gallons

30. Piping:

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

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

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

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

☐ Dispenser clearly labeled

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

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

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

Site Plan Requirements

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

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

    Site Plan Scale: 1" = 50'.

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.

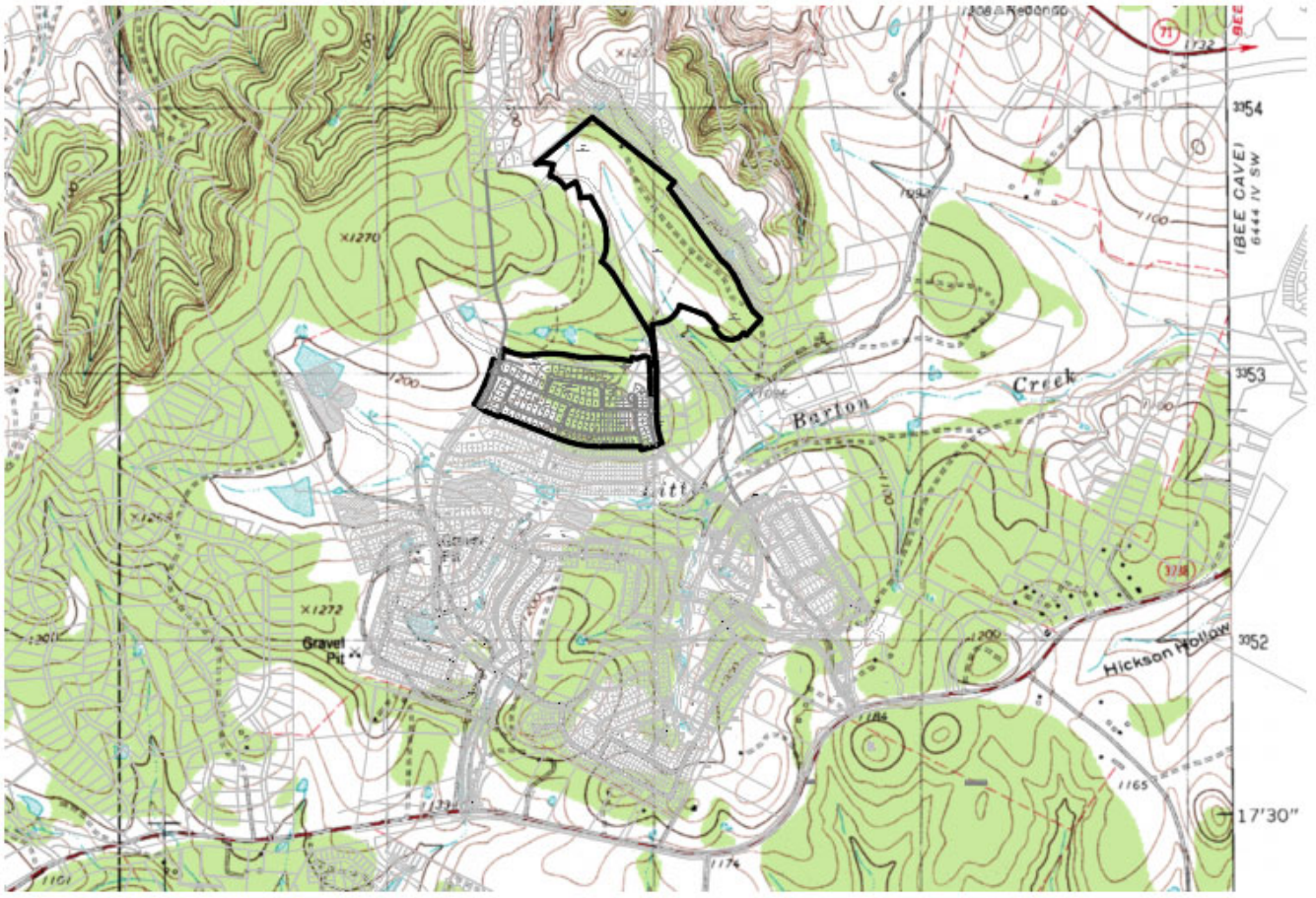
62. ☒ Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.

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.

ATTACHMENT A

ATTACHMENT B
USGS Quadrangle Map
Shingle Hills, Tex
SE/4 Spicewood
1”=2500’



ROAD CLASSIFICATION

Primary highway, hard surface

Secondary highway, hard surface

Light-duty road, hard or improved surface

Unimproved road

Interstate Route U. S. Route State Route

SHINGLE HILLS, TEX.
SE/4 SPICEWOOD 15' QUADRANGLE
30098-C1-TF-024

1986

DMA 6344 I SE-SERIES V882

ATTACHMENT C

PROJECT NARRATIVE

The Provence Phase 2 Section 3 tract is proposed to be subdivided into 126 single family residential lots and 4 open spaces, drainage, and easement lots. This site is located in western Travis County just west of Bee Caves, Texas. It is north of the Crumley Ranch Road and Hamilton Pool Rd intersection. The proposed development is located in the Contributing Zone of the Edwards Aquifer. The proposed tract is a part of the overall Provence community and adjacent to Phase 1 Section 7 & 8 and Phase 2 Section 1.

Development for this section will be consistent with previous sections in Phase 1. Improvements to the site will include paved roads and sidewalks, underground water and wastewater utilities, drainage infrastructure, and varying site grading. Water quality treatment will be done via the proposed extended detention pond, batch detention and as well as through a combination of engineering and natural VFS. The ponds are sized according to the TCEQ RG-348 OEM technical guidance. TSS removal of at least 80% of the increased loading for the development and existing structures will be achieved in the proposed BMP layout. A summary table of loading calculations is provided in the Overall Water Quality Plan, breaking down TSS removal for the new development. See the construction documents for the pond location and detailed calculations.

Water and wastewater service to this tract will be provided by tying into existing West Travis County Public Utility Agency (WTCPUA) and Travis County MUD No. 22 infrastructure within the Provence Development. All proposed improvements will be in accordance with the standards and specifications established by the TCEQ, Travis County and the City of Austin, as applicable.

Temporary and permanent measures will be included in the development of the tract in order to minimize the risk of pollutants leaving the site, both during the construction period and on a permanent basis. Temporary measures will include installation of a stabilized construction entrance, silt fence, and inlet protection. Permanent measures will utilize full restoration of areas disturbed during construction, as well as the extended detention ponds. The proposed BMP is designed in accordance with TCEQ guidelines in order to remove a minimum of 80% of the increase of TSS loadings. Because no road within the tract will be capable of conveying 25,000 vehicles per day, Hazardous Material Traps (HMT, per Section 4.1 of RG-348 Appendix A Optional Enhanced Measures) will not be required.

ATTACHMENT D

FACTORS AFFECTING SURFACE WATER QUALITY

This subdivision will consist of lots that average approximately 9000 square feet in size. Asphalt streets with concrete curbs and gutters and standard residential sidewalks fronting homes will make up the final appearance of the site plan. Standard utility construction will be a part of the construction improvements, with all utilities slated for underground installation, including dry utilities. All construction activities are potential sources of sediment being added to stormwater runoff. All construction will be protected using standard accepted methods including silt fence, stabilized construction entrance, and revegetation of disturbed areas. In addition to the construction of the subdivision, standard residential construction activities are anticipated to follow the completion of subdivision improvements.

Potential sources affecting surface water quality other than sediment include:

- Small fueling activities
- Minor equipment maintenance
- Sanitary facilities
- Solvents, paints, adhesives, etc.
- Paving materials, concrete, mortar

ATTACHMENT E

VOLUME AND CHARACTER OF STORMWATER

The character of the stormwater will be consistent with that associated with single family development and the activity necessary for land development. During the construction process and prior to the re-vegetation of the disturbed areas, it is reasonable to expect an increase in the amount of TSS within the site boundary. The increase of TSS is designed to be contained during the construction process as shown on the ESC plan by utilizing stabilized construction entrances, silt fence, and inlet protection. Re-vegetation of all areas disturbed during construction will assist in limiting the increase of TSS. Reduction of TSS after development will be accomplished through the use of an extended detention pond designed in accordance with TCEQ guidelines.

ATTACHMENT F

SUITABILITY LETTER FROM AUTHORIZED AGENT

This requirement is not applicable to this project. No onsite sewage disposal is proposed with this development. Wastewater generated from this development, will be treated at the Travis County MUD No. 22 Wastewater Treatment plant.

ATTACHMENT G

ALTERNATIVE SECONDARY CONTAINMENT METHODS

This requirement is not applicable to this project. No AST's are associated with this project.

ATTACHMENT H

AST CONTAINMENT STRUCTURE DRAWINGS

This requirement is not applicable to this project. No AST's are associated with this project.

ATTACHMENT I

20% OR LESS IMPERVIOUS COVER WAIVER

No waiver due to impervious cover limits is requested for this project. The post development impervious cover is greater than 20%. Treatment methods for TSS removal are a part of the proposed site improvements.

ATTACHMENT J

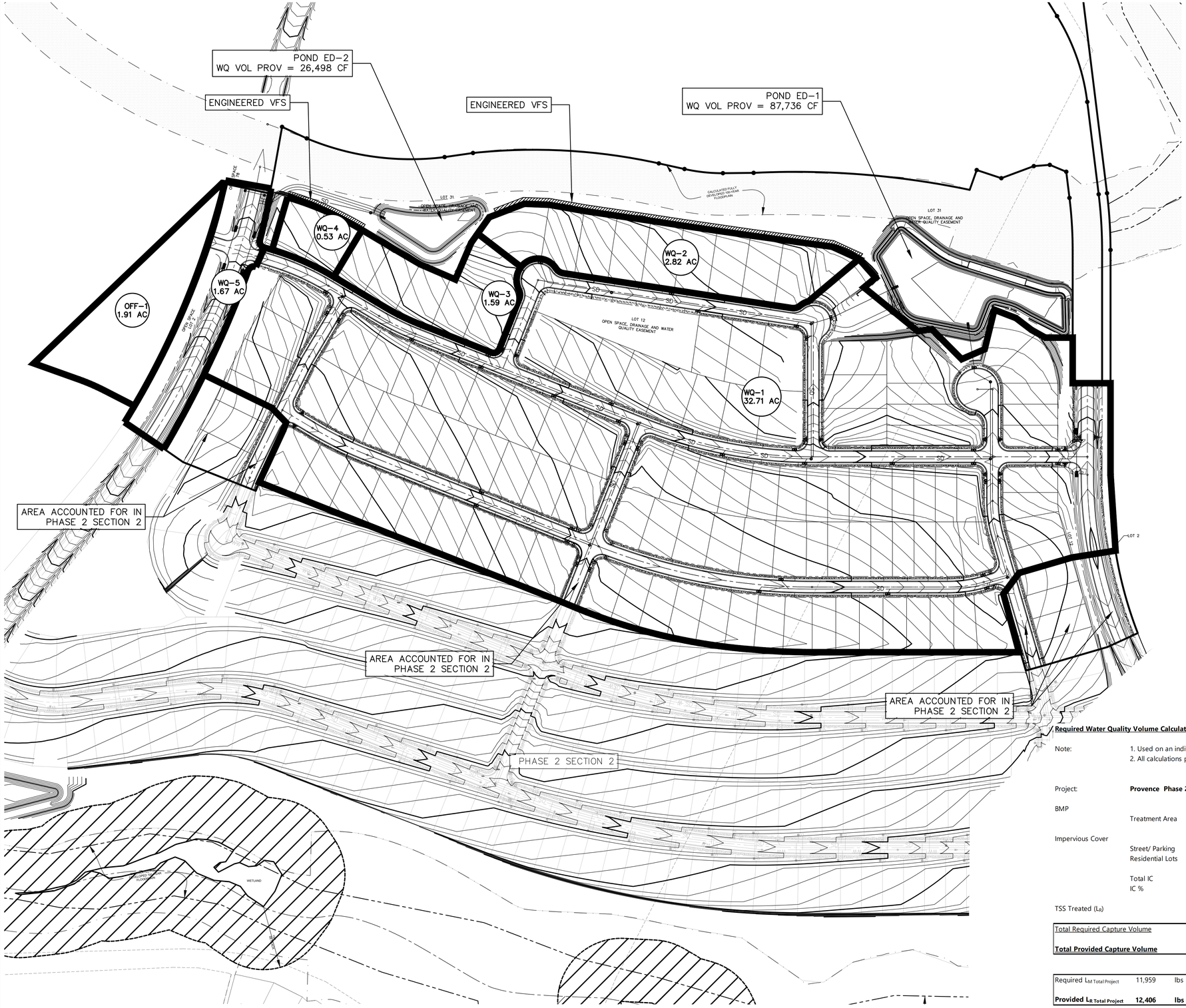
BMP'S FOR UPGRADIENT STORMWATER

All of the stormwater originating upstream of this site will be routed around the site via existing and proposed channels, storm drains and/or berms to proposed facilities. Any upstream stormwater that runs through the site will be routed to the proposed BMP and has been accounted for in the TSS calculations and sizing of the BMPs.

ATTACHMENT K

BMP'S FOR ON-SITE STORMWATER

All stormwater originating within this subdivision has been considered in the design of temporary and permanent BMP for this project. Temporary BMP's include stabilized construction entrance, silt fence, and inlet protection. Permanent BMPs include revegetation of disturbed areas, and an extended/batch detention pond with rock rip-rap. Due to the efficiency of the existing and proposed BMPs, more than 80% of the increase in the TSS loadings is treated, in compliance with TCEQ standards. No groundwater or surface water is known to exist. Rock rip-rap will be used at pond overflow locations to reduce velocity and also help return runoff to sheet flow conditions. Water quality calculations, including TSS loading calculations and the achieved treatment for each BMP, are included after this attachment for reference.



0 140 280 FEET

NOTES:

1. IMPERVIOUS COVER ASSUMPTIONS ARE IN COMPLIANCE WITH TCEQ RG-348 APPENDIX A, OEM TABLE 4-1 "IMPERVIOUS COVER ASSUMPTIONS FOR RESIDENTIAL TRACTS".
2. LOTS 5, 6, 7, & 8 IN BLK 'K' ARE ACCOUNTED FOR IN THE PHASE 2 SECTION 2 CZP.
3. LOTS 34, 35, & 36 IN BLK 'G' ARE ACCOUNTED FOR IN PHASE 2 SECTION 2 CZP.

VEGETATIVE FILTER STRIP DETAIL

BMP TREATMENT AREA	
WATER QUALITY BOUNDARY	TCEQ RG-348 (2017)
VFS	TCEQ RG-348 (2017)

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note: 1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 3**

BMP		WQ-1	WQ-2	WQ-3	WQ-4	WQ-5	Total	
	Treatment Area	32.54	2.82	1.59	0.53	1.67	39.15	Acres
Impervious Cover								
	Street/ Parking	4.95	0.00	0.00	0.00	0.49	5.44	Acres
	Residential Lots	6.69	0.72	0.48	0.16	0.00	8.05	Acres
	Total IC	11.64	0.72	0.48	0.16	0.49	13.49	Acres
	IC %	36%	26%	30%	30%	29%	34%	
TSS Treated (L_R)		10,700	711	415	157	422	12406	lbs
Total Required Capture Volume		86,796	N/A	8,916	N/A	9,378		cf
Total Provided Capture Volume		**87,736**	**N/A**	**26,498**	**N/A**	**26,498**		**cf**

Required $L_{M\ Total\ Project}$	11,959	lbs
Provided $L_{R\ Total\ Project}$	**12,406**	**lbs**

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE
92601
9/10/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL WATER QUALITY INTERIM PLAN

NO.	DATE	REVISIONS/CORRECTIONS	CHECKED BY: XX	DESIGNED BY: XX	DRAWN BY: XX	BY

Sheet --
of 55

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_wq_01.dwg 9/10/2025 3:29 PM

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Provence Phase 2 Section 3
Date Prepared: 7/7/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.7(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Travis	
Total project area included in plan * =	39.32	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	13.49	acres
Total post-development impervious cover fraction * =	0.34	
P =	32	inches
$L_{M\ TOTAL\ PROJECT}$ =	11959	lbs.

9/3/2025

Moody Engineering. Inc.
TBPE Firm No. F-18320

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 5

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-1**	
Total drainage basin/outfall area =	**32.71**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**11.64**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.36**	
$L_{M\ THIS\ BASIN}$ =	**10314**	lbs.

3. Indicate the proposed BMP Code for this basin.

	Batch Detention	
Proposed BMP =		
Removal efficiency =	**91**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**32.71**	acres
A_I =	**11.64**	acres
A_P =	**21.07**	acres
L_R =	**12055**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**10700**	lbs.
F =	**0.89**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**1.73**	inches
Post Development Runoff Coefficient =	**0.35**	
On-site Water Quality Volume =	**72384**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**14477**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**86860**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-2**	
Total drainage basin/outfall area =	**2.82**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.72**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.26**	
$L_{M\ THIS\ BASIN}$ =	**641**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Vegetated Filter Strips**	
Removal efficiency =	**85**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**2.82**	acres
A_I =	**0.72**	acres
A_P =	**2.10**	acres
L_R =	**711**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**711**	lbs.
F =	**1.00**	

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-3**	
Total drainage basin/outfall area =	**1.59**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.48**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.30**	
$L_{M\ THIS\ BASIN}$ =	**427**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Extended Detention**	
Removal efficiency =	**75**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**1.59**	acres
A_I =	**0.48**	acres
A_P =	**1.11**	acres
L_R =	**415**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**415**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.31**	
On-site Water Quality Volume =	**7104**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**1.12**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**325**	cubic feet
Storage for Sediment =	**1486**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**8916**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-4**	
Total drainage basin/outfall area =	**0.53**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.16**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.30**	
$L_{M\ THIS\ BASIN}$ =	**142**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Vegetated Filter Strips**	
Removal efficiency =	**85**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**0.53**	acres
A_I =	**0.16**	acres
A_P =	**0.37**	acres
L_R =	**157**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**157**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.31**	
On-site Water Quality Volume =	**2368**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**474**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**2842**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-5**	
Total drainage basin/outfall area =	**1.67**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.49**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.29**	
$L_{M\ THIS\ BASIN}$ =	**434**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Extended Detention**	
Removal efficiency =	**75**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**1.67**	acres
A_I =	**0.49**	acres
A_P =	**1.18**	acres
L_R =	**422**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**422**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.30**	
On-site Water Quality Volume =	**7260**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**1.91**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**555**	cubic feet
Storage for Sediment =	**1563**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**9378**	cubic feet

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**OFF-1**	
Total drainage basin/outfall area =	**1.91**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.00**	
$L_{M\ THIS\ BASIN}$ =	**0**	lbs.

Project	Provence - Phase 2 Section 3: Impervious Cover Interim								
Drainage Area	ID	Subarea No.	WQ-1	WQ-2	WQ-3	WQ-4	WQ-5	OFF-1	Total
	Area	Acres	32.71	2.82	1.59	0.53	1.67	1.91	39.32

DETERMINE IMPERVIOUS COVER AREA (roads, parking lots, sidewalks, rooftops)

Total Street IC	IC1	ac	4.95	0.00	0.00	0.00	0.49	0.00	5.44

Residential Lots	Impervious Cover from Table 4-1 in OEM RG-348 Appendix A								
	>3 ac	#							0.00
	2a area	ac	0.00	0.00	0.00	0.00	0.00	0.00	
	1-3 ac	#							0.00
	2b area	ac	0.00	0.00	0.00	0.00	0.00	0.00	
	15,000 sf-1ac	#							0.00
	2c area	ac	0.00	0.00	0.00	0.00	0.00	0.00	
	10,000-15,000 sf	#	37.5	9	6	2			66.00
	2d Area	ac	3.01	0.72	0.48	0.16	0.00	0.00	
	<10,000 sf	#	64						64.00
	2e Area	ac	3.67	0.00	0.00	0.00	0.00	0.00	
Total Res Lot IC	IC 2	ac	6.69	0.72	0.48	0.16	0.00	0.00	8.05
Parking Lot IC	IC 3	ac	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Comm Bldg IC	IC 4	ac	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	Subarea No.	WQ-1	WQ-2	WQ-3	WQ-4	WQ-5	OFF-1	
Total Impervious Area	ac	11.64	0.72	0.48	0.16	0.49	0.00	13.49

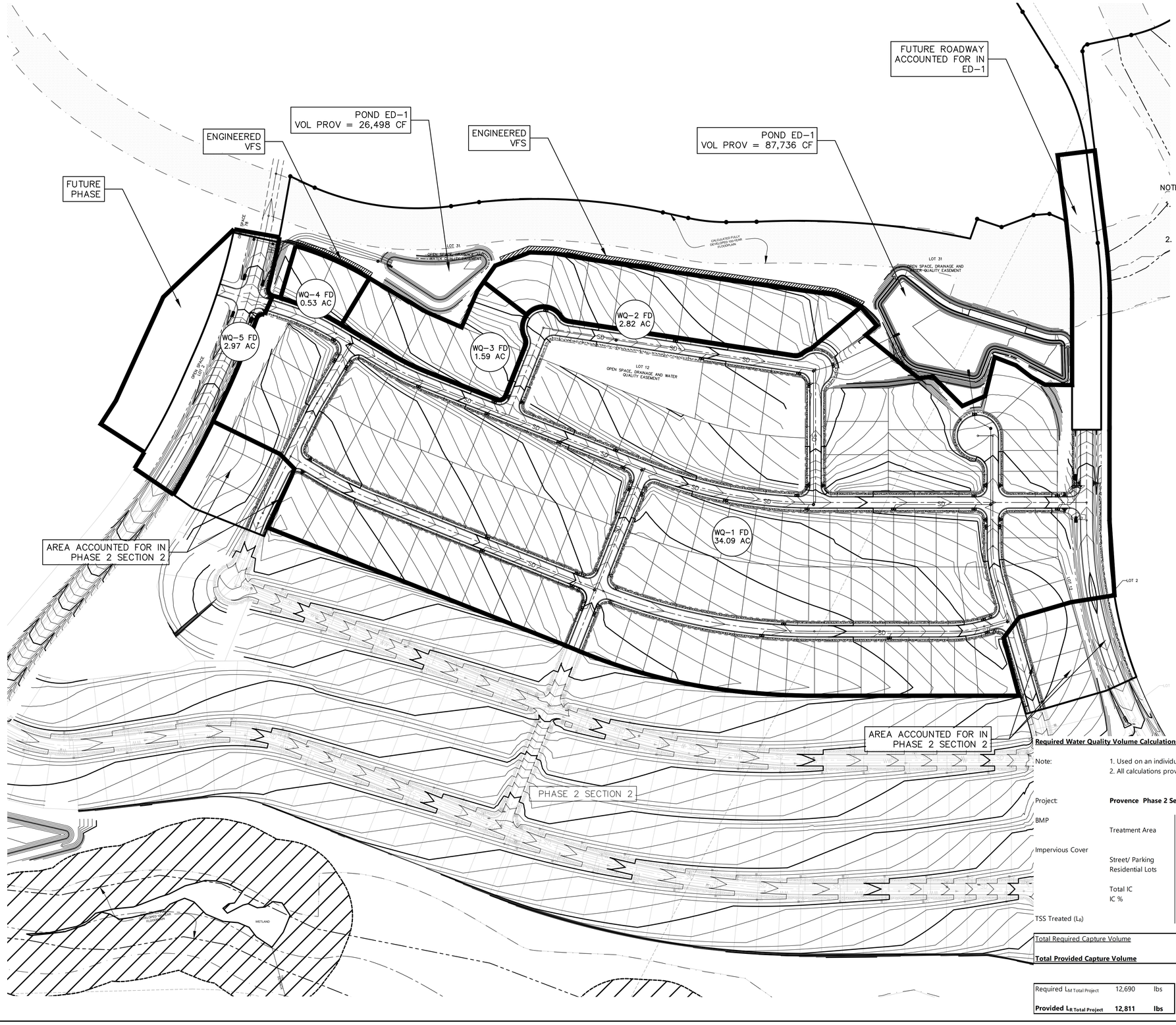
Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note: 1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 3**

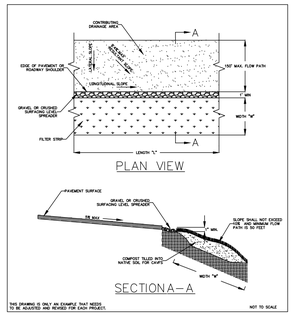
BMP		WQ-1	WQ-2	WQ-3	WQ-4	WQ-5	Total	
	Treatment Area	32.71	2.82	1.59	0.53	1.67	39.32	Acres
Impervious Cover								
	Street/ Parking	4.95	0.00	0.00	0.00	0.49	5.44	Acres
	Residential Lots	6.69	0.72	0.48	0.16	0.00	8.05	Acres
	Total IC	11.64	0.72	0.48	0.16	0.49	13.49	Acres
	IC %	36%	26%	30%	30%	29%	34%	
TSS Treated (L_R)		10,700	711	415	157	422	12406	lbs
Total Required Capture Volume		86,860	N/A	8,916	N/A	9,378		cf
Total Provided Capture Volume		**92,772**	**N/A**	**26,498**	**N/A**	**26,498**		**cf**

Required $L_{M\ Total\ Project}$	11,959	lbs
Provided $L_{R\ Total\ Project}$	**12,406**	**lbs**



NOTES:

1. IMPERVIOUS COVER ASSUMPTIONS ARE IN COMPLIANCE WITH TCEQ RG-348 APPENDIX A, OEM TABLE 4-1 "IMPERVIOUS COVER ASSUMPTIONS FOR RESIDENTIAL TRACTS".
2. FD DEVELOPED TSS CALCULATIONS ARE BASED ON FUTURE DEVELOPMENT THAT WILL BE TREATED AND HAS BEEN ACCOUNTED FOR IN THIS WQ PLAN



Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note:
1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 3 FD - Including Future Phase**

BMP		WQ-1	WQ-2	WQ-3	WQ-4	WQ-5 FD	Total	
	Treatment Area	34.09	2.82	1.59	0.53	2.97	42.00	Acres
Impervious Cover								
	Street/ Parking	4.95	0.00	0.00	0.00	0.83	5.78	Acres
	Residential Lots	6.69	0.72	0.48	0.16	0.00	8.05	Acres
	Total IC	12.12	0.72	0.48	0.16	0.83	14.32	Acres
	IC %	36%	26%	30%	30%	28%	34%	
TSS Treated (L_R)		11,105	711	415	157	422	12811	lbs
Total Required Capture Volume		85,749	N/A	8,916	N/A	9,845		cf
Total Provided Capture Volume		**87,736**	**N/A**	**26,498**	**N/A**	**26,498**		**cf**

Required $L_{M\ Total\ Project}$	12,690	lbs
Provided $L_{R\ Total\ Project}$	**12,811**	**lbs**

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE
92601
9/10/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL WATER QUALITY PLAN

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 27 of 55

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_wq_01.dwg 9/10/2025 3:29 PM

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

Project Name: Provence Phase 2 Section 3
Date Prepared: 7/7/2025

Additional information is provided for cells with a red triangle in the upper right corner. Place the cursor over the cell.
Text shown in blue indicate location of instructions in the Technical Guidance Manual - RG-348.
Characters shown in red are data entry fields.
Characters shown in black (Bold) are calculated fields. Changes to these fields will remove the equations used in the spreadsheet.

1. The Required Load Reduction for the total project: Calculations from RG-348 Pages 3-27 to 3-30

Page 3-29 Equation 3.3: $L_M = 27.7(A_N \times P)$

where:

$L_{M\ TOTAL\ PROJECT}$ = Required TSS removal resulting from the proposed development = 80% of increased load
A_N = Net increase in impervious area for the project
P = Average annual precipitation, inches

Site Data: Determine Required Load Removal Based on the Entire Project

County =	Travis	
Total project area included in plan * =	42.00	acres
Predevelopment impervious area within the limits of the plan * =	0.00	acres
Total post-development impervious area within the limits of the plan* =	14.32	acres
Total post-development impervious cover fraction * =	0.34	
P =	32	inches

$L_{M\ TOTAL\ PROJECT}$ = **12690** lbs.

* The values entered in these fields should be for the total project area.

Number of drainage basins / outfalls areas leaving the plan area = 5

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-1 FD**	
Total drainage basin/outfall area =	**34.09**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**12.12**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.36**	
$L_{M\ THIS\ BASIN}$ =	**10740**	lbs.

3. Indicate the proposed BMP Code for this basin.

	Batch Detention	
Proposed BMP =		
Removal efficiency =	**91**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**34.09**	acres
A_I =	**12.12**	acres
A_P =	**21.97**	acres
L_R =	**12553**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**11105**	lbs.
F =	**0.88**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**1.64**	inches
Post Development Runoff Coefficient =	**0.35**	
On-site Water Quality Volume =	**71458**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**14292**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**85749**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-2 FD**	
Total drainage basin/outfall area =	**2.82**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.72**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.26**	
$L_{M\ THIS\ BASIN}$ =	**641**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Vegetated Filter Strips**	
Removal efficiency =	**85**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**2.82**	acres
A_I =	**0.72**	acres
A_P =	**2.10**	acres
L_R =	**711**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**711**	lbs.
F =	**1.00**	

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-3 FD**	
Total drainage basin/outfall area =	**1.59**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.48**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.30**	
$L_{M\ THIS\ BASIN}$ =	**427**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Extended Detention**	
Removal efficiency =	**75**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**1.59**	acres
A_I =	**0.48**	acres
A_P =	**1.11**	acres
L_R =	**415**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**415**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.31**	
On-site Water Quality Volume =	**7104**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**1.12**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0.00**	
Off-site Runoff Coefficient =	**0.02**	
Off-site Water Quality Volume =	**325**	cubic feet
Storage for Sediment =	**1486**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**8916**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-4 FD**	
Total drainage basin/outfall area =	**0.53**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.16**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.30**	
$L_{M\ THIS\ BASIN}$ =	**142**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Vegetated Filter Strips**	
Removal efficiency =	**85**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**0.53**	acres
A_I =	**0.16**	acres
A_P =	**0.37**	acres
L_R =	**157**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**157**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.31**	
On-site Water Quality Volume =	**2368**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**474**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**2842**	cubic feet

The following sections are used to calculate the required water quality volume(s) for the selected BMP.
The values for BMP Types not selected in cell C45 will show NA.

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. =	**WQ-5 FD**	
Total drainage basin/outfall area =	**2.97**	acres
Predevelopment impervious area within drainage basin/outfall area =	**0.00**	acres
Post-development impervious area within drainage basin/outfall area =	**0.49**	acres
Post-development impervious fraction within drainage basin/outfall area =	**0.16**	
$L_{M\ THIS\ BASIN}$ =	**426**	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP =	**Extended Detention**	
Removal efficiency =	**75**	percent

4. Calculate Maximum TSS Load Removed (L_R) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_R = (BMP efficiency) x P x (A_I x 34.6 + A_P x 0.54)

where:

A_C = Total On-Site drainage area in the BMP catchment area
A_I = Impervious area proposed in the BMP catchment area
A_P = Pervious area remaining in the BMP catchment area
L_R = TSS Load removed from this catchment area by the proposed BMP

A_C =	**2.97**	acres
A_I =	**0.83**	acres
A_P =	**2.14**	acres
L_R =	**721**	lbs

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired $L_{M\ THIS\ BASIN}$ =	**721**	lbs.
F =	**1.00**	

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348 Pages 3-34 to 3-36

Rainfall Depth =	**4.00**	inches
Post Development Runoff Coefficient =	**0.19**	
On-site Water Quality Volume =	**8204**	cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

Off-site area draining to BMP =	**0.00**	acres
Off-site Impervious cover draining to BMP =	**0.00**	acres
Impervious fraction of off-site area =	**0**	
Off-site Runoff Coefficient =	**0.00**	
Off-site Water Quality Volume =	**0**	cubic feet
Storage for Sediment =	**1641**	
Total Capture Volume (required water quality volume(s) x 1.20) =	**9845**	cubic feet

Project	Provence - Phase 2 Section 3: Impervious Cover Interim							
Drainage Area	ID	Subarea No.	WQ-1 FD	WQ-2 FD	WQ-3 FD	WQ-4 FD	WQ-5 FD	Total
	Area	Acres	34.09	2.82	1.59	0.53	2.97	42.00

DETERMINE IMPERVIOUS COVER AREA (roads, parking lots, sidewalks, rooftops)

Total Street IC	IC1	ac	5.43	0.00	0.00	0.00	0.49	5.92
Residential Lots	Impervious Cover from Table 4-1 in OEM RG-348 Appendix A							
	>3 ac	#						0.00
	2a area	ac	0.00	0.00	0.00	0.00	0.00	
	1-3 ac	#						0.00
	2b area	ac	0.00	0.00	0.00	0.00	0.00	
	15,000 sf-1ac	#						0.00
	2c area	ac	0.00	0.00	0.00	0.00	0.00	
	10,000-15,000 sf	#	37.5	9	6	2		66.00
	2d Area	ac	3.01	0.72	0.48	0.16	0.00	
	<10,000 sf	#	64				6	70.00
	2e Area	ac	3.67	0.00	0.00	0.00	0.34	
Total Res Lot IC	IC 2	ac	6.69	0.72	0.48	0.16	0.34	8.40
Parking Lot IC	IC 3	ac	0.00	0.00	0.00	0.00	0.00	0.00
Comm Bldg IC	IC 4	ac	0.00	0.00	0.00	0.00	0.00	0.00
		Subarea No.	WQ-1 FD	WQ-2 FD	WQ-3 FD	WQ-4 FD	WQ-5 FD	
Total Impervious Area		ac	12.12	0.72	0.48	0.16	0.83	14.32

Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note: 1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 3 FD - Including Future Phase**

BMP		WQ-1 FD	WQ-2 FD	WQ-3 FD	WQ-4 FD	WQ-5 FD	Total	
	Treatment Area	34.09	2.82	1.59	0.53	2.97	42.00	Acres
Impervious Cover								
	Street/ Parking	4.95	0.00	0.00	0.00	0.83	5.78	Acres
	Residential Lots	6.69	0.72	0.48	0.16	0.00	8.05	Acres
	Total IC	12.12	0.72	0.48	0.16	0.83	14.32	Acres
	IC %	36%	26%	30%	30%	28%	34%	
TSS Treated (L_R)		11,105	711	415	157	422	12811	lbs
Total Required Capture Volume		85,749	N/A	8,916	N/A	9,845	cf	
Total Provided Capture Volume		**87,736**	**N/A**	**26,498**	**N/A**	**26,498**	**cf**	

Required $L_{M\ Total\ Project}$	12,690	lbs
Provided $L_{R\ Total\ Project}$	**12,811**	**lbs**

ATTACHMENT L

BMP'S FOR SURFACE STREAMS

Temporary and permanent BMPs have been designed to prevent pollutants from entering surface streams, although no surface streams exist on this site. Temporary BMP's include stabilized construction entrances, silt fence, and inlet protection. Permanent BMPs include re-vegetation of disturbed areas, extended/batch detention ponds and rock rip-rap. Due to the efficiency of the BMP being used, more than 80% of the increase in the TSS loadings are treated, in compliance with TCEQ standards. No groundwater is known to exist.

Rock rip-rap will be used at pond overflow locations to reduce velocity and also help return runoff to sheet flow conditions. The existing ponds has been oversized there for TSS removal for the proposed improvement have been accounted for in the overall design.

ATTACHMENT M

CONSTRUCTION PLANS

A copy of the construction drawings prepared under the supervision of a Registered Professional Engineer, including seal and signature, are included as a part of this Contributing Zone Plan. All calculations, details, notes and related documentation necessary for the complete review of the construction drawings are included.

SHEET INDEX

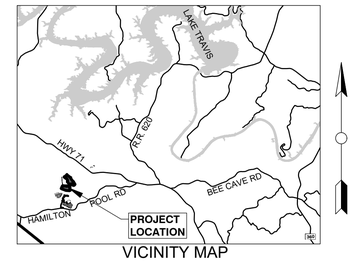
SHEET NO.	SHEET TITLE
1	COVER SHEET
2	SECTION 3 PLAT SHEET 1 OF 3
3	SECTION 3 PLAT SHEET 2 OF 3
4	SECTION 3 PLAT SHEET 3 OF 3
5	GENERAL NOTES SHEET 1 OF 3
6	GENERAL NOTES SHEET 2 OF 3
7	GENERAL NOTES SHEET 3 OF 3
8	OVERALL SITE DRAINAGE AREA MAP
9	OVERALL SITE DRAINAGE CALCULATIONS
10	EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 1 OF 2
11	EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 2 OF 2
12	OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 1OF 2
13	OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 2 OF 2
14	EROSION CONTROL NOTES & DETAILS
15	LAVONDE DRIVE STA 1+00 TO STA 9+75
16	LAVONDE DRIVE STA 20+00 TO STA 28+00
17	LISERON DRIVE STA 7+00 TO STA 15+00
18	LISERON DRIVE STA 15+00 TO STA
19	LISERON DRIVE STA 1+00 TO STA 7+00
20	BRIOCHE CIRCLE STA 7+00 TO END
21	BRIOCHE CIRCLE STA 1+00 TO STA 7+00
22	RAMIER DRIVE
23	RAMIER CUL-DE-SAC
24	BOCAGE DRIVE STA 6+50 TO STA 13+00
25	BOCAGE DRIVE STA 13+00 TO END
26	BOCAGE DRIVE STA 1+00 TO STA 6+50
27	OVERALL WATER QUALITY PLAN
28	WATER QUALITY BMP ED-1 SHEET 1 OF 2
29	WATER QUALITY BMP ED-1 SHEET 2 OF 2
30	WATER QUALITY BMP ED-2 SHEET 1 OF 2
31	WATER QUALITY BMP ED-2 SHEET 2 OF 2
32	WATER QUALITY BMP NOTES & DETAILS
33	SD "A" STA 1+00 TO STA 9+00
34	SD "A" STA 9+00 TO STA 15+00
35	SD "A" STA 15+00 TO END & SD "D"
36	SD "B"
37	SD "C"
38	SD "E"
39	SD "F" STA 1+00 TO STA 7+00
40	SD "F" STA 7+00 TO STA 13+00
41	SD "F" STA 13+00 TO END & SD "I"
42	SD "G" & "H"
43	CULVERT "A" & "B"
44	OVERALL UTILITY LAYOUT
45	WATER LINE "A"
46	WATER LINE "B'
47	WATER LINE "C" STA 1+00 TO STA 10+00
48	WATER LINE "C" STA 10+00 TO STA 19+50
49	WATER LINE "C" STA 19+50 TO END & "D" STA 1+00 TO STA 5+00
50	WATER LINE "D" STA 5+00 TO 14+00
51	WATER LINE "D" STA 14+00 TO END
52	WATER LINE "E"
53	WATER LINE "F"
54	WATER LINE "G" STA 1+00 TO STA 10+50
55	WATER LINE "G" STA 10+50 TO END
56	WWTR LINE "A" STA 1+00 TO STA 8+50
57	WWTR LINE "A" STA 8+50 TO STA 17+50
58	WWTR LINE "A" STA 17+50 TO END
59	WWTR LINE "B"
60	WWTR LINE "C"
61	WWTR LINE "D" STA 1+00 TO STA 9+50
62	WWTR LINE "D" STA 9+50 TO END & "E"
63	WWTR LINE "F" & "G"
64	SIGNAGE PLAN SHEET 1 OF 2
65	SIGNAGE PLAN SHEET 2 OF 2 & DETAILS
66	TXDOT DETAILS CONCRETE HEADWALLS (FW-0) SHEET 1
67	TXDOT DETAILS BOX CULVERTS (SCP-MD) SHEET 2
68	TXDOT DETAILS SINGLE BOX CULVERTS (SCP-5) SHEET 3
69	TXDOT DETAILS SINGLE BOX CULVERTS (SCP-6) SHEET 4
70	GENERAL DETAILS SHEET 1
71	GENERAL DETAILS SHEET 2
72	GENERAL DETAILS SHEET 3
73	GENERAL DETAILS SHEET 4

PROVENCE

PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.

TRAVIS COUNTY, TX



VICINITY MAP

LEGAL DESCRIPTION

##.## ACRES, PROVENCE PHASE 2, SECTION 3, DOC. NO._____ O.P.R.T.C., RECORDATION DATE OF _____

SURVEY

BENCHMARK:

WATERSHED

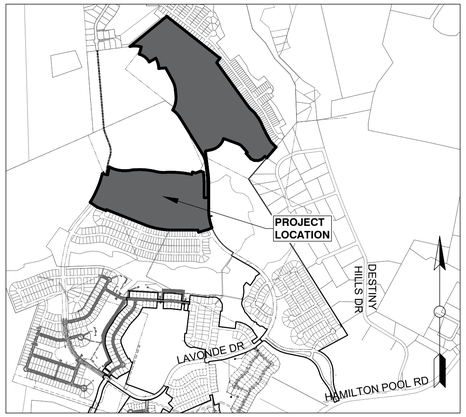
WATERSHED: LITTLE BARTON CREEK TCEQ SEGMENT ID# 1430B

EDWARDS AQUIFER

THIS PROJECT LIES WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE AS DEFINED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY.

FLOODPLAIN NOTE

THIS PROJECT DOES NOT LIE WITHIN THE 100-YEAR FLOODPLAIN, AS DEPICTED ON FEMA FIRM PANEL NO. 48453C0395J, DATED JANUARY 22, 2020.



SITE LOCATION MAP - N.T.S.

MAPSCO: **PAGE 548T, 548W, 548X**

CITY GRID: **WU25**

ADDRESS: **17100 BLOCK HAMILTON POOL RD. AUSTIN, TEXAS 78738**

WATER PRESSURE ZONE: **WTCPUA 1340 HG (1420 REDUCED ZONE) WTCPUA GRID MAP-K04/L04 (HWY 71 WATER SYSTEM)**

SUBMITTED BY:

JOSHUA F. HENKE, P.E. 9/11/2025 DATE

STATE OF TEXAS — JOSHUA F. HENKE — 92601 — LICENSED PROFESSIONAL ENGINEER

THE ENGINEER WHO PREPARED THESE PLANS IS RESPONSIBLE FOR THEIR ADEQUACY. IN APPROVING THESE PLANS, TRAVIS COUNTY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

REVIEWED BY:

TRAVIS COUNTY TRANSPORTATION AND NATURAL RESOURCES DATE

TRAVIS COUNTY DEVELOPMENT PERMIT NUMBER

TRAVIS COUNTY ESD 6 DATE

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY DATE

TRAVIS COUNTY MUD #22 DATE

PROJECT CONTACTS

OWNER:	MASONWOOD HP, LTD. 4301 WESTBANK DRIVE BLDG. A STE. 110 AUSTIN TX. 78746	ENGINEER	MOODY ENGINEERING, INC. 9225 BEE CAVES ROAD BLDG. A STE. 200 AUSTIN, TEXAS 78735 (512) 502-8333	SURVEYOR:	LANDESIGN SERVICES, INC. 1220 MCNEIL RD, SUITE 201 ROUND ROCK, TX 78681 (512) 238-7901

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY NOTES:

1. WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY IS THE WATER PROVIDER.
2. 60 5/8" METER(S) ARE FOR DOMESTIC PURPOSES ONLY.
3. WTCPUA DOES NOT GUARANTEE FIRE FLOW.
4. A WTCPUA REPRESENTATIVE MUST BE PRESENT AT TIME OF CONNECTION TO EXISTING SYSTEM.
5. ALL WATER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF AUSTIN WATER CONSTRUCTION SPECIFICATIONS AND WITH MATERIALS FROM THE APPROVED CITY OF AUSTIN STANDARD PRODUCT LIST.
6. TRAVIS COUNTY MUD #22 IS THE WASTEWATER PROVIDER.
7. LANDSCAPE IRRIGATION IS NOT PROPOSED.

TESD#6 NOTE:

UPON COMPLETION OF THE INSTALLATION OF ROADWAYS AND HYDRANT SYSTEMS SCHEDULE AN INSPECTION WITH THE FIRE PREVENTION OFFICE TO VERIFY COMPLIANCE WITH PLAN DETAILS. ITEMS THAT WILL BE VERIFIED ARE AS FOLLOWS:

A. BLUE HYDRANT MARKERS;
B. PAINTING OF HYDRANT CAPS ACCORDING TO PROPER FLOW CHARACTERISTICS;
C. HYDRANT PLACEMENT AND SPACING;
D. FIRE LANE MARKINGS OR SIGNAGE, IF APPLICABLE.

NOTES:

1. PRIOR TO SCHEDULING THE PRE-CONSTRUCTION MEETING ENSURE THAT ALL REQUIRED NOTICES AND PERMITS ARE POSTED AND THE CERTIFIED INSPECTOR FOR YOUR SITE HAS UPLOADED A SWP3 INSPECTION REPORT TO YOUR ACCOUNT THAT CONFIRMS THAT THE FIRST PHASE OF TEMPORARY ESC HAVE BEEN INSTALLED PER PLANS AND SPECIFICATIONS.

   FAILURE TO FOLLOW THE PRE-CONSTRUCTION MEETING REQUIREMENTS MAY RESULT IN WORK STOPPAGE AND ADDITIONAL PERMIT FEES.

2. SPECIAL PRE-CON NOTES:
   1. PROVIDE 48 HR. MINIMUM NOTICE TO SCHEDULE THE PRE-CON MEETING.
   2. PROVIDE A 1/2 SIZE SET OF PLANS FOR THE INSPECTOR AT THE PRE-CON.
   3. PROVIDE AN ANTICIPATED CONSTRUCTION SCHEDULE AT THE PRE-CON.
   4. BRING YOUR SWP3 FOR COMPLETENESS CHECK AT THE PRE-CON.
3. ALL DEVELOPMENT SHALL BE IN ACCORDANCE WITH THE PLANS APPROVED BY TRAVIS COUNTY.
4. SCHEDULE YOUR PROJECTS PRE-CONSTRUCTION MEETING THROUGH THE MYPERMITNOW.ORG ACCOUNT AFTER THE INITIAL 3RD PARTY SWP3 INSPECTION REPORT HAS BEEN UPLOADED AND ALL PERMITS AND NOTICES HAVE BEEN POSTED, THEN FOLLOW UP WITH EMAILS TO THE ENVIRONMENTAL INSPECTOR AT ENV-INSPECTION@TRAVISCOUNTYTX.GOV AND THE ENGINEERING INSPECTOR, JOHNNY ANGLIN, AT JOHNNY.ANGLIN@TRAVISCOUNTYTX.GOV
5. PROVIDE NOTE THAT STATES: THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND THE SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE-OUT PROCESS.
6. PROVIDE A NOTE THAT STATES: ALL STRUCTURAL FIELD CHANGES REQUIRE A PLAN REVISION APPROVAL IN WRITING BEFORE COMMENCEMENT OF THE WORK.

TOTAL AREA OF DISTURBANCE: 39.15 AC.

TOTAL AREA OF NEW IMPERVIOUS COVER: 5.44 AC. (STREETS)
8.05 AC. (FUTURE HOMES/DRIVEWAYS)

TOTAL AREA OF SITE (ENTIRE AREA WITHIN L.O.C.): ##.## AC.

REVISION/CORRECTION

NO.	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO	TOTAL # SHEET IN PLAN SET	NET CHANGE IMP. COVER (SQ.FT.)	TOTAL SITE IMP. COVER (SQ.FT.)/%	APPROVAL DATE

MOODY ENGINEERING INC

TBPE FIRM REG. NO. F-18320

9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
PHONE: (512) 502-8333 or (800) 821-9112

Texas 811 — Know what's below. Call before you dig.

CAUTION!

IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL EXISTING UTILITIES VERTICALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION AND NOTIFY THE ENGINEER IMMEDIATELY IF ANY DISCREPANCIES. CALL 811 OR 800-344-8377

P:\Active Projects\2016-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_cvr_01.dwg 9/11/2025 3:41 PM

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SECTION 3 PLAT SHEET 1 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_plot_01.dwg 9/11/2025 3:40 PM

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SECTION 3 PLAT SHEET 2 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 3 of 73

RECORD DRAWINGS

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_plot_01.dwg 9/11/2025 3:52 PM

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SECTION 3 PLAT SHEET 3 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_plot_01.dwg 9/11/2025 3:53 PM

EXHIBIT 482.301C TRAVIS COUNTY STANDARD CONSTRUCTION NOTES FOR SUBDIVISION DEVELOPMENT STREETS, DRAINAGE, WATER AND WASTEWATER

1. EACH DRIVEWAY MUST BE CONSTRUCTED IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.302(G), AND EACH DRAINAGE STRUCTURE OR SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF AUSTIN DRAINAGE CRITERIA MANUAL, UNLESS OTHER DESIGN CRITERIA ARE APPROVED BY TRAVIS COUNTY.

2. BEFORE BEGINNING ANY CONSTRUCTION, THE OWNER MUST OBTAIN A TRAVIS COUNTY DEVELOPMENT PERMIT AND POST THE DEVELOPMENT PERMIT, THE TCEQ SITE NOTICE, AND ANY OTHER REQUIRED PERMITS AT THE JOB SITE.

3. CONSTRUCTION MAY NOT TAKE PLACE WITHIN TRAVIS COUNTY RIGHT-OF-WAY UNTIL AFTER THE OWNER HAS SUBMITTED A TRAFFIC CONTROL PLAN TO TRAVIS COUNTY AND OBTAINED WRITTEN APPROVAL OF THE TRAFFIC CONTROL PLAN FROM TRAVIS COUNTY.

4. THE CONTRACTOR AND PRIMARY OPERATOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION AND THE SWP3 IN THESE APPROVED PLANS. THE CONTRACTOR AND PRIMARY OPERATOR SHALL REQUEST TRAVIS COUNTY INSPECTION AT SPECIFIC MILESTONES IN THE SEQUENCE OF THE CONSTRUCTION OF THE SITE DEVELOPMENT CORRESPONDING TO THE PRIORITY INSPECTIONS SPECIFIED IN CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS. DEVELOPMENT OUTSIDE THE LIMITS OF CONSTRUCTION SPECIFIED IN THE APPROVED PERMIT AND CONSTRUCTION PLANS IS PROHIBITED.

5. BEFORE BEGINNING ANY CONSTRUCTION, ALL STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENTS SHALL BE MET, AND THE FIRST PHASE OF THE TEMPORARY EROSION CONTROL (ESC) PLAN INSTALLED WITH A SWP3 INSPECTION REPORT UPLOADED TO MYPERMITNOW.ORG. ALL SWP3 AND ESC PLAN MEASURES AND PRIMARY OPERATOR SWP3 INSPECTIONS MUST BE PERFORMED BY THE PRIMARY OPERATOR IN ACCORDANCE WITH THE APPROVED PLANS AND SWP3 AND ESC PLAN NOTES THROUGHOUT THE CONSTRUCTION PROCESS.

6. BEFORE STARTING CONSTRUCTION, THE OWNER OR CONTRACTOR OR THEIR DESIGNATED REPRESENTATIVES SHALL SUBMIT A REQUEST VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY TO REQUEST AND SCHEDULE A MANDATORY PRECONSTRUCTION CONFERENCE AND ESC INSPECTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF OR TNR STORM WATER MANAGEMENT PROGRAM STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383.

7. THE CONTRACTOR SHALL KEEP TRAVIS COUNTY TNR ASSIGNED INSPECTION STAFF CURRENT ON THE STATUS OF SITE DEVELOPMENT AND UTILITY CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY TRAVIS COUNTY AND REQUEST PRIORITY INSPECTIONS THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY IN ACCORDANCE WITH THE SPECIFIC MILESTONES IN THE CONSTRUCTION SEQUENCING NOTES IN THESE APPROVED PLANS.

8. CONTOUR DATA SOURCE: TOPOGRAPHIC DESIGN SURVEY BY LANDESIGN SERVICES INC, OCTOBER 2019

9. FILL MATERIAL MUST BE MANAGED AND DISPOSED OF IN ACCORDANCE WITH ALL REQUIREMENTS SPECIFIED IN THE APPROVED PLANS, SWP3, AND THE TRAVIS COUNTY CODE. THE CONTRACTOR SHALL STOCKPILE FILL AND CONSTRUCTION MATERIALS ONLY IN THE AREAS DESIGNATED ON THE APPROVED PLANS AND NOT WITHIN THE 100-YEAR FLOOD PLAIN, WATERWAY SETBACK, CRITICAL ENVIRONMENTAL FEATURE SETBACK, OR OUTSIDE THE LIMITS OF CONSTRUCTION. DISPOSAL OF SOLID WASTE MATERIALS, AS DEFINED BY STATE LAW (E.G., LITTER, TIRES, DECOMPOSABLE WASTES, ETC.) IS PROHIBITED IN PERMANENT FILL SITES.

10. BEFORE DISPOSING ANY EXCESS FILL MATERIAL OFF-SITE, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR DOCUMENTATION THAT DEMONSTRATES THAT ALL REQUIRED PERMITS FOR THE PROPOSED DISPOSAL SITE LOCATION, INCLUDING TRAVIS COUNTY, TCEQ NOTICE, AND OTHER APPLICABLE DEVELOPMENT PERMITS, HAVE BEEN OBTAINED. THE OWNER OR PRIMARY OPERATOR MUST REVISE THE SWP3 AND ESC PLAN IF HANDLING OR PLACEMENT OF EXCESS FILL ON THE CONSTRUCTION SITE IS REVISED FROM THE EXISTING SWP3. IF THE FILL DISPOSAL LOCATION IS OUTSIDE TRAVIS COUNTY OR DOES NOT REQUIRE A DEVELOPMENT PERMIT, THE CONTRACTOR OR PRIMARY OPERATOR MUST PROVIDE THE COUNTY INSPECTOR THE SITE ADDRESS, CONTACT INFORMATION FOR THE PROPERTY OWNER OF THE FILL

11. THE DESIGN ENGINEER IS RESPONSIBLE FOR THE ADEQUACY OF THE CONSTRUCTION PLANS. IN REVIEWING THE CONSTRUCTION PLANS, TRAVIS COUNTY WILL RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.

12. IN THE EVENT OF ANY CONFLICTS BETWEEN THE CONTENT IN THE SWP3 SITE NOTEBOOK AND THE CONTENT IN THE CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY, THE CONSTRUCTION PLANS SHALL TAKE PRECEDENCE.

13. A MINIMUM OF TWO SURVEY BENCHMARKS SHALL BE SET, INCLUDING DESCRIPTION, LOCATION, AND ELEVATION; THE BENCHMARKS SHOULD BE TIED TO A TRAVIS COUNTY CONTROL BENCHMARK WHEN POSSIBLE.

14. ANY EXISTING PAVEMENT, CURBS, SIDEWALKS, OR DRAINAGE STRUCTURES WITHIN COUNTY RIGHT-OF-WAY WHICH ARE DAMAGED, REMOVED, OR SILTED, WILL BE REPAIRED BY THE CONTRACTOR AT OWNER OR CONTRACTOR'S EXPENSE BEFORE APPROVAL AND ACCEPTANCE OF THE CONSTRUCTION BY TRAVIS COUNTY.

15. CALL THE TEXAS EXCAVATION SAFETY SYSTEM AT 8-1-1 AT LEAST 2 BUSINESS DAYS BEFORE BEGINNING EXCAVATION ACTIVITIES.

16. ALL STORM SEWER PIPES SHALL BE CLASS III RCP, UNLESS OTHERWISE NOTED.

17. CONTRACTOR IS REQUIRED TO OBTAIN A UTILITY INSTALLATION PERMIT IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.901(A)(3) BEFORE ANY CONSTRUCTION OF UTILITIES WITHIN ANY TRAVIS COUNTY RIGHT-OF-WAY.

18. THIS PROJECT IS LOCATED ON FLOOD INSURANCE RATE MAP 48453C0039SH.

19. TEMPORARY STABILIZATION MUST BE PERFORMED IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.

20. PERMANENT SITE STABILIZATION/RE-VEGETATION MUST BE PERFORMED IMMEDIATELY IN ALL SITE AREAS WHICH ARE AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED IN THE APPROVED PLANS FOR PHASED RE-VEGETATION, IN ACCORDANCE WITH THE STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES.

21. ALL TREES WITHIN THE RIGHT-OF-WAY AND DRAINAGE EASEMENTS SHALL BE SAVED OR REMOVED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION PLANS. TRAVIS COUNTY TREE PRESERVATION STANDARDS IN TRAVIS COUNTY CODE SECTION 482.973, INCLUDING INSTALLATION AND MAINTENANCE OF ALL SPECIFIED TREE PROTECTION MEASURES, MUST BE FOLLOWED DURING CONSTRUCTION.

22. AN ENGINEER'S CONCURRENCE LETTER IN ACCORDANCE WITH TRAVIS COUNTY CODE SECTION 482.953 MUST BE SUBMITTED VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE. THE ENGINEER'S CONCURRENCE LETTER MUST BE SUBMITTED BEFORE THE CONTRACTOR OR PRIMARY OPERATOR REQUESTS A FINAL INSPECTION BY TRAVIS COUNTY.

23. SITE IMPROVEMENTS MUST BE CONSTRUCTED IN CONFORMANCE WITH THE ENGINEER'S CONSTRUCTION PLANS APPROVED BY TRAVIS COUNTY. NON-CONFORMANCE WITH THE APPROVED PLANS WILL DELAY FINAL INSPECTION APPROVAL BY THE COUNTY UNTIL PLAN CONFORMANCE IS ACHIEVED OR ANY REQUIRED PLAN REVISIONS ARE APPROVED.

24. FINAL SITE STABILIZATION. ALL AREAS DISTURBED BY THE CONSTRUCTION MUST BE PERMANENTLY REVEGETATED AND ALL TEMPORARY SEDIMENT CONTROLS AND ACCUMULATED SEDIMENTATION MUST BE REMOVED BEFORE THE COUNTY WILL ISSUE A CERTIFICATE OF COMPLIANCE FOR FINAL SITE STABILIZATION AS PART OF FINAL INSPECTION AND PROJECT COMPLETION. A DEVELOPERS CONTRACT, AS DESCRIBED IN THE SWP3 AND ESC NOTES SHEET MAY BE EXECUTED WITH TRAVIS COUNTY FOR CONDITIONAL ACCEPTANCE OF A PROJECT FOR WHICH HAS ESC FISCAL SECURITY POSTED AND FOR WHICH ALL ITEMS ARE COMPLETE

25. ALL SUBDIVISION LOTS AND AREAS OUTSIDE THE RIGHT-OF-WAY WHICH ARE DISTURBED DURING THE CONSTRUCTION PROCESS MUST BE INCLUDED IN THE FINAL STABILIZATION/REVEGETATION PLAN OF THE SUBDIVISION FOR FINAL INSPECTION APPROVAL, EXCEPT FOR SUBDIVISION LOTS THAT ARE SUBJECT TO SEPARATE TRAVIS COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), AND ESC PLAN(S).

26. SOIL DATA SOURCES: GEOTECHNICAL ENGINEERING REPORT, THE PROVENCE-PHASE 1 SECTION 4.

27. THE OWNER, UTILITY CONTRACTOR, OR A DESIGNATED REPRESENTATIVE SHALL SUBMIT A NOTICE OF CONSTRUCTION VIA THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION. IF FURTHER ASSISTANCE IS NEEDED, THE TNR PLANNING AND ENGINEERING DIVISION STAFF CAN BE CONTACTED BY TELEPHONE AT 512-854-9383

28. THE WORK WILL NOT BE ACCEPTED AND THE ONE-YEAR WARRANTY PERFORMANCE PERIOD WILL NOT BEGIN UNTIL AFTER THE CONTRACTOR HAS OBTAINED TNR APPROVAL OF THE CONSTRUCTION.

29. THE CONTRACTOR SHALL INSTALL ALL TRAFFIC MARKINGS, BARRICADES, AND SIGNAGE IN ACCORDANCE WITH THE LATEST EDITION OF TXDOT'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PRIOR TO TNR APPROVAL OF THE ROADWAY CONSTRUCTION.

EXHIBIT 482.301E SEQUENCE OF CONSTRUCTION AND PRIORITY INSPECTIONS – SUBDIVISION DEVELOPMENT

THE OWNER AND PRIMARY OPERATOR MUST FOLLOW THIS BASIC SEQUENCE OF CONSTRUCTION FOREACH SUBDIVISION DEVELOPMENT. WITHIN THE FOLLOWING SEQUENCE OF CONSTRUCTION ARE LISTED PRIORITY INSPECTIONS THAT THE OWNER AND PRIMARY OPERATOR MUST REQUEST FROM A REPRESENTATIVE OF TRAVIS COUNTY'S STORM WATER MANAGEMENT PROGRAM INSPECTION TEAM. EACH PRIORITY INSPECTION MUST BE REQUESTED ON-LINE THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. THE PRIORITY INSPECTIONS IN THIS EXHIBIT ARE CONSISTENT WITH THE PRIORITY INSPECTIONS FOUND IN THE CUSTOMER PORTAL FOR THE PROJECT. FOR ASSURANCE PURPOSES, A SECOND REQUEST TO TRAVIS COUNTY IS STRONGLY ENCOURAGED BY ADDITIONALLY SENDING AN E-MAIL TO THE FOLLOWING ADDRESS: ENV-INSPECT@TRAVISCOUNTYTX.GOV. THE SEQUENCE FOR ITEMS 1-4 AND ITEMS 17-22 MUST NOT BE ALTERED, BUT THE SEQUENCE FOR ITEMS 5-16 MAY BE MODIFIED WITH THE WRITTEN APPROVAL OF THE COUNTY.

1. ESC INSTALLATION. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS (ESC) AND TREE PROTECTION MEASURES IN ACCORDANCE WITH THE APPROVED ESC PLAN SHEETS AND THE SWP3.
   A. HAVE A QUALIFIED INSPECTOR (AS SPECIFIED IN SECTION 482.934(C)(3) OF THE TRAVIS COUNTY CODE) INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROLS AND PREPARE A CERTIFIED SWP3 INSPECTION REPORT REGARDING WHETHER THE TEMPORARY EROSION AND SEDIMENT CONTROLS WERE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS;
   B. UPLOAD THE QUALIFIED INSPECTOR'S CERTIFIED SWP3 INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY; AND
   C. REQUEST A MANDATORY PRE-CONSTRUCTION MEETING WITH TRAVIS COUNTY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION.
2. PRE-CONSTRUCTION MEETING AND ESC INSPECTION. HOLD A MANDATORY PRE-CONSTRUCTION MEETING THAT ADDRESSES THE ITEMS IN EXHIBIT 482.950 AND THE ESC PRE-CONSTRUCTION INSPECTION BY THE COUNTY AND OBTAIN COUNTY'S APPROVAL TO START CONSTRUCTION. (PRIORITY INSPECTION)
3. INSPECT FOR COMPLIANCE WITH SWP3 AND ESC PLAN. MAINTAIN AND INSPECT THE SWP3 CONTROLS AND PREPARE AND UPLOAD A WEEKLY CERTIFIED SWP3 INSPECTION REPORT THAT INCLUDES THE CONTENTS LISTED IN EXHIBIT 482.951 TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY.
4. CONSTRUCT SEDIMENT BASIN(S). CONSTRUCT ANY STORM WATER POND(S) FIRST, WHENEVER APPLICABLE, TO BE FUNCTIONAL AS CONSTRUCTION SEDIMENT BASIN(S) BEFORE GRADING AND EXCAVATING THE ENTIRE SITE, AS FOLLOWS:
   A. CLEAR, GRUB, AND EXCAVATE ONLY THE SITE AREAS AND CUT AND FILL QUANTITIES NECESSARY TO CONSTRUCT THE POND(S) IN ACCORDANCE WITH THESE APPROVED PLANS AND THE MINIMUM STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES FOR THE TEMPORARY SEDIMENT BASIN EMBANKMENTS, WALLS, INFLOWS, OUTFALLS, DRAINAGE CONVEYANCE MEASURES, SEDIMENT CONTROLS, AND STABILIZATION.
   B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE TEMPORARY SEDIMENT BASIN(S) BEFORE PROCEEDING FURTHER IN THE SEQUENCE OF CONSTRUCTION. (PRIORITY INSPECTION)
5. CONSTRUCT SUBDIVISION IMPROVEMENTS. BEGIN THE PRIMARY SUBDIVISION CLEARING, EXCAVATION, AND CONSTRUCTION ACTIVITIES AND CONTINUE THE SWP3 AND ESC PLAN IMPLEMENTATION AND MAINTENANCE PER THE APPROVED PLANS.
6. ROUGH GRADE STREETS.
7. INSTALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.
8. BEGIN INSTALLATION OF STORM SEWER LINES.
9. REGRADE STREETS TO SUBGRADE.
10. PERFORM TEMPORARY STABILIZATION IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER.
11. PERFORM PERMANENT SITE STABILIZATION/RE-VEGETATION IMMEDIATELY IN ALL SITE AREAS AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED FOR PHASED RE-VEGETATION.
12. COMPLETE UNDERGROUND UTILITY CROSSINGS ON ALL STREETS.
13. INSTALL CURB AND GUTTER.
14. LAY FINAL BASE COURSE MATERIAL.
15. INSTALL ALL TRAFFIC CONTROL SIGNING, STRIPING, AND PAVEMENT MARKERS.
16. COMPLETE ALL UNDERGROUND INSTALLATIONS WITHIN THE RIGHT-OF-WAY.
17. COMPLETE PERMANENT WATER QUALITY CONTROLS. BEGIN COMPLETION OF PERMANENT WATER QUALITY CONTROL(S) AND INSTALL THE UNDERDRAIN PER APPROVED PLANS, WHEN APPLICABLE.
   A. REMOVE CONSTRUCTION SEDIMENT, RE-ESTABLISH THE BASIN SUBGRADE, AND INSTALL UNDERDRAIN PIPING.
   B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE UNDERDRAIN PIPING INSTALLATION AND ASSOCIATED CONSTRUCTION MATERIALS (AGGREGATE, FILTER MEDIA, ETC.) BEFORE COVERING THE UNDERDRAIN AND PROCEEDING WITH CONSTRUCTION OF THE CONTROL. (PRIORITY INSPECTION)
18. COMPLETE FINAL SITE STABILIZATION INCLUDING STABILIZATION OF ALL DISTURBED SUBDIVISION LOTS STILL UNDER THE SWP3 AND ESC PLAN OF THE PRIMARY OPERATOR FOR THE SUBDIVISION STREET AND DRAINAGE CONSTRUCTION.
19. PROVIDE ENGINEER'S CONCURRENCE LETTER THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND REQUEST A FINAL INSPECTION BY TRAVIS COUNTY.
20. PERFORM A FINAL INSPECTION WITH THE COUNTY AND PREPARE A PUNCH LIST WITH REMAINING ITEMS THAT NEED TO BE COMPLETED FOR PROJECT ACCEPTANCE. (PRIORITY INSPECTION)
21. OBTAIN A CERTIFICATE OF COMPLIANCE FOR FINAL STABILIZATION FROM THE COUNTY WHEN ALL FINAL INSPECTION PUNCH LIST ITEMS ARE FINISHED AND FINAL SITE STABILIZATION AND REMOVAL OF TEMPORARY SEDIMENT CONTROLS IS COMPLETE. (PRIORITY INSPECTION)
   A. PROVIDE SEPARATE PERMIT DOCUMENTATION FOR ANY SUBDIVISION LOTS NOT STABILIZED AS PART OF THE FINAL SUBDIVISION STABILIZATION PLAN, IF NECESSARY - INCLUDING SEPARATE COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), ESC PLAN(S).
   B. PROVIDE A DEVELOPERS CONTRACT, IF NECESSARY, IF ALL ITEMS ARE COMPLETE EXCEPT RE-VEGETATION COVERAGE AND CONDITIONAL ACCEPTANCE IS REQUESTED. REQUEST RE-INSPECTION WHEN RE-VEGETATION COVERAGE IS COMPLETE.
22. RECEIVE A CONDITIONAL ACCEPTANCE FROM TRAVIS COUNTY TO BEGIN THE CONSTRUCTION WARRANTY PERIOD WHEN ALL PUNCH LIST ITEMS ARE COMPLETE. (PRIORITY INSPECTION).
23. BEFORE PROJECT APPROVAL/ISSUANCE OF THE CERTIFICATE OF COMPLETION (COC) AND FISCAL RELEASE THE FOLLOWING MUST BE COMPLETE;
24. THE OWNER MUST COMPLETE AND SUBMIT A PWQC PERMIT APPLICATION AND PWQC MAINTENANCE PLAN FOR REVIEW AND APPROVAL. BOTH DOCUMENTS MUST BE SUBMITTED AND APPROVED PRIOR TO THE PROJECT FINAL ACCEPTANCE.
25. UPON APPROVAL, THE MAINTENANCE PLAN ALONG WITH THE ORIGINAL NOTARIZED DOCUMENT MUST BE FILED IN THE REAL PROPERTY RECORDS OF TRAVIS COUNTY. PROOF OF FILING MUST BE PROVIDED PRIOR TO THE PROJECT FINAL ACCEPTANCE.
26. THE PWQC MAINTENANCE PERMIT MUST BE SIGNED BY THE SITE OWNER.
27. THE PWQC MAINTENANCE PLAN MUST BE SEALED AND SIGNED BY THE DESIGN ENGINEER.
28. UPON REQUEST A PWQC PERMIT APPLICATION AND/OR A TEMPLATE FOR A PWQC MAINTENANCE PLAN WILL BE PROVIDED OR UPLOADED TO THE MYPERMITNOW.ORG ACCOUNT.

EXHIBIT 482.950 PRE-CONSTRUCTION CONFERENCE PLANNING AND AGENDA FOR SWP3 AND ESC PLAN

BEFORE STARTING CONSTRUCTION, THE OWNER OR THEIR REPRESENTATIVE MUST SUBMIT A REQUEST, USING THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY, TO PARTICIPATE IN A PRE-CONSTRUCTION CONFERENCE WITH THE DESIGNATED COUNTY INSPECTOR. PRIOR TO THE PRE-CONSTRUCTION CONFERENCE REQUEST, THE OWNER OR OWNER'S REPRESENTATIVE SHALL ENSURE THE FIRST PHASE OF THE ESC CONTROLS ARE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS, THE OWNER'S QUALIFIED INSPECTOR HAS INSPECTED THE CONTROLS AND VERIFIED COMPLIANCE WITH THE PLANS, AND AN SWP3 INSPECTION REPORT DOCUMENTING THIS INFORMATION HAS BEEN SENT TO THE COUNTY THROUGH THE METHOD SPECIFIED BY THE DESIGNATED COUNTY INSPECTOR.

AFTER ARRANGING AN AGREED UPON DATE WITH THE COUNTY AND PROVIDING THE INITIAL SWP3 INSPECTION REPORT, THE OWNER OR OWNER'S DESIGNATED REPRESENTATIVE SHALL PROVIDE NOTICE OF THE SWP3 PRE-CONSTRUCTION CONFERENCE AND A COPY OF THE APPROVED PLANS, IF REQUESTED, TO THE FOLLOWING PERSONS OR ENTITIES AT LEAST TWO BUSINESS DAYS BEFORE THE CONFERENCE:

1. DESIGNATED COUNTY INSPECTOR(S)
2. DESIGN ENGINEER FOR THE APPROVED PLANS AND SWP3, OR THEIR REPRESENTATIVE
3. CONTRACTOR(S)/PRIMARY OPERATOR(S)
4. PRIMARY OPERATOR'S QUALIFIED INSPECTOR RESPONSIBLE FOR PREPARING THE SWP3 INSPECTION REPORTS
5. OTHER STAKEHOLDERS, AS APPROPRIATE: MUNICIPALITIES, UTILITIES, ETC.

THE SWP3 PRE-CONSTRUCTION CONFERENCE MAY BE A STANDALONE MEETING OR A PART OF A LARGER PRE-CONSTRUCTION CONFERENCE, BUT MUST INCLUDE AN ON-SITE INSPECTION APPROVAL OF THE FIRST PHASE OF THE PROJECT'S ESC PLAN BY THE COUNTY INSPECTOR BEFORE CONSTRUCTION BEGINS. THE COUNTY INSPECTOR WILL DISCUSS THE FOLLOWING APPLICABLE ITEMS IN THE APPROVED PLANS AND THE SWP3 WITH THE PARTICIPANTS:

1. THE SWP3 SITE NOTEBOOK FOR THE PROJECT, INCLUDING REVIEW OF COMPLETENESS, SIGNATURES, CONSISTENCY WITH THE APPROVED CONSTRUCTION AND ESC PLANS, AND THE REQUIREMENTS FOR MAINTAINING THE SWP3 SITE NOTEBOOK DURING THE CONSTRUCTION PROCESS.
2. THE SEQUENCE OF CONSTRUCTION AND ESC PLAN IMPLEMENTATION; SEDIMENT BASIN CONSTRUCTION SCOPE PRIOR TO FULL SITE GRADING; NON-STRUCTURAL EROSION SOURCE CONTROLS; START DATES AND SCHEDULE OF EVENTS.
3. SEDIMENT CONTROLS; PHASING OF PERIMETER AND INTERIOR SEDIMENT CONTROLS DURING CONSTRUCTION; STRUCTURAL EROSION SOURCE CONTROLS SUCH AS DRAINAGE DIVERSION; ESC MAINTENANCE REQUIREMENTS.
4. ADEQUACY OF THE FIRST ESC PHASE AND FUTURE ESC PHASES TO ADDRESS SPECIFIC SITE CONDITIONS, AND ADJUSTMENT AND REVISION OF THE ESC PLAN AND SWP3 CONTROLS DURING CONSTRUCTION.
5. TEMPORARY AND PERMANENT STABILIZATION AND RE-VEGETATION REQUIREMENTS, INCLUDING SCHEDULE, CRITICAL SITE IMPROVEMENTS AND PRIORITY RE-VEGETATION AREAS.
6. ON AND OFF-SITE TEMPORARY AND PERMANENT SPOIL AND FILL DISPOSAL AREAS, HAUL ROADS, STAGING AREAS, AND STABILIZED CONSTRUCTION ENTRANCES;
7. PERMANENT WATER QUALITY CONTROLS CONSTRUCTION AND COUNTY INSPECTIONS, AND RELATED GRADING AND DRAINAGE CONSTRUCTION.
8. SUPERVISION OF THE SWP3 IMPLEMENTATION BY THE PRIMARY OPERATOR'S DESIGNATED PROJECT MANAGER, INCLUDING ROLES, RESPONSIBILITIES, AND COORDINATION WHEN MORE THAN ONE OPERATOR IS RESPONSIBLE FOR IMPLEMENTATION.
9. INSPECTION AND PREPARATION OF THE WEEKLY SWP3 INSPECTION REPORTS BY THE PRIMARY OPERATOR'S QUALIFIED INSPECTOR; REPORT SUBMITTAL BY THE PRIMARY OPERATOR, AND SWP3 MONITORING INSPECTIONS CONDUCTED BY THE COUNTY INSPECTOR.
10. OBSERVATION AND DOCUMENTATION OF EXISTING SITE CONDITIONS ADJACENT TO THE LIMITS OF CONSTRUCTION BEFORE CONSTRUCTION, INCLUDING WATERWAYS AND POTENTIAL OUTFALL DISCHARGE ROUTES, RIGHTS-OF-WAY AND EASEMENTS, BUFFER ZONES, AND CRITICAL ENVIRONMENTAL FEATURES.
11. SPECIAL SITE CONDITIONS AND PLAN PROVISIONS, SUCH AS PROTECTION OF WATERWAYS, CRITICAL ENVIRONMENTAL FEATURES, TREES TO BE SAVED, AND FUTURE HOMEBUILDING ON SUBDIVISION LOTS.12. RAIN GAGE LOCATION OR RAINFALL INFORMATION SOURCE TO BE USED DURING CONSTRUCTION AND REPORTING.
13. FINAL INSPECTION AND ACCEPTANCE REQUIREMENTS, INCLUDING THE ENGINEER'S CONCURRENCE LETTER, COMPLETION OF REVEGETATION COVERAGE BEFORE THE NOTICE OF TERMINATION IS SUBMITTED BY THE PRIMARY OPERATOR, STABILIZATION OF RESIDENTIAL SUBDIVISION LOTS, REMOVAL OF TEMPORARY SEDIMENT CONTROLS, THE CERTIFICATE OF COMPLIANCE AND RELEASE OF ESC FISCAL SURETY.
14. EXCHANGE OF TELEPHONE NUMBERS AND CONTACT INFORMATION FOR THE PRIMARY PARTICIPANTS.

THE DESIGN ENGINEER SHALL PREPARE AND DISTRIBUTE NOTES, KEY DECISIONS, AND FOLLOW UP FROM THE PRECONSTRUCTION CONFERENCE TO ALL PARTICIPANTS WITHIN THREE BUSINESS DAYS AFTER COMPLETION OF THE CONFERENCE.

EXHIBIT 482.951 SWP3 INSPECTION AREAS AND REPORT CONTENTS

THE OWNER OR PRIMARY OPERATOR OF THE CONSTRUCTION SITE SHALL DESIGNATE A QUALIFIED INSPECTOR POSSESSING THE REQUIRED CERTIFICATION (AS SPECIFIED IN SECTION 482.934(C)(3)) TO PERFORM A WEEKLY SWP3 INSPECTION AND PREPARE A SIGNED SWP3 INSPECTION REPORT OF THE INSPECTION FINDINGS.

THE CONSTRUCTION SITE AREAS AND THE CONTROL MEASURES LISTED HEREIN ARE TO BE USED AS A MINIMUM AS THE UNIFORM CRITERIA BY THE OWNER'S QUALIFIED INSPECTOR, AS WELL AS THE COUNTY INSPECTOR, TO EVALUATE AND DETERMINE A PROJECT'S COMPLIANCE STATUS WITH THE APPROVED SWP3 AND ESC PLAN.

IN ADDITION, ON AN ONGOING BASIS AND FOLLOWING STORM EVENTS, THE PRIMARY OPERATOR'S RESPONSIBLE ON-SITE PERSONNEL SHALL ALSO INSPECT AND ADDRESS THESE ITEMS DURING CONSTRUCTION AS REQUIRED BY THE SWP3, ESC PLAN, AND TRAVIS COUNTY CODE, SECTION 482.951.

AREAS OF INSPECTION. AT THE VERY LEAST, THE FOLLOWING AREAS MUST BE INSPECTED:

1. DISTURBED AREAS AND THE APPROVED LIMITS OF CONSTRUCTION.
2. PERIMETER AND INTERIOR SEDIMENT CONTROLS.
3. AREAS UNDERGOING TEMPORARY STABILIZATION OR PERMANENT VEGETATION ESTABLISHMENT.
4. TEMPORARY AND PERMANENT FILL AND SPOIL STORAGE OR DISPOSAL AREAS.
5. STORAGE AREAS FOR MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO RAINFALL.
6. OUTFALL LOCATIONS AND THE AREAS IMMEDIATELY DOWNSTREAM.
7. STRUCTURAL CONTROLS, INCLUDING SEDIMENT PONDS, SEDIMENT TRAPS, AND DRAINAGE DIVERSIONS.
8. HAUL ROADS AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE, AND ADJACENT ROADWAYS FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.
9. WATERWAY CROSSINGS AND AREAS ADJACENT TO WATERWAYS AND CRITICAL ENVIRONMENTAL FEATURES.
10. CONCRETE WASH OUT AREAS AND ALL AREAS REQUIRING CONTROL MEASURES FOR NON-STORM WATER DISCHARGES, INCLUDING DUST, SOLID WASTE, DE-WATERING, MATERIAL SPILLS, VEHICLE MAINTENANCE AND WASHING, AND WASH WATER DISCHARGES.
11. LOCATIONS OF ALL CONTROL MEASURES THAT REQUIRE MAINTENANCE, INCLUDING ANY CONTROL MEASURE IDENTIFIED IN THE PREVIOUS SWP3 INSPECTION REPORT WHICH REQUIRED MAINTENANCE OR REVISION BY THE OWNER OR PRIMARY OPERATOR.
12. LOCATIONS OF ANY DISCHARGE OF SEDIMENT OR OTHER POLLUTANTS FROM THE SITE AND ANY DISTURBANCE BEYOND THE APPROVED LIMITS OF CONSTRUCTION.
13. LOCATIONS OF CONTROL MEASURES THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION.
14. LOCATIONS WHERE AN ADDITIONAL ESC OR CONTROL MEASURE IS NEEDED.

THE SWP3 INSPECTION REPORT MUST INCLUDE:

A. FINDINGS AS TO WHETHER THE FOLLOWING STRUCTURAL AND NON-STRUCTURAL CONTROLS REQUIRED FOR THE SITE AREAS LISTED ABOVE ARE FUNCTIONING :IN COMPLIANCE WITH THE APPROVED SWP3 AND ESC PLAN:
   1. EROSION SOURCE CONTROLS, INCLUDING THE APPROVED SEQUENCE OF CONSTRUCTION AND GRADING PLAN LIMITS, DRAINAGE DIVERSION MEASURES, TEMPORARY AND PERMANENT FILL DISPOSAL AND STOCKPILE MANAGEMENT MEASURES.
   2. SEDIMENT CONTROLS, INCLUDING PERIMETER AND INTERIOR CONTROLS, SEDIMENT TRAPS AND BASINS, AND THE SEQUENCE OF CONSTRUCTION REQUIREMENTS FOR THE SEDIMENT CONTROLS.
   3. PERMANENT EROSION AND SOIL STABILIZATION CONTROLS, BASED ON THE SEQUENCE OF CONSTRUCTION AND CRITICAL SITE IMPROVEMENTS, AND THE CESSATION OF CONSTRUCTION ACTIVITIES, INCLUDING TEMPORARY STABILIZATION MEASURES FOR AREAS INACTIVE FOR LONGER THAN 14 DAYS, AND PERMANENT STABILIZATION MEASURES FOR AREAS AT FINAL GRADE.
   4. OTHER APPLICABLE CONTROLS AND POLLUTION PREVENTION MEASURES.

B. RAINFALL DOCUMENTATION:
   1. FOR PROJECTS THAT COMPRISE TEN ACRES OR MORE, THE DOCUMENTATION MUST INCLUDE RAINFALL DATES AND AMOUNTS IN ACCORDANCE WITH SECTION 482.934(E); AND
   2. FOR PROJECTS THAT COMPRISE LESS THAN TEN ACRES, THE DOCUMENTATION MUST INCLUDE ACCURATE RAINFALL DATA FROM A LOCATION CLOSEST TO THE SITE.

C. CORRECTIVE ACTIONS REQUIRED FOR ANY NON-COMPLIANT ITEMS AND THE SCHEDULE FOR

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."

2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].

3. PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR THE NSF INTERNATIONAL SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS [§290.44(A)(2)].

4. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY [§290.44(A)(3)].

5. ALL WATER LINE CROSSINGS OF WASTEWATER MAINS SHALL BE PERPENDICULAR [§290.44(E)(4)(B)].

6. WATER TRANSMISSION AND DISTRIBUTION LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE [§290.44(A)(4)].

7. THE MAXIMUM ALLOWABLE LEAD CONTENT OF PIPES, PIPE FITTINGS, PLUMBING FITTINGS, AND FIXTURES IS 0.25 PERCENT [§290.44(B)].

8. THE CONTRACTOR SHALL INSTALL APPROPRIATE AIR RELEASE DEVICES WITH VENT OPENINGS TO THE ATMOSPHERE COVERED WITH 16-MESH OR FINER, CORROSION RESISTANT SCREENING MATERIAL OR AN ACCEPTABLE EQUIVALENT [§290.44(D)(1)].

9. THE CONTRACTOR SHALL NOT PLACE THE PIPE IN WATER OR WHERE IT CAN BE FLOODED WITH WATER OR SEWAGE DURING ITS STORAGE OR INSTALLATION [§290.44(F)(1)].

10. WHEN WATERLINES ARE LAID UNDER ANY FLOWING OR INTERMITTENT STREAM OR SEMI-PERMANENT BODY OF WATER THE WATERLINE SHALL BE INSTALLED IN A SEPARATE WATERTIGHT PIPE ENCASEMENT. VALVES MUST BE PROVIDED ON EACH SIDE OF THE CROSSING WITH FACILITIES TO ALLOW THE UNDERWATER PORTION OF THE SYSTEM TO BE ISOLATED AND TESTED [§290.44(F)(2)].

11. PURSUANT TO 30 TAC §290.44(A)(5), THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY THE MOST CURRENT AWWA FORMULAS FOR PVC PIPE, CAST IRON AND DUCTILE IRON PIPE. INCLUDE THE FORMULAS IN THE NOTES ON THE PLANS.

    - THE HYDROSTATIC LEAKAGE RATE FOR POLYVINYL CHLORIDE (PVC) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-605 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

      $$Q = \frac{LD\sqrt{P}}{148{,}000}$$

      WHERE:
      - Q = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
      - L = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
      - D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
      - P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

    - THE HYDROSTATIC LEAKAGE RATE FOR DUCTILE IRON (DI) PIPE AND APPURTENANCES SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY FORMULAS IN AMERICA WATER WORKS ASSOCIATION (AWWA) C-600 AS REQUIRED IN 30 TAC §290.44(A)(5). PLEASE ENSURE THAT THE FORMULA FOR THIS CALCULATION IS CORRECT AND MOST CURRENT FORMULA IS IN USE;

      $$L = \frac{SD\sqrt{P}}{148{,}000}$$

      WHERE:
      - L = THE QUANTITY OF MAKEUP WATER IN GALLONS PER HOUR,
      - S = THE LENGTH OF THE PIPE SECTION BEING TESTED, IN FEET,
      - D = THE NOMINAL DIAMETER OF THE PIPE IN INCHES, AND
      - P = THE AVERAGE TEST PRESSURE DURING THE HYDROSTATIC TEST IN POUNDS PER SQUARE INCH (PSI).

12. THE CONTRACTOR SHALL MAINTAIN A MINIMUM SEPARATION DISTANCE IN ALL DIRECTIONS OF NINE FEET BETWEEN THE PROPOSED WATERLINE AND WASTEWATER COLLECTION FACILITIES INCLUDING MANHOLES. IF THIS DISTANCE CANNOT BE MAINTAINED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE PROJECT ENGINEER FOR FURTHER DIRECTION. SEPARATION DISTANCES, INSTALLATION METHODS, AND MATERIALS UTILIZED MUST MEET §290.44(E)(1)-(4).

13. THE SEPARATION DISTANCE FROM A POTABLE WATERLINE TO A WASTEWATER MAIN OR LATERAL MANHOLE OR CLEANOUT SHALL BE A MINIMUM OF NINE FEET. WHERE THE NINE-FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, THE POTABLE WATERLINE SHALL BE ENCASED IN A JOINT OF AT LEAST 150 PSI PRESSURE CLASS PIPE AT LEAST 18 FEET LONG AND TWO NOMINAL SIZES LARGER THAN THE NEW CONVEYANCE. THE SPACE AROUND THE CARRIER PIPE SHALL BE SUPPORTED AT FIVE-FOOT INTERVALS WITH SPACERS OR BE FILLED TO THE SPRINGLINE WITH WASHED SAND. THE ENCASEMENT PIPE SHALL BE CENTERED ON THE CROSSING AND BOTH ENDS SEALED WITH CEMENT GROUT OR MANUFACTURED SEALANT [§290.44(E)(5)].

14. FIRE HYDRANTS SHALL NOT BE INSTALLED WITHIN NINE FEET VERTICALLY OR HORIZONTALLY OF ANY WASTEWATER LINE, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE REGARDLESS OF CONSTRUCTION[§290.44(E)(6)].

15. SUCTION MAINS TO PUMPING EQUIPMENT SHALL NOT CROSS WASTEWATER MAINS, WASTEWATER LATERALS, OR WASTEWATER SERVICE LINES. RAW WATER SUPPLY LINES SHALL NOT BE INSTALLED WITHIN FIVE FEET OF ANY TILE OR CONCRETE WASTEWATER MAIN, WASTEWATER LATERAL, OR WASTEWATER SERVICE LINE [§290.44(E)(7)].

16. WATERLINES SHALL NOT BE INSTALLED CLOSER THAN TEN FEET TO SEPTIC TANK DRAIN FIELDS [§290.44(E)(8)].

17. THE CONTRACTOR SHALL DISINFECT THE NEW WATERLINES IN ACCORDANCE WITH AWWA STANDARD C-651-14 OR MOST RECENT, THEN FLUSH AND SAMPLE THE LINES BEFORE BEING PLACED INTO SERVICE. SAMPLES SHALL BE COLLECTED FOR MICROBIOLOGICAL ANALYSIS TO CHECK THE EFFECTIVENESS OF THE DISINFECTION PROCEDURE WHICH SHALL BE REPEATED IF CONTAMINATION PERSISTS. A MINIMUM OF ONE SAMPLE FOR EACH 1,000 FEET OF COMPLETED WATERLINE WILL BE REQUIRED OR AT THE NEXT AVAILABLE SAMPLING POINT BEYOND 1,000 FEET AS DESIGNATED BY THE DESIGN ENGINEER [§290.44(F)(3)].

18. DECHLORINATION OF DISINFECTING WATER SHALL BE IN STRICT ACCORDANCE WITH CURRENT AWWA STANDARD C655-09 OR MOST RECENT.

Texas Commission on Environmental Quality
Contributing Zone Plan
General Construction Notes

1. A written notice of construction must be submitted to the TCEQ regional office at least 48 hours prior to the start of any ground disturbance or construction activities. This notice must include:
    - the name of the approved project;
    - the activity start date; and
    - the contact information of the prime contractor.

2. All contractors conducting regulated activities associated with this project should be provided with complete copies of the approved Contributing Zone Plan (CZP) and the TCEQ letter indicating the specific conditions of its approval. During the course of these regulated activities, the contractor(s) should keep copies of the approved plan and approval letter on- site.

3. No hazardous substance storage tank shall be installed within 150 feet of a water supply source, distribution system, well, or sensitive feature.

4. Prior to beginning any construction activity, all temporary erosion and sedimentation (E&S) control measures must be properly installed and maintained in accordance with the manufacturers specifications. If inspections indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations. These controls must remain in place until the disturbed areas have been permanently stabilized.

5. Any sediment that escapes the construction site must be collected and properly disposed of before the next rain event to ensure it is not washed into surface streams, sensitive features, etc.

6. Sediment must be removed from the sediment traps or sedimentation basins when it occupies 50% of the basin's design capacity.

7. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from being discharged offsite.

8. All excavated material that will be stored on-site must have proper E&S controls.

9. If portions of the site will have a cease in construction activity lasting longer than 14 days, soil stabilization in those areas shall be initiated as soon as possible prior to the 14th day of inactivity. If activity will resume prior to the 21st day, stabilization measures are not required. If drought conditions or inclement weather prevent action by the 14th day, stabilization measures shall be initiated as soon as possible.

10. The following records should be maintained and made available to the TCEQ upon request:
    - the dates when major grading activities occur;
    - the dates when construction activities temporarily or permanently cease on a portion of the site; and
    - the dates when stabilization measures are initiated.

11. The holder of any approved CZP must notify the appropriate regional office in writing and obtain approval from the executive director prior to initiating any of the following:

    A. any physical or operational modification of any best management practices (BMPs) or structure(s), including but not limited to temporary or permanent ponds, dams, berms, silt fences, and diversionary structures;

    B. any change in the nature or character of the regulated activity from that which was originally approved;

    C. any change that would significantly impact the ability to prevent pollution of the Edwards Aquifer; or

    D. any development of land previously identified as undeveloped in the approved contributing zone plan.

Austin Regional Office
12100 Park 35 Circle, Building A
Austin, Texas 78753-1808
Phone (512) 339-2929
Fax (512) 339-3795

San Antonio Regional Office 14250 Judson Road
San Antonio, Texas 78233-4480 Phone (210) 490-3096
Fax (210) 545-4329

TCEQ 217.53(d) SEPARATION DISTANCES

(1) Collection system pipes must be installed in trenches separate from water supply trenches.

(2) Wherever possible, a collection system pipe must be located below a water supply pipe. If a collection system pipe cannot be located below a water supply pipe, the owner must justify in the engineering report why it is not possible to locate the collection system pipe below the public water supply pipe.

(3) Wherever possible, collection system pipes and manholes must be located at least nine feet from all water supply pipes. If a collection system pipe or manhole cannot be located at least nine feet away from a water supply pipe, the owner must justify in the engineering report why it is not possible to provide at least nine feet of separation. Table C.1. in Figure: 30 TAC §217.53(d)(3) provides a reference to paragraphs in this subsection that apply if a collection system pipe or manhole cannot be located at least nine feet away from a water supply pipe.

Table C.1.

Case	Protection Requirement
Parallel pipes within nine feet, where the collection system pipe is above the water supply pipe	Encased in a casing pipe according to paragraph (4) of this subsection
Crossing pipes within nine feet, where the collection system pipe is above the water supply pipe	Encased in a casing pipe according to paragraph (5)(A) of this subsection -or- Constructed using 150 per square inch (psi) pressure class pipe according to paragraph (5)(B) of this subsection
Parallel pipes within nine feet, where the collection system pipe is below the water supply pipe	Constructed using 150 psi pressure class pipe according to paragraph (6)(A) of this subsection -or- Encased in a casing pipe according to paragraph (6)(B) of this subsection
Crossing pipes within nine feet, where the collection system pipe is below the water supply pipe	Constructed using 150 psi pressure class pipe according to paragraph (7)(A) of this subsection -or- Encased in cement-stabilized sand according to paragraph (7)(B) of this subsection -or- Encased in a casing pipe according to paragraph (7)(C) of this subsection
Manhole within nine feet of a water supply pipe	No measurable leakage according to paragraph (8)(A) of this subsection -or- Encased in cement-stabilized sand according to paragraph (8)(B) of this subsection

(4) If a collection system pipe is located above a water supply pipe and runs parallel to the water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must be encased. The casing pipe must be constructed of at least 150 per square inch (psi) pressure class pipe that:
(A) encases the entire length of collection system pipe that is within nine feet of the water supply pipe;
(B) is sealed at both ends with cement grout or a manufactured seal;
(C) is at least two nominal sizes larger than the wastewater collection pipe; and
(D) is supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.

(5) If a collection system pipe crosses above a water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must either be encased in a casing pipe according to subparagraph (A) of this paragraph, or must be constructed using at least 150 psi pressure class pipe according to subparagraph (B) of this paragraph.
(A) A casing pipe for a collection system pipe that crosses above a water supply pipe must be constructed of at least 150 psi pressure class pipe that is:
(i) sealed at both ends with cement grout or a manufactured seal;
(ii) at least two nominal sizes larger than the wastewater collection pipe; and
(iii) supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.
(B) A collection system pipe that crosses above a water supply pipe must be constructed of at least 150 psi pressure class, corrosion-resistant, non-brittle pipe and must use manufacturer-approved adapters. Gasketed joints, compression joints, and other non-bonded joints must be designed to seal at atmospheric pressure.

(6) If a collection system pipe is located below a water supply pipe and runs parallel to the water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must either be constructed using at least 150 psi pressure class pipe according to subparagraph (A) of this paragraph, or must be encased in a casing pipe according to subparagraph (B) of this paragraph.
(A) A collection system pipe that runs parallel to and below a water supply pipe must be constructed of at least 150 psi pressure class, corrosion-resistant, non-brittle pipe that:
(i) is located at least two vertical feet below the water supply pipe;
(ii) is located at least four horizontal feet away from the water supply pipe; and
(iii) includes joints that are designed to seal at atmospheric pressure.
(B) A casing pipe for a collection system pipe that runs parallel below a water supply pipe must be constructed of at least 150 psi pressure class pipe that:
(i) is sealed at both ends with cement grout or a manufactured seal;
(ii) is at least two nominal sizes larger than the wastewater collection pipe; and
(iii) is supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.

(7) If a collection system pipe crosses below a water supply pipe, each portion of the collection system pipe within nine feet of the water supply pipe must either be constructed using at least 150 psi pressure class pipe according to subparagraph (A) of this paragraph, or must be encased in cement-stabilized sand according to subparagraph (B) of this paragraph, or must be encased in a casing pipe according to subparagraph (C) of this paragraph.
(A) A collection system that crosses below a water supply pipe and is constructed of at least 150 psi pressure class, corrosion-resistant, non-brittle pipe must:
(i) have at least six inches of separation between the outsides of the pipes;
(ii) be centered on the crossing;
(iii) be at least 18 feet long; and
(iv) terminate at joints that are designed to seal at atmospheric pressure.
(B) A collection system pipe that crosses below a water supply pipe and is constructed of any material other than at least 150 psi pressure class, corrosion-resistant, non-brittle pipe must:
(i) have at least two feet of separation between the outsides of the pipes; and
(iii) be encased in cement-stabilized sand backfill that meets the requirements of subparagraph (D) of this paragraph.
(C) A casing pipe for a collection system pipe that crosses below a water supply pipe must be constructed of at least 150 psi pressure class pipe that is:
(i) sealed at both ends with cement grout or a manufactured seal;
(ii) at least two nominal sizes larger than the wastewater collection pipe; and
(iii) supported by spacers between the collection system pipe and the encasing pipe at a maximum of five-foot intervals.
(D) Cement-stabilized sand for encasing collection system pipes must:
(i) include at least 160 pounds of cement for every cubic yard of sand;
(ii) be installed beginning one-quarter pipe diameter below the centerline of the collection system pipe;
(iii) be installed ending one full pipe diameter above the top of the collection system pipe, or 12 inches above the top of the collection system pipe, whichever is greater.

(8) If a nine-foot separation distance between a manhole and a water supply pipe cannot be achieved, the manhole must either:
(A) have no measurable leakage during a leakage test conducted according to the requirements in §217.58 of this title (relating to Testing Requirements for Manholes); or
(B) have all portions of the manhole within nine feet of a water supply pipe encased in at least one foot of cement stabilized sand that meets the requirements of paragraph (7)(D)(i) and (ii) of this subsection.

TCEQ NOTES:

1. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE/NATIONAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI.

2. ALL PLASTIC PIPE FOR USE IN PUBLIC WATER SYSTEMS MUST ALSO BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW) AND HAVE AN ASTM DESIGN PRESSURE RATING OF AT LEAST 150 PSI OR A STANDARD DIMENSION RATIO OF 26 OR LESS.

3. NO PIPE WHICH HAS BEEN USED FOR ANY PURPOSE OTHER THAN THE CONVEYANCE OF DRINKING WATER SHALL BE ACCEPTED OR RELOCATED FOR USE IN ANY PUBLIC DRINKING WATER SUPPLY.

4. WATER TRANSMISSION AND DISTRIBUTION LINES MUST BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. HOWEVER, THE TOP OF THE WATER LINE MUST BE LOCATED BELOW THE FROST LINE AND IN NO CASE SHALL THE TOP OF THE WATER LINE BE LESS THAN 24 INCHES BELOW GROUND SURFACE.

5. THE HYDROSTATIC LEAKAGE RATE SHALL NOT EXCEED THE AMOUNT ALLOWED OR RECOMMENDED BY AWWA FORMULAS.

6. ALL WATER LINES SHALL BE HYDROSTATIC LEAK TESTED IN CONFORMANCE WITH AWWA C600-93 FOR DUCTILE IRON PIPE AND AWWA C605-94 FOR PVC PIPE.

7. ALL WATER LINES SHALL BE DISINFECTED IN CONFORMANCE WITH AWWA C651-92.

TCEQ 290.44 (on the plans):

(e) Location of waterlines. The following rules apply to installations of waterlines, wastewater mains or laterals, and other conveyances/appurtenances identified as potential sources of contamination. Furthermore, all ratings specified shall be defined by ASTM or AWWA standards unless stated otherwise. New mains, service lines, or laterals are those that are installed where no main, service line, or lateral previously existed, or where existing mains, service lines, or laterals are replaced with pipes of different size or material.
(1) When new potable water distribution lines are constructed, they shall be installed no closer than nine feet in all directions to wastewater collection facilities. All separation distances shall be measured from the outside surface of each of the respective pieces.
(2) Potable water distribution lines and wastewater mains or laterals that form parallel utility lines shall be installed in separate trenches.
(3) No physical connection shall be made between a drinking water supply and a sewer line. Any appurtenance shall be designed and constructed so as to prevent any possibility of sewage entering the drinking water system.
(4) Where the nine-foot separation distance cannot be achieved, the following criteria shall apply.
(A) New waterline installation - parallel lines.
(i) Where a new potable waterline parallels an existing, non-pressure or pressure rated wastewater main or lateral and the licensed professional engineer licensed in the State of Texas is able to determine that the existing wastewater main or lateral is not leaking, the new potable waterline shall be located at least two feet above the existing wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the existing wastewater main or lateral. Every effort shall be exerted not to disturb the bedding and backfill of the existing wastewater main or lateral.
(ii) Where a new potable waterline parallels an existing pressure-rated wastewater main or lateral and it cannot be determined by the licensed professional engineer if the existing line is leaking, the existing wastewater main or lateral shall be replaced with at least 150 psi pressure-rated pipe. The new potable waterline shall be located at least two feet above the new wastewater line, measured vertically, and at least four feet away, measured horizontally, from the replaced wastewater main or lateral.
(iii) Where a new potable waterline parallels a new wastewater main, the wastewater main or lateral shall be constructed of at least 150 psi pressure-rated pipe. The new potable waterline shall be located at least two feet above the wastewater main or lateral, measured vertically, and at least four feet away, measured horizontally, from the wastewater main or lateral.
(B) New waterline installation - crossing lines.
(i) Where a new potable waterline crosses above a wastewater main or lateral, the segment of the waterline pipe shall be centered over and must be perpendicular to the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. When crossing an existing wastewater main or lateral and it is disturbed or shows signs of leaking, the wastewater main or lateral shall be replaced for at least nine feet in both directions (18 feet total) with at least 150 psi pressure-rated pipe embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.
(I) The potable waterline shall be at least two feet above an existing, non-pressure rated wastewater main or lateral.
(II) The potable waterline shall be at least six inches above an existing, pressure-rated wastewater main or lateral.
(ii) Where a new potable waterline crosses a new, non-pressure rated wastewater main or lateral, the segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater main or lateral such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the centerline of the wastewater main or lateral. The potable waterline shall be at least two feet above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end. The materials and method of installation shall conform to one of the following options:
(I) Within nine feet horizontally of either side of the waterline, the wastewater pipe and joints shall be constructed with pipe material having a minimum pressure rating of at least 150 psi. An absolute minimum vertical separation distance of two feet shall be provided. The wastewater main or lateral shall be located below the waterline.
(II) All sections of wastewater main or lateral within nine feet horizontally of the waterline shall be encased in an 18-foot (or longer) section of pipe. Flexible encasing pipe shall have a minimum pipe stiffness of 115 psi at 5.0% deflection. The encasing pipe shall be centered on the waterline and shall be at least two nominal pipe diameters larger than the wastewater main or lateral. The space around the carrier pipe shall be supported at five-foot (or less) intervals with spacers or be filled to the springline with washed sand. Each end of the casing shall be sealed with watertight non-shrink cement grout or a manufactured watertight seal. An absolute minimum separation distance of six inches between the encasement pipe and the waterline shall be provided. The wastewater line shall be located below the waterline.
(iii) When a new waterline crosses under a wastewater main or lateral, the waterline shall be encased as described for wastewater mains or laterals in clause (ii) of this subparagraph or constructed of ductile iron or steel pipe with mechanical or welded joints as appropriate. An absolute minimum separation distance of one foot between the waterline and the wastewater main or lateral shall be provided. When a new waterline crosses under a wastewater main, the procedures in §217.53(d) of this title (relating to Pipe Design) must be followed.
(iv) Where a new potable waterline crosses a new, pressure rated wastewater main or lateral, one segment of the waterline pipe shall be centered over and shall be perpendicular to the wastewater line such that the joints of the waterline pipe are equidistant and at least nine feet horizontally from the center line of the wastewater main or lateral. The potable waterline shall be at least six inches above the wastewater main or lateral. Whenever possible, the crossing shall be centered between the joints of the wastewater main or lateral. The wastewater pipe shall have a minimum pressure rating of at least 150 psi. The wastewater main or lateral shall be embedded in cement stabilized sand (see clause (v) of this subparagraph) for the total length of one pipe segment plus 12 inches beyond the joint on each end.
(v) Where cement stabilized sand bedding is required, the cement stabilized sand shall have a minimum of 10% cement per cubic yard of cement stabilized sand mixture, based on loose dry weight volume (at least 2.5 bags of cement per cubic yard of mixture). The cement stabilized sand bedding shall be a minimum of six inches above and four inches below the wastewater main or lateral. The use of brown coloring in cement stabilized sand for wastewater main or lateral bedding is recommended for the identification of pressure rated wastewater mains during future construction.
(5) Waterline and wastewater main manhole or lateral manhole or cleanout separation. The separation distance from a potable waterline to a wastewater main manhole or lateral manhole or cleanout shall be a minimum of nine feet. Where the nine-foot separation distance cannot be achieved, the potable waterline shall be encased in a joint of at least 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at five-foot intervals with spacers or be filled to the springline with washed sand. The encasement pipe shall be centered on the crossing and both ends sealed with cement grout or manufactured sealant.
(6) Location of fire hydrants. Fire hydrants shall not be installed within nine feet vertically or horizontally of any wastewater main, wastewater lateral, or wastewater service line regardless of construction.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

GENERAL NOTES SHEET 2 OF 3

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

Sheet 6 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_gns_01.dwg 9/11/2025 3:48 PM

TRAVIS COUNTY MUD NO. 22 NOTES:

1. CALL TRAVIS COUNTY M.U.D. 22 ENGINEER (512–439–4700) AND DISTRICT MANAGER WTCPUA (512–263–0100) AT LEAST 48 HOURS PRIOR TO TYING INTO EXISTING WATER AND WASTEWATER LINES.
2. CAMERA AND MANDREL TESTING IS REQUIRED FOR GRAVITY WASTEWATER LINES, AT CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL CONTACT WTCPUA AT (512–263–0100) FOR TEMPORARY CONSTRUCTION METER AND CONSTRUCTION WATER.

TRAVIS COUNTY EMERGENCY SERVICES DISTRICT NO. 6 SUBDIVISION WATER SYSTEM PLAN NOTES

1. AN ALL–WEATHER DRIVING SURFACE (FIRE APPARATUS ACCESS) MUST BE INSTALLED IN LOCATIONS SHOWN ON THE SITE PLAN, PRIOR TO ANY BUILDING CONSTRUCTION BEYOND THE FOUNDATION.
2. VERTICAL CLEARANCE REQUIRED FOR FIRE APPARATUS IS 13 FEET, SIX INCHES FOR FULL 25 FEET WIDTH OF ACCESS DRIVES AND ROUTES FOR INTERNAL CIRCULATION.
3. THE MAXIMUM ALLOWABLE DRIVEWAY, DRIVE AISLE OR FIRE LANE GRADE IS 15 PERCENT.
4. A CERTIFIED OR WITNESSED PRESSURE TEST IS REQUIRED FOR ALL WATER MODELS, REQUIRED FIRE HYDRANT FLOW TESTS OR SPRINKLER SYSTEM DESIGNS.
5. AN APPROVED WATER SUPPLY FOR FIRE PROTECTION, EITHER TEMPORARY OR PERMANENT, SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIAL ARRIVES ON THE SITE.
6. FIRE HYDRANTS MUST BE INSTALLED WITH THE FOUR AND ONE–HALF INCH STEAMER OPENING AT LEAST 18 INCHES ABOVE FINISHED GRADE. THE FOUR AND ONE–HALF INCH STEAMER OPENING MUST FACE THE STREET WITH A THREE TO SIX FOOT SETBACK (CLEARANCE) FROM THE CURB LINE OR SHOULDER OF THE STREET.
7. NO OBSTRUCTION WITHIN A THREE–FOOT RADIUS OF ANY FIRE HYDRANT, AND THE FOUR AND ONE–HALF INCH STEAMER OPENING MUST BE TOTALLY UNOBSTRUCTED FROM THE STREET.
8. FIRE HYDRANT LOCATIONS SHALL BE IDENTIFIED BY THE INSTALLATION OF BLUE REFLECTIVE MARKERS, PER FIRE DEPARTMENT SPECIFICATIONS.
9. FIRE HYDRANTS SHALL BE PAINTED SILVER.THE BONNET AND CAPS SHALL BE PAINTED THE DESIGNATED COLOR PER THE GALLONS PER MINUTE (GPM) AS FOLLOWS:

CLASS AA	LIGHT BLUE	1500 OR HIGHER GPM
CLASS A	GREEN	1000–1499 GPM
CLASS B	ORANGE	500–999 GPM
CLASS C	REDLESS	THAN 500 GPM
CLASS D	BLACK	OUT OF SERVICE

CONTACT INFORMATION

FACILITIES OWNER: NAME/ADDRESS/PHONE
WEST TRAVIS COUNTY PUA
13215 BEE CAVE PARKWAY
BUILDING 2, SUITE 110
BEE CAVE, TEXAS 78738
512/263–0100
GENERALMANAGER@WTCPUA.ORG

LAND OWNER: NAME/ADDRESS/PHONE
OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: NAME/PHONE

MAINTENANCE:
PERSON OR FIRM RESPONSIBLE FOR EROSION/ SEDIMENTATION CONTROL CONTRACTOR:
NAME/ ADDRESS/ PHONE

MAINTENANCE:
PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION CONTRACTOR:NAME/ ADDRESS/ PHONE

SPOILS MANAGEMENT AND DISPOSAL NOTES

1. TEMPORARY HOLDING SITES AS NECESSARY TO STOCKPILE EXCAVATED SOILS, EMBEDMENT MATERIAL, AND/OR PIPING AND APPURTENANCES MAY BE LOCATED WITHIN THE LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.
2. NO PERMANENT SPOILS DISPOSAL SHALL BE ALLOWED ON–SITE, UNLESS APPROVED BY THE OWNER AND GOVERNING AUTHORITY.
3. ALL SPOILS MATERIALS SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL DISPOSAL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE; AND SHALL NOTIFY THE OWNER AND/OR ENGINEER AT LEAST FORTY–EIGHT (48) HOURS PRIOR TO DISPOSAL OF ANY SPOILS MATERIAL.

EROSION / SEDIMENTATION CONTROL NOTES

1. SEE SHEET 12

STANDARD TREE PROTECTION NOTES

1. SEE SHEET 12

WEST TRAVIS COUNTY PUBLIC UTILITY AGENCY (WTCPUA) NOTES

HOURS OF CONSTRUCTION

1. NO WORK SHALL BE DONE BETWEEN THE HOURS OF 8:00 P.M. AND 6:00 A.M; NOR ON SUNDAYS OR LEGAL HOLIDAYS WITHOUT THE WRITTEN PERMISSION OF THE WTCPUA IN EACH CASE, EXCEPT SUCH WORK AS MAY BE NECESSARY FOR THE PROPER CARE, MAINTENANCE AND PROTECTION OF THE WORK ALREADY DONE OR IN THE CASE OF AN EMERGENCY.

LIMITS OF CONSTRUCTION

1. THE LIMITS OF CONSTRUCTION SHALL BE BOUNDED BY THE RIGHT OF WAY LINE OR PERMANENT / TEMPORARY CASEMENT LIMITS SHOWN ON THE PLANS. LIMITS OF CONSTRUCTION MAY BE FURTHER RESTRICTED BY PLACEMENT OF SILT FENCE, TREE PROTECTION FENCING, OR OTHER APPURTENANCES AS SHOWN ON THE PLANS.
2. LIMITS OF CONSTRUCTION SHALL BE CLEARLY DELINEATED BY THE CONTRACTOR BY INSTALLING SILT FENCE, ORANGE TENSAR FENCING (4 – FOOT ROLL TIED TO 6–FOOT POSTS SET AT 10–FOOT INTERVALS) OR OTHER BARRIERS AS APPROVED BY THE ENGINEER. ALL TEMPORARY BARRIERS SHALL BE REMOVED AT THE END OF THE PROJECT.
3. ANY AREAS OUTSIDE THE LIMITS OF CONSTRUCTION DISTURBED BY THE CONTRACTOR SHALL IMMEDIATELY BE RESTORED TO PRECONSTRUCTION CONDITION.

SANITARY FACILITIES

1. PROVISIONS SHALL BE MADE FOR NECESSARY SANITARY CONVENIENCES FOR THE USE OF LABORERS ON THE WORK. THE FACILITIES MUST BE PROPERLY SECLUDED FROM PUBLIC OBSERVATION AND SHALL BE INSTALLED AND MAINTAINED BY THE CONTRACTOR.

PROTECTION OF BORE PITS

1. INSTALL BARRIER FENCING (TENSAR ORANGE FENCING OR CHAIN LINK FENCING) TO SURROUND THE BORE PITS. BARRIER FENCING SHALL REMAIN IN PLACE AT ALL TIMES WHILE THE BORE PIT IS OPEN. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURITY AND SAFETY AT THE BORE PITS.

HORIZONTAL CONTROLS

1. ALL LINEWORK SHALL BE STAKED PRIOR TO CONSTRUCTION WITH SEALED CUT SHEETS PROVIDED TO THE WTCPUA INSPECTOR PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCING

1. 48 HOURS PRIOR TO BEGINNING ANY WORK, CALL THE ONE–CALL BOARD OF TEXAS AT 811 OR 1–800–545–6005 FOR UTILITY LOCATIONS AND OBTAIN STREET CUT PERMIT FOR ANY WORK WITHIN CITY, COUNTY, AND/OR STATE RIGHT–OF–WAY.
2. INSTALL TEMPORARY EROSION CONTROLS AND TREE/NATURAL AREA PROTECTION FENCING PRIOR TO PRE– CONSTRUCTION MEETING AND PRIOR TO ANY SITE CLEARING, GRUBBING, EXCAVATION, MATERIAL STOCKPILING, OR OTHER CONSTRUCTION OPERATIONS.
3. SCHEDULE AND CONVENE A PRECONSTRUCTION MEETING INCLUDING BUT NOT LIMITED TO THE OWNER'S REPRESENTATIVE, ENGINEER, WTCPUA REPRESENTATIVE, FIRE DEPARTMENT, CITY, COUNTY, TXDOT REPRESENTATIVE, AND TCEQ REPRESENTATIVE, AS APPLICABLE.
4. INSTALL TRAFFIC CONTROL MEASURES.
5. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO INITIATING CONSTRUCTION.
6. ROUGH CUT WATER QUALITY PONDS AND DIRECT RUNOFF TO PONDS TO ACT AS A SEDIMENT TRAP.
7. REMOVE AND STOCKPILE TOPSOIL IN AREAS AS REQUIRED.
8. ROUGH CUT ROADS/SITE, AS NECESSARY.
9. INSTALL ALL UNDERGROUND UTILITIES. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE WTCPUA WHEN SWITCHING SERVICE TO THE WTCPUA SYSTEM. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE MATERIALS/FACILITIES TO ENSURE SERVICE IS MAINTAINED DURING SWITCHOVER.
10. COMPLETE ALL UNDERGROUND INSTALLATIONS, INCLUDING INSTALLATION OF SLEEVES.
11. COMPLETE SUBGRADE.
12. COMPLETE 1ST COURSE BASE.
13. COMPLETE FINAL COURSE BASE.
14. LAY PAVEMENT AND/OR COMPLETE ANY PAVEMENT REPAIR.
15. COMPLETE WATER QUALITY PONDS.
16. COMPLETE PERMANENT EROSION CONTROL AND SITE RESTORATION.
17. REMOVE AND DISPOSE OF TEMPORARY EROSION CONTROLS.
18. COMPLETE ANY NECESSARY FINAL DRESS UP OF AREAS DISTURBED BY CONSTRUCTION OPERATIONS.

TRAFFIC CONTROL NOTES (INCLUDE IF APPLICABLE)

1. PLANS SHALL INDICATE RESPONSIBLE AGENT FOR TRAFFIC CONTROL (ENGINEER OR CONTRACTOR).
2. CONTRACTOR SHALL MAINTAIN REASONABLE LOCAL VEHICULAR TRAFFIC THROUGHOUT CONSTRUCTION OPERATIONS.
3. CONTRACTOR SHALL PROVIDE SIGNS, BARRICADES, FLAGGERS, AND OTHER MEASURES AS REQUIRED TO ALLOW FOR VEHICULAR AND PEDESTRIAN TRAFFIC TO PROCEED SAFELY WITH MINIMUM INCONVENIENCE.
4. SIGNS, BARRICADES, FLAGGERS, AND RELATED WORK SHALL BE IN ACCORDANCE WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND WITH THE REQUIREMENTS OF THE GOVERNING CITY/COUNTY.
5. FOR ANY ACTIVITY WITHIN TXDOT RIGHT–OF–WAY, PROJECT MUST HA', E A TXDOT PERMIT. A COPY OF THE TXDOT PERMIT SHALL BE PROVIDED TO THE WTCPUA PRIOR TO CONSTRUCTION.

SWPPP NOTES

THIS PROJECT IS SUBJECT TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY'S (TCEQ) TEXAS POLLUTION DISCHARGE ELIMINATION SYSTEM (TPDES) GENERAL PERMIT TXR150000 FOR CONSTRUCTION ACTIVITIES. THE GENERAL PERMIT REQUIRES THE PREPARATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH HAS BEEN PROVIDED BY THE OWNER FOR USE BY THE CONTRACTOR. THE OWNER SHALL PROVIDE THE OWNER'S NOTICE OF INTENT (NOI) AND NOTICE OF TERMINATION (NOT) TO THE TCEQ. THE CONTRACTOR'S RESPONSIBILITIES ARE AS FOLLOWS:

1. MAINTAIN A COPY OF THE SWPPP AND A SET OF CONSTRUCTION PLANS WITH THE TEMPORARY EROSION AND SEDIMENT CONTROL PLAN AT THE WORK SITE AT ALL TIMES.
2. FILE A NOTICE OF INTENT (NOI) AND APPLICABLE PAYMENT TO THE TCEQ AT LEAST 2 DAYS PRIOR TO SITE DISTURBANCE.
3. POST A COPY OF THE OWNER'S AND CONTRACTOR'S NOI FORMS AT THE WORK SITE.
4. SIGN THE CERTIFICATION AND OBTAIN A SIGNED CERTIFICATION STATEMENT FROM ALL SUBCONTRACTORS RESPONSIBLE FOR IMPLEMENTING THE EROSION AND SEDIMENT CONTROL MEASURES WHICH INDICATES THAT THE CONTRACTOR AND SUBCONTRACTOR UNDERSTANDS THE PERMIT REQUIREMENTS (FORMS ARE IN THE SWPPP)
5. FOLLOW AND COMPLY WITH ALL ASPECTS OF THE TPDES GENERAL PERMIT NO. TXR150000. THIS INCLUDES BUT IS NOT LIMITED TO FIELD INSPECTIONS AND REPORT, MAINTAINING AND REPAIRING EROSION CONTROLS AND UPDATING EROSION CONTROLS AND UPDATING EROSION CONTROL PLAN SHEETS BASED ON FIELD CHANGES AND MODIFICATIONS.
6. FILE A COPY OF THE CONTRACTOR'S NOTICE OF TERMINATION (NOT) WITH THE TCEQ ONCE THE WORK IS COMPLETED IN ACCORDANCE WITH THE TPDES GENERAL PERMIT NO TXR.150000 AND HAS BEEN ACCEPTED BY THE OWNER.

WTCPUA WATER & WASTEWATER GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE STATE STATUTES AND U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS (O.S.H.A.). COPIES OF O.S.H.A. STANDARDS MAY BE PURCHASED FROM THE U.S. GOVERNMENT PRINTING OFFICE. INFORMATION AND RELATED REFERENCE MATERIALS MAY BE OBTAINED FROM O.S.H.A. AUSTIN AREA OFFICE – LA COSTA GREEN BLDG 1033, LA POSADA DR, SUITE 375, AUSTIN, TEXAS 78752–3832, 512– 374–0271.
2. THE ATTENTION OF THE CONTRACTOR IS DIRECTED TO THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND TO THE STATE LAW, (VERNON'S ANNOTATED TEXAS STATUTES, ARTICLE 1436 ©) AND THE NEED FOR EFFECTIVE PRECAUTIONARY MEASURES WHEN OPERATING IN THE VICINITY OF ELECTRICAL LINES. THE CONTRACTOR IS RESPONSIBLE FOR ALL SAFETY REQUIREMENTS, AND FOR COORDINATION OF ALL WORK WITH THE APPROPRIATE ELECTRIC UTILITY COMPANY.
3. THE CONTRACTOR SHALL CONTACT THE ONE–CALL BOARD OF TEXAS AT 811 OR 1–800–545–6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. THE LOCATION AND TYPE OF UTILITIES AND UNDERGROUND FACILITIES SHOWN ON THESE PLANS ARE NOT GUARANTEED TO BE ACCURATE OR ALL– INCLUSIVE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ALL EXISTING UTILITIES. THE CONTRACTOR SHALL VERIFY ALL DEPTHS AND LOCATIONS OF EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION. IN ADDITIONAL TO NORMAL PRECAUTIONS WHEN EXCAVATING, USE EXTRA CAUTION WHEN EXCAVATING WITHIN 25 FEET OF ANY UTILITIES SHOWN ON THE PLANS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION BETWEEN HIMSELF AND OTHER CONTRACTORS AND UTILITIES IN THE VICINITY OF THE PROJECT. THIS INCLUDES, BUT IS NOT LIMITED TO WATER, GAS, ELECTRICAL, TELEPHONE, CABLE TELEVISION, AND STREET AND DRAINAGE WORK. ONCE THE CONTRACTOR BECOMES AWARE OF A POSSIBLE CONFLICT, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ENGINEER AND WTCPUA INSPECTOR WITHIN TWENTY–FOUR (24) HOURS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL SPOIL MATERIAL FROM THE CONSTRUCTION SITE. ALL SPOILS MATERIAL SHALL BE DISPOSED OF BY THE CONTRACTOR AT AN APPROVED SPOIL SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND SECURING A PERMIT FOR THE SITE. THE CONTRACTOR SHALL NOTIFY THE WTCPUA INSPECTOR AT LEAST FORTY–EIGHT (48) HOURS PRIOR TO DISPOSAL OF THE MATERIAL. NO SPOILS ARE TO REMAIN OVERNIGHT IN THE FLOODPLAIN.
6. NO BLASTING OR BURNING WILL BE ALLOWED.
7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR, AT HIS EXPENSE, ALL UTILITIES, PAVEMENT, CURB, FENCES OR ANY OTHER ITEMS DAMAGED DURING CONSTRUCTION REGARDLESS OF WHETHER THESE ITEMS ARE SHOWN ON THE CONSTRUCTION PLANS.
8. WHENEVER EXISTING UTILITIES, INDICATED OR NOT ON PLANS, PRESENT OBSTRUCTIONS TO GRADE AND/OR ALIGNMENT OF PROPOSED PIPE, CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER WHO WILL DETERMINE IF EXISTING IMPROVEMENTS ARE TO BE RELOCATED OR IF THE GRADE AND/OR ALIGNMENT OF PROPOSED PIPE IS TO BE CHANGED.
9. DUST PREVENTION SHALL BE PROVIDED BY THE CONTRACTOR AT HIS OWN EXPENSE. DUST CONTROL SHALL INCLUDE SPRAYING OF WATER ON ALL DISTURBED AREAS, SPOIL PILES, OR HAUL MATERIALS ASSOCIATED WITH THE PROJECT OR OTHER METHODS APPROVED BY THE WTCPUA.
10. CLEANUP – UPON COMPLETION AND BEFORE MAKING APPLICATION FOR ACCEPTANCE OF THE WORK, THE CONTRACTOR SHALL CLEAN ALL STREETS AND ALL GROUND OCCUPIED BY HIM IN CONNECTION WITH THE WORK OF ALL RUBBISH, EXCESS MATERIALS, EXCESS EXCAVATED MATERIALS, TEMPORARY STRUCTURES AND EQUIPMENT. ALL PARTS OF THE WORK SHALL BE LEFT IN A NEAT AND PRESENTABLE CONDITION SATISFACTORY TO THE WTCPUA AND OTHER GOVERNMENTAL BODIES HAVING JURISDICTION PRIOR TO SUBMITTAL OF THE FINAL PAYMENT.
11. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BUSINESSES AND RESIDENCES AT ALL TIMES. THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS TO MINIMIZE DISRUPTION OF DELIVERIES, PARKING, AND OTHER ACTIVITIES.
12. DEWATERING, IF NECESSARY, SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL NOT CONSTITUTE A BASIS FOR ADDITIONAL PAYMENT.
13. THE MINIMUM DEPTH OF COVER FROM TOP OF PIPE TO FINISHED GRADE FOR ALL WATER LINES SHALL BE FOUR FEET. INSTALL LINES TO AVOID HIGH POINTS.
14. CONCRETE SHALL BE CLASS 'A' WITH A MINIMUM 28–DAY COMPRESSIVE STRENGTH OF 3,000 PSI, UNLESS OTHERWISE NOTED. '
15. REINFORCING STEEL SHALL BE ASTM A 615M, GRADE 60 UNLESS OTHERWISE NOTED.
16. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE WTCPUA MUST RELY ON THE ADEQUACY OF THE DESIGN ENGINEER. APPROVAL OF THESE PLANS BY THE WTCPUA DOES NOT RELEASE THE DESIGN ENGINEER OF THESE RESPONSIBILITIES.

WEST TRAVIS COUNTY PUA WATER AND WASTEWATER UTILITY NOTES

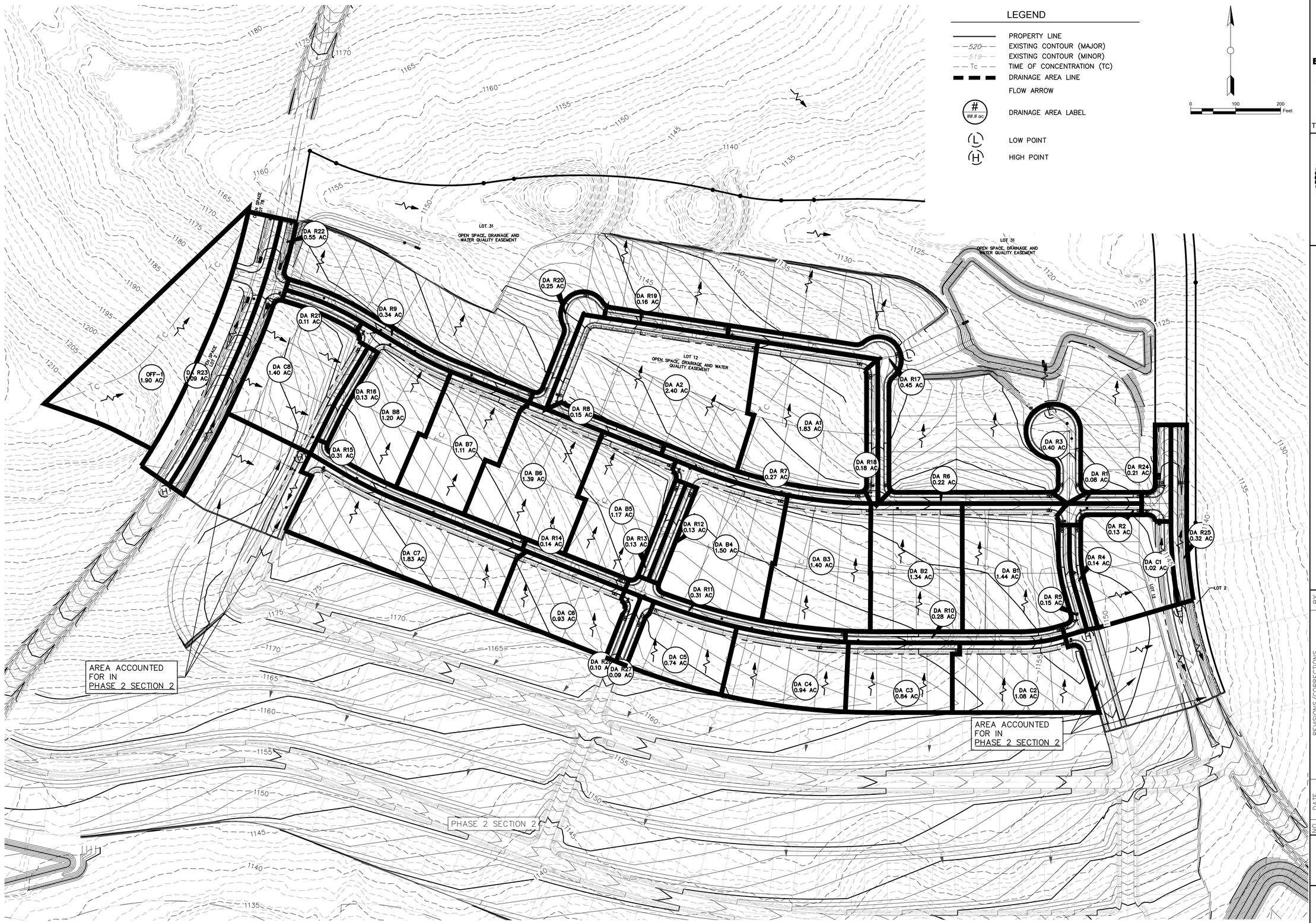
1. WEST TRAVIS COUNTY PUA IS THE WATER AND / OR WASTEWATER SERVICE PROVIDER FOR THIS PROJECT. A PRE–CONSTRUCTION MEETING WITH THE WTCPUA SHALL BE HELD PRIOR TO COMMENCEMENT OF CONSTRUCTION TO SCHEDULE INSPECTION OF INSTALLATION OF WATER/WASTEWATER FACILITIES. WATER FACILITIES WILL BE INSPECTED UP TO, AND INCLUDING, THE WATER METER AND/OR FIRE HYDRANTS. THE CONTACT NUMBER FOR WTCPUA IS (512) 263– 0100.
2. THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND STANDARD DETAILS CURRENT AT THE TIME OF CONSTRUCTION SHALL GOVERN MATERIALS AND METHODS USED TO PERFORM THIS WORK. CITY OF AUSTIN SPECIFICATIONS AND STANDARD DETAILS ARE AVAILABLE AT **HTTPS://LIBRARY.MUNICODE.COM/TX/AUSTIN/CODES/**
3. CONTRACTOR SHALL OBTAIN ALL APPROVALS AND PERMITS, INCLUDING BUT NOT LIMITED TO STREET/DRIVEWAY CUT AND UTILITY CUT PERMITS FROM THE APPROPRIATE GOVERNMENTAL AGENCY BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT–OF–WAY OF A PUBLIC STREET OR ALLEY.
4. THE WTCPUA SHALL BE CONTACTED AT (512) 263–0100 AT LEAST 48 HOURS BEFORE CONNECTING TO THEIR EXISTING WATER AND/OR WASTEWATER FACILITIES.
5. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 811 OR 1–800–545–6005 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION. IN ADVANCE OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS.
6. NO OTHER UTILITY SERVICE/APPURTENANCES SHALL BE PLACED NEAR THE PROPERTY LINE, OR OTHER ASSIGNED LOCATION DESIGNATED FOR WATER AND WASTEWATER UTILITY SERVICE THAT WOULD INTERFERE WITH THE WATER AND/OR WASTEWATER SERVICES.
7. WHERE WATER LINES AND SEWER LINE ARE INSTALLED WITH A SEPARATION DISTANCE CLOSER THAN NINE FEET (I.E., WATER LINES CROSSING WASTEWATER LINES, WATER LINES PARALLELING WASTEWATER LINES, OR WATER LINES NEXT TO MANHOLES) THE INSTALLATION MUST MEET THE REQUIREMENTS OF 30 TAC §217.53(D) (PIPE DESIGN) AND 30 TAC §290.44(E) (WATER DISTRIBUTION). ANY DEVIATION THESE STANDARDS SHALL REQUIRE A VARIANCE APPROVED BY TCEQ BEFORE SUBMITTING PIPING ASSIGNMENTS TO THE WTCPUA.
8. THE CITY OF AUSTIN SPECIFICATION ITEM 509S WILL BE REQUIRED AS A MINIMUM TRENCH SAFETY MEASURE. CONTRACT DOCUMENTS, WHICH INCLUDE A TRENCH SAFETY PLAN SIGNED AND SEALED BY A TEXAS PROFESSIONAL ENGINEER AND A PAY ITEM FOR TRENCH SAFETY MEASURES, IN COMPLIANCE WITH OSHA, STATE, COUNTY, AND CITY REQUIREMENTS BEFORE BEGINNING WORK ON THE PROJECT.
9. ALL MATERIAL TESTS, INCLUDING SOIL DENSITY TESTS AND RELATED SOIL ANALYSIS, SHALL BE ACCOMPLISHED BY AN INDEPENDENT LABORATORY FUNDED BY THE OWNER IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 1804S.4.
10. CONNECTIONS TO EXISTING WTCPUA WATER LINES SHALL BE MADE BY CUT–IN TEES IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(24). ISOLATION VALVES SHALL BE INSTALLED ON THE ENDS OF THE CUT–IN TEE, AS NECESSARY. A SHUT–OUT VALVE PLAN SHALL BE PROVIDED SHOWING THE LOCATION OF EXISTING GATE VALVES IN THE VICINITY OF THE CONNECTION. THE SHUT–OUT PLAN SHALL IDENTIFY ALL AFFECTED PROPERTY OWNERS. CONTRACTOR SHALL PERFORM ALL WORK AND SHALL FURNISH ALL MATERIALS, INCLUDING DRAINING AND CUTTING INTO EXISTING PIPING AND CONNECTING A NEW PIPELINE OR OTHER EXTENSION INTO THE EXISTING PRESSURE PIPING, FORMING AN ADDITION TO THE POTABLE WATER TRANSMISSION AND DISTRIBUTION NETWORK AND PERFORMING NECESSARY SHUTOFFS. CONTRACTOR SHALL SCHEDULE ALL SUCH CONNECTIONS IN ADVANCE AND SUCH SCHEDULE SHALL BE APPROVED BY THE WTCPUA BEFORE BEGINNING THE WORK. AT LEAST 72 HOURS– NOTICE SHALL BE GIVEN TO THE WTCPUA PRIOR TO MAKING THE CONNECTION, AND A REPRESENTATIVE FROM THE WTCPUA SHALL BE PRESENT WHEN THE CONNECTION IS MADE. PRESSURE TAPS MAY BE APPROVED ON A CASE– BY–CASE BASIS. "SIZE ON SIZE" TAPS WILL NOT BE PERMITTED. WHEN APPROVED, ANY TAPS SHALL BE MADE BY USE OF AND APPROVED FULL CIRCLE, GASKETED CAST IRON OR DUCTILE IRON TAPPING SLEEVE. CONCRETE BLOCKING SHALL BE PLACED BEHIND AND UNDER ALL TAP SLEEVES PRIOR TO MAKING THE PRESSURE TAP AND THE USE OF PRECAST BLOCKS MAY BE USED TO HOLD THE TAP IN ITS CORRECTION POSITION PRIOR TO BLOCKING. THE BLOCKING BEHIND AND UNDER THE TAP SHALL HAVE A MINIMUM OF 24 HOURS CURING TIME BEFORE THE VALVE CAN BE REOPENED FOR SERVICE FROM THAT TAP.
11. THRUST RESTRAINT SHALL BE BY METAL THRUST RESTRAINTS IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(22).
12. FIRE HYDRANTS SHALL BE SET IN ACCORDANCE WITH CITY OF STANDARD SPECIFICATION ITEM 51LS.3 E AND SHALL BE APPROVED BY THE FIRE DEPARTMENT OR OTHER APPROPRIATE PARTY PRIOR TO INSTALLATION. FIRE HYDRANTS ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A POLY WRAP BAG AND TAPED INTO PLACE. THE POLY WRAP WILL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED IN SERVICE. WHERE STORZ ADAPTORS ARE REQUIRED (HAYS COUNTY), FIRE HYDRANTS SHALL BE MANUFACTURED WITH INTEGRAL STORZ ADAPTORS.
13. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(29) AND/OR TCEQ RULES.
14. TEST PRESSURE FOR 2–HOUR TEST SHALL BE AT 175 PSI AT THE LOWEST POINT IN THE LINE.

NOTE:
PRIOR TO PRESSURE TESTING, CONTRACTOR SHALL VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT BACK TO AND INCLUDING THE VALVE AGAINST WHICH THE PRESSURE TEST SHALL BE PERFORMED, HAS BEEN INSTALLED TO AT LEAST THE SPECIFICATIONS OF THIS PROJECT. FAILURE TO VERIFY THAT THRUST BLOCKING AND/OR THRUST RESTRAINT IN THE EXISTING LINE MEETS OR EXCEEDS THE SPECIFICATIONS OF THIS PROJECT MAY RESULT IN SERIOUS DAMAGE TO THE EXISTING WATERLINE.

15. WATER LINES SHALL BE FILLED WITH WATER AND ALL AIR EXPELLED AT LEAST 24 HOURS BEFORE TESTING. ALL SERVICE LATERALS AND DRAIN VALVE LEADS, WITH THE HYDRANT VALVES CLOSED AND NOZZLE CAPS OPEN SHALL BE INCLUDED IN THE TESTS.
16. CONTRACTOR SHALL SUBMIT A DISINFECTION AND FLUSHING PLAN IN ACCORDANCE WITH AWWA STANDARDS TO THE WTCPUA FOR APPROVAL. REQUIRED FLUSHING VOLUMES, FLUSHING SCHEDULE, AND METHOD OF DISPOSAL OF FLUSH WATER SHALL BE IN ACCORDANCE WITH THE APPROVED PLAN.
17. GATE VALVES SHALL BE RESILIENT SEATED GATE VALVES CONFORMING TO AWWA C509, WITH A MINIMUM RATED WORKING PRESSURE OF 250 PSI.
18. FORCE MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEM 510.3(27) AND/OR TCEQ RULES.
19. GRAVITY SANITARY SEWER MAIN TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATION ITEMS 510.3(26) AND/OR TCEQ RULES. IN ADDITION, ALL GRAVITY SANITARY SEWER MAINS SHALL BE TELEVISED PRIOR TO ACCEPTANCE BY WTCPUA. DIGITAL FILES (VIA CD–ROM) CLEARLY SHOWING TELEVISED RECORDING SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOLLOWING INSPECTION.
20. LOCATOR 'FINDER' WIRE – ALL NON –METALLIC WATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE POLY–INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT EACH ISOLATION VALVE SUCH THAT IT IS ACCESSIBLE FROM THE VALVE BOX.
21. LOCATOR 'FINDER' WIRE – ALL NON–METALLIC WASTEWATER LINES SHALL HAVE A FINDER WIRE LOCATED ABOVE THE PIPE. THE WIRE SHALL BE POLY–INSULATED NO. 10 SOLID COPPER AND WILL TERMINATE AT READILY ACCESSIBLE LOCATIONS THROUGHOUT THE COLLECTION SYSTEM.
22. TEST STATIONS SHALL BE INSTALLED WHERE WATER AND/OR WASTEWATER LINES/APPURTENANCES AND WASTEWATER MANHOLES ARE INSTALLED OFFSITE OR OUTSIDE PAVEMENT.
23. ALL VALVE RISERS SHALL HAVE A 1'–6" SQUARE CONCRETE BOX POURED AROUND THEM AT FINISHED GRADE.
24. ALL MANHOLES SHALL BE LINED WITH A CORROSION RESISTANT LINING APPROVED BY THE WTCPUA.
25. BOLTED AND GASKETED COVERS SHALL BE USED FOR ALL MANHOLES LOCATED IN THE 100–YEAR FLOODPLAIN. WHERE THERE ARE MORE THAN THREE GASKETED MANHOLES IN A ROW, VENTS SHALL BE PROVIDED ON EVERY THIRD MANHOLE.
26. THE DOWNSTREAM END OF ANY FORCE MAIN SHALL BE TERMINATED IN A SANITARY SEWER MANHOLE IN A MANNER TO MINIMIZE TURBULENCE.
27. CONTRACTOR SHALL HAVE NECESSARY EROSION AND SEDIMENTATION CONTROLS IN PLACE PRIOR TO COMMENCING WATER/WASTEWATER FACILITY CONSTRUCTION.
28. RECORD DRAWINGS, AS STIPULATED BY THE WTCPUA, SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR VERIFICATION AND FURNISHED TO THE WTCPUA UPON COMPLETION OF THE PROJECT.
29. THE WTCPUA WILL OWN AND OPERATE ALL WATER LINES AND APPURTENANCES UP TO AND INCLUDING THE WATER METER. THESE IMPROVEMENTS WILL BE DEFINED BY A RECORDED EASEMENT OR IN PUBLIC RIGHT–OF–WAY.
30. ANY PORTIONS OF WASTEWATER LINES INCLUDING SERVICES THAT ARE LOCATED OUTSIDE OF A RECORDED EASEMENT OR PUBLIC RIGHT–OF–WAY WILL BE OWNED AND MAINTAINED BY THE PROPERTY OWNER, OR HIS/HER ASSIGNS.
31. WHERE EXISTING WATER AND/OR WASTEWATER INFRASTRUCTURE IS TO BE ABANDONED, THE ENGINEER SHALL SUBMIT AN ABANDONMENT PLAN FOR APPROVAL BY THE WTCPUA.
32. WATER SERVICES SHALL BE INSTALLED USING HDPE PIPE. COPPER IS NOT ALLOWED. MINIMUM SERVICE TAP SHALL BE 2" DIAMETER.
33. FOR ANY STORM SEWER LINE CROSSING A WATER OR WASTEWATER LINE CLOSER THAN 18", THE STORM SEWER PIPE SHALL BE LAID SUCH THAT NO STORM SEWER JOINTS WILL BE OVER THE WATER PIPE CROSSING.

TCEQ WATER DISTRIBUTION SYSTEM GENERAL CONSTRUCTION NOTES (REVISED FEBRUARY 2019 OR LATEST VERSION)

1. THIS WATER DISTRIBUTION SYSTEM MUST BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS 30 TEXAS ADMINISTRATIVE CODE (TAC) CHAPTER 290 SUBCHAPTER D. WHEN CONFLICTS ARE NOTED WITH LOCAL STANDARDS, THE MORE STRINGENT REQUIREMENT SHALL BE APPLIED. AT A MINIMUM, CONSTRUCTION FOR PUBLIC WATER SYSTEMS MUST ALWAYS MEET TCEQ'S "RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS."
2. ALL NEWLY INSTALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)/NSF INTERNATIONAL STANDARD 61 AND MUST BE CERTIFIED BY AN ORGANIZATION ACCREDITED BY ANSI [§290.44(A)(1)].
3.



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL SITE DRAINAGE AREA MAP

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018-227 Provence\2-Phase_2_Sec_3\CAD\Construction Sheets\2d_dsm_01.dwg 9/11/2025 3:55 PM

Drainage Calculations
Provence Phase 2 - Section 3

#	Area	Coefficient				Tc	Intensity				Flow			
		C2	C10	C25	C100		I2	I10	I25	I100	Q2	Q10	Q25	Q100
DA A1	1.83	0.41	0.47	0.51	0.58	7.35	5.64	8.56	10.50	13.70	4.19	7.39	9.75	14.62
DA A2	2.40	0.38	0.45	0.48	0.56	5.57	6.13	9.33	11.44	14.96	5.65	10.05	13.27	20.02
DA B1	1.44	0.48	0.55	0.59	0.67	6.60	5.83	8.86	10.87	14.20	4.04	7.01	9.20	13.62
DA B2	1.34	0.50	0.56	0.60	0.68	6.62	5.83	8.86	10.87	14.19	3.87	6.70	8.79	12.99
DA B3	1.40	0.43	0.50	0.54	0.61	6.65	5.82	8.84	10.85	14.16	3.54	6.20	8.17	12.18
DA B4	1.50	0.41	0.48	0.51	0.59	6.65	5.82	8.84	10.85	14.16	3.59	6.33	8.35	12.51
DA B5	1.17	0.41	0.48	0.52	0.59	6.74	5.79	8.80	10.80	14.10	2.81	4.94	6.52	9.76
DA B6	1.39	0.41	0.48	0.52	0.59	6.86	5.76	8.75	10.74	14.02	3.32	5.84	7.70	11.53
DA B7	1.11	0.42	0.49	0.52	0.60	6.76	5.79	8.79	10.79	14.09	2.70	4.75	6.26	9.36
DA B8	1.20	0.42	0.48	0.52	0.59	6.48	5.86	8.91	10.94	14.28	2.92	5.15	6.78	10.16
DA C1	1.02	0.44	0.50	0.54	0.62	5.00	6.31	9.61	11.79	15.42	2.80	4.92	6.48	9.68
DA C2	1.08	0.46	0.53	0.57	0.65	5.00	6.31	9.61	11.79	15.42	3.15	5.50	7.23	10.75
DA C3	0.84	0.48	0.55	0.59	0.66	5.00	6.31	9.61	11.79	15.42	2.54	4.42	5.80	8.61
DA C4	0.94	1.08	1.14	1.18	1.26	5.00	6.31	9.61	11.79	15.42	6.38	10.33	13.09	18.25
DA C5	0.76	0.45	0.52	0.55	0.63	5.00	6.31	9.61	11.79	15.42	2.16	3.78	4.97	7.41
DA C6	0.93	0.42	0.49	0.52	0.60	5.00	6.31	9.61	11.79	15.42	2.48	4.36	5.75	8.62
DA C7	1.83	0.43	0.49	0.53	0.61	5.00	6.31	9.61	11.79	15.42	4.94	8.70	11.46	17.14
DA C8	1.40	0.40	0.47	0.50	0.58	5.80	6.06	9.22	11.31	14.78	3.40	6.01	7.93	11.92
DA R1	0.08	0.55	0.62	0.67	0.75	5.00	6.31	9.61	11.79	15.42	0.28	0.48	0.63	0.92
DA R2	0.13	0.45	0.51	0.55	0.63	5.00	6.31	9.61	11.79	15.42	0.37	0.64	0.85	1.26
DA R3	0.40	0.54	0.61	0.65	0.73	5.00	6.31	9.61	11.79	15.42	1.36	2.35	3.07	4.52
DA R4	0.14	0.53	0.60	0.64	0.72	5.00	6.31	9.61	11.79	15.42	0.46	0.80	1.05	1.55
DA R5	0.15	0.51	0.58	0.62	0.70	5.00	6.31	9.61	11.79	15.42	0.48	0.84	1.10	1.62
DA R6	0.22	0.54	0.61	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.75	1.29	1.69	2.49
DA R7	0.27	0.54	0.61	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.91	1.57	2.06	3.04
DA R8	0.15	0.54	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	0.52	0.89	1.16	1.71
DA R9	0.34	0.54	0.62	0.66	0.74	5.00	6.31	9.61	11.79	15.42	1.17	2.01	2.64	3.88
DA R10	0.28	0.52	0.59	0.63	0.71	5.00	6.31	9.61	11.79	15.42	0.92	1.59	2.08	3.07
DA R11	0.31	0.52	0.59	0.63	0.71	5.00	6.31	9.61	11.79	15.42	1.02	1.76	2.30	3.40
DA R12	0.13	0.53	0.60	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.44	0.76	0.99	1.46
DA R13	0.13	0.53	0.60	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.44	0.76	0.99	1.46
DA R14	0.14	0.54	0.61	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.47	0.82	1.07	1.58
DA R15	0.31	0.53	0.60	0.64	0.72	5.00	6.31	9.61	11.79	15.42	1.03	1.78	2.33	3.44
DA R16	0.13	0.54	0.61	0.65	0.74	5.00	6.31	9.61	11.79	15.42	0.44	0.77	1.00	1.48
DA R17	0.45	0.50	0.57	0.61	0.69	5.00	6.31	9.61	11.79	15.42	1.42	2.47	3.24	4.79
DA R18	0.18	0.52	0.59	0.63	0.71	5.00	6.31	9.61	11.79	15.42	0.59	1.02	1.34	1.98
DA R19	0.16	0.53	0.60	0.65	0.73	5.00	6.31	9.61	11.79	15.42	0.54	0.93	1.22	1.79
DA R20	0.25	0.47	0.53	0.57	0.65	5.00	6.31	9.61	11.79	15.42	0.73	1.28	1.69	2.51
DA R21	0.11	0.52	0.59	0.63	0.71	5.00	6.31	9.61	11.79	15.42	0.36	0.62	0.82	1.20
DA R22	0.55	0.45	0.52	0.56	0.64	5.00	6.31	9.61	11.79	15.42	1.57	2.75	3.62	5.40
DA R23	1.09	0.37	0.43	0.47	0.54	5.00	6.31	9.61	11.79	15.42	2.53	4.52	5.98	9.06
DA R24	0.21	0.44	0.51	0.55	0.63	5.00	6.31	9.61	11.79	15.42	0.59	1.03	1.36	2.03
DA R25	0.32	0.47	0.54	0.57	0.65	5.00	6.31	9.61	11.79	15.42	0.94	1.65	2.17	3.22
DA R26	0.10	0.50	0.57	0.61	0.69	5.00	6.31	9.61	11.79	15.42	0.32	0.55	0.72	1.07
DA R27	0.09	0.53	0.60	0.64	0.72	5.00	6.31	9.61	11.79	15.42	0.30	0.52	0.68	1.00
OFF-1	1.90	0.28	0.34	0.37	0.44	11.39	4.80	7.27	8.92	11.64	2.55	4.69	6.27	9.73

Runoff Coefficients
Provence Phase 2 - Section 3

Impervious cover / lot = *70-ft Lot* *3,000* *sf*

No.	Area	Asphalt			Lots		Grass-Developed		Grass-Undeveloped		Runoff Coefficient			
	Ac.	width	length	area	# lots	area	sub -c	Area	sub-c	Area	C2	C10	C25	C100
DA A1	1.83	14.50	250.00	0.08	6.00	0.41	0.44	1.33	0.49		0.41	0.47	0.51	0.58
DA A2	2.40	14.50	590.00	0.20	5.00	0.34	0.44	1.86	0.49		0.38	0.45	0.48	0.56
DA B1	1.44	14.50	200.00	0.07	8.00	0.55	0.44	0.82	0.49		0.48	0.55	0.59	0.67
DA B2	1.34	14.50	200.00	0.07	8.00	0.55	0.44	0.72	0.49		0.50	0.56	0.60	0.68
DA B3	1.40	14.50	175.00	0.06	6.00	0.41	0.44	0.93	0.46		0.44	0.50	0.54	0.62
DA B4	1.50	14.50	250.00	0.08	6.00	0.41	0.44	1.00	0.49		0.43	0.50	0.54	0.61
DA B5	1.17	14.50	165.00	0.05	4.00	0.28	0.44	0.84	0.49		0.41	0.48	0.51	0.59
DA B6	1.39	14.50	165.00	0.05	5.00	0.34	0.44	0.99	0.49		0.41	0.48	0.52	0.59
DA B7	1.11	14.50	175.00	0.06	4.00	0.28	0.44	0.78	0.49		0.42	0.49	0.52	0.60
DA B8	1.20	14.50	220.00	0.07	4.00	0.28	0.44	0.85	0.49		0.42	0.48	0.52	0.59
DA C1	1.02	15.50	180.00	0.06	4.00	0.28	0.44	0.68	0.49		0.44	0.50	0.54	0.62
DA C2	1.08	14.50	230.00	0.08	5.00	0.34	0.44	0.66	0.49		0.46	0.53	0.57	0.65
DA C3	0.84	14.50	250.00	0.08	4.00	0.28	0.44	0.48	0.49		0.48	0.55	0.59	0.66
DA C4	0.94	14.50	250.00	0.08	4.00	0.28	1.44	0.58	0.49		1.08	1.14	1.18	1.26
DA C5	0.76	14.50	215.00	0.07	3.00	0.21	0.44	0.48	0.49		0.45	0.52	0.55	0.63
DA C6	0.93	14.50	235.00	0.08	3.00	0.21	0.44	0.65	0.49		0.42	0.49	0.52	0.60
DA C7	1.83	14.50	515.00	0.17	6.00	0.41	0.44	1.25	0.49		0.43	0.49	0.53	0.61
DA C8	1.40	14.50	260.00	0.09	4.00	0.28	0.44	1.04	0.49		0.40	0.47	0.50	0.58
DA R1	0.08	14.50	145.00	0.05			0.44	0.03	0.49		0.55	0.62	0.67	0.75
DA R2	0.13	14.50	145.00	0.05			0.44	0.08	0.49		0.45	0.51	0.55	0.63
DA R3	0.40	29.00	200.00	0.23			0.44	0.17	0.49		0.54	0.61	0.65	0.73
DA R4	0.14	14.50	230.00	0.08			0.44	0.06	0.49		0.53	0.60	0.64	0.72
DA R5	0.15	14.50	230.00	0.08			0.44	0.07	0.49		0.51	0.58	0.62	0.70
DA R6	0.22	14.50	380.00	0.13			0.44	0.09	0.49		0.54	0.61	0.65	0.73
DA R7	0.27	14.50	460.00	0.15			0.44	0.12	0.49		0.54	0.61	0.65	0.73
DA R8	0.15	14.50	265.00	0.09			0.44	0.06	0.49		0.54	0.62	0.66	0.74
DA R9	0.34	14.50	600.00	0.20			0.44	0.14	0.49		0.54	0.62	0.66	0.74
DA R10	0.28	14.50	478.00	0.16			0.44	0.12	0.49		0.54	0.61	0.65	0.73
DA R11	0.31	14.50	495.00	0.16			0.44	0.15	0.49		0.52	0.59	0.63	0.71
DA R12	0.13	14.50	220.00	0.07			0.44	0.06	0.49		0.53	0.60	0.65	0.73
DA R13	0.13	14.50	220.00	0.07			0.44	0.06	0.49		0.53	0.60	0.65	0.73
DA R14	0.14	14.50	240.00	0.08			0.44	0.06	0.49		0.54	0.61	0.65	0.73
DA R15	0.31	14.50	510.00	0.17			0.44	0.14	0.49		0.53	0.60	0.64	0.72
DA R16	0.13	14.50	227.00	0.08			0.44	0.05	0.49		0.54	0.61	0.65	0.74
DA R17	0.45	14.50	665.00	0.22			0.44	0.23	0.49		0.50	0.57	0.61	0.69
DA R18	0.18	14.50	290.00	0.10			0.44	0.08	0.49		0.52	0.59	0.63	0.71
DA R19	0.16	14.50	270.00	0.09			0.44	0.07	0.49		0.53	0.60	0.65	0.73
DA R20	0.25	14.50	310.00	0.10			0.44	0.15	0.49		0.47	0.53	0.57	0.65
DA R21	0.11	14.50	175.00	0.06			0.44	0.05	0.49		0.52	0.59	0.63	0.71
DA R22	0.55	14.50	636.00	0.21			0.44	0.34	0.49		0.45	0.52	0.56	0.64
DA R23	1.09	14.50	636.00	0.21			0.44	0.88	0.49		0.37	0.43	0.47	0.54
DA R24	0.21	14.50	230.00	0.08			0.44	0.13	0.49		0.44	0.51	0.55	0.63
DA R25	0.32	14.50	400.00	0.13			0.44	0.19	0.49		0.47	0.54	0.57	0.65
DA R26	0.10	14.50	150.00	0.05			0.44	0.05	0.49		0.50	0.57	0.61	0.69
DA R27	0.09	14.50	150.00	0.05			0.44	0.04	0.49		0.53	0.60	0.64	0.72
OFF-1	1.90						0.44	1.90	0.49		0.28	0.34	0.37	0.44

Time of Concentration
Provence Phase 2 - Section 3

Overland Flow Manning's n = 0.240
Asphalt Manning's n = 0.016

No.	Overland				Street		Channel/Pipe		Tc
	Dist	Sheet	Shall Conc.	Grade	Dist.	Grade	Dist	Velocity	
DA A1	300.00	25.00	275.00	0.030	130.00	0.040			7.35
DA A2	215.00	25.00	190.00	0.030	267.00	0.040			5.57
DA B1	270.00	25.00	245.00	0.030	135.00	0.090			6.60
DA B2	270.00	25.00	245.00	0.030	150.00	0.090			6.62
DA B3	270.00	25.00	245.00	0.030	120.00	0.090			6.59
DA B4	272.00	25.00	247.00	0.030	95.00	0.044			6.65
DA B5	280.00	25.00	255.00	0.030	70.00	0.440			6.74
DA B6	280.00	25.00	255.00	0.030	100.00	0.033			6.86
DA B7	273.00	25.00	248.00	0.030	144.00	0.033			6.76
DA B8	265.00	25.00	240.00	0.030	155.00	0.130			6.48
DA C1	156.00	25.00	131.00	0.030	0.00	0.130	8.00	6.00	3.87
DA C2	145.00	20.00	125.00	0.030	218.00	0.033			3.87
DA C3	140.00	20.00	120.00	0.030	220.00	0.033			3.75
DA C4	140.00	20.00	120.00	0.030	209.00	0.033			3.74
DA C5	140.00	20.00	120.00	0.030	150.00	0.055			3.60
DA C6	140.00	20.00	120.00	0.030	223.00	0.055			3.68
DA C7	161.00	20.00	141.00	0.030	452.00	0.055			4.43
DA C8	197.00	100.00	97.00	0.030	225.00	0.055			5.80
DA R1	12.00	12.00	0.00	0.030	153.00	0.080			0.54
DA R2	12.00	12.00	0.00	0.030	173.00	0.080			0.56
DA R3	12.00	12.00	0.00	0.030	220.00	0.080			0.60
DA R4	12.00	12.00	0.00	0.030	227.00	0.080			0.61
DA R5	12.00	12.00	0.00	0.030	260.00	0.080			0.64
DA R6	12.00	12.00	0.00	0.030	387.00	0.080			0.76
DA R7	12.00	12.00	0.00	0.030	457.00	0.080			0.83
DA R8	12.00	12.00	0.00	0.030	260.00	0.080			0.64
DA R9	12.00	12.00	0.00	0.030	600.00	0.080			0.96
DA R10	12.00	12.00	0.00	0.030	481.00	0.080			0.85
DA R11	12.00	12.00	0.00	0.030	500.00	0.080			0.87
DA R12	12.00	12.00	0.00	0.030	225.00	0.080			0.61
DA R13	12.00	12.00	0.00	0.030	225.00	0.080			0.61
DA R14	12.00	12.00	0.00	0.030	242.00	0.080			0.62
DA R15	12.00	12.00	0.00	0.030	518.00	0.080			0.88
DA R16	12.00	12.00	0.00	0.030	216.00	0.080			0.60
DA R17	12.00	12.00	0.00	0.030	373.00	0.080			0.75
DA R18	12.00	12.00	0.00	0.030	257.00	0.080			0.64
DA R19	12.00	12.00	0.00	0.030	270.00	0.080			0.65
DA R20	0.00	0.00	0.00	0.030	275.00	0.080			0.26
DA R21	12.00	12.00	0.00	0.030	180.00	0.080			0.57
DA R22	28.00	28.00	0.00	0.030	0.00	0.080	622.00	6.00	2.65
DA R23	50.00	50.00	0.00	0.030	0.00	0.080	613.00	6.00	3.35
DA R24	50.00	50.00	0.00	0.030	0.00	0.080	140.00	6.00	2.04
DA R25	20.00	20.00	0.00	0.030	0.00	0.080	370.00	6.00	1.69
DA R26	0.00	0.00	0.00	0.030	150.00	0.020		6.00	0.28
DA R27	0.00	0.00	0.00	0.030	150.00	0.020		6.00	0.28
OFF-1	594.00	100.00	494.00	0.050	0.00	0.080			11.39

100 YEAR INLET CALCULATIONS
Provence Phase 2 - Section 3

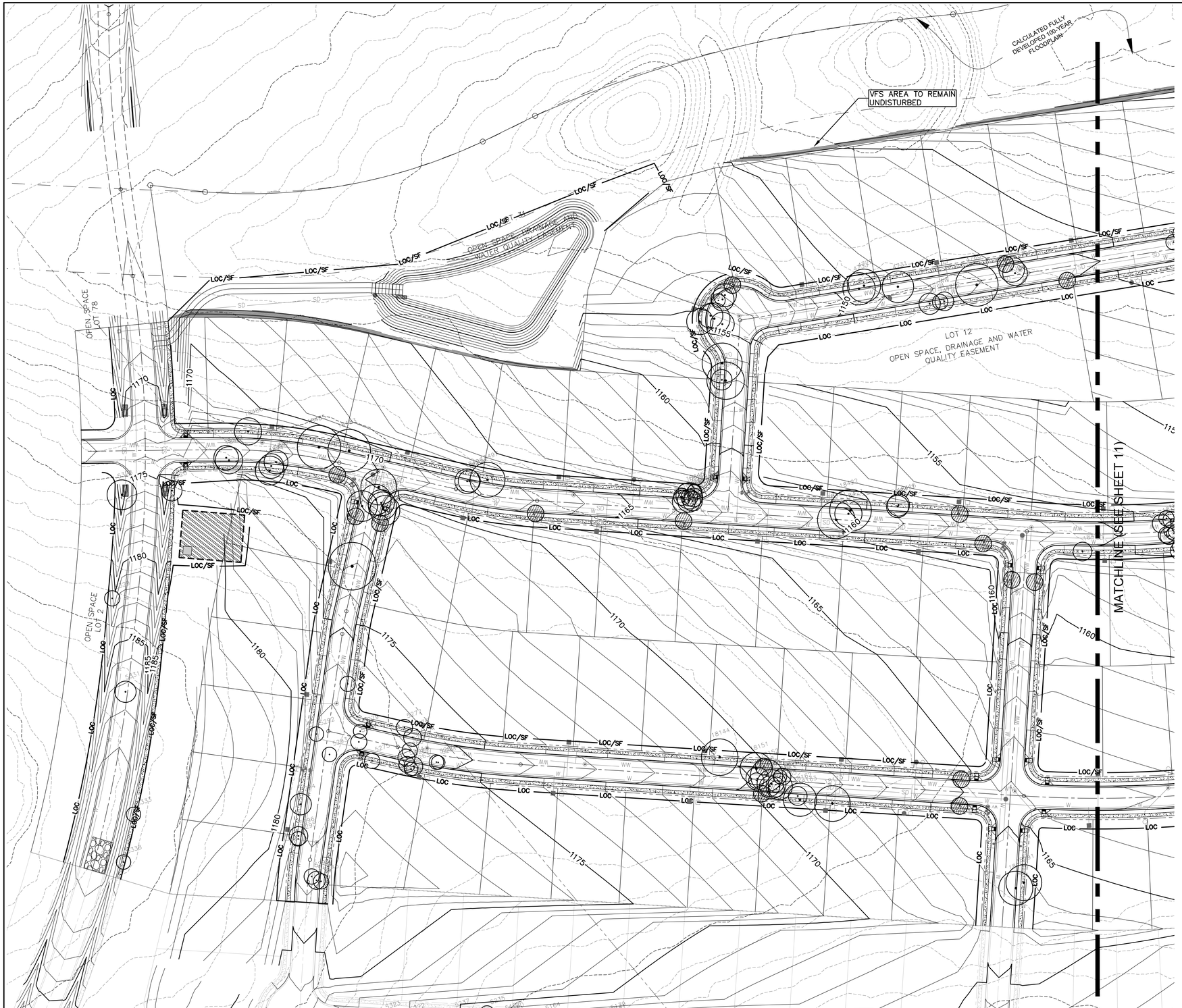
Cross Slope= 0.03
z= 33.33
n= 0.02

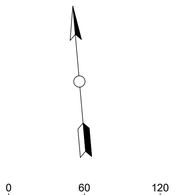
DA Number	Inlet Number	Q	Qspill	Qspill	Qpass	Qtot	Street Width	slope (%)	a	y	type	pond width	R.F.	Qa/La	La	Length	L/La	a/y	Q/Qa	Q	Qpass	remarks
DA A1	A1	13.14			6.33	19.47	29	2.00	0.42	0.49	GRADE	16.26	1	0.96	20.22	10	0.49	0.86	0.78	15.19	4.28	INTO R17
DA A2	A2	18.10				18.10	29	2.00	0.42	0.47	GRADE	15.82	1	0.95	19.09	10	0.52	0.88	0.65	11.76	6.33	INTO A1
DA B1	B1	12.25			1.48	13.73	29	2.00	0.42	0.43	GRADE	14.27	1	0.90	15.33	10	0.65	0.98	0.85	11.67	2.06	INTO R2
DA B2	B2	11.69			1.76	13.45	29	2.00	0.42	0.42	GRADE	14.16	1	0.89	15.07	10	0.66	0.99	0.89	11.97	1.48	INTO B1
DA B3	B3	10.96			1.65	12.60	29	2.00	0.42	0.41	GRADE	13.82	1	0.88	14.30	10	0.70	1.01	0.86	10.84	1.76	INTO B2
DA B4	B4	11.25			0.51	11.76	29	2.00	0.42	0.40	GRADE	13.46	1	0.87	13.52	10	0.74	1.04	0.86	10.11	1.65	INTO B3
DA B5	B5	8.77			1.36	10.13	29	2.00	0.42	0.38	GRADE	12.73	1	0.85	11.97	10	0.84	1.10	0.95	9.62	0.51	INTO B4
DA B6	B6	10.37			0.09	10.46	29	2.00	0.42	0.39	GRADE	12.88	1	0.85	12.29	10	0.81	1.09	0.87	9.10	1.36	INTO B5
DA B7	B7	8.42			0.75	9.17	29	2.00	0.42	0.37	GRADE	12.26	1	0.83	11.04	10	0.91	1.14	0.99	9.08	0.09	INTO B6
DA B8	B8	9.14			1.57	10.71	29	2.00	0.42	0.39	GRADE	13.00	1	0.85	12.53	10	0.80	1.08	0.93	9.96	0.75	INTO B7
DA C2	C2	10.39			0.15	10.53	29	2.00	0.42	0.39	SUMP	12.92	1.1	0.85	5.32	10	1.88	1.08	1.00	10.53	0.00	
DA C3	C3	8.38			6.22	14.60	29	2.00	0.42	0.44	GRADE	14.60	1	0.91	16.10	10	0.62	0.96	0.99	14.46	0.15	INTO C2
DA C4	C4	17.78			0.00	17.78	29	2.00	0.42	0.47	GRADE	15.72	1	0.94	18.83	10	0.53	0.89	0.65	11.56	6.22	INTO C3
DA C5	C5	7.27			0.13	7.40	29	2.00	0.42	0.34	GRADE	11.32	1	0.80	9.25	10	1.08	1.24	1.00	7.40	0.00	INTO C4
DA C6	C6	8.42			4.81	13.23	29	2.00	0.42	0.42	GRADE	14.07	1	0.89	14.87	10	0.67	1.00	0.99	13.10	0.13	INTO C5
DA C7	C7	16.03				16.03	29	2.00	0.42	0.45	GRADE	15.12	1	0.92	17.34	10	0.58	0.93	0.70	11.22	4.81	INTO C6
DA C8	C8	11.21				11.21	29	2.00	0.42	0.40	GRADE	13.22	1	0.86	13.00	10	0.77	1.06	0.86	9.64	1.57	INTO B8
DA R1	R1	0.92				0.92	29	2.00	0.42	0.16	SUMP	5.18	1.1	0.62	0.77	10	12.91	2.70	1.00	0.92	0.00	
DA R2	R2	1.26			2.06	3.32	29	2.00	0.42	0.25	SUMP	8.38	1.1	0.71	2.21	10	4.52	1.67	1.00	3.32	0.00	
DA R3	R3	4.52				4.52	29	2.00	0.42	0.28	SUMP	9.41	1.1	0.74	2.82	10	3.55	1.49	1.00	4.52	0.00	
DA R4	R4	1.55				1.55	29	2.00	0.42	0.19	GRADE	6.30	1	0.65	2.39	11	4.60	2.22	1.00	1.55	0.00	
DA R5	R5	1.62				1.62	29	2.00	0.42	0.19	GRADE	6.40	1	0.65	2.49	12	4.83	2.19	1.00	1.62	0.00	
DA R6	R6	2.49				2.49	29	2.00	0.42	0.23	GRADE	7.52	1	0.68	3.64	13	3.58	1.86	1.00	2.49	0.00	
DA R7	R7	3.04				3.04	29	2.00	0.42	0.24	GRADE	8.10	1	0.70	4.33	14	3.24	1.73	1.00	3.04	0.00	
DA R8	R8	1.71				1.71	29	2.00	0.42	0.20	GRADE	6.53	1	0.66	2.61	15	5.74	2.14	1.00	1.71	0.00	
DA R9	R9	3.88				3.88	29	2.00	0.42	0.27	GRADE	8.88	1	0.73	5.35	16	2.99	1.58	1.00	3.88	0.00	
DA R10	R10	3.07				3.07	29	2.00	0.42	0.24	GRADE	8.14	1	0.70	4.37	17	3.89	1.72	1.00	3.07	0.00	
DA R11	R11	3.40				3.40	29	2.00	0.42	0.25	GRADE	8.45	1	0.71	4.77	18	3.77	1.66	1.00	3.40	0.00	
DA R12	R12	1.46				1.46	29	2.00	0.42	0.18	GRADE	6.15	1	0.64	2.26	19	8.40	2.28	1.00	1.46	0.00	
DA R13	R13	1.46				1.46	29	2.00	0.42	0.18	GRADE	6.15	1	0.64	2.26	20	8.84	2.28	1.00	1.46	0.00	
DA R14	R14	1.58				1.58	29	2.00	0.42	0.19	GRADE	6.34	1	0.65	2.43	21	8.64	2.21	1.00	1.58	0.00	
DA R15	R15	3.44				3.44	29	2.00	0.42	0.25	GRADE	8.49	1	0.71	4.82	22	4.56	1.65	1.00	3.44	0.00	
DA R16	R16	1.48				1.48	29	2.00	0.42	0.19	GRADE	6.18	1	0.65	2.29	23	10.05	2.26	1.00	1.48	0.00	
DA R17	R17	4.79			4.28	9.08	29	2.00	0.42	0.37	SUMP	12.22	1.1	0.83	4.77	24	5.03	1.15	1.00	9.08	0.00	
DA R18	R18	1.98				1.98	29	2.00	0.42	0.21	GRADE	6.90	1	0.67	2.97	25	8.41	2.03	1.00	1.98	0.00	
DA R19	R19	1.79				1.79	29	2.00	0.42	0.20	GRADE	6.65	1	0.66	2.72	26	9.55	2.11	1.00	1.79	0.00	
DA R20	R20	2.51				2.51	29	2.00	0.42	0.23	GRADE	7.54	1	0.69	3.66	27	7.37	1.86	1.00	2.51	0.00	
DA R21	R21	1.20				1.20	29	2.00	0.42	0.17	GRADE	5.73	1	0.63	1.91	28	14.69	2.44	1.00	1.20	0.00	

25 YEAR INLET CALCULATIONS
Provence Phase 2 - Section 3

Cross Slope= 0.03
z= 33.33
n= 0.02

DA Number	Inlet Number	Q	Qspill	Qspill	Qpass	Qtot	Street Width	slope (%)	a	y	type	pond width	R.F.	Qa/La	La	Length	L/La	a/y	Q/Qa	Q	Qpass	remarks
DA A1	A1	8.77			1.80	10.57	29	2.00	0.42	0.39	GRADE	12.93	1	0.85	12.40	10	0.81	1.08	0.93	9.83	0.74	INTO R17
DA A2	A2	12.02				12.02	29	2.00	0.42	0.41	GRADE	13.57	1	0.87	13.76	10	0.73	1.03	0.85	10.21	1.80	INTO A1
DA B1	B1	8.29				8.29	29	2.00





LEGEND

- PROPERTY LINE
- EXIST CONTOUR (420)
- PROPOSED CONTOUR (420)
- LOC — LIMITS OF CONSTRUCTION
- SF — SILT FENCE
- LOC/SF — LIMITS OF CONSTRUCTION/SILT FENCE
- T — TREE PROTECTION
- STAGING/SPOILS AREA
- CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT
- ROCK BERM
- INLET PROTECTION
- EXISTING TREE (4224)
- EXISTING TREE TO BE REMOVED

EROSION CONTROL NOTES:

1. ALL REQUIRED NOTES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
3. INSTALL SILT FENCE ACCORDINGLY FOR RUN-ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
4. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
5. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
6. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
7. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
8. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
9. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
10. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
11. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
12. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
13. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
14. TEMPORARY ESC'S SHALL REMAIN IN PLACE IN ALL DISTURBED AREAS UNTIL ADEQUATE STABILIZATION HAS BEEN ACHIEVED.
15. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN BE OBTAINED.
16. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
17. A DE-WATERING PLAN FOR THE POND(S) MUST BE APPROVED BY THE COUNTY ENVIRONMENTAL INSPECTOR OF THE TEMPORARY SEDIMENTATION POND IS DE-WATERED AFTER RAINFALL EVENTS. THE DE-WATERING METHOD MUST MINIMIZE THE DISCHARGE OF SUSPENDED SEDIMENTS TO THE GREATEST EXTENT FEASIBLE BY DRAWING WATER FROM THE SURFACE OF THE IMPOUNDMENT.
18. CREEK SETBACK AND VFS ARE TO REMAIN UNDISTURBED, EXCEPT WHERE UTILITIES CROSS.
19. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY UPON INLET INSTALLATION.
20. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT. UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD, MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.
21. MULCH CREATED FROM CLEARING TO BE DOUBLE GROUND AND STOCKPILED ON SITE AND SUED AS TEMPORARY/TRANSITIONAL STABILIZATION MEASURES AS NEEDED/REQUIRED
22. THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE-OUT PROCESS.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

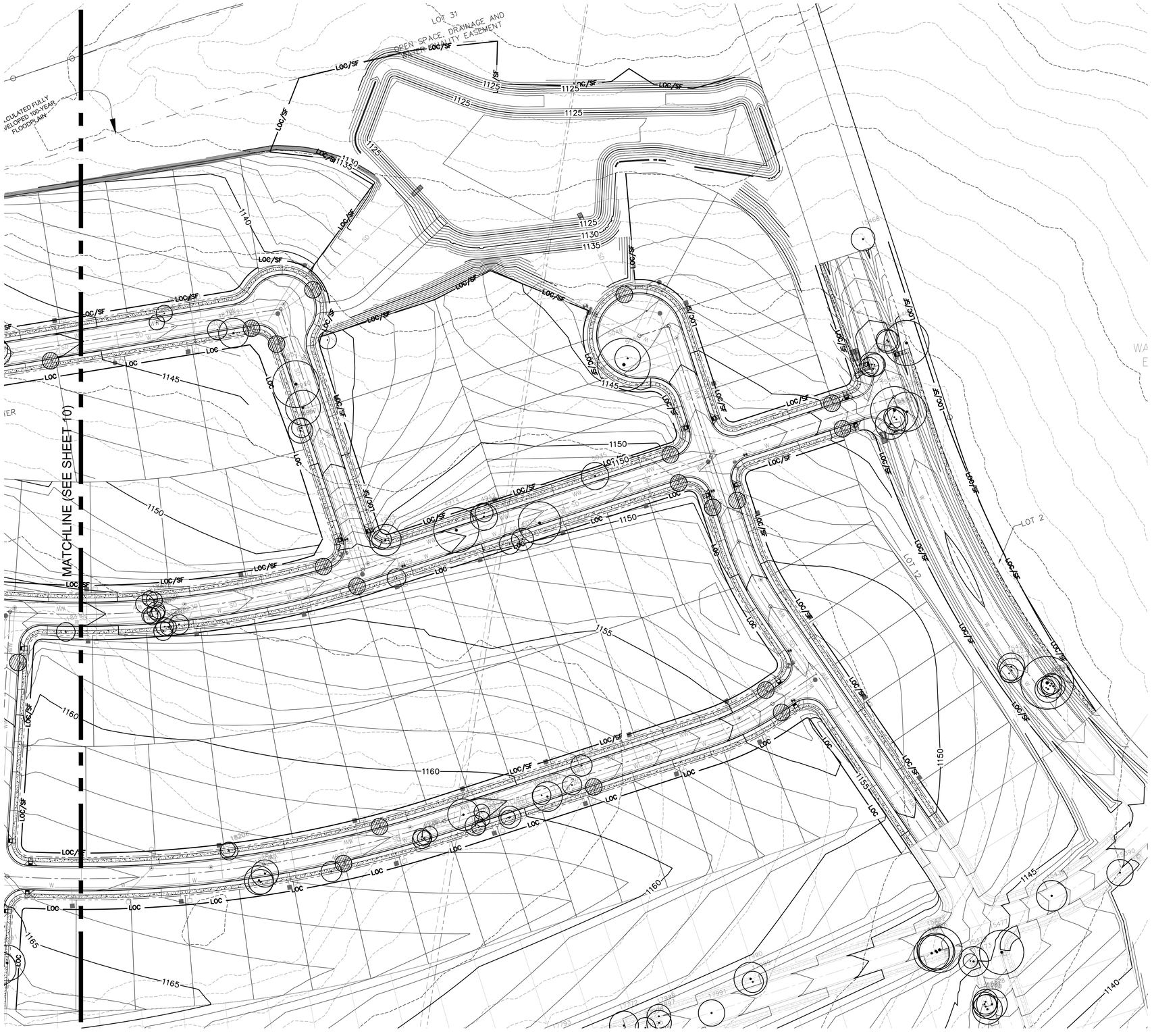
EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 9 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_ers_01.dwg 9/11/2025 3:52 PM



0 60 120 Feet

LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- 420 PROPOSED CONTOUR
- LOC LIMITS OF CONSTRUCTION
- SF SILT FENCE
- LOC/SF LIMITS OF CONSTRUCTION/SILT FENCE
- T TREE PROTECTION
- STAGING/SPOILS AREA
- CONSTRUCTION ENTRANCE/EXIT
- CONCRETE WASHOUT
- ROCK BERM
- INLET PROTECTION
- 4224 EXISTING TREE
- 4224 EXISTING TREE TO BE REMOVED

EROSION CONTROL NOTES:

1. ALL REQUIRED NOTES AND PERMITS MUST BE PLACED IN A HIGHLY VISIBLE LOCATION ONSITE BEFORE THE COMMENCEMENT OF CONSTRUCTION.
2. ALL EROSION AND SEDIMENT CONTROLS (ESC) MUST BE INSTALLED PRIOR TO ANY DISTURBANCE TO THE PROJECT SITE.
3. INSTALL SILT FENCE ACCORDINGLY FOR RUN–ON DIVERSION OR OFFSITE SEDIMENT CONTROL DEPENDING ON UP OR DOWN SLOPE, FACING POST SIDE ON THE DOWN GRADIENT SIDE.
4. ALL ESC USED ONSITE MUST BE REGULARLY MONITORED AND MAINTAINED AS NEEDED.
5. MUD AND OR DIRT TRACKED INTO THE ROADWAY MUST BE IMMEDIATELY REMOVED UPON DISCOVERY.
6. EXCESS MATERIALS THAT WILL BE TRANSPORTED TO AN OFFSITE LOCATION MUST HAVE THAT LOCATION CLEARED BY COUNTY INSPECTOR.
7. LOOSE TRASH AND DEBRIS MUST BE DISPOSED OF PROPERLY ONSITE.
8. CONTRACTOR SHALL MAINTAIN AND UTILIZE DUST CONTROL FOR THE DURATION OF THE PROJECT.
9. THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT PREVENTS TRACKING ONTO THE PUBLIC ROADWAY ON AN ONGOING/REGULAR BASIS.
10. INITIATE TEMPORARY STABILIZATION WHEN CONSTRUCTION CEASES IN A DISTURBED AREA FOR 14 DAYS.
11. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED.
12. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECT THAT ARE NOT NECESSARY FOR CONSTRUCTION.
13. COUNTY INSPECTOR MAY REQUEST ADDITIONAL CONTROLS BE INSTALLED ONSITE AS NEEDED.
14. TEMPORARY ESC'S SHALL REMAIN IN PLACE IN ALL DISTURBED AREAS UNTIL ADEQUATE STABILIZATION HAS BEEN ACHIEVED.
15. CONTRACTOR MUST REMOVE SEDIMENT FROM ALL STORM SEWER INLET BOXES, LINES, PIPES AND CULVERTS BEFORE CONDITIONAL/FINAL ACCEPTANCE CAN BE OBTAINED.
16. TRAVIS COUNTY REQUIRES CERTIFIED SWP3 INSPECTORS TO CONDUCT SWP3 INSPECTIONS AND REPORTING ON ALL PROJECTS WITH ONE ACRE OF DISTURBANCE AND LARGER.
17. A DE–WATERING PLAN FOR THE POND(S) MUST BE APPROVED BY THE COUNTY ENVIRONMENTAL INSPECTOR OF THE TEMPORARY SEDIMENTATION POND IS DE–WATERED AFTER RAINFALL EVENTS. THE DE–WATERING METHOD MUST MINIMIZE THE DISCHARGE OF SUSPENDED SEDIMENTS TO THE GREATEST EXTENT FEASIBLE BY DRAWING WATER FROM THE SURFACE OF THE IMPOUNDMENT.
18. CREEK SETBACK AND VFS ARE TO REMAIN UNDISTURBED, EXCEPT WHERE UTILITIES CROSS.
19. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY UPON INLET INSTALLATION.
20. PERMITTEE SHALL INSPECT ALL INLET PROTECTION DEVICES AS PART OF THE WEEKLY SWP3 REPORT. UPON RECEIVING A FORECAST CALLING FOR A RAIN EVENT FOR AN EXTENDED PERIOD, MODIFICATION OF INLET PROTECTION SHOULD BE MADE TO PREVENT FLOODING OR PONDING OF WATER IF TRAFFIC OR PROPERTY CONCERNS ARISE.
21. MULCH CREATED FROM CLEARING TO BE DOUBLE GROUND AND STOCKPILED ON SITE AND SUED AS TEMPORARY/TRANSITIONAL STABILIZATION MEASURES AS NEEDED/REQUIRED
22. THE OWNER'S ENGINEER WILL MAKE PERIODIC SITE VISITS AND OBSERVATIONS DURING CONSTRUCTION TO ENSURE ADEQUACY OF THE DESIGN AND SAFETY OF STRUCTURES IN COMPLIANCE WITH THE ISSUANCE OF THE CONSTRUCTION SUMMARY REPORT AND ENGINEERING CONCURRENCE LETTER AS REQUIRED AS PART OF THE PROJECT CLOSE–OUT PROCESS.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

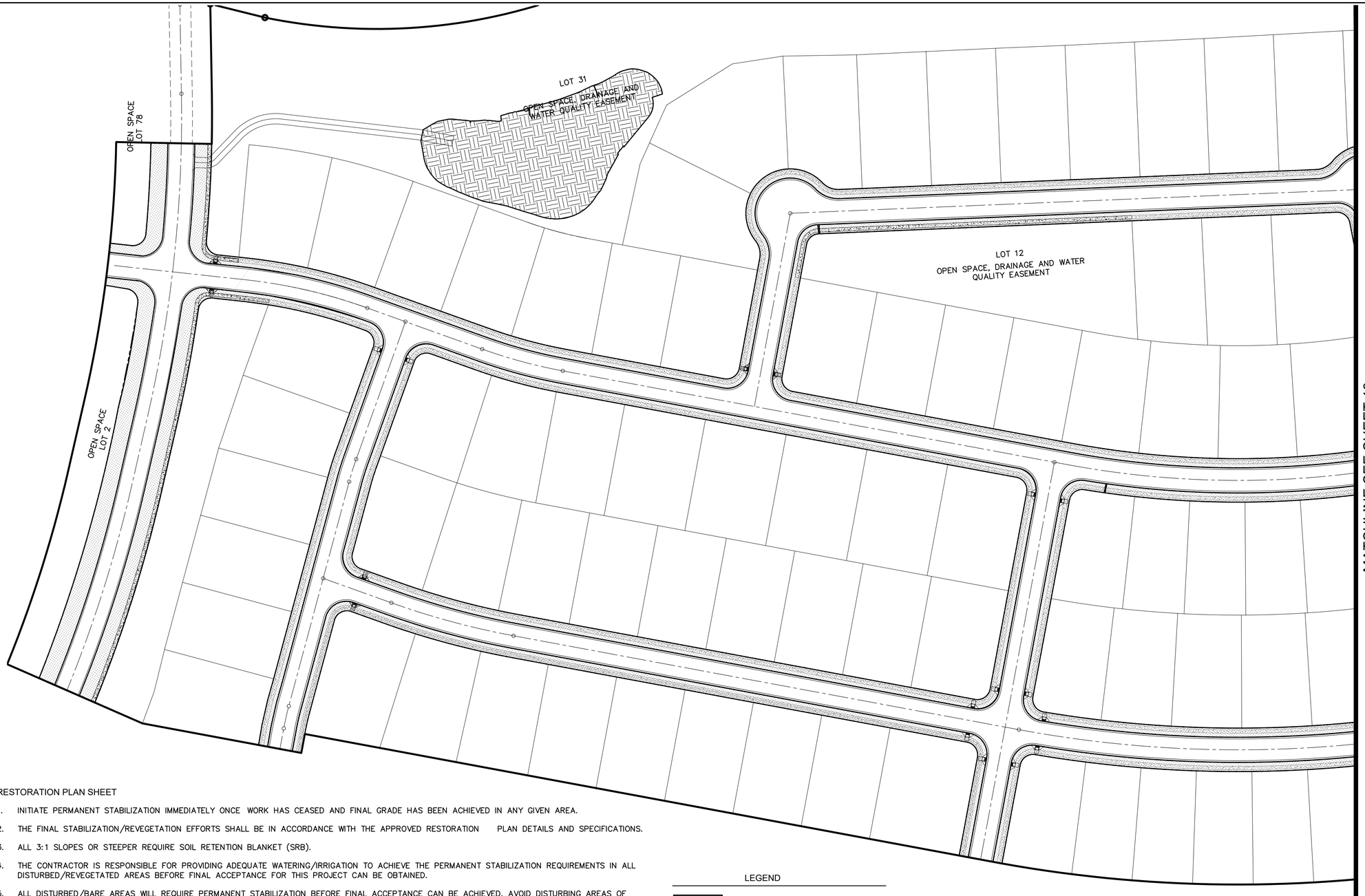
EROS. SEDIMENTATION CNTRL. & TREE PROTECTION PLAN SHEET 2 OF 2

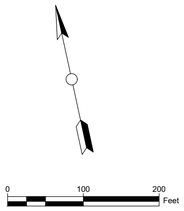
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 11 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_ers_01.dwg 9/11/2025 3:59 PM





RESTORATION PLAN SHEET

1. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED IN ANY GIVEN AREA.
2. THE FINAL STABILIZATION/REVEGETATION EFFORTS SHALL BE IN ACCORDANCE WITH THE APPROVED RESTORATION PLAN DETAILS AND SPECIFICATIONS.
3. ALL 3:1 SLOPES OR STEEPER REQUIRE SOIL RETENTION BLANKET (SRB).
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE WATERING/IRRIGATION TO ACHIEVE THE PERMANENT STABILIZATION REQUIREMENTS IN ALL DISTURBED/REVEGETATED AREAS BEFORE FINAL ACCEPTANCE FOR THIS PROJECT CAN BE OBTAINED.
5. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECTS THAT ARE NOT NECESSARY FOR CONSTRUCTION.
6. ALL DISTURBED AREAS MUST MEET THE REQUIREMENT FOR PERMANENT STABILIZATION.
7. SEE SHEET NO 12 FOR SEED AND SOIL SPECIFICATIONS AND SEASONAL PLANNING NOTES FOR FINAL STABILIZATION REQUIREMENTS.
8. THE NOTICE OF TERMINATION (NOT) FOR THIS PROJECT SHALL NOT BE SUBMITTED UNTIL THE TRAVIS COUNTY ENVIRONMENTAL INSPECTOR APPROVES CLEARANCE.
9. ALL DISTURBED AREAS, INCLUDING FUTURE HOME LOTS, ARE TO BE REVEGETATEDPRIOR TO THE SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER UNLESS:
   (A) A DEVELOPER'S AGREEMENT IS EXECUTED FOR THE REMAINING AREAS IN NEED OF STABILIZATION, OR
   (B) TRANSFERENCE OF OWNERSHIP HAS OCCURRED IN THE MANNER SPECIFIED IN SEC. 482.401.G
10. AREAS THAT CANNOT PROVIDE DOCUMENTATION OF A DEVELOPER'S AGREEMENT OR TRANSFER OF CONTROL OF OWNERSHIP WILL FALL TO THE DEVELOPER TO STABILIZE PRIOR TO SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER AND BEFORE FINAL SUBMISSION.
11. DEVELOPERS TAKE NOTE: THIS REQUIREMENT WILL BE STRONGLY ENFORCED AT TIME OF PROJECT FINAL.

LEGEND

- SOIL RETENTION MATTING CLASS 1 TYPE A (3:1 SLOPE OR STEEPER)
- HYDROMULCHING AREA
- SODDED AREA
- UNDISTURBED AREA/PAVED SURFACE (NO RESTORATION)
- 4" MITIGATION TREE

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 1OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 12 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_rest_01.dwg 9/11/2025 3:43 PM

RESTORATION PLAN SHEET

1. INITIATE PERMANENT STABILIZATION IMMEDIATELY ONCE WORK HAS CEASED AND FINAL GRADE HAS BEEN ACHIEVED IN ANY GIVEN AREA.
2. THE FINAL STABILIZATION/REVEGETATION EFFORTS SHALL BE IN ACCORDANCE WITH THE APPROVED RESTORATION PLAN DETAILS AND SPECIFICATIONS.
3. ALL 3:1 SLOPES OR STEEPER REQUIRE SOIL RETENTION BLANKET (SRB).
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ADEQUATE WATERING/IRRIGATION TO ACHIEVE THE PERMANENT STABILIZATION REQUIREMENTS IN ALL DISTURBED/REVEGETATED AREAS BEFORE FINAL ACCEPTANCE FOR THIS PROJECT CAN BE OBTAINED.
5. ALL DISTURBED/BARE AREAS WILL REQUIRE PERMANENT STABILIZATION BEFORE FINAL ACCEPTANCE CAN BE ACHIEVED. AVOID DISTURBING AREAS OF THE PROJECTS THAT ARE NOT NECESSARY FOR CONSTRUCTION.
6. ALL DISTURBED AREAS MUST MEET THE REQUIREMENT FOR PERMANENT STABILIZATION.
7. THE NOTICE OF TERMINATION (NOT) FOR THIS PROJECT SHALL NOT BE SUBMITTED UNTIL THE TRAVIS COUNTY ENVIRONMENTAL INSPECTOR APPROVES CLEARANCE.
8. ALL DISTURBED AREAS, INCLUDING FUTURE HOME LOTS, ARE TO BE REVEGETATED PRIOR TO THE SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER UNLESS:
   (A) A DEVELOPER'S AGREEMENT IS EXECUTED FOR THE REMAINING AREAS IN NEED OF STABILIZATION, OR
   (B) TRANSFERENCE OF OWNERSHIP HAS OCCURRED IN THE MANNER SPECIFIED IN SEC. 482.401.G
9. AREAS THAT CANNOT PROVIDE DOCUMENTATION OF A DEVELOPER'S AGREEMENT OR TRANSFER OF CONTROL OF OWNERSHIP WILL FALL TO THE DEVELOPER TO STABILIZE PRIOR TO SUBMISSION OF THE ENGINEER'S CONCURRENCE LETTER AND BEFORE FINAL SUBMISSION.
10. DEVELOPERS TAKE NOTE: THIS REQUIREMENT WILL BE STRONGLY ENFORCED AT TIME OF PROJECT FINAL.

LEGEND

- SOIL RETENTION MATTING CLASS 1 TYPE A (3:1 SLOPE OR STEEPER)
- HYDROMULCHING AREA
- SODDED AREA
- UNDISTURBED AREA/PAVED SURFACE (NO RESTORATION)
- 4" MITIGATION TREE

0 60 120 Feet

PHASE 2 SECTION 3 EXISTING TREES TO BE REMOVED

TAG #	SIZE (INCHES)	TYPE	BOLES			
4662	15.5	CEDAR ELM				
4663	14.5	LIVE OAK				
4664	18.5	LIVE OAK				
4665	14	LIVE OAK				
4666	8	CEDAR ELM				
4667	13.5	CEDAR ELM	9	8.5		
4668	13.5	CEDAR ELM	9	8.5		
4669	12	LIVE OAK				
4670	22	LIVE OAK	12.5	10	9	
4671	23.5	LIVE OAK	16.5	14		
4729	19.5	LIVE OAK				
4730	19	LIVE OAK				
4731	18.5	CEDAR ELM				
4752	11	LIVE OAK				
4753	9	LIVE OAK				
4754	12.5	LIVE OAK				
4778	15	LIVE OAK	11.5	7		
4779	14.5	LIVE OAK	11.5	6		
4780	25	LIVE OAK	15.5	10.5	8	
4804	9	LIVE OAK				
4805	9.5	LIVE OAK				
4821	17.5	LIVE OAK	11.5	11.5		
4822	11.5	LIVE OAK				
4865	10.5	LIVE OAK				
4896	14.5	LIVE OAK				
4897	11.5	LIVE OAK				
4901	11.5	LIVE OAK				
4903	18.5	LIVE OAK	12.5	12		
4912	16	LIVE OAK	11	9.5		
4913	10.5	LIVE OAK				
4914	26.5	LIVE OAK	11.5	10.5	10	9
4929	11	LIVE OAK				
4930	20.5	LIVE OAK	15	10.5		
4931	27.5	LIVE OAK	14	10	9	7.5
4970	12	LIVE OAK				
4975	11	LIVE OAK				
4976	10	LIVE OAK				
4977	8.5	LIVE OAK				
4978	9	LIVE OAK				
4979	11	LIVE OAK				
4980	17.5	LIVE OAK	10	7.5	7.5	
4981	11.5	LIVE OAK	8	6.5		
4982	12.5	LIVE OAK				
4991	18.5	LIVE OAK	12.5	12		
4992	9	LIVE OAK				

TAG #	SIZE (INCHES)	TYPE	BOLES		
5012	12	LIVE OAK			
5014	13	LIVE OAK			
5023	25	LIVE OAK	19	12	
5035	16	LIVE OAK			
5049	31	LIVE OAK	18	13	13
5050	15	LIVE OAK			
5243	9	LIVE OAK			
5244	10.5	LIVE OAK	8	5	
5260	8.5	CEDAR ELM			
5261	8	LIVE OAK			
5262	11	LIVE OAK			
5263	8	LIVE OAK			
5264	9.5	LIVE OAK			
5265	10	LIVE OAK			
5266	9	LIVE OAK			
5275	9	LIVE OAK			
5276	10.5	LIVE OAK			
5277	9.5	LIVE OAK			
5278	9.5	LIVE OAK			
5279	8	LIVE OAK			
5285	9	LIVE OAK			
5292	8.5	LIVE OAK			
5293	8.5	LIVE OAK			
5294	12.5	LIVE OAK			
5295	8.5	LIVE OAK			
5296	11	LIVE OAK	8	6	
5298	9	LIVE OAK			
5320	12	LIVE OAK	8.5	7	
5328	17.5	LIVE OAK	14	7	
5329	9	LIVE OAK			
5331	12.5	LIVE OAK	9	7	
5333	8.5	LIVE OAK			
5338	8.5	LIVE OAK			
15416	15.5	LIVE OAK	12	6.5	
15417	11	LIVE OAK			
15418	14	LIVE OAK	10.5	7	
15419	10.5	LIVE OAK			
15420	12	LIVE OAK			
15421	31	LIVE OAK	18.5	13	12
15422	16	LIVE OAK			
15423	14.5	LIVE OAK			
15424	10.5	LIVE OAK			
15451	23	LIVE OAK			
15452	13.5	LIVE OAK			
15453	12.5	CEDAR ELM			

TAG #	SIZE (INCHES)	TYPE	BOLES		
15454	18	LIVE OAK			
15455	28	LIVE OAK	16	15.5	8
15456	13	LIVE OAK			
15457	11	LIVE OAK			
15458	14.5	LIVE OAK			
15459	13	LIVE OAK			
15460	13.5	LIVE OAK			
15461	26.5	LIVE OAK			
15468	14	LIVE OAK			
17852	8	LIVE OAK			
17853	12	LIVE OAK			
17854	9	LIVE OAK			
17856	8.5	LIVE OAK			
17857	13	LIVE OAK			
18144	21.5	LIVE OAK			
18151	19	LIVE OAK (DEAD)			
18152	19	LIVE OAK			
18153	9	LIVE OAK			
18154	15.5	LIVE OAK			
18155	9.5	LIVE OAK			
18156	12	LIVE OAK			
18157	17	LIVE OAK			
18158	13.5	LIVE OAK	10	7	
18159	9	LIVE OAK			
18160	8	LIVE OAK			
18161	10	LIVE OAK			
18162	19.5	LIVE OAK			
18163	11	LIVE OAK			
18173	21	LIVE OAK	14	13.5	
18191	21	LIVE OAK			
18192	20	LIVE OAK (DEAD)			
18203	14.5	LIVE OAK			
18204	17	LIVE OAK			
18205	16	LIVE OAK			
18206	8.5	LIVE OAK			
18207	10.5	LIVE OAK			
18227	9.5	LIVE OAK			
18228	10.5	LIVE OAK			
18229	11	LIVE OAK			
18230	11.5	LIVE OAK			
18231	10	LIVE OAK			
18232	9.5	LIVE OAK			
18233	10.5	LIVE OAK			
18234	8.5	LIVE OAK			
18235	8	LIVE OAK			

TAG #	SIZE (INCHES)	TYPE	BOLES		
18236	11	LIVE OAK			
18237	9.5	LIVE OAK			
18238	9	LIVE OAK			
18397	28	LIVE OAK	20.5	15	
18414	11	LIVE OAK			
18416	13	LIVE OAK			
18417	13	LIVE OAK			
18421	22	LIVE OAK	16	12	
18422	24.5	LIVE OAK	16.5	15.5	
18423	16	LIVE OAK			
18441	13.5	LIVE OAK			
18442	13.5	LIVE OAK			
18443	11.5	LIVE OAK			
18444	11	LIVE OAK			
18445	15.5	LIVE OAK	11	9	
18446	9.5	LIVE OAK			
18448	8	LIVE OAK			
18449	9	LIVE OAK			
18450	10	LIVE OAK			
18468	17.5	LIVE OAK			
18469	16.5	LIVE OAK			
18470	15.5	LIVE OAK			
18471	18	LIVE OAK			
18472	18	LIVE OAK			
18473	21	LIVE OAK			
18474	17	LIVE OAK			
18475	14.5	LIVE OAK			
18476	14	LIVE OAK			
18480	14.5	LIVE OAK			
18481	16	LIVE OAK			
18483	25	LIVE OAK	17	16	
18485	25.5	LIVE OAK			
18486	16	LIVE OAK			
18495	14.5	LIVE OAK			
18496	13	LIVE OAK			
18497	20.5	LIVE OAK			

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL STABILIZATION-RESTORATION & TREE MITIGATION SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

Sheet 13 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_rest_01.dwg 9/11/2025 3:47 PM

APPENDIX P-1 - EROSION CONTROL NOTES:

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).

2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE COA ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR A TPDES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF AUSTIN ENVIRONMENTAL INSPECTOR AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE BASIC ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY COA EV PLAN REVIEWERS AS WELL AS COA EV INSPECTORS.

3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.

4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTION MEASURES AND "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO BEGINNING ANY SITE PREPARATION WORK. THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE DEVELOPMENT SERVICES DEPARTMENT, 512-974-2278 OR BY EMAIL AT ENVIRONMENTAL.INSPECTIONS@AUSTINTEXAS.GOV, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. COA APPROVED ESC PLAN AND TPDES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR AT THIS TIME.

5. ANY MAJOR VARIATION IN MATERIALS OR LOCATIONS OF CONTROLS OR FENCES FROM THOSE SHOWN ON THE APPROVED PLANS WILL REQUIRE A REVISION AND MUST BE APPROVED BY THE REVIEWING ENGINEER, ENVIRONMENTAL SPECIALIST OR CITY ARBORIST AS APPROPRIATE. MAJOR REVISIONS MUST BE APPROVED BY AUTHORIZED COA STAFF. MINOR CHANGES TO BE MADE AS FIELD REVISIONS TO THE EROSION AND SEDIMENTATION CONTROL PLAN MAY BE REQUIRED BY THE ENVIRONMENTAL INSPECTOR DURING THE COURSE OF CONSTRUCTION TO CORRECT CONTROL INADEQUACIES.

6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR THAT IS EITHER A LICENSED ENGINEER (OR PERSON DIRECTLY SUPERVISED BY THE LICENSED ENGINEER) OR CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC OR CPESC - IT), CERTIFIED EROSION, SEDIMENT AND STORMWATER - INSPECTOR (CESSWI OR CESSWI - IT) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC OR CISEC - IT) CERTIFICATION TO INSPECT THE CONTROLS AND FENCES AT WEEKLY OR BI-WEEKLY INTERVALS AND AFTER ONE-HALF (½) INCH OR GREATER RAINFALL EVENTS TO INSURE THAT THEY ARE FUNCTIONING PROPERLY. THE PERSON(S) RESPONSIBLE FOR MAINTENANCE OF CONTROLS AND FENCES SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS TO DAMAGED AREAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (⅓) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.

7. PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAUL ROADS AND WATERWAY CROSSINGS CONSTRUCTED FOR TEMPORARY CONTRACTOR ACCESS MUST BE REMOVED, ACCUMULATED SEDIMENT REMOVED FROM THE WATERWAY AND THE AREA RESTORED TO THE ORIGINAL GRADE AND REVEGETATED. ALL LAND CLEARING DEBRIS SHALL BE DISPOSED OF IN APPROVED SPOIL DISPOSAL SITES.

8. ALL WORK MUST STOP IF A VOID IN THE ROCK SUBSTRATE IS DISCOVERED WHICH IS; ONE SQUARE FOOT IN TOTAL AREA; BLOWS AIR FROM WITHIN THE SUBSTRATE AND/OR CONSISTENTLY RECEIVES WATER DURING ANY RAIN EVENT. AT THIS TIME IT IS THE RESPONSIBILITY OF THE PROJECT MANAGER TO IMMEDIATELY CONTACT A CITY OF AUSTIN ENVIRONMENTAL INSPECTOR FOR FURTHER INVESTIGATION.

9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:

   A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL [SEE STANDARD SPECIFICATION ITEM NO. 601S.3(A)]. DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.

   • TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 601S.

   AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF STANDARD SPECIFICATION 601S BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.

   • SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

   THE VEGETATIVE STABILIZATION OF AREAS DISTURBED BY CONSTRUCTION SHALL BE AS FOLLOWS:

TEMPORARY VEGETATIVE STABILIZATION:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP: (WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT UTILIZE ANNUAL RYEGRASS (LOLIUM MULTIFLORUM) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.

2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 606S, FERTILIZER. FERTILIZATION SHOULD NOT OCCUR WHEN RAINFALL IS EXPECTED OR DURING SLOW PLANT GROWTH OR DORMANCY. CHEMICAL FERTILIZER MAY NOT BE APPLIED IN THE CRITICAL WATER QUALITY ZONE.

   B. HYDROMULCH SHALL COMPLY WITH TABLE 1, BELOW.

   C. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATION 604S OR 609S.

   TABLE 1: HYDROMULCHING FOR TEMPORARY VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
100% OR ANY BLEND OF WOOD, CELLULOSE, STRAW, AND/OR COTTON PLANT MATERIAL (EXCEPT NO MULCH SHALL EXCEED 30% PAPER)	70% or greater Wood/Straw 30% or less Paper or Natural Fibers	0—3 months	Moderate slopes; from flat to 3:1	1,500 to 2,000 lbs per acre

PERMANENT VEGETATIVE STABILIZATION:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.

2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEM 604S OR 609S.

   A. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 606S, FERTILIZER. APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.

   A. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.

   C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE CHAPTER 6-4 (WATER CONSERVATION), AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE AUSTIN WATER UTILITY AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.

   D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.

   E. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 604S AND 609S.

   TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATIONS	APPLICATION RATES
Bonded Fiber Matrix (BFM)	80% Organic defibrated fibers			
10% Tackifier	6 months	On slopes up to 2:1 and erosive soil conditions	2,500 to 4,000 lbs per acre (see manufacturers recommendations)	
Fiber Reinforced Matrix (FRM)	65% Organic defibrated fibers 25% Reinforcing Fibers or less 10% Tackifier	Up to 12 months	On slopes up to 1:1 and erosive soil conditions	3,000 to 4,500 lbs per acre (see manufacturers recommendations)

3. DEVELOPER INFORMATION:

   OWNER MASONWOOD HP, LTD.

   PHONE # 512-306-8300

   ADDRESS:
   4301 WESTBANK DR., BLDG A SUITE 110
   AUSTIN, TX 78746

   OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:
   MOODY ENGINEERING INC.

   PHONE # 512-502-8333

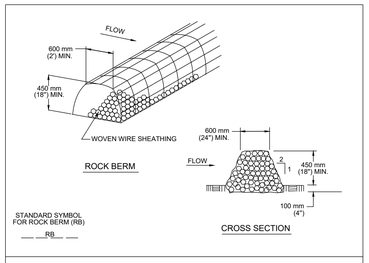
   PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE:
   MASONWOOD HP, LTD.

   PHONE # 512-306-8300

   PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE:
   MASONWOOD HP, LTD.

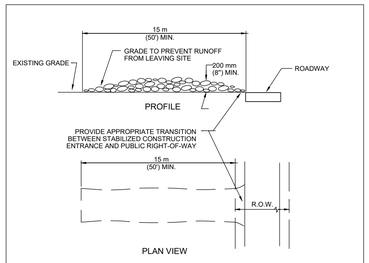
   PHONE # 512-306-8300

4. THE CONTRACTOR SHALL NOT DISPOSE OF SURPLUS EXCAVATED MATERIAL FROM THE SITE WITHOUT NOTIFYING THE DEVELOPMENT SERVICES DEPARTMENT AT 512-974-2278 AT LEAST 48 HOURS PRIOR WITH THE LOCATION AND A COPY OF THE PERMIT ISSUED TO RECEIVE THE MATERIAL.



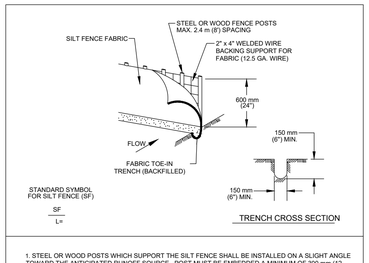
NOTES:
1. USE ONLY OPEN GRADED ROCK 75 to 125 mm (3 to 5") DIAMETER FOR ALL CONDITIONS.
2. THE ROCK BERM SHALL BE SECURED WITH A WOVEN WIRE SHEATHING HAVING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 12.9 mm (20 GAUGE).
3. THE ROCK BERM SHALL BE INSPECTED DAILY OR AFTER EACH RAIN, AND THE STONE AND/OR FABRIC CORE-WOVEN SHEATHING SHALL BE REPLACED WHEN THE STRUCTURE CEASES TO FUNCTION AS INTENDED, DUE TO SEDIMENT ACCUMULATION AMONG THE ROCKS, WASHOUT, CONSTRUCTION TRAFFIC DAMAGE, ETC.
4. IF SEDIMENT REACHES A DEPTH EQUAL TO ONE-THIRD THE HEIGHT OF THE BERM OR 150 mm (6"), WHICHEVER IS LESS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF ON AN APPROVED SITE AND IN A MANNER THAT WILL NOT CREATE A SEDIMENTION PROBLEM.
5. WHEN THE SITE IS COMPLETELY STABILIZED,THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		ROCK BERM	
RECORD COPY SIGNED BY MORGAN BYARS	8/24/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 639S-1



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

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		STABILIZED CONSTRUCTION ENTRANCE	
RECORD COPY SIGNED BY J. PATRICK MURPHY	5/23/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 641S-1



1. STEEL OR WOOD POSTS WHICH SUPPORT THE SILT FENCE SHALL BE INSTALLED ON A SLIGHT ANGLE TOWARD THE ANTICIPATED RUNOFF SOURCE. POST MUST BE EMBEDDED A MINIMUM OF 300 mm (12 INCHES). IF WOOD POSTS CANNOT ACHIEVE 300 mm (12 inches) DEPTH, USE STEEL POSTS.
2. THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWNSLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
3. THE TRENCH MUST BE A MINIMUM OF 150 mm (6 inches) DEEP AND 150 mm (6 inches) WIDE TO ALLOW FOR THE SILT FENCE FABRIC TO BE LAID IN THE GROUND AND BACKFILLED WITH COMPACTED MATERIAL.
4. SILT FENCE FABRIC SHOULD BE SECURELY FASTENED TO EACH STEEL OR WOOD SUPPORT POST OR TO WOVEN WIRE , WHICH IS IN TURN ATTACHED TO THE STEEL OR WOOD FENCE POST.
5. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.
7. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6 inches). THE SILT SHALL BE DISPOSED OF ON AN APPROVED SITE AND IN SUCH A MANNER THAT WILL NOT CONTRIBUTE TO ADDITIONAL SILTATION.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		SILT FENCE	
RECORD COPY SIGNED BY MORGAN BYARS	09/01/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 642S-1

APPENDIX P-2: - CITY OF AUSTIN STANDARD NOTES FOR TREE AND NATURAL AREA PROTECTION

1. ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
2. PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF AUSTIN STANDARDS FOR TREE PROTECTION.
3. PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING), AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
4. EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILD-UP WITHIN TREE DRIP LINES.
5. PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE) , FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:
   A. SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
   B. ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVIEWED AND AUTHORIZED BY THE CITY ABORIST;
   C. WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
   D. OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
6. EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
   A. WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE, TREE WELL, OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEYOND THE AREA DISTURBED;
   B. WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZED ROOT DAMAGE);
   C. WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING;
   D. WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY ARBORIST AT 974-1876 TO DISCUSS ALTERNATIVES.
   E.

SPECIAL NOTE: FOR THE PROTECTION OF NATURAL AREAS, NO EXCEPTIONS TO INSTALLING FENCES AT THE LIMIT OF CONSTRUCTION LINE WILL BE PERMITTED.

7. WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FT (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
8. TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
9. ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACKFILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACKFILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
10. ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
11. NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
12. PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
13. ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFERENCE THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).
14. DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

NOTES:

1. MATERIAL ¯ THE FIBRIC MUST CORRESPOND TO THE FOLLWNG REQUIREMENTS:

PROPERTY	ASTM TEST METHOD	REQUIREMENTS
FABRIC WEIGHT	D 3776	±3.0 OUNCES/SQUARE YPAD
ULTRAVIOLET (UV) RADIATION STABILITY	D 4355	70% STRENGTH RETAINED) MIN., AFTER 500 HOURS IN XENON ARC DEVICE
MUUEN BURST STRENGTH	D 3786	±120 POUND PER SQUPRE INCH
WATER FLOW RATE	D 4491	± 275 GALLONS/MINUTE/SQUARE FEET

2. THIS MATERIAL SHOULD HAVE A MAXIMUM EXPECTED USEFULLIFE OF APPROXIMATELY EIGHTEEN (18) MONTHS. THE INLET PROTECTION DEVICES SHOULD BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN OUT AND DISPOSAL OF TRAPPED SEDIMENT WILE MINIMIZING INTERFERENCE WITH CONSTRUCTION ACT IVITIES. THEY SHOU LD ALSO BE CONSTRUCTED SUCH THAT ANY PONDING OF STORM WATER WILL NOT CAUSE EXCESSIVE ß O.W. FLOODING (I.E. < 4 INCHES OF STANDING WATER) OR DPMAGETO THESTRUCTURE OR ADJACENT AREAS.

3 COVERAGE " THE FABRIC/WIRE SHOULD COMPLETELY COVER THE OPENING OF THE INLET AND DEVICES SHOULD BE INSTALLED WITHOUT PROTRUDING PARTS THAT COULD BE A TRAFFIC, WORKER, OR PEDESTRIAN HAZARD. WHERE SECTIONS OF THE FABRIC OVERLAP, THEY SHALL OVERLAP AT LEASTTHREE (3) INCHES.

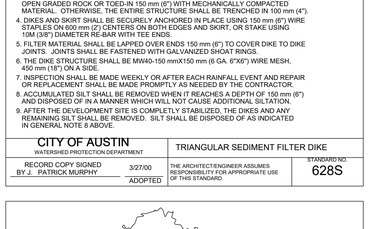
4. THE INLET FILTER SHALL BE ATTACHED IN A WAY THAT THEY CAN EASILY BE REMOVED AND ARE NOT SECURED OR ATTACHED BY THE USE OF SAND BAGS. THE INLET FILTER MUST BE REMOMD UPON COMPLETION OF WORK¯ IF REMOVAL DAMAGES THE CONCREE CURB, THE CURB MUST BE REPAIRED IMMEDIATELY

5. DAILY INSPECTION SHALL BE MADE BY THE CONTRACTOR AND SILT ACCUMULATION MUST BE REMOVED WHEN THE DEPTH REACHES 50 MM (2 INCHES) INCHES OR ONE THIRD THE HEIGHT OF THE INLET THROAT, DISPOSED OF IN A MANNER WHICH WILL NOT CWSE ADDITIONAL SILTATION.

6. CONTRACTOR SHALL MONITOR THE PERFORMANCE OF INLET PROTECTION DURING EACH RAINFALL E AND IMMEDIATELY REMOVE THE INLET PROTECTIONS IF THE STORMWATER BEGINS TO OVERTOP THE CURB.

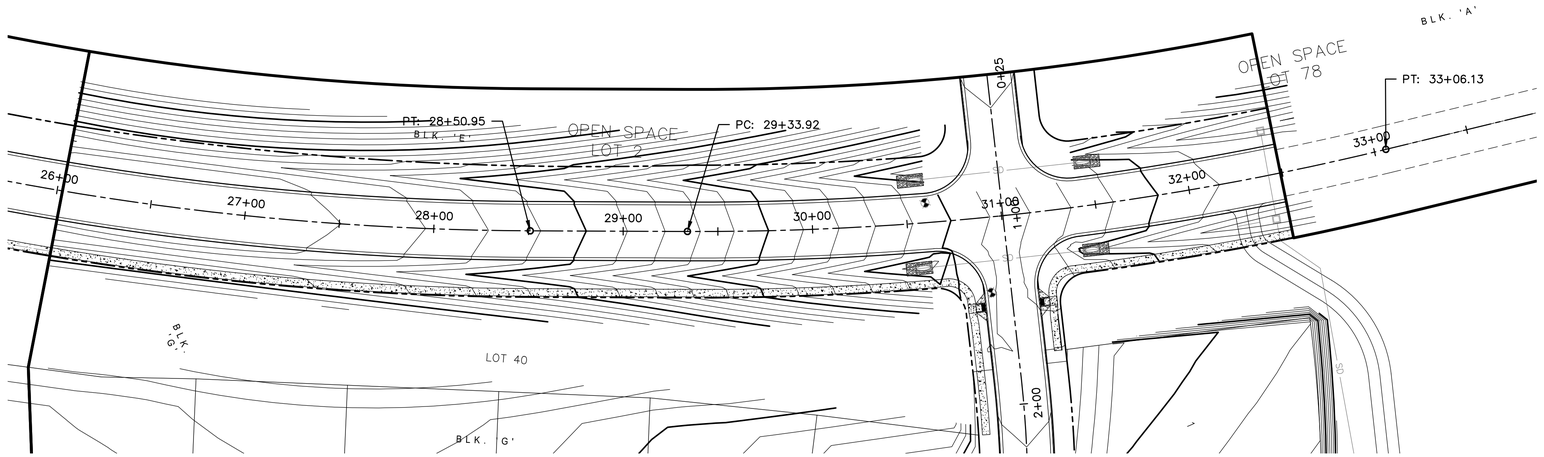
7. INLET PROTECTIONS SHALL BE REMOVED AS SOON AS THE SOURCE OF SEDIMENT HAS ACHIEVED STABILIZATION CONDITIONS.

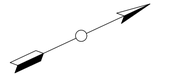
CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		FILTER DIKE CURB INLET PROTECTION	
RECORD COPY SIGNED BY MAPI YIGIL	10/30/09 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 628S-2



GENERAL NOTES
1. DIKES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT DIKE.
2. THE FABRIC COVER AND SKIRT SHALL BE A CONTINUOUS WRAPPING OF GEOTEXTILE. THE SKIRT SHALL BE A CONTINUOUS EXTENSION OF THE FABRIC ON THE UPSTREAM FACE.
3. THE SKIRT SHALL BE WEIGHTED WITH A CONTINUOUS LAYER OF 75-125 mm (3-5") OPEN GRADED ROCK OR TOED-IN 150 mm (6") WITH MECHANICALLY COMPACTED MATERIAL. OTHERWISE, THE ENTIRE STRUCTURE SHALL BE TRENCHED IN 100 mm (4").
4. DIKES AND SKIRT SHALL BE SECURELY ANCHORED IN PLACE USING 150 mm (6") WIRE STAPLES ON 600 mm (2') CENTERS ON BOTH EDGES AND SKIRT, OR STAKE USING 10M (3/8") DIAMETER RE-BAR WITH TEE ENDS.
5. FILTER MATERIAL SHALL BE LAPPED OVER ENDS 150 mm (6") TO COVER DIKE TO DIKE JOINTS. JOINTS SHALL BE FASTENED WITH GALVANIZED SHOAT RINGS.
6. THE DIKE STRUCTURE SHALL BE MW40-150 mmX150 mm (6 GA. 6"X6") WIRE MESH, 450 mm (18") ON A SIDE.
7. INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED BY THE CONTRACTOR.
8. ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 150 mm (6") AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.
9. AFTER THE DEVELOPMENT SITE IS COMPLETLY STABILIZED, THE DIKES AND ANY REMAINING SILT SHALL BE REMOVED. SILT SHALL BE DISPOSED OF AS INDICATED IN GENERAL NOTE 8 ABOVE.

CITY OF AUSTIN WATERSHED PROTECTION DEPARTMENT		TRIANGULAR SEDIMENT FILTER DIKE	
RECORD COPY SIGNED BY J. PATRICK MURPHY	3/27/00 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR





HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

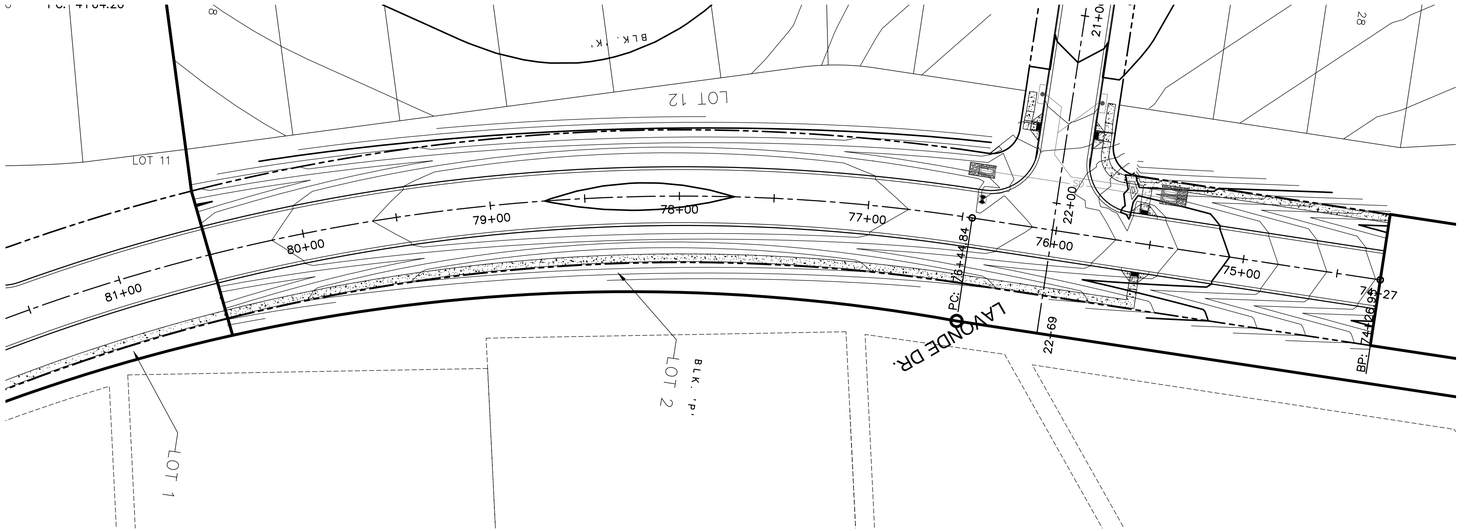
LAVONDE DRIVE STA 1+00 TO STA 9+75

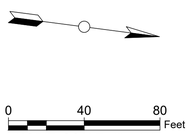
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 15 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_rd_01.dwg 9/11/2025 3:50 PM





HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3

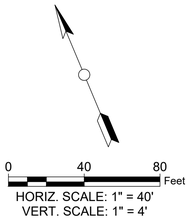
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

LAVONDE DRIVE STA 20+00 TO STA 28+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

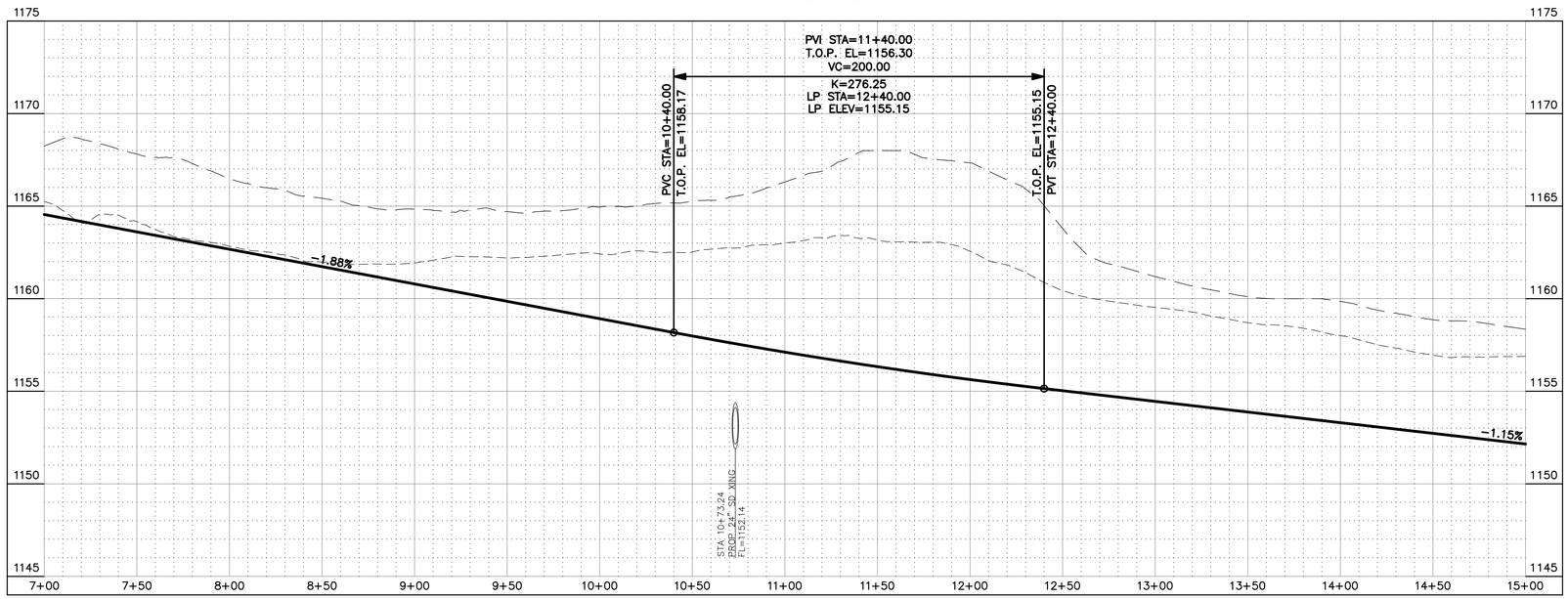
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pmp_rd_01.dwg 9/11/2025 3:51 PM



HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

LISERON DRIVE



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

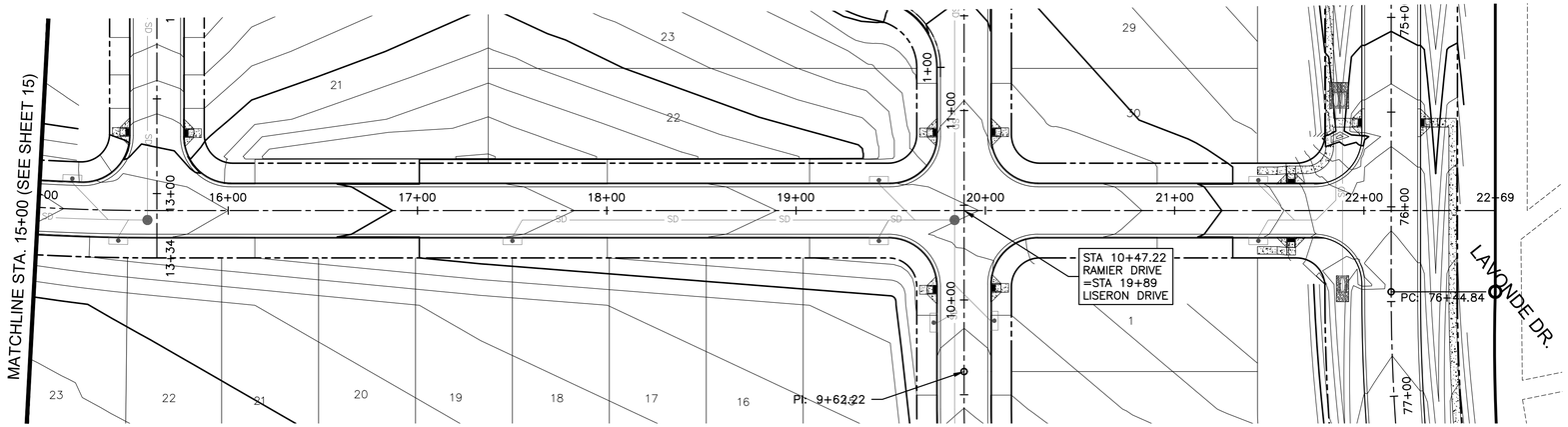
LISERON DRIVE STA 7+00 TO STA 15+00

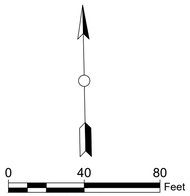
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

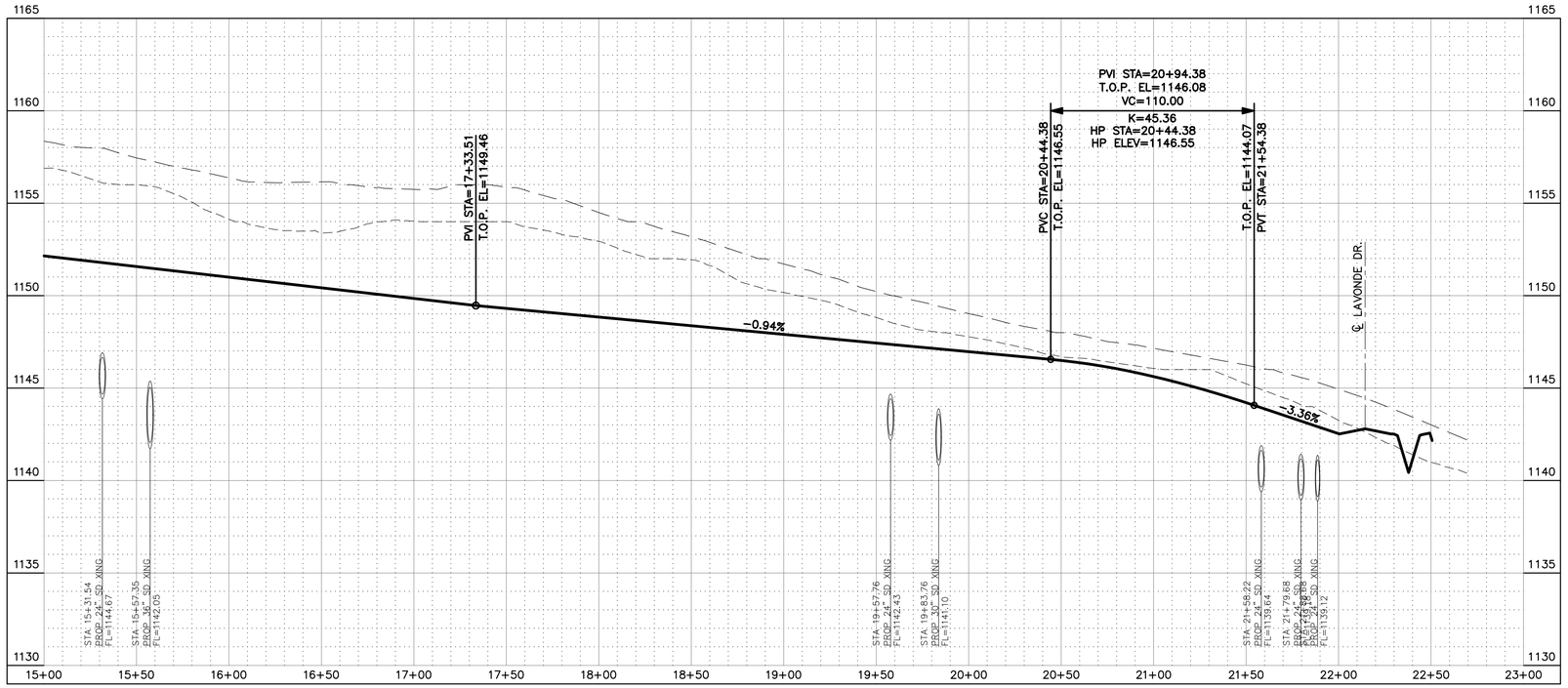
Sheet 17 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_prp_rd_01.dwg 9/11/2025 3:47 PM





LISERON DRIVE



MOODY
ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

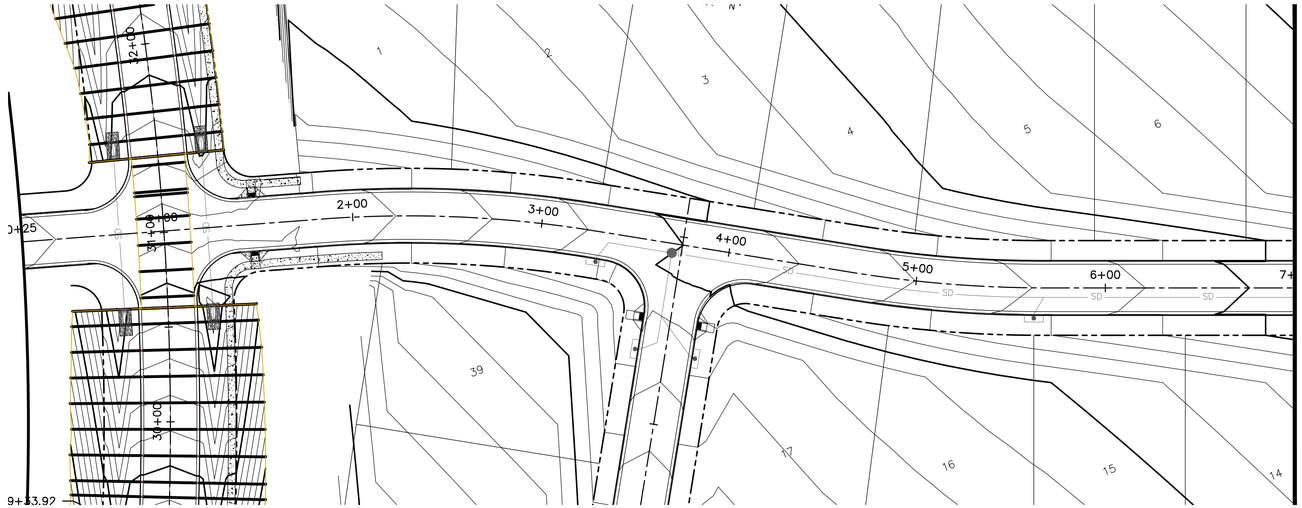
LISERON DRIVE STA 15+00 TO STA

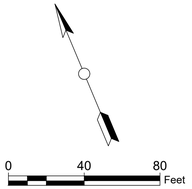
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

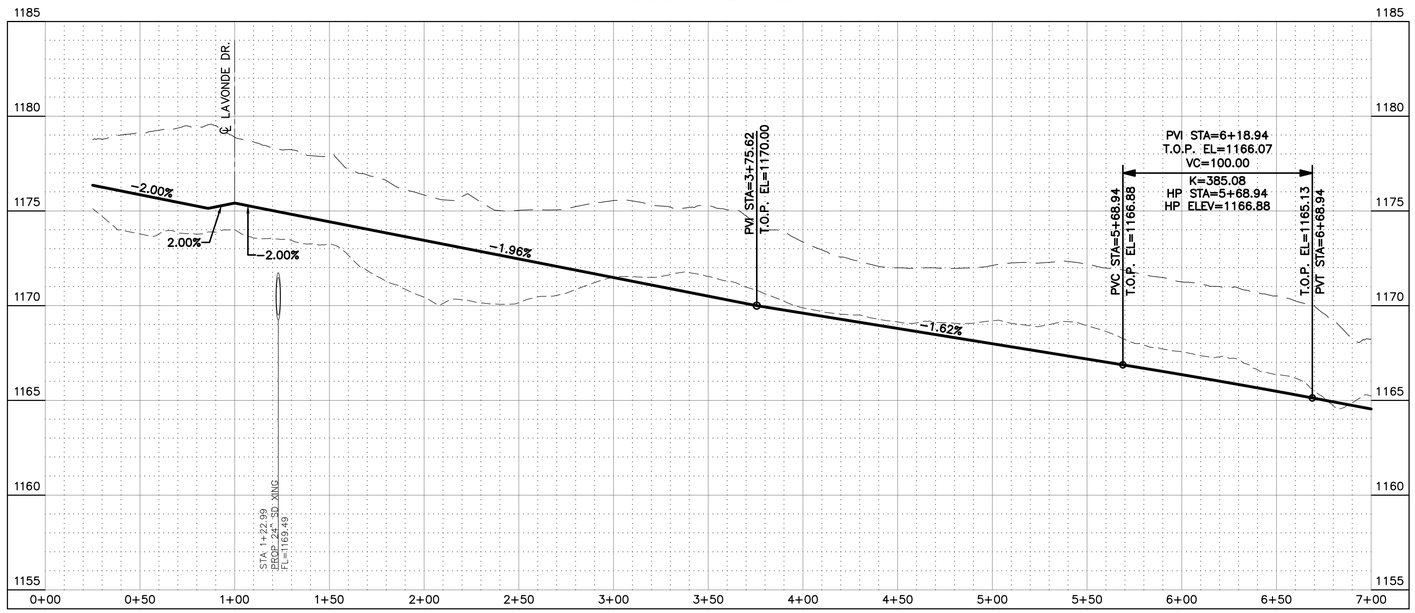
Sheet 18 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pmp_rd_01.dwg 9/11/2025 3:51 PM





LISERON DRIVE



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

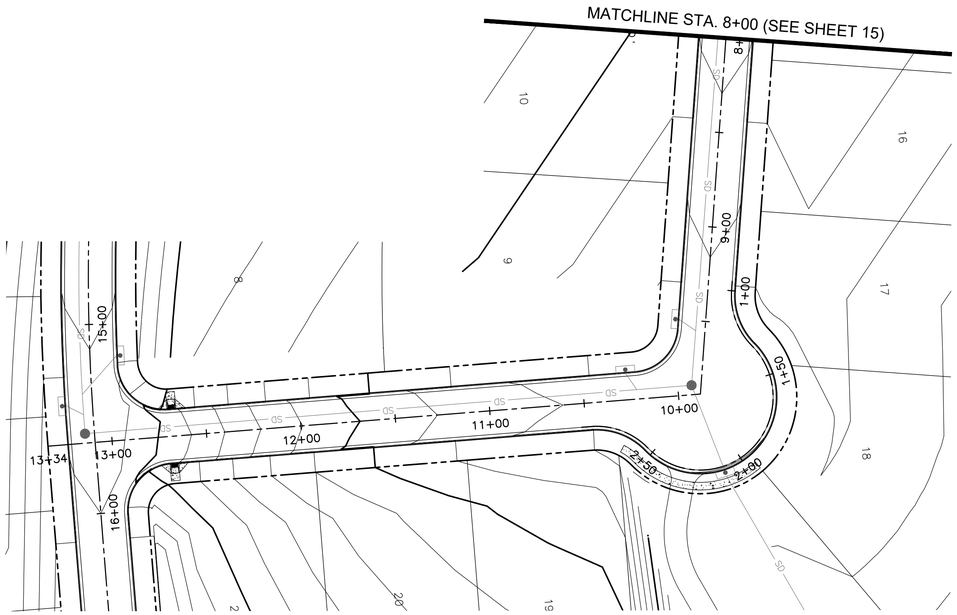
LISERON DRIVE STA 1+00 TO STA 7+00

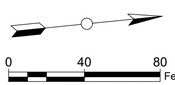
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

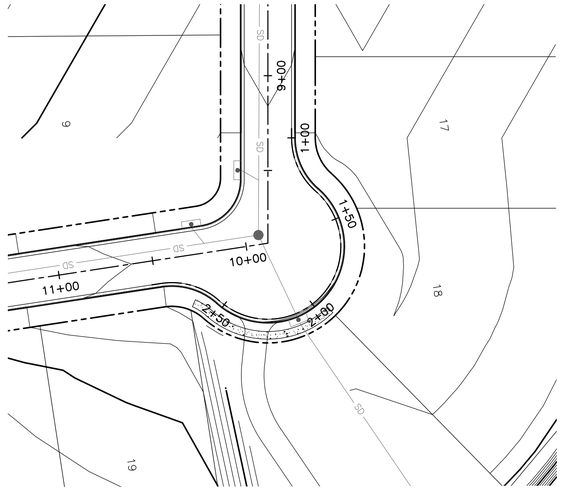
Sheet 19 of 73

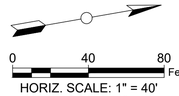
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_rd_01.dwg 9/11/2025 3:49 PM





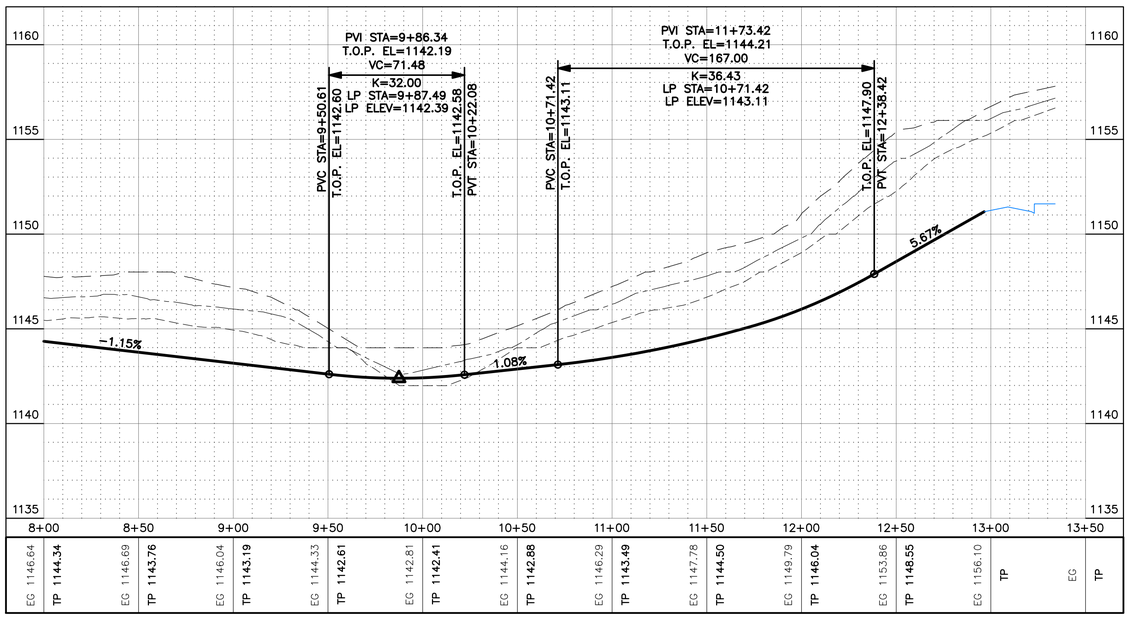
HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'



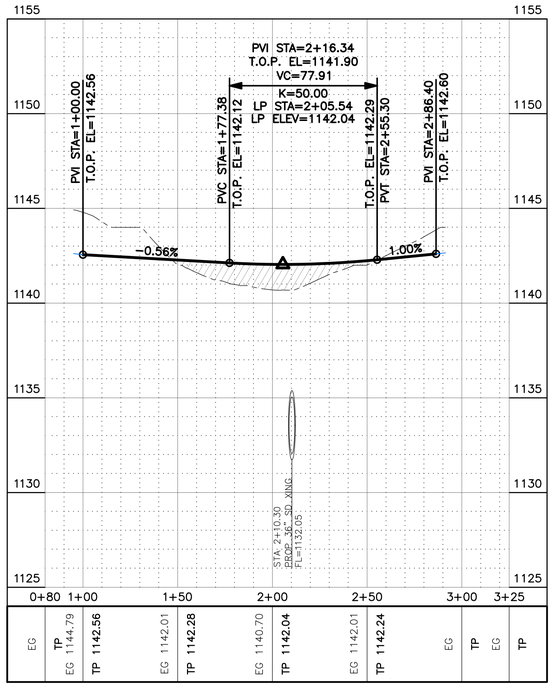


HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

BRIOCHE CIRCLE



BRIOCHE KNUCKLE (EAST)



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

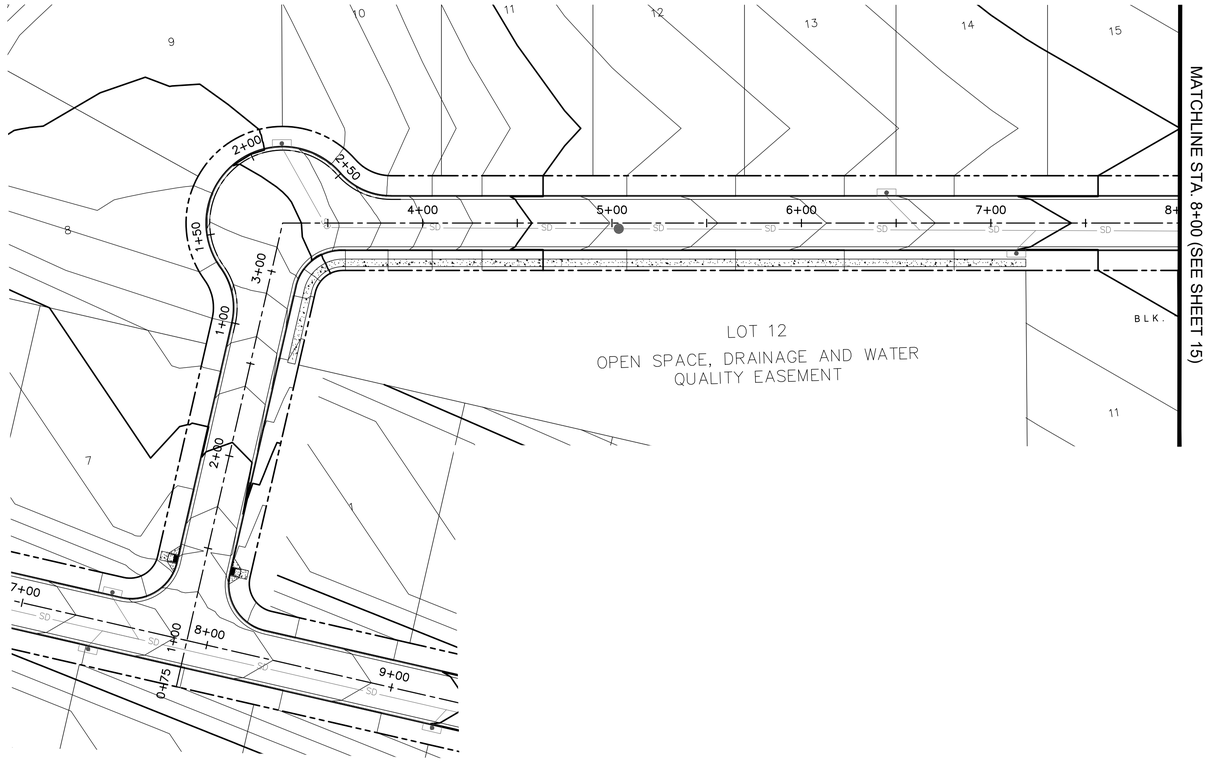
PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

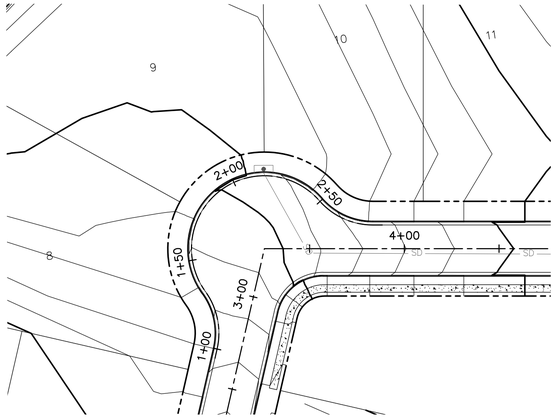
BRIOCHE CIRCLE STA 7+00 TO END

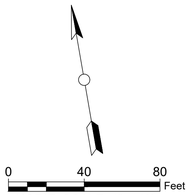
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

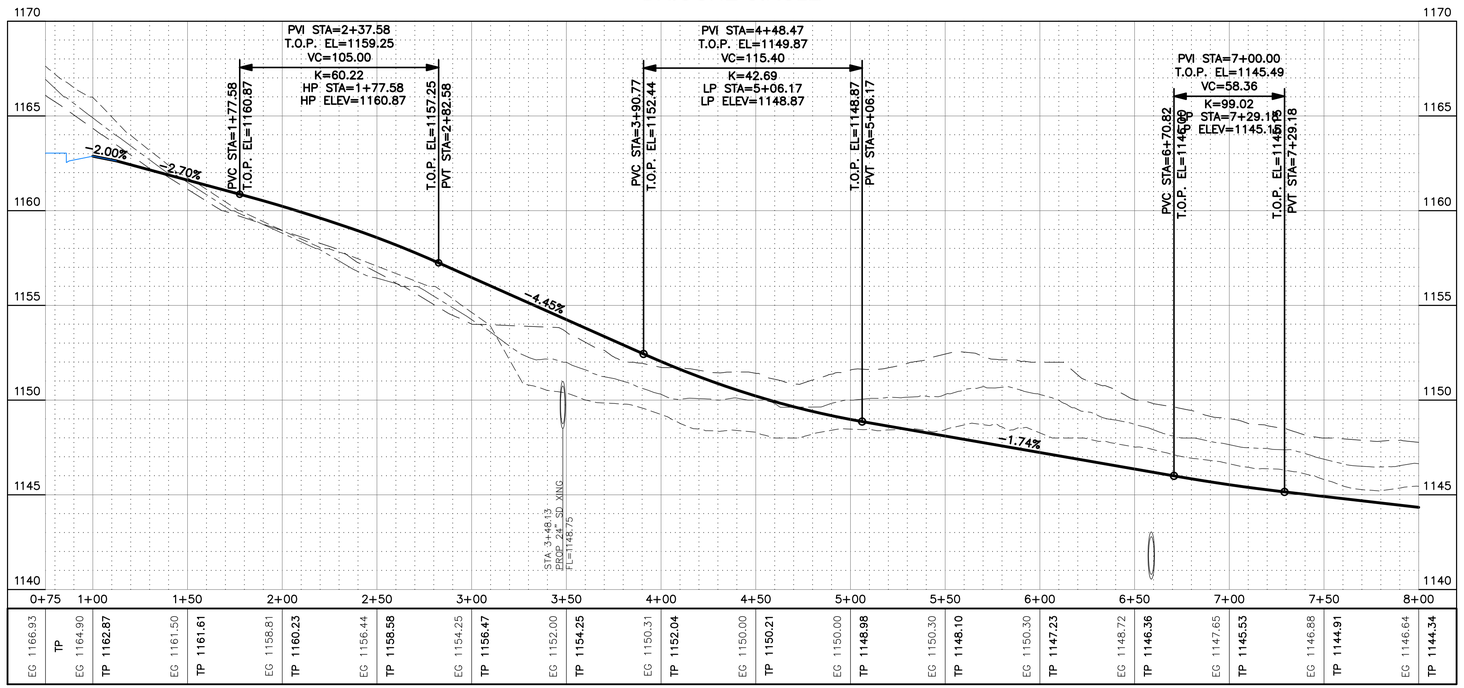
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_prp_rd_01.dwg 9/11/2025 3:48 PM



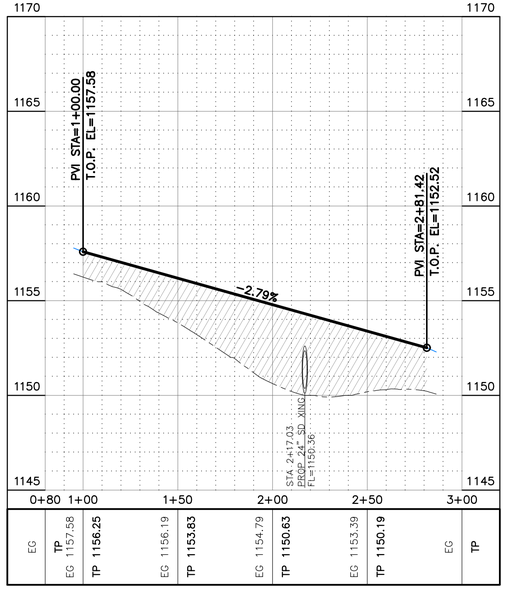




BRIOCHE CIRCLE



BRIOCHE KNUCKLE (WEST)



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

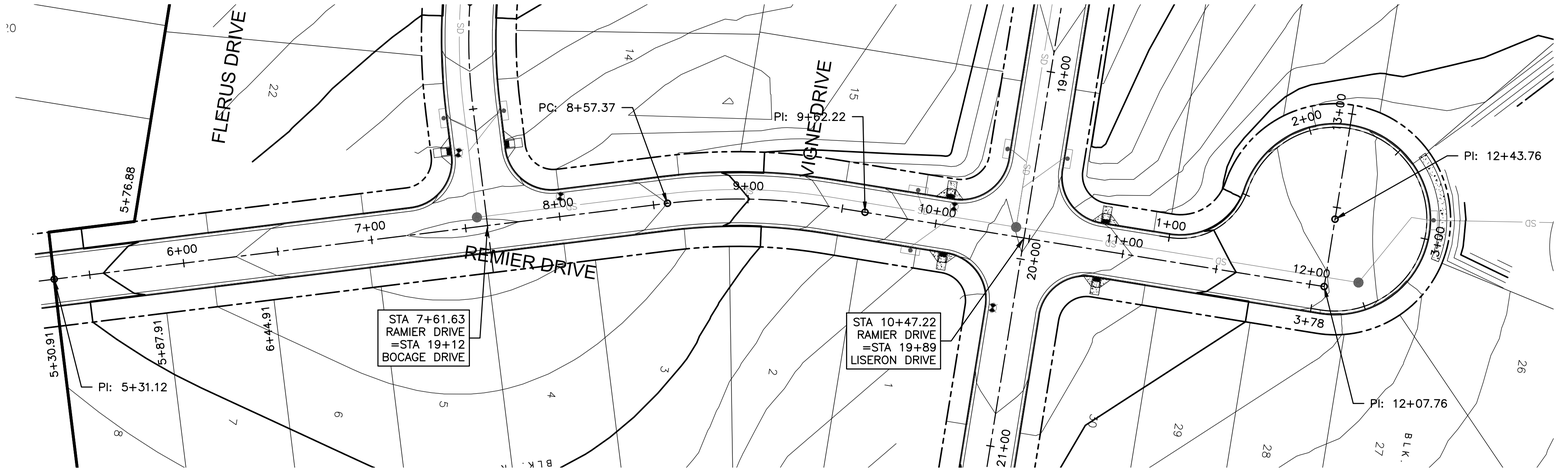
BRIOCHE CIRCLE STA 1+00 TO STA 7+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

Sheet 21 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_prp_rd_01.dwg 9/11/2025 3:56 PM



0 40 80 Feet

HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

RAMIER DRIVE

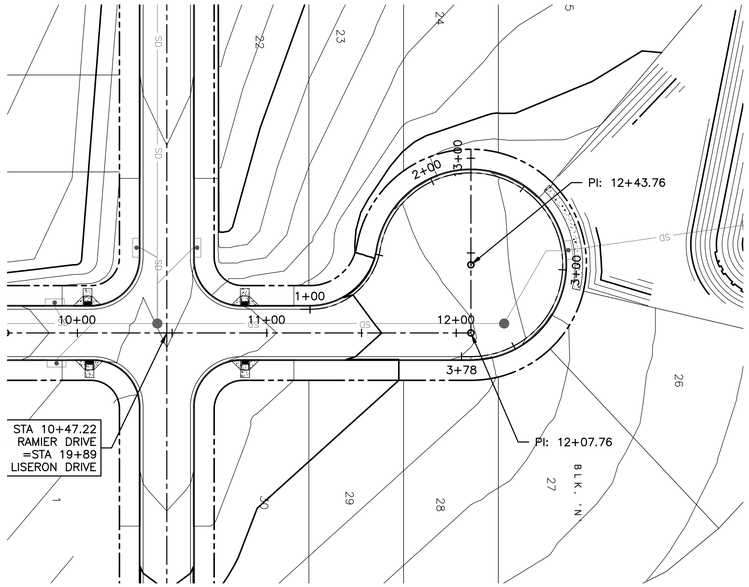
NO.	DATE	REVISIONS/CORRECTIONS	BY

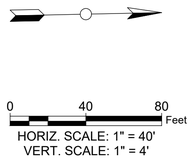
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 22 of 73

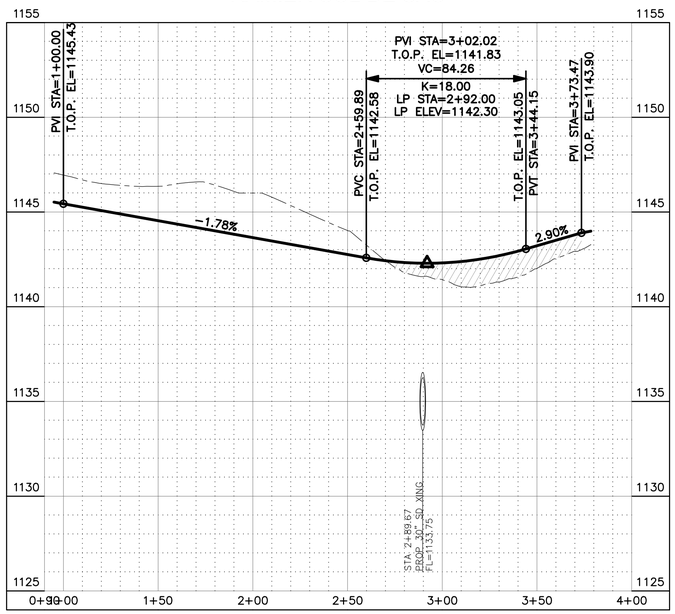
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_prp_rd_01.dwg 9/11/2025 3:47 PM

OLIVIER DRIVE





RAMIER CUL DE SAC



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

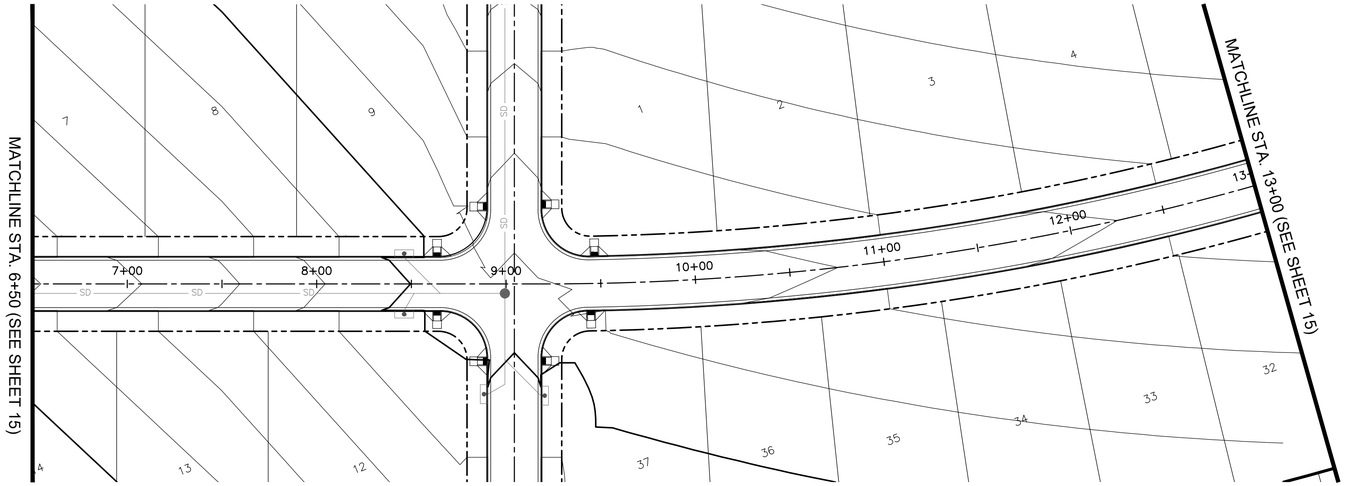
RAMIER CUL-DE-SAC

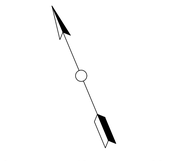
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 23 of 73

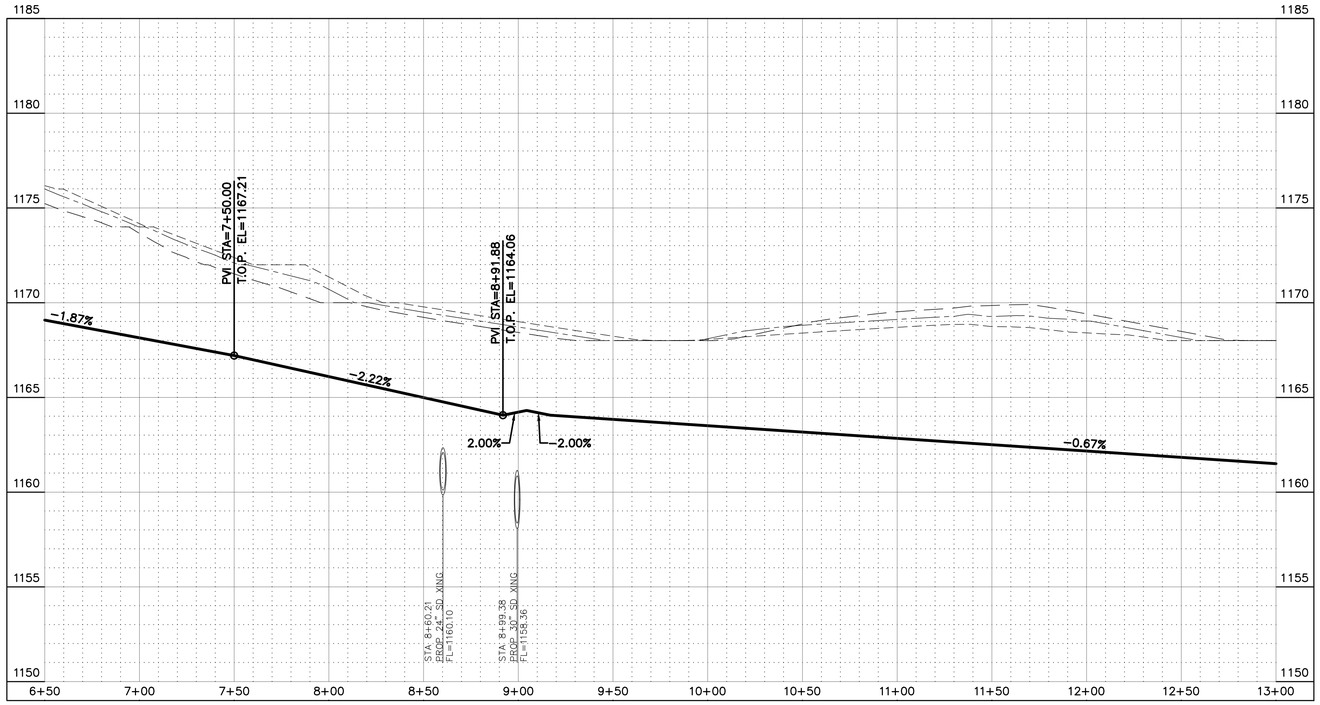
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_prp_rd_01.dwg 9/11/2025 3:44 PM





HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

BOCAGE DRIVE



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

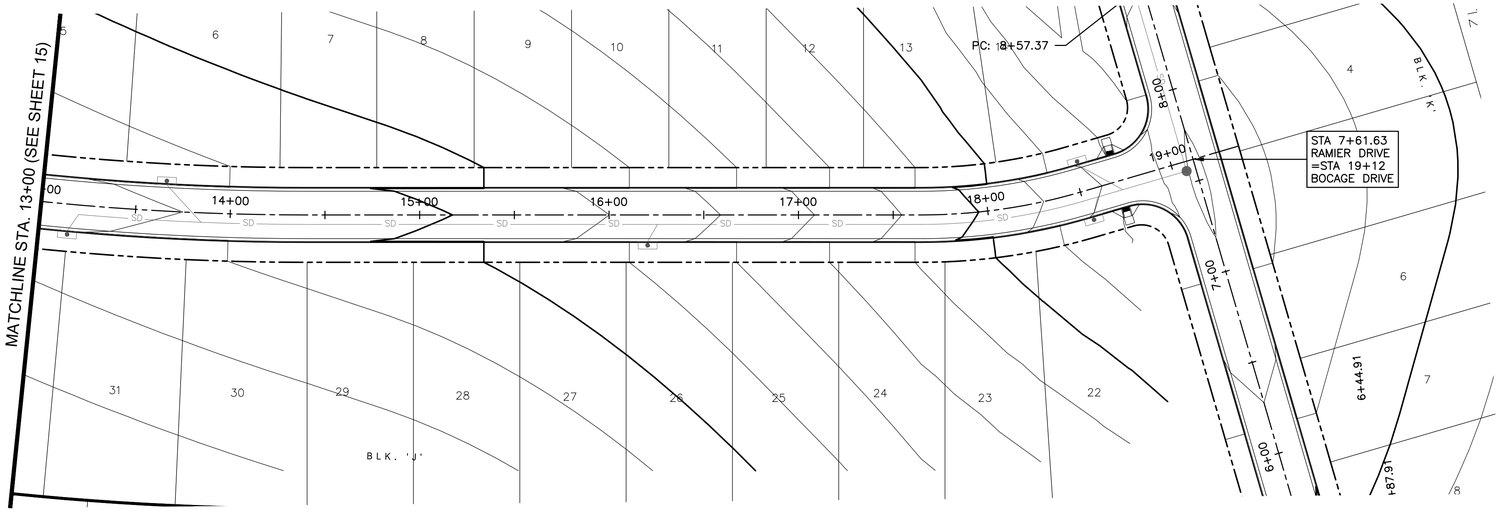
BOCAGE DRIVE STA 6+50 TO STA 13+00

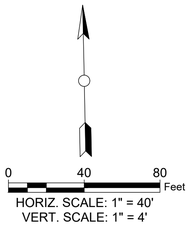
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

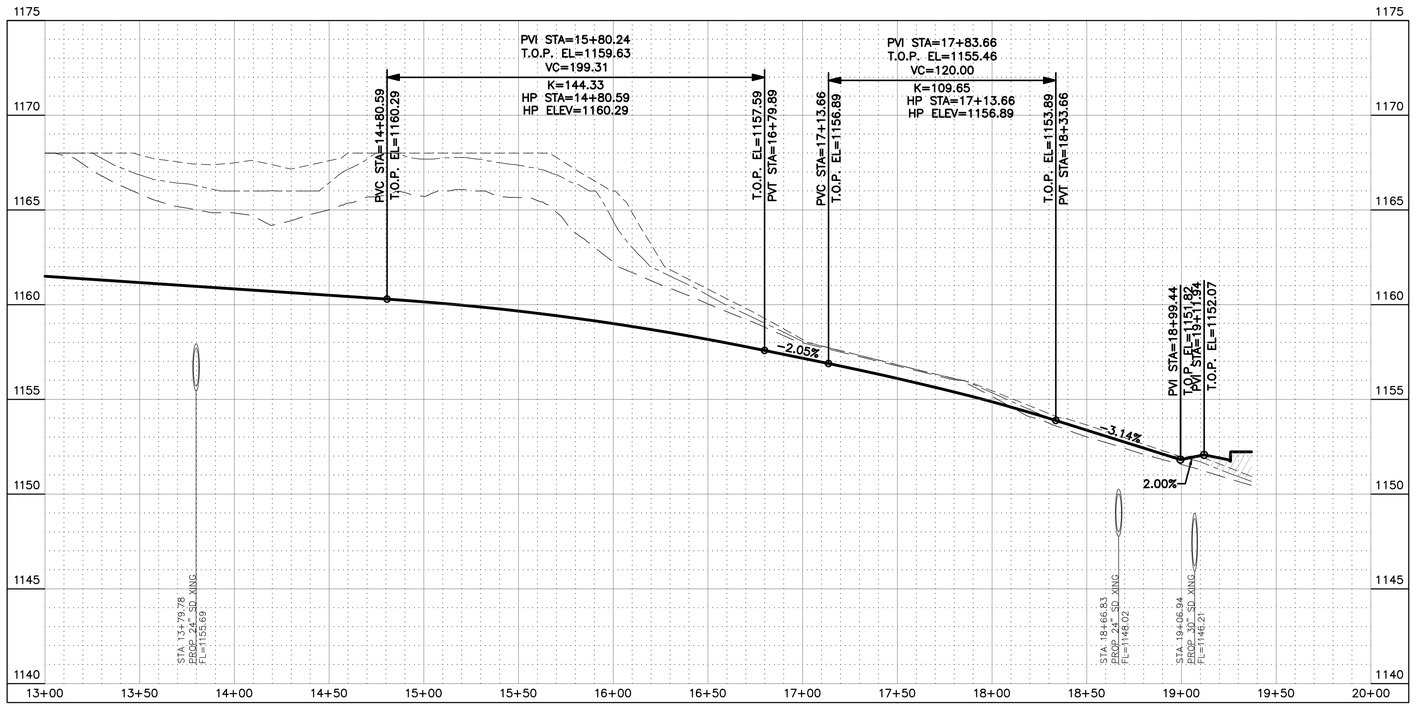
Sheet 24 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_rd_01.dwg 9/11/2025 3:58 PM





BOCAGE DRIVE



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

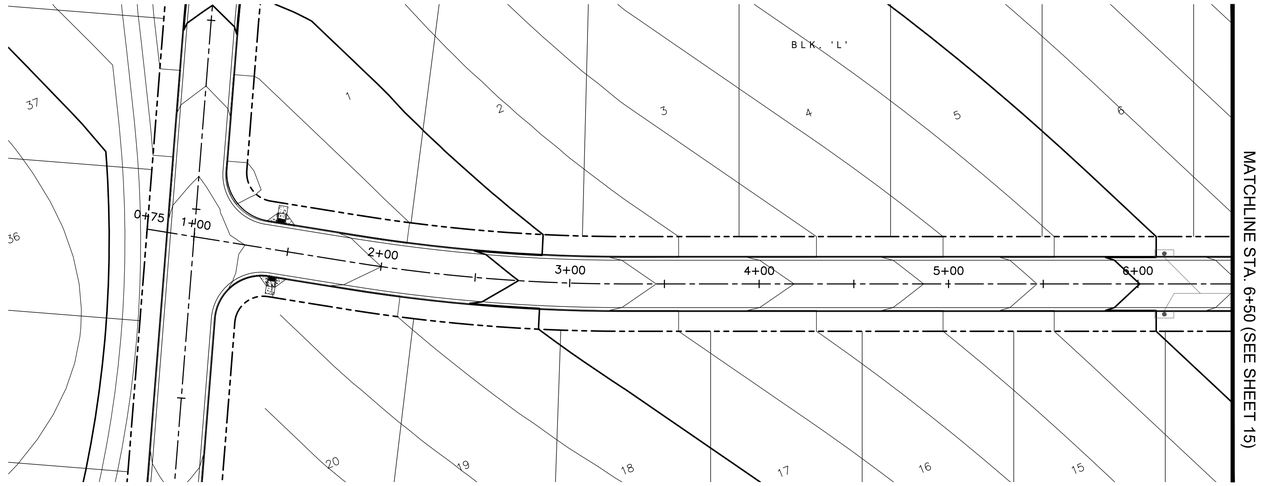
PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

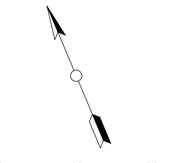
BOCAGE DRIVE STA 13+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

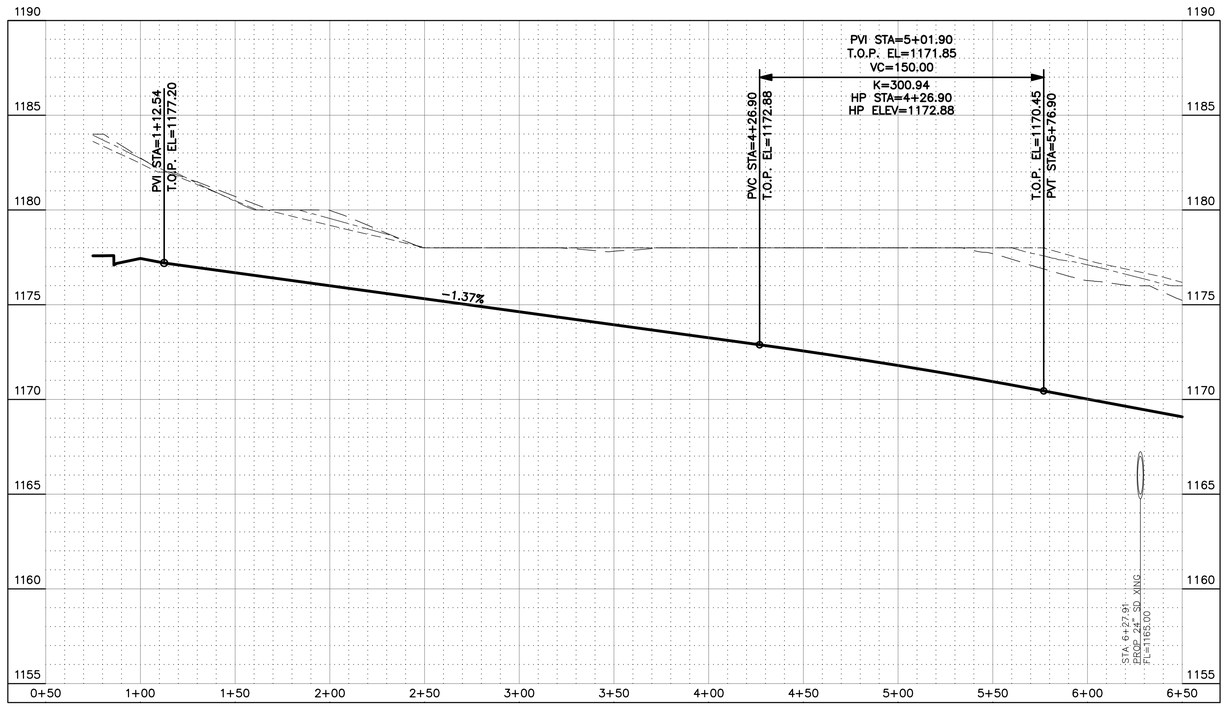
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_rd_01.dwg 9/11/2025 3:46 PM





HORIZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

BOCAGE DRIVE



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

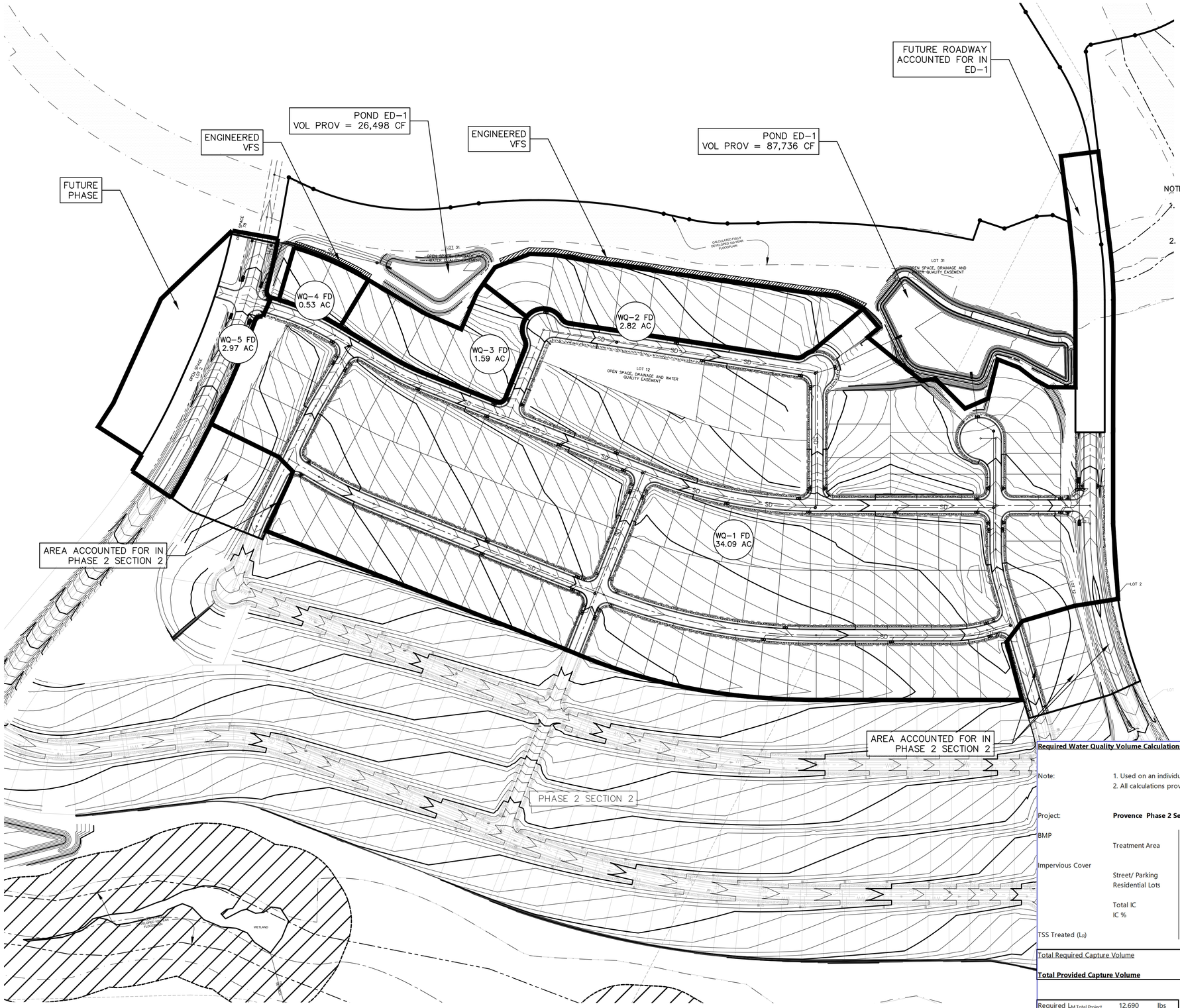
BOCAGE DRIVE STA 1+00 TO STA 6+50

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

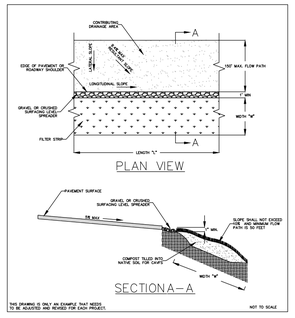
Sheet 26 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_rd_01.dwg 9/11/2025 3:42 PM



NOTES:

1. IMPERVIOUS COVER ASSUMPTIONS ARE IN COMPLIANCE WITH TCEQ RG-348 APPENDIX A, OEM TABLE 4-1 "IMPERVIOUS COVER ASSUMPTIONS FOR RESIDENTIAL TRACTS".
2. FD DEVELOPED TSS CALCULATIONS ARE BASED ON FUTURE DEVELOPMENT THAT WILL BE TREATED AND HAS BEEN ACCOUNTED FOR IN THIS WQ PLAN



Required Water Quality Volume Calculations and TSS Removal Per TCEQ RG-348

Note: 1. Used on an individual drainage area basis
2. All calculations provided in "TCEQ - TSS Removal Calculations" Spreadsheet

Project: **Provence Phase 2 Section 3 FD - Including Future Phase**

BMP		WQ-1 FD	WQ-2 FD	WQ-3 FD	WQ-4 FD	WQ-5 FD	Total	
	Treatment Area	34.09	2.82	1.59	0.53	2.97	42.00	Acres
Impervious Cover								
	Street/ Parking	4.95	0.00	0.00	0.00	0.83	5.78	Acres
	Residential Lots	6.69	0.72	0.48	0.16	0.00	8.05	Acres
	Total IC	12.12	0.72	0.48	0.16	0.83	14.32	Acres
	IC %	36%	26%	30%	30%	28%	34%	
TSS Treated (L_R)		11,105	711	415	157	422	12811	lbs
Total Required Capture Volume		85,749	N/A	8,916	N/A	9,845		cf
Total Provided Capture Volume		**87,736**	**N/A**	**26,498**	**N/A**	**26,498**		**cf**

Required $L_{M\ Total\ Project}$ 12,690 lbs

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

OVERALL WATER QUALITY PLAN

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

Sheet 27 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_wq_01.dwg 9/11/2025 3:43 PM

5.5' X 1' BOX CULVERT. SEE POND ED-01 OVERFLOW WEIR CROSS SECTION DETAIL

STA 1+00.00
ED-01
CONCRETE SLOPING HEADWALL W/ ROCK RIP RAP (CLASS I)
INSTALL: ELECTRIC ACTUATOR & VALVE

ED-01 WEIR OUTFALL (SEE DETAIL)

~600 SY
CLASS III ROCK RIP RAP
SEE OVERFLOW WEIR DETAIL

TOP OF BERM
ELEV =1130.00

~130 LF GABION WALL
TOP ELEV = 1124.50

INSTALL SEDIMENT DEPTH MARKER SEE NOTE 3

STA 0+96.36
ED-01
INSTALL: 1-REMOVABLE PVC CAP WITH 3.00" ORIFICE

LOT 31

OPEN SPACE, DRAINAGE AND WATER QUALITY EASEMENT

S66° 04' 02.03"W
112.64'

INSTALL SEDIMENT DEPTH MARKER SEE NOTE 3

TOP OF BERM
ELEV =1130.00

0 20 40 Feet

LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR

"A"

"A"

1.0%

0.50%

1.0%

1.0%

CONCRETE TRICKLE CHANNEL

STA 1+92.64 ED-01
INSTALL: SEDIMENT RISER PIPE WITH LEVEL SENSOR (SEE SEDIMENT RISER PIPE DETAIL)

~100 LF GABION WALL
TOP ELEV = 1124.50

INSTALL SEDIMENT DEPTH MARKER SEE NOTE 3

INSTALL BMP MAINTENANCE SIGN W/ RAIN GAUGE SEE NOTE 2

INSTALL POND POLE GATE (SEE POLE GATE DETAIL)

~234 SY
12' CONCRETE MAINTENANCE ACCESS DRIVE W/ TYPE II DRIVEWAY

INSTALL SIGNAW NEMA 4 ENCLOSURE W/ SIEMENS CONTROLLER

SD

BMP NOTES:

1. ED-01 TO BE AN EXTENDED DETENTION WITH BATCH DETENTION APPLICATIONS PER TCEQ RD-348 DESIGN GUIDELINES AND REQUIREMENTS
2. BMP MAINTENANCE SIGN TO INCLUDE THE FOLLOWING INFORMATION:

   RESPONSIBLE FOR MAINTENANCE:
   OWNER: MASONWOOD HP. LTD.
   EDWARDS AQUIFER PROGRAM ID:
   TELEPHONE: 512-306-8300
3. SEDIMENT DEPTH MARKER SHALL INDICATE 20% WATER QUALITY VOLUME MARK AT ELEVATION 1122.5.
4. ALL DRY ROCK RIP RAP SHALL BE 591S.3 CLASS III PER THE CITY OF AUSTIN SPECIFICATIONS.
5. AS DEPICTED ON THE PLAN, ALL WATER QUALITY EASEMENT AREAS ARE SUBJECT TO PERIODIC INSPECTION AND MONITORING BY TRAVIS COUNTY FOR THE PURPOSE OF ENSURING WATER QUALITY COMPLIANCE, AS APPLICABLE, ACCORDING TO SEC. 16.014 OF THE TEXAS WATER CODE.

NOTE:

CONTACT POSTINSPECTION@TRAVISCOUNTYTX.GOV TO SCHEDULE THE FOLLOWING MILESTONE INSPECTIONS FOR THE WATER QUALITY STRUCTURE WITH AT LEAST A 48 HOUR NOTICE, IF APPLICABLE:

- ELECTRIC ACTUATOR VALVE TESTING FOR BATCH DETENTION DESIGNS.
- COMPLETION OF CONSTRUCTION OF WATER QUALITY STRUCTURES.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER QUALITY BMP ED-1 SHEET 1 OF 2

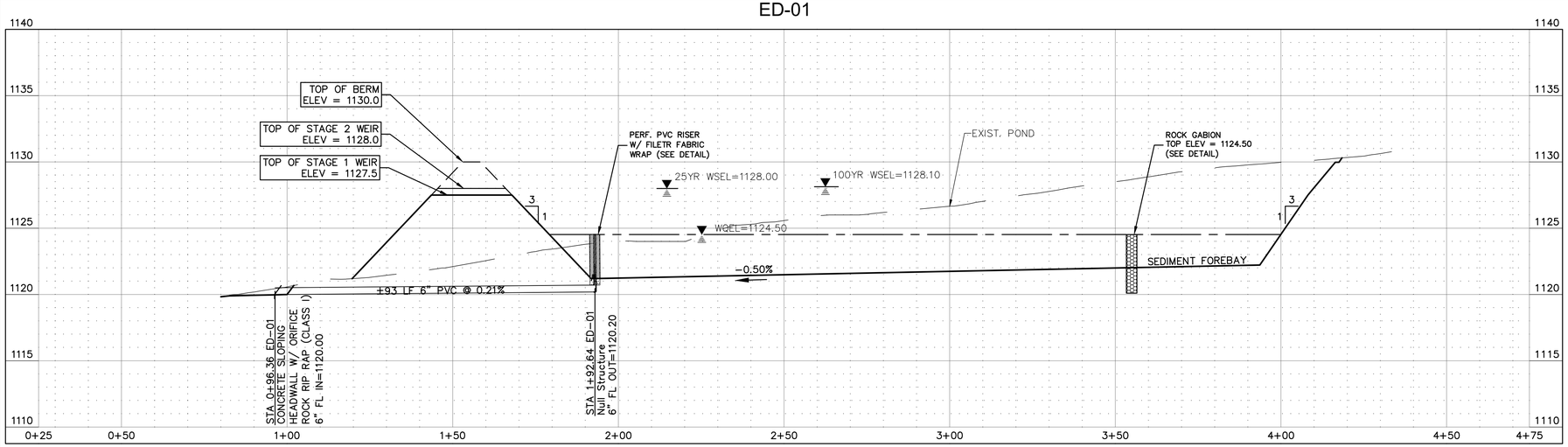
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 28 of 73

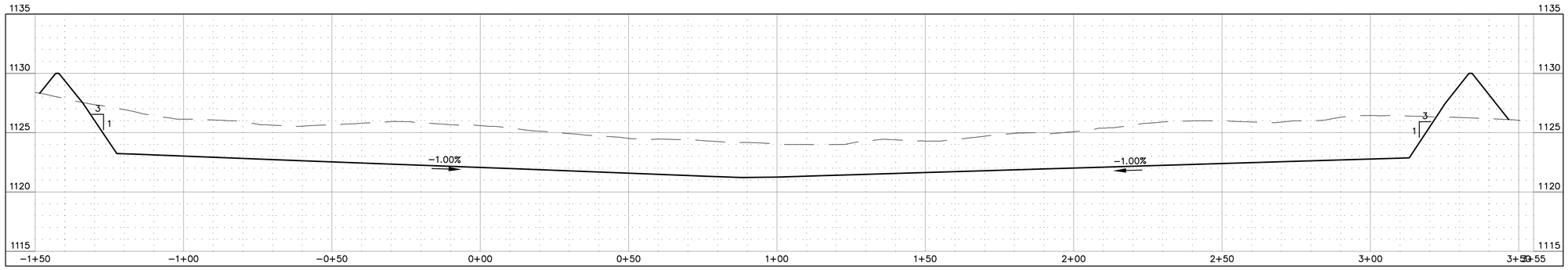
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_pnd_01.dwg 9/11/2025 3:42 PM

ED-01



EXTENDED DETENTION POND 1 (ED-1) PROFILE

SCALE. HORZ. 1"=20'
VERT. 1"=5'

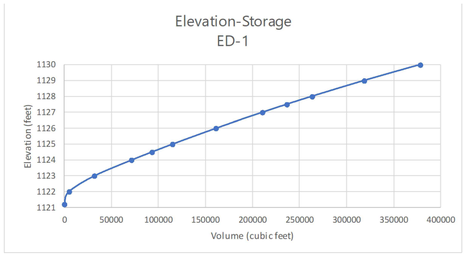


Provence Phase 2 Section 3 ED-1

Elevation	Area
1121.2	0
1122	17,573
1123	37,620
1124	41,967
1124.5	**43,413**
1125	44,859
1126	47,800
1127	50,778
1127.5	52,417
1128	54,055
1129	57,682
1130	61,417

Incremental Volume (conic method, ft³)	Cumulative Volume (conic method, ft³)	Elevation	
0	0	1121.2	
4686	4686	1122	
26968	31654	1123	
39774	71428	1124	
21344	**92772**	**1124.5**	***WQV***
22067	114839	1125	
46322	161161	1126	
49282	210442	1127	
25798	236240	1127.5	
26617	262857	1128	
55859	318715	1129	
59540	378255	1130	
WQV_{read}	**86,860**		
WQV_{provd}	**92,772**		
Σ_{vol}	**378,255**		

$$Volume = \frac{(Elev\ 2 - Elev\ 1) * (Area\ 1 + Area\ 2 + \sqrt{Area\ 1 * Area\ 2})}{3}$$



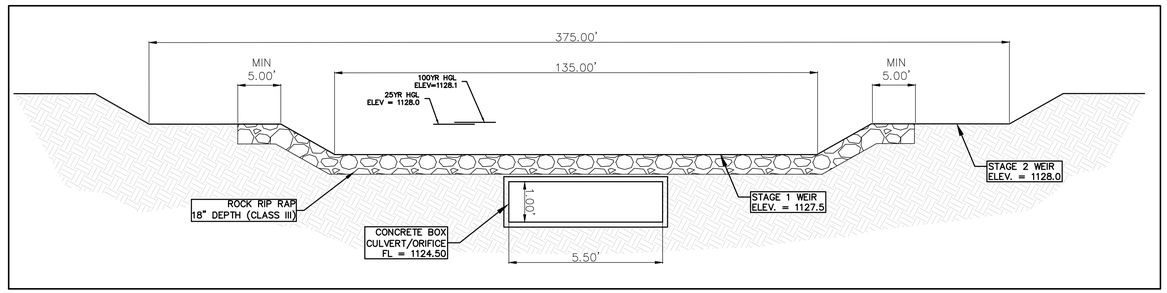
EXTENDED DETENTION POND 1 (CROSS SECTION "A-A")

SCALE. HORZ. 1"=20'
VERT. 1"=5'

Pond Drawdown ED-1

48-Hour WQ Volume Drawdown Calculations			
Q = CA(2gH)^0.5			
Water Quality Volume (cf)	92772	Gravity (ft/s^2)	32.2
Time (hr)	48	Avg Head (ft)	4.5
Time (s)	172800	Coefficient	0.6
Flow Rate (cf/s)	0.501	Orifice Area (ft^2)	0.049
48 hr Volume	86639	Orifice Radius (in)	1.500
		Orifice Radius (ft)	0.125

Orifice Diameter = 3 in



POND ED-1 OVERFLOW WEIR SECTION VIEW

SCALE: NTS

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

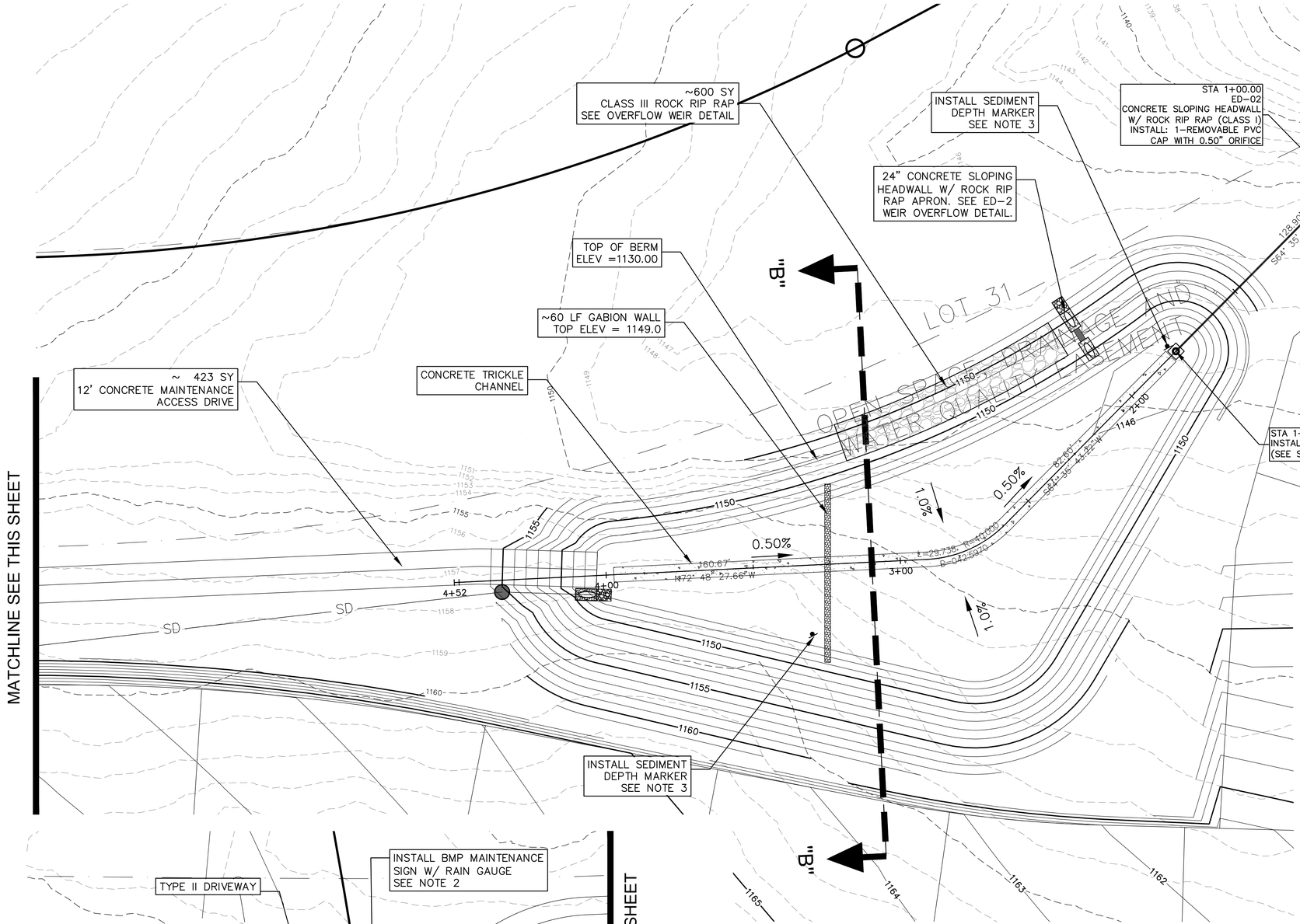
PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

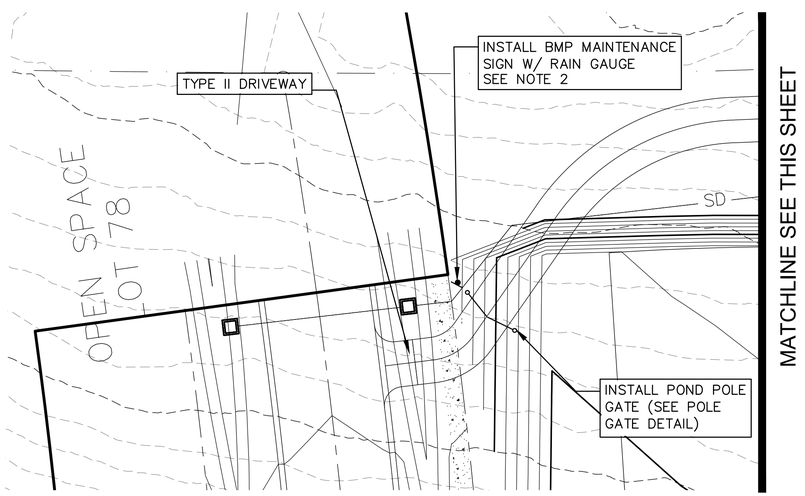
WATER QUALITY BMP ED-1 SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	DESIGNED BY: XX	DRAWN BY: XX	CHECKED BY: XX	BY

Sheet 29 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_pnd_01.dwg 9/11/2025 3:45 PM





LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR

BMP NOTES:

1. BMP MAINTENANCE SIGN TO INCLUDE THE FOLLOWING INFORMATION:

   RESPONSIBLE FOR MAINTENANCE:
   OWNER: MASONWOOD HP. LTD.
   EDWARDS AQUIFER PROGRAM ID:
   TELEPHONE: 512-306-8300

2. SEDIMENT DEPTH MARKER SHALL INDICATE 20% WATER QUALITY VOLUME MARK AT ELEVATION 1147.20.

3. ALL DRY ROCK RIP RAP SHALL BE 591S.3 CLASS III PER THE CITY OF AUSTIN SPECIFICATIONS.

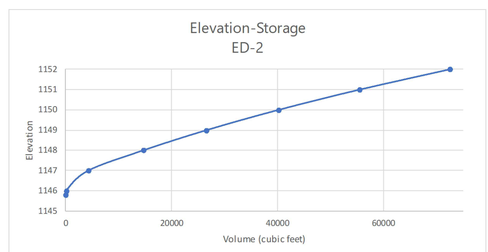
4. AS DEPICTED ON THE PLAN, ALL WATER QUALITY EASEMENT AREAS ARE SUBJECT TO PERIODIC INSPECTION AND MONITORING BY TRAVIS COUNTY FOR THE PURPOSE OF ENSURING WATER QUALITY COMPLIANCE, AS APPLICABLE, ACCORDING TO SEC. 16.014 OF THE TEXAS WATER CODE.

Provence Phase 2 Section 3 ED-2

Elevation	Area
1145.8	0
1146	539
1147	9,618
1148	11,172
1149	**12,783**
1150	14,450
1151	16,175
1152	**17,954**

Incremental Volume (conic method, ft³)	Cumulative Volume (conic method, ft³)	Elevation	
0	0	1145.8	
36	36	1146	
4145	4181	1147	
10385	14566	1148	
11968	**26534**	**1149**	WQV
13608	40142	1150	
15304	55447	1151	
17057	**72503**	**1152**	
Σ_{vol}	**72,503**		
WQV_{read}	**18,760**		
WQV_{prov}	**26,534**		

$$Volume = \frac{(Elev\,2 - Elev\,1) * (Area\,1 + Area\,2 + \sqrt{Area\,1 * Area\,2})}{3}$$



Pond Drawdown ED-2

48-Hour WQ Volume Drawdown Calculations			
Q = CA(2gH)^0.5			
Water Quality Volume (cf)	26534	Gravity (ft/s^2)	32.2
Time (hr)	48	Avg Head (ft)	4.5
Time (s)	172800	Coefficient	0.6
Flow Rate (cf/s)	0.125	Orifice Area (ft^2)	0.012
48 hr Volume	21660	Orifice Radius (in)	0.750
		Orifice Radius (ft)	0.063

Orifice Diameter = 1.5 in

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

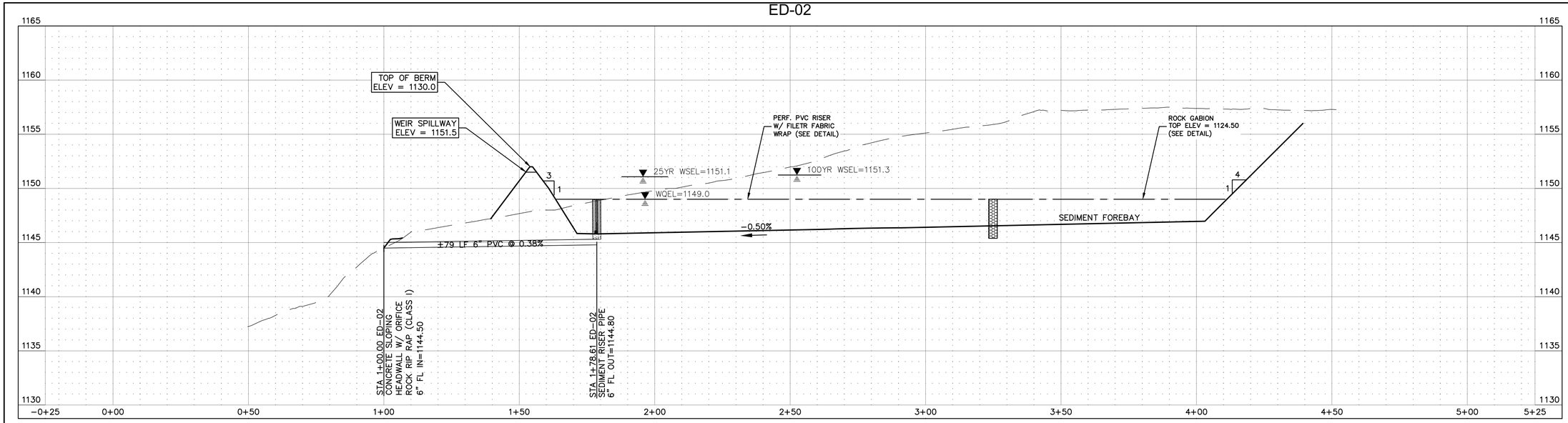
WATER QUALITY BMP ED-2 SHEET 1 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

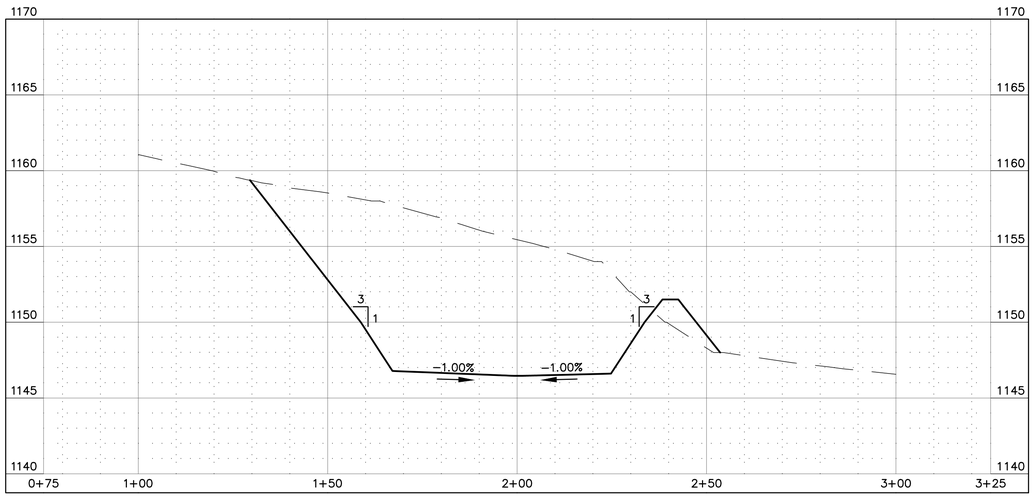
Sheet 30 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_pnd_01.dwg 9/11/2025 3:49 PM



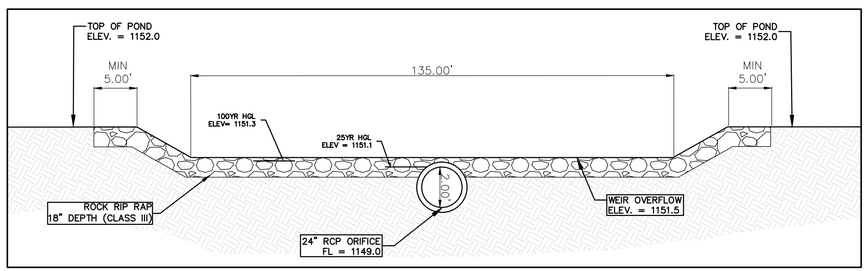
EXTENDED DETENTION POND 2 (ED-2) PROFILE

SCALE. HORZ. 1"=20'
VERT. 1"=5'



EXTENDED DETENTION POND 2 (CROSS SECTION "A-A")

SCALE. HORZ. 1"=20'
VERT. 1"=5'



POND ED-2 OVERFLOW WEIR SECTION VIEW

SCALE: NTS

MOODY
ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WATER QUALITY BMP ED-2 SHEET 2 OF 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 31 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_pnd_01.dwg 9/11/2025 3:43 PM

GENERAL REQUIREMENTS

1. ALL CODES AND STANDARDS REFERENCED FOR THE DESIGN, FABRICATION AND CONSTRUCTION OF ALL CONCRETE STRUCTURES SHALL BE THE LATEST EDITION UNLESS NOTED OTHERWISE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS. IF A CONFLICT OR DISCREPANCY EXISTS BETWEEN THE DRAWINGS AND SPECIFICATIONS, THE MORE STRINGENT REQUIREMENTS SHALL GOVERN UNLESS APPROVED OTHERWISE BY THE ENGINEER.
3. ANY REQUIRED CHANGES TO THE STRUCTURAL DRAWINGS DUE TO THE ACCEPTANCE OR INCLUSION OF ALTERNATES OR SUBSTITUTIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW.
4. THE CONTRACTOR SHALL EXAMINE THE CIVIL AND STRUCTURAL DRAWINGS FOR DIMENSIONAL COORDINATION AND ELEVATION CONTROLS AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING FABRICATION OR CONSTRUCTION.
5. THE CONTRACTOR SHALL FIELD VERIFY LOCATIONS OR EXISTING STRUCTURES AND UTILITIES TO REMAIN PRIOR TO BEGINNING WORK AND PROTECT SUCH STRUCTURES AND UTILITIES FROM DAMAGE DURING CONSTRUCTION.
6. REVEGETATE ALL DISTURBED AREAS USING CITY OF AUSTIN SPECIFICATION (COA) 604S AND TOP SOIL DEPTHS PER COA SPECIFICATION 601S. (SEE EROSION CONTROL DETAILS AND NOTES SHEET)

SUBGRADE PREPARATION AT CONCRETE RIP RAP

3. PRIOR TO PLACING SUBGRADE MATERIAL, CONSTRUCTION AREAS SHOULD BE STRIPPED OF ALL VEGETATION, LOOSE TOPSOIL, COBBLES, AND BOULDERS.
4. ALL SUBGRADE, IF ON-SITE SOIL, SHOULD BE PROFILED TO DETECT WEAK AREAS, WHICH SHOULD BE REMOVED AND REPLACED WITH SOIL EXHIBITING SIMILAR CLASSIFICATION AND MOISTURE CONTENT.
5. ROOTS OF TREES TO BE REMOVED WITHIN CONSTRUCTION AREAS SHOULD BE GRUBBED TO FULL DEPTHS. ANY VOIDS RESULTING FROM REMOVAL OF TREES AND BOULDERS SHALL BE FILLED WITH ON-SITE SOIL.
6. ALL SUBGRADE SOILS SHALL BE SCARIFIED TO A DEPTH OF 10 INCHES AND RE-COMPACTED TO MINIMUM OF 95% OF THE STANDARD PROCTOR (ASTM D 698) MAXIMUM DRY DENSITY. SOIL MOISTURE CONTENT SHALL BE 3% OF OPTIMUM.
7. ON-SITE SOILS CAN BE USED AS SUBGRADE MATERIAL FOR RIP RAP PROVIDED THAT:

   A. THEY DO NOT CONTAIN ROCKS LARGER THAN FOUR INCHES IN THEIR GREATEST DIMENSION.
   B. THEY HAVE PLASTICITY INDEX BETWEEN 5 AND 20.
   C. THEY ARE FREE OF ORGANIC DEBRIS.

   D. SUBGRADE MATERIAL SHALL BE PLACED IN LOOSE LIFTS NOT TO EXCEEDING 8 INCHES IN THICKNESS AND COMPACTED TO A MINIMUM OF 95% OF STANDARD PROCTOR (ASTM D 698) MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 3% OF OPTIMUM MOISTURE CONTENT.

   E. COMPACTION AND MOISTURE CONTENT OF SUBGRADE SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER.

CAST IN PLACE CONCRETE

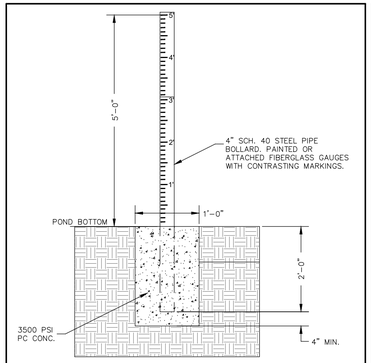
1. CONCRETE MIX DESIGN, ADMIXTURES, FORM WORK DESIGN AND CONSTRUCTION, METHODS FOR TREATMENT OF JOINTS, FINISHING OF FORMED SURFACES, AND QUALITY ASSURANCE SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN, TEXAS STANDARD SPECIFICATIONS.
2. ALL CAST IN PLACE CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE CITY OF AUSTIN, TEXAS STANDARD SPECIFICATIONS CLASS A CONCRETE AS COVERED IN TABLE 4 OF ITEM 403.

CUT SLOPES

1. FOR CUT SLOPES INTO THE NATURAL ON-SITE SOILS/ROCK, PERMANENT SLOPES SHALL BE CUT NO STEEPER THAN 3(H):1(V). AN ON-SITE INSPECTION BY GEOTECHNICAL ENGINEER IS REQUIRED IF STEEPER CUT SLOPES ARE DESIRED.
2. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) SAFETY AND HEALTH STANDARDS REQUIRE THE PROTECTION OF WORKERS ADJACENT TO EXCAVATIONS. THE OSHA GUIDELINES AND DIRECTIVES SHOULD BE ADHERED TO BY THE CONTRACTOR DURING CONSTRUCTION TO INSURE A SAFE WORKING ENVIRONMENT.
3. USE MORTORAD ROCK WALL FOR SLOPES NOT 2:1 (HORIZ.:VERT.) CUT OR FOR SLOPES THAT CANNOT BE MAINTAINED.

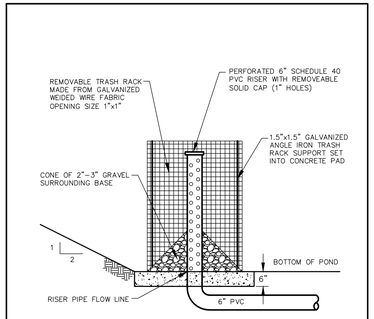
EMBANKMENT FILL COMPACTION REQUIREMENTS

1. ALL FILL SHOULD BE PLACED ON PREPARED SURFACES IN LIFTS NOT TO EXCEED EIGHT INCHES LOOSE MEASURE, WITH COMPACTED THICKNESS NOT TO EXCEED SIX INCHES, UNLESS STATED OTHERWISE.
2. ALL FILL SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE ASTM D 698 MAXIMUM DRY DENSITY AT A MOISTURE CONTENT RANGING BETWEEN -3 AND +3 PERCENT OF OPTIMUM MOISTURE CONTENT.
3. EARTHEN/ROCK EMBANKMENTS, WHICH MAY CONSIST OF THE ON-SITE SOILS AND/OR PROCESSED ROCK, SHOULD BE CONSTRUCTED AS GENERALLY OUTLINED IN TXDOT ITEM 132 OR CITY OF AUSTIN (COA) ITEM 132.
4. IF ANY IMPORTED FILL IS NEEDED FOR THE POND EMBANKMENTS, IT SHOULD MEET THE REQUIREMENTS OF A TYPE B BORROW MATERIAL AS OUTLINED IN ITEM 132 OF THE TXDOT STANDARD SPECIFICATIONS. IN ADDITION, THE UPPER 2 FEET OF EMBANKMENTS BELOW CLAY LINERS SHOULD NOT CONTAIN ANY ROCKS GREATER THAN 4 INCHES IN THE LARGEST DIMENSION, TO REDUCE THE POSSIBILITY OF CLAY LINER MIGRATION DOWNWARD INTO ROCK FILL OR VOID SPACES BETWEEN LARGE ROCKS.
5. EMBANKMENTS WHICH ARE CONSTRUCTED ON NATURAL SUBGRADE SLOPING STEEPER THAN 5(H):1(V) SHOULD BE "KEYED" INTO THE SUBGRADE AT THE TOE OF THE EMBANKMENT. THE KEYED-IN TOE SHOULD CONSIST OF A 12-FOOT WIDE SECTION WHICH IS EXCAVATED INTO THE SUBGRADE SUCH THAT A HORIZONTAL WORKING SURFACE IS ATTAINED FOR COMPACTION OF THE FIRST EMBANKMENT LIFT. SUCCESSIVE LIFTS SHOULD REMAIN HORIZONTAL AND SHOULD NOT TEND TO FOLLOW THE SLOPE OF THE NATURAL SUBGRADE.



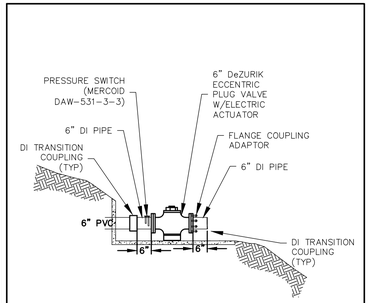
SCALE: N.T.S.

MOODY ENGINEERING, INC. | SEDIMENT DEPTH MARKER



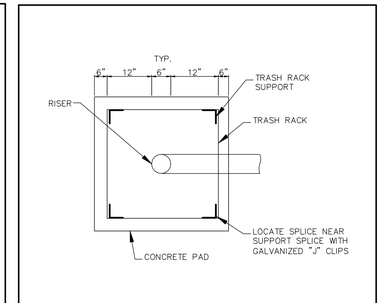
SCALE: N.T.S.

MOODY ENGINEERING, INC. | SEDIMENTATION RISER PIPE SIDE VIEW



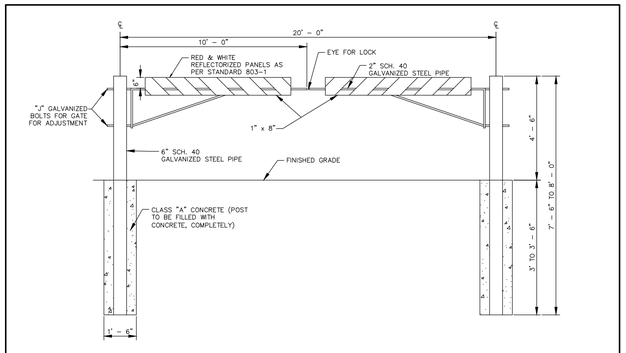
SCALE: N.T.S.

MOODY ENGINEERING, INC. | ECCENTRIC VALVE (TYP.)



SCALE: N.T.S.

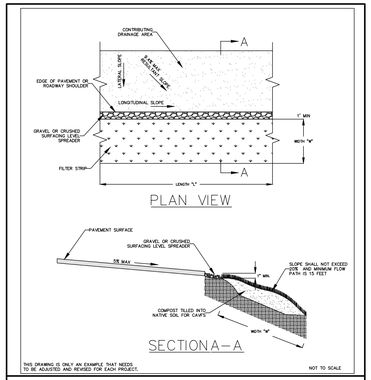
MOODY ENGINEERING, INC. | SEDIMENTATION RISER PIPE TOP VIEW



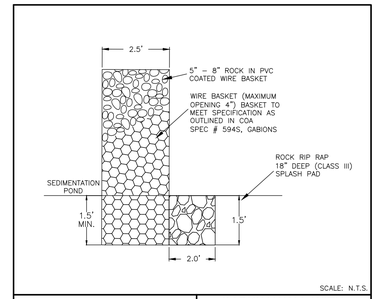
NOTE: MODIFY EXISTING GATE TO ONLY OPEN INWARD OR INSTALL A PERMANENTLY FIXATED GATE LATCH FOR WHEN IN THE OPEN POSITION.

SCALE: N.T.S.

MOODY ENGINEERING, INC. | POLE GATE DETAIL

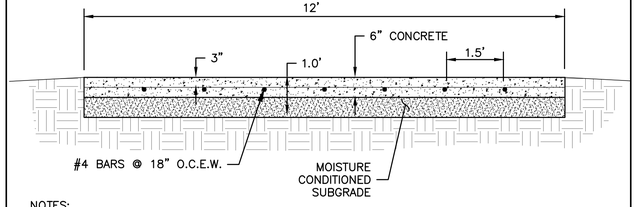


ENGINEERED VEGETATIVE FILTER STRIP DETAIL



SCALE: N.T.S.

MOODY ENGINEERING, INC. | GABION WALL WITH SPLASH PAD SECTION DETAIL

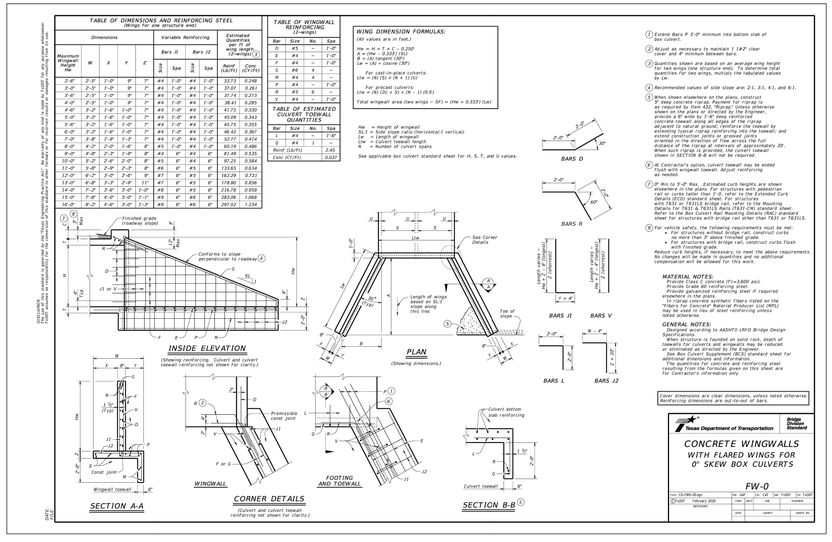


NOTES:

1. CONTROL JOINTS TO BE SPACED NO GREATER THAN 15 FEET.
2. CONCRETE TO BE DESIGNED IN ACCORDANCE WITH THE CITY OF AUSTIN ITEM 360S AND EXHIBIT A MIN. 28-DAY COMPRESSIVE STRENGTH OF 4500 PSI.

CONCRETE ACCESS ROAD CROSS SECTION

SCALE: N.T.S



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS — JOSHUA F. HENKE — 92601 — LICENSED PROFESSIONAL ENGINEER

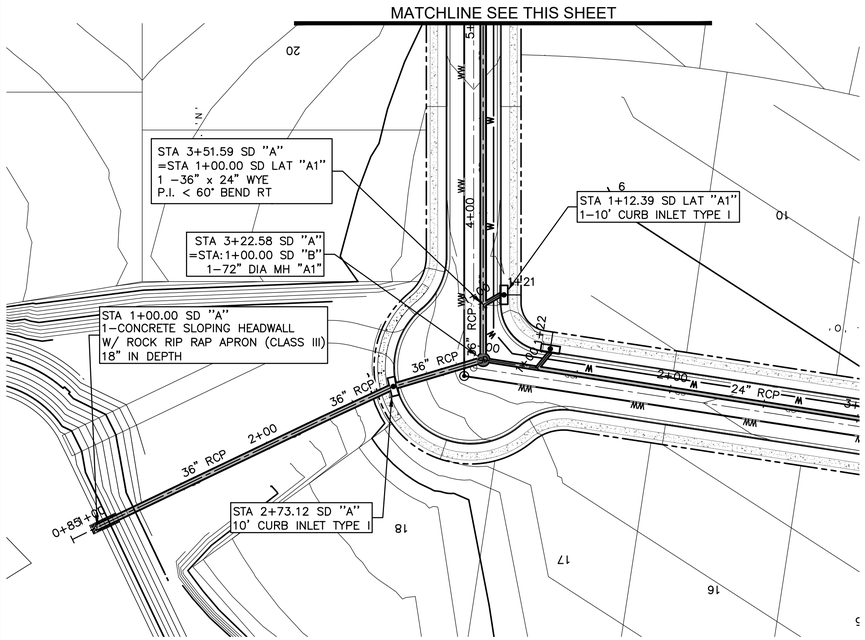
PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

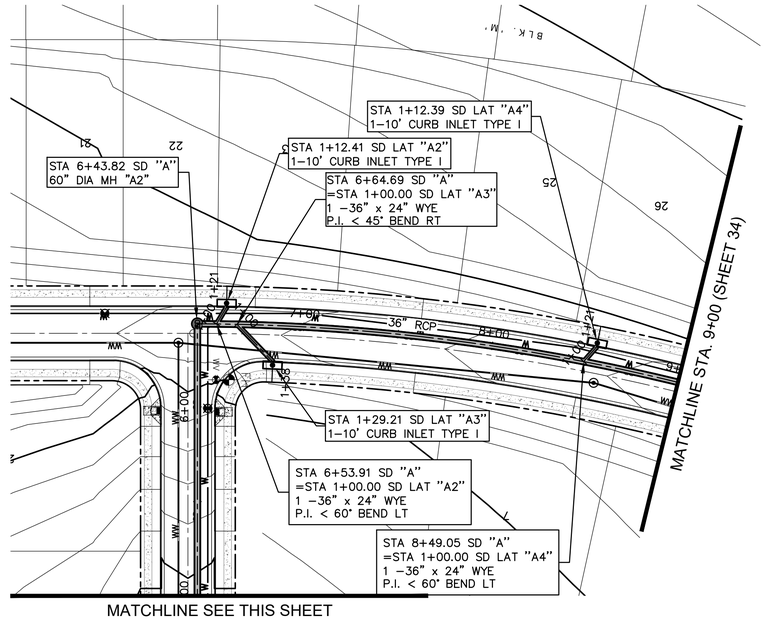
WATER QUALITY BMP NOTES & DETAILS

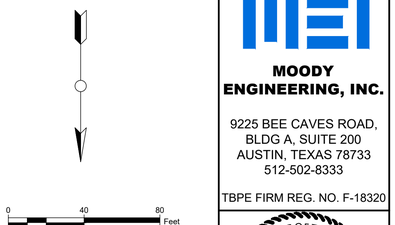
NO.	DATE	REVISIONS/CORRECTIONS	BY
		CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX	

Sheet 22 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnd-dtls_01.dwg 9/11/2025 3:40 PM



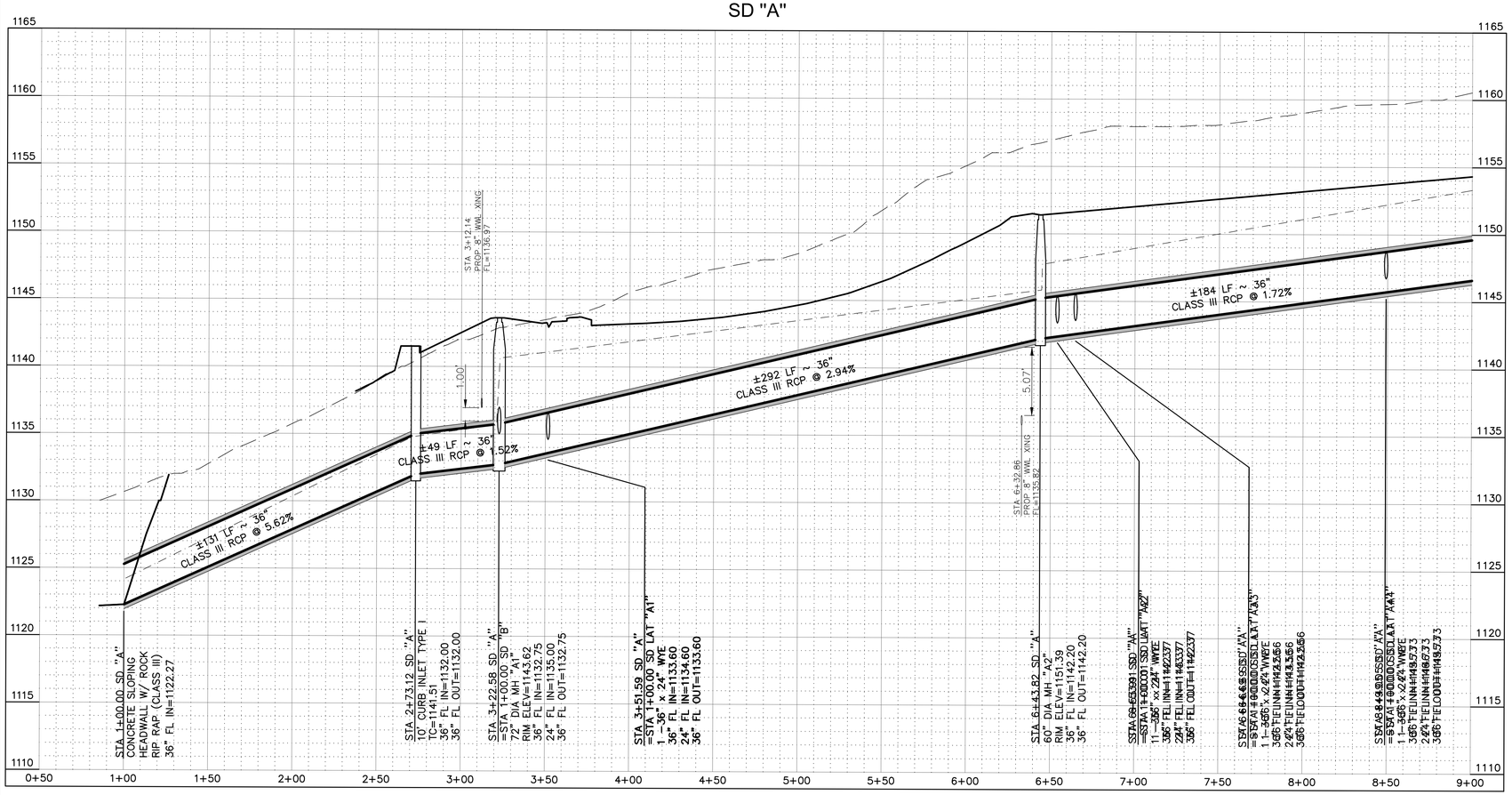




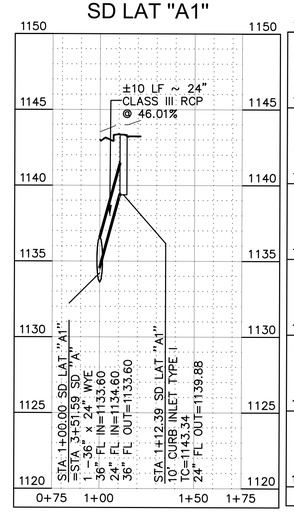
LEGEND

- EXIST CONTOUR MINOR (419)
- EXIST CONTOUR MINOR (420)
- PROPOSED CONTOUR MINOR (419)
- PROPOSED CONTOUR MAJOR (420)
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE (SD)
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

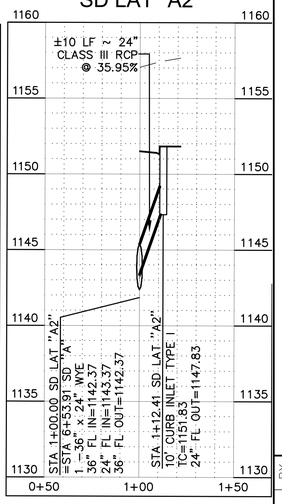
SD "A"



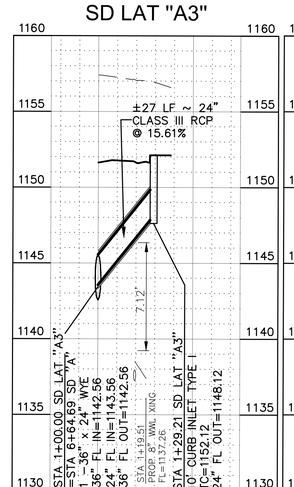
SD LAT "A1"



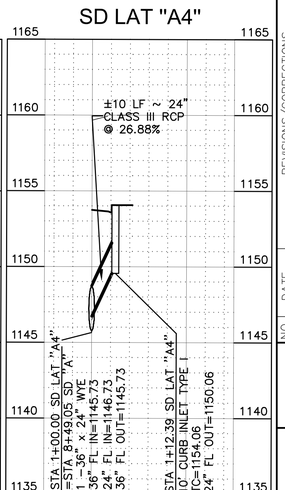
SD LAT "A2"



SD LAT "A3"



SD LAT "A4"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "A" STA 1+00 TO STA 9+00

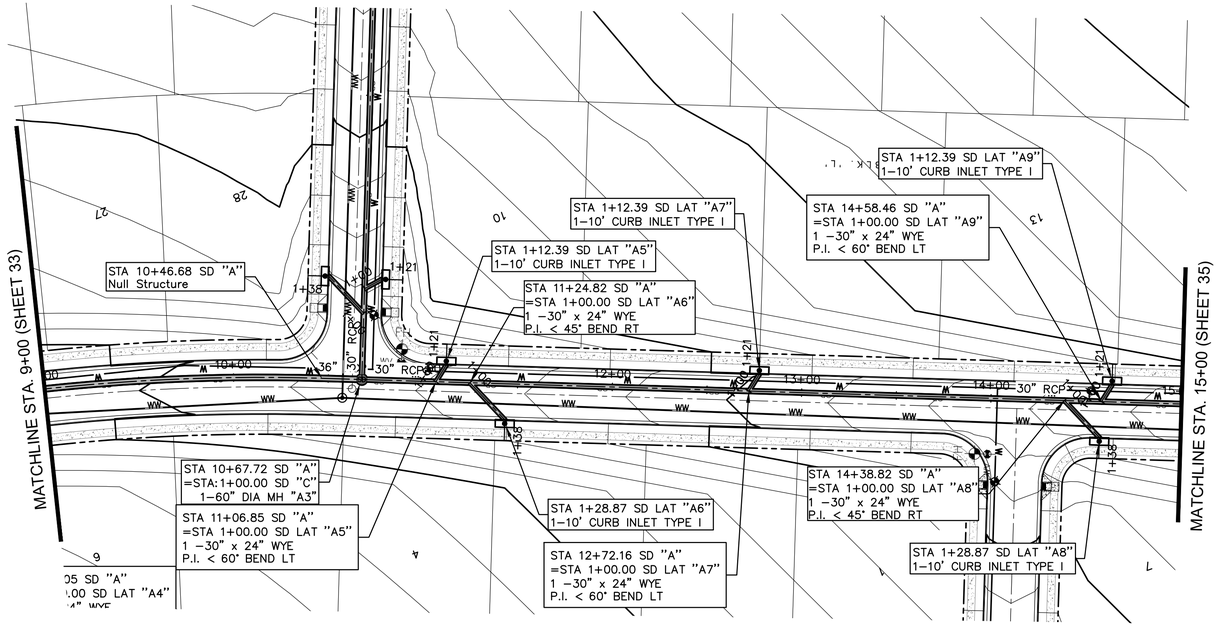
NO.	DATE	REVISIONS/CORRECTIONS	BY

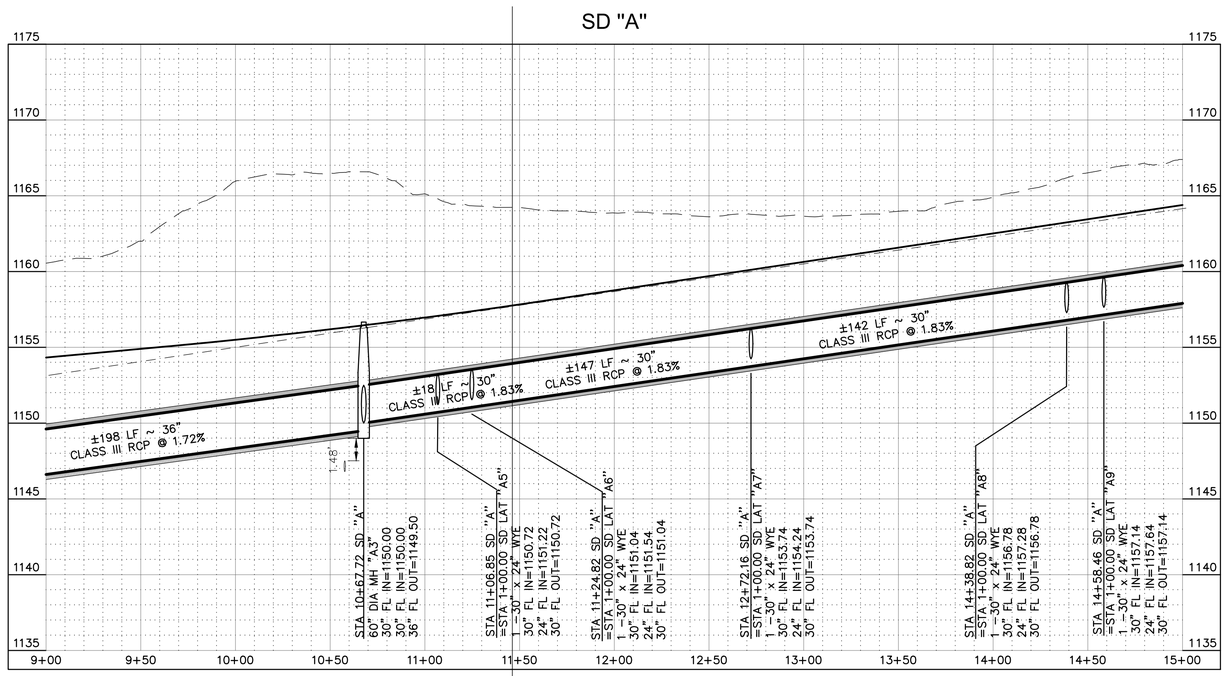
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

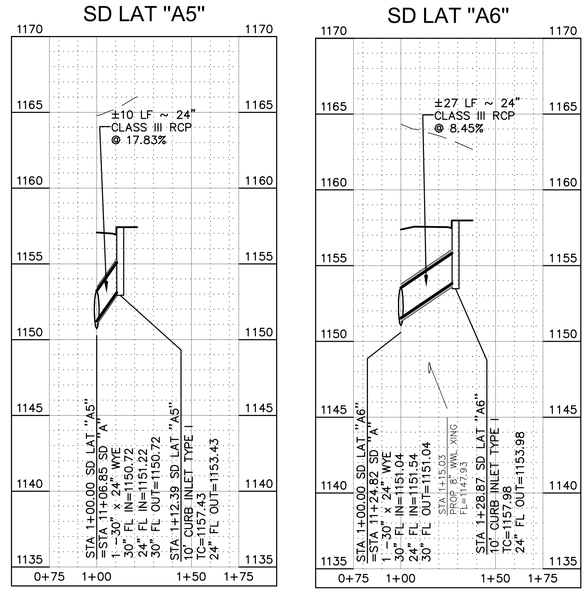
Sheet 33

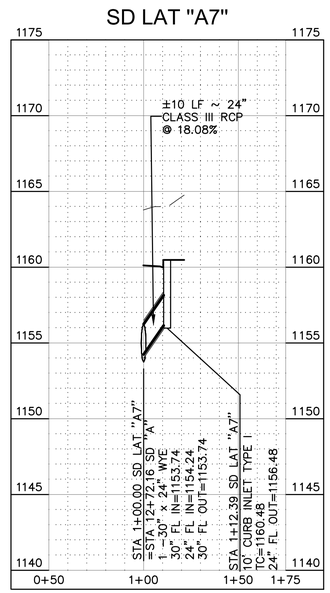
73

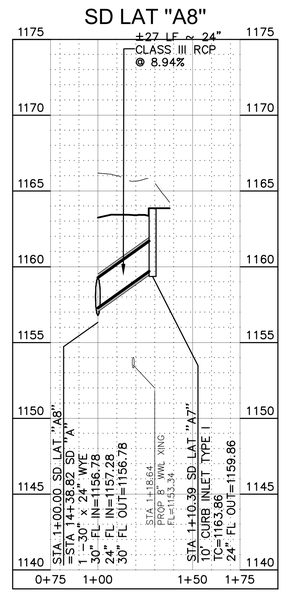
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:56 PM

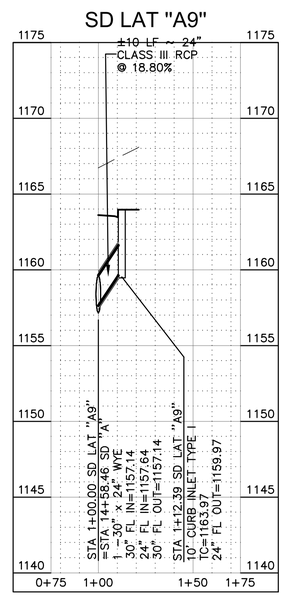


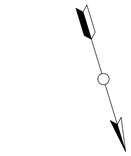












LEGEND

- EXIST CONTOUR MINOR
- EXIST CONTOUR MINOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

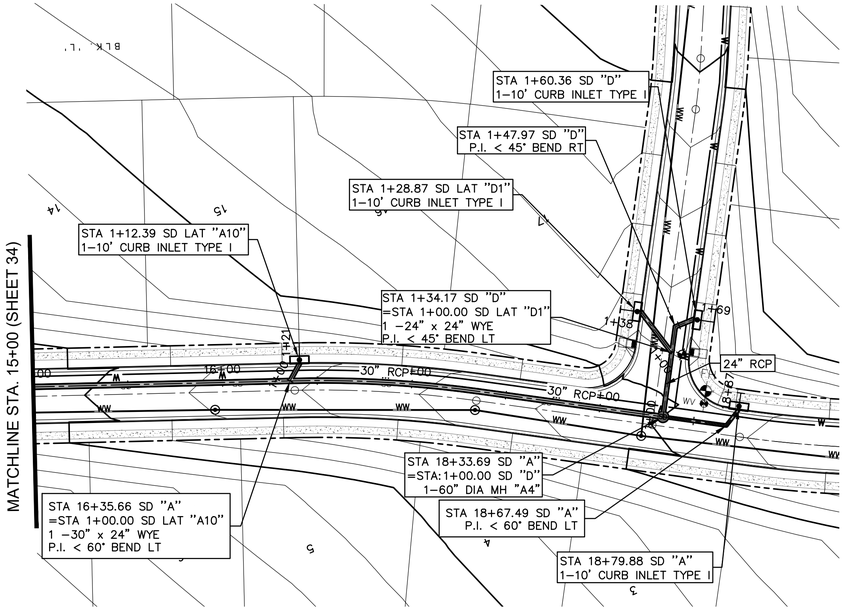
SD "A" STA 9+00 TO STA 15+00

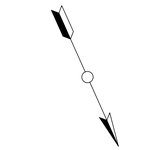
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 34 of 73

P:\Active Projects\2018-227 Provence\2-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:52 PM





0 40 80 Feet

HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

LEGEND

- EXIST CONTOUR MINOR (419)
- EXIST CONTOUR MINOR (420)
- PROPOSED CONTOUR MINOR (419)
- PROPOSED CONTOUR MAJOR (420)
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE (SD)
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

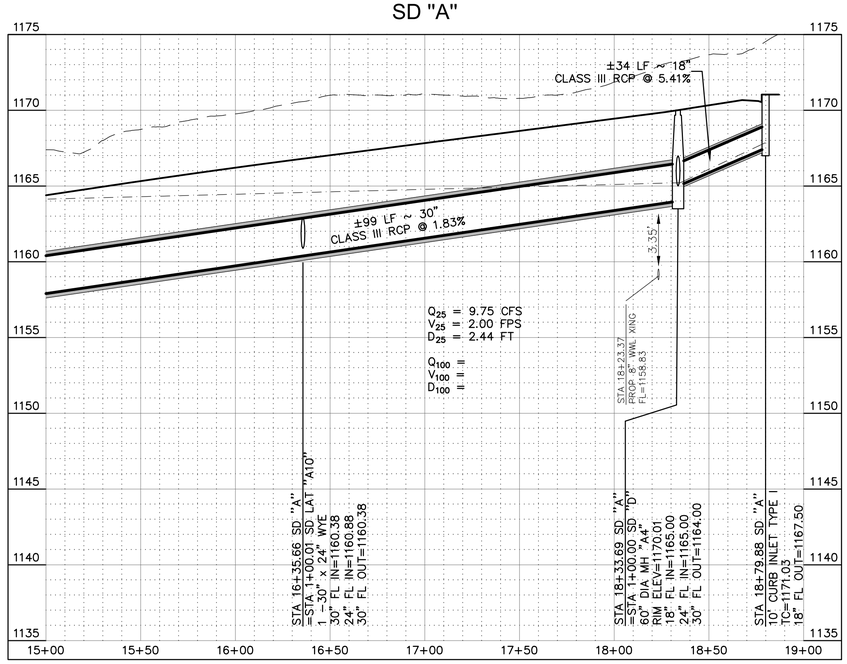
TBPE FIRM REG. NO. F-18320

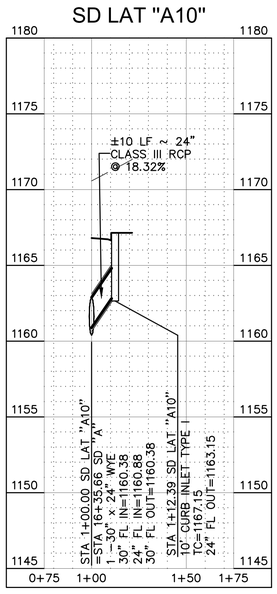
STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

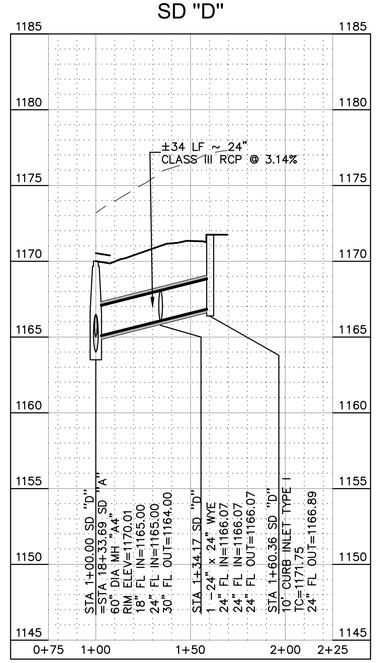
PROVENCE, PHASE 2, SECTION 3

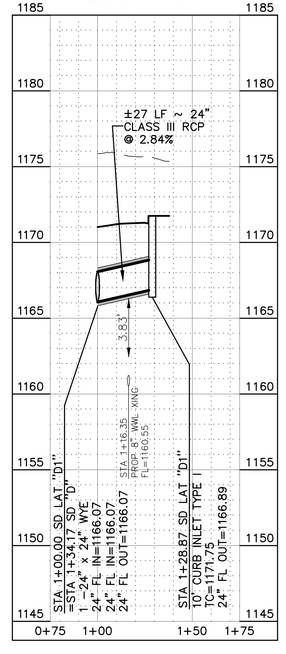
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SD "A" STA 15+00 TO END & SD "D"









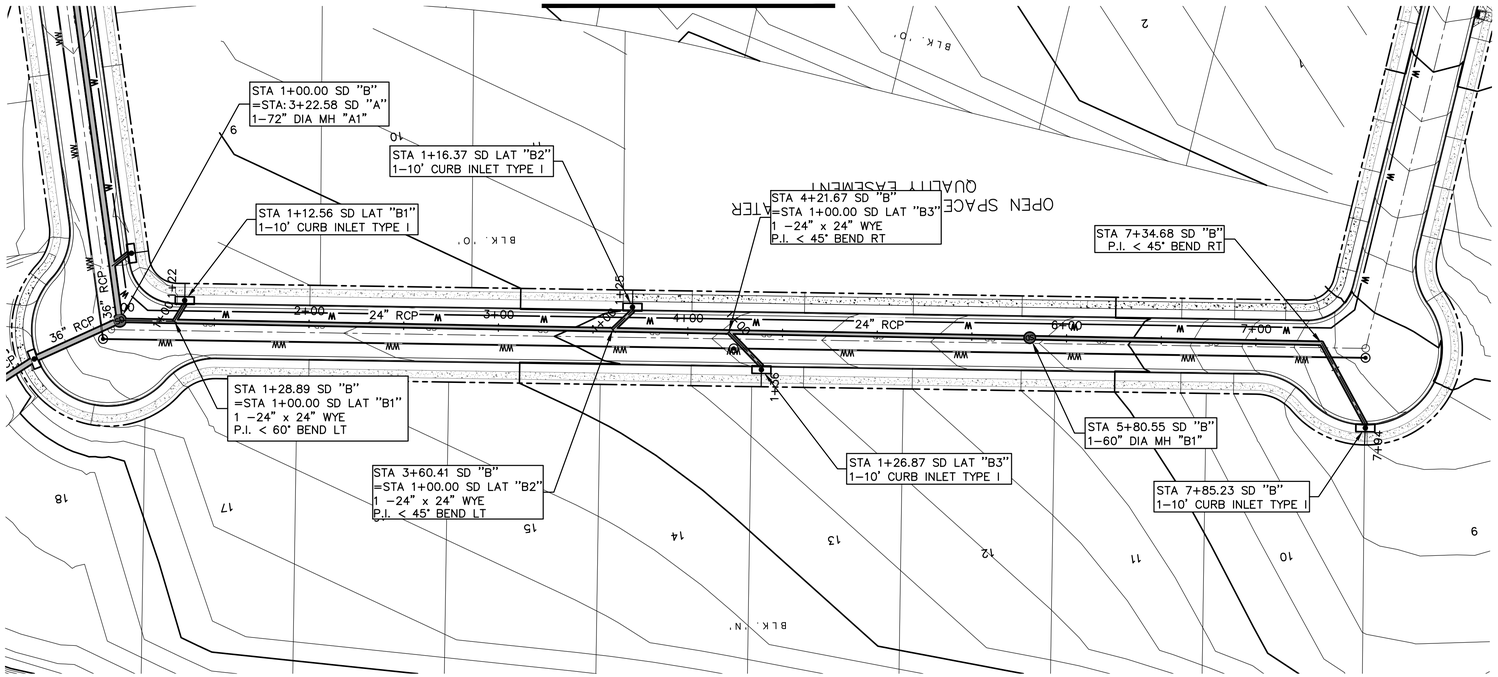
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

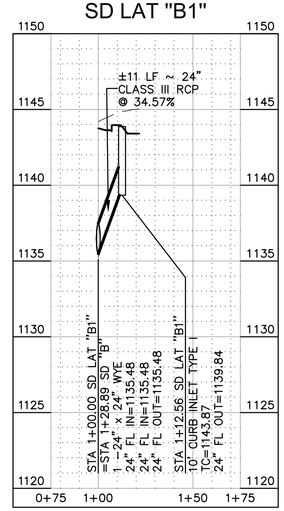
Sheet 35 of 73

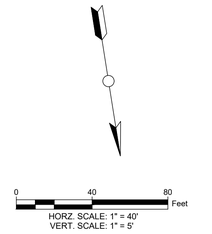
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:57 PM

MATCHLINE STA. 7+00 (SHEET ####)



SD LAT "B1"

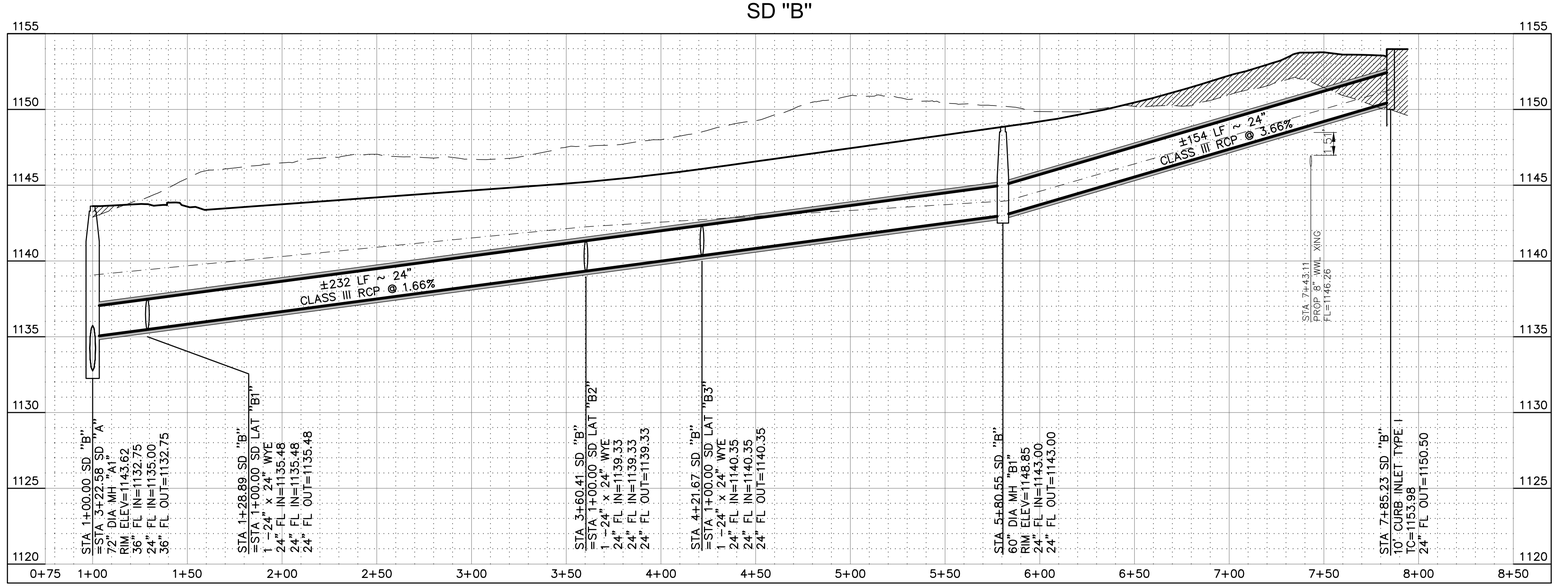




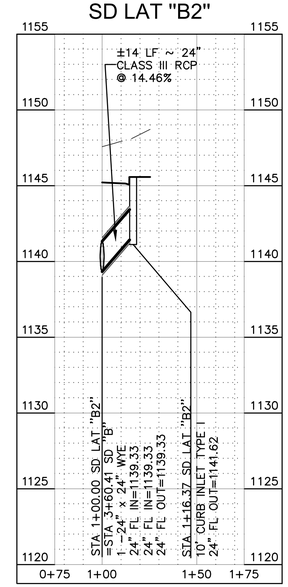
LEGEND

- EXIST CONTOUR MINOR (419)
- EXIST CONTOUR MINOR (420)
- PROPOSED CONTOUR MINOR (419)
- PROPOSED CONTOUR MAJOR (420)
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE (SD)
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

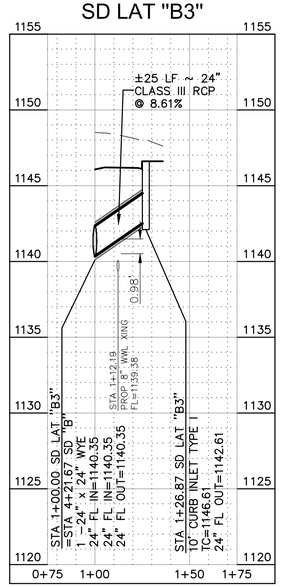
SD "B"



SD LAT "B2"



SD LAT "B3"



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

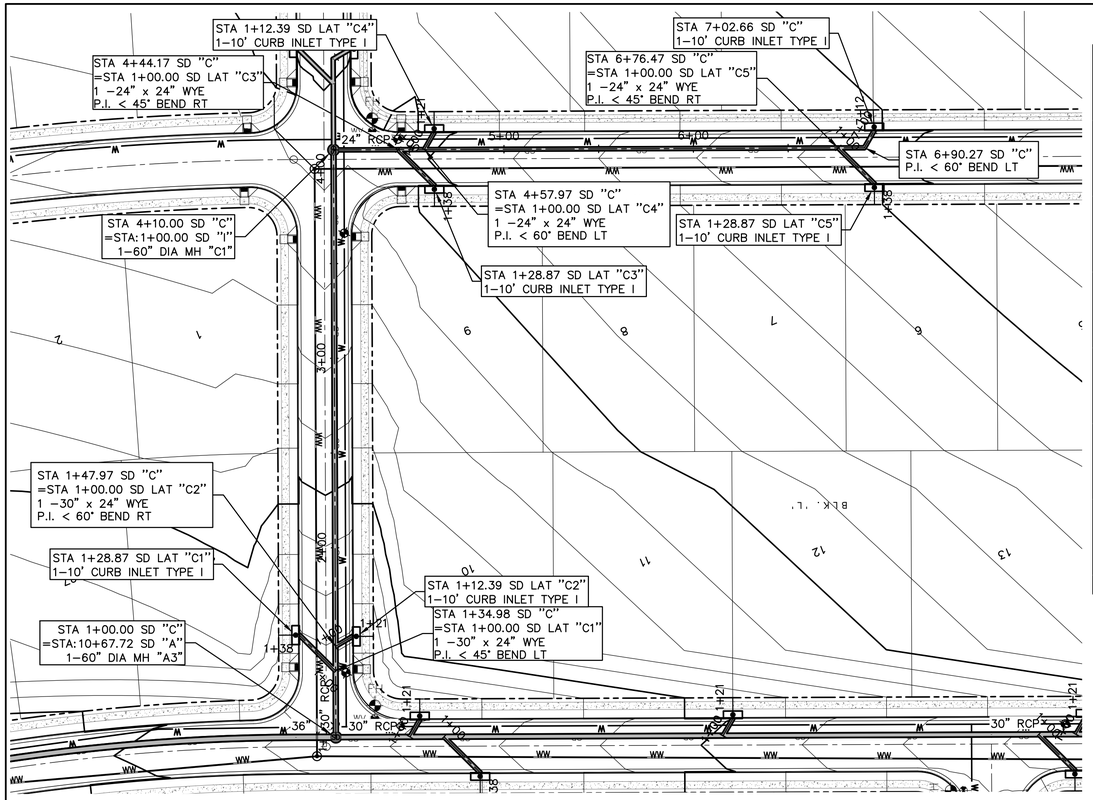
SD "B"

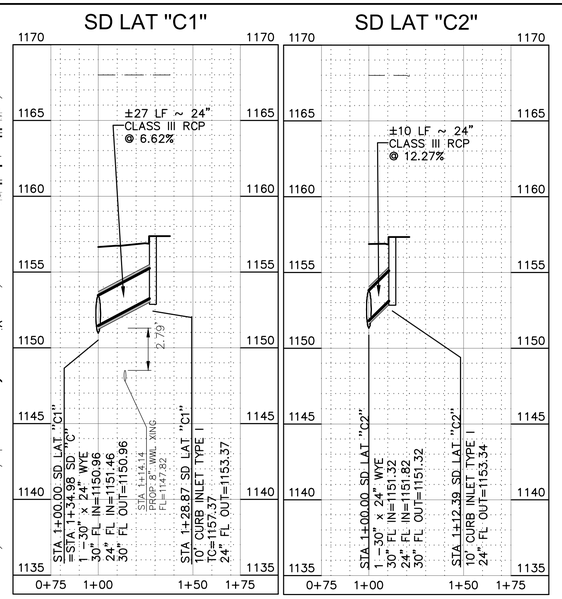
NO.	DATE	REVISIONS/CORRECTIONS	BY

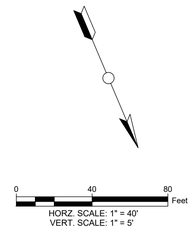
DESIGNED BY: XX DRAWN BY: XX
CHECKED BY: XX

Sheet 36 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:45 PM



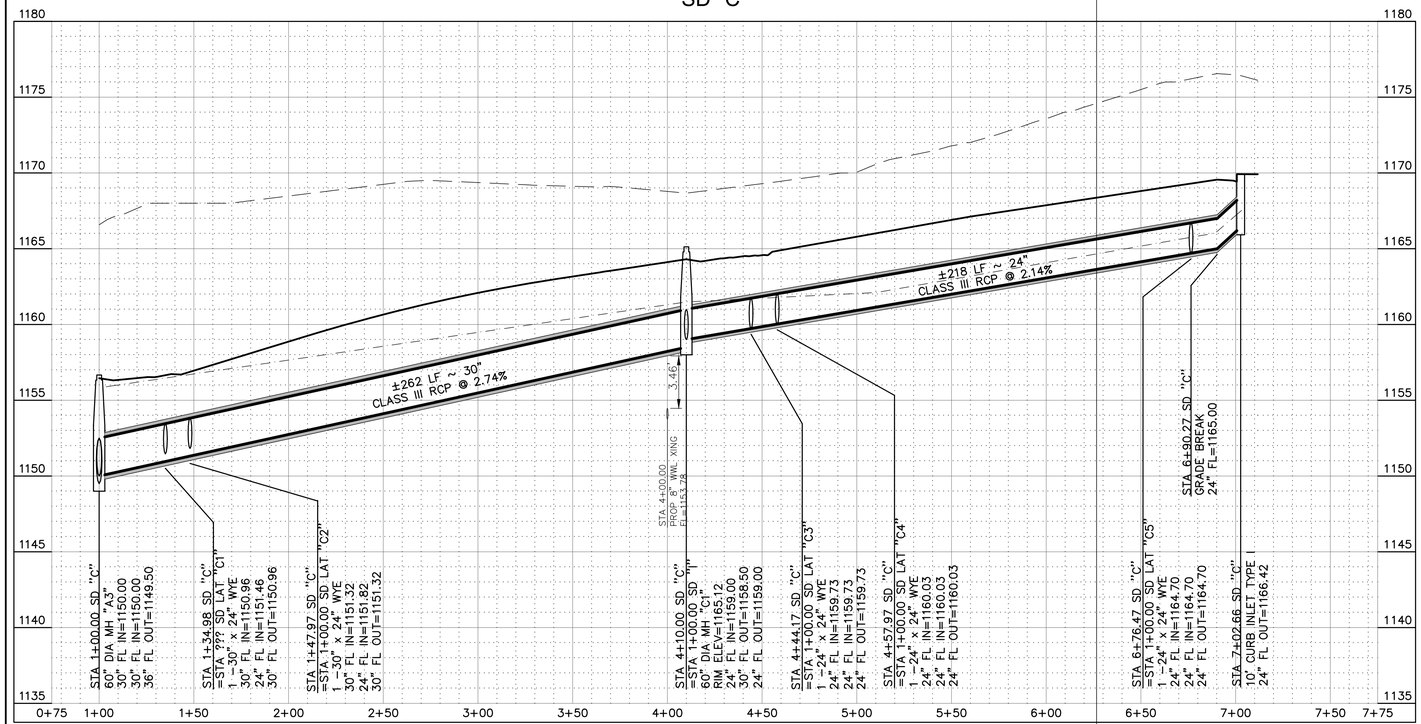




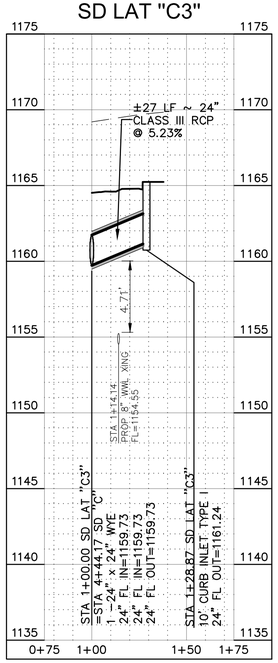
LEGEND

- EXIST CONTOUR MINOR
- EXIST CONTOUR MINOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

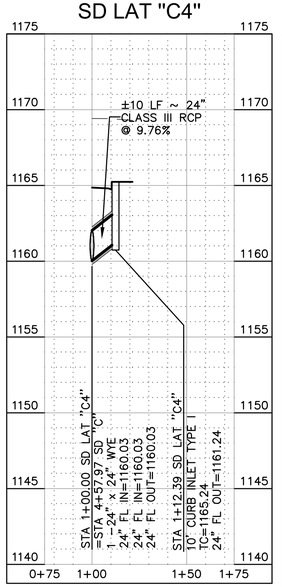
SD "C"



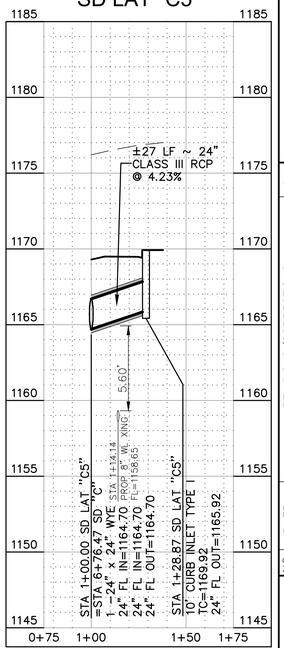
SD LAT "C3"



SD LAT "C4"



SD LAT "C5"



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

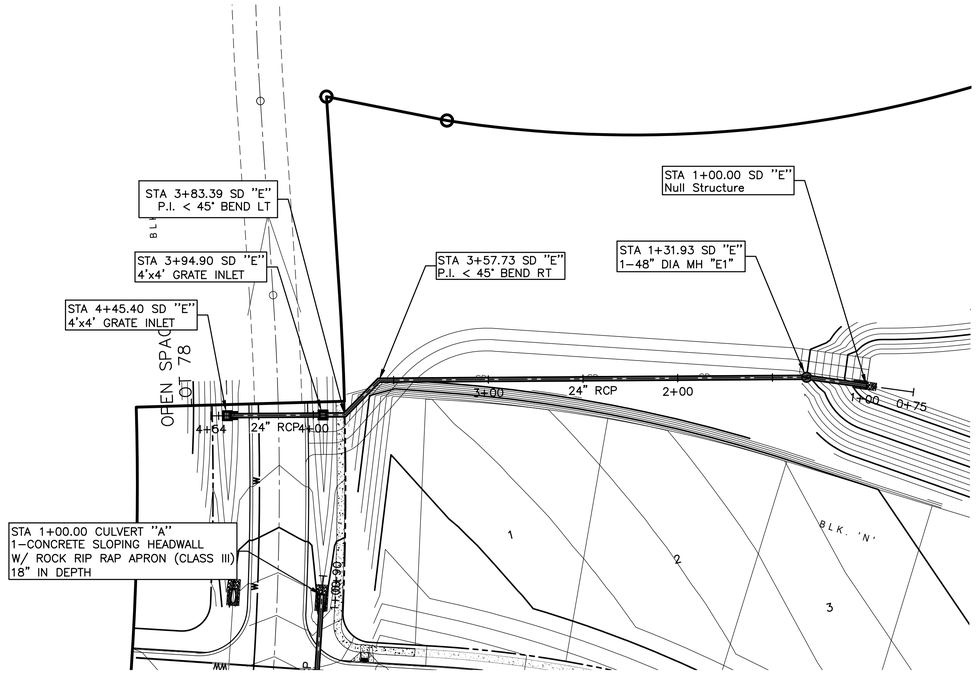
PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

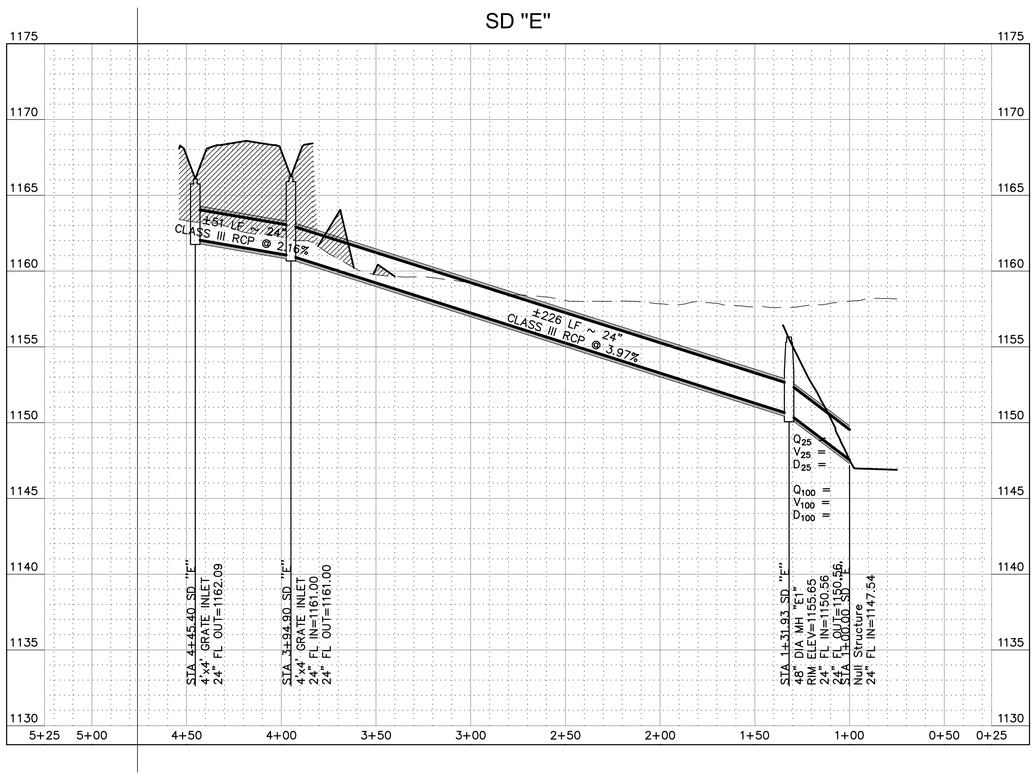
SD "C"

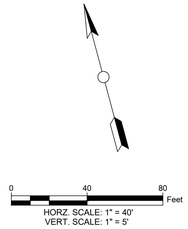
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:55 PM







LEGEND

- EXIST CONTOUR MINOR (419)
- EXIST CONTOUR MINOR (420)
- PROPOSED CONTOUR MINOR (419)
- PROPOSED CONTOUR MAJOR (420)
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE (SD)
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

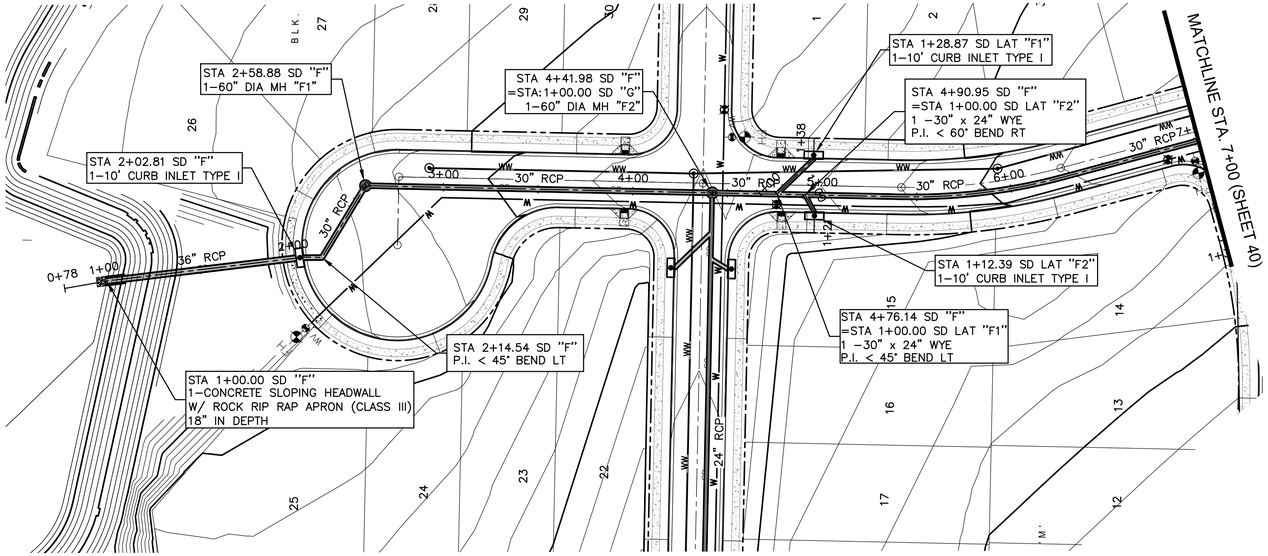
SD "E"

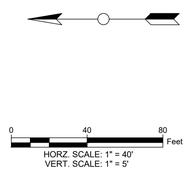
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 38 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:53 PM

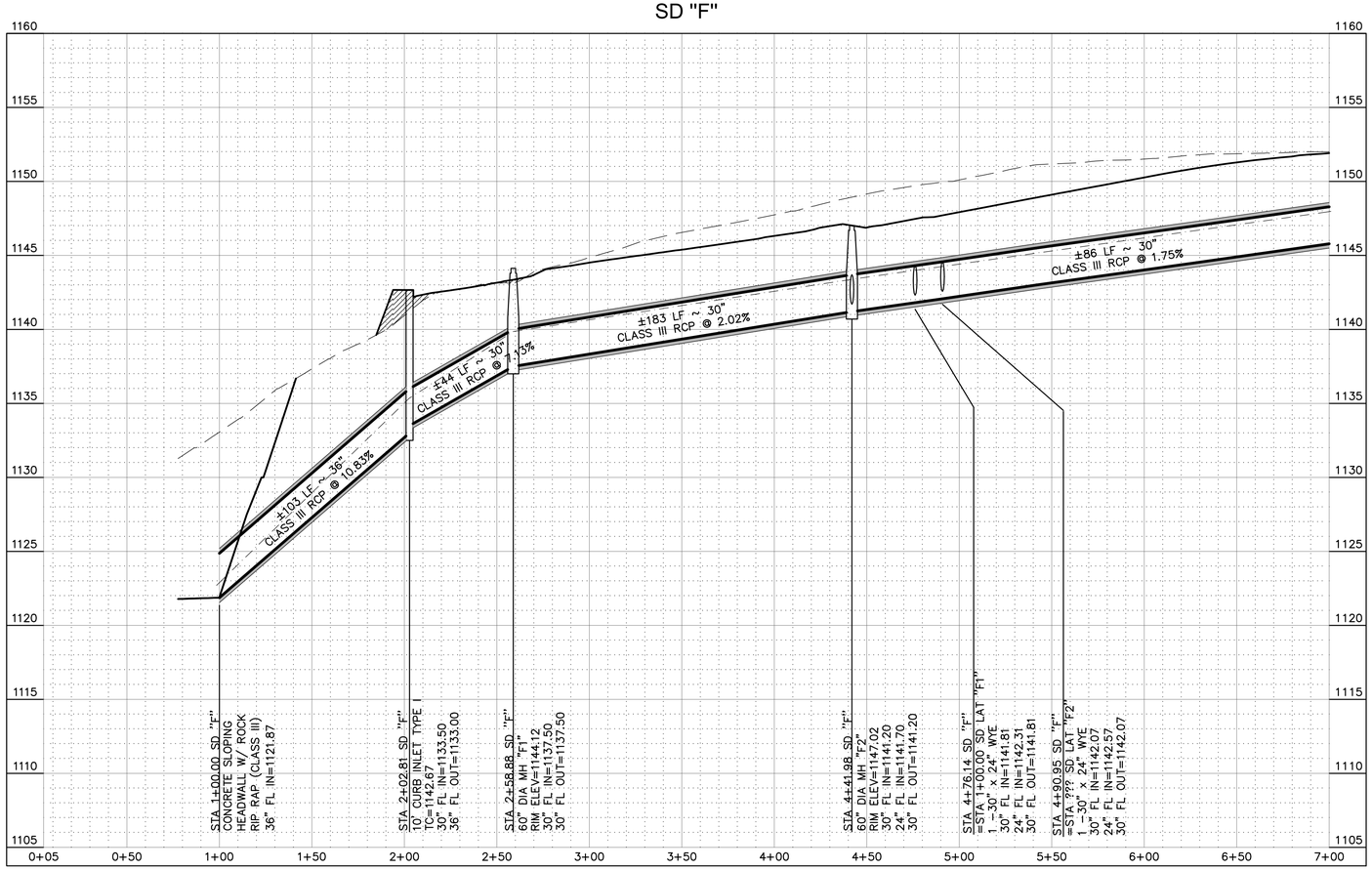




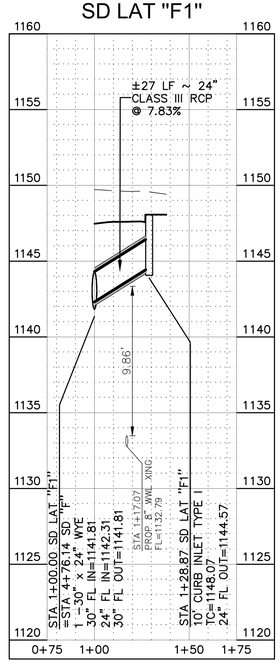
LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD — PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

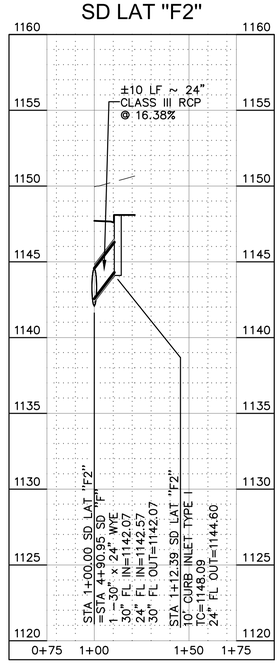
SD "F"



SD LAT "F1"



SD LAT "F2"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

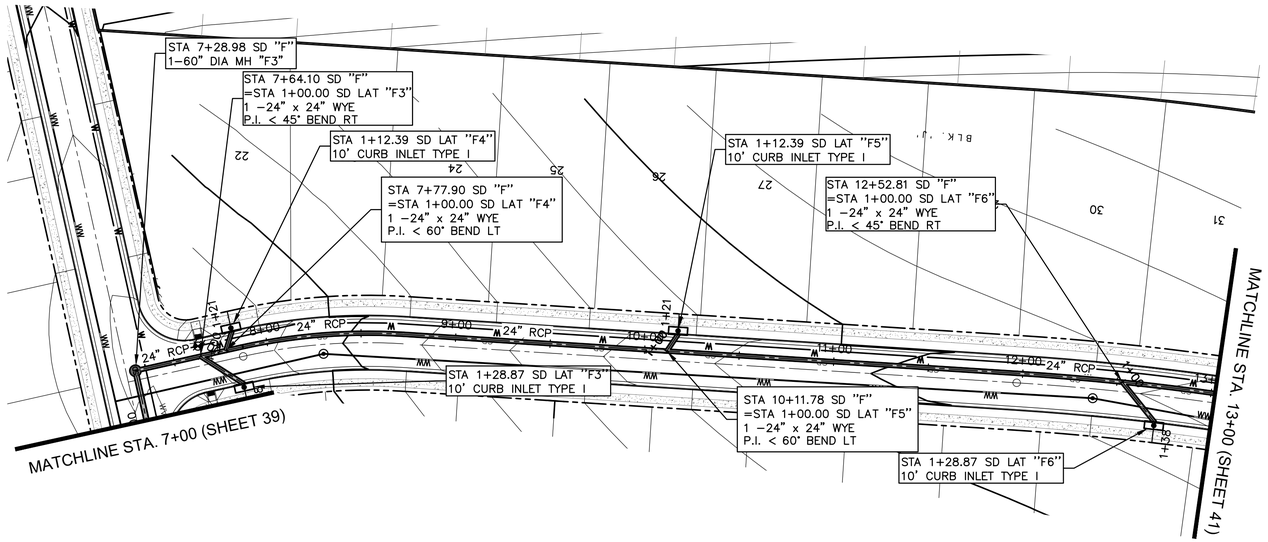
SD "F" STA 1+00 TO STA 7+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

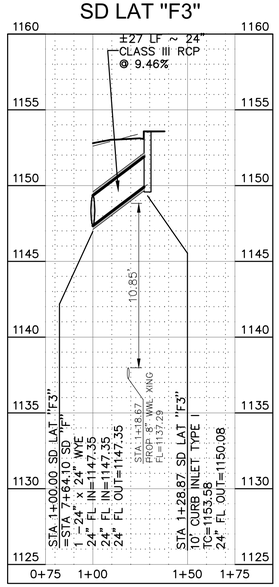
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 39 of 73

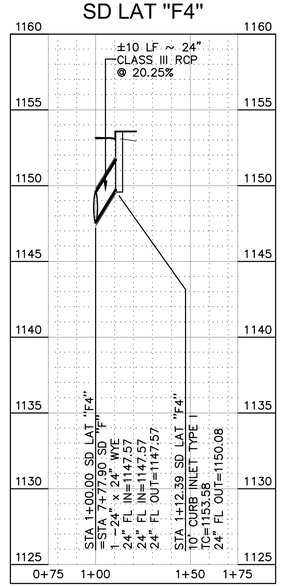
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:58 PM

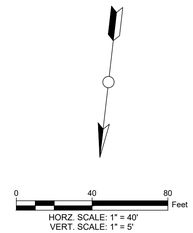


SD LAT "F3"



SD LAT "F4"



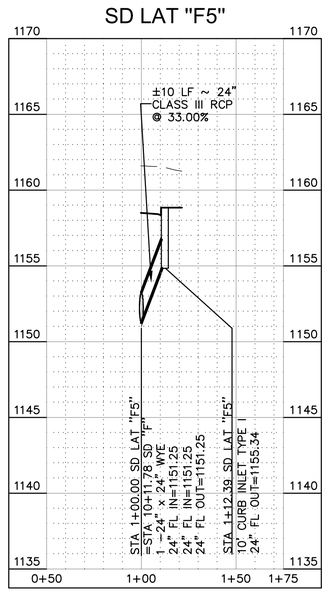


LEGEND

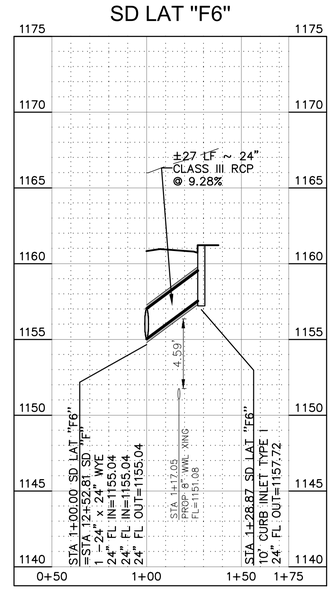
- EXIST CONTOUR MINOR
- EXIST CONTOUR MINOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

SD "F"

SD LAT "F5"



SD LAT "F6"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

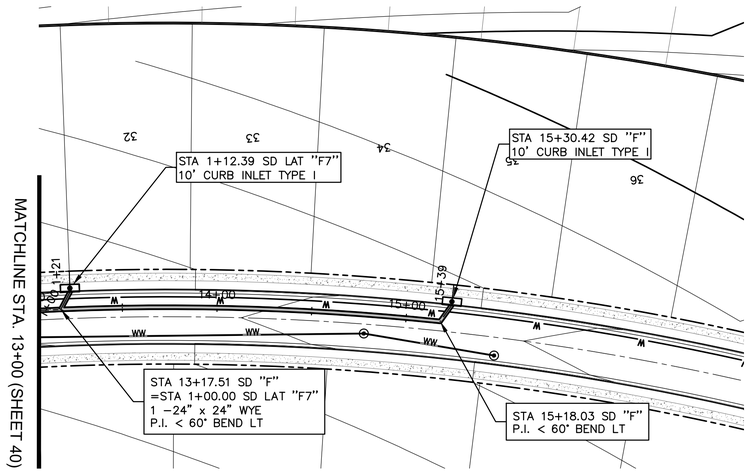
SD "F" STA 7+00 TO STA 13+00

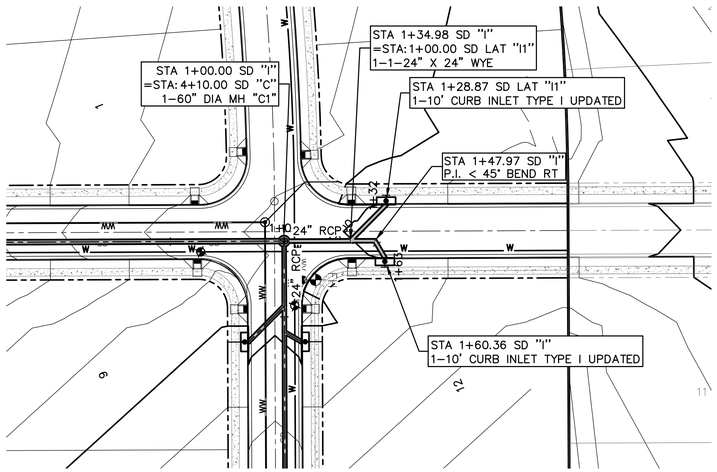
NO.	DATE	REVISIONS/CORRECTIONS	BY

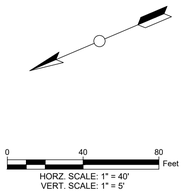
DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 40 of 73

P:\Active Projects\2018-227 Provence\2-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:57 PM



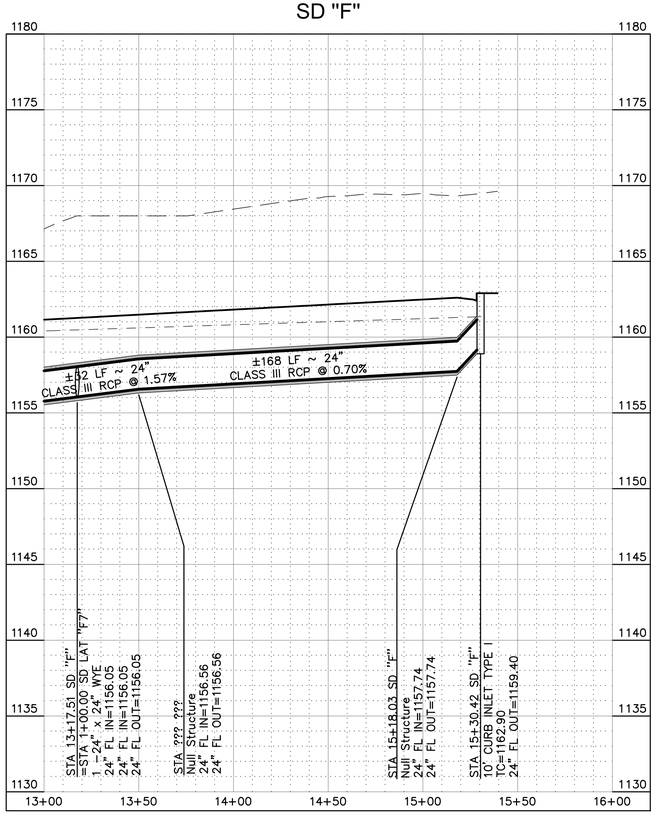




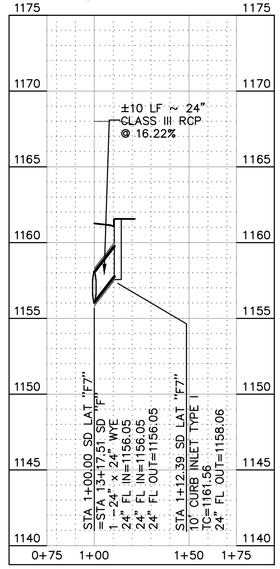
LEGEND

- EXIST CONTOUR MINOR
- EXIST CONTOUR MINOR
- PROPOSED CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

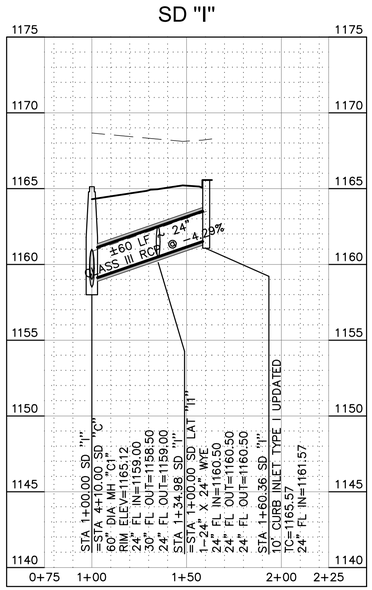
SD "F"



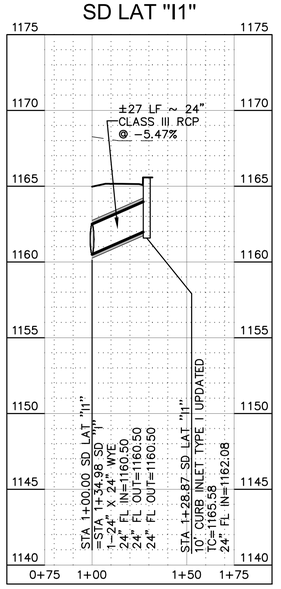
SD LAT "F7"



SD "I"



SD LAT "I1"



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

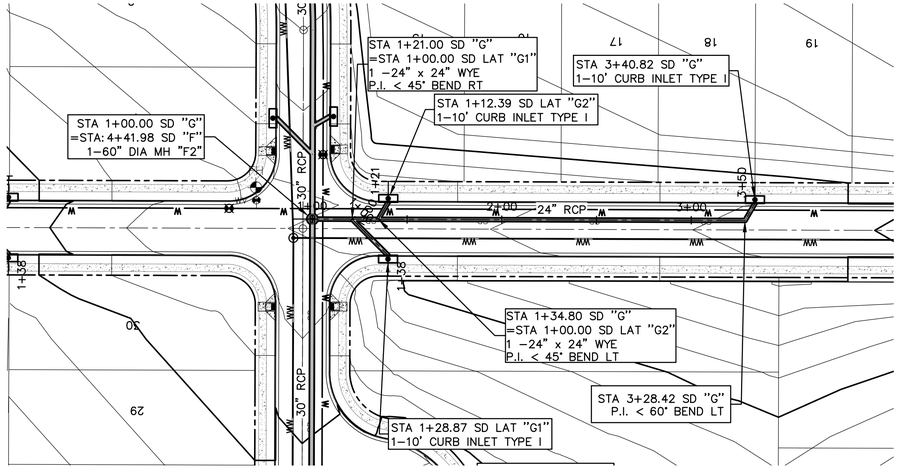
SD "F" STA 13+00 TO END & SD "I"

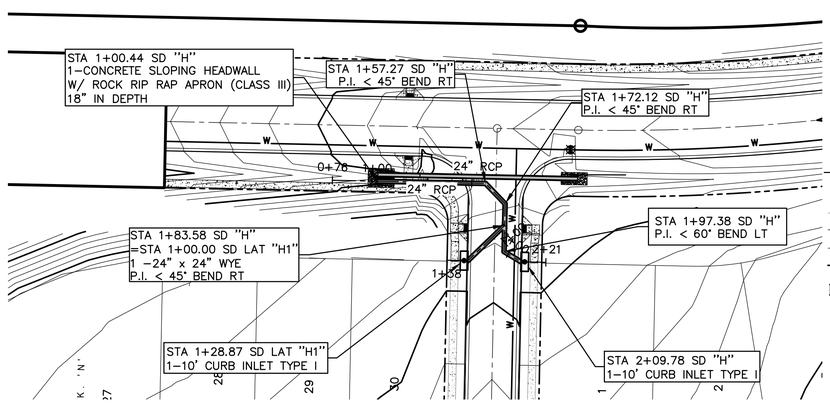
NO.	DATE	REVISIONS/CORRECTIONS	BY

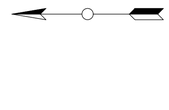
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 41 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:46 PM



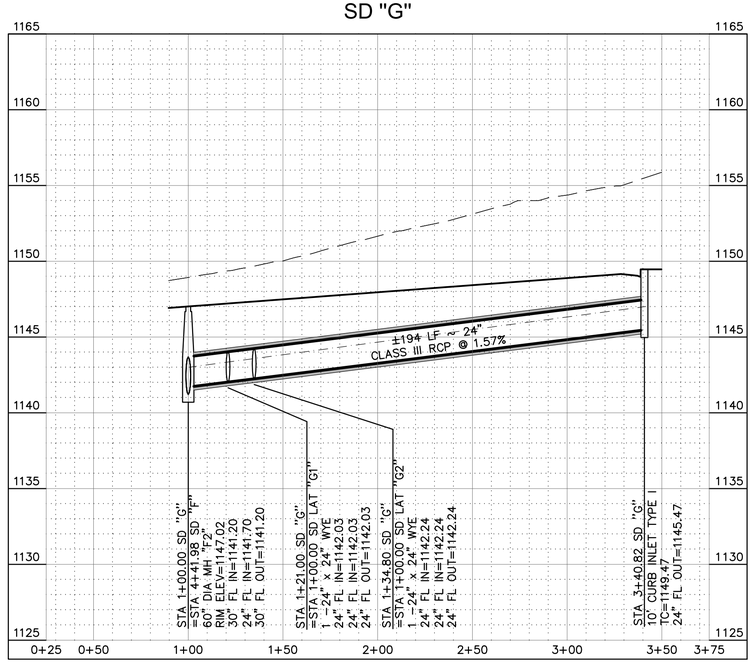




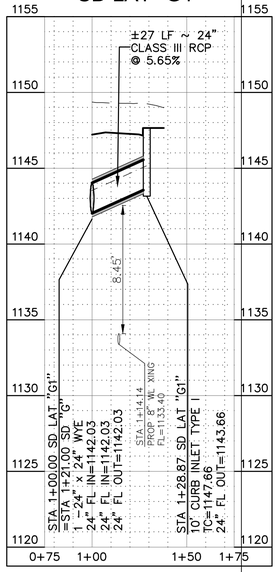
LEGEND

- 419 — EXIST CONTOUR MINOR
- 420 — EXIST CONTOUR MINOR
- 419 — PROPOSED CONTOUR MINOR
- 420 — PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD — PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25–YR HGL
- PROPOSED PROFILE 100–YR HGL

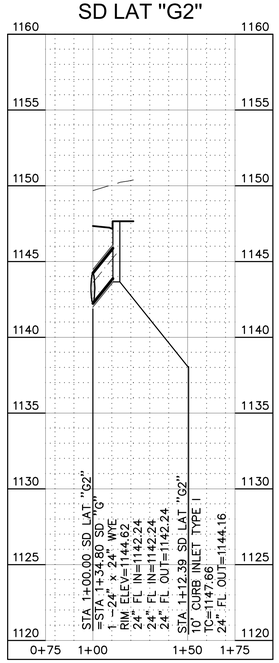
SD "G"



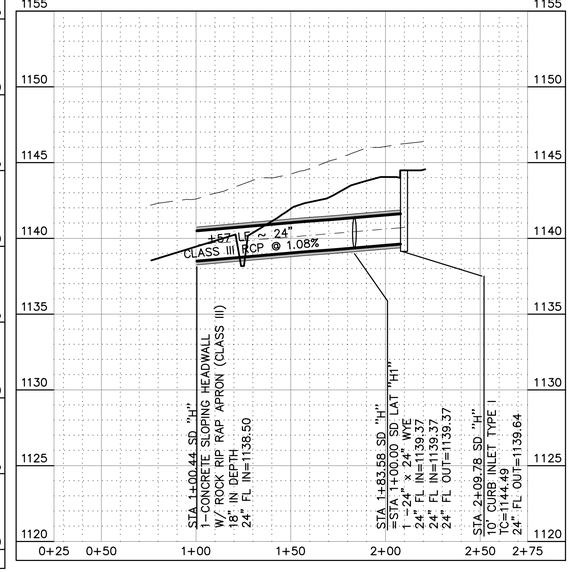
SD LAT "G1"



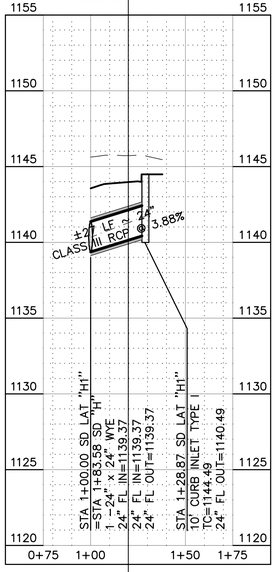
SD LAT "G2"



SD "H"



SD LAT "H1"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

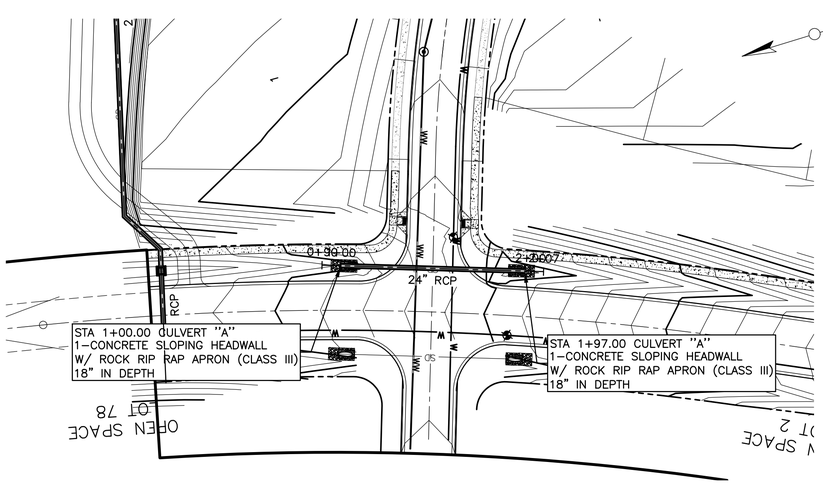
SD "G" & "H"

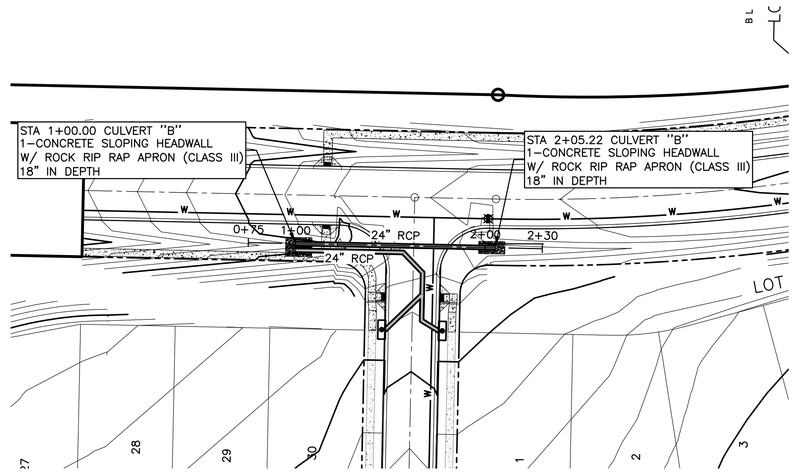
NO.	DATE	REVISIONS/CORRECTIONS	BY

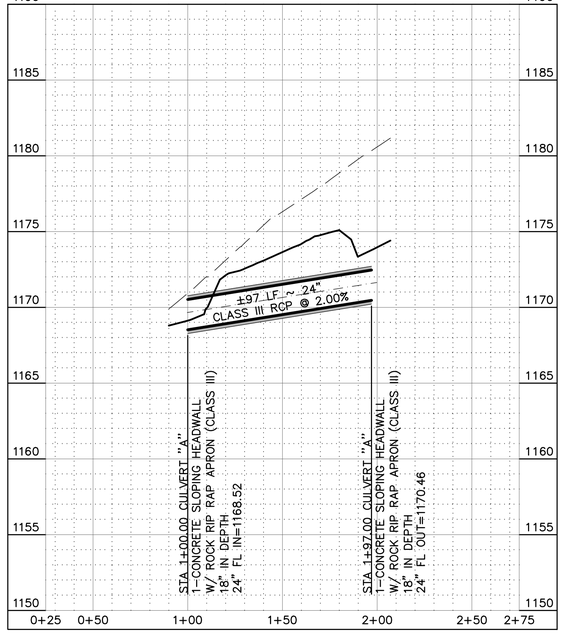
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 42 of 73

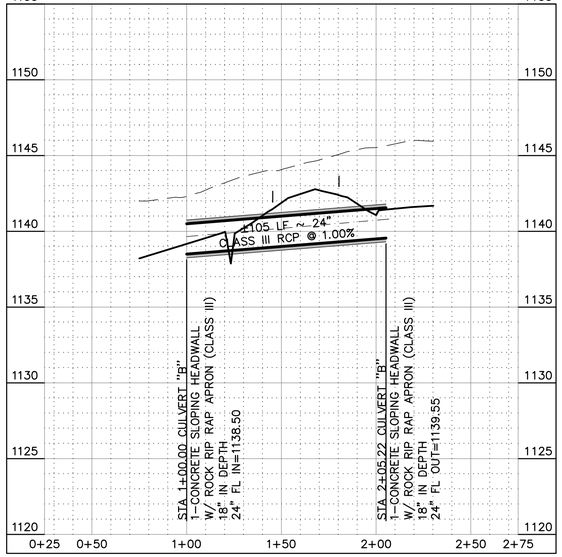
P:\Active Projects\2018-227 Provence\2-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:53 PM







Q_{25} =
V_{25} =



Q_{25} =
V_{25} =
D_{25} =

Q_{100} =
V_{100} =
D_{100} =

0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 5'

LEGEND

- 419 EXIST CONTOUR MINOR
- 420 EXIST CONTOUR MINOR
- 419 PROPOSED CONTOUR MINOR
- 420 PROPOSED CONTOUR MAJOR
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE
- PROPOSED PROFILE 25-YR HGL
- PROPOSED PROFILE 100-YR HGL

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

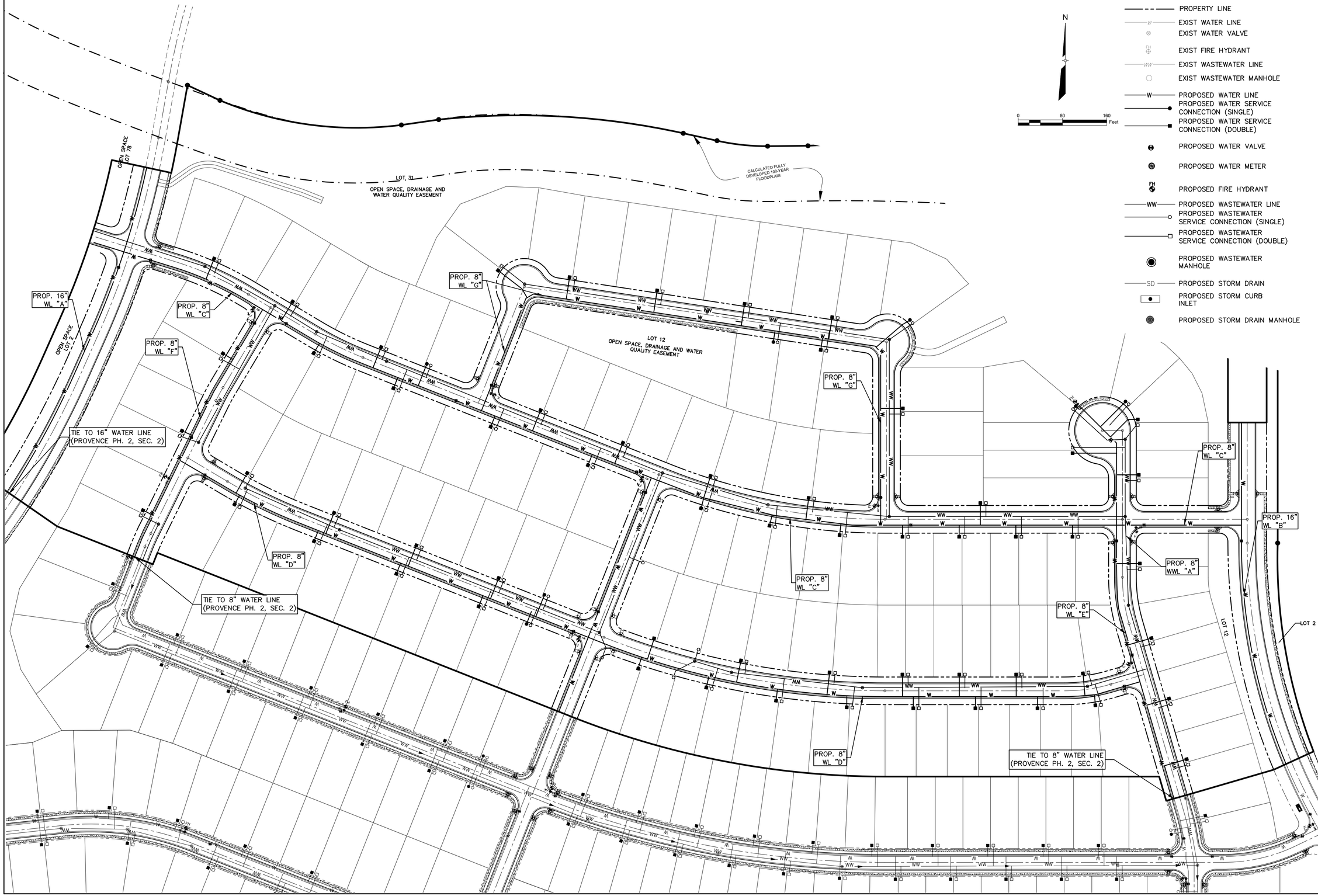
CULVERT "A" & "B"

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 43 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_strm_01.dwg 9/11/2025 3:48 PM



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

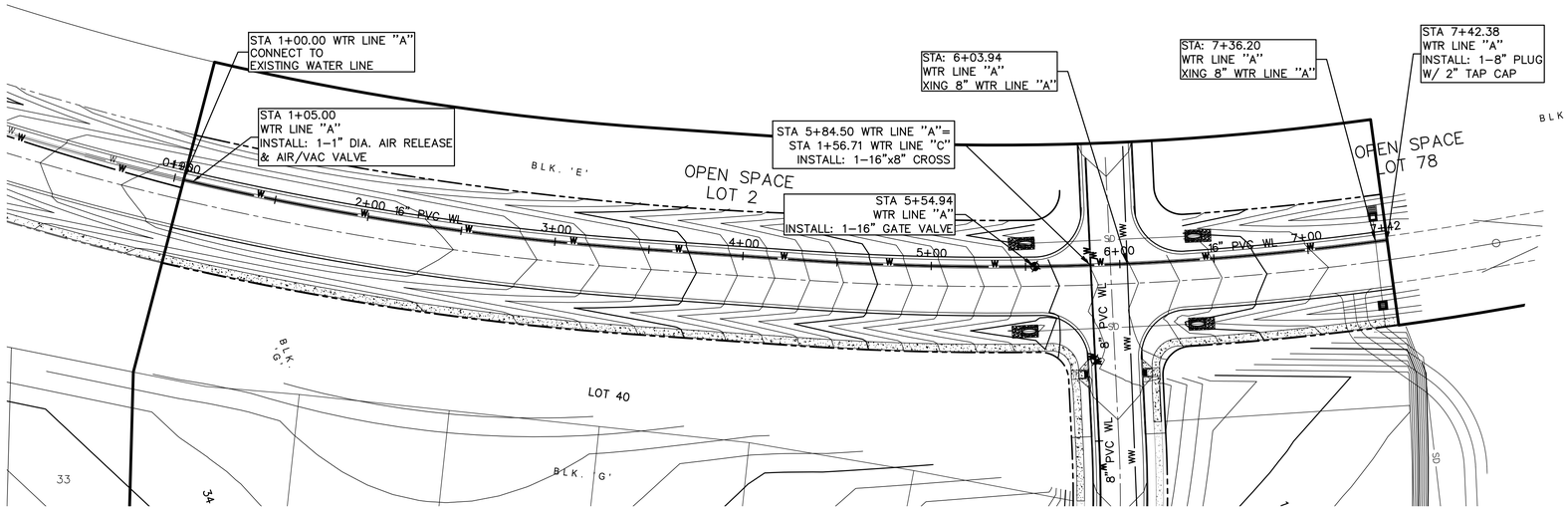
OVERALL UTILITY LAYOUT

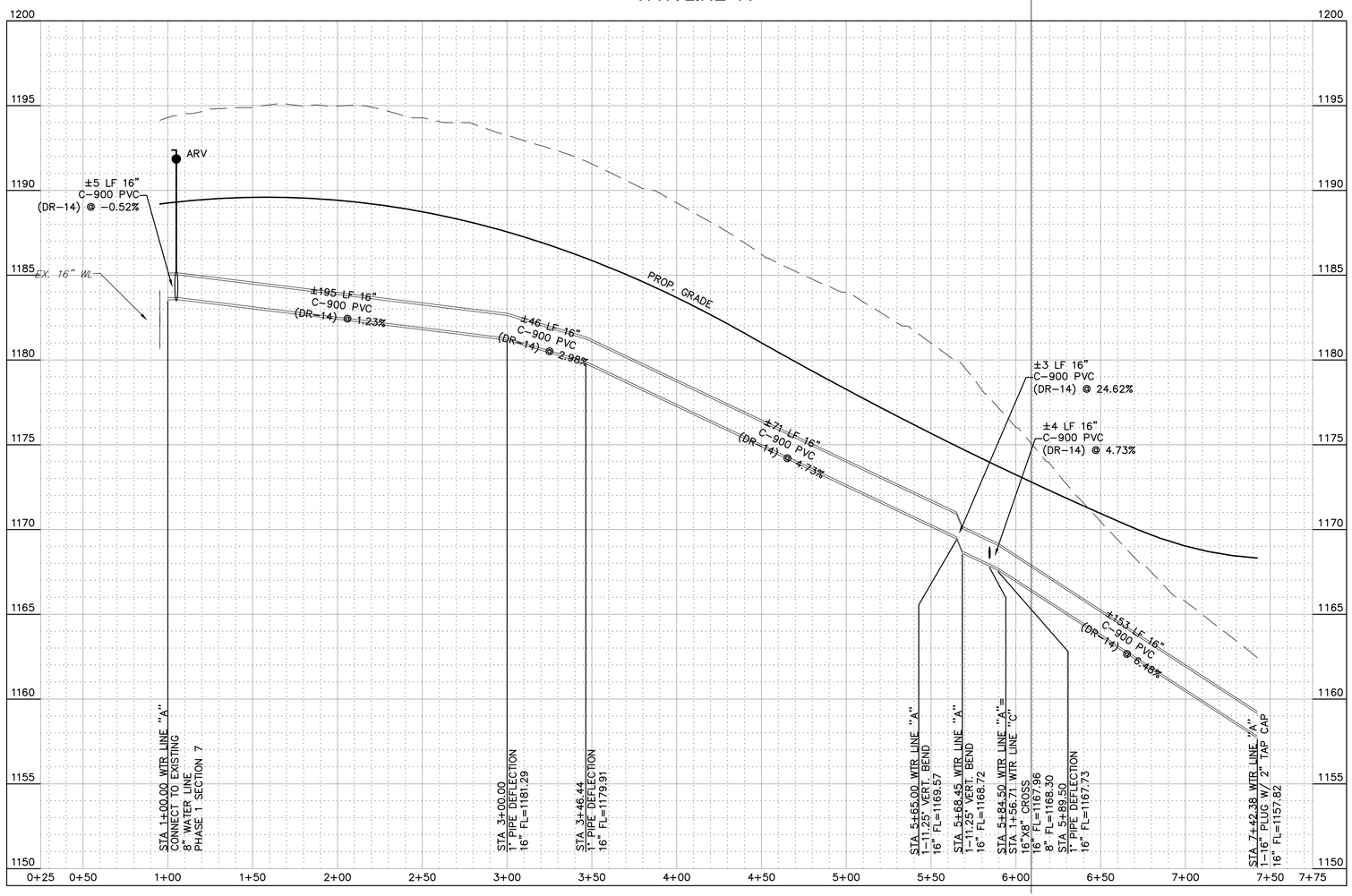
NO.	DATE	REVISIONS/CORRECTIONS	BY

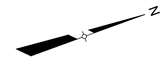
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 44 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_sou_01.dwg 9/11/2025 3:53 PM







LEGEND

- PROPERTY LINE
- 420 EXIST CONTOUR
- 420 PROPOSED CONTOUR
- W EXIST WATER LINE
- EXIST WATER VALVE
- FH EXIST FIRE HYDRANT
- WW EXIST WASTEWATER LINE
- WW EXIST WASTEWATER MANHOLE
- W PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- FH PROPOSED FIRE HYDRANT
- WW PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- CO PROPOSED CLEANOUT
- SD PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

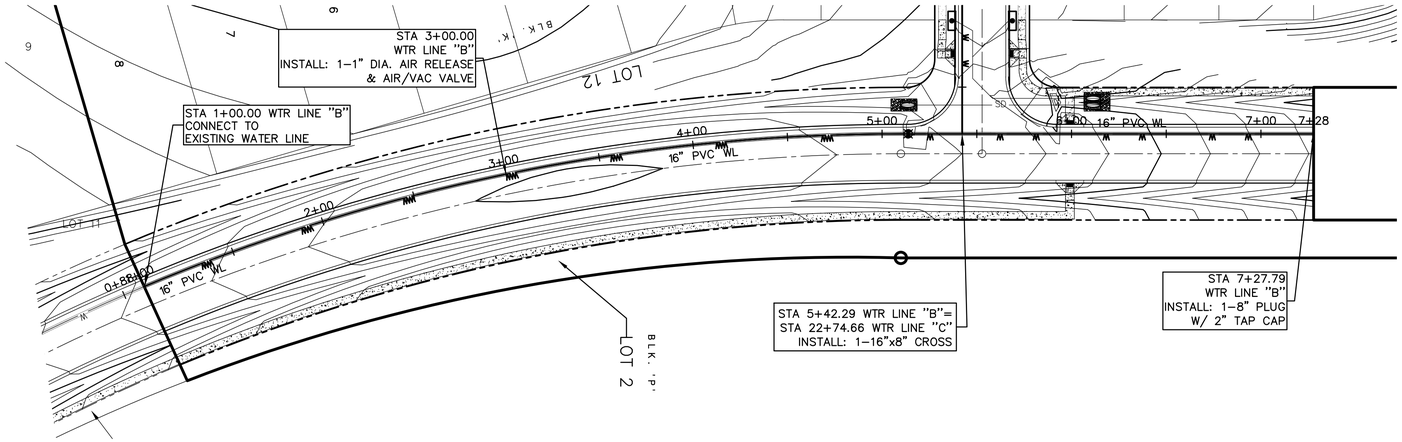
WATER LINE "A"

NO.	DATE	REVISIONS/CORRECTIONS	BY

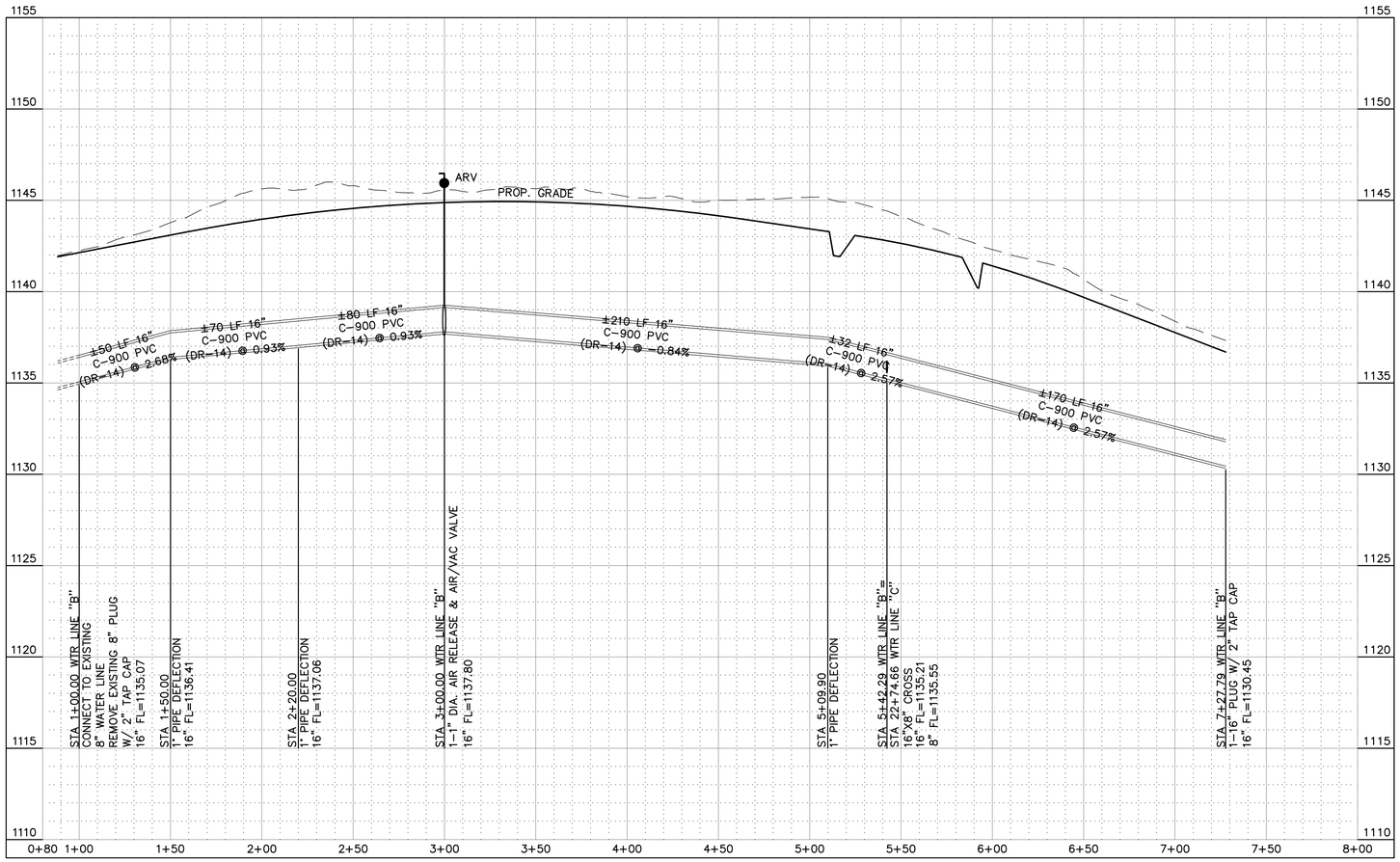
DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 45 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:54 PM



WTR LINE "B"



N

0 40 80 Feet
HORZ. SCALE: 1" = 40'
VERT. SCALE: 1" = 4'

LEGEND

- PROPERTY LINE
- 420 EXIST CONTOUR
- 420 PROPOSED CONTOUR
- W EXIST WATER LINE
- EXIST WATER VALVE
- FH EXIST FIRE HYDRANT
- WW EXIST WASTEWATER LINE
- WW EXIST WASTEWATER MANHOLE
- W PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- FH PROPOSED FIRE HYDRANT
- WW PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- CO PROPOSED CLEANOUT
- SD PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C–900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER–APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER–TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR–26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

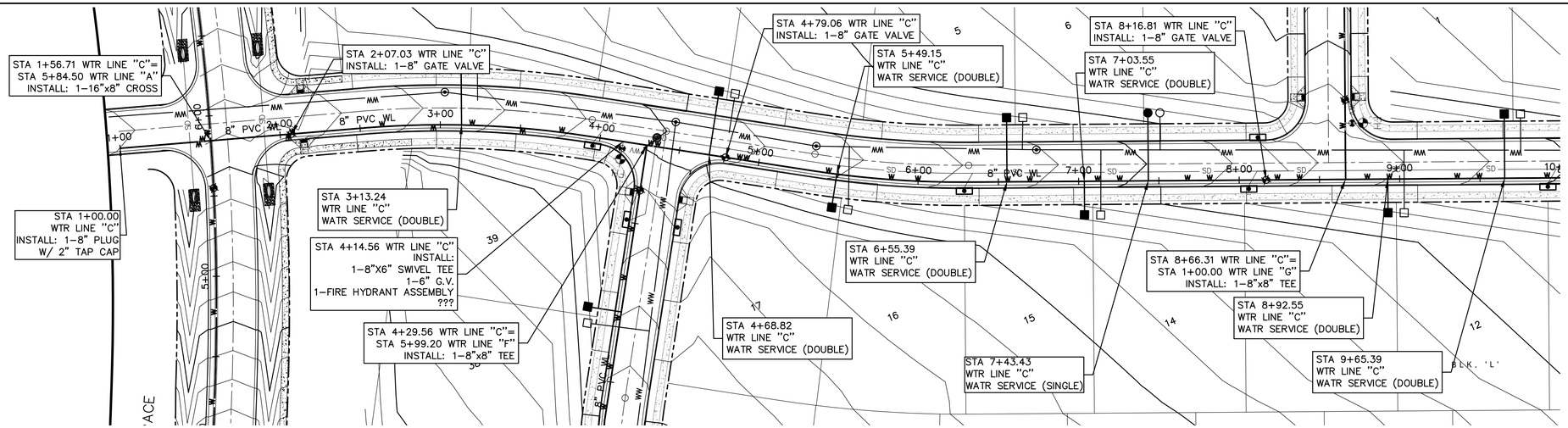
WATER LINE "B"

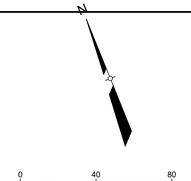
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 46 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:55 PM

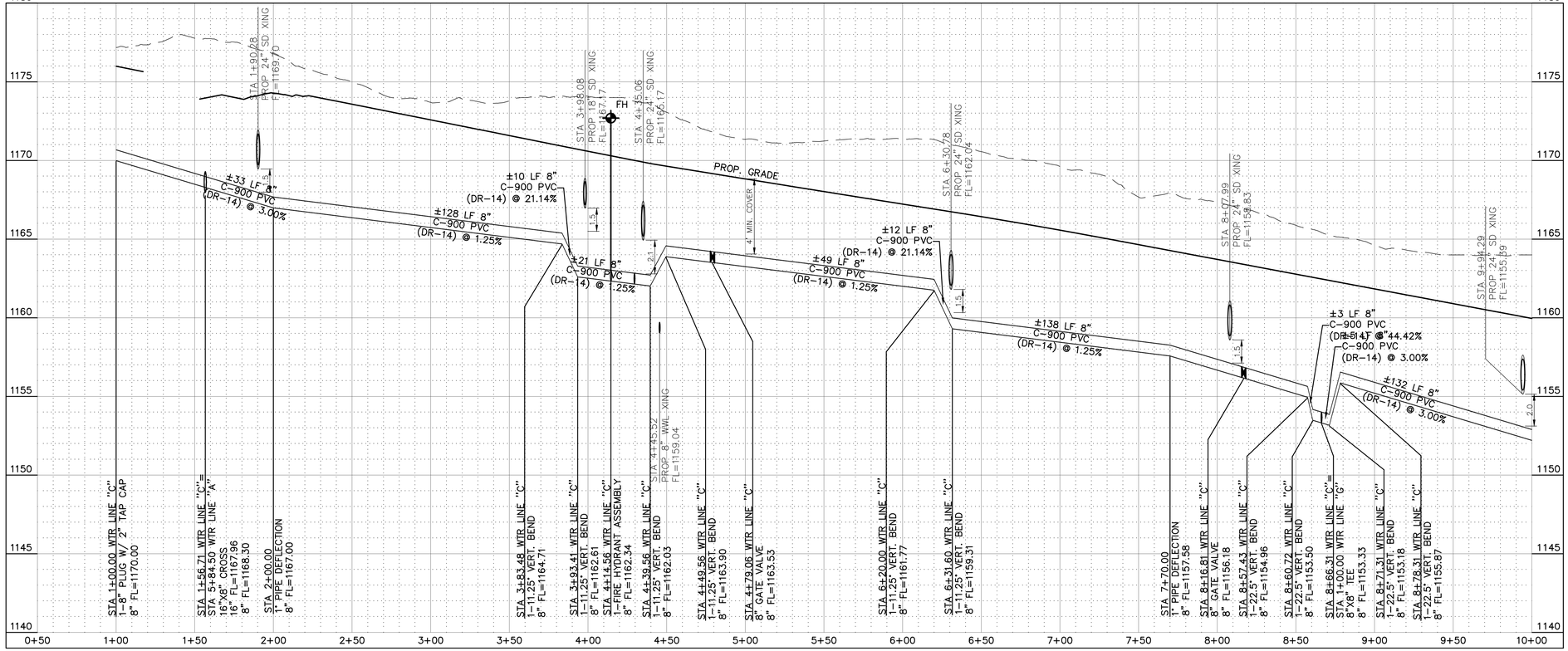




LEGEND

- PROPERTY LINE
- 420 EXIST CONTOUR
- 420 PROPOSED CONTOUR
- W EXIST WATER LINE
- EXIST WATER VALVE
- FH EXIST FIRE HYDRANT
- WW EXIST WASTEWATER LINE
- (WW) EXIST WASTEWATER MANHOLE
- W PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- FH PROPOSED FIRE HYDRANT
- WW PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- CO PROPOSED CLEANOUT
- SD PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

WTR LINE "C"



NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

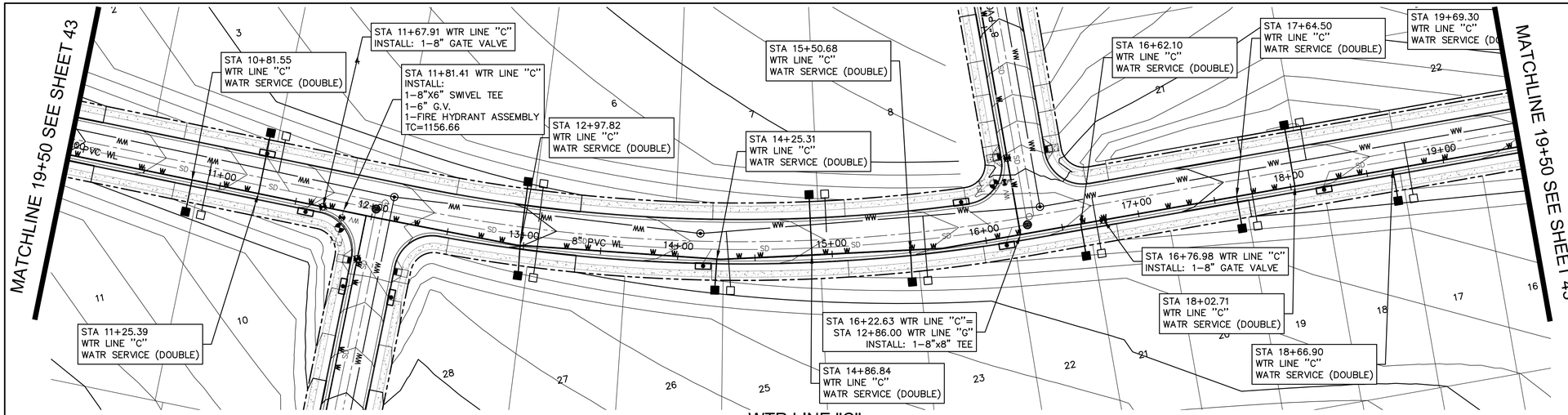
WATER LINE "C" STA 1+00 TO STA 10+00

NO.	DATE	REVISIONS/CORRECTIONS	BY

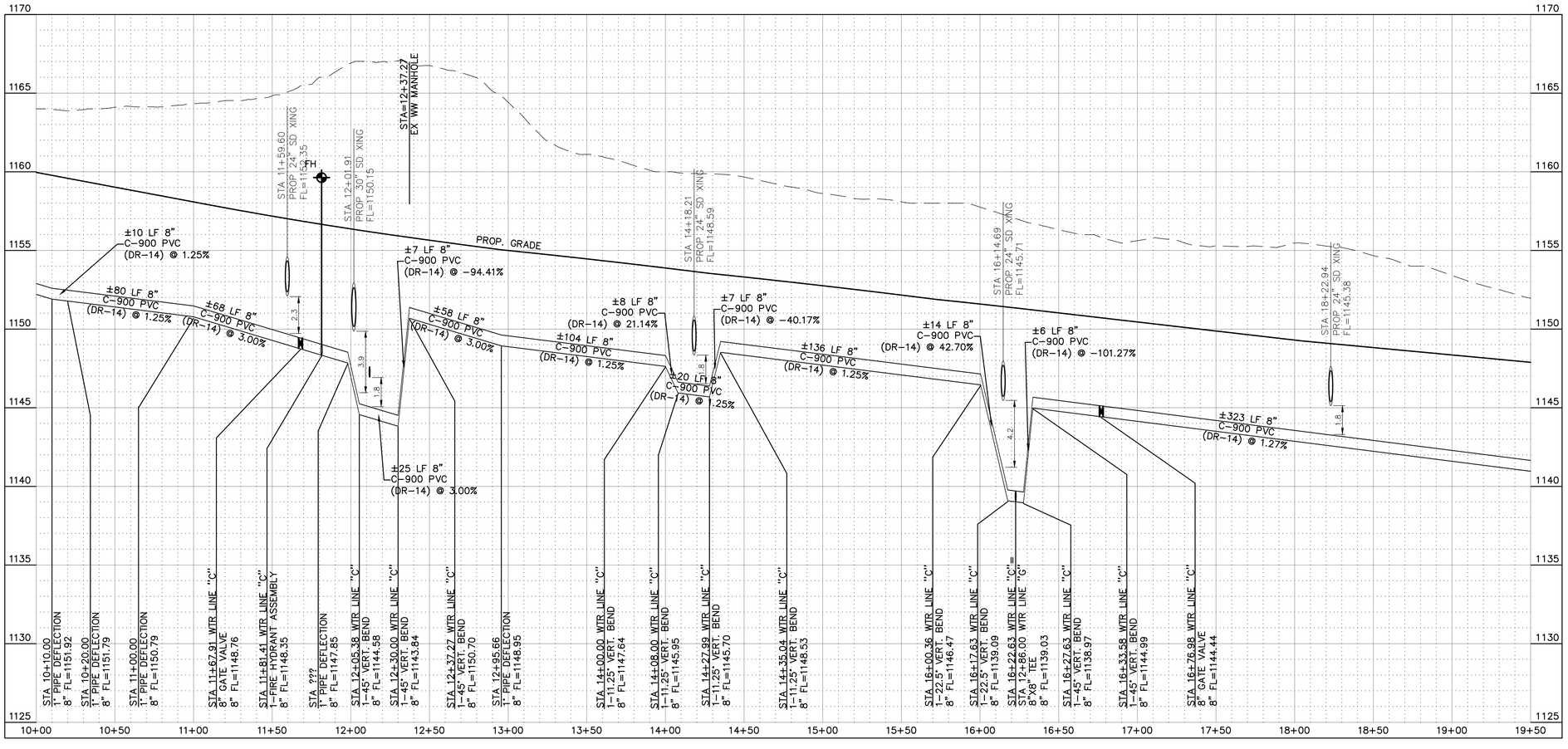
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

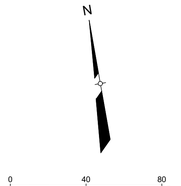
Sheet 47 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:47 PM



WTR LINE "C"





LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

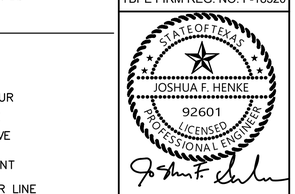
NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER–APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER–TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR–26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320



PROVENCE, PHASE 2, SECTION 3

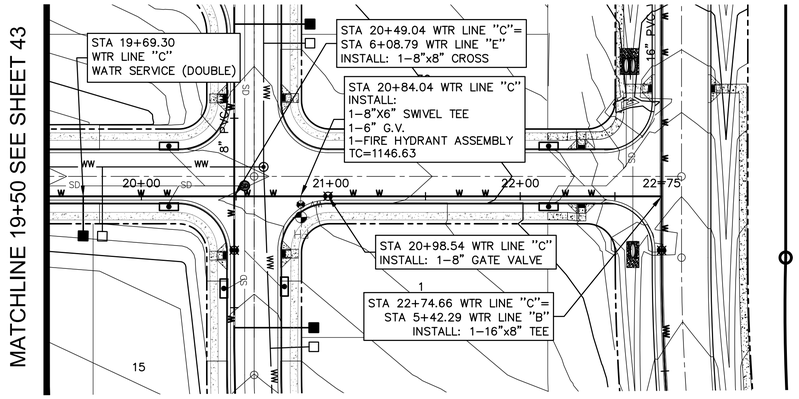
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

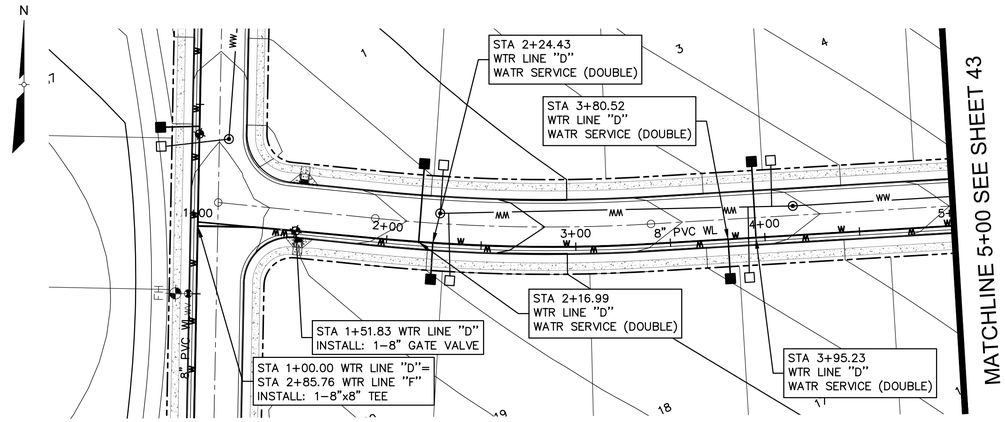
WATER LINE "C" STA 10+00 TO STA 19+50

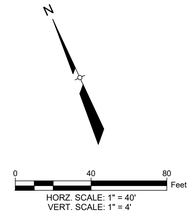
NO.	DATE	REVISIONS/CORRECTIONS	BY
		CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX	

Sheet 48 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:58 PM







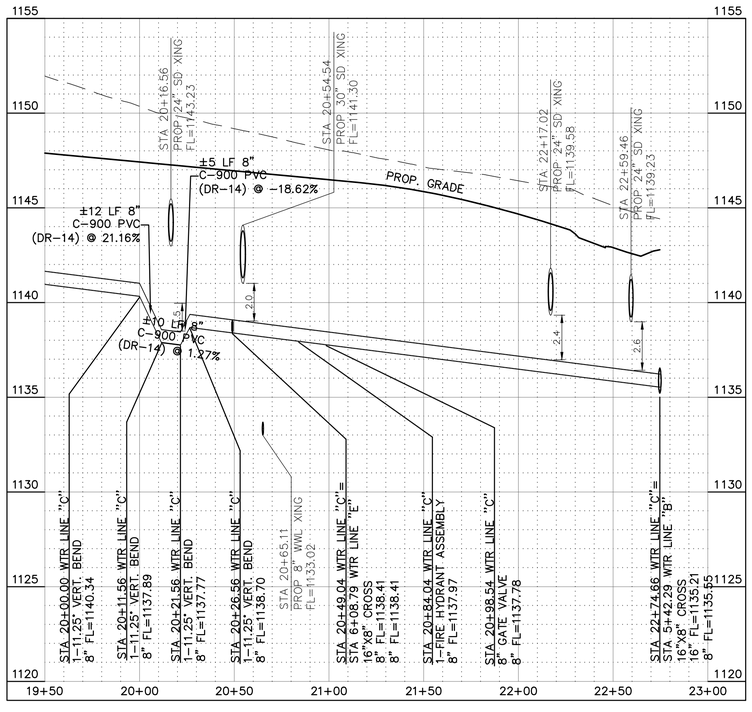
LEGEND

- PROPERTY LINE
- 420 EXIST CONTOUR
- 420 PROPOSED CONTOUR
- W EXIST WATER LINE
- EXIST WATER VALVE
- FH EXIST FIRE HYDRANT
- WW EXIST WASTEWATER LINE
- WW EXIST WASTEWATER MANHOLE
- W PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- FH PROPOSED FIRE HYDRANT
- WW PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- CO PROPOSED CLEANOUT
- SD PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

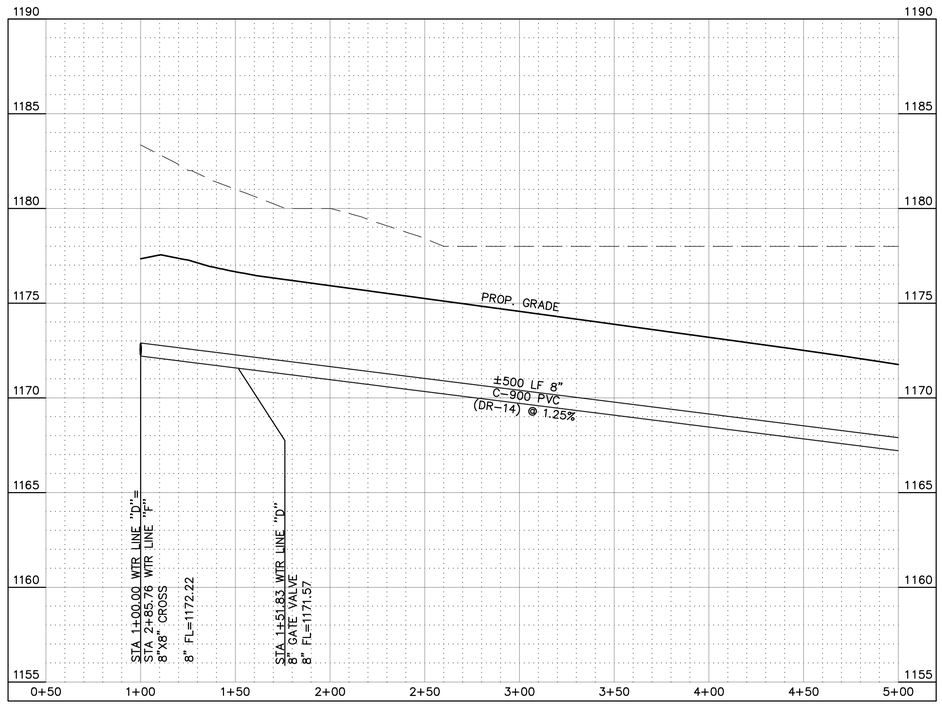
NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

WTR LINE "C"



WTR LINE "D"



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

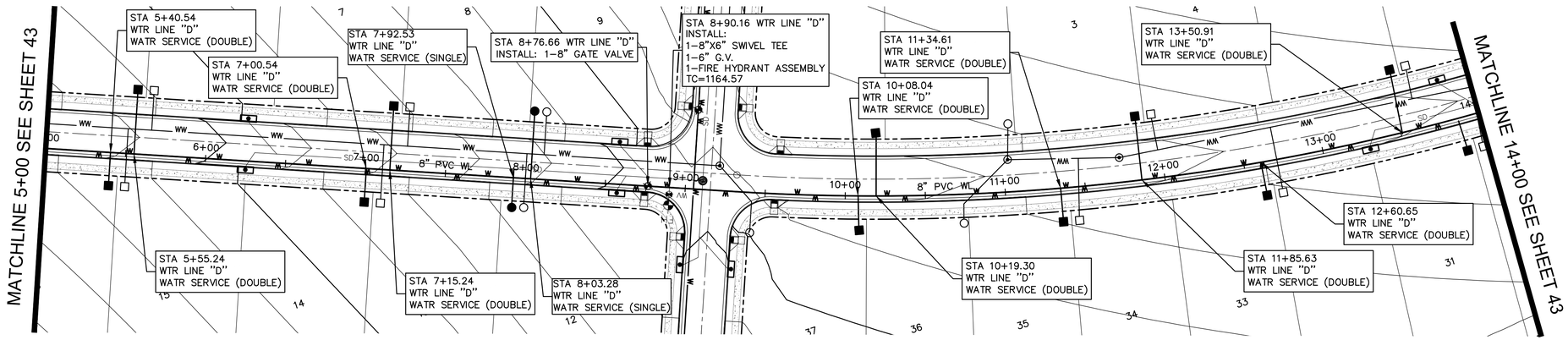
PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

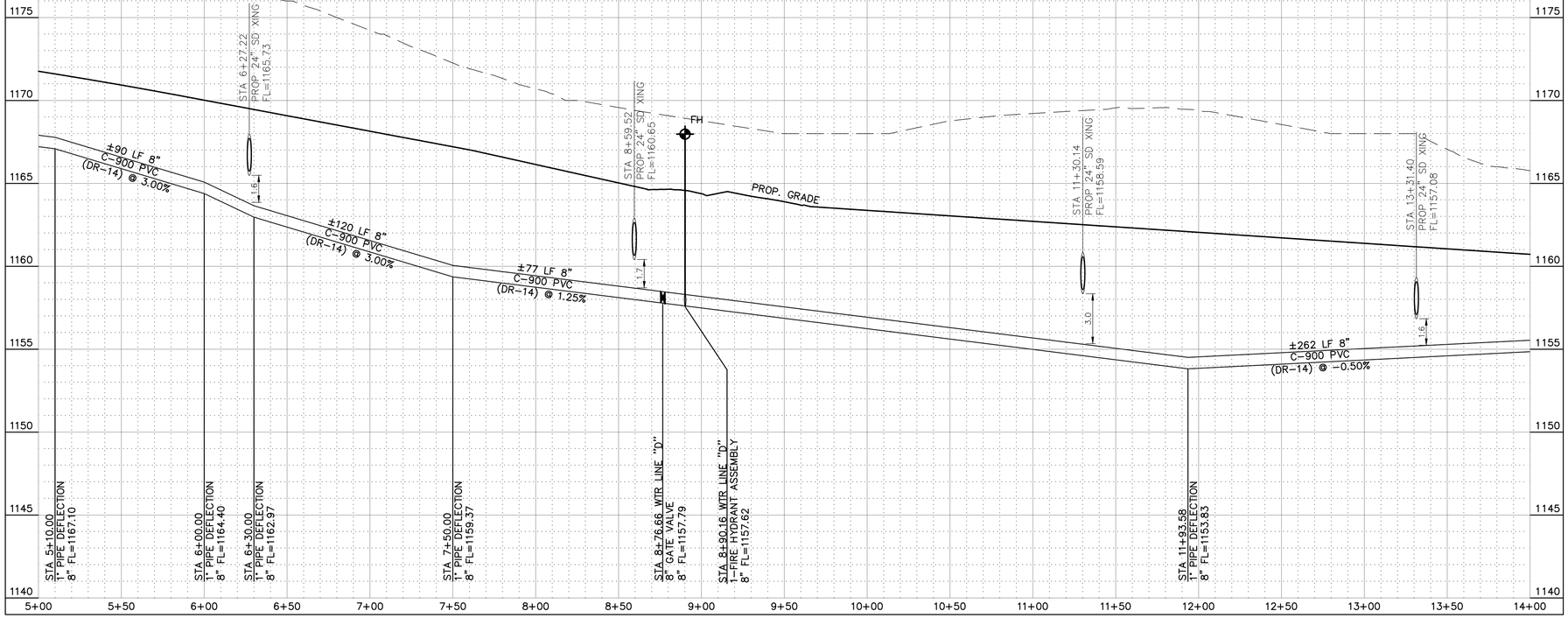
WATER LINE "C" STA 19+50 TO END & "D" STA 1+00 TO STA 5+00

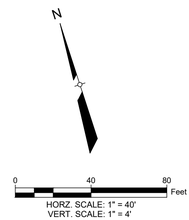
NO.	DATE	REVISIONS/CORRECTIONS	BY
		CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX	

Sheet 49 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:46 PM







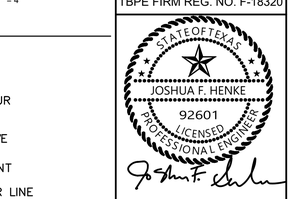
LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

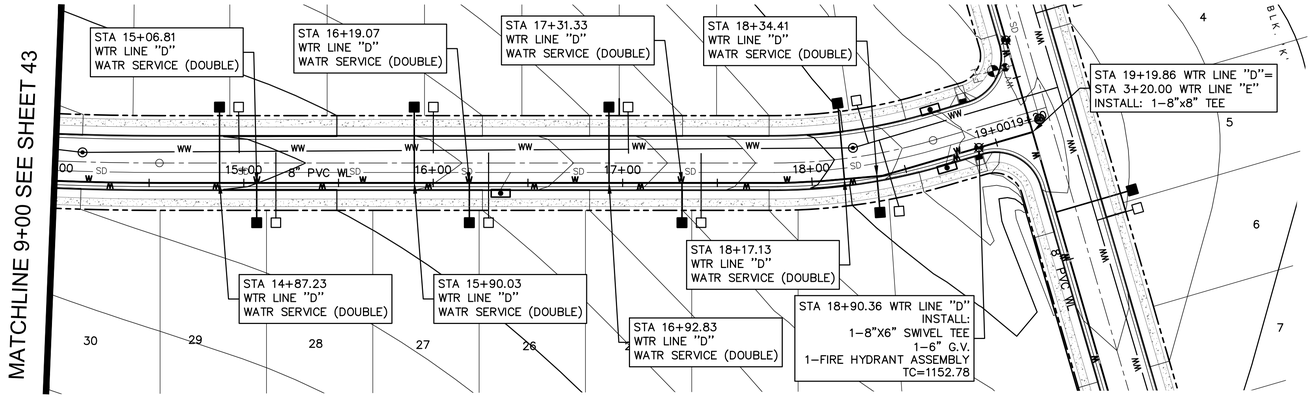


PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

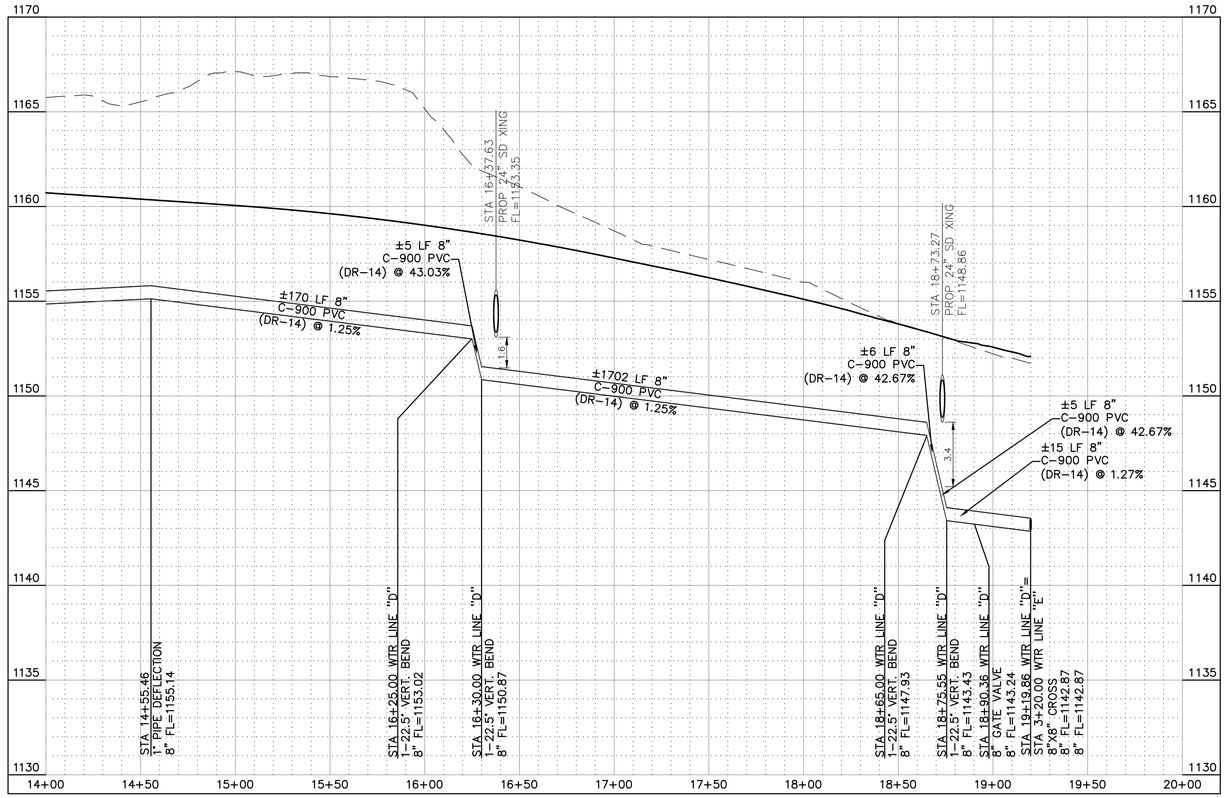
WATER LINE "D" STA 5+00 TO 14+00

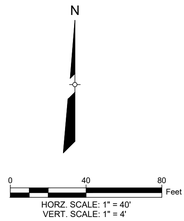
NO.	DATE	REVISIONS/CORRECTIONS	BY
		CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX	

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:57 PM



WTR LINE "D"





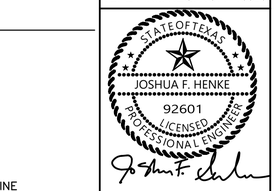
LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320



PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

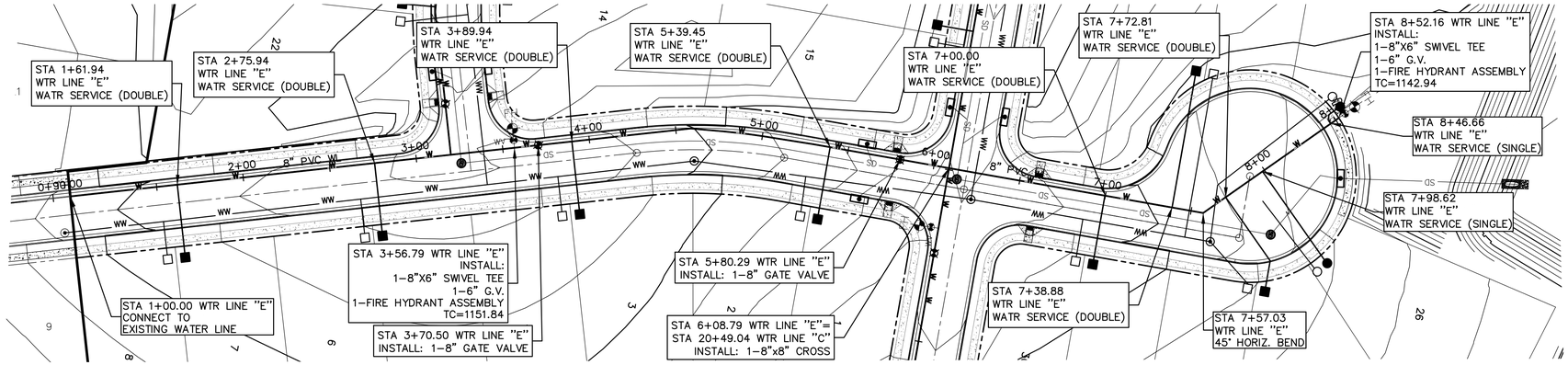
WATER LINE "D" STA 14+00 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

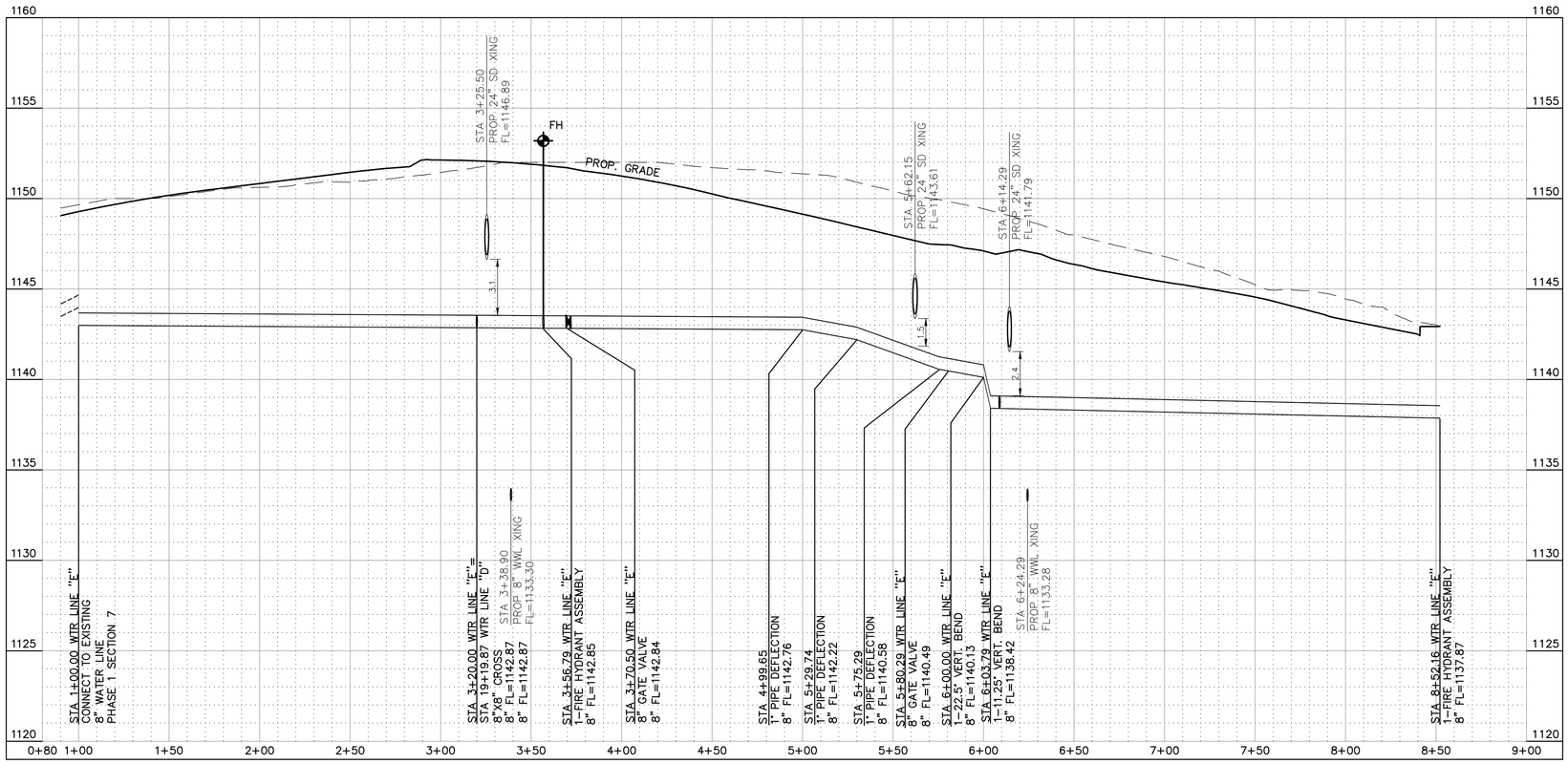
DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

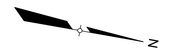
Sheet 51 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:48 PM



WTR LINE "E"





LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

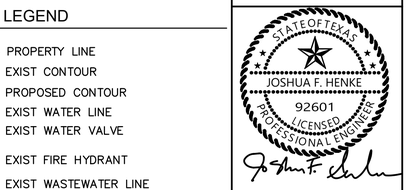
NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320



PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

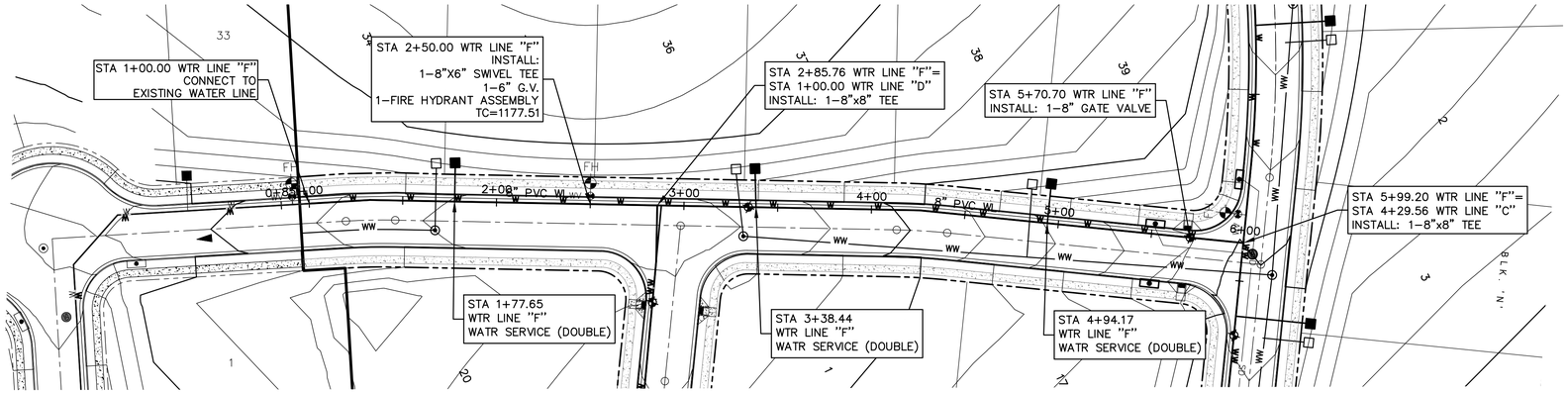
WATER LINE "E"

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet 52 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:53 PM



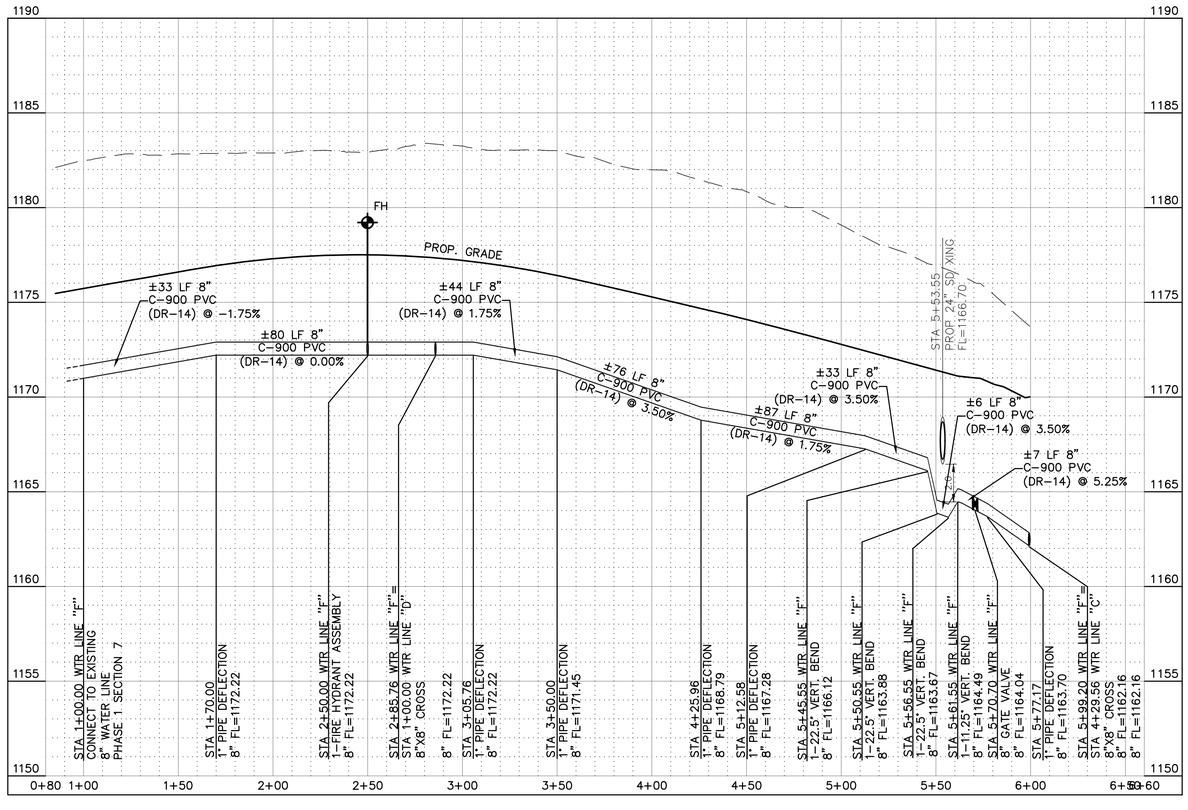
LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

WTR LINE "F"



MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

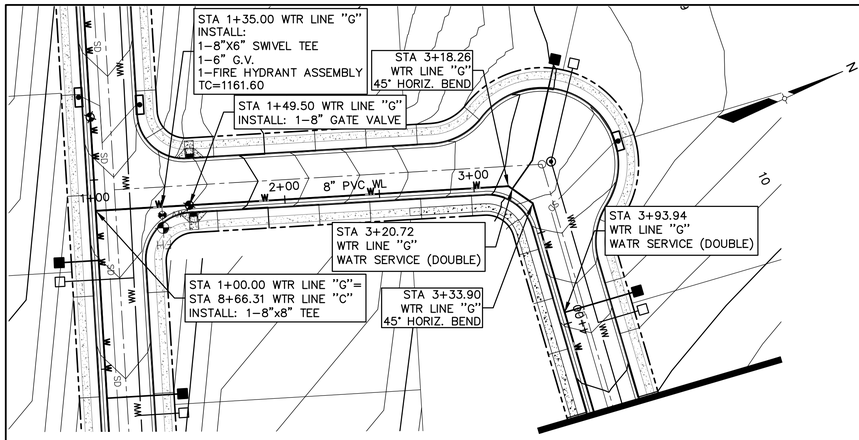
WATER LINE "F"

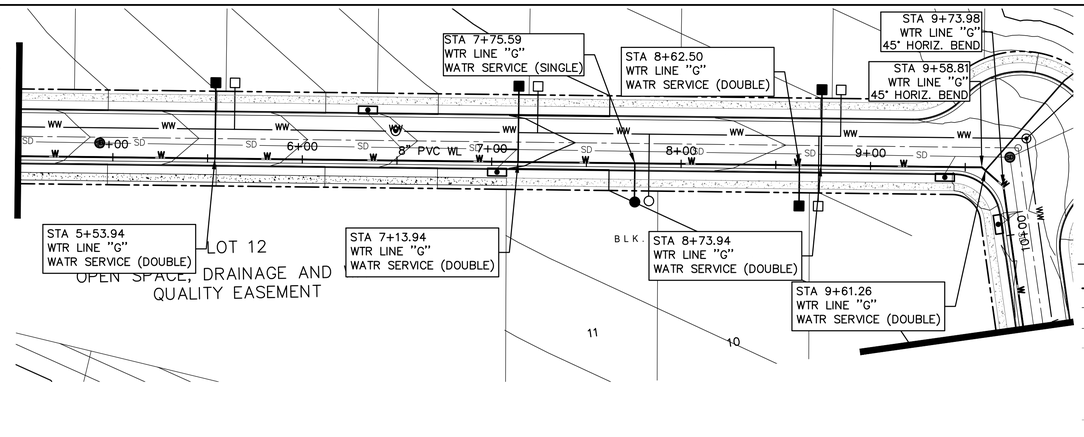
NO.	DATE	REVISIONS/CORRECTIONS	BY

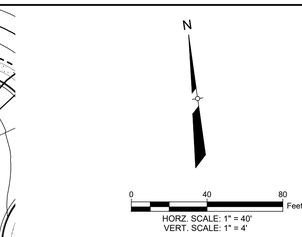
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 53 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_ppp_watr_01.dwg 9/11/2025 3:51 PM



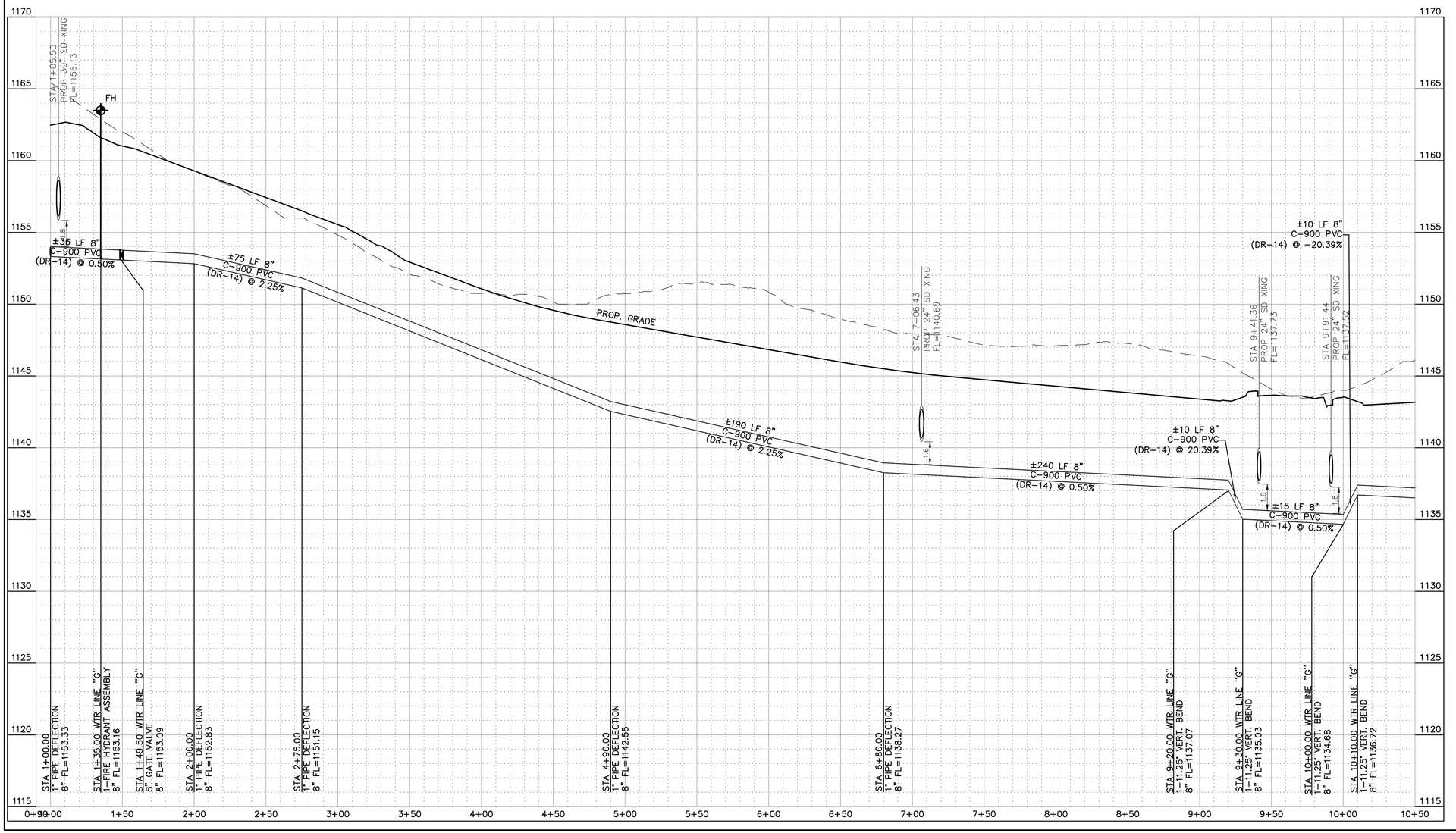




LEGEND

- PROPERTY LINE
- 420 EXIST CONTOUR
- 420 PROPOSED CONTOUR
- W EXIST WATER LINE
- EXIST WATER VALVE
- FH EXIST FIRE HYDRANT
- WW EXIST WASTEWATER LINE
- WW EXIST WASTEWATER MANHOLE
- W PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- FH PROPOSED FIRE HYDRANT
- WW PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- CO PROPOSED CLEANOUT
- SD PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- SD PROPOSED STORM DRAIN MANHOLE

WTR LINE "G"



NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

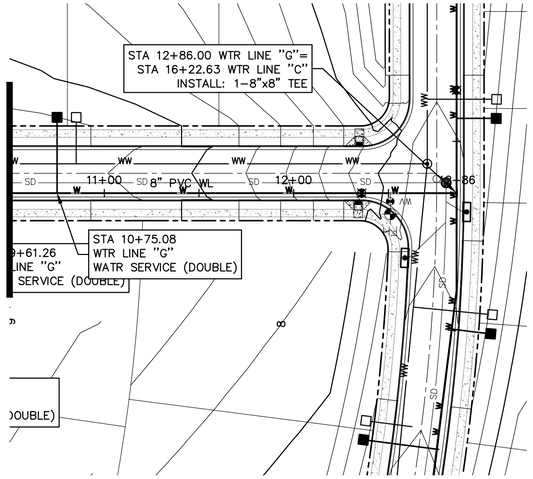
WATER LINE "G" STA 1+00 TO STA 10+50

NO.	DATE	REVISIONS/CORRECTIONS	BY

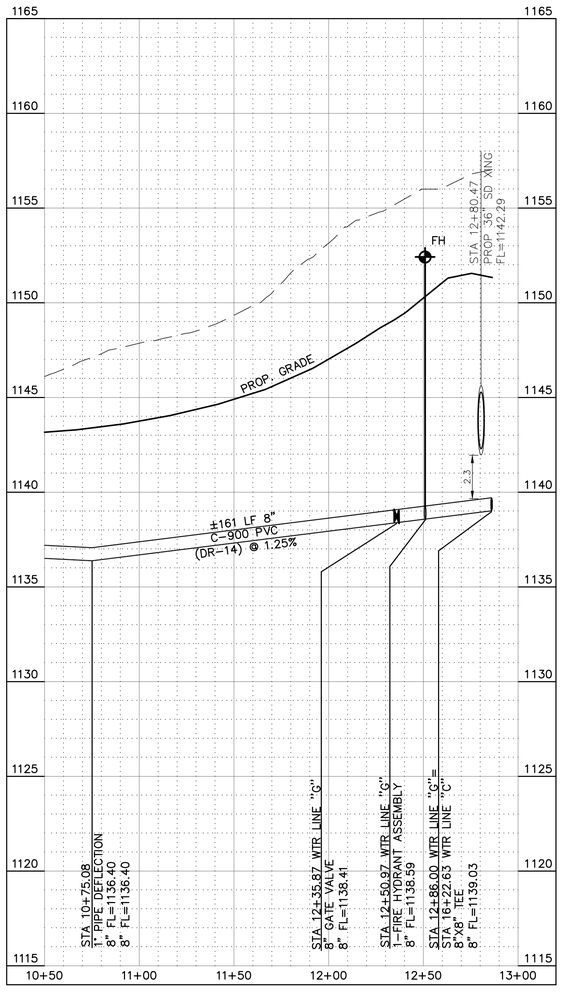
DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

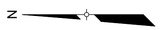
Sheet 54 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:59 PM



WTR LINE "G"





LEGEND

- PROPERTY LINE
- EXIST CONTOUR
- PROPOSED CONTOUR
- EXIST WATER LINE
- EXIST WATER VALVE
- EXIST FIRE HYDRANT
- EXIST WASTEWATER LINE
- EXIST WASTEWATER MANHOLE
- PROPOSED WATER LINE
- PROPOSED WATER SERVICE CONNECTION (SINGLE)
- PROPOSED WATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WATER VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED WASTEWATER LINE
- PROPOSED WASTEWATER SERVICE CONNECTION (SINGLE)
- PROPOSED WASTEWATER SERVICE CONNECTION (DOUBLE)
- PROPOSED WASTEWATER MANHOLE
- PROPOSED CLEANOUT
- PROPOSED STORM DRAIN
- PROPOSED STORM CURB INLET
- PROPOSED STORM DRAIN MANHOLE

NOTE:

1. CHANGES IN DIRECTION OF PVC PIPE SHALL ONLY BE BY USE OF FITTINGS OR BY DEFLECTING STRAIGHT PIPE SECTIONS AT JOINTS. LONGITUDINAL BENDING OF PIPE IS NOT ALLOWED. DEFLECTION OF PIPE AT FITTINGS IS NOT ALLOWED. DEFLECTION OF STRAIGHT PIPE SECTIONS SHALL NOT EXCEED 1 DEGREE AT EACH JOINT (EVEN IF JOINT RESTRAINT DEVICES ARE INSTALLED). DEFLECTION OF PIPE JOINTS AT FITTINGS IS ONLY ALLOWED ON DUCTILE IRON PIPE.
2. FIRE HYDRANTS SHALL BE A MINIMUM OF NINE (9) FEET AWAY FROM WASTEWATER LINES/SERVICES.
3. ALL WATER PIPE SHALL BE FACTORY RESTRAINED JOINT PIPE.
4. ALL WATER LINE TO BE FOUR (4) FEET MINIMUM COVER.
5. CENTER ONE JOINT (MIN. 18') C-900 PVC DR 14 WATER LINE PIPE AT ALL WASTEWATER CROSSINGS. THE WATER LINE PIPE SHALL BE PERPENDICULAR TO THE WASTEWATER LINE. WASTEWATER PIPE TO BE SDR 26 ASTM 2241 150 PSI PIPE AND SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF 6 INCHES ABOVE AND 4 INCHES BELOW THE WASTEWATER PIPE. MANUFACTURER-APPROVED ADAPTORS OR GASKETED JOINTS PROVIDING A WATER-TIGHT SEAL USING FACTORY INSTALLED FLEXIBLE ELASTOMERIC SEALS THAT CONFORM TO ASTM F477 SHALL BE REQUIRED.
6. ALL WASTEWATER PIPE TO BE SDR-26 ASTM D3034, EXCEPT AS SPECIFIED IN NOTE 5.
7. THE AUTOMATIC FLUSH VALVE (AFV) SHALL REMAIN THE PROPERTY OF THE WTCPUA. IF REMOVED FROM OPERATION, THE AFV(s) SHALL BE RETURNED TO THE WTCPUA.
8. WHERE WATER SERVICES ARE SUBJECT TO PRESSURES ABOVE 65 PSI, PRVs SHALL BE INSTALLED ON THE OWNER SIDE OF DOMESTIC METERS WITH A MAXIMUM DOWNSTREAM SET POINT OF 65 PSI.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

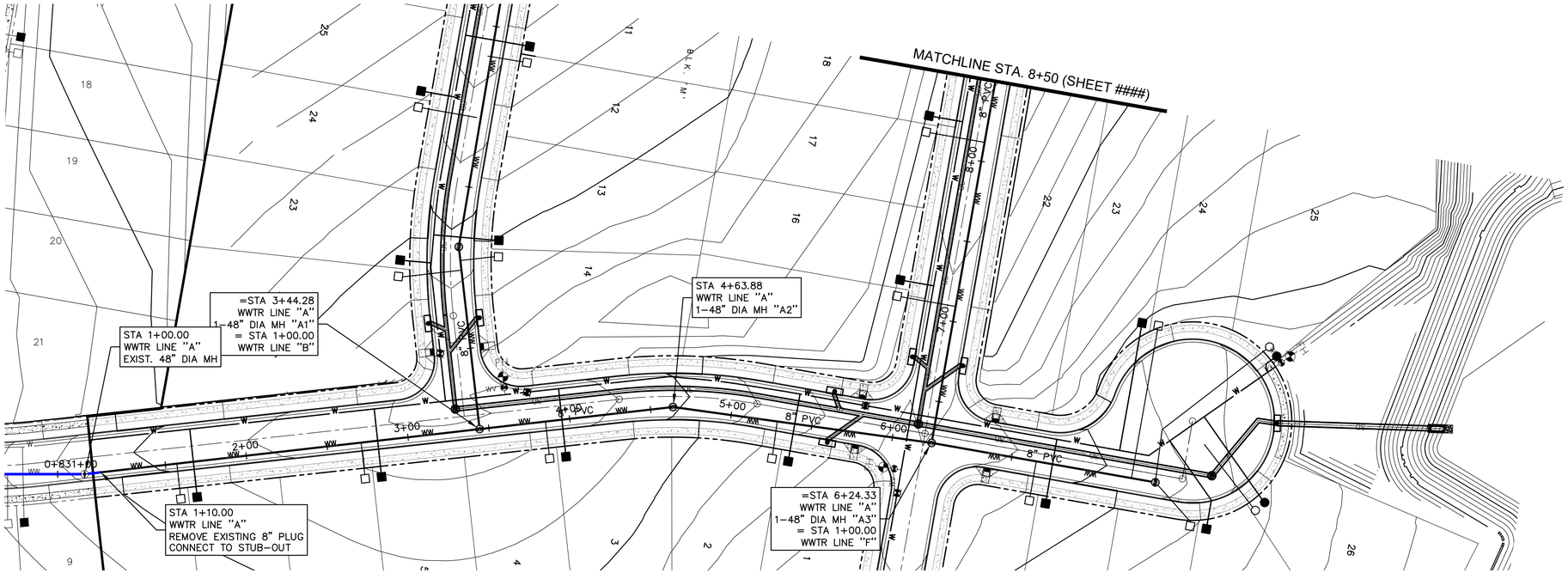
WATER LINE "G" STA 10+50 TO END

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 55 of 73

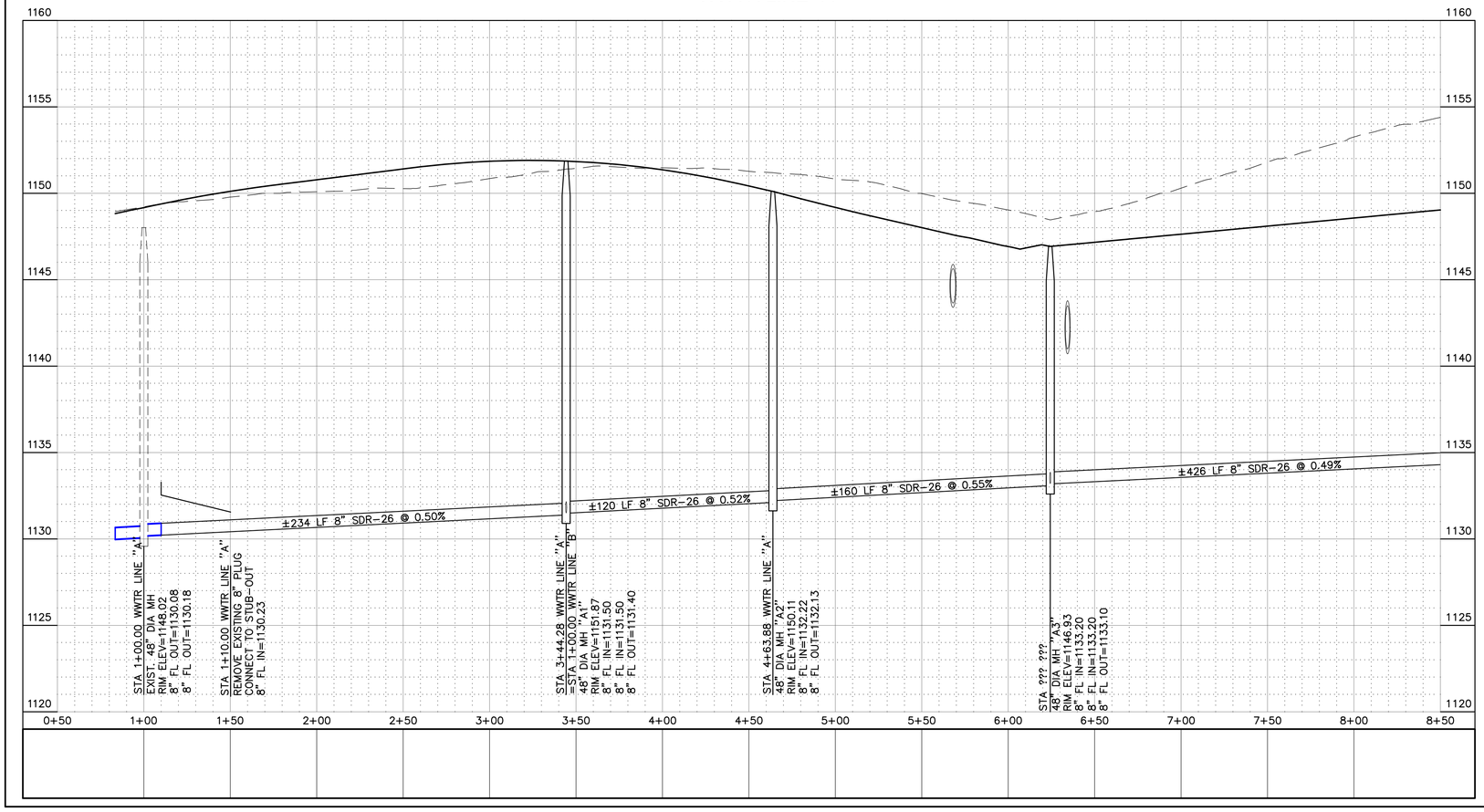
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_watr_01.dwg 9/11/2025 3:46 PM



NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "A"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

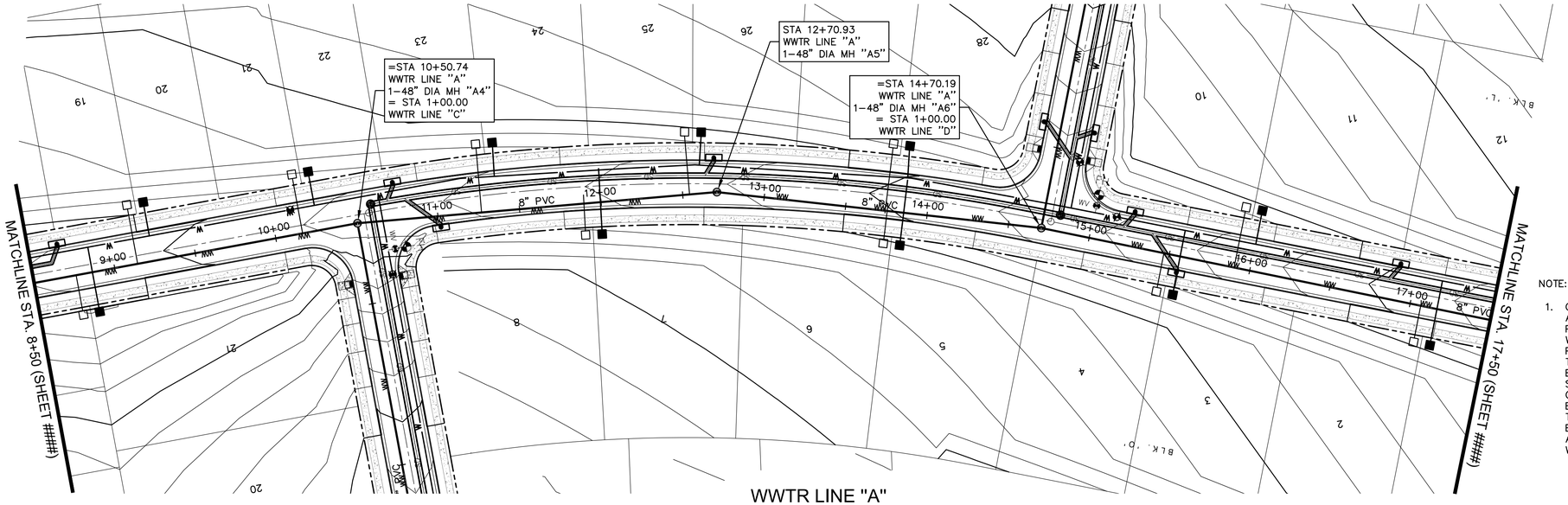
WWTR LINE "A" STA 1+00 TO STA 8+50

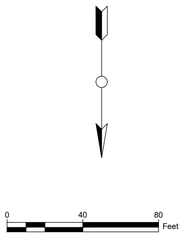
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet
####
of
73

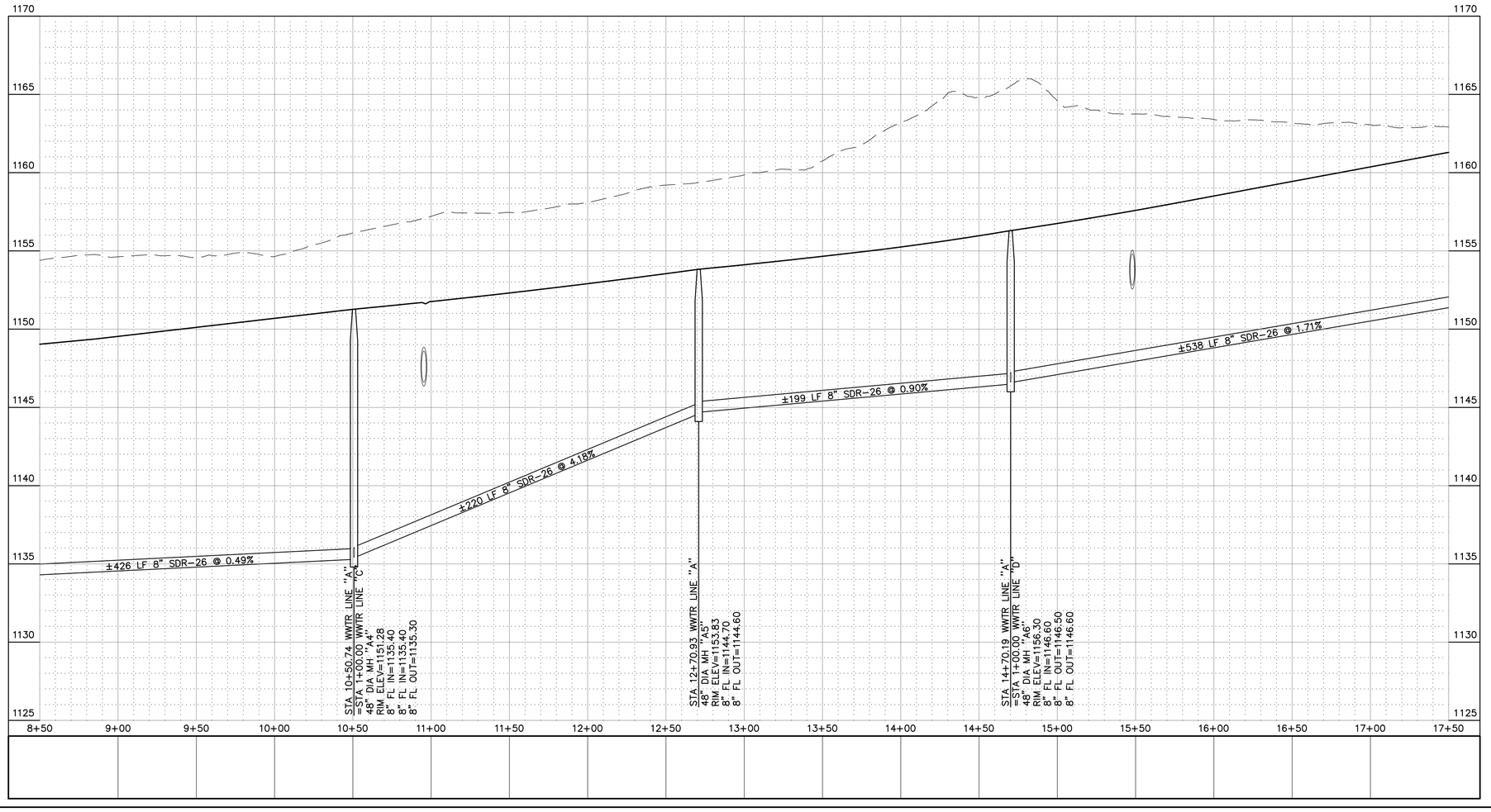
P:\Active Projects\2018 - 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_sswr_01.dwg 9/11/2025 3:50 PM





NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

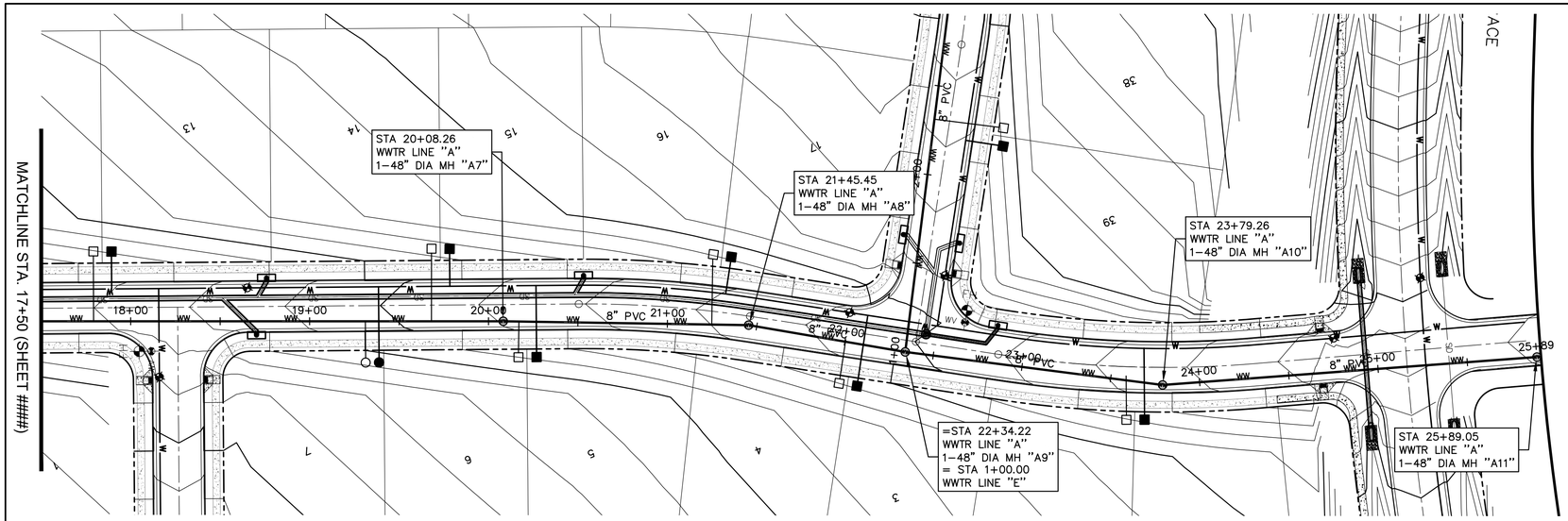
WWTR LINE "A" STA 8+50 TO STA 17+50

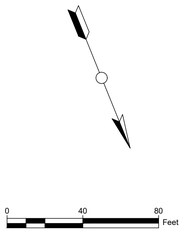
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

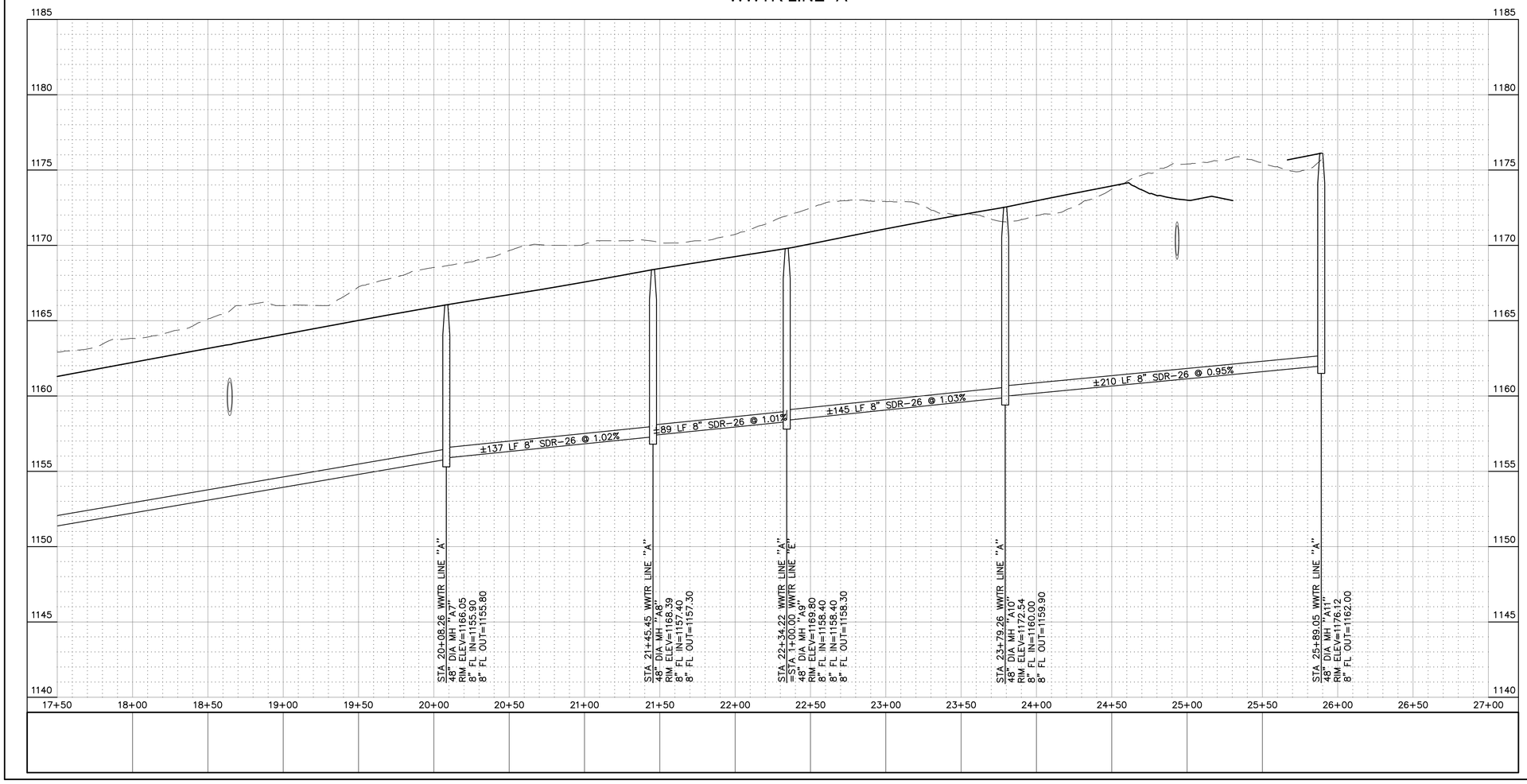
Sheet
####
of
73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_sswr_01.dwg 9/11/2025 3:44 PM





WWTR LINE "A"



NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

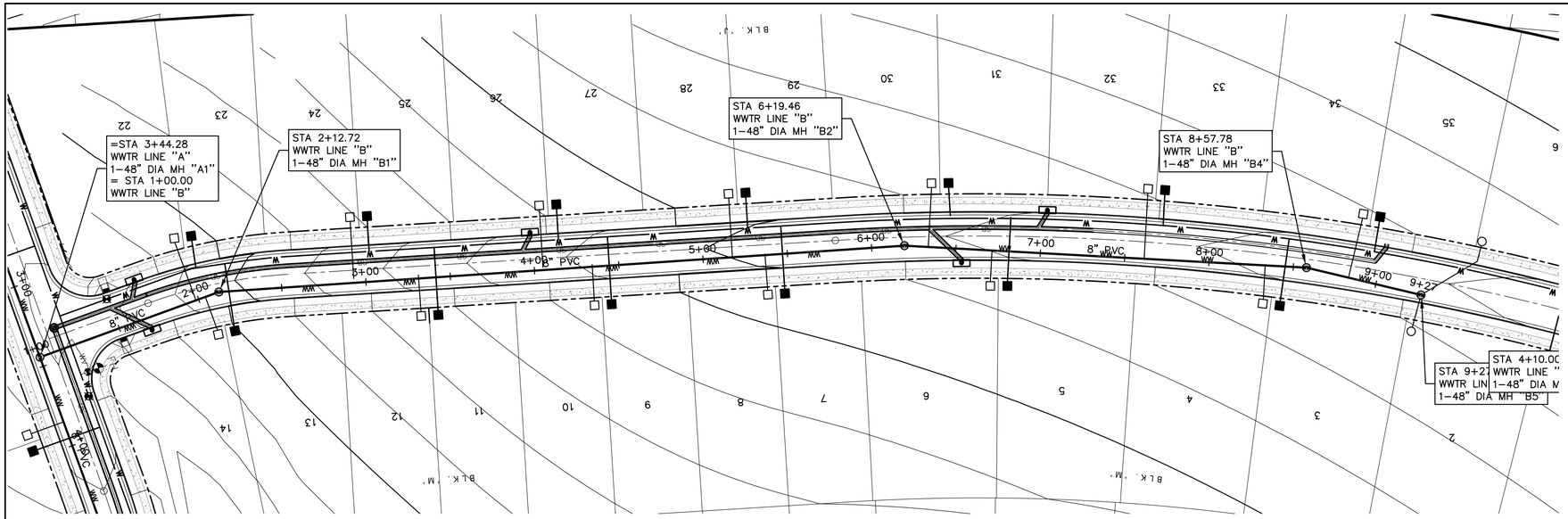
WWTR LINE "A" STA 17+50 TO END

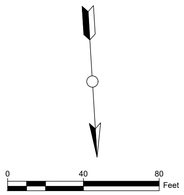
NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet
####
of
73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_sswr_01.dwg 9/11/2025 3:51 PM

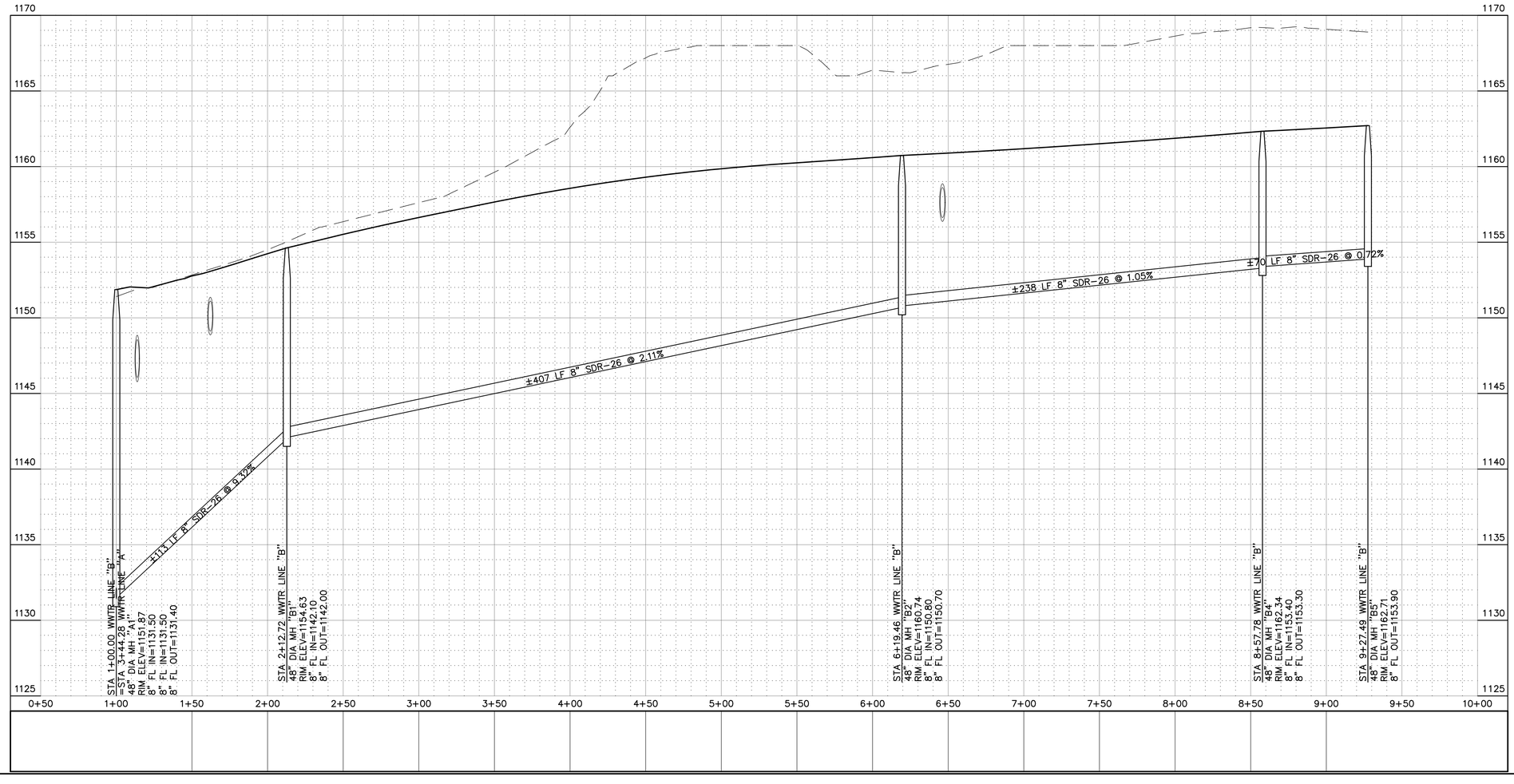




NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "B"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

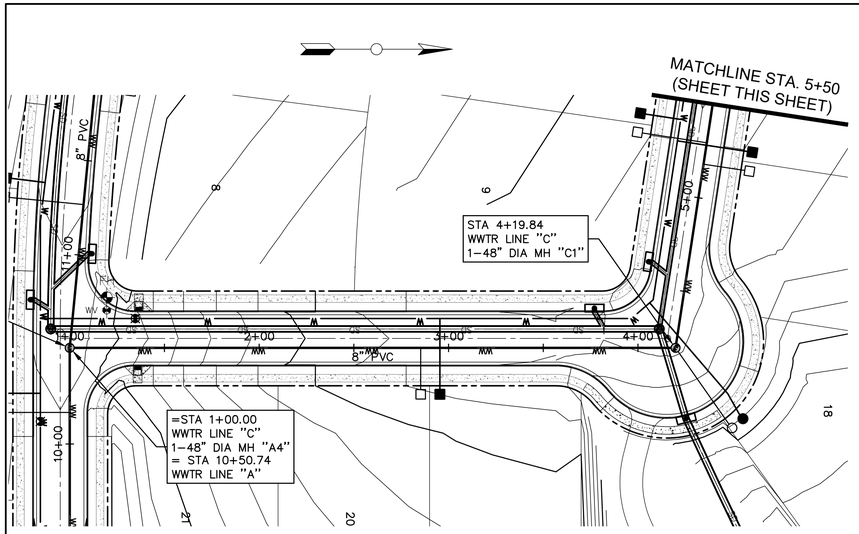
WWTR LINE "B"

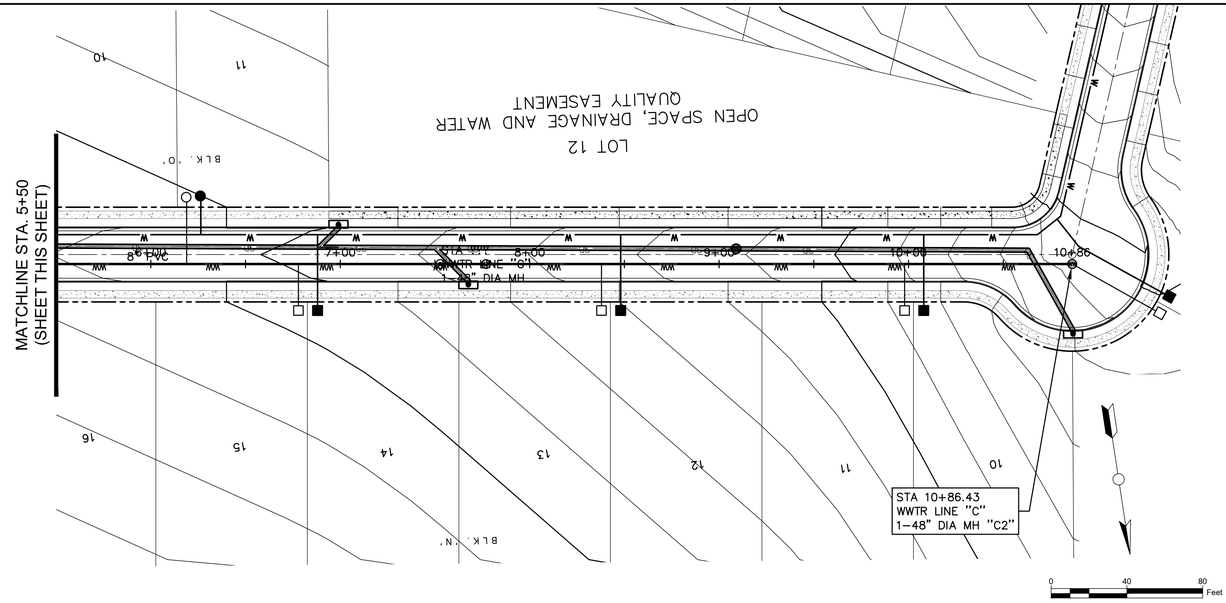
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet
####

P:\Active Projects\2018 - 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_sswr_01.dwg 9/11/2025 3:54 PM

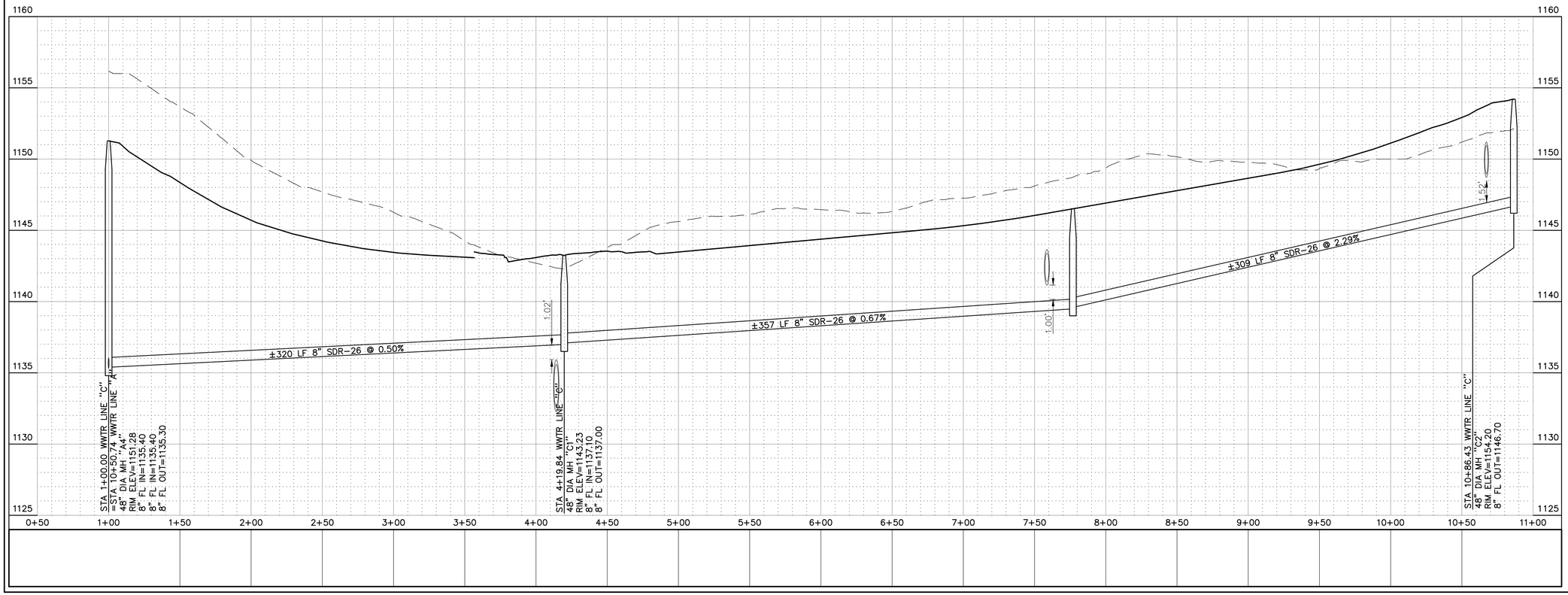




NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "C"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

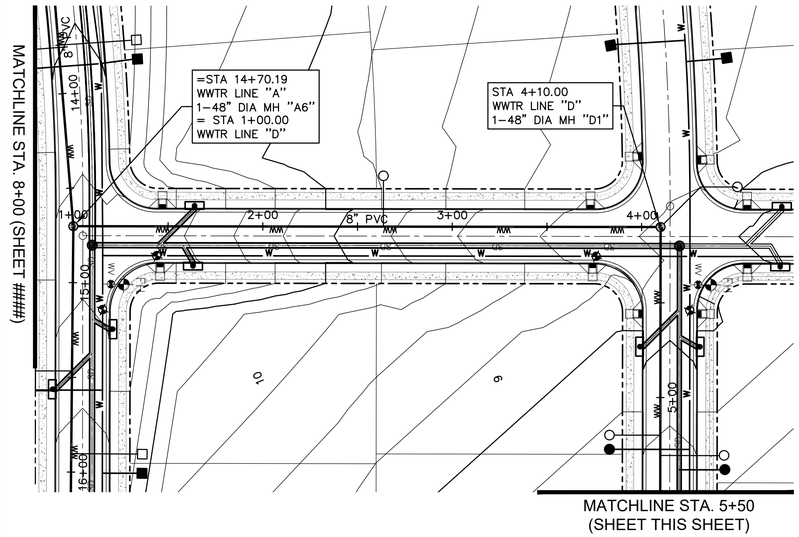
WWTR LINE "C"

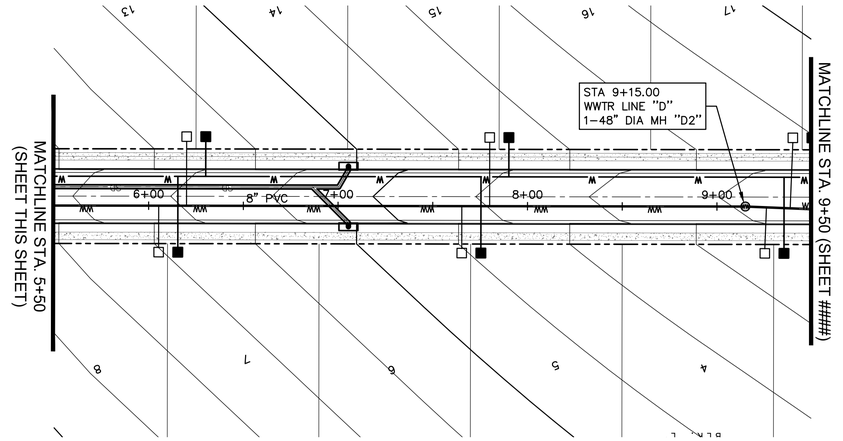
NO.	DATE	REVISIONS/CORRECTIONS	BY

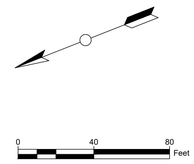
DESIGNED BY: XX DRAWN BY: XX CHECKED BY: XX

Sheet
####
of
73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_sswr_01.dwg 9/11/2025 3:43 PM



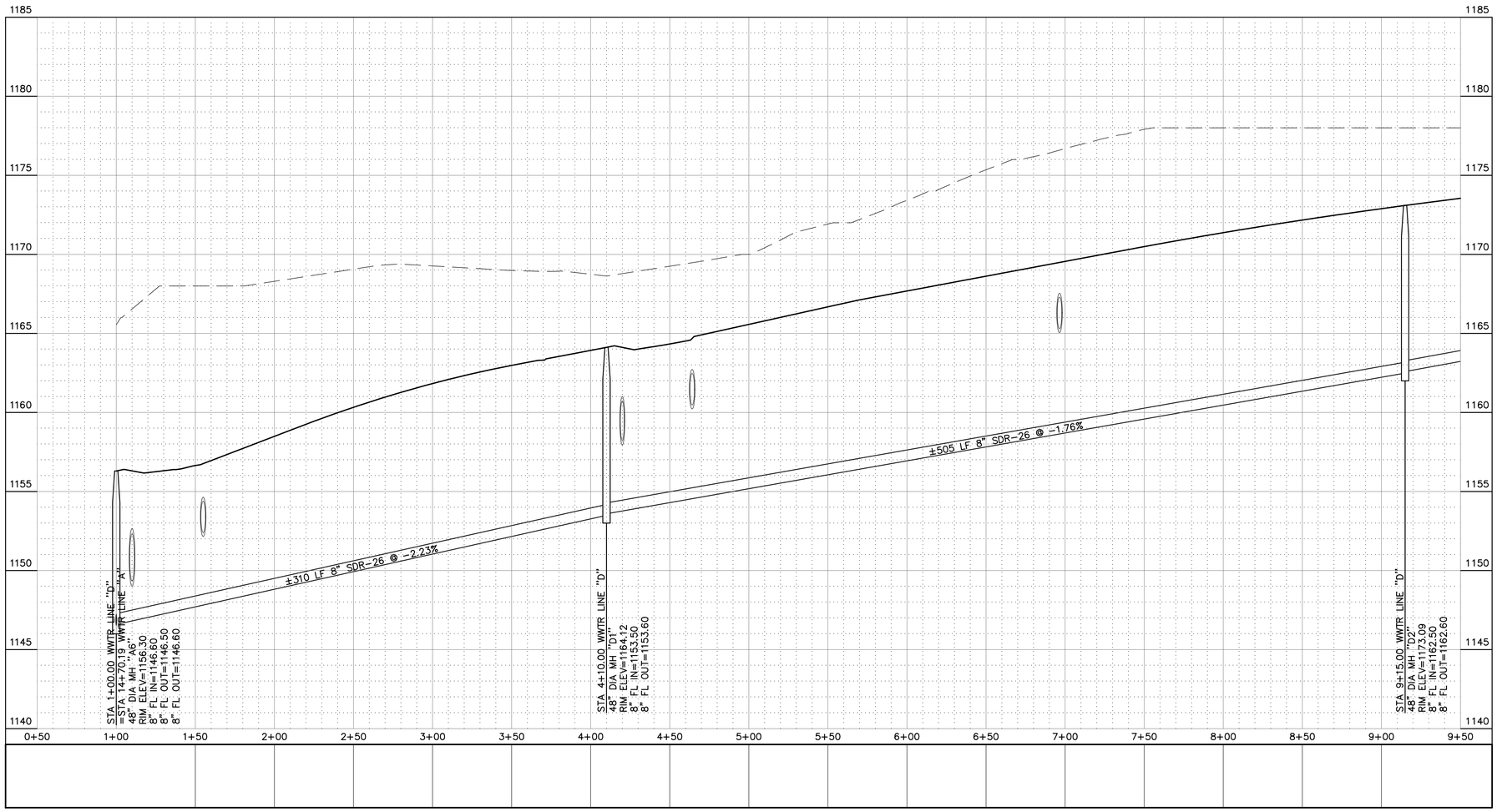




NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "D"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

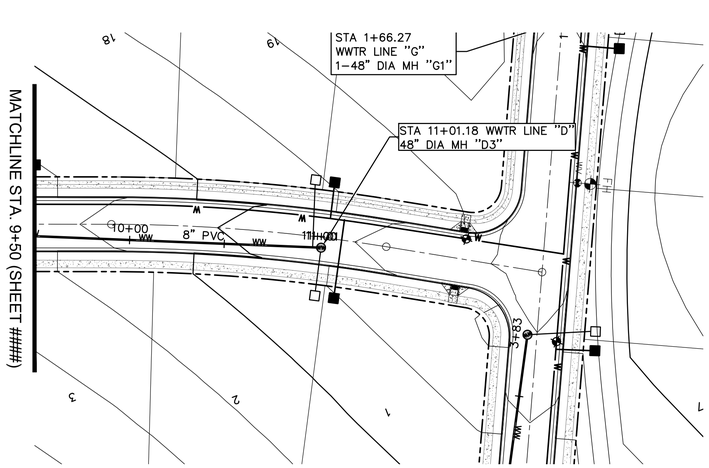
WWTR LINE "D" STA 1+00 TO STA 9+50

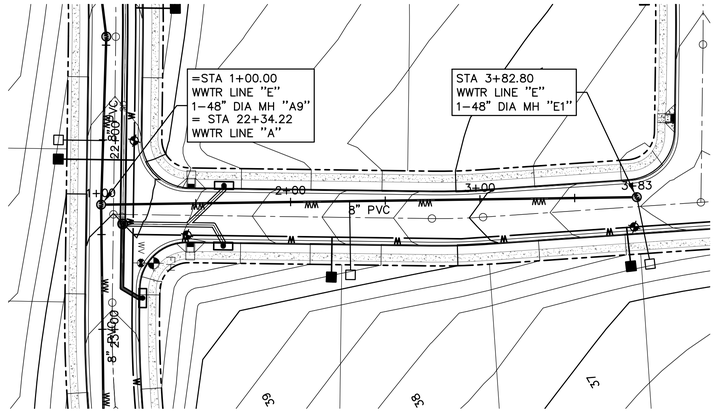
NO.	DATE	REVISIONS/CORRECTIONS	BY

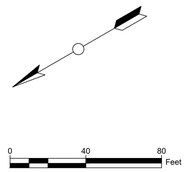
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet
####
of
73

P:\Active Projects\2018 - 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_stwr_01.dwg 9/11/2025 3:56 PM



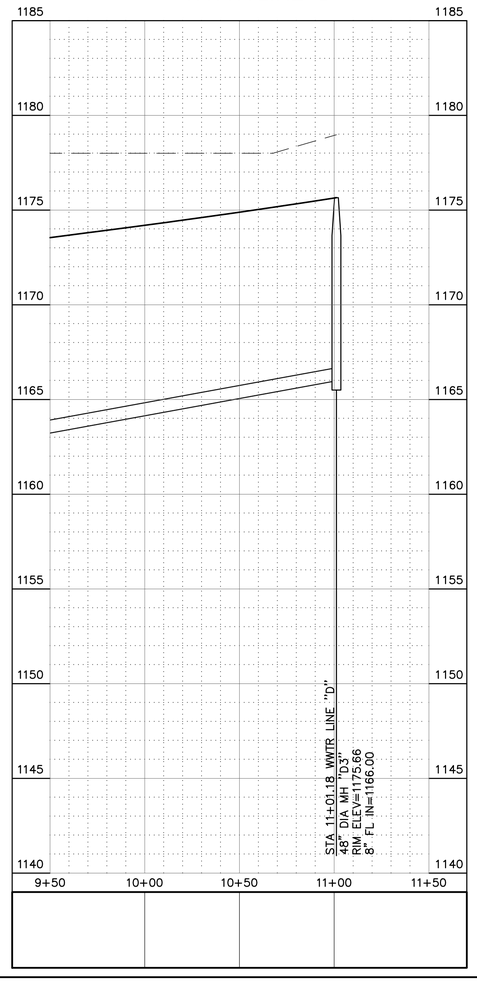




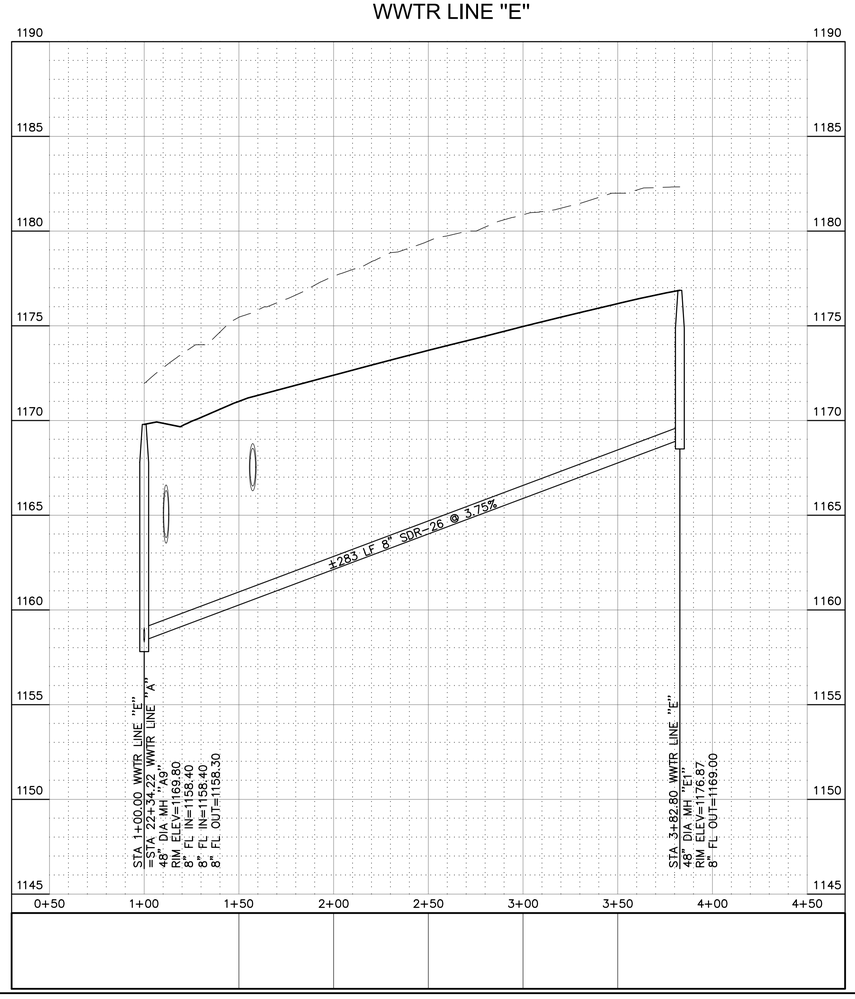
NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "D"



WWTR LINE "E"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

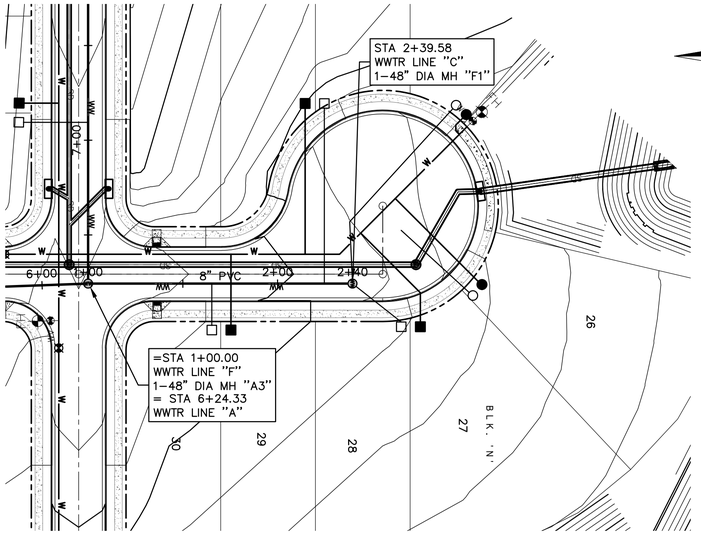
WWTR LINE "D" STA 9+50 TO END & "E"

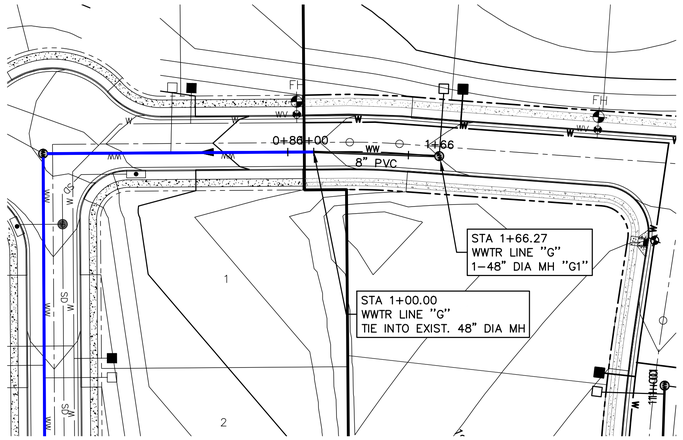
NO.	DATE	REVISIONS/CORRECTIONS	BY

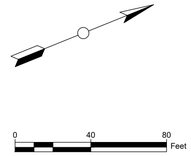
CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet
####
of
73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_stwr_01.dwg 9/11/2025 3:45 PM



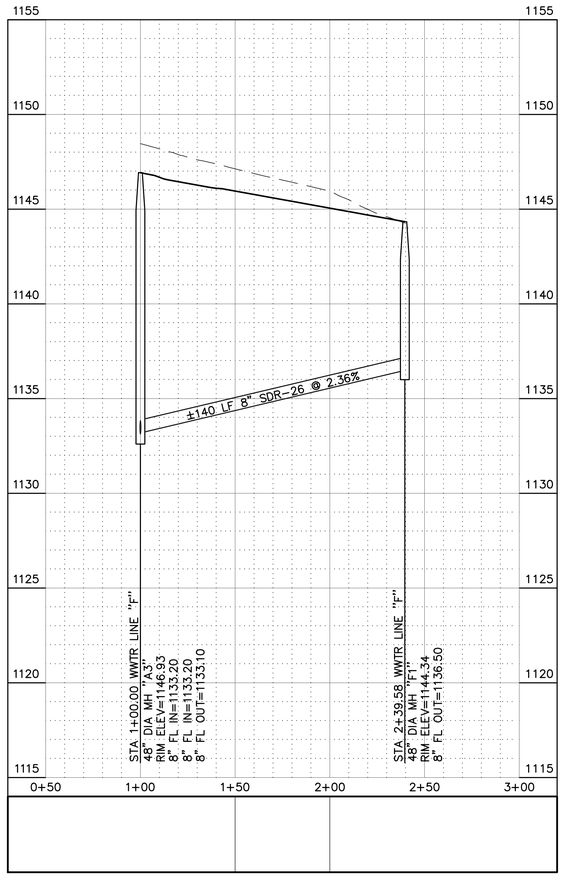




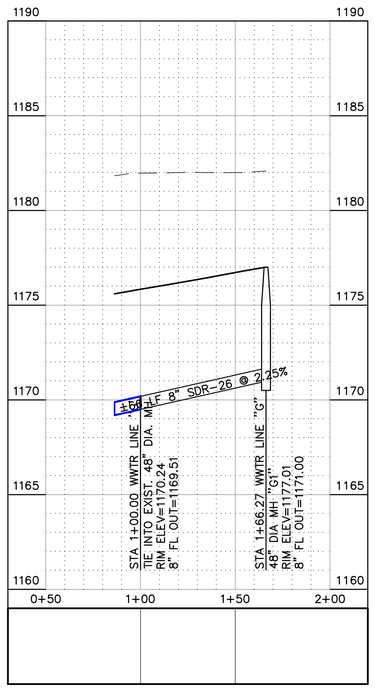
NOTE:

1. CENTER ONE JOINT (MIN. 18') SDR 26 ASTM D2241 150psi PVC WASTEWATER PIPE AT ALL WATER CROSSINGS. THE WASTEWATER PIPE SHALL BE PERPENDICULAR TO THE WATER LINE. THE WASTEWATER PIPE SHALL BE EMBEDDED IN CEMENT STABILIZED SAND FOR THE TOTAL LENGTH OF ONE PIPE SEGMENT PLUS 12 INCHES BEYOND THE JOINT ON EACH END. THE CEMENT STABILIZED SAND SHALL BE A MINIMUM OF SIX INCHES ABOVE AND FOUR INCHES BELOW THE WASTEWATER PIPE.

WWTR LINE "F"



WWTR LINE "G"



MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED
PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

WWTR LINE "F" & "G"

NO.	DATE	REVISIONS/CORRECTIONS	BY
CHECKED BY: XX	DESIGNED BY: XX	DRAWN BY: XX	

Sheet
####
of
73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_pnp_sswr_01.dwg 9/11/2025 3:41 PM

SIGN LEGEND

SYMBOL	TxDOT SPEC. NO. & SIZE
STREET NAME	STREET NAME SIGN 9" X 36" (MIN.) W/ 5" LETTERS, ALL CAPS.
STOP	R1-1 30" X 30"
◇◇◇	OM-2SR 3 @ 3" X 3" (MOUNTED ON WINGED CHANNEL POST)
SPEED LIMIT 30	R2-1 24" X 30"
SPEED LIMIT 35	R2-1 24" X 30"

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

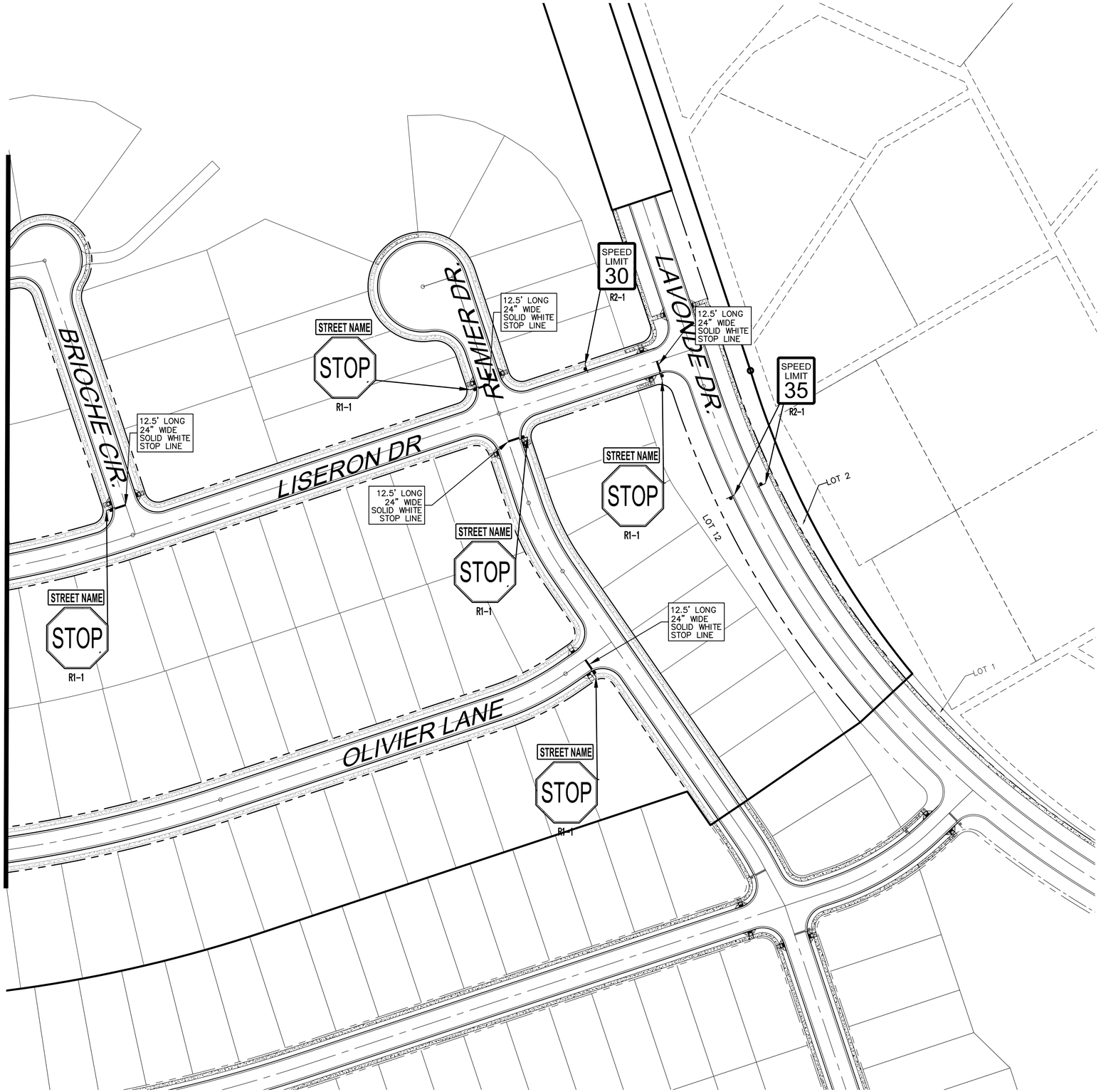
SIGNAGE PLAN SHEET 1 OF 2

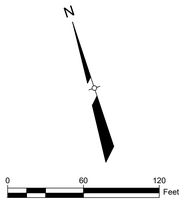
NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 64 of 73

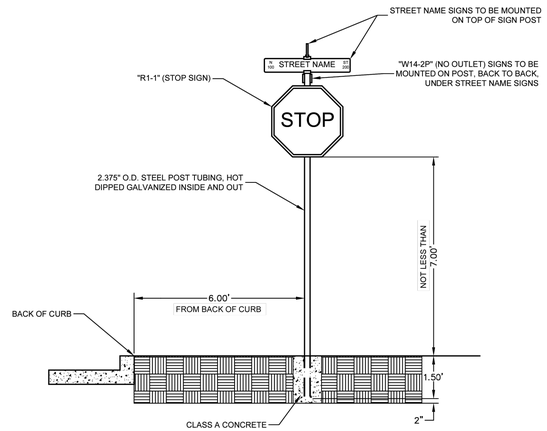
P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_sgn_01.dwg 9/11/2025 3:46 PM





SIGN LEGEND

SYMBOL	TxDOT SPEC. NO. & SIZE
STREET NAME	STREET NAME SIGN 9" X 36" (MIN.) W/ 5" LETTERS, ALL CAPS.
STOP	R1-1 30" X 30"
◇◇◇	OM-2SR 3 @ 3" X 3" (MOUNTED ON WINGED CHANNEL POST)
SPEED LIMIT 30	R2-1 24" X 30"
SPEED LIMIT 35	R2-1 24" X 30"



TYPICAL STOP SIGN POST INSTALLATION

MOODY ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

STATE OF TEXAS
JOSHUA F. HENKE
92601
LICENSED PROFESSIONAL ENGINEER

PROVENCE, PHASE 2, SECTION 3

17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

SIGNAGE PLAN SHEET 2 OF 2 & DETAILS

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

Sheet 65 of 73

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_sgn_01.dwg 9/11/2025 3:55 PM

MOODY
ENGINEERING, INC.

9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333

TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE
92601
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

TXDOT DETAILS CONCRETE HEADWALLS (FW-0)
SHEET 1

NO.	DATE	REVISIONS/CORRECTIONS	BY

CHECKED BY: XX DESIGNED BY: XX DRAWN BY: XX

P:\Active Projects\2018 - 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_details_01.dwg 9/11/2025 3:48 PM

Sheet 66 of 73

DISCLAIMER:
The use of this standard is governed by the Texas Engineering Practice Act. Any use of any information contained herein for any purpose or project except the one intended is at the sole risk of the user and without liability or legal exposure to the Texas Department of Transportation. All users are obliged to independently verify the accuracy of any information before using it.

DATE:
FILE:

TABLE OF DIMENSIONS AND REINFORCING STEEL
(Wings for one structure end)

Maximum Wingwall Height Hw	W	X	Y	Z	Variable Reinforcing Bars J1 Size	J1 Spa	Bars J2 Size	J2 Spa	Estimated Quantities per ft of wing length (2-wings) ③ Reinf (Lb/Ft)	Conc (CY/Ft)
2'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	33.73	0.248
3'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.07	0.261
3'-6"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	37.74	0.273
4'-0"	2'-5"	1'-0"	9"	7"	#4	1'-0"	#4	1'-0"	38.41	0.285
4'-6"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	41.75	0.330
5'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.09	0.343
5'-6"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	45.75	0.355
6'-0"	3'-2"	1'-0"	1'-0"	7"	#4	1'-0"	#4	1'-0"	46.42	0.367
7'-0"	3'-8"	1'-0"	1'-3"	7"	#4	1'-0"	#4	1'-0"	52.77	0.414
8'-0"	4'-2"	2'-0"	1'-6"	8"	#5	1'-0"	#4	1'-0"	60.19	0.486
9'-0"	4'-8"	2'-3"	1'-9"	8"	#4	6"	#4	6"	81.49	0.535
10'-0"	5'-2"	2'-6"	2'-0"	8"	#5	6"	#4	6"	97.25	0.584
11'-0"	5'-8"	2'-9"	2'-3"	8"	#6	6"	#5	6"	133.65	0.634
12'-0"	6'-2"	3'-0"	2'-6"	9"	#7	6"	#5	6"	162.29	0.721
13'-0"	6'-8"	3'-3"	2'-9"	11"	#7	6"	#5	6"	178.80	0.856
14'-0"	7'-2"	3'-6"	3'-0"	1'-0"	#8	6"	#5	6"	216.78	0.959
15'-0"	7'-8"	4'-0"	3'-0"	1'-1"	#9	6"	#6	6"	283.06	1.068
16'-0"	8'-2"	4'-6"	3'-0"	1'-3"	#9	6"	#6	6"	297.02	1.234

TABLE OF WINGWALL REINFORCING
(2-wings)

Bar	Size	No.	Spa
D	#5	~	1'-0"
E	#4	~	1'-0"
F	#4	~	1'-0"
G	#6	4	~
H	#4	4	~
P	#4	~	1'-0"
R	#5	6	~
V	#4	~	1'-0"

TABLE OF ESTIMATED CULVERT TOEWALL QUANTITIES

Bar	Size	No.	Spa
L	#4	~	1'-0"
Q	#4	1	~
Reinf (Lb/Ft)			2.45
Conc (CY/Ft)			0.037

WING DIMENSION FORMULAS:
(All values are in feet.)

Hw = H + T + C - 0.250
E = (Hw - 0.333') (SL)
A = (A) tangent (30°)
Lw = (A) + cosine (30°)

For cast-in-place culverts:
Ltw = (N) (S) + (N + 1) (U)

For precast culverts:
Ltw = (N) (2U + S) + (N - 1) (0.5')

Total wingwall area (two wings - SF) = (Hw + 0.333') (Lw)

Hw = Height of wingwall
SL:1 = Side slope ratio (horizontal:1 vertical)
Lw = Length of wingwall
Ltw = Culvert toewall length
N = Number of culvert spans

See applicable box culvert standard sheet for H, S, T, and U values.

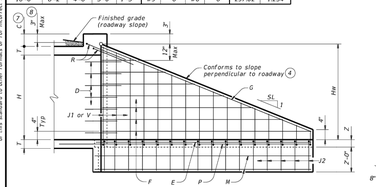
1. Extend Bars P 3'-0" minimum into bottom slab of box culvert.
2. Adjust as necessary to maintain 1 1/4" clear cover and 4" minimum between bars.
3. Quantities shown are based on an average wing height for two wings (one structure end). To determine total quantities for two wings, multiply the tabulated values by Lw.
4. Recommended values of side slope are: 2:1, 3:1, 4:1, and 6:1.
5. When shown elsewhere on the plans, construct 5" deep concrete riprap. Payment for riprap is as required by Item 432, "Riprap". Unless otherwise shown on the plans or directed by the Engineer, provide a 6" wide by 1'-0" deep reinforced concrete toewall along all edges of the riprap adjacent to natural ground; reinforce the toewall by extending typical riprap reinforcing into the toewall; and extend construction joints or grooved joints oriented in the direction of flow across the full distance of the riprap at intervals of approximately 20'. When such riprap is provided, the culvert toewall shown in SECTION B-B will not be required.
6. At Contractor's option, culvert toewall may be ended flush with wingwall toewall. Adjust reinforcing as needed.
7. 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.
8. For vehicle safety, the following requirements must be met:
   - For structures without bridge rail, construct curbs no more than 3" above finished grade.
   - For structures with bridge rail, construct curbs flush with finished grade.

Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

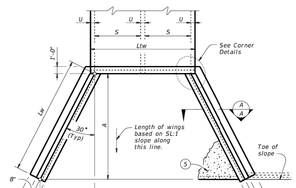
MATERIAL NOTES:
Provide Class C concrete (f'c=3,600 psi).
Provide Grade 60 reinforcing steel.
Provide galvanized reinforcing steel if required elsewhere in the plans.
In riprap concrete synthetic fibers listed on the "Fibers for Concrete" Material Producer List (MPL) may be used in lieu of steel reinforcing unless noted otherwise.

GENERAL NOTES:
Designed according to AASHTO LRFD Bridge Design Specifications.
When structure is founded on solid rock, depth of toewalls for culverts and wingwalls may be reduced or eliminated at the option of the engineer.
See Culvert Supplement (CS) standard sheet for additional dimensions and information.
The quantities for concrete and reinforcing steel resulting from the formulas given on this sheet are for Contractor's information only.

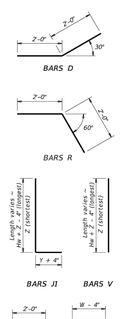
Cover dimensions are clear dimensions, unless noted otherwise. Reinforcing dimensions are out-to-out of bars.

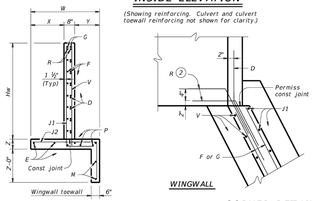


INSIDE ELEVATION
(Showing reinforcing. Culvert and culvert toewall reinforcing not shown for clarity.)



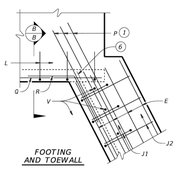
PLAN
(Showing dimensions.)





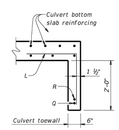
SECTION A-A

WINGWALL



FOOTING AND TOEWALL

CORNER DETAILS
(Culvert and culvert toewall reinforcing not shown for clarity.)



SECTION B-B ⑤

Texas Department of Transportation — Bridge Division Standard

CONCRETE WINGWALLS
WITH FLARED WINGS FOR
0° SKEW BOX CULVERTS

FW-0

FILE: fw-0z0z-20.dgn	DN: GAF	CK: CAT	DW: TxDOT	CK: TxDOT
©TxDOT February 2020 REVISIONS	CONT	SECT	JOB	HIGHWAY
	DIST	COUNTY		SHEET NO.

MULTIPLE UNIT PLACEMENT

SECTION B-B

DETAIL "A" (13)

WINGWALL CONNECTION

(Also applies to safety end treatment.)

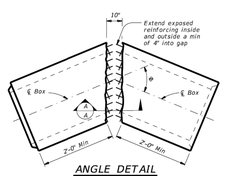
SECTION THRU TOP SLABS LESS THAN 8"

SECTION THRU CURB

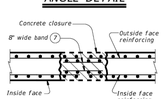
QUANTITIES PER FOOT OF CURB (10)	
Reinforcing Steel	4.12 Lb
Concrete	0.037 CY

BARS C (#4)
(Spa = 1'-0" Max)

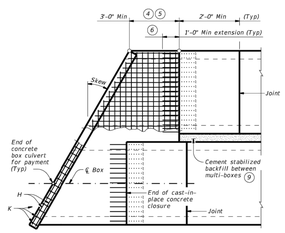
BARS K (#4)
(Spa = 1'-0" Max)
(Length = 4'-2")



ANGLE DETAIL



SECTION A-A



PLAN OF SKEWED ENDS

(Showing multi-box placement.)

(1) 0" Min to 5'-0" Max. Estimated curb heights are shown elsewhere in the plans. For structures with pedestrian rail, bicycle rail, or curbs taller than 1'-0, refer to the Extended Curb Details (ECD) standard sheet. For structures with T631 or T631LS bridge rail, refer to the Mounting Details for T631 & T631LS Rails (T631-CM) standard sheet. Refer to the Box Culvert Rail Mounting Details (RAC) standard sheet for structures with bridge rail other than T631 or T631LS.

(2) For curbs less than 1'-0" high, tilt Bars K or reduce bar height as necessary to maintain cover. For curbs less than 3" high, Bars K may be omitted.

(3) Extend curb, wingwall, or safety end treatment reinforcing into concrete closure. Bend or trim, as necessary, any reinforcing that does not fit into closure area.

(4) Provide a 2'-0" Min cast-in-place concrete closure. Break back boxes in the field or cast boxes short. Provide bands of reinforcing in the closure that are the same size and spacing as in the precast box section. Provide #4 longitudinal reinforcement spaced at 12 inches Max within the closure. Except where shown otherwise, construct the cast-in-place closure flush with the inside and outside faces of the precast box section.

(5) For multiple unit placements, adjust the length of the closure for the interior walls as necessary. Provide a 3'-0" Min cast-in-place closure in the top slab, bottom slab, and exterior wall. See Section B-B detail when interior walls are cast full length.

(6) Extend precast box reinforcing a minimum of 1'-0" into concrete closure (Typ).

(7) Place bands of reinforcing matching the inside and outside face reinforcing in the gaps of the top and bottom slabs. Place a band matching the outside face reinforcing of the wall in the gaps of the walls (placed in the outside face only). Tack weld the bands to the exposed reinforcing at each point of contact.

(8) For vehicle safety, the following requirements must be met:
- For structures without bridge rail, construct curbs no more than 3" above finished grade.
- For structures with bridge rail, construct curbs flush with finished grade.

Reduce curb heights, if necessary, to meet the above requirements. No changes will be made in quantities and no additional compensation will be allowed for this work.

(9) Cement stabilized backfill between boxes is considered part of the box culvert for payment.

(10) All curb concrete and reinforcing is considered part of the box culvert for payment.

(11) Any additional concrete and reinforcing required for the closures will be considered subsidiary to the box culvert for payment.

(12) 1'-0" typical. 2'-3" when the Box Culvert Rail Mounting Details (RAC) standard sheet is referred to elsewhere in the plans.

(13) For multiple unit placement with overlay, with 1 to 2 course surface treatment, or with the top slab as the final riding surface, provide wall closure as shown in Detail "A".

(14) This dimension may be increased with approval of the Engineer to allow the precast boxes to be tunneled or jacked in accordance with Item 476, "Jacking, Boring, or Tunneling Pipe or Box". No payment will be made for any additional material in the gap between adjacent boxes.

MATERIAL NOTES:

Provide Grade 60 reinforcing steel.
Provide ASTM A1064 welded wire reinforcement.
Provide Class C concrete (f'c = 3,600 psi) for the closures.
Provide cement stabilized backfill meeting the requirements of Item 400, "Excavation and Backfill for Structures."
Any additional concrete required for the closures will be considered subsidiary to the box culvert.

GENERAL NOTES:

Designed according to AASHTO LRFD Bridge Design Specifications.
Refer to the Single Box Culverts Precast (SCP) standard sheets for details and notes not shown.
Chamfer the bottom edge of the top slab closure 3 inches at culvert closure ends.

Cover dimensions are clear dimensions, unless noted otherwise.
Reinforcing bars dimensions are out-to-out of bars.

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

BOX CULVERTS PRECAST MISCELLANEOUS DETAILS

SCP-MD

FILE: scpmdts-20.dgn	DN: TxDOT	CK: LRE	DW: BBW/TxDOT	CK: GAI
©TxDOT February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS				
	DIST	COUNTY		SHEET NO.

DISCLAIMER:
The use of this standard is governed by the "Texas Engineering Practice Act". No liability of any kind is assumed by the Texas Department of Transportation for any reuse of these standards or for any modifications or changes made from the original version of this standard by other engineers or by parties not bound by contractual agreements to do so.

DATE:
FILE:

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD,
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE
92601
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

TXDOT DETAILS BOX CULVERTS (SCP-MD) SHEET 2

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 67 of 73

P:\Active Projects\2018 – 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_details_01.dwg 9/11/2025 3:43 PM

DISCLAIMER:
The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by the Texas Department of Transportation for any purpose whatsoever. TxDOT disclaims responsibility for the suitability of this standard for other projects and for incorrect results or damages resulting from its use.

DATE:
FILE:

BOX DATA

SECTION DIMENSIONS					Fill Height	H (Min)	REINFORCING (sq. in. / ft.) ②							① Lift Weight
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	(ft.)	(in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	(tons)
5	2	8	7	6	< 2	–	0.19	0.27	0.18	0.14	0.19	0.19	0.17	6.0
5	2	6	6	6	2 < 3	44	0.22	0.20	0.16	0.14	–	–	–	5.1
5	2	6	6	6	3 – 5	44	0.16	0.14	0.14	0.14	–	–	–	5.1
5	2	6	6	6	10	36	0.15	0.14	0.14	0.14	–	–	–	5.1
5	2	6	6	6	15	36	0.20	0.18	0.18	0.14	–	–	–	5.1
5	2	6	6	6	20	36	0.26	0.23	0.24	0.14	–	–	–	5.1
5	2	6	6	6	25	36	0.33	0.29	0.29	0.14	–	–	–	5.1
5	2	6	6	6	30	36	0.39	0.34	0.35	0.14	–	–	–	5.1
5	3	8	7	6	< 2	–	0.19	0.31	0.21	0.14	0.19	0.19	0.17	6.6
5	3	6	6	6	2 < 3	45	0.18	0.24	0.19	0.14	–	–	–	5.7
5	3	6	6	6	3 – 5	36	0.14	0.17	0.16	0.14	–	–	–	5.7
5	3	6	6	6	10	36	0.14	0.16	0.17	0.14	–	–	–	5.7
5	3	6	6	6	15	35	0.16	0.21	0.22	0.14	–	–	–	5.7
5	3	6	6	6	20	35	0.21	0.27	0.28	0.14	–	–	–	5.7
5	3	6	6	6	25	35	0.26	0.34	0.34	0.14	–	–	–	5.7
5	3	6	6	6	30	35	0.31	0.41	0.41	0.14	–	–	–	5.7
5	4	8	7	6	< 2	–	0.19	0.33	0.24	0.14	0.19	0.19	0.17	7.2
5	4	6	6	6	2 < 3	45	0.16	0.27	0.22	0.14	–	–	–	6.3
5	4	6	6	6	3 – 5	45	0.14	0.19	0.18	0.14	–	–	–	6.3
5	4	6	6	6	10	36	0.14	0.18	0.18	0.14	–	–	–	6.3
5	4	6	6	6	15	35	0.14	0.23	0.24	0.14	–	–	–	6.3
5	4	6	6	6	20	35	0.17	0.30	0.31	0.14	–	–	–	6.3
5	4	6	6	6	25	35	0.21	0.37	0.38	0.14	–	–	–	6.3
5	4	6	6	6	30	35	0.25	0.44	0.45	0.14	–	–	–	6.3
5	5	8	7	6	< 2	–	0.19	0.35	0.26	0.14	0.19	0.19	0.17	7.8
5	5	6	6	6	2 < 3	45	0.14	0.29	0.24	0.14	–	–	–	6.9
5	5	6	6	6	3 – 5	45	0.14	0.21	0.20	0.14	–	–	–	6.9
5	5	6	6	6	10	45	0.14	0.19	0.20	0.14	–	–	–	6.9
5	5	6	6	6	15	36	0.14	0.24	0.25	0.14	–	–	–	6.9
5	5	6	6	6	20	35	0.15	0.31	0.32	0.14	–	–	–	6.9
5	5	6	6	6	25	35	0.18	0.38	0.39	0.14	–	–	–	6.9
5	5	6	6	6	30	35	0.21	0.46	0.47	0.14	–	–	–	6.9

① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.

CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT 2 FT AND GREATER

CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (12" Min) (Typ)

SECTION A-A

(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:

Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.

Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:

Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.

See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.

In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)".

HL93 LOADING

Texas Department of Transportation — Bridge Division Standard

SINGLE BOX CULVERTS PRECAST

5'-0" SPAN

SCP-5

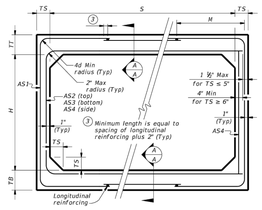
FILE:	scp05ts5-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
	REVISIONS	DIST	COUNTY		SHEET NO.

BOX DATA

SECTION DIMENSIONS					Fill Height	H (Min)	REINFORCING (sq. in. / ft.) ②							① Lift Weight
S (ft.)	H (ft.)	TT (in.)	TB (in.)	TS (in.)	(ft.)	(in.)	AS1	AS2	AS3	AS4	AS5	AS7	AS8	(tons)
6	2	8	7	7	< 2	–	0.23	0.27	0.19	0.17	0.19	0.19	0.17	7.2
6	2	7	7	7	2 < 3	43	0.25	0.21	0.17	0.17	–	–	–	6.8
6	2	7	7	7	3 – 5	43	0.20	0.17	0.17	0.17	–	–	–	6.8
6	2	7	7	7	10	39	0.20	0.17	0.17	0.17	–	–	–	6.8
6	2	7	7	7	15	39	0.26	0.20	0.20	0.17	–	–	–	6.8
6	2	7	7	7	20	39	0.34	0.26	0.26	0.17	–	–	–	6.8
6	2	7	7	7	25	39	0.43	0.32	0.32	0.17	–	–	–	6.8
6	2	7	7	7	30	39	0.52	0.38	0.39	0.17	–	–	–	6.8
6	3	8	7	7	< 2	–	0.20	0.31	0.22	0.17	0.19	0.19	0.17	7.9
6	3	7	7	7	2 < 3	43	0.21	0.24	0.19	0.17	–	–	–	7.5
6	3	7	7	7	3 – 5	39	0.17	0.18	0.17	0.17	–	–	–	7.5
6	3	7	7	7	10	39	0.17	0.18	0.19	0.17	–	–	–	7.5
6	3	7	7	7	15	38	0.22	0.24	0.24	0.17	–	–	–	7.5
6	3	7	7	7	20	38	0.28	0.31	0.31	0.17	–	–	–	7.5
6	3	7	7	7	25	38	0.35	0.38	0.39	0.17	–	–	–	7.5
6	3	7	7	7	30	38	0.42	0.46	0.46	0.17	–	–	–	7.5
6	4	8	7	7	< 2	–	0.19	0.34	0.25	0.17	0.19	0.19	0.17	8.6
6	4	7	7	7	2 < 3	43	0.19	0.27	0.21	0.17	–	–	–	8.2
6	4	7	7	7	3 – 5	39	0.17	0.21	0.19	0.17	–	–	–	8.2
6	4	7	7	7	10	39	0.17	0.20	0.21	0.17	–	–	–	8.2
6	4	7	7	7	15	38	0.18	0.27	0.27	0.17	–	–	–	8.2
6	4	7	7	7	20	38	0.24	0.34	0.35	0.17	–	–	–	8.2
6	4	7	7	7	25	38	0.29	0.43	0.42	0.17	–	–	–	8.2
6	4	7	7	7	30	38	0.35	0.51	0.52	0.17	–	–	–	8.2
6	5	8	7	7	< 2	–	0.19	0.37	0.28	0.17	0.19	0.19	0.17	9.3
6	5	7	7	7	2 < 3	43	0.17	0.30	0.24	0.17	–	–	–	8.9
6	5	7	7	7	3 – 5	43	0.17	0.23	0.21	0.17	–	–	–	8.9
6	5	7	7	7	10	39	0.17	0.22	0.23	0.17	–	–	–	8.9
6	5	7	7	7	15	38	0.17	0.28	0.29	0.17	–	–	–	8.9
6	5	7	7	7	20	38	0.20	0.37	0.38	0.17	–	–	–	8.9
6	5	7	7	7	25	38	0.25	0.45	0.46	0.17	–	–	–	8.9
6	5	7	7	7	30	38	0.30	0.54	0.55	0.17	–	–	–	8.9
6	6	8	7	7	< 2	–	0.19	0.38	0.30	0.17	0.19	0.19	0.17	10
6	6	7	7	7	2 < 3	52	0.17	0.32	0.26	0.17	–	–	–	9.6
6	6	7	7	7	3 – 5	52	0.17	0.24	0.22	0.17	–	–	–	9.6
6	6	7	7	7	10	43	0.17	0.23	0.24	0.17	–	–	–	9.6
6	6	7	7	7	15	39	0.17	0.29	0.31	0.17	–	–	–	9.6
6	6	7	7	7	20	39	0.18	0.38	0.39	0.17	–	–	–	9.6
6	6	7	7	7	25	38	0.23	0.46	0.48	0.17	–	–	–	9.6
6	6	7	7	7	30	38	0.27	0.55	0.57	0.17	–	–	–	9.6

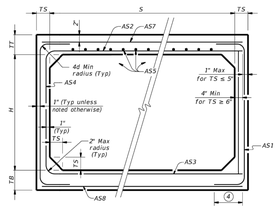
① For box length = 8'-0"

② AS1 thru AS4, AS7 and AS8 are minimum required areas of reinforcement per linear foot of box length. AS5 is minimum required area of reinforcement per linear foot of box width.



CORNER OPTION "A" CORNER OPTION "B"

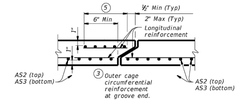
FILL HEIGHT 2 FT AND GREATER



CORNER OPTION "A" CORNER OPTION "B"

FILL HEIGHT LESS THAN 2 FT

④ Length is equal to spacing of longitudinal reinforcing plus 2". (12" Min) (Typ)



SECTION A-A

(Showing top and bottom slab joint reinforcement.)

MATERIAL NOTES:
Provide 0.03 sq. in./ft. minimum longitudinal reinforcement at each face in slabs and walls. This minimum requirement may be met by the transverse wires when wire mesh reinforcement is used.
Provide Class H concrete (f'c = 5,000 psi).

GENERAL NOTES:
Designs shown conform to ASTM C1577. Refer to ASTM C1577 for information or details not shown.
See Box Culverts Precast Miscellaneous Details (SCP-MD) standard sheet for details and notes not shown.
In lieu of furnishing the designs shown on this sheet, the contractor may furnish an alternate design that is equal to or exceeds the box design for the design fill height in the table. Submit shop plans for alternate designs in accordance with Item "Precast Concrete Structural Members (Fabrication)".

HL93 LOADING

Texas Department of Transportation | Bridge Division Standard

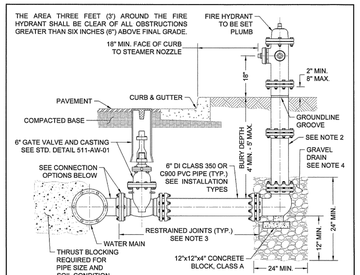
SINGLE BOX CULVERTS PRECAST 6'-0" SPAN

SCP-6

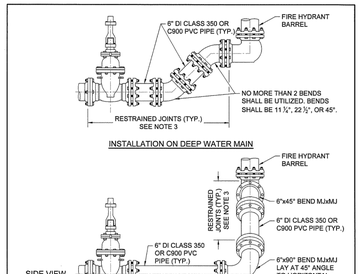
FILE:	scp06xts-20.dgn	DN: TxDOT	CK: TxDOT	DW: TxDOT	CK: TxDOT
©TxDOT	February 2020	CONT	SECT	JOB	HIGHWAY
REVISIONS		DIST	COUNTY		SHEET NO.

DISCLAIMER:
The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by the Texas Department of Transportation for any purpose whatsoever. Texas Department of Transportation and all warranties against any and all risk, express or implied, arising from its use.

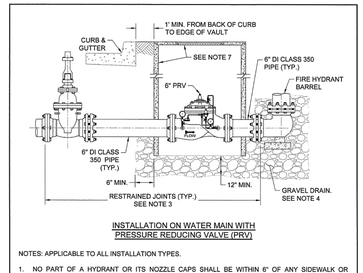
DATE:
FILE:



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-02 1 OF 3



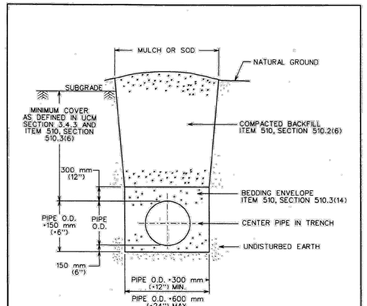
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-02 2 OF 3



NOTES: APPLICABLE TO ALL INSTALLATION TYPES.

1. NO PART OF A HYDRANT OR ITS NOZZLE CAPS SHALL BE WITHIN 6" OF ANY SIDEWALK OR PEDESTRIAN RAMP. ANY FIRE HYDRANT PLACED NEAR A STREET CORNER SHALL BE LOCATED OUTSIDE THE CURVE RADIUS AND A MINIMUM OF 4' FROM RAMPS.
2. ONE BARREL EXTENSION NOT EXCEEDING 2' LENGTH MAY BE INSTALLED DIRECTLY BELOW THE FIRE HYDRANT IN ORDER TO MEET THE REQUIRED BURY DEPTH OF 4' - 5'. BREAK AWAY BOLTS (SHOE TYPES) SHALL BE PROPERLY SPACED AND PLACED.
3. FIRE LINE SHALL HAVE ALL JOINTS RESTRAINED FROM MAIN TO FIRE HYDRANT. JOINTS SHOWN MAY VARY. SEE SPL WW-27, WW-27A, AND WW-27B FOR RESTRAINT OPTIONS.
4. BELOW EACH HYDRANT, A DRAINAGE PIT 24" IN DIAMETER AND 12" DEEP SHALL BE EXCAVATED AND FILLED WITH COMPACTED COARSE GRAVEL OR BROKEN STONE MIXED WITH COARSE SAND UNDER AND AROUND THE BOWL OF THE HYDRANT, AND TO A LEVEL 12" ABOVE THE HYDRANT DRAIN OPENING (SEE STD. SPEC. 510). THE HYDRANT DRAINAGE PIT SHALL NOT BE CONNECTED TO A SANITARY SEWER. THE DRAIN GRAVEL SHALL BE COVERED WITH FILTER FABRIC PER STD. SPEC. 6205. FOR PRV, GRAVEL SHALL EXTEND UNDER PRV VAULT 12" MIN. DEPTH UNDER THE VAULT AND 6" MIN. BEYOND VAULT.
5. FOR FIRE HYDRANT LEADS AT A MAIN OUTLET LARGER THAN 6" DIAMETER, OUTLET SHALL BE FLANGED AND A FLG x PLG REDUCER SHALL BE INSTALLED DIRECTLY ON THE OUTLET.
6. WRAP 8 MIL POLY-FILM WRAP ON ALL BURIED PIPE AND FITTINGS.
7. FOR HYDRANTS WITH PRV: CLASS 'B' RCP VAULT 60" MIN. I.D. WITH REINFORCED PRECAST CONCRETE LID (AASHTO H-20 LOADING) WITH COA FRAME AND 32" COVER WITH LETTERING MODIFIED FOR WATER.

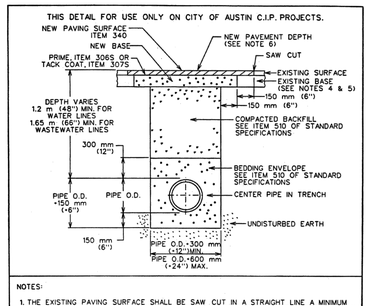
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-02 3 OF 3



REFERENCES:

1. UTILITY CRITERIA MANUAL SECTION 3.4.3, "FINAL DESIGN"
2. STANDARD SPECIFICATION MANUAL ITEM 510, SECTION 510.2(6), "SELECT BACKFILL OR BORROW"; SECTION 510.3(6), "TRENCH DEPTH AND DEPTH OF COVER"; SECTION 510.3(14), "PIPE BEDDING ENVELOPE"

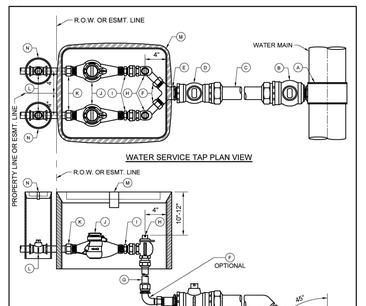
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPICAL TRENCH DETAIL WITH UNFINISHED SURFACE	
3/1/16 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-5



NOTES:

1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE A MINIMUM OF 300 mm (12") WIDER THAN THE UNDISTURBED SIDES OF THE TRENCH, SYMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
2. ANY CONCRETE PAVING SHALL BE SAW CUT 150 mm (6") WIDER THAN UNDISTURBED SIDES OF EXCAVATION.
3. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX OR TEMPORARY HOT MIX ASPHALTIC CONCRETE.
4. ROAD BASE AND SURFACE MATERIALS IN THE TRENCH CUT SHALL BE REPLACED IN KIND OF EQUAL THICKNESS, OR MINIMUM BASE THICKNESS OF 250 mm (10"), WHICHEVER IS GREATER.
5. ALL DAMAGED AREAS OF PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH MINIMUM OF 200 mm (8") OF BASE OR MATCH EXISTING THICKNESS, WHICHEVER IS GREATER.
6. SURFACE PAVEMENT SHALL BE OF THE KIND AND THICKNESS AS EXISTING, OR MINIMUM 50 mm (2"), WHICHEVER IS GREATER.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY	TYPICAL TRENCH WITH PAVED SURFACE	
3/1/16 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 510S-3



CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 1 OF 2

MATERIALS LIST:

A. 2" SERVICE CLAMP, SPL WW-264
B. 2" CORPORATION STOP, SPL WW-68
C. 2" HDPE WATER SERVICE TUBING, SPL WW-65
D. 2" BALL VALVE, SPL WW-68
E. COPPER FLARE SINGLE SERVICE FITTING, SPL WW-68
COPPER FLARE DOUBLE SERVICE WYE, SPL WW-68
F. 1" SWIVEL NUT x 1" COMPRESSION 90° ELBOW, WW-68 (OPTIONAL - NOT NEEDED IF MOUNTING BALL VALVE VERTICALLY UNDER ANGLE METER STOP)
G. 1" HDPE WATER SERVICE TUBING, SPL WW-65
H. ANGLE METER STOP, SPL WW-68

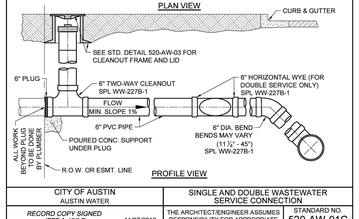
MATERIALS TO BE INSTALLED BY PLUMBER:

I. BRASS METER BUSHING - SIZE AS NEEDED TO CONNECT ANGLE STOP TO METER
J. WATER METER PURCHASED FROM AUSTIN WATER
K. BRASS WATER METER COUPLING NUT (FIT x SWIVEL COUPLING NUT:
½" AND ¾" METERS: 8 ½" LONG x ¾" DIA.
1" METERS: 8 ½" LONG x 1" DIA.
L. PROPERTY OWNER'S CUT-OFF VALVE, SPL WW-276
M. METER BOX AND COVER, SPL WW-145A;
FOR DUAL 1" METERS USE TWO SINGLE METER BOXES
N. PROPERTY OWNER'S VALVE BOX AND PO CUTOFF LID
O. TEMPORARY METER SPACER (REQUIRED TO ASSURE METER WILL FIT APPROPRIATELY)
P. 1" WOODEN DOWEL (SHOW ADDRESS ON DOWEL USING WATERPROOF MARKER)

NOTES:

1. SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM, SPL WW-27D.
2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION.
3. TOP OF METER BOXES SHOULD BE 4" ABOVE GROUND.
4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS. BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25).
5. METER BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR TRAFFIC AREA AND SIDEWALK.
6. BALL VALVE "D" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE LOCATED MORE THAN 36" BELOW FINAL GRADE.
7. METER SIZES TO BE SHOWN ON PLANS.
8. METER BOX OUT OUTS SHALL NOT EXCEED TWO TIMES THE PIPE DIAMETER.
9. INSTALL METALLIC WARNING TAPE, SPL WW-597, MINIMUM 1' ABOVE TUBING FROM SERVICE SADDLE TO BALL VALVE "D".
10. TUBING SHALL BE PLACED IN A STRAIGHT ALIGNMENT AND ALLOWED TO RELAX AND "SNAKE" LOOSELY IN THE TRENCH. TUBING BEHIND CURB AND GUTTER SHALL BE INSTALLED WITH A MINIMUM 12" DEPTH OF COVER.
11. 1" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 3'. 2" TUBING, WHEN BENT, SHALL HAVE A RADIUS NO SMALLER THAN 5'. BRASS FITTINGS SHALL NOT BE CONNECTED TO A BENT SECTION OF TUBING.
12. INSERT STIFFENERS FOR HDPE TUBING (PER SPL WW-65B) TO BE INSTALLED INSIDE TUBING AT ALL COMPRESSION FITTINGS.
13. FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED SOLID PURPLE (PER SPL WW-8A. ALL APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL METER BOX COVERS SHALL BE PURPLE AND HAVE **"RECLAIMED WATER"** CAST INTO THEM, SPL WW-145A.

CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01B 2 OF 2



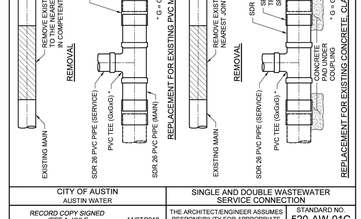
* OFFSET FROM PROPERTY LINE IS FOR DOUBLE WASTEWATER SERVICE INSTALLATION ONLY.

WHERE WATER & WASTEWATER SERVICES ARE INSTALLED ON A COMMON LOT LINE, SEE DETAIL 520-AW-01A.

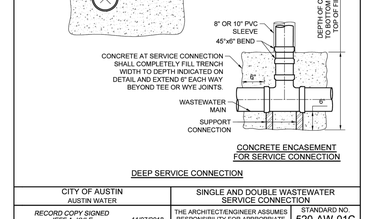
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 1 OF 4

NOTES:

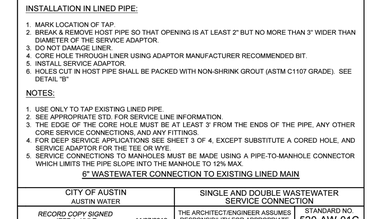
1. DURING SUBDIVISION CONSTRUCTION, UTILITY CONTRACTOR INSTALLS WASTEWATER TEE CONNECTION TO MAIN, 6" STUB, HORIZONTAL WYE FOR DOUBLE SERVICES, 6" SERVICE BRANCH WITH TWO-WAY CLEANOUT(S) AND RISER, FRAME, AND COVER. CLEANOUT(S) TO BE PLUGGED AT PROPERTY LINE OR EASEMENT LINE END. ALL WASTEWATER PIPING SHALL HAVE ELASTOMERIC GASKET TYPE JOINTS AND SLOPE DOWNWARD TO MAIN 1% MIN. TO 45° MAX. DEPTH OF SERVICE AT PROPERTY LINE WILL BE SHOWN ON PLANS BY ENGINEER IF GREATER THAN 4'. OTHERWISE THE INSTALLED DEPTH WILL BE 4' MIN. AND 6' MAX. AT PROPERTY LINE. IF WASTEWATER SERVICE LINE TO MAIN REQUIRES DEFLECTION EXCEEDING 45°, SEE SHEET 3 OF 4.
2. PIPING IN STREET RIGHT-OF-WAY AND IN EASEMENT AREA SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY CITY OF AUSTIN STANDARD SPECIFICATION 510.3 (14). MATERIALS SHALL BE AS SPECIFIED IN 510.2 (2)(A) AND (3)(B). BACKFILL ABOVE THE GRANULAR BEDDING SHALL BE AS REQUIRED BY SECTION 510.3 (25). SERVICE LINES IN THESE AREAS SHALL HAVE A MIN. COVER BELOW FINAL STREET GRADE OF 42".
3. PLUMBER SHALL REMOVE PLUG AND CONNECT TO TWO-WAY CLEANOUT. NO CONNECTION TO CLEANOUT STACK IS ALLOWED.



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 2 OF 4



CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 3 OF 4



INSTALLATION IN LINED PIPE:

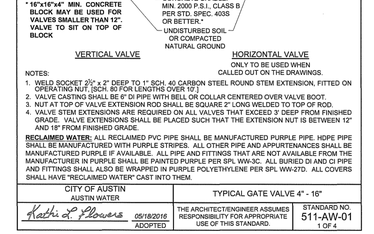
1. MARK LOCATION OF TAP.
2. BREAK & REMOVE HOST PIPE SO THAT OPENING IS AT LEAST 2" BUT NO MORE THAN 3" WIDER THAN DIAMETER OF THE SERVICE ADAPTOR.
3. DO NOT DAMAGE LINER.
4. CORE HOLE THROUGH LINER USING ADAPTOR MANUFACTURER RECOMMENDED BIT.
5. INSTALL SERVICE ADAPTOR.
6. HOLES CUT IN HOST PIPE SHALL BE PACKED WITH NON-SHRINK GROUT (ASTM C1107 GRADE). SEE DETAIL "B"

NOTES:

1. USE ONLY TO TAP EXISTING LINED PIPE.
2. SEE APPROPRIATE STD. FOR SERVICE LINE INFORMATION.
3. THE EDGE OF THE CORE HOLE MUST BE AT LEAST 3" FROM THE ENDS OF THE PIPE, ANY OTHER CORE SERVICE CONNECTIONS, AND ANY FITTINGS.
4. FOR DEEP SERVICE APPLICATIONS SEE SHEET 3 OF 4, EXCEPT SUBSTITUTE A CORED HOLE, AND SERVICE ADAPTOR FOR THE TEE OR WYE.
5. SERVICE CONNECTIONS TO MANHOLES MUST BE MADE USING A PIPE-TO-MANHOLE CONNECTOR WHICH LIMITS THE PIPE SLOPE INTO THE MANHOLE TO 12% MAX.

6" WASTEWATER CONNECTION TO EXISTING LINED MAIN

CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	
RECORD COPY SIGNED JEFF A. KYLE 11/07/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 520-AW-01C 4 OF 4

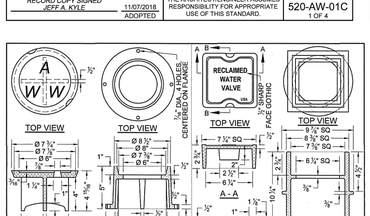


NOTES:

1. WELD SOCKET 2½" x 2" DEEP TO 1" SCH. 40 CARBON STEEL ROUND STEM EXTENSION, FITTED ON OPERATING NUT, (SCH. 80 FOR LENGTHS OVER 10').
2. VALVE CASTING SHALL BE 6" DI PIPE WITH BELL OR COLLAR CENTERED OVER VALVE BOOT.
3. NUT AT TOP OF VALVE EXTENSION ROD SHALL BE SQUARE 2" LONG WELDED TO TOP OF ROD.
4. VALVE STEM EXTENSIONS ARE REQUIRED ON ALL VALVES THAT EXCEED 3' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 12" AND 18" FROM FINISHED GRADE.

RECLAIMED WATER: ALL RECLAIMED PVC PIPE SHALL BE MANUFACTURED PURPLE PIPE. HDPE PIPE SHALL BE MANUFACTURED WITH PURPLE STRIPES. ALL OTHER PIPE AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL PIPE AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE "RECLAIMED WATER" CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 1 OF 4



NOTES:

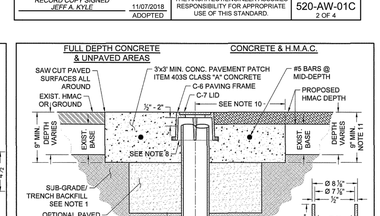
1. MATERIAL SHALL BE GRAY CAST IRON, ASTM A48, GRADE 30B.
2. THE MANUFACTURER'S IDENTIFICATION AND CASTING NUMBER, AND THE COUNTRY WHERE CAST, SHALL BE DISTINCTLY CAST ONTO EACH LID, FRAME, COLLAR AND BASE.
3. DRAFT AND SHRINKAGE ALLOWANCE SHALL BE IN ACCORDANCE WITH NORMAL FOUNDRY PRACTICE.
4. CASTING FINISH BY MANUFACTURER SHALL INCLUDE REMOVAL OF FINS AND FLASHING, AND PAINT WITH BLACK ASPHALT COATING.

WEIGHTS:

C7 LID: 13 LBS
RECLAIMED LID: 15 LBS
C6 FRAME: 23 LBS
RECLAIMED FRAME: 33 LBS
C5 BASE: 78 LBS

* "LETTERING SHALL BE 1 ½" 2 PICK BAR SLOTS REQUIRED

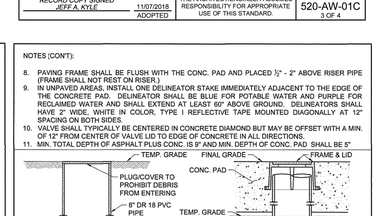
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 2 OF 4



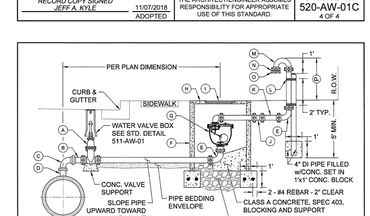
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 3 OF 4

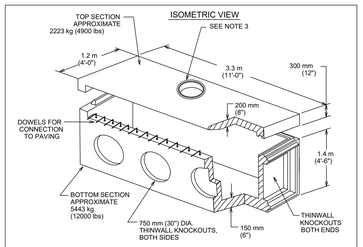
NOTES (CONT):

8. PAVING FRAME SHALL BE FLUSH WITH THE CONC. PAD AND PLACED ½" - 2" ABOVE RISER PIPE (FRAME SHALL NOT REST ON RISER.)
9. IN UNPAVED AREAS, INSTALL ONE DELINEATOR STAKE IMMEDIATELY ADJACENT TO THE EDGE OF THE CONCRETE PAD. DELINEATOR SHALL BE BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER AND SHALL EXTEND AT LEAST 60" ABOVE GROUND. DELINEATORS SHALL HAVE 2" WIDE, WHITE IN COLOR, TYPE I REFLECTIVE TAPE MOUNTED DIAGONALLY AT 12" SPACING ON BOTH SIDES.
10. VALVE SHALL TYPICALLY BE CENTERED IN CONCRETE DIAMOND BUT MAY BE OFFSET WITH A MIN. OF 12" FROM CENTER OF VALVE LID TO EDGE OF CONCRETE IN ALL DIRECTIONS.
11. MIN. TOTAL DEPTH OF ASPHALT PLUS CONC. IS 9" AND MIN. DEPTH OF CONC. PAD SHALL BE 5"



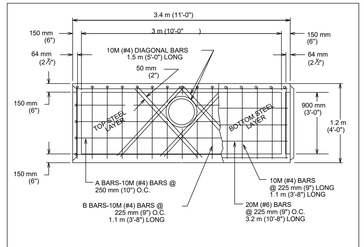
CITY OF AUSTIN AUSTIN WATER	TYPICAL GATE VALVE 4" - 16"	
Kathi L. Flowers 05/18/2016 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 511-AW-01 4 OF 4


PER PLAN DIMENSION
CURB & GUTTER
SIDEWALK
R.O.W.
WATER VALVE BOX SEE STD. DETAIL 511-AW-01
2' TYP.
9" MIN.
CONC. VALVE SUPPORT
SLOPE PIPE UPWARD TOWARD AIR VALVE
PIPE BEDDING ENVELOPE
4" Ø DI PIPE FILLED w/CONC. SET IN 1'x1' CONC. BLOCK
2 - #4 REBAR - 2' CLEAR
CLASS A CONCRETE, SPEC 403, BLOCKING AND SUPPORT
1' MI

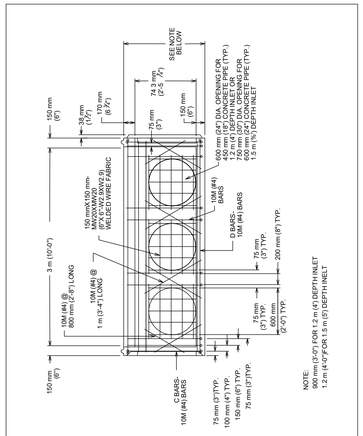


NOTES:
1. ALL CONCRETE SHALL BE CLASS "A" AS PER ITEM 403S.
2. ALL REINFORCING STEEL SHALL BE GRADE 60.
3. MANHOLE FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 5035-1.
4. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTERS OF BARS.
5. IN AREAS OF CONFLICT BETWEEN REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINFORCEMENT SHALL BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENGINEER.
6. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL INCLUDE THE TRANSITION CURB, IN ACCORDANCE WITH CITY OF AUSTIN STANDARD INLET DESIGN.
7. INVERT OF INLET SHALL BE SLOPED 1:20 WITH FILL CONCRETE BY CONTRACTOR, SHAPED AS "V" SECTION
8. THE INLET AS DESIGNED EXCEEDS THE REQUIREMENTS OF ASTM C478.
9. THIS STANDARD COMPLIES WITH THE CITY OF AUSTIN STANDARD SPECIFICATIONS ITEM NO. 506S.
10. FOR INLET CONNECTION VARIATIONS FOR MAKING A 6 m (20'-0") CURB INLET FROM STANDARD 3 m (10'-0") INLETS, SEE DALWORTH CURB INLET CONNECTION DETAIL SHEET DQ-86-103.

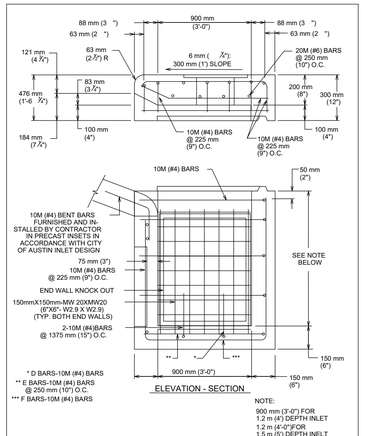
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER 12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 1 OF 5



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER 12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 2 OF 5



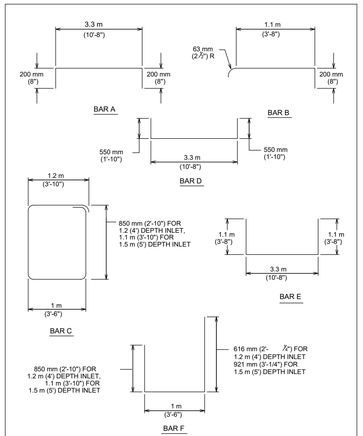
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER 12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 3 OF 5



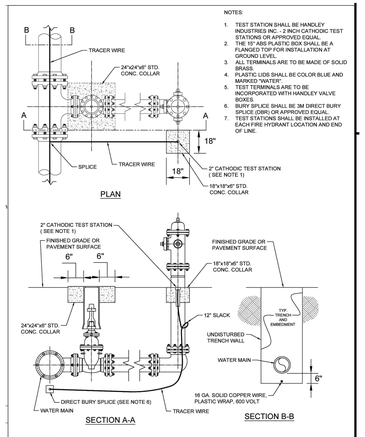
ELEVATION - SECTION

NOTE:
900 mm (3'-0") FOR 1.2 m (4') DEPTH INLET
1.2 m (4'-0")FOR 1.5 m (5') DEPTH INLET

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER 12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 4 OF 5

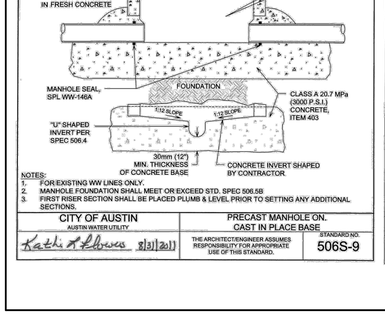


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CURB INLET 3 m (10') PRECAST TYPE 1 OR TYPE 1-R	
RECORD COPY SIGNED BY BILL GARDNER 12/09/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-4 5 OF 5



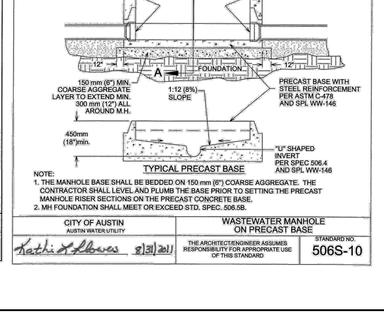
NOTES:
1. TEST STATION SHALL BE HANDLEY INDUSTRIES INC. - 2 INCH CATHODIC TEST STATIONS OR APPROVED EQUAL.
2. THE 15" ABS PLASTIC BOX SHALL BE A FLANGED TOP FOR INSTALLATION AT GRADE LEVEL.
3. ALL TERMINALS ARE TO BE MADE OF SOLID BRASS.
4. PLASTIC LIDS SHALL BE COLOR BLUE AND MARKED "WATER".
5. TEST TERMINALS ARE TO BE INCORPORATED WITH HANDLEY VALVE BOXES.
6. BURY SPLICE SHALL BE 3M DIRECT BURY SPLICE KIT OR APPROVED EQUAL.
7. TEST STATIONS SHALL BE INSTALLED AT EACH FIRE HYDRANT LOCATION AND END OF LINE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	WTCPUA CONSTRUCTION STANDARDS AND DETAILS	
RECORD COPY SIGNED BY BILL GARDNER 12/09/08 ADOPTED	TRACER WIRE INSTALLATION AND TEST STATION LOCATION	STANDARD NO. 508S-4 5 OF 5



NOTE:
1. HDPE RINGS ONLY IN PAVED AREAS

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE HEIGHT ADJUSTMENT (HDPE RINGS)	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4A 1 OF 3

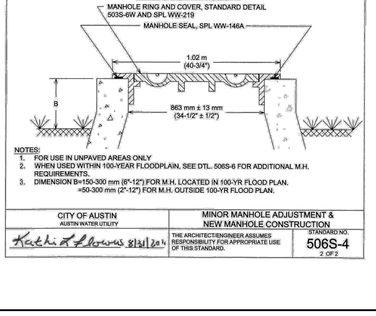


CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE HEIGHT ADJUSTMENT (HDPE RINGS)	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4A 2 OF 3

INSTALLATION INSTRUCTIONS
HDPE MANHOLE ADJUSTMENT RINGS
(FOR NEW CONSTRUCTION AND REHABILITATION)

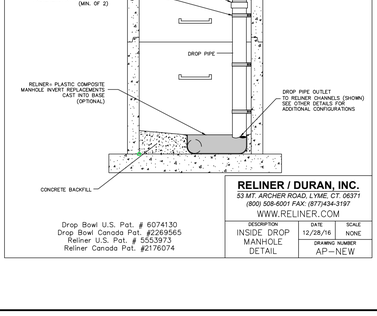
1. REMOVE EXISTING CASTING AND RINGS OR COVER PLATE TO EXPOSE CONCRETE. MANHOLE SURFACE MUST BE CLEAN AND LEVEL ±6 mm (¼"). NOTE: IF TOP OF CONCRETE STRUCTURE IS IN VERY POOR CONDITION OR IRREGULAR, THE FIRST RING CAN BE PRESSED FULLY INTO A HEAVY BED OF MORTAR ALLOWING IT AND SUBSEQUENT RINGS TO BE POSITIONED WITHOUT WOBBLE OR POINT-LOADING.
2. POSITION STRAIGHT AND LEVEL TO DETERMINE HEIGHT ADJUSTMENT REQUIRED. CONFIRM BEFORE PLACING RINGS.
3. COMBINE VARIOUS RING HEIGHTS, IN BOTH FLAT AND SLOPE, TO REACH DESIRED ADJUSTMENT. PLACE RINGS WITH INNER POCKET OPENING UP (OUTER POCKET OPENING WITH HOLES DOWN). THE INTERLOCKING LIP (MALE TONGUE) EXTENDS DOWN INTO THE STRUCTURE OF LOWER RING. MULTIPLE SLOPE RINGS CAN BE ADDED AND ROTATED TO ACHIEVE DESIRED GRADE MATCH WITHIN 6 mm (1/4"). NOTE: SLOPE RINGS ARE TAPERED TO PROVIDE 2% GRADE COMPENSATION. IF REQUIRED, HDPE SHIMS (MAX. 6 mm (1/2") PER RING MAY BE USED TO MATCH GRADE EXACTLY.
4. DRY STACK RINGS WITHOUT SEALANT TO ACHIEVE DESIRED VERTICAL AND SLOPE ADJUSTMENT. IF SLOPE RINGS ARE USED, MARK INNER FACE OF STOCK WITH PAINT OR MARKER TO MAINTAIN ALIGNMENT WHEN RE-STACKING.
5. REMOVE THE RINGS AND PLACE NEARBY IN UPSIDE-DOWN ORDER (THIS ALLOWS FOR EASY RE-ASSEMBLY IN THE CORRECT ORDER). APPLY A CONTINUOUS BEAD OF APPROVED RUBBER BUTYL SEALANT (SPL WW-703) TO THE FLAT SURFACE OF THE FIRST RING ON THE SIDE OF THE MALE TONGUE THAT WILL REST AGAINST THE CONE OPENING (MALE TONGUE DOWN). APPLY SEALANT TO AFFECT A SEAL BETWEEN THE INTERLOCKING LIP AND THE CONCRETE SURFACE IT RESTS ON.
6. APPLY 13 mm (1/2") CONTINUOUS BEAD OF APPROVED BUTYL RUBBER SEALANT (SPL WW-703) TO THE NEXT RING. THE SEALANT MUST BE APPLIED DIRECTLY INTO THE INTERLOCKING LIP (MALE TONGUE) AND THE BOTTOM OF THE RING, FAVORING THE SIDE OF THE LIP TO ASSURE A SEAL. PLACE THIS RING WITH THE INTERLOCKING LIP (MALE TONGUE) FACING DOWN ON TOP OF THE LOWER RING PREVIOUSLY INSTALLED. PRESS THE RING IN PLACE TO SET AND DISPERSE SEALANT. REMEMBER TO RE-ASSEMBLE THE RINGS USING ALIGNMENT MARKS TO POSITION SLOPE RING(S) CORRECTLY.
7. REPEAT #6 ON ALL PRE-ASSEMBLED RINGS TO REACH DESIRED HEIGHT AND SLOPE ADJUSTMENT.
8. APPLY 13 mm (1/2") CONTINUOUS BEAD OF APPROVED BUTYL RUBBER SEALANT (SPL WW-703), TO THE TOP OF THE UPPER RING.
9. POSITION CASTING ON RING(S). PRESS THE CASTING FRAME IN PLACE TO SET AND DISPERSE SEALANT.
10. BACKFILL TO RESTORE TO STD. DETAIL 1100S-1.
11. RING MANUFACTURER MUST BE LISTED ON SPL WW-703.
12. FOR USE IN PAVED AREAS ONLY.

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE HEIGHT ADJUSTMENT (HDPE RINGS)	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4A 3 OF 3

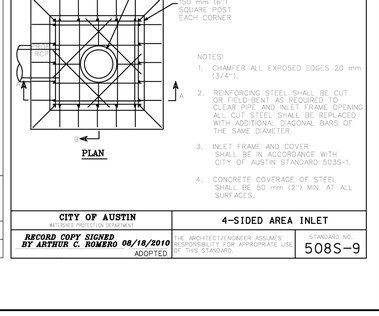


NOTES:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 1 OF 3



CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 2 OF 3



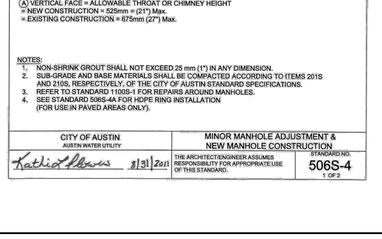
CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE WITH DROP INLET ON PRECAST BASE	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-8 3 OF 3

NOTES:
1. FOR EXISTING WW LINES ONLY.
2. MANHOLE FOUNDATION SHALL MEET OR EXCEED STD. SPEC 506.5B
3. FIRST RISER SECTION SHALL BE PLACED PLUMB & LEVEL PRIOR TO SETTING ANY ADDITIONAL SECTIONS.

CITY OF AUSTIN AUSTIN WATER UTILITY	PRECAST MANHOLE ON CAST IN PLACE BASE	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-9

NOTE:
1. THE MANHOLE BASE SHALL BE BEDDED ON 150 mm (6") COARSE AGGREGATE. THE CONTRACTOR SHALL LEVEL AND PLUMB THE BASE PRIOR TO SETTING THE PRECAST MANHOLE RISER SECTIONS ON THE PRECAST CONCRETE BASE.
2. MH FOUNDATION SHALL MEET OR EXCEED STD. SPEC. 506.5B.

CITY OF AUSTIN AUSTIN WATER UTILITY	WASTEWATER MANHOLE ON PRECAST BASE	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD	STANDARD NO. 506S-10



NOTES:
1. NON-SHRINK GROUT SHALL NOT EXCEED 25 mm (1") IN ANY DIMENSION.
2. SUB-GRADE AND BASE MATERIALS SHALL BE COMPACTED ACCORDING TO ITEMS 201S AND 210S, RESPECTIVELY, OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS.
3. REFER TO STANDARD 1100S-1 FOR REPAIRS AROUND MANHOLES.
4. SEE STANDARD 506S-4A FOR HDPE RING INSTALLATION (FOR USE IN PAVED AREAS ONLY).

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4 1 OF 2

NOTES:
1. FOR USE IN UNPAVED AREAS ONLY
2. WHEN USED WITHIN 100-YEAR FLOODPLAIN, SEE DTL. 506S-6 FOR ADDITIONAL M.H. REQUIREMENTS.
3. DIMENSION B=150-300 mm (6"-12") FOR M.H. LOCATED IN 100-YR FLOOD PLAIN. =50-300 mm (2"-12") FOR M.H. OUTSIDE 100-YR FLOOD PLAIN.

CITY OF AUSTIN AUSTIN WATER UTILITY	MINOR MANHOLE ADJUSTMENT & NEW MANHOLE CONSTRUCTION	
Kathi K Flowers 8/31/2011	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 506S-4 2 OF 2

Drop Bowl U.S. Pat. # 6074130
Drop Bowl Canada Pat. #2269565
Reliner U.S. Pat. # 5553973
Reliner Canada Pat. #2176074

RELINER / DURAN, INC.
53 MT. ARCHER ROAD, LYME, CT. 06371
(800) 508-6001 FAX: (877)434-3197
WWW.RELINER.COM

DESCRIPTION	DATE	SCALE
INSIDE DROP MANHOLE DETAIL	12/28/16	NONE
	DRAWING NUMBER	AP-NEW

CITY OF AUSTIN AUSTIN WATER UTILITY	4-SIDED AREA INLET	
RECORD COPY SIGNED BY ARTHUR J. ROMERO 08/18/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-9

NOTES:
1. CHAMFER ALL EXPOSED EDGES 20 mm (3/4").
2. REINFORCING STEEL SHALL BE CUT OR FIELD-BENT AS REQUIRED TO CLEAR PIPE AND INLET FRAME OPENING. ALL CUT STEEL SHALL BE REPLACED WITH ADDITIONAL DIAGONAL BARS OF THE SAME DIAMETER.
3. INLET FRAME AND COVER SHALL BE IN ACCORDANCE WITH CITY OF AUSTIN STANDARD 503S-1.
4. CONCRETE COVERAGE OF STEEL SHALL BE 50 mm (2") MIN. AT ALL SURFACES.

CITY OF AUSTIN AUSTIN WATER UTILITY	4-SIDED AREA INLET	
RECORD COPY SIGNED BY ARTHUR J. ROMERO 08/18/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 508S-9

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE 92601
9/11/2025

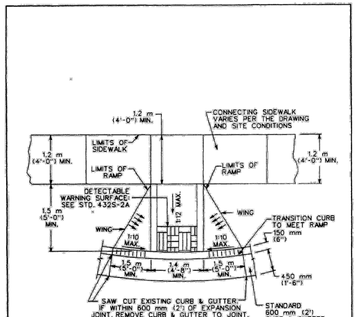
PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

GENERAL DETAILS SHEET 2

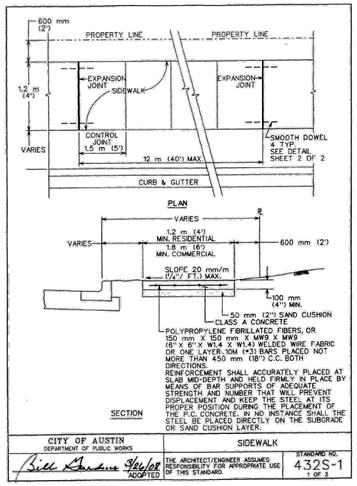
P:\Active Projects\2018 - 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_details_01.dwg 9/11/2025 3:50 PM

NO.	DATE	REVISIONS/CORRECTIONS	CHECKED BY: XX	DESIGNED BY: XX	DRAWN BY: XX	BY

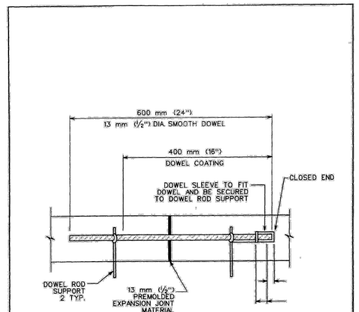
Sheet 71 of 73



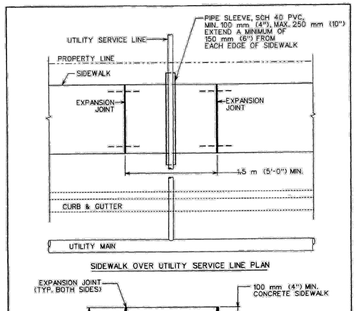
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE 1 SIDEWALK CURB RAMP	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-5



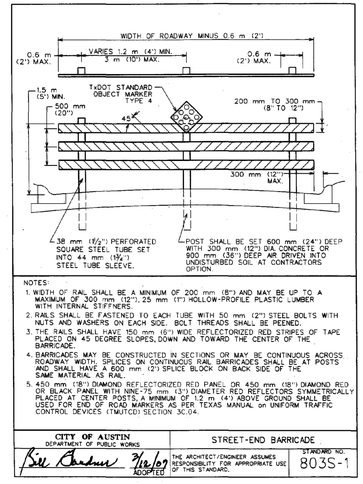
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 1 OF 3



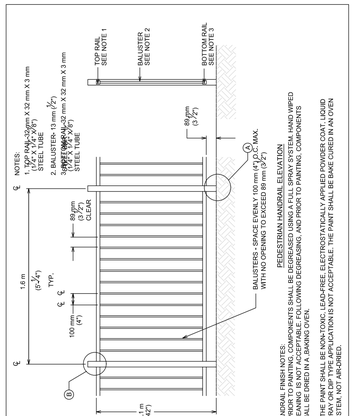
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 2 OF 3



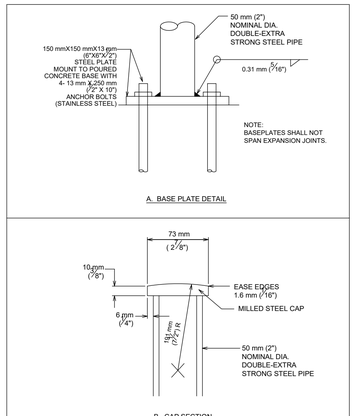
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	
Bill Gardner 9/16/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 432S-1 3 OF 3



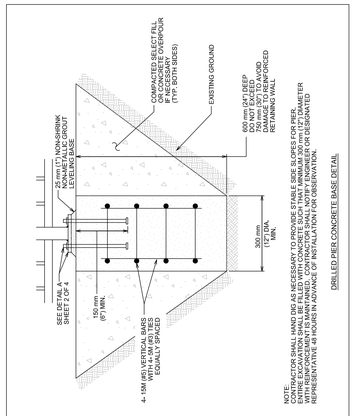
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET-END BARRICADE	
Bill Gardner 7/2/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 803S-1



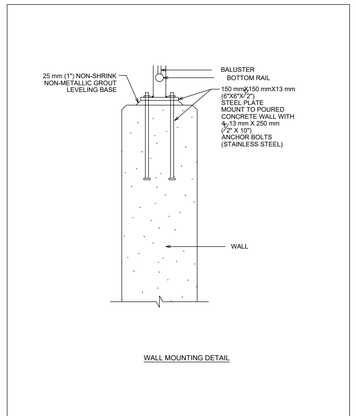
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 1 OF 4



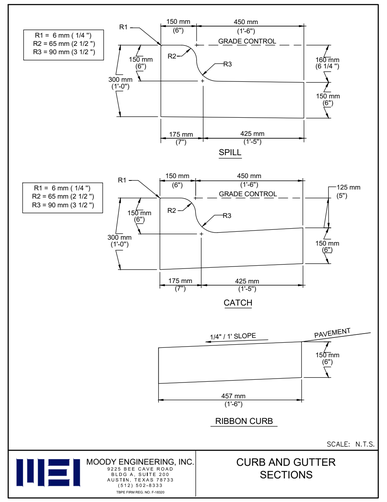
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 2 OF 4



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 3 OF 4



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PEDESTRIAN HANDRAIL	
RECORD COPY SIGNED BY KERI JUAREZ 01/04/11 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	STANDARD NO. 707S-1 4 OF 4



Asphaltic Concrete Design – Stratum 1 Subgrade

Layer		Thickness (inches)	
		Neighborhood Collector	Local Street
Asphaltic Concrete (HMAC)	Type D	2.5	2.0
Crushed Limestone Base [1]		16.0	9.0
Moisture Conditioned Subgrade		6.0	6.0

1. If the Stratum 1 soils are completely removed to expose the Stratum 2 soils or Stratum 3 limestone, the base thicknesses may be decreased as shown in the following table. Moisture conditioning of the subgrade is not necessary in Stratum 3 limestone areas.

Asphaltic Concrete Design – Stratum 2/3 Subgrade

Layer		Thickness (inches)	
		Neighborhood Collector	Local Street
Asphaltic Concrete (HMAC)	Type D	2.0	1.5
Crushed Limestone Base		10.0	8.0
Moisture Conditioned Subgrade [1]		6.0	6.0

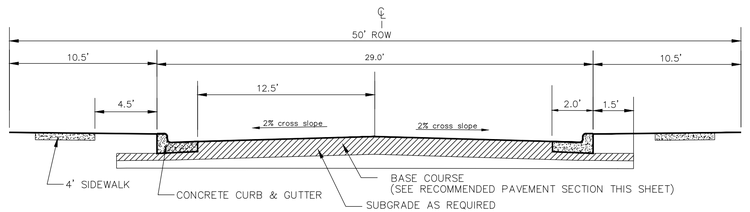
1. If the Stratum 1/2 soils are completely removed to expose the Stratum 3 limestone / weathered limestone, moisture conditioning of the subgrade is not necessary in Stratum 3 limestone areas.

Pavement Materials

Presented below are our recommended material requirements for the various pavement sections.

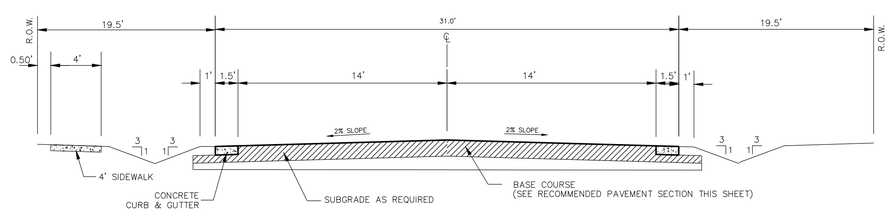
Item	Value
Hot Mix Asphaltic Concrete (HMAC) [1]	Plant mixed, hot laid Type D (Fine-Grade Surface Course). HMAC mixes should meet the specifications in COA Item 340.
Crushed Limestone Base [2]	COA Item 210 compacted as outlined in Earthwork.
Moisture Conditioned Subgrade [3]	As outlined in Earthwork.

1. For acceptance and payment evaluation purposes, we recommend the use of the provisions in COA Item 40.
2. Each lift of base should be thoroughly proof-rolled just prior to placement of subsequent lifts and/or asphalt. Particular attention should be paid to areas along curbs, above utility trenches, and adjacent to landscape islands, manholes, and storm drain inlets. Preparation of the base material should extend at least 18 inches behind curbs, or edge of pavements, whichever is greater.
3. Subgrade should not dry out or become saturated prior to pavement construction. The pavement subgrade should be thoroughly proof-rolled as outlined in Earthwork. Particular attention should be paid to areas along curbs, above utility trenches, and adjacent to manholes and storm drain inlets. Preparation of the moisture conditioned subgrade should extend at least 18 inches behind curbs, or edge of pavements, whichever is greater.



TYPICAL ROAD SECTION

N.T.S.



LAVONDE DRIVE SECTION (70' ROW)

N.T.S.

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD, BLDG A, SUITE 200
AUSTIN, TEXAS 78733
512-502-8333
TBPE FIRM REG. NO. F-18320

JOSHUA F. HENKE 92601 LICENSED PROFESSIONAL ENGINEER
9/11/2025

PROVENCE, PHASE 2, SECTION 2
17100 BLOCK HAMILTON POOL RD.
TRAVIS COUNTY, TX

GENERAL DETAILS SHEET 4

NO.	DATE	REVISIONS/CORRECTIONS	BY

DESIGNED BY: XX
DRAWN BY: XX
CHECKED BY: XX

Sheet 74 of 73

P:\Active Projects\2018 - 227 Provence\23-Phase_2_Sec_3\CAD\Construction Sheets\23_details_01.dwg 9/11/2025 3:51 PM

ATTACHMENT N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN

Masonwood HP II LLC, their successors or assigns is responsible for the inspection, maintenance, repair and retrofit, if necessary, of the permanent BMPs, the extended detention pond, within this project, as follows:

Maintenance Guidelines

Extended Detention Basins:

- *Inspections*. Basins should be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. When possible, inspections should be conducted during wet weather to dete1mine if the pond is meeting the target detention times. In particular, the extended detention control device should be regularly inspected for evidence of clogging, or conversely, for too rapid a release. If the design drawdown times are exceeded by more than 24 hours, then repairs should be scheduled immediately. The upper stage pilot channel, if any, and its flow path to the lower stage should be checked for erosion problems. During each inspection, erosion areas inside and downstream of the BMP should be identified and repaired or revegetated immediately.

- *Mowing*. The upper stage, side slopes, embankment, and emergency spillway of an extended detention basin must be mowed regularly to discourage woody growth and control weeds. Grass areas in and around basins should be mowed at least twice annually to limit vegetation height to 18 inches. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas. When mowing of grass is performed, a mulching mower should be used, or grass clippings should be caught and removed.

- *Debris and Litter Removal*. Debris and litter will accumulate near the extended detention control device and should be removed during regular mowing operations and inspections. Particular attention should be paid to floating debris that can eventually clog the control device or riser.

- *Erosion Control*. The pond side slopes, emergency spillway, and embankment all may periodically suffer from slumping and erosion, although this should not occur often if the soils are properly compacted during

construction. Regrading and revegetation may be required to connect the problems. Similarly, the channel connecting an upper stage with a lower stage may periodically need to be replaced or repaired.

- *Structural Repairs and Replacement*. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. These repairs should include patching of cracked concrete, sealing of voids, and removal of vegetation from cracks and joints. The various inlet/outlet and riser works in a basin will eventually deteriorate and must be replaced.

- *Signage*. To facilitate inspections and reporting of BMPs that are not functioning correctly, a legible sign must be placed at all extended detention ponds. The sign shall be located in plain view of the public and shall provide the name of the owner or operator, the Edwards Aquifer program ID for the project, and a telephone number where the party responsible for the maintenance of the BMP can be contacted.

- *Nuisance Control*. Standing water (not desired in an extended detention basin) or soggy conditions within the lower stage of the basin can create nuisance conditions for nearby residents. Odors, mosquitoes, weeds, and litter are all occasionally perceived to be problems. Most of these problems are generally a sign that regular inspections and maintenance are not being performed (e.g., mowing, debris removal, clearing the outlet control device).

- *Sediment Removal*. When properly designed, dry extended detention basins will accumulate quantities of sediment over time. Sediment accumulation is a serious maintenance concern in extended detention dry ponds for several reasons. First, the sediment gradually reduces available stormwater management storage capacity within the basin. Second, unlike wet extended detention basins (which have a permanent pool to conceal deposited sediments), sediment accumulation can make dry extended detention basins very unsightly. Third, and perhaps most importantly, sediment tends to accumulate around the control device. Sediment deposition increases the risk that the orifice will become clogged, and gradually reduces storage capacity reserved for pollutant removal. Sediment can also be resuspended if allowed to accumulate over time and escape through the hydraulic control to downstream channels and streams. For these reasons, accumulated sediment needs to be removed from the lower stage when sediment buildup fills 20% of the volume of the basin or at least every 10 years.

- *Grass Reseeding and Mulching*. A healthy dense grass should be

maintained in the channel and side slopes. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during swale establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established.

Batch Detention Basins:

- *Inspections.* Inspections should take place a minimum of twice a year. One inspection should take place during wet weather to determine if the basin is meeting the target detention time of 12 hours and a drawdown time of no more than 48 hours. The remaining inspections should occur between storm events so that manual operation of the valve and controller can be verified. The level sensor in the basin should be inspected and any debris or sediment in the area should be removed. The outlet structure and the trash screen should be inspected for signs of clogging. Debris and sediment should be removed from the orifice and outlet(s) as described in previous sections. Debris obstructing the valve should be removed. During each inspection, erosion areas inside and downstream of this BMP should be identified and repaired/revegetated immediately.

- *Mowing.* The basin, basin side-slopes, and embankment of the basin must be mowed to prevent woody growth and control weeds. A mulching mower should be used, or the grass clippings should be caught and removed. Mowing should take place at least twice a year, or more frequently if vegetation exceeds 18 inches in height. More frequent mowing to maintain aesthetic appeal may be necessary in landscaped areas.

- *Litter and Debris Removal.* Litter and debris removal should take place at least twice a year, as part of the periodic mowing operations and inspections. Debris and litter should be removed from the surface of the basin. Particular attention should be paid to floatable debris around the outlet structure. The outlet should be checked for possible clogging or obstructions and any debris removed.

- *Erosion control. T*he basin side slopes and embankment all may periodically suffer from slumping and erosion. To correct these problems, corrective action, such as regrading and revegetation, may be necessary. Correction of erosion control should take place whenever required based on the periodic inspections.

- *Nuisance Control.* Standing water or soggy conditions may occur in the basin. Some standing water may occur after a storm event since the valve may close with 2 to 3 inches of water in the basin. Some flow into the basin may also occur between storms due to spring flow and residential water use that

enters the storm sewer system. Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.).

- *Structural Repairs and Replacement.* With each inspection, any damage to structural elements of the basin (pipes, concrete drainage structures, retaining walls, etc.) should be identified and repaired immediately. An example of this type of repair can include patching of cracked concrete, sealing of voids, removal of vegetation from cracks and joints. The various inlet/outlet structures in a basin will eventually deteriorate and must be replaced.

- *Sediment Removal.* A properly designed batch detention basin will accumulate quantities of sediment over time. The accumulated sediment can detract from the appearance of the facility and reduce the pollutant removal performance of the facility. The sediment also tends to accumulate near the outlet structure and can interfere with the level sensor operation. Sediment shall be removed from the basin at least every 5 years, when sediment depth exceeds 6 inches, when the sediment interferes with the level sensor or when the basin does not drain within 48 hours. Care should be taken not to compromise the basin lining during maintenance.

- *Logic Controller*. The Logic Controller should be inspected as part of the twice yearly investigations. Verify that the external indicators (active, cycle in progress) are operating properly by turning the controller off and on, and by initiating a cycle by triggering the level sensor in the basin. The valve should be manually opened and closed using the open/close switch to verify valve operation and to assist in inspecting the valve for debris. The solar panel should be inspected and any dust or debris on the panel should be carefully removed. The controller and all other circuitry and wiring should be inspected for signs of corrosion, damage from insects, water leaks, or other damage. At the end of the inspection, the controller should be reset.

Vegetative Filter Strips:

- *Pest Management.* An Integrated Pest Management (IPM) Plan should be developed for vegetated areas. This plan should specify how problem insects and weeds will be controlled with minimal or no use of insecticides and herbicides.

- *Seasonal Mowing and Lawn Care*. If the filter strip is made up of turf grass, it should be mowed as needed to limit vegetation height to 18 inches, using a mulching mower (or removal of clippings). If native grasses are used, the filter may require less frequent mowing, but a minimum of twice annually. Grass clippings and brush debris should not be deposited on vegetated filter strip areas. Regular mowing should also include weed

control practices, however herbicide use should be kept to a minimum (Urbonas et al., 1992). Healthy grass can be maintained without using fertilizers because runoff usually contains sufficient nutrients. Irrigation of the site can help assure a dense and healthy vegetative cover.

- *Inspection*. Inspect filter strips at least twice annually for erosion or damage to vegetation; however, additional inspection after periods of heavy runoff is most desirable. The strip should be checked for uniformity of grass cover, debris and litter, and areas of sediment accumulation. More frequent inspections of the grass cover during the first few years after establishment will help to determine if any problems are developing, and to plan for long-term restorative maintenance needs. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Construction of a level spreader device may be necessary to reestablish shallow overland flow.

- *Debris and Litter Removal*. Trash tends to accumulate in vegetated areas, particularly along highways. Any filter strip structures (i.e. level spreaders) should be kept free of obstructions to reduce floatables being flushed downstream, and for aesthetic reasons. The need for this practice is determined through periodic inspection, but should be performed no less than 4 times per year.

- *Sediment Removal*. Sediment removal is not normally required in filter strips, since the vegetation normally grows through it and binds it to the soil. However, sediment may accumulate along the upstream boundary of the strip preventing uniform overland flow. Excess sediment should be removed by hand or with flat-bottomed shovels.

- *Grass Reseeding and Mulching*. A healthy dense grass should be maintained on the filter strip. If areas are eroded, they should be filled, compacted, and reseeded so that the final grade is level. Grass damaged during the sediment removal process should be promptly replaced using the same seed mix used during filter strip establishment. If possible, flow should be diverted from the damaged areas until the grass is firmly established. Bare spots and areas of erosion identified during semi-annual inspections must be replanted and restored to meet specifications. Corrective maintenance, such as weeding or replanting should be done more frequently in the first two to three years after installation to ensure stabilization. Dense vegetation may require irrigation immediately after planting, and during particularly dry periods, particularly as the egetation is initially established.

Sediment Disposal

Stormwater pollutants include a variety of substances that are deposited on pervious and impervious surfaces and then transported by rainfall. These contaminants include heavy metals, petroleum hydrocarbons, pesticides, and a variety of organic chemicals. Maintenance of BMP's frequently requires disposal of accumulated sediment and other material. These materials are normally classified as special wastes when disposed of in municipal landfills. Special waste is a waste that requires special handling at a Type I Municipal Solid Waste (MSW) landfill. The process to obtain authorization to dispose of a special waste begins with a request for approval called the "Request for Authorization for Disposal of Special Waste TCEQ Form 0152." The request is to the MSW permits section of the TCEQ for Executive Director· r review/approval.

Contact Information

The contact provided shall be responsible for maintenance of the BMPs during construction and until maintenance is formally relinquished to a secondary party. At that time, this plan shall be amended to include the name and contact information of the new responsible party.

Masonwood HP II LLC.
16314 Hamilton Pool Road
Austin, Texas 78738
512.306.8300 o
512.658.9700 c

ATTACHMENT O

PILOT-SCALE FIELD TESTING PLAN

No pilot-scale field testing plan is proposed with this project.

ATTACHMENT P

MEASURES FOR MINIMIZING SURFACE STREAM CONTAMINATION

Temporary and permanent BMPs have been designed to avoid or minimize surface stream contamination. No surface streams are present on site. Temporary BMP's include stabilized construction entrances, silt fence, and inlet protection. Permanent BMPs include revegetation of disturbed areas, extended/batch detention ponds, and rock rip-rap. Due to the efficiency of the BMP proposed, more than 80% of the increase in the TSS loadings are treated, in compliance with TCEQ standards. No groundwater is known to exist. Streams with no base-flow exist on-site.

The existing water quality pond is a stand-alone BMP with no secondary treatment and outfall at the south end of the property. Rock rip-rap is used at pond overflow locations to reduce velocity and also help return runoff to sheet flow conditions. The pond has been oversized in order to account for some areas that do not drain to the pond.

SWPPP Stormwater Pollution Prevention Plan for:

Provence Phase 2, Section 3
Travis County, Texas

TPDES General Permit TXR150000

Owner(s):

Masonwood HP II LLC
16314 Hamilton Pool Road
Austin, TX 78738
512-306-8300

SWPPP Contacts:

Primary Operator: (Contractor)

_____
_____
_____
_____
_____

Secondary Operator

_____
_____
_____
_____
_____

SWPPP Preparation Date:

08 / 01 / 2025

Estimated Project Dates:

Project Start Date: 08 / 01 / 2026
Project Completion Date: 03 / 08 / 2027

Contents

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING 8
1.1 Project/Site Information 8
1.2 Contact Information/Responsible Parties 9
1.3 Soils, Slopes, Vegetation, and Current Drainage Patterns 11
1.4 Receiving Waters 12
1.5 Site Features and Sensitive Areas to be Protected 13
1.6 Endangered Species Certification 13
1.7 Maps 14
SECTION 2: CONSTRUCTION ACTIVITIES AND SITE MANAGEMENT PRACTICES 14
2.1 Nature and Sequence of Construction Activity 15
2.2 Construction Site Estimates 16
2.3 Phasing and Construction Sequence Plan 17
2.4 Potential Sources of Pollution 20
SECTION 3: GRADING AND EROSION/SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs) 22
3.1 Minimize Disturbed Area and Protect Natural Features and Soil 22
3.2 Control Stormwater Flowing onto and through the Project 22
3.3 Stabilize Soils 23
3.4 Protect Slopes 24
3.5 Protect Storm Drain Inlets 25
3.6 Establish Perimeter Controls and Sediment Barriers 25
3.7 Retain Sediment On-Site 27
3.8 Establish Stabilized Construction Entrances 27
SECTION 4: GOOD HOUSEKEEPING BMPs 29
4.1 Material Handling and Waste Management 29
4.2 Establish Proper Material Staging Areas 30
4.3 Designate Washout Areas 30
4.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices 31
4.5 Control Equipment/Vehicle Washing 32
4.6 Spill Prevention and Control Plan 32
4.7 Any Additional BMPs 33
4.8 Allowable Non-Stormwater Discharge Management 33
SECTION 5: SELECTING POST-CONSTRUCTION BMPs 35
SECTION 6: INSPECTIONS 36
6.1 Inspections 36
6.2 Delegation of Authority 37
6.3 Corrective Action Log 39
SECTION 7: RECORDKEEPING AND TRAINING 40
7.1 Recordkeeping 40
7.2 Log of Changes to the SWPPP 41
7.3 Training 42
SECTION 8: PERMANENT STABILIZATION 43
SECTION 9: CERTIFICATION AND NOTIFICATION 44
SWPPP APPENDICES 1

SECTION 1: SITE EVALUATION, ASSESSMENT, AND PLANNING

1.1 Project/Site Information

Project/Site Name: Provence Phase 2 Section 3

Project Street/Location: The site is located in western Travis County, on the north side of Hamilton Pool Road, 0.5 miles north (west) of the Hamilton Pool Road/Crumley Ranch Road intersection

City: Austin State: Texas ZIP Code: 78738

County: Travis

Latitude/Longitude

Latitude: 30°18'28"N

Longitude: 98°01'38"W

Method for determining latitude/longitude:

☐ USGS topographic map (specify scale:_____) ☐ EPA Web site ☐ GPS

☒ Other (please specify): Google Maps

Is the project located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation, indicate "not applicable."

not applicable

Is this project considered a federal facility? ☐ Yes ☒ No

TPDES project or permit tracking number*: _____

**(This is the unique identifying number assigned to your project by your permitting authority after you have applied for coverage under the appropriate Texas Pollutant Discharge Elimination System (TPDES) construction general permit.)*

1.2 Contact Information/Responsible Parties

Operator(s):
Primary Operator (Contractor):
Name:
Address:
City/State/Zip:
Phone:
Fax/Email:

Secondary Operator (Owner):
Masonwood HP II LLC.
16314 Hamilton Pool Road
Austin, Texas 78738
512-306-8300

FOR CONTRACTOR (to be completed when bid/award complete):

Project Manager(s) or Site Supervisor(s):
Insert Company or Organization Name:
Insert Name:
Insert Address:
Insert City, State, Zip Code:
Insert Telephone Number:
Insert Fax/Email:
Insert area of control (if more than one operator at site) :
Repeat as necessary

FOR CONTRACTOR (to be completed when bid/award complete):

SWPPP Contact(s):
Insert Company or Organization Name:
Insert Name:
Insert Address:
Insert City, State, Zip Code:
Insert Telephone Number:
Insert Fax/Email:
Insert area of control (if more than one operator at site) :
Repeat as necessary
Certification:

This SWPPP was Prepared by:

Moody Engineering, Inc.
Alan Putnam, P.E.
9225 Bee Caves Road
Bldg. A, Ste. 200
Austin, Texas 78733
(512) 502-8333

FOR CONTRACTOR (to be completed when bid/award complete):

Emergency 24-Hour Contact:

Insert Company or Organization Name:
Insert Name:
Insert Title:
Insert Telephone Number:
Insert Cell Phone Number:

Subcontractor(s):

Insert Name:
Insert Title:
Insert Street Address:
Insert City, State, Zip:
Insert Telephone Number:
Insert Cell Phone Number:

1.3 Soils, Slopes, Vegetation, and Current Drainage Patterns

Soil type(s):

The project alignment runs through four primary soil types; each listed below starting at the south end of the project area to the north end.

BID	Brackett-Rock outcrop complex, 1 to 12 percent slopes	Well drained with a high runoff class	Hydrologic Soil Group: D
TaD	Tarrant soils, 5 to 18 percent slopes	Well drained with a very high runoff class	Hydrologic Soil Group: D
VoD	Volatile silty clay loam, 1 to 8 percent slopes	Well drained with a high runoff class	Hydrologic Soil Group: C

As indicated in the table above, the majority of soils likely to be encountered are well drained and have a high runoff potential.

This information was obtained from the US Department of Agriculture Natural Resource Conservation Service (USDA-NRCS) Web Soil Survey.

Slopes:

The majority of existing slopes within the project range are in the steep classification (over 7%), according to Table 2-1 in the City of Austin Drainage Criteria Manual. Slopes range from approximately 3% to 10%. Most existing slopes will be maintained at post construction conditions.

Drainage Patterns:

The existing drainage patterns within the limits of construction generally slope to the northeast. There is offsite drainage coming onto this site that will be routed around the site via channels and/or berms. Within the proposed limits of construction, overland flow will drain to streets where it will be captured into a storm sewer system that will transport it to two water quality ponds for the two extended detention drainage areas.

Vegetation:

The project area is located in the eastern side of the Edwards Plateau region in southwestern Travis County. It is generally rangeland and/or pastureland with a mix of hardwood trees, the majority being Live Oak. Soils are mostly shallow and well drained.

1.4 Receiving Waters

Description of receiving waters:
Little Barton Creek (TCEQ Segment ID# 1430B), confluent with Barton Creek (TCEQ Segment ID# 1430), located in the Colorado River Basin.

Description of storm sewer systems:
Within the proposed limits of construction, overland flow will drain to streets where it will be captured into a storm sewer system that will transport it to three water quality ponds for the three drainage areas.

Description of impaired waters or waters subject to TMDLs:
As of the 2016 Texas Integrated Report for the Clean Water Act, Little Barton Creek (TCEQ Segment ID# 1430B) is not considered impaired.

1.5 Site Features and Sensitive Areas to be Protected

Describe unique features that are to be preserved:
Trees will be preserved where possible on the lots and in the water quality pond areas. No other unique features are located within the site.

Describe critical environmental features (CEF) that are to be preserved:
No critical environmental features were identified in the project area.

Describe measures to protect these features:
Protection measures such as tree protection fencing will be installed to guard against impacts from constructions activities. Temporary and permanent water quality controls and best management practices will be implemented as described in Section 3.

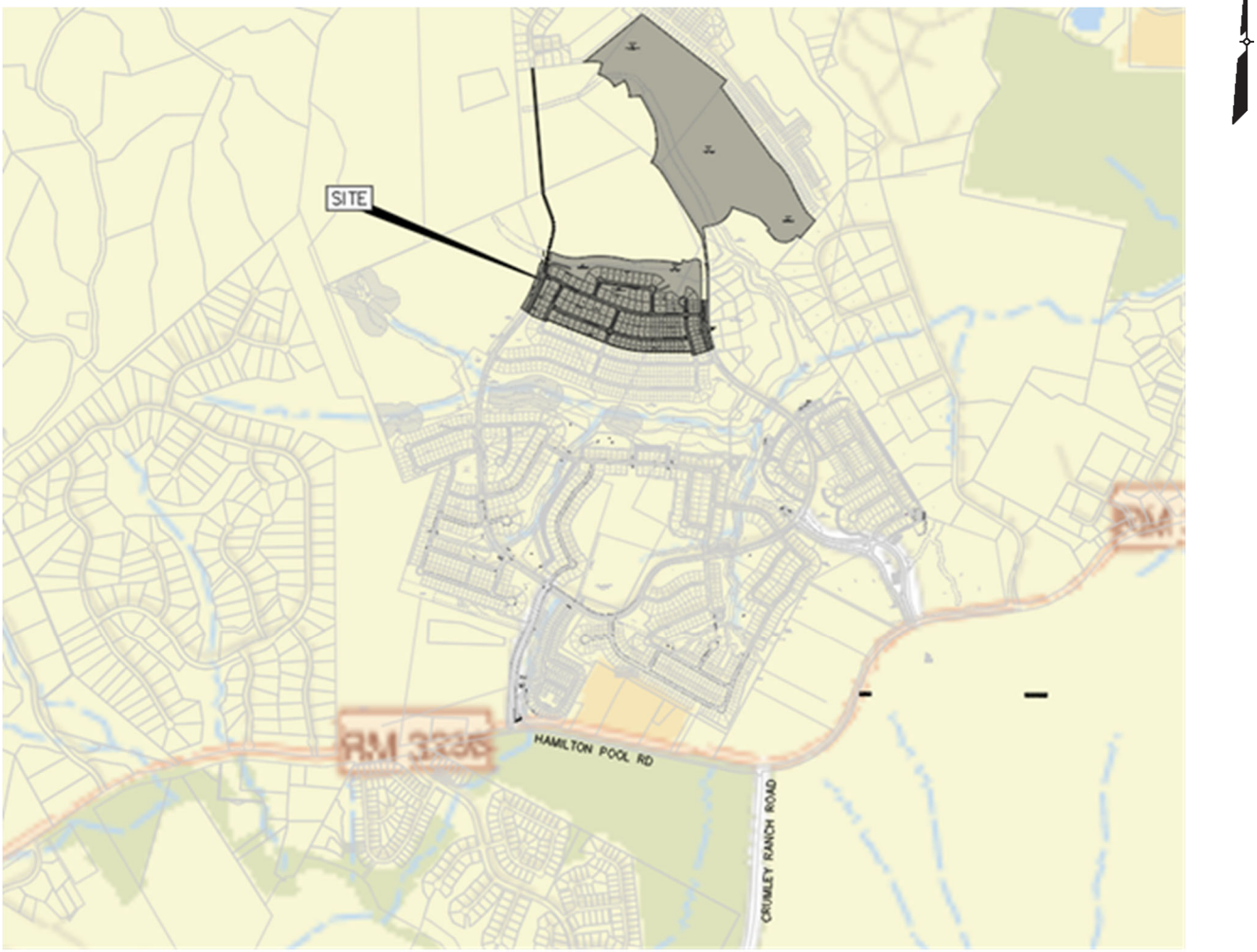
1.6 Endangered Species Certification

Are endangered or threatened species and critical habitats on or near the project area?

☐ Yes ☒ No

Describe how this determination was made:
According to an assessment performed by Horizon Environmental Services, Inc. in January 2107, titled Threatened and Endangered Species Habitat Assessment Hatchett Property aka Masonwood Development, that development on the site would have “no affect” on any of the federally listed threatened/endangered (T/E) species that occur in Travis County. The report also details a list of various T/E species found in Travis County and states that no portion of the subject site exhibits preferred habitat characteristics of the species.

1.7 Maps



SECTION 2: CONSTRUCTION ACTIVITIES AND SITE MANAGEMENT PRACTICES

2.1 Nature and Sequence of Construction Activity

Describe the general scope of the work for the project, major phases of construction, etc:

The scope of work for this Project includes subdivision improvements for 126 single family homes. These improvements consist of paved streets with curb and gutter, wastewater lines and services, water lines and services, storm sewer system, and three water quality extended detention ponds.

Erosion controls such as silt fence will be installed prior to construction. The water quality ponds will be excavated first to serve as temporary water quality controls during construction. Streets will be rough cut, then utilities installed, then the streets will be constructed. The water quality ponds will be finished out and then the entire site will be revegetated. Silt fence will be removed upon full restoration of the site.

The Project consists of approximately:

- 7,200 LF of 29-ft wide paved streets with curb and gutter
- 1,250 LF of 31-ft wide paved streets with ribbon curb
- 1,270 LF of 16” PVC 900 water line
- 6,354 LF of 8” PVC C900 water line
- 5,844 LF of 8” SDR-26 PVC wastewater line
- 22 wastewater manholes
- 63 water services
- 63 wastewater services
- 4,176 LF of RCP storm sewer with sizes from 18-in to 42-in
- 37 concrete curb inlets
- 11 storm sewer manhole
- 2 extended detention water quality ponds

What is the function of the construction activity?

☐ Flood Control, Land Reclamation

☒ Residential ☐ Commercial ☐ Industrial ☐ Road Construction ☐

☐ Other (please specify):

Estimated Project Start Date: 08 / 21 / 2026

Estimated Project Completion Date: 03 / 08 / 2027

2.2 Construction Site Estimates

The following are estimates of the construction site.

Total project area:	39.15 acres
Construction site area to be disturbed:	39.15 acres
Percentage impervious area before construction:	0 %
Rational method runoff coefficient before construction (25-yr):	C = 0.42
Percentage impervious area after construction:	34.46 %
Rational method runoff coefficient after construction (25-yr):	C = 0.54

Demonstration of how spoils will be handled during construction:

FILL SOIL MANAGEMENT AND DISPOSAL PRACTICES
Excavated fill material from the construction activities (topsoil, subsoil, rock, etc.) will be handled using the following practices to minimize exposure to runoff:

- **CONTINUOUS REMOVAL OF EXCAVATED FILL** – Fill material not reused on site will be removed continuously as it is excavated (or by end of the work day) and taken to an approved disposal site.

- **TEMPORARY STOCKPILING** – Fill material temporarily stockpiled in place as excavation occurs will be located in areas protected by E&S controls described within appropriate E&S control plan sheets and placed in a manner that uses existing grades to enhance sediment control (i.e., placing stockpiles on upslope side of excavations, etc.).

- **REMOVAL AND PERMANENT DISPOSAL** – Fill soil will be removed to the designated storage or permanent disposal area(s) as soon as practicable.

- **PROHIBITED DISPOSAL MATERIALS** – No material classified as solid waste, industrial waste, or hazardous waste or hazardous materials shall be mixed or buried with the fill material.

- **OFF-SITE DISPOSAL PERMITs** – Off site permanent fill disposal may require additional development permits, which will be the responsibility of the contractor as such areas are not included under the original permitting of this construction site.

2.3 Phasing and Construction Sequence Plan

GENERAL CONSTRUCTION SEQUENCE:

THE OWNER AND PRIMARY OPERATOR MUST FOLLOW THIS BASIC SEQUENCE OF CONSTRUCTION FOR EACH SUBDIVISION DEVELOPMENT. WITHIN THE FOLLOWING SEQUENCE OF CONSTRUCTION ARE LISTED PRIORITY INSPECTIONS THAT THE OWNER AND PRIMARY OPERATOR MUST REQUEST FROM A REPRESENTATIVE OF TRAVIS COUNTY'S STORM WATER MANAGEMENT PROGRAM INSPECTION TEAM. EACH PRIORITY INSPECTION MUST BE REQUESTED ON-LINE THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY. THE PRIORITY INSPECTIONS IN THIS EXHIBIT ARE CONSISTENT WITH THE PRIORITY INSPECTIONS FOUND IN THE CUSTOMER PORTAL FOR THE PROJECT. FOR ASSURANCE PURPOSES, A SECOND REQUEST TO TRAVIS COUNTY IS STRONGLY ENCOURAGED BY ADDITIONALLY SENDING AN E-MAIL TO THE FOLLOWING ADDRESS: ENV-INSPECT@TRAVISCOUNTYTX.GOV. THE SEQUENCE FOR ITEMS 1-4 AND ITEMS 17-22 MUST NOT BE ALTERED, BUT THE SEQUENCE FOR ITEMS 5-16 MAY BE MODIFIED WITH THE WRITTEN APPROVAL OF THE COUNTY.

1. ESC INSTALLATION. INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROLS (ESC) AND TREE PROTECTION MEASURES IN ACCORDANCE WITH THE APPROVED ESC PLAN SHEETS AND THE SWP3.

A. HAVE A QUALIFIED INSPECTOR (AS SPECIFIED IN SECTION 482.934(C)(3) OF THE TRAVIS COUNTY CODE) INSPECT THE TEMPORARY EROSION AND SEDIMENT CONTROLS AND PREPARE A CERTIFIED SWP3 INSPECTION REPORT REGARDING WHETHER THE TEMPORARY EROSION AND SEDIMENT CONTROLS WERE INSTALLED IN CONFORMANCE WITH THE APPROVED PLANS;

B. UPLOAD THE QUALIFIED INSPECTOR'S CERTIFIED SWP3 INSPECTION REPORT TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY; AND

C. REQUEST A MANDATORY PRE-CONSTRUCTION MEETING WITH TRAVIS COUNTY THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY GIVING AT LEAST 3 BUSINESS DAYS NOTIFICATION.

2. PRE-CONSTRUCTION MEETING AND ESC INSPECTION. HOLD A MANDATORY PRE-CONSTRUCTION MEETING THAT ADDRESSES THE ITEMS IN EXHIBIT 482.950 AND THE ESC PRE-CONSTRUCTION INSPECTION BY THE COUNTY AND OBTAIN COUNTY'S APPROVAL TO START CONSTRUCTION. (PRIORITY INSPECTION)

3. INSPECT FOR COMPLIANCE WITH SWP3 AND ESC PLAN. MAINTAIN AND INSPECT THE SWP3 CONTROLS AND PREPARE AND UPLOAD A WEEKLY CERTIFIED SWP3 INSPECTION REPORT THAT INCLUDES THE CONTENTS LISTED IN EXHIBIT 482.951 TO THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY.

4. CONSTRUCT SEDIMENT BASIN(S). CONSTRUCT ANY STORM WATER POND(S) FIRST, WHENEVER APPLICABLE, TO BE FUNCTIONAL AS CONSTRUCTION SEDIMENT BASIN(S) BEFORE GRADING AND EXCAVATING THE ENTIRE SITE, AS FOLLOWS:

A. CLEAR, GRUB, AND EXCAVATE ONLY THE SITE AREAS AND CUT AND FILL QUANTITIES NECESSARY TO CONSTRUCT THE POND(S) IN ACCORDANCE WITH THESE APPROVED PLANS AND THE MINIMUM STANDARDS DESCRIBED IN THE SWP3 AND ESC PLAN SHEET NOTES FOR THE TEMPORARY SEDIMENT BASIN EMBANKMENTS, WALLS, INFLOWS, OUTFALLS, DRAINAGE CONVEYANCE MEASURES, SEDIMENT CONTROLS, AND STABILIZATION.

B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE TEMPORARY SEDIMENT BASIN(S) BEFORE PROCEEDING FURTHER IN THE SEQUENCE OF CONSTRUCTION. (PRIORITY INSPECTION)

5. CONSTRUCT SUBDIVISION IMPROVEMENTS. BEGIN THE PRIMARY SUBDIVISION CLEARING, EXCAVATION, AND CONSTRUCTION ACTIVITIES AND CONTINUE THE SWP3 AND ESC PLAN IMPLEMENTATION AND MAINTENANCE PER THE APPROVED PLANS.

6. ROUGH GRADE STREETS.

7. INSTALL UTILITIES TO BE LOCATED UNDER THE PROPOSED PAVEMENT.

8. BEGIN INSTALLATION OF STORM SEWER LINES.

9. REGRADE STREETS TO SUBGRADE.

10. PERFORM TEMPORARY STABILIZATION IN ALL DISTURBED AREAS THAT HAVE CEASED CONSTRUCTION ACTIVITIES FOR 14 DAYS OR LONGER.

11. PERFORM PERMANENT SITE STABILIZATION/RE-VEGETATION IMMEDIATELY IN ALL SITE AREAS AT FINAL PLAN GRADE AND IN ALL SITE AREAS SPECIFIED FOR PHASED RE-VEGETATION.

12. COMPLETE UNDERGROUND UTILITY CROSSINGS ON ALL STREETS.

13. INSTALL CURB AND GUTTER.

14. LAY FINAL BASE COURSE MATERIAL.

15. INSTALL ALL TRAFFIC CONTROL SIGNING, STRIPING, AND PAVEMENT MARKERS.

16. COMPLETE ALL UNDERGROUND INSTALLATIONS WITHIN THE RIGHT-OF-WAY.

17. COMPLETE PERMANENT WATER QUALITY CONTROLS. BEGIN COMPLETION OF PERMANENT WATER QUALITY CONTROL(S) AND INSTALL THE UNDERDRAIN PER APPROVED PLANS, WHEN APPLICABLE.

A. REMOVE CONSTRUCTION SEDIMENT, RE-ESTABLISH THE BASIN SUBGRADE, AND INSTALL UNDERDRAIN PIPING.

B. REQUEST COUNTY INSPECTION AND OBTAIN COUNTY'S WRITTEN APPROVAL OF THE UNDERDRAIN PIPING INSTALLATION AND ASSOCIATED CONSTRUCTION

MATERIALS (AGGREGATE, FILTER MEDIA, ETC.) BEFORE COVERING THE UNDERDRAIN AND PROCEEDING WITH CONSTRUCTION OF THE CONTROL. (PRIORITY INSPECTION)

18. COMPLETE FINAL SITE STABILIZATION INCLUDING STABILIZATION OF ALL DISTURBED SUBDIVISION LOTS STILL UNDER THE SWP3 AND ESC PLAN OF THE PRIMARY OPERATOR FOR THE SUBDIVISION STREET AND DRAINAGE CONSTRUCTION.

19. PROVIDE ENGINEER'S CONCURRENCE LETTER THROUGH THE MYPERMITNOW.ORG CUSTOMER PORTAL FOR TRAVIS COUNTY WHEN CONSTRUCTION IS SUBSTANTIALLY COMPLETE AND REQUEST A FINAL INSPECTION BY TRAVIS COUNTY.

20. PERFORM A FINAL INSPECTION WITH THE COUNTY AND PREPARE A PUNCH LIST WITH REMAINING ITEMS THAT NEED TO BE COMPLETED FOR PROJECT ACCEPTANCE. (PRIORITY INSPECTION)

21. OBTAIN A CERTIFICATE OF COMPLIANCE FOR FINAL STABILIZATION FROM THE COUNTY WHEN ALL FINAL INSPECTION PUNCH LIST ITEMS ARE FINISHED AND FINAL SITE STABILIZATION AND REMOVAL OF TEMPORARY SEDIMENT CONTROLS IS COMPLETE. (PRIORITY INSPECTION)

A. PROVIDE SEPARATE PERMIT DOCUMENTATION FOR ANY SUBDIVISION LOTS NOT STABILIZED AS PART OF THE FINAL SUBDIVISION STABILIZATION PLAN, IF NECESSARY – INCLUDING SEPARATE COUNTY DEVELOPMENT PERMIT(S), SWP3 NOTICE(S), ESC PLAN(S).

B. PROVIDE A DEVELOPERS CONTRACT, IF NECESSARY, IF ALL ITEMS ARE COMPLETE EXCEPT RE-VEGETATION COVERAGE AND CONDITIONAL ACCEPTANCE IS REQUESTED. REQUEST RE-INSPECTION WHEN RE-VEGETATION COVERAGE IS COMPLETE.

22. RECEIVE A CONDITIONAL ACCEPTANCE FROM TRAVIS COUNTY TO BEGIN THE CONSTRUCTION WARRANTY PERIOD WHEN ALL PUNCH LIST ITEMS ARE COMPLETE. (PRIORITY INSPECTION).

2.4 Potential Sources of Pollution

Potential sources of sediment to stormwater runoff:

During excavation, grading, and revegetation activities, improper installation and/or maintenance of the E&S controls could result in sediment being conveyed with stormwater runoff. In addition, construction vehicles exiting the site are potential sources where sediment can be conveyed with stormwater runoff.

Potential pollutants and sources, other than sediment, to stormwater runoff:

Industrial materials and products indicated below (**X**) may be present on site at some time during the construction activities. Spills or improper use of these substances can cause soil contamination and result in storm water pollution when mixed with runoff. **(Contractor to add to this list as necessary)**

X	Concrete, grout mix	**X**	Diesel fuel		Lime
X	Fertilizer	**X**	Gasoline		
	Pesticides	**X**	Motor oil		
X	Herbicides	**X**	Hydraulic and brake fluid		
X	Batteries	**X**	Liquid asphalt emulsion		
X	Cleaning solvents	**X**	Hot mix asphalt - HMAC		
X	Paint	**X**	Cold mix asphalt		

A log form to keep track of when materials are delivered and removed from the site is included in Appendix F.

Pollution control procedures and devices:

GENERAL MATERIALS MANAGEMENT PRACTICES

The following practices will be used for all industrial materials and products present on site to reduce the risk of spills or other accidental exposure of these substances to storm water:

LIMIT INVENTORY – Efforts will be made to store only enough product required for the job, and limit extended storage time of unused materials on-site by scheduling deliveries just prior to actual need.

SECURE STORAGE - All materials stored onsite will be in a secured location, in an orderly manner, under a roof or other enclosure where possible, protected from rainfall and spillage.

ORIGINAL CONTAINERS - Products will be kept in their original containers with the original manufacturers' label and Material Safety Data Sheets (MSDS) retained and followed.

CONTAINER AND SURPLUS MATERIALS DISPOSAL - Whenever possible, all of a product will be used before disposing of the container. If surplus product must be disposed of, manufacturers' or State required methods for proper disposal shall be followed.

INSPECTION AND TRAINING - The site operator superintendent (s) will inspect regularly and inform site workers to ensure proper use, storage, and disposal of industrial products and materials.

PETROLEUM PRODUCT PRACTICES

ON-SITE STORAGE – Any on-site storage of diesel, gasoline, and petroleum oil products will be aboveground, protected by secondary containment, and in compliance with all applicable TCEQ regulations 30 T.A.C., Chapter 334, Underground/Aboveground Storage Tanks and Fire Code regulations.

MOBILE STORAGE - Fuel and automotive fluids service for operator vehicles not provided on-site will be provided by mobile vehicles meeting all hazardous materials storage and transportation regulations.

VEHICLE MAINTENANCE - All onsite vehicles will be monitored for oil and fluids leaks and receive regular preventive maintenance to reduce the chance of oil leaks, and any spills cleaned up.

LIQUID ASPHALT APPLICATIONS - Liquid asphalt emulsion “prime” coat for unpaved roads or HMAC paving operations will be applied no later than 24 Hrs prior to forecasted storm events to prevent runoff contamination. Asphalt substances will be applied according to the manufacturer’ recommendations.

SPILL PREVENTION AND CONTROL PRACTICES

SPILL REGULATIONS - Spill prevention, control, cleanup, and reporting shall comply with TCEQ regulations 30 T.A.C., Chapter 327 Spill Prevention and Control and any local regulations.

SPILL PROCEDURES- The primary operator (CONTRACTOR) shall supply and attach to this SWPPP a “Spill Prevention and Control Plan” specific to the materials stored and used on site.

Spill cleanup procedures and training are the responsibility of the primary operator (CONTRACTOR). Personal safety guidelines shall be clearly posted and available for operator personnel in the event of a spill. The spill prevention plan will be adjusted as necessary to include measures to prevent particular types of spills from reoccurring.

SPILL CLEAN UP MATERIALS - Materials and equipment for spill cleanup, such as absorbent, rags, sand, sawdust, containers, etc., will be available in vehicles or at the materials storage area onsite. All spills will be cleaned up immediately and waste residue disposed of properly.

SPILL REPORTING – Any reportable quantities of spills of hazardous materials shall be reported to the City of San Marcos and appropriate TCEQ and/or local officials as required by law. If the responsible party is uncertain whether the quantity is reportable, the City of San Marcos Inspector shall be notified and their direction followed.
For further direction, see http://www.tceq.state.tx.us/compliance/er/spill_rq.html

SECTION 3: GRADING AND EROSION/SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs)

3.1 Minimize Disturbed Area and Protect Natural Features and Soil

Site disturbance will be contained within the site's Limits of Construction. Temporary E&S controls will be installed as shown on the Erosion/Sedimentation Plans in the plans to minimize site disturbance.

3.2 Control Stormwater Flowing onto and through the Project

BMP Description: **Silt fence** will be installed to control flows through the site during construction. A line of silt fence will be placed along portions of the up-gradient limits of construction to divert off-site (outside of LOC) run-on around the construction activities.	
Installation Schedule:	Silt fence will be installed prior to initiation of construction activities.
Maintenance and Inspection:	Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season. Repair undercut silt fences. Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. Silt fences that are damaged and become unsuitable for the intended purpose should be removed from the site of work, disposed of, and replaced with new silt fence barriers. Sediment that accumulates in the silt fence must be periodically removed in order to maintain silt fence effectiveness. Sediment should be removed when the sediment accumulation reaches approximately one-half of the fence height (one foot) on the silt fence. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location. Upon removal of silt fence, accumulated sediment must also be removed and disposed of properly. Silt fences should be left in place until the upstream area is permanently stabilized. Until then, the silt fence must be inspected and maintained. Holes, depressions, or other ground disturbance caused by the removal of the silt fences should be backfilled and repaired.
Responsible Staff:	Contractor

3.3 Stabilize Soils

BMP Description: **Seeding** per Erosion Control Notes in plans will be used to stabilize exposed soils where construction activities have permanently ceased or be temporarily halted for 14 days or longer.

☒ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to begin within 14 days of end of construction activity.
Maintenance and Inspection:	Weekly and after storm events until a dense cover of vegetation has become established, all seeded areas shall be inspected for failures and reseeded as necessary.
Responsible Staff:	Contractor

BMP Description: **Mulching** will be used to stabilize exposed soils flatter than 3:1 where construction activities have temporarily halted for 5 days or longer.

☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The mulched area shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately, with additional mulching material placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it must be replaced or repaired
Responsible Staff:	Contractor

BMP Description: **Sprinkling for Dust Control:** Sprinkling will be applied to stock pile areas, active excavation sites, and along interior roads as necessary to minimize dust generation. Dust control will be implemented as needed once soil disturbance activities have been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of water at a rate of 300 gallons per acre or less will be performed by a mobile pressure-type distributor truck no more than three times a day during the months of May–September and once per day during the months of October–April or whenever the dryness of the soil warrants it.

☐ ***Permanent***	☒ ***Temporary***
Schedule:	Sprinkling shall occur as necessary to minimize dust generation.
Responsible Staff:	It shall be the Contractor's continuous responsibility at all times, including nights, holidays and weekends until acceptance of the project by the City, to maintain the specified areas relatively free of dust in a manner that will cause the least inconvenience to the public.

3.4 Protect Slopes

BMP Description: **Mulching** will be used to stabilize exposed soils on slopes flatter than 3:1 where construction activities have temporarily halted for 5 days or longer.	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The mulched area shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately, with additional mulching material placed on top of the mulch to reach the recommended thickness. When the mix is decomposed, clogged with sediment, eroded or ineffective, it must be replaced or repaired
Responsible Staff:	Contractor

BMP Description: **Soil Retention Blanket:** will be used to stabilize exposed soils on slopes steeper than 3:1 where construction activities have temporarily halted for 5 days or longer.	
☒ ***Permanent***	☒ ***Temporary***
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The blanketed areas shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately and specified by the manufacturer for repairs.
Responsible Staff:	Contractor

3.5 Protect Storm Drain Inlets

Existing and proposed storm drain inlets present within and adjacent to the limits of construction will be protected with filter curb inlet protection.

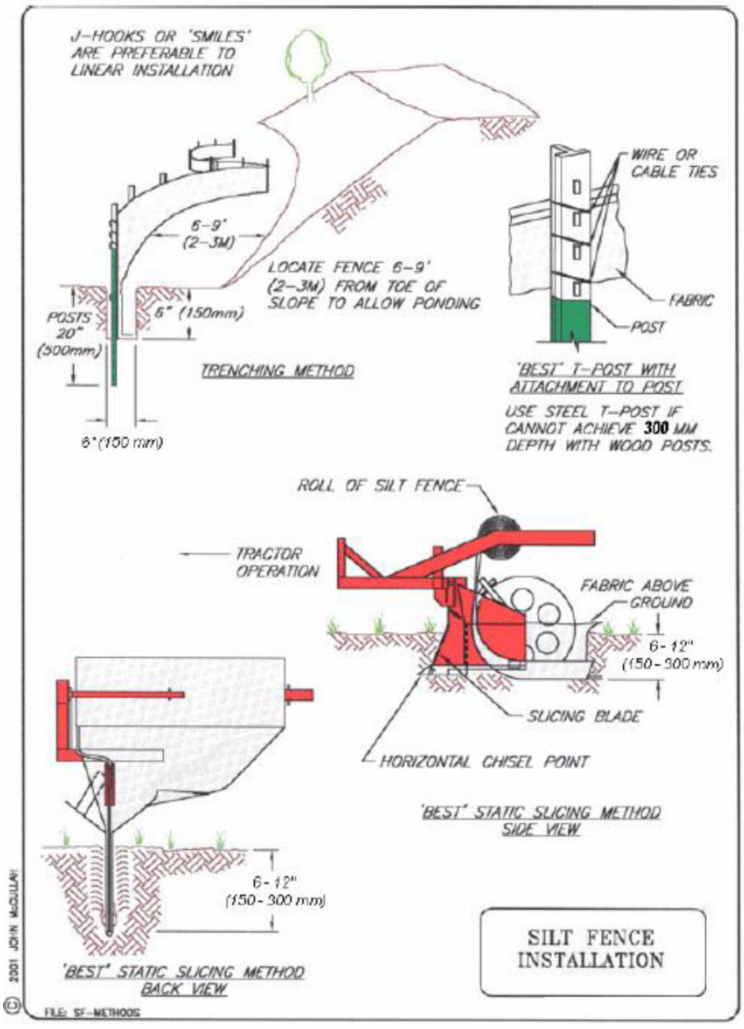
3.6 Establish Perimeter Controls and Sediment Barriers

BMP Description: **Silt fence** per Detail 642S-1 will be installed in appropriate lengths and spacing to prevent sediment escape from disturbed areas within the Limits of Construction. See Erosion Control Sheets of the approved plans for silt fence locations.	
☐ ***Permanent***	☒ ***Temporary***
Installation Schedule:	The perimeter silt fences will be installed prior to initiating construction activities.
Maintenance and Inspection:	Inspect BMPs prior to forecast rain, daily during extended rain events, after rain events, weekly during the rainy season, and at two-week intervals during the non-rainy season. Repair undercut silt fences where no longer trenched in at the toe. Repair or replace split, torn, slumping, or weathered fabric. The lifespan of silt fence fabric is generally 5 to 8 months. Silt fences that are damaged and become unsuitable for the intended purpose should be removed from the site of work, disposed of, and replaced with new silt fence barriers. Sediment that accumulates in the silt fence must be periodically removed in order to maintain silt fence effectiveness. Sediment should be removed when the sediment accumulation reaches approximately one-half of the fence height (one foot) on the silt fence. Sediment removed during maintenance may be incorporated into earthwork on the site or disposed at an appropriate location. Upon removal of silt fence, accumulated sediment must also be removed and disposed of properly. Silt fences should be left in place until the upstream area is permanently stabilized. Until then, the silt fence must be inspected and maintained. Holes, depressions, or other ground disturbance caused by the removal of the silt fences should be backfilled and repaired.
Responsible Staff:	Contractor

Maximum spacing between silt fences on slopes (also refer to plans)

Slope	Spacing Interval (ft)	Max. Drainage Area (SF) per 100 LF of silt fence
100:1 to 50:1 (1-2%)	500	25,000
50:1 to 30:1 (2-3.3%)	250	15,000
30:1 to 25:1 (3.3-4%)	150	12,000
25:1 to 20:1 (4-5%)	120	10,000
20:1 to 10:1 (5-10%)	100	5,000
10:1 to 5:1 (10-20%)	50	2,500
5:1 to 2:1 (20-50%)	10	1,000

Recommended Installation method per COA ECM 1.4.5.G:



Note: for further installation instructions, see Detail 642S-1 on the Erosion/Sedimentation and Tree Protection Details in the plans.

3.7 Retain Sediment On-Site

Sediment will be retained onsite through the practices and BMPs identified in Sections 3.2, 3.3, 3.4, 3.6, and 3.8 of this SWPPP.

3.8 Establish Stabilized Construction Entrances

BMP Description: **Stabilized Construction Entrances** will be installed per Standard Specification 641S at the point of exit from off-street staging areas to prevent the off-site transport of sediment by construction vehicles.	
Installation Schedule:	The stabilized construction entrances will be installed before construction begins area and will remain in place until revegetation replaces them as appropriate.
Maintenance and Inspection:	The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights of way. This may require periodic top dressing with additional stone as conditions demand and repair and/or clean out of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights of way must be removed immediately by contractor. When necessary, wheels must be cleaned to remove sediment prior to entrance onto public right of way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch or watercourse using approved methods.
Responsible Staff:	Contractor

3.9 Additional BMPs

If the contractor encounters groundwater during drilled shaft construction, the following shall be used to retain sediment on site.

BMP Description: **Sediment Trapping Devices for Excavation Pumpage**. A sediment trapping device to trap and filter sediment from water pumped from excavated areas. The sediment trapping device utilized by the primary operator (CONTRACTOR) shall treat groundwater encountered during excavation and tunneling activities to achieve the acceptable water quality standards. The location of sediment trap shall be convenient for clean out and disposal of the trapped sediment and shall minimize the interference with construction activities.

Installation Schedule:	No excavation may begin until submittal of dewatering sediment trapping devices and/or methods is approved and equipment is delivered to the site and fully functional.
Maintenance and Inspection:	As necessary to meet the applicable water quality requirements.
Responsible Staff:	Contractor

SECTION 4: GOOD HOUSEKEEPING BMPs

4.1 Material Handling and Waste Management

Waste Materials	
BMP Description: All waste materials will be collected and disposed of into metal trash dumpsters located within the limits of construction. Dumpsters will have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all local and state solid-waste management regulations. Only trash and construction debris from the site will be deposited in the dumpsters. All personnel will be instructed, during training sessions, regarding the correct procedure for disposal of trash and construction debris. Notices that state these practices will be posted in the onsite construction office and the individual who manages day-to-day site operations will be responsible for seeing that these practices are followed.	
Installation Schedule:	Trash dumpsters will be installed concurrent with the beginning of site work.
Maintenance and Inspection:	The dumpsters will be inspected weekly and immediately after storm events. The dumpster will be emptied weekly. If trash and construction debris are exceeding the dumpster capacity, the dumpsters will be emptied more frequently, or more dumpsters will be provided to meet the site's demands.
Responsible Staff:	Contractor

Hazardous Waste	
BMP Description: All hazardous waste materials such as oil filters, petroleum products, paint, and equipment maintenance fluids will be stored in structurally sound and sealed shipping containers in a hazardous-materials storage area located within the limits of construction and segregated from other non-waste materials. Secondary containment will be provided for all materials in the hazardous materials storage area and will consist of commercially available spill pallets. Additionally, all hazardous materials will be disposed of in accordance with federal, state, and municipal regulations. Hazardous waste materials will not be disposed of into the on-site dumpsters. All personnel will be instructed, during training sessions, regarding proper procedures for hazardous waste disposal. Notices that state these procedures will be posted in the office trailer and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.	
Installation Schedule:	Shipping containers used to store hazardous waste materials will be installed once the materials storage area has been installed for the site.
Maintenance and Inspection:	The hazardous materials storage areas will be inspected at least weekly and after storm events. The storage areas will be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Material Safety Data Sheets, material inventory, and emergency contact numbers will be maintained in the office trailer.
Responsible Staff:	Contractor

Sanitary Waste	
BMP Description: Temporary sanitary facilities (portable toilets) will be provided at the site. The toilets will be away from any concentrated flow paths and traffic flow and will have collection pans underneath as secondary containment.	
Installation Schedule:	The portable toilets will be installed concurrent with the beginning of site work.
Maintenance and Inspection:	All sanitary waste will be collected from the portable toilets a minimum of weekly or as required. The toilets will be inspected weekly for evidence of leaking holding tanks. Toilets with leaking holding tanks will be removed from the site immediately and replaced.
Responsible Staff:	Contractor

4.2 Establish Proper Material Staging Areas

Combined Staging Area and Materials Storage Area	
BMP Description: Construction equipment and maintenance materials will be stored at the combined staging area and materials storage areas. Large items will be stored in the open in the storage area. Such materials will be elevated to minimize contact with runoff.	
Installation Schedule:	The combined staging and materials storage area will be installed before any infrastructure is constructed at the site.
Maintenance and Inspection:	Storage areas will be inspected weekly and after storm events. Storage areas will be kept clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners will be repaired or replaced as needed to maintain proper function.
Responsible Staff:	Contractor

4.3 Designate Washout Areas

Concrete Washout
BMP Description: A concrete washout system will be installed with sufficient quantity and volume to contain all liquid and concrete waste generated by the washout operations. Concrete pours will not be conducted during or before an anticipated storm event. All excess concrete and concrete washout slurries from concrete mixer trucks and chutes will be discharged to the washout area or hauled off-site for disposal. When the temporary washout areas are no longer needed for the construction project, the hardened concrete and materials used to construct the areas will be removed and disposed of according to the maintenance section below and the washout areas will be backfilled, graded and stabilized with erosion controls.

Installation Schedule:	The washout areas will be constructed before they are required by construction activities. Contractor is to obtain Engineer's approval of washout location at least 2 weeks before installation.
Maintenance and Inspection:	The washout areas will be inspected daily to ensure that all concrete washing is being discharged into the washout area and to identify when concrete wastes need to be removed. The washout areas will be cleaned out once the area is filled to 75 percent of the holding capacity. Once the area's holding capacity has been reached the concrete wastes will be allowed to harden, the concrete will be broken up, removed, and properly disposed of.
Responsible Staff:	Contractor

4.4 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

Vehicle/Equipment Fueling and Maintenance

BMP Description: Several types of vehicles and equipment will be used on-site throughout the project, including graders, scrapers, excavators, loaders, paving equipment, rollers, trucks and trailers, backhoes, and forklifts. All major equipment/vehicle fueling and maintenance will be performed off-site. When vehicle fueling must occur on-site, the fueling activity will occur in the staging area. Only minor equipment maintenance will occur on-site. All equipment fluids generated from maintenance activities will be disposed of into designated drums stored on spill pallets in accordance with Section 4, Part 4.1. Absorbent, spill-cleanup materials and spill kits will be available at the combined staging and materials storage area. Drip pans will be placed under all equipment receiving maintenance and vehicles and equipment parked overnight.

Fueling and maintenance of equipment and/or vehicles shall not occur within 50 feet of the top of the creek bank.

Installation Schedule:	Equipment and vehicle maintenance and fueling practices will be implemented at the beginning of construction.
Maintenance and Inspection:	Inspect equipment/vehicle storage areas and fuel tank weekly and after storm events. Vehicles and equipment will be inspected daily when stored on site. Leaks will be repaired immediately, or the problem vehicle(s) or equipment will be removed from the project site. Keep ample supply of spill-cleanup materials on-site and immediately clean up spills and dispose of materials properly.
Responsible Staff:	Contractor

4.5 Control Equipment/Vehicle Washing

BMP Description: All equipment and vehicle washing will be performed off-site.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

4.6 Spill Prevention and Control Plan

Spill Prevention and Control Procedures

BMP Description:

1. The primary operator (CONTRACTOR) shall supply and attach to this SWPPP a "Spill Prevention and Control Plan" specific to the materials stored and used on site.
2. Employee Training: The primary operator shall train all employees detailed in Section 7, Part 7.3.
3. Vehicle Maintenance: Vehicles and equipment will be maintained off-site. All vehicles and equipment including subcontractor vehicles will be checked for leaking oil and fluids. Vehicles leaking fluids will not be allowed on-site. Drip pans will be placed under all vehicles and equipment that are parked overnight.
4. Hazardous Material Storage: Hazardous materials will be stored in accordance with Section 4, Part 4.1 and federal and municipal regulations.
5. Spill Kits: Spill kits will be within the material storage area and concrete washout areas.
6. Spills: All spills will be cleaned up immediately upon discovery. Spent absorbent materials and rags will be hauled off-site immediately after the spill is cleaned up for disposal. Spills large enough to be reportable (25 gallons to land or a sheen to water) will be reported to the National Response Center (800-424-8802) and the Texas Emergency Response Center (800-832-8224).
7. Material Safety Data Sheets, a material inventory, and emergency contact information will be maintained at the on-site project trailer.

Installation Schedule:	The spill prevention and control procedures will be implemented once construction begins on-site.
Maintenance and Inspection:	All personnel will be instructed regarding the correct procedures for spill prevention and control. Notices that state these practices will be posted in the office trailer, and the individual who manages day-to-day site operations will be responsible for seeing that these procedures are followed.
Responsible Staff:	Contractor

4.7 Any Additional BMPs

BMP Description: No Additional BMPs were identified. As construction progresses, contractor shall monitor any additional BMPs required by Engineer, Owner, or City Inspector.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

4.8 Allowable Non-Stormwater Discharge Management

The allowable non-stormwater discharges identified include the following:

Waters used to wash vehicles where detergents are not used

Water used to control dust

Potable water including uncontaminated water line flushings

Routine external building wash down that does not use detergents

Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used

Uncontaminated air conditioning or compressor condensate

Uncontaminated ground water or spring water

Foundation or footing drains where flows are not contaminated with process materials such as solvents

Uncontaminated excavation dewatering

Landscape irrigation

Water Used to Control Dust	
BMP Description: Dust control will be implemented as needed once site grading has been initiated and during windy conditions (forecasted or actual wind conditions of 20 mph or greater) while site grading is occurring. Spraying of water at a rate of 300 gallons per acre or less will be performed by a mobile pressure-type distributor truck no more than three times a day during the months of May–September and once per day during the months of October–April or whenever the dryness of the soil warrants it.	
Installation Schedule:	As needed during construction activities
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

Uncontaminated Excavation Dewatering	
BMP Description: For dewatering activities, refer to Section 3.9 of this SWPPP for appropriate BMP.	
Installation Schedule:	refer to Section 3.9
Maintenance and Inspection:	refer to Section 3.9
Responsible Staff:	Contractor

Landscape Irrigation	
BMP Description: Irrigation water will not be sprayed onto impermeable surfaces such as paved driveways and roads. Water will be directed onto soil and lawns by using hoses and correctly sized sprinklers with adjustable spray patterns. To avoid discharges of irrigation waters, the sprinklers will have low-flow rates and increased watering time. The irrigated area will be inspected for excess watering and to adjust watering times and schedules.	
Installation Schedule:	N/A
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor/Owner

Uncontaminated Water Line Flushing	
BMP Description: If flushing is to occur, uncontaminated water from water line flushing of the site infrastructure will be discharged to the sediment basin/tank, while avoiding any contact with disturbed areas. If water from the line flushing becomes contaminated, the water line will be blocked off and the flush water will be pumped to a tanker truck, which will haul the contaminated water off-site for disposal.	
Installation Schedule:	As needed during construction activities
Maintenance and Inspection:	N/A
Responsible Staff:	Contractor

SECTION 5: SELECTING POST-CONSTRUCTION BMPs

BMP Description: Extended Detention Water Quality Ponds: Designed to capture and temporarily detain the water quality volume, serving as settling basins for the solids fraction, nutrients attached to solids, and as a means of limiting downstream erosion by managing stormwater.

☒ ***Permanent***	☐ ***Temporary***
Installation Schedule:	Ponds to be rough/cut graded prior to beginning construction to act as water quality control during construction. Ponds to be fine graded/final build out/revegetated prior to project acceptance.
Maintenance and Inspection:	Detailed inspections to occur at least twice annually, with one of the inspections being during or immediately following runoff producing rain event. Deficiencies identified during inspection to be repaired immediately. Identify, replant, and restore eroded areas. Add repairs to prevent future erosion. Ensure 80% or higher vegetated covers. Mow sites twice annually to keep grass height under 18 inches. Remove clippings and any woody growth. Prevent over-compaction during mowing. Remove and property dispose any built-up sediment and debris when it reaches 10% of pond volume.
Responsible Staff:	OWNER

SECTION 6: INSPECTIONS

6.1 Inspections

1. ***Inspection Personnel:*** *Identify the person(s) who will be responsible for conducting inspections and describe their qualifications:*

   A) Contractor to supply information

2. ***Inspection Schedule and Procedures:***

   Personnel provided by the contractor must inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, discharge locations, and structural controls for evidence of, or the potential for, pollutants entering the drainage system.

   Personnel conducting these inspections must be knowledgeable of this general permit, familiar with the construction site, and knowledgeable of the SWPPP for the site.

   Sediment and erosion control measures identified in the SWPPP must be inspected to ensure that they are operating correctly. Locations where vehicles enter or exit the site must be inspected for evidence of off-site sediment tracking. Inspections must be conducted at least once every 7 calendar days (or a specific day each week as established by the contractor) and within 24 hours of the end of a storm event of 0.5 inches or greater.

   For dewatering activities, the primary operator (CONTRACTOR) shall monitor excavation, groundwater inflow, and containment volume to prevent unauthorized discharge of stormwater from the project site.

   Erosion and sedimentation control measures identified in this SWPPP shall be observed to ensure that they are operating correctly. Based on the results of the inspection, the SWPPP shall be (with the approval of the City inspector) modified as necessary (e.g. show additional controls on the erosion/sedimentation controls plan sheet and revise description of controls) to include additional or modified controls, or best management practices (BMPs), designed to correct problems identified. Revisions to the SWPPP shall be completed within 7 calendar days following the inspection. If existing controls need to be modified or if additional controls are necessary, implementation shall be completed before the next anticipated storm event, or as soon as practicable. The date that the modifications or additions were made should be noted on the “SWPPP Amendment Log” form included in Appendix H.

   Refer to Sections 3 and 4 of this SWPPP for specific maintenance schedule requirements per BPM.

   CONTRACTOR to attach a copy of the inspection report to be used on site.

   See Appendix G – Inspection Reports

6.2 Delegation of Authority

Duly Authorized Representative(s) or Position(s):
Contractor to identify the individual(s) or specifically describe the position where the construction site operator has delegated authority for the purposes of signing inspection reports, certifications, or other information.

Company or Organization Name:
Name:
Position:
Address:
City, State, Zip Code:
Telephone Number:
Fax/Email:

Attach a copy of the signed delegation of authority form.

Sample Delegation of Authority Form

Delegation of Authority

I, _____ (name), hereby designate the person or specifically described position below to be a duly authorized representative for the purpose of overseeing compliance with environmental requirements, including the Construction General Permit, at the _____ construction site. The designee is authorized to sign any reports, stormwater pollution prevention plans and all other documents required by the permit.

_____ (name of person or position)
_____ (company)
_____ (address)
_____ (city, state, zip)
_____ (phone)

By signing this authorization, I confirm that I meet the requirements to make such a designation as set forth in _____ (Reference State Permit), and that the designee above meets the definition of a "duly authorized representative" as set forth in _____ (Reference State Permit).

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 gathered and evaluated 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____

Company: _____

Title: _____

Signature: _____

Date: _____

6.3 Corrective Action Log

Corrective Action Log:
See Appendix I – Corrective Action Log

SECTION 7: RECORDKEEPING AND TRAINING

7.1 Recordkeeping

Instructions:

- The following is a list of records you should keep at your project site available for inspectors to review:
- Dates of grading, construction activity, and stabilization (which is covered in Sections 3 and 4)
- A copy of the construction general permit (attach)
- The signed and certified NOI form or permit application form (attach)
- A copy of the letter from EPA or/the state notifying you of their receipt of your complete NOI/application (attach)
- Inspection reports (attach)
- Records relating to endangered species and historic preservation (attach)
- Check your permit for additional details
- For more on this subject, see *SWPPP Guide*, Chapter 6.C.

Records will be retained for a minimum period of at least 3 years after the permit is terminated.

Date(s) when major grading activities occur:

Date(s) when construction activities temporarily or permanently cease on a portion of the site:

Date(s) when an area is either temporarily or permanently stabilized:

7.2 Log of Changes to the SWPPP

Instructions:

- Create a log here, or as an attachment, of changes and updates to the SWPPP. You should include additions of new BMPs, replacement of failed BMPs, significant changes in the activities or their timing on the project, changes in personnel, changes in inspection and maintenance procedures, updates to site maps, and so on.

Log of changes and updates to the SWPPP prepared on date noted in header above
See Appendix H - SWPPP Amendment Log

7.3 Training

Instructions:

- Training your staff and subcontractors is an effective BMP. As with the other steps you take to prevent stormwater problems at your site, you should document the training that you conduct for your staff, for those with specific stormwater responsibilities (e.g. installing, inspecting, and maintaining BMPs), and for subcontractors.
- Include dates, number of attendees, subjects covered, and length of training.
- For more on this subject, see *SWPPP Guide*, Chapter 8.

Individual(s) Responsible for Training: (Contractor to Complete)

Describe Training Conducted: (Contractor to Complete, See Appendix J “Training Log”)

- General stormwater and BMP awareness training for staff and subcontractors:

- Detailed training for staff and subcontractors with specific stormwater responsibilities:

SECTION 8: PERMANENT STABILIZATION

BMP Description: Permanent **seeding** will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have halted. Construction debris, trash and temporary BMPs (including silt fences, material storage areas, sanitary toilets, and inlet protection) will also be removed and any areas disturbed during removal will be seeded immediately.	
Installation Schedule:	Permanent seeding will be applied immediately after the final design grades are achieved on portions of the site but no later than 14 days after construction activities have halted
Maintenance and Inspection:	**Maintenance.** Maintenance is a vital factor in providing an adequate vegetative erosion control cover. Permanent revegetation has not been achieved until at least the minimum is satisfied: 95 percent coverage with no bare areas exceeding 16 square feet with a 1½ inch stand of grass.
Responsible Staff:	Contractor

BMP Description: **Soil Retention Blanket:** will be used to stabilize exposed soils on slopes steeper than 3:1 where construction activities have temporarily halted for 5 days or longer.	
Installation Schedule:	Installation to occur in areas where soil has been disturbed and construction activities will not occur for 5 days or longer.
Maintenance and Inspection:	The blanketed areas shall be inspected regularly and after each large rainfall. Any required repairs shall be made immediately and specified by the manufacturer for repairs.
Responsible Staff:	Contractor

SECTION 9: CERTIFICATION AND NOTIFICATION

Instructions:

- The SWPPP should be signed and certified by the construction operator(s) designer. Attach a copy of the NOI and permit authorization letter received from EPA or the state.

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 gathered and evaluated 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name: _____ Title: _____

Signature: _____ Date: _____

SWPPP APPENDICES

Appendix A	TPDES General Permit NO TXR150000
Appendix B	Notice of Intent (NOI)
Appendix C	Notice of Change (NOC)
Appendix D	Notice of Termination (NOT)
Appendix E	Construction Activities Log
Appendix F	Materials Delivered and Stored Onsite Log
Appendix G	Inspection Report
Appendix H	SWPPP Amendment Log
Appendix I	Corrective Action Log
Appendix J	Training Log
Appendix K	Subcontractor Certifications/Agreements

Appendix A
TPDES General Permit NO TXR150000

Texas Commission on Environmental Quality
General Permit Payment Submittal Form

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

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

Mail this form and your check to:

BY REGULAR U.S. MAIL

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

BY OVERNIGHT/EXPRESS MAIL

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

Fee Code: GPA General Permit: TXR150000

1. Check / Money Order Number:
2. Amount of Check/Money Order:
3. Date of Check or Money Order:
4. Name on Check or Money Order:
5. NOI INFORMATION

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

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

   Project/Site (RE) Name:

   Project/Site (RE) Physical Address:

Staple Check in This Space

Appendix B
Notice of Intent (NOI)

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

RESET FORM

Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

IMPORTANT:

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

ePERMITS: Sign up now for online NOI: https://www3.tceq.texas.gov/steers/
Pay a $225 reduced application fee by using ePermits.

APPLICATION FEE:

- You must pay the **$325** Application Fee to TCEQ for the paper application to be complete.
- Payment and NOI must be mailed to separate addresses.
- Did you know you can pay on line?
  - Go to http://www.tceq.texas.gov/goto/epay
  - Select Fee Type: GENERAL PERMIT CONSTRUCTION STORM WATER DISCHARGE NOI APPLICATION
- **Provide your payment information below, for verification of payment:**

☐ Mailed Check/Money Order Number: _____
Name Printed on Check: _____
Copy of check enclosed? ☐ Yes

☐ EPAY Voucher Number: _____
Is the Payment Voucher copy attached? ☐ Yes

RENEWAL: Is this NOI a Renewal of an existing General Permit Authorization? (Note: A permit cannot be renewed after June 3, 2013.)

☐ Yes The Permit number is: TXR15_____
(If a permit number is not provided, a new number will be assigned.)

☐ No

1) OPERATOR (Applicant)

a) If the applicant is currently a customer with TCEQ, what is the Customer Number (CN) issued to this entity? You may search for your CN at: http://www.tceq.texas.gov/goto/cr-customer

CN_____

b) What is the Legal Name of the entity (applicant) applying for this permit?

_____

(The legal name must be spelled exactly as filed with the Texas Secretary of State, County, or in the legal document forming the entity.)

c) What is the contact information for the Operator (Responsible Authority)? The mailing address must be recognized by the US Postal Service (USPS). You may verify the address at: https://tools.usps.com/go/ZipLookupAction!input.action

Prefix (Mr. Ms. Miss):_____
First/Last Name:_____ Suffix:_____
Title:_____Credential:_____
Phone Number:_____Ext:_____Fax Number:_____
E-mail:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____State:_____ZIP Code:_____
If outside USA:
Territory:_____Country Code:_____ Postal Code:_____

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

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

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

☐ Yes ☐ No

f) Number of Employees:

☐ 0-20; ☐ 21-100; ☐ 101-250; ☐ 251-500; or ☐ 501 or higher

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

2) APPLICATION CONTACT

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

Is the application contact the same as the applicant identified above?

☐ Yes, go to Section 3).

☐ No, complete section below

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____ Suffix: _____
Title:_____Credential:_____
Organization Name:_____
Phone Number:_____ Ext:_____ Fax Number:_____
E-mail:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ ZIP Code:_____
Mailing Information if outside USA:
Territory:_____Country Code:_____Postal Code:_____

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

If the site of your business is part of a larger business site or if other businesses were located at this site before yours, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at:
http://www.tceq.texas.gov/goto/cr-searchrn

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

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

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

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

d) County (or counties if > 1)

e) Latitude:_____Longitude: _____

f) Does the site have a physical address?

☐ Yes, complete Section A for a physical address.

☐ No, complete section B for site location information.

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

Physical Address of Project or Site:
Street Number: _____ Street Name: _____
City:_____ State:Texas ZIP Code:_____

Section B: Enter the site location information.

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

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

State: Texas ZIP Code where the site is located:

4) GENERAL CHARACTERISTICS

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

☐ Yes - If the answer is Yes, you must obtain authorization through EPA, Region 6.

☐ No

b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources?

☐ Yes - If the answer is Yes, you may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization through EPA, Region 6.

☐ No

c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?

Primary SIC Code:

d) If applicable, what is the Secondary SIC Code(s):

e) What is the total number of acres disturbed?

f) Is the project site part of a larger common plan of development or sale?

☐ Yes - If the answer is Yes, the total number of acres disturbed can be less than 5 acres.

☐ No - If the answer is No, the total number of acres disturbed must be 5 or more. If the total number of acres disturbed is less than 5 then the project site does not qualify for coverage through this Notice of Intent. Coverage will be denied. See the requirements in the general permit for small construction sites.

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

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

i) Is the discharge into an MS4?

☐ Yes - If the answer is Yes, provide the name of the MS4 operator below.

_____

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

☐ No

j) Are any of the surface water bodies receiving discharges from the construction site on the latest EPA-approved CWA 303(d) List of impaired waters?

☐ Yes - If the answer is Yes, provide the name(s) of the impaired water body(s) below.

_____

☐ No

k) Is the discharge or potential discharge within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer as defined in 30 TAC Chapter 213?

☐ Yes - If the answer is Yes, complete certification below by checking "Yes."

☐ No

I certify that a copy of the TCEQ approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) is either included or referenced in the Stormwater Pollution Prevention Plan.

☐ Yes

5) CERTIFICATION

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

a) I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000). ☐ Yes

b) 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

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

d) I certify that a Stormwater Pollution Prevention Plan 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 operate under 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

Operator Certification:

I,_____ _____
Typed or printed name Title

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

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

Signature: _____ Date:_____
(Use blue ink)

NOTICE OF INTENT CHECKLIST (TXR150000)

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

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

Application Fee:

If paying by Check:

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

If using ePay:

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

PERMIT NUMBER:

- ☐ Permit number provided – if this application is for renewal of an existing authorization.

OPERATOR INFORMATION - Confirm each item is complete:

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

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

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

GENERAL CHARACTERISTICS - Confirm each item is complete:

- ☐ Indian Country Lands –the facility is not on Indian Country Lands
- ☐ Construction activity related to facility associated to oil, gas, or geothermal resources
- ☐ Standard Industrial Classification (SIC) Code www.osha.gov/oshstats/sicser.html
- ☐ Acres disturbed is provided and qualifies for coverage through a NOI
- ☐ Common plan of development or sale
- ☐ Receiving water body(s)
- ☐ Segment number(s)
- ☐ Impaired water body(s)
- ☐ MS4 operator
- ☐ Edwards Aquifer rule

CERTIFICATION

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

Notice of Intent (NOI) for Stormwater Discharges Associated with Construction Activity under TPDES General Permit (TXR150000)

General Information and Instructions

GENERAL INFORMATION

Where to Send the Notice of Intent (NOI):

BY REGULAR U.S. MAIL
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact List:

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

Notice of Intent Process:

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

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

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

3) **Acknowledgment of Coverage:** An Acknowledgment Certificate will be mailed to the operator. This certificate acknowledges coverage under the general permit.
   -or-
   Denial of Coverage: If the operator fails to respond to the NOD or the response is inadequate, coverage under the general permit may be denied. If coverage is denied, the operator will be notified.

General Permit (Your Permit)

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

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

You should have a copy of your general permit when submitting your application. You may view and print your permit for which you are seeking coverage, on the TCEQ web site http://www.tceq.texas.gov. Search using key word TXR150000.

General Permit Forms

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

Change in Operator

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

TCEQ Central Registry Core Data Form

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

You can find the information on the Central Registry web site at http://www15.tceq.texas.gov/crpub/. You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled "Program ID". Capitalize all letters in the permit number.

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

Fees associated with a General Permit

Payment of the fee may be made by check or money order, payable to TCEQ, or through EPAY (electronic payment through the web).

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

Mailed Payments:

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

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

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

ePAY Electronic Payment: http://www.tceq.texas.gov/epay
When making the payment you must select Water Quality, and then select the fee category "General Permit Construction Storm Water Discharge NOI Application". You must include a copy of the payment voucher with your NOI. Your NOI will not be considered complete without the payment voucher.

INSTRUCTIONS FOR FILLING OUT THE NOI FORM

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

1. Operator (Applicant)

a) Enter assigned Customer Number (CN)

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

b) Legal Name

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

c) Operator Contact's (Responsible Authority) Contact Information and Mailing Address

Provide the first and last name, and the title of the person signing the Certification section of the application. This person must be an individual having signatory authority in accordance with 30 TAC Chapter §305.44. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. The address must be verifiable with the US Postal Service at https://tools.usps.com/go/ZipLookupAction!input.action for regular mail delivery (not overnight express mail). If you find that the address is not verifiable using the USPS web search, please indicate the address is used by the USPS for regular mail delivery.

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

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

d) Type of Customer (Entity Type)

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

Sole Proprietorship – DBA

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

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

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

Individual

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

Partnership

- A customer that is established as a partnership as defined by the Texas Secretary of State Office (TX SOS). A Limited Partnership or Limited Liability Partnership (Partnership) is required to file with the Texas Secretary of State. A General Partnership or Joint Venture is not required to register with the state.
- **Partnership (Limited Partnership or Limited Liability Partnership):** A limited partnership is defined in the Act as a partnership formed by two or more persons under the provisions of Section 3 of the Uniform Limited Partnership Act (Art. 6132a, Revised Civil Statutes of Texas) and having as members one or more general partners and one or more limited partners. The limited partners as such are not bound by the obligations of the partnership. Limited partners may not take part in the day-to-day operations of the business. A Limited Partnership must file with the Texas Secretary of State. A registered limited liability partnership is a general or limited partnership that is registered with the Texas Secretary of State. The partnership's name must contain the words "Registered Limited Liability Partnership" or the abbreviation "L.L.P." as the last words or letters of its name.
- **General Partnership:** A general partner may or may not invest, participates in running the partnership and is liable for all acts and debts of the partnership and any member of it. A General Partnership does not have limited partners. For a General Partnership, there is no registration with the state or even written agreement necessary for a general partnership to be formed. The legal definition of a partnership is generally stated as "an association of two or more persons to carry on as co-owners a business for profit" (Revised Uniform Partnership Act § 101 [1994]).
- **Joint Venture:** A joint venture is but another name for a special partnership. It might be distinguished from a general partnership in that the latter is formed for the transaction of a general business, while a joint venture is usually limited to a single transaction. That is, a joint venture is a special combination of persons in the nature of a partnership engaged in the joint prosecution of a particular transaction for mutual benefit or profit.

Corporation

A customer meets all of these conditions:

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

Government

Federal, state, county, or city government (as appropriate)
The customer is either an agency of one of these levels of government or the governmental body itself. The government agency's 'legal name' must be provided as the

applicant. A department name or other description of the organization should not be included as a part of the 'legal name' as applicant.

Trust or Estate

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

Other Government

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

e) Independent Entity

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

f) Number of Employees

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

g) Customer Business Tax and Filing Numbers

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

State Franchise Tax ID Number

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

Federal Tax ID

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

TX SOS Charter (filing) Number

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

DUNS Number

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

2. APPLICATION CONTACT

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

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

a) Regulated Entity Reference Number (RN)

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

If the site of your business is part of a larger business site, a Regulated Entity Number (RN) may already be assigned for the larger site. Use the RN assigned for the larger site. Search TCEQ's Central Registry to see if the larger site may already be registered as a regulated site at: http://www.tceq.texas.gov/goto/cr-searchrn

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

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

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

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

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

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

f) Site/Project (RE) Physical Address/Location Information
Enter the complete address for the site in Section A if the address can be validated through the US Postal Service. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate a site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

If a site does not have an address that includes a street (or house) number and street name, enter NO ADDRESS for the street name in Section A. In Section B provide a complete written location description. For example: "The site is located 2 miles west from intersection of Hwy 290 & IH35, located on the southwest corner of the Hwy 290 South bound lane."
Provide the city (or nearest city) and zip code of the facility location.

4. GENERAL CHARACTERISTICS

a) Indian Country Lands
If your site is located on Indian Country Lands, the TCEQ does not have authority to process your application. You must obtain authorization through EPA, Region 6, Dallas. Do not submit this form to TCEQ.

b) Construction activity associated with facility associated with exploration, development, or production of oil, gas, or geothermal resources

If your activity is associated with oil and gas exploration, development, or production, you may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization from EPA Region 6. For more information, see: http://texreg.sos.state.tx.us/public/readtac$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1&p_tac=&ti=16&pt=1&ch=3&rl=30

Construction activities associated with a facility related to oil, gas or geothermal resources may include the construction of a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel.

Where required by federal law, discharges of stormwater associated with construction activities under the Railroad Commission's jurisdiction must be authorized by the EPA and the Railroad Commission of Texas, as applicable. Activities under Railroad Commission of Texas jurisdiction include construction of a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources, such as a well site; treatment or storage facility; underground hydrocarbon or natural gas storage facility; reclamation plant; gas processing facility; compressor station; terminal facility where crude oil is stored prior to refining and at which refined products are stored solely for use at the facility; a carbon dioxide geologic storage facility under the jurisdiction of the Railroad Commission of Texas; and a gathering, transmission, or distribution pipeline that will transport crude oil or natural gas, including natural gas liquids, prior to refining of such oil or the use of the natural gas in any manufacturing process or as a residential or industrial fuel. The Railroad Commission of Texas also has jurisdiction over stormwater from land disturbance associated with a site survey that is conducted prior to construction of a facility that would be regulated by the Railroad Commission of Texas. Under 33 U.S.C. §1342(l)(2) and §1362(24), EPA cannot require a permit for discharges of stormwater from "field activities or operations associated with {oil and gas} exploration, production, processing, or treatment operations, or transmission facilities, including activities necessary to prepare a site for drilling and for the movement and placement of drilling equipment, whether or not such field activities or operations may be considered to be construction activities" unless the discharge is contaminated by contact with any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the facility. Under §3.8 of this title (relating to Water Protection), the Railroad Commission of Texas prohibits operators from causing or allowing pollution of surface or subsurface water. Operators are encouraged to implement and maintain best management practices (BMPs) to minimize discharges of pollutants, including sediment, in stormwater during construction activities to help ensure protection of surface water quality during storm events.

c) Primary Standard Industrial Classification (SIC) Code

Provide the SIC Code that best describes the construction activity being conducted at this site.

Common SIC Codes related to construction activities include:

- 1521 - Construction of Single Family Homes
- 1522 - Construction of Residential Bldgs. Other than Single Family Homes
- 1541 - Construction of Industrial Bldgs. and Warehouses

- 1542 - Construction of Non-residential Bldgs, other than Industrial Bldgs. and Warehouses
- 1611 - Highway and Street Construction, except Highway Construction
- 1622 - Bridge, Tunnel, and Elevated Highway Construction
- 1623 - Water, Sewer, Pipeline and Communications, and Power Line Construction

For help with SIC Codes, go to:
http://www.osha.gov/pls/imis/sicsearch.html

d) Secondary SIC Code
Secondary SIC Code(s) may be provided. Leave blank if not applicable. For help with SIC Codes, go to: http://www.osha.gov/pls/imis/sicsearch.html

e) Total Number of Acres Disturbed
Provide the approximate number of acres that the construction site will disturb. Construction activities that disturb less than one acre, unless they are part of a larger common plan that disturbs more than one acre, do not require permit coverage. Construction activities that disturb between one and five acres, unless they are part of a common plan that disturbs more than five acres, do not require submission of an NOI. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

If you have any questions about this item, please contact the stormwater technical staff by phone at (512)239-4671 or by email at swgp@tceq.texas.gov.

f) Common Plan of Development
Construction activities that disturb less than five acres do not require submission of an NOI unless they are part of a common plan of development or for sale where the area disturbed is five or more acres. Therefore, the estimated area of land disturbed should not be less than five, unless the project is part of a larger common plan that disturbs five or more acres. Disturbed means any clearing, grading, excavating, or other similar activities.

For more information on "What is a common plan of development?" go to:
www.tceq.texas.gov/permitting/stormwater/common_plan_of_development_steps.html

For further information, go to the TCEQ stormwater construction webpage at:
www.tceq.texas.gov/goto/construction and search for "Additional Guidance and Quick Links". If you have any further questions about this item, please call the stormwater technical staff at (512)239-4671.

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

If your site has more than one outfall you need to include the name of the first water body for each outfall, if they are different.

h) Identify the segment number(s) of the classified water body(s)
Identify the classified segment number(s) receiving a discharge directly or indirectly. Go to the following link to find the segment number of the classified water body where stormwater will flow from the site: www.tceq.texas.gov/waterquality/monitoring/viewer.html

You may also find the segment number in TCEQ publication GI-316: www.tceq.texas.gov/publications/gi/gi-316

If the discharge is into an unclassified receiving water and then crosses state lines prior to entering a classified segment, select the appropriate watershed:

- 0100 (Canadian River Basin)
- 0200 (Red River Basin)
- 0300 (Sulfur River Basin)
- 0400 (Cypress Creek Basin)
- 0500 (Sabine River Basin)

Call the Water Quality Assessments section at (512)239-4671 for further assistance.

i) Discharge into MS4 – Identify the MS4 Operator
The discharge may initially be into a municipal separate storm sewer system (MS4). If the stormwater discharge is into an MS4, provide the name of the entity that operates the MS4 where the stormwater discharges. An MS4 operator is often a city, town, county, or utility district, but possibly can be another form of government. Please note that the Construction General Permit requires the Operator to supply the MS4 with a copy of the NOI submitted to TCEQ. For assistance, you may call the technical staff at (512)239-4671.

j) Surface Water bodies on list of impaired waters – Identify the impaired water body(s)
Indicate Yes or No if any surface water bodies receiving discharges from the construction site are on the latest EPA-approved CWA 303(d) List of impaired waters. Provide the name(s) of surface water bodies receiving discharges or potential discharges from the construction site that are on the latest EPA-approved CWA 303(d) List of impaired waters. The EPA-approved CWA 303(d) List of impaired waters in Texas can be found at: www.tceq.texas.gov/waterquality/assessment/305_303.html

NOTE: Do not use any "draft" documents.

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

If the discharge or potential discharge is within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, a site specific authorization approved by the Executive Director under the Edwards Aquifer Protection Program (30 TAC Chapter 213) is required before construction can begin. The certification must be answered "Yes" for coverage under the Construction General Permit. The TCEQ approved plan must be readily available for TCEQ staff to review at the time that the NOI is submitted.

The general permit requires the approved Contributing Zone Plan or Water Pollution Abatement Plan to be included or referenced as a part of the Stormwater Pollution Prevention Plan.

For questions regarding the Edwards Aquifer Protection Program, contact the appropriate TCEQ Regional Office. For projects in Hays, Travis and Williamson Counties: Austin Regional Office, 12100 Park 35 Circle, Austin, TX 78753, 512-339-2929. For Projects in Bexar, Comal, Kinney, Medina and Uvalde Counties: TCEQ San Antonio Regional Office, 14250 Judson Rd., San Antonio, TX 78233-4480, 210-490-3096.

5. CERTIFICATIONS

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

a) Certification of Understanding the Terms and Conditions of Construction General Permit (TXR150000)

Provisional coverage under the Construction General Permit (TXR150000) begins 7 days after the completed paper NOI is postmarked for delivery to the TCEQ. (Electronic applications submitted through ePermits have immediate provisional coverage). You must obtain a copy and read the Construction General Permit before submitting your application. You may view and print the Construction General Permit for which you are seeking coverage at the TCEQ web site: www.tceq.texas.gov/goto/construction

b) Certification of Legal Name

The full legal name of the applicant as authorized to do business in Texas is required. The name must be provided exactly as filed with the Texas Secretary of State (SOS), or on other legal documents forming the entity, that is filed in the county where doing business. You may contact the SOS at (512)463 5555, for more information related to filing in Texas.

c) Understanding of Notice of Termination

A permittee shall terminate coverage under this Construction General Permit through the submittal of a NOT when the operator of the facility changes, final stabilization has been reached, the discharge becomes authorized under an individual permit, or the construction activity never began at this site.

d) Certification of Stormwater Pollution Prevention Plan

The SWP3 identifies the areas and activities that could produce contaminated runoff at your site and then tells how you will ensure that this contamination is mitigated. For example, in describing your mitigation measures, your site's plan might identify the devices that collect and filter stormwater, tell how those devices are to be maintained, and tell how frequently that maintenance is to be carried out. You must develop this plan in accordance with the TCEQ general permit requirements. This plan must be developed and implemented before you complete this NOI. The SWP3 must be available for a TCEQ investigator to review on request.

Operator Certification:

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

IF YOU ARE A CORPORATION:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(1) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:

The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a)(3) (see below). According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statute(s) under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at (512)239-0600.

30 Texas Administrative Code

§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

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

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

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

Appendix C
Notice of Change (NOC)

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

RESET FORM

Notice of Change (NOC) to an Authorization for Storm Water Discharges Associated With Construction Activity under TPDES General Permit TXR150000

IMPORTANT – Please read the following information and INSTRUCTIONS before filling out this form

ePERMITS: Sign up now for online NOC: https://www3.tceq.texas.gov/steers/index.cfm

This form will be returned for any of the following reasons:

1) The permit number is not provided, is invalid, or is no longer active,
2) Wet ink signature of person meeting signatory requirements is not provided,
3) The current permittee is not the applicant, and;
4) A requested change in operator name is not a legal name change.

This form cannot be used for a change in operator. Refer to your general permit for Information.

What is the permit number of the authorization to be changed?

TXR15_____ or TXRCW_____

1) APPLICANT INFORMATION

a) What is the full Legal Name of the current operator as on the authorization?

_____

b) What is the Customer Number (CN) assigned to this operator? You may search for your CN at: http://www.tceq.texas.gov/goto/cr-customer
CN_____

c) What is the name and title of the person signing the application? The person must be an executive official meeting signatory requirements in TAC §305.44(a).

Prefix (Mr. Ms Miss):_____
First/Last Name: _____Suffix: _____
Title: _____Credential: _____

d) What is the Regulated Entity Reference Number (RN) assigned to this site?
RN_____

2) APPLICATION CONTACT

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

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____Suffix: _____
Title:_____Credential:_____
Organization Name:_____
Phone Number:_____ Ext:_____ Fax Number:_____
E-mail:_____
Mailing Address:_____
Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ ZIP Code:_____
Mailing Information if outside USA:
Territory:_____Country Code:_____Postal Code:_____

3) REQUESTED CHANGE TO PERMITTED INFORMATION

What information has changed or needs to be corrected? Check one or more of the following options and enter the new information below.

☐ Operator legal name change with Texas Secretary of State (TX SOS).
Go to sections a) and b) as applicable.
Note: Permits are not transferable. If a change in entity has occurred, this NOC will not be processed.

☐ Address and contact information for the Operator. Fill out section b).

☐ Site Information (Regulated Entity). Fill out section c).
Note: Permits under a general permit are site specific. If a change in site location has occurred, this NOC will not be processed.

☐ General characteristics relating to the regulated activity. Fill out section d).

a) Operator Legal Name Change

1. What is the NEW active Legal Name with TX SOS or on other legal document?
   New Legal Name: _____

2. What is the TX SOS Filing Number for us to confirm this official name change?
   This is only applicable to Limited Partnerships or Corporations.
   TX SOS Filing number: _____

b) Address and Contact Information for the Operator

Verify mailing addresses with USPS:
https://tools.usps.com/go/ZipLookupAction!input.action

Prefix (Mr. Ms. Miss):_____
First/Last Name: _____Suffix: _____
Title:_____Credential:_____
Organization Name:_____
Phone Number:_____ Ext:_____ Fax Number:_____
E-mail:_____
Mailing Address:_____

Internal Routing (Mail Code, Etc.):_____
City:_____ State:_____ ZIP Code:_____
Mailing Information if outside USA:
Territory:_____Country Code:_____Postal Code:_____

c) Regulated Entity (Site) Information Correction

1. Is this a change to the location of the permitted activity?
   ☐ Yes – This NOC will not be processed since the authorizations are site specific.

   ☐ No – Continue with NOC form.

2. Corrected Name of Project or Site :
   _____

3. Updated Physical Address (new 911 address):
   Street Number:_____Street Name:_____
   City:_____ State:Texas ZIP Code:_____

4. Corrected location access description, if no physical address (street number/street name):

5. Corrected Latitude:_____ N

6. Corrected Longitude:_____W

7. Corrected County (Counties if >1):

d) Change in General Characteristics Provided on Original Form. Identify the specific change and provide the updates information. If an attachment is needed, please reference it below:

4) OPERATOR CERTIFICATION

I, _____ _____
Typed or printed name *Title*

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

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

Signature:_____ Date:_____
(Use blue ink)

Notice of Change (NOC) for Storm Water Discharges Associated with Construction Activity under TPDES General Permit TXR150000

General Information and Instructions

GENERAL INFORMATION

Where to Send the NOC:

BY REGULAR U.S. MAIL
Texas Commission on Environmental Quality
Storm Water Processing Center (MC-228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL
Texas Commission on Environmental Quality
Storm Water Processing Center (MC-228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact list:

Application – status and form questions:	512/245-0130, swpermit@tceq.texas.gov
Technical questions:	512/239-4671, swgp@tceq.texas.gov
Environmental Law Division:	512/239-0600
Records Management - obtain copies of forms:	512/239-0900
Reports from databases (as available):	512/239-DATA (3282)
Cashier's office:	512/239-0357 or 512/239-0187

NOC Process:

1. Administrative Review: The form will be reviewed to ensure the request is from the permittee (operator) on the authorization, the permit is active and initial coverage was acknowledged. Each item on the form will be reviewed for a complete response. In addition, the operator's legal name change must be verified with Texas Secretary of State (if applicable). The address(s) on the form must be verified with the US Postal Service (USPS) as an address receiving regular mail delivery. Never give an overnight/express mailing address.
If an item is incomplete or not verifiable, the operator may be notified by letter, phone call or email. In some instances as noted at the beginning of the form, the request may simply be returned.

2. NOC Confirmation: An updated Acknowledgment Certificate will be mailed to the operator only if the NOC is to change information provided on the acknowledgment certificate. The original coverage effective date will not change.

General Permit (Your Permit) and Forms

You may view and print your general permit on the TCEQ web site http://www.tceq.texas.gov. Search using key word TXR150000. General Permit Forms (NOI, NOT, and NOC) and instructions are available on the TCEQ web site http://www.tceq.texas.gov.

Change in Operator

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a NOT and the new operator must submit a NOI. The NOI must be submitted not later than 10 days prior to the change in Operator status. Note that the NOT is effective on the postmarked date. It may be necessary to not terminate the existing permit until coverage by the new entity is confirmed.

TCEQ Central Registry Core Data Form

The Core Data Form has been incorporated into this form. Do not send a Core Data Form to TCEQ. You can find the information on the Central Registry web site at http://www15.tceq.texas.gov/crpub/.

You can search by the Regulated Entity (RN), Customer Number (CN) or Name (Permittee), or by your permit number under the search field labeled *Additional ID*.

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

INSTRUCTIONS FOR FILLING OUT THE NOC FORM

1) APPLICANT INFORMATION

a) Legal Name. Provide the current legal name of the permittee, as on the permit.

b) Customer Number (CN). TCEQ's Central Registry will assign each customer a number that begins with CN, followed by nine digits. You may search for your CN at: http://www.tceq.texas.gov/goto/cr-customer.

If the name(s) provided do not match the current permittee name(s), this form will be returned. It is the responsibility of the permittee(s) to comply with the general permit.

Note: If a change is being made to the CN and the CN has other TCEQ authorization types, it is the entity's responsibility to update those authorizations at the same time. If an authorization has been cancelled or terminated, the name cannot be changed on the permit. Because of this, a new CN may be issued for the new name.

c) Person Signing this Application. Provide the name and title of the person signing the application. The person must be an executive official meeting signatory requirements in TAC §305.44.

d) Regulated Entity Reference Number (RN). This is a number issued by TCEQ's Central Registry to sites (a location where a regulated activity occurs) regulated by TCEQ. This is not a permit number, registration number, or license number. Search for your RN: http://www.tceq.texas.gov/goto/cr-searchrn.

If the site has changed or the information provided indicates a new location, this form will be returned. It is the responsibility of the permittee to comply with the general permit.

2) APPLICATION CONTACT

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

3) REQUESTED CHANGE TO PERMITTED INFORMATION

Check one or more of the available options indicating the information in the form that is to be updated. Provide the updated information in 3 a) for Legal Name Change, 3 b) for Address and Contact Information Change, 3 c) for Regulated Entity Site Information Change, or 3 d) for General Characteristics Change, as applicable.

a) Legal Name Change. Provide the new legal name. If the entity is a Limited Partnership or Corporation, the name change must be verifiable with Texas Secretary of State. The TX SOS filing number must be provided to verify only a name change occurred. You may contact the SOS at 512/463-5555, for more information related to filing in Texas. If filed in the county where doing business, provide a copy of the legal documents showing the legal name change.

Legal name changes of a Corporation and Limited Partnership will be verified with Texas Secretary of State. If the entity is filed as a new entity with a new filing number, then the change cannot be made through a NOC. The permits are not transferable. If the operator changes, the old entity must terminate their permit and the new entity must submit a form for a new permit.

b) Address and Contact Information Change. Indicate the type of address and contact information that has changed from the original NOI or last NOC submitted to TCEQ.

Verify mailing addresses with USPS https://tools.usps.com/go/ZipLookupAction!input.action for regular mail delivery (not overnight express mail). If you find that the address is not verifiable please indicate the address is used by the USPS for regular mail delivery. Failure to provide a valid mailing address will delay or prohibit us from updating the permit.

Please note that address updates relating to a general permit authorization can ONLY be made through a Notice of Change. Address changes submitted through any other form cannot be processed.

c) Regulated Entity Site Information Change. The NOC form is only for use to update or correct information submitted on the original application or last NOC for the authorization. The authorization under a general permit is site specific. If this change is related to a new location, a Notice of Change will not be processed.

Provide the updated site name, updated site addresses, corrected latitude and longitude, and/or corrected county, as applicable to your NOC request. A new physical address for an existing location is usually the result of a newly assigned 911 address for emergencies.

If providing a corrected latitude and longitude, enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. For help obtaining the latitude and longitude, go to http://www.tceq.texas.gov/gis/sqmaview.html or http://msrmaps.com/advfind.aspx.

d) Change in General Characteristics Provided on Original Form
Describe any other change that is not addressed through any question in this section of the application.

4) OPERATOR CERTIFICATION

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

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a) (see below). According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

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

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512/239-0600.

30 Texas Administrative Code
§305.44. Signatories to Applications

(a) All applications shall be signed as follows.

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

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

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

Appendix D
Notice of Termination (NOT)

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

Notice of Termination (NOT) for Authorizations under TPDES General Permit TXR150000

ePermits: This form is available on our online permitting system.
Sign up for online permitting at: https://www3.tceq.texas.gov/steers/

What is the permit number to be terminated?

TXR15 enter permit number here TXRCW enter permit number here

Section 1. OPERATOR (Permittee)

a) What is the Customer Number (CN) issued to this entity?

CN enter customer number here

b) What is the Legal Name of the current permittee?

Enter legal name of current permittee here

c) Provide the contact information for the Operator (Responsible Authority).

Prefix (Mr. Ms. or Miss): enter prefix here

First and Last Name: enter first and last name here Suffix: enter suffix here

Title: enter title here Credentials: enter credentials

Phone Number: enter phone number here Fax Number: enter fax number here

Email: enter email address here

Mailing Address: enter mailing street number and name here

City, State, and Zip Code: enter city, state, and zip code here

Country Mailing Information, if outside USA: enter country mailing info here

Section 2. APPLICATION CONTACT

This is the person TCEQ will contact if additional information is needed regarding this application.

Is the application contact the same as the permittee identified above? Yes ☐ No ☐

If Yes, go to Section 3.

If No, complete section below

Prefix (Mr. Ms. or Miss): enter prefix here

First and Last Name: enter first and last name here Suffix: enter suffix here

Title: enter title here Credentials: enter credentials here

Phone Number: enter phone number here Fax Number: enter fax number here

Email: enter email address here

Mailing Address: enter mailing street number and name here

City, State, and Zip Code: enter city, state, and zip code here

Country Mailing Information, if outside USA: enter country mailing info here

Section 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) TCEQ issued RE Reference Number (RN): RN enter regulated entity number here

b) Name of project or site as known by the local community: enter site name here

c) County, or counties if more than 1: enter counties where site is located here

d) Latitude: enter latitude here Longitude: enter longitude here

e) Site Address/Location:

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete Section 3A.

If the site does not have a physical address, provide a location description in Section 3B. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section 3A: Physical Address of Project or Site:

Street Number and Name: enter street number and name here

City, State, and Zip Code: enter city, state, and zip code here

Section 3B: Site Location Description:

Location description: enter location description here. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1

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

Zip Code where the site is located: enter zip code here

Section 4. REASON FOR TERMINATION

Check the reason for termination:

☐ Final stabilization has been achieved on all portions of the site that are the responsibility of the Operator and all silt fences and other temporary erosion controls have been removed, or scheduled for removal as defined in the SWP3.

☐ Another permitted Operator has assumed control over all areas of the site that have not been finally stabilized, and temporary erosion controls that have been identified in the SWP3 have been transferred to the new Operator.

☐ The discharge is now authorized under an alternate TPDES permit.

☐ The activity never began at this site that is regulated under the general permit.

Section 5. CERTIFICATION

Signatory Name: enter signatory name here

Signatory Title: enter signatory title here

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.

Signature (use blue ink): _____Date: _____

Instructions for Notice of Termination (NOT) for Authorizations under TPDES General Permit TXR150000

GENERAL INFORMATION

Where to Send the Notice of Termination (NOT):

BY REGULAR U.S. MAIL:
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
P.O. Box 13087
Austin, Texas 78711-3087

BY OVERNIGHT/EXPRESS MAIL:
Texas Commission on Environmental Quality
Stormwater Processing Center (MC-228)
12100 Park 35 Circle
Austin, TX 78753

TCEQ Contact List:

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

Notice of Termination Process:

A Notice of Termination is **effective on the date postmarked for delivery to TCEQ.**

When your NOT is received by the program, the form will be processed as follows:

1) Administrative Review: The form will be reviewed to confirm the following:
   - the permit number is provided;
   - the permit is active and has been approved;
   - the entity terminating the permit is the current permittee;
   - the site information matches the original permit record; and
   - the form has the required original signature with title and date.

2) Notice of Deficiency: If an item is incomplete or not verifiable as indicated above, a phone call will be made to the applicant to clear the deficiency. A letter will not be sent to the permittee if unable to process the form.

3) Confirmation of Termination: A Notice of Termination Confirmation letter will be mailed to the operator.

Change in Operator:

An authorization under the general permit is not transferable. If the operator of the regulated entity changes, the present permittee must submit a Notice of Termination and the new operator must submit a Notice of Intent. The NOT and NOI must be

submitted not later than 10 days prior to the change in Operator status.

Annual Water Quality Fee:

This fee is assessed to permittees with an active authorization under the general permit on September 1 of each year. The designated billing contact will receive an invoice for payment of the annual fee in November of each year. The payment will be due 30 days from the invoice date. A 5% penalty will be assessed if the payment is not received by TCEQ by the due date. Annual fee assessments cannot be waived as long as the authorization under the general permit is active on September 1.

It is important for the permittees to submit a NOT when coverage under the general permit is no longer required. A NOT is effective on the postmarked date of mailing the form to TCEQ. It is recommended that the NOT be mailed using a method that documents the date mailed and received by TCEQ.

INSTRUCTIONS FOR FILLING OUT THE FORM

The majority of permit information related to the current operator and regulated entity are available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

Section 1. Operator (Current Permittee):

a) Customer Number (CN)
TCEQ's Central Registry assigns each customer a number that begins with CN, followed by nine digits. This is not a permit number, registration number, or license number. The Customer Number, for the current permittee, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

b) Legal Name of Operator
The operator must be the same entity as previously submitted on the original Notice of Intent for the permit number provided. The current operator name, as provided on the current authorization, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

c) Contact Information for the Operator (Responsible Authority)
Provide information for person signing the NOT application in the Certification section. This person is also referred to as the Responsible Authority.

Provide a complete mailing address for receiving mail from the TCEQ. Update the address if different than previously submitted for the Notice of Intent or Notice of Change. The mailing address must be recognized by the US Postal Service. You may verify the address on the following website: https://tools.usps.com/go/ZipLookupAction!input.action.

The phone number should provide contact to the operator.

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

Section 2. Application Contact:

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

Section 3. Regulated Entity (RE) Information on Project or Site:

a) Regulated Entity Reference Number (RN)
A number issued by TCEQ's Central Registry to sites where an activity regulated by TCEQ. This is not a permit number, registration number, or license number. The Regulated Entity Reference Number is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

b) Name of the Project or Site
Provide the name of the site as known by the public in the area where the site is located.

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

d) Latitude and Longitude
Enter the latitude and longitude of the site in degrees, minutes, and seconds or decimal form. The latitude and longitude as provided on the current authorization is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

e) Site/Project (RE) Physical Address/Location Information
The physical address/location information, as provided on the current authorization, is available at the following website: http://www2.tceq.texas.gov/wq_dpa/index.cfm.

Section 3A. If a site has an address that includes a street number and street name, enter the complete address for the site. If the physical address is not recognized as a USPS delivery address, you may need to validate the address with your local police (911 service) or through an online map site used to locate the site. Please confirm this to be a complete and valid address. Do not use a rural route or post office box for a site location.

Section 3B. If a site does not have an address that includes a street number and street name, provide a complete written location description. For example: "The site is located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1."

Provide the city (or nearest city) and Zip Code of the facility location.

Section 4. Reason for Termination:

The Notice of Termination form is only for use to terminate the authorization (permit). The Permittee must indicate the specific reason for terminating by checking one of the options. If the reason is not listed then provide an attachment that explains the reason for termination.

Please read your general permit carefully to determine when to terminate your permit. Permits will not be reactivated after submitting a termination form. The termination is effective on the date postmarked for delivery to TCEQ.

Section 5. Certification:

The certification must bear an original signature of a person meeting the signatory

requirements specified under 30 Texas Administrative Code §305.44.

IF YOU ARE A CORPORATION:
The regulation that controls who may sign an application form is 30 Texas Administrative
Code §305.44(a), which is provided below. According to this code provision, any corporate representative may sign an NOI or similar form so long as the authority to sign such a document has been delegated to that person in accordance with corporate procedures. By signing the NOI or similar form, you are certifying that such authority has been delegated to you. The TCEQ may request documentation evidencing such authority.

IF YOU ARE A MUNICIPALITY OR OTHER GOVERNMENT ENTITY:
The regulation that controls who may sign an NOI or similar form is 30 Texas Administrative Code §305.44(a), which is provided below. According to this code provision, only a ranking elected official or principal executive officer may sign an NOI or similar form. Persons such as the City Mayor or County Commissioner will be considered ranking elected officials. In order to identify the principal executive officer of your government entity, it may be beneficial to consult your city charter, county or city ordinances, or the Texas statutes under which your government entity was formed. An NOI or similar document that is signed by a government official who is not a ranking elected official or principal executive officer does not conform to §305.44(a)(3). The signatory requirement may not be delegated to a government representative other than those identified in the regulation. By signing the NOI or similar form, you are certifying that you are either a ranking elected official or principal executive officer as required by the administrative code. Documentation demonstrating your position as a ranking elected official or principal executive officer may be requested by the TCEQ.

If you have any questions or need additional information concerning the signatory requirements discussed above, please contact the Texas Commission on Environmental Quality's Environmental Law Division at 512-239-0600.

30 TEXAS ADMINISTRATIVE CODE §305.44. SIGNATORIES TO APPLICATIONS

(a) All applications shall be signed as follows.

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

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

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

Appendix E
SWPPP Construction Activities Log

Appendix E – Construction Activities Log

Project Name:
SWPPP Contact:

Date Grading Activity Initiated	Description of Grading Activity	Date Grading Activity Ceased (Indicate Temporary or Permanent)	Date When Stabilization Measures are Initiated	Description of Stabilization Measure and Location

Appendix F
Materials Delivered and Stored Onsite Log

Appendix F – Materials Delivered and Stored Onsite Log

Project Name:
SWPPP Contact:

Material	Date Delivered	Date Removed

Appendix G
Inspection Reports

Inspection Report

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

SILT FENCE

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where is the Silt Fence Located?	Is the Bottom of the Fabric Still Buried?	Is the Fabric Torn or Sagging?	Are the Posts Tipping Over?	How Deep is the Sediment?

MAINTENANCE REQUIRED FOR SILT FENCE: _____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ **ON OR BEFORE: _____**

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

SOIL RETENTION BLANKET

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where are the Soil Retention Blanket Located?	Are the Soil Retention Blankets Embedded in the Ground?	Are the Soil Retention Blankets Anchored in Place?	What is the Condition of the Soil Retention Blanket?

MAINTENANCE REQUIRED FOR SOIL RETENTION BLANKET:_____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ **ON OR BEFORE:** _____

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

ROCK BERMS

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Where is the Rock Berm Located?	Is the Rock Berm Still in Place?	What is the Condition of the Rock Berm?

MAINTENANCE REQUIRED FOR ROCK BERMS: _____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM

INLET PROTECTION BARRIERS

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

Location	In Place?	Depth of Sediment	Condition of Inlet

MAINTENANCE REQUIRED FOR INLET PROTECTION BARRIERS: _____
_____
_____
_____
_____
_____
_____
_____
_____

TO BE PERFORMED BY: _____ ON OR BEFORE: _____

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM
(Completed weekly or as soon as possible after a significant storm event)

Name of Inspector: _____ Inspection Date: _____
Days Since Last Rainfall: _____ Amount of Last Rainfall: _____ inches

STABILIZATION MEASURES					
Area or Drainage Areas*	**Date Since Last Disturbance**	**Date of Next Disturbance**	**Stabilized (Yes or No)**	**Control Measures Implemented**	**Current Conditions of Control Measures**

* See site map for drainage area. Site may include borrow sources, haul roads, contractor's yard, stockpiles, etc.
** Areas that will be exposed more than 21 days must be stabilized within 14 days.

STABILIZATION REQUIRED: _____
_____
_____
_____

TO BE PERFORMED BY: _____ **ON OR BEFORE:** _____

Control Measure Codes		Condition Codes
1. Temporary Seeding	14. Rock Bed at Construction Exit	U – Upgrade Needed
2. Permanent Plant, Sod, or Seed	15. Timber Mat at Construction Entrance	R – Replacement Needed
3. Mulch	16. Channel Liner	M – Maintenance Needed
4. Soil Retention Blanket	17. Sediment Trap	C – Cleaning Needed
5. Buffer Zone	18. Sediment Basin	I – Increase Measures
6. Preserve Natural Resources	19. Storm Inlet Sediment Trap	S – Stable (no action required)
7. Silt Fence	20. Stone Outlet Structure	
8. Hay Bales	21. Curb and Gutter	
9. Rock Berm	22. Storm Sewers	
10. Diversion Dike	23. Velocity Control Devices	
11. Diversion Swale	24. Excess Dirt Removed From Road	
12. Pipe Slope Drain	25. Haul Roads Dampened for Dust	
13. Paved Flume	26. Cleanup of Possible Contaminants	

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 gathered and evaluated the information submitted. Based on my inquiry or the person 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 that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: _____ Date: _____

Appendix H
SWPPP Amendment Log

Appendix H – SWPPP Amendment Log

Project Name:
SWPPP Contact:

Amendment No.	Description of the Amendment	Date of Amendment	Amendment Prepared by [Name(s) and Title]

Appendix I
SWPPP Corrective Action Log

Appendix I – Corrective Action Log

Project Name:
SWPPP Contact:

Inspection Date	Inspector Name(s)	Description of BMP Deficiency	Corrective Action Needed (including planned date/responsible person)	Date Action Taken/Responsible person

Appendix J
SWPPP Training Log

Appendix J – SWPPP Training Log

Stormwater Pollution Prevention Training Log

Project Name:

Project Location:

Instructor's Name(s):

Instructor's Title(s):

Course Location: _____ Date: _____

Course Length (hours): _____

Stormwater Training Topic: *(check as appropriate)*

- ❑ **Erosion Control BMPs**
- ❑ **Emergency Procedures**
- ❑ **Sediment Control BMPs**
- ❑ **Good Housekeeping BMPs**
- ❑ **Non-Stormwater BMPs**

Specific Training Objective:_____

_____

Attendee Roster: *(attach additional pages as necessary)*

No.	Name of Attendee	Company
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

Appendix K
Subcontractor Certifications/Agreements

Appendix K – Subcontractor Certifications/Agreements

SUBCONTRACTOR CERTIFICATION
STORMWATER POLLUTION PREVENTION PLAN

Project Number: _____

Project Title: _____

Operator(s): _____

As a subcontractor, you are required to comply with the Stormwater Pollution Prevention Plan (SWPPP) for any work that you perform on-site. Any person or group who violates any condition of the SWPPP may be subject to substantial penalties or loss of contract. You are encouraged to advise each of your employees working on this project of the requirements of the SWPPP. A copy of the SWPPP is available for your review at the office trailer.

Each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement:

I certify under the penalty of law that I have read and understand the terms and conditions of the SWPPP for the above designated project and agree to follow the BMPs and practices described in the SWPPP.

This certification is hereby signed in reference to the above named project:

Company: _____

Address: _____

Telephone Number: _____

Type of construction service to be provided: _____

_____

_____

Signature: _____

Title: _____

Date: _____

Geologic Assessment

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Geologist: M. Kevin Denson Telephone: 512-442-1122

Date: 09/07/2025 Fax: 512-442-1181

Representing: Terracon Consultants, Inc. (TBPG 50058) (Name of Company and TBPG or TBPE registration number)

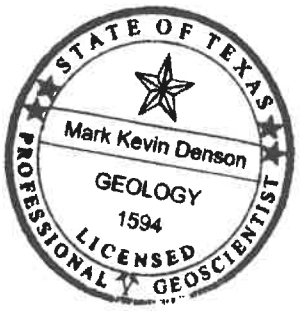
Signature of Geologist:

M Kevin Denson

Regulated Entity Name: Provence Phase 2 (Sections 1,2, and 3) North of Hamilton Pool Road, Austin, Travis County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: May 29-30, 2025; July 1, 2025; July 9, 2025
2. Type of Project:
   - ☒ WPAP
   - ☐ SCS
   - ☐ AST
   - ☐ UST
3. Location of Project:
   - ☐ Recharge Zone
   - ☐ Transition Zone
   - ☒ Contributing Zone ~~within the Transition Zone~~



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

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

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Eckrant very stony clay (TaD)	D	0-1
Brackett-Rock outcrop complex (BiD)	D	1-2
Volente silty clay loam (VoD)	C	4-5

** Soil Group Definitions (Abbreviated)*

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

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

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

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

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

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

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

   Applicant's Site Plan Scale: 1" = _'
   Site Geologic Map Scale: 1" = 300'
   Site Soils Map Scale (if more than 1 soil type): 1" = 1,000 '

9. Method of collecting positional data:

   ☒ Global Positioning System (GPS) technology.

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

10. ☒ The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. ☒ Surface geologic units are shown and labeled on the Site Geologic Map.
12. ☒ Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.

    ☐ Geologic or manmade features were not discovered on the project site during the field investigation.

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

    ☒ There are 3 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
    - ☐ The wells are not in use and have been properly abandoned.
    - ☒ The wells are not in use and will be properly abandoned.
    - ☐ The wells are in use and comply with 16 TAC Chapter 76.

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

Administrative Information

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

Attachment A

GEOLOGIC ASSESSMENT TABLE

PROJECT NAME: Provence Phase 2 (Sections 1, 2, and 3), Hamilton Pool Road, Austin Travis County, Texas

LOCATION			FEATURE CHARACTERISTICS												EVALUATION			PHYSICAL SETTING		
1A	1B *	1C*	2A	2B	3	4			5	5A	6	7	8A	8B	9	10		11		12
FEATURE ID	LATITUDE	LONGITUDE	FEATURE TYPE	POINTS	FORMATION	DIMENSIONS (FEET)			TREND (DEGREES)	DOM	DENSITY (NO/FT)	APERTURE (FEET)	INFILL	RELATIVE INFILTRATION RATE	TOTAL	SENSITIVITY		CATCHMENT AREA (ACRES)		TOPOGRAPHY
						X	Y	Z		10						<40	>40	<1.6	>1.6	
WW1	30.31483	98.024	MB	30	Kgru									0	30	x		x		Hilltop
CIS1	30.31482	98.024	MB	30	Kgru									0	30	x		x		Hilltop
WW2	30.314667	98.02567	MB	30	Kgru									0	30	x		x		Hilltop
WW3	30.302167	98.03133	MB	30	Kgru									0	30	x		x		Hilltop
Q1	30.30133	98.03233	MB	30	Kgru									5	35	x		x		Hillside

* DATUM NAD27

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

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

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

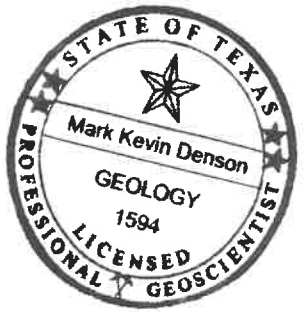
I have read, I understood, and I have followed the Texas Natural Resource Conservation Commission's Instructions to Geologists. The information presented here complies with that document and is a true representation of the conditions observed in the field.

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

Date 9/7/2025

TNRCC-0585-Table (Rev. 5-1-02)

Sheet 1 of 1



Attachment B

Stratigraphic Column
Provence Phase 2 (Sections 1, 2, and 3)
North of Hamilton Pool Road
Austin, Travis County, Texas

HYDROGEOLOGIC SUBDIVISION	FORMATION	THICKNESS (feet)	LITHOLOGY
Edwards Aquifer	Walnut Formation	50	Limestone, marl, and dolomitic limestone
Lower confining unit	Glen Rose limestone	380	Dolomitic limestone interbedded with marl in alternating resistive and recessive beds

Source: Senger, Collins and Kreitler, 1990

9/7/2025

STATE OF TEXAS
Mark Kevin Denson
GEOLOGY
1594
LICENSED
PROFESSIONAL GEOSCIENTIST

Terracon

ATTACHMENT C
SITE-SPECIFIC GEOLOGY

The Geologic Assessment (GA) of the Provence Phase 2 (Sections 1, 2, and 3) site was performed by Kevin Denson, P.G., of Terracon. The approximate 230-acre site is located north of Hamilton Pool Road at its intersection with Martinet Drive. The property is characterized as ranchland and is undeveloped with the exception of several barns, wellhouses, and other small structures. The site is vegetated with a mix of native hardwoods, mostly Ashe Juniper and Live Oak, interspersed with areas of native grasses. Exhibit 1 (attached) is a site location map depicting the site in relation to the surrounding area. The areas immediately surrounding the site are a mix of residential and undeveloped properties. The site is characterized as gently to steeply sloping, and Little Barton Creek traverses the southern portion of the site adjacent to the proposed Sections 1 and 2. Site elevation ranges from about 1,234 to 1,110 feet above mean sea level (msl).

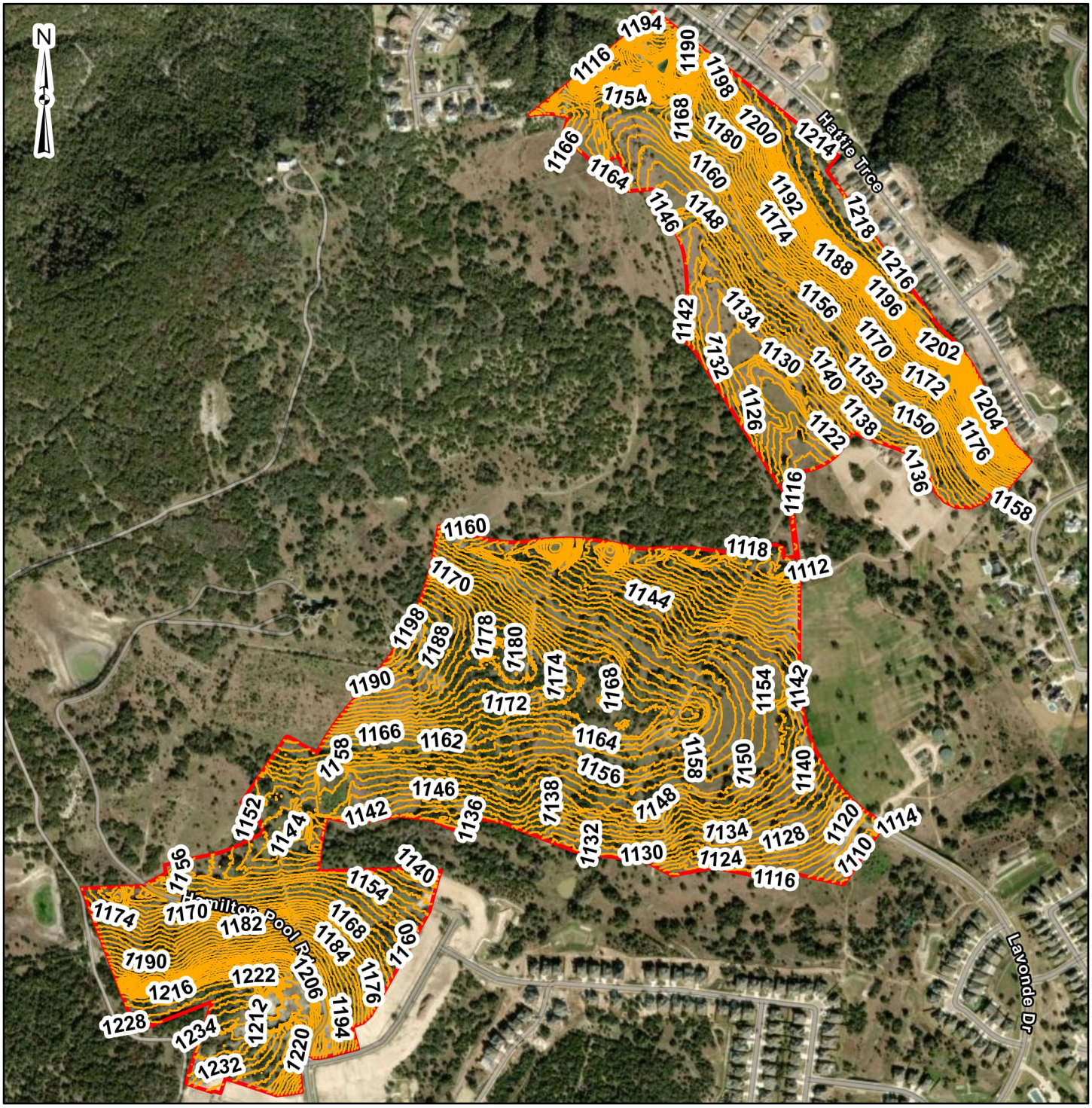
The surficial geologic units present at the site have been identified as the Walnut Formation and the Glen Rose Formation. The Walnut Formation underlies the Edwards Formation and consists of a hard, fine to medium grained limestone and marl. The Walnut Formation is about 50 feet thick in the area and represents a transgressive facies separating the Edwards from the underlying Glen Rose Formation. The Glen Rose Formation forms the lower confining unit to the Edwards aquifer and generally consists of a yellowish-tan, thinly bedded limestone and marl. The upper member of the Glen Rose (present on the site) consists of shale and marl alternating with thin beds of limestone and dolomite. This alternating bedding forms the typical stairstep topography observed in outcrops in the area. A stratigraphic column prepared for the site is attached. Exhibit 3 (attached) is a geologic map of the site.

Exposure of the geologic units is typically obscured by soil in gently sloping areas, with good exposure in more steeply sloping areas associated with dry, intermittent drainages. No faulting was observed on the site and the nearest mapped fault is located approximately 11 miles southeast of the site. The fault, locally referred to as the Mount Bonnell Fault, trends toward the northeast and is associated with the Balcones Fault zone, which represents the dominant structural trend in the vicinity of the site.

The site is located predominantly within the Edwards Aquifer Contributing Zone, with the exception of a small area in the far northern portion of Section 3. A GA was required for the site due to the proposed use of a Contributing Zone Plan with Optional Enhanced Measures (CZP-OEM). Exhibit 4 is an Edwards Aquifer Zones map depicting the site. The completed Geologic Assessment form and Geologic Assessment Table are attached.

No sensitive geologic features were observed on the site. A total of three water wells, one apparent cistern, and a historic quarry were observed in the locations depicted on Exhibit 3. If no further use is intended for the water wells as part of the proposed site development, then they should be properly plugged and abandoned in accordance with applicable regulations. A review of the Texas Water Development Board (TWDB) Water Data Interactive website did not identify information regarding the water wells.

Since the site is not located within the Recharge Zone of the Edwards Aquifer, there is no potential for recharge to the Edwards Aquifer at the site.



DATA SOURCES:
Esri Community Maps Contributors, City of Austin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Project No.:	96257140
Date:	Jul 2025
Drawn By:	RC
Reviewed By:	KD

terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

Site Specific Topography

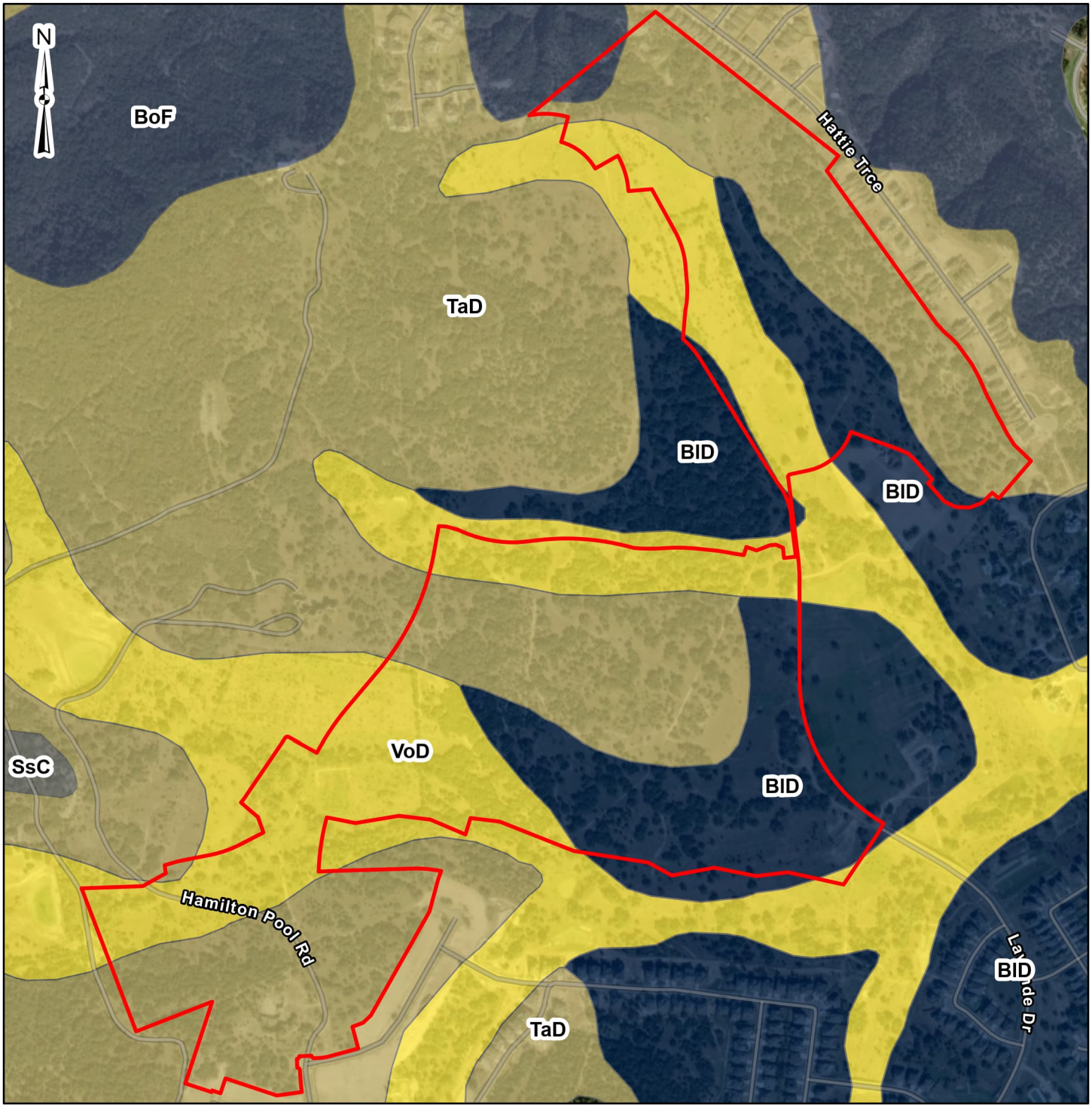
Provence Phase II - Sections 1, 2, and 3

Lavonde Drive at Montage Drive
Austin, Travis County, Texas

Exhibit

1.0

G:\0096\Projects\2025\96257140_ProvencePhase2\Maps\96257140_ProvencePhase2.aprx



Approximate Project Boundary

USDA Web Soil Survey Map Units

- Brackett-Rock outcrop complex (BID)
- Brackett-Rock outcrop-Real complex (BoF)
- Speck clay loam (SsC)
- Eckrant very stoney clay (TaD)
- Volente silty clay loam (VoD)

0 500 1,000 2,000 Feet

DATA SOURCES:
Esri Community Maps Contributors, City of Austin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Project No.:	96257140
Date:	Jul 2025
Drawn By:	RC
Reviewed By:	KD

terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

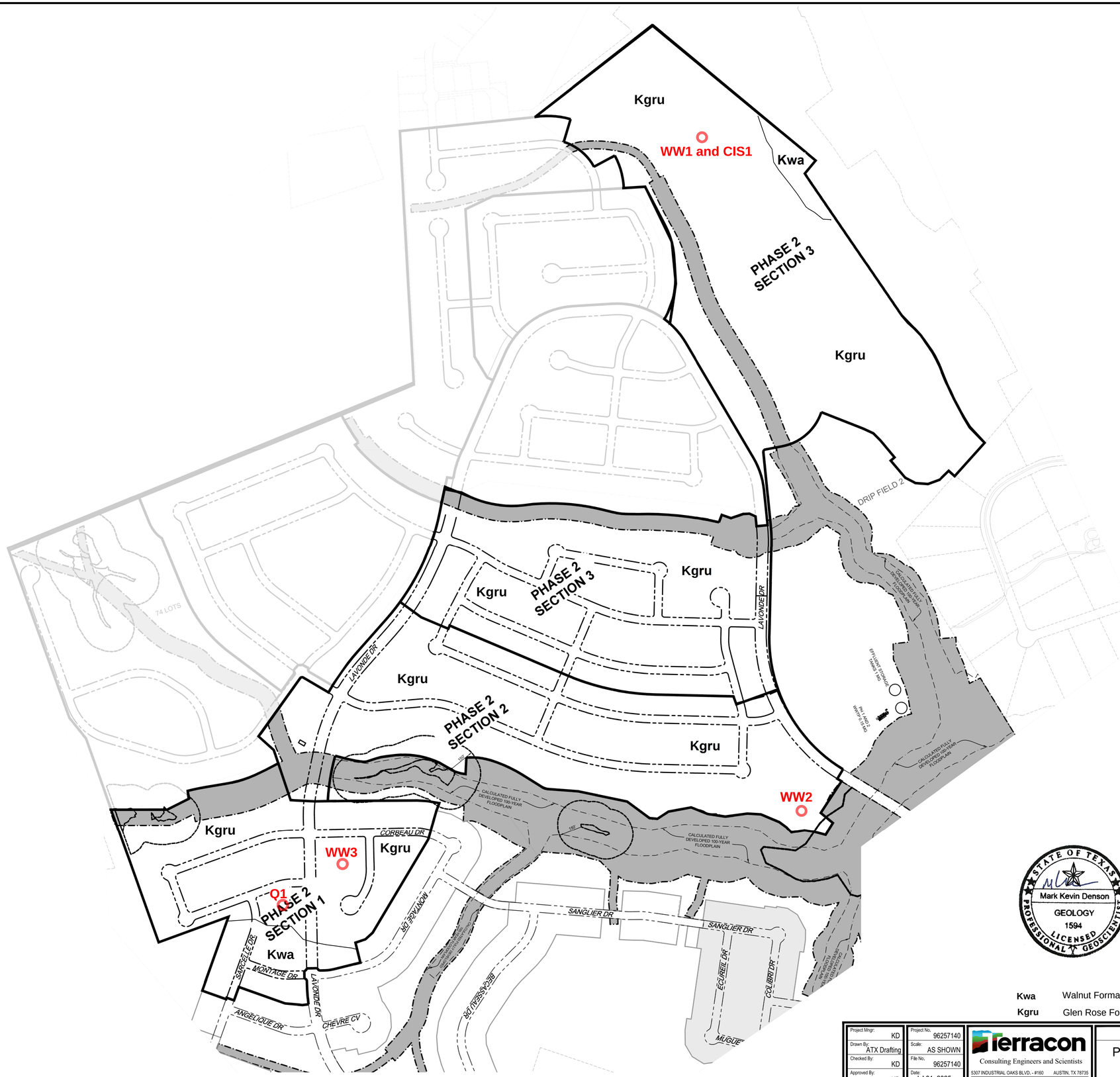
USDA Site Soil Map

Provence Phase II - Sections 1, 2, and 3

Lavonde Drive at Montage Drive
Austin, Travis County, Texas

Exhibit

2.0



N

T

300 0 150 300

APPROXIMATE SCALE IN FEET

STATE OF TEXAS
Mark Kevin Denson
GEOLOGY
1594
LICENSED
PROFESSIONAL GEOSCIENTIST

LEGEND

- Site Boundary
- Road ROW
- 100-Year Floodplain
- Geologic Contact

Kwa Walnut Formation

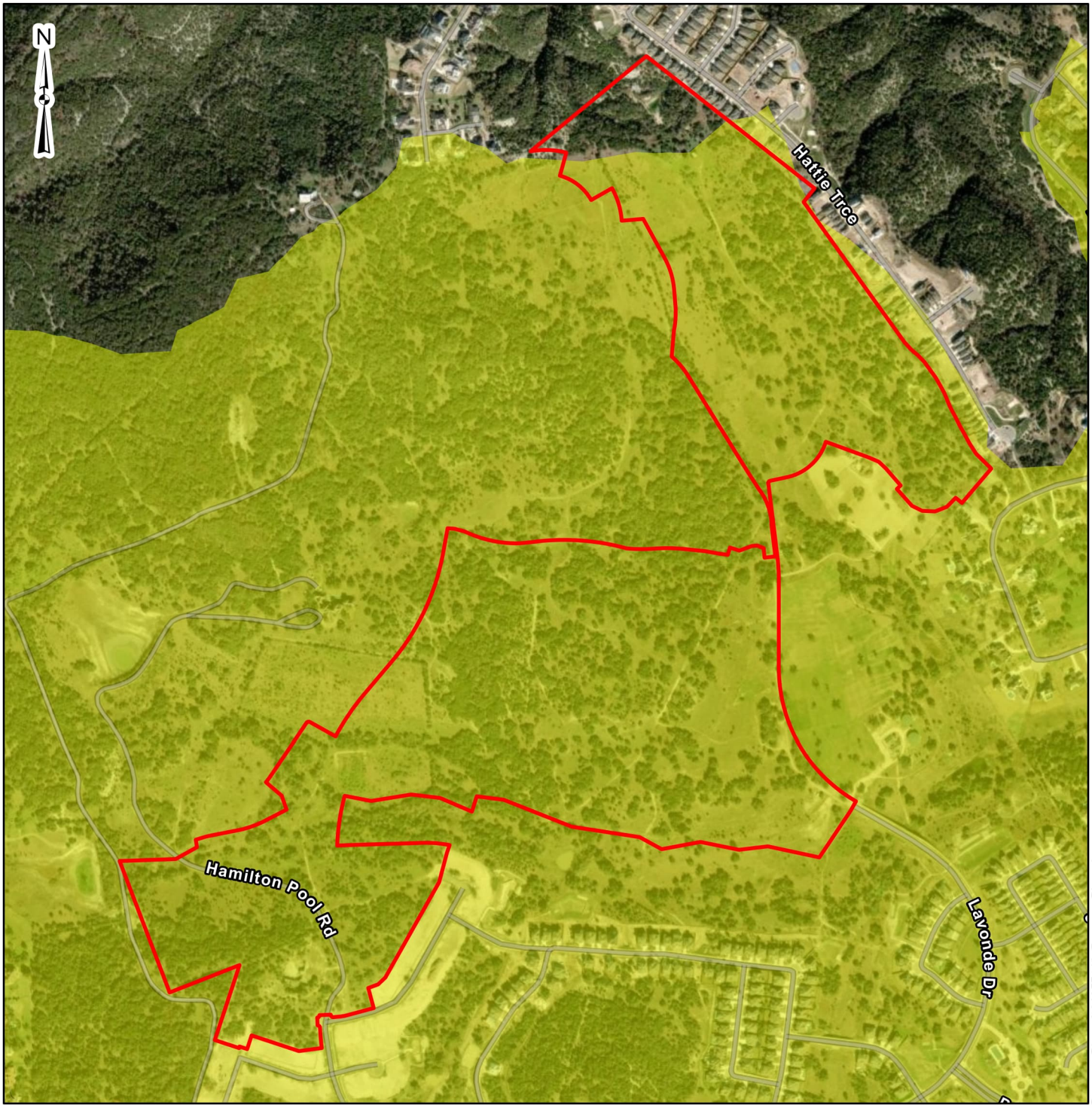
Kgru Glen Rose Formation

Kgru Geologic Formation

Feature ID

Project Mngr: KD	Project No. 96257140	Terracon Consulting Engineers and Scientists	SITE DIAGRAM
Drawn By: ATX Drafting	Scale: AS SHOWN	5307 INDUSTRIAL OAKS BLVD. - #160 AUSTIN, TX 78735	Provence Phase 2 - Sections 1, 2, & 3
Checked By: KD	File No. 96257140	PH. (512) 442-1122 FAX (512) 442-1181	Lavonde Drive at Montage Drive
Approved By: KD	Date: Jul 31, 2025		Austin, Travis County, Texas

EXHIBIT 3



Approximate Project Boundary

Edwards Aquifer Contributing Zone

0 500 1,000 2,000 Feet

DATA SOURCES:
Esri Community Maps Contributors, City of Austin, Texas Parks & Wildlife, CONANP, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA, USFWS, Maxar

Project No.:	96257140
Date:	Jul 2025
Drawn By:	RC
Reviewed By:	KD

terracon
5307 Industrial Oaks Blvd. - #160 Austin, TX 78735
PH. (512) 442-1122 terracon.com

Edwards Aquifer Zones

Provence Phase II - Sections 1, 2, and 3

Lavonde Drive at Montage Drive
Austin, Travis County, Texas

Exhibit

4.0

G:\0096\Projects\2025\96257140_ProvencePhase2\Maps\96257140_ProvencePhase2_aprx

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

I Jack Meredith,
Print Name

CFO,
Title - Owner/President/Other

of Masonwood HP II LLC,
Corporation/Partnership/Entity Name

have authorized Alan Putnam, P.E.
Print Name of Agent/Engineer

of Moody 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

3/5/2025
Date

THE STATE OF Texas §

County of Travis §

BEFORE ME, the undersigned authority, on this day personally appeared March 5th 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 5th day of March, 2025.

NINA ZAVALA
Notary ID #129918883
My Commission Expires
June 7, 2025

Nina Zavala
NOTARY PUBLIC

Nina Zavala
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: June 7, 2025

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Provence Phase 2 Section 3

Regulated Entity Location: Off Hamilton Pool Rd, 3.7 miles from Hwy 71, Travis County

Name of Customer: Masonwood HP II LLC.

Contact Person: Jack Meredith Phone: 512-306-8300

Customer Reference Number (if issued):CN _____

Regulated Entity Reference Number (if issued):RN _____

Austin Regional Office (3373)

☐ Hays ☒ Travis ☐ Williamson

San Antonio Regional Office (3362)

☐ Bexar ☐ Medina ☐ Uvalde

☐ Comal ☐ Kinney

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

☒ Austin Regional Office

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

☐ San Antonio Regional Office

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

Site Location (Check All That Apply):

☐ Recharge Zone ☒ Contributing Zone ☐ Transition Zone

Type of Plan	***Size***	***Fee Due***
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	39.15 Acres	$ 4,000
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	Acres	$
Sewage Collection System	L.F.	$
Lift Stations without sewer lines	Acres	$
Underground or Aboveground Storage Tank Facility	Tanks	$
Piping System(s)(only)	Each	$
Exception	Each	$
Extension of Time	Each	$

Signature: _____ Date: 9/3/2025

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

TCEQ Use Only

TCEQ Core Data Form

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

SECTION I: General Information

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

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

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

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

SECTION II: Customer Information

4. General Customer Information	**5. Effective Date for Customer Information Updates** (mm/dd/yyyy)	8/1/2025

☒ 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:*

Masonwood HP II 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)*
0805955711	32099356373		137251770

11. Type of Customer: ☐ Corporation ☐ Individual Partnership: ☐ General ☒ Limited
Government: ☐ City ☐ County ☐ Federal ☐ Local ☐ State ☐ Other ☐ Sole Proprietorship ☐ Other:

12. Number of Employees
☒ 0-20 ☐ 21-100 ☐ 101-250 ☐ 251-500 ☐ 501 and higher

13. Independently Owned and Operated?
☒ **Yes** ☐ **No**

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

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

15. Mailing Address:

4501 WESTBANK DR, BLDG. A, STE. 110

City	Austin	**State**	TX	**ZIP**	78746	**ZIP + 4**	7407

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

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

(512) 306-8300		( ) -

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.)*

Provence Phase 2 Section 3

23. Street Address of the Regulated Entity: ***(No PO Boxes)***								
	City	Austin	**State**	TX	**ZIP**	78733	**ZIP + 4**	
24. County	Travis							

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

25. Description to Physical Location:	This site is located in western Travis County, on the north side of Hamilton Pool Road 0.5 miles north (east) of the Hamilton Pool Road/Crumley Ranch Road Intersec on. This site lies within the Provence development.				
26. Nearest City			**State**	**Nearest ZIP Code**	
Bee Cave					
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:	30.306389		**28. Longitude (W) In Decimal:**	-98.031389	
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		236115	

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

DEVELOPMENT

34. Mailing Address:	**16314 Hamilton Pool Road**							
	City	**Austin**	**State**	**TX**	**ZIP**	**78738**	**ZIP + 4**	**7407**
35. E-Mail Address:	**Jack@masonwoodtx.com**							

36. Telephone Number	**37. Extension or Code**	**38. Fax Number** *(if applicable)*
(512) 306-8300		( ) -

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:	Leo Ramirez		41. Title:	Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address	
(512) 502-8333	117	( ) -	leo@moodyengineering.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:	Masonwood HP II LLC	Job Title:	CFO	
Name *(In Print)*:	Jack Meredith	Phone:	(512) 306- 8300	
Signature:		Date:	9/3/2025	

Moody Engineering, Inc.

9225 Bee Caves Road
Bldg. A, Suite 200
Austin, Texas 78733

Telephone: (512)502-8333
Toll Free: (800)821-9112
Fax: (512)502-8334
MOODYENGINEERING.COM

September 5th, 2025

Mr. Lori Wilson
Regional Director
Texas Commission on Environmental Quality-Region 11
MC R11
P.O. Box 13087
Austin, Texas 78711-3087

RE: Provence Phase 2 – Section 3 Subdivision Improvements
TCEQ OEM Compliance
MEI 2018.227.23

Dear Ms. Lori Wilson,

The purpose of this letter is to provide TCEQ a summary of how the proposed Provence Phase 2, Section 3 subdivision will comply with the Optional Enhanced Measures (OEM) for the Protection of Water Quality in the Edwards Aquifer as listed in RG-348, Appendix A. No variances from the OEMs are requested. This submittal is enclosed with a Contributing Zone Plan (CZP) as required for a project located within the Contributing Zone to the Edwards Aquifer.

Site Planning

A Geologic Assessment was prepared by Southwest Geoscience dated March 2014 and is provided in the CZP. This report indicates that there are no sensitive features, based on the assessment by Southwest Geoscience staff within the subject site.

The guidelines set forth in RG-348A for stream buffer setbacks have been applied to the site;

- Streams draining between 5 and 40 acres should have a minimum buffer of 25 feet from the centerline.
- Streams draining between 40 and 128 acres should have a minimum buffer of 50 feet from the centerline.

- Streams draining between 128 and 320 acres should have a minimum buffer of 100 feet from the centerline.
- Streams draining between 320 and 640 acres should have a minimum buffer of 200 feet from the centerline.
- Streams draining more than 640 acres should have a minimum buffer of 300 feet from the centerline.

Temporary rock berms are proposed during construction to reduce flow velocities and minimize construction sediment from leaving the site.

Construction:

Most of the property drains towards the northeast into a natural drainage way that drains to Little Barton Creek. The proposed development will have an increase in impervious cover and subsequently, more runoff. This increase in runoff will be negated by onsite water quality ponds and a regional detention pond built with Section 1. TCEQ requires at least eighty percent (80%) of the increase in TSS load for the developed site to be mitigated. Calculations are provided in the CZP and a summary is provided in the construction plans.

Erosion controls will follow the recommendations in RG-348.

Prior to site clearing, grading, and excavation, the stabilized construction entrance, tree protection, and silt fencing will be installed at the downstream edge of disturbed areas where shallow sheet runoff occurs. The water quality ponds will act as a sediment trap for the project during construction. During all aspects of construction, the contractor shall maintain these controls. The contractor will be responsible for stabilization practices (revegetation). The contractor will be responsible for removing the temporary controls once the revegetation is established.

Permanent BMP Implementation

The proposed permanent best management practices (BMP's) for this project include extended detention ponds. The required 80% reduction of the annual TSS loading is achieved using this BMP design. Calculations are provided in the CZP.

Measures to Protect Stream Morphology

RG-348A requires demonstration of the limitation of stormwater runoff to protect stream morphology. The peak rate of runoff for the 2-year, 24-hour storm will be limited to 50% of the undeveloped rate of runoff. Also, the 10-, 25-, and 100-year, 24-hour storm peak runoff rate will be limited to the rate of runoff calculated for the undeveloped condition based on City of Austin design criteria, using the proposed stormwater detention facilities. The regional detention pond that serves all of phase 1 was built with section 1 and Table 1 below demonstrates the Stream Morphology 2-year and 10-year storm requirements for this site. Additionally, see attachment for TCEQ OEM Drainage Analysis.

Table 1

Provence Phase 2 Section 3
TCEQ OEM DRAINAGE ANALYSIS

			Existing Conditions	
ID	Area (ac)	Impervious Cover (%)	2-Year	10-Year
E-1	34.72	1.0%	112.6	202.4
POI-A			**112.6**	**202.4**

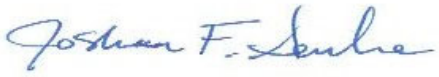
		Impervious	Proposed Conditions	
ID	Area (ac)	Cover (%)	2-Year	10-Year
WQ-1	34.52	33.72%	122.6	205.6
P-2A	2.82	18.18%	16.5	28.5
P-2B	0.53	17.39%	2.6	4.5
P-3	1.59	30.19%	5.2	8.7
P-4	3.58	13.73%	13.8	24.0
POI-A			**50.9**	**197.1**

Maintenance Requirements

Masonwood HP II LLC, will own and operate all best management practices within the Provence Phase 2 development. The developer's contractor will construct and operate the facilities per the maintenance plan during the warranty period, after which time responsibility for the maintenance plan will be transferred to the MUD.

Please see the attached maintenance plan for the project in the CZP.

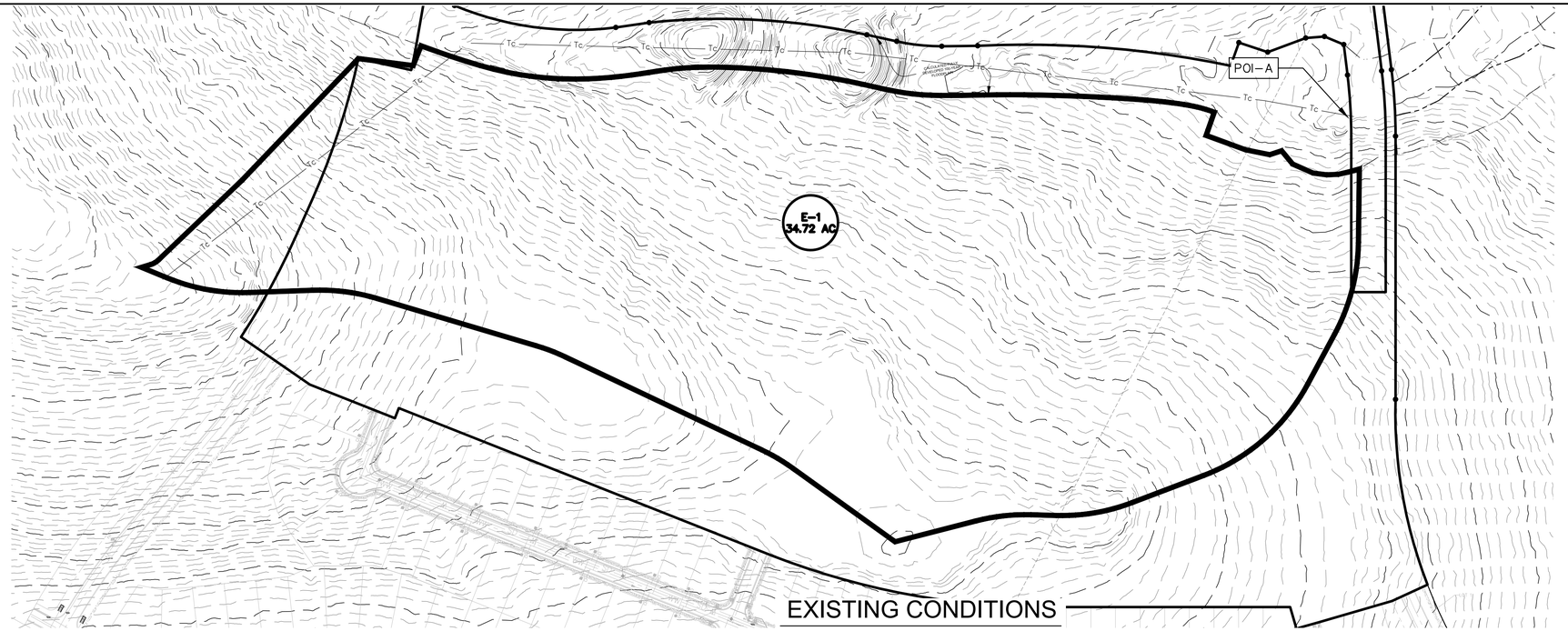
Sincerely,

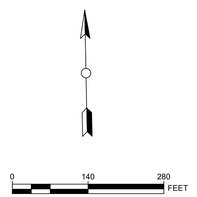


Joshua F. Henke, P.E.
Project Manager

Attachments:
Exhibit A – TCEQ OEM Drainage Analysis

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CZP\Documents\7 - TCEQ CZP OEM Letter - Phase 2 Section 3.docx



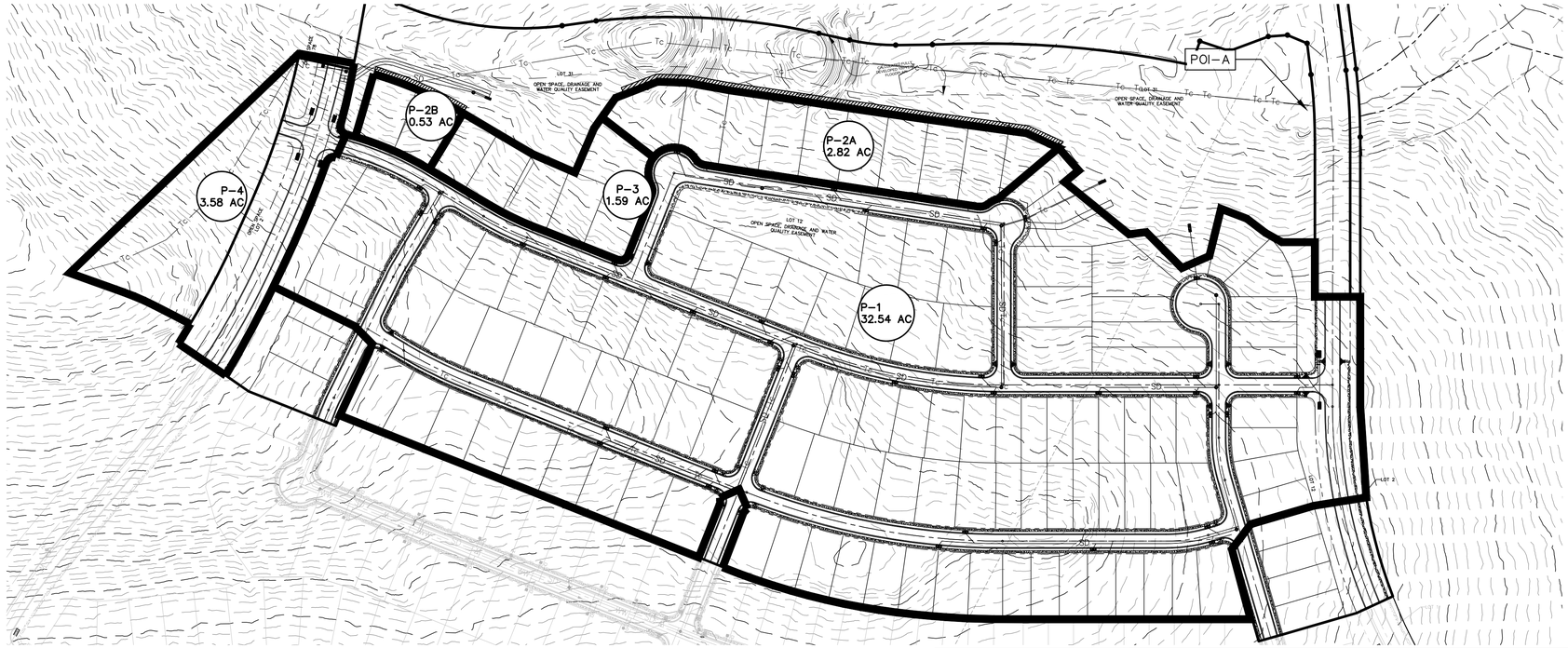


Provence Phase 2 Section 3

TCEQ OEM DRAINAGE ANALYSIS

ID	Area (ac)	Impervious Cover (%)	Existing Conditions 2-Year	Existing Conditions 10-Year
E-1	34.72	1.0%	112.6	202.4
POI-A			**112.6**	**202.4**

ID	Area (ac)	Impervious Cover (%)	Proposed Conditions 2-Year	Proposed Conditions 10-Year
WQ-1	34.52	33.72%	122.6	205.6
P-2A	2.82	18.18%	16.5	28.5
P-2B	0.53	17.39%	2.6	4.5
P-3	1.59	30.19%	5.2	8.7
P-4	3.58	13.73%	13.8	24.0
POI-A			**50.9**	**197.1**



PROPOSED CONDITIONS

MOODY ENGINEERING, INC.
9225 BEE CAVES ROAD
BLDG A, SUITE 200
AUSTIN, TEXAS 78733
(512) 502-8333
TBPE FIRM REG. NO. F-18320

EXHIBIT A
TCEQ OEM DRAINAGE ANALYSIS

PROVENCE PHASE 2 SECTION 3
TRAVIS COUNTY, TEXAS

SEP 2025

2018-227

P:\Active Projects\2018-227 Provence\23-Phase_2_Sec_3\CZP\CAD\23_wq_OEM.dwg 9/3/2025 2:03 PM

Moody Engineering, Inc.