



Water Pollution Abatement Plan

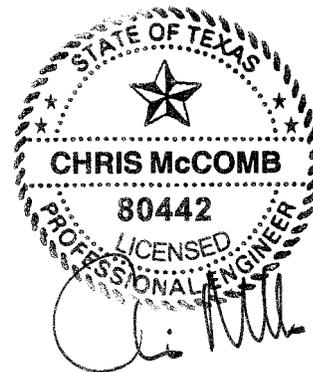
For

**Kathy Manning Athletic Center at
Town & Country**

**13228 Morris Road
Austin, Texas 78729**

**Submitted to:
Texas Commission on Environmental Quality
Austin Regional Office**

December 12, 2025



This report is released under the authority of
Christopher McComb, P.E., on December 12, 2025

AMC Design Group, Inc.
P.O. Box 303086
Austin, Texas 78703

Tel 512.385.2911
Texas Engineering Firm Registration No. F-1708

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Section 1

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: Kathy Manning Athletic Center at Town & Country					2. Regulated Entity No.:				
3. Customer Name: The Optimist Club of Town and Country Round Rock Texas					4. Customer No.:601393846				
5. Project Type: (Please circle/check one)	<input checked="" type="checkbox"/> New	Modification			Extension		Exception		
6. Plan Type: (Please circle/check one)	<input checked="" type="checkbox"/> WPAP	<input type="checkbox"/> CZ <input type="checkbox"/> P	<input type="checkbox"/> SCS	<input type="checkbox"/> UST	<input type="checkbox"/> AST	<input type="checkbox"/> EXP	<input type="checkbox"/> EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential		<u>Non-residential</u>			8. Site (acres):		11.122 acres	
9. Application Fee:	\$6,500.00		10. Permanent BMP(s):			Yes; sand filter with bio-filtration media			
11. SCS (Linear Ft.):	N/A		12. AST/UST (No. Tanks):			N/A			
13. County:	Williamson		14. Watershed:			Lake Creek			

Application Distribution

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

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

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

Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	_1_
Region (1 req.)	—	—	_1_
County(ies)	—	—	_1_
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Barton Springs/ Edwards Aquifer <input type="checkbox"/> Hays Trinity <input type="checkbox"/> Plum Creek	<input type="checkbox"/> Barton Springs/ Edwards Aquifer	NA
City(ies) Jurisdiction	<input type="checkbox"/> Austin <input type="checkbox"/> Buda <input type="checkbox"/> Dripping Springs <input type="checkbox"/> Kyle <input type="checkbox"/> Mountain City <input type="checkbox"/> San Marcos <input type="checkbox"/> Wimberley <input type="checkbox"/> Woodcreek	<input type="checkbox"/> Austin <input type="checkbox"/> Bee Cave <input type="checkbox"/> Pflugerville <input type="checkbox"/> Rollingwood <input type="checkbox"/> Round Rock <input type="checkbox"/> Sunset Valley <input type="checkbox"/> West Lake Hills	_1_ Austin <input type="checkbox"/> Cedar Park <input type="checkbox"/> Florence <input type="checkbox"/> Georgetown <input type="checkbox"/> Jerrell <input type="checkbox"/> Leander <input type="checkbox"/> Liberty Hill <input type="checkbox"/> Pflugerville <input type="checkbox"/> Round Rock

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	—	—	—	—	—
Region (1 req.)	—	—	—	—	—
County(ies)	—	—	—	—	—
Groundwater Conservation District(s)	<input type="checkbox"/> Edwards Aquifer Authority <input type="checkbox"/> Trinity-Glen Rose	<input type="checkbox"/> Edwards Aquifer Authority	<input type="checkbox"/> Kinney	<input type="checkbox"/> EAA <input type="checkbox"/> Medina	<input type="checkbox"/> EAA <input type="checkbox"/> Uvalde
City(ies) Jurisdiction	<input type="checkbox"/> Castle Hills <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Helotes <input type="checkbox"/> Hill Country Village <input type="checkbox"/> Hollywood Park <input type="checkbox"/> San Antonio (SAWS) <input type="checkbox"/> Shavano Park	<input type="checkbox"/> Bulverde <input type="checkbox"/> Fair Oaks Ranch <input type="checkbox"/> Garden Ridge <input type="checkbox"/> New Braunfels <input type="checkbox"/> Schertz	NA	<input type="checkbox"/> 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.	
Christopher B. McComb, P.E.	
Print Name of Customer/Authorized Agent	
	12/12/25
Signature of Customer/Authorized Agent	Date

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



TCEQ 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.)		
<input checked="" type="checkbox"/> New Permit, Registration or Authorization (Core Data Form should be submitted with the program application.)		
<input type="checkbox"/> Renewal (Core Data Form should be submitted with the renewal form)	<input type="checkbox"/> 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 601393846		RN

SECTION II: Customer Information

4. General Customer Information		5. Effective Date for Customer Information Updates (mm/dd/yyyy)		12/12/2025
<input type="checkbox"/> New Customer <input checked="" type="checkbox"/> Update to Customer Information <input type="checkbox"/> Change in Regulated Entity Ownership <input type="checkbox"/> Change in Legal Name (Verifiable with the Texas Secretary of State or Texas Comptroller of Public Accounts)				
<i>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).</i>				
6. Customer Legal Name (If an individual, print last name first: eg: Doe, John)			<i>If new Customer, enter previous Customer below:</i>	
The Optimist Club of Town and Country Round Rock Texas				
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)		9. Federal Tax ID	10. DUNS Number (if applicable)
801000371	N/A, this is a non-profit		(9 digits) 26-2955136	
11. Type of Customer:		<input checked="" type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> Local <input type="checkbox"/> State <input type="checkbox"/> Other		<input type="checkbox"/> Sole Proprietorship	<input checked="" type="checkbox"/> Other: Non profit	
12. Number of Employees			13. Independently Owned and Operated?	
<input checked="" type="checkbox"/> 0-20 <input type="checkbox"/> 21-100 <input type="checkbox"/> 101-250 <input type="checkbox"/> 251-500 <input type="checkbox"/> 501 and higher			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
14. Customer Role (Proposed or Actual) – as it relates to the Regulated Entity listed on this form. Please check one of the following				
<input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Owner & Operator <input type="checkbox"/> Other: <input type="checkbox"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> VCP/BSA Applicant				
15. Mailing Address:	PO Box 200417			
	City	Austin	State	TX
	ZIP	78720	ZIP + 4	
16. Country Mailing Information (if outside USA)			17. E-Mail Address (if applicable)	
			tb@cgaus.com	

18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)
(512) 619-1600		() -

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If 'New Regulated Entity' is selected, a new permit application is also required.)								
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information								
<i>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).</i>								
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)								
Kathy Manning Athletic Center at Town & Country								
23. Street Address of the Regulated Entity: (No PO Boxes)	13228 Morris Road							
	City	Austin	State	TX	ZIP	78729	ZIP + 4	
24. County	Williamson							

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

25. Description to Physical Location:									
26. Nearest City			State			Nearest ZIP Code			
<i>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).</i>									
27. Latitude (N) In Decimal:			30.459			28. Longitude (W) In Decimal:			-97.767
Degrees	Minutes		Seconds		Degrees	Minutes		Seconds	
29. Primary SIC Code		30. Secondary SIC Code		31. Primary NAICS Code		32. Secondary NAICS Code			
(4 digits)		(4 digits)		(5 or 6 digits)		(5 or 6 digits)			
8322		22		813410					
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)									
Non profit youth sports									
34. Mailing Address:		PO Box 200417							
		City	Austin	State	TX	ZIP	78720	ZIP + 4	
35. E-Mail Address:		tb@cgaus.com							
36. Telephone Number			37. Extension or Code			38. Fax Number (if applicable)			
(512) 619-1600						() -			

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.

<input type="checkbox"/> Dam Safety	<input type="checkbox"/> Districts	<input checked="" type="checkbox"/> Edwards Aquifer	<input type="checkbox"/> Emissions Inventory Air	<input type="checkbox"/> Industrial Hazardous Waste
<input type="checkbox"/> Municipal Solid Waste	<input type="checkbox"/> New Source Review Air	<input type="checkbox"/> OSSF	<input type="checkbox"/> Petroleum Storage Tank	<input type="checkbox"/> PWS
<input type="checkbox"/> Sludge	<input type="checkbox"/> Storm Water	<input type="checkbox"/> Title V Air	<input type="checkbox"/> Tires	<input type="checkbox"/> Used Oil
<input type="checkbox"/> Voluntary Cleanup	<input type="checkbox"/> Wastewater	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name:	Christopher B McComb, P.E.	41. Title:	Engineer
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address
(512) 385-2911		() -	chris@amcdesigngroup.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:	AMC Design Group, Inc.	Job Title:	President
Name (In Print):	Christopher B. McComb, P.E.	Phone:	(512) 385- 2911
Signature:		Date:	12/12/2025

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

I, William Todd Brooker
Print Name

Authorized Representative for The Optimist Club of Town and Country Round Rock Texas

have authorized Chris McComb, P.E.
Print Name of Agent/Engineer

of AMC Design Group, 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:

W. T. Brooker
Applicant's Signature

12-15-2025
Date

THE STATE OF TEXAS §

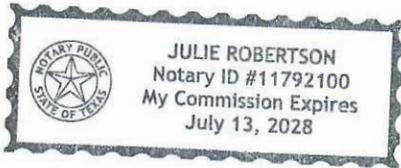
County of TARRANT §

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

GIVEN under my hand and seal of office on this 15 day of 12, 2025.

Julie Robertson
NOTARY PUBLIC

Julie Robertson
Typed or Printed Name of Notary



MY COMMISSION EXPIRES: 07.13.2028

Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Kathy Manning Athletic Center at Town & Country

Regulated Entity Location: 13228 Morris Rd., Austin, TX 78729

Name of Customer: The Optimist Club of Town and Country Round Rock Texas

Contact Person: Chris McComb, P.E. (Agent) Phone: 512-385-2911

Customer Reference Number (if issued): CN 601393846

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

San Antonio Regional Office

Mailed to: TCEQ - Cashier

Overnight Delivery to: TCEQ - Cashier

Revenues Section

Mail Code 214

P.O. Box 13088

Austin, TX 78711-3088

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

<i>Type of Plan</i>	<i>Size</i>	<i>Fee Due</i>
Water Pollution Abatement Plan, Contributing Zone Plan: One Single Family Residential Dwelling	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Multiple Single Family Residential and Parks	Acres	\$
Water Pollution Abatement Plan, Contributing Zone Plan: Non-residential	11.122 Acres	\$ 6,500.00
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: 12/12/25

Application Fee Schedule

Texas Commission on Environmental Quality

Edwards Aquifer Protection Program 30 TAC Chapter 213 (effective 05/01/2008)

Water Pollution Abatement Plans and Modifications

Contributing Zone Plans and Modifications

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

Section 2

General Information Form

Texas Commission on Environmental Quality

For Regulated Activities on the Edwards Aquifer Recharge and Transition Zones and Relating to 30 TAC §213.4(b) & §213.5(b)(2)(A), (B) Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 12/12/25

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Kathy Manning Athletic Center at Town & Country

2. County: Williamson

3. Stream Basin: Lake Creek

4. Groundwater Conservation District (If applicable): N/A

5. Edwards Aquifer Zone:

Recharge Zone

Transition Zone

6. Plan Type:

WPAP

SCS

Modification

AST

UST

Exception Request

7. Customer (Applicant):

Contact Person: William Todd Brooker

Entity: The Optimist Club of Town and Country Round Rock Texas

Mailing Address: PO Box 200417

City, State: Austin, TX

Zip: 78720

Telephone: 512-619-1600

FAX: _____

Email Address: tb@cgaus.com

8. Agent/Representative (If any):

Contact Person: Christopher McComb, P.E.

Entity: AMC Design Group, Inc.

Mailing Address: PO Box 303086

City, State: Austin, TX

Zip: 78703

Telephone: 512-385-2911

FAX: _____

Email Address: chris@amcdesigngroup.com

9. Project Location:

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

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

Property is located at 13228 Morris Road, 1250 feet north of Anderson Mill Road in Austin Texas.

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

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

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

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

Survey staking will be completed by this date: 11/7/24

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

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

15. Existing project site conditions are noted below:

- Existing commercial site
- Existing industrial site
- Existing residential site
- Existing paved and/or unpaved roads
- Undeveloped (Cleared)
- Undeveloped (Undisturbed/Uncleared)
- Other: Existing site developed for youth sports/outdoor recreation.

Prohibited Activities

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

- (1) Waste disposal wells regulated under 30 TAC Chapter 331 of this title (relating to Underground Injection Control);
- (2) New feedlot/concentrated animal feeding operations, as defined in 30 TAC §213.3;
- (3) Land disposal of Class I wastes, as defined in 30 TAC §335.1;
- (4) The use of sewage holding tanks as parts of organized collection systems; and
- (5) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41(b), (c), and (d) of this title (relating to Types of Municipal Solid Waste Facilities).
- (6) New municipal and industrial wastewater discharges into or adjacent to water in the state that would create additional pollutant loading.

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

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

- (2) Land disposal of Class I wastes, as defined in 30 TAC §335.1; and
- (3) New municipal solid waste landfill facilities required to meet and comply with Type I standards which are defined in §330.41 (b), (c), and (d) of this title.

Administrative Information

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

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

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

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

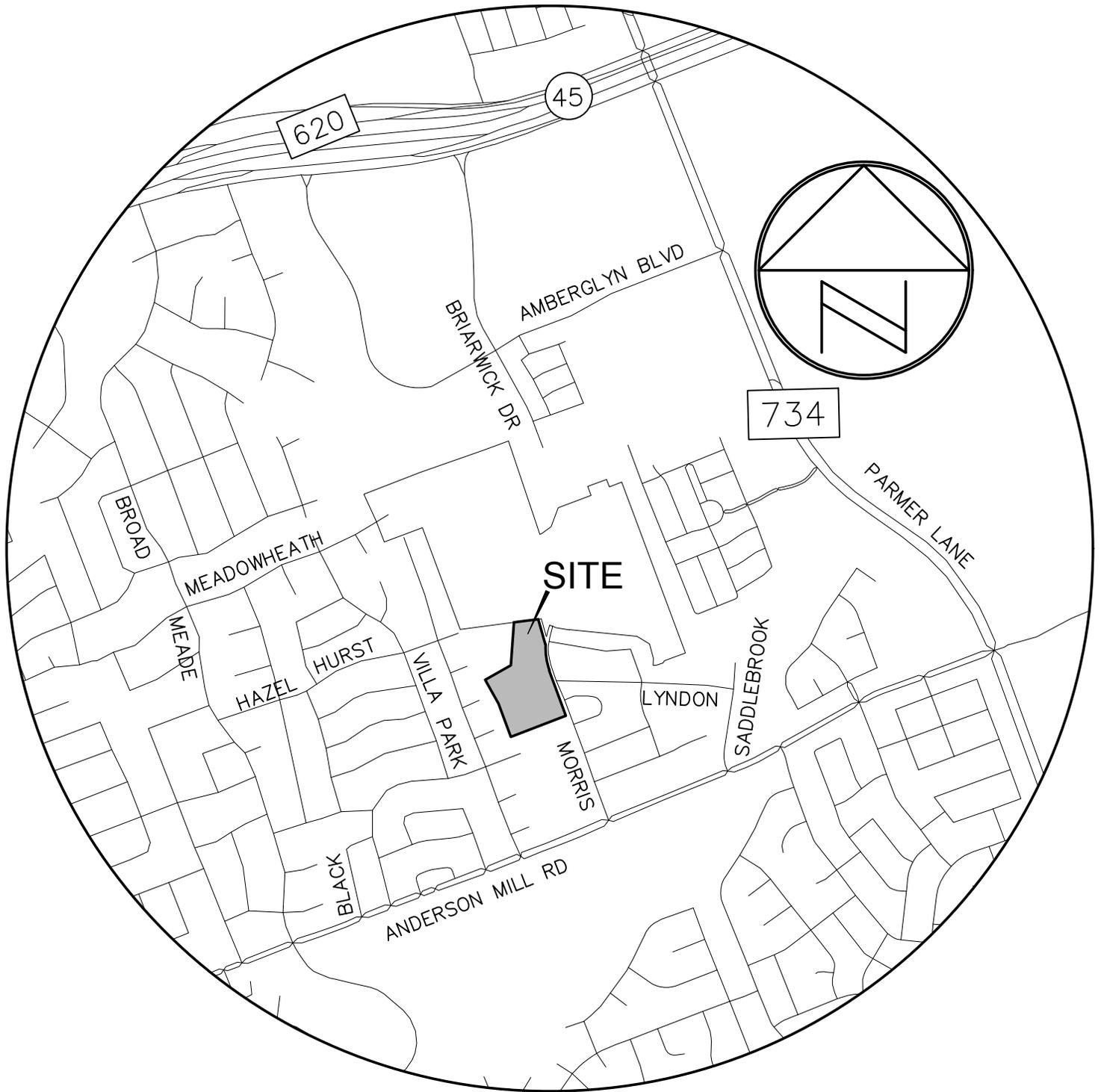
20. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies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

21. No person shall commence any regulated activity until the Edwards Aquifer Protection Plan(s) for the activity has been filed with and approved by the Executive Director.

Attachment A

A.0 Road/Location Map

13228 MORRIS ROAD



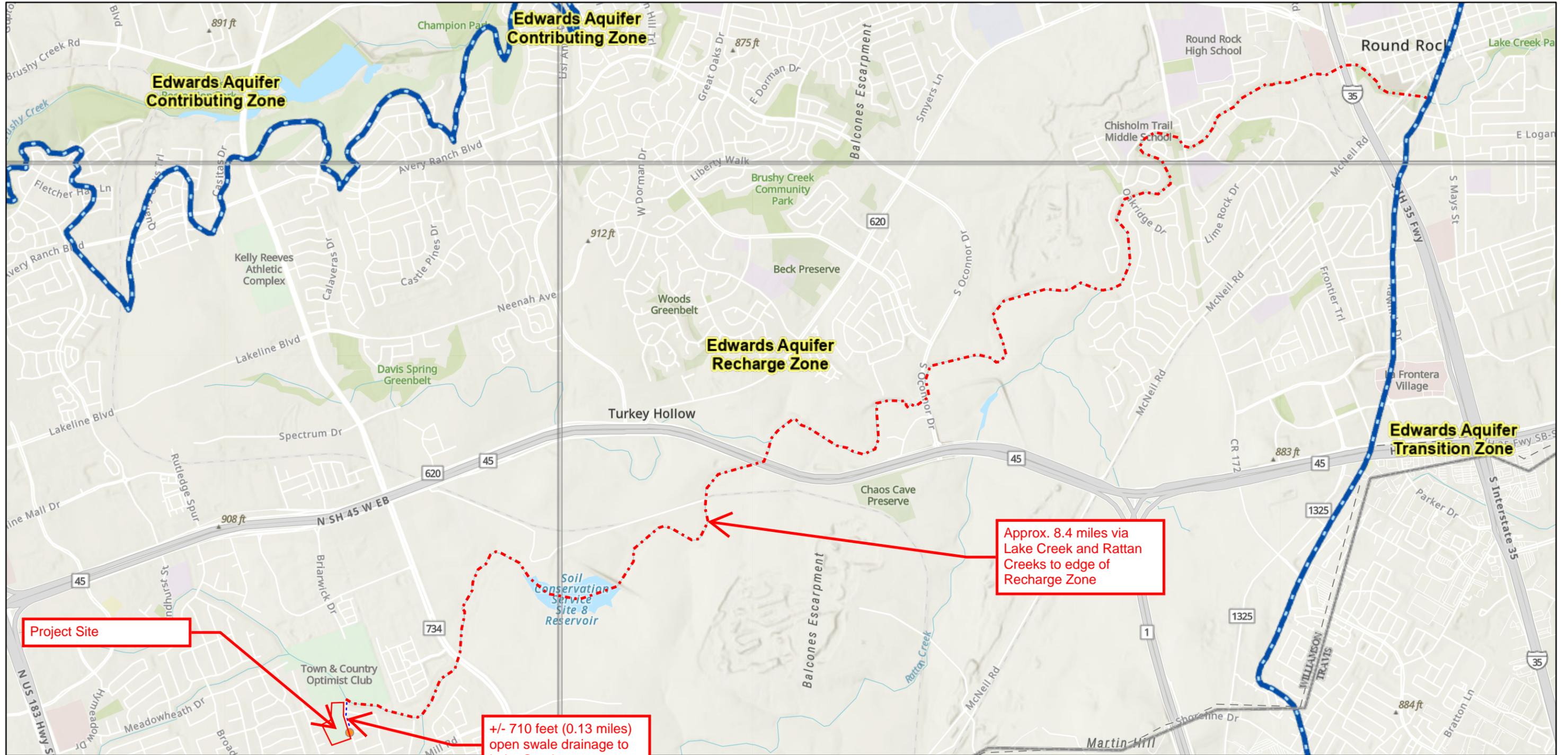
LOCATION MAP

N.T.S.

Attachment B

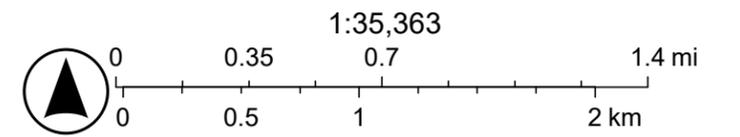
B.0 USGS/EDWARDS RECHARGE ZONE MAP

KMAC at Town and Country



12/15/2025, 8:17:55 AM

- ArcGIS World Geocoding Service
- TCEQ_EDWARDS_OFFICIAL_MAPS
- 7.5 Minute Quad Grid
- TX Counties
- Edwards Aquifer Boundary central line
- Edwards Aquifer Label
- World_Hillshade



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community, TCEQ

Attachment C

C.0 Project Description

This project description incorporates all requirements for the Kathy Manning Athletic Center at Town & Country project, a commercial Water Pollution Abatement Plan submittal. The owner's intentions for the proposed development of the land encompassed within the 11.122 acre site include the construction of a new single phased indoor recreation multi-purpose building totaling 40,700 s.f. along with parking, drainage and utility improvements to support the project. The limits of construction area is 4.132 acres. The construction shall be on Lot 1, Block A of the Town and Country Park South, recorded as Doc. No. 2001063550, Cabinet V, Slides 44, 45 and 46, Williamson County Plat Records. Construction on the property will include new pavement totaling 54,101 s.f. for 118 parking spaces, proposed site utility improvements, drainage improvements, and related site construction. The property is currently developed as youth sports soccer and baseball fields for the Optimist Club and is located in Williamson County. The existing site has 31.0 percent impervious cover. After the addition of these improvements, the site will be developed to 50.7 percent impervious cover.

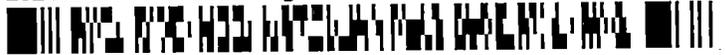
The legal description above may not reflect what is shown on Williamson County Appraisal District records because the previous plat was vacated. In 2004 the property was combined with 2 legal lots and 1 area of un-platted land, totaling 88 acres. Because the old subdivisions were not vacated, their plat notes were brought forward onto the 2004 plat. There was a plat restriction from one of the other properties that then restricted the entire 88 acres, which disallowed this project to happen. By vacating the 88 acre plat, the legal description went back to the 2001 plat mentioned above and corrected the plat note. The recorded vacation document is attached.

The existing development has portions of the site that were developed and permitted with a WPAP under 11-01062701 for the north half of the property. The proposed project is on the south third of the property and does not drain to the water quality controls of that project. Since that permit was issued over 20 years ago with an expired geologic assessment plus the fact these project areas are separated by drainage, we have chosen to submit a new WPAP.

The property is bounded by vacant land to the south, residential lots to the west, youth sports and recreation (additional Optimist Club land) to the north, and Morris Road to the east. The property exists totally within the Lake Creek Watershed and the Edwards Aquifer Recharge Zone. Refer to the construction documents, Drainage Plan and Calculations, for all drainage calculations and maps.

The property is irregular in shape with a high point located at the southwest corner of the tract, and drainage within the property flows to the east towards the Morris Road right of way. The drainage study performed includes a 3.65-acre on-site drainage area with a 6.09-acre contributing off-site drainage. The off-site area will be bypassed around the proposed site and is labeled as subbasin OS-1. The junction where drainage area reaches Morris Road is the analysis point for the drainage study. Once developed, the improvements in the proposed drainage areas will drain via sheet flow and on-site storm sewers to the proposed stormwater management ponds which include an on-site partial sedimentation/bio-filtration pond and on-site detention. The outfall from the proposed detention pond will discharge into the Morris Road roadside ditch immediately adjacent to the pond.

The drainage area of the water quality pond is 2.86 acres and the pond will provide treatment for all of the project's developed area. Drainage from the proposed water quality pond will discharge into the project's detention pond. From there the runoff flows in the Morris Road roadside ditch approximately 710 l.f. north to Lake Creek, then northwest in Lake Creek, then Rattan Creek, approximately 8.4 miles to the boundary of the Recharge Zone.



TOTAL VACATION OF TOWN AND COUNTRY PARK ADDITION

THE STATE OF TEXAS

COUNTY OF Travis

Whereas The Optimist Club of Town and Country Round Rock Texas, owners of that certain 88.298 acres land out of the Santiago Del, did heretofore subdivide the same into the subdivision designated Town and Country Park Addition the plat of which is recorded in Cabinet Y, Slides 158 – 163 of the Williamson County, Texas Official Public Records, and

WHEREAS, the following lots in said subdivision are now owned by the parties indicated, to wit:

<u>LOT</u>	<u>Block</u>	<u>OWNER</u>
1	A	The Optimist Club of Town and Country Round Rock Texas

WHEREAS, The Optimist Club of Town and Country Round Rock Texas, for and in consideration of the premises and pursuant to the provisions of Chapter 212.013 of the Local Government code, does hereby vacate all of Town and Country Park Addition.

EXECUTED THE DAYS HEREAFTER NOTED.

DATE
7/14/2025

OWNER'S SIGNATURE
[Signature]

Owner or owner's representative signature above
Representative for:
The Optimist Club of Town and Country Round Rock Texas

William Todd Brooker

Insert printed version of owner's name above. Also, if a representative is signing on behalf of a company, include representative's name and the capacity in which they are signing. Example: John Smith, Director for Hypothetical Company LLC.

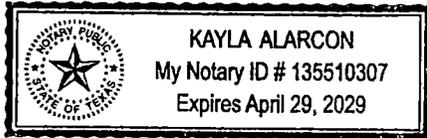
14739 Arrowhead Dr, Leander, TX 78641
Insert owner's address above (or if a company, insert company's address).

TOTAL VACATION OF TOWN AND COUNTRY PARK ADDITION

THE STATE OF TEXAS
COUNTY OF Williamson

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared William Todd Brooker, known to be the person whose name is subscribed to the foregoing instrument and he/she/they acknowledged to me that he/she/they executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 18TH DAY OF July, 2025.



Kayla Alarcon
Printed name: Kayla Alarcon
Notary Public in and for the State of
Texas

My commission expires: April 29, 2029

Unofficial Document

TOTAL VACATION OF TOWN AND COUNTRY PARK ADDITION

BE IT KNOWN, that on the 19th day of August, 2025, the Land Use Commission of the City of Austin, at its regular meeting, did approve the total vacation of the subdivision known as Town and Country as recorded in Cabinet Y, Slides 158 – 163 of the Williamson County, Texas Official Public Records, upon application therefore by all of the owners of all the lots in said subdivision.

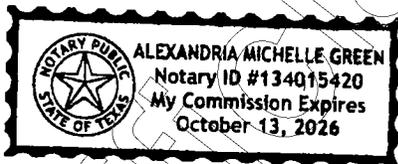
EXECUTED, this 21 day of August, 2025.

[Signature]
Name: Hank B. Smith, Chair
Land Use Commission
City of Austin

THE STATE OF TEXAS
COUNTY OF TRAVIS

BEFORE ME, the undersigned authority, a Notary Public in and for the State of Texas, on this day personally appeared Hank Smith known to be the person whose name is subscribed to the foregoing instrument as a commissioner with the Planning Commission or Zoning & Platting Commission of the City of Austin, a municipal corporation, and he/she/they acknowledged to me that he/she/they executed the same for the purpose and consideration therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, THIS 21 DAY OF August, 2025.



[Signature]
Printed name: Alexandria Green
Notary Public in and for the State of Texas
My commission expires: Oct. 13, 2026

TOTAL VACATION OF TOWN AND COUNTRY PARK ADDITION

After recorded, please return to:

Attn: Cesar Zavala # 2109.03
City of Autin – Development Services Department
Permitting & Development Center – L.U.R. 2nd Floor
P.O. Box 1088
Austin, Texas 78768

C8J-03-0041.0A(VAC) – Town and Country Park Addition

FILED AND RECORDED
OFFICIAL PUBLIC RECORDS 2025066359

Fee: \$37.00
08/25/2025 09:48 AM KWEEMS



Nancy E. Rister
Nancy E. Rister, County Clerk
Williamson County, Texas

Section 3

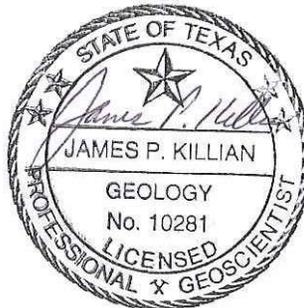
**GEOLOGIC ASSESSMENT
APPROXIMATELY 11.476-ACRE OPTIMIST CLUB MORRIS ROAD FIELDS TRACT
13398 MORRIS ROAD
AUSTIN, WILLIAMSON COUNTY, TEXAS
HJN 23175.003GA**

PREPARED FOR:

**THE OPTIMIST CLUB OF TOWN AND COUNTRY
ROUND ROCK, TEXAS**

PREPARED BY:

**HORIZON ENVIRONMENTAL SERVICES
A BRANCH OF LJA ENVIRONMENTAL SERVICES, LLC
TBPG FIRM REGISTRATION NO. 50679**



SEPTEMBER 2025

TABLE OF CONTENTS

- I. GEOLOGIC ASSESSMENT FORM (TCEQ-0585)**

- II. ATTACHMENTS:**
 - A GEOLOGIC ASSESSMENT TABLE
 - B STRATIGRAPHIC COLUMN
 - C DESCRIPTION OF SITE GEOLOGY
 - D SITE GEOLOGIC MAP
 - E SUPPORTING INFORMATION
 - F ADDITIONAL SITE MAPS
 - G SITE PHOTOGRAPHS

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: James Killian

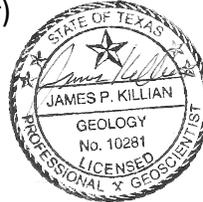
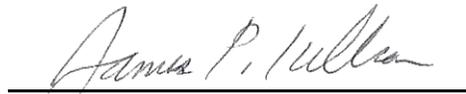
Telephone: 512-328-2430

Date: 8 September 2025

Fax: 512-328-1804

Representing: Horizon Environmental Services and TBPG Form Registration No. 50679 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: Approximately 11.476-acre Optimist Club Morris Road Fields Tract; 13398 Morris Road, Austin, Williamson County, Texas

Project Information

1. Date(s) Geologic Assessment was performed: 2 September 2025

2. Type of Project:

WPAP

AST

SCS

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)
Crawford clay, 1-3% slopes (CfB)	D	2.5
Eckrant stony clay, 0-3% slopes, stony (EeB)	D	0.9
Fairlie clay, 1-2% slopes (FaB)	C	3.9

Soil Name	Group*	Thickness(feet)

** 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" = 400'
 Site Geologic Map Scale: 1" = 400'
 Site Soils Map Scale (if more than 1 soil type): 1" = 200'
9. Method of collecting positional data:
 Global Positioning System (GPS) technology.

- Other method(s). Please describe method of data collection: _____
10. The project site and boundaries are clearly shown and labeled on the Site Geologic Map.
11. Surface geologic units are shown and labeled on the Site Geologic Map.
12. Geologic or manmade features were discovered on the project site during the field investigation. They are shown and labeled on the Site Geologic Map and are described in the attached Geologic Assessment Table.
- Geologic or manmade features were not discovered on the project site during the field investigation.
13. The Recharge Zone boundary is shown and labeled, if appropriate.
14. All known wells (test holes, water, oil, unplugged, capped and/or abandoned, etc.): If applicable, the information must agree with Item No. 20 of the WPAP Application Section.
- There are _____ (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply.)
- The wells are not in use and have been properly abandoned.
 - The wells are not in use and will be properly abandoned.
 - The wells are in use and comply with 16 TAC Chapter 76.
- There are no wells or test holes of any kind known to exist on the project site.

Administrative Information

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

ATTACHMENT A
GEOLOGIC ASSESSMENT TABLE

ATTACHMENT B
STRATIGRAPHIC COLUMN

Geologic Unit	Hydrologic Unit	Approx. Thickness at Project Site (ft)	Elevation (ft msl)	Depth (ft)
			880	0
Edwards Limestone (Ked)	Edwards Aquifer	150		
			730	150
Comanche Peak (Kc)	Confining Unit	50		
			680	200

Note: Unit elevation and thickness given with respect to a ground surface elevation of 880 ft in the southwest corner of the subject site.



Date: 09/09/2025
 Drawn: KRW
 HJN NO: 23175.003 GA

Attachment B
 Stratigraphic Column
 Optimist Club Morris Road Fields Tract
 Austin, Williamson County, Texas



ATTACHMENT C
DESCRIPTION OF SITE GEOLOGY

Geologic information for the subject site obtained via literature review is provided in Attachment E, Supporting Information.

A geologic assessment of approximately 11.476 acres located at 13398 Morris Road, Austin, Williamson County, Texas, was conducted pursuant to Texas rules for regulated activities in the Edwards Aquifer Recharge Zone (EARZ) (30 TAC 213). The subject site consists of developed recreational land for sporting events, with a parking lot on the northern portion and woodlands in the southeastern corner. Assessment findings were used to develop recommendations for site construction measures intended to be protective of water resources at the subject site and adjacent areas.

The entire subject site is located within the EARZ, as defined by the Texas Commission on Environmental Quality (TCEQ). The EARZ occurs where surface water enters the subsurface through exposed limestone bedrock containing faults, fractures, sinkholes, and caves.

The subject site is completely underlain by Edwards Limestone (Ked) (UT-BEG, 1995), which has an estimated maximum thickness of about 150 feet thick.

A total of 4 man-made features (M-1 to M-4) were identified at this site. Further information pertaining to the features is presented in the following Attachments D, E, and F. Photographs of the subject site and the geologic and man-made features are presented in Attachment G.

ATTACHMENT D
SITE GEOLOGIC MAP



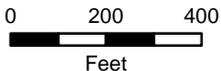
Legend

-  Man-Made Feature
-  Subject Site
-  Edwards Limestone (Ked)




Date:	09/08/2025
Drawn:	KRW
HJN NO:	23175.003GA
Source:	Nearmap, 2025; TWSC, 2014

Attachment D
 Site Geologic Map
 Optimist Club Morris Road Fields Tract
 Austin, Williamson County, Texas

ATTACHMENT E
SUPPORTING INFORMATION

1.0 INTRODUCTION AND METHODOLOGY

This report and any proposed abatement measures are intended to fulfill Texas Commission on Environmental Quality (TCEQ) reporting requirements (TCEQ, 2005). This geologic assessment includes a review of the subject site for potential aquifer recharge and documentation of general geologic characteristics for the subject site. Horizon Environmental Services (Horizon) conducted the necessary field and literature studies according to TCEQ *Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones* (TCEQ, 2004).

Horizon walked transects spaced 50 feet apart, mapped the locations of features using a sub-foot accurate Trimble Geo HX handheld GPS, and posted processed data utilizing GPS Pathfinder Office software, topographic maps, and aerial photographs. Horizon also searched the area around any potential recharge features encountered to look for additional features. When necessary, Horizon removed loose rocks and soil (by hand) to preliminarily assess each feature's subsurface extent while walking transects. However, labor-intensive excavation was not conducted during this assessment. Features that did not meet the TCEQ definition of a potential recharge feature (per TCEQ, 2004), such as surface weathering, karren, or animal burrows, were evaluated in the field and omitted from this report.

The results of this survey do not preclude the possibility of encountering subsurface voids or abandoned test or water wells during the clearing or construction phases of the proposed project. If a subsurface void is encountered during any phase of the project, work should be halted until the TCEQ (or appropriate agency) is contacted and a geologist can investigate the feature.

2.0 ENVIRONMENTAL SETTING

2.1 LOCATION AND GENERAL DESCRIPTION

The subject site consists of approximately 11.476 acres of developed land located adjacent to the northwestern corner of the intersection of Morris Road and Water Oak Lane in Williamson County, Texas (Appendix F, Figure 1).

2.2 LAND USE

The subject site is reportedly used for recreation. Two habitable structures were observed on the site. Morris Road borders the site to the east. Surrounding lands are generally used for suburban residences and commercial business.

2.3 TOPOGRAPHY AND SURFACE WATER

The subject site is situated on gently sloping terrain within the Lake Creek watershed (Appendix F, Figures 2 and 3). Surface elevations on the subject site vary from a minimum of approximately 866 feet above mean sea level (amsl) near the northern property boundary to a

maximum of approximately 880 feet amsl near the southwestern property corner (USGS, 1987). Drainage on the site occurs primarily by sheet flow from southwest to northeast.

2.4 EDWARDS AQUIFER ZONE

The subject site is found within the Edwards Aquifer Recharge Zone (TCEQ, 2025) (Attachment F, Figure 2).

2.5 SURFACE SOILS

Three soil units are mapped within the subject site (NRCS, 2025) (Appendix F, Figure 4). The soil units are described in further detail below.

Crawford clay, 1 to 3% slopes (CfB) is a gently sloping soil found at foot slopes and at the heads of drainageways on uplands. The underlying material is whitish, fractured, hard limestone. The soil is well-drained and available water capacity is low. Runoff is medium. Rooting depth is moderately deep. Erosion is a medium hazard. This soil is mainly used for rangeland. Because of the soil's high position on landscapes, and its tendency to be generally dotted with post oak, this soil is desirable for homesites. Limitations are the clayey texture and shrink-swell potential. Foundations are subject to shifting and breaking, and paved roads become bumpy and broken. Underground steel pipes may corrode if not protected. Septic systems function very poorly in the clay subsoil. This soil is suitable for recreational areas and use as habitat for open-land and rangeland wildlife (Werchan and Coker, 1983).

Eckrant stony clay, 0 to 3% slopes (EeB) is gently sloping and located on broad ridges and in shallow valleys on uplands. The soil is very stony, calcareous, and moderately alkaline. Indurated limestone underlies the Eckrant stony clay. It is known to be well-drained with a moderately slow permeability. Due to the shallowness of the soil and underlying strata, the available water capacity is very low. Eckrant stony clay is most commonly used for rangeland. The shallow limestone provides a stable foundation for housing, but makes construction of underground utility lines, foundations, roads, and streets difficult (Werchan and Coker, 1983).

Fairlie clay, 1 to 2% slopes (FaB) is a gently sloping soil found along broad flats and on edges of drainageways in uplands. Weakly cemented limestone interbedded with limy material underlies the soil. Fairlie clay is calcareous and moderately alkaline. Fairlie clay is most prominently used for crops but can also be used for tame pastures. The soil is suitable for urban uses, but the hazard of corrosivity to underground steel utility lines is severe due to the clayey texture and slow permeability associated with the soil (Werchan and Coker, 1983).

2.6 WATER WELLS

A review of TCEQ and Texas Water Development Board (TWDB) records revealed no water wells on the subject site and 3 wells within 0.5 miles of the subject site (TCEQ, 2025; TWDB, 2025). According to the TWDB records, all the off-site wells are reportedly completed within the Edwards and/or Trinity aquifers at total depth ranging from 175 to 845 feet below surface. Horizon observed no wells on the subject site.

The results of this assessment do not preclude the existence of additional undocumented/abandoned wells on the site. If a water well or casing is encountered during construction, work should be halted near the feature until the TCEQ is contacted.

2.7 GEOLOGY

Literature Review

The subject site is underlain by Edwards Limestone (Ked) (UT-BEG, 1995). Edwards Limestone comprises limestone, dolomite, and chert. The limestone is aphanitic to fine grained, massive to thin bedded, hard, brittle, and in part rudistid biostromes, with much miliolid biosparite. The dolomite is fine to very fine grained, porous, medium gray to grayish brown. Nodules and plates are common in the chert, varying in amount from bed to bed, with some intervals free of chert, mostly white to light gray. In the zone of weathering, the formation is considerably recrystallized, "honeycombed," and cavernous, forming an aquifer; it forms flat areas and plateaus bordered by scarps. Thickness ranges from 60 to 350 feet, thinning northward.

The site Stratigraphic Column is provided as Attachment B, and the Site Geologic Map is Attachment D.

The subject site is located within the Balcones Fault Zone. Available geologic reports indicate the nearest mapped fault is located approximately 3.5 miles to the southeast, trending from southwest to northeast (TWSC, 2025).

Field Assessment

A field survey was conducted under the supervision of a licensed Horizon geologist with support staff on 2 September 2025. Horizon observed 4 man-made features (M-1 to M-4) on the subject site that meet the TCEQ definition of a potential recharge feature. No springs were observed at the site. Man-made feature M-1 is a stormwater detention pond measuring approximately 120 feet long by 20 feet wide by 5 feet deep. Water infiltration of this feature is considered low. Man-made features M-2 to M-4 are sanitary sewer manholes located near the east-central portion of the subject site. These manholes and their associated underground sewer line(s) appeared to be in good working condition with no apparent breaks or surficial leakage.

The Geologic Assessment Table (Attachment A) describes those features observed on the subject site that meet the TCEQ definition of a potential recharge feature.

3.0 CONCLUSIONS AND RECOMMENDATIONS

No geologic or man-made features were identified at the subject site that would require protection or mitigation pursuant to TCEQ rules for protection of the Edwards Aquifer (30 TAC 213). The site generally appears well-suited to development prospectuses. It should be noted that soil and drainage erosion would increase with ground disturbance. Native grasses and the cobbly content of the soil aid to prevent erosion. Soil and sedimentation fencing should be placed in all appropriate areas prior to any site disturbing activities.

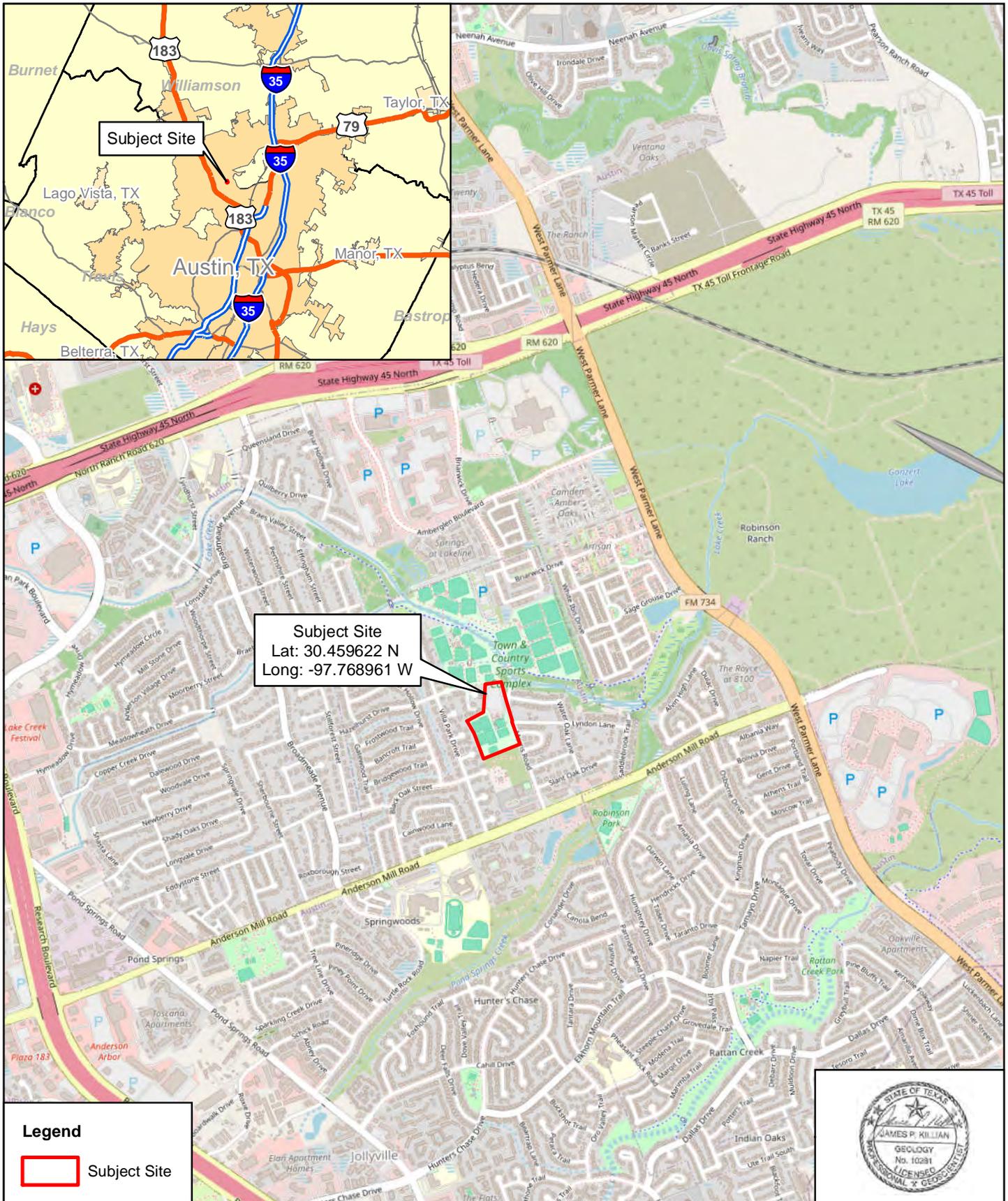
Because the subject site is located over the Edwards Aquifer Recharge Zone, it is possible that subsurface voids underlie the site. If any subsurface voids are encountered during site development, work should halt immediately so that a geologist may assess the potential for the void(s) to provide meaningful contribution to the Edwards Aquifer.

4.0 REFERENCES

- (COA) City of Austin. Geographic Information Systems/Maps. *2017 2-foot Contours*, <<http://austintexas.gov/departments/gis-and-maps/gis-data>>. Updated 15 August 2019.
- _____. *Property Profile*. City of Austin Property Profile web map application, <<http://www.austintexas.gov/gis/propertyprofile/>>. Accessed 8 September 2025.
- (Nearmap) Nearmap US, Inc. Nearmap Vertical™ digital orthographic photograph, <<https://go.nearmap.com>>. Imagery date 10 July 2025.
- (NRCS) US Department of Agriculture, Natural Resources Conservation Service. Web Soil Survey, <<http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>>. Soil map data layer updated 12 September 2019. Accessed 8 September 2025.
- (OSM) OpenStreetMap contributors. OpenStreetMap, <<http://www.openstreetmap.org>>. Available under the Open Database License (www.opendatacommons.org/licenses/odbl). Accessed 8 September 2025.
- (TCEQ) Texas Commission on Environmental Quality. Instructions to Geologists for Geologic Assessments on the Edwards Aquifer Recharge/Transition Zones. Revised October 2004.
- _____. RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices. Revised July 2005.
- _____. Optional Enhanced Measures for the Protection of Water Quality in the Edwards Aquifer (Revised). Appendix A to RG-348, Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices. September 2007.
- _____. Edwards Aquifer Protection Program. Edwards Aquifer Viewer, <<http://www.tceq.state.tx.us/field/eapp/viewer.html>>. Accessed 8 September 2025.
- (TWDB) Texas Water Development Board. Water Information Integration and Dissemination System. TWDB Groundwater Database, <<https://www3.twdb.texas.gov/apps/waterdatainteractive/groundwaterdataviewer>>. Accessed 8 September 2025.
- (TWSC) United States Geological Survey, Texas Water Science Center. Geologic Database of Texas, <<https://txpub.usgs.gov/txgeology/>>. Updated 1 February 2014; Accessed 8 September 2025.
- (UT-BEG) University of Texas Bureau of Economic Geology, C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet, Francis Luther Whitney Memorial Edition. 1974; revised 1981.
- (USGS) US Geological Survey. 7.5-minute series topographic maps, Jollyville, Texas, quadrangle. 1987.

Werchan, Leroy E., and John L. Coker. *Soil Survey of Williamson County, Texas*. US Department of Agriculture, Natural Resources Conservation Service (formerly Soil Conservation Service), in cooperation with the Texas Agricultural Experiment Station. 1983.

ATTACHMENT F
ADDITIONAL SITE MAPS



Legend

 Subject Site



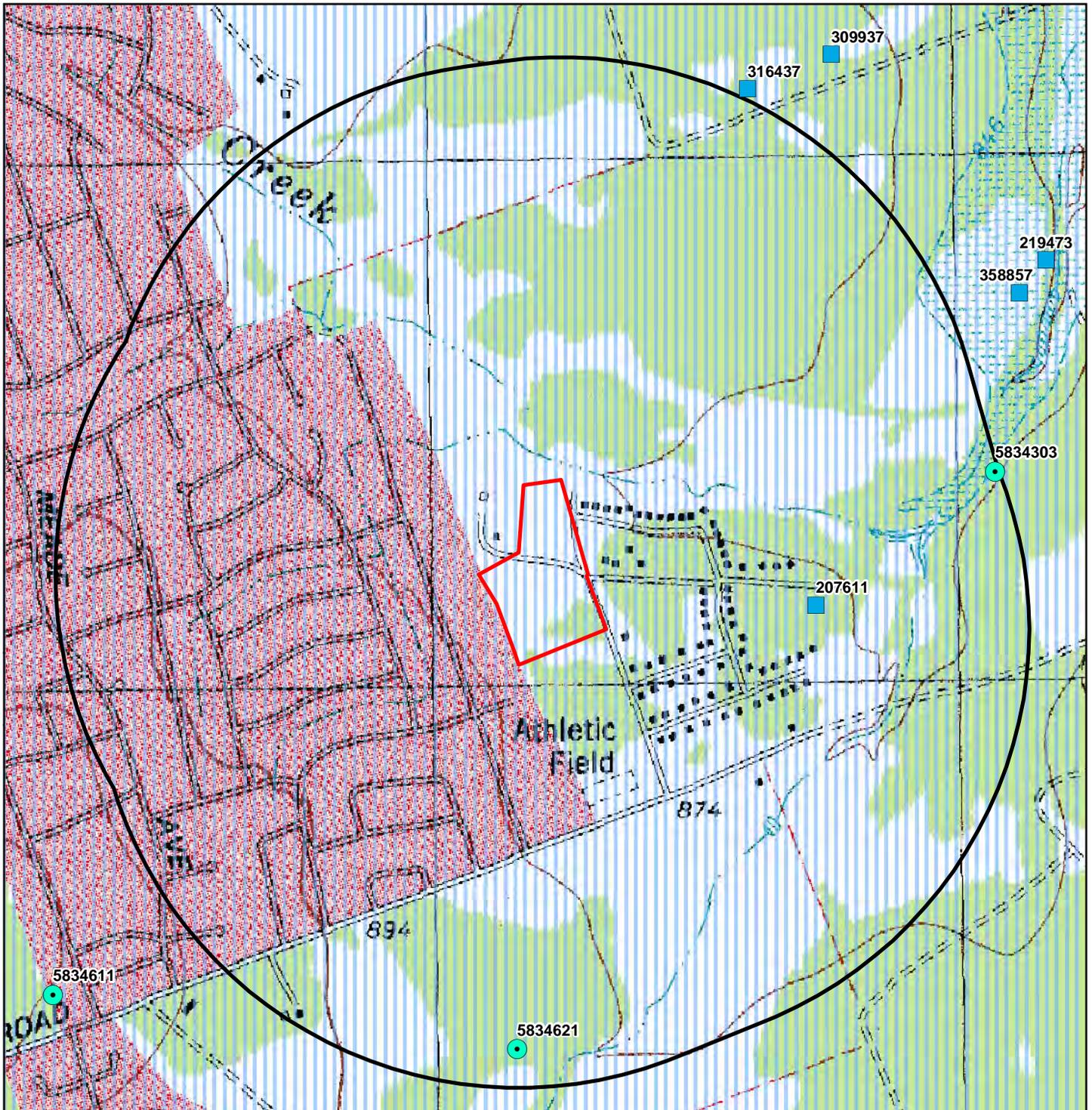
Date:	09/08/2025
Drawn:	KRW
HJN NO:	23175.003GA
Source:	OSM, 2025

Attachment F, Figure 1

Vicinity Map
 Optimist Club Morris Road Fields Tract
 Austin, Williamson County, Texas

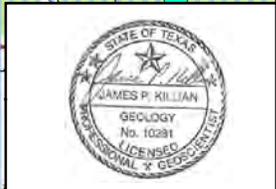


0 1,000 2,000
 Feet



Legend

- SDRDB Well Location
- GWDB Water Well
- Subject Site
- Edwards Aquifer Recharge Zone
- Half-Mile Subject Site Buffer



Date:	09/08/2025
Drawn:	KRW
HJN NO:	23175.003GA
Source:	TCEQ, 2025; TWDB, 2025; USGS, 1987

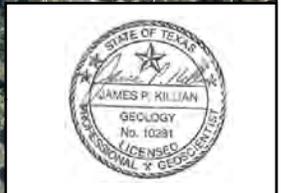
Attachment F, Figure 2
 Topography and Hydrogeology Map
 Optimist Club Morris Road Fields Tract
 Austin, Williamson County, Texas



Legend

— 2-Foot Contour

Subject Site



HorizonTM
Environmental Services

Date:	09/08/2025
Drawn:	KRW
HJN NO:	23175.003GA
Source:	COA, 2019; Nearmap, 2025

Attachment F, Figure 3

Topographic Map
Optimist Club Morris Road Fields Tract
Austin, Williamson County, Texas

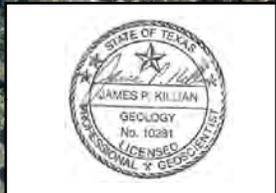

 0 100 200
 Feet



Legend

Subject Site

Soil Unit Boundary



HorizonTM
Environmental Services

Date:	09/08/2025
Drawn:	KRW
HJN NO:	23175.003GA
Source:	Nearmap, 2025; NRCS, 2025

Attachment F, Figure 4

Soil Map
Optimist Club Morris Road Fields Tract
Austin, Williamson County, Texas

0 100 200
Feet

ATTACHMENT G
SITE PHOTOGRAPHS



PHOTO 1
Man-made feature M-1 (stormwater detention pond), facing northwest



PHOTO 2
Man-made feature M-2 (sanitary sewer manhole), facing north



PHOTO 3
Man-made feature M-3 (sanitary sewer manhole), facing northeast



PHOTO 4
Man-made feature M-4 (sanitary sewer manhole), facing north

Section 4

Water Pollution Abatement Plan Application

Texas Commission on Environmental Quality

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

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

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

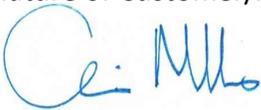
Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 12/12/25

Signature of Customer/Agent:



Regulated Entity Name: Kathy Manning Athletic Center at Town & Country

Regulated Entity Information

1. The type of project is:

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

2. Total site acreage (size of property): 11.122 acres

3. Estimated projected population: 48

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

Table 1 - Impervious Cover Table

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	41,020	÷ 43,560 =	0.94
Parking	54101	÷ 43,560 =	1.24
Other paved surfaces	0	÷ 43,560 =	0.00
Total Impervious Cover	95,121	÷ 43,560 =	2.18

Total Impervious Cover 2.18 ÷ Total Acreage 11.122 X 100 = 19.6% Impervious Cover

IC is based on this project only, not the existing that is not affected by this project's drainage. Total combined IC is 5.63 ac, 50.7%

5. **Attachment A - Factors Affecting Surface Water Quality.** A detailed description of all factors that could affect surface water and groundwater quality that addresses ultimate land use is attached.
6. Only inert materials as defined by 30 TAC §330.2 will be used as fill material.

For Road Projects Only

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

7. Type of project:

- TXDOT road project.
- County road or roads built to county specifications.
- City thoroughfare or roads to be dedicated to a municipality.
- Street or road providing access to private driveways.

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

- Concrete
- Asphaltic concrete pavement
- Other: _____

9. Length of Right of Way (R.O.W.): _____ feet.

Width of R.O.W.: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

10. Length of pavement area: _____ feet.

Width of pavement area: _____ feet.

L x W = _____ Ft² ÷ 43,560 Ft²/Acre = _____ acres.

Pavement area _____ acres ÷ R.O.W. area _____ acres x 100 = _____% impervious cover.

11. A rest stop will be included in this project.
- A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

13. **Attachment B - Volume and Character of Stormwater.** A detailed description of the volume (quantity) and character (quality) of the stormwater runoff which is expected to occur from the proposed project is attached. The estimates of stormwater runoff quality and quantity are based on the area and type of impervious cover. Include the runoff coefficient of the site for both pre-construction and post-construction conditions.

Wastewater to be generated by the Proposed Project

14. The character and volume of wastewater is shown below:

<u>100%</u> Domestic	<u>3357</u> Gallons/day
<u>0%</u> Industrial	<u>0</u> Gallons/day
<u>0%</u> Commingled	<u>0</u> Gallons/day
TOTAL gallons/day <u>3357</u>	

15. Wastewater will be disposed of by:

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

Attachment C - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities.

Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.

Sewage Collection System (Sewer Lines):

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

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

The SCS was previously submitted on _____.

The SCS was submitted with this application.

The SCS will be submitted at a later date. The owner is aware that the SCS may not be installed prior to Executive Director approval.

The sewage collection system will convey the wastewater to the City of Austin Wastewater Treatment Plant (name) Treatment Plant. The treatment facility is:

Existing.

Proposed.

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = 60'.

18. 100-year floodplain boundaries:

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

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

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

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

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

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

There are 0 (#) wells present on the project site and the locations are shown and labeled. (Check all of the following that apply)

The wells are not in use and have been properly abandoned.

The wells are not in use and will be properly abandoned.

The wells are in use and comply with 16 TAC §76.

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

21. Geologic or manmade features which are on the site:

All sensitive geologic or manmade features identified in the Geologic Assessment are shown and labeled.

No sensitive geologic or manmade features were identified in the Geologic Assessment.

Attachment D - Exception to the Required Geologic Assessment. A request and justification for an exception to a portion of the Geologic Assessment is attached.

- 22. The drainage patterns and approximate slopes anticipated after major grading activities.
- 23. Areas of soil disturbance and areas which will not be disturbed.
- 24. Locations of major structural and nonstructural controls. These are the temporary and permanent best management practices.
- 25. Locations where soil stabilization practices are expected to occur.
- 26. Surface waters (including wetlands).
 - N/A
- 27. Locations where stormwater discharges to surface water or sensitive features are to occur.
 - There will be no discharges to surface water or sensitive features.
- 28. Legal boundaries of the site are shown.

Administrative Information

- 29. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies must be submitted to the appropriate regional office.
- 30. Any modification of this WPAP will require Executive Director approval, prior to construction, and may require submission of a revised application, with appropriate fees.

Attachment A

A.0 Factors Affecting Water Quality

A.1 Asphalt Products

- A1.1 Project encompasses a commercial project including a paved parking area for an proposed commercial self storage site. Asphalt and concrete paving will be used for paving. To prevent asphaltic products from washing off the project site, the contractor will be instructed to not place asphalt products on the ground within 48 hours of forecasted rain.
- A1.2 After placement of asphalt, the applicant will maintain, for the duration of the asphalt product curing time, standby emergency personnel and equipment to contain any asphalt wash off should an unexpected rain occur.

A.2 Vehicle Maintenance

- A2.1 Purposeful release of vehicle or equipment fluids onto the ground will not be allowed. Contaminated soil resulting from accidental spills will be removed and disposed of properly.

A.3 Construction Debris

- A3.1 All construction material/debris will be placed in an on-site container and disposed of properly at an authorized landfill.

A.4 Soil Spoils/Stockpiles

- A4.1 All soil, sand, gravel and excavated materials stockpiled on-site will have appropriately sized erosion and sedimentation controls placed up-gradient and down-gradient.

Attachment B

B.0 Volume and Character of Stormwater

B.1 Existing/Proposed Runoff Conditions

B.1.1 Calculations based on the Atlas 14 City of Austin 24-Hour design storm (2, 10, 25 and 100-year):

Proposed On-Site Drainage Area to Water Quality Pond A: 2.86 Acres (Area P-1)

Proposed Impervious Cover: 76.7% (for pond design purposes). Off-site drainage is being diverted around the site.

B.1.2 Composite curve numbers are calculated using USDA soil survey data.

EXISTING DRAINAGE CONDITIONS - ATLAS 14 RAINFALL DISTRIBUTION							
DRAINAGE AREA	AREA ACRES	T _c HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
E-1	3.65	0.32	80.0	7.78	14.85	19.68	27.77
OS-1	6.09	0.50	88.1	13.99	23.71	30.20	40.97
OS-2	2.94	0.41	88.1	7.35	12.32	15.69	21.28
ANALYSIS POINT 1				28.39	49.19	63.18	86.96
PROPOSED DRAINAGE CONDITIONS							
DRAINAGE AREA	AREA ACRES	T _c HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
P-1	2.86	0.18	93.8	11.36	17.76	21.93	28.98
OS-1	6.09	0.50	84.8	13.99	23.71	30.20	40.97
OS-2	2.94	0.41	80.0	7.35	12.32	15.69	21.28
P-2	0.77	0.43	80.0	1.44	2.74	3.63	5.13
ANALYSIS POINT 1				26.98	46.35	57.95	80.59
*CITY OF AUSTIN ATLAS 14 FREQUENCY STORM							

P-2 reflects undeveloped area within the site development that does not drain to the water quality pond.

B.2.1 Drainage Area Map, see construction plans (sheets 13 and 14) for the existing and proposed drainage area maps.

Section 5

Temporary Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(A), (B), (D)(I) and (G); Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 12/12/25

Signature of Customer/Agent:



Regulated Entity Name: Kathy Manning Athletic Center at Town & Country

Project Information

Potential Sources of Contamination

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

1. Fuels for construction equipment and hazardous substances which will be used during construction:

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

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

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

- Aboveground storage tanks with a cumulative storage capacity between 250 gallons and 499 gallons will be stored on the site for less than one (1) year.
- Aboveground storage tanks with a cumulative storage capacity of 500 gallons or more will be stored on the site. An Aboveground Storage Tank Facility Plan application must be submitted to the appropriate regional office of the TCEQ prior to moving the tanks onto the project.
- Fuels and hazardous substances will not be stored on the site.
- 2. **Attachment A - Spill Response Actions.** A site specific description of the measures to be taken to contain any spill of hydrocarbons or hazardous substances is attached.
- 3. Temporary aboveground storage tank systems of 250 gallons or more cumulative storage capacity must be located a minimum horizontal distance of 150 feet from any domestic, industrial, irrigation, or public water supply well, or other sensitive feature.
- 4. **Attachment B - Potential Sources of Contamination.** A description of any activities or processes which may be a potential source of contamination affecting surface water quality is attached.

Sequence of Construction

- 5. **Attachment C - Sequence of Major Activities.** A description of the sequence of major activities which will disturb soils for major portions of the site (grubbing, excavation, grading, utilities, and infrastructure installation) is attached.
 - For each activity described, an estimate (in acres) of the total area of the site to be disturbed by each activity is given.
 - For each activity described, include a description of appropriate temporary control measures and the general timing (or sequence) during the construction process that the measures will be implemented.
- 6. Name the receiving water(s) at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project: Lake Creek

Temporary Best Management Practices (TBMPs)

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

- 7. **Attachment D – Temporary Best Management Practices and Measures.** TBMPs and measures will prevent pollution of surface water, groundwater, and stormwater. The construction-phase BMPs for erosion and sediment controls have been designed to retain sediment on site to the extent practicable. The following information is attached:

- A description of how BMPs and measures will prevent pollution of surface water, groundwater or stormwater that originates upgradient from the site and flows across the site.
 - A description of how BMPs and measures will prevent pollution of surface water or groundwater that originates on-site or flows off site, including pollution caused by contaminated stormwater runoff from the site.
 - A description of how BMPs and measures will prevent pollutants from entering surface streams, sensitive features, or the aquifer.
 - A description of how, to the maximum extent practicable, BMPs and measures will maintain flow to naturally-occurring sensitive features identified in either the geologic assessment, TCEQ inspections, or during excavation, blasting, or construction.
8. The temporary sealing of a naturally-occurring sensitive feature which accepts recharge to the Edwards Aquifer as a temporary pollution abatement measure during active construction should be avoided.
- Attachment E - Request to Temporarily Seal a Feature.** A request to temporarily seal a feature is attached. The request includes justification as to why no reasonable and practicable alternative exists for each feature.
 - There will be no temporary sealing of naturally-occurring sensitive features on the site.
9. **Attachment F - Structural Practices.** A description of the structural practices that will be used to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site is attached. Placement of structural practices in floodplains has been avoided.
10. **Attachment G - Drainage Area Map.** A drainage area map supporting the following requirements is attached:
- For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin will be provided.
 - For areas that will have more than 10 acres within a common drainage area disturbed at one time, a smaller sediment basin and/or sediment trap(s) will be used.
 - For areas that will have more than 10 acres within a common drainage area disturbed at one time, a sediment basin or other equivalent controls are not attainable, but other TBMPs and measures will be used in combination to protect down slope and side slope boundaries of the construction area.
 - There are no areas greater than 10 acres within a common drainage area that will be disturbed at one time. A smaller sediment basin and/or sediment trap(s) will be used in combination with other erosion and sediment controls within each disturbed drainage area.

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

11. **Attachment H - Temporary Sediment Pond(s) Plans and Calculations.** Temporary sediment pond or basin construction plans and design calculations for a proposed temporary BMP or measure have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer. All construction plans and design information must be signed, sealed, and dated by the Texas Licensed Professional Engineer. Construction plans for the proposed temporary BMPs and measures are attached.

N/A

12. **Attachment I - Inspection and Maintenance for BMPs.** A plan for the inspection of each temporary BMP(s) and measure(s) and for their timely maintenance, repairs, and, if necessary, retrofit is attached. A description of the documentation procedures, recordkeeping practices, and inspection frequency are included in the plan and are specific to the site and/or BMP.
13. All control measures must be properly selected, installed, and maintained in accordance with the manufacturer's specifications and good engineering practices. If periodic inspections by the applicant or the executive director, or other information indicate a control has been used inappropriately, or incorrectly, the applicant must replace or modify the control for site situations.
14. If sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to minimize offsite impacts to water quality (e.g., fugitive sediment in street being washed into surface streams or sensitive features by the next rain).
15. Sediment must be removed from sediment traps or sedimentation ponds not later than when design capacity has been reduced by 50%. A permanent stake will be provided that can indicate when the sediment occupies 50% of the basin volume.
16. Litter, construction debris, and construction chemicals exposed to stormwater shall be prevented from becoming a pollutant source for stormwater discharges (e.g., screening outfalls, picked up daily).

Soil Stabilization Practices

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

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

18. Records must be kept at the site of the dates when major grading activities occur, the dates when construction activities temporarily or permanently cease on a portion of the site, and the dates when stabilization measures are initiated.
19. Stabilization practices must be initiated as soon as practicable where construction activities have temporarily or permanently ceased.

Administrative Information

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

Attachment A

A.0 Spill Response Actions

A.1 Petroleum Products

A.1.2 All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products will be stored in tightly sealed containers, which are clearly labeled. Any asphalt substances used on-site will be applied according to the manufacturer's recommendations.

A.2 Fertilizers

A.2.1 Fertilizers used will be applied only in the minimum amounts recommended by the manufacturer. Once applied, fertilizer will be worked into the soil to limit exposure to stormwater. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

A.3 Paints

A.3.1 All containers will be tightly sealed and stored when not required for use. Excess paint will not be discharged to the storm sewer system but will be properly disposed according to manufacturers' instructions or State and local regulations.

A.4 Concrete Trucks

A.4.1 Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water on the site only at specific location shown on the plan.

A.5 In addition to the good housekeeping and material management practices discussed in the previous section of this plan, the following practices will be followed for spill prevention and cleanup:

A.5.1 Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies.

A.5.2 Materials and equipment necessary for spill cleanup will be kept in the material storage area on-site. Equipment and materials will include but not be limited to brooms, dust pans, mops, rags, gloves, goggles, kitty litter, sand, sawdust, and plastic and metal trash containers specifically for this purpose.

A.5.3 All spills will be cleaned up immediately after discovery.

A.5.4 The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with a hazardous substance.

A.5.5 Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of size.

A.5.6 The spill prevention plan will be adjusted to include measures to prevent this type of spill from reoccurring and how to clean up the spill if there is another one. A description of the spill, what caused it, and the cleanup measures will also be included.

A.5.7 The owner's representative & site construction manager responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the officer trailer on-site.

A.5.8 Notification Requirements and Procedures

Notify TCEQ immediately in the event of:

- Any spill that threatens to enter a storm sewer or watercourse.
- All petroleum spills greater than 5 gallons.
- Any hazardous or unknown material spill, e.g. many solvents, cleaners, etc.
- Any discharge suspected of being in violation of State or Municipal codes, e.g. discharges which are cloudy, foul smelling, colored, contain chemicals or heavy sediment loads.

**TCEQ SPILL REPORTING HOTLINE
800-832-8224 (24-HOURS A DAY)**

**PLEASE DO NOT LEAVE MESSAGES ON VOICE MAILBOXES FOR INCIDENTS
THAT NEED IMMEDIATE ATTENTION.**

**TCEQ SPILL RESPONSE INTERNET LINK:
www.tceq.texas.gov/response/spills**

Attachment B

Potential Sources of Contamination

The materials listed below are anticipated to be present on-site during construction:

1. Concrete
2. Detergents
3. Paints (enamel and latex)
4. Tar
5. Fertilizers
6. Petroleum based products
7. Cleaning solvents
8. Wood

Material management practices will be utilized to reduce the risk of spills or other accidental exposure of the materials listed above to stormwater runoff, including the following:

1. An effort will be made to store only enough product required to do the job.
2. All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
3. Products will be kept in their original containers with the original manufacturer's label.
4. Substances will not be mixed with one another unless recommended by the manufacturer.
5. Whenever possible, all of a product will be used up before disposing of the container.
6. Manufacturers' recommendations for proper use and disposal will be followed.
7. The site superintendent will inspect the site daily to ensure proper use and disposal of materials on-site.

The following practices will be used to reduce the risks associated with hazardous materials, if hazardous materials are needed for the work:

1. Products will be kept in original containers unless they are not re-sealable.
2. Original labels and material safety data will be retained.
3. If surplus product must be disposed of, manufacturer or local and state recommended methods for proper disposal will be followed.

Product specific practices and spill prevention practices have been included with this report as Attachment A.

The following are authorized non-stormwater discharges:

1. Discharges from fire fighting activities.
2. Fire hydrant flushing.
3. Water used to wash vehicles and pavement where detergents and soaps are not used and where spills or leaks of toxic or hazardous materials have not occurred (unless spilled materials have been removed, and if local, state or federal regulations are applicable, the materials are removed according to those regulations), and where the purpose is to remove mud, dirt, and dust.
4. Water used to control dust.
5. Potable water sources including waterline flushing.
6. Uncontaminated groundwater or spring water, including foundation or footing drains where flows are not contaminated with industrial materials such as solvents.

7. Air conditioning condensate originating from on site vehicles or the construction trailer, if present.

Each and all of these authorized non-stormwater discharges will be directed along the same channels as the stormwater run-off and through the same pollution control devices.

Attachment C

C.0 Sequence of Major Activities

C.1 Construction activities will proceed in the following sequence:

1. Assign an environmental project manager who will be onsite greater than 90% of the time during construction activity and be responsible for the items listed under Section 1.2.3.3 of the Environmental Criteria Manual.
2. Provide 72-hour notification of EV inspector (512-974-2278) prior to pre-construction.
3. Erosion controls are to be installed as indicated on the approved site plan.
4. The Environmental Project Manager must contact the Watershed Protection and Development Review Department to schedule a pre construction coordination meeting to be held on site.
5. Erosion controls will be revised, if needed, to comply with Inspectors' directives, and revised construction schedule relative to the water quality plan requirements and the erosion plan.
6. Rough cut water quality ponds, if ponds are required, prior to rough grading site. Either the permanent outlet structure or a temporary outlet must be constructed prior to development of any embankment or excavation that leads to ponding conditions. The outlet system must consist of a low-level outlet and an emergency overflow meeting the requirements of the Drainage Criteria Manual (section 8.3) and/or the Environmental Criteria Manual (Section 1.4.2.K) as required. The outlet system shall be protected from erosion and shall be maintained throughout the course of construction until final restoration is achieved.
7. Temporary controls to be inspected and maintained weekly and prior to anticipated rainfall events, and after rainfall events, as needed.
8. Environmental Project Manager will schedule a mid-construction conference to coordinate changes in the construction schedule and evaluate effectiveness of the erosion control plan after possible construction alterations to the site. Participants shall include the City Inspector, Project Engineer, General Contractor and Environmental Project Manager. The anticipated completion date and final construction sequence and inspection schedule will be coordinated with the appropriate City Inspector.
9. Clear and grub site.
10. Construct building pad and grade site for parking areas.
12. Complete construction of project.
13. Permanent controls will be cleaned out and filter media will be installed prior to/concurrently with revegetation of site.
14. Revegetate disturbed areas, including the removal of any remaining temporary controls, or execute a developers contract for the revegetation along with the engineer's concurrence letter submitted to the City after the engineer inspects the site.

15. A mid-construction conference is required for each phase, if phasing is proposed, with the Watershed Protection and Development Review Department Staff, which will be coordinated based upon completion of buildings, drainage facilities, water quality controls and temporary erosion controls by phase.

Attachment D

D.0 Temporary Best Management Practices and Measures

- D.1 The contractor shall install erosion/sedimentation controls prior to any site preparation work (clearing, grubbing or excavation).
- D.1.2 The placement of erosion/sedimentation controls shall be in accordance with the City of Austin Environmental Criteria manual and TCEQ guidelines.
- D.1.3 See the Erosion & Sedimentation Control Plan, for all temporary erosion control structure locations.
- D.1.4 Significant variation in materials or locations of controls or fences from those shown on the approved plan must be approved by the design engineer, or the city engineer as appropriate.
- D.1.5 The contractor is required to inspect the controls and silt fences at weekly intervals and after significant 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 6 inches.
- D.1.6 The stabilized construction entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public roadways. This may require periodic top dressing with additional stone as conditions demand, and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public roadway must be removed immediately.

Attachment F

F.0 Structural Practices

The following structural practices will be followed to divert flows away from exposed soils, to store flows, or to otherwise limit runoff discharge of pollutants from exposed areas of the site.

1. Silt fencing on the down slope side of disturbed areas.
2. Silt fencing around all sensitive features as shown on the E&S Plan.
3. Silt fencing around the temporary spoils, construction and staging areas.
4. Rough cutting of the detention pond and water quality pond.
5. Provide the temporary stormwater pumping discharge area as shown on the E&S Plan.

Placement of structural practices in floodplains has been avoided since there is no floodplain.

Attachment G

G.0 Drainage Area Map

G.1 Refer to the Site Drainage Plan for all drainage information, or the F-0584 Attachments.

Attachment H

H.0 Temporary Sediment Pond Plans and Calculations

- H.1 Refer to Sheet 9 of the Construction Plans, The Erosion/Sedimentation Control Plan for the temporary sediment trap layout and calculations.
- H.2 Refer to Sheet 8 of the Construction Plans for temporary sediment trap details.

Attachment I

I.0 Inspection and Maintenance for BMPs

- I.1 Temporary erosion and sedimentation controls will be inspected and maintained at weekly intervals, and after significant rainfall events in excess of ½ inch of precipitation to insure that controls are functioning properly. Damaged controls will be repaired or replaced immediately and will be conducted within twenty-four hours of the inspection report.
- I.2 Silt accumulation at each control will be removed and properly disposed when the depth of accumulation exceeds six (6) inches.
- I.3 Permanent seeding and planting will be inspected for bare spots, washouts and healthy growth.
- I.4 The contractor of record will designate a qualified person or persons to perform the following inspections:
 - 1. Disturbed areas and areas used for storage of materials that are exposed to precipitation will be inspected for evidence of, or the potential for, pollutants entering the drainage system.
 - 2. Erosion and sediment control measures identified in the plan will be observed to ensure that they are operating correctly. Repairs, if necessary, will be initiated within twenty-four hours of report.
 - 3. Where stormwater discharge locations are accessible, they will be inspected to determine whether erosion control measures are effective in preventing significant impacts to receiving waters.
 - 4. Locations where vehicles enter or exit the site will be inspected for evidence of off-site sediment tracking.
- I.5 Based on the results of the weekly inspection, the Site Description Controls of this Pollution Prevention Plan will be revised as appropriate, but in no case later than seven (7) calendar days following the inspection.
- I.6 A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of the storm water pollution prevention plan, and actions taken in accordance with items above will be made retained as part of the storm water pollution plan for at least three (3) years from the date that the site is finally stabilized. The report will be signed by applicable personnel at the conclusion of all construction activities.
- I.7 Copies of the forms to be used for the Inspection and Maintenance report are included herein.

Appendix I – Inspection Report

Project Name:
SWPPP Contact:

BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

SILT FENCE

Name of Inspector: _____
Days Since Last Rainfall: _____

Inspection Date: _____
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**

MULCH SOCK

Name of Inspector: _____
Days Since Last Rainfall: _____

Inspection Date: _____
Amount of Last Rainfall: _____ inches

Where are the Mulch Socks Located?	Are the Mulch Socks Embedded in the Ground?	Are the Mulch Socks Anchored in Place?	What is the Condition of the Mulch Socks?

MAINTENANCE REQUIRED FOR MULCH SOCKS: _____

TO BE PERFORMED BY: _____ **ON OR BEFORE:** _____

Project Name:
SWPPP Contact:

**BEST MANAGEMENT PRACTICE
INSPECTION AND MAINTENANCE REPORT FORM**

MULCH BERMS

Name of Inspector: _____
Days Since Last Rainfall: _____

Inspection Date: _____
Amount of Last Rainfall: _____ inches

Where is the Mulch Berm Located?	Is the Mulch Berm Still in Place?	What is the Condition of the Mulch Berm?

MAINTENANCE REQUIRED FOR MULCH 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: _____
Days Since Last Rainfall: _____

Inspection Date: _____
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**

STABILIZED CONSTRUCTION ENTRANCE

Name of Inspector: _____
Days Since Last Rainfall: _____

Inspection Date: _____
Amount of Last Rainfall: ____ inches

Location	Is Sediment Being Tracked onto Road?	Is the Entry Surface Clean or Sediment Filled?	Does All Traffic Use the Entrance?

MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCES: _____

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: _____

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 areas. 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: _____

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

Attachment J

J.0 Schedule of Interim and Permanent Soil Stabilization Practices

J.1 All disturbed areas shall be restored as noted below:

- a. A minimum of four inches of topsoil shall be placed in all drainage channels (except concrete or rock) and between the curb and right-of-way line.
- b. The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows:
 - I. From September 15 to March 1, seeding shall be with a combination of 1 pound per 1000 s.f. of unhulled Bermuda and 3 pounds per 1000 s.f. of winter rye with a purity of 95% with 90%.
 - II. From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 1 pound per 1000 s.f. with a purity of 95% with 85% germination.
- c. Fertilizer shall have an analysis of 15-5-10 and shall be applied at the rate of 500 pounds per acre.
- d. The planted area shall be irrigated or sprinklered in a manner that will not erode the topsoil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of ½" or more shall postpone the watering schedule for one week.
- e. Mulch type used shall be cellulose fiber, applied at a rate of 2000 pounds per acre.
- f. Restoration shall be acceptable when the grass has grown at least 1 inch high with 95% coverage, provided no bare spots larger than 16 s.f. exist.

J.2 Bare soils should be seeded or otherwise stabilized within 14 calendar days after final grading or where construction activity has temporarily ceased for more than 21 days.

Section 6

Permanent Stormwater Section

Texas Commission on Environmental Quality

for Regulated Activities on the Edwards Aquifer Recharge Zone and Relating to 30 TAC §213.5(b)(4)(C), (D)(li), (E), and (5), Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Christopher McComb, P.E.

Date: 12/12/25

Signature of Customer/Agent



Regulated Entity Name: Kathy Manning Athletic Center at Town & Country

Permanent Best Management Practices (BMPs)

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

- Permanent BMPs and measures must be implemented to control the discharge of pollution from regulated activities after the completion of construction.
 N/A
- 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: City of Austin Environmental Criteria Manual

N/A

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

N/A

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

The site will be used for low density single-family residential development and has 20% or less impervious cover.

The site will be used for low density single-family residential development but has more than 20% impervious cover.

The site will not be used for low density single-family residential development.

5. The executive director may waive the requirement for other permanent BMPs for multi-family residential developments, schools, or small business sites where 20% or less impervious cover is used at the site. This exemption from permanent BMPs must be recorded in the county deed records, with a notice that if the percent impervious cover increases above 20% or land use changes, the exemption for the whole site as described in the property boundaries required by 30 TAC §213.4(g) (relating to Application Processing and Approval), may no longer apply and the property owner must notify the appropriate regional office of these changes.

Attachment A - 20% or Less Impervious Cover Waiver. The site will be used for multi-family residential developments, schools, or small business sites and has 20% or less impervious cover. A request to waive the requirements for other permanent BMPs and measures is attached.

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

The site will not be used for multi-family residential developments, schools, or small business sites.

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

- A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.
 - No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.
 - Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.
7. **Attachment C - BMPs for On-site Stormwater.**
- A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
 - Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff, and an explanation is attached.
8. **Attachment D - BMPs for Surface Streams.** A description of the BMPs and measures that prevent pollutants from entering surface streams, sensitive features, or the aquifer is attached. Each feature identified in the Geologic Assessment as sensitive has been addressed.
- N/A
9. The applicant understands that to the extent practicable, BMPs and measures must maintain flow to naturally occurring sensitive features identified in either the geologic assessment, executive director review, or during excavation, blasting, or construction.
- The permanent sealing of or diversion of flow from a naturally-occurring sensitive feature that accepts recharge to the Edwards Aquifer as a permanent pollution abatement measure has not been proposed.
 - Attachment E - Request to Seal Features.** A request to seal a naturally-occurring sensitive feature, that includes, for each feature, a justification as to why no reasonable and practicable alternative exists, is attached.
10. **Attachment F - Construction Plans.** All construction plans and design calculations for the proposed permanent BMP(s) and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. The plans are attached and, if applicable include:
- Design calculations (TSS removal calculations)
 - TCEQ construction notes
 - All geologic features
 - All proposed structural BMP(s) plans and specifications
- N/A

11. **Attachment G - Inspection, Maintenance, Repair and Retrofit Plan.** A plan for the inspection, maintenance, repairs, and, if necessary, retrofit of the permanent BMPs and measures is attached. The plan includes all of the following:
- Prepared and certified by the engineer designing the permanent BMPs and measures
 - Signed by the owner or responsible party
 - Procedures for documenting inspections, maintenance, repairs, and, if necessary retrofit
 - A discussion of record keeping procedures
- N/A
12. **Attachment H - Pilot-Scale Field Testing Plan.** Pilot studies for BMPs that are not recognized by the Executive Director require prior approval from the TCEQ. A plan for pilot-scale field testing is attached.
- N/A
13. **Attachment I -Measures for Minimizing Surface Stream Contamination.** A description of the measures that will be used to avoid or minimize surface stream contamination and changes in the way in which water enters a stream as a result of the construction and development is attached. The measures address increased stream flashing, the creation of stronger flows and in-stream velocities, and other in-stream effects caused by the regulated activity, which increase erosion that results in water quality degradation.
- N/A

Responsibility for Maintenance of Permanent BMP(s)

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

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

Attachment B

B.0 BMPs for Upgradient Stormwater

- B.1 The overall drainage plans, Sheets 13 and 14 of the Construction Plans, shows a 6.09 acre area of off-site drainage that impacts the site and is labeled as Sub basin OS-1. Due to the drainage flow direction of the site, this off-site area is easily redirected to the Morris Road right of way and away from the project development. There are no other off-site drainage flows that enter the site.

Attachment D

D.0 BMP's for Surface Streams

Prevention of pollutants from entering surface streams, sensitive features, or the aquifer will be handled as follows.

During construction, standard erosion control measures will be used as shown in the construction plans. The entire limits of construction will be contained by a silt fence until construction is complete. Entry and exit from the site will be through a stabilized construction entrance. The water quality pond will be rough cut and a sediment trap will be installed to handle pumped discharge after rain events. After completion of the project, all impervious areas will be silt fenced until vegetative cover is established.

There are no sensitive features on this site, so additional measures will not be required, unless a sensitive feature is found during construction.

Additional prevention measures include the following:

- No asphalt products will be allowed within the property boundary.
- No fuel storage tanks will be allowed within the property boundary, both during and after construction.
- Vehicles stored on site must be stored over a concrete pad in order to contain fluid leaks. They also must have a roof overhead in order to minimize contaminate storm runoff.
- All proposed impervious cover shall be re-directed to the sedimentation/biofiltration pond.
- This site plan reflects the full buildout of the site. No future development is anticipated.

Attachment C

C.0 BMPs for On-site Stormwater

C.1 Partial Sedimentation/Bio-filtration Pond

- C.1.1 A single partial sedimentation/bio-filtration pond shall be constructed to collect the first flush runoff from all developed areas on-site. This pond shall discharge to an existing public storm sewer for storm water management, and will remove permanent erosion concerns since the stormwater will be released at rates equal to or less than existing conditions.
- C.1.2 Removal Rate Calculations – BMP Sizing Calculations. Ref. *TCEQ TGM, June 20, 2005*
See attached printout, next sheet.
- C.1.3 Refer to the attached sheets of the Construction Plans for all specific water quality control area/volume calculations and for specific water quality control construction details.

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: $L_M = 27.2(A_N \times P)$

where: $L_{M \text{ TOTAL PROJECT}}$ = 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 =	3.65	acres (Site project total drainage area, not overall property)
Predevelopment impervious area within the limits of the plan =	0.00	acres
Total post-development impervious area within the limits of the plan =	2.18	acres
Total post-development impervious cover fraction =	0.60	
P =	32	inches

$L_{M \text{ TOTAL PROJECT}} = 1897$ lbs.

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

Number of drainage basins / outfalls areas leaving the plan area = 1

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

Drainage Basin/Outfall Area No. =	1
Total drainage basin/outfall area =	2.86 acres
Predevelopment impervious area within drainage basin/outfall area =	0.00 acres
Post-development impervious area within drainage basin/outfall area =	2.18 acres
Post-development impervious fraction within drainage basin/outfall area =	0.76
$L_{M \text{ THIS BASIN}} =$	1897 lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent

- Aqualogic Cartridge Filter
- Bioretention
- Contech StormFilter
- Constructed Wetland
- Extended Detention
- Grassy Swale
- Retention / Irrigation
- Sand Filter
- Stormceptor
- Vegetated Filter Strips
- Vortechs
- Wet Basin
- Wet Vault

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: $L_R = (\text{BMP efficiency}) \times P \times (A_C \times 34.6 + A_P \times 0.54)$

where: A_C = Total On-Site drainage area in the BMP catchment area
 A_P = 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

$A_C =$	2.86	acres
$A_P =$	2.18	acres
$A_P =$	0.68	acres
$L_R =$	2159	lbs

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

Desired $L_{M \text{ THIS BASIN}} = 1897$ 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 =	1.50	inches
Post Development Runoff Coefficient =	0.57	
On-site Water Quality Volume =	8950	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 =	1790	
Total Capture Volume (required water quality volume(s) x 1.20) =	10740	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.

9. Filter area for Sand Filters

Designed as Required in RG-348

Pages 3-58 to 3-63

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins =	10740	cubic feet
Minimum filter basin area =	895	square feet
Maximum sedimentation basin area =	3580	square feet For minimum water depth of 2 feet
Minimum sedimentation basin area =	224	square feet For maximum water depth of 8 feet

Attachment F

F.0 Construction Plans

1. COVER SHEET
2. CONSTRUCTION NOTES (INCLUDING TCEQ NOTES)
3. AUSTIN WATER UTILITY NOTES 1 OF 2
4. AUSTIN WATER UTILITY NOTES 2 OF 2
5. PLAT
6. SURVEY
7. DEMO PLAN
8. EROSION CONTROL NOTES
9. EROSION/SEDIMENTATION CONTROL PLAN
10. OVERALL SITE PLAN
11. ENLARGED SITE PLAN
12. GRADING PLAN
13. EXISTING DRAINAGE PLAN
14. PROPOSED DRAINAGE PLAN
15. STORM SEWER PLAN
16. POND PLAN
17. POND DETAILS
18. POND DETAILS
19. POND QAQC PLAN
20. UTILITY PLAN
21. UTILITY PLAN & PROFILES
22. CONSTRUCTION DETAILS
23. STANDARD DETAILS
24. STANDARD DETAILS
25. UTILITY DETAILS
26. UTILITY DETAILS
27. UTILITY DETAILS
28. LANDSCAPE PLAN 1 OF 3
29. LANDSCAPE PLAN 2 OF 3
30. LANDSCAPE PLAN 3 OF 3
31. ARCHITECTURAL ELEVATIONS

GENERAL NOTES

ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER. APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN DOES NOT REMOVE THESE RESPONSIBILITIES. "REVIEWED BY AUSTIN WATER" APPLIES ONLY TO AW PUBLIC INFRASTRUCTURE, ALL OTHER WATER AND WASTEWATER INFRASTRUCTURE INSIDE PRIVATE PROPERTY ARE UNDER THE JURISDICTION OF BUILDING INSPECTIONS.

USE OF ELECTRONIC FILES GENERAL DISCLAIMER: USE OF THE ATTACHED FILES IN ANY MANNER INDICATES YOUR ACCEPTANCE OF TERMS AND CONDITIONS AS SET FORTH BELOW. IF YOU DO NOT AGREE TO ALL OF THE TERMS AND CONDITIONS, PLEASE CONTACT AUSTIN WATER PIPELINE ENGINEERING, PROJECT COORDINATOR PRIOR TO USE OF THE REFERENCED INFORMATION. PLEASE BE ADVISED THAT THE ATTACHED FILES ARE IN A FORMAT THAT CAN BE ALTERED BY THE USER. DUE TO THIS FACT, ANY REUSE OF THE DATA WILL BE AT THE USER'S SOLE RISK WITHOUT LIABILITY OR LEGAL EXPOSURE TO THE CITY OF AUSTIN AND USER SHALL INDEMNIFY AND HOLD HARMLESS THE CITY OF AUSTIN FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES INCLUDING ATTORNEY'S FEES ARISING OUT OF OR RESULTING FROM USING THE DIGITAL FILE. IN ADDITION, IT IS THE RESPONSIBILITY OF THE USER TO COMPARE ALL DATA WITH THE PDF VERSION OF THIS DRAWING. IN THE EVENT THERE IS A CONFLICT BETWEEN THE PDF VERSION DRAWING AND THE ELECTRONIC FILE, THE PDF VERSION DRAWING SHALL PREVAIL.

Table with 4 columns: PROPOSED PRODUCT TYPE (TO BE INSTALLED), LENGTH OF PIPE (L.F.), SIZE OF PIPE (INCH), NO. OF METERED SERVICES. Rows include WATER MAIN, WASTEWATER MAIN, WATER SERVICE, WASTEWATER SERVICE, and RECLAIMED WATER SERVICE.

AUTOMATED METERING INFRASTRUCTURE: EFFECTIVE MARCH 2022, NEW WATER METERS INSTALLED SHALL BE IN CONFORMANCE WITH AW'S AUTOMATED METERING INFRASTRUCTURE TECHNOLOGY, AND WITH THE APPLICABLE STANDARD PRODUCT LIST. APPLICANTS FILING A SITE PLAN OR SUBDIVISION PLAN WILL BE REQUIRED TO COORDINATE WITH THE AUSTIN WATER PLAN REVIEWER FOR DETAILS ON APPROVAL AND INSTALLATION.

PRIOR TO THE HANDLING AND DISPOSAL OF ASBESTOS PIPE, THE CONTRACTOR'S WORK PLAN WILL BE REVIEWED AND COORDINATED THROUGH COA BUILDING SERVICES DEPARTMENT - ASBESTOS, LEAD AND MOLD MANAGEMENT GROUP. MANAGER WHO CAN BE REACHED AT 512-974-7137. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UTILIZE A TRAINED, CERTIFIED AND LICENSED ASBESTOS ABATEMENT CONTRACTOR IN ACCORDANCE WITH THE FEDERAL, STATE AND LOCAL REGULATIONS.

MODIFICATIONS TO AUSTIN WATER SIGNED AND STAMPED SHEETS ARE NOT PERMITTED. ALL DESIGN MODIFICATIONS WILL NEED TO BE SUBMITTED VIA THE ABC PORTAL FOR A PLAN CORRECTION OR REVISION. ALL UNETHICAL ENGINEERING PRACTICES, INCLUDING MODIFYING CITY STAMPED PLAN SHEETS, SHALL BE REPORTED TO THE TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS (PELS). REFERENCE: TEXAS ENGINEERING PRACTICE ACT AND RULES, SUBCHAPTER C: PROFESSIONAL CONDUCT AND ETHICS

THE CONTRACTOR SHALL VERIFY ALL VERTICAL AND HORIZONTAL LOCATIONS OF EXISTING UTILITIES, BELOW GROUND AND OVERHEAD, PRIOR TO STARTING ONSITE UTILITY WORK.

INSPECTION NOTES

PLEASE CONTACT DEVELOPMENT SERVICES DEPARTMENT, SITE AND SUBDIVISION INSPECTION AT SITESUBINTAKE@AUSTINTEXAS.GOV FOR ARRANGEMENTS FOR PAYMENT OF INSPECTION FEES AND JOB ASSIGNMENT FOR INSPECTION OF THE PUBLIC UTILITIES TO THIS SITE. INSPECTION FEES MUST BE PAID BEFORE ANY PRE-CONSTRUCTION MEETING CAN BE CALLED.

UTILITY CRITERIA MANUAL WAIVER SUMMARY table with columns: WAIVER #, LINE, SHEET #, STATION(S), WAIVER FOR, UCM #, JUSTIFICATION, AW SIGNATURE, DATE APPROVED. Includes an EXAMPLE ROW.

METER NOTICE

METER NOTICE NOTES:

- 1. CHECK APPROPRIATE BOXES AND COMPLETE THE INFORMATION FOR METERS THAT WILL BE REQUIRED BY THIS PROJECT DESIGN.
2. FOR "LOOPED" PRIVATE WATER SYSTEMS THAT ARE UTILIZING MULTIPLE METERS, SERVICE UNITS WILL BE ASSESSED FOR ONLY ONE METER. THE SERVICE UNITS ASSESSED WILL BE CALCULATED USING TOTAL DOMESTIC DEMAND. REFERENCE AUSTIN WATER'S METER SIZING CHART (AWWA OPERATING CHARACTERISTICS FOR COLD WATER METERS) FOR FURTHER INFORMATION.
3. FOR WATER METERS THAT WILL HAVE NO WASTEWATER SERVICE ASSOCIATED WITH THEM, SPECIFY THE METER TYPE WITH THE INTENDED USE AND "WATER ONLY" DESIGNATION. "WATER ONLY" METER MAY INCLUDE OUTDOOR DRINKING FOUNTAINS, DECORATIVE FOUNTAINS, SWIMMING POOLS, ETC.
4. ADDRESSING FOR METERS IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD. FOLLOW 911 ADDRESSING LETTER GUIDELINES. ACCURATE ADDRESS REQUIRED FOR EACH METER PURCHASED.

Meter notice form sections: POTABLE METER(S), RECLAIMED METER(S), POTABLE BACKUP TO OWRS (NP METERS). Includes fields for ADDRESS, SOURCE AND USE, METER TYPE, SIZE, SERVICE UNITS.

ADDITIONAL REVIEW ACKNOWLEDGEMENT form. Includes sections for ONSITE WATER REUSE & AW RECLAIMED INFORMATION, AUTOMATED METERING INFORMATION, and AULCC REQUIREMENT.

STANDARD CONSTRUCTION NOTES REVISED FEBRUARY 7, 2025

- 1. THE CITY STANDARD CONSTRUCTION SPECIFICATIONS CURRENT AT THE TIME OF BIDDING SHALL COVER MATERIALS AND METHODS USED TO DO THIS WORK.
2. CONTRACTOR MUST OBTAIN A ROW PERMIT FROM AUSTIN TRANSPORTATION AND PUBLIC WORKS DEPARTMENT, RIGHT OF WAY MANAGEMENT DIVISION BEFORE BEGINNING CONSTRUCTION WITHIN THE RIGHT-OF-WAY OF A PUBLIC STREET OR ALLEY. ACTIVITY WITHIN RIGHT-OF-WAY SHALL COMPLY WITH APPROVED TRAFFIC CONTROL PLAN (TCP).
3. AT LEAST 48 HOURS PRIOR TO BEGINNING ANY UTILITY CONSTRUCTION ACTIVITY IN PUBLIC ROW OR PUBLIC EASEMENT, THE CONTRACTOR SHALL NOTIFY THE APPLICABLE CITY OF AUSTIN INSPECTION GROUP (AUSTIN TRANSPORTATION AND PUBLIC WORKS DEPARTMENT (TPW), OR DEVELOPMENT SERVICES). SEE CURRENT NOTIFICATION REQUIREMENTS AT WWW.AUSTINTEXAS.GOV.
4. THE CONTRACTOR SHALL CONTACT THE AUSTIN AREA "ONE CALL" SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS PRIOR TO ANY EXCAVATION IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES TO BE EXTENDED, TIED TO, OR ALTERED, OR SUBJECT TO DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. THE CITY OF AUSTIN WATER AND WASTEWATER MAINTENANCE RESPONSIBILITY ENDS AT R.O.W./EASEMENT LINES.
5. 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 WASTEWATER SERVICES.
6. MINIMUM TRENCH SAFETY MEASURES SHALL BE PROVIDED, AS REQUIRED BY OSHA, CITY SPECIFICATION 509S, AND CITY/COUNTY CONSTRUCTION INSPECTORS.
7. PRESSURE TAPS WILL ONLY BE ALLOWED ON A CASE BY CASE BASIS, AS DETERMINED BY THE DIRECTOR'S DESIGNEE. NORMALLY PRESSURE TAPS 4 INCHES AND LARGER SHALL BE ALLOWED IN THE FOLLOWING CASES: A) A TEST SHUT OUT INDICATES AN ADEQUATE SHUT OUT TO PERFORM THE WORK IS NOT FEASIBLE B) MORE THAN 30 CUSTOMERS OR A SINGLE CRITICAL CUSTOMER (AS DEFINED BY AUSTIN WATER) WOULD BE IMPACTED BY THE SHUT OUT OR C) THE EXISTING WATER LINE WARRANTS IT.
8. WATER LINE TESTING AND STERILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEMS 510.3 (27)-(29). FORCE MAIN PRESSURE TESTING SHALL BE CONDUCTED AND FALL UNDER THE SPECIFICATIONS AS WATER LINES (PRESSURE PIPE) OR AS DIRECTED BY THE PROJECT SPECIFICATIONS.
9. ALL MATERIAL USED ON THIS PROJECT MUST BE LISTED ON THE STANDARD PRODUCTS LISTING. ANY MATERIAL NOT LISTED HAS TO GO THROUGH THE REVIEW OF THE STANDARDS COMMITTEE FOR REVIEW AND APPROVAL PRIOR TO START OF PROJECT. TESTING AND EVALUATION OF PRODUCTS ARE REQUIRED BEFORE APPROVAL WILL BE GIVEN ANY CONSIDERATION.
10. WHEN WATER SERVICES ARE DAMAGED AND THE SERVICE MATERIAL IS POLYETHYLENE (PE), THE LINE SHALL BE REPAIRED ONLY BY HEAT FUSION WELD, AT BRASS FITTINGS, OR THE FULL LENGTH SHALL BE REPLACED PER CURRENT STANDARD DETAIL(S). WHEN POLYBUTYLENE (PB) TUBING IS DAMAGED OR TAMPERED WITH IN ANY WAY, THE FULL LENGTH OF SERVICE LINE SHALL BE REPLACED. (NOTE: FULL LENGTH IS FROM THE CORPORATION STOP TO THE METER.) REPAIR COUPLINGS ARE NOT ALLOWED FOR ANY WATER OR WASTEWATER SERVICE LINE REPAIR, RECONNECT, OR REPLACEMENT.
11. WHEN AN EXISTING WATERLINE SHUT OUT IS NECESSARY AND POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR WHO WILL THEN NOTIFY AUSTIN WATER DISPATCH AND THE AFFECTED CUSTOMERS A MINIMUM OF FORTY-EIGHT (48) HOURS IN ADVANCE.
12. THE INSPECTOR SHALL NOTIFY AUSTIN WATER AT 972-1000 AT A MINIMUM OF 72 HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METERS.
13. PROJECT-SPECIFIC SHOP DRAWINGS SHALL BE SUBMITTED FOR AW APPROVAL FOR PRE-CAST CIRCULAR VERTICAL MANHOLE SECTIONS LARGER THAN 48" DIAMETER. THE SHOP DRAWINGS SHALL INCLUDE THE FLOWLINE ELEVATION OF ALL CONNECTING PIPES; ELEVATIONS OF TRANSITIONS FROM LARGE DIAMETER SECTIONS TO 48" DIAMETER SECTIONS; TOP OF MANHOLE AND SURROUNDING GROUND ELEVATIONS; AND DETAILS OF SPECIAL CONSTRUCTION CONSIDERATIONS SPECIFIED IN THE CONTRACT DOCUMENTS.
14. WHEN CONCRETE MANHOLES LARGER THAN 48 INCH DIAMETER ARE USED, DRAWINGS THAT ARE SEALED BY A PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR BASE SLABS, FLAT TOP LIDS (IF USED), AND FLAT TYPE CONCRETE PIECES USED TO TRANSITION FROM LARGER TO SMALLER DIAMETER MANHOLE SECTIONS.
15. ALL FIRE HYDRANTS AND VALVES THAT ARE TO BE ABANDONED SHALL BE REMOVED, SALVAGED AND RETURNED TO AUSTIN WATER. NOTICE SHOULD BE GIVEN 48 HOURS PRIOR, TO PIPELINE OPERATIONS DISTRIBUTION SYSTEM - VALVES AND HYDRANT SERVICES SUPERVISOR AT AWDSM-ASSET-RECOVERY@CITYOF.AUSTIN.ONMICROSOFT.COM.
16. ALL EXISTING WATER METERS IDENTIFIED TO BE RELOCATED OR ABANDONED AT THE DEVELOPMENT SHALL BE REMOVED FROM THE METER BOX PRIOR TO CONSTRUCTION AND GIVEN IMMEDIATELY TO THE CITY OF AUSTIN INSPECTOR.
17. THE ENGINEER SHALL CALL OUT THE SIZE, TYPE AND USE (DOMESTIC, IRRIGATION OR RECLAIM) OF ALL EXISTING WATER METERS TO BE RELOCATED OR REPURPOSED. WATER METER NUMBERS WILL NOT BE REQUIRED TO BE PLACED ON THE PLAN SHEET. A SEPARATE UTILITY PERMITTING OFFICE FORM CAN BE USED TO PROVIDE RELEVANT DATA FOR THE EXISTING INFORMATION ON EXISTING METERS TO RECEIVE APPROPRIATE CREDITS. THIS FORM SHALL BE DIRECTLY SUBMITTED TO UTILITY PERMITTING OFFICE FOR REVIEW AND PROCESSING.
18. NO CONNECTION MAY BE MADE BETWEEN THE PRIVATE PLUMBING AND AUSTIN WATER INFRASTRUCTURE UNTIL A CITY APPROVED WATER METER HAS BEEN INSTALLED.
19. METER BOXES AND CLEAN OUTS SHALL NOT BE LOCATED WITHIN PAVED AREAS SUCH AS DRIVEWAYS AND SIDEWALKS.
20. NO SOIL COMPACTION EQUIPMENT SHALL COME WITHIN 24-INCHES FROM THE TOP OF THE WATER OR WASTEWATER PIPE. BETWEEN 24-36 INCHES FROM TOP OF THE PIPE, ONLY LIGHT SOIL COMPACTION EQUIPMENT (E.G., RAMMERS OR "WHACKER PACKERS", VIBRATING PLATE COMPACTORS, WALK-BEHIND HAND-GUIDED ROLLERS) OR SMOOTH ROLLER COMPACTION EQUIPMENT WEIGHING LESS THAN 5,000 LBS. WILL BE ALLOWED. WHERE SOIL COMPACTION EQUIPMENT WILL BE 36-INCHES OR GREATER FROM THE TOP OF THE PIPE, HS20 LOADS SHALL NOT BE EXCEEDED. PIPE DEPTHS SHALL BE VERIFIED THROUGH POTHOLING, LEVEL A SUE OR BY MH INVERT DATA.
21. THE DESIGN AND CONSTRUCTION OF RETAINING WALLS, BRIDGES, CULVERTS, HEADWALLS, JUNCTION STRUCTURES, SCREENING WALLS, AND STORMWATER DRAINAGE PIPE WITHIN THE VICINITY OF AW UTILITIES SHALL BE IN COMPLIANCE WITH SECTION 13 OF THE COA'S TRANSPORTATION CRITERIA MANUAL.
22. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 510.3(22) AND SPL WW-27A, WW-27A-01, WW-27A-02 AND WW-27F.
23. ALL WATERLINE BRANCH CONNECTIONS SHALL HAVE AN MJ GATE VALVE POSITIVELY RESTRAINED TO THE MJ TEE BY USING A SWIVEL TEE, FOSTER ADAPTOR, OR SWIVEL X SOLID HYDRANT ADAPTOR (WITH SWIVEL GLAND).
* ON CITY SPONSORED PROJECTS, WHERE CONFLICTS ARE IDENTIFIED BETWEEN THESE CONSTRUCTION NOTES AND THE PROJECT CONTRACT DOCUMENTS, THE CONTRACT DOCUMENTS WILL TAKE PRECEDENCE.

PROJECT INFORMATION

Table with 2 columns: FIRE, DOMESTIC AND IRRIGATION DEMAND DATA. Rows include: AUSTIN WATER PRESSURE IN PSI (81.8-112.1 PSI), STATIC PRESSURE AT HIGHEST LOT SERVED IN PSI (N/A), BUILDING SIZE IN SQUARE FEET (LARGEST BUILDING) (40,700 SQ.FT.), BUILDING TYPE PER IFC TABLE B105.1(2) (I-B), BUILDING HEIGHT (LARGEST BUILDING) (1-STORY), AVAILABLE FIRE FLOW CALCS AT 20 PSI (2983 GPM), REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2) (4250 GPM), REDUCED BUILDING FIRE FLOW PER 75% FIRE SPRINKLER (REDUCTION PER IFC TABLE B105.2) (1063 GPM), MINIMUM FIRE FLOW (SEE NOTE 2 BELOW)* (1063 GPM), WATER FIXTURE UNITS (WSFU) - CIRCLE ONE - FLUSH TANKS OR FLUSHOMETERS (128 WSFU), DOMESTIC WATER DEMAND IN GPM (74 GPM), MAXIMUM IRRIGATION DEMAND IN GPM OR WAIVER LETTER (EXISTING) (7.9 FPS / 74 GPM **), DOMESTIC LINE VELOCITY: 2" SIZE OF DOMESTIC LINE (ADDITIONAL LINES MAY BE ADDED AS NECESSARY) (7.4 FPS / 1324 GPM ***), FIRE LINE VELOCITY: 8" SIZE OF DOMESTIC LINE (ADDITIONAL LINES MAY BE ADDED AS NECESSARY) (7.4 FPS / 1324 GPM ***), LIVING UNIT EQUIVALENTS (LUEs) (N/A).

*NOTE: LOTS WITH 65 PSI OR GREATER REQUIRE A PRV TO BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE DOMESTIC WATER METER.
1. WITH THE EXCEPTION OF PROVIDING THE REQUIRED INFORMATION, DO NOT REVISE THESE TABLES IN ANYWAY.
2. MINIMUM FIRE FLOW: DESIGN ENGINEER MUST INDICATE VALUES WHICH COMPLY WITH IFC TABLES B105.1(2) OR B105.2 (REQUIRED OR REDUCED FIRE FLOWS). MINIMUM FIRE FLOW VALUE SHALL BE NO LESS THAN 1000 GPM FOR NFPA 13 SYSTEMS OR 1500 GPM FOR NFPA 13 R SYSTEMS. (FOOTNOTES a AND b FOR TABLE B105.2)
3. IF DEMAND, OTHER THAN MINIMUM FIRE FLOW, IS UTILIZED IN FIRE LINE VELOCITY DETERMINATION, ENGINEERING JUSTIFICATION SHALL BE SHOWN ON THIS SHEET WITH APPLICABLE DATA AND CALCULATIONS.

** GPM TOTAL OF ALL CONNECTIONS TO THE DOMESTIC LINE.
*** GPM TOTAL OF ALL CONNECTIONS TO THE FIRE LINE.

AW EXPIRATION STAMP

CITY OF AUSTIN
AUSTIN WATER
FEBRUARY 7, 2025
VERSION 2.0
STANDARD NO.
1 OF 2

AUSTIN WATER GENERAL INFORMATION
CONSTRUCTION NOTES FOR COMMERCIAL SITES
AND SUBDIVISION PLANS

AUSTIN WATER
REVIEW BLOCK



Table with 2 columns: NO., DATE, DESCRIPTION. Includes a disclaimer: "This graphic or other material is the exclusive and confidential property of AMC Design Group, Inc. and shall remain the property of AMC Design Group, Inc. It is to be used only for the purposes of the project stated on the drawing."/>

KATHY MANNING ATHLETIC
CENTER AT TOWN & COUNTRY
13228 MORRIS ROAD
AUSTIN, TEXAS 78729

AUSTIN WATER
INFORMATION
SHEET

FIRE FLOW TEST DATA



AUSTIN FIRE DEPARTMENT
 FIRE PREVENTION DIVISION
 6310 Wilhelmina Delco Dr., Austin, Texas 78752
 afd.hydrants@austintexas.gov



Hydrant Flow Test Report			
TEST DATE	10/15/2023	FIRE BOX	3810
TIME	645 HRS	MAP GRID ID	H38
COMPANY	PREVENTION	AFD STAFF	CARR, BRET
RESIDUAL HYDRANT			
RESIDUAL HYDRANT #	55570	MAIN SIZE (in.)	8
BLK #	DIRECTION	STREET NAME	TYPE
13200		MORRIS	RD
STATIC PRESSURE (PSI)	103	RESIDUAL PRESSURE (PSI)	86
FLOW HYDRANT			
FLOW HYDRANT #	233665	MAIN SIZE (in.)	8
BLK #	DIRECTION	STREET NAME	TYPE
8600		TALYNE CHAISE	CIR
STATIC PRESSURE (PSI)	105	RESIDUAL PRESSURE (PSI)	82
Comments	dc = discharge coefficient straight 2 1/2" butt = 0.9 w/ 45° elbow = 0.75		0.75
	FLOW RATE (GPM) =		1267

NOTE: This information represents the water supply characteristics in the immediate area on the date and time tested. The City of Austin does not guarantee this data will be representative of the water supply characteristics at any time in the future. It is the requesting party's responsibility to ensure that this test information is appropriate to the location of the project in question and that any differences in elevation between the test location and project are accounted for and included in the hydraulic calculations.

HFTR #17243067

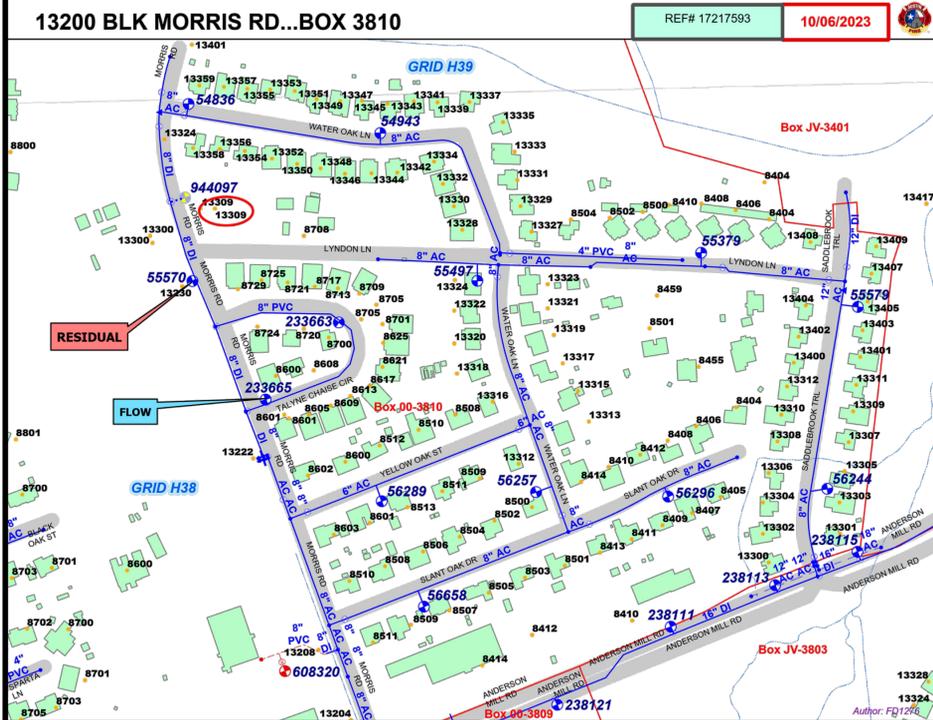
**SERVICE EXTENSION REQUESTS
 WASTEWATER**

A WASTEWATER SER IS NOT REQUIRED

**SERVICE EXTENSION REQUESTS
 WATER**

A WATER SER IS NOT REQUIRED

FIRE FLOW MAP



AUSTIN WATER
 REVIEW BLOCK

AW EXPIRATION STAMP

**AUSTIN WATER GENERAL INFORMATION
 CONSTRUCTION NOTES FOR COMMERCIAL SITES
 AND SUBDIVISION PLANS**

CITY OF AUSTIN
 AUSTIN WATER
 FEBRUARY 7, 2025
 VERSION 2.0
 STANDARD NO.
 2 OF 2



Thrasher Design
 LAND PLANNERS
 P.O. BOX 41957
 AUSTIN, TEXAS 78704 • (512) 476-4456

NO.	DATE	DESCRIPTION

**KATHY MANNING ATHLETIC
 CENTER AT TOWN & COUNTRY**
 13228 MORRIS ROAD
 AUSTIN, TEXAS 78729

AUSTIN WATER
 INFORMATION
 SHEET



SCALE: 1" = 40'
SCALE IN FEET
40 20 0 40

LEGEND

	LIMITS OF CONSTRUCTION
	SITE BOUNDARY
	EXISTING WATER
	PROPOSED WATER
	EXISTING WASTEWATER
	PROPOSED WASTEWATER
	EXISTING STORM
	PROPOSED STORM
	EXISTING OVERHEAD ELECTRIC
	PROPOSED OVERHEAD ELECTRIC
	EXISTING UNDERGROUND ELEC
	PROPOSED UNDERGROUND ELEC
	EXISTING UNDERGROUND TELE
	PROPOSED UNDERGROUND TELE
	FF
	SPOT ELEVATION
	RETAINING WALL
	PRIVATE FIRE HYDRANT
	PUBLIC FIRE HYDRANT
	HERITAGE TREE TO REMAIN W/ 1/2 C.R.Z.
	TREE TO REMAIN W/ 1/2 C.R.Z.
	TREE TO BE REMOVED
	TREE PROTECTION

- NOTES**
1. A PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS REQUIRED PRIOR TO ANY SITE DISTURBANCE.
 2. ALL EXISTING WATER METERS IDENTIFIED TO BE RELOCATED OR ABANDONED AT THE DEVELOPMENT, SHALL BE REMOVED FROM THE METER BOX PRIOR TO CONSTRUCTION AND GIVEN IMMEDIATELY TO THE DSD INSPECTOR.
 3. TREE PROTECTION FENCING IS REQUIRED FOR ALL TREES WITHIN THE LIMITS OF DESTRUCTION ON-SITE BEFORE DEMOLITION OCCURS. WHERE FENCING CANNOT BE PLACED TO PROTECT THE EXTENT OF THE CRZ WITH NATURAL GROUND COVER, PROVIDE AN 8" LAYER OF ORGANIC HARDWOOD MULCH OUTSIDE OF THE FENCING.
 4. STRAPPING 2X4 OR THICKER LUMBER (TO MATCH HEIGHT OF BUILDING) SECURELY AROUND TREE TRUNK, BUTTRESS ROOTS, AND ROOT FLARE, IS REQUIRED IF FENCING CANNOT GO AROUND THE ENTIRE HALF CRZ.
 5. IF PRUNING IS NECESSARY DURING DEMOLITION, IT SHOULD TAKE PLACE PRIOR TO THE START OF THE DEMOLITION PROCESS. IT MUST BE PERFORMED BY A QUALIFIED ARBORIST AND NO MORE THAN 25% IS PERMITTED.
 6. WHEN MULCH IS USED AS AN ALTERNATIVE PROTECTION WITHIN THE HALF CRITICAL ROOT ZONE IT SHALL BE TOPPED BY DECKING (3/4" INCH PLYWOOD) TO PROVIDE ADDITIONAL PROTECTION AGAINST COMPACTION DURING CONSTRUCTION. PROVIDE CALL-OUTS TO SPECIFIC TREES ON THE ESC PLAN WHERE THIS CRITERIA WILL OCCUR.



NO.	DATE	DESCRIPTION

**APPENDIX P-1
EROSION CONTROL NOTES**

- THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS, TREE/NATURAL AREA PROTECTIVE FENCING, AND CONDUIT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE) PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
- 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 TYPES REQUIRED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE TO 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 PLAN REVIEWERS AS WELL AS COA EYE INSPECTORS.
 - PLAN SHEETS SUBMITTED TO THE CITY OF AUSTIN MUST SHOW THE FOLLOWING:
 - DIRECTION OF FLOW DURING GRADING OPERATIONS.
 - LOCATION, DESCRIPTION, AND CALCULATIONS FOR OFF-SITE FLOW INVERSION STRUCTURES.
 - AREAS THAT WILL NOT BE DISTURBED. NATURAL FEATURES TO BE PRESERVED.
 - DELINEATION OF CONTRIBUTING DRAINAGE AREA TO EACH PROPOSED BMP (E.G., SILT FENCE, SEDIMENT BASIN, ETC.).
 - LOCATION OF EAS FOR EACH PHASE OF DISTURBANCE.
 - CALCULATIONS FOR BMPs AS REQUIRED.
 - LOCATION AND DESCRIPTION OF TEMPORARY STABILIZATION MEASURES.
 - LOCATION OF ON-SITE SPILLS AND DESCRIPTION OF HANDLING AND DISPOSAL OF BORROW MATERIALS, AND DESCRIPTION OF ON-SITE PERMANENT SPILLS DISPOSAL AREAS, INCLUDING SIZE, DEPTH OF MULCH AT REVEGETATION PROCEDURES.
 - DESCRIBE SEQUENCE OF CONSTRUCTION AS IT PERTAINS TO ESC INCLUDING THE FOLLOWING ELEMENTS:
 - 1. INSTALLATION SEQUENCE OF CONTROLS (E.G. PERIMETER CONTROLS, THEN SEDIMENT BASINS, THEN TEMPORARY STABILIZATION, THEN PERMANENT, ETC.)
 - 2. PROJECT PHASING IF REQUIRED (LOC GREATER THAN 25 ACRES)
 - 3. SEQUENCE OF GRADING OPERATIONS AND NOTATION OF TEMPORARY STABILIZATION MEASURES TO BE USED
 - 4. SCHEDULE FOR CONVERTING TEMPORARY BASINS TO PERMANENT W/ CONTROLS
 - 5. SCHEDULE FOR REMOVAL OF TEMPORARY CONTROLS
 - 6. ANTICIPATED MAINTENANCE SCHEDULE FOR TEMPORARY CONTROLS

- MINIMIZE DISTURBED NATURAL FEATURES AND SOIL
- CONTROL STORMWATER FLOWING ON AND THROUGH THE PROJECT
- STABILIZE SOILS
- PROTECT SLOPE
- PROTECT STORM DRAIN INLETS
- ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS
- RETAIN SEDIMENT ON-SITE AND CONTROL DETERIORATING PRACTICES
- ESTABLISH STABILIZED CONTOURS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES OR ONE-THIRD (1/3) OF THE INSTALLED HEIGHT OF THE CONTROL WHICHEVER IS LESS.
- PRIOR TO FINAL ACCEPTANCE BY THE CITY, HAIL 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 SPILL DISPOSAL SITES.
- ALL WORK MUST STOP 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. IN ADDITION, IF THE PROJECT SITE IS LOCATED WITHIN THE EDWARDS AQUIFER, THE PROJECT MANAGER MUST NOTIFY THE TRAVIS COUNTY BALCONES CANYONLANDS CONSERVATION PRESERVE (BCCP) BY EMAIL AT bccp@traviscountytx.gov. CONSTRUCTION ACTIVITIES WITHIN 50 FEET OF THE VOID MUST STOP.
- 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. 6015.3A.) DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.
 - B. TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 6015.
 - C. AN OWNER/ENGINEER MAY PROPOSE USE OF ONSITE SALVAGED TOPSOIL WHICH DOES NOT MEET THE CRITERIA OF STANDARD SPECIFICATION 6015 BY PROVIDING A SOIL ANALYSIS AND A WRITTEN STATEMENT FROM A QUALIFIED PROFESSIONAL IN SOILS AND/OR SITE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.
 - D. 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
 - 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 GRASS (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.
 - FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERBERMA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 6045 OR 6095.
 - A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 6065. FERTILIZER APPLICATION SHALL BE LIMITED TO THE CRITICAL ROOT ZONE OF TREES. 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 1/4 INCHES HIGH FOR TEMPORARY STABILIZATION.
 - D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD SPECIFICATIONS 6045 OR 6095.

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	70% or greater	0-3 months	Moderate slopes: from flat to 3:1	1500 to 2000 lbs per acre
(except no mulch shall exceed 30% paper)	30% or less			

- PERMANENT VEGETATIVE STABILIZATION**
- 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 (1/2) INCH AND THE AREA SHALL BE RE-SEEDING IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MOWED WITH THE COOL SEASON COVER CROPS AND NATIVE SEEDS INSTALLED TOGETHER, UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.
 - FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERBERMA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERBERMA 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 ITEMS 6045 OR 6095.
 - A. FERTILIZER FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 6065, FERTILIZER APPLICATION AND REVISIONS. CITY-OWNED AND CITY-OPERATED PROPERTY REQUIRES ANNUAL SUBMITTAL OF A RESIDUE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE COORDINATOR.
 - B. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
 - C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND. THE PLANTED AREAS WHICH CAUSING EROSION OF THE MATERIALS OR SOIL, MAINTAIN THE CRITICAL ROOT ZONE OF TREES WITH A WATER CONSERVATION. AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR DESIGNER. (SEE ITEM 6015.3A.)
 - D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1/4 INCHES HIGH WITH A MINIMUM OF 85 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 6045 OR 6095.

Table 2: Hydromulching for Permanent Vegetative Stabilization

Material	Description	Longevity	Typical Applications	Application Rates
Bonded Fiber Mats (BFM)	80% Organic	6 months	On slopes up to 2:1 and erodible soil conditions	2000 to 4500 lbs per acre (see manufacturer's recommendations)
	10% Tackifier			
Fiber	65% Organic	up to 12 months	On slopes up to 1:1 and erodible soil conditions	3000 to 4500 lbs per acre (see manufacturer's recommendations)
Reinforced Mats (RFM)	de-fibrated fibers	25% Reinforcing fibers or less	10% Tackifier	

- DEVELOPER INFORMATION:**
- DEVELOPER: OPTIMIST CLUB OF TOWN & COUNTRY ROUND ROCK
P.O. BOX 200417
AUSTIN, TX 78720
512-496-6244
- OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS:**
CIVIL ENGINEER: AMC DESIGN GROUP, INC.
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911
- FIRM RESPONSIBLE FOR E/S CONTROL/WOC/TREE & NATURAL AREA PROTECTION MAINTENANCE:**
CONTRACTOR

- THE CONTRACTOR SHALL 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.

**MODIFIED TREE & NATURAL AREA
PROTECTION STANDARD NOTE ECM 3.6.2.**

- BEFORE CONSTRUCTION**
- ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED PER ECM 3.6.1.
 - TREE PROTECTION SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION OR SITE PREPARATION. REFER TO ECM 3.6.1.A.
 - FENCING FOR TREE PROTECTION SHALL BE CHAIN-LINK MESH WITH A MINIMUM HEIGHT OF 5 FEET AND SHALL BE INSTALLED AROUND OR BEYOND THE CRITICAL ROOT ZONE EXCEPT AS ALLOWED IN ECM 3.6.1.B.4.
 - FENCING MAY NOT BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT AT UNFENCED SECTIONS OF THE CRITICAL ROOT ZONE SHALL BE COVERED WITH MULCH AT A MINIMUM DEPTH OF 8 INCHES AND A MAXIMUM DEPTH OF 12 INCHES PER ECM 3.6.1.C.
 - WHERE FENCING IS LOCATED 5 FEET OR LESS FROM THE TRUNK OF A PRESERVED TREE, TRUNK WRAPPING SHALL BE INSTALLED PER ECM 3.6.1.D.
 - EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED AND MAINTAINED SO AS NOT TO CAUSE IMPACTS THAT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.3.D.

- DURING CONSTRUCTION**
- TREES APPROVED FOR STABILIZATION SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2.A.
 - CONSTRUCTION SHALL BE TEMPORARILY MOVED OR REMOVED DURING DEVELOPMENT WITHOUT PRIOR AUTHORIZATION. THE FENCED CRITICAL ROOT ZONE SHALL NOT BE USED FOR TOOL OR MATERIAL STORAGE OF ANY KIND AND SHALL BE KEPT FREE OF LITTER. REFER TO ECM 3.6.1.B.
 - PRUNING SHALL BE IN COMPLIANCE WITH THE CURRENT ANSI A300 STANDARD FOR TREE CARE.

- AFTER CONSTRUCTION**
- TREE PROTECTION SHALL BE REMOVED AT THE END OF THE PROJECT AFTER ALL CONSTRUCTION AND FINAL GRADING IS COMPLETE, BUT BEFORE FINAL INSPECTION. REFER TO ECM 3.6.1.A.
 - LANDSCAPE INSTALLATION WITHIN THE CRZ OF PRESERVED TREES, INCLUDING IRRIGATION, SOIL AND PLANTINGS, SHALL NOT EXCEED PRESERVATION CRITERIA LISTED IN ECM 3.5.2.
 - DOCUMENTATION OF TREE WORK PERFORMED MUST BE PROVIDED TO INSPECTOR PER ECM APPENDIX P-6.
 - THIS LIST IS NOT EXHAUSTIVE.
 - REFER TO APPROPRIATE ECM SECTIONS FOR FULL REQUIREMENTS.

**SPECIAL CONSTRUCTION TECHNIQUES
ECM 3.5.4(D)**

PRIOR TO EXCAVATION WITHIN TREE DRIPLINES OR THE REMOVAL OF TREES ADJACENT TO OTHER TREES THAT ARE TO REMAIN, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE ROOT DAMAGE.

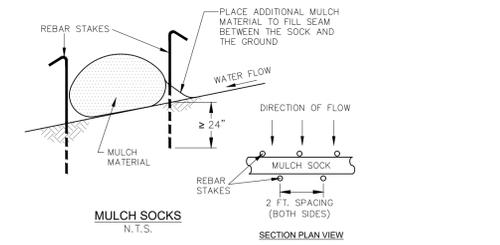
IN CRITICAL ROOT ZONE AREAS THAT CANNOT BE PROTECTED DURING CONSTRUCTION WITH FENCING AND WHERE HEAVY VEHICULAR TRAFFIC IS ANTICIPATED, COVER THOSE AREAS WITH A MINIMUM OF 12 INCHES OF ORGANIC MULCH TO MINIMIZE SOIL COMPACTION. IN AREAS WITH HIGH SOIL PLASTICITY GEOTEXTILE FABRIC PER STANDARD SPECIFICATION 6205, SHOULD BE PLACED UNDER THE MULCH TO PREVENT EXCESSIVE MIXING OF THE SOIL AND MULCH. ADDITIONALLY, MATERIAL SUCH AS PLYWOOD AND METAL SHEETS, COULD BE REQUIRED BY THE CITY ARBORIST TO MINIMIZE ROOT IMPACTS FROM HEAVY EQUIPMENT. ONCE THE PROJECT IS COMPLETED, ALL MATERIALS SHOULD BE REMOVED, AND THE MULCH SHOULD BE REDUCED TO A DEPTH OF 3 INCHES.

PERFORM ALL GRADING WITHIN CRITICAL ROOT ZONE AREAS BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE ROOT DAMAGE.

WATER ALL TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. SPRAY TREE CROWNS WITH WATER PERIODICALLY TO REDUCE DUST ACCUMULATION ON THE LEAVES.

WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.

MULCH SOCK DETAIL



**APPENDIX P-4
STANDARD SEQUENCE OF CONSTRUCTION**

- TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONSTRUCTION PLAN AND IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORMWATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION, INITIATE TREE MITIGATION MEASURES AND CONDUCT "PRE-CONSTRUCTION" TREE FERTILIZATION (IF APPLICABLE).
- THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE DEVELOPMENT SERVICES DEPARTMENT, ENVIRONMENTAL INSPECTION, AT 512-974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRECONSTRUCTION MEETING.
- THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR MEDIANATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE REVISED, IF NEEDED, TO COMPLY WITH CITY INSPECTORS' DIRECTIVES, AND REVISED CONSTRUCTION SCHEDULE RELATIVE TO THE WATER QUALITY PLAN REQUIREMENTS AND THE EROSION PLAN.
- ROUGH GRADE THE POND(S) AT 100% PROPOSED CAPACITY. EITHER THE PERMANENT OUTLET STRUCTURE OR A TEMPORARY OUTLET MUST BE CONSTRUCTED PRIOR TO DEVELOPMENT OF EMBANKMENT OR EXCAVATION THAT LEADS TO PONDING CONDITIONS. THE OUTLET SYSTEM MUST CONSIST OF A SUMP PIT OUTLET AND AN EMERGENCY SPILLWAY MEETING THE REQUIREMENTS OF THE DRAINAGE CRITERIA MANUAL AND/OR THE ENVIRONMENTAL CRITERIA MANUAL, AS REQUIRED. THE OUTLET SYSTEM SHALL BE PROTECTED FROM EROSION AND SHALL BE MAINTAINED THROUGHOUT THE COURSE OF CONSTRUCTION UNTIL INSTALLATION OF THE PERMANENT WATER QUALITY POND(S).
- TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE EROSION SEDIMENTATION CONTROL PLAN (ESC) AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
- BEGIN SITE CLEARING/CONSTRUCTION (OR DEMOLITION) ACTIVITIES.
- FINISH GRADE THE PARKING LOT AND BUILDING PAD. INSTALL SITE UTILITIES INCLUDING ON-SITE STORM SEWER AND INLETS. COMPLETE CONSTRUCTION OF DETENTION AND WATER QUALITY PONDS. ONCE THE SPLITTER STRUCTURE IS CONSTRUCTED, THE STORM SEWERS CAN BE CONNECTED AND PUT IN SERVICE.
- PERMANENT WATER QUALITY PONDS OR CONTROLS WILL BE CLEANED OUT AND FILTER MEDIA WILL BE INSTALLED PRIOR TO CONCURRENT WITH REVEGETATION OF SITE.
- COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
- UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE BEARING THE ENGINEER'S SEAL, SIGNATURE, AND DATE TO THE DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
- UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE DEVELOPMENT SERVICES DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND IN SUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
- AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY ARBORIST, THE CONTRACTOR SHALL REMOVE ALL EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT ANY MAINTENANCE AND REHABILITATION OF THE WATER QUALITY PONDS OR CONTROLS.

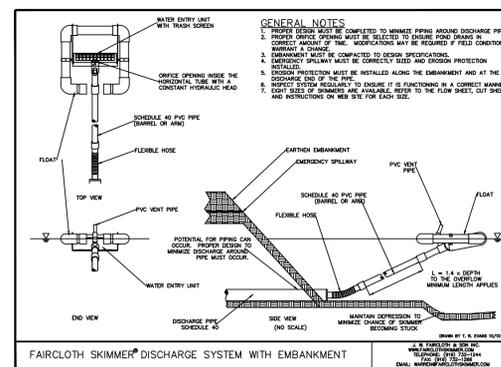
**APPENDIX P-6
REMEDIAL TREE CARE NOTES
AERATION & SUPPLEMENTAL NUTRIENT REQUIREMENTS
FOR TREES WITHIN CONSTRUCTION AREAS**

AS A COMPONENT OF AN EFFECTIVE REMEDIAL TREE CARE PROGRAM PER ENVIRONMENTAL CRITERIA MANUAL SECTION 3.5.4, PRESERVED TREES WITHIN THE LIMITS OF CONSTRUCTION MAY REQUIRE SOIL AERATION AND SUPPLEMENTAL NUTRIENTS. SOIL AND/OR FOLIAR ANALYSIS SHOULD BE USED TO DETERMINE THE NEED FOR SUPPLEMENTAL NUTRIENTS. THE CITY ARBORIST MAY REQUIRE THESE ANALYSES AS PART OF A COMPREHENSIVE TREE CARE PLAN. SOIL PH SHALL BE CONSIDERED WHEN DETERMINING THE FERTILIZATION COMPOSITION AS SOIL PH INFLUENCES THE TREE'S ABILITY TO UPTAKE NUTRIENTS FROM THE SOIL. IF ANALYSES INDICATE THE NEED FOR SUPPLEMENTAL NUTRIENTS, THEN HUMATE/NUTRIENT SOLUTIONS WITH MYCORRHIZAL COMPONENTS ARE HIGHLY RECOMMENDED. IN ADDITION, SOIL ANALYSIS MAY BE NEEDED TO DETERMINE IF ORGANIC MATERIAL OR BENEFICIAL MICROORGANISMS ARE NEEDED TO IMPROVE SOIL HEALTH. MATERIALS AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (512-974-1876) PRIOR TO APPLICATION. THE OWNER OR GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND ENSURE COORDINATION WITH THE CITY ARBORIST.

PRE-CONSTRUCTION TREATMENT SHOULD BE APPLIED IN THE APPROPRIATE SEASON, IDEALLY THE SEASON PRECEDING THE PROPOSED CONSTRUCTION. MINIMALLY, AREAS TO BE TREATED INCLUDE THE ENTIRE CRITICAL ROOT ZONE OF TREES AS DEPICTED ON THE CITY APPROVED PLANS. TREATMENT SHOULD INCLUDE, BUT NOT LIMITED TO, FERTILIZATION, SOIL TREATMENT, MULCHING, AND PROPER PRUNING.

POST-CONSTRUCTION TREATMENT SHOULD OCCUR DURING FINAL REVEGETATION OR AS DETERMINED BY A QUALIFIED ARBORIST AFTER CONSTRUCTION. CONSTRUCTION ACTIVITIES OFTEN RESULT IN A REDUCTION IN SOIL MACRO AND MICRO PORES AND AN INCREASE IN SOIL BULK DENSITY. TO AMELIORATE THE DEGRADED SOIL CONDITIONS, AERATION VIA WATER AND/OR AIR INJECTED INTO THE SOIL IS NEEDED OR BY OTHER METHODS AS APPROVED BY THE CITY ARBORIST. THE PROPOSED NUTRIENT MIX SPECIFICATIONS AND SOIL AND/OR FOLIAR ANALYSIS RESULTS NEED TO BE PROVIDED TO AND APPROVED BY THE CITY ARBORIST PRIOR TO APPLICATION (FAX # 512-974-3010). CONSTRUCTION WHICH WILL BE COMPLETED IN LESS THAN 90 DAYS MAY USE MATERIALS AT 1/2 RECOMMENDED RATES. ALTERNATIVE ORGANIC FERTILIZER MATERIALS ARE ACCEPTABLE WHEN APPROVED BY THE CITY ARBORIST. WITHIN 7 DAYS AFTER FERTILIZATION IS PERFORMED, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE WORK PERFORMED TO THE CITY ARBORIST, DEVELOPMENT SERVICES DEPARTMENT, P.O. BOX 1088, AUSTIN, TX 78767. THIS NOTE SHOULD BE REFERENCED AS ITEM #1 IN THE SEQUENCE OF CONSTRUCTION.

SKIMMER DETAIL FOR TEMP. SEDIMENT TRAP



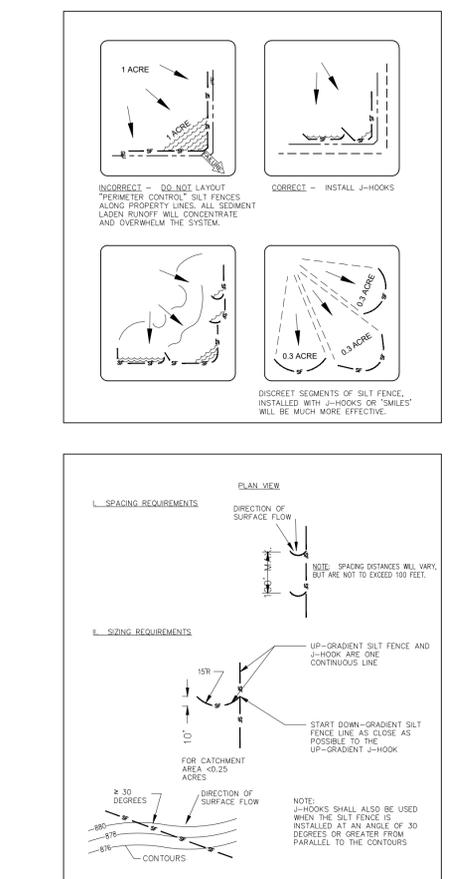
MULCH SOCK SPECIFICATIONS

- APPLICATION**
- FILTREXX SILT/SOXXTM ARE TO BE INSTALLED DOWN SLOPE OF ANY DISTURBED AREA REQUIRING EROSION AND SEDIMENT CONTROL AND FILTRATION OF SOLUBLE POLLUTANTS FROM RUNOFF. SILT/SOXX ARE EFFECTIVE WHEN INSTALLED PERPENDICULAR TO SHEET FLOW. ACCEPTABLE APPLICATIONS INCLUDE:
- SITE PERIMETERS AND INTERMEDIATE SHEET FLOW TREATMENT APPLICATIONS.
 - ABOVE AND BELOW DISTURBED AREAS SUBJECT TO SHEET RUNOFF, INTERRILL AND RILL EROSION.
 - ABOVE AND BELOW EXPOSED AND ERODIBLE SLOPES MEETING THE SLOPE CRITERIA BELOW.
 - ON COMPACTED SOILS WHERE TRENCHING OF SILT FENCE IS DIFFICULT OR IMPOSSIBLE.
 - AROUND SENSITIVE TREES WHERE TRENCHING OF SILT FENCE IS NOT BENEFICIAL FOR TREE SURVIVAL OR MAY UNNECESSARILY DISTURB ESTABLISHED VEGETATION.
 - ON PAVED SURFACES WHERE TRENCHING OF SILT FENCE IS IMPOSSIBLE.

- INSTALLATION**
- SILT/SOXXTM USED FOR PERIMETER CONTROL OF SEDIMENT AND SOLUBLE POLLUTANTS IN STORM RUNOFF SHALL MEET FILTREXX SOXXTM MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTREXX FILTERMEDIATM.
 - FILTREXXINGM™ USED FOR SOLIDS SEPARATION AND FILTRATION OF SOLUBLE POLLUTANTS FROM CONTAMINATED WATER SUCH AS CONCRETE WASH OUTS SHALL MEET FILTREXX FILTERS/OXXTM MATERIAL SPECIFICATIONS AND USE CERTIFIED FILTREXX FILTERMEDIATM.
 - CONTRACTORS ARE REQUIRED TO BE FILTREXX CERTIFIED AS DETERMINED BY FILTREXX INTERNATIONAL, LLC (440-926-2607 OR VISIT WEBSITE AT WWW.FILTREXX.COM). CERTIFICATION SHALL BE CONSIDERED CURRENT IF APPROPRIATE IDENTIFICATION IS SHOWN DURING TIME OF BID OR AT TIME OF APPLICATION (CURRENT LISTING CAN BE FOUND AT WWW.FILTREXX.COM). LOOK FOR THE FILTREXX CERTIFIED™ SEAL.
 - SILT/SOXXTM AND FILTERINGS™ WILL BE PLACED AT LOCATIONS INDICATED ON PLANS AS DIRECTED BY THE ENGINEER.
 - SILT/SOXXTM SHOULD BE INSTALLED PARALLEL TO THE BASE OF THE SLOPE OR OTHER DISTURBED AREA IN EXTREME CONDITIONS (I.E., 2:1 SLOPES). A SECOND SILT/SOXXTM SHALL BE CONSTRUCTED AT THE TOP OF THE SLOPE.
 - STAKES SHALL BE INSTALLED THROUGH THE MIDDLE OF THE SILT/SOXXTM AND FILTERING™ ON 2 FT. CENTERS AS PER THE SKETCH PROVIDED BELOW, USING #3 REBAR STAKES, OR 2 IN BY 2 IN BY 4 FT. WOODEN STAKES. IN THE EVENT STAKING IS NOT POSSIBLE, I.E., WHEN SILT/SOXXTM ARE USED ON PAVEMENT, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SILT/SOXXTM TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.
 - STAKING DEPTH FOR SAND, CLAY AND SILT LOAM SOILS SHALL BE 24 IN.
 - LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE SILT/SOXXTM, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.
 - IF THE SILT/SOXXTM IS TO BE LEFT AS A PERMANENT FILTER OR PART OF THE NATURAL LANDSCAPE, IT MAY BE SEEDED AT TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION. THE ENGINEER WILL SPECIFY SEED REQUIREMENTS.
 - FILTREXX SILT/SOXXTM ARE NOT TO BE USED IN PERENNIAL, EPHEMERAL, OR INTERMITTENT STREAMS.

- INSPECTION AND MAINTENANCE**
- ROUTINE INSPECTION SHOULD BE CONDUCTED WITHIN 24 HRS OF A RUNOFF EVENT OR AS DESIGNATED BY THE REGULATORY AUTHORITY. SILT/SOXXTM SHOULD BE REGULARLY INSPECTED AT LEAST WEEKLY TO MAKE SURE THEY MAINTAIN THEIR SHAPE AND ARE PRODUCING ADEQUATE HYDRAULIC FLOW-THROUGH. IF PONDING BECOMES EXCESSIVE, ADDITIONAL SILT/SOXXTM MAY BE REQUIRED TO REDUCE EFFECTIVE SLOPE LENGTH OR SEDIMENT REMOVAL MAY BE NECESSARY. SILT/SOXXTM SHALL BE INSPECTED UNTIL AREA ABOVE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED.
 - THE CONTRACTOR SHALL MAINTAIN THE SILT/SOXXTM IN A FUNCTIONAL CONDITION AT ALL TIMES AND IT SHALL BE ROUTINELY INSPECTED. IF THE SILT/SOXXTM HAS BEEN DAMAGED, IT SHALL BE REPAIRED, OR REPLACED IF BEYOND REPAIR.
 - THE CONTRACTOR SHALL REMOVE SEDIMENT AT THE BASE OF THE UPSLOPE SIDE OF THE SILT/SOXXTM AS NECESSARY. SEDIMENT REMOVAL SHALL BE LIMITED TO THE EFFECTIVE HEIGHT OF THE SILT/SOXXTM, OR AS DIRECTED BY THE ENGINEER. ALTERNATIVELY, A NEW SILT/SOXXTM CAN BE PLACED ON TOP OF AND SLIGHTLY BEHIND THE ORIGINAL ONE.
 - SILT/SOXXTM SHALL BE MAINTAINED UNTIL DISTURBED AREA ABOVE THE DEVICE HAS BEEN PERMANENTLY STABILIZED AND CONSTRUCTION ACTIVITY HAS CEASED.
 - THE FILTERMEDIATM WILL BE DISPERSED ON SITE ONCE DISTURBED AREA HAS BEEN PERMANENTLY STABILIZED, CONSTRUCTION ACTIVITY HAS CEASED, OR AS DETERMINED BY THE ENGINEER.
 - FOR LONG-TERM SEDIMENT AND POLLUTION CONTROL APPLICATIONS, SILT/SOXXTM CAN BE INSTALLED AT THE TIME OF INSTALLATION TO CREATE A VEGETATIVE FILTERING SYSTEM FOR PROLONGED AND INCREASED FILTRATION OF SEDIMENT AND SOLUBLE POLLUTANTS (CONTAINED VEGETATIVE FILTER STRIP). THE APPROPRIATE SEED MIX SHALL BE DETERMINED BY THE ENGINEER.

SILT FENCE PLACEMENT FOR PERIMETER CONTROL



CURB INLET SPECS & CALCS

- TEMPORARY SEDIMENT BARRIER SHALL BE MADE OF WOVEN OR NON-WOVEN MATERIAL.
- DRAINAGE AREA - LESS THAN TWO (2) ACRES.
- FABRIC WEIGHT: ASTM D3776 GREATER THAN OR EQUAL TO 3.0 OZ./S.Y.
- UV STABILITY ASTM D4355 70% STRENGTH RETAINED MIN. AFTER 500 HOURS IN XENON ARC DEVICE
- MULLEN BURST ASTM D3786 GREATER THAN OR EQUAL TO 120 STRENGTH POUNDS PER SQUARE INCH
- WATER FLOW ASTM D4491 GREATER THAN OR EQUAL TO 375 RATE GALLONS/MIN./S.F.
- THE MATERIAL SHALL HAVE A MAXIMUM EXPECTED USEFUL LIFE OF 18 MONTHS.

THE INLET PROTECTION DEVICE SHOULD BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN OUT AND DISPOSAL OF TRAPPED SEDIMENT WHILE MINIMIZING INTERFERENCE WITH CONSTRUCTION ACTIVITIES.

THEY SHOULD NOT ALLOW MORE THAN 4 INCHES OF STANDING WATER IN THE R.O.W. OR DAMAGE TO THE STRUCTURE OR ADJACENT AREAS.

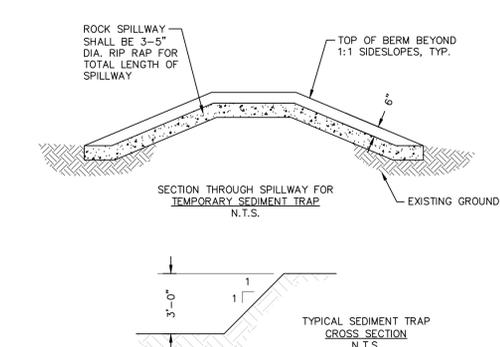
THE FABRIC SHOULD COMPLETELY COVER THE OPENING OF THE INLET AND THE DEVICE SHALL NOT HAVE PROTRUDING PARTS THAT COULD BE A TRAFFIC OR PEDESTRIAN HAZARD. OVERLAP FABRIC A MINIMUM OF 3 INCHES.

THE INLET DEVICE SHALL BE ATTACHED IN A WAY THAT THEY CAN EASILY BE REMOVED AND NOT SECURED OR ATTACHED BY THE USE OF SAND BAGS.

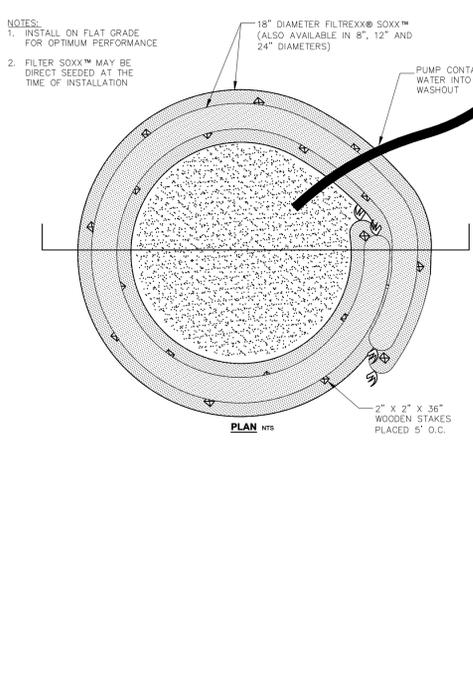
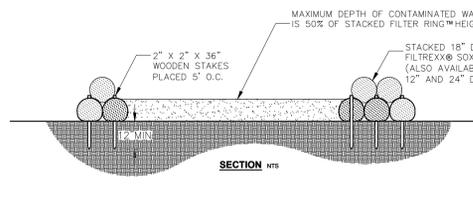
ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES A DEPTH OF 2 INCHES OR ONE-THIRD THE HEIGHT OF THE INLET THROAT, AND DISPOSED OF IN A MANNER WHICH WILL NOT CAUSE ADDITIONAL SILTATION.

APPROVED INLET PROTECTION SHALL BE GEOCURVE, OR APPROVED EQUAL. SEE DETAIL, THIS SHEET.

TEMPORARY SEDIMENT TRAP DETAILS



FILTREXX® CONCRETE WASHOUT



AMC DESIGN GROUP
ENGINEERING AND CONSULTANTS
P.O. BOX 303086
AUSTIN, TEXAS 78703
512-385-2911

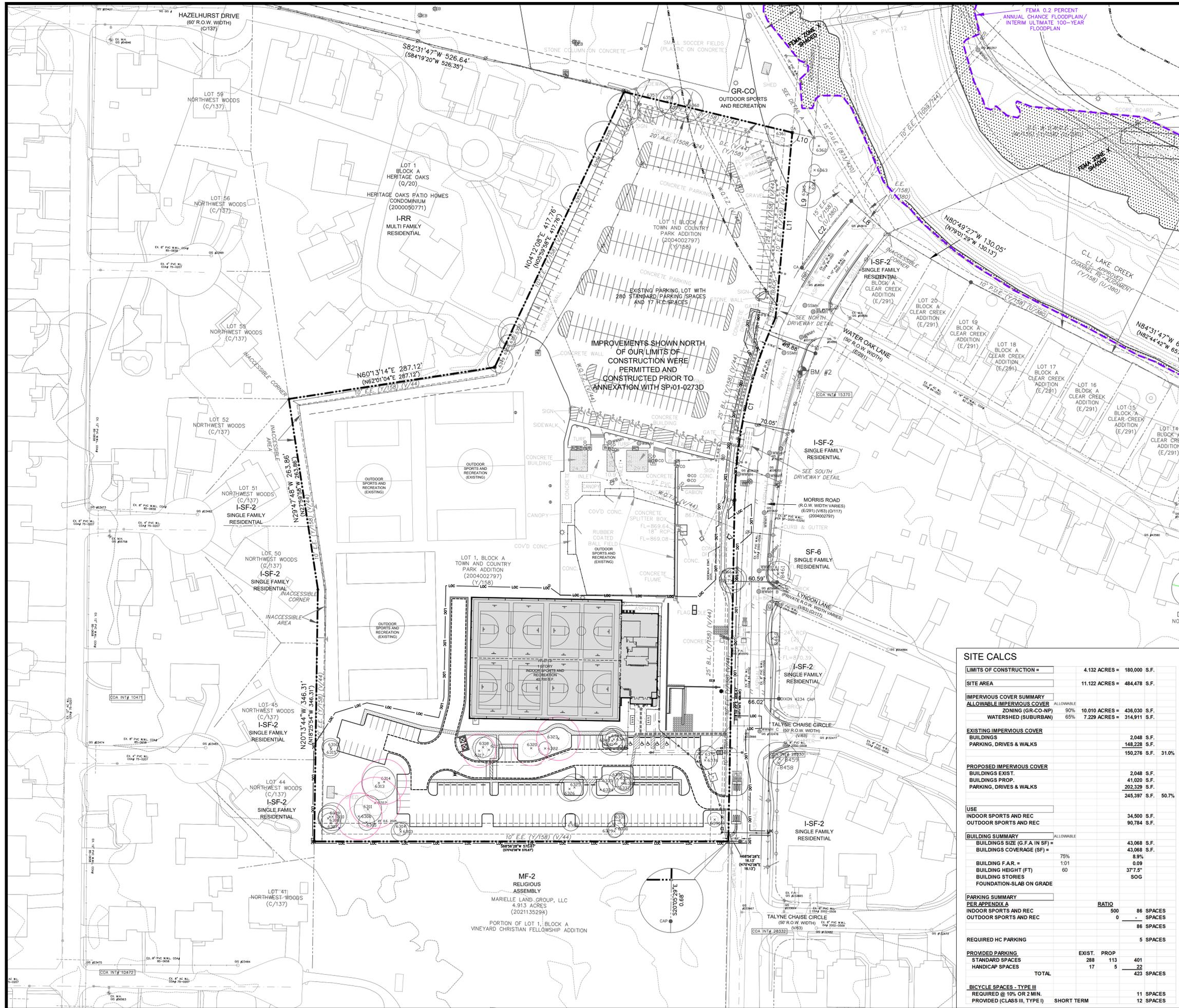
TEXAS REGISTERED ENGINEER: FBH-E-1706
CHRIS McCOMB
80442
PROFESSIONAL ENGINEER
01/27/2025

Thrasher Design
LAND PLANNERS
P.O. BOX 41987
AUSTIN, TEXAS 78704 • (512) 476-4456

NO.	DATE	DESCRIPTION

KATHY MANNING ATHLETIC CENTER AT TOWN & COUNTRY
13228 MORRIS ROAD
AUSTIN, TEXAS 78729

SWPPP NOTES



SCALE: 1" = 60'
SCALE IN FEET
60 30 0 60

- LEGEND**
- LOC — LOC — LIMITS OF CONSTRUCTION
 - FIRELANE STRIPING
 - ACCESSIBLE ROUTE (SEE NOTES)
 - ELECTRIC CABLING
 - ☒ DUMPSTER

- NOTES**
- SITE NOTES:**
- PARKING SURFACE TO BE ASPHALT. SEE CONSTRUCTION DETAILS.
 - FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF OR DAMAGE TO UTILITIES.
 - COORDINATE ALL CONSTRUCTION IN PRIVATE RIGHT-OF-WAY WITH OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.
 - ALL DEMOLISHED MATERIALS ARE TO BE MOVED TO AN OFF-SITE LOCATION BY DEMOLITION CONTRACTOR.
 - THERE ARE NO OTHER STRUCTURES OR BUILDINGS WITHIN 50' OF THE LIMITS OF CONSTRUCTION OTHER THAN THOSE SHOWN.
 - ESTABLISH FIRE ZONES AS SHOWN ON SITE BY PAINTING GUTTER RED. STENCIL THE WORDS "FIRE ZONE/TOW-AWAY ZONE" IN WHITE LETTERS AT LEAST 3 INCHES HIGH AT 30' INTERVALS ALONG THE CURB OR PAVEMENT AS NOTED ON THE SITE PLAN.
 - GUARDRAILS ARE REQUIRED ON ALL STRUCTURES WHERE THE VERTICAL GRADE DIFFERENCE IS GREATER THAN 30 INCHES ACCORDING TO THE UNIFORM BUILDING CODE. REFER TO ARCHITECTURAL PLANS FOR GUARDRAIL DESIGN AND LAYOUT.

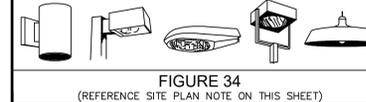
- ACCESSIBILITY NOTES:**
- WHEN MORE THAN ONE BUILDING OR FACILITY IS LOCATED ON A SITE, AT LEAST ONE ACCESSIBLE ROUTE MUST BE PROVIDED BETWEEN ACCESSIBLE ELEMENTS AND BUILDINGS.
 - SLOPES ON ACCESSIBLE ROUTES MAY NOT EXCEED 1:20 UNLESS DESIGNED AS A RAMP.
 - ACCESSIBLE ROUTES MUST HAVE A CROSS-SLOPE NO GREATER THAN 1:50.
 - GROUND SURFACES ALONG ACCESSIBLE ROUTES MUST BE STABLE, FIRM AND SLIP RESISTANT.
 - THE MAXIMUM SLOPE OF A RAMP IN NEW CONSTRUCTION IS 1:12. THE MAXIMUM RISE FOR ANY RAMP RUN IS 30 IN. THE MAXIMUM HORIZONTAL PROJECTION IS 30 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:12 AND 1:15, AND 40 FEET FOR A RAMP WITH A SLOPE BETWEEN 1:16 AND 1:20.
 - DETECTABLE WARNINGS FOR CURB RAMPS SHALL FOLLOW TDR TECHNICAL MEMORANDUM TM 08-01 AND HAVE TEXTURES CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN., A HEIGHT OF NOMINAL 0.2 IN. AND A CENTER TO CENTER SPACING OF NOMINAL 2.35 IN. AND SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES. LIGHT ON DARK, OR DARK ON LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
 - ACCESSIBLE PARKING SPACES MUST BE LOCATED ON A SURFACE WITH SLOPE NOT EXCEEDING 1:50.
 - ACCESSIBLE PARKING SPACES MUST BE LOCATED ON THE SHORTEST POSSIBLE ACCESSIBLE ROUTE OF TRAVEL TO AN ACCESSIBLE BUILDING ENTRANCE IN FACILITIES WITH MULTIPLE ACCESSIBLE BUILDING ENTRANCES WITH ADJACENT PARKING. ACCESSIBLE PARKING SPACES MUST BE DISPersed AND LOCATED NEAR THE ACCESSIBLE ENTRANCES.
 - EVERY ACCESSIBLE PARKING SPACE MUST BE IDENTIFIED BY A SIGN, CENTERED AT THE HEAD OF THE PARKING SPACE. THE SIGN MUST INCLUDE THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AND STATE "RESERVED" OR EQUIVALENT LANGUAGE. CHARACTERS AND SYMBOLS ON SUCH SIGNS MUST BE LOCATED 60" MINIMUM ABOVE THE GROUND SO THAT THEY CANNOT BE OBTURED BY A VEHICLE PARKED IN THE SPACE. SEE SIGN DETAIL ON CONSTRUCTION DETAILS SHEET.
 - AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL, THERE MUST BE A SIGN DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY. SIGNS MUST INDICATE THE DIRECTION TO AN ACCESSIBLE BUILDING ENTRANCE.
 - THE CONTRACTOR SHALL VERIFY ALL GRADES CONCERNING ACCESSIBLE ROUTES AND WALKWAYS PRIOR TO PLACEMENT OF CONCRETE. THE CONTRACTOR SHALL CONTACT THE ENGINEER 48 HOURS PRIOR TO CONCRETE PLACEMENT ON ALL ACCESSIBLE ROUTES AND WALKWAYS IN ORDER TO VERIFY FORM PLACEMENT, SLOPES AND GRADES.
 - APPROVAL OF THESE PLANS BY THE CITY OF AUSTIN INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. COMPLIANCE WITH ACCESSIBILITY STANDARDS SUCH AS THE 2010 STANDARDS FOR ACCESSIBLE DESIGN OR THE 2012 TEXAS ACCESSIBILITY STANDARDS WAS NOT VERIFIED. THE APPLICANT IS RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ACCESSIBILITY STANDARDS.

SITE CALCS

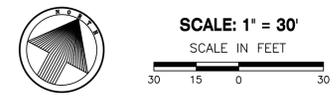
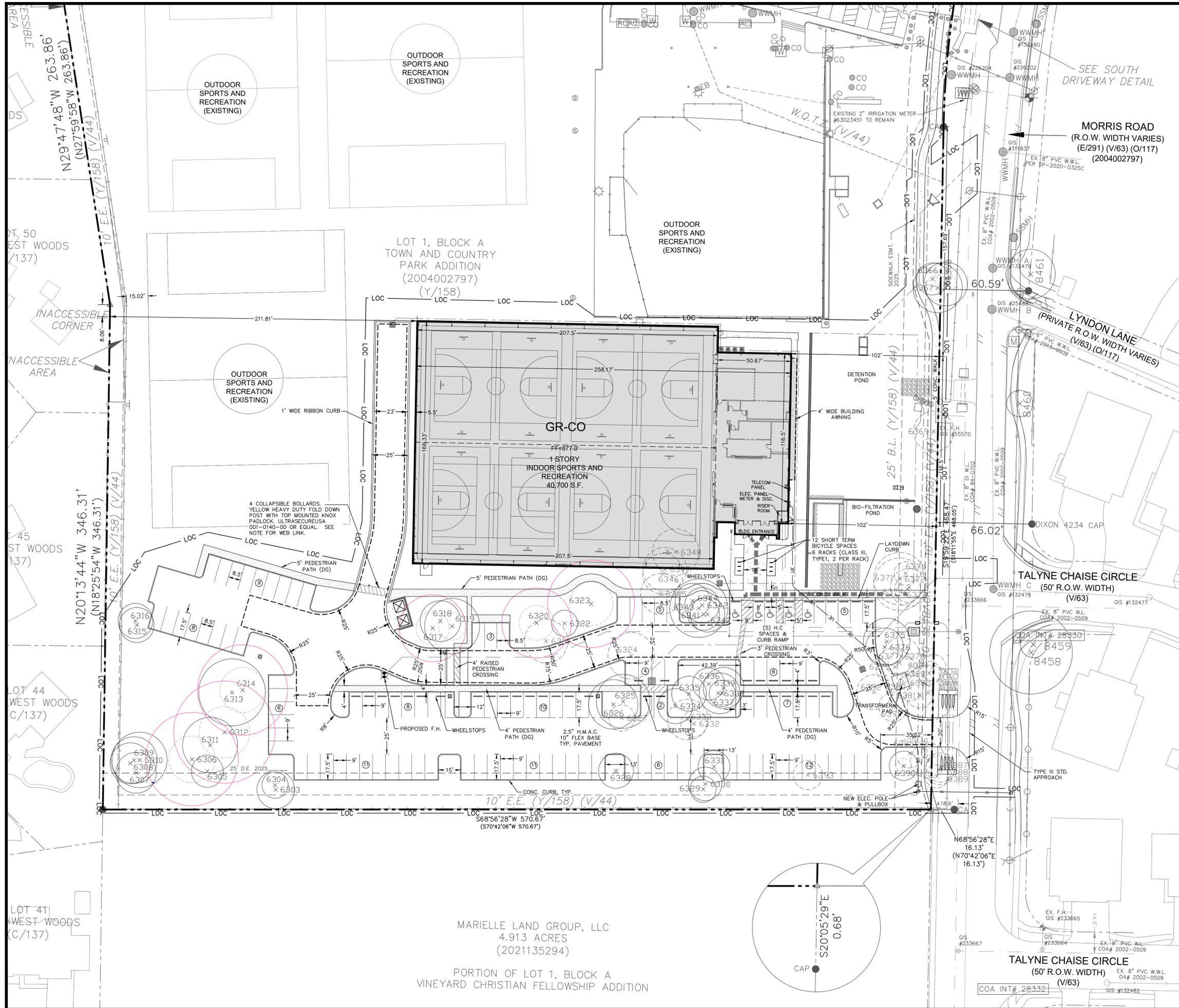
LIMITS OF CONSTRUCTION =	4.132 ACRES =	180,000 S.F.
SITE AREA	11.122 ACRES =	484,478 S.F.
IMPERVIOUS COVER SUMMARY		
ALLOWABLE IMPERVIOUS COVER	ALLOWABLE	
ZONING (GR-CO-NP)	90%	10,010 ACRES = 436,030 S.F.
WATERSHED (SUBURBAN)	65%	7,229 ACRES = 314,911 S.F.
EXISTING IMPERVIOUS COVER		
BUILDINGS		2,048 S.F.
PARKING, DRIVES & WALKS		148,228 S.F.
		150,276 S.F. 31.0%
PROPOSED IMPERVIOUS COVER		
BUILDINGS EXIST.		2,048 S.F.
BUILDINGS PROP.		41,020 S.F.
PARKING, DRIVES & WALKS		202,329 S.F.
		245,397 S.F. 50.7%
USE		
INDOOR SPORTS AND REC		34,500 S.F.
OUTDOOR SPORTS AND REC		90,784 S.F.
BUILDING SUMMARY		
BUILDINGS SIZE (G.S.F.A IN SF)		43,068 S.F.
BUILDINGS COVERAGE (BF) =		43,068 S.F.
BUILDING F.A.R. =	75%	8.9%
BUILDING HEIGHT (FT)	1.01	0.09
BUILDING STORIES	60	377.5'
FOUNDATION-SLAB ON GRADE		SOG
PARKING SUMMARY		
PER APPENDIX A	RATIO	
INDOOR SPORTS AND REC	500	86 SPACES
OUTDOOR SPORTS AND REC	0	0 SPACES
		86 SPACES
REQUIRED HC PARKING		5 SPACES
PROVIDED PARKING		
STANDARD SPACES	EXIST. 288	PROP. 113
HANDICAP SPACES	17	5
	TOTAL	423 SPACES
BICYCLE SPACES - TYPE III		
REQUIRED @ 10% OR 2 MIN.		11 SPACES
PROVIDED (CLASS III, TYPE I)		12 SPACES

- COMPATIBILITY STANDARD NOTES**
- ALL EXTERIOR LIGHTING WILL BE HOODED OR SHIELDED FROM THE VIEW OF ADJACENT RESIDENTIAL PROPERTY.
 - ALL DUMPSTERS AND ANY PERMANENTLY PLACED REFUSE RECEPTACLES WILL BE LOCATED AT A MINIMUM OF TWENTY (20) FEET FROM A PROPERTY USED OR ZONED AS SF-5 OR MORE RESTRICTIVE.
 - THE USE OF HIGHLY REFLECTIVE SURFACES, SUCH AS REFLECTIVE GLASS AND REFLECTIVE METAL ROOFS, WHOSE PITCH IS MORE THAN A RUN OF SEVEN (7) TO A RISE OF TWELVE (12), WILL BE PROHIBITED. THE NOISE LEVEL OF MECHANICAL EQUIPMENT WILL NOT EXCEED 70 DBA AT THE PROPERTY LINE ADJACENT TO RESIDENTIAL USES.
- THIS PROJECT COMPLIES WITH THE FOLLOWING BICYCLE/PEDESTRIAN IMPROVEMENT OPTIONS:
- INTERNAL UTILITY LINES LOCATED IN DRIVE AISLES/INT. CIRC. ROUTE.
 - SHADED SIDEWALKS ARE PROVIDED ALONG 100% OF ALL PUBLICLY VISIBLE BUILDING FACADES.

- COMMERCIAL DESIGN NOTES:**
- COMPLIANCE WITH BUILDING DESIGN STANDARDS, ARTICLE 3 OF SUBCHAPTER E, IS REQUIRED, AND IS TO BE REVIEWED FOR COMPLIANCE DURING BUILDING CODE REVIEW.
 - ALL EXTERIOR LIGHTING WILL BE FULL CUT-OFF AND FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E2.5 AND WILL BE REVIEWED DURING BUILDING PLAN REVIEW. ANY CHANGE OR SUBSTITUTION OF LAMP/AUGMENT FIXTURES SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL IN ACCORDANCE WITH SECTION 2.5.2.E.
 - SCREENING FOR SOLID WASTE COLLECTION AND LOADING AREAS SHALL BE THE SAME AS, OR EQUAL QUALITY TO, PRINCIPLE BUILDING MATERIALS.
 - EXTERIOR LIGHTING ABOVE THE SECOND FLOOR IS PROHIBITED IN THE CO, LR, GR, CS, OR CS-1 ZONING DISTRICTS, WHEN ADJACENT TO AN SF-5 OR MORE RESTRICTIVE ZONING DISTRICT (SECTION 25-2-585).



NO.	DATE	DESCRIPTION



- LEGEND**
- LOC — LIMITS OF CONSTRUCTION
 - - - - - FIRELANE STRIPING
 - ▬▬▬▬ ACCESSIBLE ROUTE (SEE NOTES)
 - ☒ DUMPSTER

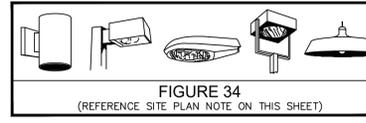
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 - TYPE III DRIVEWAYS MUST BE RECONSTRUCTED AS CONCRETE APPROVED BY THE OWNER WITHIN 60 DAYS AFTER CONSTRUCTION OF THE ABUTTING STREET TO PERMANENT GRADE WITH CURBS AND GUTTERS.
 - COLLAPSIBLE BOLLARD SHALL BE ULTRASECURE USA. [HTTPS://ULTRASECUREUSA.COM/POSTS/FOLD-DOWN-PARKING-POSTS-BOLLARDS/810-FOLD-DOWN-PARKING-POST-001-0140-00-P176.HTML](https://ultrasecureusa.com/posts/fold-down-parking-posts-bollards/810-fold-down-parking-post-001-0140-00-p176.html) WITH KNOX-PADLOCKS, OR APPROVED EQUAL.

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NO.	DATE	DESCRIPTION

EXISTING DRAINAGE CONDITIONS - ATLAS 14 RAINFALL DISTRIBUTION												
DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (%COMPOSITE)	Q10 CFS	Q25 CFS	Q100 CFS						
E-1	3.65	0.32	80.0	7.78	14.85	19.68	27.77					
OS-1	6.09	0.50	88.1	13.99	23.71	30.20	40.97					
OS-2	2.94	0.41	88.1	7.35	12.32	15.69	21.28					
ANALYSIS POINT 1												

PROPOSED DRAINAGE CONDITIONS												
DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (%COMPOSITE)	Q10 CFS	Q25 CFS	Q100 CFS						
E-1	3.65	0.32	80.0	7.78	14.85	19.68	27.77					
OS-1	6.09	0.50	84.8	13.99	23.71	30.20	40.97					
OS-2	2.94	0.41	80.0	7.35	12.32	15.69	21.28					
OS-2	0.77	0.43	80.0	1.44	2.74	3.83	5.13					
ANALYSIS POINT 1												

CITY OF AUSTIN ATLAS 14 FREQUENCY STORM												
DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (%COMPOSITE)	Q10 CFS	Q25 CFS	Q100 CFS						
E-1	3.65	0.32	80.0	7.78	14.85	19.68	27.77					
OS-1	6.09	0.50	84.8	13.99	23.71	30.20	40.97					
OS-2	2.94	0.41	80.0	7.35	12.32	15.69	21.28					
OS-2	0.77	0.43	80.0	1.44	2.74	3.83	5.13					
ANALYSIS POINT 1												

CITY OF AUSTIN ATLAS 14 FREQUENCY STORM												
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OS-2	2.94	0.41	80.0	7.35	12.32	15.69	21.28					
OS-2	0.77	0.43	80.0	1.44	2.74	3.83	5.13					
ANALYSIS POINT 1												

PROJECT: Optimist KMAC											
FIRM: AMC Design Group, Inc.											
DATE: 11/14/25											
SUBAREA ID: P-1											
DEVELOPED CONDITIONS											
ENGR: CBM											
LAND USE DESCRIPTION	FRACTION	SOIL TYPE				SCS CN		FRACTION		SCS CN	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, fair condition	0.00	CN	49	69	79	84	81.5	84	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, good condition	0.00	CN	39	61	74	80	77	80	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, poor condition	0.00	CN	68	79	88	89	87.5	89	0.0	0.0	
Open Space	0.23	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
leams, parks, etc. good condition	0.23	CN	39	61	74	80	77	80	18.8	18.8	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Grazed, fair	0.00	CN	36	60	73	79	76	79	0.0	0.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Protected from grazing, good	0.00	CN	30	55	70	77	73.5	77	0.0	0.0	
Residential Districts	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
2 acre	0.00	CN	46	65	77	82	79.5	82	0.0	0.0	
Impervious Areas	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Gravel	0.00	CN	76	85	89	91	90	91	0.0	0.0	
Impervious Areas	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
paved parking, roofs, driveways	0.77	CN	98	98	98	98	98	98	75.2	75.2	
TOTAL OF PRODUCTS:										93.8	
USE CN=										94	

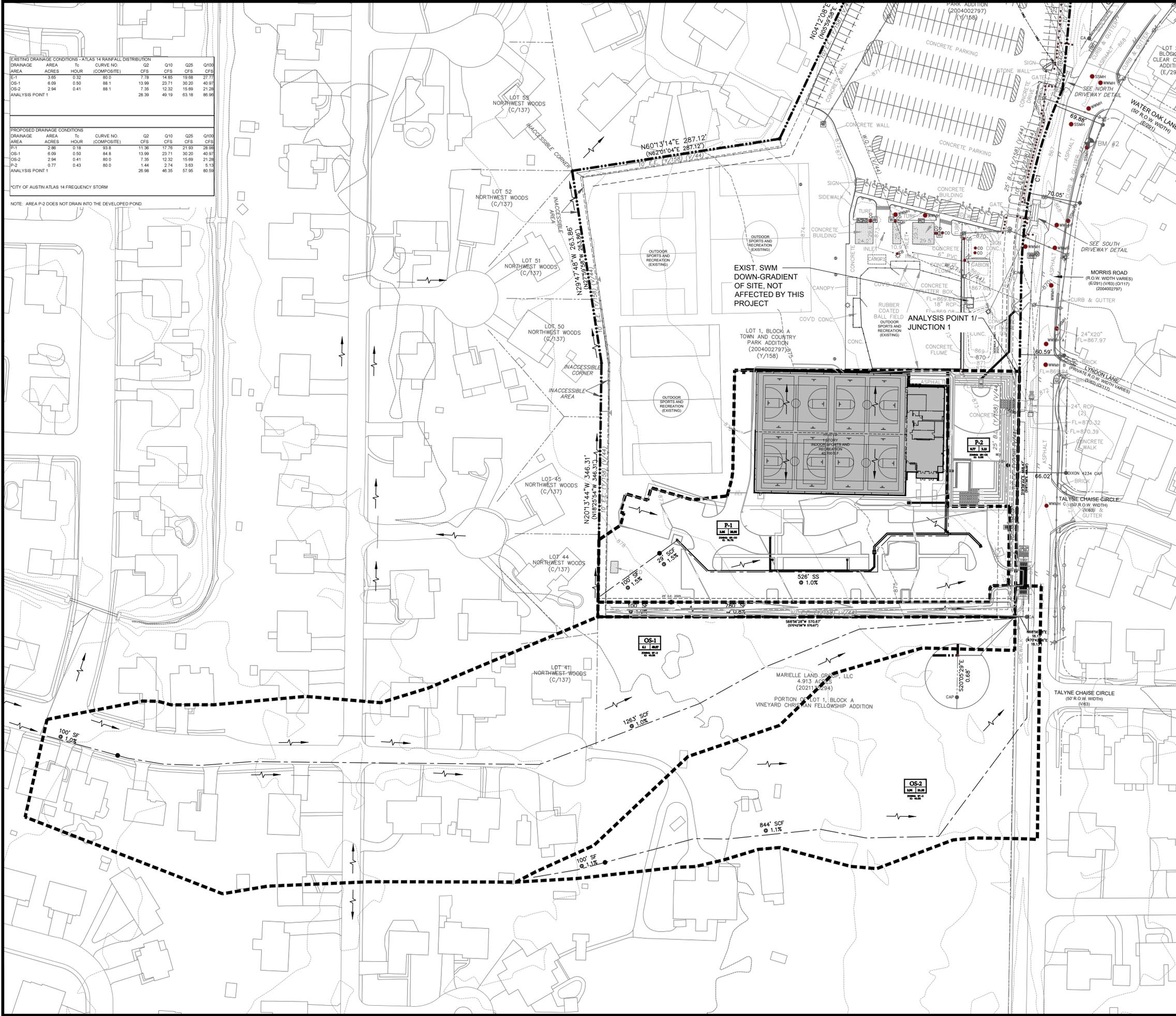
PROJECT: Optimist KMAC											
FIRM: AMC Design Group, Inc.											
DATE: 04/23/25											
SUBAREA ID: P-2											
DEVELOPED CONDITIONS											
ENGR: CBM											
LAND USE DESCRIPTION	FRACTION	SOIL TYPE				SCS CN		FRACTION		SCS CN	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, fair condition	0.00	CN	49	69	79	84	81.5	84	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, good condition	0.00	CN	39	61	74	80	77	80	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, poor condition	0.00	CN	68	79	88	89	87.5	89	0.0	0.0	
Open Space	1.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
leams, parks, etc. good condition	1.00	CN	39	61	74	80	77	80	80.0	80.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Grazed, fair	0.00	CN	36	60	73	79	76	79	0.0	0.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Protected from grazing, good	0.00	CN	30	55	70	77	73.5	77	0.0	0.0	
Residential Districts	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
2 acre	0.00	CN	46	65	77	82	79.5	82	0.0	0.0	
Impervious Areas	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Gravel	0.00	CN	76	85	89	91	90	91	0.0	0.0	
Impervious Areas	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
paved parking, roofs, driveways	0.00	CN	98	98	98	98	98	98	0.0	0.0	
TOTAL OF PRODUCTS:										80.0	
USE CN=										80	

TIME OF CONCENTRATION											
SHEET FLOW - DCM Eq. 24 (OVERTON & MEADOWS, 1976)											
SHALLOW CONCENTRATED FLOW - DCM Eq. 1.68.1.6											
TOTALS											
BASIN	SHEET FLOW	DCM Eq. 24	SHALLOW CONCENTRATED FLOW	DCM Eq. 1.68.1.6	TOTALS						
	LENGTH (FT)	SLOPE (FT/FT)	RAINFALL DEPTH (IN)	MANINGUSS n VALUE	Tc (HR)						
E-1	100	0.015	4.06	0.24	0.24	564	0.015	N	1.98	0.08	19.0
P-1	100	0.015	4.06	0.15	0.16	29	0.015	N	1.98	0.00	10.9
P-2	100	0.010	4.06	0.24	0.28	780	0.008	N	1.44	0.15	25.7
OS-1	100	0.010	4.06	0.24	0.28	1263	0.010	N	1.61	0.22	29.8
OS-2	100	0.011	4.06	0.24	0.27	844	0.011	N	1.69	0.14	24.4
Subtotal											

PROJECT: Optimist KMAC											
FIRM: AMC Design Group, Inc.											
DATE: 04/23/25											
SUBAREA ID: OS-1											
EXISTING CONDITIONS											
ENGR: CBM											
LAND USE DESCRIPTION	FRACTION	SOIL TYPE				SCS CN		FRACTION		SCS CN	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, fair condition	0.00	CN	49	69	79	84	81.5	84	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, good condition	0.00	CN	39	61	74	80	77	80	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, poor condition	0.00	CN	68	79	88	89	87.5	89	0.0	0.0	
Open Space	0.55	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
leams, parks, etc. good condition	0.55	CN	39	61	74	80	77	80	44.0	44.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Grazed, fair	0.00	CN	36	60	73	79	76	79	0.0	0.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Protected from grazing, good	0.00	CN	30	55	70	77	73.5	77	0.0	0.0	
Residential Districts	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
2 acre	0.00	CN	46	65	77	82	79.5	82	0.0	0.0	
Impervious Areas	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Gravel	0.00	CN	76	85	89	91	90	91	0.0	0.0	
Impervious Areas	0.45	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
paved parking, roofs, driveways	0.45	CN	98	98	98	98	98	98	44.1	44.1	
TOTAL OF PRODUCTS:										88.1	

PROJECT: Optimist KMAC											
FIRM: AMC Design Group, Inc.											
DATE: 04/23/25											
SUBAREA ID: OS-2											
EXISTING CONDITIONS											
ENGR: CBM											
LAND USE DESCRIPTION	FRACTION	SOIL TYPE				SCS CN		FRACTION		SCS CN	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, fair condition	0.00	CN	49	69	79	84	81.5	84	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, good condition	0.00	CN	39	61	74	80	77	80	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, poor condition	0.00	CN	68	79	88	89	87.5	89	0.0	0.0	
Open Space	0.55	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
leams, parks, etc. good condition	0.55	CN	39	61	74	80	77	80	44.0	44.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Grazed, fair	0.00	CN	36	60	73	79	76	79	0.0	0.0	
Woods	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Protected from grazing, good	0.00	CN	30	55	70	77	73.5	77	0.0	0.0	
Residential Districts	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
2 acre	0.00	CN	46	65	77	82	79.5	82	0.0	0.0	
Impervious Areas	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
Gravel	0.00	CN	76	85	89	91	90	91	0.0	0.0	
Impervious Areas	0.45	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
paved parking, roofs, driveways	0.45	CN	98	98	98	98	98	98	44.1	44.1	
TOTAL OF PRODUCTS:										88.1	

PROJECT: Optimist KMAC											
FIRM: AMC Design Group, Inc.											
DATE: 04/23/25											
SUBAREA ID: OS-1											
EXISTING CONDITIONS											
ENGR: CBM											
LAND USE DESCRIPTION	FRACTION	SOIL TYPE				SCS CN		FRACTION		SCS CN	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, fair condition	0.00	CN	49	69	79	84	81.5	84	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, good condition	0.00	CN	39	61	74	80	77	80	0.0	0.0	
Pasture	0.00	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
grassland, poor condition	0.00	CN	68	79	88	89	87.5	89	0.0	0.0	
Open Space	0.55	% AREA	A	B	C	D	U	SCS CN	FRACTION	SCS CN	
leams, parks, etc. good condition	0.55	CN	39	61	74	80					

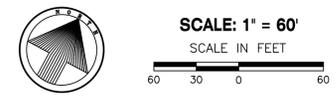


EXISTING DRAINAGE CONDITIONS - ATLAS 14 RAINFALL DISTRIBUTION											
DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
P-1	3.05	0.32	80.0	7.78	14.85	19.68	27.77				
OS-1	6.09	0.50	88.1	13.99	23.71	30.20	40.67				
OS-2	2.94	0.41	88.1	7.35	12.32	15.69	21.26				
ANALYSIS POINT 1				28.39	49.19	63.16	85.96				

PROPOSED DRAINAGE CONDITIONS											
DRAINAGE AREA	AREA ACRES	Tc HOUR	CURVE NO. (COMPOSITE)	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS	Q2 CFS	Q10 CFS	Q25 CFS	Q100 CFS
P-1	2.86	0.18	83.8	11.36	17.76	21.93	28.96				
OS-1	6.09	0.50	84.8	13.99	23.71	30.20	40.97				
OS-2	2.94	0.41	80.0	7.35	12.32	15.69	21.26				
P-2	0.77	0.43	80.0	1.44	2.74	3.63	5.13				
ANALYSIS POINT 1				26.98	46.35	57.95	80.59				

CITY OF AUSTIN ATLAS 14 FREQUENCY STORM

NOTE: AREA P-2 DOES NOT DRAIN INTO THE DEVELOPED POND



- LEGEND**
- EXISTING / PROPOSED DRAINAGE SUB AREA
 - AREA ACREAGE 100 YR. FLOW, C.F.S.
 - SUB AREA BOUNDARY
 - FLOW DIRECTION
 - TcA SOIL CLASSIFICATION (CLASS D SOILS)
 - Tc TO TRAVEL PATH
 - EXISTING STORMSEWER
 - PROPOSED STORMSEWER
 - SF SHEET FLOW
 - SCF SHALLOW CONCENTRATED FLOW

- NOTES**
- THE SITE DRAINAGE ANALYSIS WAS DESIGNED USING HEC-HMS AND THE ATLAS 14 FREQUENCY STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
 - THE STORM SEWER ANALYSIS WAS DESIGNED USING THE MODIFIED RATIONAL METHOD USING THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
 - REFER TO THE DRAINAGE CALCULATIONS AND THE ENGINEER'S REPORT FOR DETAILED INFORMATION ON ALL DRAINAGE CALCULATIONS.
 - AREAS SHOWN AS "SUB AREAS" ARE ONLY USED FOR CALCULATING DRAINAGE CONDUITS AND INLETS. REFER TO DRAINAGE STUDY FOR IN DEPTH DRAINAGE INFORMATION.
 - UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY OR FINAL INSPECTION RELEASE BY THE CITY, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
 - CONTRACTOR SHALL CALL THE TEXAS EXCAVATION SAFETY SYSTEM 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR STREET RIGHT OF WAY.
 - ROOF DOWNSPOUTS MUST BE CONNECTED TO STORM SEWER ON THE NORTH, WEST AND EAST BUILDING FACES. REFER TO ARCHITECTURAL PLANS FOR CONNECTION DETAIL.



ENGINEERING AND CONSTRUCTION CONSULTANTS
 P.O. BOX 303886
 AUSTIN, TEXAS 78703
 512-385-2911

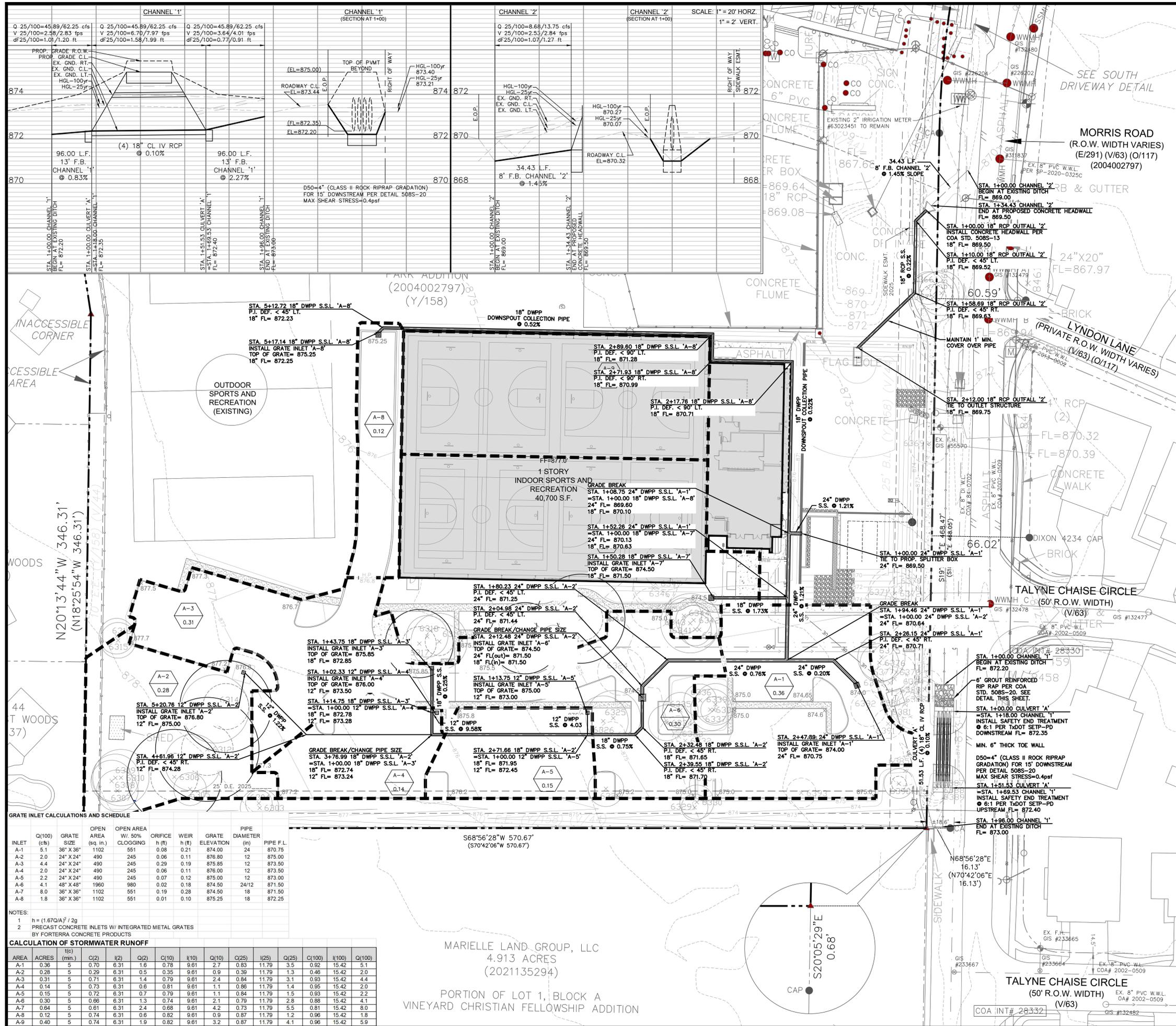


Thrasher Design
 LAND PLANNERS
 P.O. BOX 41957
 AUSTIN, TEXAS 78704 • (512) 476-4456

NO.	DATE	DESCRIPTION

KATHY MANNING ATHLETIC CENTER AT TOWN & COUNTRY
 13228 MORRIS ROAD
 AUSTIN, TEXAS 78729

PROPOSED OVERALL DRAINAGE

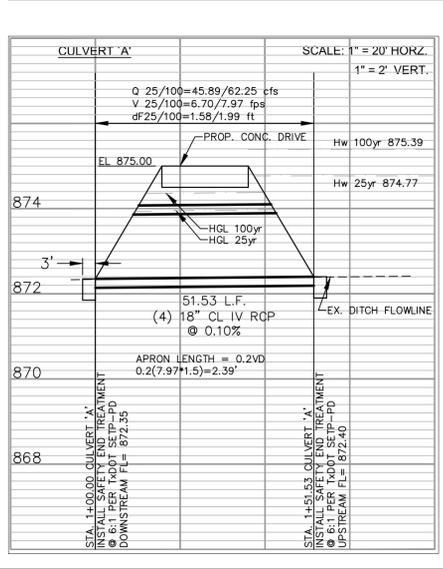
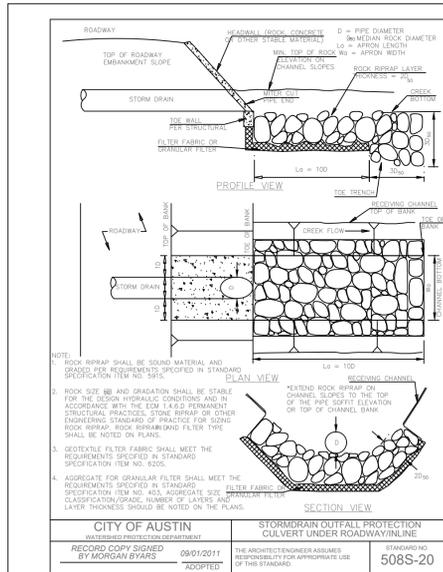


SCALE: 1" = 30'
SCALE IN FEET

LEGEND

- DRAINAGE SUB AREA
- SUB AREA ACREAGE
- SUB AREA BOUNDARY
- FLOW DIRECTION
- RCP REINFORCED CONCRETE PIPE
- DWPP ASTM F2881 DUAL WALL POLYPROPYLENE PIPE
- EXISTING STORMSEWER
- PROPOSED STORMSEWER

- NOTES**
- THE SITE DRAINAGE ANALYSIS WAS DESIGNED USING HEC-HMS AND THE AUSTIN 24 HOUR STORM AS DEFINED IN THE DRAINAGE CRITERIA MANUAL FOR THE CITY OF AUSTIN.
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 - UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS, AND PRIOR TO THE RELEASE OF THE CERTIFICATE OF OCCUPANCY OR FINAL INSPECTION RELEASE BY THE CITY, THE DESIGN ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE AND DETENTION FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS.
 - CONTRACTOR SHALL CALL THE TEXAS EXCAVATION SAFETY SYSTEM 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR STREET RIGHT OF WAY.
 - ROOF DOWNSPOUTS MUST BE CONNECTED TO STORM SEWER ON THE NORTH, WEST AND EAST BUILDING FACES. REFER TO ARCHITECTURAL PLANS FOR CONNECTION DETAIL.



GRATE INLET CALCULATIONS AND SCHEDULE

INLET	Q(100) (cfs)	GRATE SIZE	OPEN AREA (sq. in.)	OPEN AREA W/ 50% CLOGGING	ORIFICE W (ft)	WEIR H (ft)	GRATE ELEVATION	PIPE DIAMETER (in.)	PIPE F.L.
A-1	5.1	36" X 36"	1102	551	0.08	0.21	874.00	24	870.75
A-2	2.0	24" X 24"	490	245	0.06	0.11	876.90	12	875.00
A-3	4.4	24" X 24"	490	245	0.25	0.19	875.85	12	873.50
A-4	2.0	24" X 24"	490	245	0.06	0.11	876.00	12	873.50
A-5	2.2	24" X 24"	490	245	0.07	0.12	875.00	12	873.00
A-6	4.1	48" X 48"	1960	980	0.02	0.18	874.50	24/12	871.50
A-7	8.0	36" X 36"	1102	551	0.19	0.28	874.50	18	871.50
A-8	1.8	36" X 36"	1102	551	0.01	0.10	875.25	18	872.25

NOTES:

- $h = (1.67Q/A)^2 / 2g$
- PRECAST CONCRETE INLETS W/ INTEGRATED METAL GRATES BY FORTERRA CONCRETE PRODUCTS

CALCULATION OF STORMWATER RUNOFF

AREA	ACRES	C(1)	C(2)	I(2)	Q(2)	C(10)	I(10)	Q(10)	Q(25)	I(25)	Q(25)	C(100)	I(100)	Q(100)
A-1	0.36	5	0.70	6.31	1.6	0.78	9.81	2.7	0.83	11.79	3.5	0.92	15.42	5.1
A-2	0.28	5	0.29	6.31	0.5	0.35	9.81	0.9	0.39	11.79	1.3	0.48	15.42	2.0
A-3	0.31	5	0.71	6.31	1.4	0.79	9.81	2.4	0.84	11.79	3.1	0.93	15.42	4.4
A-4	0.14	5	0.73	6.31	0.6	0.81	9.81	1.1	0.86	11.79	1.4	0.95	15.42	2.0
A-5	0.15	5	0.72	6.31	0.7	0.79	9.81	1.1	0.84	11.79	1.5	0.93	15.42	2.2
A-6	0.30	5	0.66	6.31	1.3	0.74	9.81	2.1	0.79	11.79	2.8	0.88	15.42	4.1
A-7	0.64	5	0.61	6.31	2.4	0.68	9.81	4.2	0.73	11.79	5.5	0.81	15.42	8.0
A-8	0.12	5	0.74	6.31	0.6	0.82	9.81	0.9	0.87	11.79	1.2	0.96	15.42	1.8
A-9	0.40	5	0.74	6.31	1.9	0.82	9.81	3.2	0.87	11.79	4.1	0.98	15.42	5.9

MARIELLE LAND GROUP, LLC
4.913 ACRES
(2021135294)

PORTION OF LOT 1, BLOCK A
VINEYARD CHRISTIAN FELLOWSHIP ADDITION

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
P.O. BOX 30386
AUSTIN, TEXAS 78703
512-385-2911

TEXAS REGISTERED ENGINEERING FIRM E-1706

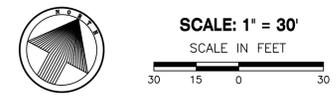
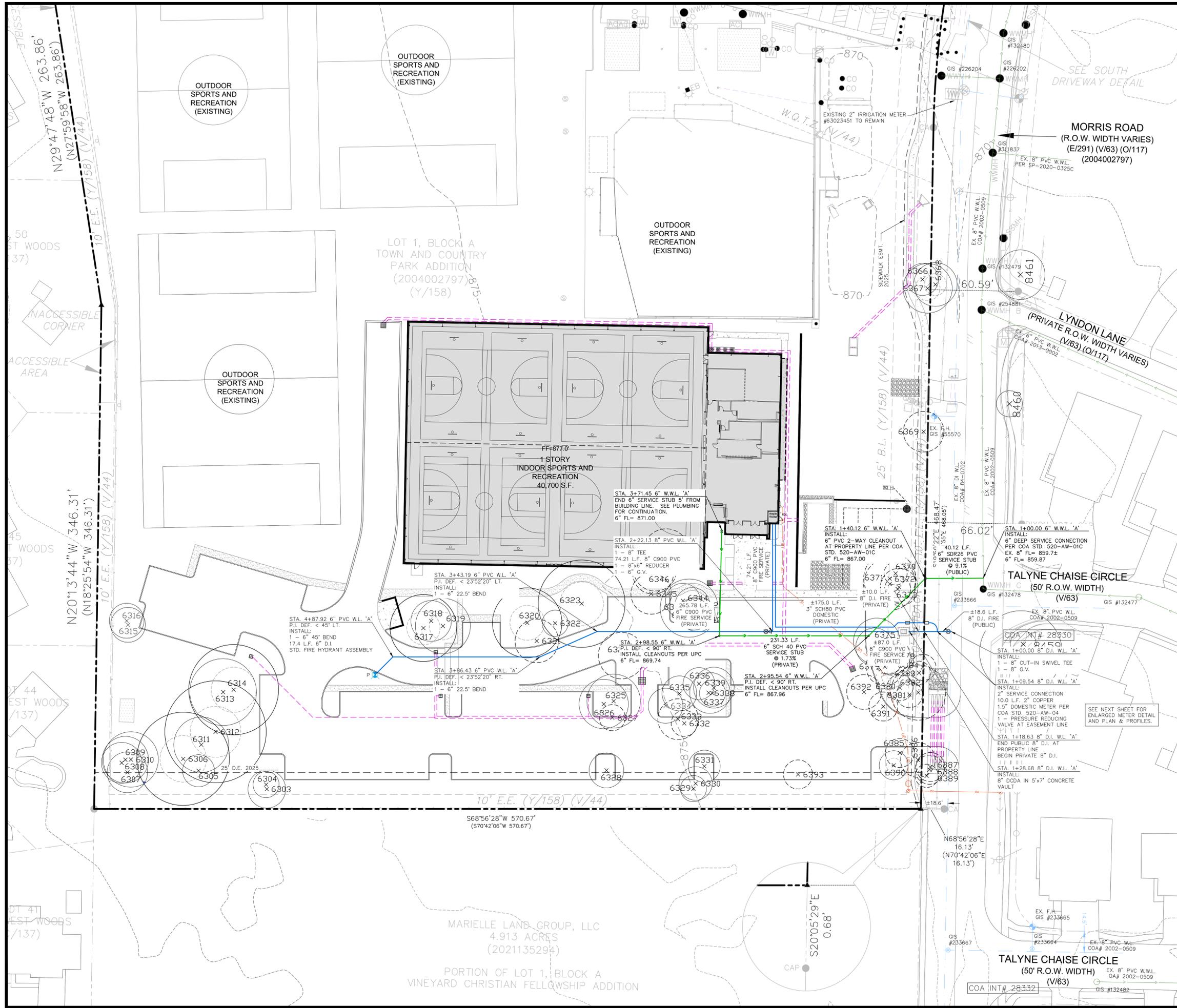
Chris McComb
LICENSED PROFESSIONAL ENGINEER
080442

Thrasher Design
LAND PLANNERS
AUSTIN, TEXAS 78704 • (512) 476-4456
P.O. BOX 41957

KATHY MANNING ATHLETIC CENTER AT TOWN & COUNTRY
13228 MORRIS ROAD
AUSTIN, TEXAS 78729

PROPOSED STORM SEWER PLAN

15 OF 31
SP-2025-0165C



LEGEND

	EXISTING WATER
	PROPOSED WATER
	EXISTING WASTEWATER
	PROPOSED WASTEWATER
	PRIVATE FIRE HYDRANT
	PUBLIC FIRE HYDRANT

- NOTES**
- REFER TO SHEET 3 FOR ALL AUSTIN WATER UTILITY STANDARD NOTES.
 - CONTRACTOR SHALL CALL THE ONE CALL SYSTEM OR THE TEXAS EXCAVATION SAFETY SYSTEM, 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR HIGHWAY RIGHT OF WAY.
 - ALL DETAILS NOT SHOWN BUT ARE COVERED BY C.O.A. DETAILS AND SPECIFICATIONS SHALL CONFORM TO CITY OF AUSTIN STANDARDS. DIMENSIONS AND LIMITS OF THESE ITEMS ARE NOTED ON THE DRAWINGS.
 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS THAT ARE REQUIRED TO COMPLY WITH SECTIONS 15-12-161 THROUGH 15-12-181 OF THE CITY CODE REGARDING EXCAVATION IN PUBLIC RIGHT-OF-WAY.
 - ALL PRIVATE FIRE HYDRANTS TO BE PAINTED RED.
 - NO METERS ARE ALLOWED WITHIN THE LIMITS OF PROPOSED OR EXISTING SIDEWALKS.

UNDERGROUND MAINS FEEDING PRIVATE FIRE HYDRANTS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, AND THE FIRE CODE, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.

UNDERGROUND MAINS FEEDING NFPA 13 SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13, AND THE FIRE CODE, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.

NOTE:
THE LOCATION OF KNOWN SUBSURFACE STRUCTURES, PIPE, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING HIMSELF AS TO THE LOCATION OF THE AFORESAID ITEMS, SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE. THE COST OF SUCH REPAIRS OR RELOCATIONS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.

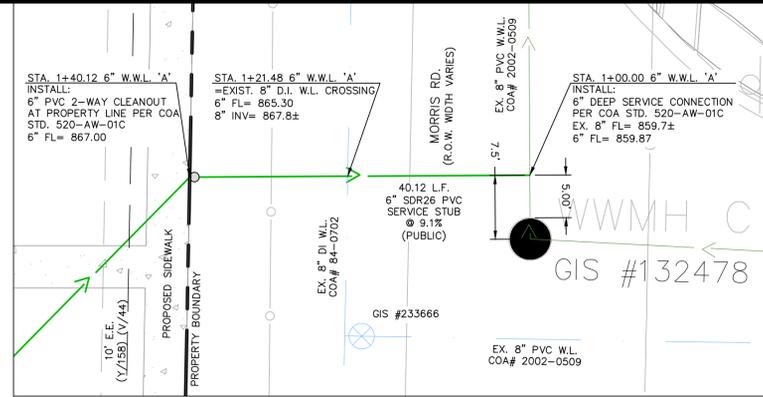
RESTRAINED JOINTS FOR ALL WATER LINE BENDS, TEES AND ENDS:
ALL HORIZONTAL AND VERTICAL WATER LINE BENDS, TEES AND DEAD ENDS SHALL BE RESTRAINED TO THE WATER MAIN USING FACTORY RESTRAINED JOINT PIPE AS APPROVED IN SPL WW-27F, OR MECHANICAL JOINT RESTRAINT DEVICES AS APPROVED IN SPL WW-27A. THE CALCULATED RESTRAINT LENGTH(S) SHALL BE INCLUDED AS CALL-OUT NOTES IN THE PLAN VIEW AND PROFILE, CALLED OUT FROM BEGINNING STATION TO END STATION PER UCM SECTION 2.9.2.B.9.

CITY OF AUSTIN WATER AND WASTEWATER UTILITY SPECIAL SERVICES DIVISION (512) 972-1060
THIS PROJECT HAS 1 PRIVATE HYDRANT LOCATED WITHIN THE PROPERTY. THE PROPERTY OWNER IS REQUIRED TO COMPLY WITH AUSTIN FIRE CODE. FAILURE TO COMPLY MAY RESULT IN CIVIL AND/OR CRIMINAL REMEDIES AVAILABLE TO THE CITY. THE PERFORMANCE OF THIS OBLIGATION SHALL ALWAYS REST WITH THE OWNER OF RECORD. FIRE HYDRANTS ON PRIVATE PROPERTY ARE REQUIRED TO BE SERVICED, MAINTAINED AND FLOWED ANNUALLY, USING A CONTRACTOR REGISTERED WITH THE CITY TO PROVIDE THE SERVICE.

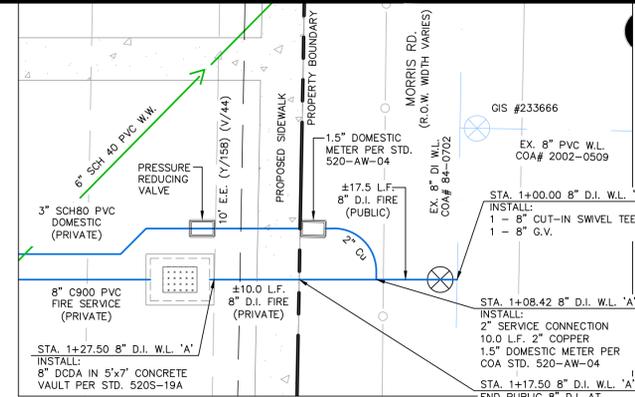
SECTION 608.2 OF THE LOCAL AMENDMENTS TO THE UNIFORM PLUMBING CODE REQUIRES A PRESSURE REDUCING VALVE IF THE LOCAL STATIC PRESSURE IS ABOVE 65 PSI. THE PRV SET AT 65 PSI MUST BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE WATER METER.
A PRV IS REQUIRED FOR THE DOMESTIC METER.



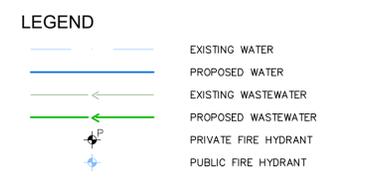
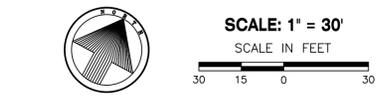
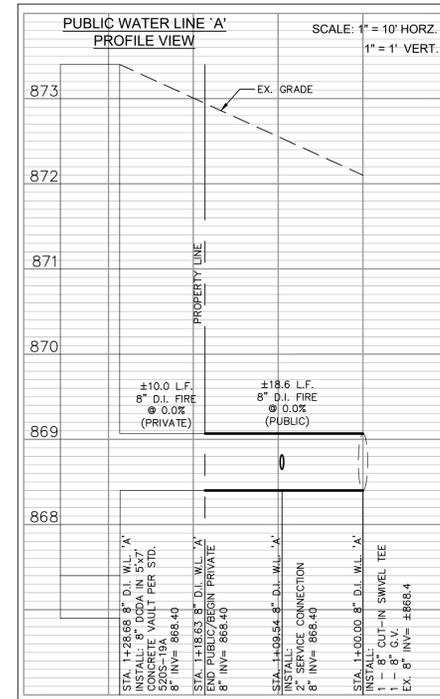
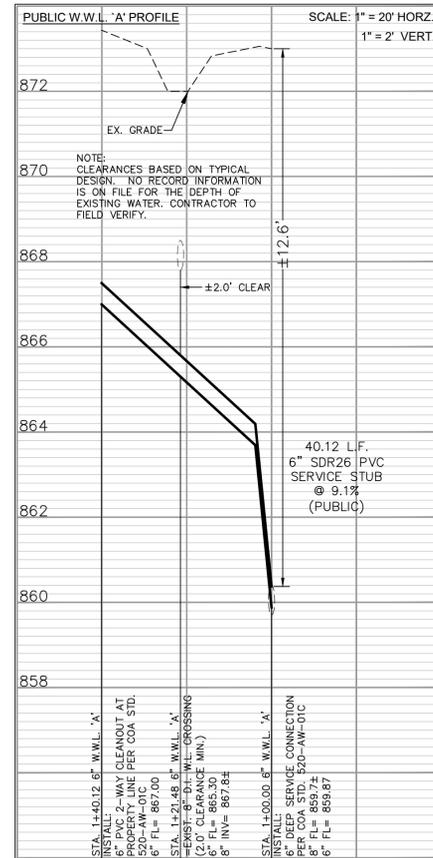
NO.	DATE	DESCRIPTION



PUBLIC WASTEWATER LINE 'A' PLAN VIEW
SCALE: 1"=10'



PUBLIC WATER LINE 'A' PLAN VIEW
SCALE: 1"=10'



- NOTES**
- REFER TO SHEET 3 FOR ALL AUSTIN WATER UTILITY STANDARD NOTES.
 - CONTRACTOR SHALL CALL THE ONE CALL SYSTEM OR THE TEXAS EXCAVATION SAFETY SYSTEM, 1-800-DIG-TESS FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN UTILITY EASEMENTS OR HIGHWAY RIGHT OF WAY.
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 - THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS THAT ARE REQUIRED TO COMPLY WITH SECTIONS 15-12-161 THROUGH 15-12-181 OF THE CITY CODE REGARDING EXCAVATION IN PUBLIC RIGHT-OF-WAY.
 - ALL PRIVATE FIRE HYDRANTS TO BE PAINTED RED.
 - NO METERS ARE ALLOWED WITHIN THE LIMITS OF PROPOSED OR EXISTING SIDEWALKS.

UNDERGROUND MAINS FEEDING PRIVATE FIRE HYDRANTS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, AND THE FIRE CODE, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.

UNDERGROUND MAINS FEEDING NFPA 13 SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13, AND THE FIRE CODE, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.

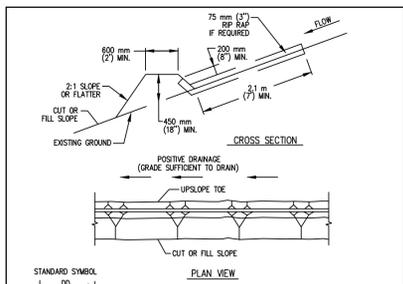
NOTE:
THE LOCATION OF KNOWN SUBSURFACE STRUCTURES, PIPE, POWER, GAS, PHONE, ETC. ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING INFORMATION AND SATISFYING HIMSELF AS TO THE LOCATION OF THE AFOREMENTIONED ITEMS, SHOWN AND NOT SHOWN. ALL REPAIRS OR RELOCATIONS NECESSARY SHALL BE MADE AS REQUIRED BY THE OWNER OF THE UTILITY OR STRUCTURE. THE COST OF SUCH REPAIRS OR RELOCATIONS NECESSARY SHALL BE BORNE BY THE CONTRACTOR.

RESTRAINED JOINTS FOR ALL WATER LINE BENDS, TEES AND ENDS:
ALL HORIZONTAL AND VERTICAL WATER LINE BENDS, TEES AND DEAD ENDS SHALL BE RESTRAINED TO THE WATER MAIN USING FACTORY RESTRAINED JOINT PIPE AS APPROVED IN SPL WW-27F, OR MECHANICAL JOINT RESTRAINT DEVICES AS APPROVED IN SPL WW-27A. THE CALCULATED RESTRAINT LENGTH(S) SHALL BE INCLUDED AS CALL-OUT NOTES IN THE PLAN VIEW AND PROFILE, CALLED OUT FROM BEGINNING STATION TO END STATION PER UCM SECTION 2.9.2.B.9.

SECTION 608.2 OF THE LOCAL AMENDMENTS TO THE UNIFORM PLUMBING CODE REQUIRES A PRESSURE REDUCING VALVE IF THE LOCAL STATIC PRESSURE IS ABOVE 65 PSI. THE PRV SET AT 65 PSI MUST BE INSTALLED ON THE PROPERTY OWNERS SIDE OF THE WATER METER.
A PRV IS REQUIRED FOR THE DOMESTIC METER.



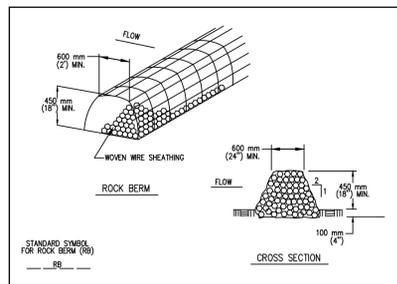
NO.	DATE	DESCRIPTION



GENERAL NOTES:

- ALL DIKES SHALL BE MACHINE COMPACTED.
- ALL DIVERSION DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
- IF DIVERTED RUNOFF FROM A PROTECTED OR STABILIZED AREA SHALL HAVE ITS OUTLET FLOW DIRECTED TO AN UNOCCUPIED STABILIZED AREA OR INTO A LEVEL SPREADER OR GRADE STABILIZATION STRUCTURE.
- DIVERTED RUNOFF FROM A DISTURBED OR EXPOSED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE, SUCH AS A ROCK BERM, BRUSH BERM, STONE OUTLET STRUCTURE, TRAP OF SEDIMENT BASIN OR TO AN AREA PROTECTED BY ANY OF THESE PRACTICES.
- UNLESS OTHERWISE SPECIFIED, GROUND STABILIZATION SHALL BE OPEN GRADED ROCK 75 TO 125 mm (3 TO 5 inches) IN DIAMETER EMBEDDED IN SOIL SURFACE.
- INSPECTION SHALL BE CONDUCTED WEEKLY OR AFTER EACH RAINFALL EVENT.

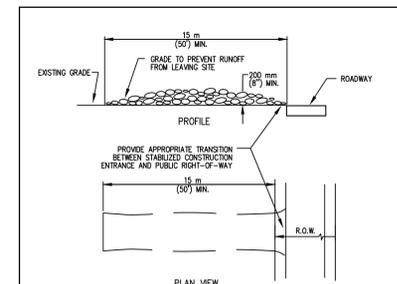
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	DIVERSION DIKE	STANDARD NO. 622S-1
RECORD COPY SIGNED BY J. PATRICK MURPHY	3/27/00 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- USE ONLY OPEN GRADED ROCK 75 TO 125 mm (3 TO 5") DIAMETER FOR ALL CONDITIONS.
- THE ROCK BERM SHALL BE SECTORED WITH A WOVEN WIRE SHEATHING MAXIMUM 25 mm (1") OPENING AND MINIMUM WIRE DIAMETER OF 1.25 mm (20 GAUGE).
- 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.
- 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 SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH OR WATERCOURSE USING APPROVED METHODS.
- WHEN THE SITE IS COMPLETELY STABILIZED THE BERM AND ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED MANNER.

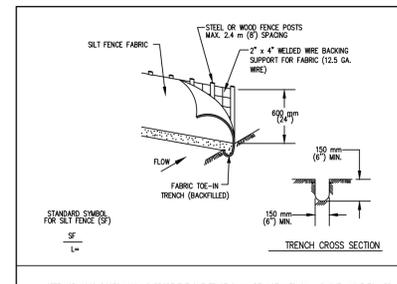
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	ROCK BERM	STANDARD NO. 639S-1
RECORD COPY SIGNED BY MORGAN BYARS	8/24/2010 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- STONE SIZE: 75-150 mm (3-5") OPEN GRADED ROCK.
- LENGTH AS EFFECTIVE BUT NOT LESS THAN 15 m (50').
- THICKNESS: NOT LESS THAN 200 mm (8").
- WIDTH: NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS/EGRESS.
- WASHING: WHEN NECESSARY, VEHICLE WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE INTO 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.
- MAINTENANCE: THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT INTO PUBLIC ROADWAY. THIS MAY REQUIRE PERIODIC TOP PRESSING 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.
- DRAINAGE: ENTRANCE MUST BE PROPERLY GRADED OR INCORPORATE A DRAINAGE SWALE TO PREVENT RUNOFF FROM LEAVING THE CONSTRUCTION SITE.

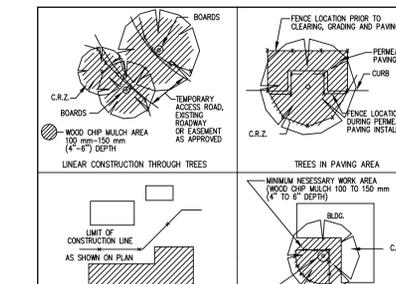
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STABILIZED CONSTRUCTION ENTRANCE	STANDARD NO. 641S-1
RECORD COPY SIGNED BY J. PATRICK MURPHY	5/23/00 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- 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.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
- 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.
- SILT FENCE FABRIC SHALL 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.
- INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.
- 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.

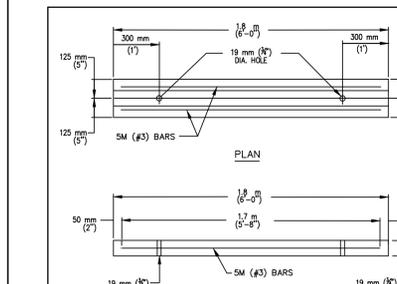
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SILT FENCE	STANDARD NO. 642S-1
RECORD COPY SIGNED BY MORGAN BYARS	09/01/2011 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- 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.
- THE TOE OF THE SILT FENCE SHALL BE TRENCHED IN WITH A SPADE OR MECHANICAL TRENCHER, SO THAT THE DOWN-SLOPE FACE OF THE TRENCH IS FLAT AND PERPENDICULAR TO THE LINE OF FLOW.
- 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.
- SILT FENCE FABRIC SHALL 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.
- INSPECTION SHALL BE MADE WEEKLY OR AFTER EACH RAINFALL EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
- SILT FENCE SHALL BE REMOVED WHEN THE SITE IS COMPLETELY STABILIZED SO AS NOT TO BLOCK OR IMPED STORM FLOW OR DRAINAGE.
- 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.

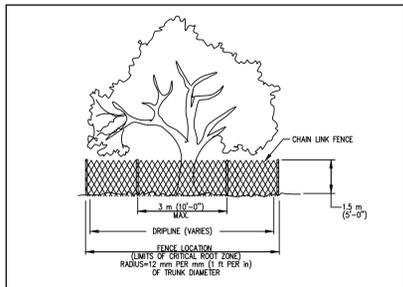
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TREE PROTECTION FENCE LOCATIONS	STANDARD NO. 610S-1
RECORD COPY SIGNED BY J. PATRICK MURPHY	11/15/99 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
- CLASS 2" PC CONCRETE (ITEM 4033) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLOORED BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN 2" THICK MAY NOT BE ALLOWED.
- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(B)(1), FOR ALL NON-METALLIC PIPE, DUCTS ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE NEOPRENE PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH AFWA UNIFORM COLOR CODE.

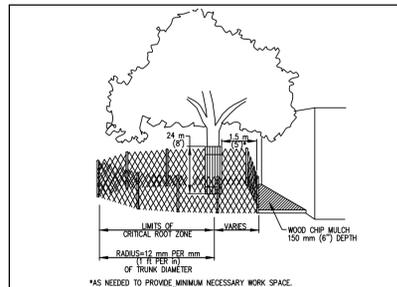
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	PARKING LOT BUMPER CURB	STANDARD NO. 439S-1
RECORD COPY SIGNED BY BILL GARDNER	3/15/05 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
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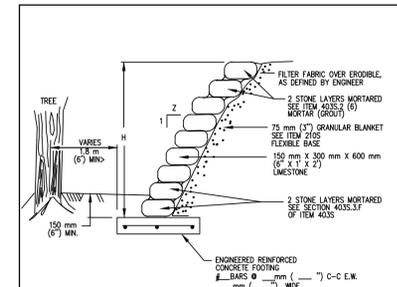
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TREE PROTECTION FENCE TYPE A - CHAIN LINK	STANDARD NO. 610S-2
RECORD COPY SIGNED BY J. PATRICK MURPHY	11/15/99 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
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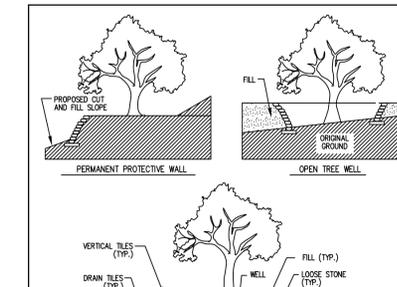
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TREE PROTECTION FENCE MODIFIED TYPE A - CHAIN LINK	STANDARD NO. 610S-4
RECORD COPY SIGNED BY J. PATRICK MURPHY	11/15/99 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



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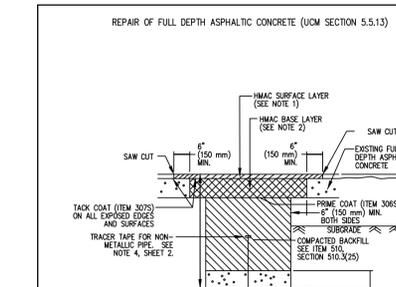
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SLOPE PROTECTION AND TREE WELLS	STANDARD NO. 610S-6
RECORD COPY SIGNED BY J. PATRICK MURPHY	03/13/06 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
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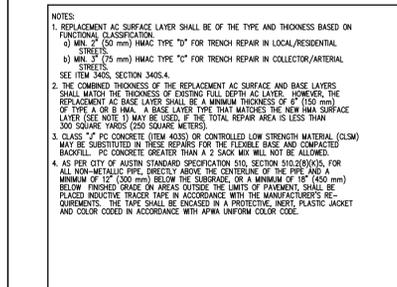
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SLOPE PROTECTION AND TREE WELLS	STANDARD NO. 610S-6
RECORD COPY SIGNED BY J. PATRICK MURPHY	03/13/06 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



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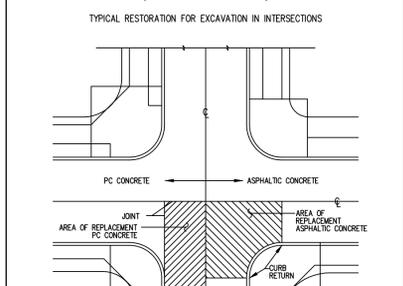
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FULL DEPTH ASPHALTIC CONCRETE PAVEMENT TRENCH REPAIR	STANDARD NO. 1100S-5
RECORD COPY SIGNED BY BILL GARDNER	9/14/05 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

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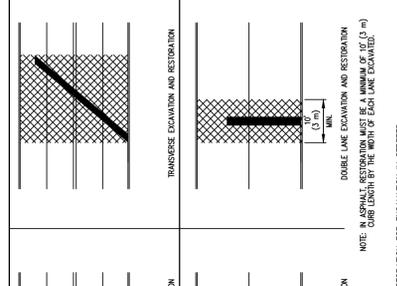
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FULL DEPTH ASPHALTIC CONCRETE PAVEMENT TRENCH REPAIR	STANDARD NO. 1100S-5
RECORD COPY SIGNED BY BILL GARDNER	9/14/05 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



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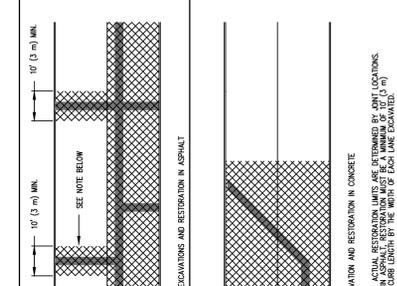
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	STANDARD NO. 1100S-7
RECORD COPY SIGNED BY BILL GARDNER	9/14/05 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



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- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
- CLASS 2" PC CONCRETE (ITEM 4033) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLOORED BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN 2" THICK MAY NOT BE ALLOWED.
- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(B)(1), FOR ALL NON-METALLIC PIPE, DUCTS ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE NEOPRENE PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH AFWA UNIFORM COLOR CODE.

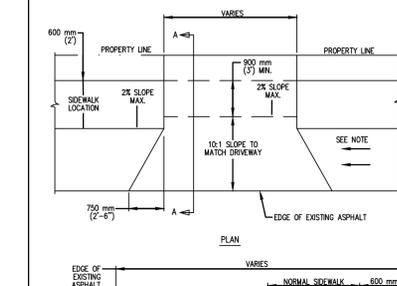
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	STANDARD NO. 1100S-7
RECORD COPY SIGNED BY BILL GARDNER	9/14/05 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
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- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(B)(1), FOR ALL NON-METALLIC PIPE, DUCTS ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE NEOPRENE PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH AFWA UNIFORM COLOR CODE.

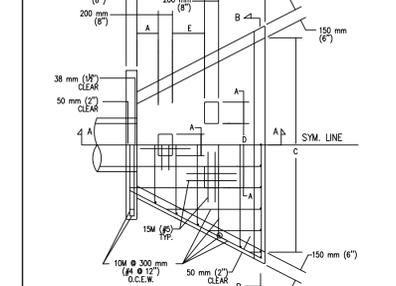
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STREET REPAIR REQUIREMENTS	STANDARD NO. 1100S-7
RECORD COPY SIGNED BY BILL GARDNER	9/14/05 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
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- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(B)(1), FOR ALL NON-METALLIC PIPE, DUCTS ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE NEOPRENE PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH AFWA UNIFORM COLOR CODE.

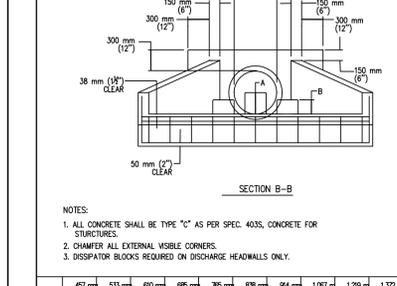
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TEMPORARY DRIVEWAY	STANDARD NO. 433S-3
RECORD COPY SIGNED BY LEON BARBA	5/23/00 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
- CLASS 2" PC CONCRETE (ITEM 4033) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLOORED BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN 2" THICK MAY NOT BE ALLOWED.
- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(B)(1), FOR ALL NON-METALLIC PIPE, DUCTS ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE NEOPRENE PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH AFWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STANDARD HEADWALL AND ENERGY DISSIPATORS	STANDARD NO. 508S-13
RECORD COPY SIGNED BY BILL GARDNER	08/20/07 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

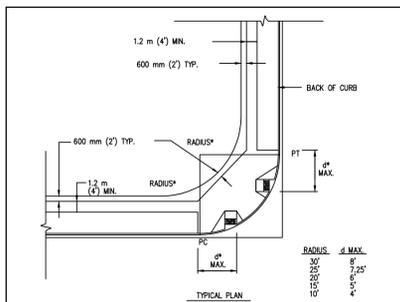


NOTES:

- REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
- MINIMUM THICKNESS OF EXISTING FULL DEPTH ASPHALTIC LAYER, HOWEVER, THE REPLACEMENT AC BASE LAYER SHALL BE A MINIMUM THICKNESS OF 8" (150 mm) OF TYPE A OR B. THE MINIMUM THICKNESS OF NEW HMA SURFACE LAYER (SEE NOTE 1) TO BE USED, THE TOTAL REPAIR AREA IS LESS THAN 300 SQUARE YARDS (250 SQUARE METERS).
- CLASS 2" PC CONCRETE (ITEM 4033) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLOORED BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN 2" THICK MAY NOT BE ALLOWED.
- AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(B)(1), FOR ALL NON-METALLIC PIPE, DUCTS ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE NEOPRENE PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH AFWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	STANDARD HEADWALL AND ENERGY DISSIPATORS	STANDARD NO. 508S-13
RECORD COPY SIGNED BY BILL GARDNER	08/20/07 APPROVED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

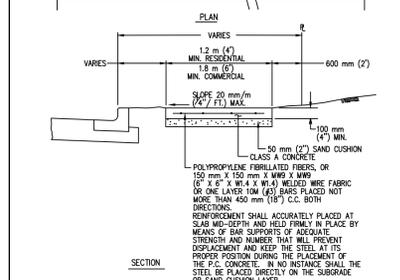
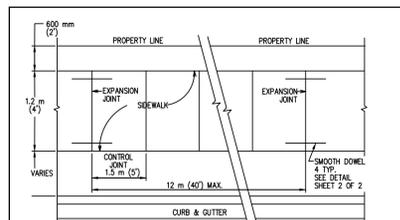
NO.	DATE	DESCRIPTION



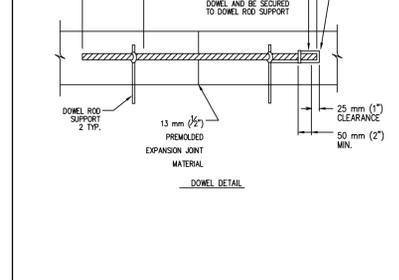
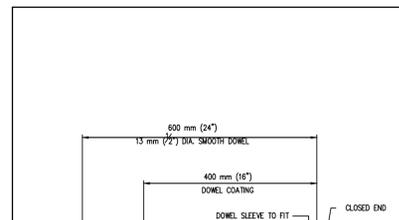
NOTES:

1. THIS STANDARD IS APPLICABLE FOR RAMP CONSTRUCTION WITH RIGHT-OF-WAY OR EASEMENT ONLY.
2. CURB RAMPS WILL BE CONSTRUCTED PERPENDICULAR TO ROADWAY CENTERLINE AND SHALL ALIGN WITH THOSE LOCATED ACROSS THE ROADWAY.
3. THE CURB, GUTTER AND RAMP SYSTEM SHALL BE CONSTRUCTED TO MAINTAIN ALL RUNOFF FROM A 25 YEAR FREQUENCY STORM WITHIN THE RIGHT-OF-WAY (DRAINAGE CRITERIA MANUAL SECTION 12.2.8) WHEN THERE IS AN ELEVATION DIFFERENCE BETWEEN THE BOTTOM OF RAMPS (E. ELEVATION AT THE GUTTER) WITHIN A GUARANTY OF AN INTERSECTION. THE LOWER ELEVATION RAMP SHALL BE CONSTRUCTED WITH A POSITIVE RAMP SLOPE OF 1:12 IN ACCORDANCE WITH STANDARDS 4325-5, 4325-24 AND 4325-55.
4. PRIORITY SHALL BE GIVEN TO THE INSTALLATION OF RAMPS IN CONFORMANCE WITH STANDARDS 4325-5 AND 4325-34.
5. THIS STANDARD SHALL ONLY BE USED WHEN WALKABLE SURFACES ARE PRESENT ON BOTH SIDES OF A RAMP.
6. THIS STANDARD MAY BE USED IN SUBDIVISION APPLICATIONS AND OTHER INSTANCES WHERE STANDARDS 4325-3 AND 4325-34 CANNOT BE UTILIZED DUE TO SPACE LIMITATIONS.
7. SEE STANDARD 4325-2A FOR DETECTABLE WARNING-PAVER INSTALLATION.
8. SEE STANDARDS 4325-5 FOR RAMP TYPE DETAIL.

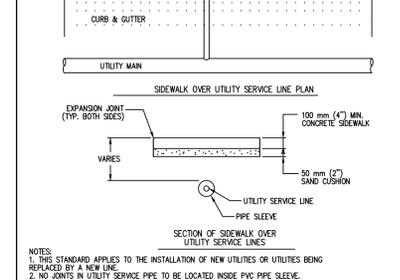
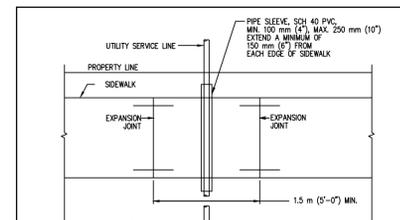
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE 1 RAMPS WITHIN PCPOT OF EASEMENT AREAS ONLY	STANDARD NO. 4325-3H
RECORD COPY SIGNED BY BILL GARDNER	08/20/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



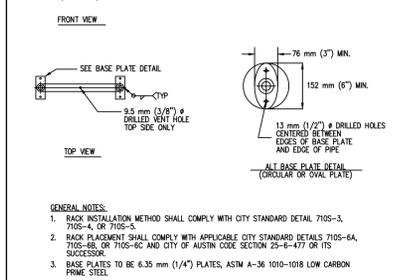
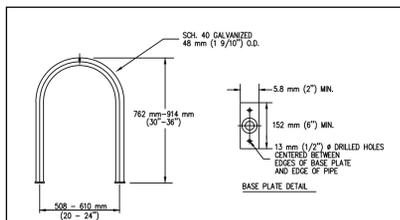
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	STANDARD NO. 4325-1
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



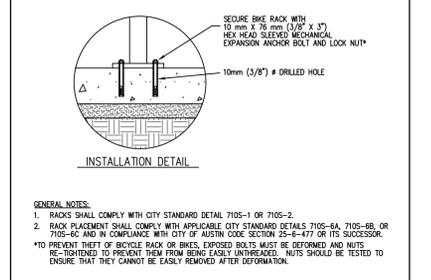
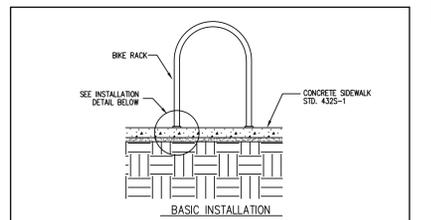
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	STANDARD NO. 4325-1
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



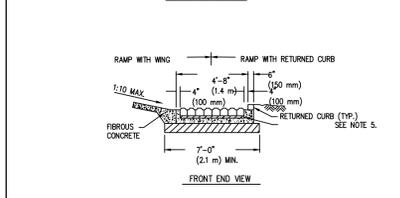
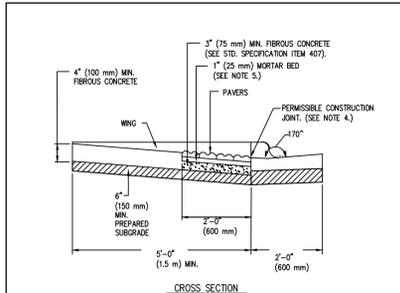
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	SIDEWALK	STANDARD NO. 4325-1
RECORD COPY SIGNED BY BILL GARDNER	03/26/08 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



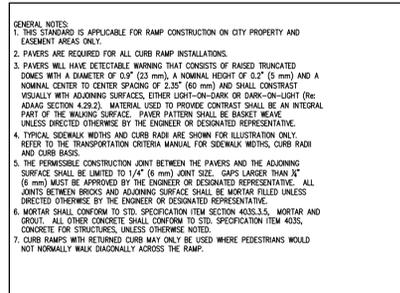
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	CLASS III STYLE BICYCLE PARKING	STANDARD NO. 710S-1
RECORD COPY SIGNED BY COLING TRAN	09/26/12 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



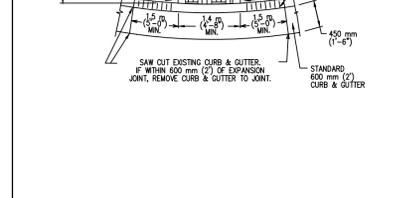
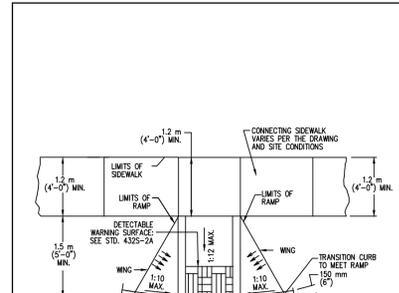
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	BICYCLE RACK INSTALLATION IN CONCRETE SIDEWALK-ALTERNATE 1	STANDARD NO. 710S-4
RECORD COPY SIGNED BY COLING TRAN	09/26/12 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



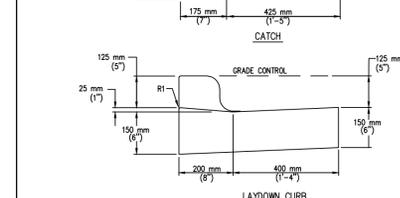
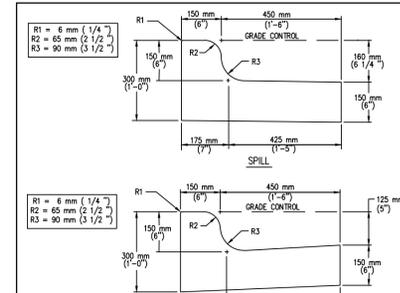
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	DETECTABLE WARNING-PAVER (CITY PROPERTY/EASEMENTS)	STANDARD NO. 432S-2A
RECORD COPY SIGNED BY BILL GARDNER	06/15/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



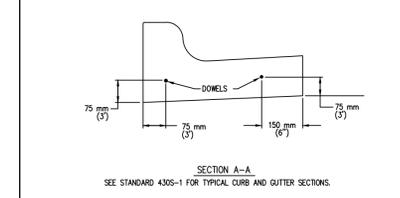
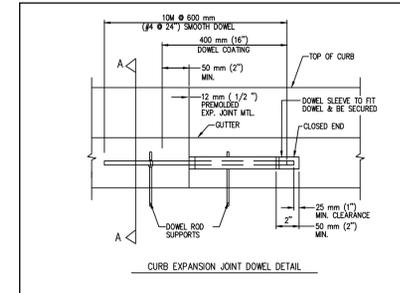
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	DETECTABLE WARNING-PAVER (CITY PROPERTY/EASEMENTS)	STANDARD NO. 432S-2A
RECORD COPY SIGNED BY BILL GARDNER	06/15/07 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



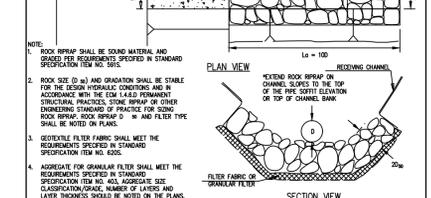
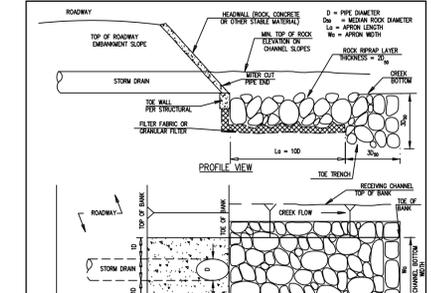
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	TYPE 1 SIDEWALK CURB RAMP	STANDARD NO. 432S-5
RECORD COPY SIGNED BY BILL GARDNER	9/14/05 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



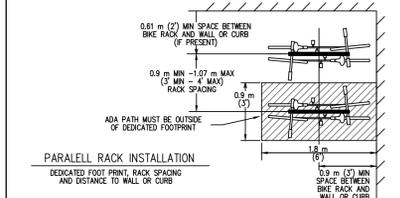
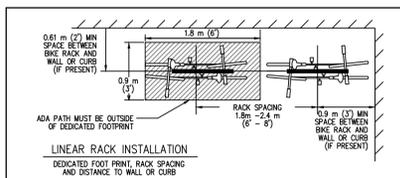
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION	CURB AND GUTTER SECTION	STANDARD NO. 430S-1
RECORD COPY SIGNED BY LINDO RIVERA	02/29/09 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION	CURB EXPANSION JOINT DOWEL DETAIL	STANDARD NO. 430S-3
RECORD COPY SIGNED BY LINDO RIVERA	02/29/09 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



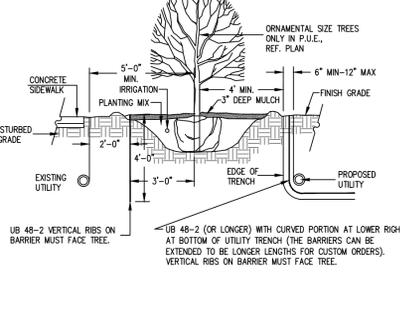
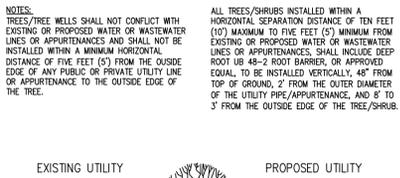
CITY OF AUSTIN WATERMARK PROTECTION DEPARTMENT	STORM DRAIN OUTFALL PROTECTION CULVERT UNDER ROADWAY/LINE	STANDARD NO. 508S-20
RECORD COPY SIGNED BY MORGAN BYARS	09/01/2011 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



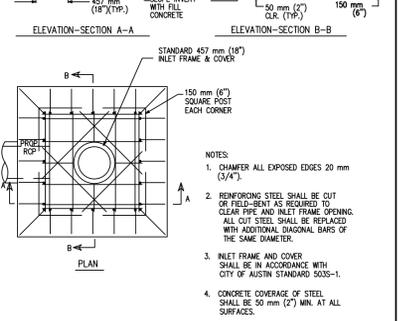
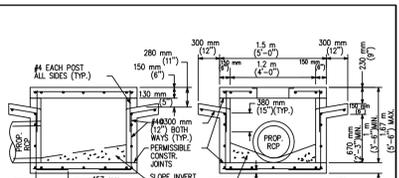
GENERAL NOTES:

1. RACKS MUST COMPLY WITH CITY STANDARD DETAIL 710S-1 OR 710S-2.
2. RACK INSTALLATION MUST COMPLY WITH CITY STANDARD DETAIL 710S-3, 710S-4, OR 710S-5.
3. RACKS MUST BE PLACED IN COMPLIANCE WITH CITY OF AUSTIN CODE SECTION 25-6-477 OR ITS SUCCESSOR.
4. RACKS MUST BE LOCATED WITHIN 7.32m (24') OF EITHER THE MAIN BUILDING ENTRY OR THE ENTRY TO THE PRIMARY LOCAL USE.
5. RACKS MUST BE PLACED PERPENDICULAR TO THE CURB WITH THE CENTERLINE OF THE RACK IN LINE WITH ANY ADJACENT TREES OR LIGHT POLES.
6. THE MINIMUM CLEARANCE BETWEEN BICYCLE RACK AND ANY PUBLIC OR PRIVATE UTILITY APURTENANCE MUST BE 0.9m (3').
7. BICYCLE RACKS MAY NOT BE MOUNTED ON TOP OF VAULTS OR STORM DRAIN INLETS.

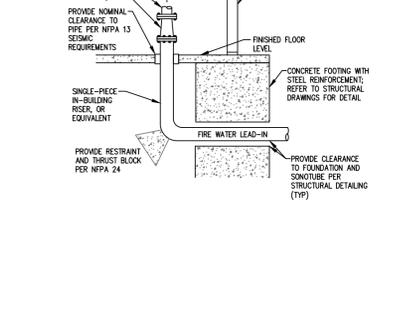
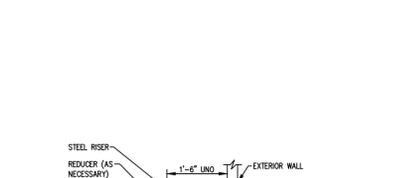
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FURNISHING LOCATION IN 12" WIDE OR LESS SIDEWALKS - BICYCLE RACK SETTING	STANDARD NO. 710S-6C
RECORD COPY SIGNED BY COLING TRAN	09/26/12 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



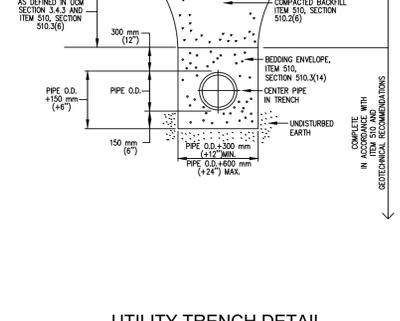
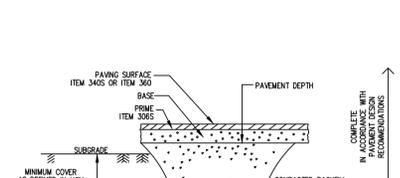
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	DETAIL FOR DEEP ROOT (TM) ROOT BARRIER UB 48-2 (OR LONGER) SCALE: N.T.S.	STANDARD NO. 508S-9
RECORD COPY SIGNED BY ARTHUR C. DOMERIO	08/18/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



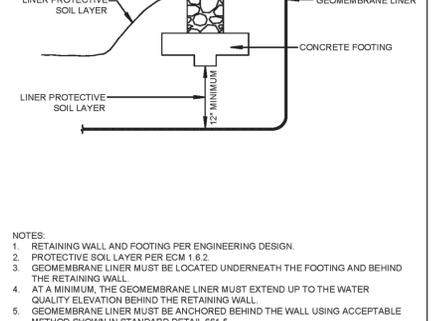
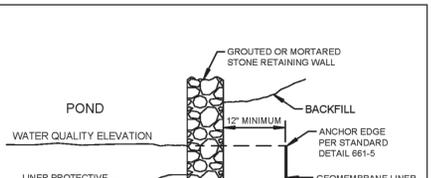
CITY OF AUSTIN WATERMARK PROTECTION DEPARTMENT	4-SIDED AREA INLET	STANDARD NO. 508S-9
RECORD COPY SIGNED BY ARTHUR C. DOMERIO	08/18/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FIRE WATER LEAD-IN (N.T.S.)	STANDARD NO. 508S-9
RECORD COPY SIGNED BY ARTHUR C. DOMERIO	08/18/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

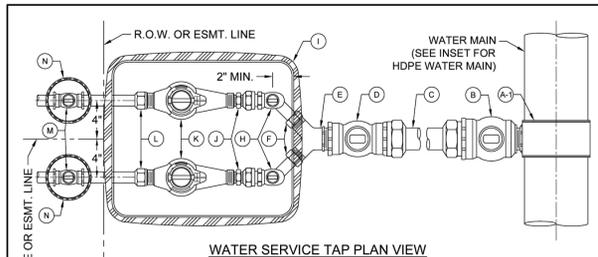


CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	UTILITY TRENCH DETAIL IN NEW PAVEMENT AREA (PRIVATE)	STANDARD NO. 508S-9
RECORD COPY SIGNED BY ARTHUR C. DOMERIO	08/18/2010 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

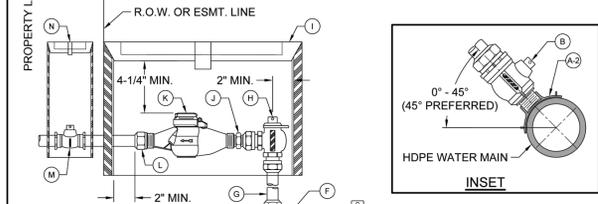


CITY OF AUSTIN WATERMARK PROTECTION DEPARTMENT	GROUTED OR MORTARED STONE RETAINING WALL GEOMEMBRANE LINER	STANDARD NO. 661-4B
RECORD COPY SIGNED BY COLING TRAN	3/23/2003 ADOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.

NO.	DATE	DESCRIPTION



WATER SERVICE TAP PLAN VIEW



WATER SERVICE TAP PROFILE VIEW

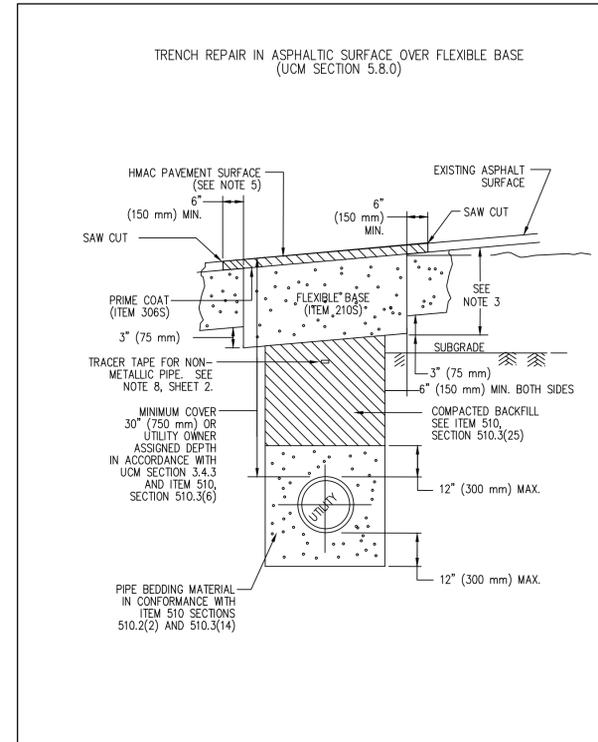
CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	STANDARD NO. 520-AW-01B 1 OF 2
RECORD COPY SIGNED BY JEFF A. KYLE	06/02/2025 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.

- MATERIALS LIST:**
- A-1. FOR PVC OR DI MAIN: 2" SERVICE SADDLE, SPL WW-264
 - A-2. FOR HDPE MAIN: 2" SERVICE SADDLE (APPROVED FOR USE ON HDPE PIPE), SPL WW-264, OR 2" ELECTROFUSION THREADED SERVICE SADDLE, SPL WW-706C
 - B. 2" COPROBATION STOP, SPL WW-68
 - C. 2" HDPE WATER SERVICE TUBING, SPL WW-65
 - D. 2" BALL VALVE, SPL WW-68
 - E. SINGLE SERVICE: 2" MIP X 1" COPPER FLARE FITTING, SPL WW-68 OR DOUBLE SERVICE: 2" MIP X 1" COPPER FLARE WYE, SPL WW-68
 - F. 1" SWIVEL NUT X 1" COMPRESSION 90° BEND, SPL WW-68
 - G. 1" HDPE WATER SERVICE TUBING, SPL WW-65
 - H. 1" ANGLE METER STOP, SPL WW-68
 - I. METER BOX AND LID, SPL WW-145A;
FOR DUAL 1" METERS: USE TWO SINGLE METER BOXES

- MATERIALS TO BE INSTALLED BY PLUMBER:**
- J. BRASS METER BUSHING - SIZE AS NEEDED TO CONNECT ANGLE METER STOP TO METER
 - K. WATER METER PURCHASED FROM AUSTIN WATER
 - L. BRASS WATER METER COUPLING MALE IPT X SWIVEL COUPLING NUT:
3/4" AND 1/2" METERS: 8 1/2" LONG X 3/4" DIA. (NO BUSHING ALLOWED BETWEEN K & L)
1" METERS: 8 1/2" LONG X 1" DIA.
 - M. PROPERTY OWNER'S CUT OFF VALVE, SPL WW-276
 - N. PROPERTY OWNER'S CUT OFF VALVE BOX AND 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 SADDLE 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 CUT OUTS SHALL NOT EXCEED TWO TIMES THE PIPE DIAMETER. CUTTING A METER BOX WITHOUT AW APPROVAL IS PROHIBITED.
 9. INSTALL METALLIC TRACER TAPE, SPL WW-597, MINIMUM 1' ABOVE TUBING FROM SERVICE CLAMP "A" 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 2' 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. SOLID, TUBULAR STAINLESS STEEL INSERT STIFFENERS FOR HDPE TUBING SHALL BE USED AT ALL COMPRESSION FITTINGS. INSERT STIFFENERS SHALL BE FROM THE SAME MANUFACTURER AS THE COMPRESSION FITTING USED.
 13. FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED SOLID PURPLE, SPL WW-65A. 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 LIDS SHALL BE PURPLE AND HAVE "RECLAIMED WATER" CAST INTO THEM, SPL WW-145A.

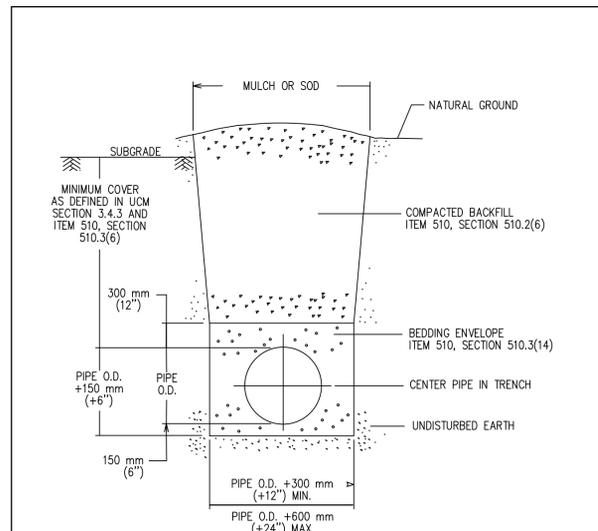
CITY OF AUSTIN AUSTIN WATER	WATER SERVICE & METER INSTALLATION - 1" & SMALLER METERS	STANDARD NO. 520-AW-01B 2 OF 2
RECORD COPY SIGNED BY JEFF A. KYLE	06/02/2025 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	STANDARD NO. 1100S-2 1 OF 2
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.

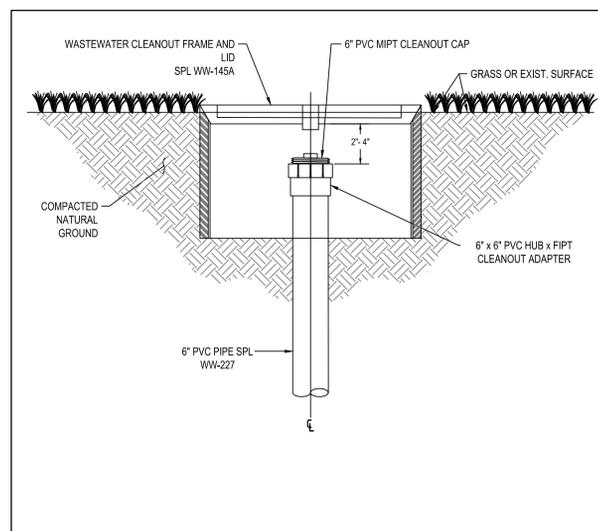
- NOTES:**
1. THE EXISTING PAVING SURFACE SHALL BE SAW CUT IN A STRAIGHT LINE, A MINIMUM OF 12" (300 mm) WIDER THAN UNDISTURBED SIDES OF THE TRENCH AND SYMMETRICAL ABOUT THE CENTER LINE OF THE EXCAVATION.
 2. IF EXCAVATION AREA IS OPEN FOR TEMPORARY PUBLIC USE, THE SURFACE SHALL BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
 3. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING BASE THICKNESS PLUS 3" (75 mm), BUT IN NO CASE LESS THAN 12" (300 mm).
 4. DAMAGED PAVEMENT OUTSIDE THE TRENCH CUT SHALL BE REMOVED AND REPLACED WITH A BASE THICKNESS OF 10" (250 mm) OR A THICKNESS MATCHING EXISTING, WHICHEVER IS GREATER.
 5. REPLACEMENT AC SURFACE LAYER SHALL BE OF THE TYPE AND THICKNESS BASED ON FUNCTIONAL CLASSIFICATION.
 - a) MIN. 2" (50 mm) HMAC TYPE "D" FOR TRENCH REPAIR IN LOCAL/RESIDENTIAL STREETS.
 - b) MIN. 3" (75 mm) HMAC TYPE "C" FOR TRENCH REPAIR IN COLLECTOR/ARTERIAL STREETS.
 6. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
 7. TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S).
 8. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKS	FLEXIBLE BASE WITH ASPHALT SURFACE TRENCH REPAIR-EXISTING PAVEMENT	STANDARD NO. 1100S-2 2 OF 2
RECORD COPY SIGNED BY KERI JUAREZ	01/04/11 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



- 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	STANDARD NO. 510S-5
RECORD COPY SIGNED BY BILL GARDNER	03/13/06 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



- NOTE:**
1. WASTEWATER CLEANOUT FRAME AND LID SHALL NOT BE PLACED IN PAVED AREAS, INCLUDING SIDEWALKS, DRIVEWAYS, OR PARKING LOTS, AND MUST BE LOCATED A MINIMUM OF 6" FROM ALL PAVED AREAS.

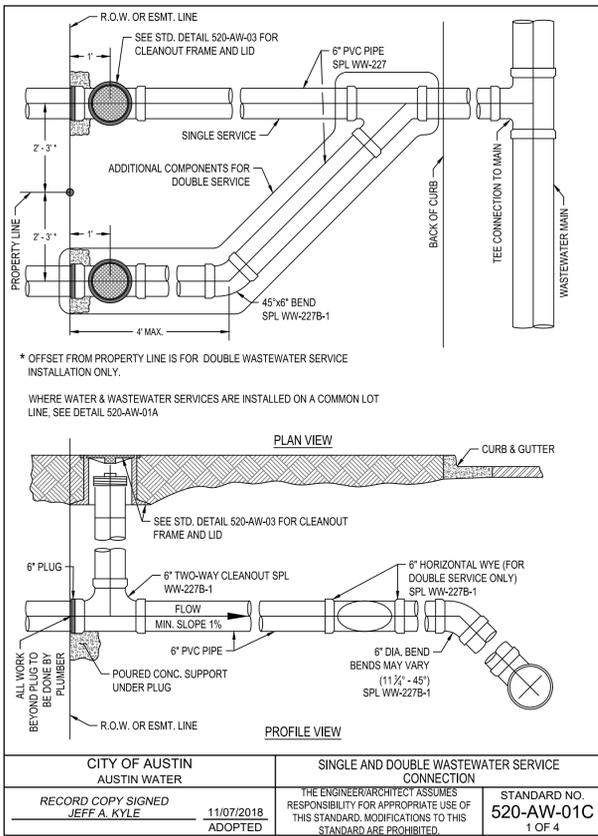
CITY OF AUSTIN AUSTIN WATER	WASTEWATER CLEANOUT FRAME AND LID	STANDARD NO. 520-AW-03 1 OF 1
DRAFT - NOTICE OF RULE ADOPTION ONLY JEFF A. KYLE	08/16/2019 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.

AMC DESIGN GROUP
ENGINEERING AND CONSTRUCTION CONSULTANTS
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AUSTIN, TEXAS 78703
512-385-2911
TEXAS REGISTERED ENGINEERING FIRM E-1708

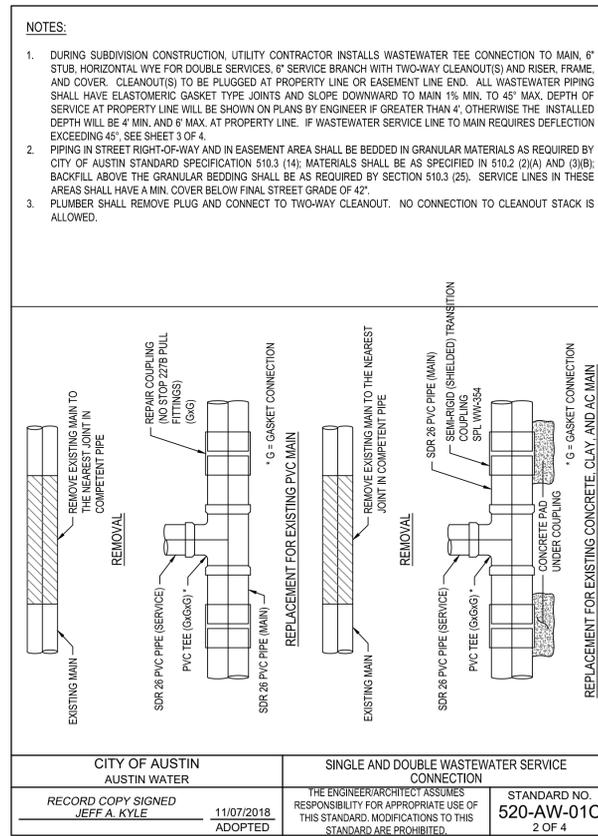
Thrasher Design
LAND PLANNERS
AUSTIN, TEXAS 78704 • (512) 476-4456
P.O. BOX 41957

NO.	DATE	DESCRIPTION

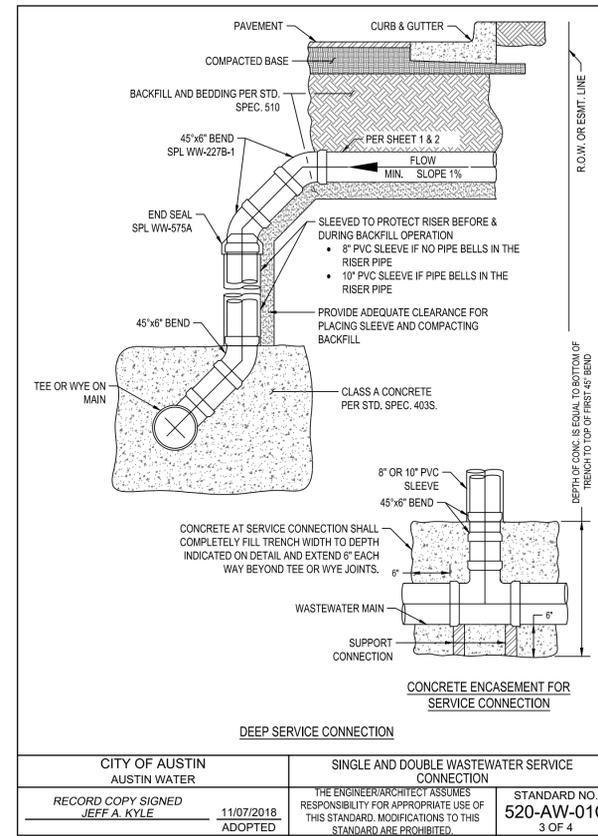
KATHY MANNING ATHLETIC CENTER AT TOWN & COUNTRY
13228 MORRIS ROAD
AUSTIN, TEXAS 78729



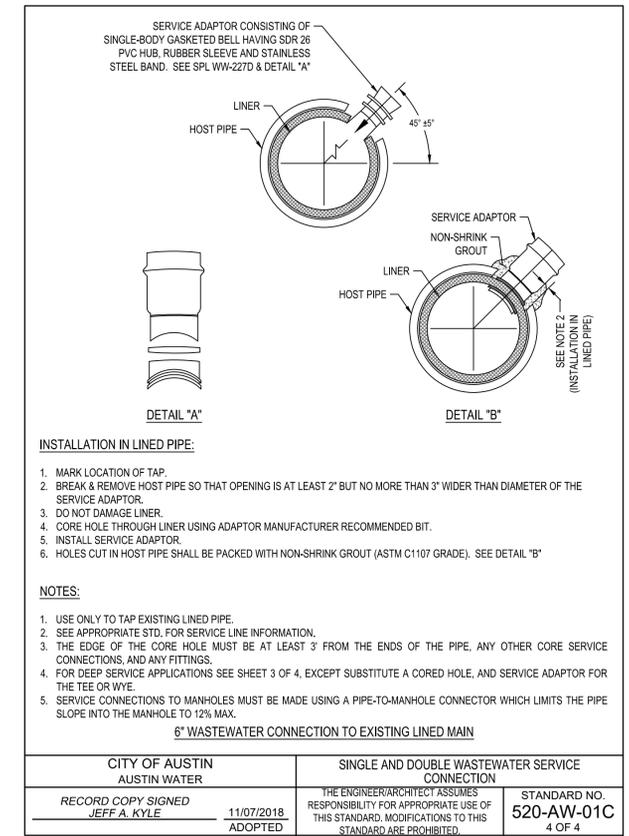
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	STANDARD NO. 520-AW-01C 1 OF 4
RECORD COPY SIGNED JEFF A. KYLE	11/07/2018 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



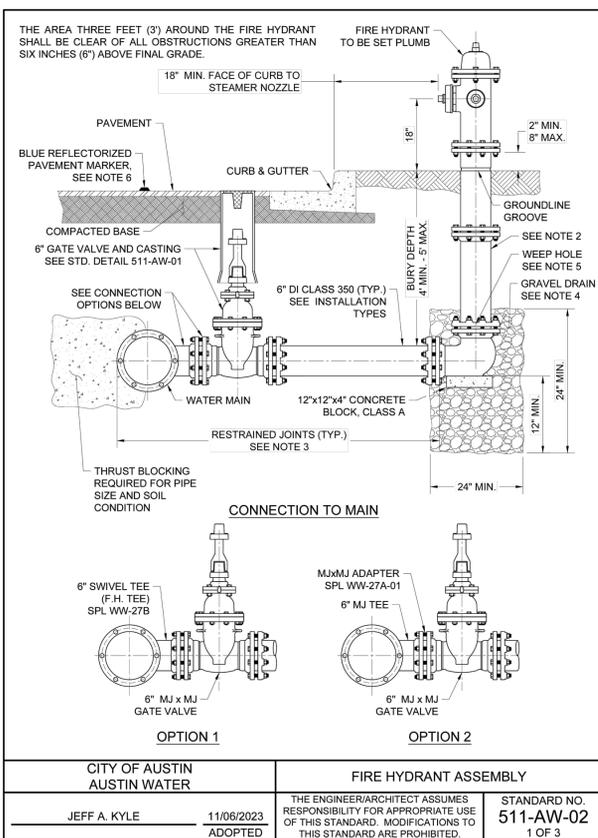
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	STANDARD NO. 520-AW-01C 2 OF 4
RECORD COPY SIGNED JEFF A. KYLE	11/07/2018 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



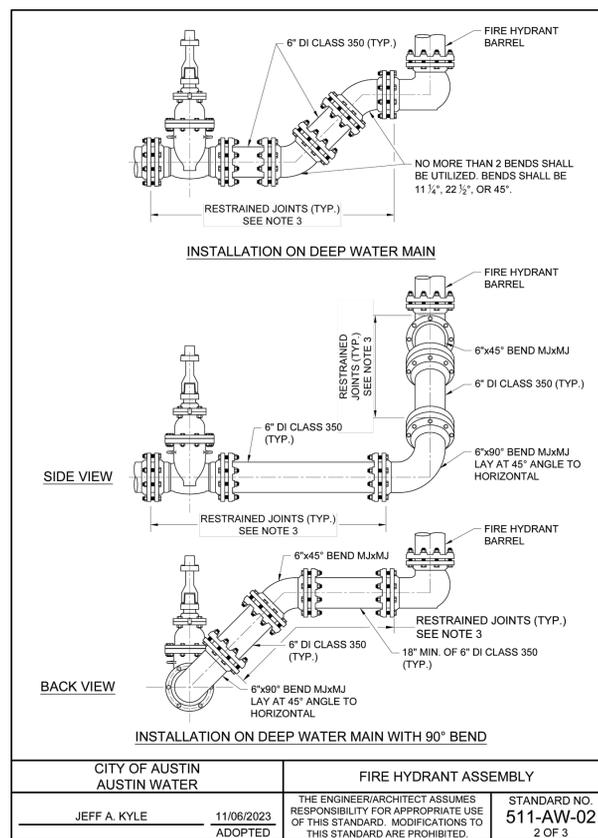
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	STANDARD NO. 520-AW-01C 3 OF 4
RECORD COPY SIGNED JEFF A. KYLE	11/07/2018 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



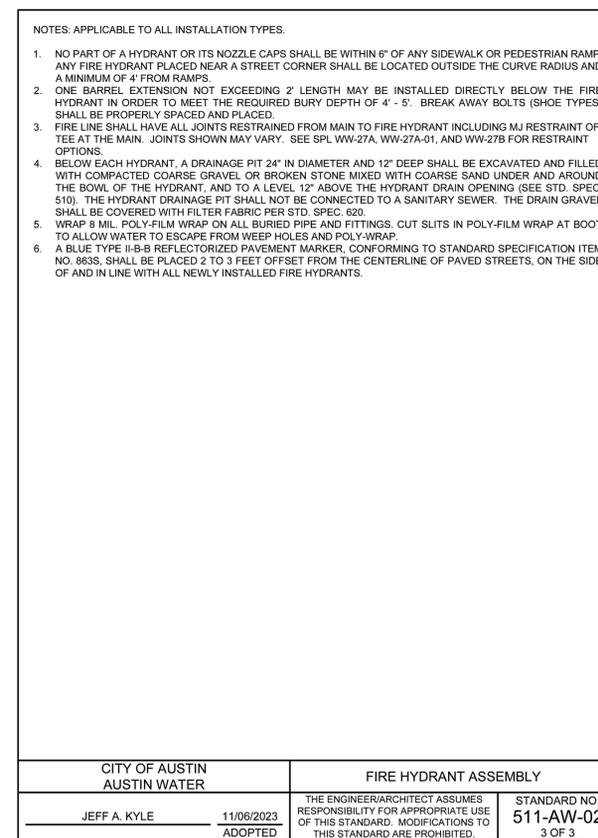
CITY OF AUSTIN AUSTIN WATER	SINGLE AND DOUBLE WASTEWATER SERVICE CONNECTION	STANDARD NO. 520-AW-01C 4 OF 4
RECORD COPY SIGNED JEFF A. KYLE	11/07/2018 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



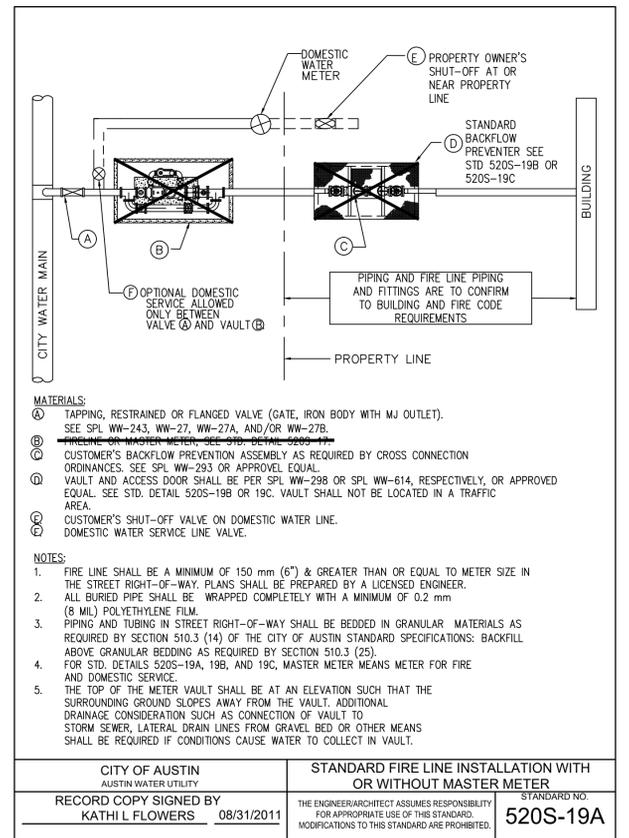
CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	STANDARD NO. 511-AW-02 1 OF 3
JEFF A. KYLE	11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	STANDARD NO. 511-AW-02 2 OF 3
JEFF A. KYLE	11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



CITY OF AUSTIN AUSTIN WATER	FIRE HYDRANT ASSEMBLY	STANDARD NO. 511-AW-02 3 OF 3
JEFF A. KYLE	11/06/2023 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.



CITY OF AUSTIN AUSTIN WATER UTILITY	STANDARD FIRE LINE INSTALLATION WITH OR WITHOUT MASTER METER	STANDARD NO. 520S-19A
RECORD COPY SIGNED BY KATHI L FLOWERS	08/31/2011 ADOPTED	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD. MODIFICATIONS TO THIS STANDARD ARE PROHIBITED.

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CHRIS McCOMB
80442
LICENSED PROFESSIONAL ENGINEER
11/21/20

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P.O. BOX 41957

KATHY MANNING ATHLETIC CENTER AT TOWN & COUNTRY
13228 MORRIS ROAD
AUSTIN, TEXAS 78729

UTILITY DETAILS

Attachment G

G.0 Inspection, Maintenance, Repair and Retrofit Plan

- G.1.1 The owner is required to inspect the water quality controls at weekly intervals and after significant rainfall events to insure that they are functioning properly. The person(s) responsible for maintenance of the water quality controls and appurtenances shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls must be removed when the depth reaches 6 inches.
- G.1.2 **Sediment Removal**
Remove sediment from the inlet structure and sedimentation chamber when sediment buildup fills the 20% volume allocated for sediment accumulation, or when the proper functioning of inlet and outlet structures is impaired. Sediment should be cleared from the inlet structure at least every year, and from the sedimentation basin at least every 5 years. Silt accumulated on the surface of the filter media should be removed when it has reached a depth of about 0.5 feet or the drainage time has increased to more than 48 hours.
- G.1.3 **Cleaning of the Underdrain**
The underdrain shall be cleaned using mechanical equipment or fire hoses to remove the sediment buildup within the pipes. Cleanouts will be installed as per the construction plans to accommodate the cleaning of every drain line. This cleaning shall be on an as needed basis to maintain design drawdown time.
- G.1.4 **Vegetation Inspection**
Inspection of the vegetation shall be biweekly during the first growing season by inspecting vegetation until 95% vegetative cover is established. Semi-Annually remove and replace dead or diseased vegetation that is considered beyond treatment. Treat all diseased trees and shrubs mechanically or by hand depending on the insect or disease infestation. In late winter trim bunch grasses, mow turf grasses and harvest other types of vegetation according to the recommendations in the planting specifications. Adhere to Section 1.6.2.F of the City of Austin *Environmental Criteria Manual*. In the spring remove previous mulch layer and apply new mulch layer by hand once every two to three years.
- G.1.5 **Media Maintenance**
Check for accumulated sediments on a monthly basis. Remove as needed. Remove debris and accumulated on a quarterly basis. Replace soil media in void areas caused by settlement and repair eroded areas. Remulch by hand any void areas. Semi-annually: lightly scarify soil with hand cultivator. If standing water remains for greater than 96 hours, remove top layer of sediment, mulch and potentially vegetation and decompact soil by scarification and replace mulch and disturbed vegetation.
- G.1.6 **Debris and Litter Removal**
Debris and litter will accumulate near the sedimentation basin outlet 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.
- G.1.7 **Mowing**
Grass areas in and around sedimentation basins must 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.

G.3.0 Responsible Party

The person responsible for maintenance of water quality controls:

A handwritten signature in black ink, appearing to read "W. T. Brooker", is written over a horizontal line.

William Todd Brooker, Representative of The Optimist Club of Town and Country Round
Rock Texas, Or their Assigns
14739 Arrowhead Drive
Leander, TX 78641

G.2.0 Engineer's Certification of this Inspection, Maintenance, Repair and Retrofit Plan

Chris McComb, P.E.
AMC Design Group, Inc.
PO Box 303086
Austin, TX 78703
512-512-2911



12/15/2025