

TCEQ CONTRIBUTING ZONE PLAN

METRO DRIVE OFFICE PARK WEST METRO DRIVE LEANDER, TEXAS 78641

PREPARED FOR

NORTH FOREST OFFICE SPACE 305 N. HEATHERWILDE BLVD, SUITE 250 PFLUGERVILLE, TEXAS 78660

PREPARED BY

PARNELL ENGINERING, INC. 500 E. WHITESTONE BLVD P.O BOX #1419 CEDAR PARK, TEXAS 78613 TEXAS ENGINEERING FIRM NO. F-19566



SUBMITTED MAY 2023



May 2, 2023

Texas Commission on Environmental Quality (TCEQ) 12100 Park 35 Circle Austin, Texas 78753

RE: Engineer's Summary Letter Metro Drive Office Park: Contributing Zone Plan (CZP) West Metro Drive Leander, TX 78641

To Whom It May Concern:

Please accept this Engineer's summary letter and report along with the accompanying Contributing Zone Plan (CZP) application packet as our formal submittal for a CZP for the above referenced project. Metro Drive Office Park is a proposed office development project comprised of nine (9) single stories office buildings situated on ±4.007 acres of land located approximately 400 linear feet west of the intersection of N US HWY 183 and West Metro Drive, Leander, Texas. The project is entirely within the Full Purpose Limits of the City of Leander. The property is legally subdivided and described as Lot 3B, block M of the replat of Lot 1, Block A of the resubdivision of Lot 1, Block A, HEB Leander Subdivision and replat of lot 3, Block M, of Northside Meadow, Phase 1A, A City of Leander, Williamson County, Texas.

The subject site is currently cleared and undeveloped with existing impervious cover totaling $\pm 11,854$ sf (0.27-ac). Existing impervious cover are from existing driveway pavement to west and east of property line. The planned development proposes 42,718 sf of structure roof tops, 68,205 sf of parking/drive pavements and 6,104 sidewalks/other paved surfaces totaling 117,207 sf (2.68-ac, 67% of the total site).

The subject property is located within the Brushy Creek Watershed. No portion of the property is located within the FEMA defined 100-yr floodplain per FIRM MAP PANEL No. 48491C0455F, having an effective date of December 20, 2019, in Williamson County, TX.

The existing tract is predominantly an open area with little to no tree coverage. A high point of approximately elevation 995-ft. exists along the northwestern portion of the property near the property line and existing driveway that is stubbed to our site from "The Learning Center", case number 19-SD-013. The land slopes away to the southeast typically between 1-5% slope, towards an existing inlet elevation 980-ft. at the intersection of two private roads. The soil on the site consists of Doss Silty Clay, Eckrant cobbly clay, and Georgetown clay loam.

Our design team has coordinated with Contech to select a water quality device named the "Jellyfish Filter" to treat the first half inch of rain fall over the impervious areas of the site. The proposed structural quality BMP will provide a TSS removal efficiency of 86% and will be located on the southeast portion of the site and will be built and maintained in compliance with TCEQ. Additionally, immediately on the downstream outfall of the Jellyfish Filter, there will be two linked stormwater detention ponds to control the increase in flow of the 2-yr, 10-yr, 25-yr, and 100-yr storm events. Atlas-14 rainfall intensities were utilized in the design of the detention ponds.

Appropriate erosion control measures have been designed in accordance with the City of Leander technical criteria and City of Austin Environmental Criteria Manual requirements and



are included for review with the accompanying plan set attached to this Contributing Zone Plan. The design of the site plan and site-engineering improvements are to ensure minimal impacts and effects on the natural and traditional character of the land and surrounding waterways. Hence, we do not anticipate any adverse impacts because of this development.

To our knowledge, the enclosed application materials are complete, correct, and in full compliance with the Technical Criteria Manuals of the TCEQ. Should you have any questions regarding this project or application, please do not hesitate to contact our office.

Sincerely, **Parnell Engineering Inc.** Texas Engineering Firm No. F-19566

mell_

Will Parnell, P.E.





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SECTION 1

EDWARDS AQUIFER APPLICATION COVER PAGE (TCEQ-20705)

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 <u>30 TAC 213</u>.

Administrative Review

1. <u>Edwards Aquifer applications</u> 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: <u>http://www.tceq.texas.gov/field/eapp</u>.

- 2. This Edwards Aquifer Application Cover Page form (certified by the applicant or agent) must be included in the application and brought to the administrative review meeting.
- 3. Administrative reviews are scheduled with program staff who will conduct the review. Applicants or their authorized agent should call the appropriate regional office, according to the county in which the project is located, to schedule a review. The average meeting time is one hour.
- 4. In the meeting, the application is examined for administrative completeness. Deficiencies will be noted by staff and emailed or faxed to the applicant and authorized agent at the end of the meeting, or shortly after. Administrative deficiencies will cause the application to be deemed incomplete and returned.

An appointment should be made to resubmit the application. The application is re-examined to ensure all deficiencies are resolved. The application will only be deemed administratively complete when all administrative deficiencies are addressed.

- 5. If an application is received by mail, courier service, or otherwise submitted without a review meeting, the administrative review will be conducted within 30 days. The applicant and agent will be contacted with the results of the administrative review. If the application is found to be administratively incomplete, it can be retrieved from the regional office or returned by regular mail. If returned by mail, the regional office may require arrangements for return shipping.
- 6. If the geologic assessment was completed before October 1, 2004 and the site contains "possibly sensitive" features, the assessment must be updated in accordance with the *Instructions to Geologists* (TCEQ-0585 Instructions).

Technical Review

- 1. When an application is deemed administratively complete, the technical review period begins. The regional office will distribute copies of the application to the identified affected city, county, and groundwater conservation district whose jurisdiction includes the subject site. These entities and the public have 30 days to provide comments on the application to the regional office. All comments received are reviewed by TCEQ.
- 2. A site assessment is usually conducted as part of the technical review, to evaluate the geologic assessment and observe existing site conditions. The site must be accessible to our staff. The site boundaries should be

clearly marked, features identified in the geologic assessment should be flagged, roadways marked and the alignment of the Sewage Collection System and manholes should be staked at the time the application is submitted. If the site is not marked the application may be returned.

- 3. We evaluate the application for technical completeness and contact the applicant and agent via Notice of Deficiency (NOD) to request additional information and identify technical deficiencies. There are two deficiency response periods available to the applicant. There are 14 days to resolve deficiencies noted in the first NOD. If a second NOD is issued, there is an additional 14 days to resolve deficiencies. If the response to the second notice is not received, is incomplete or inadequate, or provides new information that is incomplete or inadequate, the application must be withdrawn or will be denied. Please note that because the technical review is underway, whether the application is withdrawn or denied **the application fee will be forfeited**.
- 4. The program has 90 calendar days to complete the technical review of the application. If the application is technically adequate, such that it complies with the Edwards Aquifer rules, and is protective of the Edwards Aquifer during and after construction, an approval letter will be issued. Construction or other regulated activity may not begin until an approval is issued.

Mid-Review Modifications

It is important to have final site plans prior to beginning the permitting process with TCEQ to avoid delays.

Occasionally, circumstances arise where you may have significant design and/or site plan changes after your Edwards Aquifer application has been deemed administratively complete by TCEQ. This is considered a "Mid-Review Modification". Mid-Review Modifications may require redistribution of an application that includes the proposed modifications for public comment.

If you are proposing a Mid-Review Modification, two options are available:

- If the technical review has begun your application can be denied/withdrawn, your fees will be forfeited, and the plan will have to be resubmitted.
- TCEQ can continue the technical review of the application as it was submitted, and a modification application can be submitted at a later time.

If the application is denied/withdrawn, the resubmitted application will be subject to the administrative and technical review processes and will be treated as a new application. The application will be redistributed to the affected jurisdictions.

Please contact the regional office if you have questions. If your project is located in Williamson, Travis, or Hays County, contact TCEQ's Austin Regional Office at 512-339-2929. If your project is in Comal, Bexar, Medina, Uvalde, or Kinney County, contact TCEQ's San Antonio Regional Office at 210-490-3096

Please fill out all required fields below and submit with your application.

1. Regulated Entity Name: Metro Drive Office Park				2. Regulated Entity No.:				
3. Customer Name: North Forest Office Space- South Austin, LLC			4. Customer No.:					
5. Project Type: (Please circle/check one)	New	Modification		Extension		Exception		
6. Plan Type: (Please circle/check one)	WPAP CZP	SCS	UST	AST	EXP	EXT	Technical Clarification	Optional Enhanced Measures
7. Land Use: (Please circle/check one)	Residential	Non-r	Non-residential 8. Sit			8. Sit	e (acres):	±4.007
9. Application Fee:	\$4,000	10. P	10. Permanent BMP(s):			s):	1 – Jelly Fish Filter	
11. SCS (Linear Ft.):	N/A	12. AST/UST (No. Tanks):			nks):	N/A		
13. County:	Williamson	14. Watershed:				North Brushy Creek Watershed		

Application Distribution

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

Austin Region

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

I certify that to the best of my knowledge, that the application is complete and accurate. This application is hereby submitted to TCEQ for administrative review and technical review.

DEVON VO Print Name of Customer/Authorized Agent 05/26/23 Signature of Customer/Authorized Agent Date

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

SECTION 2

CONTRIBUTING ZONE PLAN APPLICATION (TCEQ-10257)

Contributing Zone Plan Application

Texas Commission on Environmental Quality

for Regulated Activities on the Contributing Zone to the Edwards Aquifer and Relating to 30 TAC §213.24(1), Effective June 1, 1999

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

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

Signature

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

Print Name of Customer/Agent: Devon Vo

Date: <u>May 26, 2023</u>

Signature of Customer/Agent:

INON

Regulated Entity Name: Metro Drive Office Park

Project Information

- 1. County: Williamson
- 2. Stream Basin: Brushy Creek
- 3. Groundwater Conservation District (if applicable): N/A
- 4. Customer (Applicant):

Contact Person: Jon Denton Entity: North Forest Office Space - South Austin, LLC Mailing Address: <u>305 N. Heatherwilde Blvd, Suite 250</u> City, State: <u>Pflugeville, TX</u> Zip: <u>78660</u> Telephone: <u>512-515-1553 ext 407</u> Fax: <u>n/a</u> Email Address: jond@nforest.com

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5. Agent/Representative (If any):

Contact Person: <u>Devon Vo</u> Entity: <u>Parnell Engineering, Inc.</u> Mailing Address: <u>500 E. Whitestone Blvd, #1419</u> City, State: <u>Cedar Park, Tx</u> Zip: <u>78613</u> Telephone: <u>512-299-5963</u> Fax: _____ Email Address: <u>devon.vo@parnellengineeringinc.com</u>

- 6. Project Location:
 - The project site is located inside the city limits of <u>Leander</u>, <u>Williamson County</u>, <u>TX</u>.
 - The project site is located outside the city limits but inside the ETJ (extra-territorial jurisdiction) of _____.
 - The project site is not located within any city's limits or ETJ.
- 7. The location of the project site is described below. Sufficient detail and clarity has been provided so that the TCEQ's Regional staff can easily locate the project and site boundaries for a field investigation.

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The subject site is located approximately 390 linear feet west of the intersection of US
HWY 183 & West Metro Drive in Leander, Texas 78641
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- 8. Attachment A Road Map. A road map showing directions to and the location of the project site is attached. The map clearly shows the boundary of the project site.
- 9. Attachment B USGS Quadrangle Map. A copy of the official 7 ½ minute USGS Quadrangle Map (Scale: 1" = 2000') is attached. The map(s) clearly show:

Project site boundaries.

- 10. Attachment C Project Narrative. A detailed narrative description of the proposed project is attached. The project description is consistent throughout the application and contains, at a minimum, the following details:
 - Area of the site
 Offsite areas
 Impervious cover
 Permanent BMP(s)
 Proposed site use
 Site history
 Previous development
 - \boxtimes Area(s) to be demolished
- 11. Existing project site conditions are noted below:

Existing commercial site Existing industrial site

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

12. The type of project is:

Residential: # of Lots:	
Residential: # of Living Unit Equivalents: _	
🔀 Commercial	
🗌 Industrial	
Other:	

13. Total project area (size of site): <u>4.007</u> Acres

Total disturbed area: <u>3.86</u> Acres

- 14. Estimated projected population: 50-100 people
- 15. The amount and type of impervious cover expected after construction is complete is shown below:

Impervious Cover of Proposed Project	Sq. Ft.	Sq. Ft./Acre	Acres
Structures/Rooftops	42,718	÷ 43,560 =	0.981
Parking	68,205	÷ 43,560 =	1.57
Other paved surfaces	6,104	÷ 43,560 =	0.14
Total Impervious Cover	117,027	÷ 43,560 =	2.69

Table 1 - Impervious Cover

Total Impervious Cover 2.68 ÷ Total Acreage 4.007 X 100 = 67.00% Impervious Cover

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

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

For Road Projects Only

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

🛛 N/A

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18.	Туре	of	project:
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TXDOT road project. County road or roads built to county specifications. City thoroughfare or roads to be dedicated to a municipality. Street or road providing access to private driveways. 19. Type of pavement or road surface to be used: Concrete Asphaltic concrete pavement Other: 20. Right of Way (R.O.W.): Length of R.O.W.: _____ feet. Width of R.O.W.: feet. $L \times W = Ft^2 \div 43,560 Ft^2/Acre = acres.$ 21. Pavement Area: Length of pavement area: _____ feet. Width of pavement area: feet. $L \times W = Ft^2 \div 43,560 Ft^2/Acre = acres.$ Pavement area acres ÷ R.O.W. area acres x 100 = % impervious cover.

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

A rest stop will not be included in this project.

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

Stormwater to be generated by the Proposed Project

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

Wastewater to be generated by the Proposed Project

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

N/A

26. Wastewater will be disposed of by:

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

 Attachment F - Suitability Letter from Authorized Agent. An on-site sewage facility will be used to treat and dispose of the wastewater from this site. The appropriate licensing authority's (authorized agent) written approval is attached. It states that the land is suitable for the use of private sewage facilities and will meet or exceed the requirements for on-site sewage facilities as specified under 30 TAC Chapter 285 relating to On-site Sewage Facilities. Each lot in this project/development is at least one (1) acre (43,560 square feet) in size. The system will be designed by a licensed professional engineer or registered sanitarian and installed by a licensed installer in compliance with 30 TAC Chapter 285.
Sewage Collection System (Sewer Lines): The sewage collection system will convey the wastewater to the (name) Treatment Plant. The treatment facility is:
Existing. Proposed.
N/A

Permanent Aboveground Storage Tanks(ASTs) ≥ 500 Gallons

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

N/A

27. Tanks and substance stored:

Table 2 - Tanks and Substance Storage

AST Number	Size (Gallons)	Substance to be Stored	Tank M	laterial
1				
2				
3				
4				
5				
	.	To	tal x 1.5 =	Gallons

Total x 1.5 = _____ Gallons

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

one tank system, the containment structure is sized to capture one and one-half (1 1/2) times the cumulative storage capacity of all systems.

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

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

Table 3 - Secondary Containment

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

Total: _____ Gallons

30. Piping:

All piping, hoses, and dispensers will be located inside the containment structure.

Some of the piping to dispensers or equipment will extend outside the containment structure.

The piping will be aboveground

] The piping will be underground

- 31. The containment area must be constructed of and in a material impervious to the substance(s) being stored. The proposed containment structure will be constructed of:
- 32. Attachment H AST Containment Structure Drawings. A scaled drawing of the containment structure is attached that shows the following:
 - Interior dimensions (length, width, depth and wall and floor thickness).
 - Internal drainage to a point convenient for the collection of any spillage.

Tanks clearly labeled

Piping clearly labeled

Dispenser clearly labeled

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

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

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

Site Plan Requirements

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

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

Site Plan Scale: 1" = <u>30</u>'.

35. 100-year floodplain boundaries:

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

 \boxtimes 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): <u>FEMA PANEL NO. 48491C0455F, DATED DECEMBER 20, 2019 FOR</u> <u>WILLIAMSON COUNTY</u>.

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

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

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

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

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

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

41. \boxtimes Locations where soil stabilization practices are expected to occur.

42. Surface waters (including wetlands).

N/A

43. Locations where stormwater discharges to surface water.

There will be no discharges to surface water.

44. Temporary aboveground storage tank facilities.

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

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45. Permanent aboveground storage tank facilities.

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

46. \square Legal boundaries of the site are shown.

Permanent Best Management Practices (BMPs)

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

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

🗌 N/A

- 48. These practices and measures have been designed, and will be constructed, operated, and maintained to insure that 80% of the incremental increase in the annual mass loading of total suspended solids (TSS) from the site caused by the regulated activity is removed. These quantities have been calculated in accordance with technical guidance prepared or accepted by the executive director.
 - The TCEQ Technical Guidance Manual (TGM) was used to design permanent BMPs and measures for this site.

A technical guidance other than the TCEQ TGM was used to design permanent BMPs and measures for this site. The complete citation for the technical guidance that was used is: _____.

🗌 N/A

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

🗌 N/A

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

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

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

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

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

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

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

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

52. X Attachment J - BMPs for Upgradient Stormwater.

A description of the BMPs and measures that will be used to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site is attached.

No surface water, groundwater or stormwater originates upgradient from the site and flows across the site, and an explanation is attached.

Permanent BMPs or measures are not required to prevent pollution of surface water, groundwater, or stormwater that originates upgradient from the site and flows across the site, and an explanation is attached.

53. X Attachment K - BMPs for On-site Stormwater.

A description of the BMPs and measures that will be used to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff from the site is attached.
 Permanent BMPs or measures are not required to prevent pollution of surface water or groundwater that originates on-site or flows off the site, including pollution caused by contaminated stormwater runoff.

- 54. Attachment L BMPs for Surface Streams. A description of the BMPs and measures that prevent pollutants from entering surface streams is attached.
 - 🛛 N/A
- 55. Attachment M Construction Plans. Construction plans and design calculations for the proposed permanent BMPs and measures have been prepared by or under the direct supervision of a Texas Licensed Professional Engineer, and are signed, sealed, and dated. Construction plans for the proposed permanent BMPs and measures are

attached and include: Design calculations, TCEQ Construction Notes, all proposed structural plans and specifications, and appropriate details.

N/A

spe	achment N - Inspection, Maintenance, Repair and Retrofit Plan. A site and BMP ecific plan for the inspection, maintenance, repair, and, if necessary, retrofit of the manent BMPs and measures is attached. The plan fulfills all of the following:
\boxtimes	Prepared and certified by the engineer designing the permanent BMPs and measures
=	Signed by the owner or responsible party Outlines specific procedures for documenting inspections, maintenance, repairs, and, if necessary, retrofit.
\boxtimes	Contains a discussion of record keeping procedures
□ N/A	λ
rec	achment O - Pilot-Scale Field Testing Plan. Pilot studies for BMPs that are not ognized by the Executive Director require prior approval from the TCEQ. A plan for ot-scale field testing is attached.
🖂 N/A	4
of t and and cre by t	achment P - Measures for Minimizing Surface Stream Contamination. A description the measures that will be used to avoid or minimize surface stream contamination d changes in the way in which water enters a stream as a result of the construction d development is attached. The measures address increased stream flashing, the ation of stronger flows and in-stream velocities, and other in-stream effects caused the regulated activity, which increase erosion that result in water quality gradation.
□ N/A	A

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

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

or a non-residential development such as commercial, industrial, institutional, schools, and other sites where regulated activities occur.

Administrative Information

- 61. Submit one (1) original and one (1) copy of the application, plus additional copies as needed for each affected incorporated city, groundwater conservation district, and county in which the project will be located. The TCEQ will distribute the additional copies to these jurisdictions.
- 62. Any modification of this Contributing Zone Plan may require TCEQ review and Executive Director approval prior to construction, and may require submission of a revised application, with appropriate fees.
- 63. The site description, controls, maintenance, and inspection requirements for the storm water pollution prevention plan (SWPPP) developed under the EPA NPDES general permits for stormwater discharges have been submitted to fulfill paragraphs 30 TAC §213.24(1-5) of the technical report. All requirements of 30 TAC §213.24(1-5) have been met by the SWPPP document.
 - The Temporary Stormwater Section (TCEQ-0602) is included with the application.

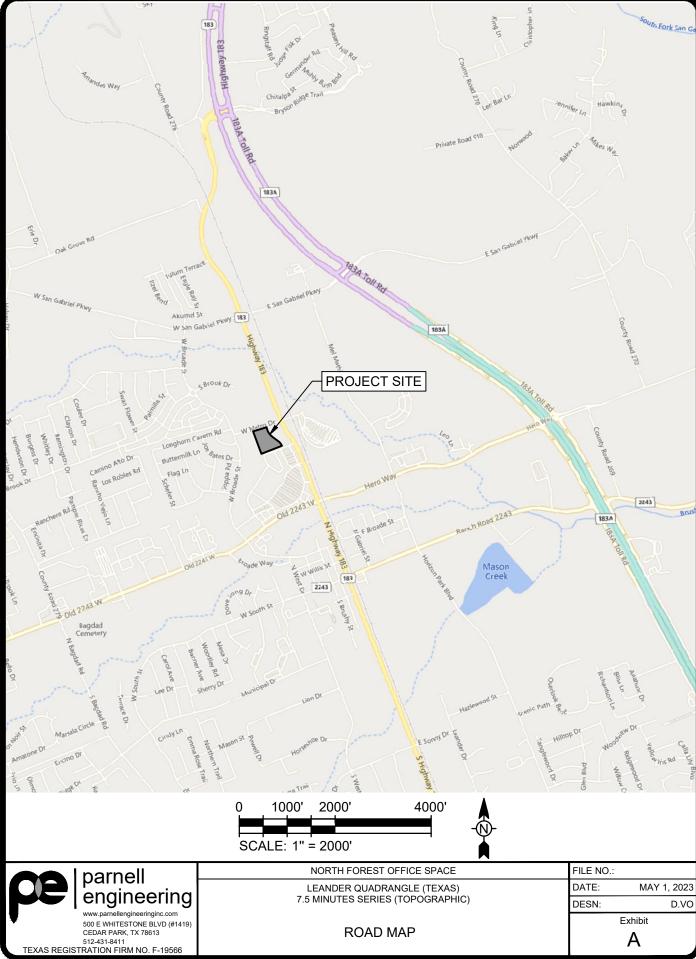
ATTACHMENT A

ROAD MAP



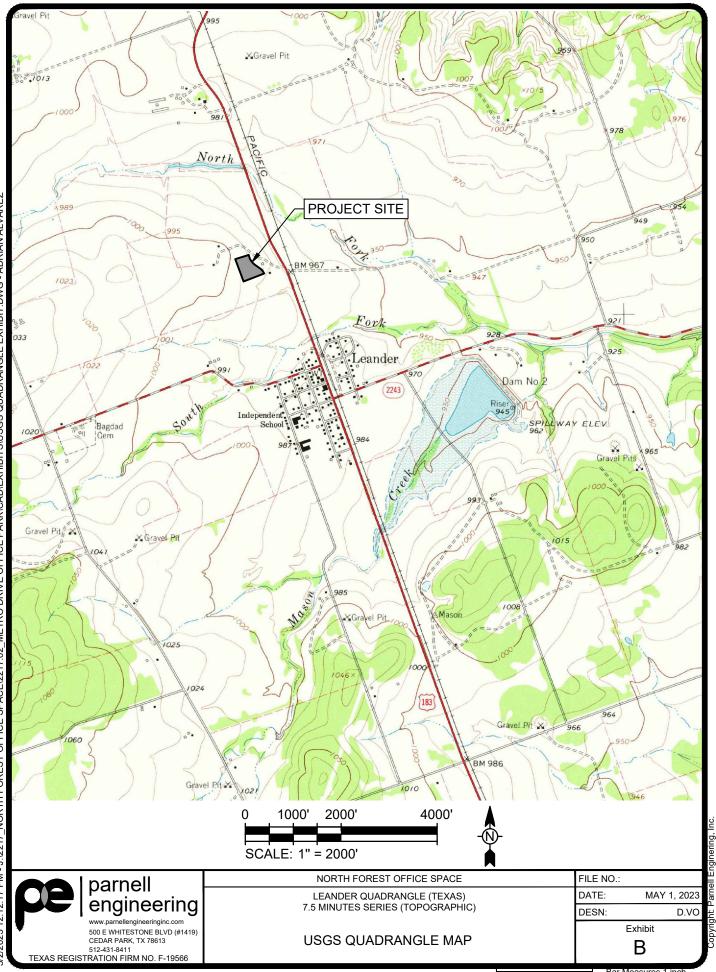
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Copyright



ATTACHMENT B

USGS QUADRANGLE MAP



6/2/2023 12:12:17 PM - J:/2217_NORTH FOREST OFFICE SPACE/2217.02_METRO DRIVE OFFICE PARKICADIEXHIBITS/USGS QUADRANGLE EXHIBIT.DWG - ADRIAN ALVAREZ

Bar Measures 1 incl

ATTACHMENT C

PROJECT NARRATIVE



Contributing Zone Application (TCEQ-10257)

Attachment C Project Narrative

Metro Drive Office Park is a proposed office development project comprised of nine (9) single stories office buildings situated on ±4.007 acres of land located approximately 400 linear feet west of the intersection of N US HWY 183 and West Metro Drive, Leander, Texas. The project is entirely within the Full Purpose Limits of the City of Leander. The property is legally subdivided and described as Lot 3B, block M of the replat of Lot 1, Block A of the resubdivision of Lot 1, Block A, HEB Leander Subdivision and replat of lot 3, Block M, of Northside Meadow, Phase 1A, A City of Leander, Williamson County, Texas.

The subject site is currently cleared and undeveloped with existing impervious cover totaling $\pm 11,854$ sf (0.27-ac). Existing impervious cover are from existing driveway pavement to west and east of property line. The planned development proposes 42,718 sf of structure roof tops, 68,205 sf of parking/drive pavements and 6,104 sidewalks/other paved surfaces totaling 117,207 sf (2.68-ac, 67% of the total site), as denoted on the Table 1 – Impervious Cover on page 3 of the Contributing Zone Application.

The subject property is located within the Brushy Creek Watershed. No portion of the property is located within the FEMA defined 100-yr floodplain per FIRM MAP PANEL No. 48491C0455F, having an effective date of December 20, 2019, in Williamson County, TX.

The existing tract is predominantly an open area with little to no tree coverage. A high point of approximately elevation 995-ft. exists along the northwestern portion of the property near the property line and existing driveway that is stubbed to our site from "The Learning Center", case number 19-SD-013. The land slopes away to the southeast typically between 1-5% slope, towards an existing inlet elevation 980-ft. at the intersection of two private roads. The soil on the site consists of Doss Silty Clay, Eckrant cobbly clay, and Georgetown clay loam.

Our design team has coordinated with Contech to select a water quality device named the "Jellyfish Filter" to treat the first half inch of rain fall over the impervious areas of the site. The proposed structural quality BMP will provide a TSS removal efficiency of 86% and will be located on the southeast portion of the site and will be built and maintained in compliance with TCEQ. Additionally, immediately on the downstream outfall of the Jellyfish Filter, there will be two linked stormwater detention ponds to control the increase in flow of the 2-yr, 10-yr, 25-yr, and 100-yr storm events. Atlas-14 rainfall intensities were utilized in the design of the detention ponds.

Appropriate erosion control measures have been designed in accordance with the City of Leander technical criteria and City of Austin Environmental Criteria Manual requirements and are included for review with the accompanying plan set attached to this Contributing Zone Plan. The design of the site plan and site engineering improvements are to ensure minimal impacts and effects on the natural and traditional character of the land and surrounding waterways. Hence, we do not anticipate any adverse impacts because of this development.

ATTACHMENT D

FACTORS AFFECTING SURFACE WATER QUALITY



Contributing Zone Application (TCEQ-10257)

Attachment D Factors Affecting Surface Water Quality

The factors that could potentially affect surface water quality attributable to the construction of the site consist of the following:

- 1. Erosion to soil disturbance during clearing and grubbing excavation, embankment, trenching, and backfilling utilities, final grading.
- 2. Oil and grease from the asphalt pavement and vehicle traffic.
- 3. Construction activity during the construction process (temporary). All activities will be conducted in a manner to minimize the potential for impact to the environment.
- 4. Normal silt build-up.
- 5. Trash which becomes loose from the subdivision residents.
- 6. Storage or equipment on-site.
- 7. Accidental spills of minor number of petroleum-based products such as paint, glue and sealants during construction.
- 8. Fertilizers used in the landscaping around the buildings.
- 9. Waste generation, storage and disposal.

Temporary Best Management Practices

These factors associated with the construction of the various improvements are kept in check through the Temporary Best Management Practices.

Permanent Best Management Practices

After construction of the various improvements and the site is restored and revegetated, the factors that could affect water quality consist of the following:

- 1. Pollutants associated with runoff from paved areas.
- 2. Pollutants associated with runoff from maintained vegetation.
- 3. Litter.

For all factors, pollutants effects will be reduced by the treatment of the onsite Jellyfish Filter BMP system that will capture and treat the runoff.

ATTACHMENT E

VOLUME AND CHARACTER OF STORMWATER



Contributing Zone Application (TCEQ-10257)

Attachment E Volume and Character of Stormwater

The increase in impervious cover and vehicular traffic associated with this development will increase the pollutants which could potentially drain into the stormwater runoff. Runoff from this project will consist of runoff from roofs, parking, and driveways. Runoff contaminants will most likely include oil and grease from vehicular use on the proposed private driveway and parking as well as lawn fertilizers and clippings (please reference Attachment D of this section for more information).

The runoffs will be conveyed via on-site storm sewer systems to the proposed Jellyfish Filter (BMPs) to capture the runoff from the proposed impervious cover. The proposed Jellyfish Filter has been designed by Contech and uses the TCEQ TSS Removal Calculations Spreadsheet which provides 86% remove efficiency. The spreadsheet can be found on the "Water Quality Control Plan", denoted as sheet CG-301 in the attached construction plan set.

Storm water runoff from the site in the pre-developed and post developed conditions were calculated using the SCS curve number method with Atlas-14 rainfall data for the City of Leander. The pre-construction runoff curve number varies from 80 to 84 and the post construction coefficients varies similarity from 80 to 84. All corresponding calculations can be found on the "Existing and Proposed Drainage Area Map", denoted as CG-201 & CG-202 of the attached construction plan set.

ATTACHMENT F

SUITABILITY LETTER FROM AUTHORIZED AGENT

NOT APPLICABLE





Contributing Zone Application (TCEQ-10257)

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

Not applicable

No on-site sewage facilities are proposed with this project.

ATTACHMENT G

ALTERNATIVE SECONDARY CONTAINMENT METHOD

NOT APPLICABLE



Contributing Zone Application (TCEQ-10257)

Attachment G Alternative Secondary Containment Methods

Not applicable

ATTACHMENT H

AST CONTAINMENT STRUCTURE DRAWINGS

NOT APPLICABLE



Contributing Zone Application (TCEQ-10257)

Attachment H AST Containment Structure Drawings

Not applicable

ATTACHMENT I

20% OR LESS IMPERVIOUS COVER WAIVER



Contributing Zone Application (TCEQ-10257)

Attachment I 20% or Less Impervious Cover Waiver

Not applicable

ATTACHMENT J

BMPS FOR UPGRADIENT STORMWATER



Contributing Zone Application (TCEQ-10257)

Attachment J BMPs for Upgradient Stormwater

Based on the existing topography map of the area, a portion west of the site denoted as OS-1, OS-2 and OS-3 on the "Proposed Drainage Area Map" naturally sheet flow and eventually shallow concentrated to four (4) distinct analysis point. In proposed conditions, OS-1 and OS-2 will naturally flow through the site as that on existing conditions and will be captured and conveyed via on-site storm sewer systems to the onsite BMPs and into two (2) detention pond with outflow control structures to further minimized any pollution to surface and/or storm water downstream of the site. OS-3 will be kept in natural conditions with native grass and will convey via sheet flow and concentrated flow via natural grass vegetation to the existing analysis point. Additional measures such as silt fences, stabilized construction entrance and concrete washouts area will be used as temporary Best Management Practices (BMPs) for stormwater that originates upstream of the subject site to prevent silts and debris washing across the site along with the storm water runoffs. Please reference the "Erosion and Sedimentation Control" on C-201 of the plan set.

ATTACHMENT K

BMPS FOR ON-SITE STORMWATER



Contributing Zone Application (TCEQ-10257)

Attachment K BMPs for On-Site Stormwater

BMP's for on-site stormwater include the following:

Temporary BMP's

- 1. Silt Fence
- 2. Silt Fence with Jay Hooks
- 3. Inlet Protection
- 4. Stabilized Construction Entrances
- 5. Concrete Washout Areas

The Jellyfish Filter has been designed per TCEQ Technical Guidance on Best Management Practice (RG-348) to provide water quality treatment for all on-site flow generated from the proposed impervious cover. Flows from the site will first drain to the Jellyfish Filter to be treated and then discharge to two (2) detention ponds that are hydraulically connected with low flow orifice and high flow weirs at the outfall of detention pond 2. The on-site detention ponds are designed to reduce post developed flows to predeveloped rates for the 2-, 10-, 25- and 100-years storm events. The pond was modeled and designed by utilizing Atlas-14 rain fall data for the City of Leander and HEC-HMS software.

ATTACHMENT L

BMPS FOR SURFACE STREAMS



Contributing Zone Application (TCEQ-10257)

Attachment L BMPs for Surface Streams

The proposed Erosion and Sedimentation Controls (such as silt fence, inlet protection, stabilized construction entrances and concrete washout areas) will aid in preventing pollution from entering the existing streams located off-site of the project during the construction phase. The on-site BMPs will remove at least 86% of the potential pollutants from entering surface stream.

ATTACHMENT M

CONSTRUCTION PLANS

DEVELOPER

NORTH FOREST OFFICE SPACE 305 N. HEATHERWIDE BLVD. SUITE 250 PFLUGERVILLE, TEXAS 78660 (515) 515-1553 CONTACT: JON DENTON; ADAM BURKE EMAIL: JOND@NFOREST.COM ADAMB@NFOREST.COM

SURVEYOR

ATS ENGINEERS INSPECTORS & SURVEYORS 4910 WEST HWY 290 AUSTIN, TEXAS 78735 (512) 328-6996

CIVIL ENGINEER | AGENT

PARNELL ENGINEERING INC. 500 E WHITESTONE BLVD. (#1419) CEDAR PARK, TEXAS 78613 (512) 431-8411 CONTACT: WILL PARNELL, P.E.; DEVON VO EMAIL: WILL.PARNELL@PARNELLENGINEERINGINC.COM DEVON.VO@PARNELLENGINEERINGINC.COM

ARCHITECT NORTH FOREST DEVELOPMENT, LLC.

2829 WEHRLE DR. SUITE 1 WILLIAMSVILLE, NY 14221 (716) 626-9764

PROJECT DESCRIPTION

THIS PROJECT CONSIST OF NINE OFFICE BUILDINGS WITH ASSOCIATED PARKING AND UTILITIES, AS WELL AS, WATER QUALITY AND DETENTION FACILITIES SITUATED ON 4.007 ACRES TRACT LOCATED ON WEST METRO DRIVE WILLIAMSON COUNTY, LEANDER, TEXAS 78641

ZONING

GC-4-C - GENERAL COMMERCIAL

FLOOD PLAIN INFORMATION

THIS TRACT IS LOCATED IN ZONE "X" - AREA OF MINIMAL FLOOD HAZARD AS SHOWN ON THE FLOODPLAIN INSURANCE RATE MAP PANEL NO. 48491C0455F, WILLIAMSON COUNTY, TEXAS DATED DECEMBER 20,2019

WATERSHED

THE SUBJECT PROPERTY IS LOCATED WITHIN TURKEY CREEK - BRUSHY CREEK

THE SITE IS LOCATED WITHIN THE EDWARDS AQUIFER CONTRIBUTING ZONE. DEVELOPMENT OF THIS SITE WILL COMPLY WITH ALL APPLICABLE TCEQ EDWARDS AQUIFER RULES.

LEGAL DESCRIPTION

4.007 ACRES (4.006 SURVEYED) OUT OF THE ATS ENGINEERS INSPECTORS & SURVEYORS SURVEY, LOT 3 B, BLOCK M. REPLAT OF LOT 1 BLOCK A. HEB LEANDER SUBDIVISION AND LOT 3 BLOCK M. OF NORTHSIDE MEADOW, PHASE 1A, RECORD IN DOCUMENT NO. 2019049397

BENCHMARK NOTE

TBM #1 - MAG NAIL IN ASPHALT IN THE PRIVATE DRIVE AISLE RIGHT OFF OS W. METRO DRIVE IN BETWEEN W. BROADE STREET AND HIGHWAY 183, N 10185945.36 E 3075316.68. ELEVATION =985.76'.

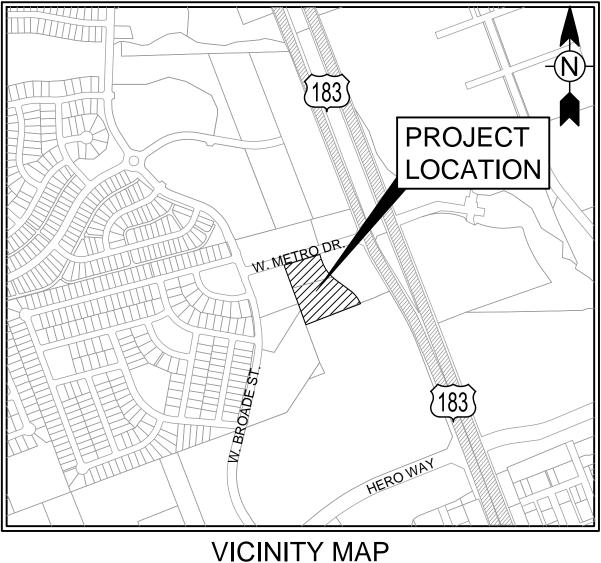
NOTES:

- 1. APPROVAL OF THESE PLANS BY THE CITY OF LEANDER INDICATES COMPLIANCE WITH APPLICABLE CITY REGULATIONS ONLY. APPROVAL BY OTHER GOVERNMENTAL ENTITIES MAY BE REQUIRED PRIOR TO THE START OF CONSTRUCTION. THE APPLICANT IS RESPONSIBLE FOR DETERMINING IF ADDITIONAL APPROVALS ARE NECESSARY.
- IF AT ANY TIME DURING CONSTRUCTION OF THIS PROJECT AN UNDERGROUND STORAGE TANK (UST) IS FOUND, CONSTRUCTION IN THAT AREA MUST STOP UNTIL A CITY OF LEANDER UST CONSTRUCTION PERMIT IS APPLIED FOR AND APPROVED. ANY UST REMOVAL WORK MUST BE CONDUCTED BY A UST CONTRACTOR THAT IS REGISTERED WITH THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ). CONTACT BRUCE CALDER AT (512) 974-2922 IF YOU HAVE ANY QUESTIONS. [COA TITLE 6]"
- RELEASE OF THIS APPLICATION 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.
- THE PLAN IS COMPLETE, ACCURATE AND IN COMPLIANCE WITH TITLE 30 OF THE LAND DEVELOPMENT CODE. 5. BY THE ACT OF SUBMITTING A BID FOR THE PROPOSED CONTRACT, THE BIDDER WARRANTS THAT THE BIDDER, AND ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS HE INTENDS TO USE HAVE CAREFULLY AND THOROUGHLY REVIEWED THE DRAWINGS AND SPECIFICATIONS AND OTHER CONTRACT DOCUMENTS AND HAVE FOUND THEM COMPLETE AND FREE FROM ANY AMBIGUITIES AND SUFFICIENT FOR THE PURPOSE INTENDED. THE BIDDER FURTHER WARRANTS THAT TO THE BEST OF HIS OR HIS SUBCONTRACTORS AND MATERIAL SUPPLIERS KNOWLEDGE ALL MATERIALS AND PRODUCTS SPECIFIED OR INDICATED HEREIN ARE ACCEPTABLE FOR ALL APPLICABLE CODES AND AUTHORITIES.
- THE SIZE AND LOCATION OF UTILITY STRUCTURES, (IF SHOWN), MAY BE EXAGGERATED FOR GRAPHICAL CLARITY.
- 7. 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, LEANDER, TEXAS).
- PURSUANT TO 15-12-131 OF THE CITY CODE, THE CONTRACTOR MAY NOT BLOCK, DIRECT, IMPEDE, OR REROUTE PEDESTRIAN AND VEHICULAR TRAFFIC, NOR PLACE A BARRICADE OR OTHER TRAFFIC DEVICE IN A RIGHT-OF-WAY, WITHOUT FIRST OBTAINING A TEMPORARY USE OF RIGHT-OF-WAY PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION.
- CONTRACTOR SHALL RESTORE ALL SIGNS AND PAVEMENT MARKINGS TO EXISTING CONDITIONS FOLLOWING THE COMPLETION OF EACH PHASE OF CONSTRUCTION. CONTRACTORS SHALL REFER TO THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (TMUTCD) FOR SIGN AND MARKING DIMENSIONS AND COLORS.
- 10. ALL CONSTRUCTION HEREIN SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF LEANDER /OR TXDOT STANDARD SPECIFICATION, UNLESS OTHER WISE NOTED. NO SEPARATE SPECIFICATIONS WILL BE PROVIDED BY PARNELL ENGINEERING, INC.
- 9. THE APPLICANT/OWNER MUST COORDINATE WITH UTILITY COMPANIES PRIOR TO CONSTRUCTION. 10. CONTRACTOR SHALL COORDINATE CONTINUOUSLY AND AS NECESSARY WITH PROPERTY/BUSINESS OWNERS
- TO MAINTAIN CONTINUATION OF TRAFFIC CONTROL AND ACCESS. 11. BE INFORMED THAT THE CONTRACTOR MUST OBTAIN A SEPARATE PERMIT TO WORK WITHIN THE COUNTY
- ROW. 12. THE ENGINEER WHO PREPARED THESE PLANS IS RESPONSIBLE FOR THEIR ADEQUACY. IN APPROVING THESE
- PLANS, TRAVIS COUNTY MUST RELY UPON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER. 13. NO EQUIPMENT, MATERIALS, AND/OR SPOILS SHALL BE STORED OVERNIGHT WITHIN THE FEMA 100-YR FLOODPLAIN. THE CREEK, AND THE CWQZ.

SITE DEVELOPMENT PLAN FOR METRO DRIVE OFFICE PARK WEST METRO DRIVE

WILLIAMSON COUNTY, LEANDER, TEXAS, 78641

MAY 2023



NOT TO SCALE

SUBMITTAL DATE: MAY 10, 2023

RELATED CASE NUMBERS:

TAX I.D NO: R586913, R586912

LAND USE SUMMARY			
ZONING:	GC-4-C - GENERAL COMMERCIAL		
LAND USE:	OFFICE SPACE		
ACREAGE:	4.006 ACRES (174,507 SQ. FT.)		
TOTAL IMPERVIOUS COVER:	2.995 ACRES (130,443 SQ.FT.)		
BUILDING IMPERVIOUS COVER:	0.981 ACRES (42,718 SQ.FT.)		
FUTURE LAND USE:	ACTIVITY CENTER		

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "TEXAS ONE CALL" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN PER THE APPROPRIATE REMEDIAL ACTION AGREED UPON BY THE ENGINEER.

	REVISIONS / CORRECTIONS						
NO	DESCRIPTION	SHEETS IN PLAN SET	NET CHANGE IMP. COVER (sq. ft.)	TOTAL SITE IMP. COVER (sq. ft.)/%	CITY OF LEANDER APPROVAL DATE	DATE IMAGED	

	S	SHEET INDEX
SHT NO.	SHT ID.	DESCRIPTION
1	G-001	COVER SHEET AND SHEET INDEX
2	G-002	GENERAL NOTES AND ABBREVIATIONS
3	V-101	FINAL PLAT - SHEET 1
4	V-102	FINAL PLAT - SHEET 2
5	C-101	EXISTING CONDITIONS AND DEMOLITION PLAN
6	C-201	EROSION AND SEDIMENT CONTROL PLAN
7	C-202	EROSION AND SEDIMENT CONTROL DETAILS
8	CS-101	OVERALL SITE PLAN
9	CS-102	PHASING PLAN
10	CS-103	FIRE PROTECTION PLAN
11	CG-101	GRADING AND DRAINAGE PLAN
12	CG-102	DETAILED GRADING
13	CG-201	EXISTING DRAINAGE MAP
14	CG-202	PROPOSED DRAINAGE AREA MAP
15	CG-203	INLET DRAINAGE AREA MAP
16	CG-301	WATER QUALITY CONTROL PLAN
17	CG-302	DETENTION POND 1 PLAN
18	CG-303	DETENTION POND 2 PLAN
19	CU-101	OVERALL UTILITY PLAN
20	CU-102	PROPOSED DRY UTILITY PLAN
21	CU-201	UTILITY DETAILS - SHEET 1
22	CU-202	UTILITY DETAILS - SHEET 2
23	CU-203	UTILITY DETAILS - SHEET 3
24	C-501	CONSTRUCTION DETAILS - SHEET 1
25	C-502	CONSTRUCTION DETAILS - SHEET 2
26	C-503	CONSTRUCTION DETAILS - SHEET 3
27	LS-101	LANDSCAPE PLAN
28	LS-102	LANDSCAPE CALCULATIONS AND SPECIFICATIONS
29	LS-103	LANDSCAPE AND TREE PROTECTION DETAILS
30	A-101	ARCHITECTURAL ELEVATIONS - BUILDING 1
31	A-102	ARCHITECTURAL ELEVATIONS - BUILDING 2
32	A-103	ARCHITECTURAL ELEVATIONS - BUILDING 3
33	A-104	ARCHITECTURAL ELEVATIONS - BUILDING 4
34	A-105	ARCHITECTURAL ELEVATIONS - BUILDING 5
35	A-106	ARCHITECTURAL ELEVATIONS - BUILDING 6
36	A-107	ARCHITECTURAL ELEVATIONS - BUILDING 7
37	A-108	ARCHITECTURAL ELEVATIONS - BUILDING 8
38	A-109	ARCHITECTURAL ELEVATIONS - BUILDING 9
39	E-101	SITE LIGHTING AND PHOTOMETRICS PLAN

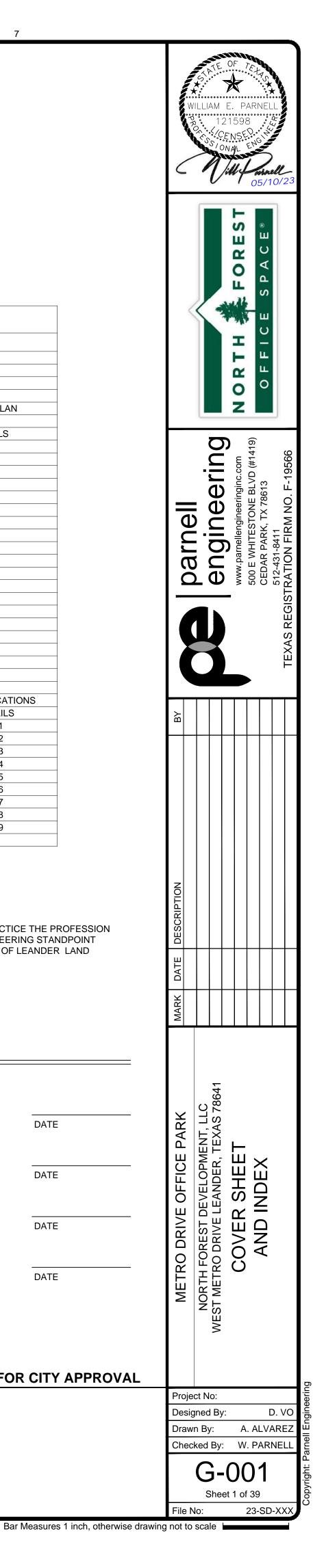
ENGINEER'S CERTIFICATION:

I, WILL PARNELL, AM AUTHORIZED UNDER THE LAWS OF THE STATE OF TEXAS TO PRACTICE THE PROFESSION OF ENGINEERING AND HEREBY CERTIFY THAT THIS PLAN IS FEASIBLE FROM AN ENGINEERING STANDPOINT AND COMPLIES WITH THE ENGINEERING RELATED PORTIONS OF TITLE 30 OF THE CITY OF LEANDER LAND DEVELOPMENT CODE. AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE.

APPROVED BY: DATE ROBIN M. GRIFFIN, AICP, EXECUTIVE DIRECTOR OF DEVELOPMENT SERVICES EMILY TRUMAN, P.E., CFM, CITY ENGINEER DATE DATE MARK TUMMONS, CPRP, DIRECTOR OF PARKS AND RECREATION CHIEF JOSHUA DAVIS, FIRE MARSHALL DATE 23-SD-XXX SITE DEVELOPMENT PERMIT NUMBER FOR CITY APPROVAL

Know what's **below.**

Call before you dig.



	REVISED March 27, 2023			SION CONT THE CONTRACT
	CITY CONTACTS:			SIGNIFICANT RA
	ENGINEERING MAIN LINE:	512-528-2721		TO DAMAGED A
	PLANNING DEPARTMENT: PUBLIC WORKS MAIN LINE:	512-528-2750 512-259-2640		THE TEMPORAR
	STORMWATER INSPECTIONS:	512-285-0055	3.	ANY ON-SITE SP PLANS. THE DE
I	UTILITIES MAIN LINE: UTILITIES ON-CALL:	512-259-1142 512-690-4760	4.	ALL AREAS DIS
I				TOPSOIL AND C
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		FOR EXISTING WATER AND WASTEWATER LOCATIONS 48 HOURS PRIOR TO CONSTRUCTION. S BEFORE 14 DAYS - LOCATE REFRESH REQUESTS MUST INCLUDE A COPY OF YOUR 811 TICKET.	6.	STABILIZED CO
		GE PREVENTION LAWS REQUIRE THAT A LOCATE REFRESH REQUEST BE SUBMITTED BEFORE 14		PROJECT ONTO ROADWAYS SH
		MARKERS ARE NO LONGER VISIBLE. AGE IMMEDIATELY - IF YOU WITNESS OR EXPERIENCE PIPELINE EXCAVATION DAMAGE, PLEASE	7.	TEMPORARY ST
		LEANDER BY PHONE AT 512-259- 2640.	8.	NOT ALREADY E
I		LL CONTACT THE CITY INSPECTOR 48 HOURS BEFORE:	0.	INLET PROTECT
		SE OF CONSTRUCTION. CONTACT ASSIGNED CITY INSPECTOR.	\ A/ A T	
I		TY OF LEANDER AFTER COMPLETION.		ALL NEWLY INS
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I		ANY DRAINAGE FACILITY WITHIN A DRAINAGE EASEMENT OR STREET ROW. THE METHOD OF PACTION OF BACKFILL IN THE CITY'S ROW MUST BE APPROVED PRIOR TO THE START OF BACKFILL		
	OPERATIONS.			WATER SERVIO
I		FOR THE ACCURACY OF THESE PLANS REMAINS WITH THE ENGINEER OF RECORD WHO PREPARED IESE PLANS, THE CITY MUST RELY ON THE ADEQUACY OF THE WORK OF THE ENGINEER OF		VALVE
	RECORD.	IESE PLANS, THE CITE MUST RELED IN THE ADEQUACE OF THE WORK OF THE ENGINEER OF	3.	OPEN UTILITIES
		REMOVED AT THE CONTRACTOR'S EXPENSE. NOTIFY THE CITY OF LEANDER IF THE DISPOSAL SITE		ACROSS THE EX
J	6. BURNING IS PROHIBITE	RISDICTIONAL BOUNDARIES. D.	4.	RESTRAINTS SH
	7. NO WORK IS TO BE PER	FORMED BETWEEN THE HOURS OF 9:00 P.M. AND 7:00 A.M. OR WEEKENDS. THE CITY INSPECTOR		SEAL COATED A
		O REQUIRE THE CONTRACTOR TO UNCOVER ALL WORK PERFORMED WITHOUT INSPECTION. PECTOR 4 DAYS PRIOR TO WORK FOR APPROVAL TO SCHEDULE ANY INSPECTIONS ON WEEKENDS	5.	SAND, AS DESC WASTEWATER L
	OR CITY HOLIDAYS.			NATURALLY OC
	9. NO BLASTING IS ALLOW	ED. SIONS TO THESE PLANS MUST FIRST BE SUBMITTED TO THE CITY BY THE DESIGN ENGINEER FOR		MEETING THE F
		APPROVAL PRIOR TO CONSTRUCTION OF THE REVISION. ALL CHANGES AND REVISIONS SHALL USE		SIEVE SIZE PE
		IGHLIGHT ALL REVISIONS AND CHANGES WITH EACH SUBMITTAL. REVISION TRIANGLE MARKERS E USED TO MARK REVISIONS. ALL CLOUDS AND TRIANGLE MARKERS FROM PREVIOUS REVISIONS		1/2" 3/8"
	MUST BE REMOVED. RE	VISION INFORMATION SHALL BE UPDATED ON COVER SHEET AND AFFECTED PLAN SHEET TITLE		#4 #10
	BLOCK. 11 THE CONTRACTOR AND	ENGINEER SHALL KEEP ACCURATE RECORDS OF ALL CONSTRUCTION THAT DEVIATES FROM THE		#10
	PLANS. THE ENGINEER	SHALL FURNISH THE CITY OF LEANDER ACCURATE "RECORD DRAWINGS" FOLLOWING THE	6.	DENSITY TESTI
		DNSTRUCTION. THESE "RECORD DRAWINGS" SHALL MEET THE SATISFACTION OF THE IENTS PRIOR TO FINAL ACCEPTANCE.	WAT	ER
	12. THE CONTRACTOR WILL	REIMBURSE THE CITY FOR ALL REPAIR AND/OR COST INCURRED AS A RESULT OF ANY DAMAGE		SAMPLING TAPS
		TRUCTURE WITHIN CITY EASEMENT OR PUBLIC RIGHT-OF-WAY, REGARDLESS OF THESE PLANS. IS BEING CARRIED OUT WITHIN EASEMENTS, THE CONTRACTOR SHALL CONFINE HIS WORK TO		PERSONNEL. AT BE COLLECTED
	WITHIN THE PERMANEN	T AND TEMPORARY EASEMENTS. PRIOR TO ACCEPTANCE, THE CONTRACTOR SHALL BE		THE CONCENTR
		IOVING ALL TRASH AND DEBRIS WITHIN THE PERMANENT EASEMENTS. CLEANUP SHALL BE TO THE ENGINEER OF RECORD AND CITY.	2.	CITY PERSONNI
	14. CONTRACTOR TO LOCA	TE, PROTECT, AND MAINTAIN BENCHMARKS, MONUMENTS, CONTROL POINTS AND PROJECT		OF WATER FINE
I		ICE POINTS. RE-ESTABLISH DISTURBED OR DESTROYED ITEMS BY REGISTERED PROFESSIONAL E STATE OF TEXAS, AT NO ADDITIONAL COST TO THE PROPERTY OWNER.	3.	VALVE. THE CONTRACT
	15. ALL CONSTRUCTION OF	ERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE		LINES MAY HAV
		FETY AND HEALTH ADMINISTRATION (OSHA). OSHA STANDARDS MAY BE PURCHASED FROM THE G OFFICE; INFORMATION AND RELATED REFERENCE MATERIALS MAY BE PURCHASED FROM OSHA,		POSSIBLY BETW AFFECTED PRO
	1033 LA POSADA DR. SU	ITE 375, AUSTIN, TEXAS 78752-3832.	4.	PRESSURE TAP
		COVERS AND WATER VALVE/METER BOXES MUST BE ADJUSTED TO FINISHED GRADE AT THE THE CONTRACTOR FOR CITY CONSTRUCTION INSPECTOR INSPECTION. ALL UTILITY ADJUSTMENTS		CONTRACTOR S
I		PRIOR TO FINAL PAVING. CONTRACTOR SHALL BACKFILL AROUND MANHOLES AND VALVE BOXES		MINIMUM OF TW
	WITH CLASS A CONCRE 17. ALL MATERIALS AND CC	TE. INSTRUCTION PROCEDURES WITHIN THE SCOPE OF THIS CONTRACT WHERE NOT SPECIFICALLY		BY THE USE OF BEHIND AND UN
	COVERED IN THE PROJE	ECT SPECIFICATIONS SHALL CONFORM TO ALL CITY OF LEANDER DETAILS AND CITY OF AUSTIN	-	THRUST BLOCK
	STANDARD SPECIFICAT 18. PROJECT SPECIFICATIC	IONS. NS TAKE PRECEDENCE OVER PLANS AND SPECIAL CONDITIONS GOVERN OVER TECHNICAL	5.	FIRE HYDRANTS
ſ	SPECIFICATIONS.		6.	THRUST BLOCK
		LL BE RESPONSIBLE FOR ACQUIRING ALL PERMITS, TESTS, APPROVALS AND ACCEPTANCES TE CONSTRUCTION OF THIS PROJECT.		AND REQUIRED THRUST BLOCK
	20. THE CONTRACTOR MUS	T OBTAIN A CONSTRUCTION WATER METER FOR ALL WATER USED DURING CONSTRUCTION. A	7.	ALL DEAD END
		<i>I</i> UST BE CARRIED AT ALL TIMES BY ALL WHO USE WATER. LL BE RESPONSIBLE FOR KEEPING ROADS AND DRIVES ADJACENT TO AND NEAR THE SITE FREE		"BLOW-OFF VAL
	FROM SOIL, SEDIMENT A	AND DEBRIS. CONTRACTOR WILL NOT REMOVE SOIL, SEDIMENT OR DEBRIS FROM ANY AREA OR	~	MANUFACTURE
		WATER. ONLY SHOVELING AND SWEEPING WILL BE ALLOWED. THE CONTRACTOR WILL BE T CONTROL FROM THE SITE. THE CONTRACTOR SHALL KEEP THE SITE AREA CLEAN AND	8.	PIPE MATERIAL SERVICES (2" O
	MAINTAINED AT ALL TIM	ES, TO THE SATISFACTION OF THE CITY. THE SUBDIVISION (OR SITE) WILL NOT BE ACCEPTED (OR		ARE NOT ALLOW
ļ		PANCY ISSUED) UNTIL THE SITE HAS BEEN CLEANED TO THE SATISFACTION OF THE CITY. V SHOULD BE PROTECTED OR NOTED IN THE PLANS TO BE REMOVED.	9.	THE NATIONAL
ļ			10.	ALL IRON PIPE
			11.	LINE FLUSHING DEPARTMENT.
	NOTE: BELOW IS GENERAL SPECIFIC TO THE PROJECT	SEQUENCE OF CONSTRUCTION. THE ENGINEER OF RECORD SHALL UPDATE BELOW WITH NOTES		ALL WATER MET
		Y FOR PRE-CONSTRUCTION MEETING AND CONSTRUCTION PERMIT.		a. SINGLE, 1" MET b. DUAL, 1" METE
ļ		AND TREE PROTECTION AND REACH OUT TO CITY FOR INSPECTION.		c. 1.5" SINGLE ME
	3. SET UP TEMPORARY TR			d. 2" SINGLE MET
ļ		IAGE PONDS AND STORM WATER FEATURES. GRADING, FRANCHISE UTILITY AND ALL NECESSARY INFRASTRUCTURE CONSTRUCTION. [NOTE:	13.	ALL WATER VAL
	PLEASE UPDATE AS PER	R THE PROJECT]	WAS	TEWATER
		HROUGH AND CONDUCT WALKTHROUGH WITH ENGINEER OF RECORD AND CITY DEPARTMENT. IS RESPONSIBLE TO PREPARE AND SUBMIT CLOSEOUT DOCUMENTS FOR PROJECT CLOSEOUT.		CURVILINEAR W
				MANDREL TEST
I				EXISTING WAST
			4.	WITH CITY OF A RECLAIMED AND
				WATER VALVE C
			5.	FORCE MAIN PIF
-				

2

ROL NOTES

OR IS REQUIRED TO INSPECT THE CONTROLS AND FENCES AT WEEKLY INTERVALS AND AFTER INFALL EVENTS TO ENSURE THAT THEY ARE FUNCTIONING PROPERLY. THE CONTRACTOR IS OR MAINTENANCE OF CONTROLS AND FENCES AND SHALL IMMEDIATELY MAKE ANY NECESSARY REPAIRS EAS. SILT ACCUMULATION AT CONTROLS MUST BE REMOVED WHEN THE DEPTH REACHES SIX (6) INCHES. SPOILS DISPOSAL SITE IS TO BE SHOWN IN THE EROSION CONTROL MAP.

OILS DISPOSAL SHALL BE REMOVED PRIOR TO ACCEPTANCE UNLESS SPECIFICALLY SHOWN ON THE TH OF SPOIL SHALL NOT EXCEED 10 FEET IN ANY AREA.

JRBED OR EXPOSED DURING CONSTRUCTION SHALL BE RESTORED WITH A MINIMUM OF 6 INCHES OF DMPOST BLEND. TOPSOIL ON SINGLE FAMILY LOTS MAY BE INSTALLED WITH HOME CONSTRUCTION. THE MPOST BLEND SHALL CONSIST OF 75% TOPSOIL AND 25% COMPOST.

ESTABLISHING VEGETATION SHALL COMPLY WITH THE AUSTIN GROW GREEN GUIDE OR WILLIAMSON OCOL FOR SUSTAINABLE ROADSIDES (SPEC 164--WC001 SEEDING FOR EROSION CONTROL). RESEEDING RMUDA SHALL NOT BE USED.

STRUCTION ENTRANCE IS REQUIRED AT ALL POINTS WHERE CONSTRUCTION TRAFFIC IS EXITING THE EXISTING PAVEMENT. LINEAR CONSTRUCTION PROJECTS MAY REQUIRE SPECIAL CONSIDERATION. L REMAIN CLEAR OF SILT AND MUD.

OP SIGNS SHOULD BE INSTALLED AT ALL CONSTRUCTION ENTRANCES WHERE A STOP CONDITION DOES

FINCLEMENT WEATHER THAT MAY RESULT IN A FLOODING SITUATION, THE CONTRACTOR SHALL REMOVE ON MEASURES UNTIL SUCH TIME AS THE WEATHER EVENT HAS PASSED.

STEWATER GENERAL NOTES

ALLED PIPES AND RELATED PRODUCTS MUST CONFORM TO AMERICAN NATIONAL STANDARDS NAL SANITATION FOUNDATION (ANSI/NSF) STANDARD 61 AND MUST BE CERTIFIED BY AND ORGANIZATION ANSI.

VICE, WASTEWATER SERVICE AND VALVE LOCATIONS SHALL BE APPROPRIATELY STAMPED AS FOLLOWS:

"W" ON TOP OF CURB SERVICE "S" ON TOP OF CURB "V" ON TOP OF CURB

SHALL NOT BE PERMITTED ACROSS THE EXISTING PAVED SURFACES. WATER AND WASTEWATER LINES ISTING PAVED SURFACES SHALL BE BORED AND INSTALLED IN STEEL ENCASEMENT PIPES. BELL ALL BE PROVIDED AT JOINTS.

ACES OF ALL DUCTILE IRON POTABLE OR RECLAIMED WATER PIPE SHALL BE CEMENT-MORTAR LINED AND S REQUIRED BY AWWA C104.

IBED IN AUSTIN SPECIFICATION ITEM 510 PIPE, SHALL NOT BE USED AS BEDDING FOR WATER AND INES. ACCEPTABLE BEDDING MATERIALS ARE PIPE BEDDING STONE, PEA GRAVEL AND IN LIEU OF SAND, A URRING OR MANUFACTURED STONE MATERIAL CONFORMING TO ASTM C33 FOR STONE QUALITY AND **DLLOWING GRADATION SPECIFICATION:**

RCENT RETAINED BY WEIGHT

0-2 40-85

95-100

FOR TRENCH BACKFILL SHALL BE DONE IN MAXIMUM 12" LIFTS.

SHALL BE BROUGHT UP TO 3 FEET ABOVE GRADE AND SHALL BE EASILY ACCESSIBLE FOR CITY THE CONTRACTORS' REQUEST, AND IN HIS PRESENCE, SAMPLES FOR BACTERIOLOGICAL TESTING WILL BY THE CITY OF LEANDER NOT LESS THAN 24 HOURS AFTER THE TREATED LINE HAS BEEN FLUSHED OF ATED CHLORINE SOLUTION AND CHARGED WITH WATER APPROVED BY THE CITY.

WILL OPERATE OR AUTHORIZE THE CONTRACTOR TO OPERATE ALL WATER VALVES THAT WILL PASS ITY'S POTABLE WATER. THE CONTRACTOR MAY BE FINED \$500 OR MORE, INCLUDING ADDITIONAL THEFT ; IF A WATER VALVE IS OPERATED IN AN UNAUTHORIZED MANNER, REGARDLESS OF WHO OPERATED THE

DR IS HEREBY NOTIFIED THAT CONNECTING TO, SHUTTING DOWN, OR TERMINATING EXISTING UTILITY TO OCCUR AT OFF-PEAK HOURS. SUCH HOURS ARE USUALLY OUTSIDE NORMAL WORKING HOURS AND EEN 12 AM AND 6 AM AFTER COORDINATING WITH CITY CONSTRUCTION INSPECTORS AND INFORMING PERTIES.

OR HOT TAPS SHALL BE IN ACCORDANCE WITH CITY OF LEANDER STANDARD SPECIFICATIONS. THE HALL PERFORM ALL EXCAVATION AND SHALL FURNISH, INSTALL AND AIR TEST THE SLEEVE AND VALVE. A R INSPECTOR MUST BE PRESENT WHEN THE CONTRACTOR MAKES A TAP, AND/OR ASSOCIATED TESTS. A (2) WORKING DAYS NOTICE IS REQUIRED. "SIZE ON SIZE" TAPS SHALL NOT BE PERMITTED UNLESS MADE AN APPROVED FULL-CIRCLE GASKETED TAPPING SLEEVE. CONCRETE THRUST BLOCKS SHALL BE PLACED DER ALL TAP SLEEVES A MINIMUM OF 24 HOURS PRIOR TO THE BRANCH BEING PLACED INTO SERVICE. S SHALL BE INSPECTED PRIOR TO BACKFILL.

ON MAINS UNDER CONSTRUCTION SHALL BE SECURELY WRAPPED WITH A BLACK POLY WRAP BAG AND CE. THE POLY WRAP SHALL BE REMOVED WHEN THE MAINS ARE ACCEPTED AND PLACED INTO SERVICE. S OR RESTRAINTS SHALL BE IN ACCORDANCE WITH THE CITY OF LEANDER STANDARD SPECIFICATIONS AT ALL FITTINGS PER DETAIL OR MANUFACTURER'S RECOMMENDATION. ALL FITTINGS SHALL HAVE BOTH S AND RESTRAINTS.

VATER MAINS SHALL HAVE "FIRE HYDRANT ASSEMBLY" OR "BLOW-OFF VALVE AND THRUST BLOCK" OR 'E AND THRUST RESTRAINTS". THRUST RESTRAINTS SHALL BE INSTALLED ON THE MINIMUM LAST THREE STANDARD 20' LAYING LENGTH). ADDITIONAL THRUST RESTRAINTS MAY BE REQUIRED BASED UPON THE RS RECOMMENDATION AND/OR ENGINEER'S DESIGN.

FOR PUBLIC WATER MAINS SHALL BE PVC (AWWA C900-DR14 MIN. 305 PSI PRESSURE RATING). WATER LESS) SHALL BE POLYETHYLENE TUBING (BLACK, 200PSI, AND SDR-(9)). COPPER PIPES AND FITTINGS ED IN THE PUBLIC RIGHT OF WAY. ALL PLASTIC PIPES FOR USE IN PUBLIC WATER SYSTEMS MUST BEAR ANITATION FOUNDATION SEAL OF APPROVAL (NSF-PW).

NT LEADS SHALL BE DUCTILE IRON PIPE (AWWA C115/C151 PRESSURE CLASS 350).

ND FITTINGS SHALL BE WRAPPED WITH MINIMUM 8-MIL POLYETHYLENE. OR ANY ACTIVITY USING A LARGE QUANTITY OF WATER MUST BE COORDINATED WITH THE PUBLIC WORKS

ER BOXES SHALL BE:

TER AND BELOW	DFW37F-12-1CA, OR EQUAL		
ERS AND BELOW	DFW39F-12-1CA, OR EQUAL		
ETER	DFW65C-14-1CA, OR EQUAL		
TER	DFW1730F-12-1CA, OR EQUAL		

E COVERS ARE TO BE PAINTED BLUE.

ASTEWATER DESIGN LAYOUT IS NOT PERMITTED.

NG SHALL BE CONDUCTED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS.

L BE COATED PER CITY OF AUSTIN SPL WW-511 (RAVEN 405 OR SPRAYWALL). PENETRATIONS TO EWATER MANHOLES REQUIRE THE CONTRACTOR TO RECOAT THE ENTIRE MANHOLE IN ACCORDANCE JSTIN STANDARD SPECIFICATIONS SECTION NO. 506.5.

RECYCLED WATER LINE SHALL BE CONSTRUCTED OF "PURPLE PIPE." ALL RECLAIMED AND RECYCLED

OVERS SHALL BE SQUARE AND PAINTED PURPLE.

ES NEED TO HAVE SWEEPING WYES FOR JOINTS.

STREET AND DRAINAGE NOTES

- 1. THE CITY OF LEANDER HAS NOT REVIEWED THESE PLANS FOR ACT (ADA). IT IS THE RESPONSIBILITY OF THE OWNER TO PRO ACCESSIBILITY WITHIN THE LIMITS OF CONSTRUCTION SHOW THE AMERICANS WITH DISABILITIES ACT AND TEXAS ACCESSI
- 2. BACKFILL BEHIND THE CURB SHALL BE COMPACTED TO OBTAI TOP OF CURB. MATERIAL USED SHALL BE PRIMARILY GRANUL DIMENSION. THE REMAINING 6" SHALL BE CLEAN TOPSOIL FRE LIFE.
- 3. A MINIMUM OF 6" OF TOPSOIL SHALL BE PLACED BETWEEN THI CHANNELS EXCEPT CHANNELS CUT IN STABLE ROCK.
- 4. DEPTH OF COVER FOR ALL CROSSINGS UNDER PAVEMENT, IN SHALL BE A MINIMUM OF 36" BELOW SUBGRADE.
- 5. STREET RIGHT-OF-WAY SHALL BE GRADED AT A SLOPE OF 1/4" INDICATED.
- 6. ALL DRAINAGE PIPE IN PUBLIC RIGHT OF WAY OR EASEMENTS OF TONGUE AND GROOVE OR O-RING JOINT DESIGN. CORRUG WAY OR EASEMENTS.
- 7. THE CONTRACTOR MUST PROVIDE A PNEUMATIC TRUCK PER
- 8. ALL STRIPING, WITH THE EXCEPTION OF STOP BARS, CROSS BASED). STOP BARS, CROSS WALKS, WORDS AND ARROWS RE 9. MANHOLE FRAMES, COVERS, VALVES, CLEAN-OUTS, ETC. SHA
- CONSTRUCTION. 10. A STOP BAR SHALL BE PLACED AT ALL STOP SIGN LOCATIONS
- 11. THE GEOTECHNICAL ENGINEER SHALL INSPECT THE SUBGRAI MADE DURING PREPARATION OF THE SOILS REPORT. ANY ADJ REVISIONS OF THE APPROVED CONSTRUCTION PLANS.
- 12. GEOTECHNICAL INVESTIGATION INFORMATION AND PAVEMEN ENGINEERING, INC. REPORT NO. A221178, DATED JANUARY 31, SHEET CS-102.
- 13. A TRAFFIC CONTROL PLAN, IN ACCORDANCE WITH THE TEXAS AUSTIN TRANSPORTATION CRITERIA MANUAL, CITY OF LEAND TRANSPORTATION CRITERIA, SHALL BE SUBMITTED TO THE CI PARTIAL OR COMPLETE ROADWAY CLOSURES. TRAFFIC CONT SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
- 14. ALL LANE CLOSURES SHALL OCCUR ONLY BETWEEN THE HOU PLANS. ANY NIGHT TIME LANE CLOSURES REQUIRE APPROVAL HOURS OF 8 PM AND 6 AM. LANE CLOSURES OBSERVED BY T PM WILL BE SUBJECT TO A FINE AND/OR SUBSEQUENT ISSUAN
- 15. TEMPORARY ROCK CRUSHING IS NOT ALLOWED. ALL SOURCE APPROVED BY THE CITY. PRIOR TO BASE PLACEMENT ALL CUI PILES ARE TO BE SUBMITTED TO THE CITY CONSTRUCTION IN
- 16. AT ROAD INTERSECTIONS THAT HAVE A VALLEY GUTTER, THE AT A DISTANCE OF 40 FEET FROM THE INTERSECTING CURB L
- 17. NO PONDING OF WATER SHALL BE ALLOWED TO COLLECT ON PUBLIC STREETS. RECONSTRUCTION OF THE DRIVEWAY APPR
- 18. ALL DRIVEWAY APPROACHES SHALL HAVE A UNIFORM TWO PI APPROVED IN WRITING BY THE ENGINEERING DEPARTMENT.
- 19. IMPROVEMENTS THAT INCLUDE RECONSTRUCTION OF AN EXIS WHICH RETAINS OPERATIONS OF NOT LESS THAN HALF OF TH CLOSURE OF SUCH DRIVEWAY CAN BE CONSIDERED WITH WR FROM ALL PROPERTY OWNERS AND ACCESS EASEMENT RIGH DRIVEWAY.
- 20. CONTRACTOR MUST CLEAR FIVE (5) FEET BEYOND ALL PUBLIC GROWTH INTO THE SIDEWALK AREAS.
- 21. SLOPE OF NATURAL GROUND ADJACENT TO THE PUBLIC RIGH NOT POSSIBLE, SLOPE PROTECTION OR RETAINING WALL MUS PRIOR TO FINAL ACCEPTANCE.
- 22. THERE SHALL BE NO WATER, WASTEWATER OR DRAINAGE AP FITTINGS, METERS, CLEAN-OUTS, MANHOLES, OR VAULTS IN
- 23. PUBLIC SIDEWALKS SHALL NOT USE CURB INLETS AS PARTIAL CONTROL BOXES, METERS, CHECK VALVE VAULTS, COMMUNIC INFRASTRUCTURE AS A VEHICULAR OR PEDESTRIAN SURFACE
- 24. ALL WET UTILITIES SHALL BE INSTALLED AND ALL DENSITIES I INSTALLATION OF DRY UTILITIES.
- 25. DRY UTILITIES SHALL BE INSTALLED AFTER SUBGRADE IS CUT COMPACTED BASE. IF NECESSARY DRY UTILITIES INSTALLED A FULL WIDTH OF THE PUBLIC RIGHT-OF-WAY.
- 26. A MINIMUM OF SEVEN (7) DAYS OF CURE TIME IS REQUIRED FO TRAFFIC TO ALL STREETS.

TRENCH SAFETY NOTES

1. TRENCH SAFETY SYSTEMS TO BE UTILIZED FOR THIS PROJEC OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS AND SHA TEXAS AND THE U.S. OCCUPATION SAFETY AND HEALTH ADMI

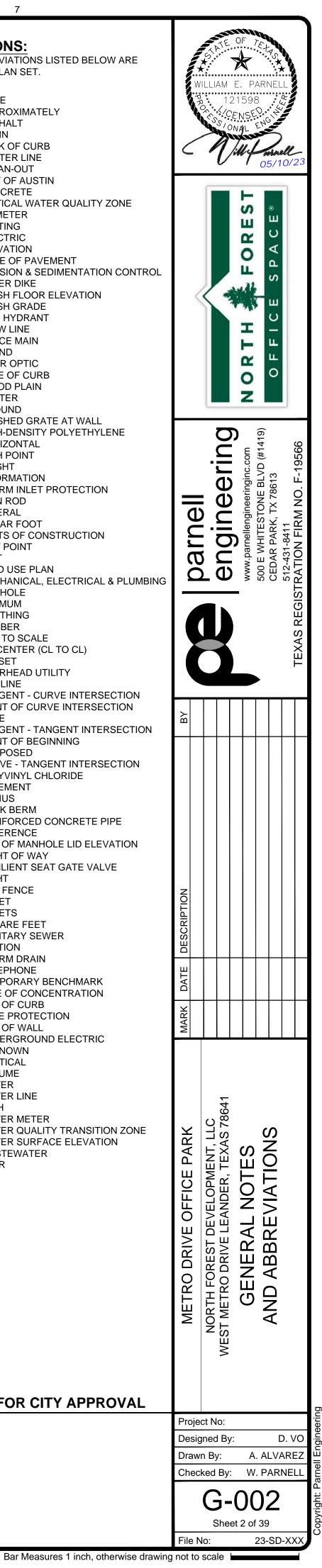
GRADING NOTES

- 1. POSITIVE DRAINAGE SHALL BE MAINTAINED ON ALL SURFACE SHOULD TAKE PRECAUTIONS NOT TO ALLOW ANY PONDING O
- 2. THE CONTRACTOR SHALL CONSTRUCT EARTHEN EMBANKMEN SOIL TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH THI
- 3. AREAS OF SOIL DISTURBANCE ARE LIMITED TO GRADING AND DISTURBED.

BENCHMARK NOTES

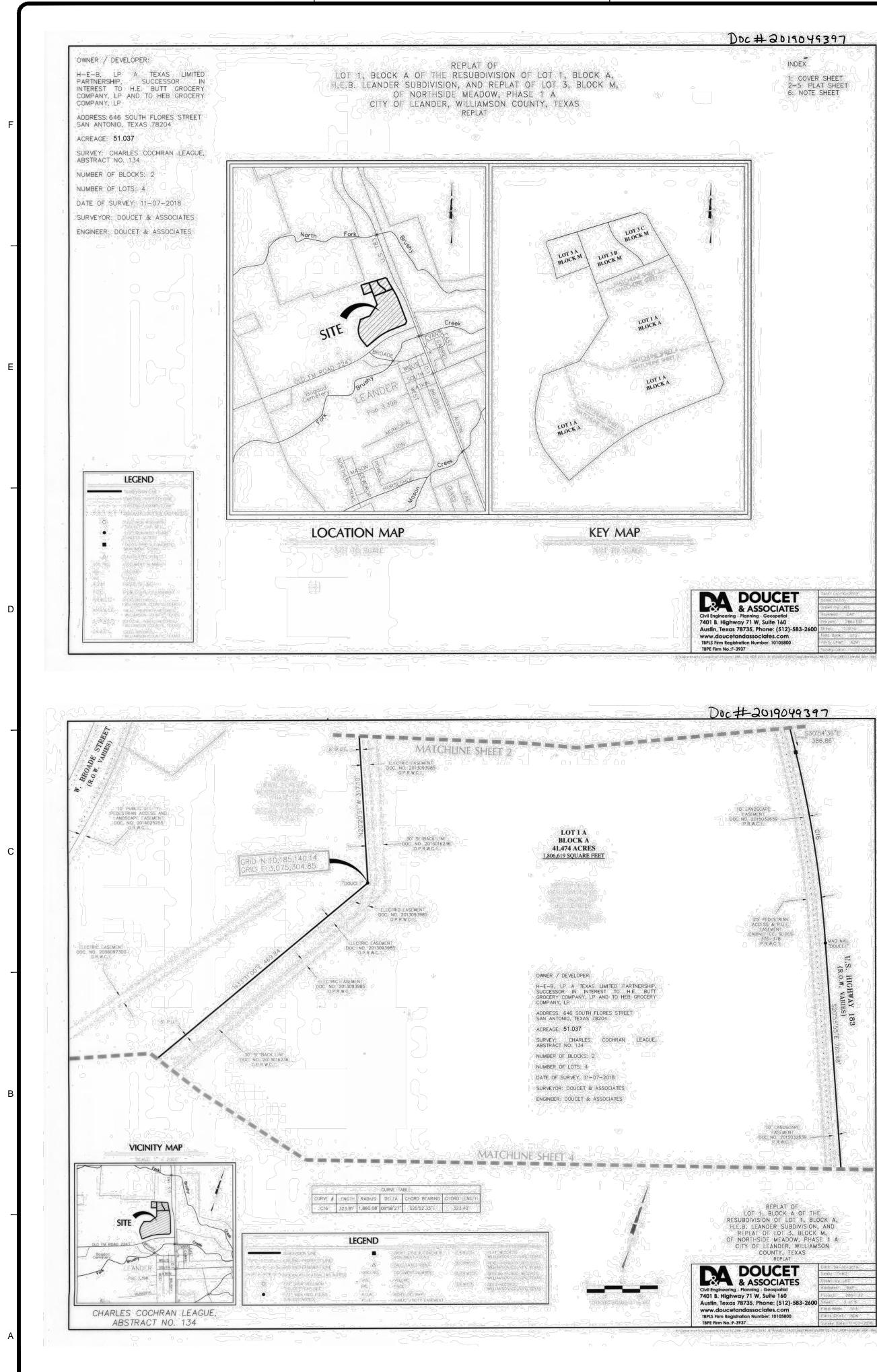
1. TBM #1 - SQUARE CUT MONUMENT FOUND NORTH OF THE INT THE ON THE NORTHWEST SIDE OF N. HWY. 183, N 10188756.03

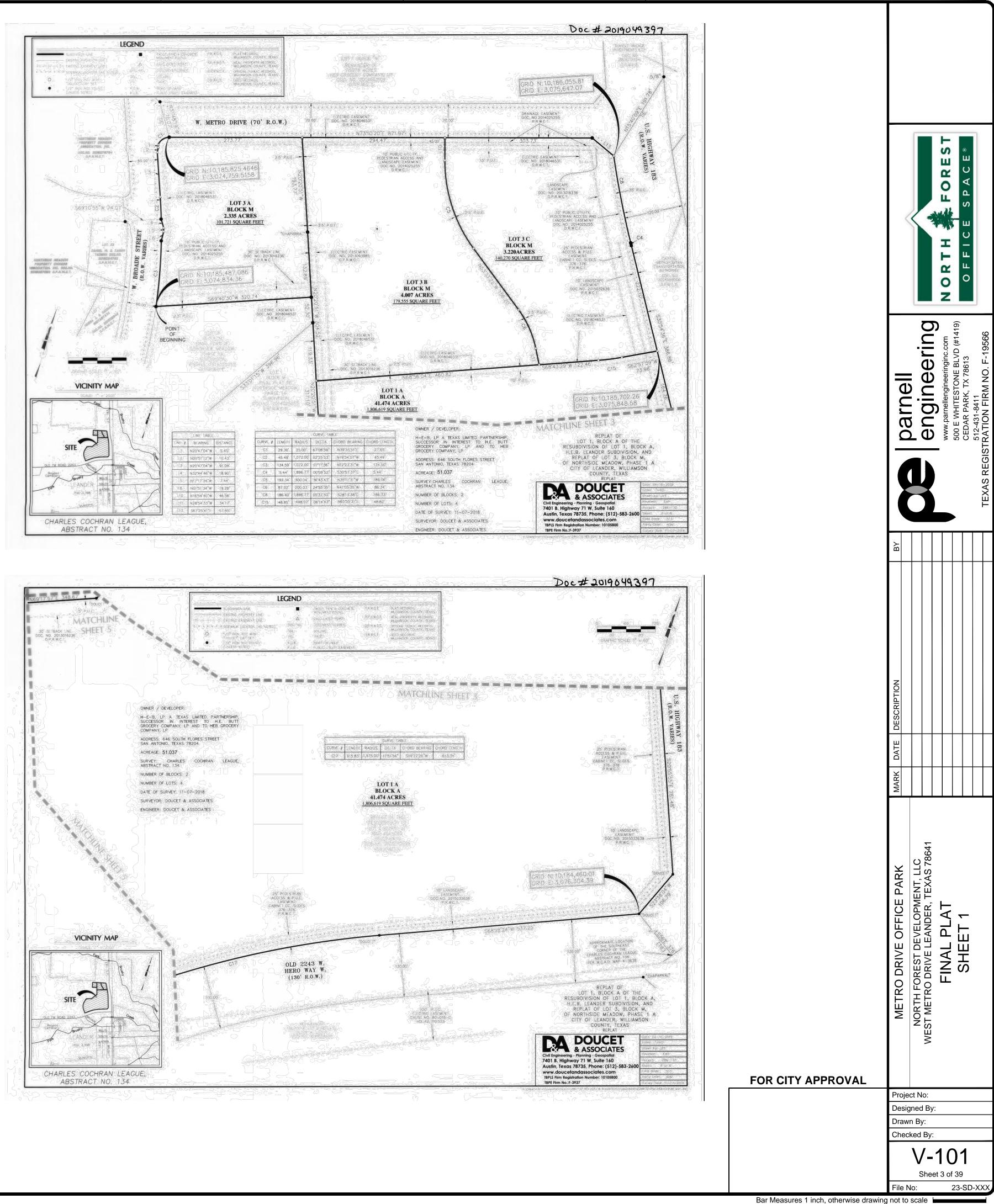
OR COMPLIANCE WITH THE AMERICANS WITH DISABILITIES OVIDE COMPLIANCE WITH ALL LEGISLATION RELATED TO		ATIONS: BBREVIATIONS LISTED BELOW ARE THIS PLAN SET.
WN IN THESE PLANS. ALL SIDEWALKS SHALL COMPLY WITH SIBILITY STANDARDS (TAS).	AC	ACRE
AIN A MINIMUM OF 95% MAXIMUM DENSITY TO WITHIN 6" OF	APPROX ASPH	APPROXIMATELY ASPHALT
JLAR WITH NO ROCKS LARGER THAN 6" IN THE GREATEST REE FROM ALL CLODS AND SUITABLE FOR SUSTAINING PLANT	BGN BOC	BEGIN BACK OF CURB
THE CURB AND RIGHT-OF-WAY AND IN ALL DRAINAGE	CL CO	CENTER LINE CLEAN-OUT
	COA / C.O.A. CONC	
INCLUDING GAS, ELECTRIC TELEPHONE, CABLE TV, ETC.,	CWQZ	CRITICAL WATER QUALITY ZONE DIAMETER
4" PER FOOT TOWARD THE CURB UNLESS OTHERWISE	E ELEC	EASTING ELECTRIC
TS SHALL BE REINFORCED CONCRETE PIPE MINIMUM CLASS III	ELEV / EL EOP	ELECTRIC ELEVATION EDGE OF PAVEMENT
JGATED METAL PIPE IS NOT ALLOWED IN PUBLIC RIGHT OR	ESC	EROSION & SEDIMENTATION CONTROL
R TXDOT SPEC FOR PROOF ROLLING.	FD FF / FFE	FILTER DIKE FINISH FLOOR ELEVATION
S WALKS, WORDS AND ARROWS, IS TO BE TYPE II (WATER REQUIRE TYPE I THERMOPLASTIC.	FG FH	FINISH GRADE FIRE HYDRANT
HALL BE RAISED TO GRADE PRIOR TO FINAL PAVEMENT	FL FM	FLOW LINE FORCE MAIN
NS.	FND FO	FOUND FIBER OPTIC
ADE FOR COMPLIANCE WITH THE DESIGN ASSUMPTIONS DJUSTMENTS THAT ARE REQUIRED SHALL BE MADE THROUGH	FOC FP	FACE OF CURB FLOOD PLAIN
DJUSTWENTS THAT ARE REQUIRED SHALL BE WADE THROUGH	G GRND	GUTTER GROUND
ENT RECOMMENDATIONS WERE PROVIDED BY TERRADYNE 31, 2023. PAVEMENT RECOMMENDATIONS CAN BE FOUND ON	GW HDPE	FINISHED GRATE AT WALL HIGH-DENSITY POLYETHYLENE
	HORIZ HP	HORIZONTAL HIGH POINT
AS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CITY OF IDER STANDARD DETAILS AND TEXAS DEPARTMENT OF	HT INFO	HEIGHT INFORMATION
CITY OF LEANDER FOR REVIEW AND APPROVAL PRIOR TO ANY NTROL PLANS MUST BE SITE SPECIFIC AND SIGNED AND	IP IR	STORM INLET PROTECTION IRON ROD
	LAT LF	LATERAL LINEAR FOOT
OURS OF 9 AM AND 4 PM UNLESS OTHERWISE NOTED ON THE AL OF THE CITY ENGINEER AND SHALL OCCUR BETWEEN THE	LOC LP	LIMITS OF CONSTRUCTION LOW POINT
THE CITY DURING PEAK HOURS OF 6 AM TO 9 AM OR 4 PM TO 8 ANCE OF WORK STOPPAGE.	LT LUP	LEFT LAND USE PLAN
CES OF FLEXIBLE BASE MATERIAL ARE REQUIRED TO BE	MEP MH	MECHANICAL, ELECTRICAL & PLUMBING MANHOLE
URRENT TRIAXIAL TEST REPORTS FOR PROPOSED STOCK	MIN N	MINIMUM NORTHING
E CROWN TO THE INTERSECTING ROAD WILL BE CULMINATED	NO NTS / N.T.S.	NUMBER NOT TO SCALE
N OR NEAR THE INTERSECTION OF PRIVATE DRIVEWAYS AND	OC O/S	ON CENTER (CL TO CL) OFFSET
PROACH SHALL BE AT THE CONTRACTOR'S EXPENSE. PERCENT SLOPE WITHIN THE PUBLIC RIGHT OF WAY UNLESS	OU P	OVERHEAD UTILITY PIPELINE
	PC PCC	TANGENT - CURVE INTERSECTION POINT OF CURVE INTERSECTION
XISTING TYPE II DRIVEWAY SHALL BE DONE IN A MANNER THE DRIVEWAY TO REMAIN OPEN AT ALL TIMES. FULL	PG Pl	PAGE TANGENT - TANGENT INTERSECTION
VRITTEN AUTHORIZATION OBTAINED BY THE CONTRACTOR GHT HOLDERS ALLOWING THE FULL CLOSURE OF THE	POB PROP	POINT OF BEGINNING PROPOSED
LIC RIGHT OF WAY TO PREVENT FUTURE VEGETATIVE	PT PVC	CURVE - TANGENT INTERSECTION POLYVINYL CHLORIDE
	PVMT R	PAVEMENT RADIUS
GHT OF WAY SHALL NOT EXCEED 3:1 SLOPE. IF A 3:1 SLOPE IS UST BE SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL	RB RCP	ROCK BERM REINFORCED CONCRETE PIPE
APPURTENANCES, INCLUDING BUT NOT LIMITED TO VALVES,	REF RIM	REFERENCE TOP OF MANHOLE LID ELEVATION
I ANY DRIVEWAY, SIDEWALK, TRAFFIC OR PEDESTRIAN AREA.	ROW / R.O.W. RSGV	RESILIENT SEAT GATE VALVE
AL WALKING SURFACE. SIDEWALKS SHALL NOT USE TRAFFIC NICATION VAULTS, OR OTHER BURIED OR PARTIALLY BURIED	RT SF	RIGHT SILT FENCE
CE. S MUST HAVE PASSED INSPECTION(S) PRIOR TO THE	SHT SHTS	SHEET SHEETS
	SQ. FT. SS	SQUARE FEET SANITARY SEWER
JT AND BEFORE THE FIRST COURSE OF BASE. NO TRENCHING D AFTER FIRST COURSE BASE SHALL BE BORED ACROSS THE	STA STM / SD	STATION STORM DRAIN
FOR HMAC PRIOR TO THE INTRODUCTION OF VEHICULAR	T TBM	TELEPHONE TEMPORARY BENCHMARK
	Tc TOC	TIME OF CONCENTRATION TOP OF CURB
	TP TOW	TREE PROTECTION TOP OF WALL
ECT ARE DESCRIBED IN ITEM 509S "TRENCH SAFETY SYSTEMS"	UE UNK	UNDERGROUND ELECTRIC UNKNOWN
HALL BE IN ACCORDANCE WITH THE LAWS OF THE STATE OF MINISTRATION REGULATIONS.	VERT VOL	VERTICAL VOLUME
	W WL	WATER WATER LINE
E AREAS WITHIN THE SCOPE OF THIS PROJECT. CONTRACTOR	W/ WM	WITH WATER METER
OF WATER. ENTS WITH SLOPES NO STEEPER THAN 3:1 AND COMPACT	WQTZ WSE	WATER QUALITY TRANSITION ZONE WATER SURFACE ELEVATION
THE CITY OF AUSTIN STANDARD SPECIFICATIONS.	WW YR	WASTEWATER YEAR
ID IMPROVEMENTS SHOWN. ALL OTHER AREAS WILL NOT BE		
ITERSECTION OF N. HWY. 183 AND SAN GABRIEL PARKWAY ON		
03 E 3074594.27. ELEVATION =982.00'.		

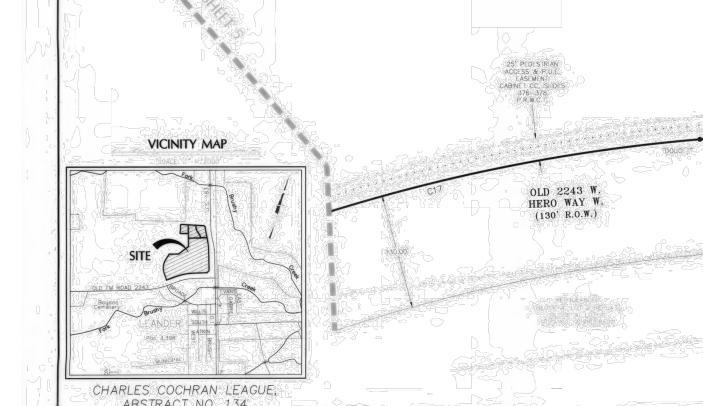


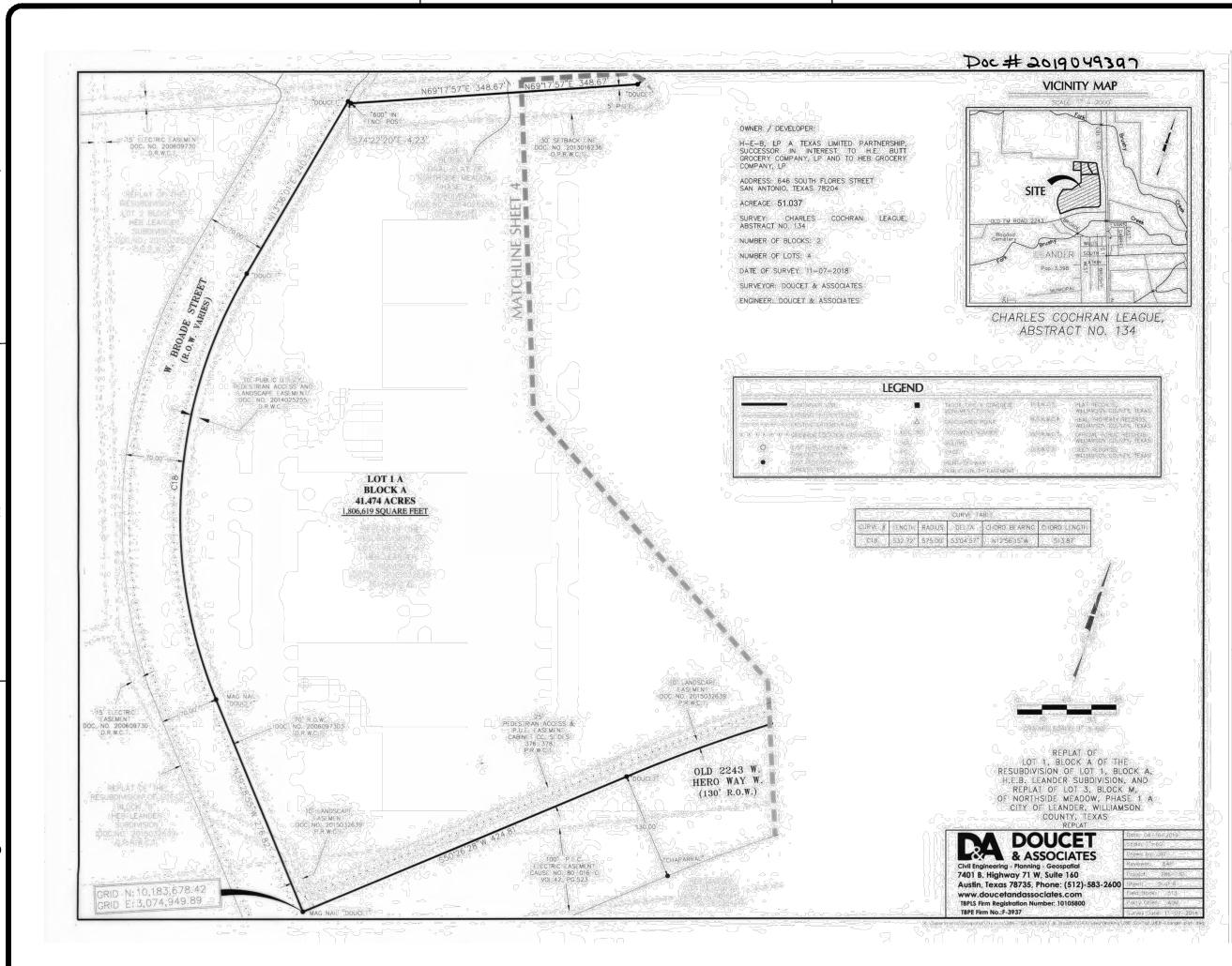


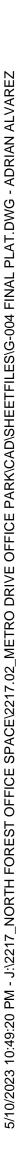
FOR CITY APPROVAL

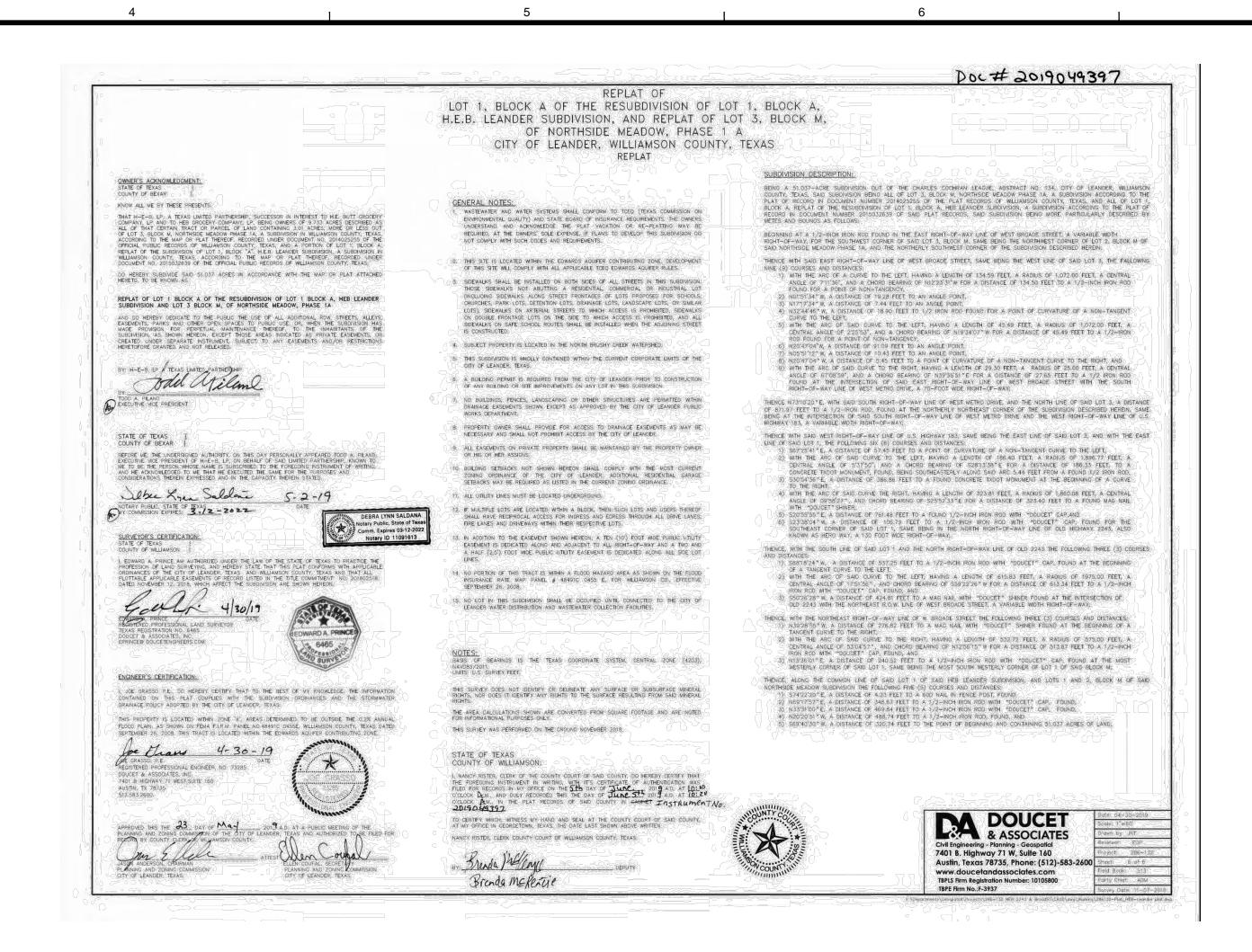


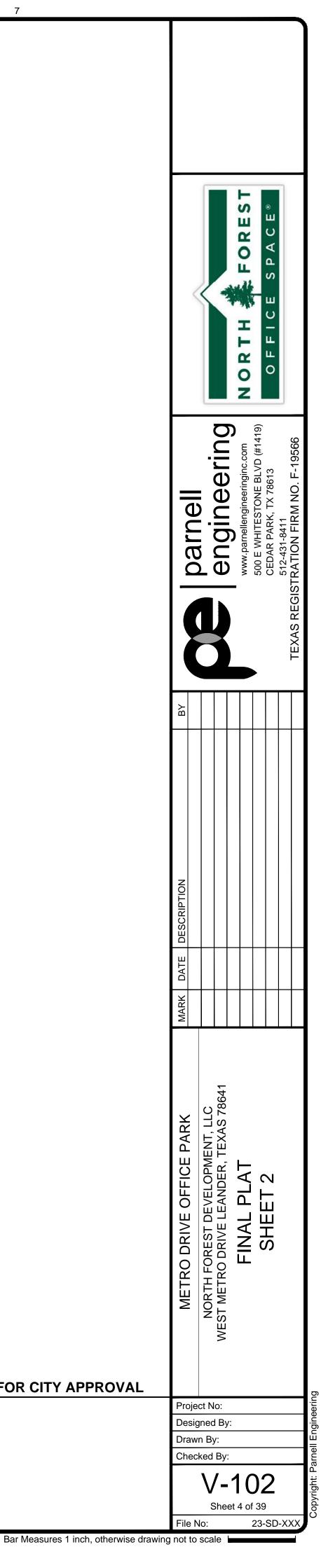




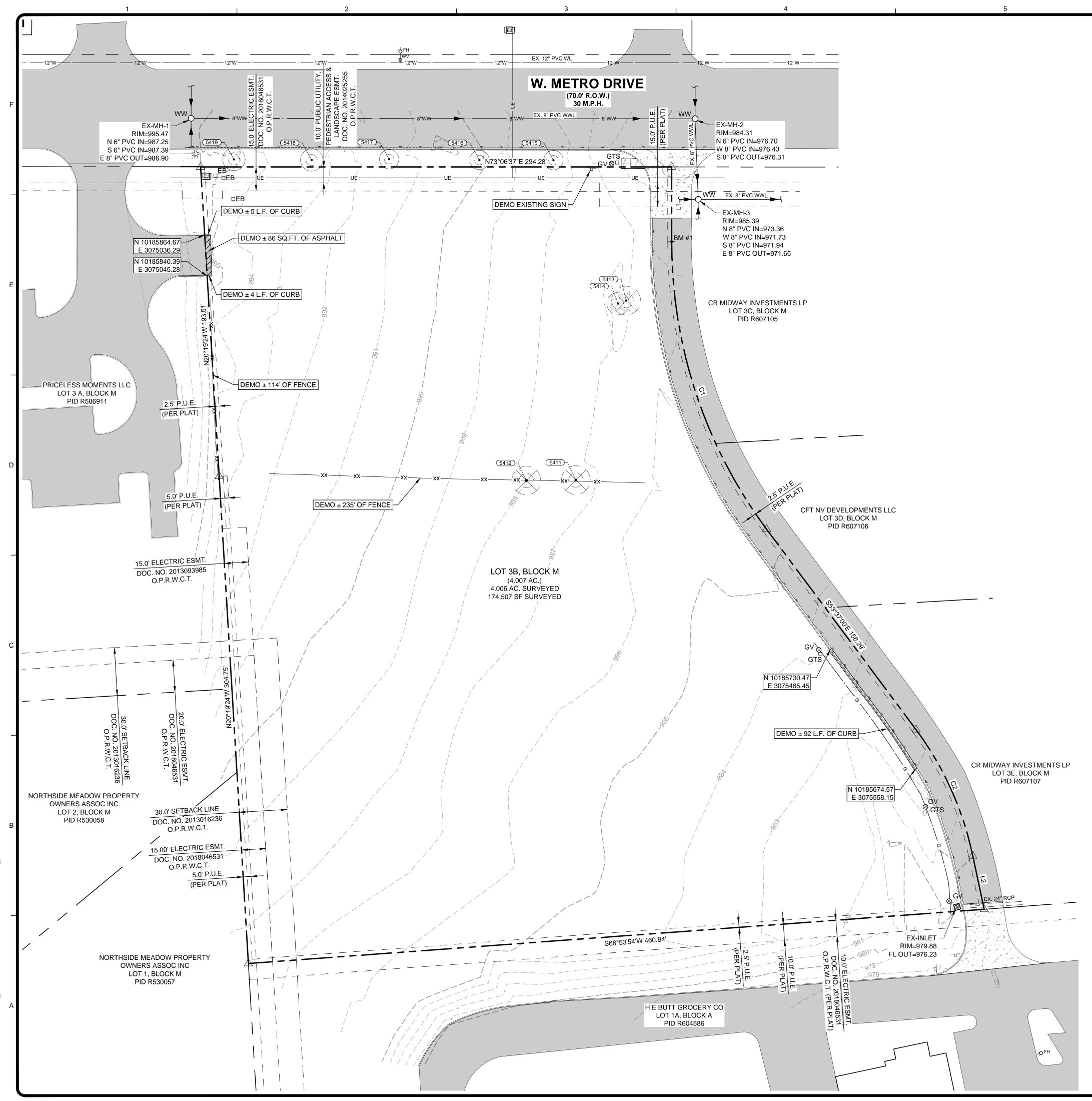


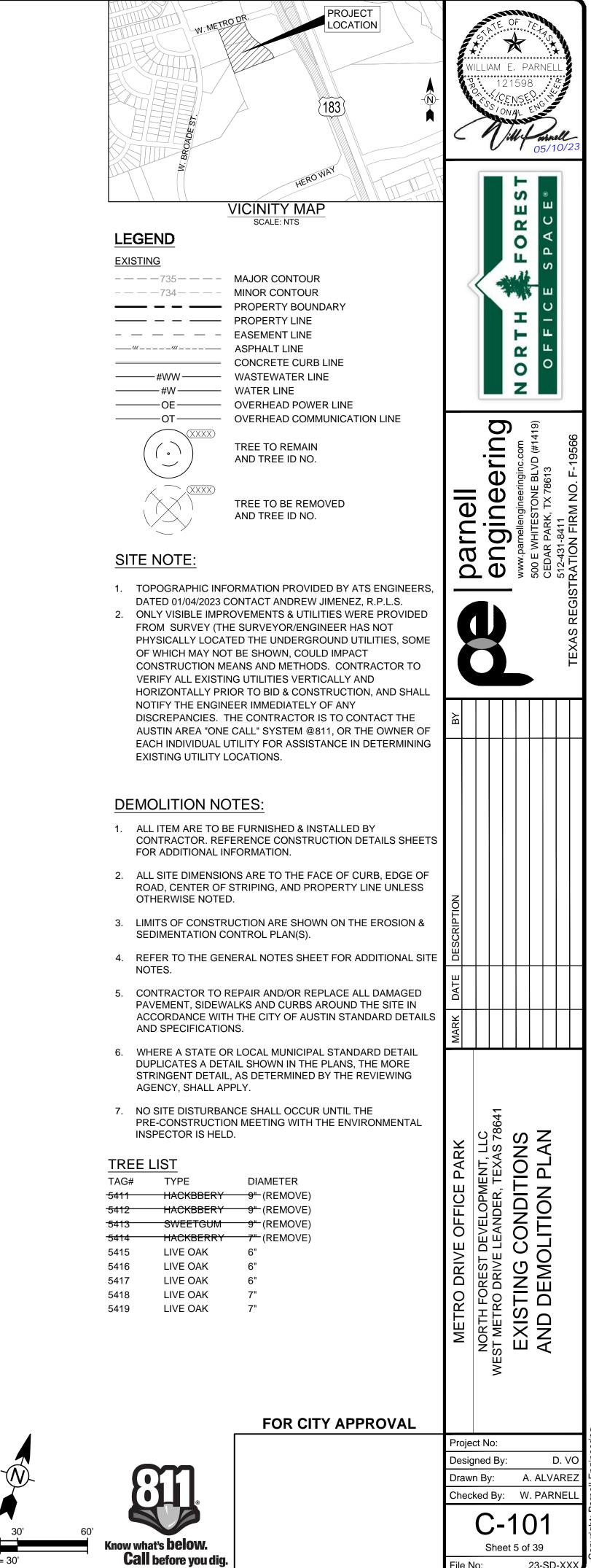






FOR CITY APPROVAL



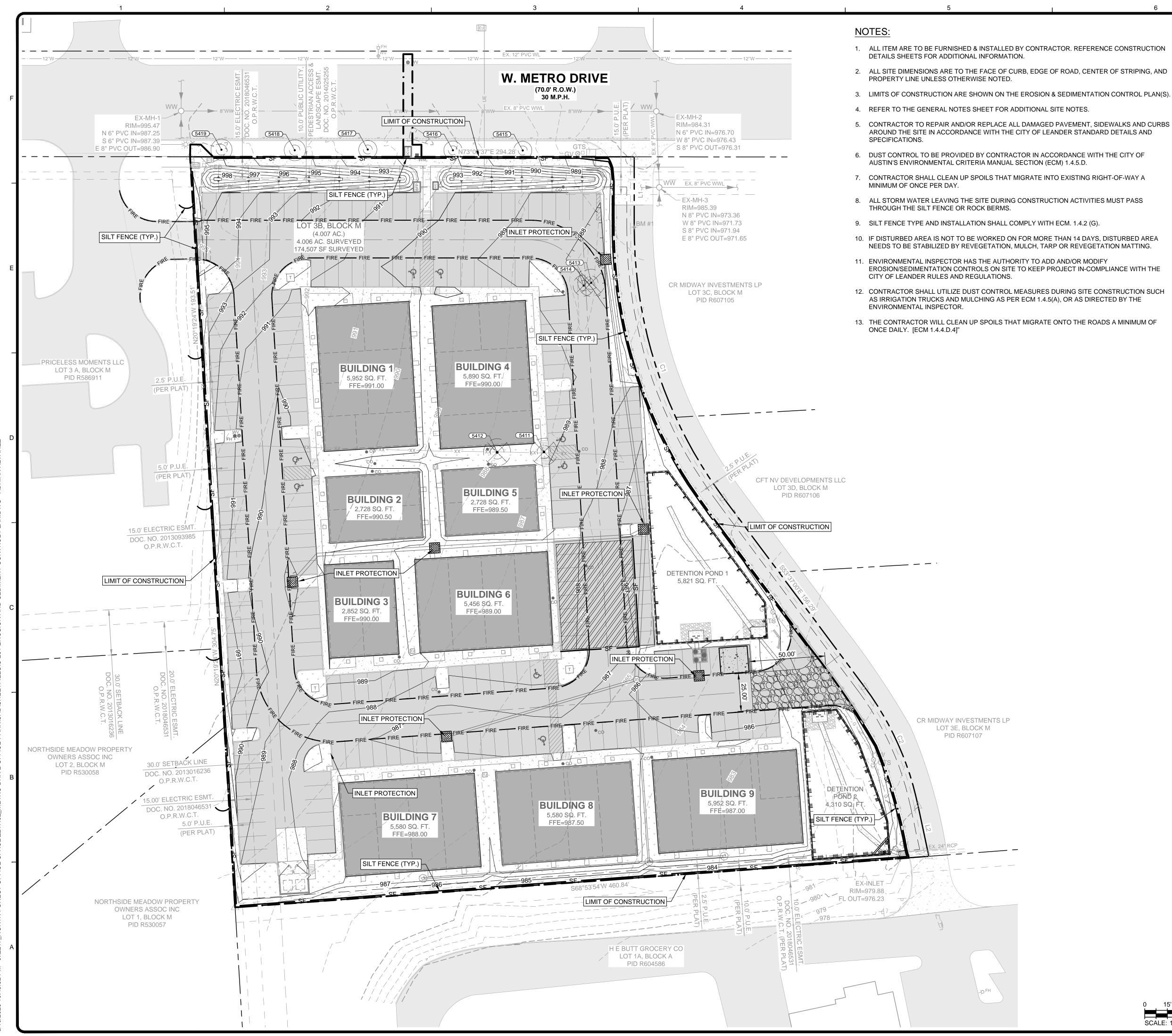


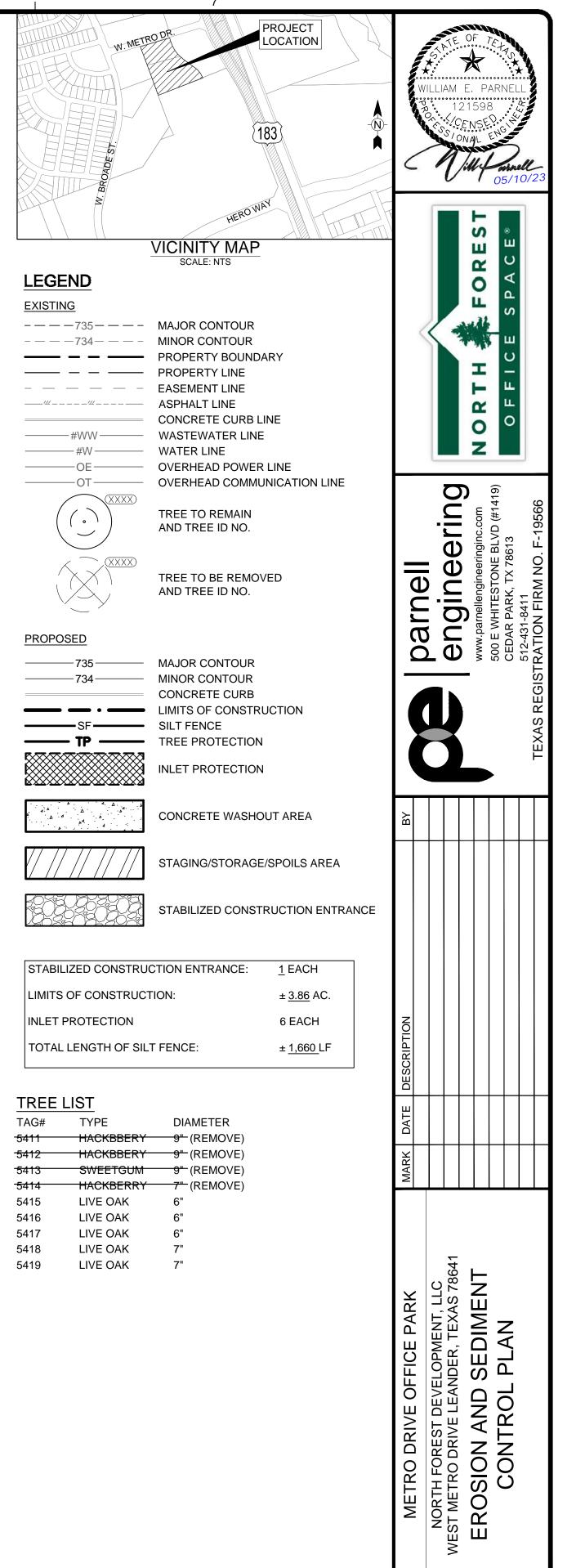
SCALE: 1" = 30'

0 15'

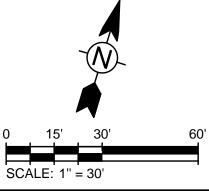
File No:

23-SD-XXX





FOR CITY APPROVAL



Know what's **below**. Call before you dig.

Bar Measures 1 inch, otherwise drawing not to scale

D. VO Drawn Bv: A. ALVAREZ Checked By: W. PARNEL

Project No:

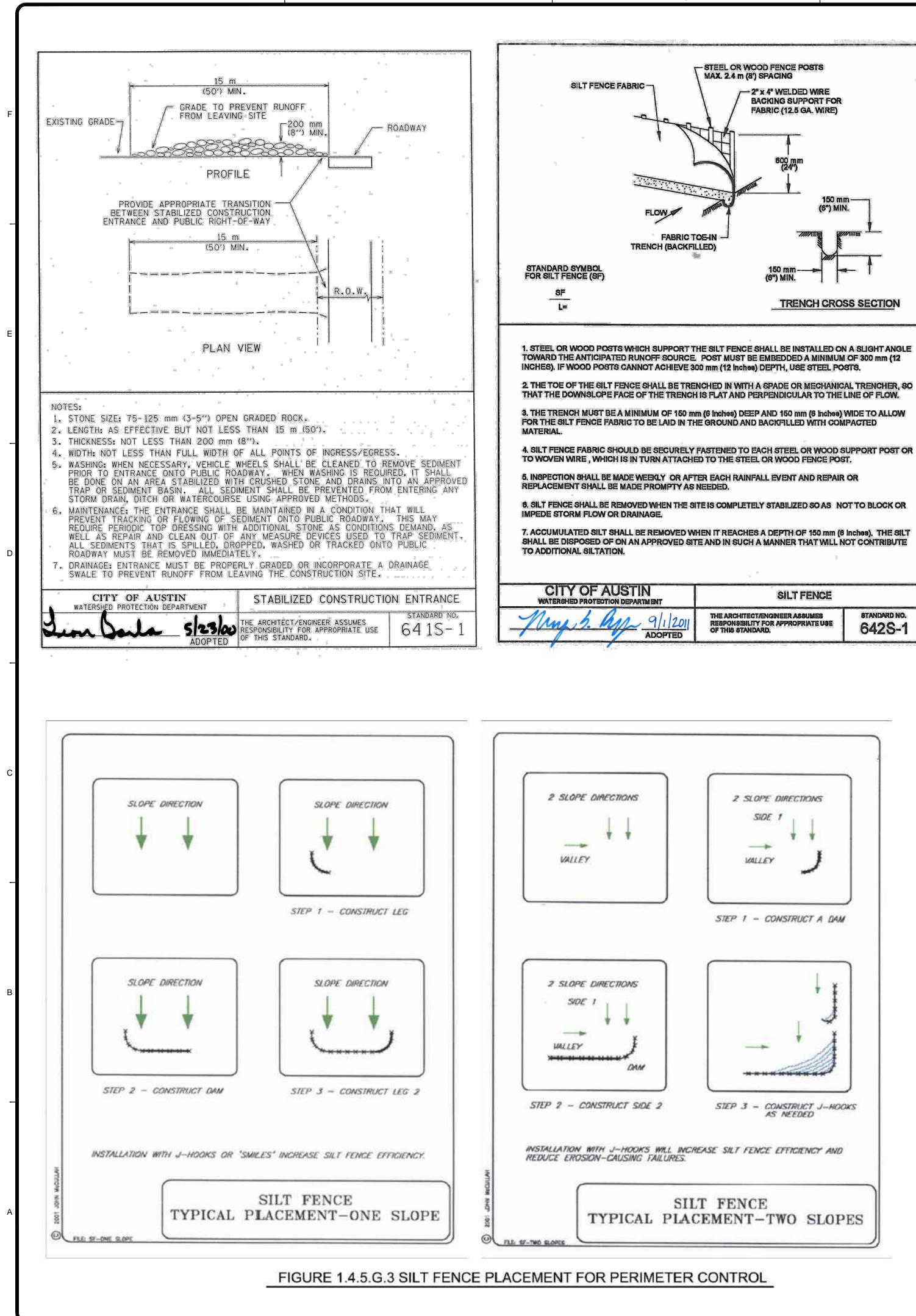
Designed By:

File No:

C-201

Sheet 6 of 39

23-SD-XXX



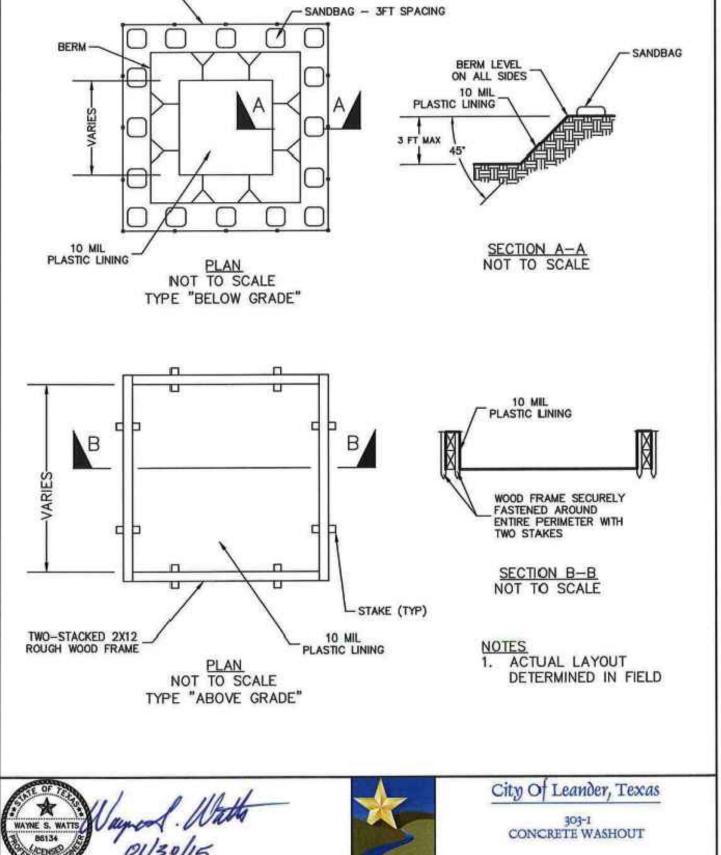


Table 1.4.5.G.1: Maximum spacing between silt fences on slopes		
Slope	Spacing Interval (ft)	Max. Drainage Area (sf)
100:1 to 50:1 (1-2%)	500	25,000
50:1 to 30:1 (2-3.3%)	250	15,000
30:1 to 25:1 (3.3-4%)	150	12,000
25:1 to 20:1 (4-5%)	120	10,000
20:1 to 10:1 (5-10%)	100	5,000
10:1 to 5:1 (10-20%)	50	2,500
5:1 to 2:1 (20-50%)	10	1,000

SILT	FENCE	SPACING	TABLE

Physical Properties	Method	Requirements
Fabric Weight in ounces per square yard (grams/square meter)	TEX-616-J ¹	5.0 minimum (150 minimum)
Equivalent Sieve Opening Size: US Standard (SI Standard sieve size)	CW-02215 ²	40 to 100 (425 to 150 μm)
Mullen Burst Strength: lbs. per sq. inch (psi) megaPascal (mPa)	ASTM D-37863	280 minimum (1.9 minimum)
Ultraviolet Resistance; % Strength Retention	ASTM D-16824	70 minimum
TxDoT Test Method Tex-616-J, "Testing of Co ² US Army Corps of Engineers Civil Wor Specification CW-02215, "Plastic Filter Fabric". ASTM D-3786, "Test Method for Hydraulic B hitting Goods and Nonwoven	ks Construction (Guide

Fabrics: Diaphragm Bursting Strength Tester Method".

⁴ ASTM D-1682, "Test Methods for Breaking Load and Elongation of Textile Fabrics ".

SILT FENCE FABRIC REQUIREMENTS

LATH & FLAGGING ON ALL SIDES

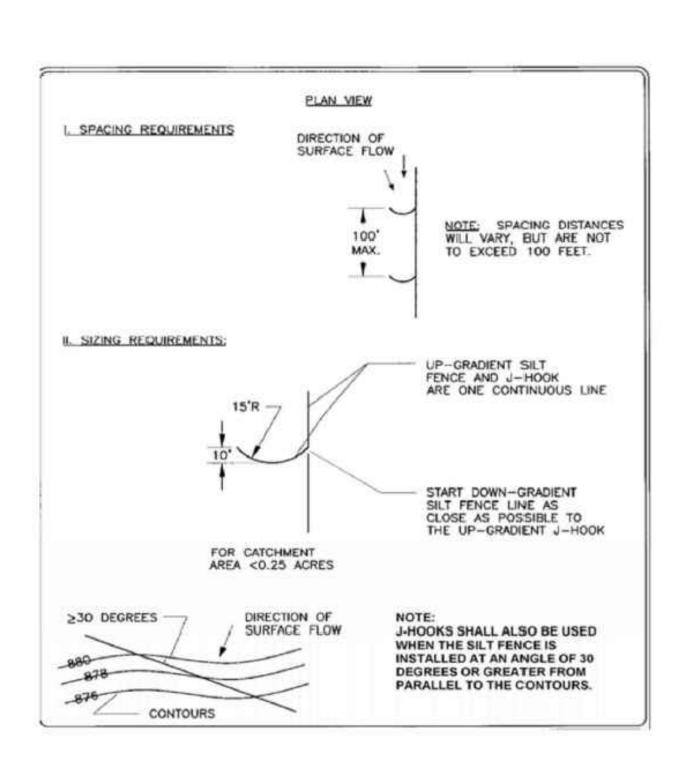
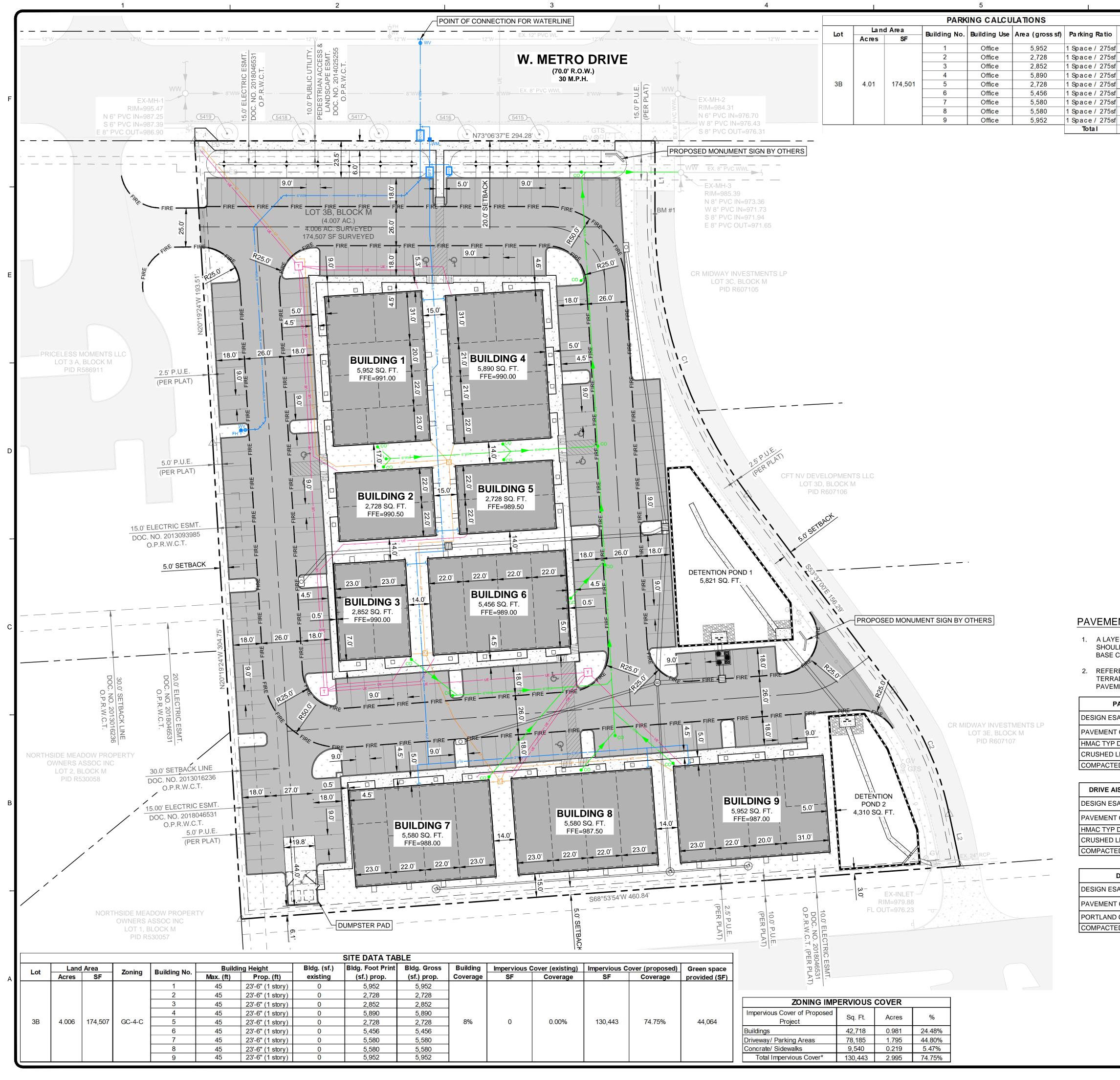


FIGURE 1.4.5.G.4 SILT FENCE J - HOOK DETAILS

	WILLIAM E. PARNELL B. 121598 C.E.NSEO S.I.NAL S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL ENG D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.I.NAL D.S.
ING DISTANCES IUT ARE NOT 100 FEET.	FOREST SPACE®
ILT HOOK NUOUS LINE	NORTH
RADIENT E AS IBLE TO NT J-HOOK	
D BE USED E IS GLE OF 30 ER FROM DNTOURS.	TEXAS REGISTRATION FIRM NO. F-19566
K DETAILS	EXAS REGIS
	DESCRIPTION
	MARK DATE
	ARK T, LLC XAS 78641 JENT -S
	FRO DRIVE OFFICE PARK H FOREST DEVELOPMENT, LLC TRO DRIVE LEANDER, TEXAS 7 SION AND SEDIMEN ONTROL DETAILS
	DRIVE C DREST DEV DRIVE LEA DN AND UTROL
	METRO DRIVE OFFICE PARK NORTH FOREST DEVELOPMENT, LLC WEST METRO DRIVE LEANDER, TEXAS 78641 EROSION AND SEDIMENT CONTROL DETAILS
OR CITY APPROVAL	Project No:
	Designed By: D. VO Drawn By: A. ALVAREZ Checked By: W. PARNELL
	C-202 Sheet 7 of 39
Bar Measures 1 inch, otherwise drawing	File No: 23-SD-XXX

FOR CITY APPROVAL



/2023 10:50:15 PM - J:\2217_NORTH FOREST OFFICE SPACE\2217.02_METRO DRIVE OFFICE PARK\CAD\SHEETFILES\CS-101 OVERALL SITE PLAN.DWG - ADRIAN AL\

	PARKING PRO	VIDED
Pa rking	Standard :	197
Re quire d	Accessible:	8
22	Street:	0
10		
10	Total:	205
21	Accessible Spaces	_
10	Required:	7
20		•
20		
20		
22		
155		

TREE	LIST	
TAG#	TYPE	DIAMETER
-5411	HACKBBERY	
5412	HACKBBERY	9" (REMOVE
5413	SWEETGUM	9" (REMOVE
5414	HACKBERRY	7" (REMOVE
5415	LIVE OAK	6"
5416	LIVE OAK	6"
5417	LIVE OAK	6"
5418	LIVE OAK	7"
5419	LIVE OAK	7"

PAVEMENT RECOMMENDATION NOTES:

1. A LAYER OF GEOGRID EQUIVALENT TO TENSAR TX5 SHOULD BE PLACED BETWEEN THE SUBGRADE AND BASE COURSE.

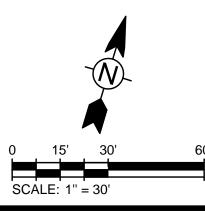
2. REFERENCE GEOTECHNICAL REPORT PERFORMED BY TERRADYNE (DATED JANUARY 31, 2023) FOR PAVEMENT RECOMMENDATION.

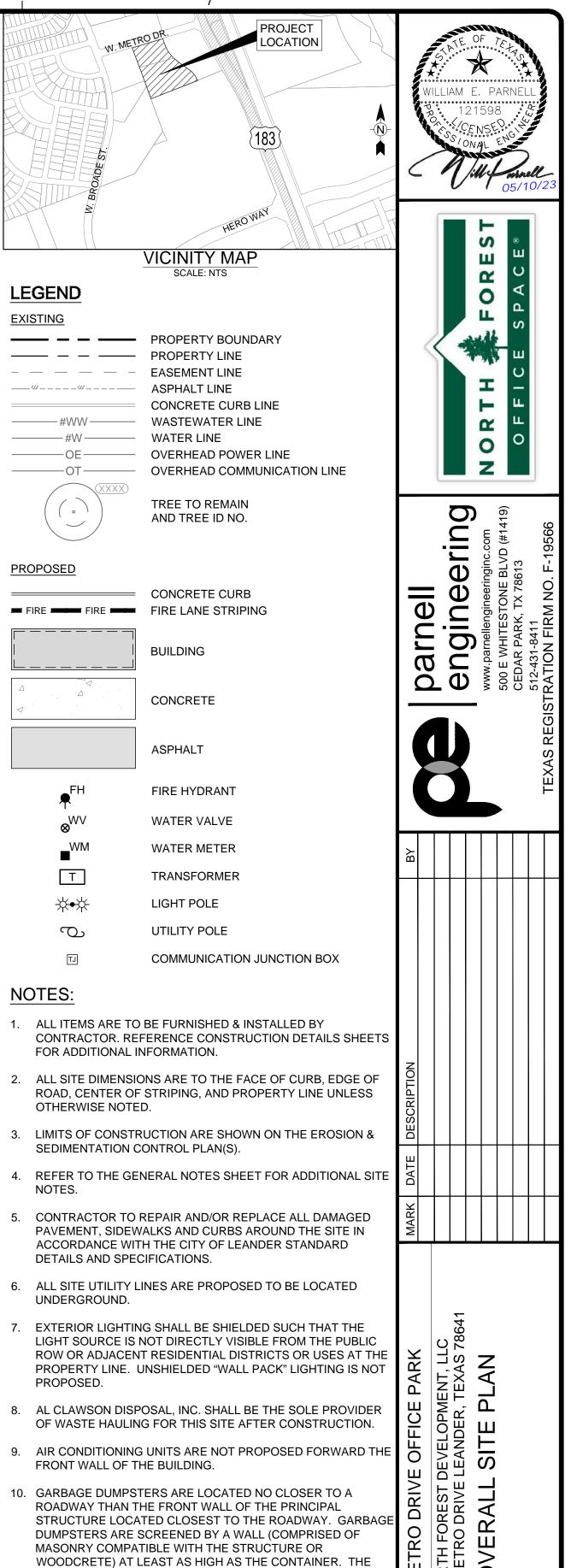
PARKING AREA - FLEXIBLE PAVEMENT			
SALS: 15,000			
CONSTITUENT	THICKNESS (IN.)		
D	2"		
LIMESTONE BASE MATERIAL	8"		
ED SUBGRADE	8"		

ISLES AND FIRE LANE - FLEXIBLE PAVEMENT	
ALS: 150,000	

ALS. 150,000	
CONSTITUENT	THICKNESS (IN.)
D	2"
LIMESTONE BASE MATERIAL	12"
ED SUBGRADE	8"

DUMPSTER PAD - RIDGID PAVEMENT			
ALS: 150,000			
CONSTITUENT	THICKNESS (IN.)		
CEMENT CONCRETE	7"		
ED SUBGRADE	8"		





11. FOR 90 GALLON ROLL OUT CONTAINER STORED OUTSIDE, IT IS REQUIRED TO BE ENCLOSED BY PRIVACY FENCE.

RECEPTACLE IS A GATE CONSTRUCTED OF SOLID WOOD OR

METAL. THE DUMPSTER IS ORIENTED FOR PICKUP BY A FRONT

OPEN SIDE TO THE DUMPSTER OR OTHER TRASH

LOAD GARBAGE TRUCK.

FOR CITY APPROVAL

Bar Measures 1 inch, otherwise drawing not to scale

Project No: Designed By: D. VO Drawn By: A. ALVAREZ Checked By: W. PARNELL Checked By: W. PARNELL Checked By: Bold Structure Checked By: Sheet 8 of 39 File No: 23-SD-XXX

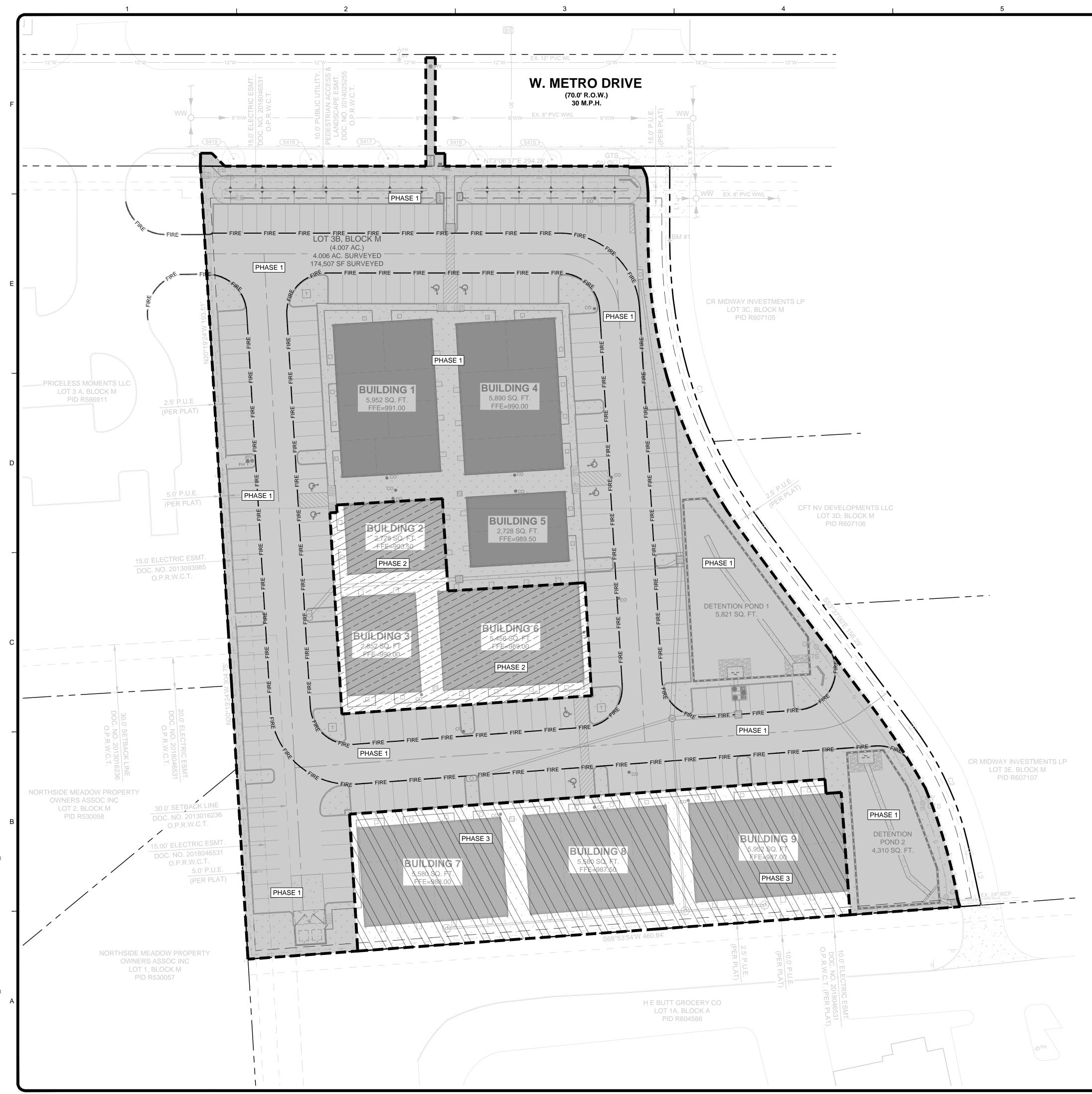
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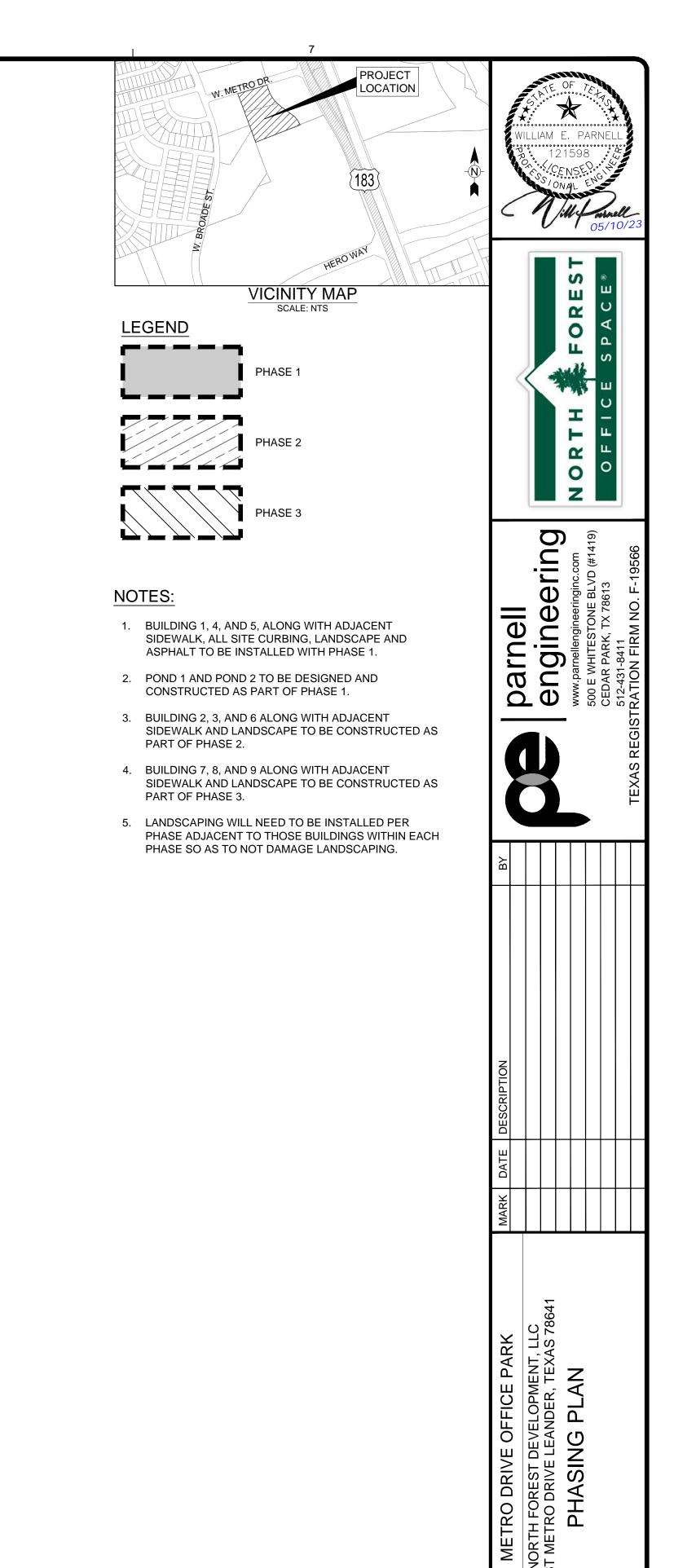
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Call before you dig

Know what's **below**.







FOR CITY APPROVAL

Bar Measures 1 inch, otherwise drawing not to scale

NORTI ST MET Project No: Designed By: D. VO Drawn By: A. ALVAREZ Checked By: W. PARNELL CS-102

Sheet 9 of 39

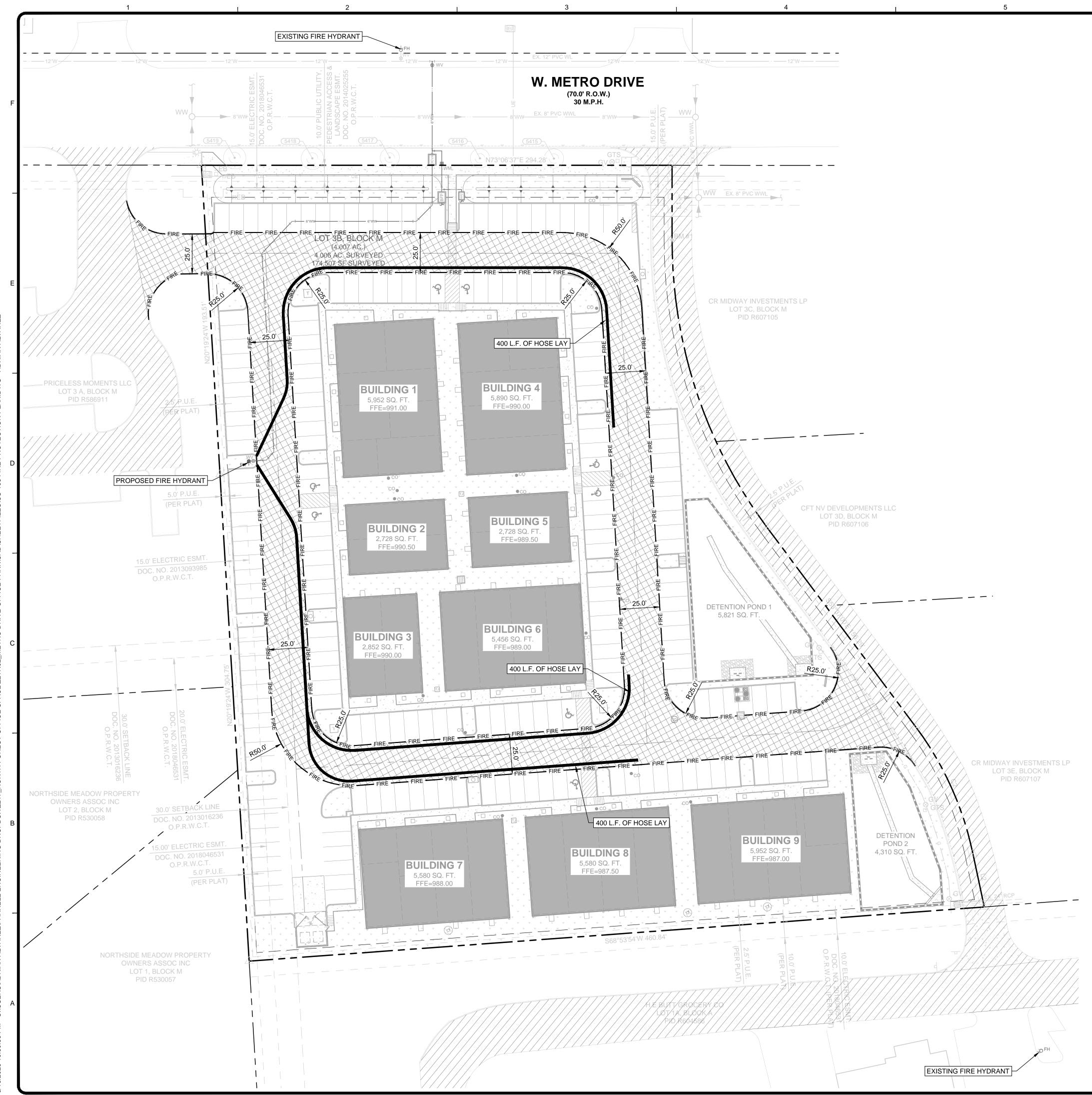
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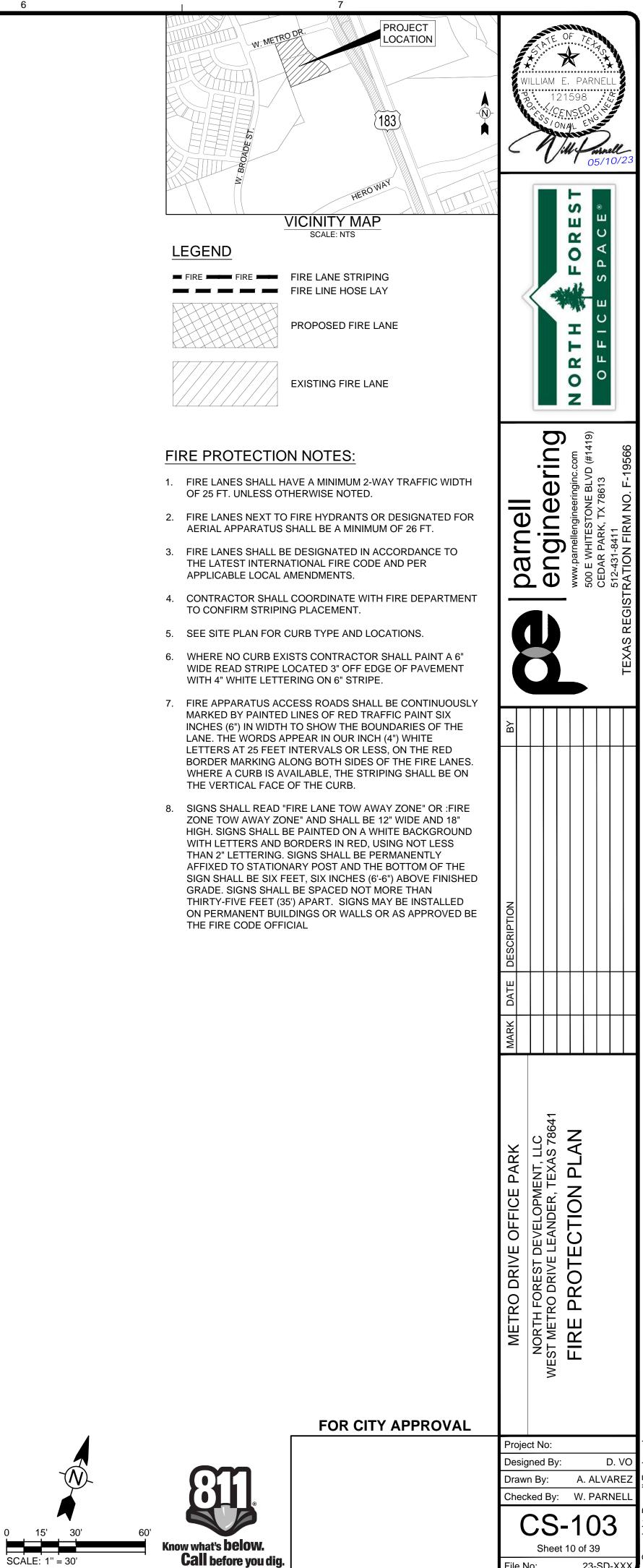
23-SD-XXX

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				5
0	1	5'	3	0'
SCA	LE:	1" =	- = 30	1



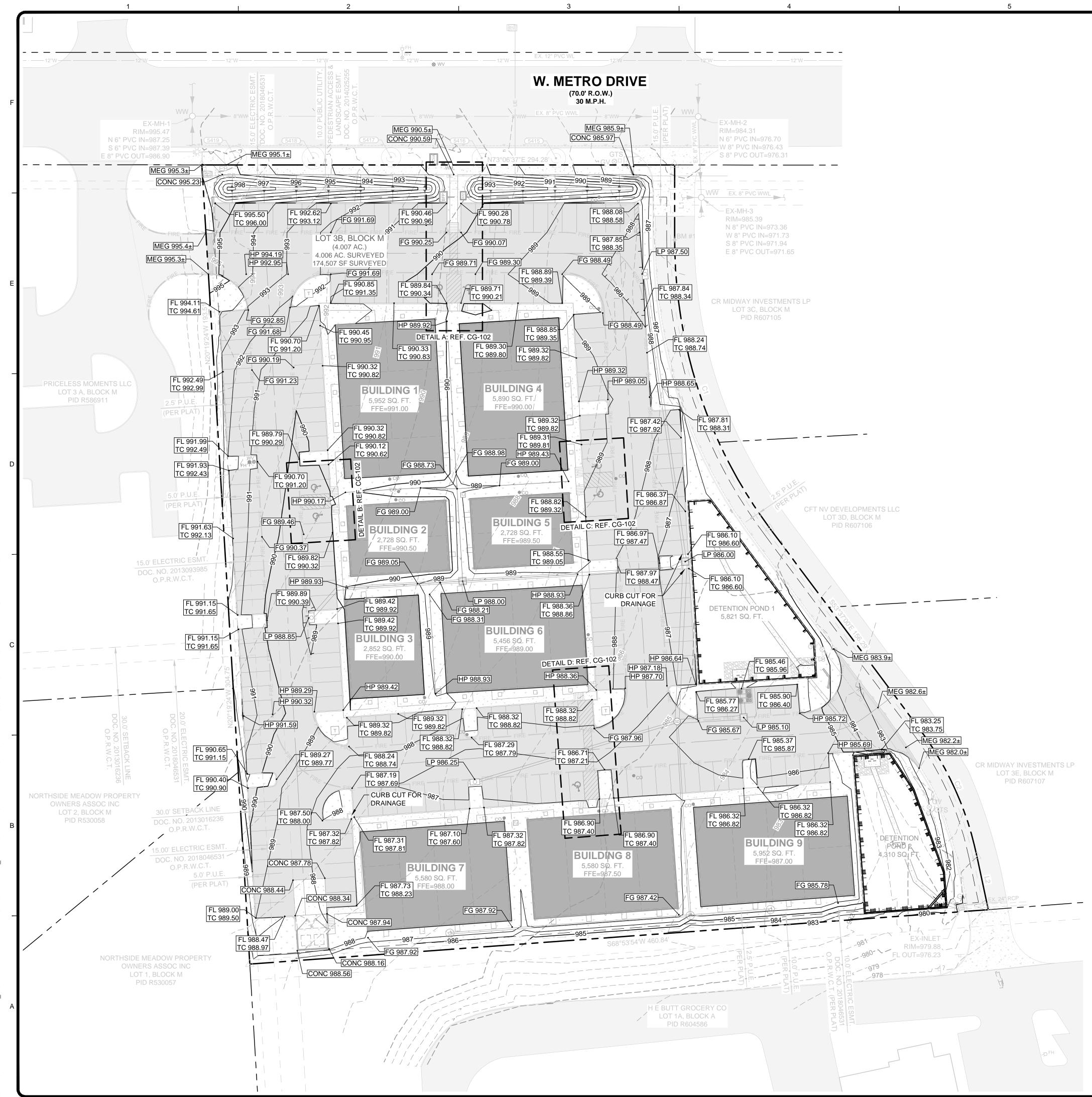


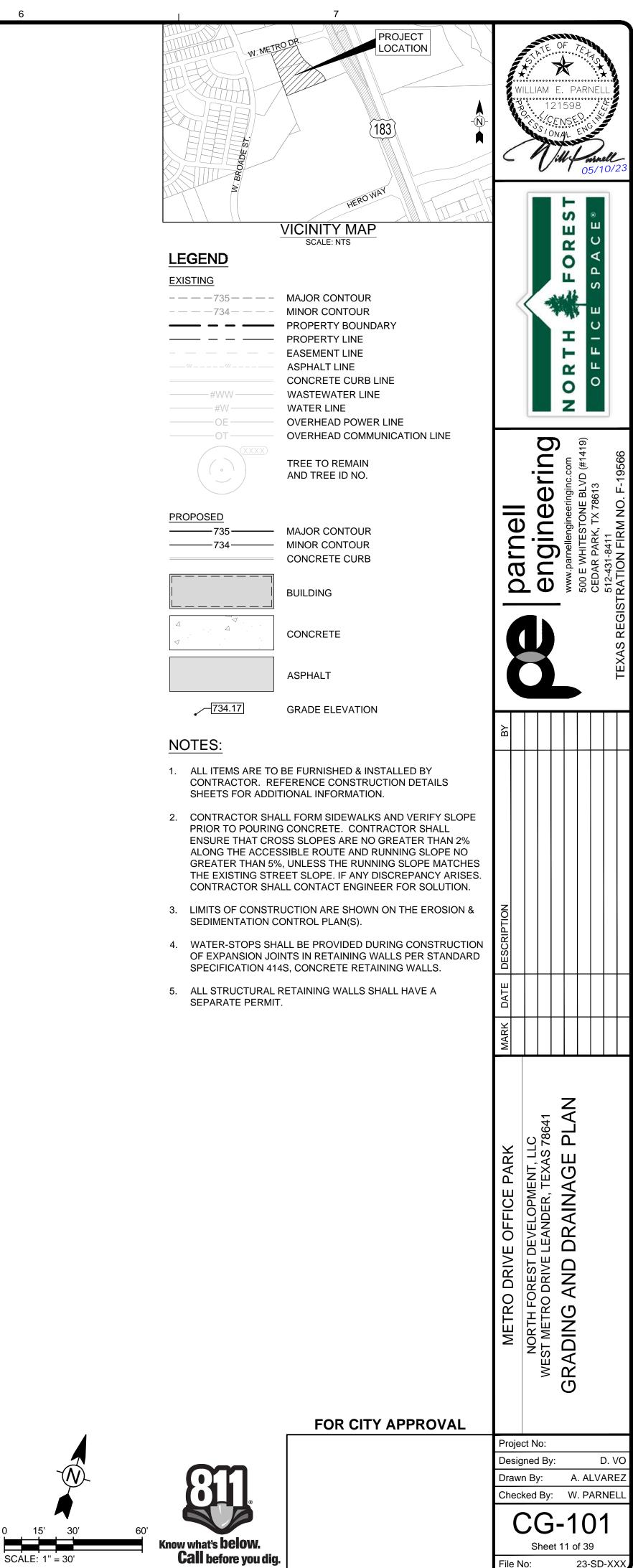
SCALE: 1" = 30'

·	Engine
L	Ц
	arnel
	right: F

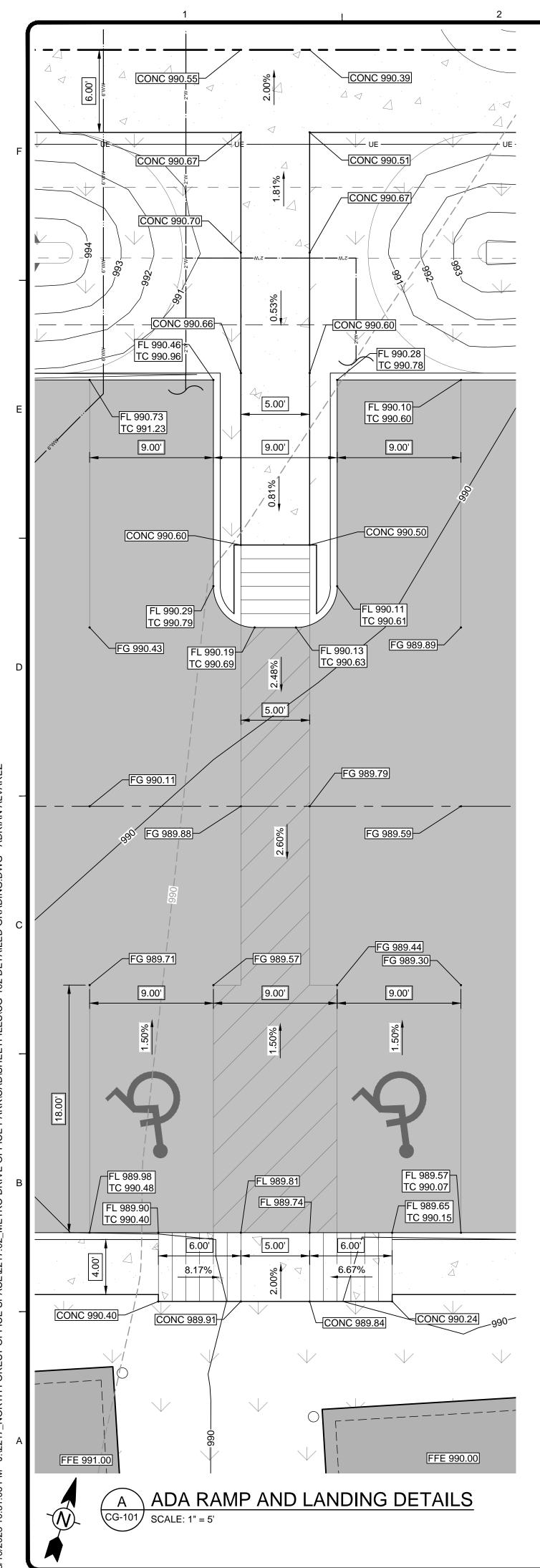
23-SD-XXX

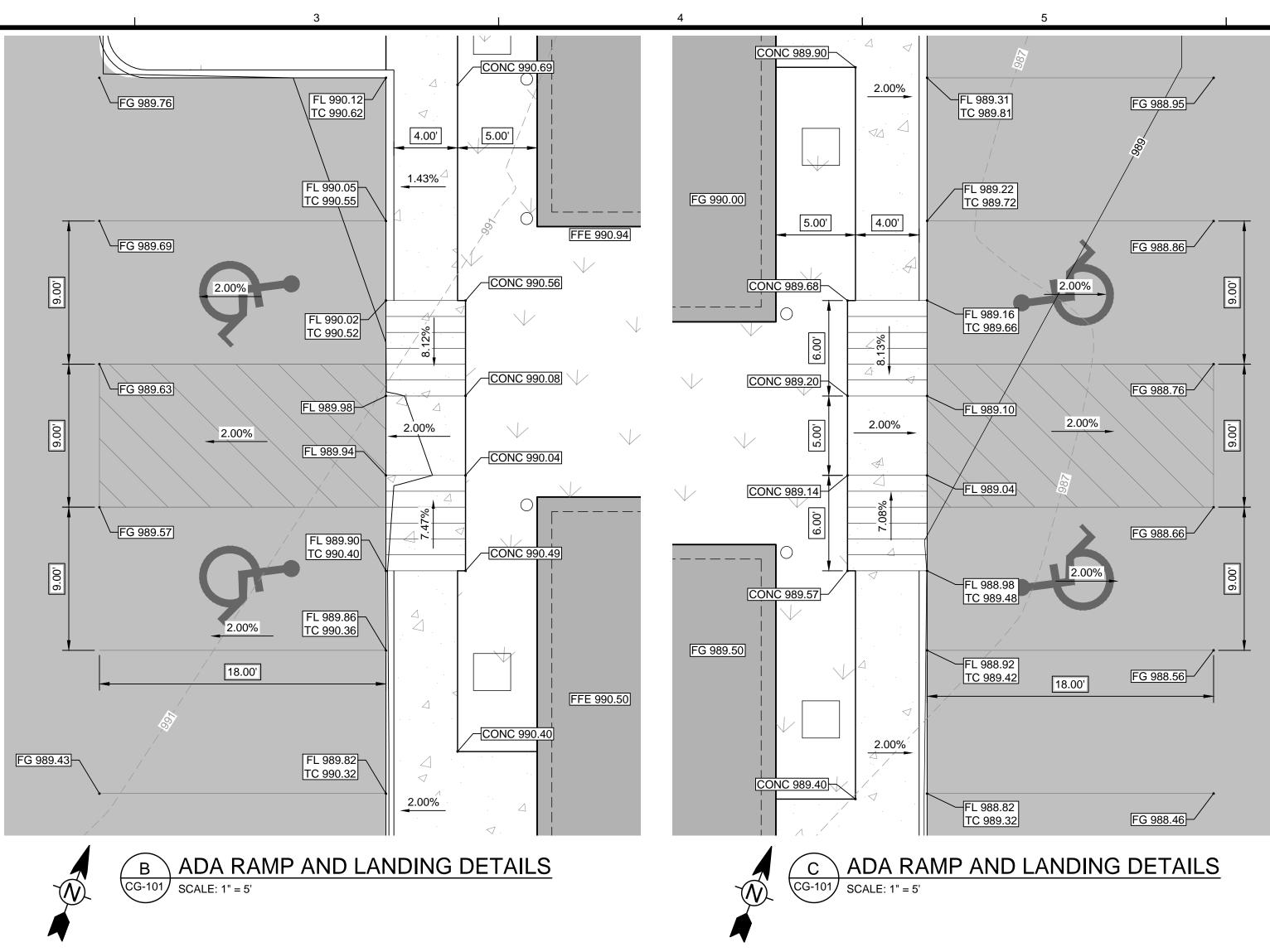
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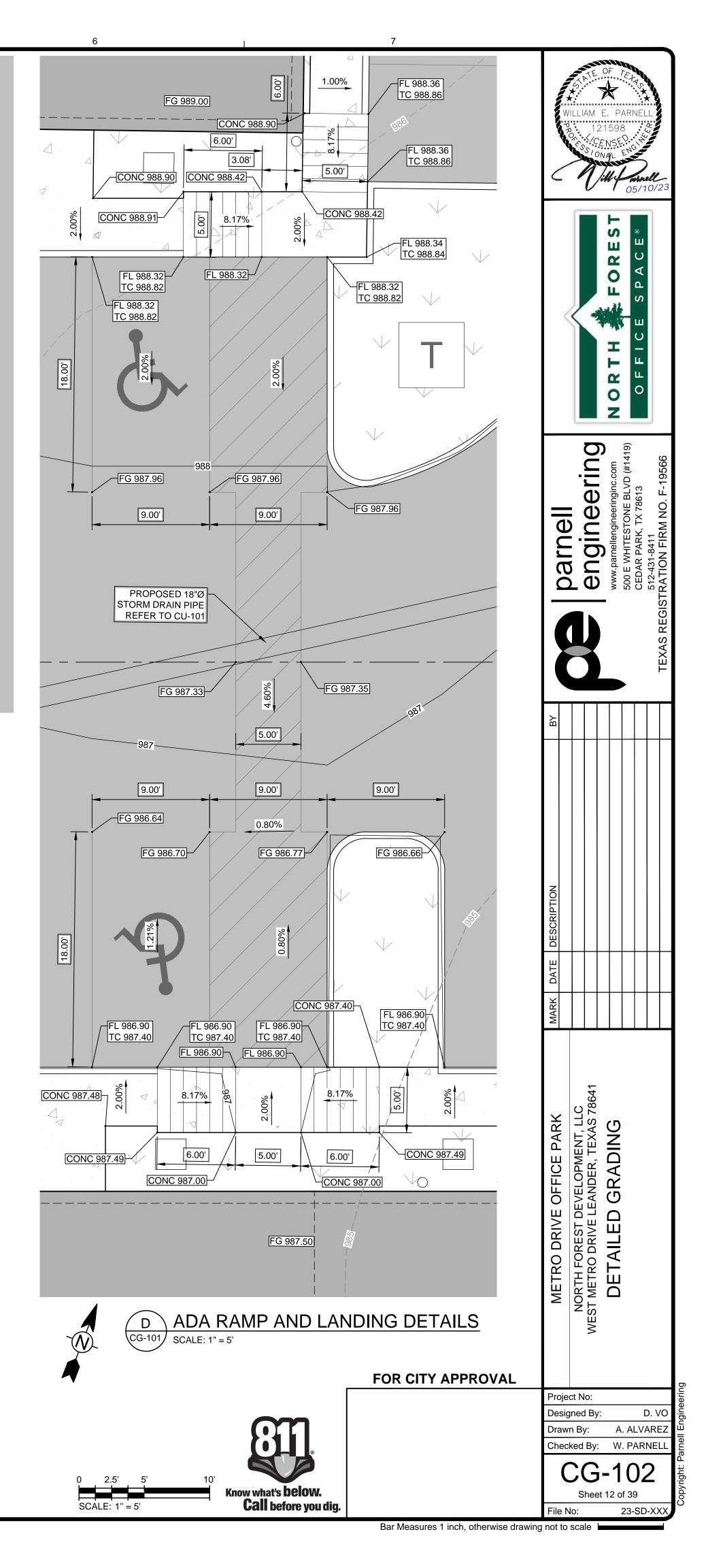


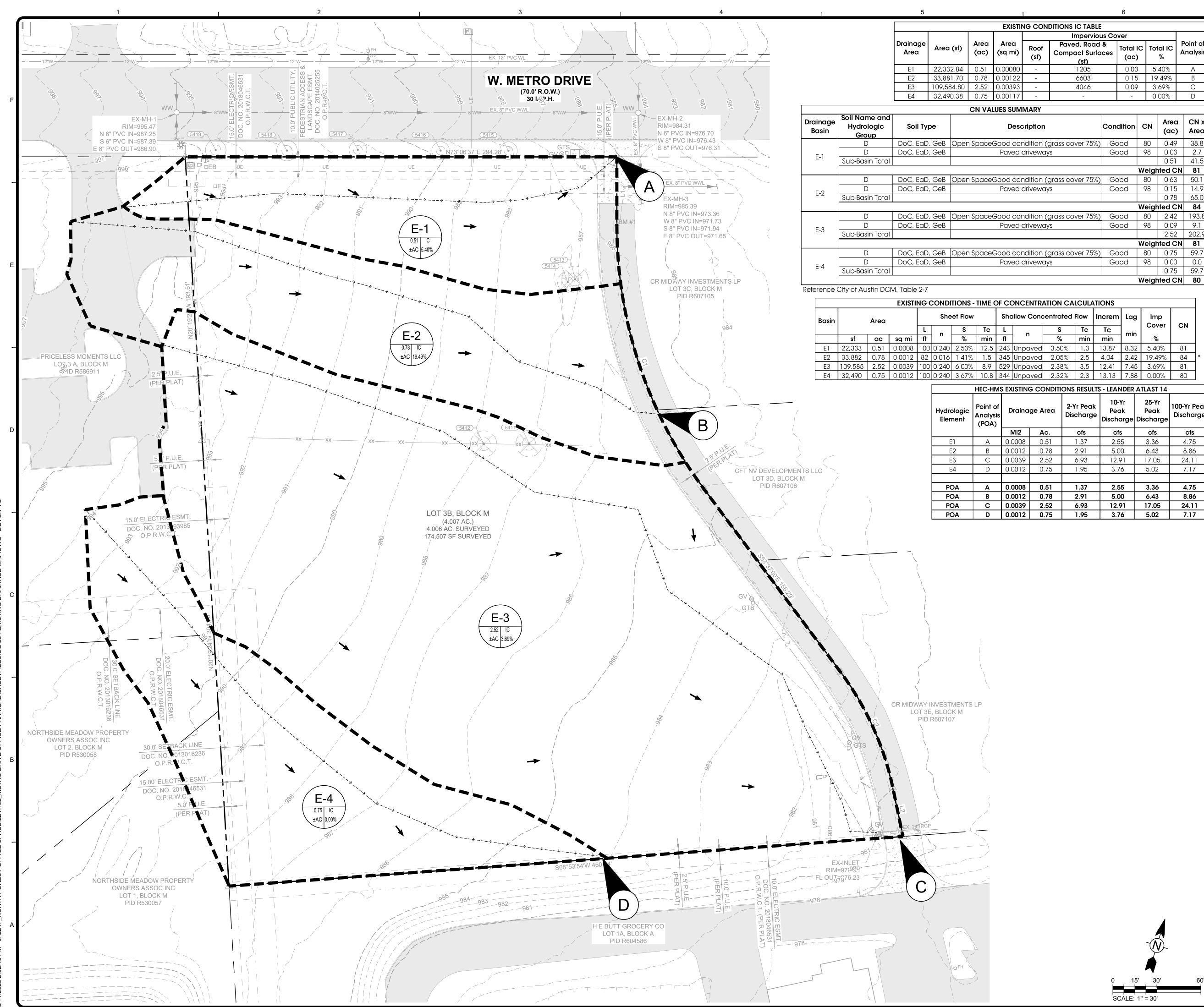


)	Engine)
2		
-	Parnel	
	/right: F)







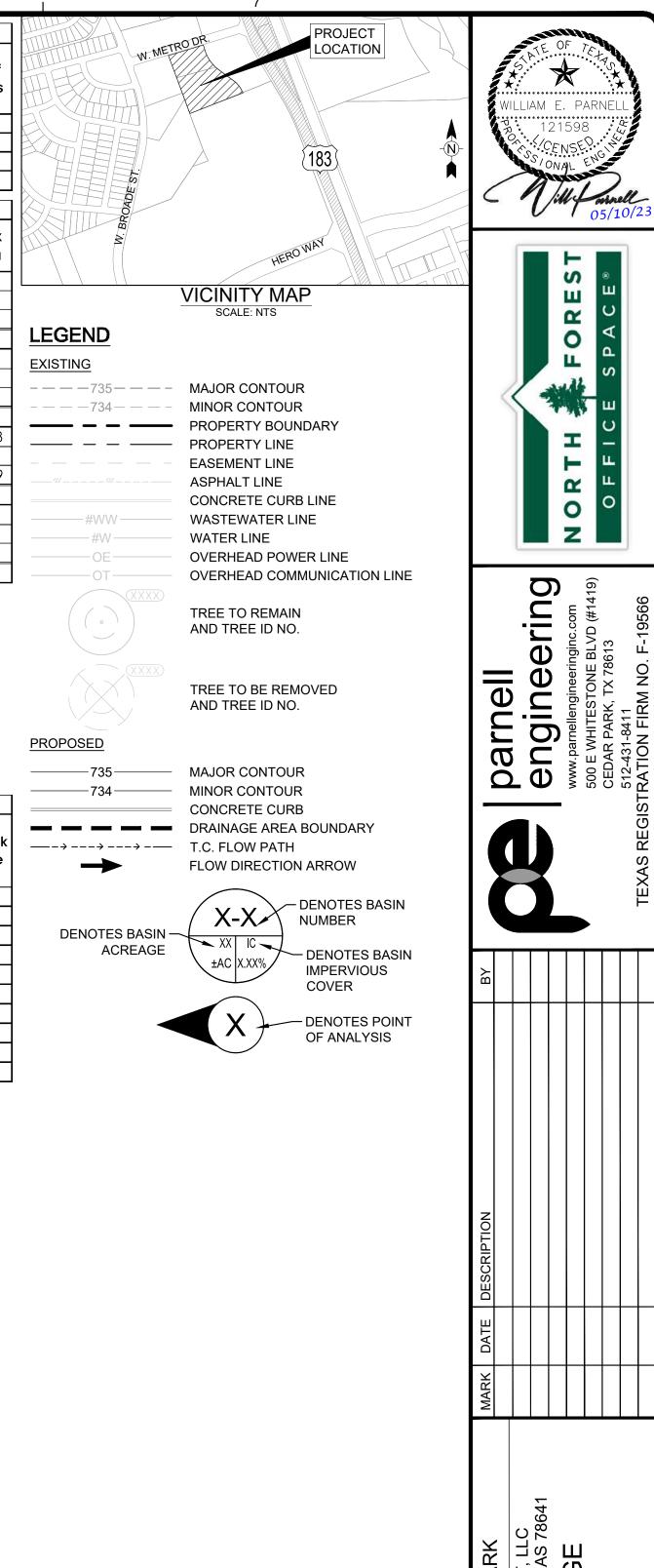


DITIONS IC TABLE			
Impervious Co	ver		
Paved, Road & Compact Surfaces (sf)	Total IC (ac)	Total IC %	Point of Analysis
1205	0.03	5.40%	А
6603	0.15	19.49%	В
4046	0.09	3.69%	С
_	-	0.00%	D

Condition	CN	Area (ac)	CN x Area	
Good	80	0.49	38.8	
Good	98	0.03	2.7	
		0.51	41.5	
	Weigh	nted CN	81	
Good	80	0.63	50.1	
Good	98	0.15	14.9	
		0.78	65.0	
Weighted CN 84				
Good	80	2.42	193.8	
Good	98	0.09	9.1	
		2.52	202.9	
	Weigh	nted CN	81	
Good	80	0.75	59.7	
Good	98	0.00	0.0	
		0.75	59.7	
	Weigh	nted CN	80	
	Good Good Good Good Good Good Good	Good 80 Good 98 Weigh Good 80 Good 98 Good 98 Good 98 Good 98 Good 98 Good 98 Good 80 Good 98 Good 98 Good 98 Good 98 Good 98 Good 98	Condition CN (ac) Good 80 0.49 Good 98 0.03 Good 98 0.03 Good 98 0.51 Weighted CN 0 60 Good 80 0.63 Good 98 0.15 Good 98 0.78 Weighted CN 0.78 Good 80 2.42 Good 98 0.09 Good 98 0.09 Good 80 2.42 Good 80 0.75 Good 98 0.09 Good 80 0.75 Good 80 0.75	

						-
TION CAI	LCULA	TIONS				
entrated Flow		Increm	Lag	Imp Cover		
S	Тс	Тс	min	Cover	CN	
%	min	min	111111	%		
3.50%	1.3	13.87	8.32	5.40%	81	
2.05%	2.5	4.04	2.42	19.49%	84	*
2.38%	3.5	12.41	7.45	3.69%	81	
2.32%	2.3	13.13	7.88	0.00%	80	

HEC-HMS EXISTING CONDITIONS RESULTS - LEANDER ATLAST 14 10-Yr 25-Yr 2-Yr Peak 100-Yr Peak Peak Peak Discharge Discharge Discharge cfs cfs cfs cfs 1.37 2.55 4.75 3.36 2.91 5.00 6.43 8.86 6.93 12.91 17.05 24.11 1.95 3.76 5.02 7.17 1.37 2.55 3.36 4.75 2.91 5.00 6.43 8.86



D. VO Drawn By: A. ALVAREZ Checked By: W. PARNEL CG-20²

TING D AREA

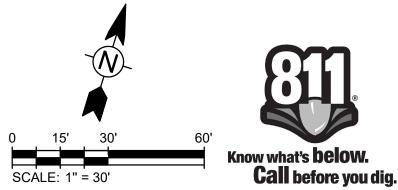
Project No: Designed By:

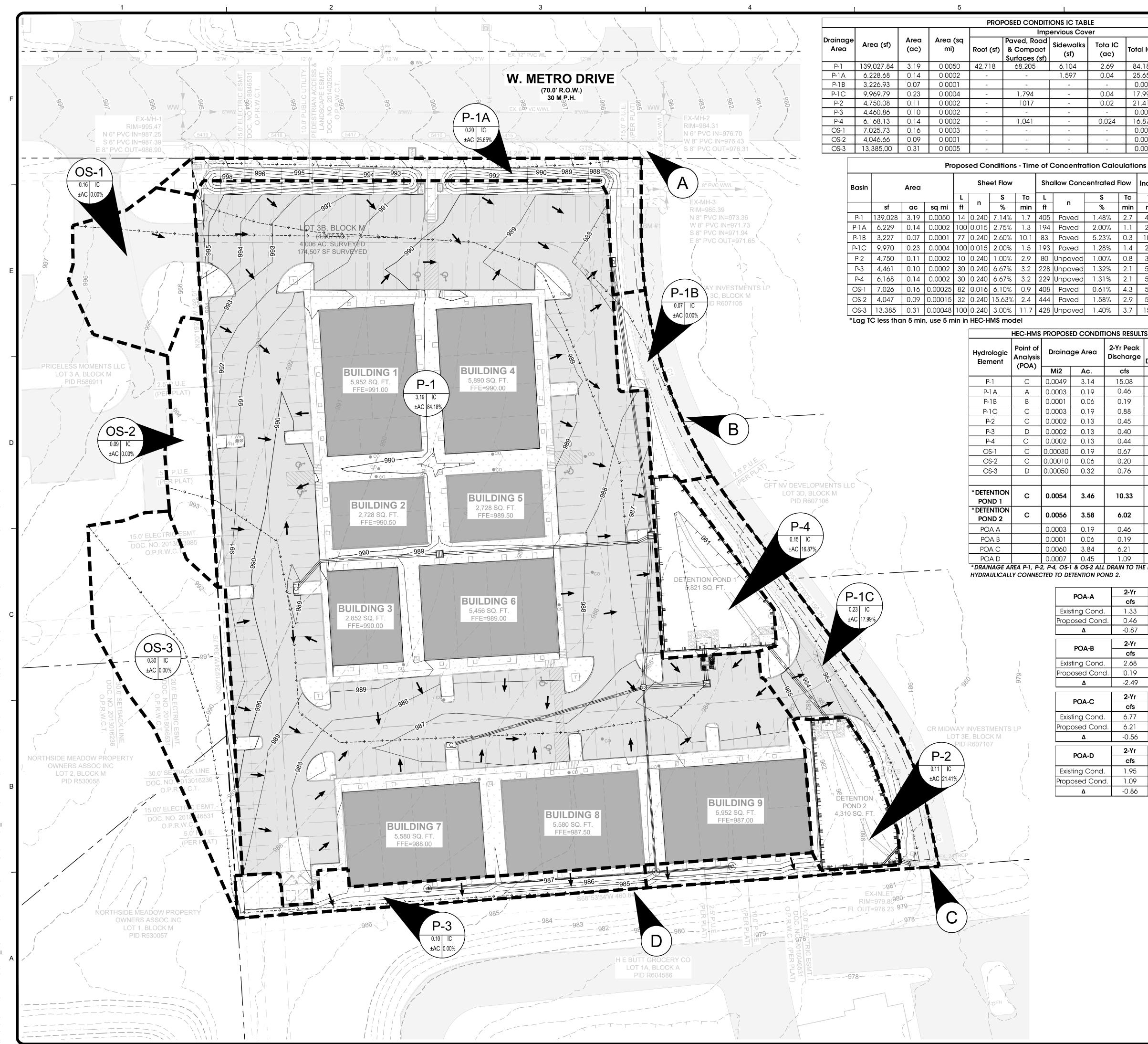
File No:

Sheet 13 of 39

23-SD-XXX







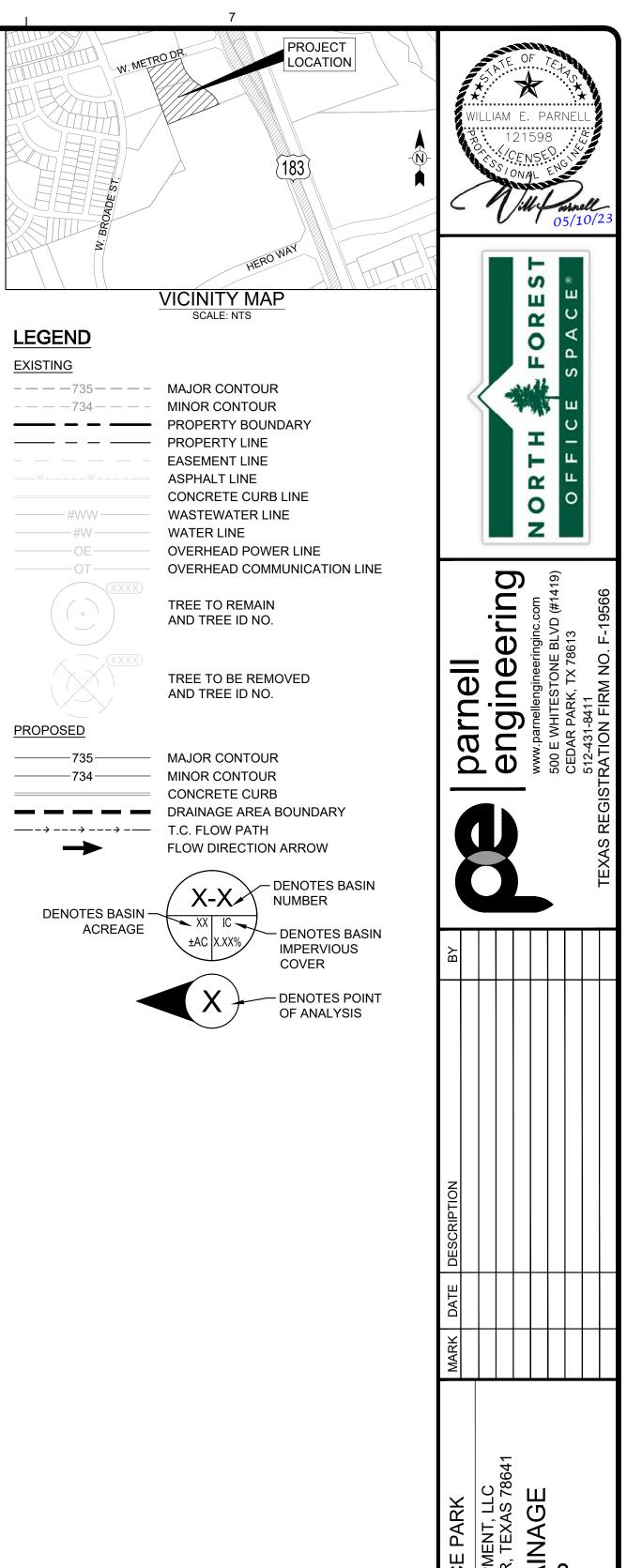
er			
Tota IC (ac)	Total IC %	Discharge Location	Point of Analysis
2.69	84.18%	Detention Pond 1	С
0.04	25.65%	-	А
-	0.00%	-	В
0.04	17.99%	-	С
0.02	21.41%	Detention Pond 2	С
-	0.00%	-	D
0.024	16.87%	Detention Pond 1	С
-	0.00%	Detention Pond 1	С
-	0.00%	Detention Pond 1	С
-	0.00%	-	D

ntrated Flow		Increm	Lag	Imp Cover	CN	
S	Тс	Тс		oover	CN	
%	min	min	min	%		
1.48%	2.7	4.44	2.67	84.18%	81	*
2.00%	1.1	2.44	1.47	25.65%	81	*
5.23%	0.3	10.36	6.21	0.00%	81	
1.28%	1.4	2.89	1.74	17.99%	81	*
1.00%	0.8	3.70	2.22	21.41%	81	*
1.32%	2.1	5.30	3.18	0.00%	81	*
1.31%	2.1	5.31	3.19	16.87%	81	*
0.61%	4.3	5.13	3.08	0.00%	84	*
1.58%	2.9	5.33	3.20	0.00%	81	*
1.40%	3.7	15.44	9.26	0.00%	80	

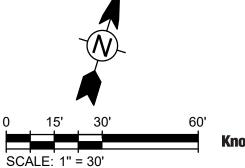
NDIT	IONS RESULT	S - LEANDE	<u> ≀ ATLAST 14</u>	,
∋a	2-Yr Peak Discharge	10-Yr Peak Discharge	25-Yr Peak Discharge	100-Yr Peak Discharge
•	cfs	cfs	cfs	cfs
4	15.08	23.23	28.86	38.55
9	0.46	0.81	1.04	1.45
16	0.19	0.35	0.46	0.66
9	0.88	1.58	2.06	2.88
3	0.45	0.80	1.04	1.45
3	0.40	0.75	1.00	1.41
3 3 9	0.44	0.79	1.03	1.44
9	0.67	1.20	1.57	2.18
16	0.20	0.38	0.50	0.71
2	0.76	1.47	1.96	2.80
6	10.33	16.94	20.75	25.86
8	6.02	10.78	15.79	23.07
9	0.46	0.81	1.04	1.45
16	0.19	0.35	0.46	0.66
4	6.21	11.14	16.36	23.93
.5	1.09	2.09	2.78	3.97

1.09 | 2.09 2.78 * DRAINAGE AREA P-1, P-2, P-4, OS-1 & OS-2 ALL DRAIN TO THE DETENTION POND 1 WHICH IS

-A	2-Yr	10-Yr	25-Yr	100-Yr	
A	cfs	cfs	cfs	cfs	
Cond.	1.33	2.51	3.33	4.72	
Cond.	0.46	0.81	1.04	1.45	
	-0.87	-1.70	-2.29	-3.27	
_	2-Yr	10-Yr	25-Yr	100-Yr	
-В	cfs	cfs	cfs	cfs	
Cond.	2.68	4.81	6.26	8.74	
Cond.	0.19	0.35	0.46	0.66	
	-2.49	-4.46	-5.80	-8.08	
	0 V-	10 V-	05 Vr	100 Vr	
.c	2-Yr	10-Yr	25-Yr	100-Yr	
•	cfs	cfs	cfs	cfs	
Cond.	6.77	12.78	16.94	24.02	
Cond.	6.21	11.14	16.36	23.93	
	-0.56	-1.64	-0.58	-0.09	
_	2-Yr	10-Yr	25-Yr	100-Yr	
·D	cfs	cfs	cfs	cfs	
Cond.	1.95	3.76	5.02	7.17	
Cond.	1.09	2.09	2.78	3.97	
	-0.86	-1.67	-2.24	-3.20	



FOR CITY APPROVAL





Bar Measures 1 inch, otherwise drawing not to scale

D. VO A. ALVAREZ

MA

SED

Project No:

Designed By:

Drawn By:

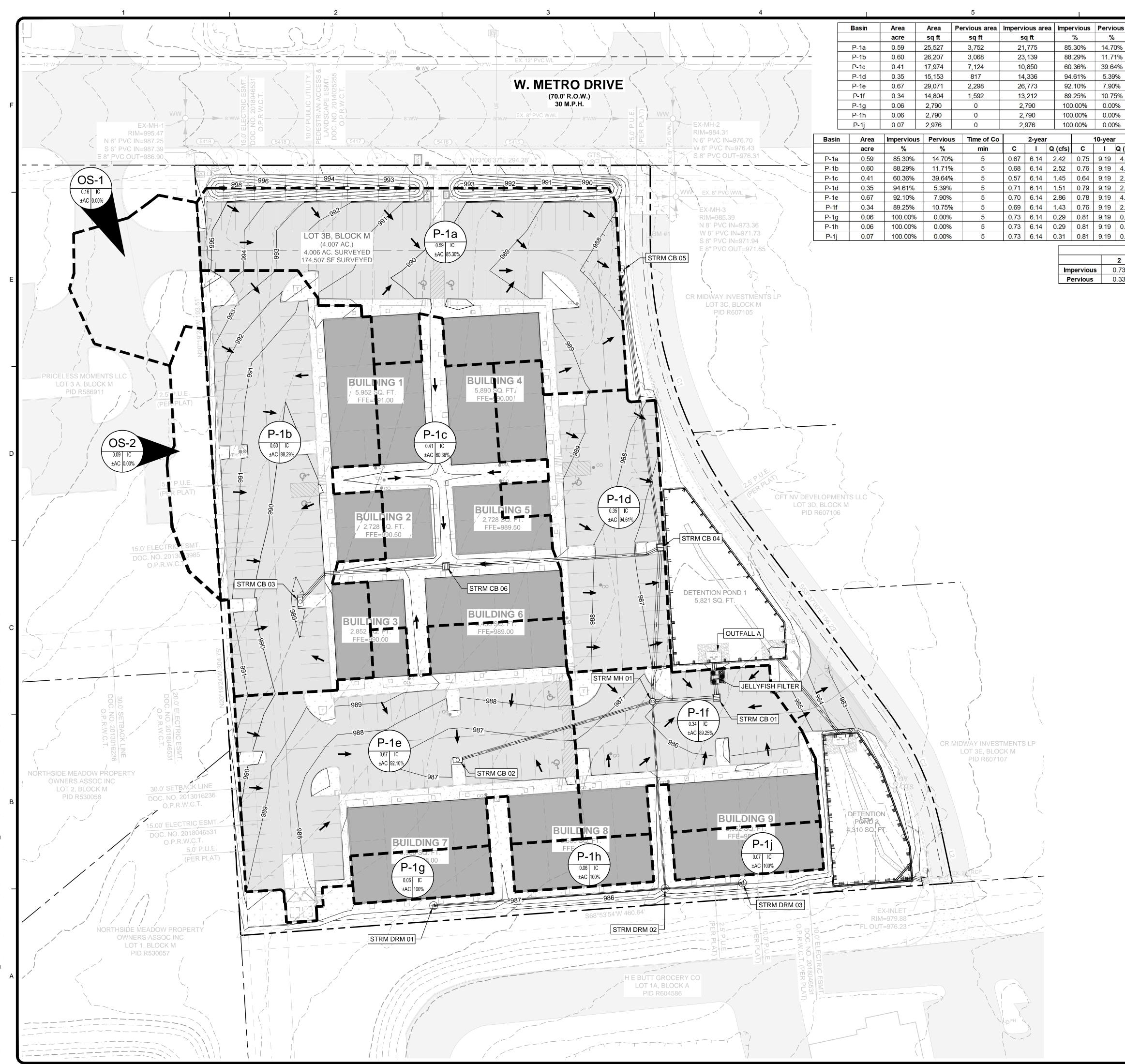
File No:

Checked By: W. PARNEL

CG-202

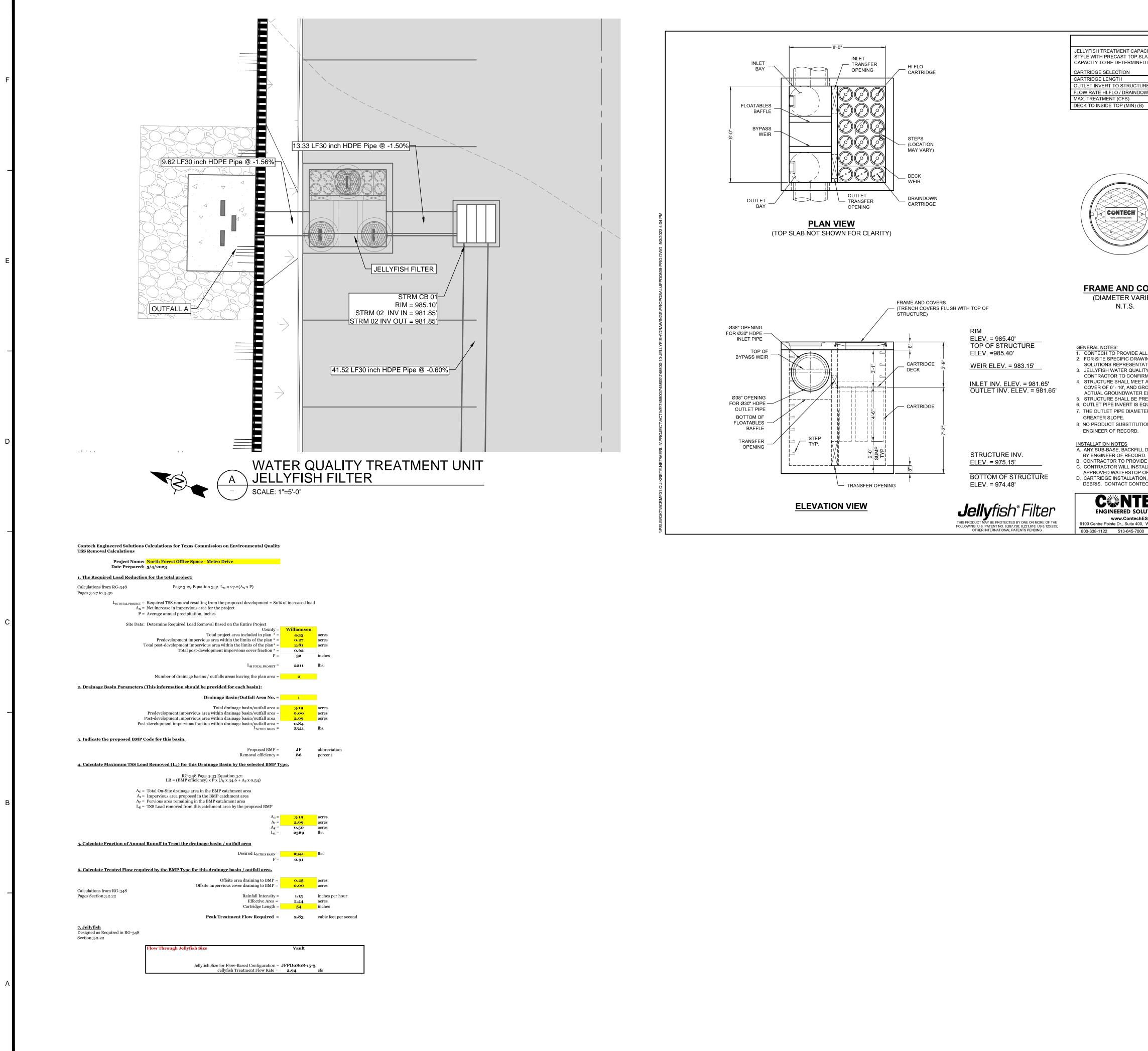
Sheet 14 of 39

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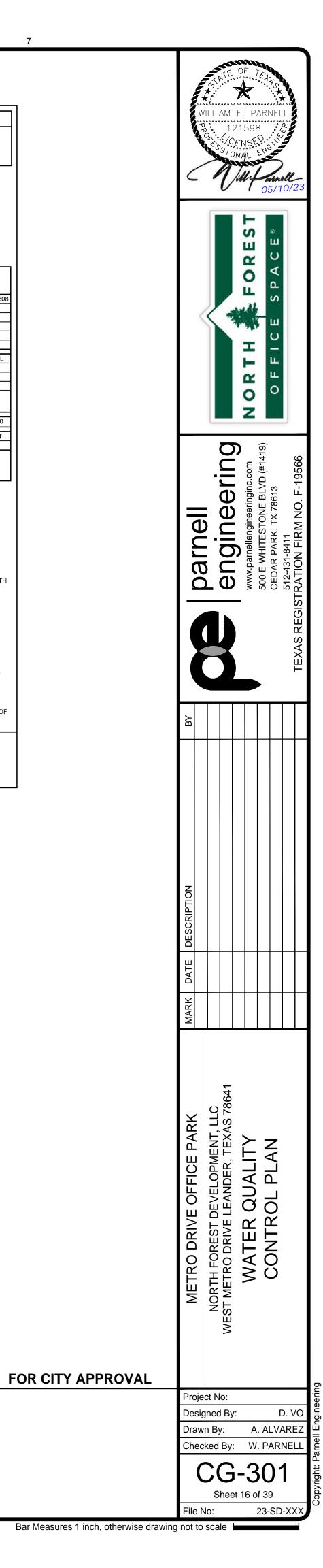


		6				7	
Pervious %	2 yr	Runoff Co 10 yr	efficient 25 yr	100 yr	W.METR	PROJECT LOCATION	TE OF TEL
14.70%	0.67	0.75	0.80	0.88			
11.71% 39.64%	0.68 0.57	0.76 0.64	0.81 0.69	0.90			WILLIAM E. PARNELL
5.39%	0.71	0.79	0.84	0.93			D. 121598
7.90% 10.75%	0.70 0.69	0.78 0.76	0.83 0.81	0.91			COS/ONAL ENG
0.00%	0.73 0.73	0.81	0.86	0.95			C Till formell
0.00%	0.73	0.81	0.86	0.95			V 1 _{05/10/23}
-year		25-year		0-year		HEROWAY	
I Q (cfs 9.19 4.02		l Q (cfs) 11.30 5.27	C 0.88 1	l Q (cfs) 5.00 7.76		VICINITY MAP	C E ®
9.194.209.192.43	-	11.305.5011.303.20		5.008.095.004.75	LEGEND	SCALE: NTS	
9.19 2.52	0.84	11.30 3.29	0.93 1	5.00 4.83	EXISTING		й <u>с</u>
9.194.769.192.39		11.306.2311.303.12		5.00 9.15 5.00 4.59	735	MAJOR CONTOUR	No.
9.19 0.48	0.86	11.30 0.62	0.95 1	5.00 0.91		MINOR CONTOUR PROPERTY BOUNDARY	A A A A A A A A A A A A A A A A A A A
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	Year	Return I a	Period b	С	OT	OVERHEAD POWER LINE	ھ 🗂
	2	58.00	11.27	0.805		TREE TO REMAIN	om (#141 (#141
	10 25	77.00 89.00	10.53 10.16	0.775 0.759		AND TREE ID NO.	BLVD (#14 3613
	100	106.00	9.46	0.732			NO. P NO. P
Cit	uy or ∟eander	IDF Curve Coefficie	antiadie 6			TREE TO BE REMOVED AND TREE ID NO.	Jine6 Jine6 ellengineerin ITESTONE F ARK, TX 786 411 FIRM NO.
					PROPOSED		MHITI WHITI S1-841 SN FI
					735	MAJOR CONTOUR	Parnellengineeringinc.com 500 E WHITESTONE BLVD (#1419) CEDAR PARK, TX 78613 512-431-8411 REGISTRATION FIRM NO. F-19566
					734	MINOR CONTOUR CONCRETE CURB	STR5 C 2 S TR
						DRAINAGE AREA BOUNDARY T.C. FLOW PATH	
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							METRO DRIVE OFFICE PARK NORTH FOREST DEVELOPMENT, LLC WEST METRO DRIVE LEANDER, TEXAS 78641 INLET DRAINAGE AREA MAP
							DRIVE OFFICE PARK REST DEVELOPMENT, LL DRIVE LEANDER, TEXAS T DRAINAGE AREA MAP
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							S NO
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						FOR CITY APPROVAL	
							Project No:
					\mathbf{m}		Designed By: D. VO Drawn By: A. ALVAREZ
							Checked By: W. PARNELL
		0 45		001			CG-203
		0 15'	30'	60'	Know what's below .		Sheet 15 of 39
		SCALE: 1"	= 30'	-	Call before you dig.		File No: 23-SD-XXX

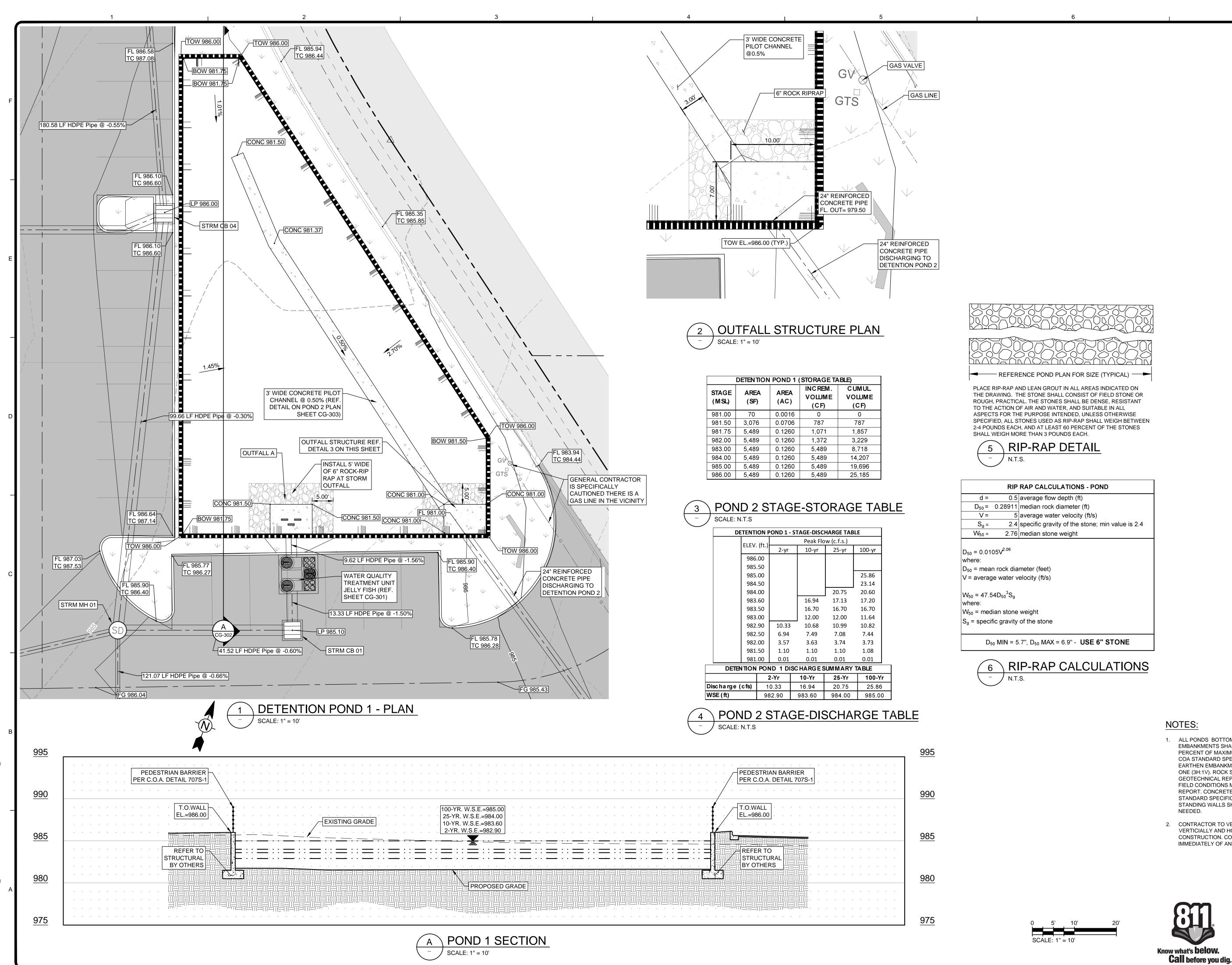
Bar Measures 1 inch, otherwise drawing not to scale



BY ENGINEER OF F		
E INVERT (A)	54" 6'-6"	
N (CFS) (PER CAR		
	2.94	
	5.00	
		SITE SPECIFIC DATA REQUIREMENTS STRUCTURE ID JFPD0800
		WATER QUALITY FLOW RATE (cfs) 2.82
\backslash		PEAK FLOW RATE (cfs) * RETURN PERIOD OF PEAK FLOW (yrs) *
		# OF CARTRIDGES REQUIRED (HF / DD) 15/3
		CARTRIDGE LENGTH 54
1		PIPE DATA: I.E. MAT'L DIA SLOPE % HGL
/ /		INLET #1 981.65 HDPE 30" * * INLET #2 * * * * *
/		OUTLET 981.65 HDPE 30" * *
/		SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.
		RIM ELEVATION 985.40
	24"	ANTI-FLOTATION BALLAST WIDTH HEIGHT
VER TR		NOTES/SPECIAL REQUIREMENTS:
S) (L	ENGTH VARIES)	* PER ENGINEER OF RECORD
IGS WITH DETAILE IVE. www.Conteche STRUCTURE SHA STRUCTURE MEE ASHTO HS-20 OR F UNDWATER ELEV/ LEVATION. CASTIN CAST CONCRETE JAL TO THE CARTE	S.com LL BE IN ACCORDANCE WITH ALL D TS REQUIREMENTS OF PROJECT. PER APPROVING JURISDICTION REG ATION AT, OR BELOW, THE OUTLET IGS SHALL MEET AASHTO M306 LOO CONFORMING TO ASTM C-857, AST RIDGE DECK ELEVATION.	VEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. QUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM AD RATING AND BE CAST WITH THE CONTECH LOGO. M C-918, AND AASHTO LOAD FACTOR DESIGN METHOD. E ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR
S SHALL BE ACCE	PTED UNLESS SUBMITTED 10 DAY	S PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE
	[I-FLOTATION PROVISIONS ARE SIT	TE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED
EPTH, AND/OR AN		CAPACITY TO LIFT AND SET THE STRUCTURE. , LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH
EQUIPMENT WITH AND LEVEL THE S FLEXIBLE BOOT).	STRUCTURE, SEALING THE JOINTS,	REEN STARTIZED AND THE TELL VERTINIT IS OF EAM AND EDGE OF
EQUIPMENT WITH AND LEVEL THE S FLEXIBLE BOOT). BY CONTECH, SHA	STRUCTURE, SEALING THE JOINTS,	
EQUIPMENT WITH AND LEVEL THE S FLEXIBLE BOOT). BY CONTECH, SHA	STRUCTURE, SEALING THE JOINTS, ALL OCCUR ONLY AFTER SITE HAS E CARTRIDGE INSTALLATION WITH JELLY	SITE STABILIZATION. FISH JFPD0808 - 745800 - 010
EQUIPMENT WITH AND LEVEL THE S FLEXIBLE BOOT). BY CONTECH, SHA TO COORDINATI	STRUCTURE, SEALING THE JOINTS, ALL OCCUR ONLY AFTER SITE HAS E CARTRIDGE INSTALLATION WITH JELLY	SITE STABILIZATION.
EQUIPMENT WITH AND LEVEL THE S FLEXIBLE BOOT). BY CONTECH, SHA	STRUCTURE, SEALING THE JOINTS, ALL OCCUR ONLY AFTER SITE HAS E CARTRIDGE INSTALLATION WITH JELLYI PROJECT N/	FISH JFPD0808 - 745800 - 010



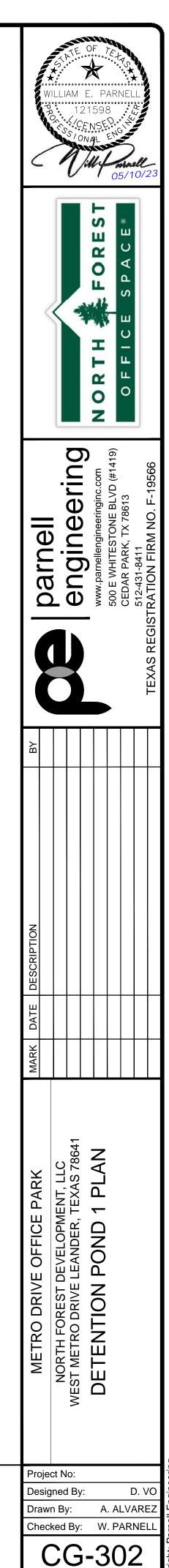




- 1. ALL PONDS BOTTOMS, SIDE SLOPES, AND EARTHEN EMBANKMENTS SHALL BE COMPACTED TO NINETY-FIVE (95) PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH COA STANDARD SPECIFICATIONS. SIDE SLOPES FOR EARTHEN EMBANKMENTS SHALL NOT EXCEED THREE TO ONE (3H:1V). ROCK SLOPES MAY EXCEED THESE LIMITS IF A GEOTECHNICAL REPORT WARRANTS A DEVIATION. ACTUAL FIELD CONDITIONS MAY OVERRIDE THE GEOTECHNICAL REPORT. CONCRETE WALLS SHALL BE BUILT TO COA STANDARD SPECIFICATIONS. EXPANSIONS JOINTS ON FREE STANDING WALLS SHALL HAVE WATER TIGHT SEALS AS
- 2. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES VERTICIALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

FOR CITY APPROVAL

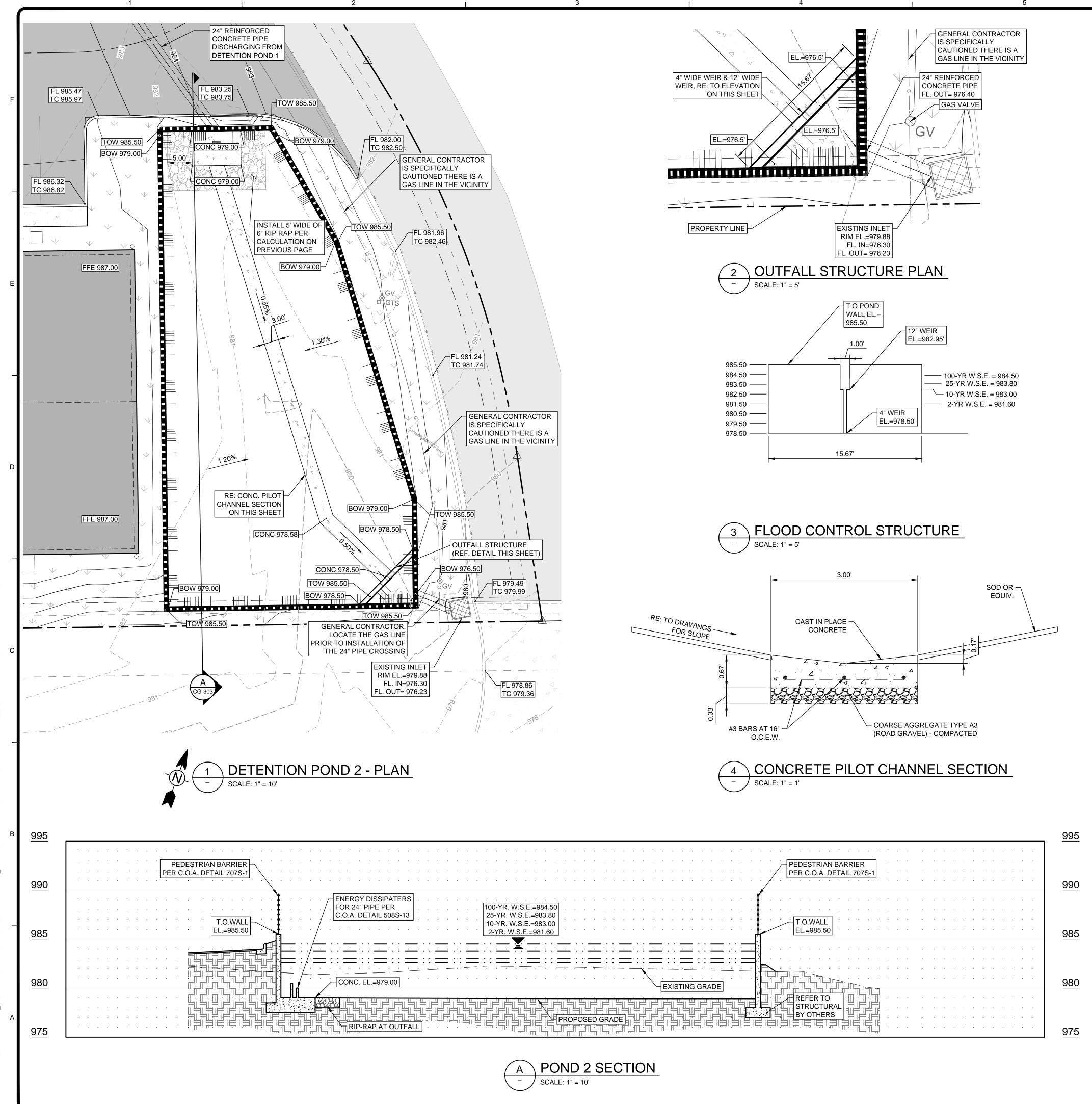
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Sheet 17 of 39

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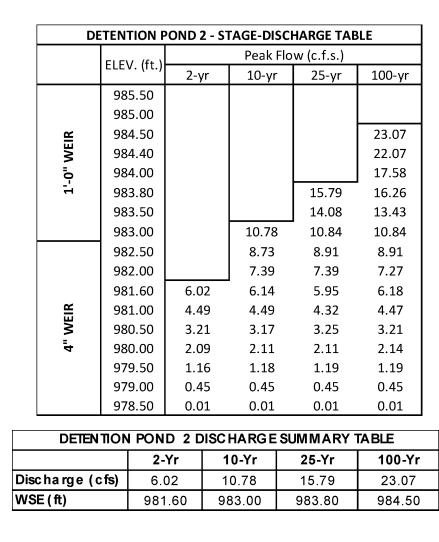
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- 2. CONTRACTOR TO VERIFY ALL EXISTING UTILITIES VERTICIALLY AND HORIZONTALLY PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.

DETENTION POND 2 (STORAGE TABLE)							
STAGE	STAGE AREA AREA INCREM. CUMUL						
(MSL)	(SF)	(AC)	VOLUME	VOLUME			
978.50	61	0.0014	0	0			
979.00	3,890	0.0893	988	988			
980.00	3,890	0.0893	3,890	4,878			
981.00	3,890	0.0893	3,890	8,768			
982.00	3,890	0.0893	3,890	12,659			
983.00	3,890	0.0893	3,890	16,549			
984.00	3,890	0.0893	3,890	20,439			
985.00	3,890	0.0893	3,890	24,329			
985.50	3,890	0.0893	1,945	26,274			

POND 2 STAGE-STORAGE TABLE SCALE: N.T.S

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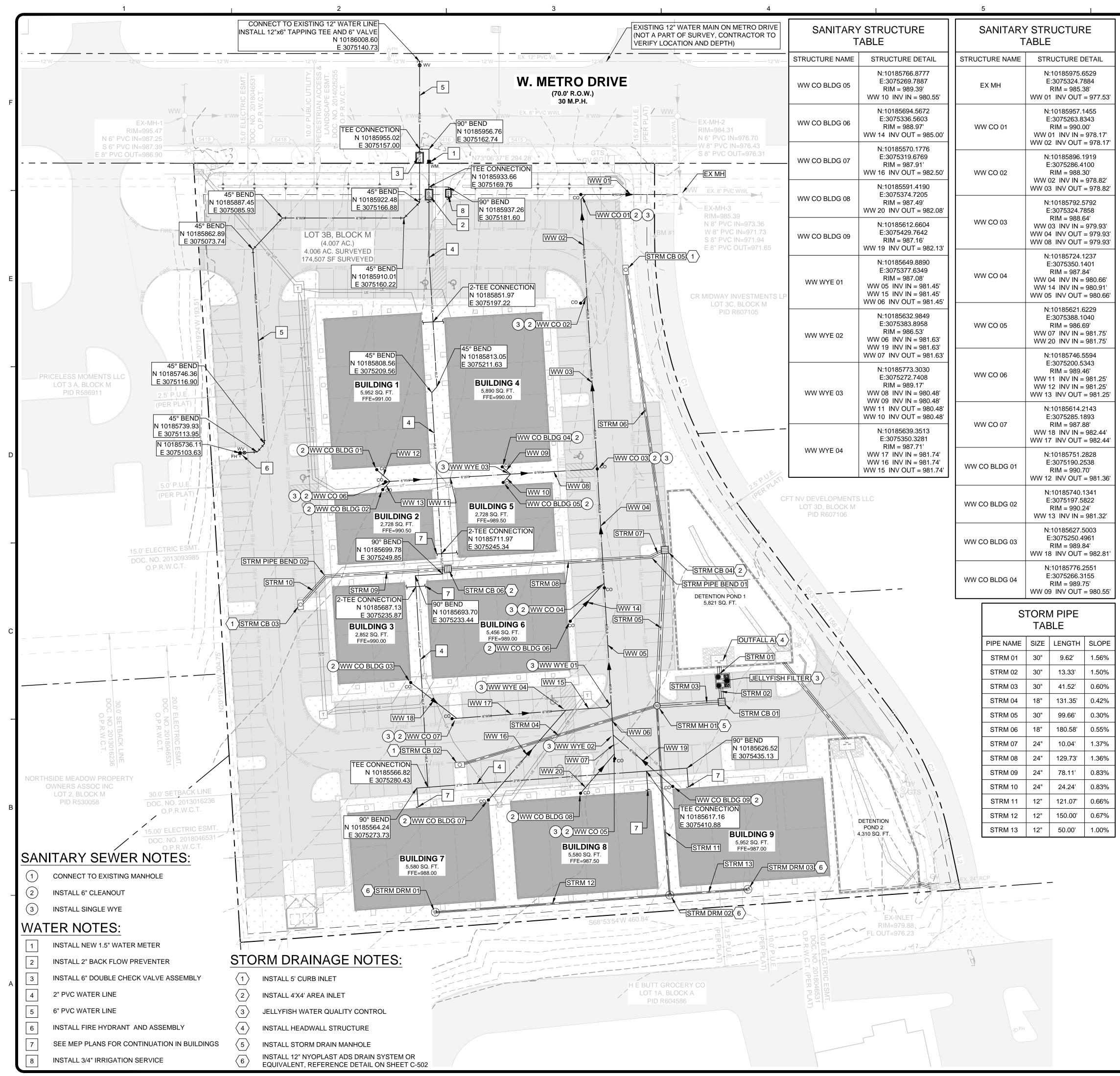


POND 2 STAGE-DISCHARGE TABL SCALE: N.T.S

SCALE: 1" = 1

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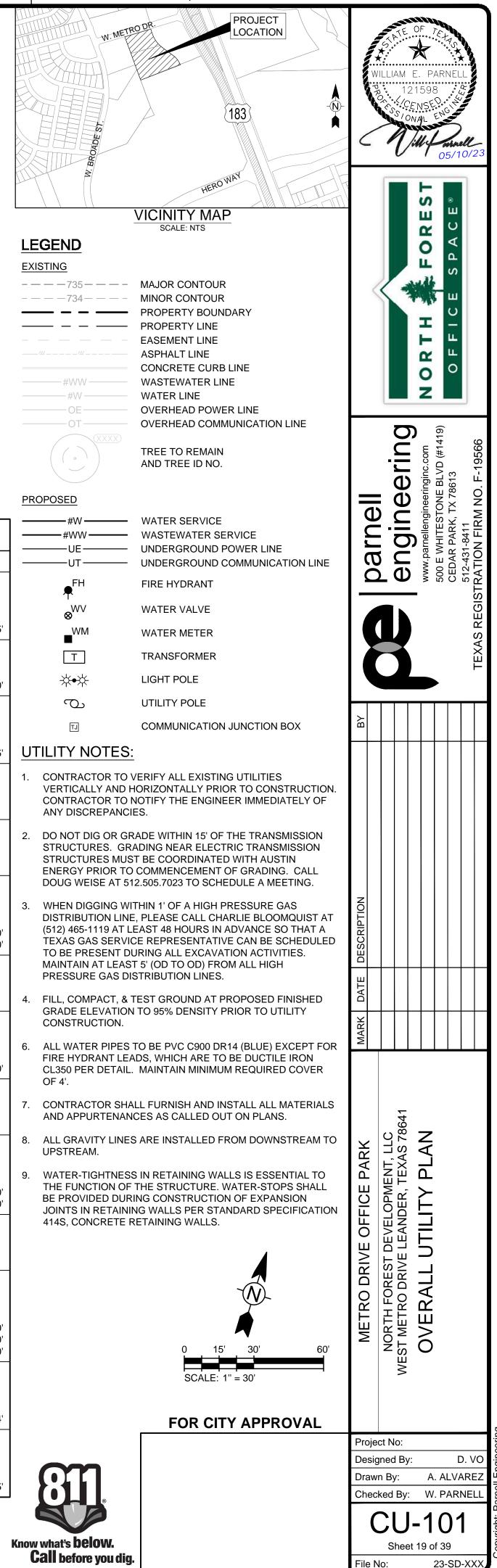
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			NORTH FOREST		OFFICE SPACE [®]		
Darnel			www.parnellengineeringinc.com	500 E WHITESTONE BLVD (#1419)	CEDAR PARK, TX 78613	512-431-8411	TEXAS REGISTRATION FIRM NO. F-19566
							TEXASR
BY							
DESCRIPTION							
MARK DATE DESCRIPTION							
METRO DRIVE OFFICE PARK	NORTH FOREST DEVELOPMENT, LLC	WEST METRO DRIVE LEANDER, TEXAS 78641	DETENTION POND 2 PLAN				
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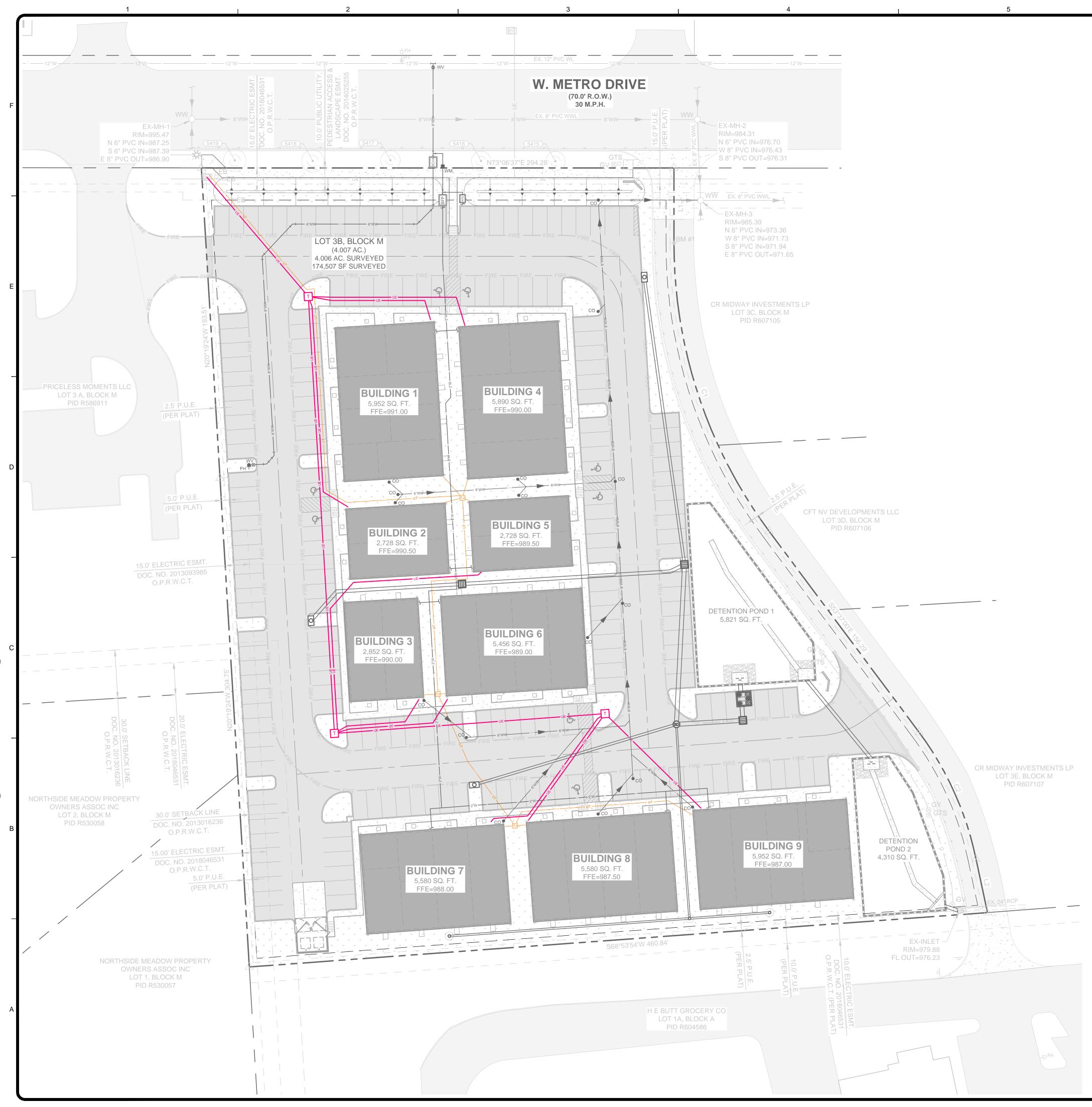


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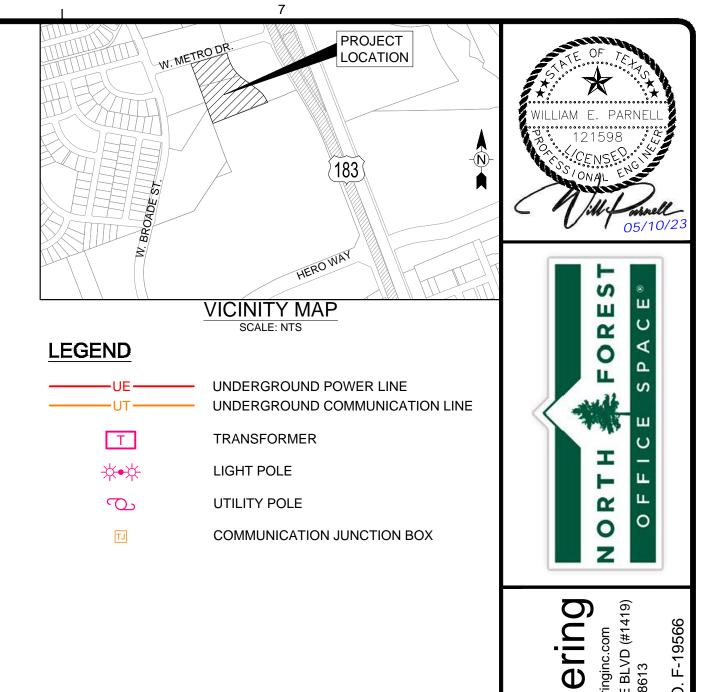
SANITARY PIPE TABLE				
PIPE NAME	SIZE	LENGTH	SLOPE	
WW 01	6"	63.70'	1.00%	
WW 02	6"	65.00'	1.00%	
WW 03	6"	110.49'	1.00%	
WW 04	6"	73.00'	1.00%	
WW 05	6"	79.16'	1.00%	
WW 06	6"	18.03'	1.00%	
WW 07	6"	12.12'	1.00%	
WW 08	6"	55.50'	1.00%	
WW 09	6"	7.07'	1.00%	
WW 10	6"	7.07'	1.00%	
WW 11	6"	77.00'	1.00%	
WW 12	6"	11.31'	1.00%	
WW 13	6"	7.07'	1.00%	
WW 14	6"	32.53'	12.57%	
WW 15	6"	29.27'	1.00%	
WW 16	6"	75.66'	1.00%	
WW 17	6"	69.82'	1.00%	
WW 18	6"	37.15'	1.00%	
WW 19	6"	50.17'	1.00%	
WW 20	6"	33.04'	1.00%	

STORM STR	RUCTURE TABLE
STRUCTURE NAME	STRUCTURE DETAIL
JELLYFISH FILTER	N:10185685.8370 E:3075439.3089 RIM = 985.40' STRM 01 INV IN = 981.65' STRM 02 INV OUT = 981.65'
OUTFALL A	N:10185694.8103 E:3075435.8461 RIM = 986.00' STRM 01 INV OUT = 981.50'
STRM CB 01	N:10185673.3978 E:3075444.1092 RIM = 985.10' STRM 02 INV IN = 981.85' STRM 03 INV OUT = 981.95'
STRM CB 02	N:10185586.3841 E:3075295.7053 RIM = 986.25' STRM 04 INV IN = 983.75'
STRM CB 03	N:10185654.6481 E:3075168.7267 RIM = 988.85' STRM 10 INV IN = 985.85'
STRM CB 04	N:10185755.6845 E:3075381.1062 RIM = 986.00' STRM 05 INV IN = 982.50' STRM 06 INV OUT = 983.50' STRM 07 INV OUT = 983.00'
STRM CB 05	N:10185919.5473 E:3075305.2192 RIM = 987.50' STRM 06 INV IN = 984.50'
STRM CB 06	N:10185703.8053 E:3075252.0934 RIM = 988.00' STRM 08 INV IN = 984.90' STRM 09 INV OUT = 985.00'
STRM DRM 01	N:10185491.7636 E:3075308.1337 RIM = 987.60' STRM 12 INV IN = 985.10'
STRM DRM 02	N:10185545.7671 E:3075448.0752 RIM = 986.00' STRM 11 INV IN = 984.00' STRM 13 INV OUT = 984.10' STRM 12 INV OUT = 984.10'
STRM DRM 03	N:10185563.7683 E:3075494.7223 RIM = 986.31' STRM 13 INV IN = 984.60'
STRM MH 01	N:10185658.9772 E:3075405.1744 RIM = 986.15' STRM 03 INV IN = 982.20' STRM 04 INV OUT = 983.20' STRM 05 INV OUT = 983.20' STRM 11 INV OUT = 983.20'
STRM PIPE BEND 01	N:10185748.8620 E:3075373.7446 RIM = 985.32' STRM 07 INV IN = 983.14' STRM 08 INV OUT = 983.14'
STRM PIPE BEND 02	N:10185676.6769 E:3075178.8479 RIM = 987.83' STRM 09 INV IN = 985.65' STRM 10 INV OUT = 985.65'



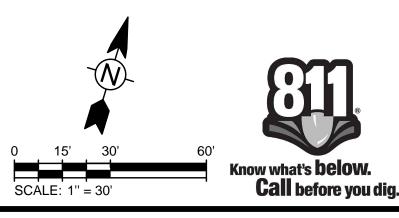






DRY UTILITY GENERAL NOTES:

- 1. CONTRACTOR SHALL MAINTAIN MINIMUM 24" CLEARANCE FROM ALL EXISTING UTILITIES. 2. FOR PUBLIC WATER & WASTEWATER LINE EMERGENCIES, CONTACT THE CITY OF LEANDER PUBLIC WORKS EMERGENCY 24-HOUR ON-CALL LINE AT 512-690-4760.
- 3. THE CONTRACTOR SHALL CONTACT THE TEXAS EXCAVATION SAFETY SYSTEM AT 1-800-344-8377 FOR EXISTING UTILITY LOCATIONS 48 HOURS PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES THAT ARE TO BE EXTENDED, TIED TO, CROSSED, OR ALTERED; OR SUBJECT TO
- DAMAGE/INCONVENIENCE BY THE CONSTRUCTION OPERATIONS. 4. CONTACT THE CITY OF LEANDER PUBLIC WORKS DEPARTMENT FOR EXISTING WATER, WASTEWATER, STREET LIGHT ELECTRICAL WIRING, AND TRAFFIC SIGNAL WIRING LOCATIONS A MINIMUM OF 48 HOURS PRIOR TO START OF CONSTRUCTION.
- a. LOCATE REQUESTS MUST INCLUDE A COPY OF YOUR 811 TICKET b. REFRESH ALL LOCATES BEFORE 14 DAYS - LOCATE REFRESH REQUESTS MUST INCLUDE A COPY OF YOUR 811 TICKET. TEXAS PIPELINE DAMAGE PREVENTION LAWS REQUIRE THAT A LOCATE REFRESH REQUEST BE SUBMITTED BEFORE 14 DAYS, OR IF LOCATION MARKERS ARE NO LONGER VISIBLE.
- c. REPORT ALL DAMAGE TO CITY INFRASTRUCTURE IMMEDIATELY IF YOU WITNESS OR EXPERIENCE EXCAVATION DAMAGE, PLEASE CONTACT THE CITY OF LEANDER PUBLIC WORKS DEPARTMENT BY PHONE. IF DAMAGE IS WITNESSED OR EXPERIENCED AFTER HOURS, CALL THE CITY OF LEANDER UTILITIES ON-CALL LINE AT THE NUMBER LISTED ABOVE.
- 5. A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CONTRACTOR, DESIGN ENGINEER/PERMIT APPLICANT & CITY OF LEANDER REPRESENTATIVES PRIOR TO INSTALLATION OF **EROSION/SEDIMENTATION CONTROLS & TREE PROTECTION MEASURES** AS WELL AS PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE CITY OF LEANDER PLANNING DEPARTMENT AT 512-528-2750 AT LEAST THREE (3) DAYS PRIOR TO MEETING DATE.
- 6. CITY OF LEANDER NOISE ORDINANCE PROHIBITS CONSTRUCTION ACTIVITY BETWEEN THE HOURS OF 9 PM AND 7 AM. REQUESTS FOR EXCEPTIONS TO THE ORDINANCE MUST BE MADE TO LEANDER CITY COUNCIL.
- 7. CONTRACTOR SHALL BORE UNDER ALL DRIVEWAYS, STREET CROSSINGS AND OTHER PAVED AREAS. OPEN CUT CROSSING SHALL NOT BE ALLOWED.
- 8. CONTRACTOR SHALL REPLACE ALL DAMAGED PAVEMENT, CURB & GUTTER, SIDEWALK, CURB INLETS AND ALL OTHER INFRASTRUCTURE DAMAGED BY CONSTRUCTION PER CITY OF LEANDER STANDARDS & SPECIFICATIONS.
- 9. AL CLAWSON DISPOSAL, INC. SHALL BE THE SOLE PROVIDER OF WASTE HAULING AFTER CONSTRUCTION.
- 10. ALL UNDERGROUND UTILITY LINES SHALL CROSS UNDERNEATH WATERLINES. 11. THE MINIMUM DEPTH OF COVER FOR UTILITY LINES INSTALLED UNDER
- CITY OF LEANDER ROADWAYS SHALL BE 36" BENEATH FINISHED GRADE.
- DRY UTILITY EROSION CONTROL & RESTORATION: 1. THE CITY OF LEANDER ENVIRONMENT INSPECTOR HAS THE AUTHORITY
- TO ADD OR MODIFY EROSION/SEDIMENTATION CONTROLS ON SITE THROUGHOUT THE DURATION OF THE PROJECT.
- 2. ALL AREAS DISTURBED OR EXPOSED DURING CONSTRUCTION SHALL BE RESTORED WITH A MINIMUM OF 6" TOPSOIL. THE 6" MINIMUM SOIL DEPTH SHALL CONSISTS OF 75% SOIL BLENDED WITH 25% COMPOST.
- 3. ALL DISTURBED AREAS SHALL BE RE-VEGETATED USING ONLY APPROVED GRASSES FROM THE GROW GREEN GUIDE.



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CU-102

Sheet 20 of 39

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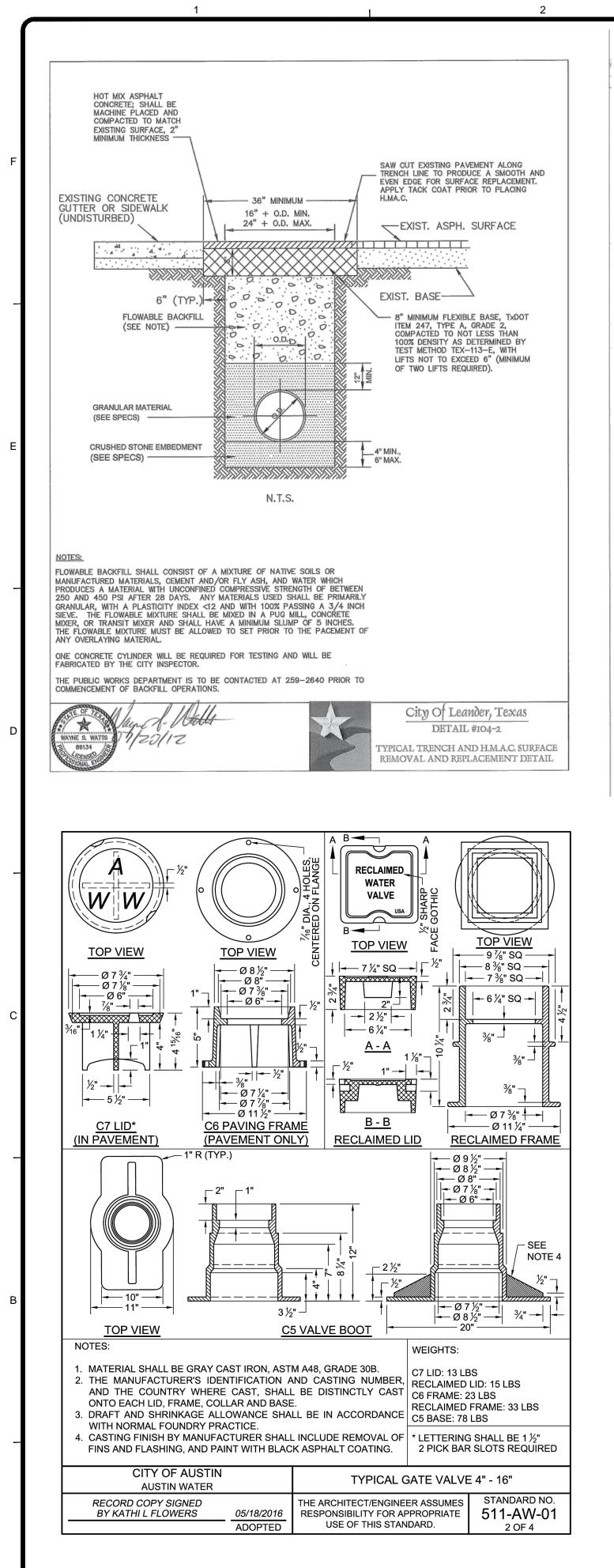
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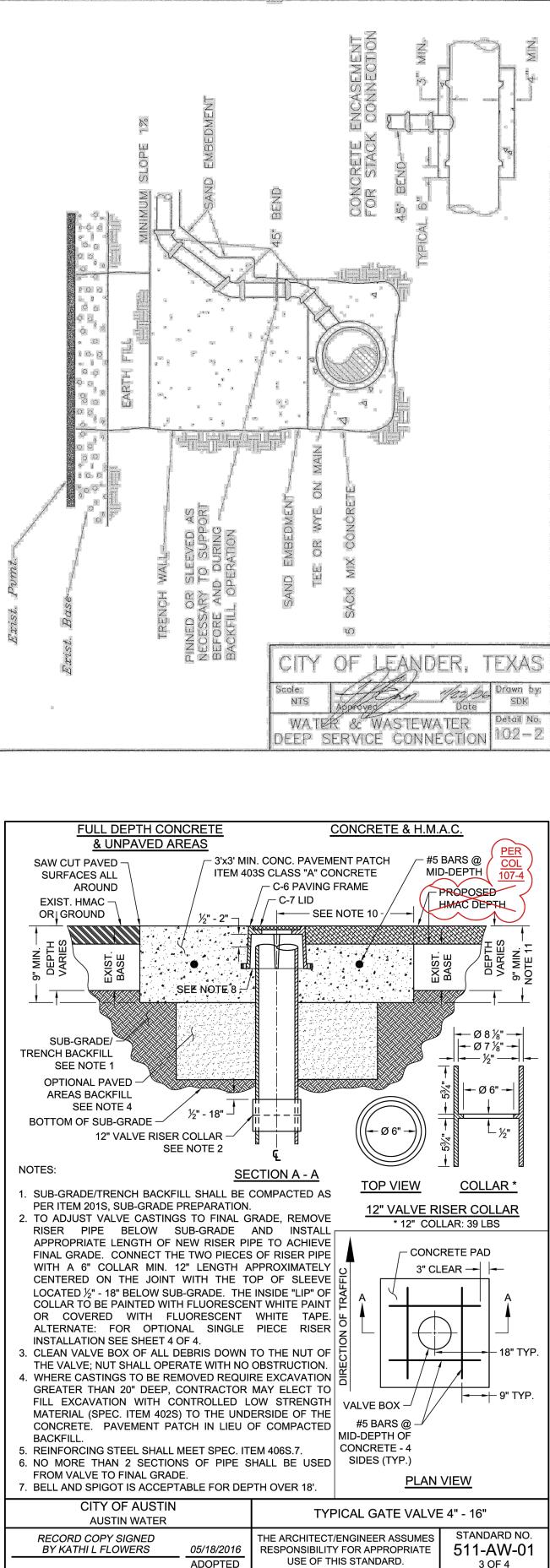
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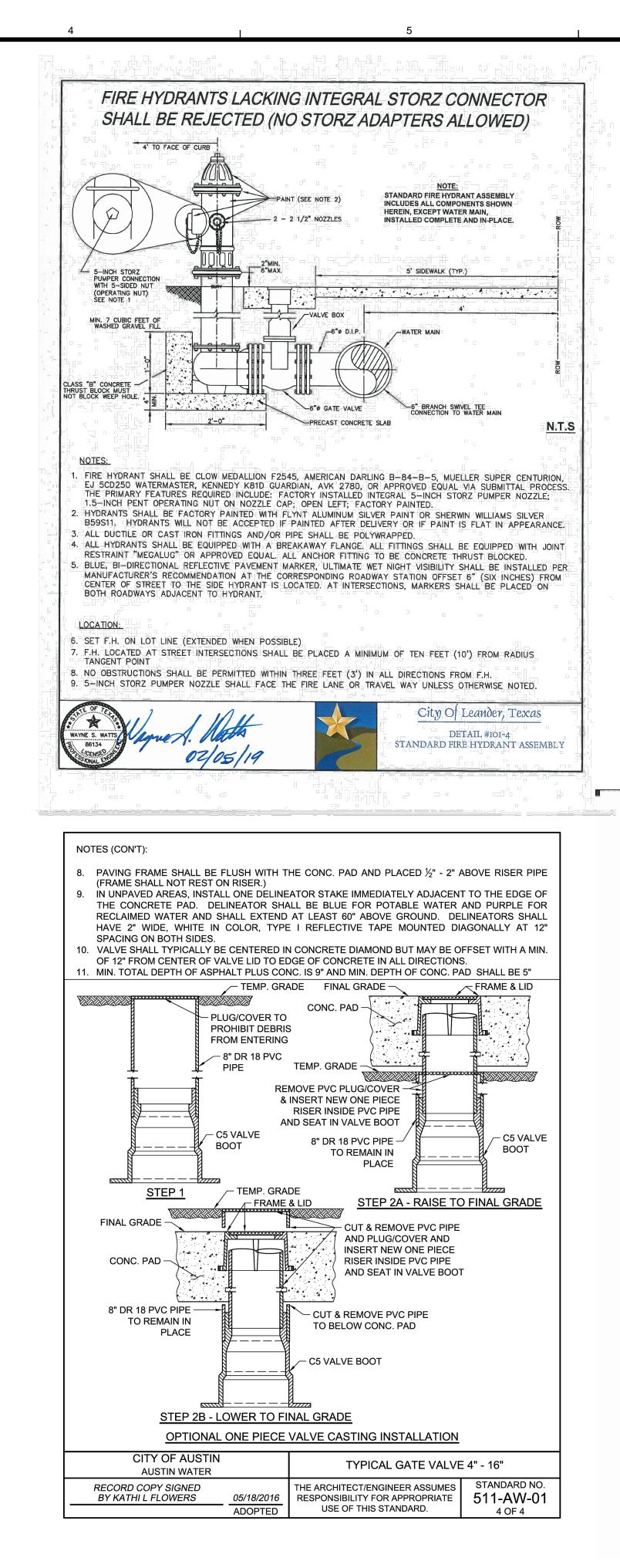
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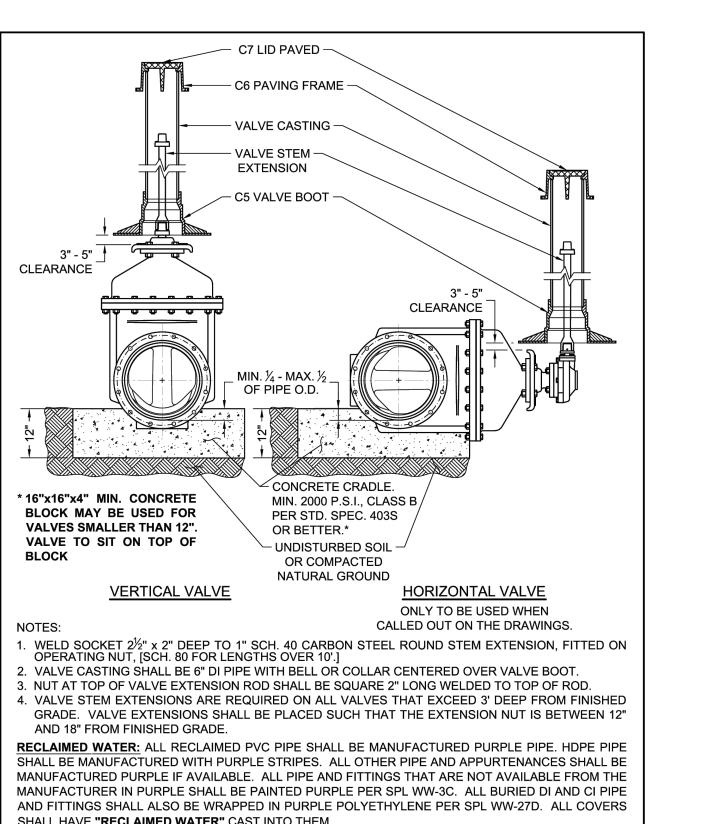
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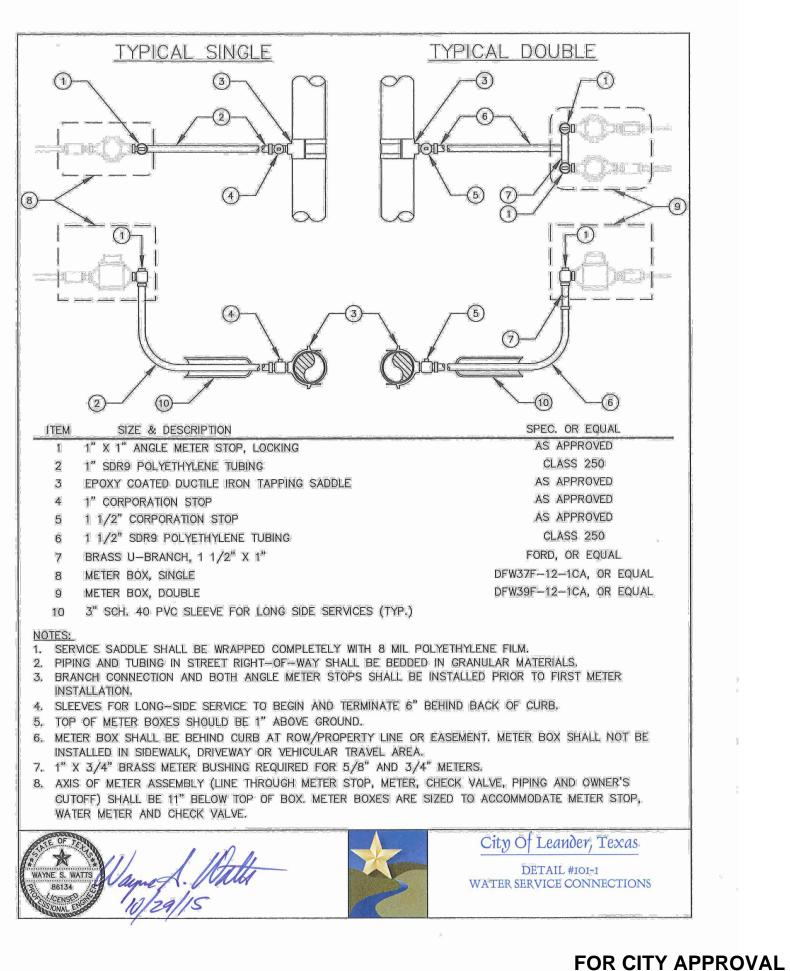


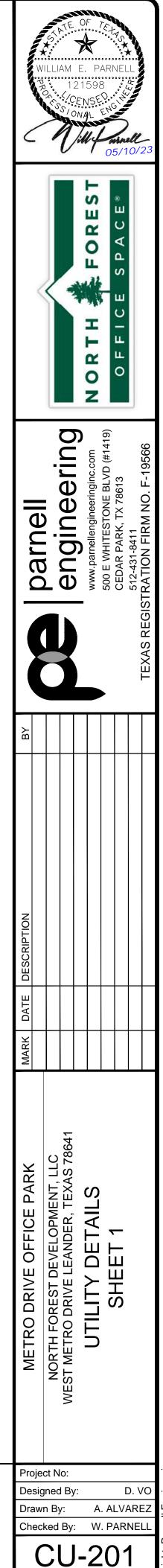






SHALL HAVE RECLAIMED WATER CAST INTO THEM.					
CITY OF AUSTIN AUSTIN WATER		TYPICAL GATE VALVE 4" - 16"			
AUSTIN WATER					
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE	STANDARD NO. 511-AW-01		
	ADOPTED	USE OF THIS STANDARD.	1 OF 4		



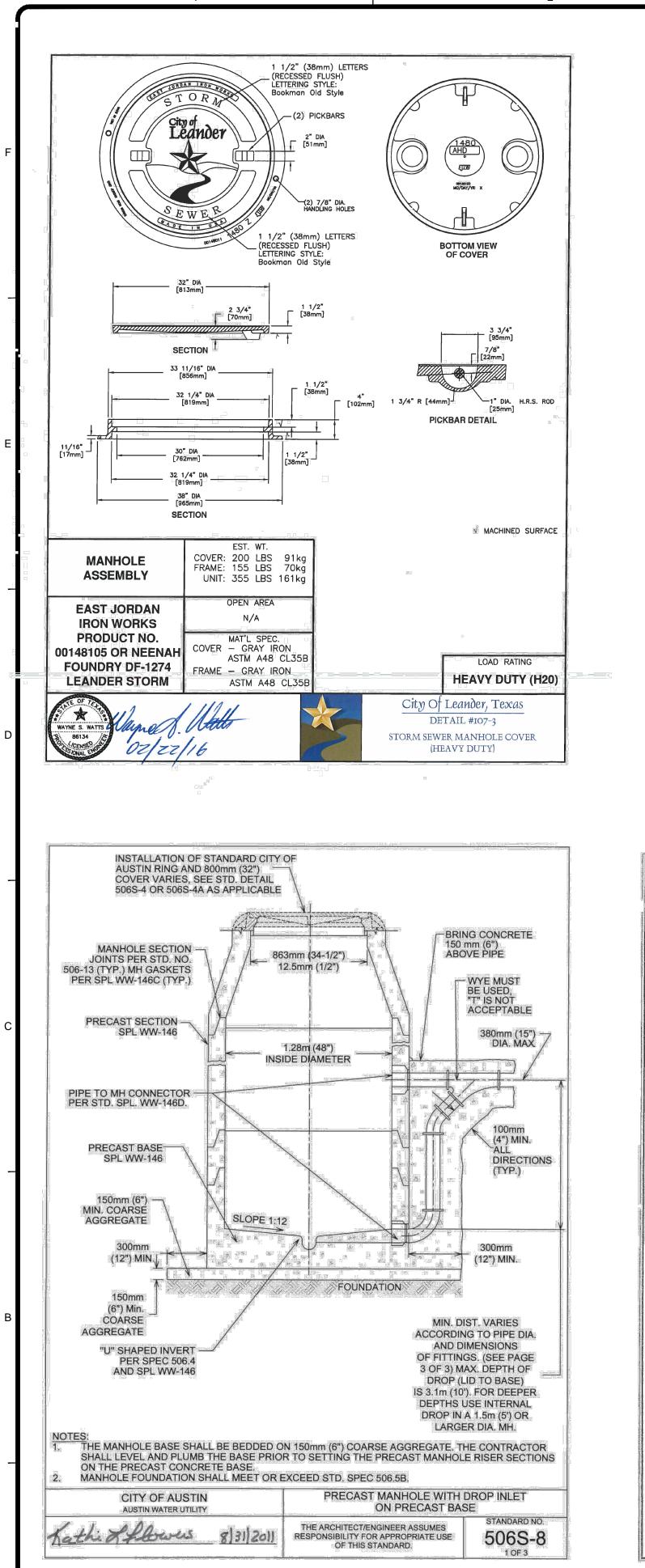


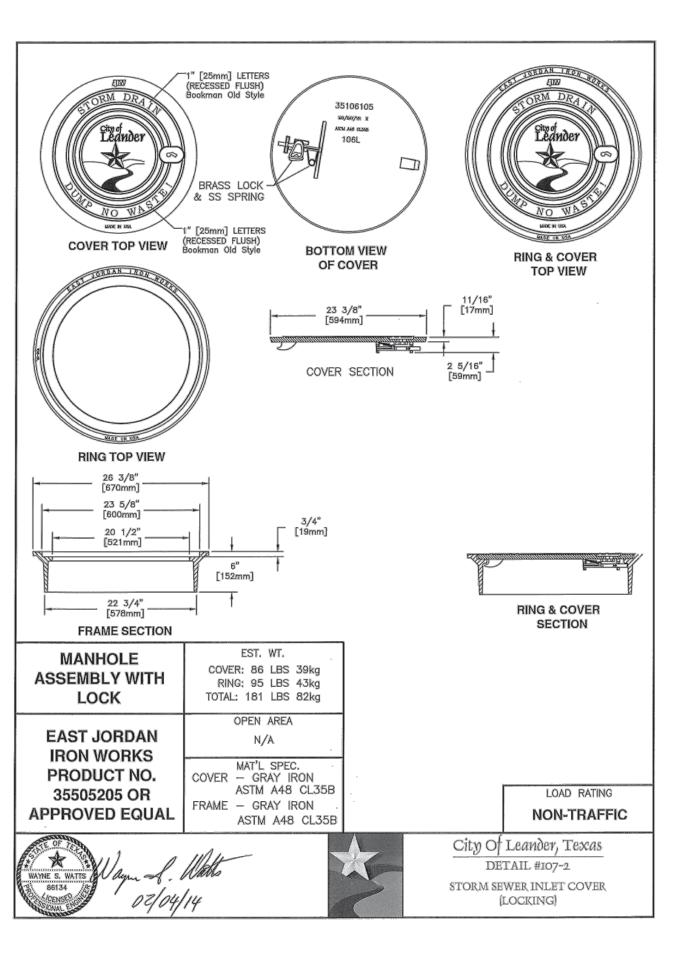
Know what's **below.** Call before you dig.

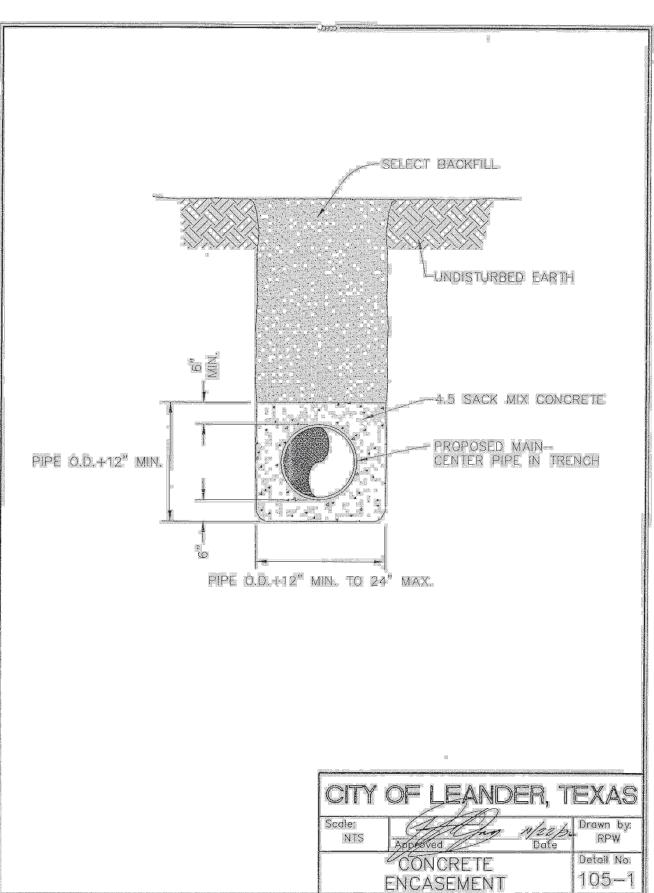
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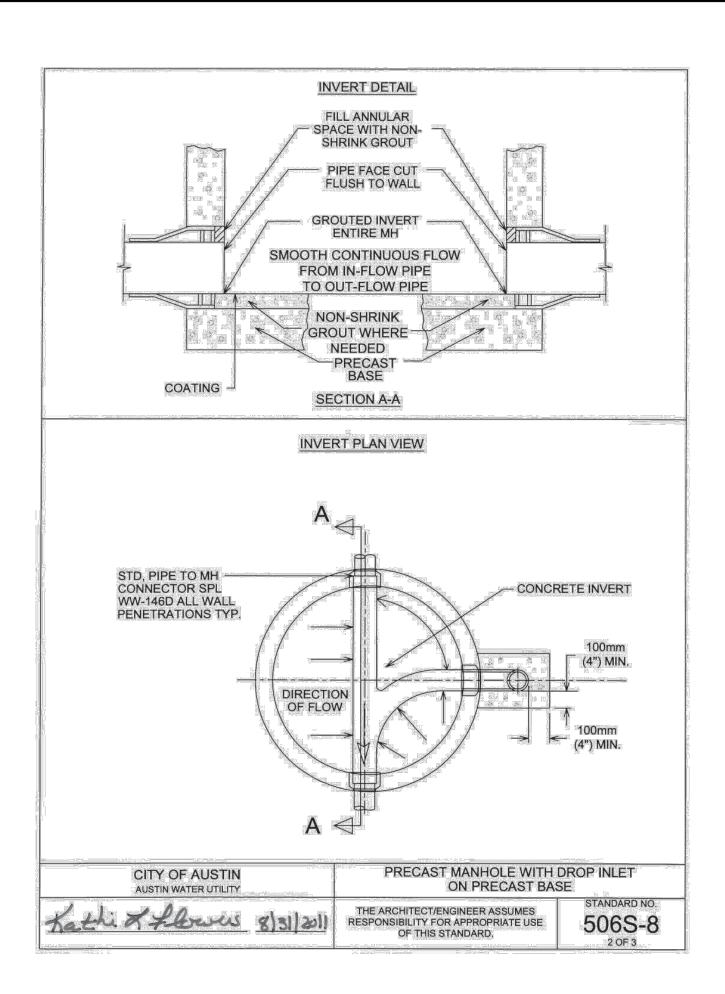
Sheet 21 of 28

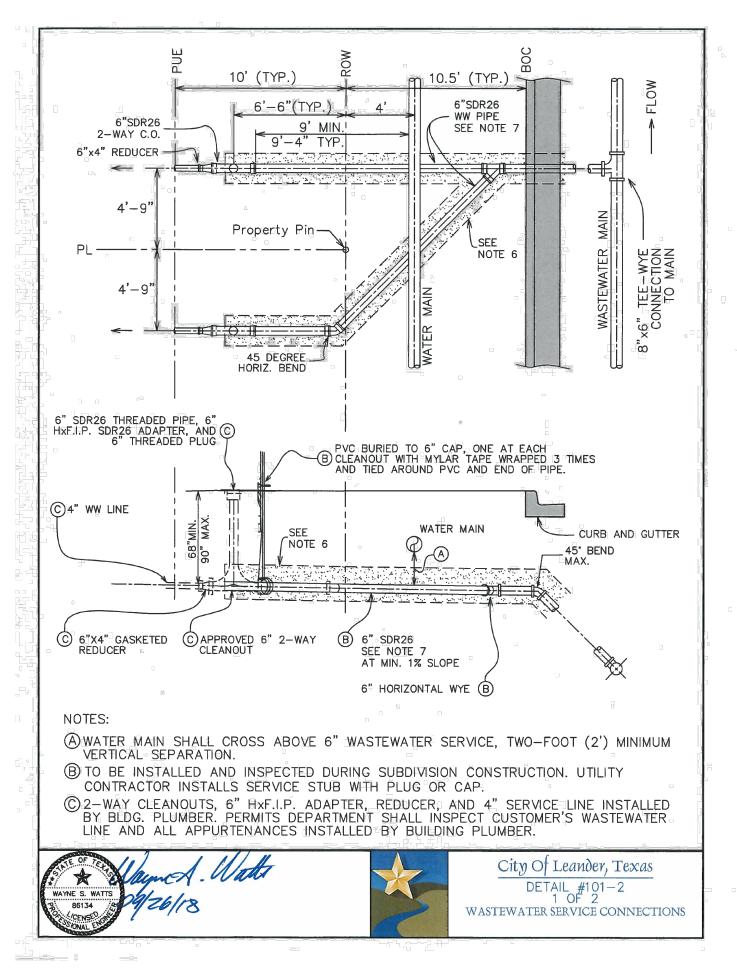
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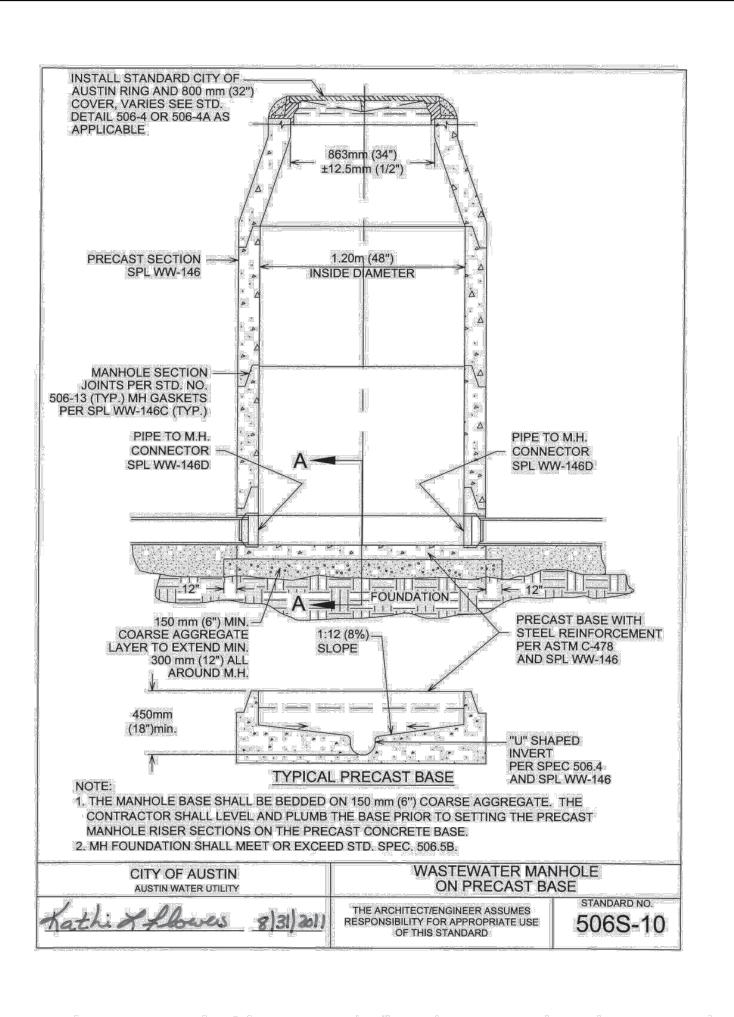


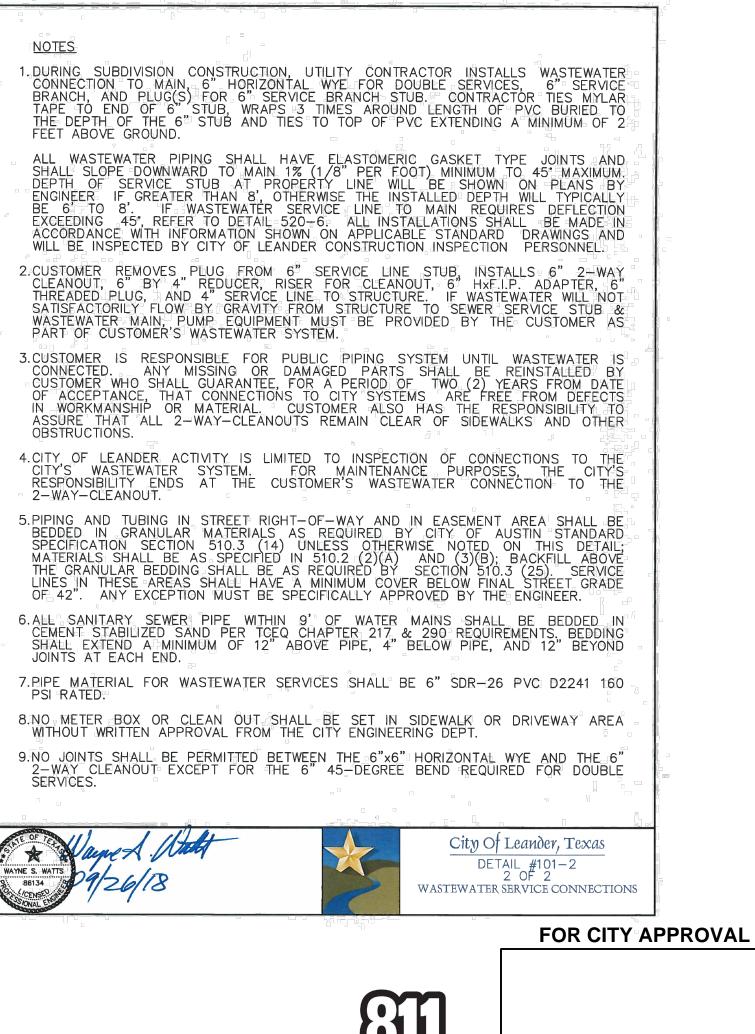






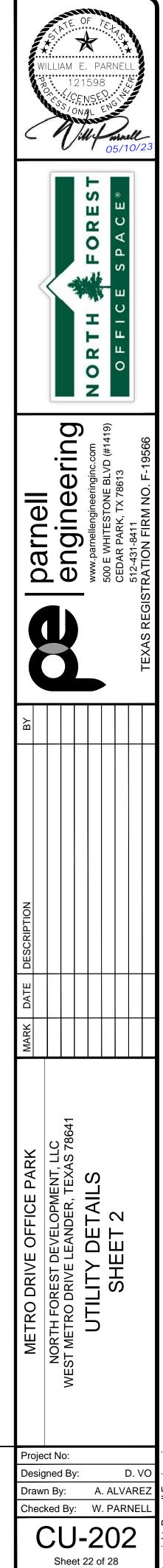


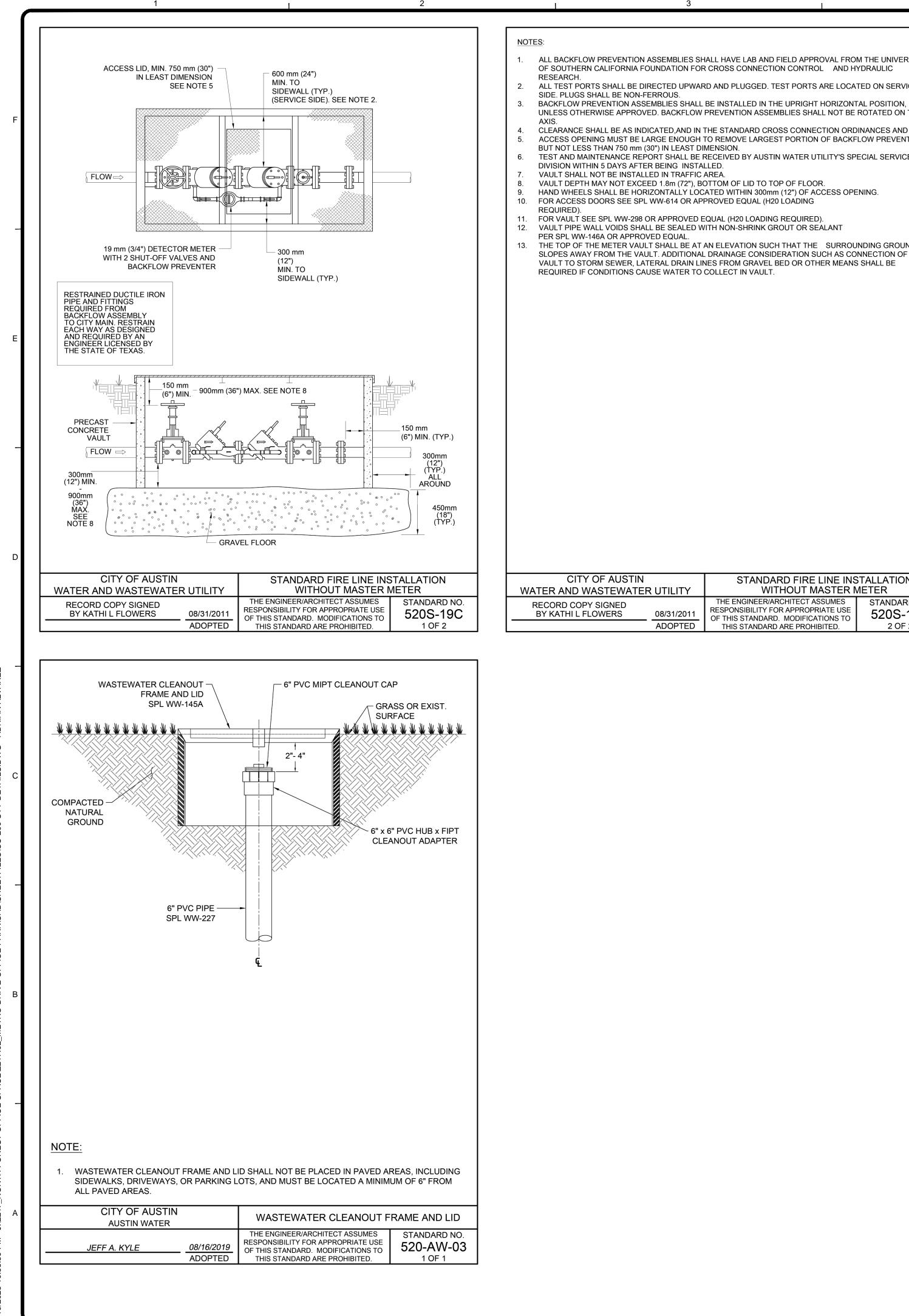




Know what's **below**.

Call before you dig





ALL BACKFLOW PREVENTION ASSEMBLIES SHALL HAVE LAB AND FIELD APPROVAL FROM THE UNIVERSITY

2. ALL TEST PORTS SHALL BE DIRECTED UPWARD AND PLUGGED. TEST PORTS ARE LOCATED ON SERVICE

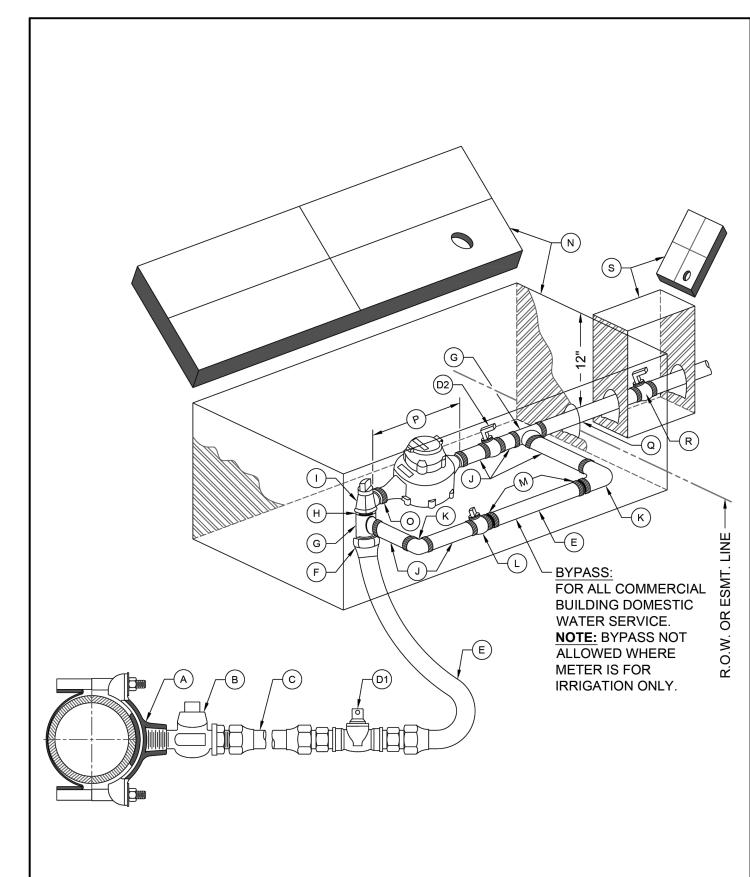
UNLESS OTHERWISE APPROVED. BACKFLOW PREVENTION ASSEMBLIES SHALL NOT BE ROTATED ON THEIR CLEARANCE SHALL BE AS INDICATED, AND IN THE STANDARD CROSS CONNECTION ORDINANCES AND UCM.

ACCESS OPENING MUST BE LARGE ENOUGH TO REMOVE LARGEST PORTION OF BACKFLOW PREVENTER, TEST AND MAINTENANCE REPORT SHALL BE RECEIVED BY AUSTIN WATER UTILITY'S SPECIAL SERVICE

VAULT DEPTH MAY NOT EXCEED 1.8m (72"), BOTTOM OF LID TO TOP OF FLOOR. HAND WHEELS SHALL BE HORIZONTALLY LOCATED WITHIN 300mm (12") OF ACCESS OPENING. 10. FOR ACCESS DOORS SEE SPL WW-614 OR APPROVED EQUAL (H20 LOADING

11. FOR VAULT SEE SPL WW-298 OR APPROVED EQUAL (H20 LOADING REQUIRED).

13. THE TOP OF THE METER VAULT SHALL BE AT AN ELEVATION SUCH THAT THE SURROUNDING GROUND SLOPES AWAY FROM THE VAULT. ADDITIONAL DRAINAGE CONSIDERATION SUCH AS CONNECTION OF VAULT TO STORM SEWER, LATERAL DRAIN LINES FROM GRAVEL BED OR OTHER MEANS SHALL BE



STANDARD FIRE LINE INSTALLATION								
TILITY	WITHOUT MASTER METER							
	THE ENGINEER/ARCHITECT ASSUMES	STANDARD NO.						
8/31/2011	RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD, MODIFICATIONS TO	520S-19C						
DOPTED	THIS STANDARD ARE PROHIBITED.	2 OF 2						

CITY OF AUSTIN		1 ½" - 2" METER INSTA	LLATION
AUSTIN WATER		SHOWING OPTIONAL	
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD, MODIFICATIONS TO	STANDARD NO. 520-AW-04
	ADOPTED	THIS STANDARD ARE PROHIBITED.	1 OF 2

- B. 2" CORPORATION STOP MALE THREAD INLET BY COMPRESSION OUTLET C. 2" COPPER WATER SERVICE TUBING EXTENDED BEYOND PAVEMENT
- D1. 2" BALL VALVE, SPL WW-275
- D2. 2" BALL VALVE, SPL WW-275
- E. 2" COPPER SERVICE TUBING
- F. 2" BRASS COUPLING COMPRESSION TO MALE IPT
- G. 2" BRASS TEE
- H. 2" BRASS CLOSE-NIPPLE I. 2" ANGLE METER STOP; SERVICE TUBING INLET x FLANGED OUTLET
- J. 2" BRASS NIPPLE
- K. 2" BRASS ELBOW L. 2" LOCKABLE CURB STOP - FEMALE IPT INLET BY COMPRESSION OUTLET
- M. 2" BRASS COUPLING SERVICE TUBING TO MALE IPT
- N. RECTANGULAR METER BOX AND COVER, SPL WW-145A
- O. BRASS ADAPTER (2" x 1 $\frac{1}{2}$ ") FOR 1 $\frac{1}{2}$ " METER ONLY P. WATER METER. LENGTH 13", (PURCHASED FROM AUSTIN WATER)
- Q. 2" COPPER SERVICE TUBING (PRIVATE PLUMBING PER CODE)
- R. CUSTOMER CUT-OFF VALVE S. CUSTOMER VALVE BOX AND LID

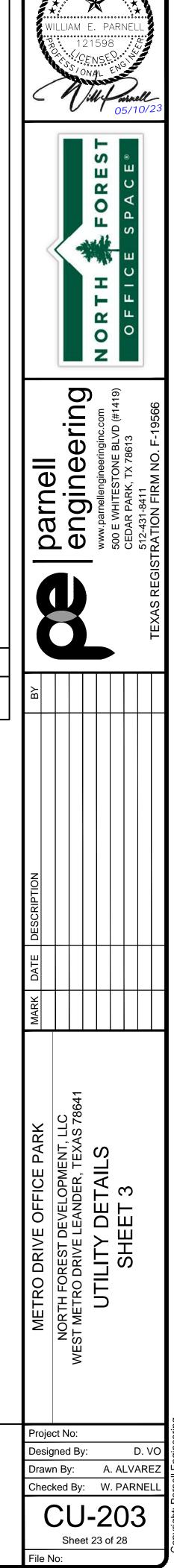
NOTES:

- SERVICE CLAMP SHALL BE WRAPPED COMPLETELY WITH 8 MIL. POLYETHYLENE FILM.
- 2. BRANCH CONNECTIONS AND ALL ANGLE METER STOPS MUST BE INSTALLED PRIOR TO ANY METER INSTALLATION. TOP OF BOXES SHOULD BE 1" ABOVE GROUND.
- 4. PIPING AND TUBING IN STREET RIGHT-OF-WAY SHALL BE BEDDED IN GRANULAR MATERIALS AS REQUIRED BY SECTION 510.3 (14) OF THE CITY OF AUSTIN STANDARD SPECIFICATIONS; BACKFILL ABOVE GRANULAR BEDDING AS REQUIRED BY SECTION 510.3 (25). 5. BOX MUST BE BEHIND CURB NEXT TO PROPERTY LINE OR EASEMENT AND OUT OF VEHICULAR
- TRAFFIC AREA AND SIDEWALK. 6. BALL VALVE "D1" SHALL NOT BE LOCATED UNDER SIDEWALK, CURB, OR PAVEMENT, AND NOT BE
- LOCATED MORE THAN 24" HORIZONTALLY FROM METER BOX OR 36" BELOW FINAL GRADE. 7. COPPER SERVICE SHALL BE COPPER TUBING SIZE ANNEALED SEAMLESS TYPE "K" MEETING
- ASTM B88 WITH NO SWEAT OR SOLDERED JOINTS.

RECLAIMED WATER:

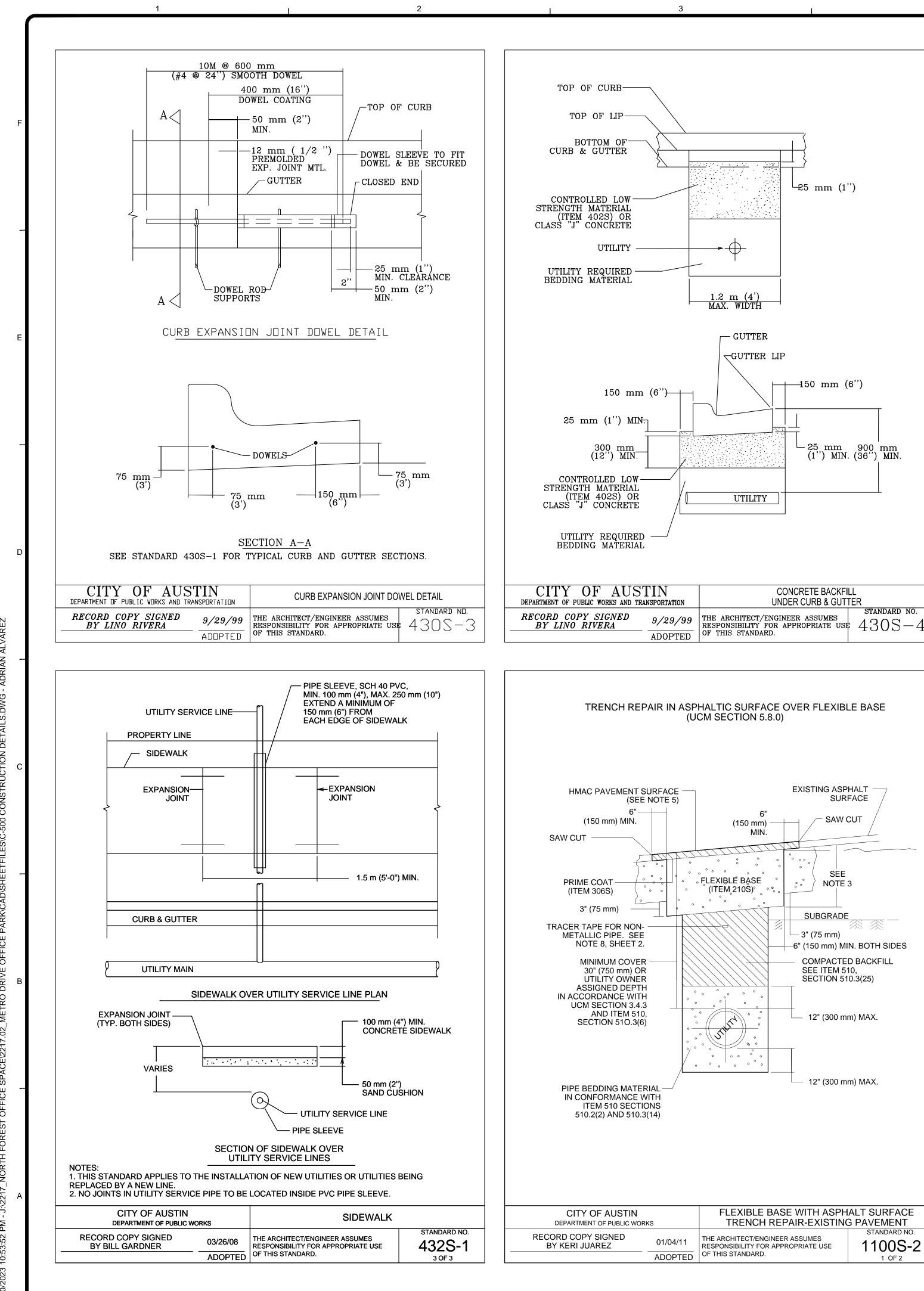
FOR RECLAIMED WATER SERVICES AND METERS, ALL RECLAIMED TUBING SHALL BE MANUFACTURED PURPLE TUBING. ALL OTHER TUBING AND APPURTENANCES SHALL BE MANUFACTURED PURPLE IF AVAILABLE. ALL TUBING AND FITTINGS THAT ARE NOT AVAILABLE FROM THE MANUFACTURER IN PURPLE SHALL BE PAINTED PURPLE PER SPL WW-3C. ALL BURIED DI AND CI PIPE AND FITTINGS SHALL ALSO BE WRAPPED IN PURPLE POLYETHYLENE PER SPL WW-27D. ALL COVERS SHALL HAVE "RECLAIMED WATER" CAST INTO THEM.

CITY OF AUSTIN AUSTIN WATER		1 ½" - 2" METER INSTALLATION SHOWING OPTIONAL BYPASS			
RECORD COPY SIGNED BY KATHI L FLOWERS	05/18/2016	THE ENGINEER/ARCHITECT ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD, MODIFICATIONS TO	STANDARD NO. 520-AW-04		
	ADOPTED	THIS STANDARD ARE PROHIBITED.	2 OF 2		



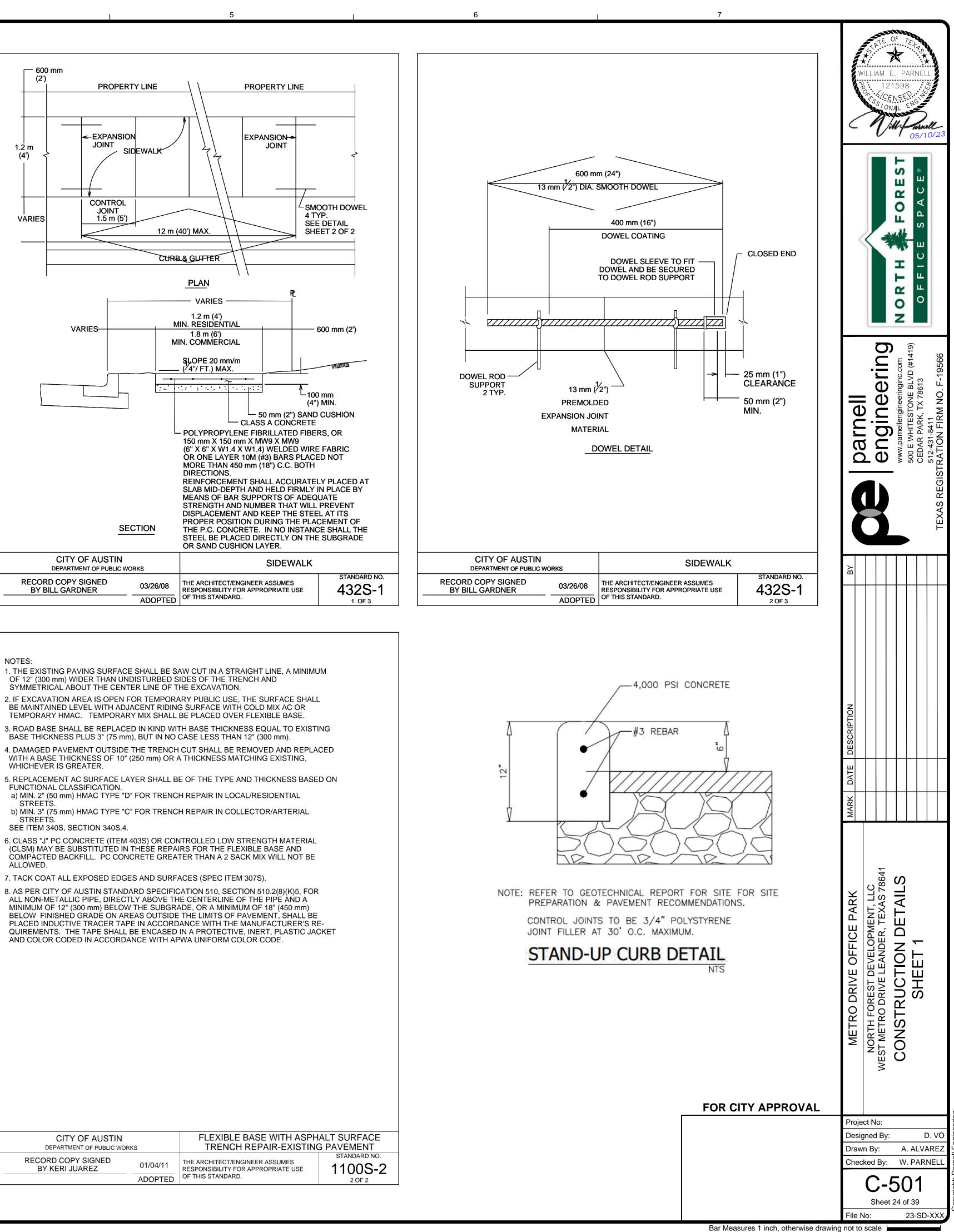


FOR CITY APPROVAL





1 N		
ORTATION	UNDER CURB & GUT	ſER
/29/99 DOPTED	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	standard no. 430S-4

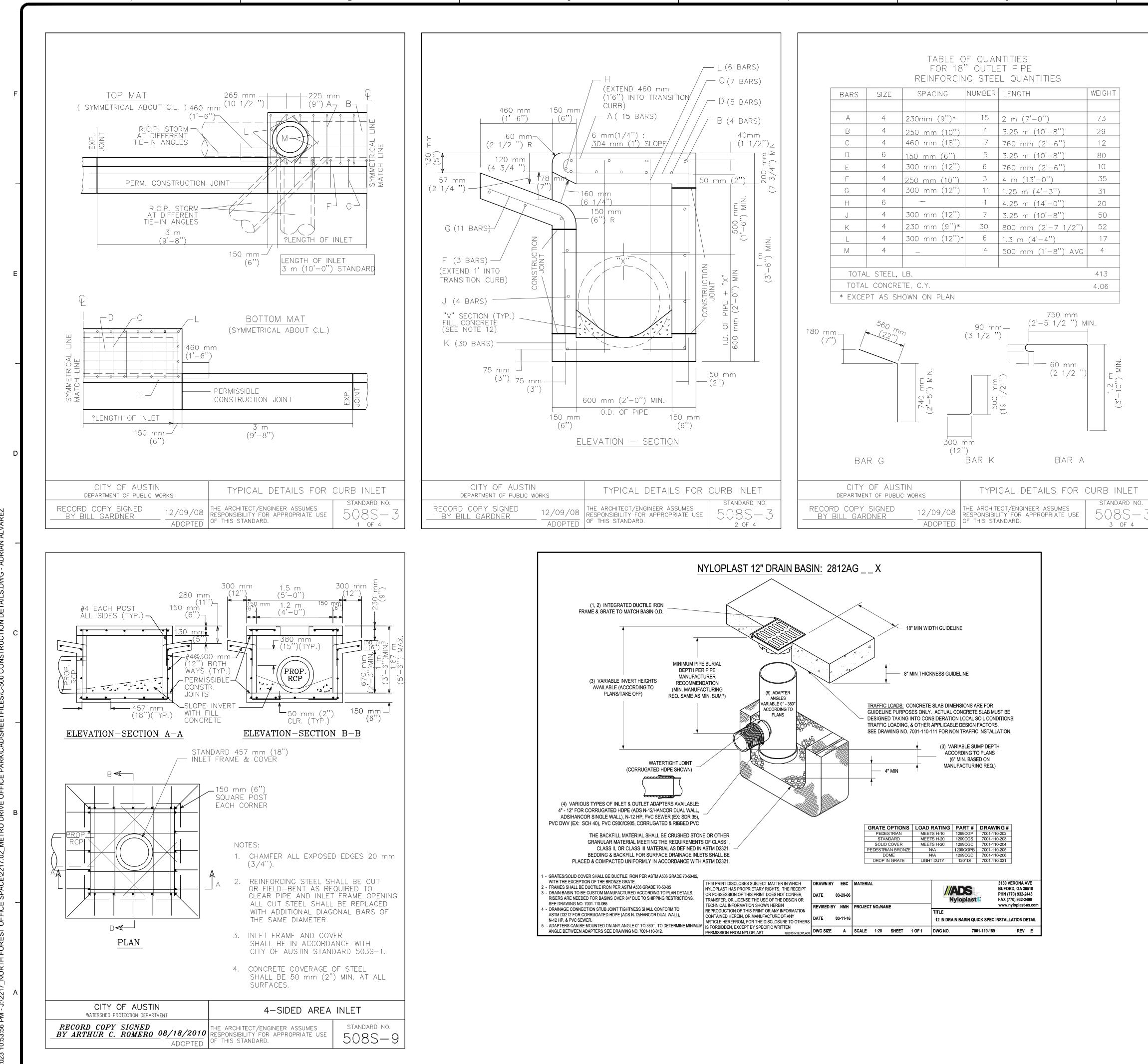


NOTES:

- BE MAINTAINED LEVEL WITH ADJACENT RIDING SURFACE WITH COLD MIX AC OR TEMPORARY HMAC. TEMPORARY MIX SHALL BE PLACED OVER FLEXIBLE BASE.
- 3. ROAD BASE SHALL BE REPLACED IN KIND WITH BASE THICKNESS EQUAL TO EXISTING
- FUNCTIONAL CLASSIFICATION.

- 6. CLASS "J" PC CONCRETE (ITEM 403S) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE SUBSTITUTED IN THESE REPAIRS FOR THE FLEXIBLE BASE AND COMPACTED BACKFILL. PC CONCRETE GREATER THAN A 2 SACK MIX WILL NOT BE ALLOWED.
- 7. TACK COAT ALL EXPOSED EDGES AND SURFACES (SPEC ITEM 307S).
- 8. AS PER CITY OF AUSTIN STANDARD SPECIFICATION 510, SECTION 510.2(8)(K)5, FOR ALL NON-METALLIC PIPE, DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND A MINIMUM OF 12" (300 mm) BELOW THE SUBGRADE, OR A MINIMUM OF 18" (450 mm) BELOW FINISHED GRADE ON AREAS OUTSIDE THE LIMITS OF PAVEMENT, SHALL BE PLACED INDUCTIVE TRACER TAPE IN ACCORDANCE WITH THE MANUFACTURER'S RE-QUIREMENTS. THE TAPE SHALL BE ENCASED IN A PROTECTIVE, INERT, PLASTIC JACKET AND COLOR CODED IN ACCORDANCE WITH APWA UNIFORM COLOR CODE.

6	FLEXIBLE BASE WITH ASPH TRENCH REPAIR-EXISTING		CITY OF AUSTIN DEPARTMENT OF PUBLIC WOR	RKS	FLEXIBLE BASE WITH ASPH TRENCH REPAIR-EXISTING	
01/04/11	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE	standard no. 1100S-2	RECORD COPY SIGNED BY KERI JUAREZ	01/04/11	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE	standard no. 1100S-2
ADOPTED	OF THIS STANDARD.	1 OF 2		ADOPTED	OF THIS STANDARD.	2 OF 2

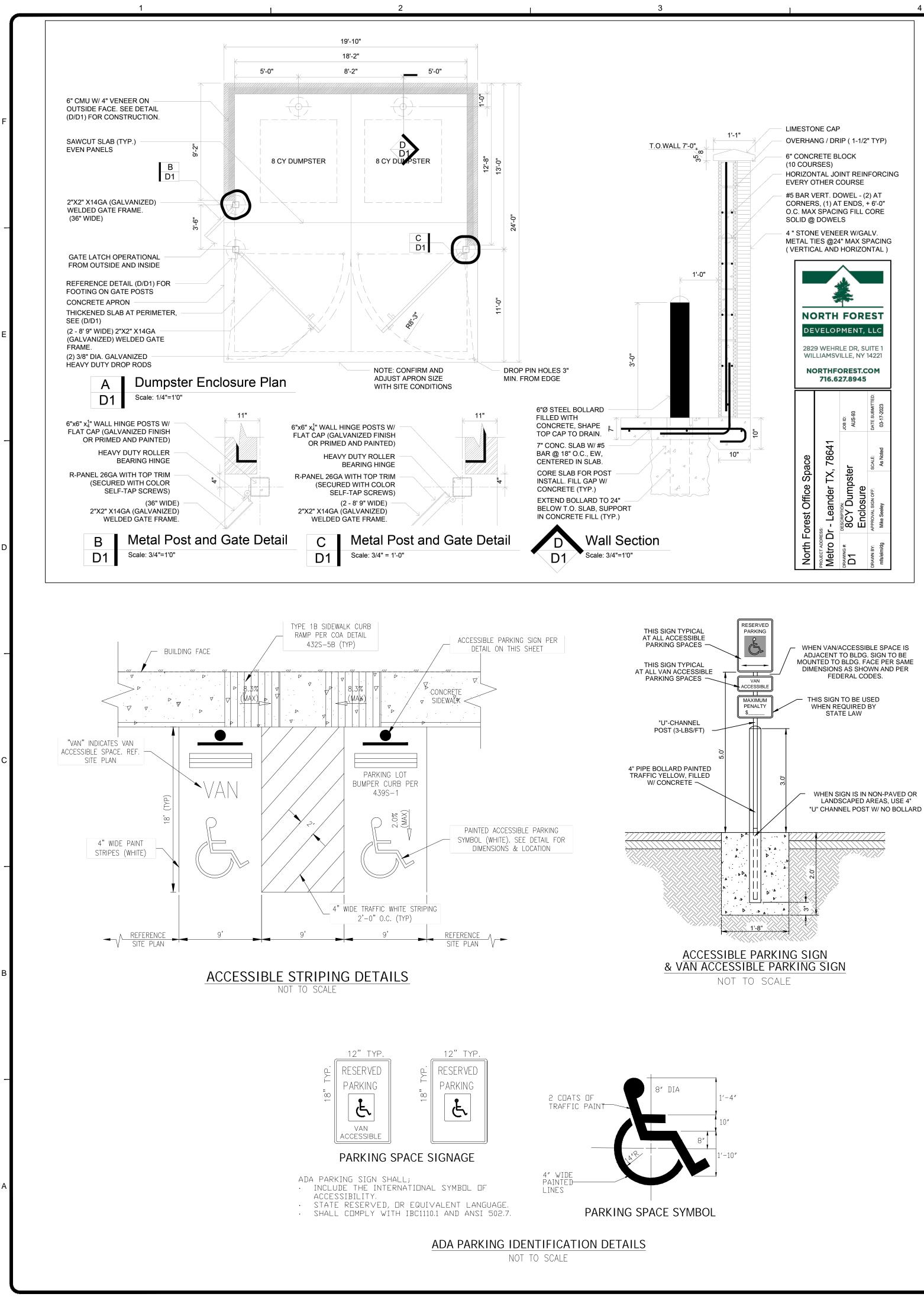


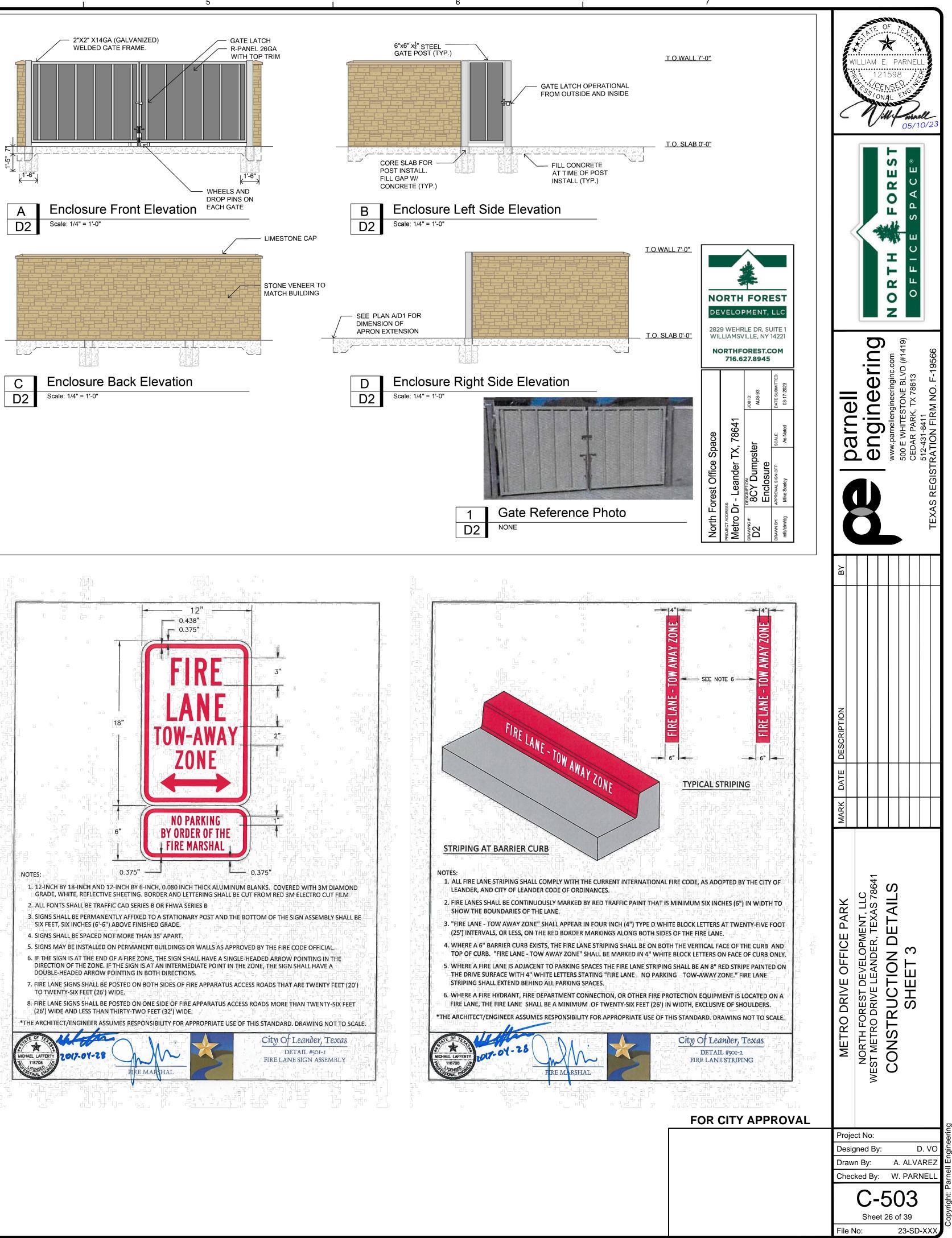
NOTES: 1. ALL CONCRETE SHALL BE CLASS "A" 2. ALL REINFORCING STEEL SHALL BE GRADE 60 3. DIMENSIONS RELATING TO REINFORCING STEEL ARE TO 4. VERTICAL STEEL MAY BE SPLICED (380 mm or 15" MIN LOWER ONE-HALF OF ALL INLET WALLS.5. IN AREAS OF REINFORCING STEEL, PIPES AND MANHOLE FRAME, THE REINI BE BENT OR ADJUSTED TO CLEAR AS DIRECTED BY THE ENG 6. QUANTITIES SHOWN HEREON ARE FOR THE CONTRACTOF PAYMENT WILL BE MADE FOR EACH INLET OF THE TYPE S IN PLACE INCLUDING MANHOLE FRAME AND OVER. 7. CHAMFER ALL EXPOSED EDGES 20 mm (3/4"). 8. MANHOLE FRAME AND COVER SHALL BE IN ACCORDAN AUSTIN STANDARD 503S-1. 9. THE CONTRACTOR MAY PROPOSE ALTERNATE PROCEDUI CONSTRUCTION OF INLETS, INCLUDING PRECAST UNITS. PLAN PROPOSED ALTERNATES SHALL BE SUBMITTED TO THE ENGIN APPROVAL BEFORE CONSTRUCTION. 10. ALL INLET WALLS SHALL BE FORMED EXCEPT WHERE TH SURROUNDING MATERIAL IS SUCH THAT IT CAN BE TRIMMED VERTICAL FACE. WHEN INLET WALLS ARE PLACED TO NEAT E THE WALL THICKNESS SHALL NOT EXCEED 10 INCHES. 11. PAYMENT FOR INLET AT THE CONTRACT PRICE SHALL I TRANSITION CURB. 12. INVERT OF INLET SHALL BE SLOPED 1:20 WITH FILL C AS "V" SECTION 13. NO SPLICING OF REINFORCING STEEL SHALL BE PERMIT OTHERWISE NOTED ON THE PLANS OR PERMITTED IN WRITING	N. LAP) IN THE CONFLICT BETWEEN FORCEMENT SHALL GINEER. R'S INFORMATION ONLY. SPECIFIED, COMPLETE NCE WITH CITY OF RES FOR THE IS FOR SUCH NEER FOR REVIEW AND HE NATURE OF THE TO A SMOOTH EXCAVATION LINES NCLUDE THE ONCRETE, SHAPED TED UNLESS		MILLIAM E. PARNELL 121598 121598 CENSE ONAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORAL STORA
REFERENCES: FOR EXPANSION JOINT DOWEL AND DOWEL LOCA SEE STD. 430S-3, "CURB EXPANSION JOI FOR 18" MANHOLE FRAME AND COVER DETAILS SEE STD. 503S-1, "18" COVER AND FRAM	NT DOWEL DETAIL".		Control Control Control Control www.parnellengineeringinc.com www.parnellengineeringinc.com www.parnellengineeringinc.com \$00 E WHITESTONE BLVD (#1419) CEDAR PARK, TX 78613 \$12-431-8411 TEXAS REGISTRATION FIRM NO. F-19566
CITY OF AUSTIN DEPARTMENT OF PUBLIC WORKSTYPICAL DERECORD COPY SIGNED BY BILL GARDNER12/09/08 ADOPTEDTHE ARCHITECT/ENGINEE RESPONSIBILITY FOR APP OF THIS STANDARD.	TAILS FOR CURB INLET STANDARD NO. PROPRIATE USE 508.5-3 4 OF 4	BY	
		MARK DATE DESCRIPTION	
		METRO DRIVE OFFICE PARK	NORTH FOREST DEVELOPMENT, LLC WEST METRO DRIVE LEANDER, TEXAS 78641 CONSTRUCTION DETAILS SHEET 2
	FOR CITY APPROVAL	Desi Drav	ect No: igned By: D. VO wn By: A. ALVAREZ cked By: W. PARNELL C-502 Sheet 25 of 39

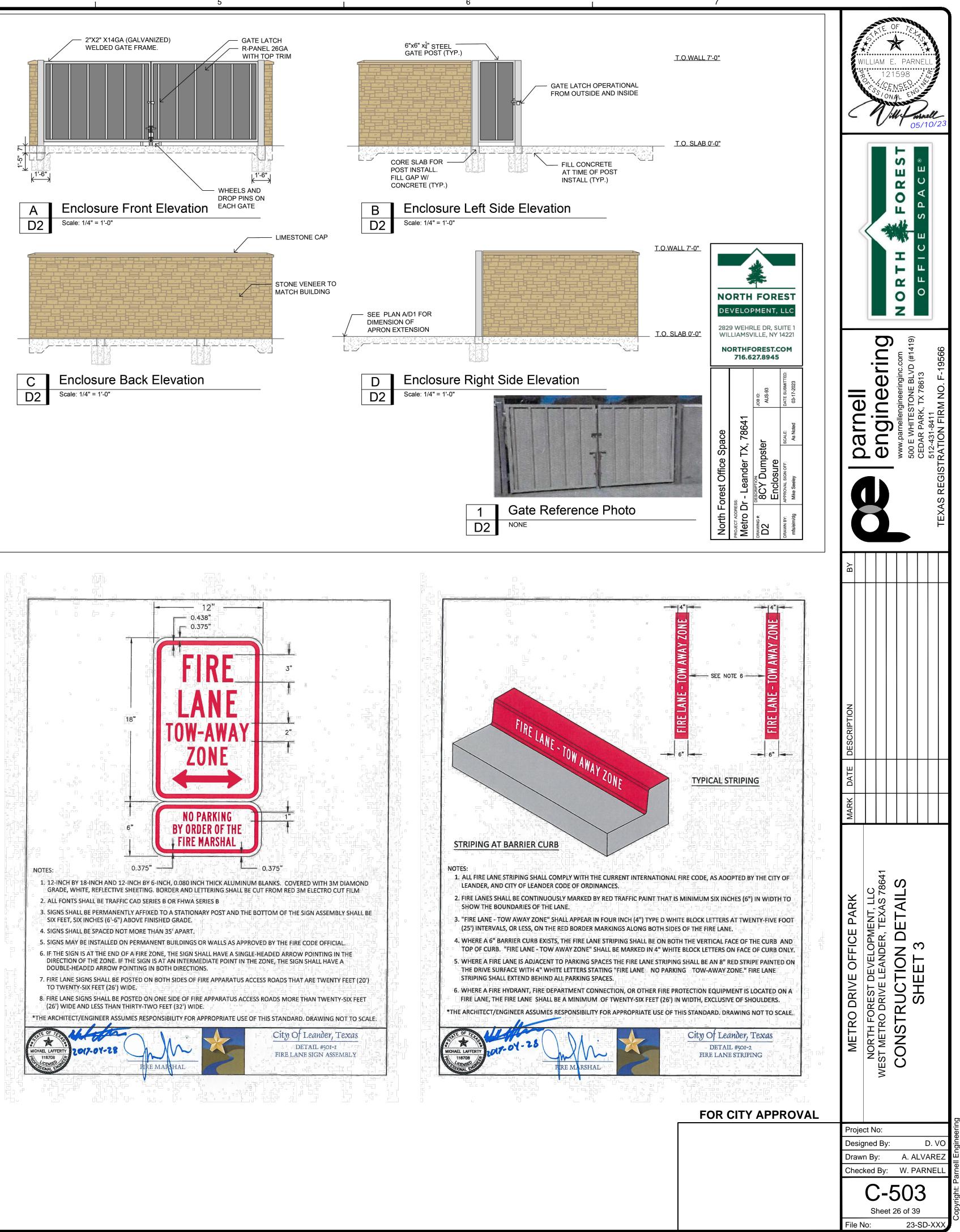
File No:

Bar Measures 1 inch, otherwise drawing not to scale

23-SD-XXX









PLANT SCHEDULE

	TREES	CODE	COMMON NAME
_	\bigcirc	bc2	Bald Cypress
rs D	•)	bo2	Burr Oak
	$\left(\cdot\right)$	mo2	Monterey Oak
		sr2	Shumard Red Oak
	ORNAMENTAL TREES	CODE	COMMON NAME
	\bigcirc	cm2	Crape Myrtle, Muskogee
	SHRUBS	CODE	COMMON NAME
	ĸ	k	Knock Out Rose
	\odot	р	Pineapple Guava
	¢	r	Red Yucca
	t	t	Texas Sage 'Silverado'

REFERENCE NOTES SCHEDULE

SYMBOL	DESCRIPTION
1	Lawn, Sod
2	Steel Edge
4	Decomposed Granite
5	River Cobble

				L	ANDS	SCAP	E WO	RKSHEE	T					
Overall Required Landscape	and the second		-		· ·	PI	oviaea L	andscape	Area					
	%		SQFT		Total			-		ļ.	SQFT	%		
Multi-Family	20%	_ X		_1=	0	LT¢	tal Area		1		_ 26,176 _	15 💷		
Office/Professional	15%	Х			0	To	tal Provid	led≏	1		35,466	20		
Commercial	15%	X	174,507		26176		[]		10					[
Industrial/Manufacturing	10%	Х		0	0	Tu	Infgrass M	lax			13,088	50%	[
School/Church/Community	15%	X			0	i — Tu	infgrass P	rovided	10	ļļ	11,649	45%	امتعدار	
Park	15%	X		1	0	La	ndscape	area betwe	en	1	7,578	28%		l
ir				i Ti		R	OW and B	uilding					in di	
					setbac	k areas	. Howev	er, the sett	ack areas	are requ	ired to be		ПП	
landscaped even if they excee					setbac	k areas	. Howev	er, the sett	oack areas.	are requ	ired to be			<u></u>
landscaped even if they excee Setback Areas					setbaci	k areas	. Howev			are requ				DENCE
landscaped even if they excee	d the abov				setbaci	k areas		REQUIRE	<u> </u>] D		PROVIDE	· · · · · · · · · · · · · · · · · · ·	and the second se	RENCE
landscaped even if they excee Setback Areas	d the abov	ve p	ercentage			k areas	Trees			are requ		D Shrubs	DIFFE	RENCE Shrubs -18
landscaped even if they excee Setback Areas Front, North (W. Metro Dr)	d the abov SQFT 2,682				4.47		Trees	REQUIRE] D Shrubs_	Trees	PROVIDE	Shrubs	Inches	Shrubs
Setback Areas Front, North (W. Metro Dr) West (N/A, ADJ COMM)	d the aboy SQFT 2,682 0		ercentage		4.47	Units	Trees 9	REQUIRE	D Shrubs 18	Trees	PROVIDE	Shrubs 0	Inches 0	Shrubs -18
landscaped even if they excee Setback Areas Front, North (W. Metro Dr)	d the abov SQFT 2,682		ercentage 600 600		4.47 0.00 0.00	Units	Trees 9 0	REQUIRE Inches 18 0	D Shrubs 18	Trees	PROVIDE Inches 18 0	Shrubs 0 0	Inches 0	Shrubs -18 0

J	TREE TABLE							
TAG	SPECIES	DIAMETER (IN)	REMOVE					
5411	Hackberry	9	YES					
5412	Hackberry	9	YES					
5413	Sweetgum	9	YES					
5414	Hackberry	7	YES					
5415	Live Oak	6	NO					
5416	Live Oak	6	NO					
5417	Live Oak	6	_NO					
5418	Live Oak	7	NO					
5419	Live Oak	Ĵ.	NO					

	Ultrade of a	1		1	
TREE CALIPER INC	HES	<u> </u>		9	
TREE SIZE (in caliper inches)	TOTAL INCHES	SAVED INCHES	SAVED INCHES %	REMOVED INCHES	REMOVED INCHES %
8" to 18"		0	#DIV/01		#DIV/01
>18" to 26"	0.00	0.00	#DIV/01		#DIV/0!
SUBTOTAL 8" to 26"	0	0	#DIV/01	0	#DIV/01
>26*	0	Ó	#DIV/01	0	#DIV/01
TOTALS	0	0	#DIV/01	0	#DIV/0!
TOTAL TREES				ļ	
TREE SIZE (in caliper inches)	TOTAL TREES	SAVED TREES	SAVED TREES %	REMOVED TREES	REMOVED TREES %
8" to 18"	<u>0</u>	. 11 4	#DIV/01	0)	#DIV/01
>18" to 26"	Ö	2	#DIV/01		#DIV/01
SUBTOTAL 8" to 26"	0	.13	#D(V/0)	Ó	#DIV/01
>26" HERITAGE	0	1 1	#DIV/01	0)	#DIV/0!
TOTALS	0	14	#DIV/01	0	#DIV/01
MITIGATION PLAN	l: 8" - 18"			1	
TREE SIZE (in caliper Inches)	>50% REMOVAL	1:1 REPLACEMENT	2:1 REPLACEMENT	3:1 REPLACEMENT	FEES
8" to 18"	#DIV/01	#DIV/0!	ι	¥	#DIV/0!
MITIGATION PLAN	I: Protected	& Heritage Tre	es	ſ	
TREE SIZE (in caliper inches)	Removed (total inches)	1:1 REPLACEMENT	2:1 REPLACEMENT	3:1 REPLACEMENT	FEES
>18" to 26"	0		o .	1 .5	\$0
>26" HERITAGE	0	*	6.2.8.1 78		\$0 1
MITIGATION OWE					

BOTANICAL NAME	CONT	CAL	SIZE	QTY
Taxodium distichum	-	2"Cal	6` H min	9
Quercus macrocarpa	-	2"Cal	6` H min	4
Quercus polymorpha `Monterey`	-	2"Cal	6` H min	7
Quercus shumardii	-	2"Cal	6` H min	7
BOTANICAL NAME	CONT	CAL	SIZE	QTY
Lagerstroemia indica 'Muskogee'	-	2"Cal	6` H min	1
BOTANICAL NAME	CONT	SIZE		
Rosa acicularis `Knock Out`	5 gal			14
Feijoa sellowiana	5 gal			12
Hesperaloe parviflora	5 gal			16
Leucophyllum frutescens 'Silverado'	5 gal			18

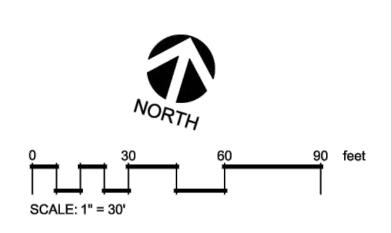
CITY NOTES

- The developer and subsequent owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planted areas shall be provided with an automatic irrigation system and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of the Landscape Ordinance.
 Tree caliper is the trunk diameter of a tree at one (1') foot above natural grade per the Composite Zoning Ordinance.
 All new landscapes (non-residential and residential) are required to have a minimum of six inches (6") of soil depth in areas planted with trungrass. This six-inch (6") minimum soil denth will consist of 75 percent soil blended with 25 percent compost. The soil/compost blend
- turfgrass. This six-inch (6") minimum soil depth will consist of 75 percent soil blended with 25 percent compost. The soil/compost blend shall be incorporated into the top two inches of the native soil. The six-inch (6") depth requirement does not apply to the area between the drip line and trunk of existing trees, shrub beds or wildscape areas. Areas with existing native vegetation that remain undisturbed shall be exempt from the soil depth provision; provided that native soil and vegetation in such area is fenced during construction and protected

- exempt from the soil depth provision; provided that native soil and vegetation in such area is fenced during construction and protected from disturbance and compaction during the construction process.
 All disturbed areas and ROW will be re-vegetated by the developer.
 All invasive species shall be removed from the property.
 No more than 50% of the same species may be planted to meet the tree planting requirements.
 A minimum pervious area 3 feet in radius and not less than 50% of the calculated drip line area is provided around the trunks of all existing and proposed trees.
 No landscaping over 3 feet high is located within 40 feet of the intersection of any street. (Measured from the edge of pavement as if the curbs or pavement edges are not rounded off and intersect at a right angle).
 In the event of a conflict with tree removal/preservation call outs on plan sheet(s) versus tree removal/preservation matrix, the tree removal/preservation matrix shall apply. It is the contractors responsibility to verify with City staff should any inconsistency exist within an
- removal/preservation matrix shall apply. It is the contractors responsibility to verify with City staff should any inconsistency exist within an approved plan set. No in-field changes are made to approved plans, no exceptions.

NOTES

- Provide mulch tree ring for all trees outside of beds. Install per detail #1 on specifications sheet. Provide bubbler. Mulch is in addition to quantities listed.
 Contractor is responsible for verifying all plant and material quantities.
- Irrigation sleeves shall be run to all landscaped areas prior to concrete pour.
 Drip irrigation in all beds and spray irrigation in all lawn areas.



Base Date Age Date Age Date Consultant Seal
BLARR LANDSCAPPE BLARR LANDSCAPPE BLAR LANDSCAPPE (512) 522-8979 info@BlairLA.com www.BlairLA.com www.BlairLA.com www.BlairLA.com www.BlairLA.com www.BlairLA.com www.BlairLA.com to Congress Ave. Ste 2000 Ste 2000 Austin, TX 78701
William S. Blair Multiam S. Blair May 6, 2023
NFOS Metro Drice Metro Drive Leander, Texas
Lesign By: Will Blair
Checked By: xxxx Issue Date: 05/06/2023 Project Number: 23020-LP LS-101 Sheet 27 of 39

23-SD-XXX

REFERENCE NOTE SPECIFICATIONS

LAWN AREAS - SOD / HYDROMULCH / SEED MIX 1. Lawn, Zoysia "Palisades" Sod. Top of lawn 1" below top of adjacent concrete/hardscape. Flatten sod with lawn roller. Provide spray irrigation. Temporary irrigation only within septic fields or Right of Way (R.O.W.). Pre emergent weed treatment recommended.

STEEL EDGE

Steel edge, 3/16" x 4" landscape edging as manufactured by Ryerson, or equal, dark green and furnished with steel stakes. Install edging in smooth curves free of kinks. Final height of edging to be 1" above height of soil mat of sod.

MULCHES / GRAVELS / RIVER ROCK / BOULDERS

- Mulch, Native Hardwood. 3" deep with drip irrigation. Ensure that drip line is placed above rootballs. 4. Decomposed Granite, 4" deep compacted
- 5. River Cobble, "Brazos Brown" aka "Cafe". 70% 1-3" size mixed with 30% 3-8" size. 3" deep, weed barrier cloth beneath. If used in areas near plants provide irrigation bubblers to plants and use the following bed prep: 6" of "Growers Mix" soil (40% compost, 40% loam, 10% sand) tilled into existing soil in all areas of the bed. Pocket planting acceptable where plant material is not massed or limestone is present.

LANDSCAPE PLANTING SPECIFICATIONS

- Guarantee All labor, materials and plants will be guaranteed for a period of twelve (12) months after the final acceptance of work by Owner. All plants that have died or are unhealthy shall be replaced no later than 30 days from the anniversary date of the final acceptance. This guarantee does not apply to plant material that dies due to abnormal freezes, hail, abnormal high winds, or other acts of God, vandalism or lack of normal maintenance and watering. This guarantee does not apply to annual plantings.
- 2) Contractor is to verify all site dimensions and layout prior to the commencement of landscape construction. Any discrepancies between the drawings and the actual site conditions shall be brought to the attention of the owner's representative immediately.
- 3) Contractor is responsible for verification of the location of all underground utilities, repair to said utilities as a result of the work of the contractor shall be the responsibility of the contractor. Refer to the drawing for any additional information.
- 4) Contractor is responsible for maintaining positive drainage in all shrub and turf planting areas.
- 5) Tree pits are to be the same depth as the root ball and 24" wider. Prior to planting the tree pit should be filled with water to check for good drainage. If water does not drain the Contractor should check with the Landscape Architect to relocate the tree.
- 6) Trees should be positioned in the center of the tree pits, back filled with soil that was excavated from the pit until the surface is level with the surrounding area and the crown of the plant is at the finished grade. Build a water basin around the tree (36" dia.). Water until planting pit is soaked and soil has settled. Add soil necessary to bring soil level flush with surrounding ground. Fill the basin with three (3) inches of compost.
- 7) All plant material shall conform to the standards of the latest edition of "American Standard for Nursery Stock" by The American Association of Nurserymen and "Grades and Standards" by The Texas Association of Nurserymen. A plant shall be dimensioned as it stands in its natural position. All plants shall be at least the minimum size indicated. Larger stock is acceptable at no additional cost, and providing that the larger plants will not be cut back to size indicated.
- 8) It is the landscape contractor's responsibility to provide plants free of disease or pests. 9) Space specified quantity of plant materials to evenly fill designated areas, adjusting spacing indicated on the drawings as required. Landscape architect or owner to have final approval of locations of all trees, shrubs and groundcover beds.
- 10) Contractor is responsible for removing all clods, rocks, concrete, trash and any other debris from beds prior to adding soil ix or plant material
- All planting beds are to have six (6) inches of "Growers Mix" soil (40% compost, 40% loam, 10% sand) tilled at a depth of eight (8) inches in all areas of the bed. A two (2) inch layer of shredded hardwood bark mulch should be applied to all beds after planting is completed. Four (4) inch pots and ground cover may be planted through the mulch.
- 12) Contractor is responsible for removal of trash and repair of hazardous conditions (tools, open holes, et.) on a daily basis by the end of the work day.
- Water all plantings in bed areas thoroughly on a daily basis until final acceptance.
- 14) To prepare turf areas treat them with a selective herbicide two weeks prior to sodding or seeding. Then rake area to remove stones, sticks and other debris. Add six (6) inches of "Landscape Mix" soil (25% compost, 75% soil) to the turf area. Rake area to a finish grade (1" below walks and curbs).
- 15) If sodding is to take place the sod should be gathered and planted within a 48 hour period. Lay the sod to form a solid mass with tight fitting joints. Butt ends and sides of sod and offset joints in adjacent courses. Roll sod to ensure good contact with soil. If planting on a slope be sure to lay courses parallel to the contours and secure sod with pins if necessary. Site preparation and maintenance will be the same for hydromulching.
- 16) Water sod daily so as to not allow turf blades to wilt. If necessary water twice per day.
- 17) Apply slow release fertilizer 15-15-15 or equal at a rate of 2 lbs. per 100 s.f. to all turf or planted areas.
- 18) Contractor shall keep all construction areas and public streets free from accumulation of waste material. Upon completion of construction and prior to final approval contractor shall thoroughly clean the site of all trash, spilled soil, and litter, etc. that has resulted from landscape construction operations. Repair all damage to finish grade including tailings from excavations, wheel ruts, etc. caused from construction. All debris, trash and excess materials and equipment shall be removed from the site prior to final acceptance.
- 19) Remove all tags, ribbons and wires from all newly installed plant material.

LANDSCAPE MAINTENANCE REQUIREMENTS

The owner shall be responsible for:

- 1) Regular maintenance of all required landscape areas and plant materials in a vigorous and healthy condition, free from diseases, pests, weeds, and litter. This maintenance shall include weeding, watering, fertilization, pruning, mowing, edging, mulching or other needed maintenance, in accordance with generally accepted horticultural practice.
- 2) The repair or replacement of required landscape structures (walls, fences, etc.) to a structurally sound condition.
- The regular maintenance, repair, or replacement, where necessary, of any required screening 3) or buffering.
- 4) All open space areas that are to be preserved as natural plant communities shall be trimmed, at least once a year, of all exotic vegetation, lawn grasses, trash, or other debris. Natural area should be mulched, pruned and otherwise maintained so that plants are vigorous.

ADDITIONAL NOTES

- 1) Mechanical equipment shall be screened from view of at least sixty (60%) percent of any street or public right-of-way.
- 2) Tree caliper is the trunk diameter of a tree at twelve inches (1.0') above natural grade per the Composite Zoning Ordinance.
- 3) All new landscapes (non-residential and residential) are required to have a minimum of six inches (6") of soil depth in areas planted with turf grass. This six-inch (6") minimum soil depth will consist of 75 percent soil blended with 25 percent compost. The soil/compost blend shall be incorporated into the top two inches of the native soil. The six-inch (6") depth requirement does not apply to the area between the drip line and trunk of existing trees, shrub beds or wildscape areas. Areas with existing native vegetation that remain undisturbed shall be exempt from the soil depth provision; provided that native soil and vegetation in such area is fenced during construction and protected from disturbance and compaction during the construction process.
- 4) All disturbed areas and ROW will be re-vegetated by the developer. The developer and subsequent owners of the landscaped property, or the manager or agent of the owner, shall be responsible for the maintenance of all landscape areas. Said areas shall be maintained so as to present a healthy, neat and orderly appearance at all times and shall be kept free of refuse and debris. All planted areas shall be provided with an automatic irrigation system and watered as necessary to ensure continuous healthy growth and development. Maintenance shall include the replacement of all dead plant material if that material was used to meet the requirements of the Landscape Ordinance.
- 5) No more than 50% of the same species may be planted to meet the tree planting requirements.

IRRIGATION SPECIFICATIONS

- 1) Irrigation contractor will provide pipes for sleeves and specify locations for placement of sleeves by general contractor prior to pouring concrete or laying asphalt.
- 2) Irrigation contractor will install all backflow prevention devices and all piping between the point of connection and the backflow preventer as per local governing authorities. 3) Find location of backflow preventer, and automatic controller location shall be approved
- by the owner's authorized representative.
- 4) 120 VAC electrical power source at controller location shall be provided by others. The irrigation contractor shall make the final connection from the electrical source to the controller.
- All sprinkler heads shall be set perpendicular to finish grade unless otherwise specified. 6) The irrigation contractor shall flush and adjust all sprinkler heads and valves for optimum coverage with minimal overspray onto walks, streets, walls, etc.
- 7) Head location is the responsibility of the irrigation contractor, with the understanding that all landscape areas will receive adequate water to provide for vigorous growth of vegetation.
- 8) Irrigation contractor will replace or repair all items damaged by his work.
- 9) All work shall be installed in accordance with applicable codes and ordinances for the City of Leander, Texas and the National Electrical Code and all governing authorities. 10) The irrigation contractor is responsible for reporting any deficiency in water pressure
- that would affect the operation of the irrigation system. 11) The irrigation contractor shall be a Registered Licensed Irrigator in the State of Texas. Contractor must conform to all codes as stated in section 34 of the Texas Water Code and TNRCC.
- 12) All remote control valves, gate valves, guick couplers and control wire and computer cable pull pints shall be installed in approved valve boxes.
- 13) Irrigation Contractor shall procure all permits, licenses, and pay all charges and fees and give all necessary notices for the completion of work.
- 14) Contractor shall not disturb roots of existing trees. There shall be no machine trenching below the dripline of existing trees.
- 15) Extreme care shall be exercised in excavating and working near utilities. Contractor shall verify the location and condition of all utilities and be responsible for damage to any utilities.
- 16) Contractor shall clearly mark all exposed excavations, materials, and equipment. Cover or barricade trenches when the contractor is not on the site. Take all necessary precautions to protect and prevent injury to any persons on the site.
- 17) All automatic irrigation systems shall be equipped with a controller of dual or multiple programming. Controllers shall have multiple cycle start capacity and a flexible calendar program, including the capacity of being set to water every five days. All automatic irrigation systems shall be equipped with a rain sensor shutoff device.
- 18) Irrigation in Texas is regulated by the Texas Commission on Environmental Quality, www.tceq.texas.gov, (512) 239-1000



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Sheet Title	

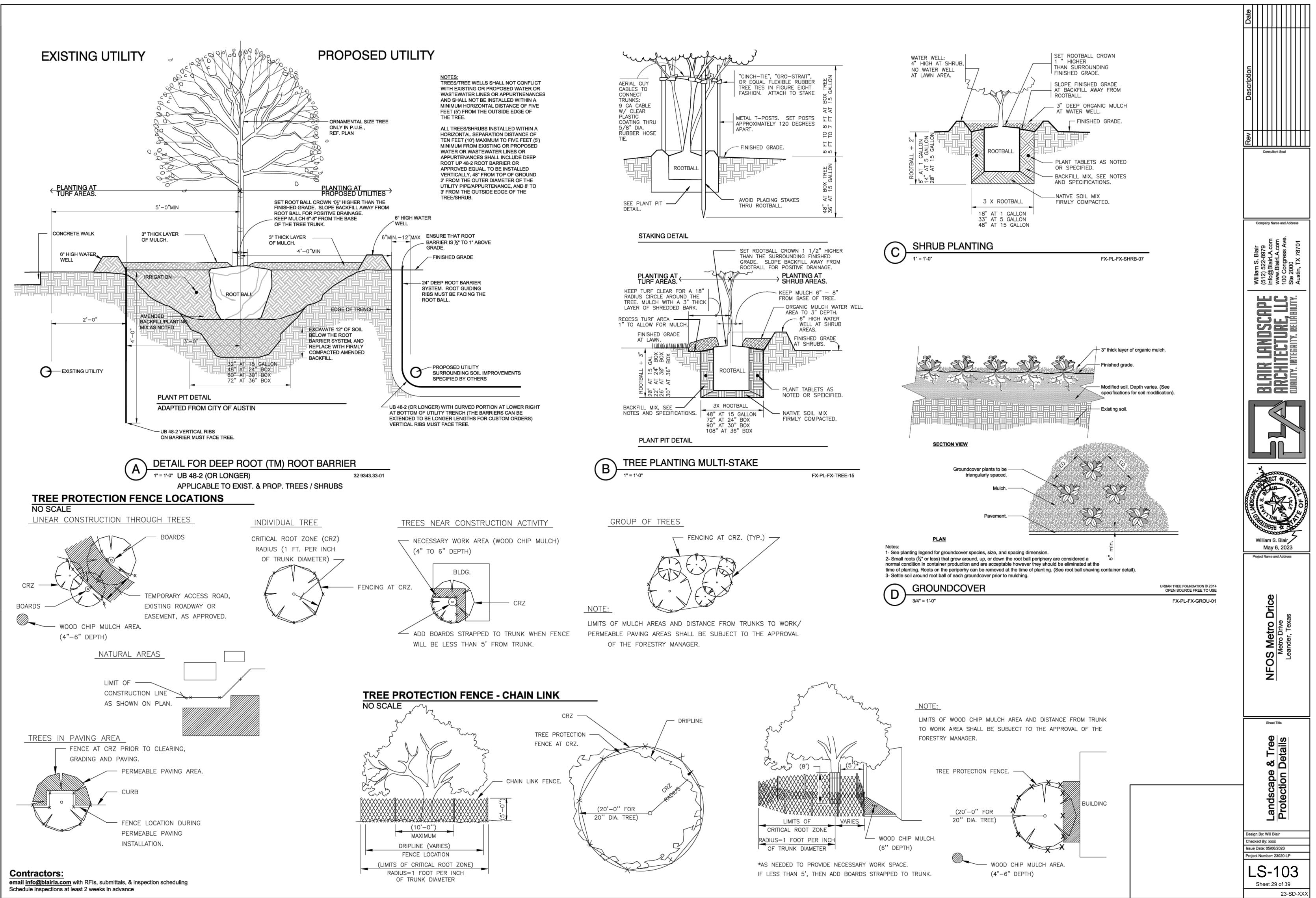


Design By: Will Blair
Checked By: xxxx
Issue Date: 05/06/2023
Project Number: 23020-LP

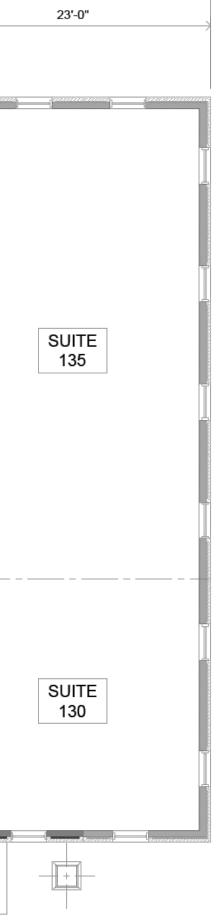
LS-102

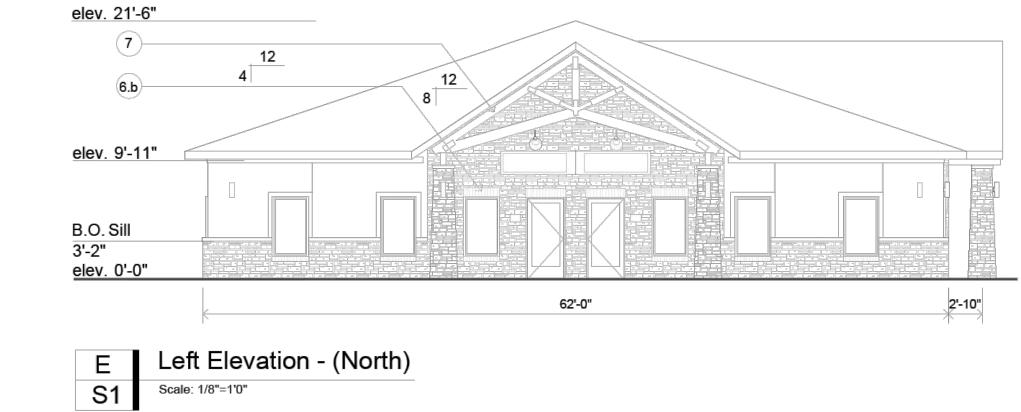
Sheet 28 of 39

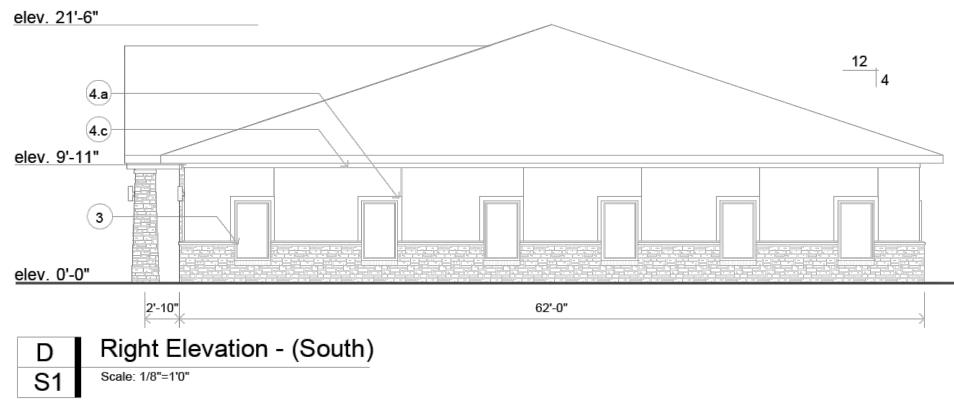
23-SD-XXX











	Total		% of O	verall Ar	ea
Gross Wall Area	3466.3	sf			
Total Window Area	450.0	sf	13.0	%	
Total Door Area	100.0	sf	2.9	%	
Total Stone Area (net)	1531.3	sf	44.2	%	
Total Stucco Area (net)	1385.0	sf	40.0	%	
Area of Stone at Entry Colum	ากร	Qty	square	footage	
Standard Ht Columns		6		439.9	S
Raised Area Columns		0		0.0	S
Total Stone Area at Building	Columns			439.9	

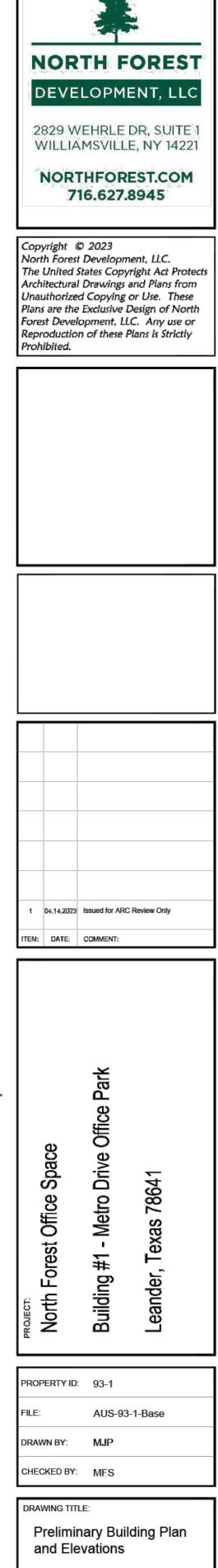


1 S1

Exterior Building Material Area and Percentages Scale: NONE

Construction Material Notes:

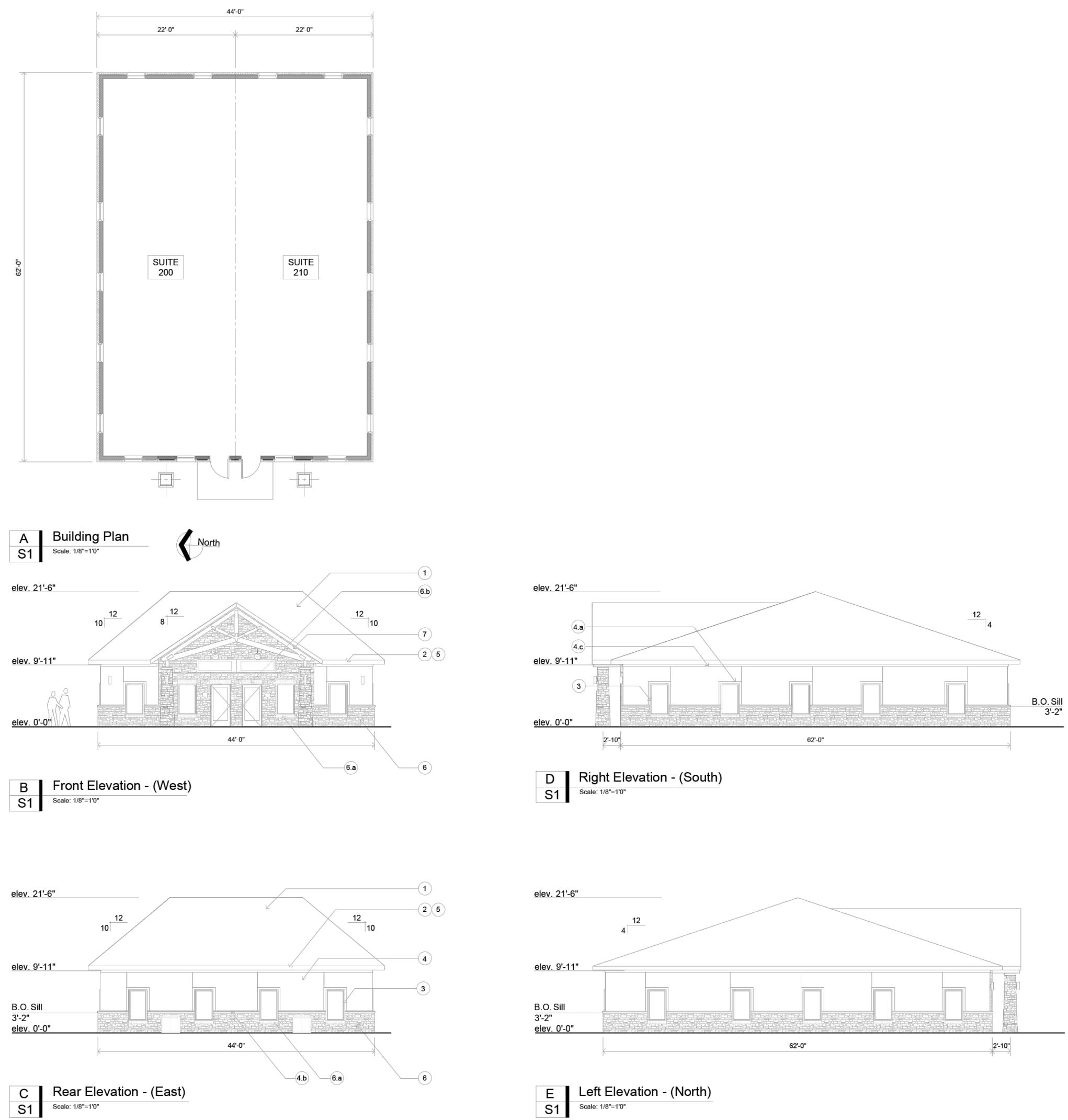
- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
- (3) WINDOW/ DOOR TRIM COLOR = WHITE
- 4 STUCCO, COLOR = SHERWIN WILLIAMS "KESTREL WHITE" SW7516 PER MANUFACTURER DETAILS & SYSTEM REQUIREMENTS.
- (4.a) STUCCO WINDOW SURROUND, 4" WIDE AT SIDES AND TOP
- 4.b STUCCO SILL
- (4.c) STUCCO FRIEZE BOARD
- (5) FASCIA AND TRIM COLOR = WHITE
- 6 STONE "SNOW WHITE" CHOPPED, CUT TOP AND BOTTOM, 4's, 6's, 8's. (ESPINOZA STONE, INC.)
- (6.a) STONE SILL AT WINDOWS
- 6.b STONE HEADER/ SOLDIER COURSE ABOVE WINDOW AND DOOR OPENINGS WHERE STONE VENEER IS FULL HEIGHT
- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")



A-101

Sheet 30 of 39

SHEET:



	Total		% of C	verall Ar	ea
Gross Wall Area	2222	.1 sf			
Total Window Area	270.0	sf	12.2	%	
Total Door Area	40.0	sf	1.8	%	
Total Stone Area (net)	810.6	sf	36.5	%	
Total Stucco Area (net)	1101.	5 sf	49.6	%	
Area of Stone at Entry Colum	ins	Qty	square	e footage	
Standard Ht Columns		2		146.6	S
Raised Area Columns		0		0.0	S
Total Stone Area at Building (Columns			146.6	s



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CHECKED BY: MFS

DRAWING TITLE: Preliminary Building Plan and Elevations



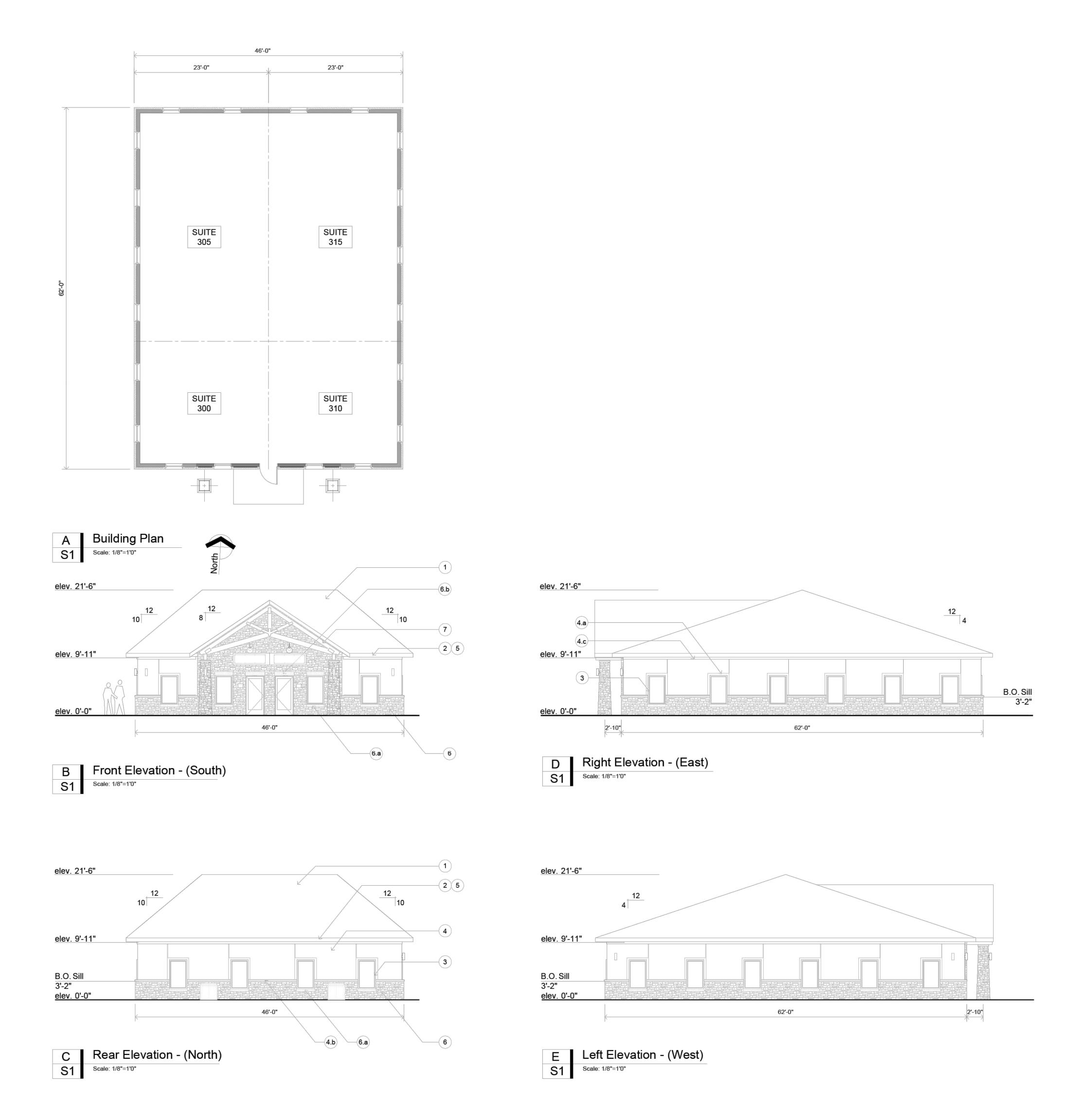
	Total		// 01 0	Voluii / III	Ju
Gross Wall Area	2222.1	sf			
Total Window Area	270.0	sf	12.2	%	
Total Door Area	40.0	sf	1.8	%	
Total Stone Area (net)	810,6	sf	36.5	%	
Total Stucco Area (net)	1101.5	sf	49.6	%	
Area of Stone at Entry Columns		Qty	square	footage	
Standard Ht Columns		2		146.6	sf
Raised Area Columns		0		0.0	sf
Total Stone Area at Building Co	lumns			146.6	sf

1

Exterior Building Material Area and Percentages Scale: NONE

Construction Material Notes:

- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
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- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")



	Total		% of C	verall Are	ea
Gross Wall Area	2222.	1 sf			
Total Window Area	300.0	sf	13.5	%	
Total Door Area	40.0	sf	1.8	%	
Total Stone Area (net)	802.8	sf	36.1	%	
Total Stucco Area (net)	1079.3	3 sf	48.6	%	
Area of Stone at Entry Colum	ns	Qty	square	e footage	
Standard Ht Columns		2		146.6	sf
Raised Area Columns		0		0.0	sf
Total Stone Area at Building (Columns			146.6	sf

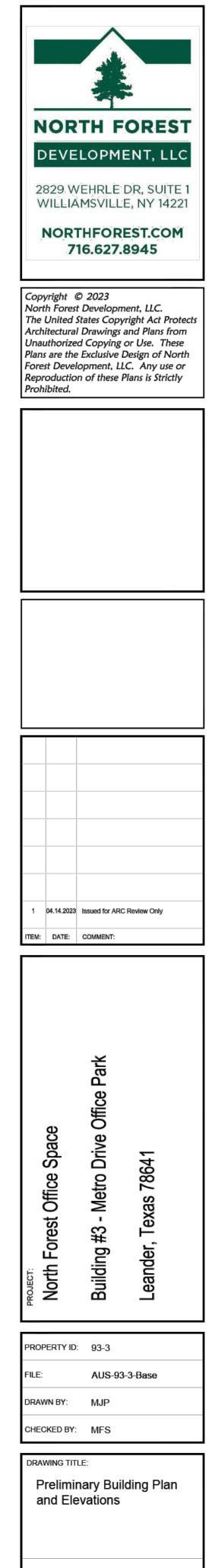


Exterior Building Material Area and Percentages

1 Exterior S1 ^{Scale: NONE}

Construction Material Notes:

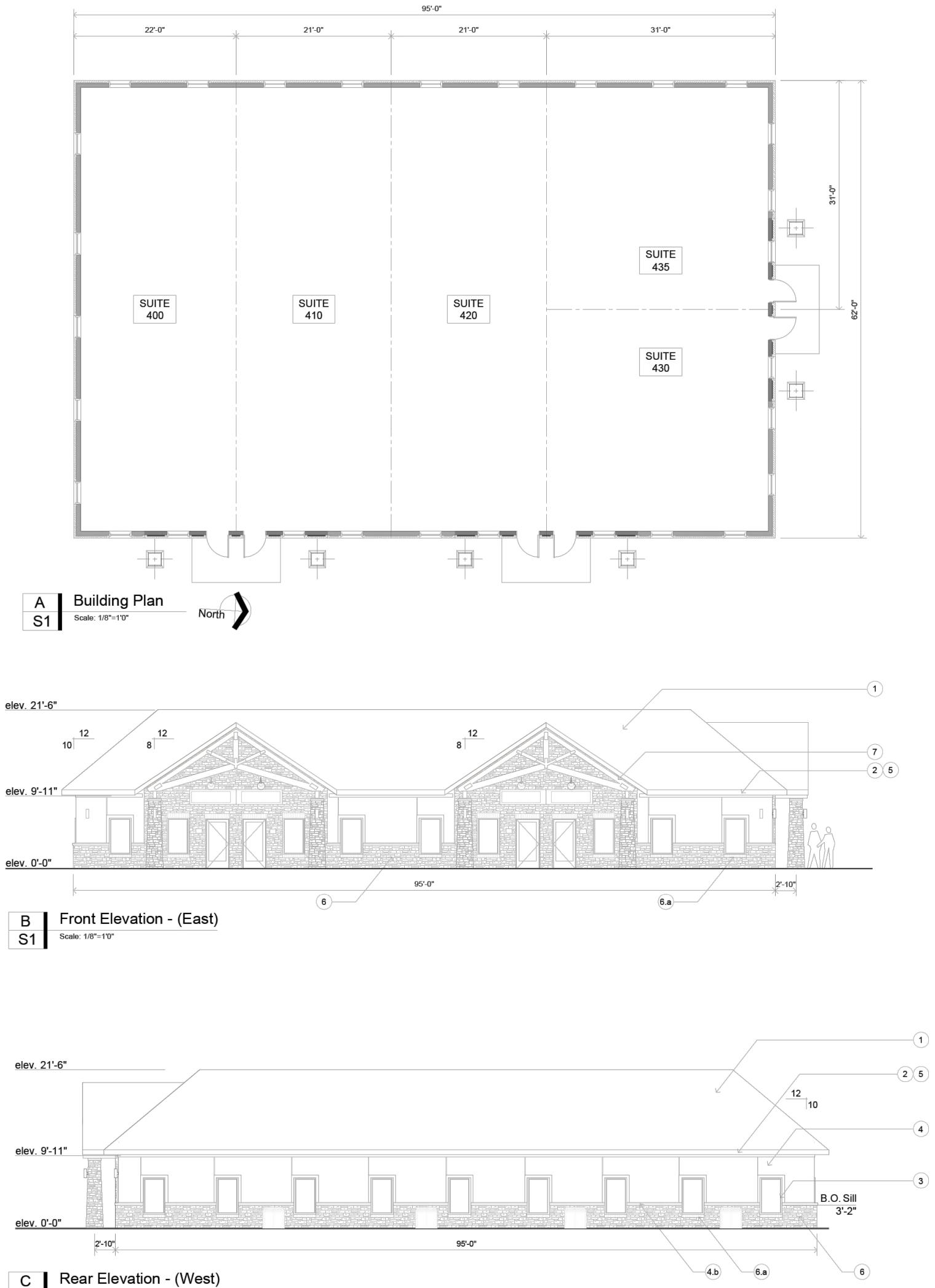
- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
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- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")



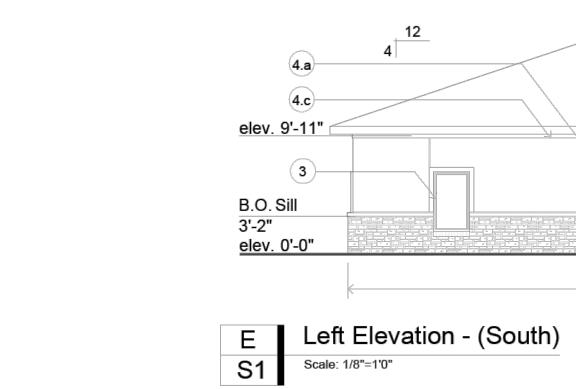
A-103

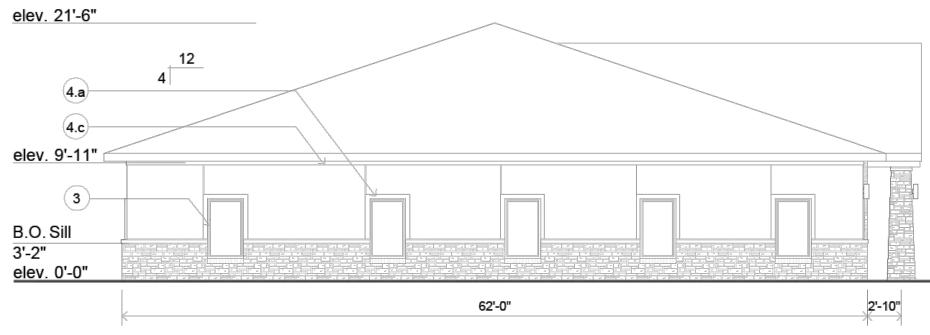
Sheet 32 of 39

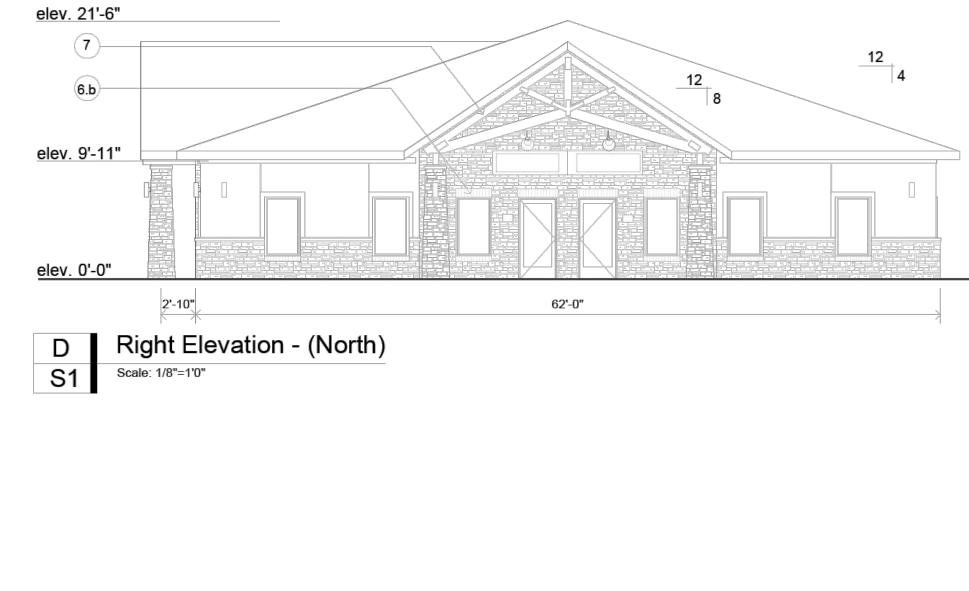
SHEET:











	Total		% of C	verall Ar	ea
Gross Wall Area	3446.3	sf			
Total Window Area	435.0	sf	12.6	%	
Total Door Area	120.0	sf	3.5	%	
Total Stone Area (net)	1508.9	sf	43.8	%	
Total Stucco Area (net)	1382.4	sf	40. 1	%	
Area of Stone at Entry Columns		Qty	square	footage	
Standard Ht Columns		6		439.9	1
Raised Area Columns		0		0.0	;
Total Stone Area at Building Co	lumns	U		439.9	9



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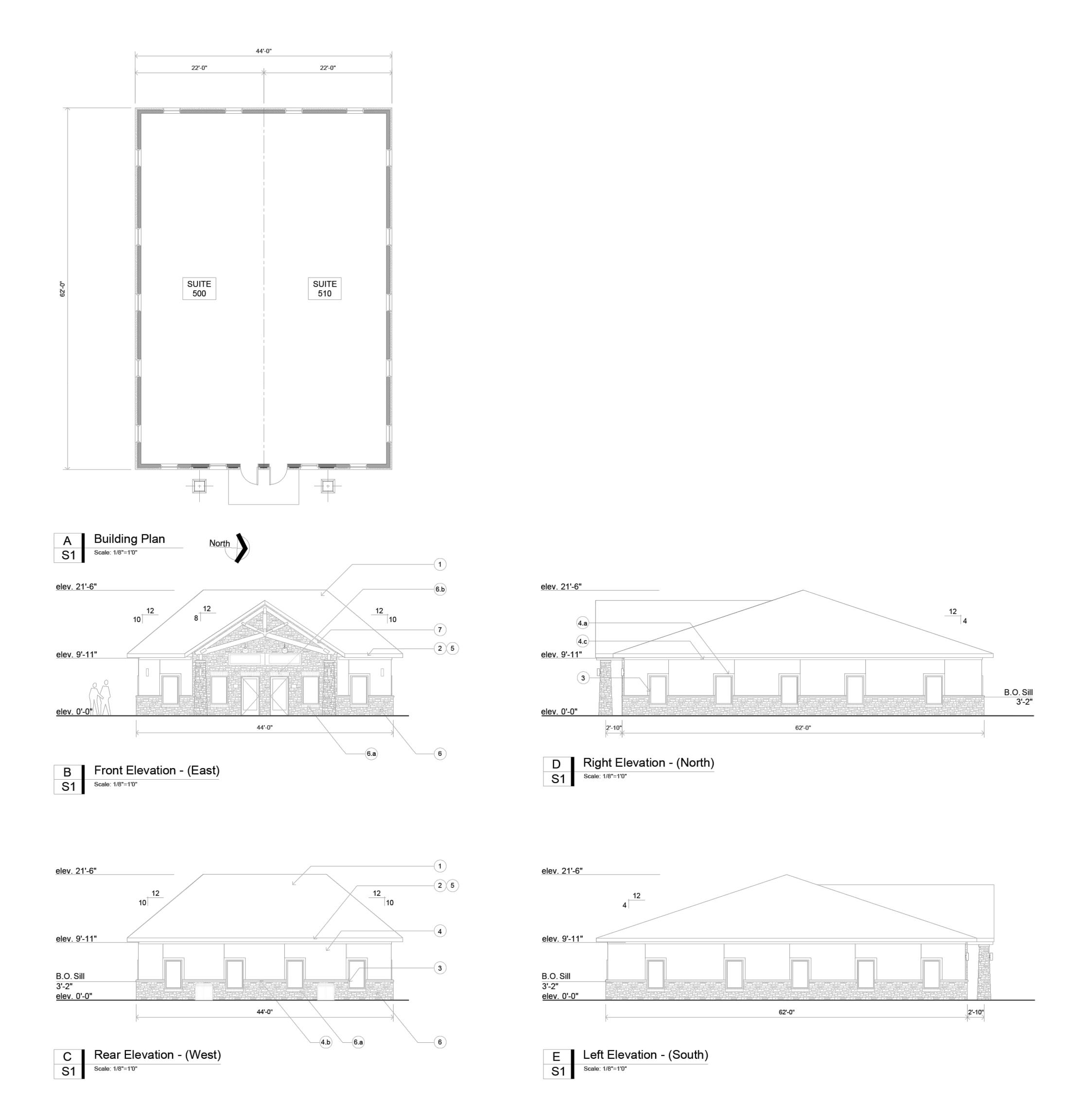
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PROPERTY ID:	93-4
FILE:	AUS-93-4-Base
DRAWN BY:	MJP
CHECKED BY:	MFS
DRAWING TITLE	E:
	ary Building Plan

1

Exterior Building Material Area and Percentages Scale: NONE

Construction Material Notes:

- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
- 3 WINDOW/ DOOR TRIM COLOR = WHITE
- 4 STUCCO, COLOR = SHERWIN WILLIAMS "KESTREL WHITE" SW7516 PER MANUFACTURER DETAILS & SYSTEM REQUIREMENTS.
- (4.a) STUCCO WINDOW SURROUND, 4" WIDE AT SIDES AND TOP
- 4.b STUCCO SILL
- (4.c) STUCCO FRIEZE BOARD
- 5 FASCIA AND TRIM COLOR = WHITE
- 6 STONE "SNOW WHITE" CHOPPED, CUT TOP AND BOTTOM, 4's, 6's, 8's. (ESPINOZA STONE, INC.)
- (6.a) STONE SILL AT WINDOWS
- 6.b STONE HEADER/ SOLDIER COURSE ABOVE WINDOW AND DOOR OPENINGS WHERE STONE VENEER IS FULL HEIGHT
- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")

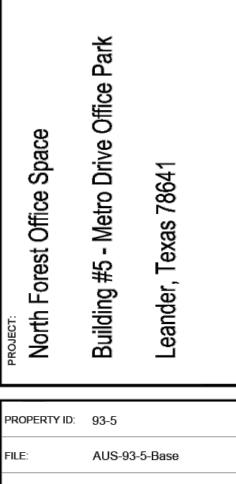


	Total		% of C	verall Ar	ea
Gross Wall Area	2222	.1 sf			
Total Window Area	270.0	sf	12.2	%	
Total Door Area	40.0	sf	1.8	%	
Total Stone Area (net)	810.6	sf	36.5	%	
Total Stucco Area (net)	1101.	5 sf	49.6	%	
Area of Stone at Entry Colum	ins	Qty	square	e footage	
Standard Ht Columns		2		146.6	Ş
Raised Area Columns		0		0.0	S
Total Stone Area at Building (Columns			146.6	s



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CHECKED BY: MFS

DRAWING TITLE:

Preliminary Building Plan and Elevations



Construction Material Notes:

- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE

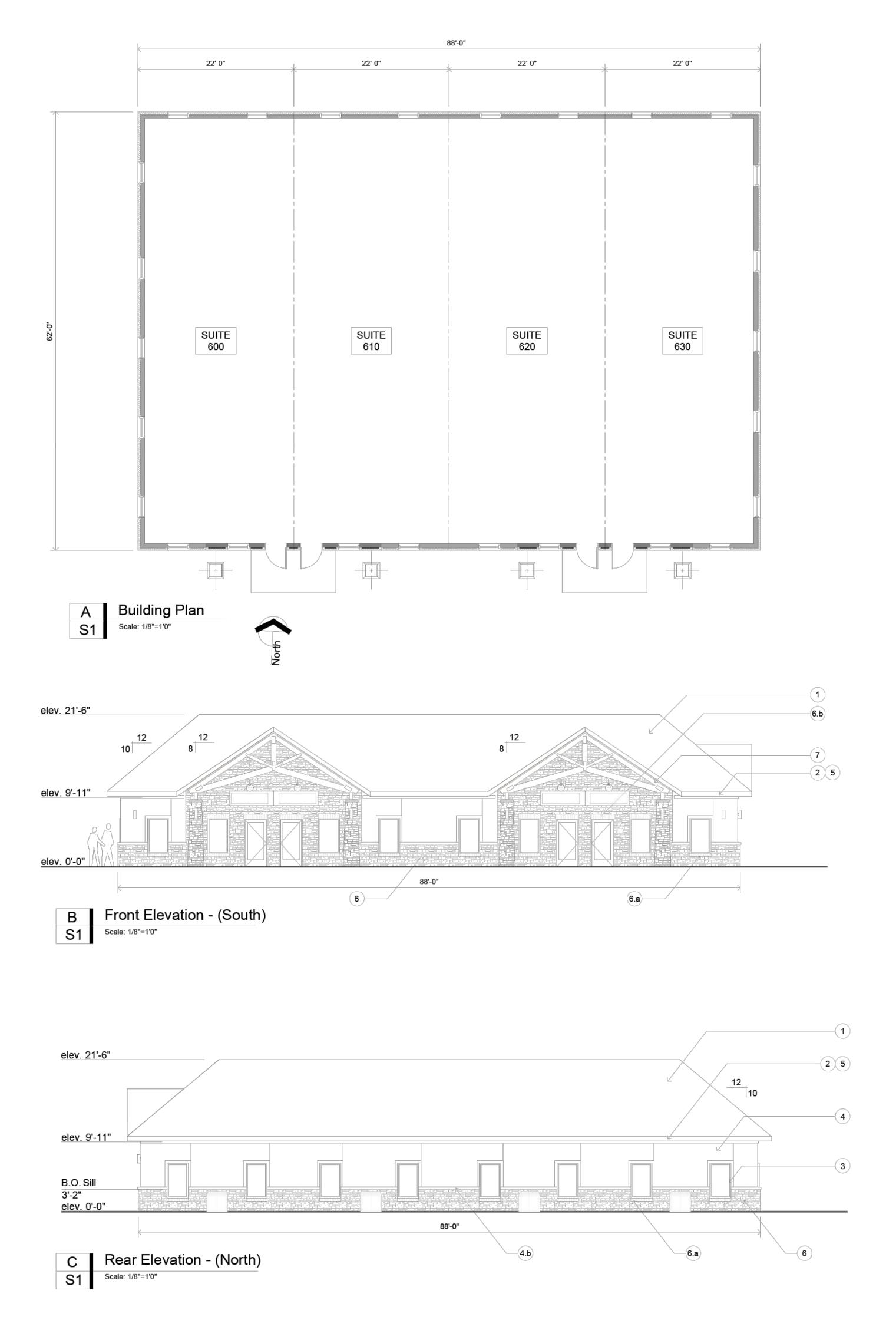
Exterior Building Material Area and Percentages

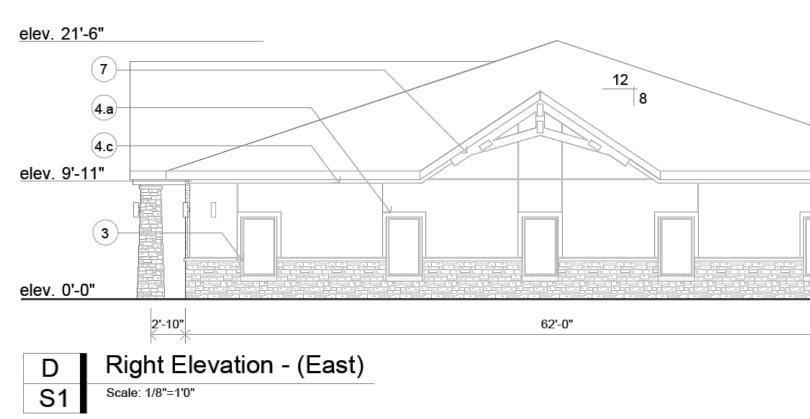
- 3 WINDOW/ DOOR TRIM COLOR = WHITE
- 4 STUCCO, COLOR = SHERWIN WILLIAMS "KESTREL WHITE" SW7516 PER MANUFACTURER DETAILS & SYSTEM REQUIREMENTS.
- 4.a STUCCO WINDOW SURROUND, 4" WIDE AT SIDES AND TOP
- 4.b STUCCO SILL

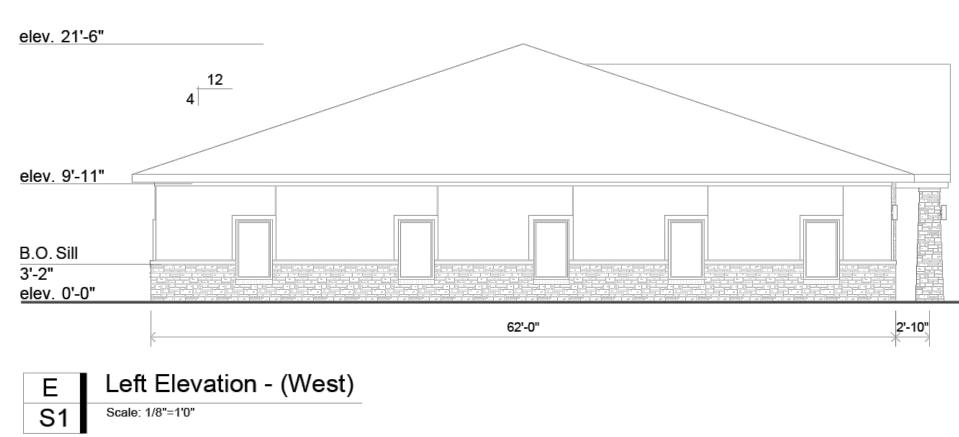
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Scale: NONE

- 4.c STUCCO FRIEZE BOARD
- 5 FASCIA AND TRIM COLOR = WHITE
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- 7 CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")





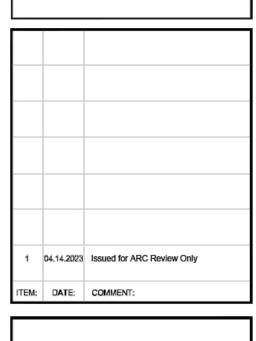


	Total		% of C	verall Ar	ea
Gross Wall Area	3270.9	sf			
otal Window Area	390.0	sf	11.9	%	
Fotal Door Area	80.0	sf	2.4	%	
Total Stone Area (net)	1267.2	sf	38.7	%	
Fotal Stucco Area (net)	1533.7	sf	46.9	%	
Area of Stone at Entry Columns		Qty	square	e footage	
Standard Ht Columns		4		293.3	S
Raised Area Columns		0		0.0	S
Total Stone Area at Building Co	lumns	U		293.3	_

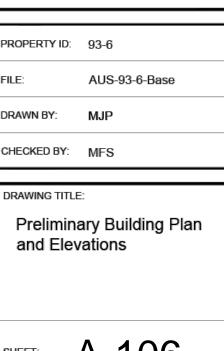
Exterior Building Material Area and Percentages



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Construction Material Notes: (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD. 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE

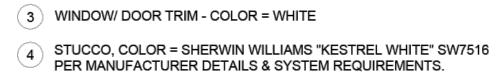
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Scale: NONE

- 4.c STUCCO FRIEZE BOARD
- 5 FASCIA AND TRIM COLOR = WHITE
- 6 STONE "SNOW WHITE" CHOPPED, CUT TOP AND BOTTOM, 4's, 6's, 8's. (ESPINOZA STONE, INC.)
- (6.a) STONE SILL AT WINDOWS
- 6.b STONE HEADER/ SOLDIER COURSE ABOVE WINDOW AND DOOR OPENINGS WHERE STONE VENEER IS FULL HEIGHT



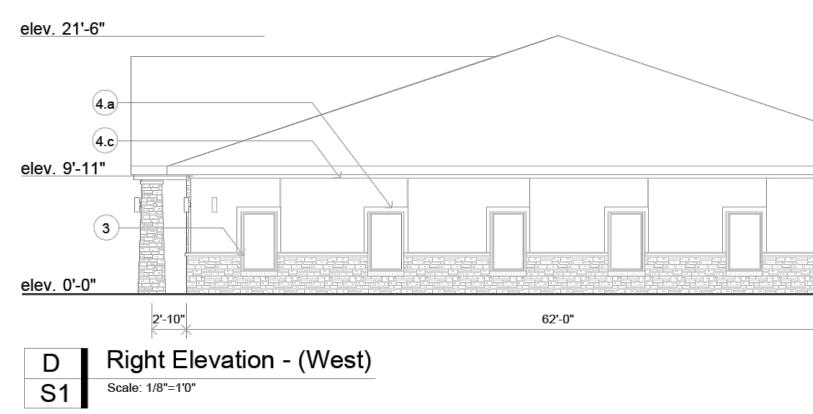


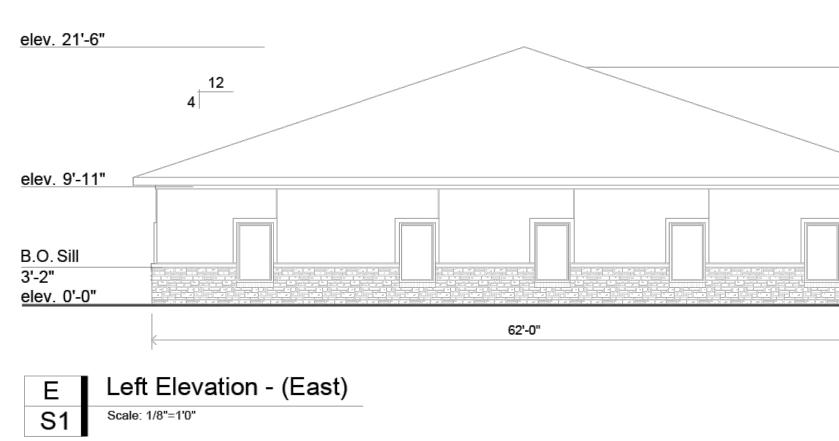


- (4.a) STUCCO WINDOW SURROUND, 4" WIDE AT SIDES AND TOP
- 4.b STUCCO SILL

- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")



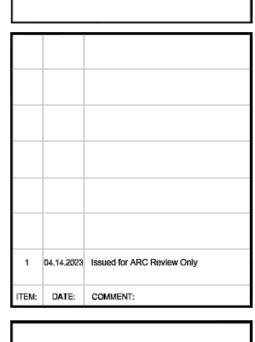




	Total		% of C	verall Ar	ea
Gross Wall Area	3244.2	2 sf			
Total Window Area	405.0	sf	12.5	%	
Total Door Area	60.0	sf	1.8	%	
Total Stone Area (net)	1296.0) sf	39.9	%	
Total Stucco Area (net)	1483.2	sf.	45.7	%	
Area of Stone at Entry Columns		Qty	square	e footage	
Standard Ht Columns		4		293.3	s
Raised Area Columns		0		0.0	S
Total Stone Area at Building	Columns			293.3	



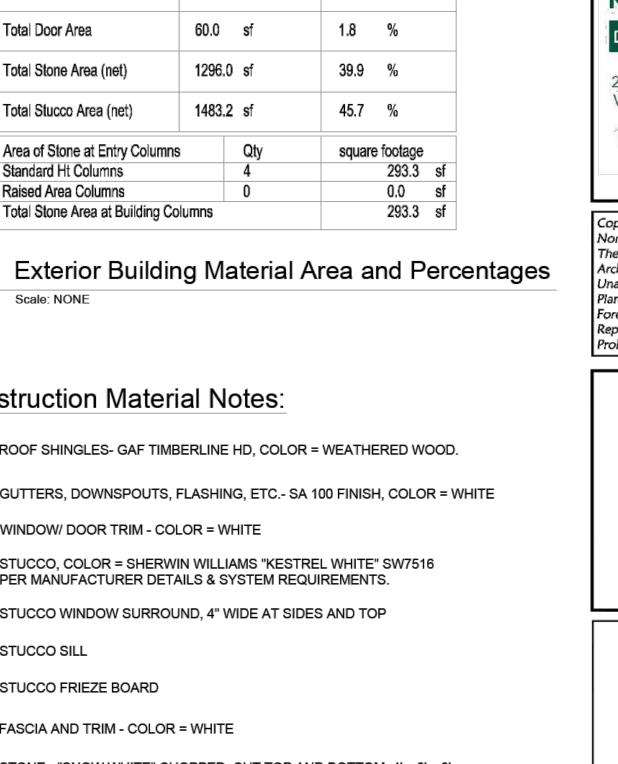
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PROPERTY ID:	93-7
FILE:	AUS-93-7-Base
DRAWN BY:	MJP
CHECKED BY:	MFS
DRAWING TITLE	2
Prelimina and Elev	ary Building Plan ations
SHEET:	A-107

Sheet 36 of 39



Building Totals- AUS-93-7, L	Total	% of	Overall Area
Gross Wall Area	3244.2 sf		
Total Window Area	405.0 sf	12.5	%
Total Door Area	60.0 sf	1.8	%
Total Stone Area (net)	1296.0 sf	39.9	%
Total Stucco Area (net)	1483.2 sf	45.7	%
Area of Stone at Entry Colun	nns Qt	y squa	re footage
Standard Ht Columns	4		293.3 s
Raised Area Columns	0		0.0 s
Total Stone Area at Building	Columns		293.3 s

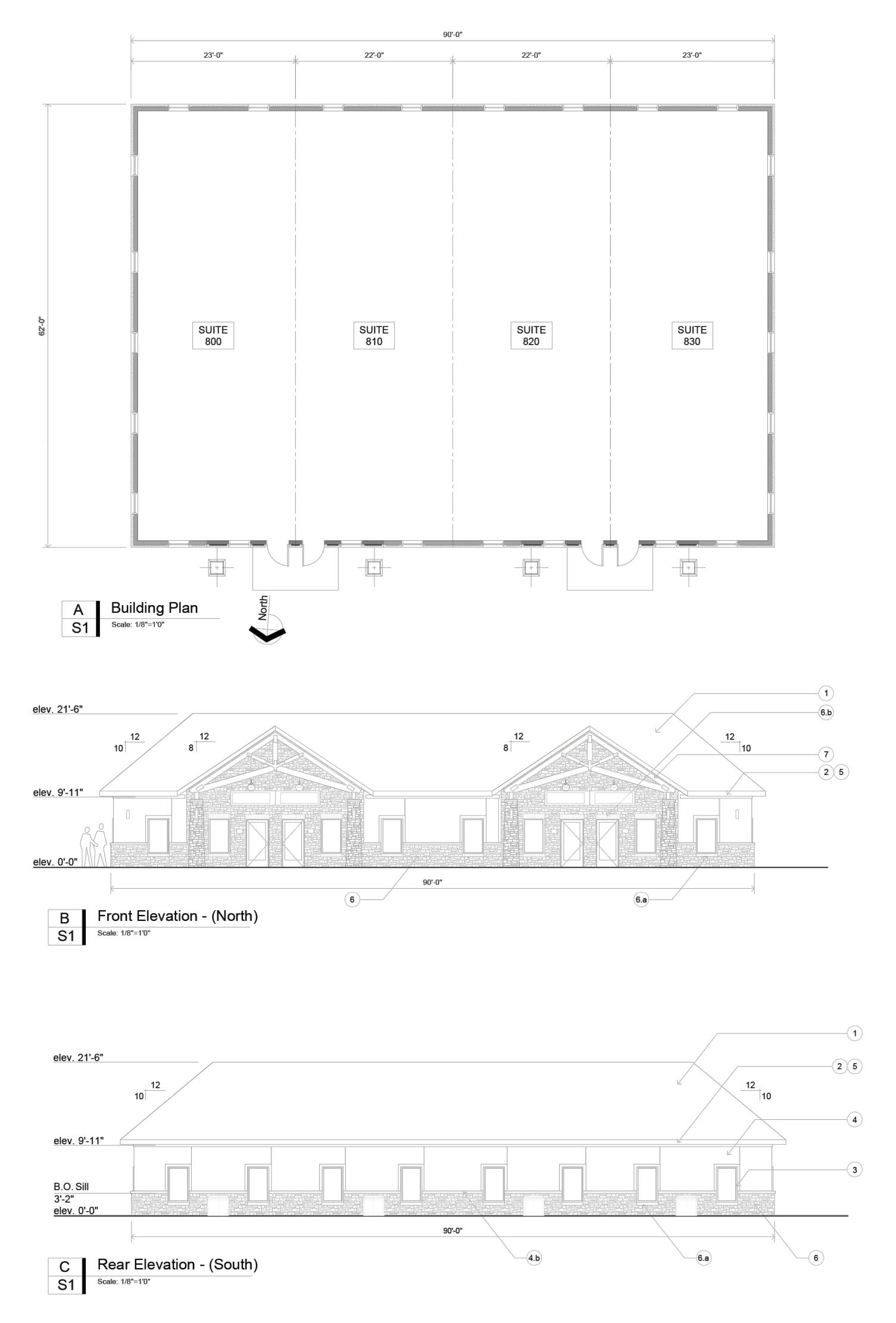
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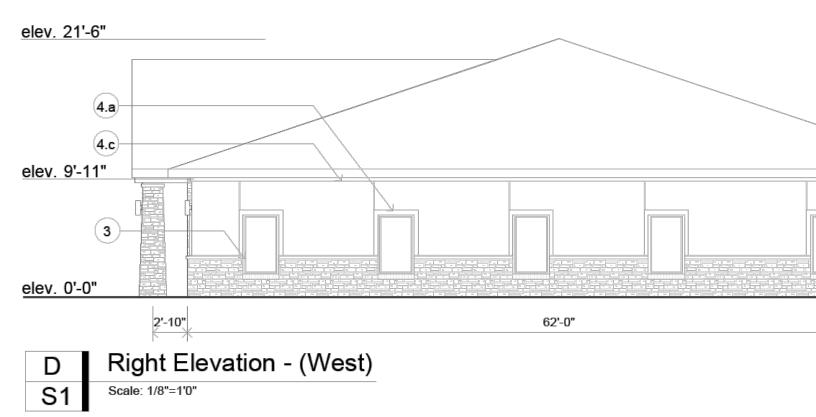
Construction Material Notes:

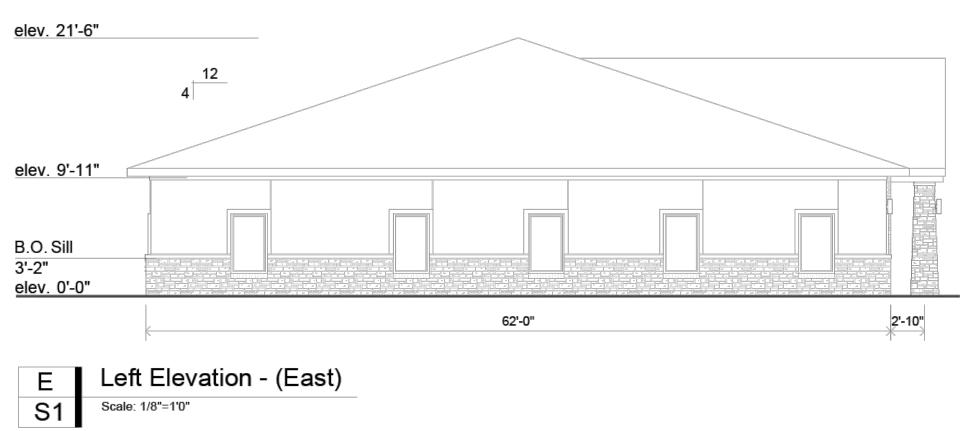
- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
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- (4.a) STUCCO WINDOW SURROUND, 4" WIDE AT SIDES AND TOP
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- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")



2'-10"





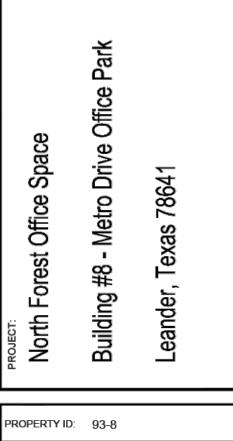


	Total		% of C	verall Ar	ea
Gross Wall Area	3244.2	sf.			
Total Window Area	390.0	sf	12.0	%	
Total Door Area	80.0	sf	2.5	%	
Total Stone Area (net)	1279.9	sf	39.5	%	
Total Stucco Area (net)	1494.3	sf	46 .1	%	
Area of Stone at Entry Columns		Qty	square	e footage	
Standard Ht Columns		4		293.3	\$
Raised Area Columns		0		0.0	S
Total Stone Area at Building (Columns	uar		293.3	



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PROPERTY ID:	93-8
FILE:	AUS-93-8-Base
DRAWN BY:	MJP
CHECKED BY:	MFS
DRAWING TITLE	2
Prelimina and Elev	ary Building Plan ations
SHEET:	A-108

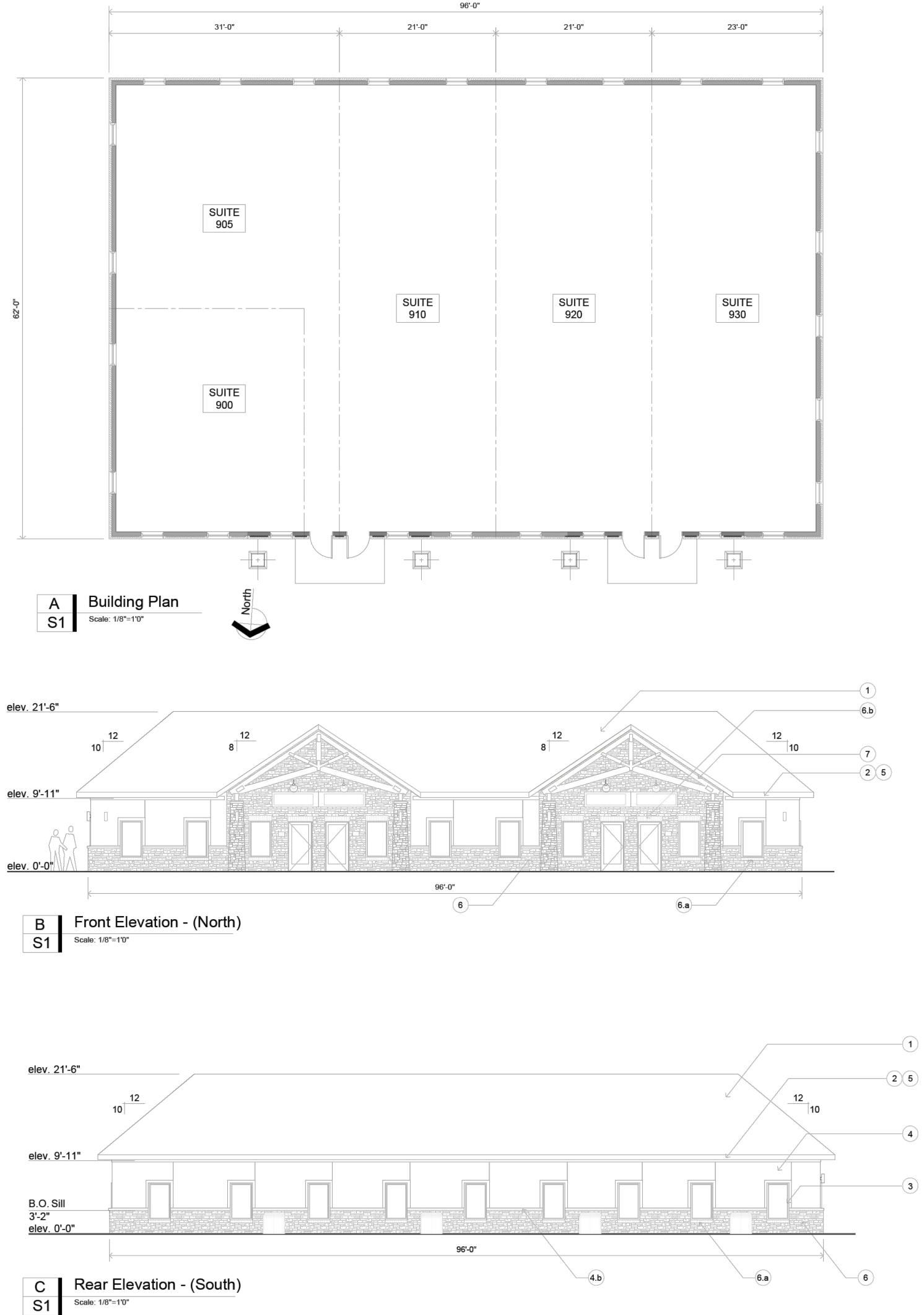
Sheet 37 of 39

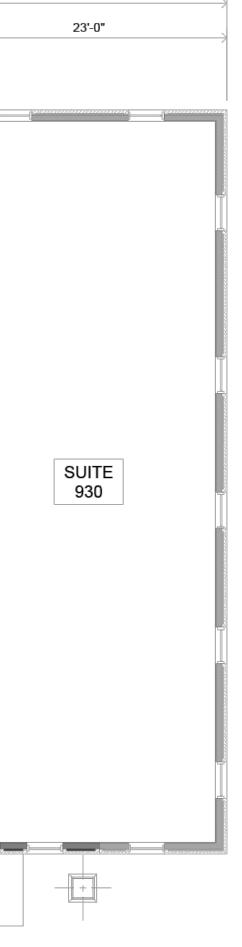
Exterior Building Material Area and Percentages 1 Scale: NONE

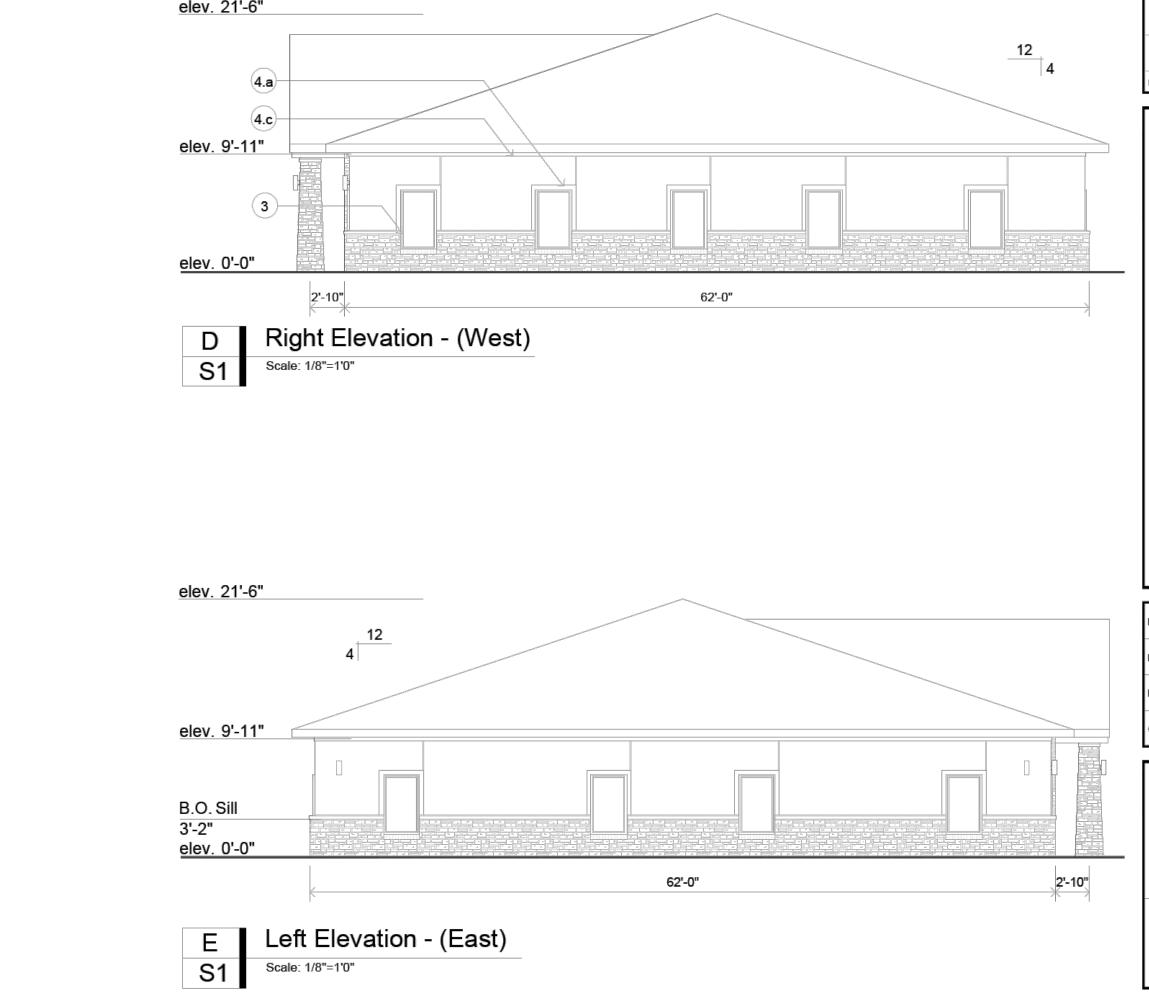
Construction Material Notes:

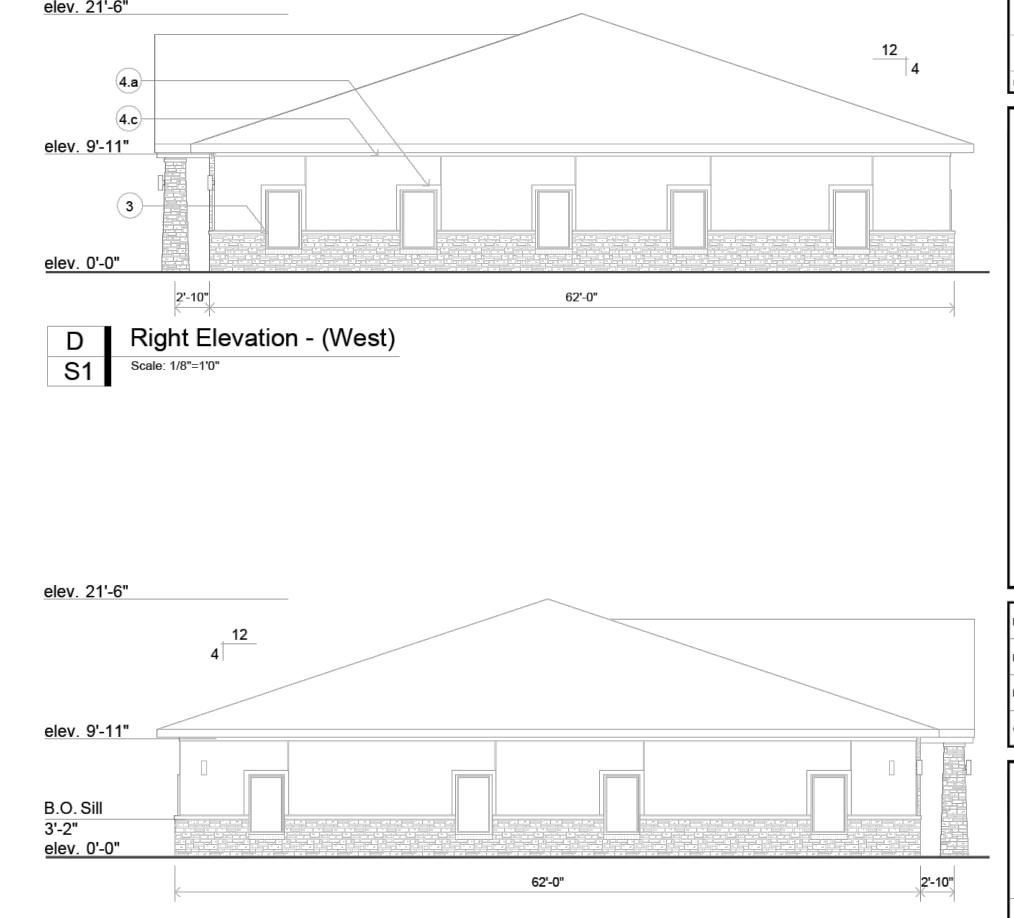
- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
- (3) WINDOW/ DOOR TRIM COLOR = WHITE
- 4 STUCCO, COLOR = SHERWIN WILLIAMS "KESTREL WHITE" SW7516 PER MANUFACTURER DETAILS & SYSTEM REQUIREMENTS.
- (4.a) STUCCO WINDOW SURROUND, 4" WIDE AT SIDES AND TOP
- 4.b STUCCO SILL
- 4.c STUCCO FRIEZE BOARD
- 5 FASCIA AND TRIM COLOR = WHITE
- 6 STONE "SNOW WHITE" CHOPPED, CUT TOP AND BOTTOM, 4's, 6's, 8's. (ESPINOZA STONE, INC.)
- (6.a) STONE SILL AT WINDOWS
- 6.b STONE HEADER/ SOLDIER COURSE ABOVE WINDOW AND DOOR OPENINGS WHERE STONE VENEER IS FULL HEIGHT
- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")











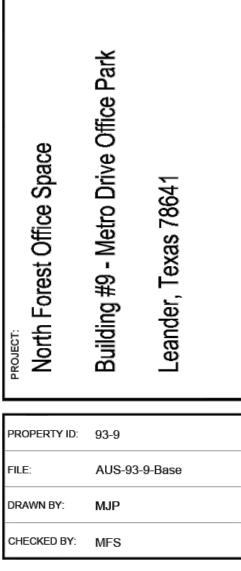
elev. 21'-6"

	Total		% of C	verall Ar	ea
Gross Wall Area	3364.2	sf 2			
Total Window Area	405.0	sf	12.0	%	
Total Door Area	80.0	sf	2.4	%	
Total Stone Area (net)	1314.0	sf	39.1	%	
Total Stucco Area (net)	1565.2	sf.	46.5	%	
Area of Stone at Entry Columns		Qty	square	e footage	
Standard Ht Columns		4		293.3	S
Raised Area Columns		0		0.0	S
Total Stone Area at Building	Columns			293.3	1



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DRAWING TITLE:

Preliminary Building Plan and Elevations

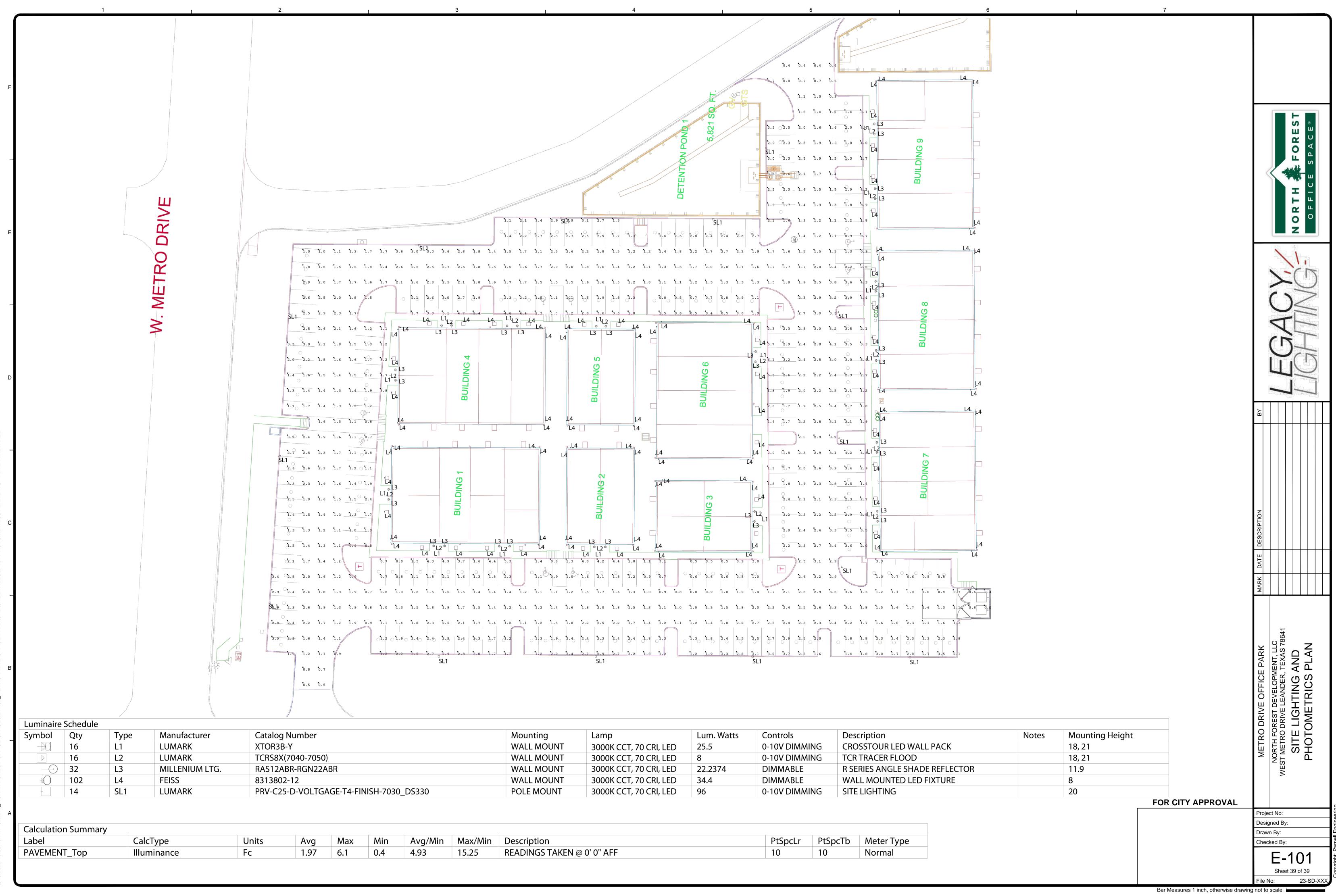


1

Exterior Building Material Area and Percentages Scale: NONE

Construction Material Notes:

- (1) ROOF SHINGLES- GAF TIMBERLINE HD, COLOR = WEATHERED WOOD.
- 2 GUTTERS, DOWNSPOUTS, FLASHING, ETC.- SA 100 FINISH, COLOR = WHITE
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- (7) CEDAR TRUSS- STAINED BROWN (RAL 8008 "OLIVE BROWN")



Mounting	Lamp	Lum. Watts	Controls	Description
WALL MOUNT	3000K CCT, 70 CRI, LED	25.5	0-10V DIMMING	CROSSTOUR LED WALL
WALL MOUNT	3000K CCT, 70 CRI, LED	8	0-10V DIMMING	TCR TRACER FLOOD
WALL MOUNT	3000K CCT, 70 CRI, LED	22.2374	DIMMABLE	R SERIES ANGLE SHADE
WALL MOUNT	3000K CCT, 70 CRI, LED	34.4	DIMMABLE	WALL MOUNTED LED F
POLE MOUNT	3000K CCT, 70 CRI, LED	96	0-10V DIMMING	SITE LIGHTING

in	Max/Min	Description	PtSpcLr	PtSpcTb	Meter Type
	15.25	READINGS TAKEN @ 0' 0" AFF	10	10	Normal

ATTACHMENT N

INSPECTION, MAINTENANCE, REPAIR AND RETROFIT PLAN



Contributing Zone Application (TCEQ-10257)

Attachment N Inspection, Maintenance, Repair, and Retrofit Plan

- 1. Jellyfish cartridges are passively backwashed automatically after each storm event, which removes accumulated sediment from the membranes and significantly extends the service life of the cartridges and the maintenance interval.
- 2. If required, the cartridges can be easily manually backwashed without removing the cartridges. Additionally, the lightweight cartridges can be removed by hand and externally rinsed, and rinsed cartridges then re-installed. These simple maintenance options allow for cartridge regeneration, thereby minimizing cartridge replacement costs and life-cycle treatment costs while ensuring long-term treatment performance.
- 3. Regular inspection and maintenance are proven, cost-effective ways to maximize water resource protection for all stormwater pollution control practices and are required to insure proper functioning of the Jellyfish® Filter.
- 4. Inspection of the Jellyfish® Filter is performed from the surface, while proper maintenance requires a combination of procedures conducted from the surface and with worker entry into the structure.
- 5. Please refer to the following information and guidelines before conducting inspection and maintenance activities.
 - a. Post-construction inspections is required prior to putting the Jellyfish Filter into service.
 - b. Routine inspections are recommended quarterly during the first year of operation to accurately assess the sediment and floatable pollutant accumulation, and to ensure that the automatic backwash feature is functioning properly.
 - c. Inspection frequency in subsequent years is based on the maintenance plan developed in the first year but must occur annually at a minimum.
 - d. Inspections should also be performed immediately after oil, fuel or other chemical spill.
 - e. The unit must be cleared Annually.
 - i. This includes removal and appropriate disposal of all water, sediment, oil and grease and debris that has accumulated within the unit.
 - f. Jellyfish Filter is to be inspected and maintained by professional vacuum cleaning service providers with experience in the maintenance of underground tanks, sewers and catch basins.
 - g. Filter cartridges should be tested for an adequate flow rate, every 12 months and cleaned and re-commissioned, or replaced if necessary.
 - h. A manual backflush must be performed on a single draindown cartridge using Jellyfish Cartridge Backflush Pipe (described in the Jellyfish Filter Owner's Manual). If the time required to drain 14 gallons of backflush water from the Backflush Pipe (from top of pipe to the top of the open flapper valve) exceeds 15 seconds, it is recommended to perform a manual backflush on each of the cartridges. After the manual backflush, the draindown test should be repeated on a single cartridge to determine if the cartridge can drain 14 gallons of water in 15 seconds. If the cartridge still does not achieve the design flow rate, it must be replaced.
 - i. The unit should be cleaned out immediately after an oil, fuel or chemical spill.
 - j. This cartridge cleaning procedure is performed by removing the cartridge from the cartridge deck and externally rinsing the filtration tentacles using a low-pressure water sprayer, as described in the Jellyfish® Filter Owner's Manual.
 - k. If this procedure is performed within the structure, the cartridge or individual filtration tentacles should be rinsed while safely suspended over the maintenance access wall opening in the cartridge deck, such that rinsate flows into the lower chamber of the Jellyfish® Filter.
 - I. If the rinsing procedure is performed outside the structure, the cartridge or individual filtration tentacles should be rinsed in a suitable basin such as a plastic barrel or tub, and rinsate subsequently poured into the maintenance access wall opening in the cartridge deck. Sediment is subsequently removed from the lower chamber by standard vacuum service.



- 6. During construction, the SWPPP will be followed, and accurate records of inspections will take place.
- 7. Additional maintenance guidelines along with inspection maintenance log can be found on *Exhibit A* of this Inspection, Maintenance, Repair and Retrofit Plan.

North Forest Office Space. by signing this document, is certifying that it will be responsible for ensuring that the water quality controls required to meet the standards of the Texas Commission on Environmental Quality (TCEQ) are inspected as necessary, given the appropriate maintenance, repaired as necessary and will be retrofit if any site revisions are proposed. The items above describe the measures which may be taken to provide these requirements.

Signature CAA

Printed Name and Position

202 Date

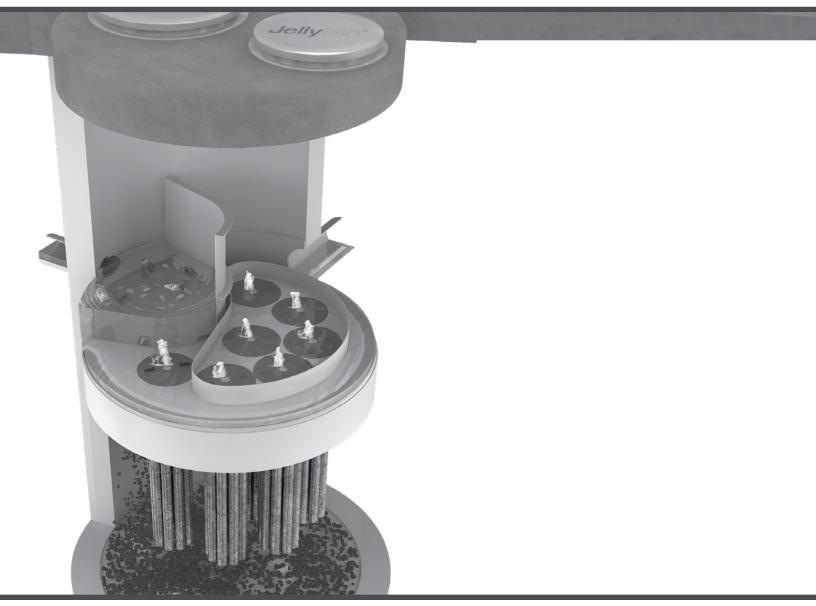
Exhibit:

A. Jellyfish Filter Inspection and Maintenance Guide

North Forest Office Space | Leander, Williamson County, TX | TCEQ | CZP Application - Attachment N



Jellyfish[®] Filter Maintenance Guide







JELLYFISH[®] FILTER INSPECTION & MAINTENANCE GUIDE

Jellyfish units are often just one of many structures in a more comprehensive stormwater drainage and treatment system.

In order for maintenance of the Jellyfish filter to be successful, it is imperative that all other components be properly maintained. The maintenance and repair of upstream facilities should be carried out prior to Jellyfish maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.

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Cartridge Assembly & Cleaning	5
Inspection Process	7

1.0 Inspection and Maintenance Overview

The primary purpose of the Jellyfish® Filter is to capture and remove pollutants from stormwater runoff. As with any filtration system, these pollutants must be removed to maintain the filter's maximum treatment performance. Regular inspection and maintenance are required to insure proper functioning of the system.

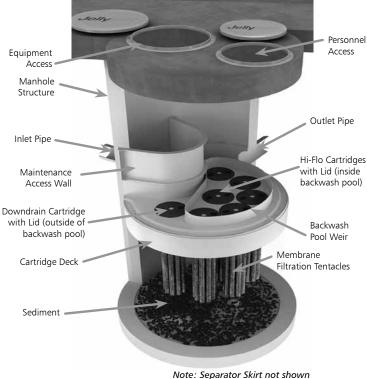
Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm events.

Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present
- Observe if there is any physical damage to the deck or cartridge lids
- Observe the amount of debris in the Maintenance
 Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
 - Removal of collected sediments
 - Rinsing and re-installing the filter cartridges
- Replace filter cartridge tentacles, as needed



2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; or per the approved project stormwater quality documents (if applicable), whichever is more frequent.

- 1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.
- 2. Inspection frequency in subsequent years is based on the inspection and maintenance plan developed in the first year of operation. Minimum frequency should be once per year.
- 3. Inspection is recommended after each major storm event.
- 4. Inspection is required immediately after an upstream oil, fuel or other chemical spill.

3.0 Inspection Procedure

The following procedure is recommended when performing inspections:

- 1. Provide traffic control measures as necessary.
- 2. Inspect the MAW or inlet bay for floatable pollutants such as trash, debris, and oil sheen.
- 3. Measure oil and sediment depth in several locations, by lowering a sediment probe until contact is made with the floor of the structure. Record sediment depth, and presences of any oil layers.
- 4. Inspect cartridge lids. Missing or damaged cartridge lids to be replaced.
- 5. Inspect the MAW (where appropriate), cartridge deck and receptacles, and backwash pool weir, for damaged or broken components.

3.1 Dry weather inspections

- Inspect the cartridge deck for standing water, and/or sediment on the deck.
- No standing water under normal operating conditions.
- Standing water inside the backwash pool, but not outside the backwash pool indicates, that the filter cartridges need to be rinsed.



Inspection Utilizing Sediment Probe

- Standing water outside the backwash pool is not anticipated and may indicate a backwater condition caused by high water elevation in the receiving water body, or possibly a blockage in downstream infrastructure.
- Any appreciable sediment (≥1/16") accumulated on the deck surface should be removed.

3.2 Wet weather inspections

- Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the MAW or inlet bay.
- Less than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool).
- Greater than 6 inches, flow should be exiting the cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the following:

- 1. Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
- 2. Floatable trash, debris, and oil removal.
- 3. Deck cleaned and free from sediment.
- 4. Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
- Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
- 6. Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent inspection.
- The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill.
 Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

- 1. Provide traffic control measures as necessary.
- 2. Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures. *Caution: Dropping objects onto the cartridge deck may cause damage*.

- 3. Perform Inspection Procedure prior to maintenance activity.
- 4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
- 5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

5.1 Filter Cartridge Removal

- 1. Remove a cartridge lid.
- 2. Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. *Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and 125 lbs.*
- 3. Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

5.2 Filter Cartridge Rinsing

1. Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.



- Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
- 3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. *Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.*

- 4. Collected rinse water is typically removed by vacuum hose.
- 5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

5.3 Sediment and Flotables Extraction

- 1. Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
- 2. Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



Vacuuming Sump Through MAW

- 3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
- 4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or inlet bay.
- 5. Remove the sediment from the bottom of the unit through the MAW or inlet bay opening.



Vacuuming Sump Through MAW

6. For larger diameter Jellyfish Filter manholes (≥8-ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the receptacle.

5.4 Filter Cartridge Reinstallation and Replacement

- Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and debris.
- 2. Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. *Caution: Do not force the cartridge downward; damage may occur.*
- 3. Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
- 4. If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

5.5 Chemical Spills

Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response agency and contact Contech.

5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Jellyfish Filter Components & Filter Cartridge Assembly and Installation

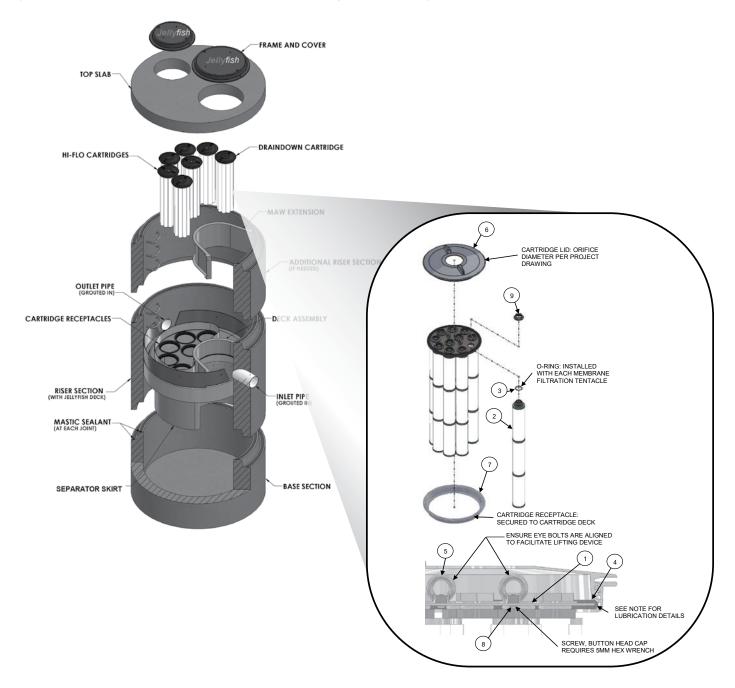


TABLE 1: BOM

ITEM NO.	DESCRIPTION			
1	JF HEAD PLATE			
2	JF TENTACLE			
3	JF O-RING			
	JF HEAD PLATE			
4	GASKET			
5	JF CARTRIDGE EYELET			
6	JF 14IN COVER			
7	JF RECEPTACLE			
	BUTTON HEAD CAP			
8	SCREW M6X14MM SS			
9	JF CARTRIDGE NUT			

TABLE 2: APPROVED GASKET LUBRICANTS

PART NO.	MFR	DESCRIPTION
78713	LA-CO	LUBRI-JOINT
40501	HERCULES	DUCK BUTTER
30600	OATEY	PIPE LUBRICANT
PSLUBXL1Q	PROSELECT	PIPE JOINT LUBRICANT

NOTES:

Head Plate Gasket Installation:

Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lide (ITem 6). Follow Lubricant manufacturer's instructions.

Lid Assembly:

Rotate Cartridge Lid counter-clockwise until both male threads drop down and properly seat. Then rotate Cartridge Lid clock-wise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

Jellyfish Filter Inspection and Maintenance Log

Owner:			Jellyfish Model No:			
Location:			GPS Coordinates:			
Land Use:	Commercial:		Industrial:		Service Station:	
Roadway/Highway:			Airport:		Residential:	

Data/Tima:			
Date/Time:			
Inspector:			
Maintenance Contractor:			
Visible Oil Present: (Y/N)			
Oil Quantity Removed:			
Floatable Debris Present: (Y/N)			
Floatable Debris Removed: (Y/N)			
Water Depth in Backwash Pool			
Draindown Cartridges externally rinsed and recommissioned: (Y/N)			
New tentacles put on Draindown Cartridges: (Y/N)			
Hi-Flo Cartridges externally rinsed and recommissioned: (Y/N)			
New tentacles put on Hi-Flo Cartridges: (Y/N)			
Sediment Depth Measured: (Y/N)			
Sediment Depth (inches or mm):			
Sediment Removed: (Y/N)			
Cartridge Lids intact: (Y/N)			
Observed Damage:			
Comments:			





800.338.1122 www.ContechES.com

- Drawings and specifications are available at www.conteches.com/jellyfish.
- Site-specific design support is available from Contech Engineered Solutions.
- Find a Certified Maintenance Provider at www.conteches.com/ccmp

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Support

ATTACHMENT O

PILOT-SCALE FIELD TESTING PLAN

NOT APPLICABLE



Contributing Zone Application (TCEQ-10257)

Attachment O Pilot Scale Field Testing

Not Applicable.

ATTACHMENT P

MEASURES FOR MINIMIZING

SURFACE STREAM CONTAMINATION



Contributing Zone Application (TCEQ-10257)

Attachment P Measures for Minimizing Surface Stream Contamination

During construction this project will use silt fencing and inlet protection to prevent contamination to the existing streams. Once the site is constructed and developed, the Jellyfish Filter will be the permanent BMP and storm water will have its pollutant loading reduced prior to being released into the Brushy Creek watershed. The detention ponds will have an outlet structure designed to prevent erosion and decrease flows and velocities of the discharge water. Additionally, the proposed Jellyfish Filter will minimize surface stream contamination by removing at least 86% of potential pollutants. An "Erosion and Sedimentation Control Plan" has been included in plan set. This plan outlines temporary BMPs to be used throughout the construction process which will ensure Surface Stream Contamination is minimized.

SECTION 3

TEMPORARY STORMWATER SECTION (TCEQ-0602)

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: Devon Vo

Date: <u>May 26, 2023</u>

Signature of Customer/Agent:

Regulated Entity Name: Metro Drive Office Park

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: <u>Brushy Creek</u>

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. X 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. \square 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



Temporary Stormwater Section (TCEQ-0602)

Attachment A Spill Response Actions

In the event of accidental spills of hazardous materials or hydrocarbons, the contractor will be required to maintain a stockpile of sand material in the construction staging area. This sand material will be used to provide a dike to contain large spills and to provide an absorbent material that can be disposed of off the Edwards Aquifer Recharge, Contributing and Transition Zones during the cleanup process. The contractor will be required to contact the owner, who will notify the Texas Commission on Environmental Quality (TCEQ) in the event of a spill. It is required that all contaminated soils be removed from the project site and disposed of in accordance with applicable regulations off of the Edwards Aquifer Recharge, Contributing and Transition Zones. Below are measure outlined by the TCEQ for spill prevention and response.

Education

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

General Measures

- 1. To the extent that the work can be accomplished safely, spills of oil, petroleum products, substances listed under 40 CFR parts 110,117, and 302, and sanitary and septic wastes should be contained and cleaned up immediately.
- 2. Store hazardous materials and wastes in covered containers and protect from vandalism.
- 3. Place a stockpile of spill cleanup materials where it will be readily accessible.
- 4. Train employees in spill prevention and cleanup.
- 5. Designate responsible individuals to oversee and enforce control measures.
- 6. Spills should be covered and protected from storm water run-on during rainfall to the extent that it doesn't compromise cleanup activities.
- 7. Do not bury or wash spills with water.
- 8. Store and dispose of used clean up materials, contaminated materials, and recovered spill material that is no longer suitable for the intended purpose in conformance with the provisions in applicable BMPs.
- 9. Do not allow water used for cleaning and decontamination to enter storm drains or watercourses. Collect and dispose of contaminated water in accordance with applicable regulations.
- 10. Contain water overflow or minor water spillage and do not allow it to discharge into drainage facilities or watercourses.
- 11. Place Material Safety Data Sheets (MSDS), as well as proper storage, cleanup, and spill reporting instructions for hazardous materials stored or used on the project site in an open, conspicuous, and accessible location.



12. Keep waste storage areas clean, well-organized, and equipped with ample cleanup supplies as appropriate for the materials being stored. Perimeter controls, containment structures, covers, and liners should be repaired or replaced as needed to maintain proper function.

Cleanup

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

Minor Spills

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

Semi-Significant Spills

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

Spills should be cleaned up immediately:

- 1. Contain spread of the spill.
- 2. Notify the project foreman immediately.
- 3. If the spill occurs on paved or impermeable surfaces, clean up using "dry" methods (absorbent materials, cat litter and/or rags). Contain the spill by encircling with absorbent materials and do not let the spill spread widely.
- 4. If the spill occurs in dirt areas, immediately contain the spill by constructing an earthen dike. Dig up and properly dispose of contaminated soil.
- 5. If the spill occurs during rain, cover spill with tarps or other material to prevent contaminating runoff.

Significant/Hazardous Spills

For significant or hazardous spills that are in reportable quantities:

- 1. Notify the TCEQ by telephone as soon as possible and within 24 hours at 512-339-2929 (Austin) or 210-490-3096 (San Antonio) between 8 AM and 5 PM. After hours, contact the Environmental Release Hotline at 1-800-832-8224. It is the contractor's responsibility to have all emergency phone numbers at the construction site.
- 2. For spills of federal reportable quantities, in conformance with the requirements in 40 CFR parts 110,119, and 302, the contractor should notify the National Response Center at 1-800-424-8802.
- 3. Notification should first be made by telephone and followed up with a written report.
- 4. The services of a spills contractor or a Hazmat team should be obtained immediately.



Construction personnel should not attempt to clean up until the appropriate and qualified staffs have arrived at the job site.

- 5. Other agencies which may need to be consulted including, but are not limited to, the City Police Department, County Sheriff Office, Fire Departments, etc.
- 6. More information on spill rules and appropriate responses is available on the TCEQ website at: http://www.tnrcc.state.tx.us/enforcement/emergency_response.html

Vehicle and Equipment Maintenance

- 1. If maintenance must occur on-site, use a designated area and a secondary containment, located away from drainage courses, to prevent the run-on of storm water and the runoff of spills.
- 2. Regularly inspect onsite vehicles and equipment for leaks and repair immediately
- 3. Check incoming vehicles and equipment (including delivery trucks, and employee and subcontractor vehicles) for leaking oil and fluids. Do not allow leaking vehicles or equipment onsite.
- 4. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids.
- 5. Place drip pans or absorbent materials under paving equipment when not in use.
- 6. Use absorbent materials on small spills rather than hosing down or burying the spill. Remove the absorbent materials promptly and dispose of properly.
- 7. Promptly transfer used fluids to the proper waste or recycling drums. Don't leave full drip pans or other open containers lying around.
- 8. Oil filters disposed of in trashcans or dumpsters can leak oil and pollute storm water. Place the oil filter in a funnel over a waste oil-recycling drum to drain excess oil before disposal. Oil filters can also be recycled. Ask the oil supplier or recycler about recycling oil filters.
- 9. Store cracked batteries in a non-leaking secondary container. Do this with all cracked batteries even if you think all the acid has drained out. If you drop a battery, treat it as if it is cracked. Put it into the containment area until you are sure it is not leaking.

Vehicle and Equipment Fueling

- 1. If fueling must occur on site, use designated areas, located away from drainage courses, to prevent the run-on of storm water and the runoff of spills.
- 2. Discourage "topping off" of fuel tanks.
- 3. Always use secondary containment, such as a drain pan, when fueling to catch spills/ leaks.

ATTACHMENT B

POTENTIAL SOURCES OF CONTAMINATION





Attachment B Potential Sources of Contamination

Potential Sources of Pollutants during Construction

- 1. Soil erosion due to construction.
- 2. Oil, grease, fuel and hydraulic fluid contamination from construction equipment and vehicle drippings.
- 3. Miscellaneous trash and debris from construction and material wrappings.
- 4. Portable toilet spills.
- 5. Concrete and concrete products
- 6. Asphaltic products
- 7. Fertilizers
- 8. Paints
- 9. Lumber

Potential Sources of Pollutants after Construction

- 1. Traffic related pollutants from cars, roads and driveways.
- 2. Improper disposal of trash.
- 3. Pesticides, herbicides and fertilizers.

Please refer to **Attachment A: Spill Response Actions** of this report for more information and details for preventative and responsive actions to treat potential sources of contamination.

ATTACHMENT C

SEQUENCE OF MAJOR ACTIVITIES



Attachment C Sequence of Major Activities

The construction activities for the of <u>Metro Drive Office Park</u> project involves general site preparation, which consists of silt fencing, a construction staging area, a concrete truck washout pit, a temporary construction entrance, clearing and grubbing of vegetation, excavation and grading within the entire acreage of the project site. See the attached Site Plan for details of sequencing and installation of temporary measures. All disturbed soil areas shall be re-vegetated.

Major Construction Activities and Sequencing

The major construction activities for this project will include and be sequenced as follows:

- 1. Clear, grub, site preparation and installing silt fencing, a construction staging area, a concrete truck washout pit, and a temporary construction entrance. *(Estimated area to be disturbed ±3.84 Ac.)*
- 2. Rough Grade including ponds. (Estimated area to be disturbed ±3.84 Ac.)
- 3. Installation of utility service and connection and storm sewer systems. (Estimated area to be disturbed ±0.20 Ac.)
- 4. Base and paving application. (Estimated area to be disturbed ±2.99 Ac.)
- 5. Restoration of site with vegetation. (Estimated area to be disturbed ±1.00 Ac.)

Protective fences shall be put in place according to the City of Leander standards for tree protection prior to start of any site preparation work. Fences shall be maintained throughout all phases of the construction project. During the installation of utilities and base paving application, the contractor shall use dust control measures such as irrigator trucks and mulching. Contractor will clean up spoils that migrate onto the roads a minimum once daily. The contractor is responsible for implementing and maintaining the storm water pollution prevention plan.

ATTACHMENT D

TEMPORARY BEST MANAGEMENT PRATICES AND MEASURES



Attachment D Temporary Best Management Practices and Measures

The following Temporary Best Management Practices (BMP) and measures will be utilized during construction and remain in place until final site stabilization:

- 1. Rough cut the detention ponds, which will be used as sediment basins. Inlet protection will be installed to stop the pollution of stormwater runoff by preventing soil and debris entering storm drain inlets.
- 2. Silt fencing, a construction staging area, a concrete truck washout pit, and a temporary construction entrance / exit will be used in accordance with the latest edition TCEQ Technical Guidance Manual details and criteria, to prevent pollution of surface water and groundwater that originates both up-gradient and on-site.
- 3. Silt fences, a construction entrance / exit and a concrete truck washout pit shall be in place before the first phase of construction for the commercial site is to begin. The temporary construction entrance / exit, construction staging area and concrete wash out pit will prevent sediments from flowing into public right-of-ways. The fencing will be installed downstream of cut/fill areas. The locations of the silt fence were based on the criteria to limit the drainage area of disturbed soil to ¼ acres per 100 linear feet of fencing.
- 4. Silt fences will intercept any pollutants from entering the surfaces waters of <u>Brushy</u> <u>Creek</u>. The locations of the silt fences were based on the criteria to limit the drainage area of disturbed soil to less than 5 acres. The placement of the temporary measures was based on the layout of streets and drains.
- 5. The BMP design for the site has been planned to prevent construction runoff and pollutants from directly entering surface streams, sensitive features or the aquifer. <u>No</u> <u>features on site.</u>

ATTACHMENT E

REQUEST TO TEMPORARILY SEAL A FEATURE

NOT APPLICABLE



Attachment E Request to Temporarily Seal a Feature

This section/attachment does not apply to this submittal. There will be no temporary sealing of sensitive features on the site.

ATTACHMENT F

STRUCTURAL PRACTICES



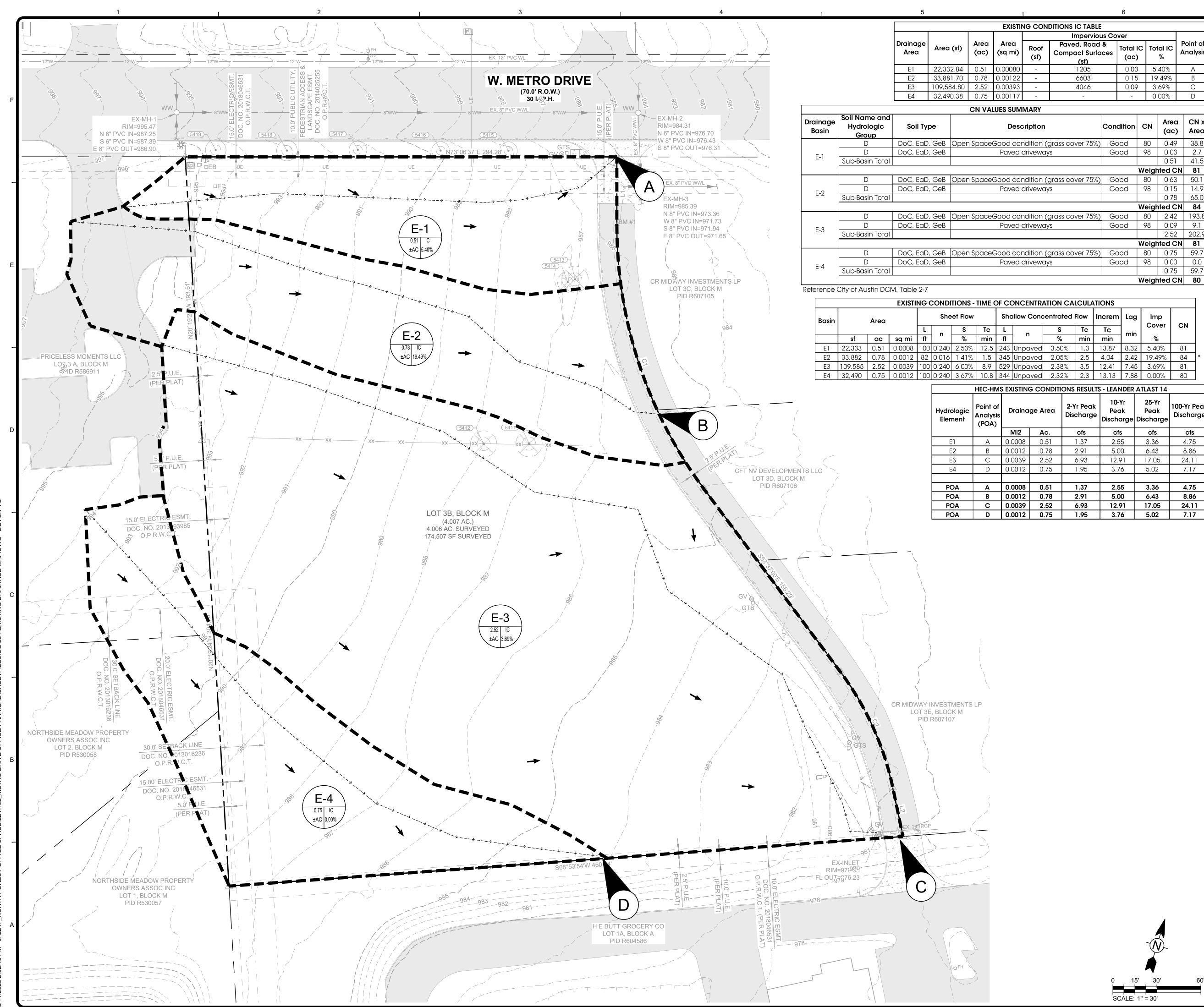
Attachment F Structural Practice

The following structural measures will be installed prior to constructions of the project and in accordance with the latest edition of "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices" (TCEQ RG-348) and its details and criteria.

- 1. Installation of silt fences along the boundary of the road right-of-ways and limits of construction.
- 2. Installation of a stabilized construction entrance/ exit to minimize the tracking of mud and debris offsite by vehicles.
- 3. Installation of construction staging areas and concrete washout pit.
- 4. Installation of rock berms (if applicable).

ATTACHMENT G

DRAINAGE AREA MAP

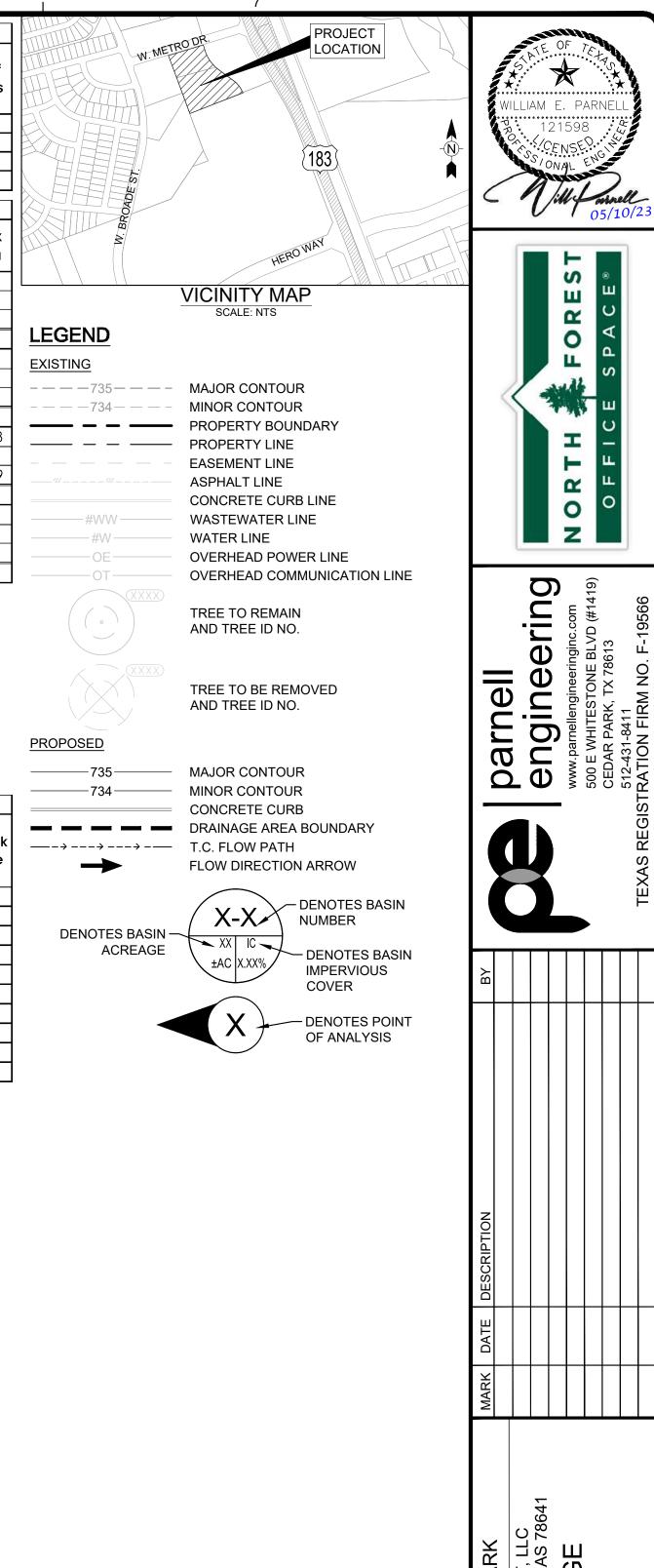


DITIONS IC TABLE						
Impervious Co	ver					
Paved, Road & Compact Surfaces (sf)	Point of Analysis					
1205	0.03	5.40%	А			
6603	0.15	19.49%	В			
4046	0.09	3.69%	С			
_	-	0.00%	D			

Condition	CN	Area (ac)	CN x Area
Good	80	0.49	38.8
Good	98	0.03	2.7
		0.51	41.5
	Weigh	nted CN	81
Good	80	0.63	50.1
Good	98	0.15	14.9
		0.78	65.0
	Weigh	nted CN	84
Good	80	2.42	193.8
Good	98	0.09	9.1
		2.52	202.9
	Weigh	nted CN	81
Good	80	0.75	59.7
Good	98	0.00	0.0
		0.75	59.7
	Weigh	nted CN	80
	Good Good Good Good Good Good Good	Good 80 Good 98 Weigh Good 80 Good 98 Good 98 Good 98 Good 98 Good 98 Good 98 Good 80 Good 98 Good 98 Good 98 Good 98 Good 98 Good 98	Condition CN (ac) Good 80 0.49 Good 98 0.03 Good 98 0.03 Good 98 0.51 Weighted CN 0 60 Good 80 0.63 Good 98 0.15 Good 98 0.78 Weighted CN 0.78 Good 80 2.42 Good 98 0.09 Good 98 0.09 Good 80 2.42 Good 80 0.75 Good 98 0.09 Good 80 0.75 Good 80 0.75

ION CALCULATIONS									
entrated I	Flow	Increm	Lag	Imp Cover					
S	Тс	Тс	min	Cover	CN				
%	min	min	111111	%					
3.50%	1.3	13.87	8.32	5.40%	81				
2.05%	2.5	4.04	2.42	19.49%	84	*			
2.38%	3.5	12.41	7.45	3.69%	81				
2.32%	2.3	13.13	7.88	0.00%	80				

HEC-HMS EXISTING CONDITIONS RESULTS - LEANDER ATLAST 14 10-Yr 25-Yr 2-Yr Peak 100-Yr Peak Peak Peak Discharge Discharge Discharge cfs cfs cfs cfs 1.37 2.55 4.75 3.36 2.91 5.00 6.43 8.86 6.93 12.91 17.05 24.11 1.95 3.76 5.02 7.17 1.37 2.55 3.36 4.75 2.91 5.00 6.43 8.86



D. VO Drawn By: A. ALVAREZ Checked By: W. PARNEL CG-20²

TING D AREA

Project No: Designed By:

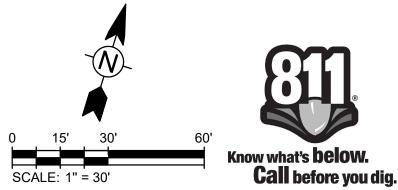
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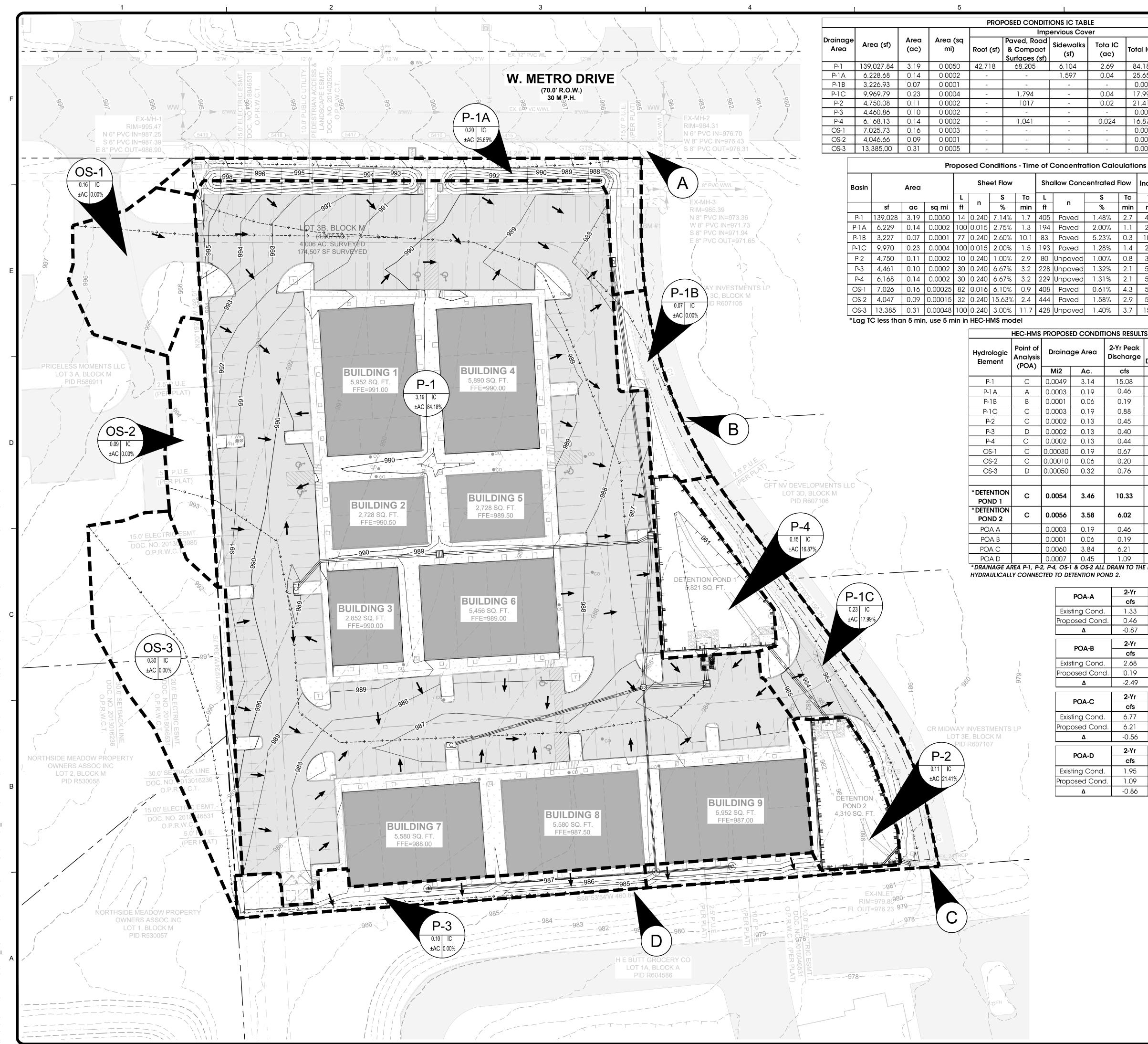
Sheet 13 of 39

23-SD-XXX



Bar Measures 1 inch, otherwise drawing not to scale





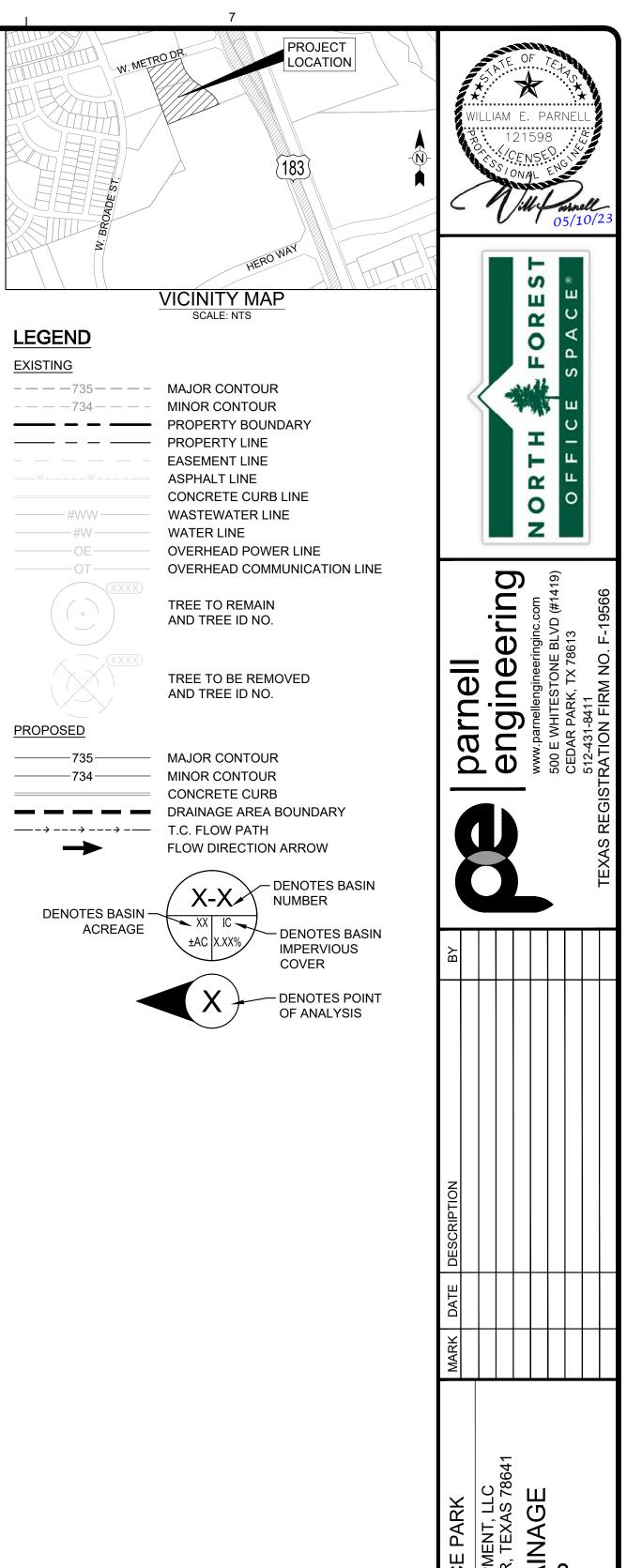
er			
Tota IC (ac) Total IC %		Discharge Location	Point of Analysis
2.69	84.18%	Detention Pond 1	С
0.04	25.65%	-	А
-	0.00%	-	В
0.04	17.99%	-	С
0.02	21.41%	Detention Pond 2	С
-	0.00%	-	D
0.024	16.87%	Detention Pond 1	С
-	0.00%	Detention Pond 1	С
-	0.00%	Detention Pond 1	С
-	0.00%	-	D

ntrated Flow		ntrated Flow		Increm	Lag	Imp Cover	CN	
S Tc		Тс		oover	CN			
%	min	min	min	%				
1.48%	2.7	4.44	2.67	84.18%	81	*		
2.00%	1.1	2.44	1.47	25.65%	81	*		
5.23%	0.3	10.36	6.21	0.00%	81			
1.28%	1.4	2.89	1.74	17.99%	81	*		
1.00%	0.8	3.70	2.22	21.41%	81	*		
1.32%	2.1	5.30	3.18	0.00%	81	*		
1.31%	2.1	5.31	3.19	16.87%	81	*		
0.61%	4.3	5.13	3.08	0.00%	84	*		
1.58%	2.9	5.33	3.20	0.00%	81	*		
1.40%	3.7	15.44	9.26	0.00%	80			

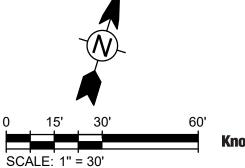
NDIT	IONS RESULT	S - LEANDE	<u> ≀ ATLAST 14</u>	,
∋a	2-Yr Peak Discharge	10-Yr Peak Discharge	25-Yr Peak Discharge	100-Yr Peak Discharge
•	cfs	cfs	cfs	cfs
4	15.08	23.23	28.86	38.55
9	0.46	0.81	1.04	1.45
16	0.19	0.35	0.46	0.66
9	0.88	1.58	2.06	2.88
3	0.45	0.80	1.04	1.45
3	0.40	0.75	1.00	1.41
3 3 9	0.44	0.79	1.03	1.44
9	0.67	1.20	1.57	2.18
16	0.20	0.38	0.50	0.71
2	0.76	1.47	1.96	2.80
6	10.33	16.94	20.75	25.86
8	6.02	10.78	15.79	23.07
9	0.46	0.81	1.04	1.45
16	0.19	0.35	0.46	0.66
4	6.21	11.14	16.36	23.93
.5	1.09	2.09	2.78	3.97

1.09 | 2.09 2.78 * DRAINAGE AREA P-1, P-2, P-4, OS-1 & OS-2 ALL DRAIN TO THE DETENTION POND 1 WHICH IS

-A	2-Yr	10-Yr	25-Yr	100-Yr
A	cfs	cfs	cfs	cfs
Cond.	1.33	2.51	3.33	4.72
Cond.	0.46	0.81	1.04	1.45
	-0.87	-1.70	-2.29	-3.27
_	2-Y r	10-Yr	25-Yr	100-Yr
-В	cfs	cfs	cfs	cfs
Cond.	2.68	4.81	6.26	8.74
Cond.	0.19	0.35	0.46	0.66
	-2.49	-4.46	-5.80	-8.08
	0 V-	10 V-	05 Vr	100 Vr
.c	2-Yr	10-Yr	25-Yr	100-Yr
•	cfs	cfs	cfs	cfs
Cond.	6.77	12.78	16.94	24.02
Cond.	6.21	11.14	16.36	23.93
	-0.56	-1.64	-0.58	-0.09
_	2-Yr	10-Yr	25-Yr	100-Yr
·D	cfs	cfs	cfs	cfs
Cond.	1.95	3.76	5.02	7.17
Cond.	1.09	2.09	2.78	3.97
	-0.86	-1.67	-2.24	-3.20



FOR CITY APPROVAL





Bar Measures 1 inch, otherwise drawing not to scale

D. VO A. ALVAREZ

MA

SED

Project No:

Designed By:

Drawn By:

File No:

Checked By: W. PARNEL

CG-202

Sheet 14 of 39

23-SD-XXX

ATTACHMENT H

TEMPORARY SEDIMENT PONDS PLANS AND CALCULATIONS

NOT APPLICABLE





Attachment H Temporary Sediment Ponds Plans and Calculations

This attachment does not apply to this submittal. There will be no common drainage area with more than 10 acres of disturbed area within the project limits.

ATTACHMENT I

INSPECTION AND MAINTENANCE FOR BMPS



Attachment I Inspection and Maintenance for BMPs

Inspection

Designated and qualified person(s) should inspect the Pollution Control Measures every seven (7) days and after each rainfall event. An inspection report that summarizes the scope of the inspection, names and qualifications of personnel conducting the inspection, date of the inspection, major observations and actions that will be taken as a result of the inspection should be kept with the TPDES data for the project. The general contractor will be responsible to review and reference sections 1.3 and 1.4 of "Complying with the Edwards Aquifer Rules: Technical Guidance on Best Management Practices" (TCEQ RG-348) for erosion and sedimentation control and maintenance as applicable.

Construction Entrance / Exit and Construction Staging Area Maintenance

- 1. The entrance should be maintained in a condition, which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or clean out of any measures used to trap sediment.
- 2. All sediment spilled, dropped, washed or tracked on to public right-of-ways should be removed immediately be the contractor.
- 3. When necessary, wheels should be cleaned to remove sediment prior to entrance onto public right-of-ways.
- 4. When washing is required, it should be done on an area stabilized with crushed stone that drains into an approved sediment trap or sediment basin.
- 5. All sediment should be prevented from entering any storm drain, ditch or watercourse by using approved methods.

Sediment Filter Structure Maintenance

- 1. Inspect all fencing weekly, and after any rainfall.
- 2. Remove sediment when buildup reaches 6 inches.
- 3. Replace any torn fabric or install a second line of fencing parallel to the torn section.
- 4. Replace or repair any sections crushed or collapsed in the course of construction activity. If a section of fence is obstructing vehicular access, consider relocating it to a spot where it will provide equal protection, but will not obstruct vehicles. A triangular filter dike may be preferable to a silt fence at common vehicle access points.
- 5. When construction is complete, the sediment should be disposed of in a manner that will not cause additional siltation and the prior location of the silt fence should be revegetated. The fence itself should be disposed of in an approved landfill.

Rock Berm Structure Maintenance

1. Inspection should be made weekly and after each rainfall by the responsible party. For



installations in streambeds, additional daily inspections should be made.

- 2. Remove sediment and other debris when buildup reaches 6 inches and dispose of the accumulated silt in an approved manner that will not cause any additional siltation.
- 3. The berm should be reshaped as needed during inspection.
- 4. The berm should be replaced when the structure ceases to function as intended due to silt accumulation among the rocks, washout, construction traffic damage, etc.
- 5. The rock berm should be left in place until all upstream areas are stabilized and accumulated silt removed.

Curb Inlet Gravel Filter Structure Maintenance

- 1. Inspection should be made weekly or after each rainfall event and repair or replacement should be made promptly as needed by the contractor.
- 2. Inspect and realign dikes as needed to prevent gaps between sections.
- 3. Accumulated silt should be removed after each rainfall, and disposed of in a manner which will not cause additional siltation.
- 4. After the site is completely stabilized, the dikes and any remaining silt should be removed. Silt should be disposed of in a manner that will not contribute to additional siltation.



SAMPLE INSPECTION REPORT

NAME & QUALIFICATION OF INSPECTOR:

Date of Inspection: _____

Inspectors shall observe the following items on each inspection:

- Disturbed areas that have not been fully stabilized
- Areas used for storage of materials that are exposed to precipitation
- Control measures outlined in the site plan
- Locations where vehicles enter/exit the site

Inspectors shall denote if any corrective actions are required and when the action was completed.

Major Observations:

Corrective Actions Required:

Corrective Actions Performed:

Signature

Date

ATTACHMENT J

SCHEDULE OF INTERIM AND PERMANENT SOIL STABILIZATION PRACTICES



Attachment J Schedule of Interim and Permanent Soil Stabilization

Stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion in that portion of the site has temporarily or permanently ceased. Where the initiation of stabilization measures by the 14th day after construction activity temporary or permanently ceased is precluded by weather conditions, stabilization measures shall be initiated as soon as practicable. Where construction activity on a portion of the site is temporarily ceased, and earth disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of site. In areas experiencing droughts where the initiation of stabilization measures by the 14th day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable. Below are guidelines from TCEQ for the installation of sod to stabilized exposed areas.

Materials:

Hydraulic Mulches:

Wood fiber mulch can be applied alone or as a component of hydraulic matrices. Wood fiber applied alone is typically applied at the rate of 2,000 to 4,000 lb/acre. Wood fiber mulch is manufactured from wood or wood waste from lumber mills or from urban sources.

Hydraulic Matrices:

Hydraulic matrices include a mixture of wood fiber and acrylic polymer or other tackifier as binder. Apply as a liquid slurry using a hydraulic application machine (i.e., hydro seeder) at the following minimum rates, or as specified by the manufacturer to achieve complete coverage of the target area: 2,000 to 4,000 lb/acre wood fiber mulch, and 5 to 10% (by weight) of tackifier (acrylic copolymer, guar, psyllium, etc.)

Bonded Fiber Matrix.

Bonded fiber matrix (BFM) is a hydraulically applied system of fibers and adhesives that upon drying forms an erosion resistant blanket that promotes vegetation, and prevents soil erosion. BFMs are typically applied at rates from 3,000 lb/acre to 4,000 lb/acre based on the manufacturer's recommendation. A biodegradable BFM is composed of materials that are 100% biodegradable. The binder in the BFM should also be biodegradable and should not dissolve or disperse upon re-wetting. Typically, biodegradable BFMs should not be applied immediately before, during or immediately after rainfall if the soil is saturated. Depending on the product, BFMs typically require 12 to 24 hours to dry and become effective.

Installation:

- 1. Prior to application, roughen embankment and fill areas by rolling with a crimping or punching type roller or by track walking. Track walking shall only be used where other methods are impractical.
- 2. To be effective, hydraulic matrices require 24 hours to dry before rainfall occurs.



3. Avoid mulch over spray onto roads, sidewalks, drainage channels, existing vegetation, etc.

Inspection and Maintenance Guidelines:

- 1. Mulched areas should be inspected weekly and after each rain event to locate and repair any damage.
- 2. Areas damaged by storms or normal construction activities should be regarded and hydraulic mulch reapplied as soon as practical.

COPY OF NOTICE OF INTENT (NOI) (TCEQ-20022)

SECTION 4

TCEQ Office Use Only Permit No: CN: RN:



Notice of Intent (NOI) for an Authorization for Stormwater Discharges Associated with Construction Activity under TPDES General Permit TXR150000

IMPORTANT INFORMATION

Please read and use the General Information and Instructions prior to filling out each question in the NOI form.

Use the NOI Checklist to ensure all required information is completed correctly. **Incomplete applications delay approval or result in automatic denial.**

Once processed your permit authorization can be viewed by entering the following link into your internet browser: http://www2.tceq.texas.gov/wq_dpa/index.cfm or you can contact TCEQ Stormwater Processing Center at 512-239-3700.

ePERMITS

Effective September 1, 2018, this paper form must be submitted to TCEQ with a completed electronic reporting waiver form (TCEQ-20754).

To submit an NOI electronically, enter the following web address into your internet browser and follow the instructions: https://www3.tceq.texas.gov/steers/index.cfm

APPLICATION FEE AND PAYMENT

The application fee for submitting a paper NOI is \$325. The application fee for electronic submittal of a NOI through the TCEQ ePermits system (STEERS) is \$225.

Payment of the application fee can be submitted by mail or through the TCEQ ePay system. The payment and the NOI must be mailed to separate addresses. To access the TCEQ ePay system enter the following web address into your internet browser: http://www.tceq.texas.gov/epay.

Provide your payment information for verification of payment:

- If payment was mailed to TCEQ, provide the following:
 - Check/Money Order Number:
 - Name printed on Check:
- If payment was made via ePay, provide the following:
 - Voucher Number:
 - A copy of the payment voucher is attached to this paper NOI form.

RE	NEWAL (This portion of the NOI is not applicable	le aft	er June 3, 20	18)				
Is t	this NOI for a renewal of an existing authorization	on?	□ Yes	□ No				
If Y	f Yes, provide the authorization number here: TXR15							
NC	NOTE: If an authorization number is not provided, a new number will be assigned.							
SE	CTION 1. OPERATOR (APPLICANT)							
a)	If the applicant is currently a customer with TC (CN) issued to this entity? CN	EQ, v	vhat is the Cı	ıstomer Number				
	(Refer to Section 1.a) of the Instructions)							
b)	What is the Legal Name of the entity (applicant) legal name must be spelled exactly as filed with County, or in the legal document forming the en	the	Texas Secreta					
c)	What is the contact information for the Operat	or (F	lesponsible A	authority)?				
	Prefix (Mr. Ms. Miss):							
	First and Last Name: Su	ffix:	Click here to	enter text.				
	Title: <u>President</u> Credentials:							
	Phone Number: Fax Num	mber	Click here t	o enter text.				
	E-mail:							
	Mailing Address:							
	City, State, and Zip Code: DRIFTWOOD, TX 786	<u>19</u>						
	Mailing Information if outside USA:							
	Territory:							
	Country Code: Postal C	ode:		enter text.				
d)	Indicate the type of customer:							
	🗆 Individual	\Box F	ederal Govern	nment				
	Limited Partnership	$\Box C$	ounty Goverr	nment				
	🗆 General Partnership		tate Governm	ient				
	🗆 Trust	□ C	ity Governme	ent				
	Sole Proprietorship (D.B.A.)		ther Governm	nent				

□ Other:

e) Is the applicant an independent operator? □ No 🛛 Yes

TCEQ-20022	(2/6/2018)	
1000 20022	(1)/0/2010)	

🗆 Estate

 \boxtimes Corporation

Notice of Intent for Construction Stormwater Discharges under TXR150000

	_			_	_		
(If a	governmental	and title a	anhaidian	on port of o	longon con	nonation	abaalt Ma)
ui a g	Jovernmeniai	епни а	SHOSICIALV	or part of a	Targer cor	noranon	CHECK NOT
(II G Z	50 CI IIII CII CUI	circity, a	, ouboraiury,	or pure or u	Tunger cor	por acion,	

- f) Number of Employees. Select the range applicable to your company.
 - □ 0-20

□ 251-500

⊠ 21-100

□ 501 or higher

- □ 101-250
- g) Customer Business Tax and Filing Numbers: (**Required** for Corporations and Limited Partnerships. **Not Required** for Individuals, Government, or Sole Proprietors.)

State Franchise Tax ID Number:

Federal Tax ID:

Texas Secretary of State Charter (filing) Number:

DUNS Number (if known):

SECTION 2. APPLICATION CONTACT

Is the application contact the same as the applicant identified above?

\square	Yes.	σo	to	Section	3
	1 C 0,	80	ω	Jeeuon	J

 \Box No, complete this section

Prefix (Mr. Ms. Miss):
First and Last Name:
Title: Credential:
Organization Name:
Phone Number: Fax Number:
E-mail: Click here to enter text
Mailing Address:
Internal Routing (Mail Code, Etc.):
City, State, and Zip Code:
Mailing information if outside USA:
Territory:
Country Code: Postal Code:

SECTION 3. REGULATED ENTITY (RE) INFORMATION ON PROJECT OR SITE

a) If this is an existing permitted site, what is the Regulated Entity Number (RN) issued to this site? RN

(Refer to Section 3.a) of the Instructions)

- b) Name of project or site (the name known by the community where it's located):
- c) In your own words, briefly describe the type of construction occurring at the regulated site (residential, industrial, commercial, or other):
- d) County or Counties (if located in more than one):
- e) Latitude: Longitude:
- f) Site Address/Location

If the site has a physical address such as 12100 Park 35 Circle, Austin, TX 78753, complete *Section A*.

If the site does not have a physical address, provide a location description in *Section B*. Example: located on the north side of FM 123, 2 miles west of the intersection of FM 123 and Highway 1.

Section A:

Street Number and Name:

City, State, and Zip Code:

Section B:

Location Description:

City (or city nearest to) where the site is located:

Zip Code where the site is located:

SECTION 4. GENERAL CHARACTERISTICS

- a) Is the project or site located on Indian Country Lands?
 - Yes, do not submit this form. You must obtain authorization through EPA Region 6.

🖾 No

- b) Is your construction activity associated with a facility that, when completed, would be associated with the exploration, development, or production of oil or gas or geothermal resources?
 - Yes. Note: The construction stormwater runoff may be under jurisdiction of the Railroad Commission of Texas and may need to obtain authorization through EPA Region 6.

🛛 No

- c) What is the Primary Standard Industrial Classification (SIC) Code that best describes the construction activity being conducted at the site?
- d) What is the Secondary SIC Code(s), if applicable?
- e) What is the total number of acres to be disturbed?
- f) Is the project part of a larger common plan of development or sale?

TCEQ-20022 (3/6/2018)

🛛 Yes

- □ No. The total number of acres disturbed, provided in e) above, must be 5 or more. If the total number of acres disturbed is less than 5, do not submit this form. See the requirements in the general permit for small construction sites.
- g) What is the estimated start date of the project?
- h) What is the estimated end date of the project?
- i) Will concrete truck washout be performed at the site? \square Yes \square No
- j) What is the name of the first water body(ies) to receive the stormwater runoff or potential runoff from the site?
- k) What is the segment number(s) of the classified water body(ies) that the discharge will eventually reach?
- l) Is the discharge into a Municipal Separate Storm Sewer System (MS4)?

 \Box Yes \boxtimes No

If Yes, provide the name of the MS4 operator:

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

m) Is the discharge or potential discharge from the site within the Recharge Zone, Contributing Zone, or Contributing Zone within the Transition Zone of the Edwards Aquifer, as defined in 30 TAC Chapter 213?

 \boxtimes Yes, complete the certification below.

 \square No, go to Section 5

I certify that the copy of the TCEQ-approved Plan required by the Edwards Aquifer Rule (30 TAC Chapter 213) that is included or referenced in the Stormwater Pollution Prevention Plan will be implemented.

SECTION 5. NOI CERTIFICATION

- a) I certify that I have obtained a copy and understand the terms and conditions of the Construction General Permit (TXR150000).
- b) I certify that the full legal name of the entity applying for this permit has been provided and is legally authorized to do business in Texas.
- c) I understand that a Notice of Termination (NOT) must be submitted when this authorization is no longer needed.
- d) I certify that a Stormwater Pollution Prevention Plan has been developed, will be implemented prior to construction and to the best of my knowledge and belief is compliant with any applicable local sediment and erosion control plans, as required in the Construction General Permit (TXR150000).

Note: For multiple operators who prepare a shared SWP3, the confirmation of an operator may be limited to its obligations under the SWP3, provided all obligations are confirmed by at least one operator.

🖾 Yes

SECTION 6. APPLICANT CERTIFICATION SIGNATURE

Operator Signatory Name:

Operator Signatory Title:

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

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

Signature (use blue ink): Date:

SECTION 5

AGENT AUTHORIZATION FORM (TCEQ-0599)

	Agent Authorization Form For Required Signature Edwards Aquifer Protection Program Relating to 30 TAC Chapter 213
	Effective June 1, 1999
I	JON DENTON
	Print Name
	GENERAL MANAGER
	Title - Owner/President/Other
of	NORTH FOREST OFFICE SPACE - SOUTH AUSTIN, LLC
	Corporation/Partnership/Entity Name
have authorized _	DEVON VO
	Print Name of Agent/Engineer
of	PARNELL ENGINEERING, INC.
	Print Name of Firm

to represent and act on the behalf of the above named Corporation, Partnership, or Entity for the purpose of preparing and submitting this plan application to the Texas Commission on Environmental Quality (TCEQ) for the review and approval consideration of regulated activities.

I also understand that:

- 1. The applicant is responsible for compliance with 30 Texas Administrative Code Chapter 213 and any condition of the TCEQ's approval letter. The TCEQ is authorized to assess administrative penalties of up to \$10,000 per day per violation.
- 2. For those submitting an application who are not the property owner, but who have the right to control and possess the property, additional authorization is required from the owner.
- 3. Application fees are due and payable at the time the application is submitted. The application fee must be sent to the TCEQ cashier or to the appropriate regional office. The application will not be considered until the correct fee is received by the commission.
- 4. A notarized copy of the Agent Authorization Form must be provided for the person preparing the application, and this form must accompany the completed application.
- 5. No person shall commence any regulated activity on the Edwards Aquifer Recharge Zone, Contributing Zone or Transition Zone until the appropriate application for the activity has been filed with and approved by the Executive Director.

SIGNATURE PAGE:	
Λ	
AA	
Applicarit's Signature	

5-8-2022

THE STATE OF TEXAS § County of Travis §

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

GIVEN under my hand and seal of office on this 8th day of Thay 2023 TERRY L. DUNCAN Notary Public, State of Texas Comm. Expires 02-03-2027 lem i Notary ID 134185102 Notarv

MY COMMISSION EXPIRES: 02-03-2027

SECTION 6

APPLICATION FEE FORM (TCEQ-0574)

Application Fee Form

Texas Commission on Environmental Quality									
Name of Proposed Regulated Entity: <u>Metro Drive Office Park</u> Regulated Entity Location: West Metro Drive Leander, Texas 78641									
Regulated Entity Location: West Metro Drive, Leander, Texas 78641									
Name of Customer: North Forest Office Space - South Austin, LLC									
Contact Person: Devon Vo Phone: <u>512-299-5963</u>									
Customer Reference Number (if issued):CN									
Regulated Entity Reference Numbe	er (if issued):RN								
Austin Regional Office (3373)									
🗌 Hays	Travis	⊠ w	illiamson						
San Antonio Regional Office (3362)								
Bexar	Medina		valde						
 Comal	 Kinney								
Application fees must be paid by ch		or money order, payab	le to the Texas						
Commission on Environmental Qu									
form must be submitted with your	•	•	•						
🔀 Austin Regional Office	S	an Antonio Regional O	office						
Mailed to: TCEQ - Cashier	_	vernight Delivery to: 1							
Revenues Section		2100 Park 35 Circle							
Mail Code 214	В	uilding A, 3rd Floor							
P.O. Box 13088		ustin, TX 78753							
Austin, TX 78711-3088		512)239-0357							
Site Location (Check All That Apply	/):								
Recharge Zone	🔀 Contributing Zone	Transi	tion Zone						
Type of Plan		Size	Fee Due						
Water Pollution Abatement Plan, C									
Plan: One Single Family Residential	-	Acres	\$						
Water Pollution Abatement Plan, C	ontributing Zone								
Plan: Multiple Single Family Reside	ntial and Parks	Acres	\$						
Water Pollution Abatement Plan, C	ontributing Zone								
Plan: Non-residential		4.007 Acres	\$ 4,000						
Sewage Collection System		L.F.	\$						
Lift Stations without sewer lines		Acres	\$						
Underground or Aboveground Stor	age Tank Facility	Tanks	\$						
Piping System(s)(only)		Each	\$						
Exception		Each	\$						
Extension of Time		Each	\$						
Signature:	Date	05/23/23							

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

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

Organized Sewage Collection Systems and Modifications

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

Underground and Aboveground Storage Tank System Facility Plans and Modifications

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

Exception Requests

	Project	Fee
Exception Request		\$500

Extension of Time Requests

Project	Fee
Extension of Time Request	\$150

SECTION 7

CORE DATA FORM (TCEQ-10400)



TCEQ Core Data Form

For detailed instructions regarding completion of this form, please read the Core Data Form Instructions or call 512-239-5175.

SECTION I: General Information

BECHON	1. 901																	
		sion (If other is c						,										
New Pe	rmit, Regis	stration or Authori	zation (Core I	Data Fo	orm should	d be	subm	itted v	vith t	the pr	ogram	арр	licatic	n.)				
🗌 Renewa	l (Core Da	ata Form should b	e submitted v	vith the	renewal f	orm)		Othe	er								
2. Customer Reference Number (if issued) Follow this								3. Re	egula	ated	Entity	Ref	erenc	e Numbe	er (ii	f issue	d)	
CN			<u>l or RN nu</u> entral Regis			RN	1											
SECTION II: Customer Information																		
4. General Customer Information 5. Effective Date for Custo								natio	n Up	pdate	s (mm	n/dd/	/ууу)	4/2	6/2	023		
New Cust		me (Verifiable wit	_		to Custor				otroll	ler of l			0	Regulate	ed E	ntity O	wnersh	nip
The Custo	mer Nai	ne submitted f State (SOS)	here may	be upo	dated a	uto	matic	ally	bas	sed o	on wh	hat			nd	active	e with	the
6. Customer	Legal Na	me (If an individual	l, print last nam	ne first: e	g: Doe, Jo	hn)		l	f nev	w Cus	tomer,	ente	r prev	ious Cust	tome	er below	<u>/:</u>	
NORTH F	FORES	Г OFFICE SF	PACE- SO	UTH	AUST	IN,	LLC											
7. TX SOS/C	•	Number			Tax ID (11 digits) 9. F			9. Federal Tax ID (9 digits)				10. D	UNS	6 Numl	ber (if ap	oplicable)		
08021340	05		3205608	6880	880 45-2973927													
11. Type of C	Customer	: 🛛 Corporati	on			livid	ual	Partnership: 🗖 Genera			al 🗌 Limited							
Government:	🗌 City 🔲	County 🗌 Federal 🗌] State 🗌 Othe	r	🗌 So	le P	ropriet	orship)		Other:							
12. Number (of Employ ☑ 21-100	/ees	251-500		501 and I	high	er	13. Independently Owned and Operated? ⊠ Yes										
14. Custome	r Role (Pr	oposed or Actual) -	- as it relates to	the Reg	gulated En	tity li	isted or	this fo	orm.	Please	e check	k one	of the	following				
Owner	nal Licens	ee Respo	tor Insible Party		Own		opera y Clea		pplic	cant]Othe	er:					
	305 N	. Heatherwild	le Blvd, Si	uite 23	50													
15. Mailing Address:									_					1				
	City	PFLUGER	VILLE	S	tate	ΓХ		ZIP	7	7866	0			ZIP + 4	1			
16. Country	Mailing In	formation (if outsi	de USA)				17. E	-Mail	Add	dress	(if appl	licable)					
							jono	l@n	fore	est.c								
18. Telephor	ne Numbe	r		19. Ex	xtension	or (Code				20. Fa	ax N	umbe	e r (if appl	licab	le)		
(512)515-1553 407 () -																		

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*) ⊠ New Regulated Entity □ Update to Regulated Entity Name □ Update to Regulated Entity Information

The Regulated Entity Name submitted may be updated in order to meet TCEQ 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.)

METRO DRIVE OFFICE PARK

23. Street Address of	WES	T METRO DI	RIVE	3							
the Regulated Entity:											
<u>(No PO Boxes)</u>	City	LEANDE	R	State	TX	ZIP	78641	78641			
24. County											
		Enter Physical	Locati	on Descriptio	n if no st	reet addres	s is provid	ded.			
25. Description to Physical Location:	5	Project site is located approximately 390 linear feet west of the intersection of N US HWY 183 & Metro Drive.									
26. Nearest City							State		Nea	rest ZIP Code	
LEANDER							TX		780	541	
27. Latitude (N) In Decir	nal:				28.	Longitude (W) In Dec	imal:			
Degrees	Minutes		Secor	nds	Deg	rees	М	inutes		Seconds	
30		35		12.897		-97		5	51	30.582	
29. Primary SIC Code (4	digits)	30. Secondary SI	C Cod	e (4 digits)	31. Prim (5 or 6 dig	ary NAICS (Code	32. Se (5 or 6	econdary NA	ICS Code	
8741					56111	0					
33. What is the Primary	Busines	s of this entity?	(Do no	ot repeat the SIC o	or NAICS de	scription.)					
PROFESSIONAL	OFFIC	E									
				305 N. H	EATHER	WILDE BLV	D, SUITE	250			
34. Mailing											
Address:	City	City PFLUGERVILLE State		ТХ	ZIP 78660			ZIP + 4			
35. E-Mail Address	:				joı	nd@nforest.	com				
36. Teleph	one Nur	nber		37. Extensio	n or Cod	e	38.	Fax Nur	nber <i>(if appl</i>	icable)	
(512)	515-155	3						() -		
39. TCEQ Programs and II orm. See the Core Data Form				write in the perr	nits/registr	ation numbers	that will be	affected	by the updates	submitted on this	
Dam Safety	🗌 Dis	stricts	\square	Edwards Aquif	er	🗌 Emissi	ons Invento	ory Air	Industria	Hazardous Waste	
Municipal Solid Waste	🗌 Ne	w Source Review Air	r 🗆] OSSF		Petrole	eum Storage	e Tank	PWS		
_											
Sludge	Sto	orm Water] Title V Air		Tires			Used Oil		
		1 14/ 1		1 M I I I I	• •		D : 14				
Voluntary Cleanup		aste Water] Wastewater Ag	griculture	U Water	Rights		Other:		
SECTION IV: Pre	eparer	· Information	<u>n</u>								

40. Name: Devon Vo			41. Title:	Vice President	
42. Telephone Number	43. Ext./Code	44. Fax Number	45. E-Mail Address		
(512)299-5963		() -	devon.vo	@parnellengineeringinc.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:	PARNELL ENGINEERING INC	Job Title:	Vice President		
Name (In Print):	DEVON VO			Phone:	(512) 299- 5963

	\square		
Signature:	furon for	Date:	05/26/23
	\mathcal{O}		