

WATER POLLUTION ABATEMENT PLAN

for

DAVIS SPRING CENTER

9900 PARMER LANE WEST

Prepared By:

**Gregory Griffin, P.E.
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Austin, Texas 78753
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Firm Registration F-634**

OCTOBER 2023

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 if not withdrawn the application will be denied and 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 to you:

- You can withdraw your application, and your fees will be refunded or credited for a resubmittal.
- 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 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 effected 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: Davis Spring Center				2. Regulated Entity No.: 104812573			
3. Customer Name: Neenah Group Investments, L.P.				4. Customer No.: 601163371			
5. Project Type: (Please circle/check one)	New						
6. Plan Type: (Please circle/check one)	WPAP						
7. Land Use: (Please circle/check one)		Non-residential			8. Site (acres):	11.28	
9. Application Fee:	\$6,500.00	10. Permanent BMP(s):			Sedimentation Filtration		
11. SCS (Linear Ft.):	NA	12. AST/UST (No. Tanks):			No Tanks		
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.

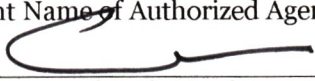
Austin Region			
County:	Hays	Travis	Williamson
Original (1 req.)	—	—	<u> </u> x <u> </u>
Region (1 req.)	—	—	<u> </u> x <u> </u>
County(ies)	—	—	<u> </u> x <u> </u>
Groundwater Conservation District(s)	<u> </u> Edwards Aquifer Authority <u> </u> Barton Springs/ Edwards Aquifer <u> </u> Hays Trinity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

San Antonio Region					
County:	Bexar	Comal	Kinney	Medina	Uvalde
Original (1 req.)	—	—	—	—	—
Region (1 req.)	—	—	—	—	—
County(ies)	—	—	—	—	—
Groundwater Conservation District(s)	<u> </u> Edwards Aquifer Authority <u> </u> Trinity-Glen Rose	<u> </u> Edwards Aquifer Authority	<u> </u> Kinney	<u> </u> EAA <u> </u> Medina	<u> </u> EAA <u> </u> Uvalde
City(ies) Jurisdiction	<u> </u> Castle Hills <u> </u> Fair Oaks Ranch <u> </u> Helotes <u> </u> Hill Country Village <u> </u> Hollywood Park <u> </u> San Antonio (SAWS) <u> </u> Shavano Park	<u> </u> Bulverde <u> </u> Fair Oaks Ranch <u> </u> Garden Ridge <u> </u> New Braunfels <u> </u> Schertz	NA	<u> </u> 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.

Gregory Griffin, P.E.

Print Name of Authorized Agent



10/17/23

Signature of 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):

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: Gregory Griffin, P.E. Agent

Date: 10/17/2023

Signature of Customer/Agent:



Project Information

1. Regulated Entity Name: Davis Spring Center
2. County: Williamson
3. Stream Basin: Lake Creek
4. Groundwater Conservation District (If applicable): NA
5. Edwards Aquifer Zone:

- Recharge Zone
 Transition Zone

6. Plan Type:

- WPAP
 SCS
 Modification

- AST
 UST
 Exception Request

7. Customer (Applicant):

Contact Person: Fred G. Eppright, Vice President

Entity: Neenah Group Investments L.P. through its General Partner Sovereign Investments, Inc.

Mailing Address: 3215 Steck Ave. Suite 101

City, State: Austin, Texas

Zip: 78757

Telephone: 512 459-9300

FAX: _____

Email Address: Fred@captexdev.com

8. Agent/Representative (If any):

Contact Person: Gregory Griffin, P.E.

Entity: Griffin Engineering Group, Inc.

Mailing Address: 11808 Tedford St.

City, State: Austin, Texas

Zip: 78753

Telephone: 512 836-3113

FAX: 512 836-3103

Email Address: Griffinengineeringgroup@gmail.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.

Southeast corner of Parmer Lane and Neenah Ave.

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: Time of submittal

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: _____

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:

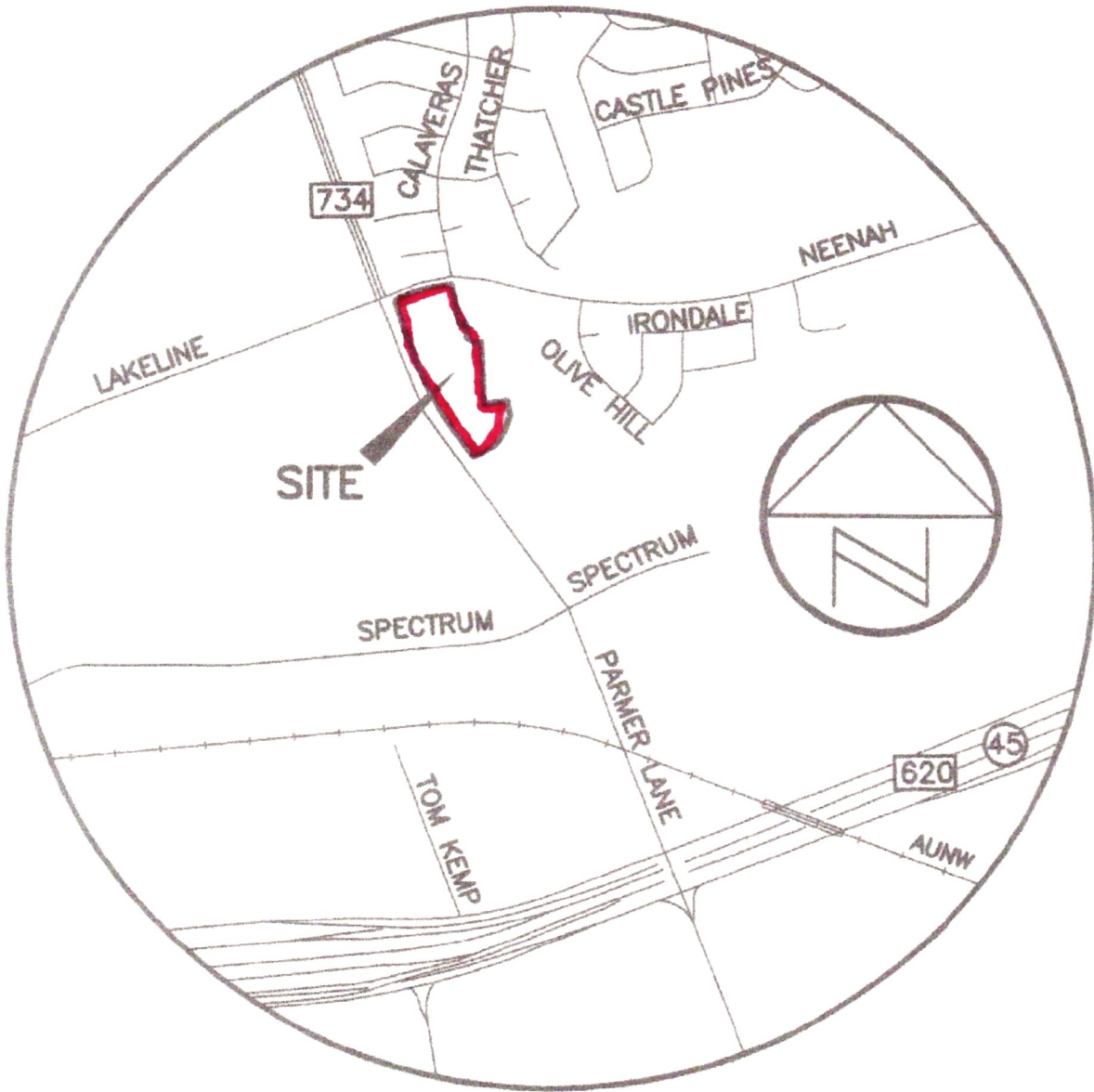
- (1) Waste disposal wells regulated under 30 TAC Chapter 331 (relating to Underground Injection Control);

- (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.

EXHIBIT A

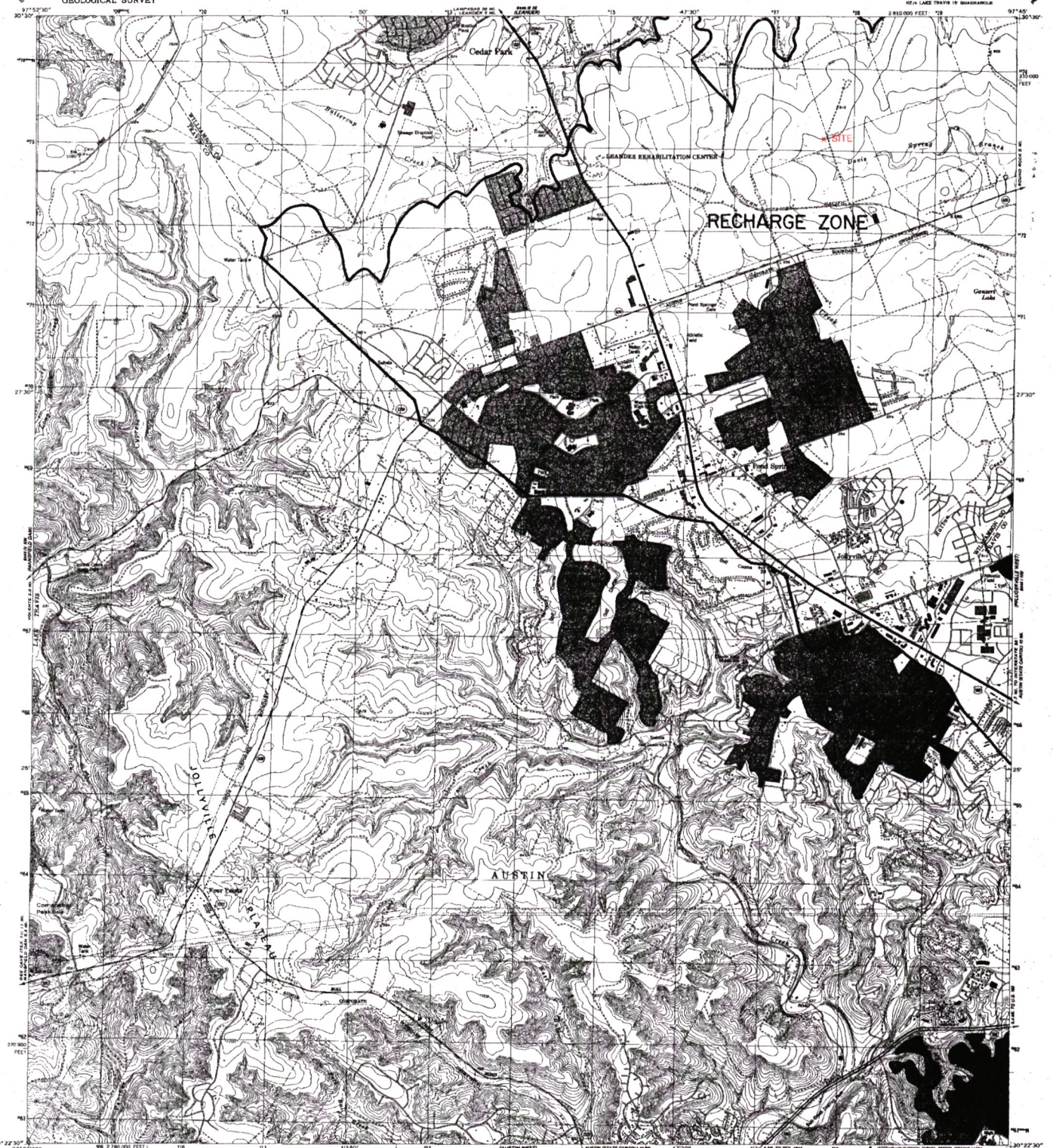


LOCATION MAP
NOT TO SCALE

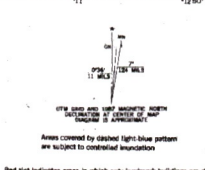
ATTACHMENT B USGS/EDWARDS RECHARGE ZONE MAP

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

JOLLYVILLE QUADRANGLE
TEXAS
7.5 MINUTE SERIES (TOPOGRAPHIC)
NEAR LAKE TRAVIS 19 QUADRANGLE



Map produced and published by the Geological Survey
Control by USGS and NGS/NOAA
Topography by photogrammetric methods from aerial photographs taken 1967. Field checked 1966. Revised from aerial photographs taken 1956. Field checked 1956. Map series 1967
Projection and 10,000-foot grid ticks: Texas coordinate system, central zone (Lambert conformal conic) 1000-meter Universal Transverse Mercator grid, zone 14 1927 North American Datum
To align on the projected North American Datum 1983 from the projection lines 18 meters south and 20 meters east as shown by dashed corner ticks
Five red dashed lines indicate selected fence lines
Red tint indicates areas in which only landmark buildings are shown



SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
THIS MAP COMPLES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

Primary highway	Light-duty road: hard or hard surface
Secondary highway	Unimproved road
Hard surface	Light-duty road: soft or soft surface

Interstate Route U. S. Route State Route

JOLLYVILLE, TEX.
NEAR LAKE TRAVIS 19 QUADRANGLE
30097-07-17-024
1967
SALA 4444 BY THE SERIES 1962



3097-234

EXHIBIT C PROJECT DESCRIPTION

The 11.28 acre site was first developed in 2005 that contained two retail buildings and a Taco Bell. Water quality was provided by a sedimentation/filtration pond. This pond was sized for future development of the drainage area to the pond and the proposed 5,000 square foot retail/restaurant building and associated parking are included in this drainage area.

The new development, will include the above mentioned 5,000 square foot building, as well two new retail/restaurant buildings and associated parking. A new sedimentation/filtration pond will be provided to treat stormwater runoff for the new impervious cover areas.

No demolition is proposed for this project and there are no offsite flows entering the proposed development of the site.

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: Jonathan B Selby

Telephone: 512-658-7178

Date: 8/30/2023

Fax: _____

Representing: Jonathan B Selby TX Geo. #2445 (Name of Company and TBPG or TBPE registration number)

Signature of Geologist:



Regulated Entity Name: Davis Spring Center Phase 2

Project Information

1. Date(s) Geologic Assessment was performed: 8/29/2023

2. Type of Project:

WPAP

SCS

AST

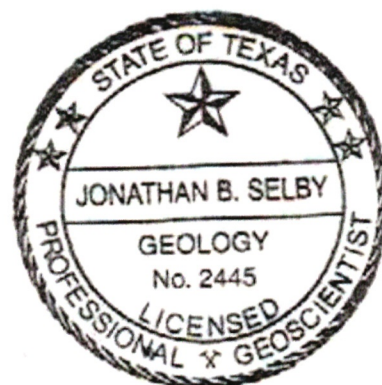
UST

3. Location of Project:

Recharge Zone

Transition Zone

Contributing Zone within the Transition Zone



4. **Attachment A - Geologic Assessment Table.** Completed Geologic Assessment Table (Form TCEQ-0585-Table) is attached.
5. Soil cover on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups* (Urban Hydrology for Small Watersheds, Technical Release No. 55, Appendix A, Soil Conservation Service, 1986). If there is more than one soil type on the project site, show each soil type on the site Geologic Map or a separate soils map.

Table 1 - Soil Units, Infiltration Characteristics and Thickness

Soil Name	Group*	Thickness(feet)
Doss silty clay moist(DoC), 1-5% slopes	D	1.67'
Georgetown clay loam(GeB) ,0-2% slopes	D	3.33'
Crawford clay(CfB), 1-3% slopes	D	3.33'

Soil Name	Group*	Thickness(feet)

** Soil Group Definitions (Abbreviated)*

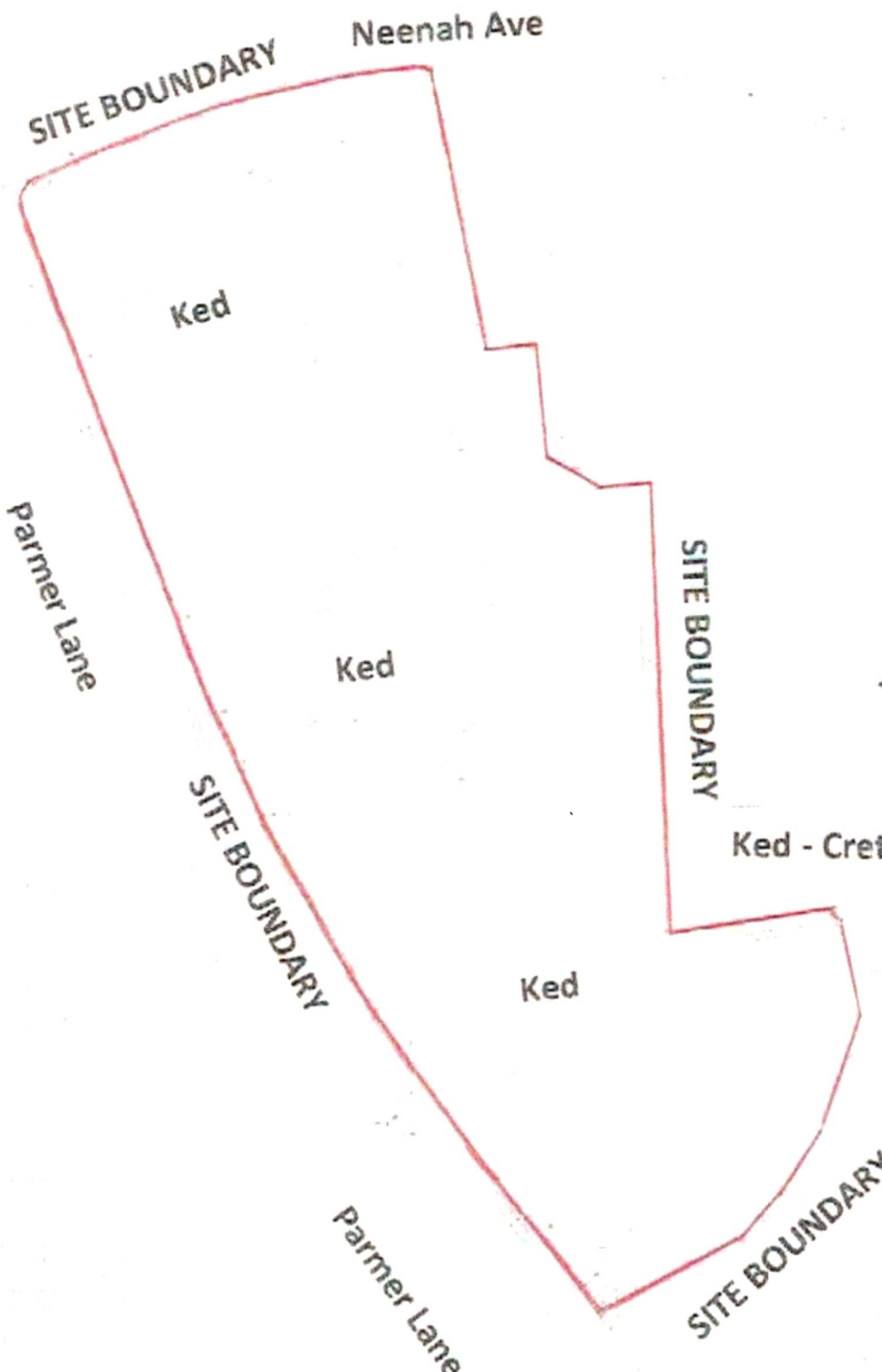
- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

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" = 40'
 Site Geologic Map Scale: 1" = 40'
 Site Soils Map Scale (if more than 1 soil type): 1" = 350'
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

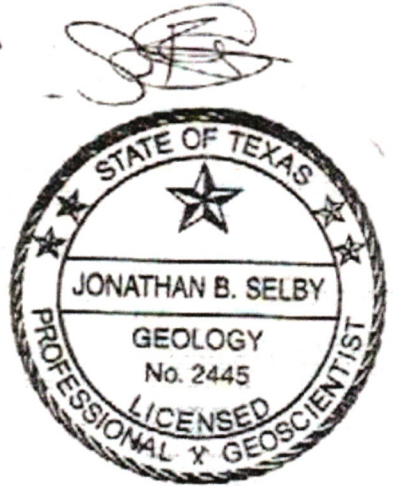
15. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions. The copies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



Jonathan B Selby- Geologist

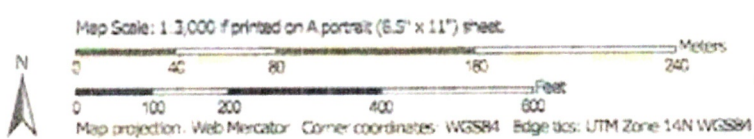
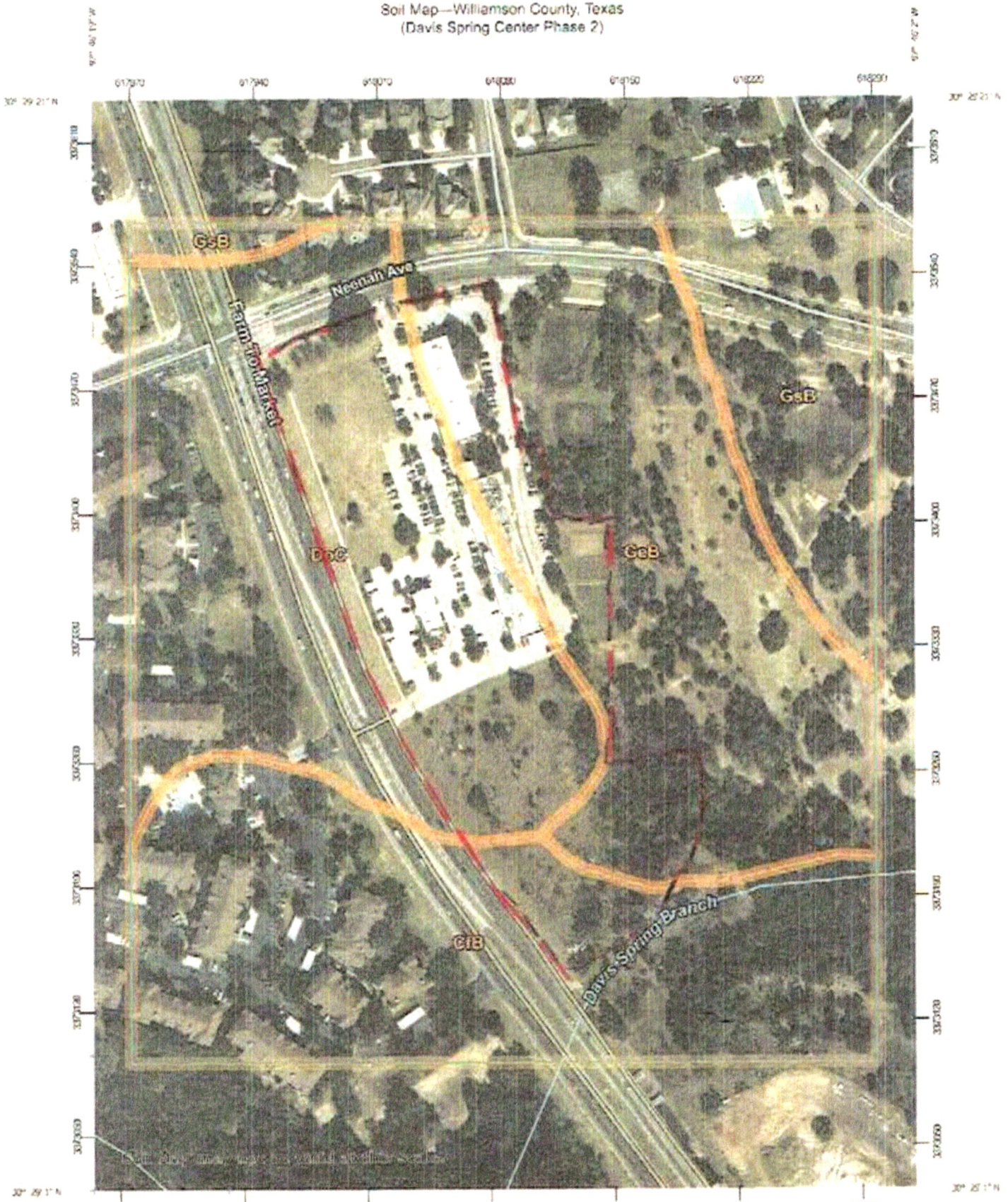
Site Geologic Map

Ked - Cretaceous Edwards Formation



Creppent

Soil Map—Williamson County, Texas
(Davis Spring Center Phase 2)

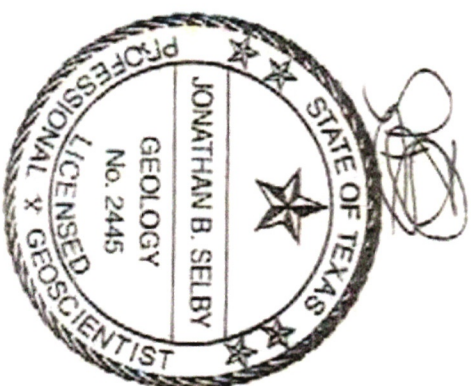


SITE BOUNDARY

Stratigraphic Column

HYDROGEOLOGIC SUBDIVISION	FORMATION	THICKNESS (feet)	LITHOLOGY
Edwards Aquifer	Edwards Limestone	300	Mudstone to packstone, crystalline limestone, wackestone

Source: Maclay(1995)



Site Geology

The site consists of 11.279 acres at the southeast intersection of Parmer Lane and Neenah Ave and is partially developed as depicted on the site map. It is located entirely within the Edwards Aquifer Recharge Zone. Topographically, the site ranges in elevation from 890' on the north side to 865' on the south side. Drainage is therefore to the south-southeast into Davis Springs Branch which lies approximately 150' to the south of the site.

Three soil types are present. Doss silty clay moist, (DoC), 1 to 5% slopes, is present on the west side of the site and is 1.67' thick. Georgetown clay loam (GeB), 0 to 2 % slopes, is 3.33' thick, and occurs on the east side of site. Crawford clay (CfB), 1 to 3 % slopes, is present on the south side of the site and is 3.33' thick. All soil types are classified as Group D and possess very slow infiltration rates.

The site is underlain by the Cretaceous Edwards Formation (Ked) which regionally is a vuggy, occasionally karsted limestone. The closest documented mapped fault is approximately 1.5 miles to the west. On-site, the Edwards is covered by the soils described above and does not crop out. The site was traversed per TCEQ guidelines. No potential geologic recharge features were discovered. In addition, no water wells or test holes were discovered. Based upon this, there is very low potential for fluid movement to the Edwards Aquifer and therefore recharge potential is very low.

GEOLOGIC ASSESSMENT TABLE										PROJECT NAME:									
LOCATION					FEATURE CHARACTERISTICS					EVALUATION					PHYSICAL SETTING				
1A	1B*	1C*	2A	2B	3	4	5A	6	7	8A	8B	9	10	11	12				
FEATURE ID	CATEGORY	LONGITUDE	FEATURE NAME	POINTS	FORMATION	DIMENSIONS (FEET)	SHAPE (CIRCULAR)	DEPTH (FEET)	APPROX. AREA (SQ FT)	SOIL	RELATIVE HUMIDITY RATE	WIND	VELOCITY	CATCHMENT AREA (ACRES)	IC-OC DATA				
						X Y Z	RC						<80	<16	>L5				
No features discovered																			



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

12 TOPOGRAPHY
 Cliff, Hill top, Hillside, Drainage, Floodplain, Streambed

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

I have read, I understand, and I have followed the Texas Commission on Environmental Quality's Instructions to Geologists. The information presented here complies with that document and is a true representation of the card lines observed in the field. My signature certifies that I am qualified as a geologist as defined by 30 TAC Chapter 213.

[Handwritten Signature]

Date 8/30/23

Sheet (of)

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: Gregory Griffin, P.E.

Date: 10/17/23

Signature of Customer/Agent:



Regulated Entity Name: Davis Spring Center

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): 11.28

3. Estimated projected population: 100

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	57,825	÷ 43,560 =	1.33
Parking	229,997	÷ 43,560 =	5.28
Other paved surfaces	8,300	÷ 43,560 =	0.19
Total Impervious Cover	296,208	÷ 43,560 =	6.80

Total Impervious Cover 6.28 ÷ Total Acreage 11.28 X 100 = 60.3% Impervious Cover

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

For Road Projects Only

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

7. Type of project:

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

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

- Concrete
- Asphaltic concrete pavement
- Other: _____

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

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

L x W = _____ 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>1,500</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>0</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 Was constructed prior to submittal requirements.
 - 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 Walnut Creek (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" = 40'.

18. 100-year floodplain boundaries:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- 22. 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

Factors Affecting Water Quality

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site during construction include:

1. Soil erosion due to the clearing of the site.
2. Oil, grease, fuel, and hydraulic fluid contamination from construction equipment and vehicle drippings.
3. Hydrocarbons from asphalt paving operations.
4. Miscellaneous trash and litter from construction workers and material wrappings.
5. Potential overflow/spills from portable toilets.

Potential sources of pollution that may reasonably be expected to affect the quality of storm water discharges from the site after development include:

1. Oil, grease, fuel, and hydraulic fluid contamination from vehicle drippings.
2. Dirt and dust which may fall off vehicles.
3. Miscellaneous trash and litter.

For gas spills and oil leakage, and any hydrocarbon sources, see section 1.4.16 of the TCEQ Technical Guidance Manual for cleanup/treatment requirements for different levels of spillage/leakage.

Attachment B

Volume and Character of Stormwater

The character of the proposed runoff will be similar to what is found in typical Building and surface parking developments of this size. The proposed volumes and treatment requirements are attached as TSS Removal Calculations.

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

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

1. The Required Load Reduction for the total project:

Calculations from RG-348

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M \text{ TOTAL PROJECT}}$ = Required TSS removal result
 A_N = Net increase in impervious area
 P = Average annual precipitation

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

County = Williamson
Total project area included in plan * = 2.72 acres
Predevelopment impervious area within the limits of the plan * = 0.00 acres
Total post-development impervious area within the limits of the plan * = 1.87 acres
Total post-development impervious cover fraction * = 0.69
P = 32 inches

$L_{M \text{ TOTAL PROJECT}}$ = 1628 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. = New Pond
Total drainage basin/outfall area = 2.72 acres
Predevelopment impervious area within drainage basin/outfall area = 0.00 acres
Post-development impervious area within drainage basin/outfall area = 1.87 acres
Post-development impervious fraction within drainage basin/outfall area = 0.69
 $L_{M \text{ THIS BASIN}}$ = 1628 lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
Removal efficiency = 89 percent



10/17/23

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: $L_R = (\text{BMP efficiency}) \times P \times (A_I \times 3$

where:

A_C = Total On-Site drainage area

A_I = Impervious area proposed in

A_P = Pervious area remaining in th

L_R = TSS Load removed from this

A_C = **2.72** acres

A_I = **1.87** acres

A_P = **0.85** acres

L_R = **1856** lbs

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

Desired $L_{M \text{ THIS BASIN}}$ = **1628** lbs.

F = **0.88**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Rainfall Depth = **1.50** inches

Post Development Runoff Coefficient = **0.49**

On-site Water Quality Volume = **7308** cubic feet

Calculations from RG-348

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 = **1462**

Total Capture Volume (required water quality volume(s) x 1.20) = **8769** cubic feet

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

7. Retention/Irrigation System

Designed as Required in RG

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = **0.1** in/hr
Irrigation area = **NA** square feet
NA acres

8. Extended Detention Basin System

Designed as Required in RG

Required Water Quality Volume for extended detention basin = **NA** cubic feet

9. Filter area for Sand Filters

Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **8769** cubic feet

Minimum filter basin area = **406** square feet

Maximum sedimentation basin area = **3654** square feet

Minimum sedimentation basin area = **913** square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **8769** cubic feet

Minimum filter basin area = **731** square feet

Maximum sedimentation basin area = **2923** square feet

Minimum sedimentation basin area = **183** square feet

10. Bioretention System

Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins

Designed as Required in RG

Required capacity of Permanent Pool = **NA** cubic feet

Required capacity at WQV Elevation = **NA** cubic feet

Texas Commission on Environmental Quality

TSS Removal Calculations 04-20-2009

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

1. The Required Load Reduction for the total project:

Calculations from RG-348

Page 3-29 Equation 3.3: $L_M = 27.2(A_N \times P)$

where:

$L_{M \text{ TOTAL PROJECT}}$ = Required TSS removal result
 A_N = Net increase in impervious area
 P = Average annual precipitation

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

County =	Williamson	
Total project area included in plan *	6.10	acres
Predevelopment impervious area within the limits of the plan *	0.00	acres
Total post-development impervious area within the limits of the plan *	4.87	acres
Total post-development impervious cover fraction *	0.80	
P =	32	inches

$L_{M \text{ TOTAL PROJECT}}$ = 4239 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

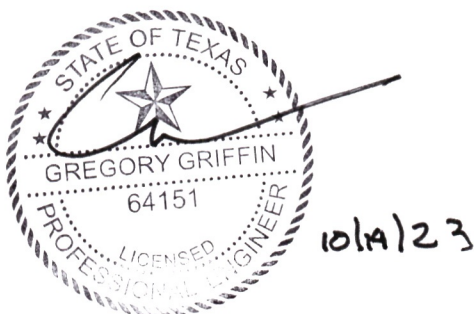
2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = Existing Pond

Total drainage basin/outfall area =	6.10	acres
Predevelopment impervious area within drainage basin/outfall area =	0.00	acres
Post-development impervious area within drainage basin/outfall area =	4.87	acres
Post-development impervious fraction within drainage basin/outfall area =	0.80	
$L_{M \text{ THIS BASIN}}$ =	4239	lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = Sand Filter
 Removal efficiency = 89 percent



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

RG-348 Page 3-33 Equation 3.7: $L_R = (\text{BMP efficiency}) \times P \times (A_i \times 3$

where:

A_C = Total On-Site drainage area
 A_i = Impervious area proposed in
 A_p = Pervious area remaining in th
 L_R = TSS Load removed from this

A_C = **6.10** acres
 A_i = **4.87** acres
 A_p = **1.23** acres
 L_R = **4818** lbs

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

Desired $L_{M \text{ THIS BASIN}}$ = **4239** lbs.

F = **0.88**

6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area.

Rainfall Depth = **1.50** inches
Post Development Runoff Coefficient = **0.62**
On-site Water Quality Volume = **20646** cubic feet

Calculations from RG-348

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 = **4129**

Total Capture Volume (required water quality volume(s) x 1.20) = 24775 cubic feet

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

7. Retention/Irrigation System

Designed as Required in RG

Required Water Quality Volume for retention basin = **NA** cubic feet

Irrigation Area Calculations:

Soil infiltration/permeability rate = **0.1** in/hr
Irrigation area = **NA** square feet
NA acres

8. Extended Detention Basin System

Designed as Required in RG

Required Water Quality Volume for extended detention basin = **NA** cubic feet

9. Filter area for Sand Filters

Designed as Required in RG

9A. Full Sedimentation and Filtration System

Water Quality Volume for sedimentation basin = **24775** cubic feet
Minimum filter basin area = **1147** square feet
Maximum sedimentation basin area = **10323** square feet
Minimum sedimentation basin area = **2581** square feet

9B. Partial Sedimentation and Filtration System

Water Quality Volume for combined basins = **24775** cubic feet
Minimum filter basin area = **2065** square feet
Maximum sedimentation basin area = **8258** square feet
Minimum sedimentation basin area = **516** square feet

10. Bioretention System

Designed as Required in RG

Required Water Quality Volume for Bioretention Basin = **NA** cubic feet

11. Wet Basins

Designed as Required in RG

Required capacity of Permanent Pool = **NA** cubic feet
Required capacity at WQV Elevation = **NA** cubic feet

Attachment C

No OSSF is proposed for this project.

Attachment D

A Geological Assessment is provided for this project.

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: Gregory Griffin, P.E.

Date: 10/17/23

Signature of Customer/Agent:



Regulated Entity Name: Davis Spring Center

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

Spill Response Actions

There will be hydrocarbons stored on-site. If any spills of that nature occur from other sources, they will be cleaned and treated in accordance with standard approved procedures. TCEQ inspectors will be consulted to ensure proper clean-up and documentation. A Hazardous Material Interceptor system will be installed down gradient to the fuel filling locations to intercept any significant gas spills.

To report an environmental emergency, discharge, spill, or air release, call:

- Environmental Release Hotline or the Texas Commission on Environmental Quality (TCEQ) **1-800-832-8224**
- [Regional Office](#), Monday through Friday 8:00 to 5:00
- TCEQ (24-Hours) at 512/ 339-2929
- Reportable Quantities are described below:

(a) Hazardous substances. The reportable quantities for hazardous substances shall be:

- (1) for spills or discharges onto land--the quantity designated as the Final Reportable Quantity (RQ) in Table 302.4 in 40 CFR §302.4; or
- (2) for spills or discharges into waters in the state--the quantity designated as the Final RQ in Table 302.4 in 40 CFR §302.4, except where the Final RQ is greater than 100 pounds in which case the RQ shall be 100 pounds.

(b) Oil, petroleum product, and used oil.

(1) The RQ for crude oil and oil other than that defined as petroleum product or used oil shall be:

- (A) for spills or discharges onto land--210 gallons (five barrels); or
- (B) for spills or discharges directly into water in the state--quantity sufficient to create a sheen.

(2) The RQ for petroleum product and used oil shall be:

- (A) except as noted in subparagraph (B) of this paragraph, for spills or discharges onto land--25 gallons;
- (B) for spills or discharges to land from PST exempted facilities--210 gallons (five barrels); or
- (C) for spills or discharges directly into water in the state--quantity sufficient to create a sheen.

(c) Industrial solid waste or other substances. The RQ for spills or discharges into water in the state shall be 100 pounds.

Attachment B

Potential Sources of Contamination

Asphalt will be used for construction of parking isles and parking areas. Sources of contamination would be from oils, transmission fluids, and other materials from construction and automobile vehicles. Some contamination might occur from machinery used during construction.

Stabilized construction entrances will be placed at the entrances to the site in order to deter contamination resulting from construction vehicles tracking mud and other contaminants onto public roadways. Temporary Best Management practices such as silt fence, rock berm, and inlet protection, will be used. The location of these items is shown on the Erosion Control and Tree Protection Plan of the attached plans.

Attachment C

Sequence of Construction

For construction:

1. Install temporary erosion/sedimentation and tree protection controls on the site as indicated on the erosion control sheet.
2. Grade the site as indicated on the construction plans. Rough grade new sedimentation pond to serve as a sediment trap.
3. Install all underground utilities as indicated on the construction plans.
4. Construct the proposed improvements (buildings, parking areas, walks) as per the construction plans
5. Remove all temporary erosion and sedimentation controls upon completion of permanent revegetation of all disturbed areas.
6. Total disturbed area 5.56 Acres.

Attachment D

Temporary Best Management Practices and Measures

Erosion Control Methods

During Construction, temporary erosion controls will be utilized to prevent silt runoff from the site. After construction, permanent restoration (sod, hydromulch, and landscape areas) will be installed to prevent silt runoff from the site.

Temporary Sedimentation Control Methods

Silt Fencing, Rock Berms, and Inlet Protection

Silt fencing and rock berms will be placed at the downslope side of disturbed areas within the Limit of Construction and others areas that arise during construction. Inlet protection will be placed on all inlets during construction

Construction Entrance/Exit:

A Stabilized construction entrance is to be install at all construction entrances and properly maintained during construction to control tracking of mud and debris from the site.

To the greatest possible extent, the existing naturally occurring flows within this development will be maintained. See the Erosion Control Plan of the construction plans for the Temporary Best Management Practices and Measures locations. A SWPPP will be prepared for the project and a SWPPP Consultant will monitor the project during each phase of construction.

Attachment F

Structural Practices

Curb and gutter construction will be utilized to direct stormwater runoff to the stormwater inlets located within the project. Storm sewer lines will convey stormwater runoff from the inlets to the existing and proposed sedimentation/filtration pond where treatment for pollutants will occur. There is no offsite stormwater runoff into the site. Temporary BMP for the project will include stabilized construction entrances, inlet protection, rock berm, and silt fence.

Attachment G

Drainage Area Map

A Drainage Area Map is included in this submittal of the accompanying construction plans. See Sheets 18, 19, and 20 in the attached Plans and Specifications.

Attachment H

Temporary Sedimentation Pond Plans and Calculations

There are no temporary sedimentation ponds for this project.

Attachment I

Inspection and Maintenance for BMPs

Silt Fencing, rock berm, and Inlet Protection

1. Inspect all silt fencing, rock berms, and inlet protection weekly and after any rainfall events.
2. Remove sediment when buildup reaches 6 inches, or install a second line of fencing/berm parallel to the old fence.
3. Replace or repair any sections crushed or collapsed in the course of construction activity.

Stabilized Construction Entrance

1. The entrance should be maintained in a conditions which will prevent tracking or flowing of sediment onto public rights of way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measure used to trap sediment.
2. All sediment spilled, dropped, washed, or tracked on to the public right of way should be removed immediately by the contractor.
3. When necessary, wheels should be cleaned to remove sediment prior to the entrance onto public right of way.

The permittee responsible (the Contractor) shall maintain a log of inspection of all temporary BMPs. Inspections should be made and documented every 14 days, and within 24 hours after rainfall events in excess of 0.5 inches to ensure site compliance. 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). A SWPPP will be prepared for the project and a SWPPP consultant will monitor the above during construction.

Attachment J

Schedule of Interim and Permanent Soil Stabilization Practices

During the construction phase of this project, soils will be stabilized by the use of silt fencing and rock berms, which will be in place prior to commencement of any construction activity involving disturbance of the soil. Following completion of construction, soils will be stabilized by the use of landscaping, including sodding. For reference, the TCEQ Technical Guidance Manual Chapter 1 gives further information relating stabilization schedules for interruptions. 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. A SWPPP will be prepared for the project and a SWPPP consultant will perform inspections during each construction phase.

Permanent Stormwater Section

Texas Commission on Environmental Quality

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

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

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

Signature

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

Print Name of Customer/Agent: Gregory Griffin, P.E. Agent

Date: 10/17/23

Signature of Customer/Agent



Regulated Entity Name: Davis Spring Center

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: _____

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 A

20% or Less Impervious Cover Waiver

This section is not applicable. The development exceeds twenty percent (20%) impervious cover.

Attachment B

BMPs for Upgradient Stormwater

No up gradient flows impact this project site.

Attachment C

BMP's for On-site Stormwater

On-site flows will be filtered through the use of an existing sedimentation/filtration pond and a new sedimentation/filtration pond. These water quality Best Management Practice has been designed using the TCEQ Design Criteria.

Attachment D

BMP's for Surface Streams

The placement of silt fencing, rock berm and inlet protection as temporary erosion control and the existing sedimentation/filtration and new sedimentation ponds will assist in preventing pollutants from entering surface streams or the aquifer.

No "sensitive" or "possibly sensitive" features were identified in the Geologic Assessment for this site.

Attachment E

Request to Seal Features

This requirement is not applicable to this project. No features were identified in the Geological Assessment for this submittal.

Attachment F

Construction Plans

One (1) original and three (3) sets of the construction plans as submitted to the City of Austin for Site Plan permitting are attached to this WPAP report submittal.

Attachment G

Inspection, Maintenance, Repair and Retrofit Plan for the Sand Filter

PROJECT NAME: Davis Spring Center

ADDRESS: 9900 Parmer Lane West.

CITY, STATE, ZIP: Austin, Texas 78717

Routine Maintenance

Mowing:

Grass areas in and around sand filters 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.

Inspections:

BMP facilities must be inspected at least twice a year (once during or immediately following wet weather) to evaluate facility operation. During each inspection, erosion areas inside and downstream of the BMP must be identified and repaired or revegetated immediately. With each inspection, any damage to the structural elements of the system (pipes, concrete drainage structures, retaining walls, etc.) must be identified and repaired immediately. The condition of the emergency spillway should be checked, and the inlet, barrel, and outlet should be inspected for clogging. The adequacy of upstream and downstream channel erosion protection measures and stability of the side slopes should be checked. Cracks, voids and undermining should be patched/filled to prevent additional structural damage. Trees and root systems should be removed to prevent growth in cracks and joints that can cause structural damage.

The inspections should be carried out with as-built pond plans in hand.

Debris and Litter Removal:

As part of periodic moving operations and inspections, debris and litter should be removed from the surface of the basin. Particular attention should be paid to floating debris, and the outlet should be checked for possible clogging.

Erosion Control:

The basin side slopes, emergency spillway, and embankment all may periodically suffer from slumping and erosion. Corrective measures such as regrading and revegetation may be necessary. Similarly, the riprap

protecting the channel near the outlet may need to be repaired or replaced.

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 the 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 five years. Silt accumulated on the surface of the filter media should be removed when it has reached a depth of about 0.5 inch or the drainage time has increased to more than 48 hours. Due to no access ramp into the pond, a temporary metal ramp may be required to access the ramp with heavy equipment.

Filter Underdrain:

Clean underdrain piping network to remove any sediment buildup every two years, or as needed to maintain design drawdown time.

Media Replacement:

More extensive maintenance of the filter media is required when the drawdown time begins to exceed the target time of 48 hours. Non-routine or corrective maintenance should be performed when the drawdown time exceeds 72 hours. When this occurs, the upper layer of geotechnical material and gravel ballast should be removed and replaced with new materials meeting the original specifications. Any discolored sand should also be removed and replaced. In filters that have been regularly maintained, this should be limited within the top 2 to 3 inches.

Nuisance Control:

Twice a year, the facility should be evaluated in terms of nuisance control (insects, weeds, odors, algae, etc.). Biological control of algae and mosquitoes is preferable to chemical applications.

Non-Routine Maintenance:

Structural Repairs and Replacement:

Eventually, the various inlet/outlet and riser works in the basin will deteriorate and must be replaced. Once a year, during inspections, check all metal, concrete, and PVC for corrosion, sun-damage, and seepage around the structures.

Sediment Removal:

Sediment accumulated in the sediment forebay area should be removed from the facility every two years to prevent accumulation in the permanent pool. Dredging of the permanent pool must occur at least every 15 years,

or when accumulation of sediment impairs functioning of the outlet structure. "Proper" disposal of accumulated silt shall be accomplished following Texas Commission on Environmental Quality and local guidelines and specifications. Check county and municipal requirements.

Harvesting:

Once every year, vegetation present at the fringes of the pond should be harvested to prevent the basin from filling with decaying organic matter.

Record Keeping:

Responsible Party or their assigns shall keep written records of all maintenance items including dates of maintenance.

Responsible Party: Neenah Group Investments, L.P. through its General Partner,
Sovereign Investments, Inc.

Mailing Address: 3215 Steck Avenue Suite 101

City, State, Zip: Austin, Texas 78757

Telephone: 512 459-9300

Email: Fred@captexdev.com

Fred G. Eppright, Vice President

Print Name of Responsible Party



Signature of Responsible Party

10/17/23

Date

Attachment H

Pilot Scale Field Testing Plan

This plan is not applicable to this project.

Attachment I

Measures for Minimizing Surface Stream Contamination

Surface stream contamination will be mitigated by utilization of an existing sedimentation/filtration pond and a new sedimentation/filtration pond. Stormwater runoff from this development will be directed to the existing sedimentation/filtration pond and new sedimentation/filtration pond for TSS Removal. Following TSS Removal, the runoff will be discharged into a tributary of Lake Creek

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

I Fred G. Eppright,
Print Name

Vice President of Sovereign Investments, Inc., General Partner of Neenah Group Investments, L.P.,
Title

have authorized Gregory Griffin, P.E.

of Griffin Engineering Group, Inc.

Have authorized on behalf of Neenah Group Investments, L.P., 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:

x [Signature]
Applicant's Signature

x 10-10-23
Date

THE STATE OF TEXAS §

County of Travis §

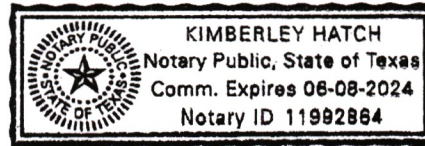
BEFORE ME, the undersigned authority, on this day personally appeared Fred G. Eppright, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed same for the purpose and consideration therein expressed.

GIVEN under my hand and seal of office on this 10 day of October, 2023.

Kimberley Hatch
NOTARY PUBLIC

Kimberley Hatch
Typed or Printed Name of Notary

MY COMMISSION EXPIRES: 06-08-2024



Application Fee Form

Texas Commission on Environmental Quality

Name of Proposed Regulated Entity: Davis Spring Center

Regulated Entity Location: 9900 Parmer Lane West

Name of Customer: Neenah Group Investments, L.P. by Sovereign Investments, Inc., General Partner

Contact Person: Fred G. Eppright, Vice President

Phone: 512 459-9300

Customer Reference Number (if issued): CN 601163371

Regulated Entity Reference Number (if issued): RN 104812573

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

12100 Park 35 Circle

Mail Code 214

Building A, 3rd Floor

P.O. Box 13088

Austin, TX 78753

Austin, TX 78711-3088

(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	11.28 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: 10/17/23

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

<i>Project</i>	<i>Project Area in Acres</i>	<i>Fee</i>
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

<i>Project</i>	<i>Cost per Linear Foot</i>	<i>Minimum Fee- Maximum Fee</i>
Sewage Collection Systems	\$0.50	\$650 - \$6,500

Underground and Aboveground Storage Tank System Facility Plans and Modifications

<i>Project</i>	<i>Cost per Tank or Piping System</i>	<i>Minimum Fee- Maximum Fee</i>
Underground and Aboveground Storage Tank Facility	\$650	\$650 - \$6,500

Exception Requests

<i>Project</i>	<i>Fee</i>
Exception Request	\$500

Extension of Time Requests

<i>Project</i>	<i>Fee</i>
Extension of Time Request	\$150



TCEQ Core Data Form

TCEQ Use Only

For detailed instructions regarding completion of 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 601163371		RN 104812573

SECTION II: Customer Information

4. General Customer Information	5. Effective Date for Customer Information Updates (mm/dd/yyyy)	10/2023	
<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)			
The Customer Name submitted here may be updated automatically based on what is current and active with the Texas Secretary of State (SOS) or Texas Comptroller of Public Accounts (CPA).			
6. Customer Legal Name (If an individual, print last name first: e.g.: Doe, John)		If new Customer, enter previous Customer below:	
Neenah Group Investments L.P.			
7. TX SOS/CPA Filing Number	8. TX State Tax ID (11 digits)	9. Federal Tax ID (9 digits)	10. DUNS Number (if applicable)
0800039204	32035939761	043588803	
11. Type of Customer:	<input type="checkbox"/> Corporation	<input type="checkbox"/> Individual	Partnership: <input type="checkbox"/> General <input checked="" type="checkbox"/> Limited
Government: <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> Other	<input type="checkbox"/> Sole Proprietorship	<input type="checkbox"/> Other:	
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"/> Occupational Licensee <input type="checkbox"/> Responsible Party <input type="checkbox"/> Voluntary Cleanup Applicant <input type="checkbox"/> Other:			
15. Mailing Address:	3215 Steck Ave. Suite 101		
	City	Austin	State Tx ZIP 78757 ZIP + 4
16. Country Mailing Information (if outside USA)		17. E-Mail Address (if applicable)	
		Fred@captexdev.com	
18. Telephone Number	19. Extension or Code	20. Fax Number (if applicable)	
(512) 459 - 9300	2	() -	

SECTION III: Regulated Entity Information

21. General Regulated Entity Information (If "New Regulated Entity" is selected below this form should be accompanied by a permit application)	
<input checked="" type="checkbox"/> New Regulated Entity <input type="checkbox"/> Update to Regulated Entity Name <input type="checkbox"/> Update to Regulated Entity Information	
The Regulated Entity Name submitted may be updated in order to meet TCEQ Agency Data Standards (removal of organizational endings such as Inc, LP, or LLC).	
22. Regulated Entity Name (Enter name of the site where the regulated action is taking place.)	
Davis Spring Center	

23. Street Address of the Regulated Entity: (No PO Boxes)	9900 Parmer Lane West						
	City	Austin	State	Tx	ZIP	78717	ZIP + 4
24. County	Williamson						

Enter Physical Location Description if no street address is provided.

25. Description to Physical Location:						
26. Nearest City			State		Nearest ZIP Code	
Austin			Tx		78717	
27. Latitude (N) In Decimal:			28. Longitude (W) In Decimal:			
Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
30	29	13.31	97	46	12.72	
29. Primary SIC Code (4 digits)		30. Secondary SIC Code (4 digits)		31. Primary NAICS Code (5 or 6 digits)		
5999				452319		
32. Secondary NAICS Code (5 or 6 digits)						
33. What is the Primary Business of this entity? (Do not repeat the SIC or NAICS description.)						
Retail/Restaurant						
34. Mailing Address:		3215 Steck Ave.				
		Suite 101				
		City	Austin	State	Tx	ZIP
35. E-Mail Address:		Fred@captexdev>com				
36. Telephone Number		37. Extension or Code		38. Fax Number (if applicable)		
(512) 459 - 9300				() -		

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 checked="" 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"/> Waste Water	<input type="checkbox"/> Wastewater Agriculture	<input type="checkbox"/> Water Rights	<input type="checkbox"/> Other:

SECTION IV: Preparer Information

40. Name: Gregory Griffin, P.E.			41. Title: President ,Griffin Engineering Group, Inc.		
42. Telephone Number		43. Ext./Code	44. Fax Number		45. E-Mail Address
(512) 836 - 3113			(512) 836 - 3103		Griffinengineeringgroup@gmail.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:	Griffin Engineering Group, Inc.	Job Title:	President
Name(In Print):	Gregory Griffin, P.E.	Phone:	(512) 836 - 3113
Signature:		Date:	10/17/13

GENERAL CONSTRUCTION NOTES

1. ALL RESPONSIBILITY FOR THE ADEQUACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF AUSTIN MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
2. CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1-800-344-8377) FOR UTILITY LOCATION STANDARDS ON ANY WORK IN CITY EASEMENTS OR STREET R.O.W.
3. CONTRACTOR SHALL NOTIFY THE CITY OF AUSTIN - SITE & SUBDIVISION DIVISION TO SUBMIT REQUIRED DOCUMENTATION, PAY CONSTRUCTION INSPECTION FEES, AND TO SCHEDULE THE REQUIRED SITE AND SUBDIVISION PRE-CONSTRUCTION MEETING. THIS MEETING MUST BE HELD PRIOR TO ANY CONSTRUCTION ACTIVITIES WITHIN THE R.O.W. OR PUBLIC EASEMENTS. PLEASE VISIT [HTTP://AUSTINTEXAS.GOV/PAGE/COMMERCIAL-SITE-AND-SUBDIVISION-INSPECTIONS](http://austintexas.gov/page/commercial-site-and-subdivision-inspections) FOR A LIST OF SUBMITTAL REQUIREMENTS, INFORMATION CONCERNING FEES, AND CONTACT INFORMATION.
4. FOR SLOPES OR TRENCHES GREATER THAN FIVE FEET IN DEPTH, A NOTE MUST BE ADDED STATING: "ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION." (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA, 611 EAST 6TH STREET, AUSTIN, TEXAS.)
5. ALL SITE WORK MUST ALSO COMPLY WITH ENVIRONMENTAL REQUIREMENTS.
6. UPON COMPLETION OF THE PROPOSED SITE IMPROVEMENTS AND PRIOR TO THE FOLLOWING, THE ENGINEER SHALL CERTIFY IN WRITING THAT THE PROPOSED DRAINAGE, FILTRATION AND TREATMENT FACILITIES WERE CONSTRUCTED IN CONFORMANCE WITH THE APPROVED PLANS:
 - RELEASE OF THE CERTIFICATE OF OCCUPANCY BY THE DEVELOPMENT SERVICES DEPARTMENT (INSIDE THE CITY LIMITS); OR
 - INSTALLATION OF AN ELECTRIC OR WATER METER (IN THE FIVE-MILE ETJ)

DEVELOPER INFORMATION

NEENAH GROUP INVESTMENTS (512) 459-9300
 OWNER PHONE #
 3215 STECK AVE. #101 AUSTIN, TEXAS 78757
 OWNER ADDRESS
 GREGORY GRIFFIN, P.E.
 OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS PHONE #
 OWNER (512) 836-3113
 PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL, MAINTENANCE PHONE #
 OWNER
 PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION, MAINTENANCE PHONE #

ORDINANCE REQUIREMENTS

1. ALL IMPROVEMENTS SHALL BE MADE IN ACCORDANCE WITH THE RELEASED SITE PLAN. ANY ADDITIONAL IMPROVEMENTS WILL REQUIRE SITE PLAN AMENDMENTS AND APPROVAL OF THE DEVELOPMENT SERVICES DEPARTMENT.
2. APPROVAL OF THIS SITE PLAN DOES NOT INCLUDE BUILDING CODE AND FIRE CODE APPROVAL NOR BUILDING PERMIT APPROVAL.
3. ALL SIGNS MUST COMPLY WITH THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE (CHAPTER 25-10).
4. ADDITIONAL ELECTRIC EASEMENTS MAY BE REQUIRED AT A LATER DATE.
5. WATER AND WASTEWATER SERVICE WILL BE PROVIDED BY THE CITY OF AUSTIN.
6. ALL EXISTING STRUCTURES SHOWN TO BE REMOVED WILL REQUIRE A DEMOLITION PERMIT FROM THE CITY OF AUSTIN DEVELOPMENT SERVICES DEPARTMENT.
7. FOR DRIVEWAY CONSTRUCTION: THE OWNER IS RESPONSIBLE FOR ALL COSTS FOR RELOCATION OF, OR DAMAGE TO UTILITIES.
8. FOR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, A ROW EXCAVATION PERMIT IS REQUIRED.

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
 WATER POLLUTION ABATEMENT PLAN GENERAL
 CONSTRUCTION NOTES**

1. A WRITTEN NOTICE OF CONSTRUCTION MUST BE SUBMITTED TO THE TCEQ REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO THE START OF ANY REGULATED ACTIVITIES. THIS NOTICE MUST INCLUDE:
 - THE NAME OF THE APPROVED PROJECT;
 - THE ACTIVITY START DATE; AND
 - THE CONTACT INFORMATION OF THE PRIME CONTRACTOR.
2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN (WPAP) AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL DURING THE COURSE OF THESE REGULATED ACTIVITIES. THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.
3. IF ANY SENSITIVE FEATURE(S) (CAVES, SOLUTION CAVITY, SINKHOLE, ETC.) IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. CONSTRUCTION ACTIVITIES MAY NOT BE RESUMED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE APPROPRIATE PROTECTIVE MEASURES IN ORDER TO PROTECT ANY SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.
4. NO TEMPORARY OR PERMANENT HAZARDOUS SUBSTANCE STORAGE TANK SHALL BE INSTALLED WITHIN 150FEET OF A WATER SUPPLY SOURCE, DISTRIBUTION SYSTEM, WELL, OR SENSITIVE FEATURE.
5. PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED PLANS AND MANUFACTURERS SPECIFICATIONS. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED IN APPROPRIATELY, OR IN CORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITUATIONS THESE CONTROLS MUST REMAIN IN PLACE UNTIL THE DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
6. ANY SEDIMENT THAT ESCAPES THE CONSTRUCTION SITE MUST BE COLLECTED AND PROPERLY DISPOSED OF BEFORE THEN EXTRA IN EVENT TO ENSURE IT IS NOT WASHED INTO SURFACE STREAMS, SENSITIVE FEATURES, ETC.
7. SEDIMENT MUST BE REMOVED FROM THE SEDIMENT TRAPS OR SEDIMENTATION BASINS NOT LATER THAN WHEN IT OCCUPIES 50%OF THE BASIN'S DESIGN CAPACITY.
8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER SHALL BE PREVENTED FROM BEING DISCHARGED OFFSITE.
9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FILL OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.
10. IF PORTIONS OF THE SITE WILL HAVE A TEMPORARY OR PERMANENT CEASE IN CONSTRUCTION ACTIVITY LASTING LONGER THAN 14 DAYS, SOIL STABILIZATION IN THOSE AREAS SHALL BE INITIATED AS SOON AS POSSIBLE PRIOR TO THE 14TH DAY OF INACTIVITY. IF ACTIVITY WILL RESUME PRIOR TO THE 21ST DAY, STABILIZATION MEASURES ARE NOT REQUIRED. IF DROUGHT CONDITIONS OR IN CLEMENT WEATHER PREVENT ACTION BY THE 14TH DAY, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS POSSIBLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST:
 - THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR;
 - THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND
 - THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.
12. THE HOLDER OF ANY APPROVED EDWARDS AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:
 - A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES;
 - B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER;
 - C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

APPENDIX P-4: - STANDARD SEQUENCE OF CONSTRUCTION

THE FOLLOWING SEQUENCE OF CONSTRUCTION SHALL BE USED FOR ALL DEVELOPMENT. THE APPLICANT IS ENCOURAGED TO PROVIDE ANY ADDITIONAL DETAILS APPROPRIATE FOR THE PARTICULAR DEVELOPMENT.

1. TEMPORARY EROSION AND SEDIMENTATION CONTROLS ARE TO BE INSTALLED AS INDICATED ON THE APPROVED SITE PLAN OR SUBDIVISION CONTROL PLAN AND IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT IS REQUIRED TO BE POSTED ON THE SITE. INSTALL TREE PROTECTION AND INITIATE TREE MITIGATION MEASURES.
2. THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR MUST CONTACT THE WATERSHED PROTECTION DEPARTMENT, ENVIRONMENTAL INSPECTION, AT 512-974-2278, 72 HOURS PRIOR TO THE SCHEDULED DATE OF THE REQUIRED ON-SITE PRE-CONSTRUCTION MEETING.
3. THE ENVIRONMENTAL PROJECT MANAGER, AND/OR SITE SUPERVISOR, AND/OR DESIGNATED RESPONSIBLE PARTY, AND THE GENERAL CONTRACTOR WILL FOLLOW THE 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.
4. TEMPORARY EROSION AND SEDIMENTATION CONTROLS WILL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) POSTED ON THE SITE.
5. BEGIN SITE CLEARING/CONSTRUCTION ACTIVITIES.
6. IN THE BARTON SPRINGS ZONE, THE ENVIRONMENTAL PROJECT MANAGER OR SITE SUPERVISOR WILL SCHEDULE A MID-CONSTRUCTION CONFERENCE TO COORDINATE THE 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 OR SITE SUPERVISOR. THE ANTICIPATED COMPLETION DATE AND FINAL CONSTRUCTION SEQUENCE AND INSPECTION SCHEDULE WILL BE COORDINATED WITH THE APPROPRIATE CITY INSPECTOR.

7. AFTER ROUGH GRADING SITE, INSTALL STORM SEWER AND INLETS. GRADE SITE TO DRAIN TO INLETS.
8. COMPLETE CONSTRUCTION AND START REVEGETATION OF THE SITE AND INSTALLATION OF LANDSCAPING.
9. UPON COMPLETION OF THE SITE CONSTRUCTION AND REVEGETATION OF A PROJECT SITE, THE DESIGN ENGINEER SHALL SUBMIT AN ENGINEER'S LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT INDICATING THAT CONSTRUCTION, INCLUDING REVEGETATION, IS COMPLETE AND INSUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
10. UPON COMPLETION OF LANDSCAPE INSTALLATION OF A PROJECT SITE, THE LANDSCAPE ARCHITECT SHALL SUBMIT A LETTER OF CONCURRENCE TO THE WATERSHED PROTECTION AND DEVELOPMENT REVIEW DEPARTMENT INDICATING THAT THE REQUIRED LANDSCAPING IS COMPLETE AND INSUBSTANTIAL CONFORMITY WITH THE APPROVED PLANS. AFTER RECEIVING THIS LETTER, A FINAL INSPECTION WILL BE SCHEDULED BY THE APPROPRIATE CITY INSPECTOR.
11. AFTER A FINAL INSPECTION HAS BEEN CONDUCTED BY THE CITY INSPECTOR AND WITH APPROVAL FROM THE CITY INSPECTOR, REMOVE THE TEMPORARY EROSION AND SEDIMENTATION CONTROLS AND COMPLETE ANY NECESSARY FINAL REVEGETATION RESULTING FROM REMOVAL OF THE CONTROLS. CONDUCT
 - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 6015.
 - 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, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.
 - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

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APPENDIX P-1 - EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTIVE FENCING PRIOR TO ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR EXCAVATION).
2. THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE WITH THE ENVIRONMENTAL CRITERIA MANUAL AND THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. THE COA ESC PLAN SHALL BE CONSULTED AND USED AS THE BASIS FOR A PROPOSED SWPPP. IF A SWPPP IS REQUIRED, IT SHALL BE AVAILABLE FOR REVIEW BY THE CITY OF AUSTIN ENVIRONMENTAL INSPECTOR AT ALL TIMES DURING CONSTRUCTION, INCLUDING AT THE PRE-CONSTRUCTION MEETING. THE CHECKLIST BELOW CONTAINS THE ELEMENTS THAT SHALL BE REVIEWED FOR PERMIT APPROVAL BY COA EV PLAN REVIEWERS AS WELL AS COA EV 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 DIVERSION 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 AND TYPE OF E&S BMPS FOR EACH PHASE OF DISTURBANCE.
- ✓ CALCULATIONS FOR BMPS AS REQUIRED.
- ✓ LOCATION AND DESCRIPTION OF TEMPORARY STABILIZATION MEASURES.
- ✓ LOCATION OF ON-SITE SPOILS, DESCRIPTION OF HANDLING AND DISPOSAL OF BORROW MATERIALS, AND DESCRIPTION OF ON-SITE PERMANENT SPOILS AREAS, INCLUDING SIZE, DEPTH OF FILL AND 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 WQ CONTROLS
5. SCHEDULE FOR REMOVAL OF TEMPORARY CONTROLS
6. ANTICIPATED MAINTENANCE SCHEDULE FOR TEMPORARY CONTROLS

-- CATEGORIZE EACH BMP UNDER ONE OF THE FOLLOWING AREAS OF BMP ACTIVITY AS DESCRIBED BELOW.

- 3.1 MINIMIZE DISTURBED AREA AND PROTECT NATURAL FEATURES AND SOIL
- 3.2 CONTROL STORMWATER FLOWING ONTO AND THROUGH THE PROJECT
- 3.3 STABILIZE SLOPES
- 3.4 PROTECT SLOPES
- 3.5 PROTECT STORM DRAIN INLETS
- 3.6 ESTABLISH PERIMETER CONTROLS AND SEDIMENT BARRIERS
- 3.7 RETAIN SEDIMENT ON-SITE AND CONTROL DOWATERING PRACTICES
- 3.8 ESTABLISH STABILIZED CONSTRUCTION EXITS
- 3.9 ANY ADDITIONAL BMPS
 - NOTE THE LOCATION OF EACH BMP ON YOUR SITE MAP(S).
 - FOR ANY STRUCTURAL BMPS, YOU SHOULD PROVIDE DESIGN SPECIFICATIONS AND DETAILS AND REFER TO THEM.
 - FOR MORE INFORMATION, SEE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL 1.4.
3. THE PLACEMENT OF TREE/NATURAL AREA PROTECTIVE FENCING SHALL BE IN ACCORDANCE WITH THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL AND TREE/NATURAL AREA PROTECTION AND THE APPROVED GRADING/TREE AND NATURAL AREA PLAN.
4. A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD ON-SITE WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT AND ENVIRONMENTAL INSPECTOR. AFTER INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS AND TREE/NATURAL AREA PROTECTION MEASURES AND PRIOR TO BEGINNING ANY SITE PREPARATION WORK, THE OWNER OR OWNER'S REPRESENTATIVE SHALL NOTIFY THE PLANNING AND DEVELOPMENT REVIEW DEPARTMENT, 974-2278, AT LEAST THREE DAYS PRIOR TO THE MEETING DATE. COA APPROVED ESC PLAN AND TPOES SWPPP (IF REQUIRED) SHOULD BE REVIEWED BY COA EV INSPECTOR AT THIS TIME.

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

6. THE CONTRACTOR IS REQUIRED TO PROVIDE A CERTIFIED INSPECTOR WITH EITHER A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC), CERTIFIED EROSION, SEDIMENT AND STORMWATER- INSPECTOR (CESSWI) OR CERTIFIED INSPECTOR OF SEDIMENTATION AND EROSION CONTROLS (CISEC) CERTIFICATION TO INSPECT THE CONTROLS AND 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 SIX (6) INCHES.

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

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

9. TEMPORARY AND PERMANENT EROSION CONTROL: ALL DISTURBED AREAS SHALL BE RESTORED AS NOTED BELOW:
 - A. ALL DISTURBED AREAS TO BE REVEGETATED ARE REQUIRED TO PLACE A MINIMUM OF SIX (6) INCHES OF TOPSOIL (SEE STANDARD SPECIFICATION ITEM NO. 6015.3(A)). DO NOT ADD TOPSOIL WITHIN THE CRITICAL ROOT ZONE OF EXISTING TREES.
 - TOPSOIL SALVAGED FROM THE EXISTING SITE IS ENCOURAGED FOR USE, BUT IT SHOULD MEET THE STANDARDS SET FORTH IN 6015.
 - 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, LANDSCAPE ARCHITECTURE, OR AGRONOMY INDICATING THE ONSITE TOPSOIL WILL PROVIDE AN EQUIVALENT GROWTH MEDIA AND SPECIFYING WHAT, IF ANY, SOIL AMENDMENTS ARE REQUIRED.
 - SOIL AMENDMENTS SHALL BE WORKED INTO THE EXISTING ONSITE TOPSOIL WITH A DISC OR TILLER TO CREATE A WELL-BLENDED MATERIAL.

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

TEMPORARY VEGETATIVE STABILIZATION:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING SHALL BE WITH OR INCLUDE A COOL SEASON COVER CROP (WESTERN WHEATGRASS (PASCOPYRUM SMITHII) AT 5.6 POUNDS PER ACRE, OATS (AVENA SATIVA) AT 4.0 POUNDS PER ACRE, CEREAL RYE GRAIN (SECALE CEREALE) AT 45 POUNDS PER ACRE. CONTRACTOR MUST ENSURE THAT ANY SEED APPLICATION REQUIRING A COOL SEASON COVER CROP DOES NOT INCLUDE RYEGRASS (LOLIUM MONENSIS) OR PERENNIAL RYEGRASS (LOLIUM PERENNE). COOL SEASON COVER CROPS ARE NOT PERMANENT EROSION CONTROL.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE OR A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 6045 OR 6095.
 - A. FERTILIZER SHALL BE APPLIED ONLY IF WARRANTED BY A SOIL TEST AND SHALL CONFORM TO ITEM NO. 6065. FERTILIZATION SHOULD NOT OCCUR WHEN RAINFALL IS EXPECTED OR DURING SLOW PLANT GROWTH OR DORMANCY. CHEMICAL FERTILIZER MAY NOT BE APPLIED IN THE CRITICAL WATER QUALITY ZONE.
 - B. HYDROMULCH SHALL COMPLY WITH TABLE 1, BELOW.
 - C. TEMPORARY EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95% TOTAL COVERAGE SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR TEMPORARY STABILIZATION ARE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 10 SQUARE FEET.
 - D. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, AND STANDARD 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 (EXCEPT NO MULCH SHALL EXCEED 30% PAPER)	70% OR GREATER WOOD / STRAW 30% OR LESS PAPER OR NATURAL FIBERS	0-3 MONTHS	MODERATE SLOPES; FROM FLAT TO 3:1	1,500 TO 2,000 LBS PER ACRE

PERMANENT VEGETATIVE STABILIZATION:

1. FROM SEPTEMBER 15 TO MARCH 1, SEEDING IS CONSIDERED TO BE TEMPORARY STABILIZATION ONLY. IF COOL SEASON COVER CROPS EXIST WHERE PERMANENT VEGETATIVE STABILIZATION IS DESIRED, THE GRASSES SHALL BE MOWED TO A HEIGHT OF LESS THAN ONE-HALF (½) INCH AND THE AREA SHALL BE RE-SEEDED IN ACCORDANCE WITH TABLE 2 BELOW. ALTERNATIVELY, THE COOL SEASON COVER CROP CAN BE MIXED WITH BERMUDAGRASS OR NATIVE SEED AND INSTALLED TOGETHER. UNDERSTANDING THAT GERMINATION OF WARM-SEASON SEED TYPICALLY REQUIRES SOIL TEMPERATURES OF 60 TO 70 DEGREES.
2. FROM MARCH 2 TO SEPTEMBER 14, SEEDING SHALL BE WITH HULLED BERMUDA AT A RATE OF 45 POUNDS PER ACRE WITH A PURITY OF 95% AND A MINIMUM PURE LIVE SEED (PLS) OF 0.83. BERMUDA GRASS IS A WARM SEASON GRASS AND IS CONSIDERED PERMANENT EROSION CONTROL. PERMANENT VEGETATIVE STABILIZATION CAN ALSO BE ACCOMPLISHED WITH A NATIVE PLANT SEED MIX CONFORMING TO ITEMS 6045 OR 6095.
 - A. FERTILIZER USE SHALL FOLLOW THE RECOMMENDATION OF A SOIL TEST. SEE ITEM 6065. FERTILIZER APPLICATIONS OF FERTILIZER (AND PESTICIDE) ON CITY-OWNED AND MANAGED PROPERTY REQUIRES THE YEARLY SUBMITTAL OF A PESTICIDE AND FERTILIZER APPLICATION RECORD, ALONG WITH A CURRENT COPY OF THE APPLICATOR'S LICENSE. FOR CURRENT COPY OF THE RECORD TEMPLATE CONTACT THE CITY OF AUSTIN'S IPM COORDINATOR.
 - B. HYDROMULCH SHALL COMPLY WITH TABLE 2, BELOW.
 - C. WATER THE SEEDED AREAS IMMEDIATELY AFTER INSTALLATION TO ACHIEVE GERMINATION AND A HEALTHY STAND OF PLANTS THAT CAN ULTIMATELY SURVIVE WITHOUT SUPPLEMENTAL WATER. APPLY THE WATER UNIFORMLY TO THE PLANTED AREAS WITHOUT CAUSING DISPLACEMENT OR EROSION OF THE MATERIALS OR SOIL. MAINTAIN THE SEEDBED IN A MOIST CONDITION FAVORABLE FOR PLANT GROWTH. ALL WATERING SHALL COMPLY WITH CITY CODE, CHAPTER 6-4 (WATER CONSERVATION), AT RATES AND FREQUENCIES DETERMINED BY A LICENSED IRRIGATOR OR OTHER QUALIFIED PROFESSIONAL, AND AS ALLOWED BY THE AUSTIN WATER UTILITY AND CURRENT WATER RESTRICTIONS AND WATER CONSERVATION INITIATIVES.
 - D. PERMANENT EROSION CONTROL SHALL BE ACCEPTABLE WHEN THE GRASS HAS GROWN AT LEAST 1½ INCHES HIGH WITH A MINIMUM OF 95 PERCENT FOR THE NON-NATIVE MIX, AND 95 PERCENT COVERAGE FOR THE NATIVE MIX SO THAT ALL AREAS OF A SITE THAT RELY ON VEGETATION FOR STABILITY MUST BE UNIFORMLY VEGETATED, AND PROVIDED THERE ARE NO BARE SPOTS LARGER THAN 16 SQUARE FEET.
 - E. WHEN REQUIRED, NATIVE PLANT SEEDING SHALL COMPLY WITH REQUIREMENTS OF THE CITY OF AUSTIN ENVIRONMENTAL CRITERIA MANUAL, ITEMS 6045 AND 6095.

TABLE 2: HYDROMULCHING FOR PERMANENT VEGETATIVE STABILIZATION

MATERIAL	DESCRIPTION	LONGEVITY	TYPICAL APPLICATION	APPLICATION RATES
BONDED FIBER MATRIX (BFM)	80% ORGANIC DEBRATED FIBERS			
10% TACKIFIER	6 MONTHS	ON SLOPES UP TO 2:1 AND EROSIIVE SOIL CONDITIONS	2,500 TO 4,000 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)	
FIBER REINFORCED MATRIX (FRM)	65% ORGANIC DEBRATED FIBERS 25% REINFORCING	UP TO 12 MONTHS	ON SLOPES UP TO 1:1 AND EROSIIVE SOIL CONDITIONS	3,000 TO 4,500 LBS PER ACRE (SEE MANUFACTURERS RECOMMENDATIONS)
	FIBERS OR LESS 10% TACKIFIER			

3. DEVELOPER INFORMATION:
 - OWNER NEENAH GROUP INVESTMENTS
 - PHONE # (512) 459-9300
 - ADDRESS 3215 STECK AVE. #101, AUSTIN, TX, 78757
 - OWNER'S REPRESENTATIVE RESPONSIBLE FOR PLAN ALTERATIONS: GREGORY GRIFFIN P.E.
 - PHONE # (512) 836-3113
 - PERSON OR FIRM RESPONSIBLE FOR EROSION/SEDIMENTATION CONTROL MAINTENANCE: CONTRACTOR
 - PHONE #
 - PERSON OR FIRM RESPONSIBLE FOR TREE/NATURAL AREA PROTECTION MAINTENANCE: CONTRACTOR
 - PHONE #

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

SOURCE: RULE NO. R161-15.13, 1-4-2016.

3.6.2 STANDARD PLAN NOTE

THE FOLLOWING PLAN NOTE SUMMARIZES THE CONTENTS OF THE ENVIRONMENTAL CRITERIA MANUAL AS IT RELATES TO TREE PROTECTION ON SITES WITH ACTIVE PERMITS:

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.
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
TREE APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER THAT DOES NOT EXCEED PRESERVATION CRITERIA FOR THE TREES TO REMAIN. REFER TO ECM 3.5.2.A.
FENCING MAY NOT 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.3.
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.

**APPENDIX P-6 - REMEDIAL TREE CARE NOTES
 AERATION AND 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 MYCORRHIZAE 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 DEPICED ON THE CITY ARBORIST'S TREATMENT SHEET. 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 ½ RECOMMENDED RATES. ALTERNATIVE ORGANIC FERTILIZER MATERIALS ARE ACCEPTABLE WHEN APPROVED BY THE CITY ARBORIST. WITHIN 7 DAYS AFTER FERTILIZATION IS COMPLETED, THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF THE WORK PERFORMED TO THE CITY ARBORIST, PLANNING AND DEVELOPMENT REVIEW DEPARTMENT, P.O. BOX 1088, AUSTIN, TX 78767.

*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.

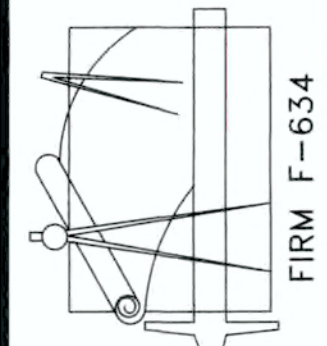
WHEN INSTALLING CONCRETE ADJACENT TO THE ROOT ZONE OF A TREE, USE A PLASTIC VAPOR BARRIER BEHIND THE CONCRETE TO PROHIBIT LEACHING OF LIME INTO THE SOIL.

DATE: OCT. 2023
 DESIGNED: _____
 DRAWN: GS - ER
 CHECKED: _____
 JOB NO: _____

DAVIS SPRING CENTER
 GENERAL NOTES
 9900 PARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 AUSTIN, TEXAS 78753 (512) 836-3113
 11808 TEDFORD ST., FIRM F-634



BENCHMARK INFORMATION:

BM #1: SQUARE CUT ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEEHAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'

BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARMER LANE, APPROXIMATELY 52' WEST OF TYPE II TXDOT MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'

VERTICAL DATUM: NAVD 88 (GEOID 18)

BEARING BASIS: THE TEXAS COORDINATE SYSTEM OF 1983 (NAD83), CENTRAL ZONE, BASED ON GPS SOLUTIONS FROM THE NATIONAL GEODETIC SURVEY (NGS) ON-LINE POSITIONING USER SERVICE (OPUS) FOR CHAPARRAL CONTROL POINT "CH118".

4" ALUMINUM DISK SET IN CONCRETE

SURFACE COORDINATES:
N 10151099.29
E 3104153.08

TEXAS STATE PLANE COORDINATES:
N 10145881.31
E 3103780.62

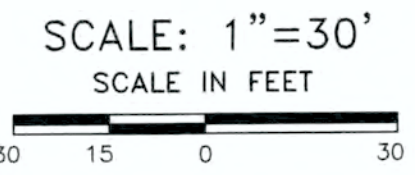
ELEVATION = 885.17'
VERTICAL DATUM: NAVD 88 (GEOID 18)

COMBINED SCALE FACTOR = 0.999880014
(FOR SURFACE TO GRID CONVERSION)

INVERSE SCALE FACTOR = 1.000120
(FOR GRID TO SURFACE CONVERSION)

SCALED ABOUT 0,0
THETA ANGLE: 1°19'12"

A TOPOGRAPHIC & TREE SURVEY OF A PORTION OF LOT 1, BLOCK A, OF DAVIS SPRING SECTION 8-E, A SUBDIVISION IN WILLIAMSON COUNTY, TEXAS, RECORDED IN CABINET BB, SLIDE 270, PLAT RECORDS OF WILLIAMSON COUNTY, TEXAS, ALSO A PORTION OF A CALLED 14.472 ACRE TRACT CONVEYED TO THE CITY OF AUSTIN IN DOCUMENT NO. 2019061754, ALSO A PORTION OF A CALLED 49.00 ACRE TRACT CONVEYED TO DAVIS SPRING COMMERCIAL PROPERTY OWNERS ASSOCIATION INC IN DOCUMENT NO. 2003143324, BOTH OF THE OFFICIAL PUBLIC RECORDS OF WILLIAMSON COUNTY, TEXAS, AND ALSO A PORTION OF A CALLED 3.442 ACRE TRACT, BEING THE REMAINDER OF A TRACT OF LAND CONVEYED TO DAVIS SPRING PROPERTIES, LTD. IN VOLUME 2199, PAGE 202 OF THE DEED RECORDS OF WILLIAMSON COUNTY, TEXAS.



CURVE	RADIUS	DELTA	ARC	BEARING	CHORD	(RECORD)
C1	25.00'	89°25'16"	38.58'	N24°06'58"E	34.86'	(N23°47'52" 34.84')
C2	955.00'	17°33'58"	292.79'	N78°40'04"E	291.65'	(N78°40'13" 291.75')
C3	1900.00'	16°46'11"	556.11'	N28°46'41"W	554.12'	(N28°45'25"W 554.11')
C4	955.00'	19°22'53"	323.05'	S84°46'16"E	321.51'	(S84°46'08"E 321.43')
C5	3600.00'	4°52'37"	306.42'	S77°51'57"E	306.33'	(S77°51'20"E 306.35')

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.95')
L2	N84°00'35"E	49.97'	(N83°59'41"E 50.00')
L3	S05°58'26"E	1.15.03'	(S06°00'19"E 1.15.00')
L4	S61°41'58"E	60.64'	(S61°37'35"E 60.58')
L5	N84°02'02"E	49.89'	(N83°59'41"E 49.81')
L6	S39°57'45"E	14.45'	(S40°10'29"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.98'	(S19°36'17"W 64.92')
L9	S18°08'13"W	57.80'	(S18°08'45"W 57.84')
L10	S32°39'22"W	73.57'	(S32°37'47"W 73.52')
L11	S41°07'57"W	58.09'	(S41°08'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'00"W 162.80')

TREE INDEX

TAG NO. TYPE INDICATES MULTI TRUNK

INDIVIDUAL TRUNK DIA. (IN INCHES)

CRITICAL ROOT ZONES (TREE CIRCLES) ARE SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES.

LEGEND:

- BUM = OLIV BUMELIA
- CEM = CEDAR
- CE = CEDAR ELM
- CHTW = CHINESE TALLOW
- HB = HACKBERRY
- LO = LIVE OAK
- MSU = MESQUITE
- PEC = PECAN
- PO = POST OAK

1442 LO 10 10	3005 PO 24	3069 PO 20
1443 LO 9	3006 CDR 12	3070 PO 10
1444 CHTW 21 16	3007 LO 10	3071 PO 20
1445 HB 12	3008 CDR 12	3072 CE 19
1446 MSU 13	3009 CDR 12	3073 PO 18
1447 HB 12	3010 CDR 12	3074 PEC 27
1448 HB 15	3011 CDR 11	3075 CE 20
1449 LO 17	3012 CDR 12	3076 LO 23
1450 LO 14	3013 CDR 10	3077 LO 12
1451 LO 13	3014 CDR 13	3078 LO 22
1452 LO 12	3015 CDR 13	3079 LO 12
1453 LO 12	3016 LO 15	3080 CE 10
1454 PEC 18 15	3017 CDR 14	3081 CE 12 8
1455 PO 28	3018 LO 9 5	3082 CE 8
1456 LO 16	3019 LO 12	3083 CE 15
1457 LO 19	3020 HB 11	3084 CE 17
1458 LO 10	3021 CDR 12	3085 CE 11
1459 LO 9	3022 CDR 10	3086 LO 20
1460 LO 9	3023 CDR 10	3087 LO 14 13 8
1461 LO 10	3024 CDR 10	3088 LO 18 14
1462 LO 8 8	3025 LO 9	3089 LO 32
1463 HB 13	3026 CDR 16 8	3090 PEC 15
1464 LO 25 21	3027 LO 12 7 5	3091 PEC 16
18 13	3028 CE 9	3092 PEC 19
1465 HB 9	3029 HB 11	3093 PEC 16
1466 LO 16 14	3030 PEC 20	3094 CE 22
1467 CE 9	3031 LO 11	3095 PO 22
1468 LO 9	3032 CDR 11	3096 CDR 12
1469 LO 13	3033 CDR 11	3097 CE 12 8
1470 LO 9	3034 LO 11	3098 CE 17
1471 LO 9	3035 CDR 11	3099 PEC 19
1472 BUM 12	3036 LO 10	3100 PO 28
1473 CDR 19	3037 CE 13	3101 PEC 17
1474 LO 10	3038 CE 13	3102 PEC 22
1475 CDR 36	3039 CE 13	3103 CE 9
1476 PO 23	3040 LO 25	3104 CE 9
1477 HB 13	3041 CDR 11	3105 LO 18
1478 HB 14	3042 CE 11	3106 LO 34
1479 CDR 10	3043 CDR 15	3107 LO 36
1480 LO 14	3044 CDR 13	3108 CDR 14
1481 PEC 18	3045 PO 30	3109 CDR 12
1482 CE 8	3046 CDR 12	3110 CDR 11
1483 CE 8	3047 CDR 13	3111 HB 19
1484 CE 10 9	3048 CE 22	3112 CE 30
1485 CE 9	3049 CDR 12	3113 LO 9
1486 LO 16	3050 CE 12	3114 LO 15
1487 LO 14 12	3051 CE 13	3115 LO 10
1488 LO 13 13	3052 CE 9	3116 LO 20
1489 CE 8 4	3053 CE 13	3117 CE 18
1490 LO 8 8	3054 CE 8	3118 PO 18
1491 LO 20 19	3055 CE 8	3119 CE 21
1492 LO 23	3056 PO 18	3120 CE 18
1493 PEC 20	3057 LO 14	3121 LO 17
1494 LO 10	3058 CE 11	3122 CE 11
1495 LO 13	3059 PEC 9	3123 CE 19
1496 LO 14 10	3060 CE 14	3124 CE 13
1497 LO 14 13	3061 CE 8	3125 PEC 17
1498 CDR 11	3062 CE 11	3126 LO 8 4
1499 CE 10	3063 CE 10	3127 LO 31 10
1500 HB 12	3064 PO 21	3128 LO 14 12
1501 LO 12	3065 LO 23	3129 LO 8
1502 LO 12	3066 PO 18	3130 LO 8 5 5
1503 PEC 16	3067 PO 14	3131 LO 9 9 8 5
1504 PO 15	3068 PO 17	

THE SPECIES OF TREES SHOWN WERE DETERMINED TO THE BEST OF OUR ABILITY BY ONE OF THE GROUND SURVEY CREW, NOT A CERTIFIED ARBORIST. CONSULT A CERTIFIED ARBORIST FOR FINAL DETERMINATION OF SPECIES.

NOTE ABOUT DEAD TREES: IF THE TREE APPEARED TO BE DEAD, THEN IT HAS BEEN NOTED AS DEAD. HOWEVER, SUCH DETERMINATION IS SUBJECT TO VERIFICATION BY A QUALIFIED ARBORIST.

LEGEND

● 1/2" REBAR FOUND (OR AS NOTED)	⊕ TRAFFIC SIGNAL POLE
○ 1/2" REBAR WITH "CA INC" CAP FOUND	□ SIGNAL BOX
● 1/2" REBAR WITH "G&R" CAP FOUND	ⓧ TELEPHONE UTILITY
● 1/2" REBAR WITH "CHAPARRAL" CAP FOUND	ⓧ UNDERGROUND TELEPHONE MARKER
● T-DOT TYPE II DISK FOUND	ⓧ TELEPHONE MANHOLE
● "X" IN CONCRETE FOUND	ⓧ GAS UTILITY
▲ CALCULATED POINT	ⓧ CLEANOUT
ⓧ WASTEWATER CLEANOUT	ⓧ WASTEWATER MANHOLE
ⓧ WATER METER	ⓧ STORMSEWER MANHOLE
ⓧ WATER VALVE	ⓧ WASTEWATER EASEMENT
ⓧ FIRE HYDRANT	ⓧ STORMSEWER EASEMENT
ⓧ FIRE DEPARTMENT CONNECT	ⓧ HANDICAP PARKING SPACE
ⓧ SPRINKLER CONTROL VALVE	ⓧ SIGN
ⓧ UTILITY POLE	ⓧ MAILBOX
ⓧ GUY WIRE	ⓧ BOLLARD
ⓧ OVERHEAD UTILITIES	ⓧ EDGE OF ASPHALT PAVEMENT
ⓧ ELECTRIC UTILITY	ⓧ BARB WIRE FENCE
ⓧ ELECTRIC MANHOLE	ⓧ VENT PIPE
ⓧ ELECTRIC PULL BOX	ⓧ UNDERGROUND FIBER OPTIC MARKER
ⓧ LIGHT POLE	() RECORD INFORMATION
ⓧ GROUND LIGHT	W.W.E. WASTEWATER EASEMENT
	W.L.E. WATER LINE EASEMENT

CONTRACTOR'S RESPONSIBILITY

THE LOCATION OF EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LOCATIONS OF THE BUILDINGS AND OTHER SITE COMPONENTS AND THEIR INTERRELATIONSHIP WITH THE BUILDING SITE, AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.

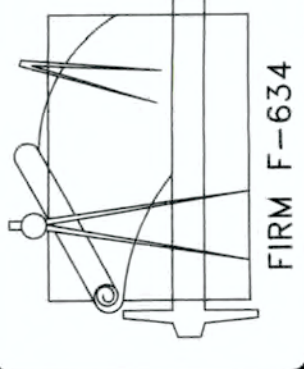
FURTHERMORE, THE CONTRACTOR RESPONSIBLE FOR ALL AMERICAN DISABILITIES CODE COMPLIANCE AND TEXAS ACCESSIBILITY STANDARDS FOR THE CONSTRUCTION OF ALL ITEMS CONTAINED HEREIN INCLUDING BUT NOT LIMITED TO HANDICAP ACCESS GRADES, DIMENSIONS, ETC. CONTRACTOR IS TO NOTIFY GRIFFIN ENGINEERING GROUP, INC. OF ANY CONFLICTS WITH THE PLANS AND THE CONDITIONS IN THE FIELD DURING CONSTRUCTION.

DATE: OCT. 2023
DESIGNED: CS - ER
DRAWN: CS - ER
CHECKED:
JOB NO.:

DAVIS SPRING CENTER
EXISTING SURVEY
9900 PARMER LANE WEST

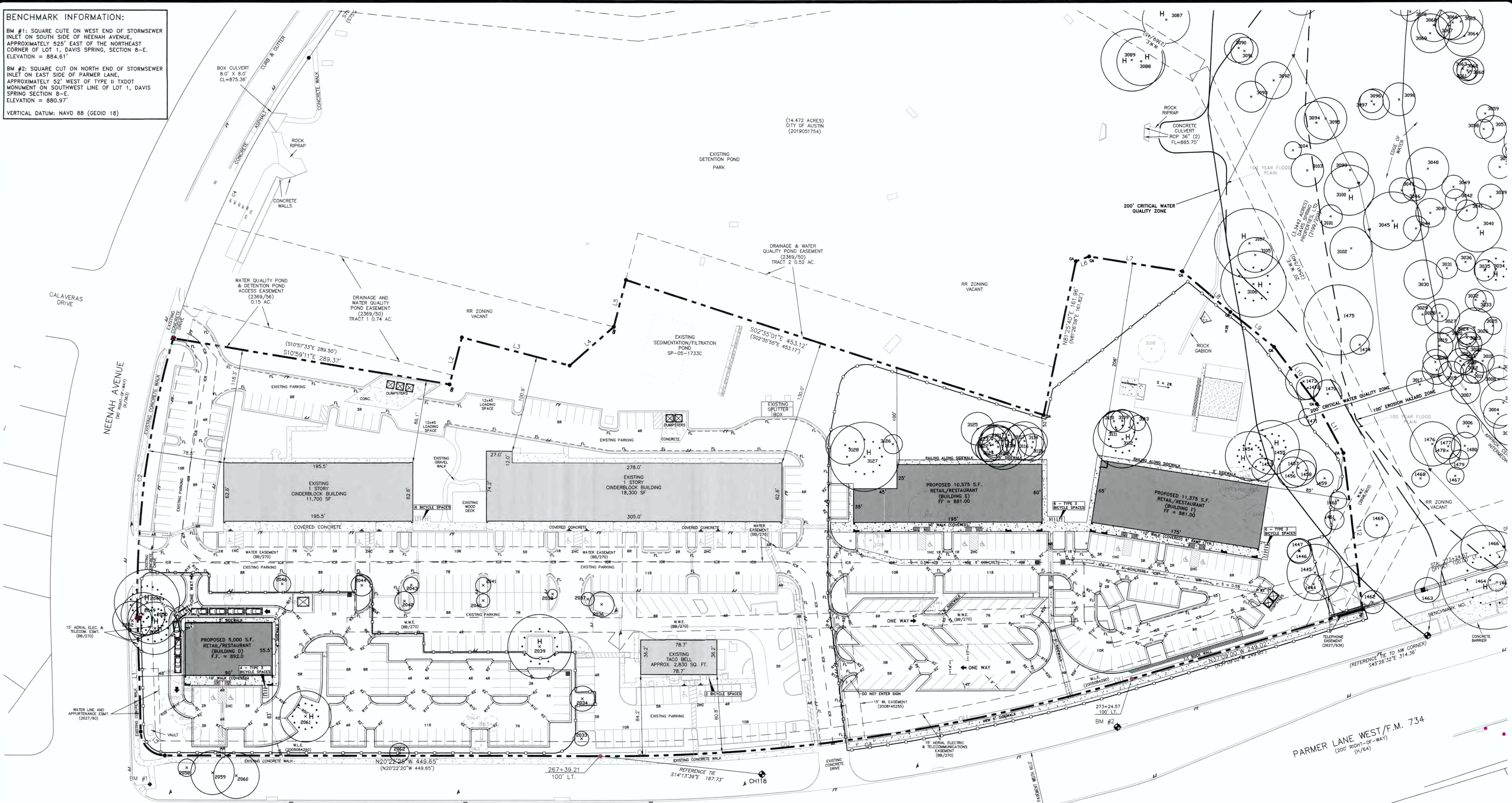


GRIFFIN ENGINEERING GROUP INC.
AUSTIN, TEXAS 78753 (512) 836-3113
11808 TEDFORD ST.,



SHEET NUMBER
4 of 29

BENCHMARK INFORMATION:
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 VERTICAL DATUM: NAVD 88 (GEOID 18)

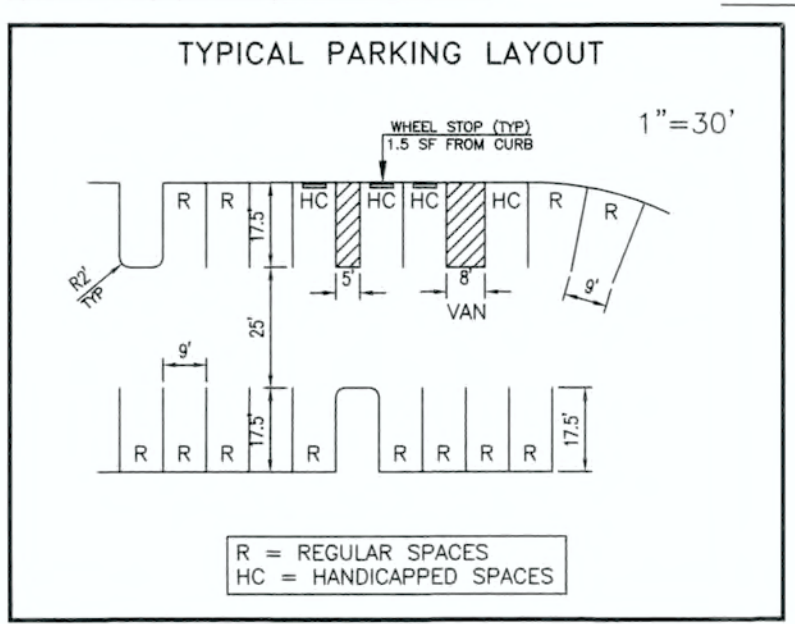


LEGEND
 ■ LIMIT OF CONSTRUCTION 5.56 AC

PARMER LANE WEST/F.M. 734
 (200' RIGHT-OF-WAY)
 (11/64)

- LEGEND**
- 1/2" REBAR FOUND (OR AS NOTED)
 - ^{CA} 1/2" REBAR WITH "CA INC" CAP FOUND
 - ^{GR} 1/2" REBAR WITH "G&R" CAP FOUND
 - ^{CH} 1/2" REBAR WITH "CHAPARRAL" CAP FOUND
 - TxDOT TYPE II DISK FOUND
 - "X" IN CONCRETE FOUND
 - ▲ CALCULATED POINT
 - ⊕ WATER METER
 - ⊖ WATER VALVE
 - ⊕ FIRE HYDRANT
 - ⊕ FIRE DEPARTMENT CONNECT
 - ⊕ SPRINKLER CONTROL VALVE
 - ⊕ UTILITY POLE
 - ⊕ GUY WIRE
 - ⊕ OVERHEAD UTILITIES
 - ⊕ ELECTRIC UTILITY
 - ⊕ ELECTRIC MANHOLE
 - ⊕ ELECTRIC PULL BOX
 - ⊕ LIGHT POLE
 - ⊕ GROUND LIGHT
 - ⊕ TRAFFIC SIGNAL POLE
 - ⊕ SIGNAL BOX
 - ⊕ TELEPHONE UTILITY
 - ⊕ UNDERGROUND TELEPHONE MARKER
 - ⊕ TELEPHONE MANHOLE
 - ⊕ GAS UTILITY
 - ⊕ CLEANOUT
 - ⊕ WASTEWATER CLEANOUT
 - ⊕ WASTEWATER MANHOLE
 - ⊕ STORMSEWER MANHOLE
 - ⊕ HANDICAP PARKING SPACE
 - ⊕ SIGN
 - ⊕ MAILBOX
 - ⊕ BOLLARD
 - ⊕ EDGE OF ASPHALT PAVEMENT
 - ⊕ BARR WIRE FENCE
 - ⊕ VENT PIPE
 - ⊕ UNDERGROUND FIBER OPTIC MARKER
 - () RECORD INFORMATION
 - W.W.E. WASTEWATER EASEMENT
 - W.L.E. WATER LINE EASEMENT

- LEGEND**
- H HERITAGE TREE
 - ⊗ TREE TO REMOVE
 - ⊕ CRITICAL ROOT ZONE



SCALE: 1" = 50'
 SCALE IN FEET

CONTRACTOR'S RESPONSIBILITY
 THE LOCATION OF EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LOCATIONS OF THE BUILDINGS AND OTHER SITE COMPONENTS AND THEIR INTERRELATIONSHIP WITH THE BUILDING SITE, AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.
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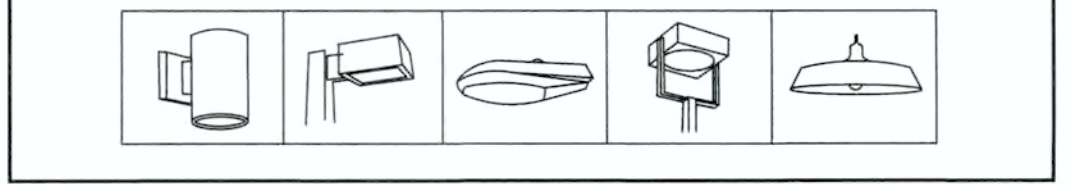
CURVE TABLE

CURVE	RADIUS	DELTA	ARC BEARING	CHORD	(RECORD)
C1	25.00'	88°25'16"	38.58'	N24°06'58"E 34.86'	(N23°47'52"E 34.84')
C2	955.00'	17°33'58"	292.79'	N76°46'04"E 291.65'	(N78°45'13"E 291.73')
C3	1900.00'	16°46'11"	556.11'	N28°46'41"W 554.12'	(N28°45'25"W 554.11')
C4	955.00'	19°22'53"	323.05'	S8°46'16"E 321.51'	(S8°46'08"E 321.43')
C5	3600.00'	4°52'37"	306.42'	S77°51'57"E 306.33'	(S77°51'20"E 306.35')

LINE TABLE

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.95')
L2	N84°00'35"E	49.97'	(N83°59'41"E 50.00')
L3	S05°58'26"E	115.03'	(S06°00'19"E 115.00')
L4	S61°41'38"E	60.64'	(S61°37'55"E 60.58')
L5	N84°02'02"E	49.89'	(N83°59'41"E 49.91')
L6	S39°57'45"E	14.45'	(S40°10'28"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.88'	(S19°36'16"W 64.90')
L9	S18°08'13"W	57.80'	(S18°08'43"W 57.84')
L10	S32°39'22"W	73.57'	(S32°37'07"W 73.52')
L11	S41°07'57"W	58.09'	(S41°08'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'00"W 162.90')

NOTE:
 ALL EXTERIOR LIGHTING WILL BE FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E 25. ALL SITE LIGHTING TO BE LOCATED ON THE BUILDING WILL BE IN COMPLIANCE WITH SUBCHAPTER E 25, AND WILL BE REVIEWED DURING BUILDING PLAN REVIEW. ANY CHANGE OR SUBSTITUTION OF LAMP/LIGHT FIXTURES SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL IN ACCORDANCE WITH SECTION 25.2.E.



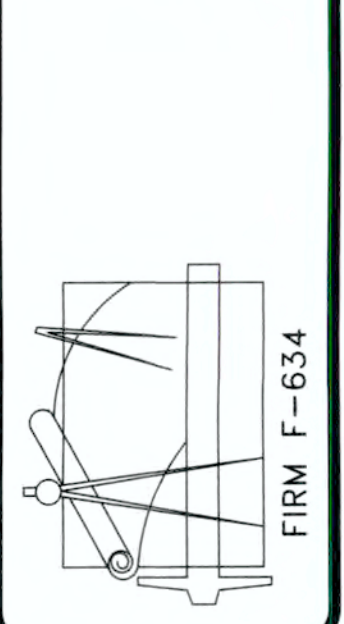
FIRE ZONE NOTE
 FIRE ZONES ARE ESTABLISHED ON THIS SITE BY PAINTING THE CURB LINES RED IN THE AREAS DEPICTED ON THE PLAN SHEET. THE FIRE ZONES ARE NOTED AS SUCH:
 FL
 THE WORDS "FIRE ZONE/TOW AWAY ZONE" WILL BE STENCILED IN WHITE LETTERS AT LEAST THREE INCHES HIGH AT 35 FOOT INTERVALS ALONG THE CURBS. IN ADDITION, SIGNS SHALL BE POSTED AT BOTH ENDS OF A FIRE ZONE.

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 OVERALL SITE PLAN
 9900 PARMER LANE WEST

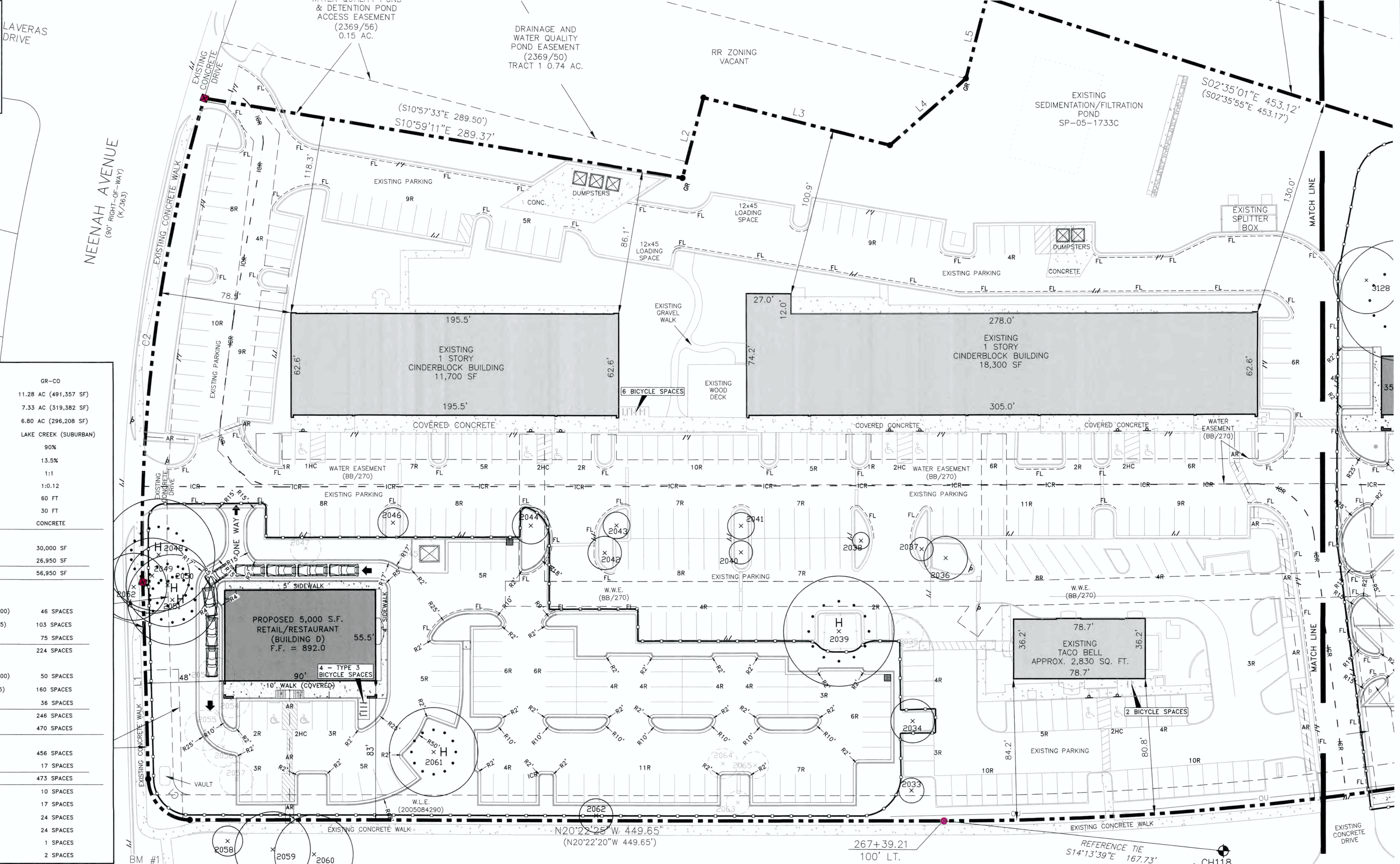


GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



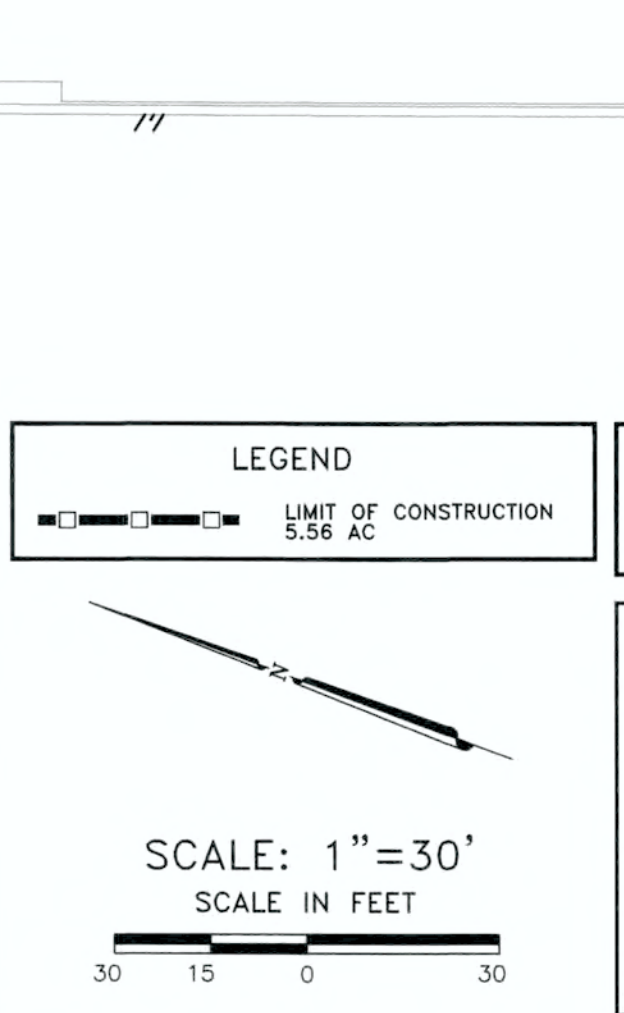
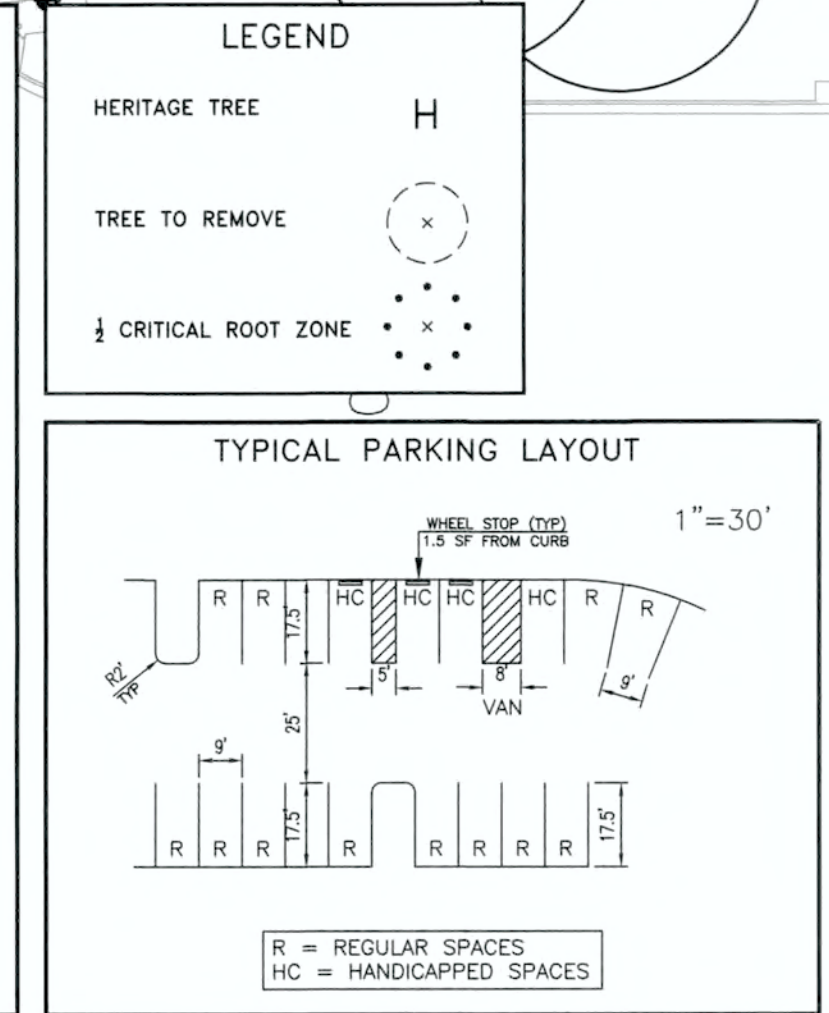
SHEET NUMBER
 5 of 29

BENCHMARK INFORMATION:
 BM #1: SQUARE CUTE ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'
 BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARMER LANE, APPROXIMATELY 52' WEST OF TYPE II TxDOT MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'
 VERTICAL DATUM: NAVD 88 (GEOID 18)



SITE DATA	
ZONING	GR-CO
GROSS / NET SITE AREA	11.28 AC (491,357 SF)
ALLOWABLE IMPERVIOUS COVER (65%)	7.33 AC (319,382 SF)
PROPOSED IMPERVIOUS COVER (60.2%)	6.80 AC (296,208 SF)
WATERSHED	LAKE CREEK (SUBURBAN)
MAXIMUM BUILDING COVERAGE	90%
PROPOSED BUILDING COVERAGE (66,555 SF)	13.5%
MAXIMUM FAR	1:1
PROPOSED FAR	1:0.12
MAXIMUM HEIGHT	60 FT
PROPOSED HEIGHT	30 FT
FOUNDATION	CONCRETE
BUILDING	
EXISTING	30,000 SF
PROPOSED	26,950 SF
TOTAL	56,950 SF
REQUIRED PARKING	
EXISTING	
4,617 SF RESTAURANT (<2,500 SF - 1:100)	46 SPACES
7,721 SF RESTAURANT (>2,500 SF - 1:75)	103 SPACES
20,492 SF RETAIL (1:275)	75 SPACES
TOTAL	224 SPACES
PROPOSED	
5,000 SF RESTAURANT (<2,500 SF - 1:100)	50 SPACES
12,000 SF RESTAURANT (>2,500 SF - 1:75)	160 SPACES
9,950 SF RETAIL (1:275)	36 SPACES
TOTAL	246 SPACES
TOTAL REQUIRED PARKING	470 SPACES
PARKING PROVIDED	
REGULAR SPACES	456 SPACES
HANDICAPPED SPACES	17 SPACES
TOTAL	473 SPACES
HANDICAPPED SPACES REQUIRED (2%)	10 SPACES
HANDICAPPED SPACES PROVIDED	17 SPACES
BICYCLE SPACES REQUIRED (5% OF REQUIRED)	24 SPACES
BICYCLE SPACES PROVIDED	24 SPACES
LOADING SPACES REQUIRED	1 SPACES
LOADING SPACES PROVIDED	2 SPACES

LEGEND	
● 1/2" REBAR FOUND (OR AS NOTED)	⊕ TRAFFIC SIGNAL POLE
● 1/2" REBAR WITH "CA INC" CAP FOUND	⊞ SIGNAL BOX
● 1/2" REBAR WITH "G&R" CAP FOUND	⊞ TELEPHONE UTILITY
● 1/2" REBAR WITH "CHAPARRAL" CAP FOUND	⊞ UNDERGROUND TELEPHONE MARKER
● TxDOT TYPE II DISK FOUND	⊞ TELEPHONE MANHOLE
● "X" IN CONCRETE FOUND	⊞ GAS UTILITY
● CALCULATED POINT	⊞ CLEANOUT
● WATER METER	● WWCW WASTEWATER CLEANOUT
● WATER VALVE	● WWHM WASTEWATER MANHOLE
● FIRE HYDRANT	● SSMH STORMSEWER MANHOLE
● FIRE DEPARTMENT CONNECT	● HPCP HANDICAP PARKING SPACE
● SPRINKLER CONTROL VALVE	⊞ SIGN
● UTILITY POLE	⊞ MAILBOX
● GUY WIRE	⊞ BOLLARD
● OVERHEAD UTILITIES	⊞ EDGE OF ASPHALT PAVEMENT
⊞ ELECTRIC UTILITY	⊞ BARB WIRE FENCE
⊞ ELECTRIC MANHOLE	⊞ VENT PIPE
⊞ ELECTRIC PULL BOX	⊞ UNDERGROUND FIBER OPTIC MARKER
⊞ LIGHT POLE	() RECORD INFORMATION
⊞ GROUND LIGHT	W.W.E. WASTEWATER EASEMENT
	W.L.E. WATER LINE EASEMENT



PARMER LANE WEST/F.M. 734
 (200' RIGHT-OF-WAY)
 (H/64)

CONTRACTOR'S RESPONSIBILITY
 THE LOCATION OF EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LOCATIONS OF THE BUILDINGS AND OTHER SITE COMPONENTS AND THEIR INTERRELATIONSHIP WITH THE BUILDING SITE, AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.

FIRE DEPARTMENT CONNECTION
 INTERNAL CIRCULATION ROUTE --- ICR ---
 ACCESSIBLE ROUTE --- AR ---

NOTE:
 ALL EXTERIOR LIGHTING WILL BE FULLY SHIELDED IN COMPLIANCE WITH SUBCHAPTER E.25. ALL SITE LIGHTING SHALL BE LOCATED ON THE BUILDING WILL BE IN COMPLIANCE WITH SUBCHAPTER E.25, AND WILL BE REVIEWED DURING BUILDING PLAN REVIEW. ANY CHANGE OR SUBSTITUTION OF LAMP/LIGHT FIXTURES SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL IN ACCORDANCE WITH SECTION 25.2.E.

CURVE TABLE						
CURVE	RADIUS	DELTA	ARC	BEARING	CHORD	(RECORD)
C1	25.00'	88°25'16"	38.58'	N24°06'58"E	34.86'	(N23°47'52"E 34.84')
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FIRE ZONE NOTE
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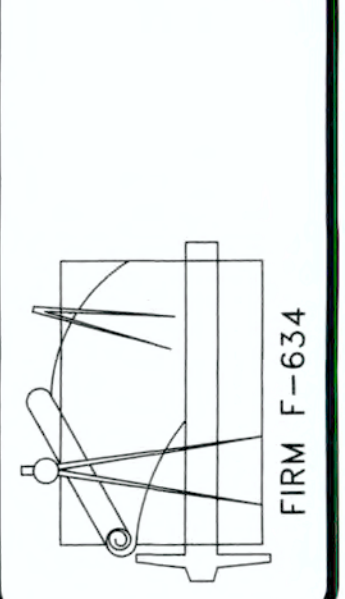
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DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED: CS - ER
 JOB NO.:

DAVIS SPRING CENTER
 SITE PLAN
 (NORTH)
 9900 PARMER LANE WEST

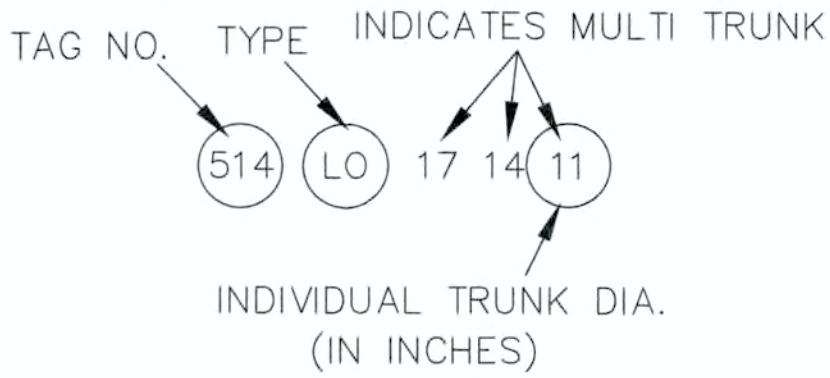


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 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 6 of 29

TREE INDEX



CRITICAL ROOT ZONES (TREE CIRCLES) ARE SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES.

H HERITAGE TREE
 * TREE TO BE REMOVED

BUM = GUM BUMELIA
 CDR = CEDAR
 CE = CEDAR ELM
 CHTW = CHINESE TALLOW
 HB = HACKBERRY
 LO = LIVE OAK
 MSQ = MESQUITE
 PEC = PECAN
 PO = POST OAK
 CHIN = CHINQUAPIN OAK
 CRM = GRAPE MYRTLE
 RB = REDBUD
 YPN = YAUPON

* 1442	LO	10	10	3006	CDR	12	3070	PO	10	2033	CE	5	5				
* 1443	LO	9		3007	CDR	15	3071	PO	20	2034	LO	13					
1444	CHTW	10		3008	CDR	12	3072	CE	19	* 2035	CE	9					
1445	CHTW	21	16	3009	CDR	12	3073	PO	18	2036	LO	10	6				
1446	MSQ	13		3010	CDR	12	H 3074	PEC	27	2037	CHIN	7					
1447	HB	12		3011	CDR	11	3075	CE	17	2038	CHIN	5					
* 1448	HB	15		3012	CDR	12	3076	CE	20	H 2039	LO	19	15 13 (33")				
* 1449	LO	17		3013	CDR	10	3077	LO	23	2040	CE	7					
* 1450	LO	14		3014	CDR	13	3078	LO	22	2041	CE	8					
* 1451	LO	13		3015	CDR	13	3079	LO	12	2042	LO	10					
* 1452	LO	12		3016	LO	15	3080	CE	10	2043	LO	8					
1453	LO	12		3017	CDR	14	3081	CE	12	2044	LO	11					
H 1454	PEC	18	15 (25.5")	3018	LO	8	5 5	3082	CE	8	* 2045	RB	7				
H 1455	PO	28		3019	LO	14		3083	CE	15	2046	CE	9				
1456	LO	16		3020	HB	8		3084	CE	17	* 2047	CE	9				
1457	LO	19		3021	CDR	12		3085	CE	11	H 2048	LO	25	17 (33.5")			
1458	LO	10		3022	CDR	12		3086	LO	20	2049	LO	18	9			
1459	LO	9		3023	CDR	10		H 3087	LO	14	13	8 (24.5")	H 2050	LO	17	16 (25")	
1460	LO	9		3024	CDR	10		H 3088	LO	18	14 (25")	H 2051	LO	27			
1461	LO	10		3025	LO	9		H 3089	LO	32		2052	LO	20			
1462	LO	8	8	3026	CDR	16	8	3090	PEC	15	* 2053	CE	11				
1463	HB	13		3027	LO	12	7	5	3091	PEC	14	* 2054	CE	11			
H 1464	LO	25	21	18	13	51")		3092	PEC	19	* 2055	CE	12				
1465	HB	9		3028	CE	9		3093	PEC	16	* 2056	CE	12				
1466	LO	16	14	3029	HB	11		3094	CE	22	* 2057	CE	10				
1467	CE	9		3030	PEC	20		3095	PO	22	2058	CE	9				
1468	LO	9		3031	LO	11		3096	CDR	12	2059	LO	12	11	10		
1469	LO	13		3032	CDR	11		3097	CE	12	8	2060	PEC	13	11	10	
1470	LO	10	9	H 3034	LO	22		3098	CE	17	H 2061	PEC	15	12	11 (26.5")		
1471	LO	9		3035	CDR	11		3099	PEC	19	2062	YPN	4	4	4		
1472	BUM	12		3036	LO	10		H 3100	PO	26	* 2063	CRM	3	3	3	2	
1473	CDR	19		3037	CE	13		3101	PEC	12	* 2064	CRM	3	3	3	3	
1474	LO	10		3038	CE	13		3102	PEC	22	* 2065	CRM	4	2	2	2	2
1475	CDR	36		3039	CE	13		3103	PEC	17							
1476	PO	23		H 3040	LO	25		3104	CE	9							
1477	HB	13		3041	CDR	11		3105	LO	18							
1478	HB	14		3042	CE	11		H 3106	LO	34							
1479	CDR	10		3043	CDR	15		H 3107	LO	36							
1480	LO	14		3044	CDR	13		* 3108	CDR	14							
1481	PEC	18		H 3045	PO	30		3109	CDR	12							
1482	CE	8		3046	CDR	12		3110	CDR	11							
1483	CE	8		3047	CDR	13		3111	HB	19							
1484	CE	10	9	3048	CE	22		H 3112	CE	30							
1485	CE	9		3049	CDR	12		3113	LO	8							
1486	LO	16		3050	CE	12		3114	LO	15							
1487	LO	14	12	3051	CE	13		3115	LO	14							
1488	LO	13	13	3052	CE	8		3116	CE	20							
1489	CE	9	4	3053	CE	13		3117	CE	18							
1490	LO	8	8	3054	CE	9		H 3118	CE	25							
H 1491	LO	20	19 (29.5")	3055	CE	8		3119	CE	21							
1492	LO	23		3056	PO	18		3120	CE	18							
1493	PEC	20		3057	PO	14		3121	CE	17							
1494	LO	10		3058	CE	10		3122	CE	11							
1495	LO	13		3059	PEC	9		3123	CE	19							
1496	LO	14	10	3060	CE	14		3124	CE	13							
1497	LO	14	13	3061	CE	8		3125	PEC	17							
1498	CDR	11		3062	CE	11		3126	LO	8	4						
1499	CE	15		3063	CE	10		H 3127	LO	31	10 (36")						
1500	HB	12		3064	PO	21		3128	LO	14	12						
3001	LO	17		3065	LO	23		* 3129	LO	8							
3002	LO	12		3066	PO	18		* 3130	LO	8	5	5					
3003	PEC	16		3067	PO	14		* 3131	LO	9	9	8	5				
3004	PO	15		3068	PO	17											
3005	PO	24		3069	PO	20											

THE SPECIES OF TREES SHOWN WERE DETERMINED TO THE BEST OF OUR ABILITIES BY ON THE GROUND SURVEY CREW, NOT A CERTIFIED ARBORIST. CONSULT A CERTIFIED ARBORIST FOR FINAL DETERMINATION OF SPECIES.

NOTE ABOUT DEAD TREES: IF THE TREE APPEARED TO BE DEAD, THEN IT HAS BEEN NOTED AS DEAD; HOWEVER, SUCH DETERMINATION IS SUBJECT TO VERIFICATION BY A QUALIFIED ARBORIST.

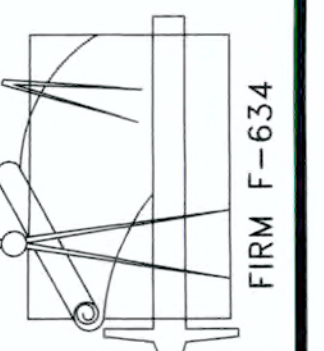
DATE OF SURVEY 6-21-2022

DATE: OCT. 2023
 DESIGNED:
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

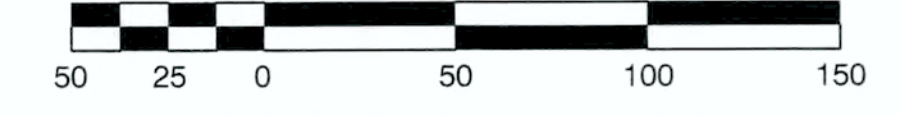
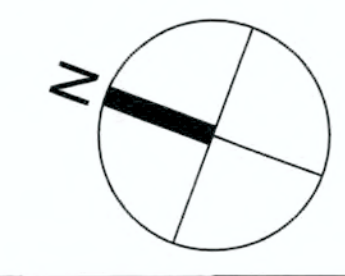
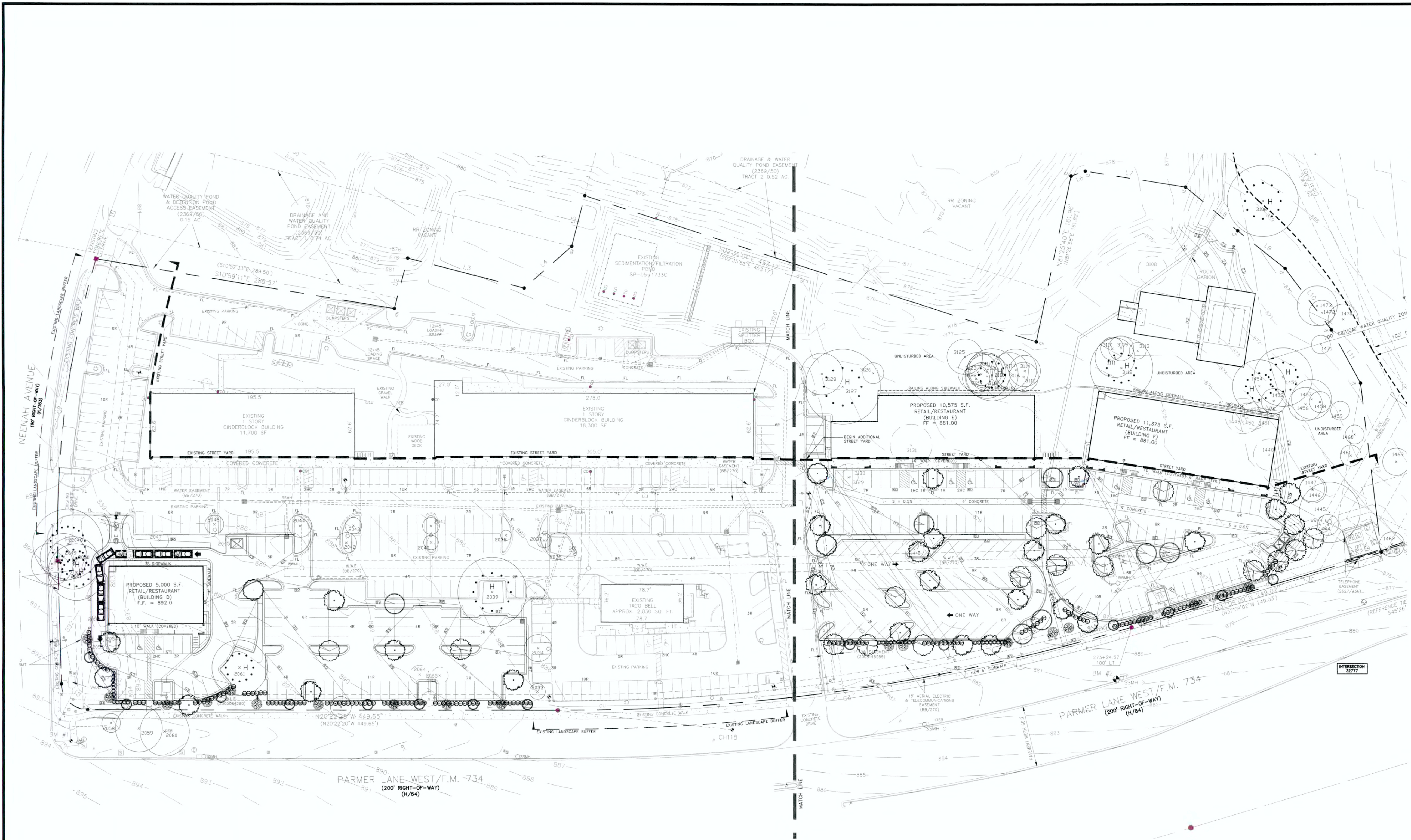
DAVIS SPRING CENTER
 TREE LIST
 9900 FARMER LANE WEST



GRIFFIN
ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 8 of 29



SCALE: 1 = 50'-0"

LEGEND	
H	HERITAGE TREE
*	TREE TO REMOVE
(X)	TREE TO REMOVE (SEE PLAN)
(X)	CRITICAL ROOT ZONE (SEE PLAN)

REVISIONS:	NO.	DATE	BY	DESCRIPTION

LANDSCAPE ORDINANCE COMPLIANCE PLAN
DAVIS SPRING CENTER
 9900 PARMER LANE WEST, AUSTIN, TEXAS 78717

EndVision Design, Inc.
 land planning • design development • landscape architecture
 P.O. BOX 341316, Austin, Texas 78734
 Off: 512.670.1219 E-fax: 512.852.4704



THIS SEAL CERTIFIES THAT THE PLAN IS ACCURATE AND IN GENERAL COMPLIANCE WITH THE REQUIREMENTS OF CHAPTER 25-2 ARTICLE 9 OF THE LAND DEVELOPMENT CODE. THE INTENT OF THIS PLAN IS TO SATISFY CITY OF AUSTIN LANDSCAPE ORDINANCE REQUIREMENTS ONLY AS IT APPLIES.

LANDSCAPE CALCULATIONS

STREET YARD	Required	Provided		
Total Site Area	N/A	491,348 sf.		
New Total Street-yard Area	N/A	86,387 sf.		
Street-yard/Landscape (20%)	17,277 sf.	XX,XXX sf. (0.00%)		
TREES (street-yard)	41	42		
Existing Tree Credit				
2" diameter to 6" diameter	— ea. x 1 =	— ea.		
6" diameter or greater	4 ea. x 2 =	8 ea.		
Proposed Trees (street yard)	41 ea.	50 ea.		
REPLACEMENT TREES				
Required caliper inches to be replaced	104"			
Proposed caliper inches replaced	104"			
Number & Size of replacement tree total	52 Trees @ 3.5" caliper			
NEW ISLAND, MEDIANS, OR PENINSULAS	Required	Provided		
Street-yard area (229 new spaces)	1,717.5 sf.	12,474 sf.		
Non street-yard area (4 new spaces)	0 sf.	0 sf.		
BUFFERING POINTS	Required 1,011	Total Provided 1,011		
SIZE	QUANTITY	PREFERRED	OTHER	PROVIDED
Large Trees 3-1/2"	15	9 pts.	— pts.	135 pts.
Small Trees 3"	32	9 pts.	— pts.	288 pts.
Large Shrubs 5 GAL	196	3 pts.	— pts.	588 pts.
Medium Shrubs	—	— pts.	— pts.	— pts.
Small Shrubs	—	— pts.	— pts.	— pts.
Decorative Wall (3' min. ht.)	—	—	lin.ft. x 3	— pts.
Berm (3' min. ht. @ max. 4:1 slope max.)	—	—	lin.ft. x 1	— pts.
INNOVATIVE WATER MANAGEMENT				
Required Landscaped Area (Section 2.4.9.1)		17,277 s.f.		
20% of Streetyard				
Req. non-streetyard island, medians, or peninsulas				
50 Percent of Required Landscaped Area		8,639 s.f.		
Undisturbed Natural Areas	Required 8,629	Provided 45,164 sf.		

*ALL PROPOSED TREES ARE BOTH REPLACEMENT AND REQUIRED PARKING LOT TREES (SEE TREE REPLACEMENT CALCULATIONS).
 ALL ORDINANCE TREES ARE TO BE INSTALLED LARGER THAN ORDINANCE REQUIRES (1-1/2") WITH EXCESS TO COUNT TOWARDS REPLACEMENT

PLANT SCHEDULE

CANOPY TREES	CODE	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
	BO	5	BURR OAK / <i>Quercus macrocarpa</i>	Cont.	3.5" Cal	6' HT. MIN.
	CO	7	CHINQUAPIN OAK / <i>Quercus muhlenbergii</i>	Cont.	3.5" Cal	6' HT. MIN.
	PO	6	MONTEREY OAK / <i>Quercus polymorpha</i>	Cont.	3.5" Cal	6' HT. MIN.
	LO	25	LIVE OAK / <i>Quercus virginiana</i>	Cont.	3.5" Cal	6' HT. MIN.
	CE	9	CEDAR ELM / <i>Ulmus crassifolia</i>	Cont.	3.5" Cal	6' HT. MIN.
ORNAMENTAL TREES	CODE	QTY	COMMON / BOTANICAL NAME	CONT	CAL	SIZE
	TXRB	16	TEXAS REDBUD / <i>Cercis canadensis var. texensis</i>	Cont.	3" Cal	6' HT. MIN.
	YPN	14	YAUPON HOLLY / <i>Ilex vomitoria</i>	Cont.	3" Cal	6' HT. MIN.
SHRUBS	CODE	QTY	COMMON / BOTANICAL NAME	CONT		
	SS	62	SILVERADO SAGE / <i>Leucophyllum frutescens 'Bertstorff dwarf'</i>	5 GAL.		
	D	33	DWARF WAX MYRTLE / <i>Myrica pusilla</i>	5 GAL.		
GRASSES	CODE	QTY	COMMON / BOTANICAL NAME	CONT		
	BM	101	BIG MUHLY / <i>Muhlenbergia lindheimeri</i>	5 GAL.		

TREE INDEX

TAG NO. TYPE INDICATES MULTI TRUNK

514 LO 17 14 11

INDIVIDUAL TRUNK DIA. (IN INCHES)

CRITICAL ROOT ZONES (TREE CIRCLES) ARE SHOWN USING THE COA FORMULA FOR SINGLE AND MULTI TRUNK TREES.

H HERITAGE TREE

* TREE TO BE REMOVED

BUM = GUM BUMELIA
 CDR = CEDAR
 CE = CEDAR ELM
 CHTW = CHINESE TALLOW
 HB = HACKBERRY
 LO = LIVE OAK
 MSQ = MESQUITE
 PEC = PECAN
 PO = POST OAK
 CHIN = CHINQUAPIN OAK
 CRM = CRAPE MYRTLE
 RB = REDBUD
 YPN = YAUPON

* 1442 LO 10 10 (15")	H 3106 LO 34	2033 CE 5 5 (7.5")	2059 LO 12 11 10 (23")
* 1443 LO 9	* 3108 CDR 14	2034 LO 13	2060 PEC 13 11 10 (23.5)
1444 CHTW 10	3109 CDR 12	* 2035 CE 9	H 2061 PEC 15 12 11 (26.5")
1445 CHTW 21 16 (29")	3110 CDR 11	2036 LO 10 6 (13")	2062 YPN 4 4 4 4 (8")
1446 MSQ 13	3111 HB 19	2037 CHIN 7	* 2063 CRM 3 3 3 2 (6")
1447 HB 12	H 3112 CE 30	2038 CHIN 5	* 2064 CRM 3 3 3 3 (6")
* 1448 HB 15	3113 LO 8	H 2039 LO 19 15 13 (33")	* 2065 CRM 4 2 2 2 2 (6")
* 1449 LO 17	3114 LO 15	2040 CE 7	
* 1450 LO 14	3115 LO 14	2041 CE 8	
* 1451 LO 13	3116 CE 20	2042 LO 10	
* 1452 LO 12	3117 CE 18	2043 LO 8	
1453 LO 12	H 3118 CE 25	2044 LO 11	
H 1454 PEC 18 15 (25.5")	3119 CE 21	* 2045 RB 7	
H 1455 PO 28	3120 CE 18	2046 CE 9	
1456 LO 16	3121 CE 17	* 2047 CE 9	
1457 LO 19	3122 CE 11	H 2048 LO 25 17 (33.5")	
1458 LO 10	3123 CE 19	2049 LO 18 9 (22.5")	
1459 LO 9	3124 CE 13	H 2050 LO 17 16 (25")	
1460 LO 9	3125 PEC 17	H 2051 LO 27	
1461 LO 10	3126 LO 8 4 (10")	2052 LO 20	
1462 LO 8 8 (12")	H 3127 LO 31 10 (36")	* 2053 CE 11	
1469 LO 13	3128 LO 14 12 (20")	* 2054 CE 11	
1470 LO 10 9 (14.5")	* 3129 LO 8	* 2055 CE 12	
1471 LO 9	* 3130 LO 8 5 5 (13")	* 2056 CE 12	
1472 BUM 12	* 3131 LO 9 9 8 5 (16")	* 2057 CE 10	
1473 CDR 19		2058 CE 9	

DATE OF SURVEY: 6-21-2022

THE SPECIES OF TREES SHOWN WERE DETERMINED TO THE BEST OF OUR ABILITIES BY ON THE GROUND SURVEY CREW, NOT A CERTIFIED ARBORIST. CONSULT A CERTIFIED ARBORIST FOR FINAL DETERMINATION OF SPECIES.

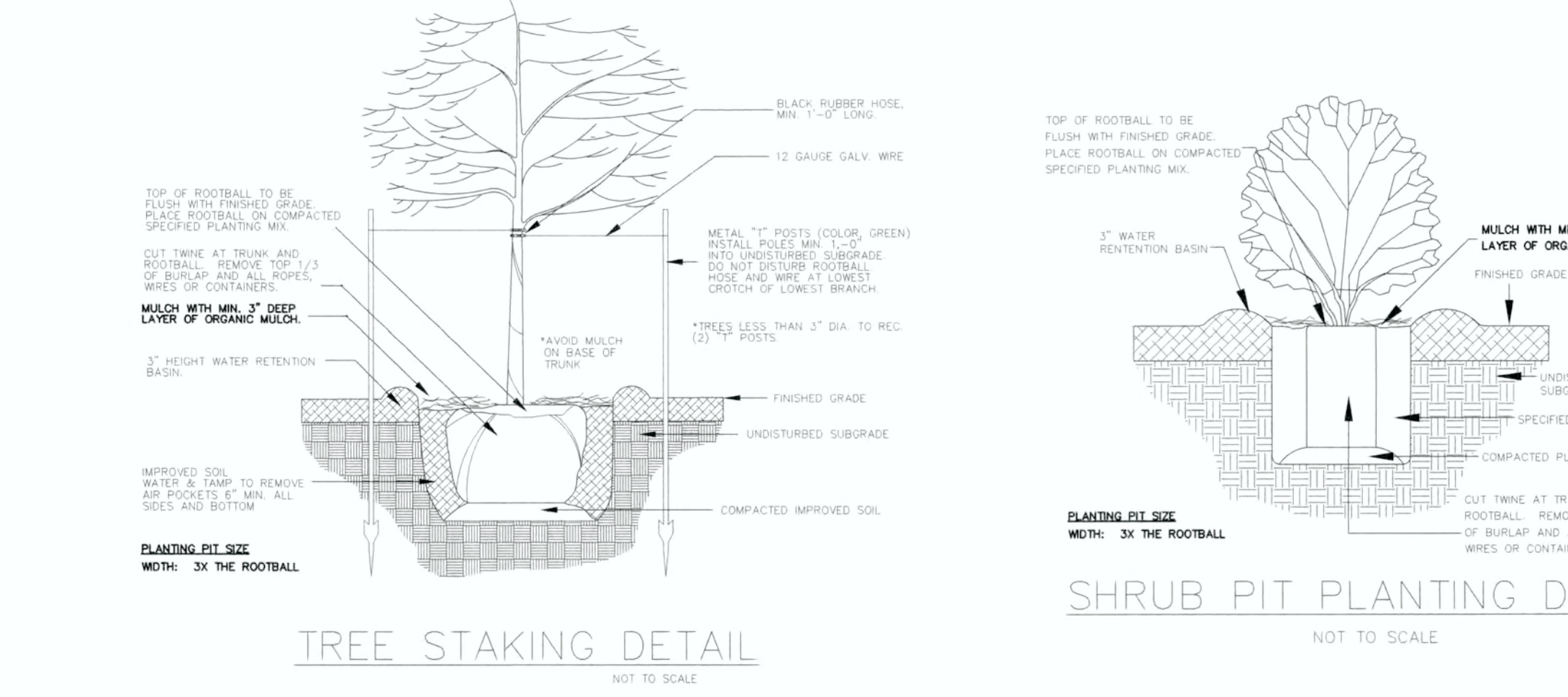
NOTE ABOUT DEAD TREES: IF THE TREE APPEARED TO BE DEAD, THEN IT HAS BEEN NOTED AS DEAD; HOWEVER, SUCH DETERMINATION IS SUBJECT TO VERIFICATION BY A QUALIFIED ARBORIST.

URBAN FOREST TABULATION:

TOTAL APPENDIX F TREE INCHES SURVEYED = 1,264.5"
 TOTAL APPENDIX F TREE INCHES REMOVED = 104"
 TOTAL NON-APPENDIX F TREE INCHES REMOVED = 0"
 TOTAL INVASIVE TREE INCHES REMOVED = 0"
 TOTAL MITIGATION TREE INCHES PLANTED ON SITE = 104"

TREE REPLACEMENT CALCULATIONS

SURVEYED TREE #	APPENDIX "F"	19" & OVER" CAL.	HERITAGE	NON-APPENDIX "F"	19" & OVER" CAL.
1442	15"				
1443	9"				
1448	15"				
1449	17"				
1450	14"				
1451	13"				
1452	12"				
3108	14"				
3129	8"				
3130	13"				
3131	16"				
2335	9"				
2047	9"				
2053	11"				
2054	11"				
2056	12"				
2057	10"				
TOTALS	208"	—	—	—	—
TOTAL INCHES TO BE REPLACED	104 @ 50%	— @ 100%	— @ 225%	— @ 25%	— @ 50%
TOTAL CALIPER INCHES TO BE REPLACED	104"				
TOTAL CALIPER INCHES REPLACED (52 TREES @ 3.5" CAL.) - 78" ORD REQ. =	104"				



- LANDSCAPE ORDINANCE NOTES:**
- Existing trees to be saved shall be protected by tree protective fencing before construction begins. Fencing shall consist of 6" chain link fence with or "T"posts 8 feet o.c. In cases where the distance between the tree trunk and protective fencing is less than 5 feet, trunk protection shall be used in conjunction with protective fencing. Trunk protection shall consist of 2" x 4" or 2" x 6" planking attached to entire perimeter of trunk with plastic strapping.
 - No equipment or materials shall be stored, operated or maintained within the fenced area. Fences shall be at the dripline and completely surround the tree or clusters of trees.
 - Grade changes that do not appear on site plans shall be brought to the attention of the Landscape Architect by general contractor before construction begins.
 - The Owner will continuously maintain the required landscaping in accordance with LDC section 25-2-984.
 - For all trees to remain, a comprehensive tree care program, including fertilization of all trees encroached upon by construction, shall be implemented.
 - All areas of native vegetation beyond the limits of construction are to be left undisturbed. Native areas to be saved shall be cleaned of dead wood, pruned, and seeded under direction of the Landscape Architect.
 - All landscaping, replacement trees, screening, buffering, street yard, and all other revegetated areas shall have adequate irrigation provided to sustain growth.
 - All landscape areas are to be protected by 6 inch wheel curbs, wheelstops or other barriers as per Environmental Criteria Manual, Section 2.4.7 LDC 25-2-1004(A), ECM 2.4.7(A).
 - All plant materials and irrigation shall be in place and operational at the time of landscape inspection for Certificate of Occupancy, Fiscal posting shall be made in lieu of a completed landscape installation.
 - All required landscape planting areas shall be a minimum of 8 feet in width (soil area) and for the minimum of 10 foot medians for "large parking lot" areas.
 - All disturbed areas within the limits of construction shall be hydro seeded as per city specifications.
- SCREENING NOTE**
- Screening for solid waste collection and loading areas shall be the same as, or of equal quality to, principal building materials.
- IRRIGATION NOTES:**
- Automatic irrigation systems shall comply with the following requirements. These requirements shall be noted on the Site Development Permit and shall be implemented as part of the landscape inspection:
- A new commercial and multi-family irrigation system must be designed and installed so that:
 - there is not direct overspray on non-irrigated areas;
 - the system does not include spray irrigation on areas less than six (6) feet wide (such as medians, buffer strips, and parking lot islands) above-ground irrigation emission devices are set back at least six (6) inches from impervious surfaces;
 - the irrigation system has a master valve;
 - circuit remote control valves have adjustable flow controls;
 - serviceable in-head check valves are adjacent to paved areas where elevation differences may cause low head drainage;
 - the irrigation system has a City-approved weather based controller;
 - an automatic rain shut-off device shuts off the irrigation system automatically after not more than a one-half inch (1/2") rainfall;
 - zone valves and circuits are separated based on plant water requirements; an irrigation emission device (such as spray, rotor, or drip emitter) does not exceed the manufacturer's recommended operating pressure; and
 - no component of the irrigation system deviates from the manufacturer's recommended use of the product.
 - The maximum spacing between spray or rotary sprinkler heads must not exceed the radius of throw of the head unless manufacturer of the sprinkler head specifically recommends a greater spacing. The radius of throw is determined by reference to the manufacturer's specifications for a specific nozzle at a specific operating pressure.
 - The irrigation installer shall develop and provide on as-built design plan and water budget to the City at the time the final plumbing inspection is performed. The water budget shall include:
 - a chart containing zone numbers, precipitation rate, and gallons per minute; and
 - the location of the emergency irrigation system shut-off valve. A laminated copy of the water budget shall be permanently installed inside the irrigation controller door.
 - The irrigation installer shall provide a report to the City on a form provided by the Austin Water Utility Department certifying compliance with Subsection 1 when the final plumbing inspection is performed by the City.
- SPECIAL NOTES:**
- If establishing vegetation during any stage of a drought, section 6-4-30 may require a variance. Contact Austin Water Conservation staff at waterusecompvar@atxintexas.gov or call (512)974-2199.

REGISTERED LANDSCAPE ARCHITECT
 KERRY L. WILSON
 STATE OF TEXAS
 10.04.23

THIS SEAL CERTIFIES THAT THE PLAN IS ACCURATE AND IN GENERAL COMPLIES WITH THE REQUIREMENTS OF CHAPTER 25-2, ARTICLE 9 OF THE LAND DEVELOPMENT CODE. THE INTENT OF THIS PLAN IS TO SATISFY CITY OF AUSTIN LANDSCAPE ORDINANCE REQUIREMENTS ONLY AS IT APPLIES.

en vision design

land planning • design development • landscape architecture
 P.O. BOX 341316, Austin, Texas 78734
 Off: 512.670.1219 E-fax: 512.852.4704

LANDSCAPE ORDINANCE NOTES AND DETAILS

REVISIONS: NO. DATE BY DESCRIPTION

EndVision Design, Inc.
 land planning • design development • landscape architecture
 P.O. BOX 341316, Austin, Texas 78734
 Off: 512.670.1219 E-fax: 512.852.4704

12 OF 29

BENCHMARK INFORMATION:

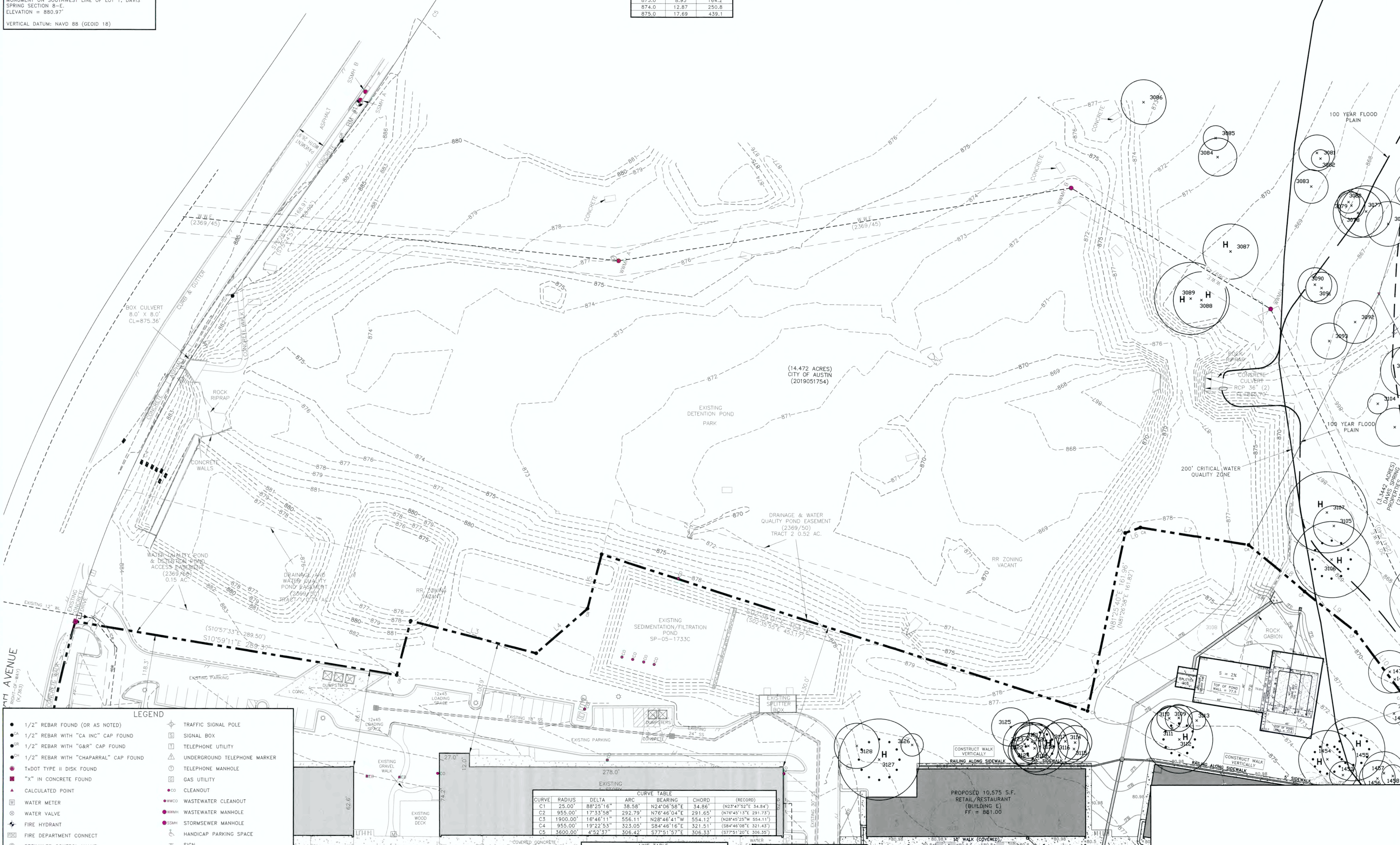
BM #1: SQUARE CUT ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 52' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'

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VERTICAL DATUM: NAVD 88 (GEOID 18)

ELEVATION (ft)	STORAGE (ac-ft)	DISCHARGE (cfs)
866.0	0.00	0.0
867.0	0.01	10.3
868.0	0.17	32.2
869.0	0.73	64.4
870.0	1.86	98.6
871.0	3.59	122.3
872.0	5.90	141.3
873.0	8.95	164.2
874.0	12.87	250.8
875.0	17.69	439.1

	ELEVATION (FT)	STORAGE (AC-FT)	DISCHARGE (CFS)
2 YEAR	870.9	3.5	120.7
10 YEAR	872.5	7.6	153.8
25 YEAR	873.4	10.5	197.6
100 YEAR	874.3	14.5	315.5



LEGEND

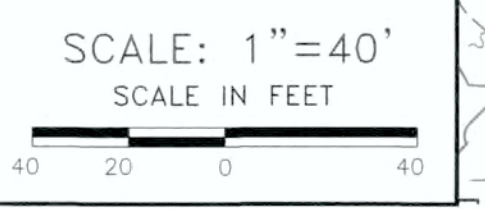
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● ^{CH} 1/2" REBAR WITH "CHAPARRAL" CAP FOUND	⊕ UNDERGROUND TELEPHONE MARKER
● TxDOT TYPE II DISK FOUND	⊕ TELEPHONE MANHOLE
■ "X" IN CONCRETE FOUND	⊕ GAS UTILITY
▲ CALCULATED POINT	⊕ CLEANOUT
⊕ WATER METER	● WWCW WASTEWATER CLEANOUT
⊕ WATER VALVE	● WWMH WASTEWATER MANHOLE
⊕ FIRE HYDRANT	● SSMH STORMSEWER MANHOLE
⊕ FIRE DEPARTMENT CONNECT	⊕ HANDICAP PARKING SPACE
⊕ SPRINKLER CONTROL VALVE	⊕ SIGN
⊕ UTILITY POLE	⊕ MAILBOX
⊕ GUY WIRE	⊕ BOLLARD
⊕ OVERHEAD UTILITIES	⊕ EDGE OF ASPHALT PAVEMENT
⊕ ELECTRIC UTILITY	⊕ BARR WIRE FENCE
⊕ ELECTRIC MANHOLE	⊕ VENT PIPE
⊕ ELECTRIC PULL BOX	⊕ UNDERGROUND FIBER OPTIC MARKER
⊕ RECORD INFORMATION	⊕ RECORD INFORMATION
⊕ LIGHT POLE	⊕ W.W.E. WASTEWATER EASEMENT
⊕ GROUND LIGHT	⊕ W.L.E. WATER LINE EASEMENT

EXISTING CURVE TABLE

CURVE	RADIUS	DELTA	ARC	BEARING	CHORD	(RECORD)
C1	25.00'	88°25'16"	38.58'	N24°06'58"E	34.86'	(N23°47'52"E 34.84')
C2	955.00'	17°53'58"	292.79'	N76°46'04"E	291.65'	(N76°45'13"E 291.73')
C3	1900.00'	18°46'11"	556.11'	N28°46'41"W	554.12'	(N28°45'25"W 554.11')
C4	955.00'	19°22'53"	323.05'	S84°46'16"E	321.51'	(S84°46'08"E 321.43')
C5	3600.00'	4°52'37"	306.42'	S77°51'57"E	306.33'	(S77°51'20"E 306.35')

LINE TABLE

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.95')
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L3	S05°58'26"E	115.03'	(S06°00'19"E 115.00')
L4	S61°41'38"E	60.64'	(S61°37'35"E 60.58')
L5	N84°02'02"E	49.89'	(N83°59'41"E 49.91')
L6	S39°57'45"E	14.45'	(S40°10'29"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°52'44"W	64.88'	(S19°51'14"W 64.90')
L9	S18°08'13"W	57.80'	(S18°08'43"W 57.84')
L10	S32°39'22"W	73.57'	(S32°37'47"W 73.52')
L11	S41°07'57"W	58.09'	(S41°08'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'07"W 162.90')



CONTRACTOR'S RESPONSIBILITY

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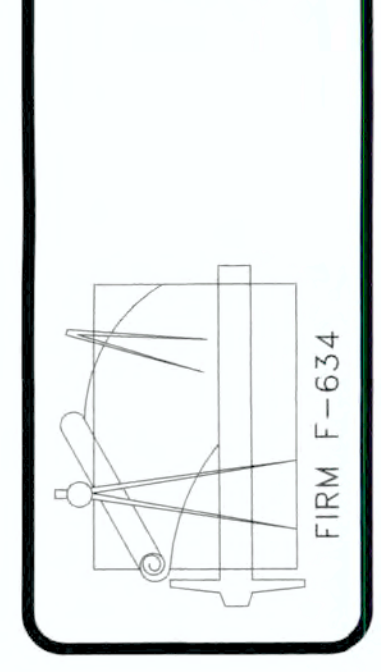
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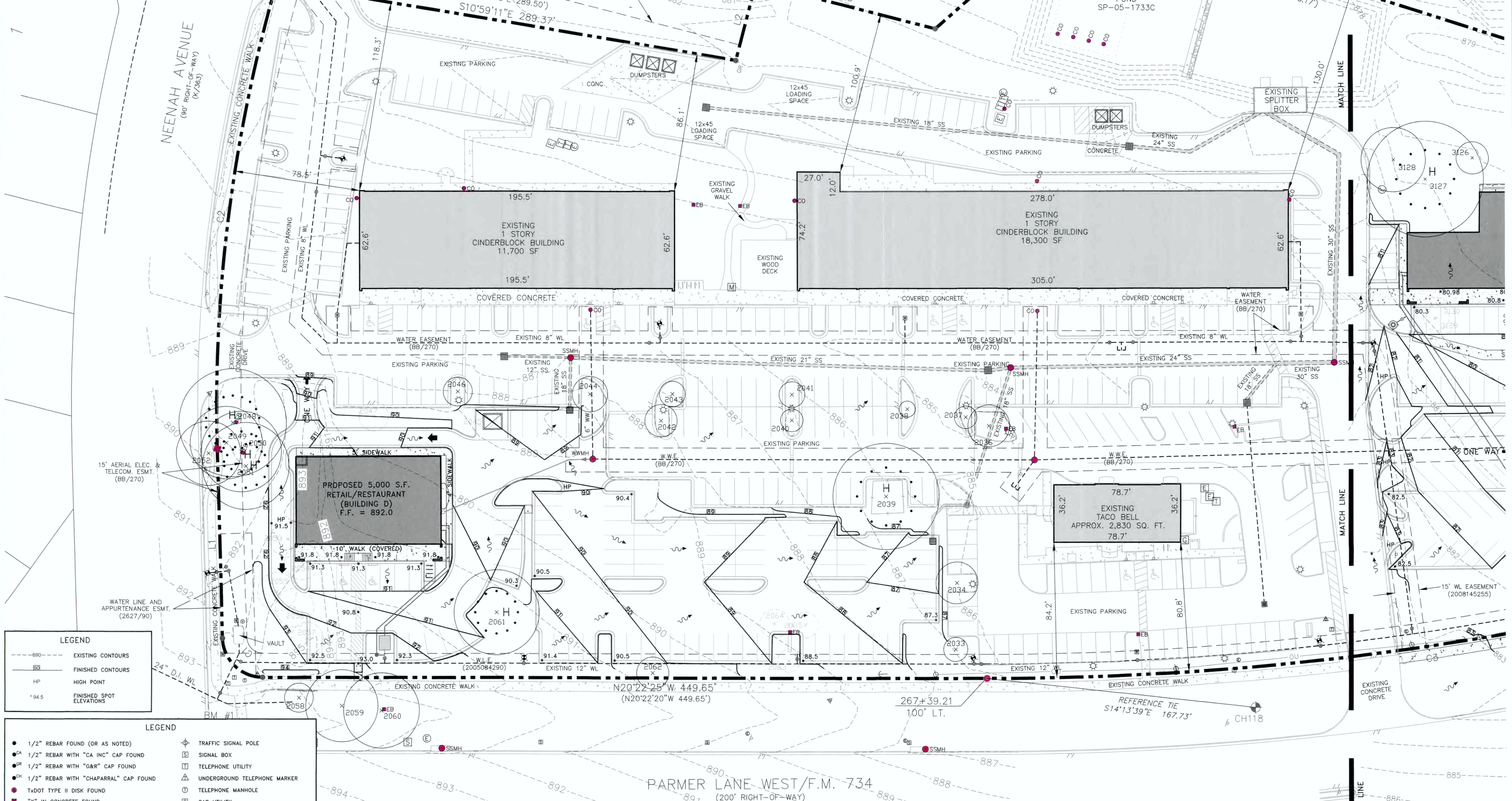
DAVIS SPRING CENTER
 EXISTING DETENTION POND
 9900 PARKER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



BENCHMARK INFORMATION:
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 VERTICAL DATUM: NAVD 88 (GEOID 18)



LEGEND

- 690- EXISTING CONTOURS
- 94.5- FINISHED SPOT ELEVATIONS
- HP HIGH POINT
- FINISHED CONTOURS

LEGEND

- 1/2" REBAR FOUND (OR AS NOTED)
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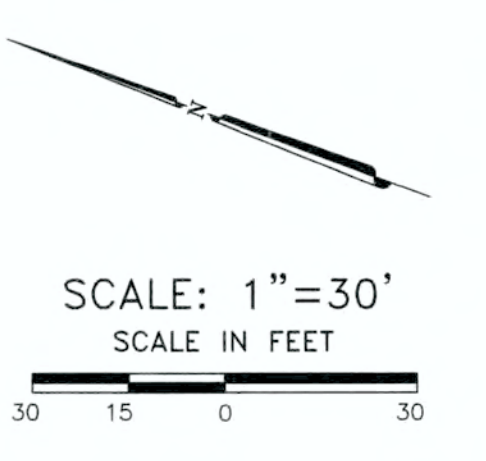
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L12	S62°58'22"W	162.98'	(S62°40'00"W 162.90')

LEGEND

- H HERITAGE TREE
- TREE TO REMOVE
- ⊥ CRITICAL ROOT ZONE



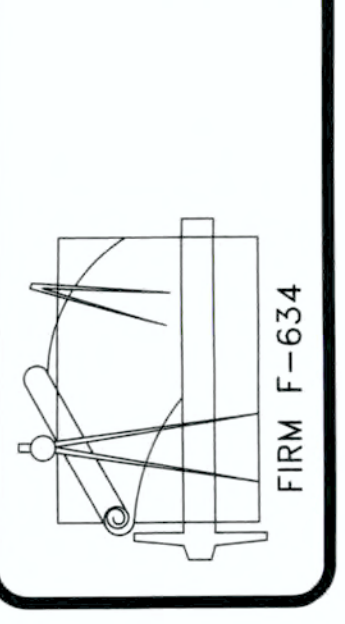
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DATE: OCT. 2023
 DESIGNED: CS - ER
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 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 GRADING PLAN
 (NORTH)
 9900 PARMER LANE WEST

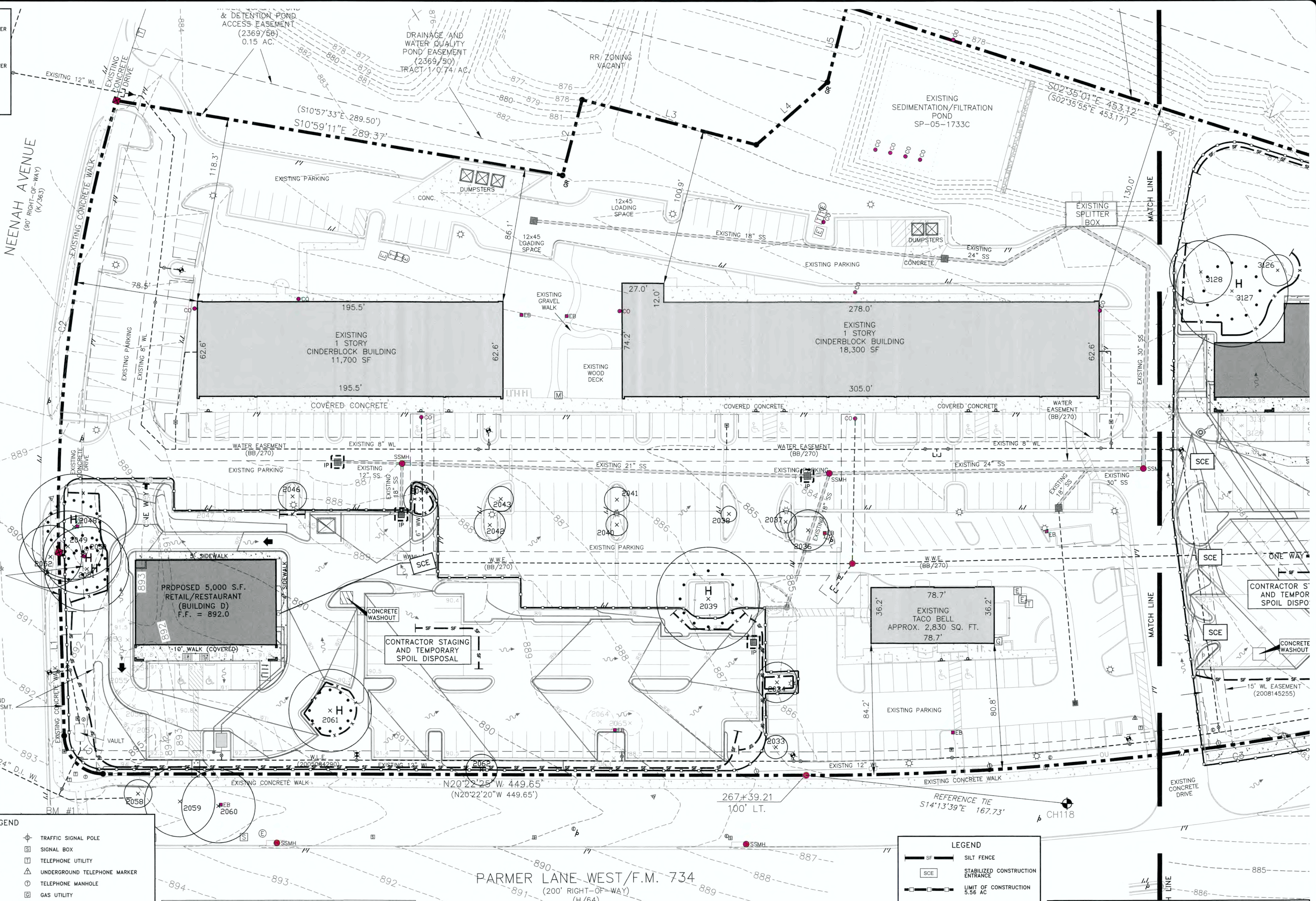


GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 14 of 29

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LEGEND

---	EXISTING CONTOURS
---	FINISHED CONTOURS
HP	HIGH POINT
94.5	FINISHED SPOT ELEVATIONS

LEGEND

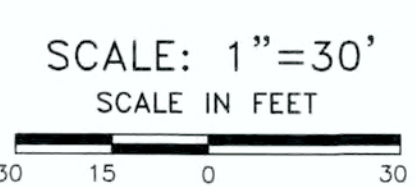
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● ^{CH}	1/2" REBAR WITH "CHAPARRAL" CAP FOUND	⊕	UNDERGROUND TELEPHONE MARKER
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---	OVERHEAD UTILITIES	---	BARB WIRE FENCE
---	ELECTRIC UTILITY	---	VENT PIPE
---	ELECTRIC MANHOLE	---	UNDERGROUND FIBER OPTIC MARKER
---	ELECTRIC PULL BOX	---	RECORD INFORMATION
---	LIGHT POLE	---	W.W.E. WASTEWATER EASEMENT
---	GROUND LIGHT	---	W.L.E. WATER LINE EASEMENT

CURVE TABLE

CURVE	RADIUS	DELTA	ARC	BEARING	CHORD	(RECORD)
C1	25.00'	88°25'16"	38.58'	N24°06'58"E	34.86'	(N23°47'52"E 34.84')
C2	955.00'	17°33'58"	292.79'	N76°46'04"E	291.65'	(N76°45'13"E 291.73')
C3	1300.00'	16°48'11"	556.11'	N28°46'41"W	554.12'	(N28°45'25"W 554.17')
C4	955.00'	19°22'53"	323.05'	S84°46'16"E	321.51'	(S84°46'08"E 321.43')
C5	3600.00'	4°52'37"	306.42'	S77°51'57"E	306.33'	(S77°51'20"E 306.35')

LINE TABLE

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.95')
L2	N84°00'35"E	49.97'	(N83°59'41"E 50.00')
L3	S05°58'26"E	115.03'	(S06°00'19"E 115.00')
L4	S61°41'38"E	60.64'	(S61°37'35"E 60.58')
L5	N84°02'02"E	49.89'	(N83°59'41"E 49.87')
L6	S39°57'45"E	14.45'	(S40°10'28"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.88'	(S19°36'16"W 64.90')
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L10	S32°39'23"W	73.57'	(S32°37'47"W 73.55')
L11	S41°07'57"W	58.09'	(S41°06'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'00"W 162.90')



CONTRACTOR'S RESPONSIBILITY
 THE LOCATION OF EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LOCATIONS OF THE BUILDINGS AND OTHER SITE COMPONENTS AND THEIR INTERRELATIONSHIP WITH THE BUILDING SITE, AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.
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LEGEND

---	SILT FENCE
---	STABILIZED CONSTRUCTION ENTRANCE
---	LIMIT OF CONSTRUCTION 5.56 AC
---	INLET PROTECTION
---	TREE PROTECTION
---	ROCK BERM

LEGEND

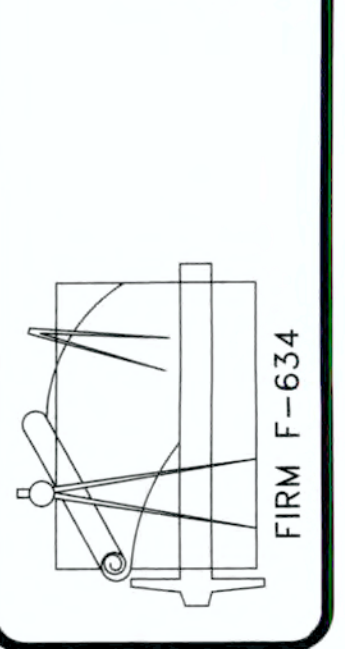
H	HERITAGE TREE
⊕	TREE TO REMOVE
⊕	CRITICAL ROOT ZONE

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 EROSION CONTROL AND
 TREE PROTECTION PLAN
 (NORTH)
 9900 PARMER LANE WEST

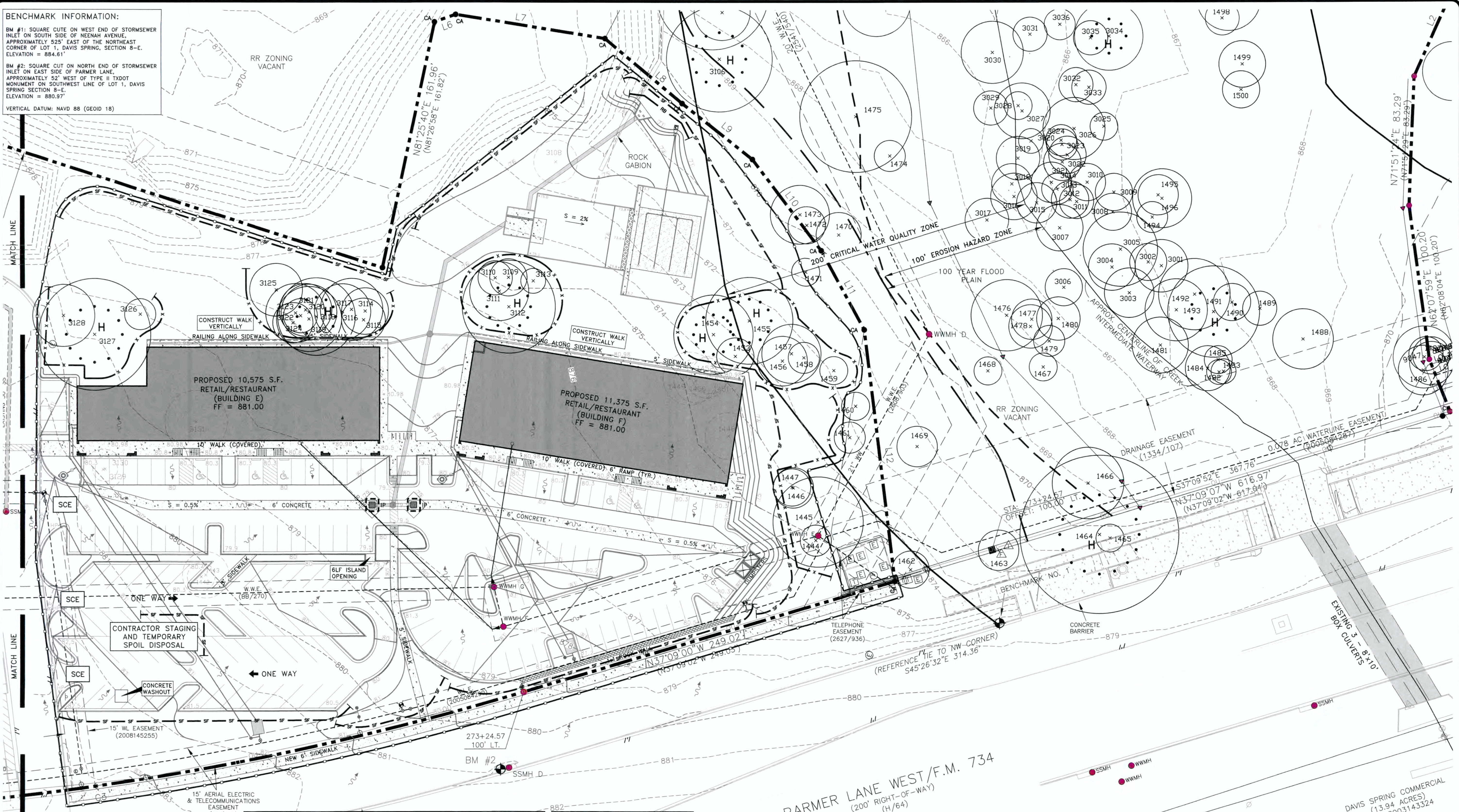


GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 16 of 29

BENCHMARK INFORMATION:
 BM #1: SQUARE CUT ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'
 BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARMER LANE, APPROXIMATELY 52' WEST OF TYPE II TYPOT MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'
 VERTICAL DATUM: NAVD 88 (GEOID 18)



LEGEND

- SF SILT FENCE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- IP INLET PROTECTION
- RP TREE PROTECTION
- RB ROCK BERM

LEGEND

- HERITAGE TREE H
- TREE TO REMOVE
- CRITICAL ROOT ZONE

LEGEND

- 1/2" REBAR FOUND (OR AS NOTED)
- CA 1/2" REBAR WITH "CA INC" CAP FOUND
- GR 1/2" REBAR WITH "G&R" CAP FOUND
- CH 1/2" REBAR WITH "CHAPARRAL" CAP FOUND
- TDOT TYPE II DISK FOUND
- "X" IN CONCRETE FOUND
- CALCULATED POINT
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- FIRE DEPARTMENT CONNECT
- SPRINKLER CONTROL VALVE
- UTILITY POLE
- GUY WIRE
- OVERHEAD UTILITIES
- ELECTRIC UTILITY
- ELECTRIC MANHOLE
- ELECTRIC PULL BOX
- LIGHT POLE
- GROUND LIGHT

LEGEND

- TRAFFIC SIGNAL POLE
- SIGNAL BOX
- TELEPHONE UTILITY
- UNDERGROUND TELEPHONE MARKER
- TELEPHONE MANHOLE
- GAS UTILITY
- CLEANOUT
- WASTEWATER CLEANOUT
- WASTEWATER MANHOLE
- STORMSEWER MANHOLE
- HANDICAP PARKING SPACE
- SIGN
- MAILBOX
- BOLLARD
- EDGE OF ASPHALT PAVEMENT
- BARB WIRE FENCE
- VENT PIPE
- UNDERGROUND FIBER OPTIC MARKER
- RECORD INFORMATION
- W.W.E. WASTEWATER EASEMENT
- W.L.E. WATER LINE EASEMENT

LEGEND

- EXISTING CONTOURS
- FINISHED CONTOURS
- HP HIGH POINT
- FINISHED SPOT ELEVATIONS

CURVE TABLE						
CURVE	RADIUS	DELTA	ARC LENGTH	BEARING	CHORD	(RECORD)
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L1	N67°53'53"E	117.74'	(N67°58'05"E 117.85')
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L6	S39°57'45"E	14.45'	(S40°10'28"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.88'	(S19°38'18"W 64.90')
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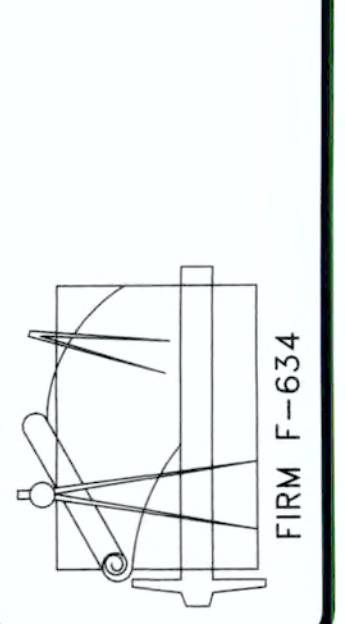
SCALE: 1"=30'
 SCALE IN FEET

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO:

DAVIS SPRING CENTER
 EROSION CONTROL AND
 TREE PROTECTION PLAN
 (SOUTH)
 9900 PARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



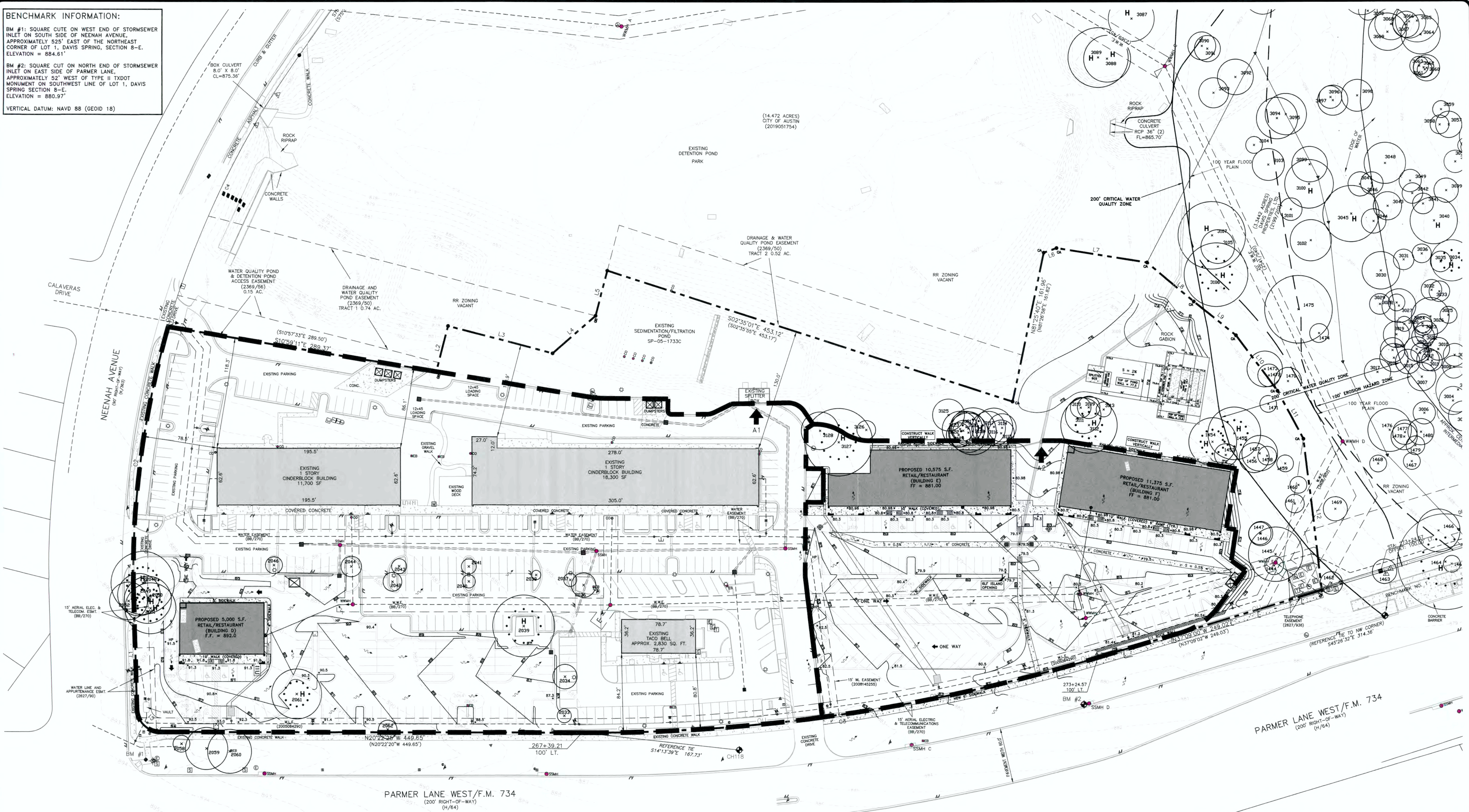
SHEET NUMBER
 17 of 29

BENCHMARK INFORMATION:

BM #1: SQUARE CUT ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'

BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARKER LANE, APPROXIMATELY 52' WEST OF TYPE II TxDOT MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'

VERTICAL DATUM: NAVD 88 (GEOID 18)



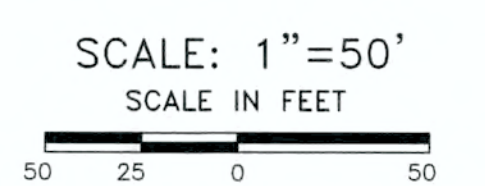
- LEGEND**
- 1/2" REBAR FOUND (OR AS NOTED)
 - ^{CA} 1/2" REBAR WITH "CA INC" CAP FOUND
 - ^{GR} 1/2" REBAR WITH "G&R" CAP FOUND
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 - TxDOT TYPE II DISK FOUND
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 - ▲ CALCULATED POINT
 - ⊠ WATER METER
 - ⊕ WATER VALVE
 - ⊠ FIRE HYDRANT
 - ⊠ FIRE DEPARTMENT CONNECT
 - ⊠ SPRINKLER CONTROL VALVE
 - ⊠ UTILITY POLE
 - ⊠ GUY WIRE
 - ⊠ OVERHEAD UTILITIES
 - ⊠ ELECTRIC UTILITY
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 - ⊠ ELECTRIC PULL BOX
 - ⊠ LIGHT POLE
 - ⊠ GROUND LIGHT
 - ⊠ TRAFFIC SIGNAL POLE
 - ⊠ SIGNAL BOX
 - ⊠ TELEPHONE UTILITY
 - ⊠ UNDERGROUND TELEPHONE MARKER
 - ⊠ TELEPHONE MANHOLE
 - ⊠ GAS UTILITY
 - CLEANOUT
 - WWC WASTEWATER CLEANOUT
 - WWMH WASTEWATER MANHOLE
 - SSMH STORMSEWER MANHOLE
 - ⊠ HANDICAP PARKING SPACE
 - ⊠ SIGN
 - ⊠ MAILBOX
 - BOLLARD
 - ⊠ EDGE OF ASPHALT PAVEMENT
 - ⊠ BARB WIRE FENCE
 - ⊠ VENT PIPE
 - ⊠ UNDERGROUND FIBER OPTIC MARKER
 - () RECORD INFORMATION
 - W.W.E. WASTEWATER EASEMENT
 - W.L.E. WATER LINE EASEMENT

CURVE TABLE

CURVE	RADIUS	DELTA	ARC	BEARING	CHORD	(RECORD)
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LINE TABLE

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.95')
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L3	S05°58'26"E	115.03'	(S06°00'19"E 115.00')
L4	S81°41'38"E	80.84'	(S81°37'35"E 80.98')
L5	N84°03'02"E	49.89'	(N83°59'41"E 49.91')
L6	S39°57'45"E	14.45'	(S40°12'29"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.99')
L8	S19°35'44"W	64.88'	(S19°36'16"W 64.90')
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- LEGEND**
- HERITAGE TREE H
 - TREE TO REMOVE ⊗
 - CRITICAL ROOT ZONE ⊗ ⊗ ⊗

- LEGEND**
- DRAINAGE BOUNDARY

DRAINAGE CALCULATIONS ATLAS 14

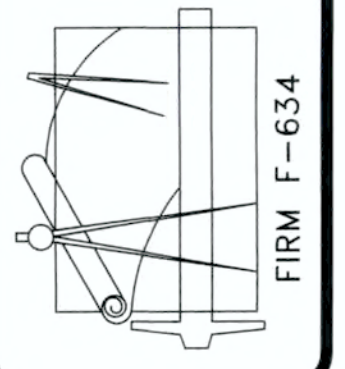
SUBAREA	ACREAGE	IMPERVIOUS COVER	PERCENTAGE
A1	6.10 AC	4.87 AC	79.90 %
A2	2.72 AC	1.87 AC	68.80 %

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 OVERALL SITE MASTER DRAINAGE MAP
 9900 PARKER LANE WEST

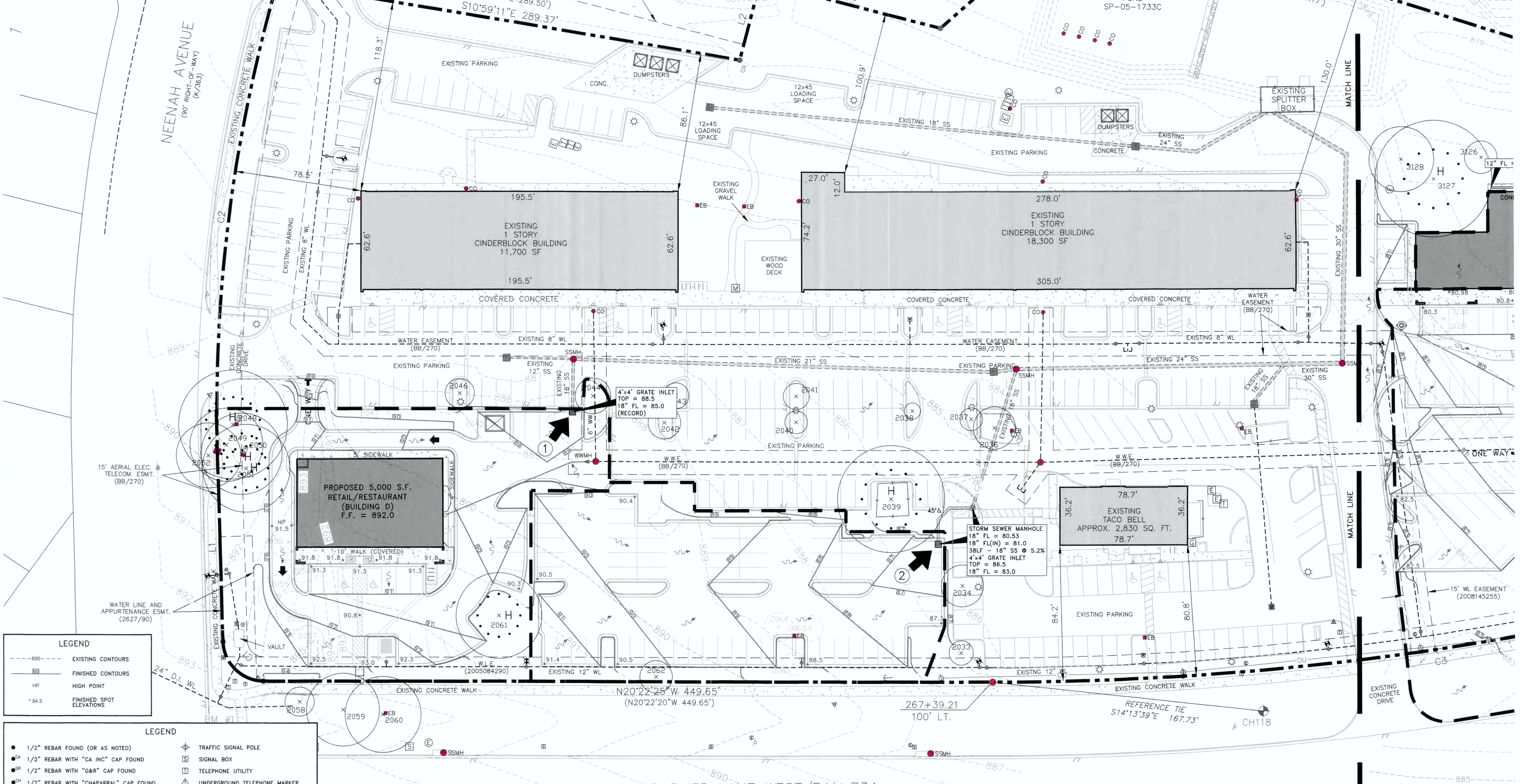


GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 18 of 29

BENCHMARK INFORMATION:
 BM #1: SQUARE CUTE ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'
 BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARMER LANE, APPROXIMATELY 52' WEST OF TYPE II TXDOT MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'
 VERTICAL DATUM: NAVD 88 (GEOID 18)



LEGEND

- 890- EXISTING CONTOURS
- 890- FINISHED CONTOURS
- HP HIGH POINT
- * 94.5 FINISHED SPOT ELEVATIONS

LEGEND

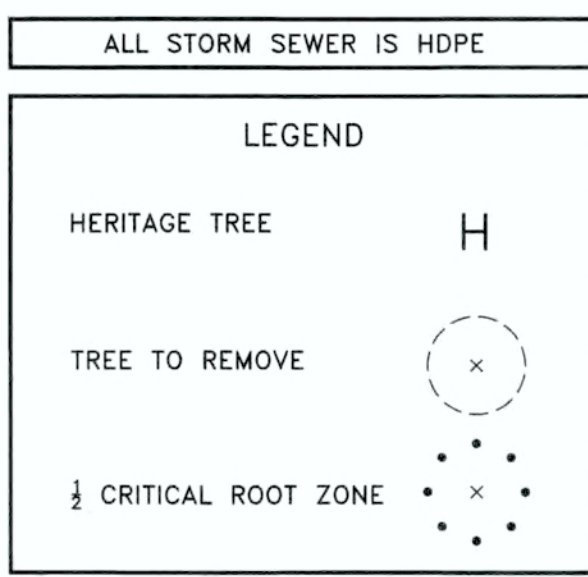
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- ⊠ WATER METER
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- ⊞ GAS UTILITY
- ⊞ CLEANOUT
- ⊞ WWCOD WASTEWATER CLEANOUT
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- ⊞ HANDICAP PARKING SPACE
- ⊞ SIGN
- ⊞ MAILBOX
- ⊞ BOLLARD
- ⊞ EDGE OF ASPHALT PAVEMENT
- ⊞ BARB WIRE FENCE
- ⊞ VENT PIPE
- ⊞ UNDERGROUND FIBER OPTIC MARKER
- () RECORD INFORMATION
- W.W.E. WASTEWATER EASEMENT
- W.L.E. WATER LINE EASEMENT

CURVE TABLE

CURVE	RADIUS	DELTA	ARC	BEARING	CHORD	(RECORD)
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LINE TABLE

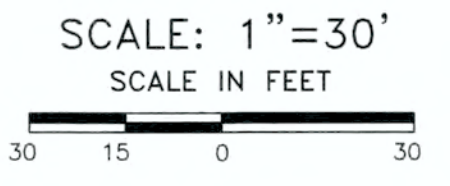
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L12	S62°38'22"W	162.98'	(S62°40'00"W 162.80')



DRAINAGE CALCULATIONS ATLAS 14

SUBAREA	ACREAGE	IMPERVIOUS COVER	Tc	C100	I100	Q100
1	0.80 AC	0.42 AC	5	0.68	15.42	8.4
2	0.63 AC	0.49 AC	5	0.83	15.42	8.1
TOTAL	1.43 AC	0.91 AC				16.5

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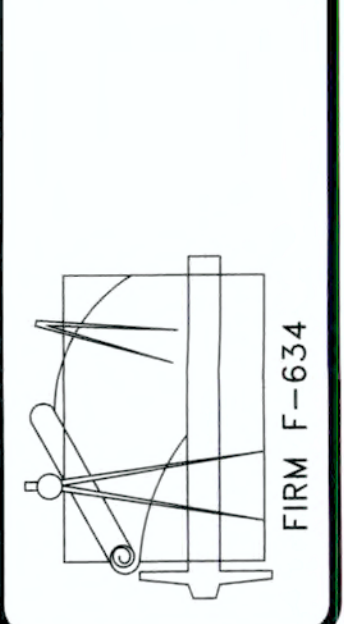


DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED: CS - ER
 JOB NO.:

DAVIS SPRING CENTER
 SITE DRAINAGE AND
 STORM SEWER PLAN
 (NORTH)
 9900 PARMER LANE WEST

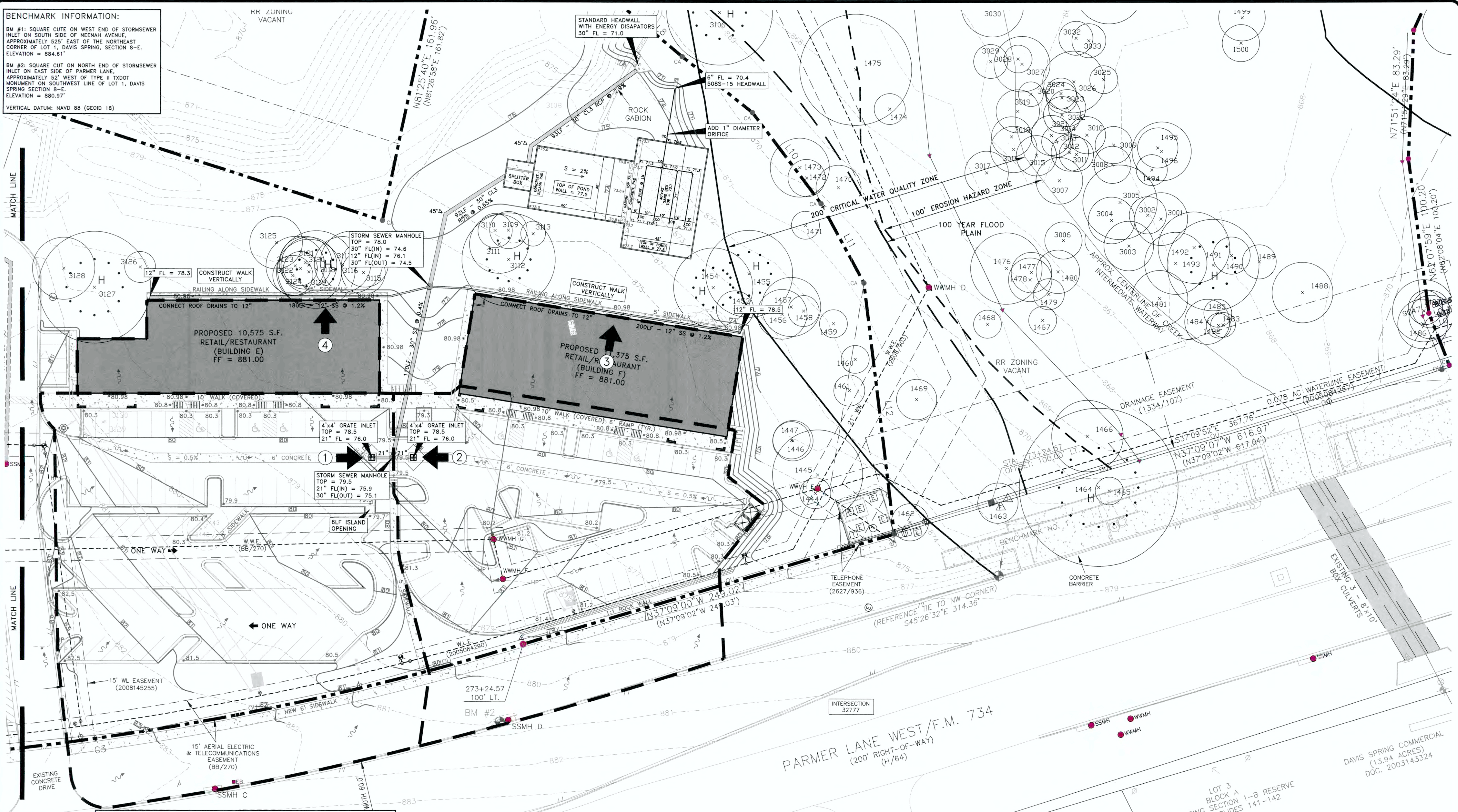


GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 19 of 29

BENCHMARK INFORMATION:
 BM #1: SQUARE CUTE ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'
 BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARMER LANE, APPROXIMATELY 52' WEST OF THE NORTHWEST MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'
 VERTICAL DATUM: NAVD 88 (GEOID 18)



- LEGEND**
- 1/2" REBAR FOUND (OR AS NOTED)
 - CA 1/2" REBAR WITH "CA INC" CAP FOUND
 - GR 1/2" REBAR WITH "GR" CAP FOUND
 - OH 1/2" REBAR WITH "CHAPARRAL" CAP FOUND
 - TxDOT TYPE II DISK FOUND
 - "X" IN CONCRETE FOUND
 - ▲ CALCULATED POINT
 - ⊙ WATER METER
 - ⊙ WATER VALVE
 - ⊙ FIRE HYDRANT
 - ⊙ FIRE DEPARTMENT CONNECT
 - ⊙ SPRINKLER CONTROL VALVE
 - ⊙ UTILITY POLE
 - GUY WIRE
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 - ⊙ UNDERGROUND TELEPHONE MARKER
 - ⊙ TELEPHONE MANHOLE
 - ⊙ GAS UTILITY
 - ⊙ CLEANOUT
 - ⊙ WWC WASTEWATER CLEANOUT
 - ⊙ WWMH WASTEWATER MANHOLE
 - ⊙ SSMH STORMSEWER MANHOLE
 - ⊙ HANDICAP PARKING SPACE
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 - ⊙ MAILBOX
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 - EDGE OF ASPHALT PAVEMENT
 - BARB WIRE FENCE
 - ⊙ VENT PIPE
 - ⊙ UNDERGROUND FIBER OPTIC MARKER
 - () RECORD INFORMATION
 - W.W.E. WASTEWATER EASEMENT
 - W.L.E. WATER LINE EASEMENT

- LEGEND**
- 660' ——— EXISTING CONTOURS
 - HP ——— FINISHED CONTOURS
 - ⊙ 94.5' FINISHED SPOT ELEVATIONS
- LEGEND**
- H HERITAGE TREE
 - ⊙ TREE TO REMOVE
 - ⊙ CRITICAL ROOT ZONE

ALL STORM SEWER IS HDPE

LEGEND

— 660' ——— EXISTING CONTOURS

— HP ——— FINISHED CONTOURS

⊙ 94.5' FINISHED SPOT ELEVATIONS

CURVE	RADIUS	DELTA	ARC BEARING	CHORD	(RECORD)
C1	25.00'	88°25'16"	38.58'	N24°06'58"E 34.86'	(N23°47'52"E 34.84')
C2	955.00'	17°33'58"	292.79'	N76°46'04"E 291.65'	(N76°45'13"E 291.73')
C3	1900.00'	18°46'11"	556.11'	N28°46'41"W 554.12'	(N28°45'23"W 554.11')
C4	955.00'	19°22'53"	323.05'	S84°46'16"E 321.51'	(S84°46'08"E 321.43')
C5	3600.00'	4°52'37"	306.42'	S77°51'57"E 306.33'	(S77°51'20"E 306.33')

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.95')
L2	N84°00'35"E	49.97'	(N83°59'41"E 50.00')
L3	S05°58'26"E	115.03'	(S06°00'19"E 115.00')
L4	S61°41'38"E	60.64'	(S61°37'35"E 60.58')
L5	N84°02'02"E	49.89'	(N83°59'41"E 49.91')
L6	S39°57'45"E	14.45'	(S40°10'29"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.88'	(S19°36'16"W 64.90')
L9	S18°08'13"W	57.80'	(S18°08'43"W 57.84')
L10	S32°39'22"W	73.57'	(S32°37'47"W 73.52')
L11	S41°07'57"W	58.09'	(S41°08'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'00"W 162.90')

DRAINAGE CALCULATIONS ATLAS 14

SUBAREA	ACREAGE	IMPERVIOUS COVER	Tc	C100	I100	Q100
1	1.30 AC	0.78 AC	5	0.73	15.42	14.6
2	0.92 AC	0.59 AC	5	0.75	15.42	10.7
3	0.25 AC	0.25 AC	5	0.97	15.42	3.8
4	0.25 AC	0.25 AC	5	0.97	15.42	3.7
TOTAL	2.72 AC	1.87 AC				32.8

CONTRACTOR'S RESPONSIBILITY
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PARMER LANE WEST/F.M. 734
 (200' RIGHT-OF-WAY)
 (H/64)

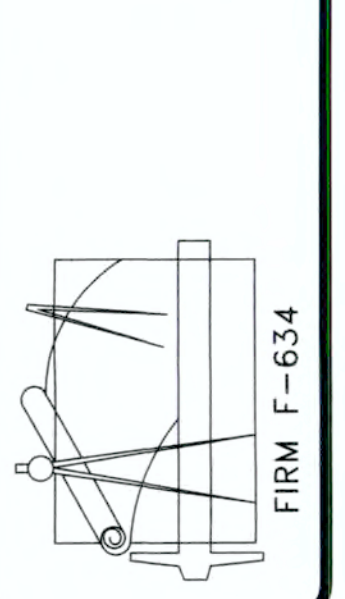
SCALE: 1"=30'
 SCALE IN FEET

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 SITE DRAINAGE AND
 STORM SEWER PLAN
 (SOUTH)
 9900 PARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 20 of 29

BENCHMARK INFORMATION:
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**APPENDIX R-3
 PARTIAL SEDIMENTATION/FILTRATION POND CALCULATIONS
 FOR DEVELOPMENT PERMITS
 SUBAREA A-2**

DRAINAGE AREA DATA:

WATER QUALITY POND	2.51 AC	
DRAINAGE AREA TO CONTROL (DA)	24.0 %	
DRAINAGE AREA IMPERVIOUS COVER (INCREASED FOR FUTURE IC)	1.20 INCHES	
CAPTURE DEPTH (CD)		

WATER QUALITY CONTROL CALCULATIONS:

The Water Quality Control is to be PARTIAL SEDIMENTATION FILTRATION 100-Year Peak Flow Rate to Control (Q100) RATIONAL (ATLAS 14)

	REQUIRED	PROPOSED
Water Quality Volume (WQV=CD*DA*3650)	10,934 cf	10,961 cf
Maximum Ponding Depth above Sand Bed (H)	1.8 ft	1.8 ft
Sedimentation Pond Area	2,400 sf	2,400 sf
Sedimentation Pond Volume (minimum 20% of WQV)	2,187 cf	3,840 cf
Filtration Pond Area (WQV/(4+1.33*H)) H=1.8	1,626 sf	1,680 sf
Filtration Pond Volume	8,207 cf	7,121 cf

Water Quality Elevation

Elevation of Splitter/Overflow Weir	875.6 ft msl	875.6 ft msl
Top of Gation Wall	875.1 ft msl	875.1 ft msl

Length of Splitter Weir

Required Head to Pass Q100	0.75 ft	0.75 ft
Pond Freeboard Provided to Pass Q100	0.65 ft	0.65 ft
48 Hour Drawdown Time Orifice Diameter		1 in

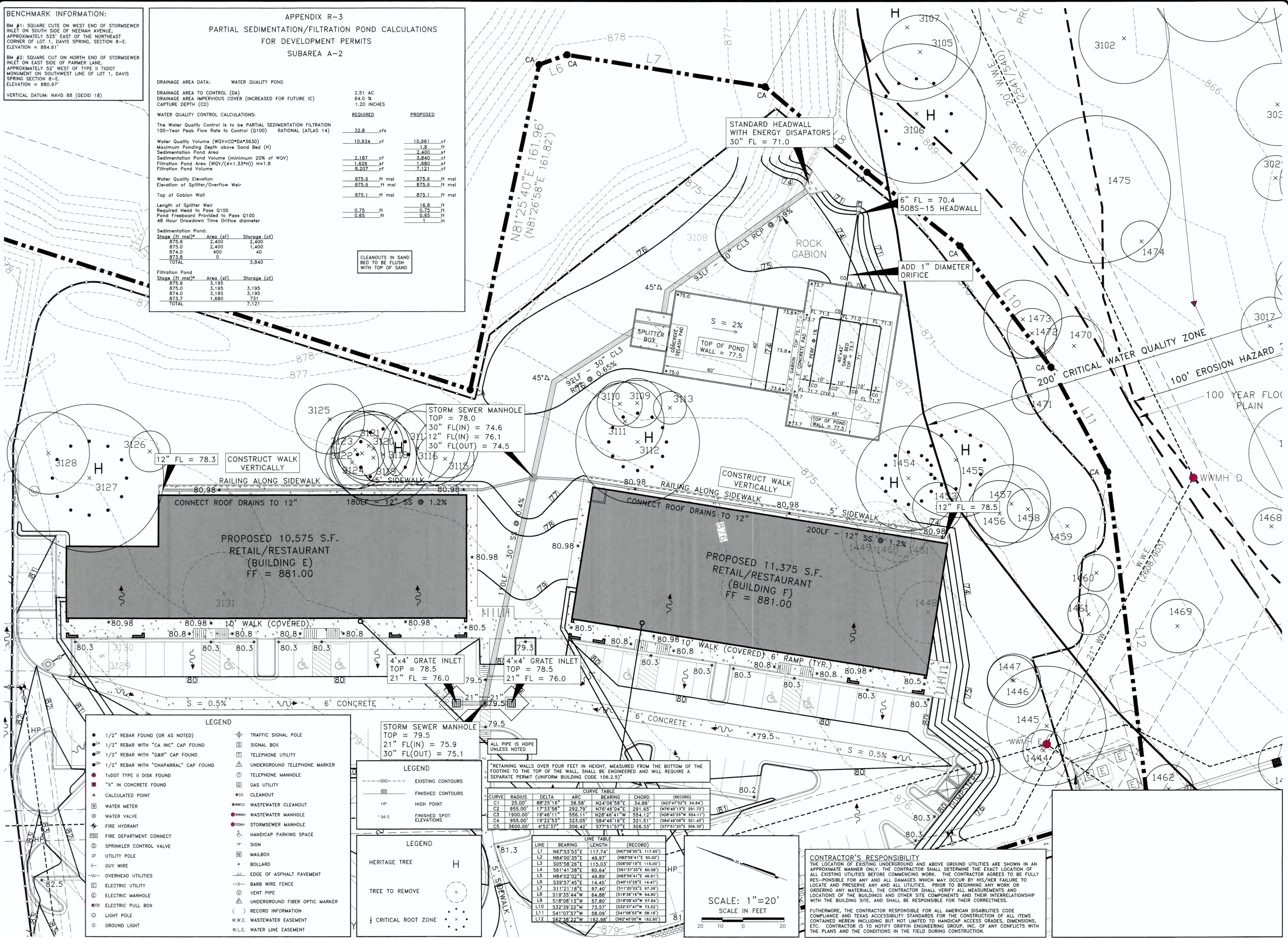
Sedimentation Pond:

Stage (ft. msl)*	Area (sf)	Storage (cf)
875.6	2,400	2,400
875.0	2,400	1,400
874.0	400	40
873.8	0	0
TOTAL		3,840

Filtration Pond

Stage (ft. msl)*	Area (sf)	Storage (cf)
875.6	3,195	3,195
875.0	3,195	3,195
874.0	3,195	3,195
873.7	731	731
TOTAL	1,880	7,121

CLEANOUTS IN SAND BED TO BE FLUSH WITH TOP OF SAND



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- 1/2" REBAR FOUND (OR AS NOTED)
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LEGEND

- EXISTING CONTOURS
- FINISHED CONTOURS
- HIGH POINT
- FINISHED SPOT ELEVATIONS

LEGEND

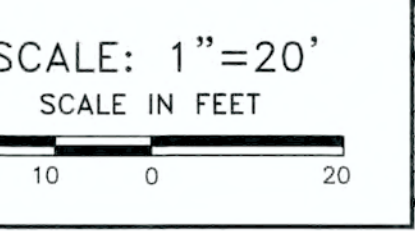
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CURVE TABLE

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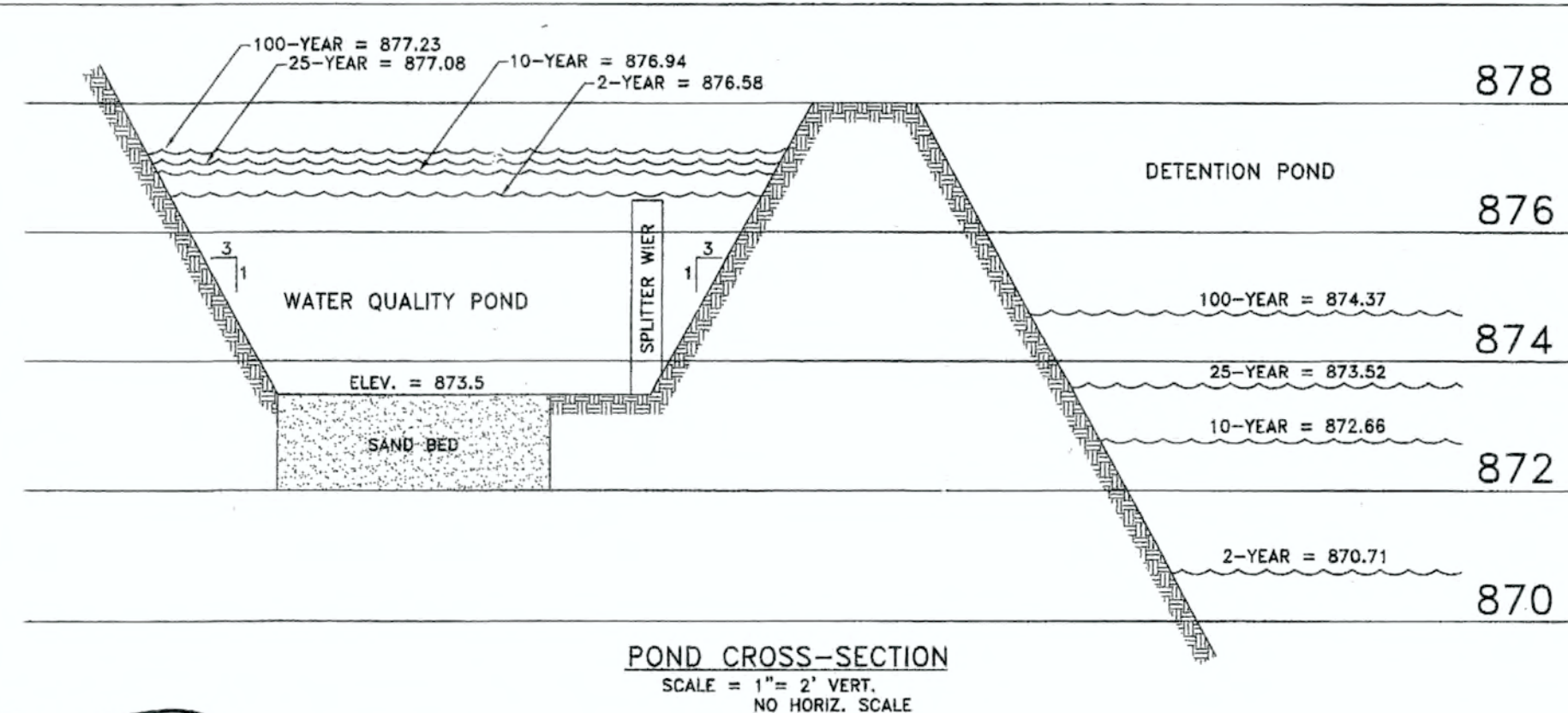
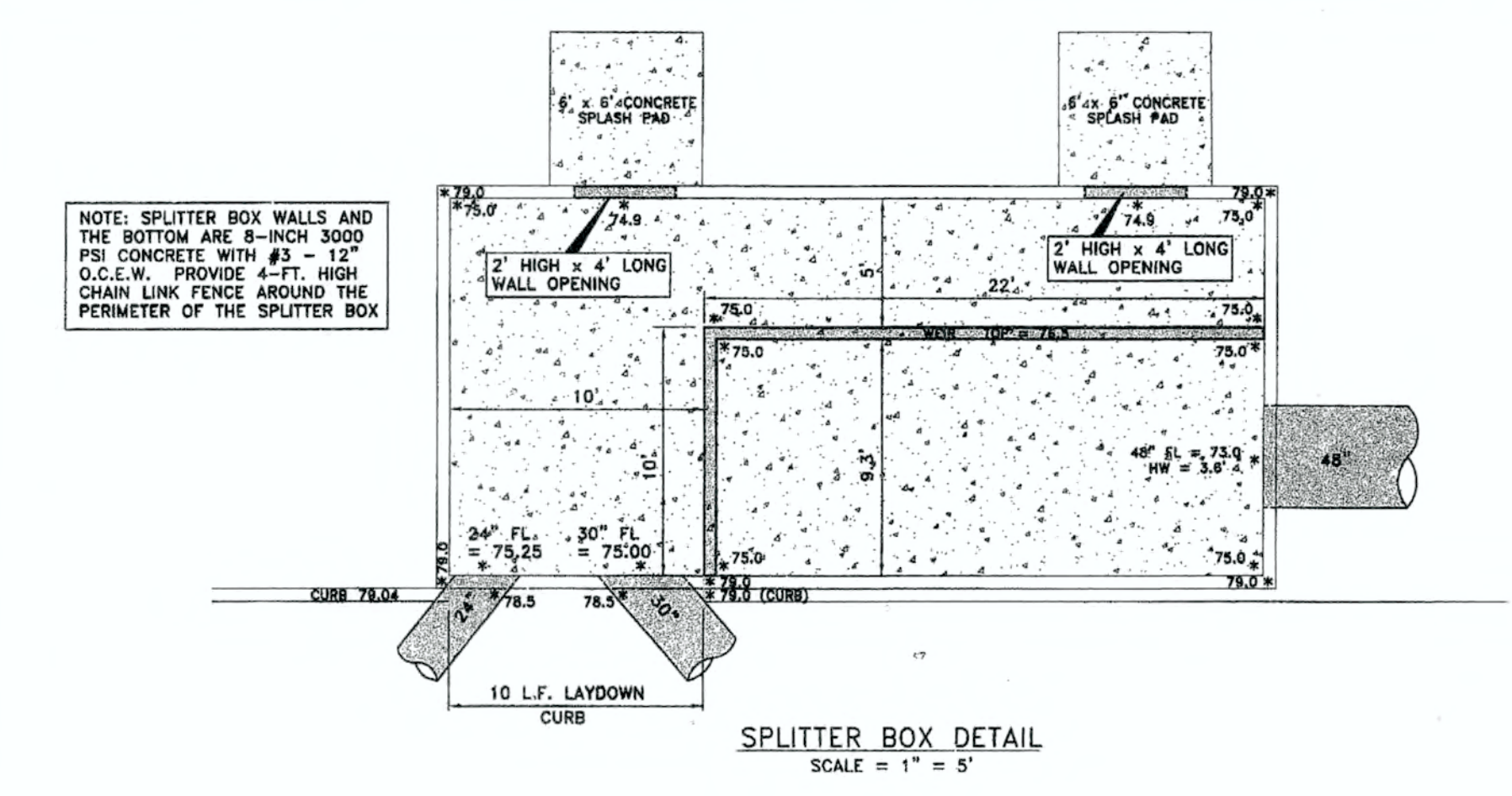
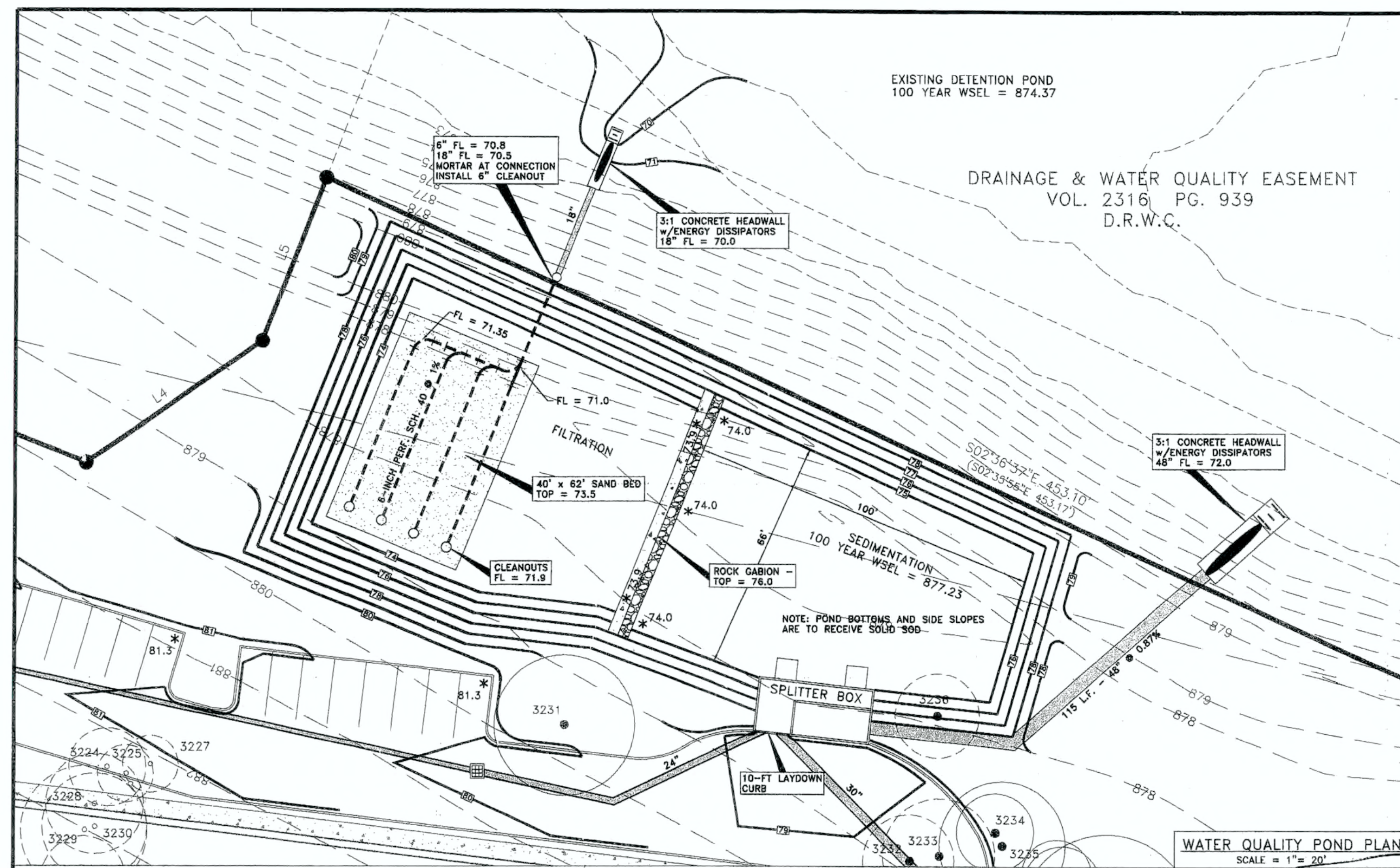
DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED: CS - ER
 JOB NO:

DAVIS SPRING CENTER
 WATER QUALITY POND
 9900 FARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113
 FIRM F-634

SHEET NUMBER
 21 of 29

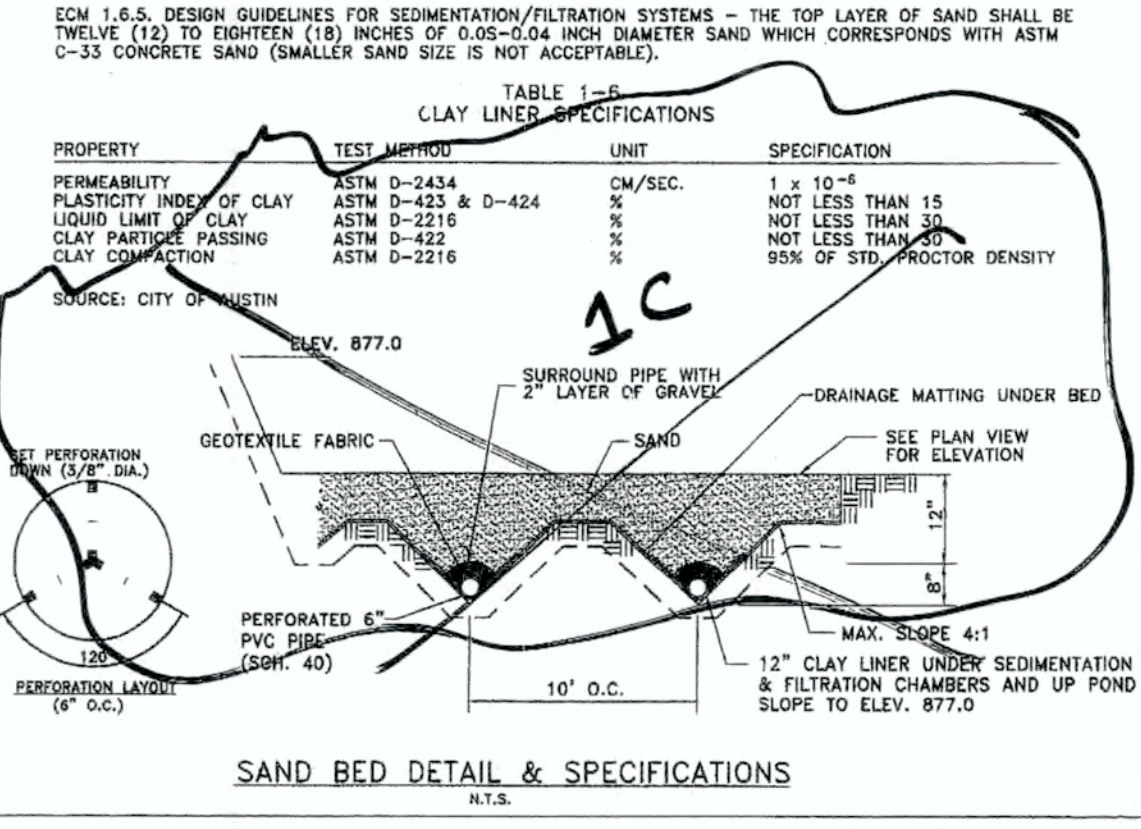


DRAINAGE MATTING SPECIFICATIONS

PROPERTY	TEST METHOD	UNIT	SPECIFICATION
MATERIAL	NONWOVEN GEOTEXTILE FABRIC		
UNIT WEIGHT		Oz/Sq.Yd.	20
FLOW RATE (FABRIC)		GPM/FT ²	180 (MIN.)
PERMEABILITY	ASTM D-2434	CM/SEC	12.4 X 10 ⁻⁵
GRAB STRENGTH (FABRIC)	ASTM D-1682	Lb.	Dry (5-95 Wet W6:70)
PUNCTURE STRENGTH (FABRIC)	COE CW-0215	Lb.	42 (MIN.)
MULLER BURST STRENGTH	ASTM D-1117	Pa	140 (MIN.)
EQUIV. OPENING SIZE	US STANDARD SIEVE	No.	100 (75-120)
FLOW RATE (DRAINAGE CORE)	DREXEL UNIV. TEST METHOD	GPM/FT. WIDTH	14

GEOTEXTILE FABRIC SPECIFICATIONS

PROPERTY	TEST METHOD	UNIT	SPECIFICATION
MATERIAL	NON-WOVEN GEOTEXTILE		
UNIT WEIGHT		Oz/Sq.Yd.	180 (MIN.)
FILTRATION RATE		INCH/SECOND	0.08 (MIN.)
GRAB STRENGTH	ASTM D-1682	Lb.	400 (MIN.)
PUNCTURE STRENGTH	ASTM D-751 (MODIFIED)	Lb.	135 (MIN.)
MULLER BURST STRENGTH	ASTM D-751	Pa	400 (MIN.)
TENSILE STRENGTH	ASTM D-1682	Lb.	300 (MIN.)
EQUIV. OPENING SIZE	US STANDARD SIEVE	No.	300 (MIN.)



**APPENDIX R-3
PARTIAL SEDIMENTATION/FILTRATION POND CALCULATIONS
FOR DEVELOPMENT PERMITS**

DRAINAGE AREA DATA

DRAINAGE AREA TO CONTROL	6.1 ACRES
DRAINAGE AREA IMPERVIOUS COVER	82% (5.0 AC.)
CAPTURE DEPTH	1.12 INCH

WATER QUALITY CONTROL CALCULATIONS

POND #1
THE WATER QUALITY CONTROL IS TO BE PARTIAL SEDIMENTATION/FILTRATION

SITE AREA DRAINING TO POND	6.1 ACRES
TOTAL AREA DRAINING TO THE POND	6.1 ACRES
DESIGN PEAK FLOW RATE Q100 = (0.73)(11.9)(0.86)	62.4 CFS

WATER QUALITY VOLUME (CD* AREA)

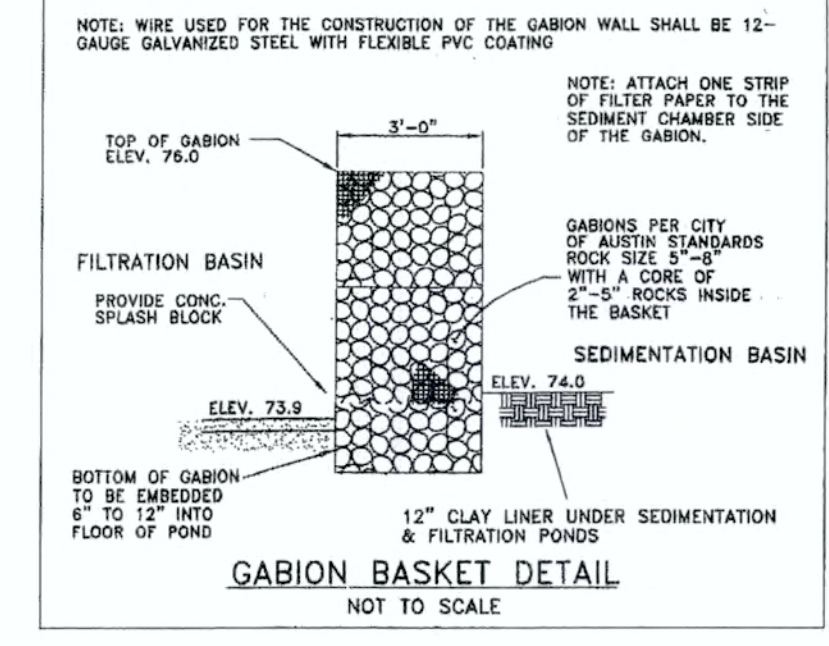
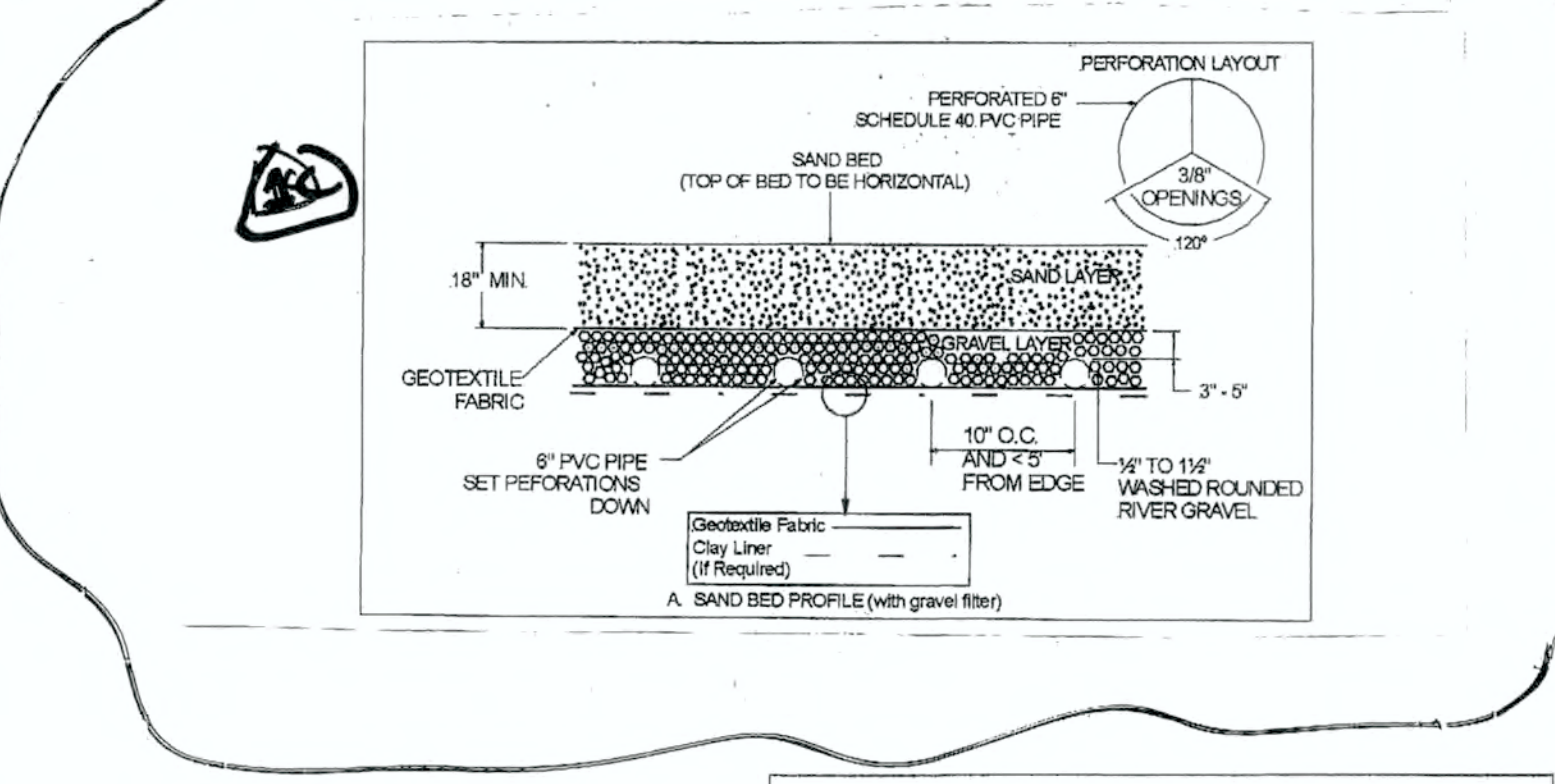
	REQUIRED	PROVIDED
SEDIMENTATION POND AREA	24,800	34,331
SEDIMENTATION POND VOLUME (>20% WQV)	5,790	7,487
FILTRATION POND AREA (WQV/10)	4,960	13,229
FILTRATION POND VOLUME	2,480	2,480
FILTRATION POND VOLUME	19,840	21,102

WATER QUALITY VOLUME ELEVATION

ELEVATION OF SPLITTER/OVERFLOW WEIR (>WQ ELEV.)	876.5 FT. MSL
HEIGHT OF GABION WALL (WQ ELEV. - 0.5')	876.0 FT. MSL
LENGTH OF SPLITTER WEIR	32.0 FT.
REQUIRED HEAD TO PASS THE DESIGN FLOW	0.75 FT.
SEDIMENTATION POND FREEBOARD PROVIDED TO PASS DESIGN FLOW	0.75 FT.

POND VOLUMES

SEDIMENTATION POND VOLUME			FILTRATION POND VOLUME		
ELEV.	AREA	STORAGE	ELEV.	AREA	STORAGE
876.5	7467	5604	876.5	8691	4217
876.0	6950	3475	876.0	8180	7755
875.0	6150	0	875.0	7331	6895
874.0	0	0	874.0	6458	6895
873.5	0	0	873.5	2480	2234
TOTAL SEDIMENTATION 13,229 C.F.			TOTAL FILTRATION 21,102 C.F.		



GRIFFIN ENGINEERING GROUP, INC.
11711 NORTH LAMAR BLVD., AUSTIN, TEXAS 78753 (512) 836-3115

DAVIS SPRING CENTER
9900 WEST PARMER LANE
WATER QUALITY POND PLAN AND DETAILS

SCALE: 1" = 20'

SITE PLAN RELEASE Sheet 13 of 22

FILE NUMBER: SP-05-1733C EXPIRATION DATE: 8/1/09

CASE MANAGER: NIKKI HOELTER APPLICATION DATE: DECEMBER 21, 2005

APPROVED ADMINISTRATIVELY ON: 6/1/06

APPROVED BY PLANNING COMMISSION ON: N/A

APPROVED BY CITY COUNCIL ON: N/A

Under Section 118 of Chapter 25-5 of the Austin City Code.

Signing for Director, Watershed Protection & Development Review Department
DATE OF RELEASE: 6/1/06 Zoning: GR-CD

Rev. 1 Correction 1 N/A 3/12/08

Rev. 2 Correction 2

RELEASE OF THIS INFORMATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.

SHEET NUMBER 13 OF 22

DRAWING DATE: APRIL 14, 2006

CASE NO. SP-05-1733C FILED 12/21/2005

DATE: OCT. 2023
DESIGNED:
DRAWN: CS - ER
CHECKED:
JOB NO.:

DAVIS SPRING CENTER
EXISTING WATER QUALITY POND
SP-05-1733C
9900 PARMER LANE WEST

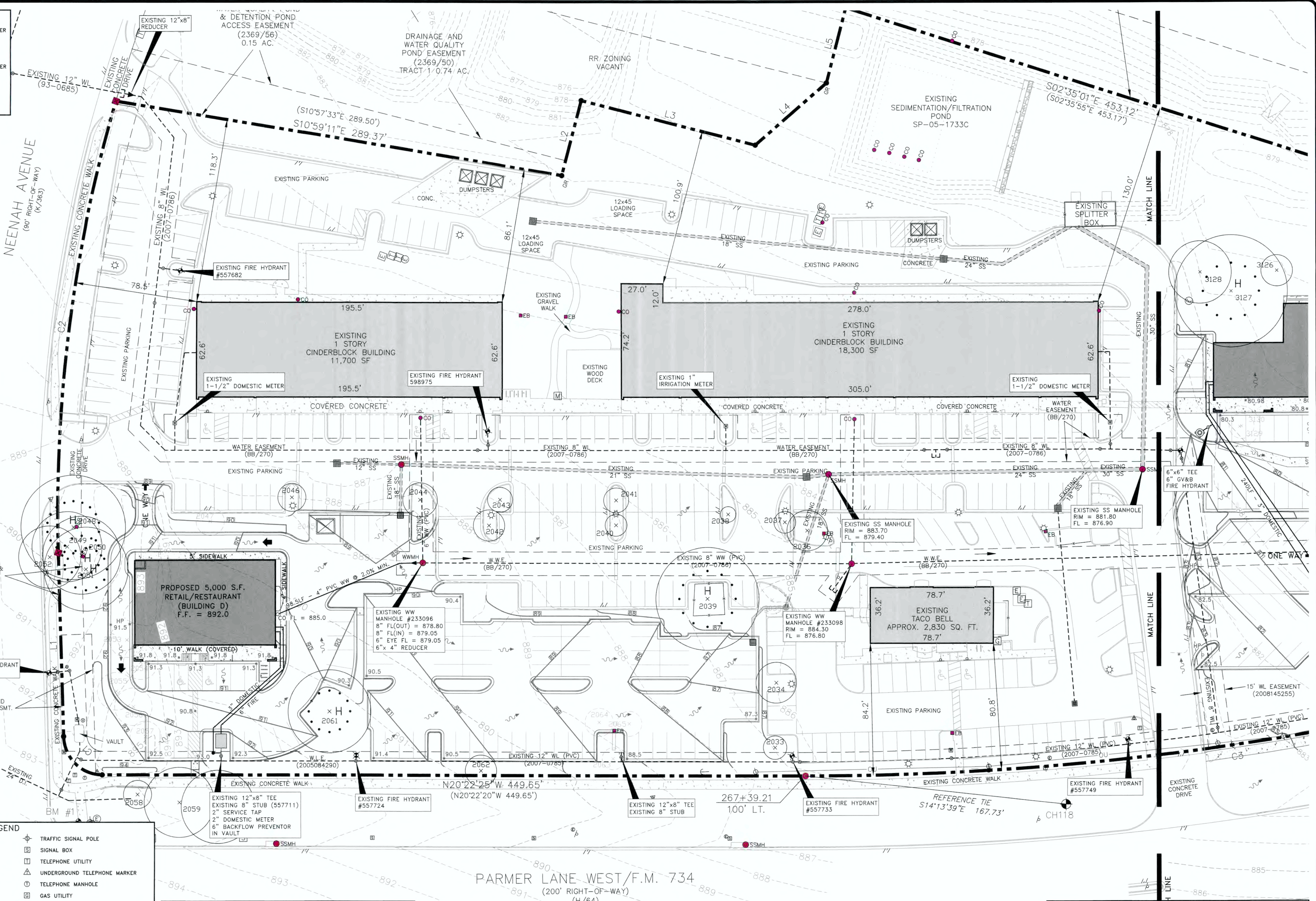


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11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113

FIRM F-634

SHEET NUMBER
22 of 29

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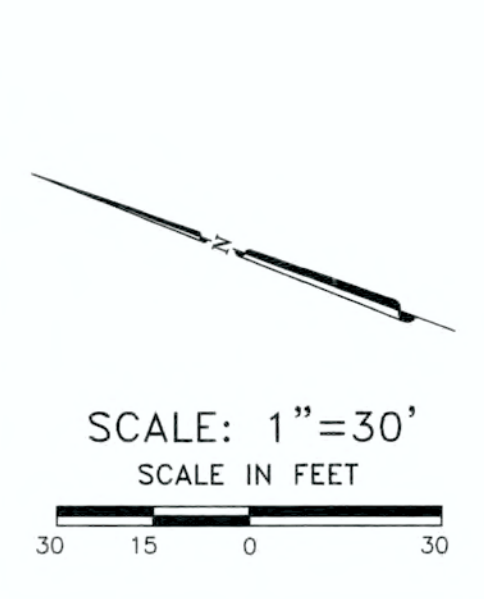
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C3	1900.00'	16°46'11"	556.11'	N28°46'41"W	554.12'	(N28°45'25"W 554.17')
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C5	3600.00'	4°52'37"	306.42'	S77°51'57"E	306.33'	(S77°51'20"E 306.35')

LINE TABLE

LINE	BEARING	LENGTH	(RECORD)
L1	N67°53'53"E	117.74'	(N67°58'05"E 117.85')
L2	N84°00'35"E	49.97'	(N83°59'41"E 50.00')
L3	S05°58'26"E	115.03'	(S06°00'19"E 115.00')
L4	S61°41'38"E	60.64'	(S61°37'35"E 60.58')
L5	N84°02'00"E	49.89'	(N83°59'41"E 49.81')
L6	S39°57'45"E	14.45'	(S40°10'29"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.88'	(S19°36'16"W 64.90')
L9	S18°08'13"W	57.80'	(S18°06'43"W 57.84')
L10	S32°39'22"W	73.57'	(S32°37'47"W 73.52')
L11	S41°07'57"W	58.09'	(S41°06'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'00"W 162.80')

- LEGEND**
- H HERITAGE TREE
 - ⊗ TREE TO REMOVE
 - ⊕ CRITICAL ROOT ZONE



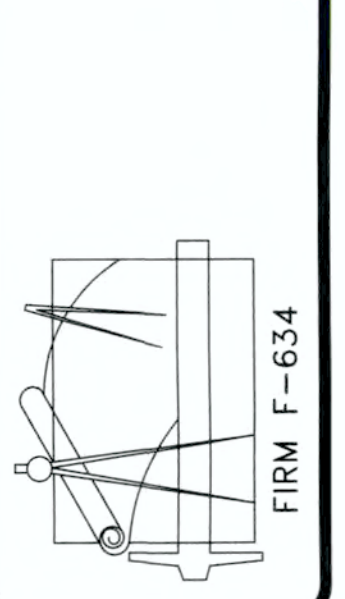
CONTRACTOR'S RESPONSIBILITY
 THE LOCATION OF EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LOCATIONS OF THE BUILDINGS AND OTHER SITE COMPONENTS AND THEIR INTERRELATIONSHIP WITH THE BUILDING SITE, AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.
 FURTHERMORE, THE CONTRACTOR RESPONSIBLE FOR ALL AMERICAN DISABILITIES CODE COMPLIANCE AND TEXAS ACCESSIBILITY STANDARDS FOR THE CONSTRUCTION OF ALL ITEMS CONTAINED HEREIN INCLUDING BUT NOT LIMITED TO HANDICAP ACCESS GRADES, DIMENSIONS, ETC. CONTRACTOR IS TO NOTIFY GRIFFIN ENGINEERING GROUP, INC. OF ANY CONFLICTS WITH THE PLANS AND THE CONDITIONS IN THE FIELD DURING CONSTRUCTION.

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 WATER AND WASTEWATER PLAN
 (NORTH)
 9900 PARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



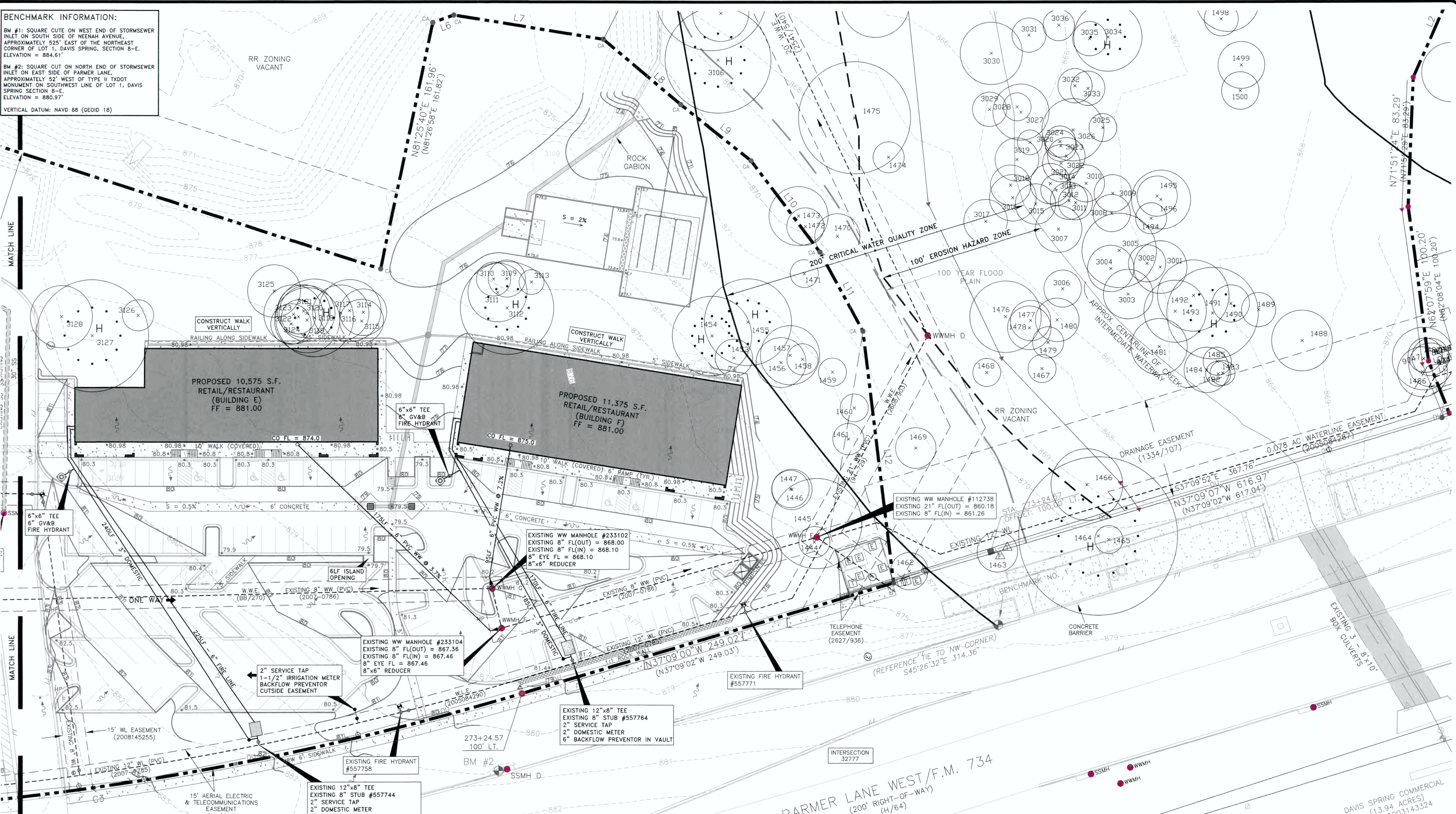
SHEET NUMBER
 23 of 29

BENCHMARK INFORMATION:

BM #1: SQUARE CUT ON WEST END OF STORMSEWER INLET ON SOUTH SIDE OF NEENAH AVENUE, APPROXIMATELY 525' EAST OF THE NORTHEAST CORNER OF LOT 1, DAVIS SPRING, SECTION 8-E. ELEVATION = 884.61'

BM #2: SQUARE CUT ON NORTH END OF STORMSEWER INLET ON EAST SIDE OF PARMER LANE, APPROXIMATELY 52' WEST OF TYPE II TXDOT MONUMENT ON SOUTHWEST LINE OF LOT 1, DAVIS SPRING SECTION 8-E. ELEVATION = 880.97'

VERTICAL DATUM: NAVD 88 (GEOID 18)



- LEGEND**
- 1/2" REBAR FOUND (OR AS NOTED)
 - 1/2" REBAR WITH "CA INC" CAP FOUND
 - 1/2" REBAR WITH "O&R" CAP FOUND
 - 1/2" REBAR WITH "CHAPARRAL" CAP FOUND
 - TXDOT TYPE II DISK FOUND
 - "X" IN CONCRETE FOUND
 - ▲ CALCULATED POINT
 - ⊠ WATER METER
 - ⊞ WATER VALVE
 - ⊕ FIRE HYDRANT
 - ⊞ FIRE DEPARTMENT CONNECT
 - ⊞ SPRINKLER CONTROL VALVE
 - ⊞ UTILITY POLE
 - ⊞ BOLLARD
 - ⊞ GUY WIRE
 - ⊞ OVERHEAD UTILITIES
 - ⊞ ELECTRIC UTILITY
 - ⊞ ELECTRIC MANHOLE
 - ⊞ ELECTRIC PULL BOX
 - ⊞ LIGHT POLE
 - ⊞ GROUND LIGHT
 - ⊞ TRAFFIC SIGNAL POLE
 - ⊞ SIGNAL BOX
 - ⊞ TELEPHONE UTILITY
 - ⊞ UNDERGROUND TELEPHONE MARKER
 - ⊞ TELEPHONE MANHOLE
 - ⊞ GAS UTILITY
 - ⊞ CLEANOUT
 - ⊞ WASTEWATER CLEANOUT
 - ⊞ WASTEWATER MANHOLE
 - ⊞ STORMSEWER MANHOLE
 - ⊞ HANDICAP PARKING SPACE
 - ⊞ SIGN
 - ⊞ MAILBOX
 - ⊞ BOLLARD
 - ⊞ EDGE OF ASPHALT PAVEMENT
 - ⊞ BOLLARD
 - ⊞ BOLLARD
 - ⊞ VENT PIPE
 - ⊞ UNDERGROUND FIBER OPTIC MARKER
 - ⊞ RECORD INFORMATION
 - ⊞ W.W.E. WASTEWATER EASEMENT
 - ⊞ W.L.E. WATER LINE EASEMENT

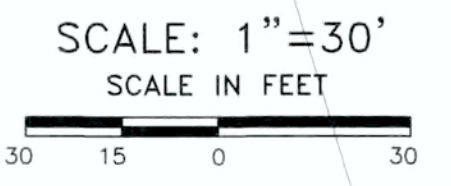
CURVE TABLE

CURVE	RADIUS	DELTA	ARC LENGTH	ARC BEARING	CHORD	(RECORD)
C1	25.00'	88°25'16"	38.58'	N24°06'58"E	34.86'	(N23°47'52"E 34.84')
C2	955.00'	17°33'58"	292.79'	N76°46'04"E	291.65'	(N76°45'13"E 291.73')
C3	1900.00'	16°46'11"	556.11'	N28°46'41"W	554.12'	(N28°45'25"W 554.11')
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L4	S61°41'38"E	60.64'	(S61°37'35"E 60.58')
L5	N84°02'02"E	49.89'	(N83°59'41"E 49.91')
L6	S39°57'45"E	14.45'	(S40°10'29"E 14.47')
L7	S11°21'18"E	97.40'	(S11°20'02"E 97.39')
L8	S19°35'44"W	64.88'	(S19°36'16"W 64.90')
L9	S18°08'13"W	57.80'	(S18°08'43"W 57.84')
L10	S32°39'22"W	73.57'	(S32°47'17"W 73.52')
L11	S41°07'57"W	58.09'	(S41°08'53"W 58.16')
L12	S62°38'22"W	162.98'	(S62°40'00"W 162.90')

- LEGEND**
- ⊞ HERITAGE TREE
 - ⊞ TREE TO REMOVE
 - ⊞ CRITICAL ROOT ZONE



CONTRACTOR'S RESPONSIBILITY

THE LOCATION OF EXISTING UNDERGROUND AND ABOVE GROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS/HER FAILURE TO LOCATE AND PRESERVE ANY AND ALL UTILITIES. PRIOR TO BEGINNING ANY WORK OR ORDERING ANY MATERIALS, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND LOCATIONS OF THE BUILDINGS AND OTHER SITE COMPONENTS AND THEIR INTERRELATIONSHIP WITH THE BUILDING SITE, AND SHALL BE RESPONSIBLE FOR THEIR CORRECTNESS.

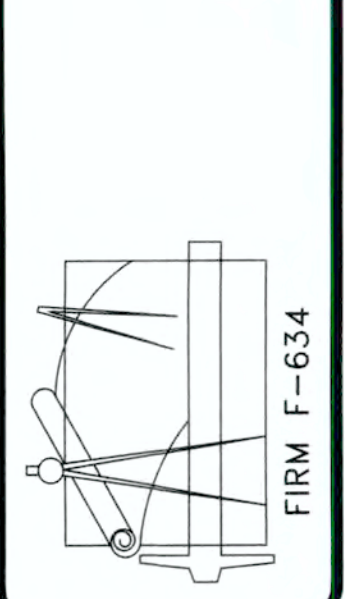
FURTHERMORE, THE CONTRACTOR RESPONSIBLE FOR ALL AMERICAN DISABILITIES CODE COMPLIANCE AND TEXAS ACCESSIBILITY STANDARDS FOR THE CONSTRUCTION OF ALL ITEMS CONTAINED HEREIN INCLUDING BUT NOT LIMITED TO HANDICAP ACCESS GRADES, DIMENSIONS, ETC. CONTRACTOR IS TO NOTIFY GRIFFIN ENGINEERING GROUP, INC. OF ANY CONFLICTS WITH THE PLANS AND THE CONDITIONS IN THE FIELD DURING CONSTRUCTION.

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 WATER AND WASTEWATER PLAN
 (SOUTH)
 9900 PARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
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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 FACILITIES. ALL OTHER WATER AND WASTEWATER FACILITIES 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.

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 plans will be reviewed and coordinated through Austin Water's Asbestos Program Manager who can be reached at 512-972-0915. 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 untechnical 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

PROJECT INFORMATION¹ BUILDING 1

FIRE, DOMESTIC AND IRRIGATION DEMAND DATA	
GRID NUMBER:	H41
MAPSCO NUMBER:	404
AW INTERSECTION NUMBER:	20639 / 32670 / 32671 / 3277 / 32778
BUILDING SIZE IN SQUARE FEET:	5,000
BUILDING TYPE PER IFC:	V - B
BUILDING HEIGHT:	30 Ft
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	1,620
REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2):	2,000
REDUCED FIRE FLOW PER 75% FIRE SPRINKLER REDUCTION PER IFC TABLE B105.2:	1,500
MINIMUM FIRE FLOW (SEE NOTE #2 BELOW):	1,500
DOMESTIC WATER DEMAND IN GPM:	160
WATER SUPPLY FIXTURE UNITS (WSFU) FLUSH TANKS OR FLUSHMETERS (CIRCLE APPLICABLE ITEM):	NOT KNOWN - SPEC
AUSTIN WATER PRESSURE ZONE:	NWA
STATIC WATER PRESSURE IN PSI:	81
STATIC PRESSURE AT THE HIGHEST LOT SERVED IN PSI:	79
STATIC PRESSURE AT THE LOWEST LOT SERVED IN PSI:	81
MAXIMUM IRRIGATION DEMAND:	120
FIRE LINE VELOCITY: 6 SIZE OF FIRE LINE	8
DOMESTIC LINE VELOCITY: 3 SIZE OF DOMESTIC LINE	6
LIVING UNIT EQUIVALENTS (LUEs)	NOT KNOWN - SPEC

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. MIN FIRE FLOW: DESIGN ENGINEER MUST INDICATE VALUES WHICH COMPLY WITH IFC TABLES B105.1(2) OR B105.2 (REQUIRED OR REDUCED FIRE FLOWS). MIN FIRE FLOW VALUE SHALL BE NO LESS THAN 1000 GPM FOR NFPA 13 SYSTEMS OR 1500 GPM FOR NFPA 13R 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.

PROJECT INFORMATION¹ BUILDING 2

FIRE, DOMESTIC AND IRRIGATION DEMAND DATA	
GRID NUMBER:	H41
MAPSCO NUMBER:	404
AW INTERSECTION NUMBER:	20639 / 32670 / 32671 / 3277 / 32778
BUILDING SIZE IN SQUARE FEET:	10,575
BUILDING TYPE PER IFC:	V - B
BUILDING HEIGHT:	30 Ft
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	1,620
REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2):	2,750
REDUCED FIRE FLOW PER 75% FIRE SPRINKLER REDUCTION PER IFC TABLE B105.2:	1,500
MINIMUM FIRE FLOW (SEE NOTE #2 BELOW):	1,500
DOMESTIC WATER DEMAND IN GPM:	160
WATER SUPPLY FIXTURE UNITS (WSFU) FLUSH TANKS OR FLUSHMETERS (CIRCLE APPLICABLE ITEM):	NOT KNOWN - SPEC
AUSTIN WATER PRESSURE ZONE:	NWA
STATIC WATER PRESSURE IN PSI:	81
STATIC PRESSURE AT THE HIGHEST LOT SERVED IN PSI:	79
STATIC PRESSURE AT THE LOWEST LOT SERVED IN PSI:	81
MAXIMUM IRRIGATION DEMAND:	120
FIRE LINE VELOCITY: 6 SIZE OF FIRE LINE	8
DOMESTIC LINE VELOCITY: 3 SIZE OF DOMESTIC LINE	6
LIVING UNIT EQUIVALENTS (LUEs)	NOT KNOWN - SPEC

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. MIN FIRE FLOW: DESIGN ENGINEER MUST INDICATE VALUES WHICH COMPLY WITH IFC TABLES B105.1(2) OR B105.2 (REQUIRED OR REDUCED FIRE FLOWS). MIN FIRE FLOW VALUE SHALL BE NO LESS THAN 1000 GPM FOR NFPA 13 SYSTEMS OR 1500 GPM FOR NFPA 13R 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.

PROJECT INFORMATION¹ BUILDING 3

FIRE, DOMESTIC AND IRRIGATION DEMAND DATA	
GRID NUMBER:	H41
MAPSCO NUMBER:	404
AW INTERSECTION NUMBER:	20639 / 32670 / 32671 / 3277 / 32778
BUILDING SIZE IN SQUARE FEET:	11,375
BUILDING TYPE PER IFC:	V - B
BUILDING HEIGHT:	30 Ft
AVAILABLE FIRE FLOW CALCS AT 20 PSI:	1,620
REQUIRED BUILDING FIRE FLOW PER IFC TABLE B105.1(2):	3,000
REDUCED FIRE FLOW PER 75% FIRE SPRINKLER REDUCTION PER IFC TABLE B105.2:	1,500
MINIMUM FIRE FLOW (SEE NOTE #2 BELOW):	1500
DOMESTIC WATER DEMAND IN GPM:	160
WATER SUPPLY FIXTURE UNITS (WSFU) FLUSH TANKS OR FLUSHMETERS (CIRCLE APPLICABLE ITEM):	NOT KNOWN - SPEC
AUSTIN WATER PRESSURE ZONE:	NWA
STATIC WATER PRESSURE IN PSI:	81
STATIC PRESSURE AT THE HIGHEST LOT SERVED IN PSI:	79
STATIC PRESSURE AT THE LOWEST LOT SERVED IN PSI:	81
MAXIMUM IRRIGATION DEMAND:	120
FIRE LINE VELOCITY: 6 SIZE OF FIRE LINE	8
DOMESTIC LINE VELOCITY: 3 SIZE OF DOMESTIC LINE	6
LIVING UNIT EQUIVALENTS (LUEs)	NOT KNOWN - SPEC

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. MIN FIRE FLOW: DESIGN ENGINEER MUST INDICATE VALUES WHICH COMPLY WITH IFC TABLES B105.1(2) OR B105.2 (REQUIRED OR REDUCED FIRE FLOWS). MIN FIRE FLOW VALUE SHALL BE NO LESS THAN 1000 GPM FOR NFPA 13 SYSTEMS OR 1500 GPM FOR NFPA 13R 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.

Meter Notice:
 Meter 1.5 inches and larger must be purchased and ordered 90 days in advance of installation.

Meter(s) Requirement for Project:
 Address: 9900 WEST PARMER LANE
 Proposed Use: RETAIL RESTAURANT - DOMESTIC
 Type: POSITIVE DISPLACEMENT
 Size: 2" GPM Range: 8 - 160
 Service Units: 8

Meter(s) Requirement for Project:
 Address: 9900 WEST PARMER LANE
 Proposed Use: RETAIL RESTAURANT - DOMESTIC
 Type: POSITIVE DISPLACEMENT
 Size: 2" GPM Range: 8 - 160
 Service Units: 8

Meter(s) Requirement for Project:
 Address: 9900 WEST PARMER LANE
 Proposed Use: RETAIL RESTAURANT - DOMESTIC
 Type: POSITIVE DISPLACEMENT
 Size: 2" GPM Range: 8 - 160
 Service Units: 8

Reclaimed Meter(s) Requirement for Project:
 Address: N/A
 Proposed Use:
 Type:
 Size: GPM Range:

FIRE FLOW TEST DATA

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

Hydrant Flow Test Report

TEST DATE: 08/05/2023	FIRE BOX: 4501	COMPANY: PREVENTION
TIME: 1130 hrs	MAP GRID ID: H41	AFD STAFF: SHEEHAN, BRADLEY

RESIDUAL HYDRANT

RESIDUAL HYDRANT #	598975	MAIN SIZE (in.)	8
BLK #	9900	DIRECTION	W
STREET NAME	PARMER	TYPE	LN
STATIC PRESSURE (PSI)	102	RESIDUAL PRESSURE (PSI)	48

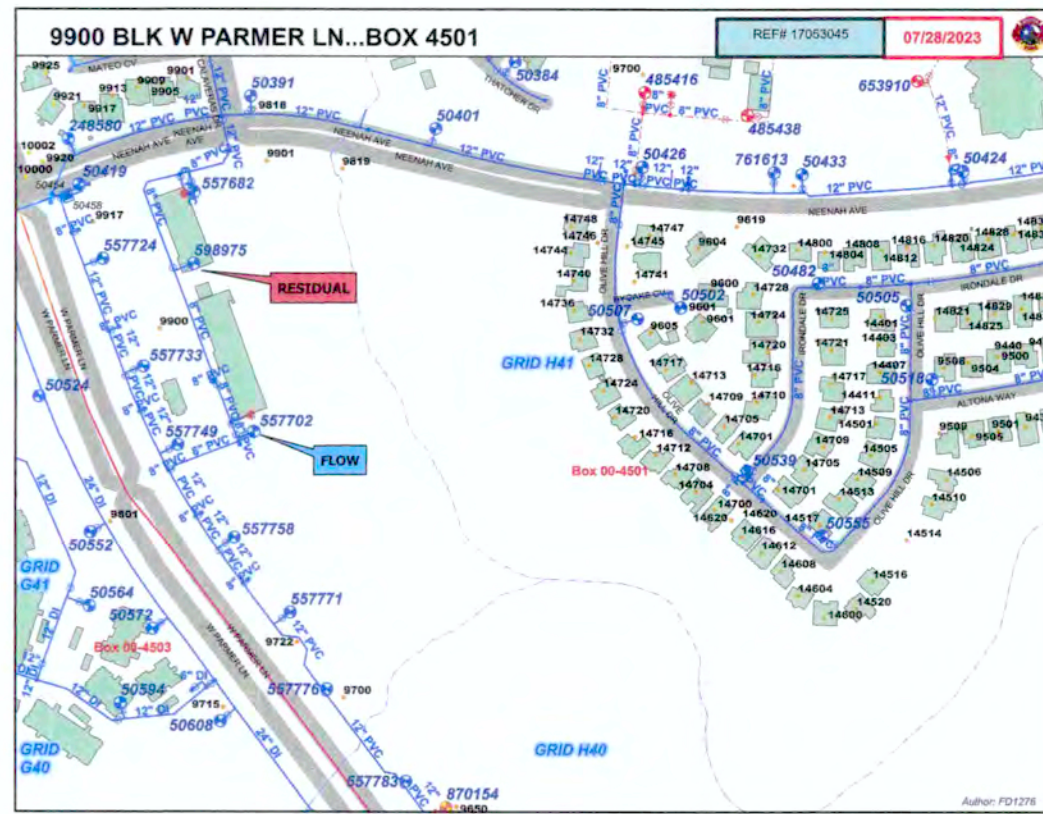
FLOW HYDRANT

FLOW HYDRANT #	57702	MAIN SIZE (in.)	8
BLK #	9900	DIRECTION	W
STREET NAME	PARMER	TYPE	LN
STATIC PRESSURE (PSI)	81	RESIDUAL PRESSURE (PSI)	40

Comments: $Q = \frac{1.487}{C} \sqrt{P} H^{5/2}$
 $C = 100$
 $H = 65 - 48 = 17$
 $Q = \frac{1.487}{100} \sqrt{17} 17^{5/2} = 1060$

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.

FIRE FLOW MAP



AW INFRASTRUCTURE INFORMATION			
PROPOSED PRODUCT TYPE (TO BE INSTALLED)	LENGTH OF PIPE (L.F.)	SIZE OF PIPE (INCH)	NO. OF SERVICES
WATER MAIN			NA
WASTEWATER MAIN			NA
RECLAIMED WATER MAIN			NA
WATER SERVICE	NA	NA	NA
WASTEWATER SERVICE	NA	NA	NA
RECLAIMED WATER SERVICE	NA	NA	NA

EXPAND OR REDUCE TABLE AS NEEDED.
 THE INFORMATION INCLUDED IN THIS TABLE ARE APPROXIMATE VALUES ESTIMATED BASED ON GENERAL ENGINEERING GUIDELINES.

INSPECTION NOTES

Please contact Development Services Department, Site and Subdivision Inspection at stes@intake@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 held.

STANDARD CONSTRUCTION NOTES

October 1, 2021

- THE CITY STANDARD CONSTRUCTION SPECIFICATIONS CURRENT AT THE TIME OF BIDDING SHALL COVER MATERIALS AND METHODS USED TO DO THIS WORK.
- CONTRACTOR MUST OBTAIN A ROW PERMIT FROM AUSTIN TRANSPORTATION DEPT., 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 TOP.
- 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, DEVELOPMENT SERVICES, OR PUBLIC WORKS). SEE CURRENT NOTIFICATION REQUIREMENTS AT WWW.AUSTINTEXAS.GOV.
- 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.
- 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.
- MINIMUM TRENCH SAFETY MEASURES SHALL BE PROVIDED, AS REQUIRED BY OSHA, CITY SPECIFICATION 5095, AND CITY/COUNTY CONSTRUCTION INSPECTORS.
- ALL MATERIALS TESTS ORDERED BY THE OWNER FOR QUALITY ASSURANCE PURPOSES, SHALL BE CONDUCTED BY AN INDEPENDENT LABORATORY AND FUNDED BY THE OWNER IN ACCORDANCE WITH CITY STANDARD SPECIFICATION ITEM 1804.6.
- PRESSURE TAPS SHALL 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 BY 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.
- 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 AT THE PRESSURES SHOWN ON THE APPROVED PLANS.
- 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.
- 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 DETAILS. WHEN POLYETHYLENE (PE) 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.
- 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.
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTOR SO THAT HE CAN NOTIFY THE AUSTIN WATER AT 972-0000 AT A MINIMUM OF 72 HOURS PRIOR TO RELOCATING ANY DOMESTIC OR FIRE DEMAND WATER METERS. THE CONTRACTOR SHALL CAREFULLY REMOVE ALL METERS AND METERS BOXES THAT ARE INDICATED TO BE RELOCATED OR SALVAGED. THE CONTRACTOR SHALL INSTALL THE REMOVED METER OR CITY PROVIDED METER AT THE NEW LOCATION INDICATED ON THE CONSTRUCTION PLANS.
- THE CONTRACTOR SHALL VERIFY ALL VERTICAL AND HORIZONTAL LOCATIONS OF EXISTING UTILITIES, BELOW GROUND AND OVERHEAD, PRIOR TO STARTING ON-SITE UTILITY WORK.
- ALL WATER, WASTEWATER, AND RECLAIMED MAINS SHALL BE INSTALLED IN ACCORDANCE WITH THE SEPARATION DISTANCES INDICATED ON THE PLANS, PER UTILITY CRITERIA MANUAL AND TCEQ CHAPTERS 210, 217, AND 290.
- 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.
- 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.
- 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 512-972-1280.
- 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.
- THE ENGINEER SHALL CALL OUT THE SIZE, TYPE AND USE (DOMESTIC OR IRRIGATION) 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 AUSTIN WATER TAPS OFFICE FORM WILL BE USED TO PROVIDE RELEVANT DATA FOR THE EXISTING INFORMATION ON EXISTING METERS TO RECEIVE APPROPRIATE CREDITS. THIS FORM SHALL BE DIRECTLY SUBMITTED TO AUSTIN WATER TAPS OFFICE FOR REVIEW AND PROCESSING.
- NO CONNECTION MAY BE MADE BETWEEN THE PRIVATE PLUMBING AND AUSTIN WATER INFRASTRUCTURE UNTIL A CITY APPROVED WATER METER HAS BEEN INSTALLED.
- METER BOXES AND CLEAN OUTS SHALL NOT BE LOCATED WITHIN PAVED AREAS SUCH AS DRIVEWAYS AND SIDEWALKS.

AUSTIN WATER REVIEW BLOCK

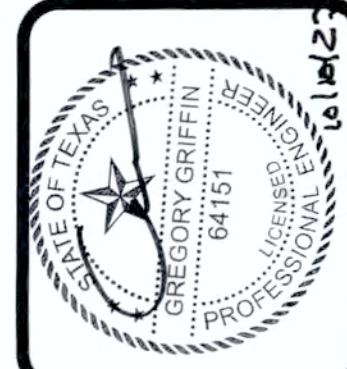
AW EXPIRATION STAMP

NOTE: DO NOT REMOVE THE TITLE BLOCK
AUSTIN WATER GENERAL INFORMATION AND CONSTRUCTION NOTES FOR COMMERCIAL SITES AND SUBDIVISION PLANS

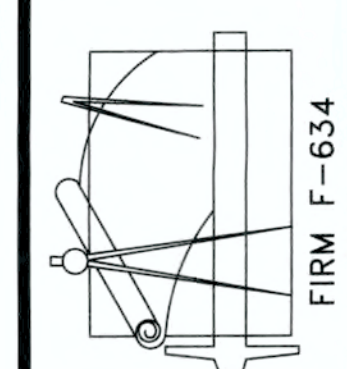
CITY OF AUSTIN
 AUSTIN WATER
 October 2021
 VERSION 2.0
 STANDARD NO.
 1 OF 1

DATE: OCT. 2023
 DESIGNED: CS - ER
 DRAWN: CS - ER
 CHECKED:
 JOB NO.:

DAVIS SPRING CENTER
 AUSTIN WATER UTILITY
 VERSION 1.2
 9900 PARMER LANE, WEST



GRIFFIN ENGINEERING GROUP INC.
 11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
 25 of 29

APPENDIX P-2 TREE AND NATURAL AREA PROTECTION NOTES

- ALL TREES AND NATURAL AREAS SHOWN ON PLAN TO BE PRESERVED SHALL BE PROTECTED DURING CONSTRUCTION WITH TEMPORARY FENCING.
- PROTECTIVE FENCES SHALL BE ERECTED ACCORDING TO CITY OF AUSTIN STANDARDS FOR TREE PROTECTION.
- PROTECTIVE FENCES SHALL BE INSTALLED PRIOR TO THE START OF ANY SITE PREPARATION WORK (CLEARING, GRUBBING OR GRADING) AND SHALL BE MAINTAINED THROUGHOUT ALL PHASES OF THE CONSTRUCTION PROJECT.
- EROSION AND SEDIMENTATION CONTROL BARRIERS SHALL BE INSTALLED OR MAINTAINED IN A MANNER WHICH DOES NOT RESULT IN SOIL BUILDUP WITHIN TREE DRIP LINES.
- PROTECTIVE FENCES SHALL SURROUND THE TREES OR GROUP OF TREES, AND WILL BE LOCATED AT THE OUTERMOST LIMIT OF BRANCHES (DRIP LINE), OR, FOR NATURAL AREAS, PROTECTIVE FENCES SHALL FOLLOW THE LIMIT OF CONSTRUCTION LINE, IN ORDER TO PREVENT THE FOLLOWING:
 - SOIL COMPACTION IN THE ROOT ZONE AREA RESULTING FROM VEHICULAR TRAFFIC OR STORAGE OF EQUIPMENT OR MATERIALS;
 - ROOT ZONE DISTURBANCES DUE TO GRADE CHANGES (GREATER THAN 6 INCHES CUT OR FILL), OR TRENCHING NOT REVEALED AND AUTHORIZED BY THE CITY ARBORIST;
 - WOUNDS TO EXPOSED ROOTS, TRUNK OR LIMBS BY MECHANICAL EQUIPMENT;
 - OTHER ACTIVITIES DETRIMENTAL TO TREES SUCH AS CHEMICAL STORAGE, CEMENT TRUCK CLEANING, AND FIRES.
- EXCEPTIONS TO INSTALLING FENCES AT TREE DRIP LINES MAY BE PERMITTED IN THE FOLLOWING CASES:
 - WHERE THERE IS TO BE AN APPROVED GRADE CHANGE, IMPERMEABLE PAVING SURFACE TREE WELLS OR OTHER SUCH SITE DEVELOPMENT, ERECT THE FENCE APPROXIMATELY 2 TO 4 FEET BEHIND THE AREA IN QUESTION;
 - WHERE PERMEABLE PAVING IS TO BE INSTALLED WITHIN A TREE'S DRIP LINE, ERECT THE FENCE AT THE OUTER LIMITS OF THE PERMEABLE PAVING AREA (PRIOR TO SITE GRADING SO THAT THIS AREA IS GRADED SEPARATELY PRIOR TO PAVING INSTALLATION TO MINIMIZE ROOT DAMAGE);
 - WHERE TREES ARE CLOSE TO PROPOSED BUILDINGS, ERECT THE FENCE TO ALLOW 6 TO 10 FEET OF WORK SPACE BETWEEN THE FENCE AND THE BUILDING;
 - WHERE THERE ARE SEVERE SPACE CONSTRAINTS DUE TO TRACT SIZE, OR OTHER SPECIAL REQUIREMENTS, CONTACT THE CITY ARBORIST AT 974-1876 TO DISCUSS ALTERNATIVES.
- WHERE ANY OF THE ABOVE EXCEPTIONS RESULT IN A FENCE BEING CLOSER THAN 4 FEET TO A TREE TRUNK, PROTECT THE TRUNK WITH STRAPPED-ON PLANKING TO A HEIGHT OF 8 FEET (OR TO THE LIMITS OF LOWER BRANCHING) IN ADDITION TO THE REDUCED FENCING PROVIDED.
- TREES APPROVED FOR REMOVAL SHALL BE REMOVED IN A MANNER WHICH DOES NOT IMPACT TREES TO BE PRESERVED.
- ANY ROOTS EXPOSED BY CONSTRUCTION ACTIVITY SHALL BE PRUNED FLUSH WITH THE SOIL. BACK FILL ROOT AREAS WITH GOOD QUALITY TOP SOIL AS SOON AS POSSIBLE. IF EXPOSED ROOT AREAS ARE NOT BACK FILLED WITHIN 2 DAYS, COVER THEM WITH ORGANIC MATERIAL IN A MANNER WHICH REDUCES SOIL TEMPERATURE AND MINIMIZES WATER LOSS DUE TO EVAPORATION.
- ANY TRENCHING REQUIRED FOR THE INSTALLATION OF LANDSCAPE IRRIGATION SHALL BE PLACED AS FAR FROM EXISTING TREE TRUNKS AS POSSIBLE.
- NO LANDSCAPE TOPSOIL DRESSING GREATER THAN 4 INCHES SHALL BE PERMITTED WITHIN THE DRIP LINE OF TREES. NO SOIL IS PERMITTED ON THE ROOT FLARE OF ANY TREE.
- PRUNING TO PROVIDE CLEARANCE FOR STRUCTURES, VEHICULAR TRAFFIC AND EQUIPMENT SHALL TAKE PLACE BEFORE DAMAGE OCCURS (RIPPING OF BRANCHES, ETC.).
- ALL FINISHED PRUNING SHALL BE DONE ACCORDING TO RECOGNIZED, APPROVED STANDARDS OF THE INDUSTRY (REFER TO THE NATIONAL ARBORIST ASSOCIATION PRUNING STANDARDS FOR SHADE TREES AVAILABLE ON REQUEST FROM THE CITY ARBORIST).
- DEVIATIONS FROM THE ABOVE NOTES MAY BE CONSIDERED ORDINANCE VIOLATIONS IF THERE IS SUBSTANTIAL NON-280F-00 COMPLIANCE OR IF A TREE SUSTAINS DAMAGE AS A RESULT.

THE FOLLOWING PRACTICES ARE RECOMMENDED BUT NOT REQUIRED FOR PRESERVATION OF TREES WITHIN DEVELOPMENT PROJECTS:

- PRIOR TO EXCAVATION OR GRADE CUTTING WITHIN TREE DRIP LINES, MAKE A CLEAN CUT BETWEEN THE DISTURBED AND UNDISTURBED ROOT ZONES WITH A ROCK SAW OR SIMILAR EQUIPMENT TO MINIMIZE DAMAGE TO REMAINING ROOTS.
- WHERE ANY OF THE ABOVE EXCEPTIONS TO FENCING AT A TREE'S DRIP LINE RESULT IN AREAS OF UNPROTECTED ROOT ZONES (UNDER DRIP LINES) WHERE HEAVY TRAFFIC IS EXPECTED, COVER THOSE AREAS WITH 4 INCHES OR ORGANIC MULCH OR GRAVEL TO MINIMIZE SOIL COMPACTION.
- ALL GRADING WITHIN PROTECTED ROOT ZONE AREAS SHOULD BE DONE BY HAND OR WITH SMALL EQUIPMENT TO MINIMIZE DAMAGE.
- TREES MOST HEAVILY IMPACTED BY CONSTRUCTION ACTIVITIES SHOULD BE WATERED DEEPLY ONCE A WEEK DURING PERIODS OF HOT, DRY WEATHER. TREE CROWNS SHOULD BE SPRAYED 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 ROOT ZONE.
- TREE TRIMMING IS CONSIDERED A SPECIAL TECHNIQUE FOR TREE PRESERVATION.

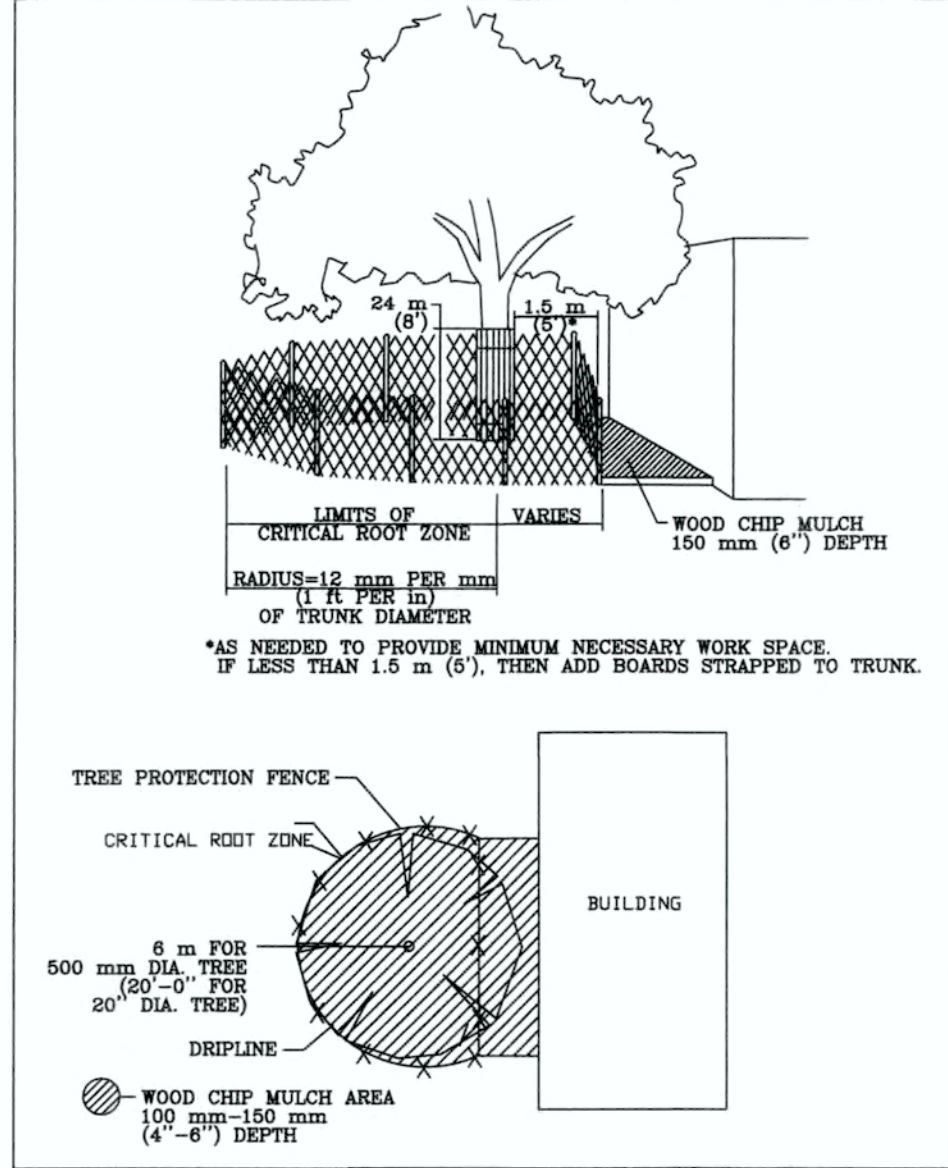
APPENDIX P-6 REMEDIAL TREE CARE NOTES

AERATION AND 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, PRESERVE TREES WITHIN LIMITS OF CONSTRUCTION MAY REQUIRE SOIL AERATION AND SUPPLEMENTAL NUTRIENTS. THE CITY ARBORIST MAY REQUIRE THESE ANALYSIS 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 ANALYSIS INDICATE THE NEED FOR SUPPLEMENTAL NUTRIENTS, THEN HUMATE/NUTRIENT SOLUTIONS WITH MYCORRHIZAE IF AND METHODS ARE TO BE APPROVED BY THE CITY ARBORIST (512-974-1876) PRIOR TO APPLICATION. THE OWNER OF GENERAL CONTRACTOR SHALL SELECT A FERTILIZATION CONTRACTOR AND ENSURE COORDINATION WITH THE CITY ARBORIST.

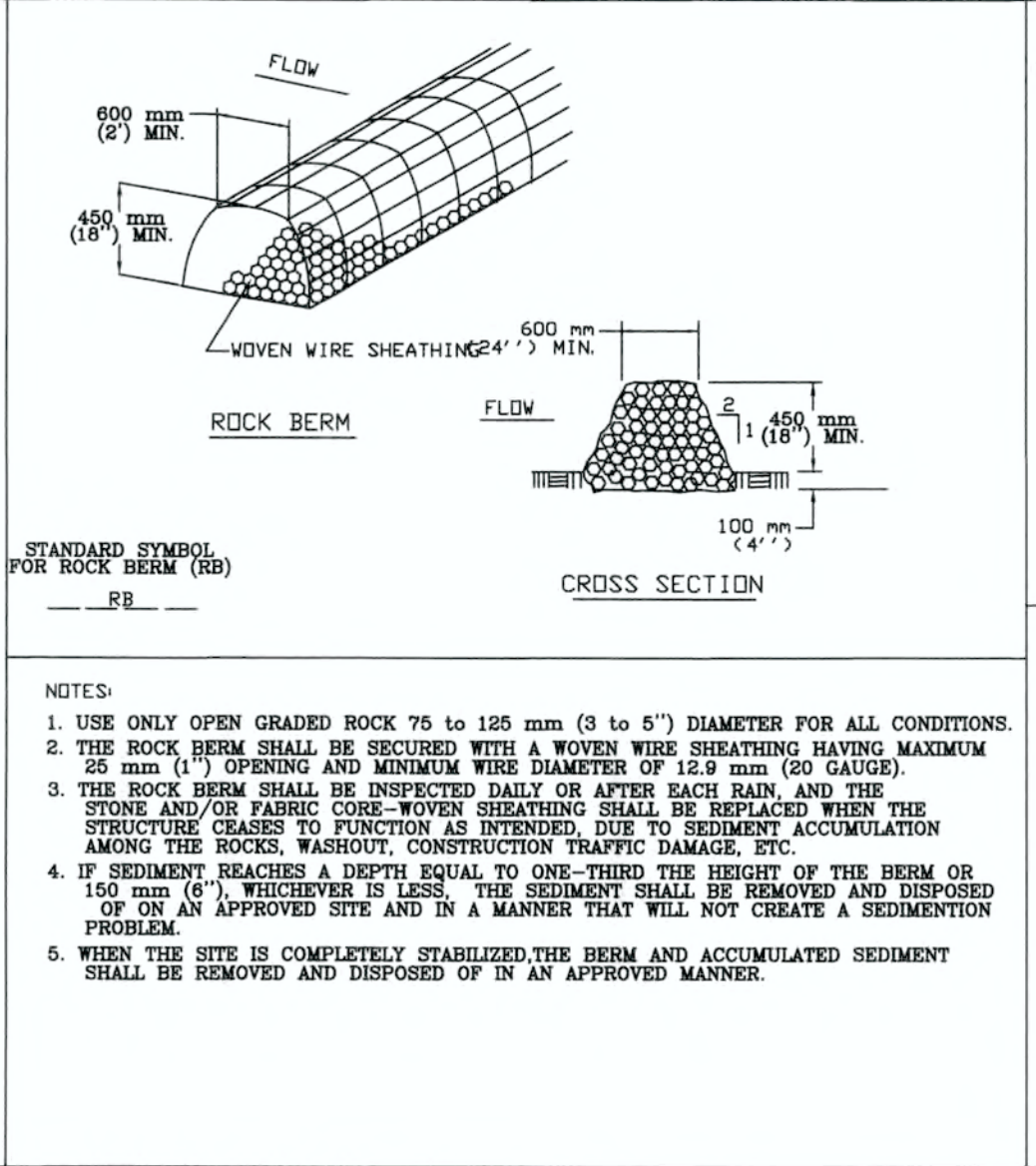
PRE-CONSTRUCTION TREATMENT SHOULD BE APPLIED IN THE APPROPRIATE SEASON, IDEALLY THE SEASON PRECEDING THE PROPOSED CONSTRUCTION. MINIMALLY, AREAS TO BE TREATED INCLUDE THE ENTIRE CRITICAL ROOT ZONE OF TREES AS DEPICTED ON THE CITY APPROVED PLANS. TREATMENT SHOULD INCLUDE, BUT NOT LIMITED TO, FERTILIZATION, 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 OF 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 POLAR 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 ½ 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, PLANNING AND DEVELOPMENT REVIEW DEPARTMENT, P.O. BOX 1088, AUSTIN, TX 78767. THIS NOTE SHOULD BE REFERENCED AS ITEM #1 IN THE SEQUENCE OF CONSTRUCTION.



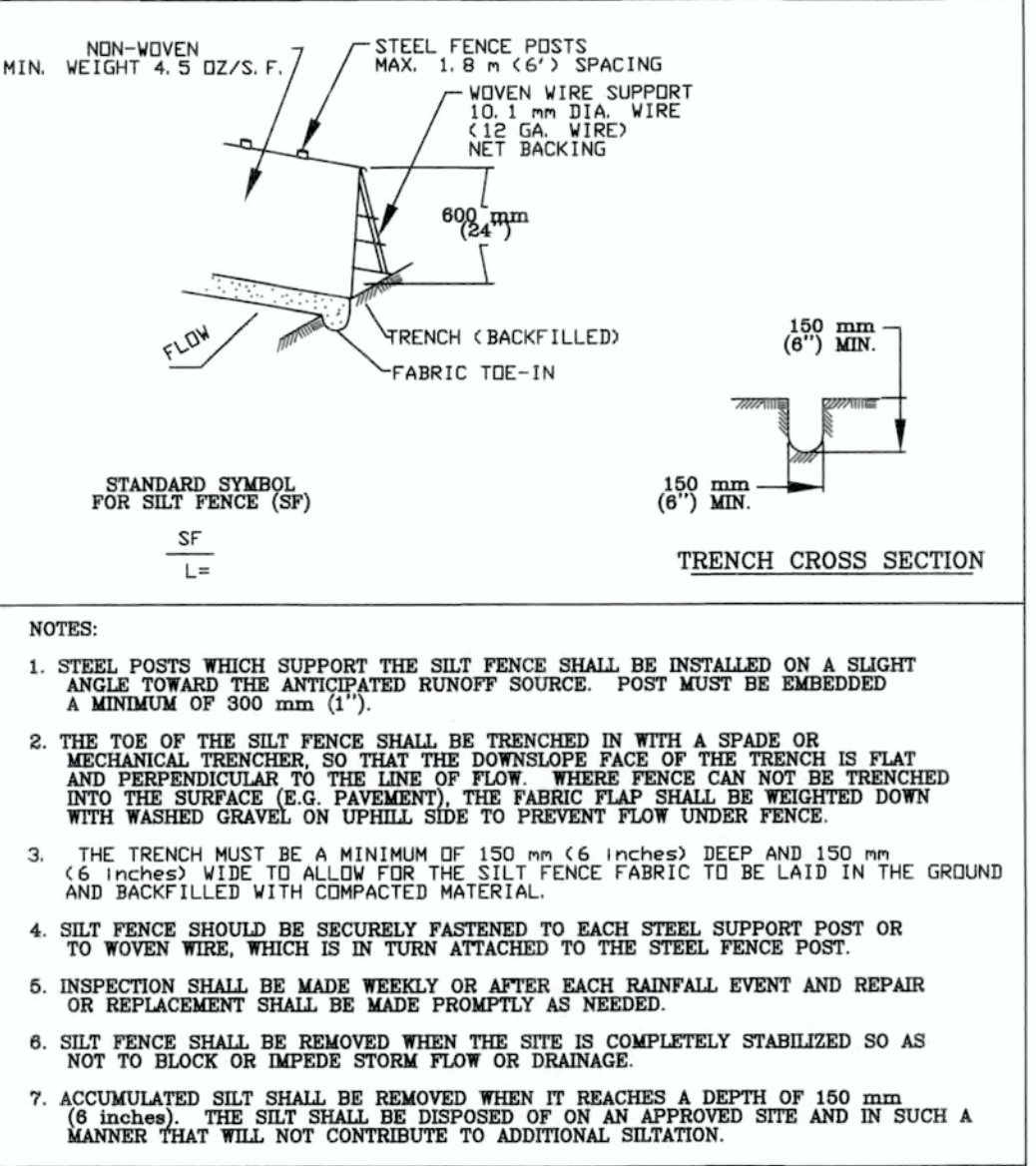
CITY OF AUSTIN
WATERSHED PROTECTION DEPARTMENT
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/16/99 ADOPTED

TREE PROTECTION FENCE
MODIFIED TYPE A - CHAIN LINK
THE ARCHITECT/ENGINEER ASSURES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.
STANDARD NO. 610S-4



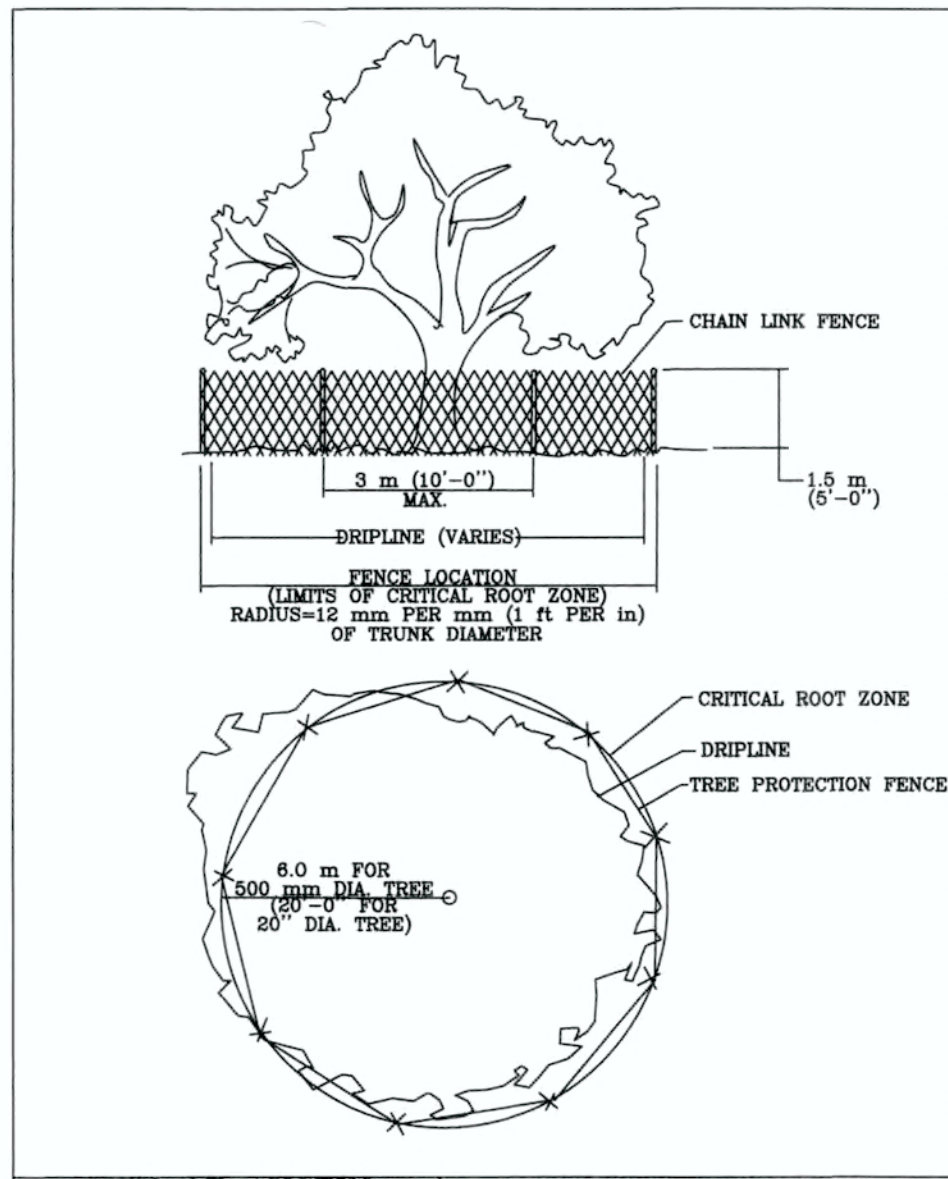
CITY OF AUSTIN
WATERSHED PROTECTION DEPARTMENT
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ROCK BERM
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STANDARD NO. 639S-1



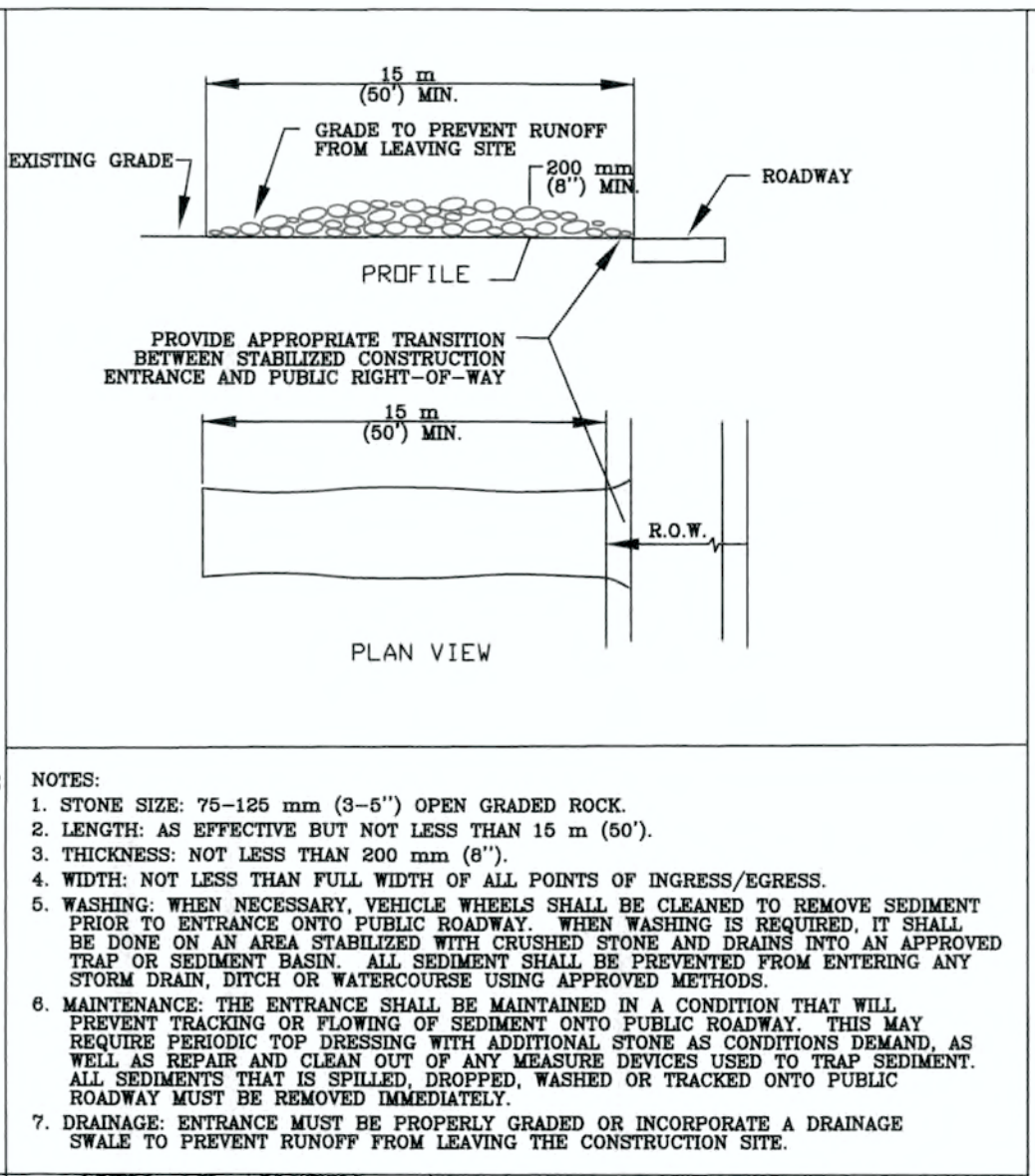
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WATERSHED PROTECTION DEPARTMENT
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SILT FENCE
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STANDARD NO. 642S-1



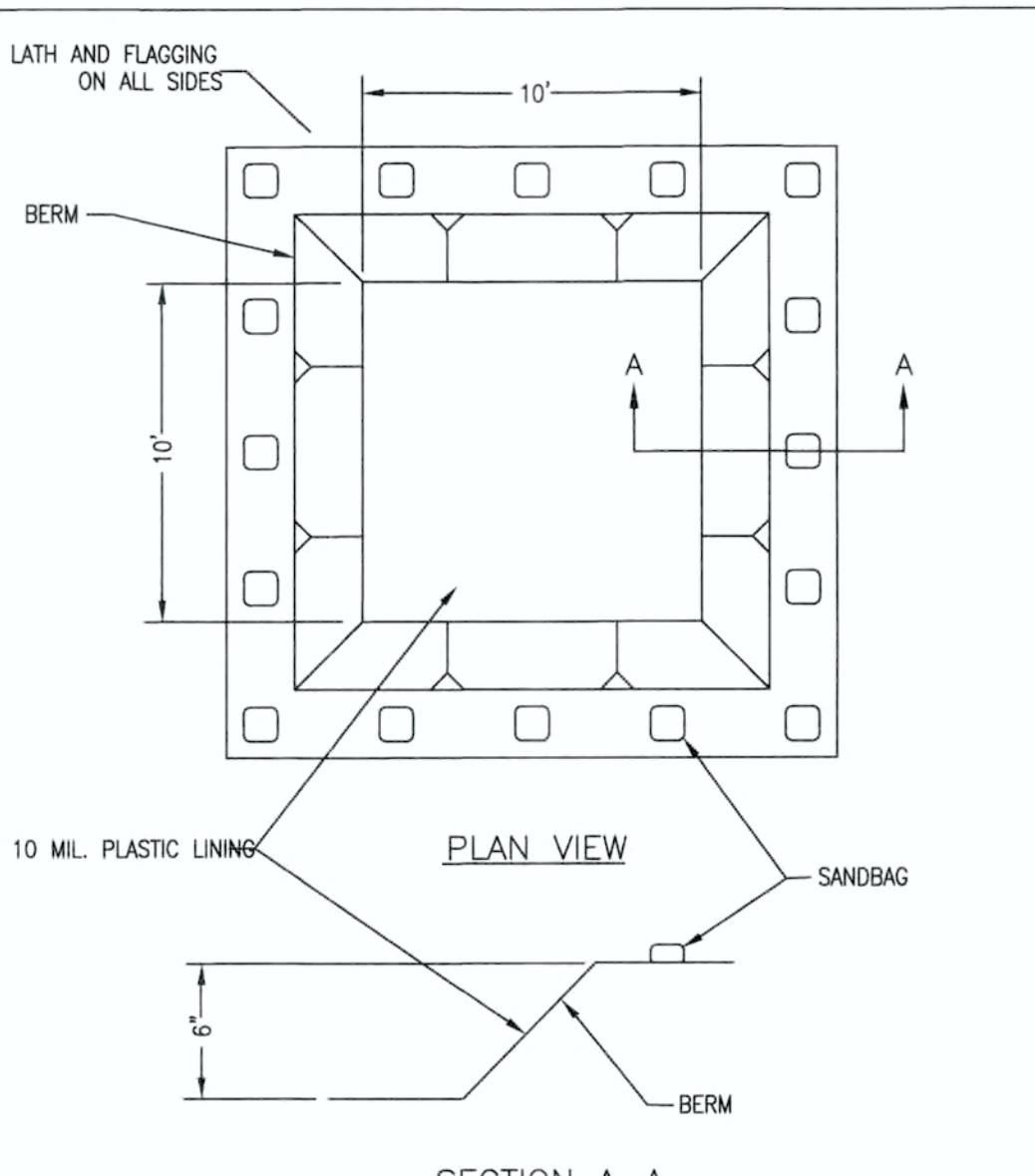
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WATERSHED PROTECTION DEPARTMENT
RECORD COPY SIGNED BY J. PATRICK MURPHY 11/16/99 ADOPTED

TREE PROTECTION FENCE
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STANDARD NO. 610S-2

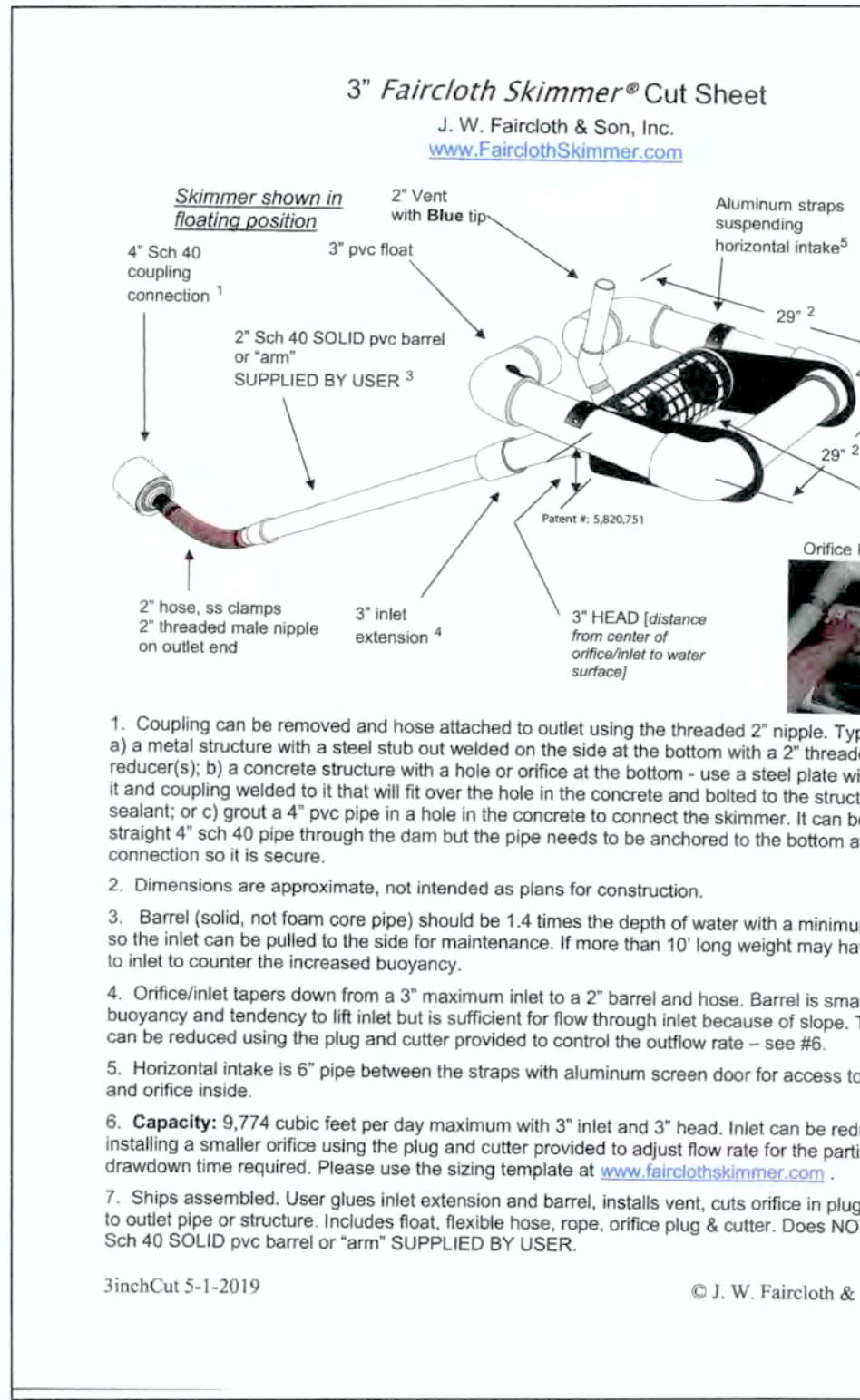


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WATERSHED PROTECTION DEPARTMENT
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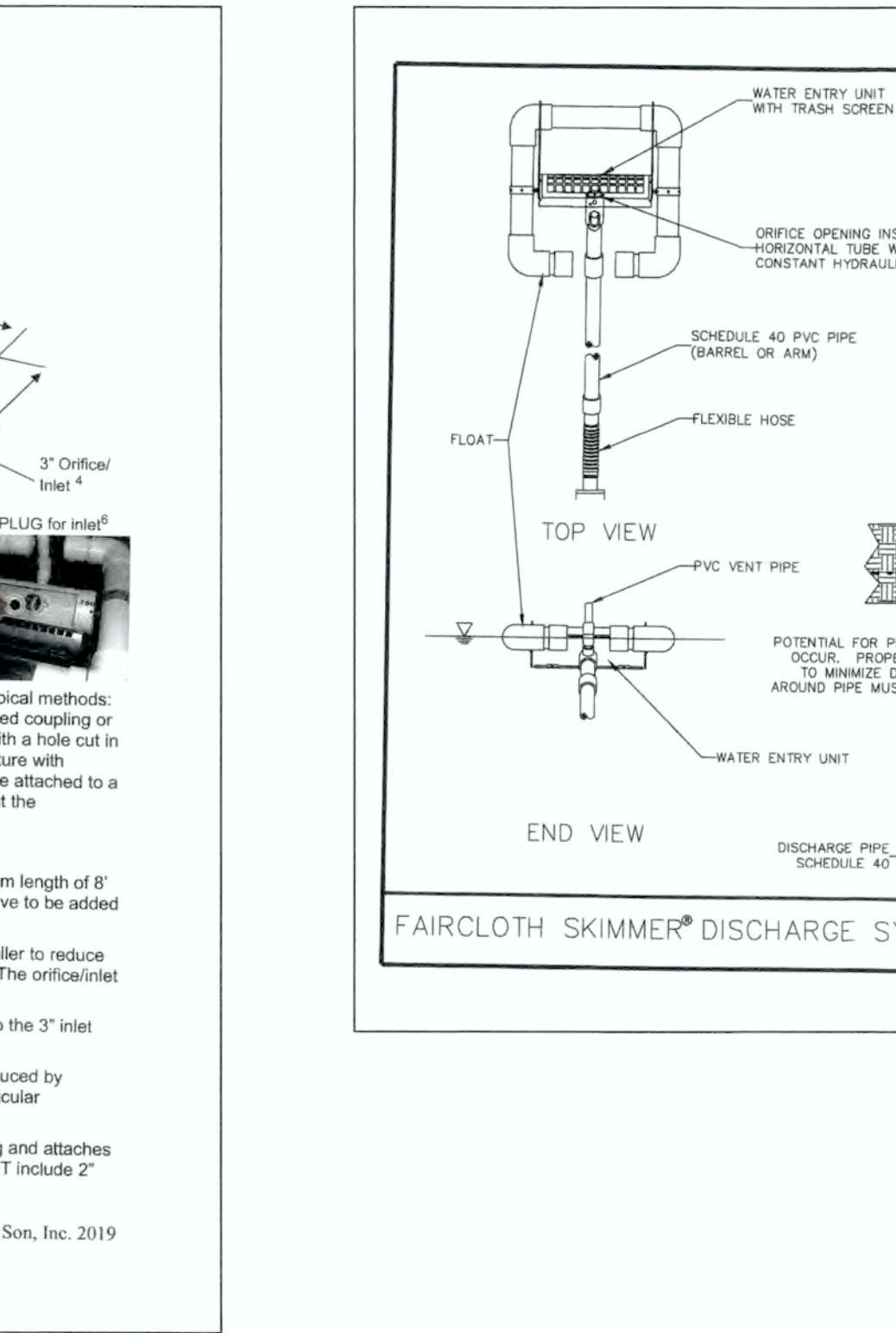
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STANDARD NO. 641S-1



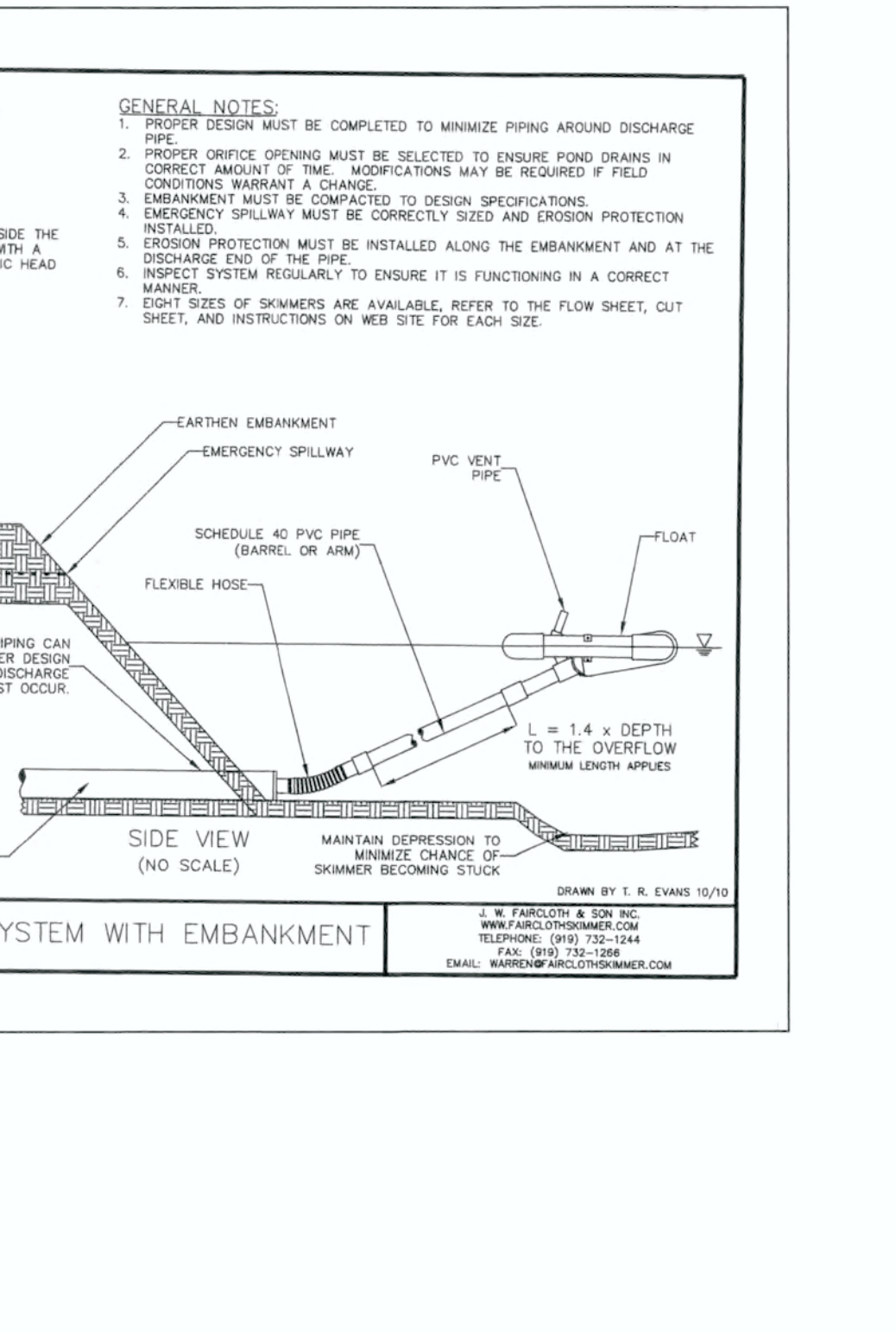
SECTION A-A
02 CONCRETE WASHOUT DETAIL NTS



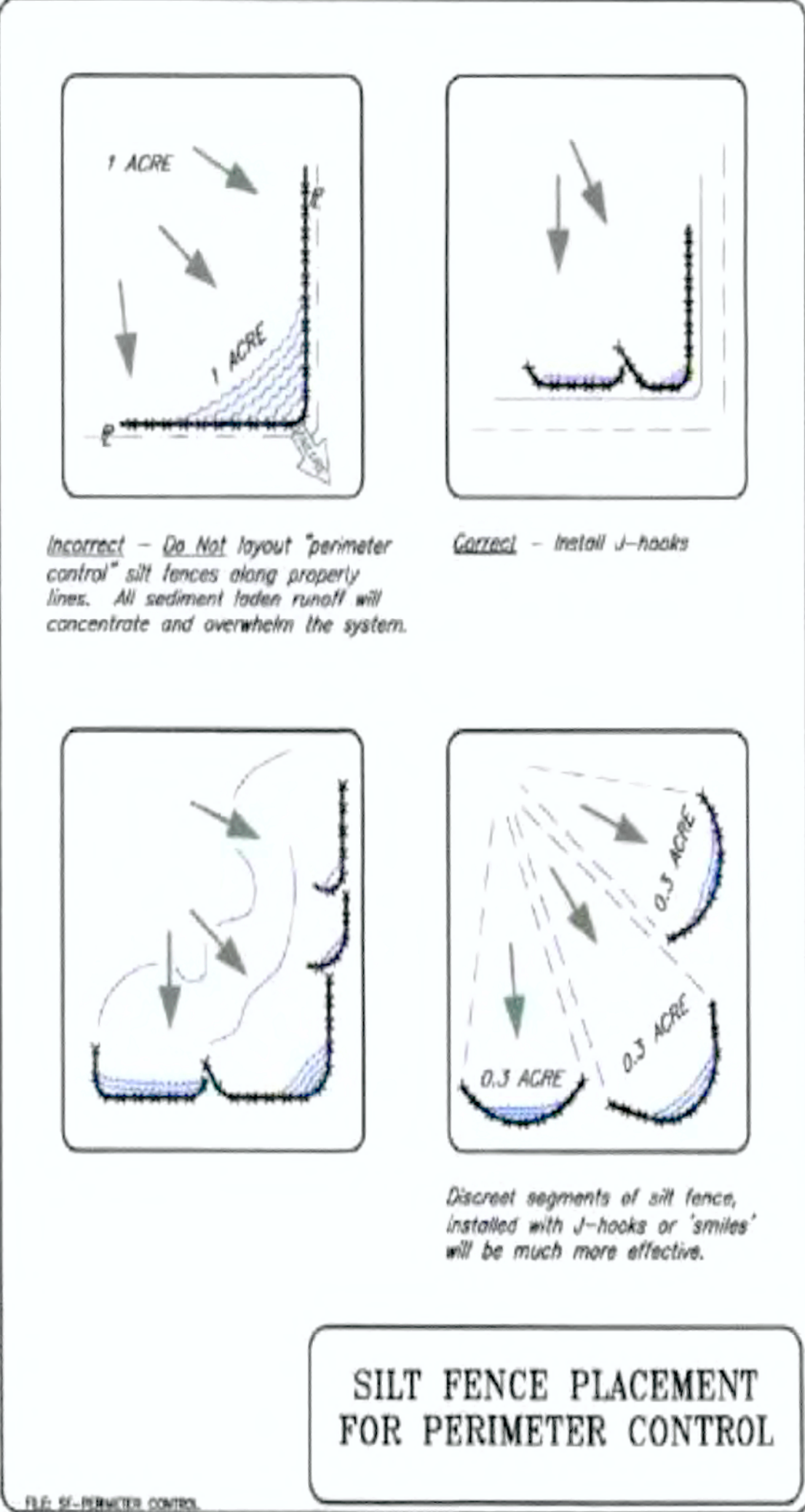
3inchCut 5-1-2019
© J. W. Faircloth & Son, Inc. 2019



FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH EMBANKMENT
DRAWN BY L. R. EVANS 10/10



FAIRCLOTH SKIMMER® DISCHARGE SYSTEM WITH EMBANKMENT
DRAWN BY L. R. EVANS 10/10



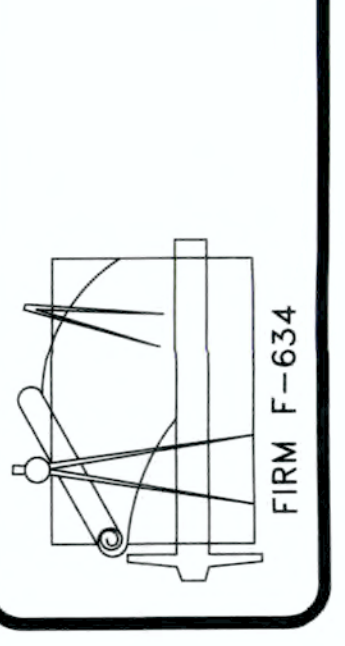
SILT FENCE PLACEMENT FOR PERIMETER CONTROL

DATE: OCT. 2023
DESIGNED: CS - ER
DRAWN: CS - ER
CHECKED:
JOB NO.:

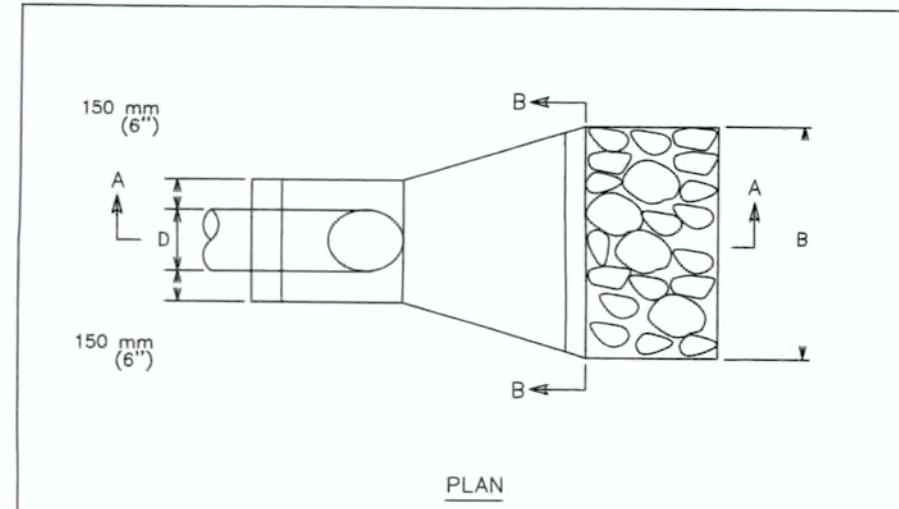
DAVIS SPRING CENTER
EROSION CONTROL AND
TREE PROTECTION DETAILS
9900 PARKER LANE WEST



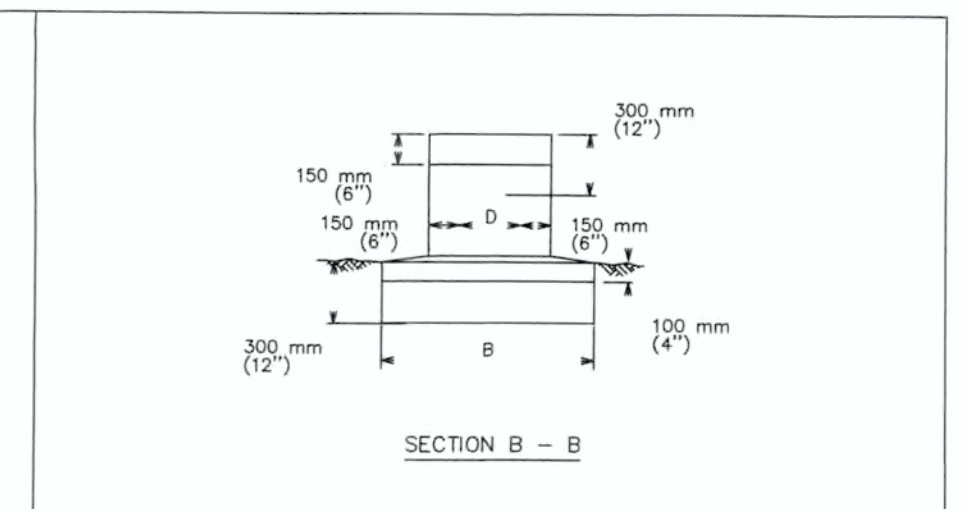
GRIFFIN ENGINEERING GROUP INC.
11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



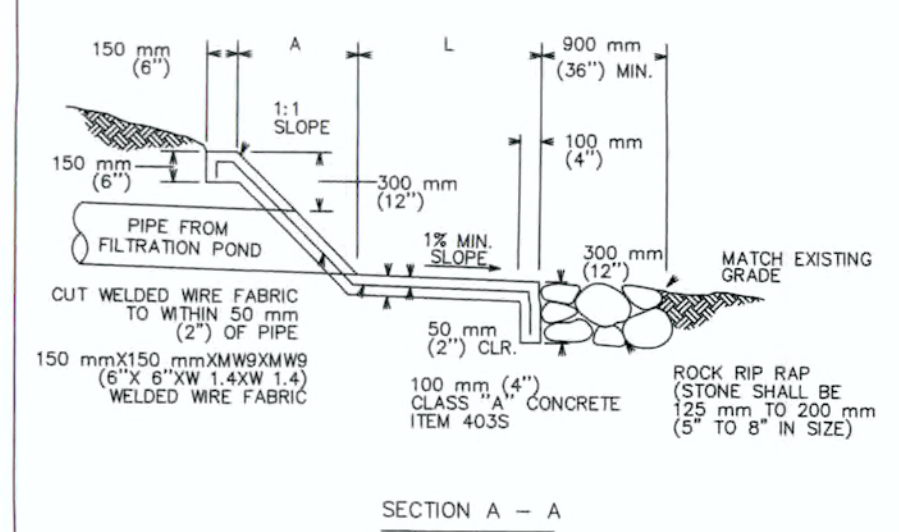
SHEET NUMBER
26 of 29



PLAN



SECTION B - B

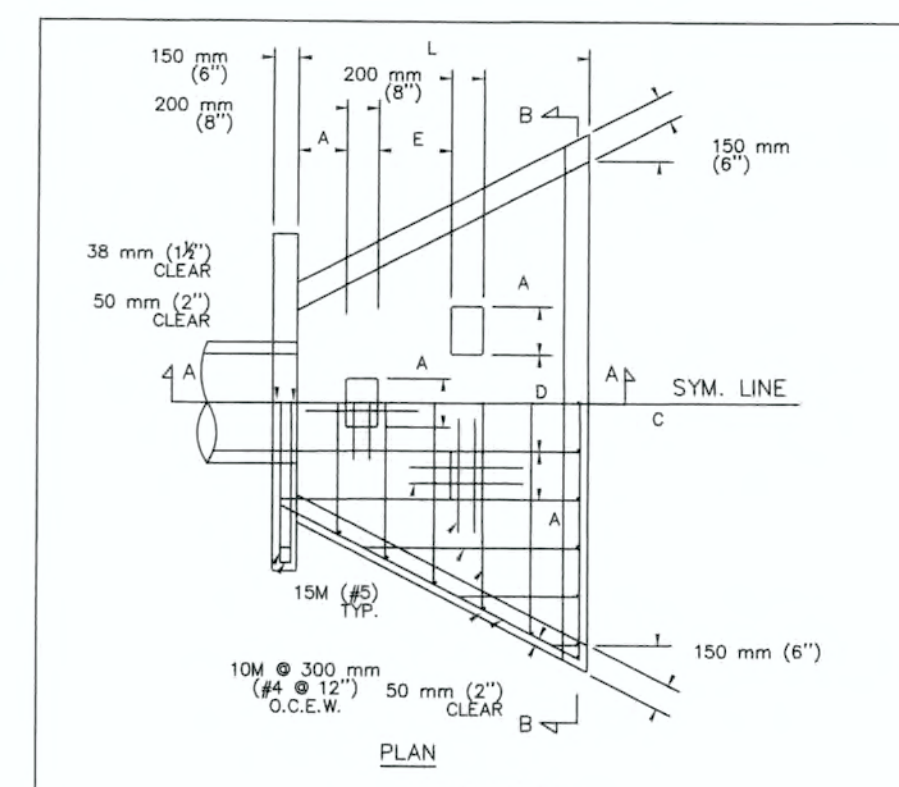


SECTION A - A

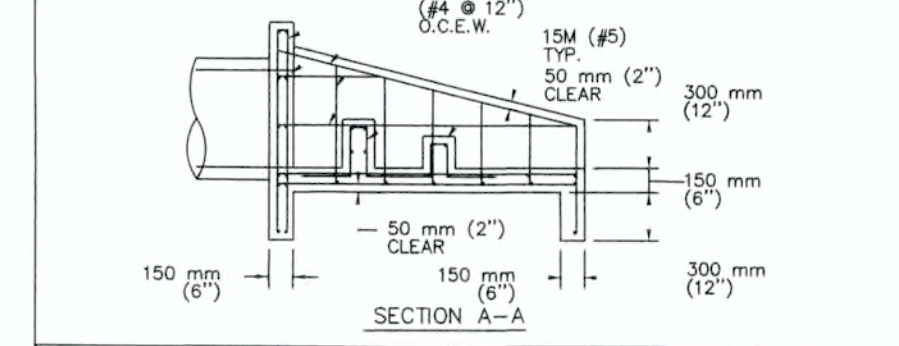
A	450 mm (15')	500 mm (16')	550 mm (18')	600 mm (20')	675 mm (22')
B	750 mm (25')	800 mm (26')	850 mm (28')	1,05 mm (35')	1,27 m (42')
C	150 mm (5')	200 mm (6')	250 mm (8')	300 mm (10')	375 mm (12')
L	650 mm (21')	800 mm (26')	750 mm (25')	900 mm (30')	1,2 m (40')

CITY OF AUSTIN
DEPARTMENT OF WATER RESOURCES AND DEVELOPMENT REVIEW
RECORD COPY SIGNED BY GEORGE E. OSWALD 3/15/05 ADOPTED

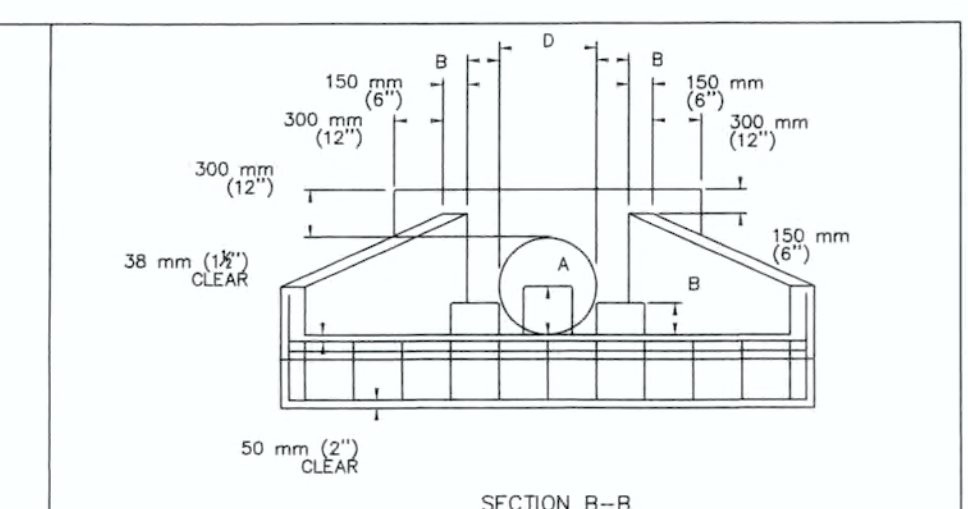
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PLAN



SECTION A - A

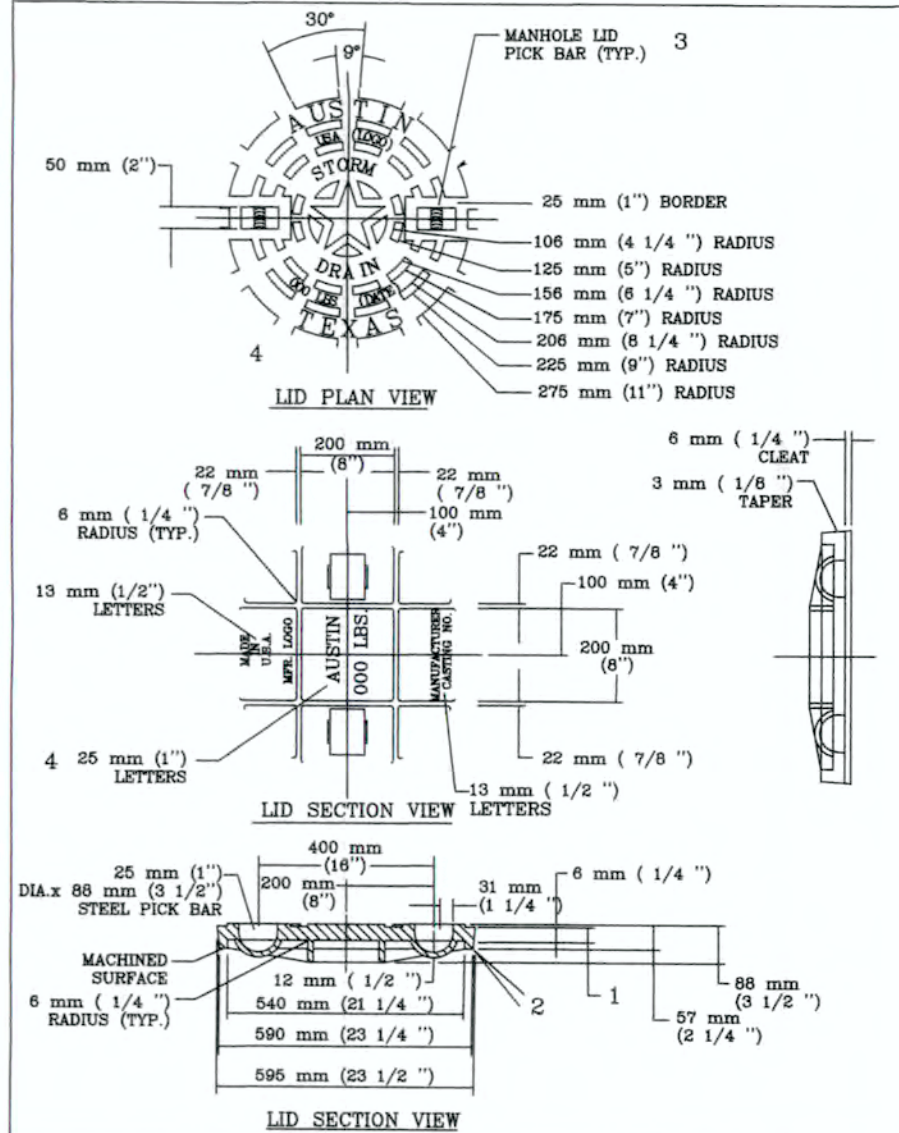


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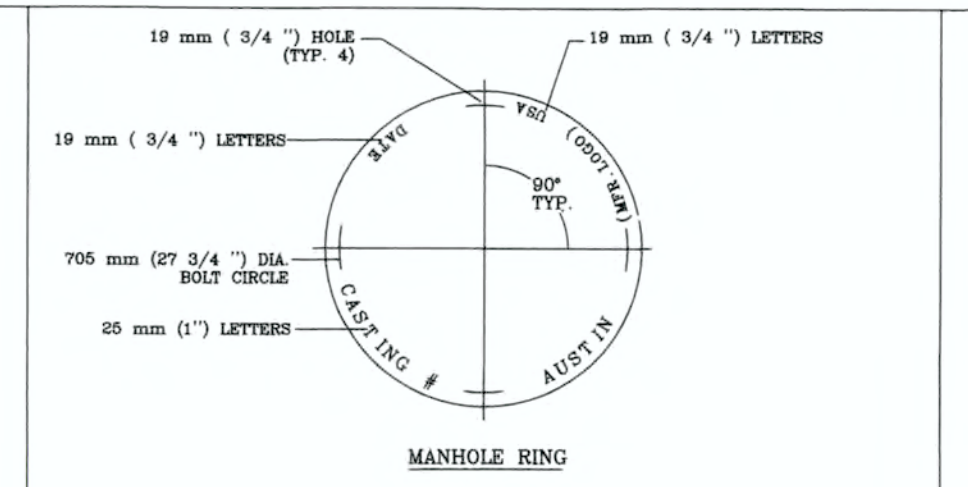
NOTES:
1. ALL CONCRETE SHALL BE TYPE "C" AS PER SPEC. 403S, CONCRETE FOR STRUCTURES.
2. CHAMFER ALL EXTERNAL VISIBLE CORNERS.
3. DISSIPATOR BLOCKS REQUIRED ON DISCHARGE HEADWALLS ONLY.

D	450 mm (15')	533 mm (17')	610 mm (20')	685 mm (23')	765 mm (25')	838 mm (28')	914 mm (30')	1,067 mm (35')	1,219 mm (40')	1,372 mm (45')	1,524 mm (50')
A	225 mm (9')	250 mm (10')	300 mm (12')	350 mm (14')	400 mm (16')	450 mm (18')	500 mm (20')	550 mm (22')	600 mm (24')	675 mm (22')	750 mm (25')
B	150 mm (6')	175 mm (7')	200 mm (8')	225 mm (9')	250 mm (10')	275 mm (11')	300 mm (12')	325 mm (13')	350 mm (14')	375 mm (15')	400 mm (16')
C	2.29 m (7.5')	2.67 m (8.8')	3.05 m (10')	3.43 m (11.3')	3.81 m (12.5')	4.19 m (13.8')	4.57 m (15')	5.33 m (17.5')	6.10 m (20')	6.86 m (22.5')	7.62 m (25')
L	1.37 m (4.5')	1.60 m (5.3')	1.83 m (6')	2.06 m (6.8')	2.29 m (7.5')	2.52 m (8.3')	2.74 m (9')	3.20 m (10.5')	3.66 m (12')	4.11 m (13.5')	4.57 m (15')
E	300 mm (12')	350 mm (14')	400 mm (16')	450 mm (18')	500 mm (20')	550 mm (22')	600 mm (24')	650 mm (26')	700 mm (28')	800 mm (36')	900 mm (40')

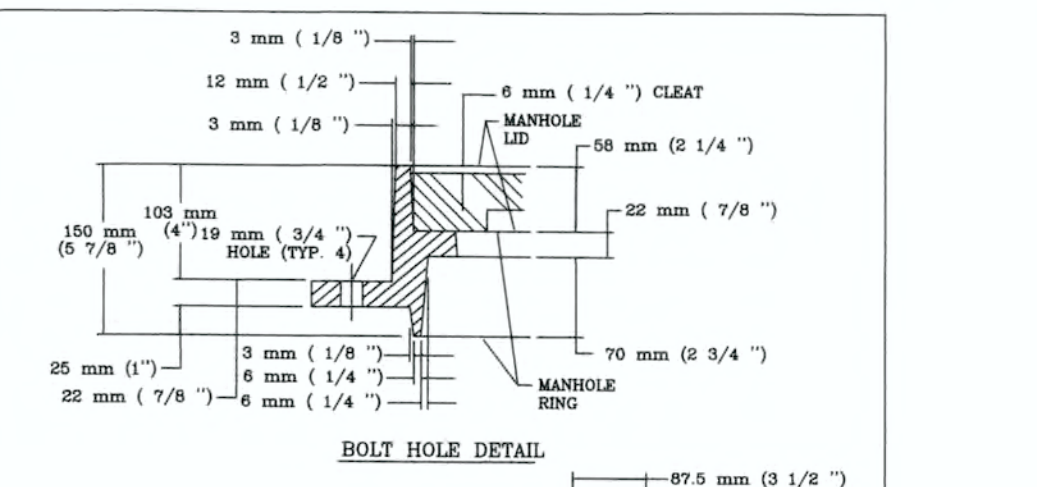
CITY OF AUSTIN
DEPARTMENT OF WATER RESOURCES AND DEVELOPMENT REVIEW
RECORD COPY SIGNED BY BILL GARDNER 08/20/07 ADOPTED



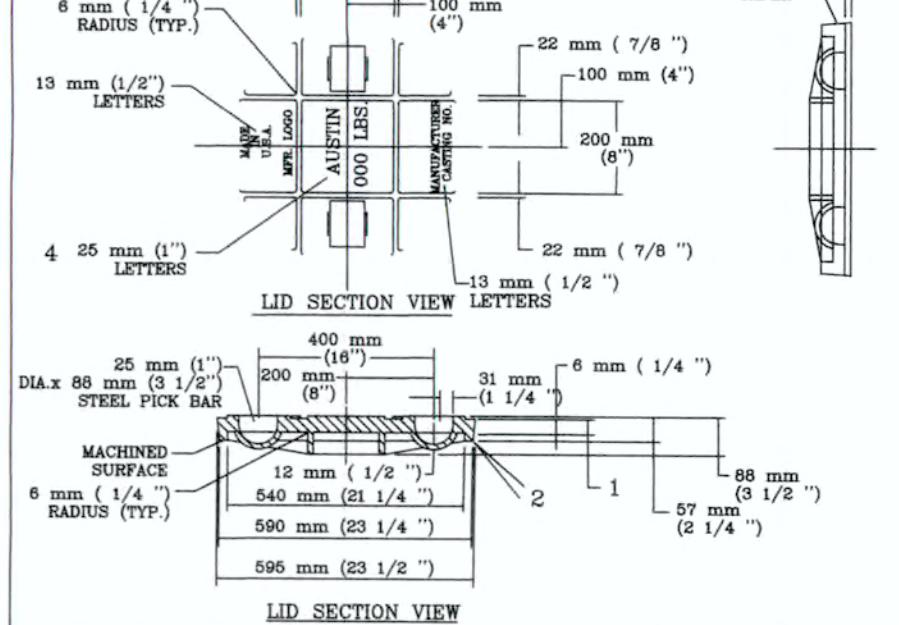
LID PLAN VIEW



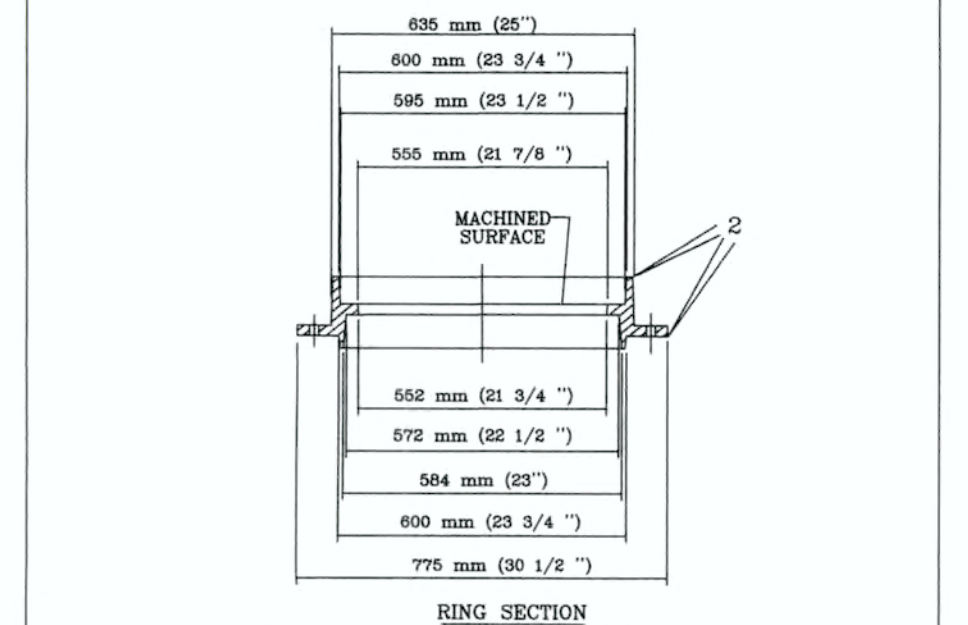
MANHOLE RING



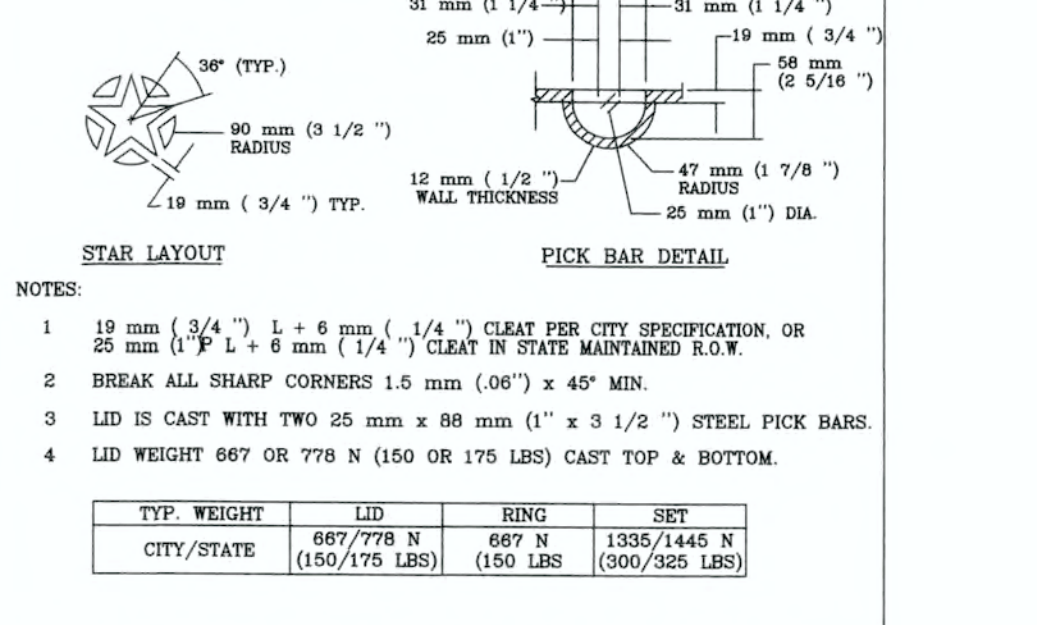
BOLT HOLE DETAIL



LID SECTION VIEW



RING SECTION

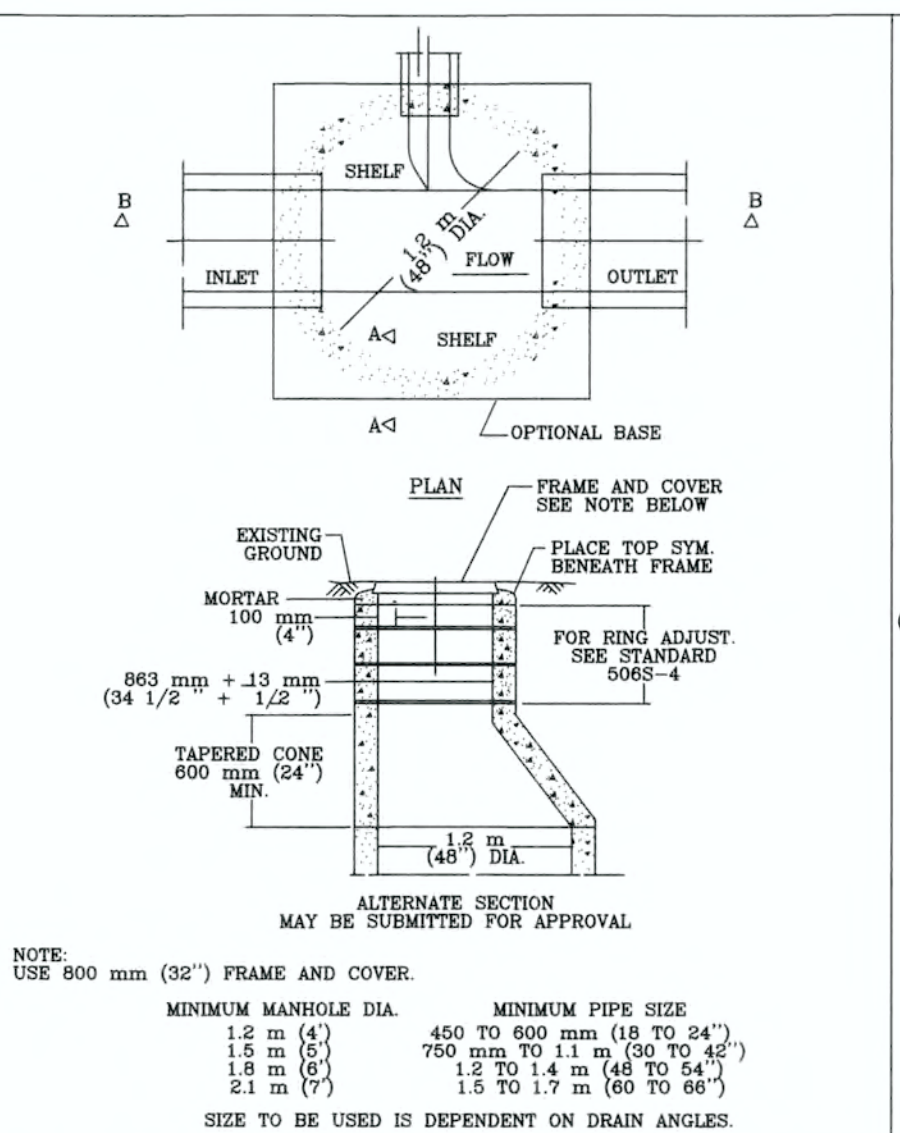


STAR LAYOUT

CITY OF AUSTIN
DEPARTMENT OF WATER RESOURCES AND DEVELOPMENT REVIEW
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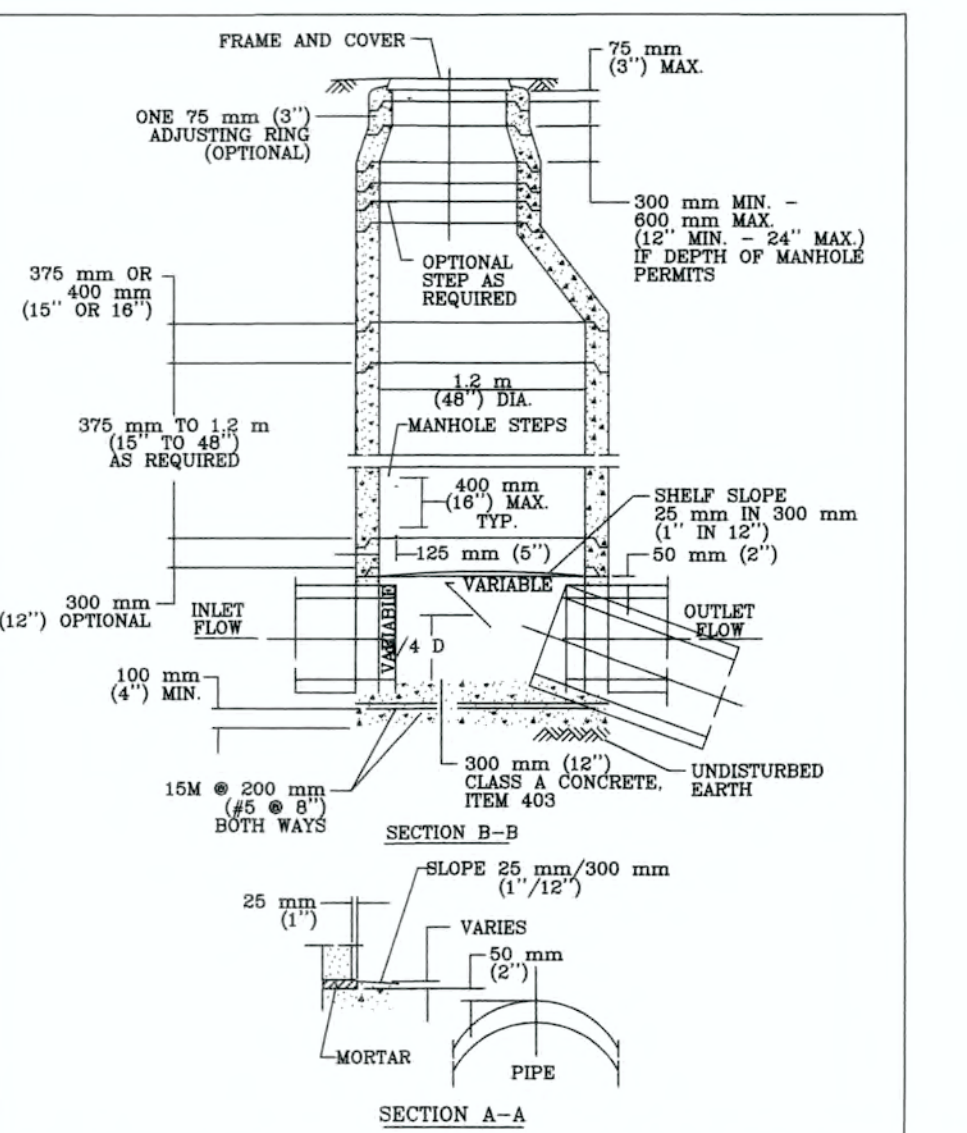
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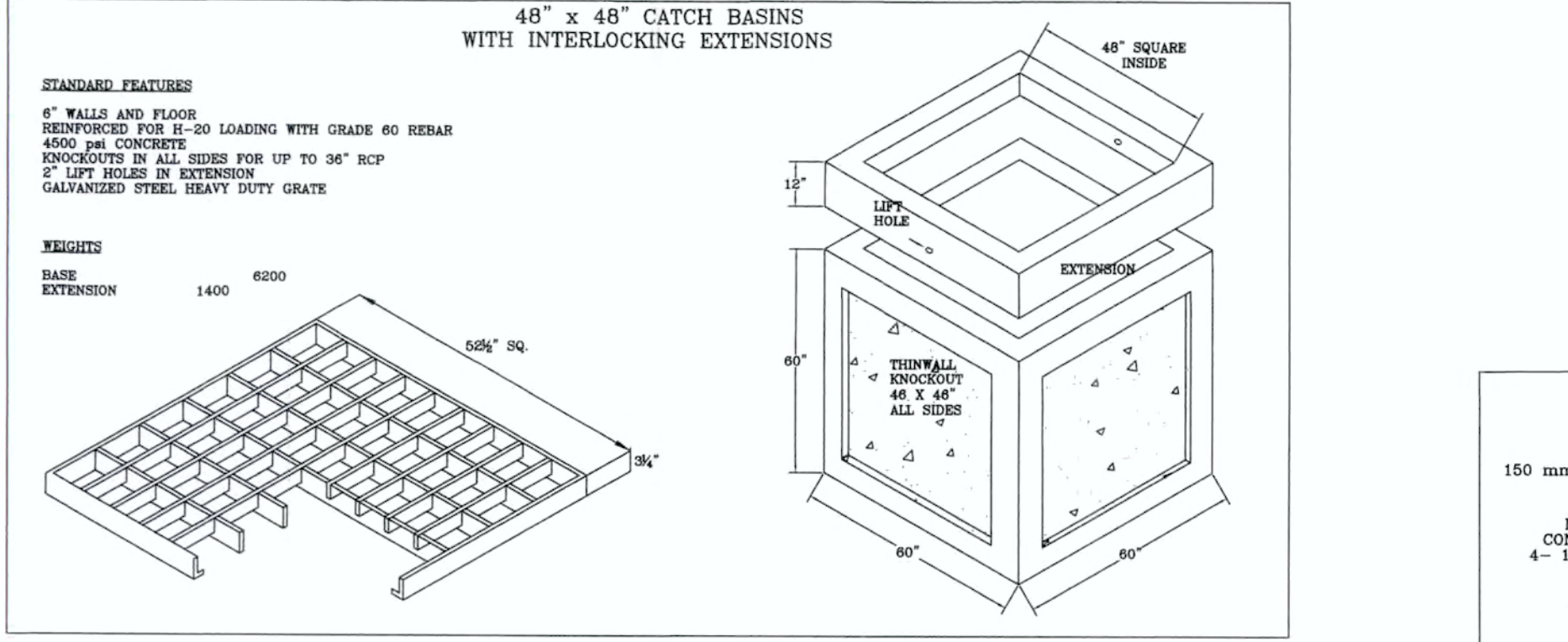
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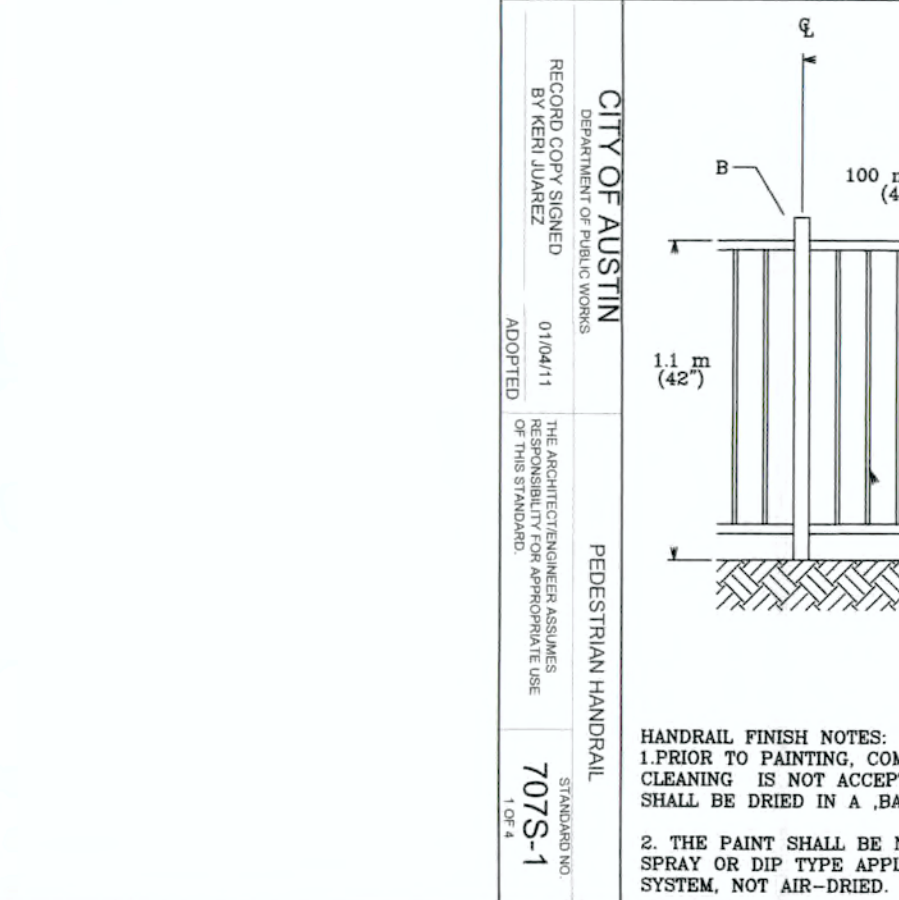


SECTION A - A

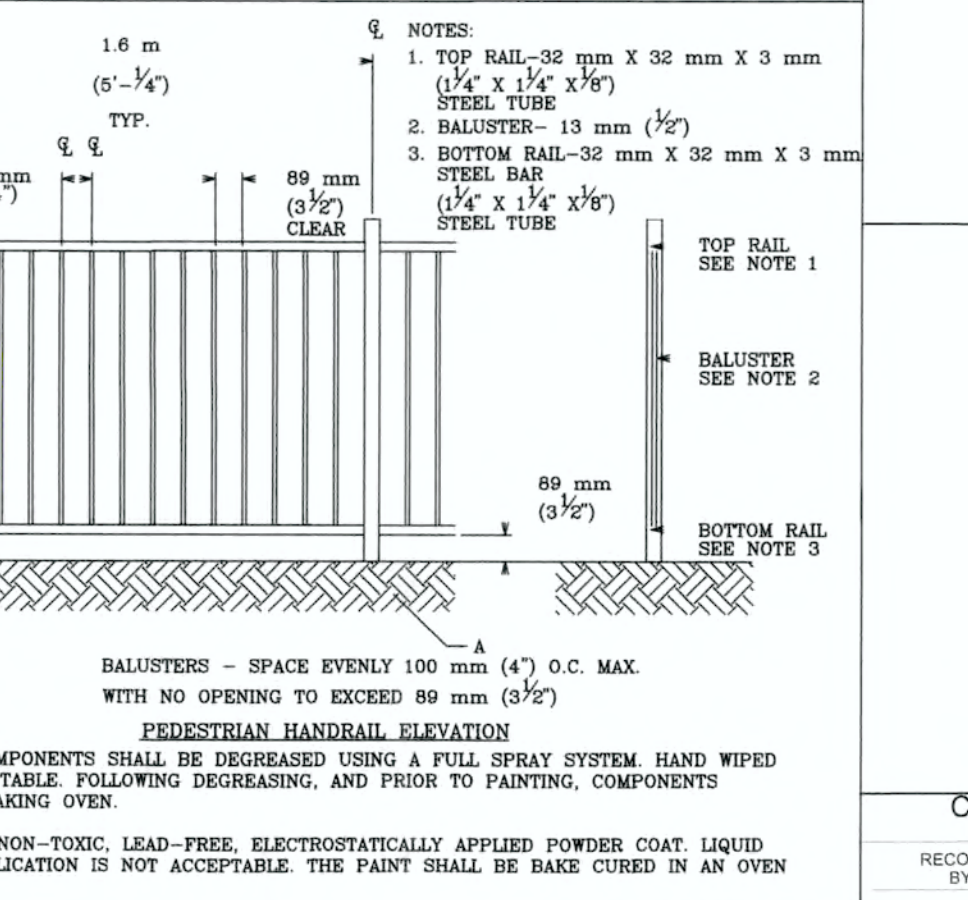
CITY OF AUSTIN
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48" x 48" CATCH BASINS WITH INTERLOCKING EXTENSIONS



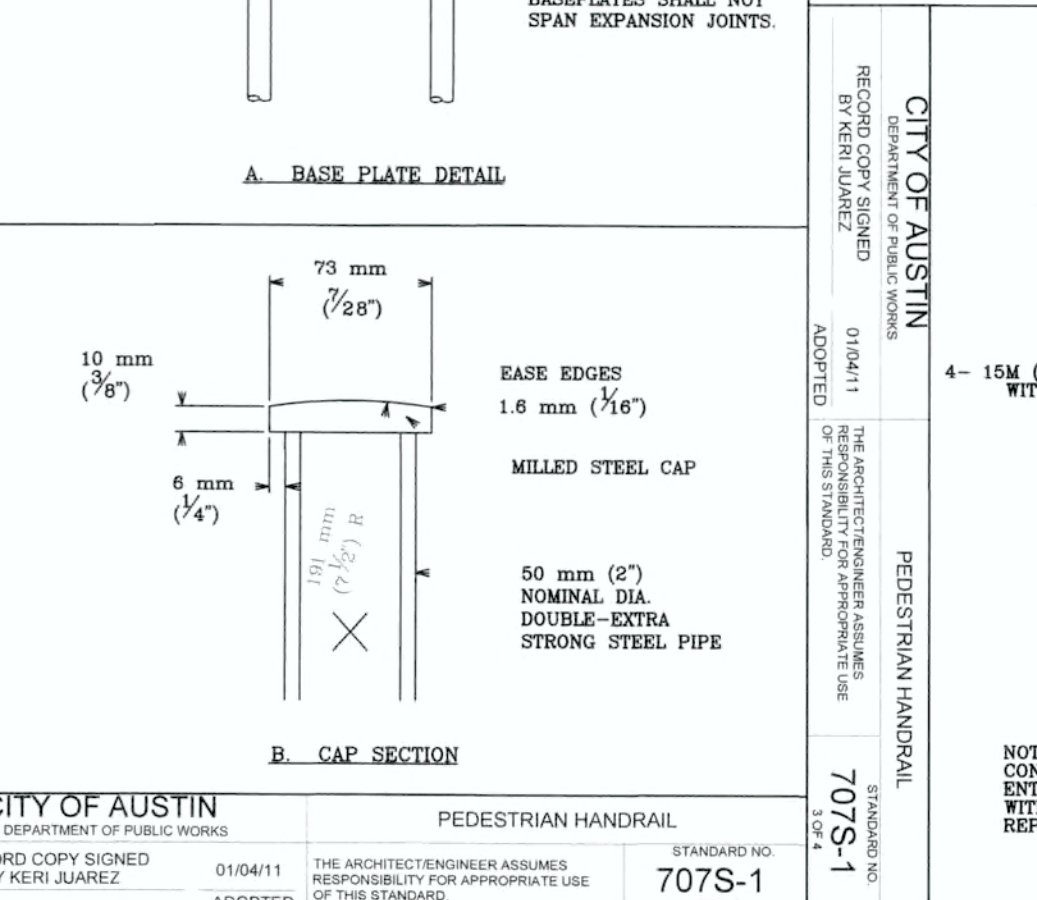
PEDESTRIAN HANDRAIL



A. BASE PLATE DETAIL

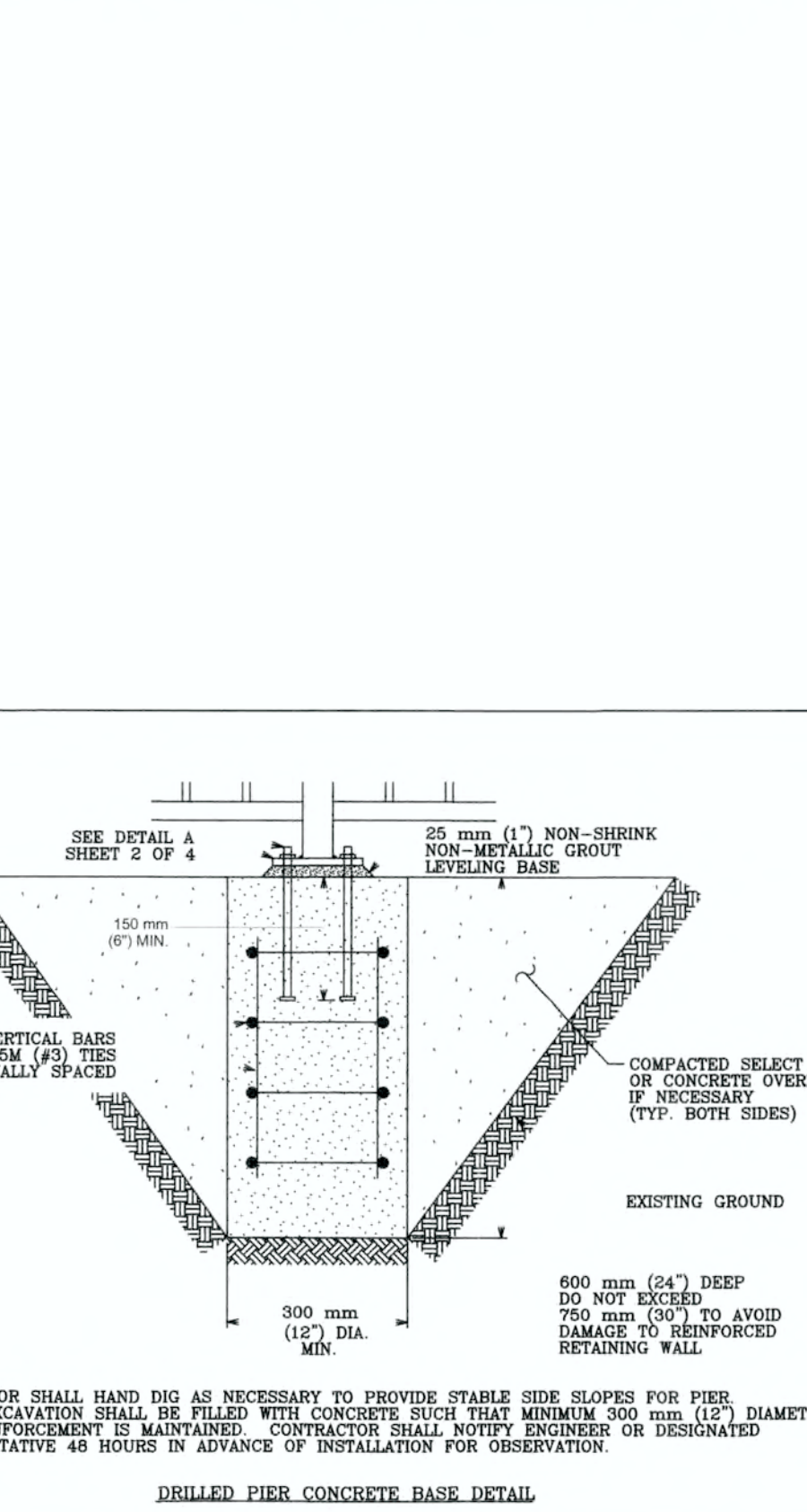
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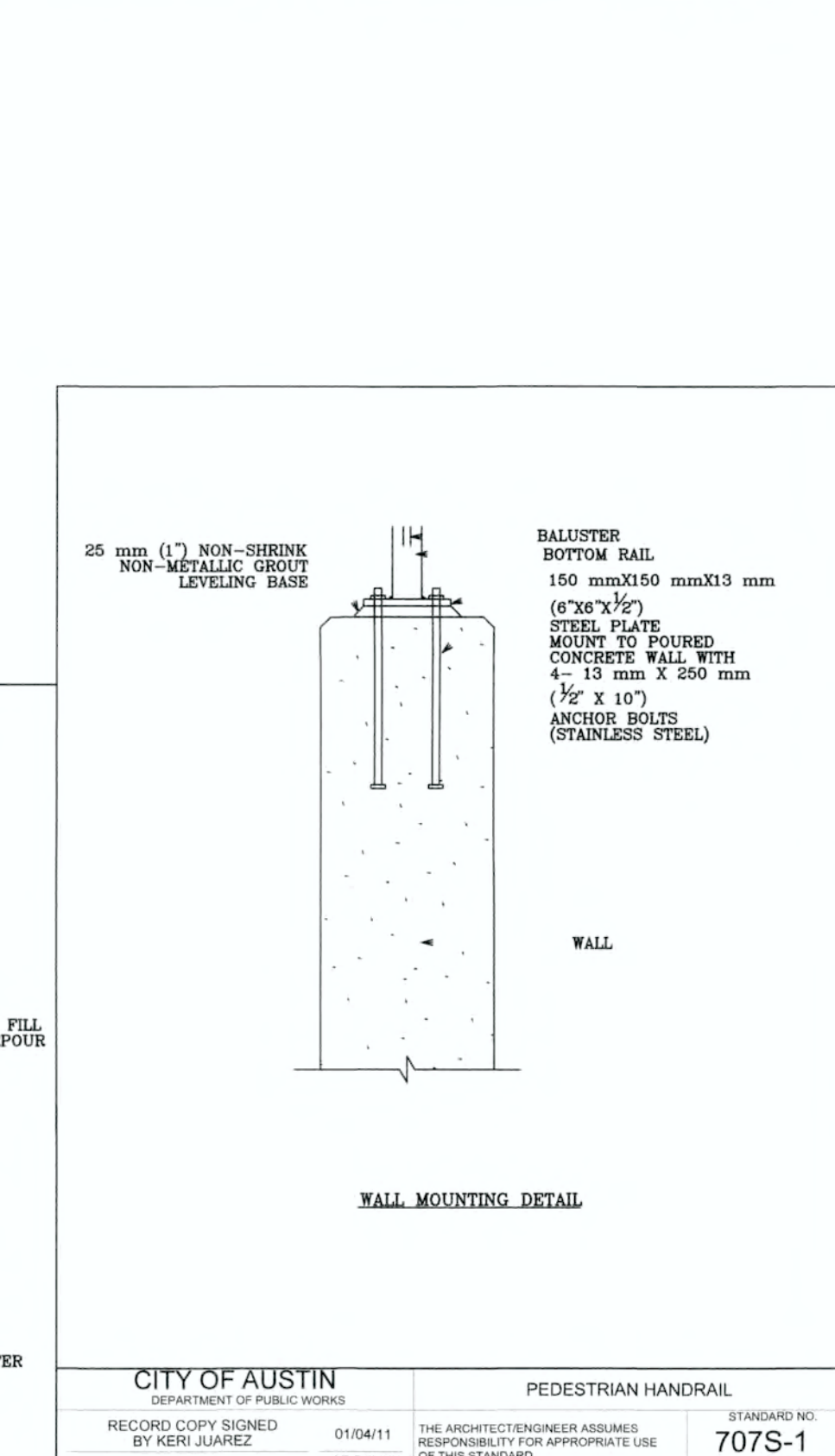
B. CAP SECTION

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DRILLED PIER CONCRETE BASE DETAIL

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WALL MOUNTING DETAIL

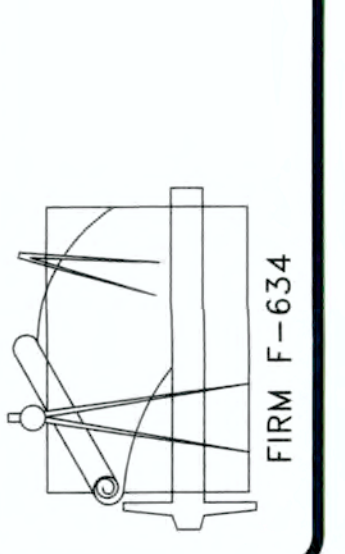
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DATE: OCT. 2023
DESIGNED: CS - ER
DRAWN: CS - ER
CHECKED:
JOB NO.:

DAVIS SPRING CENTER
CONSTRUCTION DETAILS
9900 PARMER LANE WEST



GRIFFIN ENGINEERING GROUP INC.
11808 TEDFORD ST., AUSTIN, TEXAS 78753 (512) 836-3113



SHEET NUMBER
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