



PLANNING & ZONING COMMISSION MEETING

Tuesday, April 23, 2024 at 6:00 PM

Agenda

1. **Call to Order**
2. **Opening Prayer and Pledge of Allegiance**
3. **Consideration and Approval of Minutes**
 - [A\)](#) March 26, 2024 Planning And Zoning Meeting Minutes
4. **New Site Plan Considerations**
 - [A\)](#) Discussion and Consideration of Maverick Services
 - [B\)](#) Discussion and Consideration of Mississippi Tent Conditional Use
 - [C\)](#) Discussion and Consideration of Gluckstadt Retail Center Site Plan
 - [D\)](#) Discussion and Consideration of Mac Haik Service Building Conditional Use
 - [E\)](#) Discussion and Consideration of Mac Haik Service Building Site Plan
 - [F\)](#) Discussion and Consideration of Candlewood Suites Conditional Use
 - [G\)](#) Discussion and Consideration of Candlewood Suites Site Plan
5. **New Business**
 - [A\)](#) Public Hearing for Discussion of Proposed Zoning Ordinance Amendments
6. **Next Meeting**
 - A) The Next Planning And Zoning Meeting Will Be Held On May 28, 2024
7. **Adjourn**

**MINUTES OF THE REGULAR MEETING
OF THE PLANNING AND ZONING COMMISSION
OF THE CITY OF GLUCKSTADT, MISSISSIPPI**

A regular meeting of the Planning and Zoning Commission of the City of Gluckstadt, Mississippi (“the Board”), was duly called, held, and conducted on Tuesday, March 26, 2024, at 6:00 p.m. at Gluckstadt City Hall, 343 Distribution Drive, Gluckstadt, Madison County, Mississippi.

The following members were present, to-wit:

Andrew Duggar
Melanie Greer (Vice-Chairwoman)
Phillips King
Sam McGaugh (Chairman)
Katrina B. Myricks
Kayce Saik
Tim Slattery

Absent:

Also present:

Zachary L. Giddy, Attorney
William Hall, City of Gluckstadt

Chairman Sam McGaugh called the meeting to order. Roll was called and it was announced that a majority of the voting members of the Board were present, and that said number constituted a quorum.

Commissioner Sam McGaugh led the Pledge of Allegiance and opened the meeting with prayer.

All members of the Board present acknowledged receipt of the agenda and the agenda was as follows:

- 1. Call to Order**
- 2. Opening Prayer and Pledge of Allegiance**
- 3. Consideration and Approval of Minutes**

A) Consideration And Approval Of February 27, 2024 Minutes

4. New Site Plan Considerations

A) Discussion and Consideration of The Meadows Preliminary Plat

B) Discussion and Consideration of the Corner Site Plan

5. Old Business

A) Discussion and Consideration of Variances for Candlewood Suites – Continuance

6. New Business

7. Next Meeting

A) The Next Planning and Zoning Meeting Will Be Held on April 23, 2024.

8. Adjourn

The Board considered the Minutes of the February 27, 2024, regular meeting. Commissioner Melanie Greer moved to approve the minutes presented as written. The motion was seconded by Commissioner Katrina Myricks and approved unanimously. The Chairman declared the motion carried.

Preliminary Plat – The Meadows at Stout Farms, Part 4

The Board next considered the preliminary plat for The Meadows at Stout Farms, Part 4. Paul Hopper, Petitioner, addressed the Board and stated the plat was approved by the county because most of the development is outside of the Gluckstadt city limits with only a small portion of the lots – the back yards of four lots – being located in the city limits. Most of the houses / structures will be outside of the city limits, but there is a possibility of ancillary structures in rear yards. On motion by Commissioner Andrew Duggar and seconded by Commissioner Melanie Greer, the Board voted unanimously to recommend to the Mayor and Board of Aldermen that they approve the preliminary plat for The Meadows at Stout Farms, Part 4 as submitted. The Chairman declared the motion carried.

Site Plan – The Corner Site Plan

The Board next considered the site plat for The Corner located at Church Road and Old Jackson Road in the City of Gluckstadt. Daniel Woolridge was present on behalf of the

Petitioner and addressed the Board. Mr. Woolridge stated The Corner will be a 7,500 sq. ft. office/retail building. The building will be brick on all four sides with man-made stone accent on the bottom. The site plan, engineering and landscape are identical to previously approved plan for this site, but with new owners and with different business. The parking lot will be asphalt in the drive lanes with concrete parking spaces containing adequate parking. On motion by Commissioner Melanie Greer and seconded by Commissioner Katrina Myricks, the Board voted unanimously to recommend to the Mayor and Board of Aldermen that they approve the site plan for The Corner as submitted. The Chairman declared the motion carried.

OLD BUSINESS

William Hall advised the city is still waiting on engineering plans and additional site plan documents. On motion by Commissioner Andrew Duggar and seconded by Commissioner Melanie Greer, the Board voted unanimously to continue the public hearing for Candlewood Suites variance request to the April 23, 2024, Planning and Zoning Commission meeting with all notice and process continued to that date certain, with the condition that all needed documentation be submitted to the City by April 12, 2024. The Chairman declared the motion carried.

NEW BUSINESS

None.

There was no further business to be presented.

ADJOURN

Commissioner Phillips King moved that the meeting be adjourned. The motion was seconded by Commissioner Tim Slattery and approved unanimously. The Chairman declared the Motion carried.

WITNESS OUR HANDS, this the _____ day of _____, 2024.

SAM McGAUGH, Chairman

MELANIE GREER, Vice Chairman/Secretary

City of Gluckstadt

Application for Conditional Use

Subject Property Address: 109 Lone Wolf Drive, Madison MS 39110

Parcel #: _____

Owner: JSD Group LLC / Eddie Dees
Address: 109 Lone Wolf Drive
Madison MS 39110

Applicant: Matthew Tucker, Mavserve Services
Address: 7980 Choctaw Ln
Shreveport La 71107

Phone #: 601-201-1518
E-Mail: Miss Edis@yahoo.com

Phone #: 318-773-2425
E-Mail: mtucker@mavserve.com

Current Zoning District: G1

Acreage of Property (If applicable): .5 Acres

Use sought of Property: Outside inspections, Repairs, + Services

2024/03/06

Requirements of Applicant:

1. Letter demonstrating how the proposed use will comply with or otherwise satisfy the requirements for granting a Conditional Use pursuant to Section 804.01 of the Zoning Ordinance.
2. Copy of written legal description.
3. Additional items may be requested depending on the nature and status of the proposed development or property.
4. \$ 250.00 fee required for processing
5. Site Plan as required in Section 807-810

Requirements for Granting Conditional Use: (Section 805.01, Zoning Ordinance)

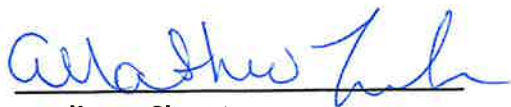
A Conditional Use shall not be granted unless satisfactory provisions and arrangements have been made concerning all the following:

- (a). Ingress and egress to property and proposed structures
- (b). Off-Street parking and loading areas
- (c). Refuse and service areas
- (d). Utilities, with reference locations, availability, and compatibility.
- (e). Screening and buffering with reference to type, dimensions, and character.
- (f). Required yards and other open spaces.
- (g). General compatibility with adjacent properties and other properties in the district.
- (h). Any other provisions deemed applicable by the Mayor and Board of Aldermen.

Applicant shall be present at the Planning and Zoning Commission meeting and Mayor and Board of Alderman meeting. Documents shall be submitted thirty (30) days prior to the Planning and Zoning Commission meeting.

Applicant is responsible for complying with all applicable requirements of the Zoning Ordinance.

By signing this application, it is understood and agreed that permission is given to the Zoning Administrator to have a sign erected on subject property, giving notice to the public that said property is being considered for a dimensional variance.



Applicant Signature

3/6/24

Date

Property Owner Signature

Date



5015 N. Lakeshore Dr. Shreveport LA, 71107
(318)-562-6391
mtucker@mavserve.com

March 6, 2024

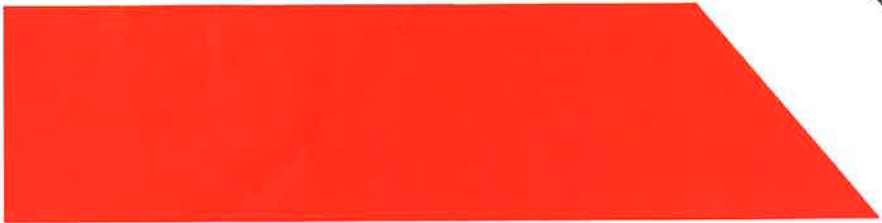
To whom it may concern:

I am Mathew Tucker owner/member of Maverick Services, LLC. I am writing you today to apply for conditional use of outside repair activities at 109 Lone Wolf Dr.. Maverick services is a fleet service company servicing the railroad and fleet industry. We perform services, preventive maintenance, repairs, and inspections.

From my understanding, the current zoning permits only indoor repairs. However, some of my duties cannot be performed inside and will need to be performed outside. I would like to request conditional use of the rear lot on the property. These are to include, but are not limited to, inspections, repairs, and services. None of the duties will be performed in front, or on the side of the building. I have attached some pictures of the common vehicles we service at our Shreveport facility, and a site map of the requested area.

Thank you for your consideration.

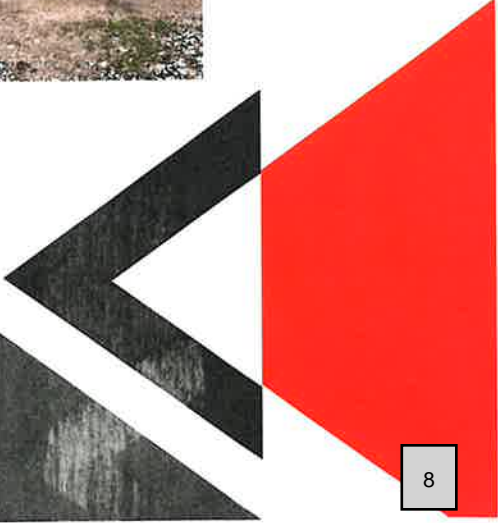
Mathew Tucker
Maverick Services, LLC.
318-773-2425
mtucker@mavserve.com



MAVERICK SERVICES

5015 N. Lakeshore Dr. Shreveport LA, 71107
(318)-562-6391
mtucker@mavserve.com

Commonly Services Vehicles in Shreveport





5015 N. Lakeshore Dr. Shreveport LA, 71107
(318)-562-6391
mtucker@mavserve.com

Map of Requested Area





INTERIM AD DRAFT

This is the proof of your ad scheduled to run in **Madison County Journal** on the dates indicated below. If changes are needed, please contact us prior to deadline at **(601) 853-4222**.

Notice ID: tXxD3vGydNgpEEDmcrMz | **Proof Updated: Mar. 26, 2024 at 01:48pm CDT**
Notice Name: Conditional Use for Maverick Services

This is not an invoice. Below is an estimated price, and it is subject to change. You will receive an invoice with the final price upon invoice creation by the publisher.

FILER	FILING FOR
Bridgette Smith	Madison County Journal
bridgette.smith@gluckstadt.net	
(769) 567-2306	

Columns Wide:	1	Ad Class: Legals
Total Column Inches:	2.29	
Number of Lines:	20	

03/28/2024: Other	15.36
Proof of Publication Fee	3.00

Subtotal	\$18.36
Tax	\$0.00
Processing Fee	\$6.84
Total	\$25.20

NOTICE IS HEREBY GIVEN TO THOSE PARTIES IN INTEREST that there will be a Public Hearing on Tuesday, April, 23, 2024 at 6:00 PM before the Gluckstadt Planning and Zoning Commission at the Gluckstadt City Hall, 343 Distribution Drive, Gluckstadt, MS 39110 for the purpose of Conditional Use for Garage with Outside Storage for Maverick Services for the following address:

109 Lone Wolf Drive, Gluckstadt, MS 39110

The Public Hearing in relation thereto shall provide parties in interest and citizens an opportunity to be heard. A copy of the Conditional Use application shall be available at City Hall for inspection by the public.

City of Gluckstadt

Application for Conditional Use

Subject Property Address: 384 Church Rd, Madison MS 39110

Parcel #: 082E-21-016/04.00

Owner: Hutchinson Office Properties LLC

Applicant: Hutchinson Office Properties LLC

Address: 384 Church Rd, Madison MS 39110

Address: 384 Church Rd Madison, MS 39110

Phone #: 601-853-1698

Phone #: _____

E-Mail: Lee@mississippitent.com

E-Mail: _____

Current Zoning District: C 2

Acreeage of Property (If applicable): 2.73

Use sought of Property: Lay down Yard

2024051

Requirements of Applicant:

1. Letter demonstrating how the proposed use will comply with or otherwise satisfy the requirements for granting a Conditional Use pursuant to Section 804.01 of the Zoning Ordinance.
2. Copy of written legal description.
3. Additional items may be requested depending on the nature and status of the proposed development or property.
4. \$ 250.00 fee required for processing
5. Site Plan as required in Section 807-810

Requirements for Granting Conditional Use: (Section 805.01, Zoning Ordinance)

A Conditional Use shall not be granted unless satisfactory provisions and arrangements have been made concerning all the following:

- (a). Ingress and egress to property and proposed structures
- (b). Off-Street parking and loading areas
- (c). Refuse and service areas
- (d). Utilities, with reference locations, availability, and compatibility.
- (e). Screening and buffering with reference to type, dimensions, and character.
- (f). Required yards and other open spaces.
- (g). General compatibility with adjacent properties and other properties in the district.
- (h). Any other provisions deemed applicable by the Mayor and Board of Aldermen.

Applicant shall be present at the Planning and Zoning Commission meeting and Mayor and Board of Alderman meeting. Documents shall be submitted thirty (30) days prior to the Planning and Zoning Commission meeting.

Applicant is responsible for complying with all applicable requirements of the Zoning Ordinance.

By signing this application, it is understood and agreed that permission is given to the Zoning Administrator to have a sign erected on subject property, giving notice to the public that said property is being considered for a dimensional variance.



Applicant Signature

3/28/2024

Date



Property Owner Signature

3/28/2024

Date

Gluckstadt Planning and Zoning Board,

I hope this letter finds you well. I am representing the owners of Hutchinson Office Properties. They are coming before you today to request a conditional use permit for approximately 2.7 acres they currently own. This 2.7 acres is situated directly south of a property owned at 384 Church Rd, Madison, MS 39110. This request is to be able to provide a laydown yard at the rear of the property. The yard will be fenced with 8ft tall and screened with privacy screens. Landscaping will be placed along the east and south sides of the property as well. On the far south side of the property there will be an outparcel that is approximately 1 acre for future development. This will allow the subject property to be screened from all four sides by either existing buildings, future buildings and or landscaping.

This yard is being proposed for a national equipment rental to come to our community. This would be a great addition to our growing city. Rest assured that the building facing Church Rd would stay the same with reasonable improvements that would be approved by the board. We thank you for your consideration in this matter.

Lee Hutchinson

A handwritten signature in black ink, appearing to read 'Lee Hutchinson', written in a cursive style.

BOOK 3852 PAGE 233 DOC 01 TY W
INST # 891028 MADISON COUNTY MS.
This instrument was filed for
record 5/14/20 at 11:36:38 AM
RONNY LOTT, C.C. BY: CWH D.C.

GRANTOR:
Ronald L. Hutchinson
Judith S. Hutchinson
105 Stonebridge Ln
Madison, MS 39110
(601) 624-7810

PREPARED BY:
D. Eric Kimbrough, MSB #100350
2086 Old Taylor Road Suite 1021 *206-260*
Oxford, MS 38655 *260*
(662) 234-2330 / (662) 471-4224 (Fax)

GRANTEE:
Hutchinson Office Properties, LLC
384 Church Road
Madison, MS 39110
(601) 624-7810

INDEXING INSTRUCTIONS:
Northern 1/2 of Section 21, Township 8
North, Range 2 East, Madison County
Mississippi

WARRANTY DEED

STATE OF MISSISSIPPI
COUNTY OF MADISON

FOR AND IN CONSIDERATION OF the sum of TEN AND NO/100 DOLLARS (\$10.00), cash in hand paid, and other good and valuable consideration, the receipt and sufficiency of which is hereby fully acknowledged, RONALD L. HUTCHINSON and wife, JUDITH S. HUTCHINSON ("Grantors"), do hereby convey and warrant unto HUTCHINSON OFFICE PROPERTIES, LLC, a Mississippi limited liability company ("Grantee"), all of their right, title, and interest in and to the following described property lying and being situated in Madison County, Mississippi, and more particularly described as follows, to-wit:

A parcel of land containing 2.97 acres (129,505.16 square feet), more or less, being situated in the Northern 1/2 of Section 21, Township 8 North, Range 2 East, Madison County, Mississippi, and being more particularly described by metes and bounds as follows:

Commence at a found iron pin marking the Northwest corner of Section 21; run thence along the North line of said section North 89 degrees 36 minutes 14 seconds East for a distance of 1200.10 feet to the POINT OF BEGINNING for the parcel herein described; thence continue North 89 degrees, 36 minutes, 14 seconds East for

a distance of 68.56 feet; thence leave said North line and run South for a distance of 73.71 feet; thence South 89 degrees 39 minutes 14 seconds East for a distance of 151.00 feet to a point on the West line of the Bellsouth property as described in Book 504 at Page 40 of the Madison County Land Records; thence run along said West line South 00 degrees 20 minutes 42 seconds West for a distance of 564.33 feet to the Southwest corner of said property; thence South 89 degrees 36 minutes 14 seconds West for a distance of 220.00 feet; thence North 00 degrees 20 minutes 42 seconds East for a distance of 640.00 feet to the POINT OF BEGINNING.

Subject to subdivision and zoning regulations in effect in Madison County, Mississippi, rights of way and easements for public roads and public utilities.

This deed is prepared without the benefit of a title search or survey.

WITNESS OUR SIGNATURES, this the 23rd day of April, 2020.



RONALD L. HUTCHINSON


JUDITH S. HUTCHINSON

STATE OF MISSISSIPPI
COUNTY OF MADISON

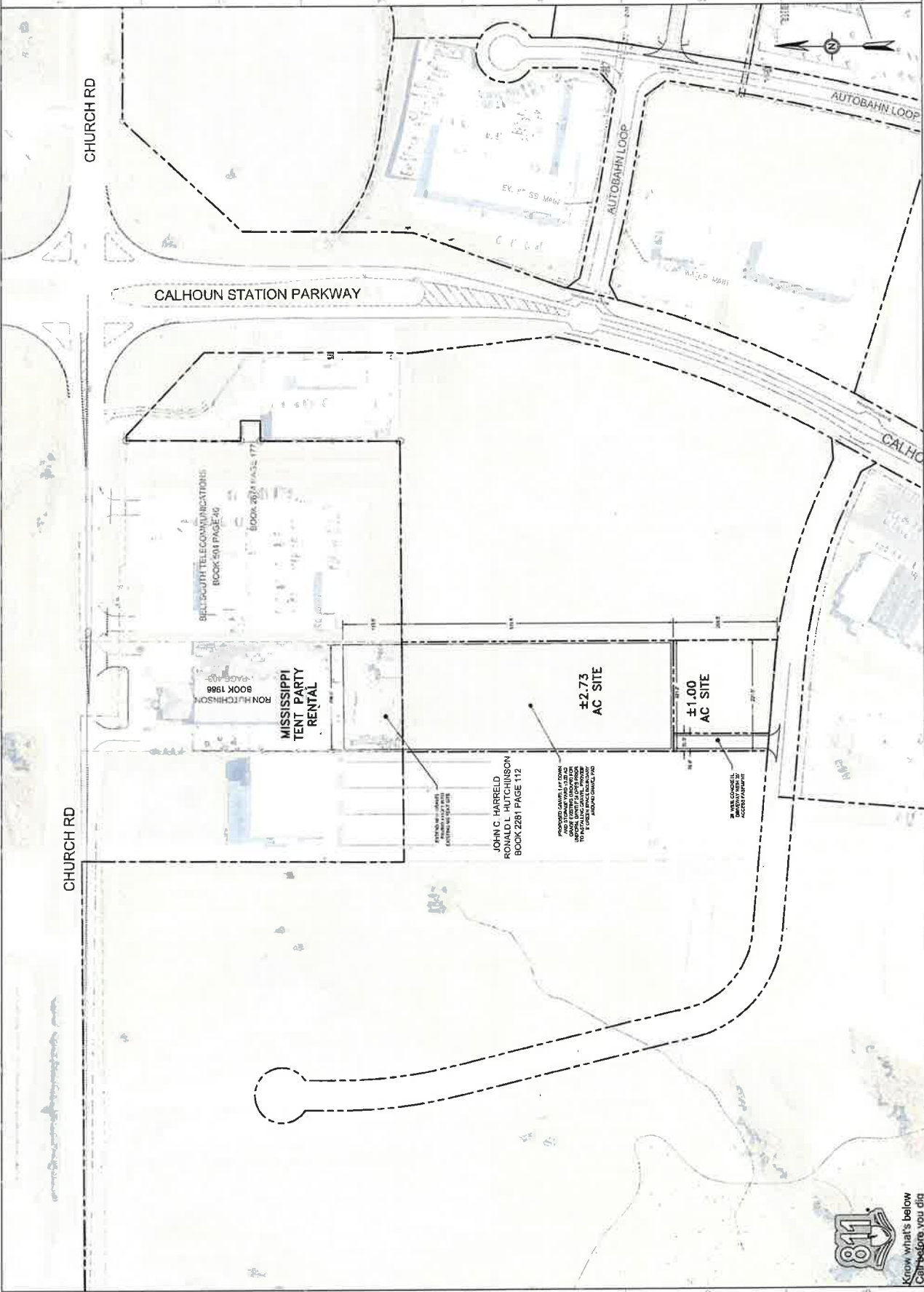
Before me, the undersigned authority in and for the County and State aforesaid, this day personally appeared the within named, RONALD L. HUTCHINSON and wife, JUDITH S. HUTCHINSON, who acknowledged that they signed and delivered the above and foregoing Warranty Deed as their voluntary act and deed on the day and year therein mentioned

Given under my hand and official seal on this, the 23rd day of April, 2020.


NOTARY PUBLIC

My Commission Expires: _____


<p>DEAN ENGINEERING SOLUTIONS INC. 1000 S. GARDNER ROAD, SUITE 100 GUMMERSVILLE, MS 39110 PHONE: 662-875-1100 FAX: 662-875-1101 WWW.DEANENGINEERING.COM</p>	<p>NOT FOR CONSTRUCTION</p>	<p>DRAWING ISSUED</p>	<p>OWNER: MS TENT</p>	<p>SITE DEVELOPMENT</p>	<p>DATE: 18 MAR 2014</p>	<p>SHEET NO: 240301</p>
			<p>PROJECT TITLE: MAC HARK NEW SERVICE BUILDING</p>	<p>SHEET TITLE: SITE PLAN</p>	<p>SCALE: AS SHOWN</p>	<p>DATE: 18 MAR 2014</p>





INTERIM AD DRAFT

This is the proof of your ad scheduled to run in **Madison County Journal** on the dates indicated below. If changes are needed, please contact us prior to deadline at (601) 853-4222.

Notice ID: OQFInzsiTGLhctScp2bG | Proof Updated: Apr. 02, 2024 at 01:23pm CDT
Notice Name: Conditional Use for Hutchinson Office Prop.

This is not an invoice. Below is an estimated price, and it is subject to change. You will receive an invoice with the final price upon invoice creation by the publisher.

FILER	FILING FOR
Bridgette Smith bridgette.smith@gluckstadt.com (769) 567-2306	Madison County Journal

Columns Wide:	1	Ad Class:	REGULARS
Total Column Inches:	3.22		
Number of Lines:	29		

04/04-2024 Other	18.72
Proof of Publication Fee	3.00

Subtotal	\$21.72
Tax	\$0.00
Processing Fee	\$7.17
Total	\$28.89

NOTICE IS HEREBY GIVEN TO THOSE PARTIES IN INTEREST that there will be a Public Hearing on Tuesday, April 23, 2024 at 6:00 PM before the Gluckstadt Planning and Zoning Commission at the Gluckstadt City Hall, 343 Distribution Drive, Gluckstadt MS 39110, for the purpose of Conditional Use for Public/Quasi-Public Facilities for 2.7 acres currently owned to provide a laydown yard at the rear of the property with a fence and privacy screens for the following described parcel and address:

Madison County Parcel No. 082E-21-016/04.00

Address: 384 Church Road

The Public Hearing in relation thereto shall provide parties in interest, and citizens an opportunity to be heard. A copy of the Conditional Use shall be available at the City Hall for inspection by the public.

/s/ Lindsay Kellum
City Clerk's Signature

DEAN
 ENGINEERING SOLUTIONS, INC.
 4780 I-55 NORTH, SUITE 100-4
 JACKSON, MS 39211
 601-557-2002 WWW.DEANESI.COM

COMMITTEE ON DEAN ENGINEERING SOLUTIONS, INC. THIS DOCUMENT IS THE PROPERTY OF DEAN ENGINEERING SOLUTIONS, INC. ALL RIGHTS ARE RESERVED. ANY REPRODUCTION OR TRANSMISSION OF THIS DOCUMENT WITHOUT THE WRITTEN PERMISSION OF DEAN ENGINEERING SOLUTIONS, INC. WILL BE SUBJECT TO LEGAL ACTION.

NOT FOR CONSTRUCTION
 W. SETH DEAN
 P.E.
 DATE OF MISSISSIPPI
 03-19-2024

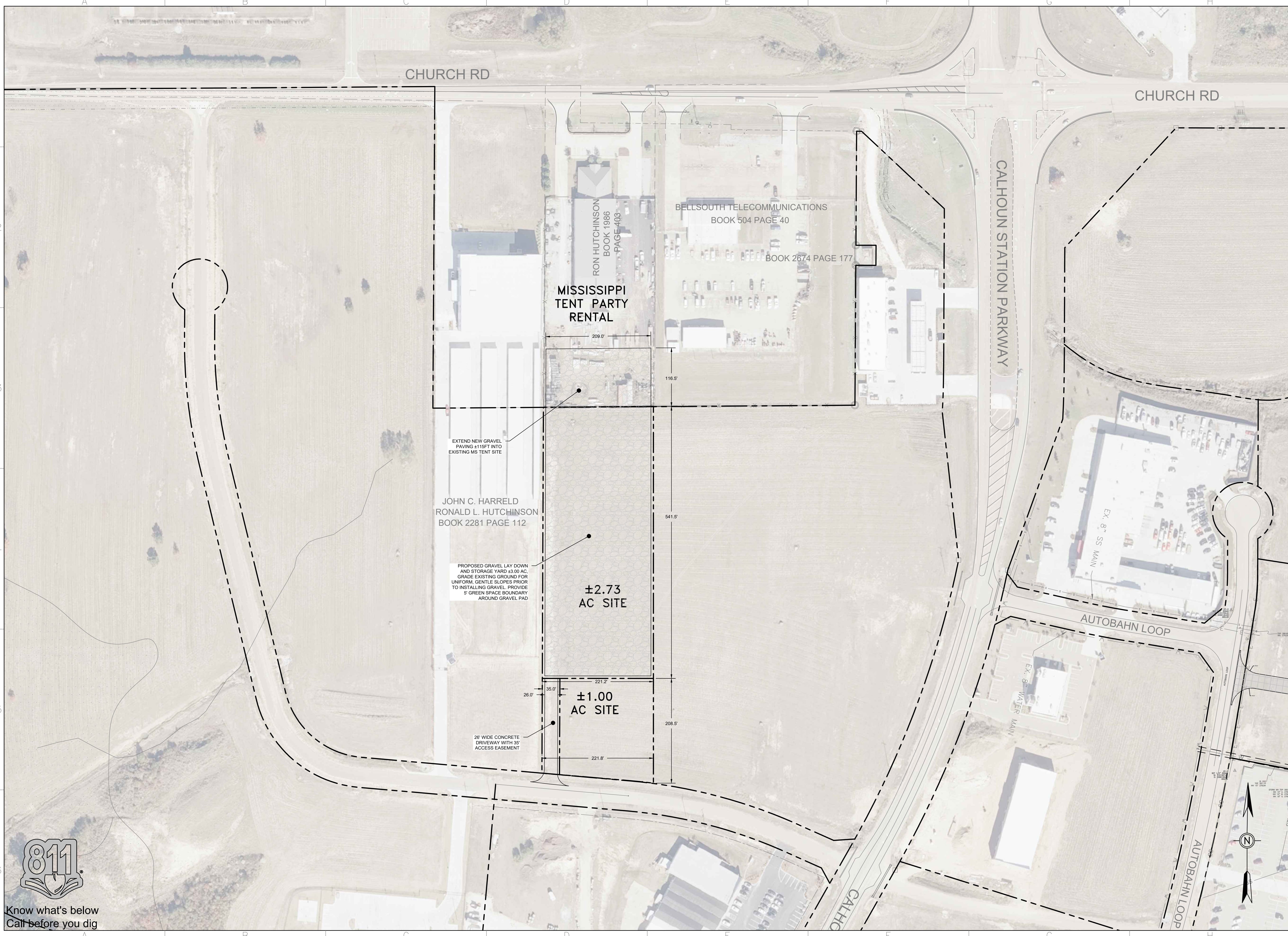
No.	Description	Date
1	PLANS SUBMITTED FOR OWNER REVIEW	03-19-2024

OWNER:
MS TENT
 GLUCKSTADT WAY
 GLUCKSTADT, MS 39110

PROJECT TITLE: MAC HAIK NEW SERVICE BUILDING
SHEET TITLE: SITE PLAN
SITE DEVELOPMENT

JOB NO.: 240301
 DATE: 19 MAR 2024
 SCALE: AS SHOWN
 DRAWN BY: WSD
 REVIEWED BY: WSD

SHEET NUMBER:
3



City of Gluckstadt
Application for Site Plan Review

Subject Property Address: no address assigned - Gluckstadt Road

Parcel #: Part of Parcel 2 in book 2807, Page 381, # 0821-29-010/21.00

Owner: Dave Thind

Jared Pierce, AIA
Applicant: Canizaro Cawthon Davis

Address: 2530 Flowood Drive
Flowood, MS 39232

Address: 129 S. President St.
Jackson, MS 39110

Phone #: 601-720-6575

Phone #: 601-948-7337 ext. 245

E-Mail: davethind@msn.com

E-Mail: jared@ccdarchitects.com

Current Zoning District: C2

Acreeage of Property (If applicable): 3.0 (130, 680 SF)

Use sought of Property: Shopping Center

Requirements of Applicant:

- 1. Copy of written legal description.
- 2. Site Plan as required in Sections 807-810 of City of Gluckstadt Zoning Ordinance
- 3. Color Rendering & Elevations at time of submittal

Requirements for Site Plan Submittal (Refer to Section 807, Gluckstadt Zoning Ordinance)

Nine (9) copies of the site plan shall be prepared and submitted to the Zoning Administrator. Digital copies are acceptable. Three (3) hard copies are required.

Site Plan Specifications (Section 809, Zoning Ordinance)

- A. Lot Lines (property lines)
- B. Zoning of the adjacent lots
- C. The names of owners of adjacent lots
- D. Rights of way existing and proposed streets, including streets shown on the adopted Throughfares plan
- E. Access ways, curb cuts, driveways, and parking, including number of parking spaces to be provided
- F. All existing and proposed easements
- G. All existing and proposed water and sewer lines. Also, the location of all existing and proposed fire hydrants.
- H. Drainage plan showing existing and proposed storm drainage facilities. The drainage plan shall indicate adjacent off site drainage courses and projected storm water flow rates from off-site and on-site sources.

- I. Contours at vertical intervals of five (5) feet or less.
- J. Floodplain designation, according to FEMA Maps.
- K. Landscaped areas and planting screens.
- L. Building lines and the locations of all structures, existing and proposed
- M. Proposed uses of the land and buildings, if known
- N. Open space and recreation areas, where required.
- O. Area in square feet, and/or square acres of parcel
- P. Proposed gross lot coverage in square feet
- Q. Number and type of dwelling units where proposed
- R. Location of sign structures and drawings. (Section 701)
- S. Location of garbage dumpster and enclosure. (Section 406.06)
- T. Any other data necessary to allow for a through evaluation of the proposed use, including a traffic study.

Applicant shall be present at the monthly meeting of the Planning and Zoning Commission when site plan is on the agenda for consideration; additionally, applicant shall be present at the Mayor and Board of Alderman meeting when the site plan is on the agenda for final approval.

Applicant is responsible for complying with all applicable requirements of the Gluckstadt Zoning Ordinance.

Site Plans shall be submitted by the 5:00 pm on the 5th day of the month, immediately preceding the next regular meeting of the Planning and Zoning Commission. No Exceptions.

Once submitted to the Planning & Zoning Administrator for approval to add to the Planning and Zoning Commission's agenda, no amendments or changes shall be made to the site plan. If you wish to submit changes, you will be required to resubmit by the 5th of the following month for the next monthly meeting of the Planning and Zoning Commission.

Attestation: *By signing this application, the applicant agrees to all the terms and conditions laid out in this document. Approval of site plan is subject to Board approval.*



 Applicant Signature

August 4, 2022

 Date

CITY OF GLUCKSTADT BUILDING DEPARTMENT
OFFICE USE ONLY

Date Received: _____

Application Complete & Approved to Submit to P&Z Board (please check):

Yes _____ No _____

Signature: _____
 Planning & Zoning Administrator (or Authorized Representative)

ADDENDUM NUMBER ONE (1)

Date: October 12, 2022
Project Name: Gluckstadt Retail Center
Gluckstadt Road
Gluckstadt, Mississippi
CCD Project No. 22029
Copies To: Larry Wagner - Commercial Construction & Maintenance
Dave Thind – River Oaks Investment Group

The following changes, additions, deletions, clarifications and/or substitutions to the project manual (including the Specifications) and Drawings dated September 28, 2022, are hereby made part of the Contract Documents.

REFER TO THE SPECIFICATIONS

- 1.1 Section 090500 Color Design: Revise paragraph 3.2.A.1.b read as follows:
 - b. Color 2, Yellow (accent) – to match Benjamin Moore 297 Golden Honey

END OF ADDENDUM NUMBER ONE (1)

CANIZARO CAWTHON DAVIS

Submitted by:



Jared Pierce, AIA
Principal

Stormwater Impact Analysis

For

Gluckstadt Retail Center

Proposed Commercial
Site Development
Gluckstadt, MS

Report Prepared by:

Dean Engineering Solutions Inc.



8-3-2022

Issue Dates
3 Aug 2022

Description
Submittal for Review

Project Overview

The project site development lies within the City of Gluckstadt, on Gluckstadt Rd near I-55. The existing site is approximately 3.00 AC of undeveloped land with grass coverage. The proposed project will feature a new commercial retail development with a building, parking, drives and all necessary utilities. The project will also feature an underground stormwater detention structure sized to accommodate stormwater for the proposed developed.

Existing Site Description:

Stormwater runoff from the existing site surface drains north to existing stormwater curb inlets and piped away. According to the USDA Natural Resource Conservation Service, Web Soil Survey Service mapping, the existing site soils are Loring Silt Loam, and Gillsburg Silt Loam, which belong to USDA hydrologic soils group C & D respectively. According to FEMA FIRM Map #28089C0415F, no portion of the site lies within a 100-year flood plain or flood way or other regulatory floodway.

Stormwater Management:

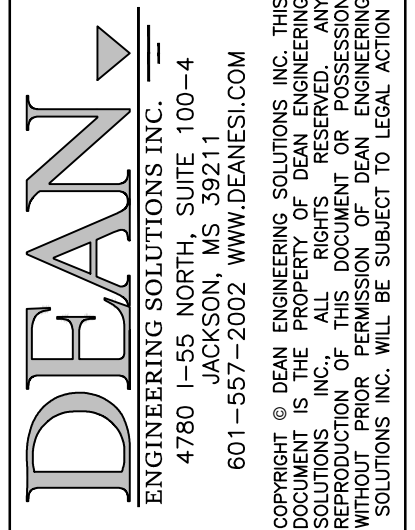
The proposed stormwater detention design controls and reduces stormwater flows below the existing development conditions for the 2-year, 5, 10, 25, 50 and 100-yr storm events. See attachments for detailed stormwater flow characteristics and other pertinent design parameters, inputs and results.

Pond routing runoff summary				
Storm Event (year)	Pre-Develop flow (cfs)	Post-Dvlp. Flow Un-detained (CFS)	Post-Dvlp. Flow detained (CFS)	Detained Water Elevation
2	7.57	13.22	6.07	285.97
5	10.7	16.97	8.27	286.49
10	13.34	20.09	11.51	286.90
25	15.99	23.19	15.36	287.30
50	18.37	25.97	18.28	287.63
100	20.49	28.44	20.39	287.93

List of Attachments:

- Maps
 - DA1 – Pre-Development Drainage Map
 - DA2 – Post Development Drainage Map
 - Natural Resources Conservation Service Web Soil Survey
 - FEMA FIRMette Map

- Calculations
 - HydroCAD Pond Routing Report (2-100 year events)



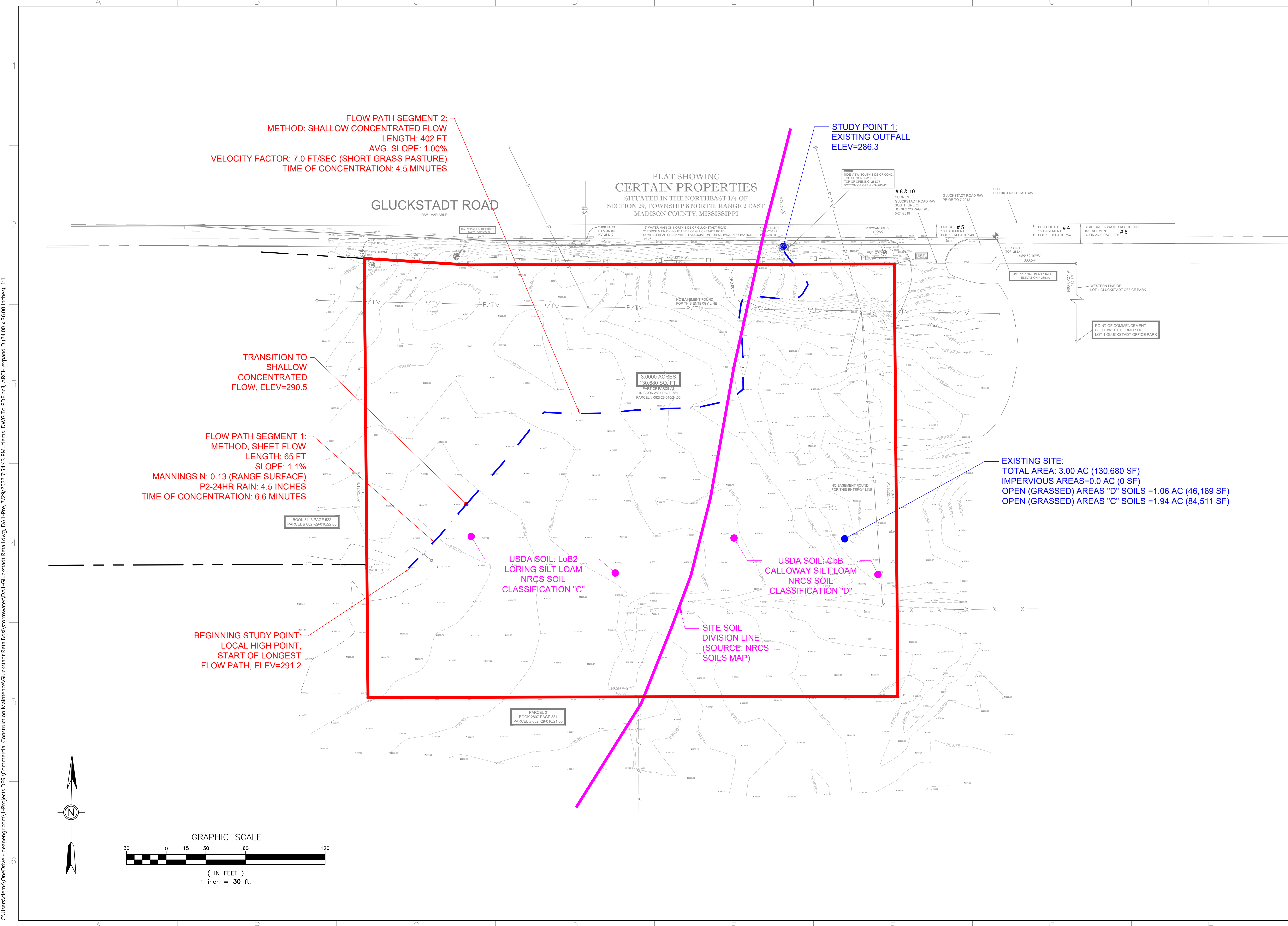
No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	00-00-0000

DRAWING ISSUED
OWNER: OWNER NAME & DATA
OWNER ADDRESS AND PHONE

PROJECT TITLE:
SHEET TITLE:
**STORMWATER IMPACT STUDY MAP
PRE-DEVELOPMENT CONDITIONS**
SITE DEVELOPMENT

JOB NO.: 200000
DATE: 00 JAN 2021
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
DA-1



FLOW PATH SEGMENT 2:
METHOD: SHALLOW CONCENTRATED FLOW
LENGTH: 402 FT
AVG. SLOPE: 1.00%
VELOCITY FACTOR: 7.0 FT/SEC (SHORT GRASS PASTURE)
TIME OF CONCENTRATION: 4.5 MINUTES

STUDY POINT 1:
EXISTING OUTFALL
ELEV=286.3

TRANSITION TO SHALLOW CONCENTRATED FLOW, ELEV=290.5

FLOW PATH SEGMENT 1:
METHOD, SHEET FLOW
LENGTH: 65 FT
SLOPE: 1.1%
MANNINGS N: 0.13 (RANGE SURFACE)
P2-24HR RAIN: 4.5 INCHES
TIME OF CONCENTRATION: 6.6 MINUTES

BEGINNING STUDY POINT:
LOCAL HIGH POINT,
START OF LONGEST
FLOW PATH, ELEV=291.2

**USDA SOIL: LoB2
LÖRING SILT LOAM
NRCS SOIL
CLASSIFICATION "C"**

**USDA SOIL: Cbb
CALLOWAY SILT LOAM
NRCS SOIL
CLASSIFICATION "D"**

**SITE SOIL
DIVISION LINE
(SOURCE: NRCS
SOILS MAP)**

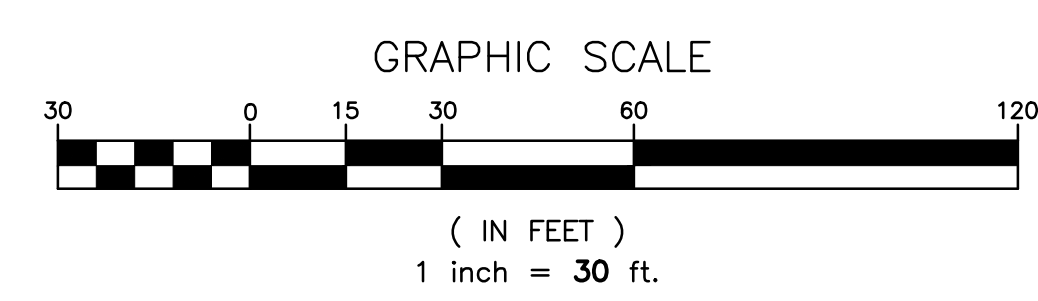
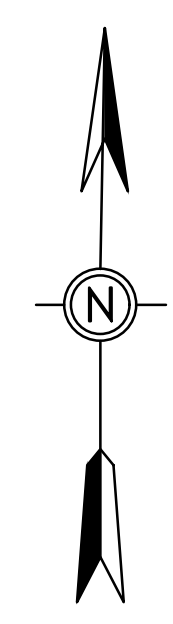
EXISTING SITE:
TOTAL AREA: 3.00 AC (130,680 SF)
IMPERVIOUS AREAS=0.0 AC (0 SF)
OPEN (GRASSED) AREAS "D" SOILS =1.06 AC (46,169 SF)
OPEN (GRASSED) AREAS "C" SOILS =1.94 AC (84,511 SF)

**PLAT SHOWING
CERTAIN PROPERTIES**
SITUATED IN THE NORTHEAST 1/4 OF
SECTION 29, TOWNSHIP 8 NORTH, RANGE 2 EAST
MADISON COUNTY, MISSISSIPPI

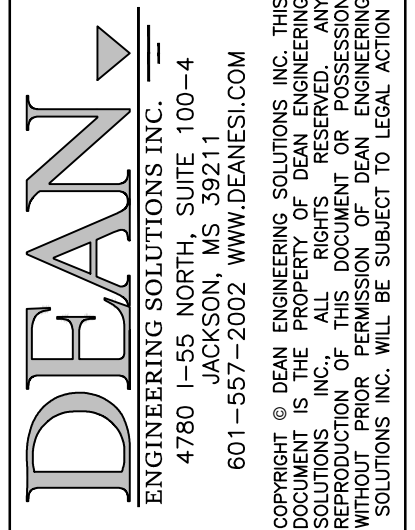
**3.0000 ACRES
130,680 SQ. FT.**
PART OF PARCELS
IN BOOK 2807 PAGE 381
PARCEL # 082-29-01021.00

BOOK 3143 PAGE 522
PARCEL # 082-29-01022.00

PARCEL 2
BOOK 2807 PAGE 381
PARCEL # 082-29-01021.00



C:\Users\OneDrive - deanengr.com\1-Projects\DES\Commercial Construction Maintenance\Gluckstadt Retail\GIS\stormwater\DA1-Gluckstadt Retail.dwg, DA1-Pre, 7/29/2022 7:54:43 PM, clem, DWG To PDF.pc3, ARCH expand D (24.00 x 36.00 inches), 1:1



No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	00-00-0000

OWNER:
OWNER NAME & DATA
OWNER ADDRESS AND PHONE

PROJECT TITLE:
SHEET TITLE:
**STORMWATER IMPACT STUDY MAP
PRE-DEVELOPMENT CONDITIONS**
SITE DEVELOPMENT

JOB NO.: 200000
DATE: 00 JAN 2021
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
DA-1

PLAT SHOWING
CERTAIN PROPERTIES
SITUATED IN THE NORTHEAST 1/4 OF
SECTION 29, TOWNSHIP 8 NORTH, RANGE 2 EAST
MADISON COUNTY, MISSISSIPPI

GLUCKSTADT ROAD
RW- VARIABLE

STUDY POINT 1:
EXISTING OUTFALL
ELEV=286.3

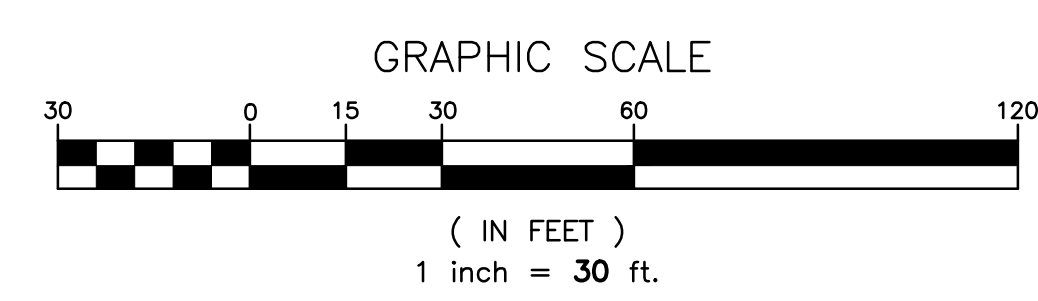
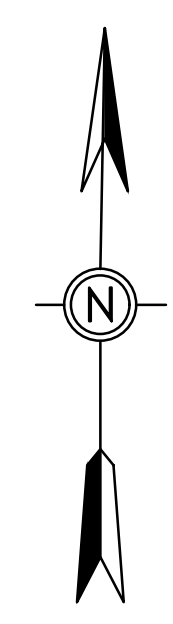
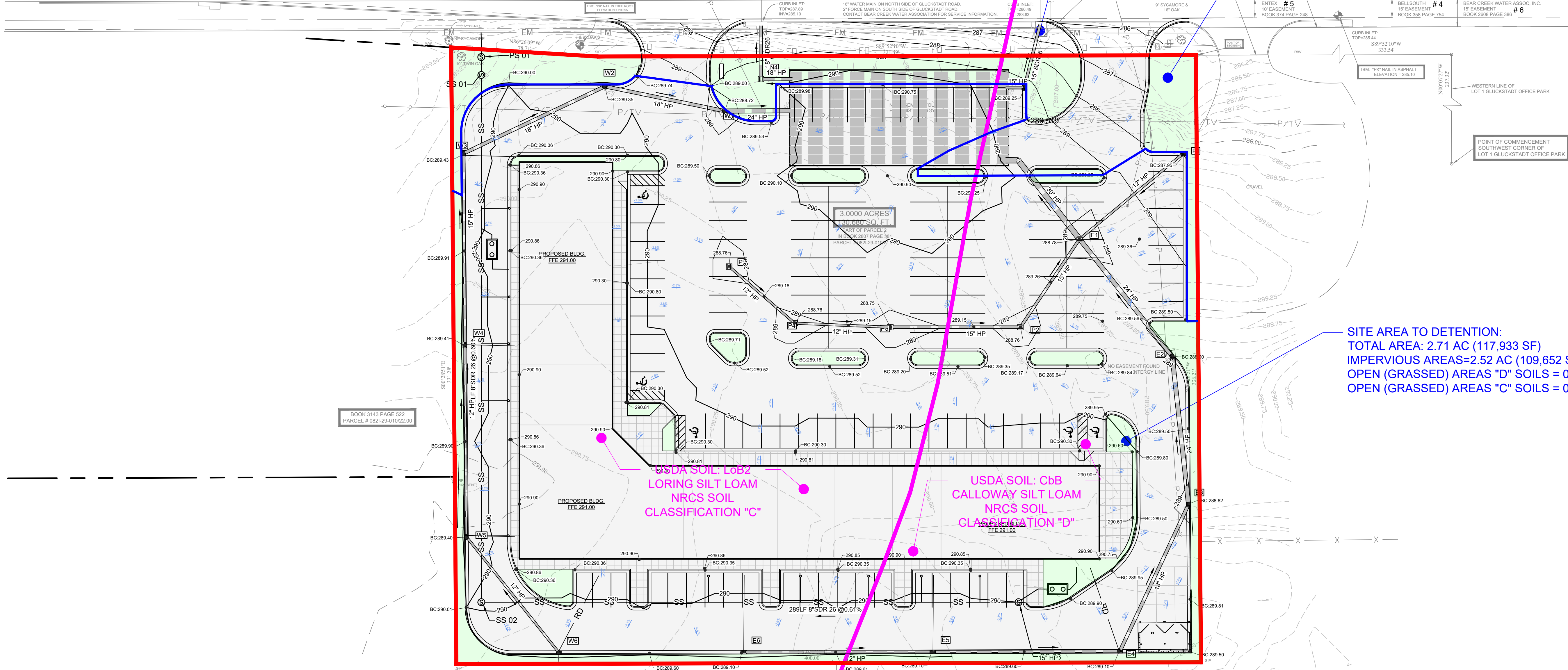
SITE AREA BYPASSING DETENTION:
TOTAL AREA: 0.29 AC (12,685 SF)
IMPERVIOUS AREAS=0.10 AC (4,433 SF)
OPEN (GRASSED) AREAS "D" SOILS =0.07 AC (3,140 SF)
OPEN (GRASSED) AREAS "C" SOILS =0.12 AC (5,112 SF)

SITE AREA TO DETENTION:
TOTAL AREA: 2.71 AC (117,933 SF)
IMPERVIOUS AREAS=2.52 AC (109,652 SF)
OPEN (GRASSED) AREAS "D" SOILS = 0.09 AC (3,744 SF)
OPEN (GRASSED) AREAS "C" SOILS = 0.10 AC (4,537 SF)

USDA SOIL: Lb2
LORING SILT LOAM
NRCS SOIL
CLASSIFICATION "C"

USDA SOIL: Cb
CALLOWAY SILT LOAM
NRCS SOIL
CLASSIFICATION "D"

SITE SOIL
DIVISION LINE
(SOURCE: NRCS
SOILS MAP)



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Soil Map—Madison County, Mississippi

Section 4, Item C)



Map Scale: 1:1,830 if printed on A landscape (11" x 8.5") sheet.




Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 15N WGS84



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)




















Soils






 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

Special Point Features






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Madison County, Mississippi
 Survey Area Data: Version 16, Sep 8, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

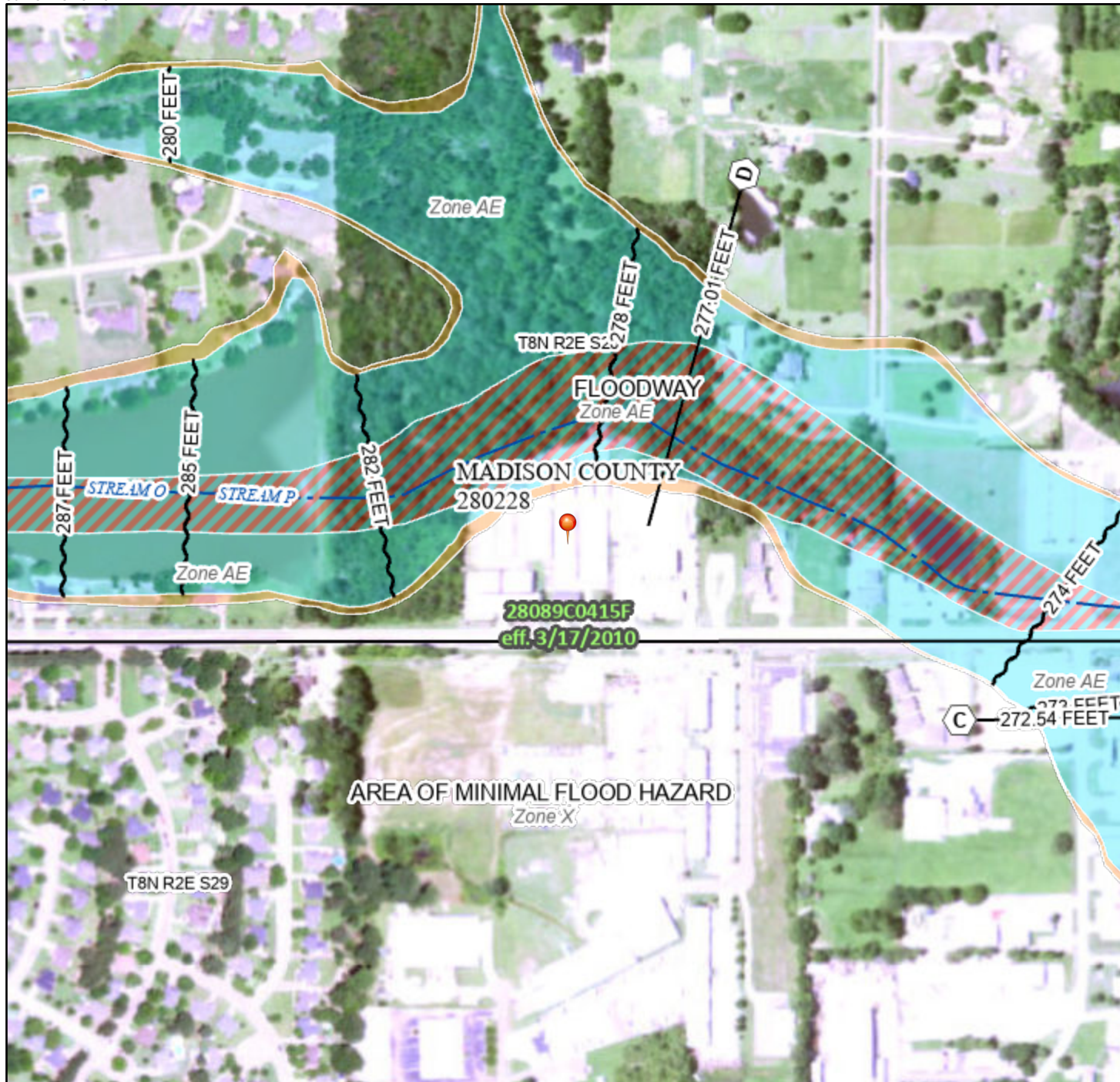
Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
CbB	Calloway silt loam, 1 to 3 percent slopes	5.2	38.5%
Gb	Gillsburg silt loam	0.3	2.4%
LoB2	Loring silt loam, 2 to 5 percent slopes, moderately eroded, central	8.0	59.1%
Oa	Oaklimeter silt loam, 0 to 2 percent slopes, occasionally flooded, north	0.0	0.0%
Totals for Area of Interest		13.6	100.0%

National Flood Hazard Layer FIRMette



90°7'5"W 32°31'19"N



Legend

Section 4, Item C)

SEE FIS REPORT FOR DETAILED LEGEND AND INFORMATION

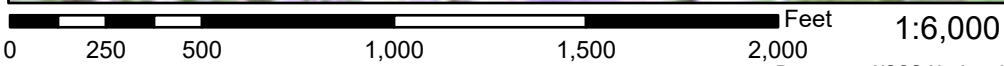
SPECIAL FLOOD HAZARD AREAS	OTHER AREAS OF FLOOD HAZARD	OTHER AREAS	GENERAL STRUCTURES	OTHER FEATURES	MAP PANELS
Without Base Flood Elevation (BFE) Zone A, V, A99	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X	NO SCREEN Area of Minimal Flood Hazard Zone X	Channel, Culvert, or Storm Sewer	20.2 Cross Sections with 1% Annual Chance Water Surface Elevation	Digital Data Available
With BFE or Depth Zone AE, AO, AH, VE, AR	Future Conditions 1% Annual Chance Flood Hazard Zone X	Effective LOMRs	Levee, Dike, or Floodwall	17.5 Coastal Transect	No Digital Data Available
Regulatory Floodway	Area with Reduced Flood Risk due to Levee. See Notes. Zone X	Area of Undetermined Flood Hazard Zone D		Base Flood Elevation Line (BFE)	Unmapped
	Area with Flood Risk due to Levee Zone D			Limit of Study	
				Jurisdiction Boundary	
				Coastal Transect Baseline	
				Profile Baseline	
				Hydrographic Feature	

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

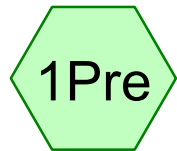
This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 4/19/2022 at 9:52 AM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

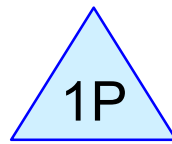
This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifier, FIRM panel number, and FIRM effective date. Map in unmapped and unmodernized areas cannot be used for regulatory purposes.



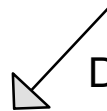
Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Pre Development Site



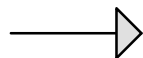
Post to Detention



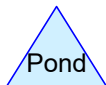
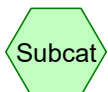
Detention



Post Bypass



Post Outfall



Routing Diagram for Gluckstadt Retail STM SC-740
Prepared by {enter your company name here}, Printed 8/3/2022
HydroCAD® 10.00-26 s/n 09984 © 2020 HydroCAD Software Solutions LLC

Gluckstadt Retial STM SC-740

Prepared by {enter your company name here}
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Page 2

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.220	74	>75% Grass cover, Good, HSG C (2Post, 2S)
0.160	80	>75% Grass cover, Good, HSG D (2Post, 2S)
1.940	79	Pasture/grassland/range, Fair, HSG C (1Pre)
1.060	84	Pasture/grassland/range, Fair, HSG D (1Pre)
2.620	98	Paved parking, HSG C (2Post, 2S)
6.000	88	TOTAL AREA

Gluckstadt Retial STM SC-740

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Page 3

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
4.780	HSG C	1Pre, 2Post, 2S
1.220	HSG D	1Pre, 2Post, 2S
0.000	Other	
6.000		TOTAL AREA

Gluckstadt Retial STM SC-740

Prepared by {enter your company name here}

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Page 4

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.000	0.000	0.220	0.160	0.000	0.380	>75% Grass cover, Good	2Post, 2S
0.000	0.000	1.940	1.060	0.000	3.000	Pasture/grassland/range, Fair	1Pre
0.000	0.000	2.620	0.000	0.000	2.620	Paved parking	2Post, 2S
0.000	0.000	4.780	1.220	0.000	6.000	TOTAL AREA	

Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

Prepared by {enter your company name here}

Printed 8/3/2022

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Page 5

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1Pre: Pre Development Site Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=2.55"
Flow Length=467' Tc=11.1 min CN=81 Runoff=7.57 cfs 0.637 af

Subcatchment 2Post: Post to Detention Runoff Area=2.710 ac 92.99% Impervious Runoff Depth=4.15"
Tc=5.0 min CN=97 Runoff=12.24 cfs 0.937 af

Subcatchment 2S: Post Bypass Runoff Area=0.290 ac 34.48% Impervious Runoff Depth=2.82"
Tc=5.0 min CN=84 Runoff=0.99 cfs 0.068 af

Pond 1P: Detention Peak Elev=285.97' Storage=0.193 af Inflow=12.24 cfs 0.937 af
Outflow=5.56 cfs 0.937 af

Link 3L: Post Outfall Inflow=6.07 cfs 1.005 af
Primary=6.07 cfs 1.005 af

Total Runoff Area = 6.000 ac Runoff Volume = 1.642 af Average Runoff Depth = 3.28"
56.33% Pervious = 3.380 ac 43.67% Impervious = 2.620 ac

Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

Prepared by {enter your company name here}

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Page 6

Summary for Subcatchment 1Pre: Pre Development Site

Runoff = 7.57 cfs @ 12.15 hrs, Volume= 0.637 af, Depth= 2.55"

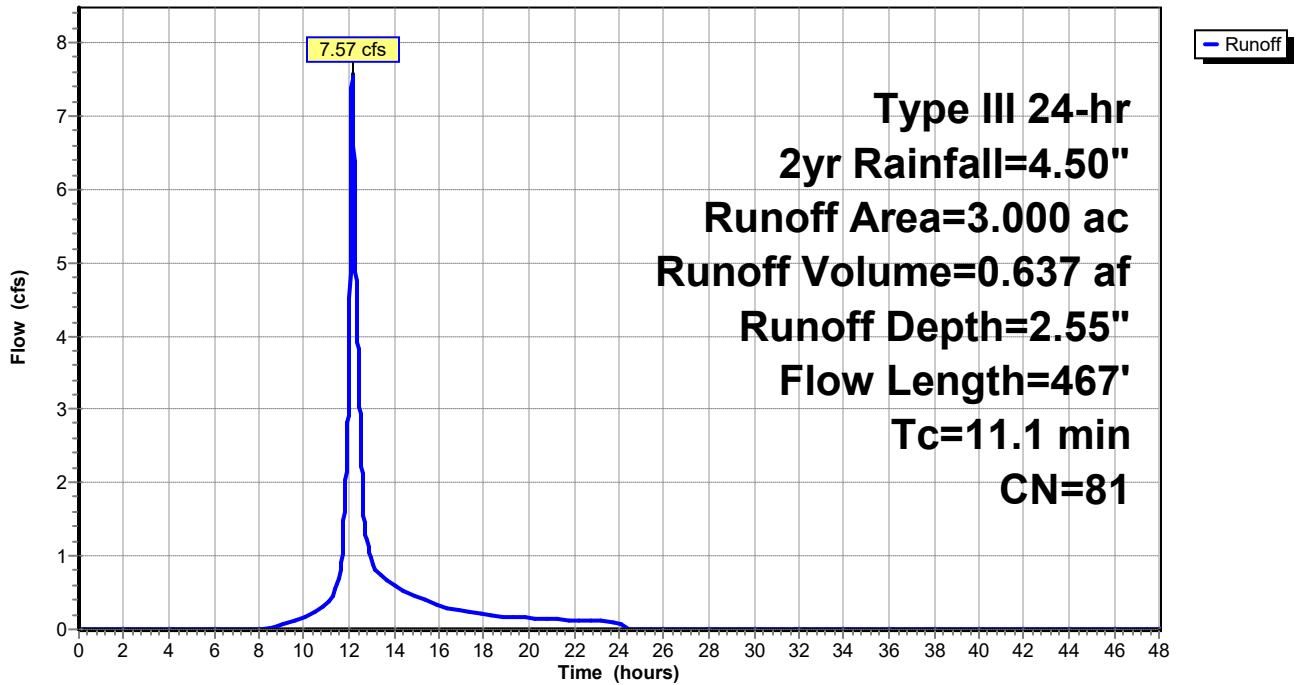
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2yr Rainfall=4.50"

Area (ac)	CN	Description
1.940	79	Pasture/grassland/range, Fair, HSG C
1.060	84	Pasture/grassland/range, Fair, HSG D
3.000	81	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	65	0.0110	0.16		Sheet Flow, Range n= 0.130 P2= 4.50"
4.5	402	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.1	467	Total			

Subcatchment 1Pre: Pre Development Site

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

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Printed 8/3/2022

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Page 7

Summary for Subcatchment 2Post: Post to Detention

Runoff = 12.24 cfs @ 12.07 hrs, Volume= 0.937 af, Depth= 4.15"

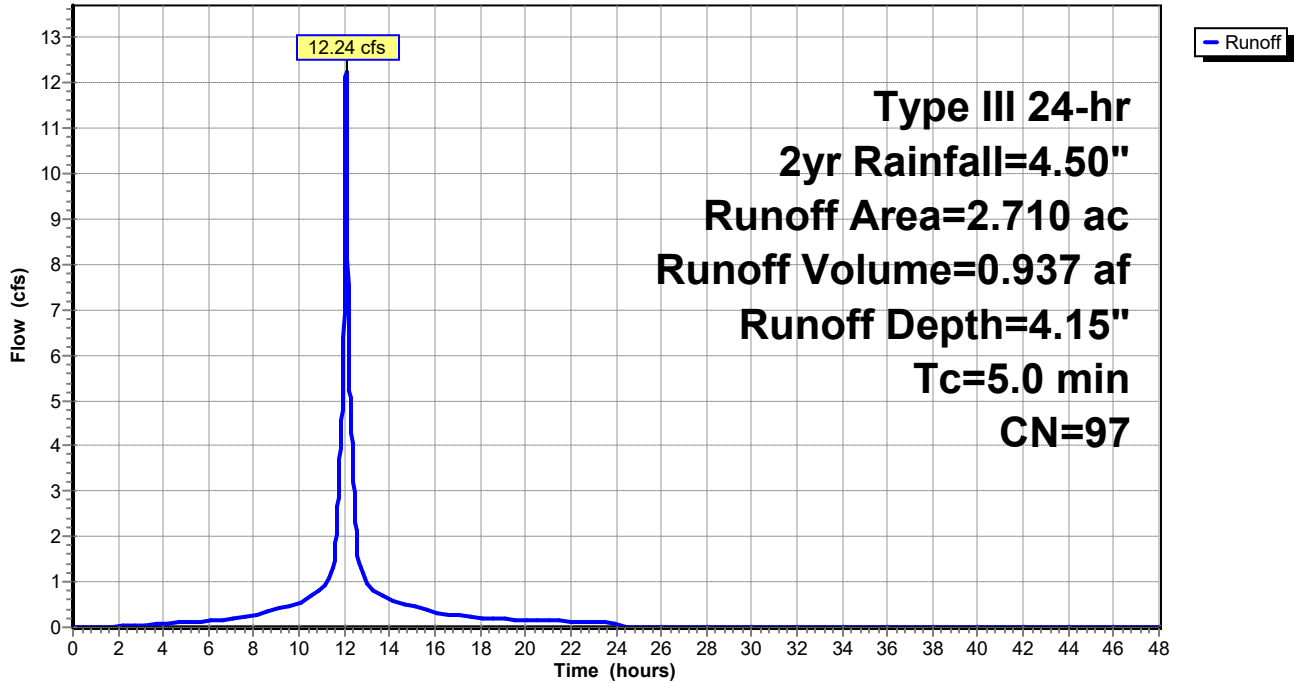
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2yr Rainfall=4.50"

Area (ac)	CN	Description
0.100	74	>75% Grass cover, Good, HSG C
2.520	98	Paved parking, HSG C
0.090	80	>75% Grass cover, Good, HSG D
2.710	97	Weighted Average
0.190		7.01% Pervious Area
2.520		92.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2Post: Post to Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

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Printed 8/3/2022

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Page 8

Summary for Subcatchment 2S: Post Bypass

Runoff = 0.99 cfs @ 12.07 hrs, Volume= 0.068 af, Depth= 2.82"

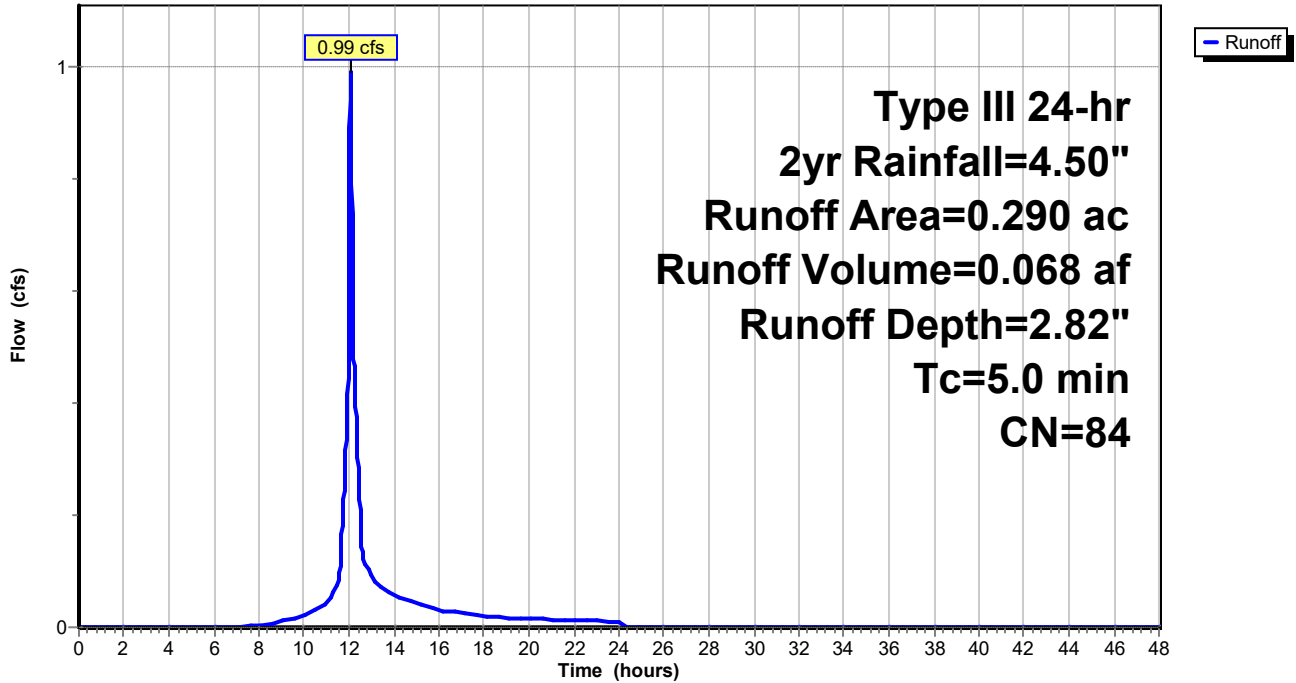
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2yr Rainfall=4.50"

Area (ac)	CN	Description
0.120	74	>75% Grass cover, Good, HSG C
0.100	98	Paved parking, HSG C
0.070	80	>75% Grass cover, Good, HSG D
0.290	84	Weighted Average
0.190		65.52% Pervious Area
0.100		34.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Bypass

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

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Summary for Pond 1P: Detention

Inflow Area = 2.710 ac, 92.99% Impervious, Inflow Depth = 4.15" for 2yr event
 Inflow = 12.24 cfs @ 12.07 hrs, Volume= 0.937 af
 Outflow = 5.56 cfs @ 12.22 hrs, Volume= 0.937 af, Atten= 55%, Lag= 9.0 min
 Primary = 5.56 cfs @ 12.22 hrs, Volume= 0.937 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 285.97' @ 12.22 hrs Surf.Area= 0.148 ac Storage= 0.193 af

Plug-Flow detention time= 36.2 min calculated for 0.937 af (100% of inflow)
 Center-of-Mass det. time= 36.3 min (793.4 - 757.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	284.00'	0.169 af	51.25'W x 125.54'L x 4.00'H Field A 0.591 af Overall - 0.169 af Embedded = 0.422 af x 40.0% Voids
#2A	284.50'	0.169 af	ADS_StormTech SC-740 +Cap x 160 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 160 Chambers in 10 Rows
		0.338 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	284.00'	15.0" Round Culvert L= 70.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 284.00' / 283.80' S= 0.0029 '/ Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Primary	286.15'	18.0" Round Culvert L= 60.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 286.15' / 285.35' S= 0.0133 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=5.56 cfs @ 12.22 hrs HW=285.97' (Free Discharge)

1=Culvert (Barrel Controls 5.56 cfs @ 4.53 fps)

2=Culvert (Controls 0.00 cfs)

Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

Prepared by {enter your company name here}

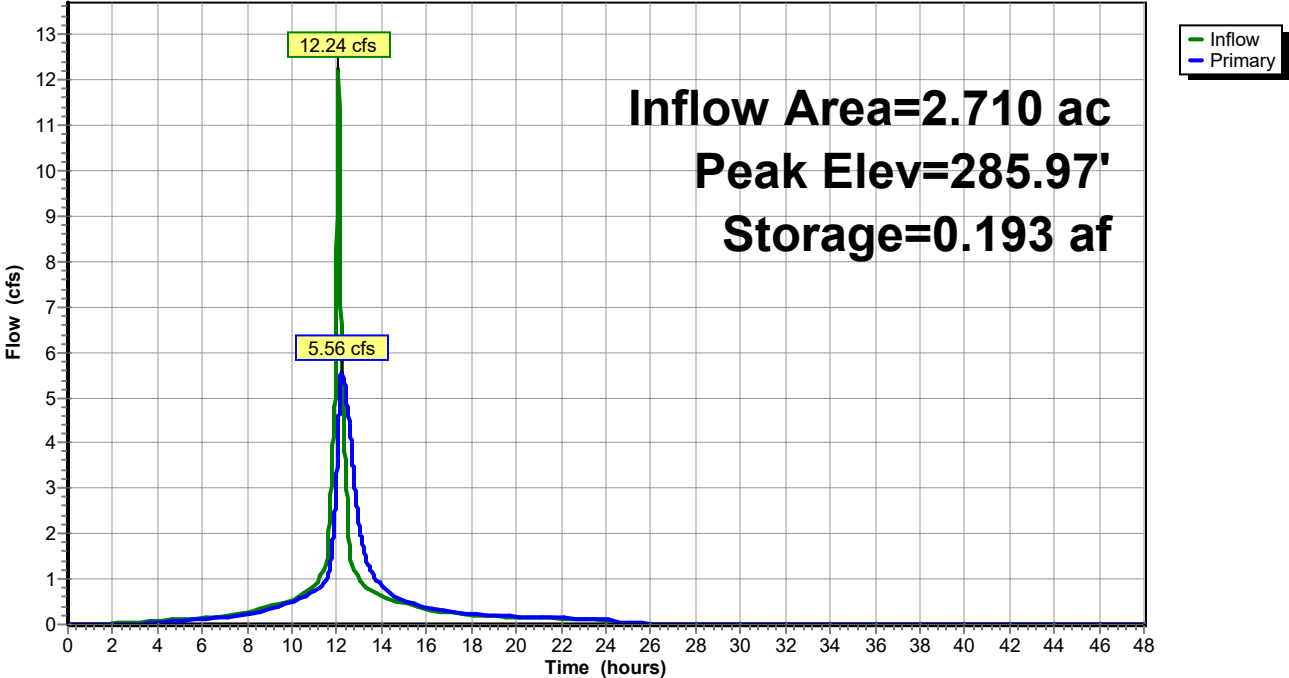
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Page 10

Pond 1P: Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 2yr Rainfall=4.50"

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Page 11

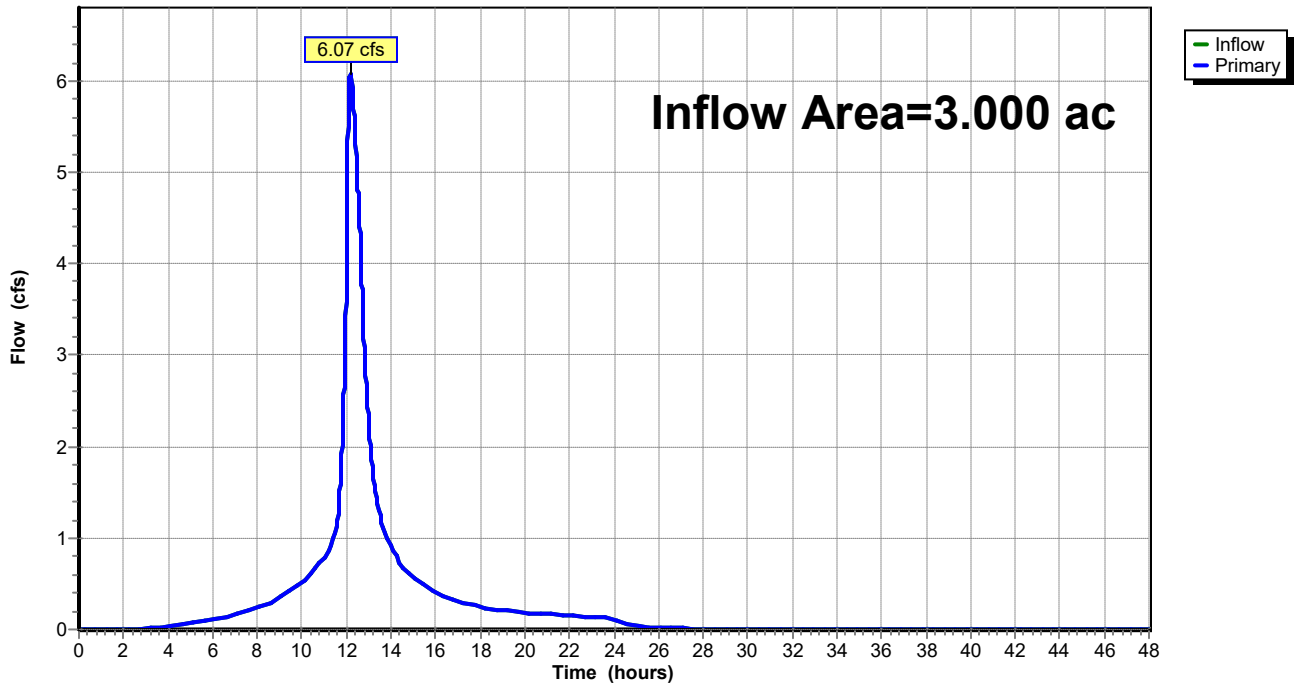
Summary for Link 3L: Post Outfall

Inflow Area = 3.000 ac, 87.33% Impervious, Inflow Depth = 4.02" for 2yr event
Inflow = 6.07 cfs @ 12.17 hrs, Volume= 1.005 af
Primary = 6.07 cfs @ 12.17 hrs, Volume= 1.005 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 3L: Post Outfall

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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Page 12

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1Pre: Pre Development Site Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=3.61"
Flow Length=467' Tc=11.1 min CN=81 Runoff=10.70 cfs 0.903 af

Subcatchment 2Post: Post to Detention Runoff Area=2.710 ac 92.99% Impervious Runoff Depth=5.34"
Tc=5.0 min CN=97 Runoff=15.59 cfs 1.207 af

Subcatchment 2S: Post Bypass Runoff Area=0.290 ac 34.48% Impervious Runoff Depth=3.92"
Tc=5.0 min CN=84 Runoff=1.36 cfs 0.095 af

Pond 1P: Detention Peak Elev=286.49' Storage=0.242 af Inflow=15.59 cfs 1.207 af
Outflow=7.55 cfs 1.207 af

Link 3L: Post Outfall Inflow=8.27 cfs 1.302 af
Primary=8.27 cfs 1.302 af

Total Runoff Area = 6.000 ac Runoff Volume = 2.205 af Average Runoff Depth = 4.41"
56.33% Pervious = 3.380 ac 43.67% Impervious = 2.620 ac

Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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Summary for Subcatchment 1Pre: Pre Development Site

Runoff = 10.70 cfs @ 12.15 hrs, Volume= 0.903 af, Depth= 3.61"

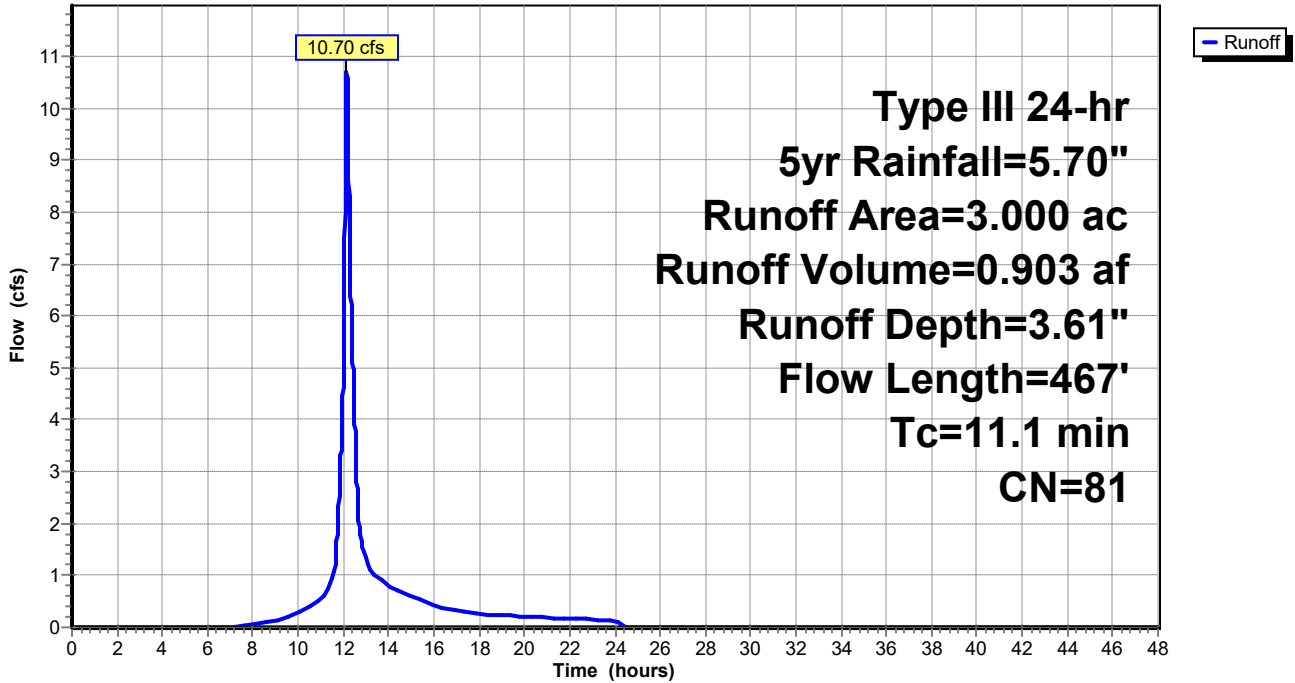
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 5yr Rainfall=5.70"

Area (ac)	CN	Description
1.940	79	Pasture/grassland/range, Fair, HSG C
1.060	84	Pasture/grassland/range, Fair, HSG D
3.000	81	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	65	0.0110	0.16		Sheet Flow, Range n= 0.130 P2= 4.50"
4.5	402	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.1	467	Total			

Subcatchment 1Pre: Pre Development Site

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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Summary for Subcatchment 2Post: Post to Detention

Runoff = 15.59 cfs @ 12.07 hrs, Volume= 1.207 af, Depth= 5.34"

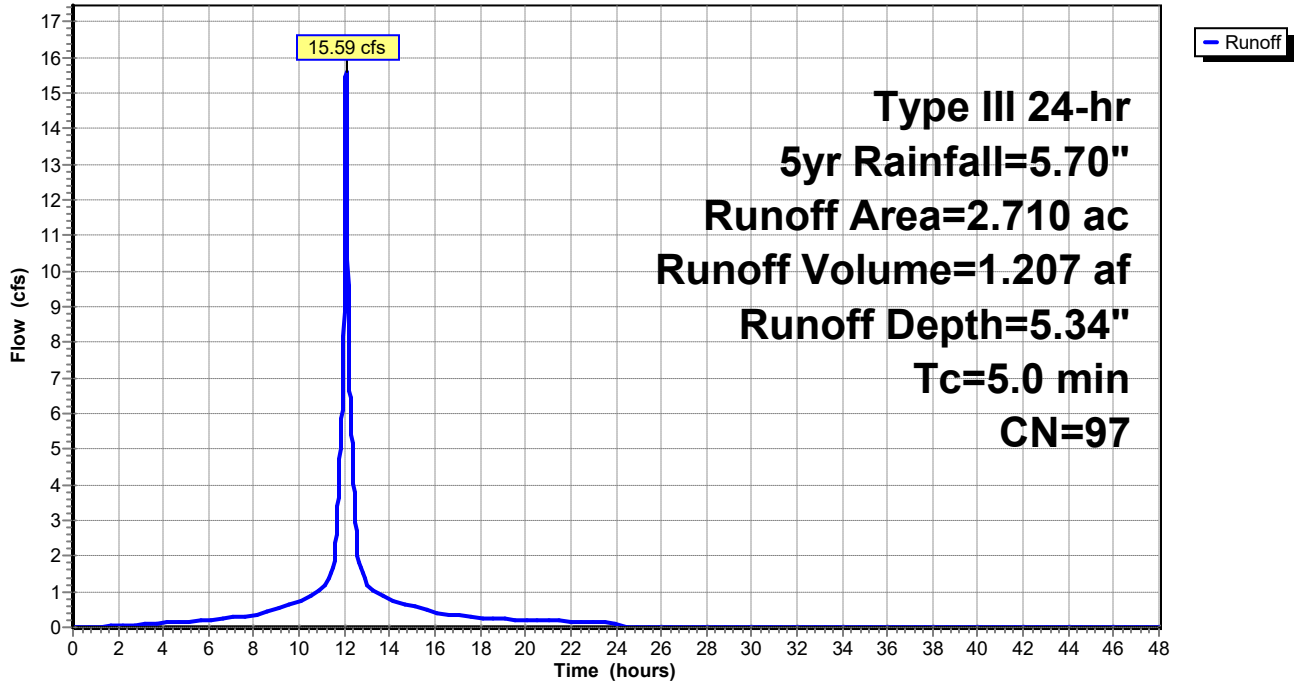
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 5yr Rainfall=5.70"

Area (ac)	CN	Description
0.100	74	>75% Grass cover, Good, HSG C
2.520	98	Paved parking, HSG C
0.090	80	>75% Grass cover, Good, HSG D
2.710	97	Weighted Average
0.190		7.01% Pervious Area
2.520		92.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2Post: Post to Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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Summary for Subcatchment 2S: Post Bypass

Runoff = 1.36 cfs @ 12.07 hrs, Volume= 0.095 af, Depth= 3.92"

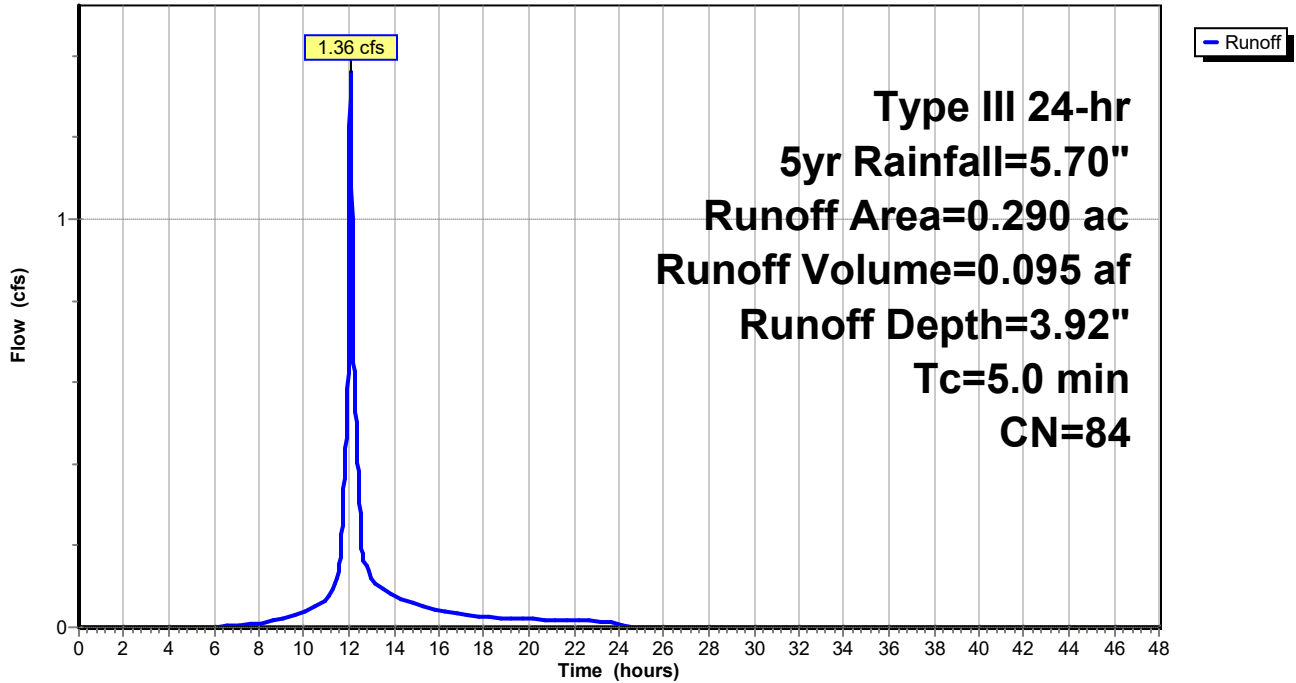
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 5yr Rainfall=5.70"

Area (ac)	CN	Description
0.120	74	>75% Grass cover, Good, HSG C
0.100	98	Paved parking, HSG C
0.070	80	>75% Grass cover, Good, HSG D
0.290	84	Weighted Average
0.190		65.52% Pervious Area
0.100		34.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Bypass

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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Summary for Pond 1P: Detention

Inflow Area = 2.710 ac, 92.99% Impervious, Inflow Depth = 5.34" for 5yr event
 Inflow = 15.59 cfs @ 12.07 hrs, Volume= 1.207 af
 Outflow = 7.55 cfs @ 12.20 hrs, Volume= 1.207 af, Atten= 52%, Lag= 8.0 min
 Primary = 7.55 cfs @ 12.20 hrs, Volume= 1.207 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 286.49' @ 12.20 hrs Surf.Area= 0.148 ac Storage= 0.242 af

Plug-Flow detention time= 33.6 min calculated for 1.207 af (100% of inflow)
 Center-of-Mass det. time= 33.7 min (785.9 - 752.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	284.00'	0.169 af	51.25'W x 125.54'L x 4.00'H Field A 0.591 af Overall - 0.169 af Embedded = 0.422 af x 40.0% Voids
#2A	284.50'	0.169 af	ADS_StormTech SC-740 +Cap x 160 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 160 Chambers in 10 Rows
		0.338 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	284.00'	15.0" Round Culvert L= 70.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 284.00' / 283.80' S= 0.0029 '/ Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Primary	286.15'	18.0" Round Culvert L= 60.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 286.15' / 285.35' S= 0.0133 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=7.55 cfs @ 12.20 hrs HW=286.49' (Free Discharge)

1=Culvert (Barrel Controls 6.95 cfs @ 5.67 fps)

2=Culvert (Inlet Controls 0.60 cfs @ 1.99 fps)

Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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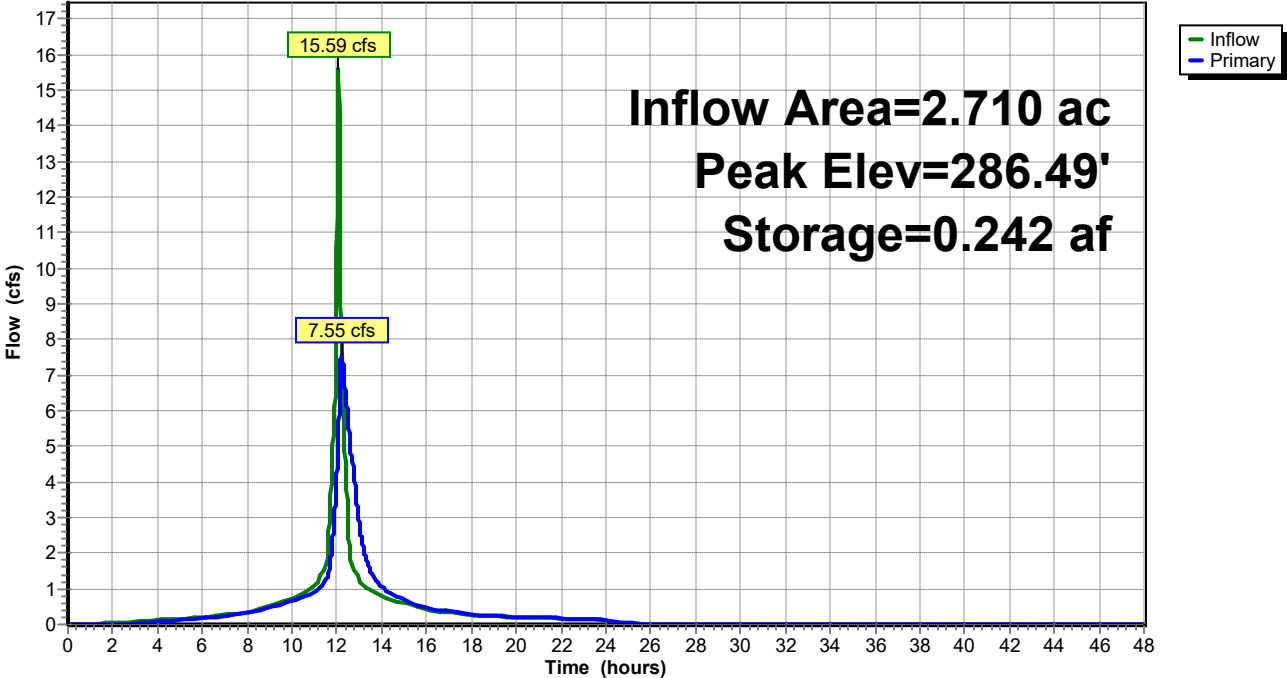
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Pond 1P: Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 5yr Rainfall=5.70"

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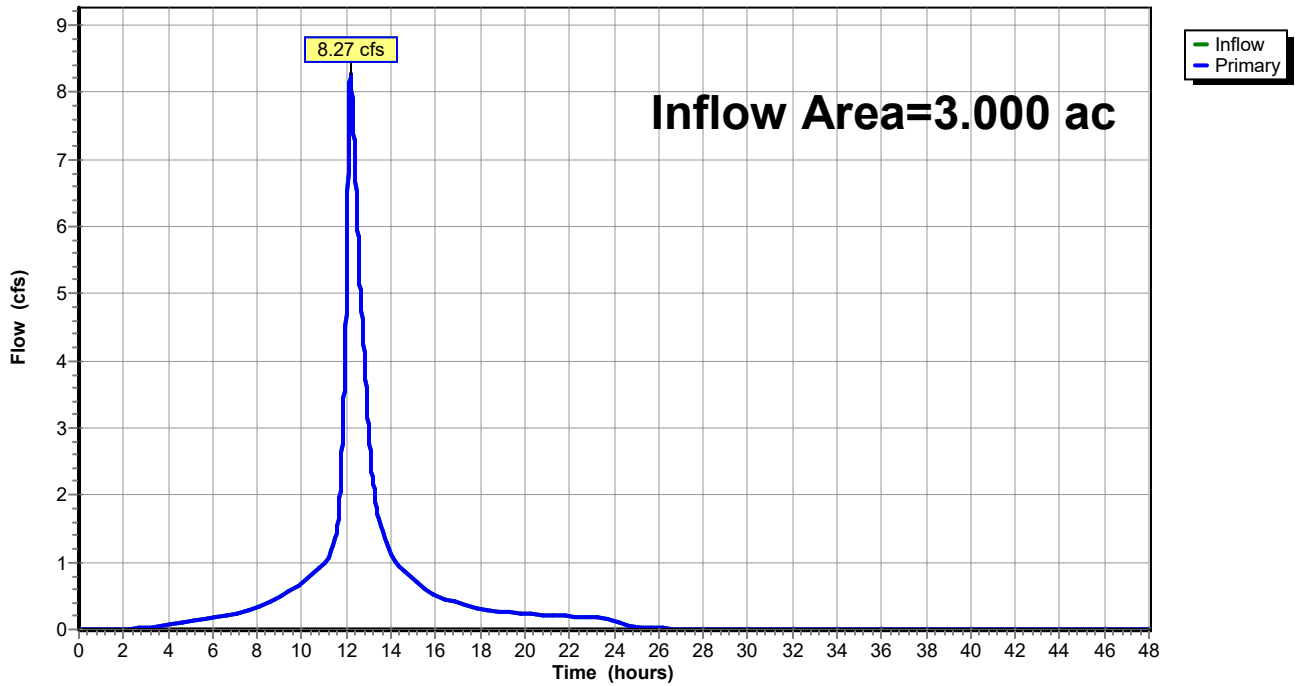
Summary for Link 3L: Post Outfall

Inflow Area = 3.000 ac, 87.33% Impervious, Inflow Depth = 5.21" for 5yr event
Inflow = 8.27 cfs @ 12.18 hrs, Volume= 1.302 af
Primary = 8.27 cfs @ 12.18 hrs, Volume= 1.302 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 3L: Post Outfall

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 10yr Rainfall=6.70"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1Pre: Pre Development Site Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=4.53"
Flow Length=467' Tc=11.1 min CN=81 Runoff=13.34 cfs 1.132 af

Subcatchment 2Post: Post to Detention Runoff Area=2.710 ac 92.99% Impervious Runoff Depth=6.34"
Tc=5.0 min CN=97 Runoff=18.37 cfs 1.432 af

Subcatchment 2S: Post Bypass Runoff Area=0.290 ac 34.48% Impervious Runoff Depth=4.86"
Tc=5.0 min CN=84 Runoff=1.68 cfs 0.117 af

Pond 1P: Detention Peak Elev=286.90' Storage=0.273 af Inflow=18.37 cfs 1.432 af
Outflow=10.50 cfs 1.432 af

Link 3L: Post Outfall Inflow=11.51 cfs 1.550 af
Primary=11.51 cfs 1.550 af

Total Runoff Area = 6.000 ac Runoff Volume = 2.681 af Average Runoff Depth = 5.36"
56.33% Pervious = 3.380 ac 43.67% Impervious = 2.620 ac

Gluckstadt Retial STM SC-740

Type III 24-hr 10yr Rainfall=6.70"

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Summary for Subcatchment 1Pre: Pre Development Site

Runoff = 13.34 cfs @ 12.15 hrs, Volume= 1.132 af, Depth= 4.53"

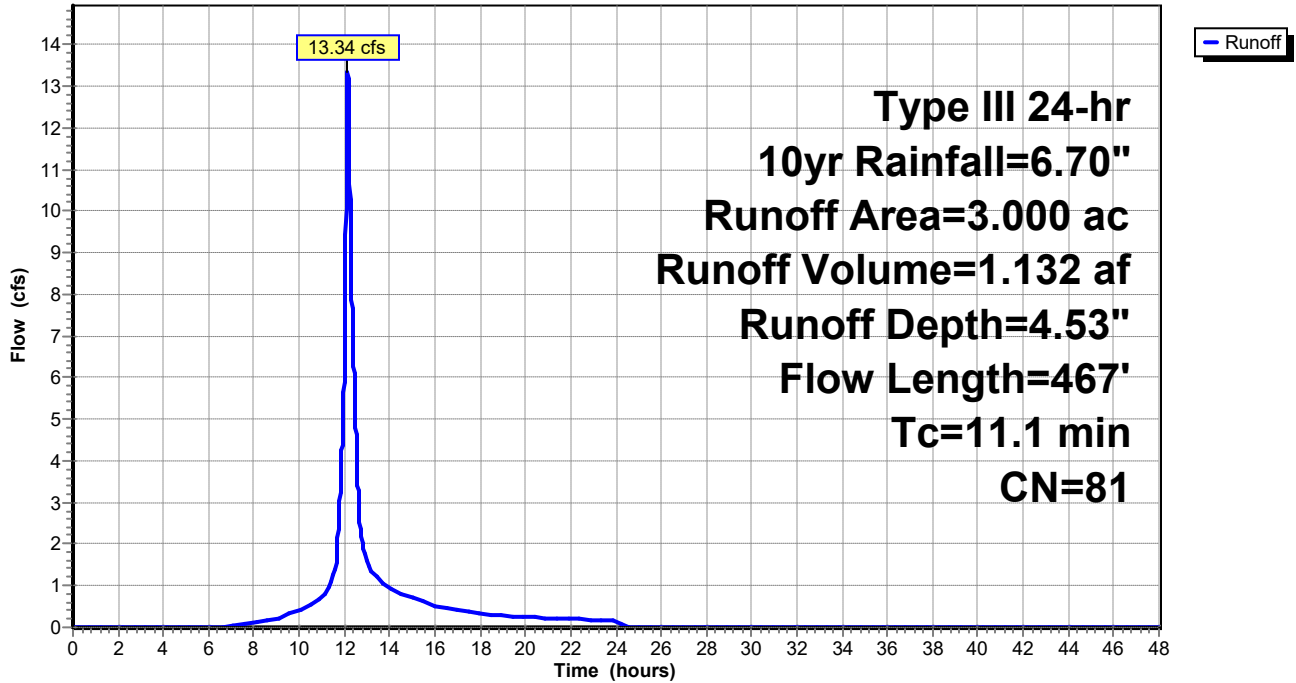
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10yr Rainfall=6.70"

Area (ac)	CN	Description
1.940	79	Pasture/grassland/range, Fair, HSG C
1.060	84	Pasture/grassland/range, Fair, HSG D
3.000	81	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	65	0.0110	0.16		Sheet Flow, Range n= 0.130 P2= 4.50"
4.5	402	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.1	467	Total			

Subcatchment 1Pre: Pre Development Site

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 10yr Rainfall=6.70"

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Summary for Subcatchment 2Post: Post to Detention

Runoff = 18.37 cfs @ 12.07 hrs, Volume= 1.432 af, Depth= 6.34"

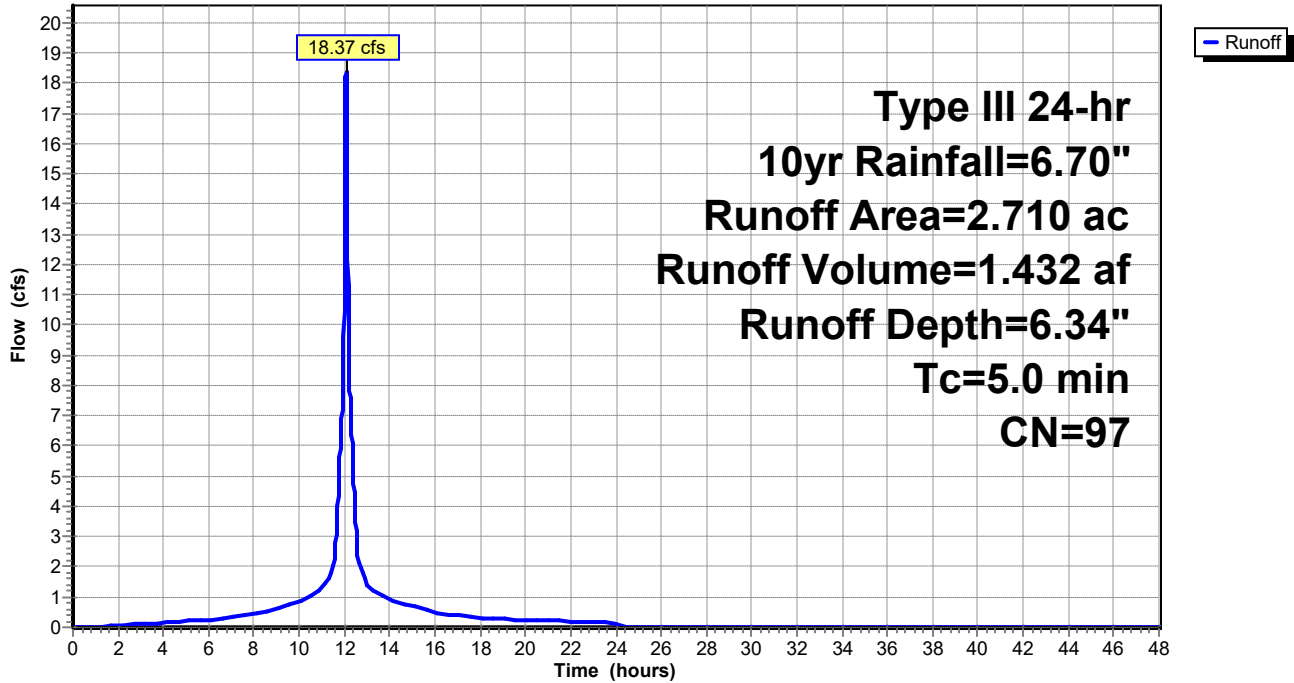
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10yr Rainfall=6.70"

Area (ac)	CN	Description
0.100	74	>75% Grass cover, Good, HSG C
2.520	98	Paved parking, HSG C
0.090	80	>75% Grass cover, Good, HSG D
2.710	97	Weighted Average
0.190		7.01% Pervious Area
2.520		92.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2Post: Post to Detention

Hydrograph



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Type III 24-hr 10yr Rainfall=6.70"

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Summary for Subcatchment 2S: Post Bypass

Runoff = 1.68 cfs @ 12.07 hrs, Volume= 0.117 af, Depth= 4.86"

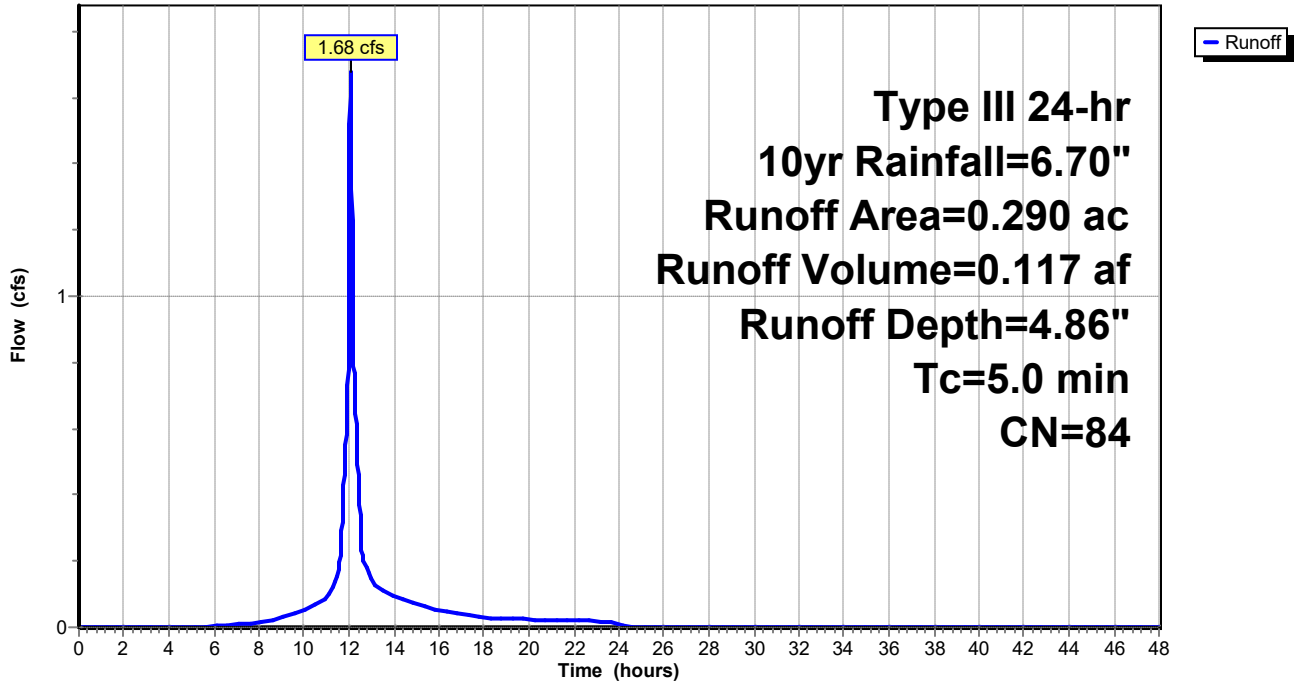
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10yr Rainfall=6.70"

Area (ac)	CN	Description
0.120	74	>75% Grass cover, Good, HSG C
0.100	98	Paved parking, HSG C
0.070	80	>75% Grass cover, Good, HSG D
0.290	84	Weighted Average
0.190		65.52% Pervious Area
0.100		34.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Bypass

Hydrograph



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Type III 24-hr 10yr Rainfall=6.70"

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Summary for Pond 1P: Detention

Inflow Area = 2.710 ac, 92.99% Impervious, Inflow Depth = 6.34" for 10yr event
 Inflow = 18.37 cfs @ 12.07 hrs, Volume= 1.432 af
 Outflow = 10.50 cfs @ 12.17 hrs, Volume= 1.432 af, Atten= 43%, Lag= 6.1 min
 Primary = 10.50 cfs @ 12.17 hrs, Volume= 1.432 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 286.90' @ 12.17 hrs Surf.Area= 0.148 ac Storage= 0.273 af

Plug-Flow detention time= 31.9 min calculated for 1.432 af (100% of inflow)
 Center-of-Mass det. time= 31.8 min (781.0 - 749.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	284.00'	0.169 af	51.25'W x 125.54'L x 4.00'H Field A 0.591 af Overall - 0.169 af Embedded = 0.422 af x 40.0% Voids
#2A	284.50'	0.169 af	ADS_StormTech SC-740 +Cap x 160 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 160 Chambers in 10 Rows
		0.338 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	284.00'	15.0" Round Culvert L= 70.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 284.00' / 283.80' S= 0.0029 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Primary	286.15'	18.0" Round Culvert L= 60.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 286.15' / 285.35' S= 0.0133 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=10.50 cfs @ 12.17 hrs HW=286.90' (Free Discharge)

1=Culvert (Barrel Controls 7.88 cfs @ 6.42 fps)

2=Culvert (Inlet Controls 2.61 cfs @ 2.95 fps)

Gluckstadt Retial STM SC-740

Type III 24-hr 10yr Rainfall=6.70"

Prepared by {enter your company name here}

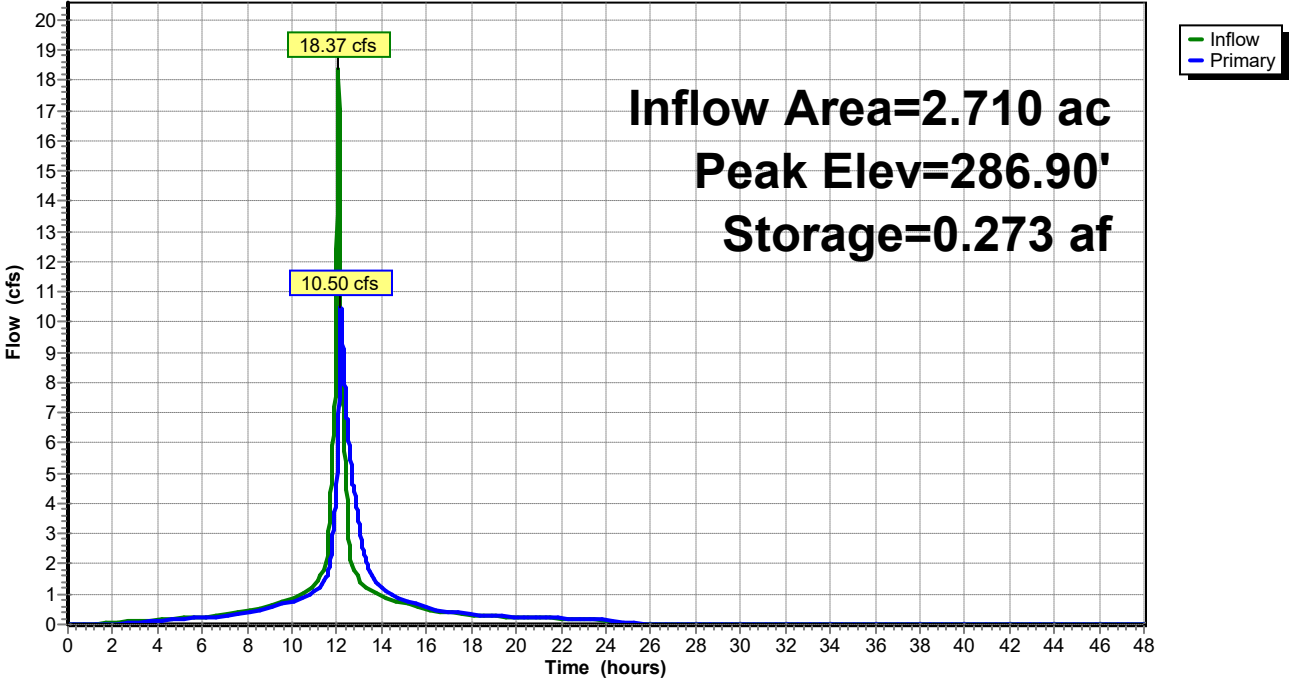
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Pond 1P: Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 10yr Rainfall=6.70"

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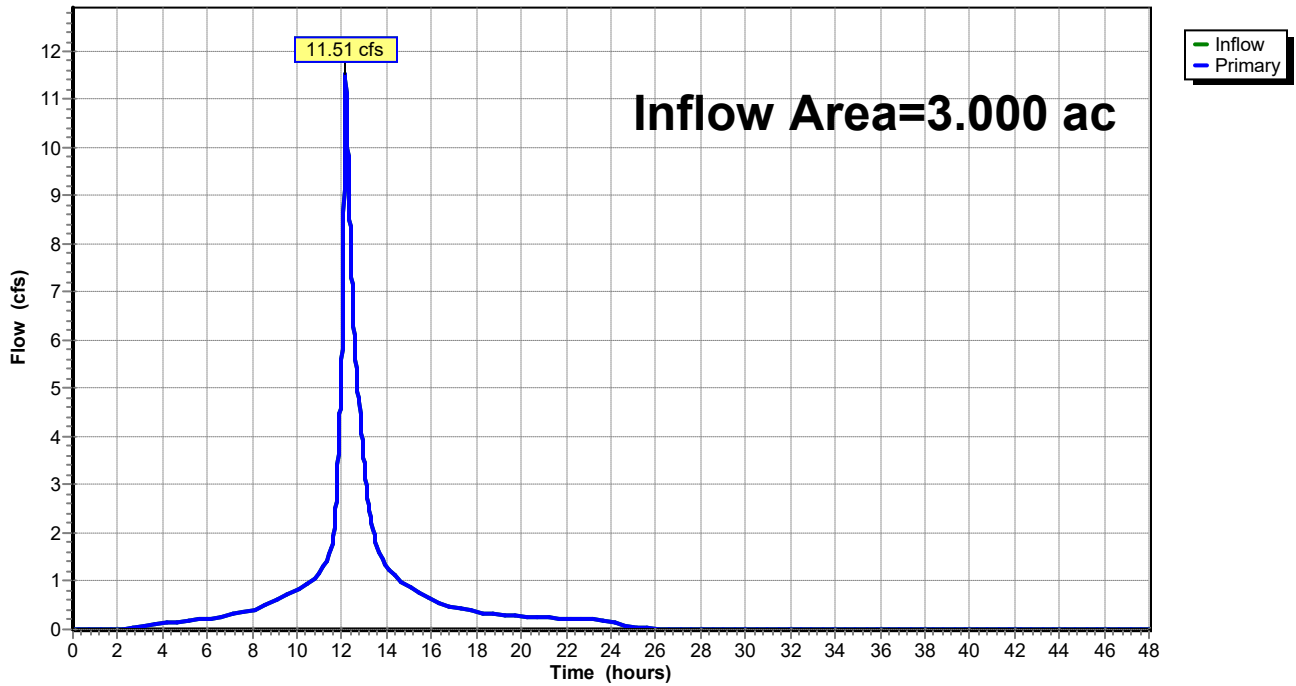
Summary for Link 3L: Post Outfall

Inflow Area = 3.000 ac, 87.33% Impervious, Inflow Depth = 6.20" for 10yr event
Inflow = 11.51 cfs @ 12.16 hrs, Volume= 1.550 af
Primary = 11.51 cfs @ 12.16 hrs, Volume= 1.550 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 3L: Post Outfall

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1Pre: Pre Development Site Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=5.46"
Flow Length=467' Tc=11.1 min CN=81 Runoff=15.99 cfs 1.365 af

Subcatchment 2Post: Post to Detention Runoff Area=2.710 ac 92.99% Impervious Runoff Depth=7.34"
Tc=5.0 min CN=97 Runoff=21.15 cfs 1.658 af

Subcatchment 2S: Post Bypass Runoff Area=0.290 ac 34.48% Impervious Runoff Depth=5.81"
Tc=5.0 min CN=84 Runoff=1.99 cfs 0.140 af

Pond 1P: Detention Peak Elev=287.30' Storage=0.296 af Inflow=21.15 cfs 1.658 af
Outflow=13.98 cfs 1.658 af

Link 3L: Post Outfall Inflow=15.36 cfs 1.798 af
Primary=15.36 cfs 1.798 af

Total Runoff Area = 6.000 ac Runoff Volume = 3.163 af Average Runoff Depth = 6.33"
56.33% Pervious = 3.380 ac 43.67% Impervious = 2.620 ac

Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

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Summary for Subcatchment 1Pre: Pre Development Site

Runoff = 15.99 cfs @ 12.15 hrs, Volume= 1.365 af, Depth= 5.46"

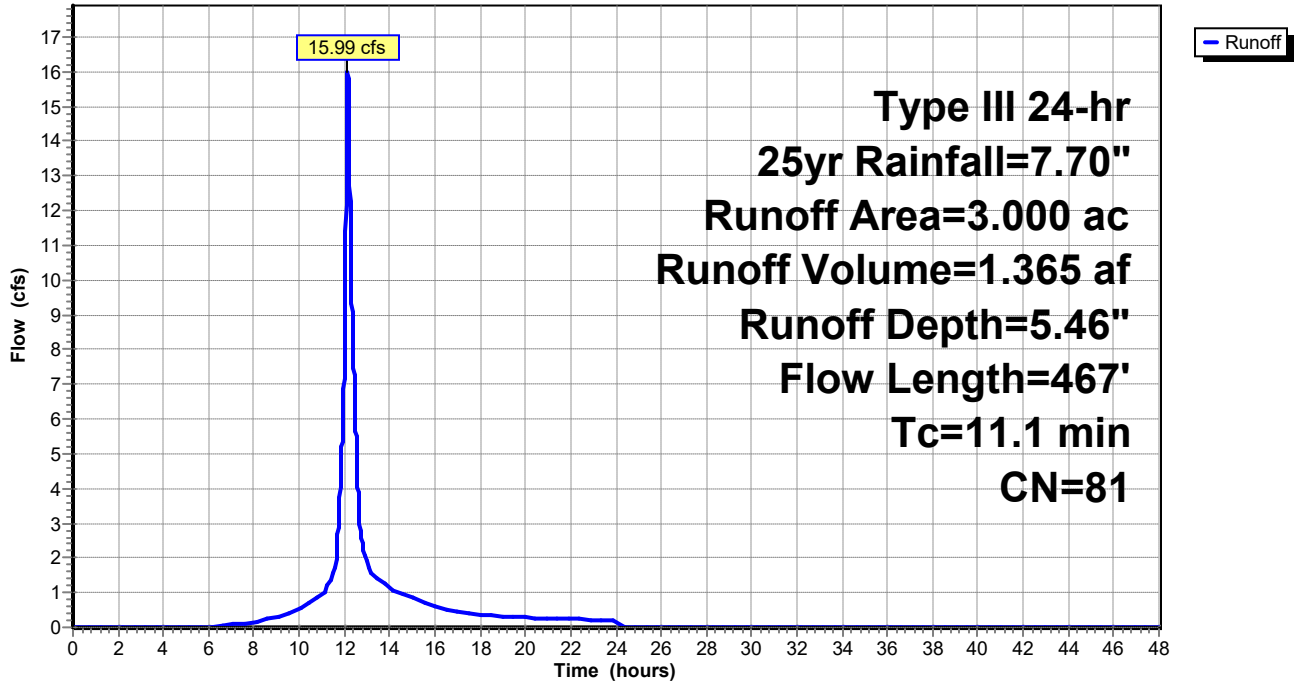
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25yr Rainfall=7.70"

Area (ac)	CN	Description
1.940	79	Pasture/grassland/range, Fair, HSG C
1.060	84	Pasture/grassland/range, Fair, HSG D
3.000	81	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	65	0.0110	0.16		Sheet Flow, Range n= 0.130 P2= 4.50"
4.5	402	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.1	467	Total			

Subcatchment 1Pre: Pre Development Site

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

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Summary for Subcatchment 2Post: Post to Detention

Runoff = 21.15 cfs @ 12.07 hrs, Volume= 1.658 af, Depth= 7.34"

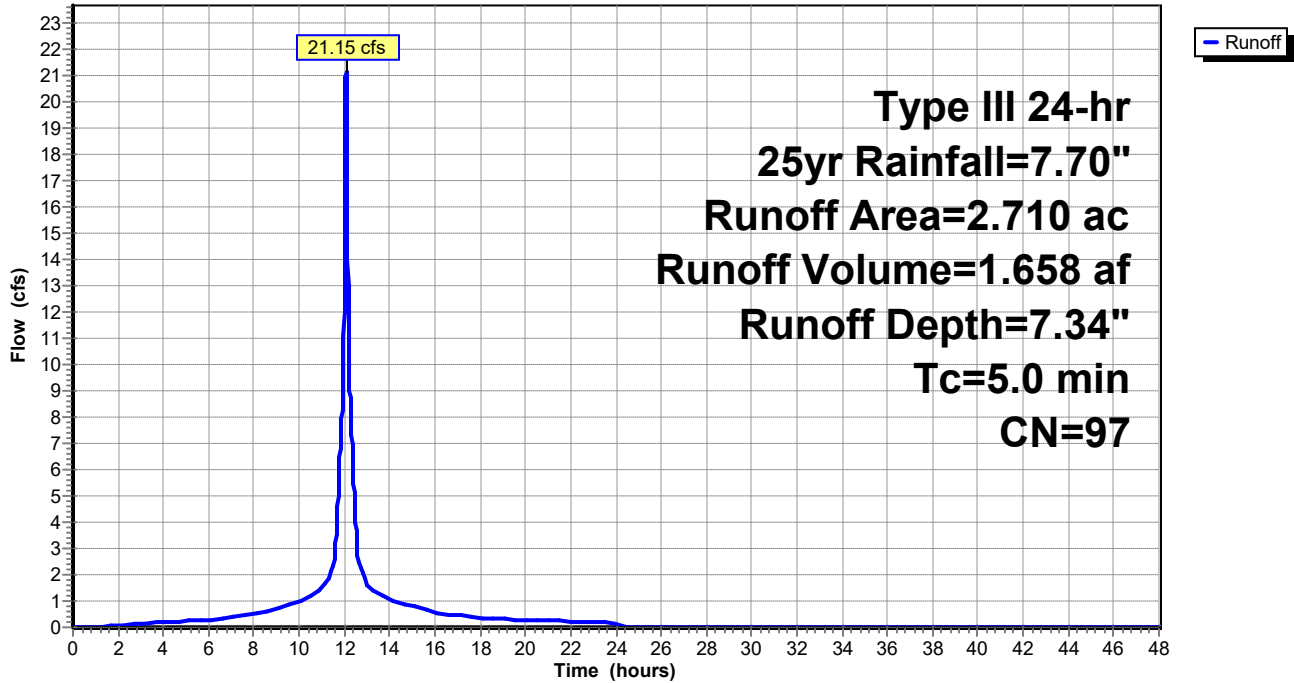
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25yr Rainfall=7.70"

Area (ac)	CN	Description
0.100	74	>75% Grass cover, Good, HSG C
2.520	98	Paved parking, HSG C
0.090	80	>75% Grass cover, Good, HSG D
2.710	97	Weighted Average
0.190		7.01% Pervious Area
2.520		92.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2Post: Post to Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

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Summary for Subcatchment 2S: Post Bypass

Runoff = 1.99 cfs @ 12.07 hrs, Volume= 0.140 af, Depth= 5.81"

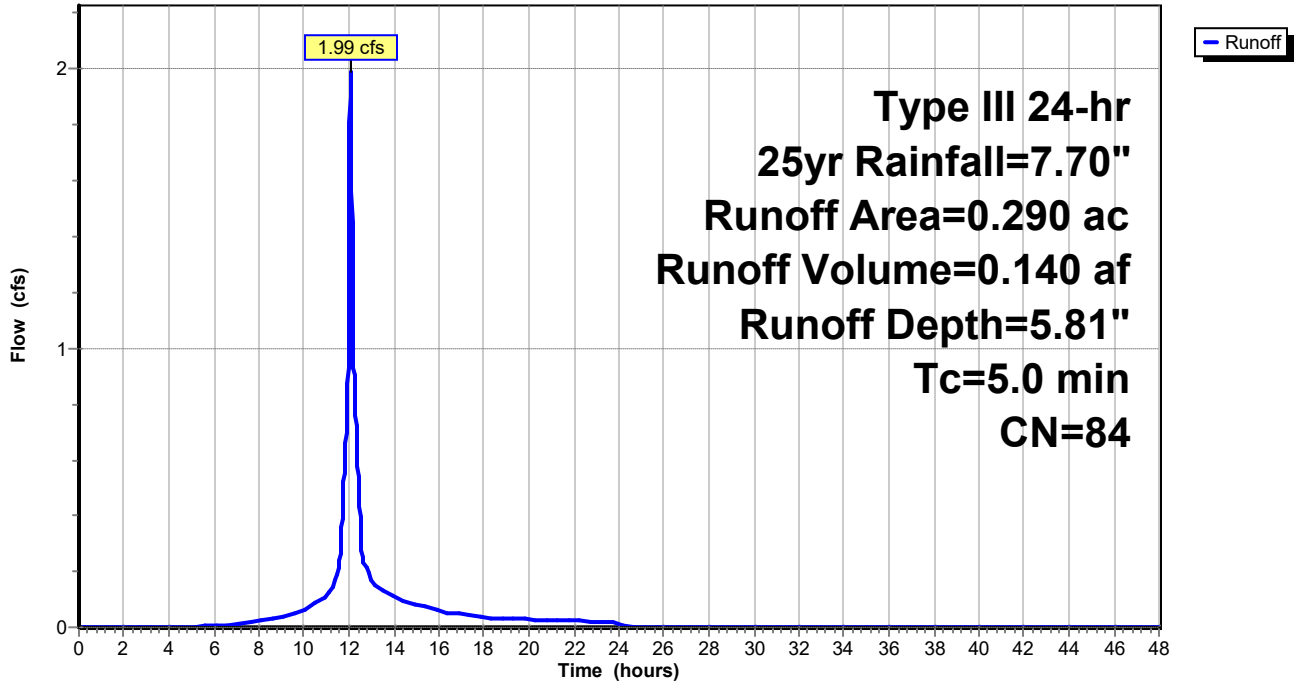
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25yr Rainfall=7.70"

Area (ac)	CN	Description
0.120	74	>75% Grass cover, Good, HSG C
0.100	98	Paved parking, HSG C
0.070	80	>75% Grass cover, Good, HSG D
0.290	84	Weighted Average
0.190		65.52% Pervious Area
0.100		34.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Bypass

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

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Summary for Pond 1P: Detention

Inflow Area = 2.710 ac, 92.99% Impervious, Inflow Depth = 7.34" for 25yr event
 Inflow = 21.15 cfs @ 12.07 hrs, Volume= 1.658 af
 Outflow = 13.98 cfs @ 12.15 hrs, Volume= 1.658 af, Atten= 34%, Lag= 4.9 min
 Primary = 13.98 cfs @ 12.15 hrs, Volume= 1.658 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 287.30' @ 12.15 hrs Surf.Area= 0.148 ac Storage= 0.296 af

Plug-Flow detention time= 29.9 min calculated for 1.657 af (100% of inflow)
 Center-of-Mass det. time= 30.1 min (776.9 - 746.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	284.00'	0.169 af	51.25'W x 125.54'L x 4.00'H Field A 0.591 af Overall - 0.169 af Embedded = 0.422 af x 40.0% Voids
#2A	284.50'	0.169 af	ADS_StormTech SC-740 +Cap x 160 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 160 Chambers in 10 Rows
		0.338 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	284.00'	15.0" Round Culvert L= 70.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 284.00' / 283.80' S= 0.0029 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Primary	286.15'	18.0" Round Culvert L= 60.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 286.15' / 285.35' S= 0.0133 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=13.97 cfs @ 12.15 hrs HW=287.30' (Free Discharge)

1=Culvert (Barrel Controls 8.68 cfs @ 7.08 fps)

2=Culvert (Inlet Controls 5.29 cfs @ 3.65 fps)

Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

Prepared by {enter your company name here}

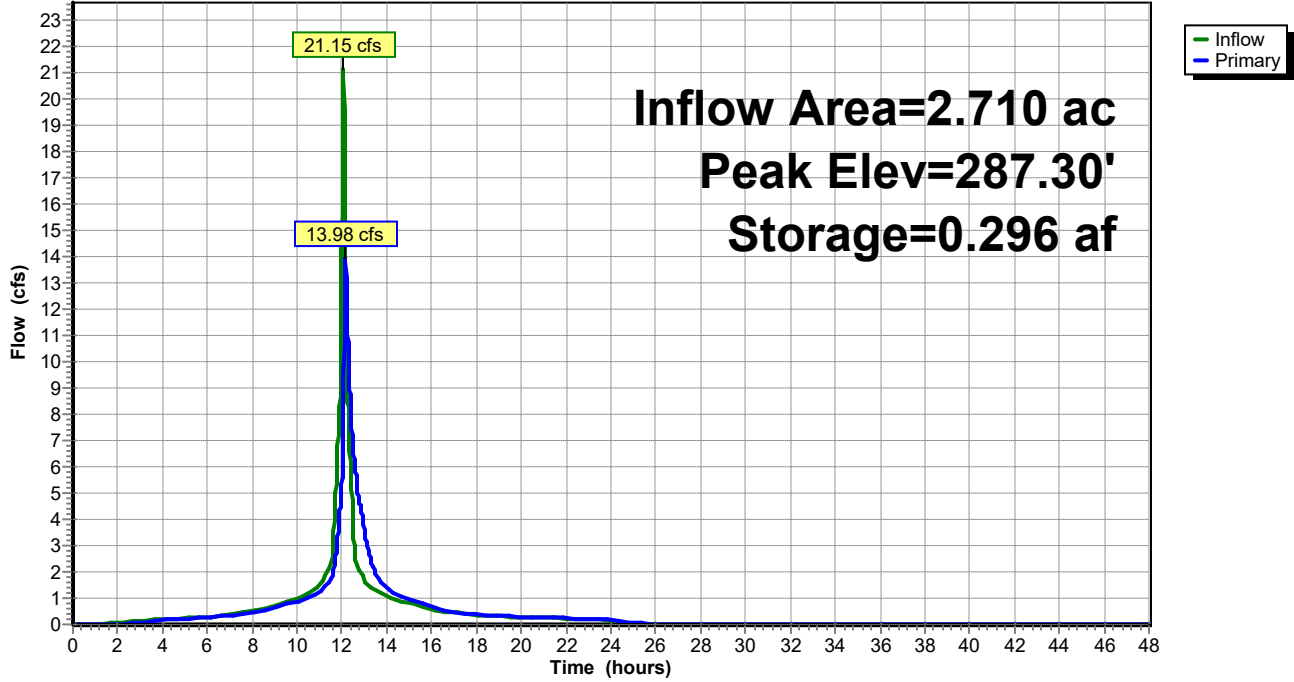
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Pond 1P: Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 25yr Rainfall=7.70"

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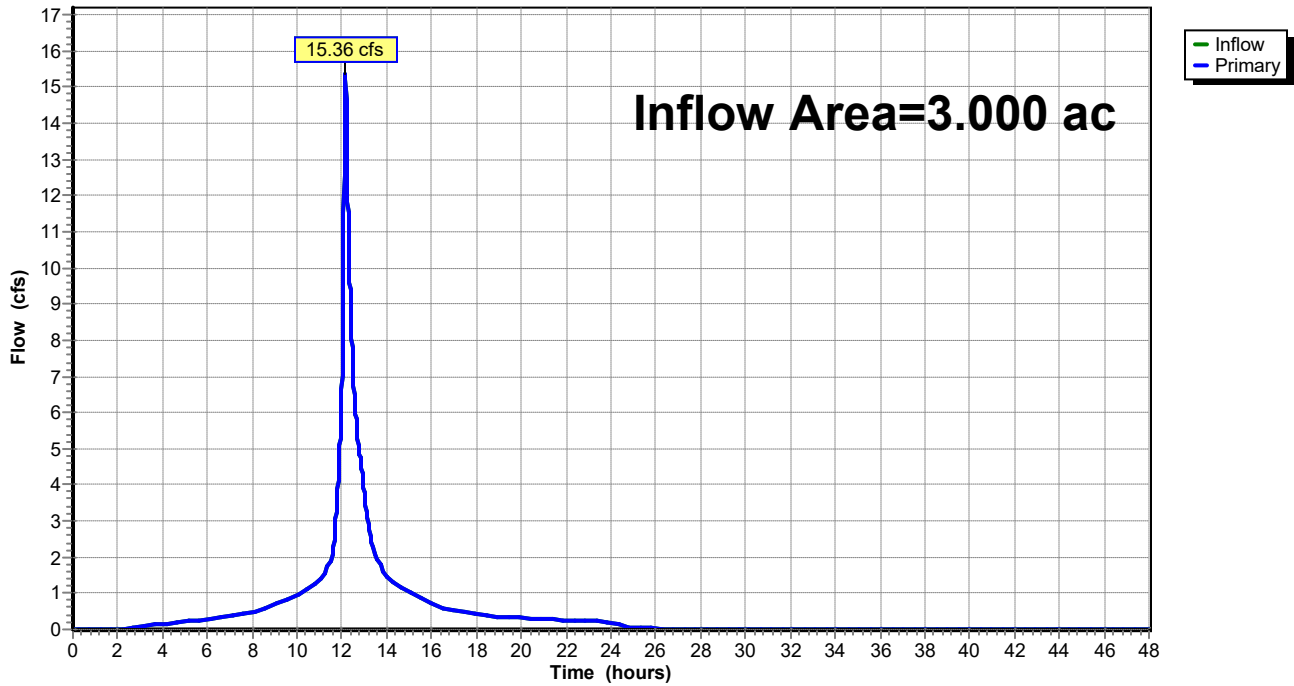
Summary for Link 3L: Post Outfall

Inflow Area = 3.000 ac, 87.33% Impervious, Inflow Depth = 7.19" for 25yr event
Inflow = 15.36 cfs @ 12.14 hrs, Volume= 1.798 af
Primary = 15.36 cfs @ 12.14 hrs, Volume= 1.798 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 3L: Post Outfall

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1Pre: Pre Development Site Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=6.31"
Flow Length=467' Tc=11.1 min CN=81 Runoff=18.37 cfs 1.578 af

Subcatchment 2Post: Post to Detention Runoff Area=2.710 ac 92.99% Impervious Runoff Depth=8.24"
Tc=5.0 min CN=97 Runoff=23.65 cfs 1.861 af

Subcatchment 2S: Post Bypass Runoff Area=0.290 ac 34.48% Impervious Runoff Depth=6.67"
Tc=5.0 min CN=84 Runoff=2.27 cfs 0.161 af

Pond 1P: Detention Peak Elev=287.63' Storage=0.316 af Inflow=23.65 cfs 1.861 af
Outflow=16.59 cfs 1.861 af

Link 3L: Post Outfall Inflow=18.28 cfs 2.022 af
Primary=18.28 cfs 2.022 af

Total Runoff Area = 6.000 ac Runoff Volume = 3.600 af Average Runoff Depth = 7.20"
56.33% Pervious = 3.380 ac 43.67% Impervious = 2.620 ac

Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

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Summary for Subcatchment 1Pre: Pre Development Site

Runoff = 18.37 cfs @ 12.15 hrs, Volume= 1.578 af, Depth= 6.31"

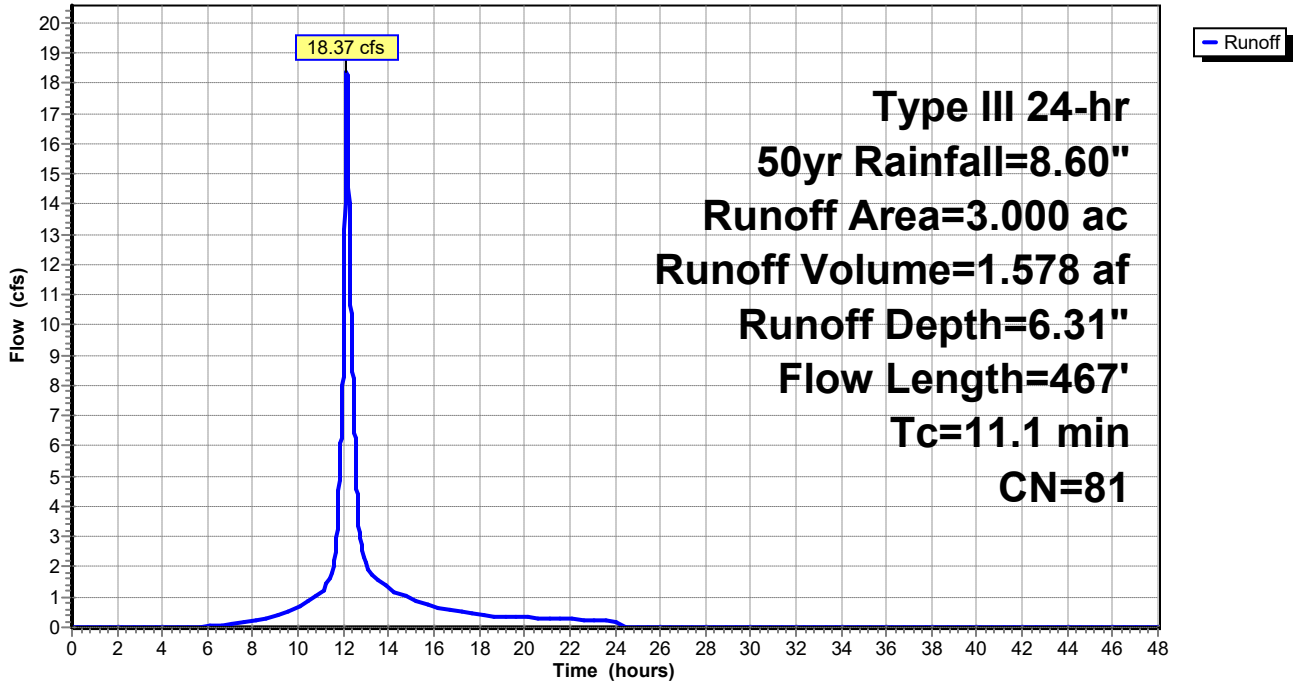
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 50yr Rainfall=8.60"

Area (ac)	CN	Description
1.940	79	Pasture/grassland/range, Fair, HSG C
1.060	84	Pasture/grassland/range, Fair, HSG D
3.000	81	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	65	0.0110	0.16		Sheet Flow, Range n= 0.130 P2= 4.50"
4.5	402	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.1	467	Total			

Subcatchment 1Pre: Pre Development Site

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

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Summary for Subcatchment 2Post: Post to Detention

Runoff = 23.65 cfs @ 12.07 hrs, Volume= 1.861 af, Depth= 8.24"

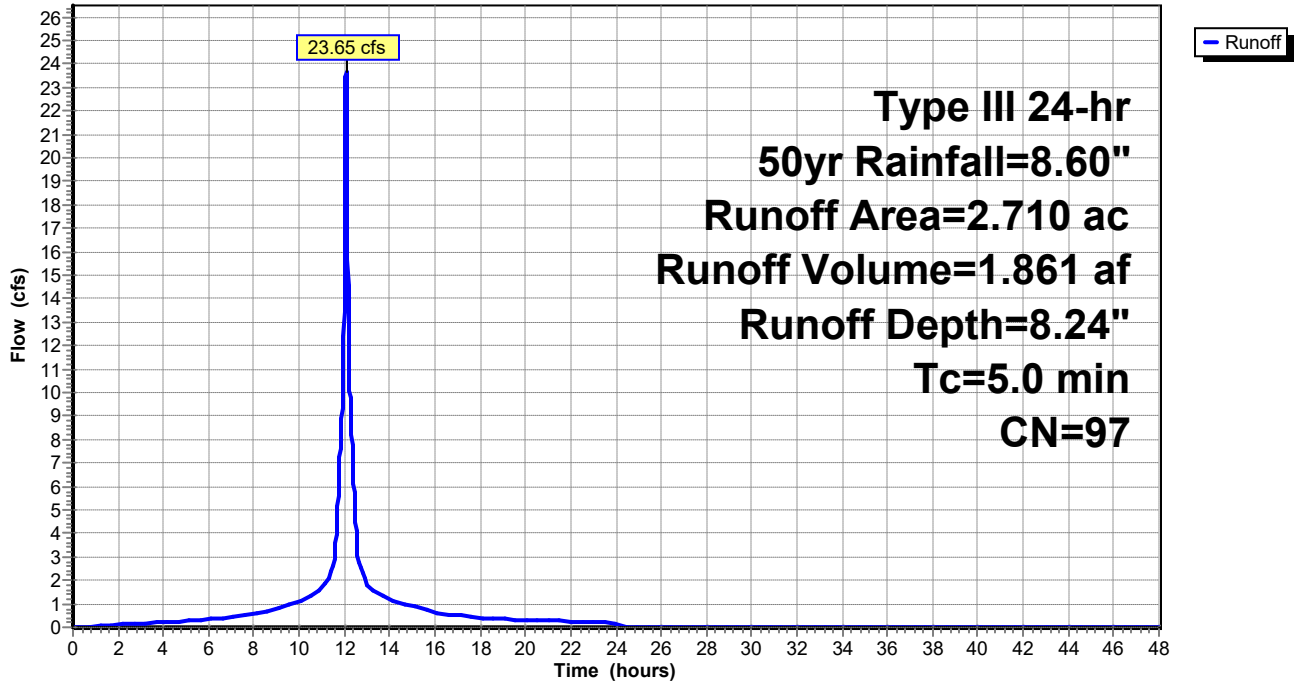
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 50yr Rainfall=8.60"

Area (ac)	CN	Description
0.100	74	>75% Grass cover, Good, HSG C
2.520	98	Paved parking, HSG C
0.090	80	>75% Grass cover, Good, HSG D
2.710	97	Weighted Average
0.190		7.01% Pervious Area
2.520		92.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2Post: Post to Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

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Summary for Subcatchment 2S: Post Bypass

Runoff = 2.27 cfs @ 12.07 hrs, Volume= 0.161 af, Depth= 6.67"

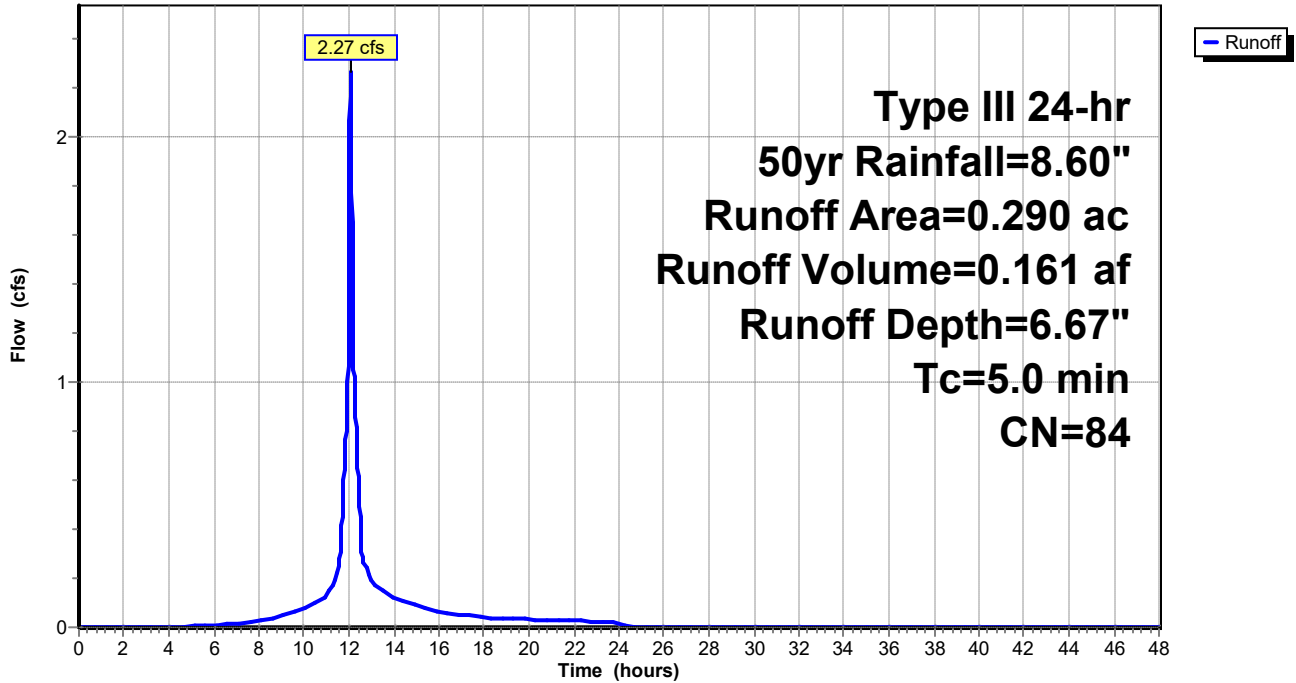
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 50yr Rainfall=8.60"

Area (ac)	CN	Description
0.120	74	>75% Grass cover, Good, HSG C
0.100	98	Paved parking, HSG C
0.070	80	>75% Grass cover, Good, HSG D
0.290	84	Weighted Average
0.190		65.52% Pervious Area
0.100		34.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Bypass

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

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Summary for Pond 1P: Detention

Inflow Area = 2.710 ac, 92.99% Impervious, Inflow Depth = 8.24" for 50yr event
 Inflow = 23.65 cfs @ 12.07 hrs, Volume= 1.861 af
 Outflow = 16.59 cfs @ 12.14 hrs, Volume= 1.861 af, Atten= 30%, Lag= 4.4 min
 Primary = 16.59 cfs @ 12.14 hrs, Volume= 1.861 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 287.63' @ 12.14 hrs Surf.Area= 0.148 ac Storage= 0.316 af

Plug-Flow detention time= 28.9 min calculated for 1.861 af (100% of inflow)
 Center-of-Mass det. time= 28.8 min (773.9 - 745.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	284.00'	0.169 af	51.25'W x 125.54'L x 4.00'H Field A 0.591 af Overall - 0.169 af Embedded = 0.422 af x 40.0% Voids
#2A	284.50'	0.169 af	ADS_StormTech SC-740 +Cap x 160 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 160 Chambers in 10 Rows
		0.338 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	284.00'	15.0" Round Culvert L= 70.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 284.00' / 283.80' S= 0.0029 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Primary	286.15'	18.0" Round Culvert L= 60.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 286.15' / 285.35' S= 0.0133 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=16.59 cfs @ 12.14 hrs HW=287.63' (Free Discharge)

- 1=Culvert (Barrel Controls 9.30 cfs @ 7.58 fps)
- 2=Culvert (Inlet Controls 7.29 cfs @ 4.14 fps)

Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

Prepared by {enter your company name here}

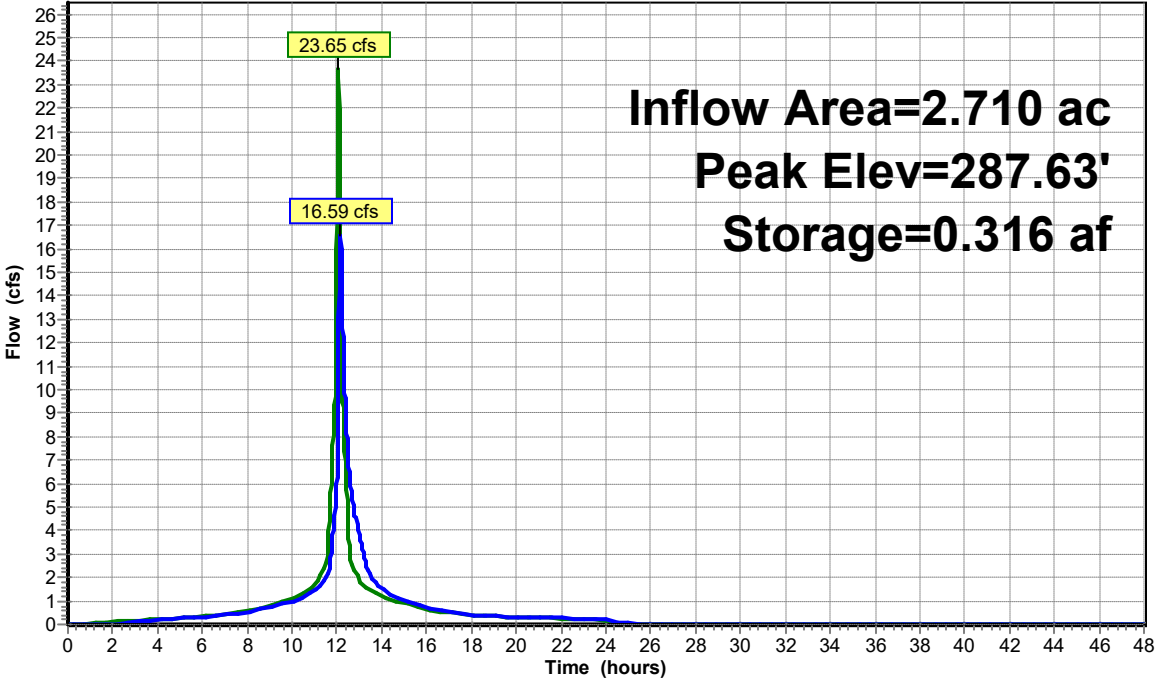
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Pond 1P: Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 50yr Rainfall=8.60"

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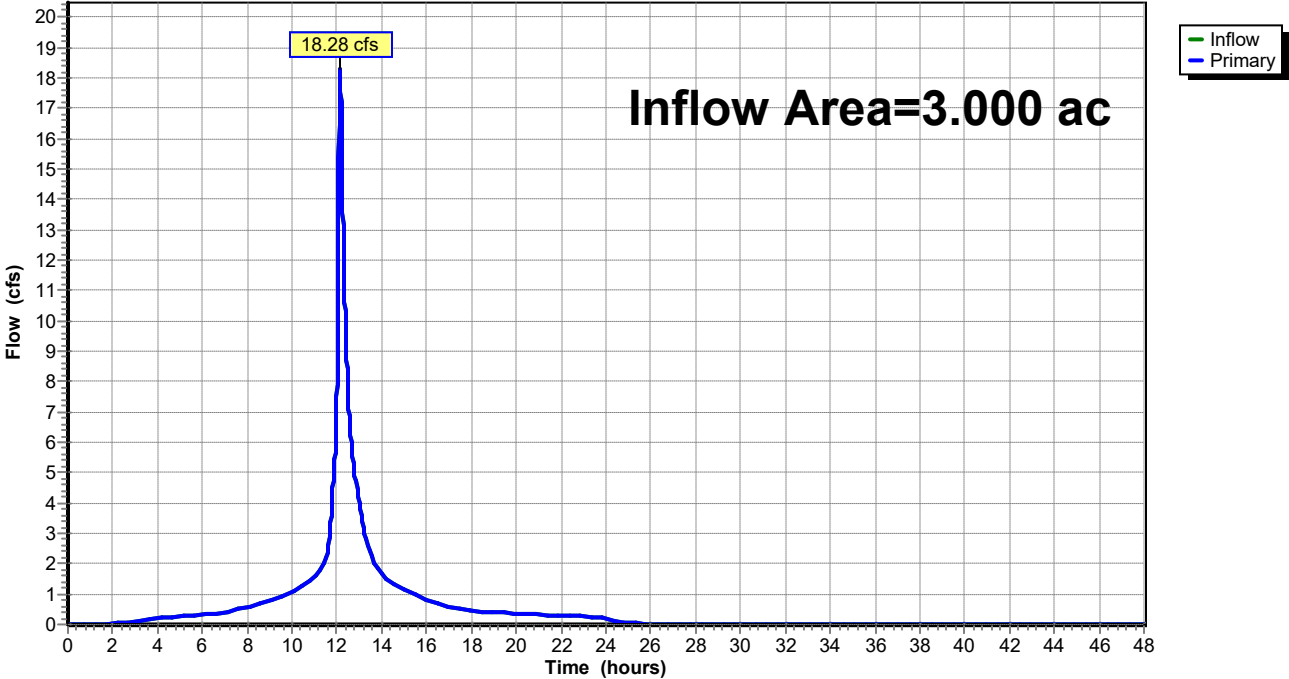
Summary for Link 3L: Post Outfall

Inflow Area = 3.000 ac, 87.33% Impervious, Inflow Depth = 8.09" for 50yr event
Inflow = 18.28 cfs @ 12.13 hrs, Volume= 2.022 af
Primary = 18.28 cfs @ 12.13 hrs, Volume= 2.022 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 3L: Post Outfall

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

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Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1Pre: Pre Development Site Runoff Area=3.000 ac 0.00% Impervious Runoff Depth=7.07"
Flow Length=467' Tc=11.1 min CN=81 Runoff=20.49 cfs 1.768 af

Subcatchment 2Post: Post to Detention Runoff Area=2.710 ac 92.99% Impervious Runoff Depth=9.04"
Tc=5.0 min CN=97 Runoff=25.87 cfs 2.041 af

Subcatchment 2S: Post Bypass Runoff Area=0.290 ac 34.48% Impervious Runoff Depth=7.45"
Tc=5.0 min CN=84 Runoff=2.52 cfs 0.180 af

Pond 1P: Detention Peak Elev=287.93' Storage=0.334 af Inflow=25.87 cfs 2.041 af
Outflow=18.49 cfs 2.041 af

Link 3L: Post Outfall Inflow=20.39 cfs 2.221 af
Primary=20.39 cfs 2.221 af

Total Runoff Area = 6.000 ac Runoff Volume = 3.989 af Average Runoff Depth = 7.98"
56.33% Pervious = 3.380 ac 43.67% Impervious = 2.620 ac

Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

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Summary for Subcatchment 1Pre: Pre Development Site

Runoff = 20.49 cfs @ 12.15 hrs, Volume= 1.768 af, Depth= 7.07"

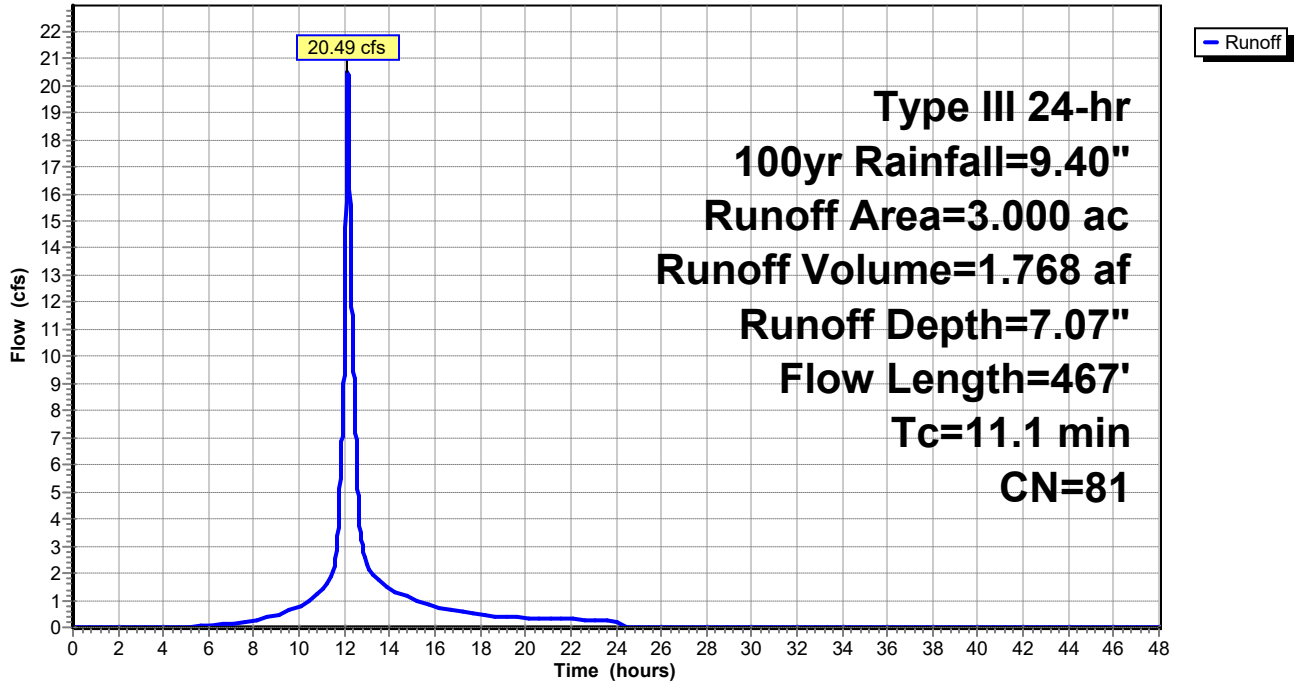
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100yr Rainfall=9.40"

Area (ac)	CN	Description
1.940	79	Pasture/grassland/range, Fair, HSG C
1.060	84	Pasture/grassland/range, Fair, HSG D
3.000	81	Weighted Average
3.000		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.6	65	0.0110	0.16		Sheet Flow, Range n= 0.130 P2= 4.50"
4.5	402	0.0100	1.50		Shallow Concentrated Flow, Grassed Waterway Kv= 15.0 fps
11.1	467	Total			

Subcatchment 1Pre: Pre Development Site

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

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Summary for Subcatchment 2Post: Post to Detention

Runoff = 25.87 cfs @ 12.07 hrs, Volume= 2.041 af, Depth= 9.04"

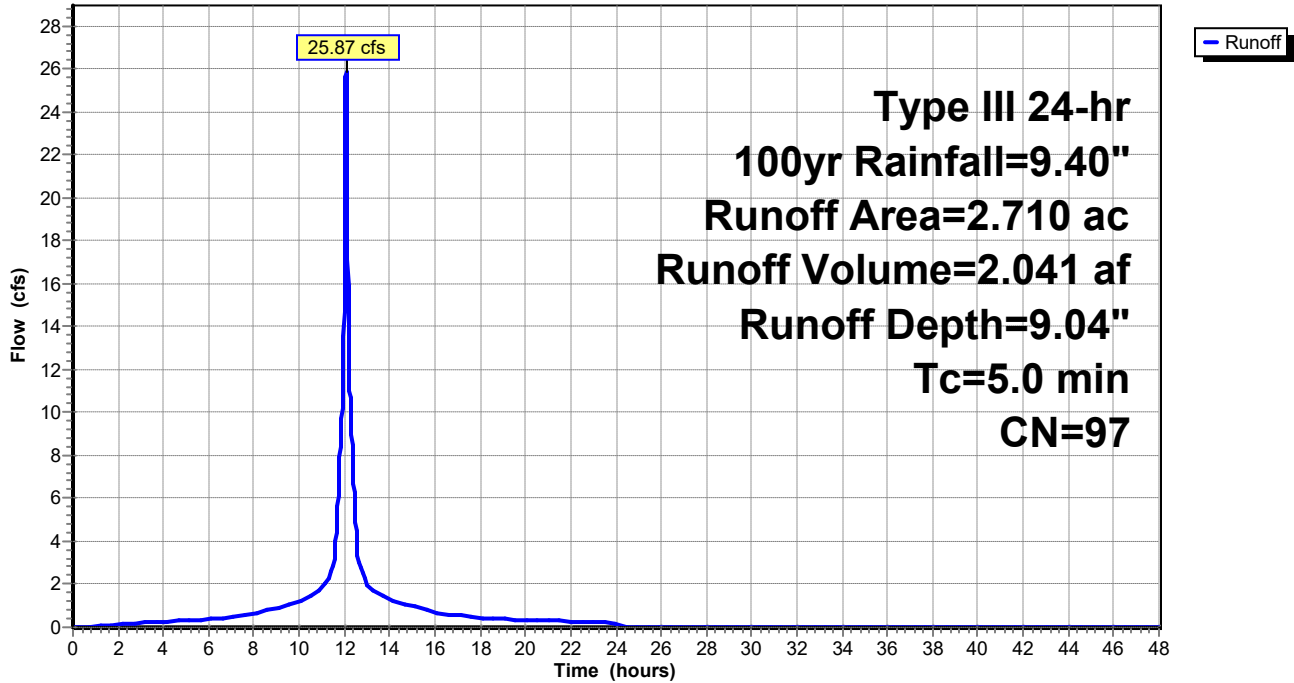
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100yr Rainfall=9.40"

Area (ac)	CN	Description
0.100	74	>75% Grass cover, Good, HSG C
2.520	98	Paved parking, HSG C
0.090	80	>75% Grass cover, Good, HSG D
2.710	97	Weighted Average
0.190		7.01% Pervious Area
2.520		92.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2Post: Post to Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

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Summary for Subcatchment 2S: Post Bypass

Runoff = 2.52 cfs @ 12.07 hrs, Volume= 0.180 af, Depth= 7.45"

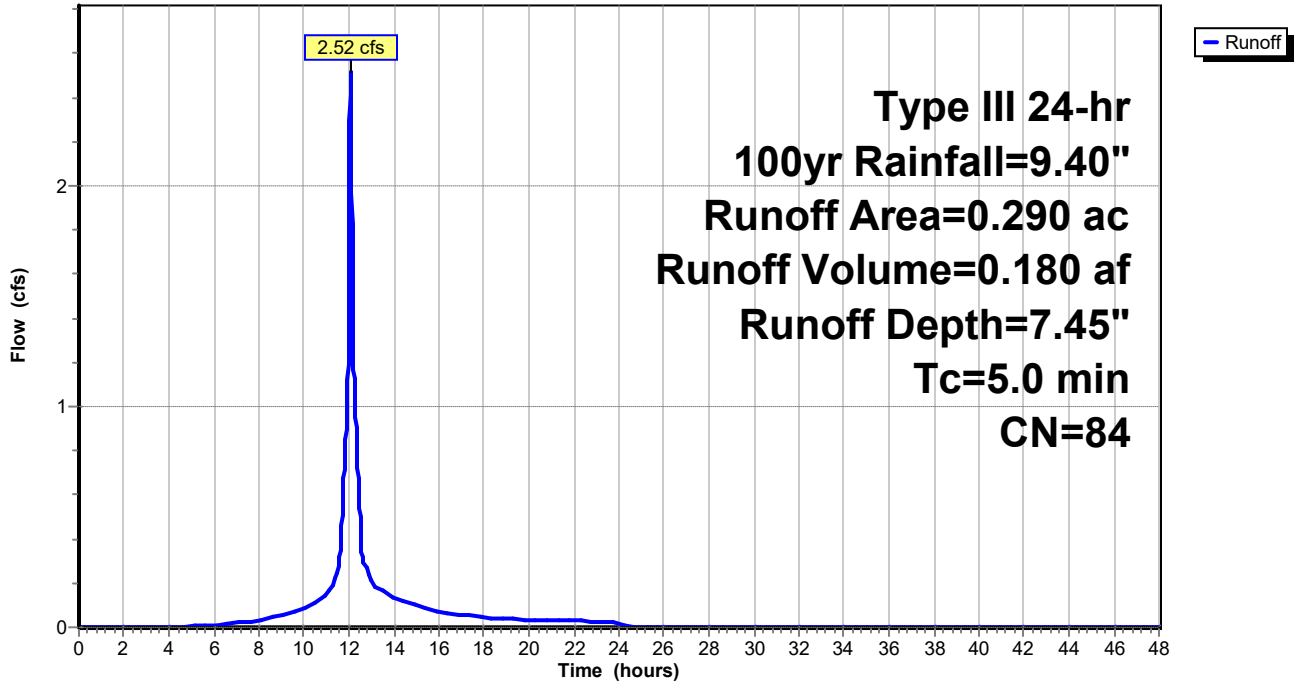
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 100yr Rainfall=9.40"

Area (ac)	CN	Description
0.120	74	>75% Grass cover, Good, HSG C
0.100	98	Paved parking, HSG C
0.070	80	>75% Grass cover, Good, HSG D
0.290	84	Weighted Average
0.190		65.52% Pervious Area
0.100		34.48% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 2S: Post Bypass

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

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Summary for Pond 1P: Detention

Inflow Area = 2.710 ac, 92.99% Impervious, Inflow Depth = 9.04" for 100yr event
 Inflow = 25.87 cfs @ 12.07 hrs, Volume= 2.041 af
 Outflow = 18.49 cfs @ 12.14 hrs, Volume= 2.041 af, Atten= 29%, Lag= 4.2 min
 Primary = 18.49 cfs @ 12.14 hrs, Volume= 2.041 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
 Peak Elev= 287.93' @ 12.14 hrs Surf.Area= 0.148 ac Storage= 0.334 af

Plug-Flow detention time= 27.7 min calculated for 2.041 af (100% of inflow)
 Center-of-Mass det. time= 27.9 min (771.6 - 743.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	284.00'	0.169 af	51.25'W x 125.54'L x 4.00'H Field A 0.591 af Overall - 0.169 af Embedded = 0.422 af x 40.0% Voids
#2A	284.50'	0.169 af	ADS_StormTech SC-740 +Cap x 160 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 160 Chambers in 10 Rows
		0.338 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	284.00'	15.0" Round Culvert L= 70.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 284.00' / 283.80' S= 0.0029 '/ Cc= 0.900 n= 0.012, Flow Area= 1.23 sf
#2	Primary	286.15'	18.0" Round Culvert L= 60.0' RCP, sq.cut end projecting, Ke= 0.500 Inlet / Outlet Invert= 286.15' / 285.35' S= 0.0133 '/ Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=18.48 cfs @ 12.14 hrs HW=287.93' (Free Discharge)

1=Culvert (Barrel Controls 9.83 cfs @ 8.01 fps)

2=Culvert (Inlet Controls 8.65 cfs @ 4.89 fps)

Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

Prepared by {enter your company name here}

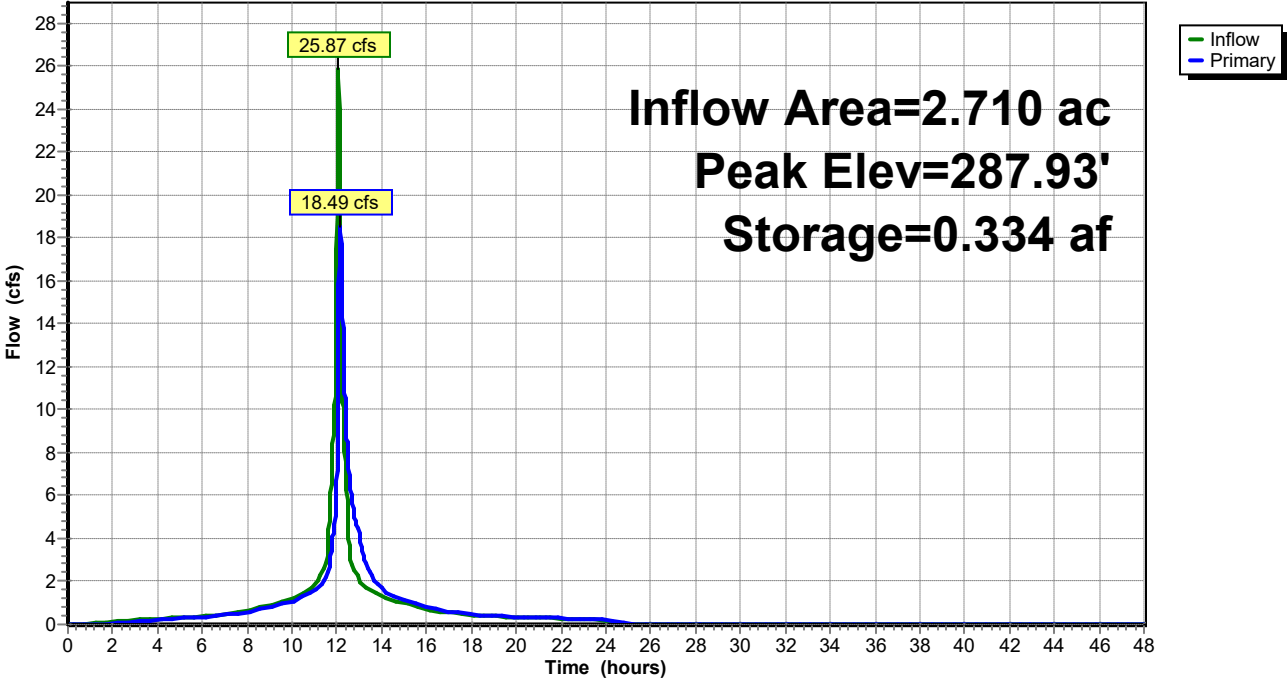
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Pond 1P: Detention

Hydrograph



Gluckstadt Retial STM SC-740

Type III 24-hr 100yr Rainfall=9.40"

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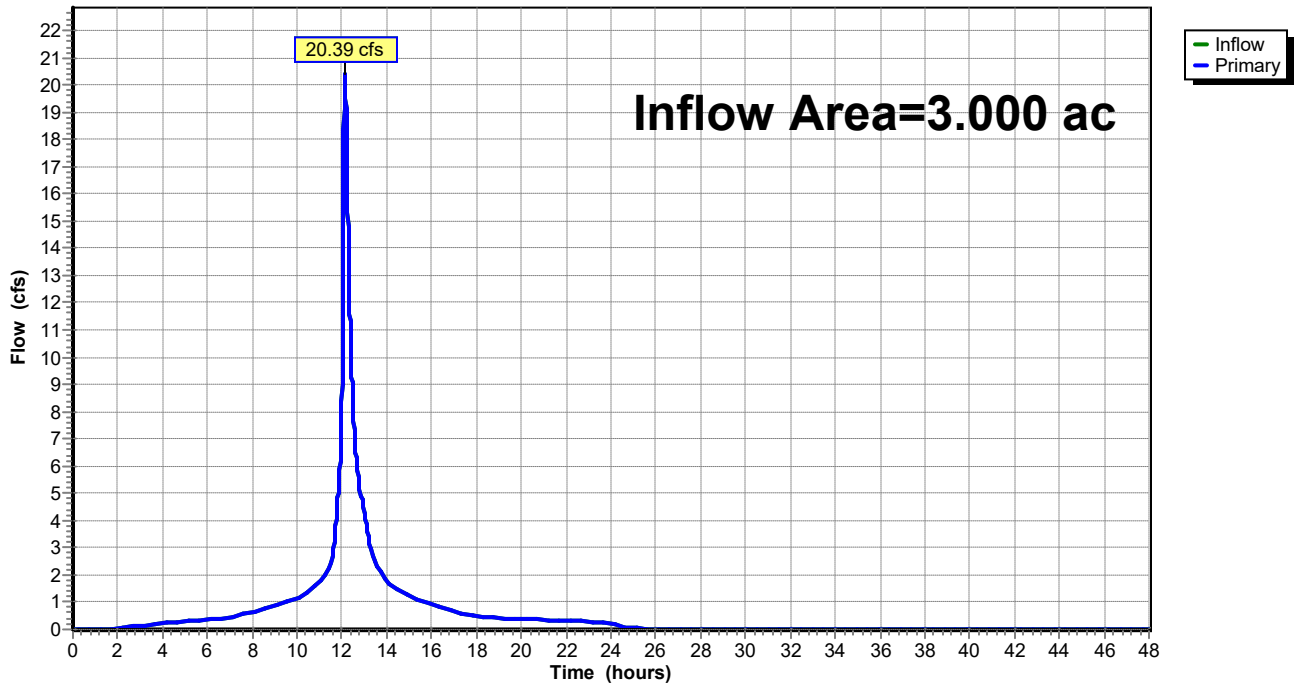
Summary for Link 3L: Post Outfall

Inflow Area = 3.000 ac, 87.33% Impervious, Inflow Depth = 8.88" for 100yr event
Inflow = 20.39 cfs @ 12.13 hrs, Volume= 2.221 af
Primary = 20.39 cfs @ 12.13 hrs, Volume= 2.221 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Link 3L: Post Outfall

Hydrograph



Jared Pierce, AIA

From: Nolan Williamson <NWilliamson@bcwaterms.org>
Sent: Thursday, August 18, 2022 1:37 PM
To: seth dean
Cc: Robert Richardson
Subject: RE: Bear Creek Coordination - Gluckstadt Retail

I don't see any issues. I can't tell exactly where this is, but I do need to tell you that we don't have any sewer along the south side of Gluckstadt Road west of the Storage Depot. Our sewerline ends near the property line between Storage Depot and the property west of Storage Depot that contains 2 strip center buildings. The sewer line ends there and crosses under Gluckstadt Road to serve those 2 properties on the north side. So I can't tell exactly where that would be along your frontage.

Pressure should not be an issue. This forcemain pumps a short distance easterly and dumps into a manhole. So there is zero head at the discharge point.

Nolan Williamson, P.E.
General Manager
Bear Creek Water Association, Inc.
601-856-5969, Ext 242

From: seth dean <seth@deanesi.com>
Sent: Tuesday, August 16, 2022 6:43 AM
To: Nolan Williamson <NWilliamson@bcwaterms.org>
Cc: Robert Richardson <Robert.Richardson@bcwaterms.org>
Subject: Bear Creek Coordination - Gluckstadt Retail

Nolan,

Thanks for the feedback below. Please review attached utility plan edits per comments below. Please also read note 3 with revisions pertaining to BC work up to "point of service". Does BC approve of this plan?

Also, could you please confirm the pressure of the 2" FM at the point of connection?

Thanks,

Seth

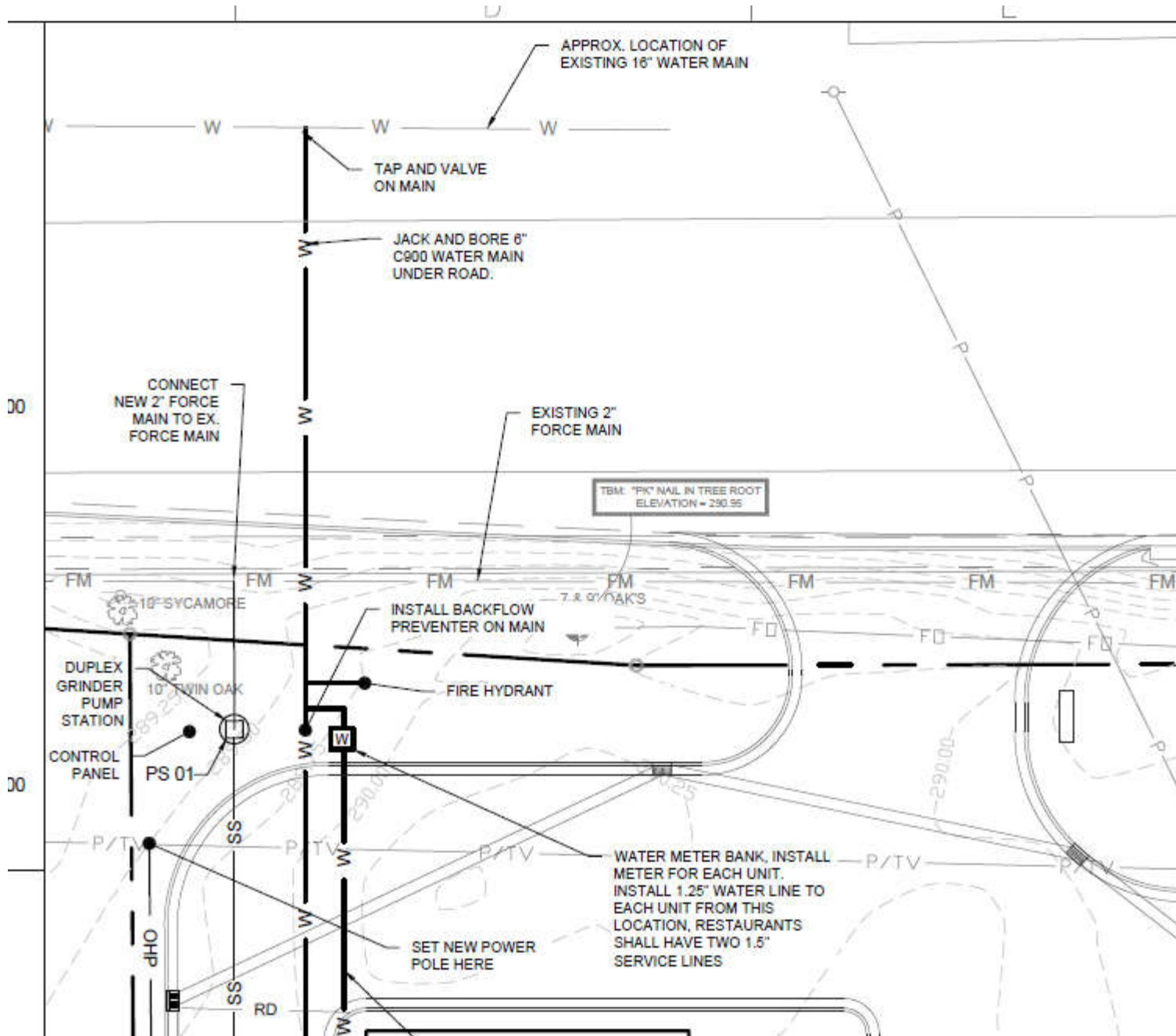
From: Nolan Williamson <NWilliamson@bcwaterms.org>
Sent: Monday, August 15, 2022 2:36 PM
To: seth dean <seth@deanesi.com>
Cc: Robert Richardson <Robert.Richardson@bcwaterms.org>
Subject: Sent from Snipping Tool

Seth,

The attached areas are the issues. You mention “tap and valve on main” and “jack and bore 6-inch C900 water main under road”. Bear Creek handles everything on our side of the “point of service”. So we decide material, connection type, etc. Everything on our side of the “point of service” should simply say “by Bear Creek Water”. We will bring everything to the point of service. These contractors come in here thinking they are supposed to bore under the road and say “That’s what my siteplan shows”.

I would say “6-waterline under Gluckstadt Road to be installed by Bear Creek Water”

Nolan Williamson, P.E.
General Manager
Bear Creek Water Association, Inc.
601-856-5969, Ext 242



PLANNING AND ZONING REVIEW SET

GLUCKSTADT RETAIL CENTER



RIVER OAKS INVESTMENT GROUP
GLUCKSTADT ROAD

ARCHITECT

CANIZARO • CAWTHON • DAVIS
Architecture • Planning • Interior Design
129 South President Street Jackson Mississippi 39201.3605 601.948.7337

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GLUCKSTADT RETAIL CENTER
RIVER OAKS INVESTMENT GROUP
GLUCKSTADT ROAD

AREA LOCATION MAP



CODE INFORMATION

- INTERNATIONAL BUILDING CODE 2018

LIST OF DRAWINGS

GENERAL	
T0.0	COVER PAGE
ARCHITECTURAL	
A121	FLOOR PLAN
A221	EXTERIOR ELEVATIONS
A222	EXTERIOR ELEVATIONS
A900	RENDERINGS
LANDSCAPE	
L100	PLANTING PLAN
CIVIL	
1	COVER
2	EXISTING CONDITIONS & DEMO PLAN
3	SITE PLAN
4	UTILITY PLAN
5	GRADING PLAN
6	EROSION CONTROL PLAN (SWPPP)
7	SITE DETAILS
8	UTILITY DETAILS
9	UTILITY DETAILS
10	PUMP STATION DETAILS

CIVIL DRAWINGS ARE INCLUDED FOR SITE PLAN REVIEW REFERENCE ONLY. CIVIL DESIGN IS NOT INCLUDED IN CANIZARO CAWTHON DAVIS'S CONTRACT AND THE INCLUSION OF THESE DRAWINGS DOES NOT CONSTITUTE THE REVIEW OR OVERSIGHT OF THE CIVIL DESIGN.

COVER PAGE

CCD PROJECT 22029

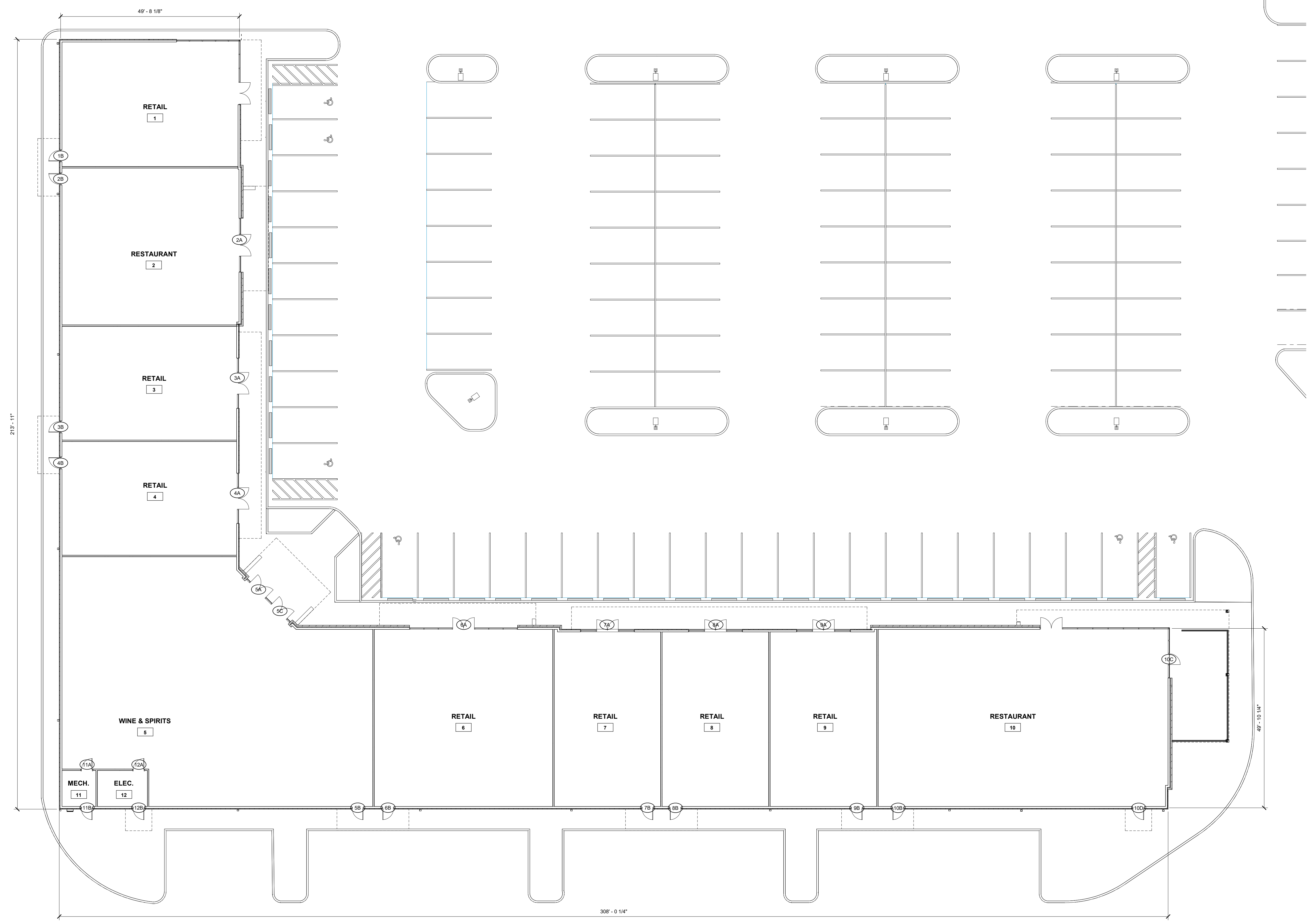
DATE ISSUED

SEPTEMBER 15, 2022

DATE REVISED

DRAWING NO.

T0.0



1 FLOOR PLAN
 3/32" = 1'-0"

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 RIVER OAKS INVESTMENT GROUP
 GLUCKSTADT ROAD

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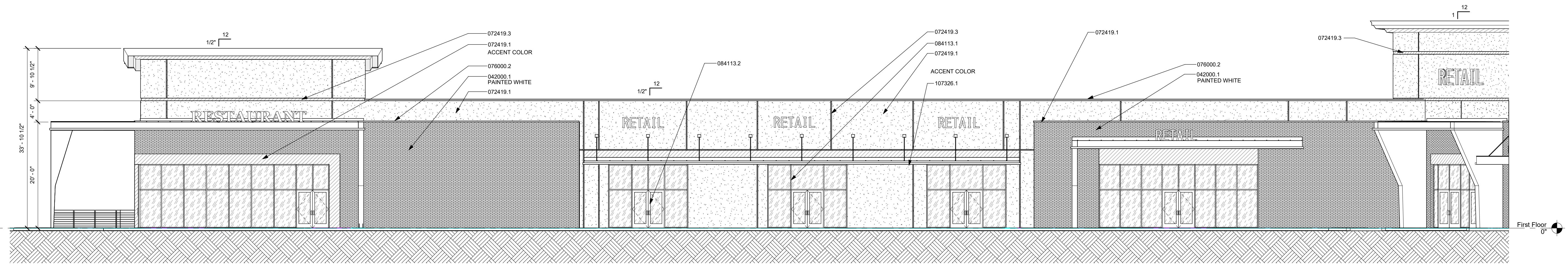
FLOOR PLAN

CCD PROJECT 22029

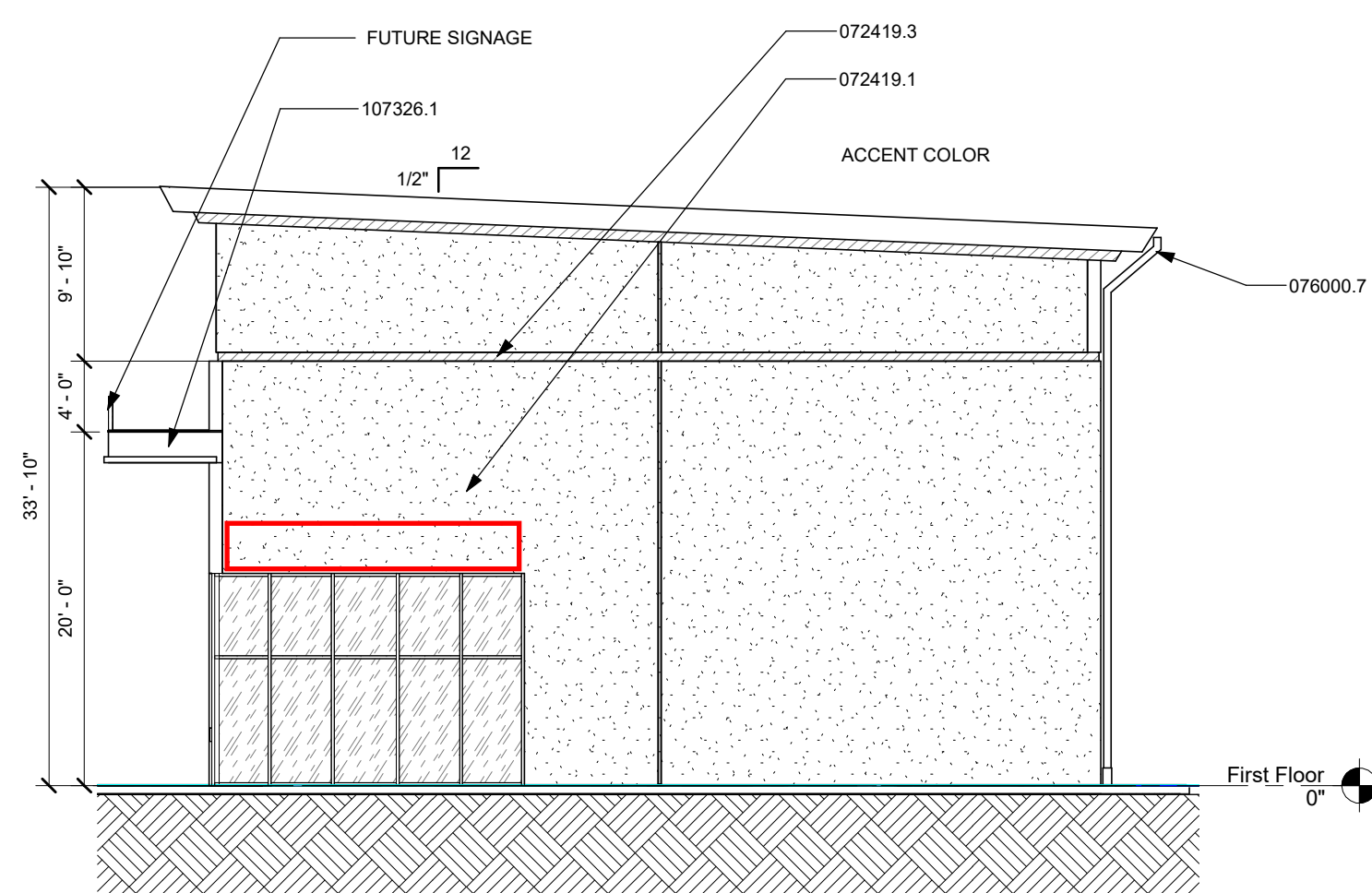
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 SEPTEMBER 15, 2022
 DATE REVISED

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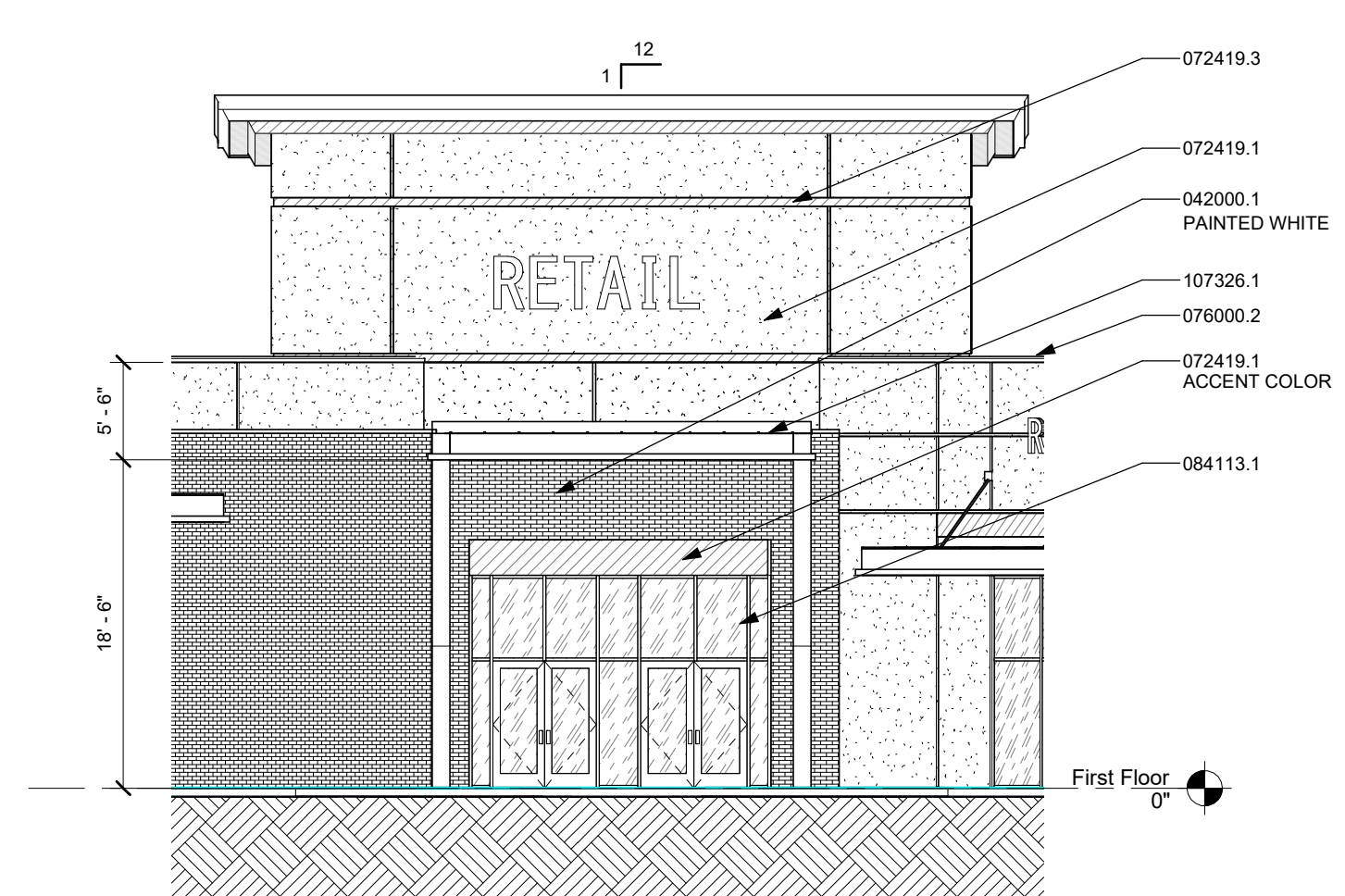
A121



1 NORTH ELEVATION
1/8" = 1'-0"



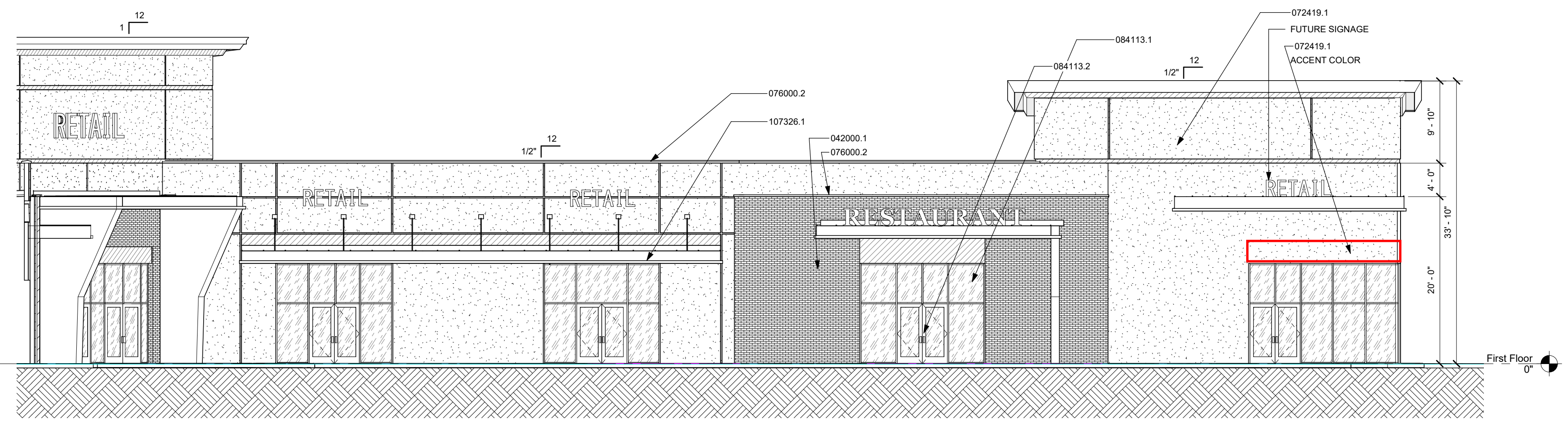
2 NORTH ELEVATION
1/8" = 1'-0"



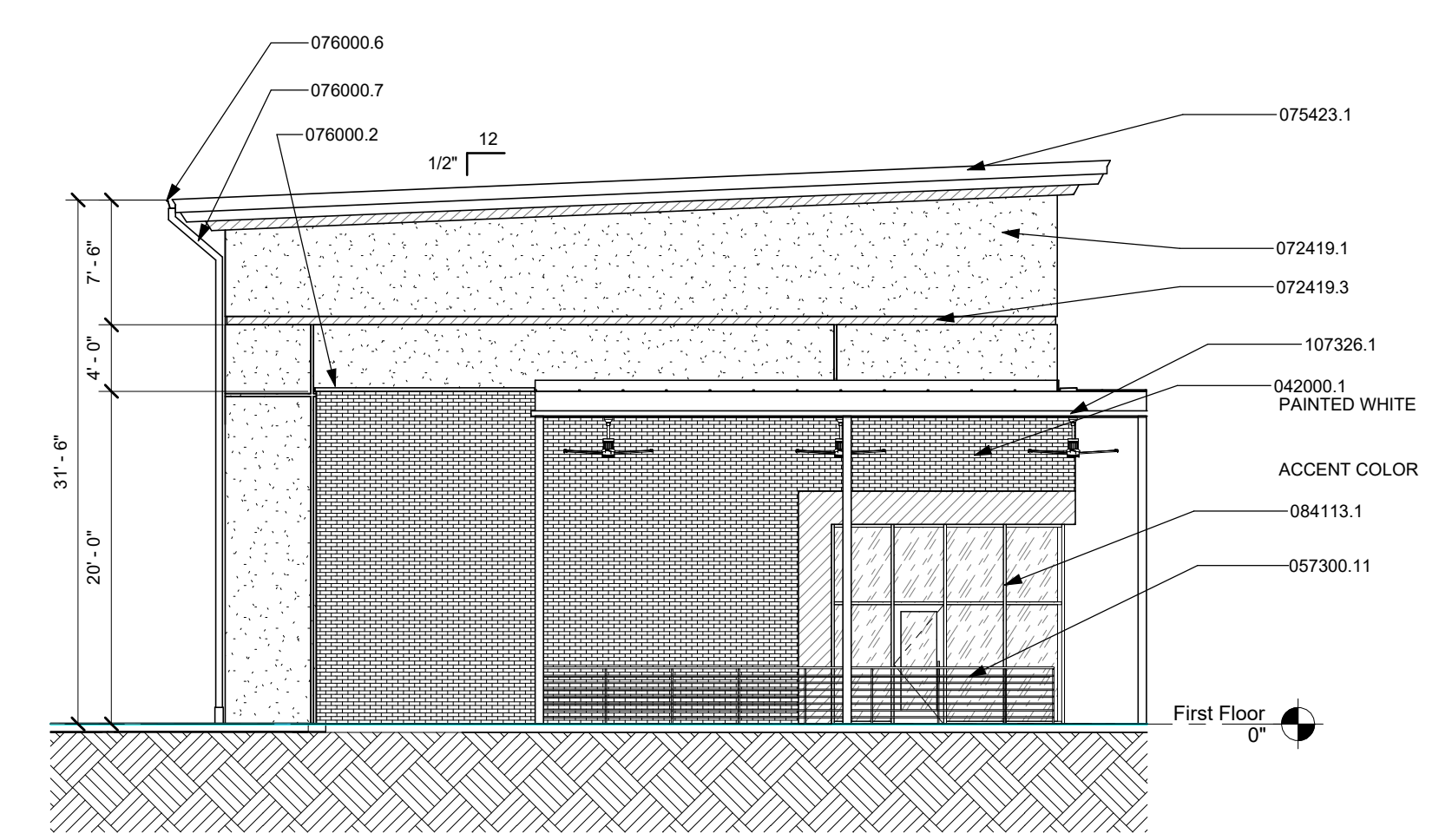
3 CORNER ELEVATION
1/8" = 1'-0"

Keynote Legend

- 042000.1 FACE BRICK
- 057300.11 ORNAMENTAL HANDRAIL SYSTEM
- 072419.1 EXT INSUL & FINISH SYSTEM
- 072419.3 REVEAL JOINT
- 075423.1 TPO ROOFING SYSTEM
- 076000.2 METAL COPING
- 076000.6 METAL GUTTER
- 076000.7 METAL DOWNSPOUT
- 084113.1 ALUMINUM STOREFRONT SYSTEM
- 084113.2 ALUMINUM ENTRANCE DOOR
- 107326.1 PRE-ENGINEERED CANOPY



4 EAST ELEVATION
1/8" = 1'-0"



5 EAST ELEVATION
1/8" = 1'-0"

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35201.3605 Jackson, Mississippi 39201.3605

GLUCKSTADT RETAIL CENTER
RIVER OAKS INVESTMENT GROUP
GLUCKSTADT ROAD

EXTERIOR ELEVATIONS

CCD PROJECT 22029

DATE ISSUED SEPTEMBER 15, 2022

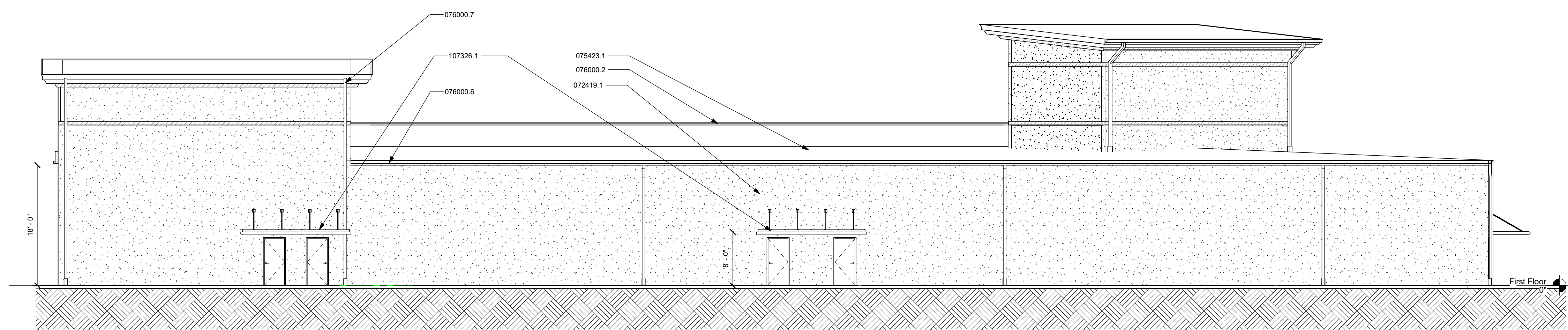
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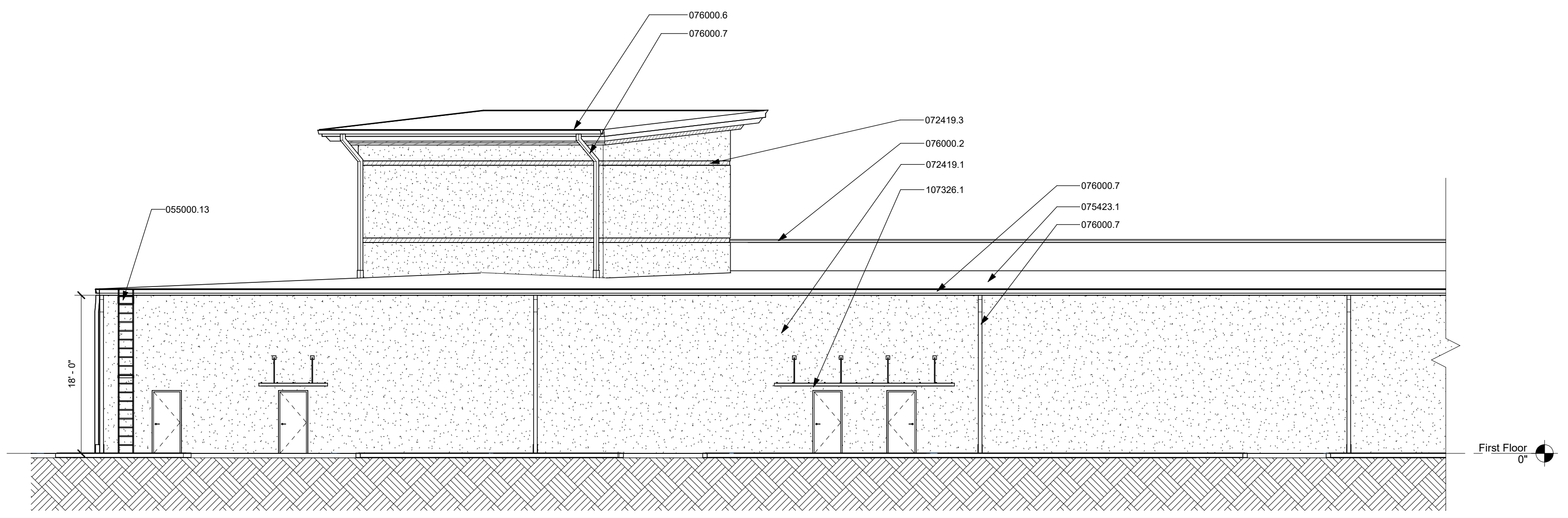
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Keynote Legend

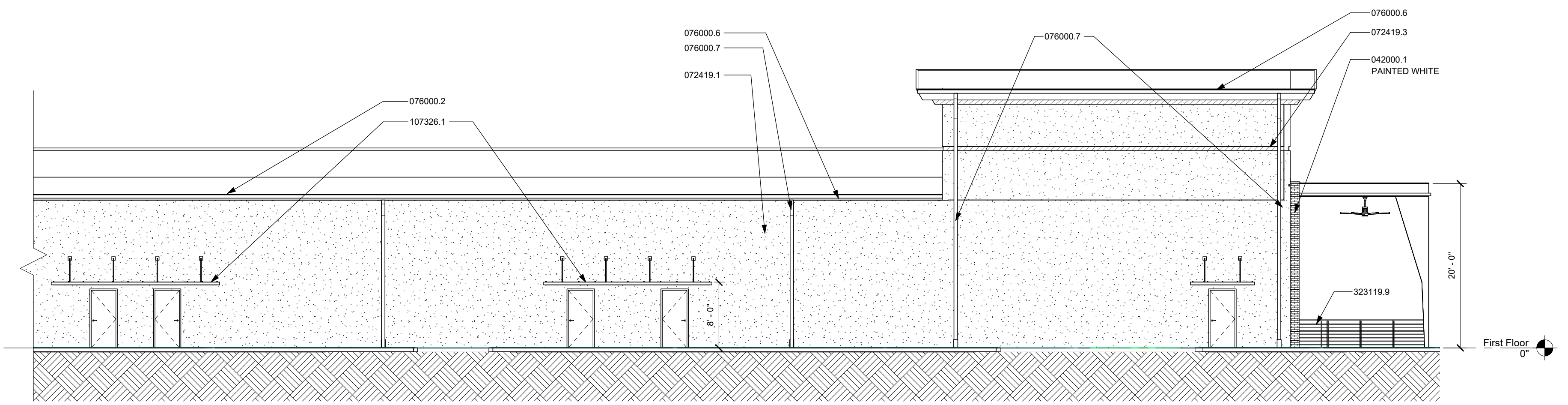
- 042000.1 FACE BRICK
- 055000.13 ROOF ACCESS LADDER
- 072419.1 EXT INSUL & FINISH SYSTEM
- 072419.3 REVEAL JOINT
- 075423.1 TPO ROOFING SYSTEM
- 076000.2 METAL COPING
- 076000.6 METAL GUTTER
- 076000.7 METAL DOWNSPOUT
- 107326.1 PRE-ENGINEERED CANOPY RAIL
- 323119.9 RAIL



1 WEST ELEVATION
1/8" = 1'-0"



2 SOUTH ELEVATION
1/8" = 1'-0"



3 SOUTH ELEVATION - CONT.D
1/8" = 1'-0"

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GLUCKSTADT RETAIL CENTER
 RIVER OAKS INVESTMENT GROUP
 GLUCKSTADT ROAD

EXTERIOR ELEVATIONS

CCD PROJECT 22029

DATE ISSUED
SEPTEMBER 15, 2022

DATE REVISED

DRAWING NO.

A222



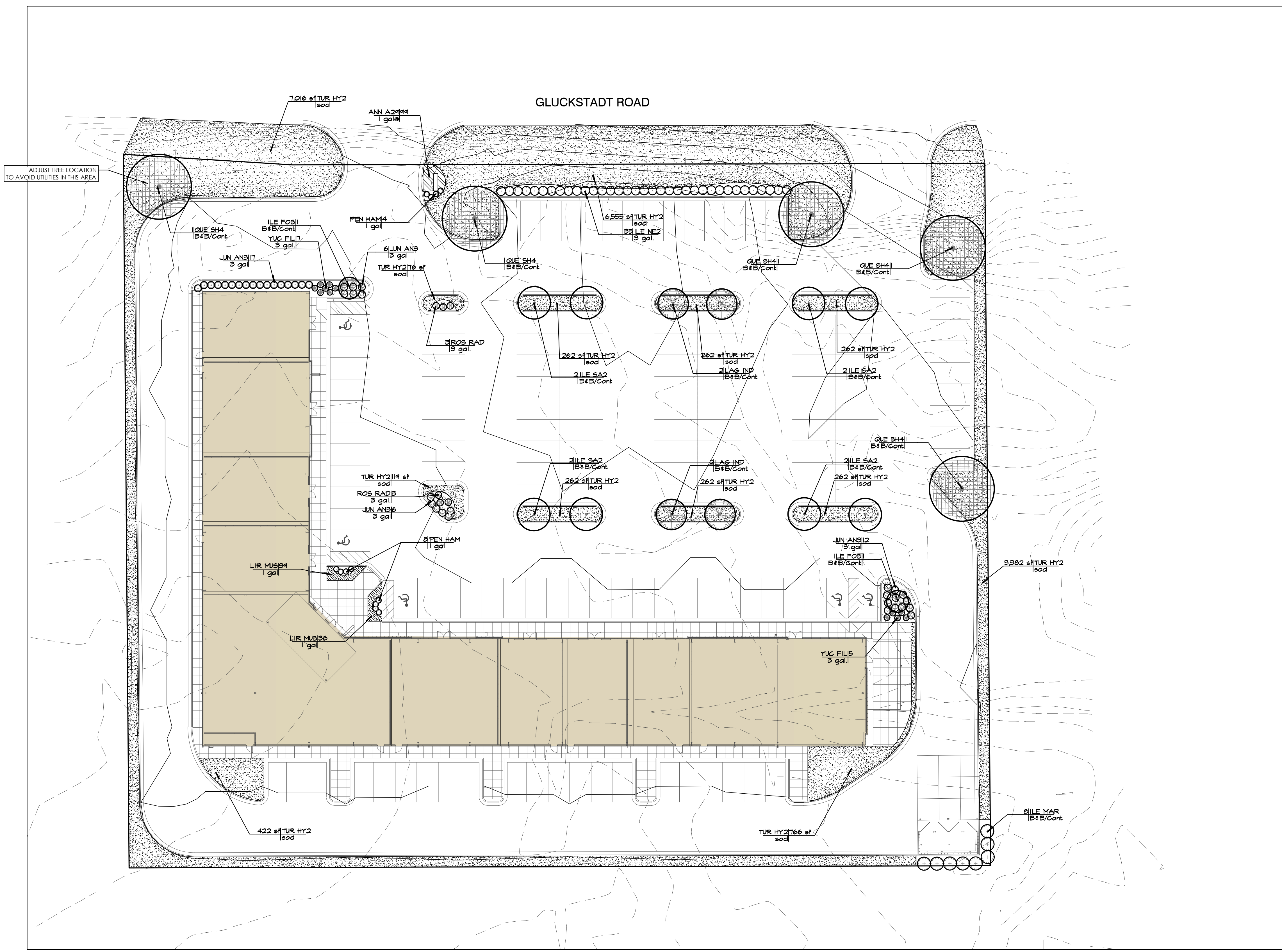
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GLUCKSTADT RETAIL CENTER
RIVER OAKS INVESTMENT GROUP
GLUCKSTADT ROAD

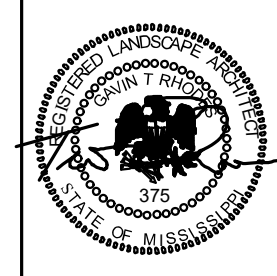
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RENDERINGS
CCD PROJECT 22029
DATE ISSUED SEPTEMBER 15, 2022
DATE REVISED
DRAWING NO. A900



PLANT SCHEDULE

TREES	COMMON NAME
ILE FOS	FOSTER'S HOLLY
ILE SA2	SAVANNAH HOLLY
LAG IND	NATCHEZ WHITE CRAPE MYRTLE
QUE SH4	SHUMARD RED OAK
SHRUBS	COMMON NAME
ILE NE2	NEEDLEPOINT HOLLY
ILE MAR	MARY NELL HOLLY
JUN AN3	ANDORRA JUNIPER
PEN HAM	HAMELN DWARF FOUNTAIN GRASS
ROS RAD	KNOCKOUT ROSE
YUC FIL	COLOR GUARD ADAM'S NEEDLE
GROUND COVERS	COMMON NAME
ANN A29	
LIR MUS	BIG BLUE LIRIOPE
TUR HY2	CYNODON DACTYLON 'TIFWAY 419'



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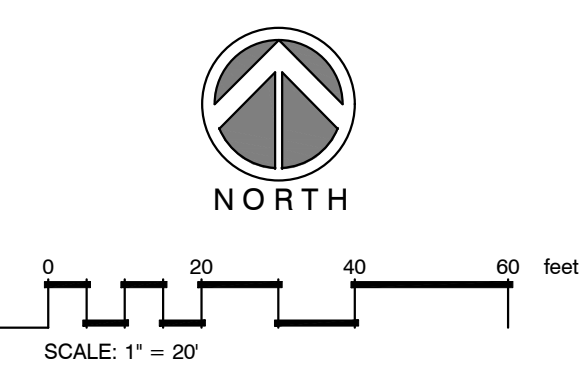
GLUCKSTADT RETAIL CENTER
 RIVER OAKS INVESTMENT GROUP
 GLUCKSTADT ROAD

CCD PROJECT 22029
 DATE ISSUED SEPTEMBER 28, 2022
 DATE REVISED

DRAWING NO.

L100

1 PLANTING PLAN



SUBMITTED FOR CITY REVIEW

GLUCKSTADT RETAIL CENTER

PROPOSED COMMERCIAL SITE DEVELOPMENT

GLUCKSTADT ROAD GLUCKSTADT, MS 39110

DEAN
ENGINEERING SOLUTIONS, INC.
4780 I-55 NORTH, SUITE 100-4
JACKSON, MS 39211
601-557-2002 WWW.DEANESI.COM

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No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022
2	EAST DRIVE ENTRANCE EDITS PER CITY COMMENTS	08-10-2022
3	BEAR CREEK UTILITY COORDINATION REVISIONS	08-16-2022

DRAWING ISSUED

OWNER:
**RIVER OAKS
INVESTMENT GROUP**

DAVID THIND
GLUCKSTADT RD

PROJECT TITLE: **GLUCKSTADT RETAIL CENTER**

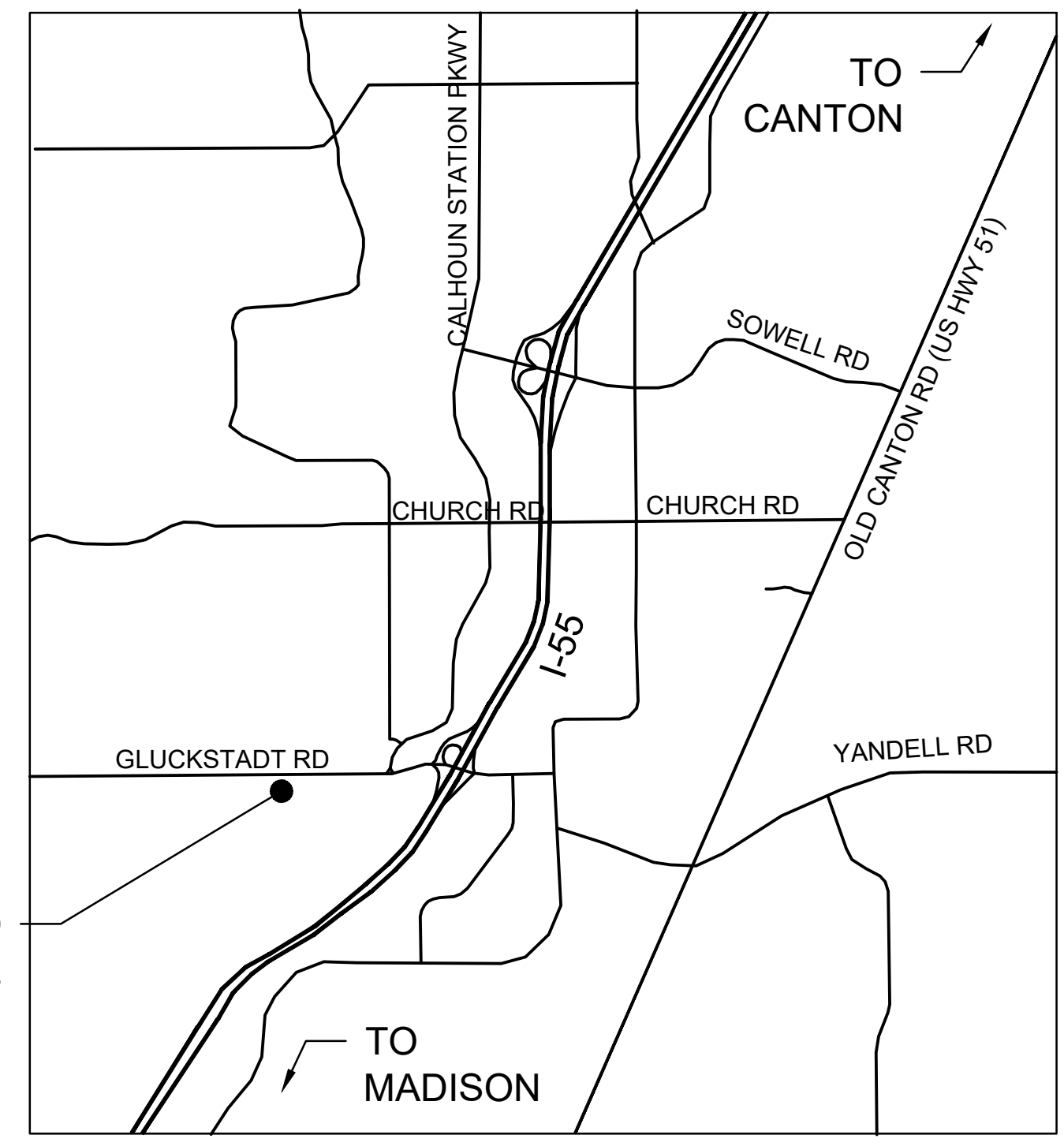
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COVER

SITE DEVELOPMENT

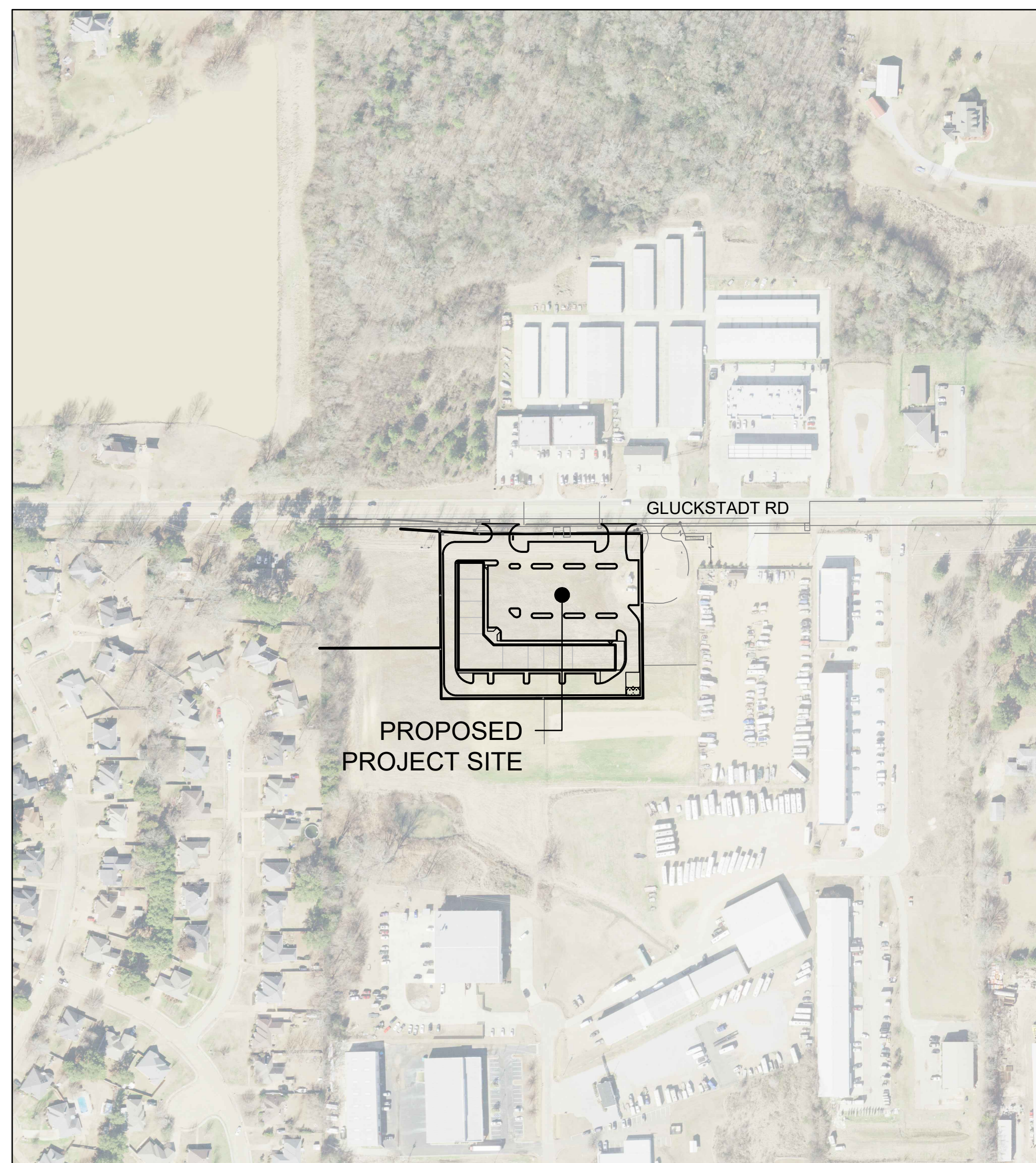
JOB NO.: 220501
DATE: 1 AUG 2022
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
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CITY LOCATION
SCALE: NONE



STREET LOCATION



STATE LOCATION

TABLE OF CONTENTS

1. COVER
2. EXISTING CONDITIONS & DEMO PLAN
3. SITE PLAN
4. UTILITY PLAN
5. GRADING PLAN
6. EROSION CONTROL PLAN (SWPPP)
7. SITE DETAILS
8. UTILITY DETAILS
9. DRAINAGE DETAILS
10. PUMP STATION DETAILS



PLAT SHOWING CERTAIN PROPERTIES

SITUATED IN THE NORTHEAST 1/4 OF SECTION 29, TOWNSHIP 8 NORTH, RANGE 2 EAST MADISON COUNTY, MISSISSIPPI

GLUCKSTADT ROAD

RW - VARIABLE

SIDE VIEW-SOUTH SIDE OF CONC.
TOP OF CONC.=286.32
TOP OF OPENING=285.77
BOTTOM OF OPENING=285.42

8 & 10
CURRENT GLUCKSTADT ROAD RW SOUTH LINE OF BOOK 3723 PAGE 948 5-24-2019

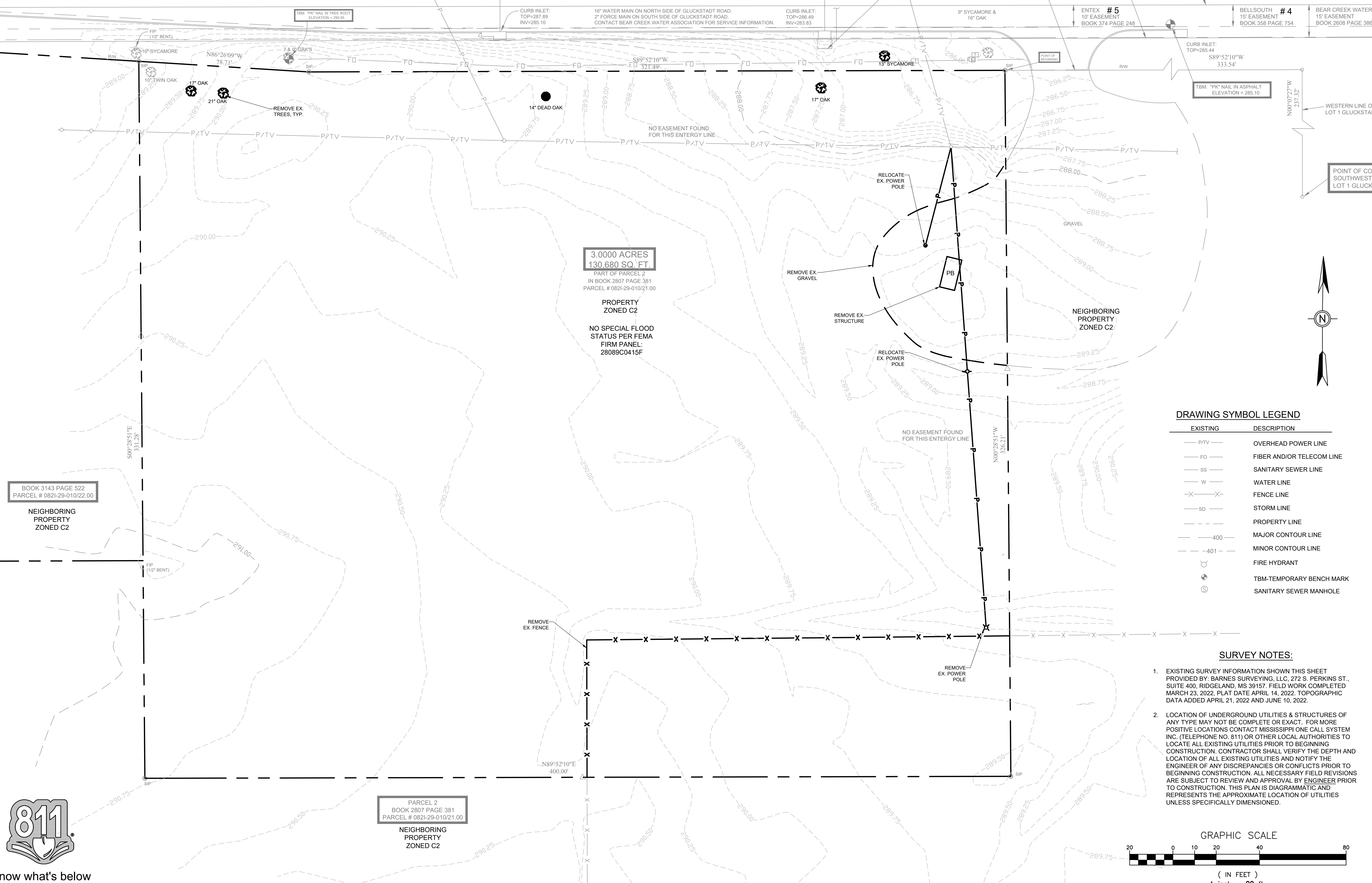
GLUCKSTADT ROAD RW PRIOR TO 7-2012

OLD GLUCKSTADT ROAD RW

ENTEX # 5
10' EASEMENT BOOK 374 PAGE 248

BELLSOUTH # 4
15' EASEMENT BOOK 358 PAGE 754

BEAR CREEK WATER 15' EASEMENT BOOK 2608 PAGE 386



3.0000 ACRES
130,680 SQ. FT.
PART OF PARCEL 2
IN BOOK 2807 PAGE 381
PARCEL # 0821-29-010/21.00

PROPERTY ZONED C2

NO SPECIAL FLOOD STATUS PER FEMA FIRM PANEL: 28089C0415F

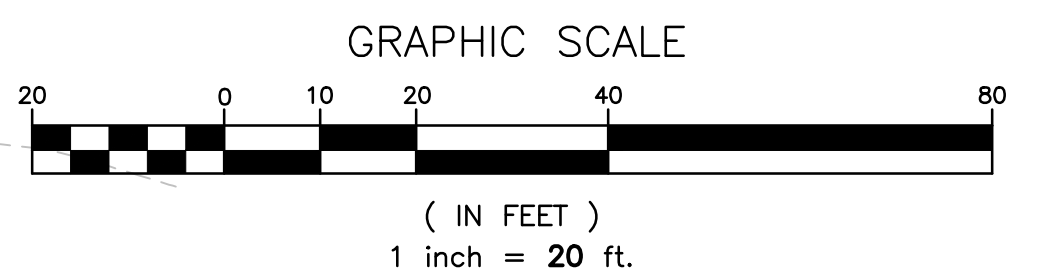
BOOK 3143 PAGE 522
PARCEL # 0821-29-010/22.00

PARCEL 2
BOOK 2807 PAGE 381
PARCEL # 0821-29-010/21.00

DRAWING SYMBOL LEGEND

EXISTING	DESCRIPTION
P/TV	OVERHEAD POWER LINE
FO	FIBER AND/OR TELECOM LINE
SS	SANITARY SEWER LINE
W	WATER LINE
X-X	FENCE LINE
SD	STORM LINE
- - -	PROPERTY LINE
-400-	MAJOR CONTOUR LINE
-401-	MINOR CONTOUR LINE
⊕	FIRE HYDRANT
⊙	TBM-TEMPORARY BENCH MARK
⊙	SANITARY SEWER MANHOLE

- ### SURVEY NOTES:
- EXISTING SURVEY INFORMATION SHOWN THIS SHEET PROVIDED BY: BARNES SURVEYING, LLC, 272 S. PERKINS ST., SUITE 400, RIDGELAND, MS 39157. FIELD WORK COMPLETED MARCH 23, 2022, PLAT DATE APRIL 14, 2022, TOPOGRAPHIC DATA ADDED APRIL 21, 2022 AND JUNE 10, 2022.
 - LOCATION OF UNDERGROUND UTILITIES & STRUCTURES OF ANY TYPE MAY NOT BE COMPLETE OR EXACT. FOR MORE POSITIVE LOCATIONS CONTACT MISSISSIPPI ONE CALL SYSTEM INC. (TELEPHONE NO. 811) OR OTHER LOCAL AUTHORITIES TO LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER PRIOR TO CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED.



DEAN ENGINEERING SOLUTIONS, INC.

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DRAWING ISSUED

No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022

OWNER:
RIVER OAKS INVESTMENT GROUP
DAVID THIND
GLUCKSTADT RD

PROJECT TITLE: **GLUCKSTADT RETAIL CENTER**
SHEET TITLE: **EXISTING CONDITIONS & DEMO PLAN**
SITE DEVELOPMENT

JOB NO.: 220501
DATE: 1 AUG 2022
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
2

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PROPOSED GROSS LOT COVERAGE OF BUILDINGS AND STRUCTURES
BUILDING SIZE: 23,936 SF TOTAL (SINGLE STORY)

CITY PARKING REQUIREMENTS
(PER JUNE, 2021 ORDINANCE SECTION 501.02)
GENERAL BUSINESS: 1 SPACE PER 225 SF GROSS FLOOR AREA
RESTAURANT: 1/100 SF
TOTAL GENERAL SF: 17,490 SF OR 78 SPACES
TOTAL RESTAURANT SF: 6,446 SF OR 29 SPACES

TOTAL SPACES REQUIRED: 107
TOTAL SPACES PROVIDED: 138

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REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI
20957

08-16-2022



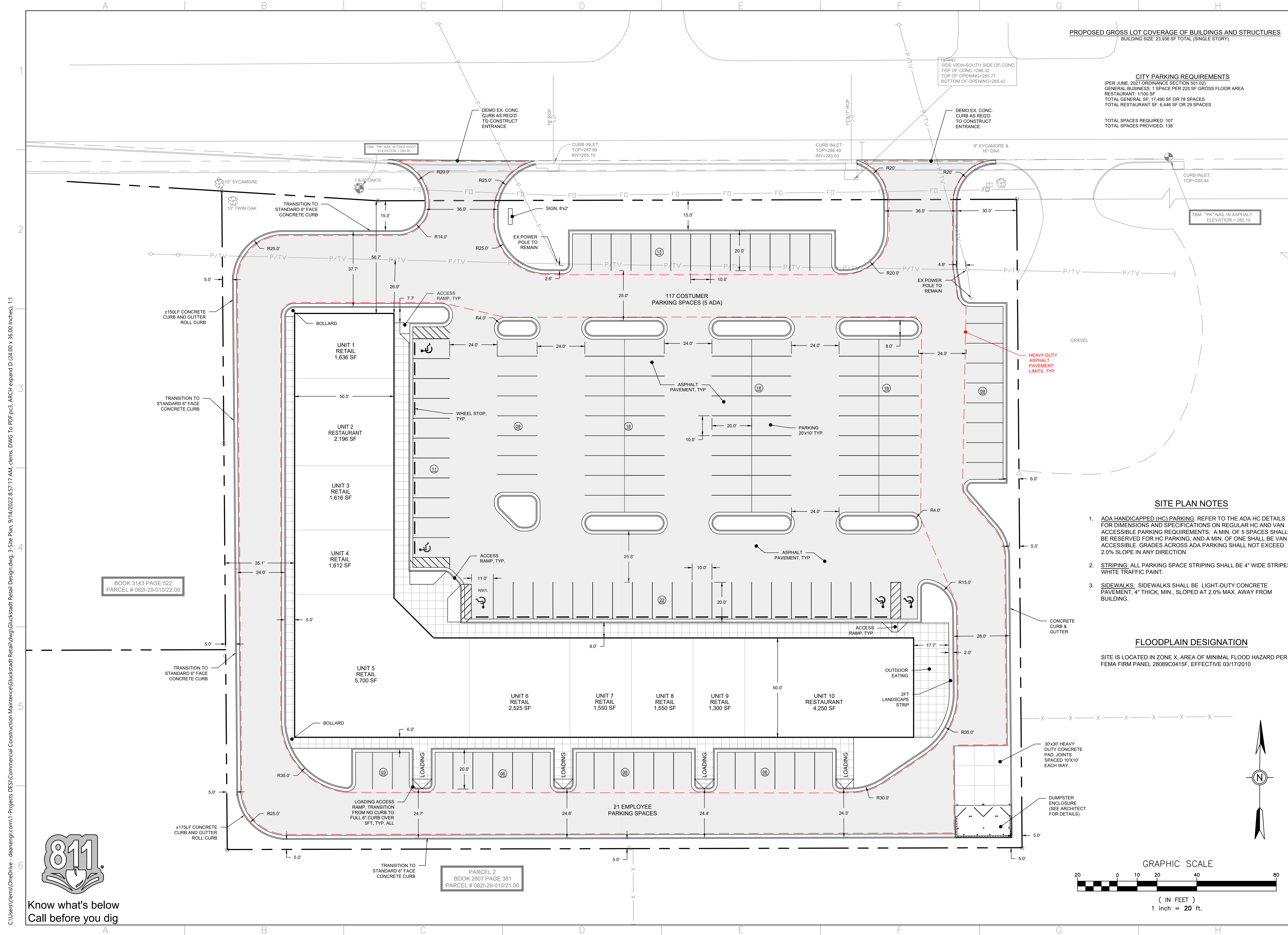
No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022
2	EAST DRIVE ENTRANCE EDITS PER CITY COMMENTS	08-10-2022
3	BEAR CREEK UTILITY COORDINATION REVISIONS	08-16-2022

OWNER:
RIVER OAKS INVESTMENT GROUP
DAVID THIND
GLUCKSTADT RD

PROJECT TITLE: **GLUCKSTADT RETAIL CENTER**
SHEET TITLE:
SITE PLAN
SITE DEVELOPMENT

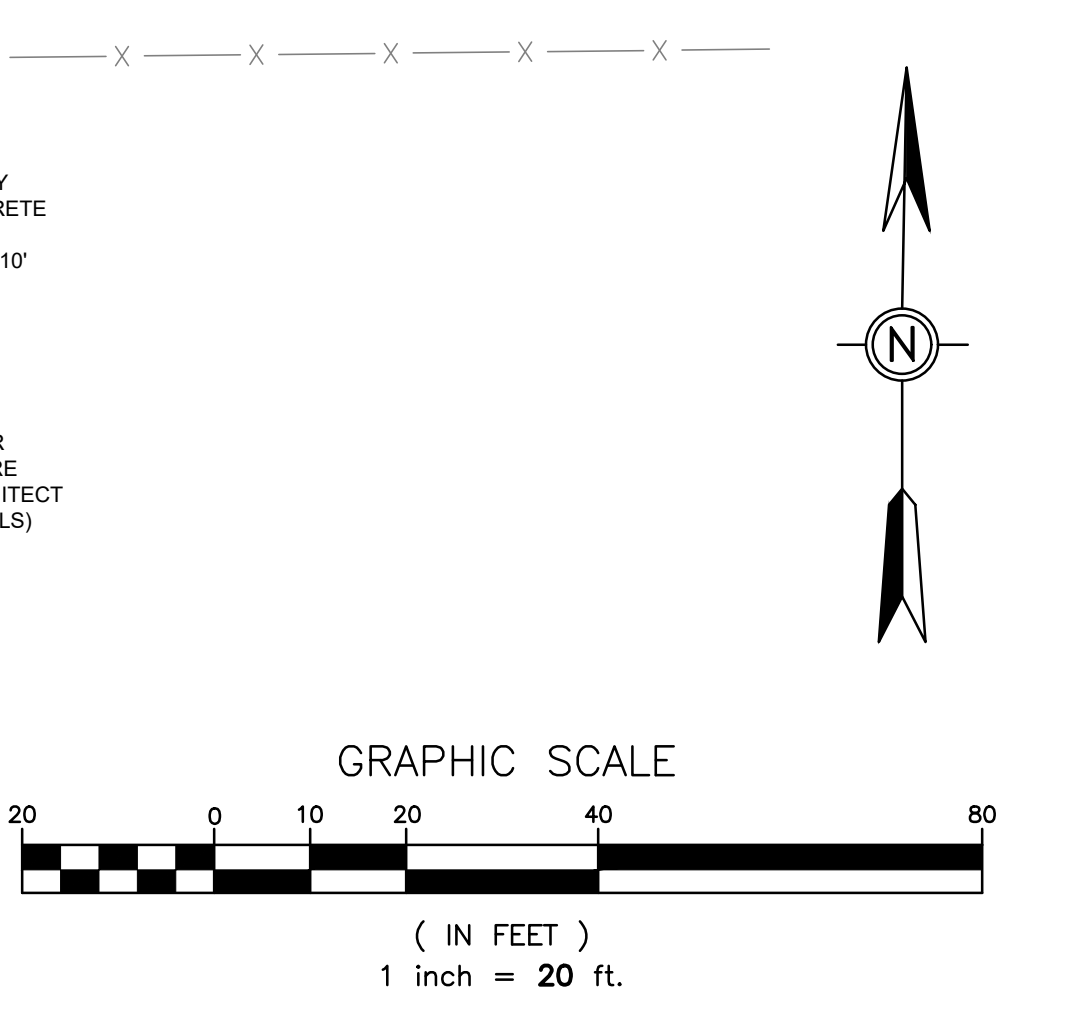
JOB NO.: 220501
DATE: 1 AUG 2022
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
3



- SITE PLAN NOTES**
- ADA HANDICAPPED (HC) PARKING: REFER TO THE ADA HC DETAILS FOR DIMENSIONS AND SPECIFICATIONS ON REGULAR HC AND VAN ACCESSIBLE PARKING REQUIREMENTS. A MIN. OF 5 SPACES SHALL BE RESERVED FOR HC PARKING, AND A MIN. OF ONE SHALL BE VAN ACCESSIBLE. GRADES ACROSS ADA PARKING SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION
 - STRIPING: ALL PARKING SPACE STRIPING SHALL BE 4" WIDE STRIPES, WHITE TRAFFIC PAINT.
 - SIDEWALKS: SIDEWALKS SHALL BE LIGHT-DUTY CONCRETE PAVEMENT, 4" THICK, MIN., SLOPED AT 2.0% MAX. AWAY FROM BUILDING.

FLOODPLAIN DESIGNATION
SITE IS LOCATED IN ZONE X, AREA OF MINIMAL FLOOD HAZARD PER FEMA FIRM PANEL 28089C0415F, EFFECTIVE 03/17/2010



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Know what's below
Call before you dig

BOOK 3143 PAGE 522
PARCEL # 0821-29-010/22.00

PARCEL 2
BOOK 2807 PAGE 381
PARCEL # 0821-29-010/21.00

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REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI
20857

08-10-2022

DRAWING ISSUED

No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022
2	EAST DRIVE ENTRANCE EDITS PER CITY COMMENTS	08-10-2022

OWNER:
RIVER OAKS
INVESTMENT GROUP

PROJECT TITLE: GLUCKSTADT RETAIL CENTER

SHEET TITLE: GRADING PLAN

SITE DEVELOPMENT

OWNER:
RIVER OAKS
INVESTMENT GROUP

PROJECT TITLE: GLUCKSTADT RETAIL CENTER

SHEET TITLE: GRADING PLAN

SITE DEVELOPMENT

PROJECT TITLE: GLUCKSTADT RETAIL CENTER

SHEET TITLE: GRADING PLAN

SITE DEVELOPMENT

JOB NO.: 220501
DATE: 1 AUG 2022
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

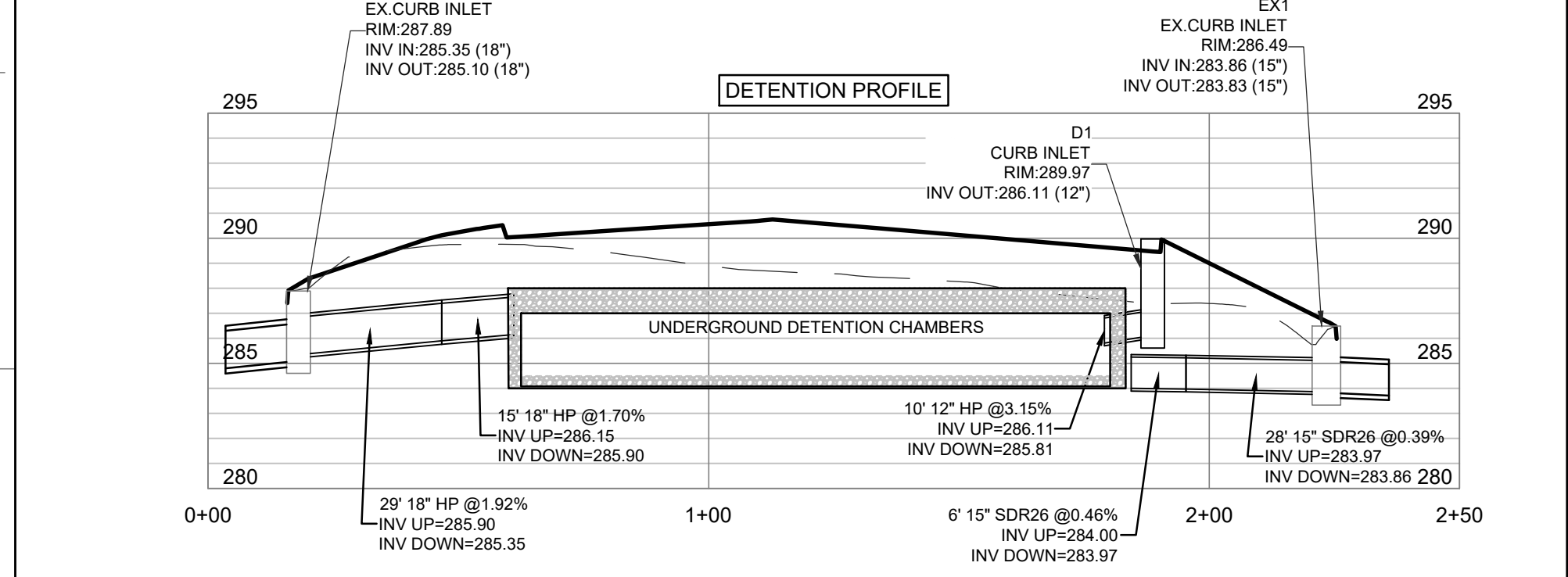
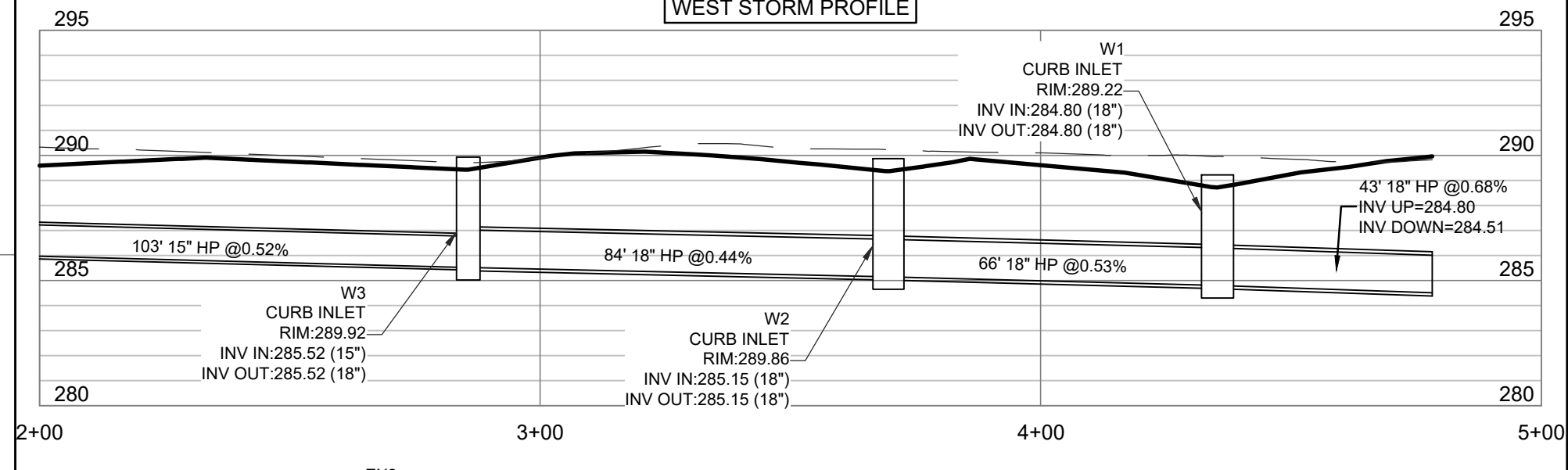
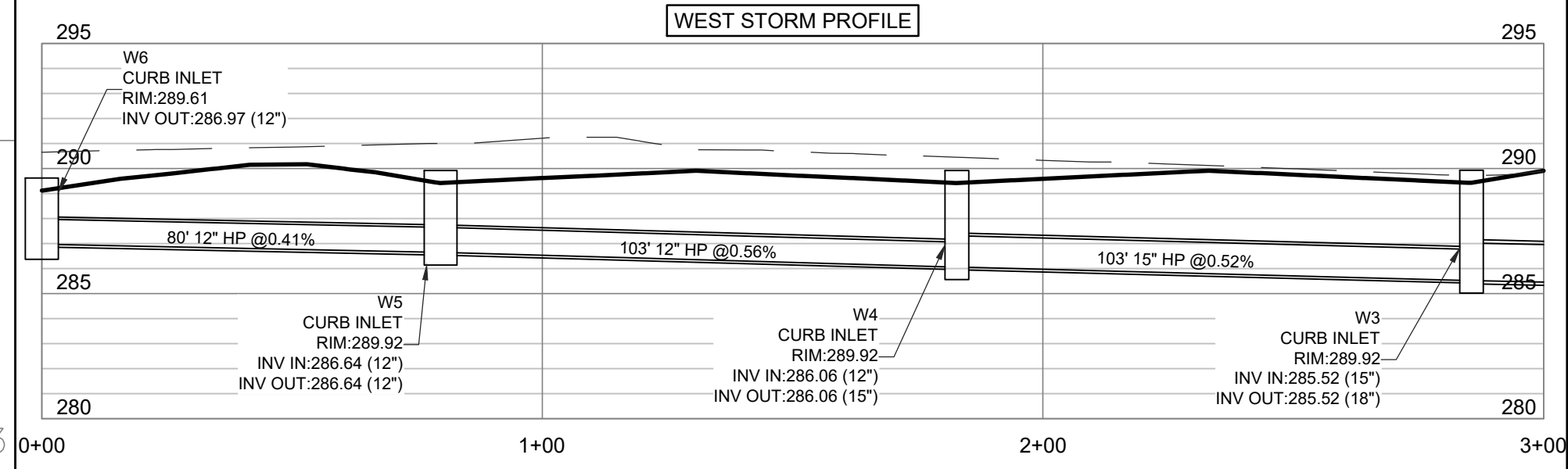
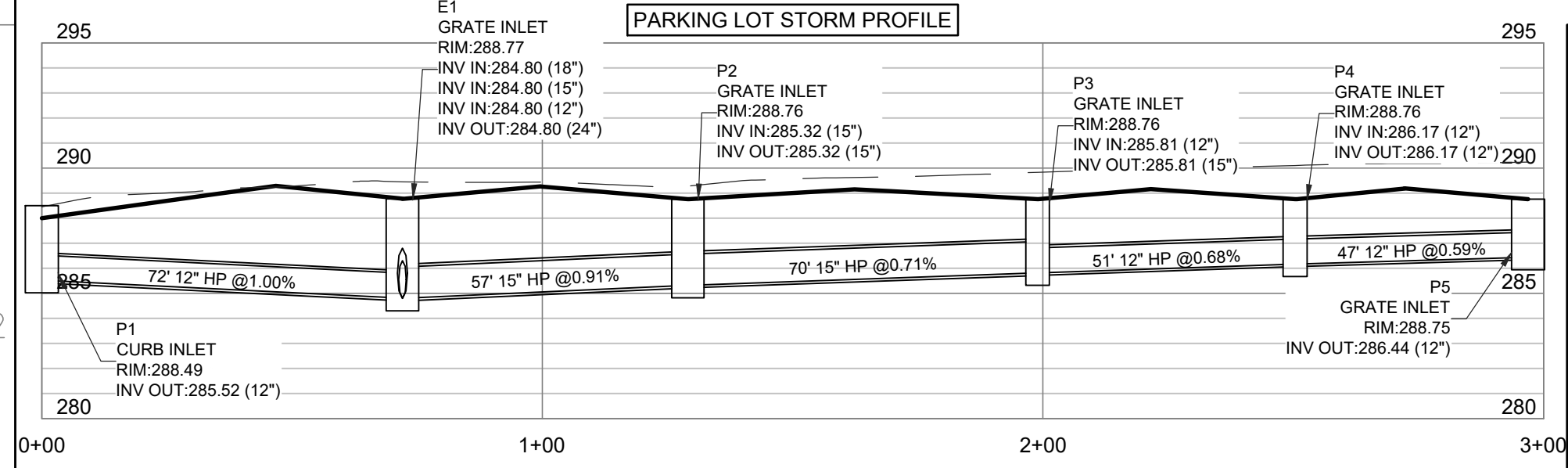
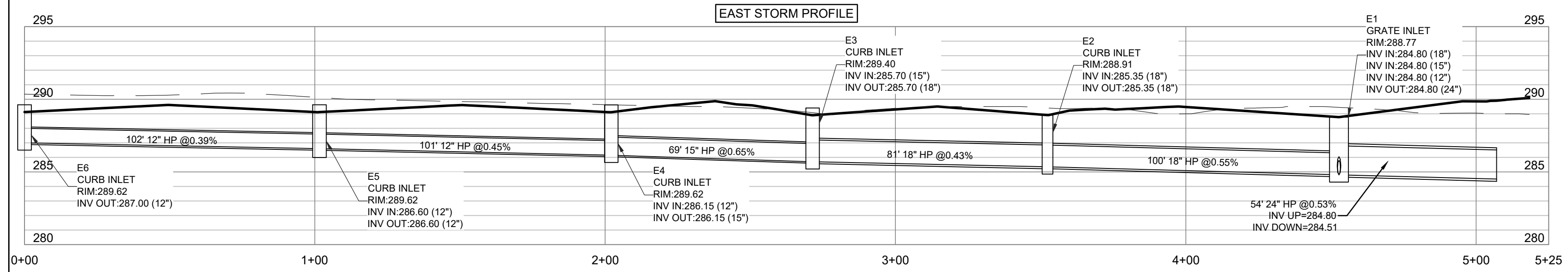
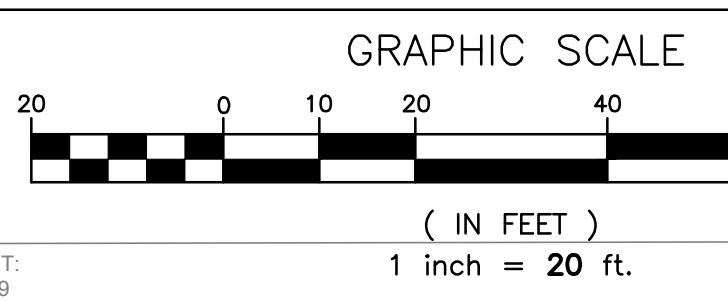
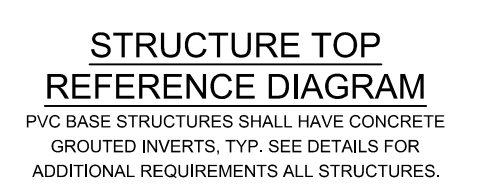
SHEET NUMBER: 5

DRAWING SYMBOL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		GRATE INLET (PVC BASE, 24" SQUARE D.I. TOP)
		CURB INLET (PVC BASE STR, 2'x3' D.I. TOP)
		STORM SEWER LINE
		SLOPE DIRECTION & PERCENT
		MAJOR CONTOUR LINE
		MINOR CONTOUR LINE
		SPOT ELEVATION
		AT CURB: BC=BOTTOM OF CURB, TC=TOP CURB

UNDERGROUND DETENTION NOTES:
SYSTEM SHALL BE ADS TYPE SC-740
OVERALL SYSTEM SIZE: 125.54'x51.25'x4.00' AND 14,650 CF STORAGE. 160 CHAMBERS, 681 CY STONE, 30" TALL CHAMBER, OVER 6" STONE, WITH 12" STONE COVER. SEE DETAILS FOR ADDITIONAL SPECIFICATIONS. CONTRACTOR SHALL SUBMIT SYSTEM SHOP DRAWINGS FOR APPROVAL PRIOR TO INSTALLATION.

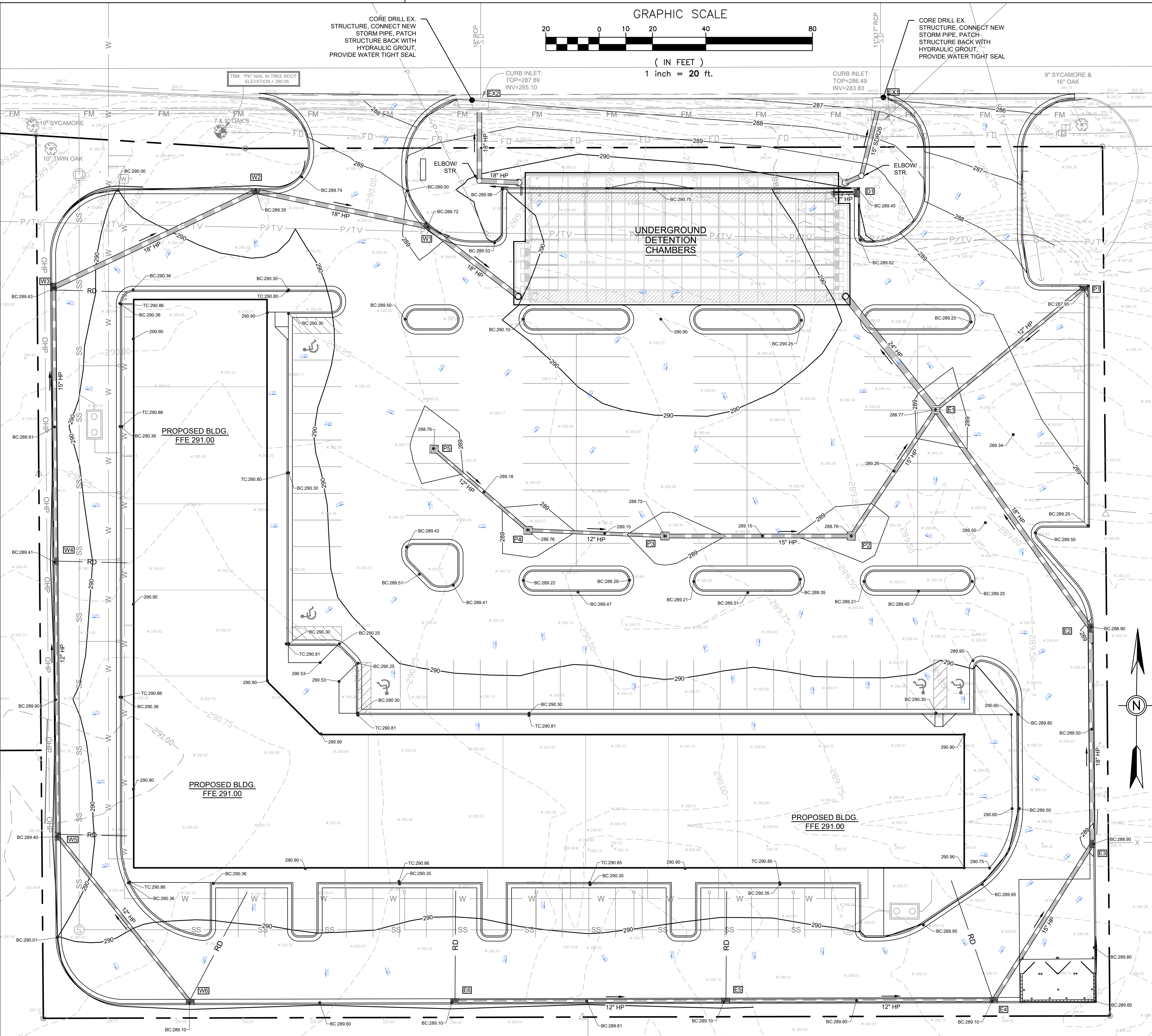
DESIGN ELEVATIONS:
• STONE INV.=284.00 (6" THICK BASE LAYER)
• ARCH INV.=284.50
• TOP ARCH=287.00
• TOP STONE=288.00
• FINISHED GRADE=289.00 MIN.



PROFILE NOTES:
SOLID LINE=PROPOSED GRADE, DASHED LINE=EXISTING GROUND.
SCALE: 1"=30' HORIZONTAL
VERTICAL EXAGGERATION=5X

GRADING & STORM DRAINAGE NOTES

- UTILITIES: CONTRACTOR SHALL HAVE MISSISSIPPI ONE CALL (881 OR 800-227-6477) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER AND PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.
- ADA GRADES: GRADES IN HANDICAP PARKING AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION. GRADES ALONG ALL HANDICAP ACCESSIBLE PATHS SHALL NOT EXCEED 3%.
- GRADES AT DOORS: THE SIDEWALK GRADES AT BUILDING DOORS SHALL HAVE A MAXIMUM 2" DROP (0.04 FT) FROM FINISHED FLOOR TO ACHIEVE ADA ACCESSIBILITY.
- GEOTECHNICAL ENGINEER: CONTRACTOR SHALL COORDINATE GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER. SEE REPORT # 437-22-A, BY LADNER TESTING, INC. DATED MAY 18, 2022 FOR ADDITIONAL CONSTRUCTION REQUIREMENTS RELATED TO EARTH WORK & GRADING AND EXISTING SOIL INFORMATION.
- ROOF DRAINS: CONNECT ALL ROOF DRAINS TO NEAREST UNDERGROUND STORM NETWORK STRUCTURES AT INVERT OUT PIPE ELEVATION. ALL PIPE SHALL BE SDR26 PVC, WITH A MIN. SLOPE OF 2.0%. TYP. ALL ROOF DRAIN PIPE, FITTING & CONNECTIONS SHALL BE SDR-26 PVC. TYP. SEE DETAILS FOR TYPICAL ROOF DRAIN CONNECTIONS. SEE STRUCTURAL AND MECHANICAL/PLUMBING PLANS & DETAILS FOR DOWNSPOUT LOCATIONS AND COORDINATION.
- SIDEWALKS: SIDE WALK CROSS SLOPE SHALL NOT EXCEED 2% SLOPE. REFER TO PLANS FOR DETAILED SPOT ELEVATIONS.
- CORRUGATED PLASTIC PIPE (HP): HP REFERS TO DUAL WALL, CORRUGATED PLASTIC PIPE, HP AS MANUFACTURED BY ADS, GRAY IN COLOR. SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS. ALL PIPE JOINTS SHALL BE WRAPPED IN 4" OF FILTER CLOTH REGARDLESS OF JOINT GASKETS OR MATERIAL TYPE. ALL HP SHALL BE BACKFILLED WITH SELECT FILL. SEE SPECS FOR ADDITIONAL REQUIREMENTS.



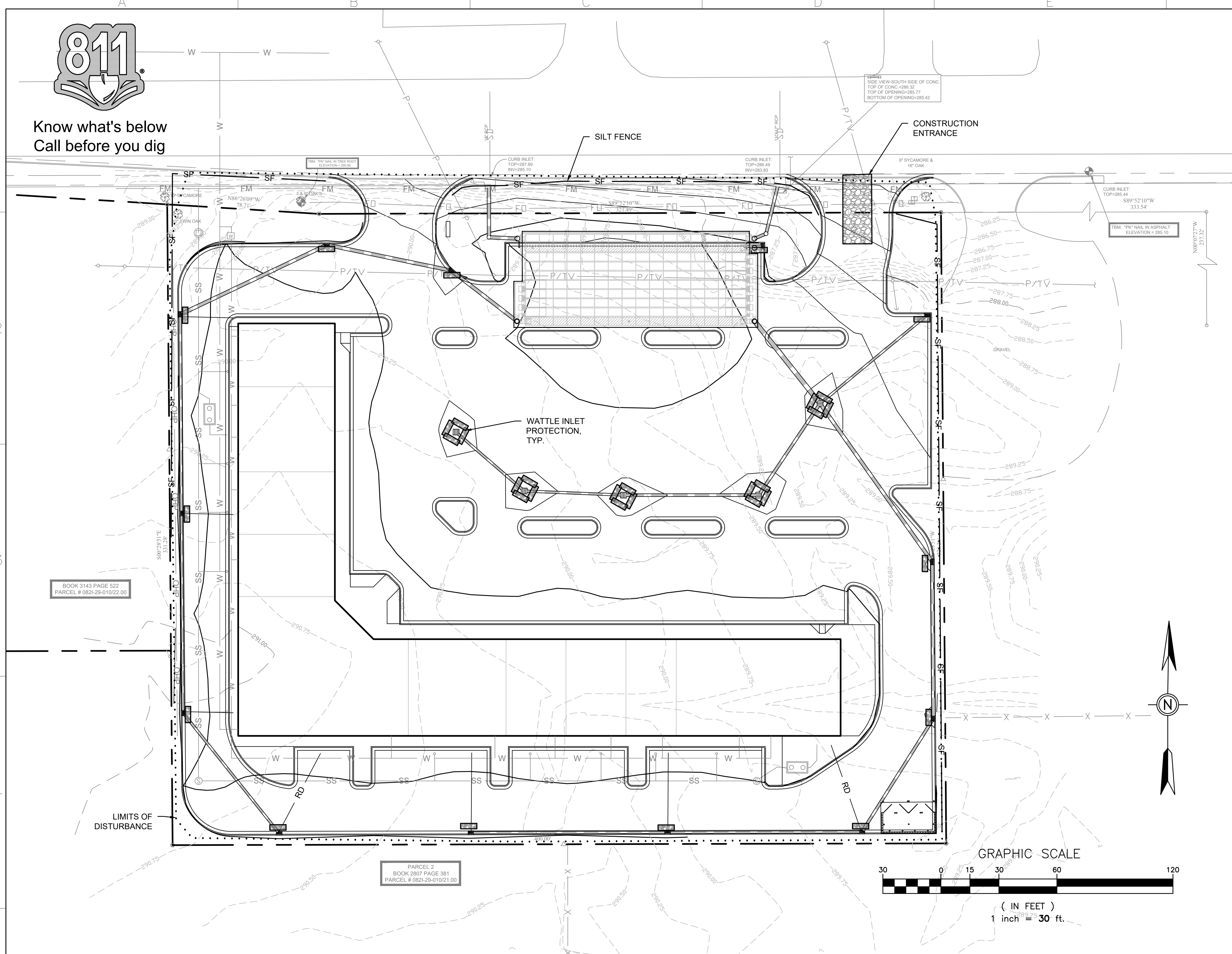
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Know what's below
Call before you dig



Know what's below
Call before you dig

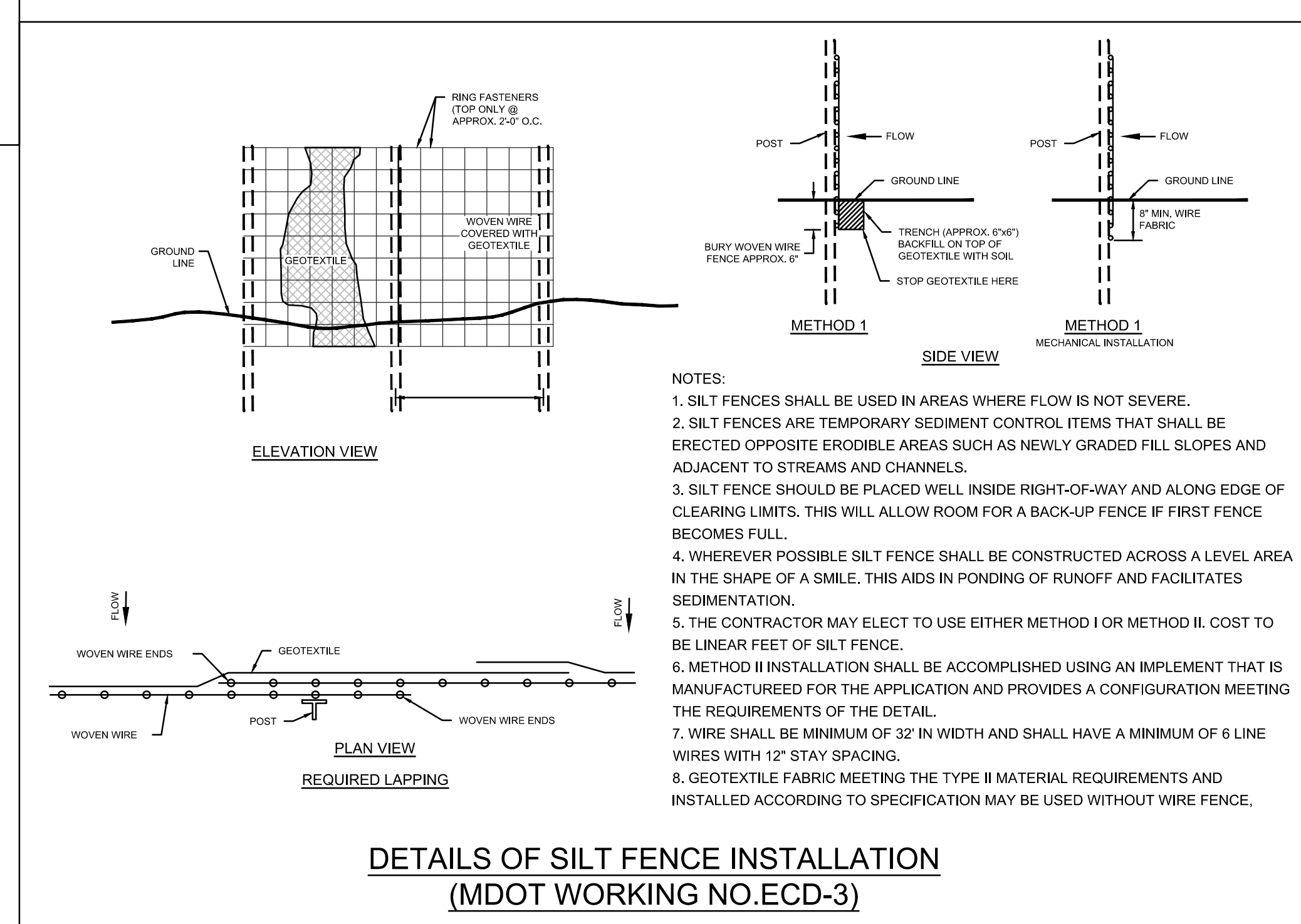
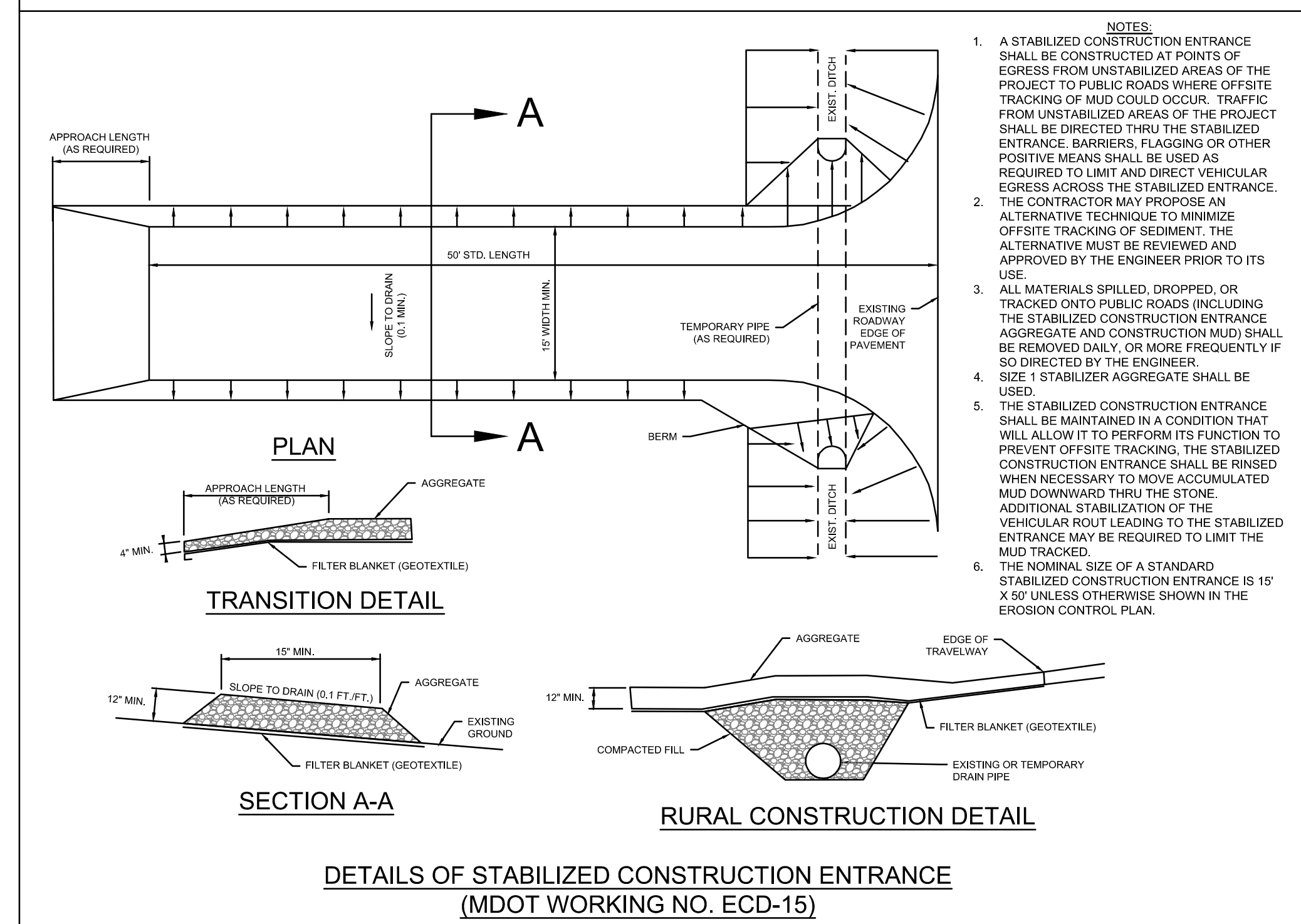
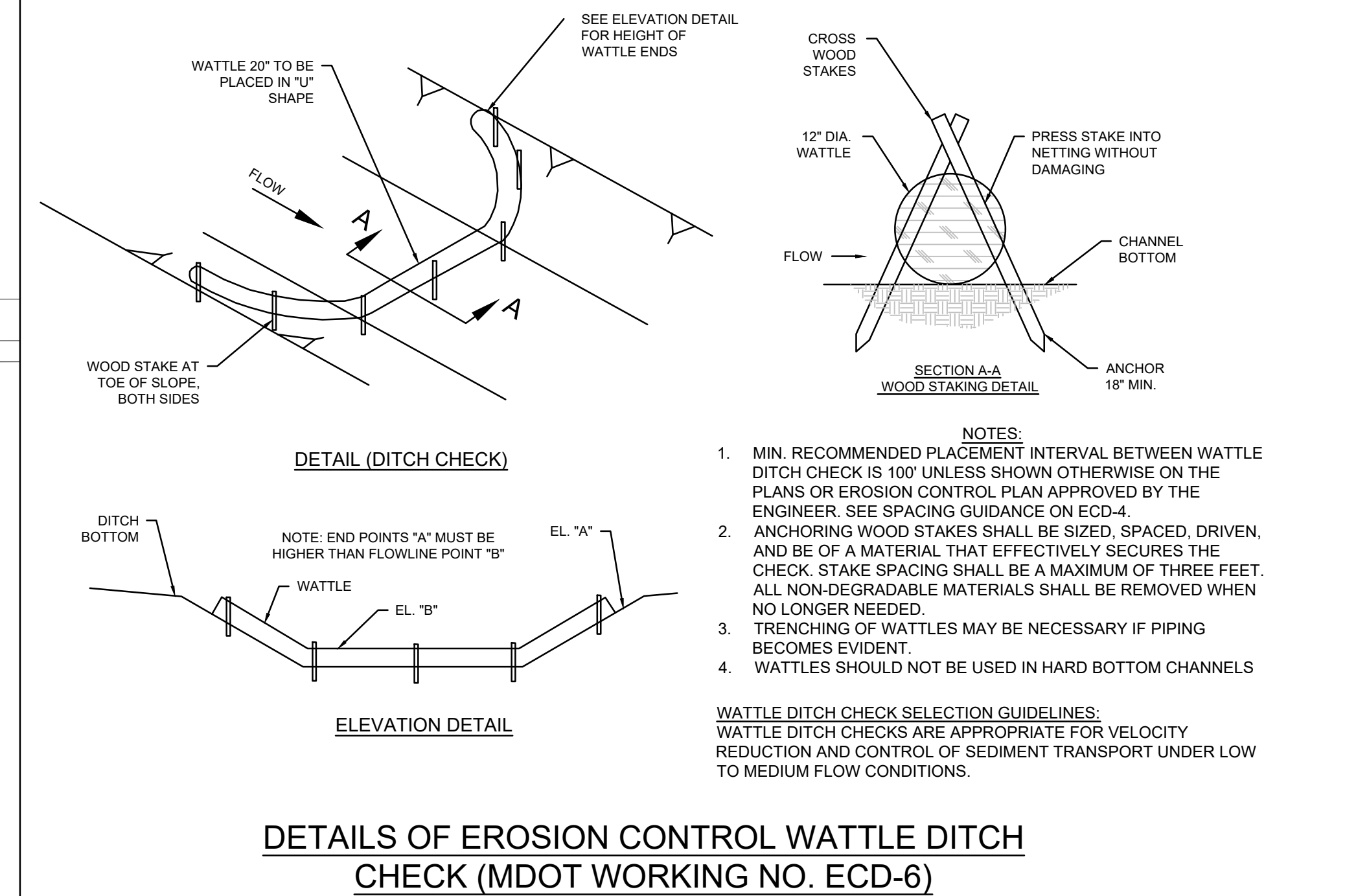


EROSION CONTROL PLAN NOTES

- TOTAL DISTURBED SITE AREA = ±3.00 AC.
- VEGETATIVE CONTROLS:** A COMBINATION OF TEMPORARY AND PERMANENT GRASSING WILL BE USED TO PROTECT SLOPES AS CONSTRUCTION PROGRESSES. REFER TO VEGETATION SPECIFICATIONS FOR DETAILS. SHOULD A DISTURBED AREA BE LEFT UNDISTURBED FOR 14 DAYS OR MORE, TEMPORARY OR PERMANENT VEGETATION SHALL BE PLACED IMMEDIATELY.
- STRUCTURAL CONTROLS:** INSTALL CONSTRUCTION ENTRANCES, DIVERSION DITCHES, WATTLE CHECK DAMS, SILT FENCE AND ALL OTHER STRUCTURAL BMPs AS SHOWN BELOW. PERMANENT EROSION CONTROL BMPs AND STRUCTURAL BMPs SHOULD BE PLACED AS SOON AS POSSIBLE TO ENSURE FINAL STABILIZATION OF THE SITE.
- WATTLE CHECK DAMS:** SILT FENCE AND HAY BALES ARE NOT ACCEPTABLE FORMS OF CHECK DAMS WITHIN TEMPORARY DIVERSION DITCHES, SWALES OR OTHER AREAS OF CONCENTRATED FLOW. CONTRACTOR SHALL USE SAND BAGS OR STONE DAMS TO CHECK FLOW. WATTLES MAY ALSO BE USED WHERE LOWER FLOWS/SMALLER DRAINAGE AREAS OCCUR.
- HOUSEKEEPING & MAINTENANCE PRACTICES:** ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. NON-FUNCTIONING EROSION CONTROLS SHALL BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL CONTROLS WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW. WALK THROUGH INSPECTIONS ARE RECOMMENDED BEFORE ANTICIPATED STORM EVENTS TO VERIFY THE INTEGRITY OF EROSION CONTROL MEASURES AND TO DETERMINE IF ADDITIONAL MEASURES ARE NEEDED. SEDIMENT BASINS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 2.0 FEET BELOW THE TOP OF THE RISER, AND/OR WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. SILT FENCE SHALL BE CLEANED OUT WHEN SEDIMENT REACHES 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. MAINTENANCE AND REPAIR OF EQUIPMENT SHALL BE PERFORMED OFF-SITE. MATERIAL WASH OUT SHALL OCCUR EITHER OFF-SITE OR WITHIN DESIGNATED WASH OUT AREAS.
- POST-CONSTRUCTION CONTROL MEASURES:** AS CONSTRUCTION IS COMPLETED, PERMANENT VEGETATIVE GROWTH SHALL BE ESTABLISHED ON DISTURBED SOILS TO IMPROVE SOIL STABILITY AND PROVIDE A BUFFER ZONE FOR LOOSE MATERIAL. LINED DITCHES SHALL BE INSTALLED AS SPECIFIED IN THE EROSION CONTROL SEQUENCE TO REDUCE EROSION IN CONCENTRATED FLOW AREAS AND RIP-RAP WILL BE PLACED AS SPECIFIED TO DISSIPATE FLOW ENERGY AND REDUCE FLOW VELOCITY. TEMPORARY BMPs MUST BE REMOVED FROM THE SITE WHEN THEY ARE NO LONGER NEEDED.

DRAWING SYMBOL LEGEND

PROPOSED	DESCRIPTION
	SILT FENCE PROTECTION
	LIMITS OF DISTURBANCE
	WATTLE CHECK DAM/INLET PROTECTION



Section 4, Item C)

DEAN ENGINEERING SOLUTIONS, INC.
 4780 I-55 NORTH, SUITE 100-4
 JACKSON, MS 39211
 601-557-2002 WWW.DEANESI.COM

REGISTERED PROFESSIONAL ENGINEER
 STATE OF MISSISSIPPI
 20057
 08-03-2022

No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022

DRAWING ISSUED

OWNER: RIVER OAKS INVESTMENT GROUP
 DAVID THIND
 GLUCKSTADT RD

PROJECT TITLE: GLUCKSTADT RETAIL CENTER
 SHEET TITLE: EROSION CONTROL PLAN (SWPPP)
 SITE DEVELOPMENT

JOB NO.: 220501
 DATE: 1 AUG 2022
 SCALE: AS SHOWN
 DRAWN BY: WSD
 REVIEWED BY: WSD

SHEET NUMBER:
6

DEAN ENGINEERING SOLUTIONS, INC. JACKSON, MS 39211 601-557-2002 WWW.DEANESI.COM

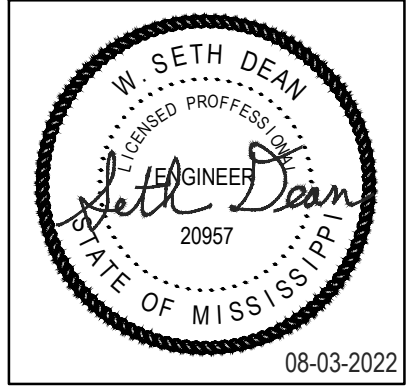


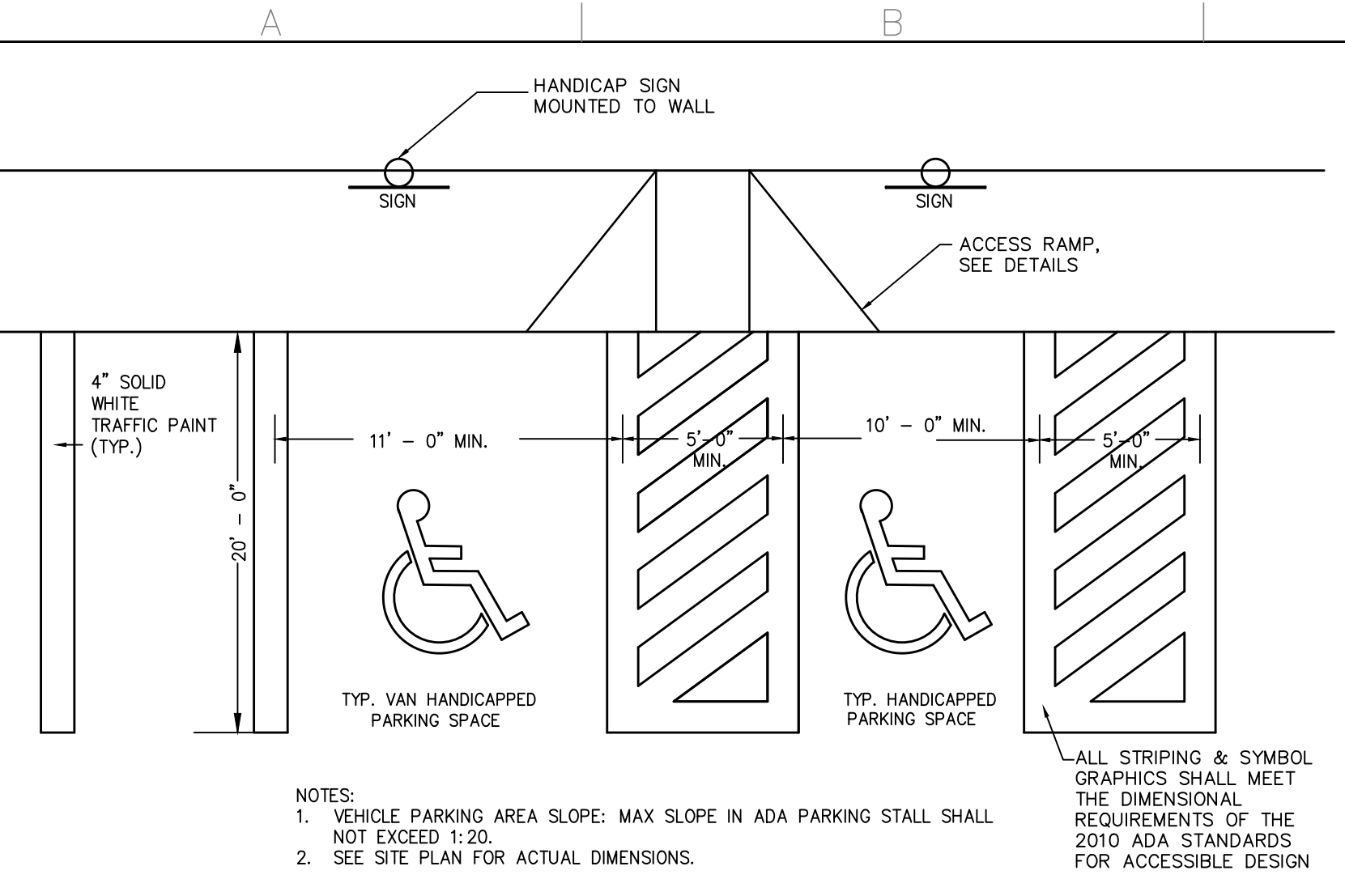
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OWNER: RIVER OAKS INVESTMENT GROUP DAVID THIND GLUCKSTADT RD

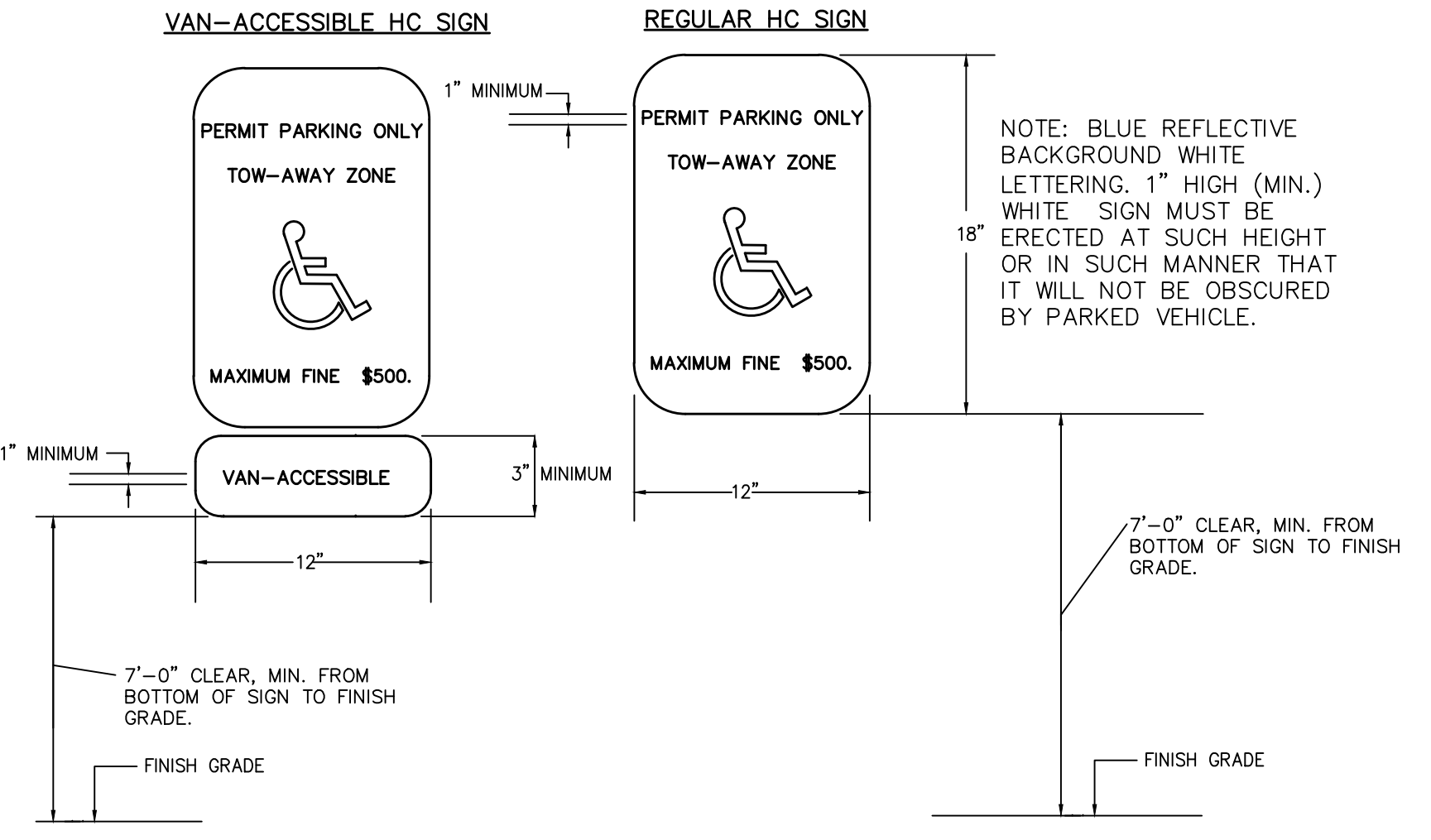
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JOB NO.: 220501 DATE: 1 AUG 2022 SCALE: AS SHOWN DRAWN BY: WSD REVIEWED BY: WSD

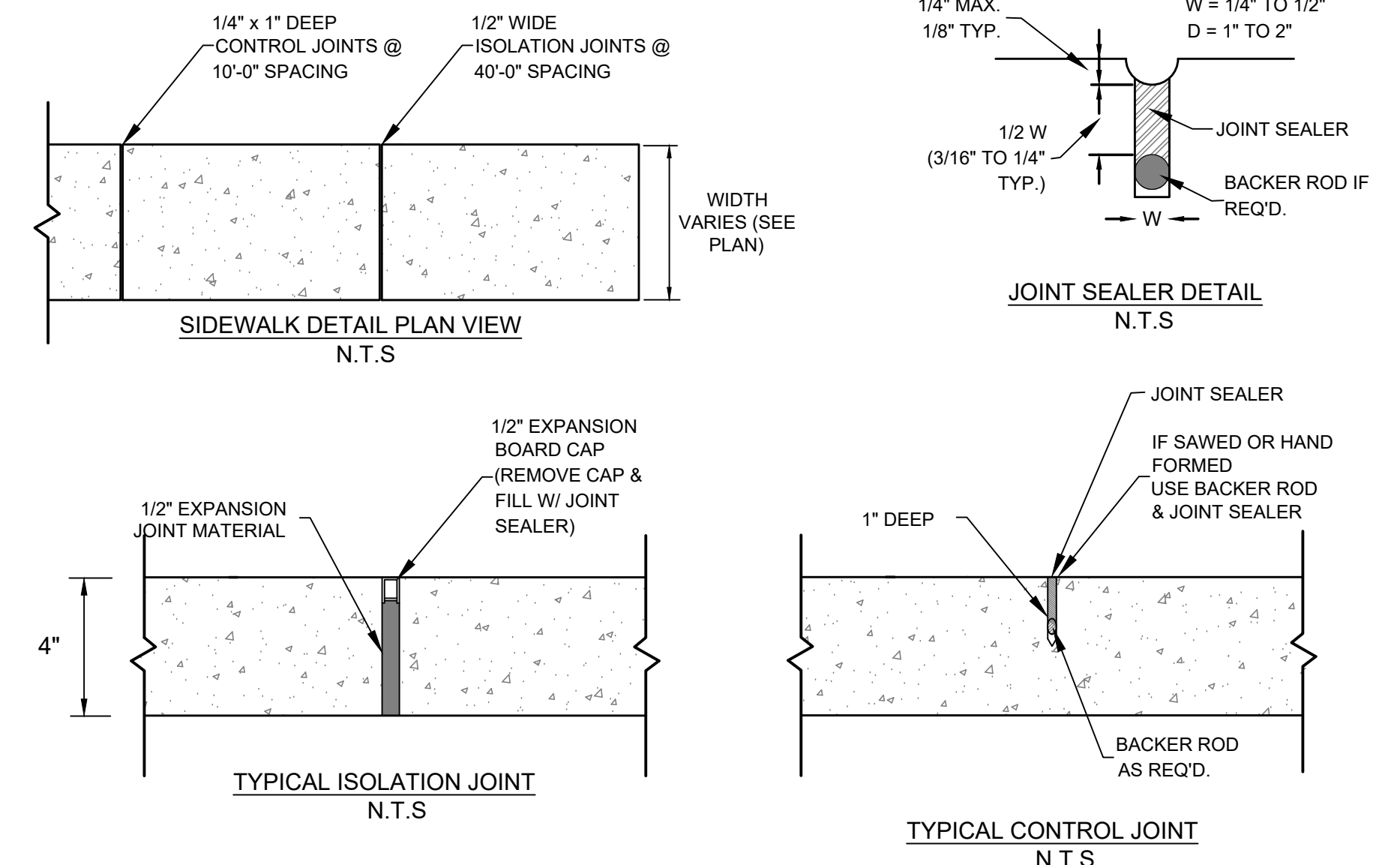
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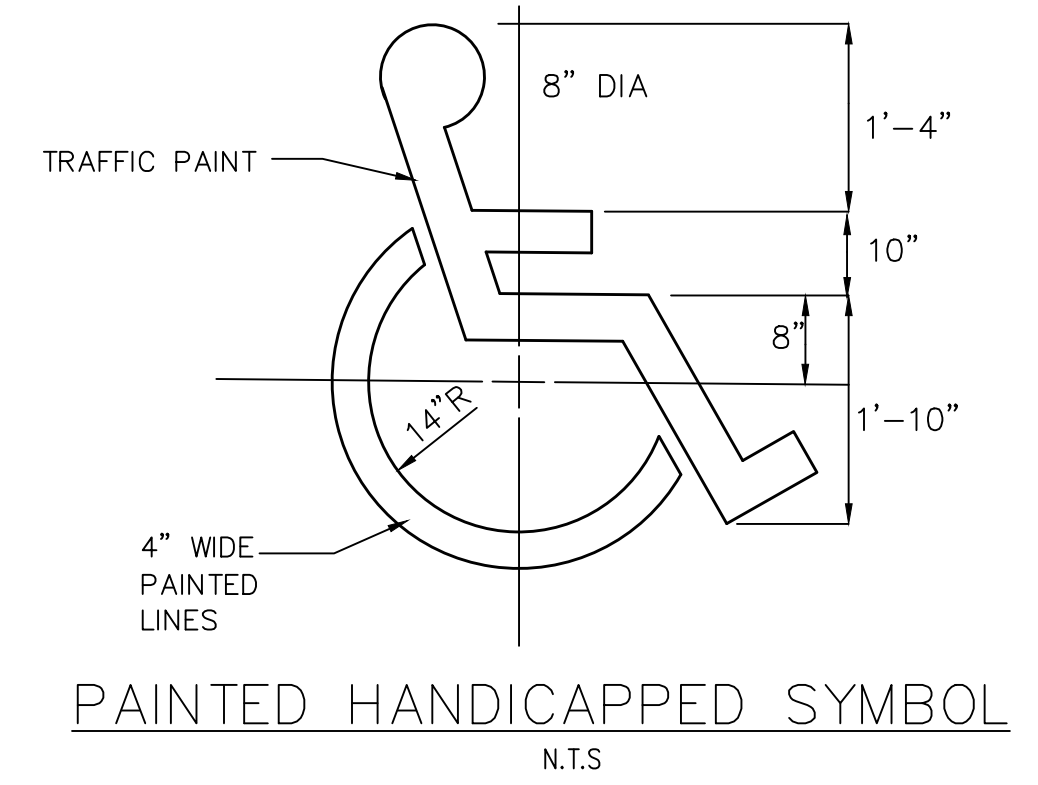
HANDICAPPED PAVEMENT STRIPING N.T.S.



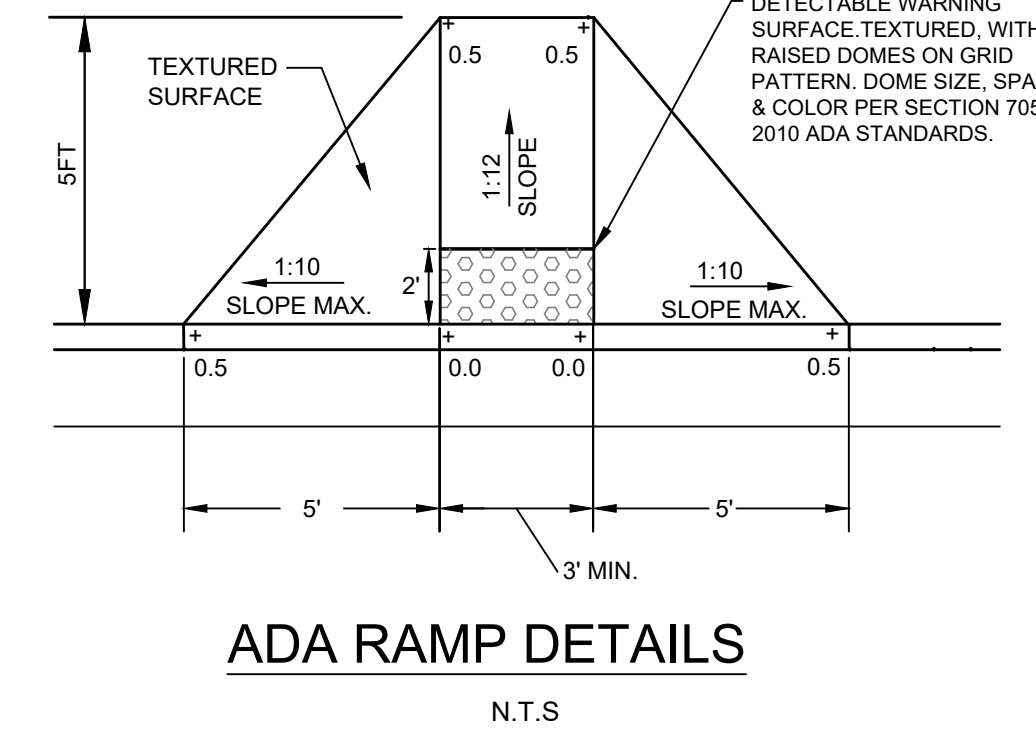
HANDICAP SIGN DETAILS N.T.S.



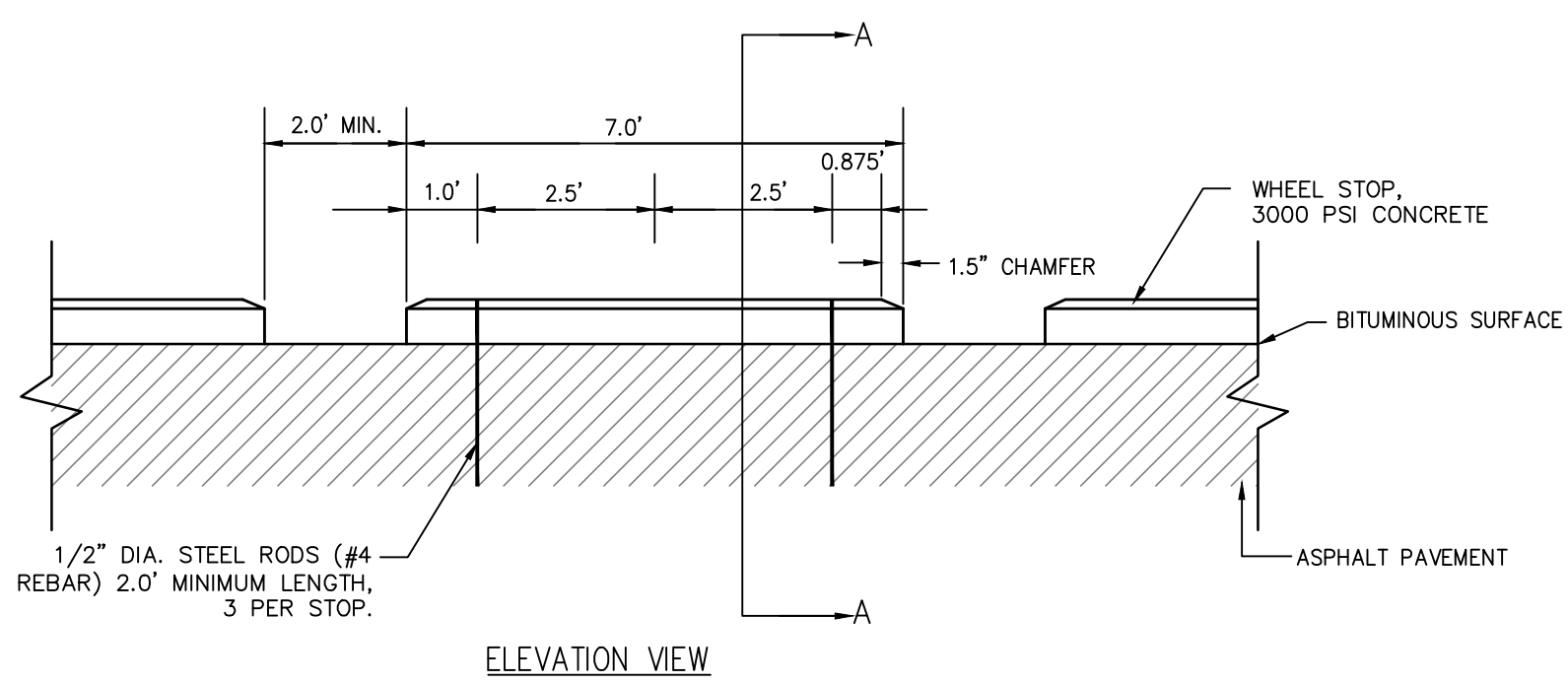
TYPICAL SIDEWALK & CURB DETAILS N.T.S.



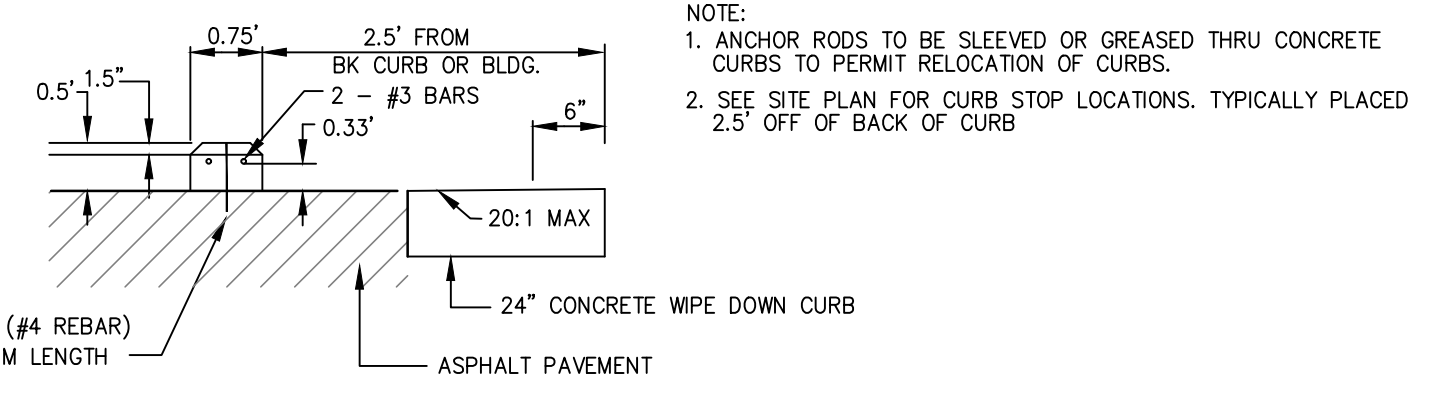
PAINTED HANDICAPPED SYMBOL N.T.S.



ADA RAMP DETAILS N.T.S.

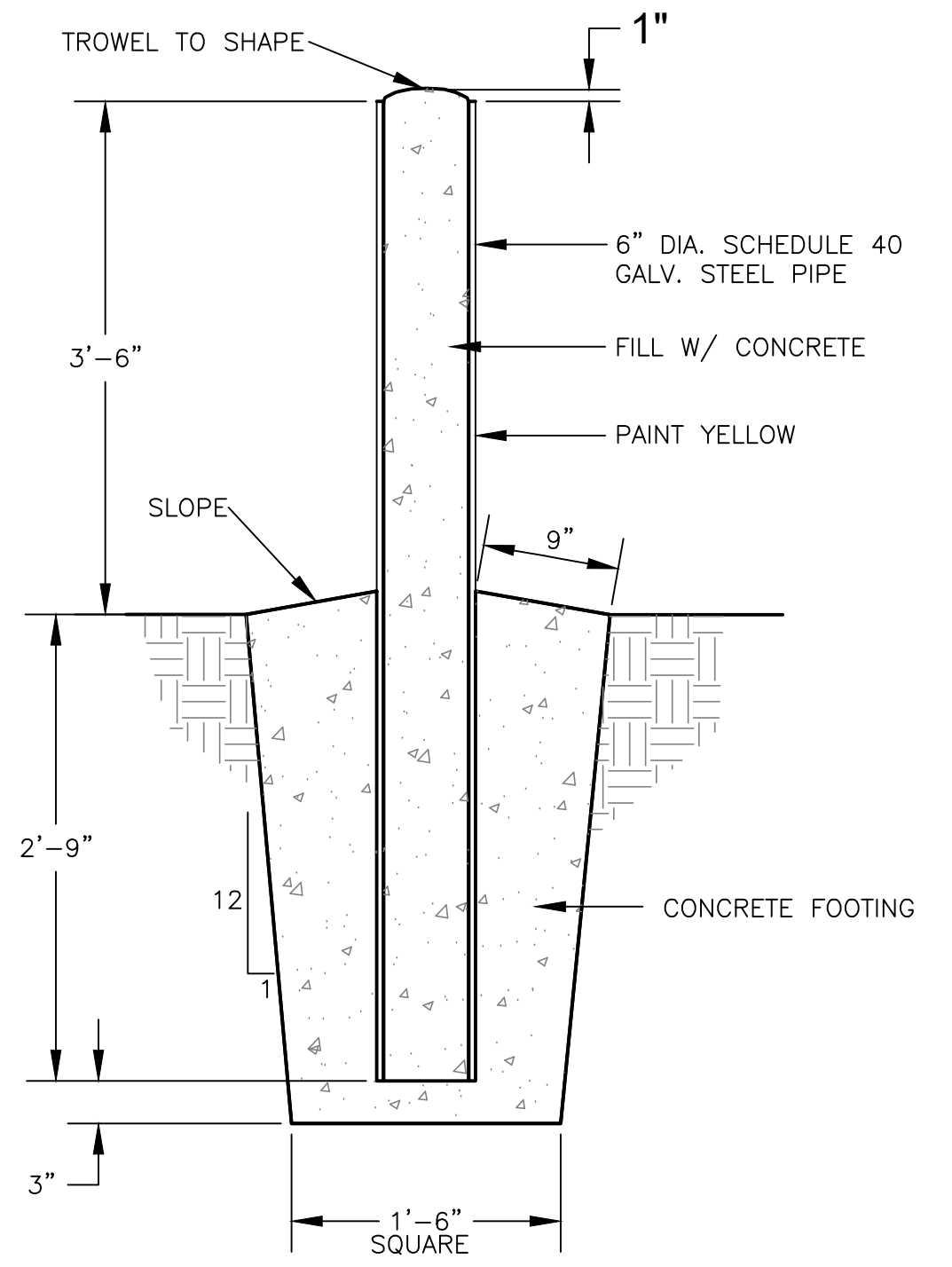


ELEVATION VIEW

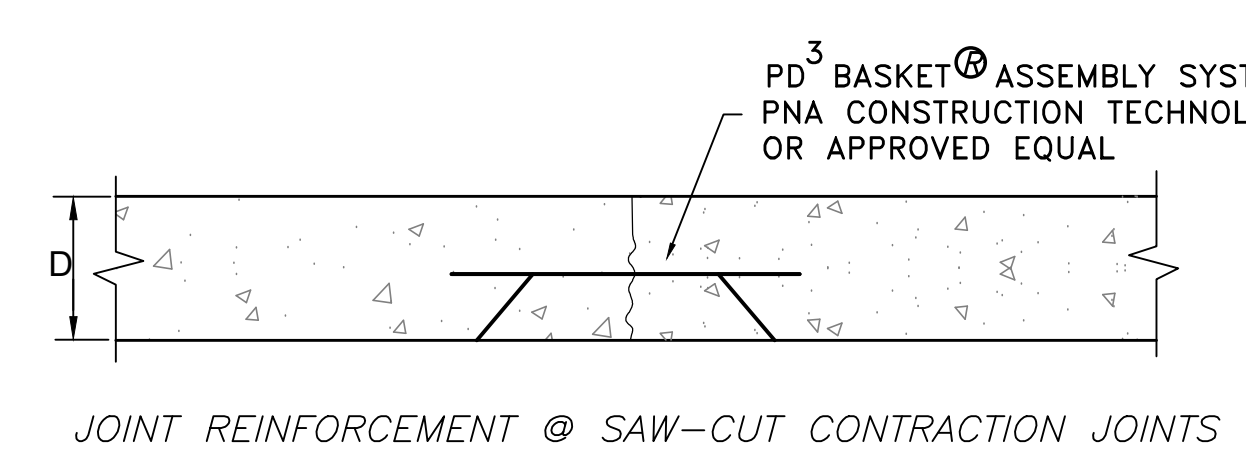


SECTION A - A

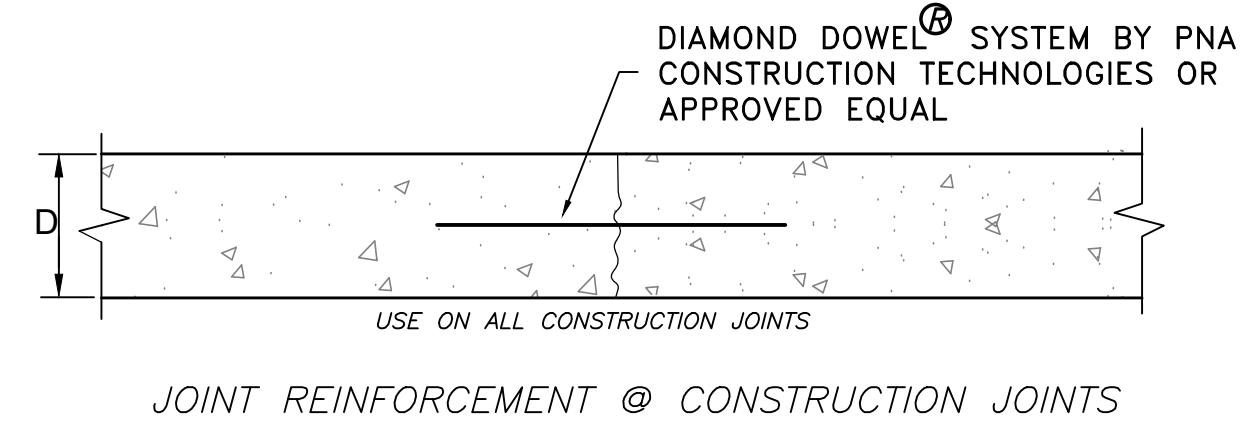
WHEEL STOP DETAIL N.T.S.



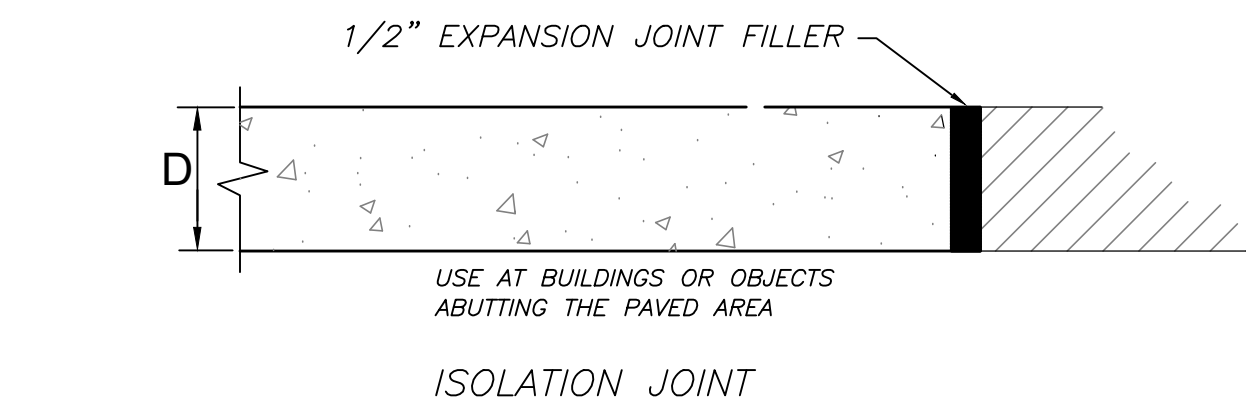
BOLLARD DETAIL N.T.S.



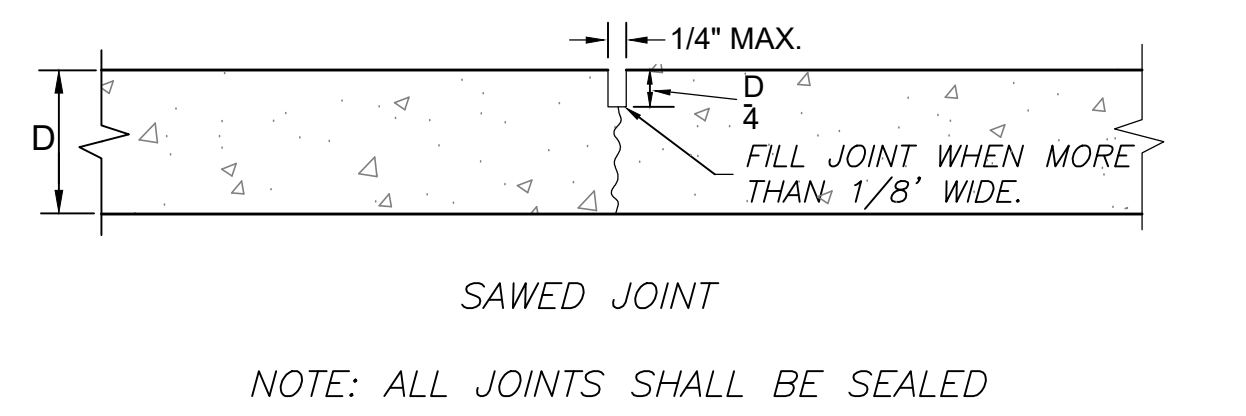
JOINT REINFORCEMENT @ SAW-CUT CONTRACTION JOINTS



JOINT REINFORCEMENT @ CONSTRUCTION JOINTS

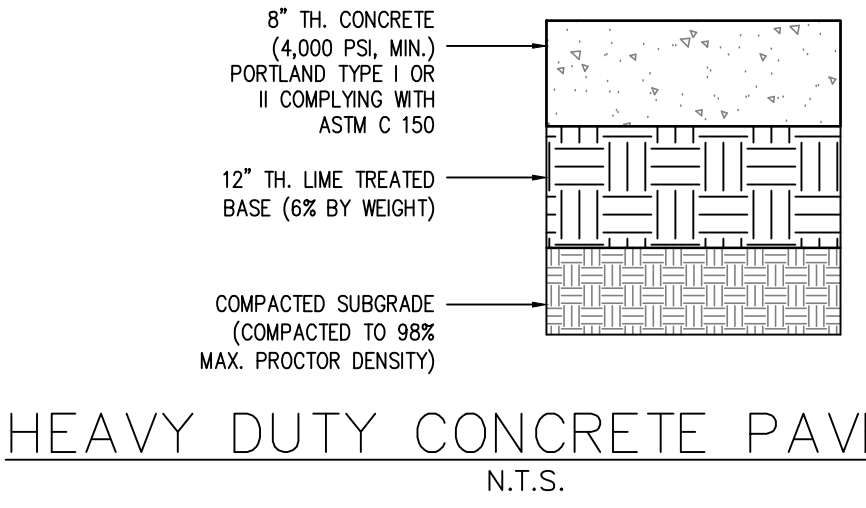


ISOLATION JOINT

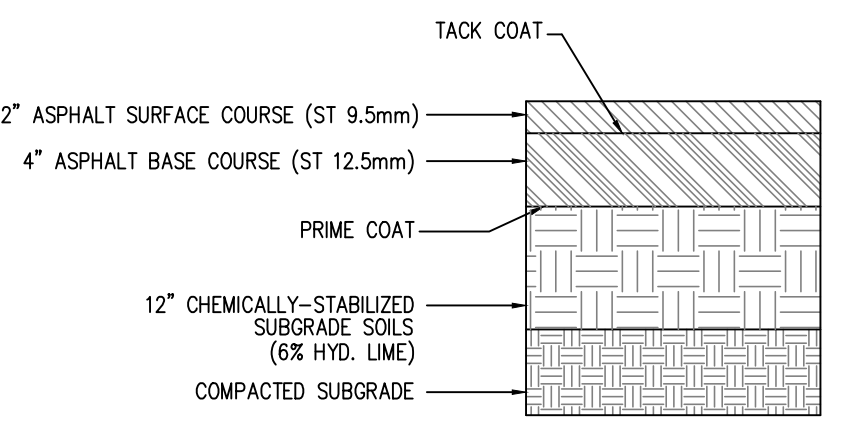


SAWED JOINT

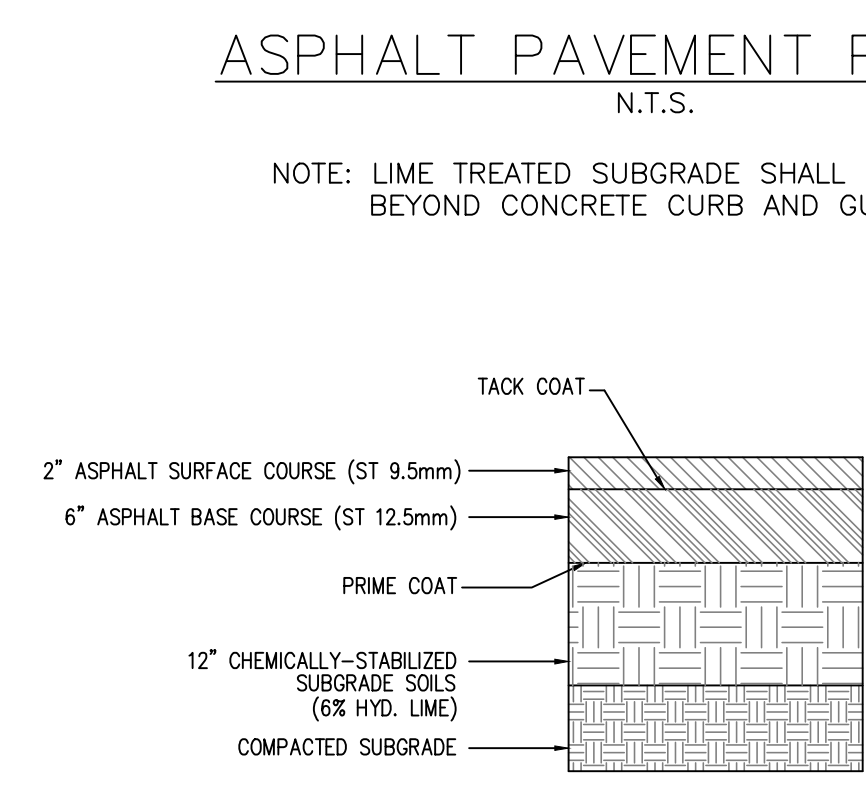
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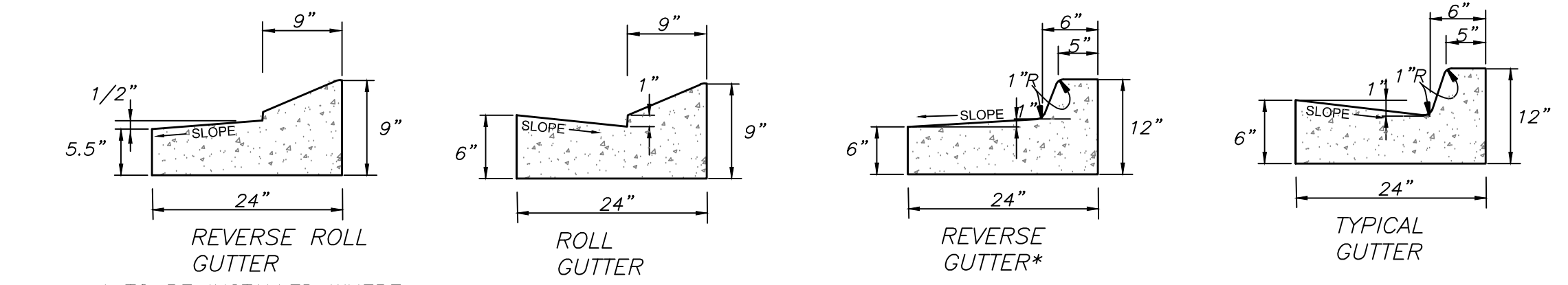
HEAVY DUTY CONCRETE PAVEMENT N.T.S.



ASPHALT PAVEMENT PARKING N.T.S.



HEAVY DUTY ASPHALT PAVEMENT N.T.S.



CONCRETE CURB & GUTTER DETAILS N.T.S.

C:\Users\dems\OneDrive - deanengr.com\1-Projects\DESIGN\Commercial Construction\Maintenance\Gluckstadt Retail\dwg\Details\08-03-2022 9:21:28 AM.dwg DWG To PDF.pc3 ARCH full bleed D (24.00 x 36.00 inches), 1:1

DEAN
ENGINEERING SOLUTIONS, INC.
4780 W-55 NORTH, SUITE 100-4
JACKSON, MS 39211
601-557-2002 WWW.DEANENGINEERING.COM

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W. SETH DEAN
REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI
20051

08-03-2022

DRAWING ISSUED

PLANS SUBMITTED FOR CITY REVIEW

Date: 08-03-2022

Description: RIVER OAKS INVESTMENT GROUP

No. 1

OWNER: RIVER OAKS INVESTMENT GROUP

DAVID THIND
GLUCKSTADT RD

PROJECT TITLE: GLUCKSTADT RETAIL CENTER

SHEET TITLE: UTILITY DETAILS

SITE DEVELOPMENT

JOB NO.: 220501

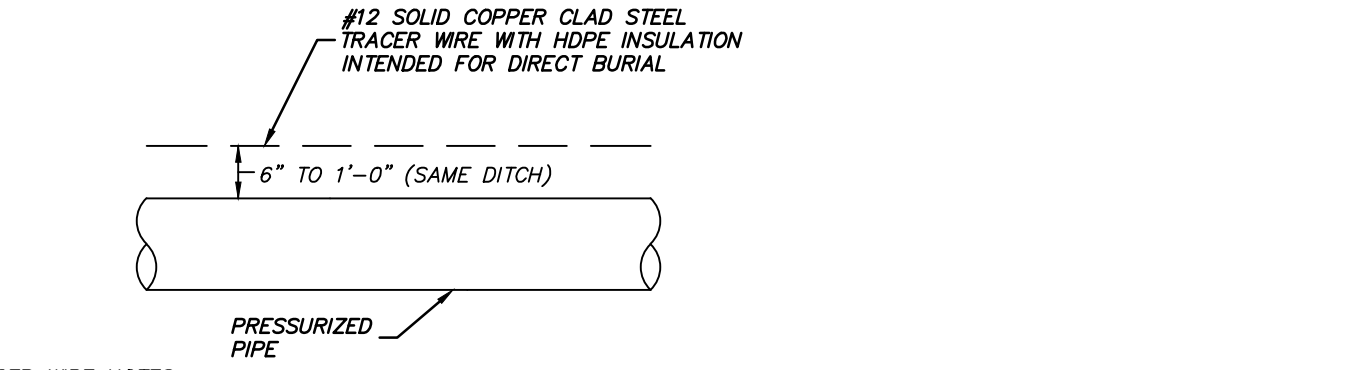
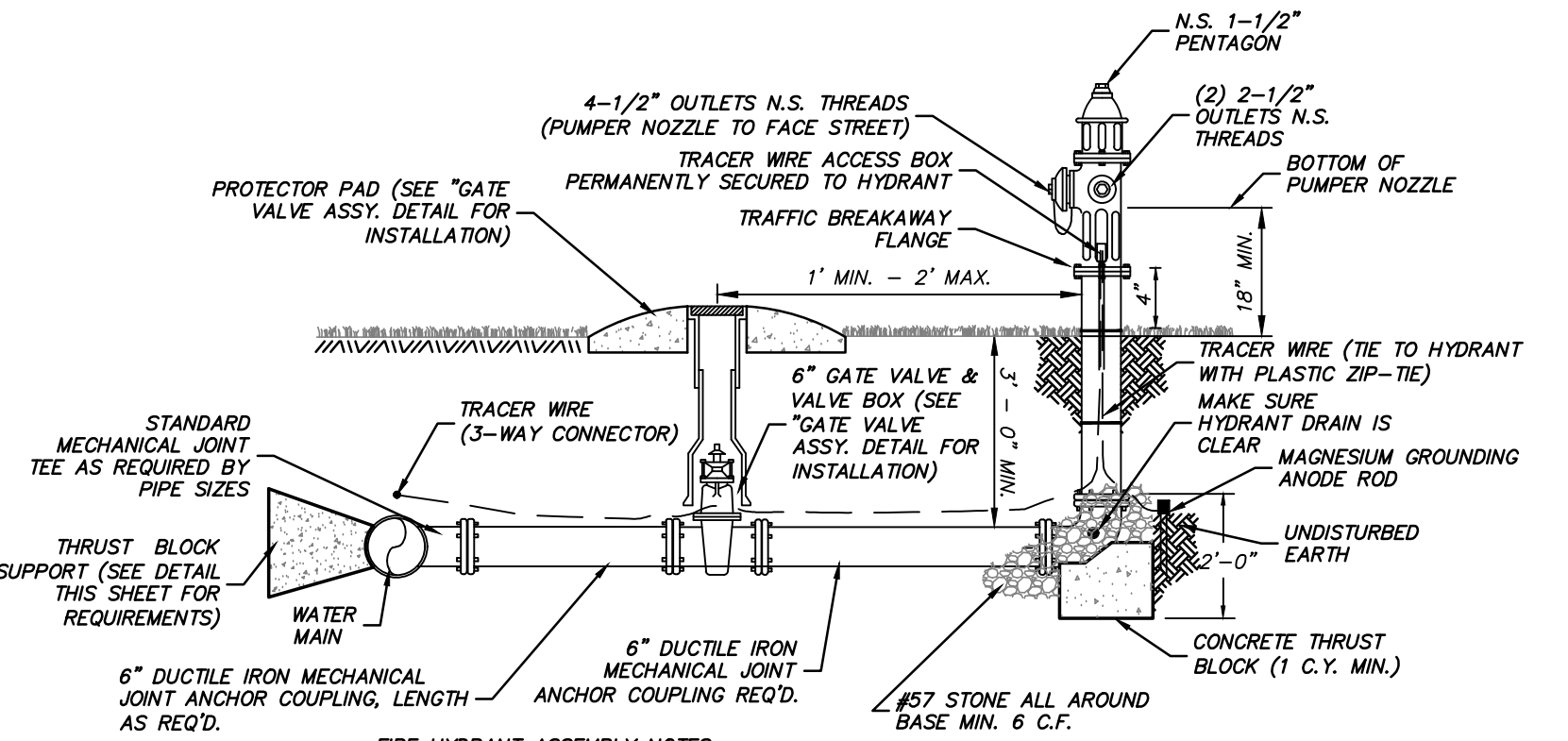
DATE: 1 AUG 2022

SCALE: AS SHOWN

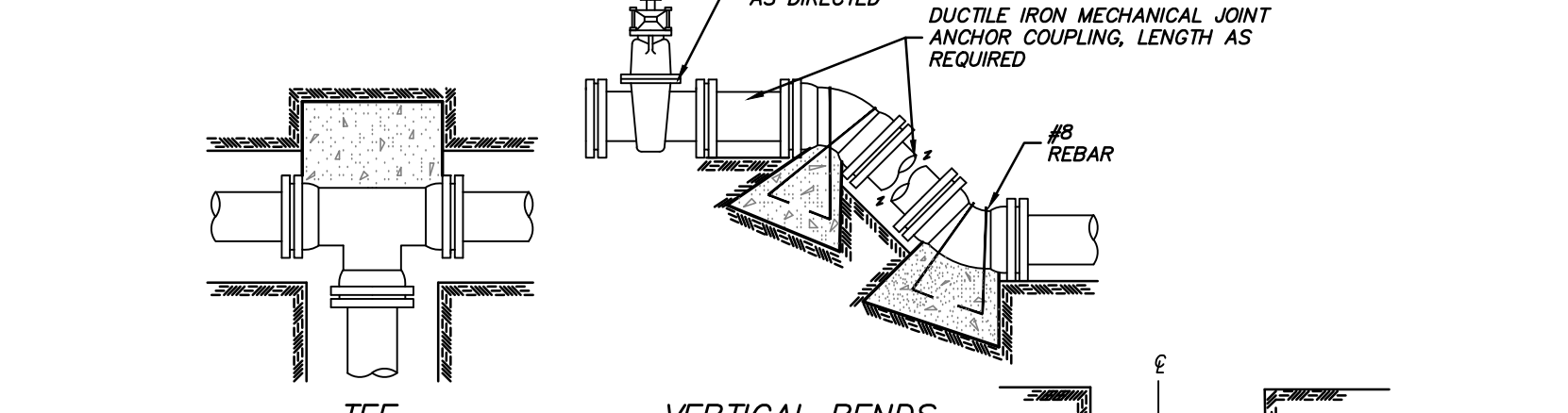
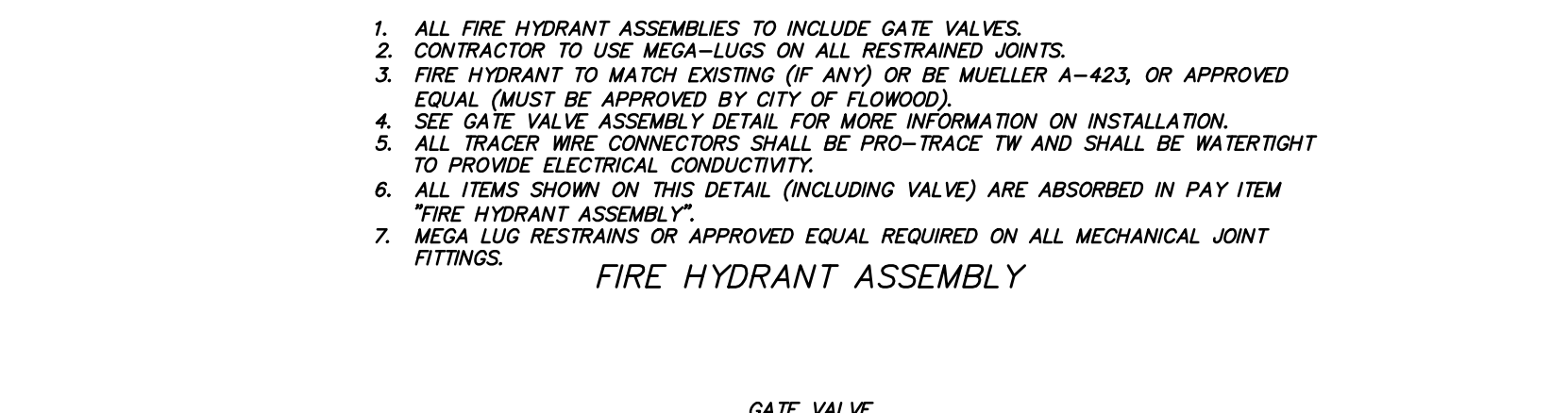
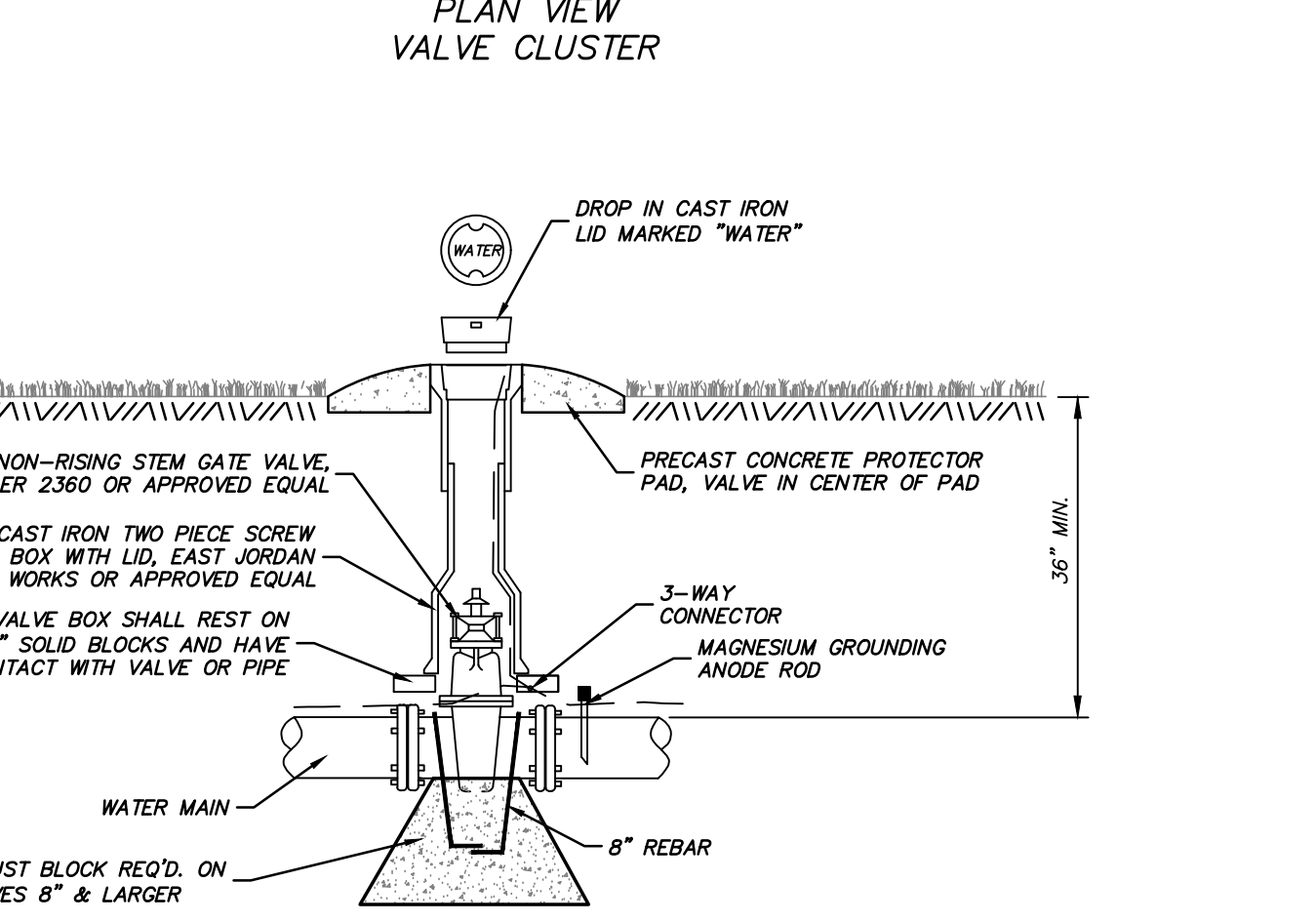
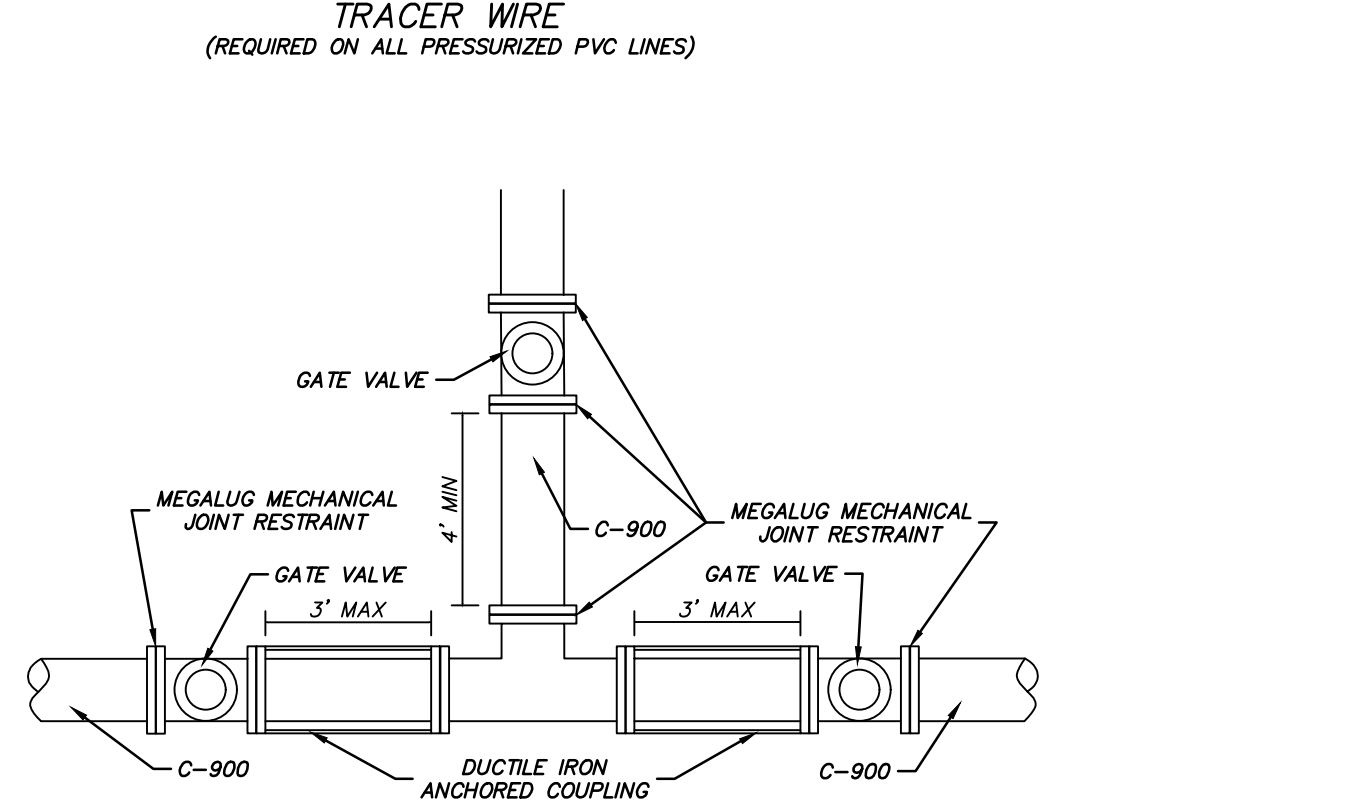
DRAWN BY: WSD

REVIEWED BY: WSD

SHEET NUMBER: 8



- TRACER WIRE NOTES:**
- TRACER WIRE SHALL BE ABSORBED IN THE PER FOOT COST OF THE PRESSURIZED LINE.
 - TRACER WIRE COLOR SHALL BE BLUE FOR WATER CONSTRUCTION.
 - ALL TRACER WIRE SHALL BE INSTALLED AS A COMPLETE SYSTEM, COMPLETE WITH CONNECTORS, MAGNESIUM ANODE GROUND RODS, AND TERMINAL STATIONS AT EACH FIRE HYDRANT, WATER VALVE, AND TERMINATION LOCATIONS.
 - TRACER WIRE SHALL BE COPPERHEAD 1230-HS OR APPROVED EQUAL BY CITY.
 - ALL ACCESSORIES SHALL BE COPPERHEAD OR APPROVED EQUAL BY CITY.
 - TRACER WIRE WILL BE TESTED BY CITY AND ALL AREAS NOT ABLE TO BE LOCATED USING TYPICAL LOW FREQUENCY LINE TRACING EQUIPMENT SHALL BE REPAIRED BY CONTRACTOR PRIOR TO ACCEPTANCE.
 - ALL TRACER WIRE CONNECTORS SHALL BE PRO-TRACE TW AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.



TYPICAL THRUST BLOCK

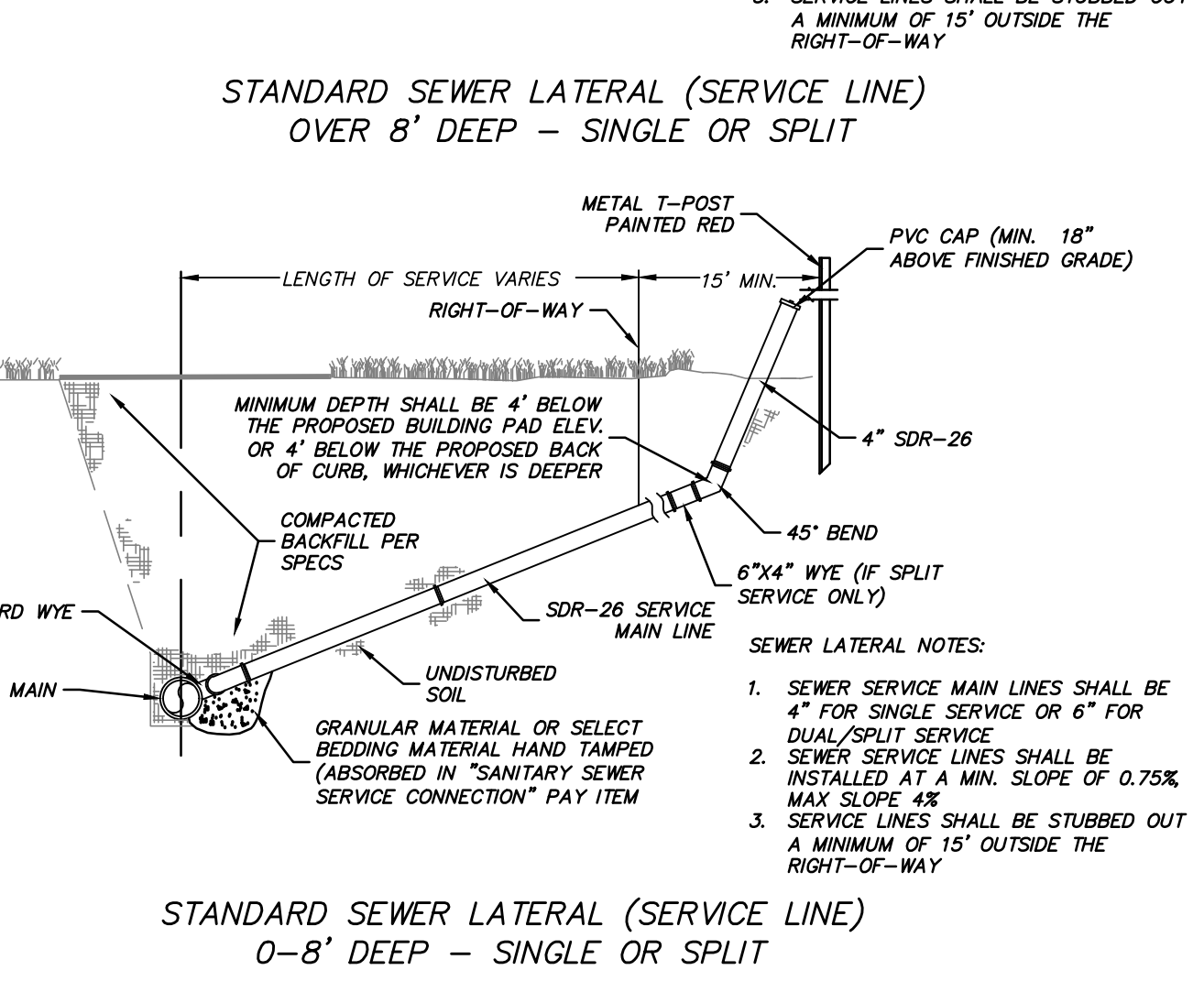
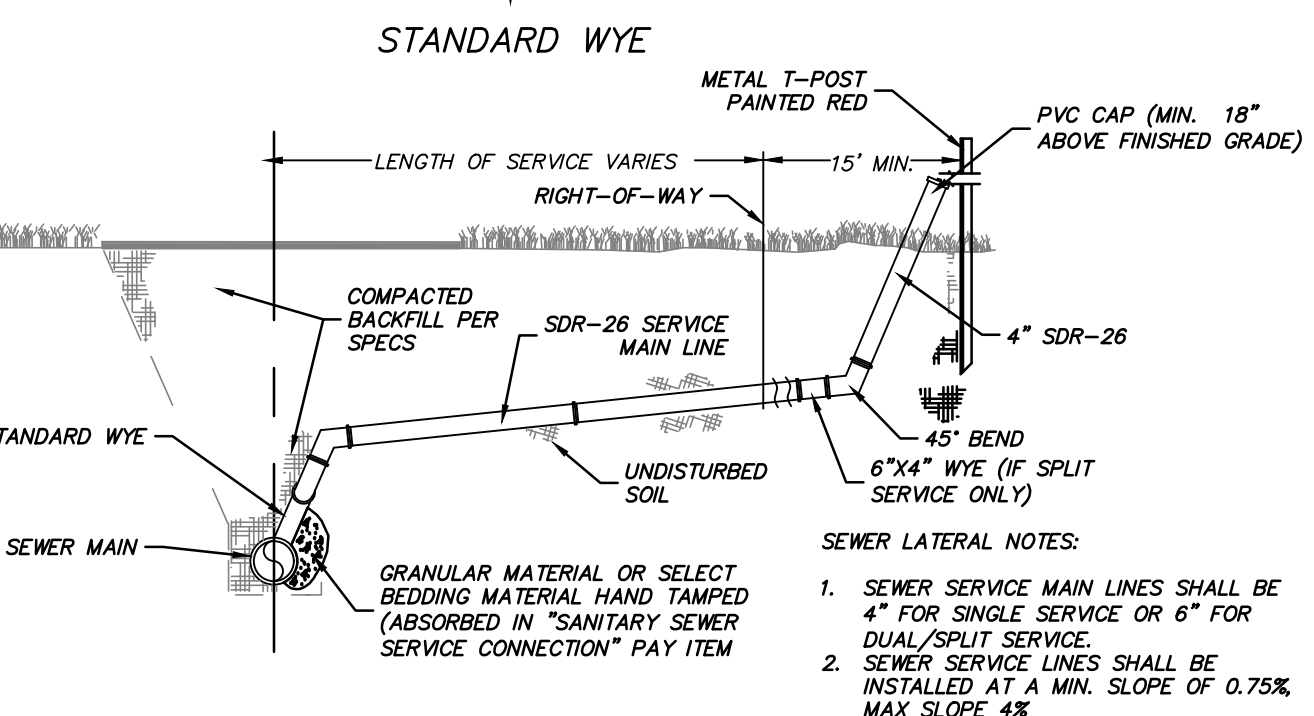
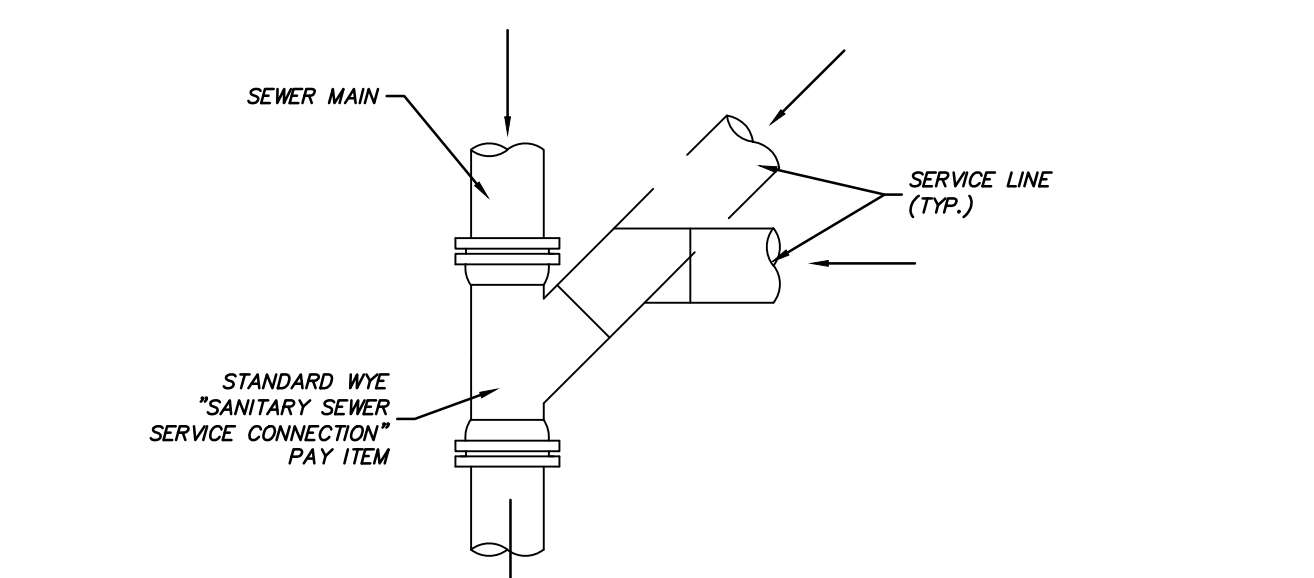
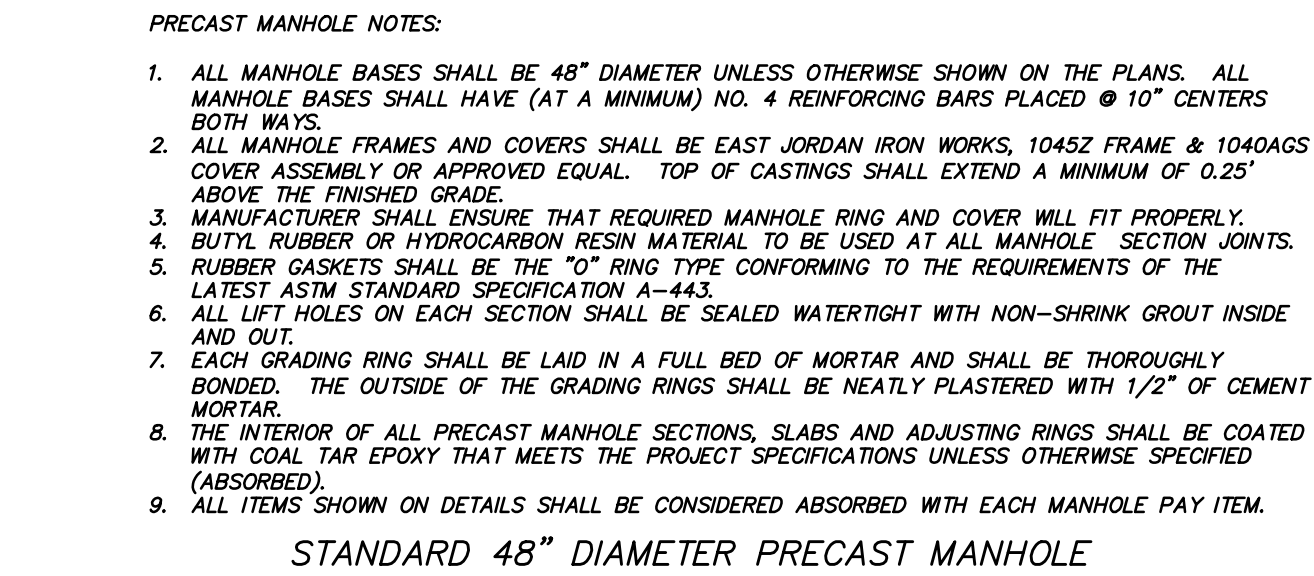
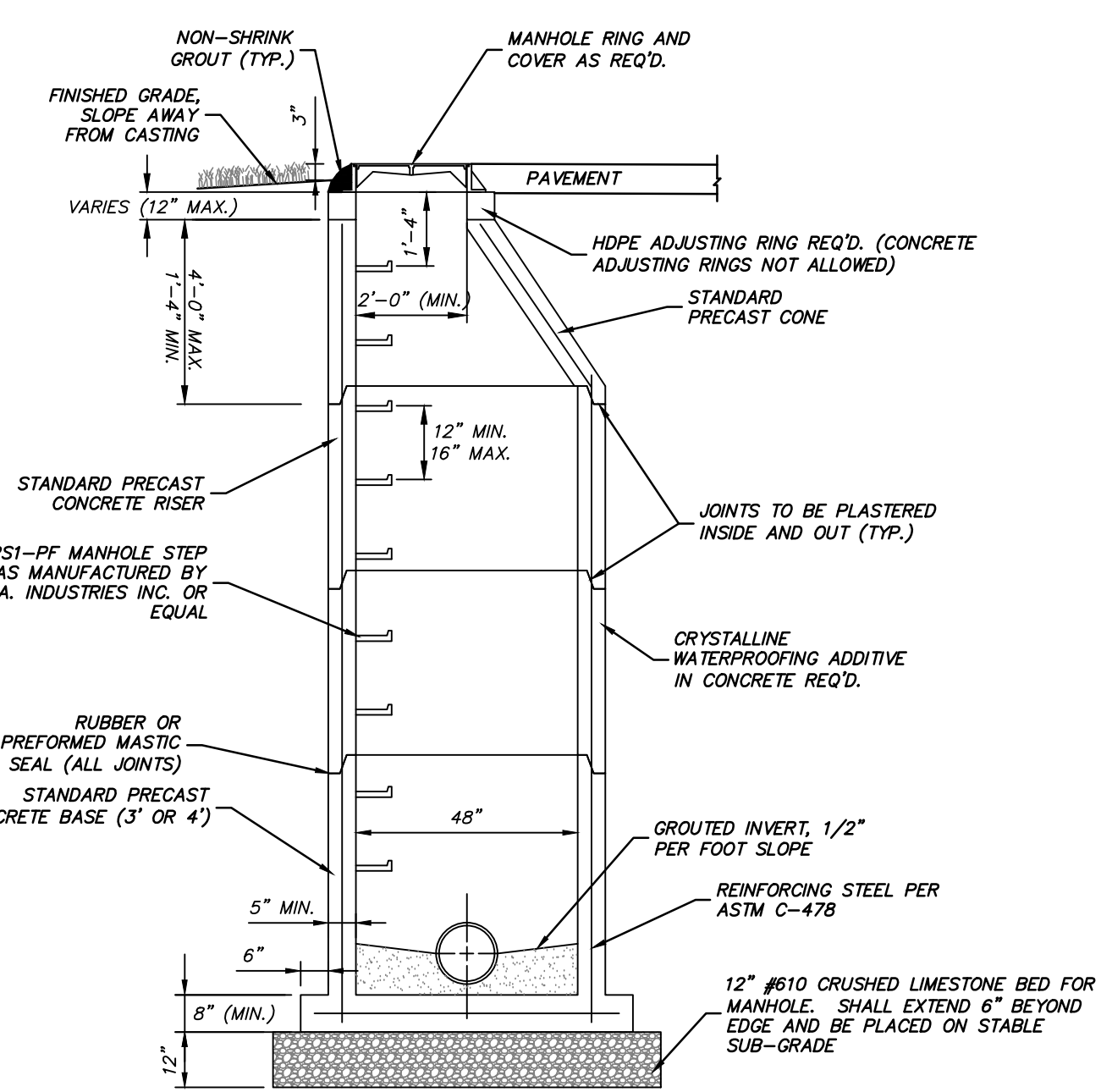
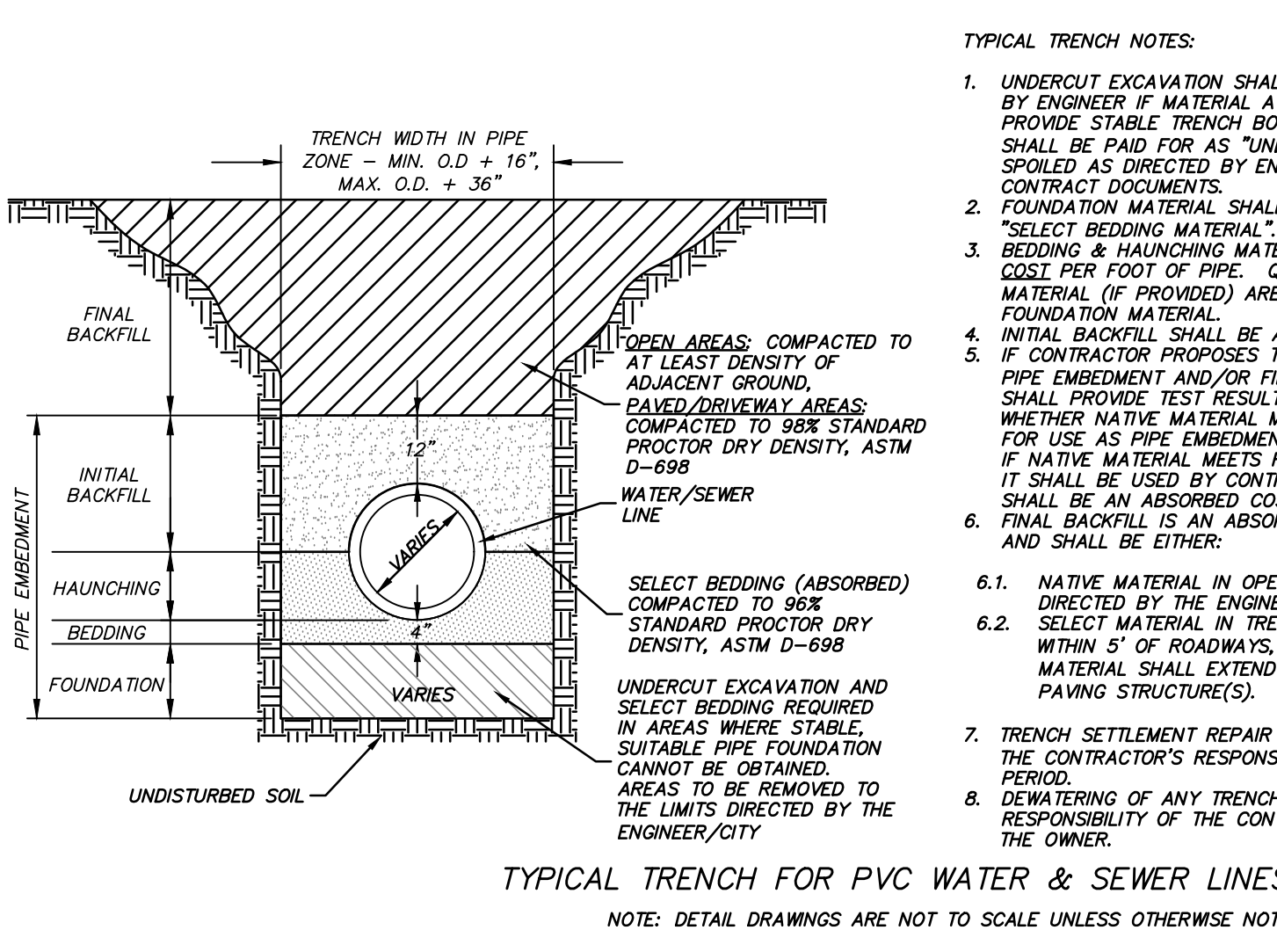
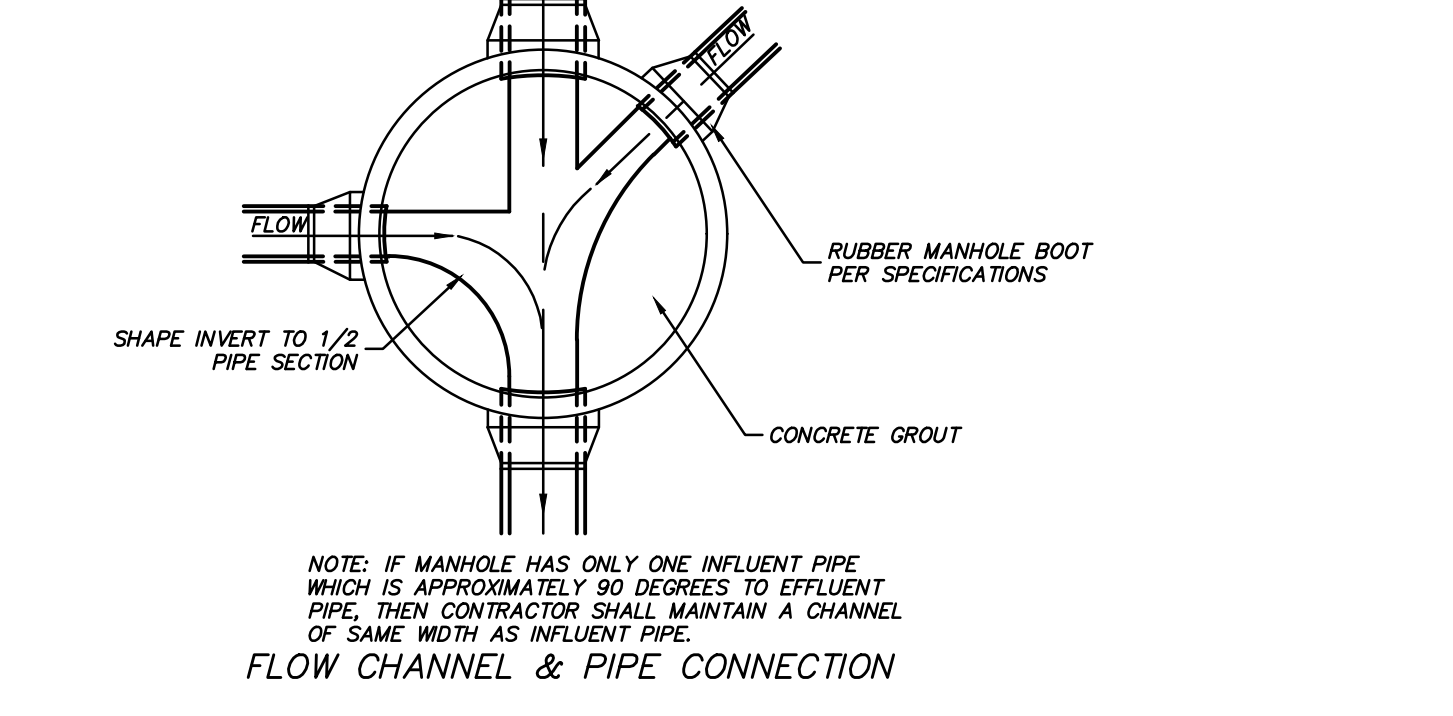
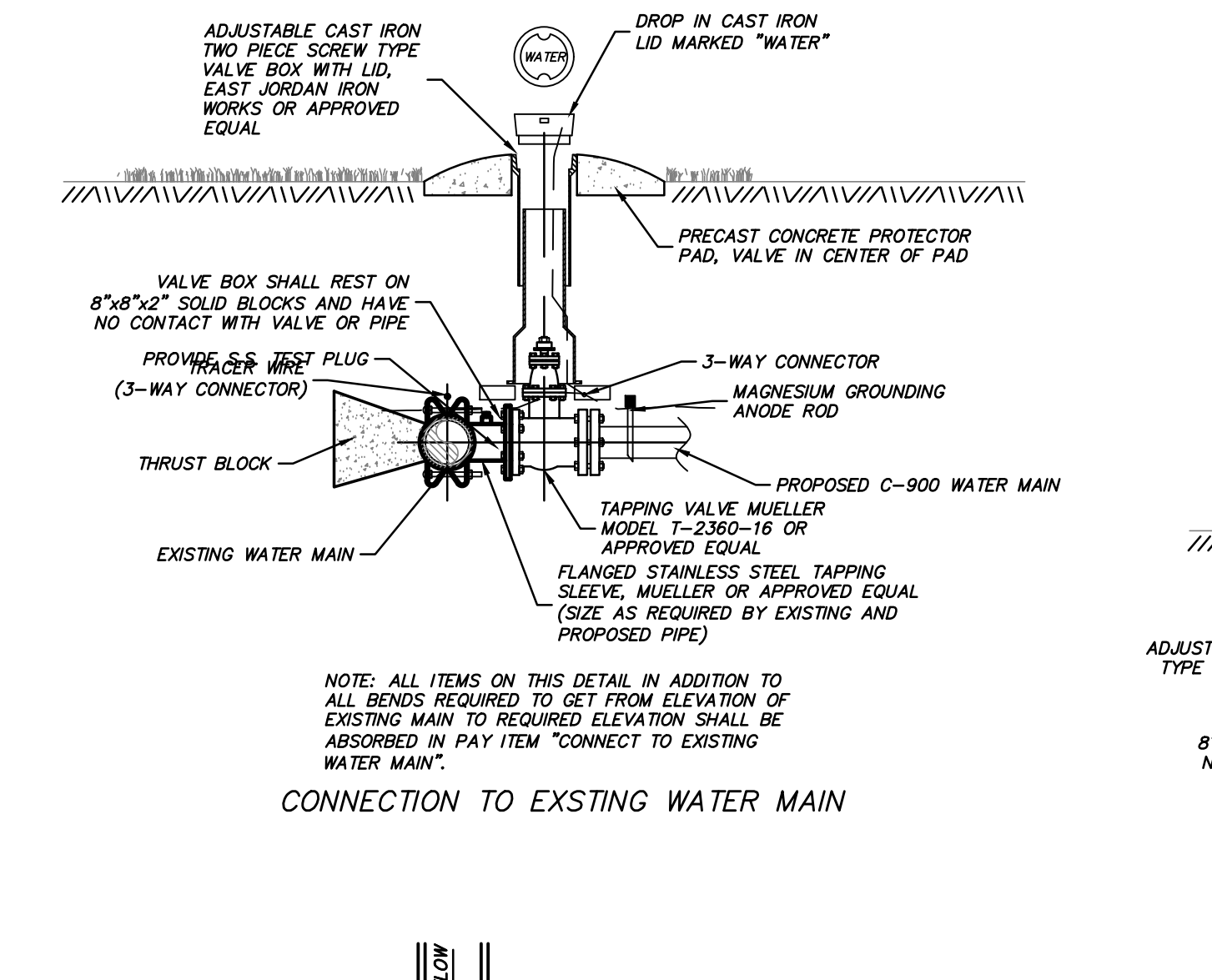
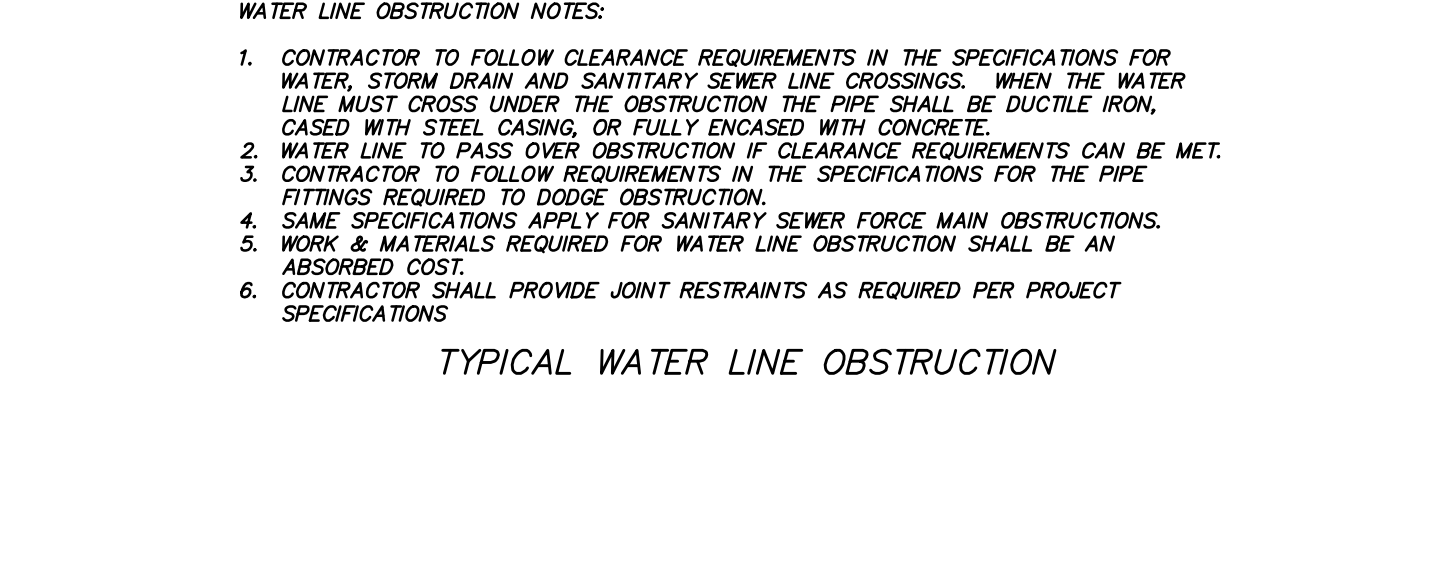
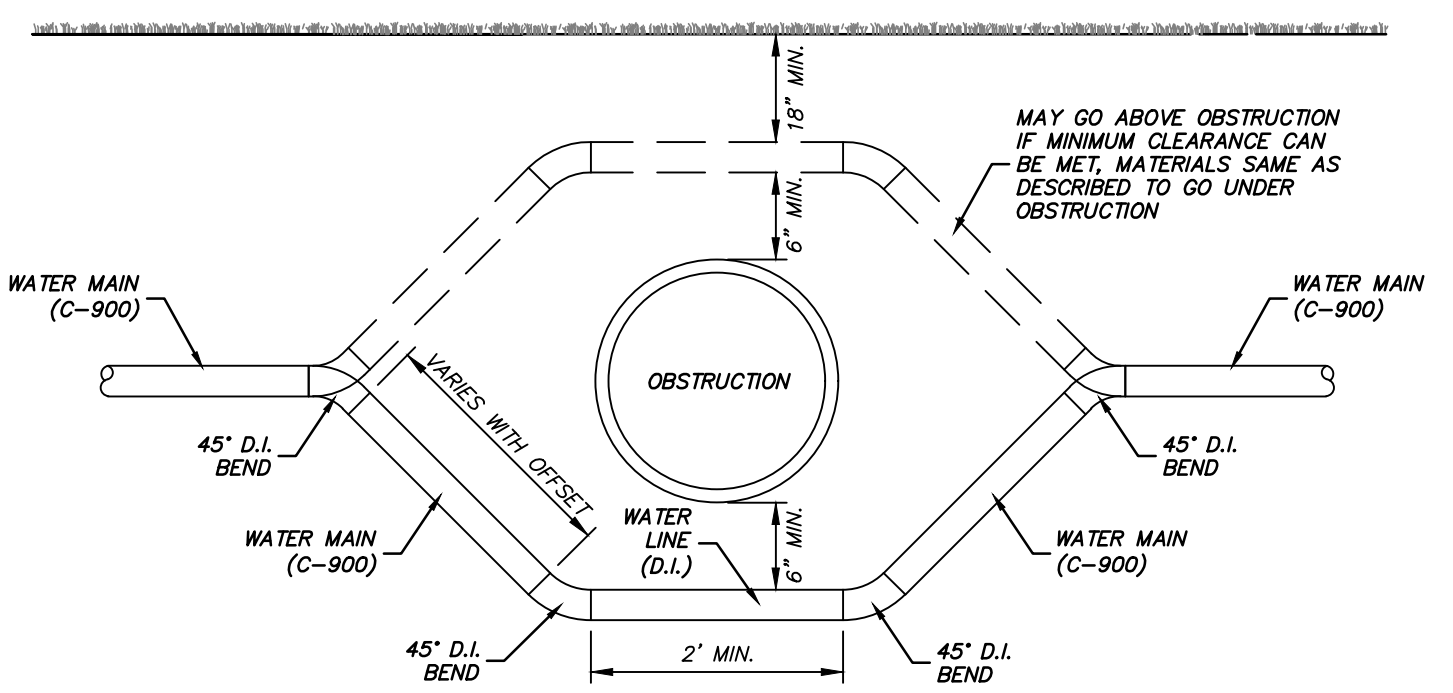
BEARING AREA IN SQ. FT.

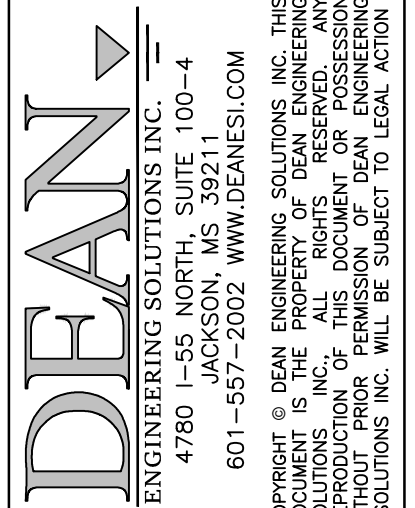
NORMAL PIPE DIAMETER (IN.)	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4" OR LESS	2	2	2	1
6	3	4	3	2
8	5	7	4	2
10	8	12	6	3
12	12	18	9	5
14	18	24	12	6
16	24	30	16	7

VERTICAL BENDS

4" OR LESS	6" OR LESS	8" OR LESS	10" OR LESS	12" OR LESS	14" OR LESS	16" OR LESS
-	14.0(20)	14.0(20)	14.0(20)	14.0(20)	14.0(20)	14.0(20)
6	27.0(40)	27.0(40)	27.0(40)	27.0(40)	27.0(40)	27.0(40)
8	46.0(67)	46.0(67)	46.0(67)	46.0(67)	46.0(67)	46.0(67)
10	68.0(100)	68.0(100)	68.0(100)	68.0(100)	68.0(100)	68.0(100)
12	93.0(135)	93.0(135)	93.0(135)	93.0(135)	93.0(135)	93.0(135)
14	120.0(175)	120.0(175)	120.0(175)	120.0(175)	120.0(175)	120.0(175)
16	150.0(225)	150.0(225)	150.0(225)	150.0(225)	150.0(225)	150.0(225)

VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)





08-03-2022

No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022

OWNER:
RIVER OAKS
INVESTMENT GROUP

DAVID THIND
GLUCKSTADT RD

PROJECT TITLE: GLUCKSTADT RETAIL CENTER

SHEET TITLE: UTILITY DETAILS

SITE DEVELOPMENT

JOB NO.: 220501

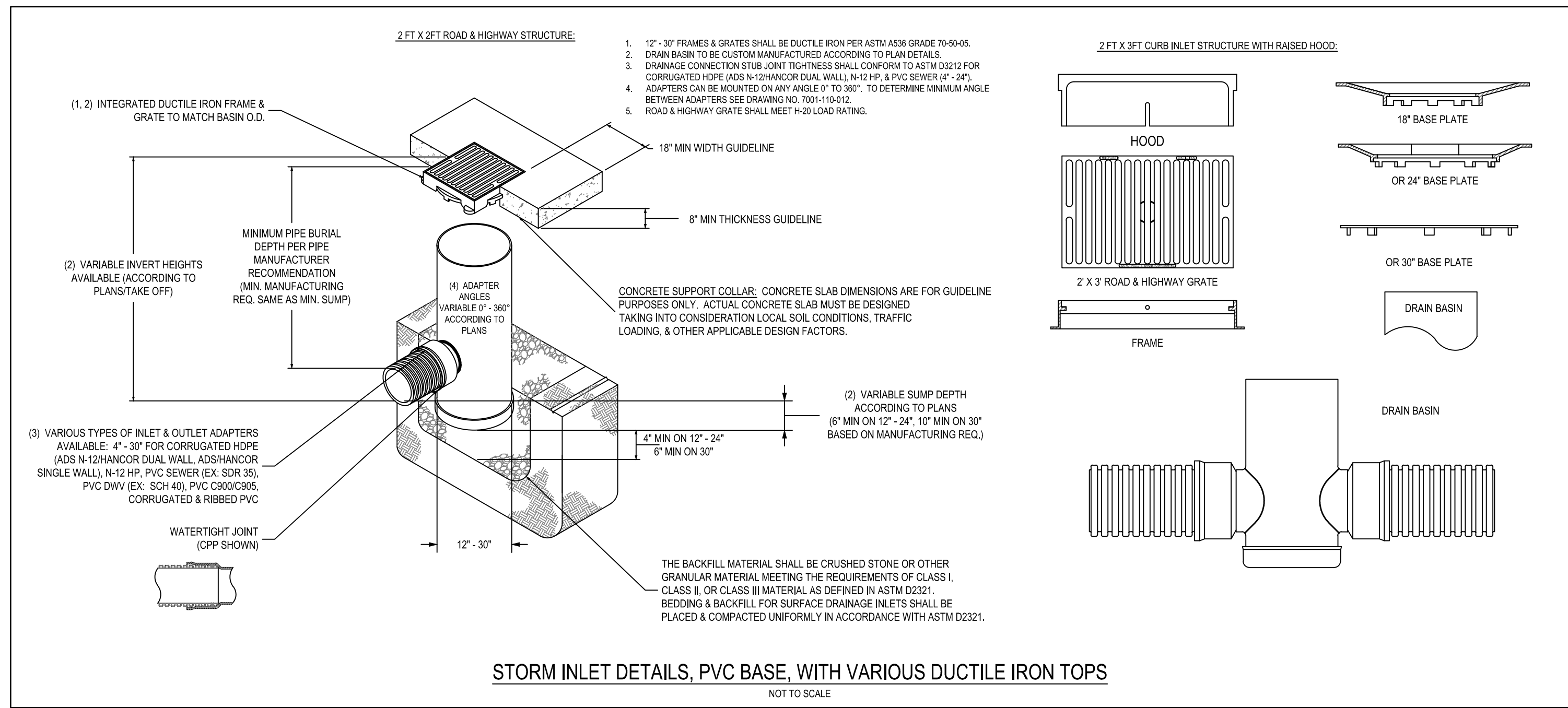
DATE: 1 AUG 2022

SCALE: AS SHOWN

DRAWN BY: WSD

REVIEWED BY: WSD

SHEET NUMBER:
9



SC-740 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH SC-740.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDIE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.5 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

- STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELLED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4" - 2" (20-50 mm).
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

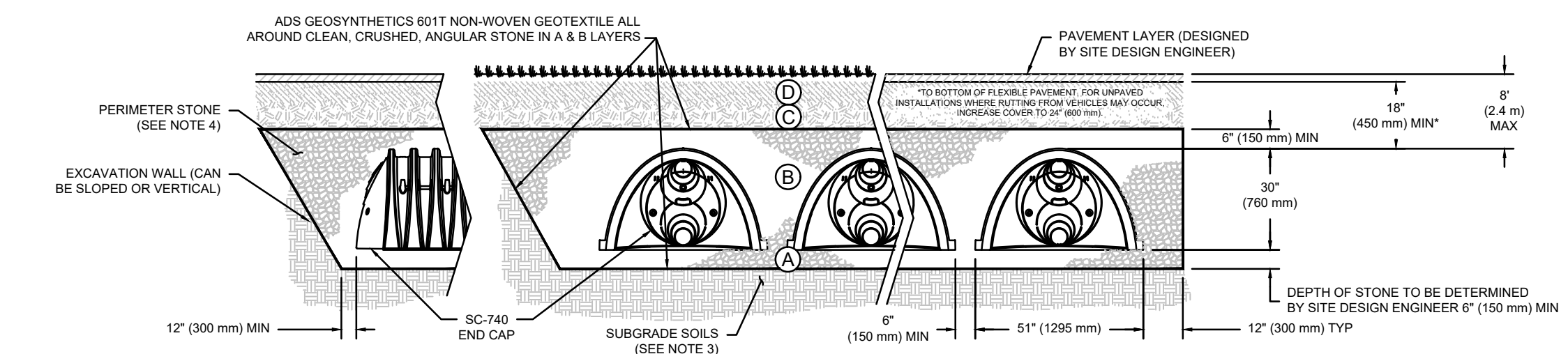
NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
 - FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.
- USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY STONES DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.
- CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <3% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL-GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{1,2}

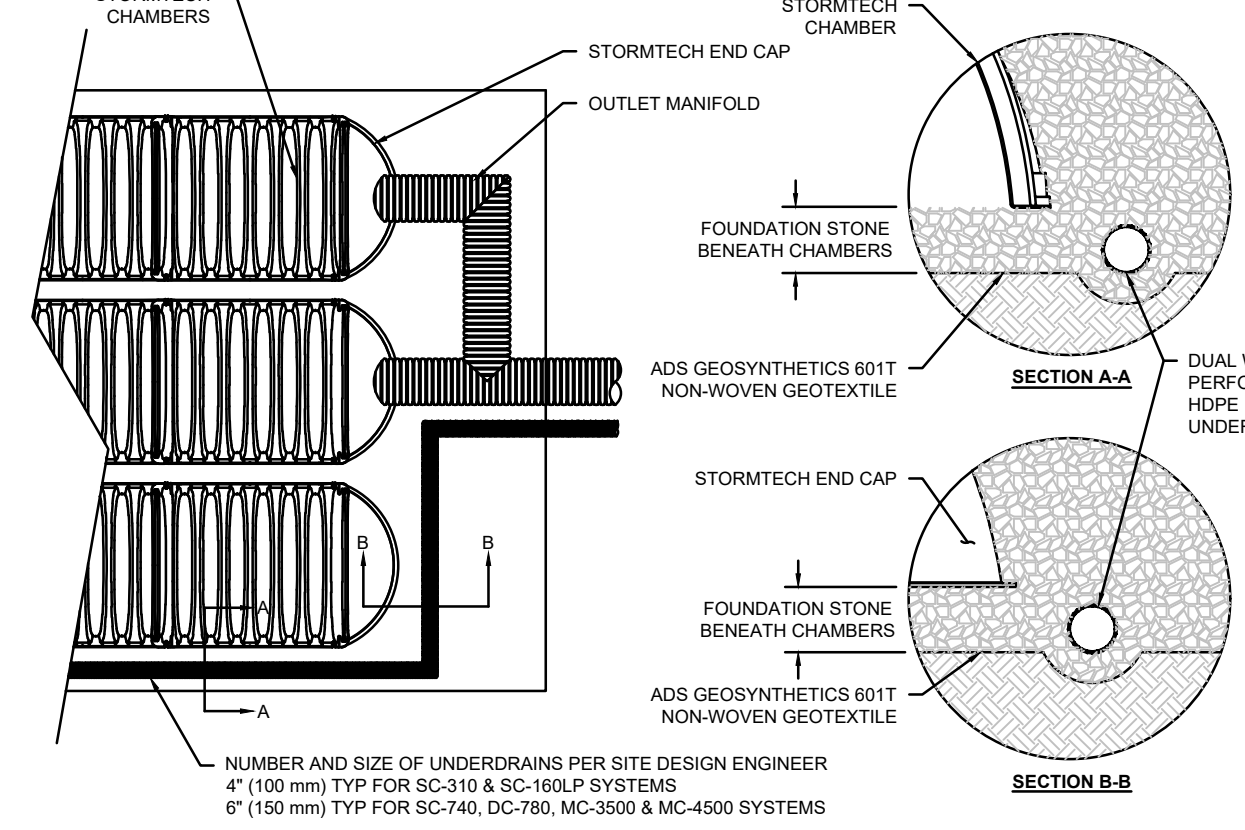
- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) MAX LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



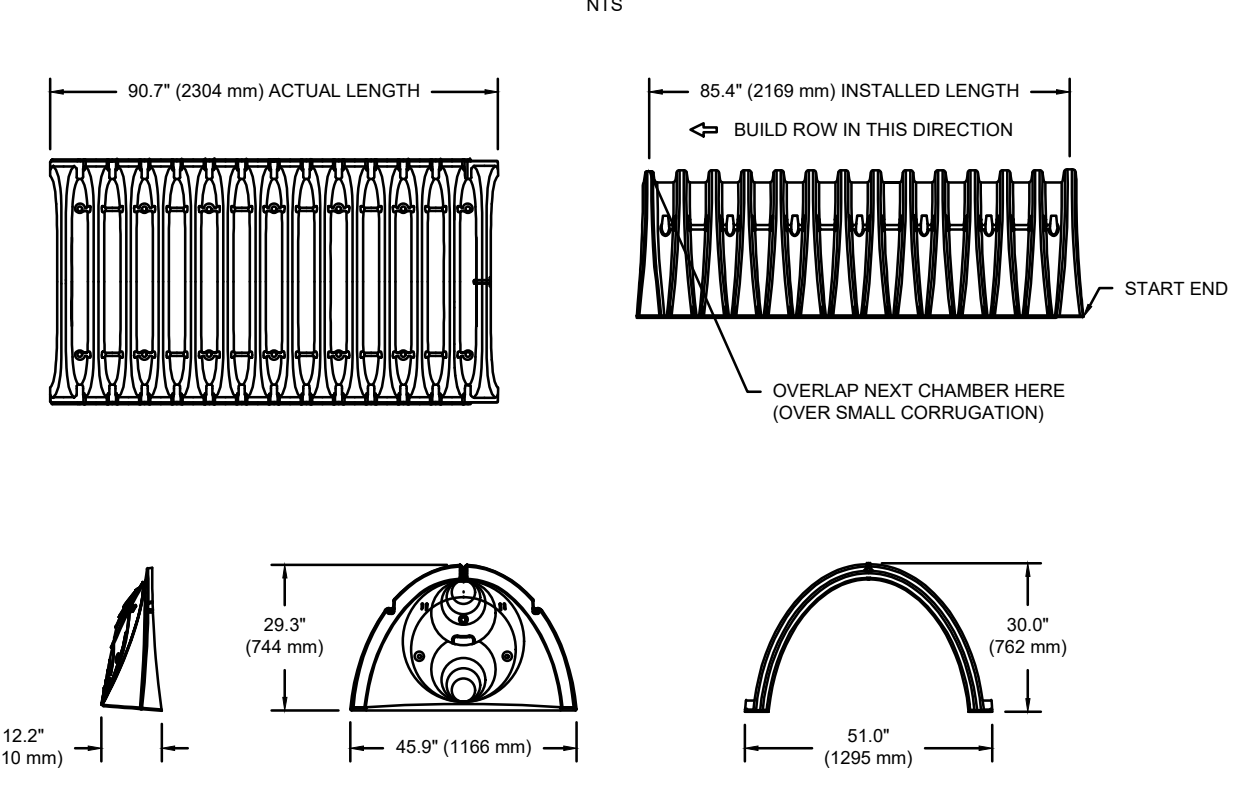
NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT². THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

UNDERDRAIN DETAIL



SC-740 TECHNICAL SPECIFICATION

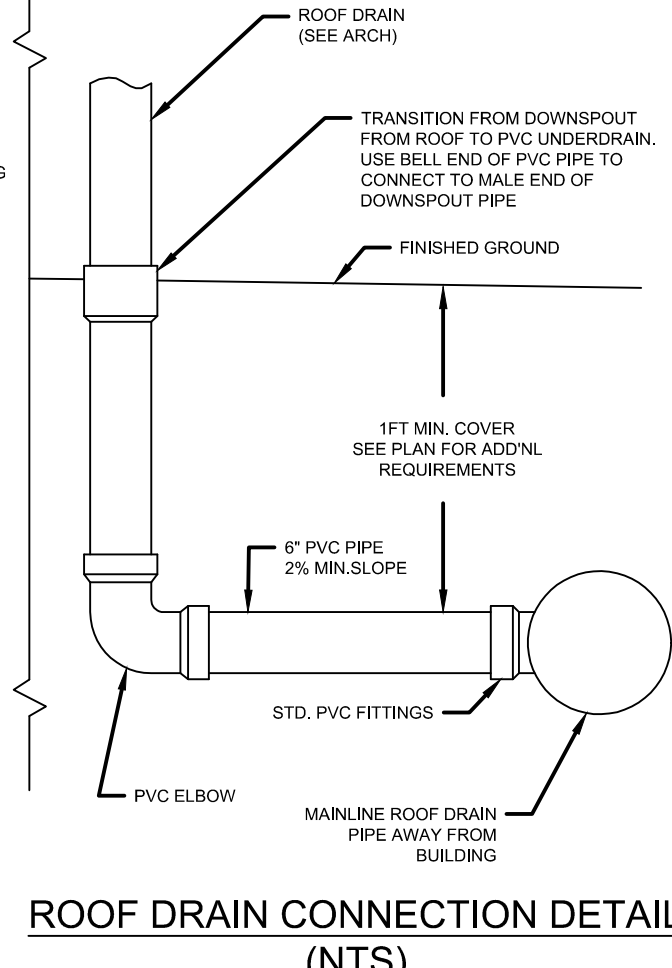
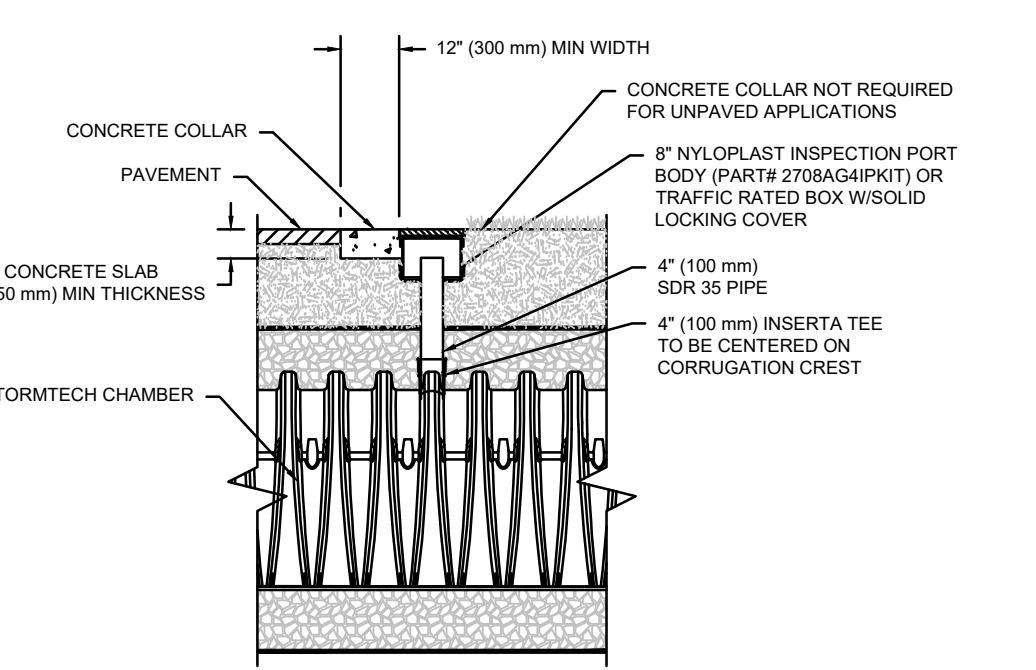


INSPECTION & MAINTENANCE

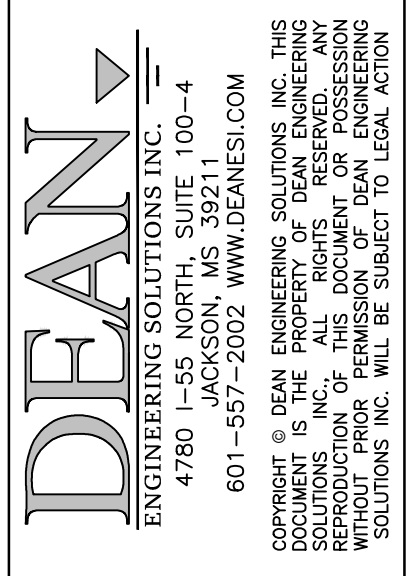
- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- INSPECTION PORTS (IF PRESENT)
 - REMOVE OPEN LD ON NYLOPLAST INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIUM ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
- REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES:

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



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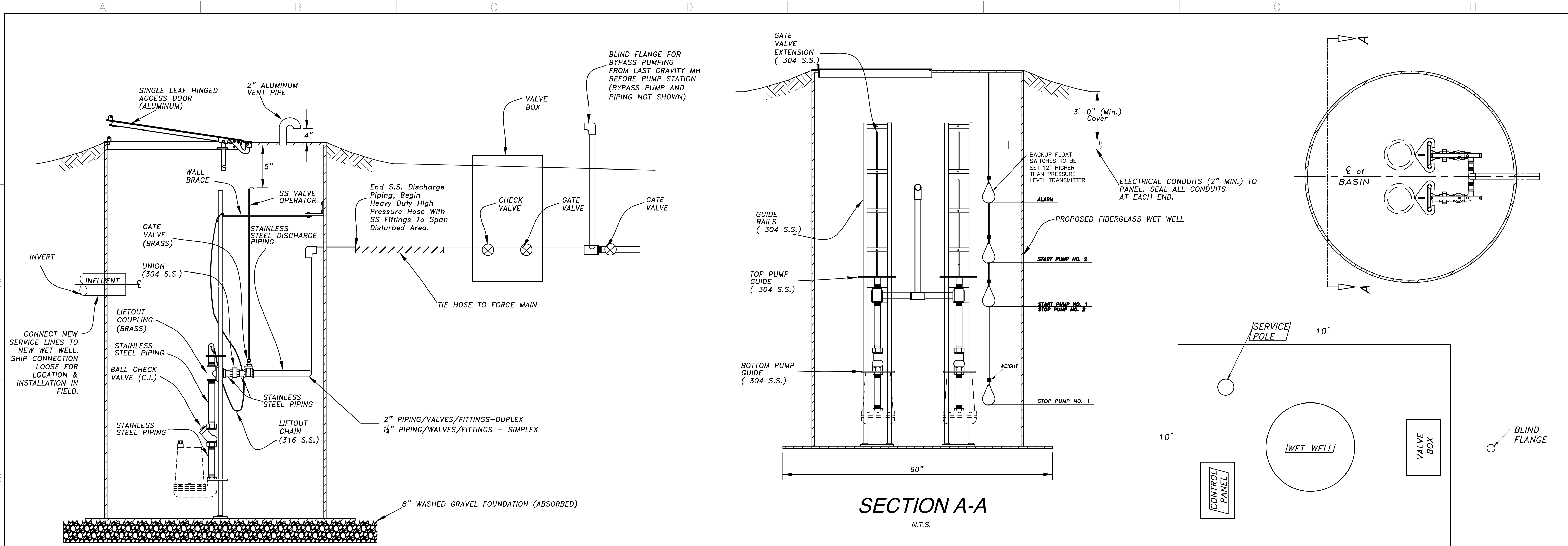
No.	Description	Date
1	PLANS SUBMITTED FOR CITY REVIEW	08-03-2022
2	EAST DRIVE ENTRANCE EDITS PER CITY COMMENTS	08-10-2022
3	BEAR CREEK UTILITY COORDINATION REVISIONS	08-16-2022

OWNER:
RIVER OAKS
INVESTMENT GROUP
DAVID THIND
GLUCKSTADT RD

PROJECT TITLE: **GLUCKSTADT RETAIL CENTER**
SHEET TITLE:
PUMP STATION DETAILS
SITE DEVELOPMENT

JOB NO.:	220501
DATE:	1 AUG 2022
SCALE:	AS SHOWN
DRAWN BY:	WSD
REVIEWED BY:	WSD

SHEET NUMBER:
10



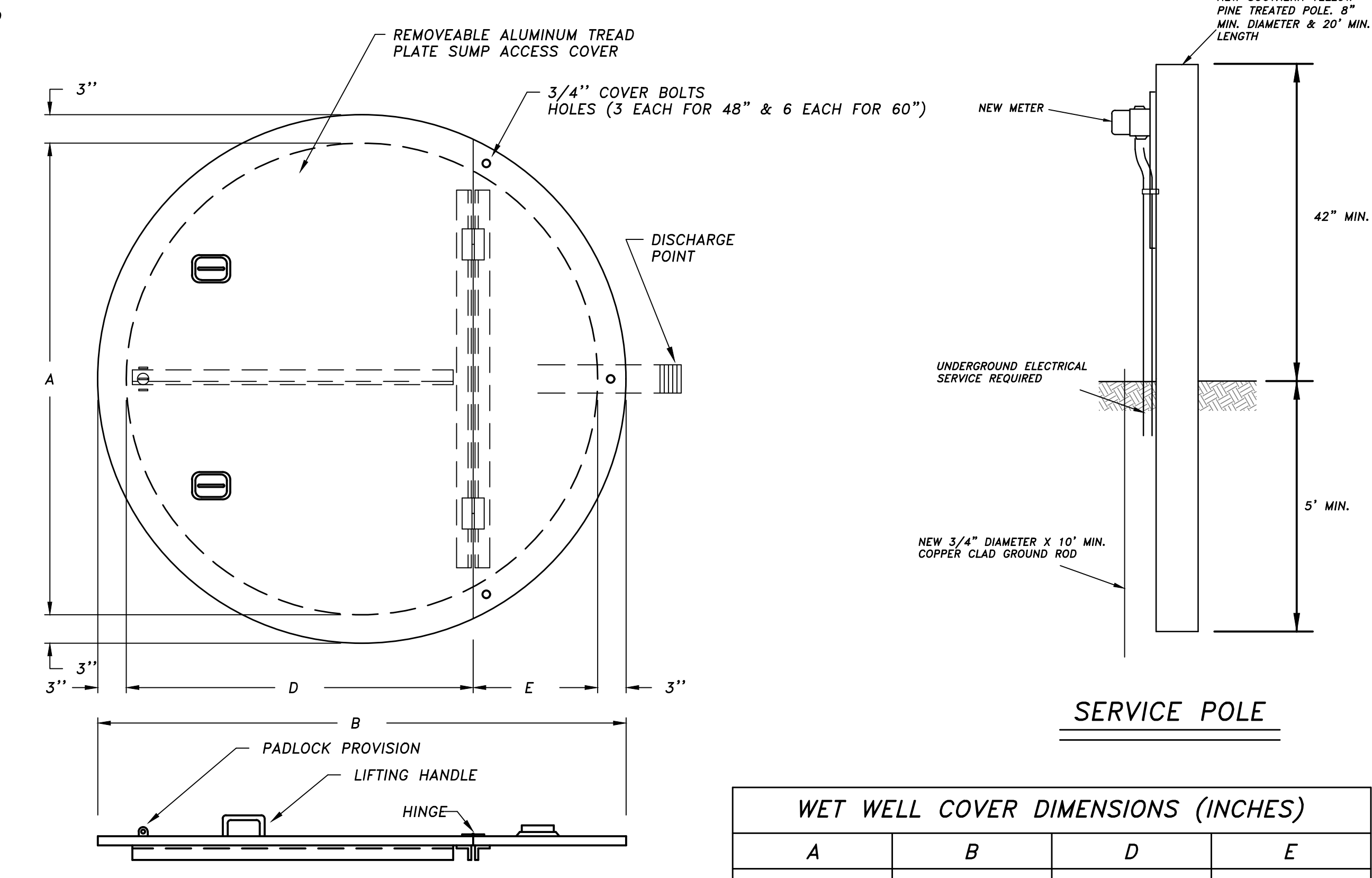
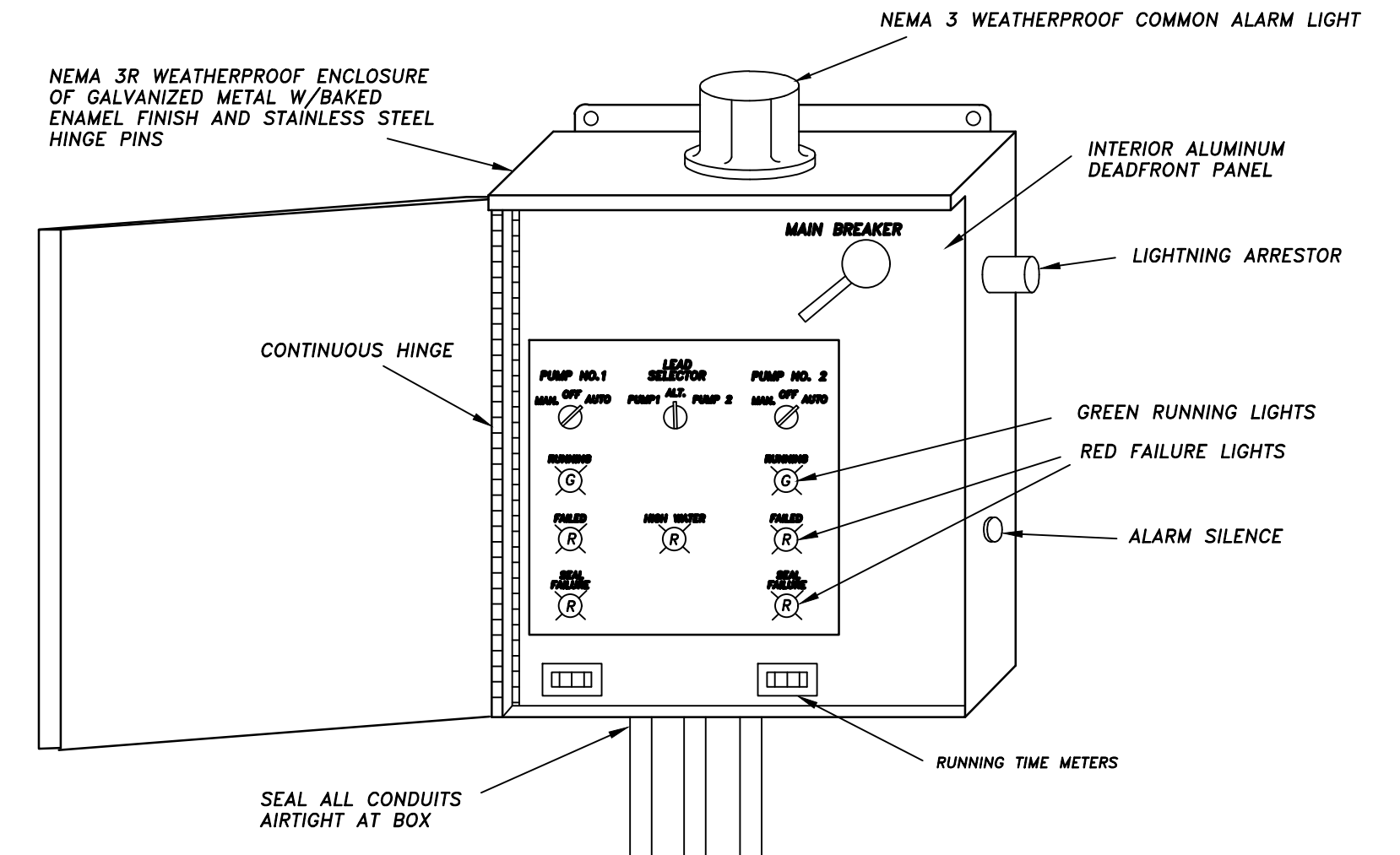
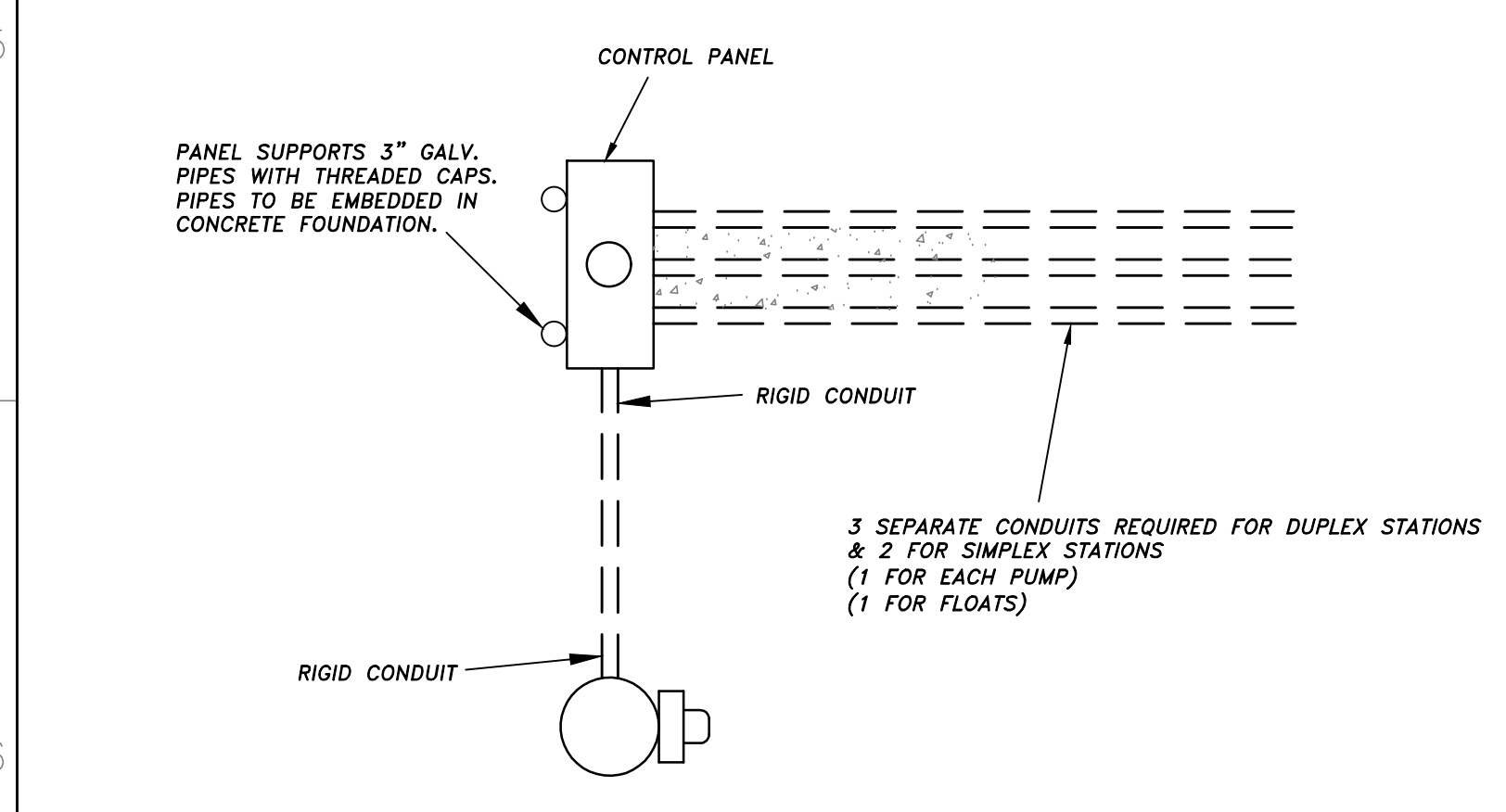
ELEVATION ~ PUMP STATION WET WELL
N.T.S.

- NOTES:
1. IMMEDIATELY FOLLOWING WETWELL INSTALLATION, CONTRACTOR SHALL COMPLETELY PLACE AND COMPACT BACKFILL, INSTALL TOP COVER, FILL WITH WATER, AND ANY OTHER PRECAUTIONS NECESSARY TO PROTECT WETWELL FROM UPLIFT FORCES.
 2. CONTROL PANEL, PIPING, ETC. SHALL BE FIELD LOCATED TO BEST FIT SITE AS DIRECTED BY ENGINEER AND OWNER.
 3. SITE TO BE DRESSED AND GRADED TO UNIFORM SLOPES TO DIVERT SURFACE DRAINAGE AWAY FROM WETWELL AND VALVE BOX.
 4. THE ELEVATIONS SHOWN IN THE DESIGN TABLE ARE THE MINIMUM DESIGN REQUIREMENTS. IF MANUFACTURER OF THE PROPOSED PUMP REQUIRE A GREATER DEPTH, THE WETWELL BOTTOM SHALL BE LOWERED AS NECESSARY AT NO ADDITIONAL COST TO THE OWNER.
 5. INLET & OUTLET PIPE CONNECTIONS TO BE SHIPPED LOOSE (FOR LOCATION & INSTALLATION IN FIELD).

PUMP STATION PLAN VIEW
N.T.S.

DUPLIX PUMP STATION DATA		
PARAMETERS	UNITS	PUMP 1&2
CAPACITY (PUMP)	G.P.M.	60
SIZE	HP	5HP (MIN.)
MOTOR VOLTAGE	VOLTS	230
MOTOR SPEED	R.P.M.	3450
PHASE POWER	N.A.	3
HEAD	FT.	50
FRICITION (C=140)	FT.	2.5
ELEVATION DIFFERENCE	FT.	53.5
TOTAL (T.D.H.)	FT.	92.5
FRICITION (C=100)	FT.	2.5
ELEVATION DIFFERENCE	FT.	96.5
TOTAL (T.D.H.)	FT.	48"
WET WELL I.D.	IN.	2"
FORCE MAIN I. D.	IN.	375" x 360" = 755"
DISCH. PIPE, VALVES & FITTINGS I.D.	IN.	2"
FORCE MAIN LENGTH	L.F.	290.00
ELEVATION TOP	FT.	283.50
ELEV. LOWEST GRAVITY INVERT	FT.	285.00
ELEVATION ALARM	FT.	284.00
ELEV. ON 2ND PUMP	FT.	283.00
ELEV. ON 1ST PUMP	FT.	281.00
ELEVATION OFF (1st & 2nd)	FT.	279.50
ELEVATION INVERT	FT.	285.00
ELEVATION FORCE MAIN DISCHARGE	FT.	NA
ELEV. CONTROLLING HIGH POINT	FT.	

- NOTES:
1. PUMPS SHALL BE PENTAIR HYDROMATIC - HPGH/HPGHX-500, SPEED RATED 3,500 RPM, MOTOR RATING 5.0 HP, 5.75 INCH IMPELLER



WET WELL COVER DIMENSIONS (INCHES)			
A	B	D	E
48	54	38	10

CONTROL PANEL PLAN VIEW

TYPICAL CONTROL PANEL

BASIN COVER

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City of Gluckstadt

Application for Conditional Use

Subject Property Address: TBD by E911. Adjacent Address is 150 Autobahn Loop, Madison, MS 39110
Parcel #: 39110082E-21 -016/19.00

Owner: MH Canton CDJR Realty LTD
Address: 11757 Katy Freeway #1300
Houston, Tx 77079

Applicant: Peoples Construction
Address: 3913 Underwood Drive
Flowood, MS 39232

Phone #: _____
E-Mail: _____

Phone #: 601-932-1111
E-Mail: alex@peoplesconstruction.com

Current Zoning District: C-2

Acreage of Property (If applicable): 4.11 acres

Use sought of Property: _____

Indoor vehicle service / Enclosed warehouse

Garage w/ outside storage
2024038

209

Requirements of Applicant:

1. Letter demonstrating how the proposed use will comply with or otherwise satisfy the requirements for granting a Conditional Use pursuant to Section 804.01 of the Zoning Ordinance.
2. Copy of written legal description.
3. Additional items may be requested depending on the nature and status of the proposed development or property.
4. \$ 250.00 fee required for processing
5. Site Plan as required in Section 807-810

Requirements for Granting Conditional Use: (Section 805.01, Zoning Ordinance)

A Conditional Use shall not be granted unless satisfactory provisions and arrangements have been made concerning all the following:

- (a). Ingress and egress to property and proposed structures
- (b). Off-Street parking and loading areas
- (c). Refuse and service areas
- (d). Utilities, with reference locations, availability, and compatibility.
- (e). Screening and buffering with reference to type, dimensions, and character.
- (f). Required yards and other open spaces.
- (g). General compatibility with adjacent properties and other properties in the district.
- (h). Any other provisions deemed applicable by the Mayor and Board of Aldermen.

Applicant shall be present at the Planning and Zoning Commission meeting and Mayor and Board of Alderman meeting. Documents shall be submitted thirty (30) days prior to the Planning and Zoning Commission meeting.

Applicant is responsible for complying with all applicable requirements of the Zoning Ordinance.

By signing this application, it is understood and agreed that permission is given to the Zoning Administrator to have a sign erected on subject property, giving notice to the public that said property is being considered for a dimensional variance.

Marlene S

3/1/2024

Applicant Signature

Date

Property Owner Signature

Date



PEOPLES CONSTRUCTION CORPORATION

Building Relationships in Central Mississippi since 1966

Date: March 4, 2024

To: William Hall
City of Gluckstadt

RE: Mac Haik New Service Building Conditional Use Request

Pursuant to the City of Gluckstadt zoning ordinance section 805.01, Mac Haik Chrysler Dodge Jeep Ram is requesting a conditional use permit for the proposed new service building to be constructed adjacent to the current dealership operations. The parcel is currently zoned C-2. The proposed use will include both indoor vehicle service and indoor parts warehouse to support the dealership operations.

Per section XXIII Highway Commercial District (C-2) of the zoning ordinance, indoor vehicle service is a permitted use, therefor we are requested a conditional use for the indoor parts warehouse and outside vehicle storage. The proposed use and nature will be similar to the current dealerships use.

The proposed new building will support the future operations and growth of the Mac Haik and continue to further support the Gluckstadt community.

Sincerely,

Alex Reeves

Prepared by & Return to:

Matthew T. Hagan
1980 Post Oak Blvd, Ste 1380
Houston, TX 77056
Ph: 713-850-9000

1200
#613
FEDEX

TITLE OF INSTRUMENT:

Warranty Deed

GRANTEE:

MAC HAIK
11757 Katy Freeway #1500
Houston, Texas 77079
Phone: 281-496-7788

GRANTOR:

MH RAW LAND LLC
11757 Katy Freeway #1500
Houston, Texas 77079
Phone: 281-496-7788

INDEXING INSTRUCTIONS:

The North 1/2 of Section 21,
Township 8 North-Range 2 East,
Madison County, Mississippi

WARRANTY DEED

FOR AND IN CONSIDERATION of the sum of Ten Dollars (\$10.00), cash in hand paid, and other good, legal and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned, **MAC HAIK**, GRANTOR, does hereby Grant, Bargain, Sell, Convey, and Warrant unto **MH RAW LAND LLC**, a Texas limited liability company, GRANTEE, that certain land and property situated and being in **MADISON** County, Mississippi, to-wit: (the "Property")

SEE EXHIBIT "A"

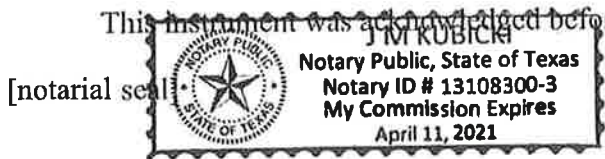
WITNESS MY SIGNATURE on this the 25th day of April, 2018.

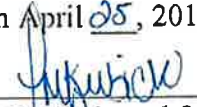


MAC HAIK

STATE OF TEXAS)
) ss.
COUNTY OF HARRIS)

This instrument was acknowledged before me on April 25, 2018 by MAC HAIK.





Notary Public in and for said County and State

My commission expires:
April 11, 2021

Print Name of Notary:
Jim Kubicki

EXHIBIT A – LEGAL DESCRIPTION**TRACT 1:**

A certain tract of land containing 4.06 acres, more or less, situated in the Northeast Quarter of the Northwest Quarter, the Northwest Quarter of the Northeast Quarter, the Southeast Quarter of the Northwest Quarter and the Southwest Quarter of the Northeast Quarter of Section 21, Township 8 North, Range 2 East, Madison County, Mississippi, and being more particularly described as follows:

Commencing at a P.K. nail set in pavement, marking the Northwest corner of Section 21, Township 8 North, Range 2 East, Madison County, Mississippi; run thence South 68°14'25" East for 2811.55 feet to a point on the East line of Autobahn Loop, said point hereinafter referred to as the Point of Beginning:

Thence South 87°03'09" East for 538.63 feet to a point on the West line of Interstate No. 55; thence Southerly along the arc of a 01°01'09" curve to the right, said curve having a radius of 5622.43 feet and a chord of South 08°35'25" West for 363.73 feet, for an arc distance of 363.80 feet; thence North 79°19'52" West for 541.11 feet to a point on the East line of Autobahn Loop; thence Northerly along the arc of a 01°13'42" curve to the left, said curve having a radius of 4665.01 feet and a chord of North 09°52'47" East for 79.91 feet; thence North 09°23'20" East along the East line of Autobahn Loop for 211.28 feet to the Point of Beginning.

TRACT 2:

A certain tract of land containing 1.01 acres, more or less, situated in the Northwest Quarter of the Northeast Quarter and the Northeast Quarter of the Northwest Quarter of Section 21, Township 8 North, Range 2 East, Madison County, Mississippi, and being that same tract of land as conveyed to Mac Haik by Warranty Deed and recorded in the Office of the Chancery Clerk of Madison County, Mississippi, in Deed Book 3366, at Page 570, and being more particularly described as follows:

Commencing at a P.K. nail set in pavement, marking the Northwest corner of Section 21, Township 8 North, Range 2 East, Madison County, Mississippi; run thence South 70°22'41" East for 2779.13 feet to a ½" rebar set on the East line of Autobahn Loop, said point hereinafter referred to as the Point of Beginning:

Thence South 81°15'40" East for 543.83 feet to a ½" rebar set on the West line of Interstate No. 55; thence Southerly along the arc of a 01°01'09" curve to the right, said curve having a radius of 5622.43 feet and a chord of South 06°27'33" West for 54.43 feet, for an arc distance of 54.43 feet; thence leaving the West line of Interstate No. 55, run North 87°03'09" West for 538.63 feet to a point on the East line of Autobahn Loop; thence North 09°23'20" East along the East line of Autobahn Loop for 4.17 feet to a ½" rebar; thence Northerly along the arc of a 13°24'53" curve to

the left, said curve having a radius of 427.11 feet and a chord of North 04°47'11" East for 68.55 feet, for an arc distance of 68.62 feet to a ½" rebar; thence North 00°11'01" East along the East line of Autobahn Loop for 36.59 feet to the Point of Beginning.



INTERIM AD DRAFT

This is the proof of your ad scheduled to run in **Madison County Journal** on the dates indicated below. If changes are needed, please contact us prior to deadline at **(601) 853-4222**.

Notice ID: K2QEQLCKgD84ggSCWka3 | **Proof Updated: Mar. 26, 2024 at 01:31pm CDT**
Notice Name: Conditional Use for Mac Haik Service Building

This is not an invoice. Below is an estimated price, and it is subject to change. You will receive an invoice with the final price upon invoice creation by the publisher.

FILER	FILING FOR
Bridgette Smith	Madison County Journal
bridgette.smith@gluckstadt.net	
(769) 567-2306	

Columns Wide:	1	Ad Class: Legals
Total Column Inches:	2.06	
Number of Lines:	18	

03/28/2024: Other	14.64
Proof of Publication Fee	3.00

Subtotal	\$17.64
Tax	\$0.00
Processing Fee	\$6.76
Total	\$24.40

NOTICE IS HEREBY GIVEN TO THOSE PARTIES IN INTEREST that there will be a Public Hearing on Tuesday, April 23, 2024 at 6:00 PM before the Gluckstadt Planning and Zoning Commission at the Gluckstadt City Hall, 343 Distribution Drive, Gluckstadt, MS 39110 for the purpose of Conditional Use for Enclosed Warehouse and Garage with Outside Storage for the following parcel: 082E-21-016/19.00

The Public Hearing in relation thereto shall provide parties in interest and citizens an opportunity to be heard. A copy of the Conditional Use application shall be available at City Hall for inspection by the public.

MAC HAIK

NEW SERVICE BUILDING

PROPOSED COMMERCIAL SITE DEVELOPMENT

AUTOBAHN LOOP

GLUCKSTADT, MS 39110

DEAN
ENGINEERING SOLUTIONS, INC.
4780 I-55 NORTH, SUITE 100-4
JACKSON, MS 39211
601-557-2002 WWW.DEANESI.COM

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No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

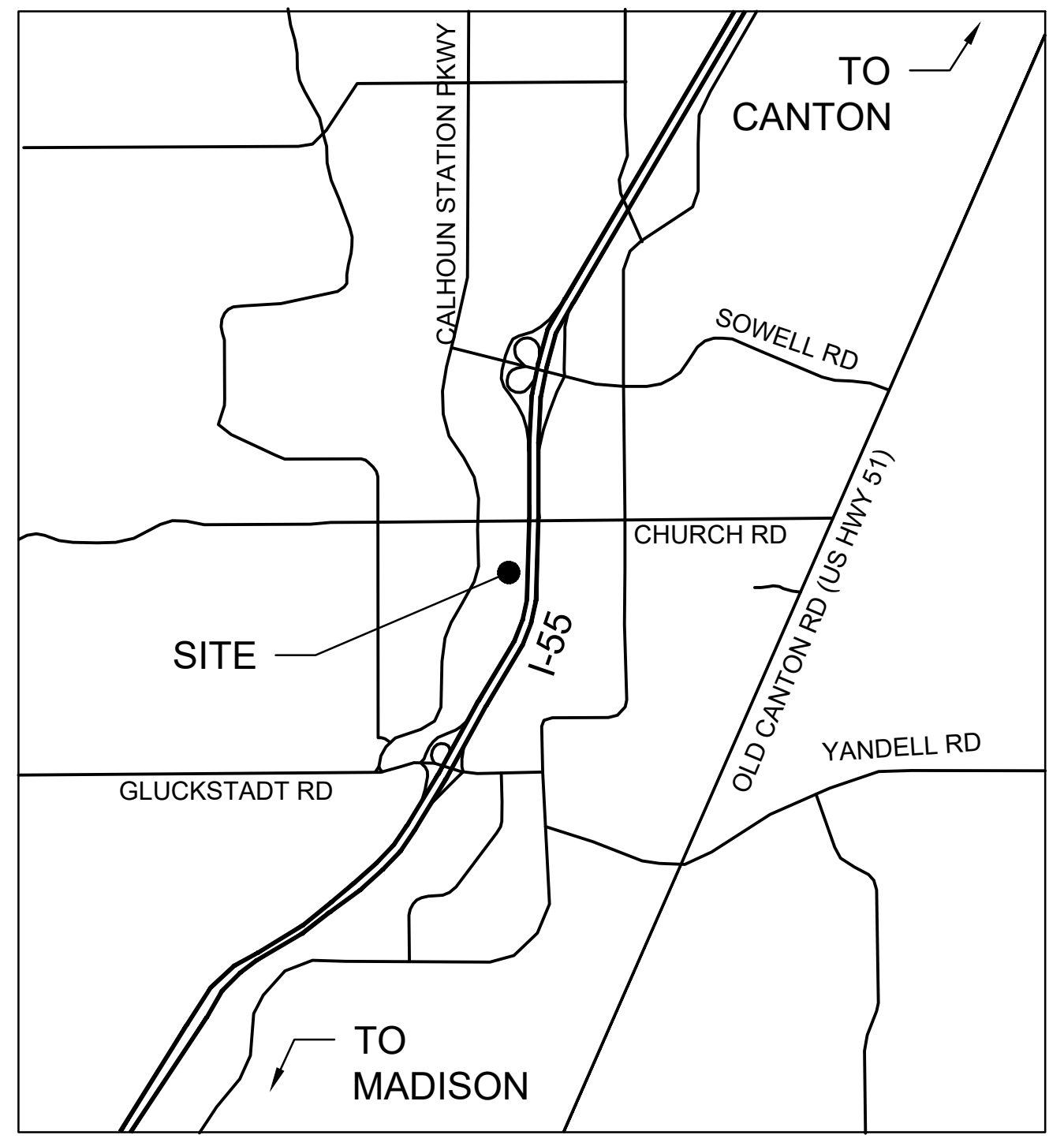
DRAWING ISSUED

OWNER:
MAC HAIK
AUTOBAHN LOOP
GLUCKSTADT, MS 39110

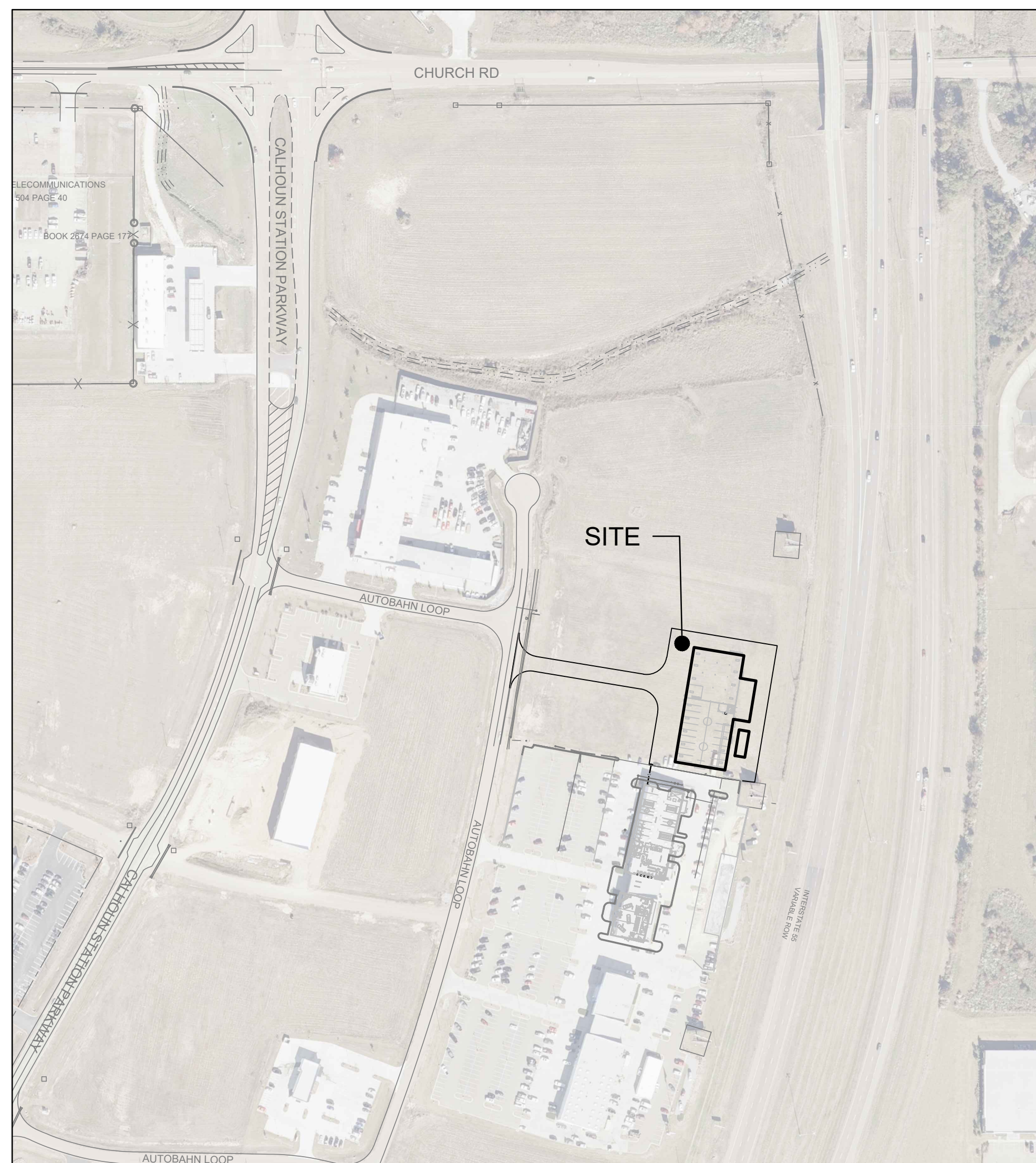
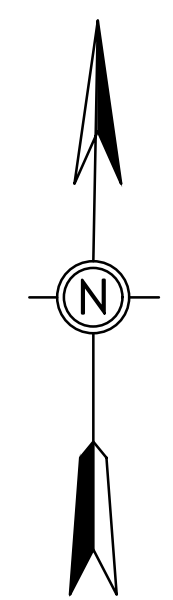
PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE: **COVER**
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
1



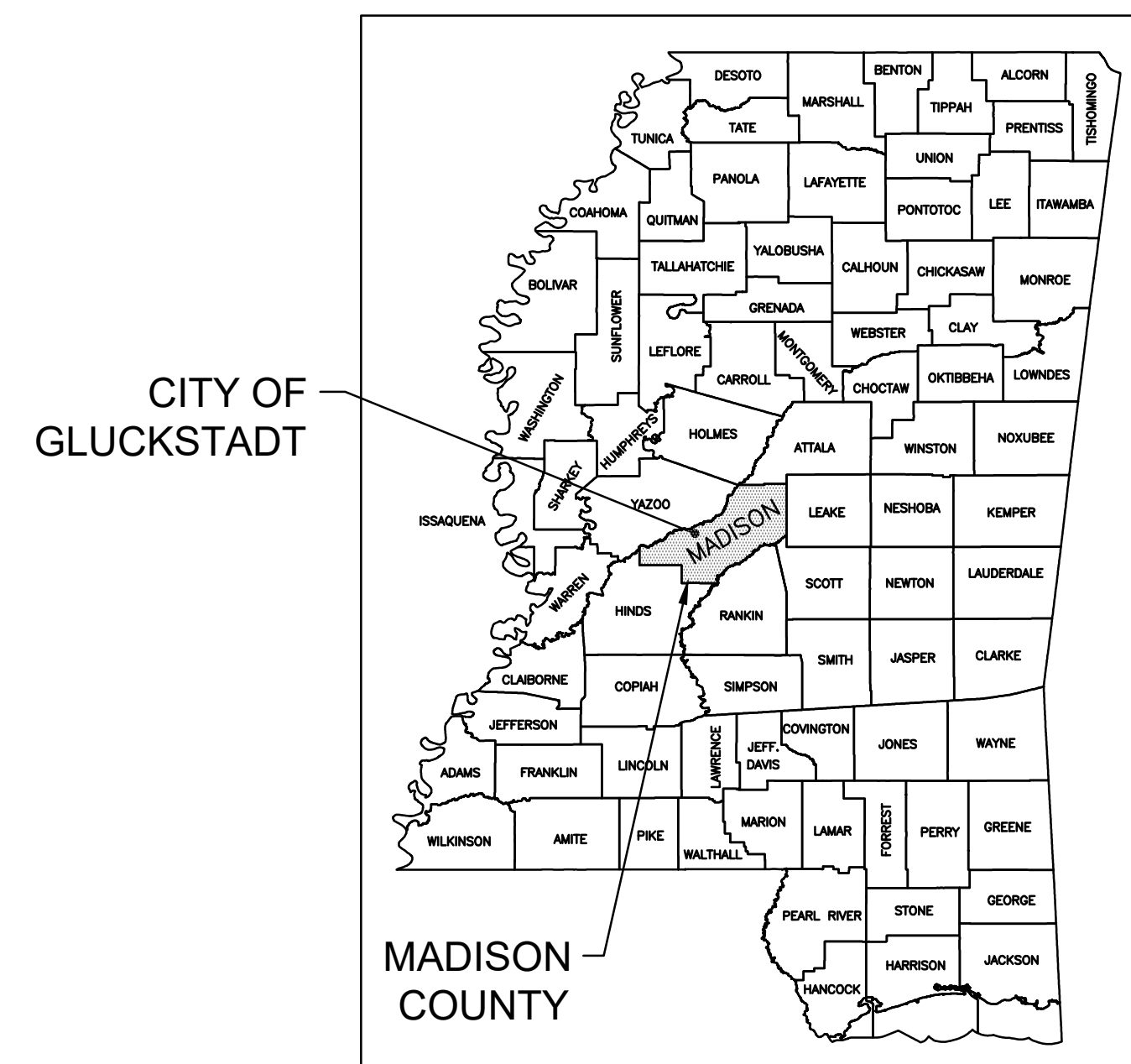
CITY LOCATION



STREET LOCATION

TABLE OF CONTENTS

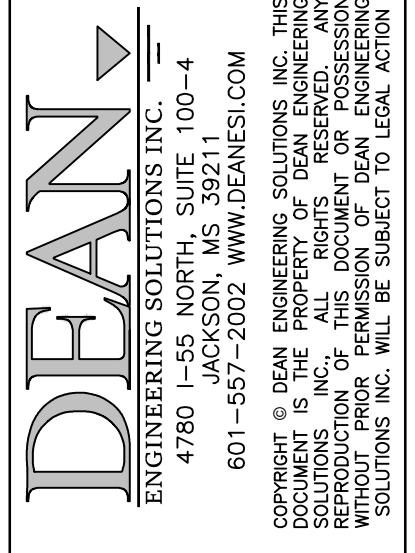
- COVER
- EXISTING CONDITIONS & DEMO PLAN
- SITE PLAN
- UTILITY PLAN
- GRADING PLAN
- EROSION CONTROL PLAN (SWPPP)
- DETAILS



STATE LOCATION



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No.	Description	Date
		02-27-2024
DRAWING ISSUED		
PLANS SUBMITTED FOR REVIEW		

OWNER:
MAC HAIK
AUTBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE:
EXISTING CONDITIONS & DEMO PLAN
SITE DEVELOPMENT

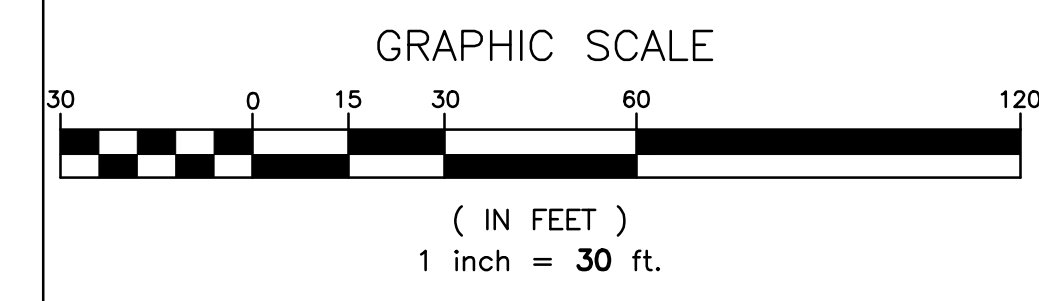
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DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
2



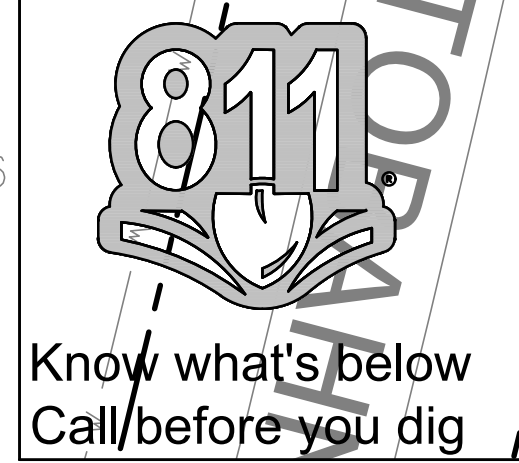
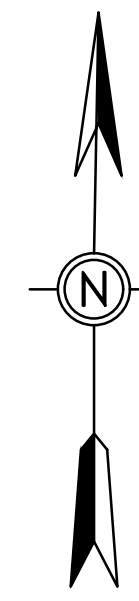
DRAWING SYMBOL LEGEND

EXISTING	DESCRIPTION
— E —	OVERHEAD POWER LINE
— SS —	SANITARY SEWER LINE
— W —	WATER LINE
— X — X —	FENCE LINE
— STM —	STORM LINE
---	PROPERTY LINE
— 400 —	MAJOR CONTOUR LINE
— 401 —	MINOR CONTOUR LINE
⊙	SANITARY SEWER MANHOLE



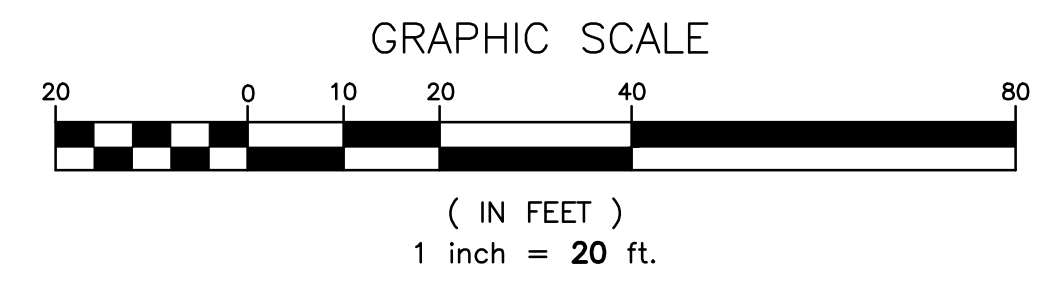
SURVEY NOTES:

1. LOCATION OF UNDERGROUND UTILITIES & STRUCTURES OF ANY TYPE MAY NOT BE COMPLETE OR EXACT. FOR MORE POSITIVE LOCATIONS CONTACT MISSISSIPPI ONE CALL SYSTEM INC. (TELEPHONE NO. 811) OR OTHER LOCAL AUTHORITIES TO LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER PRIOR TO CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED.



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SITE PLAN NOTES

1. CONCRETE JOINTS: JOINTS SHALL BE SPACED ON 10FT x 10FT SQUARE GRID PATTERN TYPICAL. JOINTS SHOULD FORM PANELS THAT ARE APPROXIMATELY SQUARE WITH THE LONGEST PANEL DIMENSION NO MORE THAN 1.25 TIMES THE SHORTEST PANEL DIMENSION. JOINTS SHOULD INTERSECT RADIUSES & OTHER STRUCTURES AT A NEAR PERPENDICULAR ANGLE, OR HAVE A ±18° SEGMENT THAT HITS PERPENDICULARLY. CONCRETE JOINT SPACING, REINFORCEMENT AND LAYOUT SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE'S "GUIDE FOR THE DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS" - ACI 330. SEE DETAILS FOR ADDITIONAL PAVING AND JOINT REQUIREMENTS. CONTRACTOR SHALL SUBMIT A SHOP DRAWING FOR REVIEW SHOWING PROPOSED SAW-JOINT PATTERNS, DIMENSIONS, LOCATIONS OF CONSTRUCTION JOINTS, ISOLATION JOINTS AND EXPANSION JOINTS, AND CONCRETE MIX DESIGN PROPERTIES.



No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

DRAWING ISSUED

OWNER:
MAC HAIK
 AUTBAHN LOOP
 GLUCKSTADT, MS 39110

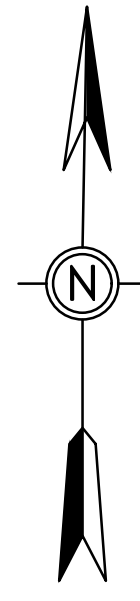
PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
 SHEET TITLE:
SITE PLAN
 SITE DEVELOPMENT

JOB NO.: 240201
 DATE: 05 FEB 2024
 SCALE: AS SHOWN
 DRAWN BY: WSD
 REVIEWED BY: WSD

SHEET NUMBER:
3



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No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

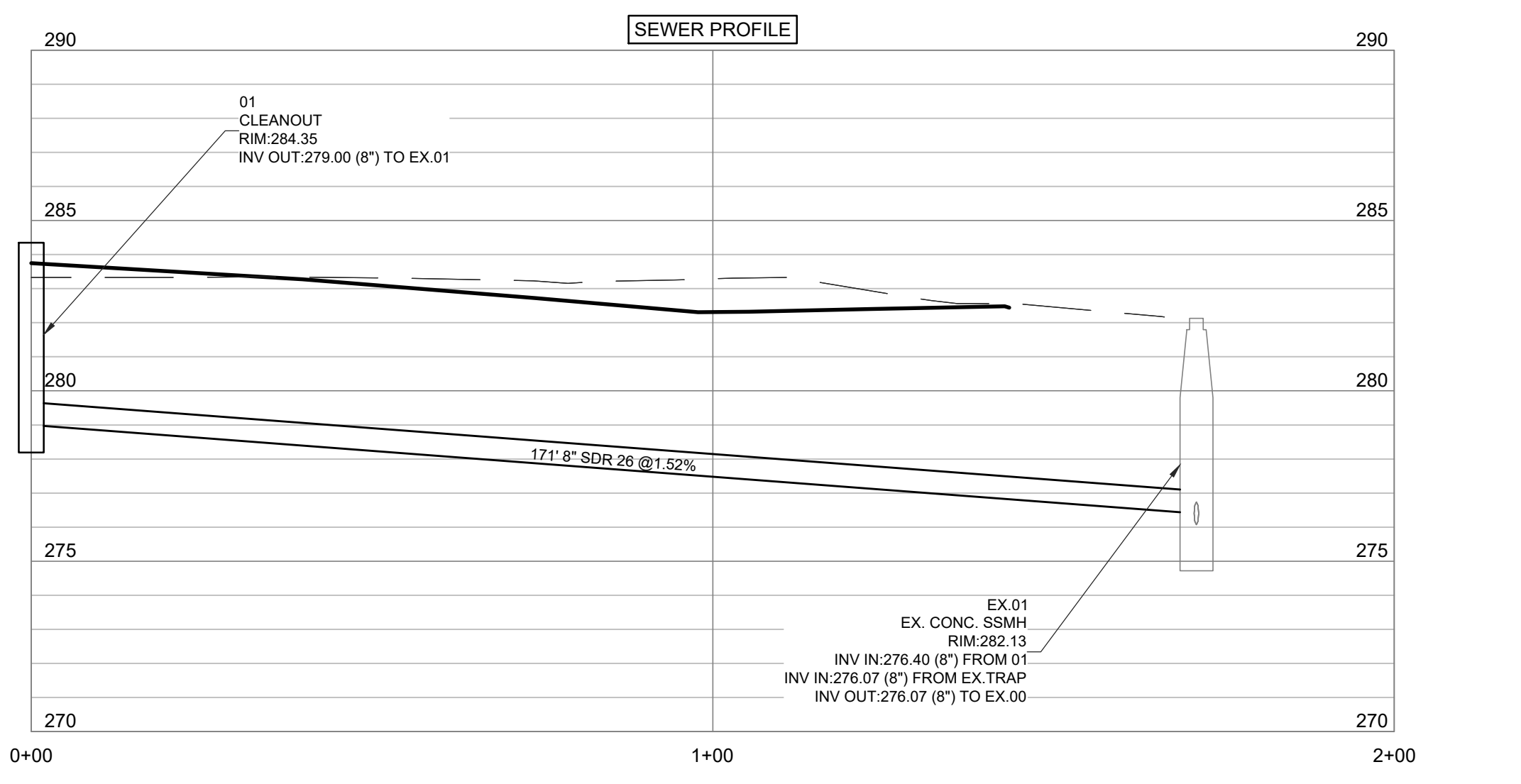
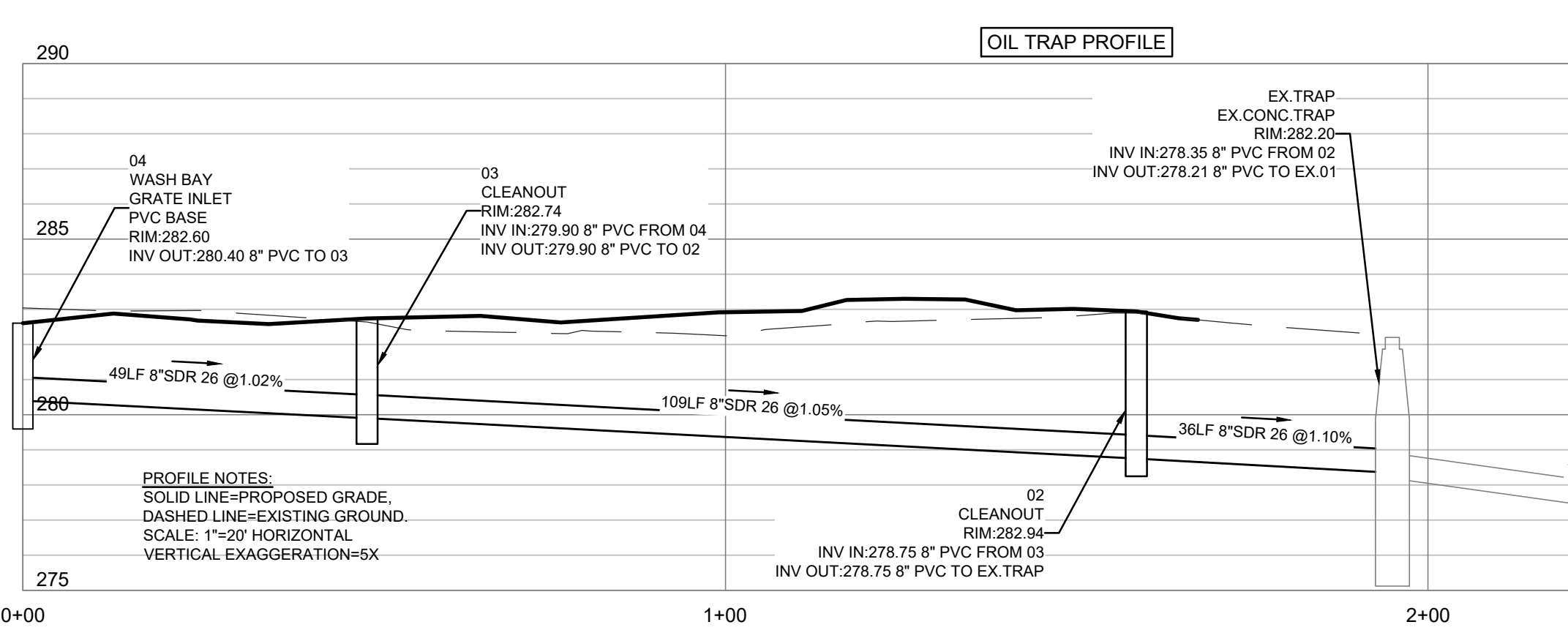
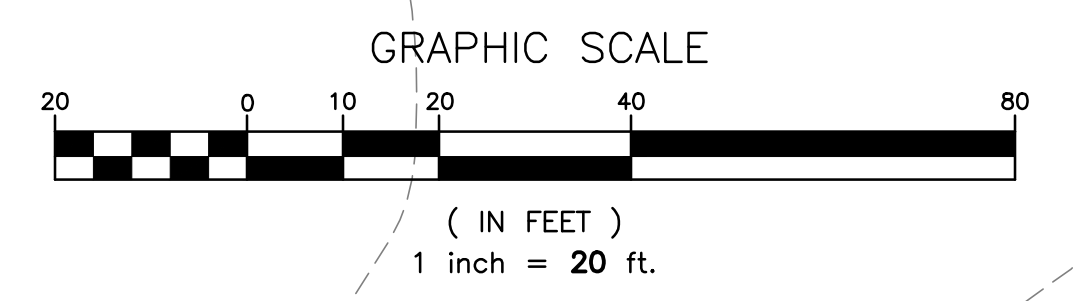
DRAWING ISSUED

OWNER:
MAC HAIK
AUTUBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE:
UTILITY PLAN
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
4



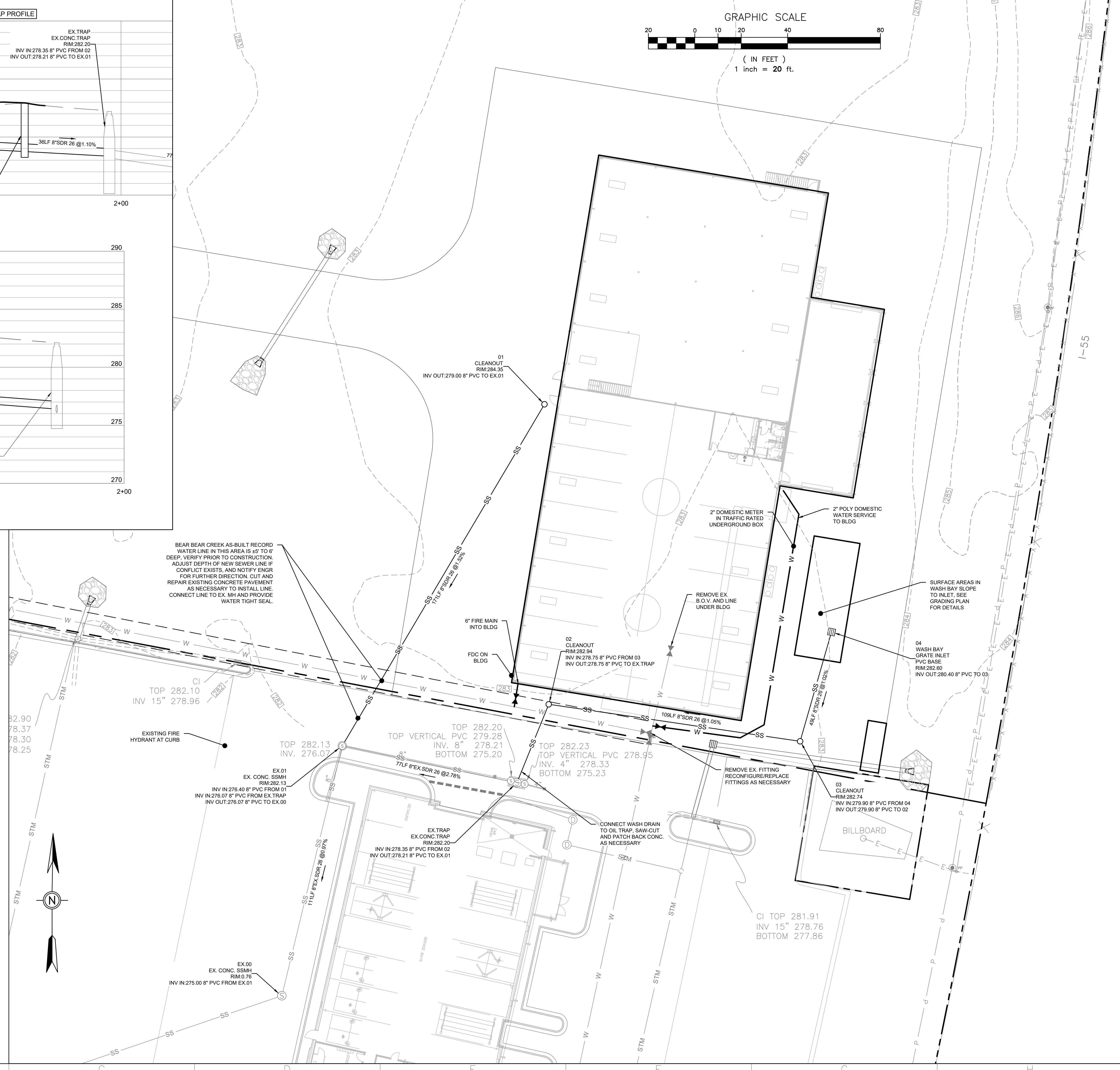
- UTILITY PLAN NOTES**
- LOCAL MUNICIPALITY STANDARDS: ALL WATER & SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE UTILITY PROVIDER, BEAR CREEK, WHICH SERVES WATER AND SEWER TO THE SITE. CONTRACTOR SHALL CONFIRM LOCAL STANDARDS PRIOR TO CONSTRUCTION.
 - INSPECTIONS: CONTRACTOR SHALL NOTIFY THE LOCAL MUNICIPALITY AND OR UTILITY PROVIDER TO INSPECT ALL WATER AND SEWER MAINS, CONNECTION AND ACCESSORIES PRIOR TO PLACEMENT OF BACKFILL.
 - UTILITY LOCATIONS: CONTRACTOR SHALL HAVE MISSISSIPPI ONE CALL (811 OR 800-227-6477) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER PRIOR TO CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED.
 - MEP COORDINATION: THIS PLAN SHOWS WATER & SEWER SERVICES FOR THE SITE UP TO 5' FROM THE BUILDING. REFER TO MECHANICAL, ELECTRICAL, PLUMBING (MEP) PLANS FOR CONTINUATION INTO BUILDING, INCLUDING FIRE DEPARTMENT CONNECTION AND BACK FLOW PREVENTOR REQUIREMENTS FOR ALL WATER LINES.
 - WATER LINE THRUST RESTRAINTS: ALL WATER LINES SHALL HAVE THRUST RESTRAINTS (CONCRETE BLOCKING RESTRAINT MECHANISMS) AT ALL BENDS, TEES, FITTINGS ETC. SEE DETAILS FOR ADDITIONAL REQUIREMENTS. MEGA-LUG RESTRAINT JOINTS MAY ALSO BE USED WITH PRIOR SUBMITTAL APPROVAL BY ENGR.
 - SEWER CLEANOUTS: SEE MEP PLANS FOR LOCATION AND ELEVATIONS OF SEWER OUT OF BUILDING. COORDINATE SEWER OUT OF BUILDING WITH CLEANOUTS TO MAIN. INSTALL CLEANOUT TOPS FLUSH WITH ADJACENT PAVEMENT SURFACE.
 - WATER LINE COVER: THE WATER LINE SHALL HAVE A MIN. OF 3' GROUND COVER.
 - MINIMUM UTILITY SEPARATION DISTANCES:
SANITARY SEWER MAINS AND STORM SEWER - 24" VERTICAL
SANITARY SEWER MAINS AND WATER - 10' HORIZONTAL OR 18" VERTICAL
STORM SEWER AND WATER - 18" VERTICAL
- IF MINIMUM VERTICAL SEPARATIONS CAN NOT BE ACHIEVED AT UTILITY & STORM DRAIN CROSSING, USE DIP MATERIALS AND INSTALL CONCRETE CRADLE WITH 6" MIN. CLEARANCE.

DRAWING SYMBOL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		FIRE HYDRANT
		WATER VALVE
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE



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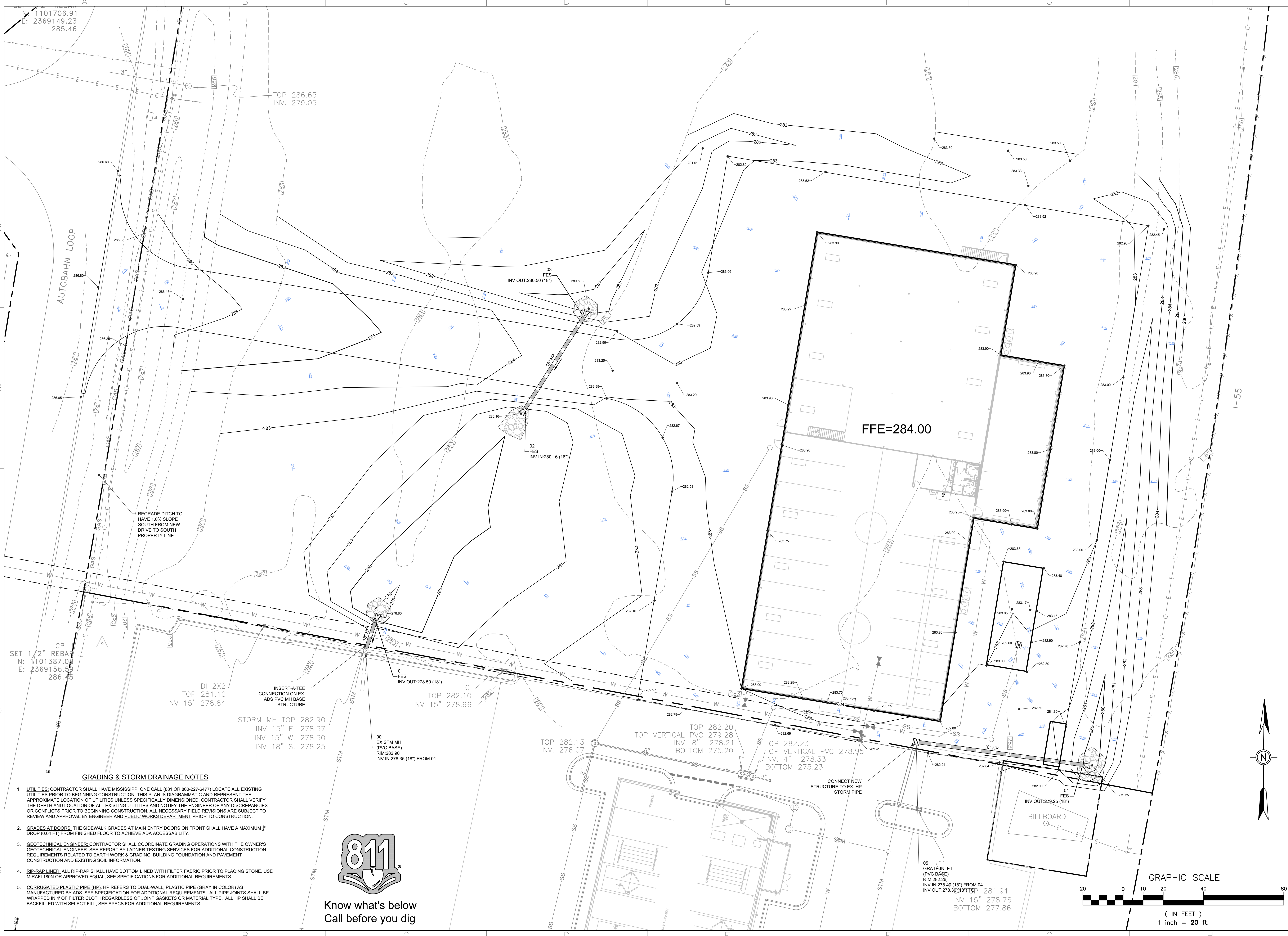
No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

OWNER:
MAC HAIK
AUTBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE:
GRADING PLAN
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
5



CP-
SET 1/2" REBAR
N: 1101706.91
E: 2369149.23
285.46

TOP 286.65
INV. 279.05

03
FES
INV OUT:280.50 (18")

02
FES
INV IN:280.16 (18")

REGRADE DITCH TO
HAVE 1.0% SLOPE
SOUTH FROM NEW
DRIVE TO SOUTH
PROPERTY LINE

CP-
SET 1/2" REBAR
N: 1101387.08
E: 2369156.59
286.45

DI 2X2
TOP 281.10
INV 15" 278.84

STORM MH TOP 282.90
INV 15" E. 278.37
INV 15" W. 278.30
INV 18" S. 278.25

INSERT A-TEE
CONNECTION ON EX
ADS PVC MH BASE
STRUCTURE

01
FES
INV OUT:278.50 (18")

CI
TOP 282.10
INV 15" 278.96

00
EX STM MH
(PVC BASE)
RIM 282.90
INV IN:278.35 (18") FROM 01

TOP 282.13
INV. 276.07

TOP 282.20
TOP VERTICAL PVC 279.28
INV. 8" 278.21
BOTTOM 275.20

TOP 282.23
TOP VERTICAL PVC 278.95
INV. 4" 278.33
BOTTOM 275.23

CONNECT NEW
STRUCTURE TO EX. HP
STORM PIPE

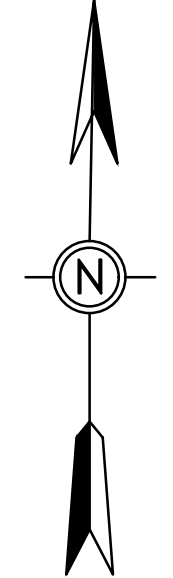
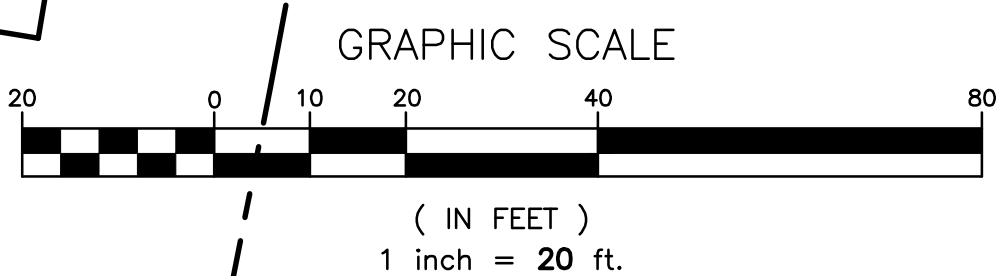
05
GRATE INLET
(PVC BASE)
RIM 282.26
INV IN:278.40 (18") FROM 04
INV OUT:278.30 (18") TO:
281.91
INV 15" 278.76
BOTTOM 277.86

GRADING & STORM DRAINAGE NOTES

- UTILITIES: CONTRACTOR SHALL HAVE MISSISSIPPI ONE CALL (881 OR 800-227-6477) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENT THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER AND PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.
- GRADES AT DOORS: THE SIDEWALK GRADES AT MAIN ENTRY DOORS ON FRONT SHALL HAVE A MAXIMUM 1/4" DROP (0.04 FT) FROM FINISHED FLOOR TO ACHIEVE ADA ACCESSIBILITY.
- GEOTECHNICAL ENGINEER: CONTRACTOR SHALL COORDINATE GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER. SEE REPORT BY LADNER TESTING SERVICES FOR ADDITIONAL CONSTRUCTION REQUIREMENTS RELATED TO EARTH WORK & GRADING, BUILDING FOUNDATION AND PAVEMENT CONSTRUCTION AND EXISTING SOIL INFORMATION.
- RIP-RAP LINER: ALL RIP-RAP SHALL HAVE BOTTOM LINED WITH FILTER FABRIC PRIOR TO PLACING STONE. USE MIRAFI 180N OR APPROVED EQUAL. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- CORRUGATED PLASTIC PIPE (HP): HP REFERS TO DUAL-WALL, PLASTIC PIPE (GRAY IN COLOR) AS MANUFACTURED BY ADS. SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS. ALL PIPE JOINTS SHALL BE WRAPPED IN 4" OF FILTER CLOTH REGARDLESS OF JOINT GASKETS OR MATERIAL TYPE. ALL HP SHALL BE BACKFILLED WITH SELECT FILL. SEE SPECS FOR ADDITIONAL REQUIREMENTS.



Know what's below
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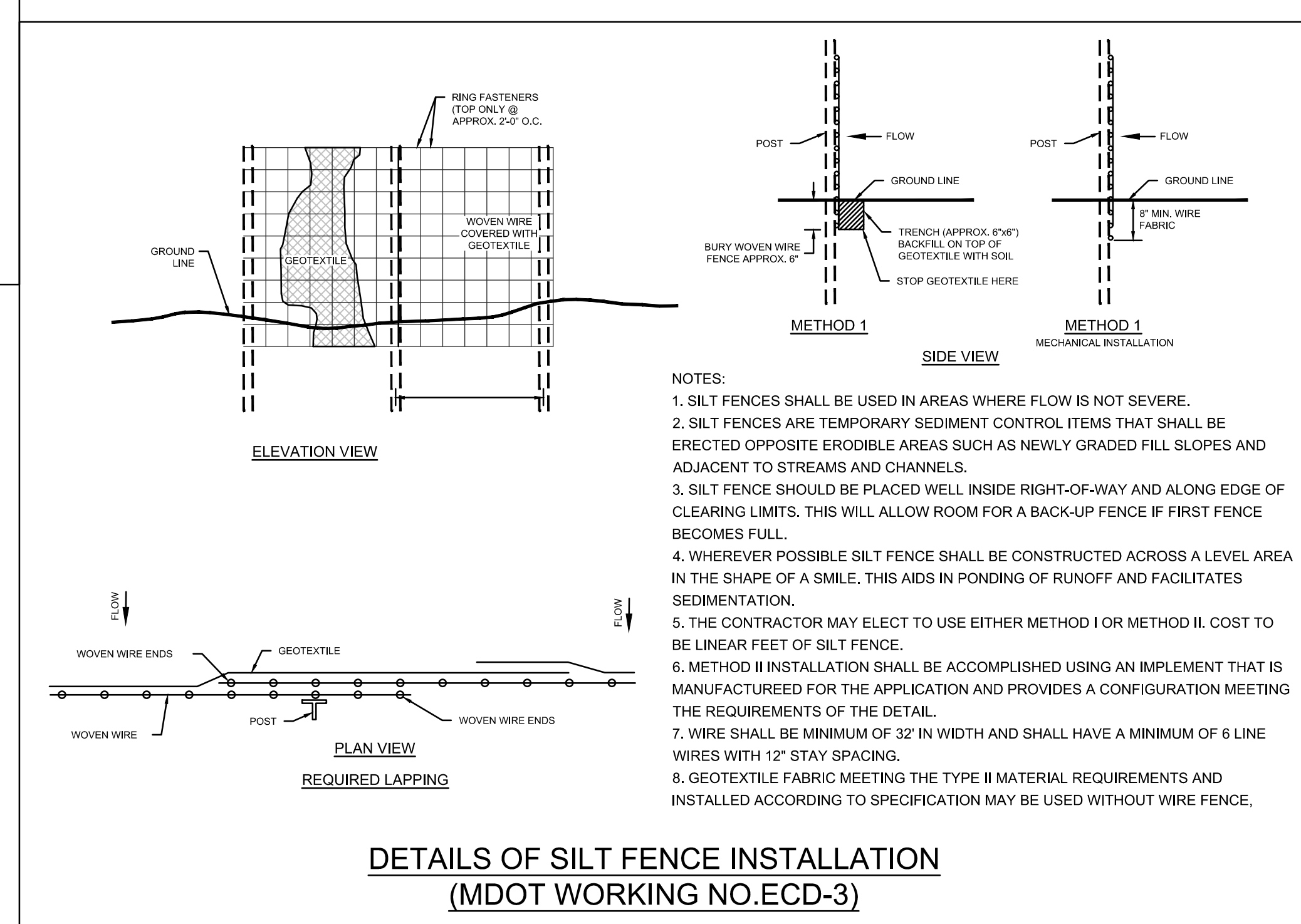
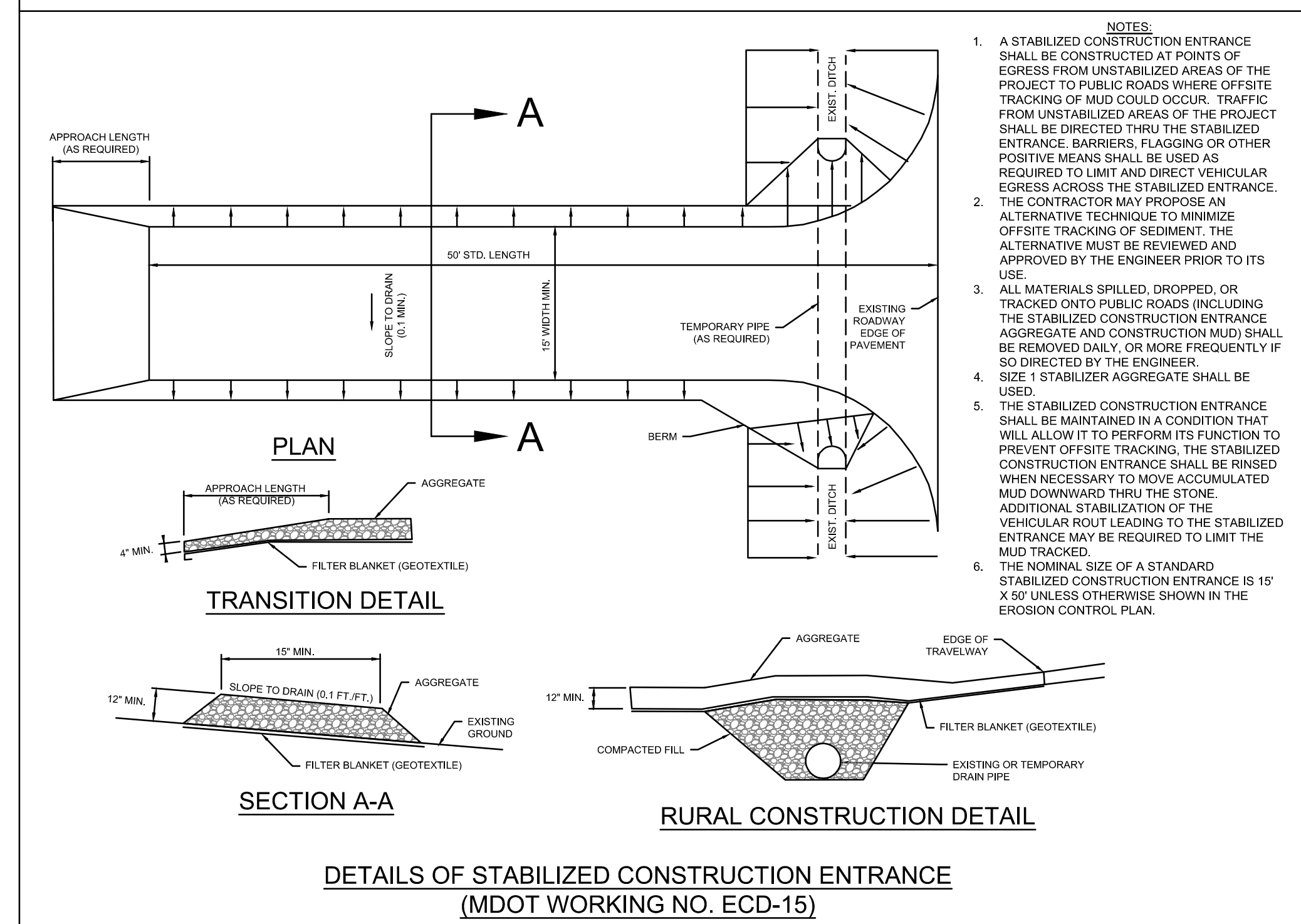
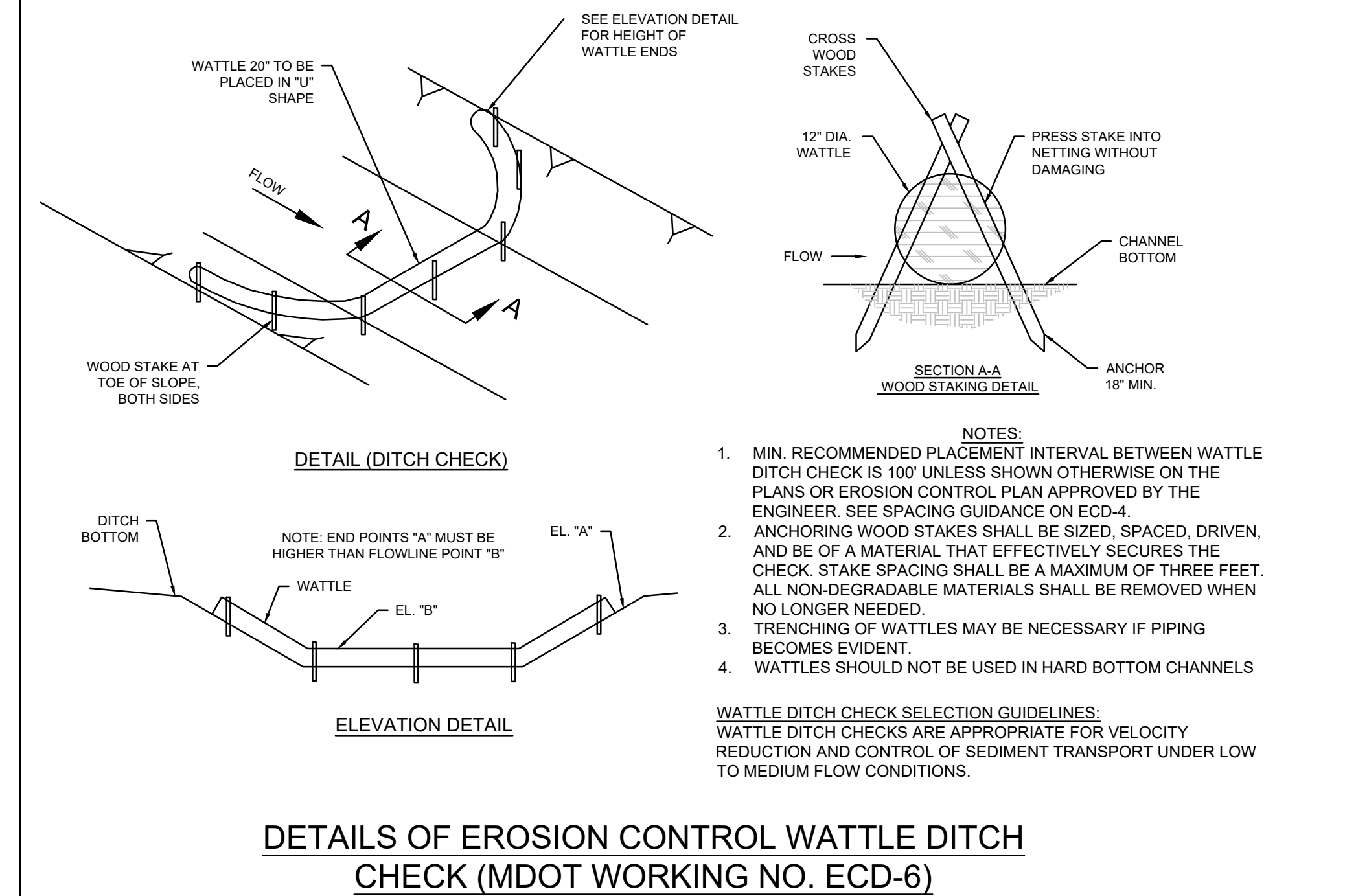


EROSION CONTROL PLAN NOTES

- TOTAL DISTURBED SITE AREA = 3.50 AC.
- VEGETATIVE CONTROLS:** A COMBINATION OF TEMPORARY AND PERMANENT GRASSING WILL BE USED TO PROTECT SLOPES AS CONSTRUCTION PROGRESSES. REFER TO VEGETATION SPECIFICATIONS FOR DETAILS. SHOULD A DISTURBED AREA BE LEFT UNDISTURBED FOR 14 DAYS OR MORE, TEMPORARY OR PERMANENT VEGETATION SHALL BE PLACED IMMEDIATELY.
- STRUCTURAL CONTROLS:** INSTALL CONSTRUCTION ENTRANCES, DIVERSION DITCHES, WATTLE CHECK DAMS, SILT FENCE AND ALL OTHER STRUCTURAL BMPs AS SHOWN BELOW. PERMANENT EROSION CONTROL BMPs AND STRUCTURAL BMPs SHOULD BE PLACED AS SOON AS POSSIBLE TO ENSURE FINAL STABILIZATION OF THE SITE.
- WATTLE CHECK DAMS:** SILT FENCE AND HAY BALES ARE NOT ACCEPTABLE FORMS OF CHECK DAMS WITHIN TEMPORARY DIVERSION DITCHES, SWALES OR OTHER AREAS OF CONCENTRATED FLOW. CONTRACTOR SHALL USE SAND BAGS OR STONE DAMS TO CHECK FLOW. WATTLES MAY ALSO BE USED WHERE LOWER FLOWS/SMALLER DRAINAGE AREAS OCCUR.
- HOUSEKEEPING & MAINTENANCE PRACTICES:** ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. NON-FUNCTIONING EROSION CONTROLS SHALL BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL CONTROLS WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW. WALK THROUGH INSPECTIONS ARE RECOMMENDED BEFORE ANTICIPATED STORM EVENTS TO VERIFY THE INTEGRITY OF EROSION CONTROL MEASURES AND TO DETERMINE IF ADDITIONAL MEASURES ARE NEEDED. SEDIMENT BASINS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 2.0 FEET BELOW THE TOP OF THE RISER, AND/OR WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. SILT FENCE SHALL BE CLEANED OUT WHEN SEDIMENT REACHES 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. MAINTENANCE AND REPAIR OF EQUIPMENT SHALL BE PERFORMED OFF-SITE. MATERIAL WASH OUT SHALL OCCUR EITHER OFF-SITE OR WITHIN DESIGNATED WASH OUT AREAS.
- POST-CONSTRUCTION CONTROL MEASURES:** AS CONSTRUCTION IS COMPLETED, PERMANENT VEGETATIVE GROWTH SHALL BE ESTABLISHED ON DISTURBED SOILS TO IMPROVE SOIL STABILITY AND PROVIDE A BUFFER ZONE FOR LOOSE MATERIAL. LINED DITCHES SHALL BE INSTALLED AS SPECIFIED IN THE EROSION CONTROL SEQUENCE TO REDUCE EROSION IN CONCENTRATED FLOW AREAS AND RIP-RAP WILL BE PLACED AS SPECIFIED TO DISSIPATE FLOW ENERGY AND REDUCE FLOW VELOCITY. TEMPORARY BMPs MUST BE REMOVED FROM THE SITE WHEN THEY ARE NO LONGER NEEDED.

DRAWING SYMBOL LEGEND

PROPOSED	DESCRIPTION
	SILT FENCE PROTECTION
	LIMITS OF DISTURBANCE
	WATTLE CHECK DAM/INLET PROTECTION



Section 4, Item D)

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02-27-2024

DRAWING ISSUED	Date	02-27-2024
	Description	PLANS SUBMITTED FOR REVIEW
No.		

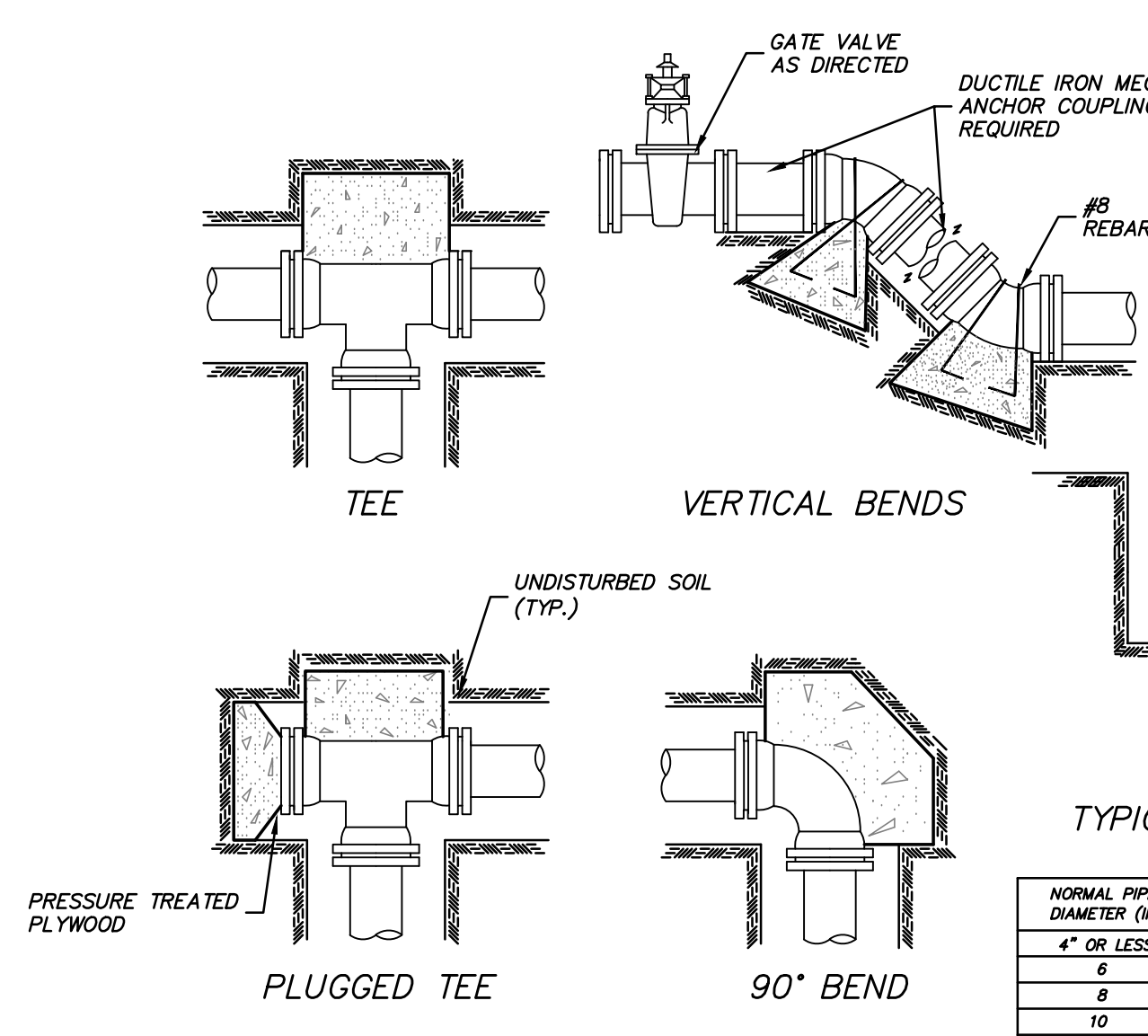
OWNER: **MAC HAIK**
AUTUBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE: **EROSION CONTROL PLAN (SWPPP)**
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER: **6**

108



TYPICAL CROSS SECTION

BEARING AREA IN SQ. FT.

NORMAL PIPE DIAMETER (IN.)	DEAD END, TEE, PLUG	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4" OR LESS	2	2	2	1	1
6	3	4	3	2	2
8	5	7	4	2	2
10	8	12	6	3	3
12	12	16	9	5	3
14	14	18	11	6	4
16	16	20	12	7	6

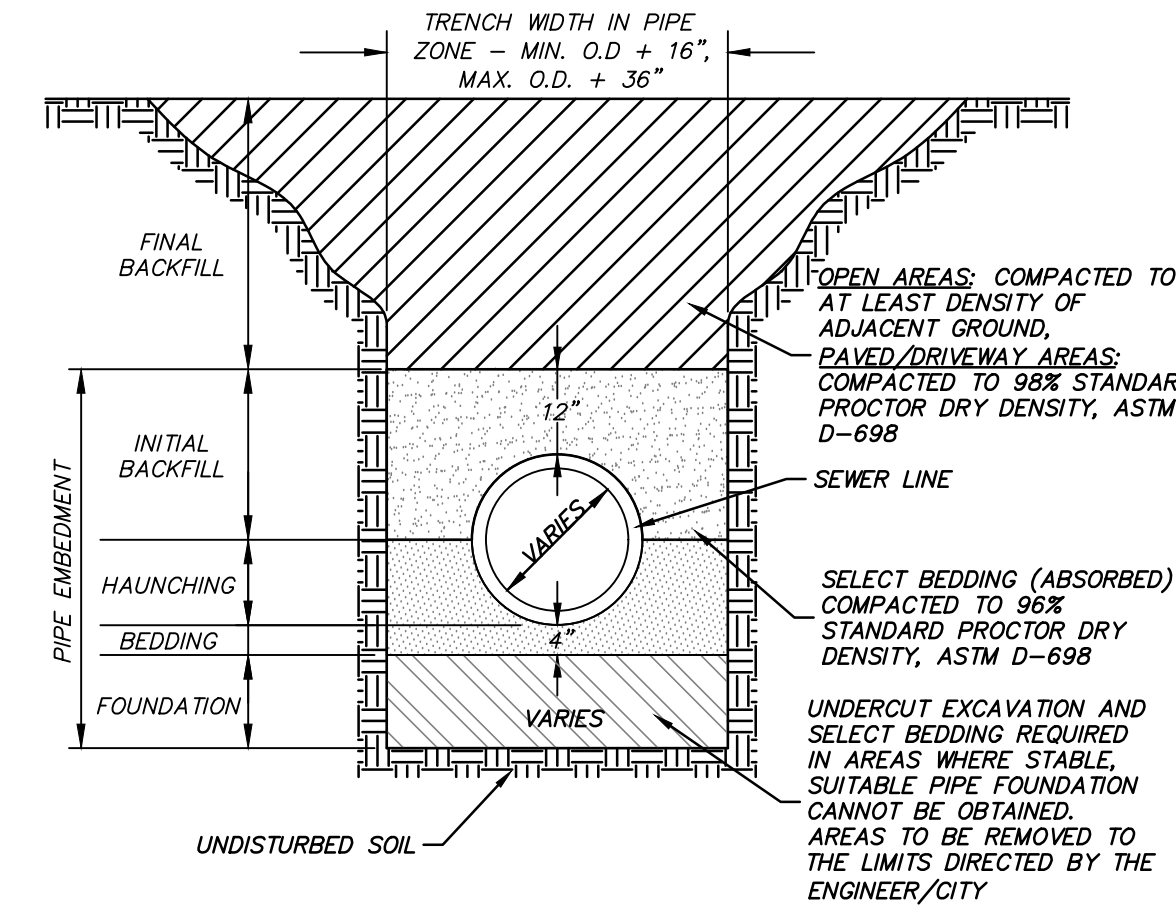
VERTICAL BENDS

4" OR LESS	6" (0.22)	8" (0.15)	10" (0.15)
6	14.0(5.9)	6.0(2.2)	4.0(1.5)
8	27.0(10)	9.0(3.3)	6.0(2.2)
10	46.0(2.0)	16.0(6.7)	7.5(3.0)
12	68.0(2.5)	22.0(8.0)	9.0(3.3)
14	80.0(3.0)	40.0(1.5)	14.0(5.2)
16	90.0(3.3)	52.0(1.9)	18.0(6.7)

VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)

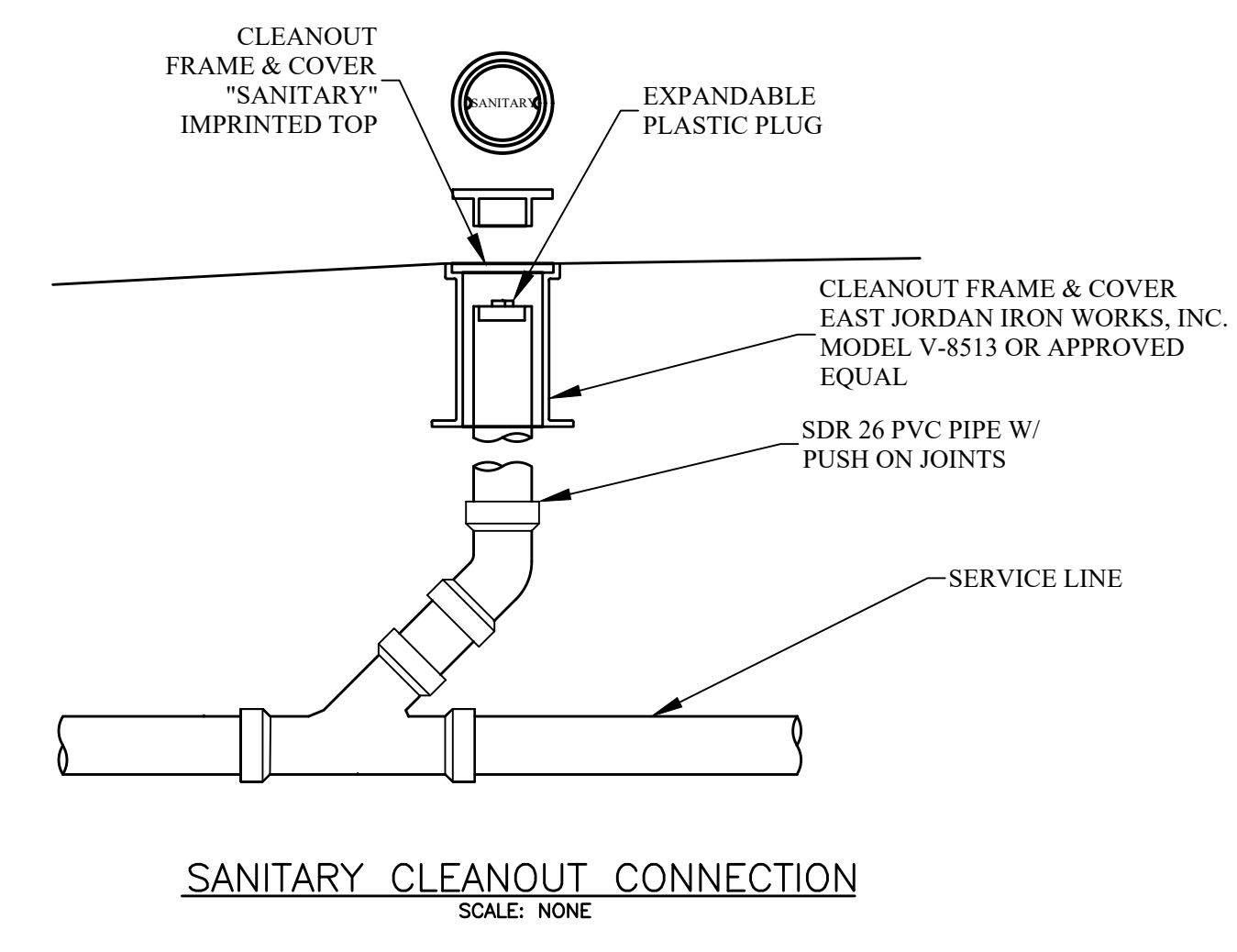
- THRUST BLOCK NOTES:
- ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH.
 - PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
 - POUR THRUST BLOCKS AGAINST UNDISTURBED SOIL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE SOIL AND EXTEND THRUST BLOCKS TO UNDISTURBED SOIL.
 - IN BACK FILLING, ANY MUCK ENCOUNTERED SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL.
 - WRAP ALL FITTINGS WITH 8-MIL POLYETHYLENE ENCASEMENT.
 - BACK FILL MATERIAL SHALL NOT INCLUDE ROCK OR BOULDERS.
 - ALL CONCRETE SHALL BE MINIMUM 2500 PSI.
 - THRUST BLOCKS SHALL BE AN ABSORBED COST.
 - MEGA LUG RESTRAINS OR APPROVED EQUAL REQUIRED ON ALL MECHANICAL JOINT FITTINGS.
 - CONTRACTOR SHALL PROVIDE JOINT RESTRAINTS AS REQUIRED PER PROJECT SPECIFICATIONS.

TYPICAL THRUST BLOCK

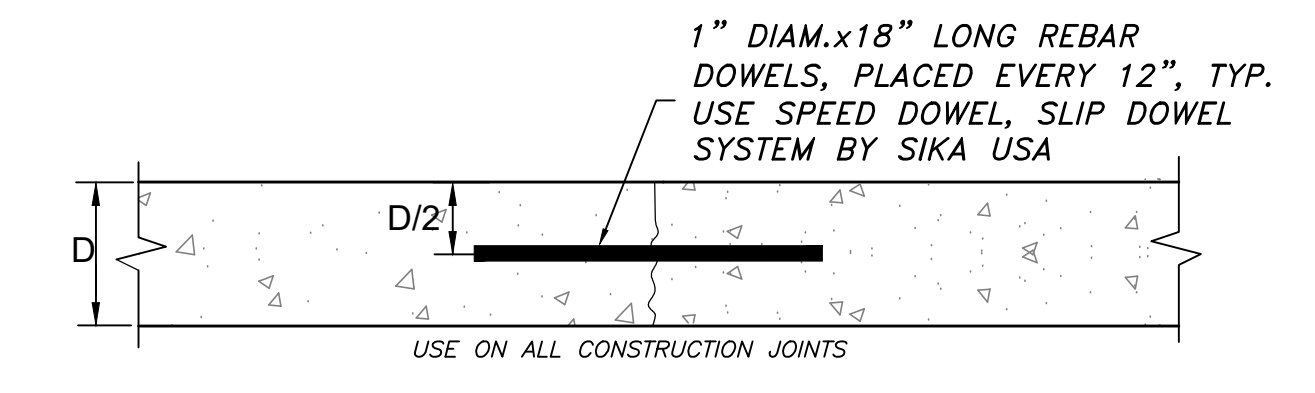


TYPICAL TRENCH FOR WATER & SEWER LINES
NOTE: DETAIL DRAWINGS ARE NOT TO SCALE UNLESS OTHERWISE NOTED ON SPECIFIC DETAIL.

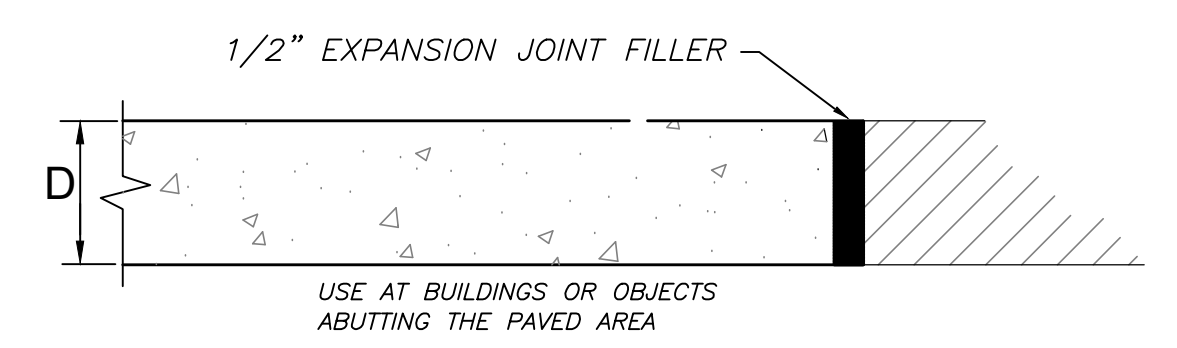
- TYPICAL TRENCH NOTES:
- UNDERCUT EXCAVATION SHALL BE REQUIRED AS DIRECTED BY ENGINEER IF MATERIAL AT PLANNED GRADE WILL NOT PROVIDE STABLE TRENCH BOTTOM FOR PIPE LAYING. IT SHALL BE PAID FOR AS "UNDERCUT EXCAVATION" AND SPOILED AS DIRECTED BY ENGINEER OR REQUIRED IN CONTRACT DOCUMENTS.
 - FOUNDATION MATERIAL SHALL BE PAID FOR UNDER PAY ITEM "SELECT BEDDING MATERIAL".
 - BEDDING & HAUNCHING MATERIAL SHALL BE AN ABSORBED COST PER FOOT OF PIPE. QUANTITIES FOR BEDDING MATERIAL (IF PROVIDED) ARE INTENDED TO BE USED FOR FOUNDATION MATERIAL.
 - INITIAL BACKFILL SHALL BE AN ABSORBED COST.
 - IF CONTRACTOR PROPOSES TO USE NATIVE MATERIAL FOR PIPE EMBEDMENT AND/OR FINAL BACKFILL, CONTRACTOR SHALL PROVIDE TEST RESULTS TO ENGINEER STATING WHETHER NATIVE MATERIAL MEETS PROJECT SPECIFICATIONS FOR USE AS PIPE EMBEDMENT MATERIAL OR FINAL BACKFILL. IF NATIVE MATERIAL MEETS REQUIREMENTS FOR SUCH THEN IT SHALL BE USED BY CONTRACTOR FOR THIS PURPOSE AND SHALL BE AN ABSORBED COST PER FOOT OF PIPE.
 - FINAL BACKFILL IS AN ABSORBED COST PER FOOT OF PIPE AND SHALL BE EITHER:
 - NATIVE MATERIAL IN OPEN AREAS UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR
 - SELECT MATERIAL IN TRENCHES CONSTRUCTED UNDER OR WITHIN 5' OF ROADWAYS, CURBED OR PAVED AREAS. MATERIAL SHALL EXTEND 5' BEYOND THE EDGE OF PAVING STRUCTURE(S).
 - TRENCH SETTLEMENT REPAIR (INCLUDING RE-GRASSING IS THE CONTRACTOR'S RESPONSIBILITY DURING WARRANTY PERIOD).
 - DEWATERING OF ANY TRENCH FOR ANY REASON IS THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.



SANITARY CLEANOUT CONNECTION
SCALE: NONE

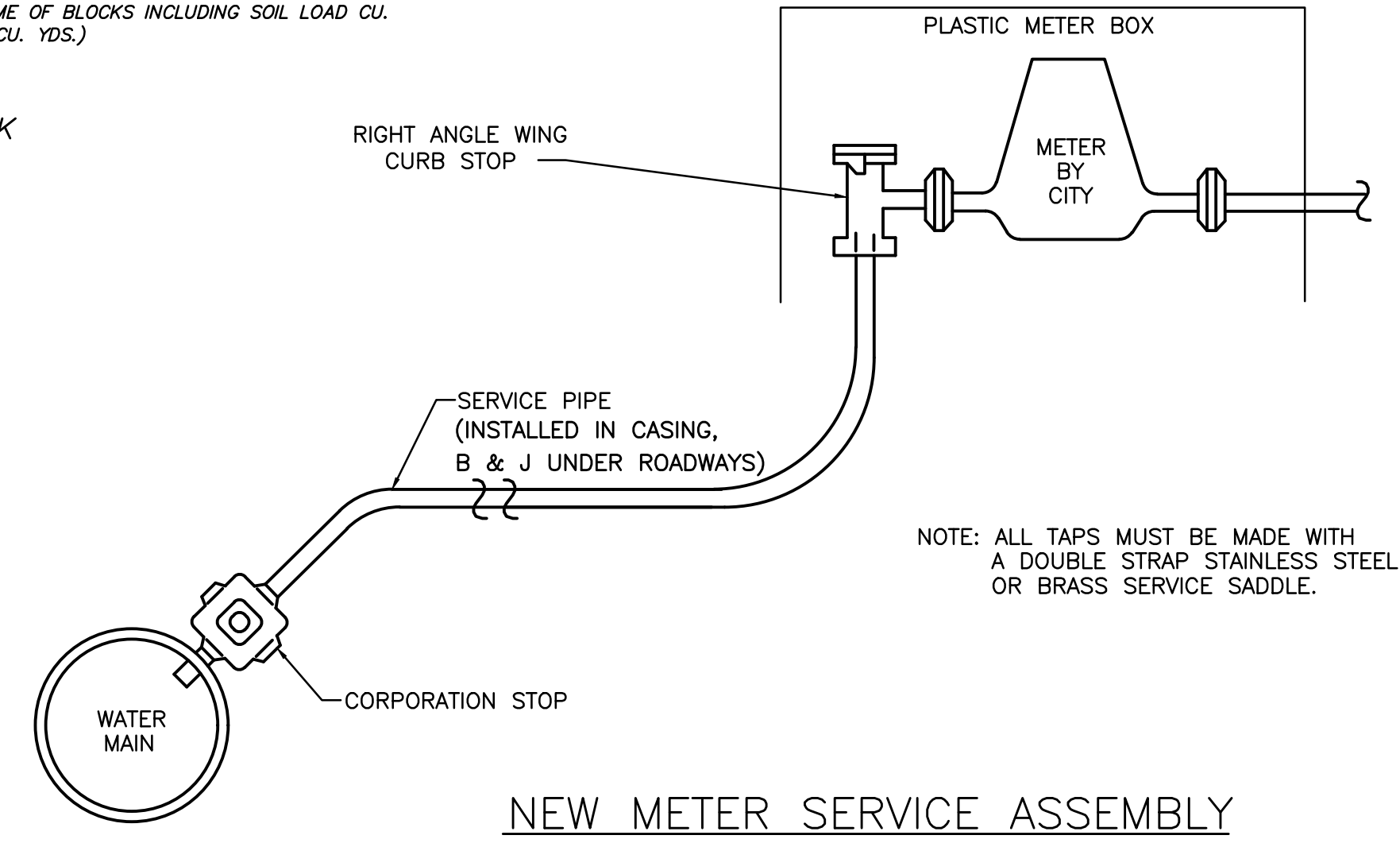


JOINT REINFORCEMENT @ CONSTRUCTION/CONTRACTION JOINTS

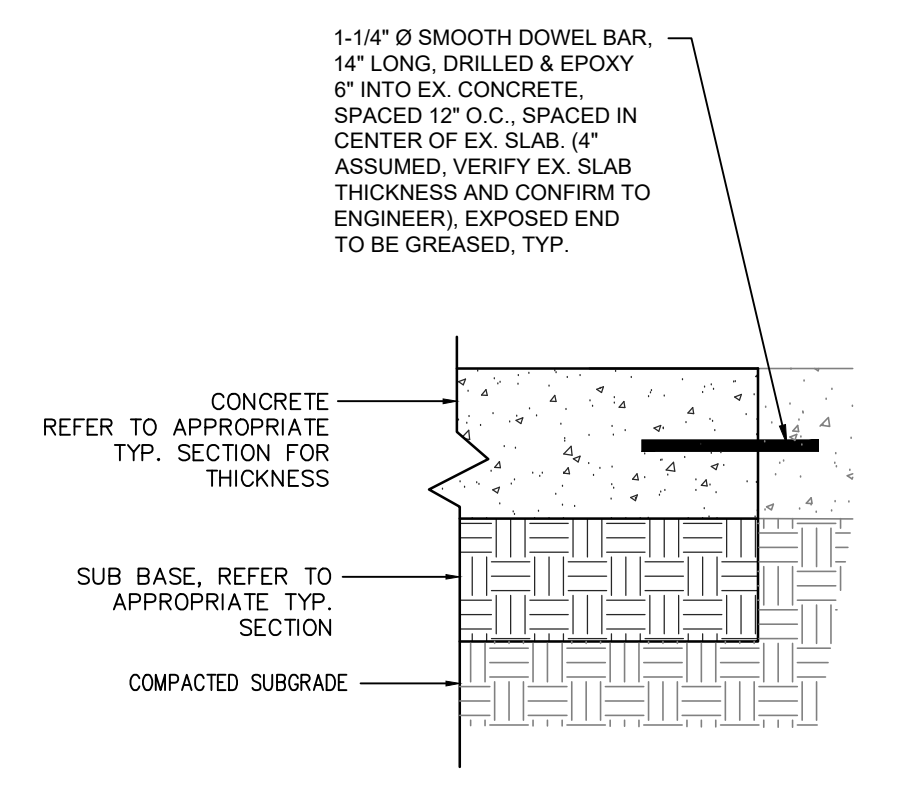


ISOLATION JOINT
USE AT BUILDINGS OR OBJECTS ABUTTING THE PAVED AREA

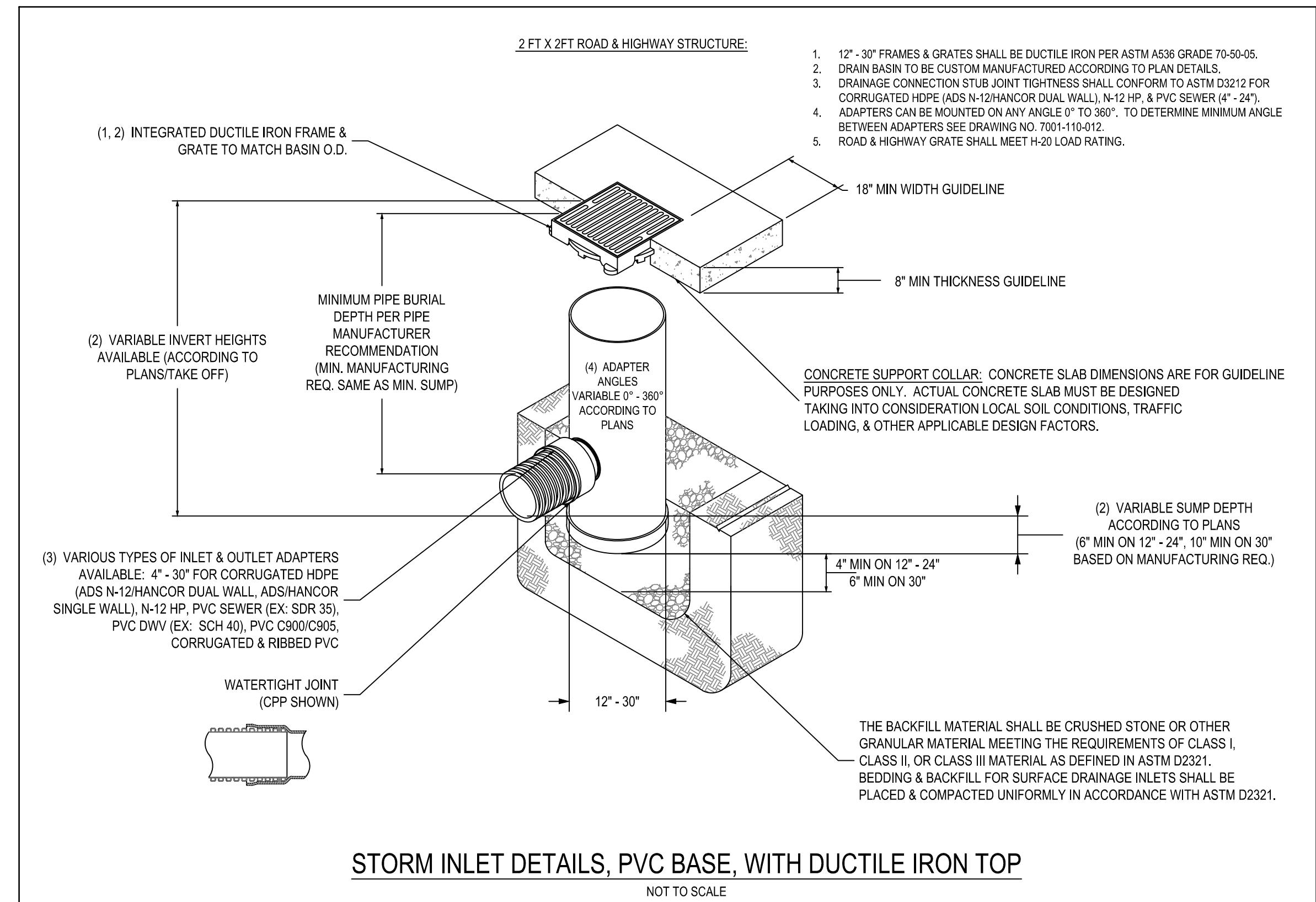
CONCRETE PAVING JOINT DETAILS
N.T.S.



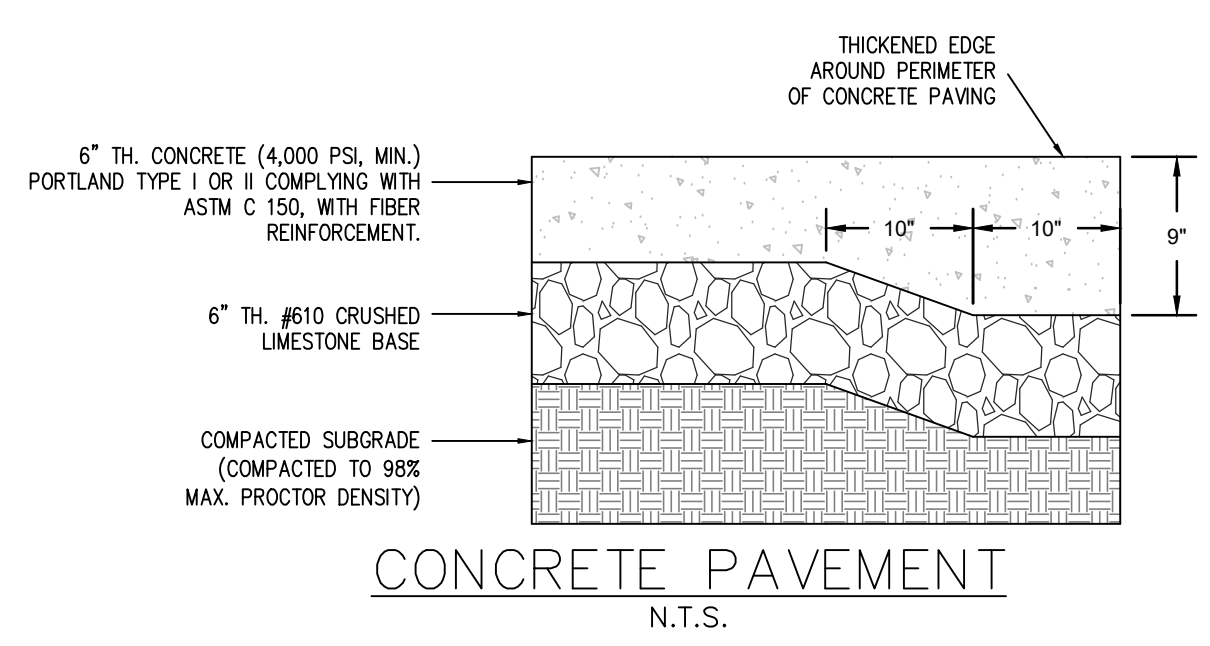
NEW METER SERVICE ASSEMBLY
SCALE: NONE



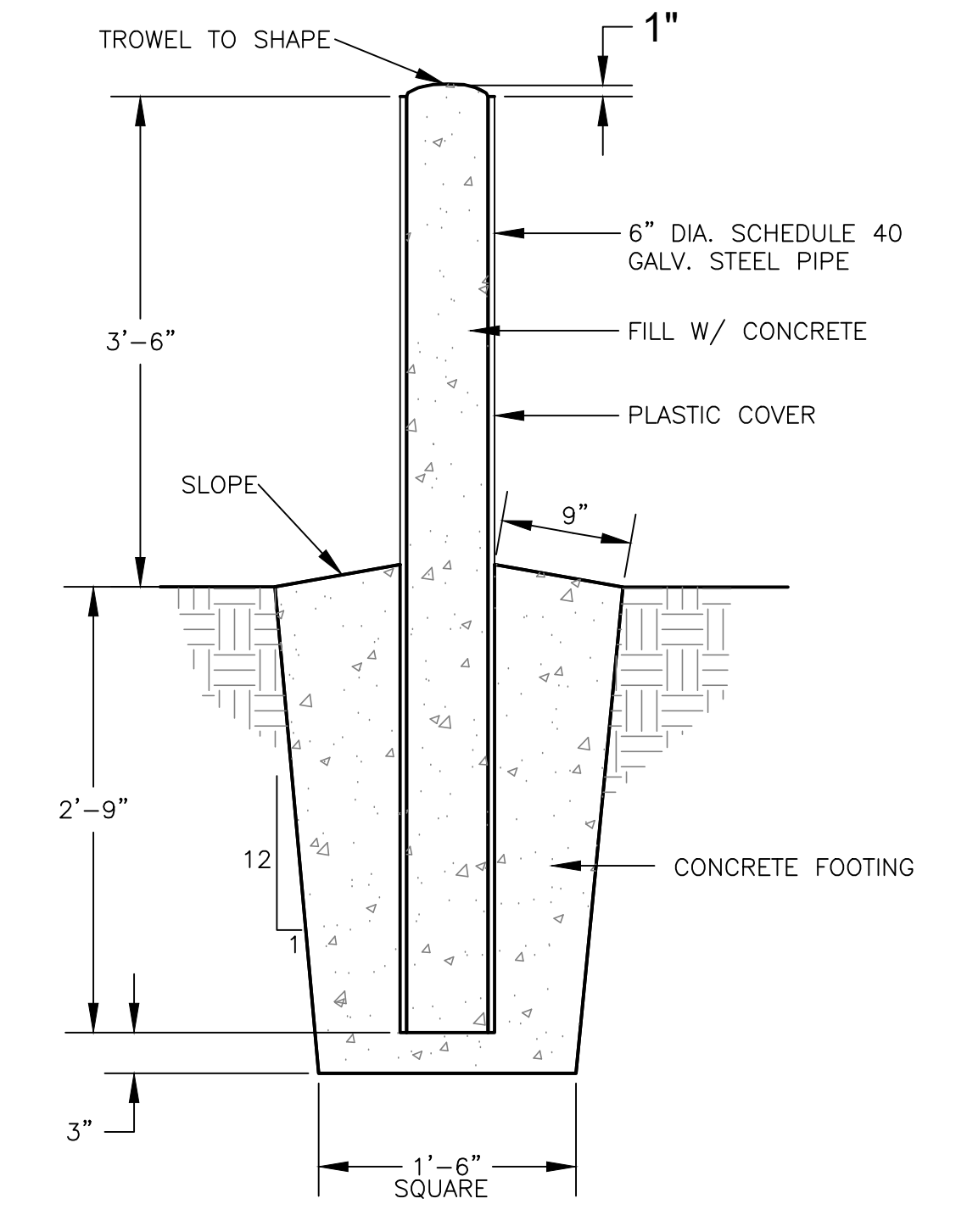
NEW CONCRETE TO EXISTING CONCRETE DETAIL
N.T.S.



STORM INLET DETAILS, PVC BASE, WITH DUCTILE IRON TOP
NOT TO SCALE



CONCRETE PAVEMENT
N.T.S.



BOLLARD DETAIL
N.T.S.

Section 4, Item D)

DEAN
ENGINEERING SOLUTIONS, INC.
4780 I-55 NORTH, SUITE 100-4
JACKSON, MS 39211
601-557-2002 WWW.DEANESI.COM

REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI
20557
02-27-2024

No.	Description	Date	Date
	PLANS SUBMITTED FOR REVIEW	02-27-2024	02-27-2024

DRAWING ISSUED

OWNER: **MAC HAIK**
AUTBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**

SHEET TITLE: **DETAILS**

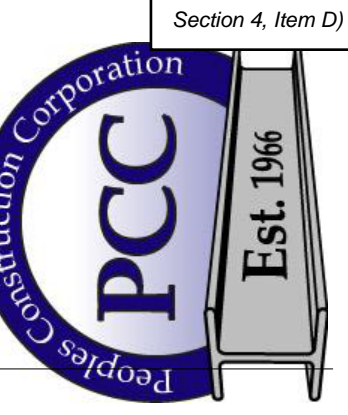
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

7

SHEET NUMBER:

SITE CONTEXT



PEOPLES CONSTRUCTION

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 Office: 601-932-1111 || Fax: 601-932-1112
 www.peoplesconstruction.com

Project Title

NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

Date: 3/1/2024
 Drawn By: AGR
 Checked By: Checker

Sheet Number
G1

Professional Seal

100% SALES DRAWINGS

ARCHITECTURAL NOTES

- 1) PROVIDE 6" WHITE VINYL BACK ROOF INSULATION & 4" WHITE VINYL BACK WALL INSULATION
- 2) PROVIDE FIBERGLASS ROOF SKYLIGHTS

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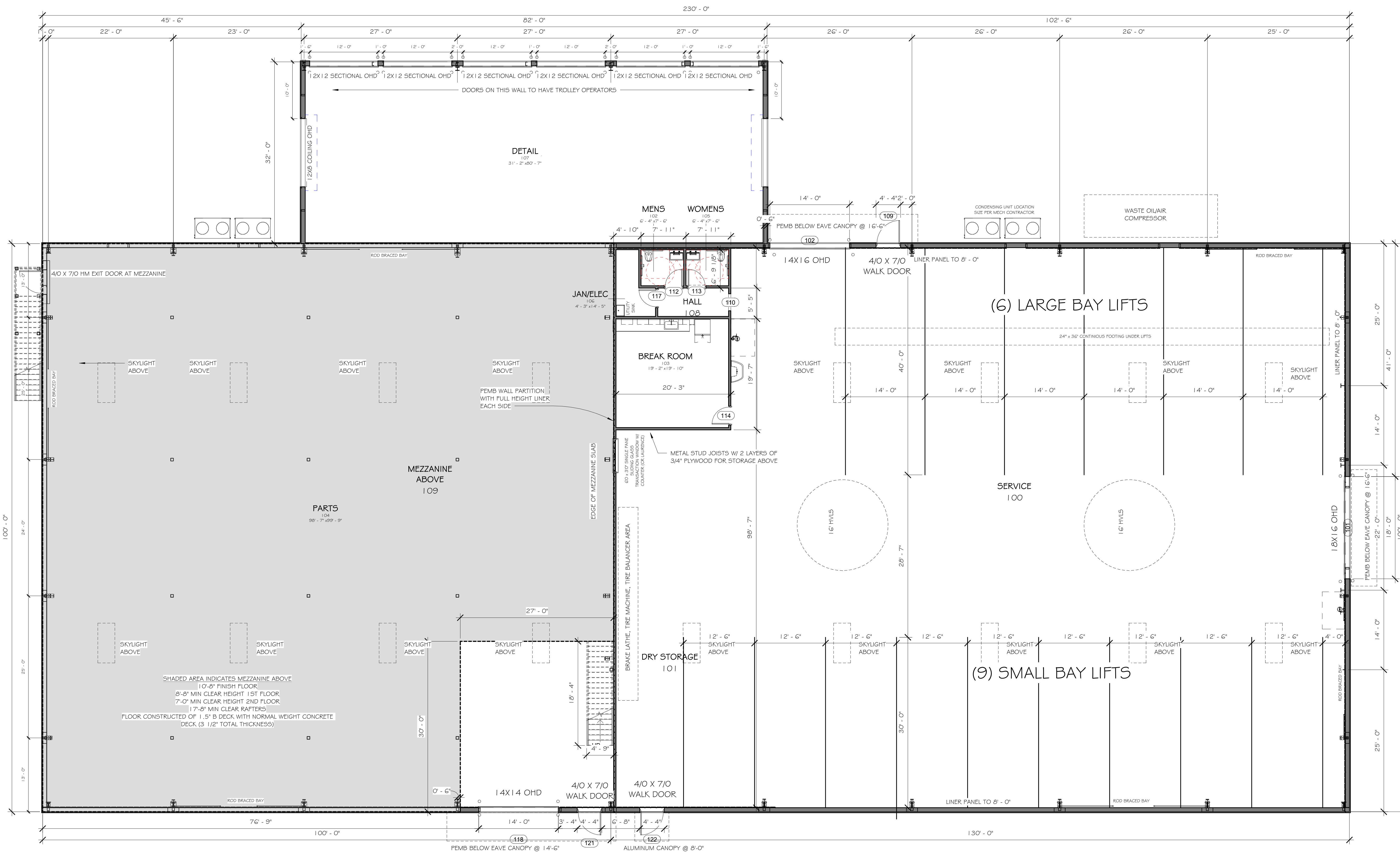
Date: 3/1/2024
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A-1

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1 FLOOR PLAN
 1/8" = 1'-0"



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Date

3/1/2024

Drawn By

AGR

Checked By

Checker

Sheet Number

A-2

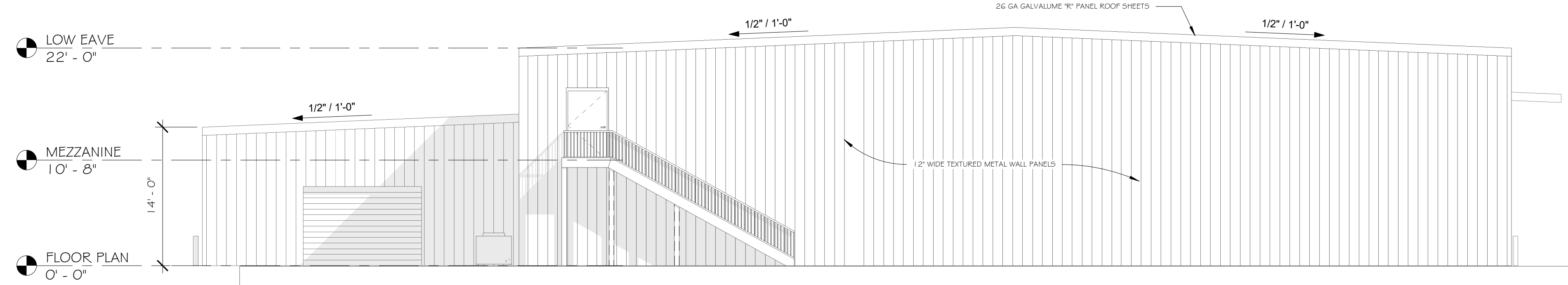
112



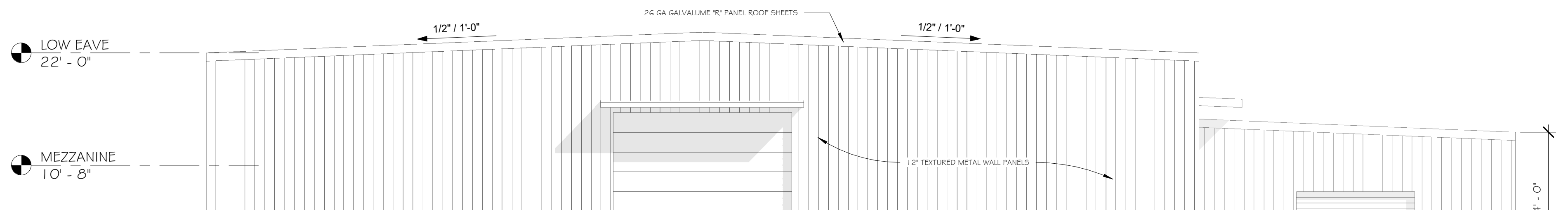
1 WEST ELEVATION
1/8" = 1'-0"

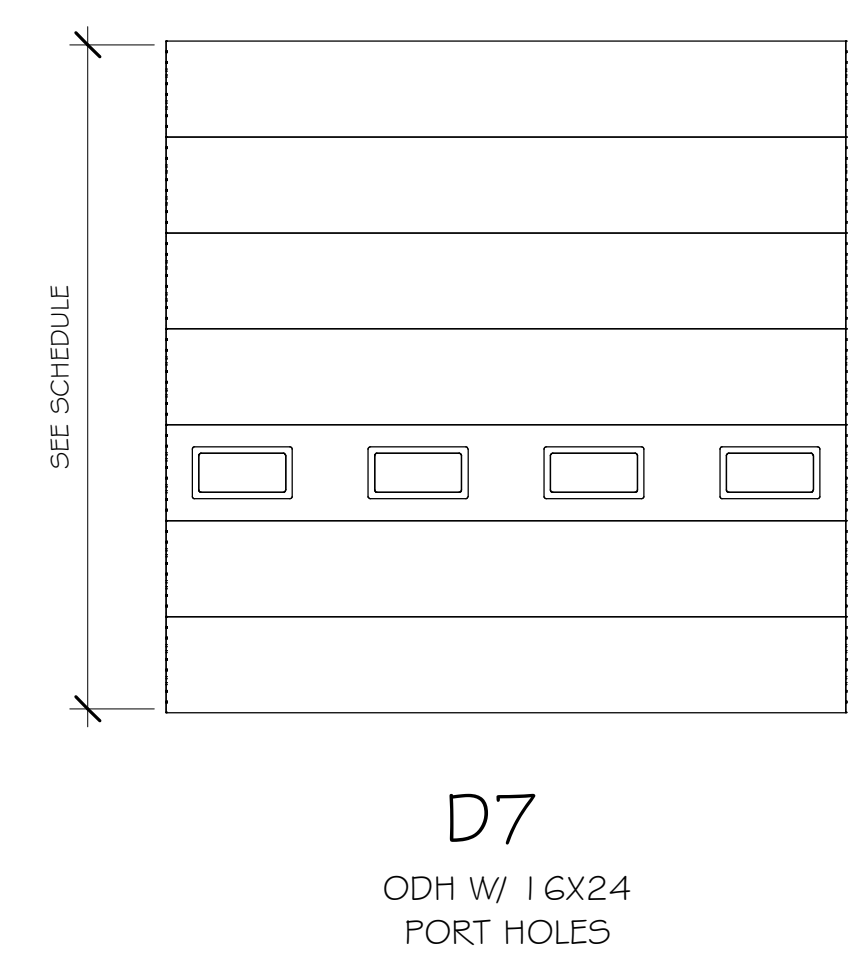
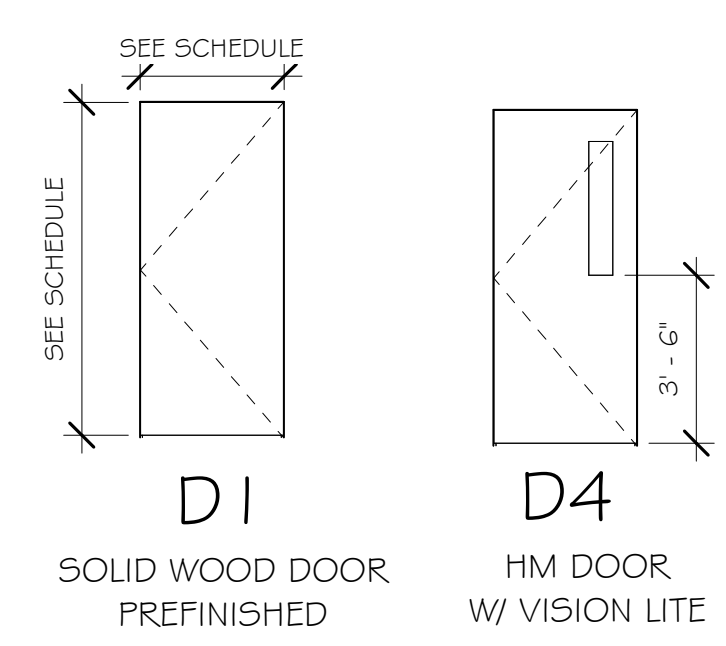


2 EAST ELEVATION
1/8" = 1'-0"



3 North
1/8" = 1'-0"





1 DOOR TYPE SCHEDULE
 1/4" = 1'-0"

RUBBER BASE (RB)
 MFG - ROPPE OR EQUAL
 COLOR - STANDARD COLORS

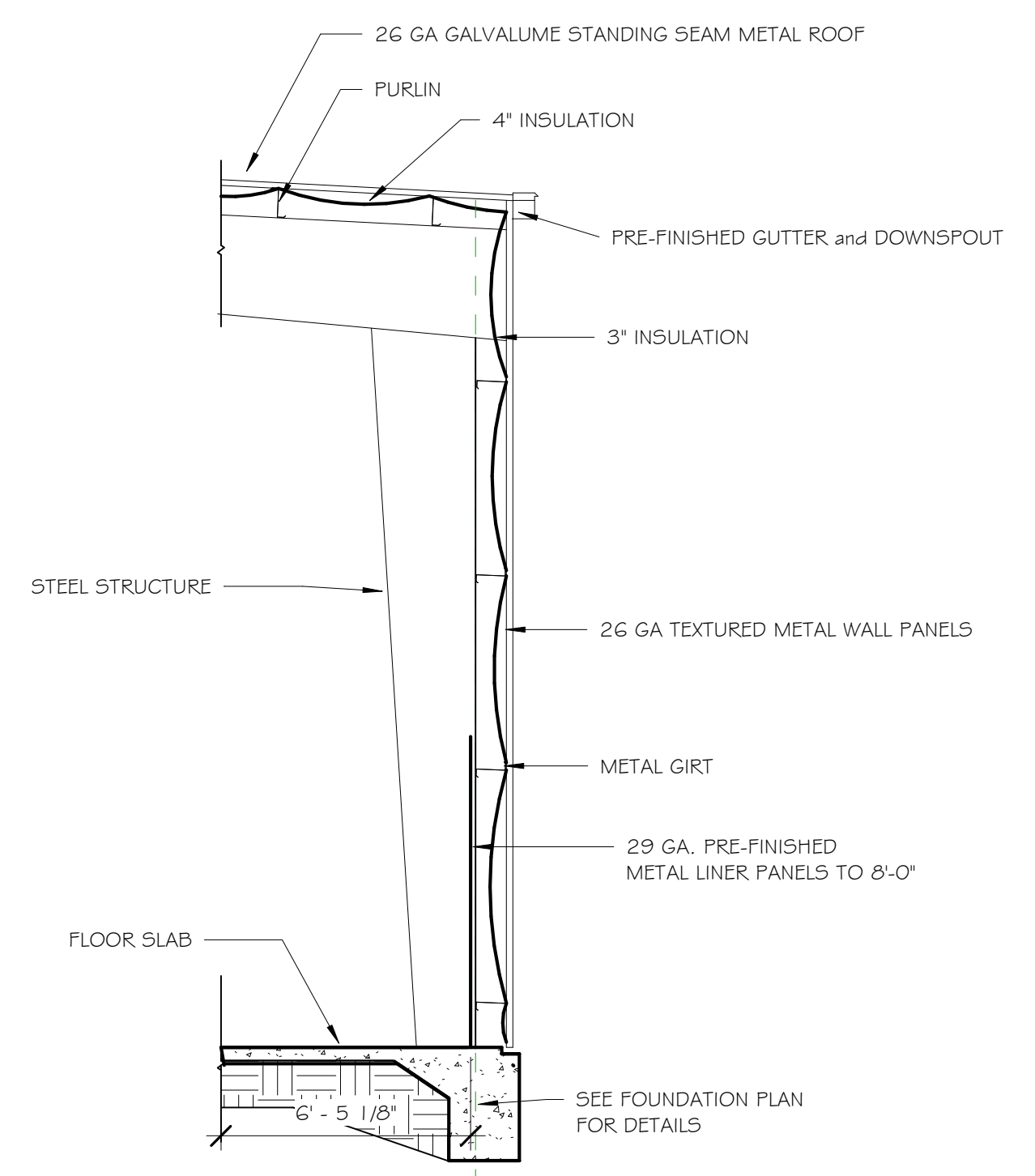
ACOUSTICAL CEILING TILE (ACT-1)
 MFG - ARMSTRONG OR EQUAL
 MODEL - 1728
 COLOR - SQUARE EDGE 24" X 24",
 WHITE, 1 1/2" GRID, WHITE

VINYL COMPOSITE TILE (VCT)
 MFG - PRICE MID RANGE
 SIZE - 12X12
 COLOR - TBD

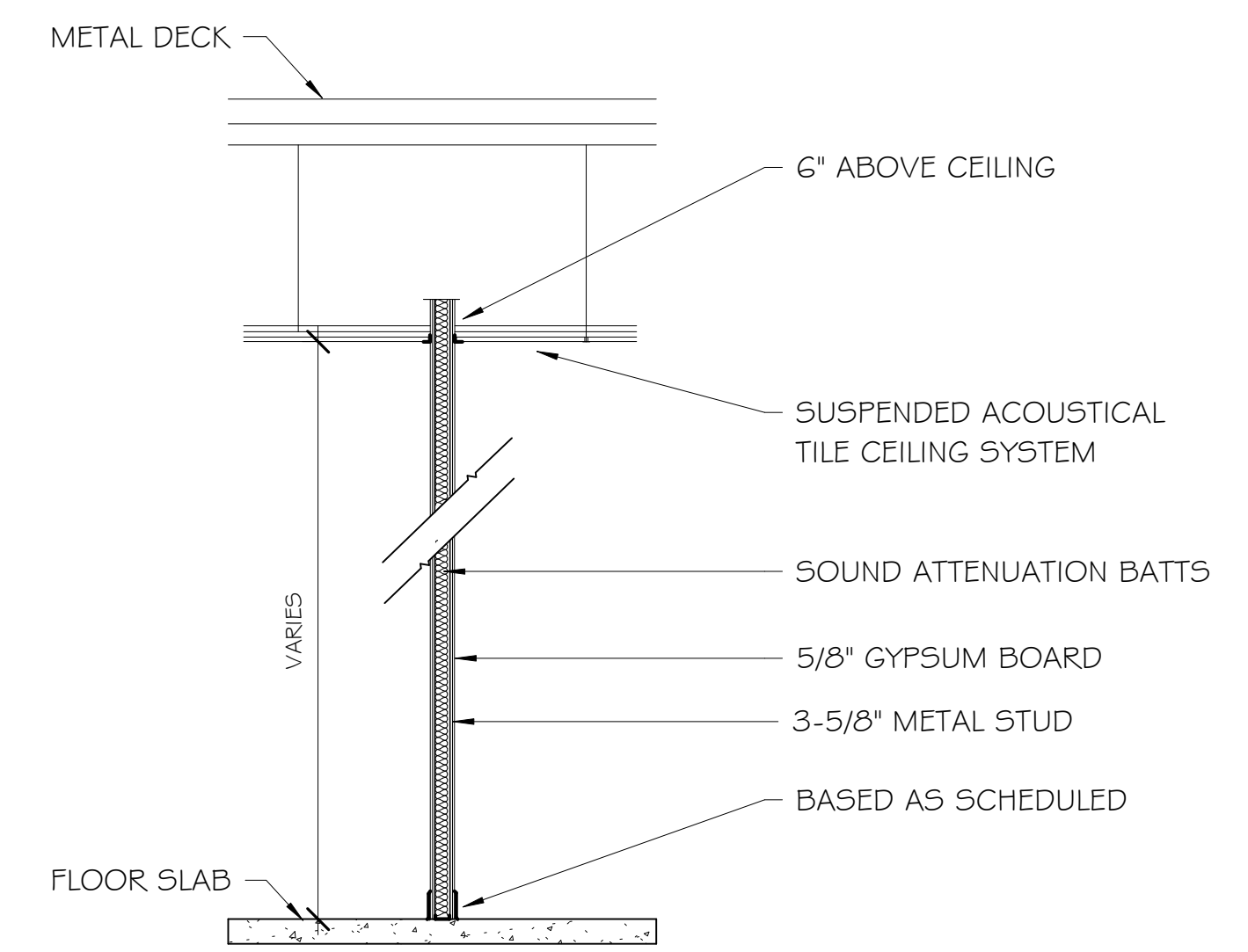
SEALED CONCRETE (SC)

1 FINISH LEGEND
 1/4" = 1'-0"

DOOR SCHEDULE							
Mark	Width	Height	DOOR TYPE	Thickness	Frame Type	Finish	Comments
101	18' - 0"	16' - 0"	D7	2"	STEEL	PAINT	
102	14' - 0"	16' - 0"	D7	2"	STEEL	PAINT	
109	4' - 0"	7' - 0"		1 3/4"			
110	0' - 0"	0' - 0"					
112	3' - 0"	7' - 0"		1 3/4"			
113	3' - 0"	7' - 0"		1 3/4"			
114	3' - 0"	7' - 0"		1 3/4"			
117	3' - 0"	7' - 0"		1 3/4"			
118	14' - 0"	14' - 0"		2"			
121	4' - 0"	7' - 0"		1 3/4"			
122	4' - 0"	7' - 0"		1 3/4"			
123	12' - 0"	10' - 0"		2"			
124	12' - 0"	10' - 0"		2"			
132	12' - 0"	10' - 0"		2"			
133	12' - 0"	10' - 0"		2"			
134	12' - 0"	10' - 0"		2"			
135	12' - 0"	10' - 0"		2"			
136	14' - 0"	14' - 0"	D7	2"	STEEL	PAINT	
137	10' - 0"	10' - 0"		2"			
138	10' - 0"	10' - 0"		2"			
139	12' - 0"	8' - 0"		3"			
140	12' - 0"	8' - 0"		3"			
141	4' - 0"	7' - 0"		1 3/4"			

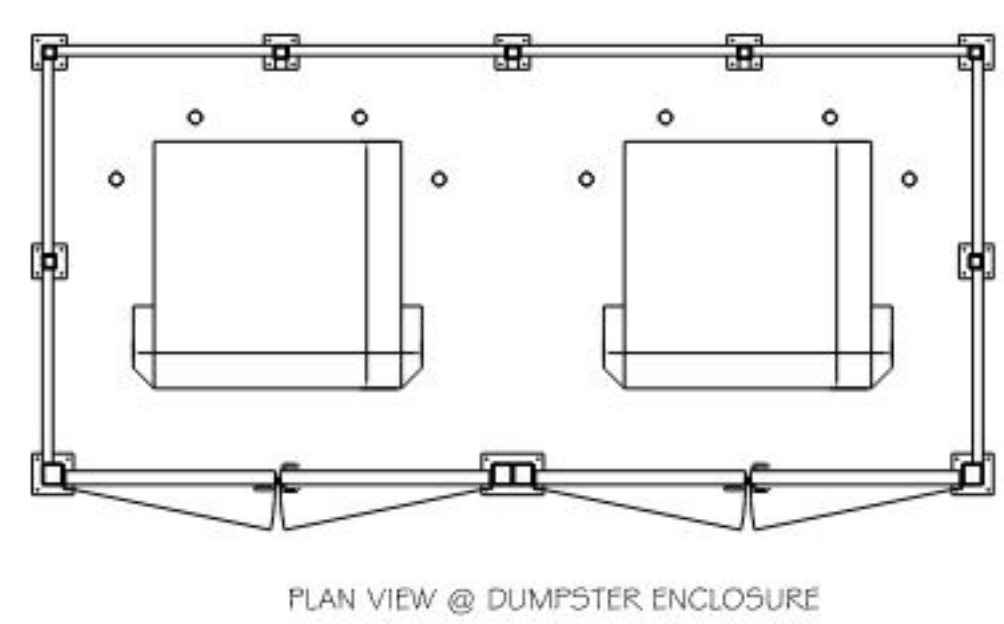


2 Typical Warehouse Exterior Wall
 1/4" = 1'-0"

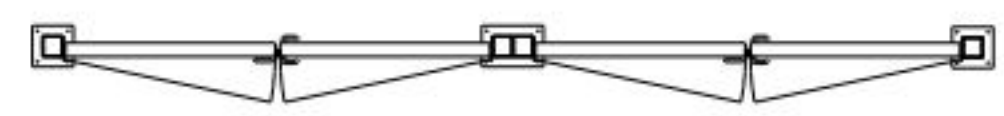


3 TYPICAL INTERIOR WALL PARTITION
 1/4" = 1'-0"

FINISH SCHEDULE						
ROOM NUMBER	ROOM NAME	FLOOR FINISH	WALL FINISH	BASE FINISH	CEILING FINISH	CEILING HEIGHT
100	SERVICE	SC	LINER PANEL	NONE	EXPOSED	EXPOSED
101	DRY STORAGE	SC	LINER PANEL	NONE	EXPOSED	EXPOSED
102	MENS	VCT	PAINT	VCT	ACT	9' - 0"
103	BREAK ROOM	VCT	PAINT	VCT	ACT	9' - 0"
104	PARTS	SC	LINER PANEL	NONE	EXPOSED	EXPOSED
105	WOMENS	VCT	PAINT	VCT	ACT	9' - 0"
106	JAN/ELEC	VCT	PAINT	VCT	ACT	9' - 0"
107	DETAIL	SC	LINER PANEL	NONE	EXPOSED	9' - 0"
108	HALL	SC	PAINT	RB	ACT	9' - 0"
109	MEZZANINE ABOVE	SC	LINER PANEL	NONE	EXPOSED	EXPOSED



PLAN VIEW @ DUMPSTER ENCLOSURE



GATE ELEVATION VIEW



TYPICAL GATE SECTION

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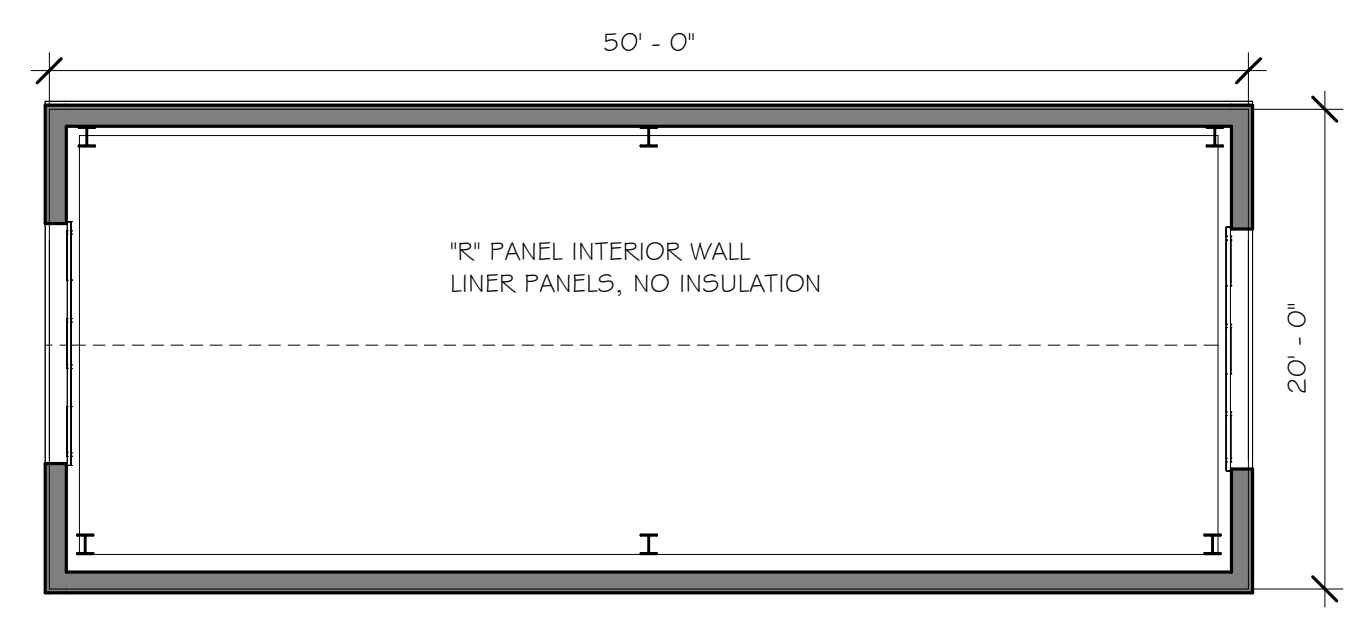
NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

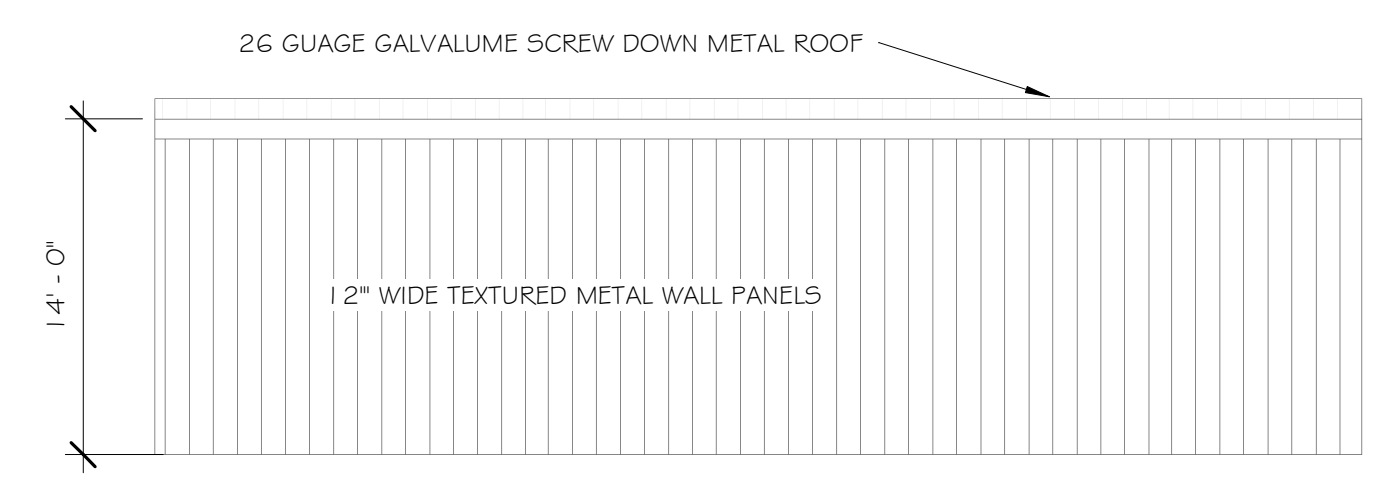
Date 3/1/2024
 Drawn By AGR
 Checked By Checker

Sheet Number
A-3
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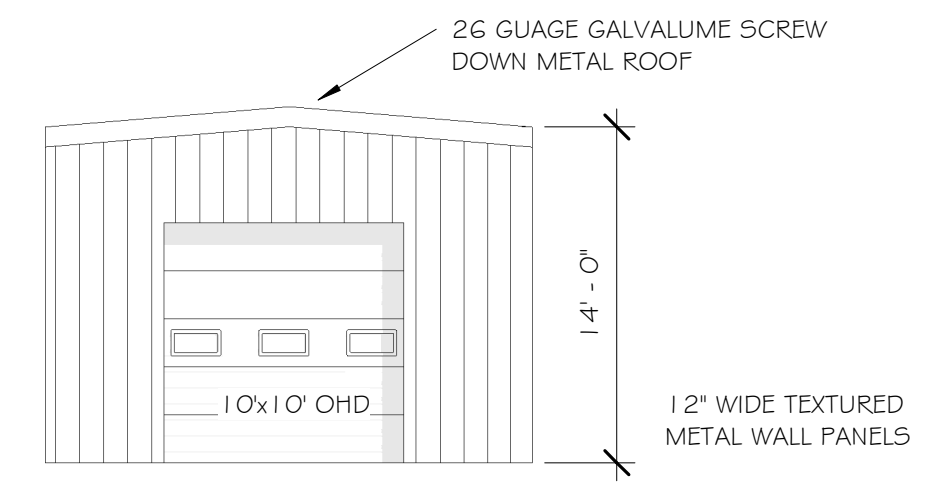
100% SALES DRAWINGS



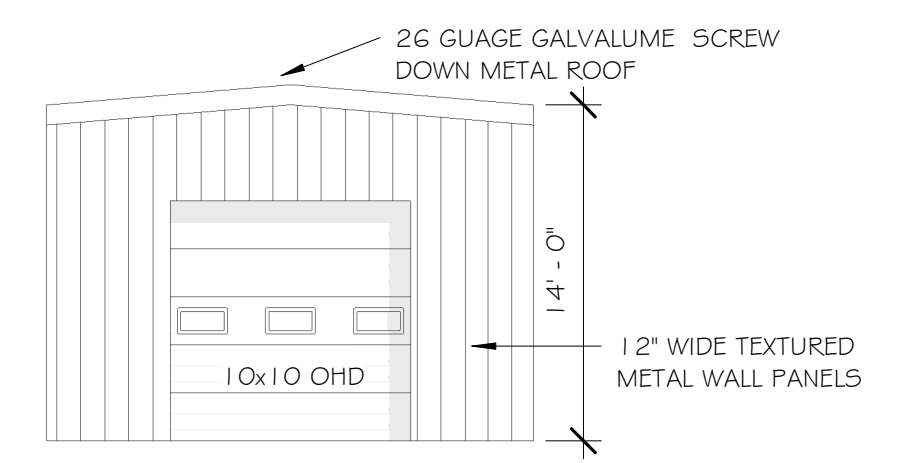
1 WASH BAY FLOOR PLAN
 1/8" = 1'-0"



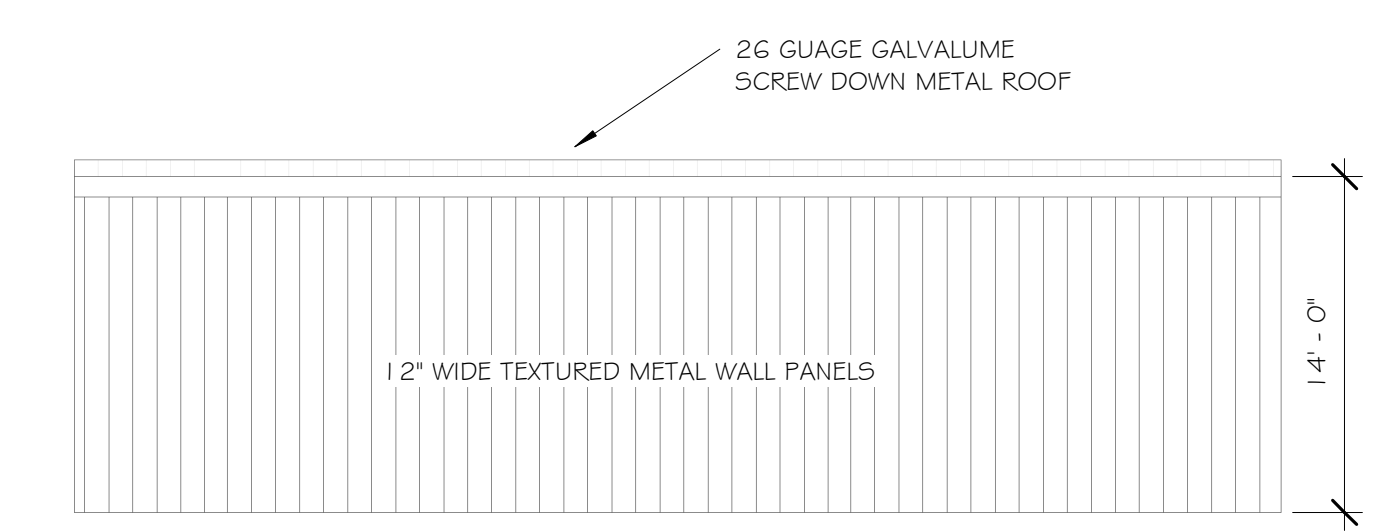
2 WASHBAY Elevation 5-A
 1/8" = 1'-0"



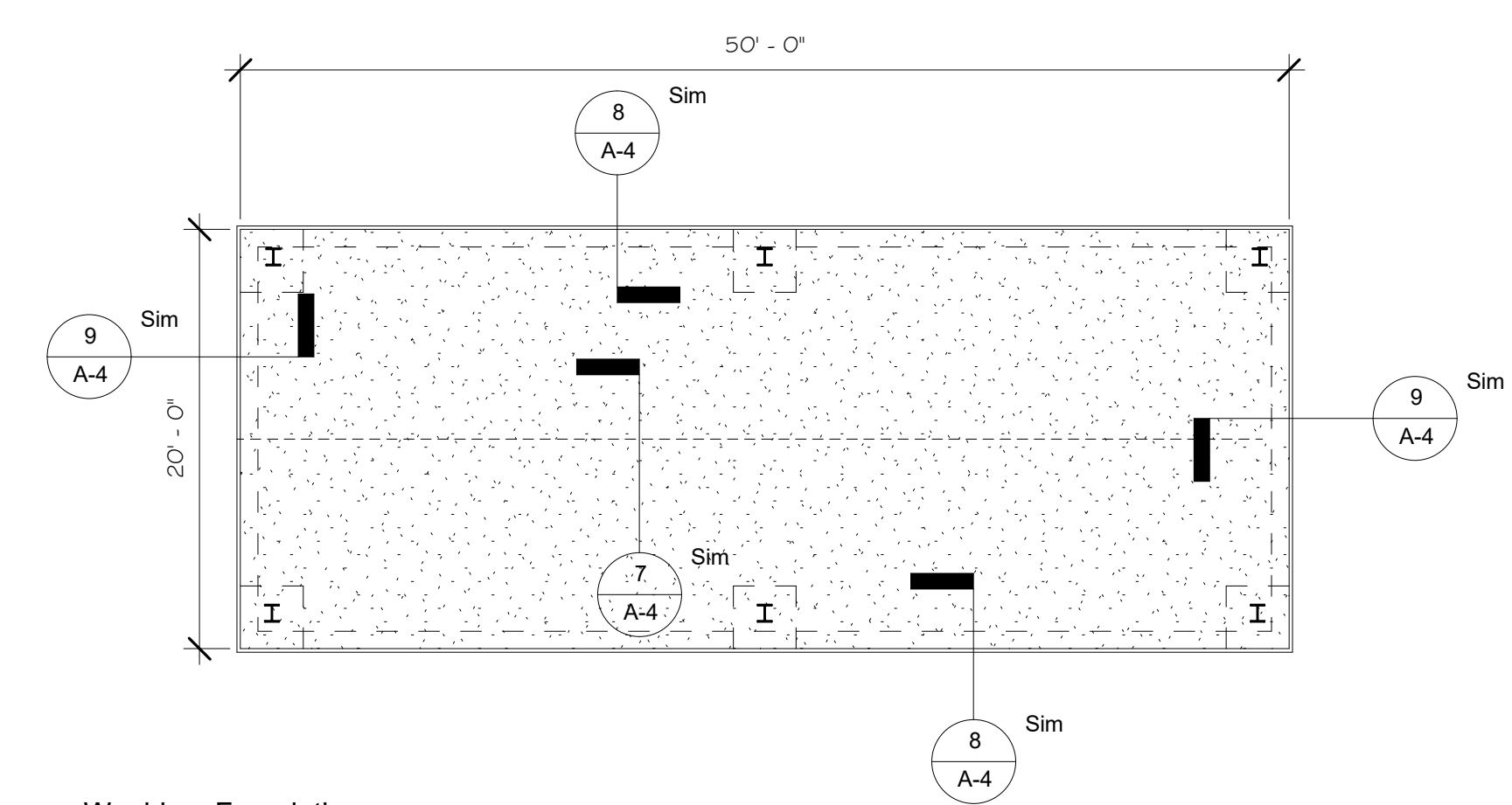
3 WASHBAY Elevation 6-A
 1/8" = 1'-0"



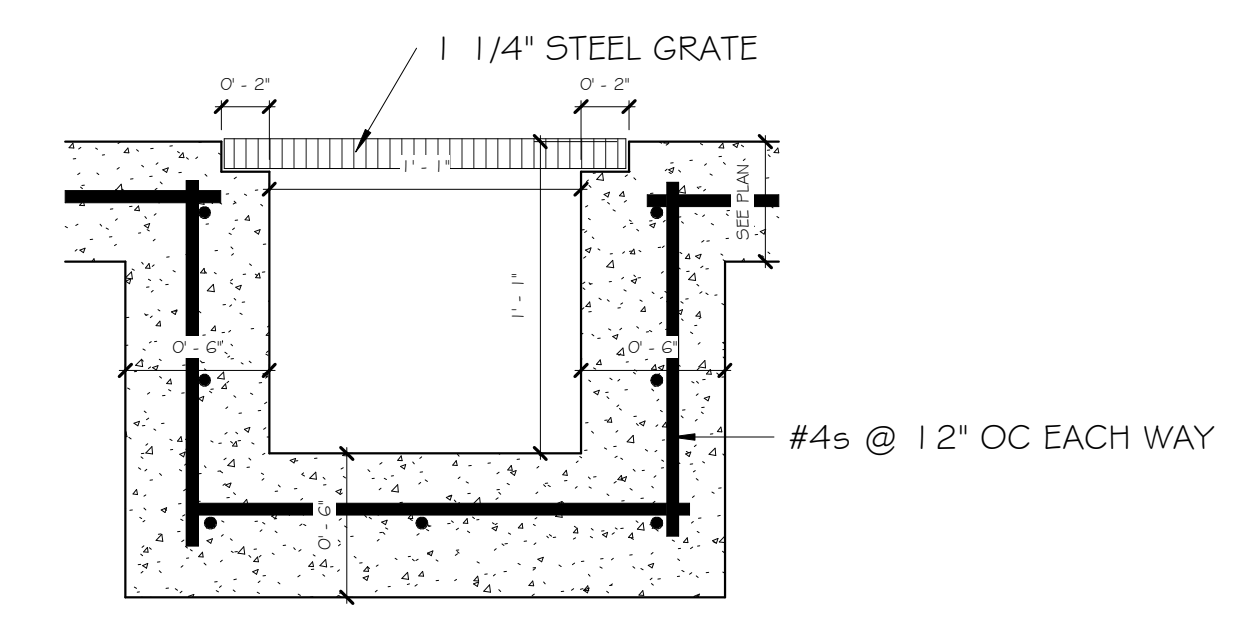
4 WASHBAY Elevation 7-A
 1/8" = 1'-0"



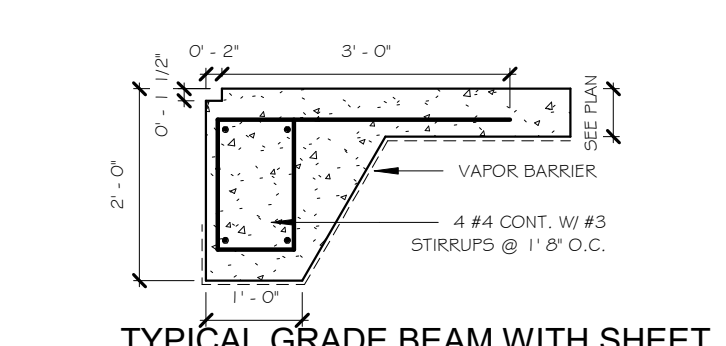
5 WASHBAY Elevation 8-A
 1/8" = 1'-0"



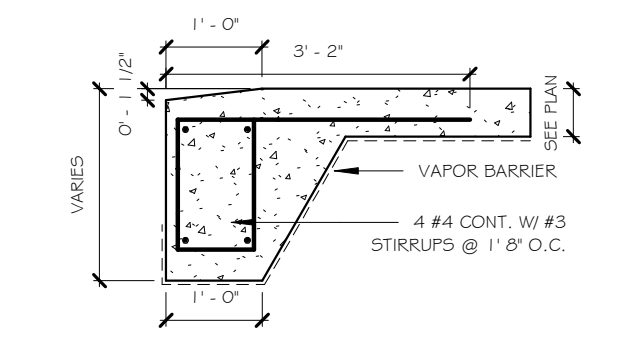
6 Washbay Foundation
 1/8" = 1'-0"



7 TRENCH DRAIN DETAIL
 1 1/2" = 1'-0"



8 TYPICAL GRADE BEAM WITH SHEET NOTCH DETAIL 2
 1/2" = 1'-0"



9 TYPICAL GRADE BEAM AT OHD DETAIL 2
 1/2" = 1'-0"

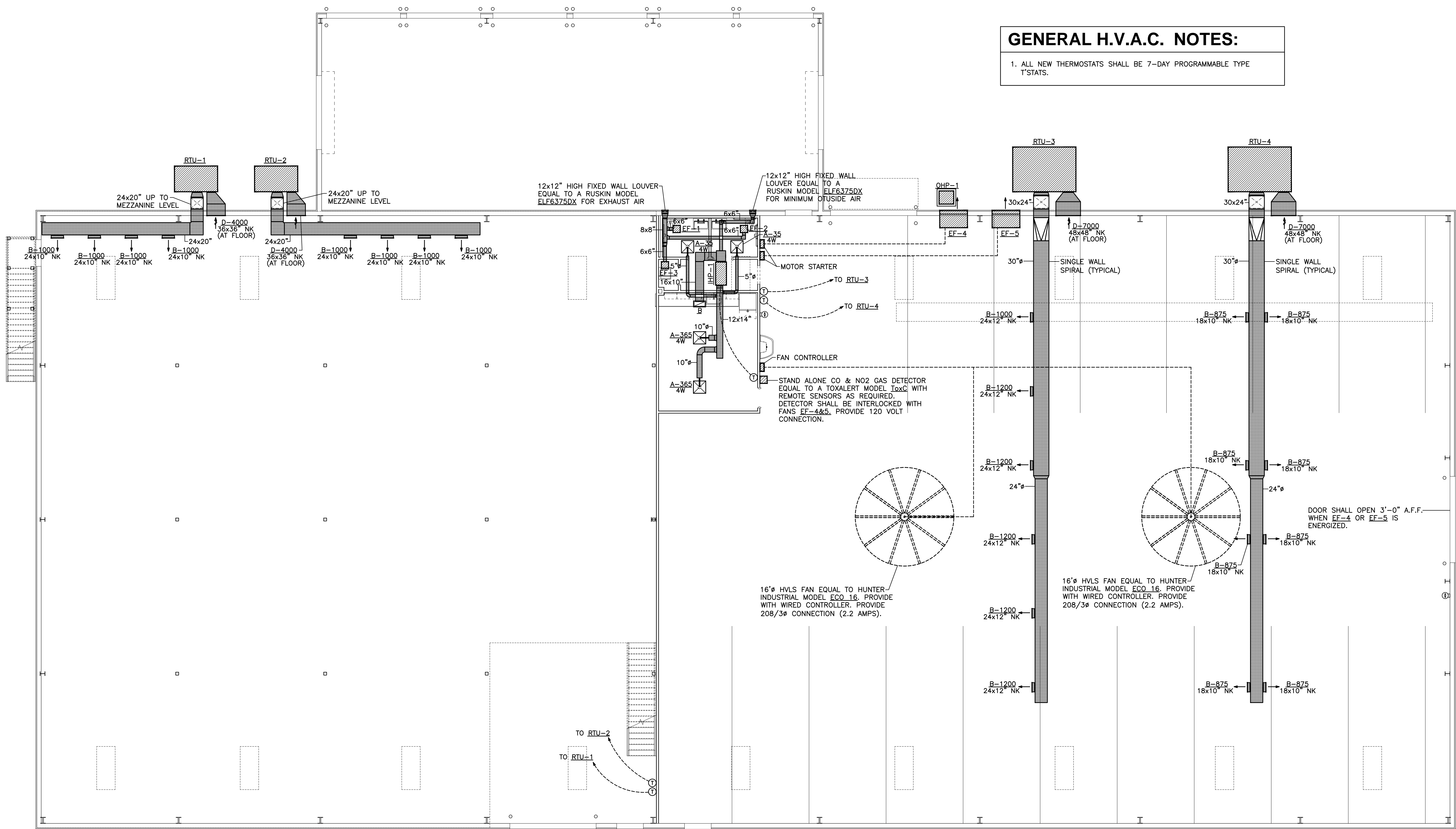


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GLUCKSTADT, MS

Date: 2/23/2024
Drawn By: DVM
Checked By: SCW
Sheet Number: **M-1**
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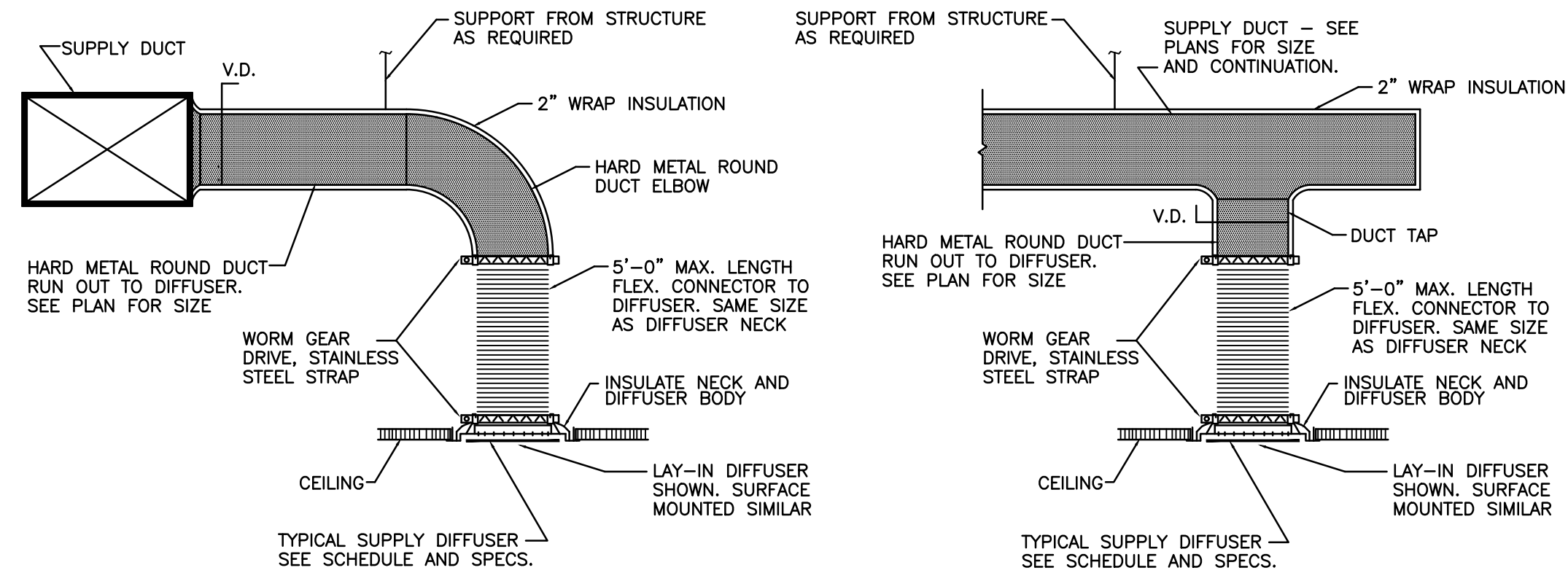
GENERAL H.V.A.C. NOTES:
1. ALL NEW THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE T'STATS.



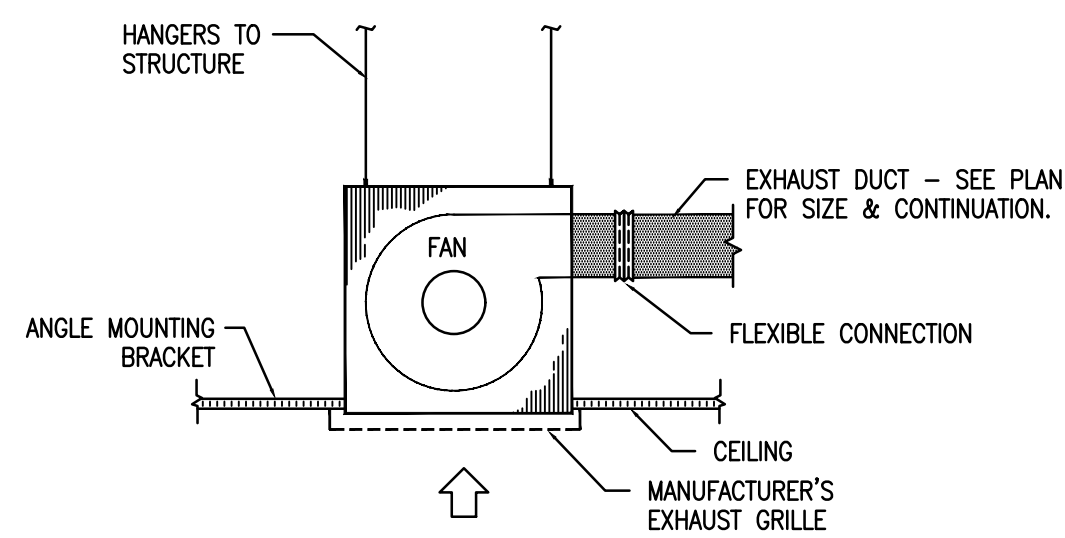
FLOOR PLAN - H.V.A.C.
SCALE: 1/8"=1'-0"
NORTH



SCWA# 24-022
Scott C. Woods and Associates
SCWA Mechanical Engineers
112 Lone Wolf Dr., Madison, Ms 39110
Ph. (601)859-9864/Fax (601)859-2564/Email www.scweng.com

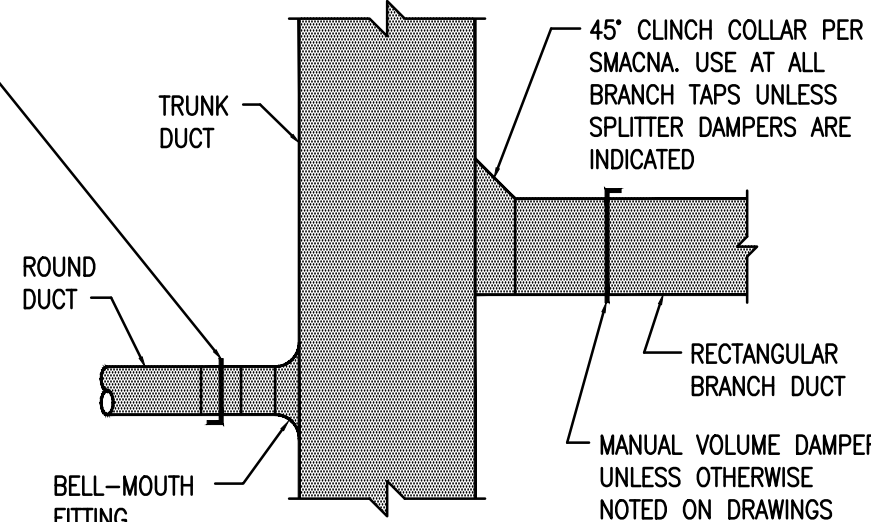


TYPICAL DIFFUSER MOUNTING
N.T.S.



CEILING MOUNTED EXHAUST FAN DETAIL
N.T.S.

NOTE:
DAMPERS SHALL BE PROVIDED IN ALL BRANCH RUN-OUTS TO DIFFUSERS, GRILLES AND REGISTERS UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS. DAMPERS ABOVE INACCESSIBLE CLG. SHALL BE COORDINATED WITH ACCESS DOORS. IF DAMPERS OCCUR IN AREAS NOT ACCESSIBLE FROM ACCESS DOORS PROVIDE OPERATOR ROD AND CLG. REGULATOR WITH GASKET AND SEALED CEILING PENETRATION.
PROVIDE MANUAL OPPOSED BLADE VOLUME DAMPER IN BRANCH LINE UNLESS OTHERWISE NOTED ON DRAWINGS. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATION NEAR TRUNK DUCT AND MINIMUM OF 5'-0" FROM ANY AIR INLET OR OUTLET DEVICE.
COORDINATE WITH ACCESS DOORS IN NON-ACCESSIBLE CLGS.



BRANCH DUCT TAP DETAIL
N.T.S.

GENERAL NOTES:

- A. INSTALLATION
 1. ALL PIPING OR DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILINGS.
 2. THERMOSTATS SHALL BE LOCATED 5'-0" ABOVE FLOOR AND SHALL CLEAR ALL EQUIPMENT. THERMOSTATS LOCATED NEXT TO DOORS SHALL BE LOCATED ON LATCH SIDE OF DOOR.
 3. COORDINATE DIFFUSER, GRILLE, AND REGISTER LOCATIONS WITH REFLECTED CEILING PLAN.
 4. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COORDINATION OF WORK OF ALL TRADES TO ASSURE PROPER INSTALLATION AND CLEARANCES. DRAWINGS ARE ESSENTIALLY DIAGRAMMATICAL AND THEREFORE CONTRACTOR SHOULD PLAN EXACT ROUTING OF DUCT AND PIPE BASED ON FIELD CONDITIONS. PROVIDE ADDITIONAL TRANSITIONS AND OFFSETS AS NECESSARY (AT NO ADDITIONAL COST TO OWNER) TO COMPLETE INSTALLATION AND MAINTAIN REQUIRED CEILING HEIGHTS.
 5. ACCESS PANELS IN DUCTWORK AND NON-ACCESSIBLE CEILINGS SHALL BE PROVIDED FOR OPERATION AND MAINTENANCE OF ALL BOXES, COILS, VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. PROVIDE MINIMUM 24" X 24" CEILING ACCESS PANEL FOR VAV BOXES AND 12" X 12" FOR DAMPERS. COORDINATE EXACT PLACEMENT OF ACCESS PANELS AND EQUIPMENT SO THAT REASONABLE MAINTENANCE SPACE IS AVAILABLE.
 6. CONTRACTOR SHALL COORDINATE ALL OPENINGS IN ROOF TO CONFORM WITH DIMENSIONS OF EQUIPMENT PURCHASED. DUCTS THROUGH ROOF TO FANS AND HVAC EQUIPMENT SHALL BE TRANSITIONED TO COORDINATE WITH EQUIPMENT CONNECTION SIZES AND ROOF OPENING REQUIREMENTS.
 7. INSTALLATION OF ALL EQUIPMENT AND SYSTEMS SHALL BE IN ACCORDANCE WITH STANDARD DETAILS, SECTIONS, AND ELEVATIONS SHOWN ON THE DRAWINGS.
 8. CONTRACTOR SHALL MAINTAIN A CLEAR SERVICE AREA AROUND ALL EQUIPMENT FOR MAINTENANCE SUCH AS, FILTER REMOVAL, MOTOR AND DRIVE ADJUSTMENTS, COIL AND TUBE CLEANING OR REMOVAL.
 9. ALL CONSTRUCTION SHALL BE PER DETAILS AND SPECIFICATIONS OF CONTRACT DOCUMENTS.
- B. DUCTWORK
 1. ALL DUCT RUNOUTS TO DIFFUSERS, RETURN AIR GRILLES AND EXHAUST GRILLES SHALL BE COMPLETE WITH VOLUME DAMPERS UNLESS NOTED OTHERWISE. DAMPERS MAY BE OMITTED IN DUCT RUNOUTS FROM BOXES SERVING SINGLE DIFFUSER. LOCATE DAMPERS SO THEY ARE ACCESSIBLE FROM LAY-IN CEILING OR ACCESS DOORS.
 2. ROUND SUPPLY RUNOUTS TO DIFFUSERS SHALL BE HARD METAL TO WITHIN 5'-0" DEVELOPED LENGTH FROM DIFFUSER. MAXIMUM 5'-0" OF FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTION TO DIFFUSER.
 3. DUCT TRANSITIONS SHALL BE PROVIDED AS REQUIRED FROM ALL EQUIPMENT CONNECTS TO DUCT SIZES INDICATED ON DRAWINGS.
 4. PROVIDE EASED INLET RECTANGULAR TO ROUND TAPS AT DUCT TAPS IF ROUND DUCT SIZE IS TOO LARGE FOR BELLMOUTH TAP TO TRUNK DUCT.

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GLUCKSTADT, MS

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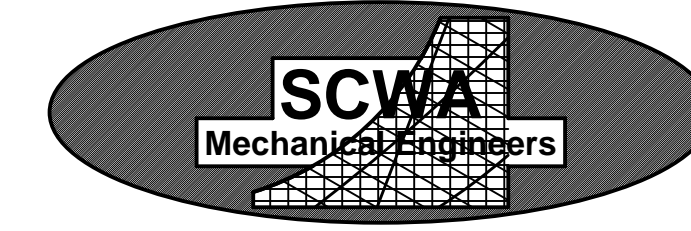
Sheet Number

M-2

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SCWA# 24-022
Scott C. Woods and Associates



112 Lone Wolf Dr./Madison, Ms 39110
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Sheet Number: **M-3**
 Professional Seal

OUTDOOR HEAT PUMP SCHEDULE															
MARK	MAKE	MODEL	COOLING			HEATING			ELECTRICAL				MIN. CIRCUIT AMPACITY	MAX. FUSE SIZE	REMARKS
			AMBIENT	MBH	SEER	AMBIENT	MBH	COP	COMP. FLA	FAN FLA	VOLTS	PHASE			
OHP-1	TRANE	4TTR4024	95°F	24.0	14.0	47°F	24.0	----	10.1	0.85	208	1	13	20	

INDOOR HEAT PUMP SCHEDULE																				
MARK	MAKE	MODEL	FAN			MOTOR			COOLING-95° AMB.				HEATING-47° AMB.				MCA	MOP	REMARKS	
			TOT CFM	O.A. CFM	E.S.P.	HP	VOLTS	PH.	EAT	TMBH	SMBH	EAT	MBH	AUX. HEAT KW	STEPS	VOLTS				PH.
IHP-1	TRANE	TEM4A24	800	80	.50"	1/3	208	1	80°/67°F	24.0	18.3	75°	24.0	7.2	1	208	1	45	45	PROVIDE W/ 1" FILTER RACK SINGLE POINT POWER CONNECTION

ROOFTOP UNIT SCHEDULE (COOLING ONLY)																					
MARK	MAKE	MODEL	TYPE	COOLING CAPACITY			ELECTRIC		EVAPORATOR FAN				CONDENSER FAN			COMP.		MCA	MOP	REMARKS	
				TMBH	SMBH	ENTERING AIR DB/WB	VOLTS	PHASE	CFM	O.A.	ESP	H.P.	FLA	NO.	VOLTS	FLA	NO.				FLA
RTU-1	TRANE	TSJ120	HORIZONTAL	120.0	----	80°/67°F	208	3	4,000	200	.50"	3.0	8.8	1	208	2.8	2	25.8/9.7	54	70	
RTU-2	TRANE	TSJ120	HORIZONTAL	120.0	----	80°/67°F	208	3	4,000	200	.50"	3.0	8.8	1	208	2.8	2	25.8/9.7	54	70	
RTU-3	TRANE	TSJ210	HORIZONTAL	214.0	----	80°/67°F	208	3	7,000	700	.50"	(2)3.0	8.8 EA.	2	208	4.3 EA.	2	35.7/20.2	93	125	
RTU-4	TRANE	TSJ210	HORIZONTAL	214.0	----	80°/67°F	208	3	7,000	700	.50"	(2)3.0	8.8 EA.	2	208	4.3 EA.	2	35.7/20.2	93	125	

FAN SCHEDULE															
MARK	MAKE	MODEL	TYPE	CFM	RPM	ESP	WHEEL		DRIVE	SONES	MOTOR			INTERLOCKED W/ CONTROLLED BY	REMARKS
							TYPE	MIN DIA			HP	VOLTS	PHASE		
EF-1	COOK	GC-140	CLG. MTD.	100	1500	.25"	FC	----	DIRECT	3.1	.009	120	1	MOTION SENSOR	A,B,C,D
EF-2	COOK	GC-140	CLG. MTD.	100	1500	.25"	FC	----	DIRECT	3.1	.009	120	1	MOTION SENSOR	A,B,C,D
EF-3	COOK	GC-140	CLG. MTD.	100	1500	.25"	FC	----	DIRECT	3.1	.009	120	1	WALL SWITCH	A,B,C,D
EF-4	COOK	48XMWH	WALL PROP	25,000	526	.125"	PROP	----	BELT	28	3.0	208	3	STARTER	C,E,F
EF-5	COOK	48XMWH	WALL PROP	25,000	526	.125"	PROP	----	BELT	28	3.0	208	3	STARTER	C,E,F

ACCESSORIES: (A) VIBRATION ISOLATORS (B) GRAVITY BACKDRAFT DPR. (C) DISCONNECT (D) SPEED CONTROLLER (E) WALL COLLAR (F) GRAVITY SHUTTER

GRILLE, REGISTER AND DIFFUSER SCHEDULE															
MARK	MAKE	MODEL	TYPE	USE			MTG	PANEL SIZE	NECK SIZE	MAX CFM	MAX PD	DAMPER	FINISH	PATTERN	REMARKS
				S	R	E									
A	TITUS	TDC-AA	LOUVER FACE	X			LAY-IN	24x24"	SEE PLANS	SEE PLANS	.07"	----	WHITE	SEE PLANS	
B	TITUS	300F	DOUBLE DEFLECTION	X			DUCT	MFGR'S STANDARD	SEE PLANS	SEE PLANS	.07"	----	ALUMINUM	FULLY ADJUSTABLE	
C	TITUS	50F	CUBE CORE		X		LAY-IN	24x12"		1200	.05"	----	WHITE	----	
D	TITUS	30F	FIXED BLADE			X	SIDEWALL	MFGR'S STANDARD	SEE PLANS	SEE PLANS	.07"	----	ALUMINUM	0° DEFLECTION	



SCWA# 24-022
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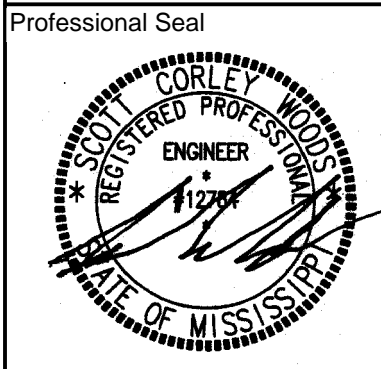
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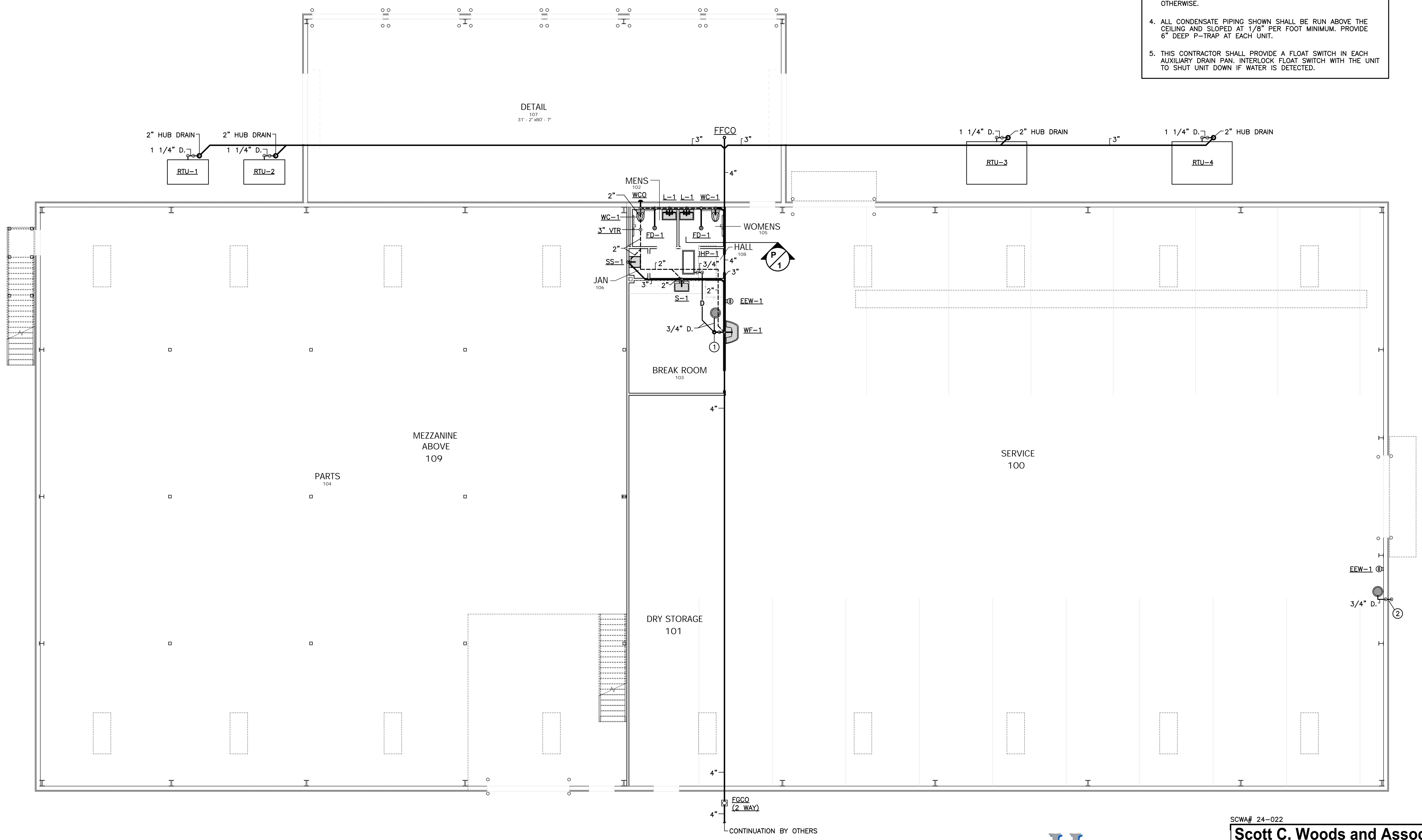


KEYED NOTES

- ① INDICATES 2" DEEP SEAL P-TRAP WITH 2x3" INCREASER AND SURE SEAL ABOVE CEILING.
- ② ROUTE 3/4" DRAIN DOWN WALL AND TURN OUT 4" ABOVE FINISHED GRADE.

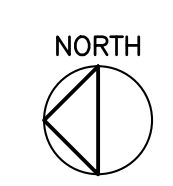
GENERAL PLUMBING NOTES

- 1. THIS CONTRACTOR SHALL COORDINATE SEWER INVERTS WITH CIVIL CONTRACTOR BEFORE INSTALLING PIPE.
- 2. ALL SANITARY SEWER PIPING SHOWN SHALL BE BELOW THE FLOOR AND SLOPED AT 1/8" PER FOOT MINIMUM UNLESS NOTED OTHERWISE.
- 3. ALL VENT PIPING SHALL BE ABOVE THE CEILING UNLESS NOTED OTHERWISE.
- 4. ALL CONDENSATE PIPING SHOWN SHALL BE RUN ABOVE THE CEILING AND SLOPED AT 1/8" PER FOOT MINIMUM. PROVIDE 6" DEEP P-TRAP AT EACH UNIT.
- 5. THIS CONTRACTOR SHALL PROVIDE A FLOAT SWITCH IN EACH AUXILIARY DRAIN PAN. INTERLOCK FLOAT SWITCH WITH THE UNIT TO SHUT UNIT DOWN IF WATER IS DETECTED.



DETAIL
107
31' - 2" x 80' - 7"

FGCO
(2 WAY)
CONTINUATION BY OTHERS



FLOOR PLAN - WASTE AND VENT
SCALE: 1/8"=1'-0"



SCWA# 24-022
Scott C. Woods and Associates
SCWA
Mechanical Engineers
112 Lone Wolf Dr., Madison, Ms 39110
Ph. (601)859-9864/Fax (601)859-2564/Email www.scweng.com



PEOPLES CONSTRUCTION
DESIGN - BUILD GENERAL CONTRACTORS
3913 Underwood Drive || Flowood, MS 39232
Office: 601-932-1111 || Fax: 601-932-1112
www.peoplesconstruction.com

Project Title
NEW SERVICE BUILDING FOR MAC HAIK
GLUCKSTADT, MS

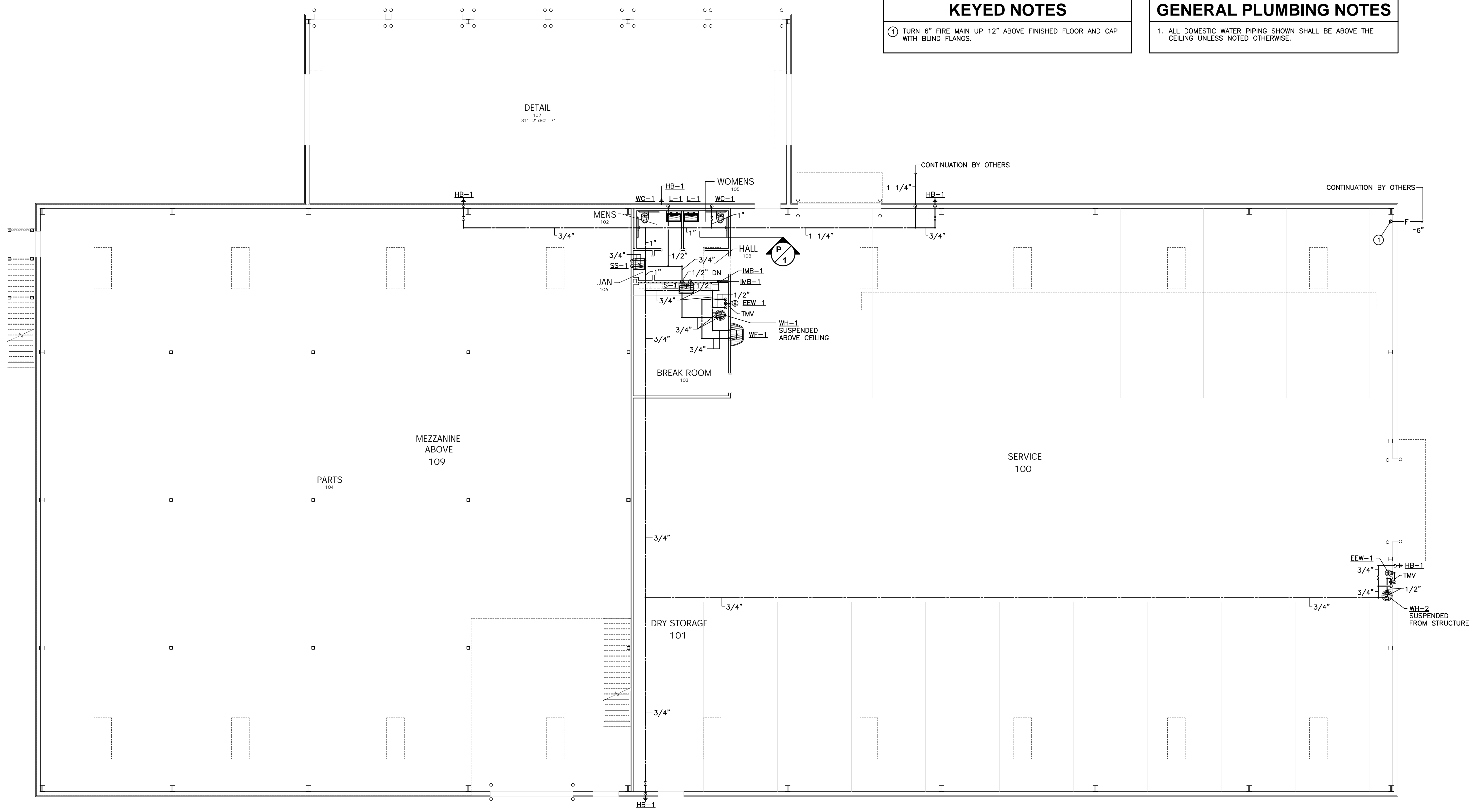
Date 2/23/2024
Drawn By DVM
Checked By SCW

Sheet Number
P-2
Professional Seal

KEYED NOTES
① TURN 6" FIRE MAIN UP 12" ABOVE FINISHED FLOOR AND CAP WITH BLIND FLANGES.

GENERAL PLUMBING NOTES
1. ALL DOMESTIC WATER PIPING SHOWN SHALL BE ABOVE THE CEILING UNLESS NOTED OTHERWISE.

DETAIL
107
31' - 2" x 80' - 7"

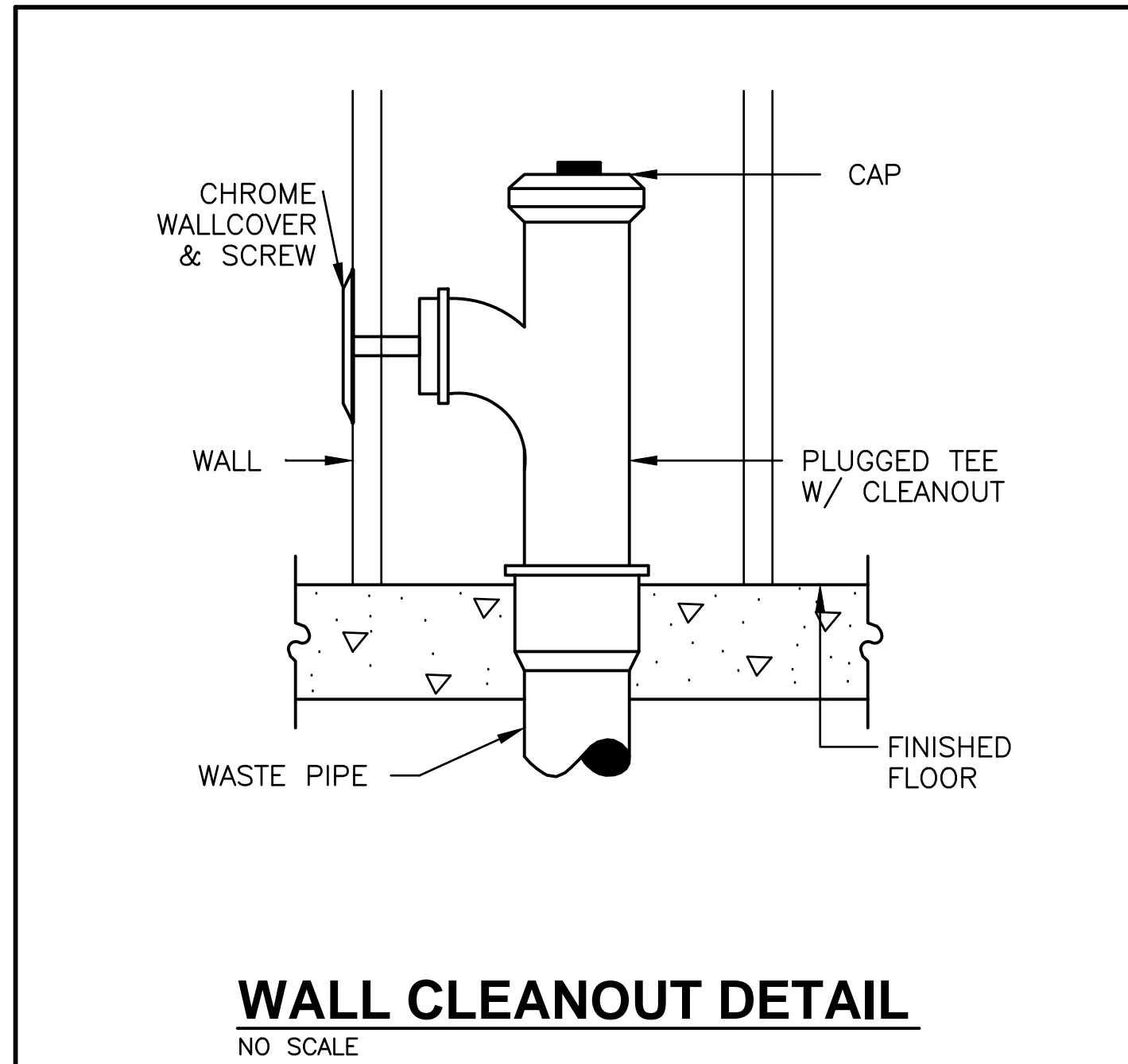


NORTH
FLOOR PLAN - DOMESTIC WATER
SCALE: 1/8"=1'-0"

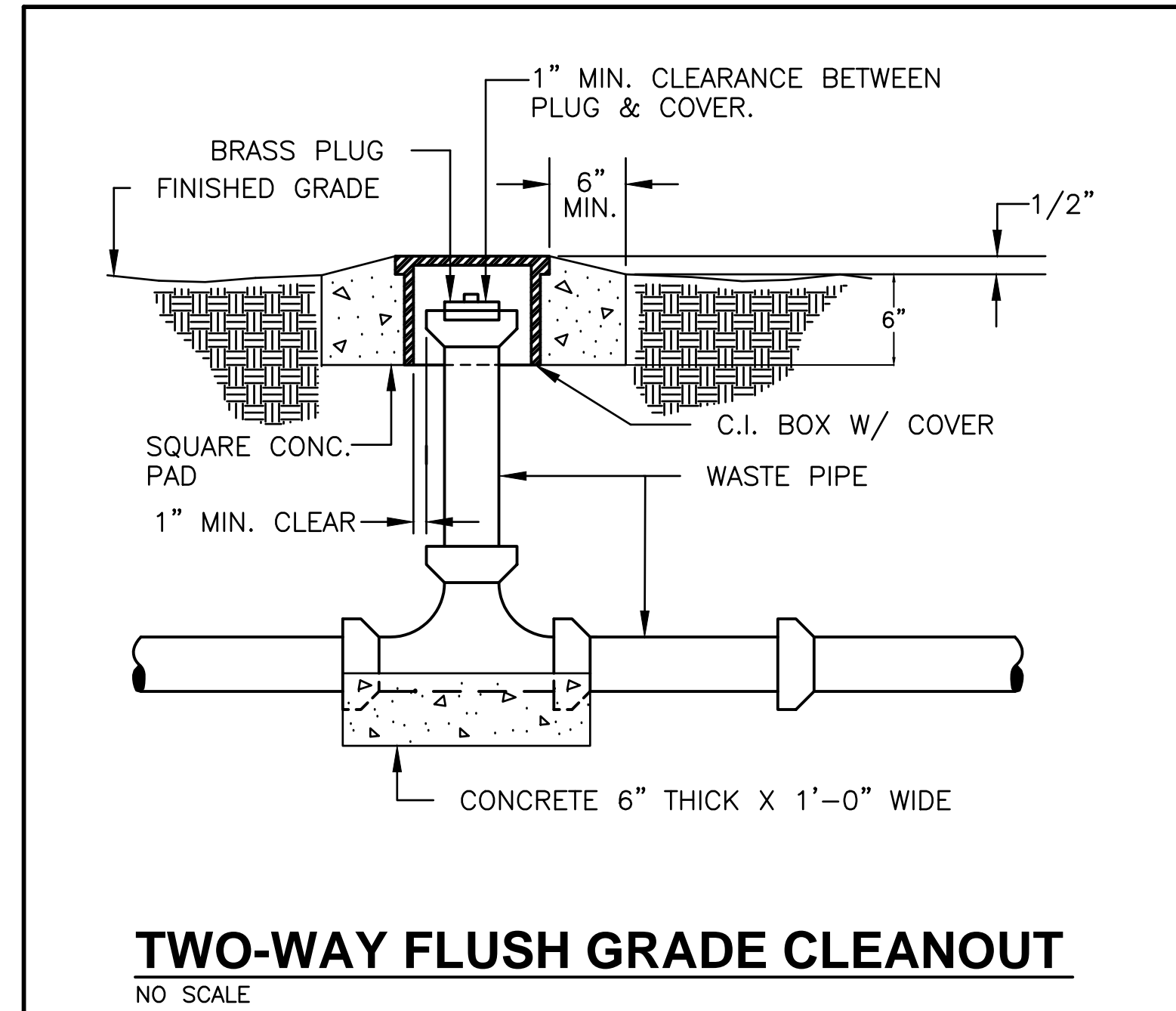


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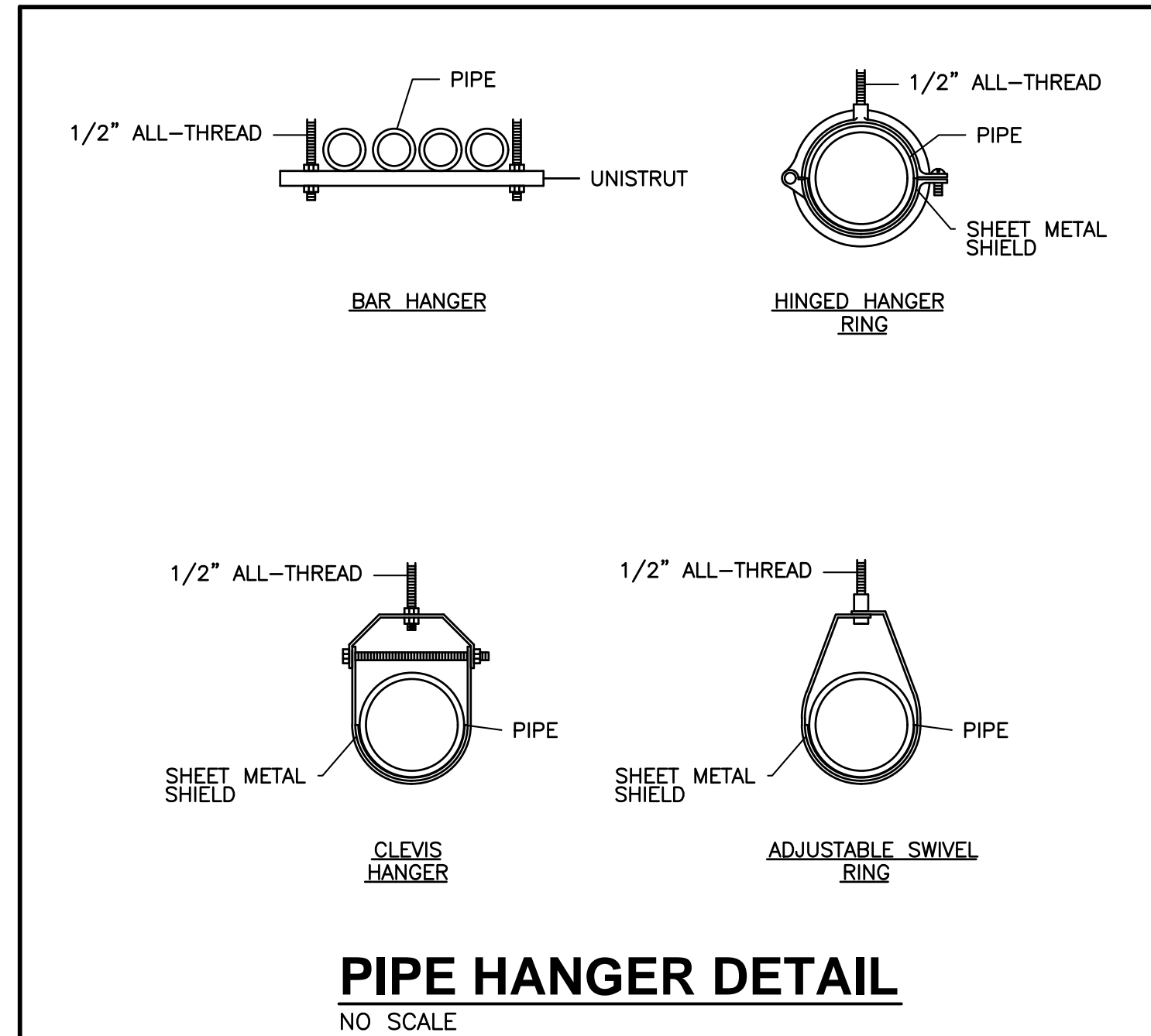
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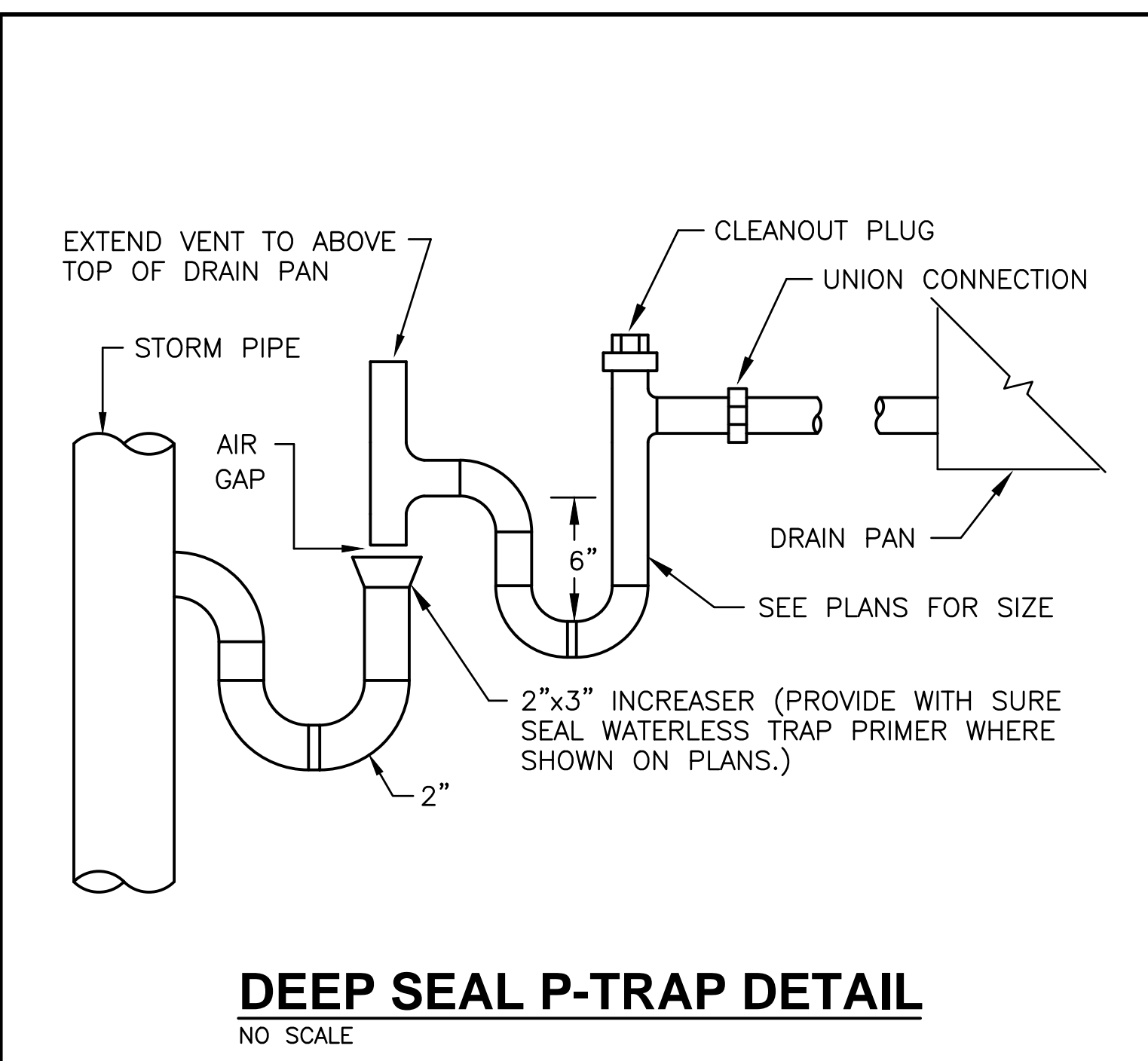
WALL CLEANOUT DETAIL
NO SCALE



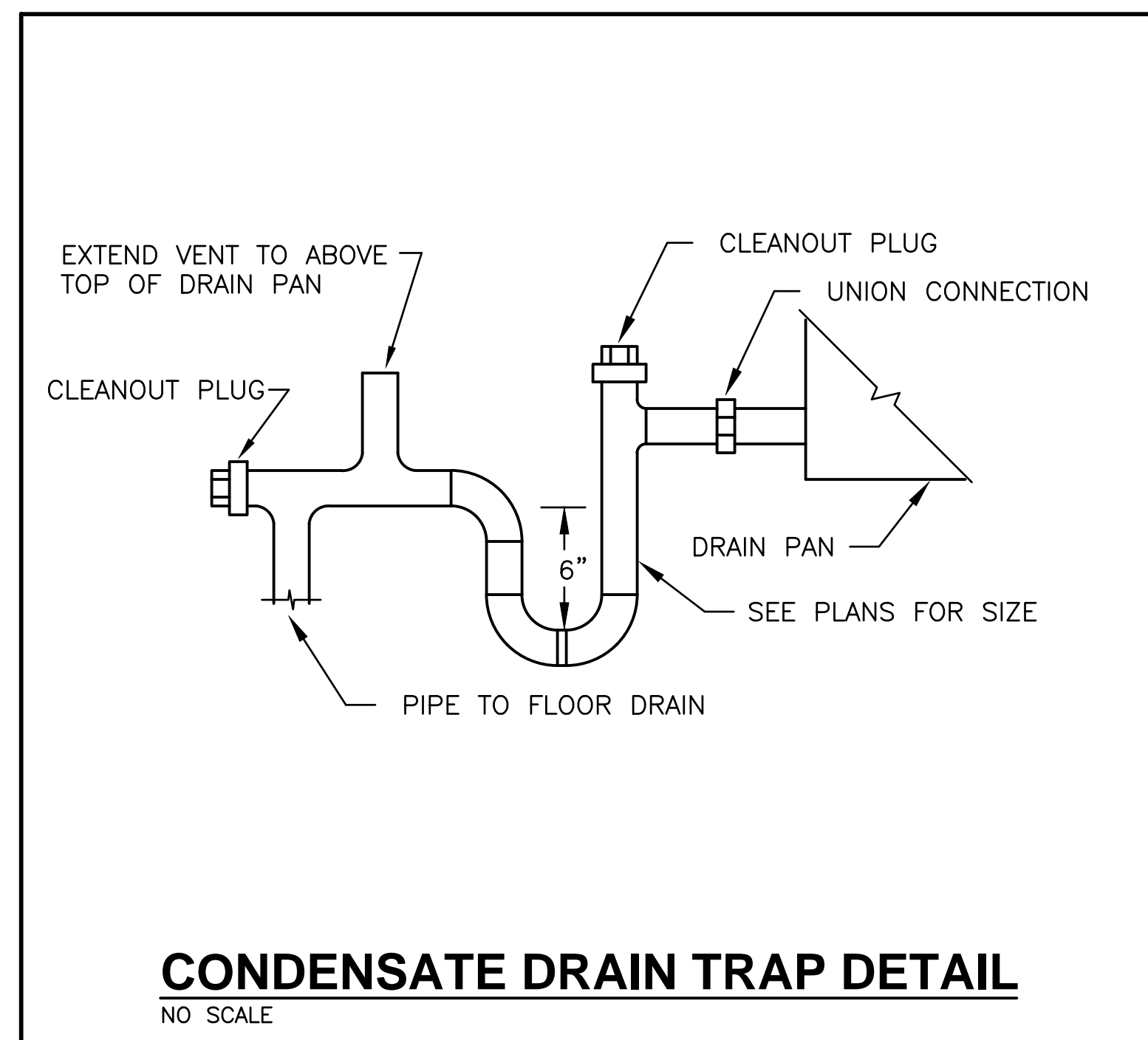
TWO-WAY FLUSH GRADE CLEANOUT
NO SCALE



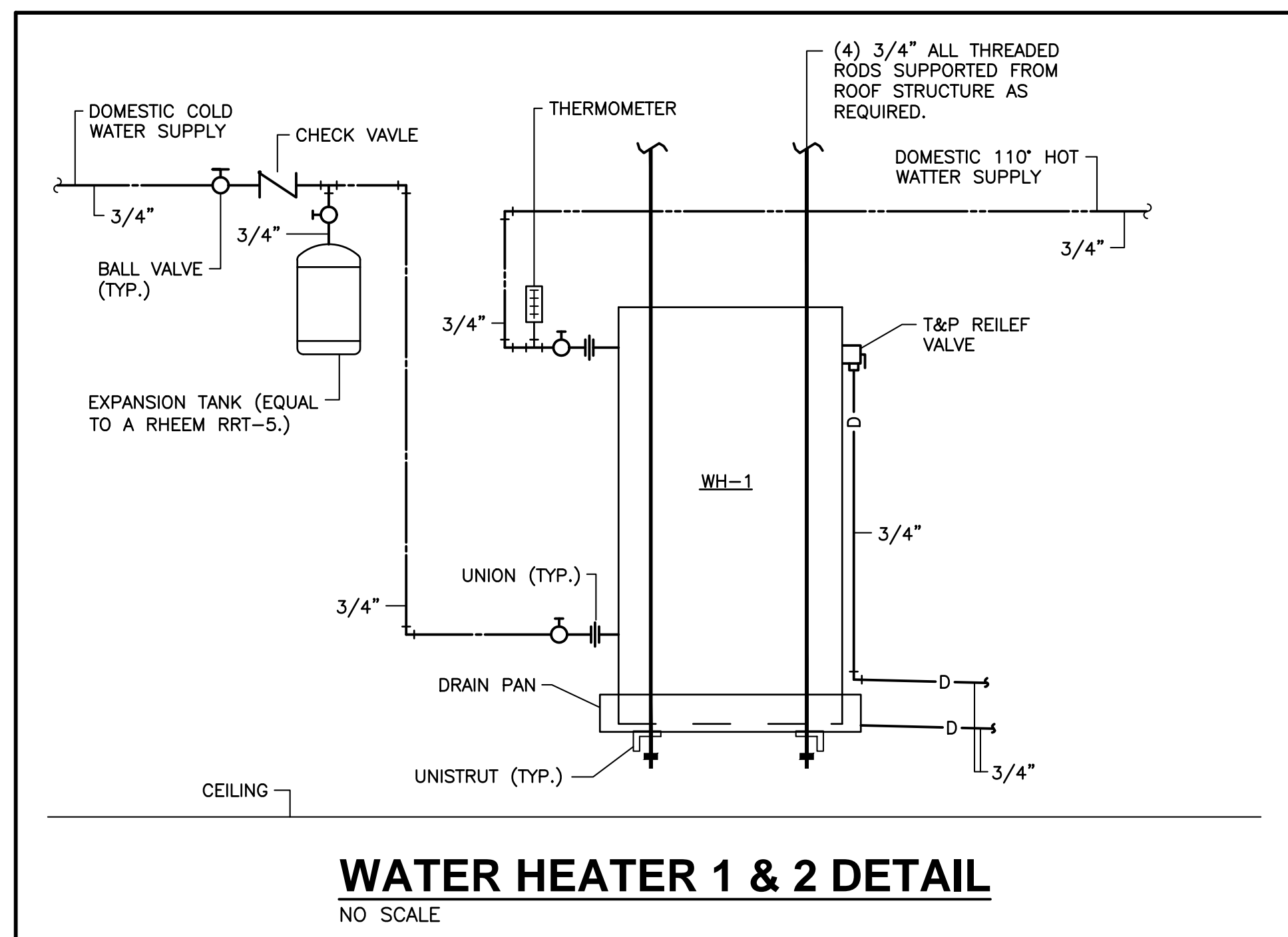
PIPE HANGER DETAIL
NO SCALE



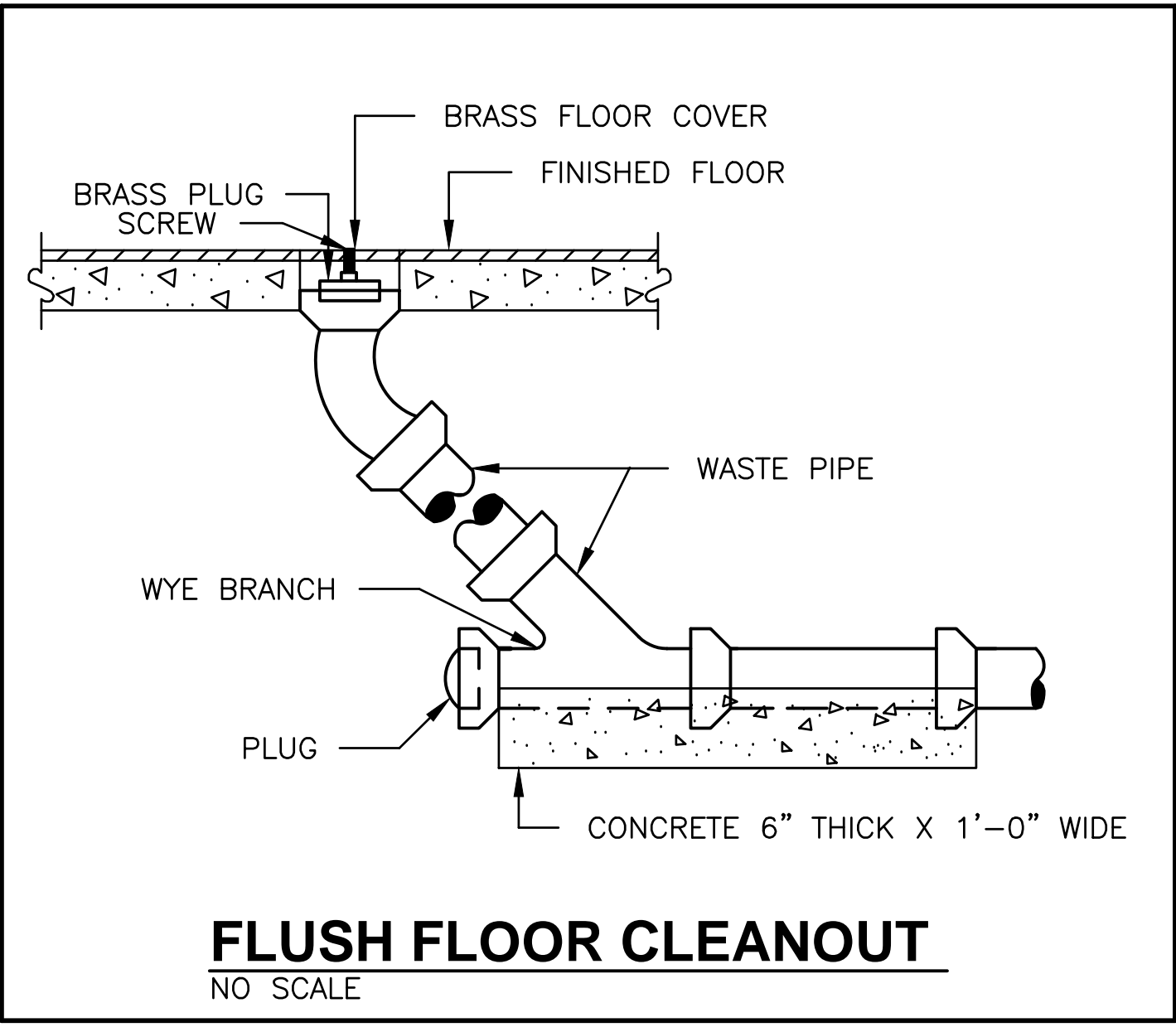
DEEP SEAL P-TRAP DETAIL
NO SCALE



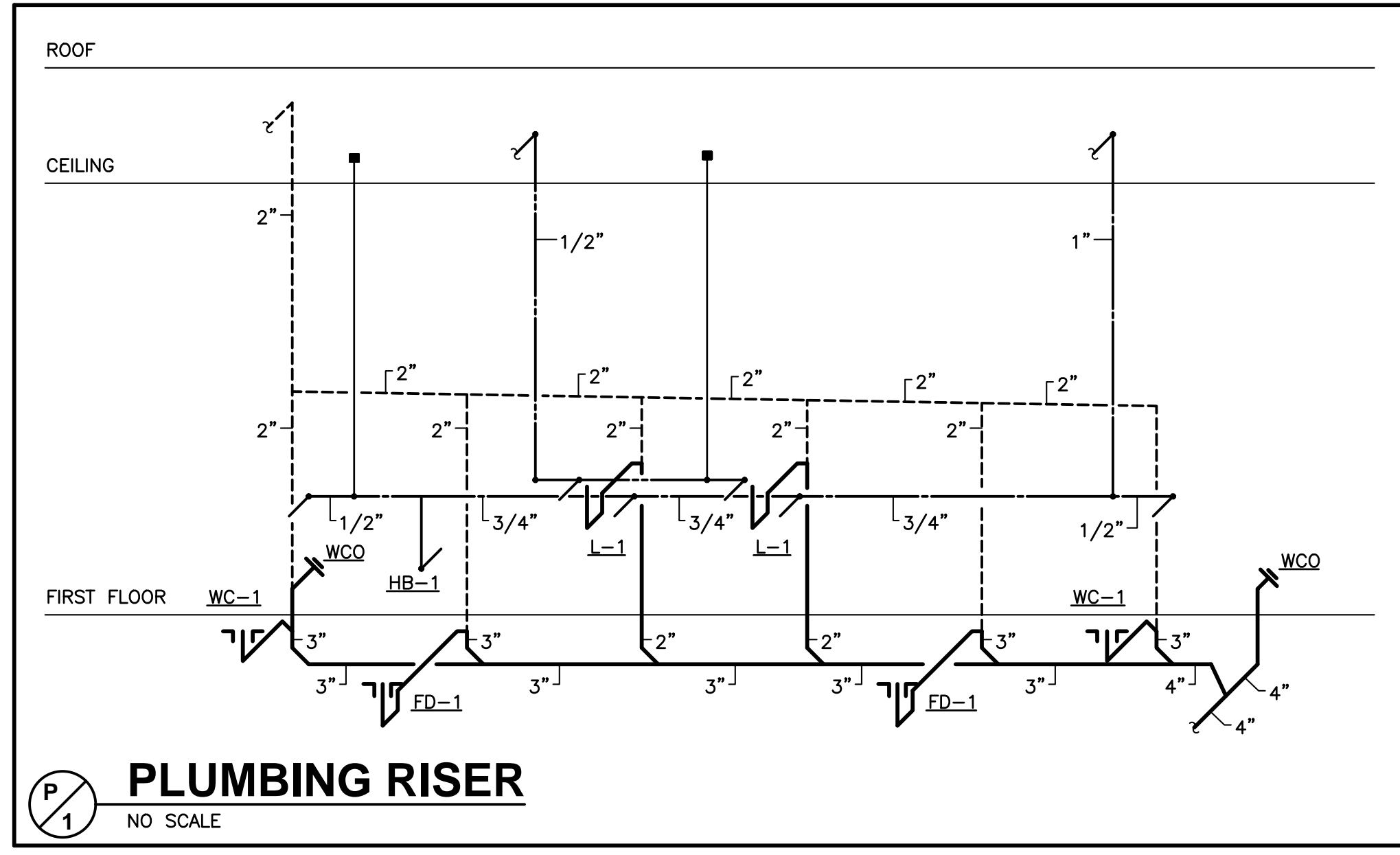
CONDENSATE DRAIN TRAP DETAIL
NO SCALE



WATER HEATER 1 & 2 DETAIL
NO SCALE



FLUSH FLOOR CLEANOUT
NO SCALE



PLUMBING RISER
NO SCALE



SCWA# 24-022
Scott C. Woods and Associates

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NEW SERVICE BUILDING FOR MAC HAIK

Date: 2/23/2024
 Drawn By: DVM
 Checked By: SCW

Sheet Number: **P-3**
 Professional Seal



WATER HEATERS										
MARK	FUEL	STORAGE GALLONS	RECOVERY GPH @ 90' RISE	INPUT M.B.H.	ELEC. DATA			FLUE	MFR. AND MODEL	REMARKS
					SERVICE	BLOWER H.P.	K.W.			
WH-1	ELECTRIC	20	21	---	208V/1PH	---	2@4.5	---	RHEEM PROE20 S2 RH	NON-SIMULTANEOUS ELEMENTS
WH-2	ELECTRIC	20	21	---	208V/1PH	---	2@4.5	---	RHEEM PROE20 S2 RH	NON-SIMULTANEOUS ELEMENTS

STANDARD PLUMBING LEGEND	
DOMESTIC COLD WATER	
DOMESTIC 110° HOT WATER	
SANITARY SEWER PIPING	
VENT PIPING	
GAS PIPING	
CONDENSATE DRAIN LINE	
BALL VALVE	
CHECK VALVE	
UNION	
GAS COCK	
WATER HAMMER ARRESTOR	
VENT THROUGH ROOF	
FLUSH GRADE CLEANOUT	
WALL CLEANOUT	
VTR	
FGCO	
WCO	

PLUMBING FIXTURE SCHEDULE													
MARK	DESCRIPTION	MAKE	MODEL	SUPPLY FITTING	SUPPLY PIPE(S)	DRAIN	TRAP	ROUGH-IN SIZES					REMARKS
								C.W.	H.W.	WASTE	VENT	TRAP	
WC-1	WATER CLOSET, FLOOR MOUNTED, PRESSURE TANK TYPE, A.D.A.	KOHLER	K-3493	---	ZURN ZH8824CR	---	---	1/2"	---	4"	2" or 4"	INT.	W/ BEMIS 1055SSC WHITE SEAT, W/ BOLT CAPS. OPEN FRONT AND FLUSH TO SIDE.
L-1	LAVATORY, WALL HUNG A.D.A., 20"x18"	KOHLER	K-2005	DELTA 22C101	ZURN ZH8824LR	ZURN Z-8746	ZURN Z8710BN	1/2"	1/2"	2"	2"	1 1/4"	COORDINATE ROUGH-IN WITH DRAIN ASSEMBLY. INSULATE DRAIN, P-TRAP AND SUPPLY PIPES WITH TRAP WRAP CS00-RHS. PROVIDE ZURN MODEL ZW1070XL MIXING VALVE.
WF-1	WASHFOUNTAIN, 3 STATION	ACORN	3423-2-S0	---	ZURN ZH8824LR	---	ZURN Z8702BN	3/4"	3/4"	2"	2"	1 1/2"	REQUIRES 120v,1ph RECEPTACLE. SET AT 105' LEAVING WATER TEMPERATURE.
S-1	SINK, STAINLESS STEEL, SINGLE COMPARTMENT 22"x19"x7 1/4"	ELKAY	PSR2219	DELTA 26T2944	ZURN ZH8824LR	ELKAY LK-35	ZURN Z8702BN	1/2"	1/2"	2"	2"	1 1/2"	
SS-1	SERVICE SINK, FLOOR MOUNTED	MUSTEE	17F	MUSTEE 93.600	---	---	KOHLER K-6673	3/4"	3/4"	2"	2"	1 1/2"	WITH VACUUM BREAKER.
IMB-1	ICE MAKER BOX	OATEY	38681	---	---	---	---	1/2"	---	---	---	---	MOUNT BOTTOM AT 12" ABOVE THE FINISHED FLOOR.
FD-1	FLOOR DRAIN POLISHED BRONZE	ZURN	ZB-415-B	---	---	---	---	---	---	3"	2"	3"	WITH SURE SEAL WATERLESS TRAP PRIMER.
EEW-1	EMERGENCY EYE/FACE WASH	ACORN SAFETY	S0420	---	ZURN ZH8824LR	---	ZURN Z8710BN	1/2"	1/2"	2"	2"	1 1/4"	WITH ACORN SAFETY MODEL ET71-1-BVS-OTG THERMOSTATIC MIXING VALVE.
HB-1	HOSE BIBB FREEZE PROOF	ARROWHEAD	38LF	---	---	---	---	3/4"	---	---	---	---	WITH VACUUM BREAKER.

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 www.peoplesconstruction.com

Project Title

NEW SERVICE BUILDING FOR MAC HAIK
 GLUCKSTADT, MS

Date: 2/23/2024
 Drawn By: DVM
 Checked By: SCW

Sheet Number

P-4



SCWA# 24-022
Scott C. Woods and Associates

 112 Lone Wolf Dr./Madison, Ms 39110
 Ph. (601)859-9864/Fax (601)859-2564/Email www.scweng.com

City of Gluckstadt

Application for Site Plan Review

Subject Property Address: TBD by E911. Adjacent Address is 150 Autobahn Loop, Madison, MS 39110

Parcel #: 39110082E-21 -016/19.00

Owner: MH Canton CDJR Realty LTD

Applicant: Peoples Construction

Address: 11757 Katy Freeway #1300
Houston, Tx 77079

Address: 3913 Underwood Drive
Flowood, MS 39232

Phone #: _____

Phone #: 601-932-1111

E-Mail: _____

E-Mail: alex@peoplesconstruction.com

Current Zoning District: C-2

Acreage of Property (If applicable): 4.11 acres

Use sought of Property: Indoor vehicle service / Enclosed warehouse

2024037

208

Requirements of Applicant:

1. Copy of written legal description.
2. Site Plan as required in Sections 807-810 of City of Gluckstadt Zoning Ordinance
3. Color Rendering & Elevations at time of submittal

Requirements for Site Plan Submittal (Refer to Section 807, Gluckstadt Zoning Ordinance)

Nine (9) copies of the site plan shall be prepared and submitted to the Zoning Administrator. Digital copies are acceptable. Three (3) hard copies are required.

Site Plan Specifications (Section 809, Zoning Ordinance)

- A. Lot Lines (property lines)
- B. Zoning of the adjacent lots
- C. The names of owners of adjacent lots
- D. Rights of way existing and proposed streets, including streets shown on the adopted Throughfares plan
- E. Access ways, curb cuts, driveways, and parking, including number of parking spaces to be provided
- F. All existing and proposed easements
- G. All existing and proposed water and sewer lines. Also, the location of all existing and proposed fire hydrants.
- H. Drainage plan showing existing and proposed storm drainage facilities. The drainage plan shall indicate adjacent off site drainage courses and projected storm water flow rates from off-site and on-site sources.

- I. Contours at vertical intervals of five (5) feet or less.
- J. Floodplain designation, according to FEMA Maps.
- K. Landscaped areas and planting screens.
- L. Building lines and the locations of all structures, existing and proposed
- M. Proposed uses of the land and buildings, if known
- N. Open space and recreation areas, where required.
- O. Area in square feet, and/or square acres of parcel
- P. Proposed gross lot coverage in square feet
- Q. Number and type of dwelling units where proposed
- R. Location of sign structures and drawings. (Section 701)
- S. Location of garbage dumpster and enclosure. (Section 406.06)
- T. Any other data necessary to allow for a through evaluation of the proposed use, including a traffic study.

Applicant shall be present at the monthly meeting of the Planning and Zoning Commission when site plan is on the agenda for consideration; additionally, applicant shall be present at the Mayor and Board of Alderman meeting when the site plan is on the agenda for final approval.

Applicant is responsible for complying with all applicable requirements of the Gluckstadt Zoning Ordinance.

Site Plans shall be submitted by the 5:00 pm on the 5th day of the month, immediately preceding the next regular meeting of the Planning and Zoning Commission. No Exceptions.

Once submitted to the Planning & Zoning Administrator for approval to add to the Planning and Zoning Commission's agenda, no amendments or changes shall be made to the site plan. If you wish to submit changes, you will be required to resubmit by the 5th of the following month for the next monthly meeting of the Planning and Zoning Commission.

Attestation: By signing this application, the applicant agrees to all the terms and conditions laid out in this document. Approval of site plan is subject to Board approval.


 _____ 3/1/2024
 Applicant Signature Date

CITY OF GLUCKSTADT BUILDING DEPARTMENT
OFFICE USE ONLY

Date Received: _____

Application Complete & Approved to Submit to P&Z Board (please check):

Yes _____ No _____

Signature: _____
Planning & Zoning Administrator (or Authorized Representative)

MAC HAIK

NEW SERVICE BUILDING

PROPOSED COMMERCIAL SITE DEVELOPMENT

AUTOBAHN LOOP

GLUCKSTADT, MS 39110

DEAN
ENGINEERING SOLUTIONS, INC.
4780 I-55 NORTH, SUITE 100-4
JACKSON, MS 39211
601-557-2002 WWW.DEANESI.COM

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No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

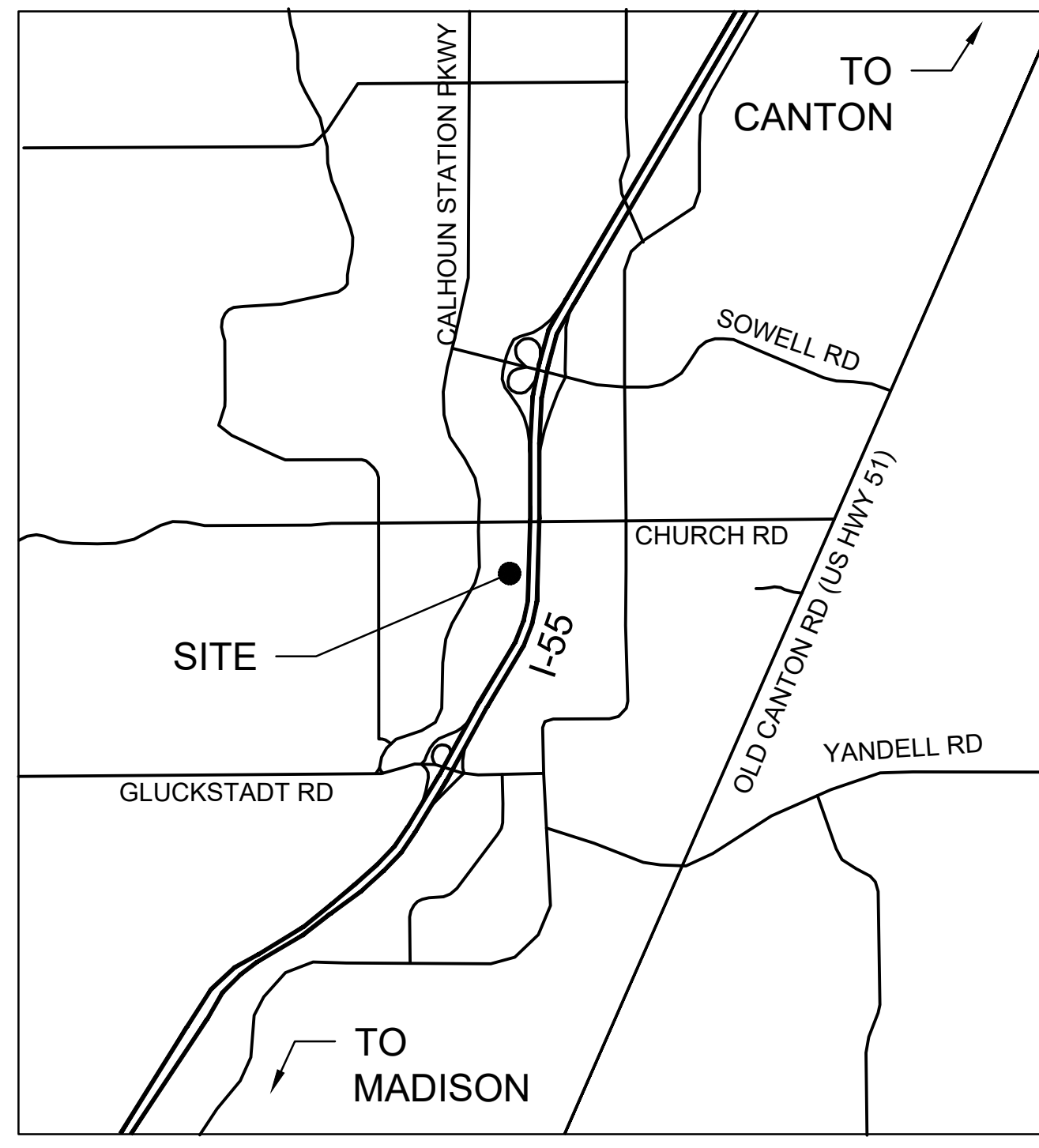
DRAWING ISSUED
Description
PLANS SUBMITTED FOR REVIEW

OWNER:
MAC HAIK
AUTOBAHN LOOP
GLUCKSTADT, MS 39110

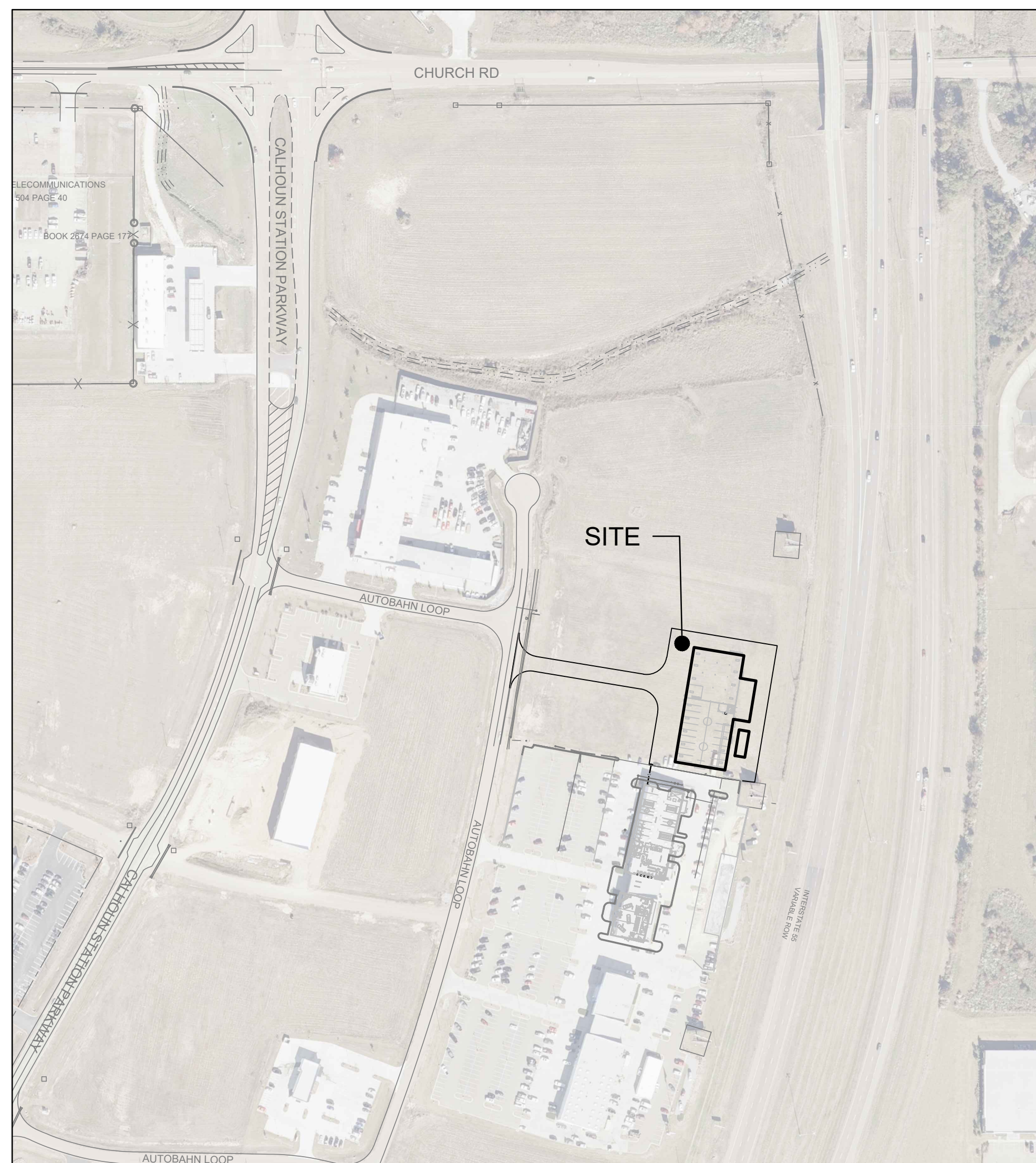
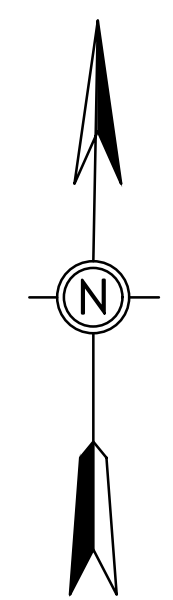
PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE: **COVER**
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
1

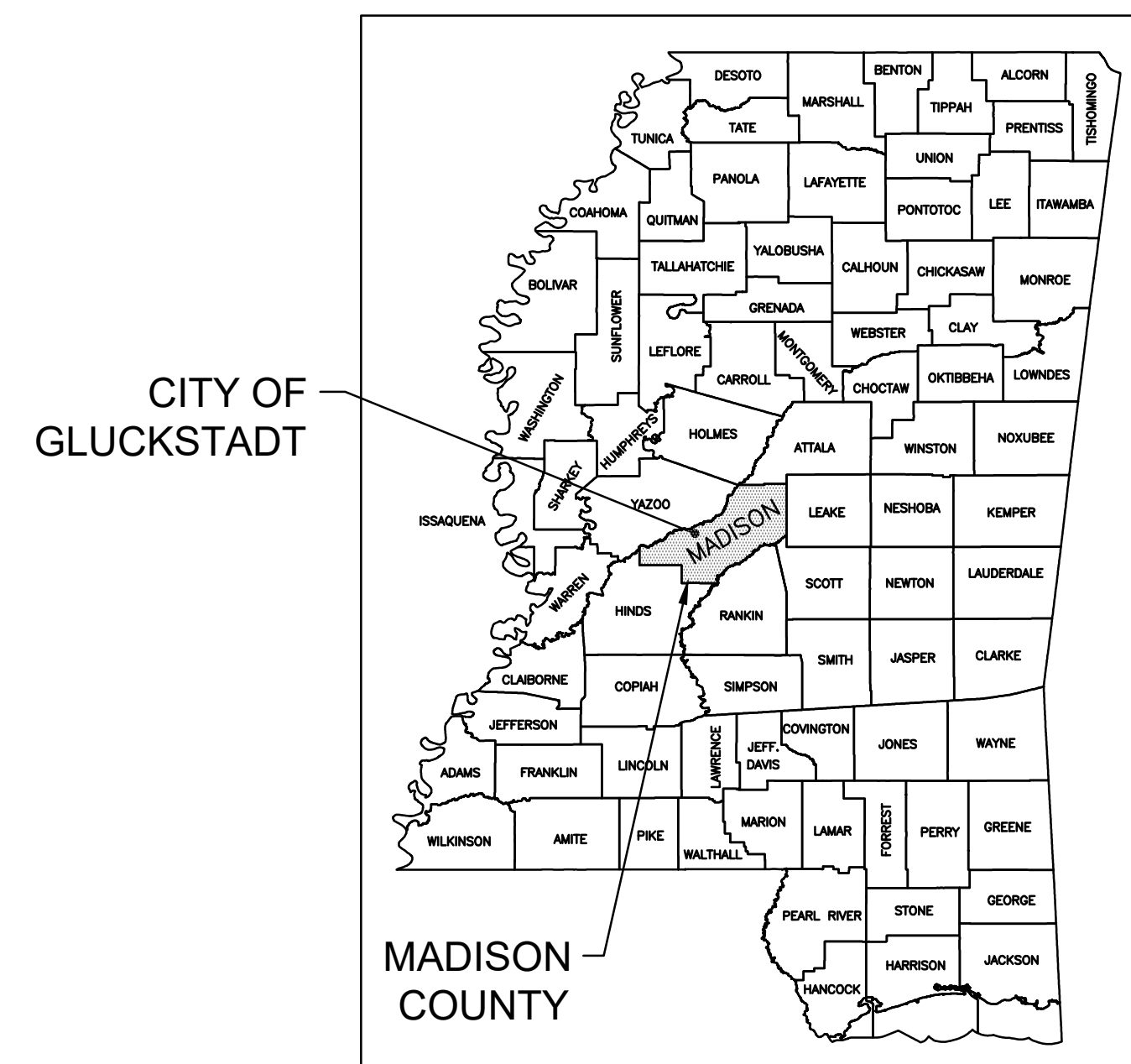


CITY LOCATION



STREET LOCATION

- TABLE OF CONTENTS
1. COVER
 2. EXISTING CONDITIONS & DEMO PLAN
 3. SITE PLAN
 4. UTILITY PLAN
 5. GRADING PLAN
 6. EROSION CONTROL PLAN (SWPPP)
 7. DETAILS

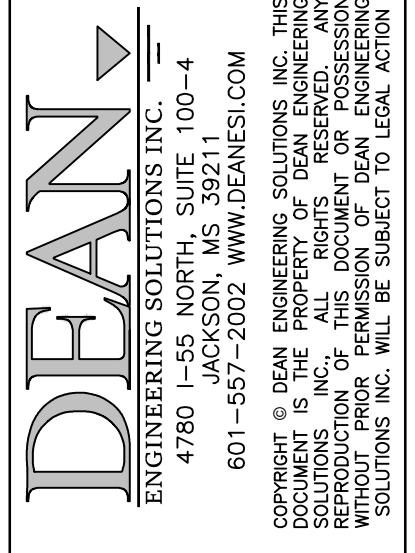


STATE LOCATION



Know what's below
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C:\Users\clems\OneDrive - deanengr.com\1-Projects\DESIGN\Peoples\Mac Haik Gluckstadt\dwg\Design\Haik.dwg, 1-Cover, 2/27/2024 3:26:46 PM, clem, DWG To PDF.pc3, ARCH expand D (24.00 x 36.00 inches), 1:1



No.	Description	Date
		02-27-2024
DRAWING ISSUED		
PLANS SUBMITTED FOR REVIEW		

OWNER:
MAC HAIK
AUTBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE:
EXISTING CONDITIONS & DEMO PLAN
SITE DEVELOPMENT

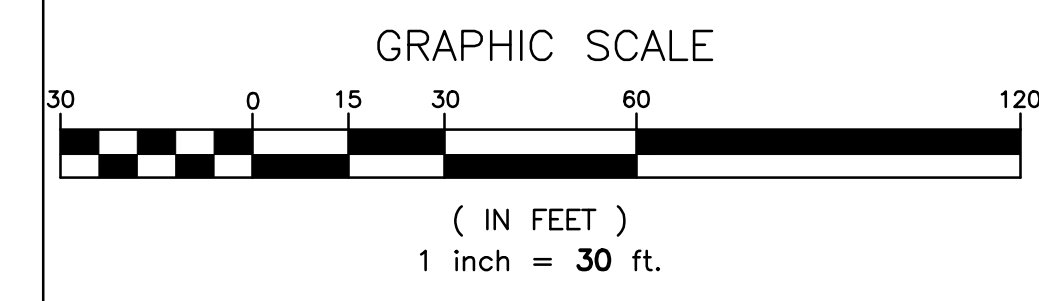
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DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

SHEET NUMBER:
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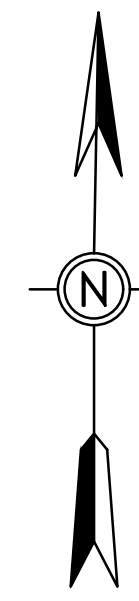
DRAWING SYMBOL LEGEND

EXISTING	DESCRIPTION
— E —	OVERHEAD POWER LINE
— SS —	SANITARY SEWER LINE
— W —	WATER LINE
— X — X —	FENCE LINE
— STM —	STORM LINE
— — — —	PROPERTY LINE
— 400 —	MAJOR CONTOUR LINE
— 401 —	MINOR CONTOUR LINE
⊙	SANITARY SEWER MANHOLE



SURVEY NOTES:

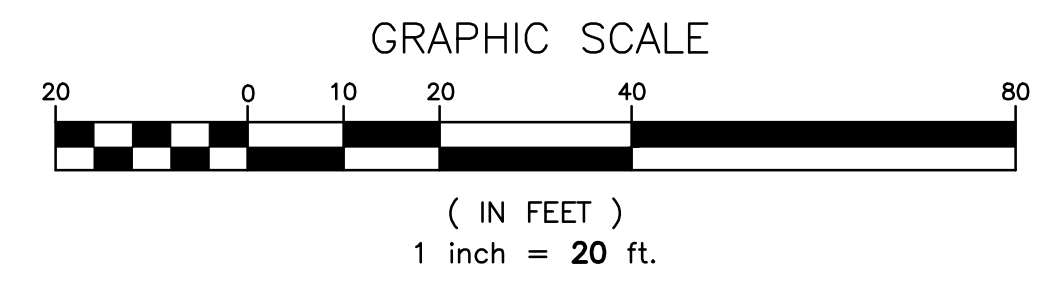
1. LOCATION OF UNDERGROUND UTILITIES & STRUCTURES OF ANY TYPE MAY NOT BE COMPLETE OR EXACT. FOR MORE POSITIVE LOCATIONS CONTACT MISSISSIPPI ONE CALL SYSTEM INC. (TELEPHONE NO. 811) OR OTHER LOCAL AUTHORITIES TO LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER PRIOR TO CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED.



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SITE PLAN NOTES

1. CONCRETE JOINTS: JOINTS SHALL BE SPACED ON 10FT x 10FT SQUARE GRID PATTERN TYPICAL. JOINTS SHOULD FORM PANELS THAT ARE APPROXIMATELY SQUARE WITH THE LONGEST PANEL DIMENSION NO MORE THAN 1.25 TIMES THE SHORTEST PANEL DIMENSION. JOINTS SHOULD INTERSECT RADIUSES & OTHER STRUCTURES AT A NEAR PERPENDICULAR ANGLE, OR HAVE A ±18° SEGMENT THAT HITS PERPENDICULARLY. CONCRETE JOINT SPACING, REINFORCEMENT AND LAYOUT SHALL BE DESIGNED IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE'S "GUIDE FOR THE DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS" - ACI 330. SEE DETAILS FOR ADDITIONAL PAVING AND JOINT REQUIREMENTS. CONTRACTOR SHALL SUBMIT A SHOP DRAWING FOR REVIEW SHOWING PROPOSED SAW-JOINT PATTERNS, DIMENSIONS, LOCATIONS OF CONSTRUCTION JOINTS, ISOLATION JOINTS AND EXPANSION JOINTS, AND CONCRETE MIX DESIGN PROPERTIES.



No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

DRAWING ISSUED

OWNER:
MAC HAIK
 AUTOBAHN LOOP
 GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
 SHEET TITLE:
SITE PLAN
 SITE DEVELOPMENT

JOB NO.: 240201
 DATE: 05 FEB 2024
 SCALE: AS SHOWN
 DRAWN BY: WSD
 REVIEWED BY: WSD

SHEET NUMBER:
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JACKSON, MS 39211
601-557-2002 WWW.DEANESI.COM

REGISTERED PROFESSIONAL ENGINEER
STATE OF MISSISSIPPI
20957

02-27-2024

DRAWING ISSUED
Description: PLANS SUBMITTED FOR REVIEW
Date: 02-27-2024
No. 1

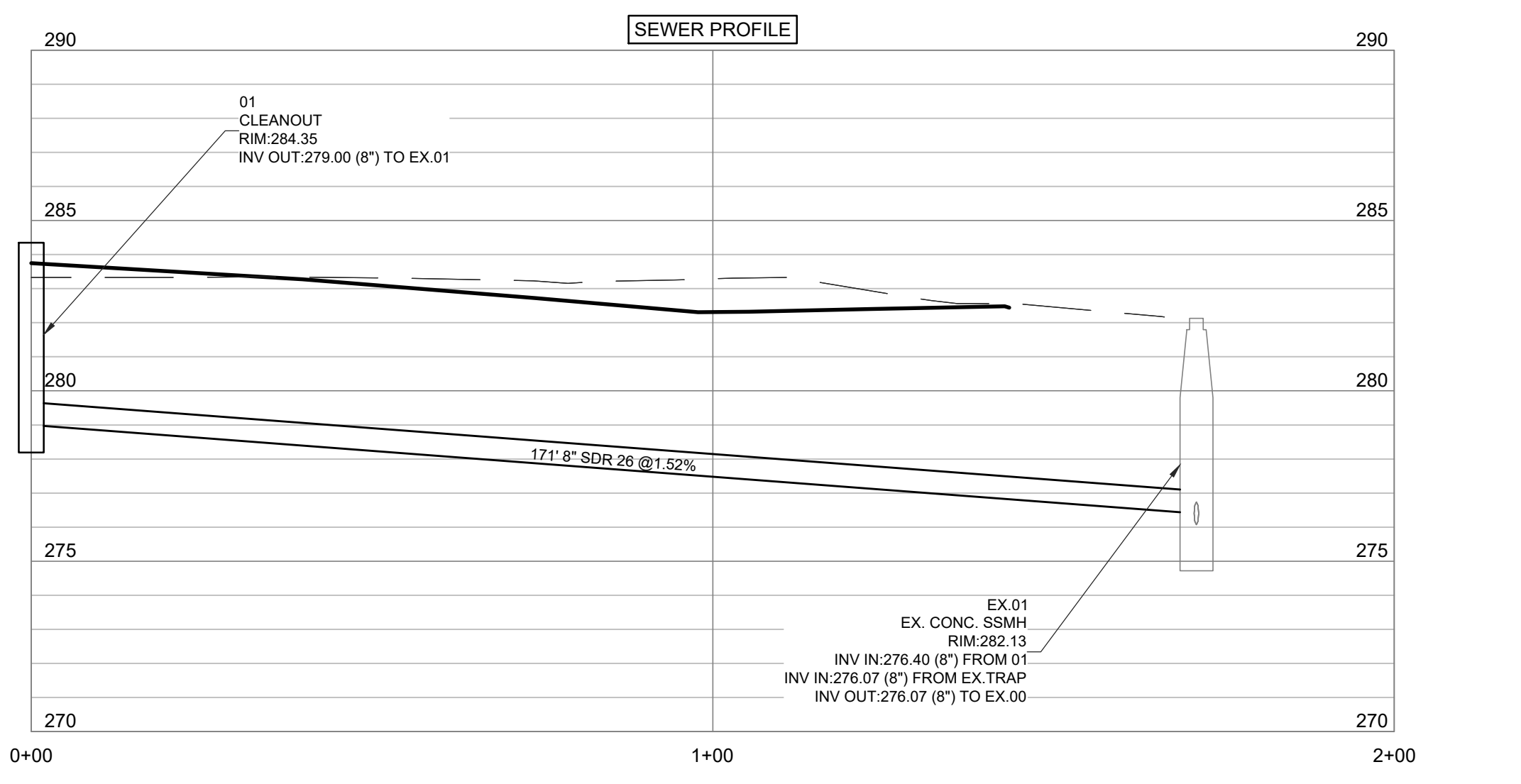
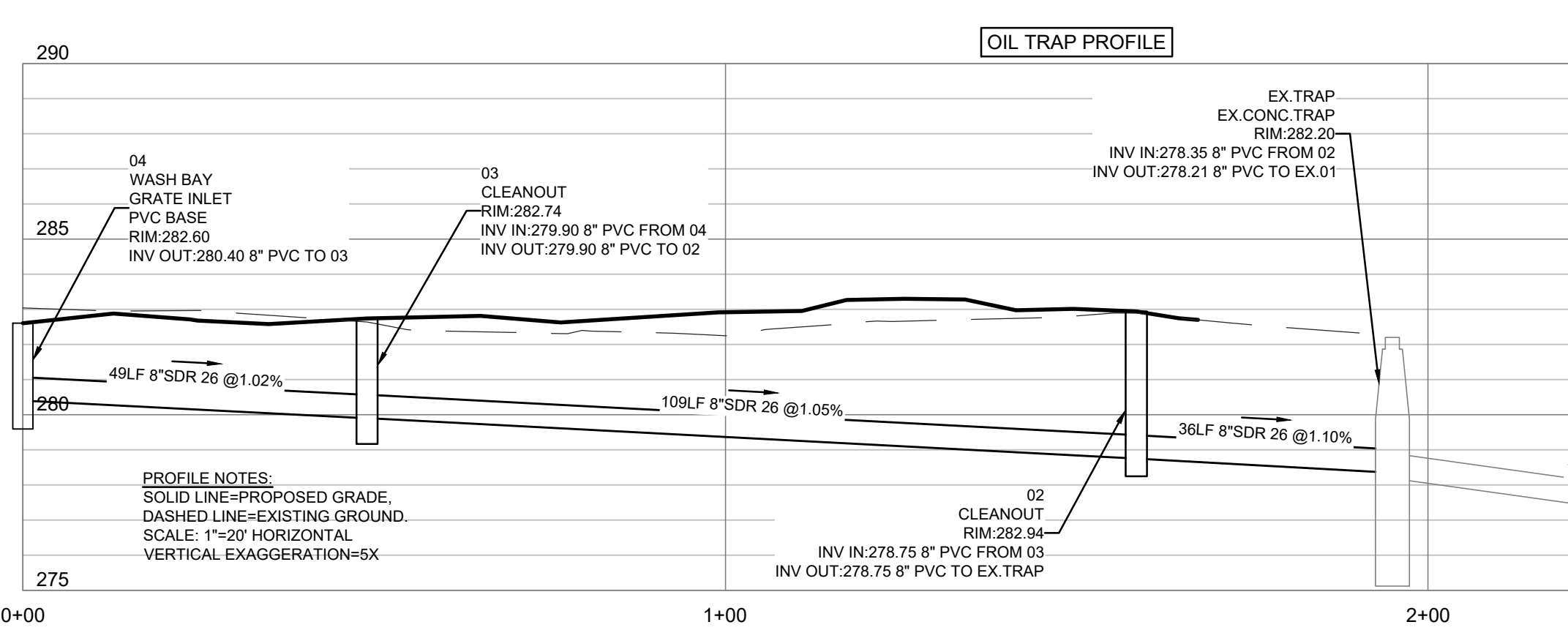
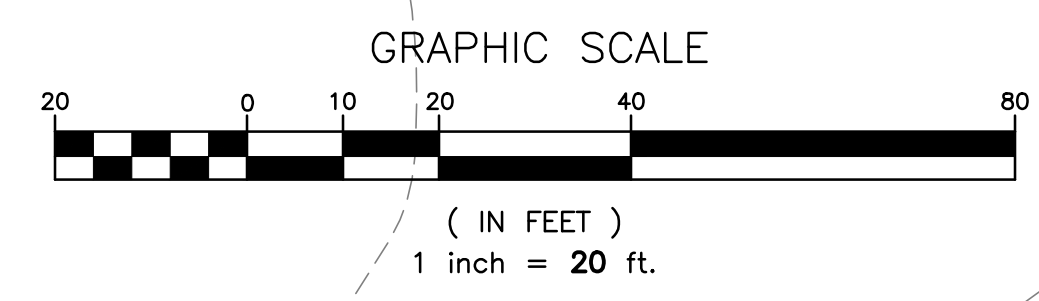
No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

OWNER:
MAC HAIK
AUTUBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: MAC HAIK NEW SERVICE BUILDING
SHEET TITLE: UTILITY PLAN
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

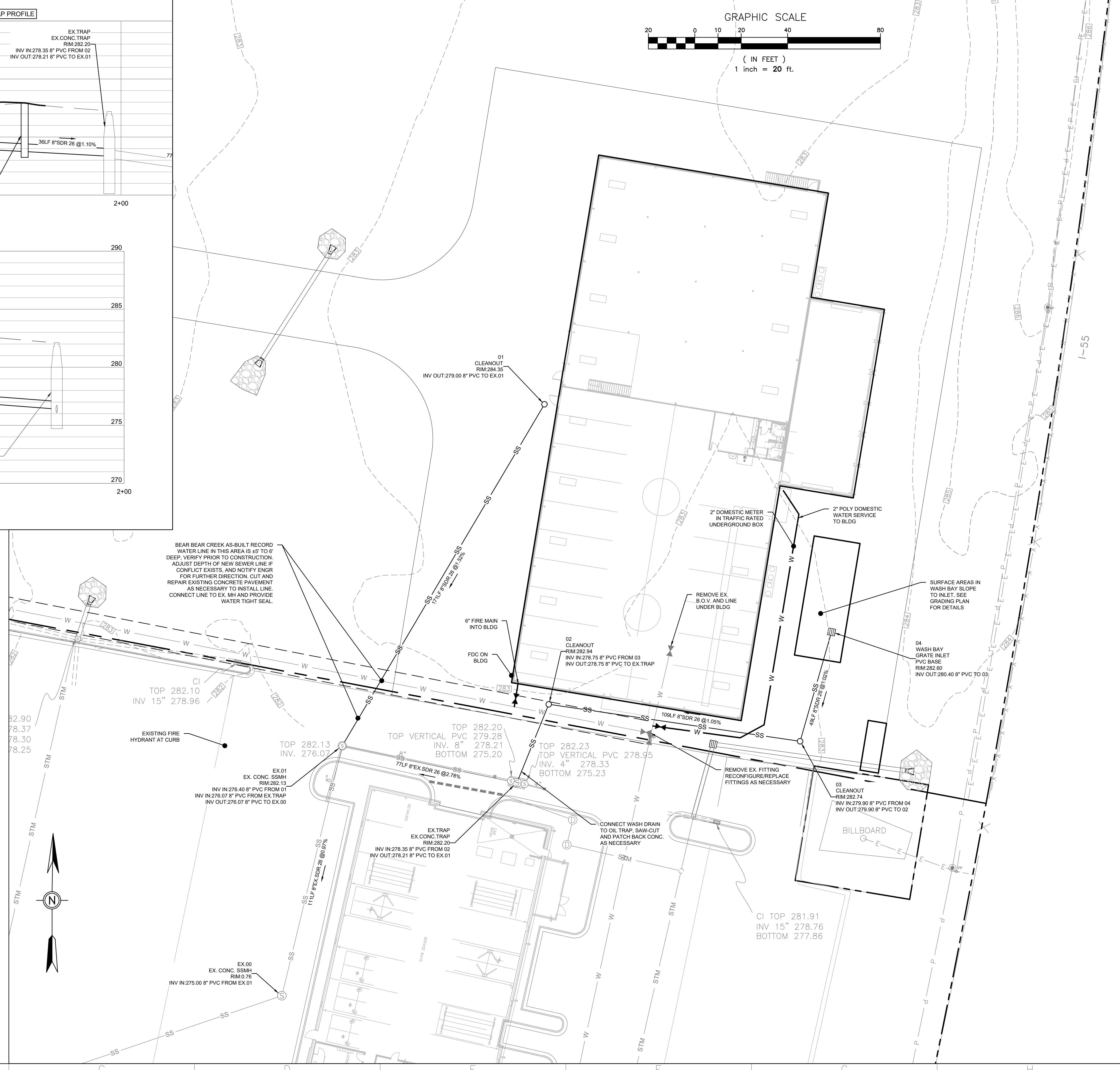
SHEET NUMBER:
4



- UTILITY PLAN NOTES**
- LOCAL MUNICIPALITY STANDARDS: ALL WATER & SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE UTILITY PROVIDER, BEAR CREEK, WHICH SERVES WATER AND SEWER TO THE SITE. CONTRACTOR SHALL CONFIRM LOCAL STANDARDS PRIOR TO CONSTRUCTION.
 - INSPECTIONS: CONTRACTOR SHALL NOTIFY THE LOCAL MUNICIPALITY AND OR UTILITY PROVIDER TO INSPECT ALL WATER AND SEWER MAINS, CONNECTION AND ACCESSORIES PRIOR TO PLACEMENT OF BACKFILL.
 - UTILITY LOCATIONS: CONTRACTOR SHALL HAVE MISSISSIPPI ONE CALL (811 OR 800-227-6477) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER PRIOR TO CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENTS THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED.
 - MEP COORDINATION: THIS PLAN SHOWS WATER & SEWER SERVICES FOR THE SITE UP TO 5' FROM THE BUILDING. REFER TO MECHANICAL, ELECTRICAL, PLUMBING (MEP) PLANS FOR CONTINUATION INTO BUILDING, INCLUDING FIRE DEPARTMENT CONNECTION AND BACK FLOW PREVENTOR REQUIREMENTS FOR ALL WATER LINES.
 - WATER LINE THRUST RESTRAINTS: ALL WATER LINES SHALL HAVE THRUST RESTRAINTS (CONCRETE BLOCKING RESTRAINT MECHANISMS) AT ALL BENDS, TEES, FITTINGS ETC. SEE DETAILS FOR ADDITIONAL REQUIREMENTS. MEGA-LUG RESTRAINT JOINTS MAY ALSO BE USED WITH PRIOR SUBMITTAL APPROVAL BY ENGR.
 - SEWER CLEANOUTS: SEE MEP PLANS FOR LOCATION AND ELEVATIONS OF SEWER OUT OF BUILDING. COORDINATE SEWER OUT OF BUILDING WITH CLEANOUTS TO MAIN. INSTALL CLEANOUT TOPS FLUSH WITH ADJACENT PAVEMENT SURFACE.
 - WATER LINE COVER: THE WATER LINE SHALL HAVE A MIN. OF 3' GROUND COVER.
 - MINIMUM UTILITY SEPARATION DISTANCES:
SANITARY SEWER MAINS AND STORM SEWER - 24" VERTICAL
SANITARY SEWER MAINS AND WATER - 10' HORIZONTAL OR 18" VERTICAL
STORM SEWER AND WATER - 18" VERTICAL
- IF MINIMUM VERTICAL SEPARATIONS CAN NOT BE ACHIEVED AT UTILITY & STORM DRAIN CROSSING, USE DIP MATERIALS AND INSTALL CONCRETE CRADLE WITH 6" MIN. CLEARANCE.

DRAWING SYMBOL LEGEND

EXISTING	PROPOSED	DESCRIPTION
		FIRE HYDRANT
		WATER VALVE
		SANITARY SEWER MANHOLE
		SANITARY SEWER LINE
		WATER LINE



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JACKSON, MS 39211
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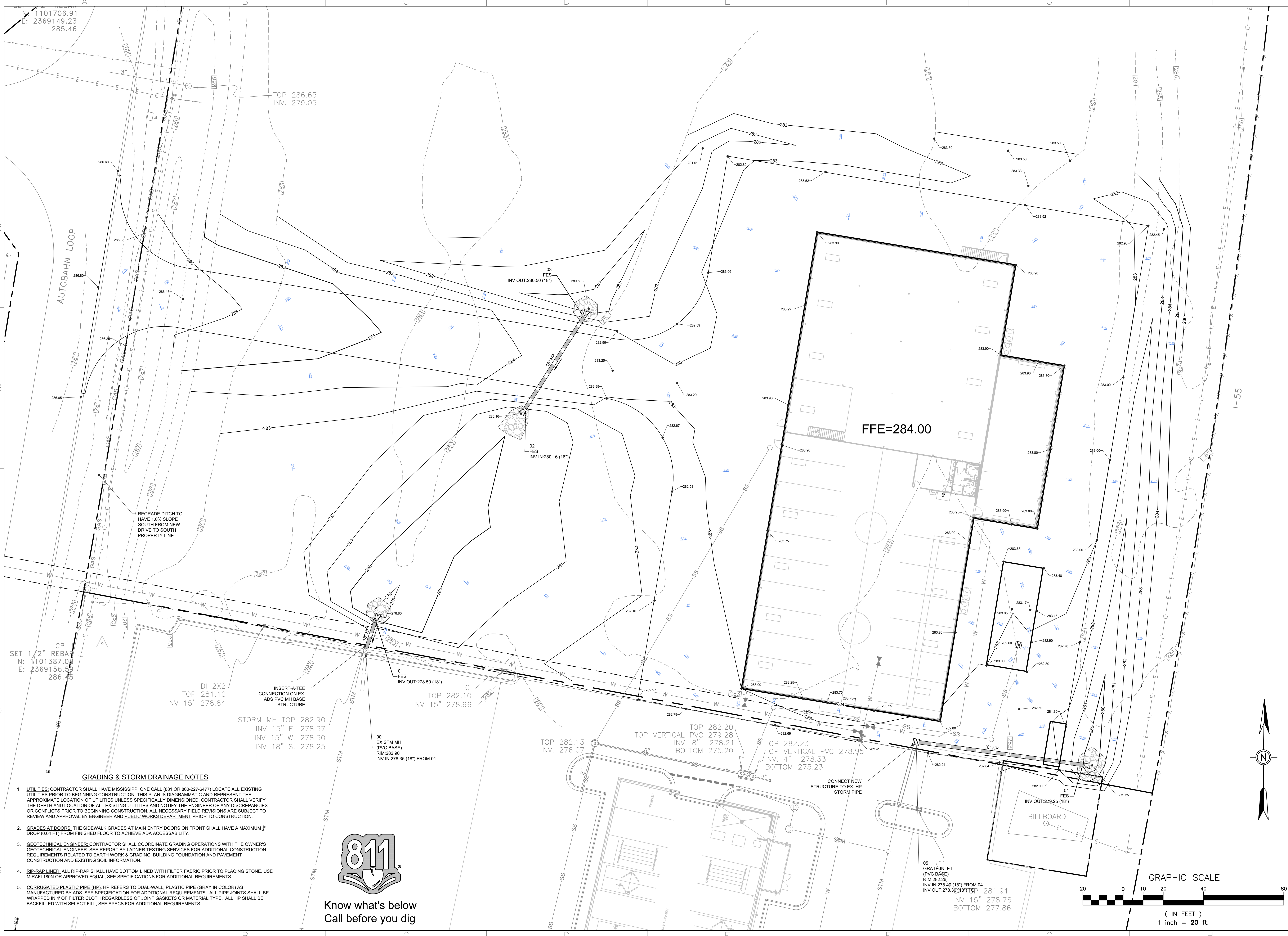
No.	Description	Date
1	PLANS SUBMITTED FOR REVIEW	02-27-2024

OWNER:
MAC HAIK
AUTBAHN LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE:
GRADING PLAN
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

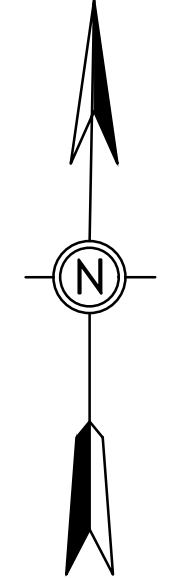
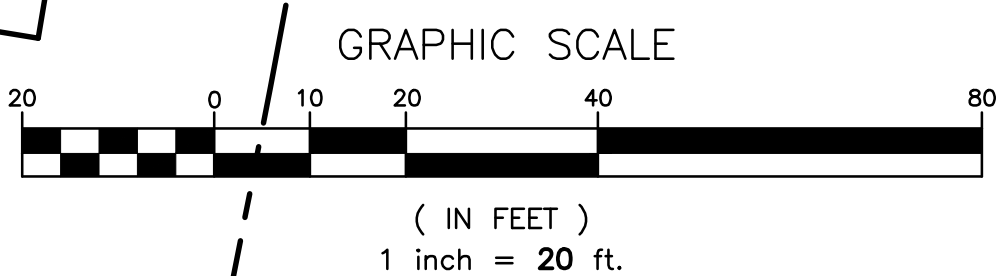
SHEET NUMBER:
5



- GRADING & STORM DRAINAGE NOTES**
- UTILITIES: CONTRACTOR SHALL HAVE MISSISSIPPI ONE CALL (881 OR 800-227-6477) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THIS PLAN IS DIAGRAMMATIC AND REPRESENT THE APPROXIMATE LOCATION OF UTILITIES UNLESS SPECIFICALLY DIMENSIONED. CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION. ALL NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER AND PUBLIC WORKS DEPARTMENT PRIOR TO CONSTRUCTION.
 - GRADES AT DOORS: THE SIDEWALK GRADES AT MAIN ENTRY DOORS ON FRONT SHALL HAVE A MAXIMUM 1/4" DROP (0.04 FT) FROM FINISHED FLOOR TO ACHIEVE ADA ACCESSIBILITY.
 - GEOTECHNICAL ENGINEER: CONTRACTOR SHALL COORDINATE GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER. SEE REPORT BY LADNER TESTING SERVICES FOR ADDITIONAL CONSTRUCTION REQUIREMENTS RELATED TO EARTH WORK & GRADING, BUILDING FOUNDATION AND PAVEMENT CONSTRUCTION AND EXISTING SOIL INFORMATION.
 - RIP-RAP LINER: ALL RIP-RAP SHALL HAVE BOTTOM LINED WITH FILTER FABRIC PRIOR TO PLACING STONE. USE MIRAFI 180N OR APPROVED EQUAL. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 - CORRUGATED PLASTIC PIPE (HP): HP REFERS TO DUAL-WALL, PLASTIC PIPE (GRAY IN COLOR) AS MANUFACTURED BY ADS. SEE SPECIFICATION FOR ADDITIONAL REQUIREMENTS. ALL PIPE JOINTS SHALL BE WRAPPED IN 4" OF FILTER CLOTH REGARDLESS OF JOINT GASKETS OR MATERIAL TYPE. ALL HP SHALL BE BACKFILLED WITH SELECT FILL. SEE SPECS FOR ADDITIONAL REQUIREMENTS.

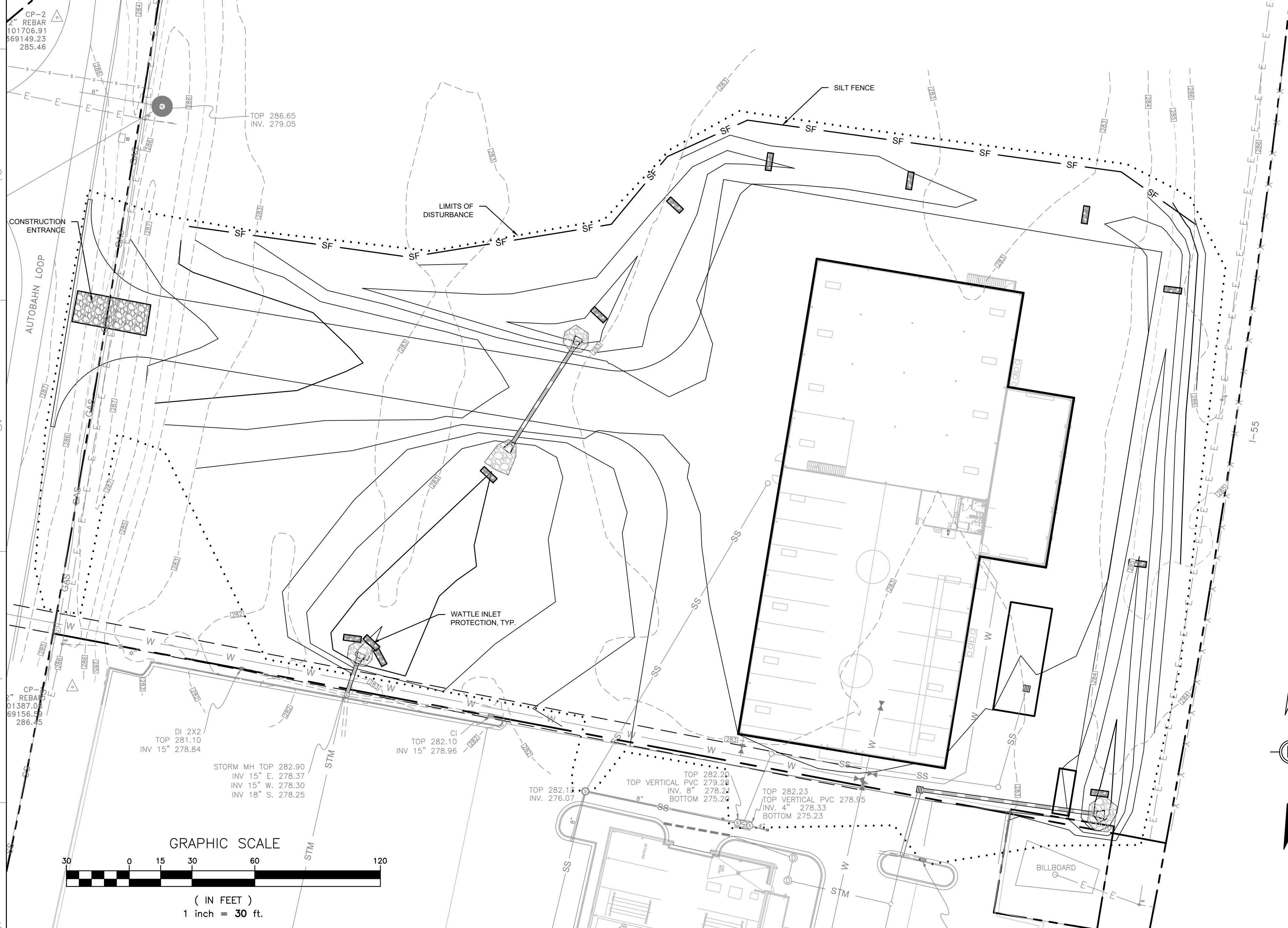


Know what's below
Call before you dig





Know what's below
Call before you dig

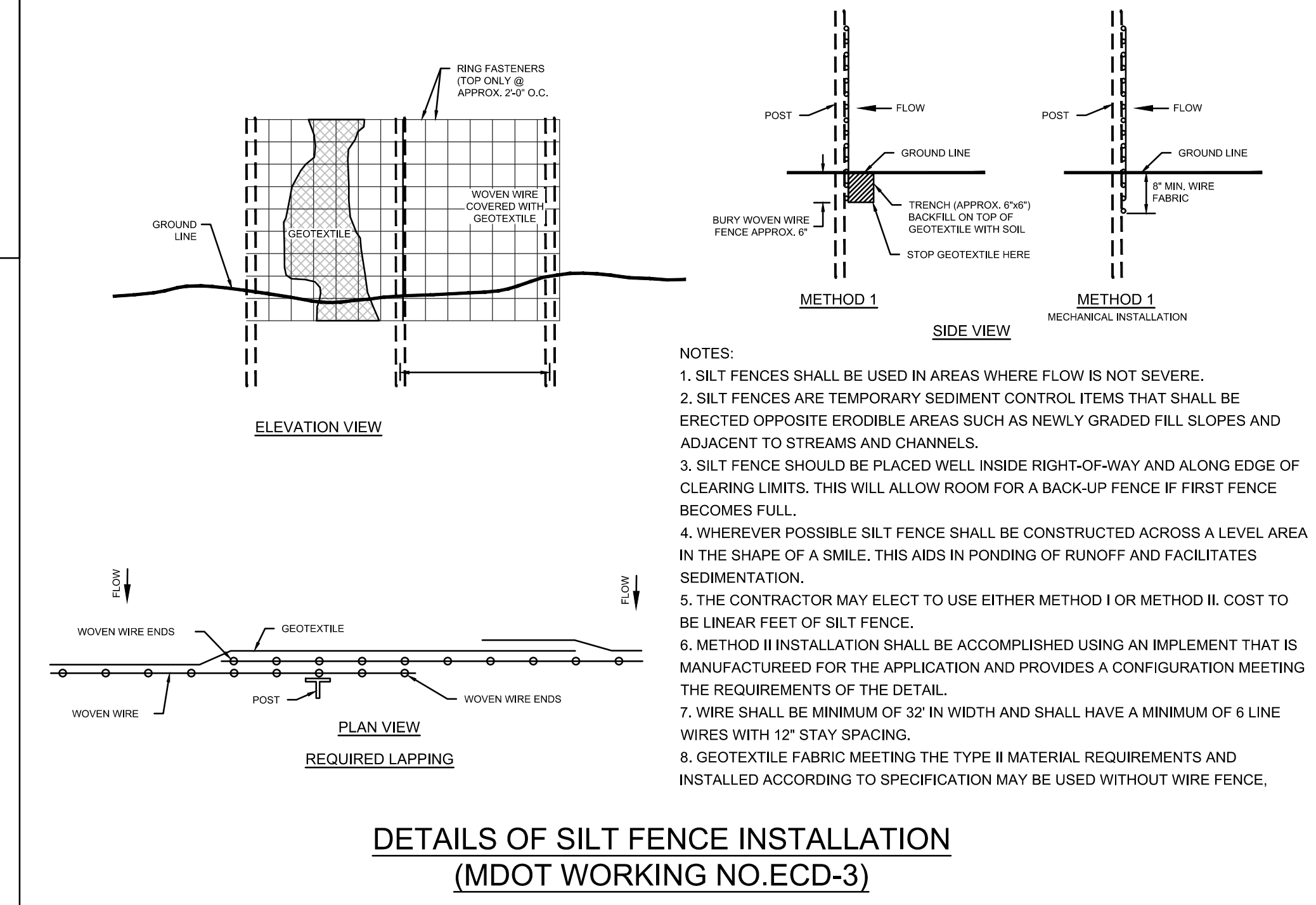
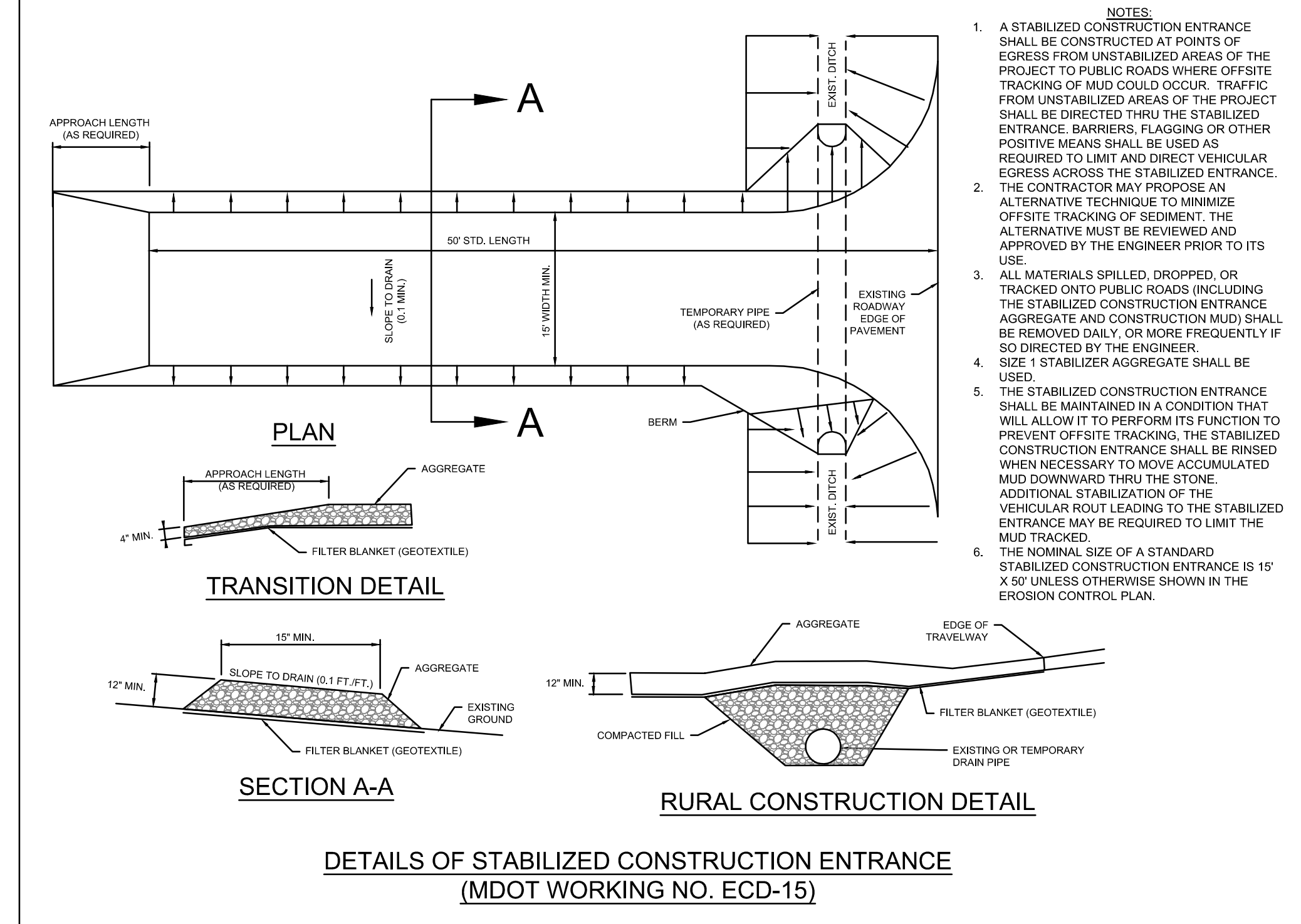
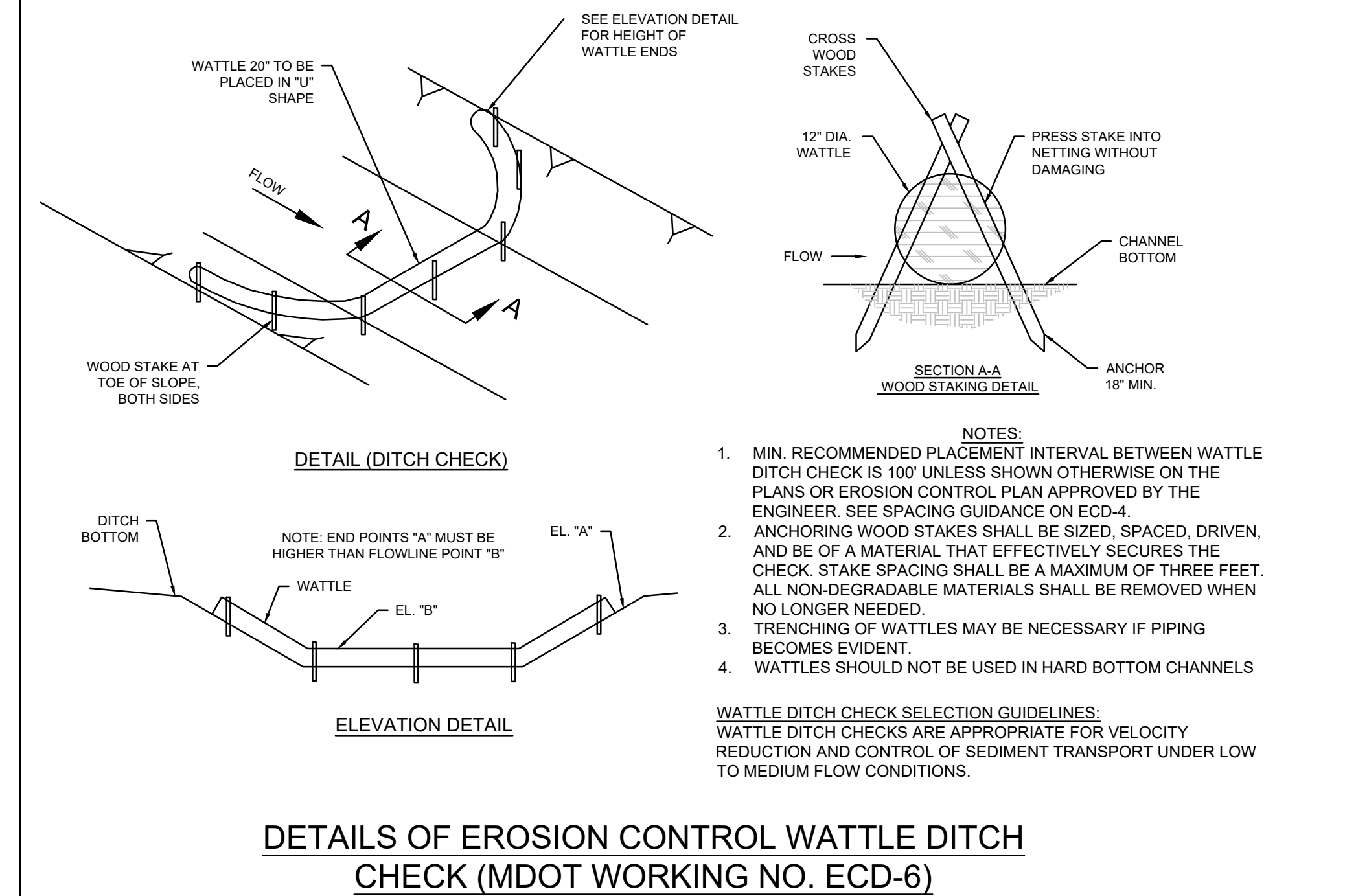


EROSION CONTROL PLAN NOTES

- TOTAL DISTURBED SITE AREA = 3.50 AC.
- VEGETATIVE CONTROLS:** A COMBINATION OF TEMPORARY AND PERMANENT GRASSING WILL BE USED TO PROTECT SLOPES AS CONSTRUCTION PROGRESSES. REFER TO VEGETATION SPECIFICATIONS FOR DETAILS. SHOULD A DISTURBED AREA BE LEFT UNDISTURBED FOR 14 DAYS OR MORE, TEMPORARY OR PERMANENT VEGETATION SHALL BE PLACED IMMEDIATELY.
- STRUCTURAL CONTROLS:** INSTALL CONSTRUCTION ENTRANCES, DIVERSION DITCHES, WATTLE CHECK DAMS, SILT FENCE AND ALL OTHER STRUCTURAL BMPs AS SHOWN BELOW. PERMANENT EROSION CONTROL BMPs AND STRUCTURAL BMPs SHOULD BE PLACED AS SOON AS POSSIBLE TO ENSURE FINAL STABILIZATION OF THE SITE.
- WATTLE CHECK DAMS:** SILT FENCE AND HAY BALES ARE NOT ACCEPTABLE FORMS OF CHECK DAMS WITHIN TEMPORARY DIVERSION DITCHES, SWALES OR OTHER AREAS OF CONCENTRATED FLOW. CONTRACTOR SHALL USE SAND BAGS OR STONE DAMS TO CHECK FLOW. WATTLES MAY ALSO BE USED WHERE LOWER FLOWS/SMALLER DRAINAGE AREAS OCCUR.
- HOUSEKEEPING & MAINTENANCE PRACTICES:** ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. NON-FUNCTIONING EROSION CONTROLS SHALL BE REPAIRED, REPLACED, OR SUPPLEMENTED WITH FUNCTIONAL CONTROLS WITHIN 24 HOURS OF DISCOVERY, OR AS SOON AS FIELD CONDITIONS ALLOW. WALK THROUGH INSPECTIONS ARE RECOMMENDED BEFORE ANTICIPATED STORM EVENTS TO VERIFY THE INTEGRITY OF EROSION CONTROL MEASURES AND TO DETERMINE IF ADDITIONAL MEASURES ARE NEEDED. SEDIMENT BASINS WILL BE CLEANED OUT WHEN THE LEVEL OF SEDIMENT REACHES 2.0 FEET BELOW THE TOP OF THE RISER, AND/OR WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. SILT FENCE SHALL BE CLEANED OUT WHEN SEDIMENT REACHES 1/3 TO 1/2 OF THE HEIGHT OF THE FENCE. MAINTENANCE AND REPAIR OF EQUIPMENT SHALL BE PERFORMED OFF-SITE. MATERIAL WASH OUT SHALL OCCUR EITHER OFF-SITE OR WITHIN DESIGNATED WASH OUT AREAS.
- POST-CONSTRUCTION CONTROL MEASURES:** AS CONSTRUCTION IS COMPLETED, PERMANENT VEGETATIVE GROWTH SHALL BE ESTABLISHED ON DISTURBED SOILS TO IMPROVE SOIL STABILITY AND PROVIDE A BUFFER ZONE FOR LOOSE MATERIAL. LINED DITCHES SHALL BE INSTALLED AS SPECIFIED IN THE EROSION CONTROL SEQUENCE TO REDUCE EROSION IN CONCENTRATED FLOW AREAS AND RIP-RAP WILL BE PLACED AS SPECIFIED TO DISSIPATE FLOW ENERGY AND REDUCE FLOW VELOCITY. TEMPORARY BMPs MUST BE REMOVED FROM THE SITE WHEN THEY ARE NO LONGER NEEDED.

DRAWING SYMBOL LEGEND

PROPOSED	DESCRIPTION
	SILT FENCE PROTECTION
	LIMITS OF DISTURBANCE
	WATTLE CHECK DAM/INLET PROTECTION



Section 4, Item E)

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02-27-2024

DRAWING ISSUED	Date	02-27-2024
	Description	PLANS SUBMITTED FOR REVIEW
No.		

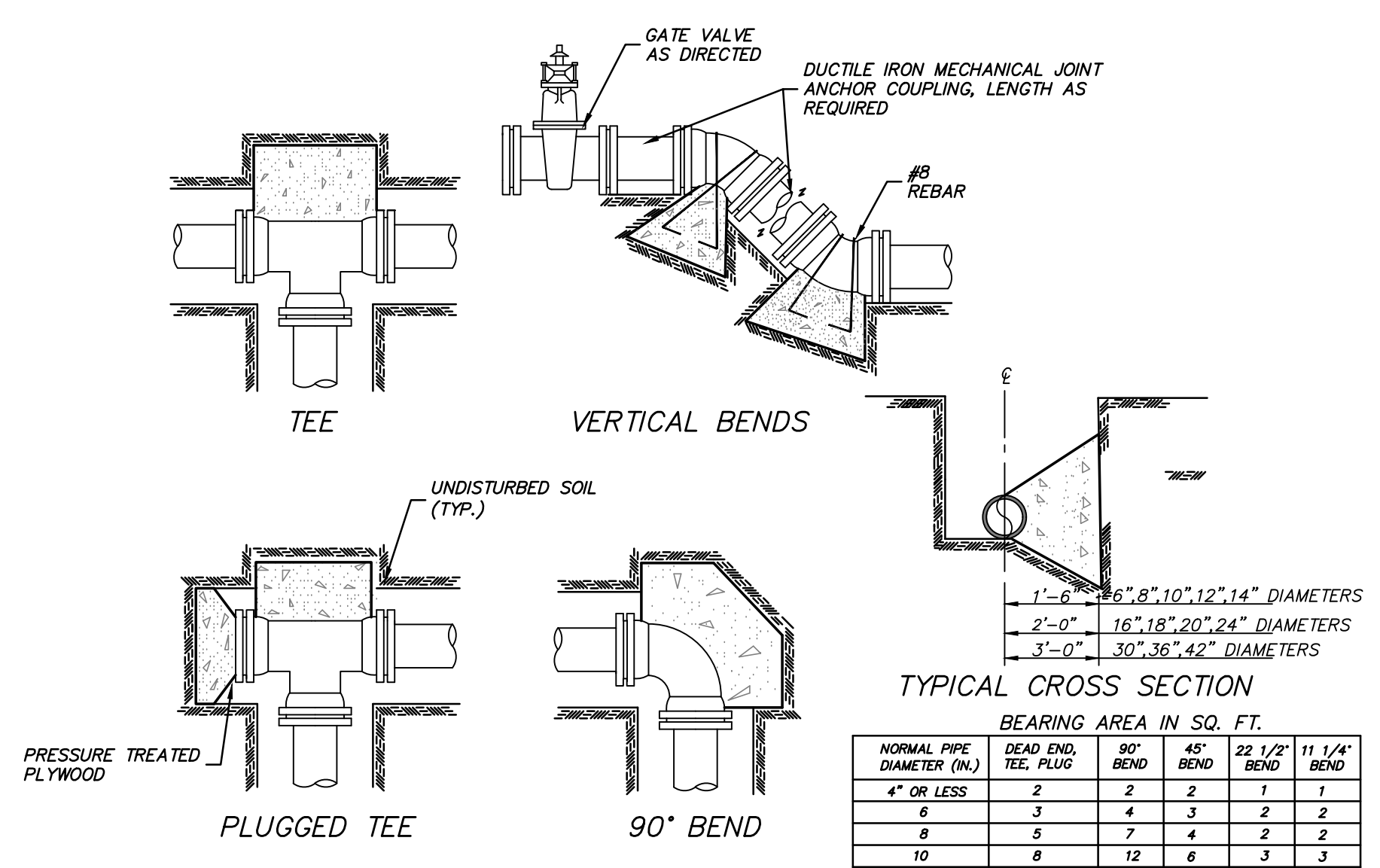
OWNER: **MAC HAIK**
AUTOBahn LOOP
GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**
SHEET TITLE: **EROSION CONTROL PLAN (SWPPP)**
SITE DEVELOPMENT

JOB NO.: 240201
DATE: 05 FEB 2024
SCALE: AS SHOWN
DRAWN BY: WSD
REVIEWED BY: WSD

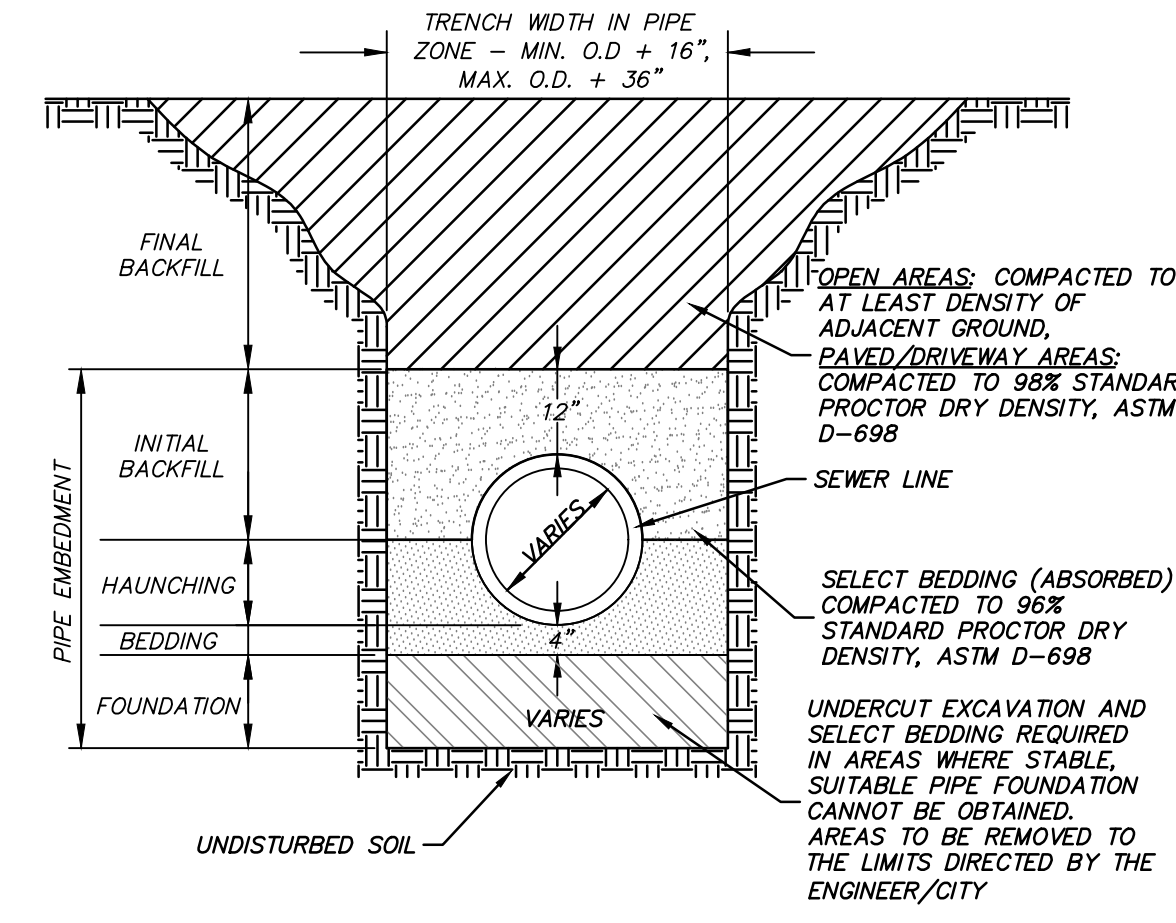
SHEET NUMBER: **6**

130



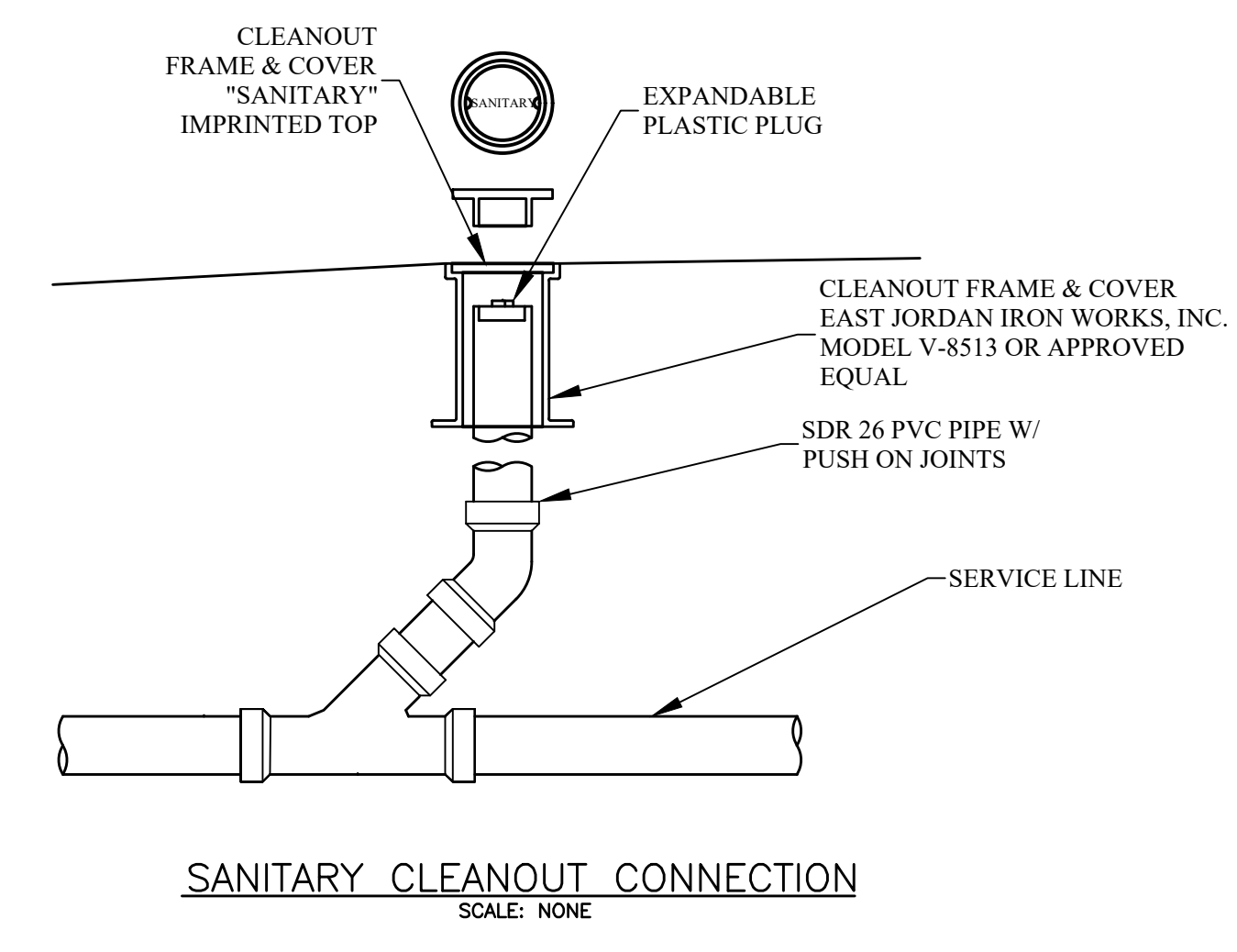
- THRUST BLOCK NOTES:**
- ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH.
 - PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
 - POUR THRUST BLOCKS AGAINST UNDISTURBED SOIL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE SOIL AND EXTEND THRUST BLOCKS TO UNDISTURBED SOIL.
 - IN BACK FILLING, ANY MUCK ENCOUNTERED SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL.
 - WRAP ALL FITTINGS WITH 8-MIL POLYETHYLENE ENCASEMENT.
 - BACK FILL MATERIAL SHALL NOT INCLUDE ROCK OR BOULDERS.
 - ALL CONCRETE SHALL BE MINIMUM 2500 PSI.
 - THRUST BLOCKS SHALL BE AN ABSORBED COST.
 - MEGA LUG RESTRAINS OR APPROVED EQUAL REQUIRED ON ALL MECHANICAL JOINT FITTINGS.
 - CONTRACTOR SHALL PROVIDE JOINT RESTRAINTS AS REQUIRED PER PROJECT SPECIFICATIONS.

TYPICAL THRUST BLOCK

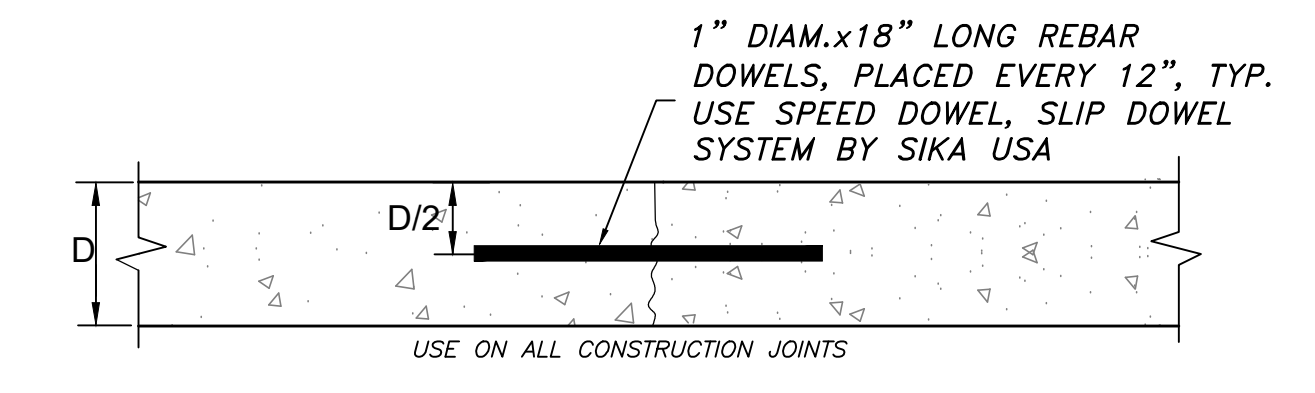


TYPICAL TRENCH FOR WATER & SEWER LINES
NOTE: DETAIL DRAWINGS ARE NOT TO SCALE UNLESS OTHERWISE NOTED ON SPECIFIC DETAIL.

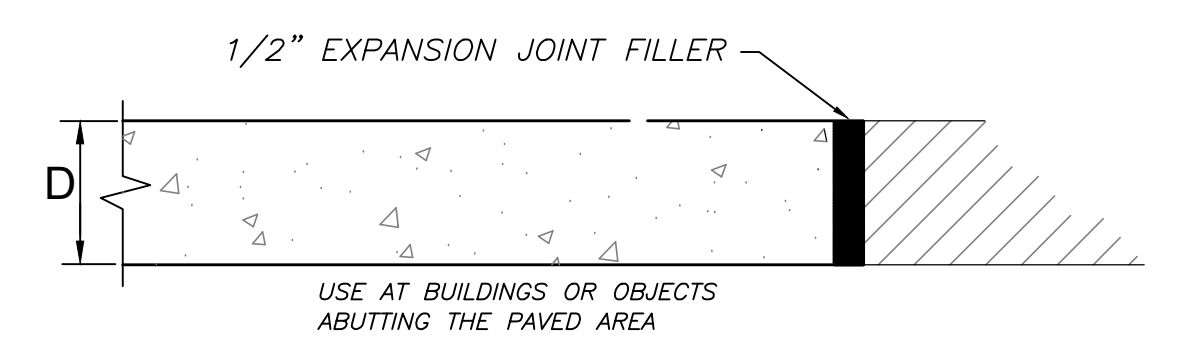
- TYPICAL TRENCH NOTES:**
- UNDERCUT EXCAVATION SHALL BE REQUIRED AS DIRECTED BY ENGINEER IF MATERIAL AT PLANNED GRADE WILL NOT PROVIDE STABLE TRENCH BOTTOM FOR PIPE LAYING. IT SHALL BE PAID FOR AS "UNDERCUT EXCAVATION" AND SPOILED AS DIRECTED BY ENGINEER OR REQUIRED IN CONTRACT DOCUMENTS.
 - FOUNDATION MATERIAL SHALL BE PAID FOR UNDER PAY ITEM "SELECT BEDDING MATERIAL".
 - BEDDING & HAUNCHING MATERIAL SHALL BE AN ABSORBED COST PER FOOT OF PIPE. QUANTITIES FOR BEDDING MATERIAL (IF PROVIDED) ARE INTENDED TO BE USED FOR FOUNDATION MATERIAL.
 - INITIAL BACKFILL SHALL BE AN ABSORBED COST.
 - IF CONTRACTOR PROPOSES TO USE NATIVE MATERIAL FOR PIPE EMBEDMENT AND/OR FINAL BACKFILL, CONTRACTOR SHALL PROVIDE TEST RESULTS TO ENGINEER STATING WHETHER NATIVE MATERIAL MEETS PROJECT SPECIFICATIONS FOR USE AS PIPE EMBEDMENT MATERIAL OR FINAL BACKFILL. IF NATIVE MATERIAL MEETS REQUIREMENTS FOR SUCH THEN IT SHALL BE USED BY CONTRACTOR FOR THIS PURPOSE AND SHALL BE AN ABSORBED COST PER FOOT OF PIPE.
 - FINAL BACKFILL IS AN ABSORBED COST PER FOOT OF PIPE AND SHALL BE EITHER:
 - NATIVE MATERIAL IN OPEN AREAS UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR
 - SELECT MATERIAL IN TRENCHES CONSTRUCTED UNDER OR WITHIN 5' OF ROADWAYS, CURBED OR PAVED AREAS. MATERIAL SHALL EXTEND 5' BEYOND THE EDGE OF PAVING STRUCTURE(S).
 - TRENCH SETTLEMENT REPAIR (INCLUDING RE-GRASSING IS THE CONTRACTOR'S RESPONSIBILITY DURING WARRANTY PERIOD).
 - DEWATERING OF ANY TRENCH FOR ANY REASON IS THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.



SANITARY CLEANOUT CONNECTION
SCALE: NONE

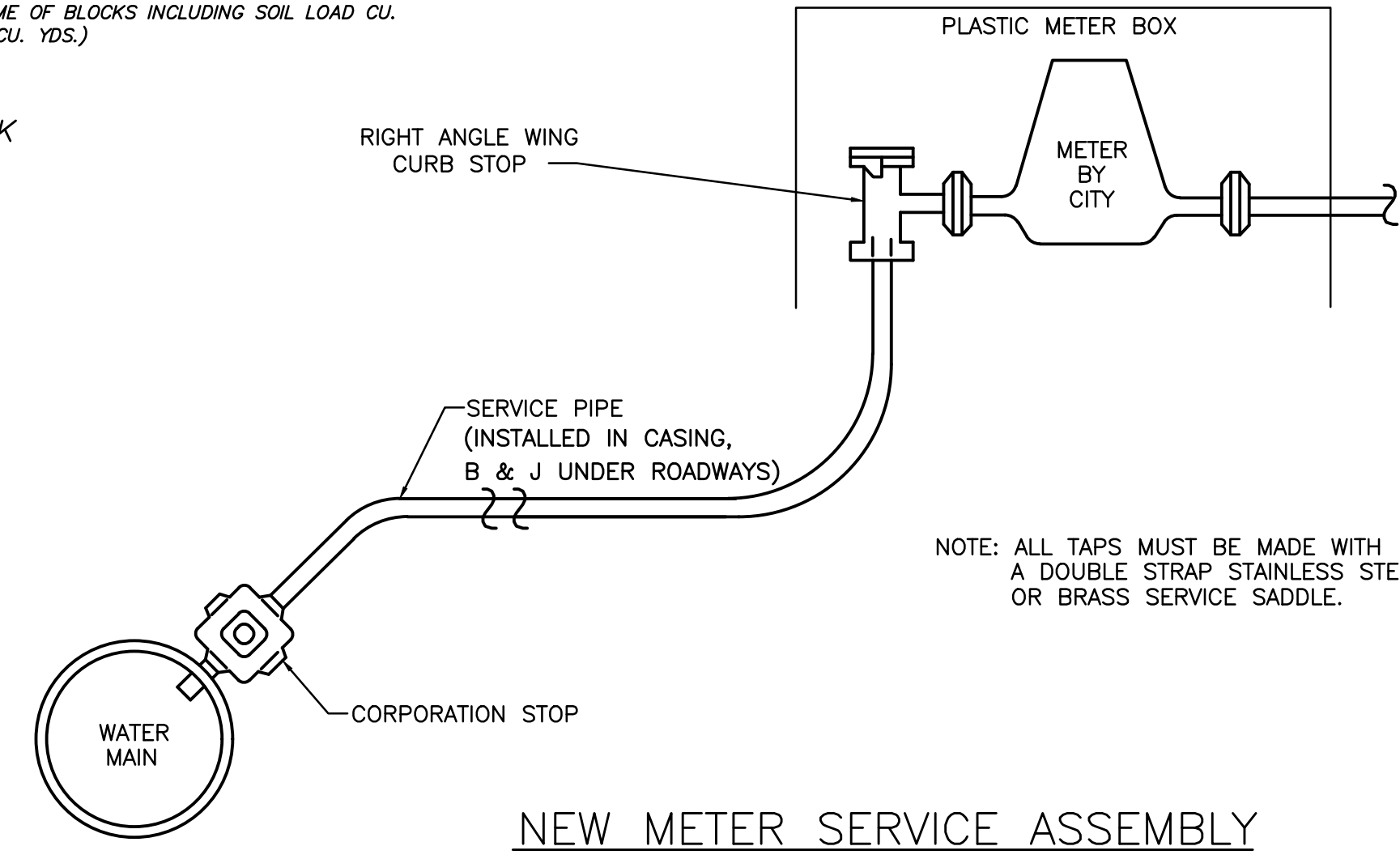


JOINT REINFORCEMENT @ CONSTRUCTION/CONTRACTION JOINTS

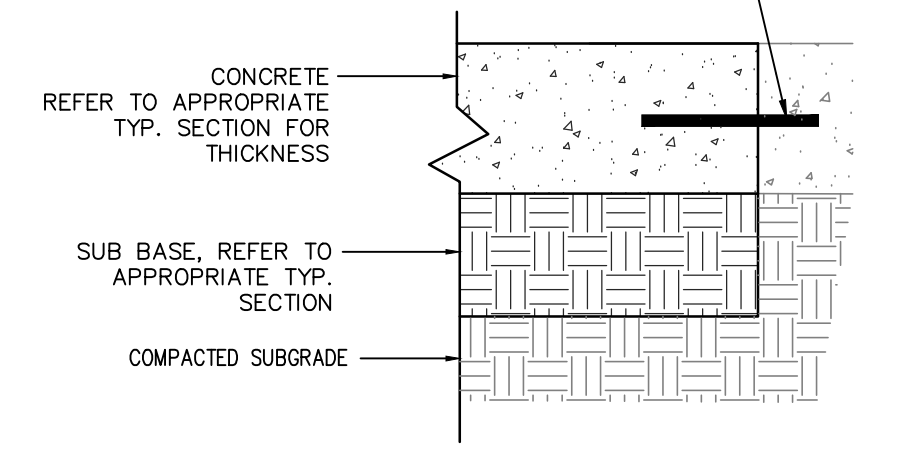


ISOLATION JOINT
USE AT BUILDINGS OR OBJECTS ABUTTING THE PAVED AREA

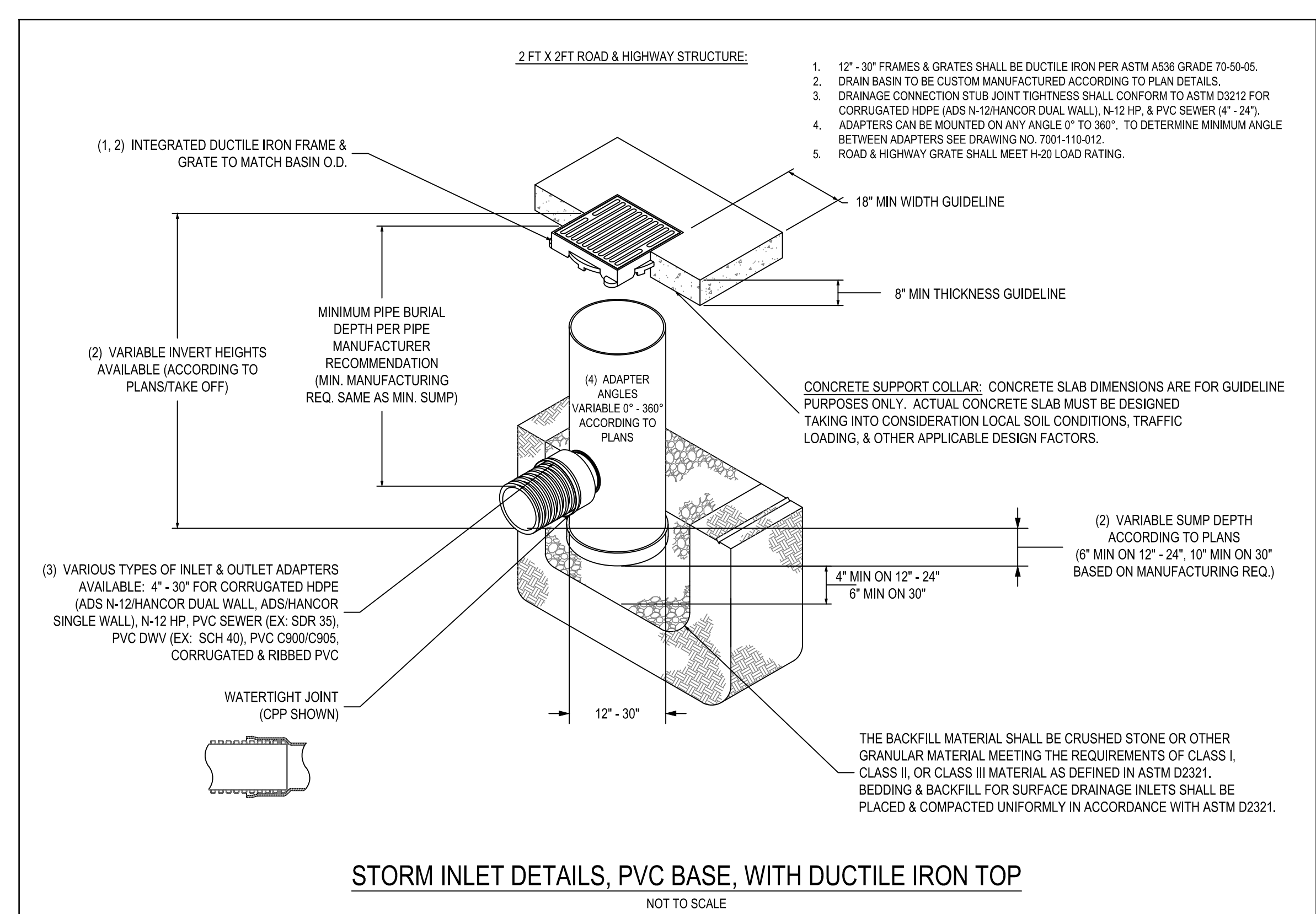
CONCRETE PAVING JOINT DETAILS
N.T.S.



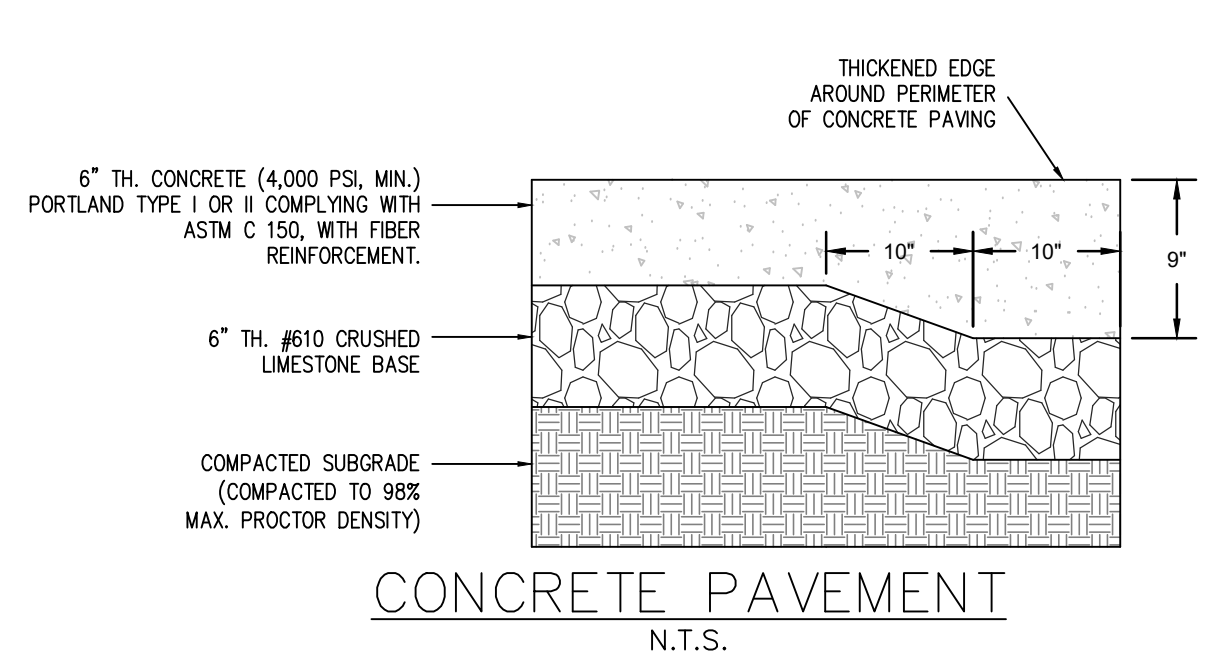
NEW METER SERVICE ASSEMBLY
SCALE: NONE



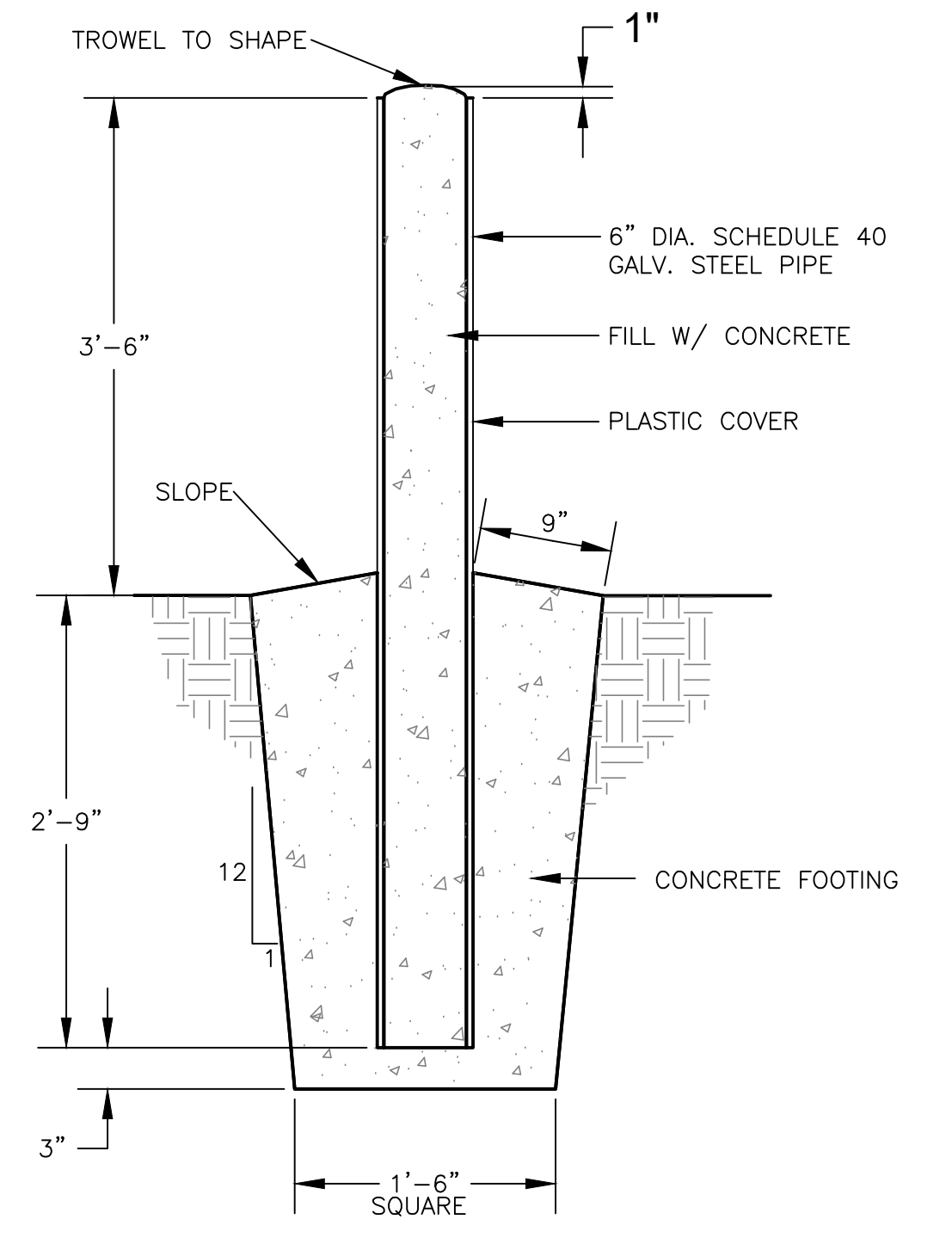
NEW CONCRETE TO EXISTING CONCRETE DETAIL
N.T.S.



STORM INLET DETAILS, PVC BASE, WITH DUCTILE IRON TOP
NOT TO SCALE



CONCRETE PAVEMENT
N.T.S.



BOLLARD DETAIL
N.T.S.

Section 4, Item E)

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 ENGINEERING SOLUTIONS, INC.
 JACKSON, MS 39211
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 601-557-2002 WWW.DEANESI.COM

REGISTERED PROFESSIONAL ENGINEER
 STATE OF MISSISSIPPI
 20557
 02-27-2024

No.	Description	Date	
1	PLANS SUBMITTED FOR REVIEW	02-27-2024	

DRAWING ISSUED

OWNER: **MAC HAIK**
 ALUTBAHN LOOP
 GLUCKSTADT, MS 39110

PROJECT TITLE: **MAC HAIK NEW SERVICE BUILDING**

SHEET TITLE: **DETAILS**

SITE DEVELOPMENT

JOB NO.: 240201
 DATE: 05 FEB 2024
 SCALE: AS SHOWN
 DRAWN BY: WSD
 REVIEWED BY: WSD

SHEET NUMBER: **7**

SITE CONTEXT



PEOPLES CONSTRUCTION

DESIGN - BUILD GENERAL CONTRACTORS
 3913 Underwood Drive || Flowood, MS 39232
 Office: 601-932-1111 || Fax: 601-932-1112
 www.peoplesconstruction.com

Project Title

NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

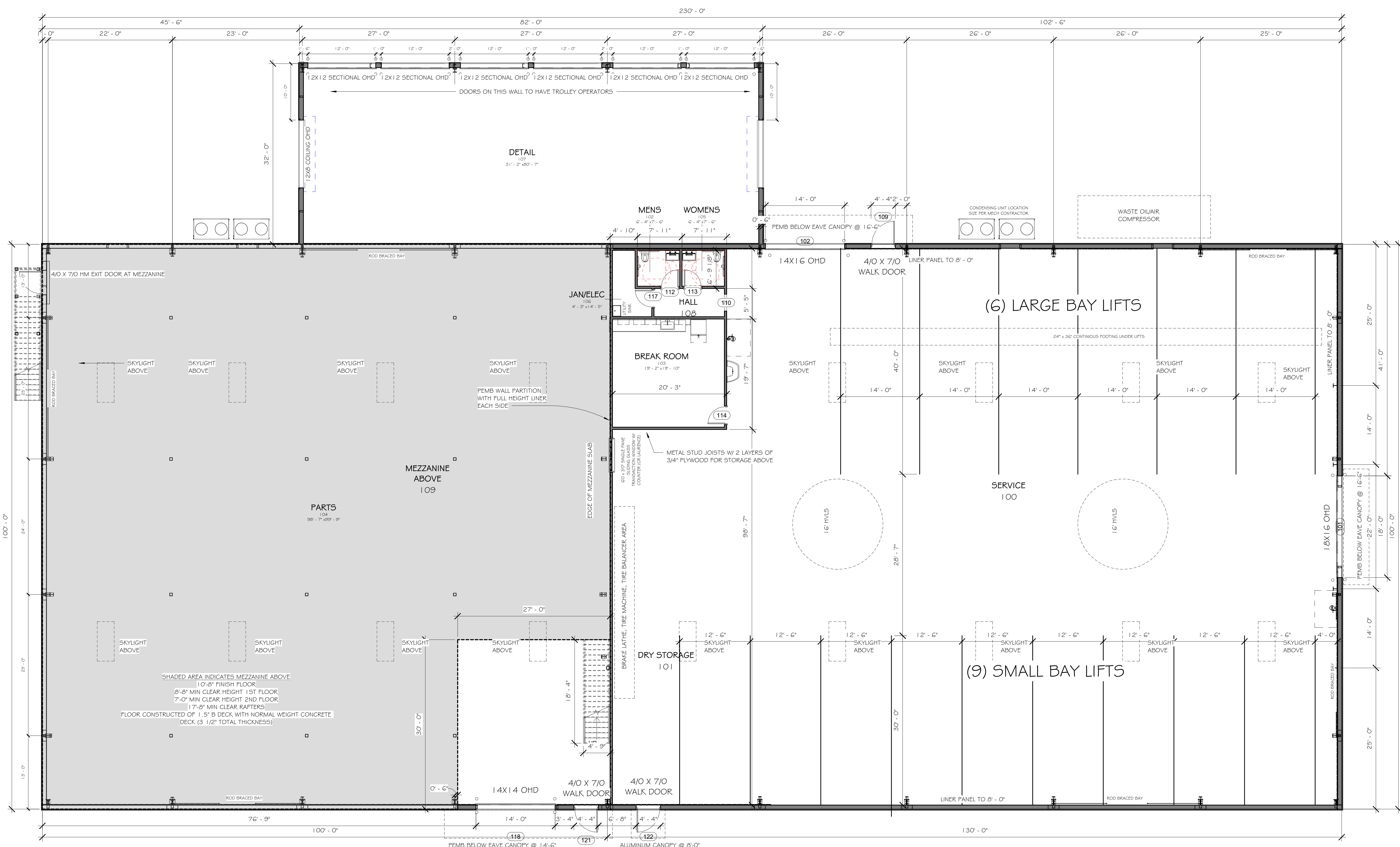
Date 3/1/2024
 Drawn By AGR
 Checked By Checker

Sheet Number
G1
 Professional Seal

100% SALES DRAWINGS

ARCHITECTURAL NOTES

- 1) PROVIDE 6" WHITE VINYL BACK ROOF INSULATION
 & 4" WHITE VINYL BACK WALL INSULATION
- 2) PROVIDE FIBERGLASS ROOF SKYLIGHTS



PEOPLES CONSTRUCTION
 DESIGN - BUILD GENERAL CONTRACTORS
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Project Title
NEW SERVICE BUILDING FOR MAC HAIK
 GLUCKSTADT, MS

Date
 3/1/2024
 Drawn By
 AGR
 Checked By
 Checker

Sheet Number
A-1
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100% SALES DRAWINGS

1 FLOOR PLAN
 1/8" = 1'-0"



PEOPLES CONSTRUCTION

DESIGN - BUILD GENERAL CONTRACTORS

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NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

Date 3/1/2024

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Checked By Checker

Sheet Number

A-2

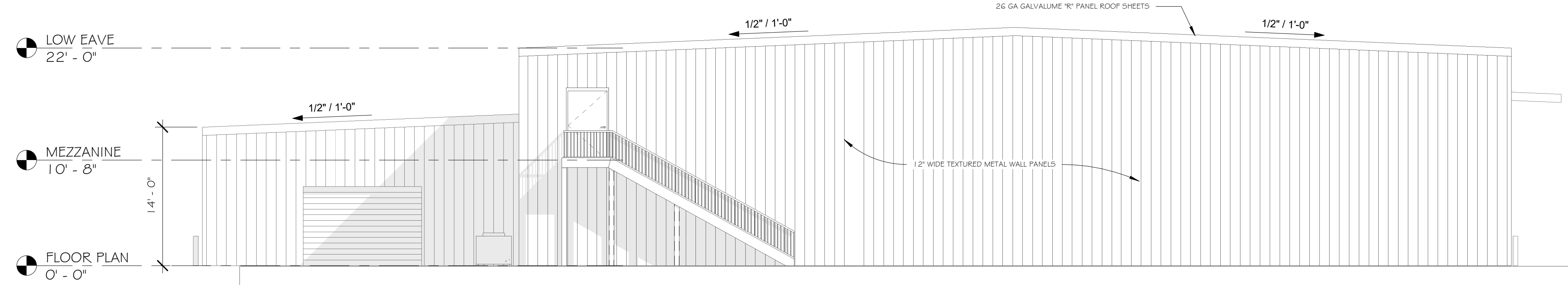
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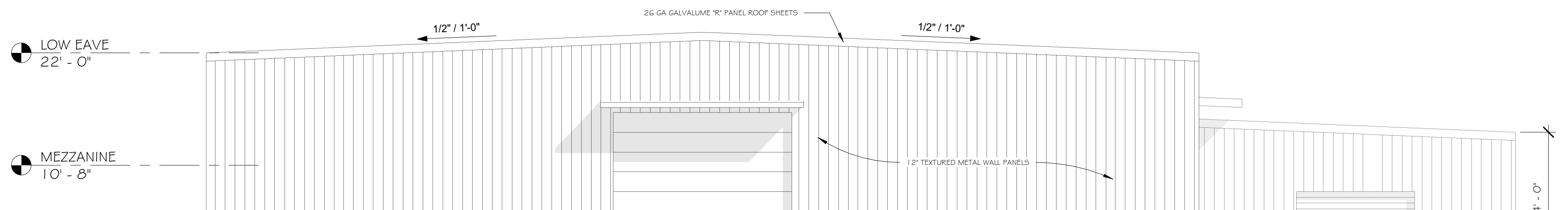
1 WEST ELEVATION
1/8" = 1'-0"

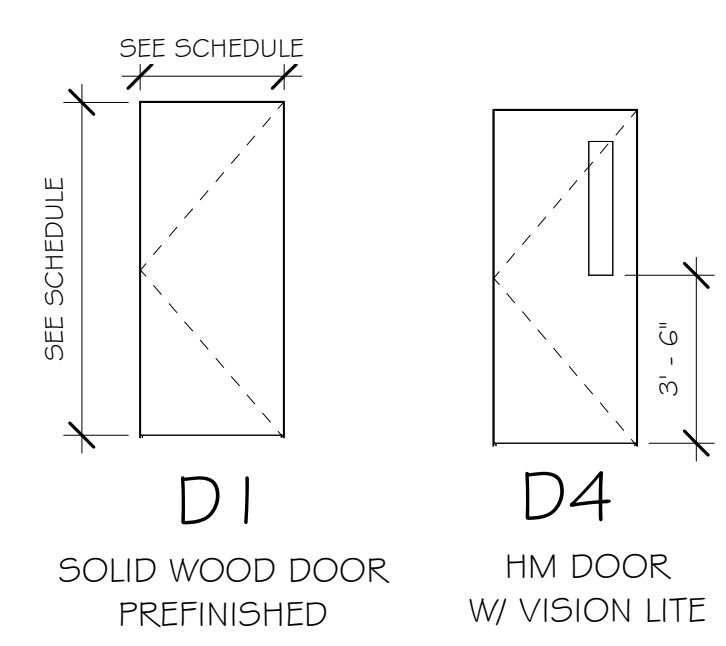


2 EAST ELEVATION
1/8" = 1'-0"



3 North
1/8" = 1'-0"





DOOR TYPE SCHEDULE
 1/4" = 1'-0"

RUBBER BASE (RB)
 MFG - ROPPE OR EQUAL
 COLOR - STANDARD COLORS

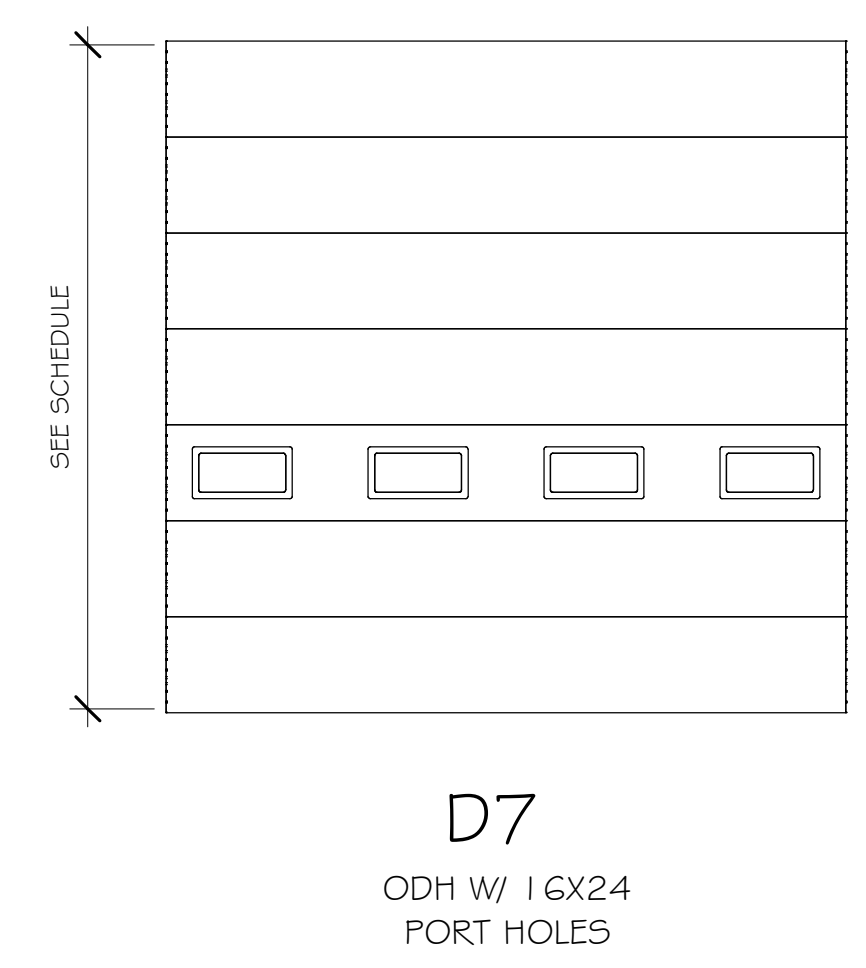
ACOUSTICAL CEILING TILE (ACT-1)
 MFG - ARMSTRONG OR EQUAL
 MODEL - 1728
 COLOR - SQUARE EDGE 24" X 24",
 WHITE, 1 1/2" GRID, WHITE

VINYL COMPOSITE TILE (VCT)
 MFG - PRICE MID RANGE
 SIZE - 12X12
 COLOR - TBD

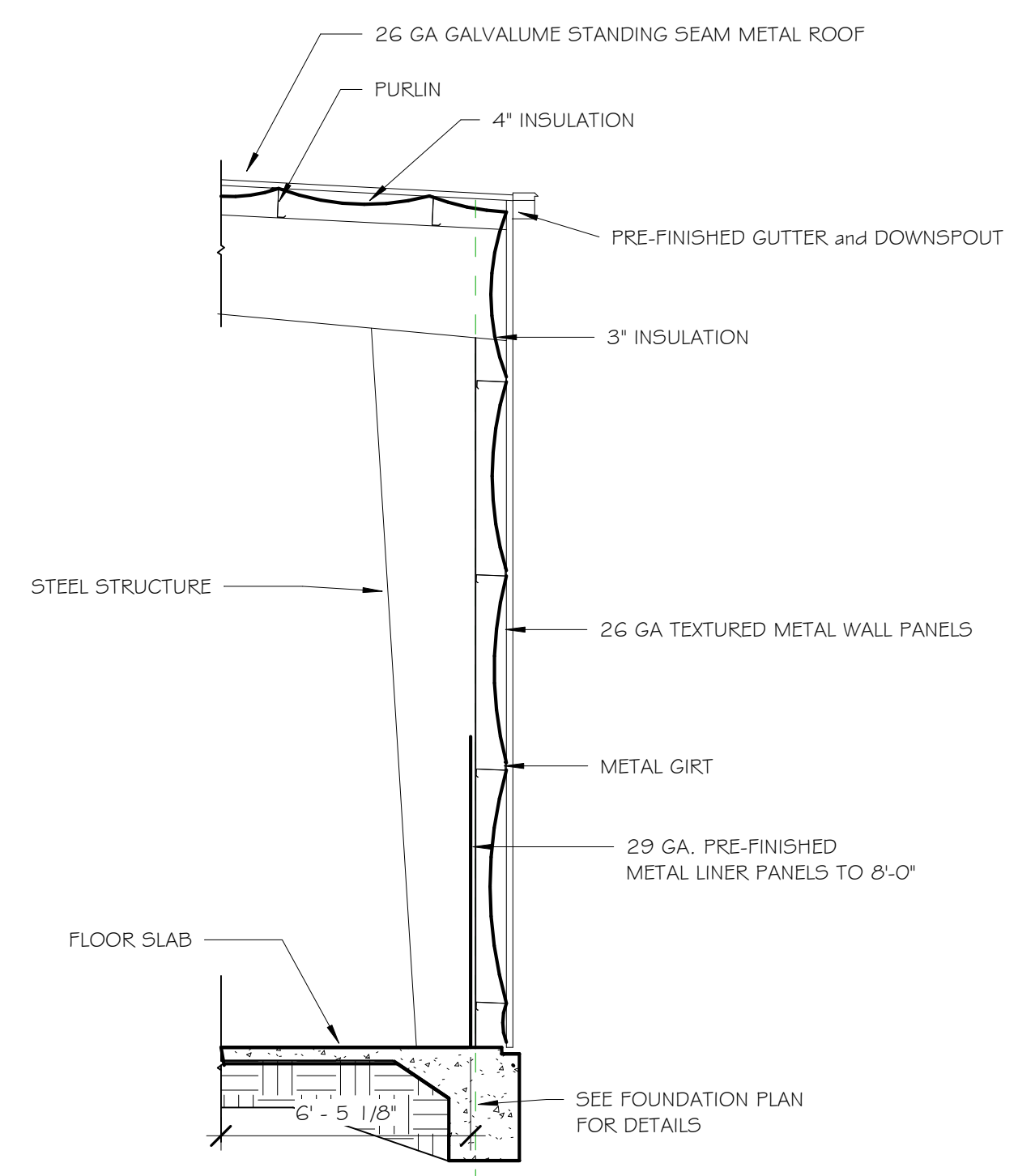
SEALED CONCRETE (SC)

FINISH LEGEND
 1/4" = 1'-0"

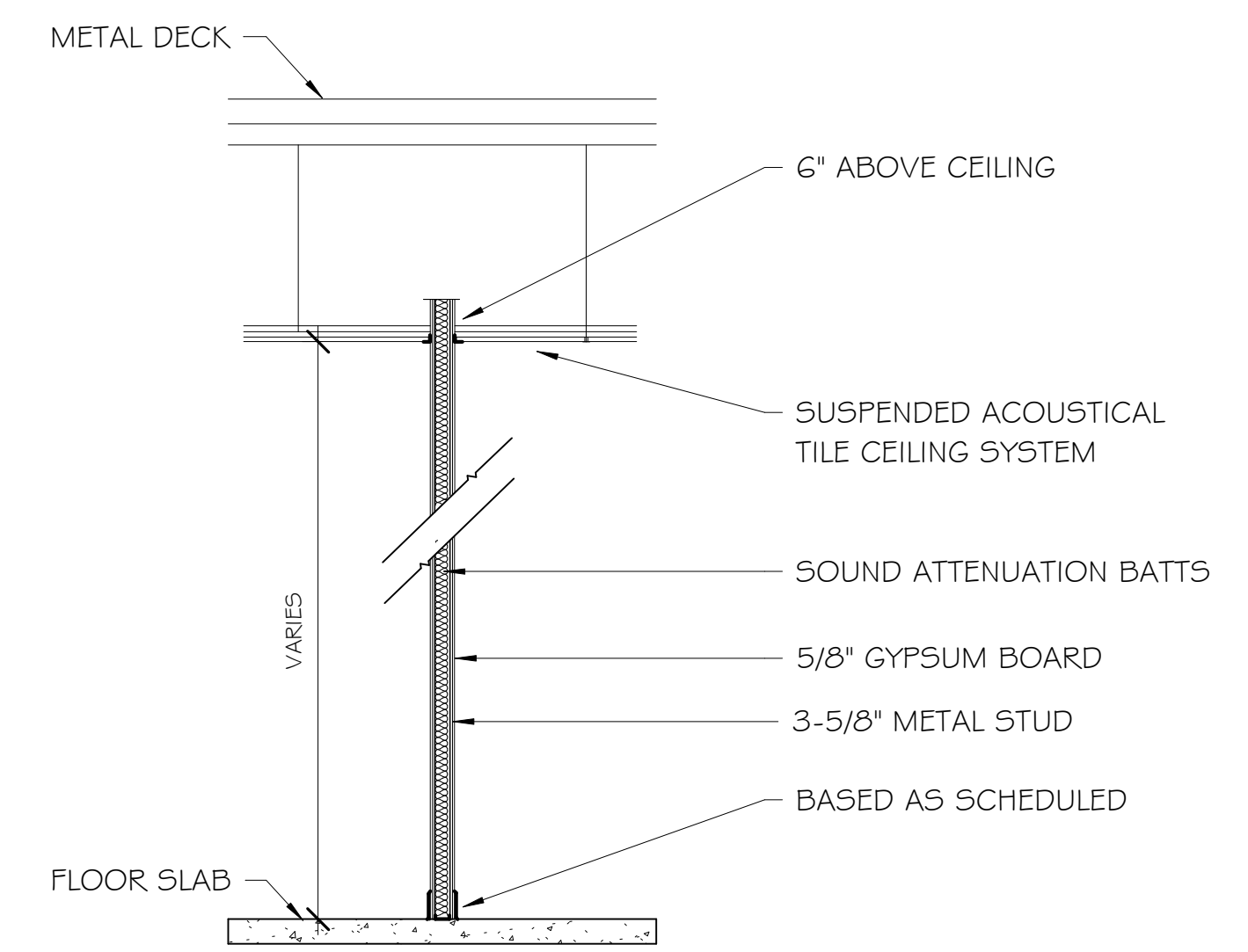
DOOR SCHEDULE							
Mark	Width	Height	DOOR TYPE	Thickness	Frame Type	Finish	Comments
101	18' - 0"	16' - 0"	D7	2"	STEEL	PAINT	
102	14' - 0"	16' - 0"	D7	2"	STEEL	PAINT	
109	4' - 0"	7' - 0"		1 3/4"			
110	0' - 0"	0' - 0"					
112	3' - 0"	7' - 0"		1 3/4"			
113	3' - 0"	7' - 0"		1 3/4"			
114	3' - 0"	7' - 0"		1 3/4"			
117	3' - 0"	7' - 0"		1 3/4"			
118	14' - 0"	14' - 0"		2"			
121	4' - 0"	7' - 0"		1 3/4"			
122	4' - 0"	7' - 0"		1 3/4"			
123	12' - 0"	10' - 0"		2"			
124	12' - 0"	10' - 0"		2"			
132	12' - 0"	10' - 0"		2"			
133	12' - 0"	10' - 0"		2"			
134	12' - 0"	10' - 0"		2"			
135	12' - 0"	10' - 0"		2"			
136	14' - 0"	14' - 0"	D7	2"	STEEL	PAINT	
137	10' - 0"	10' - 0"		2"			
138	10' - 0"	10' - 0"		2"			
139	12' - 0"	8' - 0"		3"			
140	12' - 0"	8' - 0"		3"			
141	4' - 0"	7' - 0"		1 3/4"			



D7
 ODH W/ 16X24
 PORT HOLES

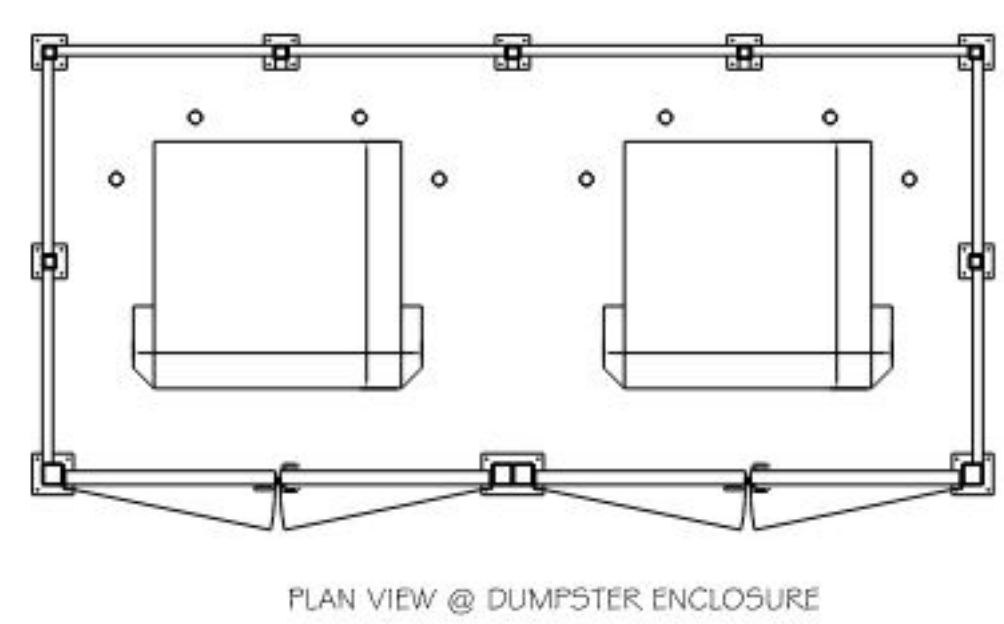


Typical Warehouse Exterior Wall
 1/4" = 1'-0"

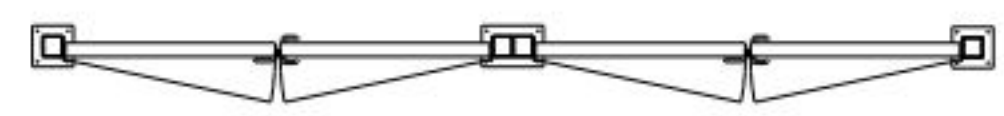


TYPICAL INTERIOR WALL PARTITION
 1/4" = 1'-0"

FINISH SCHEDULE						
ROOM NUMBER	ROOM NAME	FLOOR FINISH	WALL FINISH	BASE FINISH	CEILING FINISH	CEILING HEIGHT
100	SERVICE	SC	LINER PANEL	NONE	EXPOSED	EXPOSED
101	DRY STORAGE	SC	LINER PANEL	NONE	EXPOSED	EXPOSED
102	MENS	VCT	PAINT	VCT	ACT	9' - 0"
103	BREAK ROOM	VCT	PAINT	VCT	ACT	9' - 0"
104	PARTS	SC	LINER PANEL	NONE	EXPOSED	EXPOSED
105	WOMENS	VCT	PAINT	VCT	ACT	9' - 0"
106	JAN/ELEC	VCT	PAINT	VCT	ACT	9' - 0"
107	DETAIL	SC	LINER PANEL	NONE	EXPOSED	9' - 0"
108	HALL	SC	PAINT	RB	ACT	9' - 0"
109	MEZZANINE ABOVE	SC	LINER PANEL	NONE	EXPOSED	EXPOSED



PLAN VIEW @ DUMPSTER ENCLOSURE



GATE ELEVATION VIEW

TYPICAL GATE SECTION

PEOPLES CONSTRUCTION
 DESIGN - BUILD GENERAL CONTRACTORS
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Project Title

NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

Date 3/1/2024
 Drawn By AGR
 Checked By Checker

Sheet Number

A-3
 Professional Seal

100% SALES DRAWINGS

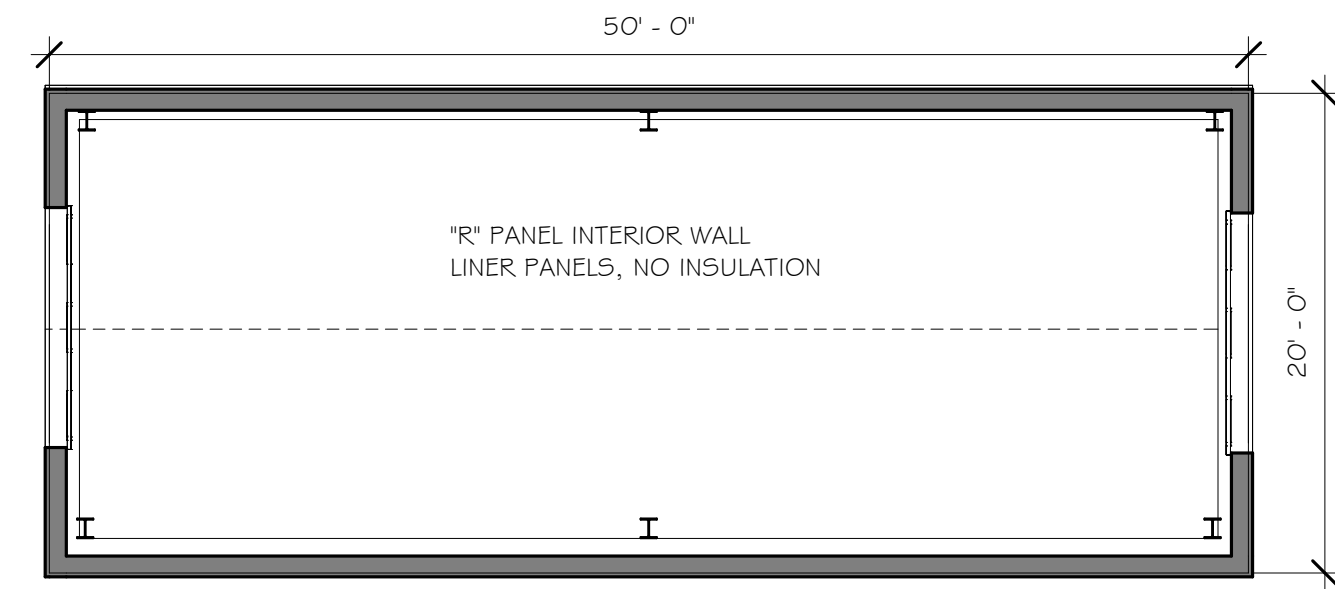
Project Title

NEW SERVICE BUILDING FOR MAC HAIK

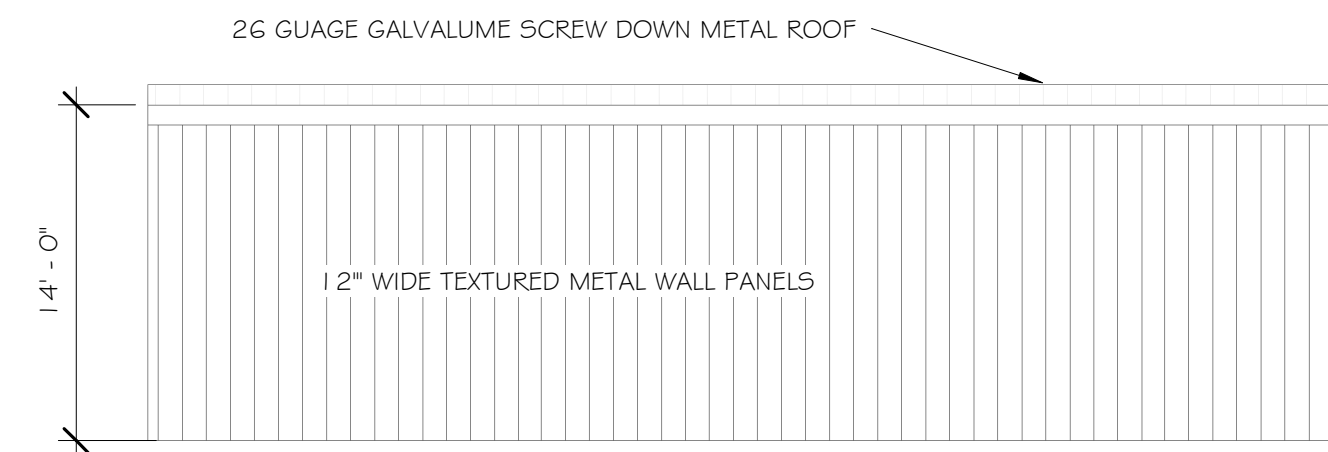
GLUCKSTADT, MS

Date: 3/1/2024
 Drawn By: AGR
 Checked By: Checker
 Sheet Number: **A-4**
 Professional Seal

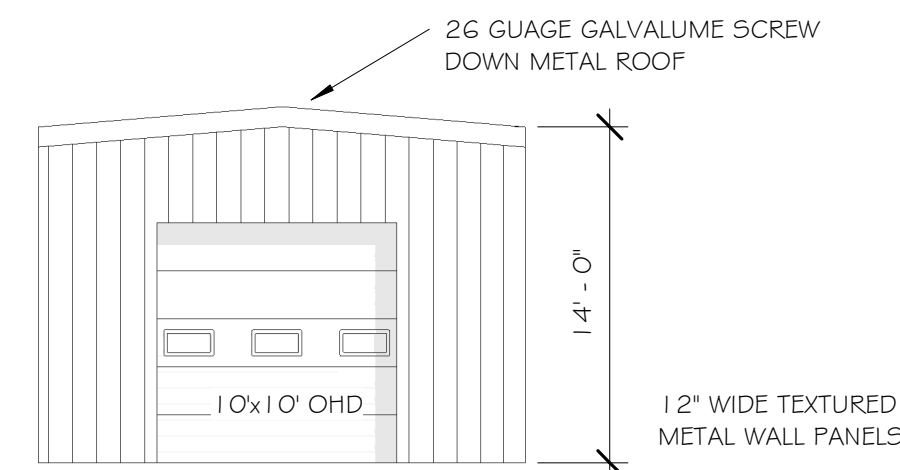
100% SALES DRAWINGS



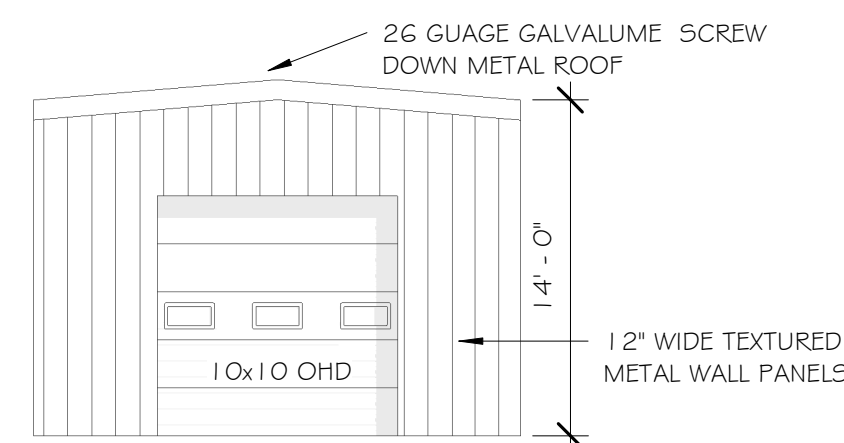
1 WASH BAY FLOOR PLAN
 1/8" = 1'-0"



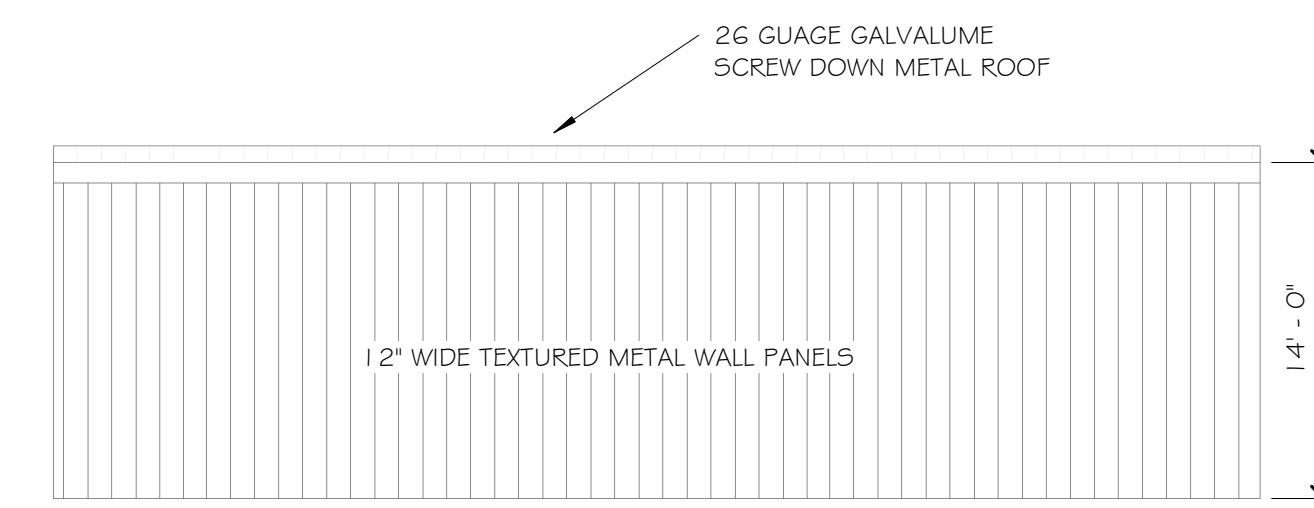
2 WASHBAY Elevation 5-A
 1/8" = 1'-0"



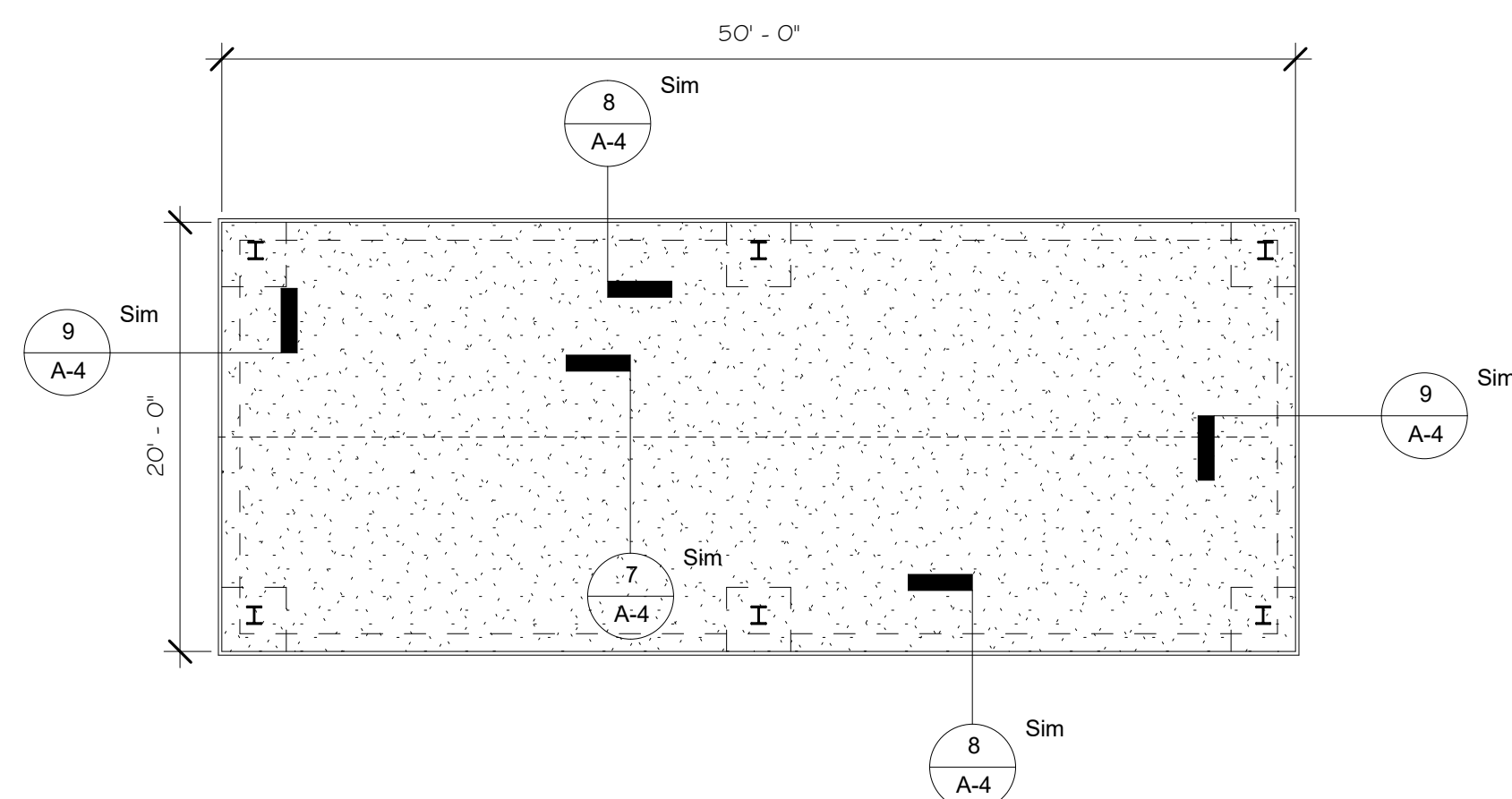
3 WASHBAY Elevation 6-A
 1/8" = 1'-0"



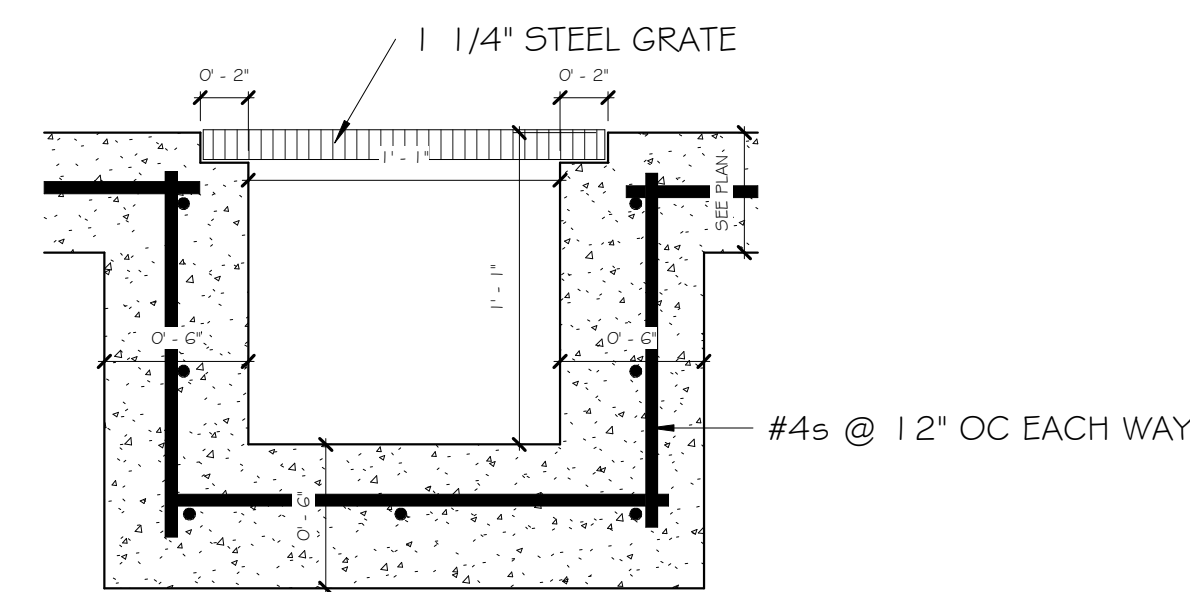
4 WASHBAY Elevation 7-A
 1/8" = 1'-0"



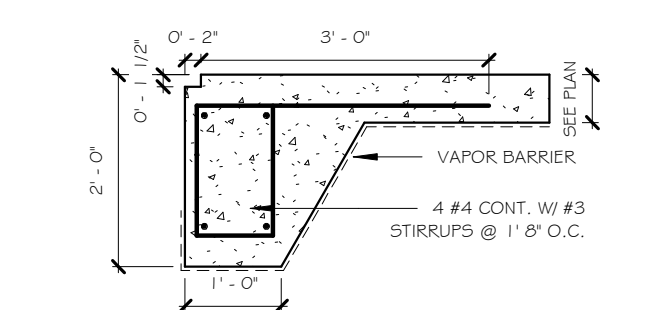
5 WASHBAY Elevation 8-A
 1/8" = 1'-0"



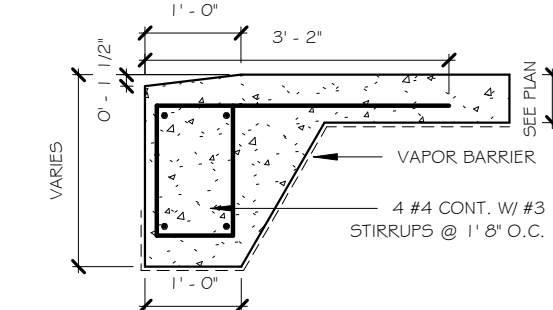
6 Washbay Foundation
 1/8" = 1'-0"



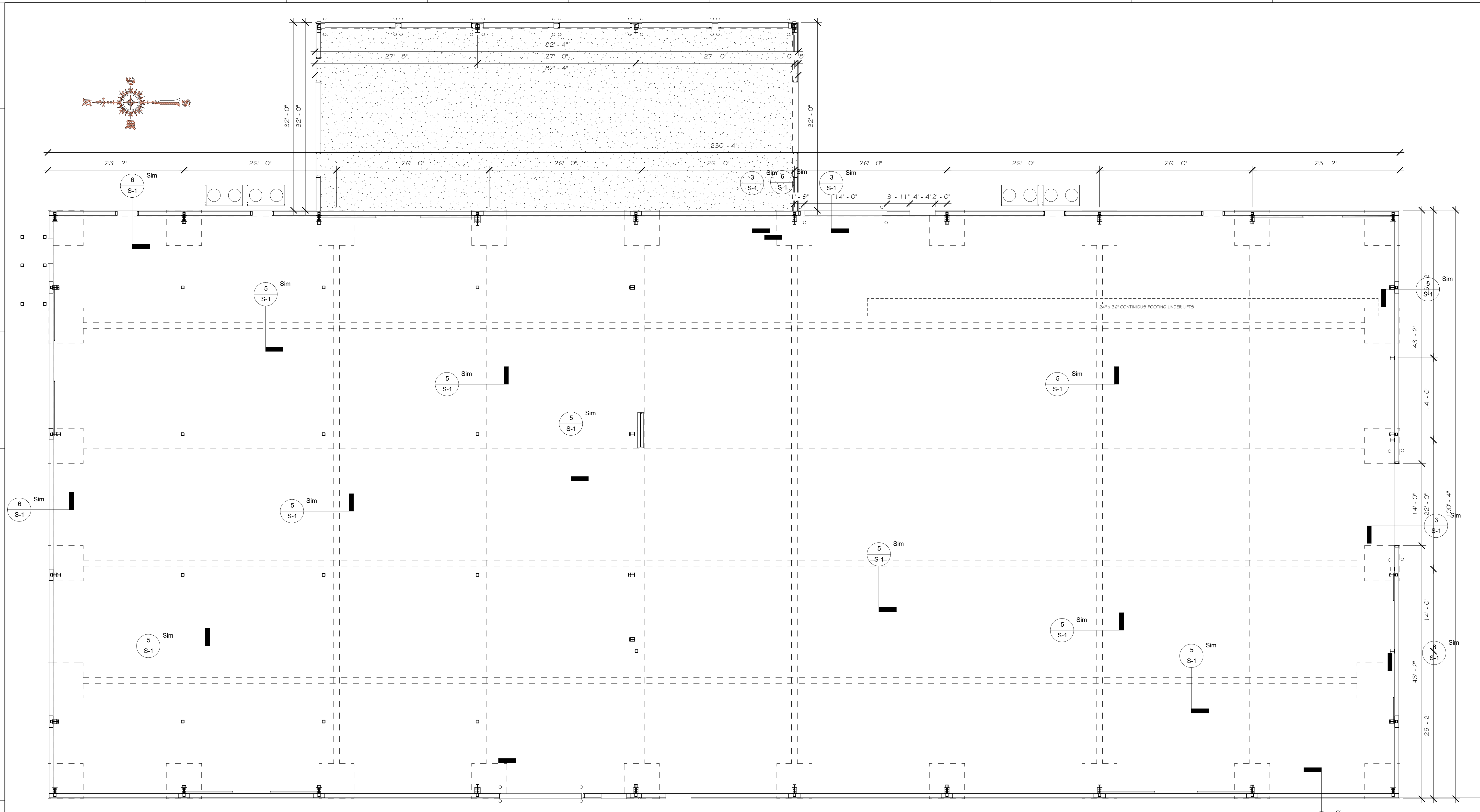
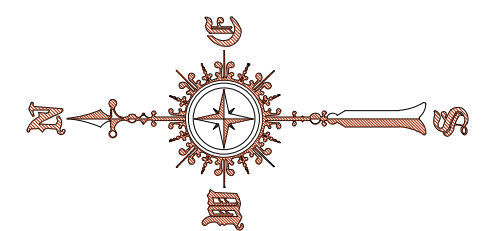
7 TRENCH DRAIN DETAIL
 1 1/2" = 1'-0"



8 TYPICAL GRADE BEAM WITH SHEET NOTCH DETAIL 2
 1/2" = 1'-0"



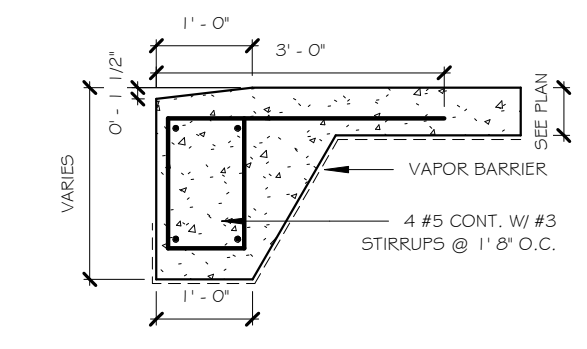
9 TYPICAL GRADE BEAM AT OHD DETAIL 2
 1/2" = 1'-0"



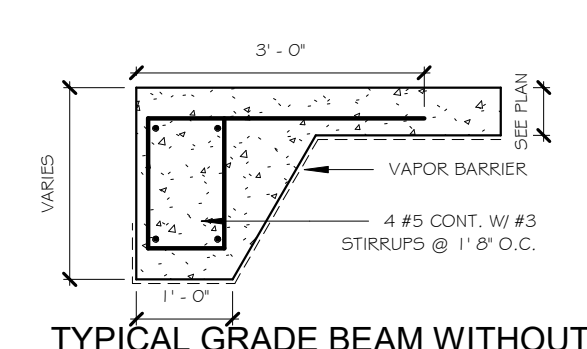
8 FND
 1/8" = 1'-0"

STRUCTURAL NOTES

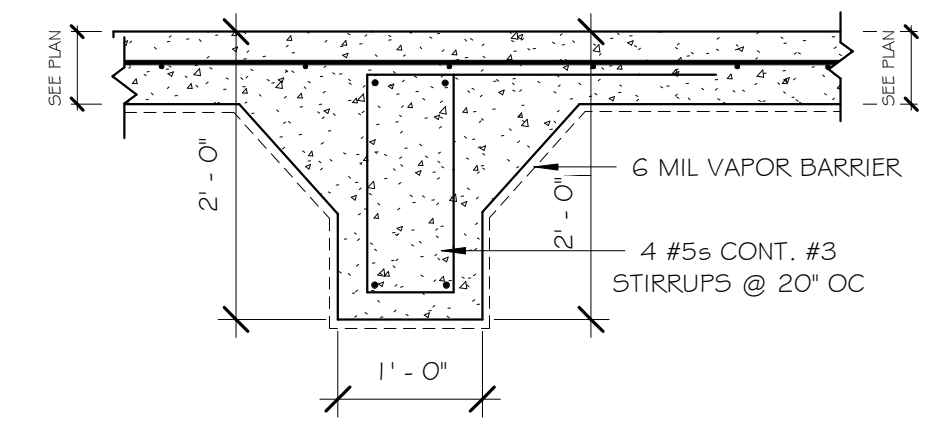
1. REINFORCING STEEL - GRADE 60
2. CONCRETE
 - A. 3,500 PSI FOOTINGS
 - B. 3,500 PSI SLAB
3. SOIL BEARING CAPACITY - 2,000 PSF
4. FOUNDATION DESIGN BASED ON THE FOLLOWING:
 - A. SOIL INVESTIGATION - TBD
 - B. REACTIONS - TBD
5. NO EXPANSIVE CLAYS ALLOWED WITHIN 6'-0" OF THE LOWEST FOUNDATION MEMBER. PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING IN ALL DIRECTIONS.
6. SLAB CONTROL JOINTS SHOULD BE SAWED AS FOLLOWS:
 - A. SAW JOINTS AS SOON AS CONCRETE HAS SET ENOUGH TO ALLOW OPERATIONS
 - B. MIN. DEPTH - D=0.30 X SLAB DEPTH. MIN. SPACING 20' - 0" EACH WAY



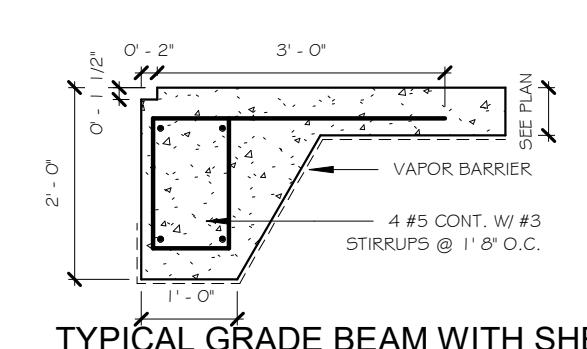
3 TYPICAL GRADE BEAM AT OHD DETAIL
 1/2" = 1'-0"



4 TYPICAL GRADE BEAM WITHOUT NOTCH
 1/2" = 1'-0"



5 TYPICAL THICKENED SLAB DETAIL
 3/4" = 1'-0"



6 TYPICAL GRADE BEAM WITH SHEET PILING DETAIL
 1/2" = 1'-0"

FOOTING SCHEDULE				
Type Mark	Length	Width	Thickness	Reinforcing
F1	<varies>	<varies>	<varies>	

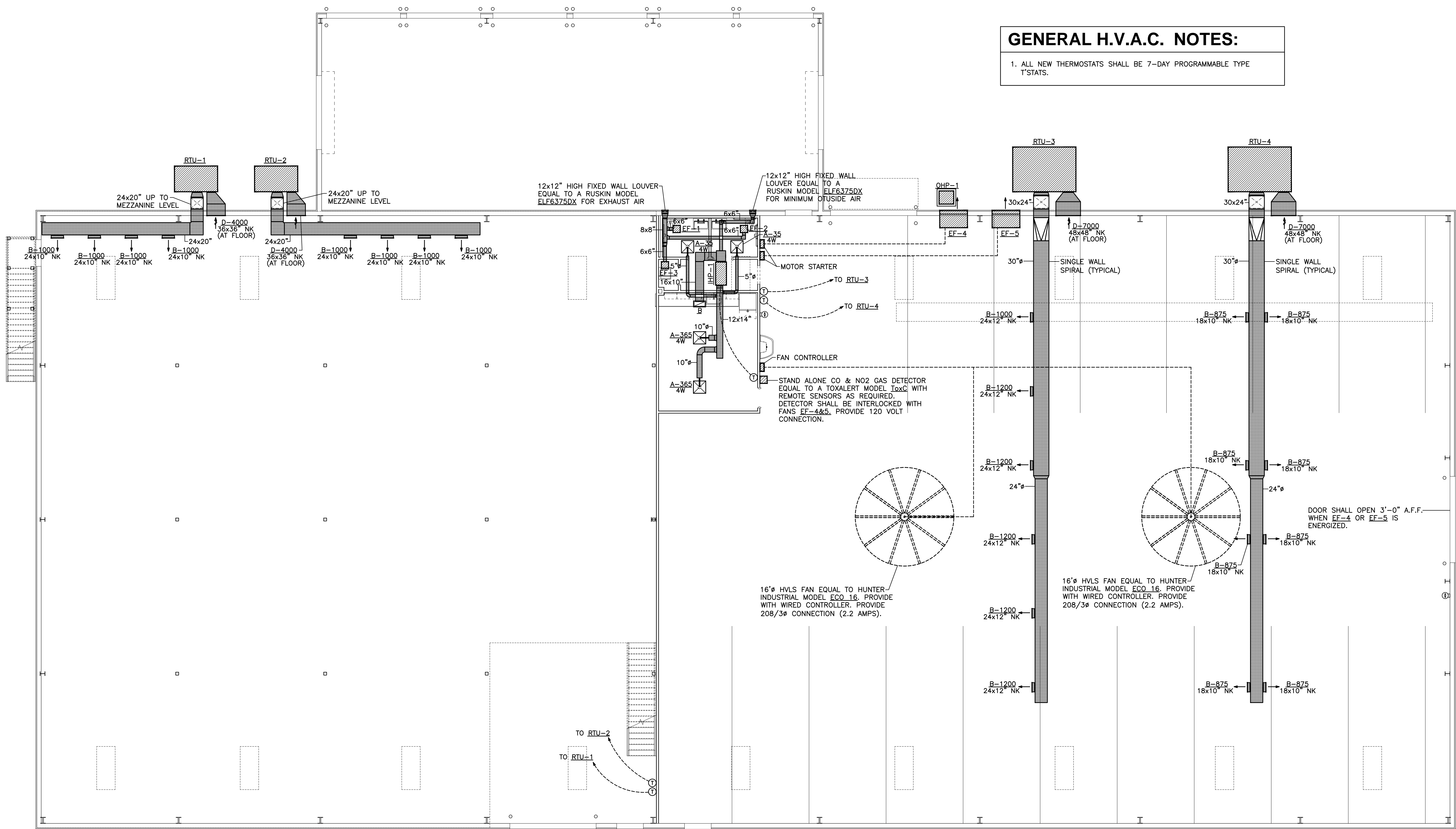


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Project Title
NEW SERVICE BUILDING FOR MAC HAIK
GLUCKSTADT, MS

Date: 2/23/2024
Drawn By: DVM
Checked By: SCW
Sheet Number: **M-1**
Professional Seal

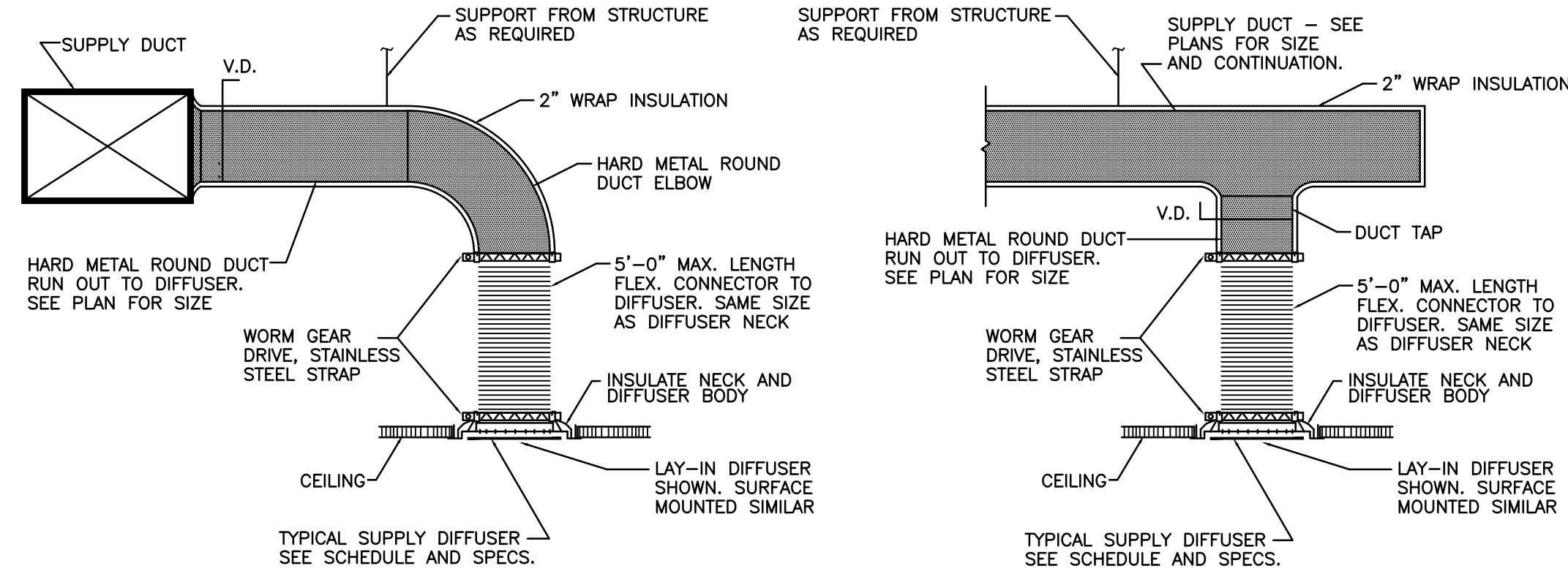
GENERAL H.V.A.C. NOTES:
1. ALL NEW THERMOSTATS SHALL BE 7-DAY PROGRAMMABLE TYPE T'STATS.



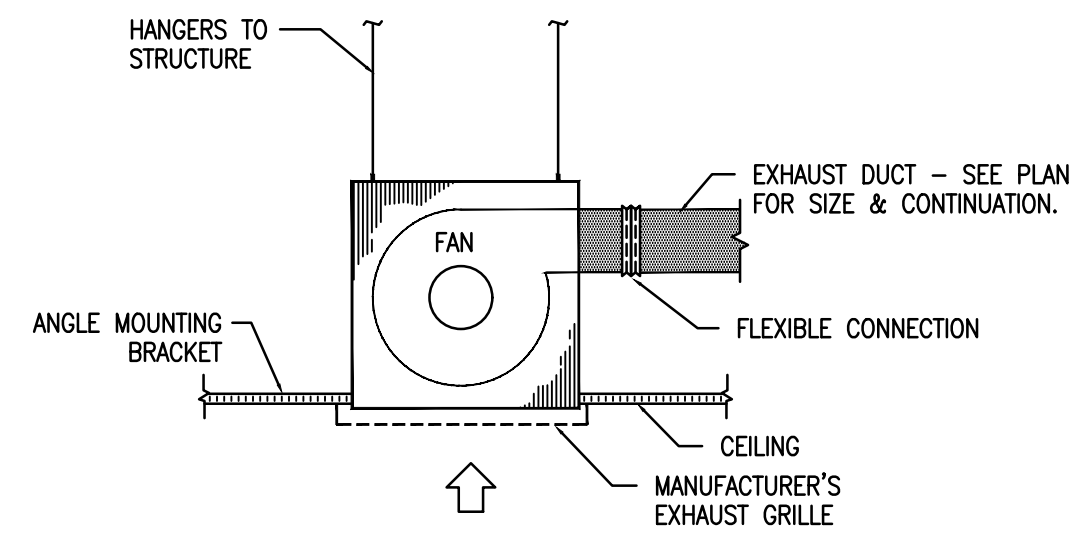
FLOOR PLAN - H.V.A.C.
SCALE: 1/8"=1'-0"



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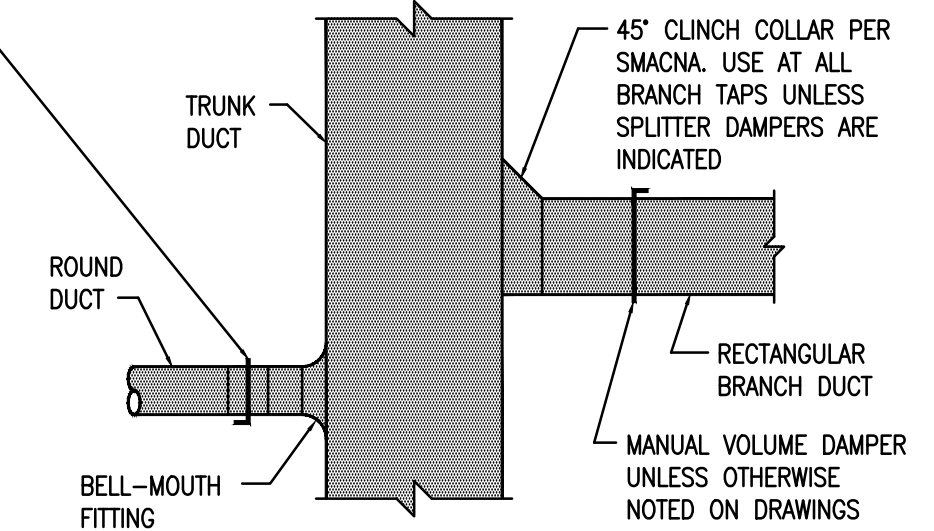


TYPICAL DIFFUSER MOUNTING
N.T.S.



CEILING MOUNTED EXHAUST FAN DETAIL
N.T.S.

NOTE:
DAMPERS SHALL BE PROVIDED IN ALL BRANCH RUN-OUTS TO DIFFUSERS, GRILLES AND REGISTERS UNLESS SPECIFICALLY NOTED OTHERWISE ON DRAWINGS. DAMPERS ABOVE INACCESSIBLE CLG. SHALL BE COORDINATED WITH ACCESS DOORS. IF DAMPERS OCCUR IN AREAS NOT ACCESSIBLE FROM ACCESS DOORS PROVIDE OPERATOR ROD AND CLG. REGULATOR WITH GASKET AND SEALED CEILING PENETRATION.
PROVIDE MANUAL OPPOSED BLADE VOLUME DAMPER IN BRANCH LINE UNLESS OTHERWISE NOTED ON DRAWINGS. DAMPERS SHALL BE INSTALLED IN ACCESSIBLE LOCATION NEAR TRUNK DUCT AND MINIMUM OF 5'-0" FROM ANY AIR INLET OR OUTLET DEVICE.
COORDINATE WITH ACCESS DOORS IN NON-ACCESSIBLE CLGS.



BRANCH DUCT TAP DETAIL
N.T.S.

- GENERAL NOTES:
- A. INSTALLATION
 1. ALL PIPING OR DUCTS IN FINISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR SUSPENDED CEILINGS.
 2. THERMOSTATS SHALL BE LOCATED 5'-0" ABOVE FLOOR AND SHALL CLEAR ALL EQUIPMENT. THERMOSTATS LOCATED NEXT TO DOORS SHALL BE LOCATED ON LATCH SIDE OF DOOR.
 3. COORDINATE DIFFUSER, GRILLE, AND REGISTER LOCATIONS WITH REFLECTED CEILING PLAN.
 4. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COORDINATION OF WORK OF ALL TRADES TO ASSURE PROPER INSTALLATION AND CLEARANCES. DRAWINGS ARE ESSENTIALLY DIAGRAMMATICAL AND THEREFORE CONTRACTOR SHOULD PLAN EXACT ROUTING OF DUCT AND PIPE BASED ON FIELD CONDITIONS. PROVIDE ADDITIONAL TRANSITIONS AND OFFSETS AS NECESSARY (AT NO ADDITIONAL COST TO OWNER) TO COMPLETE INSTALLATION AND MAINTAIN REQUIRED CEILING HEIGHTS.
 5. ACCESS PANELS IN DUCTWORK AND NON-ACCESSIBLE CEILINGS SHALL BE PROVIDED FOR OPERATION AND MAINTENANCE OF ALL BOXES, COILS, VALVES, TRAPS, DAMPERS, CLEANOUTS, CONTROLS, ETC. PROVIDE MINIMUM 24" X 24" CEILING ACCESS PANEL FOR VAV BOXES AND 12" X 12" FOR DAMPERS. COORDINATE EXACT PLACEMENT OF ACCESS PANELS AND EQUIPMENT SO THAT REASONABLE MAINTENANCE SPACE IS AVAILABLE.
 6. CONTRACTOR SHALL COORDINATE ALL OPENINGS IN ROOF TO CONFORM WITH DIMENSIONS OF EQUIPMENT PURCHASED. DUCTS THROUGH ROOF TO FANS AND HVAC EQUIPMENT SHALL BE TRANSITIONED TO COORDINATE WITH EQUIPMENT CONNECTION SIZES AND ROOF OPENING REQUIREMENTS.
 7. INSTALLATION OF ALL EQUIPMENT AND SYSTEMS SHALL BE IN ACCORDANCE WITH STANDARD DETAILS, SECTIONS, AND ELEVATIONS SHOWN ON THE DRAWINGS.
 8. CONTRACTOR SHALL MAINTAIN A CLEAR SERVICE AREA AROUND ALL EQUIPMENT FOR MAINTENANCE SUCH AS, FILTER REMOVAL, MOTOR AND DRIVE ADJUSTMENTS, COIL AND TUBE CLEANING OR REMOVAL.
 9. ALL CONSTRUCTION SHALL BE PER DETAILS AND SPECIFICATIONS OF CONTRACT DOCUMENTS.
 - B. DUCTWORK
 1. ALL DUCT RUNOUTS TO DIFFUSERS, RETURN AIR GRILLES AND EXHAUST GRILLES SHALL BE COMPLETE WITH VOLUME DAMPERS UNLESS NOTED OTHERWISE. DAMPERS MAY BE OMITTED IN DUCT RUNOUTS FROM BOXES SERVING SINGLE DIFFUSER. LOCATE DAMPERS SO THEY ARE ACCESSIBLE FROM LAY-IN CEILING OR ACCESS DOORS.
 2. ROUND SUPPLY RUNOUTS TO DIFFUSERS SHALL BE HARD METAL TO WITHIN 5'-0" DEVELOPED LENGTH FROM DIFFUSER. MAXIMUM 5'-0" OF FLEXIBLE DUCT MAY BE USED FOR FINAL CONNECTION TO DIFFUSER.
 3. DUCT TRANSITIONS SHALL BE PROVIDED AS REQUIRED FROM ALL EQUIPMENT CONNECTS TO DUCT SIZES INDICATED ON DRAWINGS.
 4. PROVIDE EASED INLET RECTANGULAR TO ROUND TAPS AT DUCT TAPS IF ROUND DUCT SIZE IS TOO LARGE FOR BELLMOUTH TAP TO TRUNK DUCT.

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Date: 2/23/2024
Drawn By: DVM
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Sheet Number

M-2
Professional Seal



SCWA# 24-022
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NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

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Sheet Number: **M-3**
 Professional Seal

OUTDOOR HEAT PUMP SCHEDULE															
MARK	MAKE	MODEL	COOLING			HEATING			ELECTRICAL				MIN. CIRCUIT AMPACITY	MAX. FUSE SIZE	REMARKS
			AMBIENT	MBH	SEER	AMBIENT	MBH	COP	COMP. FLA	FAN FLA	VOLTS	PHASE			
OHP-1	TRANE	4TTR4024	95°F	24.0	14.0	47°F	24.0	----	10.1	0.85	208	1	13	20	

INDOOR HEAT PUMP SCHEDULE																				
MARK	MAKE	MODEL	FAN			MOTOR			COOLING-95° AMB.				HEATING-47° AMB.				MCA	MOP	REMARKS	
			TOT CFM	O.A. CFM	E.S.P.	HP	VOLTS	PH.	EAT	TMBH	SMBH	EAT	MBH	AUX. HEAT KW	STEPS	VOLTS				PH.
IHP-1	TRANE	TEM4A24	800	80	.50"	1/3	208	1	80°/67°F	24.0	18.3	75°	24.0	7.2	1	208	1	45	45	PROVIDE W/ 1" FILTER RACK SINGLE POINT POWER CONNECTION

ROOFTOP UNIT SCHEDULE (COOLING ONLY)																					
MARK	MAKE	MODEL	TYPE	COOLING CAPACITY			ELECTRIC		EVAPORATOR FAN				CONDENSER FAN			COMP.		MCA	MOP	REMARKS	
				TMBH	SMBH	ENTERING AIR DB/WB	VOLTS	PHASE	CFM	O.A.	ESP	H.P.	FLA	NO.	VOLTS	FLA	NO.				FLA
RTU-1	TRANE	TSJ120	HORIZONTAL	120.0	----	80°/67°F	208	3	4,000	200	.50"	3.0	8.8	1	208	2.8	2	25.8/9.7	54	70	
RTU-2	TRANE	TSJ120	HORIZONTAL	120.0	----	80°/67°F	208	3	4,000	200	.50"	3.0	8.8	1	208	2.8	2	25.8/9.7	54	70	
RTU-3	TRANE	TSJ210	HORIZONTAL	214.0	----	80°/67°F	208	3	7,000	700	.50"	(2)3.0	8.8 EA.	2	208	4.3 EA.	2	35.7/20.2	93	125	
RTU-4	TRANE	TSJ210	HORIZONTAL	214.0	----	80°/67°F	208	3	7,000	700	.50"	(2)3.0	8.8 EA.	2	208	4.3 EA.	2	35.7/20.2	93	125	

FAN SCHEDULE															
MARK	MAKE	MODEL	TYPE	CFM	RPM	ESP	WHEEL		DRIVE	SONES	MOTOR			INTERLOCKED W/ CONTROLLED BY	REMARKS
							TYPE	MIN DIA			HP	VOLTS	PHASE		
EF-1	COOK	GC-140	CLG. MTD.	100	1500	.25"	FC	----	DIRECT	3.1	.009	120	1	MOTION SENSOR	A,B,C,D
EF-2	COOK	GC-140	CLG. MTD.	100	1500	.25"	FC	----	DIRECT	3.1	.009	120	1	MOTION SENSOR	A,B,C,D
EF-3	COOK	GC-140	CLG. MTD.	100	1500	.25"	FC	----	DIRECT	3.1	.009	120	1	WALL SWITCH	A,B,C,D
EF-4	COOK	48XMWH	WALL PROP	25,000	526	.125"	PROP	----	BELT	28	3.0	208	3	STARTER	C,E,F
EF-5	COOK	48XMWH	WALL PROP	25,000	526	.125"	PROP	----	BELT	28	3.0	208	3	STARTER	C,E,F

ACCESSORIES: (A) VIBRATION ISOLATORS (B) GRAVITY BACKDRAFT DPR. (C) DISCONNECT (D) SPEED CONTROLLER (E) WALL COLLAR (F) GRAVITY SHUTTER

GRILLE, REGISTER AND DIFFUSER SCHEDULE															
MARK	MAKE	MODEL	TYPE	USE			MTG	PANEL SIZE	NECK SIZE	MAX CFM	MAX PD	DAMPER	FINISH	PATTERN	REMARKS
				S	R	E									
A	TITUS	TDC-AA	LOUVER FACE	X			LAY-IN	24x24"	SEE PLANS	SEE PLANS	.07"	----	WHITE	SEE PLANS	
B	TITUS	300F	DOUBLE DEFLECTION	X			DUCT	MFGR'S STANDARD	SEE PLANS	SEE PLANS	.07"	----	ALUMINUM	FULLY ADJUSTABLE	
C	TITUS	50F	CUBE CORE		X		LAY-IN	24x12"	22x10"	1200	.05"	----	WHITE	----	
D	TITUS	30F	FIXED BLADE		X		SIDEWALL	MFGR'S STANDARD	SEE PLANS	SEE PLANS	.07"	----	ALUMINUM	0° DEFLECTION	



SCWA# 24-022
Scott C. Woods and Associates

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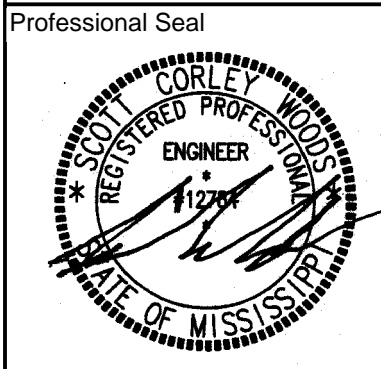
NEW SERVICE BUILDING FOR MAC HAIK

GLUCKSTADT, MS

Date: 2/23/2024
Drawn By: DVM
Checked By: SCW

Sheet Number

P-1

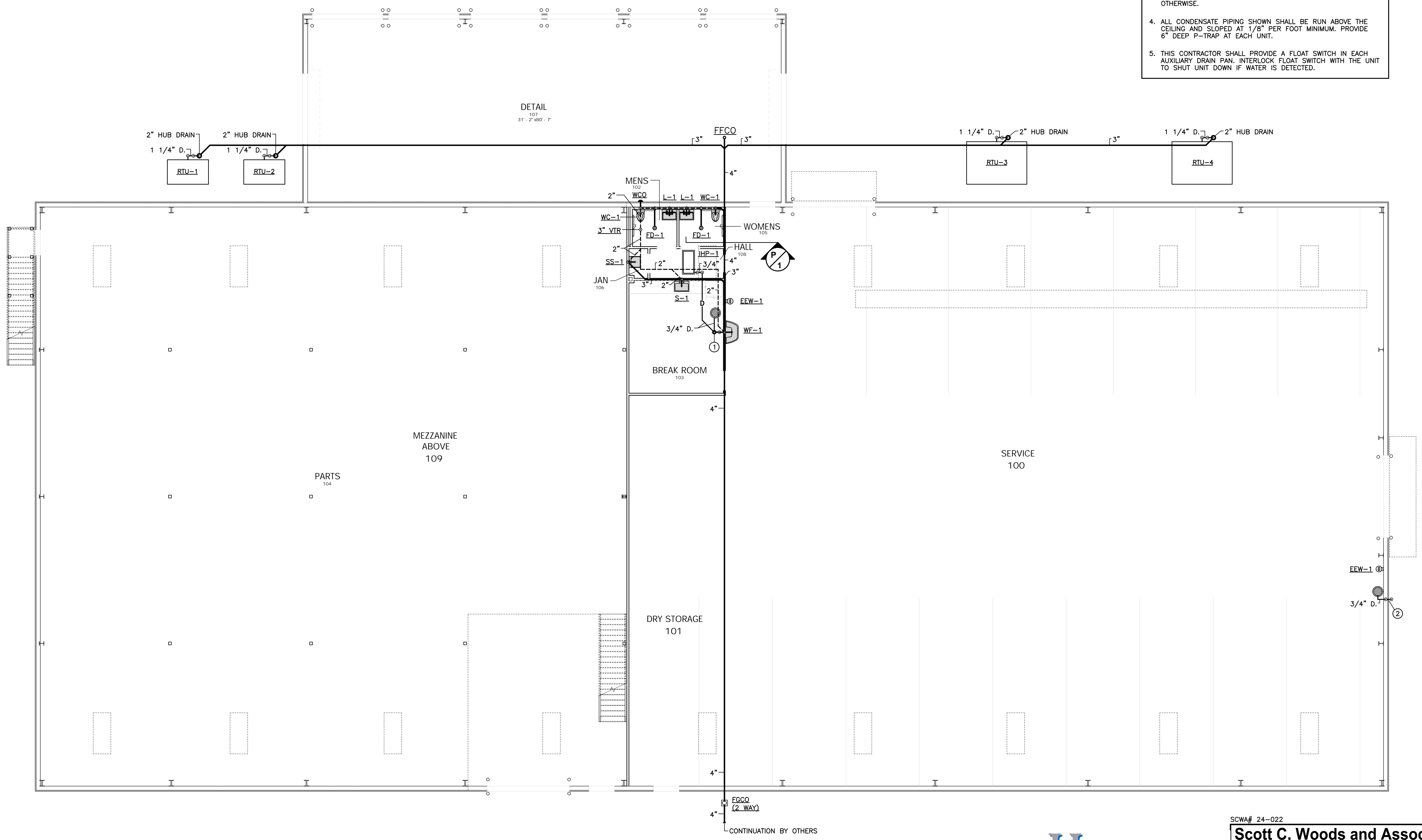


KEYED NOTES

- ① INDICATES 2" DEEP SEAL P-TRAP WITH 2x3" INCREASER AND SURE SEAL ABOVE CEILING.
- ② ROUTE 3/4" DRAIN DOWN WALL AND TURN OUT 4" ABOVE FINISHED GRADE.

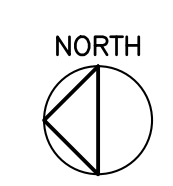
GENERAL PLUMBING NOTES

- 1. THIS CONTRACTOR SHALL COORDINATE SEWER INVERTS WITH CIVIL CONTRACTOR BEFORE INSTALLING PIPE.
- 2. ALL SANITARY SEWER PIPING SHOWN SHALL BE BELOW THE FLOOR AND SLOPED AT 1/8" PER FOOT MINIMUM UNLESS NOTED OTHERWISE.
- 3. ALL VENT PIPING SHALL BE ABOVE THE CEILING UNLESS NOTED OTHERWISE.
- 4. ALL CONDENSATE PIPING SHOWN SHALL BE RUN ABOVE THE CEILING AND SLOPED AT 1/8" PER FOOT MINIMUM. PROVIDE 6" DEEP P-TRAP AT EACH UNIT.
- 5. THIS CONTRACTOR SHALL PROVIDE A FLOAT SWITCH IN EACH AUXILIARY DRAIN PAN. INTERLOCK FLOAT SWITCH WITH THE UNIT TO SHUT UNIT DOWN IF WATER IS DETECTED.



DETAIL
107
31' - 2" x 80' - 7"

FGCO
(2 WAY)
CONTINUATION BY OTHERS



FLOOR PLAN - WASTE AND VENT
SCALE: 1/8"=1'-0"



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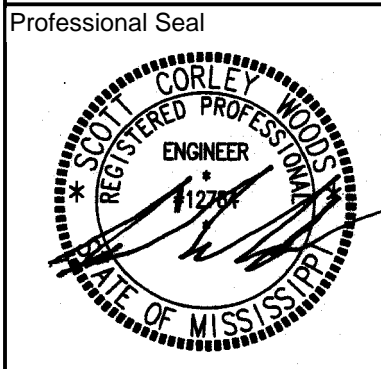
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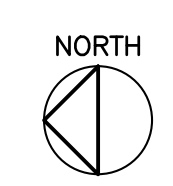
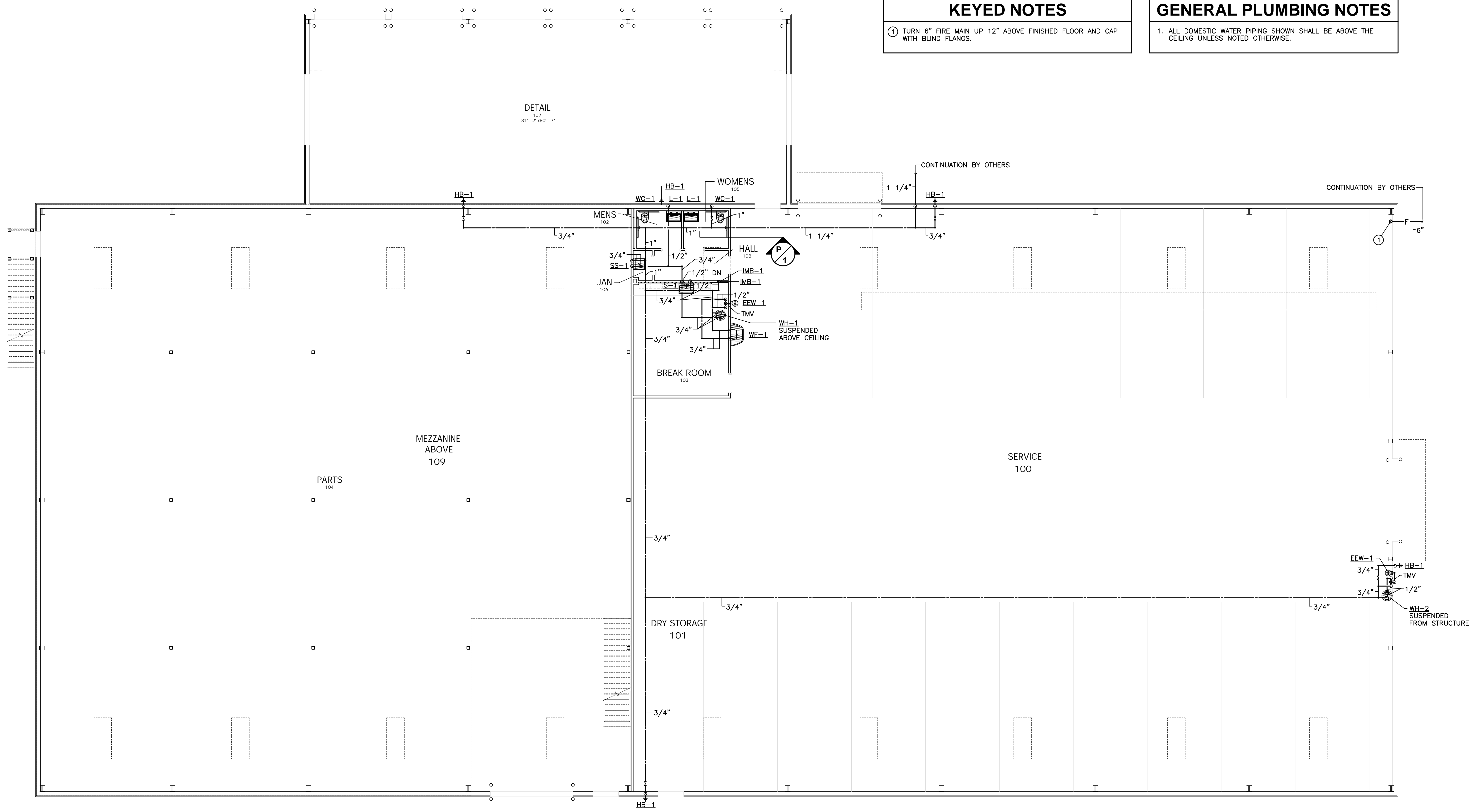
P-2



KEYED NOTES
① TURN 6" FIRE MAIN UP 12" ABOVE FINISHED FLOOR AND CAP WITH BLIND FLANGES.

GENERAL PLUMBING NOTES
1. ALL DOMESTIC WATER PIPING SHOWN SHALL BE ABOVE THE CEILING UNLESS NOTED OTHERWISE.

DETAIL
107
31' - 2" x 80' - 7"



FLOOR PLAN - DOMESTIC WATER
SCALE: 1/8"=1'-0"



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WATER HEATERS										
MARK	FUEL	STORAGE GALLONS	RECOVERY GPH @ 90' RISE	INPUT M.B.H.	ELEC. DATA			FLUE	MFR. AND MODEL	REMARKS
					SERVICE	BLOWER H.P.	K.W.			
WH-1	ELECTRIC	20	21	---	208V/1PH	---	2@4.5	---	RHEEM PROE20 S2 RH	NON-SIMULTANEOUS ELEMENTS
WH-2	ELECTRIC	20	21	---	208V/1PH	---	2@4.5	---	RHEEM PROE20 S2 RH	NON-SIMULTANEOUS ELEMENTS

STANDARD PLUMBING LEGEND	
DOMESTIC COLD WATER	
DOMESTIC 110° HOT WATER	
SANITARY SEWER PIPING	
VENT PIPING	
GAS PIPING	
CONDENSATE DRAIN LINE	
BALL VALVE	
CHECK VALVE	
UNION	
GAS COCK	
WATER HAMMER ARRESTOR	
VENT THROUGH ROOF	
FLUSH GRADE CLEANOUT	
WALL CLEANOUT	

PLUMBING FIXTURE SCHEDULE													
MARK	DESCRIPTION	MAKE	MODEL	SUPPLY FITTING	SUPPLY PIPE(S)	DRAIN	TRAP	ROUGH-IN SIZES					REMARKS
								C.W.	H.W.	WASTE	VENT	TRAP	
WC-1	WATER CLOSET, FLOOR MOUNTED, PRESSURE TANK TYPE, A.D.A.	KOHLER	K-3493	---	ZURN ZH8824CR	---	---	1/2"	---	4"	2" or 4"	INT.	W/ BEMIS 1055SSC WHITE SEAT, W/ BOLT CAPS. OPEN FRONT AND FLUSH TO SIDE.
L-1	LAVATORY, WALL HUNG A.D.A., 20"x18"	KOHLER	K-2005	DELTA 22C101	ZURN ZH8824LR	ZURN Z-8746	ZURN Z8710BN	1/2"	1/2"	2"	2"	1 1/4"	COORDINATE ROUGH-IN WITH DRAIN ASSEMBLY. INSULATE DRAIN, P-TRAP AND SUPPLY PIPES WITH TRAP WRAP CS00-RHS. PROVIDE ZURN MODEL ZW1070XL MIXING VALVE.
WF-1	WASHFOUNTAIN, 3 STATION	ACORN	3423-2-S0	---	ZURN ZH8824LR	---	ZURN Z8702BN	3/4"	3/4"	2"	2"	1 1/2"	REQUIRES 120v,1ph RECEPTACLE. SET AT 105' LEAVING WATER TEMPERATURE.
S-1	SINK, STAINLESS STEEL, SINGLE COMPARTMENT 22"x19"x7 1/4"	ELKAY	PSR2219	DELTA 26T2944	ZURN ZH8824LR	ELKAY LK-35	ZURN Z8702BN	1/2"	1/2"	2"	2"	1 1/2"	
SS-1	SERVICE SINK, FLOOR MOUNTED	MUSTEE	17F	MUSTEE 93.600	---	---	KOHLER K-6673	3/4"	3/4"	2"	2"	1 1/2"	WITH VACUUM BREAKER.
IMB-1	ICE MAKER BOX	OATEY	38681	---	---	---	---	1/2"	---	---	---	---	MOUNT BOTTOM AT 12" ABOVE THE FINISHED FLOOR.
FD-1	FLOOR DRAIN POLISHED BRONZE	ZURN	ZB-415-B	---	---	---	---	---	3"	2"	3"	---	WITH SURE SEAL WATERLESS TRAP PRIMER.
EEW-1	EMERGENCY EYE/FACE WASH	ACORN SAFETY	S0420	---	ZURN ZH8824LR	---	ZURN Z8710BN	1/2"	1/2"	2"	2"	1 1/4"	WITH ACORN SAFETY MODEL ET71-1-BVS-OTG THERMOSTATIC MIXING VALVE.
HB-1	HOSE BIBB FREEZE PROOF	ARROWHEAD	38LF	---	---	---	---	3/4"	---	---	---	---	WITH VACUUM BREAKER.

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P-4



SCWA# 24-022
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207 Dees Place
REQUEST FOR DIMENSIONAL VARIANCE
APPLICATION

Subject Property Address: Lot 12 Parcel # 082H-28-002/14.00
Owner: BDP Group LLC Applicant: Candlewood Suites
Address: 321 Pinehurst Cir Address: Dees Dr.
Ridgeland MS 39157
Phone No. (601) 672-1110 Phone No. _____
Current Zoning District: C-2

Requirements of Applicant:

1. Letter stating reason for requested dimensional variance.
2. Copy of the written legal description.
3. Site plan, building elevations and floor plan drawings on 8.5" x 11".
4. Four complete sets of working plans.
5. Proposed signage to include color and size.
6. \$250.00 fee required for processing.

Requirements for Granting Variances: *(Section 3004.01 – Zoning Ordinance)*

- (a). Applicant shall demonstrate that special conditions and circumstances exist which are peculiar to the land, structure or building involved and which are not applicable to other lands, structures or buildings in the same district.
- (b). Applicant shall demonstrate that literal interpretation of the provisions of this Ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under terms of this Ordinance.
- (c). Applicant shall demonstrate that granting the variance will not confer on the applicant any special privilege that is denied by this Ordinance to other lands, structures or buildings in the same district.

Applicant shall be present at the Planning and Zoning Commission meeting and Mayor/Board of Aldermen meeting. Documents shall be submitted thirty (30) days prior to the Planning and Zoning Commission meeting.

Applicant is responsible for complying with all applicable requirements of the Zoning Ordinance.

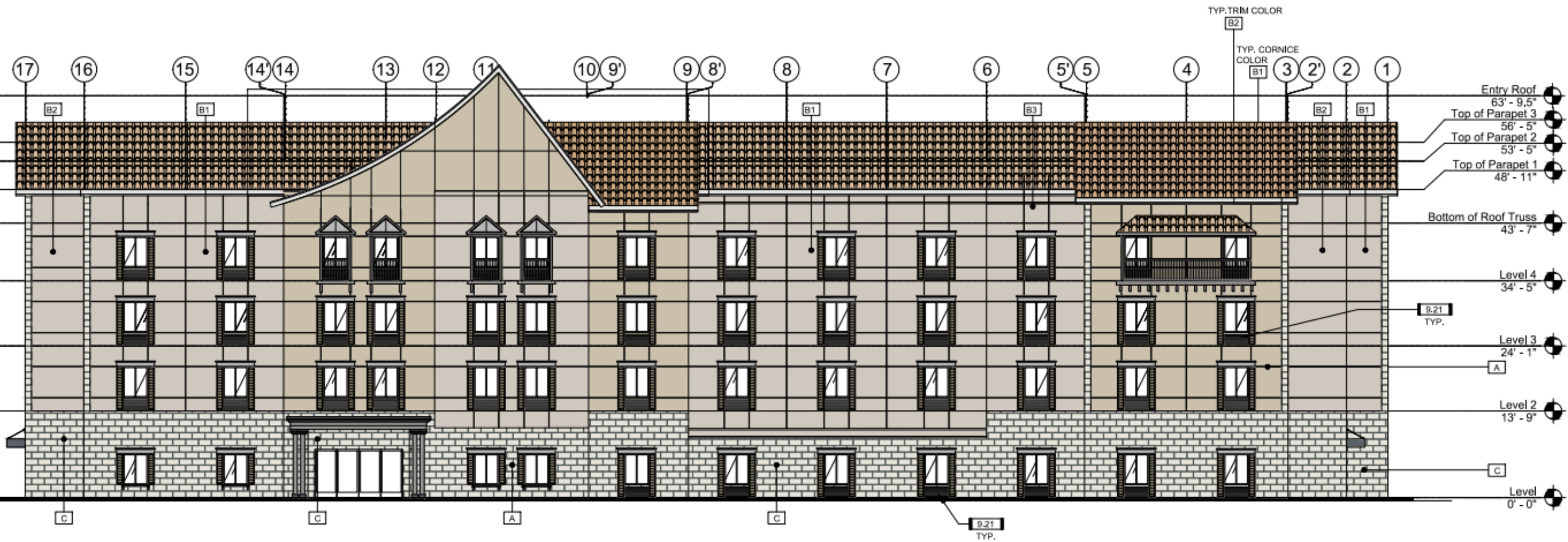
By signing this application, it is understood and agreed that permission is given to the Zoning Administrator to have a sign erected on subject property, giving notice to the public that said property is being considered for a dimensional variance.

✓ [Signature]
Applicant Signature

✓ 10/16/23
Date

Property Owner Signature

Date



City of Gluckstadt
343 Distribution Dr
Madison, MS 39110

Shahil Desai
Desai Ventures LLC
601-672-1110
Shahildesai9@gmail.com

William,

I am writing this letter on behalf of BDP Group LLC.

We are requesting a variance for the following:

- Parking ordinance
- Building height ordinance

For the parking ordinance, we are requesting a 1:1 parking per room and the largest shift on property at any given time. These are the ordinances that we have followed in every city we have built in our metro area. These are the specifications that the franchise gives us as well.

For the building height ordinance, we are requesting an approval for total height of 63' 9 ½".

Our structural building only has a height of 43' 7", the reason we are asking for 63' 9 ½" is because of our parapets on the roof that give the building a design and can not be altered per Franchise specifications,

Thanks,

Shahil Desai

HYDRAULIC CALCULATIONS

FOR

CANDLEWOOD SUITES

Located in
City of Gluckstadt, Madison County, Mississippi

PREPARED FOR:

BDP GROUP
602 Springridge Road
Clinton, MS 39056



CIVIL ♦ STRUCTURAL ♦ PLANNING ♦ SURVEYING ♦ UAV MAPPING
www.benchmarkms.net

Site Considerations:

Candlewood Suites is a proposed hotel located on Dees Plaza in Gluckstadt, Mississippi. The site is on +/- 1.75 acres and will consist of a 4 story, 81 room hotel with a concrete parking lot. Detention for this site will be handled by an underground detention system.

Storm Drain Infrastructure Calculations:

The calculations for the storm drain infrastructure for the site were done using Stormwater Studio 2024 v 3.0.0.33. The following pages are the hydraulic considerations for each individual inlet followed by the tabulated results for a 25-year event routed through the pipe runs.

STORM DRAIN NETWORK CALCULATIONS

PROJECT: CANDLEWOOD SUITES

COUNTY: MADISON

COEFFICIENTS, C	
IMPERVIOUS AREAS	0.99

FORMULAS
$t_c = (10 \times (H_L)^{3.7}) / ((17^C \times S^{2.1}))$
$Q = C \times I \times A$
$I_{25} = 36.964 / (t_c + 3.30)^{.5945}$
$I_{100} = 39.2528 / (t_c + 2.40)^{.5599}$

HSG = C

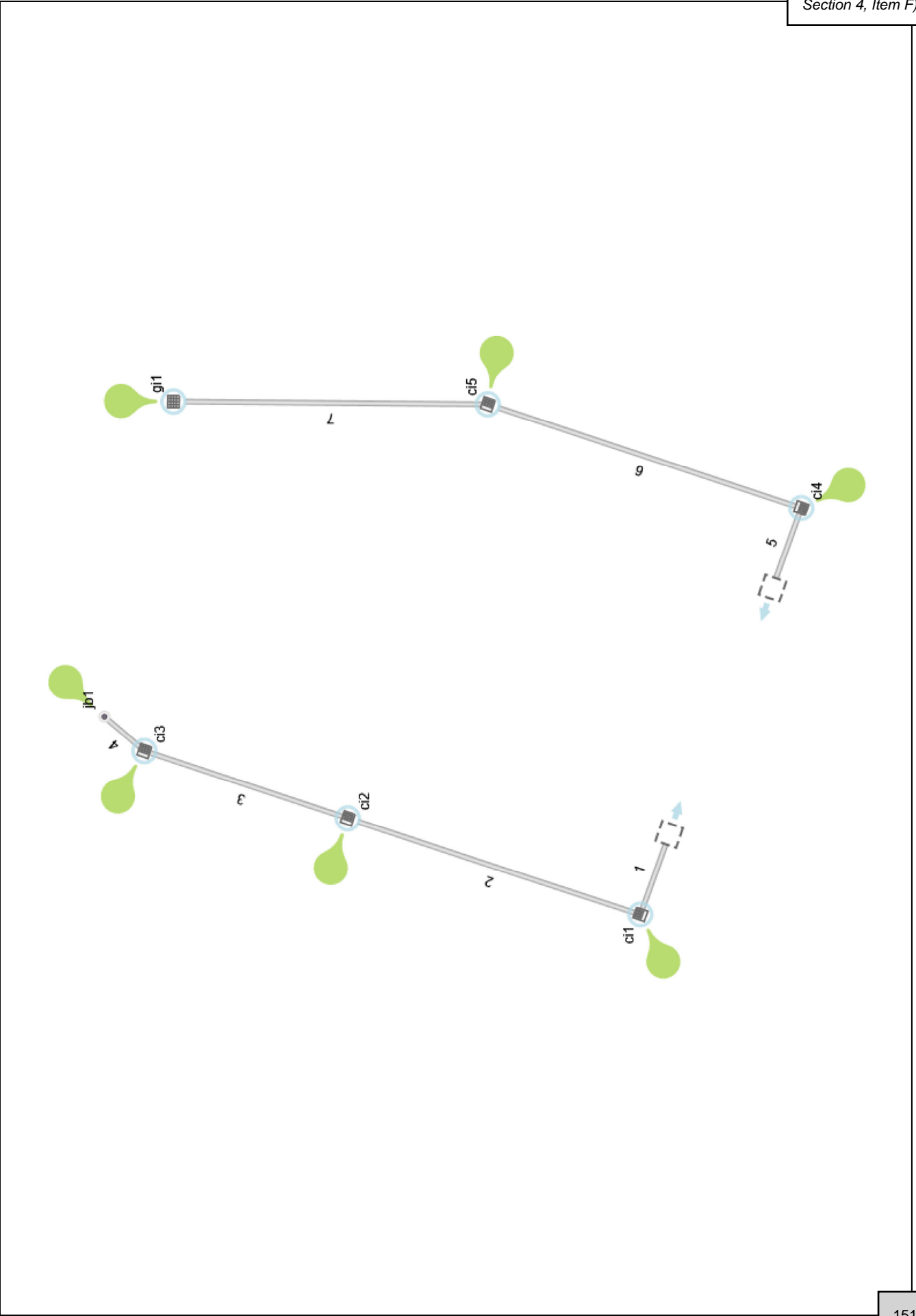
DRAIN BASIN	D.A. (sf)	D.A. (ac)	H _L (ft)	S (%)	C	t _c (min)	I ₂₅ (in/hr)	I ₁₀₀ (in/hr)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)	NOTES
GI-1	8466.30	0.19	57.02	2.8937215	0.99	2.16	14.57	16.78	2.80	3.23	
CI-1	16684.6	0.38	145.35	1.89198486	0.99	3.34	12.97	14.76	4.92	5.60	
CI-2	5710.4	0.13	67.82	2.58035978	0.99	2.36	14.26	16.39	1.85	2.13	
CI-3	7146.3	0.16	78.00	2.24358974	0.99	2.56	13.97	16.01	2.27	2.60	
CI-4	16848.7	0.39	152.67	1.80127071	0.99	3.44	12.86	14.62	4.92	5.60	
CI-5	6999.2	0.16	69.64	2.51292361	0.99	2.40	14.20	16.32	2.26	2.60	

Plan View

Stormwater Studio 2024 v 3.0.0.33

Project Name: Enter Project Name...

03-04-2024



Section 4, Item F)

Project File: 7302 Storm Drain 2-28-24

Storm Sewer Tabulation*

Project Name: Enter Project Name...
03-04-2024

Stormwater Studio 2024 v 3.0.0.33

Line ID	Length (ft)	Drng Area (ac)		Rational (C)	C x A		Tc (min)		Intensity (in/hr)	Total Q (cfs)	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev (ft)		HGL Elev (ft)		Surface Elev (ft)		Line No
		Incr	Total		Incr	Total	Inlet	Syst					Size (in)	Slope (%)	Up	Dn	Up	Dn	Up	Dn	
ugd-ci1	40.00	0.380	0.670	0.99	0.38	0.66	3.3	3.35	0.00	14.19	15.99	4.53	267.83	269.63	269.77	269.63	270.75	271.00	270.75	271.00	1
ci1 - ci2	139.50	0.130	0.290	0.99	0.13	0.29	2.4	2.91	0.00	9.72	16.02	3.20	268.53	270.07	270.30	270.07	271.75	270.75	271.75	270.75	2
ci2 - ci3	96.98	0.160	0.160	0.99	0.16	0.16	2.6	2.56	0.00	8.13	7.46	4.60	269.02	270.31	270.89	270.31	271.75	271.75	271.75	271.75	3
ci3 - jb1	24.23	0.000	0.000	0.00	0.00	0.00	0.0	0.00	0.00	5.89	7.69	3.33	269.15	271.20	271.27	271.20	271.50	271.75	271.50	271.75	4
ugd - ci4	40.00	0.390	0.740	0.99	0.39	0.73	3.4	3.44	0.00	9.05	15.99	2.93	267.85	269.65	269.70	269.65	270.75	271.00	270.75	271.00	5
ci4 - ci5	149.50	0.160	0.350	0.99	0.16	0.35	2.4	2.76	0.00	4.74	7.44	2.68	268.60	267.85	270.10	269.80	271.75	270.75	271.75	270.75	6
ci5 - g1	141.72	0.190	0.190	0.99	0.19	0.19	2.2	2.16	0.00	2.88	4.57	2.40	269.31	270.45	270.45	270.19	271.85	271.75	271.85	271.75	7

Section 4, Item F)

Project File: 7302 Storm Drain 2-28-24

results NOT current with inputs.

Detention Considerations and Calculations:

The calculations for the detention basin were computed using Hydrology Studio 2024 v 3.0.0.32. For pre-existing conditions, the entire site as well as the Sherwin Williams site directly to the north were considered as one drainage basin, DB-1 Pre. For the post-development conditions, DB-1 Pre was broken into 2 separate drainage basins, DB-1 Post Bypass and DB-1 Post Pond. DB-1 Post Pond consists of the developed Sherwin Williams site as well as the portion of the Candlewood Suites site that will be covered by the hotel and the curb and gutter parking area. DB-1 Post Bypass consists of the areas that will remain grassed outside the limits of the curbed parking area where the runoff will not enter the underground detention basin. After routing DB-1 Post Pond through the underground detention basin located at the southern portion of the site, DB-1 Post Pond was combined with DB-1 Post Bypass to form the DB-1 Post Combined hydrograph. After analyzing the site for both pre and post development conditions there was no increase in runoff leaving the site for each of the modeled storm events. The following pages include the hydraulic considerations for the site as well as the tabulated results. More information can be provided upon request.

DRAINAGE BASIN CALCULATIONS

PROJECT: CANDLEWOOD SUITES

COUNTY: MADISON

COEFFICIENTS, C	
OPEN GRASSED AREA	0.51
COMMERCIAL AREA	0.97

FORMULAS
$t_c = (10 \times (H_L)^{37}) / ((17^C \times S^{21}))$
$Q = C \times I \times A$
$I_{25} = 36.964 / (t_c + 3.30)^{.5945}$
$I_{100} = 39.2528 / (t_c + 2.40)^{.5599}$

HYDROLOGIC SOIL GROUP = C

D.B.	D.A.(SF)	D.A.(ac)	H _L (ft)	S (%)	C _w	t _c (min)	I ₂₅ (in/hr)	I ₁₀₀ (in/hr)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
Pre-Development										
DB-1 PRE	98012.17	2.25	690.95	1.16	0.61	19.21411906	5.804228332	7.02345967	7.998701547	9.678902093
Post-Development										
DB-1 POST BYPASS	14266.84	0.33	360.00	1.39	0.51	19.42418473	5.772270312	6.98552802	0.964176976	1.166834697
DB-1 POST POND	83745.33	1.92	690.95	1.16	0.97	6.977417164	9.251537903	11.2098871	17.25275257	20.90478469

WEIGHTED C

DRAIN BASIN	D.A.(SF)	D.A.(AC)	GRASS (AC)	C	COMMERCIAL (AC)	C	WEIGHTED C (C _w)
Pre-Development							
DB-1 PRE	98012.17	2.25	1.75	0.51	0.50	0.97	0.61
Post-Development							
DB-1 POST BYPASS	14266.84	0.33	0.33	0.51	0.00	0.97	0.51
DB-1 POST POND	83745.33	1.92	0.00	0.51	1.92	0.97	0.97

TOTAL STORAGE REQUIRED

DB-1 (Q_{post}-Q_{pre})*(T_c post)*(60s/min)= 4699.66 cf

Note: Preliminary calculations estimating storage required for underground detention system.

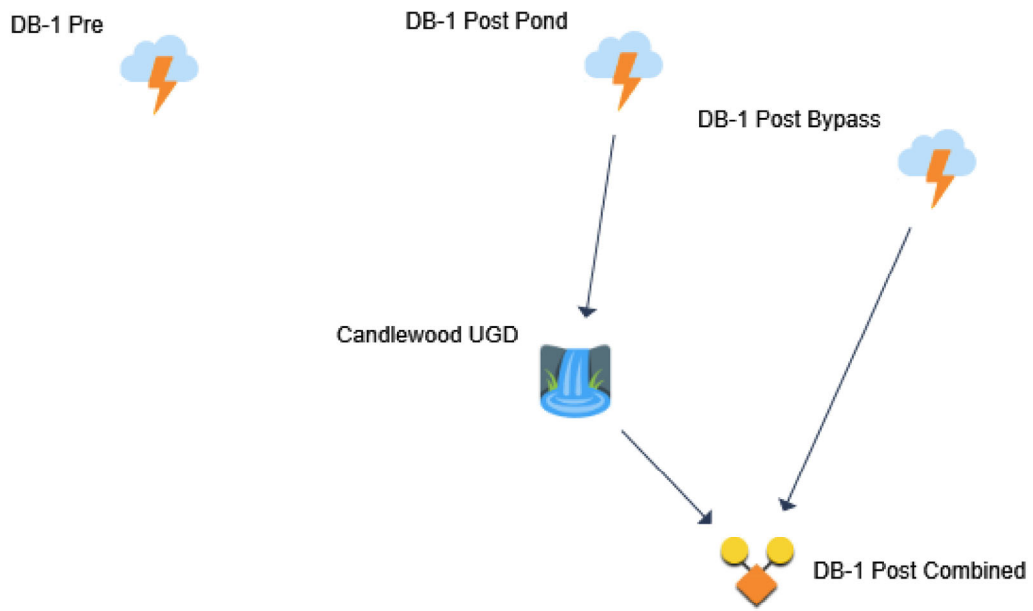
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- 25 - Year**
 - Hydrograph Summary 6
- 50 - Year**
 - Hydrograph Summary 7
- 100 - Year**
 - Hydrograph Summary 8

Basin Model

Hydrology Studio v 3.0.0.32

04-09-2024



Hydrograph by Return Period

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Outflow (cfs)							
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
1	Rational	DB-1 Pre		4.820		5.781	6.579	7.695	8.560	9.425
2	Rational	DB-1 Post Pond		10.40		12.45	14.17	16.56	18.43	20.29
3	Pond Route	Candlewood UGD		2.113		3.694	4.639	5.798	6.770	7.523
4	Rational	DB-1 Post Bypass		0.591		0.709	0.807	0.944	1.050	1.156
5	Junction	DB-1 Post Combined		2.517		4.142	5.149	6.394	7.411	8.234

Hyd. 1 > Hyd. 5

DB-1 Pre (Hyd. 1) is intended to represent the pre existing conditions of the site.

DB-1 Post Pond (Hyd. 2) is intended to represent the post development conditions for the portions of the site that will drain into the underground detention basin.

Candlewood UGD (Hyd. 3) is intended to represent DB-1 Post Pond after routing the runoff through the underground detention basin.

DB-1 Post Bypass (Hyd. 4) is intended to represent the post development conditions for the portion of the site that will bypass the detention basin.

DB-1 Post Combined (Hyd. 5) is intended to represent the post development conditions of the site after routing DB-1 Post Pond through the underground detention basin and then combining that hydrograph with DB-1 Post Bypass.

Hyd. 5 should be less than or equal to Hyd. 1 indicating there is no increase in runoff leaving the site.

There is a decrease in runoff for each storm event that was modeled after routing the runoff through the underground detention basin.

Hydrograph 2-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	4.820	0.32	5,494	---		
2	Rational	DB-1 Post Pond	10.40	0.12	4,368	---		
3	Pond Route	Candlewood UGD	2.113	0.22	4,341	2	268.39	3,561
4	Rational	DB-1 Post Bypass	0.591	0.32	674	---		
5	Junction	DB-1 Post Combined	2.517	0.22	5,015	3, 4		

Hydrograph 5-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	5.781	0.32	6,590	---		
2	Rational	DB-1 Post Pond	12.45	0.12	5,229	---		
3	Pond Route	Candlewood UGD	3.694	0.20	5,201	2	268.54	4,062
4	Rational	DB-1 Post Bypass	0.709	0.32	808	---		
5	Junction	DB-1 Post Combined	4.142	0.20	6,009	3, 4		

Hydrograph 10-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	6.579	0.32	7,500	---		
2	Rational	DB-1 Post Pond	14.17	0.12	5,951	---		
3	Pond Route	Candlewood UGD	4.639	0.20	5,924	2	268.69	4,469
4	Rational	DB-1 Post Bypass	0.807	0.32	920	---		
5	Junction	DB-1 Post Combined	5.149	0.20	6,844	3, 4		

Hydrograph 25-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	7.695	0.32	8,773	---		
2	Rational	DB-1 Post Pond	16.56	0.12	6,957	---		
3	Pond Route	Candlewood UGD	5.798	0.20	6,930	2	268.91	5,025
4	Rational	DB-1 Post Bypass	0.944	0.32	1,076	---		
5	Junction	DB-1 Post Combined	6.394	0.20	8,005	3, 4		

Hydrograph 50-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	8.560	0.32	9,759	---		
2	Rational	DB-1 Post Pond	18.43	0.12	7,740	---		
3	Pond Route	Candlewood UGD	6.770	0.18	7,713	2	269.14	5,472
4	Rational	DB-1 Post Bypass	1.050	0.32	1,197	---		
5	Junction	DB-1 Post Combined	7.411	0.20	8,909	3, 4		

Hydrograph 100-yr Summary

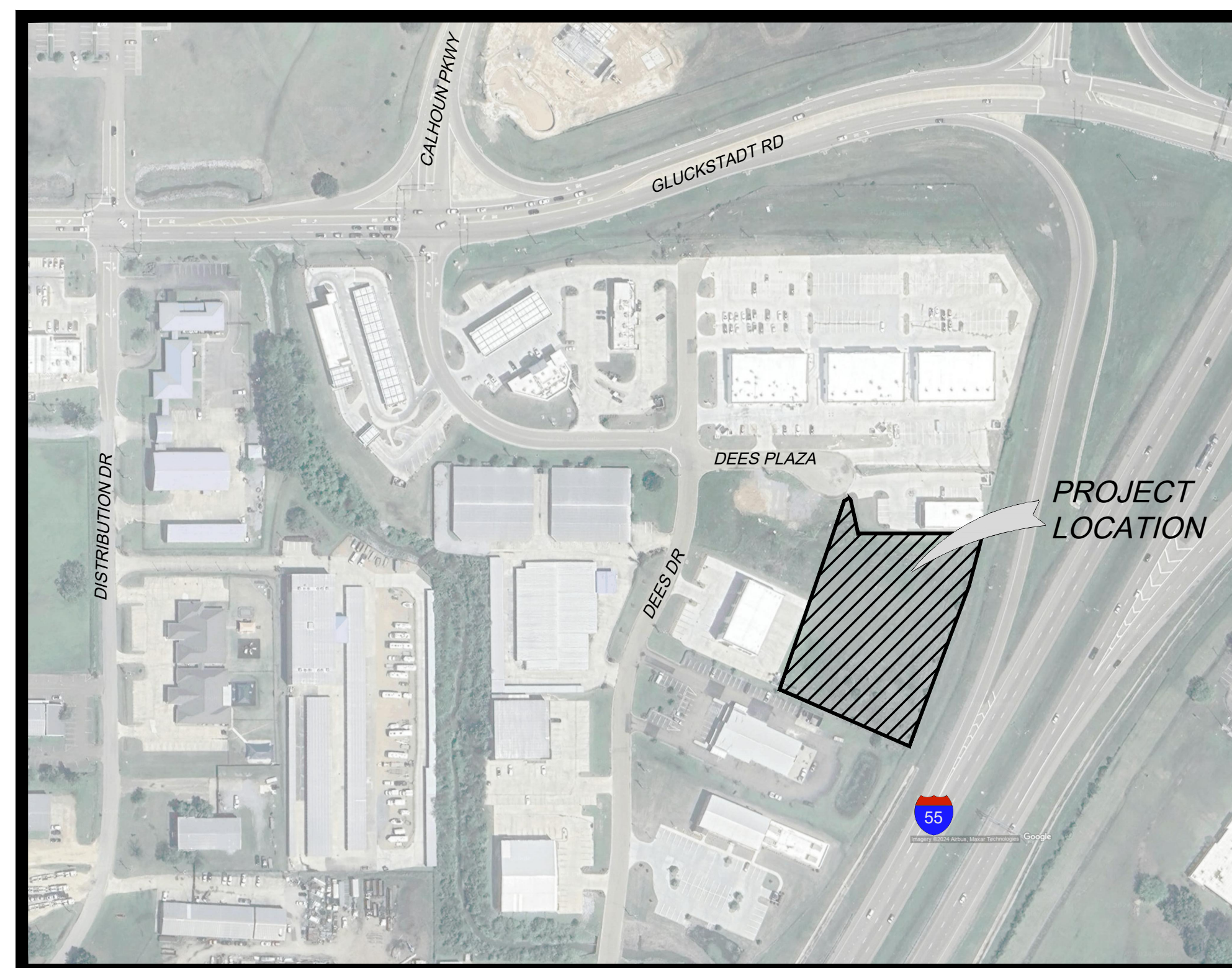
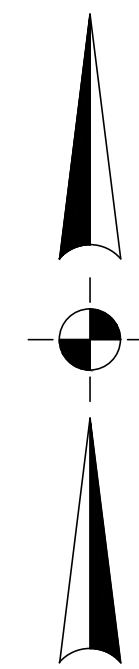
Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	9.425	0.32	10,745	---		
2	Rational	DB-1 Post Pond	20.29	0.12	8,523	---		
3	Pond Route	Candlewood UGD	7.523	0.18	8,496	2	269.36	5,916
4	Rational	DB-1 Post Bypass	1.156	0.32	1,318	---		
5	Junction	DB-1 Post Combined	8.234	0.20	9,813	3, 4		

CONSTRUCTION PLANS FOR: CANDLEWOOD SUITES

LOCATION:
DEEZ PLAZA
MADISON COUNTY, MISSISSIPPI
APRIL 2024



VICINITY MAP

DRAWING INDEX

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FOR REVIEW AND APPROVAL



Charlton B. Alford

Charlton B. Alford, P.E.
Mississippi License No. 29595

4/5/2024

Date

Equipment, materials and construction of all improvements required in these plans shall be in accordance with these construction drawings & project specifications.

The drawings and specifications represented herein are and shall remain the property of Benchmark Engineering & Surveying, LLC and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared. Visual contact with these drawings or specifications shall constitute evidence of acceptance of these restrictions.

OWNER:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD
CLINTON, MS 39056

<p>BENCHMARK ENGINEERING & SURVEYING, LLC</p> <p>CIVIL ♦ STRUCTURAL ♦ PLANNING ♦ SURVEYING ♦ UAV MAPPING</p> <p>BRANDON FLOWOOD MADISON</p> <p>EST. 2004 www.benchmarkms.net 601-627-7780</p>	<p>SHEET NUMBER</p> <p>1 of 16</p>
	<p>PROJECT NUMBER</p> <p>B-7302</p>

GENERAL CONSTRUCTION NOTES:

- 1. IT IS NOT THE INTENT OF THESE CONSTRUCTION DRAWINGS, NOTES OR DETAILS TO COVER ALL OF THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO READ THE PROJECT SPECIFICATIONS AND BE FAMILIAR WITH THE MATERIALS REQUIRED, INSTALLATION OF SUCH, REQUIRED TESTING, AND AN ALL ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE WORK REQUIRED IN THESE PLANS.

SITE GRADING AND PAVING NOTES:

- 1. TECHNICAL SPECIFICATION FOR MATERIALS AND CONSTRUCTION METHODS FOR THIS PROJECT SHALL CONFORM TO THE LATEST EDITION OF MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (MOOT STANDARDS), THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT (IF INCLUDED IN THE CONTRACT DOCUMENTATION).

ABBREVIATIONS

Table with 2 columns: Abbreviation and Full Name. Includes entries like # POUND, ASSY. ASSEMBLY, AVG. AVERAGE, B.F.E. BASE FLOOD ELEVATION, BLDG. BUILDING, etc.

LINE TYPES

Table with 2 columns: Line Style and Description. Includes entries like EX. ADJACENT PROPERTY LINE, EX. AT&T LINE, EX. BLDG. LINE, EX. E. ROAD, EX. COMB UNDERGROUND, EX. CONC., EX. CULTURT, EX. CURB, EX. DITCH, EX. EASE, EX. EDGE OF GRAVEL, EX. EP, EX. FENCE BARBED WIRE, EX. FENCE CYCLONE, EX. FENCE WROUGHT IRON, EX. FENCE WOOD, EX. FIBER OPTIC, EX. GAS LINE, EX. GROUND CONTOUR LINE, EX. LANDSCAPING, EX. POWER (OVERHEAD), EX. RET. WALL, EX. RR TRACKS, EX. SIDEWALK, EX. SS, EX. STRIPPING, EX. TOP SLOPE, EX. TOP BANK, EX. TREE LINE, EX. WATER EDGE, EX. WATER LINE.

SYMBOLS

Table of symbols for various features: PROP. SS MH, PROP. SS CLEANOUT, PROP. CI (SINGLE), PROP. CI (SINGLE EXT.), PROP. CI (DBL EXT.), PROP. ORATE INLET, PROP. JB, PROP. FIRE HYDRANT ASSY., PROP. GATE VALVE ASSY., PROP. SPOT ELEV., TEMP. BM, PROP. WATER METER ASSY., PROP. BACKFLOW ASSY., EX. POWER POLE, EX. SS MH, EX. SS LIFT STATION, EX. GATE VALVE ASSY., EX. WATER METER ASSY.

HATCHES

Table of hatching patterns for various materials: FLOOD ZONE AE, FLOOD ZONE X, LIGHT DUTY ASPHALT, HEAVY DUTY ASPHALT, BLDG., CONC., RIP-RAP, CONST. ROAD, GRASS SEED RECD.

WATER & SEWER SYSTEM NOTES:

- 1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND PROJECT SPECIFICATIONS.

STORM DRAIN NOTES:

- 1. TECHNICAL SPECIFICATIONS FOR STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE LATEST EDITION OF MISSISSIPPI STANDARD SPECIFICATIONS FOR STATE AID ROAD AND BRIDGE CONSTRUCTION.

UTILITY COMPANIES:

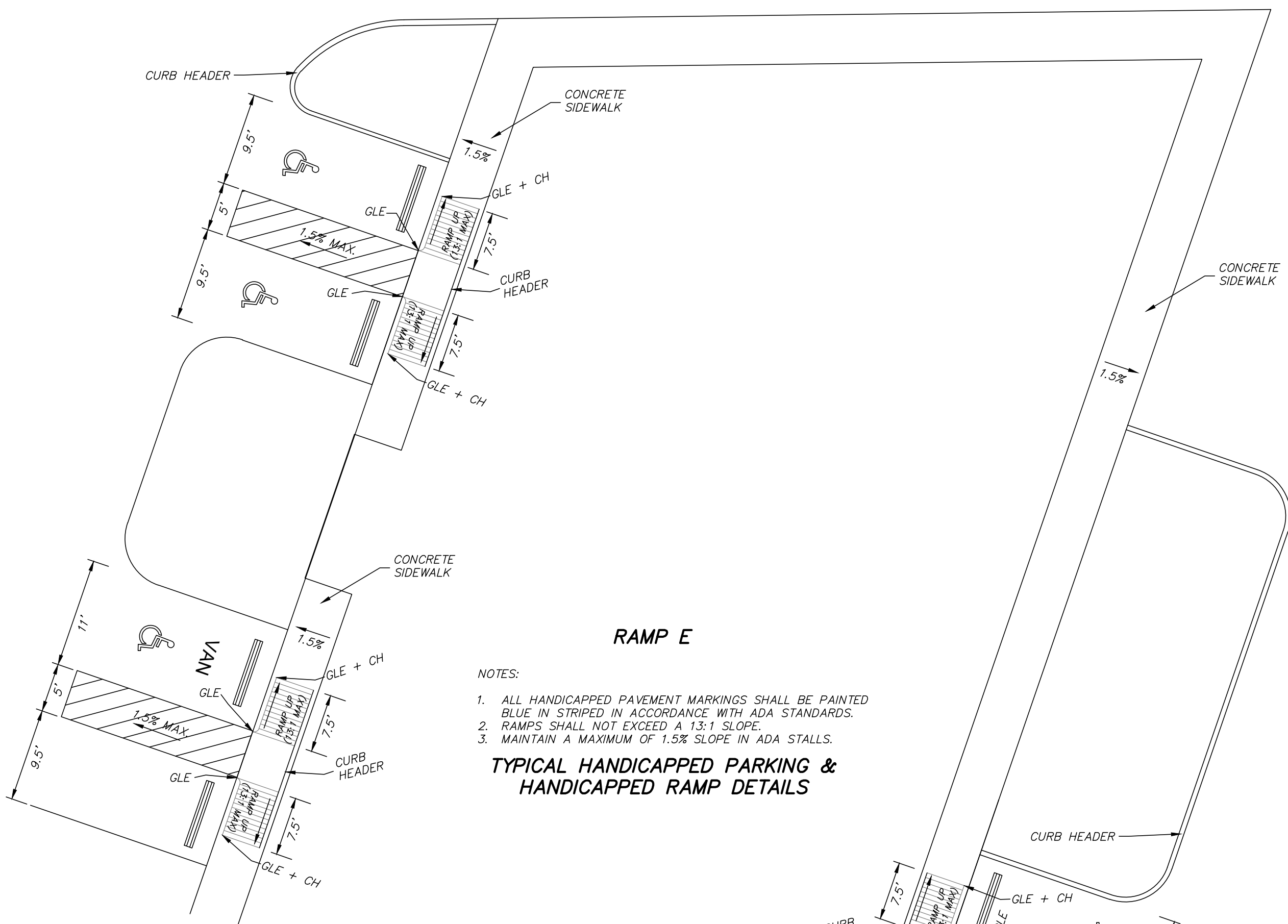
- WATER – BEAR CREEK WATER ASSOCIATION
- SEWER – BEAR CREEK WATER ASSOCIATION
- ELECTRICAL – ENTERGY
- GAS – CENTERPOINT ENERGY

NOTES:

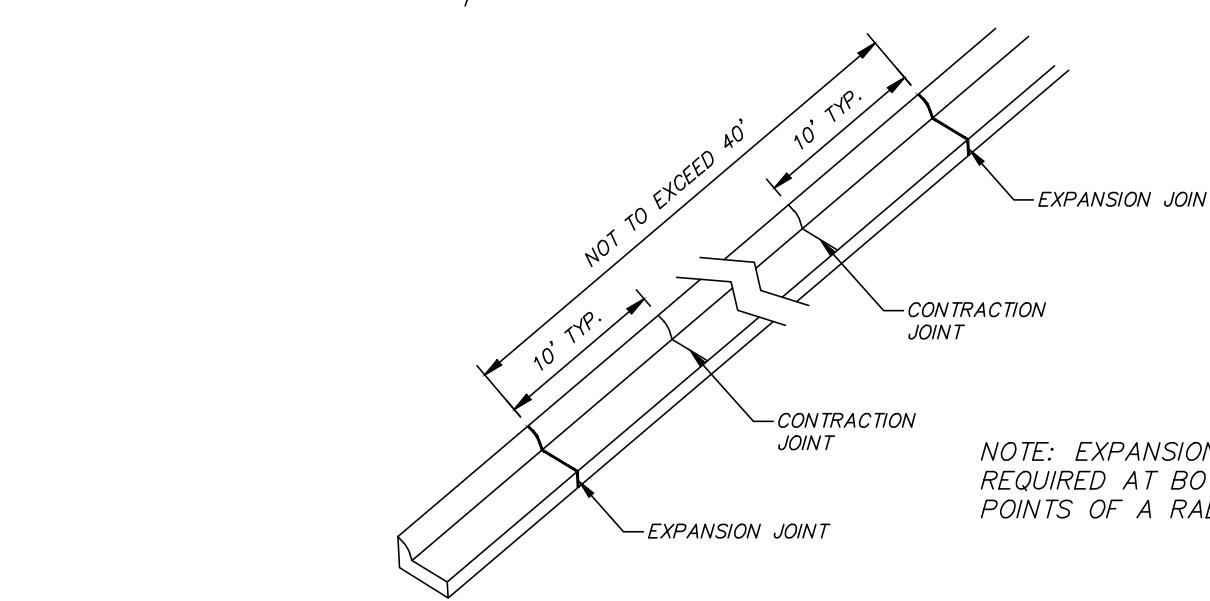
IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ITS OPERATORS, SUB CONTRACTORS, & EMPLOYEES ARE AWARE OF THE POTENTIAL UTILITY CONFLICTS WITHIN THE WORK AREA WHERE IMPROVEMENTS ARE TO TAKE PLACE AND/OR UTILITY LINES ARE TO BE INSTALLED.

EXISTING UNDERGROUND UTILITIES REPRESENTED ON THESE PLANS WERE FIELD LOCATED PER THE MARKINGS OF A UTILITY LOCATING COMPANY AND THEIR REPRESENTATIVES. NO VERTICAL INFORMATION WAS PROVIDED IN THESE LOCATIONS. THESE LOCATIONS SHOULD BE CONSIDERED APPROXIMATE AND IT SHALL BE UNDERSTOOD THAT THE ENGINEER/SURVEYOR IS NOT RESPONSIBLE FOR THE CORRECTNESS OF SUFFICIENCY REGARDING THE UNDERGROUND UTILITIES (SHOWN OR NOT SHOWN). THE ENGINEER/SURVEYOR/OWNER PROVIDES NO CERTAINTY OF THE ACCURACY OF THE INFORMATION SHOWN NOR CERTIFICATION THAT ADDITIONAL UTILITY LINES ARE NOT PRESENT IN THE CONSTRUCTION LIMITS WHILE NOT SHOWN ON THE DRAWINGS.

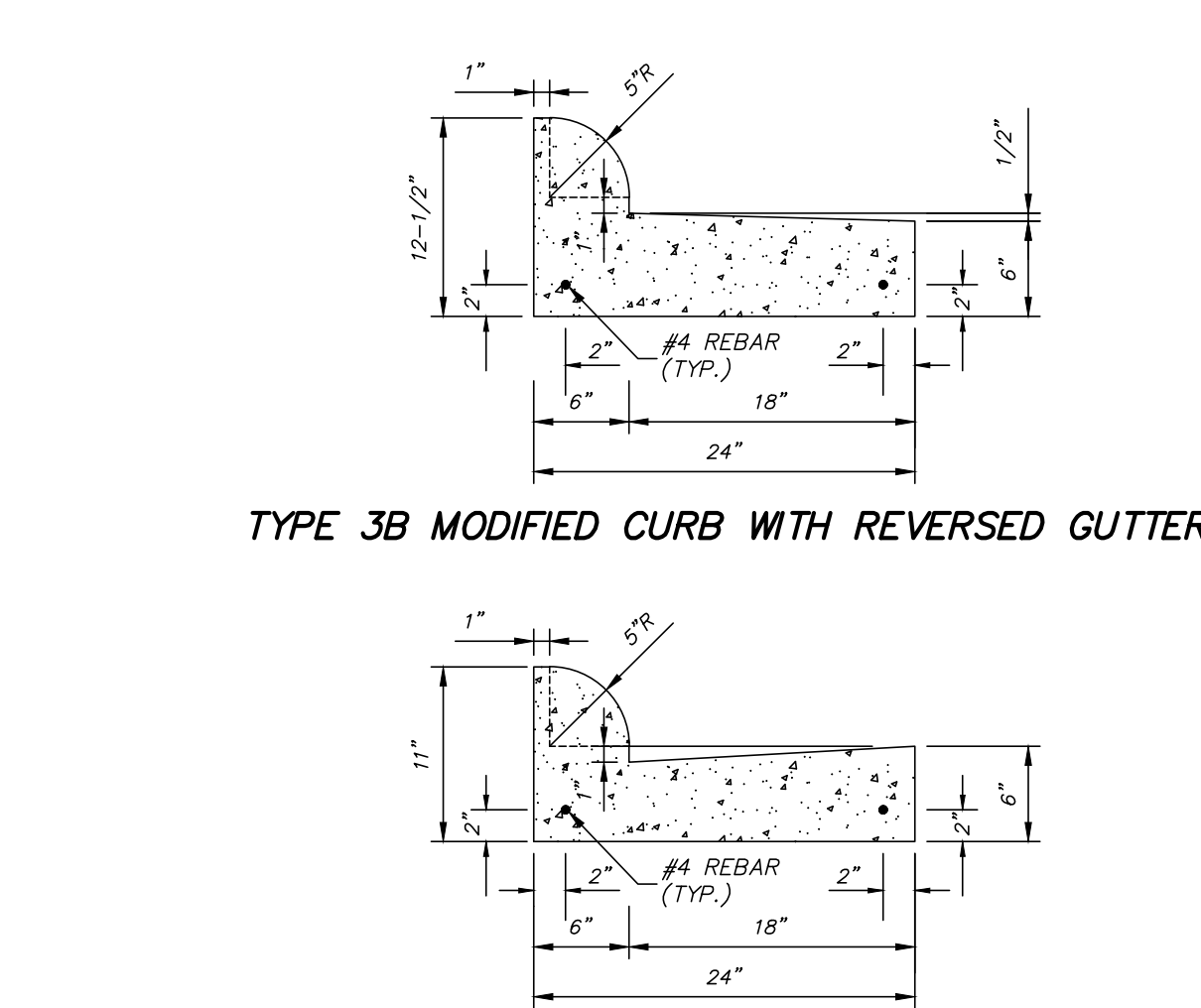
Vertical banner for BENCHMARK ENGINEERING & SURVEYING, LLC. Includes logo, contact information, and project details: PROJECT LOCATION: DEES PLAZA MADISON COUNTY, MISSISSIPPI; CLIENT: BDP GROUP, LLC; ADDRESS: 602 SPRINGRIDGE ROAD, CLINTON, MS.



- NOTES:
1. ALL HANDICAPPED PAVEMENT MARKINGS SHALL BE PAINTED BLUE IN STRIPES IN ACCORDANCE WITH ADA STANDARDS.
 2. RAMP SHALL NOT EXCEED A 13:1 SLOPE.
 3. MAINTAIN A MAXIMUM OF 1.5% SLOPE IN ADA STALLS.
- TYPICAL HANDICAPPED PARKING & HANDICAPPED RAMP DETAILS**

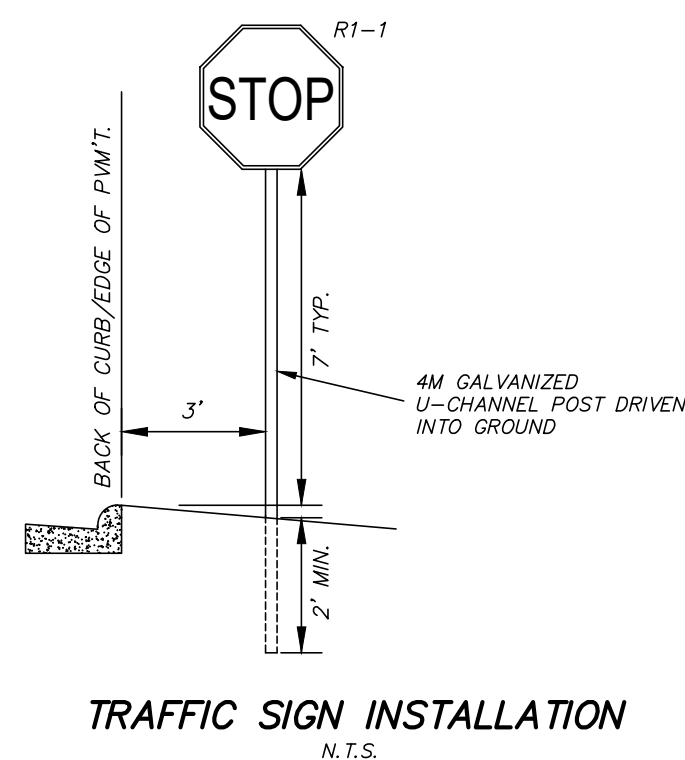


TYPICAL CURB AND GUTTER JOINT SPACING

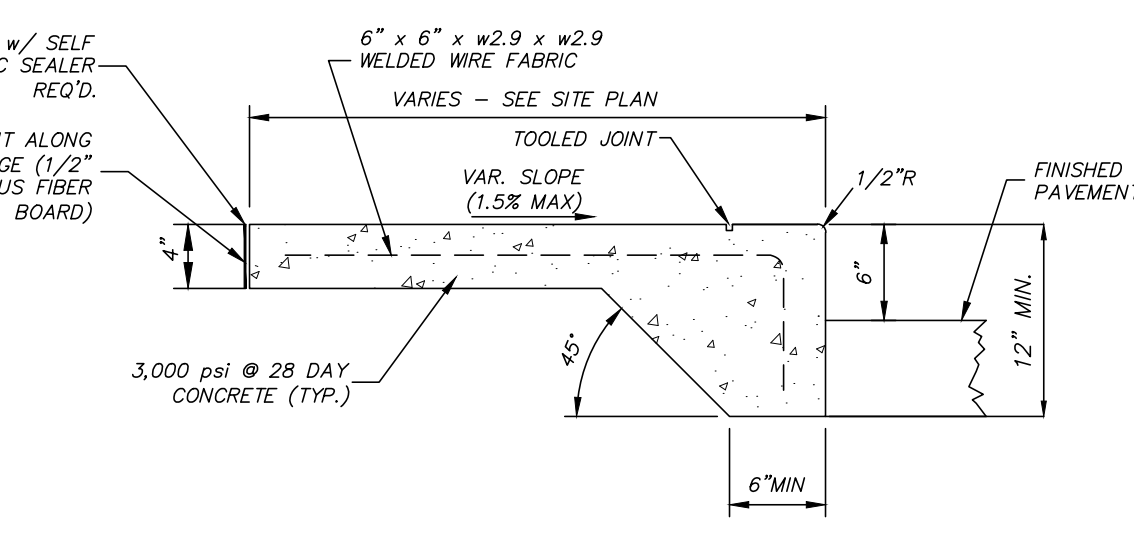


- CURB AND GUTTER NOTES:
1. CURB AND GUTTER SHALL BE 3500 PSI MINIMUM CONCRETE.
 2. CURB AND GUTTER SHALL BE PLACED ON COMPACTED SUB-GRADE MEETING ROADWAY SPECIFICATIONS. SUB-GRADE SHALL PASS A PROOF ROLL WITH THE ENGINEER OR HIS REPRESENTATIVE PRIOR TO POURING ANY PORTION OF THE CURB AND GUTTER.
 3. PROVIDE EXPANSION JOINTS WITH 1/2" EXPANSION MATERIAL AT INTERVALS NOT TO EXCEED FORTY (40) FEET. TWO 3/4" DOWEL BARS HELD IN PLACE BY APPROVED CHAIRS OR SUPPORTS, 15" IN LENGTH REQ'D. AT EXPANSION JOINTS.
 4. TOOLED CONTRACTION/CONTROL JOINTS (1/4" WIDE x 1" DEEP) ARE REQUIRED IN THE CURB AND GUTTER AT EVENLY SPACED INTERVALS NOT TO EXCEED TEN (10) FEET.
 5. CONTRACTOR SHALL MAKE TRANSITION FROM STANDARD CURB TO REVERSED GUTTER THROUGH A RADIUS IS POSSIBLE AND IF NOT, GRADUALLY TRANSITION BETWEEN CONTRACTION JOINTS.
 6. LOCATIONS FOR REVERSE GUTTER ARE NOTED ON THE DRAWINGS. THE CONTRACTOR MAY PROPOSE TO ADJUST LOCATIONS BY PROVIDING ENGINEER WITH A DRAWING WITH PROPOSED REVERSE GUTTER LOCATIONS FOR HIS REVIEW AND COMMENT/REJECTION/APPROVAL.

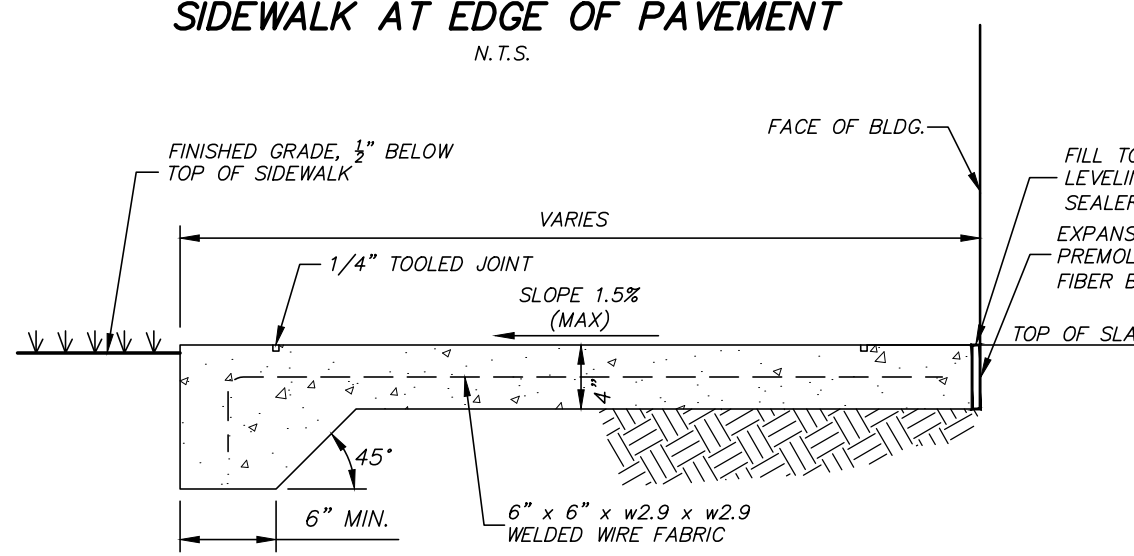
CURB AND GUTTER DETAILS



TRAFFIC SIGN INSTALLATION N.T.S.



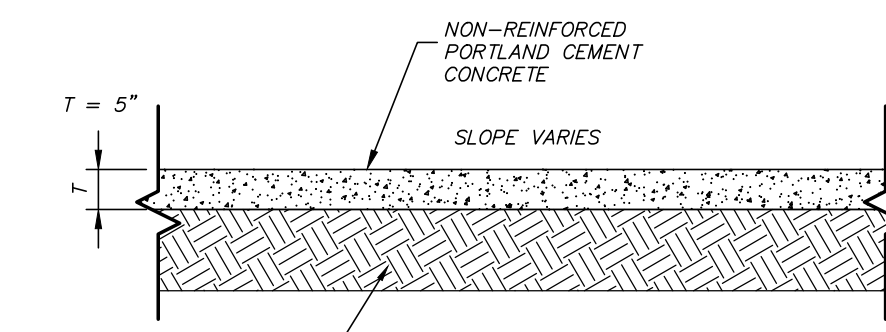
SIDEWALK AT EDGE OF PAVEMENT N.T.S.



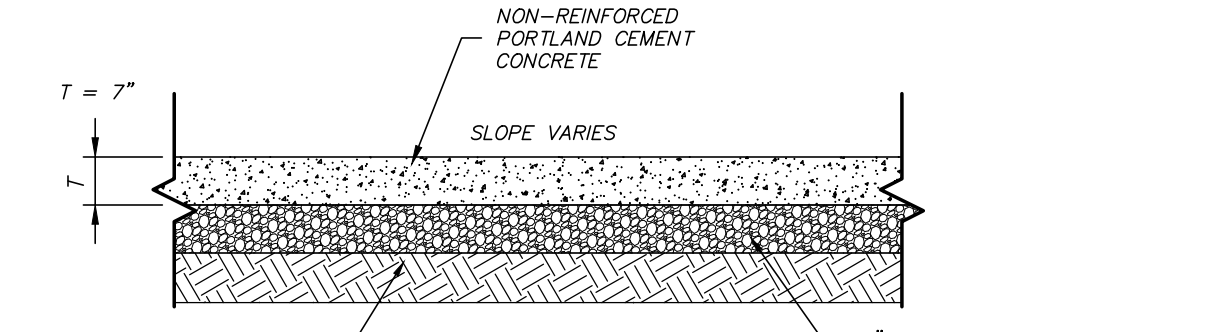
SIDEWALK AT LANDSCAPING N.T.S.

- SIDEWALK CONSTRUCTION NOTES:
1. SUB-GRADE FOR SIDEWALK SHALL PREPARED IN SAME MANNER AS REQUIRED FOR PAVEMENT CONSTRUCTION.
 2. EXPANSION JOINT REQ'D. WHERE TYING SIDEWALK TO BUILDING OR BACK OF CURB WITH 1/2" PRE-MOLDED BITUMINOUS FIBER BOARD AND TOP FILLED WITH 1/2" SELF LEVELING ELASTOMERIC SEALER.
 3. WELDED WIRE FABRIC SHALL BE SHEETS AND NOT ROLLS.
 4. CONTRACTION JOINTS REQUIRED AT 5' O.C. & EXPANSION JOINTS REQUIRED AT 15' O.C. UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
 5. CONTRACTION/CONTROL JOINTS SHALL BE TOOLED OR SAWCUT IN STRAIGHT LINES TO THE DEPTHS SHOWN AT THE PROPER CURE TIME AND WITH THE PROPER MATERIALS/EQUIPMENT TO LEAVE THE FINISHED CONCRETE SURFACE ALONG THE JOINTS LOOKING SMOOTH AND FREE FROM CHIPPING OR OTHER DEFECTS. JOINTS WHERE CHIPPING OR OTHER IRREGULARITIES THAT COMPROMISE THE LOOK OF THE CONCRETE PER THE OWNER/ENGINEER SHALL BE REJECTED AND SUBSEQUENTLY REMOVED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
 6. CONTRACTOR SHALL SEE SPOT ELEVATIONS ON GRADING LAYOUT FOR SIDEWALK SLOPES.

CONCRETE SIDEWALK DETAILS



NON-REINFORCED CONCRETE PAVING SECTION

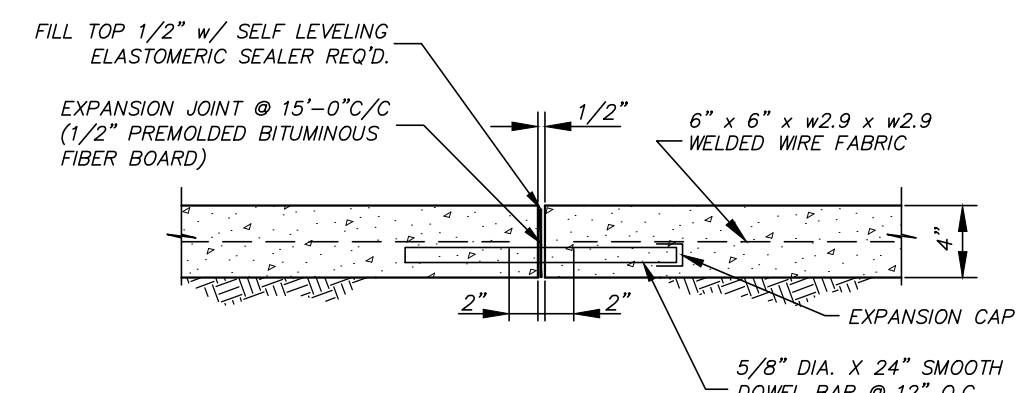


NON-REINFORCED CONCRETE PAVING HEAVY DUTY & DUMPSTER PAD SECTION

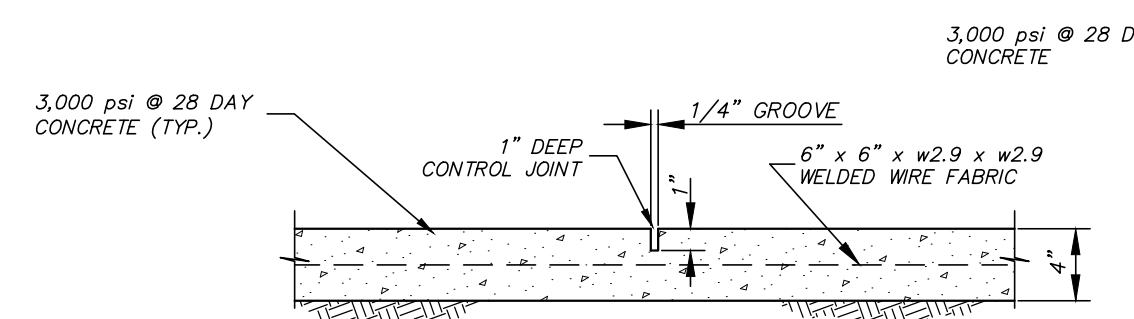
NOTES:

1. PORTLAND CEMENT CONCRETE SHALL HAVE A MINIMUM 28-DAY FLEXURAL STRENGTH OF 650 PSI AND A COMPRESSIVE STRENGTH OF 4,000 PSI.
2. EXPANSION, ISOLATION AND CONTROL JOINT SPACING & CONFIGURATION, MIX DESIGN, MIX PLACEMENT AND CURING SHALL CONFORM TO THE RECOMMENDATIONS OF THE AMERICAN CONCRETE INSTITUTE "ACI 308R-01" GUIDE FOR DESIGN AND CONSTRUCTION OF CONCRETE PARKING LOTS" AND THE PORTLAND CEMENT ASSOCIATION (PCA).
3. CONTRACTION/CONTROL JOINTS SHALL BE TOOLED OR SAWCUT IN STRAIGHT LINES TO THE DEPTHS SHOWN AT THE PROPER CURE TIME AND WITH THE PROPER MATERIALS/EQUIPMENT TO LEAVE THE FINISHED CONCRETE SURFACE ALONG THE JOINTS LOOKING SMOOTH AND FREE FROM CHIPPING OR OTHER DEFECTS. JOINTS WHERE CHIPPING OR OTHER IRREGULARITIES THAT COMPROMISE THE LOOK OF THE CONCRETE PER THE OWNER/ENGINEER SHALL BE REJECTED AND SUBSEQUENTLY REMOVED AND REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

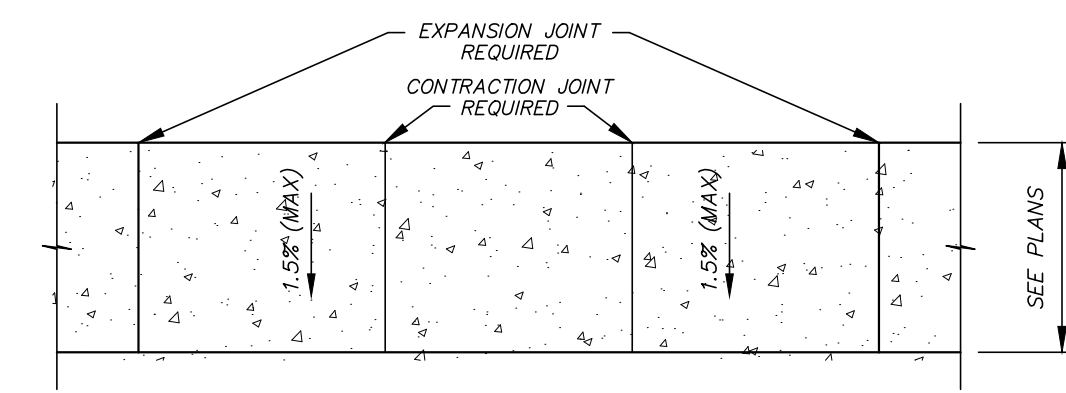
TYPICAL SECTIONS OF RIGID PAVEMENT STRUCTURES



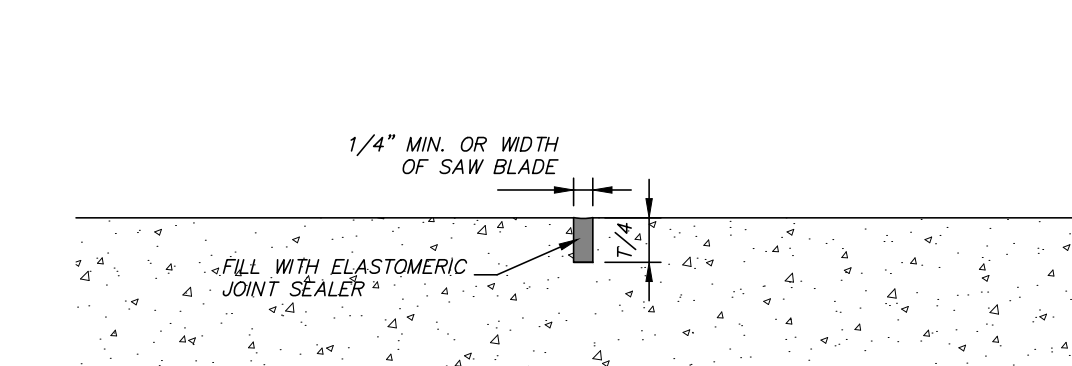
SIDEWALK EXPANSION JOINT DETAIL



SIDEWALK CONTRACTION JOINT DETAIL



SIDEWALK JOINT LAYOUT DETAIL

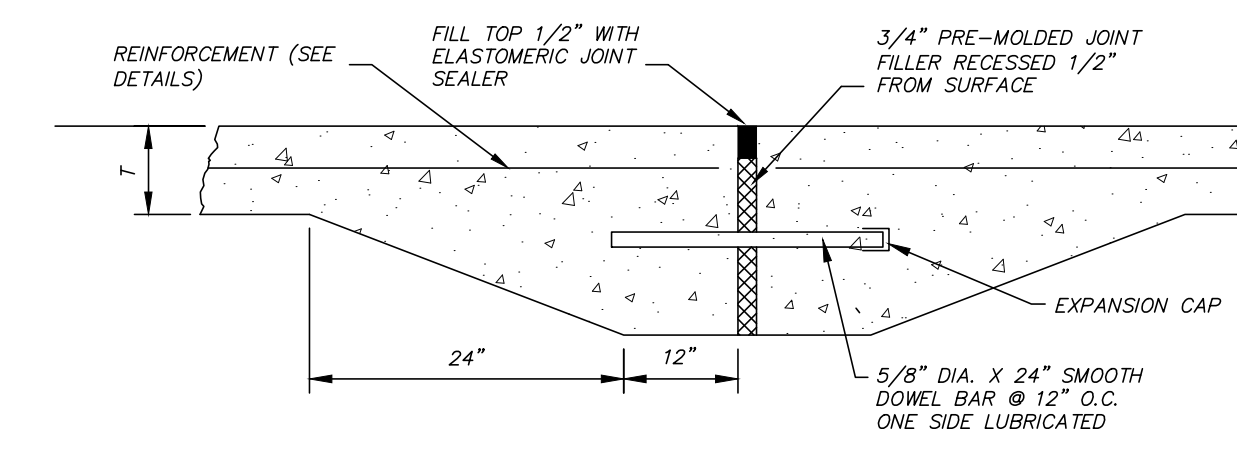


LONGITUDINAL JOINT DETAIL

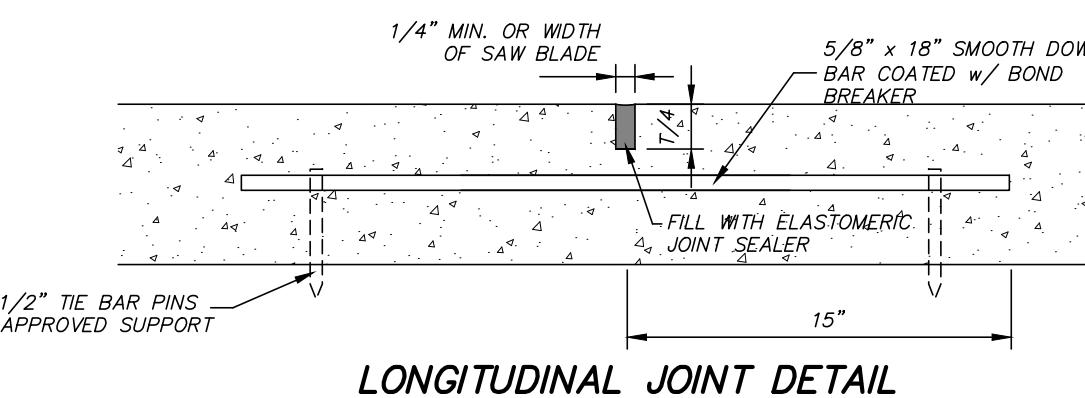
NOTES:

1. CONTRACTION JOINTS TO BE SAWS PER ACI STANDARDS TO ALLOW FOR SMOOTH, CLEAN, FINISHED EDGES AND AT INTERVALS ACCORDING TO ACI STANDARDS. PANELS WITH RAVELED EDGES FROM SAW CUTTING WILL BE REJECTED SHALL BE REMOVED & REPLACED BY CONTRACTOR AT NO COST TO THE OWNER.

CONTRACTION JOINT DETAIL

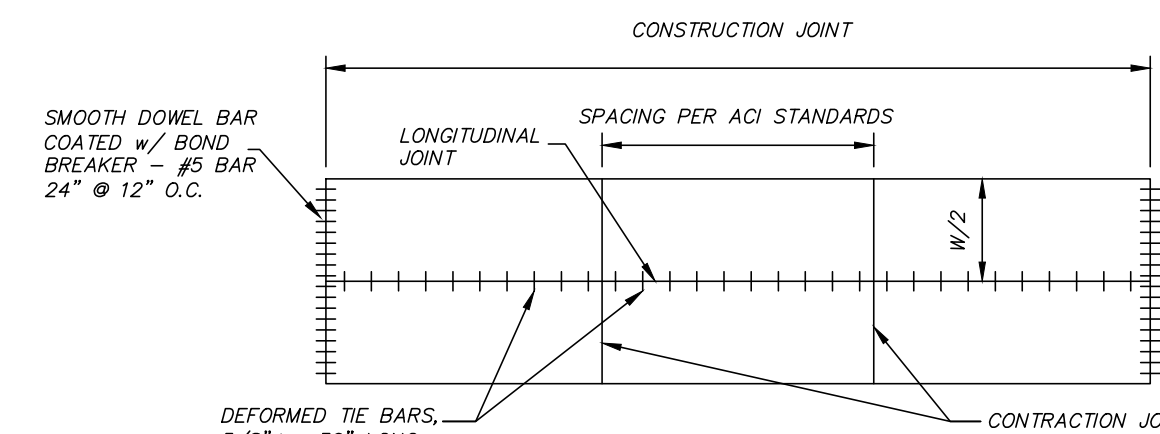


TRANSVERSE EXPANSION JOINT DETAIL



- NOTES:
1. REQUIRED AT ALL LOCATIONS WHERE PROPOSED PAVEMENT TIES TO EXISTING PAVEMENT UNLESS OTHERWISE NOTED.
 2. DRILL HOLE INTO EX. CONCRETE PAVEMENT TO LENGTH REQUIRED, USE CHEMICAL ADHESIVE TO BAR TO EXISTING CONCRETE.
 3. DOWEL BAR LOCATION TO MATCH TIE BAR SPACING WHERE APPLICABLE, MINIMUM SPACING OF 18".
 4. 1/4" RADIUS NOT REQ'D. ON EXISTING CONCRETE IF NOT ALREADY THERE.
 5. SEE DETAILS FOR PAVEMENT THICKNESS.

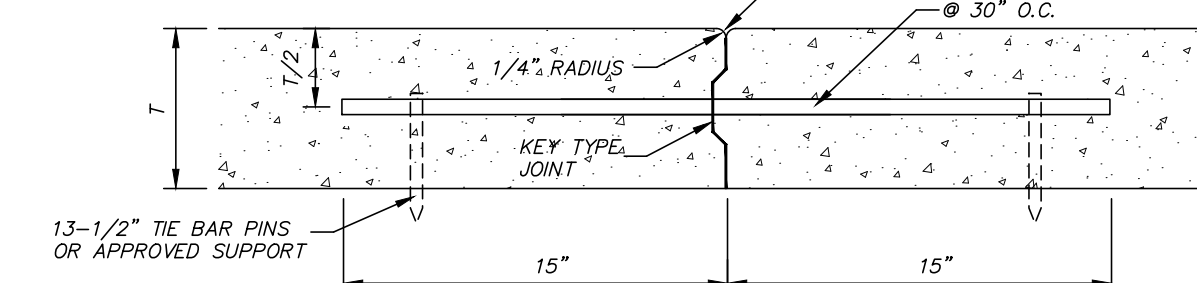
PROPOSED CONCRETE PAVEMENT TO EXISTING CONCRETE PAVEMENT DETAIL



NOTES:

1. LONGITUDINAL JOINTS REQUIRED ON PAVEMENT THAT IS 20' OR WIDER AND IS TO BE CENTERED.
2. SEE DETAILS FOR MORE INFORMATION OF JOINT CONSTRUCTION AND DOWEL BARS.
3. KEY TYPE JOINT SHALL BE USED ON ALL LONGITUDINAL JOINTS WHEN ADJACENT LANE IS NOT POURED AT THE SAME TIME.

TYPICAL JOINT SPACING FOR RIGID PAVEMENT

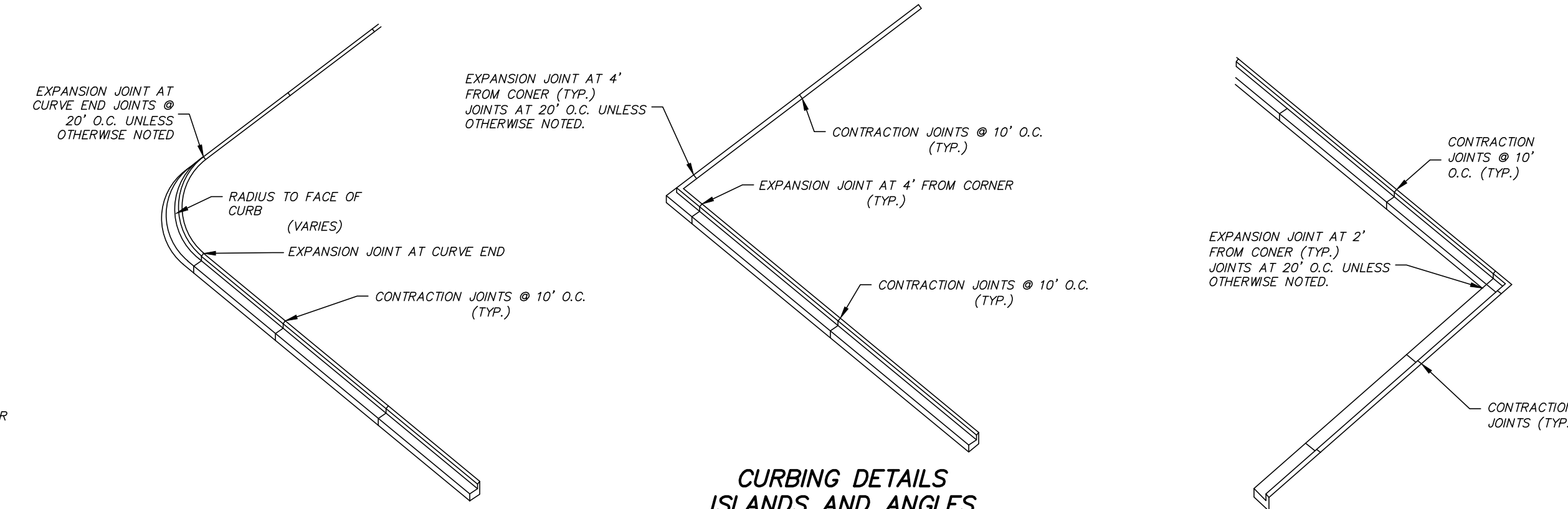


NOTES:

1. KEY TYPE JOINT SHALL BE USED ON ALL LONGITUDINAL CONSTRUCTION JOINTS WHEN ADJACENT LANE IS NOT POURED AT THE SAME TIME.
2. ALTERNATIVE METHODS FOR KEY TYPE JOINT SHALL BE PRESENTED TO ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.

CONSTRUCTION JOINT DETAIL

CONCRETE ROADWAY DETAILS



CURBING DETAILS ISLANDS AND ANGLES

REVISIONS:

DATE: 4/5/24 DRAWN: JH

CHECKED: GAB SCALE: -

REF C/L: -

EG SURFACE: -

FG SURFACE: -

PROJECT LOCATION: DEES PLAZA MADISON COUNTY, MISSISSIPPI

CLIENT: BDP GROUP, LLC

602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT: CANDLEWOOD SUITES
SHEET CONTENTS: TYPICAL SECTION & MISCELLANEOUS DETAILS

SHEET NUMBER 3 of 16

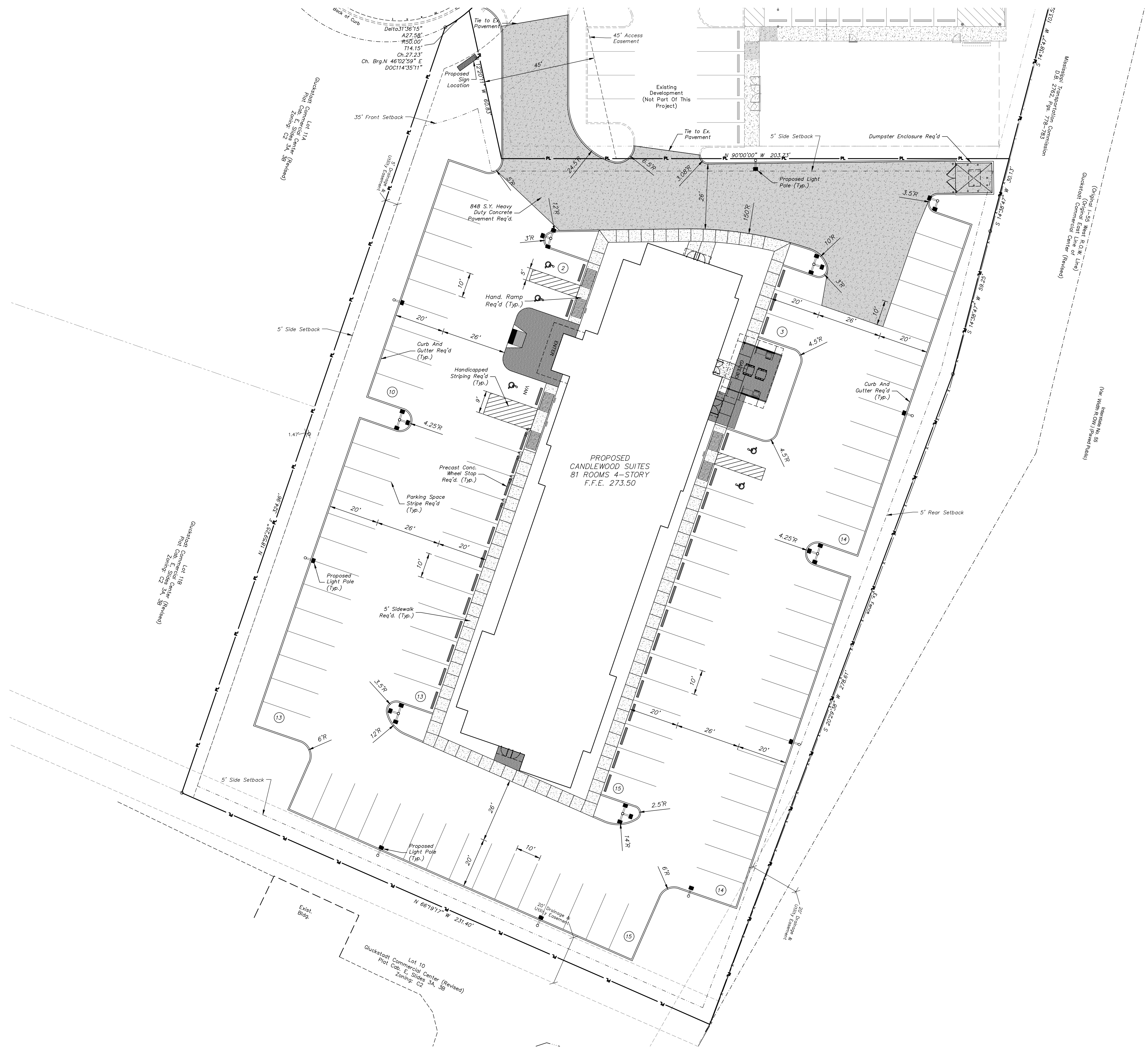
PROJECT NUMBER B-7302

DATE:	4/5/24
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REF C/L:	EG SURFACE
REVISIONS:	
DRAWN:	JH
SCALE:	1" = 20'
EG SURFACE:	
FG SURFACE:	

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI
 CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
 SHEET CONTENTS:
SITE PLAN

SHEET NUMBER
4 of 16
 PROJECT NUMBER
B-7302



PROJECT SITE INFORMATION:

CURRENT ZONING - C-2, HIGHWAY COMMERCIAL DISTRICT

MINIMUM SETBACK REQUIREMENTS:
 FRONT - 35'
 SIDE - 5'
 REAR - 5'

APPROXIMATE PROJECT ACREAGE: ±1.75 AC

APPROXIMATE ACREAGE BREAKDOWN:
 PROPOSED BUILDING - 0.259 AC (11,276± S.F.), 14.47%
 PROPOSED SIDEWALKS - 0.069 AC (3021± S.F.), 3.85%
 PROPOSED DRIVES/PARKING - 0.88 AC (38,486± S.F.), 49.16%
 GREEN AREA - 0.552 AC (24,045± S.F.), 30.84%

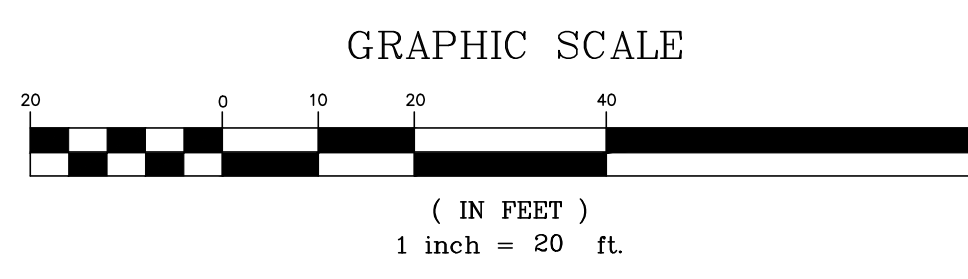
PARKING REQUIRED: 122 SPACES REQUIRED*
 PARKING PROVIDED: 99 NEW SPACES, INCLUDING 5 HANDICAPPED

*A VARIANCE ON THE NUMBER OF PARKING SPACES AND THE SITE PLAN WAS APPROVED BY THE MADISON COUNTY BOARD OF SUPERVISORS AT THE NOV. 2, 2020 BOS MEETING.

HEAVY DUTY CONCRETE (RIGID) PAVING REQ'D.
 CONCRETE SIDEWALK REQ'D.

NOTE: ALL PAVING NOT NOTED AS ONE OF THE ABOVE SHALL BE CONSIDERED LIGHT DUTY CONCRETE

- NOTE:
- SEE TYPICAL SECTIONS AND PROJECT SPECIFICATIONS FOR PAVING REQUIREMENTS.
 - RADIAL DIMENSIONS ARE MEASURED FROM THE BACK OF CURB.
 - PARKING LOT DIMENSIONS ARE TO THE FACE OF CURB.
 - SEE ARCHITECTURAL PLANS FOR MORE DETAILS ON THE BUILDINGS AND DUMPSTER ENCLOSURE.
 - ANY PAVING NOT DELINEATED AS A FORM OF CONCRETE OR HEAVY DUTY CONCRETE PAVING SHALL BE CONSIDERED LIGHT DUTY CONCRETE PAVING.
 - PARKING SPACE STRIPING SHALL BE 4" MINIMUM WIDTH AND PAINTED WHITE.
 - ITEMS NOTED AS LEGEND STRIPING SHALL BE THERMOPLASTIC INSTALLED PER MOOT REQUIREMENTS FOR SIZE AND THICKNESS. ALL REMAINING STRIPING SHALL BE FAST DRYING SOLVENT BASED TRAFFIC PAINT FOR USE ON BITUMINOUS AND PORTLAND CEMENT CONCRETE PAVEMENT. PAINT SHALL MEET THE REQUIREMENTS OF SECTION 710 OF THE LATEST EDITION OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 - IT IS THE OWNER'S RESPONSIBILITY TO OBTAIN PERMISSION TO PERFORM WORK ON ADJACENT PROPERTY FROM THE PROPERTY OWNERS SHOULD IT BE NECESSARY TO COMPLETELY INSTALL IMPROVEMENTS.
 - PRIOR TO INSTALLATION OF CURB & GUTTER THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A MARKED UP DRAWING SHOWING WHERE REVERSED GUTTER CURB IS PROPOSED FOR HIS REVIEW AND APPROVAL.

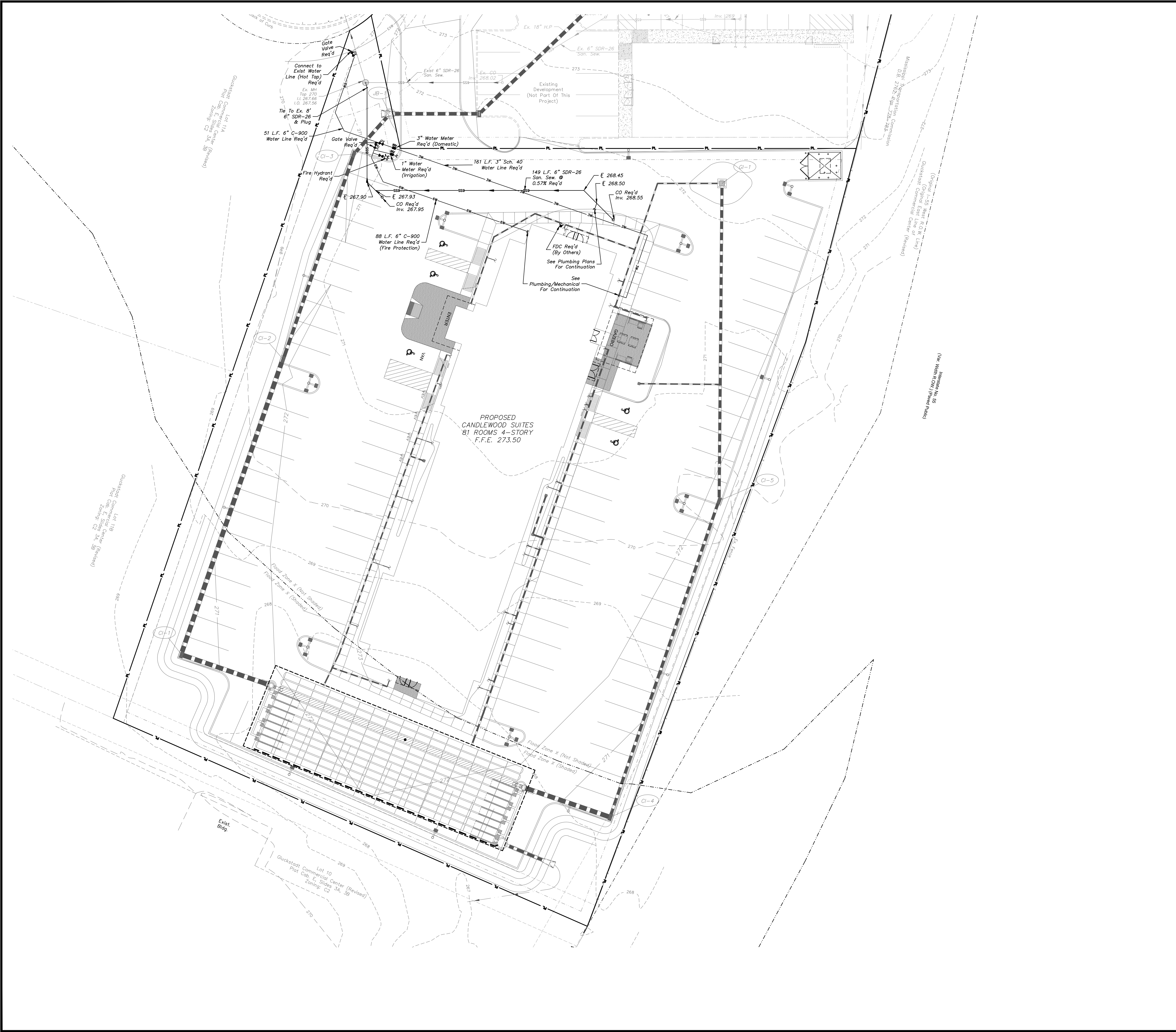


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CHECKED: GAB	SCALE: 1" = 20'	
REF C/L:	EG SURFACE:	
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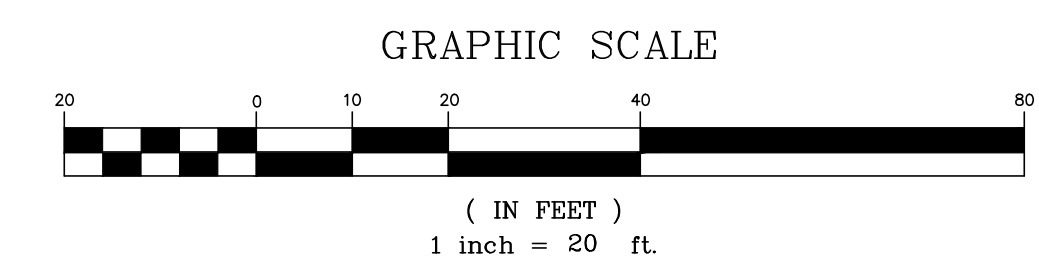
PROJECT LOCATION:	DEES PLAZA
	MADISON COUNTY, MISSISSIPPI
CLIENT:	BDP GROUP, LLC
	602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:	CANDLEWOOD SUITES
SHEET CONTENTS:	WATER & SEWER LAYOUT

SHEET NUMBER	5 of 16
PROJECT NUMBER	B-7302



- NOTES:
- SEE NOTES ON SHEET 2, DETAIL DRAWINGS & PROJECT
 - ALL EXISTING UTILITIES ARE SHOWN AS THEY WERE MARKED BY OTHERS AND SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL AT 811 FOR A LOCATE PRIOR TO BEGINNING CONSTRUCTION TO VERIFY LOCATIONS. CONTRACTOR SHALL POT-HOLE EXISTING UTILITY LINES IN AREAS WHERE PROPOSED UTILITIES (WATER, SEWER, STORM DRAIN) CROSS AND NOTIFY ENGINEER IMMEDIATELY IF CONFLICT IS DISCOVERED.
 - CONTRACTOR TO VERIFY EXISTING LOCATION AND ELEVATION OF ALL UTILITY INFRASTRUCTURE REQUIRED FOR COMPLETION OF THIS PROJECT IN FULL PRIOR TO BEGINNING ANY ASPECT OF CONSTRUCTION. THIS INCLUDES ALL ON-SITE AND OFF-SITE UTILITIES AS REQUIRED. SHOULD ANY DISCREPANCIES BE FOUND THEY SHALL BE IMMEDIATELY BROUGHT TO THE ENGINEER'S ATTENTION IN WRITING TO RECEIVE FURTHER INSTRUCTION.
 - CONTRACTOR SHALL COORDINATE ALL WORK DIRECTLY INVOLVING, CROSSING OR IN THE VICINITY OF AN EXISTING UTILITY LINE WITH UTILITY PROVIDER/OWNER.
 - WATER AND SANITARY SEWER LINES TO BE INSTALLED ACCORDING TO THE PROJECT DETAILS AND SPECIFICATIONS.
 - TRACER WIRE REQUIRED ON ALL NEW WATER LINES NO MATTER THE SIZE. ACCESS BOXES SHALL BE INSTALLED AS REQUIRED FOR CONTINUOUS CONDUCTIVITY IN WIRE FOR LOCATION PURPOSES AND NOTED ON THE DRAWINGS WHERE THEY WERE INSTALLED. CONTRACTOR SHALL PROVIDE ENGINEER WITH DRAWING SHOWING PROPOSED LOCATION OF ACCESS BOXES PRIOR TO INSTALLATION.
 - CONTRACTOR TO COMPARE THE PROPOSED SIZE AND PROPOSED BUILDING TIE-IN LOCATION OF ALL WATER AND SANITARY SEWER LINES WITH THE BUILDING/PLUMBING PLANS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER IN WRITING OF ANY DISCREPANCIES.
 - ALL FITTING SHALL BE RESTRAINED WITH MEGA LUGS.
 - GATE VALVES AND OTHER FITTING SHALL BE CONNECTED DIRECTLY TO EACH OTHER.
 - THRUST BLOCKING REQ'D UNDER ALL VALVES AND ON ALL FITTINGS.
 - CONTRACTOR SHALL COORDINATE WATER SERVICE REQUIREMENTS WITH THE WATER ASSOCIATION AND PAY ALL FEES ASSOCIATED WITH SUCH.



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PROJECT LOCATION:
DEES PLAZA
 MADISON COUNTY, MISSISSIPPI

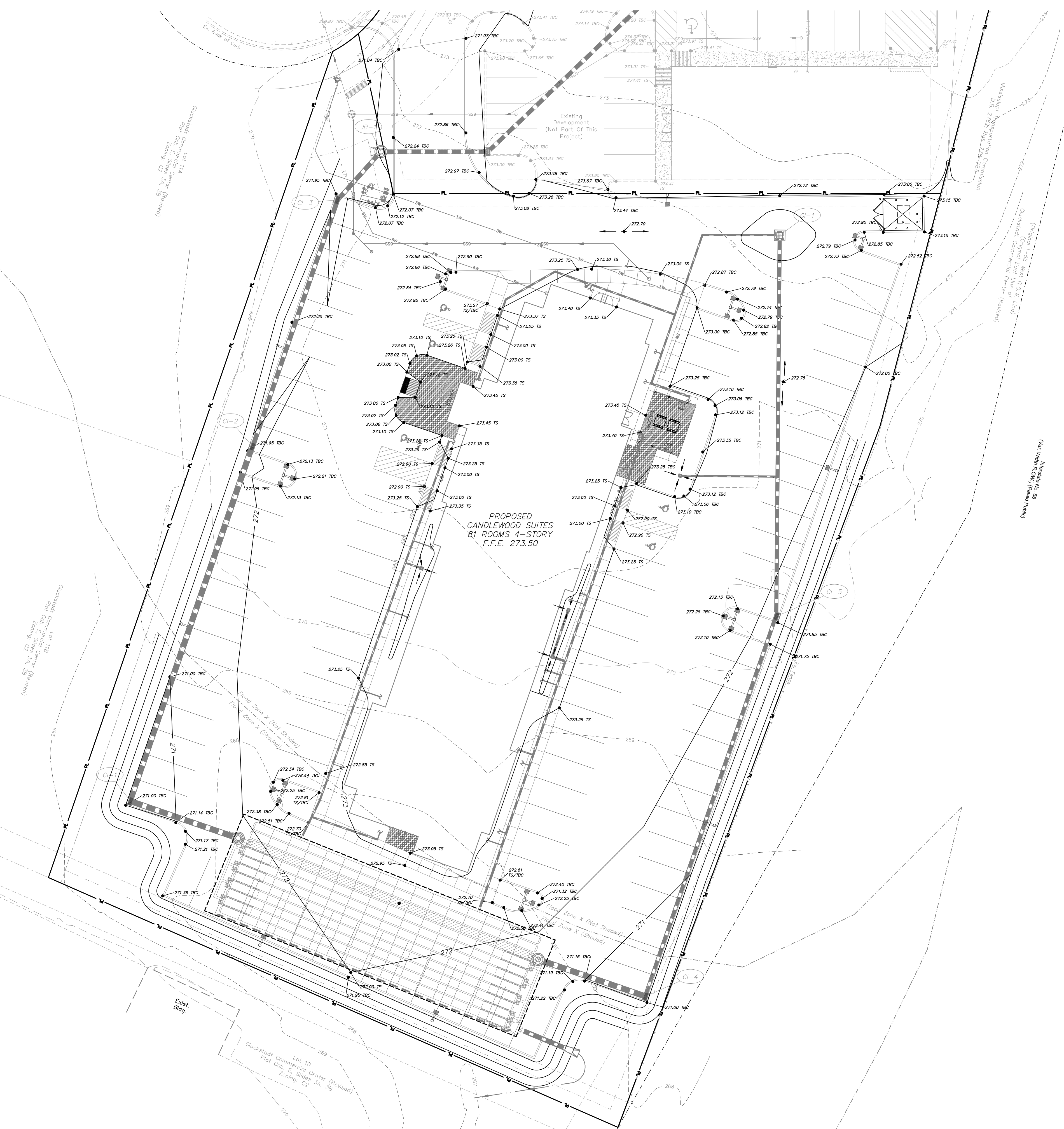
CLIENT:
BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES

SHEET CONTENTS:
GRADING PLAN

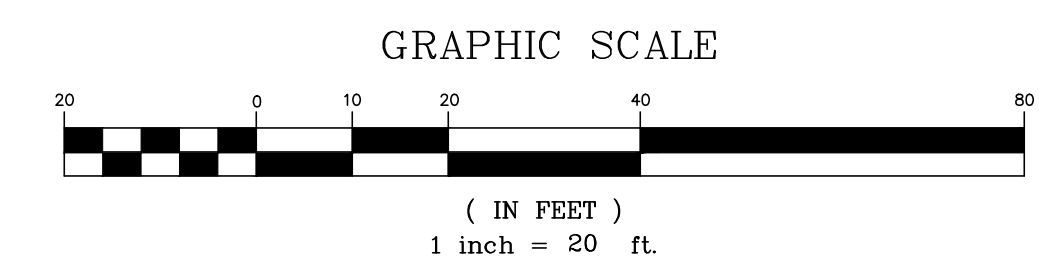
SHEET NUMBER
6 of 16

PROJECT NUMBER
B-7302



SPOT ELEVATION LEGEND
 TBC = TOP BACK OF CURB
 TS = TOP OF SIDEWALK
 TP = TOP OF PAVEMENT

- NOTES:
- SEE NOTES ON SHEET 2, DETAIL DRAWINGS & PROJECT SPECIFICATIONS FOR MORE DETAILED INFORMATION ON INSTALLATION REQUIREMENTS.
 - ALL EXISTING UTILITIES ARE SHOWN AS THEY WERE MARKED BY OTHERS AND SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL AT 601-362-4374 FOR A LOCATE PRIOR TO BEGINNING CONSTRUCTION TO VERIFY LOCATIONS.
 - PRIOR TO BIDDING THE PROJECT THE CONTRACTOR SHALL POTHOLE EXISTING UTILITY LINES IN AREAS WHERE PROPOSED UTILITIES (WATER, SEWER, STORM DRAIN) OR DRAINAGE SWALES ARE PROPOSED TO CROSS AND NOTIFY ENGINEER IMMEDIATELY IF CONFLICT IS DISCOVERED.
 - SLOPES THAT ARE GREATER THAN 3:1 SHALL RECEIVE SOLID SOD UNLESS OTHERWISE NOTED.
 - ALL DISTURBED AREAS THAT ARE OUTSIDE THE PROJECT SCOPE/LIMITS SHALL BE REPAIRED TO AS GOOD AS THE ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE. PICTURE DOCUMENTATION OF THESE AREAS SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO DISTURBING TO SERVE AS PROOF OF THE PRE-EXISTING CONDITION.
 - MAINTAIN SLOPE IN HANDICAPPED STALLS AT 1.5% MAXIMUM.
 - PRIOR TO INSTALLATION OF ANY PORTION OF THE CURB AND GUTTER THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A MARKED UP DRAWING SHOWING WHERE REVERSED GUTTER CURB IS PROPOSED FOR HIS REVIEW AND APPROVAL.



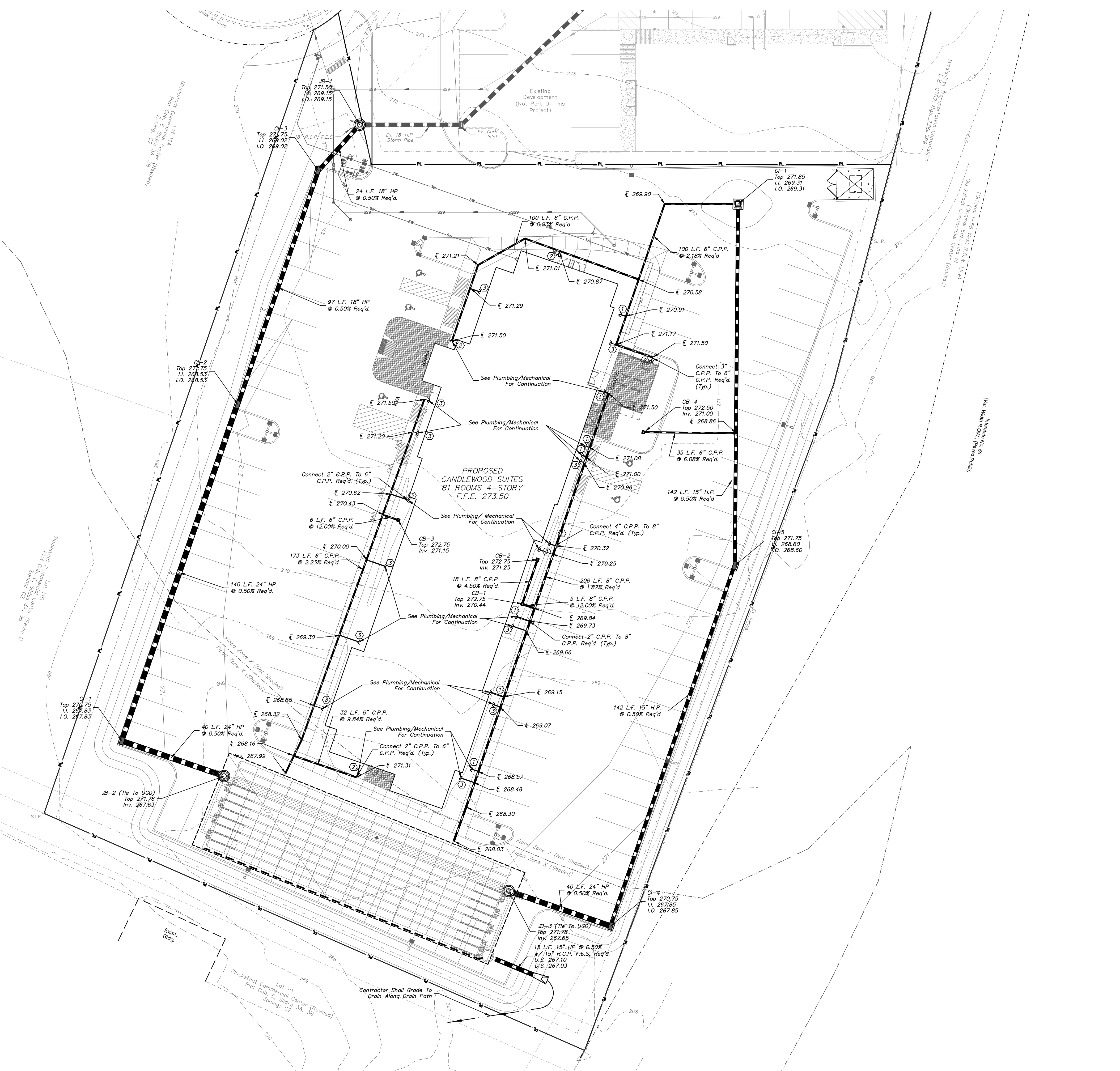
BENCHMARK
ENGINEERING & SURVEYING, LLC
 101 Highpointe Court, Suite B
 Brandon, MS 39042
 601-827-7780
 www.benchmarkms.com

DATE:	4/5/24	DRAWN:	JH	REVISIONS:
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REF C/L:		EG SURFACE:		
		FG SURFACE:		

PROJECT LOCATION:
 DEES PLAZA
 MADISON COUNTY, MISSISSIPPI
 CLIENT:
 BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

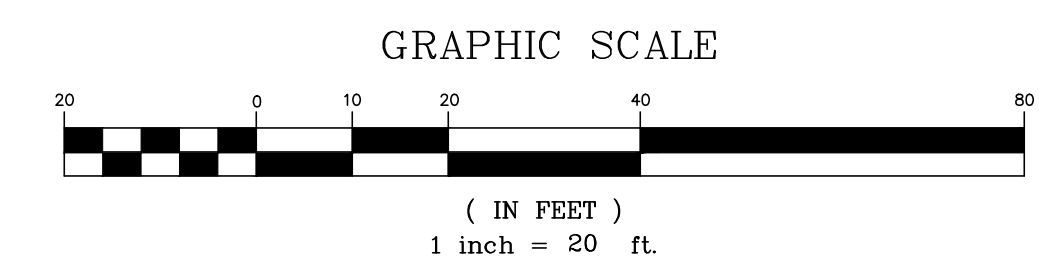
PROJECT:
CANDLEWOOD SUITES
 SHEET CONTENTS:
STORM DRAINAGE LAYOUT

SHEET NUMBER
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 PROJECT NUMBER
B-7302



- LEGEND**
- ① 4" C.P.P. REQ'D. FOR CONNECTION TO DOWNSPOUT
 - ② 3" C.P.P. REQ'D. FOR CONNECTION TO DOWNSPOUT
 - ③ 2" C.P.P. REQ'D. FOR CONNECTION TO CONDENSATE LEADER

- NOTES:**
1. SEE NOTES ON STORM DRAIN DETAILS & PROJECT SPECIFICATIONS FOR MORE DETAILED INFORMATION ON INSTALLATION REQUIREMENTS.
 2. ALL EXISTING UTILITIES ARE SHOWN AS THEY WERE MARKED BY OTHERS AND SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL AT 601-362-4374 FOR A LOCATE PRIOR TO BEGINNING CONSTRUCTION TO VERIFY LOCATIONS. CONTRACTOR SHALL POT-HOLE EXISTING UTILITY LINES IN AREAS WHERE PROPOSED UTILITIES (WATER, SEWER, STORM DRAIN) CROSS AND NOTIFY ENGINEER IMMEDIATELY IF CONFLICT IS DISCOVERED.
 3. NOT ALL UTILITY INFRASTRUCTURE REQUIRED OF THIS PROJECT IS SHOWN ON THIS SHEET FOR CLARITY PURPOSES. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DRAWINGS AND ALL THAT IS REQUIRED OF THEM.
 4. INVERT ELEVATIONS SHOWN ON THE PLANS FOR THE STORM DRAIN STRUCTURES AND CULVERTS REPRESENT THE FLOW LINE. CONTRACTOR TO ACCOUNT FOR PIPE OR STRUCTURE THICKNESS WHEN INSTALLING.
 5. THIS PARCEL IS LOCATED IN FLOOD ZONE X (NOT SHADED) AND FLOOD ZONE X (SHADED) ACCORDING TO FLOOD INSURANCE RATE MAP NO. 28090C0415F, COMMUNITY PANEL NO. 280228 0415 F, EFFECTIVE DATE: MARCH 17, 2010.
 6. CURB INLETS (GI-1 & GI-2) SHALL BE NYLOPLAST BASINS WITH 2'X3' DIAGONAL FRAME & GRATE.
 7. GRATE INLETS (GI-1) SHALL BE NYLOPLAST INLETS WITH 2'X2' HEAVY DUTY FRAME AND GRATE AND SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS FOR PROPOSED APPLICATIONS.
 8. PRECAST OR POURED IN PLACE STRUCTURES ARE ALLOWED BUT SHALL BE AT NO EXTRA COST TO THE OWNER.
 9. IT IS INTENDED THAT ALL GRATE INLETS BE SURROUNDED WITH AN 18" WIDE X 6" THICK CONCRETE APRON. THE CORNERS OF THE APRON SHALL BE 0.05'-0.10' HIGHER THAN THE INLET TOP.
 10. SLOPES THAT ARE GREATER THAN 3:1 SHALL RECEIVE SOLID SOD UNLESS OTHERWISE NOTED.
 11. ALL DISTURBED AREAS ARE TO BE REPAIRED TO AS GOOD AS THE ORIGINAL CONDITION OR BETTER. PICTURE DOCUMENTATION OF THESE AREAS SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO DISTURBING.
 12. ALL HP STORM PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR PROPOSED APPLICATION.
 13. CONTRACTOR SHALL TIE ROOF DRAIN LINES INTO MAINS USING TEE OR OTHER WATERTIGHT METHOD APPROVED BY ENGINEER.
 14. CATCH BASINS CB-1 & CB-2 SHALL BE 8" ADS IN-LINE DRAINS W/ 12"X12" DUCTILE IRON GRATE. CATCH BASIN CB-3 AND CB-4 SHALL BE 6" ADS IN-LINE DRAIN W/ 12"X12" DUCTILE IRON GRATE. CATCH BASINS SHALL BE FITTED WITH CAP STYLE REDUCER FOR GRATE INSTALLATION AS NEEDED. TEES AND FITTINGS SHALL BE AS REQUIRED BY MANUFACTURER.

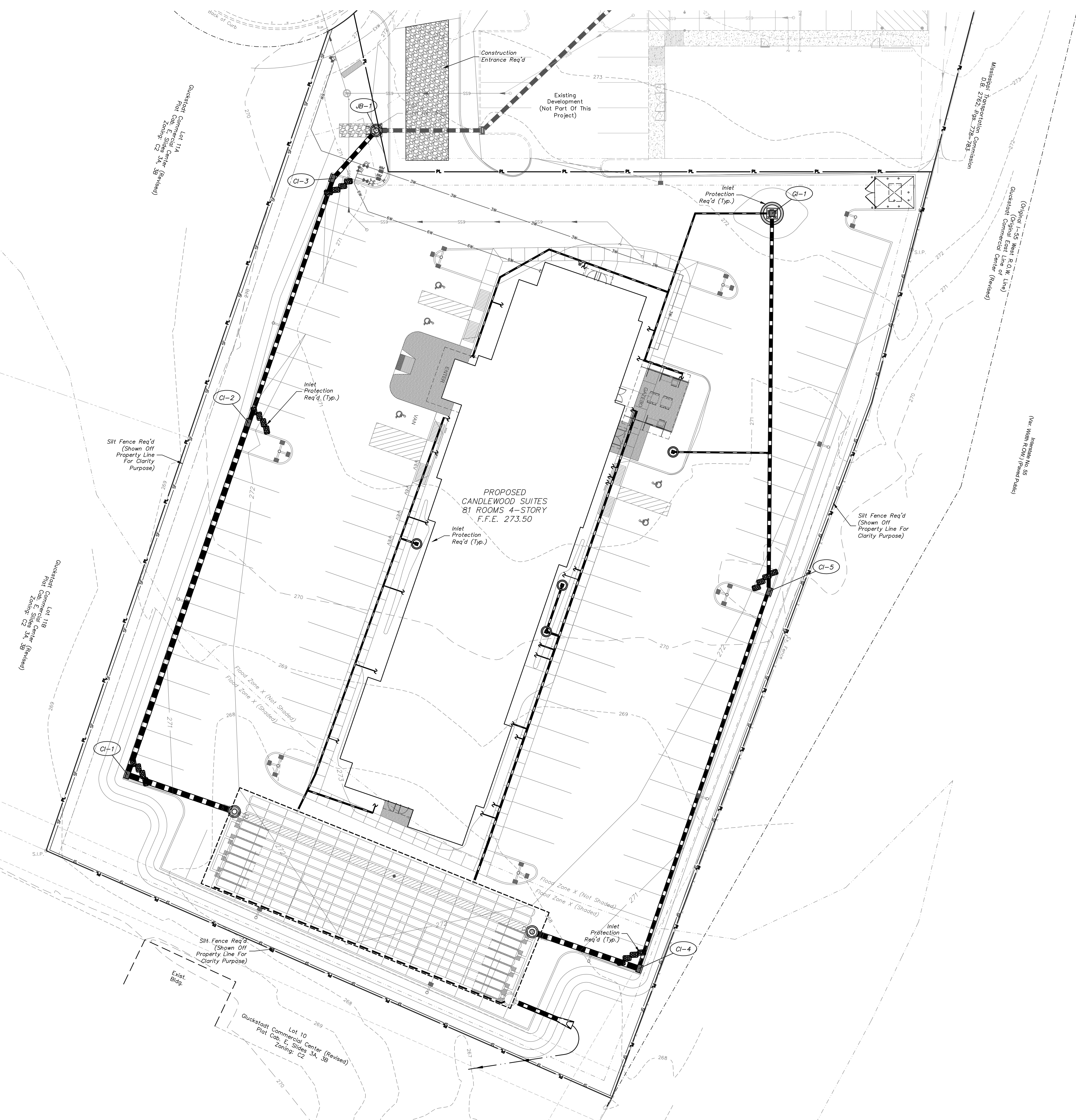


DATE:	4/5/24	DRAWN:	JH
CHECKED:	GAB	SCALE:	1" = 20'
REF C/L:		EG SURFACE:	
		FG SURFACE:	

PROJECT LOCATION:	DEES PLAZA MADISON COUNTY, MISSISSIPPI
CLIENT:	BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS

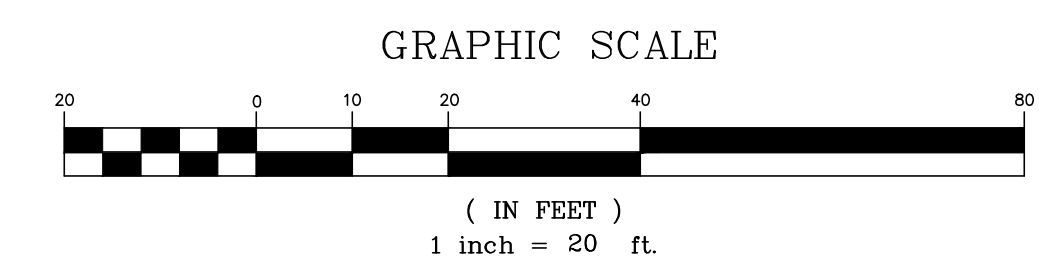
PROJECT:	CANDLEWOOD SUITES
SHEET CONTENTS:	EROSION CONTROL LAYOUT

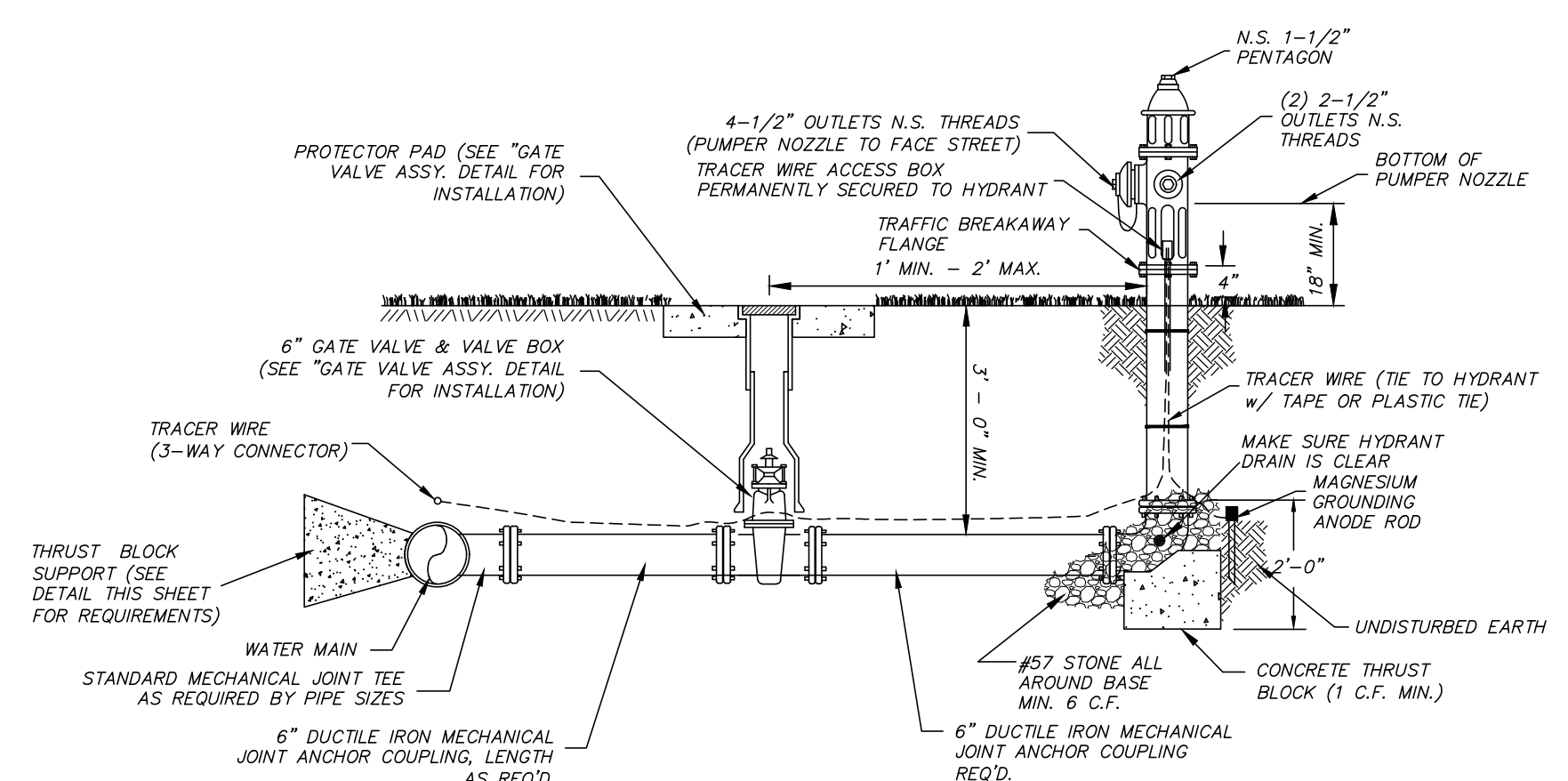
SHEET NUMBER	8 of 16
PROJECT NUMBER	B-7302



- CONSTRUCTION & EROSION CONTROL SEQUENCE SCHEDULE**
- THE SCHEDULE LAID OUT BELOW IS TO PROVIDE CLARIFICATION TO THE CONTRACTOR ON THE INTENDED ORDER OF CONSTRUCTION IN CONJUNCTION WITH THE REQUIRED EROSION CONTROL MEASURES OF THIS PROJECT AS SHOWN ON THIS SHEET AND OTHER CONTRACT DOCUMENTS.
1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
 2. INSTALL SANITARY FACILITIES AND TRASH CONTAINERS.
 3. SET UP EQUIPMENT AND MATERIALS STAGING AREA IF NEEDED BY THE CONTRACTOR FOR PROJECT.
 4. INSTALL SILT FENCING ALONG THE DOWNSTREAM BOUNDARY OF ANY AREAS THAT WILL BE DISTURBED.
 5. BEGIN GRADING OPERATIONS TO GET THE PROJECT SITE TO ROUGH GRADE. PLACE ADDITIONAL TEMPORARY MEASURES AS REQUIRED DURING THE GRADING OPERATIONS TO CONTROL RUNOFF.
 6. BEGIN INSTALLING SITE UTILITIES SUCH AS SEWER, STORM DRAIN, WATER SERVICES, ETC.
 7. COMPLETE BUILDING PAD AND BEGIN INSTALLING CURB & PAVING OPERATIONS.
 8. FINE GRADE THE REMAINDER OF THE DISTURBED AREAS OF THE SITE.
 9. STABILIZE THE PROJECT SITE WITH PERMANENT SEED & MULCH OR PER LANDSCAPING PLAN AND INSTALL ANY OTHER PERMANENT EROSION CONTROL MEASURES THAT MAY NOT BE IN PLACE.
 10. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES IN DRAINAGE BASINS ONCE IMPROVEMENTS REQ'D IN THESE PLANS HAS BEEN COMPLETED AND AREAS DISTURBED DURING INSTALLATION OF SUCH HAS BEEN STABILIZED WITHIN SAID BASIN WITH 90% VEGETATIVE COVER.

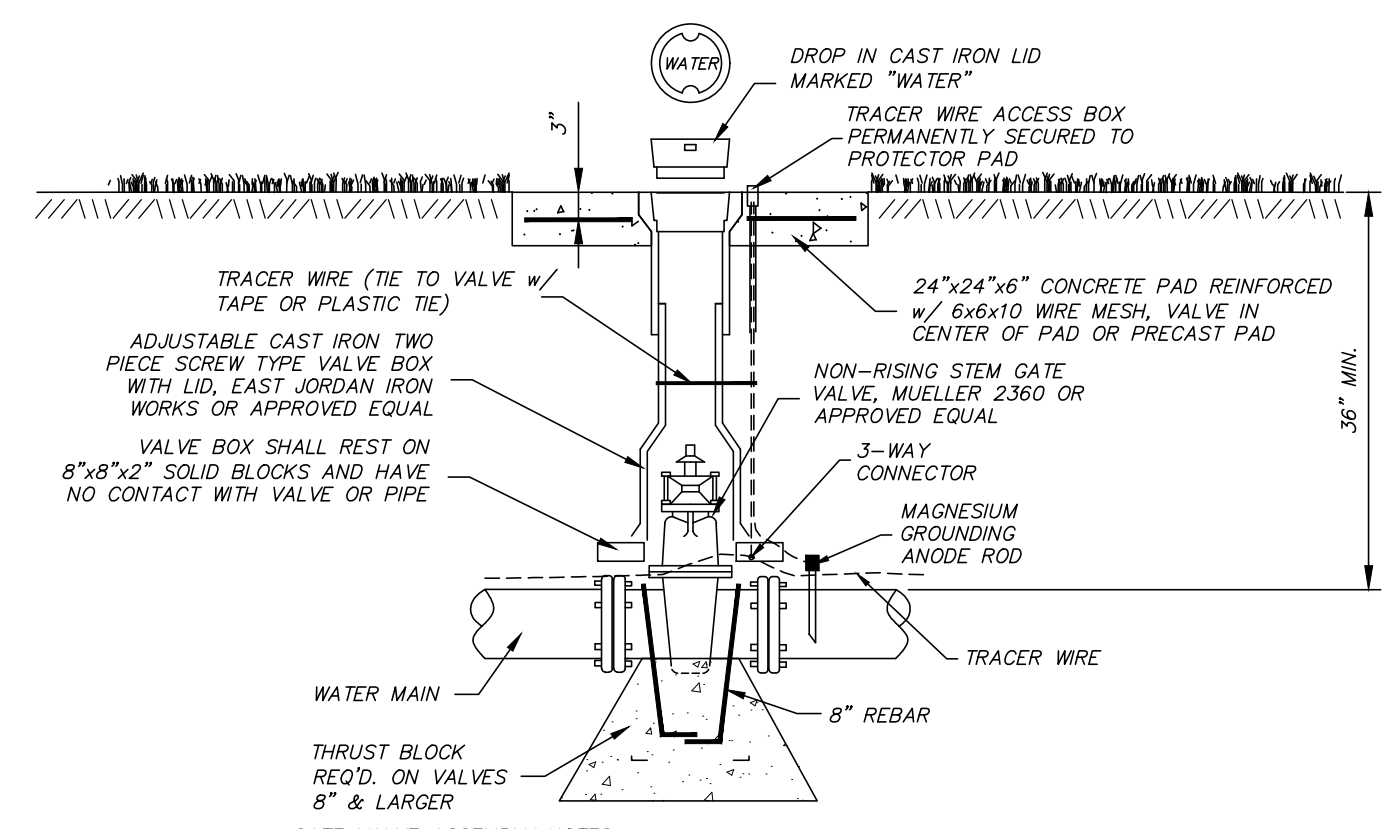
- EROSION CONTROL NOTES:**
1. ALL DISTURBED AREAS SHALL BE TREATED WITH PERMANENT SEED & MULCH (COMMON BERMUDA) ONCE SUCH HAS REACHED FINAL GRADE OR AS REQUIRED PER THE LANDSCAPING PLAN. REQUIREMENTS OF THE LANDSCAPING PLAN GOVERN. SHOULD THE CONSTRUCTION SCHEDULE NOT BE CONDUIVE TO PLANTING BERMUDA PER SPECIFICATIONS, THEN THE CONTRACTOR SHALL SUBMIT AN ALTERNATE SPECIES FOR APPROVAL.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THE SMALL CONSTRUCTION NOTICE OF INTENT (SCNOI) AND FILL IN THE PRIME CONTRACTOR'S INFORMATION AND KEEP READILY AVAILABLE AT THE JOB SITE. ALL REQUIREMENTS OF THE SCNOI ARE THE CONTRACTOR'S RESPONSIBILITY INCLUDING BUT NOT LIMITED TO ALL REQUIRED INSPECTIONS, WEEKLY REPORTS AND MAINTENANCE OF THE SITE.
 3. S.C.N.O.I. COVERAGE SHALL BE TRANSFERRED TO SITE PROJECT CONTRACTOR ONCE PROJECT IS AWARDED. SUCH COVERAGE SHALL THEN BE TRANSFERRED TO GENERAL CONTRACTOR ONCE SITE PACKAGE REQUIREMENTS HAVE BEEN COMPLETED. THIS IS THE CONTRACTOR'S RESPONSIBILITY AND COPIES OF SUCH SHALL BE PROVIDED TO ENGINEER AND OWNER.
 4. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES THAT DISTURB EXISTING GROUND.
 5. CONTRACTOR IS TO EVALUATE ALL STORM WATER MANAGEMENT CONTROLS A MINIMUM OF ONCE PER WEEK AND AFTER RAINFALL EVENTS TO DETERMINE EFFECTIVENESS OF THE EROSION AND SILTATION CONTROL MEASURES. ADDITIONAL MEASURES TO BE INSTALLED AS NEEDED TO CONTROL SEDIMENT (ABSORBED). INSPECTION REPORTS TO BE FILLED OUT ONCE PER WEEK NOTING ALL ACTIONS (IF ANY) REQUIRED.
 6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AND REPAIR ALL TEMPORARY EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTENANCE OR REPLACEMENT OF ANY TEMPORARY EROSION CONTROL MEASURES.
 7. TEMPORARY EROSION CONTROL MEASURES DEPICTED ON THIS DRAWING ARE MINIMUM REQUIREMENTS TO BE UTILIZED IN DEVELOPMENT OF THE SITE-SPECIFIC STORMWATER POLLUTION PREVENTION PLAN AND ARE NOT MEANT TO ADDRESS ALL OF THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT.
 8. IT IS THE INTENT OF THE SPECIFICATIONS THAT THE WORK SHALL PROCEED IN A MANNER AND SEQUENCE TO ENSURE THAT ESTABLISHMENT OF PERMANENT EROSION CONTROL ITEMS ARE ACCOMPLISHED IMMEDIATELY AFTER FINISH GRADING.
 9. EFFECTIVE USE OF TEMPORARY MEASURES, INCLUDING SEDIMENT BASINS, TEMPORARY SEEDING, ETC. SHALL BE MADE SO AS TO PREVENT OR MINIMIZE EROSION AND SILTATION UNTIL PERMANENT MEASURES ARE ESTABLISHED.
 10. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL @ 811 AT LEAST 48 HOURS BEFORE IMPROVEMENTS ARE MADE.
 11. CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES TO CONTROL SILTATION.
 12. SEE THE EROSION CONTROL DETAIL SHEET FOR MORE DETAIL ON THE INSTALLATION OF THE REQUIRED EROSION CONTROL MEASURES.
 13. ONCE THE PERMANENT EROSION CONTROL MEASURES ARE IN PLACE A FINAL SITE INSPECTION IS TO BE COORDINATED BY THE CONTRACTOR WITH THE ENGINEER AND THE OWNER. ONCE SITE MEETS ALL PARTIES SPECIFICATIONS THE CONTRACTOR WITH BE RELIEVED OF THE RESPONSIBILITIES OF THIS CONTRACT.
 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EROSION CONTROL MEASURES SHOULD, TO THE EXTENT PRACTICABLE:
 - A. DIVERT UP-SLOPE WATER AROUND DISTURBED AREAS OF THE SITE
 - B. LIMIT THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST AMOUNT OF TIME POSSIBLE
 - C. MINIMIZE THE AMOUNT OF SURFACE AREA THAT MUST BE DISTURBED
 - D. IMPLEMENT BEST MANAGEMENT PRACTICES TO MITIGATE ADVERSE IMPACTS FROM STORM WATER RUNOFF
 - E. REMOVE SEDIMENT THAT WOULD CONTRIBUTE TO OR CAUSE ADVERSE IMPACTS TO STATE WATERS FROM STORM WATER BEFORE IT LEAVES THE SITE





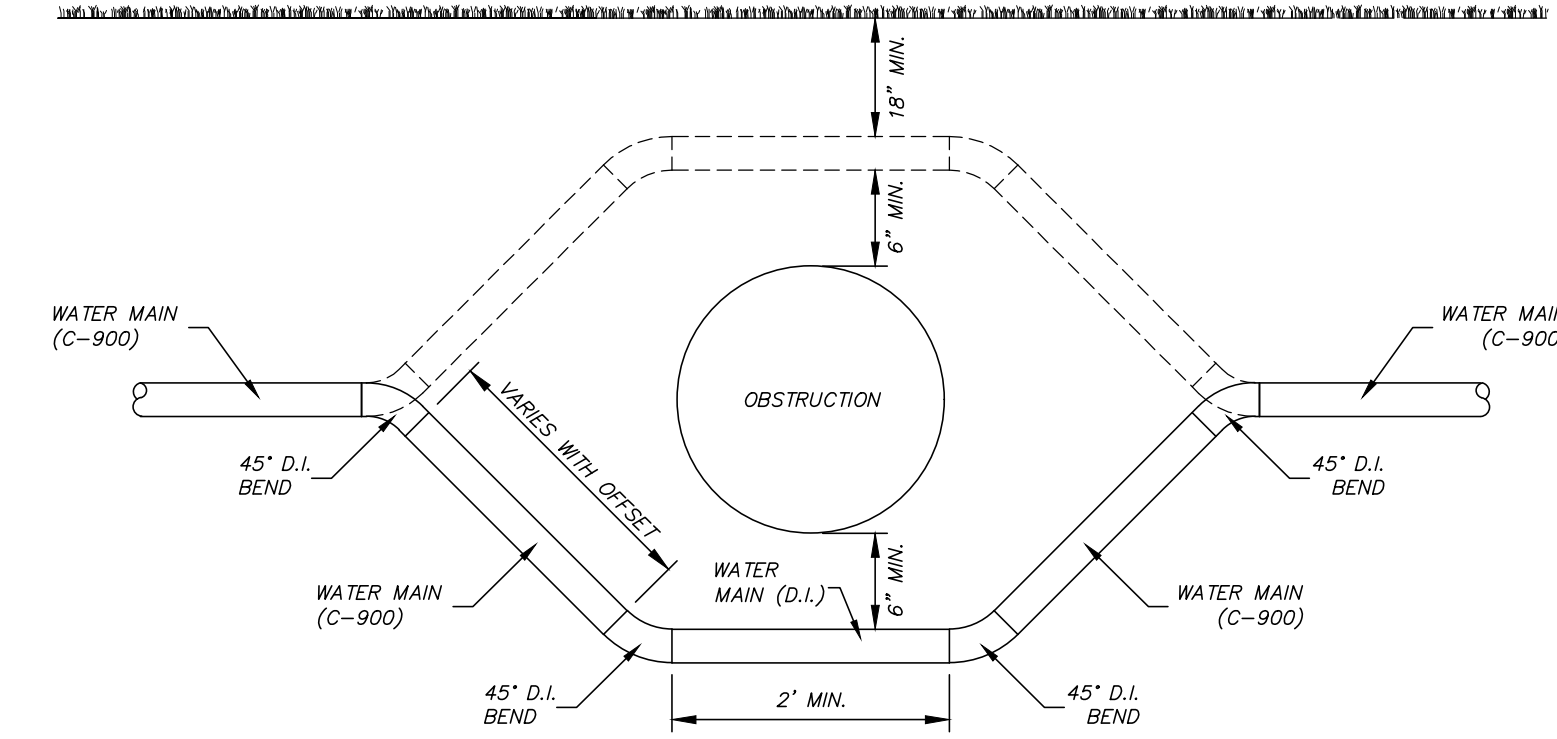
- FIRE HYDRANT ASSEMBLY NOTES:**
1. FIRE HYDRANTS SHALL BE PAINTED WHITE.
 2. ALL FIRE HYDRANT ASSEMBLIES TO INCLUDE GATE VALVES.
 3. CONTRACTOR TO USE MEGA-LUGS ON ALL RESTRAINED JOINTS.
 4. FIRE HYDRANT TO MATCH EXISTING (IF ANY) OR BE MUELLER A-423, OR APPROVED EQUAL (MUST BE APPROVED BY BEAR CREEK WATER ASSOCIATION).
 5. SEE GATE VALVE ASSEMBLY DETAIL FOR MORE INFORMATION ON INSTALLATION.
 6. ALL TRACER WIRE CONNECTORS SHALL BE AS REQUIRED BY THE CITY AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.
 7. ALL ITEMS SHOWN ON THIS DETAIL (INCLUDING VALVE) ARE ABSORBED IN FIRE HYDRANT ASSEMBLY ITEM.

FIRE HYDRANT ASSEMBLY



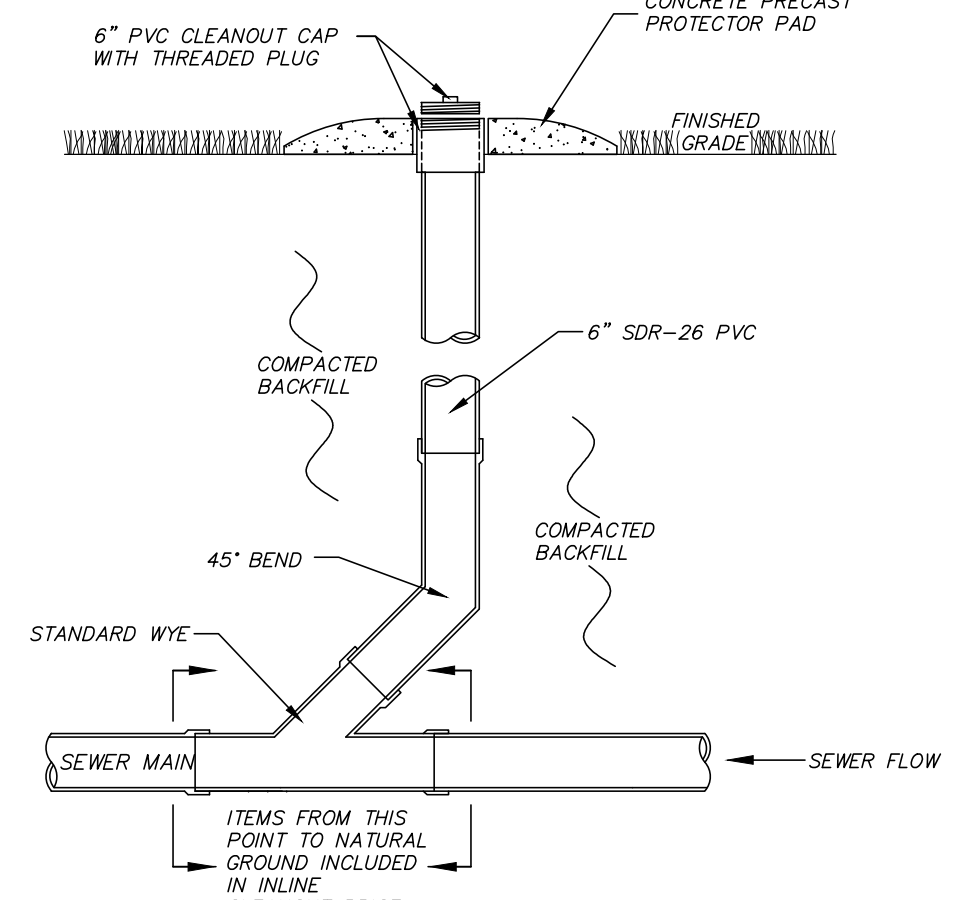
- GATE VALVE ASSEMBLY NOTES:**
1. GATE VALVE SHALL MATCH SIZE OF LINE ON WHICH IT IS INSTALLED UNLESS OTHERWISE NOTED.
 2. VALVE BOX SHALL BE SET PLUMB AND CENTERED ABOVE THE VALVE NUT.
 3. THRUST BLOCKS REQUIRED ON ALL GATE VALVES AND SHALL BE PLACED ON TAMPED SOIL MEETING SPECIFICATIONS FOR BEDDING MATERIAL OR ON CRUSHED LIMESTONE.
 4. ALL TRACER WIRE CONNECTORS SHALL BE AS REQUIRED BY THE CITY AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.
 5. ALL BOLTS SHALL BE POLY WRAPPED TO REMAIN FREE OF CONCRETE AND SHALL BE FULLY ACCESSIBLE.
 6. CONCRETE PROTECTOR PADS REQUIRED ON ALL VALVES INCLUDING HYDRANT VALVES (ABSORBED).

GATE VALVE ASSEMBLY

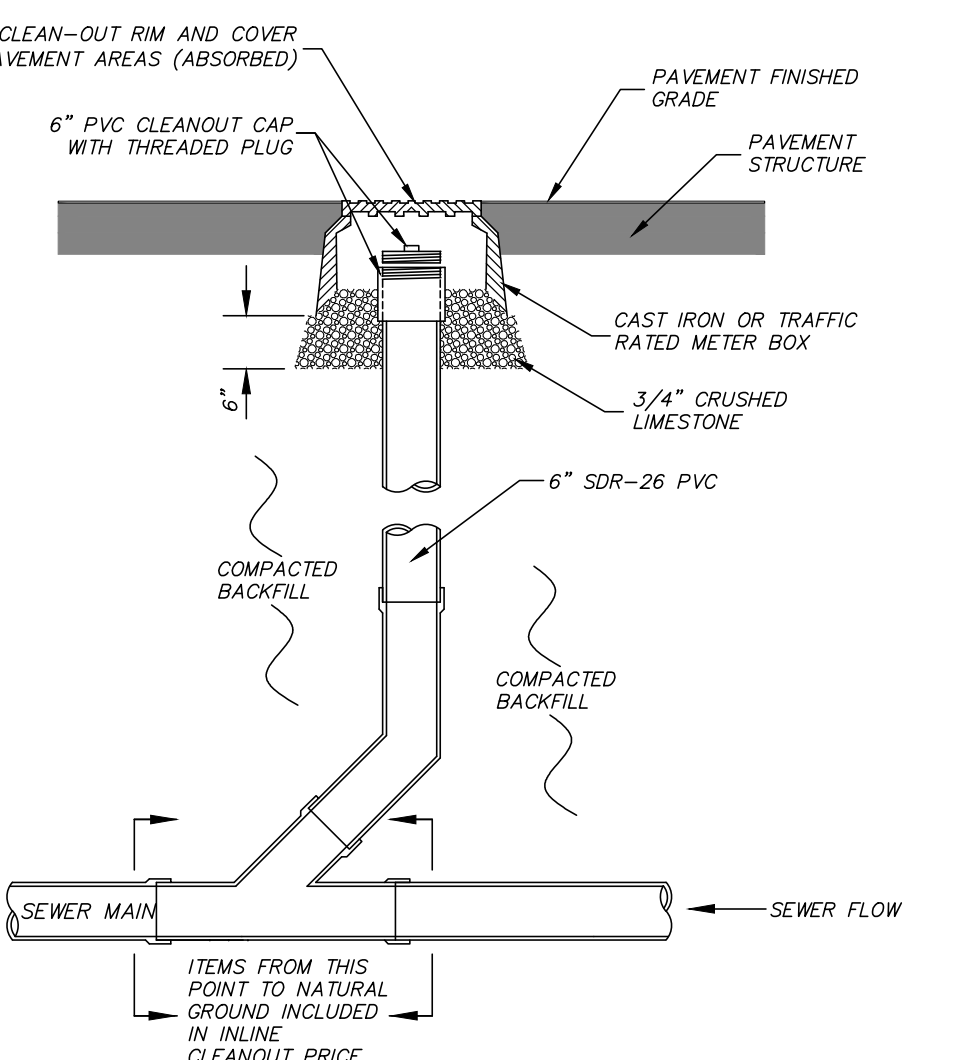


- WATER LINE OBSTRUCTION NOTES:**
1. CONTRACTOR TO FOLLOW CLEARANCE REQUIREMENTS IN THE SPECIFICATIONS FOR WATER, STORM DRAIN AND SANITARY SEWER LINE CROSSINGS. WHEN THE WATER LINE MUST CROSS UNDER THE OBSTRUCTION THE PIPE SHALL BE DUCTILE IRON, CASED WITH STEEL CASING, OR FULLY ENCASED WITH CONCRETE.
 2. WATER LINE TO PASS OVER OBSTRUCTION IF CLEARANCE REQUIREMENTS CAN BE MET.
 3. CONTRACTOR TO FOLLOW REQUIREMENTS IN THE SPECIFICATIONS FOR THE PIPE FITTINGS REQUIRED TO DODGE OBSTRUCTION.
 4. SAME SPECIFICATIONS APPLY FOR SANITARY SEWER FORCE MAIN OBSTRUCTIONS.
 5. WORK & MATERIALS REQUIRED FOR WATER LINE OBSTRUCTION SHALL BE AN ABSORBED COST.

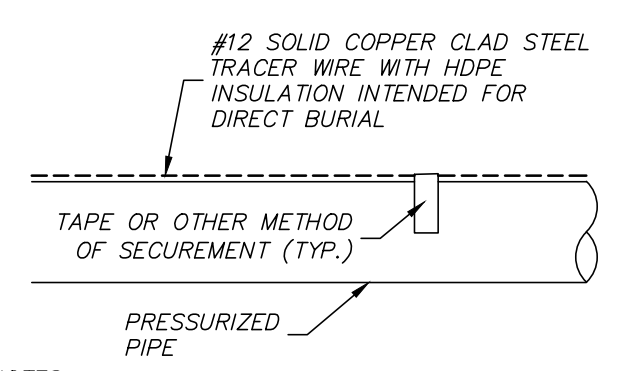
TYPICAL WATER LINE OBSTRUCTION DETAIL



INLINE CLEANOUT - GRASSED AREA
N.T.S.

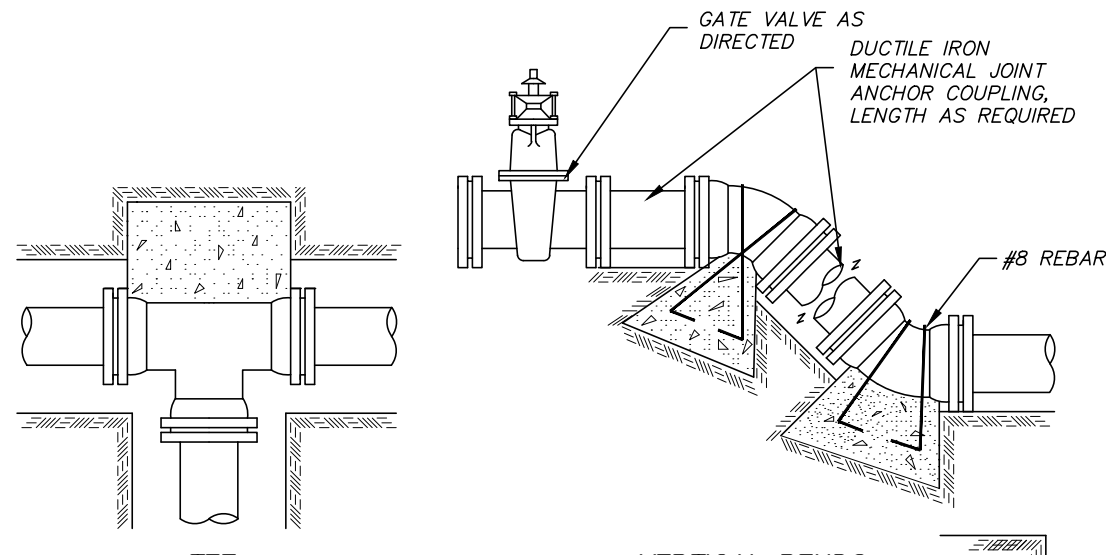


INLINE CLEANOUT - PAVED AREA
N.T.S.

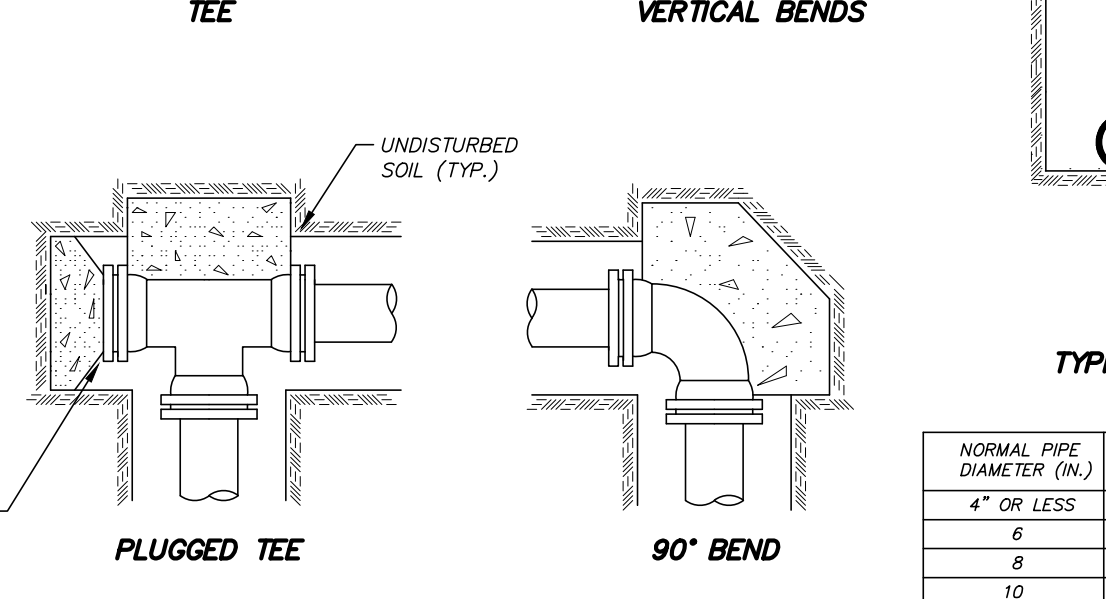


- TRACER WIRE NOTES:**
1. TRACER WIRE SHALL BE ABSORBED IN THE PER FOOT COST OF THE PRESSURIZED LINE.
 2. TRACER WIRE COLOR SHALL BE BLUE FOR WATER CONSTRUCTION.
 3. TRACER WIRE SHALL BE SECURED TO THE TOP OF THE PIPE WITH TAPE OR OTHER METHODS.
 4. METHODS OF SECURING WIRE SHALL BE INSTALLED AT INTERVALS AS NECESSARY TO MAINTAIN WIRE LOCATION DURING BACKFILL AND COMPACTION.
 5. ALL TRACER WIRE SHALL BE INSTALLED AS A COMPLETE SYSTEM, COMPLETE WITH CONNECTORS, MAGNESIUM ANODE GROUND RODS, AND TERMINAL STATIONS AT EACH FIRE HYDRANT, WATER VALVE, AND TERMINATION LOCATIONS.
 6. TRACER WIRE SHALL BE COPPERHEAD 1230-HS OR APPROVED EQUAL BY CITY.
 7. CONNECTORS MAY BE PRO-TRACE TW OR COPPERHEAD. ALL OTHER ACCESSORIES SHALL BE COPPERHEAD OR APPROVED EQUAL BY THE CITY.
 8. ALL CONNECTIONS SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.
 9. TRACER WIRE WILL BE TESTED BY CITY AND ALL AREAS NOT ABLE TO BE LOCATED USING TYPICAL LOW FREQUENCY LINE TRACING EQUIPMENT SHALL BE REPAIRED BY CONTRACTOR PRIOR TO ACCEPTANCE.
 10. ALL TRACER WIRE CONNECTORS SHALL BE PRO-TRACE TW AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.

TRACER WIRE



- WATER LINE OBSTRUCTION NOTES:**
1. CONTRACTOR TO FOLLOW CLEARANCE REQUIREMENTS IN THE SPECIFICATIONS FOR WATER, STORM DRAIN AND SANITARY SEWER LINE CROSSINGS. WHEN THE WATER LINE MUST CROSS UNDER THE OBSTRUCTION THE PIPE SHALL BE DUCTILE IRON, CASED WITH STEEL CASING, OR FULLY ENCASED WITH CONCRETE.
 2. WATER LINE TO PASS OVER OBSTRUCTION IF CLEARANCE REQUIREMENTS CAN BE MET.
 3. CONTRACTOR TO FOLLOW REQUIREMENTS IN THE SPECIFICATIONS FOR THE PIPE FITTINGS REQUIRED TO DODGE OBSTRUCTION.



BEARING AREA IN SQ. FT.

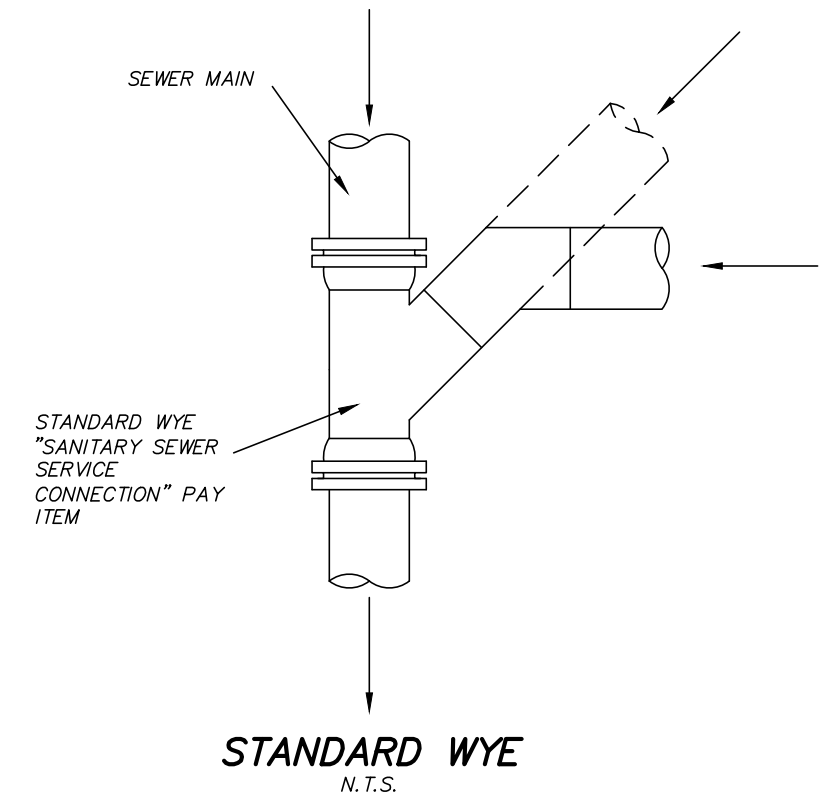
NORMAL PIPE DIAMETER (IN.)	DEAD END, TEE, PLUG	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4" OR LESS	2	2	2	1	1
6	3	4	3	2	2
8	5	7	4	2	2
10	8	12	6	3	3
12	12	16	9	5	3
14	14	18	11	6	4
16	16	20	12	7	6

VERTICAL BENDS

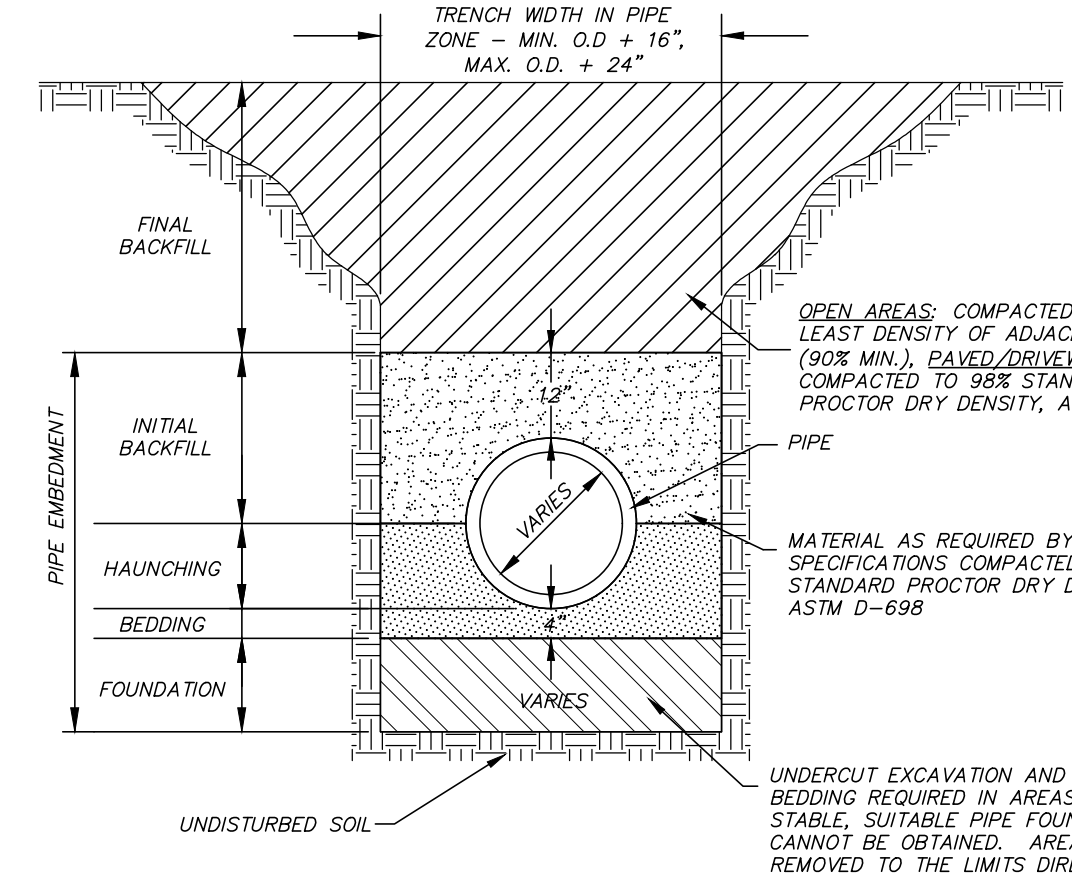
4" OR LESS	6	8	10	12	14	16
-	-	8.0(22)	4.0(15)	4.0(15)	-	-
-	-	14.0(52)	6.0(22)	4.0(15)	-	-
-	-	27.0(71)	9.0(33)	6.0(22)	-	-
-	-	46.0(21)	16.0(67)	7.5(30)	-	-
-	-	68.0(23)	22.0(80)	9.0(33)	-	-
-	-	90.0(31)	40.0(15)	14.0(52)	-	-
-	-	90.0(33)	52.0(19)	18.0(67)	-	-

VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)

TYPICAL THRUST BLOCK



STANDARD WYE
N.T.S.



- TYPICAL TRENCH NOTES:**
1. UNDERCUT EXCAVATION SHALL BE REQUIRED AS DIRECTED BY ENGINEER IF MATERIAL AT PLANNED GRADE WILL NOT PROVIDE STABLE TRENCH BOTTOM FOR PIPE LAYING. COST FOR REMOVAL AND DISPOSAL SHALL BE AN ABSORBED COST.
 2. FOUNDATION MATERIAL SHALL BE PLACED AS DIRECTED BY ENGINEER AND SHALL BE AN ABSORBED COST.
 3. IF CONTRACTOR PROPOSES TO USE NATIVE MATERIAL FOR PIPE EMBEDMENT AND/OR FINAL BACKFILL, CONTRACTOR SHALL PROVIDE TEST RESULTS PER SPECIFICATIONS TO ENGINEER STATING WHETHER NATIVE MATERIAL MEETS PROJECT SPECIFICATIONS FOR USE AS SUCH. IF IT DOES NOT MEET SPECIFICATION, THEN CONTRACTOR SHALL PROVIDE MATERIAL FOR SAID PURPOSES AND SPOIL EXCESS MATERIAL AT NO ADDITIONAL COST TO THE OWNER.
 4. NATIVE MATERIAL IN OPEN AREAS UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR SELECT MATERIAL IN TRENCHES CONSTRUCTED UNDER OR WITHIN 5' OF ROADWAYS, CURBED OR PAVED AREAS. MATERIAL SHALL EXTEND 3' BEYOND THE EDGE OF PAWING STRUCTURES.
 5. ABSORBED COST IN EITHER CASE MENTIONED.
 6. TRENCH SETTLEMENT REPAIR IS THE CONTRACTOR'S RESPONSIBILITY DURING WARRANTY PERIOD.
 7. DENATURING OF ANY TRENCH FOR ANY REASON IS THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.

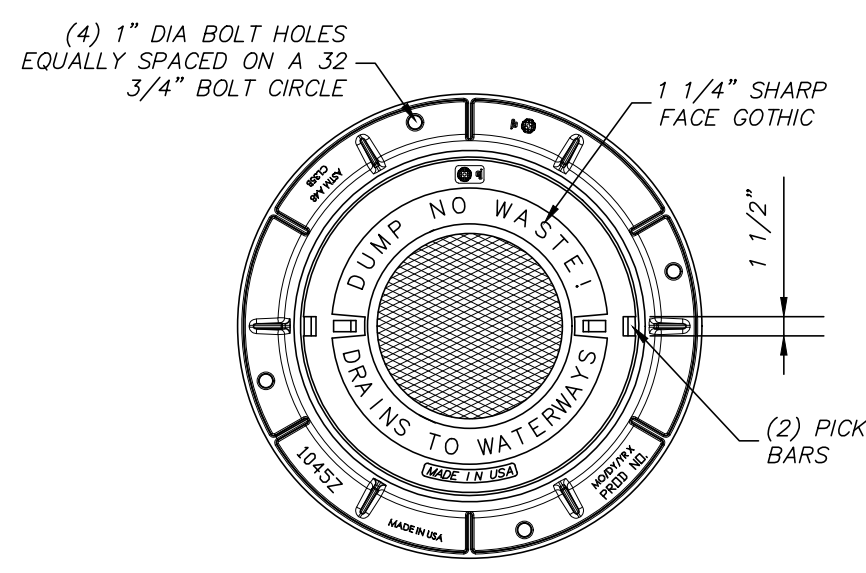
TYPICAL TRENCH DETAIL FOR WATER AND/OR SANITARY SEWER LINES

REVISIONS:

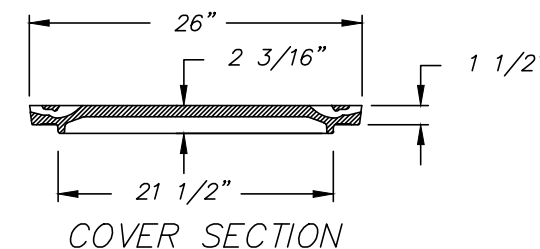
DATE	BY	DESCRIPTION
4/5/24	GAB	SCALE: -
		REF C/L:
		EG SURFACE:
		FG SURFACE:

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI
CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

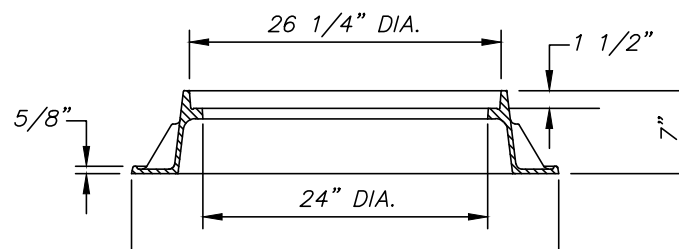
PROJECT:
CANDLEWOOD SUITES
SHEET CONTENTS:
WATER & SANITARY SEWER SYSTEM DETAILS



FRAME & COVER PLAN VIEW



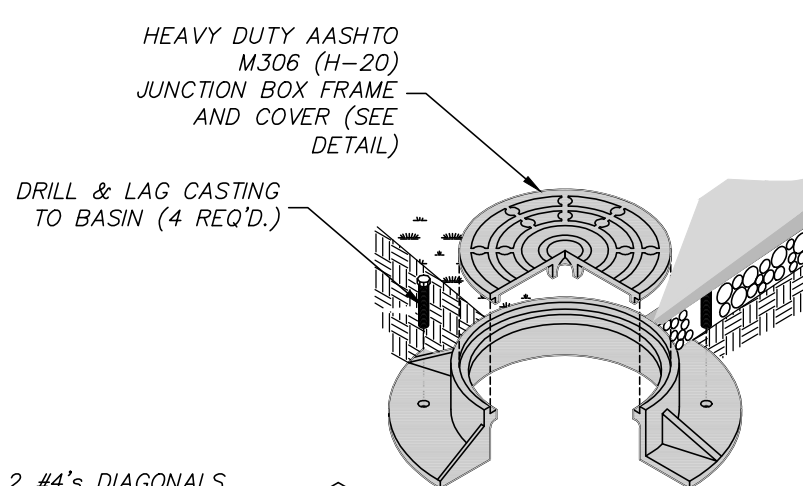
COVER SECTION



FRAME SECTION

NOTE: FRAME & COVER SHOWN IS EAST JORDAN IRON WORKS 1045Z FRAME & 1040A COVER ASSEMBLY. ALTERNATE FRAME AND COVER WILL BE CONSIDERED BUT MUST HAVE A 24" MINIMUM OPENING, MANUFACTURED AND TESTED IN ACCORDANCE WITH AASHTO M306 FOR TRAFFIC SERVICE, HAVE PICKBARS OF HOLES FOR COVER REMOVAL, & MEET OTHER SPECIFICATIONS OF THE FRAME AND COVER SHOWN.

JUNCTION BOX FRAME AND COVER

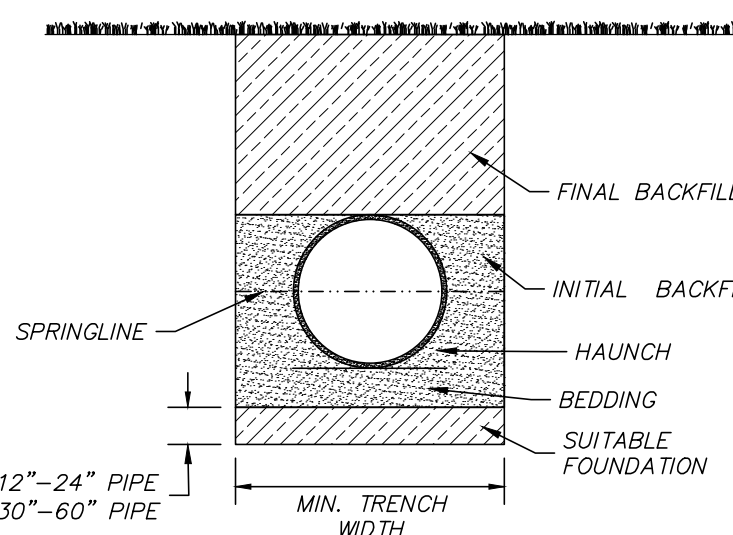


NOTE: WALL THICKNESS, "W", FOR PRECAST BOXES SHALL BE 5" MIN., FOR POURED IN PLACED SHALL BE 6" MIN.

JUNCTION BOX NOTES:

- 1. BOXES MAY BE PRECAST IF ELEVATIONS ALLOW, POURED IN PLACE (4000 PSI 28 DAY COMPRESSIVE STRENGTH) OR NYLOPLAST. PRECAST MANHOLES WITH CONE TOPS MAY BE USED FOR JUNCTION BOX IF THE PIPE SIZES ALLOW.
- 2. WIDTHS AND DEPTHS OF CATCH BASINS DETERMINED BY PIPE SIZES AND ANGLES AND CASTINGS TO BE USED. A MINIMUM OF 6" FROM THE OUTSIDE EDGE OF THE PIPE TO THE INSIDE EDGE OF THE WALL IS REQUIRED.
- 3. CONTRACTOR TO ENSURE THAT WATER IS NOT ALLOWED TO POND BEHIND THE INLET BOXES DURING CONSTRUCTION.
- 4. ON PRECAST CONCRETE BOXES THE LIFT HOLES ON EACH SECTION TO BE SEALED WATERTIGHT WITH NONSHRINK GROUT INSIDE AND OUT.
- 5. GROUT FOR JOINING PIPE TO PRECAST UNITS WILL BE A COMMERCIAL, NON-SHRINK, MASONRY GROUT MEETING MDOT SPECIFICATIONS. ALL VOIDS SHALL BE FILLED WITH PIECES OF BLOCKS OR BRICKS PRIOR TO GROUTING. GROUTING REQUIRED INSIDE AND OUT. FILTER CLOTH SHALL SURROUND EACH OUTSIDE PIPE CONNECTION TO BOX A MINIMUM OF 18" ON WALL OF BOX AND ALONG PIPE. PIPE CONNECTIONS TO INLETS SHALL NOT BE BACKFILLED WITHOUT CITY'S DESIGNER PRIOR INSPECTION AND APPROVAL.
- 6. BOXES SHALL HAVE FORMED INVERTS OUT OF NON-SHRINK GROUT SLOPING TO DRAIN TO OUTLET CULVERT.
- 7. STEPS REQ'D. IN STRUCTURES GREATER THAN 48" IN DEPTH. FIRST STEP TO BE 18" FROM THE BOTTOM WITH 12" SPACING BETWEEN REMAINING STEPS.
- 8. PRECAST BOXES SHALL BE POURED IN SECTIONS AS NEEDED AND RECOMMENDED BY THE MANUFACTURER TO GET TO DESIRED ELEVATION.
- 9. BOX WIDTH WILL VARY DEPENDENT ON THE SIZE OF THE PIPES ENTERING AND LEAVING THE BOX. IT IS UP TO THE CONTRACTOR/MANUFACTURER TO DETERMINE SIZE OF BOX.
- 10. JUNCTION BOXES SHALL BE MANUFACTURED OR POURED SO THAT THE ROUND MH LID IS THE ONLY PART OF THE STRUCTURE THAT IS VISIBLE ONCE FINAL GRADING HAS BEEN DONE. CONTRACTOR SHALL INSTALL RISERS AS NEEDED TO ENSURE THAT A MINIMUM OF 6" OF SOIL CAN BE PLACED ON TOP OF THE BOX TO COVER IT IN GRASSED AREAS AND 4" OF SOIL PLUS PAVING STRUCTURE IN PAVED AREAS.
- 11. ALL ITEMS SHOWN ON THIS DETAIL INCLUDING FRAME AND COVER AND OTHER INCIDENTALS TO PROVIDE OWNER WITH COMPLETE INSTALLATION AND CONNECTION OF PIPING SHALL BE INCLUDED IN THE PER EACH PAY ITEM "JUNCTION BOX".

JUNCTION BOX



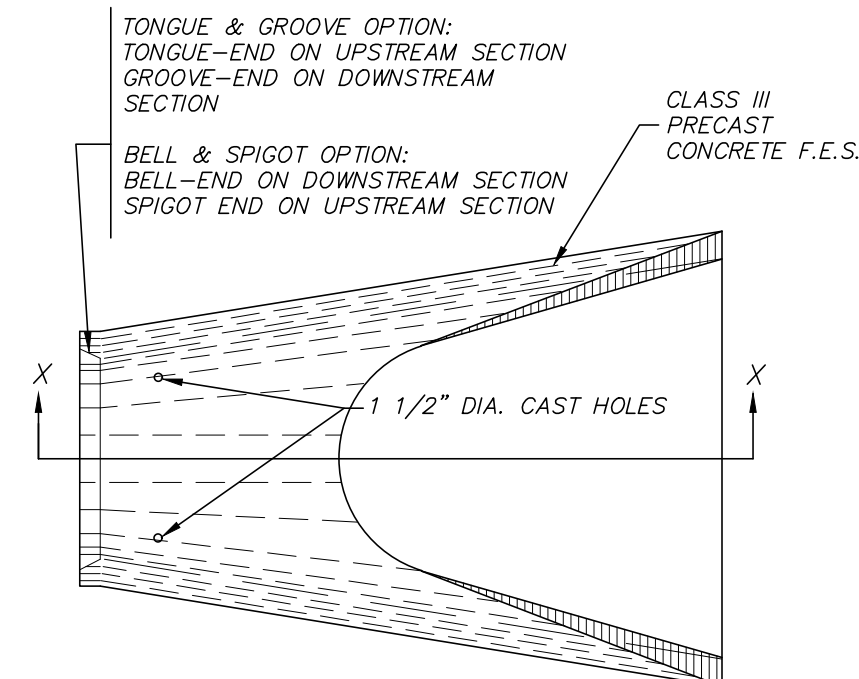
HP STORM TRENCH INSTALLATION NOTES:

- 1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2921, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS". LATEST EDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321, CLASS I/IV MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
- 2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- 3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- 4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE A MINIMUM OF 95% UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 12"-24" DIAMETER PIPE, 6" FOR 30"-60" DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED.
- 5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE A MINIMUM OF 95% TO THE SPRINGLINE OF THE PIPE AND 90% TO THE CROWN OF THE PIPE.
- 6. FINAL BACKFILL: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREA) IS 12" FROM THE TOP OF THE PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, CLASS I OR II MATERIAL COMPACTED TO 85% SPD AND CLASS III COMPACTED TO 95% SPD IS REQUIRED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- 7. MAXIMUM FILL HEIGHTS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATION.

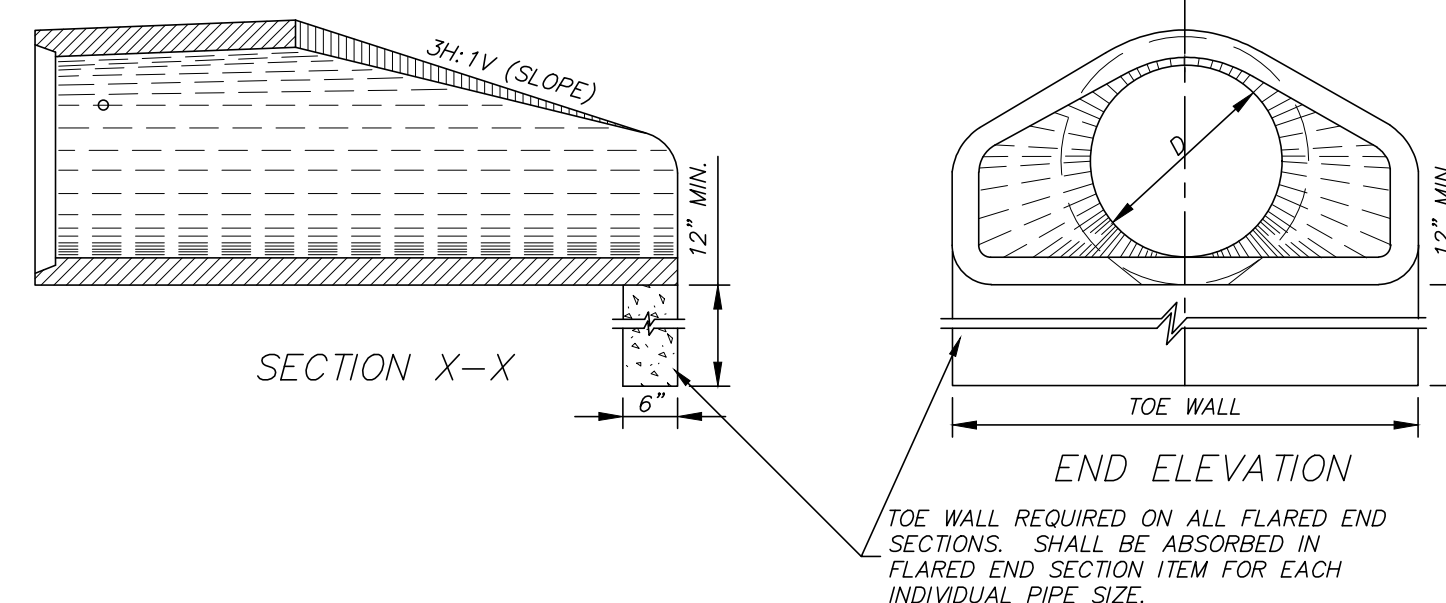
HP STORM TRENCH INSTALLATION

RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
60"	96"



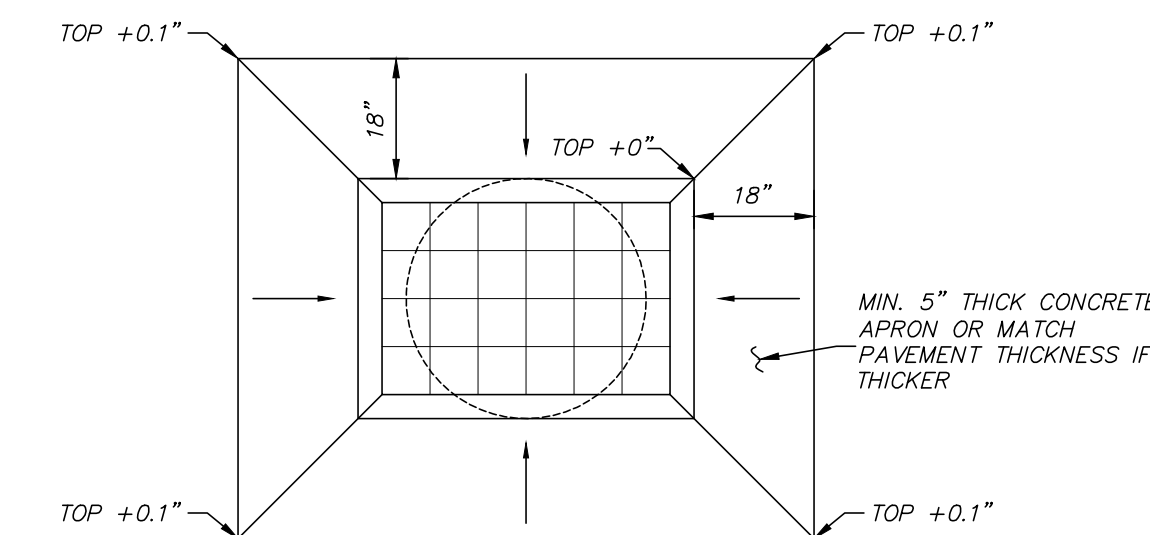
PLAN OF DOWNSTREAM END



CONCRETE FLARED END SECTION NOTES:

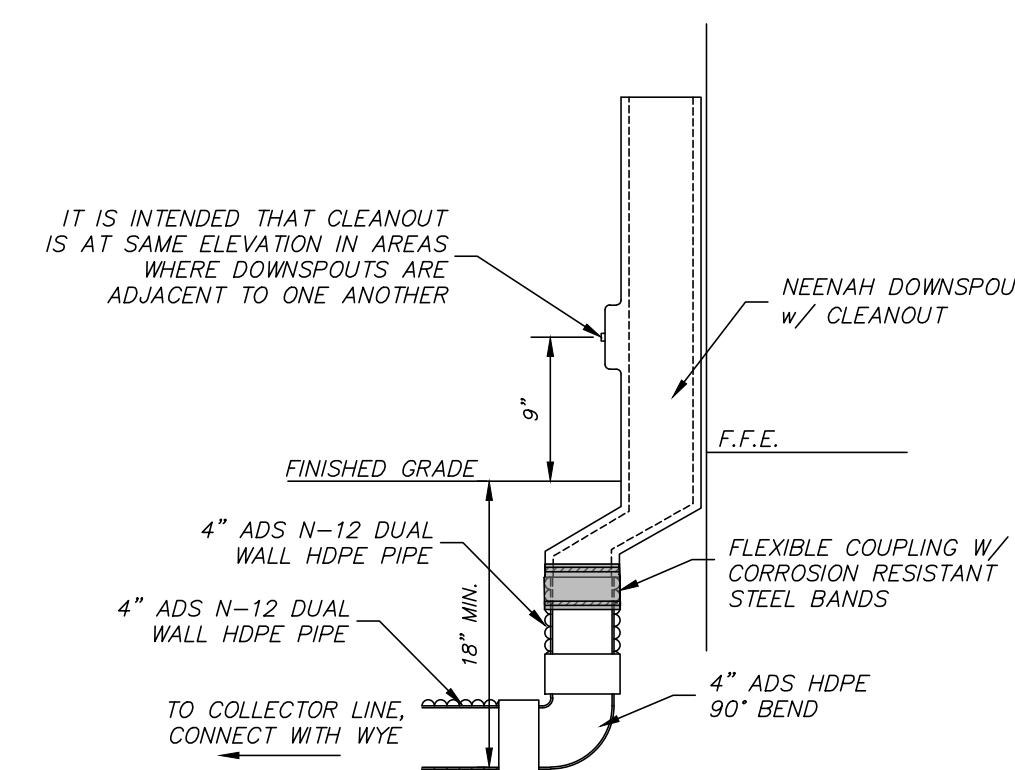
- 1. ALL FLARED END SECTIONS SHALL BE PRECAST STRUCTURES MADE IN ACCORDANCE WITH THE REQUIREMENTS OF MDOT STANDARD DETAIL WORKING NUMBER FE-1, SHEET 6530 FOR CLASS III CONCRETE ROUND PIPE AND WORKING NUMBER FE-1A, SHEET 6531 FOR CLASS III CONCRETE ARCH PIPE.
- 2. ALL LIFT HOLES SHALL BE SEALED WITH NON-SHRINK GROUT PER MDOT SPECIFICATIONS FOR SEALING CONCRETE PIPE.
- 3. TOE WALL REQUIRED ON ALL FLARED END SECTIONS AND SHALL RUN FULL WIDTH OF FLARED END SECTION.
- 4. CONCRETE FLARED END SECTIONS PLACED AT CONNECTION TO HP PIPE SHALL BE DOUBLE WRAPPED FULLY W/ FILTER CLOTH AND SECURED WITH A CONCRETE COLLAR CENTERED ON THE JOINT PER THE CONCRETE COLLAR DETAIL OR CONNECTED W/ DISSIMILAR MARMAC COUPLER (SHOWN ON THIS SHEET). COST FOR SUCH SHALL BE ABSORBED IN THE FLARED END SECTIONS PAY ITEM.

CONCRETE FLARED END SECTION



TYPICAL CONCRETE APRON

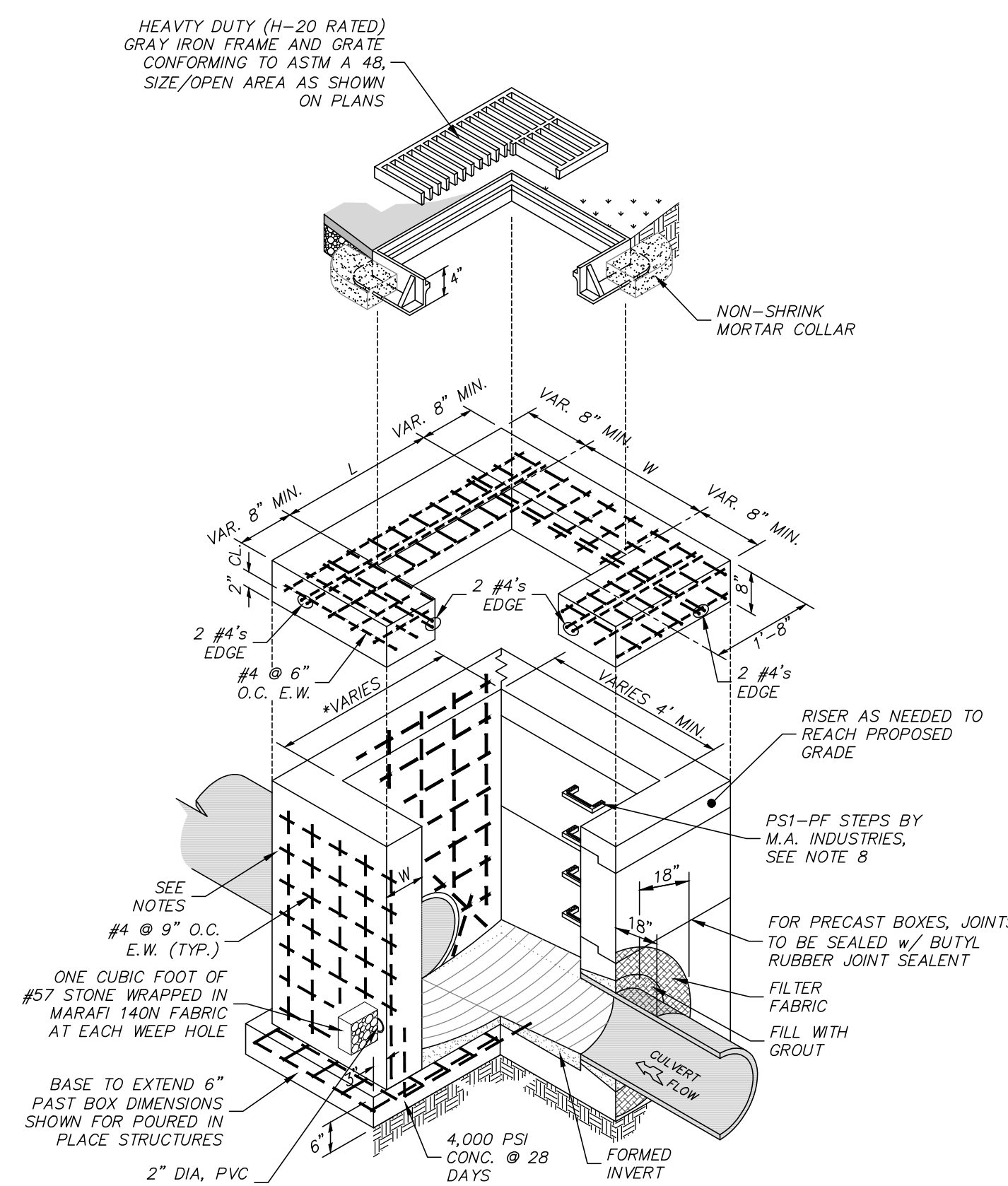
NOTE: CONCRETE APRON SHALL BE NON-REINFORCED PORTLAND CEMENT CONCRETE AND SHALL HAVE A MINIMUM 28-DAY FLEXURAL STRENGTH OF 650 PSI AND A COMPRESSIVE STRENGTH OF 4,000 PSI.



NOTES:

- 1. CONTRACTOR SHALL ADJUST FLOWLINE ELEVATION AS NEEDED TO AVOID CONFLICTS WITH OTHER UTILITIES OR PAVING.
- 2. ALL CONNECTIONS SHALL BE MADE WATER TIGHT.

TYPICAL DOWNSPOUT CONNECTION DETAIL

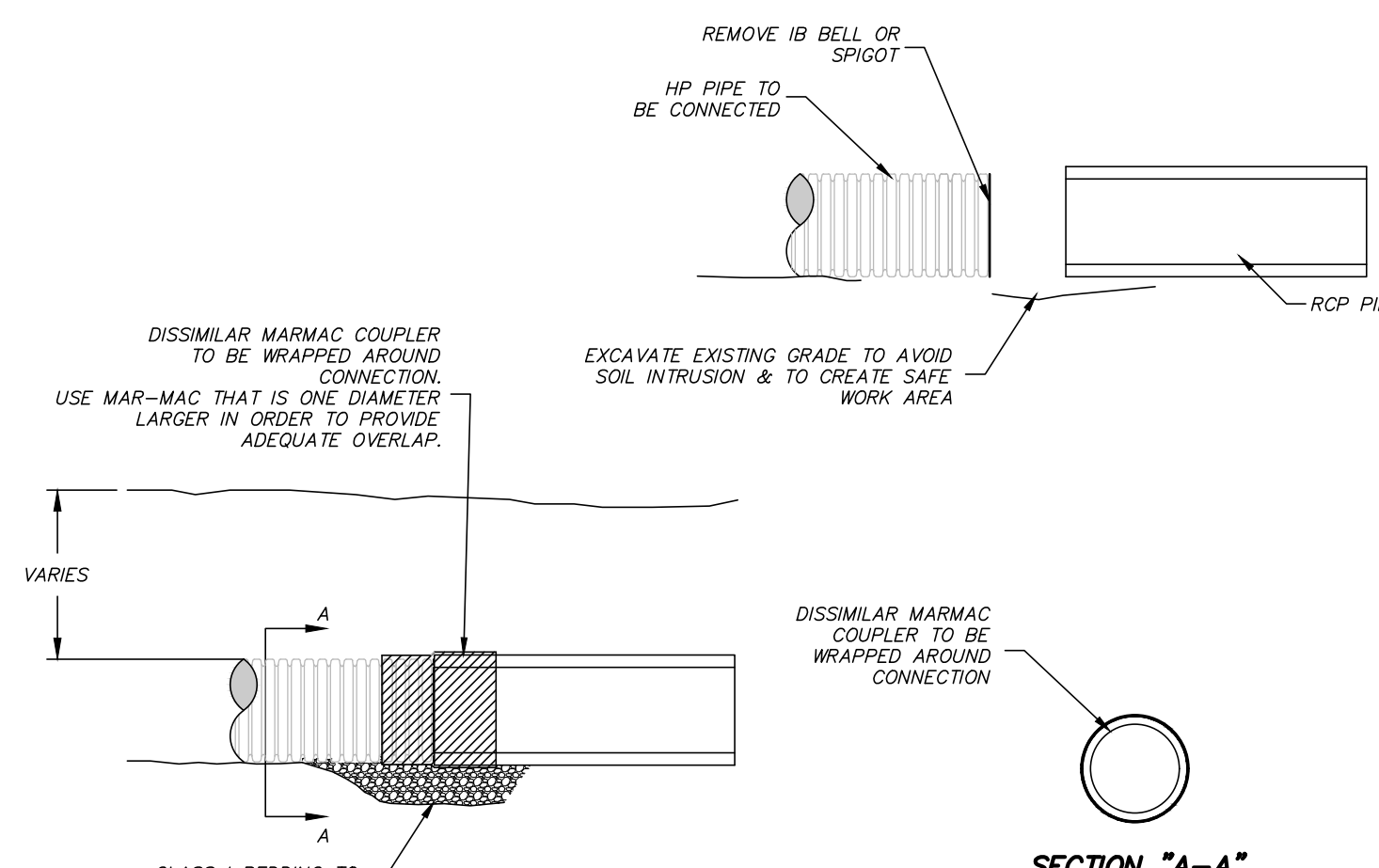


NOTE: WALL THICKNESS, "W", FOR PRECAST BOXES SHALL BE 5" MIN., FOR POURED IN PLACED SHALL BE 6" MIN.

GUTTER INLET NOTES:

- 1. "L" AND "W" DIMENSIONS WILL VARY DEPENDING ON THE TYPE OF CASTING SPECIFIED ON THE DRAWINGS. IT IS INTENDED THAT THE FRAME BE CENTERED ON THE BOX UNLESS NOTED OTHERWISE.
- 2. BOXES MAY BE PRECAST IF ELEVATIONS ALLOW OR POURED IN PLACE (4000 PSI 28 DAY COMPRESSIVE STRENGTH). PRECAST MANHOLES WITH CONE TOPS MAY BE USED FOR GRATE INLETS IF THE REQUIRED GRATE AND PIPE SIZES ALLOW.
- 3. WIDTHS AND DEPTHS OF CATCH BASINS DETERMINED BY PIPE SIZES AND ANGLES AND CASTINGS TO BE USED. A MINIMUM OF 12" FROM THE OUTSIDE EDGE OF THE PIPE TO THE INSIDE EDGE OF THE WALL IS REQUIRED.
- 4. CONTRACTOR TO ENSURE THAT WATER IS NOT ALLOWED TO POND BEHIND THE INLET BOXES DURING CONSTRUCTION.
- 5. ON PRECAST CONCRETE BOXES THE LIFT HOLES ON EACH SECTION TO BE SEALED WATERTIGHT WITH NON-SHRINK GROUT INSIDE AND OUT.
- 6. GROUT FOR JOINING PIPE TO PRECAST UNITS WILL BE A COMMERCIAL, NON-SHRINK, MASONRY GROUT MEETING MDOT SPECIFICATIONS. ALL VOIDS SHALL BE FILLED WITH PIECES OF BLOCKS OR BRICKS PRIOR TO GROUTING. GROUTING REQUIRED INSIDE AND OUT. FILTER CLOTH SHALL SURROUND EACH OUTSIDE PIPE CONNECTION TO BOX A MINIMUM OF 18" ON WALL OF BOX AND ALONG PIPE. PIPE CONNECTIONS TO INLETS SHALL NOT BE BACKFILLED WITHOUT CITY'S DESIGNER PRIOR INSPECTION AND APPROVAL.
- 7. BOXES SHALL HAVE FORMED INVERTS OUT OF NON-SHRINK GROUT SLOPING TO DRAIN TO OUTLET CULVERT.
- 8. STEPS REQ'D. IN STRUCTURES GREATER THAN 48" IN DEPTH. FIRST STEP TO BE 18" FROM THE BOTTOM WITH 12" SPACING BETWEEN REMAINING STEPS.
- 9. PRECAST BOXES SHALL BE POURED IN SECTIONS AS NEEDED AND RECOMMENDED BY THE MANUFACTURER TO GET TO DESIRED ELEVATION.
- 10. BOX WIDTH WILL VARY DEPENDENT ON THE SIZE OF THE PIPES ENTERING AND LEAVING THE BOX. IT IS UP TO THE CONTRACTOR/MANUFACTURER TO DETERMINE SIZE OF BOX.
- 11. GRATE INLETS SHALL BE MANUFACTURED OR POURED SO THAT THE FRAME AND GRATE IS THE ONLY PART OF THE BOX THAT IS VISIBLE ONCE FINAL GRADING HAS BEEN DONE. CONTRACTOR SHALL INSTALL RISERS AS NEEDED TO ENSURE THAT A MINIMUM OF 6" OF SOIL CAN BE PLACED ON TOP OF THE BOX TO COVER IT IN GRASSED AREAS AND 4" OF SOIL PLUS PAVING STRUCTURE IN PAVED AREAS.
- 12. ALL ITEMS SHOWN ON THIS DETAIL INCLUDING FRAME AND COVER AND OTHER INCIDENTALS TO PROVIDE OWNER WITH COMPLETE INSTALLATION AND CONNECTION OF PIPING SHALL BE INCLUDED IN THE PER EACH PAY ITEM "GRATE INLET".

GRATE INLET



NOTES:

- 1. CONNECTION AND PIPE TO BE BACKFILLED PER ASTM D2321, LATEST EDITION.
- 2. AN INTERNAL CYLINDER MAY BE WELDED TO THE PIPE TO BE INSERTED INTO THE ID OF THE EXISTING PIPE AND MINIMIZE JOINT MOVEMENT. HOWEVER, AN INTERNAL CYLINDER IS NOT RECOMMENDED FOR DOWNSTREAM CONNECTIONS SUCH AS CONNECTIONS TO F.E.S.
- 3. CONNECTION CAN BE MADE BY POURING A CONCRETE COLLAR PER CONCRETE COLLAR DETAILS (PER MDOT STANDARD IF NOT INCLUDED IN CONTRACT DRAWINGS).
- 4. PAYMENT FOR CONNECTION SHALL BE ABSORBED IN PIPE OR FLARED END SECTION (F.E.S.) PAY ITEM AND SHALL INCLUDE ALL ITEMS SHOWN ON THIS DETAIL AND ANY INCIDENTALS TO MAKE SECURE CONNECTION.

CONNECTING HP STORM PIPE TO R.C.P.

REVISIONS:

DATE	BY	DESCRIPTION
4/5/24	GAB	SCALE: -
		REF C/L:
		EG SURFACE:
		FG SURFACE:

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI
CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
SHEET CONTENTS:
STORM DRAIN DETAILS

SHEET NUMBER

10 of 16

PROJECT NUMBER

B-7302

BRANDON FACIANE
504-259-6556
BRANDON.FACIANE@ADSPIPE.COM



SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

DATE: 4/5/24	DRAWN: GH	REVISIONS:
CHECKED: GAB	SCALE: 1"=1'	
REF C/L:		
EG SURFACE:		
FG SURFACE:		

PROJECT LOCATION: DEES PLAZA MADISON COUNTY, MISSISSIPPI	CLIENT: BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS
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PROJECT: CANDLEWOOD SUITES	SHEET CONTENTS: UNDERGROUND DETENTION DETAILS
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SHEET NUMBER 11 of 16
PROJECT NUMBER B-7302

PROPOSED LAYOUT

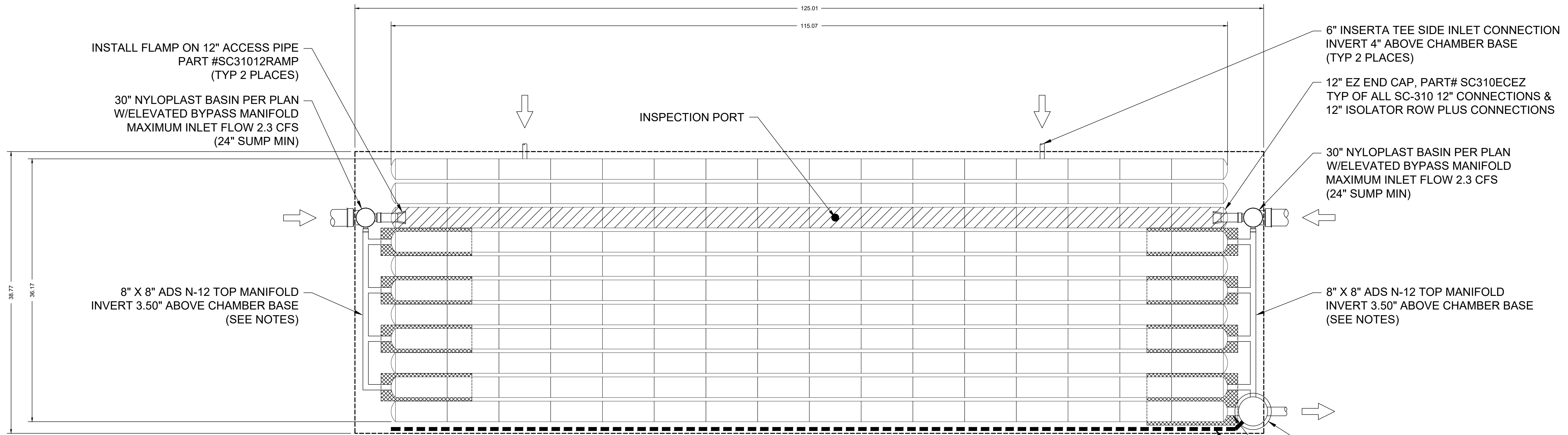
176	STORMTECH SC-310 CHAMBERS
22	STORMTECH SC-310 END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
6,082	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
4846	SYSTEM AREA (ft ²)
327	SYSTEM PERIMETER (ft)


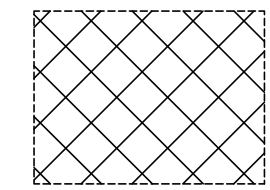
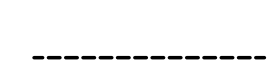
PROPOSED ELEVATIONS

276.93	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
270.93	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
270.43	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
270.43	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
270.43	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
269.43	TOP OF STONE
268.93	TOP OF SC-310 CHAMBER
267.93	INSERTA TEE SIDE INLET CONNECTION INVERT
267.89	8" TOP MANIFOLD INVERT
267.68	12" ISOLATOR ROW PLUS CONNECTION INVERT
267.68	12" BOTTOM CONNECTION INVERT
267.60	BOTTOM OF SC-310 CHAMBER
267.10	UNDERDRAIN INVERT
267.10	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



-  ISOLATOR ROW PLUS (SEE DETAIL)
-  PLACE MINIMUM 12.5' OF ADSPLUS625 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
-  BED LIMITS

- 6" INSERTA TEE SIDE INLET CONNECTION INVERT 4" ABOVE CHAMBER BASE (TYP 2 PLACES)
- 12" EZ END CAP, PART# SC310ECEZ TYP OF ALL SC-310 12" CONNECTIONS & 12" ISOLATOR ROW PLUS CONNECTIONS
- 30" NYLOPLAST BASIN PER PLAN W/ELEVATED BYPASS MANIFOLD MAXIMUM INLET FLOW 2.3 CFS (24" SUMP MIN)
- 8" X 8" ADS N-12 TOP MANIFOLD INVERT 3.50" ABOVE CHAMBER BASE (SEE NOTES)
- OUTLET STRUCTURE PER PLAN MAXIMUM OUTLET FLOW 2.7 CFS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)
- 12" ADS N-12 BOTTOM CONNECTION INVERT 0.90" ABOVE CHAMBER BASE (SEE NOTES)
- 6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN (SIZE TBD BY ENGINEER / SOLID OUTSIDE PERIMETER STONE)

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	FG SURFACE:	

PROJECT LOCATION: DEES PLAZA MADISON COUNTY, MISSISSIPPI	CLIENT: BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS
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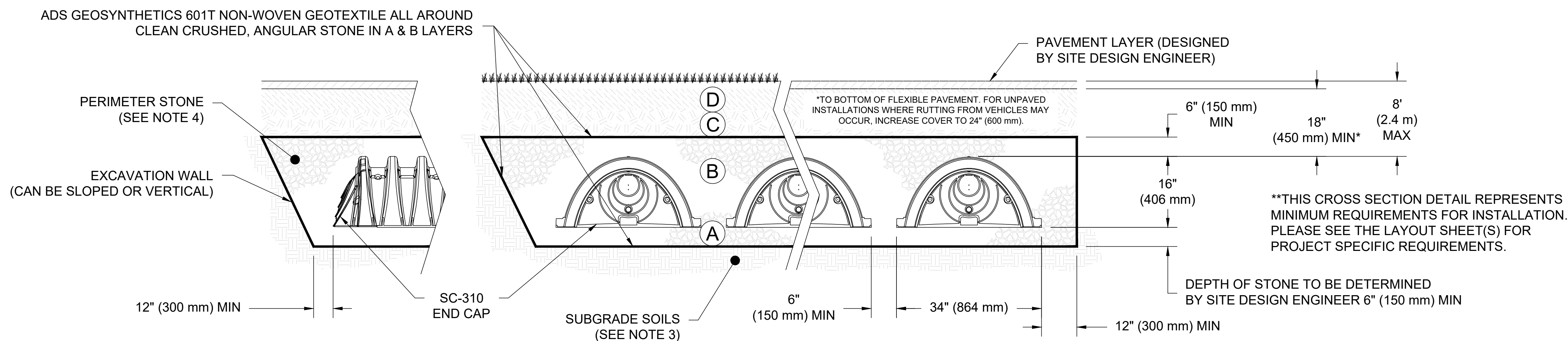
PROJECT: CANDLEWOOD SUITES
SHEET CONTENTS: UNDERGROUND DETENTION DETAILS

SHEET NUMBER 12 of 16
PROJECT NUMBER B-7302

ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
 5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

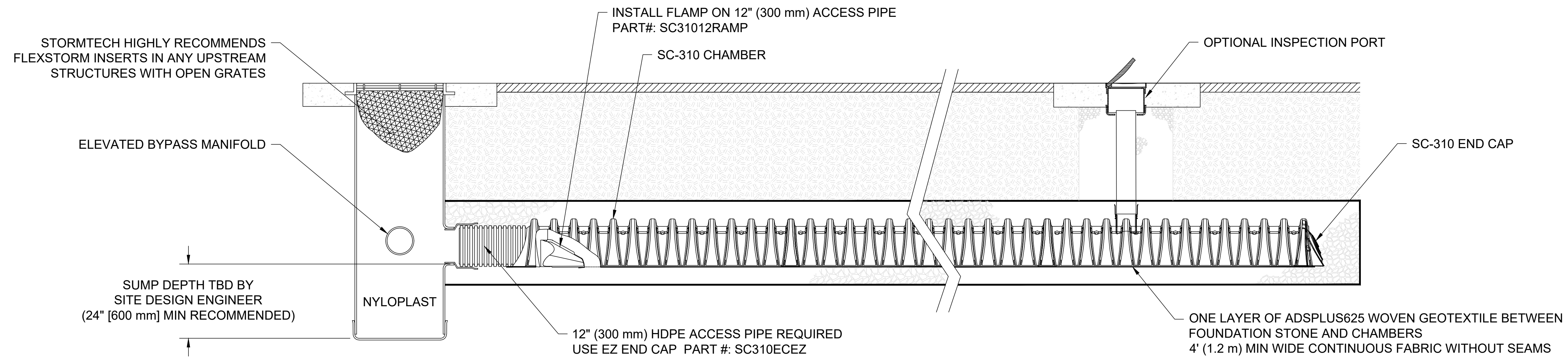
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FG SURFACE:

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI
CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

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PROJECT NUMBER
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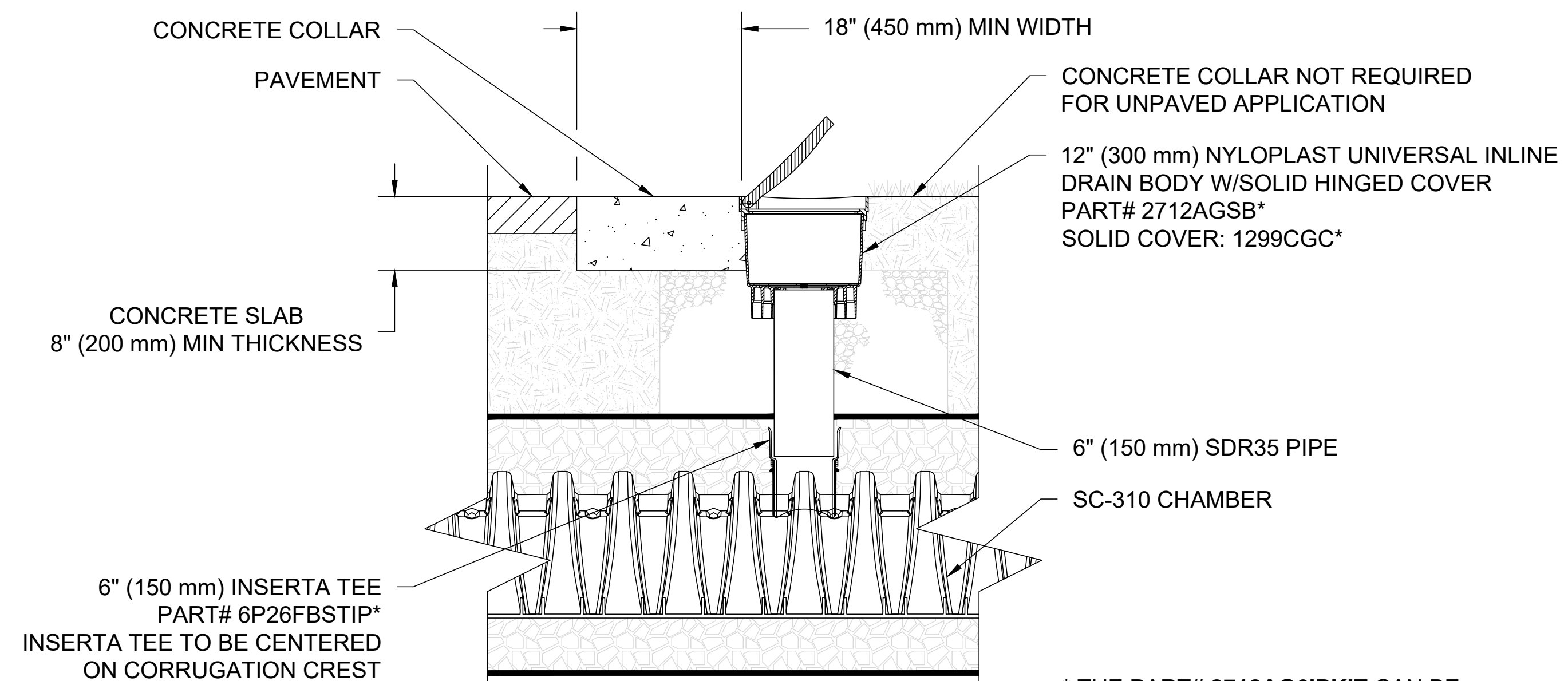
SC-310 ISOLATOR ROW PLUS DETAIL
 NTS

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR PLUS ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



SC-310 6" (150 mm) INSPECTION PORT DETAIL
 NTS

DATE: 4/5/24	DRAWN: JH	REVISIONS:
CHECKED: GAB	SCALE: 1"=1'	
REF C/L:	EG SURFACE:	
	FG SURFACE:	

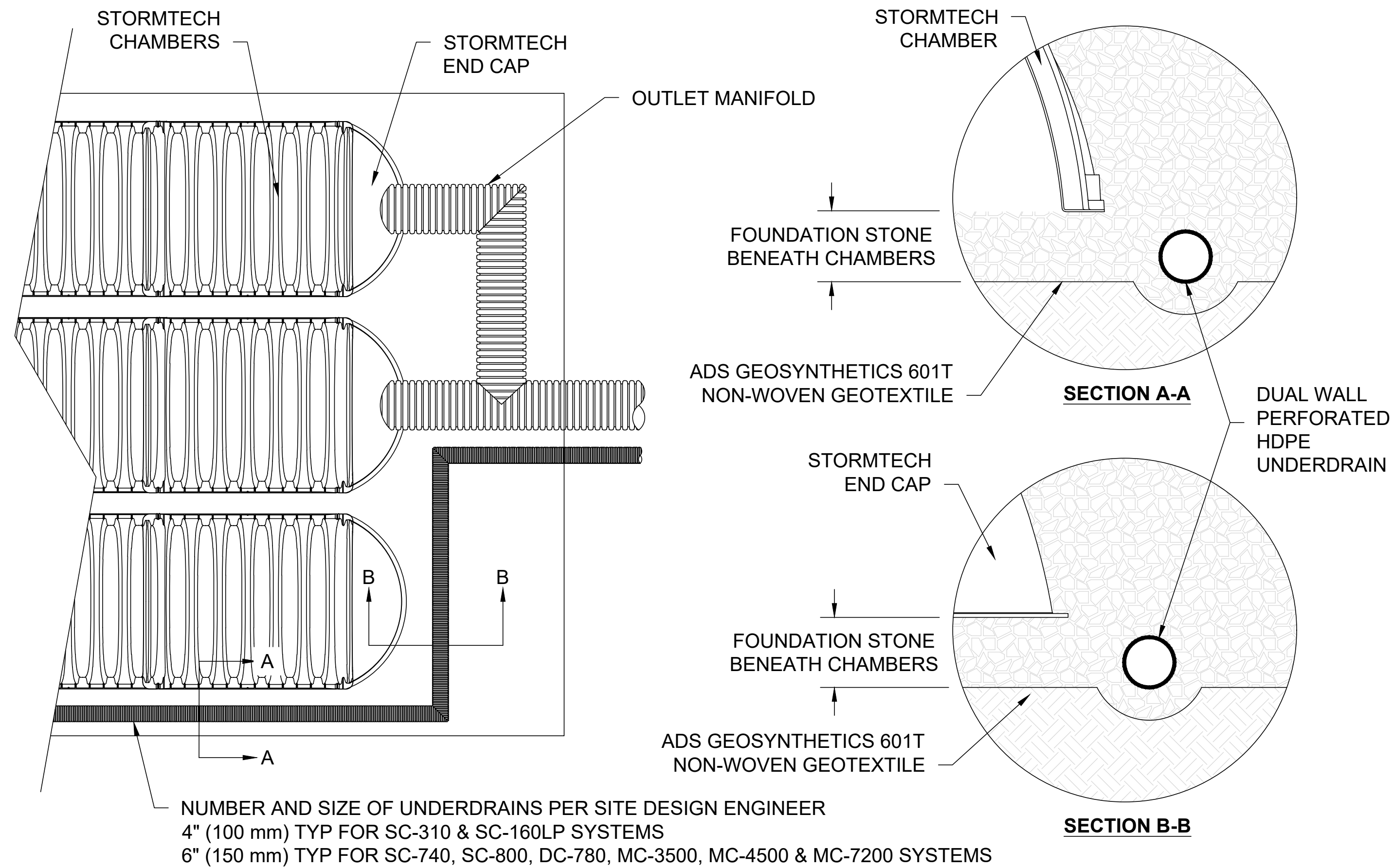
PROJECT LOCATION:
 DEES PLAZA
 MADISON COUNTY, MISSISSIPPI
 CLIENT:
 BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
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UNDERGROUND DETENTION DETAILS

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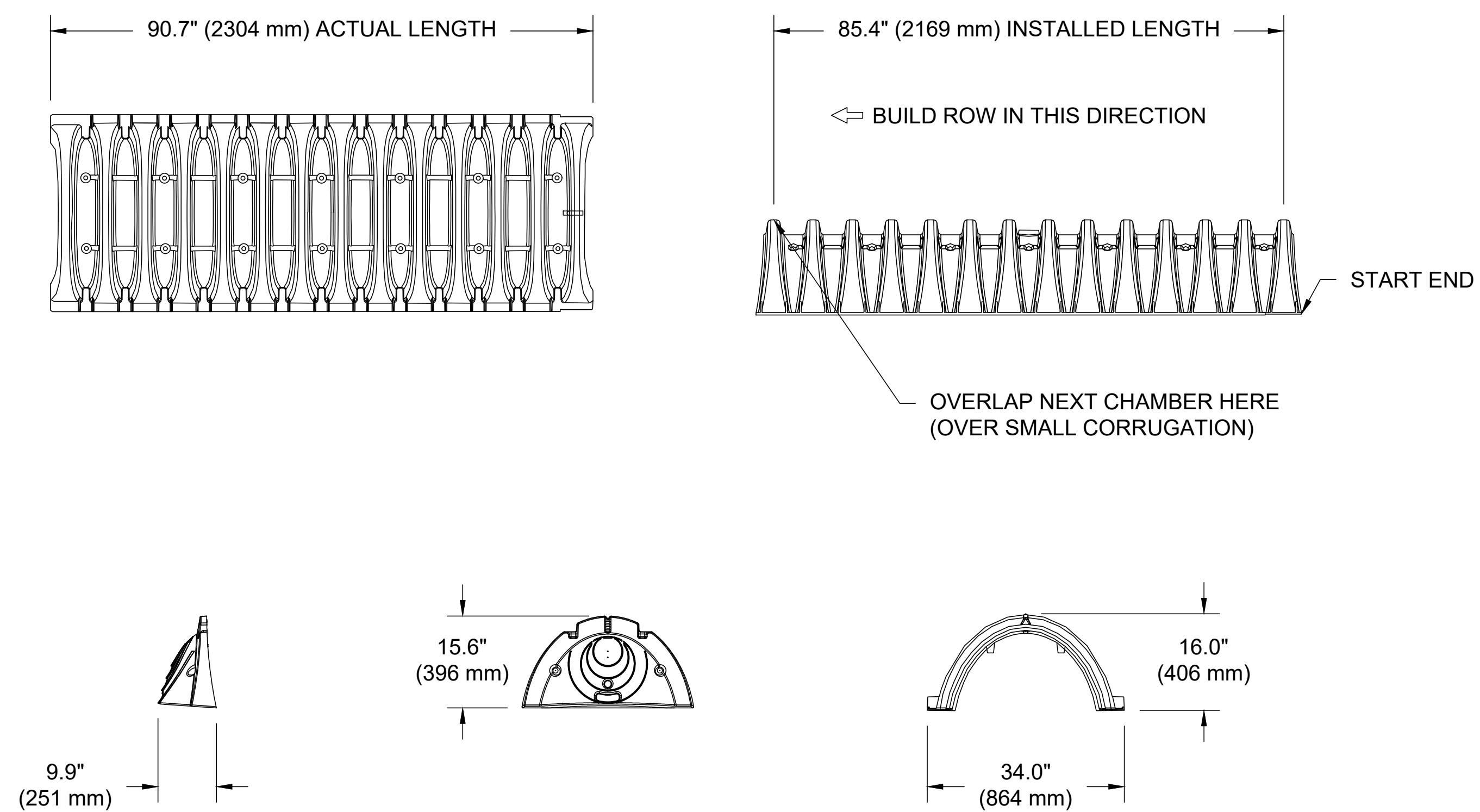
UNDERDRAIN DETAIL

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SC-310 TECHNICAL SPECIFICATION

NTS



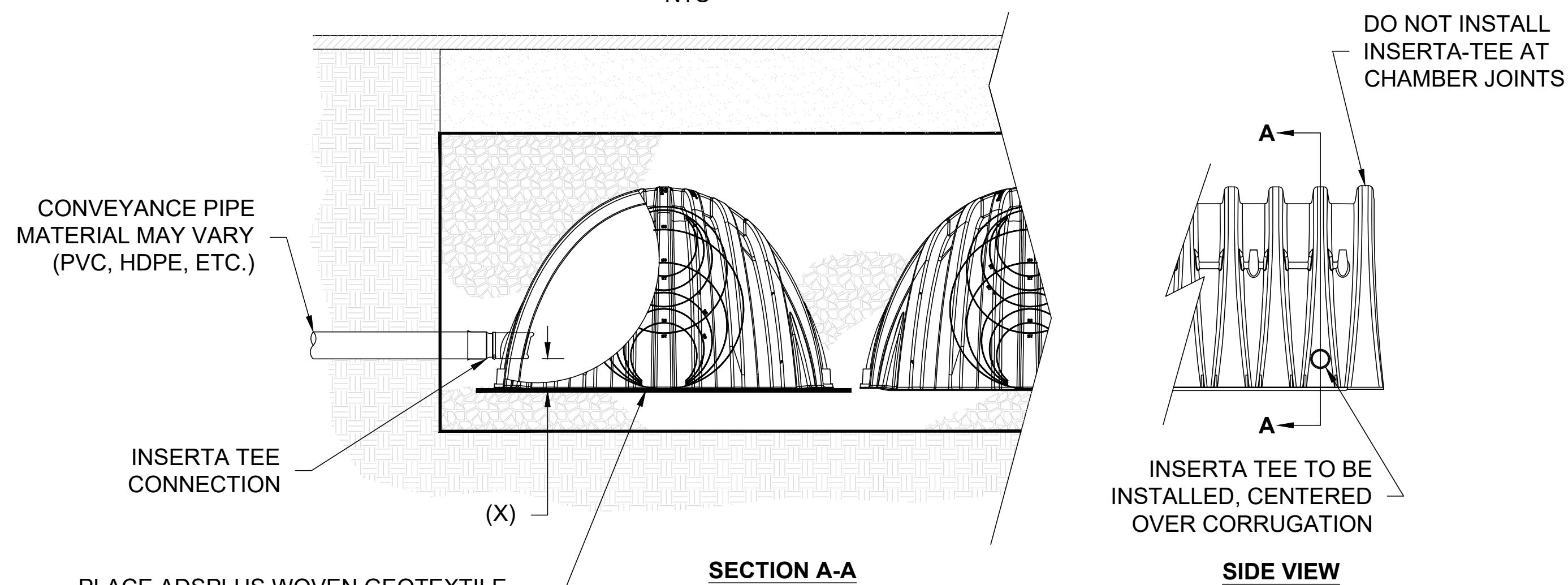
NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m ³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m ³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

INSERTA TEE DETAIL

NTS



PLACE ADSPLUS WOVEN GEOTEXTILE (CENTERED ON INSERTA-TEE INLET) OVER BEDDING STONE FOR SCOUR PROTECTION AT SIDE INLET CONNECTIONS. GEOTEXTILE MUST EXTEND 6" (150 mm) PAST CHAMBER FOOT

SECTION A-A

SIDE VIEW

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
SC-800	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
 PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
 PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

NOTES:

- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
- CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

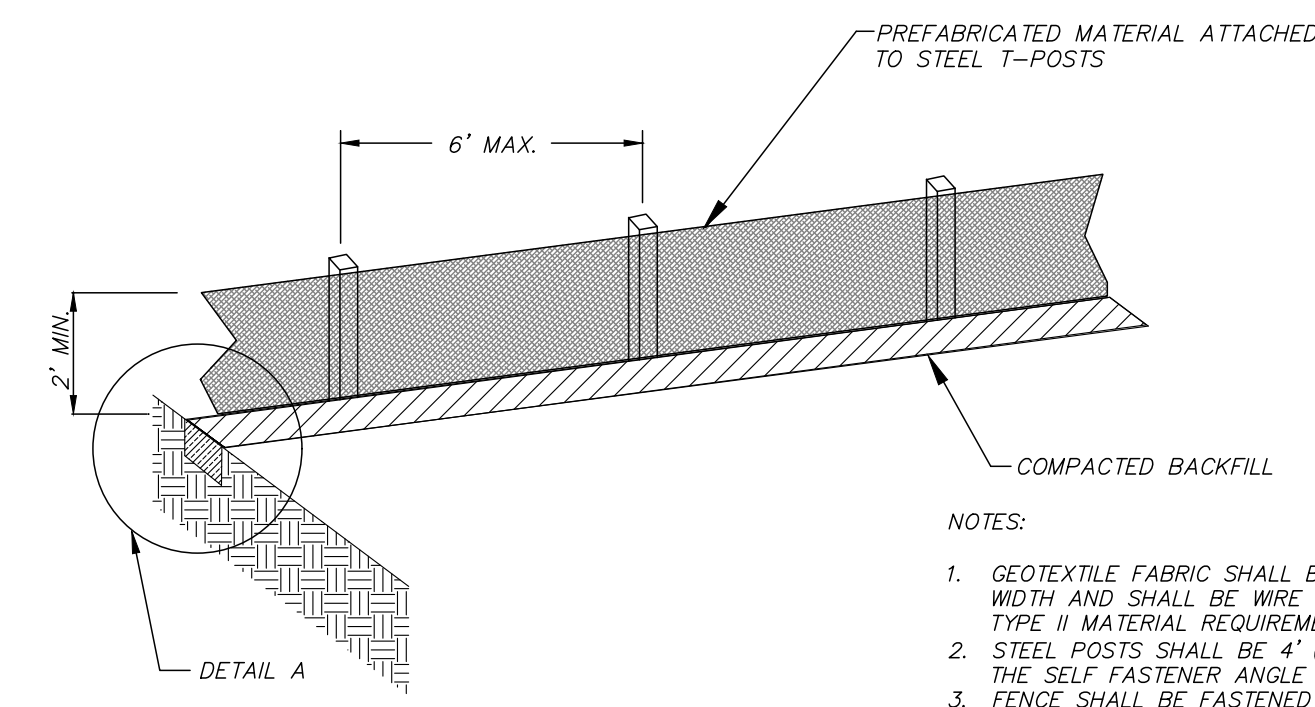
REVISIONS:

DATE: 4/5/24	DRAWN: JH
CHECKED: GAB	SCALE: 1"=1'
REF C/L:	EG SURFACE:
FG SURFACE:	

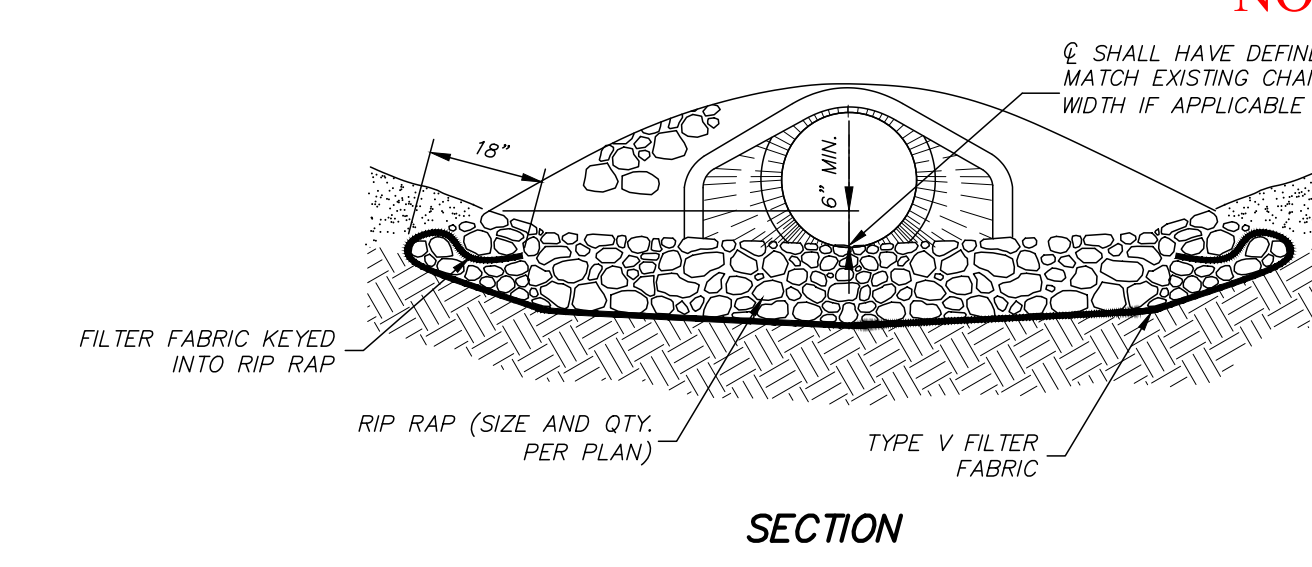
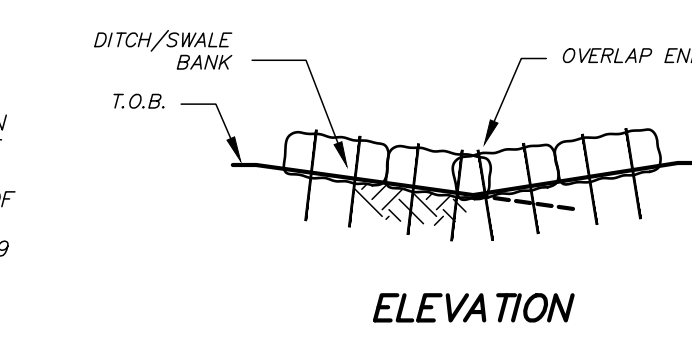
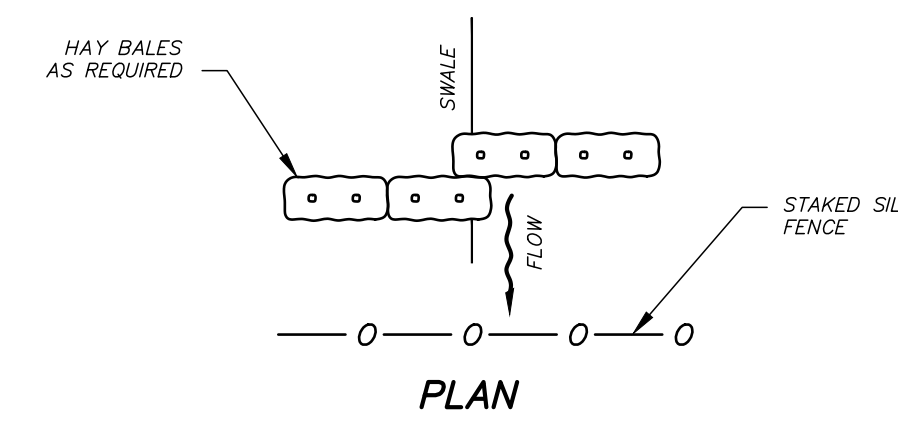
PROJECT LOCATION:
 DEES PLAZA
 MADISON COUNTY, MISSISSIPPI
 CLIENT:
 BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
 SHEET CONTENTS:
UNDERGROUND DETENTION DETAILS

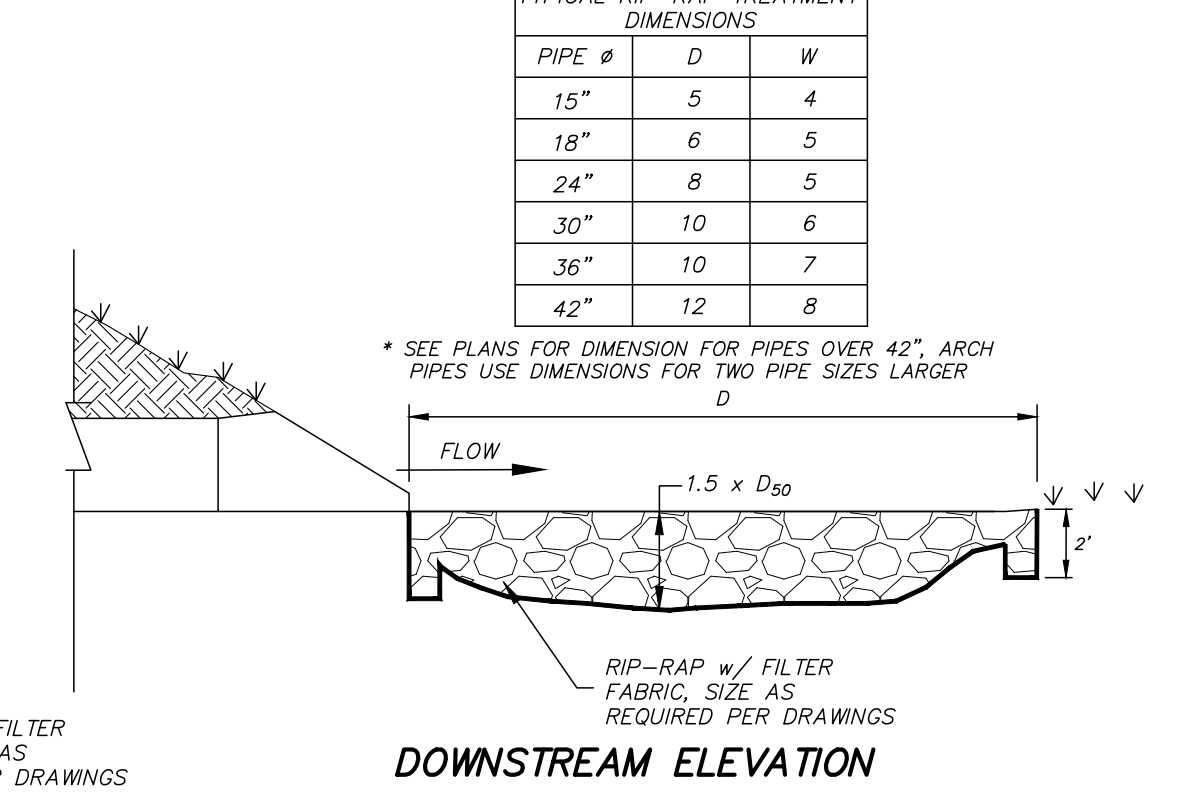
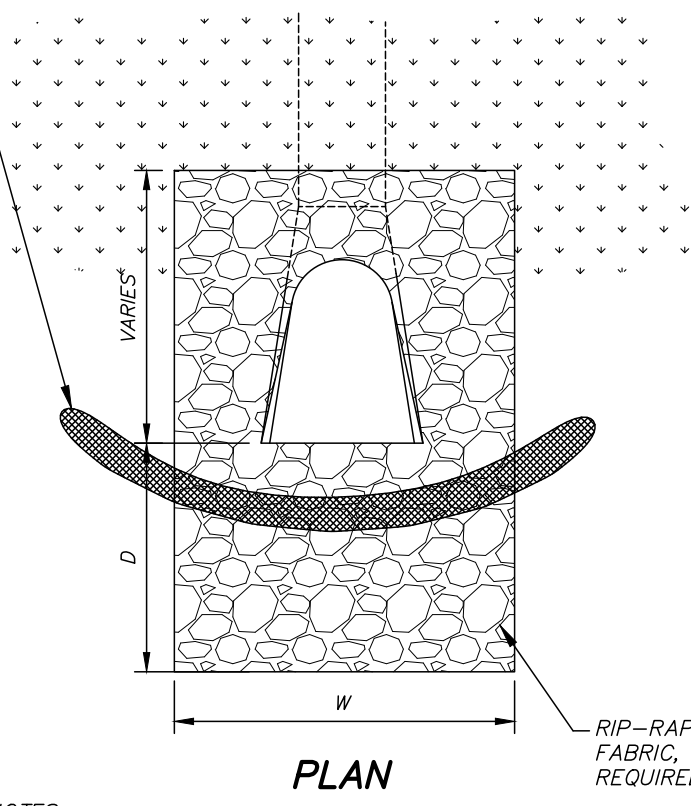
SHEET NUMBER
15 of 16
 PROJECT NUMBER
B-7302



- NOTES:
1. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE WIRE BACKED OR MEET MDOT TYPE II MATERIAL REQUIREMENTS.
 2. STEEL POSTS SHALL BE 4" (MIN.) IN HEIGHT AND OF THE SELF FASTENER ANGLE STEEL TYPE.
 3. FENCE SHALL BE FASTENED WITH NOT LESS THAN 9 GAGE STAPLES 1" LONG FOR WOODEN POSTS AND 3/4" FOR WOODEN STAKES.
 4. ALLOW A 6" OVERLAP OF FABRIC AT JOINTS.

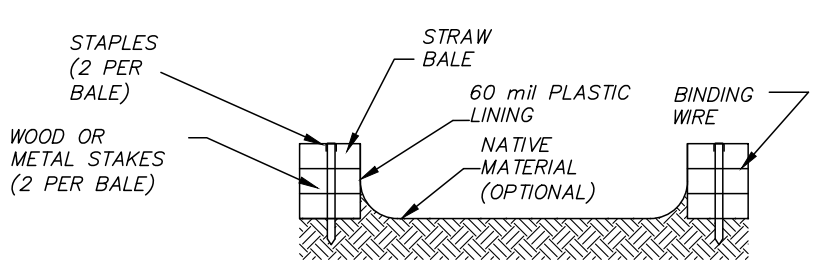


PIPE Ø	D	W
15"	5	4
18"	6	5
24"	8	5
30"	10	6
36"	10	7
42"	12	8

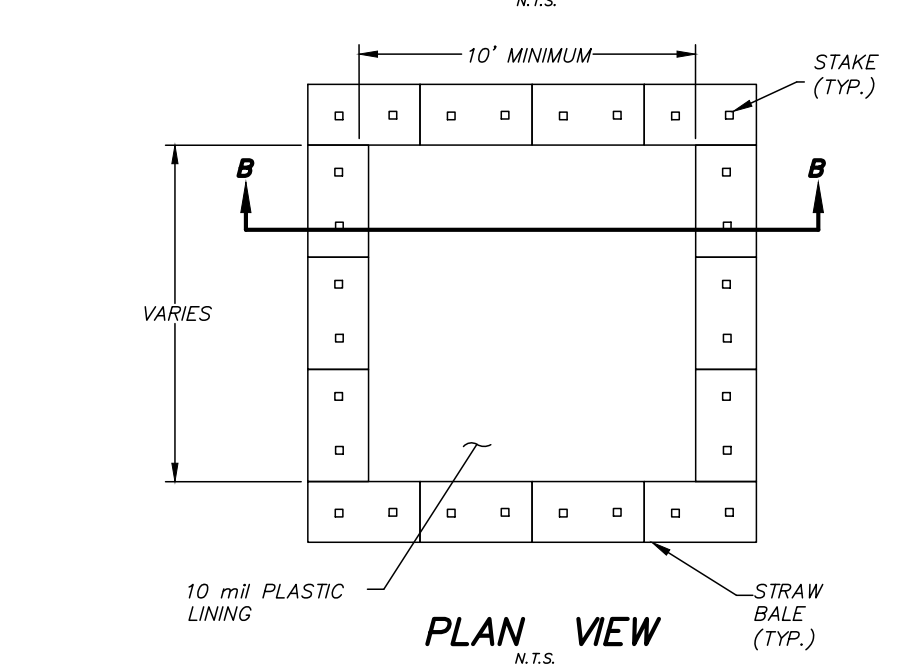


- NOTES:
1. RIP-RAP TREATMENT REQUIRED AT ALL CULVERTS UPSTREAM AND DOWNSTREAM ENDS.
 2. RIP-RAP TREATMENT ON UPSTREAM AND DOWNSTREAM ENDS SHALL TOTALLY SURROUND CULVERT TO A MINIMUM OF 12" ABOVE THE TOP OF THE PIPE.
 3. SEE CHART FOR DIMENSIONS FOR D & W UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
 4. RIP-RAP WILL BE PAID FOR BY THE SQUARE YARD.
 5. RIP-RAP DIMENSIONS SHOWN ON THE SCHEDULE ARE TYPICAL AND MAY BE FIELD ADJUSTED BY ENGINEER. ANY CHANGE IN QUANTITY RESULTING FROM FIELD ADJUSTMENT WILL BE PAID PER SQUARE YARD AT CONTRACT UNIT PRICE.

CULVERT RIP-RAP OUTLET PROTECTION



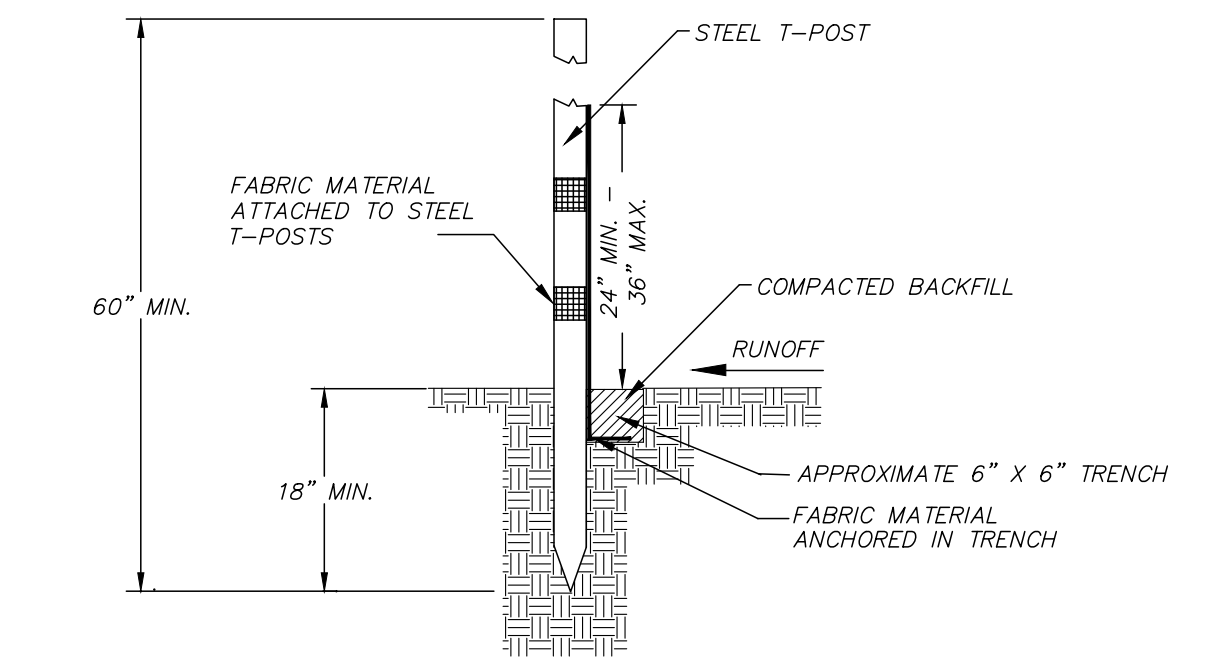
SECTION B-B



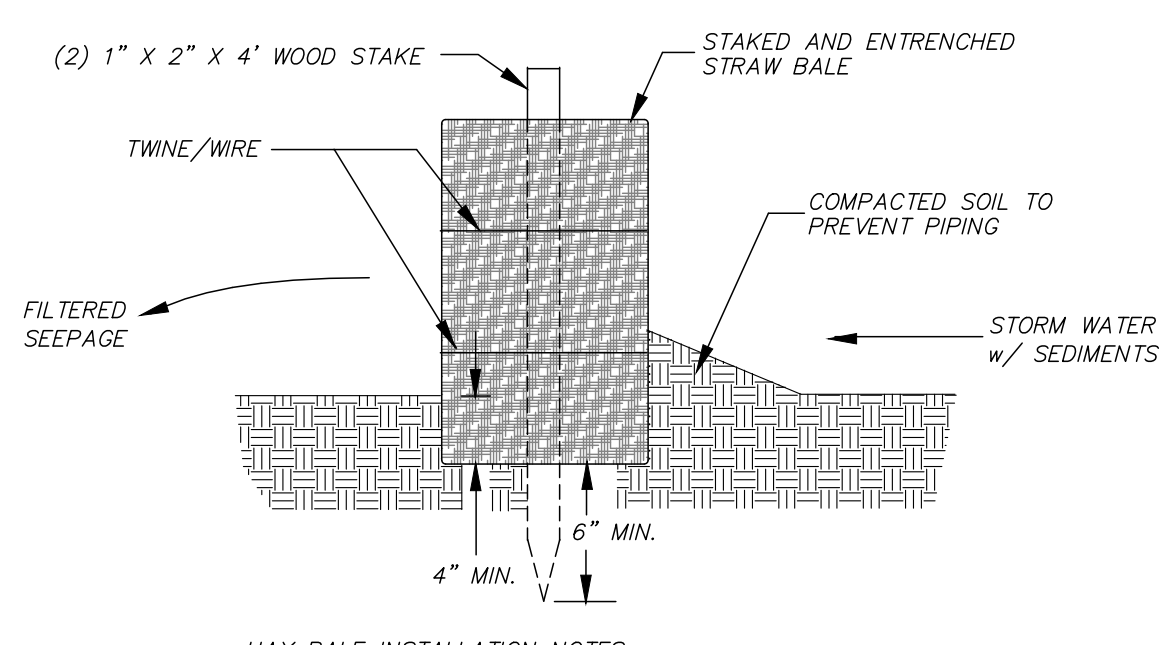
PLAN VIEW

STRAW BALE CONCRETE WASHOUT AREA

- NOTES:
1. LOCATION TO BE DETERMINED BY CONTRACTOR AND APPROVED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE.
 2. IF CONCRETE WASHOUT AREA EXHIBITS LEAKAGE OR PROVES TO BE INADEQUATE FOR ITS INTENDED PURPOSE, THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE.
 3. IF REQUIRED BY ENGINEER OR C.O.J., AREAS IMMEDIATELY DOWNSTREAM/DOWNSLOPE SHALL INCLUDE A SECONDARY STORMWATER RUNOFF POLLUTION PREVENTION MEASURE.
 4. MAINTENANCE SHALL BE IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN.



SILT FENCE DETAILS



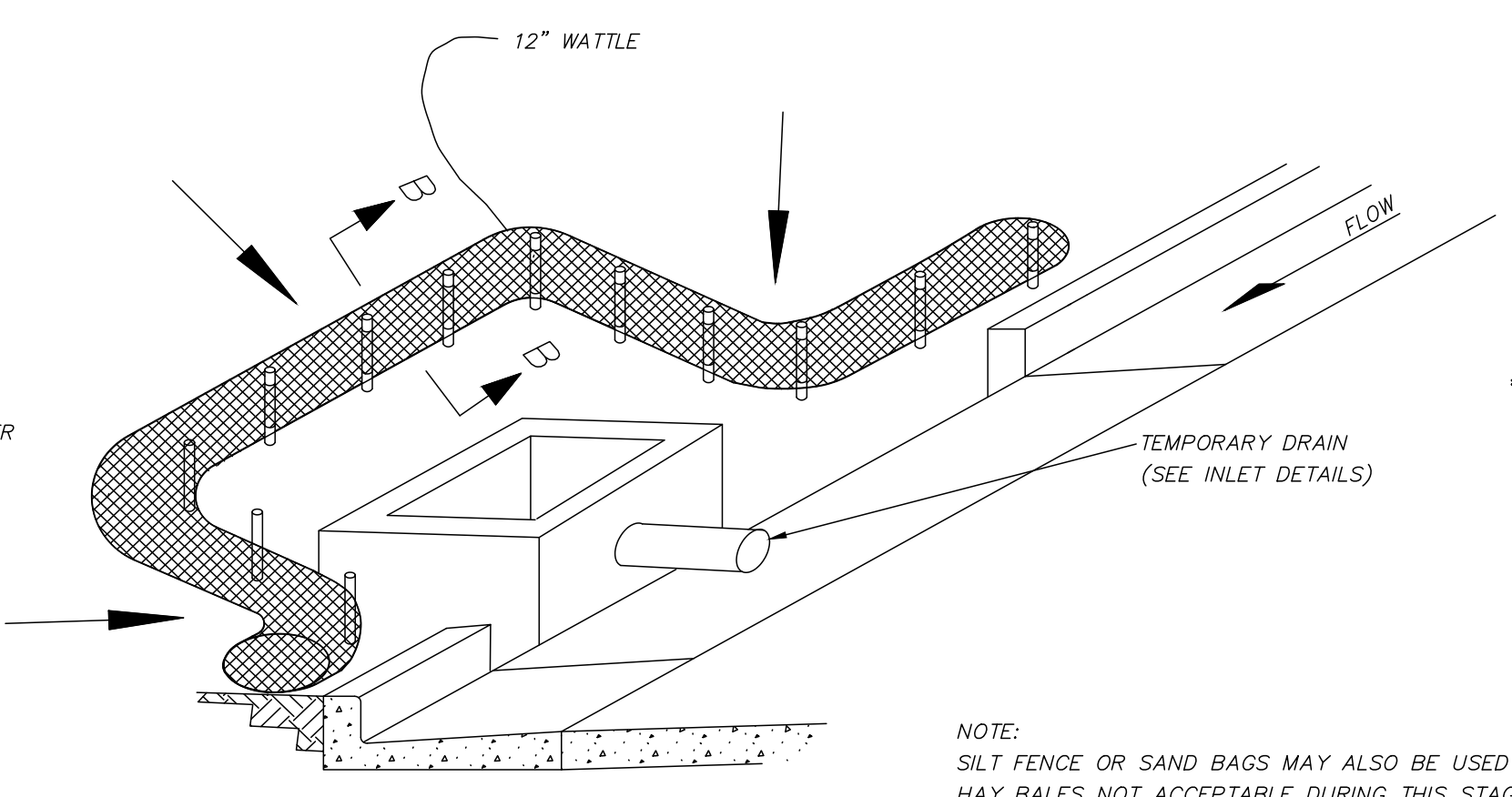
HAY BALE INSTALLATION NOTES:

1. HAY BALES SHALL BE TRENCHED 3" TO 4" AND STAKED WITH (2) 1"x2"x4" WOOD STAKES PER BALE.
2. SILT FENCE SHALL BE DOWN STREAM OF HAY BALES.
3. ADJACENT BALES SHALL BE BUTTED FIRMLY TOGETHER. UNAVOIDABLE GAPS SHALL BE PLUGGED WITH HAY OR STRAW TO PREVENT SILT FROM PASSING.

HAY BALE INSTALLATION

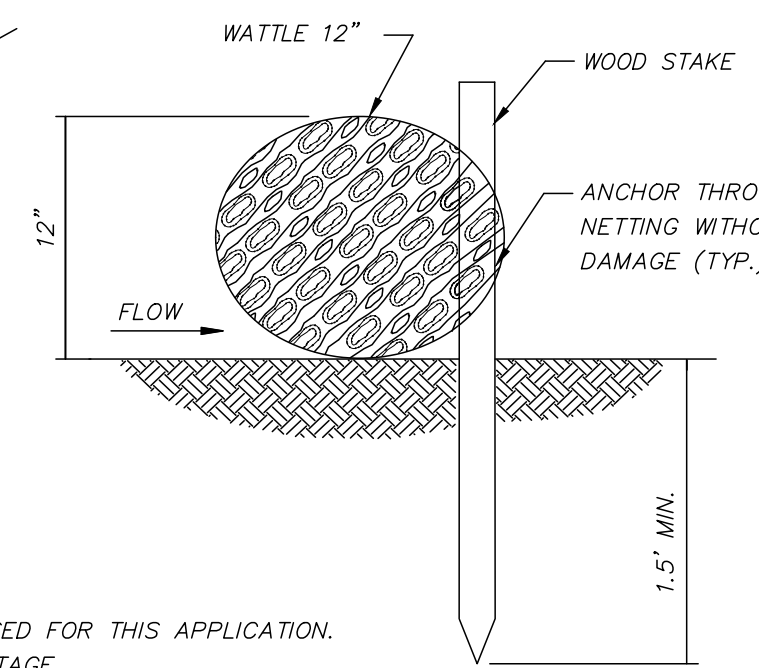
WATTLE DITCH CHECK SELECTION GUIDELINES

WATTLE DITCH CHECKS ARE APPROPRIATE FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.

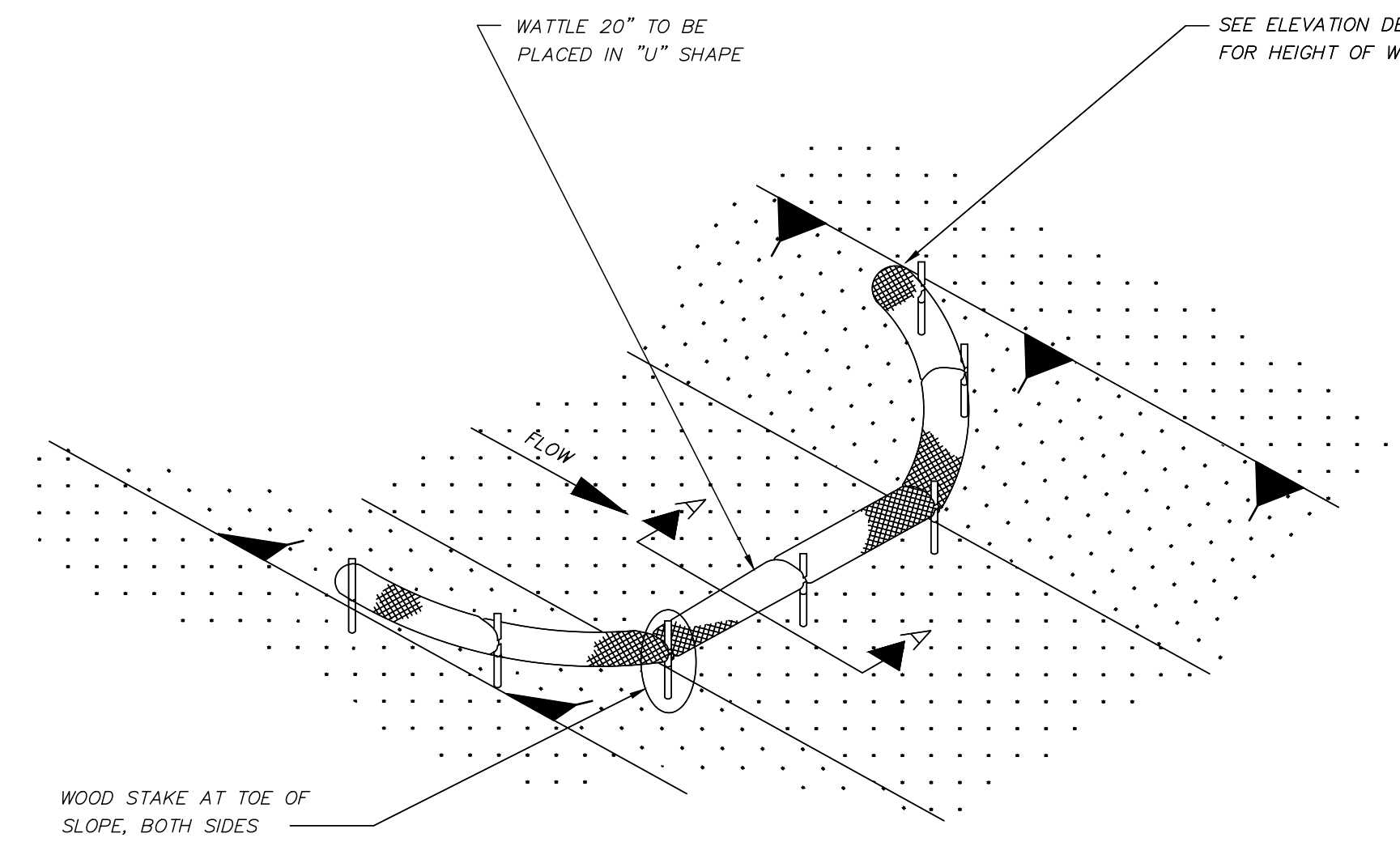


CURB INLET PROTECTION SINGLE OR DOUBLE WING INLET

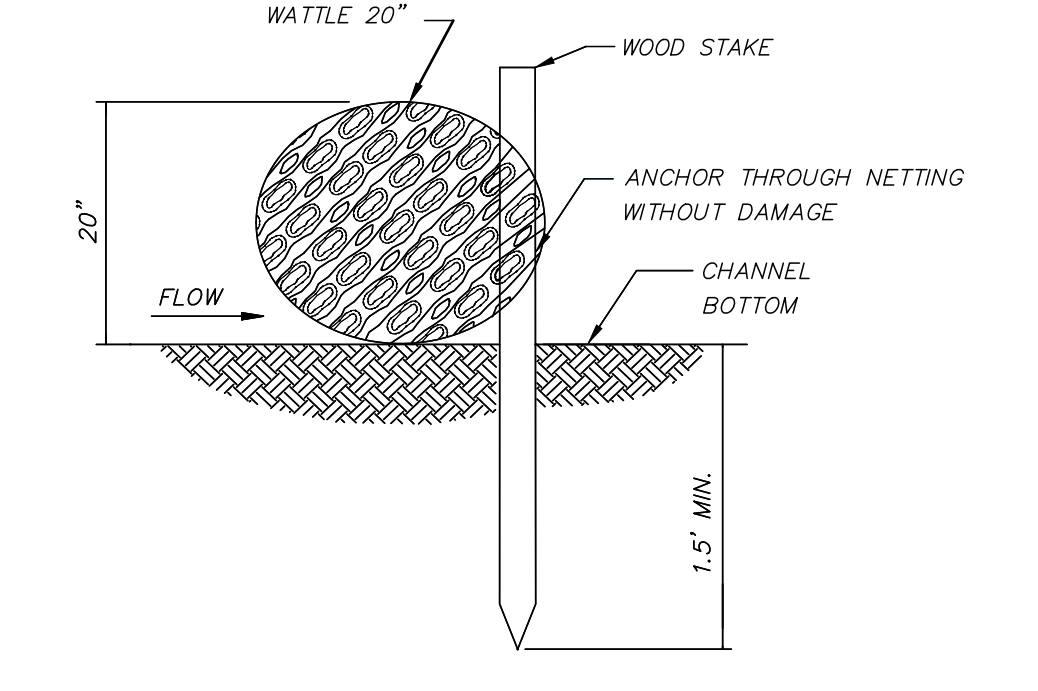
NOTE: SILT FENCE OR SAND BAGS MAY ALSO BE USED FOR THIS APPLICATION. HAY BALES NOT ACCEPTABLE DURING THIS STAGE.



SECTION B-B

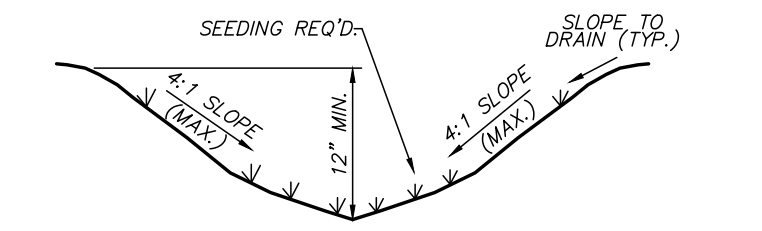


DETAIL (DITCH CHECK)

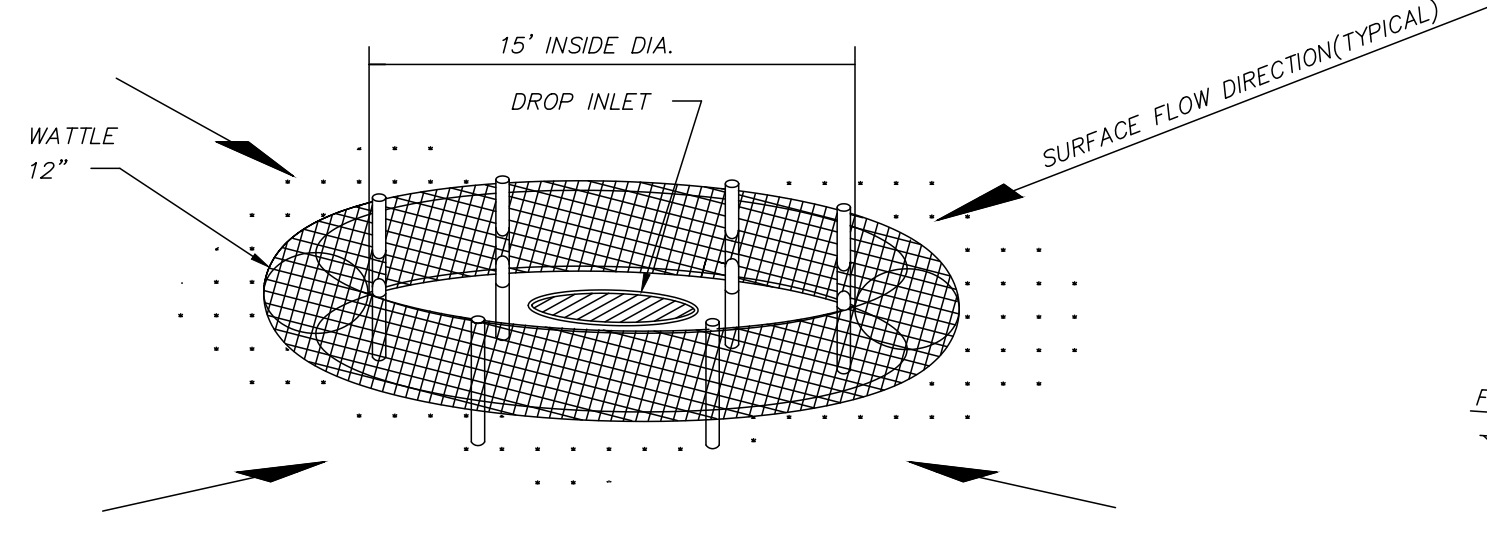


SECTION A-A

- NOTES:
1. MINIMUM RECOMMENDED PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK IS 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON ECD-4.
 2. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
 3. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
 4. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.



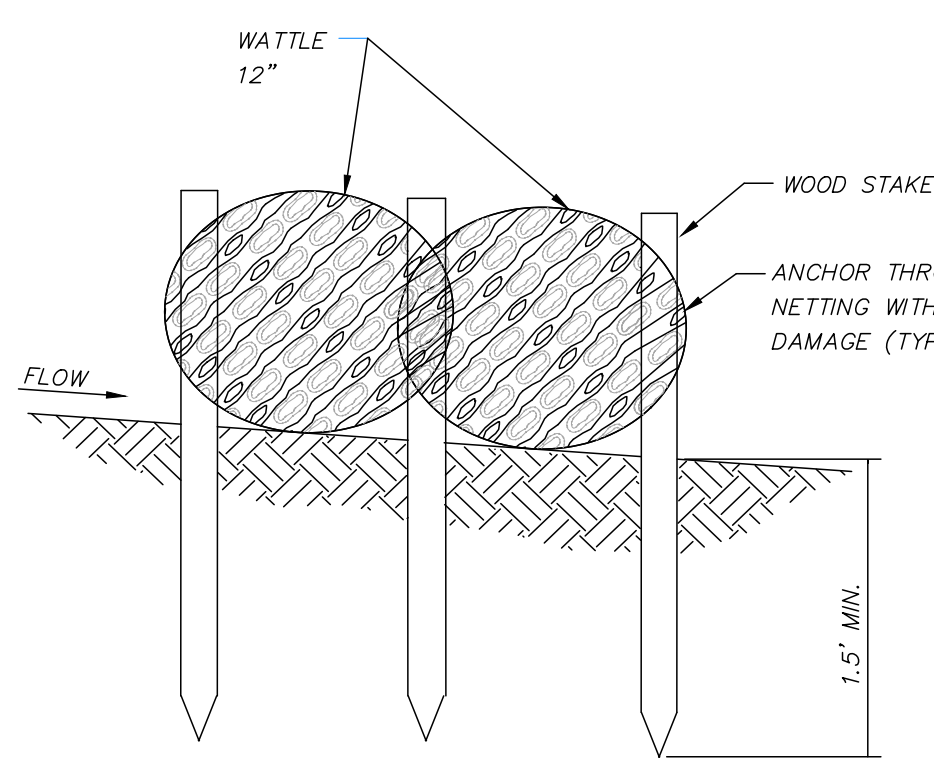
SWALE SECTION



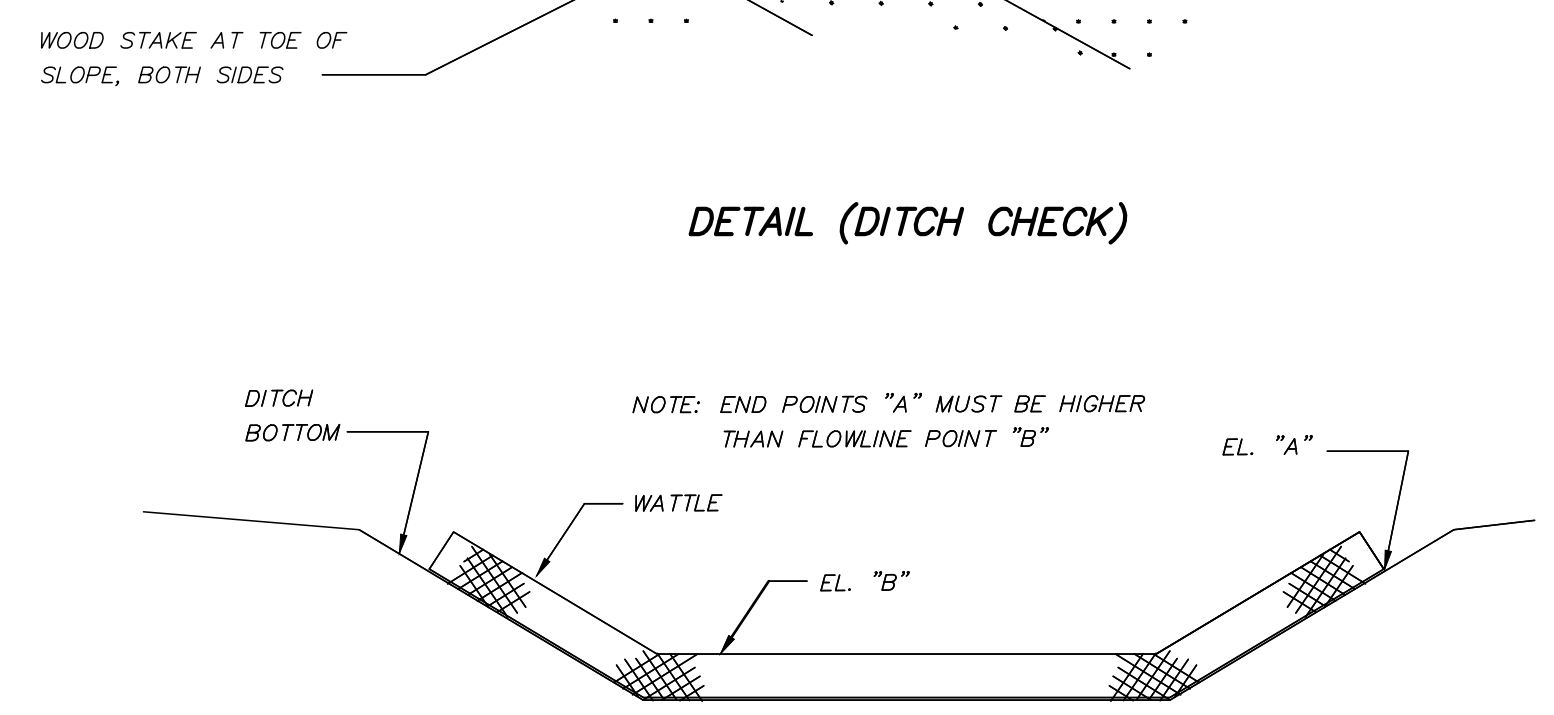
DROP INLET PROTECTION

- NOTES:
1. ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET.
 2. OVERLAP ENDS OF WATTLES PER MANUFACTURERS RECOMMENDATIONS (1MIN., 3MAX.).
 3. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.

WATTLE INLET PROTECTION

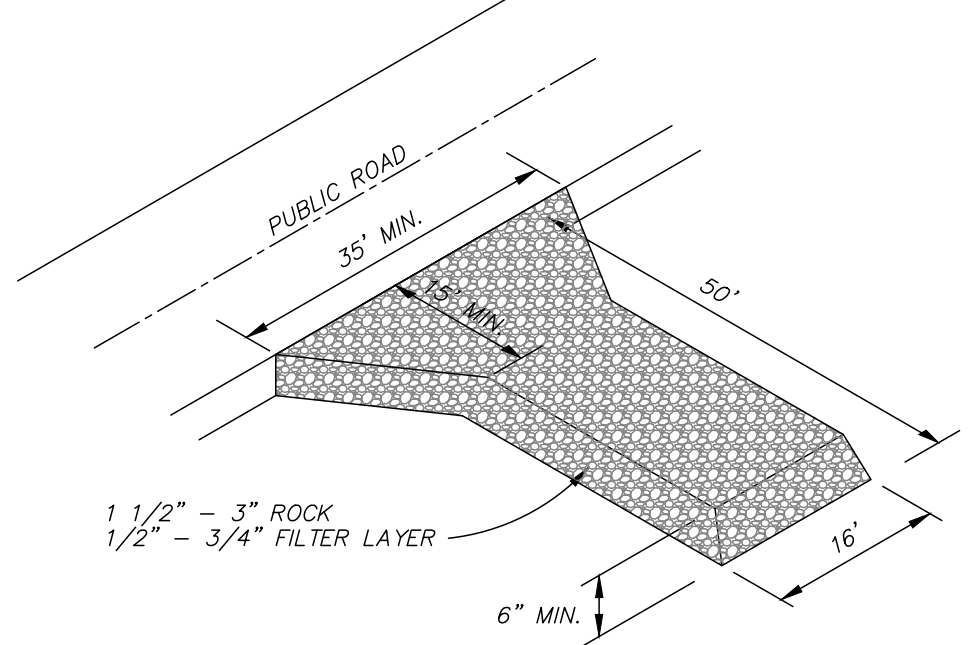


SECTION A-A



ELEVATION DETAIL

WATTLE DITCH CHECK



TEMPORARY CONSTRUCTION ENTRANCE DETAIL

- NOTES:
1. VEHICLE TRACKING MAT SHALL BE LOCATED AT EVERY ENTRANCE/EXIT TO THE CONSTRUCTION SITE.
 2. VEHICLE TRACKING MAT SHALL BE MAINTAINED BY CONTRACTOR AS NEEDED TO PREVENT ANY MATERIAL FROM BEING TRACKED ONTO CITY STREET.
 3. SEDIMENT AND OTHER MATERIAL SPILLED, DROPPED OR TRACKED ONTO CITY STREET SHALL BE IMMEDIATELY REMOVED BY CONTRACTOR.
 4. DIMENSIONS SHOWN ABOVE ARE TYPICAL IF CONDITIONS ALLOW. ANY REVISIONS TO DIMENSIONS SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.

REVISIONS:

DATE	BY	DESCRIPTION
4/5/24	JH	DRAWN
	GAB	CHECKED
		SCALE
		REF C/L
		EG SURFACE
		FG SURFACE

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI
CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
SHEET CONTENTS:
EROSION CONTROL DETAILS

HYDRAULIC CALCULATIONS

FOR

CANDLEWOOD SUITES

Located in
City of Gluckstadt, Madison County, Mississippi

PREPARED FOR:

BDP GROUP

602 Springridge Road
Clinton, MS 39056



CIVIL ♦ STRUCTURAL ♦ PLANNING ♦ SURVEYING ♦ UAV MAPPING
www.benchmarkms.net

Site Considerations:

Candlewood Suites is a proposed hotel located on Dees Plaza in Gluckstadt, Mississippi. The site is on +/- 1.75 acres and will consist of a 4 story, 81 room hotel with a concrete parking lot. Detention for this site will be handled by an underground detention system.

Storm Drain Infrastructure Calculations:

The calculations for the storm drain infrastructure for the site were done using Stormwater Studio 2024 v 3.0.0.33. The following pages are the hydraulic considerations for each individual inlet followed by the tabulated results for a 25-year event routed through the pipe runs.

STORM DRAIN NETWORK CALCULATIONS

PROJECT: CANDLEWOOD SUITES

COUNTY: MADISON

COEFFICIENTS, C	
IMPERVIOUS AREAS	0.99

FORMULAS
$t_c = (10 \times (H_L)^{3.7}) / ((17^C \times S^{2.1}))$
$Q = C \times I \times A$
$I_{25} = 36.964 / (t_c + 3.30)^{.5945}$
$I_{100} = 39.2528 / (t_c + 2.40)^{.5599}$

HSG = C

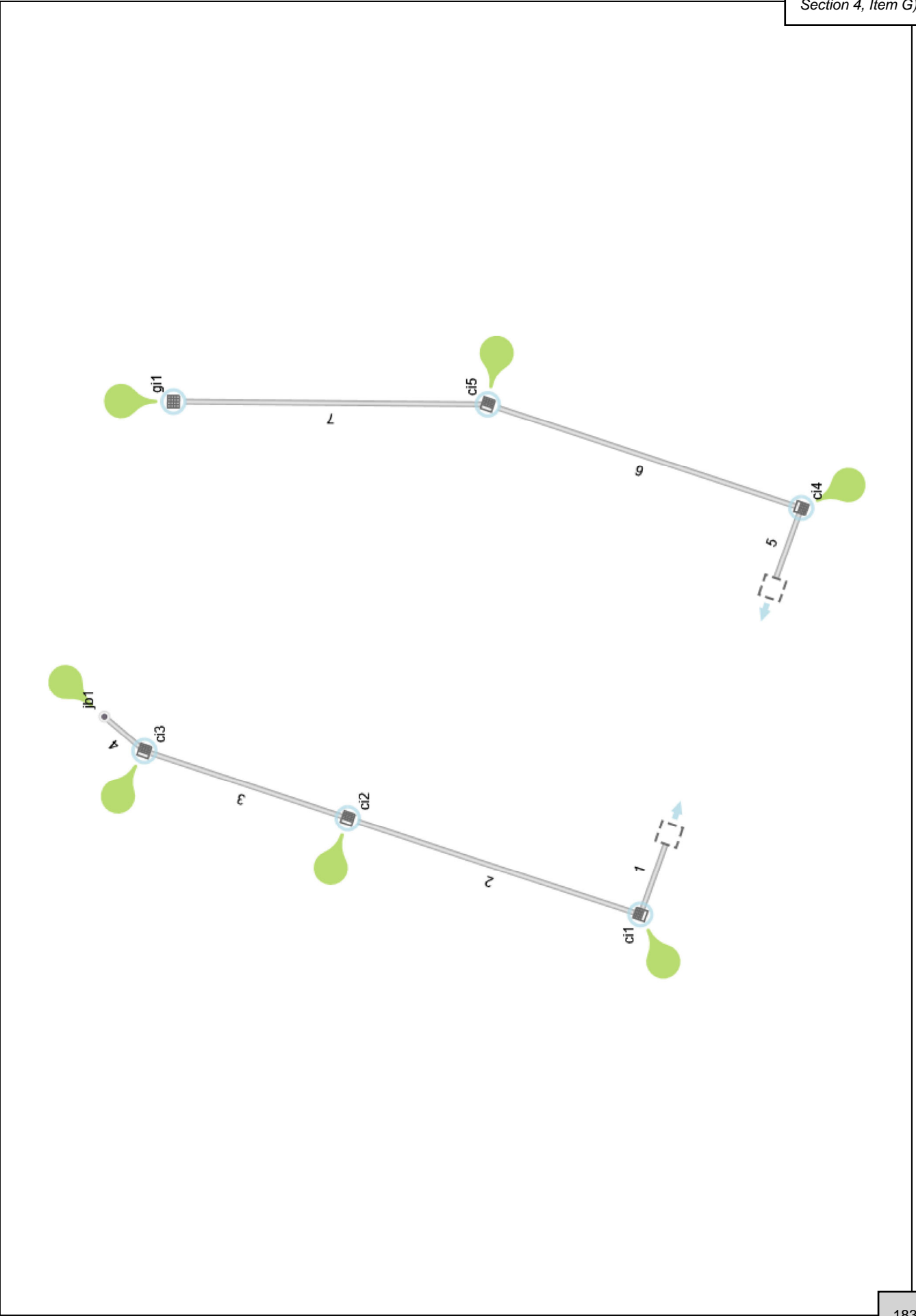
DRAIN BASIN	D.A. (sf)	D.A. (ac)	H _L (ft)	S (%)	C	t _c (min)	I ₂₅ (in/hr)	I ₁₀₀ (in/hr)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)	NOTES
GI-1	8466.30	0.19	57.02	2.8937215	0.99	2.16	14.57	16.78	2.80	3.23	
CI-1	16684.6	0.38	145.35	1.89198486	0.99	3.34	12.97	14.76	4.92	5.60	
CI-2	5710.4	0.13	67.82	2.58035978	0.99	2.36	14.26	16.39	1.85	2.13	
CI-3	7146.3	0.16	78.00	2.24358974	0.99	2.56	13.97	16.01	2.27	2.60	
CI-4	16848.7	0.39	152.67	1.80127071	0.99	3.44	12.86	14.62	4.92	5.60	
CI-5	6999.2	0.16	69.64	2.51292361	0.99	2.40	14.20	16.32	2.26	2.60	

Plan View

Stormwater Studio 2024 v 3.0.0.33

Project Name: Enter Project Name...

03-04-2024



Section 4, Item G)

Project File: 7302 Storm Drain 2-28-24

Storm Sewer Tabulation*

Project Name: Enter Project Name...

Stormwater Studio 2024 v 3.0.0.33

03-04-2024

Line ID	Length (ft)	Drng Area (ac)		Rational (C)	C x A		Tc (min)		Intensity (in/hr)	Total Q (cfs)	Capacity (cfs)	Velocity (ft/s)	Line		Invert Elev (ft)		HGL Elev (ft)		Surface Elev (ft)		Line No
		Incr	Total		Incr	Total	Inlet	Syst					Incr	Total	Size (in)	Slope (%)	Up	Dn	Up	Dn	
ugd-ci1	40.00	0.380	0.670	0.99	0.38	0.66	3.3	3.35	0.00	14.19	15.99	4.53	267.83	269.63	269.77	269.63	270.75	271.00	270.75	271.00	1
ci1 - ci2	139.50	0.130	0.290	0.99	0.13	0.29	2.4	2.91	0.00	9.72	16.02	3.20	268.53	270.07	270.30	270.07	271.75	270.75	271.75	270.75	2
ci2 - ci3	96.98	0.160	0.160	0.99	0.16	0.16	2.6	2.56	0.00	8.13	7.46	4.60	269.02	270.31	270.89	270.31	271.75	271.75	271.75	271.75	3
ci3 - jb1	24.23	0.000	0.000	0.00	0.00	0.00	0.0	0.00	0.00	5.89	7.69	3.33	269.15	271.20	271.27	271.20	271.50	271.75	271.50	271.75	4
ugd - ci4	40.00	0.390	0.740	0.99	0.39	0.73	3.4	3.44	0.00	9.05	15.99	2.93	267.85	269.65	269.70	269.65	270.75	271.00	270.75	271.00	5
ci4 - ci5	149.50	0.160	0.350	0.99	0.16	0.35	2.4	2.76	0.00	4.74	7.44	2.68	268.60	267.85	270.10	269.80	271.75	270.75	271.75	270.75	6
ci5 - g1	141.72	0.190	0.190	0.99	0.19	0.19	2.2	2.16	0.00	2.88	4.57	2.40	269.31	270.45	270.45	270.19	271.85	271.75	271.85	271.75	7

Section 4, Item G)

Project File: 7302 Storm Drain 2-28-24

results NOT current with inputs.

Detention Considerations and Calculations:

The calculations for the detention basin were computed using Hydrology Studio 2024 v 3.0.0.32. For pre-existing conditions, the entire site as well as the Sherwin Williams site directly to the north were considered as one drainage basin, DB-1 Pre. For the post-development conditions, DB-1 Pre was broken into 2 separate drainage basins, DB-1 Post Bypass and DB-1 Post Pond. DB-1 Post Pond consists of the developed Sherwin Williams site as well as the portion of the Candlewood Suites site that will be covered by the hotel and the curb and gutter parking area. DB-1 Post Bypass consists of the areas that will remain grassed outside the limits of the curbed parking area where the runoff will not enter the underground detention basin. After routing DB-1 Post Pond through the underground detention basin located at the southern portion of the site, DB-1 Post Pond was combined with DB-1 Post Bypass to form the DB-1 Post Combined hydrograph. After analyzing the site for both pre and post development conditions there was no increase in runoff leaving the site for each of the modeled storm events. The following pages include the hydraulic considerations for the site as well as the tabulated results. More information can be provided upon request.

DRAINAGE BASIN CALCULATIONS

PROJECT: CANDLEWOOD SUITES

COUNTY: MADISON

COEFFICIENTS, C	
OPEN GRASSED AREA	0.51
COMMERCIAL AREA	0.97

FORMULAS
$t_c = (10 \times (H_L)^{37}) / ((17^C \times S^{21}))$
$Q = C \times I \times A$
$I_{25} = 36.964 / (t_c + 3.30)^{.5945}$
$I_{100} = 39.2528 / (t_c + 2.40)^{.5599}$

HYDROLOGIC SOIL GROUP = C

D.B.	D.A.(SF)	D.A.(ac)	H _L (ft)	S (%)	C _w	t _c (min)	I ₂₅ (in/hr)	I ₁₀₀ (in/hr)	Q ₂₅ (cfs)	Q ₁₀₀ (cfs)
Pre-Development										
DB-1 PRE	98012.17	2.25	690.95	1.16	0.61	19.21411906	5.804228332	7.02345967	7.998701547	9.678902093
Post-Development										
DB-1 POST BYPASS	14266.84	0.33	360.00	1.39	0.51	19.42418473	5.772270312	6.98552802	0.964176976	1.166834697
DB-1 POST POND	83745.33	1.92	690.95	1.16	0.97	6.977417164	9.251537903	11.2098871	17.25275257	20.90478469

WEIGHTED C

DRAIN BASIN	D.A.(SF)	D.A.(AC)	GRASS (AC)	C	COMMERCIAL (AC)	C	WEIGHTED C (C _w)
Pre-Development							
DB-1 PRE	98012.17	2.25	1.75	0.51	0.50	0.97	0.61
Post-Development							
DB-1 POST BYPASS	14266.84	0.33	0.33	0.51	0.00	0.97	0.51
DB-1 POST POND	83745.33	1.92	0.00	0.51	1.92	0.97	0.97

TOTAL STORAGE REQUIRED

DB-1 (Q_{post}-Q_{pre})*(T_c post)*(60s/min)= 4699.66 cf

Note: Preliminary calculations estimating storage required for underground detention system.

Section 4, Item G)

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Basin Model Schematic **1**

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2 - Year

Hydrograph Summary **3**

5 - Year

Hydrograph Summary **4**

10 - Year

Hydrograph Summary **5**

25 - Year

Hydrograph Summary **6**

50 - Year

Hydrograph Summary **7**

100 - Year

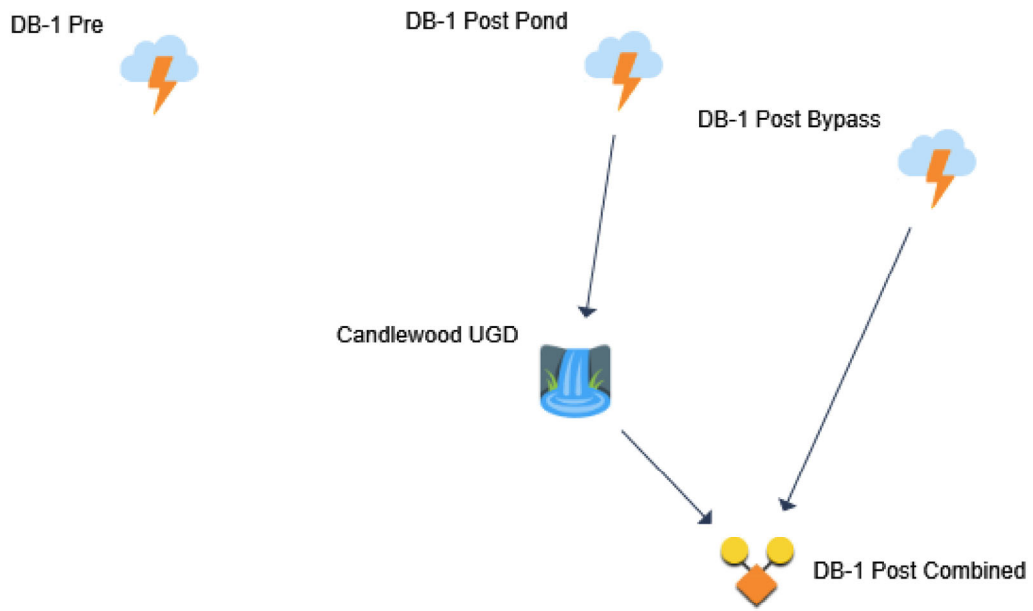
Hydrograph Summary **8**

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Basin Model

Hydrology Studio v 3.0.0.32

04-09-2024



Hydrograph by Return Period

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Outflow (cfs)							
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
1	Rational	DB-1 Pre		4.820		5.781	6.579	7.695	8.560	9.425
2	Rational	DB-1 Post Pond		10.40		12.45	14.17	16.56	18.43	20.29
3	Pond Route	Candlewood UGD		2.113		3.694	4.639	5.798	6.770	7.523
4	Rational	DB-1 Post Bypass		0.591		0.709	0.807	0.944	1.050	1.156
5	Junction	DB-1 Post Combined		2.517		4.142	5.149	6.394	7.411	8.234

Hyd. 1 > Hyd. 5

DB-1 Pre (Hyd. 1) is intended to represent the pre existing conditions of the site.

DB-1 Post Pond (Hyd. 2) is intended to represent the post development conditions for the portions of the site that will drain into the underground detention basin.

Candlewood UGD (Hyd. 3) is intended to represent DB-1 Post Pond after routing the runoff through the underground detention basin.

DB-1 Post Bypass (Hyd. 4) is intended to represent the post development conditions for the portion of the site that will bypass the detention basin.

DB-1 Post Combined (Hyd. 5) is intended to represent the post development conditions of the site after routing DB-1 Post Pond through the underground detention basin and then combining that hydrograph with DB-1 Post Bypass.

Hyd. 5 should be less than or equal to Hyd. 1 indicating there is no increase in runoff leaving the site.

There is a decrease in runoff for each storm event that was modeled after routing the runoff through the underground detention basin.

Hydrograph 2-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	4.820	0.32	5,494	---		
2	Rational	DB-1 Post Pond	10.40	0.12	4,368	---		
3	Pond Route	Candlewood UGD	2.113	0.22	4,341	2	268.39	3,561
4	Rational	DB-1 Post Bypass	0.591	0.32	674	---		
5	Junction	DB-1 Post Combined	2.517	0.22	5,015	3, 4		

Hydrograph 5-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	5.781	0.32	6,590	---		
2	Rational	DB-1 Post Pond	12.45	0.12	5,229	---		
3	Pond Route	Candlewood UGD	3.694	0.20	5,201	2	268.54	4,062
4	Rational	DB-1 Post Bypass	0.709	0.32	808	---		
5	Junction	DB-1 Post Combined	4.142	0.20	6,009	3, 4		

Hydrograph 10-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	6.579	0.32	7,500	---		
2	Rational	DB-1 Post Pond	14.17	0.12	5,951	---		
3	Pond Route	Candlewood UGD	4.639	0.20	5,924	2	268.69	4,469
4	Rational	DB-1 Post Bypass	0.807	0.32	920	---		
5	Junction	DB-1 Post Combined	5.149	0.20	6,844	3, 4		

Hydrograph 25-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	7.695	0.32	8,773	---		
2	Rational	DB-1 Post Pond	16.56	0.12	6,957	---		
3	Pond Route	Candlewood UGD	5.798	0.20	6,930	2	268.91	5,025
4	Rational	DB-1 Post Bypass	0.944	0.32	1,076	---		
5	Junction	DB-1 Post Combined	6.394	0.20	8,005	3, 4		

Hydrograph 50-yr Summary

Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	8.560	0.32	9,759	---		
2	Rational	DB-1 Post Pond	18.43	0.12	7,740	---		
3	Pond Route	Candlewood UGD	6.770	0.18	7,713	2	269.14	5,472
4	Rational	DB-1 Post Bypass	1.050	0.32	1,197	---		
5	Junction	DB-1 Post Combined	7.411	0.20	8,909	3, 4		

Hydrograph 100-yr Summary

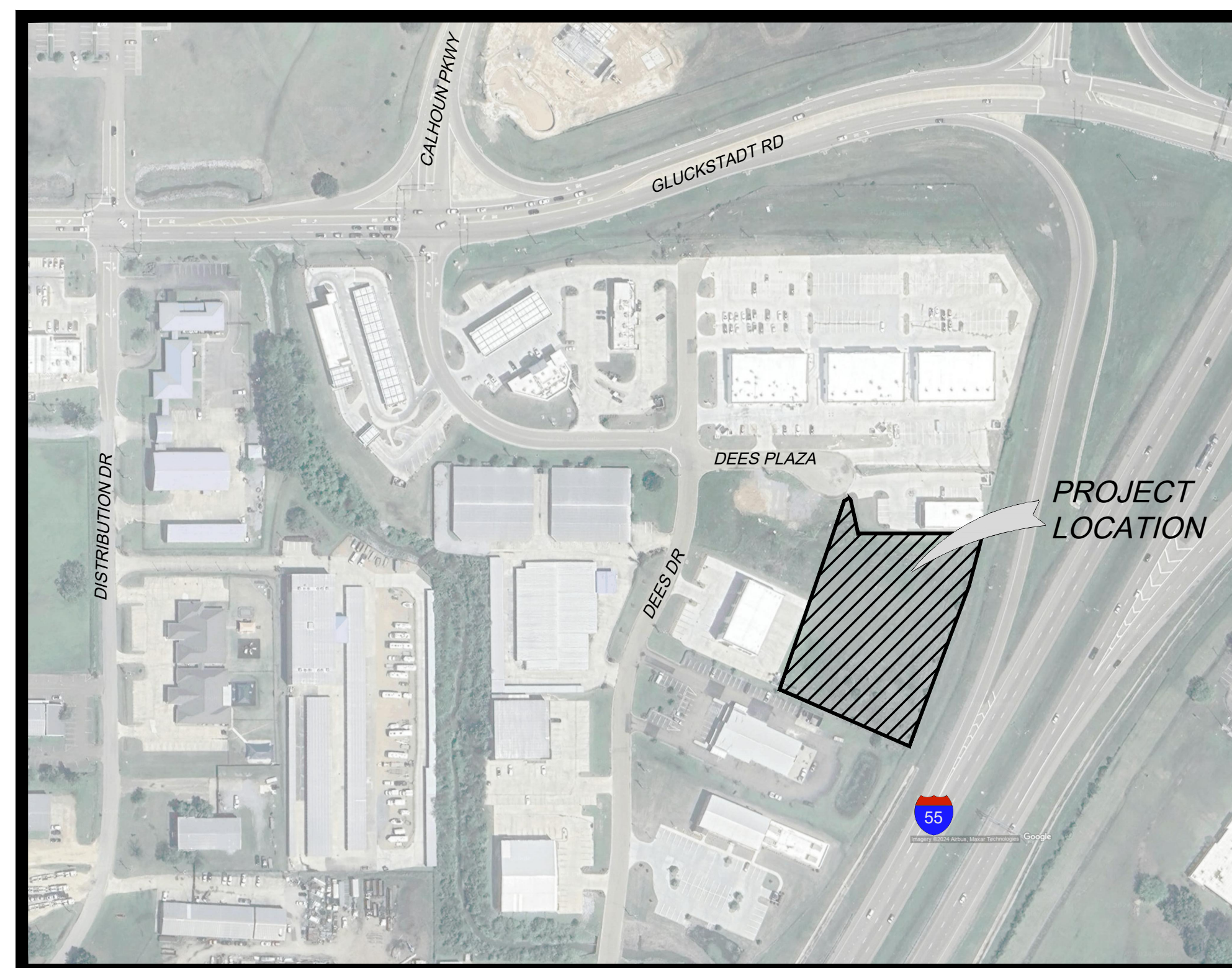
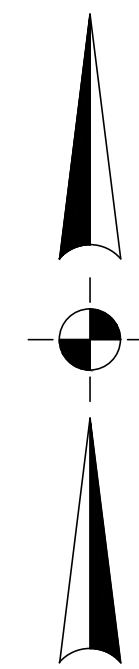
Hydrology Studio v 3.0.0.32

04-09-2024

Hyd. No.	Hydrograph Type	Hydrograph Name	Peak Flow (cfs)	Time to Peak (hrs)	Hydrograph Volume (cuft)	Inflow Hyd(s)	Maximum Elevation (ft)	Maximum Storage (cuft)
1	Rational	DB-1 Pre	9.425	0.32	10,745	---		
2	Rational	DB-1 Post Pond	20.29	0.12	8,523	---		
3	Pond Route	Candlewood UGD	7.523	0.18	8,496	2	269.36	5,916
4	Rational	DB-1 Post Bypass	1.156	0.32	1,318	---		
5	Junction	DB-1 Post Combined	8.234	0.20	9,813	3, 4		

CONSTRUCTION PLANS FOR: CANDLEWOOD SUITES

LOCATION:
DEEZ PLAZA
MADISON COUNTY, MISSISSIPPI
APRIL 2024



VICINITY MAP

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FOR REVIEW AND APPROVAL



Charlton B. Alford

Charlton B. Alford, P.E.
Mississippi License No. 29595

4/5/2024

Date

Equipment, materials and construction of all improvements required in these plans shall be in accordance with these construction drawings & project specifications.

The drawings and specifications represented herein are and shall remain the property of Benchmark Engineering & Surveying, LLC and no part thereof shall be copied, disclosed to others or used in connection with any other work or project other than the specific project for which they have been prepared. Visual contact with these drawings or specifications shall constitute evidence of acceptance of these restrictions.

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CLINTON, MS 39056

BENCHMARK ENGINEERING & SURVEYING, LLC <small>CIVIL ♦ STRUCTURAL ♦ PLANNING ♦ SURVEYING ♦ UAV MAPPING</small> <small>BRANDON FLOWOOD MADISON</small> <small>EST. 2004 www.benchmarkms.net 601-627-7780</small>	<small>SHEET NUMBER</small> 1 of 16
	<small>PROJECT NUMBER</small> B-7302

GENERAL CONSTRUCTION NOTES:

- IT IS NOT THE INTENT OF THESE CONSTRUCTION DRAWINGS, NOTES OR DETAILS TO COVER ALL OF THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO READ THE PROJECT SPECIFICATIONS AND BE FAMILIAR WITH THE MATERIALS REQUIRED, INSTALLATION OF SUCH, REQUIRED TESTING, AND AN ALL ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE WORK REQUIRED IN THESE PLANS.
- ALL ELEMENTS AND ITEMS NEEDED FOR THE COMPLETE INSTALLATION OF THE IMPROVEMENTS SHOWN IN THESE PLANS THAT ARE NOT SHOWN AS A SEPARATE PAY ITEM SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE AND ABSORB THE COST OF THE IMPROVEMENTS.
- THE LATEST STANDARD DETAIL DRAWINGS AND STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION ADOPTED BY MDOT SHALL APPLY TO ALL MATERIALS, CONSTRUCTION METHODS, PROCEDURES AND ITEMS SHOWN ON THESE PERMIT DRAWINGS, UNLESS OTHERWISE NOTED HEREIN.
- ALL EXISTING ROADWAY SIGNS AND OTHER OBSTRUCTIONS LOCATED WITHIN THE LIMITS OF THE PROJECT SITE WILL BE REMOVED AS REQUIRED BY CONSTRUCTION AND REPLACED AS NEEDED TO MAINTAIN PUBLIC SAFETY AT LOCATION AS DIRECTED BY ENGINEER.
- CONTRACTOR SHALL PROVIDE REASONABLE ACCESS TO ALL PROPERTIES IN THE PROJECT AREA THROUGHOUT CONSTRUCTION.
- ALL WORK SHALL BE PERFORMED UNDER OPEN ROAD CLOSURES WILL BE ALLOWED. NO WORK REQUIRING LANE CLOSURES SHALL BE ALLOWED ON WEEKDAYS BETWEEN 7:15 - 8:30 AM AND 4:30 - 6:00 PM.
- CONTRACTOR SHALL COMPLY WITH TRAFFIC CONTROL DETAILS SHOWN IN THESE PLANS, REQUIREMENTS AND DETAILS SHOWN IN LATEST EDITION OF MUTCD, AND PER MDOT STANDARD DETAILS AS THEY APPLY SHOULD THEY NOT BE SHOWN IN PLANS FOR A PARTICULAR SITUATION.
- ELEVATION DIFFERENCE BETWEEN LANES SHALL NOT EXCEED 3" AT THE END OF EACH WORK DAY.
- CONTRACTOR SHALL INSTALL TRAFFIC CONTROL DEVICES SUCH AS SIGNS, CONES, DRUMS, FLASHERS, BARRICADES, ETC. TO SAFELY CHANNEL OR DIRECT TRAFFIC. WHEN NECESSARY, FLAGGERS SHALL BE USED IN CONJUNCTION WITH TRAFFIC CONTROL DEVICES. FLAGGER AHEAD SIGN REQUIRED IN ADVANCE OF FLAGGERS EXCEPT DURING BRIEF PERIODS AND EMERGENCY SITUATIONS. THESE ARE MINIMUM REQUIREMENTS AND IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO MAINTAIN TRAFFIC IN A SAFE MANNER.
- TRAFFIC CONTROL DEVICES SHALL BE INSTALLED WHENEVER NECESSARY TO MAINTAIN A SAFE TRAFFIC FLOW AND SHALL REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED FOR SUCH. THEY BE REMOVED IMMEDIATELY THEREAFTER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL LABOR, MATERIALS, EQUIPMENT AND INCIDENTAL ITEMS NEEDED TO PROVIDE ADEQUATE CONSTRUCTION SIGNING, BARRICADES, TRAFFIC CONTROL DEVICES AND OTHER RELATED ITEMS FOR THE PROJECT AREA, DURING THE CONSTRUCTION PERIOD. MAINTENANCE AND PROTECTION OF TRAFFIC MUST COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL WORK REQUIRED FOR TRAFFIC CONTROL SHALL BE PAID FOR IN THE "TRAFFIC CONTROL" PAY ITEM BASED ON ESTIMATED COMPLETION PERCENTAGE OF PAY ITEM.
- THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED TO SAFELY, SHARPLY AND ACCEPTABLY COMPLETE THE WORK IN A TIMELY MANNER. ALL WORK AND CONSTRUCTION PROCEDURES ARE SUBJECT TO APPROVAL OF THE ENGINEER/OWNER. THE CONTRACTOR WILL BE EXPECTED TO PROCEED DILIGENTLY AND CONSISTENTLY IN THEIR ACTIVITIES AND OPERATION ON ALL WORKING DAYS WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE THEREFOR.
- THE CONTRACTOR SHALL WARRANT HIS WORKMANSHIP AND MATERIALS AS REQUIRED IN THE PROJECT SPECIFICATIONS.
- ALL EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND ARE BASED ON INFORMATION PROVIDED BY OTHERS. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THE LOCATION OF ALL EXISTING UTILITIES (POWER, TELEPHONE, GAS, WATER, SEWER, ETC.) PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL LOCATE AND MARK ALL UTILITIES IN THE PROJECT AREA PRIOR TO CONSTRUCTION AND COMPARE HIS FINDINGS AGAINST THE PROPOSED IMPROVEMENTS REQUIRED IN THESE PLANS. SHOULD ANY DISCREPANCIES BE FOUND BETWEEN THE EXISTING CONDITIONS AND PROPOSED IMPROVEMENTS THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IN WRITING AND AWAIT FURTHER INSTRUCTION.
- THE CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR THE PROTECTION OF ALL PRIVATE AND PUBLIC UTILITIES EVEN THOUGH THEY MAY NOT BE SHOWN ON THE PLANS. ANY DAMAGE DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE UTILITY OWNER BY THE CONTRACTOR. THIS INCLUDES ALL SERVICE LATERALS OF ANY KIND.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING THE INTEGRITY AND OPERATIONS OF ALL ABOVE AND BELOW GROUND UTILITY FACILITIES AT ALL TIMES. THE CONTRACTOR SHALL CONDUCT ITS ACTIVITIES AND OPERATIONS TO INSURE THE FUNCTIONAL INTEGRITY OF EACH UTILITY FACILITY LOCATED WITHIN THE WORK SITE. CONTRACTOR ASSUMES FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS WHETHER SHOWN ON THE PLANS OR NOT. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANY AT NO COST TO THE OWNER.
- THE CONTRACTOR IS REQUIRED BY LAW TO NOTIFY MISSISSIPPI ONE CALL @ 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO LOCATE ALL EXISTING UTILITIES ON SITE.
- THE CONTRACTOR WILL NOT BE RESPONSIBLE FOR DEMOLISHING OR REMOVING ANY EXISTING ABOVE OR BELOW GROUND TELEPHONE, CABLE, POWER, OR GAS LINES BUT SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH ALL LOCAL UTILITY COMPANIES.
- THE CONTRACTOR SHALL VERIFY ALL SHOWN DIMENSIONS AND ELEVATIONS (EXISTING AND PROPOSED) IN THE FIELD AND SHALL SATISFY HIMSELF AS TO THE ACCURACY BETWEEN WORK SET FORTH ON THESE PLANS AND THE WORK REQUIRED IN THE FIELD. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL MARK THE CONSTRUCTION LIMITS AND REVIEW WITH THE ENGINEER/OWNER PRIOR TO PERFORMING ANY CLEARING OPERATIONS.
- THE CONTRACTOR SHALL CAREFULLY PROTECT AND PRESERVE ALL SURVEY MARKERS OR MONUMENTS ENCOUNTERED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL UTILIZE TEMPORARY FENCING AS REQUIRED BY LOCAL, STATE AND FEDERAL CODES TO PROTECT AND INSURE A SAFE WORK AREA.
- ALL MATERIAL THAT IS CONSIDERED UNSUITABLE FOR FILL MATERIAL SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF BY THE CONTRACTOR EITHER ON-SITE OR OFF-SITE AS REQUIRED BY PLANS, SPECS OR ENGINEER.
- THE CONTRACTOR SHALL ESTABLISH A VEGETATIVE COVER (TEMPORARY AND/OR PERMANENT) AS NOTED ON THE DRAWINGS AND/OR IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS ON ALL AREAS WHERE THE EXISTING VEGETATION WAS REMOVED OR DISTURBED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS TO MATCH PRE-CONSTRUCTION CONDITION OR BETTER PRIOR TO COMPLETION OF THE PROJECT.
- THE CONTRACTOR SHALL PLACE ALL EXCAVATED MATERIAL IN LOCATIONS TO PREVENT EROSION INTO DRAINAGE-WAYS. ALL AREAS DISTURBED BY EXCAVATED MATERIAL SHALL BE RESTORED TO ITS ORIGINAL CONDITION.
- ALL EXCAVATIONS ARE TO BE BACKFILLED AT THE END OF EACH WORK DAY.
- ALL FENCING, SIDEWALKS, CURBS, FLOWER BEDS, PLANTERS, ETC. THAT IS DAMAGED DURING CONSTRUCTION WILL BE REPLACED AND RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL KEEP EQUIPMENT AND OPERATOR ON SITE AS NECESSARY TO KEEP ROADWAYS ADJACENT TO THE PROJECT SITE CLEAN OF MUD AND DIRT THROUGHOUT CONSTRUCTION. ADDITIONALLY, CONTRACTOR MUST ENSURE THAT AFFECTED ROADS ARE CLEAN PRIOR TO LEAVING THE SITE FOR THE DAY. ALL CLEANING AND MAINTENANCE SHALL BE AN ABSORBED COST.
- THE CONTRACTOR SHALL CAREFULLY REMOVE, STORE AND REINSTALL ALL CITY/COUNTY/STATE OWNED SIGNS WHOSE REMOVAL IS REQUIRED BY HIS CONSTRUCTION WORK IN THE PROJECT AREA. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR THE APPROPRIATE AGENCY TO INSPECT ALL SIGNS SCHEDULED TO BE REMOVED PRIOR TO THEIR REMOVAL. ONCE SAID SIGNS HAVE BEEN REMOVED, IT WILL BE ASSUMED THAT THEY WERE IN GOOD CONDITION AT THE TIME OF REMOVAL. ANY SIGNS DAMAGED OR LOST BY THE CONTRACTOR SHALL BE REPLACED AT NO COST TO THE APPROPRIATE AGENCY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ANY AND ALL EXISTING STRUCTURES NECESSARY FOR COMPLETION OF WORK DESCRIBED IN THESE PLANS UNLESS OTHERWISE NOTED.
- ALL GRADING WORK SHALL BE PERFORMED IN A MANNER TO PROMOTE POSITIVE DRAINAGE AND KEEP THE EXISTING DRAINAGE PATTERNS. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
- CONTRACTOR SHALL CONDUCT ALL GRADING WORK IN A MANNER THAT WILL NOT ADVERSELY AFFECT ADJACENT PROPERTY OWNERS.
- NO ACTIVITY REQUIRED FOR THE ACCOMPLISHMENT OF THE WORK IS TO BE PERFORMED WHEN SOIL CONDITIONS ARE NOT CONDUICIVE THEREFOR.
- CONTRACTOR SHALL CONDUCT ITS OPERATIONS AND ACTIVITIES IN SUCH A MANNER AS TO MINIMIZE THE EROSION OF SOILS AND THE DEPOSITION OF SEDIMENTS INTO EXISTING DRAINAGE COURSES DOWNSTREAM OF PROJECT WORK SITE OR ONTO ADJACENT PROPERTIES.
- PRIOR TO SUBMISSION OF ITS BID THE CONTRACTOR SHALL REVIEW THESE PLANS, THE ESTIMATED QUANTITIES FOR THE PRINCIPAL ITEMS OF WORK ON WHICH PAYMENT IS TO BE BASED, PROJECT SPECIFICATIONS AND ANY OTHER DOCUMENTS REFERENCED HEREIN. SUBMISSION OF ITS BID SHALL BE DEEMED A POSITIVE INDICATION THAT THE CONTRACTOR FOUND ALL OF SAME ADEQUATE FOR SUBMISSION OF A UNIT PRICE BID AND FOR INSTALLATION AND/OR CONSTRUCTION OF THE WORK.
- STATIONING AND LENGTHS SHOWN (STREET AND UTILITY) IS HORIZONTAL STATIONING MEASURED ON A LEVEL PLANE. ACTUAL LENGTH SHALL BE DETERMINED BY MEASUREMENT ALONG THE SLOPE OR CURVE.
- THE CONTRACTOR SHALL PROCURE ALL REQUIRED PERMITS AND LICENSES; PAY ALL FEES, CHARGES AND TAXES (INCLUDING SALES AND USE TAXES); GIVE ALL REQUIRED NOTICES; MAINTAIN AN ORDERLY AND SAFE FLOW OF TRAFFIC; MAINTAIN PROPER STORMWATER DRAINAGE; LOCATE AND AVOID DISRUPTING ALL EXISTING UTILITIES; TRANSPORT ALL EQUIPMENT AND MATERIAL AS REQUIRED BY ANY AGENCY HAVING JURISDICTION OVER ANY ROAD USE THEREOF; TRANSPORT, HANDLE AND INSTALL ALL MATERIALS IN ACCORDANCE WITH THEIR RESPECTIVE MANUFACTURER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS; PROPERLY BACKFILL ALL TRENCHES AND EXCAVATIONS; MAINTAIN A CLEAN AND ORDERLY WORK SITE; PROMPTLY REMOVE ALL EQUIPMENT, DEBRIS AND EXCESS SOILS AND/OR MATERIALS ON COMPLETION OF THE WORK; AND RESTORE TO SUBSTANTIALLY THE SAME OR BETTER CONDITIONS ALL DISTURBED PAVEMENTS AND GROUND SURFACES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROCURING A LOCATION TO SERVE AS HIS LAY DOWN YARD. ANY COSTS ASSOCIATED WITH SUCH SHALL BE AN ABSORBED COST.
- A MATERIALS TESTING COMPANY PROVIDED BY THE OWNER SHALL PERFORM INSPECTIONS, PROOF ROLLS AND TESTING ON EARTHWORK, CONCRETE AND OTHER MATERIALS ASSOCIATED WITH THE PROJECT ON THE OWNER'S BEHALF TO CONFIRM THAT THE PROJECT SPECIFICATIONS ARE BEING MET. THE CONTRACTOR SHALL BE REQUIRED TO COORDINATE HIS PROGRESS WITH SAID TESTING AGENCY SO THAT THEY ARE ABLE TO SCHEDULE REQUIRED TESTING.
- ANY MATERIALS OR WORKMANSHIP THAT DOES NOT MEET SPECIFICATION SHALL BE REJECTED, REMOVED, AND REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- CONSTRUCTION LAYOUT IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE AN ABSORBED COST. ENGINEER SHALL PROVIDE CONTRACTOR WITH CAD DRAWINGS CONTAINING LINEWORK THAT CONTRACTOR CAN USE AT HIS OWN RISK TO PREPARE CONSTRUCTION LAYOUT POINTS AND PERFORM OTHER TASKS AS NEEDED. TO RECEIVE CAD DRAWING, CONTRACTOR SHALL BE REQUIRED TO SIGN AND RETURN A RELEASE FORM PROVIDED BY ENGINEER RELEASING ENGINEER OF ANY LIABILITY FROM CONTRACTOR'S USE OF PROVIDED CAD FILE. CAD DRAWING WILL NOT BE A 3D MODEL.
- ELEVATIONS ARE BASED ON M.S.L. DATUM (NAVD 88).
- CONTRACTOR SHALL PROVIDE PROJECT RECORD DOCUMENTS AS REQUIRED IN SPECIFICATION SECTION 01720 WHICH SHALL INCLUDE BUT NOT BE LIMITED TO AS-BUILT RECORD DRAWINGS AND AS-BUILT SURVEY.
- ALL DETAIL DRAWINGS INCLUDED IN THESE PLANS SHALL BE CONSIDERED NOT TO SCALE UNLESS OTHERWISE NOTED.
- ALL GRAPHIC SCALES AND REFERENCES TO DRAWING SCALE IN THESE PLANS ARE BASED ON THE DRAWINGS BEING PRINTED ON A 24"x36" SHEET.

WATER & SEWER SYSTEM NOTES:

- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THESE PLANS AND PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL PROVIDE ALL THE MATERIALS AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE WATER AND SEWER SYSTEMS INFRASTRUCTURE SHOWN IN THESE PLANS.
- THE CONTRACTOR SHALL MAKE ALL TIES TO EXISTING UTILITIES AND COORDINATE THEM WITH THE GOVERNING UTILITY AUTHORITY.
- ALL MANHOLES, FIRE HYDRANTS, VALVE LOCATIONS AND GRATE AREAS SHALL BE ADJUSTED TO PROPER LINE AND FINISHED GRADE BY THE CONTRACTOR AFTER PLACING OF PAVEMENT AND BEFORE FINAL ACCEPTANCE.
- TRENCHING AND EMBEDMENT WORK SHALL CONFORM TO THE PROJECT SPECIFICATION SECTION 02230, EXCAVATION AND BACKFILL FOR CONDUITS AND STRUCTURES AND SHALL FOLLOW THE TYPICAL CROSS-SECTION DETAIL FOR TRENCHING. UNLESS SPECIFIED OTHERWISE, BACKFILL MATERIAL SHALL BE COMPACTED TO 96% DENSITY OF STANDARD PROCTOR IN ACCORDANCE WITH ASTM D-698. ALL BACKFILL MATERIAL SHALL BE COMPACTED IN 6" LAYERS.
- THE END OF WATER AND SEWER SERVICE LINES SHALL BE TIGHTLY CAPPED OR PLUGGED AND MARKED UNTIL SUCH TIME AS SERVICE CONNECTIONS ARE MADE OR LINES OR EXTENDED.
- ALL WATER AND SANITARY SEWER LINES SHALL BE INSTALLED WITH A MINIMUM OF THREE FEET (3') OF COVER OVER THE TOP OF THE PIPE AT FINISHED GRADE OR AS SHOWN OR NOTED OTHERWISE. WHERE INSTALLED IN A ROADWAY SECTION THE MINIMUM COVER OVER THE TOP OF THE PIPE SHALL BE FOUR FEET (4'). BACKFILLING OF TRENCHES SHALL MEET THE PROJECT SPECIFICATIONS.
- WATER LINE SHALL BE INSTALLED TO MAINTAIN A MINIMUM CLEARANCE OF 12" BELOW OR ABOVE EXISTING OR PROPOSED STORM DRAIN PIPING AND STRUCTURES THAT ARE PARALLEL TO OR INTERSECT THE WATER MAIN WHILE MAINTAINING THE MINIMUM COVER REQUIREMENTS.
- TEN FEET (10') CLEARANCE IS REQUIRED BETWEEN ALL WATER AND SEWER LINES. AT LOCATIONS WHERE THE WATER AND SEWER LINES MUST CROSS EACH OTHER THERE SHALL BE A MINIMUM CLEARANCE OF 18" WITH THE WATER PASSING OVER THE SEWER. IF THESE SEPARATIONS CANNOT BE MET, THE SEWER LINE SHALL BE CONSTRUCTED TO THE SAME SPECIFICATIONS AS THE WATER LINE AND BE WATER TIGHT UNTIL SUCH A POINT WHERE MINIMUM SEPARATION CAN BE MET. WHERE GRAVITY FLOW SEWERS CROSS ABOVE WATER LINES, THE SEWER PIPE FOR A DISTANCE OF TEN (10) FEET, EACH SIDE OF THE CROSSING, EITHER SHALL BE DUCTILE IRON PRESSURE PIPE WITHOUT ANY JOINT CLOSER THAN THREE (3') FEET TO THE CROSSING, OR SHALL BE FULLY ENCASED IN CONCRETE.
- ALL SANITARY SEWER SERVICES SHALL BE MARKED WITH A "Y" CUT INTO THE FACE OF THE CURB.
- ALL WATER SERVICE LINES SHALL BE INSTALLED 10' TO THE UPHILL SIDE OF THE SEWER SERVICE LINE UNLESS OTHERWISE SHOWN. SERVICE LINE LOCATION TO BE MARKED WITH A "W" CUT INTO THE FACE OF THE CURB.
- FIRE HYDRANT MAKE AND MODEL SHALL BE APPROVED BY THE GOVERNING UTILITY AUTHORITY PRIOR TO INSTALLATION.
- THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR TESTING THE WATER AND SEWER SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS AND SHALL NOTIFY THE ENGINEER AND THE GOVERNING UTILITY AUTHORITY AT LEAST 48 HOURS IN ADVANCE OF PERFORMING ANY TESTS. A COPY OF ALL TEST RESULTS SHALL BE EMAILED TO BENCHMARK ENGINEERING & SURVEYING, LLC @ office@benchmarkms.net (OR ALTERNATE ADDRESS AS DIRECTED AT PRE-CON MEETING) AS SOON AS THEY ARE AVAILABLE.
- FITTINGS FOR WATER LINES SHALL BE OF MECHANICAL JOINT TYPE AND SHALL BE RESTRAINED BY THE USE OF MEGA-LUGS AND CONCRETE THRUST BLOCKING. MEGA-LUGS AND THRUST BLOCKS ARE ABSORBED IN THE PER FOOT OF PIPE OR IN THE FITTINGS PAY ITEM (IF INCLUDED ON THE BID FORM).
- THE LENGTHS OF THE SANITARY SEWER LINES ARE MEASURED FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.
- FITTINGS FOR ALL APPLICATIONS OF WATER AND SEWER LINES WHICH ARE NOT AN ITEMIZED PAY ITEM SHALL BE AN ABSORBED COST.
- ALL DISCONNECTIONS OR CONNECTIONS TO EXISTING WATER AND SEWER SYSTEM SHALL BE MADE DURING OFF-PEAK PERIODS AND COORDINATED WITH THE GOVERNING UTILITY AUTHORITY.

SITE GRADING AND PAVING NOTES:

- TECHNICAL SPECIFICATION FOR MATERIALS AND CONSTRUCTION METHODS FOR THIS PROJECT SHALL CONFORM TO THE LATEST EDITION OF MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (MDOT STANDARDS), THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT (IF INCLUDED IN THE CONTRACT DOCUMENTATION). SHOULD THERE BE A DISCREPANCY BETWEEN THE DRAWINGS/CONTRACT DOCUMENTS AND MDOT STANDARDS THEN THE MDOT STANDARDS SHALL GOVERN. FOR DISCREPANCIES INVOLVING EARTHWORK, THE GOVERNING ORDER SHALL BE GEOTECHNICAL REPORT, MDOT STANDARDS, CONTRACT DRAWINGS/CONTRACT DOCUMENTS.
- EARTHWORK SHALL INCLUDE CLEARING, STRIPPING, AND THE STOCKPILING OF TOPSOIL, REMOVING UNSUITABLE MATERIALS, THE CONSTRUCTION OF EMBANKMENTS, NON-STRUCTURAL FILLS, FINAL SHAPING AND TRIMMING TO THE LINES, GRADES AND CROSS SECTIONS SHOWN ON THE PLANS. ALL UNSUITABLE OR EXCESS MATERIAL SHALL BE LEGALLY DISPOSED OF AS DIRECTED BY THE ENGINEER.
- AS AN INITIAL STEP OF SITE PREPARATION, TREES AND VEGETATION WITHIN THE CONSTRUCTION LIMITS SHOULD BE REMOVED. TREE AND VEGETATION REMOVAL (CLEARING AND GRUBBING) WILL INCLUDE STUMPS AND ROOT SYSTEMS. HOLES CREATED BY TREE AND STUMP REMOVAL SHOULD BE BACKFILLED WITH COMPACTED SELECT FILL TO NO ADDITIONAL COST.
- AFTER CLEARING AND GRUBBING, STRIPPING SHOULD BE PERFORMED TO A SUFFICIENT DEPTH (6" MINIMUM DEPTH IN GRASSED AREAS, 12" MINIMUM IN WOODED OR PREVIOUSLY WOODED AREAS) WITHIN CONSTRUCTION AREAS TO REMOVE ORGANIC-LADEN SURFICIAL SOILS, VEGETATION, DEBRIS, BRUSH AND ROOTS (TOPSOIL). TOPSOIL EXCAVATED SHALL BE STOCKPILED ON THE SITE AT AN APPROVED LOCATION UNTIL SUCH TIME THAT THIS TOPSOIL CAN BE USED FOR FINAL GRADING/PLATING OF SLOPES. STOCKPILING AND PLACEMENT IS NOT A PAY ITEM, BUT SHALL BE AN ABSORBED COST.
- ONCE CLEARING, GRUBBING, AND STRIPPING HAS BEEN COMPLETED THE CONTRACTOR SHALL EXCAVATE AREAS THAT ARE TO BE CUT TO REACH PLAN GRADE. CONTRACTOR SHALL THEN NOTIFY THE ENGINEER & TESTING AGENCY TO SET UP A FIELD INSPECTION OF THE SUB-GRADE PRIOR TO PLACEMENT OF ANY SELECT FILL. CONTRACTOR SHALL HAVE EQUIPMENT AVAILABLE TO PERFORM A PROOF ROLL OR FOR FURTHER EXCAVATION SHOULD THE ENGINEER OR TESTING AGENCY DEEM NECESSARY. ANY AREAS THAT PROVE TO BE UNSTABLE DURING THE PROOF ROLL OR APPEAR TO HAVE UN-SUITABLE MATERIALS SHALL BE MARKED AND A RECOMMENDATION FOR REMEDIATION SHALL BE PROVIDED BY TESTING AGENCY'S REPRESENTATIVE. SUCH AREAS SHALL BE PROOF ROLLED AGAIN ONCE REMEDIATION HAS BEEN COMPLETED.
- FINE-GRAINED SOILS EXPOSED AFTER STRIPPING, EXCAVATION AND UNDERCUTTING ARE SUSCEPTIBLE TO PUMPING AND/OR BECOMING UNSTABLE AND RUTTING EXCESSIVELY UNDER WET CONDITIONS. THE CONSTRUCTION TECHNIQUES, TYPES OF EQUIPMENT UTILIZED AND SITE DRAINAGE PROVIDED DURING CONSTRUCTION WILL HAVE TO BE ADJUSTED TO PREVENT THE PROBLEMS OF PUMPING AND RUTTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER EQUIPMENT SHOULD BE CONTROLLED TO MINIMIZE TRAFFIC OVER THE SITE. ALL TRAFFIC SHOULD BE DISCOURAGED DURING PERIODS OF INCLEMENT WEATHER.
- UNDERCUTTING AND BACKFILLING WILL BE REQUIRED TO REMOVE EXPANSIVE CLAYS (CH) OR OTHER UN-SUITABLE MATERIALS SHOULD THEY BE ENCOUNTERED TO CREATE A MINIMUM OF A 3' VERTICAL AND HORIZONTAL (OR AS DESCRIBED IN GEOTECHNICAL REPORT) BUFFER FROM SUCH MATERIAL AND THE BOTTOM OF THE PAVED SURFACE OR SHOULDER MATERIAL. UNDERCUTTING SHALL BE PAID FOR IN PAY ITEM "UNDERCUTTING" AND HAULED OFF-SITE.
- SELECT FILL MATERIAL (EITHER ON-SITE OR IMPORTED) SHALL CONSIST OF LESS THAN 2% ORGANIC MATTER, FREE OF DEBRIS, WITH ROCKS NO GREATER THAN 6" AND A LIQUID LIMIT OF LESS THAN 40 AND A PLASTICITY INDEX BETWEEN 10 AND 20 OR MDOT BORROW CLASS B9-10 EQUIVALENT.
- ANY DISTURBED AREAS SHALL BE REMOVED DURING GRADING OPERATIONS AND EITHER STOCKPILED FOR USE ON-SITE AS DIRECTED BY ENGINEER OR HAULED OFF-SITE. IF PLACED ON-SITE SUCH MATERIAL SHALL BE PAID FOR AS UNCLASSIFIED EXCAVATION. SHOULD MATERIAL BE HAULED OFF-SITE, IT SHALL BE PAID FOR AS "EXCESS EXCAVATION" OR "UNDERCUT EXCAVATION".
- FILL SOILS SHOULD BE COMPACTED FROM LIFTS NOT EXCEEDING 8" IN LOOSE THICKNESS TO NOT LESS THAN THE DENSITIES DESCRIBED IN SPECIFICATION SECTION 02220 AT MOISTURE CONTENTS WITHIN 3 PERCENTAGE POINTS OF THE OPTIMUM WATER CONTENT. STABILITY MUST BE EVIDENT DURING COMPACTION OF EACH LIFT BEFORE ANY SUBSEQUENT LIFTS OF FILL MATERIAL ARE ADDED.
- OWNER'S TESTING AGENCY SHALL PERFORM MATERIAL TESTING ON SELECT FILL MATERIAL (WHETHER IMPORTED OR ON-SITE MATERIAL) TO CONFIRM THAT ANY MATERIAL THAT THE CONTRACTOR MEETS PROJECT SPECIFICATIONS PRIOR TO ALLOWING SAID MATERIALS TO BE PLACED ON THE SITE. ADDITIONALLY, OWNER'S TESTING AGENCY SHALL CONDUCT FIELD MOISTURE/DENSITY TESTS ON PLACEMENT OF EACH LIFT OF FILL AND ON FINAL COMPACTION SUB-GRADE AT INTERVALS REQUIRED IN THE PROJECT SPECIFICATIONS. TEST RESULTS SHALL BE EMAILED TO office@benchmarkms.net (OR ALTERNATE ADDRESS AS DIRECTED AT PRE-CON MEETING) IMMEDIATELY AFTER TEST RESULTS HAVE BEEN PREPARED. ANY MATERIALS OR WORK THAT TESTING SHOWS DOES NOT MEET REQUIREMENTS SHALL BE REMOVED AND REPLACED AS DIRECTED BY TESTING AGENCY OR ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- A PROOF ROLL OF THE SUB-GRADE FOR THE CURB AND PAVED AREAS SHALL BE REQUIRED PRIOR TO PLACEMENT OF CURB & GUTTER AND ASPHALT BASE COURSE; HOWEVER, PRIOR TO THE CONTRACTOR CONTACTING THE ENGINEER FOR A PROOF ROLL, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE EARTHWORK TESTING AGENCY AND REQUEST THAT THEY PROVIDE ALL TEST RESULTS TO ENGINEER AND TO CERTIFY TO THE ENGINEER THAT ALL REQUIREMENTS OF THE CONSTRUCTION PLANS, SPECIFICATIONS AND GEOTECHNICAL REPORT IN RELATION TO THE PREPARATION OF THE ROADWAY SUB-GRADE HAVE BEEN MET OR EXCEEDED. ONCE THIS INFORMATION IS RECEIVED, ENGINEER WILL SCHEDULE PROOF ROLL WITH CONTRACTOR. SHOULD THERE BE AREAS THAT "PUMP" AND DO NOT PASS THE PROOF ROLL, THE CONTRACTOR SHALL PROVIDE REMEDIAL OPERATIONS (AT NO ADDITIONAL COST TO OWNER) TO THESE AREAS AND SET UP ANOTHER PROOF ROLL. ONCE THE ENTIRE SUBJECT AREA OF THE PROOF ROLL PASSES THE ENGINEER'S INSPECTION, THE LOCAL GOVERNING AUTHORITY SHALL BE NOTIFIED BY THE CONTRACTOR TO PERFORM THEIR OWN. SHOULD IT RAIN AFTER THE PROOF ROLL, ANOTHER PASSING PROOF ROLL SHALL BE REQUIRED PRIOR TO POURING CURB OR PAVING UNLESS AUTHORIZED OTHERWISE BY THE LOCAL GOVERNING AUTHORITY.
- THE GRADING AND CONSTRUCTION OF THE SITE IMPROVEMENTS SHALL NOT CAUSE THE PONDING OF STORM WATER. ALL AREAS ADJACENT TO THESE IMPROVEMENTS SHALL BE GRADED TO ALLOW POSITIVE DRAINAGE. POSITIVE DRAINAGE SHALL BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL TAKE SPECIAL CARE IN GRADING NEAR TREES, BUSHES AND SHRUBS WHICH ARE NOT TO BE REMOVED SO AS NOT TO CAUSE INJURY TO ROOTS OR TRUNKS.
- THE CONTRACTOR SHALL USE CARE IN GRADING OR EXCAVATION NEAR ANY AND ALL EXISTING ITEMS WHICH ARE NOT INDICATED TO BE REMOVED. ANY DAMAGE DONE TO THESE EXISTING ITEMS BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- PROPOSED ELEVATIONS INDICATE FINISHED CONDITIONS. FOR ROUGH GRADING ELEVATIONS ALLOW FOR THICKNESS OF PROPOSED ITEMS (ROADS, WALKS, DRIVES, ETC.) OR TOPSOIL AS SHOWN.
- ALL DISTURBED AREAS NOT PAVED SHALL BE BROUGHT TO FINISHED GRADE WITH 4" TOPSOIL OR APPROVED SUITABLE MATERIAL FOR GROWING VEGETATION, THEN SEED, MULCHED, FERTILIZED AND WATERED AS REQUIRED TO PREVENT EROSION AND TO ACCOMMODATE THE PROJECT SPECIFICATIONS. THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH PERMANENT VEGETATION BY ANY MEANS NECESSARY TO MEET THE VEGETATIVE COVER REQUIREMENTS OF THE PROJECT SPECIFICATIONS. SHOULD THE NATIVE SOIL NOT BE CONDUICIVE TO VEGETATIVE GROWTH SPECIFIED THEN CONTRACTOR SHALL PLAN TO BRING IN MATERIAL AS NEEDED TO ACCOMPLISH REQUIRED VEGETATION AT NO COST TO THE OWNER.
- STREET PAVING AND CURBS TO REMAIN SHALL BE PROTECTED FROM DAMAGE, AND IF DAMAGED, SHALL BE REPLACED PROMPTLY AT NO ADDITIONAL COST TO THE OWNER.

EROSION CONTROL NOTES:

- "TEMPORARY EROSION CONTROL" PAY ITEM INCLUDES ALL ITEMS SHOWN ON THE CONTRACT DRAWINGS AND ALL ITEMS REQUIRED TO STAY IN COMPLIANCE WITH THE REQUIREMENTS OF THE LOCAL GOVERNING AUTHORITY, THE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ), THE STORM WATER POLLUTION PREVENTION PLAN (S.W.P.P.P.) NARRATIVE AND THE SMALL CONSTRUCTION NOTICE OF INTENT (S.C.N.O.I.).
- CONTRACTOR SHALL FAMILIARIZE HIMSELF AND ABIDE BY THE REQUIREMENTS OF THE S.C.N.O.I. AND THE S.W.P.P.P. NARRATIVE AND OTHER RELATED EROSION CONTROL DOCUMENTS, CONTRACTOR SHALL BE NAMED PRIME CONTRACTOR ON THE S.C.N.O.I.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP A COPY OF THE S.C.N.O.I. AND RELATED DOCUMENTS ON THE PROJECT SITE AT ALL TIMES.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COMPLY WITH THE REQUIREMENTS OF THE S.C.N.O.I./STORM WATER COVERAGE PERMIT WHICH INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING: MAINTAIN, REPAIR, REPLACE ALL TEMPORARY EROSION CONTROL MEASURES; PERFORM INSPECTIONS AND FILL OUT INSPECTION REPORTS AS REQUIRED BY THE S.C.N.O.I./STORM WATER PERMIT COVERAGE; ADD ADDITIONAL MEASURES AS NEEDED TO STAY IN COMPLIANCE WITH THE PERMIT COVERAGE; MAINTAIN A RED-LINE DRAWING ON-SITE SHOWING FAILURES, REPAIRS, ADDITIONAL MEASURES, ETC. WITH THE DATES OF SUCH.
- TEMPORARY EROSION CONTROL MEASURES DEPICTED ON THE DRAWINGS SHALL BE CONSIDERED BY THE CONTRACTOR TO BE THE MINIMUM BMP'S TO BE INSTALLED AS PART OF THE SITE CONSTRUCTION AND THE SPECIFIC EROSION CONTROL PLAN AND ARE NOT MEANT TO ADDRESS ALL OF THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT, AS NOTED CONTRACTOR SHALL ADD ADDITIONAL MEASURES (AT NO ADDITIONAL COST TO THE OWNER) AS REQUIRED TO STAY IN COMPLIANCE WITH MDEQ REGULATIONS.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY MEASURES USING MDEQ BMP'S TO CONTROL EROSION AND STORM WATER POLLUTION THROUGHOUT THE CONSTRUCTION PERIOD TO STAY IN COMPLIANCE WITH THE REQUIREMENTS OF THE LOCAL GOVERNING AUTHORITY AND MDEQ.
- ALL TEMPORARY EROSION CONTROL MEASURES SHALL BE IN PLACE BEFORE EARTH MOVING OPERATIONS BEGIN.
- CLEARING AND GRUBBING TO THE MINIMUM SHALL BE ACCORDING TO THE PROJECT SPECIFICATIONS AND THE ROADWAY SLOPES.
- EMBANKMENTS AND EXCAVATED AREAS SHALL BE PROMPTLY STABILIZED TO MINIMIZE EROSION.
- WATLES OR RIP-RAP EROSION CHECKS, SILT FENCING OR OTHER APPROVED BMP'S SHALL BE USED ALONG THE TOE OF FILL SLOPES, IN DITCHES, AND IN OTHER AREAS WHERE EROSION IS A PROBLEM AND SILT LADEN RUNOFF MAY ENTER A STREAM, DITCH OR ADJACENT PROPERTY.
- ANY STOCKPILED SOIL OR FILL MATERIAL SHALL BE LOCATED AND TREATED IN A MANNER TO PREVENT SILT FROM ENTERING STREAMS. NO EXCAVATED MATERIAL SHALL BE DITCHES. THE CONTRACTOR SHALL DISPOSE OF ALL EXCAVATED MATERIAL IN A LOCATION APPROVED BY THE ENGINEER.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONTINUALLY MAINTAINED.
- THE CONTRACTOR SHALL KEEP STREETS AND SIDEWALKS ADJACENT TO THE LIMITS OF CONSTRUCTION FREE OF MUD AND DEBRIS.
- ALL DISTURBED AREAS NOT PAVED SHALL BE BROUGHT TO FINISHED GRADE WITH 4" TOPSOIL OR APPROVED SUITABLE MATERIAL FOR GROWING VEGETATION, THEN SEED, MULCHED, FERTILIZED AND WATERED AS REQUIRED TO PREVENT EROSION WITH TEMPORARY OR PERMANENT SEEDING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH PERMANENT VEGETATION (MIN. 90% COVERAGE) BY ANY MEANS NECESSARY TO MEET THE VEGETATIVE COVER REQUIREMENTS OF THE PROJECT SPECIFICATIONS. SHOULD THE NATIVE SOIL NOT BE CONDUICIVE TO VEGETATIVE GROWTH SPECIFIED THEN CONTRACTOR SHALL PLAN TO BRING IN MATERIAL AS NEEDED TO ACCOMPLISH REQUIRED VEGETATION AT NO COST TO THE OWNER.
- ALL EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL THE DISTURBED UPSTREAM AREA HAS BEEN INSPECTED BY THE ENGINEER AND APPROVAL HAS BEEN GIVEN FOR REMOVAL.
- CONTRACTOR WILL BE RESPONSIBLE FOR ANY REPAIRS OR REPLACEMENT REQUIRED TO RESTORE AREAS TO THEIR ORIGINAL CONDITION AT NO COST TO THE OWNER WHERE EROSION CONTROL MEASURES FAILED.
- CONTRACTOR SHALL PROVIDE A STORAGE AREA FOR ALL POTENTIALLY TOXIC MATERIALS THAT ARE TO BE STORED ON SITE. THE LOCATION OF THIS AREA SHALL BE COORDINATED WITH THE ENGINEER. ANY WORK REQUIRED TO CREATE, MAINTAIN AND REMOVE STORAGE AREA SHALL BE AN ABSORBED COST.
- FUEL AND MATERIAL STORAGE AREAS SHALL BE LOCATED AS FAR AWAY FROM ANY DITCHES OR STREAMS AS POSSIBLE. A 60ML POLYETHYLENE LINER IS REQUIRED UNDER FUEL TANKS.

STORM DRAIN NOTES:

- TECHNICAL SPECIFICATIONS FOR STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE LATEST EDITION OF MISSISSIPPI STANDARD SPECIFICATIONS FOR STATE AID ROAD AND BRIDGE CONSTRUCTION.
- JOINTS SHALL BE CONSTRUCTED AND JOINED TOGETHER IN SUCH A MANNER THAT NO SPILL THROUGH OF BACKFILL WILL OCCUR.
- ALL REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE CLASS III UNLESS OTHERWISE NOTED AND WRAPPED IN FILTER CLOTH AT ALL JOINTS. LIFT HOLES TO BE GROUTED AND SEALED WATER TIGHT.
- ANY ADDITIONAL EXCAVATION REQUIRED FOR INSTALLATION OF BEDDING MATERIAL FOR STORM DRAIN PIPE SHALL BE INCLUDED IN THE CONTRACT PRICE PER LINEAR FOOT OF STORM DRAINAGE PIPE.
- THE CONTRACTOR SHALL NOTIFY RANKIN COUNTY TO PERFORM AN INSPECTION OF ALL DRAINAGE PIPE INSTALLATIONS PRIOR TO PLACEMENT OF BACKFILL.
- PIPE NOTED HP PIPE (12" OR LARGER) ON THE DRAWINGS REFERS TO ADS HP STORM OR EQUAL. PIPE NOTED AS C.P.P. (12"-) ON THE DRAWINGS REFERS TO ADS DUAL WALL CORRUGATED PLASTIC PIPE (BLACK). BOTH SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- CONTRACTOR SHALL PROVIDE DRAIN HOLES OR BLOCK OUTS AT ALL CURB INLETS (TO BE GROUTED IN WHEN FINAL SURFACE COURSE IS APPLIED).
- THE LENGTH OF THE STORM DRAIN LINES ARE MEASURED FROM THE CENTER OF THE INLET/JUNCTION BOX TO THE CENTER OF THE INLET/JUNCTION BOX.
- INLET/JUNCTION BOX SIZES TO BE DETERMINED BY CONTRACTOR OR MANUFACTURER BASED ON THE PIPE SIZES AND THE ENTRY/EXIT ANGLE OF THE CULVERTS.
- INLET TOPS TO BE ADJUSTED AS NECESSARY TO MATCH FINISHED GRADE ELEVATION AND LONGITUDINAL SLOPE OF THE ROADWAY.
- INLETS SHOWN WITH SINGLE OR DOUBLE EXTENSIONS ARE FOR INFORMATIONAL PURPOSES WITH THE INTENT TO SHOW THE CONTRACTOR WHERE SINGLE, DOUBLE AND TRIPLE INLETS ARE REQUIRED. IN SOME CASES THE ELEVATIONS AND SIZES OF THE INCOMING PIPES WILL NOT ALLOW THE USE OF AN EXTENSION. IN SUCH CASES THE CONTRACTOR MAY POUR IN PLACE AN EXTENSION(S) OR USE A DOUBLE/TRIPLE BOX. PAYMENT FOR SUCH STRUCTURES SHALL BE COVERED UNDER CORRESPONDING "CURB INLET W/ EXTENSION" PAY ITEM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE WHAT INLETS WILL WORK WITH EXTENSIONS AND WHICH ONES WILL NOT AND PRICE/ADJUST ACCORDINGLY.
- NO DRAINAGE STRUCTURE TOPS SHALL BE PERMANENTLY SECURED UNTIL SUCH TIME THAT THE SURROUNDING AREA HAS BEEN SHAPED TO FINAL GRADE SO THAT VERTICAL ADJUSTMENTS CAN BE MADE TO THE TOPS OF STRUCTURES TO ALLOW THEM TO MATCH FINISHED GRADE. VERTICAL ADJUSTMENTS TO DRAINAGE STRUCTURES SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- RIM OR TOP ELEVATION OF INLET TOPS ARE TO THE CENTER OF THE MAIN INLET STRUCTURE. CONTRACTOR/MANUFACTURER SHALL TAKE LONGITUDINAL SLOPE OF ROADWAY INTO ACCOUNT WHEN MAKING INLET BOXES.
- CURB INLET TOPS SHALL NOT BE SECURED/POURED UNTIL THE CURB HAS BEEN INSTALLED. JUNCTION BOX AND GRATE INLET TOPS SHALL BE FIELD ADJUSTED TO MATCH FINISHED GRADE. ONCE FINISHED GRADE IS ESTABLISHED BY ENGINEER, ONCE THE CURB AND GRATE HAS BEEN TAKEN PLACE NOT BE SECURED UNTIL FINAL GRADING HAS TAKEN PLACE.
- IT IS INTENDED THAT ONLY THE SOLID MANHOLE COVER IS VISIBLE ON JUNCTION BOXES.

ABBREVIATIONS

#	POUND	L.F.	LINEAR FEET (HORIZONTAL)
ASSY.	ASSEMBLY	MAX.	MAXIMUM
AVG.	AVERAGE	M.H.	SANITARY SEWER MANHOLE
B.F.E.	BASE FLOOD ELEVATION	MIN.	MINIMUM
BLDG.	BUILDING	M.J.	MECHANICAL JOINT
BM	BENCHMARK	N.T.S.	NOT TO SCALE
C	CHORD LENGTH	O.C.	ON CENTER
C	CENTERLINE	P.C.	POINT OF CURVATURE
CI	CURB INLET	PERM.	PERMANENT
CONC.	CONCRETE	PI	POINT OF INTERSECTION
CONST.	CONSTRUCTION	PROP.	PROPOSED
C.M.P.	CORRUGATED METAL PIPE	PT	POINT OF TANGENCY
C.P.P.	CORRUGATED PLASTIC PIPE	R	RADIUS
C.Y.	CUBIC YARD	R.C.P.	REINFORCED CONCRETE PIPE
DIA.	DIAMETER	R.C.A.P.	REINFORCED CONCRETE ARCH PIPE
D.I.P.	DUCTILE IRON PIPE	RD.	ROAD
DBL	DOUBLE	REQD.	REQUIRED
DWG	DRAWING	RET. WALL	RETAINING WALL
E.A.	EACH	R.O.W./ROW	RIGHT OF WAY
EASE.	EASEMENT	R.R.	RAILROAD
EP	EDGE OF PAVEMENT	SD	STORM DRAIN
EX.	EXISTING	SHLDR.	SHOULDER
EXST.	EXIST.	SS	SANITARY SEWER
EXT.	EXTENSION	STA.	STATION
E.W.	EACH WAY	STD.	STANDARD
F.E.S.	FINISHED END SECTION	S.Y.	SQUARE YARD
F.F.E.	FINISHED FLOOR ELEVATION	T	TANGENT LENGTH
FW	FLOWLINE (EQUALS INVERT)	TBC	TOP OF CURB
FG	FINISHED GRADE	TBM	TEMPORARY BENCHMARK
FM	SANITARY SEWER FORCE MAIN	TEMP.	TEMPORARY
GV	GATE VALVE	TOE	TOE OF SLOPE
GI	GRATE INLET	TOP	TOP OF BANK
GR	GRASS	TOP OF PAVEMENT	TOP OF PAVEMENT (ALL TYPES)
HORIZ.	HORIZONTAL	TRL	TRAIL
HYD.	HYDRANT	TS	TOP OF SIDEWALK
INV.	INVERT (EQUALS FLOWLINE)	Typ.	TYPICAL
JB	JUNCTION BOX	VERT.	VERTICAL
LB	POUND		

LINE TYPES

---	EX. ADJACENT PROPERTY LINE	---	BASE FLOOD ELEVATION LINE & ELEV.
---	EX. AT&T LINE	---	FLOWLINE
---	EX. BLDG. LINE	---	FLOOD ZONE LINE
---	EX. E. ROAD	---	PROP. CASING
---	EX. EXIST. UNDERGROUND	---	PROP. CENTERLINE
---	EX. CONC.	---	PROP. CLEARING LIMITS
---	EX. CULTURT	---	PROP. CURB
---	EX. CURB	---	PROP. EASE.
---	EX. DITCH	---	PROP. FENCE BARBED WIRE
---	EX. EASE	---	PROP. FENCE CYCLONE
---	EX. EDGE OF GRAVEL	---	PROP. FENCE WROUGHT IRON
---	EX. EP	---	PROP. FENCE WOOD
---	EX. FENCE BARBED WIRE	---	PROP. FINISHED GRADE CONTOUR LINE
---	EX. FENCE CYCLONE	---	PROP. SHOULDER
---	EX. FENCE WROUGHT IRON	---	PROP. GAS LINE
---	EX. FENCE WOOD	---	PROP. PHASE LINE
---	EX. FIBER OPTIC	---	PROP. PROPERTY
---	EX. GAS LINE	---	PROP. RET. WALL
---	EX. GROUND CONTOUR LINE	---	PROP. R.O.W.
---	EX. LANDSCAPING	---	PROP. SD CULTVERT
---	EX. POWER (OVERHEAD)	---	PROP. SETBACKS
---	EX. POWER (UNDERGROUND)	---	PROP. SIDEWALK
---	EX. RET. WALL	---	PROP. SILT FENCE
---	EX. RR TRACKS	---	PROP. SS FM
---	EX. SIDEWALK	---	PROP. SS LINE
---	EX. SS	---	PROP. SS SERVICE LINE
---	EX. STRIPPING	---	PROP. SWALE/DRAIN PATH
---	EX. TOP SLOPE	---	PROP. WATER EDGE
---	EX. TOP BANK	---	PROP. WATER LINE
---	EX. TREE LINE	---	PROP. WATER SERVICE LINE
---	EX. WATER'S EDGE		
---	EX. WATER LINE		

SYMBOLS

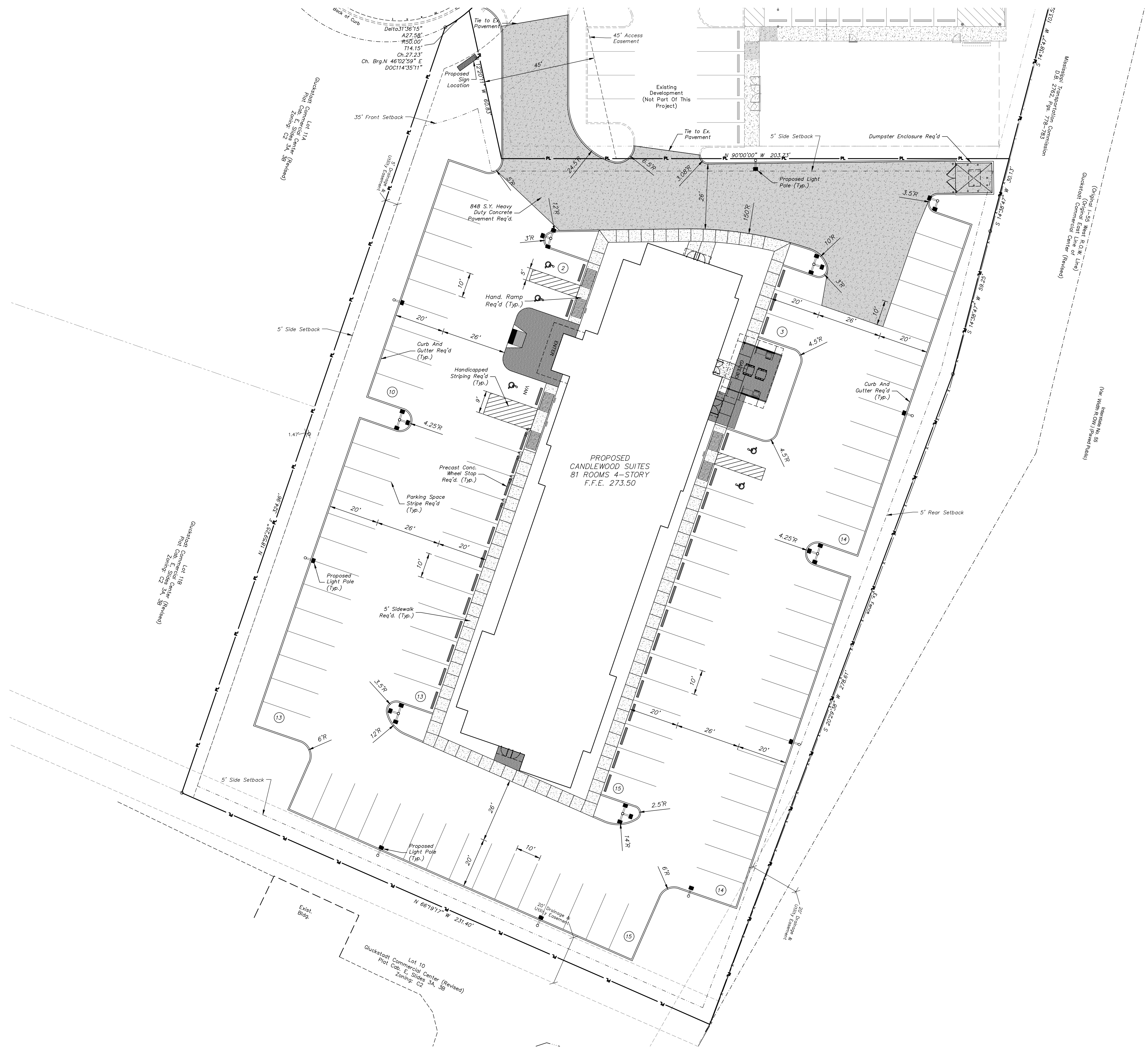
●	PROP. SS MH	○	PROP. SS MH LABEL
○	PROP. SS CLEANOUT	○	PROP. SS STRUCTURE LABEL
○	PROP. CI (SINGLE)	○	EX. FIRE HYDRANT ASSY.
○	PROP. CI (SINGLE EXT.)	○	PROP. F.E.S.
○	PROP. CI (DBL EXT.)	○	EX. F.E.S.
○	PROP. ORATE INLET	○	PROP. WATTLE
○	PROP. JB	○	F.E.S. INLET PROTECTION
○	PROP. FIRE HYDRANT ASSY.	○	PROP. CI PROTECTION ON SLOPE
○	PROP. GATE VALVE ASSY.	○	PROP. CI PROTECTION IN SAG
○	PROP. SPOT ELEV.	○	PROP. CI PROTECTION
○	TEMP. BM	○	SET IR

DATE:	4/5/24	DRAWN:	JH	REVISIONS:
CHECKED:	GAB	SCALE:	1" = 20'	
REF C/L:		EG SURFACE:		
		FG SURFACE:		

PROJECT LOCATION:	DEES PLAZA MADISON COUNTY, MISSISSIPPI
CLIENT:	BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:	CANDLEWOOD SUITES
SHEET CONTENTS:	SITE PLAN

SHEET NUMBER	4 of 16
PROJECT NUMBER	B-7302



PROJECT SITE INFORMATION:

CURRENT ZONING - C-2, HIGHWAY COMMERCIAL DISTRICT

MINIMUM SETBACK REQUIREMENTS:
 FRONT - 35'
 SIDE - 5'
 REAR - 5'

APPROXIMATE PROJECT ACREAGE: ±1.75 AC

APPROXIMATE ACREAGE BREAKDOWN:
 PROPOSED BUILDING - 0.259 AC (11,276± S.F.), 14.47%
 PROPOSED SIDEWALKS - 0.069 AC (3021± S.F.), 3.85%
 PROPOSED DRIVES/PARKING - 0.88 AC (38,486± S.F.), 49.16%
 GREEN AREA - 0.552 AC (24,045± S.F.), 30.84%

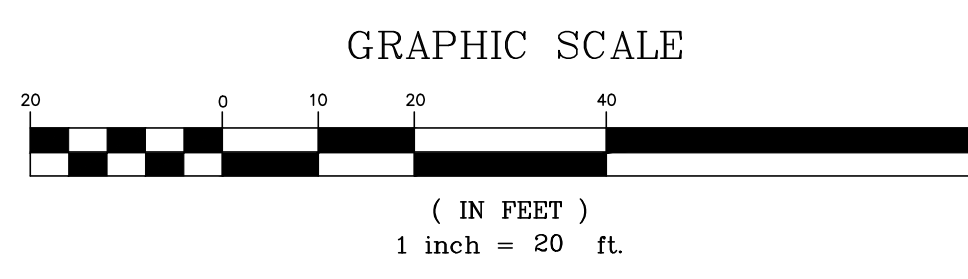
PARKING REQUIRED: 122 SPACES REQUIRED*
 PARKING PROVIDED: 99 NEW SPACES, INCLUDING 5 HANDICAPPED

*A VARIANCE ON THE NUMBER OF PARKING SPACES AND THE SITE PLAN WAS APPROVED BY THE MADISON COUNTY BOARD OF SUPERVISORS AT THE NOV. 2, 2020 BOS MEETING.

HEAVY DUTY CONCRETE (RIGID) PAVING REQ'D.
 CONCRETE SIDEWALK REQ'D.

NOTE: ALL PAVING NOT NOTED AS ONE OF THE ABOVE SHALL BE CONSIDERED LIGHT DUTY CONCRETE

- NOTE:
- SEE TYPICAL SECTIONS AND PROJECT SPECIFICATIONS FOR PAVING REQUIREMENTS.
 - RADIAL DIMENSIONS ARE MEASURED FROM THE BACK OF CURB. PARKING LOT DIMENSIONS ARE TO THE FACE OF CURB.
 - SEE ARCHITECTURAL PLANS FOR MORE DETAILS ON THE BUILDINGS AND DUMPSTER ENCLOSURE.
 - ANY PAVING NOT DELINEATED AS A FORM OF CONCRETE OR HEAVY DUTY CONCRETE PAVING SHALL BE CONSIDERED LIGHT DUTY CONCRETE PAVING.
 - PARKING SPACE STRIPING SHALL BE 4" MINIMUM WIDTH AND PAINTED WHITE.
 - ITEMS NOTED AS LEGEND STRIPING SHALL BE THERMOPLASTIC INSTALLED PER MOOT REQUIREMENTS FOR SIZE AND THICKNESS. ALL REMAINING STRIPING SHALL BE FAST DRYING SOLVENT BASED TRAFFIC PAINT FOR USE ON BITUMINOUS AND PORTLAND CEMENT CONCRETE PAVEMENT. PAINT SHALL MEET THE REQUIREMENTS OF SECTION 710 OF THE LATEST EDITION OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
 - IT IS THE OWNER'S RESPONSIBILITY TO OBTAIN PERMISSION TO PERFORM WORK ON ADJACENT PROPERTY FROM THE PROPERTY OWNERS SHOULD IT BE NECESSARY TO COMPLETELY INSTALL IMPROVEMENTS.
 - PRIOR TO INSTALLATION OF CURB & GUTTER THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A MARKED UP DRAWING SHOWING WHERE REVERSED GUTTER CURB IS PROPOSED FOR HIS REVIEW AND APPROVAL.



DATE: 4/5/24	DRAWN: KDR	REVISIONS:
CHECKED: GAB	SCALE: 1" = 20'	
REF C/L:	EG SURFACE:	
	FG SURFACE:	

PROJECT LOCATION:
DEES PLAZA
 MADISON COUNTY, MISSISSIPPI

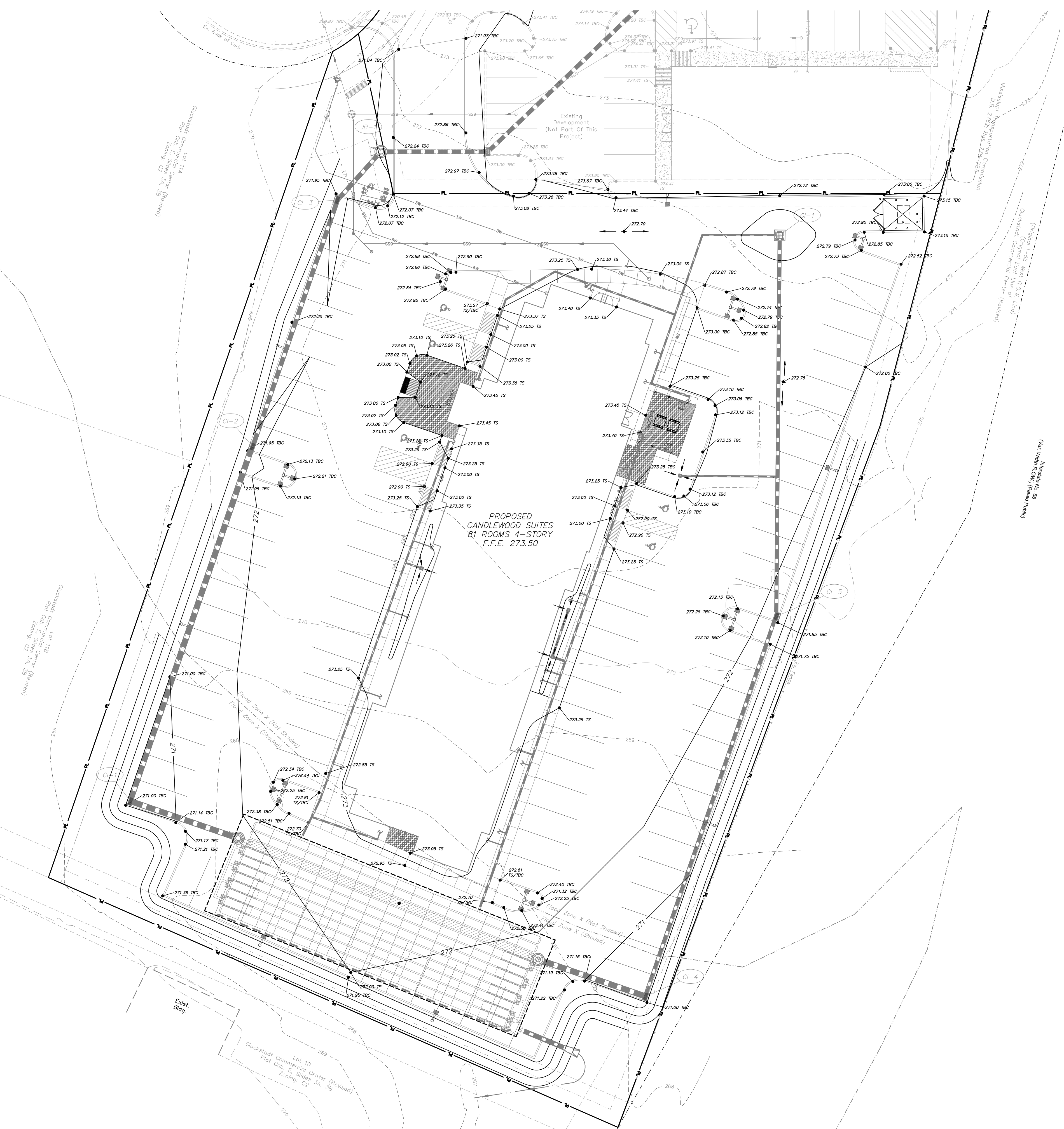
CLIENT:
BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES

SHEET CONTENTS:
GRADING PLAN

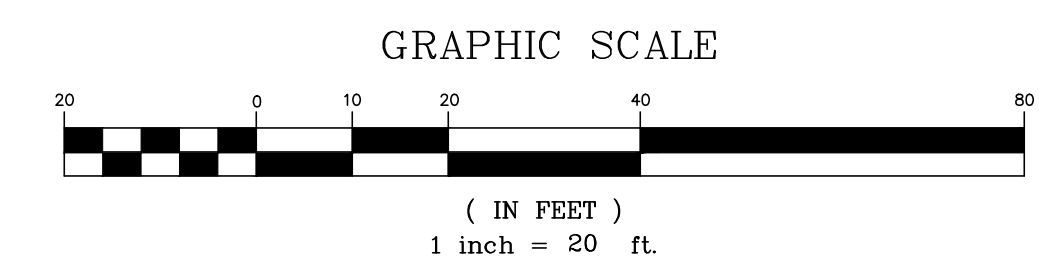
SHEET NUMBER
6 of 16

PROJECT NUMBER
B-7302



SPOT ELEVATION LEGEND
 TBC = TOP BACK OF CURB
 TS = TOP OF SIDEWALK
 TP = TOP OF PAVEMENT

- NOTES:
- SEE NOTES ON SHEET 2, DETAIL DRAWINGS & PROJECT SPECIFICATIONS FOR MORE DETAILED INFORMATION ON INSTALLATION REQUIREMENTS.
 - ALL EXISTING UTILITIES ARE SHOWN AS THEY WERE MARKED BY OTHERS AND SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL AT 601-362-4374 FOR A LOCATE PRIOR TO BEGINNING CONSTRUCTION TO VERIFY LOCATIONS.
 - PRIOR TO BIDDING THE PROJECT THE CONTRACTOR SHALL POTHOLE EXISTING UTILITY LINES IN AREAS WHERE PROPOSED UTILITIES (WATER, SEWER, STORM DRAIN) OR DRAINAGE SWALES ARE PROPOSED TO CROSS AND NOTIFY ENGINEER IMMEDIATELY IF CONFLICT IS DISCOVERED.
 - SLOPES THAT ARE GREATER THAN 3:1 SHALL RECEIVE SOLID SOD UNLESS OTHERWISE NOTED.
 - ALL DISTURBED AREAS THAT ARE OUTSIDE THE PROJECT SCOPE/LIMITS SHALL BE REPAIRED TO AS GOOD AS THE ORIGINAL CONDITION OR BETTER AT THE CONTRACTOR'S EXPENSE. PICTURE DOCUMENTATION OF THESE AREAS SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO DISTURBING TO SERVE AS PROOF OF THE PRE-EXISTING CONDITION.
 - MAINTAIN SLOPE IN HANDICAPPED STALLS AT 1.5% MAXIMUM.
 - PRIOR TO INSTALLATION OF ANY PORTION OF THE CURB AND GUTTER THE CONTRACTOR SHALL PROVIDE ENGINEER WITH A MARKED UP DRAWING SHOWING WHERE REVERSED GUTTER CURB IS PROPOSED FOR HIS REVIEW AND APPROVAL.



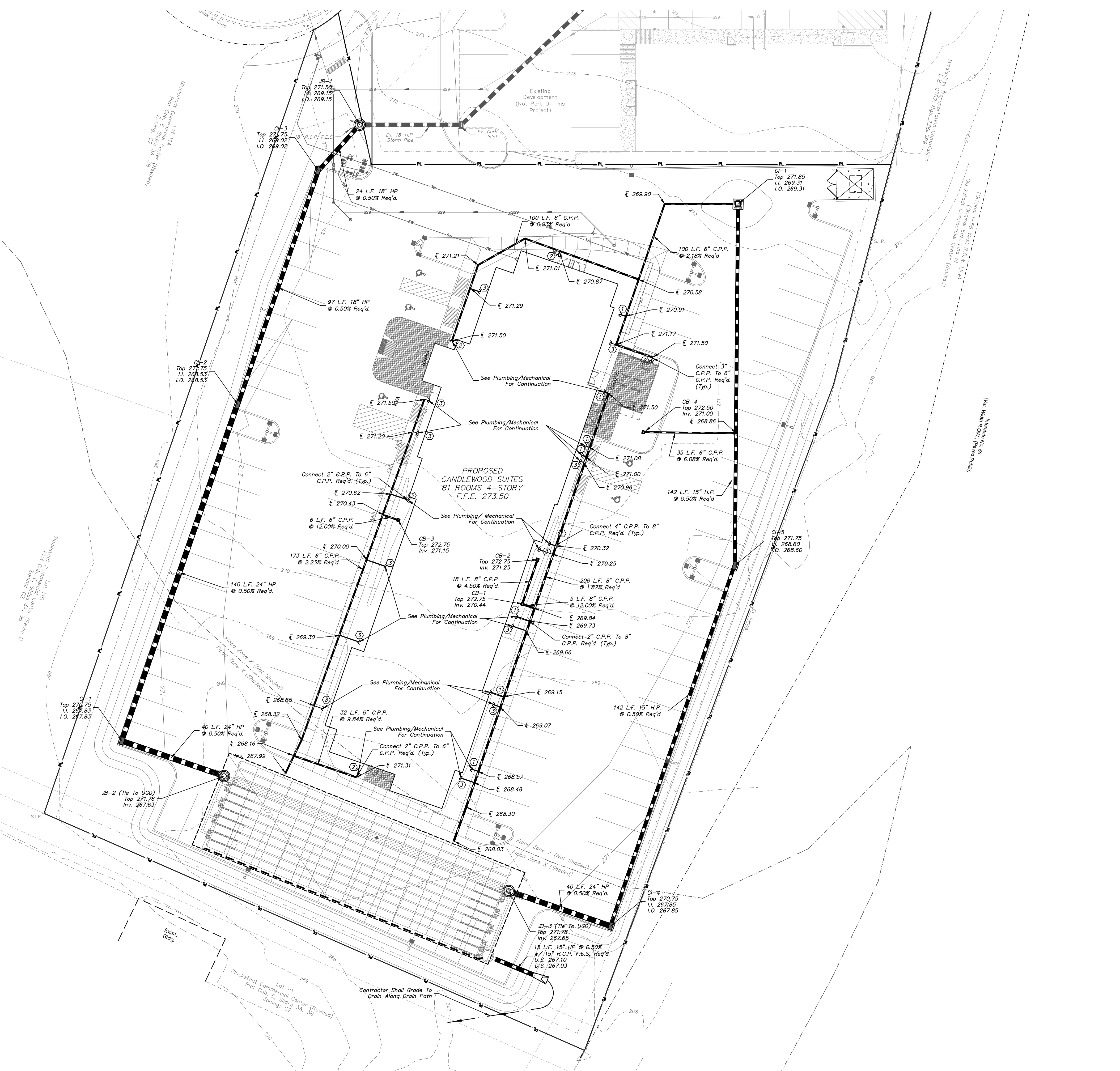
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ENGINEERING & SURVEYING, LLC
 101 Highpointe Court, Suite B
 Brandon, MS 39042
 601-827-7780
 www.benchmarkms.com

DATE:	4/5/24
CHECKED:	GAB
REF C/L:	
EG SURFACE:	
FG SURFACE:	

PROJECT LOCATION:
 DEES PLAZA
 MADISON COUNTY, MISSISSIPPI
 CLIENT:
 BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

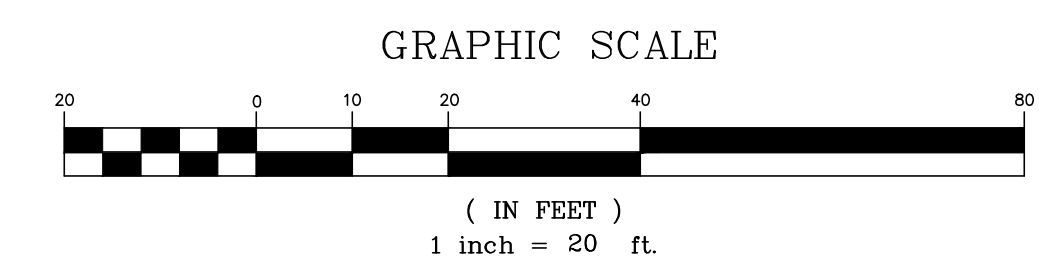
PROJECT:
CANDLEWOOD SUITES
 SHEET CONTENTS:
STORM DRAINAGE LAYOUT

SHEET NUMBER
7 of 16
 PROJECT NUMBER
B-7302



- LEGEND**
- ① 4" C.P.P. REQ'D. FOR CONNECTION TO DOWNSPOUT
 - ② 3" C.P.P. REQ'D. FOR CONNECTION TO DOWNSPOUT
 - ③ 2" C.P.P. REQ'D. FOR CONNECTION TO CONDENSATE LEADER

- NOTES:**
1. SEE NOTES ON STORM DRAIN DETAILS & PROJECT SPECIFICATIONS FOR MORE DETAILED INFORMATION ON INSTALLATION REQUIREMENTS.
 2. ALL EXISTING UTILITIES ARE SHOWN AS THEY WERE MARKED BY OTHERS AND SHALL BE CONSIDERED APPROXIMATE. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL AT 601-362-4374 FOR A LOCATE PRIOR TO BEGINNING CONSTRUCTION TO VERIFY LOCATIONS. CONTRACTOR SHALL POT-HOLE EXISTING UTILITY LINES IN AREAS WHERE PROPOSED UTILITIES (WATER, SEWER, STORM DRAIN) CROSS AND NOTIFY ENGINEER IMMEDIATELY IF CONFLICT IS DISCOVERED.
 3. NOT ALL UTILITY INFRASTRUCTURE REQUIRED OF THIS PROJECT IS SHOWN ON THIS SHEET FOR CLARITY PURPOSES. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CONTRACT DRAWINGS AND ALL THAT IS REQUIRED OF THEM.
 4. INVERT ELEVATIONS SHOWN ON THE PLANS FOR THE STORM DRAIN STRUCTURES AND CULVERTS REPRESENT THE FLOW LINE. CONTRACTOR TO ACCOUNT FOR PIPE OR STRUCTURE THICKNESS WHEN INSTALLING.
 5. THIS PARCEL IS LOCATED IN FLOOD ZONE X (NOT SHADED) AND FLOOD ZONE X (SHADED) ACCORDING TO FLOOD INSURANCE RATE MAP NO. 28090C0415F, COMMUNITY PANEL NO. 280228 0415 F, EFFECTIVE DATE: MARCH 17, 2010.
 6. CURB INLETS (GI-1 & GI-2) SHALL BE NYLOPLAST BASINS WITH 2'X3' DIAGONAL FRAME & GRATE.
 7. GRATE INLETS (GI-1) SHALL BE NYLOPLAST INLETS WITH 2'X2' HEAVY DUTY FRAME AND GRATE AND SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS FOR PROPOSED APPLICATIONS.
 8. PRECAST OR POURED IN PLACE STRUCTURES ARE ALLOWED BUT SHALL BE AT NO EXTRA COST TO THE OWNER.
 9. IT IS INTENDED THAT ALL GRATE INLETS BE SURROUNDED WITH AN 18" WIDE X 6" THICK CONCRETE APRON. THE CORNERS OF THE APRON SHALL BE 0.05'-0.10' HIGHER THAN THE INLET TOP.
 10. SLOPES THAT ARE GREATER THAN 3:1 SHALL RECEIVE SOLID SOD UNLESS OTHERWISE NOTED.
 11. ALL DISTURBED AREAS ARE TO BE REPAIRED TO AS GOOD AS THE ORIGINAL CONDITION OR BETTER. PICTURE DOCUMENTATION OF THESE AREAS SHALL BE PROVIDED BY THE CONTRACTOR PRIOR TO DISTURBING.
 12. ALL HP STORM PIPE SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR PROPOSED APPLICATION.
 13. CONTRACTOR SHALL TIE ROOF DRAIN LINES INTO MAINS USING TEE OR OTHER WATERTIGHT METHOD APPROVED BY ENGINEER.
 14. CATCH BASINS CB-1 & CB-2 SHALL BE 8" ADS IN-LINE DRAINS W/ 12"X12" DUCTILE IRON GRATE. CATCH BASIN CB-3 AND CB-4 SHALL BE 6" ADS IN-LINE DRAIN W/ 12"X12" DUCTILE IRON GRATE. CATCH BASINS SHALL BE FITTED WITH CAP STYLE REDUCER FOR GRATE INSTALLATION AS NEEDED. TEES AND FITTINGS SHALL BE AS REQUIRED BY MANUFACTURER.



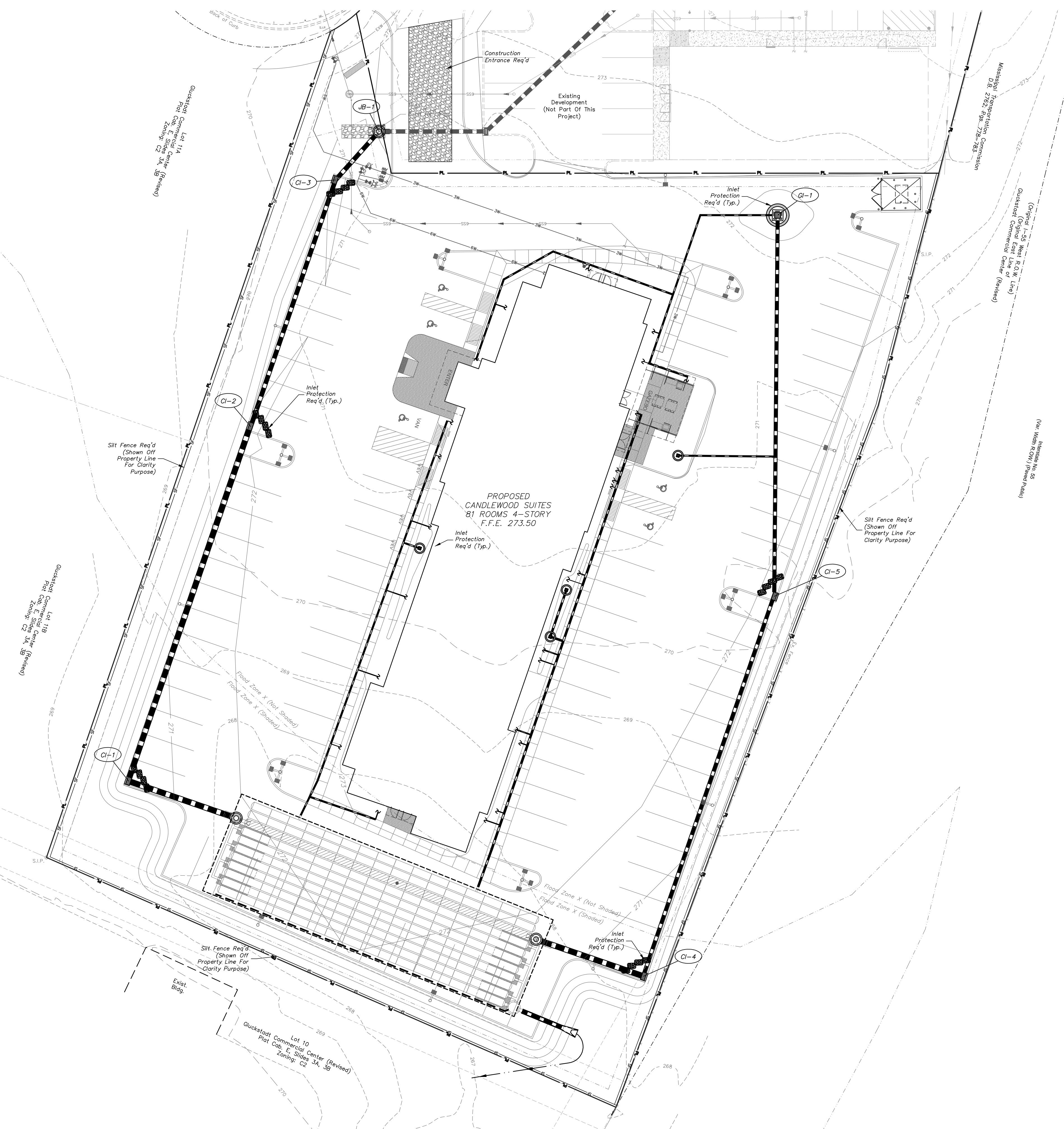
Contractor Shall Grade To Drain Along Drain Path

DATE:	4/5/24	DRAWN:	JH
CHECKED:	GAB	SCALE:	1" = 20'
REF C/L:		EC SURFACE:	
		FG SURFACE:	

PROJECT LOCATION:	DEES PLAZA MADISON COUNTY, MISSISSIPPI
CLIENT:	BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS

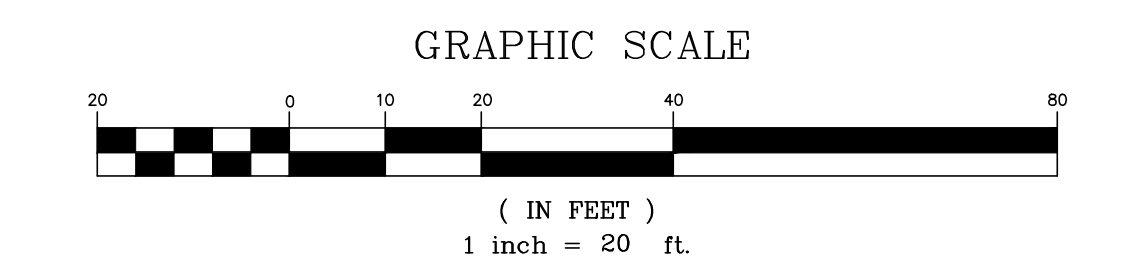
PROJECT:	CANDLEWOOD SUITES
SHEET CONTENTS:	EROSION CONTROL LAYOUT

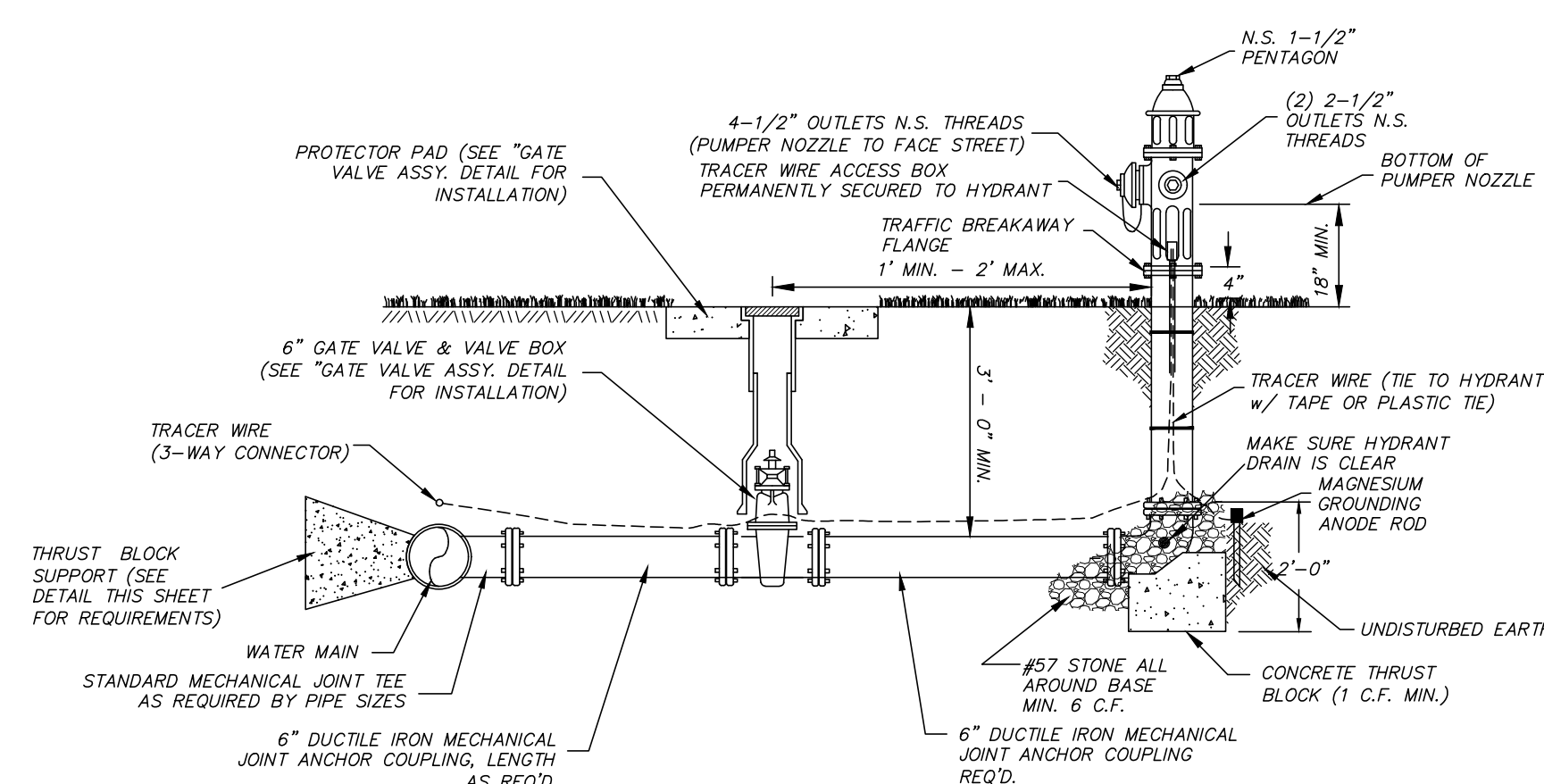
SHEET NUMBER	8 of 16
PROJECT NUMBER	B-7302



- CONSTRUCTION & EROSION CONTROL SEQUENCE SCHEDULE**
- THE SCHEDULE LAID OUT BELOW IS TO PROVIDE CLARIFICATION TO THE CONTRACTOR ON THE INTENDED ORDER OF CONSTRUCTION IN CONJUNCTION WITH THE REQUIRED EROSION CONTROL MEASURES OF THIS PROJECT AS SHOWN ON THIS SHEET AND OTHER CONTRACT DOCUMENTS.
1. INSTALL TEMPORARY CONSTRUCTION ENTRANCE.
 2. INSTALL SANITARY FACILITIES AND TRASH CONTAINERS.
 3. SET UP EQUIPMENT AND MATERIALS STAGING AREA IF NEEDED BY THE CONTRACTOR FOR PROJECT.
 4. INSTALL SILT FENCING ALONG THE DOWNSTREAM BOUNDARY OF ANY AREAS THAT WILL BE DISTURBED.
 5. BEGIN GRADING OPERATIONS TO GET THE PROJECT SITE TO ROUGH GRADE. PLACE ADDITIONAL TEMPORARY MEASURES AS REQUIRED DURING THE GRADING OPERATIONS TO CONTROL RUNOFF.
 6. BEGIN INSTALLING SITE UTILITIES SUCH AS SEWER, STORM DRAIN, WATER SERVICES, ETC.
 7. COMPLETE BUILDING PAD AND BEGIN INSTALLING CURB & PAVING OPERATIONS.
 8. FINE GRADE THE REMAINDER OF THE DISTURBED AREAS OF THE SITE.
 9. STABILIZE THE PROJECT SITE WITH PERMANENT SEED & MULCH OR PER LANDSCAPING PLAN AND INSTALL ANY OTHER PERMANENT EROSION CONTROL MEASURES THAT MAY NOT BE IN PLACE.
 10. REMOVE ALL TEMPORARY EROSION CONTROL MEASURES IN DRAINAGE BASINS ONCE IMPROVEMENTS REQ'D IN THESE PLANS HAS BEEN COMPLETED AND AREAS DISTURBED DURING INSTALLATION OF SUCH HAS BEEN STABILIZED WITHIN SAID BASIN WITH 90% VEGETATIVE COVER.

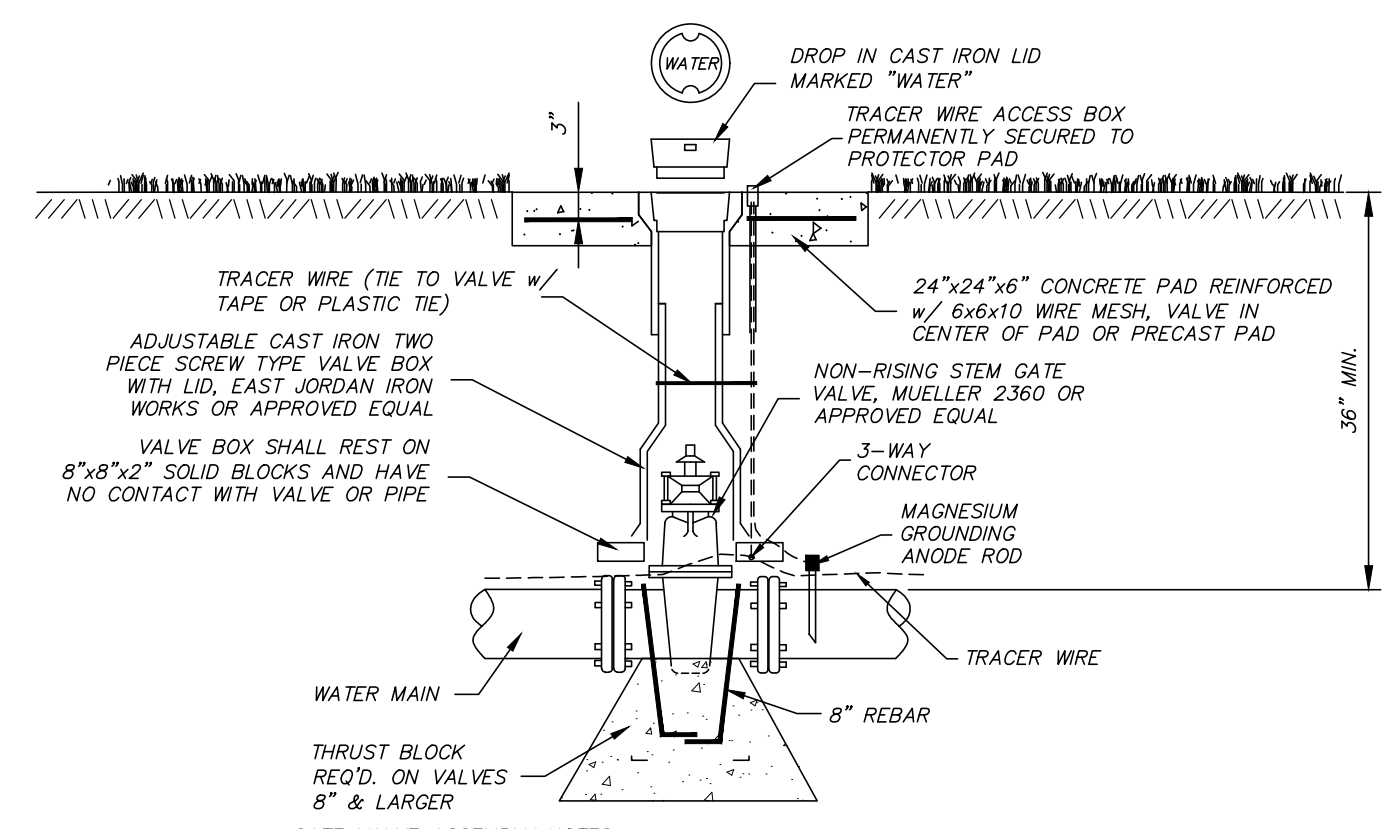
- EROSION CONTROL NOTES:**
1. ALL DISTURBED AREAS SHALL BE TREATED WITH PERMANENT SEED & MULCH (COMMON BERMUDA) ONCE SUCH HAS REACHED FINAL GRADE OR AS REQUIRED PER THE LANDSCAPING PLAN. REQUIREMENTS OF THE LANDSCAPING PLAN GOVERN. SHOULD THE CONSTRUCTION SCHEDULE NOT BE CONDUIVE TO PLANTING BERMUDA PER SPECIFICATIONS, THEN THE CONTRACTOR SHALL SUBMIT AN ALTERNATE SPECIES FOR APPROVAL.
 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COPY OF THE SMALL CONSTRUCTION NOTICE OF INTENT (SCNOI) AND FILL IN THE PRIME CONTRACTOR'S INFORMATION AND KEEP READILY AVAILABLE AT THE JOB SITE. ALL REQUIREMENTS OF THE SCNOI ARE THE CONTRACTOR'S RESPONSIBILITY INCLUDING BUT NOT LIMITED TO ALL REQUIRED INSPECTIONS, WEEKLY REPORTS AND MAINTENANCE OF THE SITE.
 3. S.C.N.O.I. COVERAGE SHALL BE TRANSFERRED TO SITE PROJECT CONTRACTOR ONCE PROJECT IS AWARDED. SUCH COVERAGE SHALL THEN BE TRANSFERRED TO GENERAL CONTRACTOR ONCE SITE PACKAGE REQUIREMENTS HAVE BEEN COMPLETED. THIS IS THE CONTRACTOR'S RESPONSIBILITY AND COPIES OF SUCH SHALL BE PROVIDED TO ENGINEER AND OWNER.
 4. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE IMPLEMENTED PRIOR TO STARTING ANY CONSTRUCTION ACTIVITIES THAT DISTURB EXISTING GROUND.
 5. CONTRACTOR IS TO EVALUATE ALL STORM WATER MANAGEMENT CONTROLS A MINIMUM OF ONCE PER WEEK AND AFTER RAINFALL EVENTS TO DETERMINE EFFECTIVENESS OF THE EROSION AND SILTATION CONTROL MEASURES. ADDITIONAL MEASURES TO BE INSTALLED AS NEEDED TO CONTROL SEDIMENT (ABSORBED). INSPECTION REPORTS TO BE FILLED OUT ONCE PER WEEK NOTING ALL ACTIONS (IF ANY) REQUIRED.
 6. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN AND REPAIR ALL TEMPORARY EROSION CONTROL MEASURES THROUGHOUT CONSTRUCTION. NO SEPARATE PAYMENT SHALL BE MADE FOR MAINTENANCE OR REPLACEMENT OF ANY TEMPORARY EROSION CONTROL MEASURES.
 7. TEMPORARY EROSION CONTROL MEASURES DEPICTED ON THIS DRAWING ARE MINIMUM REQUIREMENTS TO BE UTILIZED IN DEVELOPMENT OF THE SITE-SPECIFIC STORMWATER POLLUTION PREVENTION PLAN AND ARE NOT MEANT TO ADDRESS ALL OF THE REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT.
 8. IT IS THE INTENT OF THE SPECIFICATIONS THAT THE WORK SHALL PROCEED IN A MANNER AND SEQUENCE TO ENSURE THAT ESTABLISHMENT OF PERMANENT EROSION CONTROL ITEMS ARE ACCOMPLISHED IMMEDIATELY AFTER FINISH GRADING.
 9. EFFECTIVE USE OF TEMPORARY MEASURES, INCLUDING SEDIMENT BASINS, TEMPORARY SEEDING, ETC. SHALL BE MADE SO AS TO PREVENT OR MINIMIZE EROSION AND SILTATION UNTIL PERMANENT MEASURES ARE ESTABLISHED.
 10. CONTRACTOR TO CONTACT MISSISSIPPI ONE CALL @ 811 AT LEAST 48 HOURS BEFORE IMPROVEMENTS ARE MADE.
 11. CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES TO CONTROL SILTATION.
 12. SEE THE EROSION CONTROL DETAIL SHEET FOR MORE DETAIL ON THE INSTALLATION OF THE REQUIRED EROSION CONTROL MEASURES.
 13. ONCE THE PERMANENT EROSION CONTROL MEASURES ARE IN PLACE A FINAL SITE INSPECTION IS TO BE COORDINATED BY THE CONTRACTOR WITH THE ENGINEER AND THE OWNER. ONCE SITE MEETS ALL PARTIES SPECIFICATIONS THE CONTRACTOR WITH BE RELIEVED OF THE RESPONSIBILITIES OF THIS CONTRACT.
 14. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE EROSION CONTROL MEASURES SHOULD, TO THE EXTENT PRACTICABLE:
 - A. DIVERT UP-SLOPE WATER AROUND DISTURBED AREAS OF THE SITE
 - B. LIMIT THE EXPOSURE OF DISTURBED AREAS TO THE SHORTEST AMOUNT OF TIME POSSIBLE
 - C. MINIMIZE THE AMOUNT OF SURFACE AREA THAT MUST BE DISTURBED
 - D. IMPLEMENT BEST MANAGEMENT PRACTICES TO MITIGATE ADVERSE IMPACTS FROM STORM WATER RUNOFF
 - E. REMOVE SEDIMENT THAT WOULD CONTRIBUTE TO OR CAUSE ADVERSE IMPACTS TO STATE WATERS FROM STORM WATER BEFORE IT LEAVES THE SITE





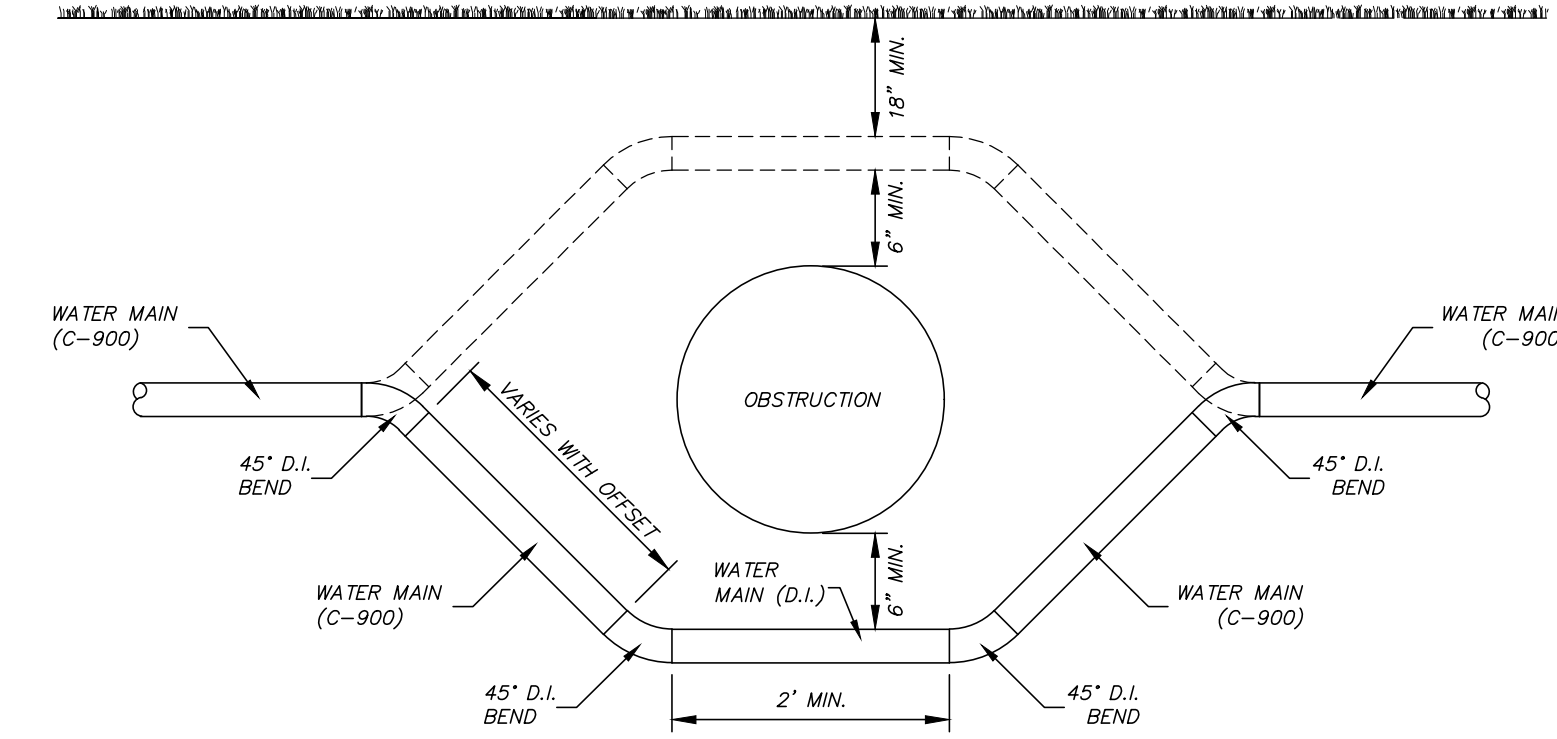
- FIRE HYDRANT ASSEMBLY NOTES:**
1. FIRE HYDRANTS SHALL BE PAINTED WHITE.
 2. ALL FIRE HYDRANT ASSEMBLIES TO INCLUDE GATE VALVES.
 3. CONTRACTOR TO USE MEGA-LUGS ON ALL RESTRAINED JOINTS.
 4. FIRE HYDRANT TO MATCH EXISTING (IF ANY) OR BE MUELLER A-423, OR APPROVED EQUAL (MUST BE APPROVED BY BEAR CREEK WATER ASSOCIATION).
 5. SEE GATE VALVE ASSEMBLY DETAIL FOR MORE INFORMATION ON INSTALLATION.
 6. ALL TRACER WIRE CONNECTORS SHALL BE AS REQUIRED BY THE CITY AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.
 7. ALL ITEMS SHOWN ON THIS DETAIL (INCLUDING VALVE) ARE ABSORBED IN FIRE HYDRANT ASSEMBLY ITEM.

FIRE HYDRANT ASSEMBLY



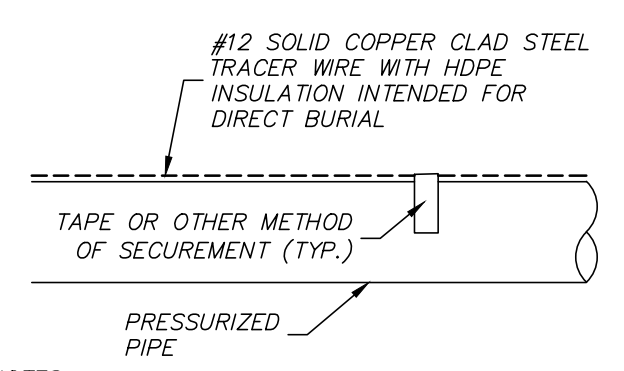
- GATE VALVE ASSEMBLY NOTES:**
1. GATE VALVE SHALL MATCH SIZE OF LINE ON WHICH IT IS INSTALLED UNLESS OTHERWISE NOTED.
 2. VALVE BOX SHALL BE SET PLUMB AND CENTERED ABOVE THE VALVE NUT.
 3. THRUST BLOCKS REQUIRED ON ALL GATE VALVES AND SHALL BE PLACED ON TAMPED SOIL MEETING SPECIFICATIONS FOR BEDDING MATERIAL OR ON CRUSHED LIMESTONE.
 4. ALL TRACER WIRE CONNECTORS SHALL BE AS REQUIRED BY THE CITY AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.
 5. ALL BOLTS SHALL BE POLY WRAPPED TO REMAIN FREE OF CONCRETE AND SHALL BE FULLY ACCESSIBLE.
 6. CONCRETE PROTECTOR PADS REQUIRED ON ALL VALVES INCLUDING HYDRANT VALVES (ABSORBED).

GATE VALVE ASSEMBLY



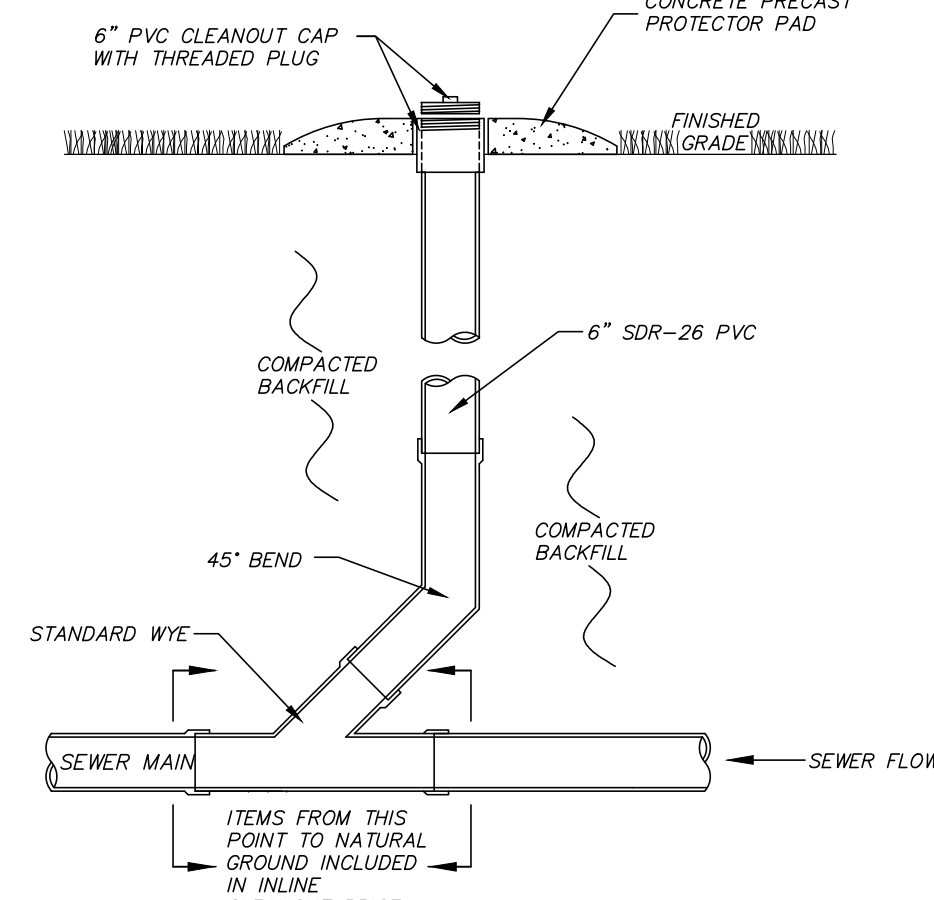
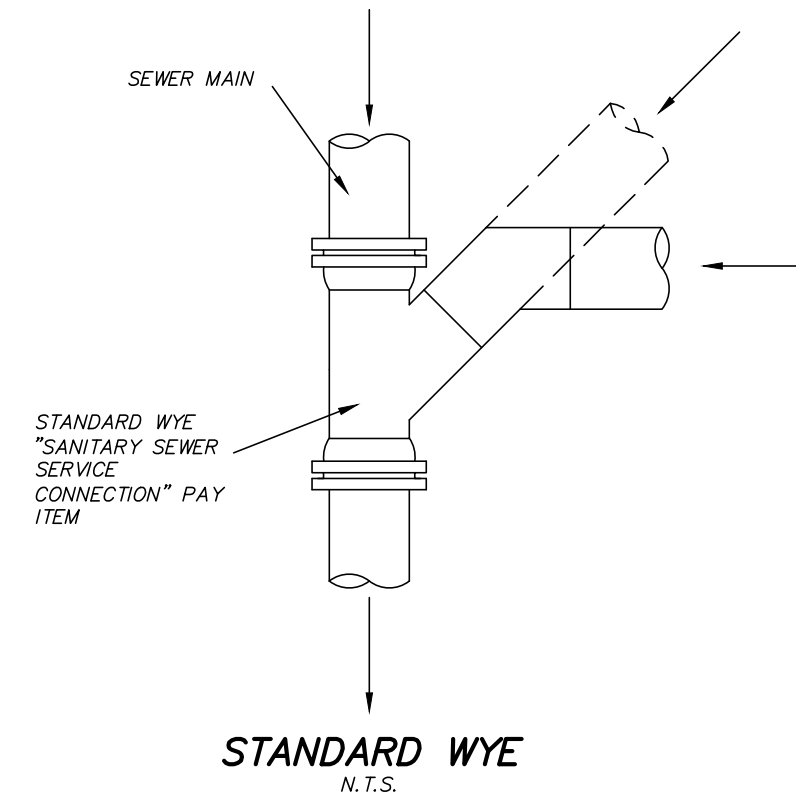
- WATER LINE OBSTRUCTION NOTES:**
1. CONTRACTOR TO FOLLOW CLEARANCE REQUIREMENTS IN THE SPECIFICATIONS FOR WATER, STORM DRAIN AND SANITARY SEWER LINE CROSSINGS. WHEN THE WATER LINE MUST CROSS UNDER THE OBSTRUCTION THE PIPE SHALL BE DUCTILE IRON, CASED WITH STEEL CASING, OR FULLY ENCASED WITH CONCRETE.
 2. WATER LINE TO PASS OVER OBSTRUCTION IF CLEARANCE REQUIREMENTS CAN BE MET.
 3. CONTRACTOR TO FOLLOW REQUIREMENTS IN THE SPECIFICATIONS FOR THE PIPE FITTINGS REQUIRED TO DODGE OBSTRUCTION.
 4. SAME SPECIFICATIONS APPLY FOR SANITARY SEWER FORCE MAIN OBSTRUCTIONS.
 5. WORK & MATERIALS REQUIRED FOR WATER LINE OBSTRUCTION SHALL BE AN ABSORBED COST.

TYPICAL WATER LINE OBSTRUCTION DETAIL

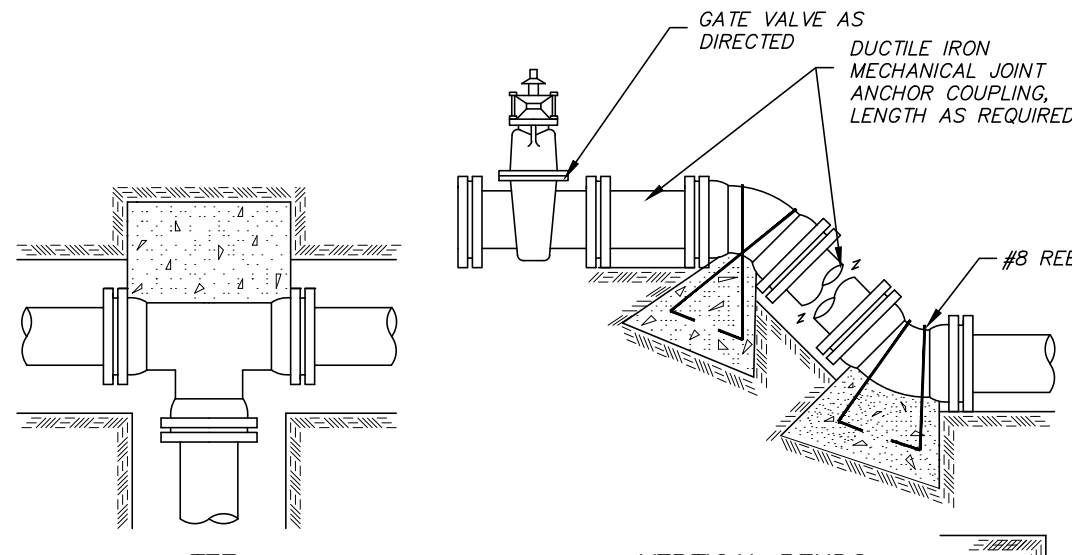


- TRACER WIRE NOTES:**
1. TRACER WIRE SHALL BE ABSORBED IN THE PER FOOT COST OF THE PRESSURIZED LINE.
 2. TRACER WIRE COLOR SHALL BE BLUE FOR WATER CONSTRUCTION.
 3. TRACER WIRE SHALL BE SECURED TO THE TOP OF THE PIPE WITH TAPE OR OTHER METHODS.
 4. METHODS OF SECURING WIRE SHALL BE INSTALLED AT INTERVALS AS NECESSARY TO MAINTAIN WIRE LOCATION DURING BACKFILL AND COMPACTION.
 5. ALL TRACER WIRE SHALL BE INSTALLED AS A COMPLETE SYSTEM, COMPLETE WITH CONNECTORS, MAGNESIUM ANODE GROUND RODS, AND TERMINAL STATIONS AT EACH FIRE HYDRANT, WATER VALVE, AND TERMINATION LOCATIONS.
 6. TRACER WIRE SHALL BE COPPERHEAD 1230-HS OR APPROVED EQUAL BY CITY.
 7. CONNECTORS MAY BE PRO-TRACE TW OR COPPERHEAD. ALL OTHER ACCESSORIES SHALL BE COPPERHEAD OR APPROVED EQUAL BY THE CITY.
 8. ALL CONNECTIONS SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.
 9. TRACER WIRE WILL BE TESTED BY CITY AND ALL AREAS NOT ABLE TO BE LOCATED USING TYPICAL LOW FREQUENCY LINE TRACING EQUIPMENT SHALL BE REPAIRED BY CONTRACTOR PRIOR TO ACCEPTANCE.
 10. ALL TRACER WIRE CONNECTORS SHALL BE PRO-TRACE TW AND SHALL BE WATERTIGHT TO PROVIDE ELECTRICAL CONDUCTIVITY.

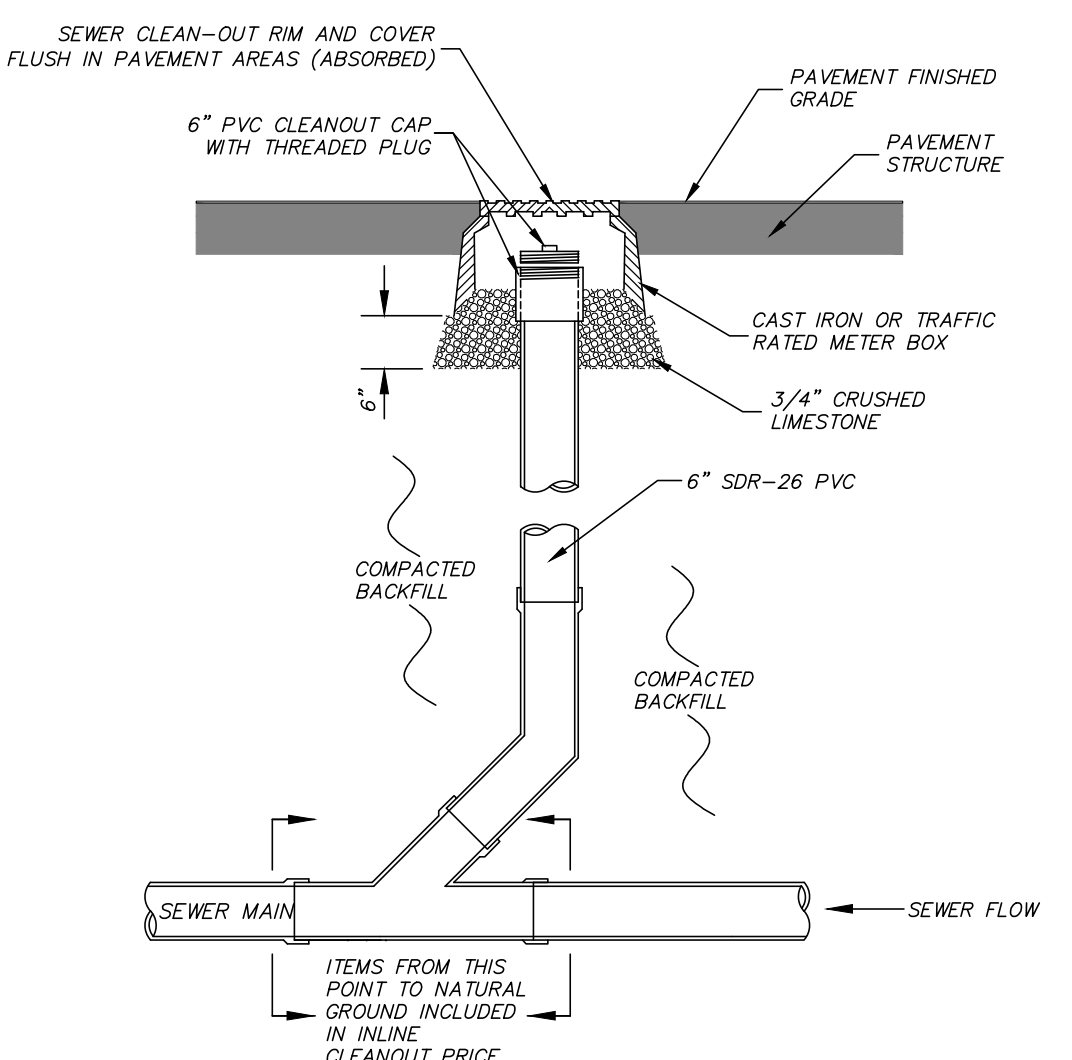
TRACER WIRE



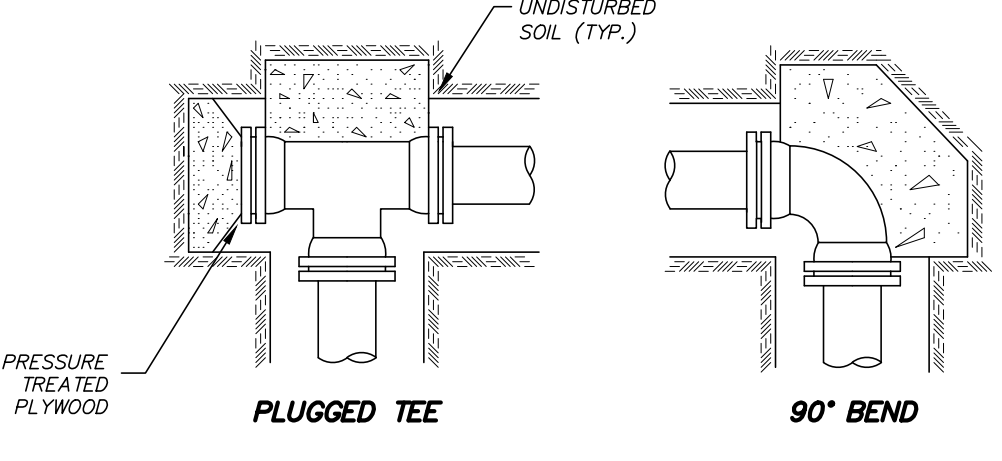
INLINE CLEANOUT - GRASSED AREA



- WATER LINE OBSTRUCTION NOTES:**
1. CONTRACTOR TO FOLLOW CLEARANCE REQUIREMENTS IN THE SPECIFICATIONS FOR WATER, STORM DRAIN AND SANITARY SEWER LINE CROSSINGS. WHEN THE WATER LINE MUST CROSS UNDER THE OBSTRUCTION THE PIPE SHALL BE DUCTILE IRON, CASED WITH STEEL CASING, OR FULLY ENCASED WITH CONCRETE.
 2. WATER LINE TO PASS OVER OBSTRUCTION IF CLEARANCE REQUIREMENTS CAN BE MET.
 3. CONTRACTOR TO FOLLOW REQUIREMENTS IN THE SPECIFICATIONS FOR THE PIPE FITTINGS REQUIRED TO DODGE OBSTRUCTION.



INLINE CLEANOUT - PAVED AREA



- NOTES:**
1. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH.
 2. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
 3. POUR THRUST BLOCKS AGAINST UNDISTURBED SOIL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE SOIL AND EXTEND THRUST BLOCKS TO UNDISTURBED SOIL.
 4. IN BACK FILLING, ANY ROCK ENCOUNTERED SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIAL.
 5. WRAP ALL FITTINGS WITH 8-MIL POLYETHYLENE ENCASEMENT.
 6. BACK FILL MATERIAL SHALL NOT INCLUDE ROCK OR BOULDERS.
 7. ALL CONCRETE SHALL BE MINIMUM 2500 PSI.
 8. THRUST BLOCKS SHALL BE AN ABSORBED COST.
 9. MEGA LUG RESTRAINS OR APPROVED EQUAL REQUIRED ON ALL MECHANICAL JOINT FITTINGS.

TYPICAL THRUST BLOCK

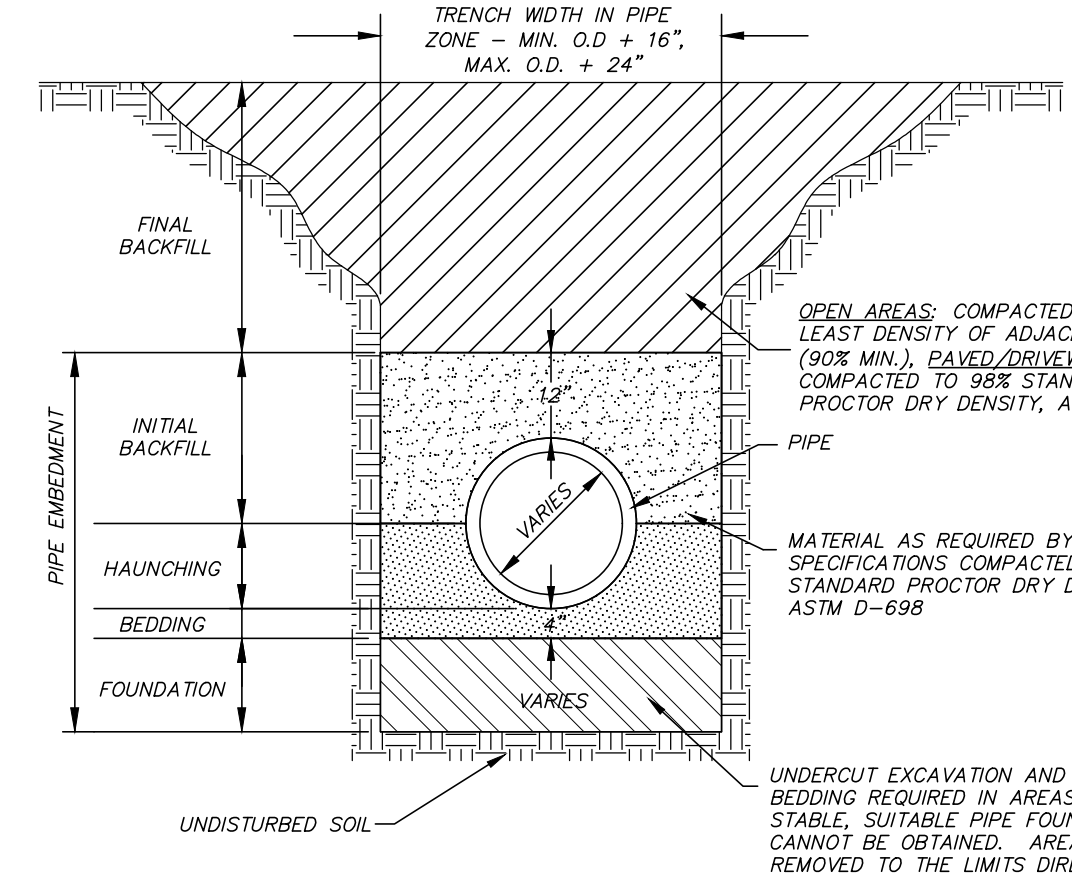
TYPICAL CROSS SECTION

Labels include: 1'-6", 6", 8", 10", 12", 14", 16" DIAMETERS; 2'-0", 16", 18", 20", 24" DIAMETERS; 3'-0", 30", 36", 42" DIAMETERS.

NORMAL PIPE DIAMETER (IN.)	BEARING AREA IN SQ. FT.				
	DEAD END, TEE, PLUG	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
4" OR LESS	2	2	2	1	1
6	3	4	3	2	2
8	5	7	4	2	2
10	8	12	6	3	3
12	12	16	9	5	3
14	14	18	11	6	4
16	16	20	12	7	6

4" OR LESS	VERTICAL BENDS				
6	-	-	8.0(22)	4.0(15)	4.0(15)
8	-	-	14.0(52)	6.0(22)	4.0(15)
10	-	-	27.0(71)	9.0(33)	6.0(22)
12	-	-	46.0(21)	16.0(67)	7.5(30)
14	-	-	68.0(23)	22.0(80)	9.0(33)
16	-	-	90.0(31)	40.0(15)	14.0(52)
16	-	-	90.0(31)	52.0(19)	18.0(67)

VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)



- TYPICAL TRENCH NOTES:**
1. UNDERCUT EXCAVATION SHALL BE REQUIRED AS DIRECTED BY ENGINEER IF MATERIAL AT PLANNED GRADE WILL NOT PROVIDE STABLE TRENCH BOTTOM FOR PIPE LAYING. COST FOR REMOVAL AND DISPOSAL SHALL BE AN ABSORBED COST.
 2. FOUNDATION MATERIAL SHALL BE PLACED AS DIRECTED BY ENGINEER AND SHALL BE AN ABSORBED COST.
 3. IF CONTRACTOR PROPOSES TO USE NATIVE MATERIAL FOR PIPE EMBEDMENT AND/OR FINAL BACKFILL, CONTRACTOR SHALL PROVIDE TEST RESULTS PER SPECIFICATIONS TO ENGINEER STATING WHETHER NATIVE MATERIAL MEETS PROJECT SPECIFICATIONS FOR USE AS SUCH. IF IT DOES NOT MEET SPECIFICATION, THEN CONTRACTOR SHALL PROVIDE MATERIAL FOR SAID PURPOSES AND SPOIL EXCESS MATERIAL AT NO ADDITIONAL COST TO THE OWNER.
 4. NATIVE MATERIAL IN OPEN AREAS UNLESS OTHERWISE DIRECTED BY THE ENGINEER, OR SELECT MATERIAL IN TRENCHES CONSTRUCTED UNDER OR WITHIN 5' OF ROADWAYS, CURBED OR PAVED AREAS. MATERIAL SHALL EXTEND 5' BEYOND THE EDGE OF PAWING STRUCTURES.
 5. ABSORBED COST IN EITHER CASE MENTIONED.
 6. TRENCH SETTLEMENT REPAIR IS THE CONTRACTOR'S RESPONSIBILITY DURING WARRANTY PERIOD.
 7. DENATURING OF ANY TRENCH FOR ANY REASON IS THE RESPONSIBILITY OF THE CONTRACTOR AT NO EXTRA COST TO THE OWNER.

TYPICAL TRENCH DETAIL FOR WATER AND/OR SANITARY SEWER LINES

REVISIONS:

DATE	BY	DESCRIPTION
4/5/24	GAB	SCALE: -

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PROJECT LOCATION: DEES PLAZA, MADISON COUNTY, MISSISSIPPI
CLIENT: BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT: CANDLEWOOD SUITES
SHEET CONTENTS: WATER & SANITARY SEWER SYSTEM DETAILS

SHEET NUMBER: 9 of 16
PROJECT NUMBER: B-7302

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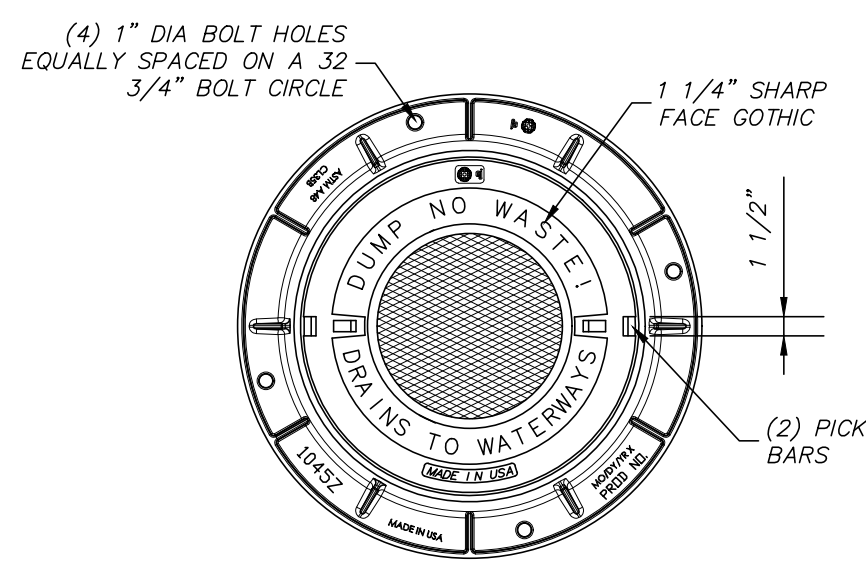
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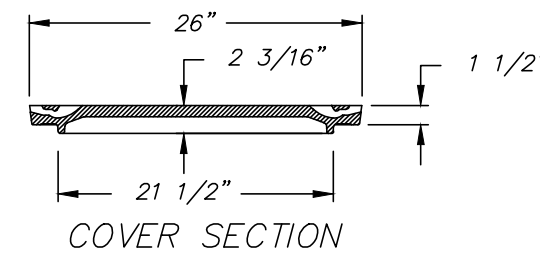
SHEET CONTENTS:
STORM DRAIN DETAILS

SHEET NUMBER
10 of 16

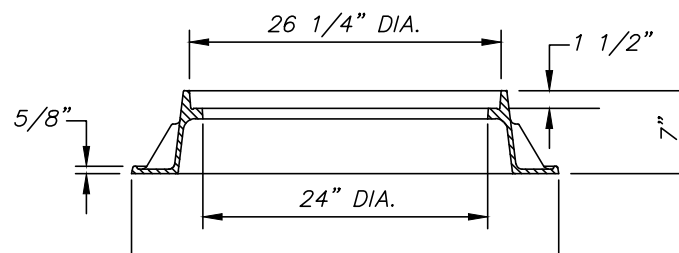
PROJECT NUMBER
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FRAME & COVER PLAN VIEW



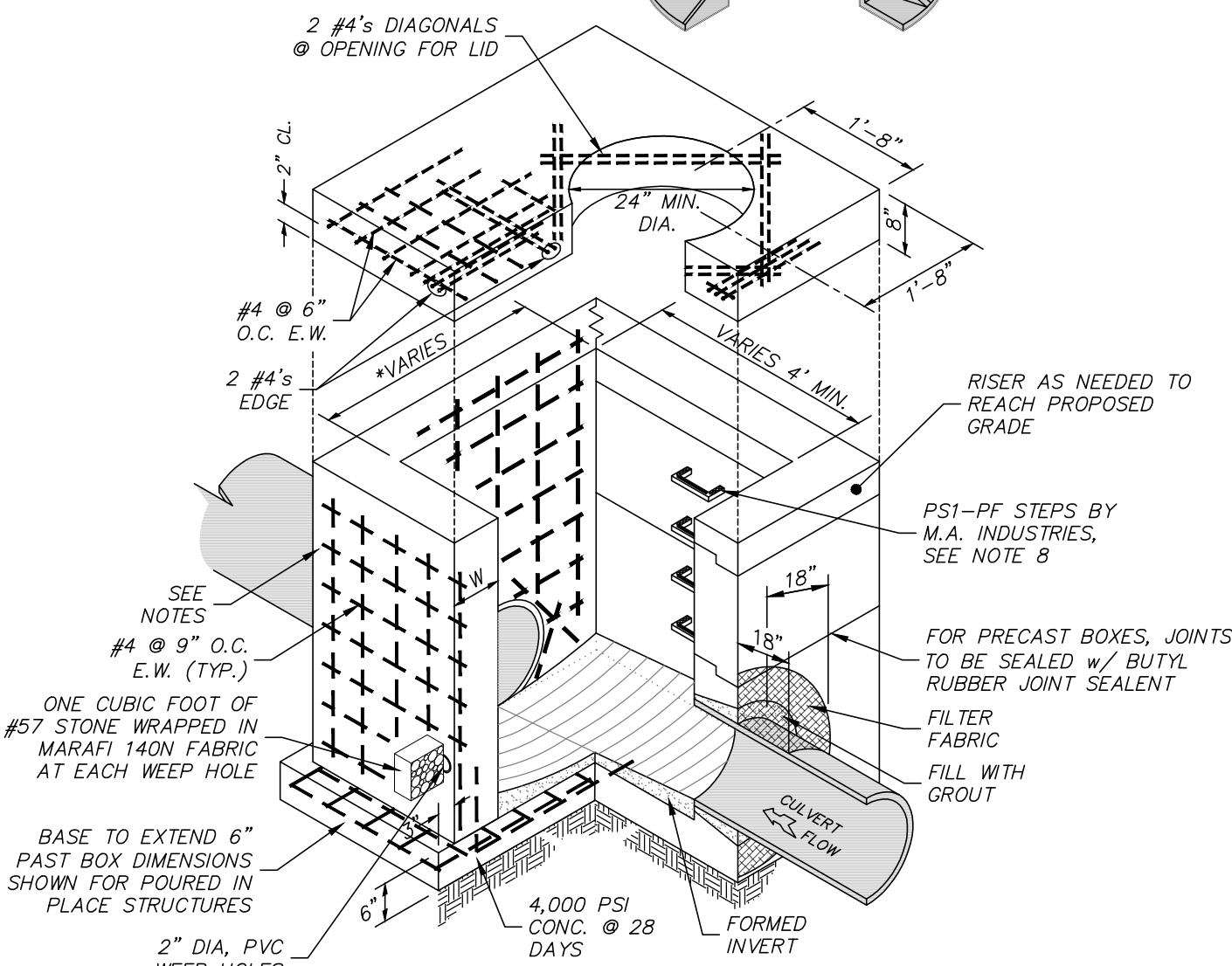
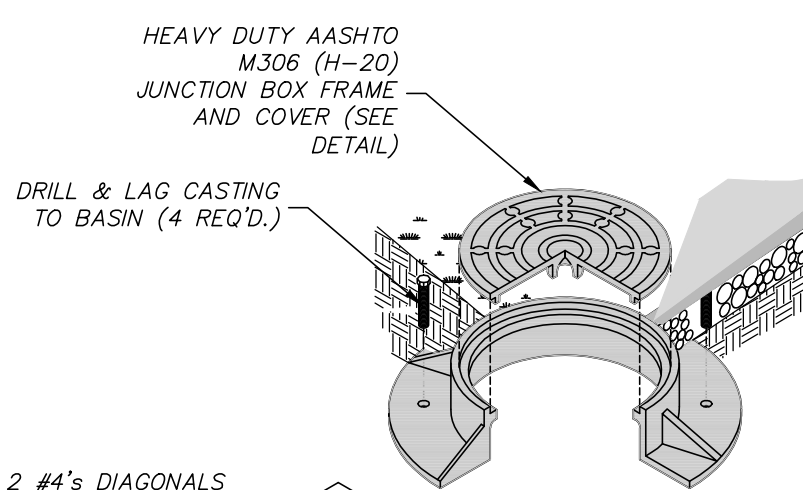
COVER SECTION



FRAME SECTION

NOTE: FRAME & COVER SHOWN IS EAST JORDAN IRON WORKS 10452 FRAME & 1040A COVER ASSEMBLY. ALTERNATE FRAME AND COVER WILL BE CONSIDERED BUT MUST HAVE A 24" MINIMUM OPENING, MANUFACTURED AND TESTED IN ACCORDANCE WITH AASHTO M306 FOR TRAFFIC SERVICE, HAVE PICKBARS OF HOLES FOR COVER REMOVAL, & MEET OTHER SPECIFICATIONS OF THE FRAME AND COVER SHOWN.

JUNCTION BOX FRAME AND COVER

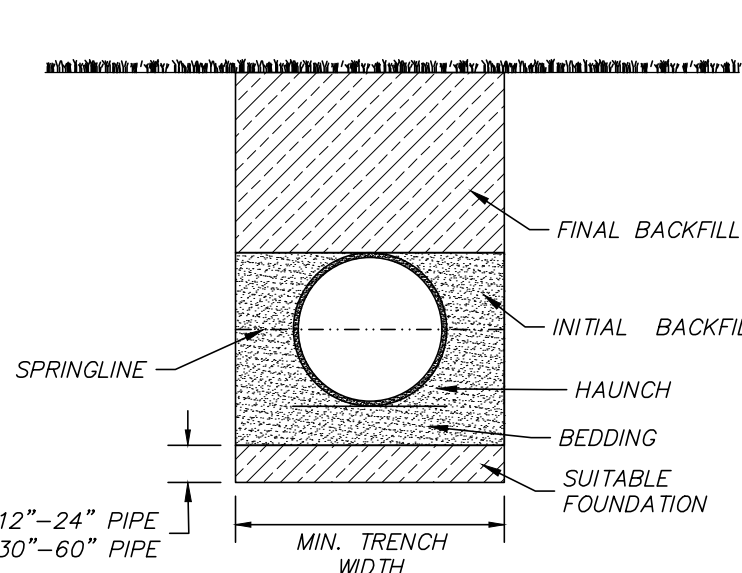


NOTE: WALL THICKNESS, "W", FOR PRECAST BOXES SHALL BE 5" MIN., FOR POURED IN PLACED SHALL BE 6" MIN.

JUNCTION BOX NOTES:

- BOXES MAY BE PRECAST IF ELEVATIONS ALLOW, POURED IN PLACE (4000 PSI 28 DAY COMPRESSIVE STRENGTH) OR NYLOPLAST. PRECAST MANHOLES WITH CONE TOPS MAY BE USED FOR JUNCTION BOX IF THE PIPE SIZES ALLOW.
- WIDTHS AND DEPTHS OF CATCH BASINS DETERMINED BY PIPE SIZES AND ANGLES AND CASTINGS TO BE USED. A MINIMUM OF 6" FROM THE INSIDE EDGE OF THE PIPE TO THE INSIDE EDGE OF THE WALL IS REQUIRED.
- CONTRACTOR TO ENSURE THAT WATER IS NOT ALLOWED TO POND BEHIND THE INLET BOXES DURING CONSTRUCTION.
- ON PRECAST CONCRETE BOXES THE LIFT HOLES ON EACH SECTION TO BE SEALED WATERTIGHT WITH NONSHRINK GROUT INSIDE AND OUT.
- GROUT FOR JOINING PIPE TO PRECAST UNITS WILL BE A COMMERCIAL, NON-SHRINK, MASONRY GROUT MEETING MDOT SPECIFICATIONS. ALL VOIDS SHALL BE FILLED WITH PIECES OF BLOCKS OR BRICKS PRIOR TO GROUTING. GROUTING REQUIRED INSIDE AND OUT. FILTER CLOTH SHALL SURROUND EACH OUTSIDE PIPE CONNECTION TO BOX A MINIMUM OF 18" ON WALL OF BOX AND ALONG PIPE. PIPE CONNECTIONS TO INLETS SHALL NOT BE BACKFILLED WITHOUT CITY'S DESIGNER PRIOR INSPECTION AND APPROVAL.
- BOXES SHALL HAVE FORMED INVERTS OUT OF NON-SHRINK GROUT SLOPING TO DRAIN TO OUTLET CULVERT.
- STEPS REQ'D. IN STRUCTURES GREATER THAN 48" IN DEPTH. FIRST STEP TO BE 18" FROM THE BOTTOM WITH 12" SPACING BETWEEN REMAINING STEPS.
- PRECAST BOXES SHALL BE POURED IN SECTIONS AS NEEDED AND RECOMMENDED BY THE MANUFACTURER TO GET TO DESIRED ELEVATION.
- BOX WIDTH WILL VARY DEPENDENT ON THE SIZE OF THE PIPES ENTERING AND LEAVING THE BOX. IT IS UP TO THE CONTRACTOR/MANUFACTURER TO DETERMINE SIZE OF BOX.
- JUNCTION BOXES SHALL BE MANUFACTURED OR POURED SO THAT THE ROUND MH LID IS THE ONLY PART OF THE STRUCTURE THAT IS VISIBLE ONCE FINAL GRADING HAS BEEN DONE. CONTRACTOR SHALL INSTALL RISERS AS NEEDED TO ENSURE THAT A MINIMUM OF 6" OF SOIL CAN BE PLACED ON TOP OF THE BOX TO COVER IT IN GRASSED AREAS AND 4" OF SOIL PLUS PAVING STRUCTURE IN PAVED AREAS.
- ALL ITEMS SHOWN ON THIS DETAIL INCLUDING FRAME AND COVER AND OTHER INCIDENTALS TO PROVIDE OWNER WITH COMPLETE INSTALLATION AND CONNECTION OF PIPING SHALL BE INCLUDED IN THE PER EACH PAY ITEM "JUNCTION BOX".

JUNCTION BOX



HP STORM TRENCH INSTALLATION

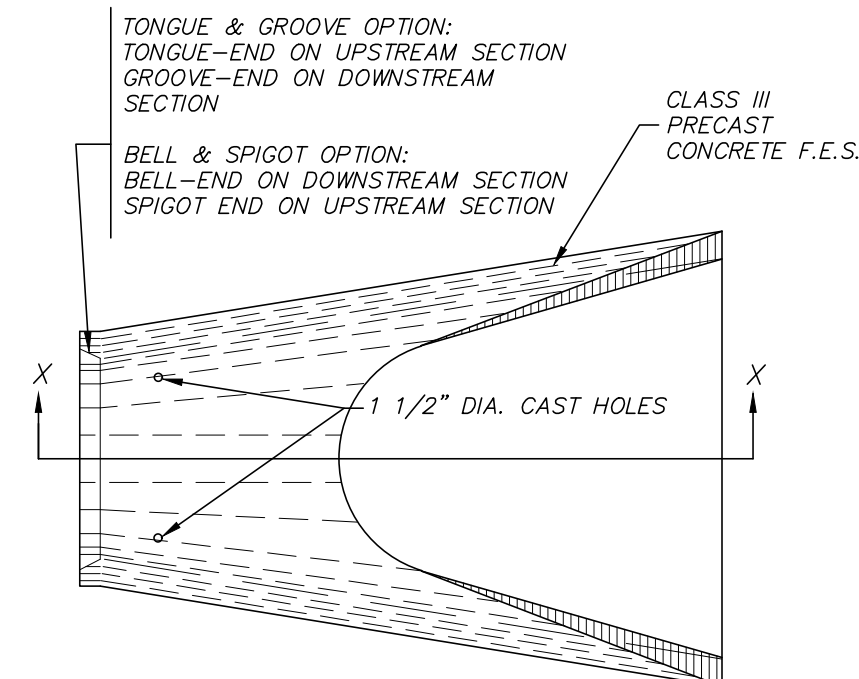
RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
60"	96"

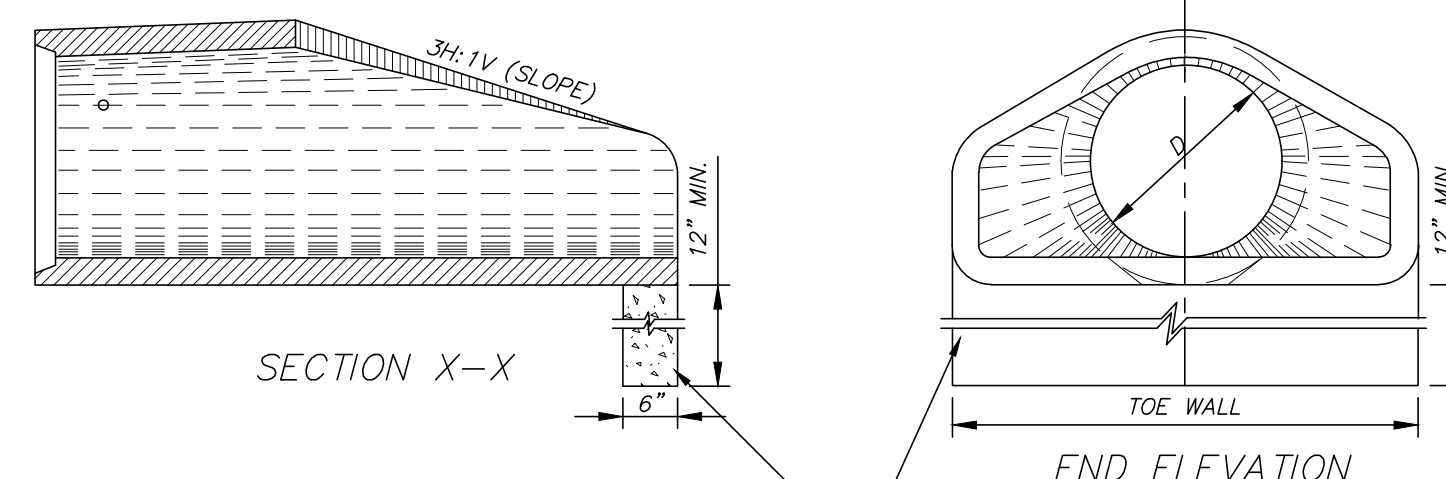
HP STORM TRENCH INSTALLATION NOTES:

- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2921, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS". LATEST EDITION, WITH THE EXCEPTION THAT THE INITIAL BACKFILL MAY EXTEND TO THE CROWN OF THE PIPE. SOIL CLASSIFICATIONS ARE PER THE LATEST VERSION OF ASTM D2321, CLASS I/IV MATERIALS (MH, CH) AS DEFINED IN PREVIOUS VERSIONS OF ASTM D2321 ARE NOT APPROPRIATE BACKFILL MATERIALS.
- MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
- FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
- BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. COMPACTION SHALL BE A MINIMUM OF 95% UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 12"-24" DIAMETER PIPE, 6" FOR 30"-60" DIAMETER PIPE. THE MIDDLE 1/3 BENEATH THE PIPE INVERT SHALL BE LOOSELY PLACED.
- INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING TO THE CROWN OF THE PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION. COMPACTION SHALL BE A MINIMUM OF 95% TO THE SPRINGLINE OF THE PIPE AND 90% TO THE CROWN OF THE PIPE.
- FINAL BACKFILL: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREA) IS 12" FROM THE TOP OF THE PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, CLASS I OR II MATERIAL COMPACTED TO 85% SPD AND CLASS III COMPACTED TO 95% SPD IS REQUIRED. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.
- MAXIMUM FILL HEIGHTS SHALL NOT EXCEED MANUFACTURER'S RECOMMENDATION.

HP STORM TRENCH INSTALLATION



PLAN OF DOWNSTREAM END



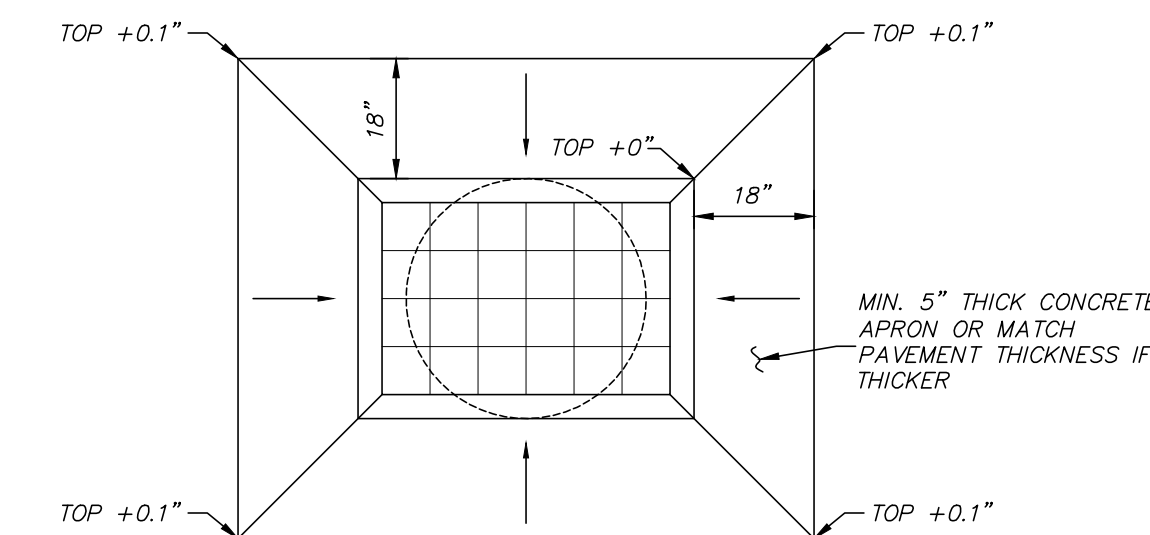
SECTION X-X

END ELEVATION

CONCRETE FLARED END SECTION NOTES:

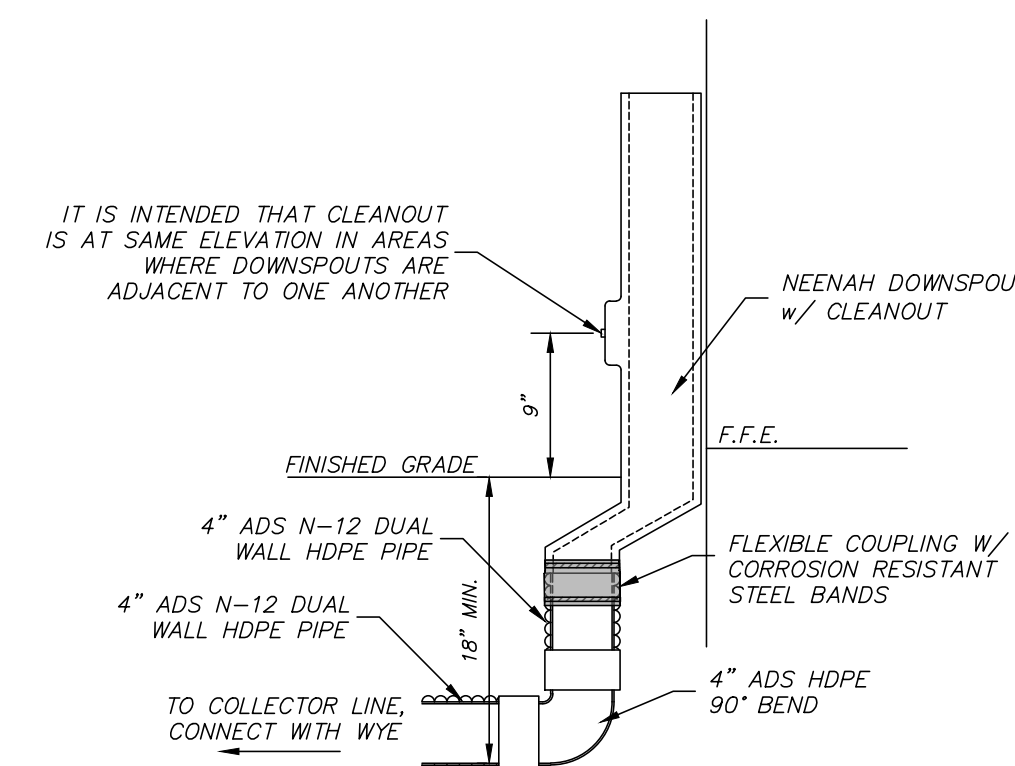
- ALL FLARED END SECTIONS SHALL BE PRECAST STRUCTURES MADE IN ACCORDANCE WITH THE REQUIREMENTS OF MDOT STANDARD DETAIL WORKING NUMBER FE-1, SHEET 6530 FOR CLASS III CONCRETE ROUND PIPE AND WORKING NUMBER FE-1A, SHEET 6531 FOR CLASS III CONCRETE ARCH PIPE.
- ALL LIFT HOLES SHALL BE SEALED WITH NON-SHRINK GROUT PER MDOT SPECIFICATIONS FOR SEALING CONCRETE PIPE.
- TOE WALL REQUIRED ON ALL FLARED END SECTIONS AND SHALL RUN FULL WIDTH OF FLARED END SECTION.
- CONCRETE FLARED END SECTIONS PLACED AT CONNECTION TO HP PIPE SHALL BE DOUBLE WRAPPED FULLY W/ FILTER CLOTH AND SECURED WITH A CONCRETE COLLAR CENTERED ON THE JOINT PER THE CONCRETE COLLAR DETAIL OR CONNECTED W/ DISSIMILAR MARMAC COUPLER (SHOWN ON THIS SHEET). COST FOR SUCH SHALL BE ABSORBED IN THE FLARED END SECTIONS PAY ITEM.

CONCRETE FLARED END SECTION



TYPICAL CONCRETE APRON

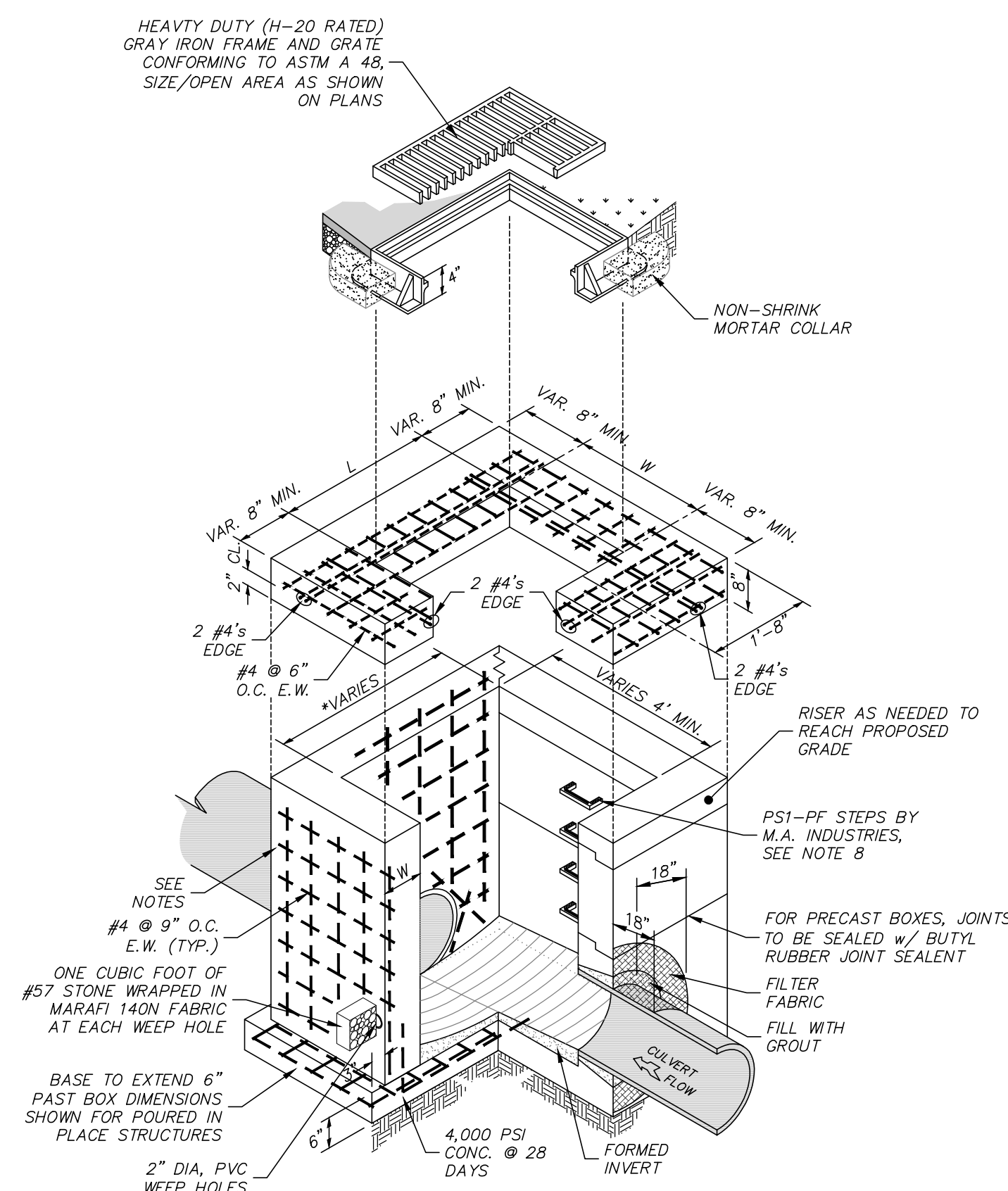
NOTE: CONCRETE APRON SHALL BE NON-REINFORCED PORTLAND CEMENT CONCRETE AND SHALL HAVE A MINIMUM 28-DAY FLEXURAL STRENGTH OF 650 PSI AND A COMPRESSIVE STRENGTH OF 4,000 PSI.



NOTES:

- CONTRACTOR SHALL ADJUST FLOWLINE ELEVATION AS NEEDED TO AVOID CONFLICTS WITH OTHER UTILITIES OR PAVING.
- ALL CONNECTIONS SHALL BE MADE WATER TIGHT.

TYPICAL DOWNSPOUT CONNECTION DETAIL

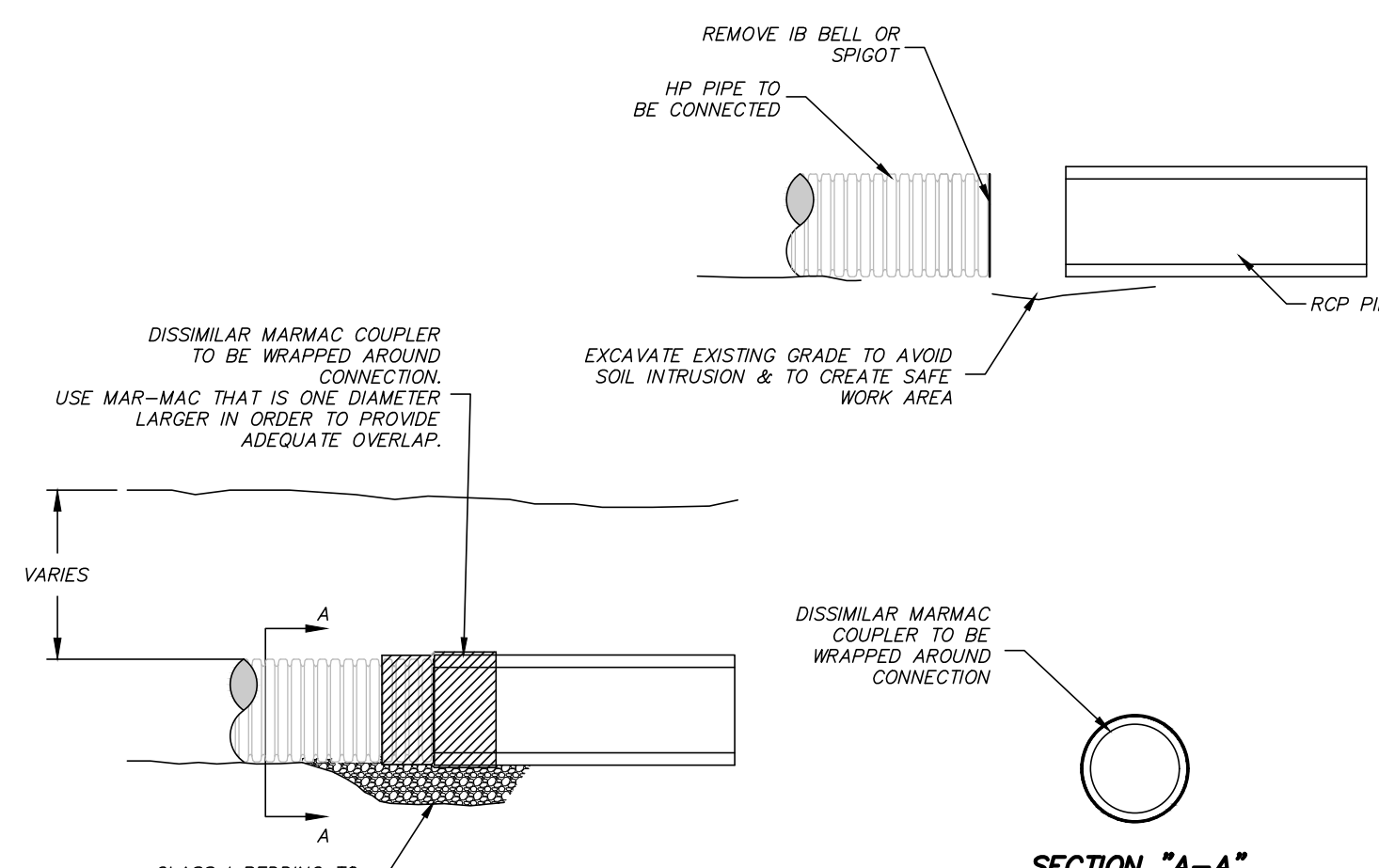


NOTE: WALL THICKNESS, "W", FOR PRECAST BOXES SHALL BE 5" MIN., FOR POURED IN PLACED SHALL BE 6" MIN.

GRATE INLET NOTES:

- "L" AND "W" DIMENSIONS WILL VARY DEPENDING ON THE TYPE OF CASTING SPECIFIED ON THE DRAWINGS. IT IS INTENDED THAT THE FRAME BE CENTERED ON THE BOX UNLESS NOTED OTHERWISE.
- BOXES MAY BE PRECAST IF ELEVATIONS ALLOW OR POURED IN PLACE (4000 PSI 28 DAY COMPRESSIVE STRENGTH). PRECAST MANHOLES WITH CONE TOPS MAY BE USED FOR GRATE INLETS IF THE REQUIRED GRATE AND PIPE SIZES ALLOW.
- WIDTHS AND DEPTHS OF CATCH BASINS DETERMINED BY PIPE SIZES AND ANGLES AND CASTINGS TO BE USED. A MINIMUM OF 12" FROM THE OUTSIDE EDGE OF THE PIPE TO THE INSIDE EDGE OF THE WALL IS REQUIRED.
- CONTRACTOR TO ENSURE THAT WATER IS NOT ALLOWED TO POND BEHIND THE INLET BOXES DURING CONSTRUCTION.
- ON PRECAST CONCRETE BOXES THE LIFT HOLES ON EACH SECTION TO BE SEALED WATERTIGHT WITH NON-SHRINK GROUT INSIDE AND OUT.
- GROUT FOR JOINING PIPE TO PRECAST UNITS WILL BE A COMMERCIAL, NON-SHRINK, MASONRY GROUT MEETING MDOT SPECIFICATIONS. ALL VOIDS SHALL BE FILLED WITH PIECES OF BLOCKS OR BRICKS PRIOR TO GROUTING. GROUTING REQUIRED INSIDE AND OUT. FILTER CLOTH SHALL SURROUND EACH OUTSIDE PIPE CONNECTION TO BOX A MINIMUM OF 18" ON WALL OF BOX AND ALONG PIPE. PIPE CONNECTIONS TO INLETS SHALL NOT BE BACKFILLED WITHOUT CITY'S DESIGNER PRIOR INSPECTION AND APPROVAL.
- BOXES SHALL HAVE FORMED INVERTS OUT OF NON-SHRINK GROUT SLOPING TO DRAIN TO OUTLET CULVERT.
- STEPS REQ'D. IN STRUCTURES GREATER THAN 48" IN DEPTH. FIRST STEP TO BE 18" FROM THE BOTTOM WITH 12" SPACING BETWEEN REMAINING STEPS.
- PRECAST BOXES SHALL BE POURED IN SECTIONS AS NEEDED AND RECOMMENDED BY THE MANUFACTURER TO GET TO DESIRED ELEVATION.
- BOX WIDTH WILL VARY DEPENDENT ON THE SIZE OF THE PIPES ENTERING AND LEAVING THE BOX. IT IS UP TO THE CONTRACTOR/MANUFACTURER TO DETERMINE SIZE OF BOX.
- GRATE INLETS SHALL BE MANUFACTURED OR POURED SO THAT THE FRAME AND GRATE IS THE ONLY PART OF THE BOX THAT IS VISIBLE ONCE FINAL GRADING HAS BEEN DONE. CONTRACTOR SHALL INSTALL RISERS AS NEEDED TO ENSURE THAT A MINIMUM OF 6" OF SOIL CAN BE PLACED ON TOP OF THE BOX TO COVER IT IN GRASSED AREAS AND 4" OF SOIL PLUS PAVING STRUCTURE IN PAVED AREAS.
- ALL ITEMS SHOWN ON THIS DETAIL INCLUDING FRAME AND COVER AND OTHER INCIDENTALS TO PROVIDE OWNER WITH COMPLETE INSTALLATION AND CONNECTION OF PIPING SHALL BE INCLUDED IN THE PER EACH PAY ITEM "GRATE INLET".

GRATE INLET



SECTION "A-A"

NOTES:

- CONNECTION AND PIPE TO BE BACKFILLED PER ASTM D2321, LATEST EDITION.
- AN INTERNAL CYLINDER MAY BE INSERTED INTO THE ID OF THE EXISTING PIPE AND MINIMIZE JOINT MOVEMENT. HOWEVER, AN INTERNAL CYLINDER IS NOT RECOMMENDED FOR DOWNSTREAM CONNECTIONS SUCH AS CONNECTIONS TO F.E.S.
- CONNECTION CAN BE MADE BY POURING A CONCRETE COLLAR PER CONCRETE COLLAR DETAILS (PER MDOT STANDARD IF NOT INCLUDED IN CONTRACT DRAWINGS).
- PAYMENT FOR CONNECTION SHALL BE ABSORBED IN PIPE OR FLARED END SECTION (F.E.S.) PAY ITEM AND SHALL INCLUDE ALL ITEMS SHOWN ON THIS DETAIL AND ANY INCIDENTALS TO MAKE SECURE CONNECTION.

CONNECTING HP STORM PIPE TO R.C.P.

BRANDON FACIANE
504-259-6556
BRANDON.FACIANE@ADPIPE.COM



SC-310 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-310.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE OR POLYETHYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2922 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-310 SYSTEM

1. STORMTECH SC-310 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-310 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-310 & SC-740 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/SC-800/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

DATE: 4/5/24	DRAWN: GH	REVISIONS:
CHECKED: GAB	SCALE: 1"=1'	
REF C/L:		
EG SURFACE:		
FG SURFACE:		

PROJECT LOCATION: DEES PLAZA MADISON COUNTY, MISSISSIPPI	CLIENT: BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS
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PROJECT: CANDLEWOOD SUITES	SHEET CONTENTS: UNDERGROUND DETENTION DETAILS
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SHEET NUMBER 11 of 16
PROJECT NUMBER B-7302

PROPOSED LAYOUT

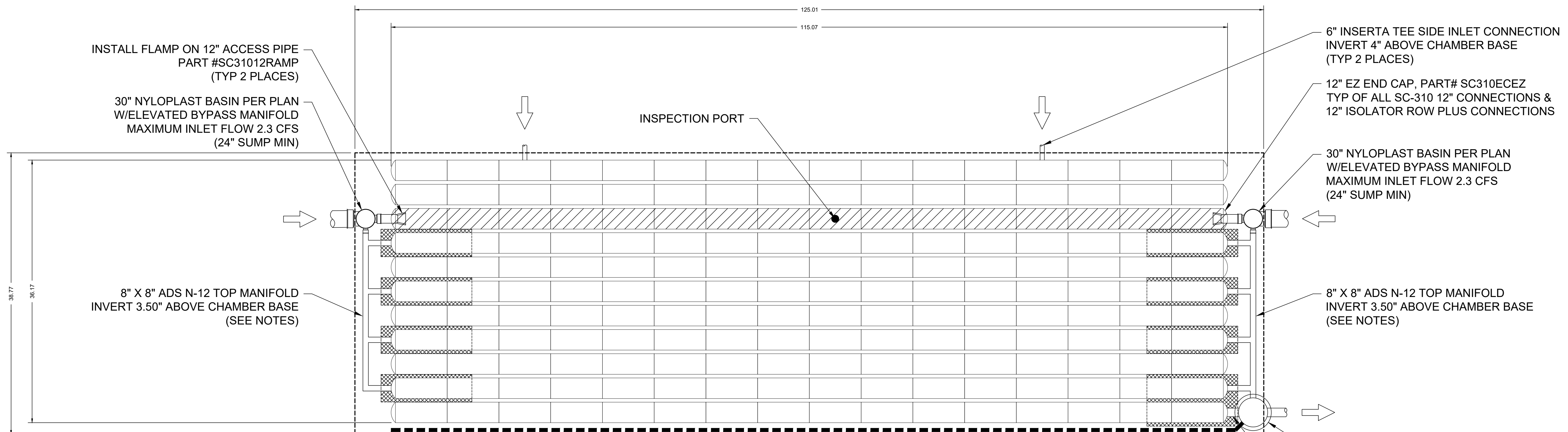
176	STORMTECH SC-310 CHAMBERS
22	STORMTECH SC-310 END CAPS
6	STONE ABOVE (in)
6	STONE BELOW (in)
40	% STONE VOID
6,082	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)
4846	SYSTEM AREA (ft ²)
327	SYSTEM PERIMETER (ft)

PROPOSED ELEVATIONS

276.93	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
270.93	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
270.43	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
270.43	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
270.43	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
269.43	TOP OF STONE
268.93	TOP OF SC-310 CHAMBER
267.93	INSERTA TEE SIDE INLET CONNECTION INVERT
267.89	8" TOP MANIFOLD INVERT
267.68	12" ISOLATOR ROW PLUS CONNECTION INVERT
267.68	12" BOTTOM CONNECTION INVERT
267.60	BOTTOM OF SC-310 CHAMBER
267.10	UNDERDRAIN INVERT
267.10	BOTTOM OF STONE

NOTES

- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE.
- DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE INSITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.



- ISOLATOR ROW PLUS (SEE DETAIL)
- PLACE MINIMUM 12.5' OF ADSPLUS625 WOVEN GEOTEXTILE OVER BEDDING STONE AND UNDERNEATH CHAMBER FEET FOR SCOUR PROTECTION AT ALL CHAMBER INLET ROWS
- BED LIMITS

- 6" INSERTA TEE SIDE INLET CONNECTION INVERT 4" ABOVE CHAMBER BASE (TYP 2 PLACES)
- 12" EZ END CAP, PART# SC310ECEZ TYP OF ALL SC-310 12" CONNECTIONS & 12" ISOLATOR ROW PLUS CONNECTIONS
- 30" NYLOPLAST BASIN PER PLAN W/ELEVATED BYPASS MANIFOLD MAXIMUM INLET FLOW 2.3 CFS (24" SUMP MIN)
- 8" X 8" ADS N-12 TOP MANIFOLD INVERT 3.50" ABOVE CHAMBER BASE (SEE NOTES)
- OUTLET STRUCTURE PER PLAN MAXIMUM OUTLET FLOW 2.7 CFS (DESIGN BY ENGINEER / PROVIDED BY OTHERS)
- 12" ADS N-12 BOTTOM CONNECTION INVERT 0.90" ABOVE CHAMBER BASE (SEE NOTES)
- 6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN (SIZE TBD BY ENGINEER / SOLID OUTSIDE PERIMETER STONE)

BENCHMARK
ENGINEERING & SURVEYING, LLC
CIVIL • STRUCTURAL • PLANNING • SURVEYING • UAV MAPPING
BRANDON | FLOWOOD | MADISON
www.benchmarkeng.com EST. 2004

DATE: 4/5/24

DRAWN: JH

CHECKED: GAB

SCALE: 1"=1'

REF C/L:

EG SURFACE:

FG SURFACE:

REVISIONS:

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI

CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES

SHEET CONTENTS:
UNDERGROUND DETENTION DETAILS

SHEET NUMBER
12 of 16

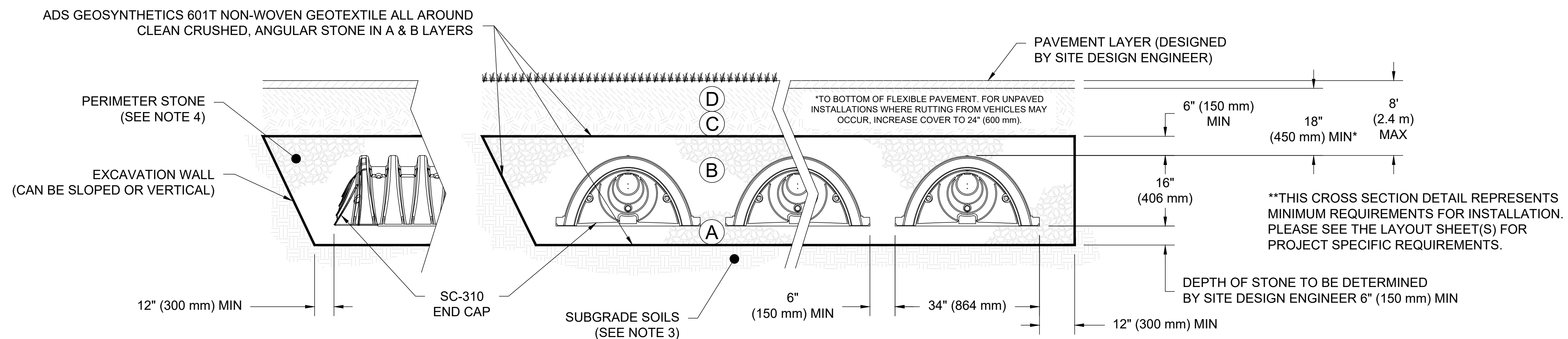
PROJECT NUMBER
B-7302

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ACCEPTABLE FILL MATERIALS: STORMTECH SC-310 CHAMBER SYSTEMS

MATERIAL LOCATION		DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145 ¹ A-1, A-2-4, A-3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ⁵	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE ⁵	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
 - ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
 - WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:

- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2922 (POLETHYLENE) OR ASTM F2418 (POLYPROPYLENE), "STANDARD SPECIFICATION FOR CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- SC-310 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2922 SHALL BE GREATER THAN OR EQUAL TO 400 LBS/FT/%. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.



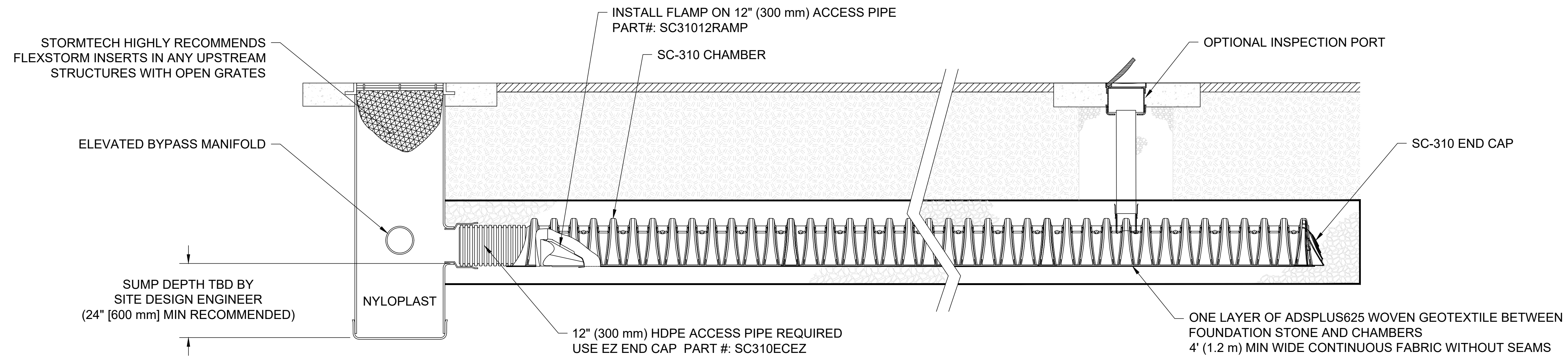
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REVISED:	REF C/L:	EG SURFACE:	FG SURFACE:

PROJECT LOCATION:
DEES PLAZA
MADISON COUNTY, MISSISSIPPI
CLIENT:
BDP GROUP, LLC
602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
SHEET CONTENTS:
UNDERGROUND DETENTION DETAILS

SHEET NUMBER
13 of 16

PROJECT NUMBER
B-B302



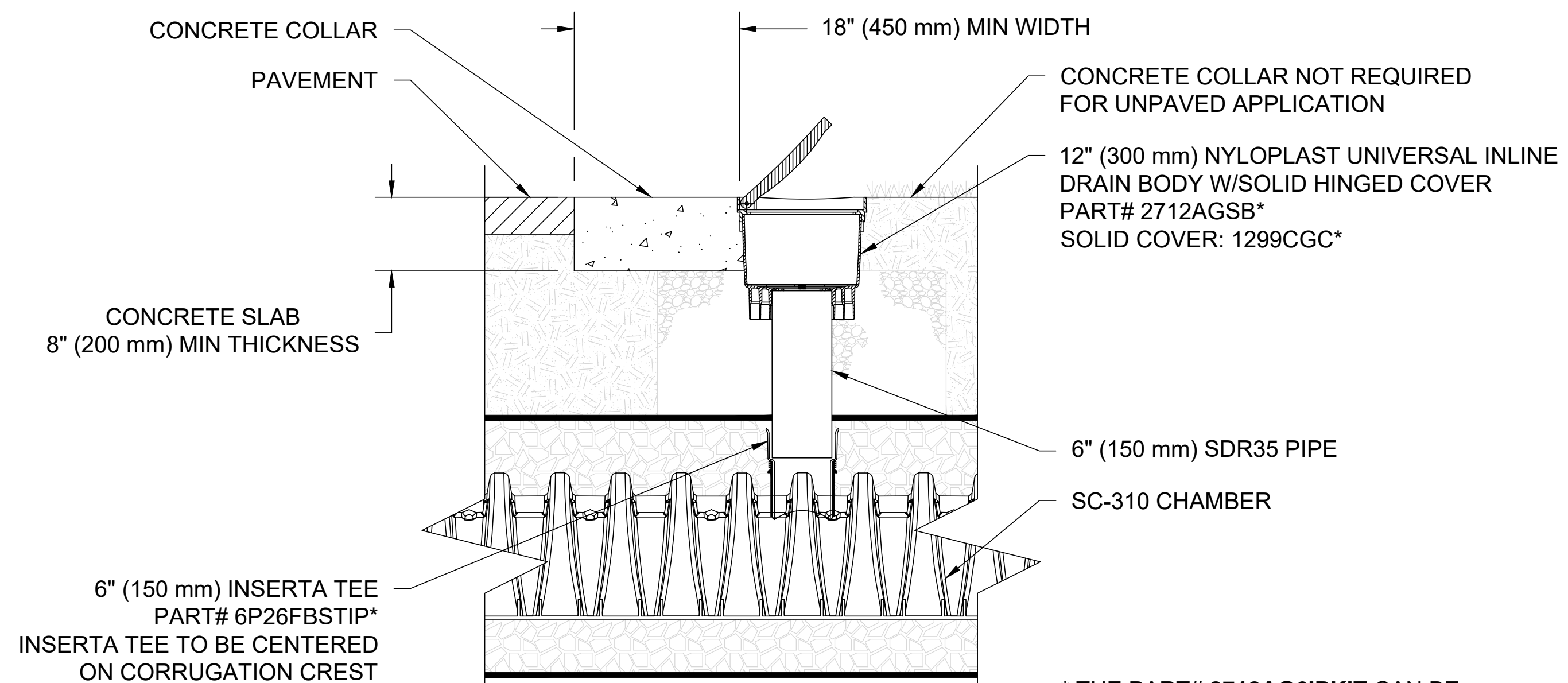
SC-310 ISOLATOR ROW PLUS DETAIL
 NTS

INSPECTION & MAINTENANCE

- STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
 - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
 - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
 - B. ALL ISOLATOR PLUS ROWS
 - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
 - B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.
- STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



SC-310 6" (150 mm) INSPECTION PORT DETAIL
 NTS

DATE: 4/5/24	DRAWN: GH	REVISIONS:
CHECKED: GAB	SCALE: 1"=1'	
REF C/L:	EG SURFACE:	
	FG SURFACE:	

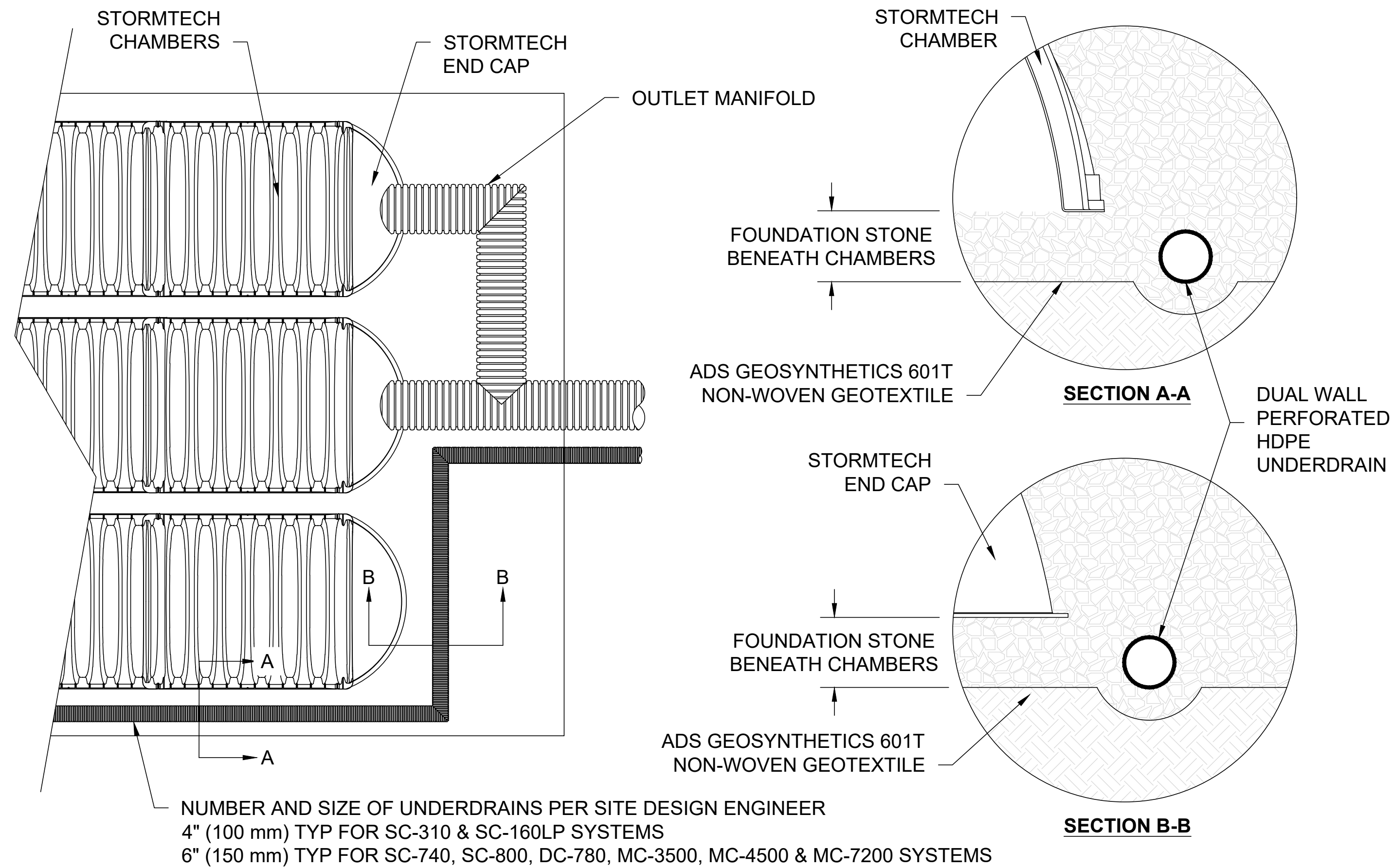
PROJECT LOCATION: DEES PLAZA MADISON COUNTY, MISSISSIPPI	CLIENT: BDP GROUP, LLC 602 SPRINGRIDGE ROAD, CLINTON, MS
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PROJECT: CANDLEWOOD SUITES	SHEET CONTENTS: UNDERGROUND DETENTION DETAILS
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SHEET NUMBER 14 of 16
PROJECT NUMBER B-7302

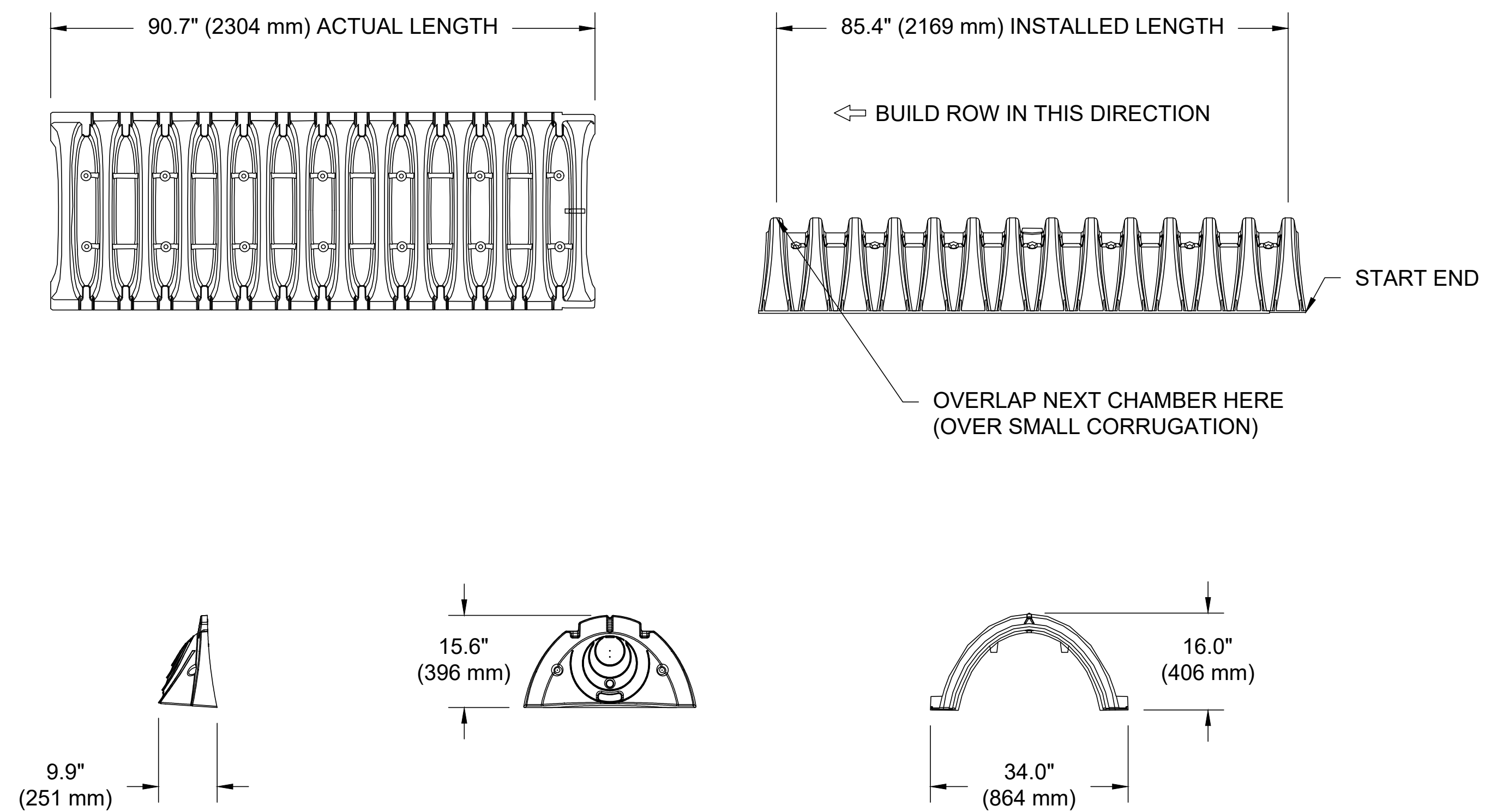
UNDERDRAIN DETAIL

NTS



SC-310 TECHNICAL SPECIFICATION

NTS



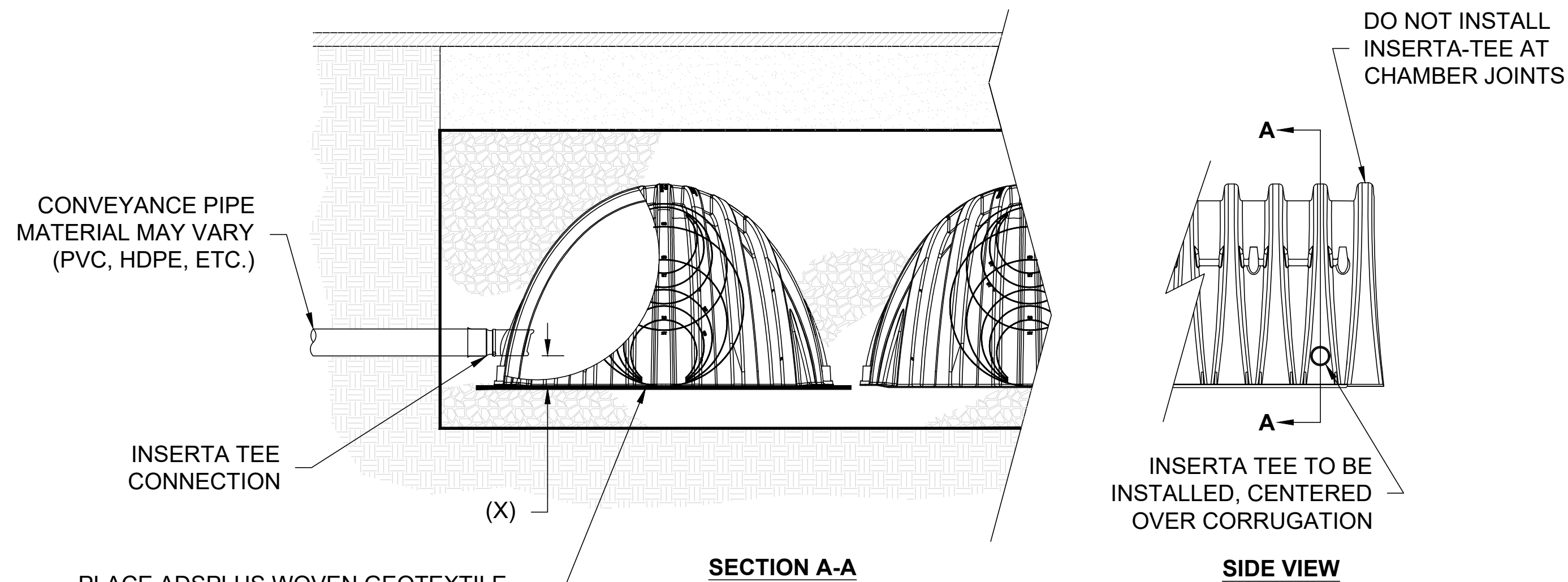
NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	34.0" X 16.0" X 85.4"	(864 mm X 406 mm X 2169 mm)
CHAMBER STORAGE	14.7 CUBIC FEET	(0.42 m ³)
MINIMUM INSTALLED STORAGE*	31.0 CUBIC FEET	(0.88 m ³)
WEIGHT	35.0 lbs.	(16.8 kg)

*ASSUMES 6" (152 mm) ABOVE, BELOW, AND BETWEEN CHAMBERS

INSERTA TEE DETAIL

NTS



PLACE ADSPLUS WOVEN GEOTEXTILE (CENTERED ON INSERTA-TEE INLET) OVER BEDDING STONE FOR SCOUR PROTECTION AT SIDE INLET CONNECTIONS. GEOTEXTILE MUST EXTEND 6" (150 mm) PAST CHAMBER FOOT

SECTION A-A

SIDE VIEW

CHAMBER	MAX DIAMETER OF INSERTA TEE	HEIGHT FROM BASE OF CHAMBER (X)
SC-310	6" (150 mm)	4" (100 mm)
SC-740	10" (250 mm)	4" (100 mm)
SC-800	10" (250 mm)	4" (100 mm)
DC-780	10" (250 mm)	4" (100 mm)
MC-3500	12" (300 mm)	6" (150 mm)
MC-4500	12" (300 mm)	8" (200 mm)
MC-7200	12" (300 mm)	8" (200 mm)

INSERTA TEE FITTINGS AVAILABLE FOR SDR 26, SDR 35, SCH 40 IPS GASKETED & SOLVENT WELD, N-12, HP STORM, C-900 OR DUCTILE IRON

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
 PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
 PRE CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC310EPE06T / SC310EPE06TPC	6" (150 mm)	9.6" (244 mm)	5.8" (147 mm)	---
SC310EPE06B / SC310EPE06BPC			---	0.5" (13 mm)
SC310EPE08T / SC310EPE08TPC	8" (200 mm)	11.9" (302 mm)	3.5" (89 mm)	---
SC310EPE08B / SC310EPE08BPC			---	0.6" (15 mm)
SC310EPE10T / SC310EPE10TPC	10" (250 mm)	12.7" (323 mm)	1.4" (36 mm)	---
SC310EPE10B / SC310EPE10BPC			---	0.7" (18 mm)
SC310ECEZ*	12" (300 mm)	13.5" (343 mm)	---	0.9" (23 mm)

ALL STUBS, EXCEPT FOR THE SC310ECEZ ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC310ECEZ THE 12" (300 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 0.25" (6 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

- NOTES:**
- PART NUMBERS WILL VARY BASED ON INLET PIPE MATERIALS. CONTACT STORMTECH FOR MORE INFORMATION.
 - CONTACT ADS ENGINEERING SERVICES IF INSERTA TEE INLET MUST BE RAISED AS NOT ALL INVERTS ARE POSSIBLE.

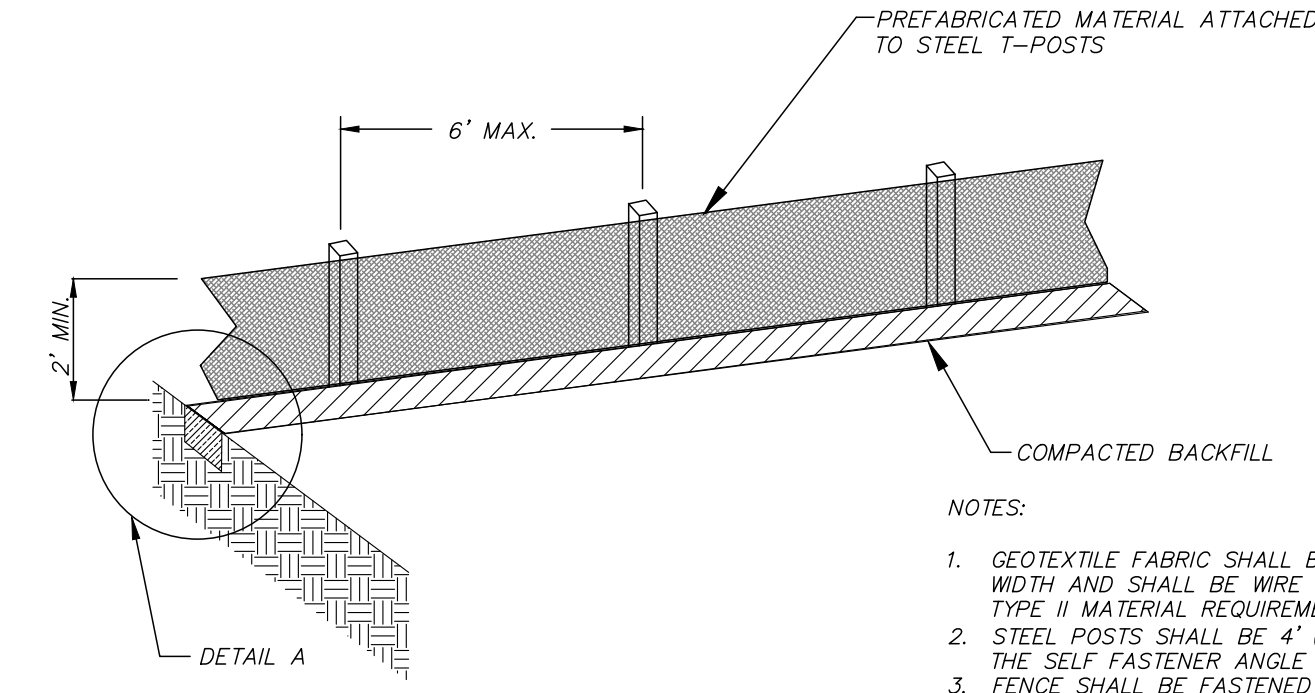
REVISIONS:

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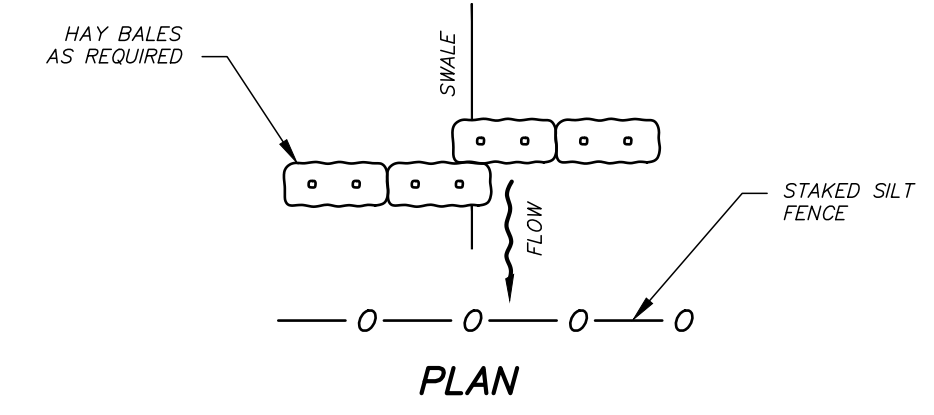
PROJECT LOCATION:
 DEES PLAZA
 MADISON COUNTY, MISSISSIPPI
 CLIENT:
 BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
 SHEET CONTENTS:
UNDERGROUND DETENTION DETAILS

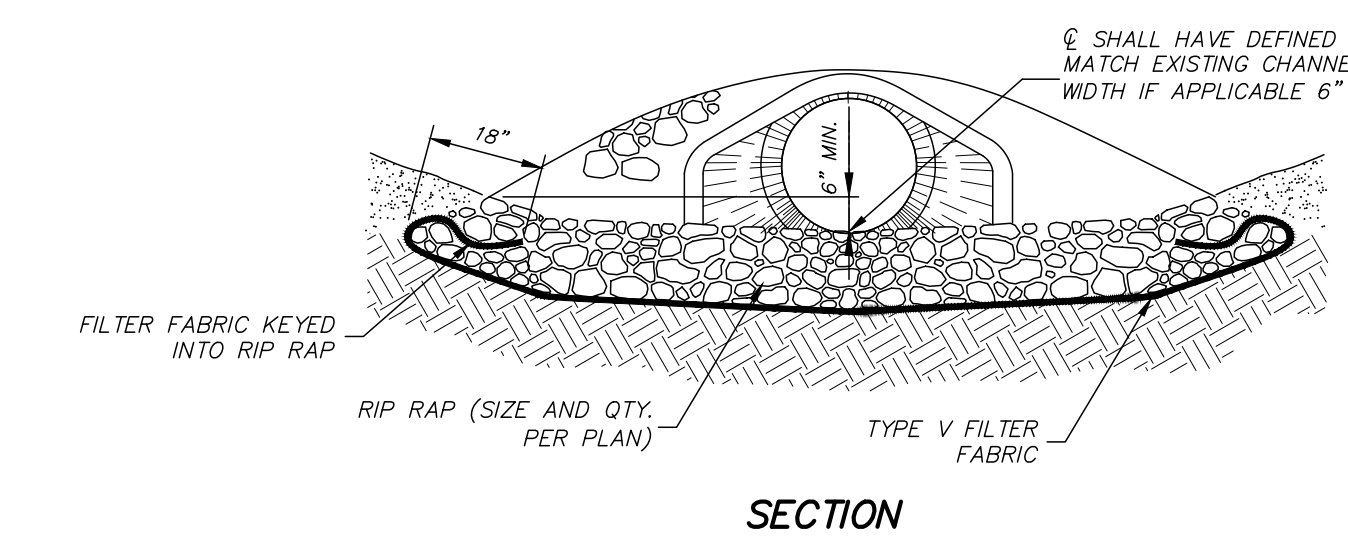
SHEET NUMBER
15 of 16
 PROJECT NUMBER
B-7302



- NOTES:
1. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE WIRE BACKED OR MEET MDOT TYPE II MATERIAL REQUIREMENTS.
 2. STEEL POSTS SHALL BE 4" (MIN.) IN HEIGHT AND OF THE SELF FASTENER ANGLE STEEL TYPE.
 3. FENCE SHALL BE FASTENED WITH NOT LESS THAN 9 GAGE STAPLES 1" LONG FOR WOODEN POSTS AND 3/4" FOR WOODEN STAKES.
 4. ALLOW A 6" OVERLAP OF FABRIC AT JOINTS.



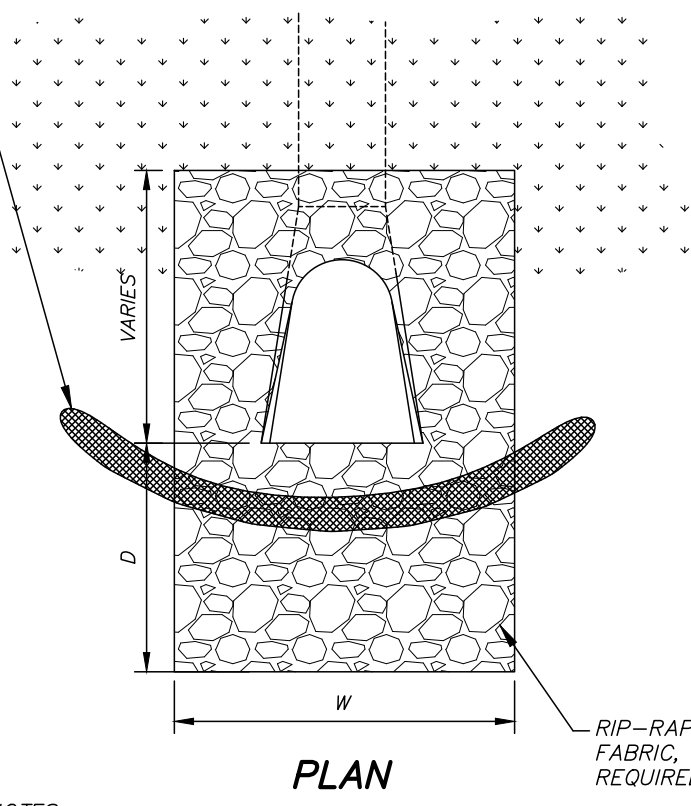
ELEVATION



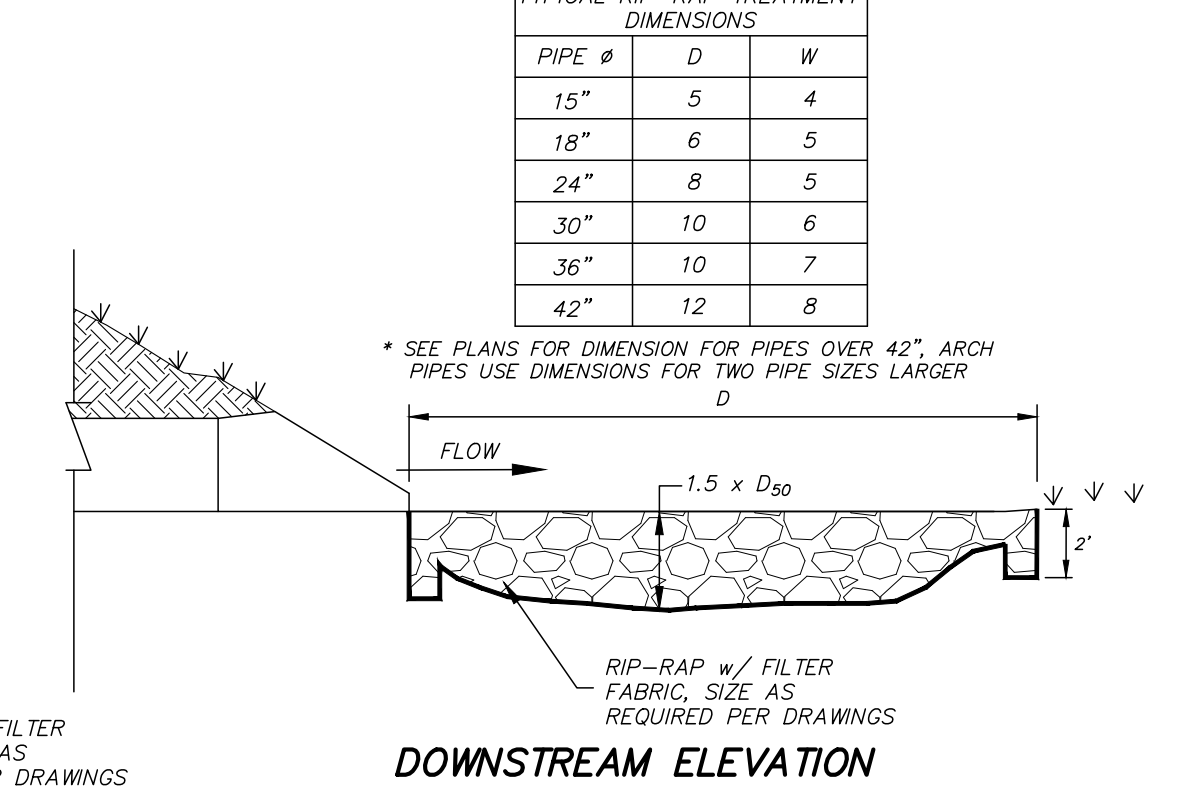
SECTION

PIPE #	D	W
15"	5	4
18"	6	5
24"	8	5
30"	10	6
36"	10	7
42"	12	8

* SEE PLANS FOR DIMENSION FOR PIPES OVER 42" ARCH PIPES USE DIMENSIONS FOR TWO PIPE SIZES LARGER



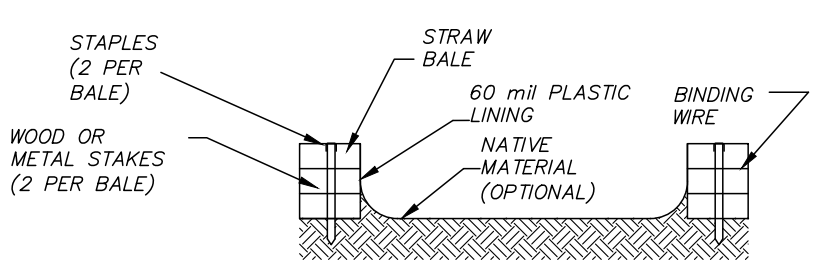
PLAN



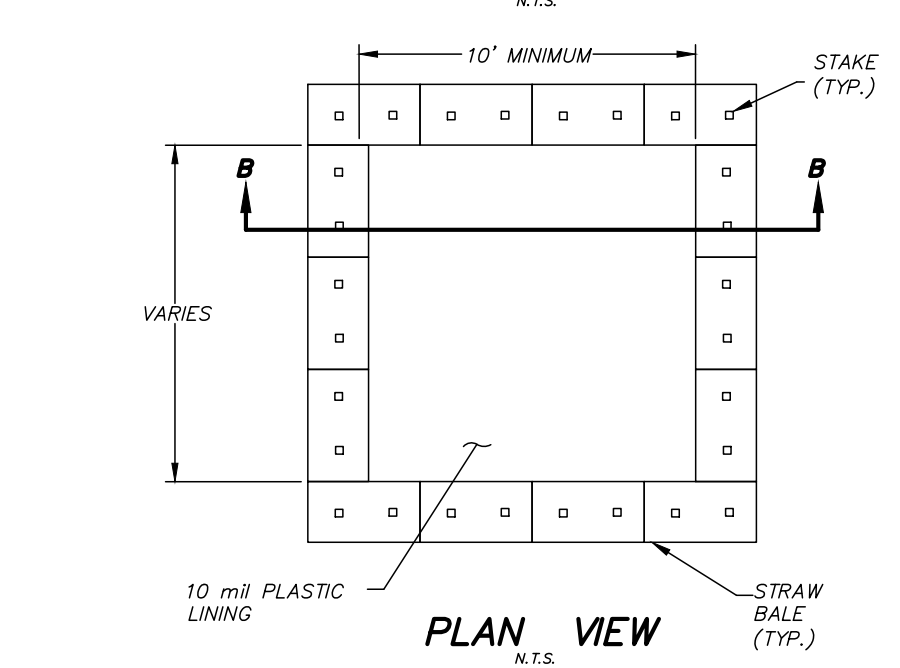
DOWNSTREAM ELEVATION

- NOTES:
1. RIP-RAP TREATMENT REQUIRED AT ALL CULVERTS UPSTREAM AND DOWNSTREAM ENDS.
 2. RIP-RAP TREATMENT ON UPSTREAM AND DOWNSTREAM ENDS SHALL TOTALLY SURROUND CULVERT TO A MINIMUM OF 12" ABOVE THE TOP OF THE PIPE.
 3. SEE CHART FOR DIMENSIONS FOR D & W UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
 4. RIP-RAP WILL BE PAID FOR BY THE SQUARE YARD.
 5. RIP-RAP DIMENSIONS SHOWN ON THE SCHEDULE ARE TYPICAL AND MAY BE FIELD ADJUSTED BY ENGINEER. ANY CHANGE IN QUANTITY RESULTING FROM FIELD ADJUSTMENT WILL BE PAID PER SQUARE YARD AT CONTRACT UNIT PRICE.

CULVERT RIP-RAP OUTLET PROTECTION



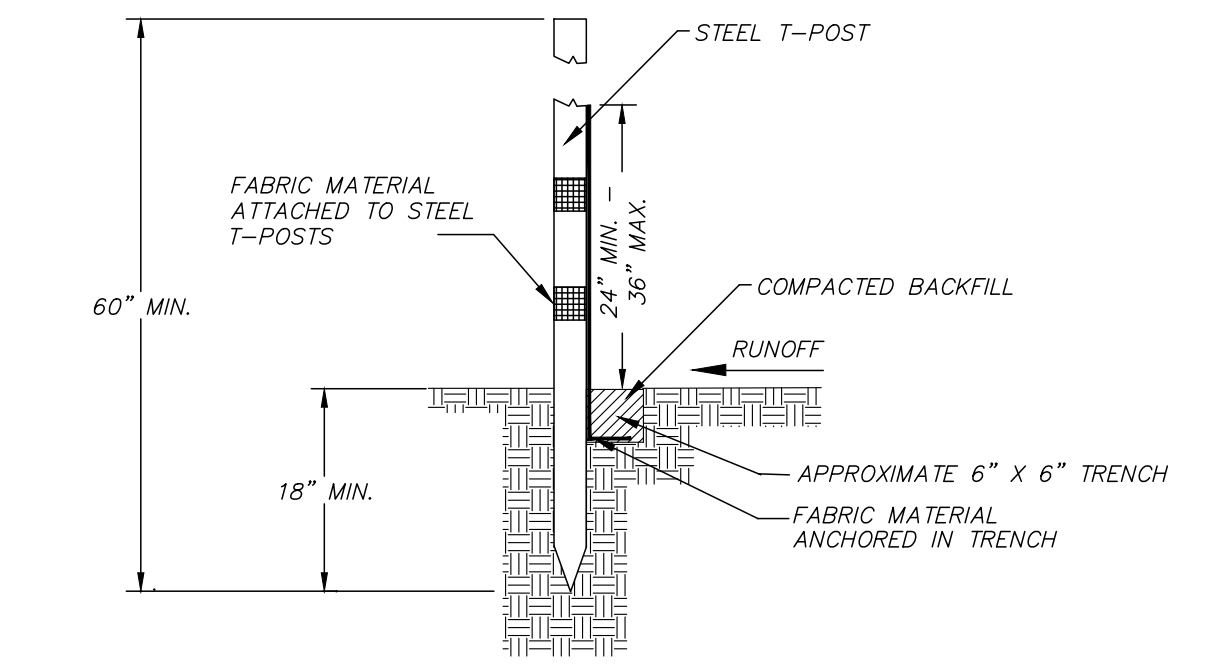
SECTION B-B



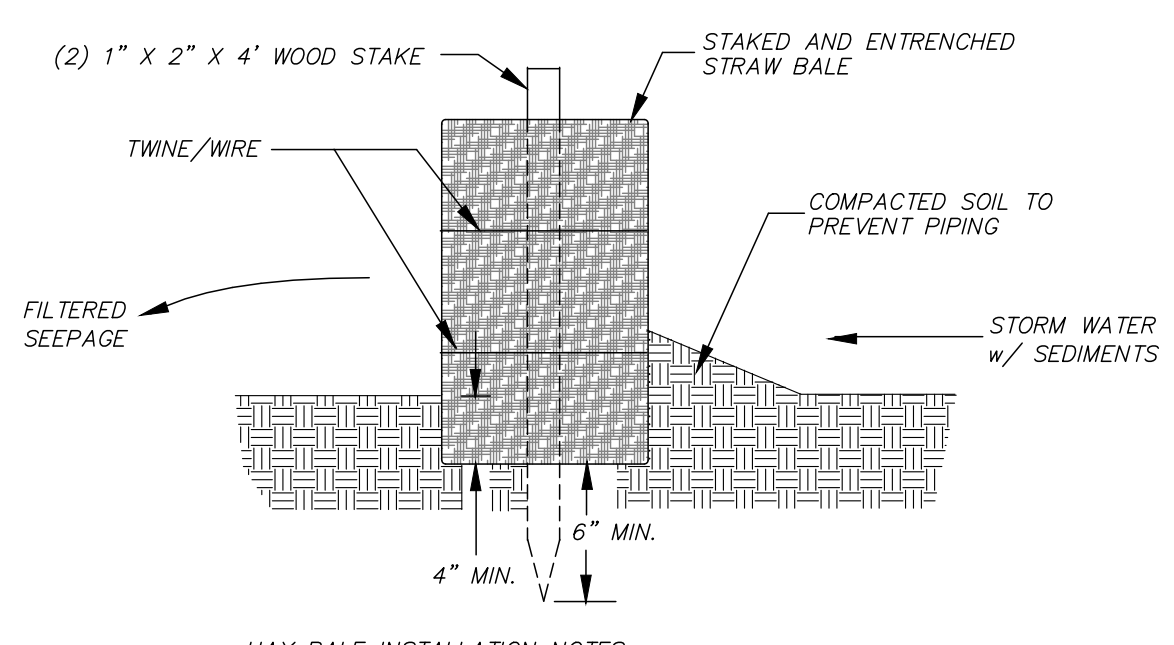
PLAN VIEW

STRAW BALE CONCRETE WASHOUT AREA

- NOTES:
1. LOCATION TO BE DETERMINED BY CONTRACTOR AND APPROVED BY THE ENGINEER OR ENGINEER'S REPRESENTATIVE.
 2. IF CONCRETE WASHOUT AREA EXHIBITS LEAKAGE OR PROVES TO BE INADEQUATE FOR ITS INTENDED PURPOSE, THE CONTRACTOR SHALL IMMEDIATELY REPAIR OR REPLACE.
 3. IF REQUIRED BY ENGINEER OR C.O.J., AREAS IMMEDIATELY DOWNSTREAM/DOWNSLOPE SHALL INCLUDE A SECONDARY STORMWATER RUNOFF POLLUTION PREVENTION MEASURE.
 4. MAINTENANCE SHALL BE IN ACCORDANCE WITH THE APPROVED STORMWATER MANAGEMENT PLAN.



SILT FENCE DETAILS



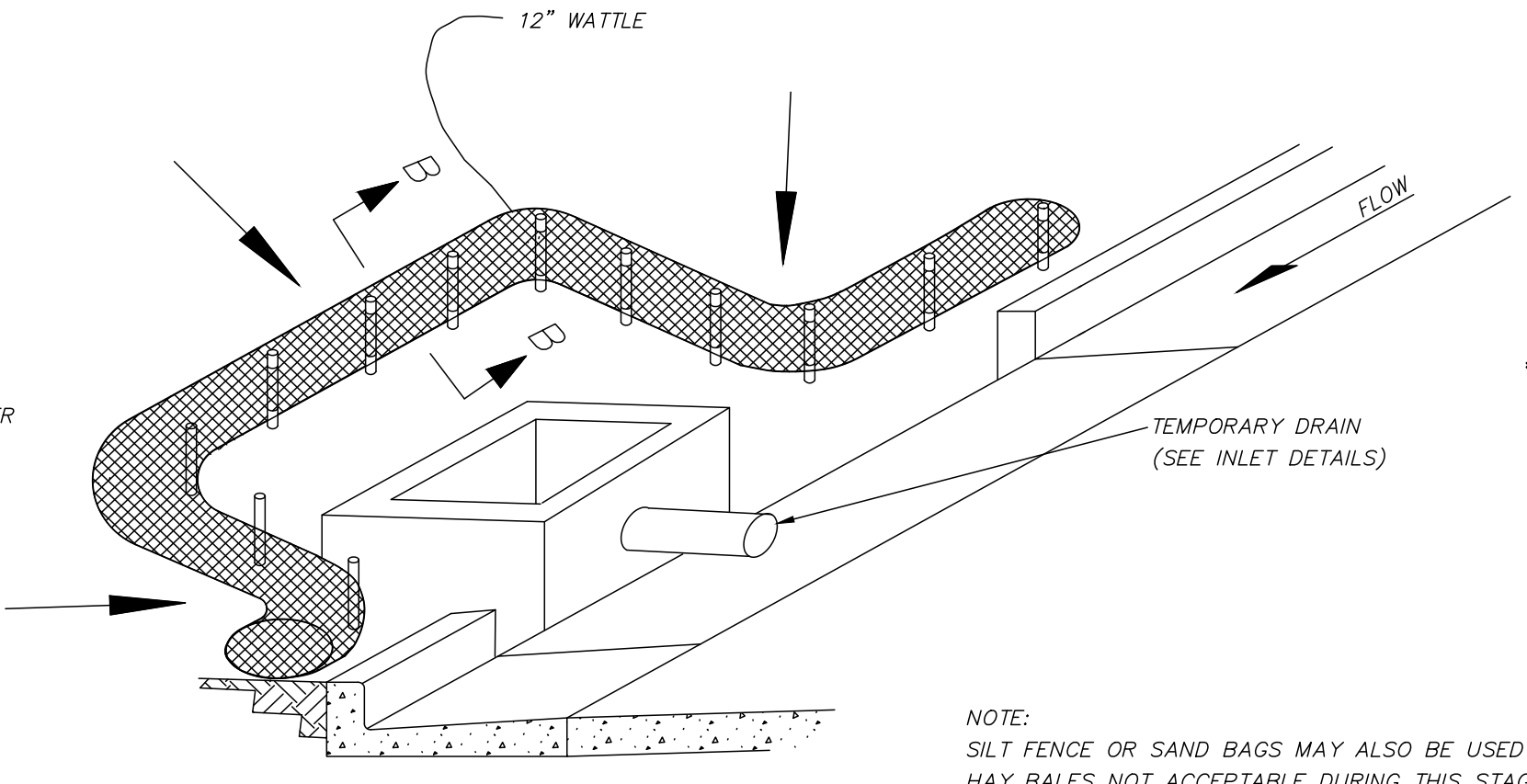
HAY BALE INSTALLATION NOTES:

1. HAY BALES SHALL BE TRENCHED 3" TO 4" AND STAKED WITH (2) 1"X2"X4" WOOD STAKES PER BALE.
2. SILT FENCE SHALL BE DOWN STREAM OF HAY BALES.
3. ADJACENT BALES SHALL BE BUTTED FIRMLY TOGETHER. UNAVOIDABLE GAPS SHALL BE PLUGGED WITH HAY OR STRAW TO PREVENT SILT FROM PASSING.

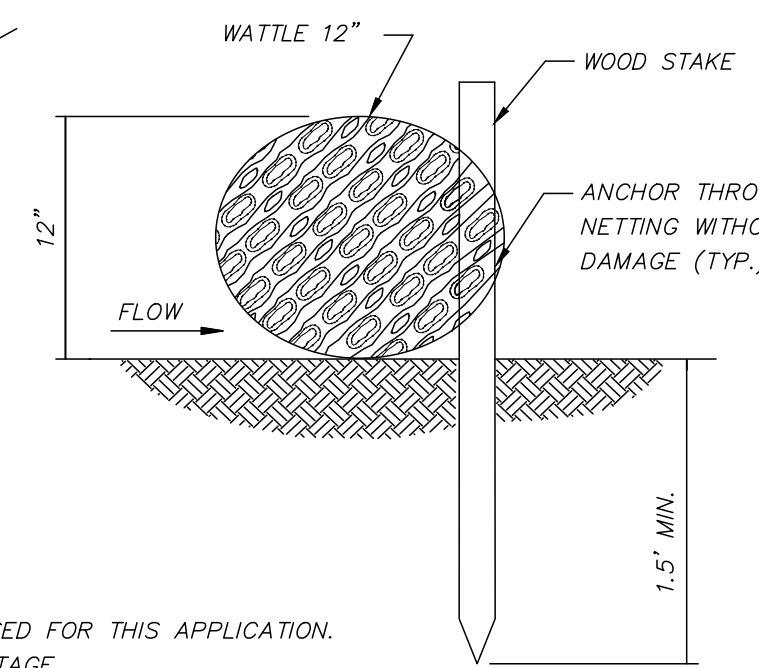
HAY BALE INSTALLATION

WATTLE DITCH CHECK SELECTION GUIDELINES

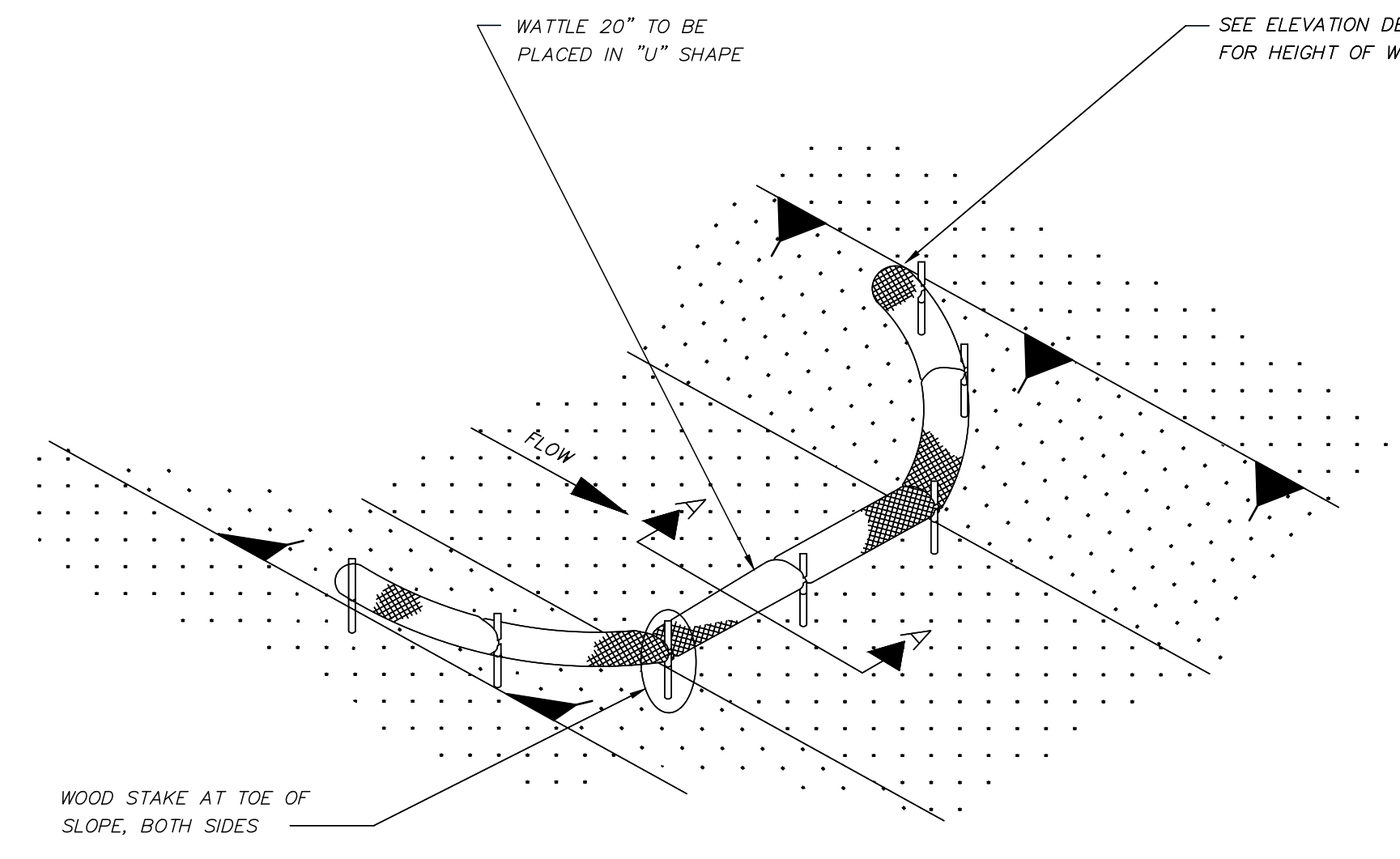
WATTLE DITCH CHECKS ARE APPROPRIATE FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.



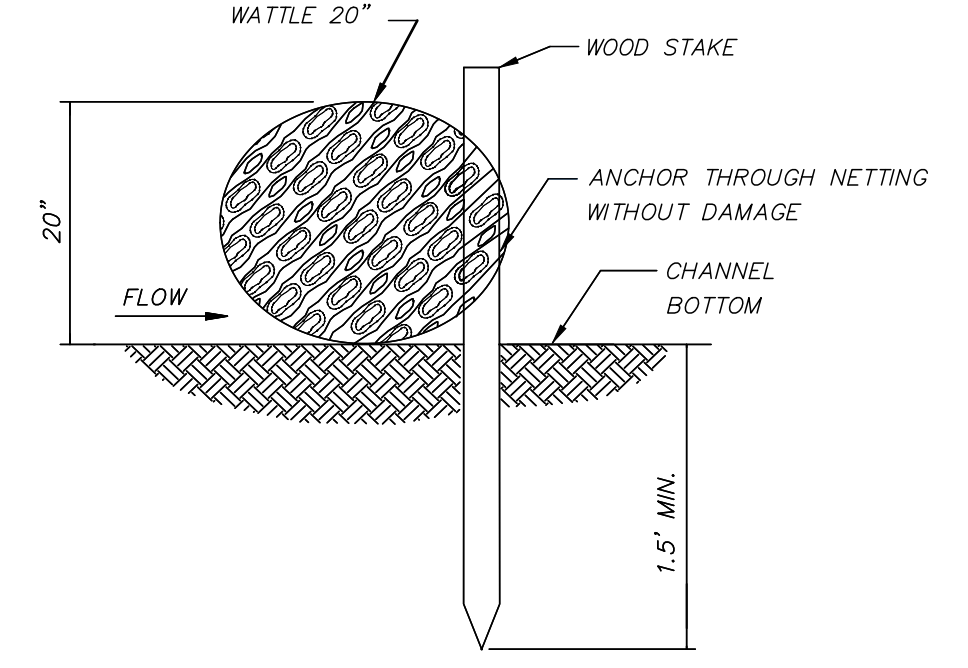
CURB INLET PROTECTION SINGLE OR DOUBLE WING INLET



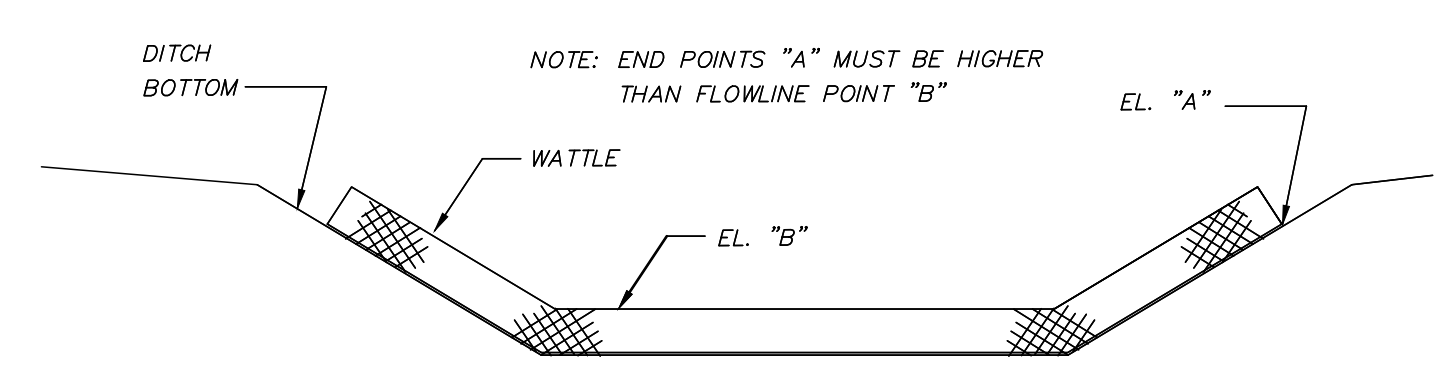
SECTION B-B



DETAIL (DITCH CHECK)



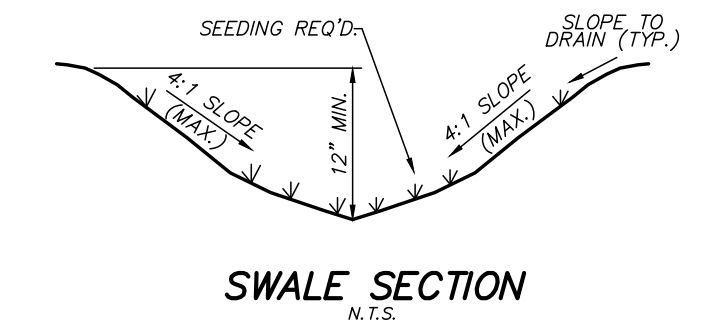
SECTION A-A



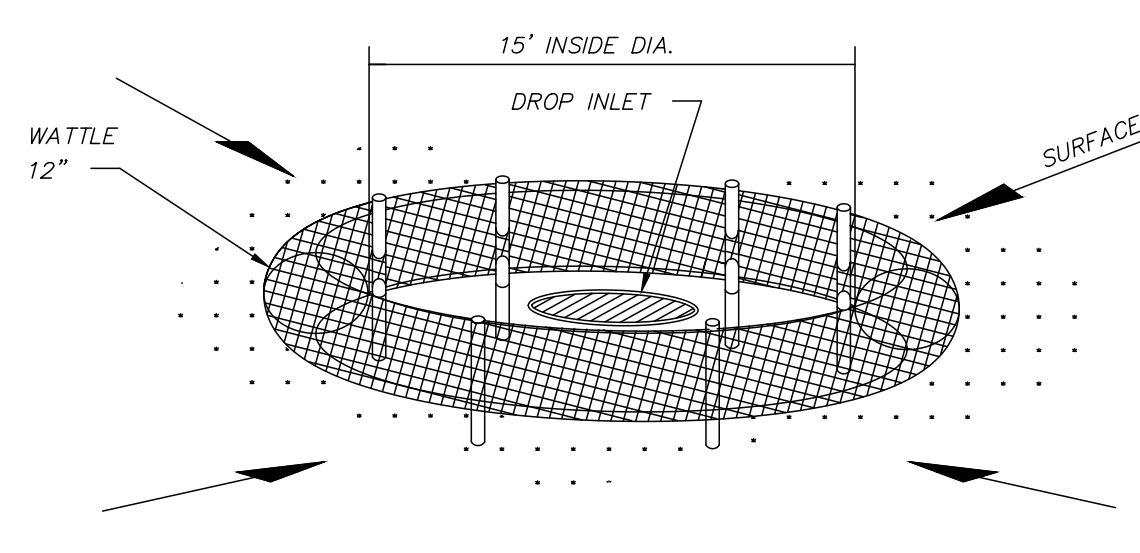
ELEVATION DETAIL

- NOTES:
1. MINIMUM RECOMMENDED PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK IS 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON ECD-4.
 2. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
 3. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
 4. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.

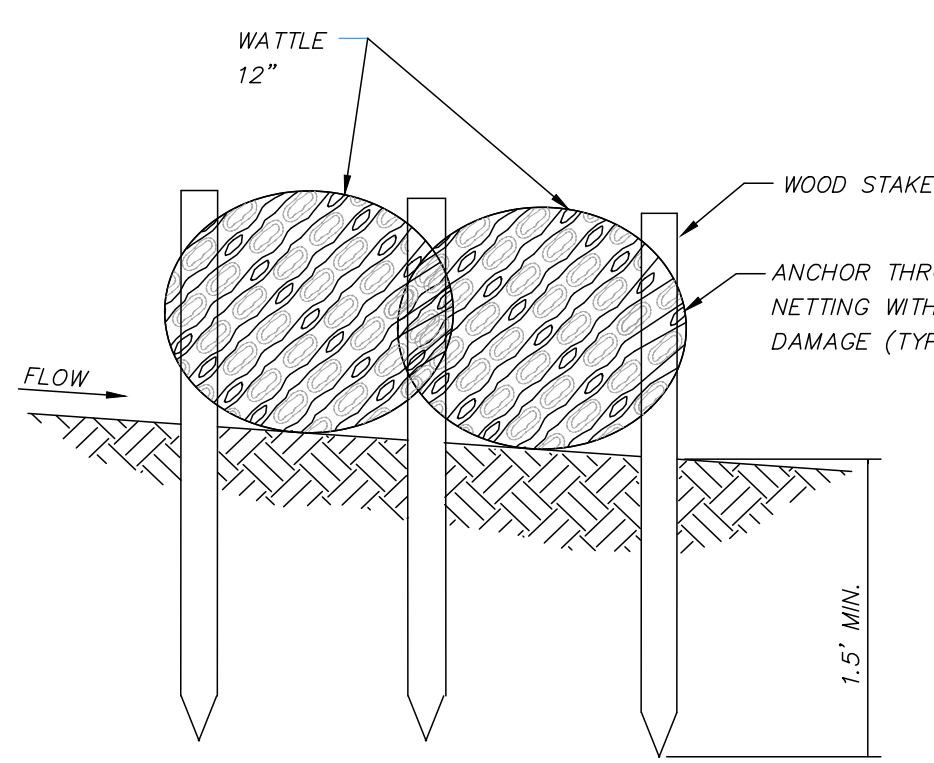
WATTLE DITCH CHECK



SWALE SECTION



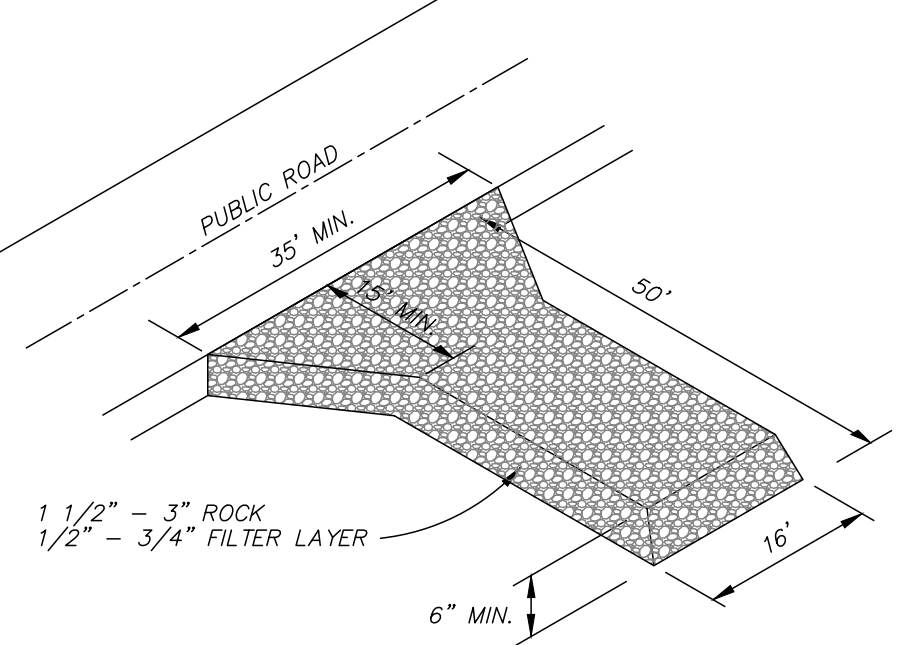
DROP INLET PROTECTION



SECTION A-A

WATTLE INLET PROTECTION

- NOTES:
1. ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET.
 2. OVERLAP ENDS OF WATTLES PER MANUFACTURERS RECOMMENDATIONS (1 MIN., 3 MAX.).
 3. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.



TEMPORARY CONSTRUCTION ENTRANCE DETAIL

- NOTES:
1. VEHICLE TRACKING MAT SHALL BE LOCATED AT EVERY ENTRANCE/EXIT TO THE CONSTRUCTION SITE.
 2. VEHICLE TRACKING MAT SHALL BE MAINTAINED BY CONTRACTOR AS NEEDED TO PREVENT ANY MATERIAL FROM BEING TRACKED ONTO CITY STREET.
 3. SEDIMENT AND OTHER MATERIAL SPILLED, DROPPED OR TRACKED ONTO CITY STREET SHALL BE IMMEDIATELY REMOVED BY CONTRACTOR.
 4. DIMENSIONS SHOWN ABOVE ARE TYPICAL IF CONDITIONS ALLOW. ANY REVISIONS TO DIMENSIONS SHALL BE APPROVED BY ENGINEER PRIOR TO INSTALLATION.

REVISIONS:

DATE	BY	DESCRIPTION
4/5/24	JH	DRAWN
	GAB	CHECKED
		SCALE
		REF C/L
		EG SURFACE
		FG SURFACE

PROJECT LOCATION:
 DEES PLAZA
 MADISON COUNTY, MISSISSIPPI
 CLIENT:
 BDP GROUP, LLC
 602 SPRINGRIDGE ROAD, CLINTON, MS

PROJECT:
CANDLEWOOD SUITES
 SHEET CONTENTS:
EROSION CONTROL DETAILS

ORDINANCE OF THE MAYOR AND BOARD OF ALDERMEN OF THE CITY OF GLUCKSTADT, MISSISSIPPI AMENDING THE ZONING ORDINANCE OF THE CITY OF GLUCKSTADT, MISSISSIPPI

WHEREAS, the Mayor and Board of Aldermen of the City of Gluckstadt, Mississippi did lawfully adopt a Zoning Ordinance on December 16, 2021, after proper notice and a public hearing; and,

WHEREAS, the Mayor and Board of Aldermen now desire to amend certain sections of the City’s Zoning Ordinance; and,

WHEREAS, in the time and manner provided for by law, the City of Gluckstadt did cause a public hearing to be noticed and published and set for April 23, 2024, at 6:00 o’clock p.m. in City Hall before the Planning and Zoning Commission to consider a text amendment to the City’s Zoning Ordinance; and,

WHEREAS, at the time date and place specified in the notice, the Planning and Zoning Commission of the City of Gluckstadt, Mississippi did conduct a full and complete hearing and thereafter did recommend that the Zoning Ordinance of the City of Gluckstadt, Mississippi be amended as set out hereinafter; and,

WHEREAS, the Mayor and Board of Aldermen find that there exists both a public need and a change in character of the neighborhood for a text amendment to the City’s Zoning Ordinance; and

NOW THEREFORE BE IT ORDAINED, by the Mayor and Board of Aldermen of the City of Gluckstadt, Mississippi, that the following sections are hereby adopted as amendments to the Official Zoning Ordinance of the City of Gluckstadt, Mississippi, as provided in the following sections:

SECTION 1

That the matters and facts stated in the preamble hereof are found to be true and correct.

SECTION 2

Amend Section 301 of the Zoning Ordinance by adding thereto the following definition:

“Conceptual Site Plan: A drawing indicating the location of existing and proposed buildings or other structures, landscaping, points of ingress/egress, and driveways on a single lot.”

SECTION 3

Amend Section 406.10 of the Zoning Ordinance so that it now reads as follows:

“All permanent structures hereafter constructed in the City of Gluckstadt shall have street/road numbers posted either on the structure, or at the street/road right-of-way on which such structures front. Such numbers shall be a minimum of four (4) inches in height with a minimum stroke of one-half (.5) inches and contrast with their background color.”

SECTION 4

Amend the table titled “Minimum Distance Required in 503.03” in Section 503.03 of the Zoning Ordinance to change the “Driveway Width Regulations” for local and collector streets to a minimum of 26 feet.

SECTION 5

Amend Section 804.01 of the Zoning Ordinance so that it now reads as follows:

“Any person desiring a dimensional variance from the terms of this Ordinance shall submit a written application (on a form furnished by the Zoning Administrator) demonstrating compliance with all of the following. The applicant shall complete the application and provide one (1) copy to the Zoning Administrator. Applications shall be submitted by the 1st day of the month preceding the next regular meeting of the Planning and Zoning Commission at which the application is to be reviewed, or it will not be placed on the Planning and Zoning Commission agenda for that meeting. A variance shall not be granted unless the applicant demonstrates: A. That special conditions and circumstances exist which are peculiar to the land, structure, or building involved 60 and which are not applicable to other lands, structures, or buildings, in the same district. B. That literal interpretation of the provisions of this Ordinance would deprive the applicant of rights commonly enjoyed by other properties in the same district under the terms of this Ordinance. C. That granting the variance requested will not confer on the applicant any special privilege that is denied by this Ordinance to other lands, structures, or buildings in the same zoning district.”

SECTION 6

Amend Section 805.01 of the Zoning Ordinance so that it now reads as follows:

“Any person desiring a conditional use permit shall submit a written application (on a form furnished by the Zoning Administrator) indicating the Section in the Ordinance under which the conditional use is sought and stating the grounds on which it is requested. The applicant shall complete the application and provide one (1) copy to the Zoning Administrator. Applications shall be submitted by the 1st day of the month preceding the next regular meeting of the Planning and Zoning Commission at which the application is to be reviewed, or it will not be

placed on the Planning and Zoning Commission agenda for that meeting. The Planning and Zoning Commission shall not grant a conditional use unless satisfactory provision and arrangement has been made concerning all of the following: A. Ingress and egress to property and proposed structures thereon with particular reference to vehicular and pedestrian safety and convenience, traffic flow and control, and access in case of fire or catastrophe. B. Off-street parking and loading areas. C. Refuse and service areas. D. Utilities, with reference to locations, availability, and compatibility. E. Screening and buffering with reference to type, dimensions, and character. F. Required yards and other open space. G. General compatibility with adjacent properties and other property in the district. H. Whether or not the proposed use will have any adverse impact upon nearby properties or the community at large. Examples of adverse impact include, but are not limited to, the following: a. The extent to which on-site lighting spills onto or is directed toward adjacent property. b. The extent to which noise generated by the conditional use will have a negative impact upon the peaceful use and enjoyment of adjacent properties or surrounding neighborhoods. c. The extent to which noise generated by patrons, customers, clients, or users of the conditional use will have a negative impact upon the peaceful use and enjoyment of adjacent properties or surrounding neighborhoods. d. The extent to which the proposed conditional use will have a cluttered appearance as a result of site design, signage, or other features that may be visible from the street or adjoining properties. e. The hours of operation or frequency of use. f. I. The impact to natural features, such as tree cover, drainage courses, flooding and erosion. Any other provisions deemed applicable by the Planning and Zoning Commission or the Mayor and Board of Aldermen.”

SECTION 7

Amend Section 806.01 of the Zoning Ordinance so that it now reads as follows:

“Amendments to this Ordinance include: (1) amendments to the text; and (2) amendments to the Official Zoning Map, which is legally a part of this Ordinance. Any person may initiate an amendment to this Ordinance by filing an application with the Zoning Administrator (on a form furnished by him/her). The applicant shall complete the application and provide one (1) copy to the Zoning Administrator. Applications shall be submitted by the 1st day of the month preceding the next regular meeting of the Planning and Zoning Commission at which the application is to be reviewed, or it will not be placed on the Planning and Zoning Commission agenda for that meeting. All applications for rezoning shall be accompanied by a legal property description in digital form.”

SECTION 8

Amend Section 806.02 of the Zoning Ordinance so that it now reads as follows:

“If a specific use is identified by the applicant for a rezoning (i.e., a proposed amendment to the Official Zoning Map), then the application for rezoning shall be accompanied by a conceptual site plan as defined in Section 301.”

SECTION 9

Amend Section 808.02 of the Zoning Ordinance so that it now reads as follows:

“Three (3) copies and a digital file copy of each site plan shall be prepared and submitted to the Zoning Administrator. Site plans shall be submitted by the 1st day of the month preceding the next regular meeting of the Planning and Zoning Commission at which the plan is to be reviewed, or it will not be placed on the Planning and Zoning Commission agenda for that meeting. The Zoning Administrator shall notify the applicant of any deficiencies or omissions in the site plan. The site plan shall not be processed until all required data is provided as prescribed in Section 809 of this Ordinance.”

SECTION 10

Amend the dimensional requirements table at Article XXII: Highway Commercial District (C-2) by changing the “Minimum Lot Width” to the following:

“Minimum Lot Width (Center/Ind.): 200/100 feet”

SECTION 11

Amend Section 2203.03(B) of the Zoning Ordinance so that it now reads as follows:

“Independent commercial uses: 100 feet (unless access can be arranged between two or more lots having common frontage with less than 100 feet for each lot).”

SECTION 12

This Ordinance shall take effect and be in force one (1) month from and after passage as provided by law.

MOTION made to adopt the foregoing Ordinance was made by Alderman _____ and SECONDED by Alderman _____ and the foregoing having first been reduced to writing, was submitted to a Roll Call Vote, the result was as follows:

Alderman Bates voted:	Aye / Nay
Alderman Powell voted:	Aye / Nay
Alderman Slay voted:	Aye / Nay
Alderman Taylor voted:	Aye / Nay
Alderman Williams voted:	Aye / Nay

WHEREUPON, the Mayor declared the Motion had carried and that the Ordinance was adopted.

SO ORDAINED, ADOPTED, AND APPROVED by the Mayor and Board of Alderman of the City of Gluckstadt, Madison County, Mississippi at its regular meeting held on the _____ day of _____, 2024.

Walter C. Morrison, Mayor of the
City of Gluckstadt, Mississippi

ATTEST:

Lindsay Kellum, City Clerk

[S E A L]