

DRAWING INDEX

SHEET NUMBER	SHEET TITLE	ORIGINAL DATE	REVISION DATE
TO.01	COVER SHEET	2/9/2024	4/24/2024
TO.02	TOPOGRAPHIC SURVEY (SHEET 1 OF 7)	2/9/2024	4/15/2024
TO.03	TOPOGRAPHIC SURVEY (SHEET 2 OF 7)	2/9/2024	4/15/2024
TO.04	TOPOGRAPHIC SURVEY (SHEET 3 OF 7)	2/9/2024	4/15/2024
TO.05	TOPOGRAPHIC SURVEY (SHEET 4 OF 7)	2/9/2024	4/15/2024
TO.06	TOPOGRAPHIC SURVEY (SHEET 5 OF 7)	2/9/2024	4/15/2024
TO.07	TOPOGRAPHIC SURVEY (SHEET 6 OF 7)	2/9/2024	4/15/2024
TO.08	TOPOGRAPHIC SURVEY (SHEET 7 OF 7)	2/9/2024	4/15/2024
CO.01	GENERAL NOTES (SHEET 1 OF 2)	2/9/2024	4/24/2024
CO.02	GENERAL NOTES (SHEET 2 OF 2)	2/9/2024	4/24/2024
CO.03	NGG01 NOTES (SHEET 1 OF 2)	2/9/2024	4/24/2024
CO.04	NGG01 NOTES (SHEET 2 OF 2)	2/9/2024	4/24/2024
C1.01	DEMOLITION AND PHASE I ESC PLAN - OVERALL	2/9/2024	4/24/2024
C1.02	DEMOLITION AND PHASE I ESC PLAN - AREA 1	2/9/2024	4/24/2024
C1.03	DEMOLITION AND PHASE I ESC PLAN - AREA 2	2/9/2024	4/24/2024
C2.01	SITE PLAN - OVERALL	2/9/2024	4/24/2024
C2.02	SITE PLAN - AREA 1	2/9/2024	4/24/2024
C2.03	SITE PLAN - AREA 2	2/9/2024	4/24/2024
C3.01	PHASE II ESC PLAN - OVERALL	2/9/2024	4/24/2024
C3.02	PHASE II ESC PLAN - AREA 1	2/9/2024	4/24/2024
C3.03	PHASE II ESC PLAN - AREA 2	2/9/2024	4/24/2024
C3.04	GRADING AND STORM DRAINAGE PLAN - OVERALL	2/9/2024	4/24/2024
C3.05	GRADING AND STORM DRAINAGE PLAN - AREA 1	2/9/2024	4/24/2024
C3.06	GRADING AND STORM DRAINAGE PLAN - AREA 2	2/9/2024	4/24/2024
C3.07	STORM PROFILES	2/9/2024	4/24/2024
C3.08	BMP DETAILS	2/9/2024	4/24/2024
C3.09	SAND FILTER DETAILS	2/9/2024	4/24/2024
C3.10	SAND FILTER PROFILES	4/24/2024	4/24/2024
C4.01	UTILITY PLAN	2/9/2024	4/24/2024
C5.01	ESC DETAILS (SHEET 1 OF 2)	2/9/2024	4/24/2024
C5.02	ESC DETAILS (SHEET 2 OF 2)	2/9/2024	4/24/2024
C5.03	SITE DETAILS (SHEET 1 OF 4)	2/9/2024	4/24/2024
C5.04	SITE DETAILS (SHEET 2 OF 4)	2/9/2024	4/24/2024
C5.05	SITE DETAILS (SHEET 3 OF 4)	2/9/2024	4/24/2024
C5.06	SITE DETAILS (SHEET 4 OF 4)	2/9/2024	4/24/2024
C5.07	STORM DETAILS (SHEET 1 OF 4)	2/9/2024	4/24/2024
C5.08	STORM DETAILS (SHEET 2 OF 4)	2/9/2024	4/24/2024
C5.09	STORM DETAILS (SHEET 3 OF 4)	2/9/2024	4/24/2024
C5.10	STORM DETAILS (SHEET 4 OF 4)	2/9/2024	4/24/2024
C5.11	UTILITY DETAILS	2/9/2024	4/24/2024
L1.01	LANDSCAPE PLAN	2/9/2024	4/24/2024
L1.02	LANDSCAPE NOTES AND DETAILS	2/9/2024	4/24/2024

PROJECT / BUILDING INFORMATION:

SCOPE OF WORK: PARKING LOT EXPANSION, EXPANSION OF EXISTING STORMWATER POND, NEW SAND FILTER BMP, WATER/SEWER UTILITY SERVICES FOR FUTURE RESTROOM BUILDING, NEW TENNIS COURTS, AND CONVERSION OF EXISTING TENNIS COURTS TO PICKLEBALL COURTS

SITE AREA: 61.01 AC
 DENUDED AREA: 8.0 AC
 ZONING: RP (RURAL PRESERVATION)

PARCEL ID NUMBER: 00713113
 WATERSHED: ROCKY RIVER
 RIVER BASIN: YADKIN PEE DEE

BAILEY ROAD PARK EXPANSION - PHASE I

100% CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA
 MECKLENBURG COUNTY

ACCELA NUMBER: PUB-500002

VICINITY MAP



LOCATION MAP



CONTACTS

OWNER:
 TOWN OF CORNELIUS
 ADAM ABERNATHY
 ASSISTANT DIRECTOR OF PARKS & RECREATION DEPARTMENT
 21445 CATAWBA AVENUE
 CORNELIUS, NC 28031
 PH. (704) 892-6031 EXT. 164
 AABERNATHY@CORNELIUS.ORG

ENGINEER:
 DEWBERRY ENGINEERS INC.
 DANIEL JONES, P.E.
 9300 HARRIS CORNERS PKWY, SUITE 220
 CHARLOTTE, NC 28269
 PH. (704) 631-5208
 FAX (704) 509-9937
 DJONES@DEWBERRY.COM

LANDSCAPE ARCHITECT:
 DEWBERRY ENGINEERS INC.
 TRISTAN M. MCMANNIS, PLA
 9300 HARRIS CORNERS PKWY SUITE 220
 CHARLOTTE, NC 28269
 PH. (704) 264-1233
 FAX (704) 509-9937
 TMCMANNIS@DEWBERRY.COM

SUBMITTAL		SET NUMBER
<input type="checkbox"/> PRELIMINARY	<input type="checkbox"/> CONSTRUCTION	
<input checked="" type="checkbox"/> APPROVAL	<input type="checkbox"/> REVISION	
<input checked="" type="checkbox"/> BIDDING	<input type="checkbox"/> RECORD	



Dewberry Engineers Inc.
 9300 Harris Corners Pkwy - Suite 220
 Charlotte, NC 28269
 Phone: 704.509.9918
 Fax: 704.509.9937
 www.dewberry.com
 NCSBLS #F-0629
 NCBOLA #C-478

BAILEY ROAD PARK
 EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

SEAL:



FOR SITE DESIGN

SEAL:



FOR UTILITY DESIGN ONLY

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN

APPROVED BY: TM

CHECKED BY: DJ

DATE: FEBRUARY 9, 2024

TITLE

COVER SHEET

DEI PROJECT NO: 50168691

SHEET NO.

T0.01

LEGEND

Table with 3 columns: Symbol, Description, and Symbol. Includes items like FOUND MONUMENT, PROPERTY LINE PER DEED NOT SURVEYED, FEMA, FEDERAL EMERGENCY MANAGEMENT AGENCY, DB, DEED BOOK, etc.

GENERAL NOTES

- 1. ALL DISTANCES SHOWN ARE HORIZONTAL GROUND MEASUREMENTS.
2. THIS IS A TOPOGRAPHIC SURVEY. PROPERTY LINES SHOWN HEREON ARE NOT SURVEYED AND WERE APPROXIMATED FROM FOUND MONUMENTATION AND INFORMATION FROM DEEDS AND MAPS OF RECORD.
3. SEE DATUM DESCRIPTION NOTE FOR GRID TIE INFORMATION.
4. THIS MAP IS NOT PREPARED FOR RECORDATION AS PER G.S. 47-30.
5. RIGHT OF WAY WIDTHS, IF SHOWN, ARE PER INFORMATION OF RECORD.
6. SUB-GRADE CONNECTIVITY AND ROUTING OF STORM AND SANITARY SEWER PIPES ARE APPROXIMATED PER AVAILABLE INFORMATION. PIPE SIZES, INVERT ELEVATIONS, AND MATERIALS ARE CERTIFIED TO BE CORRECT WHERE PIPES ARE CLEARLY VISIBLE WITHOUT CONFINED SPACE ENTRY.
7. UNDERGROUND UTILITIES SHOWN HEREON ARE PER MARKINGS PLACED BY TAYLOR WISEMAN & TAYLOR AND 811. THE SURVEYOR OFFERS NO WARRANTY OR OPINION AS TO THE ACCURACY OF UNDERGROUND UTILITY LOCATIONS. THE SURVEYOR OFFERS NO GUARANTEE THAT ALL UTILITIES LOCATED ON SITE ARE SHOWN HEREON.
8. SANITARY SEWER PIPES LABELED AS "PAINTED" ARE SHOWN PER MARKINGS PLACED BY TAYLOR WISEMAN & TAYLOR AND 811. THE SURVEYOR OFFERS NO WARRANTY OR OPINION AS TO THE ACCURACY OF SAID SANITARY SEWER ROUTING OR CONNECTIVITY.
9. LINES SHOWN ON SHEET 1 ARE FOR ILLUSTRATIVE PURPOSES ONLY.

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON STATE PLANE COORDINATES ESTABLISHED BY DEWBERRY GPS #101 HAVING NAD83(2011) STATE PLANE COORDINATES OF:
NORTHING: 629,049.65'
EASTING: 1,451,130.18'
ELEVATION: 802.57'

THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.999845933
VERTICAL DATUM: NAVD88
ALL LINEAR DIMENSIONS SHOWN HEREON ARE LOCALIZED HORIZONTAL DISTANCES.

GPS NOTE

I, ADAM C. HALES, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:

- (1) CLASS OF SURVEY: CLASS A
(2) POSITIONAL ACCURACY: $\pm 0.100'$
(3) TYPE OF GPS/GNSS FIELD PROCEDURE: VRS
(4) DATE OF SURVEY: 2023-10-13
(5) DATUM/EPOCH: NAD83(2011)
(6) PUBLISHED/FIXED-CONTROL USED: VRS
(7) GEOD MODEL: GEOD18
(8) COMBINED GRID FACTOR(S) AT SET GRID TIE: 0.999845933
(9) UNITS: US SURVEY FEET.

21 NCAC 56.1606 PLAT CERTIFICATION

I, ADAM C. HALES CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THIS GROUND SURVEY WAS PERFORMED AT THE 95% CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS FOR A PLANIMETRIC SURVEY TO THE ACCURACY OF CLASS B AND VERTICAL ACCURACY WHEN APPLICABLE TO THE CLASS B STANDARD, AND THAT THE ORIGINAL DATA WAS OBTAINED ON OCTOBER 10TH, 2023; THAT THE SURVEY WAS COMPLETED ON JANUARY 31ST, 2024; THAT CONTOURS SHOWN AS [BROKEN LINES] MAY NOT MEET THE STATED STANDARD; AND ALL COORDINATES ARE BASED ON NC GRID, NORTH NAD83 (2011) AND ALL ELEVATIONS ARE BASED ON NAVD88.

NOT A CERTIFIED DOCUMENT AS TO THE ORIGINAL DOCUMENT BUT ONLY AS TO THE REVISIONS. THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY GAVIN D. PROFFIT, L-5298, ON NOVEMBER 14, 2023.

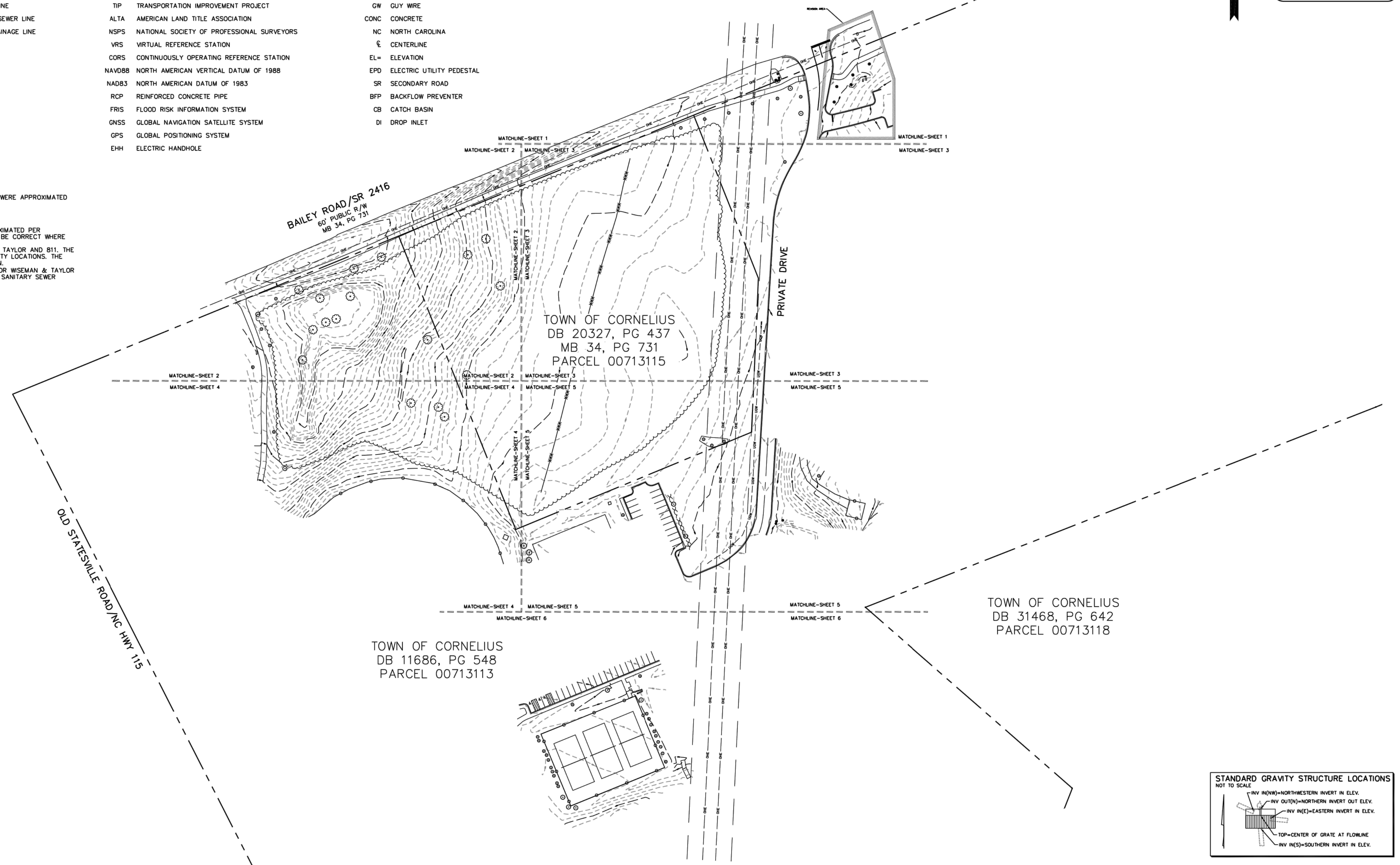
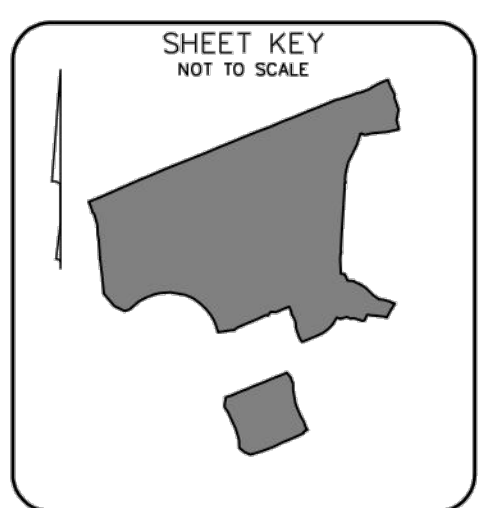
THIS DOCUMENT IS CERTIFIED ONLY AS TO THE REVISIONS DATED ON OR AFTER APRIL 15, 2024.

DocuSigned by: Adam Hales



Table with 4 columns: NO., DATE, BY, DESCRIPTION. Row 1: 1, 4/11/2024, PAS, ADDITIONAL TOPO AREA.

ADAM C. HALES, PROFESSIONAL LAND SURVEYOR L-4980

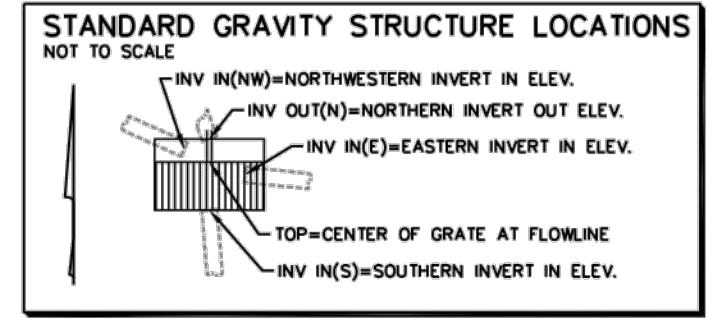


TOWN OF CORNELIUS DB 31468, PG 642 PARCEL 00713118

TOWN OF CORNELIUS DB 11686, PG 548 PARCEL 00713113

TOWN OF CORNELIUS DB 20327, PG 437 MB 34, PG 731 PARCEL 00713115

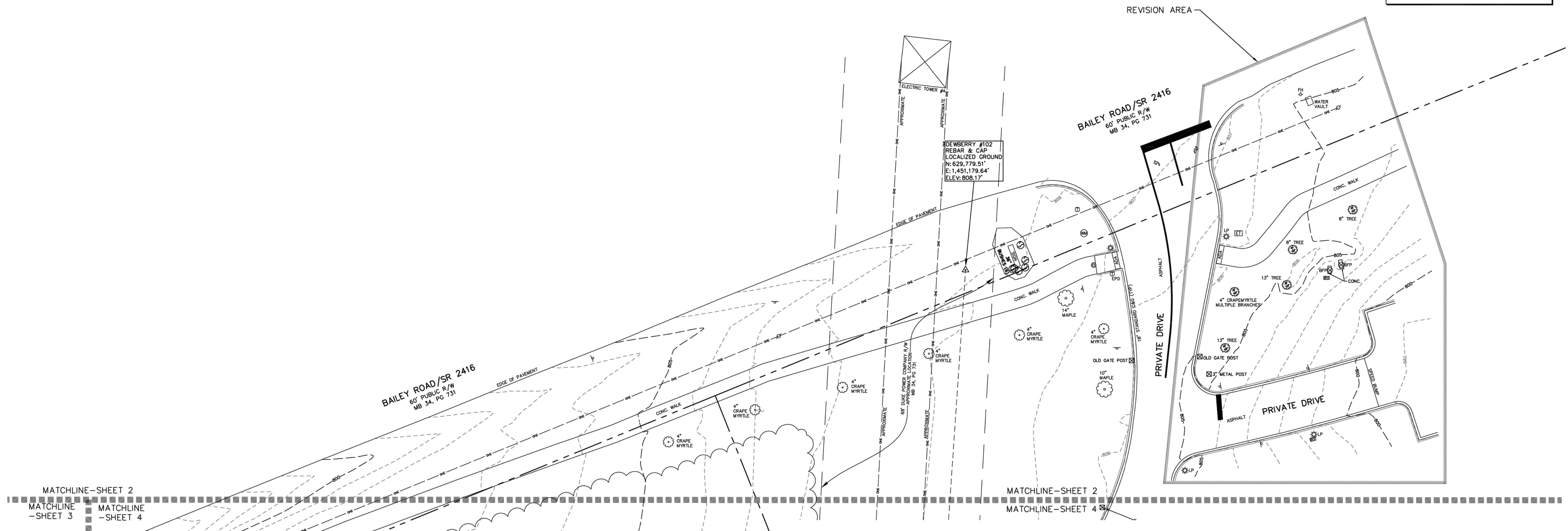
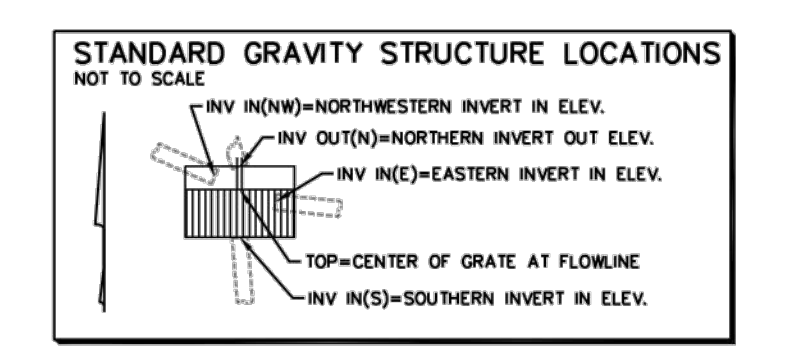
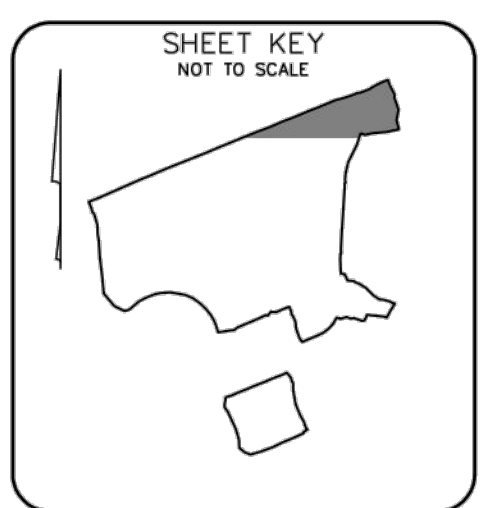
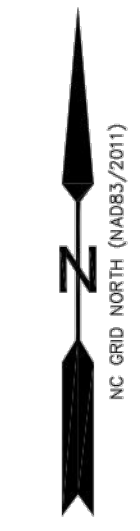
BAILEY ROAD/SR 2416 60' PUBLIC R/W MB 34, PG 731



FLOOD ZONE INFORMATION THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD ZONE AS PER FEMA FIRM PANEL 3710465200K, EFFECTIVE DATE 11/16/2018.

Project information block including Dewberry logo, address (9300 HARRIS CORNERS PARKWAY SUITE 220 CHARLOTTE, NC 28269-3797), drawing title (TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS BAILEY ROAD PARK), scale (1" = 80'), and drawing number (50168691-TOPO).

NOTE: SEE SHEET 1 FOR NOTES, LEGEND AND CERTIFICATIONS

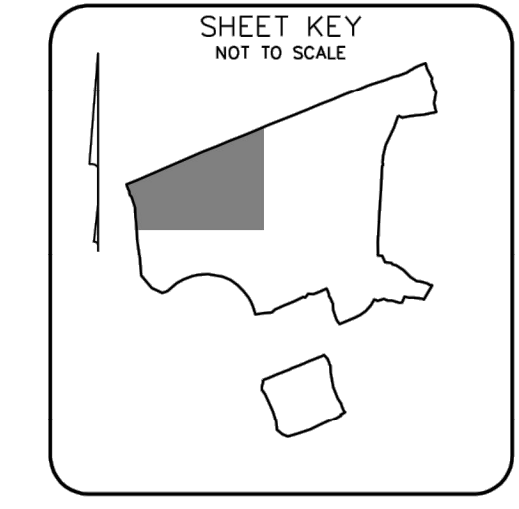
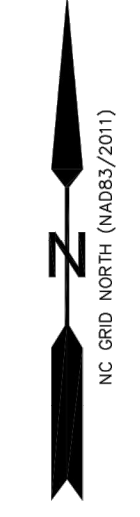
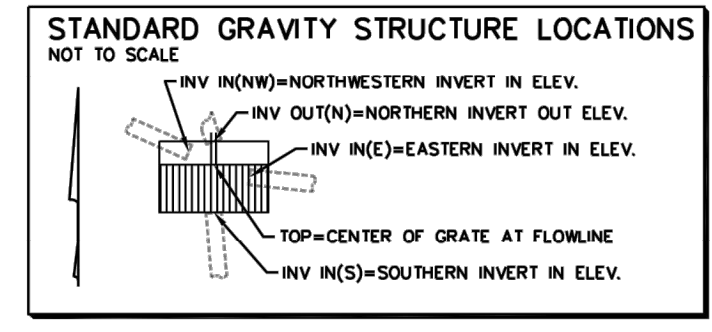


MATCHLINE-SHEET 2
MATCHLINE-SHEET 3
MATCHLINE-SHEET 4

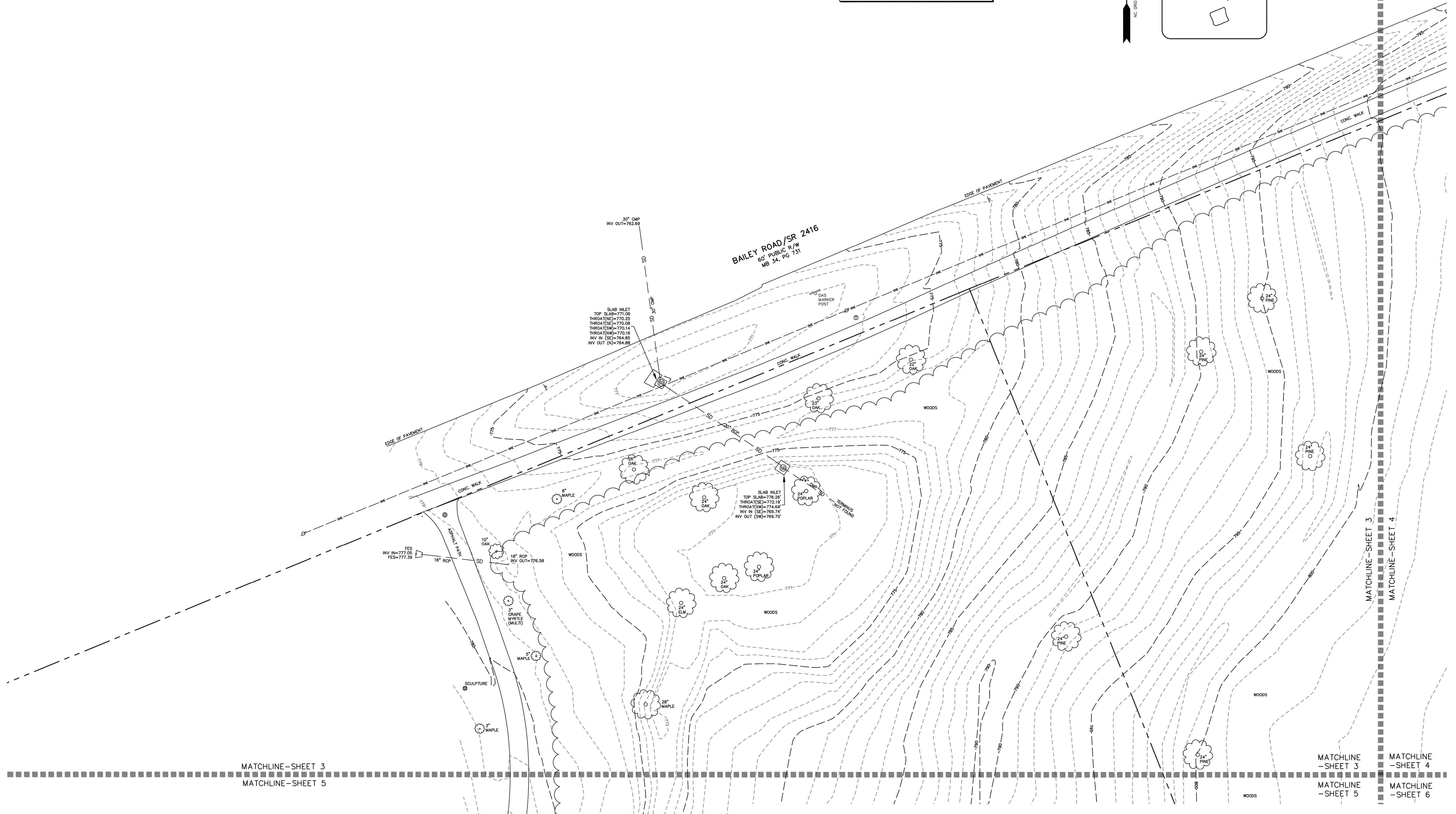
MATCHLINE-SHEET 2
MATCHLINE-SHEET 4

<p>Dewberry Engineers Inc.</p> <p>9300 HARRIS CORNERS PARKWAY SUITE 220 CHARLOTTE, NC 28269-3797 PHONE: (704) 509-9918 FAX: (704) 509-9987 NC REGISTRATION # F-0929</p>	<p>CURRENT OWNER PER DEED BOOK AND PAGE AS SHOWN</p> <p>TOWN OF CORNELIUS</p> <p>P.O. BOX 399 CORNELIUS, NC 28031</p>	<p>VICINITY MAP NOT TO SCALE</p>	<p>TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS</p> <p>BAILEY ROAD PARK</p> <p>DRAWING SCALE: 1" = 20'</p> <p>COMPLETED: JANUARY 31, 2024</p> <p>GRAPHIC SCALE: 0' 10' 20' 40' 80'</p>	
	<p>DRAWN BY: PAS/AMO</p> <p>CHECKED BY: ACH</p> <p>DRAWING NUMBER: 50168691-TOPO</p>	<p>SITE LOCATION: 11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA</p>	<p>SCALE</p>	<p>SHEET 2 OF 7</p>

NOTE: SEE SHEET 1 FOR NOTES, LEGEND AND CERTIFICATIONS



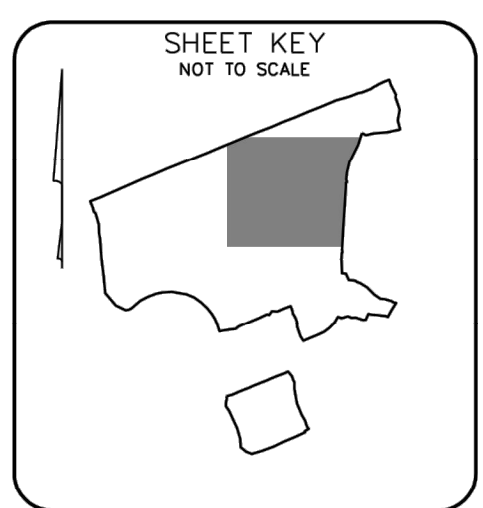
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MATCHLINE—SHEET 3 MATCHLINE—SHEET 4



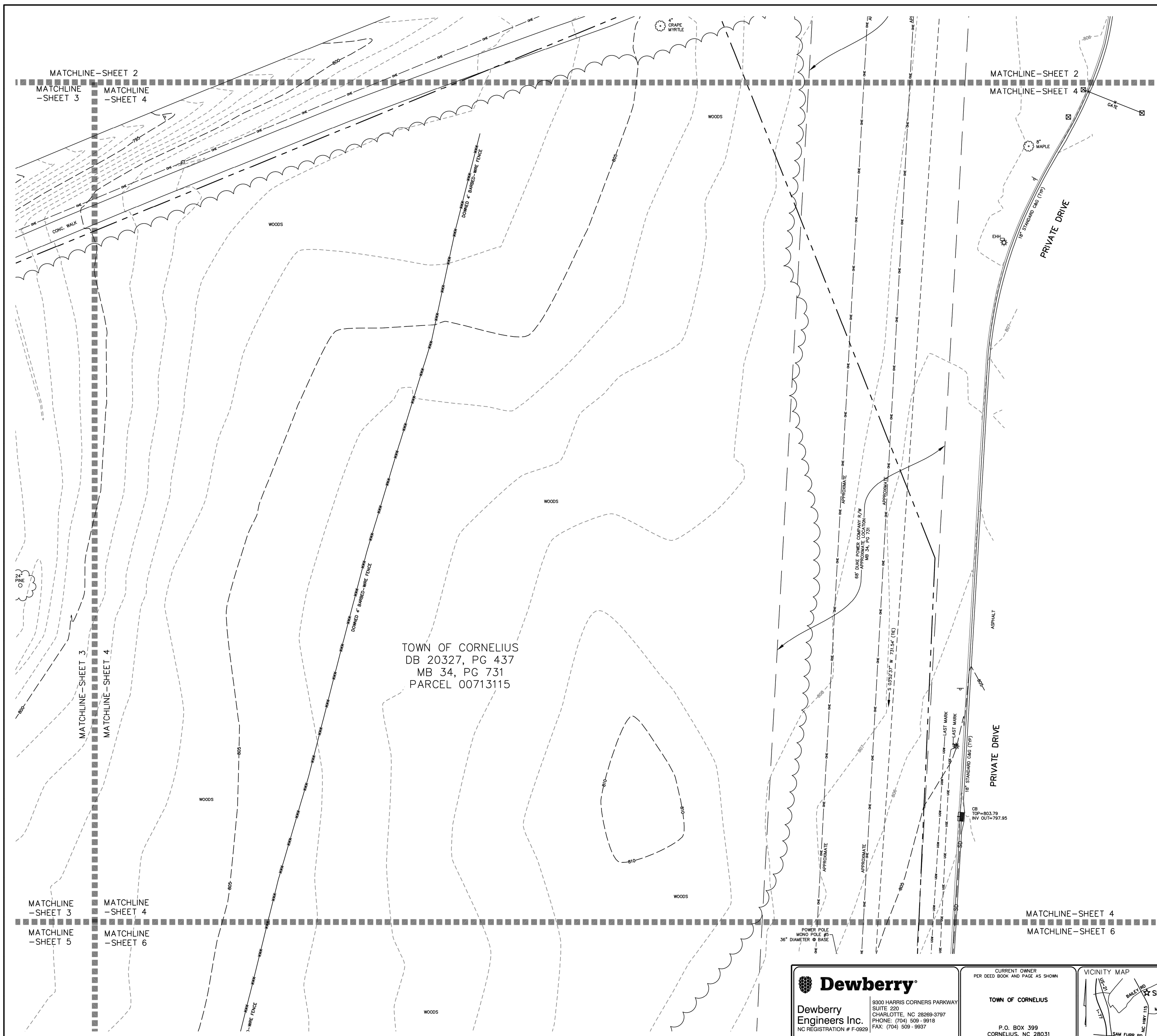
MATCHLINE—SHEET 3
MATCHLINE—SHEET 5

MATCHLINE—SHEET 3
MATCHLINE—SHEET 4
MATCHLINE—SHEET 5
MATCHLINE—SHEET 6

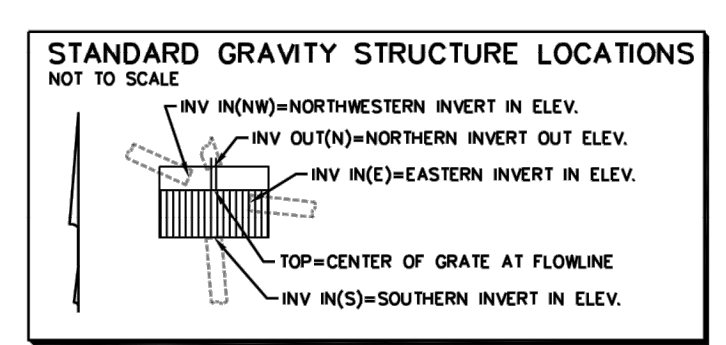
<p>Dewberry Engineers Inc. 9300 HARRIS CORNERS PARKWAY SUITE 220 CHARLOTTE, NC 28269-3797 PHONE: (704) 509-9918 FAX: (704) 509-9937 NC REGISTRATION # F-0928</p>	<p>CURRENT OWNER PER DEED BOOK AND PAGE AS SHOWN</p> <p>TOWN OF CORNELIUS</p> <p>P.O. BOX 399 CORNELIUS, NC 28031</p>	<p>VICINITY MAP NOT TO SCALE</p>	<p>TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS BAILEY ROAD PARK</p> <table border="1"> <tr> <td>DRAWING SCALE: 1" = 20'</td> <td>DRAWN BY: PAS/AMO</td> <td>CHECKED BY: ACH</td> <td>SITE LOCATION: 11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA</td> </tr> <tr> <td>FIELDWORK COMPLETED: JANUARY 31, 2024</td> <td>DRAWING NUMBER: 50168691-TOPO</td> <td colspan="2"></td> </tr> </table> <p>GRAPHIC SCALE: 0' 10' 20' 40' 80'</p>	DRAWING SCALE: 1" = 20'	DRAWN BY: PAS/AMO	CHECKED BY: ACH	SITE LOCATION: 11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA	FIELDWORK COMPLETED: JANUARY 31, 2024	DRAWING NUMBER: 50168691-TOPO		
	DRAWING SCALE: 1" = 20'	DRAWN BY: PAS/AMO	CHECKED BY: ACH	SITE LOCATION: 11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA							
	FIELDWORK COMPLETED: JANUARY 31, 2024	DRAWING NUMBER: 50168691-TOPO									
<p>SHEET 3 OF 7</p>											



NOTE: SEE SHEET 1 FOR NOTES, LEGEND AND CERTIFICATIONS



TOWN OF CORNELIUS
DB 20327, PG 437
MB 34, PG 731
PARCEL 00713115



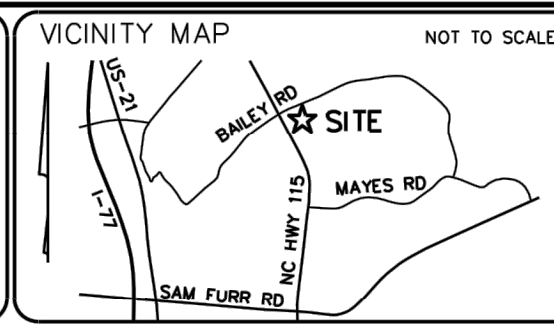
Dewberry
 Dewberry
 Engineers Inc.
 NC REGISTRATION # F-0929

9300 HARRIS CORNERS PARKWAY
 SUITE 220
 CHARLOTTE, NC 28269-3797
 PHONE: (704) 509-9918
 FAX: (704) 509-9937

CURRENT OWNER
 PER DEED BOOK AND PAGE AS SHOWN

TOWN OF CORNELIUS

P.O. BOX 399
 CORNELIUS, NC 28031

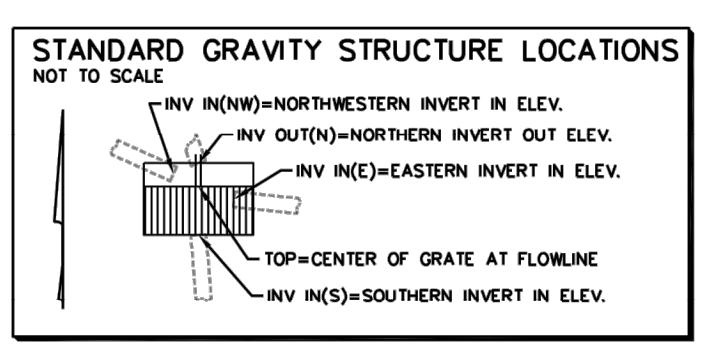
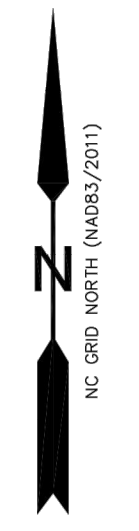
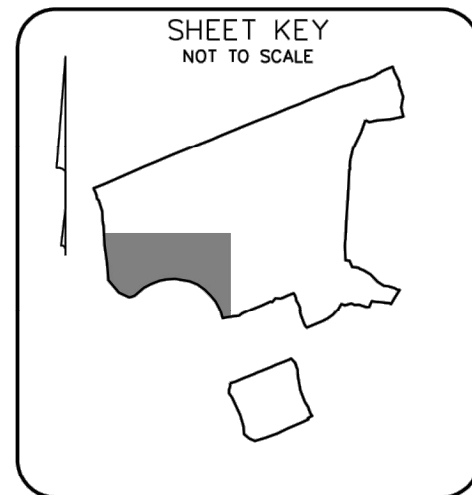


TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS
BAILEY ROAD PARK

DRAWING SCALE 1" = 20'	DRAWN BY PAS/AMO	CHECKED BY ACH	SITE LOCATION 11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA
FIELDWORK COMPLETED JANUARY 31, 2024	DRAWING NUMBER 50168691-TOPO		

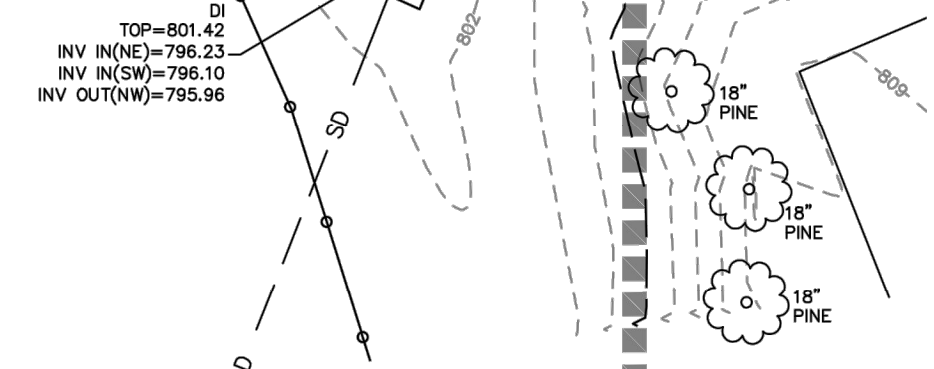
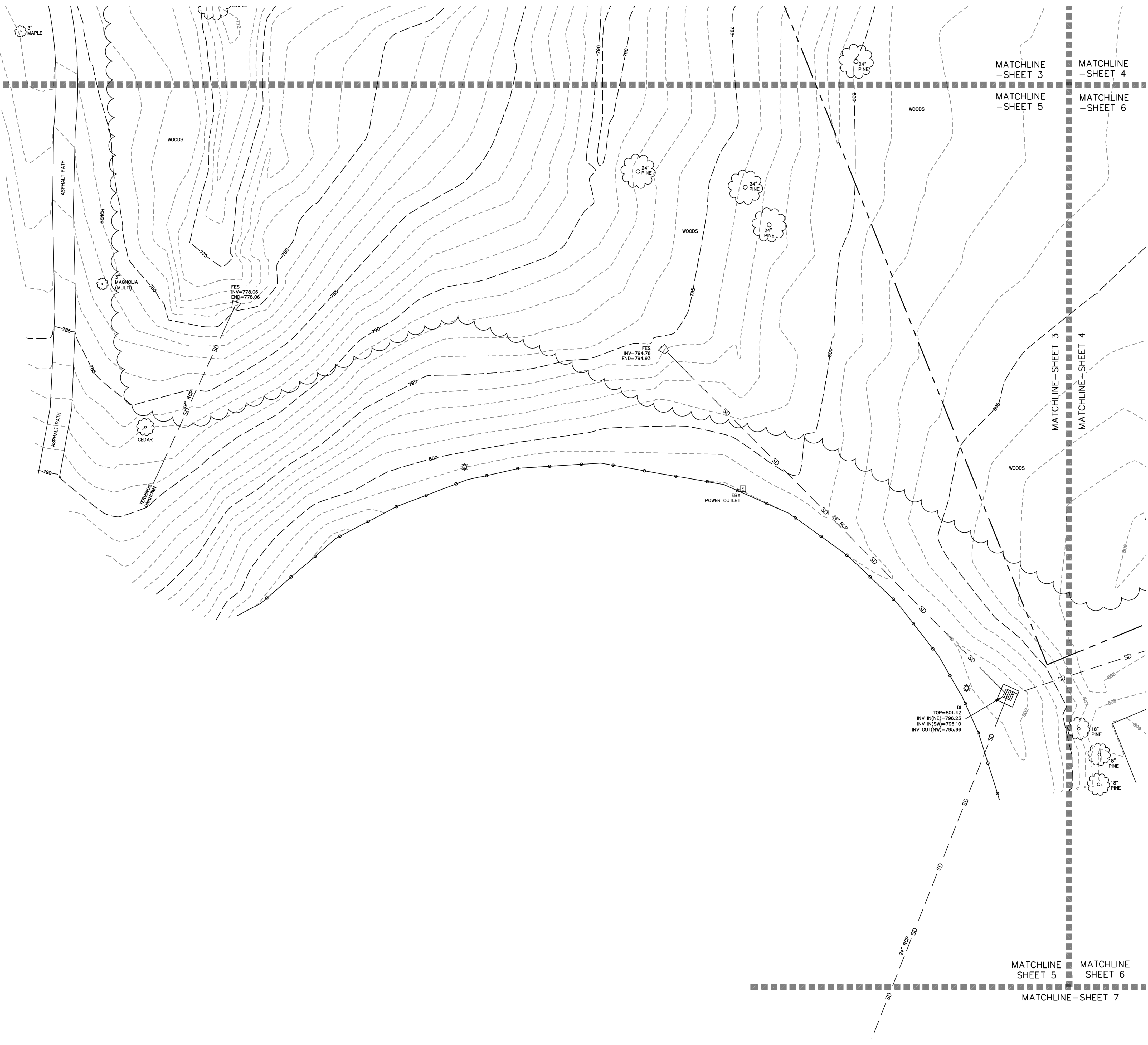
GRAPHIC SCALE: 0' 10' 20' 40' 80'

SHEET 4 OF 7



MATCHLINE-SHEET 3
MATCHLINE-SHEET 5

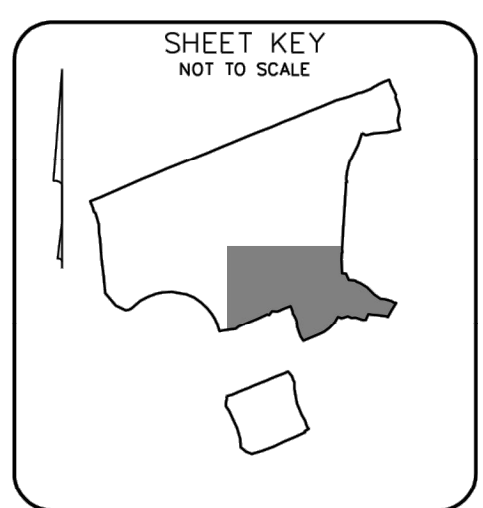
MATCHLINE-SHEET 3
MATCHLINE-SHEET 4
MATCHLINE-SHEET 5
MATCHLINE-SHEET 6



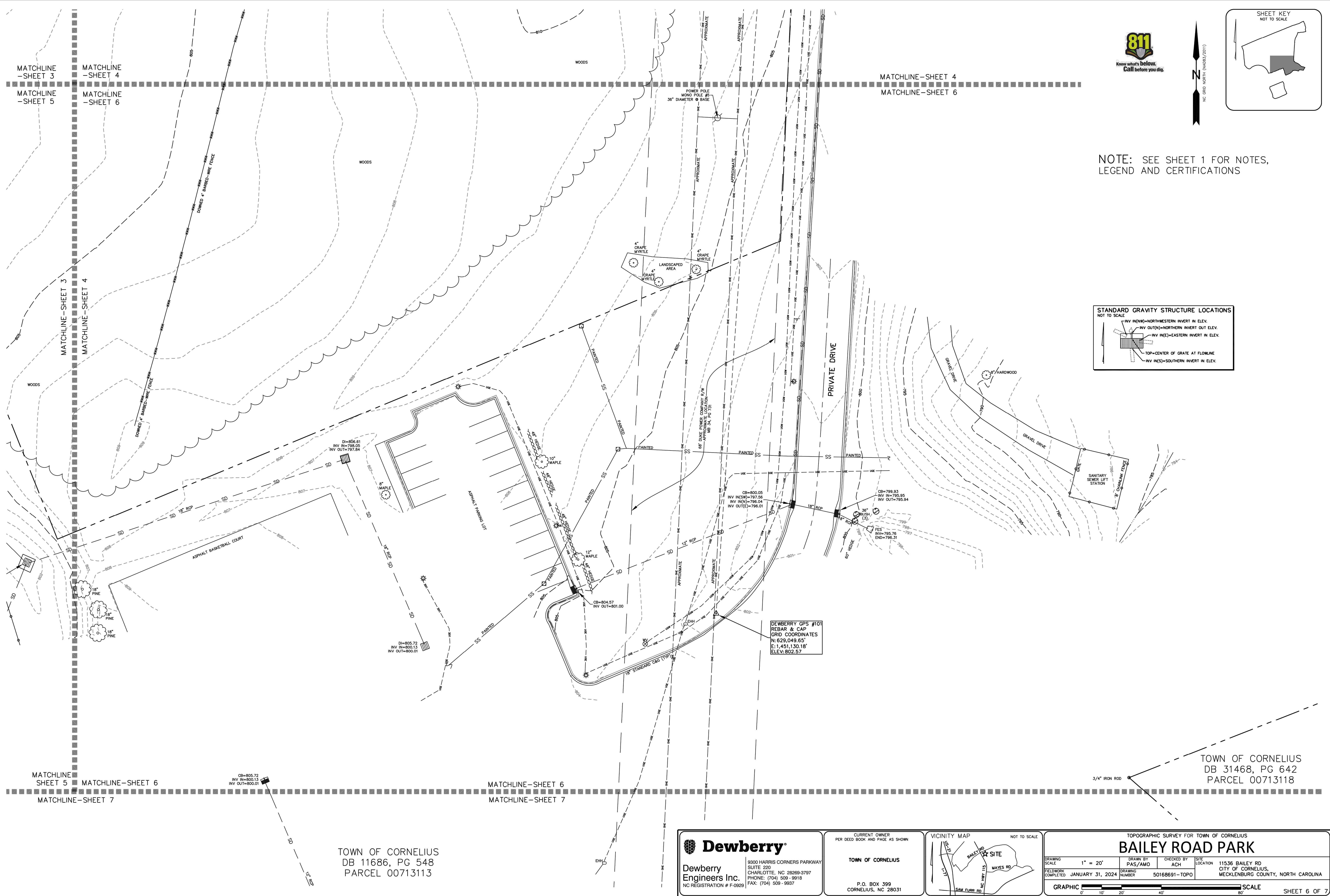
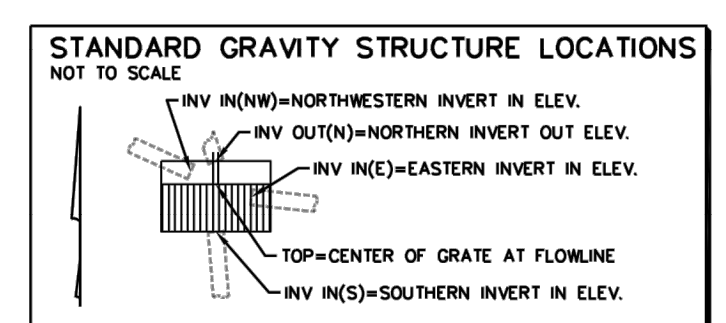
MATCHLINE-SHEET 3
MATCHLINE-SHEET 4
MATCHLINE-SHEET 5
MATCHLINE-SHEET 6
MATCHLINE-SHEET 7

NOTE: SEE SHEET 1 FOR NOTES, LEGEND AND CERTIFICATIONS

<p>Dewberry Engineers Inc.</p> <p>9300 HARRIS CORNERS PARKWAY SUITE 220 CHARLOTTE, NC 28269-3797 PHONE: (704) 509-9818 FAX: (704) 509-9937 NC REGISTRATION # F-0928</p>	<p>CURRENT OWNER PER DEED BOOK AND PAGE AS SHOWN</p> <p>TOWN OF CORNELIUS</p> <p>P.O. BOX 399 CORNELIUS, NC 28031</p>	<p>VICINITY MAP NOT TO SCALE</p>	<p>TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS BAILEY ROAD PARK</p> <table border="1"> <tr> <td>DRAWING SCALE</td> <td>1" = 20'</td> <td>DRAWN BY</td> <td>PAS/AMO</td> <td>CHECKED BY</td> <td>ACH</td> <td>SITE LOCATION</td> <td>11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA</td> </tr> <tr> <td>FIELDWORK COMPLETED</td> <td>JANUARY 31, 2024</td> <td>DRAWING NUMBER</td> <td>50168691-TOPO</td> <td></td> <td></td> <td></td> <td></td> </tr> </table> <p>GRAPHIC SCALE: 0' 10' 20' 40' 80'</p>	DRAWING SCALE	1" = 20'	DRAWN BY	PAS/AMO	CHECKED BY	ACH	SITE LOCATION	11536 BAILEY RD CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA	FIELDWORK COMPLETED	JANUARY 31, 2024	DRAWING NUMBER	50168691-TOPO				
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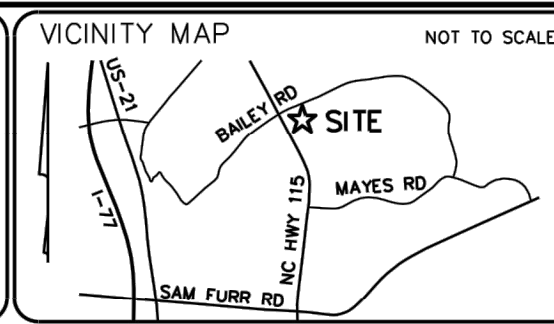
NOTE: SEE SHEET 1 FOR NOTES, LEGEND AND CERTIFICATIONS



TOWN OF CORNELIUS
DB 11686, PG 548
PARCEL 00713113

Dewberry
Engineers Inc.
9300 HARRIS CORNERS PARKWAY
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PHONE: (704) 509-9818
FAX: (704) 509-9937
NC REGISTRATION # F-0928

CURRENT OWNER
PER DEED BOOK AND PAGE AS SHOWN
TOWN OF CORNELIUS
P.O. BOX 399
CORNELIUS, NC 28031



TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS
BAILEY ROAD PARK

DRAWING SCALE: 1" = 20'	DRAWN BY: PAS/AMO	CHECKED BY: ACH	SITE LOCATION: 11536 BAILEY RD, CITY OF CORNELIUS, MECKLENBURG COUNTY, NORTH CAROLINA
FIELDWORK COMPLETED: JANUARY 31, 2024	DRAWING NUMBER: 50168691-TOPO		

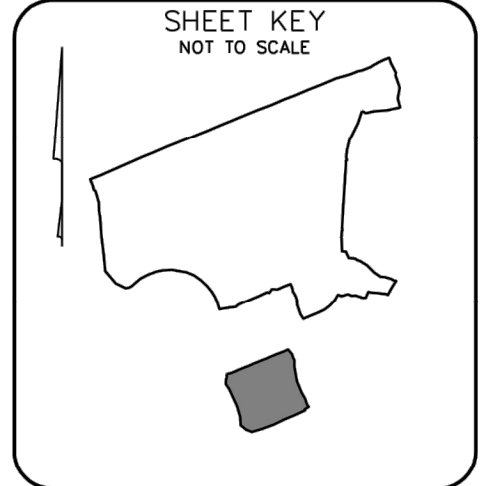
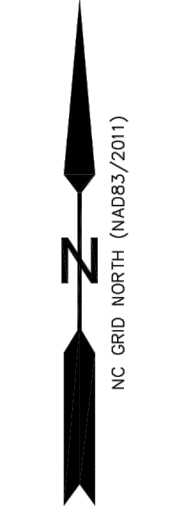
GRAPHIC SCALE: 0' 10' 20' 40' 80'

SHEET 6 OF 7

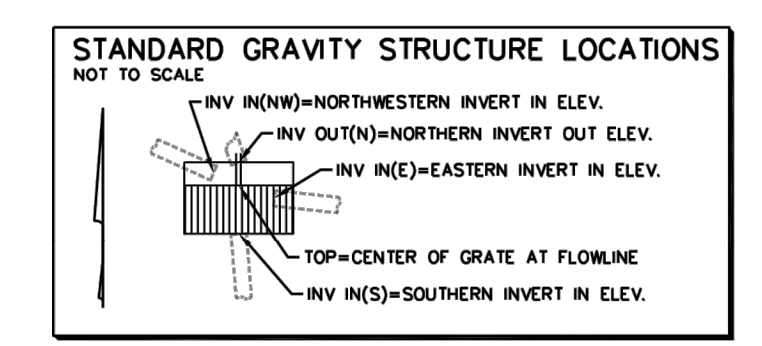
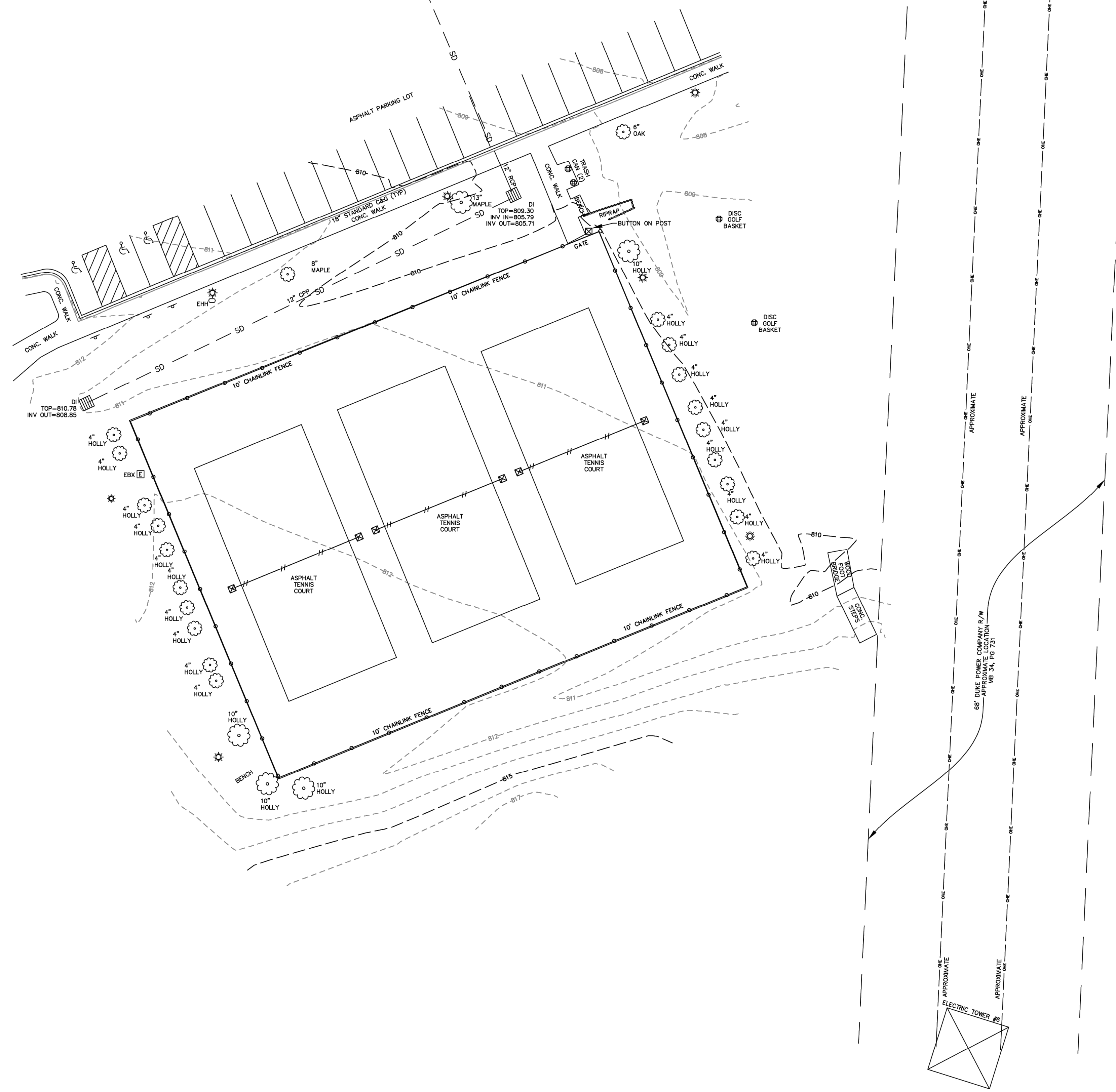
MATCHLINE-SHEET 5 MATCHLINE-SHEET 6
MATCHLINE-SHEET 7

MATCHLINE-SHEET 6
MATCHLINE-SHEET 7

TOWN OF CORNELIUS
DB 11686, PG 548
PARCEL 00713113



NOTE: SEE SHEET 1 FOR NOTES, LEGEND AND CERTIFICATIONS



Dewberry
 Engineers Inc.
 9300 HARRIS CORNERS PARKWAY
 SUITE 220
 CHARLOTTE, NC 28269-3797
 PHONE: (704) 509-9818
 FAX: (704) 509-9937
 NC REGISTRATION # F-0928

CURRENT OWNER
 PER DEED BOOK AND PAGE AS SHOWN
TOWN OF CORNELIUS
 P.O. BOX 399
 CORNELIUS, NC 28031

VICINITY MAP
 NOT TO SCALE

TOPOGRAPHIC SURVEY FOR TOWN OF CORNELIUS
BAILEY ROAD PARK
 DRAWING SCALE 1" = 20'
 DRAWN BY PAS/AMO CHECKED BY ACH
 FIELDWORK COMPLETED JANUARY 31, 2024 DRAWING NUMBER 50168691-TOPO
 SITE LOCATION 11536 BAILEY RD
 CITY OF CORNELIUS,
 MECKLENBURG COUNTY, NORTH CAROLINA
 GRAPHIC SCALE 0' 10' 20' 40' 80'
 SHEET 7 OF 7

GENERAL NOTES

- 1. BASE DATA FROM MECKLENBURG COUNTY GIS AND SURVEY PREPARED BY DEWBERRY ENGINEERS INC. ON APRIL 15, 2024.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING ALL ILLUSTRATED KNOWN UNDERGROUND ELEMENTS. ADDITIONALLY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR EXERCISING REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. THE CONTRACTOR SHALL NOTIFY THE OWNER AND DESIGNER OF RECORD IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE ILLUSTRATED DESIGN.
- 3. PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC, AND ALL OF THE OWNER'S FACILITIES. SHOULD DAMAGES OCCUR, CONTRACTOR SHALL REPAIR IMMEDIATELY AS DIRECTED BY THE OWNER OR DESIGNER OF RECORD. REPAIRS SHALL BE MADE AT NO COST TO THE DEVELOPER/OWNER.
- 4. CONTRACTOR SHALL HOLD HARMLESS THE OWNER AND THE DESIGNER OF RECORD FOR DAMAGES, INJURIES OR OTHER ACCIDENTS WHICH OCCUR DURING THESE CONSTRUCTION ACTIVITIES.
- 5. TREES AND EXISTING LANDSCAPING NOT DESIGNATED FOR REMOVAL SHALL BE PROTECTED DURING CONSTRUCTION.
- 6. CONTRACTOR IS RESPONSIBLE FOR ALL DAMAGES DURING CONSTRUCTION INCLUDING DAMAGES TO OTHER CONTRACTORS & CONSULTANTS WORK AND SHALL MAKE REPAIRS OR HAVE REPAIRS MADE BY OTHERS AT THEIR EXPENSE.
- 7. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION ADJUSTMENTS OF ALL EXISTING VAULTS (REGARDLESS OF FUNCTION), METER BOXES, FIRE HYDRANTS, CLEAN OUTS, MANHOLES ETC. TO MATCH FINISHED GRADES AND SITE PLAN. ALL SUCH WORK SHALL BE COORDINATED WITH THE DESIGNER OF RECORD AND OWNER.
- 8. UTILIZE SIGNS, BARRICADES, ETC. TO ENSURE THE SAFETY OF THE GENERAL PUBLIC.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LAYOUT OF ALL WORK AS ILLUSTRATED ON PLANS. IF EXISTING CONDITIONS DIFFER FROM THOSE ILLUSTRATED ON PLANS, NOTIFY DESIGNER OF RECORD AND DEVELOPER/OWNER PRIOR TO CONSTRUCTION.
- 10. VERIFY ALL DIMENSIONS AND GRADES AT THE JOB SITE. IF DIFFERENCES ARE FOUND, NOTIFY DESIGNER OF RECORD SO THAT MODIFICATIONS TO THESE DRAWINGS CAN BE MADE.
- 11. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- 12. ANY LAND DISTURBANCE ACTIVITY >1 ACRE REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THE GENERAL PERMIT TO DISCHARGE STORMWATER UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (PERMIT NO NCG010000). ANY PERMIT NONCOMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT ACTION BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY. (FOR QUESTIONS CONTACT MOORESVILLE REGIONAL OFFICE WATER QUALITY STAFF AT 704-663-1699.
- 13. ALL SUBSURFACE DRAINAGE PIPE SHALL BE REINFORCED CONCRETE (RCP) PIPE, AS APPROVED BY THE TOWN OF CORNELIUS/MECKLENBURG COUNTY. PIPES IN R/W MUST BE RCP.
- 14. CONTRACTOR TO COORDINATE PLANTING LOCATIONS WITH THE TOWN OF CORNELIUS PRIOR TO PLACEMENT.
- 15. IF THE SAME PERSON CONDUCTS THE LAND-DISTURBING ACTIVITY & ANY RELATED BORROW OR WASTE ACTIVITY, THE RELATED BORROW OR WASTE ACTIVITY SHALL CONSTITUTE PART OF THE LAND-DISTURBING ACTIVITY UNLESS THE BORROW OR WASTE ACTIVITY IS REGULATED UNDER THE MINING ACT OF 1971, OR IS A LANDFILL REGULATED BY THE DIVISION OF WASTE MANAGEMENT. IF THE LAND-DISTURBING ACTIVITY AND ANY RELATED BORROW OR WASTE ACTIVITY ARE NOT CONDUCTED BY THE SAME PERSON, THEY SHALL BE CONSIDERED SEPARATE LAND-DISTURBING ACTIVITIES AND MUST BE PERMITTED EITHER THROUGH THE SEDIMENTATION POLLUTION CONTROL ACT AS A ONE-USE BORROW SITE OR THROUGH THE MINING ACT.

EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL "STD." NUMBERS REFER TO THE MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS (MCLDS).
- 2. ON-SITE BURIAL PITS REQUIRE AN ON-SITE DEMOLITION LANDFILL PERMIT FROM THE ZONING ADMINISTRATOR.
- 3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
- 4. GRADING MORE THAN ONE ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
- 5. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- 6. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
- 7. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY THE EROSION CONTROL INSPECTOR.
- 8. SLOPES SHALL BE GRADED NO STEEPER THAN 2:1. FILL SLOPES GREATER THAN 10' REQUIRE ADEQUATE TERRACING (MCLDS #30.16).
- 9. A GRADING PLAN MUST BE SUBMITTED FOR ANY LOT GRADING EXCEEDING ONE ACRE THAT WAS NOT PREVIOUSLY APPROVED.
- 10. DEWATERING TO BE AUTHORIZED BY THE EROSION CONTROL INSPECTOR AS RELATED TO SITE CONDITIONS. CONTRACTOR SHALL OBTAIN EROSION CONTROL INSPECTOR AUTHORIZATION PRIOR TO DEWATERING ACTIVITIES.
- 11. TEMPORARY DRIVEWAY PERMIT FOR CONSTRUCTION ENTRANCES IN NCDOT RIGHT OF WAY MUST BE PRESENTED AT PRE-CONSTRUCTION MEETING.
- 12. ALL EMBANKMENTS MUST BE CONSTRUCTED PER SECTION 4.0.6 EMBANKMENT REQUIREMENTS IN THE BMP DESIGN MANUAL.
- 13. SITE PREPARATION SHALL BE AS DIRECTED IN REPORT TITLED "GEOTECHNICAL ENGINEERING REPORT: BAILEY ROAD PARK TENNIS COURTS" PREPARED BY CAROLINAS GEOTECHNICAL GROUP DATED MAY 5, 2023. SLOPES GREATER THAN 10 VERTICAL FEET REQUIRE ADEQUATE TERRACING (MCLDS # 30.16). SOILS ENGINEER TO VERIFY STABILITY OF SLOPES GREATER THAN 3:1.
- 14. SOIL COMPACTION TESTS ARE REQUIRED ON ANY BERM >= 5' IN HEIGHT FROM THE NATURAL GRADE. SOIL COMPACTION MUST BE AT 95% PROCTOR PER ASTM D-1557 AND CERTIFIED BY A LICENSED SOIL ENGINEER.
- 15. ALL LAND-DISTURBING ACTIVITIES, INCLUDING THOSE THAT DISTURB LESS THAN AN ACRE, SHALL PROVIDE ADEQUATE EROSION CONTROL MEASURES, STRUCTURES, OR DEVICES IN ACCORDANCE WITH THE COUNTY SOIL EROSION AND SEDIMENTATION CONTROL ORDINANCE.
- 16. SURFACE WATER DRAIN DOWN DEVICES (RISERS OR SKIMMERS) SHALL BE INSTALLED IN ALL SEDIMENT BASINS. ROCK COFFER FOREBAYS SHALL BE USED IN CONJUNCTION WITH ALL SEDIMENT BASINS. THE BASIN SHALL ALSO HAVE A VOLUME TWENTY-FIVE (25) PERCENT GREATER THAN THE 1,800 CUBIC FEET PER DRAINAGE ACRE, WHEN POSSIBLE.
- 17. POLYACRYLAMIDES (PAM) SHALL BE USED TO REDUCE TURBIDITY AND SUSPENDED SOLIDS WHENEVER A SEDIMENT TRAP, BASIN, PIT, HOLE, OR BUILDING FOUNDATION IS BEING PUMPED OUT TO REMOVE SEDIMENT LADEN WATER. PAM IS NOT REQUIRED WHEN ANY OF THE ABOVE IS BEING PUMPED TO AN APPROVED SEDIMENT BASIN ON SITE. THIS ACTIVITY MUST BE INSPECTED AND APPROVED BY THE EROSION CONTROL INSPECTOR. CONTRACTOR SHALL APPLY PAM AS DIRECTED BY MANUFACTURER.
- 18. POLYACRYLAMIDES MAY BE REQUIRED ON SITE, AS DETERMINED BY THE EROSION CONTROL INSPECTOR.
- 19. DOUBLE ROW OF HIGH HAZARD SILT FENCE WITH WIRE BACKING AND STONE SHALL BE USED ALONG WETLANDS, STREAMS, LAKES OR OTHER SURFACE WATER BODIES AS WELL AS ADJACENT TO ALL S.W.I.M. OR OTHER WATER QUALITY BUFFERS. SINGLE ROW OF SILT FENCE WITH WIRE BACKING AND WASHED STONE MAY BE REQUIRED ON ALL OTHER AREAS, AS DETERMINED NECESSARY BY THE COUNTY ENGINEER OR FIELD INSPECTOR.
- 20. A 10-FOOT UNDISTURBED BUFFER SHALL BE PROVIDED AROUND THE OUTSIDE EDGE OF DRAINAGE FEATURES SUCH AS INTERMITTENT AND PERENNIAL STREAMS, PONDS, AND WETLANDS. INCIDENTAL DRAINAGE IMPROVEMENTS OR REPAIRS WILL BE PERMITTED WITHIN THE BUFFER AS APPROVED BY TOWN STAFF. THESE WOULD INCLUDE ANY ALLOWANCES STATED IN THE SWIM BUFFER AND/OR PCCO ORDINANCES, IF APPLICABLE.
- 21. A GROUND COVER SUFFICIENT TO RESTRAIN ACCELERATED EROSION MUST BE PROVIDED WITHIN 7 CALENDAR DAYS OF THE DATE OF LAST LAND-DISTURBING ACTIVITY ON ANY PORTION OF THE PROJECT.
- 22. APPLY EROSION CONTROL MATTING TO DIVERSION DITCHES AND INTERIOR BASIN SLOPES AS SHOWN ON THE PLANS.
- 23. ALL BASIN SPILLWAYS SHALL BE SIZED TO PASS THE 50-YR STORM EVENT.
- 24. FILL SLOPE STEEPNESS SHALL BE LIMITED TO 2:1. SLOPES STEEPER THAN 3:1 MUST BE TERRACED OR OTHERWISE PROVIDE AN APPROVED ENGINEERED SOLUTION. SLOPES 3:1 OR FLATTER MUST BE DESIGNED AS SET FORTH IN THE NC SOIL EROSION & SEDIMENT PLANNING & DESIGN MANUAL, STANDARD 6.02A.
- 25. ALL PLANS WILL CARRY A "PERFORMANCE RESERVATION".
- 26. ALL SELF-INSPECTION LOG BOOK ENTRIES WILL BE ELECTRONICALLY SENT TO THE AREA INSPECTOR, WITHIN 2 WORKING DAYS OF A QUALIFYING RAIN EVENT OR WEEKLY (WHICHEVER IS SHORTER), FOR EROSION CONTROL BASINS WITH A DRAINAGE AREA GREATER THAN 10 ACRES. TURBIDITY MEASUREMENTS MAY BE REQUIRED AT THE DISCRETION OF THE TOWN TO MEASURE CLARITY OF BASIN EFFLUENT AND ANY POTENTIAL IMPACT TO RECEIVING WATERS AT THE TIME OF RAINFALL-TRIGGERED INSPECTIONS. READINGS MUST BE COLLECTED AT THE BASIN OUTFALL (TO MEASURE CLARITY OF BASIN EFFLUENT), UPSTREAM OF THE DISCHARGE POINT (TO MEASURE BASELINE CONDITIONS) AND DOWNSTREAM OF THE DISCHARGE POINT (TO MEASURE STREAM IMPACTS OF THE BASIN EFFLUENT) WHEN POSSIBLE. THE RESULTS MUST BE LOGGED IN THE INSPECTION REPORTS.
- 27. AFTER CONSTRUCTION IS COMPLETED AND THE SITE IS STABILIZED, REMOVE ALL TEMPORARY MEASURES.

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

THE SCOPE OF THIS PROJECT INCLUDES THE CONSTRUCTION OF SIX (6) NEW TENNIS COURTS, THE CONVERSION OF THREE (3) EXISTING TENNIS COURTS INTO TEN (10) PICKLEBALL COURTS, THE CONSTRUCTION OF TWO (2) NEW PARKING LOTS, THE EXPANSION OF THE EXISTING DRY DETENTION POND, THE CONSTRUCTION OF ONE (1) NEW SAND FILTER BMP, AND THE INSTALLATION OF STORM DRAINAGE, UTILITIES, AND LANDSCAPING. THE DENUDED LIMITS FOR THE PROJECT ARE APPROXIMATELY 8.0 AC.

ADJACENT PROPERTY

IT DOES NOT APPEAR ADJACENT PROPERTIES SHALL BE AFFECTED BY THE PERFORMANCE OF WORK ASSOCIATED WITH THIS PROJECT.

CRITICAL AREAS

NO CRITICAL AREAS ARE WITHIN THE PROJECT LIMITS.

NCDEQ INSPECTOR: JEFFREY CHANDLER (704) 235-2148

MANAGEMENT STRATEGIES

- 1. CONSTRUCTION SHALL BE SEQUENCED SO THAT DISTURBANCE, CONSTRUCTION, AND STABILIZATION CAN BE ACHIEVED AS SOON AS PRACTICABLE.
- 2. HARDSCAPE INSTALLATION SHALL BEGIN IMMEDIATELY FOLLOWING RETURN TO EXISTING SUBGRADE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.
- 4. AFTER ACHIEVING ADEQUATE STABILIZATION, THE TEMPORARY EROSION & SEDIMENT CONTROLS SHALL BE CLEANED UP AND REMOVED IMMEDIATELY.

EROSION AND SEDIMENT CONTROL MEASURES

THE INTENT OF THE EROSION AND SEDIMENT CONTROLS SHOWN ON THESE DRAWINGS IS TO GUIDE THE CONTRACTOR IN IMPLEMENTING ACCEPTABLE MEASURES, INFRASTRUCTURE, AND MAINTENANCE PROGRAMS THAT WILL MINIMIZE THE AMOUNT OF EROSION AND RESULTING SEDIMENT THAT WILL TAKE PLACE DURING THE CONSTRUCTION OF THIS PROJECT.

EROSION AND SEDIMENT CONTROL MAINTENANCE

IN GENERAL, ALL THE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED WEEKLY AND AFTER EACH ½" RAINFALL TO ENSURE THEY ARE IN WORKING ORDER. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- 1. INLET PROTECTION: SEDIMENT DEPOSITS SHALL BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE DESIGN DEPTH OF THE TRAP.
- 2. SILT FENCE SHALL BE MAINTAINED BY CONTRACTOR THROUGHOUT THE DURATION OF THE PROJECT TO FUNCTION PER THE STANDARD DETAILS. WHEN/WHERE NECESSARY CONTRACTOR SHALL REPLACE/REPAIR DAMAGED SILT FENCE PER STANDARD DETAILS.

GENERAL DEMOLITION NOTES

- 1. SAW CUT AND REMOVE ALL ASPHALT AND CONCRETE TO LIMITS REQUIRED FOR PROPOSED WORK. SAW CUTS FOR CONCRETE SHALL OCCUR AT THE NEAREST CONTROL JOINT OR EXPANSION JOINT. SAW CUTS BETWEEN CONTROL JOINTS ARE NOT ACCEPTABLE. ALL DECORATIVE SCORING PATTERNS SHALL BE REPLACED TO THE OWNER'S SATISFACTION. CONTRACTOR SHALL DOCUMENT AND PHOTOGRAPH ALL DECORATIVE SCORING PATTERNS PRIOR TO DEMOLITION.
- 2. CONTRACTOR SHALL PHOTOGRAPH ALL ELEMENTS OF THE SITE TO BE MODIFIED FOR THIS PROJECT AND SUBMIT PHOTOGRAPHIC DOCUMENTATION TO OWNER AND DESIGNER OF RECORD FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
- 3. REMOVE VEGETATION, GRASS, & ROOTMATS IN AREAS TO RECEIVE NEW ASPHALT AND CONCRETE PAVEMENTS.
- 4. ALL PRIMARY UTILITIES DISCOVERED DURING DEMOLITION OPERATIONS SHALL BE PROPERLY PRESERVED AND PROTECTED.
- 5. THE CONTRACTOR SHALL IMMEDIATELY REPORT TO THE OWNER ANY UNFORESEEN OR ADVERSE CONDITIONS DISCOVERED DURING DEMOLITION OPERATIONS.
- 6. CONTRACTOR SHALL PROTECT EXISTING PLANT MATERIAL NOT DESIGNATED FOR REMOVAL OR RELOCATION FROM DAMAGE DURING CONSTRUCTION.
- 7. CONTRACTOR SHALL KEEP ALL SURROUNDING ROADWAYS AND DRAINAGE SYSTEMS FREE FROM DIRT, MUD, AND CONSTRUCTION DEBRIS AT ALL TIMES.
- 8. CONTRACTOR SHALL REMOVE ASPHALT PAVEMENT, CONCRETE AND MISCELLANEOUS ITEMS AS NECESSARY TO FACILITATE CONSTRUCTION IN ACCORDANCE WITH STATE AND LOCAL REGULATIONS.
- 9. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY ITEMS DAMAGED DURING THE CONSTRUCTION.
- 10. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, FOOTING, AND SLABS WITHIN THE PROJECT LIMITS TO FULL DEPTH OR AS INDICATED ON THESE PLANS.
- 11. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEBRIS AND CONSTRUCTION WASTE AT A LANDFILL LEGALLY ABLE TO ACCEPT SUCH MATERIAL IN THE STATE OF NORTH CAROLINA.

CONSTRUCTION SEQUENCE

PHASE 1:

- 1. CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY FOR CONSTRUCTION.
- 2. CONTRACTOR SHALL OBTAIN CERTIFICATE OF COVERAGE (COC).
- 3. CONTRACTOR SHALL SET UP AN ON-SITE PRE-CONSTRUCTION CONFERENCE WITH NCDEQ INSPECTOR, JEFFREY CHANDLER. FAILURE TO SCHEDULE SUCH CONFERENCE 48 HOURS PRIOR TO ANY LAND DISTURBING ACTIVITY IS SUBJECT TO FINE.
- 4. CONTRACTOR SHALL INSTALL CONSTRUCTION ENTRANCE, INLET PROTECTION, SILT FENCE, SEDIMENT BASINS, DIVERSION DITCHES/CHANNELS, TREE PROTECTION, AND OTHER MEASURES AS SHOWN ON PLANS, CLEARING ONLY AS NECESSARY TO INSTALL THESE DEVICES.
- 5. CONTRACTOR SHALL CALL FOR ON-SITE INSPECTION BY INSPECTOR. WHEN APPROVED, CLEARING AND GRUBBING MAY BEGIN.
- 6. CONTRACTOR SHALL BEGIN SITE DEMOLITION AS SHOWN ON THE DEMOLITION AND PHASE 1 ESC PLANS.
- 7. ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL AND MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS (MCLDS).
- 8. THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
- 9. CONTRACTOR SHALL MONITOR THE LOCAL WEATHER EVERY DAY THROUGHOUT THE ENTIRE DURATION OF CONSTRUCTION AND ADJUST SCHEDULING ACTIVITIES ACCORDINGLY TO LIMIT POTENTIAL SEDIMENTATION TO THE MAXIMUM EXTENT PRACTICABLE.
- 10. PRIOR TO ALL RAIN EVENTS, CONTRACTOR SHALL INSPECT ALL EROSION CONTROL DEVICES TO ENSURE PROPER FUNCTION DURING A RAIN EVENT. CONTRACTOR SHALL REPLACE ANY EROSION CONTROL DEVICE THAT NO LONGER PROVIDES ADEQUATE PERFORMANCE DURING A RAIN EVENT.

PHASE 2:

- 1. CONTRACTOR SHALL ADJUST MEASURES INSTALLED IN PHASE 1 AS NEEDED FOR PHASE 2 AND SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING PHASE 2. CONTRACTOR SHALL VERIFY THAT SILT FENCE AND OTHER MEASURES INSTALLED DURING PHASE 1 ARE STILL PROVIDING PROTECTION TO KEEP SEDIMENT FROM LEAVING THE SITE.
- 2. CONTRACTOR SHALL COMMENCE WITH ROUGH GRADING OF THE SITE
- 3. CONTRACTOR SHALL INSTALL PERMANENT STORM PIPES, STRUCTURES, AND UTILITIES AS SHOWN ON PLANS. CONTRACTOR SHALL CALL FOR ON-SITE INSPECTION BY INSPECTOR. INSPECTOR SHALL VERIFY INSTALLATION OF STORM PIPES AND STRUCTURES AND THAT SITE DRAINAGE PATTERNS MATCH CONDITIONS SHOWN ON THE PHASE 2 ESC PLAN.
- 4. CONTRACTOR SHALL COMMENCE FINE GRADING OF THE SITE.
- 5. CONTRACTOR SHALL COMMENCE PAVING AND SIDEWALK INSTALLATION AND SHALL BRING ALL GRADES TO FINAL GRADES AS SHOWN ON PLANS.
- 7. CONTRACTOR SHALL COORDINATE WITH EROSION CONTROL INSPECTOR FOR INSPECTION PRIOR TO REMOVAL OF ANY EROSION CONTROL MEASURES.
- 8. CONTRACTOR SHALL STABILIZE ALL DENUDED AREAS. ONCE THE SITE HAS BEEN STABILIZED, CONTRACTOR SHALL CONVERT THE SEDIMENT BASIN INTO A DRY DETENTION BASIN AND SHALL CONVERT THE SKIMMER SEDIMENT BASIN INTO A SAND FILTER AS SHOWN ON THE PLANS. CONTRACTOR SHALL CLEAN OUT SEDIMENT THAT HAS ACCUMULATED IN THE BASIN DURING EROSION CONTROL PHASES.
- 9. AFTER CONSTRUCTION IS COMPLETED AND THE SITE IS STABILIZED, CONTRACTOR SHALL REMOVE ALL TEMPORARY MEASURES, AND STABILIZE ANY RESULTING DISTURBED AREA FROM REMOVAL OF TEMPORARY MEASURES.
- 10. CONTRACTOR SHALL SUBMIT OR CAUSE TO BE SUBMITTED THE NOTICE OF TERMINATION (NOT) TO NCDEQ.

GRADING NOTES

- 1. ALL STORM STRUCTURES SHALL MEET CURRENT NCDOT STANDARDS APPROVED FOR USE IN THE TOWN OF CORNELIUS PER MCLDS STD. NO. 20.00.
- 2. ALL STORM INLETS LABELED "CB" SHALL BE GRATE TYPE INLETS (NCDOT 840.02).
- 3. ALL STORM STRUCTURES LABELED "JB" SHALL BE JUNCTION BOXES (NCDOT 840.52).
- 4. ALL STORM STRUCTURES LABELED "DI" SHALL BE GRATE DROP TYPE INLET (NCDOT 840.14 & 840.17 IF PIPE GREATER THAN 30" DIA.).
- 5. THE MINIMUM COVER FOR CLASS III RCP SHALL BE 2'. WHERE 2' OF COVER CANNOT BE PROVIDED THE PIPE SHALL BE CLASS IV.
- 6. ALL INCOMING PIPES SHALL BE CUT FLUSH WITH THE INSIDE OF STORM STRUCTURES AND THE INVERTS GROUDED AND TROWELED TO PROVIDE POSITIVE DISCHARGE THROUGH THE STRUCTURE.
- 7. ALL STORM DRAINAGE STRUCTURES GREATER THAN 42" DEPTH SHALL HAVE STEPS CAST INTO THEM.
- 8. RIM ELEVATIONS ARE AT THE CENTER OF THE GRATE AT THE EDGE OF PAVEMENT. RIM ELEVATIONS FOR DROP INLETS AND MANHOLES SHALL BE AT THE CENTER OF THE LID OR GRATE.
- 9. ALL SPOT ELEVATIONS SHOWN ARE TOP BACK OF CURB (BC) UNLESS OTHERWISE NOTED.
- 10. ALL SIDEWALKS AND PAVED AREAS FOR PEDESTRIAN TRAFFIC SHALL BE GRADED IN ACCORDANCE WITH THE 2010 ADA GUIDELINES AND SHALL HAVE A CROSS SLOPE OF 1.5% PREFERRED, 2% MAXIMUM. THE LONGITUDINAL SLOPE OF WALKS SHALL NOT EXCEED 5% UNLESS THESE DRAWINGS INDICATE A RAMP CONDITION. ANY LANDINGS, AND LOADING AREA ADJACENT TO BUS STOP SHALL NOT HAVE A SLOPE GREATER THAN 2% IN ANY DIRECTION.
- 11. WHERE ADJACENT PLACEMENT SLOPES AWAY FROM THE PROPOSED CURB & GUTTER THE CONTRACTOR SHALL PROVIDE SPILL CURB.
- 12. IN ORDER TO ENSURE PROPER DRAINAGE, CURB SHALL HAVE A MINIMUM OF 0.5% SLOPE, UNLESS SPILL CURB IS INDICATED ON THE PLANS. SHADED CURB & GUTTER INDICATES LOCATION FOR SPILL CURBS.
- 13. CONTRACTOR IS RESPONSIBLE FOR OBTAINING POSITIVE DRAINAGE AT ALL INTERSECTIONS. SPECIAL CARE MUST BE TAKEN WHERE SPILL CURB IS CALLED OUT.
- 14. NO STORM PIPE SHALL BE INSTALLED WITHIN THE S.W.I.M. BUFFERS.
- 15. GENERALLY, SOIL MATERIALS FOR CONSTRUCTION SHALL BE AS RECOMMENDED IN THE GEOTECHNICAL REPORT TITLED "GEOTECHNICAL ENGINEERING REPORT: BAILEY ROAD PARK TENNIS COURTS" PREPARED BY CAROLINAS GEOTECHNICAL GROUP DATED MAY 5, 2023.
- 16. FILL AND BACKFILL MATERIAL SHALL CONSIST OF SOIL, GRANULAR SAND, GRAVEL, AND COBBLE MATERIAL, FREE FROM FROZEN MATERIAL, ORGANIC MATERIAL, TRASH, GLASS, BROKEN CONCRETE, AND OTHER CORROSIVE OR DELETERIOUS MATERIAL. APPROVAL OF FILL AND BACKFILL MATERIAL IS CONTINGENT ON THE MATERIAL HAVING A MAXIMUM DRY DENSITY OF NOT LESS THAN 90 POUNDS PER CUBIC FOOT. THE MATERIAL MUST BE STABLE AND HAVE A LIQUID LIMIT LESS THAN 50 AND A PLASTIC INDEX LESS THAN 30 WHEN TESTED IN ACCORDANCE WITH ASTM D4318. SIZE RESTRICTIONS ARE AS FOLLOWS:
 - 16.1. NO MATERIAL SHALL HAVE DIMENSIONS LARGER THAN FOUR (4") INCHES. WHERE THE SUBGRADE LAYER IS LESS THAN FOUR (4") INCHES THE MAXIMUM SIZE SHALL NOT EXCEED TWO THIRDS (2/3) THE DEPTH OF THE LAYER. WHERE UNSTABLE SUBGRADE IS ENCOUNTERED, THE CONTRACTOR SHALL OBTAIN RECOMMENDATIONS FROM THE OWNER'S GEOTECHNICAL ENGINEER AND PROVIDE RECOMMENDATIONS AND VARIANCE PERING TO OWNER TO STABILIZE THE MATERIAL BY TECHNIQUES SUCH AS OVER EXCAVATION AND BACKFILL WITH IMPORTED MATERIAL, USE OF GEOTECHNICAL REINFORCEMENT, CHEMICAL STABILIZATION OR OTHER METHODS. THE CONTRACTOR SHALL NOTIFY THE OWNER OF PROPOSED SOLUTION TO STABILIZE THE SUBGRADE AND SHALL NOT COMMENCE UNTIL THEY HAVE RECEIVED WRITTEN APPROVAL FROM THE OWNER. IF TESTS OR OBSERVATION REVEAL THAT MATERIAL BEING PLACED IS NOT OF SUITABLE QUALITY AND STRUCTURAL VALUE, THE CONTRACTOR SHALL PROVIDE OTHER MATERIAL AS APPROVED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- 17. EXCAVATION OF ALL MATERIALS SHALL BE PERFORMED IN CONFORMITY WITH THE LINES AND GRADES INDICATED ON THE DRAWINGS. SUITABLE MATERIAL REMOVED FROM THE EXCAVATION MAY BE USED AS FILL AND BACKFILL OR ANY OTHER AREAS WITHIN THE LIMITS OF WORK AS PERMITTED BY THE ENGINEER. WHERE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF THE WORK IS CONSIDERED UNSUITABLE BY THE OWNER'S GEOTECHNICAL ENGINEER, WHERE MATERIAL ENCOUNTERED WITHIN THE LIMITS OF THE WORK IS CONSIDERED UNSUITABLE BY THE OWNER'S GEOTECHNICAL ENGINEER, SUCH MATERIAL SHALL BE EXCAVATED AS DIRECTED BY THESE STANDARDS, THE PLANS, OR THE OWNER'S GEOTECHNICAL ENGINEER AND REPLACED WITH SUITABLE MATERIAL.
- 18. BUILDING PADS AND THE PAVEMENT STRUCTURE SHALL BE FOUNDED ON ORIGINAL, UNDISTURBED SOIL OR ON STRUCTURAL BACKFILL EXTENDED TO THE UNDISTURBED SOIL. BUILDING PADS AND THE PAVEMENT STRUCTURE SHALL NOT BE FOUNDED ON EXISTING FILL IF ENCOUNTERED AT THE PROJECT SITE UNLESS APPROVED BY THE ENGINEER. IF EXISTING FILL IS ENCOUNTERED AT THE SUBGRADE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER WHO SHALL EVALUATE THE EXISTING FILL FOR SUITABILITY OF ACCEPTING NEW FILL.
- 19. THE CONTRACTOR SHALL BLEND THE INTERSECTION OF CUT SLOPES WITH THE SLOPES OF ADJACENT NATURAL GROUND SURFACES IN A UNIFORM MANNER, THE TOPS OF CUT SLOPES SHALL BE FLATTENED AND ROUNDED.
- 20. ALL EXCAVATED MATERIAL SHALL BE STOCKPILED IN A MANNER THAT DOES NOT ENDANGER THE WORK OR WORKERS AND DOES NOT OBSTRUCT SIDEWALKS, STREETS, ALLEYS, AND/OR DRIVEWAYS. THE WORK SHALL BE DONE IN A MANNER THAT WILL MINIMIZE INTERFERENCE WITH TRAFFIC AND/OR DRAINAGE. THE CONTRACTOR AT THE END OF EACH DAY SHALL BARRICADE ALL EXCAVATIONS AND DITCH LINES, REMOVE EXCESS EXCAVATED MATERIAL FROM TRAVEL WAYS, AND THOROUGHLY CLEAN ALL STREETS, ALLEYS, AND/OR SIDEWALKS AFFECTED BY THE EXCAVATION.
- 21. MATERIAL ENCOUNTERED DURING EXCAVATION; SUCH AS, RUBBISH, ORGANIC, OR FROZEN MATERIAL, AND ANY OTHER MATERIAL WHICH IS UNSATISFACTORY FOR USE AS BACKFILL IN THE OPINION OF THE OWNER'S GEOTECHNICAL ENGINEER, SHALL BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. STONES, CONCRETE, OR ASPHALT CHUNKS LARGER THAN FOUR (4") INCHES OR FROZEN MATERIAL SHALL BE CONSIDERED UNSATISFACTORY BACKFILL AND REMOVED BY THE CONTRACTOR. FROZEN MATERIAL, HOWEVER, MAY BE THAWED OUT AND USED AT A LATER DATE.
- 22. FILL AND BACKFILL SHALL CONSIST OF APPROVED MATERIAL UNIFORMLY DISTRIBUTED IN 8-INCH UNCOMPACTED LIFTS. EACH LIFT OF BACKFILL SHALL BE COMPACTED TO THE REQUIRED DENSITY BEFORE SUCCESSIVE LAYERS ARE PLACED. STRUCTURAL FILL AND BACKFILL SHALL BE COMPACTED TO A DENSITY OF NOT LESS THAN 95 PERCENT OF THE MAXIMUM DRY DENSITY WITHIN +/- TWO (2%) PERCENT OF THE OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D698.
- 23. BEFORE ANY FILL IS PLACED, CLEARING, TREE REMOVAL, SOD AND TOPSOIL REMOVAL OVER THE ENTIRE AREA SHALL BE PERFORMED IN ACCORDANCE WITH THESE STANDARDS. THE BASE OF FILL AREA SHALL BE PROOFROLLED WITH A PNEUMATIC Tired VEHICLE WEIGHING NO LESS THAN 20 TONS AND OBSERVED BY THE OWNER'S GEOTECHNICAL ENGINEER. THE CONTRACTOR SHALL NOTIFY THE OWNER AND THE OWNER'S GEOTECHNICAL ENGINEER NO LESS THAN 24 HOURS PRIOR TO PLACING FILL TO SCHEDULE THE PROOFROLL. NO FILL MATERIAL SHALL BE PLACED UPON SIFT, SPONGY, OR FROZEN MATERIAL OR OTHER MATERIAL. THE STABILITY OF WHICH IS IN THE OPINION OF THE OWNER'S GEOTECHNICAL ENGINEER, UNSUITABLE FOR THE PLACEMENT THEREOF.
- 24. WHEN FILL IS TO BE PLACED ON SLOPES, IT SHALL BE CONTINUOUSLY BENCHED IN HORIZONTAL LAYERS TO KEY INTO THE EXISTING SLOPE. EACH LIFT OF THE FILL MATERIAL SHALL NOT EXCEED EIGHT (8") INCHES IN LOOSE DEPTH. THE CONTRACTOR SHALL THOROUGHLY MIX AND INSURE UNIFORM DENSITY AND MOISTURE FOR PROPER COMPACTION.
- 25. GRADED SLOPES SHALL NOT EXCEED 3:1 OR AS RECOMMENDED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- 26. BACKFILL MATERIAL SHALL NOT BE DEPOSITED AGAINST NEWLY CONSTRUCTED MASONRY OR CONCRETE STRUCTURES UNTIL THE CONCRETE HAS DEVELOPED A FIELD COMPRESSIVE STRENGTH OF EQUAL TO THE DESIGN COMPRESSIVE STRENGTH.
- 27. COMPACTION METHODS THAT PRODUCE HORIZONTAL OR VERTICAL EARTH PRESSURES, WHICH MAY CAUSE EXCESSIVE DISPLACEMENT OR OVERTURNING, OR MAY DAMAGE STRUCTURES, BURIED PIPE, OR UTILITIES, SHALL NOT BE USED.
- 28. UNLESS OTHERWISE INDICATED IN THE CONTRACT OR DIRECTED BY THE ENGINEER, ALL SHEETING AND BRACING USED IN EXCAVATION SHALL BE REMOVED BY THE CONTRACTOR PRIOR TO BACKFILLING.
- 29. THE CONTRACTOR IS RESPONSIBLE FOR THE SCHEDULING THE QUALITY CONTROL TESTING AND PROTECTION OF WORK UNTIL ACCEPTED BY THE OWNER. ALL QUALITY CONTROL TEST RESULTS SHALL BE MADE AVAILABLE TO THE OWNER AND ENGINEER IMMEDIATELY AFTER TESTING. ACCEPTANCE TESTING MAY INCLUDE BUT NOT LIMITED TO TESTS ASSOCIATED WITH PLACING OF CONCRETE, ASPHALT, AND BASE COURSE SUBGRADE PREPARATION, AND SOIL COMPACTION. THE CONTRACTOR SHALL COORDINATE WITH THE CONSTRUCTION MATERIAL TESTING FIRM AS TO WHEN HE OR SHE IS READY FOR TESTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COSTS ASSOCIATED WITH RE-TESTING DUE TO FAILED ACCEPTANCE TEST.
- 30. UPON COMPLETION OF THE STRIPPING OPERATIONS, THE EXPOSED SUBGRADE IN AREA TO RECEIVE FILL SHOULD BE PROOFROLLED WITH A LOADED DUMP TRUCK OR SIMILAR PNEUMATIC Tired VEHICLE (MINIMUM LOADED WIGHT OF 20 TONS) UNDER THE OBSERVATION OF THE A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER.
- 31. THE PROOFROLLING PROCEDURES SHOULD CONSIST OF COMPLETE PASSES OF THE EXPOSED AREA, WITH HALF OF THE PASSES BEING IN A DIRECTION PERPENDICULAR TO THE PRECEDING ONES. AFTER EXCAVATION OF THE SITE HAS BEEN COMPLETED, THE EXPOSED SUBGRADE IN CUT AREAS SHOULD ALSO BE PROOFROLLED AS PREVIOUSLY DESCRIBED. ANY AREA WHICH DEFLECT, RUT, OR PUMP EXCESSIVELY DURING PROOFROLLING OR FAIL TO IMPROVE SUFFICIENTLY AFTER SUCCESSIVE PASSES SHOULD BE UNDERCUT TO SUITABLE SOILS AND REPLACED WITH STRUCTURAL FILL. THE EXTENT OF THE UNDERCUT REQUIRED SHOULD BE EVALUATED IN THE FIELD BY AN EXPERIENCED REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER WHILE MONITORING CONSTRUCTION ACTIVITY. THE EVALUATION SHOULD CONSIST OF A COMPREHENSIVE PROOFROLLING PROGRAM AND THOROUGH FIELD EVALUATION DURING CONSTRUCTION.
- 32. AFTER THE PROOFROLLING OPERATION HAS BEEN COMPLETED AND APPROVED, FINAL SITE GRADING SHOULD PROCEED IMMEDIATELY. IF CONSTRUCTION PROGRESSES DURING WET WEATHER, THE PROOFROLLING OPERATION SHOULD BE REPEATED WITH AT LEAST ON PASS IN EACH DIRECTION IMMEDIATELY PRIOR TO PLACING BASE COURSE IN THE PARKING/DRIVE AREAS. IF UNSTABLE CONDITIONS AREA EXPOSED DURING THE OPERATION, THEN UNDERCUTTING SHOULD BE PERFORMED.



Dewberry Engineers Inc.

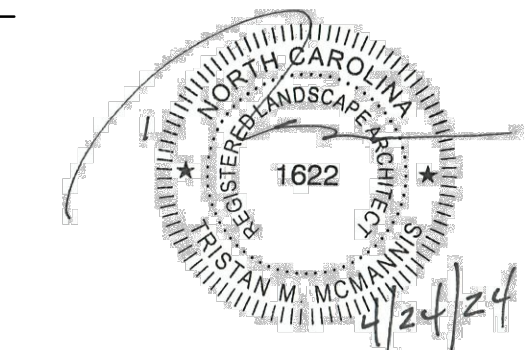
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BAILEY ROAD PARK EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY BN

APPROVED BY TM

CHECKED BY DJ

DATE FEBRUARY 9, 2024

TITLE

GENERAL NOTES (SHEET 1 OF 2)

DEI PROJECT NO: 50168991

SHEET NO.

C0.01

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SITE NOTES

1. DIMENSIONS AND COORDINATE POINTS ARE TO FACE OF CURB, EDGE OF PAVEMENT, OR CORNER OF BUILDING UNLESS OTHERWISE NOTED.
2. ALL IMPROVEMENTS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE AND LOCAL STANDARDS.
3. ANY DISCREPANCIES FOUND IN THE FIELD SHALL BE CALLED TO THE ATTENTION OF THE OWNER OR ENGINEER OF RECORD PRIOR TO PROCEEDING WITH WORK.
4. PRIOR TO BEGINNING CONSTRUCTION, THE GENERAL CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND APPROVALS FROM ALL REGULATORY AUTHORITIES.
5. THE GENERAL CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES, AND RIGHT-OF-WAYS, PUBLIC AND PRIVATE, PRIOR TO WORKING IN THESE AREAS.
6. GENERAL CONTRACTOR SHALL MAINTAIN THE SITE IN A MANNER SO THAT WORKMEN AND THE PUBLIC SHALL BE PROTECTED FROM INJURY.
7. DO NOT SCALE DRAWINGS FROM ACTUAL DIMENSIONS, AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
8. THE (TOWN OF CORNELIUS/MECKLENBURG COUNTY) ENGINEERING DEPARTMENT HAS NOT REVIEWED THE STRUCTURAL STABILITY OF ANY RETAINING WALLS ON THE SITE AND DOES NOT ASSUME RESPONSIBILITY FOR THEM.
9. THE ENGINEER WILL PROVIDE THE CONTRACTOR WITH AN ELECTRONIC FILE OF THESE DRAWINGS UPON REQUEST.
10. ALL RETAINING WALLS SHALL HAVE A 48" HEIGHT BLACK ALUMINUM FENCE WITH PICKETS NOT PERMITTING THE PASSAGE OF A 4" DIAMETER SPHERE LOCATED ON THE TOP OF WALL. SEE WALL DESIGN BY OTHERS FOR DETAILED INFORMATION.
11. IF REQUIRED BY MECKLENBURG COUNTY, CONTRACTOR IS RESPONSIBLE FOR OBTAINING P.E. SEALED SHOP DRAWINGS FOR RETAINING WALLS AND MUST SUBMIT TO TOWN ENGINEER PRIOR TO CONSTRUCTION.
12. ALL PAVED AREAS SHALL COMPLY WITH THE LATEST ADA ACCESSIBILITY (2010) AND ANSI A117.1 GUIDELINES.
13. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,600-PSI AT 28 DAYS, AND SHALL HAVE A MEDIUM BROOM FINISH PERPENDICULAR TO THE PATH OF TRAVEL.
14. ALL PROPOSED PAVEMENT ADJACENT TO EXISTING PAVEMENT SHALL TIE FLUSH TO ADJACENT SURFACES.

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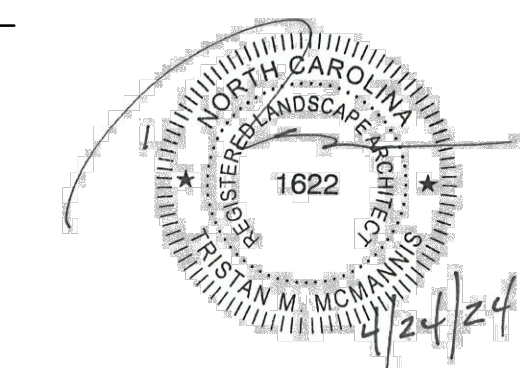


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**BAILEY ROAD PARK
 EXPANSION - PHASE I**
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 APPROVED BY: TM
 CHECKED BY: DJ
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TITLE

**GENERAL NOTES
 (SHEET 2 OF 2)**

DEI PROJECT NO: 50168691

SHEET NO.

C0.02

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Rolled erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting 	<ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Shrubs or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated Stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

- Maintain vehicles and equipment to prevent discharge of fluids.
- Provide drip pans under any stored equipment.
- Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
- Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
- Remove leaking vehicles and construction equipment from service until the problem has been corrected.
- Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

- Never bury or burn waste. Place litter and debris in approved waste containers.
- Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
- Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
- Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
- Anchor all lightweight items in waste containers during times of high winds.
- Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
- Dispose waste off-site at an approved disposal facility.
- On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

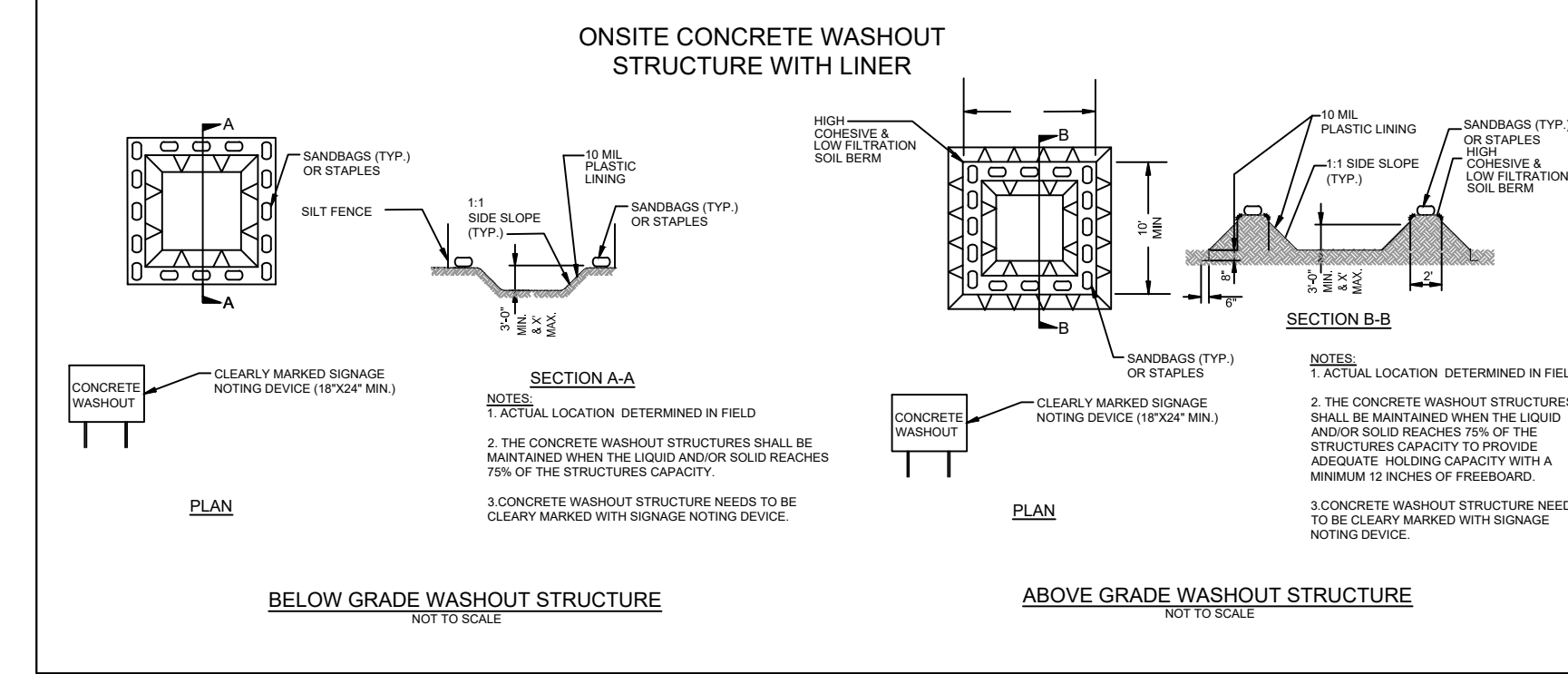
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, sized and placed appropriately for the needs of site.
- Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
- Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
- Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
- Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
- Provide stable stone access point when feasible.
- Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

- Do not discharge concrete or cement slurry from the site.
- Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
- Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
- Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
- Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
- Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
- Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
- Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
- Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
- At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
- Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment.
- Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

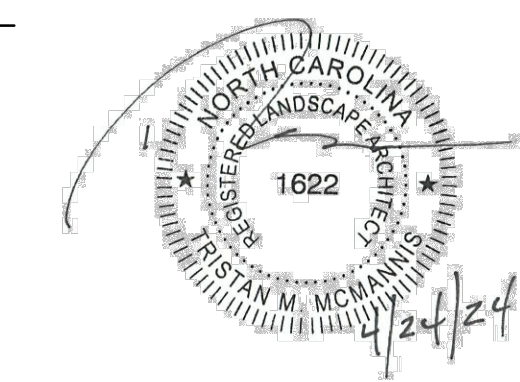


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**BAILEY ROAD PARK
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APPROVED BY: TM
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TITLE:
**NCG01 NOTES
(SHEET 1 OF 2)**

DEI PROJECT NO: 50168691

SHEET NO.

C0.03

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Table with 3 columns: Inspect, Frequency (during normal business hours), and Inspection records must include:.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Table with 2 columns: Item to Document and Documentation Requirements.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

- (a) Visible sediment deposition in a stream or wetland.
(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).
(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
(d) Anticipated bypasses and unanticipated bypasses.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Table with 2 columns: Occurrence and Reporting Timeframes (After Discovery) and Other Requirements.

PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- (a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.



NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

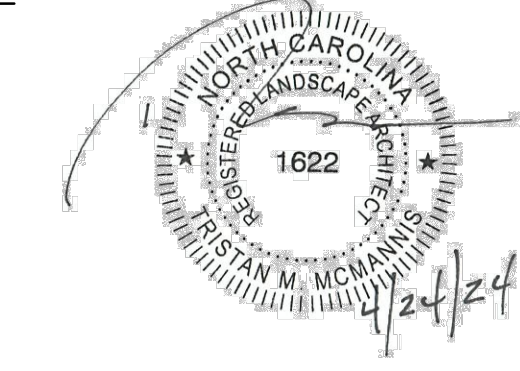


Dewberry Engineers Inc. 9300 Harris Corners Pkwy - Suite 220 Charlotte, NC 28269 Phone: 704.509.9918 Fax: 704.509.9937 www.dewberry.com NCBELS #F-0629 NCBOLA #C-478

BAILEY ROAD PARK EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS 11536 BAILEY ROAD CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE:

REVISIONS

Table with 4 columns: NO., DATE, BY, DESCRIPTION.

DRAWN BY: BN

APPROVED BY: TM

CHECKED BY: DJ

DATE: FEBRUARY 9, 2024

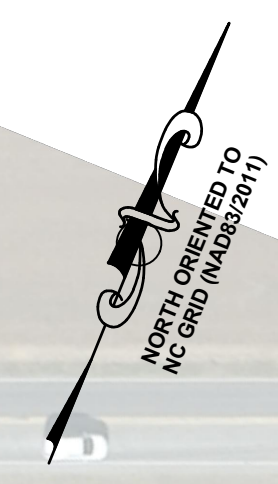
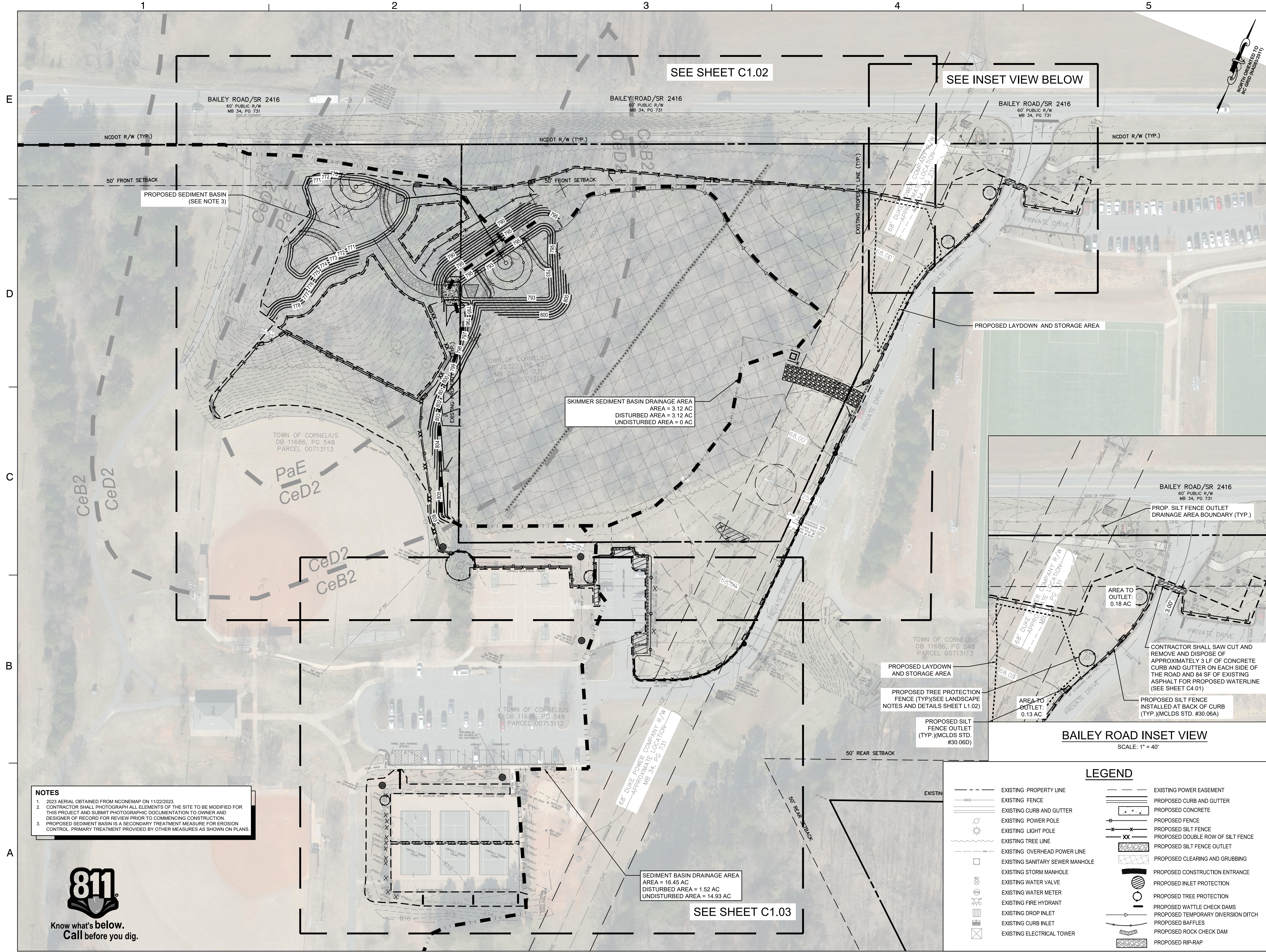
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NCG01 NOTES (SHEET 2 OF 2)

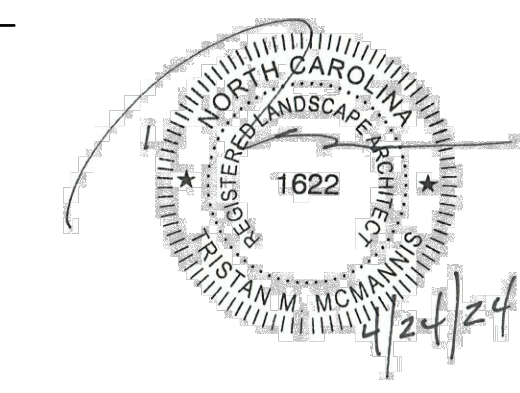
DEI PROJECT NO: 50168691

SHEET NO.

C0.04

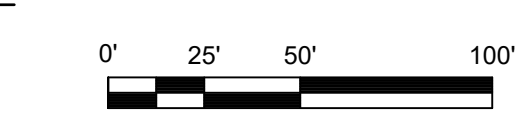


SEAL:



SEAL:

SCALE: 1" = 50'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE
**DEMOLITION AND
 PHASE I ESC
 PLAN - OVERALL**

DEI PROJECT NO: 50168691

SHEET NO.

C1.01

NOTES
 1. 2023 AERIAL OBTAINED FROM NCONMAP ON 11/22/2023.
 2. CONTRACTOR SHALL PHOTOGRAPH ALL ELEMENTS OF THE SITE TO BE MODIFIED FOR THIS PROJECT AND SUBMIT PHOTOGRAPHIC DOCUMENTATION TO OWNER AND DESIGNER OF RECORD FOR REVIEW PRIOR TO COMMENCING CONSTRUCTION.
 3. PROPOSED SEDIMENT BASIN IS A SECONDARY TREATMENT MEASURE FOR EROSION CONTROL. PRIMARY TREATMENT PROVIDED BY OTHER MEASURES AS SHOWN ON PLANS.



LEGEND

	EXISTING PROPERTY LINE		EXISTING POWER EASEMENT
	EXISTING FENCE		PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER		PROPOSED CONCRETE
	EXISTING POWER POLE		PROPOSED FENCE
	EXISTING LIGHT POLE		PROPOSED SILT FENCE
	EXISTING TREE LINE		PROPOSED DOUBLE ROW OF SILT FENCE
	EXISTING OVERHEAD POWER LINE		PROPOSED SILT FENCE OUTLET
	EXISTING SANITARY SEWER MANHOLE		PROPOSED CLEARING AND GRUBBING
	EXISTING STORM MANHOLE		PROPOSED CONSTRUCTION ENTRANCE
	EXISTING WATER VALVE		PROPOSED INLET PROTECTION
	EXISTING WATER METER		PROPOSED TREE PROTECTION
	EXISTING FIRE HYDRANT		PROPOSED WATTLE CHECK DAMS
	EXISTING DROP INLET		PROPOSED TEMPORARY DIVERSION DITCH
	EXISTING CURB INLET		PROPOSED BAFFLES
	EXISTING ELECTRICAL TOWER		PROPOSED ROCK CHECK DAM
			PROPOSED RIP-RAP

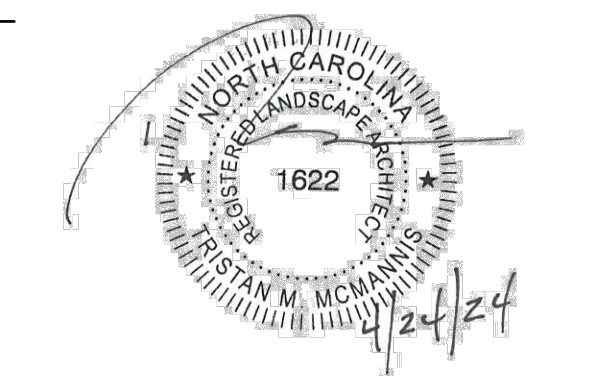
Know what's below.
 Call before you dig.

**BAILEY ROAD PARK
 EXPANSION - PHASE I**

CONSTRUCTION DOCUMENTS

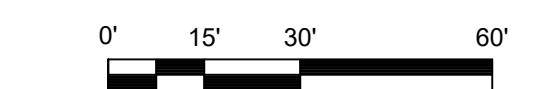
11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE: 1" = 30'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

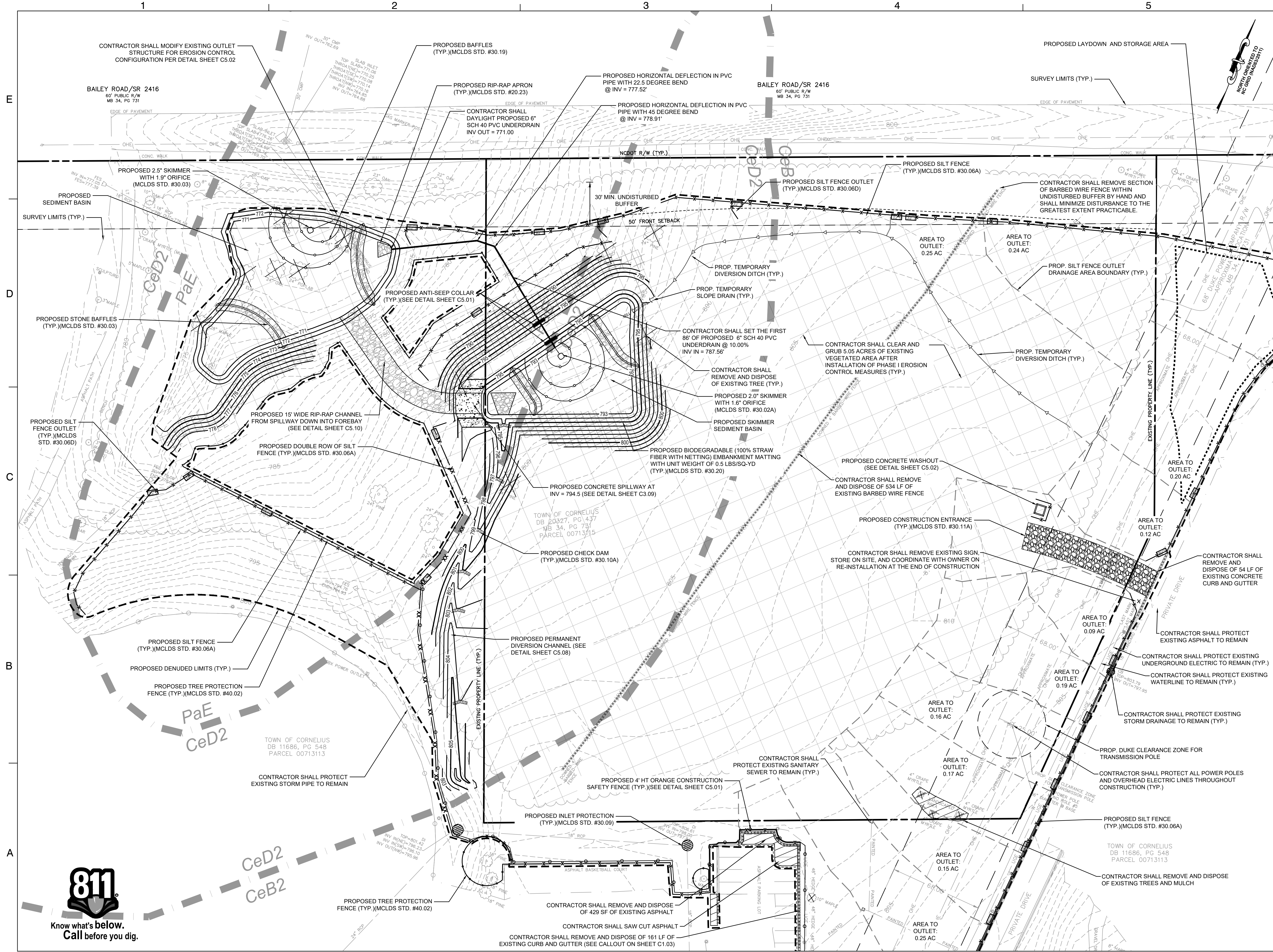
DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

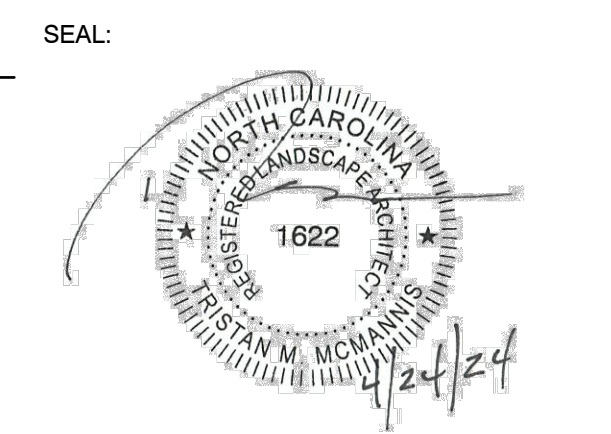
TITLE
**DEMOLITION AND
 PHASE I ESC
 PLAN - AREA 1**

DEI PROJECT NO: 50168991

SHEET NO.

C1.02





SEAL:

SCALE: 1" = 20'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

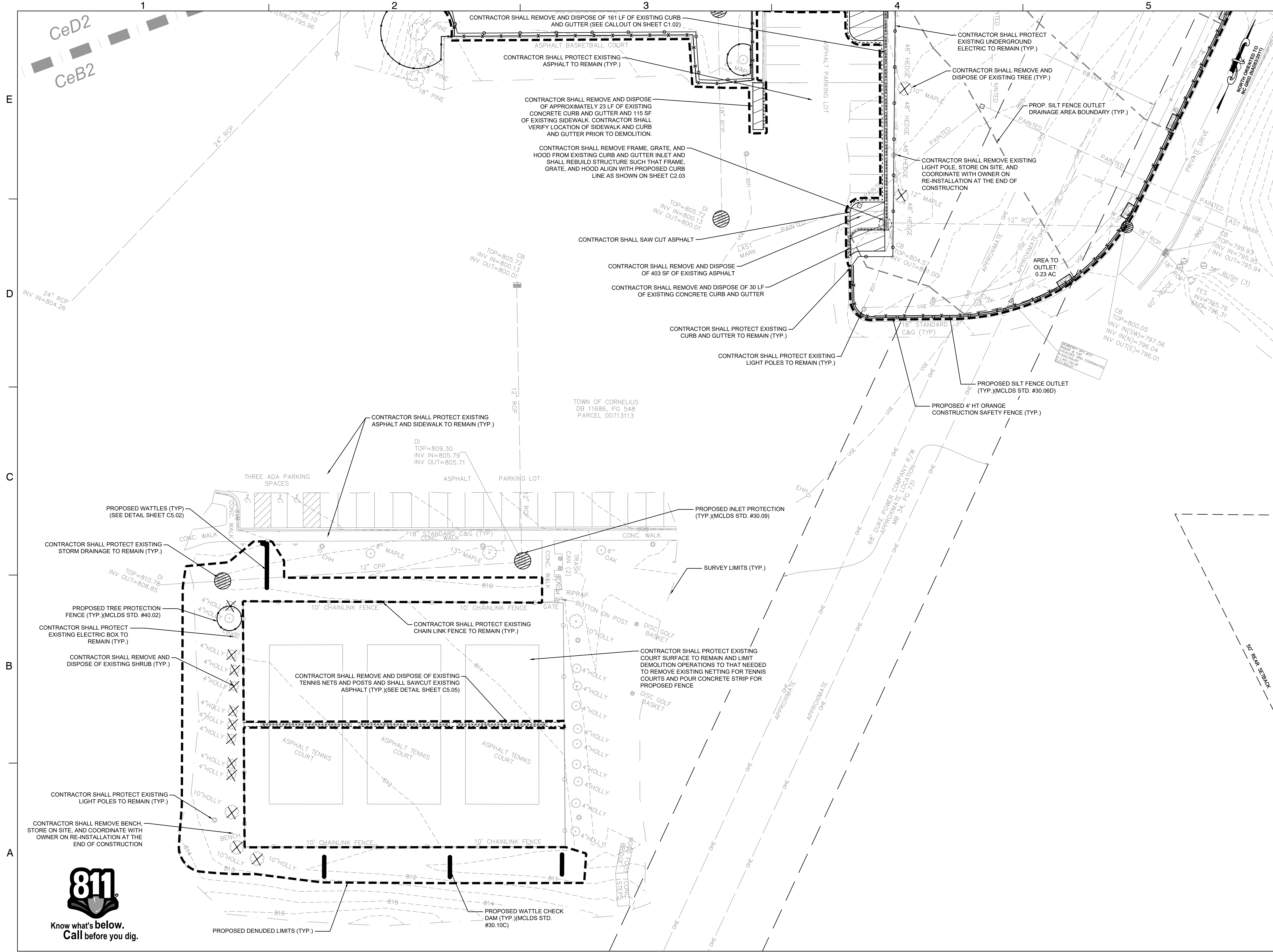
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 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE
**DEMOLITION AND
 PHASE I ESC
 PLAN - AREA 2**

DEI PROJECT NO: 50168691

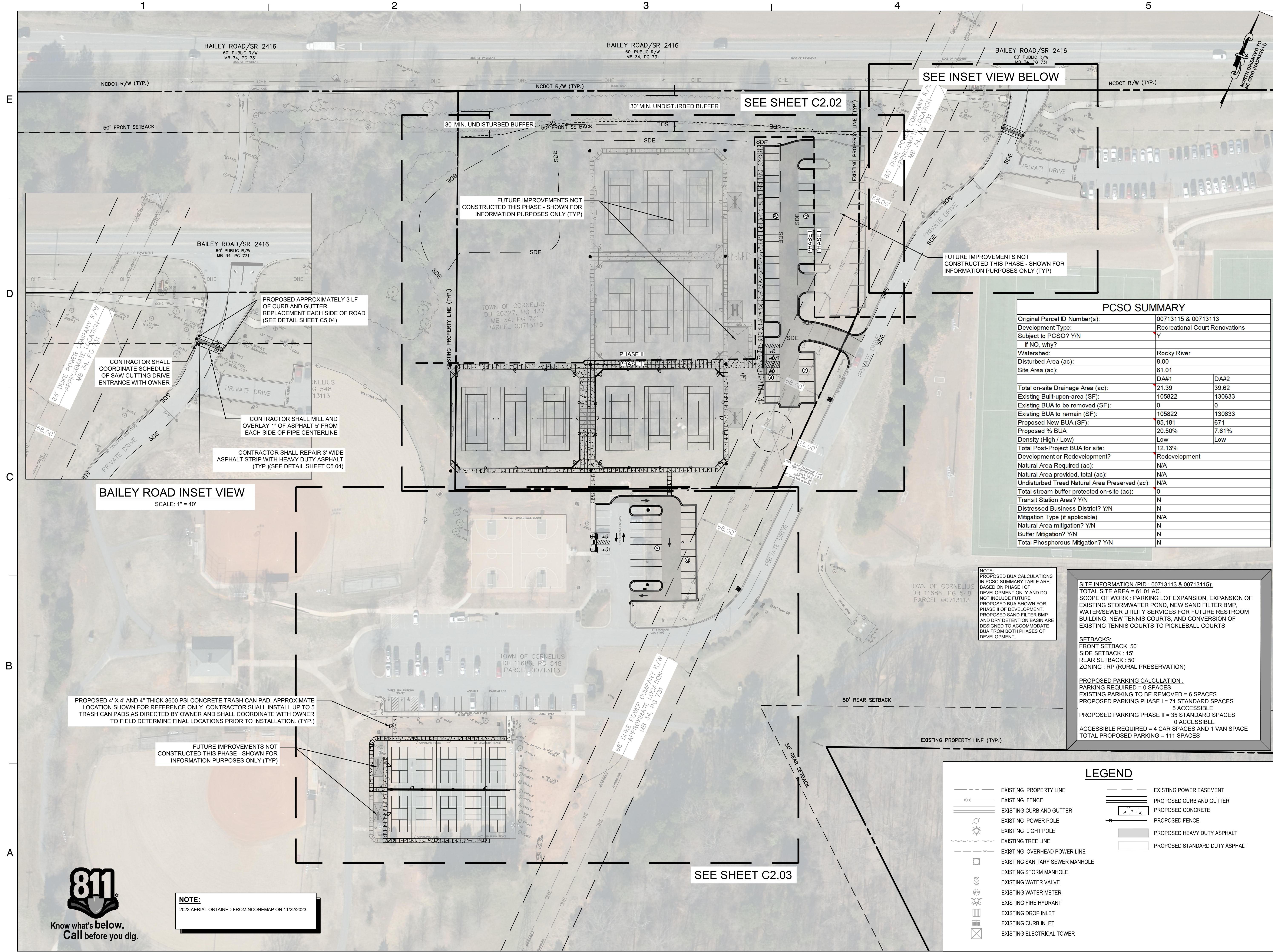
SHEET NO.

C1.03

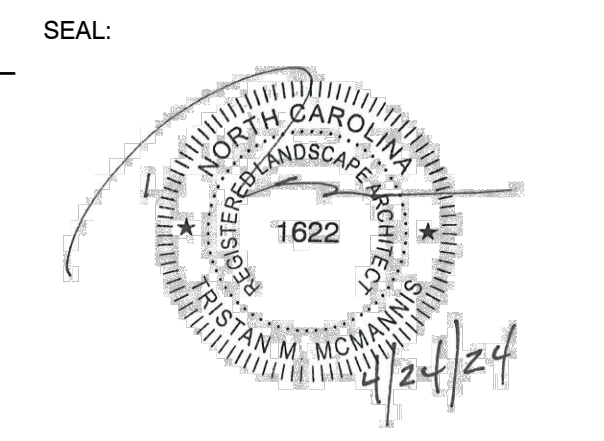


**BAILEY ROAD PARK
 EXPANSION - PHASE I**

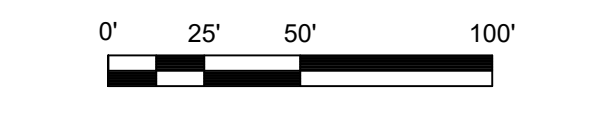
CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031



PCSO SUMMARY	
Original Parcel ID Number(s):	00713115 & 00713113
Development Type:	Recreational Court Renovations
Subject to PCSO? Y/N	Y
# NO. why?	
Watershed:	Rocky River
Disturbed Area (ac):	8.00
Site Area (ac):	61.01
	DA#1 DA#2
Total on-site Drainage Area (ac):	21.39 39.62
Existing Built-upon-area (SF):	105822 130633
Existing BUA to be removed (SF):	0 0
Existing BUA to remain (SF):	105822 130633
Proposed New BUA (SF):	85,181 671
Proposed % BUA:	20.50% 7.61%
Density (High / Low)	Low Low
Total Post-Project BUA for site:	12.13%
Development or Redevelopment?	Redevelopment
Natural Area Required (ac):	N/A
Natural Area provided, total (ac):	N/A
Undisturbed Treed Natural Area Preserved (ac):	N/A
Total stream buffer protected on-site (ac):	0
Transit Station Area? Y/N	N
Distressed Business District? Y/N	N
Mitigation Type (if applicable)	N/A
Natural Area mitigation? Y/N	N
Buffer Mitigation? Y/N	N
Total Phosphorous Mitigation? Y/N	N



SCALE: 1" = 50'



REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DJ	AGENCY COMMENTS

DRAWN BY: BN
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 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

**SITE PLAN -
 OVERALL**

DEI PROJECT NO: 50168991

SHEET NO.

C2.01



NOTE:
 2023 AERIAL OBTAINED FROM NCONEMAP ON 11/22/2023.

NOTE:
 PROPOSED BUA CALCULATIONS IN PCSO SUMMARY TABLE ARE BASED ON PHASE I OF DEVELOPMENT ONLY AND DO NOT INCLUDE FUTURE PROPOSED BUA SHOWN FOR PHASE II OF DEVELOPMENT. PROPOSED SAND FILTER BMP AND DRY DETENTION BASIN ARE DESIGNED TO ACCOMMODATE BUA FROM BOTH PHASES OF DEVELOPMENT.

SITE INFORMATION (PID : 00713113 & 00713115):
 TOTAL SITE AREA = 61.01 AC.
 SCOPE OF WORK : PARKING LOT EXPANSION, EXPANSION OF EXISTING STORMWATER POND, NEW SAND FILTER BMP, WASTEWATER UTILITY SERVICES FOR FUTURE RESTROOM BUILDING, NEW TENNIS COURTS, AND CONVERSION OF EXISTING TENNIS COURTS TO PICKLEBALL COURTS

SETBACKS:
 FRONT SETBACK : 50'
 SIDE SETBACK : 15'
 REAR SETBACK : 50'
 ZONING : RP (RURAL PRESERVATION)

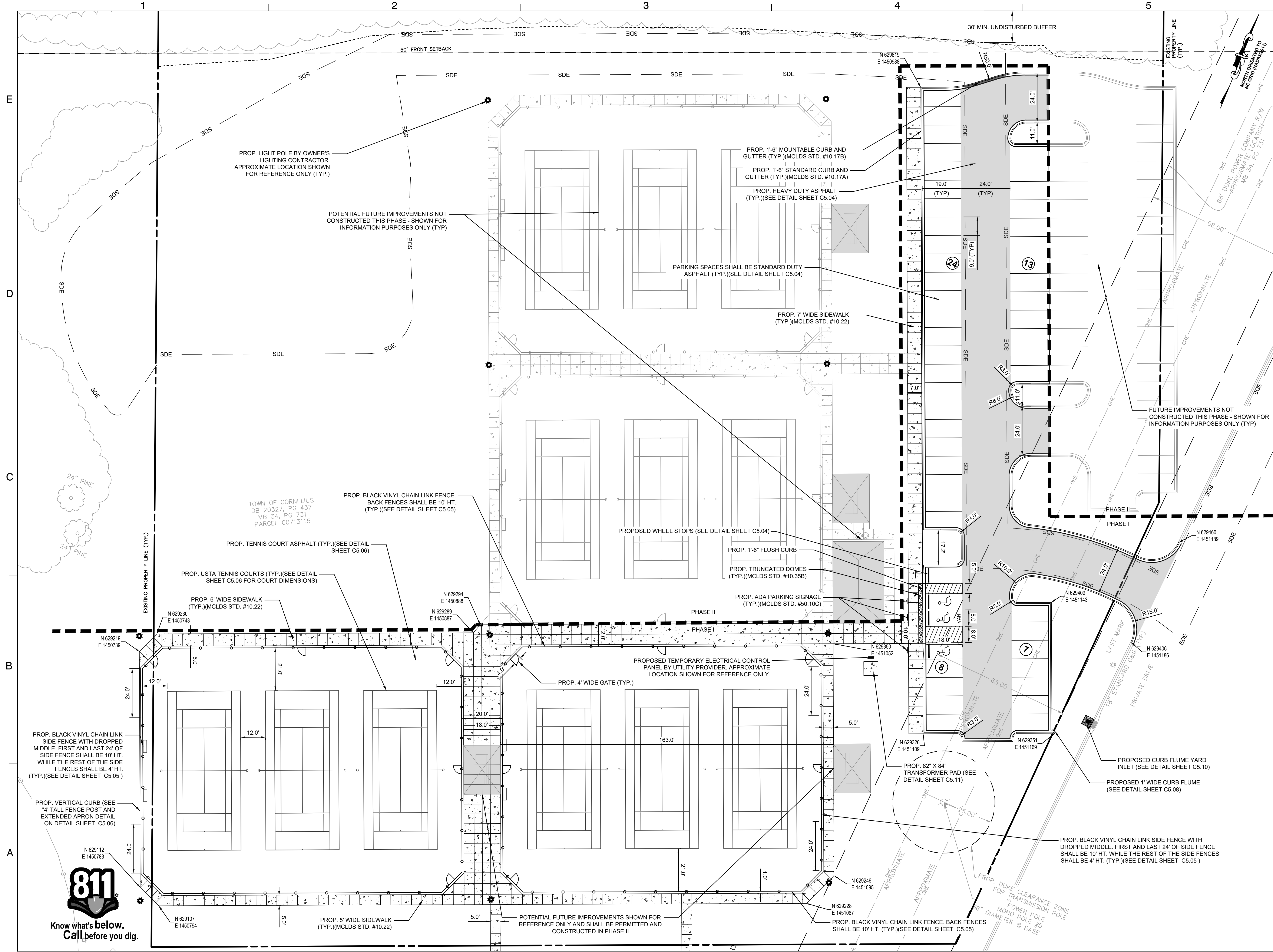
PROPOSED PARKING CALCULATION :
 PARKING REQUIRED = 0 SPACES
 EXISTING PARKING TO BE REMOVED = 6 SPACES
 PROPOSED PARKING PHASE I = 71 STANDARD SPACES
 5 ACCESSIBLE
 PROPOSED PARKING PHASE II = 35 STANDARD SPACES
 0 ACCESSIBLE
 ACCESSIBLE REQUIRED = 4 CAR SPACES AND 1 VAN SPACE
 TOTAL PROPOSED PARKING = 111 SPACES

LEGEND	
	EXISTING PROPERTY LINE
	EXISTING FENCE
	EXISTING CURB AND GUTTER
	EXISTING POWER POLE
	EXISTING LIGHT POLE
	EXISTING TREE LINE
	EXISTING OVERHEAD POWER LINE
	EXISTING SANITARY SEWER MANHOLE
	EXISTING STORM MANHOLE
	EXISTING WATER VALVE
	EXISTING WATER METER
	EXISTING FIRE HYDRANT
	EXISTING DROP INLET
	EXISTING CURB INLET
	EXISTING ELECTRICAL TOWER
	EXISTING POWER EASEMENT
	PROPOSED CURB AND GUTTER
	PROPOSED CONCRETE
	PROPOSED FENCE
	PROPOSED HEAVY DUTY ASPHALT
	PROPOSED STANDARD DUTY ASPHALT

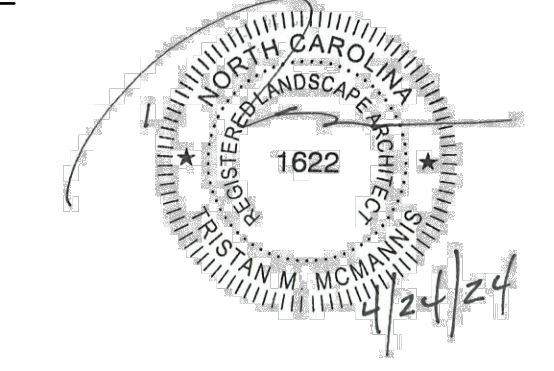
**BAILEY ROAD PARK
 EXPANSION - PHASE I**

CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

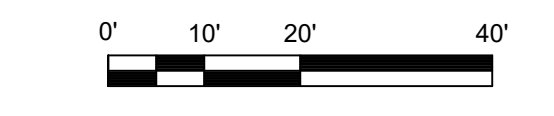


SEAL:



SEAL:

SCALE: 1" = 20'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
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 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024
 TITLE:

**SITE PLAN -
 AREA 1**

DEI PROJECT NO: 50168991

SHEET NO.

C2.02

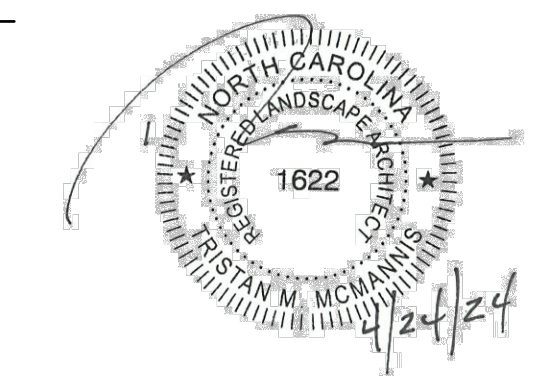


**BAILEY ROAD PARK
 EXPANSION - PHASE I**

CONSTRUCTION DOCUMENTS

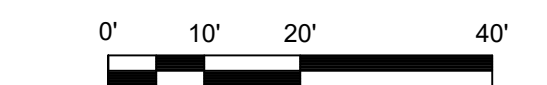
11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE: 1" = 20'



REVISIONS

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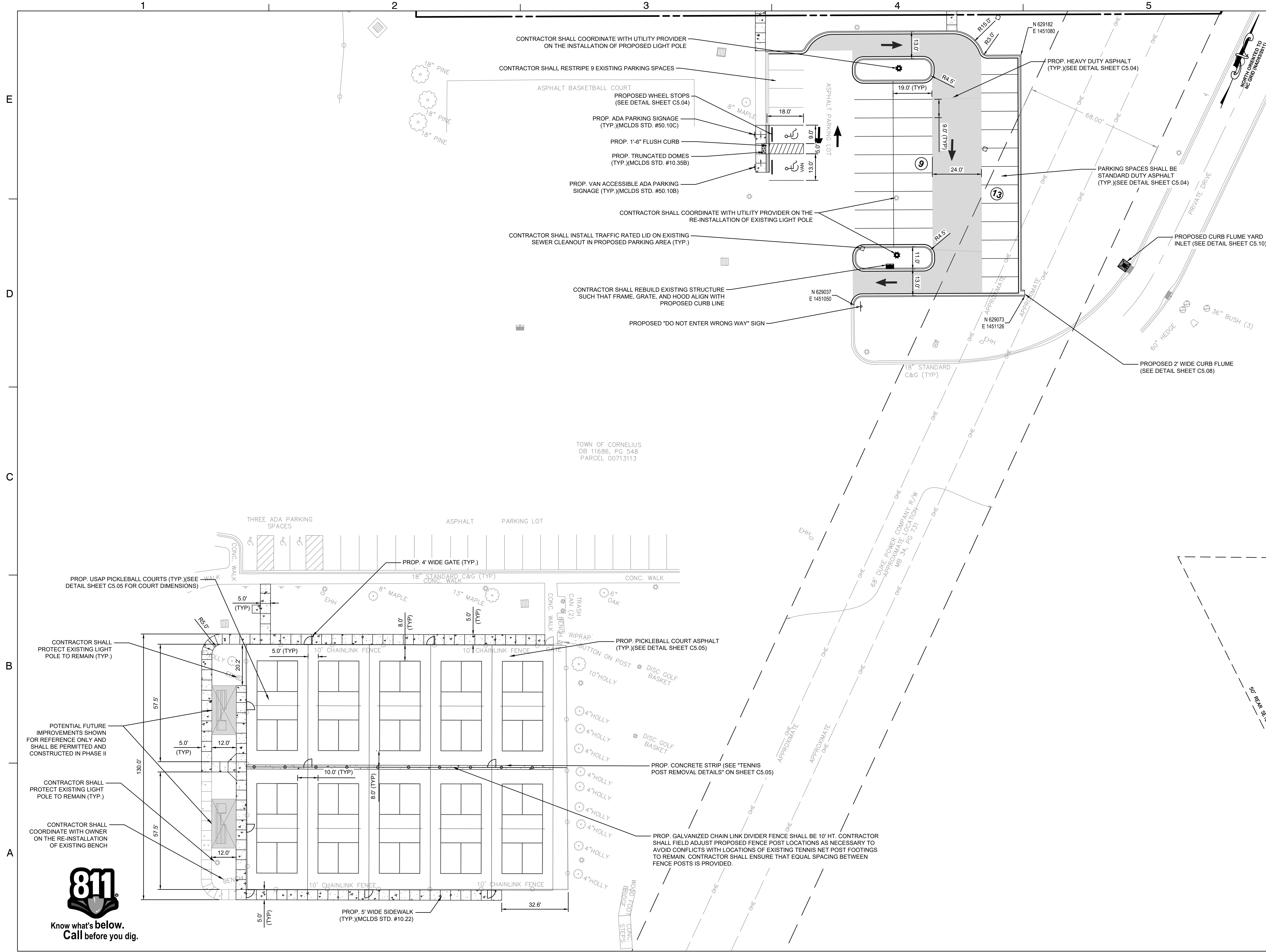
TITLE

**SITE PLAN -
 AREA 2**

DEI PROJECT NO: 50168691

SHEET NO.

C2.03

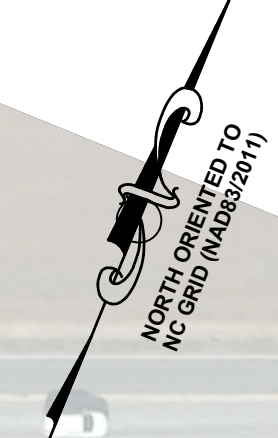


TOWN OF CORNELIUS
 DB 11686, PG 548
 PARCEL 00713113



SEE SHEET C3.02

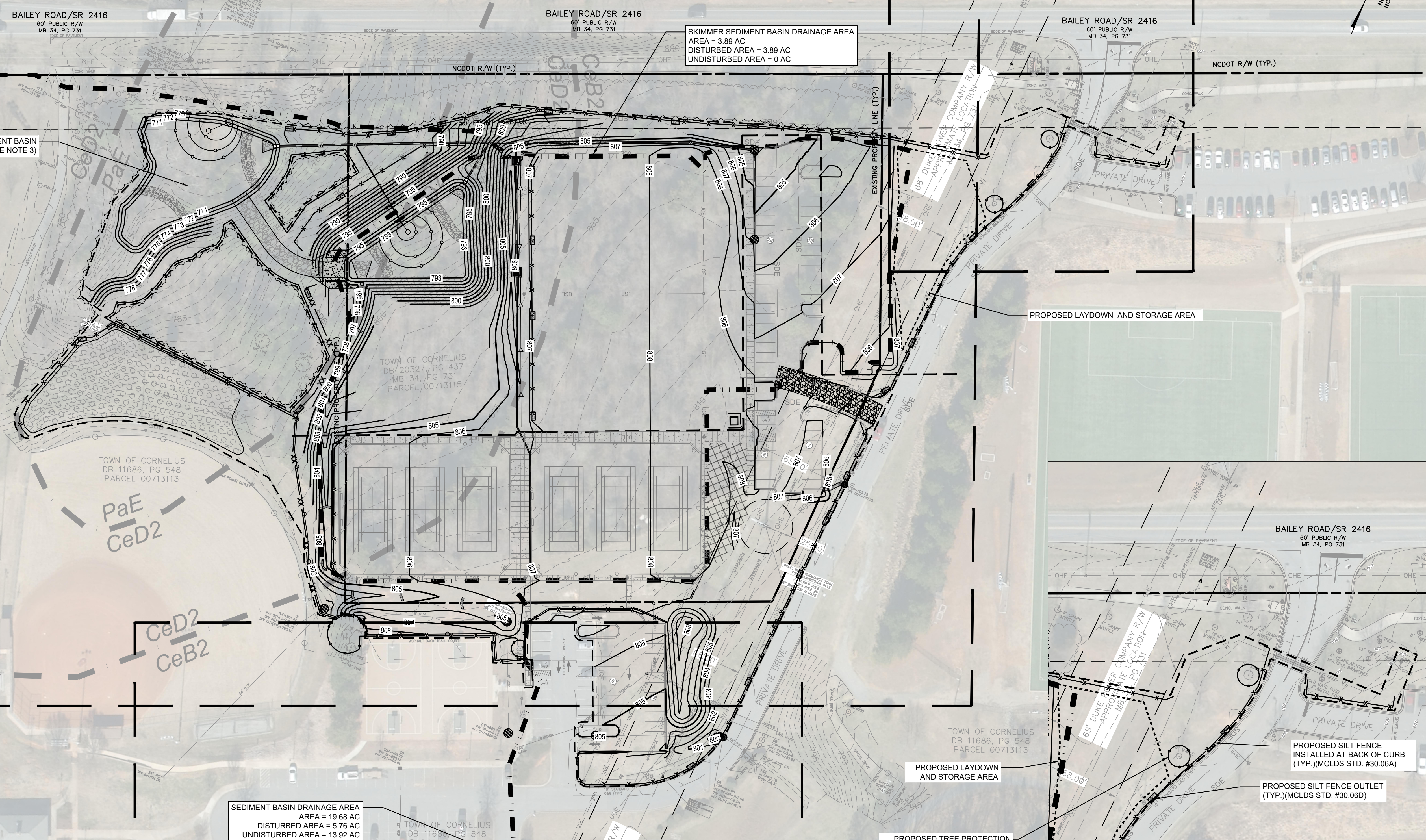
SEE INSET VIEW BELOW



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**BAILEY ROAD PARK
EXPANSION - PHASE I**
CONSTRUCTION DOCUMENTS
11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031

E
D
C
B
A



SKIMMER SEDIMENT BASIN DRAINAGE AREA
AREA = 3.89 AC
DISTURBED AREA = 3.89 AC
UNDISTURBED AREA = 0 AC

PROPOSED SEDIMENT BASIN
(SEE NOTE 3)

PROPOSED LAYDOWN AND STORAGE AREA

TOWN OF CORNELIUS
DB 11686, PG 548
PARCEL 00713113

PaE
CeD2

CeD2
CeB2

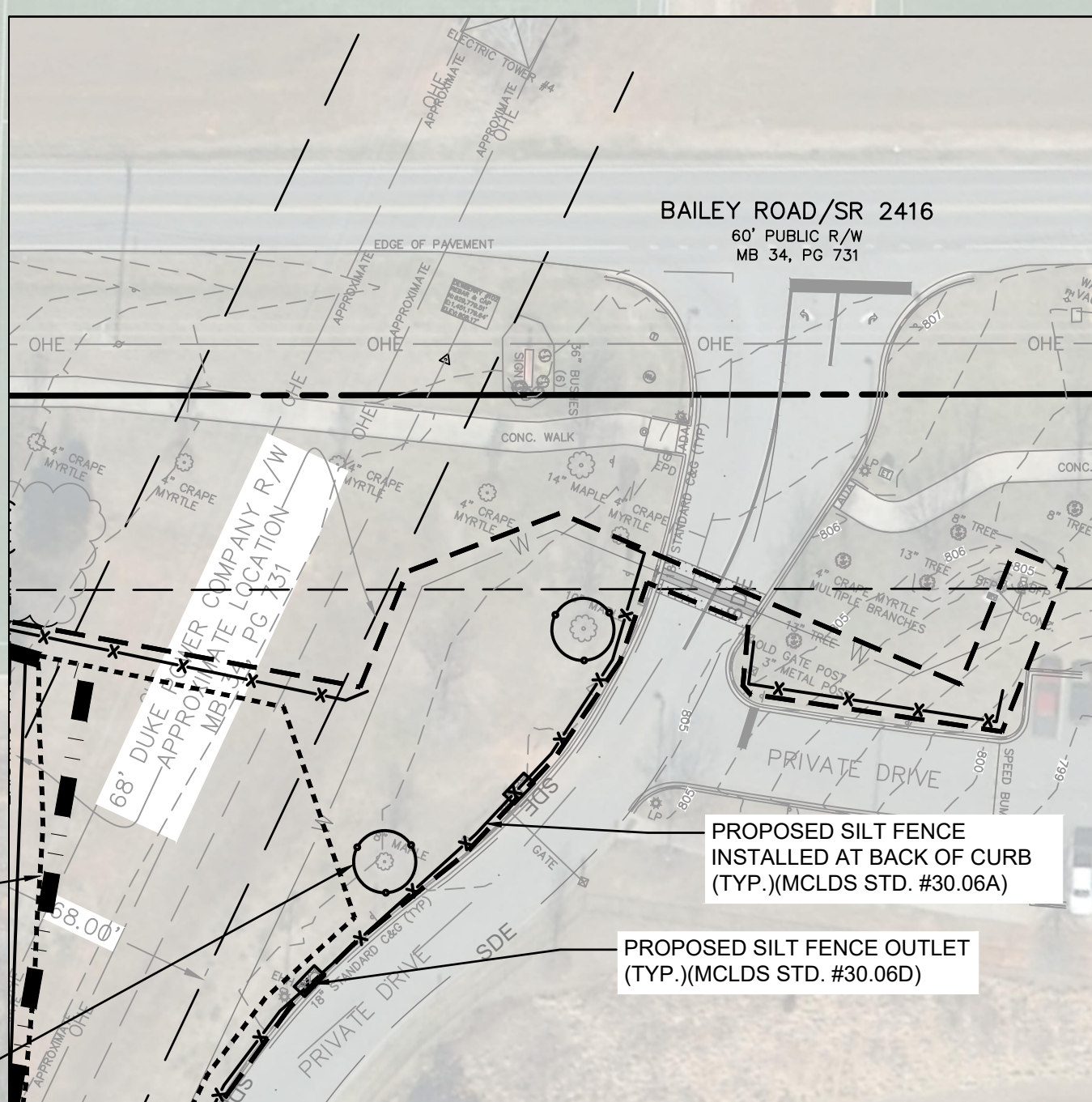
SEDIMENT BASIN DRAINAGE AREA
AREA = 19.68 AC
DISTURBED AREA = 5.76 AC
UNDISTURBED AREA = 13.92 AC

PROPOSED LAYDOWN
AND STORAGE AREA

PROPOSED TREE PROTECTION
FENCE (TYP)(SEE LANDSCAPE
NOTES AND DETAILS SHEET L1.02)

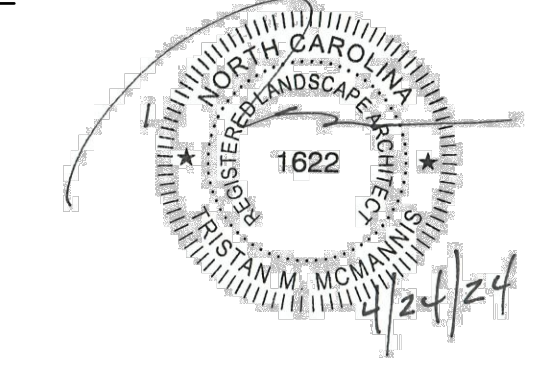
PROPOSED SILT FENCE
INSTALLED AT BACK OF CURB
(TYP)(MCLDS STD. #30.06A)

PROPOSED SILT FENCE OUTLET
(TYP)(MCLDS STD. #30.06D)



BAILEY ROAD INSET VIEW
SCALE: 1" = 40'

SEAL:



SEAL:

SCALE: 1" = 50'



REVISIONS

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CHECKED BY: DJ
DATE: FEBRUARY 9, 2024

**PHASE II ESC
PLAN - OVERALL**

DEI PROJECT NO: 50168891

SHEET NO.

C3.01

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

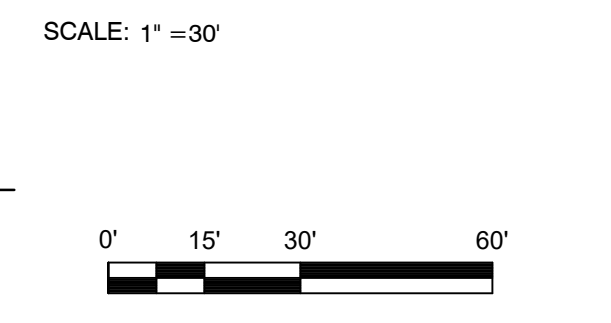
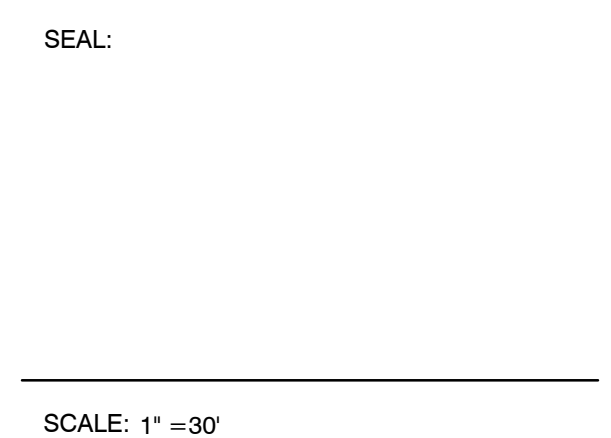
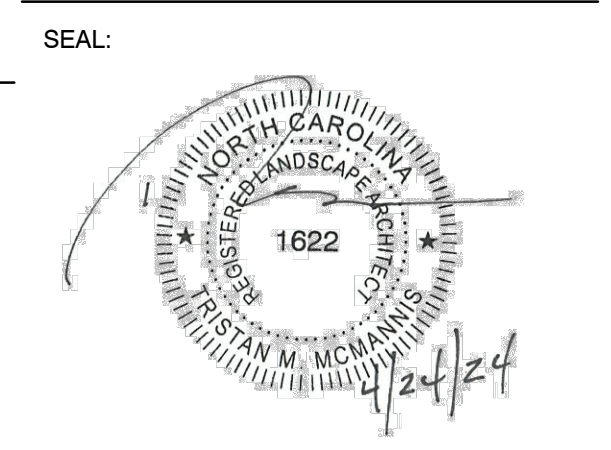
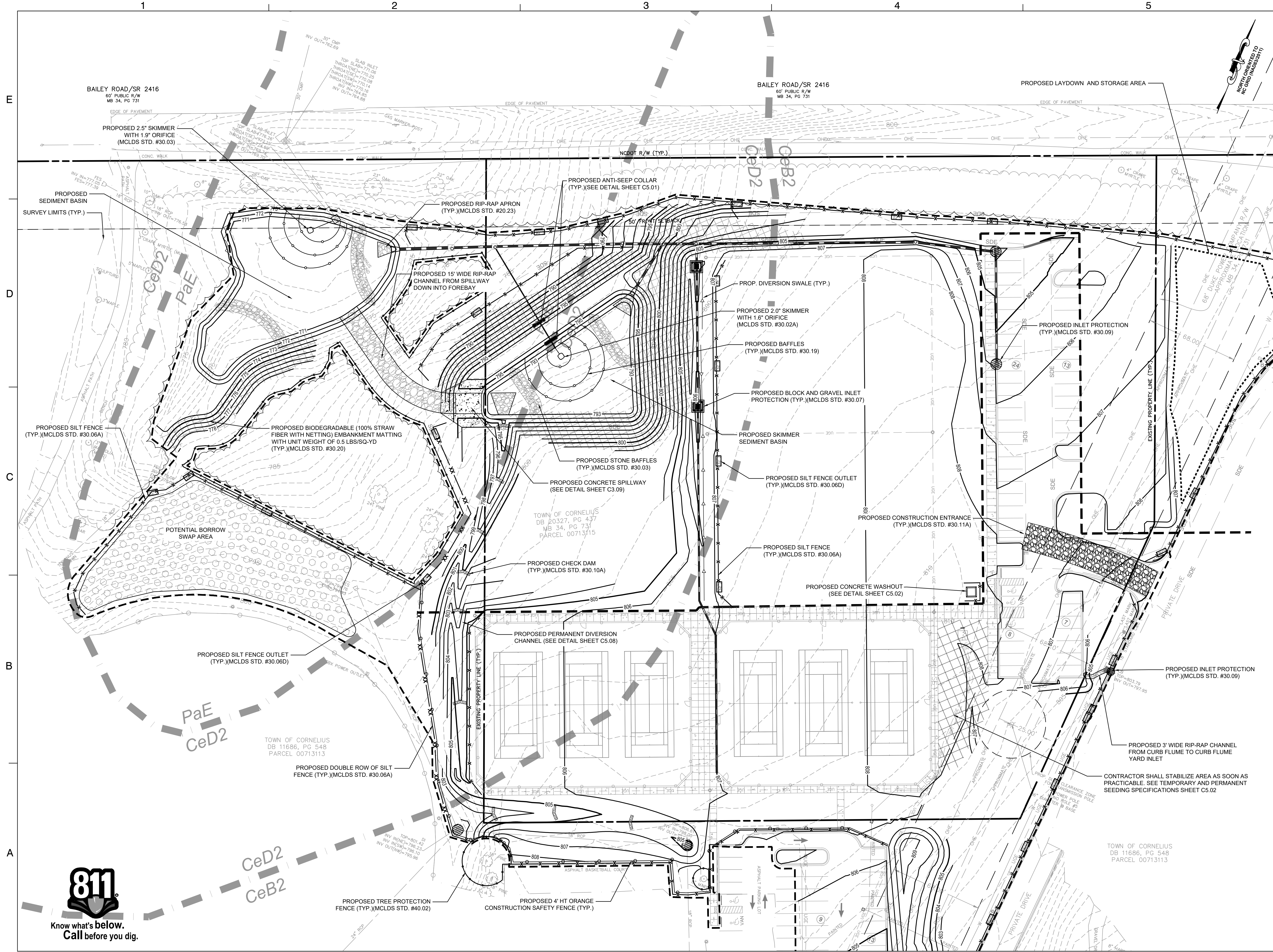
SEE SHEET C3.03

LEGEND

	EXISTING PROPERTY LINE		EXISTING POWER EASEMENT
	EXISTING FENCE		PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER		PROPOSED CONCRETE
	EXISTING POWER POLE		PROPOSED FENCE
	EXISTING LIGHT POLE		PROPOSED SILT FENCE
	EXISTING TREE LINE		PROPOSED DOUBLE ROW OF SILT FENCE
	EXISTING OVERHEAD POWER LINE		PROPOSED SILT FENCE OUTLET
	EXISTING SANITARY SEWER MANHOLE		PROPOSED CLEARING AND GRUBBING
	EXISTING STORM MANHOLE		PROPOSED CONSTRUCTION ENTRANCE
	EXISTING WATER VALVE		PROPOSED INLET PROTECTION
	EXISTING WATER METER		PROPOSED TREE PROTECTION
	EXISTING FIRE HYDRANT		PROPOSED WATTLE CHECK DAMS
	EXISTING DROP INLET		PROPOSED TEMPORARY DIVERSION DITCH
	EXISTING CURB INLET		PROPOSED BAFFLES
	EXISTING ELECTRICAL TOWER		PROPOSED ROCK CHECK DAM
			PROPOSED RIP-RAP

**BAILEY ROAD PARK
 EXPANSION - PHASE I**
 CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031



REVISIONS

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DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

**PHASE II ESC
 PLAN - AREA 1**

DEI PROJECT NO: 50168991

SHEET NO.

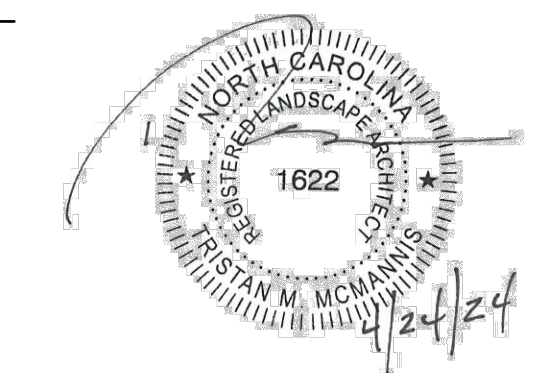
C3.02



**BAILEY ROAD PARK
 EXPANSION - PHASE I**

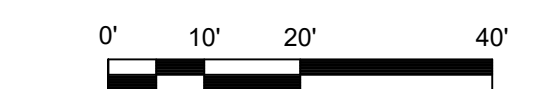
CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE: 1" = 20'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

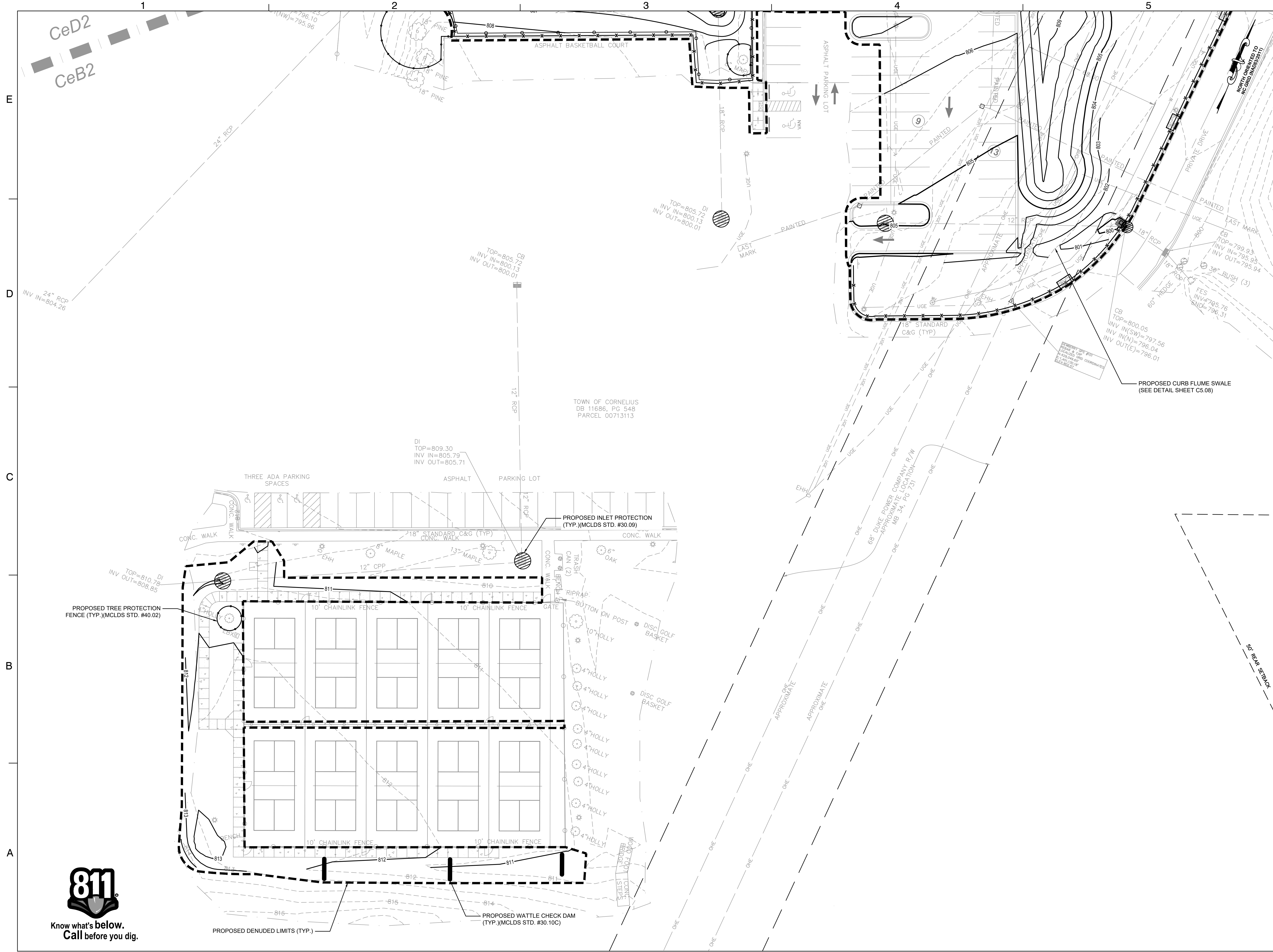
DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE
**PHASE II ESC
 PLAN - AREA 2**

DEI PROJECT NO: 50168691

SHEET NO.

C3.03



TOWN OF CORNELIUS
 DB 11686, PG 548
 PARCEL 00713113

PROPOSED CURB FLUME SWALE
 (SEE DETAIL SHEET C5.08)

PROPOSED INLET PROTECTION
 (TYP.) (MCLDS STD. #30.09)

PROPOSED TREE PROTECTION
 FENCE (TYP.) (MCLDS STD. #40.02)

PROPOSED WATTLE CHECK DAM
 (TYP.) (MCLDS STD. #30.10C)

PROPOSED DENUEDED LIMITS (TYP.)



Know what's below.
 Call before you dig.

1

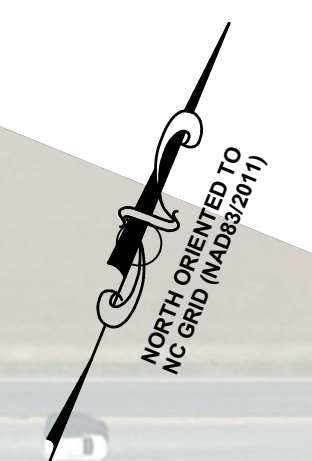
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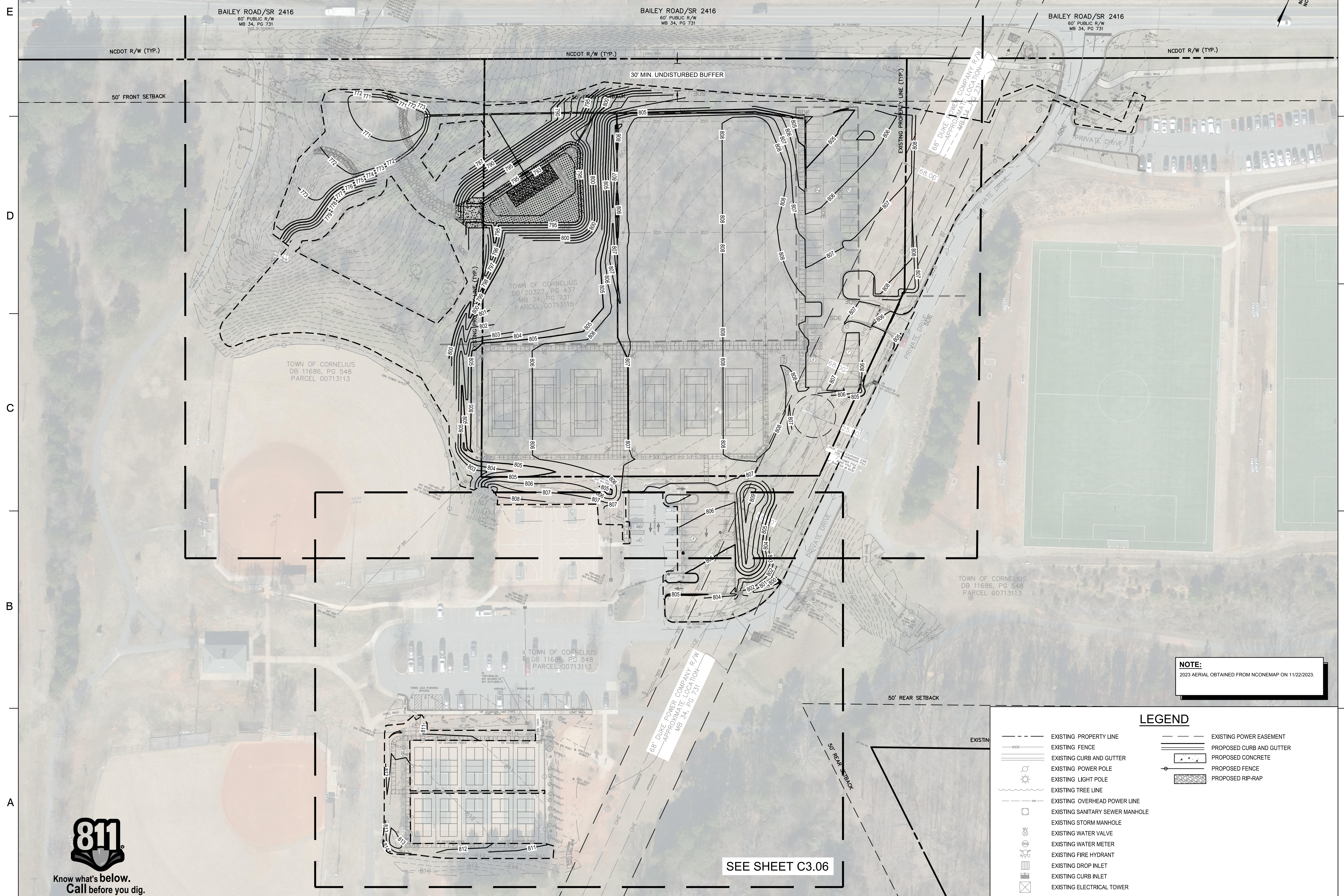
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SEE SHEET C3.05

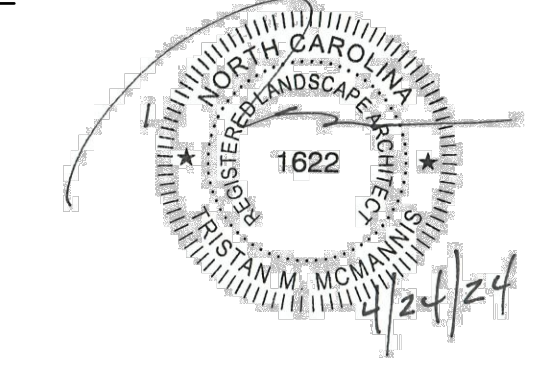


Dewberry
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**BAILEY ROAD PARK
 EXPANSION - PHASE I**
 CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
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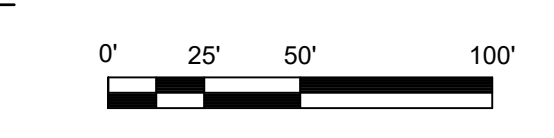


SEAL:



SEAL:

SCALE: 1" = 50'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

NOTE:
 2023 AERIAL OBTAINED FROM NCONEMAP ON 11/22/2023.

LEGEND

	EXISTING PROPERTY LINE		EXISTING POWER EASEMENT
	EXISTING FENCE		PROPOSED CURB AND GUTTER
	EXISTING CURB AND GUTTER		PROPOSED CONCRETE
	EXISTING POWER POLE		PROPOSED FENCE
	EXISTING LIGHT POLE		PROPOSED RIP-RAP
	EXISTING TREE LINE		
	EXISTING OVERHEAD POWER LINE		
	EXISTING SANITARY SEWER MANHOLE		
	EXISTING STORM MANHOLE		
	EXISTING WATER VALVE		
	EXISTING WATER METER		
	EXISTING FIRE HYDRANT		
	EXISTING DROP INLET		
	EXISTING CURB INLET		
	EXISTING ELECTRICAL TOWER		

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE: **GRADING AND
 STORM
 DRAINAGE PLAN
 - OVERALL**

DEI PROJECT NO: 50168891

SHEET NO.

C3.04

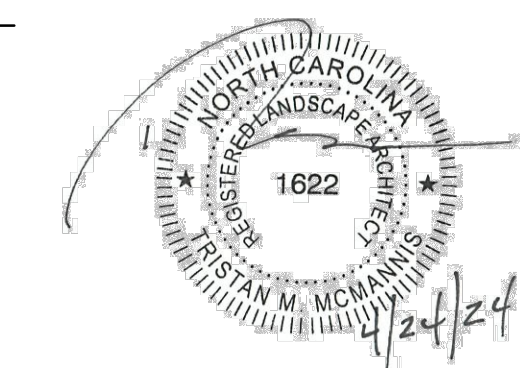


SEE SHEET C3.06

**BAILEY ROAD PARK
 EXPANSION - PHASE I**

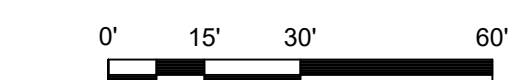
CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE: 1" = 30'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

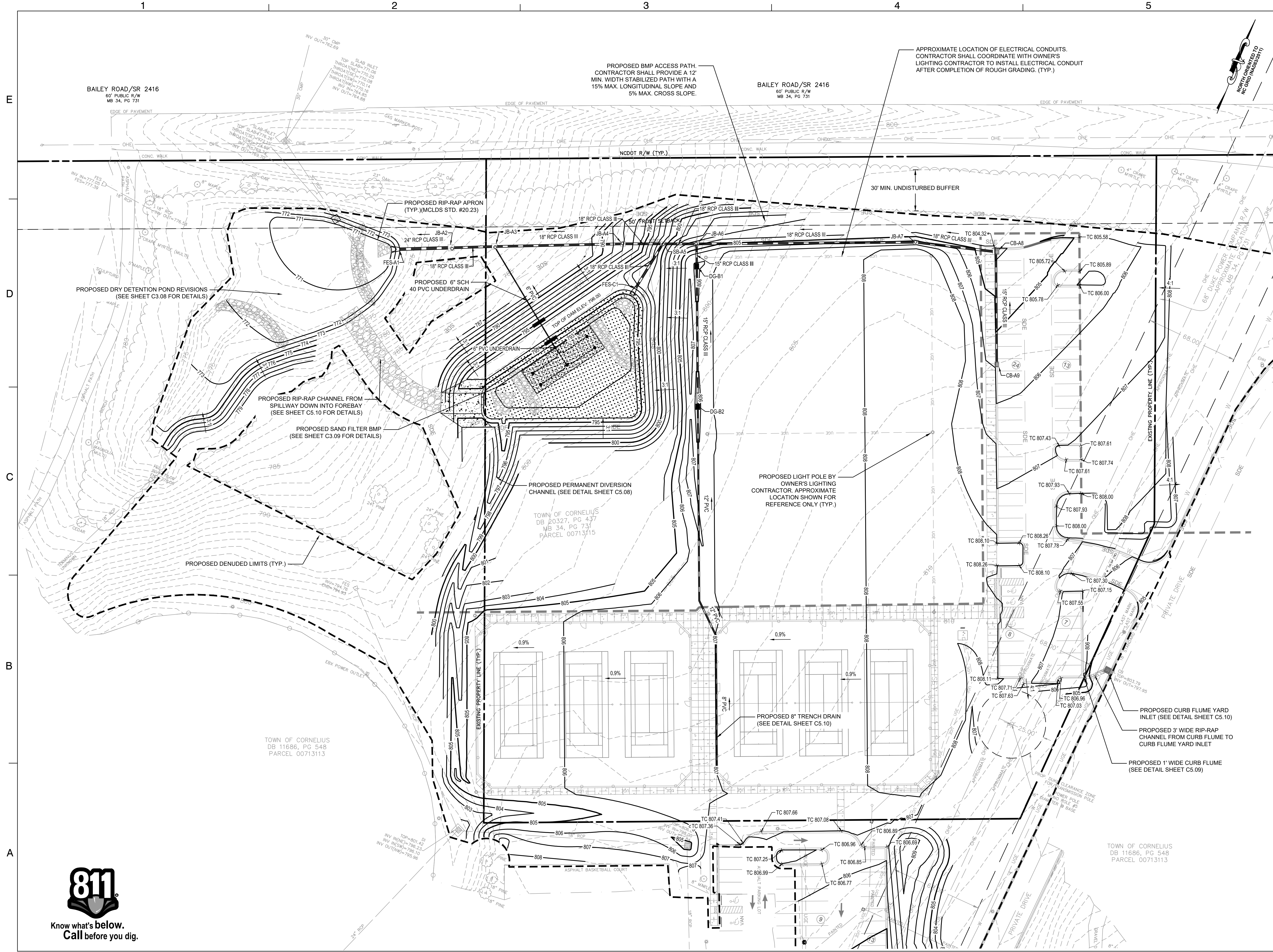
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 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

**TITLE
 GRADING AND
 STORM
 DRAINAGE PLAN
 - AREA 1**

DEI PROJECT NO: 50168991

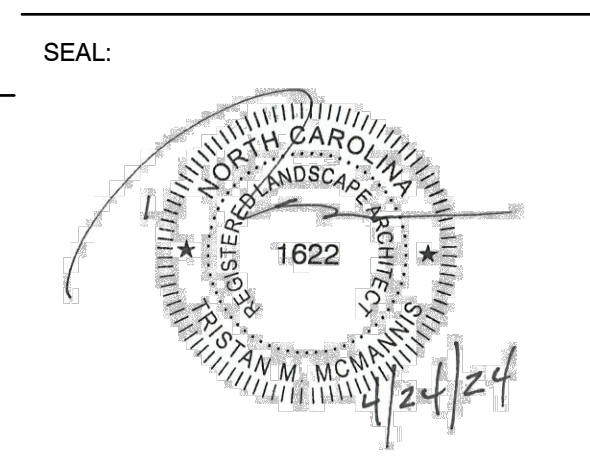
SHEET NO.

C3.05



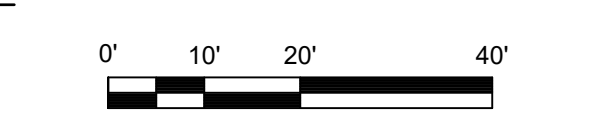
**BAILEY ROAD PARK
 EXPANSION - PHASE I**
 CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031



SEAL:

SCALE: 1" = 20'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

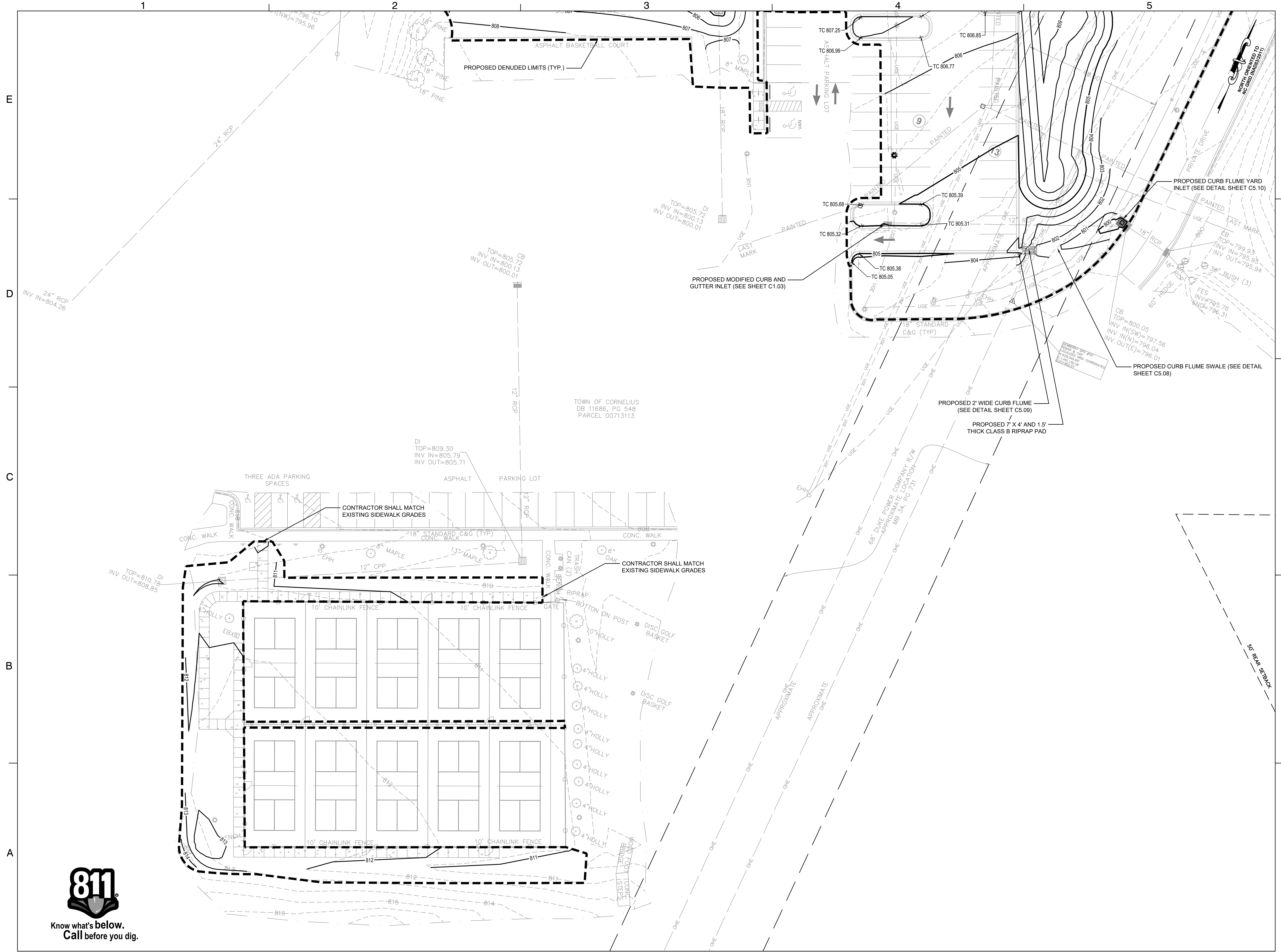
DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE
**GRADING AND
 STORM
 DRAINAGE PLAN
 - AREA 2**

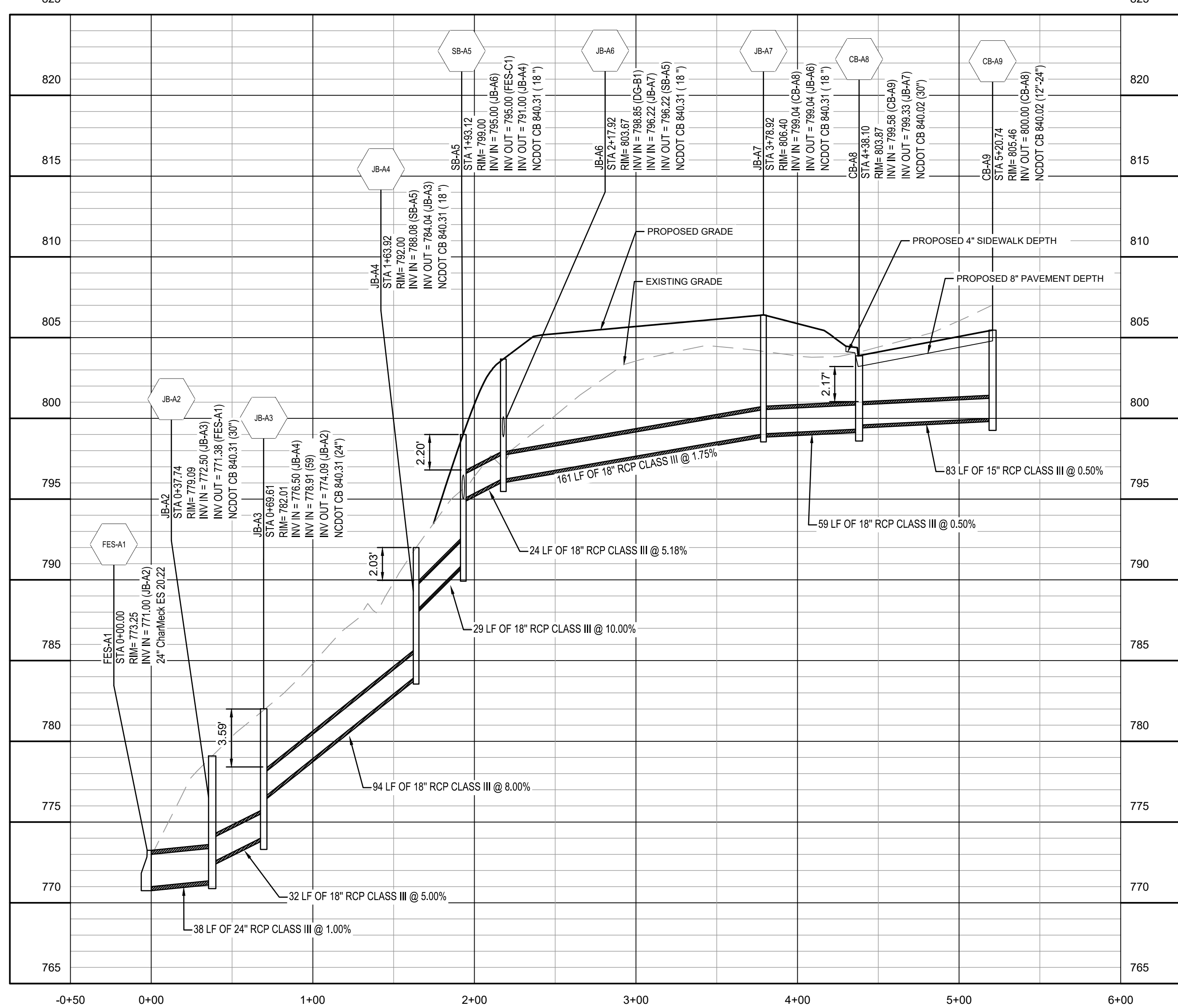
DEI PROJECT NO: 50168691

SHEET NO.

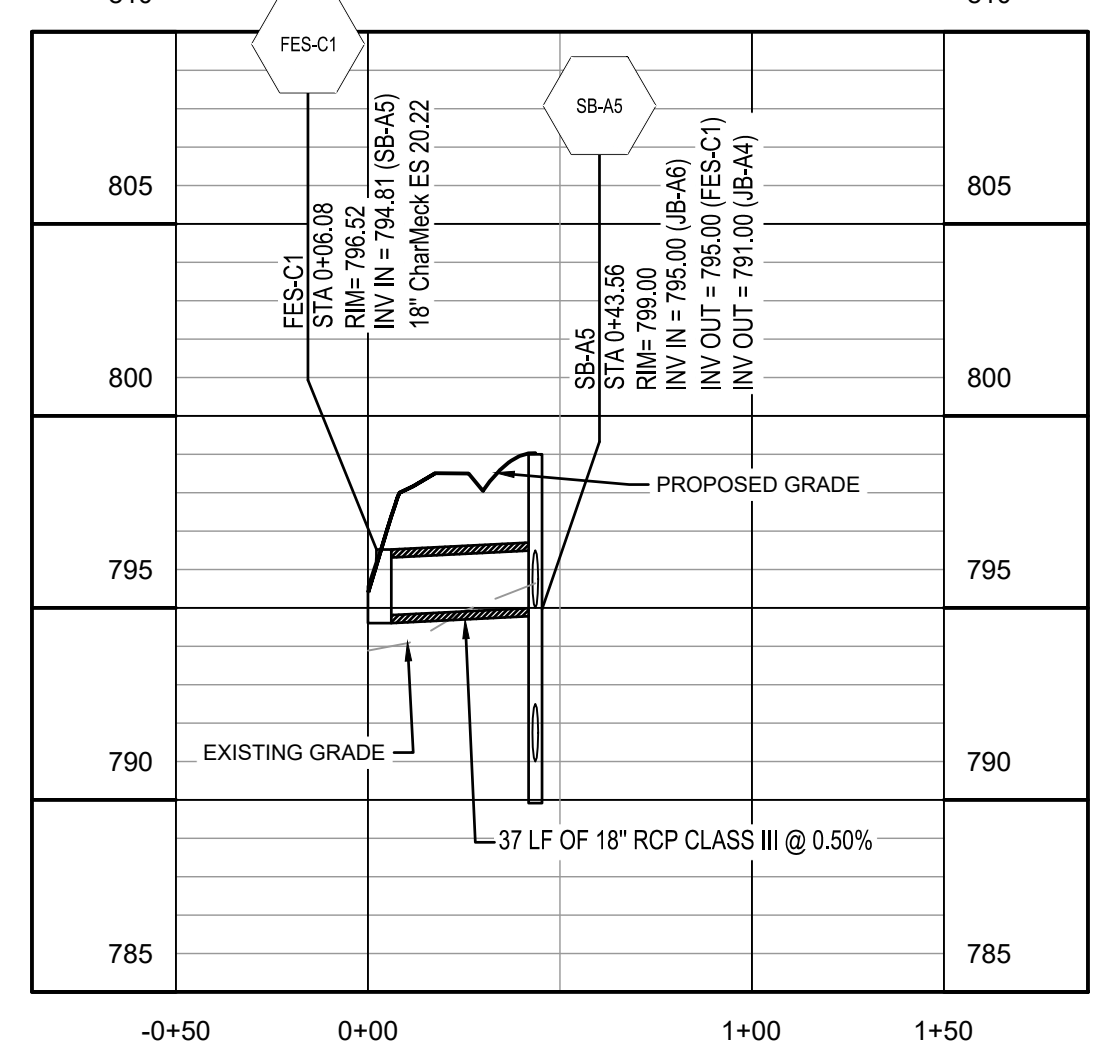
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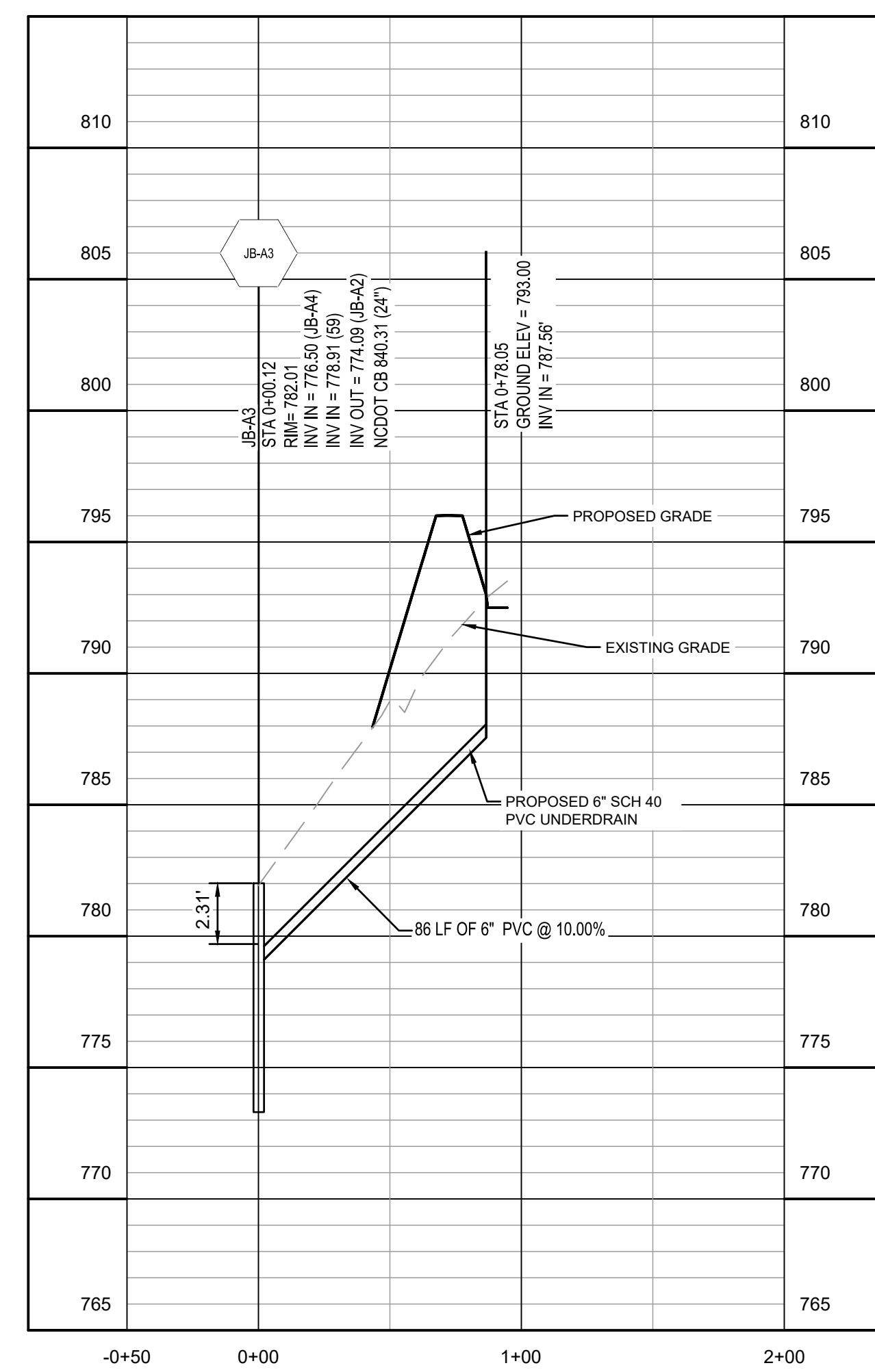
FES-A1 TO CB-A9



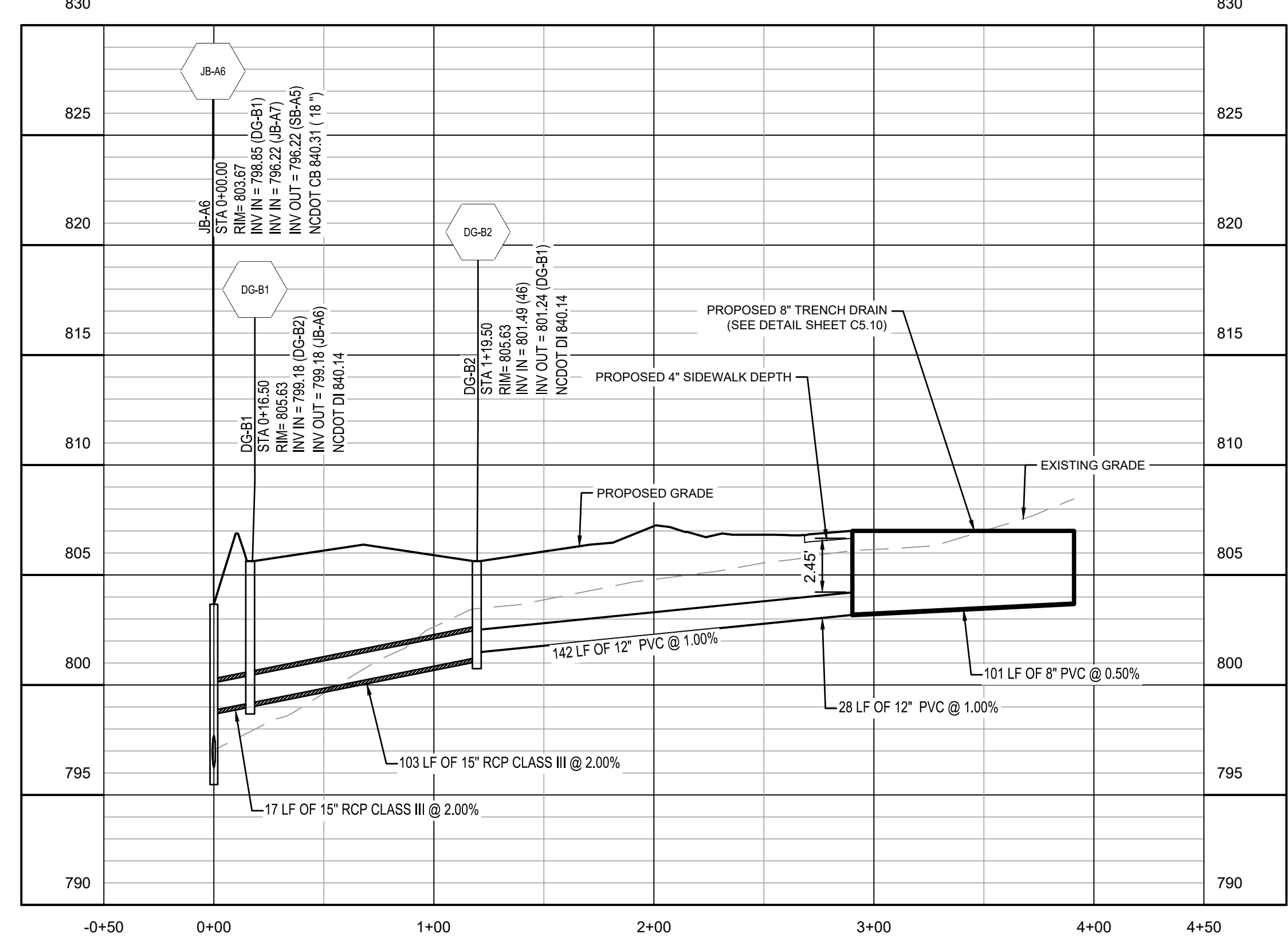
FES-C1 TO SB-A5



JB-A3 TO 6-IN. PVC UNDERDRAIN



JB-A6 TO 8 IN. TRENCH DRAIN

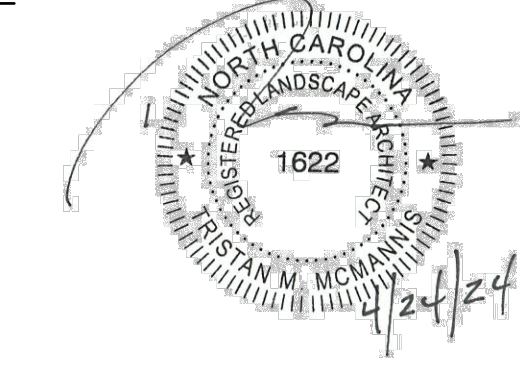


Dewberry Engineers Inc.
9500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0829
NCBOLA #C-478

BAILEY ROAD PARK
EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS
11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

HORIZONTAL SCALE: 1" = 50'



VERTICAL SCALE: 1" = 5'



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

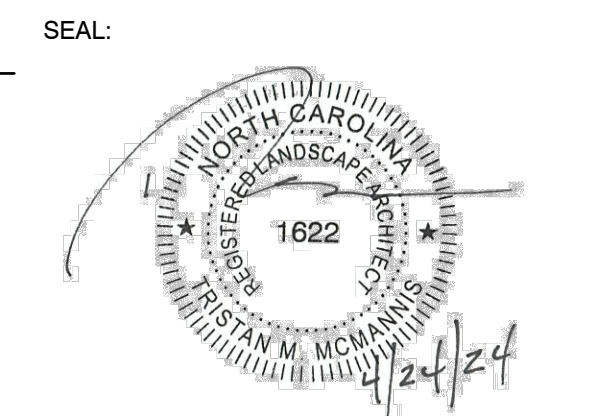
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APPROVED BY: TM
CHECKED BY: DJ
DATE: FEBRUARY 9, 2024
TITLE:

STORM
PROFILES

DEI PROJECT NO: 50168691

SHEET NO.

C3.07



SEAL:
 SCALE:

REVISIONS			
NO.	DATE	BY	DESCRIPTION
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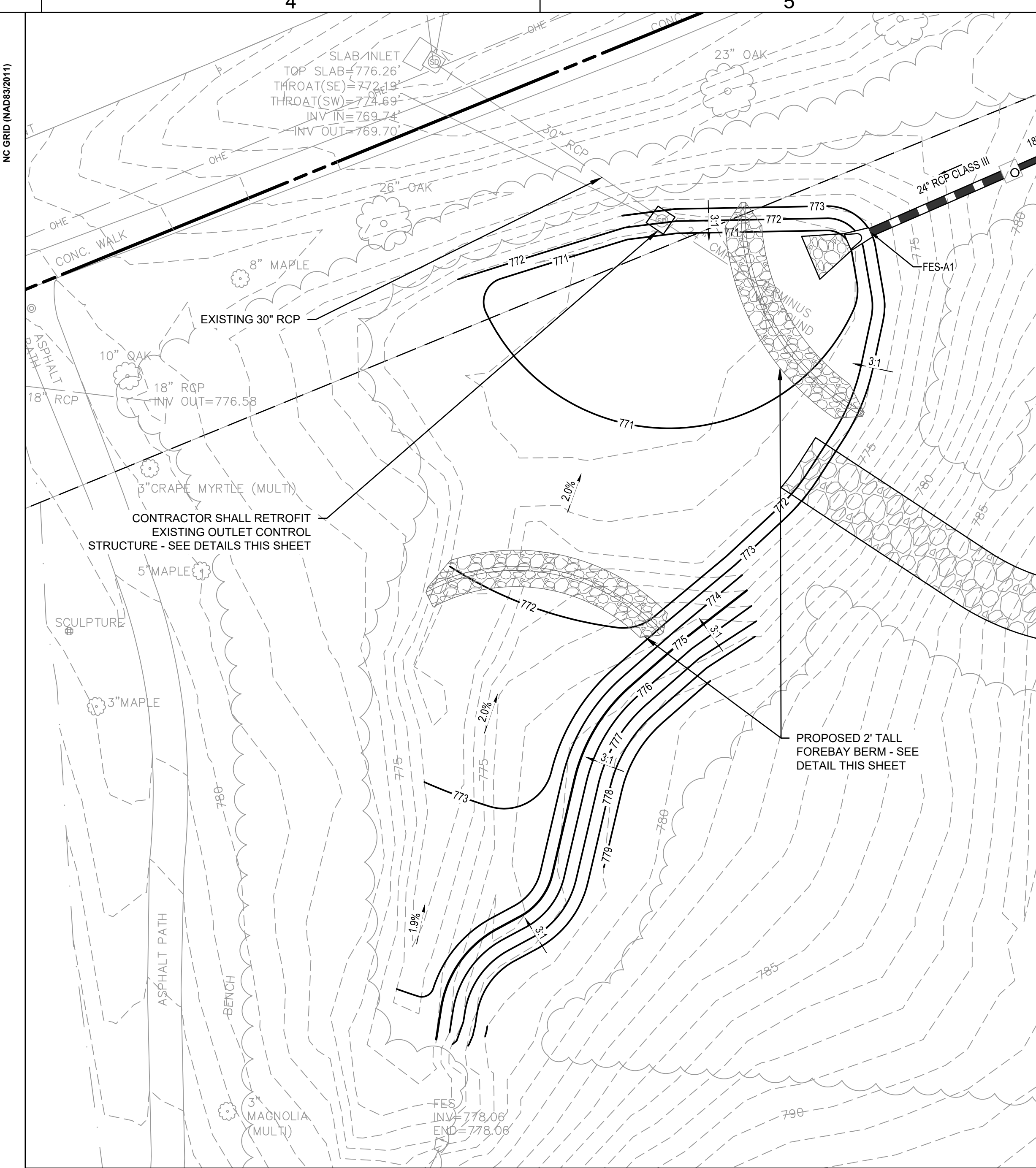
DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024
 TITLE:

BMP DETAILS

DEI PROJECT NO: 50168691

SHEET NO.

C3.08



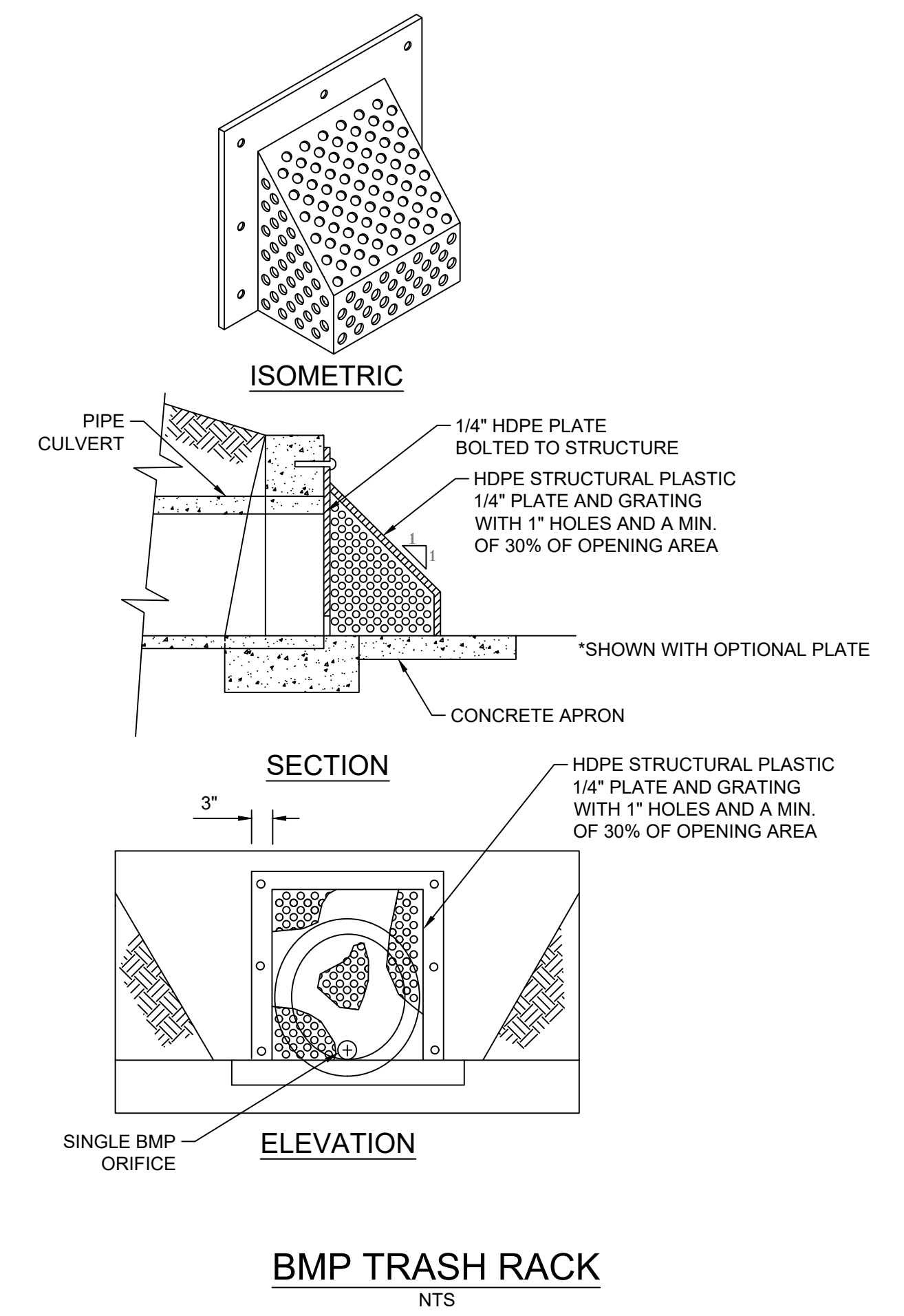
BMP PLAN VIEW
 SCALE: 1" = 20'

Dry Pond Maintenance Tasks and Schedule	
TASK	SCHEDULE
Forebay inspection and cleanout	Monthly inspection. Remove sediment every 7 years or when sediment volume exceeds 50% of storage volume
Bank mowing and inspection / stabilization of eroded areas	Monthly (maintain 3 - 6 inch grass height)
Outlet / inlet inspection and cleanout	Monthly
Unwanted vegetation and trash removal	Monthly
Inspect for structural damage, leaks, etc.	Yearly
Inspect / exercise all mechanical devices, valves, etc.	Yearly
Evaluate sediment level (remove as needed)	Yearly
Security	As needed

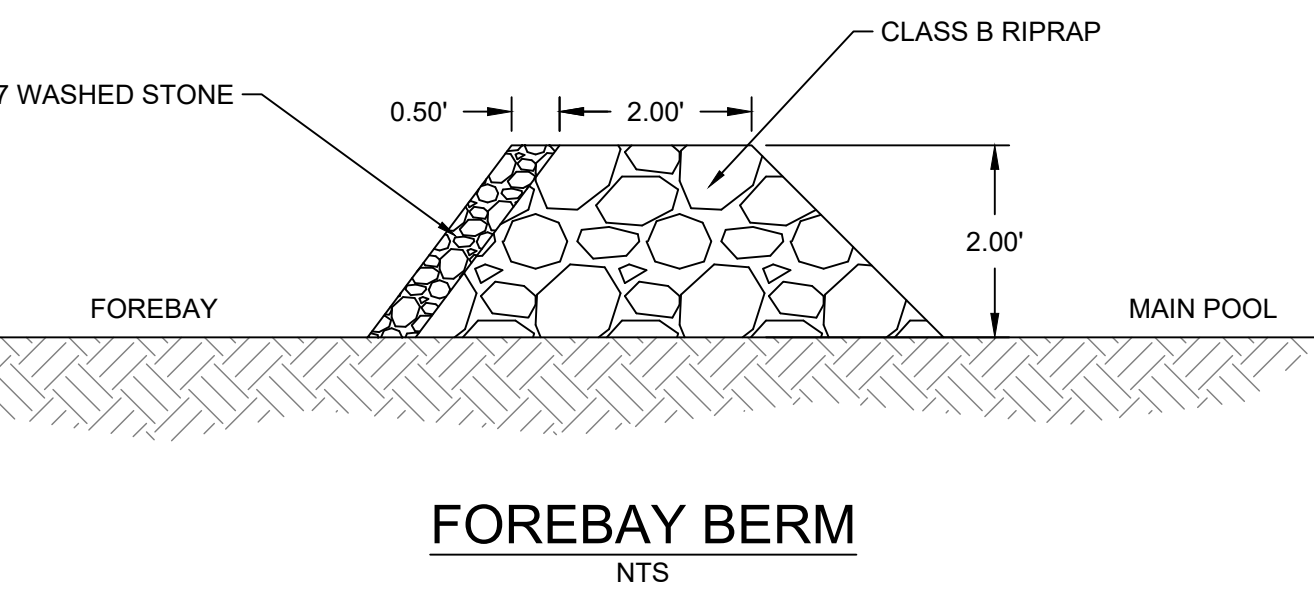
BMP Inset Table Extended Dry Detention	
BAILEY ROAD TENNIS AND PICKLEBALL COURTS RENOVATION	
Project Name:	2
Sequence ID:	13,007.00
Surface Area at WQv (sq. ft.):	23,784
Surface Area at top of berm (sq. ft.):	19,987
Drainage Area (acres):	> 2 acres - Residential Open Space
Land Use/Development Type:	Grassed
Vegetation Type:	25%
Percent Built-Up Area:	6
Maximum Depth (ft.):	Surface
Detention Basin Type:	Y
Forebay Present (Y/N):	N
Flow Diverters Present (Y/N):	Post Construction Ordinance
Regulated By:	Standard
Treatment Effectiveness:	629457
NC State Plane X (easting):	1450532
NC State Plane Y (northing):	

EXTENDED DRY DETENTION BMP				
PEAK CONTROL STORM EVENTS	PRE-DEVELOPMENT RUNOFF	POST-DEVELOPMENT RUNOFF	POST-ROUTING RUNOFF	ELEVATION
TOP OF BASIN				777.00
50YR - 6HR	14.70 CFS	51.99 CFS	22.41 CFS	776.39
25YR - 6HR	10.89 CFS	42.29 CFS	10.83 CFS	776.11
10YR - 6HR	6.68 CFS	30.56 CFS	6.51 CFS	775.28
BMP	REQUIRED	PROVIDED	ELEVATION	
CHANNEL PROTECTION VOLUME (CPv)	36721 CF	41121 CF		774.17
BOTTOM OF BASIN				771.00
SHWT ELEVATION				226076 SF

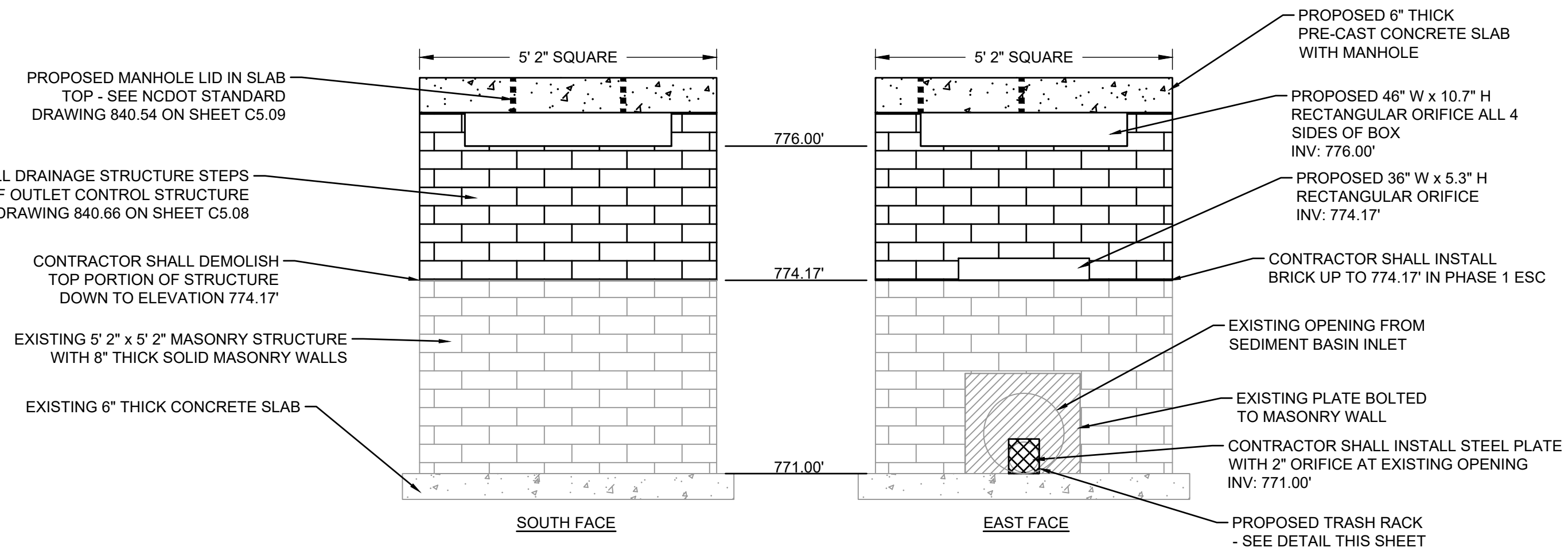
EXTENDED DRY DETENTION MAX ALLOWABLE BUA



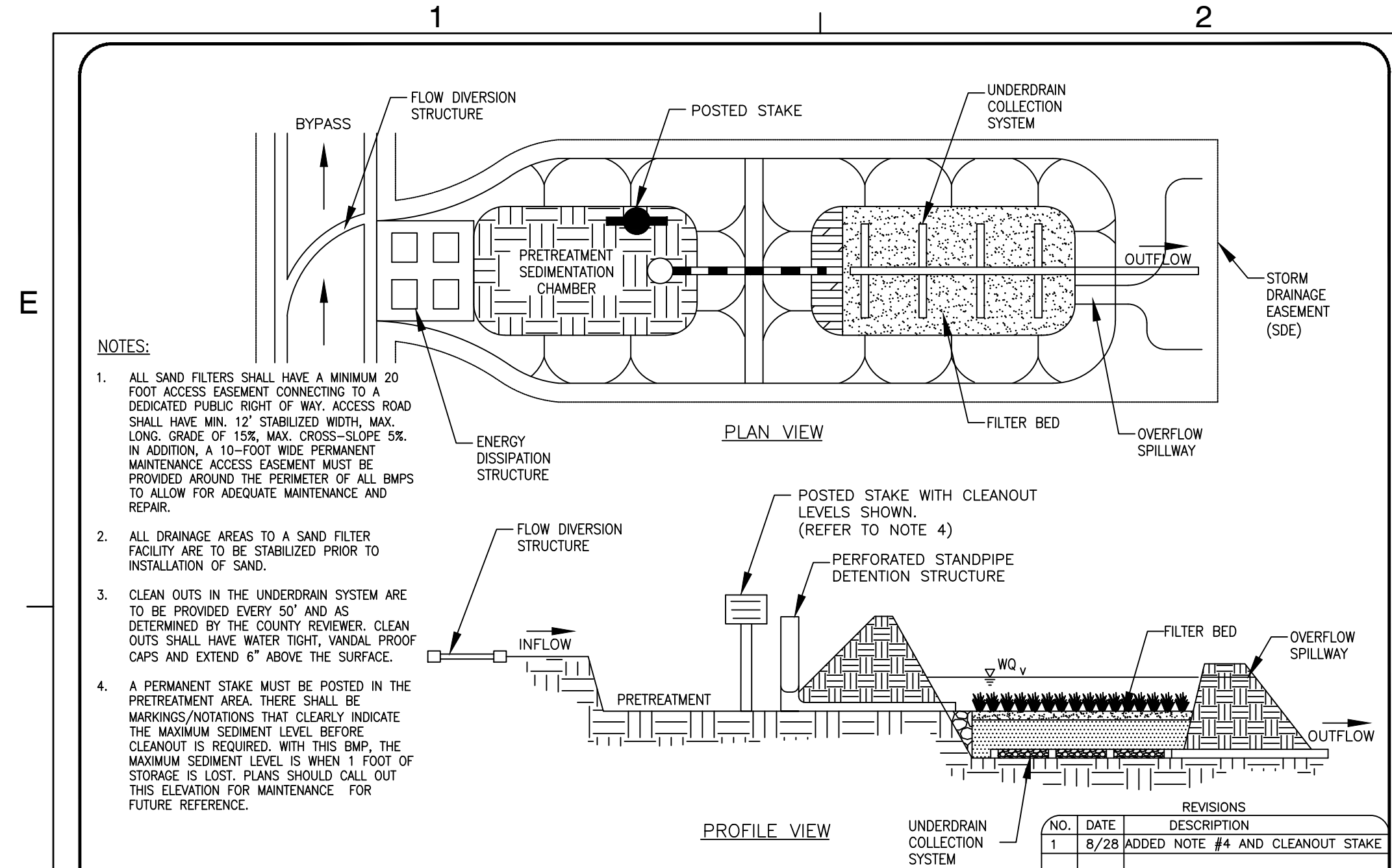
BMP TRASH RACK
 NTS



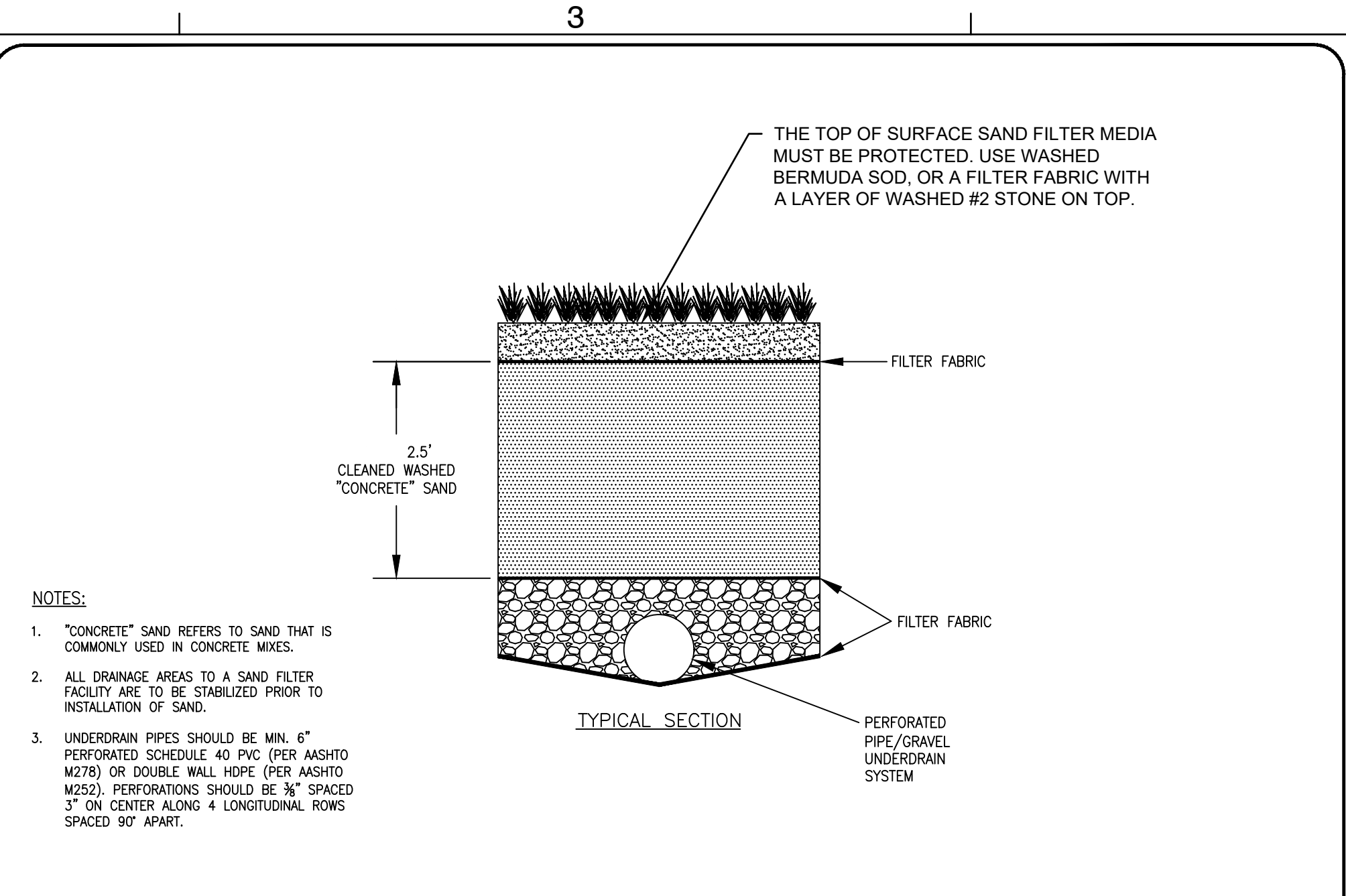
FOREBAY BERM
 NTS



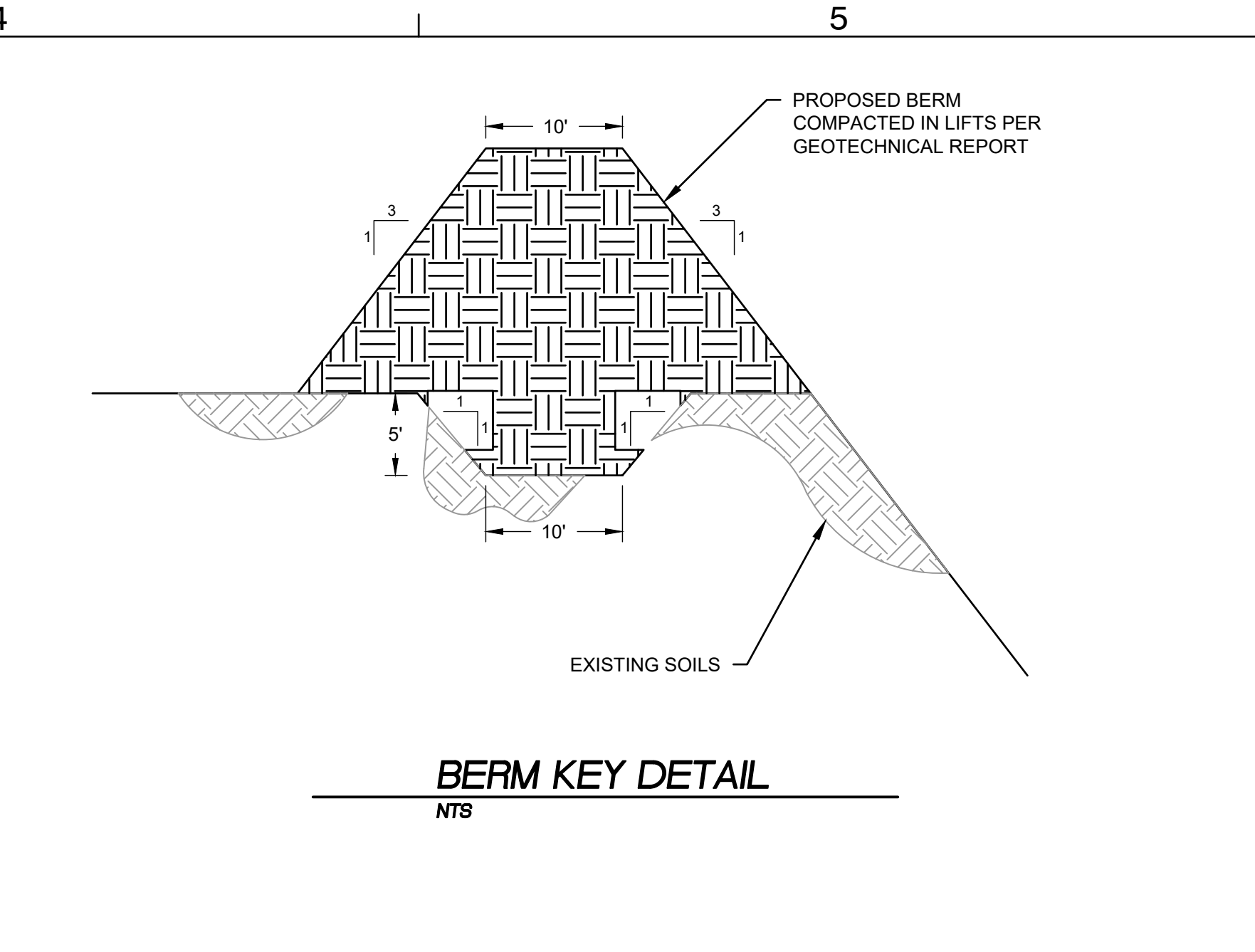
Know what's below.
 Call before you dig.



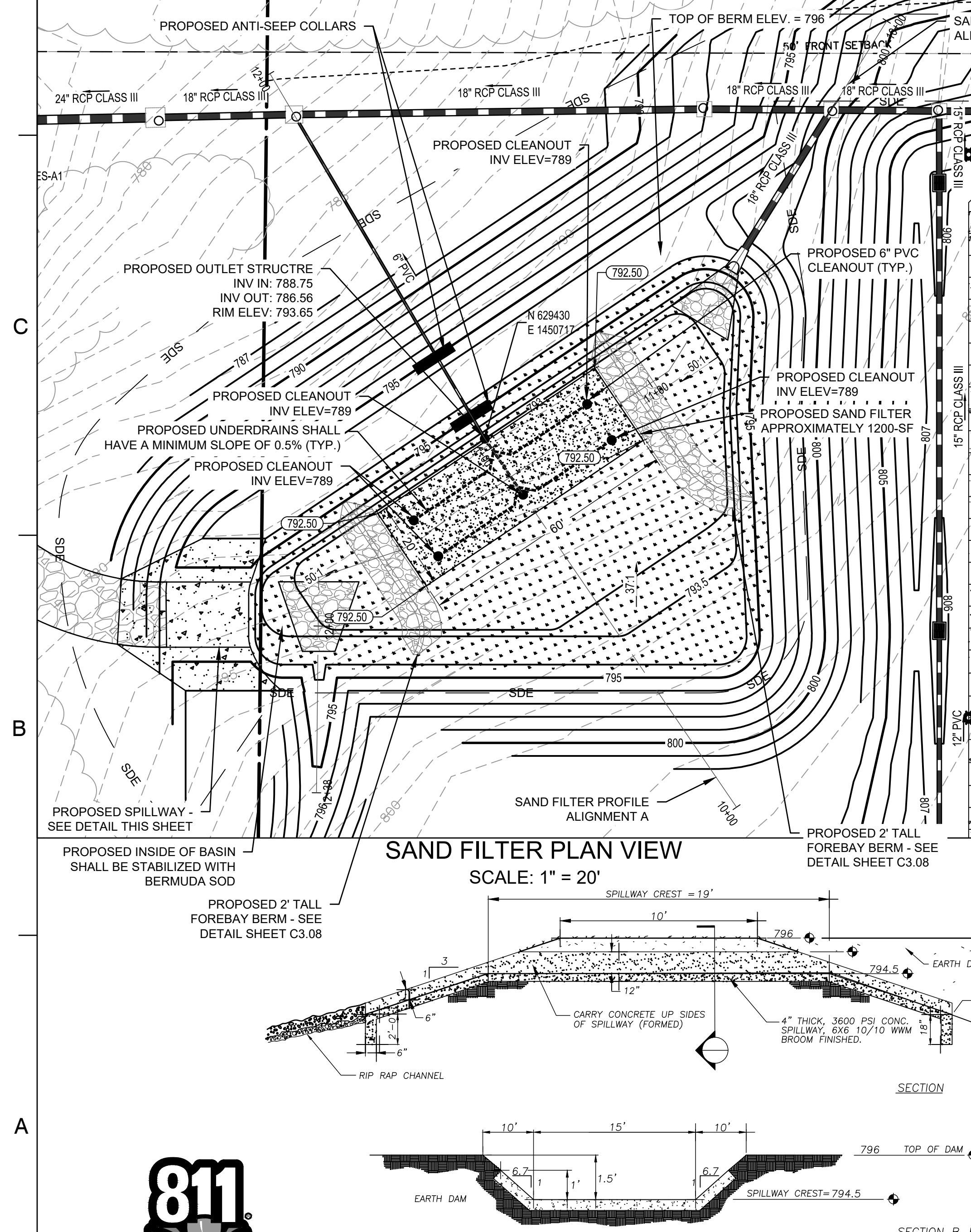
MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS
SURFACE SAND FILTER
 STD. NO. 21.24 REV. 1



MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS
SURFACE SAND FILTER SECTION
 STD. NO. 21.25 REV. 1



BERM KEY DETAIL
 MTS



SAND FILTER PLAN VIEW
 SCALE: 1" = 20'

SAND FILTER BMP SUMMARY CHART

PEAK CONTROL STORM EVENTS	PRE-DEVELOPMENT RUNOFF	POST-DEVELOPMENT RUNOFF	POST-ROUTING RUNOFF	ELEVATION
TOP OF DAM				796.00
50YR - 6HR	2.65 CFS	20.09 CFS	19.02 CFS	794.98
BMP		REQUIRED	PROVIDED	ELEVATION
WATER QUALITY VOLUME (WQv)		11323.83 CF	11323.83 CF	794.50
TOP OF SAND FILTER CELL				792.50
BOTTOM OF SAND FILTER CELL		1101.55 SF	1200 SF	790.00
SHWT ELEVATION				159647.5F

BMP Inset Table Sand Filter
BAILEY ROAD TENNIS AND PICKLEBALL COURTS RENOVATION

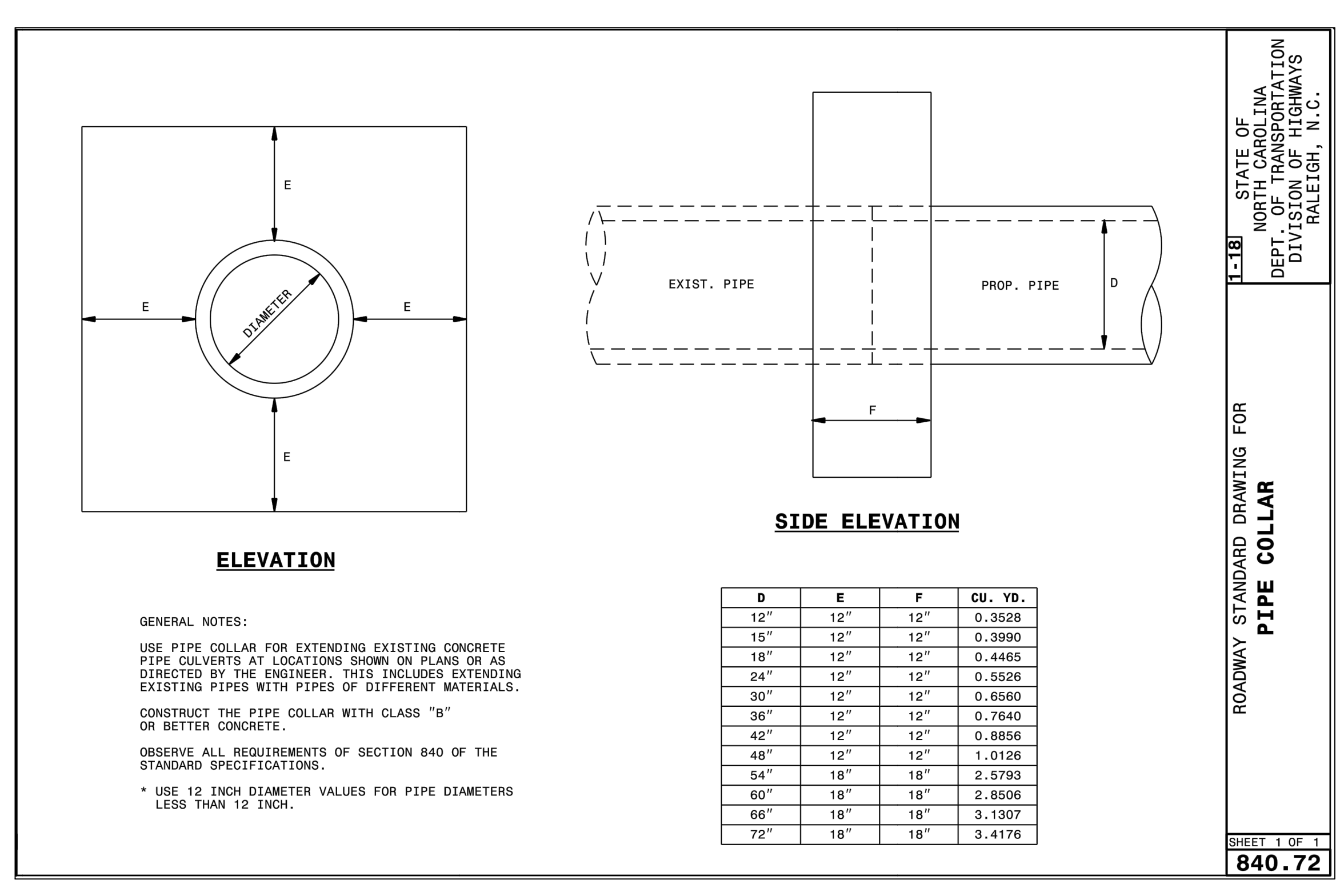
Project Name:	BAILEY ROAD TENNIS AND PICKLEBALL COURTS RENOVATION		
Sequence ID:	1		
Drainage Area (acres):	3.89		
Land Use/Development Type:	> 2 acres - Residential Open Space		
Vegetation Type:	Grassed		
Percent Built-Up Area:	82%		
Sediment Chamber Length (ft.):	28.5	31	
Sediment Chamber Width (ft.):	34.5	37.5	
Sediment Chamber Height (ft.):	2.5	2.5	
Sand Filter Type:	Surface		
Media Depth (ft.):	2.5		
Media Surface Area (ft ²):	1200		
Flow Diverter Present (Y/N):	Y		
Regulated By:	Post Construction Ordinance		
Treatment Effectiveness:	Optimal		
NC State Plane X (easting):	629423		
NC State Plane Y (northing):	1450731		

BMP Inset Table Extended Dry Detention
BAILEY ROAD TENNIS AND PICKLEBALL COURTS RENOVATION

Project Name:	BAILEY ROAD TENNIS AND PICKLEBALL COURTS RENOVATION		
Sequence ID:	1		
Surface Area at WQv (sq. ft.):	6,891.00		
Surface Area at top of berm (sq. ft.):	7,889		
Drainage Area (acres):	3.89		
Land Use/Development Type:	> 2 acres - Residential Open Space		
Vegetation Type:	Grassed		
Percent Built-Up Area:	82%		
Maximum Depth (ft.):	3.5		
Detention Basin Type:	Surface		
Forebay Present (Y/N):	Y		
Flow Diverters Present (Y/N):	Y		
Regulated By:	Post Construction Ordinance		
Treatment Effectiveness:	Standard		
NC State Plane X (easting):	629430		
NC State Plane Y (northing):	1450717		

SAND FILTER NOTES:

- THE UNDERDRAIN COLLECTION SYSTEM SHOULD BE EQUIPPED WITH 6-INCH MINIMUM PERFORATED SCHEDULE 40 OR STRONGER PVC PIPE OR DOUBLE WALL HDPE PIPE. PERFORATIONS SHALL BE PER AASHTO M278 FOR PVC PIPE, AASHTO M252 FOR DOUBLE WALL HDPE PIPE, OR BE 3/8-INCH IN DIAMETER SPACED 3 INCHES ON CENTER ALONG 4 LONGITUDINAL ROWS THAT ARE SPACED 90° APART. THE PIPES SHALL HAVE A MINIMUM SLOPE OF 0.5% AND A MAXIMUM SPACING OF 10 FEET ON CENTER.
- CLEANOUTS OF 6-INCH SOLID PVC MUST BE PROVIDED FOR EVERY 50 LINEAR FEET OF UNDERDRAIN, AT ALL BENDS, AND ENDS OF THE SYSTEM FOR MAINTENANCE PURPOSES. THE TOP OF THE CLEANOUTS SHOULD EXTEND 6 INCHES ABOVE THE TOP OF FILTER AND HAVE A WATERTIGHT, VANDAL PROOF CAP. AT LEAST ONE CLEANOUT SHALL BE INSTALLED AS AN EMERGENCY UNDERDRAIN THAT IS FLUSH WITH THE TOP OF FILTER AND HAVE A 6-INCH THREADED EXTENSION PIPE. THE FURTHEST CLEANOUT FROM THE OUTLET MUST HAVE THE MINIMUM REQUIRED FILTER MEDIA DEPTH.



Sand Filter Maintenance and Schedule

TASK	SCHEDULE
Inspect banks and surrounding drainage areas for erosion and stabilize if necessary	Monthly
Street sweep parking lot	Quarterly
Trash removal	Monthly
Inspect outlet for obstructions	Monthly
Inspect for clogging	Monthly
Inspect inlet grates	Monthly
Skim sand media	Yearly
Pump oil and grit from sedimentation chamber	Yearly or at 50% full
Replace sand media	As needed (expect 3 years)
Grassed Sand Filter Only	
Mow basin to recommended height in alternating patterns to prevent compaction and prevent weed growth. Bag clippings to prevent thatch build-up.	Weekly to bi-weekly during the growing season, as needed other seasons
Light fertilizing to establish healthy roots	Only during the first 2 years
Aerate and dethatch basin floor	Every 2 Years

Dry Pond Maintenance Tasks and Schedule

TASK	SCHEDULE
Forebay inspection and cleanout	Monthly inspection. Remove sediment every 7 years or when sediment volume exceeds 50% of storage volume
Bank mowing and inspection / stabilization of eroded areas	Monthly (maintain 3 - 6 inch grass height)
Outlet / inlet inspection and cleanout	Monthly
Unwanted vegetation and trash removal	Monthly
Inspect for structural damage, leaks, etc.	Yearly
Inspect / exercise all mechanical devices, valves, etc.	Yearly
Evaluate sediment level (remove as needed)	Yearly
Security	As needed

811
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Detention Basin Spillway Detail

Dewberry
 Dewberry Engineers Inc.
 9500 Harris Corners Pkwy - Suite 220
 Charlotte, NC 28269
 Phone: 704.509.9918
 Fax: 704.509.9937
 www.dewberry.com
 NCBELS #F-0629
 NCBOLA #C-478

BAILEY ROAD PARK EXPANSION - PHASE I
 CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.
 1622
 2/24

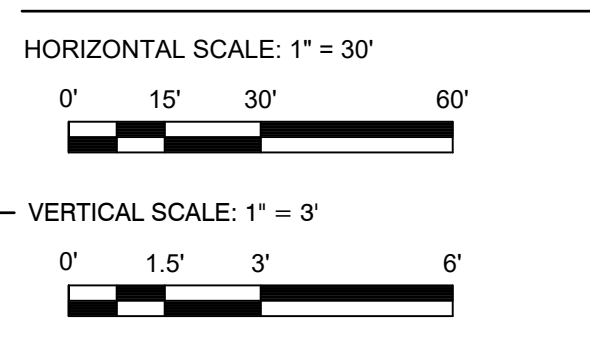
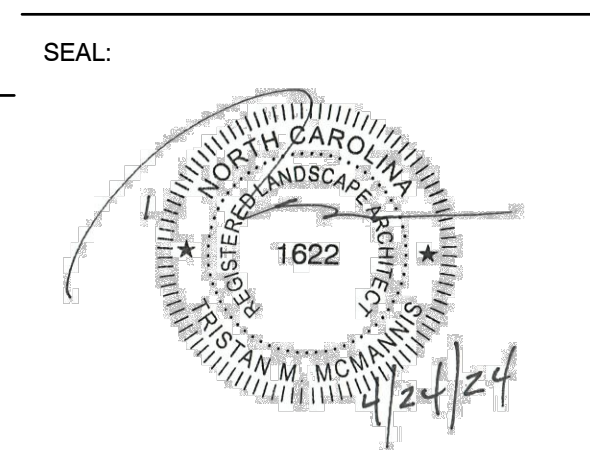
ROADWAY STANDARD DRAWING FOR
PIPE COLLAR
 SHEET 1 OF 1
840.72

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024
 TITLE: SAND FILTER DETAILS
 DEI PROJECT NO: 50168691
 SHEET NO. **C3.09**

E
D
C
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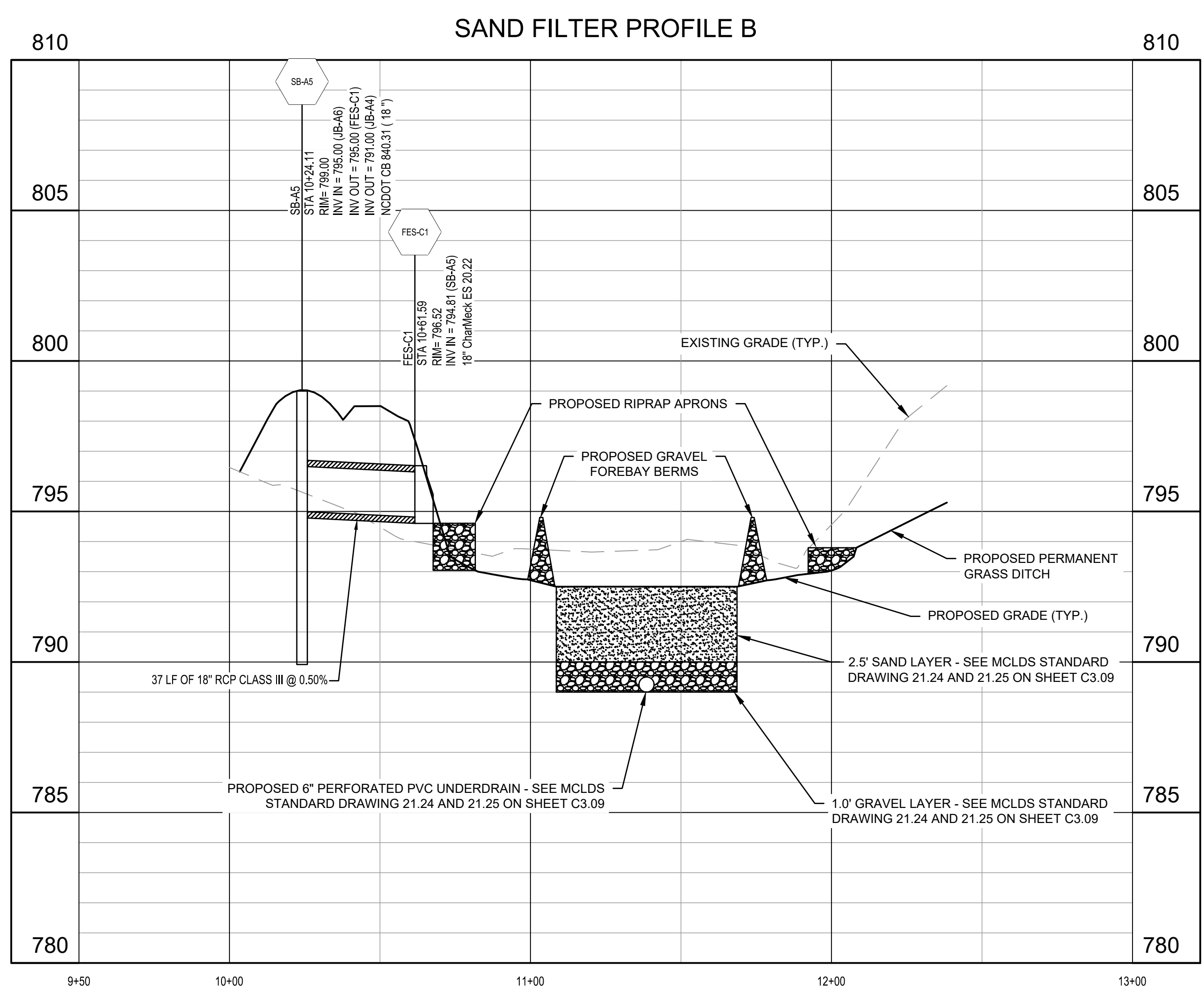
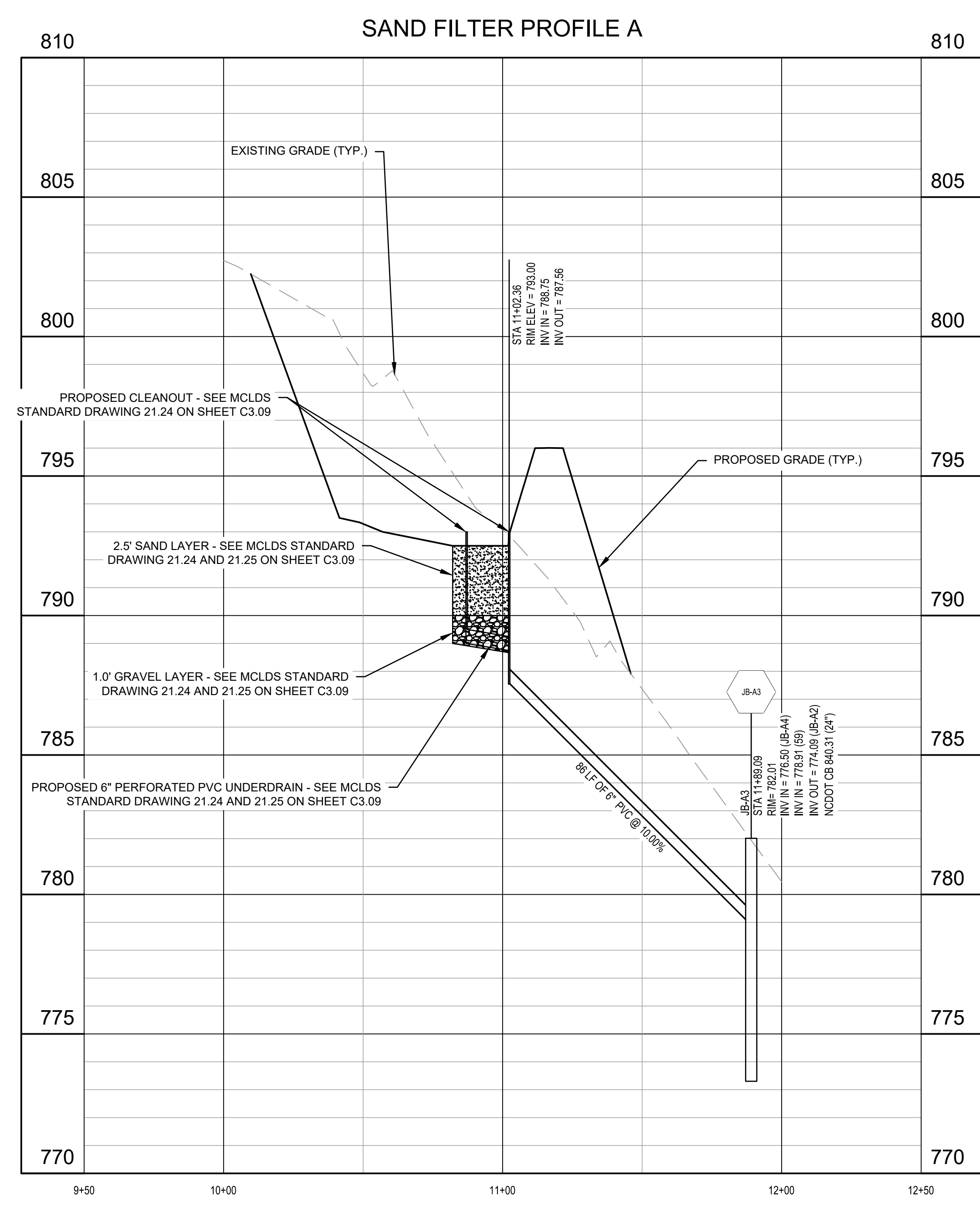
DRAWN BY: BN
 APPROVED BY: TM
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 DATE: FEBRUARY 9, 2024

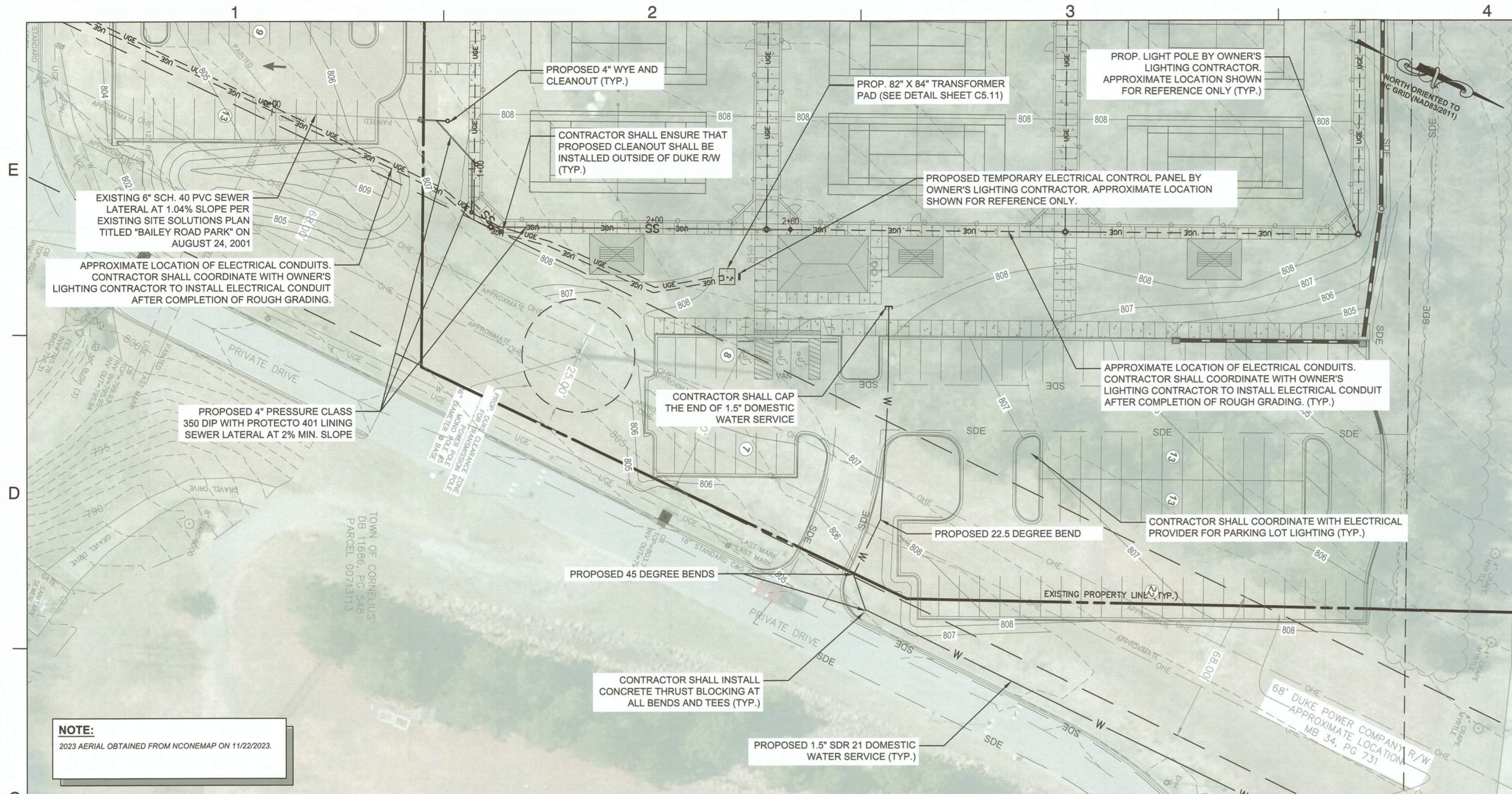
TITLE
**SAND FILTER
 PROFILES**

DEI PROJECT NO: 50168691

SHEET NO.

C3.10





NOTE:
2023 AERIAL OBTAINED FROM NCONEMAP ON 11/22/2023.

- UTILITY NOTES:**
- TOPOGRAPHIC INFORMATION, SHOWN WITHIN PROJECT LIMITS, BASED ON INFORMATION PROVIDED BY BASE DATA FROM MECKLENBURG COUNTY GIS AND SURVEY PREPARED BY DEWBERRY ENGINEERS INC. ON APRIL 15, 2024.
 - UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODE REQUIREMENTS.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES (STORM DRAINAGE, ELECTRIC, GAS, TELEPHONE, ETC.) PRIOR TO CONSTRUCTION. INFORMATION SHOWN ON THIS PLAN IS FOR REFERENCE ONLY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL NOTIFY THE OWNER/DESIGNER OF RECORD IMMEDIATELY IF ANY DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND ACTUAL FIELD CONDITIONS ARE FOUND.
 - MINIMUM COVER FOR ALL SANITARY SEWER MAINS SHALL BE 3'-0" DUCTILE IRON PIPE WILL BE SUBSTITUTED WHEN MINIMUM COVER CAN NOT BE MAINTAINED.
 - THE STANDARD DEPTH OF COVER FOR WATER MAINS SHALL BE 3'-0" MIN. EXCEPT AT VALVE OR HYDRANT LOCATIONS, OR OTHER SPECIAL CONDITIONS.
 - THE CONNECTION TO EXISTING WATER MAINS SHALL BE PERFORMED ONLY AFTER ALL PRESSURE TESTING AND CHLORINATION ARE SUCCESSFULLY COMPLETED AND THE LOCAL REVIEW AUTHORITY HAS APPROVED THE CONNECTION. THE CONTRACTOR SHALL AVOID DISRUPTION OF EXISTING SERVICE.
 - REFER TO PLUMBING DRAWING SERIES FOR THE LOCATION OF WATER AND SANITARY SEWER SERVICE CONNECTIONS AT THE BUILDING.
 - UNLESS OTHERWISE NOTED, THE PHYSICAL CONNECTION BETWEEN THE SITE UTILITY LINES AND THE PIPE INSTALLED BY THE PLUMBING CONTRACTOR SHALL BE MADE BY THE SITE UTILITY CONTRACTOR.
 - PIPE LENGTHS SHOWN ON PLAN ARE THE ENGINEER'S ESTIMATE USED TO COMPUTE PIPE SLOPES AND INVERTS AND SHALL NOT BE CONSTRUED BY THE CONTRACTOR TO REPRESENT THE ACTUAL QUANTITY OF PIPE REQUIRED.
 - IF WATER LINE CROSSES OVER SANITARY SEWER BOTH PIPES SHALL BE DUCTILE IRON 10' EACH SIDE. IF WATER CROSSES UNDER THE SEWER REGARDLESS OF CLEARANCE, BOTH PIPES SHALL BE DUCTILE IRON 10' EACH SIDE. IF WATER LINE RUNS PARALLEL TO SEWER LINE WITH LESS THAN 18" VERTICAL CLEARANCE AND LESS THAN 10' SIDE CLEARANCE BOTH PIPES SHALL BE DUCTILE IRON.
 - IF REQUIRED BY NOTE 11 ABOVE, REPLACE EXISTING SEWER WITH DUCTILE IRON PIPE, CLASS 350 WORKING PRESSURE WITH GASKETED JOINTS, 10' EACH SIDE OF WATER MAIN.
 - THERE SHOULD BE A MIN. 12" VERTICAL CROSSING SEPARATION BETWEEN STORM DRAINS AND WATER OR SEWER LINES, WHERE THERE IS LESS THAN 12" VERTICAL SEPARATION FERROUS MATERIAL SHALL BE LAID FOR 10' EITHER SIDE OF CROSSING, FOR SEWER AND WATER LINES.
 - PRIOR TO BACK FILLING WATER AND SEWER TRENCHES, CONTACT ENGINEER WITH AT LEAST 24 HOURS NOTICE OF INSTALLATION TO SCHEDULE INSPECTION OF LINES.
 - ALL SANITARY SEWER SHALL BE SDR-35 PIPE UNLESS OTHERWISE NOTED.
 - EACH CHARLOTTE WATER REQUIRED BPA IS REQUIRED TO BE TESTED BY A CHARLOTTE WATER APPROVED CERTIFIED TESTER PRIOR TO PLACING THE WATER SYSTEM IN SERVICE.
 - ALL WATER METERS SHALL BE CHARLOTTE WATER BACKFLOW COMPLIANT.
 - CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL TESTS & SUPPLYING TESTING EQUIPMENT NECESSARY TO PROVIDE ENGINEER'S CERTIFICATION FOR WATER & SEWER LINES PER STATE & LOCAL REQUIREMENTS. CONTRACTOR SHALL SCHEDULE ALL TESTING W/ENGINEER AT LEAST 2 BUSINESS DAYS PRIOR TO THE TEST.
 - CONTRACTOR SHALL INSTALL CONCRETE THRUST BLOCKS OR RESTRAINED JOINT PIPE @ ALL BENDS & TEES. CONCRETE THRUST BLOCKS & RESTRAINED JOINT PIPE SHALL MEET ALL STATE & CHARLOTTE WATER REQUIREMENTS.
 - CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDER AND OWNER'S LIGHTING CONTRACTOR ON INSTALLATION OF ELECTRICAL CONDUITS, ELECTRICAL EQUIPMENT, TRANSFORMER PAD, AND SITE LIGHTING.

WASTEWATER TREATMENT PLANT RECEIVING WASTEWATER:

- MCALPINE
- IRWIN
- MCDOWELL
- SUGAR
- MALLARD
- ROCKY RIVER

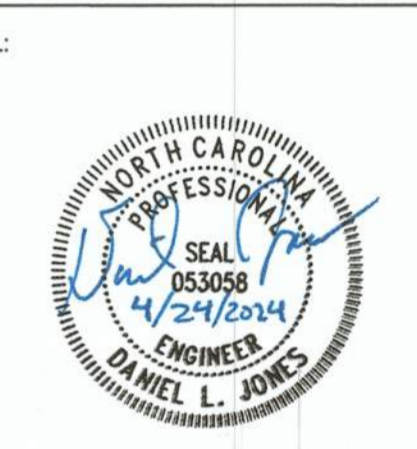
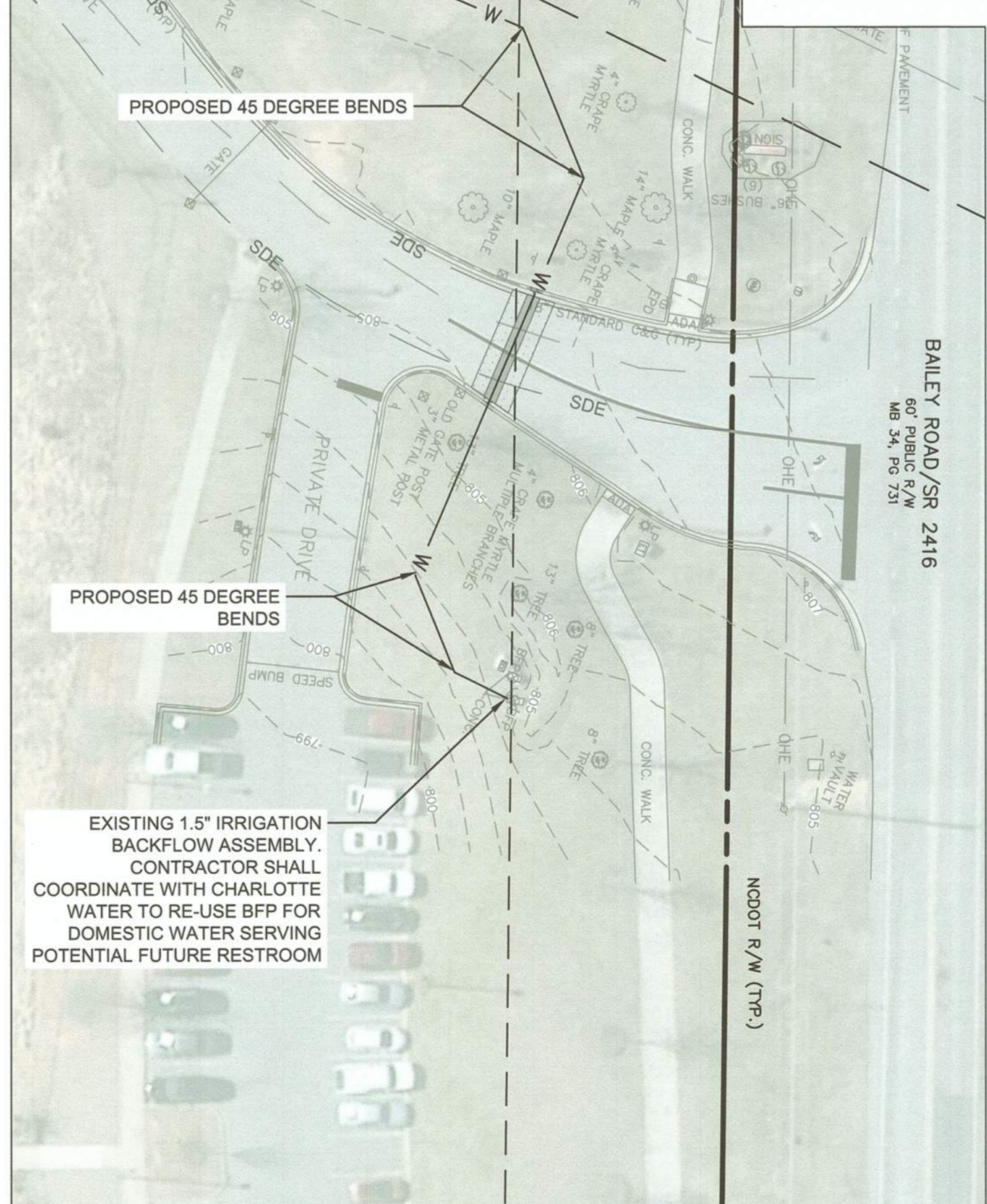
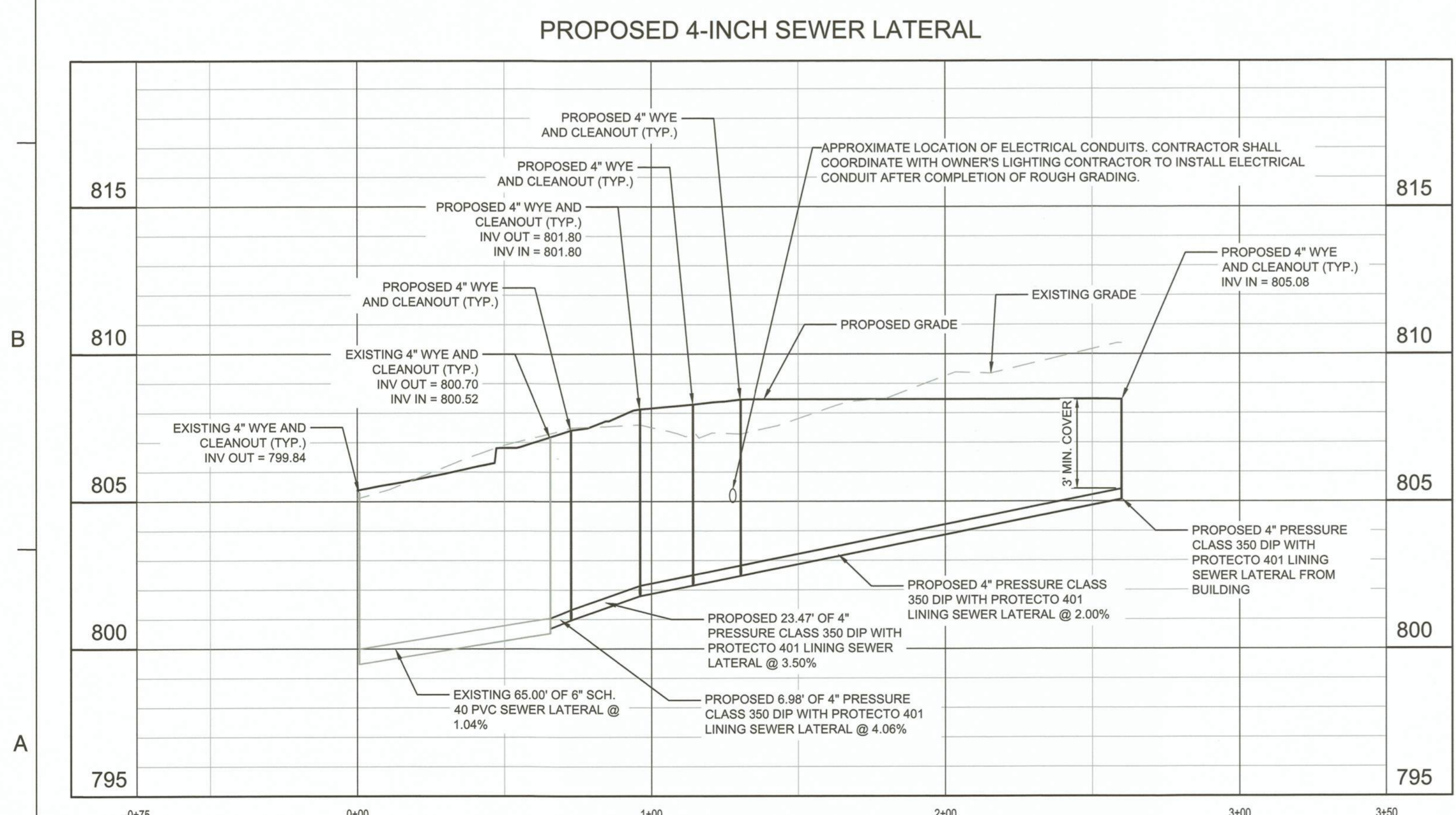
NOTICE TO CONTRACTOR:

- THIS LAND DEVELOPMENT PLAN HAS NOT BEEN REVIEWED OR APPROVED BY CHARLOTTE WATER VIA EPM.
- PRIOR TO CONSTRUCTION PLEASE CONTACT MIKE GARBARK (MGARBARK@CI.CHARLOTTE.NC.US OR 704-432-5797) WITH CHARLOTTE WATER REGARDING YOUR DEVELOPMENT.
- LAND DEVELOPMENT PLAN REVISIONS DUE TO PLAN COMMENTS BY CHARLOTTE WATER WOULD REQUIRE SUBMISSION OF A REVISED CONSTRUCTION PLAN TO THE TOWN/COUNTY FOR REVIEW. ALL ADDITIONAL FEES DUE TO THE PLAN REVISION TO BE PAID BY THE OWNER/DEVELOPER/CONTRACTOR.

- CLT WATER NOTES:**
- CUSTOMER IS RESPONSIBLE FOR STAKING SITE AS NECESSARY TO DETERMINE SERVICE LOCATIONS & ELEVATIONS. PRIOR TO CLT WATER CONTRACTOR MOBILIZING TO INSTALL SERVICES, SITE ADDRESS MUST BE VISIBLY POSTED AT SITE.
 - ON-SITE CONTRACTOR IS RESPONSIBLE FOR RELOCATING ANY APPLICABLE CONFLICTING UTILITIES NECESSARY TO COMPLETE SERVICE INSTALLATIONS. ADDITIONAL FEES MAY APPLY & CONSTRUCTION TIMELINES EXTENDED IF CONFLICTING UTILITIES ARE NOT SHOWN ON PLANS.
 - WATER AND SEWER CONNECTIONS SHALL NOT BE LOCATED WITHIN PROPOSED CONSTRUCTION ENTRANCES.
 - PAYMENT FOR A QUOTED SERVICE CONNECTION SHALL BE CONSIDERED ACKNOWLEDGEMENT & APPROVAL OF CLT WATER COMMENTS BY THE APPLICANT; PAYMENT DOES NOT INCLUDE ANY ADDITIONAL FEES REQUIRED DUE TO UNFORESEEN CONDITIONS THAT ARE/WERE NOT DEPICTED ON THE SITE PLAN PROVIDED BY THE APPLICANT.
 - BACKFLOW PREVENTION REVIEW SHALL BE COORDINATED THOUGH MECK. CO. CODE ENFORCEMENT PERMITTING PROCESS AT THE TIME OF APPLICATION FOR BUILDING PERMITS. THESE REQUIREMENTS CAN BE FOUND AT [HTTP://CHARLOTTENC.GOV/WATER/PAGES/BACKFLOWCONSTRUCTIONGUIDELINES.ASP](http://charlottenc.gov/water/pages/backflowconstructionguidelines.asp). PLEASE CONTACT MARK KROUSE AT (704) 432-5800 FOR MORE INFORMATION. ANY REVISION TO TAP AND/OR METER LOCATIONS MAY BE SUBJECT TO RESUBMITTAL TO BACKFLOW FOR REVIEW.

WATER DEMAND CALCULATION RESULTS

DEMAND TYPE	DEMAND FLOW (GPM)	CORRESPONDING METER (CLT WATER METER CHART)



HORIZONTAL SCALE: 1" = 30'
0' 15' 30' 60'
VERTICAL SCALE: 1" = 3'
0' 1.5' 3' 6'

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

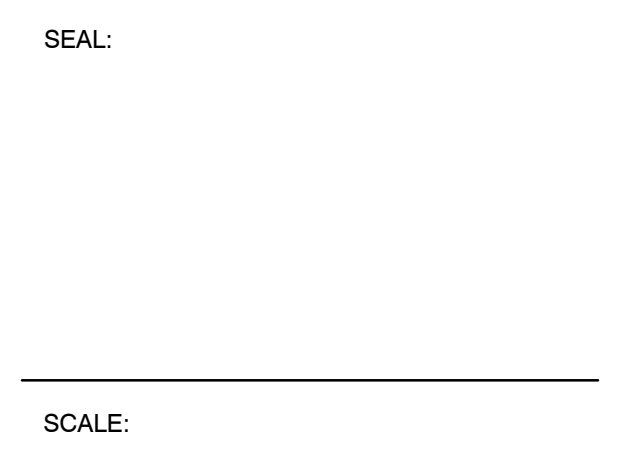
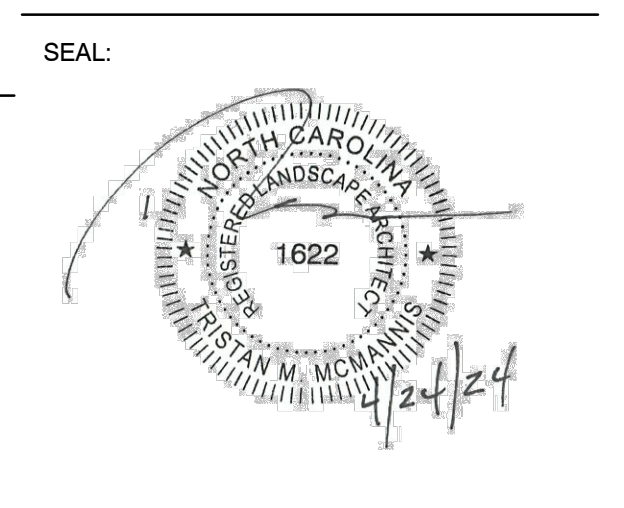
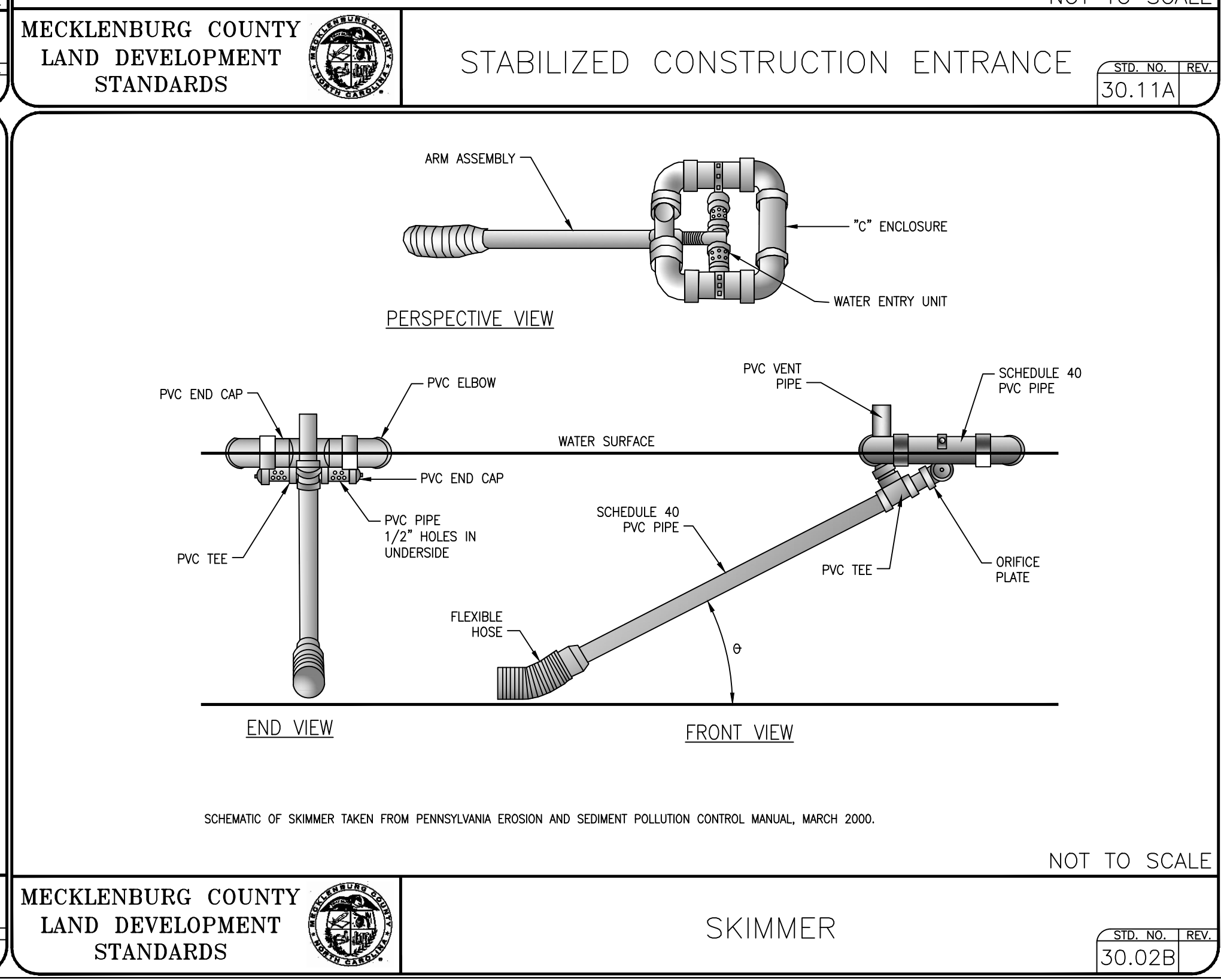
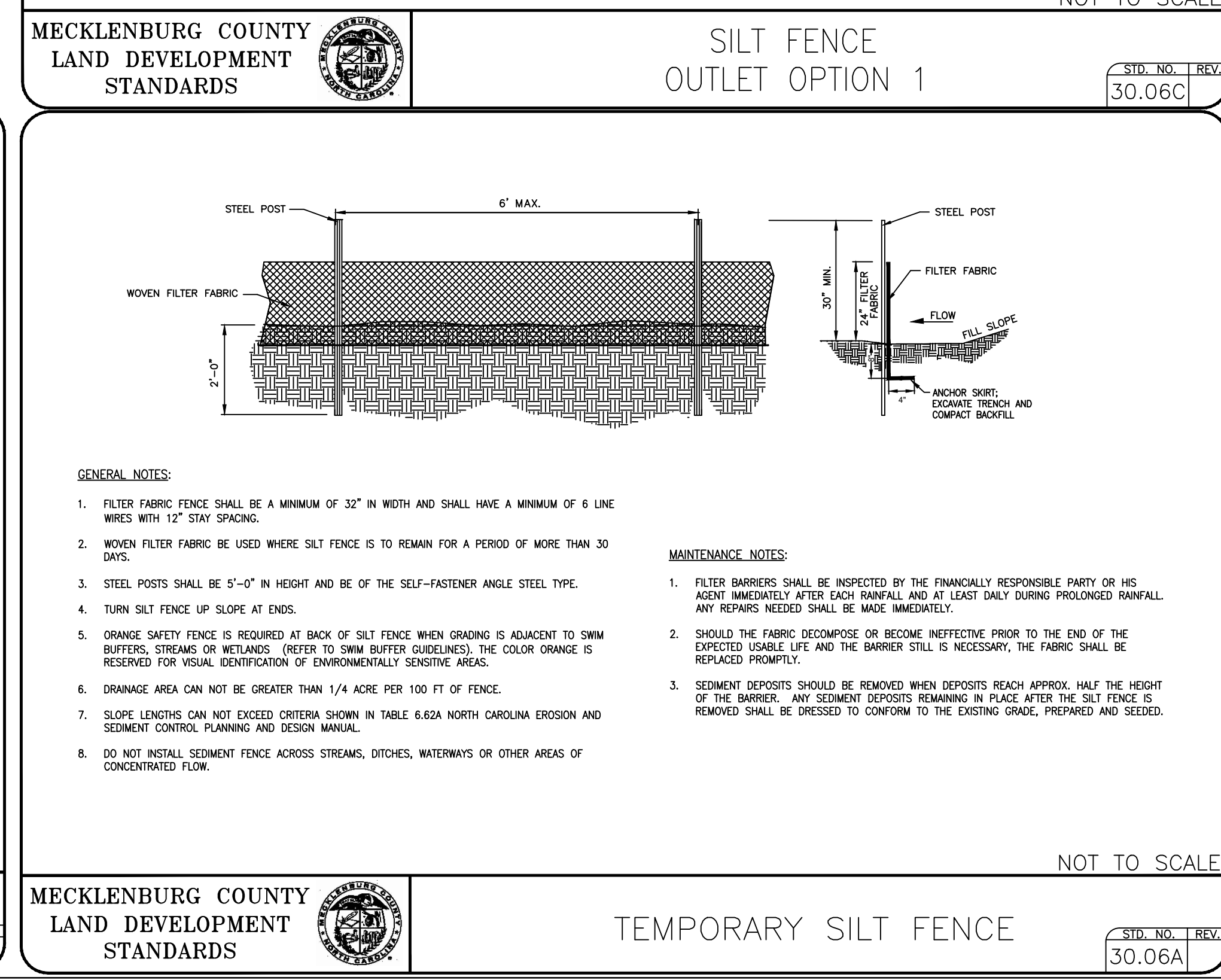
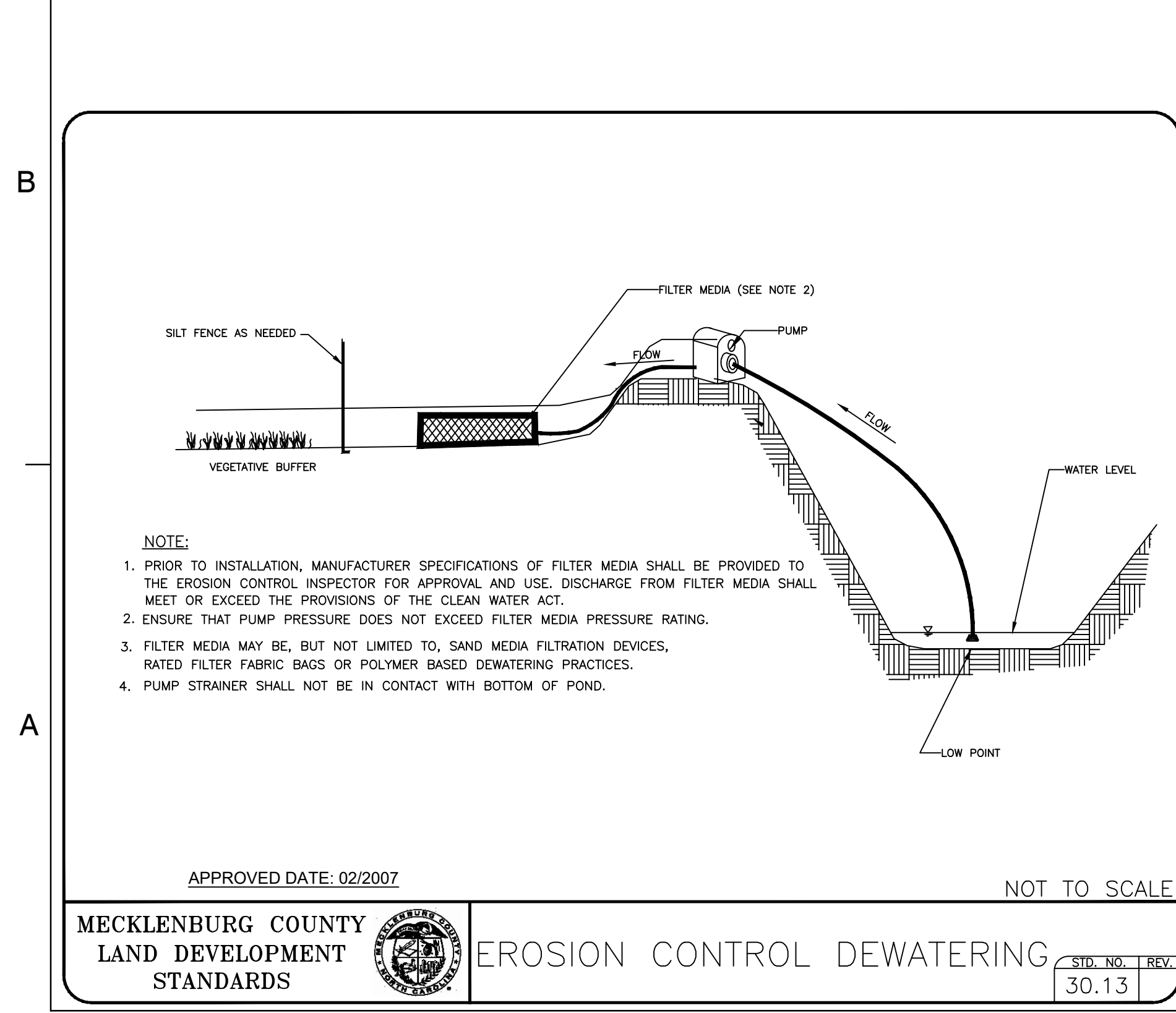
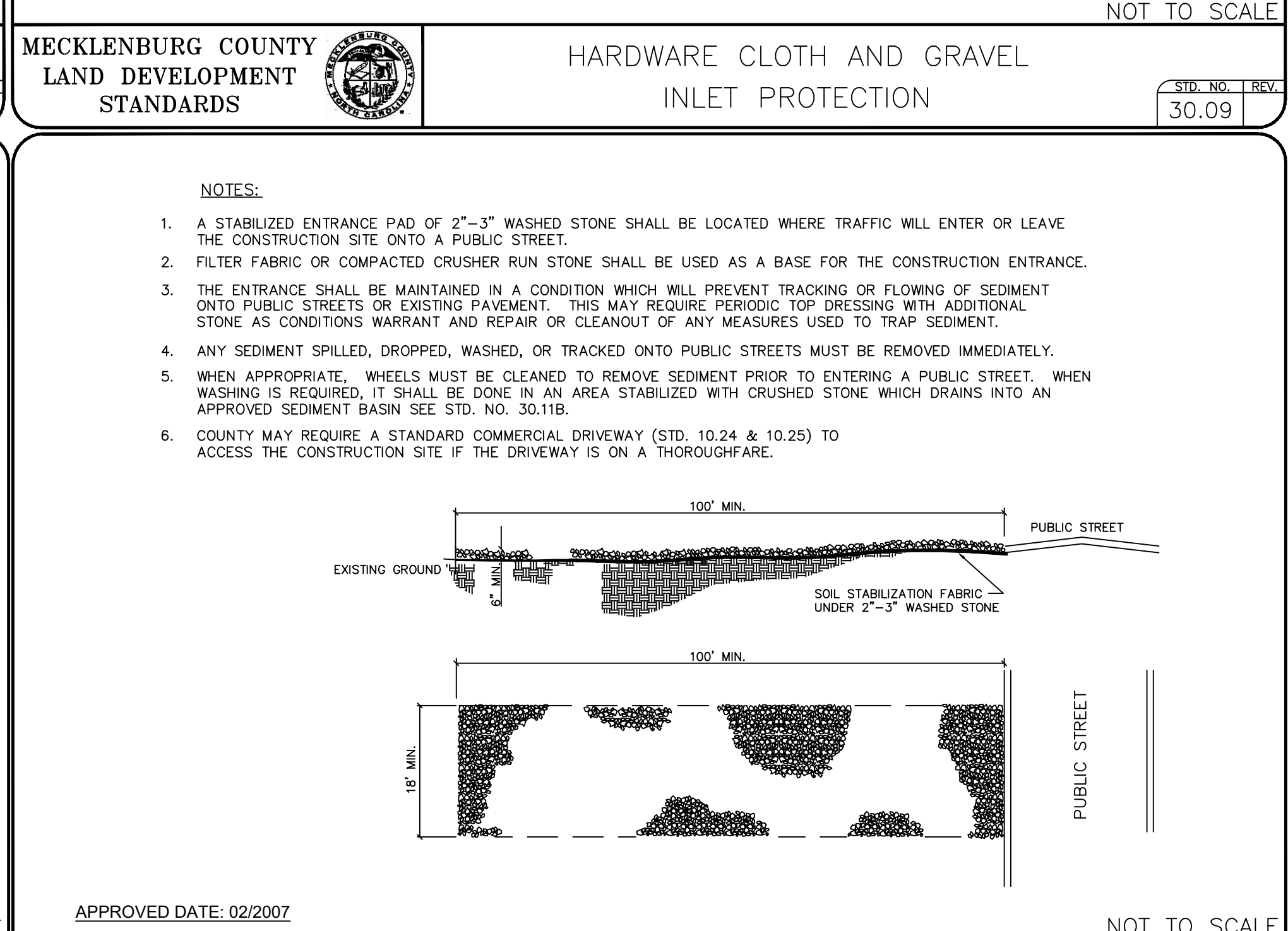
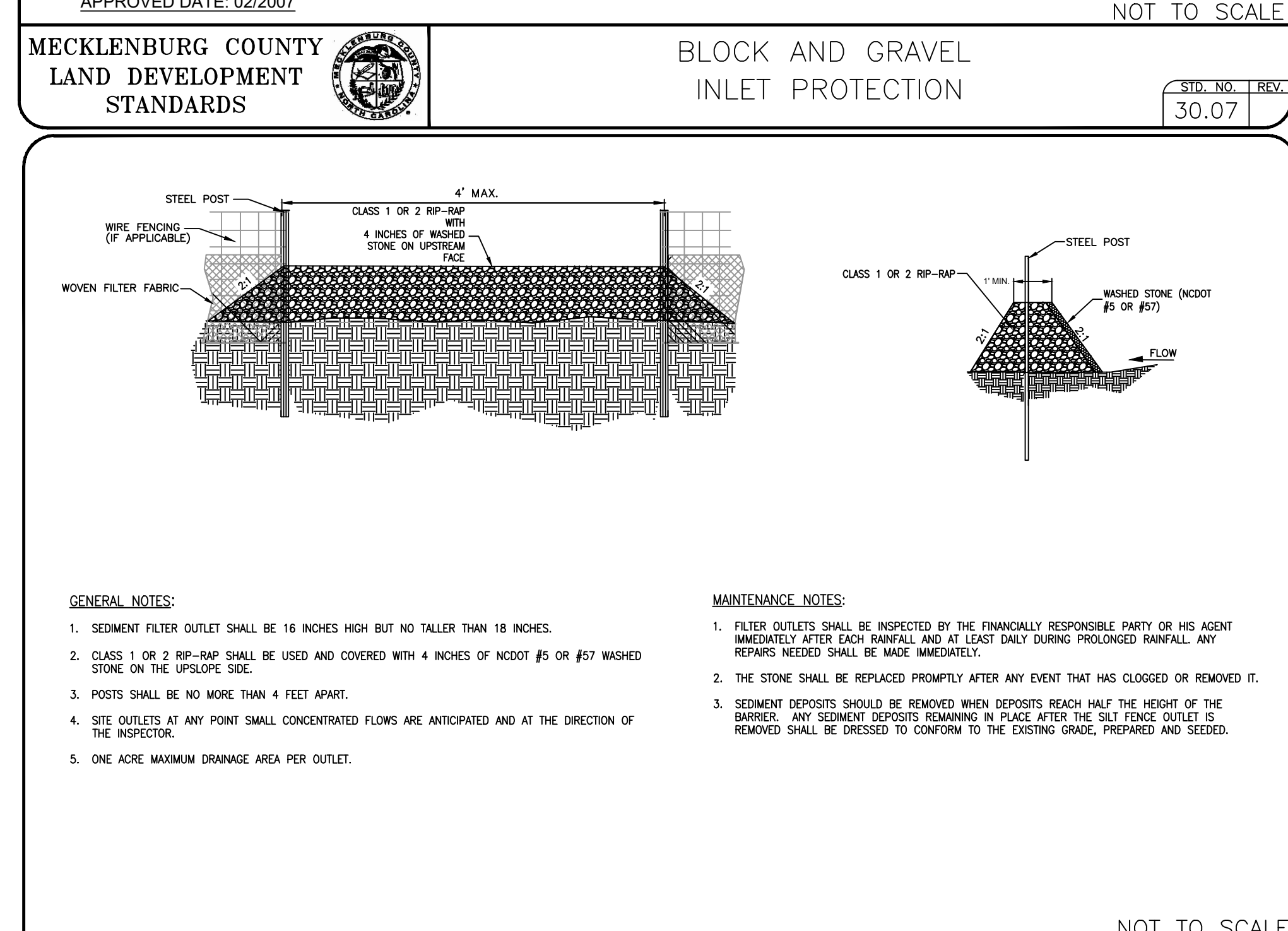
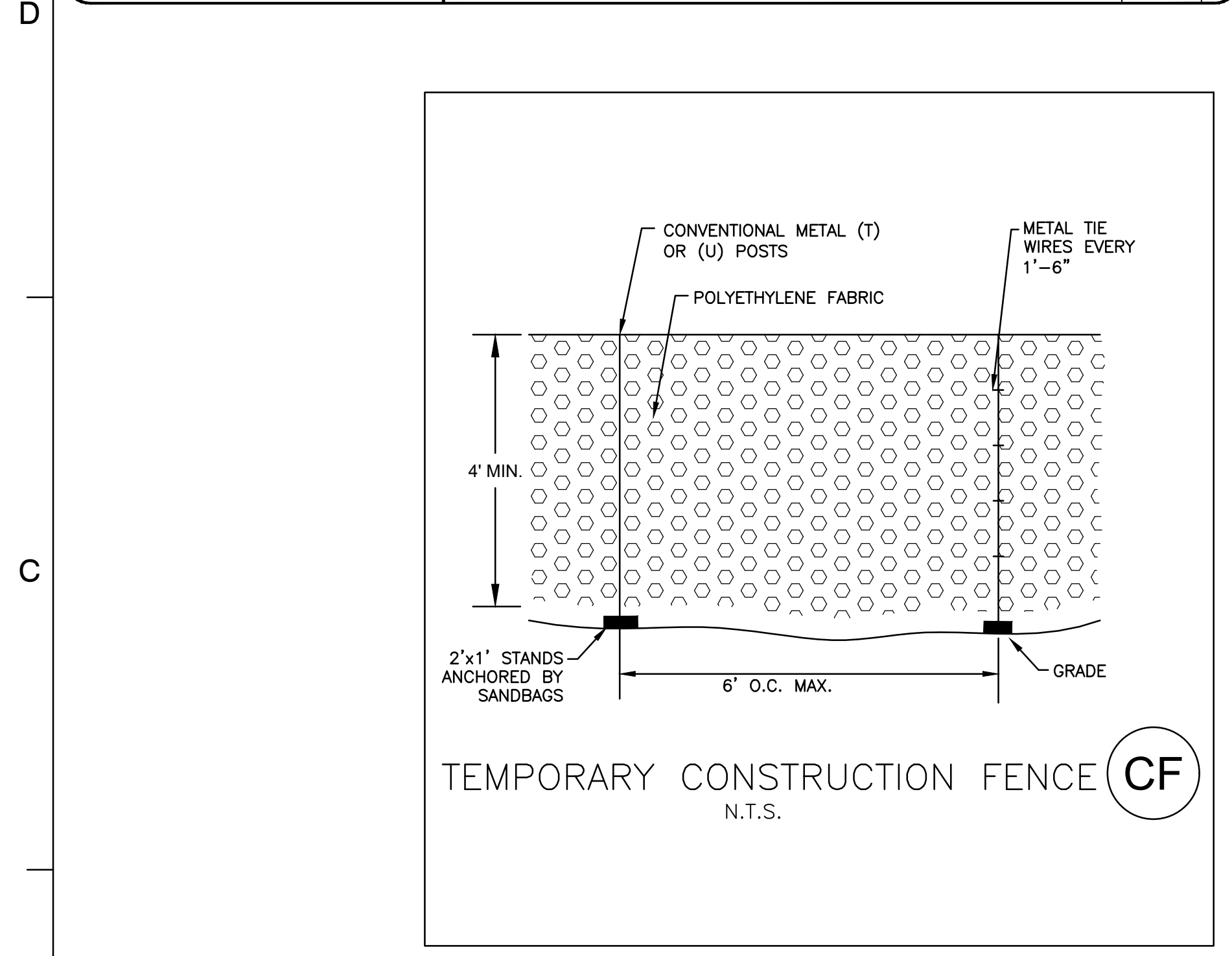
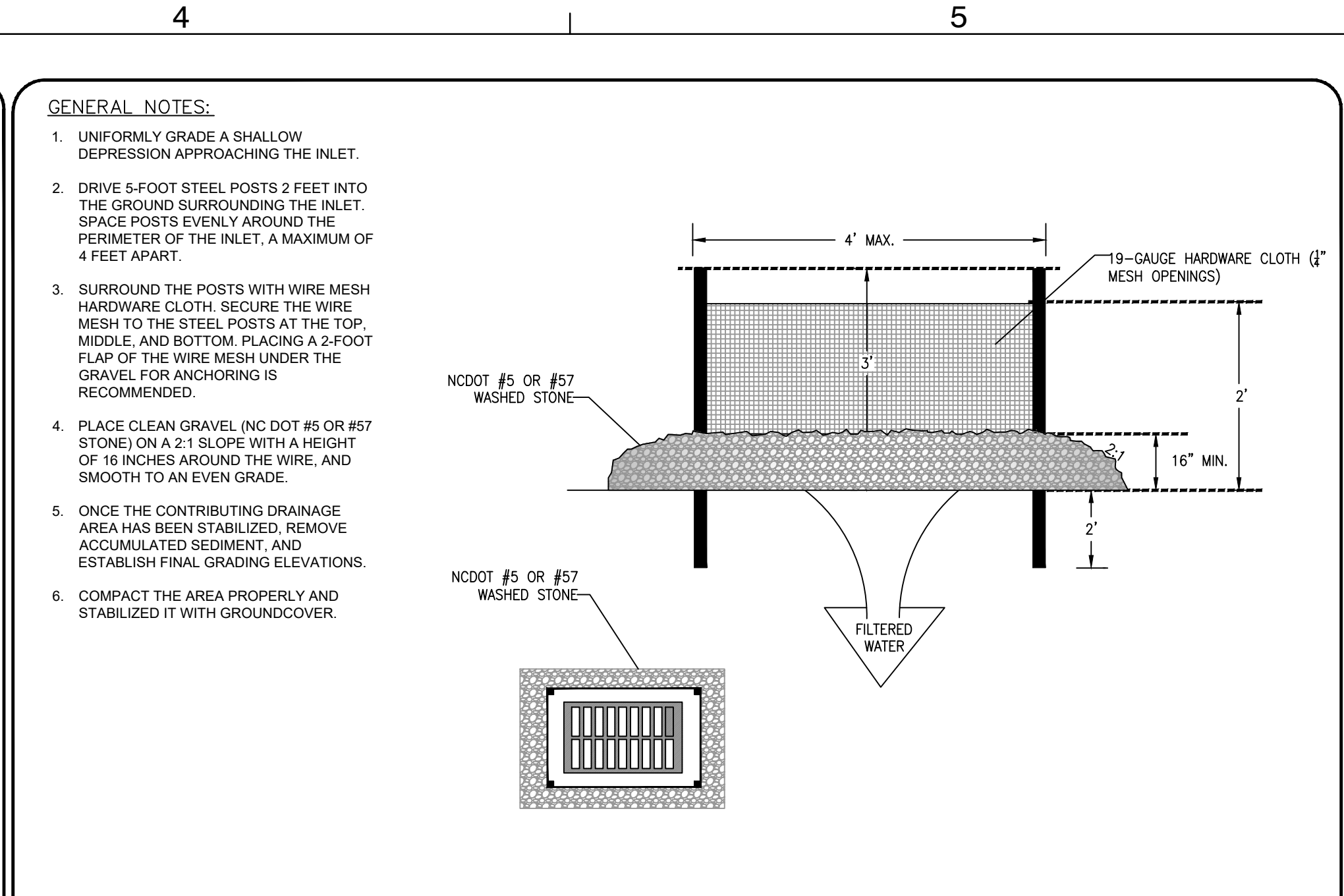
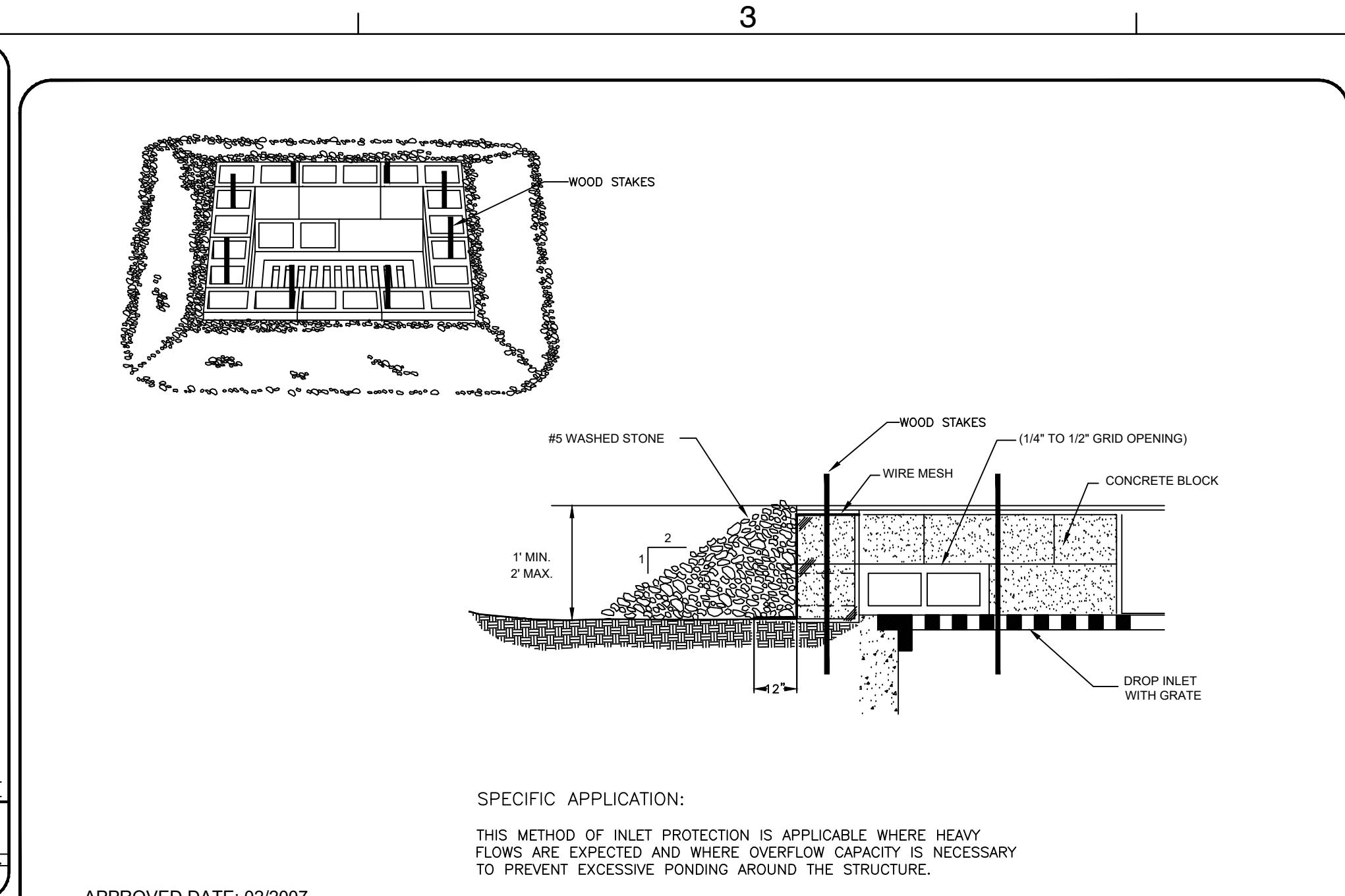
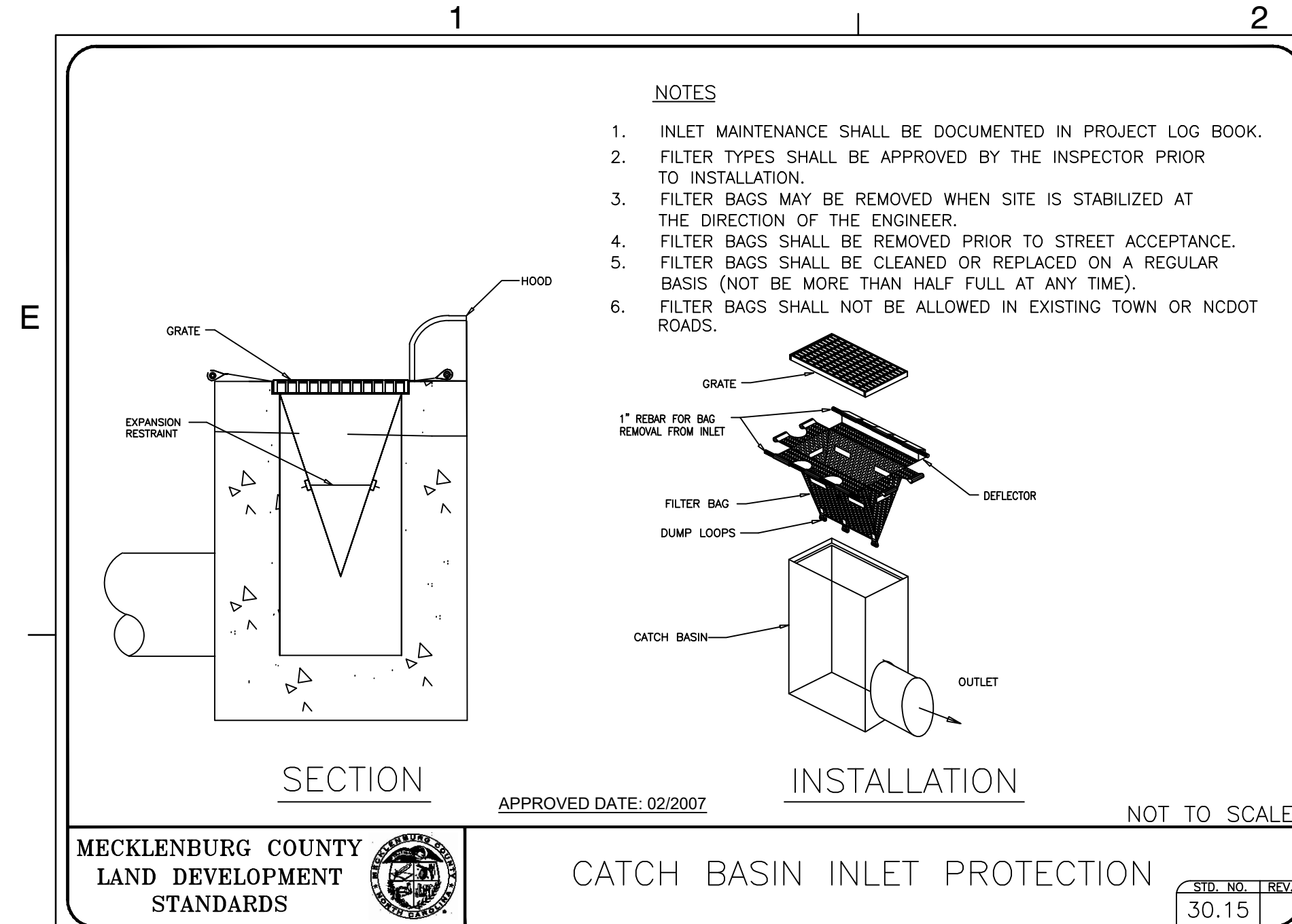
DRAWN BY: BN
APPROVED BY: DJ
CHECKED BY: TM
DATE: FEBRUARY 9, 2024
TITLE: UTILITY PLAN

DEI PROJECT NO: 50168691

SHEET NO.

C4.01





REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
APPROVED BY: TM
CHECKED BY: DJ
DATE: FEBRUARY 9, 2024
TITLE:

ESC DETAILS (SHEET 1 OF 2)

	GENTLE SLOPES	STEEP SLOPES
SEEDING MIXTURE	80 lbs/acre of tall fescue	100 lbs/acre tall fescue 30 lbs/acre Sericea lespedeza (unscarified after August 15) 10 lbs/acre Kobe lespedeza
SEEDING DATES	FALL: August 25 - October Late winter: February 15 - April 15 To extend spring seeding into June, add 15 lbs/acre hulled Bermudagrass Overseeding of Kobe lespedeza over fall-seeded tall fescue is very effective.	FALL: August 25 - October 15 Late winter: February 15 - April 15 To extend spring seeding into June, add 15 lbs/acre hulled Bermudagrass Overseeding of Kobe lespedeza over fall-seeded tall fescue is very effective.
SEEDING AMENDMENTS	Apply lime and fertilizer per soil tests, or 4000 lbs/acre limestone and 1000 lbs/acre 10-10-10 fertilizer.	Apply lime and fertilizer per soil tests, or 4000 lbs/acre limestone and 1000 lbs/acre 10-10-10 fertilizer.

NOTE 1
Ground Cover-- Protective cover must be established on all disturbed areas within 21 calendar days after land disturbing activity is completed or has temporarily ceased.

NOTE 2
Graded slopes and fills-- Protective cover must be established on all graded slopes and fills within 21 calendar days after a phase of grading is completed or has temporarily ceased.

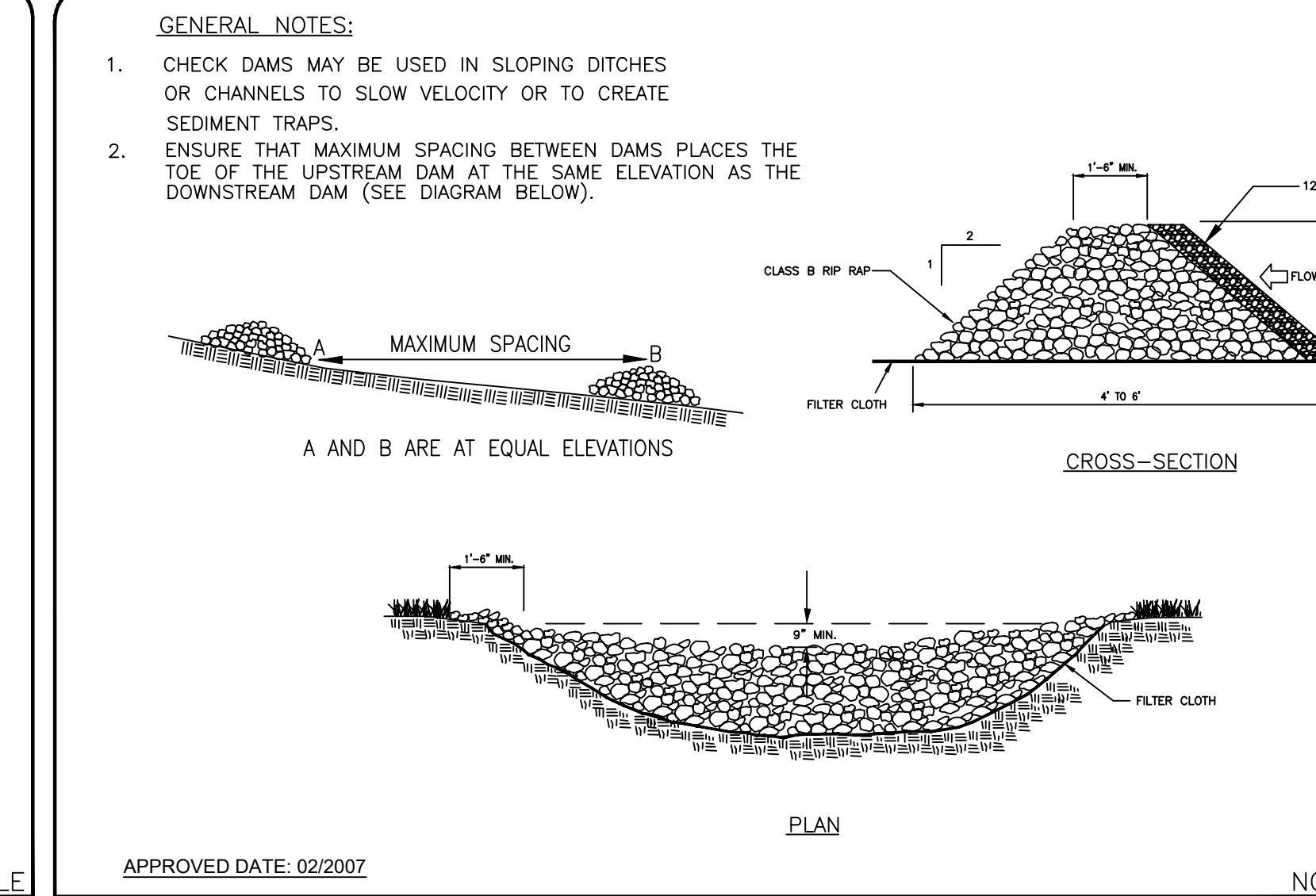
APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS SEEDING SCHEDULE (SEASONAL) NOT TO SCALE

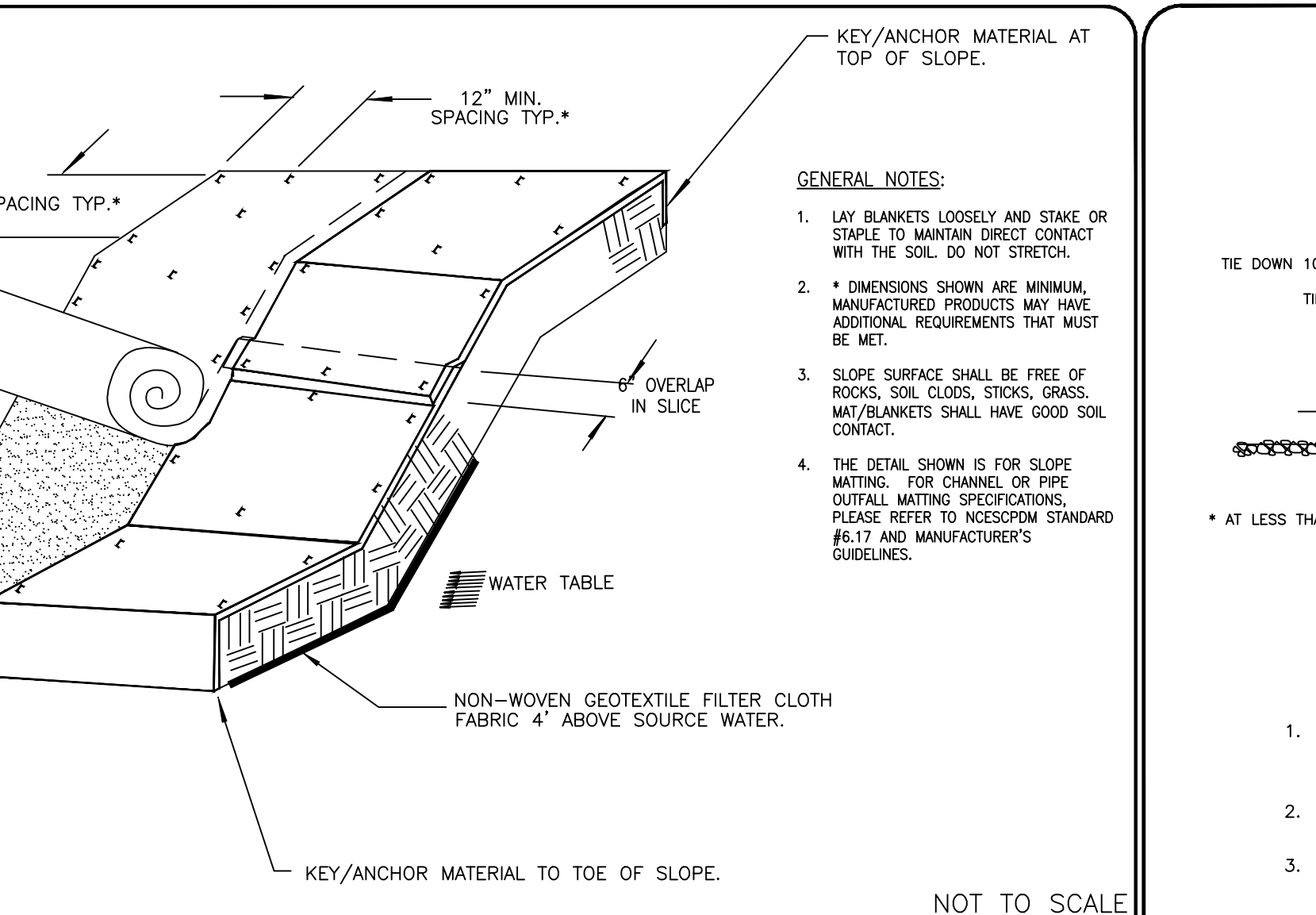
	EARLY SUMMER SEASON	STEEP SLOPES
SEEDING MIXTURE	40 lbs/acre of German millet 80 lbs/acre of tall fescue	120 lbs/acre Rye (grain) 80 lbs/acre tall fescue
SEEDING DATES	May 1 - August 15	October 25 - December 30
SEEDING AMENDMENTS	Refertilize if growth is not fully adequate. Apply 4000 lbs/acre straw or equivalent hydroseeding.	Between December 30 - February 15, add 50 lbs/acre of annual Kobe lespedeza. Apply 4000 lbs/acre straw or equivalent hydroseeding.

APPROVED DATE: 02/2007

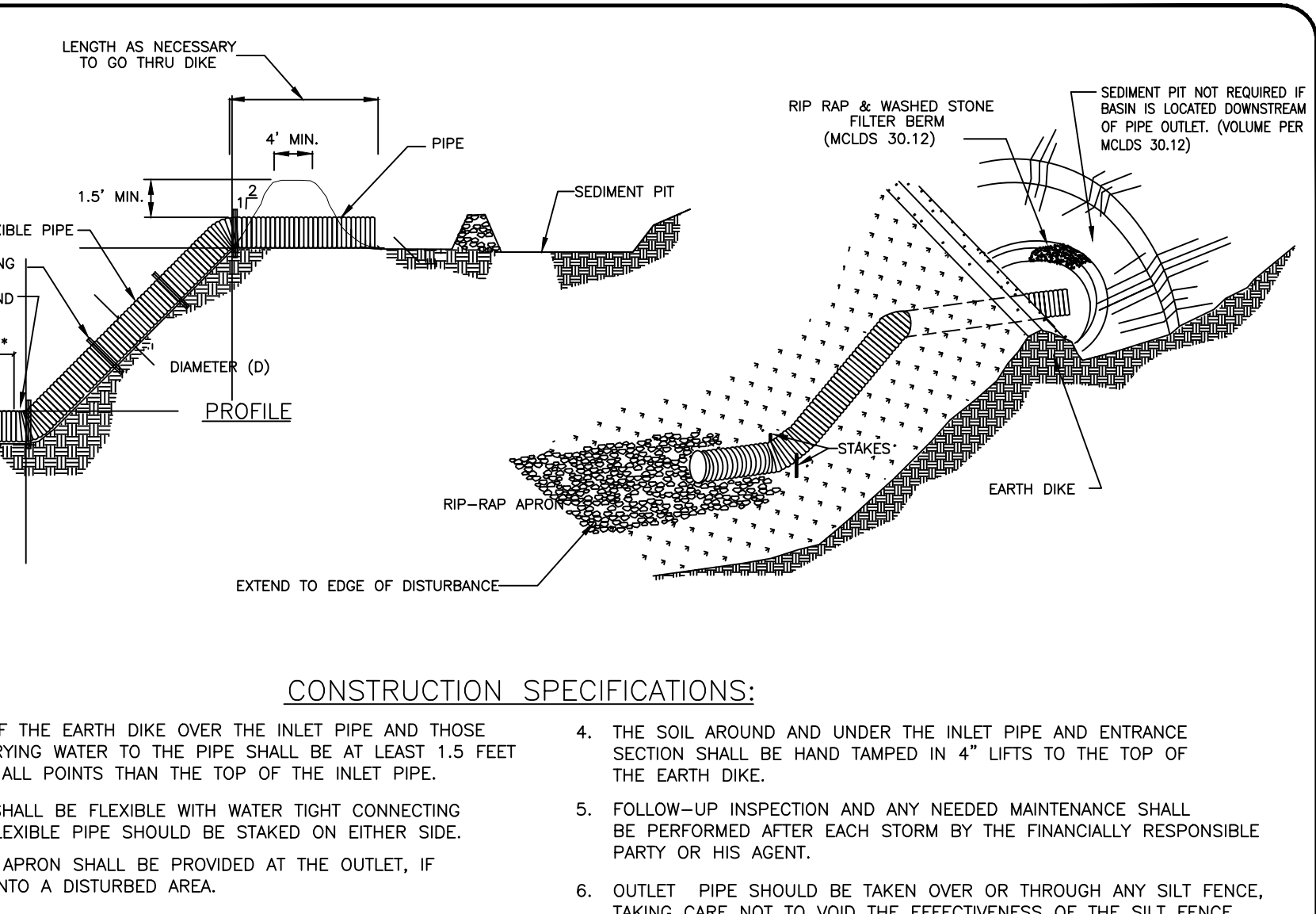
MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS SEEDING SCHEDULE (SEASONAL) NOT TO SCALE



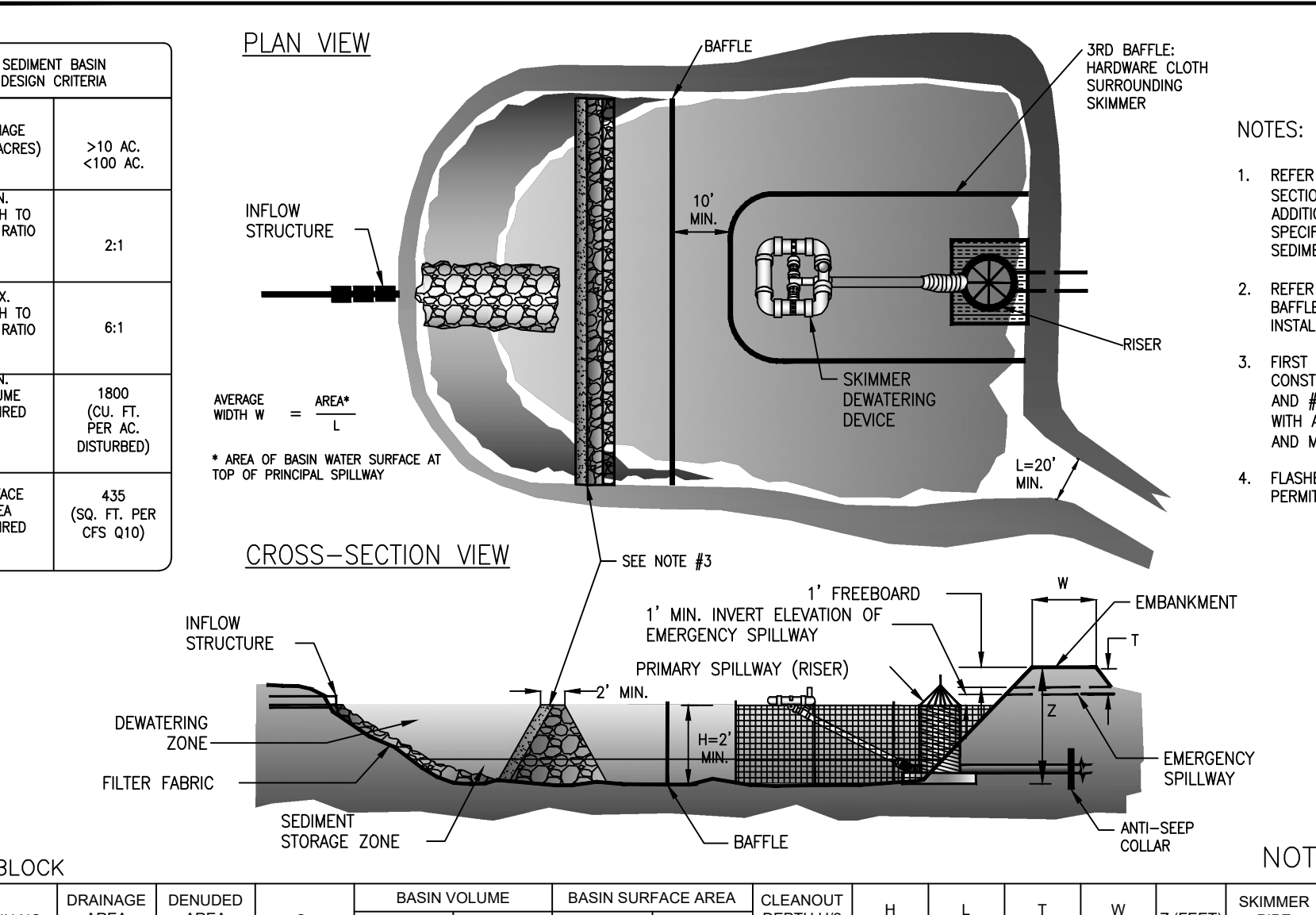
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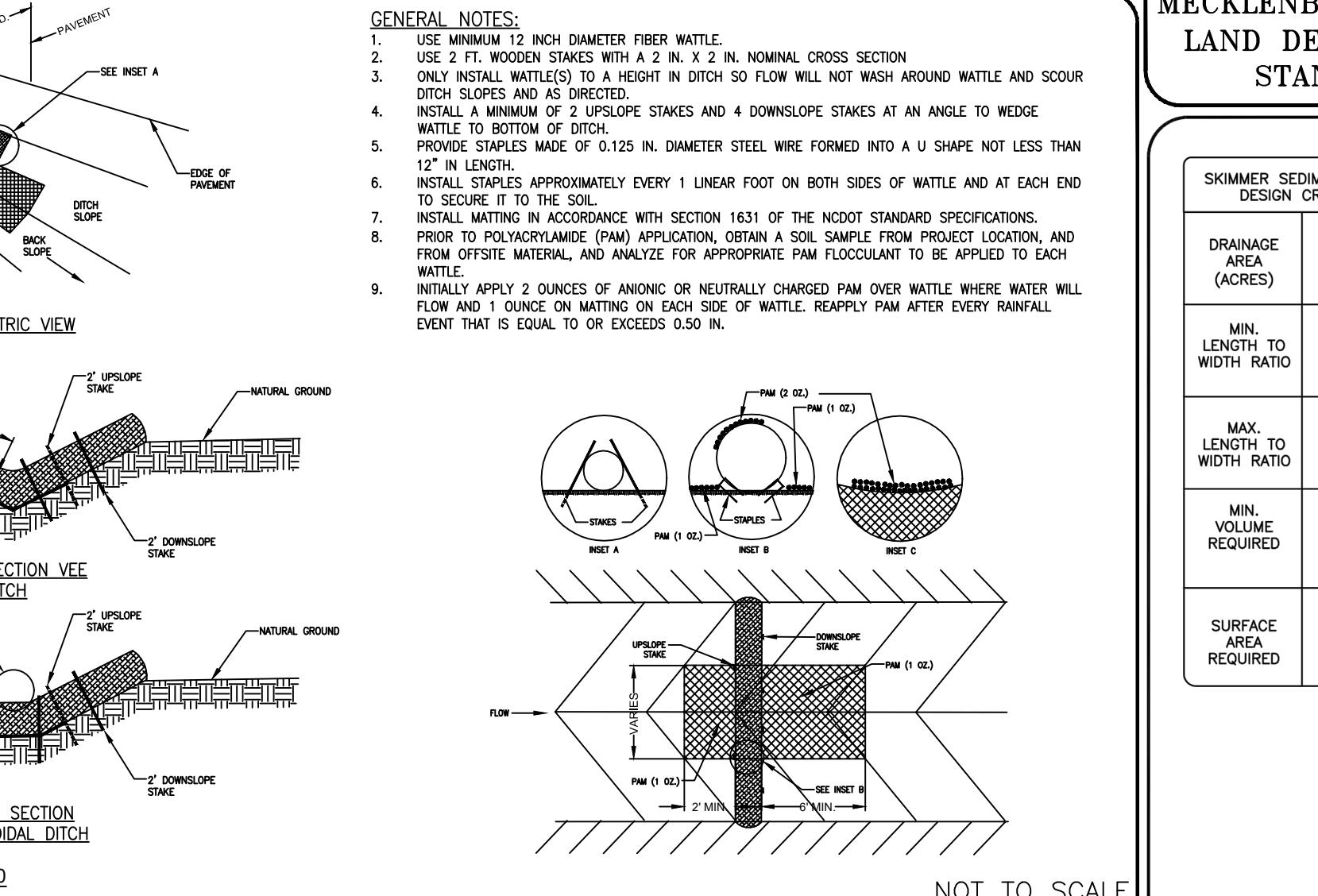
MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS EMBANKMENT MATTING DETAIL NOT TO SCALE



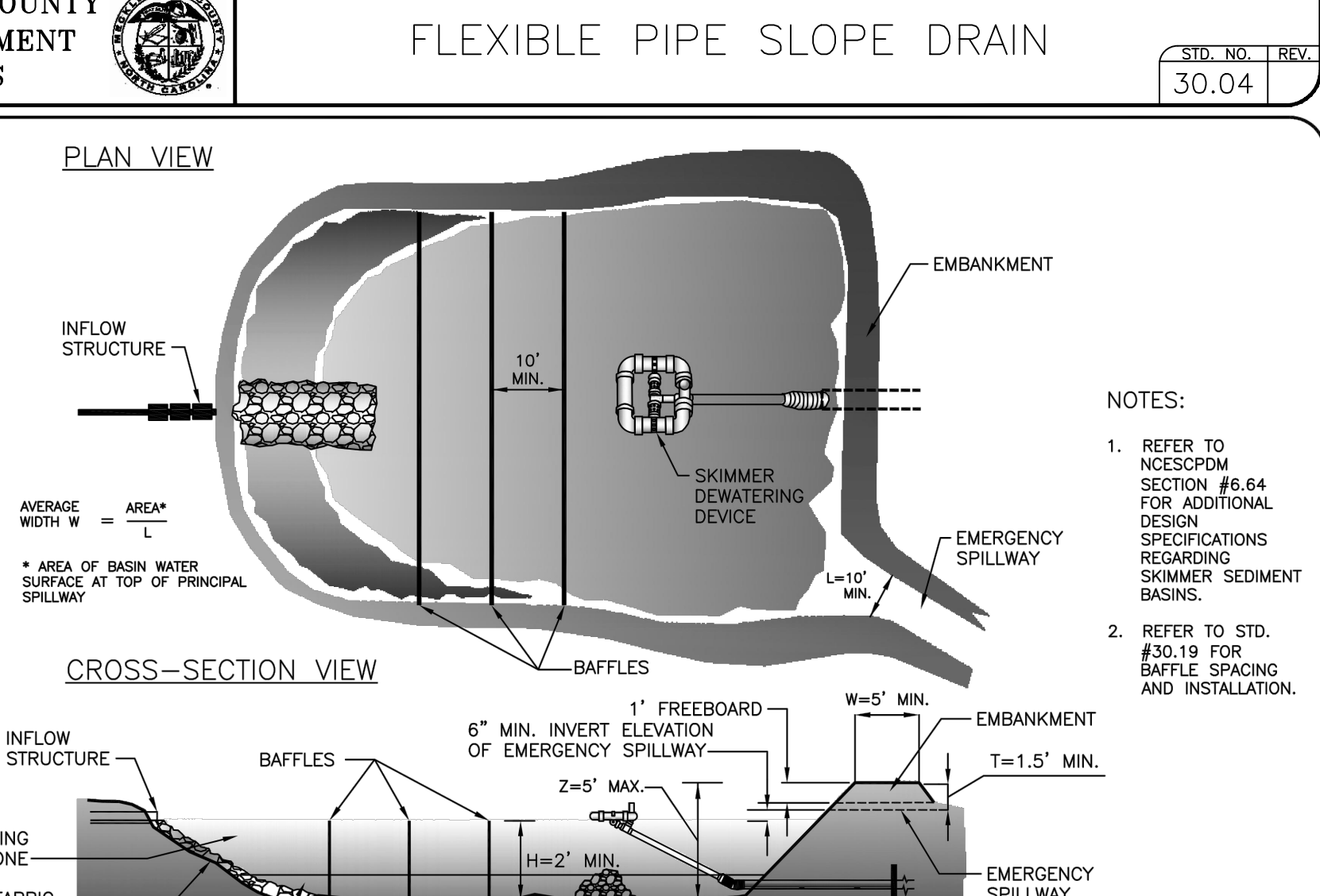
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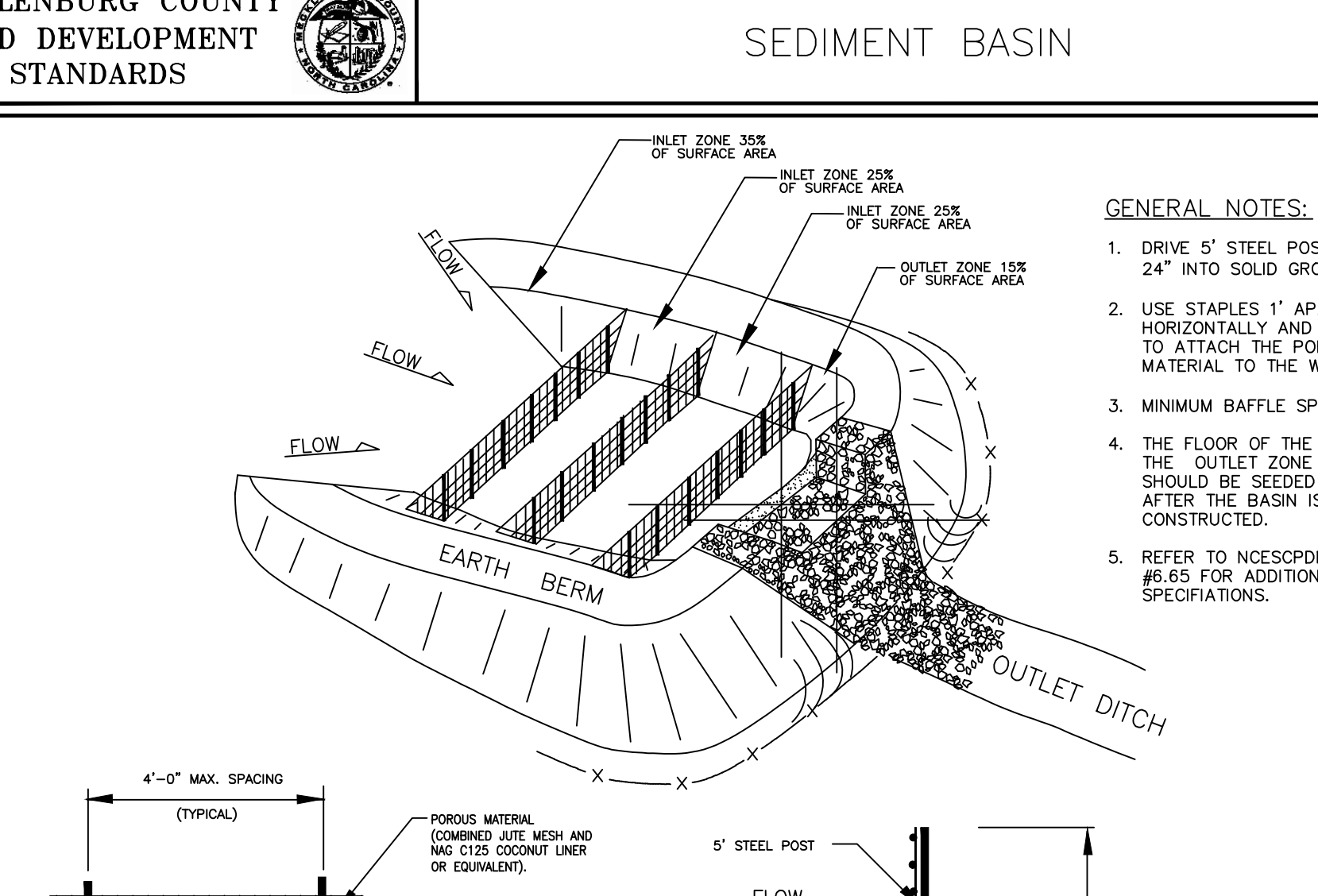
MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS SEDIMENT BASIN NOT TO SCALE



MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS TEMPORARY WATTLE CHECK DAM WITH MATTING AND OPTIONAL PAM NOT TO SCALE



MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS SKIMMER SEDIMENT BASIN NOT TO SCALE



MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS BAFFLE INSTALLATION NOT TO SCALE

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

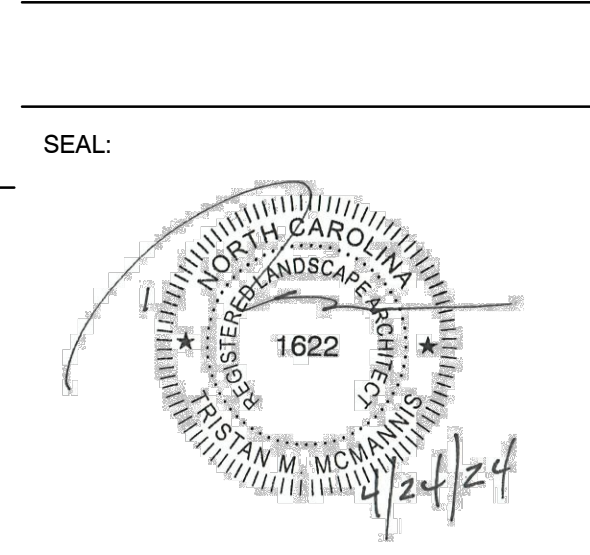
MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS



SEAL:
SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
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DRAWN BY: BN
APPROVED BY: TM
CHECKED BY: DJ
DATE: FEBRUARY 9, 2024
TITLE:

ESC DETAILS (SHEET 2 OF 2)

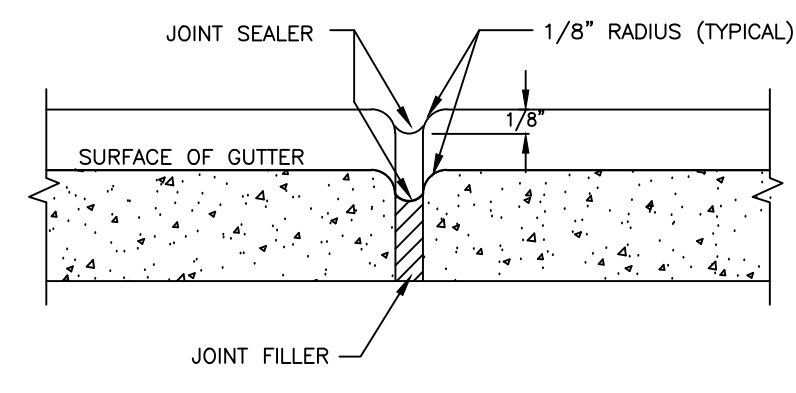
E

D

C

B

A



TRANSVERSE EXPANSION JOINT

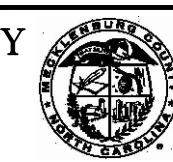
NOTES:

- CONTRACTION JOINTS SHALL BE SPACED AT 10-FOOT INTERVALS. FOR VALLEY GUTTER, A 10-FOOT SPACING MAY BE USED WHEN A MACHINE IS USED. JOINT SPACING MAY BE ALTERED BY THE COUNTY ENGINEER TO PREVENT UNCONTROLLED CRACKING.
- CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.
- ALL EXPANSION JOINTS SHALL BE SPACED AT 90-FOOT INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS. JOINTS SHALL MATCH LOCATIONS WITH JOINTS IN ADJUTING SIDEWALK.
- CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 P.S.I. IN 28 DAYS.
- CURB SHALL BE DEPRESSED AT INTERSECTIONS TO PROVIDE FOR FUTURE ACCESSIBLE RAMPS.
- TOP 6" OF SUBGRADE BENEATH THE CURB AND GUTTER SHALL BE COMPACTED TO 100% STANDARD PROCTOR DENSITY.

APPROVED DATE: 02/2007

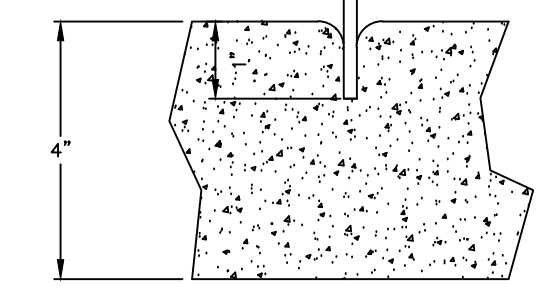
NOT TO SCALE

MECKLENBURG COUNTY
LAND DEVELOPMENT
STANDARDS

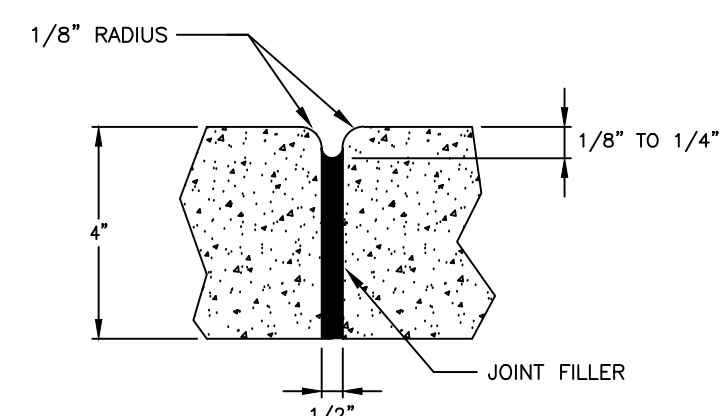


CONCRETE CONTRACTION JOINT

STD. NO. 10.17C
REV.



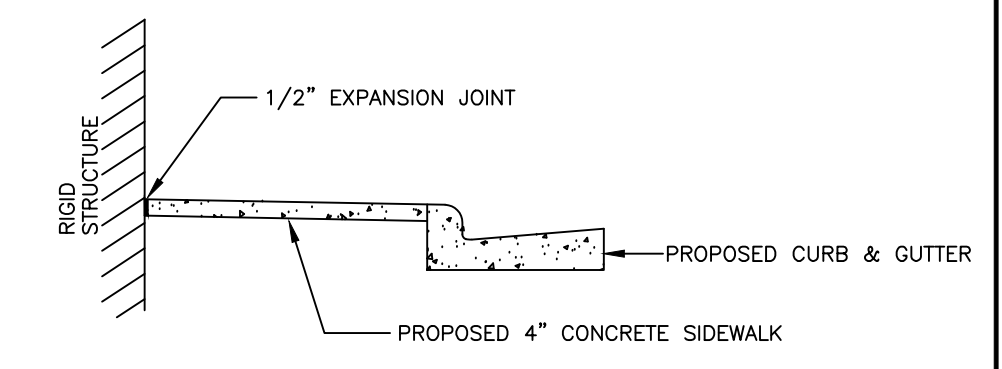
GROOVE JOINT IN SIDEWALK



TRANSVERSE EXPANSION JOINT IN SIDEWALK

GENERAL NOTES:

- A GROOVE JOINT 1" DEEP WITH 1/8" RADI SHALL BE REQUIRED IN THE CONCRETE SIDEWALK AT 5' INTERVALS. ONE 1/2" EXPANSION JOINT WILL BE REQUIRED AT 45' INTERVALS NOT TO EXCEED 50' AND MATCHING EXPANSION/CONSTRUCTION JOINT IN ADJACENT CURB. A SEALED 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE THE SIDEWALK JOINS ANY RIGID STRUCTURE.
- SIDEWALK AT DRIVEWAY ENTRANCES TO BE 6" THICK.
- WIDTH OF SIDEWALK ON THOROUGHFARE STREETS SHALL BE A MINIMUM OF 5'.
- WIDTH OF SIDEWALKS ON NON-THOROUGHFARE STREETS SHALL BE A MINIMUM OF 5'.
- SIDEWALK TO BE POURED TO END OF RADIUS AT INTERSECTING STREETS.
- CONCRETE COMPRESSIVE STRENGTH SHALL BE 3600 PSI. IN 28 DAYS.
- ZONING CONDITIONS MAY REQUIRE ADDITIONAL WIDTH SIDEWALKS WHICH SHALL SUPERSEDE THESE STANDARD DIMENSIONS SHOWN.

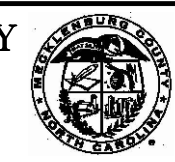


DETAILS SHOWING EXPANSION JOINTS FOR CONCRETE SIDEWALK

APPROVED DATE: 02/2007

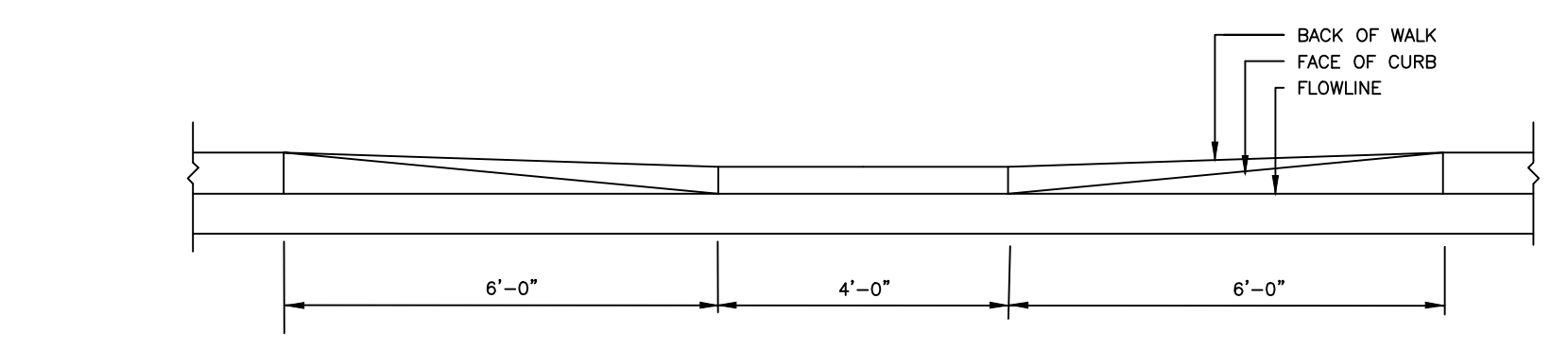
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MECKLENBURG COUNTY
LAND DEVELOPMENT
STANDARDS

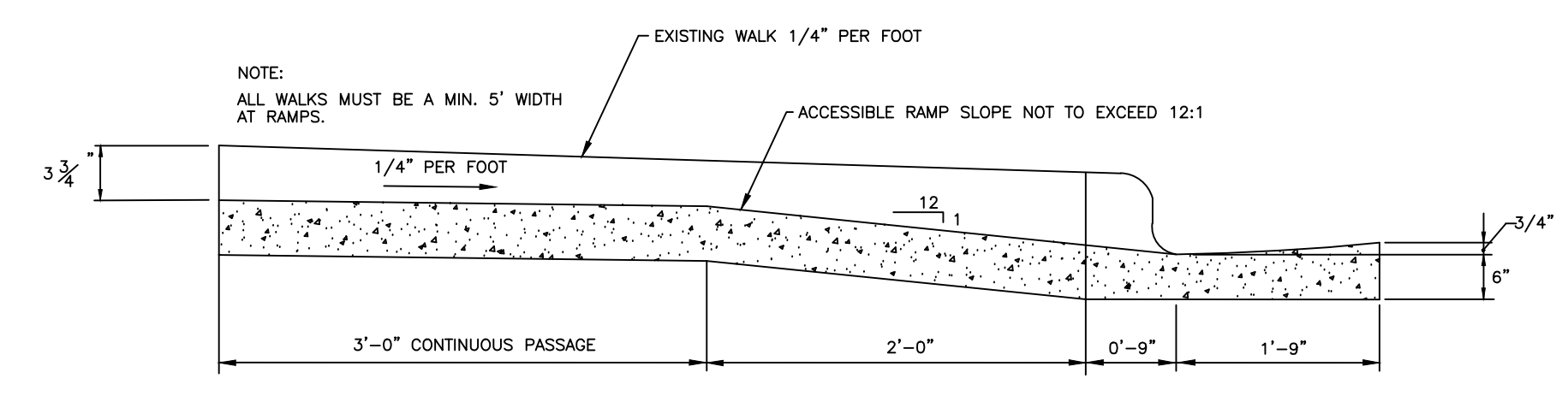


CONCRETE SIDEWALKS

STD. NO. 10.22
REV.



SECTION THROUGH FLOWLINE



TYPICAL RAMP SECTION

APPROVED DATE: 02/2007

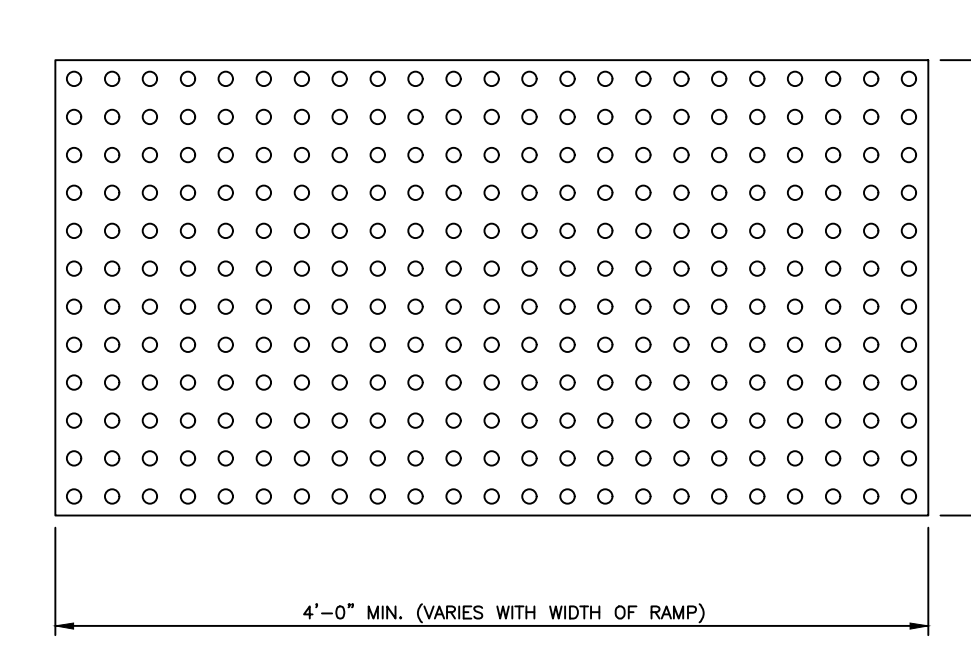
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MECKLENBURG COUNTY
LAND DEVELOPMENT
STANDARDS

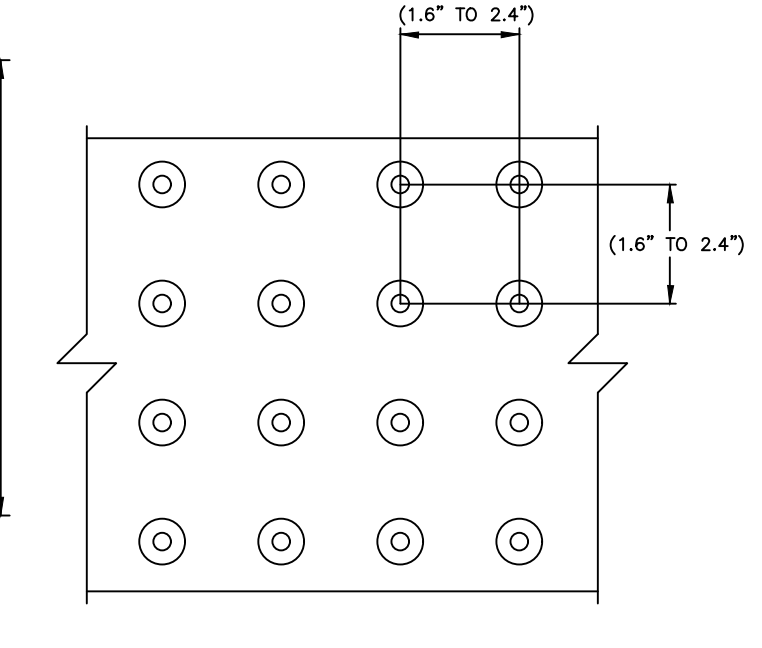


ACCESSIBLE RAMP SECTIONS WITHOUT PLANTING STRIP 2'-6" CURB AND GUTTER

STD. NO. 10.32B
REV.



TRUNCATED DOME PLAN VIEW



TRUNCATED DOME SPACING

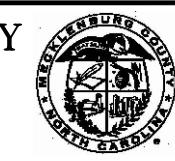
NOTES:

- ALL DETECTABLE WARNING DEVICES USED IN NEW CONSTRUCTION SHALL BE OF A RIGID PRECAST OR EMBEDDED PRODUCT APPROVED BY THE COUNTY ENGINEER. RETRO FIT MATS WILL ONLY BE ALLOWED ON EXISTING RAMPS WITH PRIOR APPROVAL OF THE COUNTY ENGINEER FOR MATERIAL TYPE AND INSTALLATION (E. RESURFACING).
- WIDTH OF DETECTABLE WARNING AREA SHALL BE A MINIMUM OF 4 FEET AND VARY WITH WIDTH OF RAMP.
- LENGTH OF DETECTABLE WARNING AREA SHALL BE 2 FEET REGARDLESS OF SECTION WIDTH.
- DETECTABLE WARNING AREA CAN BE SQUARE WHERE USED IN A CURB RADIUS.
- DETECTABLE WARNING DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.
- DETECTABLE WARNING AREA SHALL BE COLORED BLACK IN ALL LOCATIONS.
- IF PANDERS ARE TO BE USED, PANDERS SHALL BE 6" THICK AND CAST FROM 5000 psi CONCRETE.
- MATS ARE TO BE RIGID WITH TURN DOWN EDGES EMBEDDED IN CONCRETE TO ELIMINATE TRIP HAZARD.

APPROVED DATE: 02/2007

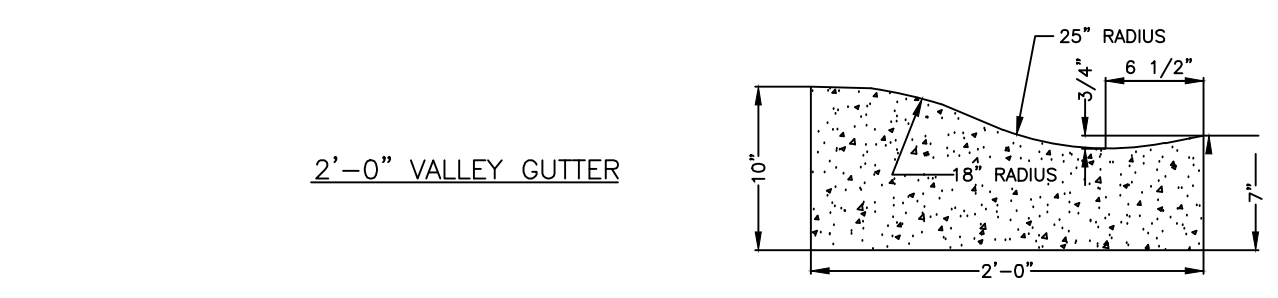
NOT TO SCALE

MECKLENBURG COUNTY
LAND DEVELOPMENT
STANDARDS

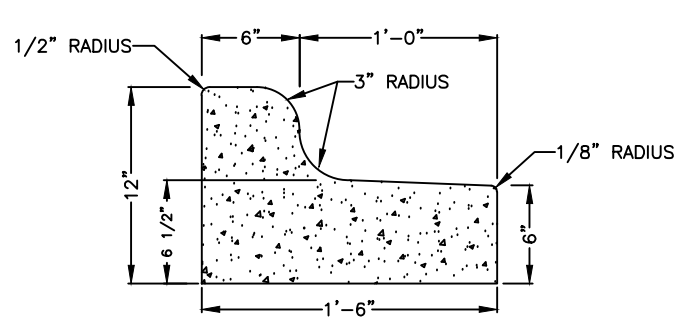


TRUNCATED DOMES PLAN AND CROSS-SECTION

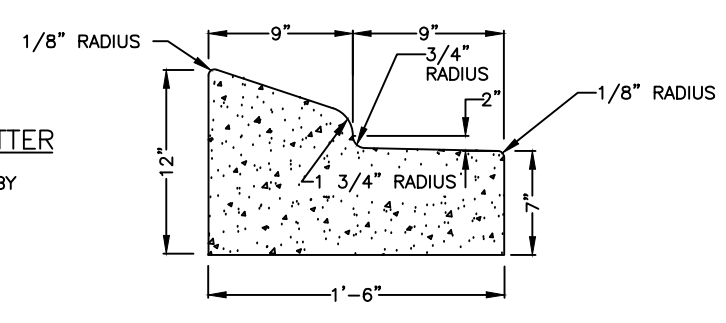
STD. NO. 10.35B
REV.



2'-0" VALLEY GUTTER



1'-6" MEDIAN CURB AND GUTTER
TO BE USED IN MEDIANS WHEN LANES ARE SLOPED FROM ISLAND OR AS SPECIFIED BY THE ENGINEER.

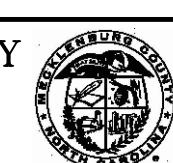


1'-6" MOUNTABLE CURB AND GUTTER
TO BE USED IN MEDIANS ONLY; WHEN SPECIFIED BY THE ENGINEER.

APPROVED DATE: 02/2007

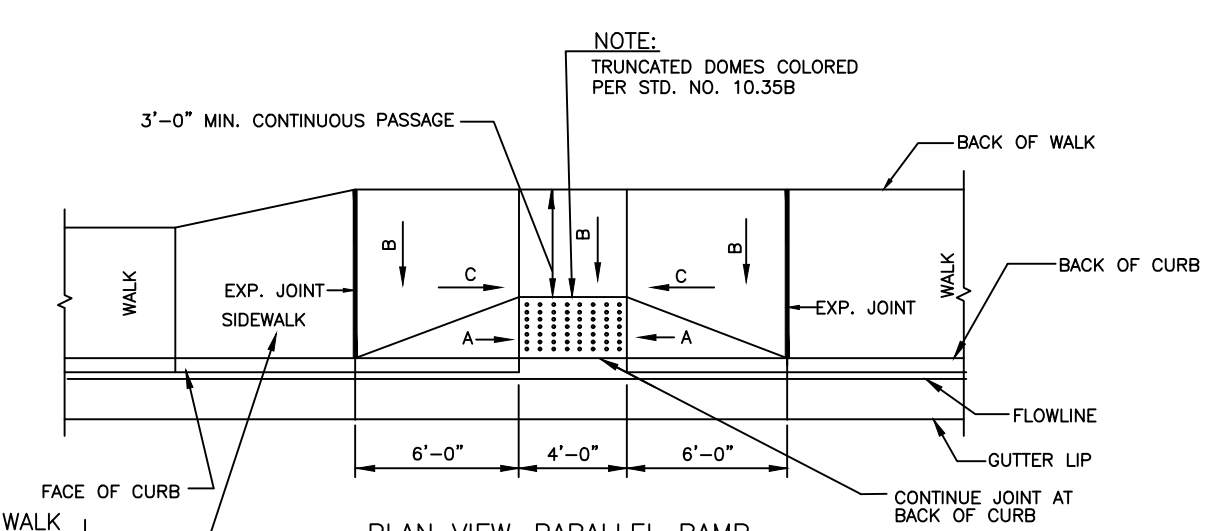
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MECKLENBURG COUNTY
LAND DEVELOPMENT
STANDARDS

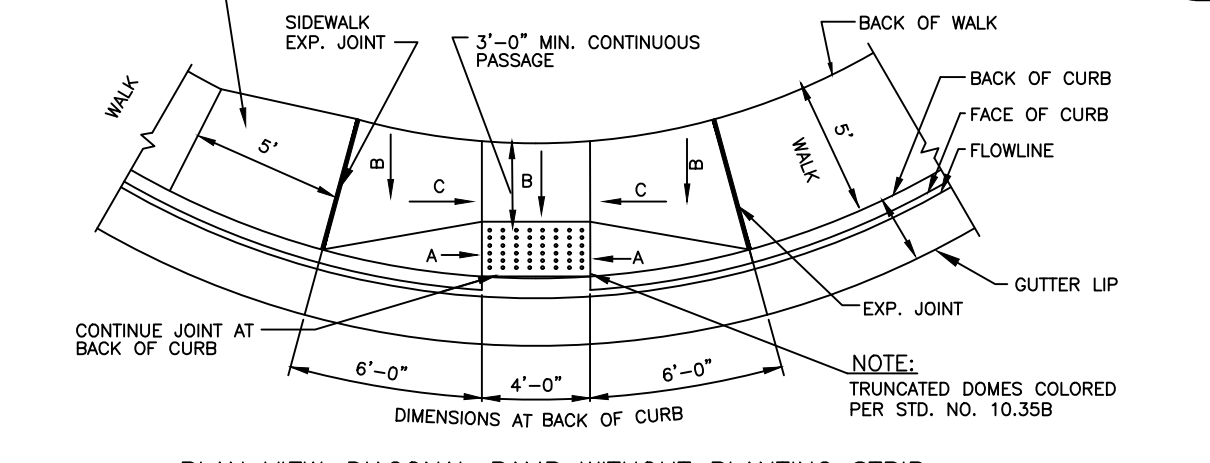


CURB AND GUTTER

STD. NO. 10.17B
REV.



PLAN VIEW-PARALLEL RAMP WITHOUT PLANTING STRIP

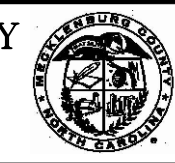


PLAN VIEW-DIAGONAL RAMP WITHOUT PLANTING STRIP

APPROVED DATE: 02/2007

NOT TO SCALE

MECKLENBURG COUNTY
LAND DEVELOPMENT
STANDARDS



ACCESSIBLE RAMP STANDARD WITHOUT PLANTING STRIP 2'-6" CURB AND GUTTER

STD. NO. 10.32A
REV.



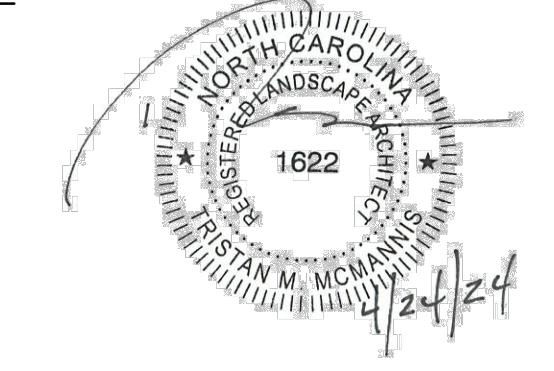
Dewberry Engineers Inc.
9500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
Phone: 704.509.9918
Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0829
NCBOLA #C-478

BAILEY ROAD PARK EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
APPROVED BY: TM
CHECKED BY: DJ
DATE: FEBRUARY 9, 2024

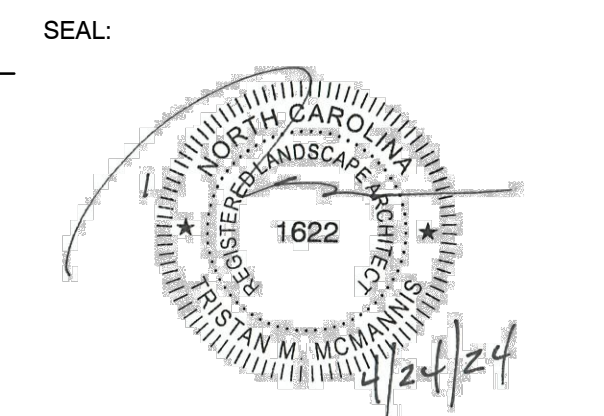
TITLE

SITE DETAILS (SHEET 1 OF 4)

DEI PROJECT NO: 50168891

SHEET NO.

C5.03



SEAL:
 SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024
 TITLE:

**SITE DETAILS
 (SHEET 2 OF 4)**

DEI PROJECT NO: 50168991
 SHEET NO:
C5.04

ACCESSIBLE PARKING REQUIREMENTS

TOTAL PARKING SPACES PROVIDED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED	MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED TO BE VAN ACCESSIBLE
1 TO 25	1	1
26 TO 50	2	1
51 TO 75	3	1
76 TO 100	4	1
101 TO 150	5	1
151 TO 200	6	1
201 TO 300	7	1
301 TO 400	8	1
401 TO 500	9	2
501 TO 1000	2% OF TOTAL	1 IN EVERY 8 ACCESSIBLE SPACES
1001 AND OVER	20 PLUS 1 FOR EACH 100 OVER 1000	1 IN EVERY 8 ACCESSIBLE SPACES

SECTION 4.1.2 (5) OF THE AMERICANS WITH DISABILITIES ACT (ADA). SEE 4.1.2(5) (3) FOR MEDICAL CARE FACILITIES.

NOTES:
 1. ALL 12"x18" ACCESSIBLE SIGNS (R7-8a & R7-1) SHALL BE MOUNTED AT 7 FEET FROM GRADE TO BOTTOM EDGE OF SIGN FACE (MUTCD). MOUNTING HEIGHT CAN BE REDUCED TO 5 FEET IF PLACED IN AN AREA BETWEEN SIDEWALK AND BUILDING FACE IN WHICH PEDESTRIANS ARE NOT EXPECTED TO USE.
 2. REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) U.S. DEPARTMENT OF TRANSPORTATION AND NORTH CAROLINA DEPARTMENT OF TRANSPORTATION SUPPLEMENT.
 3. IF ACCESSIBLE ROUTE IS A RAISED SIDEWALK AREA THEN RAMPS ARE REQUIRED AT LOADING ZONE AREA.

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

ACCESSIBLE PARKING AND SIGNAGE STANDARDS

STANDARD NO. 50.10A

PARKING STANDARDS (CONTINUED)

SIDEWALK ADJACENT TO HEAD-IN OR BACK-IN PARKING SHALL BE AT LEAST 7 FEET WIDE.

PARKING ON ONE SIDE OF A SIDEWALK

SIDEWALK BETWEEN TWO ROWS OF HEAD-IN OR BACK-IN PARKING SHALL BE AT LEAST 9 FEET WIDE.

PARKING ON BOTH SIDES OF A SIDEWALK

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

PARKING STANDARDS (CONTINUED)

STANDARD NO. 50.09B

PARKING STANDARDS

RECOMMENDED, MINIMUM, COMPACT parking diagrams for 90°, 60°, and 45° angles.

NOTES:
 1. FOR ACCESSIBLE PARKING STANDARDS/SIGNAGE SEE STDS. 50.10A, B, AND C.
 2. PAVEMENT MARKINGS SHALL BE 4" WHITE PAINT.
 3. ALTERNATIVE PARKING ANGLES, AISLE WIDTHS, AND OPERATION (TWO-WAY ANGLED PARKING OR REVERSE-ANGLE PARKING) WILL BE CONSIDERED ON A CASE-BY-CASE BASIS.
 4. FOR DIMENSIONS OF PARKING SPACES AND AISLES IN THE TOWN OF MATTHEWS, REFER TO UDO 155.607.3

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

PARKING STANDARDS

STANDARD NO. 50.09A

SUPPLEMENTAL ACCESSIBLE SIGN (R7-8d)

MAXIMUM PENALTY \$250

GS20-37.6

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

SUPPLEMENTAL ACCESSIBLE SIGN (R7-8d)

STANDARD NO. 50.10C

SUPPLEMENTAL ACCESSIBLE SIGN (R7-8e)

VAN ACCESSIBLE

RESERVED PARKING

MAXIMUM PENALTY \$250

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

SUPPLEMENTAL ACCESSIBLE SIGN (R7-8e)

STANDARD NO. 50.10B

STANDARD CURB AND GUTTER

STANDARD 2'-6" CURB AND GUTTER

1'-6" STANDARD CURB AND GUTTER

2'-0" STANDARD CURB & GUTTER

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD CURB AND GUTTER

STANDARD NO. 10.17A

WHEEL STOP DETAIL

ELEVATION VIEW

SECTION A - A

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

WHEEL STOP DETAIL

N.T.S.

RECOMMENDED PAVING SPECIFICATIONS

PROPOSED PARKING STANDARD DUTY ASPHALT PAVEMENT SECTION

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

RECOMMENDED PAVING SPECIFICATIONS

RECOMMENDED PAVING SPECIFICATIONS

PROPOSED PARKING HEAVY DUTY ASPHALT PAVEMENT SECTION

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

RECOMMENDED PAVING SPECIFICATIONS

STANDARD CURB AND GUTTER

STANDARD 2'-6" CURB AND GUTTER

1'-6" STANDARD CURB AND GUTTER

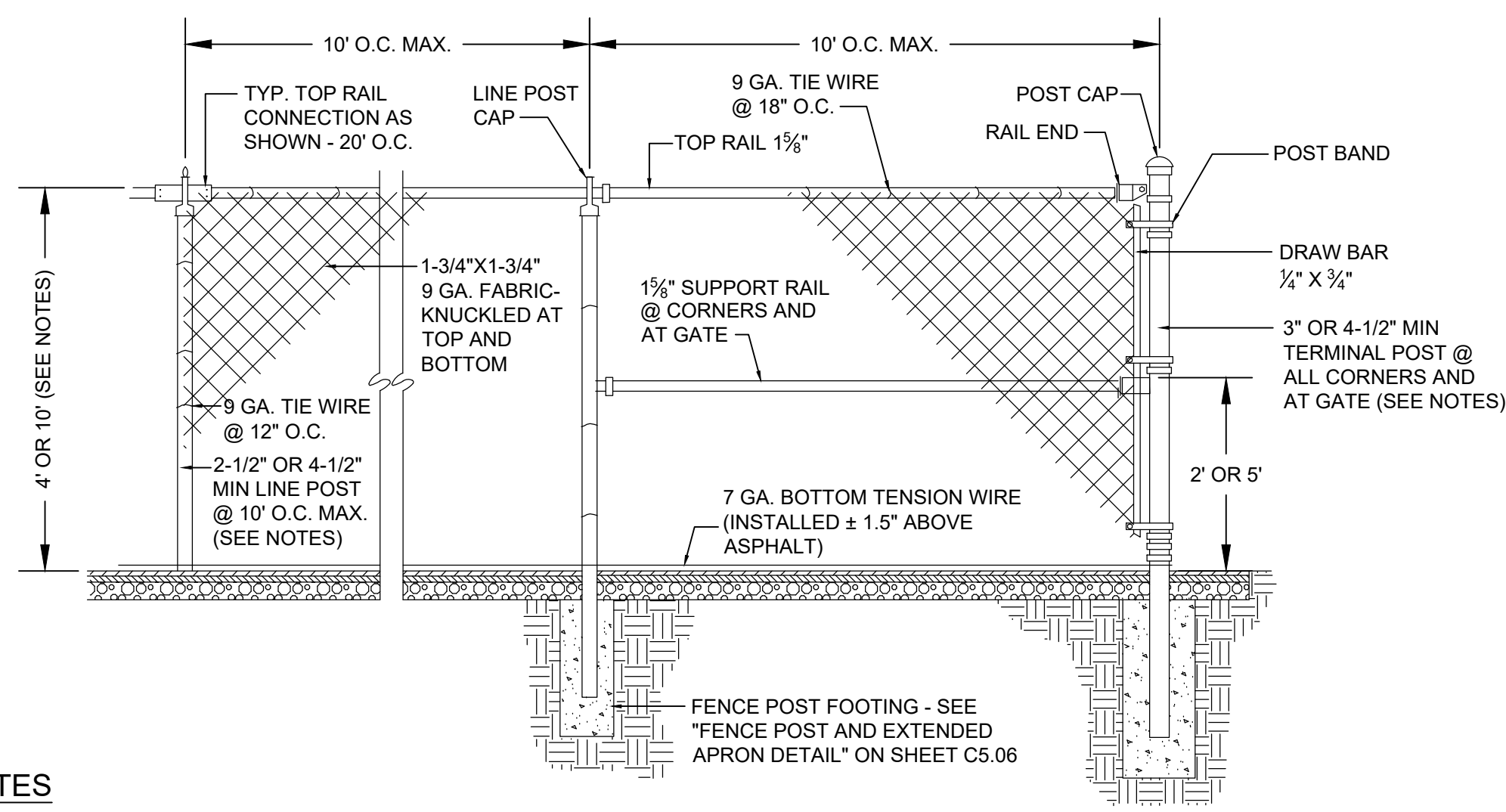
2'-0" STANDARD CURB & GUTTER

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD CURB AND GUTTER

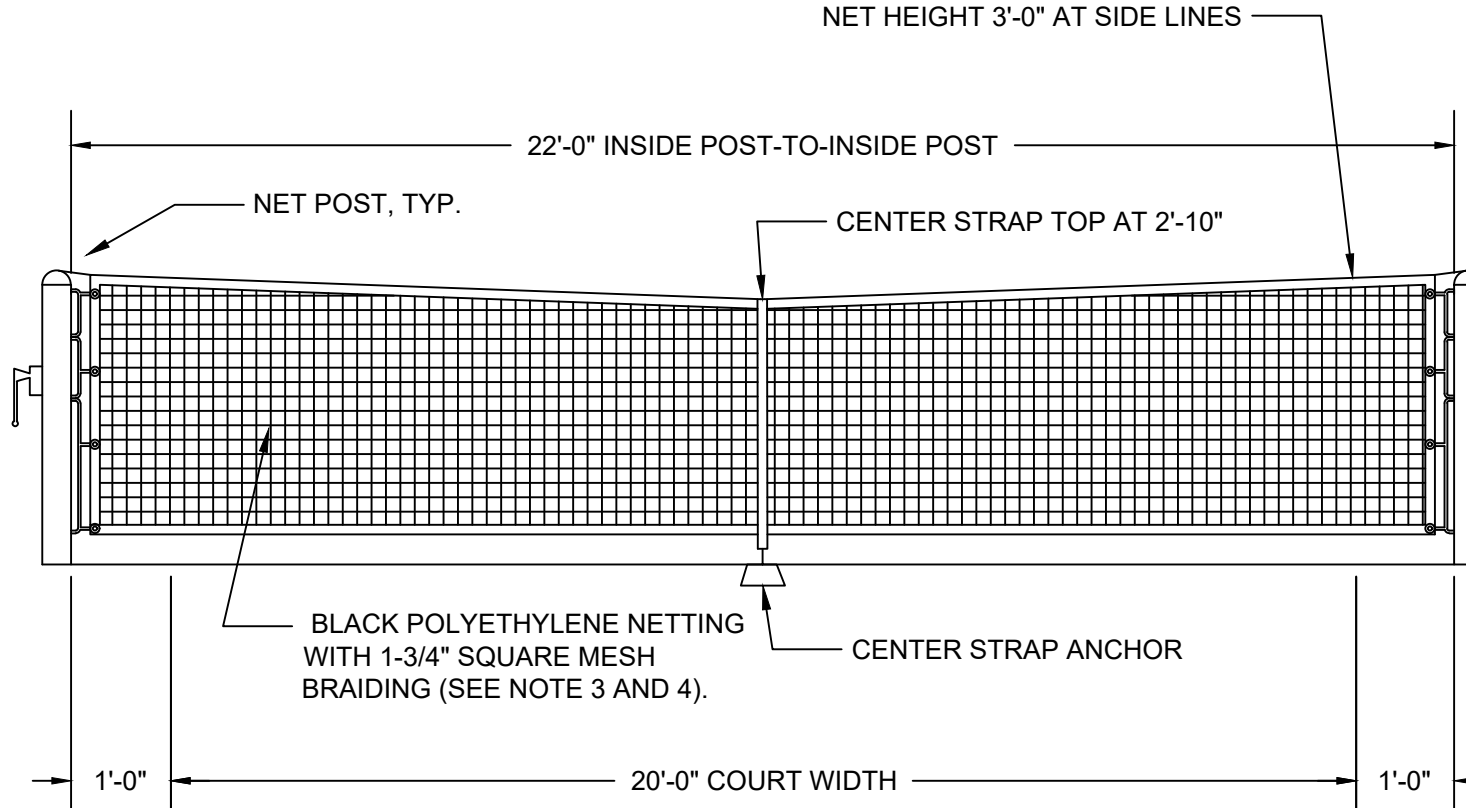
STANDARD NO. 10.17A



NOTES

- POSTS, RAILS AND FITTINGS SHALL BE BLACK VINYL COATED, PRIOR TO INSTALLING FENCE FABRIC. SEE SPECIFICATIONS FOR FURTHER MATERIAL AND INSTALLATION DATA.
- FENCE HEIGHT VARIES PER LAYOUT OF INDIVIDUAL TENNIS COURTS (SEE SHEET C2.02). FENCE HEIGHT ALONG THE SIDES OF THE COURT SHALL BE 4' HEIGHT, WHILE FENCE HEIGHT ALONG THE BACK SIDE OF THE COURT SHALL BE 10' HEIGHT.
- PROVIDE AND INSTALL TENNIS SCREENS FOR ALL FENCE AREAS UNLESS OTHERWISE DIRECTED BY THE TOWN. (SEE DETAIL ON SHEET C5.06)
- FOR 4' HEIGHT FENCE, TERMINAL POSTS SHALL BE 3" MIN. DIAMETER AND LINE POSTS SHALL BE 2-1/2" MIN. DIAMETER.
- FOR 10' HEIGHT FENCE, TERMINAL AND LINE POSTS SHALL BE 4-1/2" DIAMETER.

**FENCE DETAIL
 NOT TO SCALE**



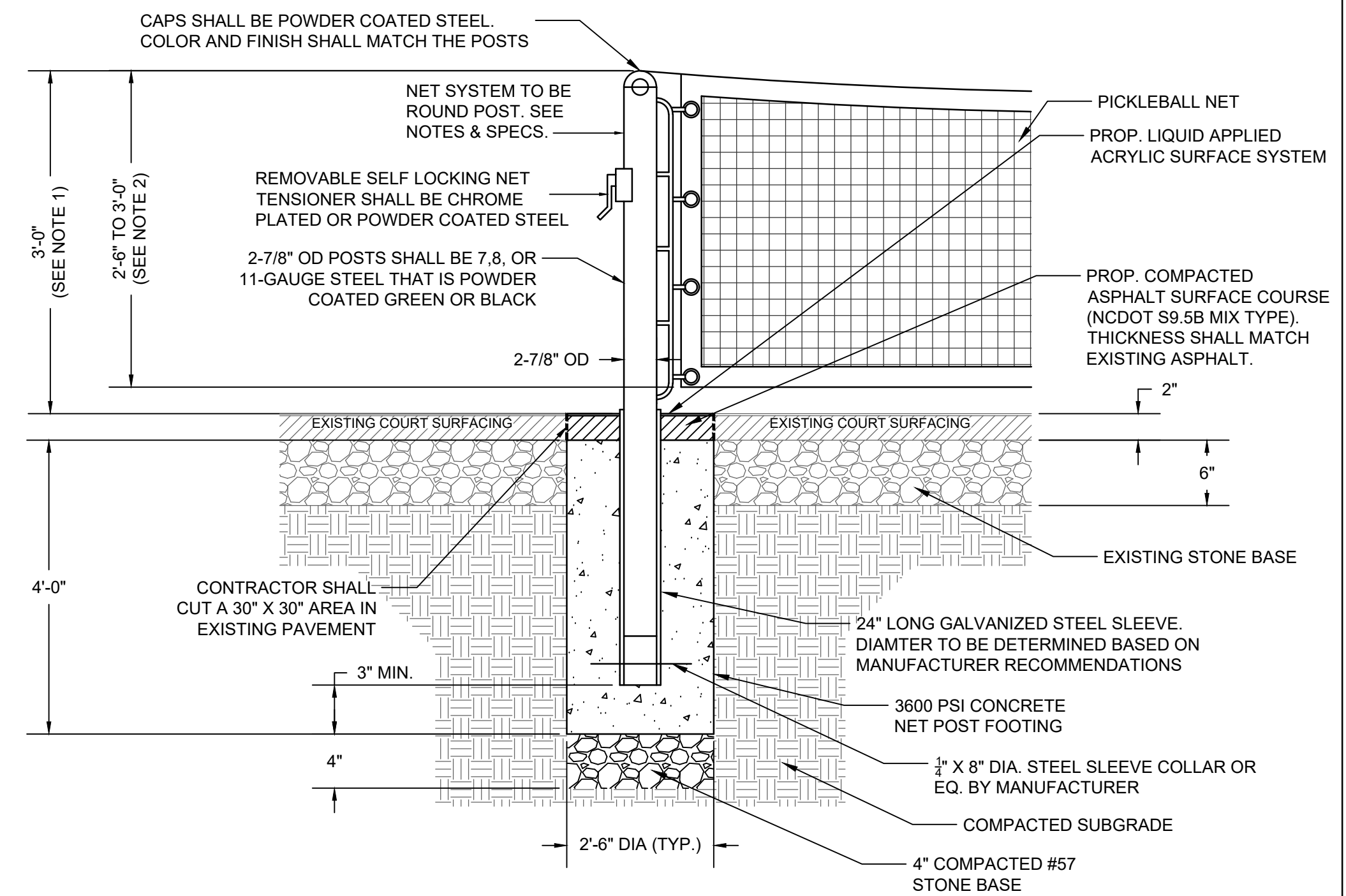
NOTES

- ALTHOUGH 3'-0" IS WITHIN ALLOWED TOLERANCES AND COMMONLY USED, TO HAVE THE NET AT EXACTLY 3 FEET HIGH OVER THE SIDELINE (AS PER THE RULEBOOK), THE POST HEIGHT SHOULD BE 36.20 INCHES.
- CREATING A 'GAP' BETWEEN THE NET AND COURT SURFACE IS OPTIONAL AND DEPENDS ON PLAYER PREFERENCES.
- HEADBAND SHALL BE A WHITE 2-PLY VINYL COATED POLYESTER, LOCK SEWN WITH 4 ROWS OF #32 POLYESTER THREAD. COMPLETE WITH A VINYL COATED, 5/8" GALVANIZED STEEL CABLE.
- SIDE AND BOTTOM TAPES SHALL BE DOUBLE LOCK STITCHED WITH A BLACK VINYL COATED POLYESTER THREAD.
- THE NET SHOULD BE INSTALLED WITH A RECOMMENDED TENSION OF 175 - 250 LBS WITH A CENTER STRAP, OR 75 - 150 LBS WITHOUT A CENTER STRAP.
- THE EXISTING PAVEMENT SECTION THICKNESS AND EDGE TREATMENT LISTED ABOVE ARE BASED ON PLANS TITLED "BAILEY ROAD PARK" BY SITE SOLUTIONS DATED AUGUST 24, 2001.

RECOMMENDED PAVING SPECIFICATIONS:

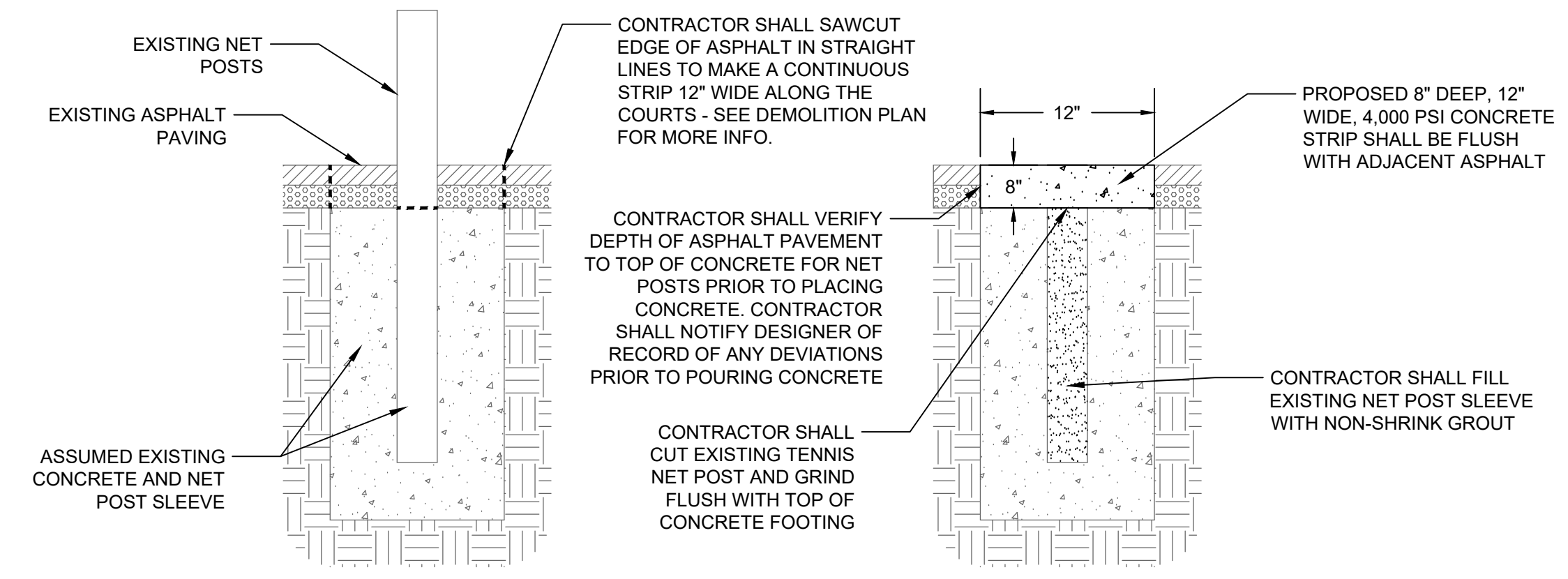
- ALL SUBGRADE SHALL BE COMPACTED TO 100% OF THE MAXIMUM DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST TO A DEPTH OF 8 INCHES, AND A DENSITY OF 95% STANDARD PROCTOR FOR DEPTHS GREATER THAN 8 INCHES.
- SEE SPECIFICATIONS FOR SURFACE MATERIALS, PAVING EQUIPMENT, PAINT, AND COLOR REQUIREMENTS

**PICKLEBALL NET, COURT, AND POST DETAILS
 NOT TO SCALE**

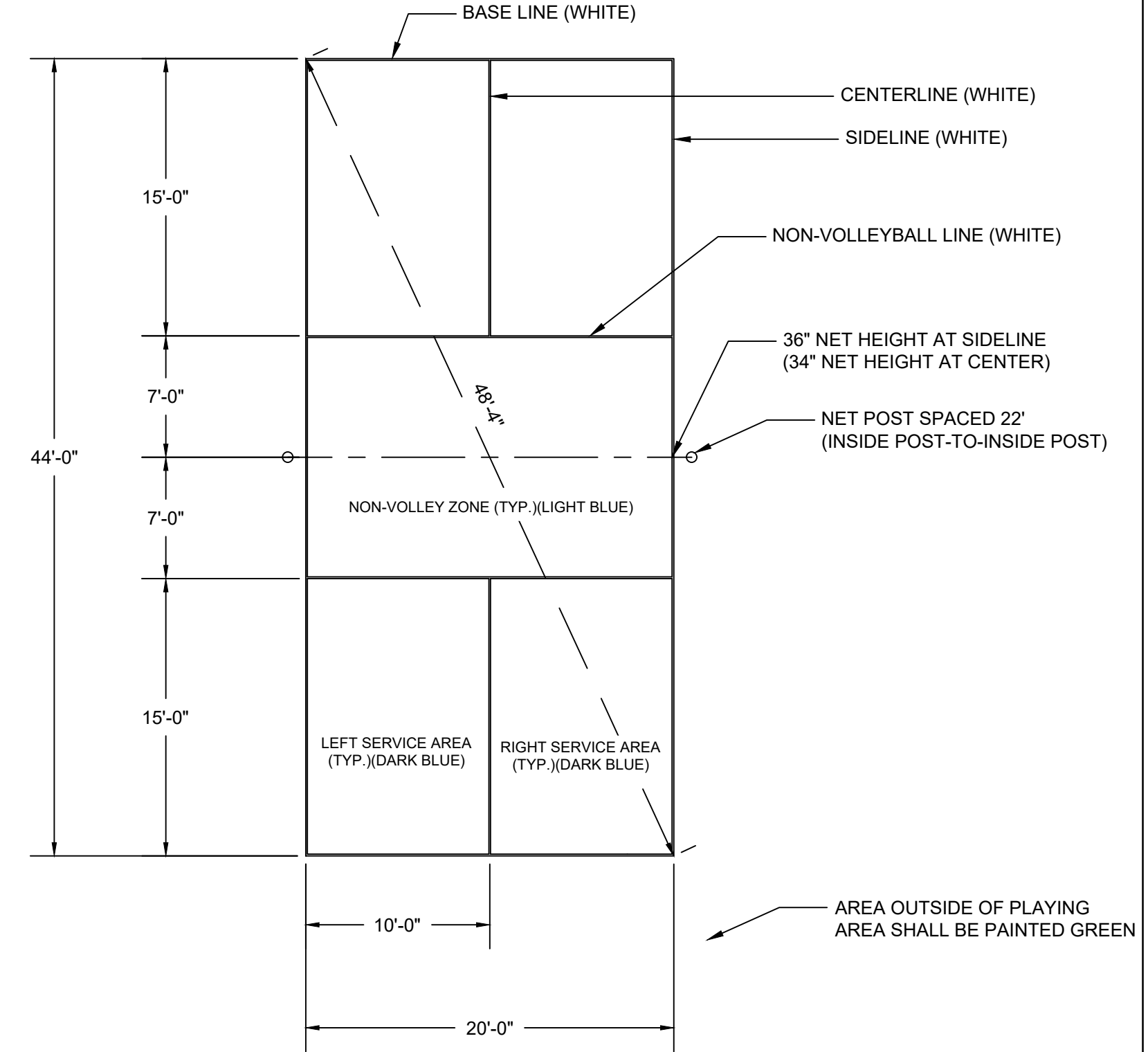


EXISTING

PROPOSED



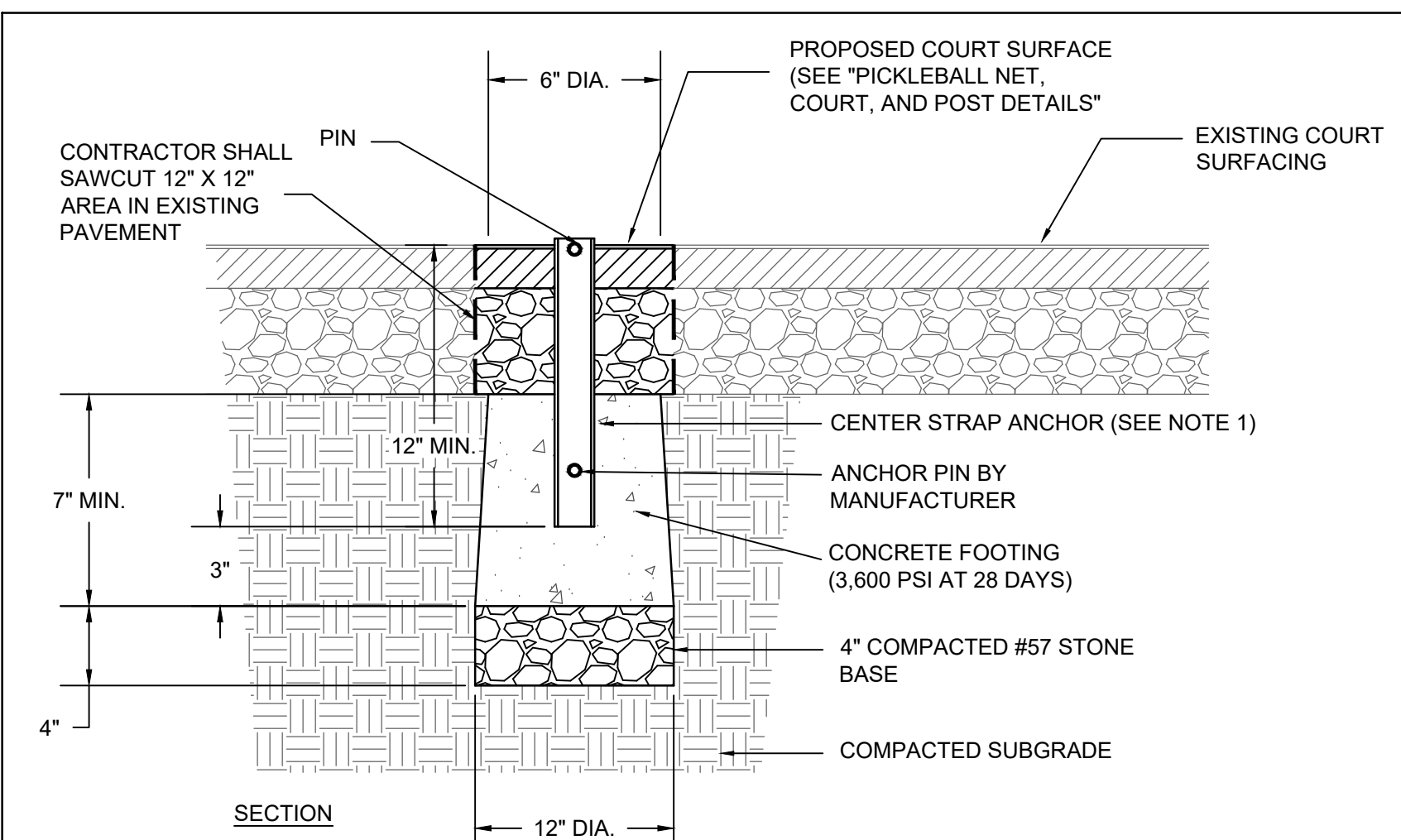
**TENNIS POST REMOVAL DETAILS
 NOT TO SCALE**



**PICKLEBALL COURT - PLAYING LINE LAYOUT
 NOT TO SCALE**

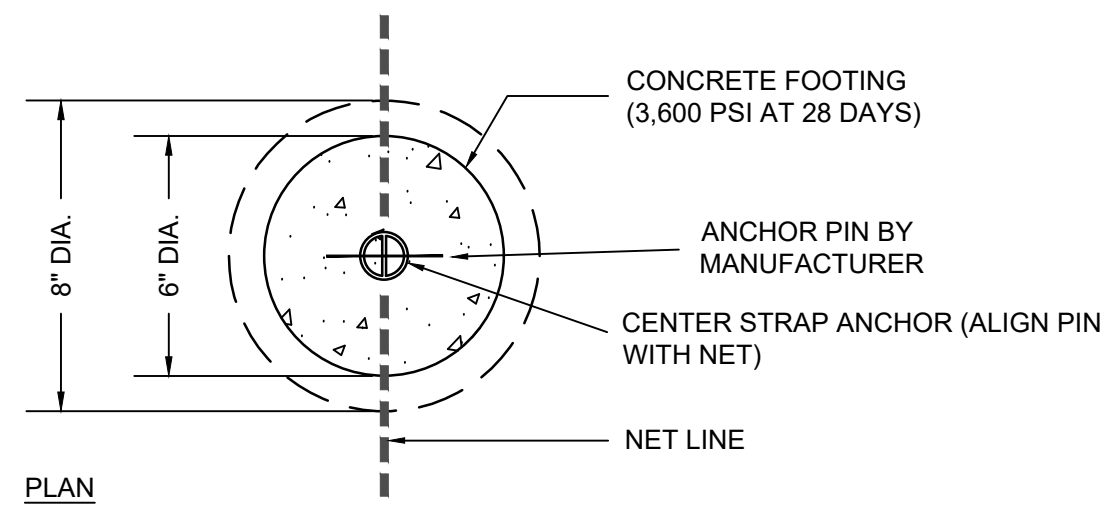
NOTES

- ALL DIMENSIONS ARE TO THE OUTER EDGE OF LINES.
- ALL LINES SHALL BE 2" WIDE.
- COLOR SAMPLES SHALL BE PROVIDED TO OWNER AND DESIGNER OF RECORD FOR APPROVAL PRIOR TO INSTALLATION.
- PAINT SHALL BE 100% ACRYLIC COATING WITH SILICA SAND OR APPROVED EQUAL TO PROVIDE A NON-SLIP SURFACE.



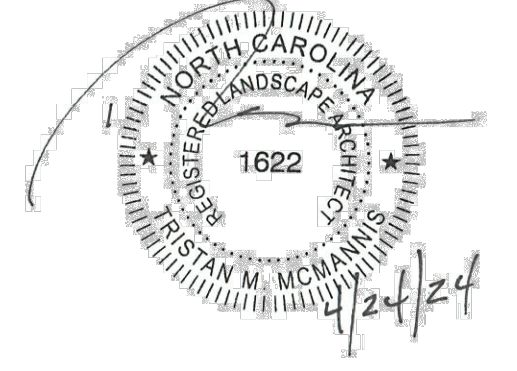
NOTE:

- CENTER STRAP ANCHOR TO BE 10-GAUGE HEAVY DUTY GALVANIZED STEEL WITH REPLACEABLE STAINLESS STEEL CENTER PIN.



**PICKLEBALL NET CENTER STRAP ANCHOR DETAILS
 NOT TO SCALE**

SEAL:



SEAL:

SCALE:

REVISIONS			
NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

**SITE DETAILS
 (SHEET 3 OF 4)**

1

2

3

4

5

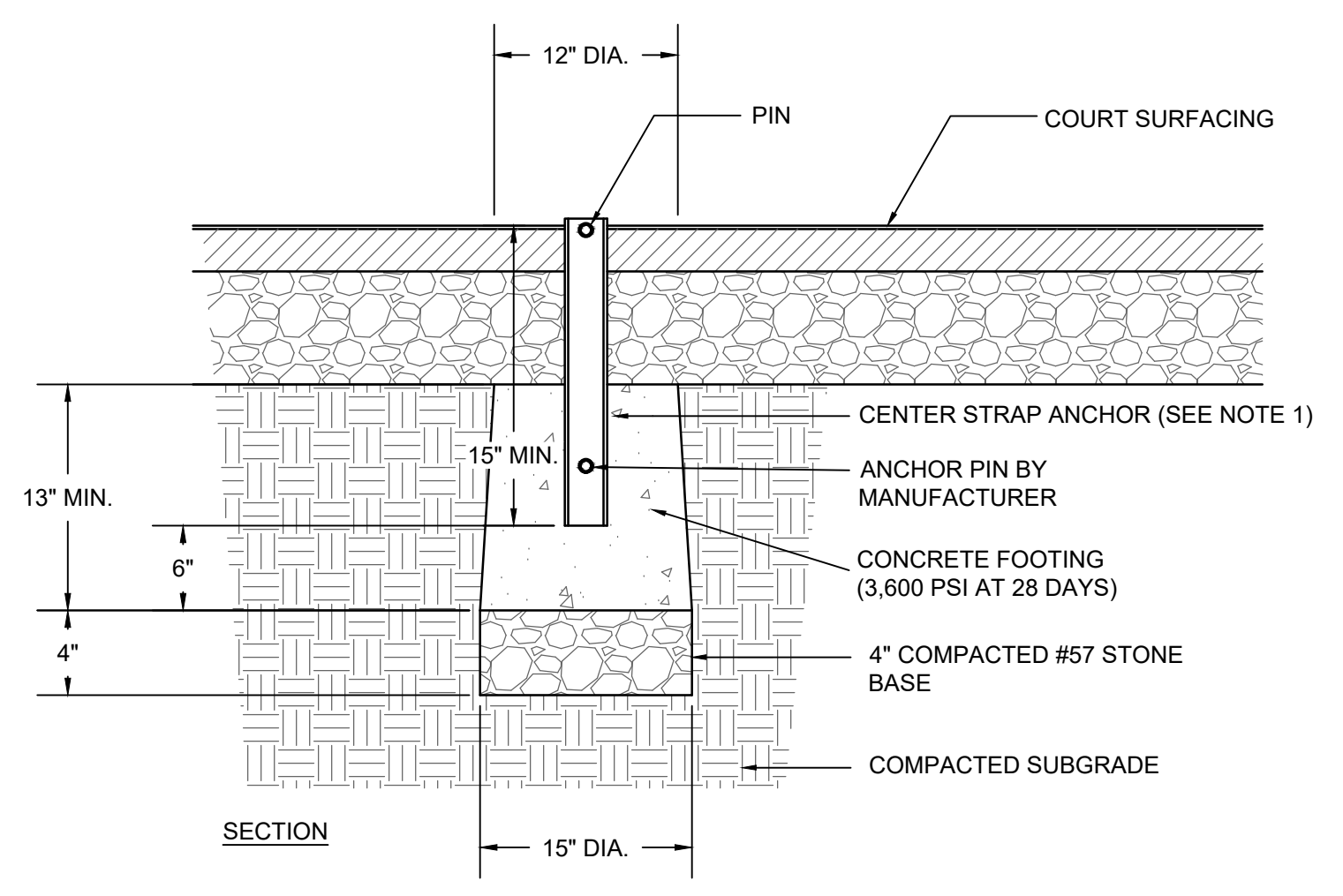
E

D

C

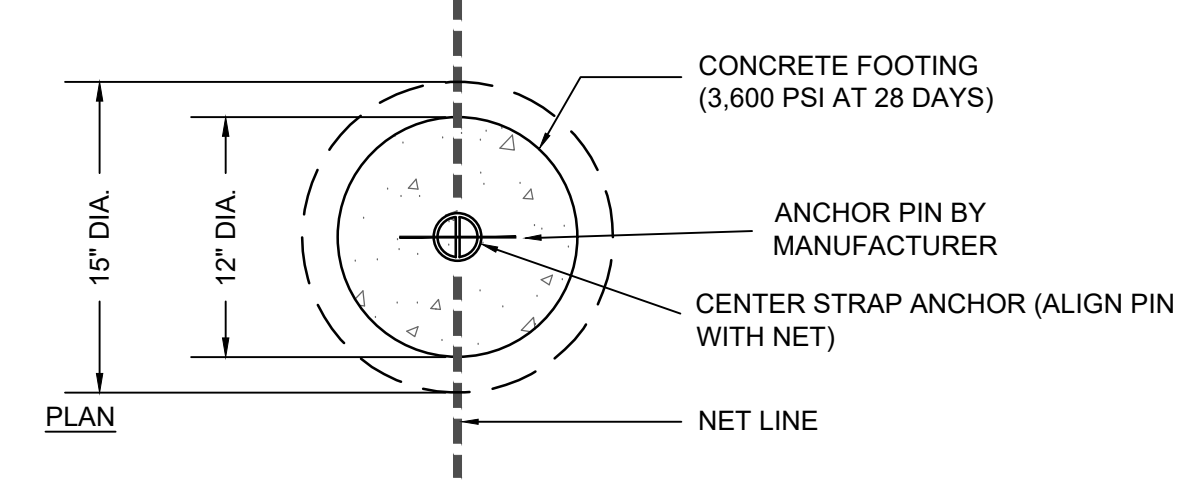
B

A

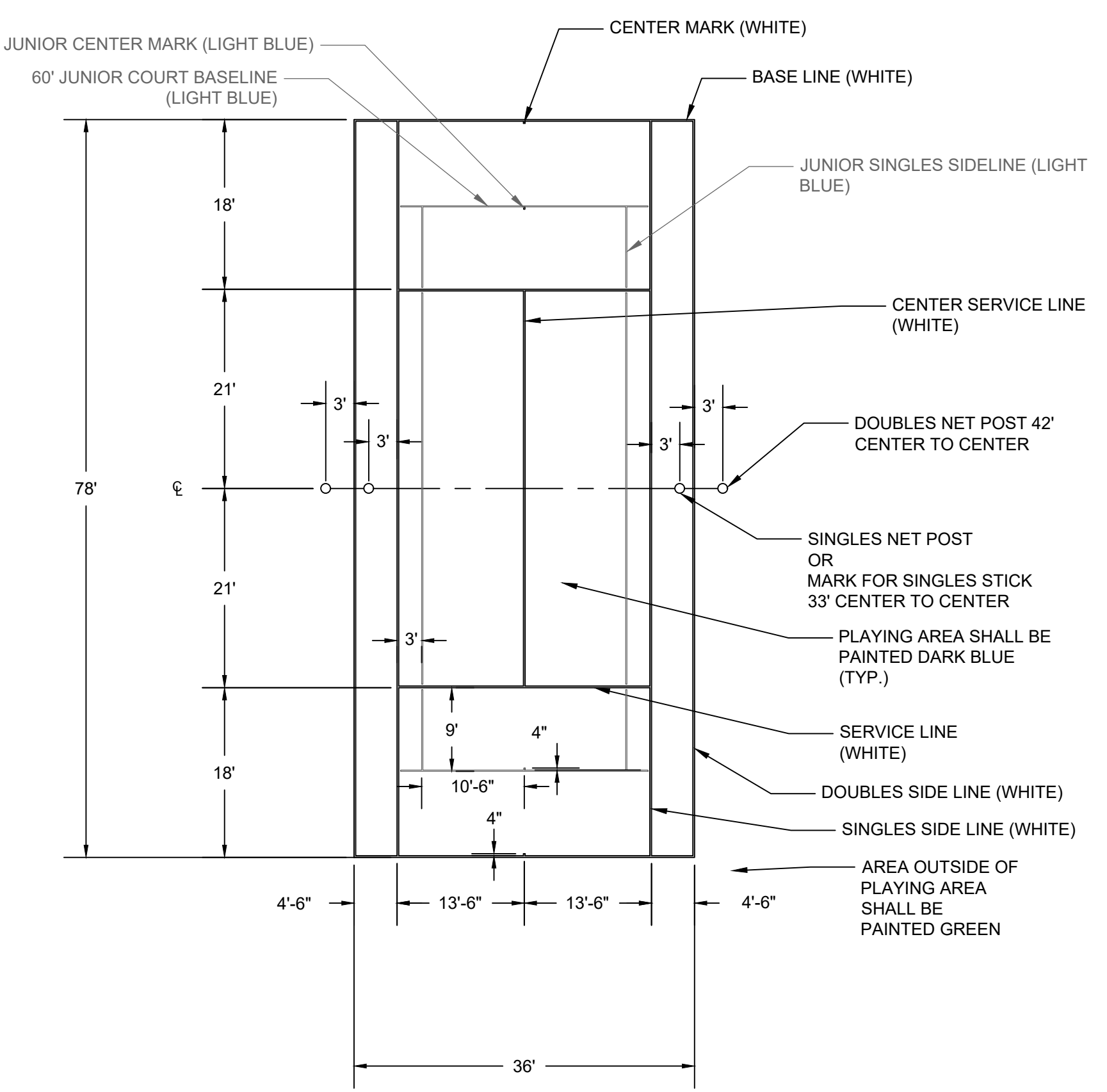


NOTE:

1. CENTER STRAP ANCHOR TO BE 10-GAUGE HEAVY DUTY GALVANIZED STEEL WITH REPLACEABLE STAINLESS STEEL CENTER PIN.



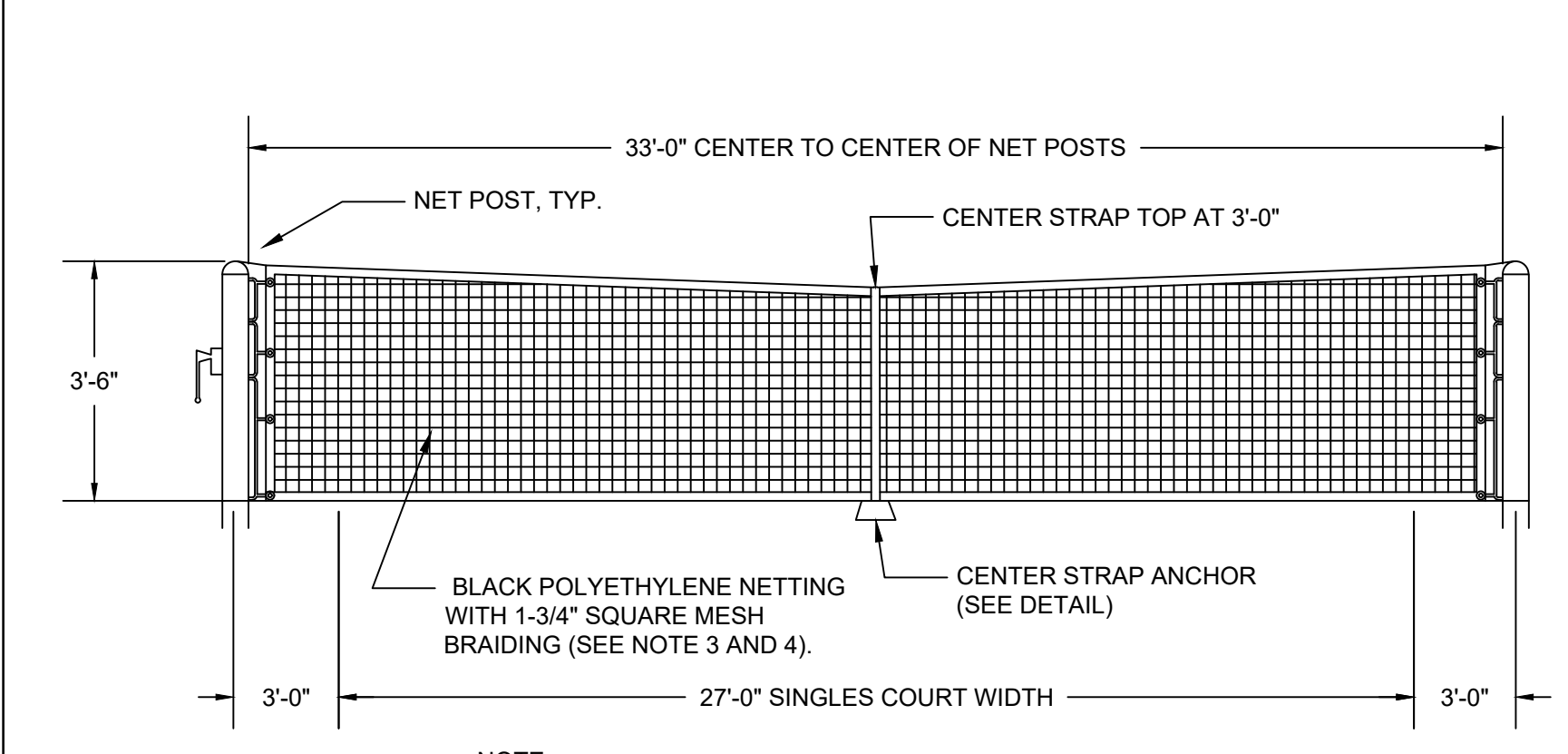
TENNIS NET CENTER STRAP ANCHOR DETAIL
NOT TO SCALE



78' TENNIS COURT WITH BLENDED PLAYING LINES
LAYOUT
NOT TO SCALE

NOTES

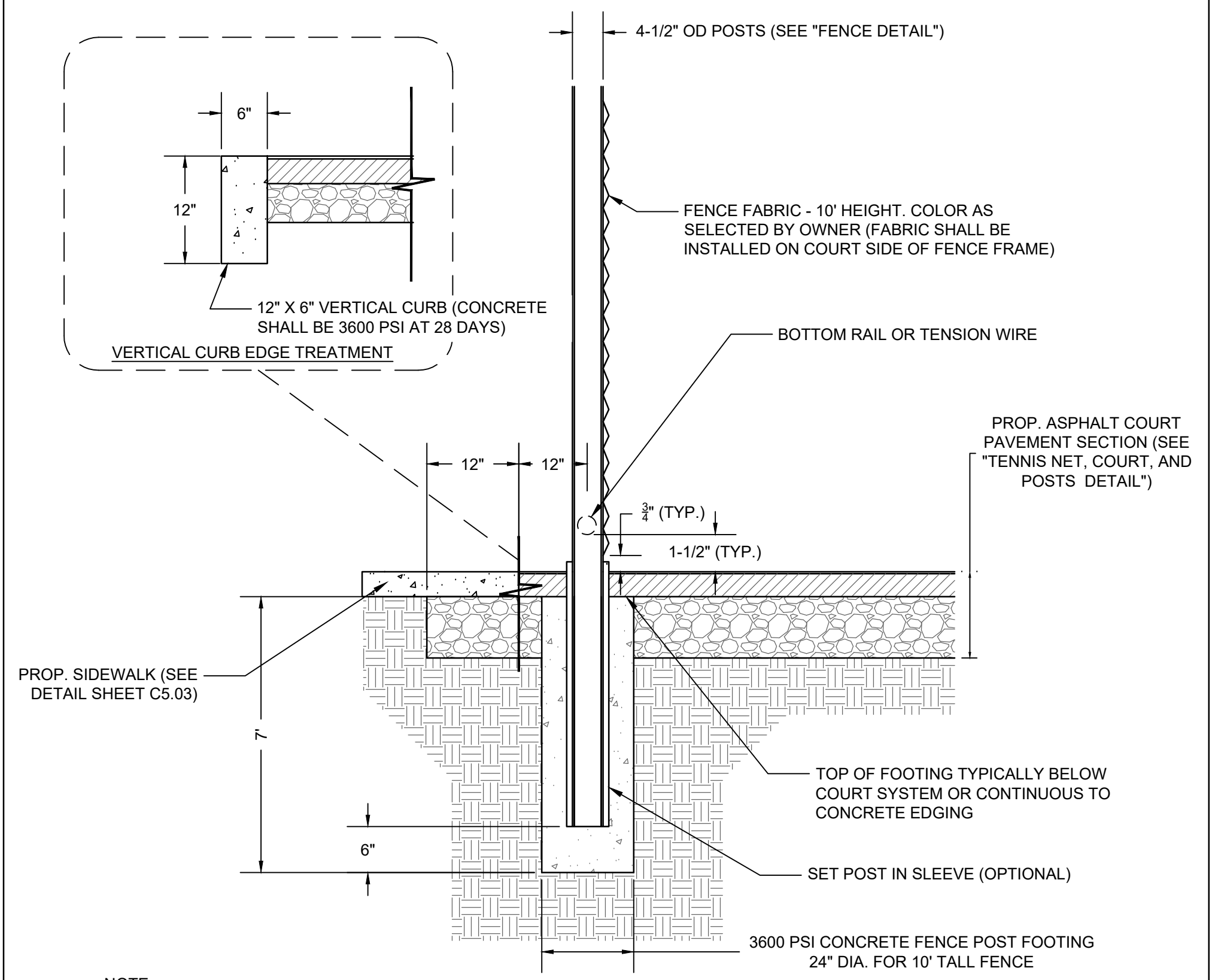
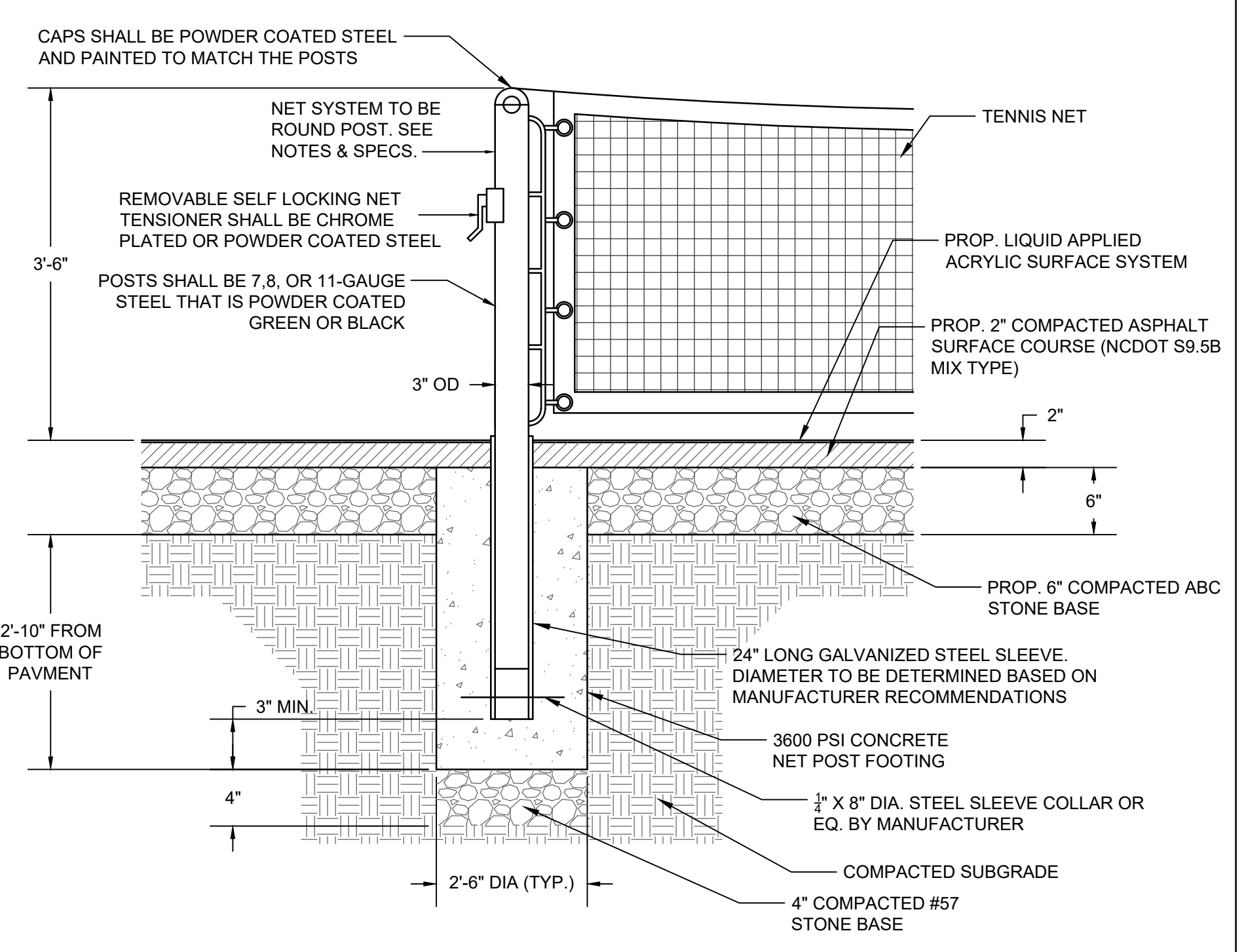
- ALL DIMENSIONS ARE MEASURED TO THE OUTER EDGE OF LINES, WITH THE EXCEPTION OF THE CENTER LINES WHICH SHALL BE MEASURED TO THE CENTER.
- CENTER SERVICE LINE AND CENTER MARK SHALL BE 2" WIDE. OTHER LINES SHALL BE BETWEEN 1" AND 2" WIDE, EXCEPT THE BASELINES MAY BE UP TO 4" WIDE.
- ALL BLENDED PLAYING LINES SHALL BE TEXTURED LINE PAINT WITHIN THE SAME FAMILY AS THE PLAYING SURFACE COLOR.
- ALL BLENDED PLAYING LINES SHALL BE 1-1/2" WIDE
- ALL BLENDED PLAYING LINES SHALL TERMINATE 3" FROM THE 78' COURT LINES.
- COLOR SAMPLES SHALL BE PROVIDED TO OWNER AND DESIGNER OF RECORD FOR APPROVAL PRIOR TO INSTALLATION.
- PAINT SHALL BE 100% ACRYLIC COATING WITH SILICA SAND OR APPROVED EQUAL TO PROVIDE A NON SLIP SURFACE.



- NOTE:
- THE NET SHOULD BE INSTALLED WITH A RECOMMENDED TENSION OF 400 - 450 LBS.
 - NETS SHALL BE SECURED TO NET POSTS USING LACING ROPE.
 - HEADBAND SHALL BE A WHITE 2-PLY VINYL COATED POLYESTER, LOCK SEWN WITH 4 ROWS OF #32 POLYESTER THREAD. COMPLETE WITH A VINYL COATED 5/8" GALVANIZED STEEL CABLE.
 - SIDE AND BOTTOM TAPES SHALL BE DOUBLE LOCK STITCHED WITH A BLACK VINYL COATED POLYESTER THREAD.

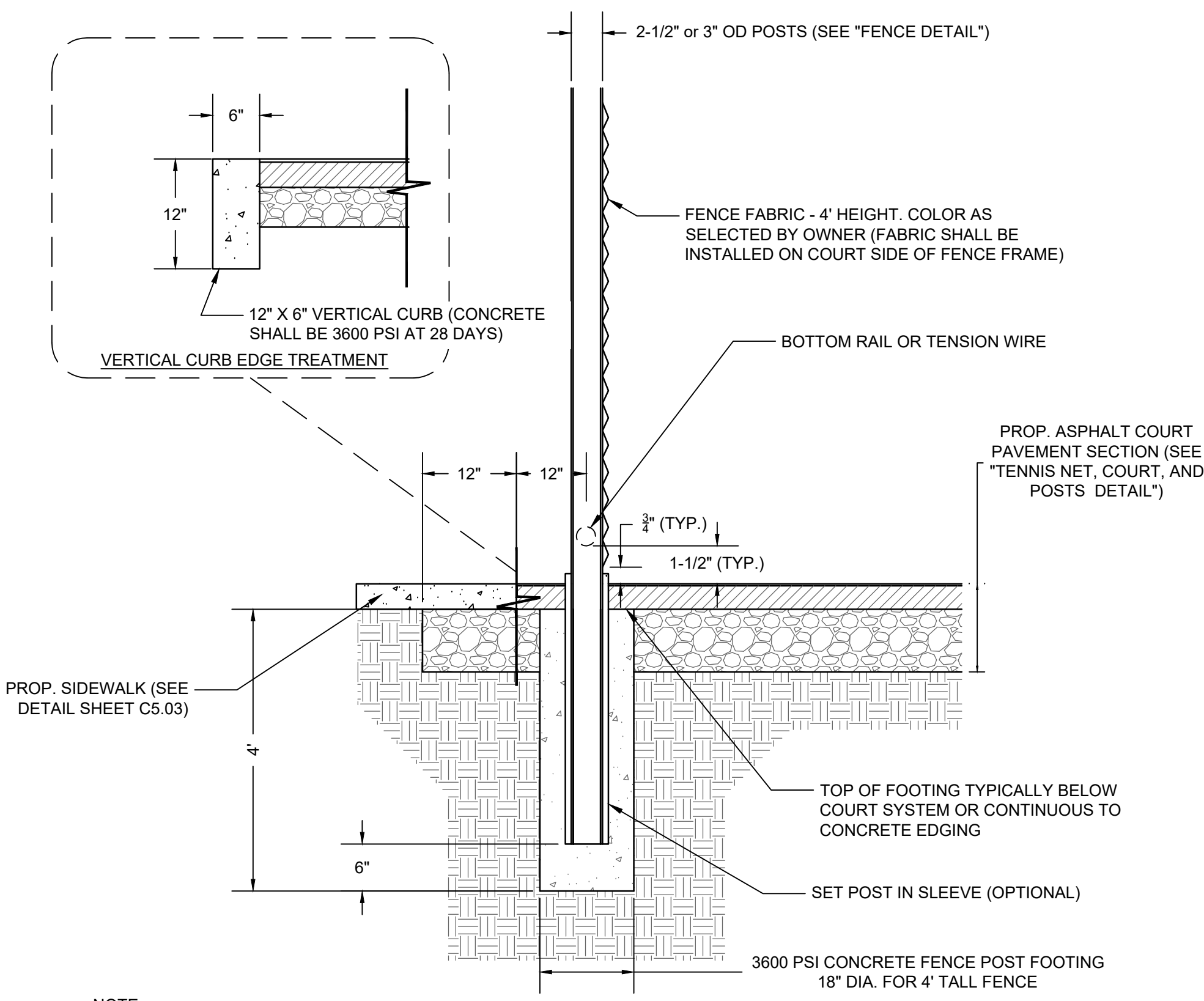
- RECOMMENDED PAVING SPECIFICATIONS:
- ALL SUBGRADE SHALL BE COMPACTED TO 100% OF THE MAXIMUM DENSITY OBTAINABLE WITH THE STANDARD PROCTOR TEST TO A DEPTH OF 8 INCHES, AND A DENSITY OF 95% STANDARD PROCTOR FOR DEPTHS GREATER THAN 8 INCHES.
 - SEE SPECIFICATIONS FOR SURFACE MATERIALS, PAVING EQUIPMENT, PAINT, AND COLOR REQUIREMENTS

TENNIS NET, COURT, AND POST DETAILS
NOT TO SCALE



- NOTE:
- PROVIDE AND INSTALL TENNIS SCREENS FOR ALL FENCE AREAS UNLESS OTHERWISE DIRECTED BY THE TOWN.

10' TALL FENCE POST AND EXTENDED APRON DETAIL
NOT TO SCALE



- NOTE:
- PROVIDE AND INSTALL TENNIS SCREENS FOR ALL FENCE AREAS UNLESS OTHERWISE DIRECTED BY THE TOWN.

4' TALL FENCE POST AND EXTENDED APRON DETAIL
NOT TO SCALE

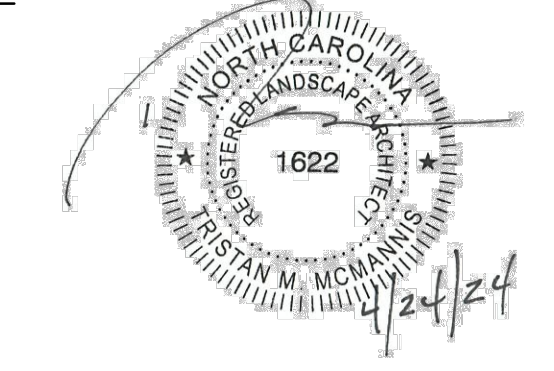


Dewberry Engineers Inc.
9500 Harris Corners Pkwy - Suite 220
Charlotte, NC 28269
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Fax: 704.509.9937
www.dewberry.com
NCBELS #F-0829
NCBOLA #C-478

BAILEY ROAD PARK
EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS
11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
APPROVED BY: TM
CHECKED BY: DJ
DATE: FEBRUARY 9, 2024

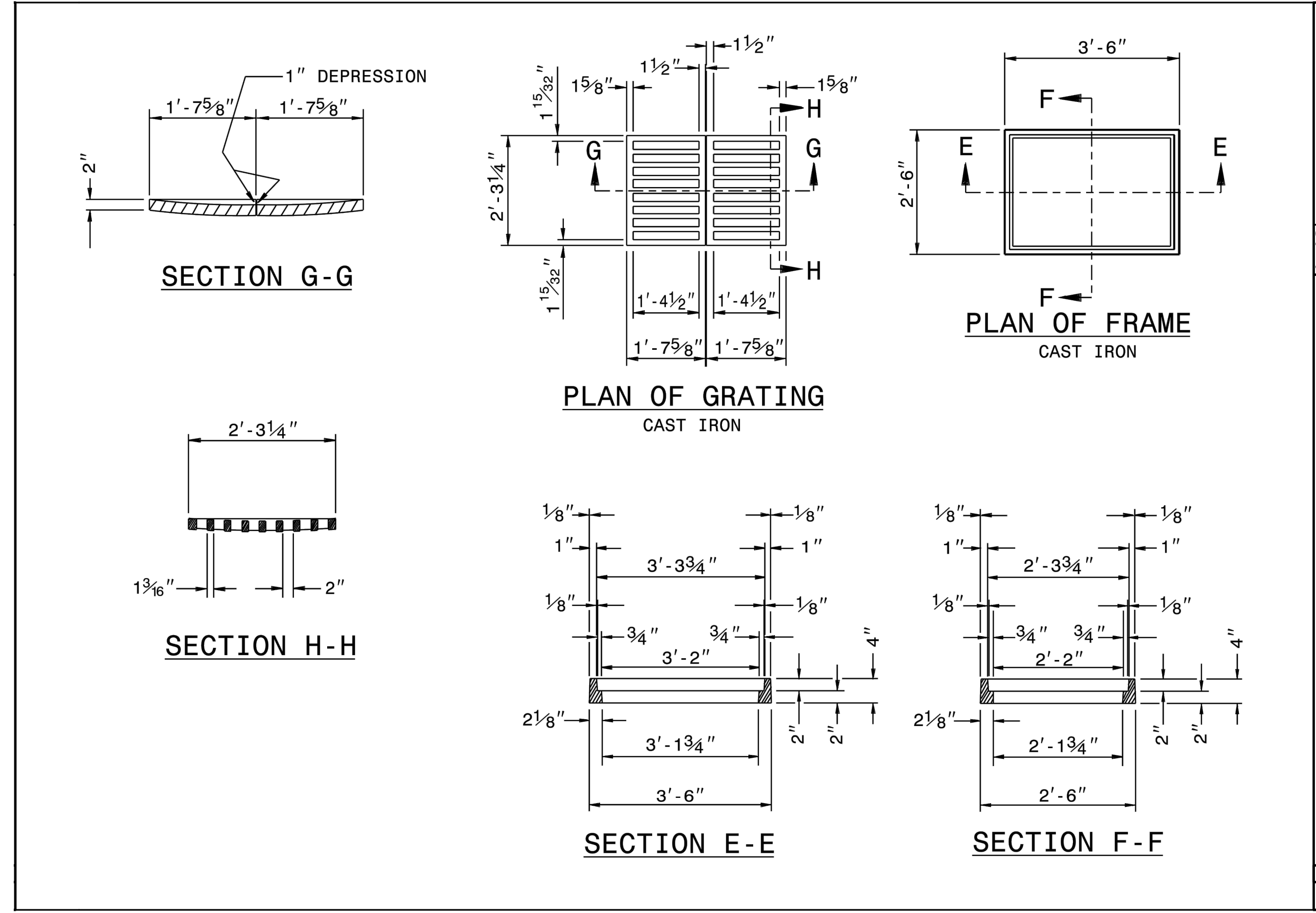
TITLE

SITE DETAILS
(SHEET 4 OF 4)

DEI PROJECT NO: 50168891

SHEET NO.

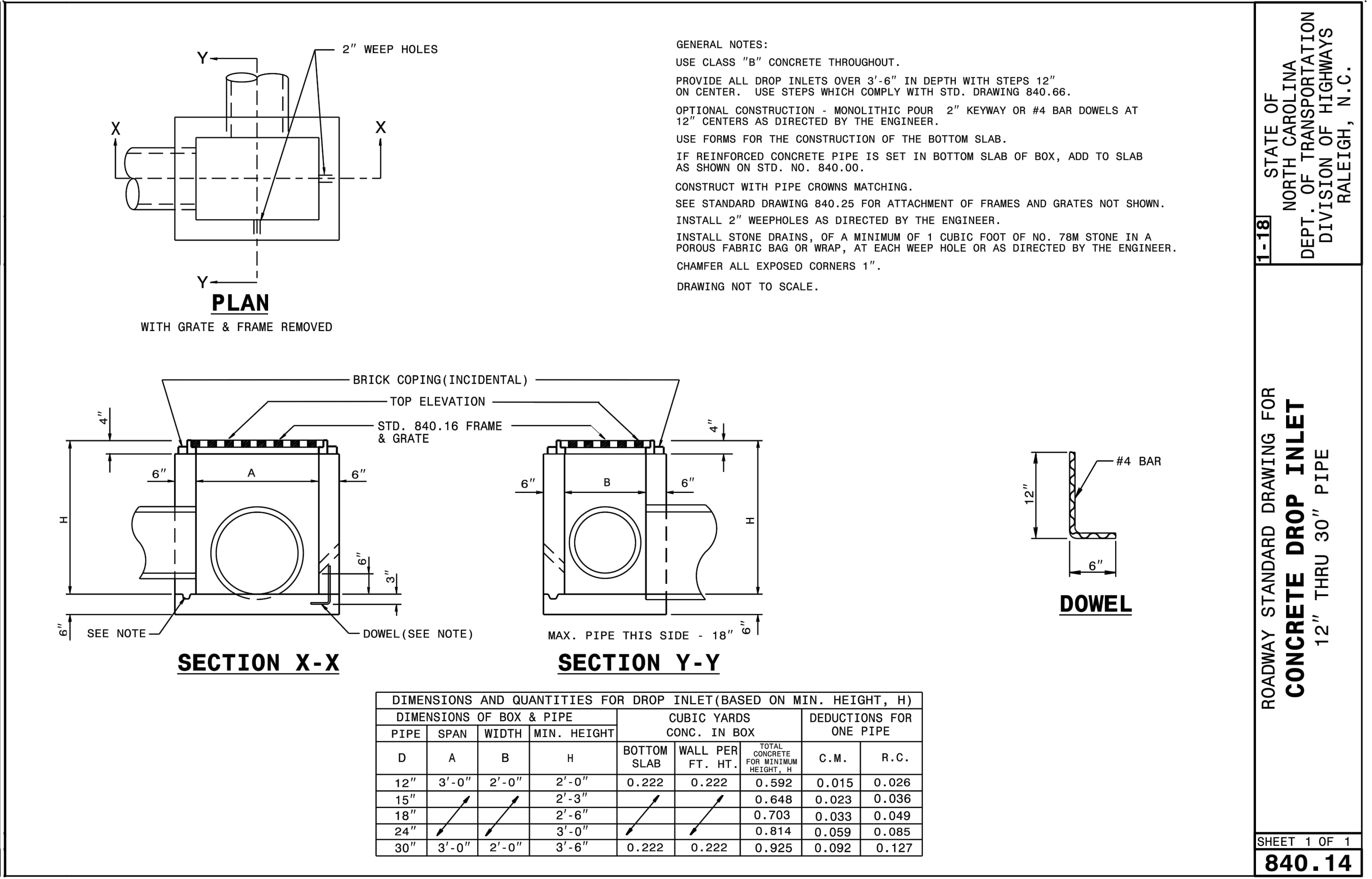
C5.06



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **DROP INLET FRAME AND GRATES** FOR USE WITH STD. DWG.S 840.14 AND 840.15

SHEET 1 OF 1 **840.16**



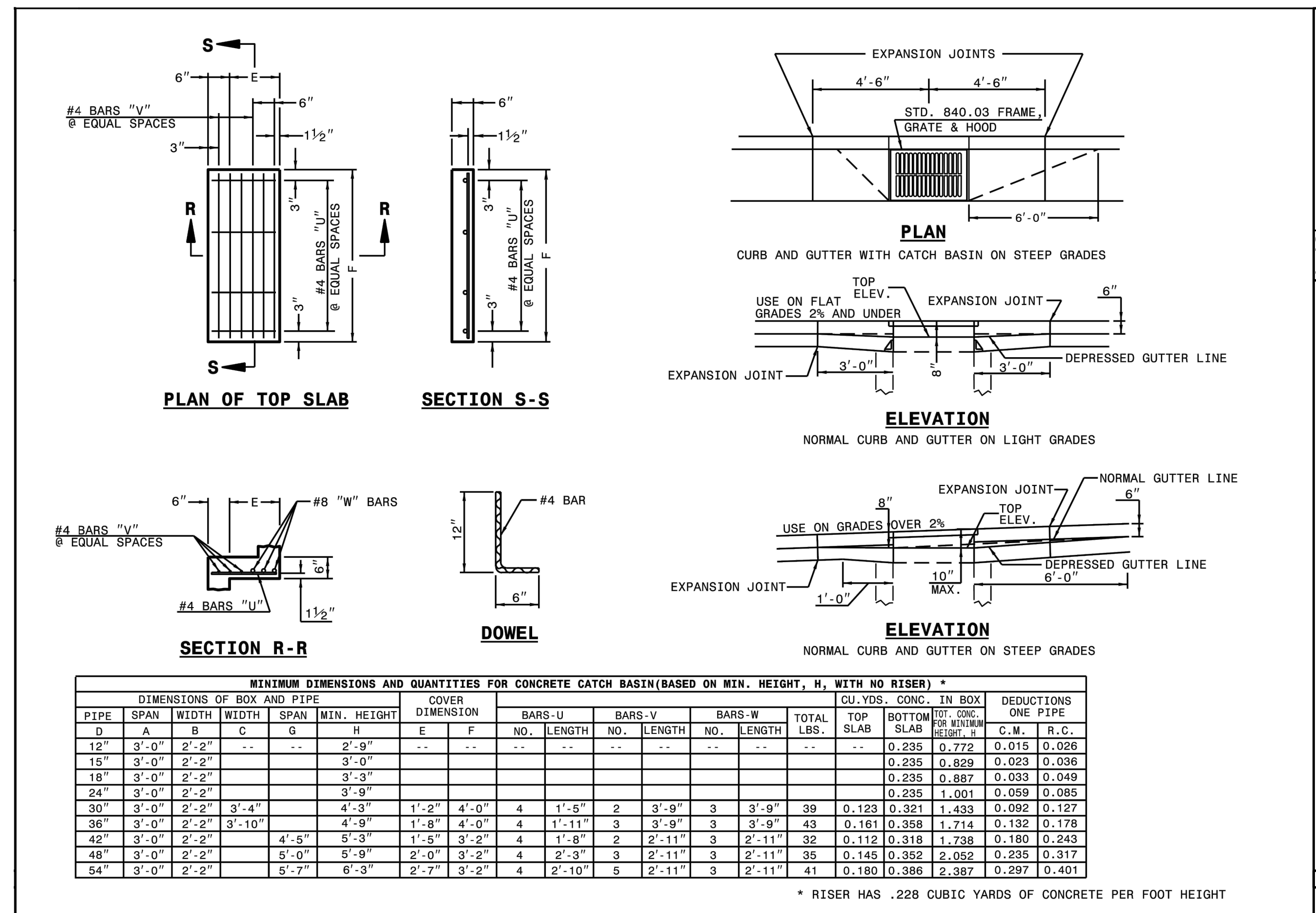
GENERAL NOTES:
 USE CLASS "B" CONCRETE THROUGHOUT.
 PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 OPTIONAL CONSTRUCTION - MONOLITHIC POUR 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
 CONSTRUCT WITH PIPE CROWNS MATCHING.
 SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
 INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.
 INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 78M STONE IN A POROUS FABRIC BAG OR WRAP, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
 CHAMFER ALL EXPOSED CORNERS 1".
 DRAWING NOT TO SCALE.

DIMENSIONS AND QUANTITIES FOR DROP INLET (BASED ON MIN. HEIGHT, H)				CUBIC YARDS		DEDUCTIONS FOR ONE PIPE		
PIPE	SPAN	WIDTH	MIN. HEIGHT	BOTTOM SLAB	WALL PER FT. HT.	TOTAL CONCRETE FOR MINIMUM HEIGHT, H	C.M.	R.C.
12"	3'-0"	2'-0"	2'-0"	0.222	0.222	0.592	0.015	0.026
15"	3'-0"	2'-0"	2'-3"	0.235	0.235	0.648	0.023	0.036
18"	3'-0"	2'-0"	2'-6"	0.248	0.248	0.703	0.033	0.049
24"	3'-0"	2'-0"	3'-0"	0.272	0.272	0.814	0.059	0.085
30"	3'-0"	2'-0"	3'-6"	0.296	0.296	0.925	0.092	0.127

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **CONCRETE DROP INLET** 12" THRU 30" PIPE

SHEET 1 OF 1 **840.14**



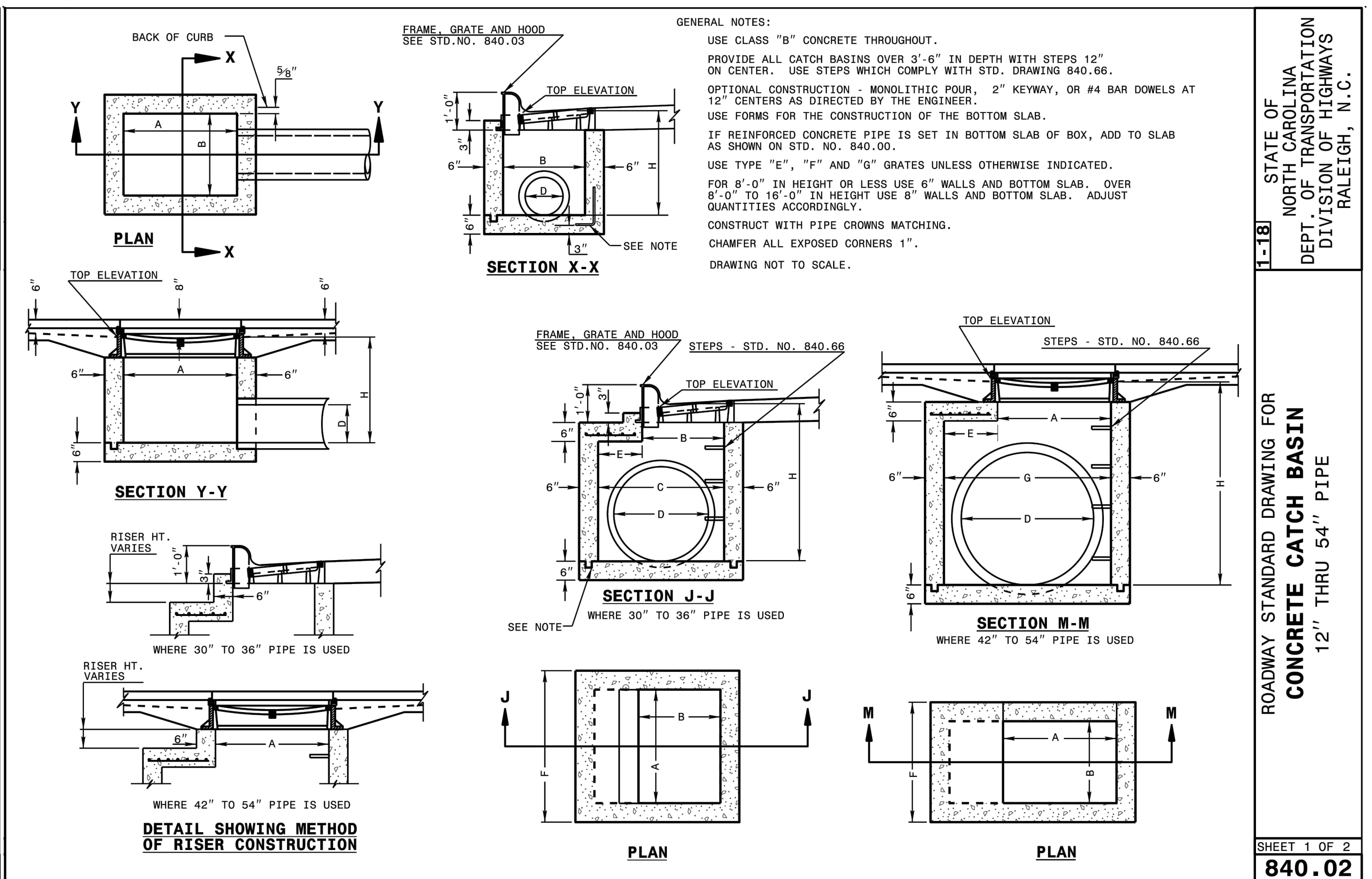
MINIMUM DIMENSIONS AND QUANTITIES FOR CONCRETE CATCH BASIN (BASED ON MIN. HEIGHT, H, WITH NO RISER) *																	
PIPE	DIMENSIONS OF BOX AND PIPE				COVER DIMENSION	BARS-U			BARS-V			TOTAL LBS.	CU. YDS. CONC. IN BOX		DEDUCTIONS ONE PIPE		
	D	SPAN	WIDTH	HEIGHT		NO.	LENGTH	NO.	LENGTH	NO.	LENGTH		TOP SLAB	BOTTOM SLAB	C.M.	R.C.	
12"	3'-0"	2'-2"	2'-2"	2'-9"	4'-0"	4	1'-5"	2	3'-9"	3	3'-9"	39	0.123	0.321	1.433	0.092	0.127
15"	3'-0"	2'-2"	2'-2"	3'-0"	4'-0"	4	1'-11"	3	3'-9"	3	3'-9"	43	0.161	0.358	1.714	0.132	0.178
18"	3'-0"	2'-2"	2'-2"	3'-3"	4'-0"	4	1'-8"	2	2'-11"	3	2'-11"	35	0.145	0.352	2.052	0.235	0.317
24"	3'-0"	2'-2"	2'-2"	3'-9"	4'-0"	4	2'-3"	3	2'-11"	3	2'-11"	41	0.180	0.386	2.387	0.297	0.401
30"	3'-0"	2'-2"	3'-4"	4'-3"	4'-0"	4	2'-7"	4	2'-11"	3	2'-11"	41	0.180	0.386	2.387	0.297	0.401
36"	3'-0"	2'-2"	3'-10"	4'-9"	4'-0"	4	2'-10"	5	2'-11"	3	2'-11"	41	0.180	0.386	2.387	0.297	0.401
42"	3'-0"	2'-2"	4'-5"	5'-3"	4'-0"	4	2'-10"	5	2'-11"	3	2'-11"	41	0.180	0.386	2.387	0.297	0.401
48"	3'-0"	2'-2"	5'-0"	5'-9"	4'-0"	4	2'-10"	5	2'-11"	3	2'-11"	41	0.180	0.386	2.387	0.297	0.401
54"	3'-0"	2'-2"	5'-7"	6'-3"	4'-0"	4	2'-10"	5	2'-11"	3	2'-11"	41	0.180	0.386	2.387	0.297	0.401

* RISER HAS .228 CUBIC YARDS OF CONCRETE PER FOOT HEIGHT

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **CONCRETE CATCH BASIN** 12" THRU 54" PIPE

SHEET 2 OF 2 **840.02**

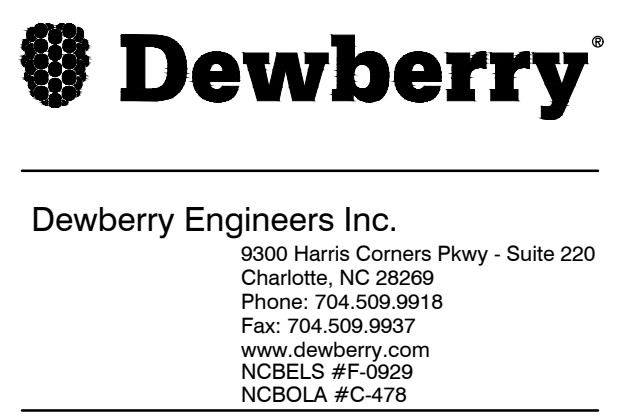


GENERAL NOTES:
 USE CLASS "B" CONCRETE THROUGHOUT.
 PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
 USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED.
 FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 6" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
 CONSTRUCT WITH PIPE CROWNS MATCHING.
 CHAMFER ALL EXPOSED CORNERS 1".
 DRAWING NOT TO SCALE.

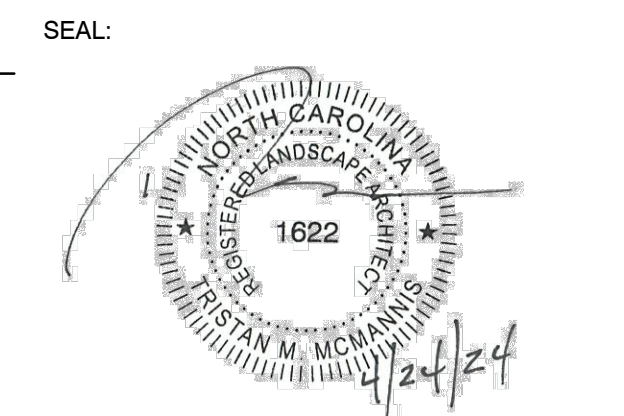
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **CONCRETE CATCH BASIN** 12" THRU 54" PIPE

SHEET 1 OF 2 **840.02**



BAILEY ROAD PARK EXPANSION - PHASE I
 CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031



REVISIONS

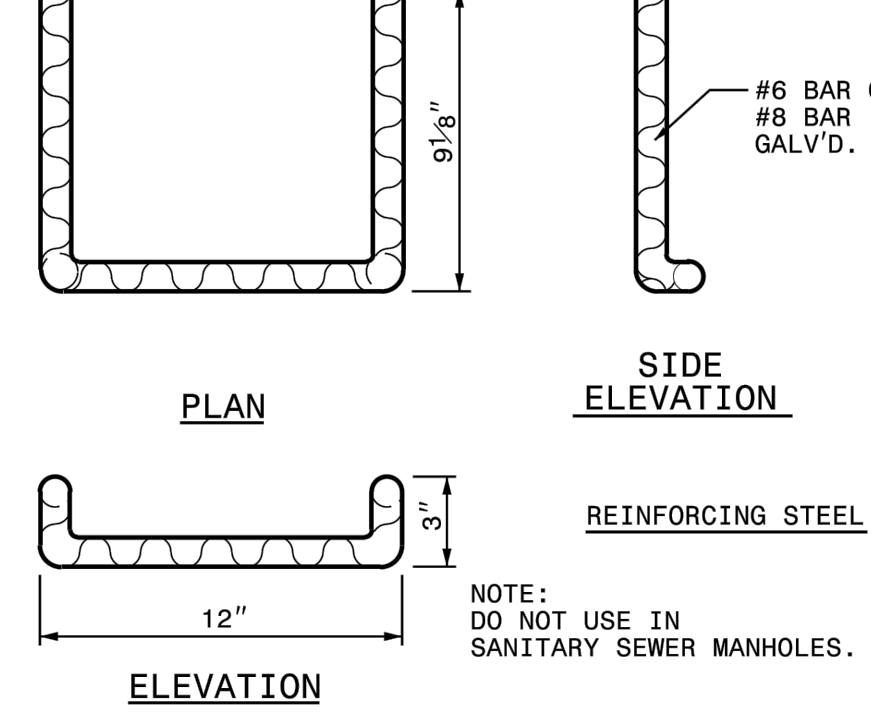
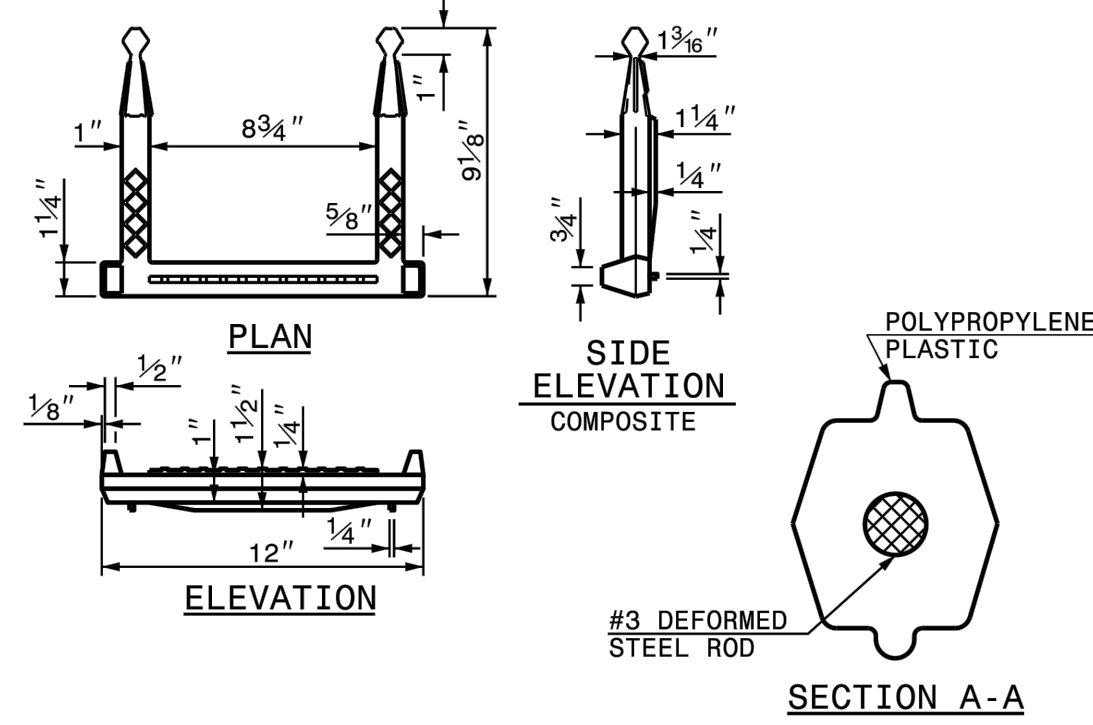
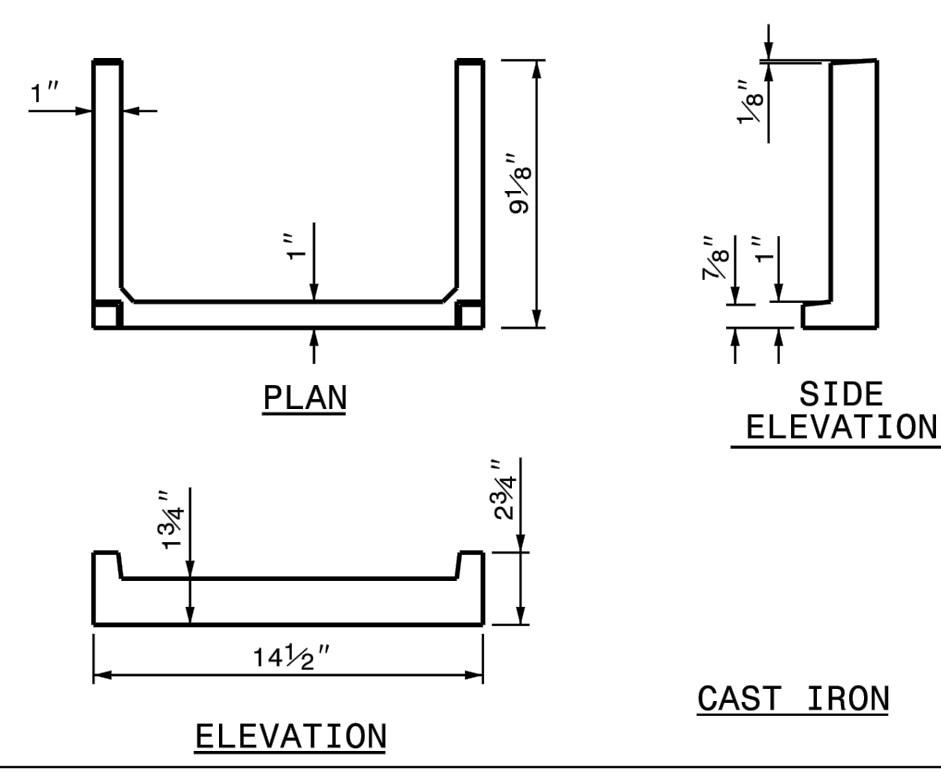
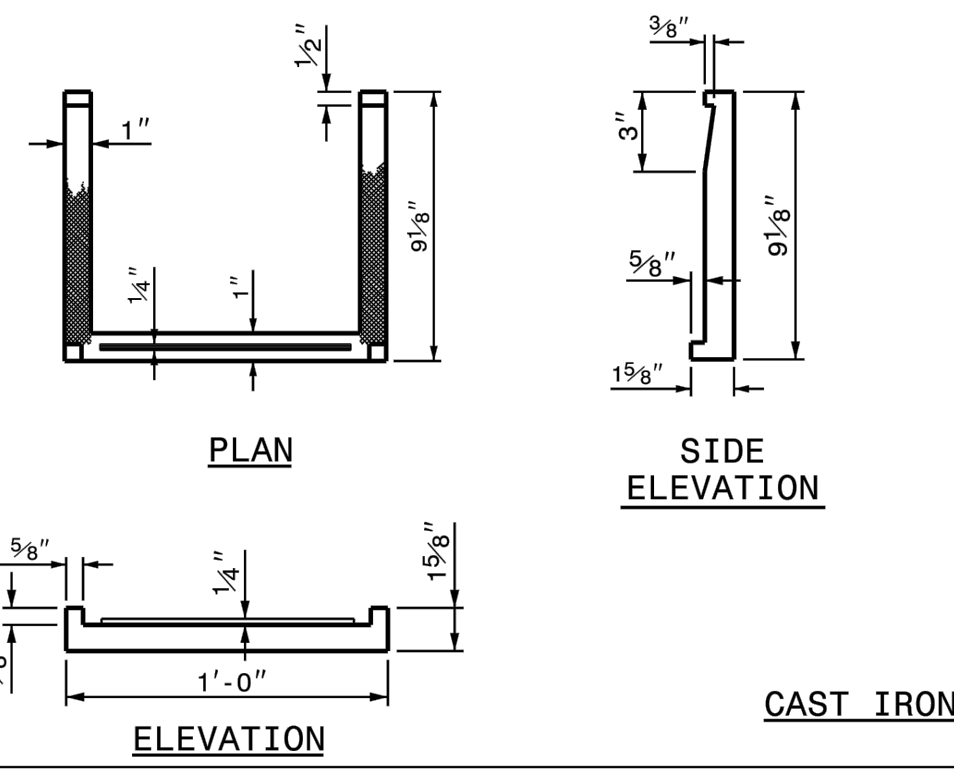
NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE: STORM DETAILS (SHEET 1 OF 4)

DEI PROJECT NO: 50168991
 SHEET NO: C5.07

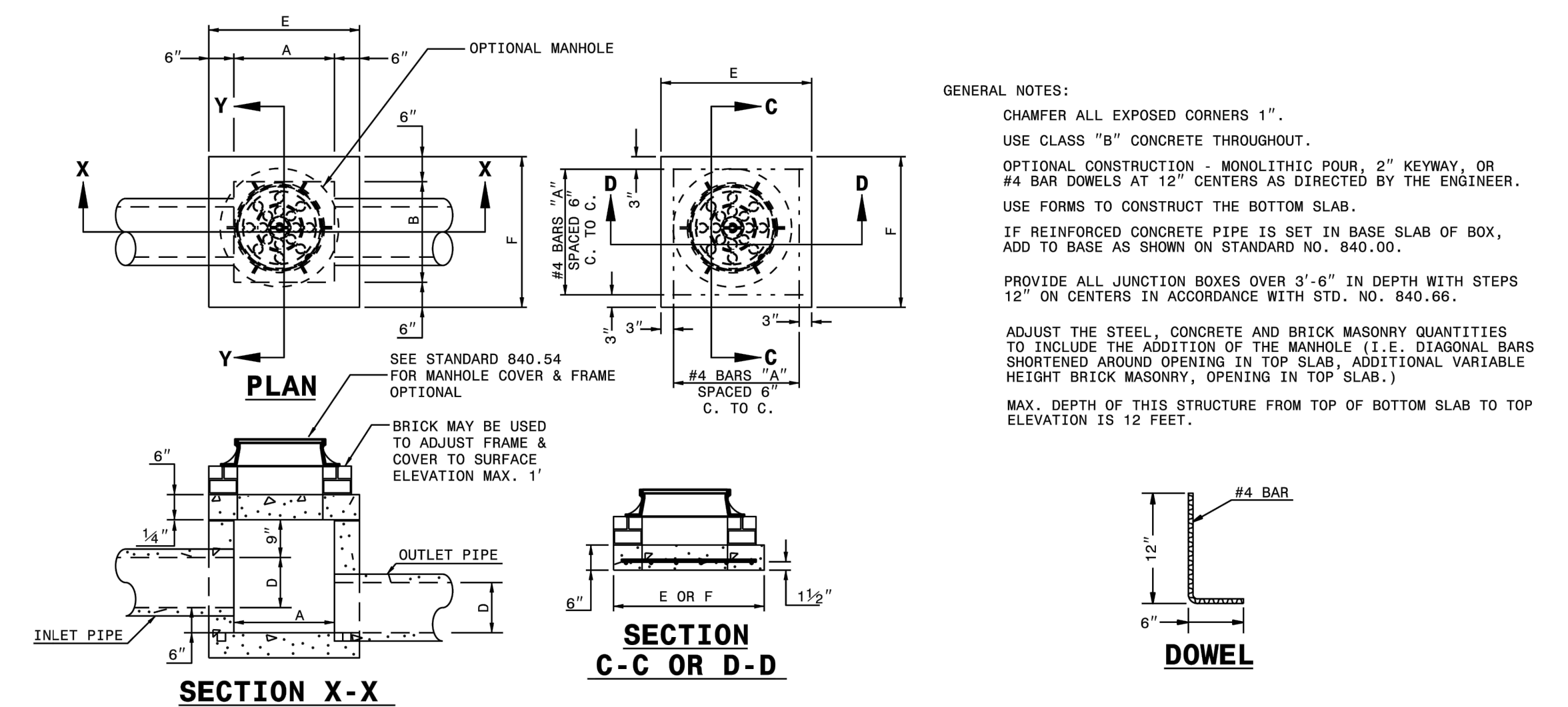
NOTES:
 INSTALL ALL STEPS PROTRUDING 4" FROM INSIDE FACE OF STRUCTURE WALL.
 STEPS DIFFERING IN DIMENSIONS, CONFIGURATION, OR MATERIALS FROM THOSE SHOWN MAY ALSO BE USED PROVIDED THE CONTRACTOR HAS FURNISHED THE ENGINEER WITH DETAILS OF THE PROPOSED STEPS AND HAS RECEIVED WRITTEN APPROVAL FROM THE ENGINEER FOR THE USE OF SUCH STEPS.



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **DRAINAGE STRUCTURE STEPS**

SHEET 1 OF 1
840.66



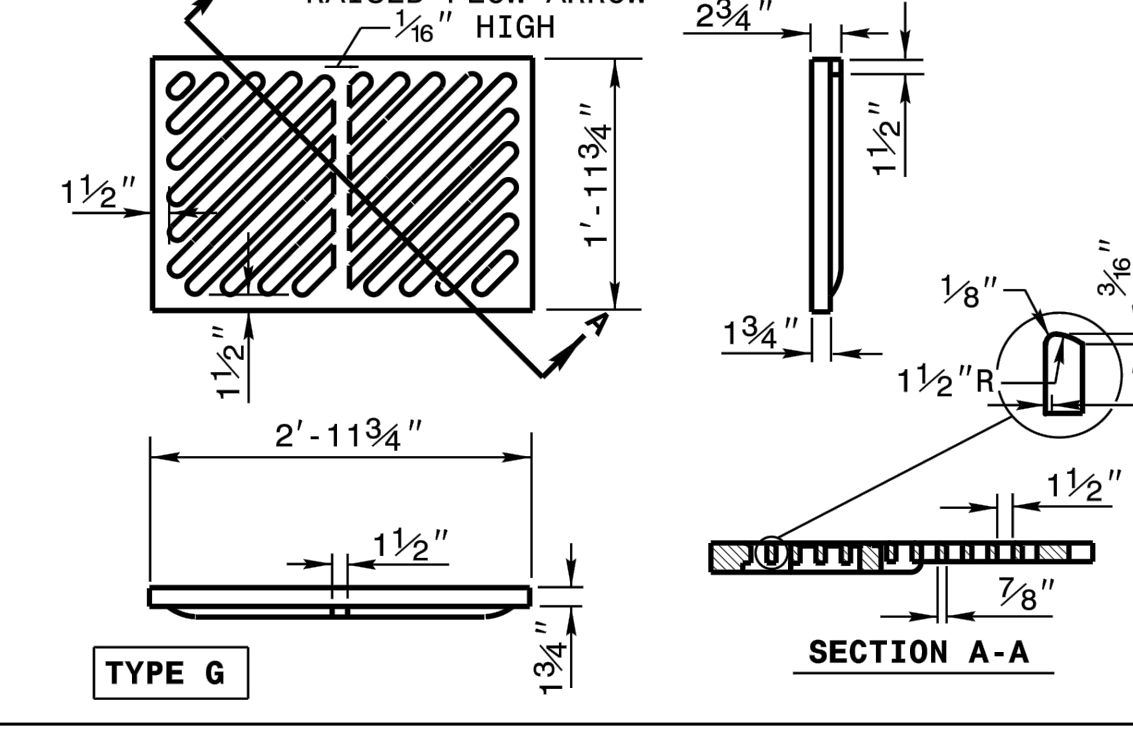
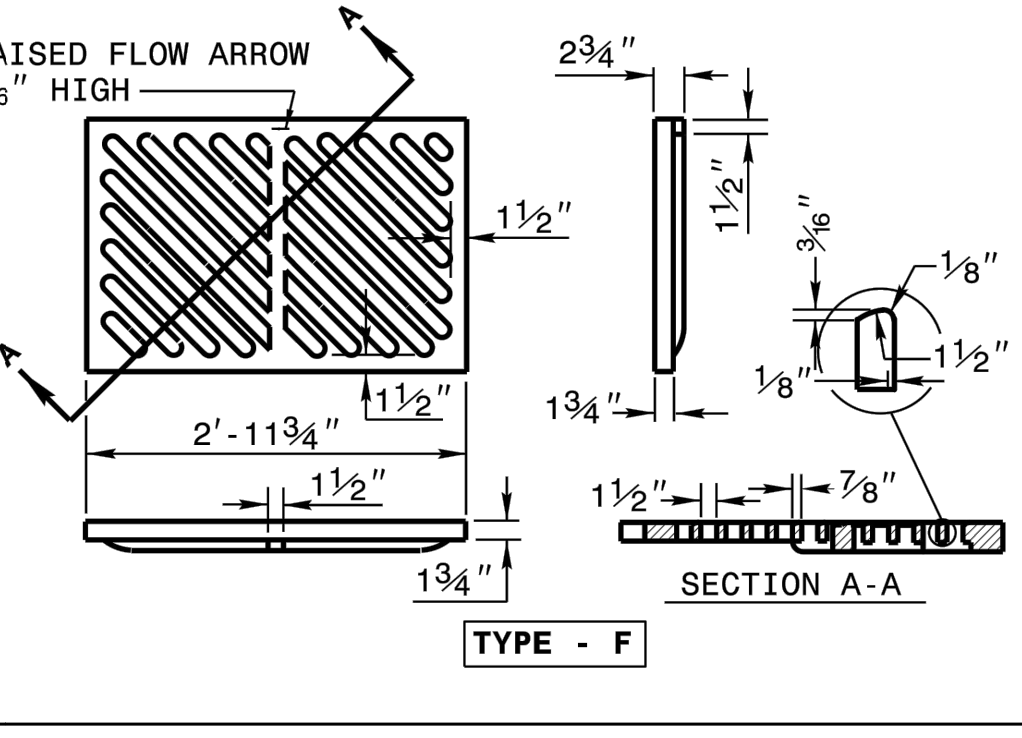
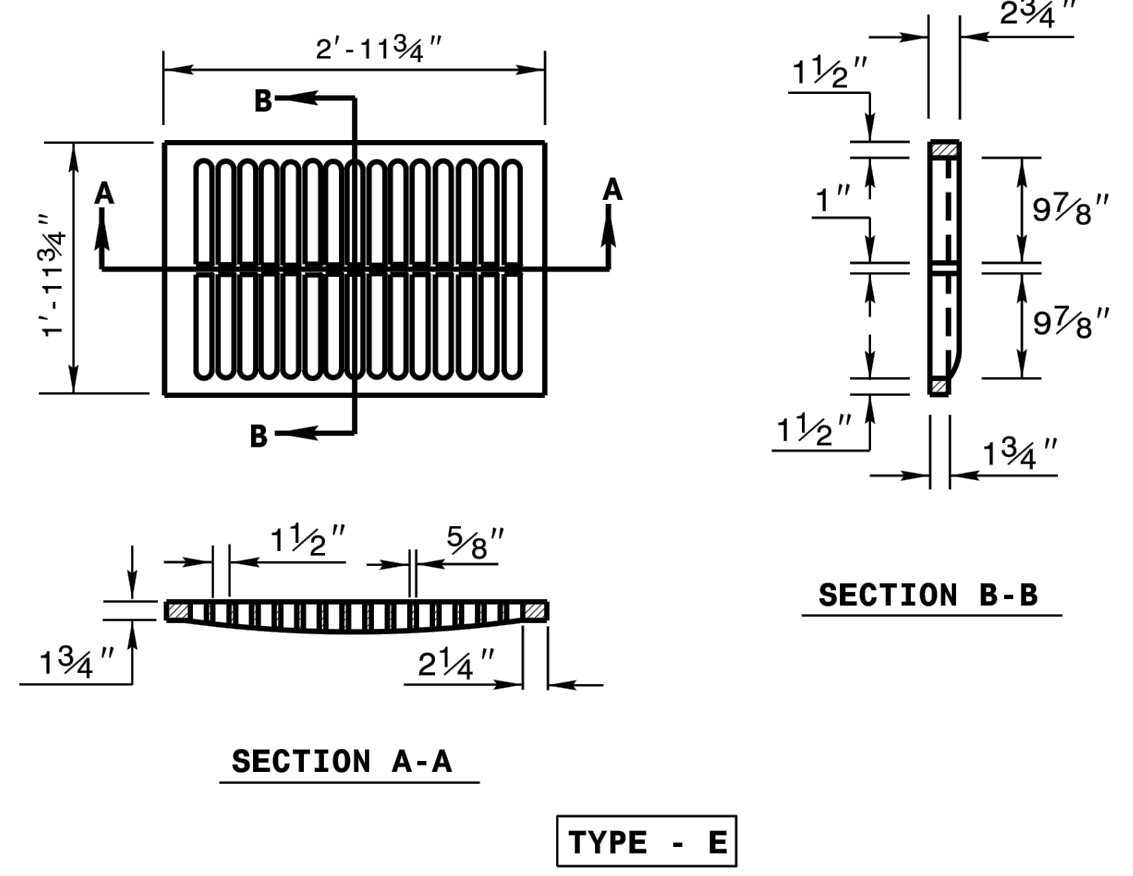
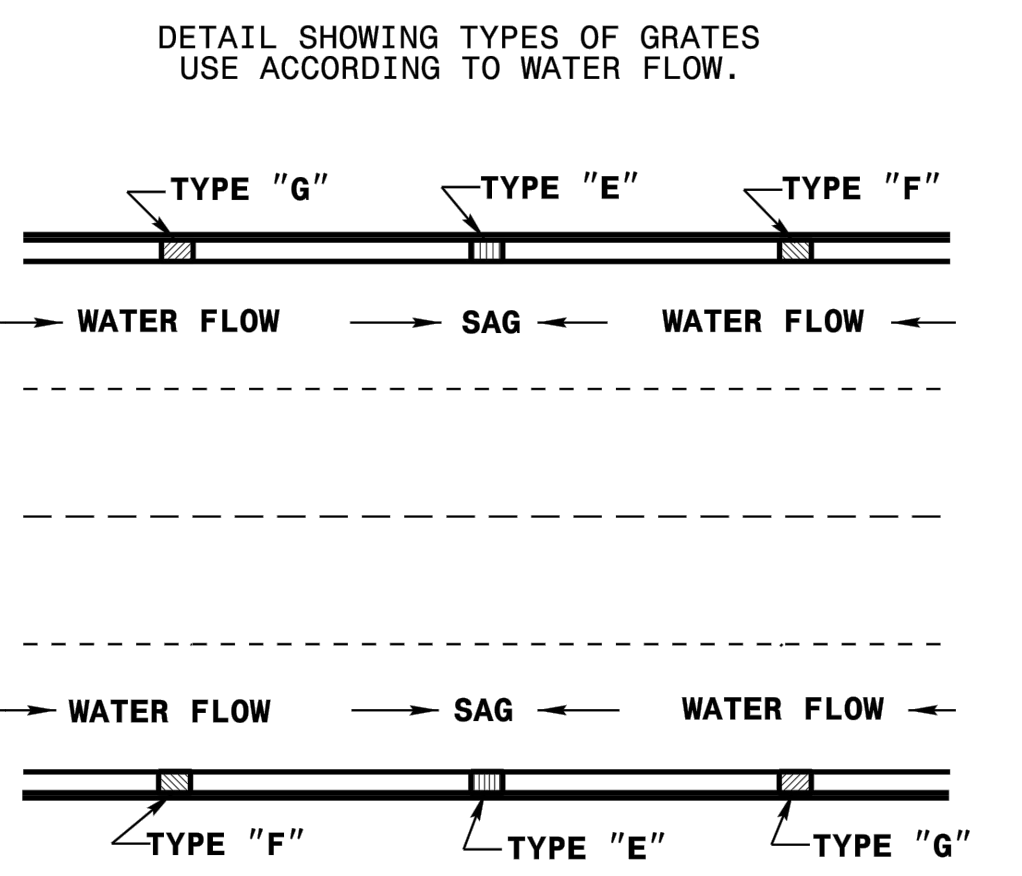
DIMENSIONS AND QUANTITIES FOR CONCRETE JUNCTION BOXES

PIPE	DIMENSIONS OF BOX AND PIPE				REINFORCEMENT BARS "A"		TOP SLAB DIMENSIONS		CUBIC YARDS IN BOX			TOTAL QUANTITIES BOX AND SLAB		DEDUCTIONS FOR ONE PIPE CU. YDS.	
	SPAN	WIDTH	HEIGHT	NO.	LENGTH	E	F	TOP SLAB	BOTTOM SLAB	WALL/ FT. OF HT.	LBS. REINF.	CU. YDS. MIN.	C.S.	R.C.	
12"	2'-0"	2'-0"	2'-3"	12	2'-9"	3'-0"	3'-0"	0.167	0.167	0.185	24	0.750	0.015	0.024	
15"	2'-3"	2'-3"	2'-6"	12	3'-0"	3'-3"	3'-3"	0.196	0.196	0.204	24	0.902	0.032	0.036	
18"	2'-6"	2'-6"	2'-9"	14	3'-3"	3'-6"	3'-6"	0.227	0.227	0.222	30	1.065	0.033	0.049	
24"	3'-0"	3'-0"	3'-3"	16	3'-9"	4'-0"	4'-0"	0.296	0.296	0.259	40	1.434	0.059	0.085	
30"	3'-6"	3'-6"	3'-9"	18	4'-3"	4'-6"	4'-6"	0.375	0.375	0.296	51	1.860	0.092	0.127	
36"	4'-0"	4'-0"	4'-3"	20	4'-9"	5'-0"	5'-0"	0.463	0.463	0.333	64	2.341	0.132	0.178	
42"	4'-6"	4'-6"	4'-9"	22	5'-3"	5'-6"	5'-6"	0.560	0.560	0.370	77	2.878	0.180	0.243	
48"	5'-0"	5'-0"	5'-3"	26	6'-3"	6'-4"	6'-4"	0.743	0.743	0.407	111	3.623	0.235	0.317	
54"	5'-6"	5'-6"	5'-9"	28	6'-7"	6'-10"	6'-10"	0.865	0.865	0.444	126	4.283	0.297	0.401	
60"	6'-0"	6'-0"	6'-3"	30	7'-3"	7'-6"	7'-6"	1.042	1.042	0.481	145	5.090	0.367	0.495	
66"	7'-0"	7'-0"	7'-3"	32	7'-10"	8'-1"	8'-1"	1.210	1.210	0.518	169	5.917	0.444	0.589	

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **CONCRETE JUNCTION BOX (WITH OPTIONAL MANHOLE)**

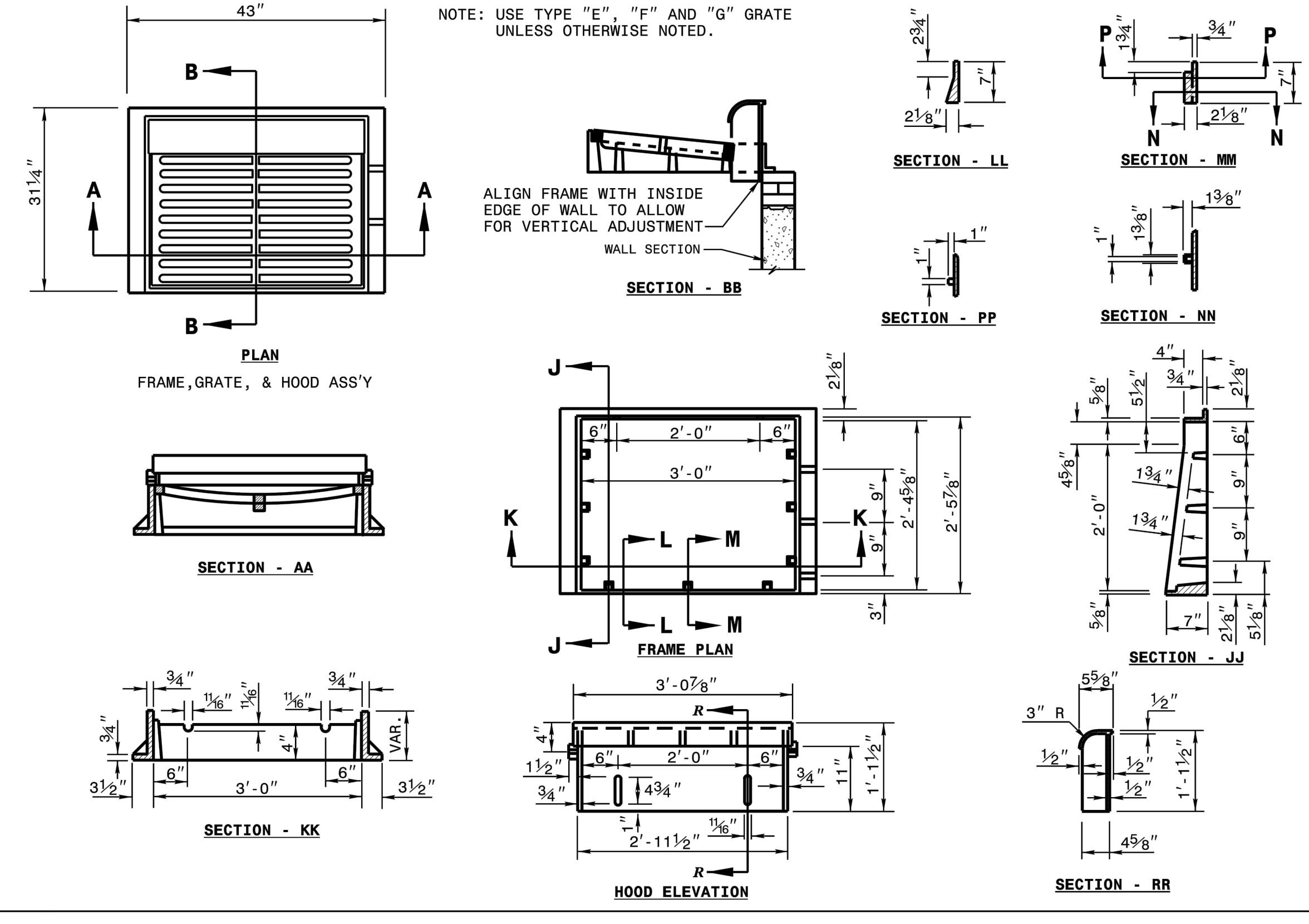
SHEET 1 OF 1
840.31



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **FRAME, GRATES, AND HOOD** FOR USE ON STANDARD CATCH BASIN

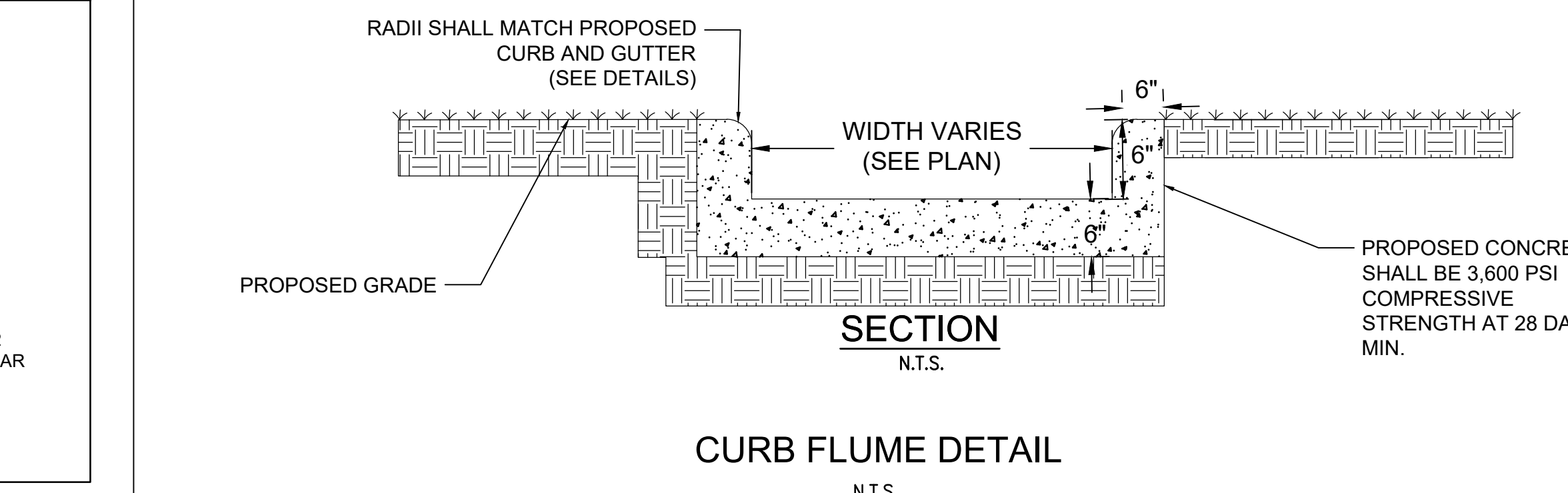
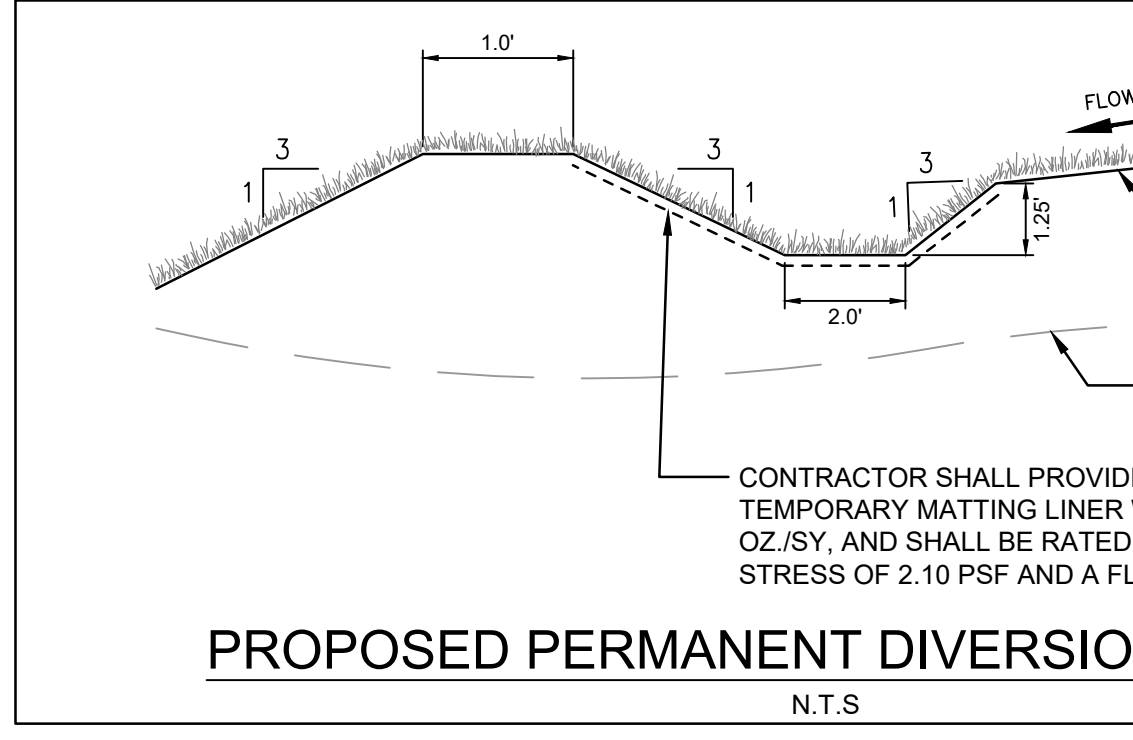
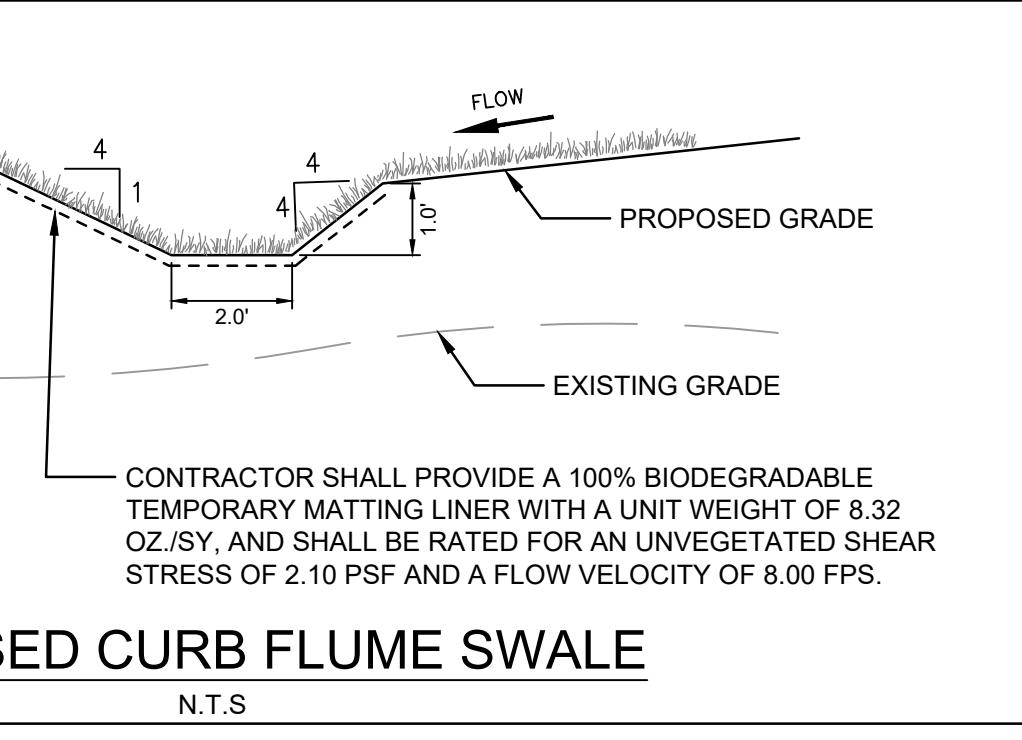
SHEET 2 OF 2
840.03



STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR **FRAME, GRATES, AND HOOD** FOR USE ON STANDARD CATCH BASIN

SHEET 1 OF 2
840.03



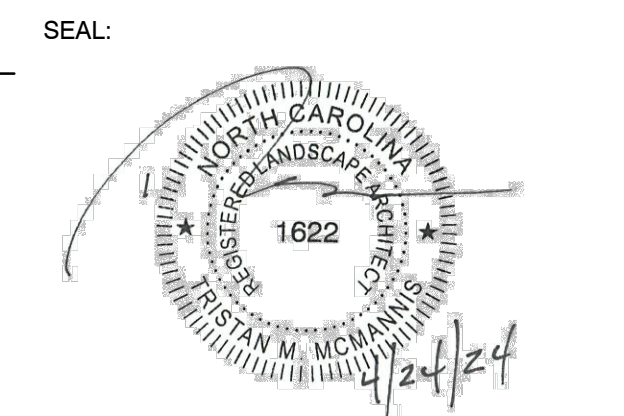
Dewberry

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 NCBELS #F-0629
 NCBOLA #C-478

BAILEY ROAD PARK EXPANSION - PHASE I

CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031



REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024
 TITLE: **STORM DETAILS (SHEET 2 OF 4)**
 DEI PROJECT NO: 50168991
 SHEET NO: **C5.08**

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

FLARED END SECTION 12" THRU 72" PIPE

D	T	A	B	C	E	L	H/V	WT.
12"	2'-1/4"	4"	2'-0"	4'-1"	2'-0"	6'-1"	3:1	730
15"	2'-1/4"	6"	2'-3"	3'-10"	2'-0"	6'-1"	3:1	730
18"	2'-1/2"	9"	2'-3"	3'-10"	3'-0"	6'-1"	3:1	1190
24"	3"	10"	3'-8"	2'-6"	4'-0"	6'-2"	3:1	1770
30"	3'-1/2"	1'-0"	4'-6"	1'-9"	5'-0"	6'-2"	3:1	2380
36"	4"	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	3:1	5320
42"	4'-1/2"	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	3:1	5920
48"	5"	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	3:1	7470
54"	5'-1/2"	2'-3"	5'-6"	2'-10"	7'-6"	8'-4"	3:1	8810
60"	6"	2'-6"	5'-0"	3'-3"	8'-0"	8'-3"	3:1	11180
66"	6'-1/2"	3'-0"	6'-0"	2'-3"	8'-6"	8'-3"	3:1	12530
72"	7"	3'-0"	6'-6"	1'-9"	9'-0"	8'-3"	3:1	13980

GENERAL NOTES:

- SEE FORMER NCDOT STANDARD 310.01 FOR DETAILS.
- REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170, TABLE 2, WALL B.
- ALL CONCRETE TO BE 4000 P.S.I COMPRESSIVE STRENGTH.
- PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
- PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
- THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD FORMS AND TEMPLATES.
- NOT TO BE USED IN NCDOT MAINTAINED RIGHT OF WAY.

APPROVED DATE: 02/2007

NOT TO SCALE

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD NO. 20.23A

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

MANHOLE FRAME AND COVER

SOLID COVER SHOWN PERFORATED. PERFORATED AVAILABLE IF SPECIFIED.
STATE USE OF SYSTEM ON COVER (I.E.: SEWER, STORM DRAIN, ELECTRICAL)

MINIMUM WEIGHTS - LBS.
FRAME - 180
COVER - 120
TOTAL - 300

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD NO. 20.23A

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

GRADING AT DROP INLET

YARD INLET	AREA (AC.)	CFS	HEAD H (FT.)	COMMENT
DG-B1	0.23 AC.	1.54	0.14	
DG-B2	0.64 AC.	4.27	0.28	

APPROVED DATE: 02/2007

NOT TO SCALE

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD NO. 20.35

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

METHOD OF PIPE INSTALLATION RIGID PIPE

GENERAL NOTES:

- I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
- O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
- H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

LEGEND:

- APPROVED SUITABLE LOCAL MATERIAL.
- TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.
- LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.
- SPRINGLINE OF PIPE
- SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINGLINE.
- UNDISTURBED EARTH MATERIAL
- SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD NO. 300.01

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

NOTES:

- CLASS OR MEDIAN SIZE OF RIPRAP AND LENGTH, WIDTH AND DEPTH OF APRON TO BE DESIGNED BY THE ENGINEER.
- REFER TO THE CHARLOTTE MECKLENBURG STORM WATER DESIGN MANUAL FOR RIPRAP APRON DESIGN STANDARDS.
- RIPRAP SHOULD EXTEND UP BOTH SIDES OF THE APRON AND AROUND THE END OF THE PIPE OR CULVERT AT THE DISCHARGE OUTLET AT A MAXIMUM SLOPE OF 2:1 AND A HEIGHT NOT LESS THAN TWO THIRDS THE PIPE DIAMETER OR CULVERT HEIGHT.
- THERE SHALL BE NO OVERFLOW FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE RIPPED OR RIPRAPPED SHALL BE UNDERCUT SO THAT THE WEIGHT OF THE APRON SHALL BE AT THE SAME GRADE (PLUS) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF OR TOE WALL AT THE DOWNSTREAM END.
- THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL. MAXIMUM TAPER TO RECEIVING CHANNEL, 5:1.
- ALL SUBGRADE FOR STRUCTURE TO BE COMPACTED TO 95% OR GREATER.
- THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
- NO BENDS OR CURVES IN THE HORIZONTAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
- FILTER FABRIC SHALL BE INSTALLED ON COMPACTED SUBGRADE PRIOR TO PLACEMENT OF RIP RAP.
- ANY DISTURBED AREA FROM END OF APRON TO RECEIVING CHANNEL MUST BE STABILIZED.

USE USDA NOMOGRAPH FROM NC SEDIMENT AND EROSION CONTROL MANUAL OR CHARLOTTE MECKLENBURG STORM WATER DESIGN MANUAL FOR DESIGN DATA.

RIP RAP APRON AT PIPE OUTFALLS OTHER THAN AT SWIM

OUTLET	Ld	W1	W2	T*	H
FES-C1	10.0'	11.5'	4.5'	1.0'	1.00'
FES-A1	10.0'	12.0'	6.0'	1.2'	1.33'

* d50 (see fig 8.06 a-b) % NC SEDIMENT AND EROSION CONTROL MANUAL
dmax = 1.5 x d50
T = 1.5 X dmax

APPROVED DATE: 02/2007

MECKLENBURG COUNTY LAND DEVELOPMENT STANDARDS

STANDARD NO. 20.23

NOTE TO CONTRACTOR:
FOR MORE INFORMATION ON PIPE BEDDING REQUIREMENTS, PLEASE REFERENCE PROJECT SPECIFICATIONS SECTIONS 31 20 00 EARTH MOVING, 33 05 00 EARTHWORK FOR UTILITIES, AND 33 41 00 STORM DRAINAGE.

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STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
MANHOLE FRAME AND COVER

CONSTRUCTION DOCUMENTS
11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031

SEAL:

SEAL:

SCALE:

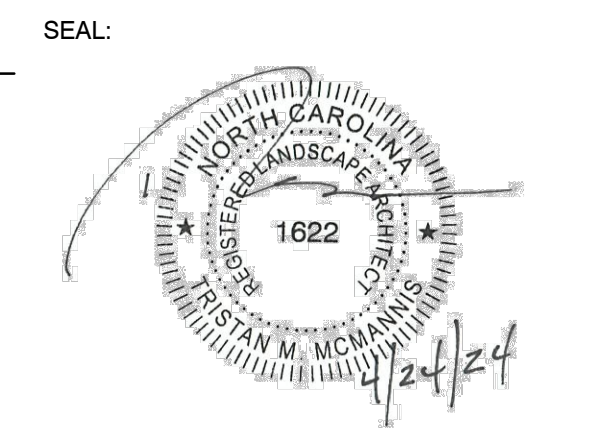
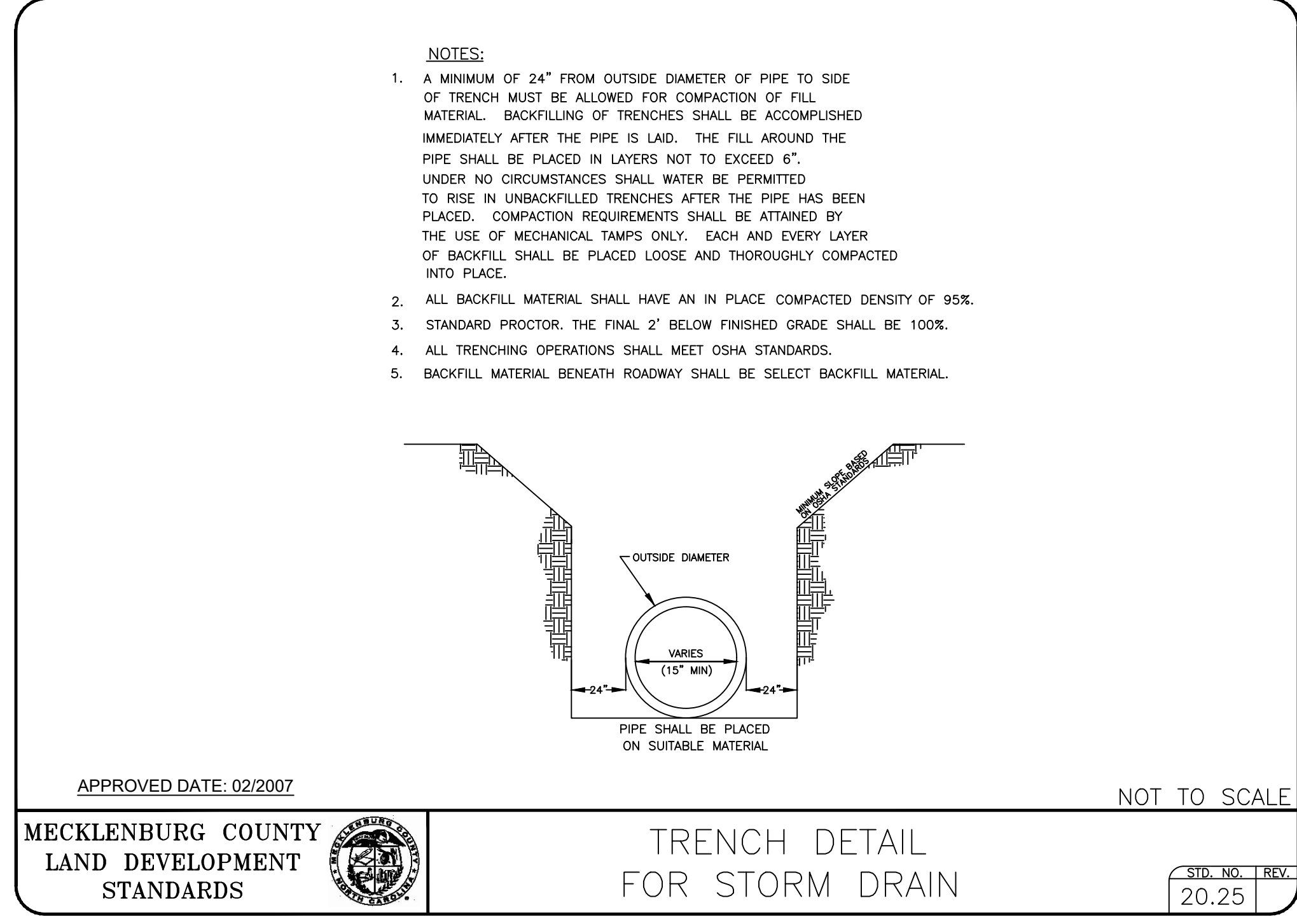
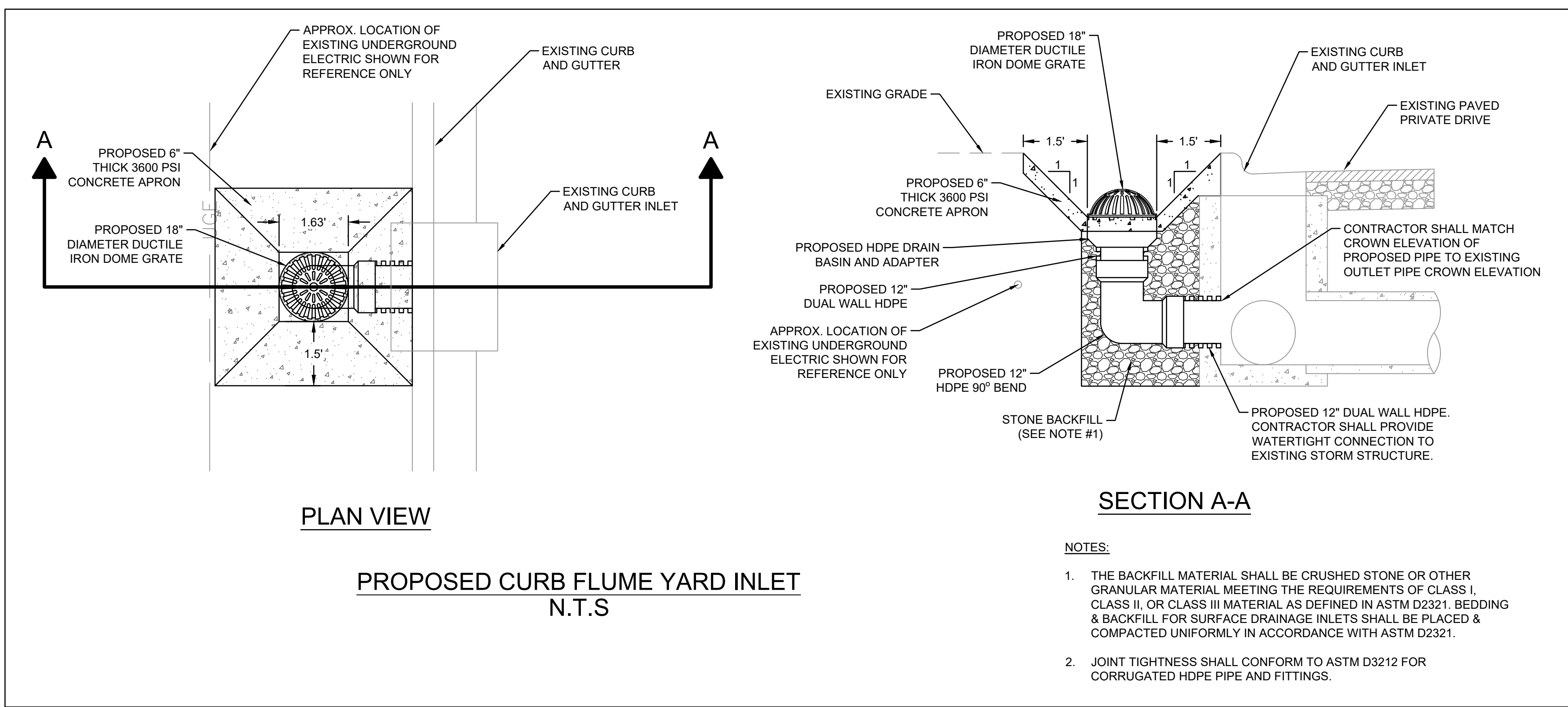
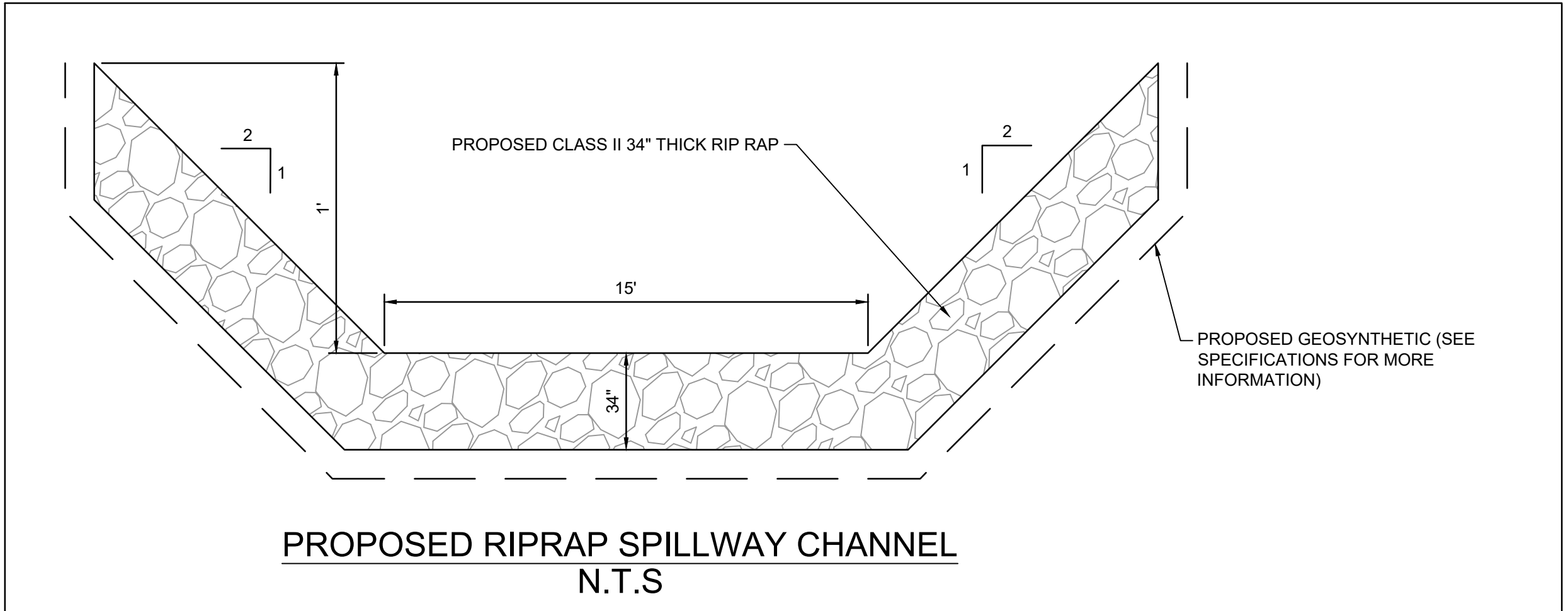
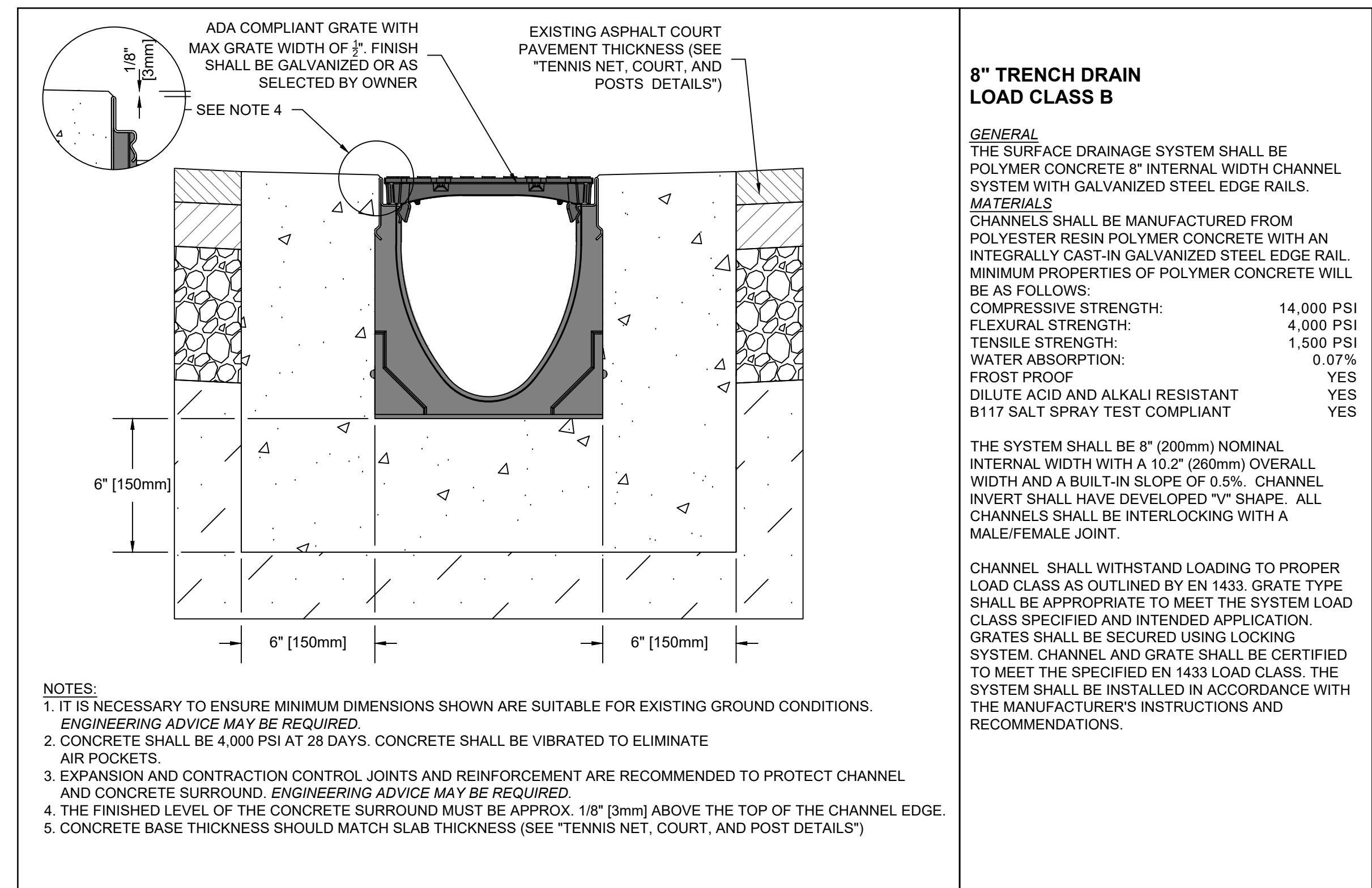
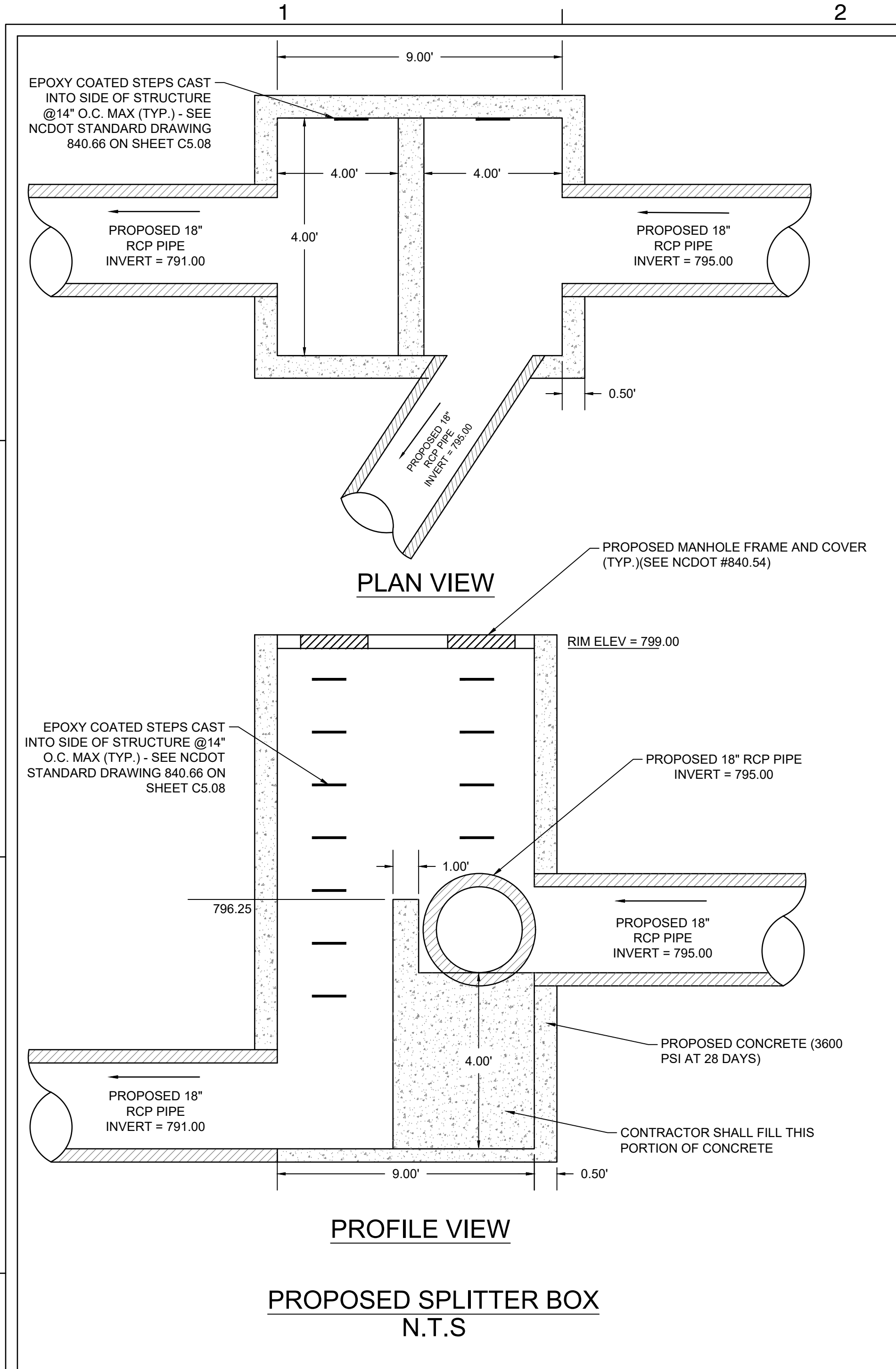
REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
APPROVED BY: TM
CHECKED BY: DJ
DATE: FEBRUARY 9, 2024
TITLE:

STORM DETAILS (SHEET 3 OF 4)

DEI PROJECT NO: 50168991
SHEET NO.
C5.09



SEAL:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

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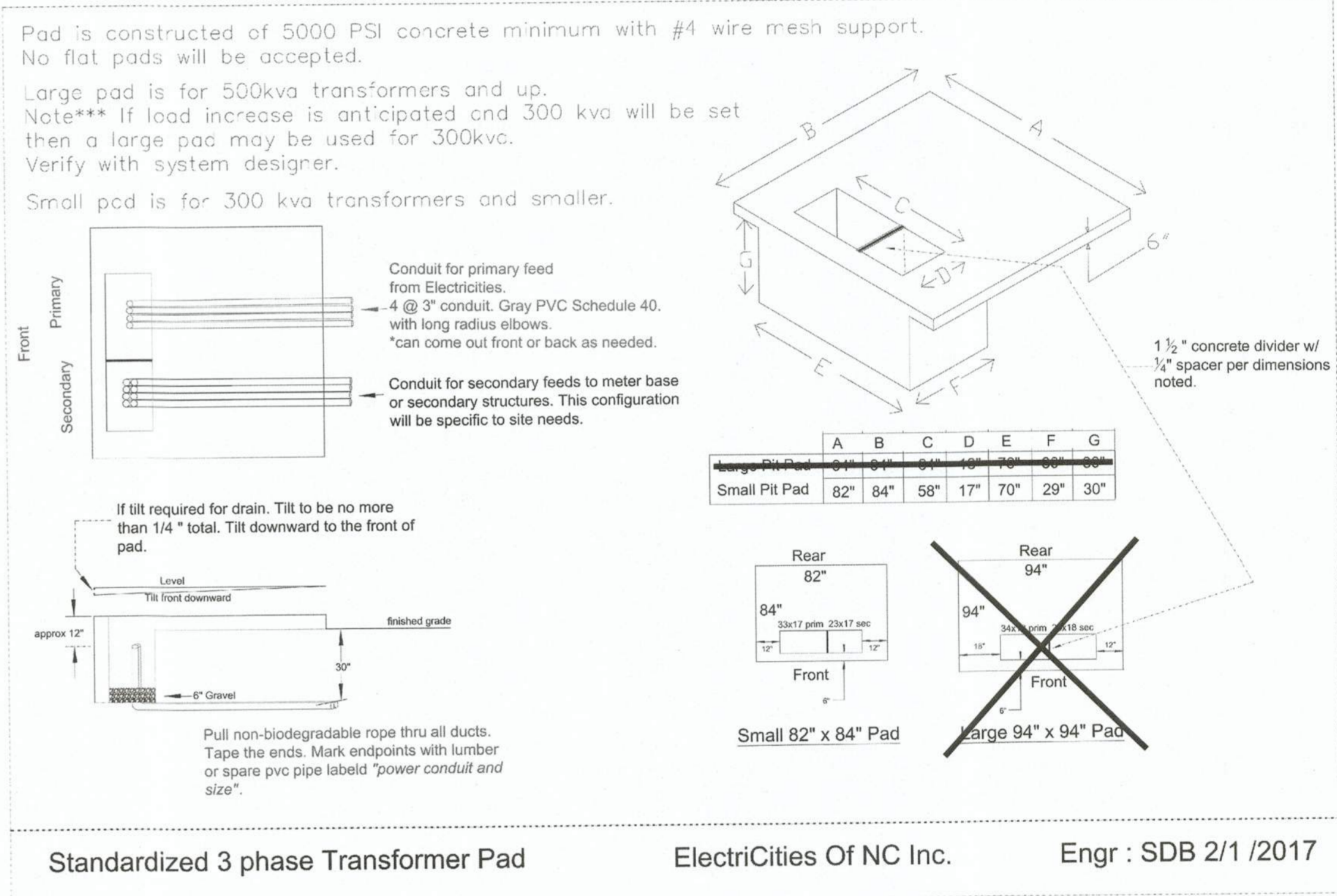
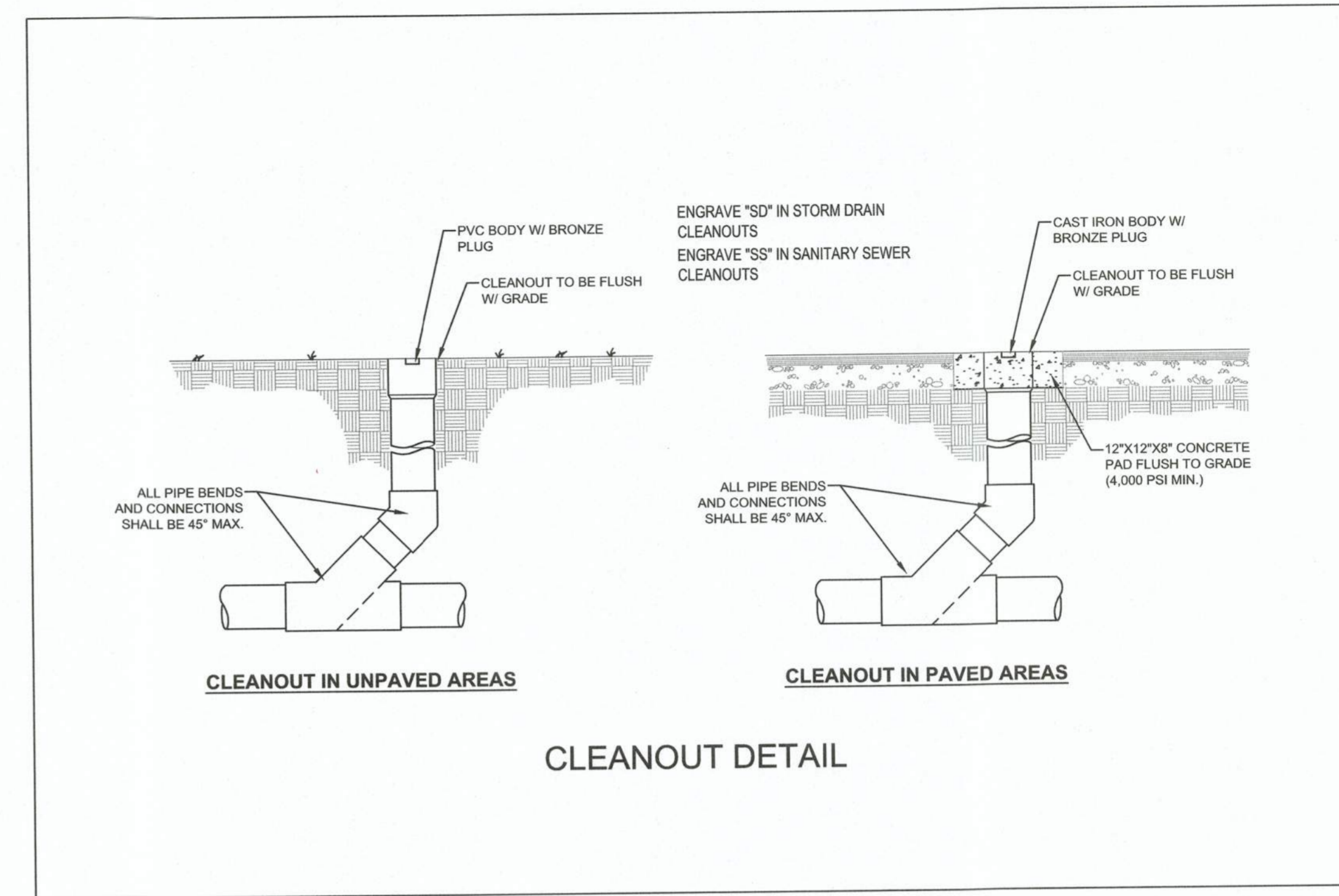
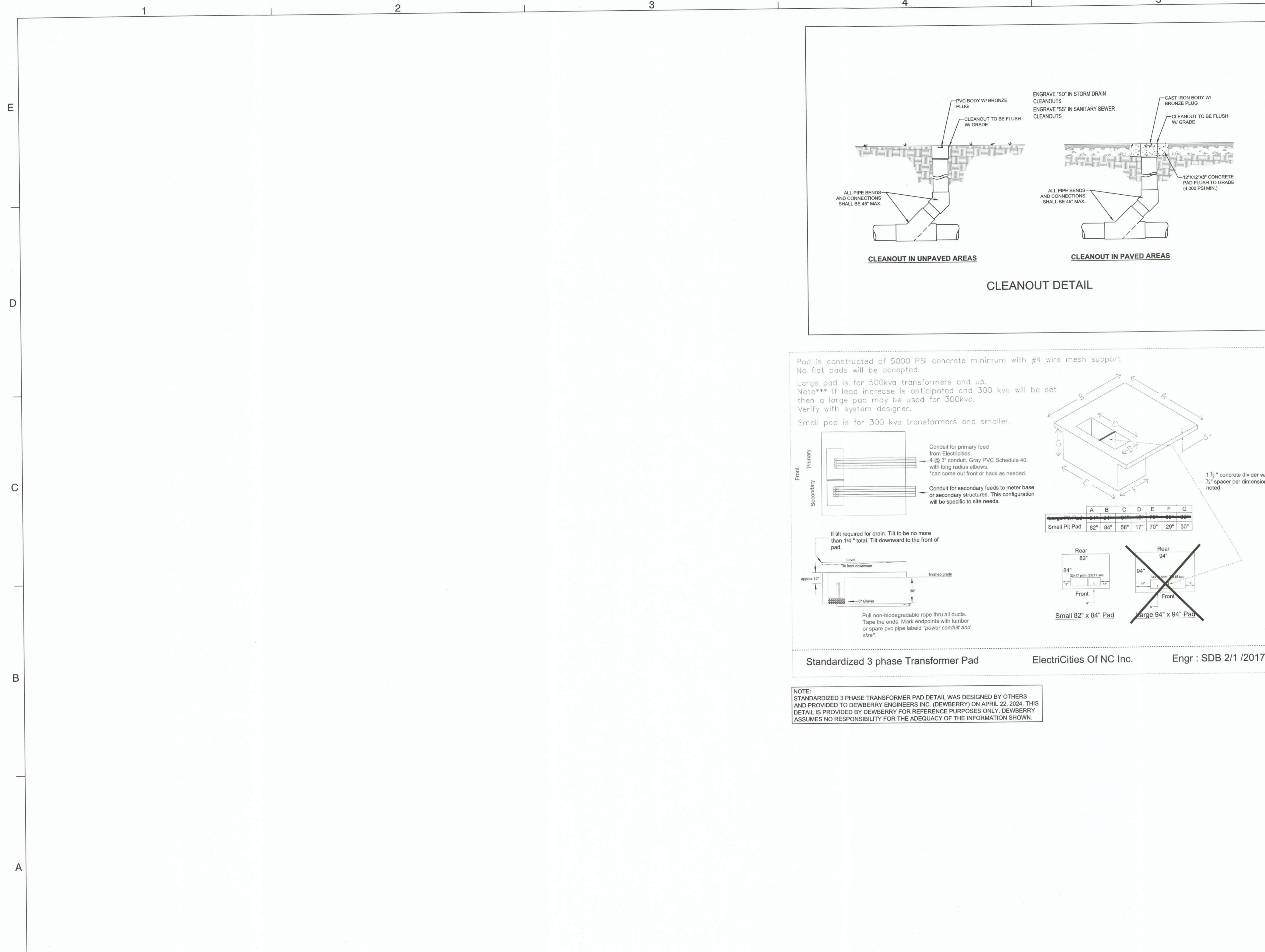
APPROVED BY: TM

CHECKED BY: DJ

DATE: FEBRUARY 9, 2024

TITLE:

STORM DETAILS
(SHEET 4 OF 4)

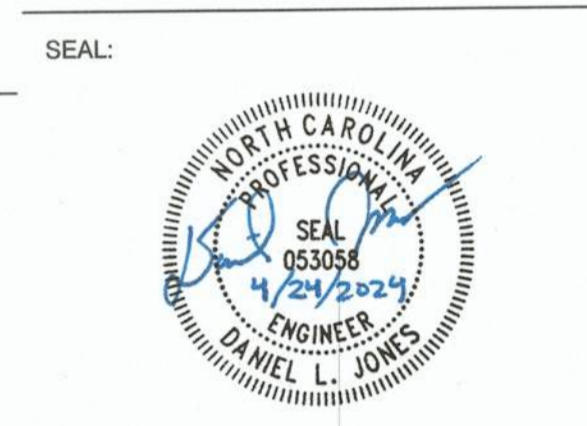


NOTE:
STANDARDIZED 3 PHASE TRANSFORMER PAD DETAIL WAS DESIGNED BY OTHERS AND PROVIDED TO DEWBERRY ENGINEERS INC. (DEWBERRY) ON APRIL 22, 2024. THIS DETAIL IS PROVIDED BY DEWBERRY FOR REFERENCE PURPOSES ONLY. DEWBERRY ASSUMES NO RESPONSIBILITY FOR THE ADEQUACY OF THE INFORMATION SHOWN.



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BAILEY ROAD PARK
EXPANSION - PHASE I
CONSTRUCTION DOCUMENTS
11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031



SEAL:
SCALE:

REVISIONS			
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DRAWN BY: BN
 APPROVED BY: DJ
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 DATE: FEBRUARY 9, 2024

TITLE: UTILITY DETAILS

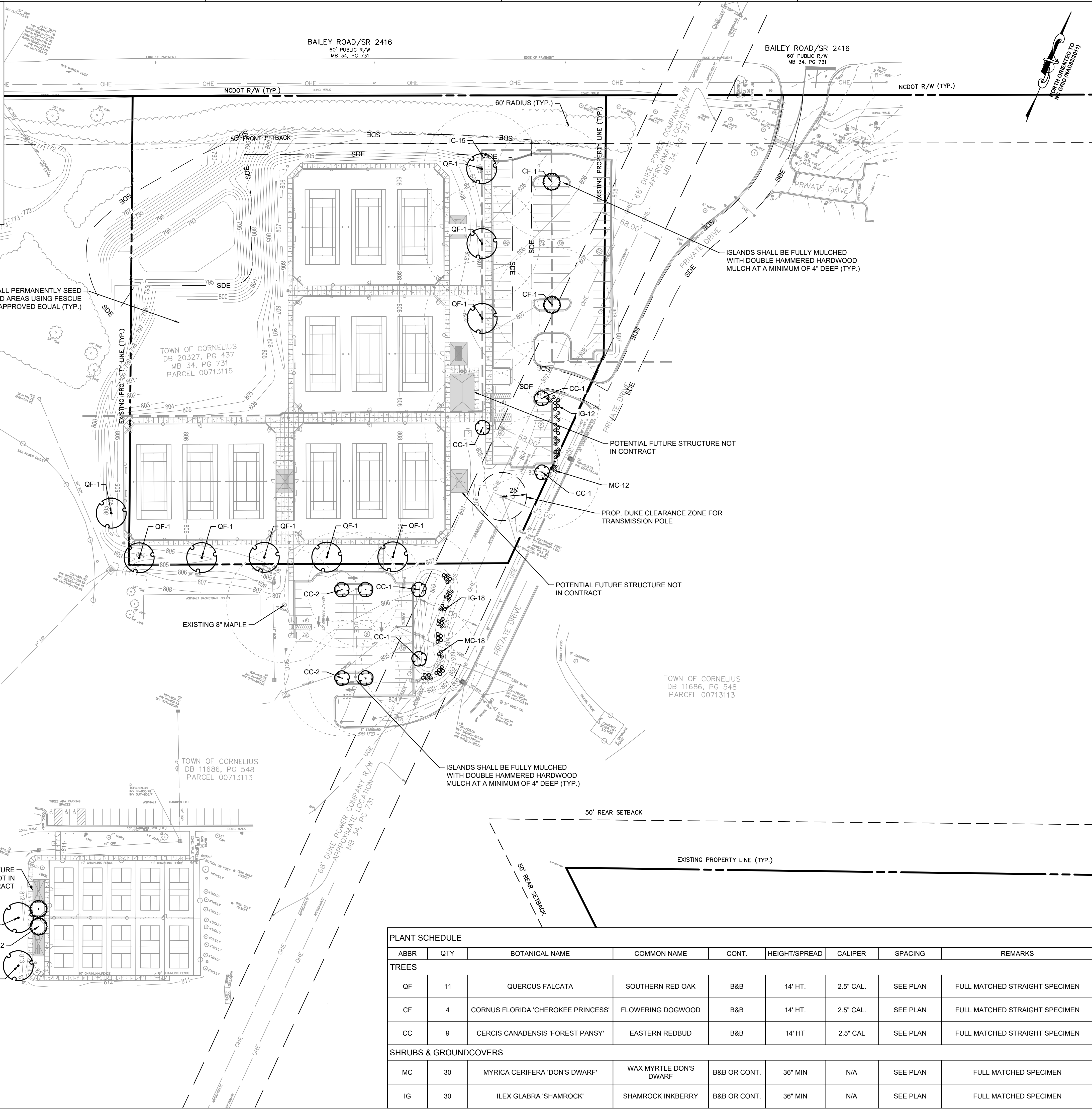
DEI PROJECT NO: 50188691

SHEET NO.

C5.11

LEGEND

- EXISTING PROPERTY LINE
- EXISTING FENCE
- EXISTING CURB AND GUTTER
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING TREE LINE
- EXISTING OVERHEAD POWER LINE
- EXISTING SANITARY SEWER MANHOLE
- EXISTING STORM MANHOLE
- EXISTING WATER VALVE
- EXISTING WATER METER
- EXISTING FIRE HYDRANT
- EXISTING DROP INLET
- EXISTING CURB INLET
- EXISTING ELECTRICAL TOWER
- EXISTING POWER EASEMENT
- PROPOSED CURB AND GUTTER
- PROPOSED CONCRETE
- PROPOSED FENCE



**TOWN OF CORNELIUS LAND DEVELOPMENT CODE SECTION 9.4.2.3
TYPE C INTERIOR AND PERIMETER PLANTINGS**

LOCATION & REQUIRED USAGE:
INTERIORS OF ALL PARKING AREAS

THIS TYPE FUNCTIONS AS A TREE CEILING OVER A PARKING AREA PROVIDING SHELTER FROM SUN AND RAIN. LARGE MATURING CANOPY TREES SHALL BE PLANTED IN A MANNER THAT PROVIDES SHADE FOR THE ENTIRE PARKING AREA AT MATURITY. TO THIS END, NO PARKING SPACE SHALL BE MORE THAN 60 FEET FROM THE BASE OF A CANOPY TREE. THE USE OF DIFFERING SPECIES AROUND THE PARKING AREA IS ENCOURAGED TO PROMOTE DIVERSITY IN THE OVERALL URBAN TREE CANOPY. THE USE OF EXISTING VEGETATION TO SATISFY THIS REQUIREMENT IS ENCOURAGED. SUPPLEMENTAL PLANTINGS MAY BE REQUIRED IN ADDITION TO NATIVE MATERIALS. THE ZONING ADMINISTRATOR OR DESIGNEE MAY, AT THEIR DISCRETION, REDUCE THE REQUIRED TYPE C BUFFER ON THE SUBJECT PROPERTY.

PARKING AREA PERIMETER (NON-STREET FRONT) PLANTINGS

- MINIMUM 10' WIDE BUFFER
- SHRUB PLANTINGS SHALL HAVE NO UNOBSTRUCTED OPENINGS WIDER THAN 4'. AT LEAST 75% OF THE REQUIRED SHRUBS SHALL BE EVERGREEN SPECIES LOCALLY ADAPTED TO THE AREA.

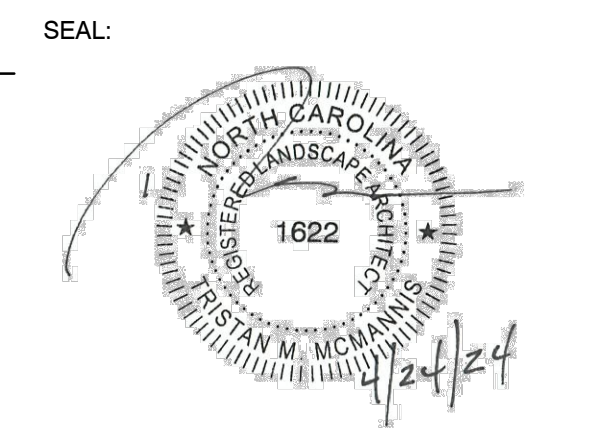
PLANT SCHEDULE									
ABBR	QTY	BOTANICAL NAME	COMMON NAME	CONT.	HEIGHT/SPREAD	CALIPER	SPACING	REMARKS	
TREES									
QF	11	QUERCUS FALCATA	SOUTHERN RED OAK	B&B	14' HT.	2.5" CAL.	SEE PLAN	FULL MATCHED STRAIGHT SPECIMEN	
CF	4	CORNUS FLORIDA 'CHEROKEE PRINCESS'	FLOWERING DOGWOOD	B&B	14' HT.	2.5" CAL.	SEE PLAN	FULL MATCHED STRAIGHT SPECIMEN	
CC	9	CERCIS CANADENSIS 'FOREST PANSY'	EASTERN REDBUD	B&B	14' HT	2.5" CAL	SEE PLAN	FULL MATCHED STRAIGHT SPECIMEN	
SHRUBS & GROUNDCOVERS									
MC	30	MYRICA CERIFERA 'DON'S DWARF'	WAX MYRTLE DON'S DWARF	B&B OR CONT.	36" MIN	N/A	SEE PLAN	FULL MATCHED SPECIMEN	
IG	30	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	B&B OR CONT.	36" MIN	N/A	SEE PLAN	FULL MATCHED SPECIMEN	

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**BAILEY ROAD PARK
EXPANSION - PHASE I**

CONSTRUCTION DOCUMENTS

11536 BAILEY ROAD
CORNELIUS, NORTH CAROLINA 28031



SCALE: 1" = 50'

REVISIONS			
NO.	DATE	BY	DESCRIPTION
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DRAWN BY: BN
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DATE: FEBRUARY 9, 2024
TITLE:

**LANDSCAPE
PLAN**

DEI PROJECT NO: 50168991
SHEET NO. **L1.01**

LANDSCAPE NOTES

TREE AND VEGETATION PROTECTION

- TREES AND VEGETATION ADJACENT TO THE ACTUAL WORK AREA OR BORROW AREA SHALL BE PROTECTED WITH TEMPORARY FENCING (CHAIN LINK FENCE FOR TREES; CONSTRUCTION SAFETY FENCE FOR VEGETATION) TO PRESERVE EXISTING ITEMS INDICATED TO REMAIN AND TO PREVENT DAMAGE TO PROPERTY.
- ANY TREES AND/OR SHRUBS DAMAGED DURING CONSTRUCTION SHALL BE REPLACED BY THE CONTRACTOR IN COORDINATION WITH THE OWNER.
- THE PARKING OF VEHICLES AND STORAGE OF ANY CONSTRUCTION EQUIPMENT OR MATERIALS SHALL NOT OCCUR UNDER THE DRIP LINE OF TREES.
- BACKFILL AND COMPACTION SHALL BE COMPLETED TO THE SATISFACTION OF THE OWNER.

MAINTENANCE SURETY REQUIRED

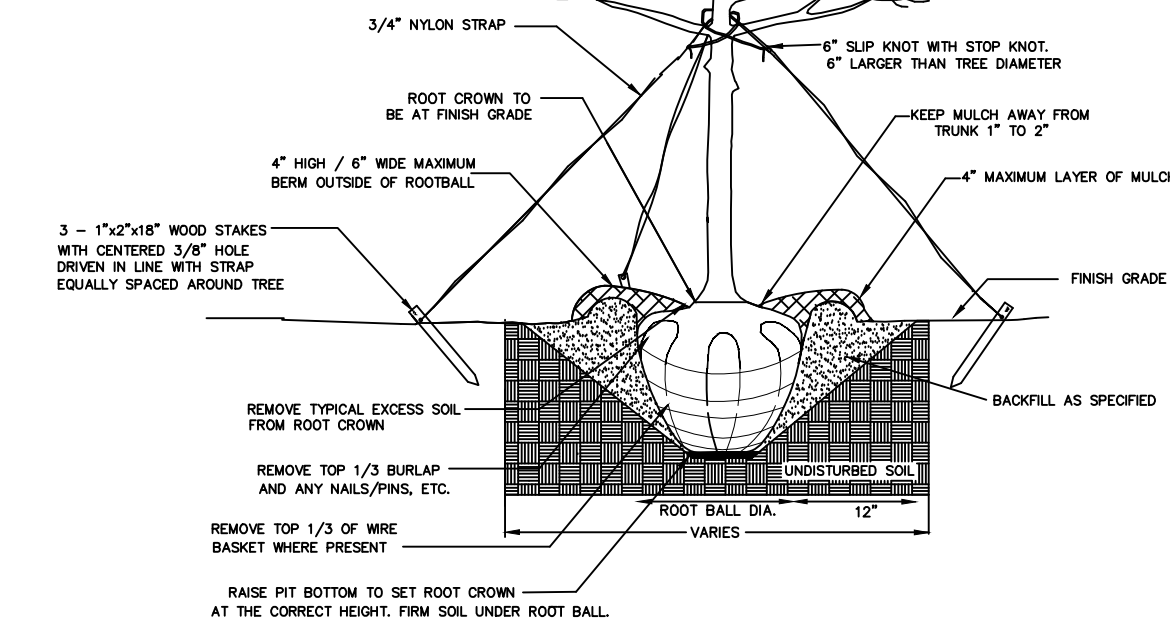
- DEVELOPERS SHALL ENTER INTO A MAINTENANCE SURETY AGREEMENT WITH THE TOWN OF CORNELIUS GUARANTEEING THE VIABILITY OF TREES AND SHRUBS PLANTED IN BUFFER YARDS FOR A PERIOD OF 1 YEAR FOLLOWING PLANTING. THE AMOUNT OF THE SURETY SHALL BE EQUAL TO 50% OF THE VALUE OF THE NEW TREES OR LANDSCAPE MATERIAL AND THEIR INSTALLATION. THE MAINTENANCE SURETY SHALL BE PROVIDED WHEN ALL OF THE REQUIRED TREES AND SHRUBS HAVE BEEN PLANTED.
- SIZE, QUALITY AND OVERALL HEALTH OF ALL PLANT MATERIAL USED SHALL CONFORM TO THE LATEST EDITION OF "USA STANDARDS FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- CONTRACTOR SHALL MULCH SHRUB BEDS AND TREES WITH DOUBLE HAMMERED HARDWOOD MULCH SPREAD TO APPROXIMATELY 4" DEPTH.
- ALL AREAS OUTSIDE OF PLANTING BEDS WITHIN LIMITS OF WORK/LIMITS OF DISTURBANCE TO BE PLANTED WITH REBEL II FESCUE SEED - SEE PLAN FOR DETAILS.
- CONTRACTOR IS RESPONSIBLE FOR ALL PLANTS SHOWN ON PLANS. QUANTITIES ARE FOR CONVENIENCE ONLY. IF THERE IS A DISCREPANCY BETWEEN THE PLAN AND PLANT SCHEDULE, PLAN SHALL PREVAIL.
- ALL CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM WITH MECKLENBURG COUNTY AND TOWN OF CORNELIUS STANDARDS.
- CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO INSTALLATION AND NOTIFY LANDSCAPE ARCHITECT IMMEDIATELY IF FIELD CONDITIONS WARRANT ADJUSTMENT OF PLANT MATERIALS.
- COORDINATE LANDSCAPE INSTALLATION WITH ANY LIGHTING/IRRIGATION CONSTRUCTION.
- LARGE MATURING TREES MUST BE A MINIMUM 25 FEET FROM OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. COORDINATE PLANTINGS WITH THE PROPER POWER COMPANY IF NECESSARY. IF TREES CONFLICT WITH POWER LINES OR SIGNS NOTIFY LANDSCAPE ARCHITECT TO RESOLVE BEFORE PLANTING.
- WITHIN PLANT BED AREAS CONTRACTOR IS RESPONSIBLE FOR THE VIABILITY OF ALL PLANT MATERIAL FOR A MIN. PERIOD OF 90 DAYS AFTER ACCEPTANCE FROM OWNER BUT MAY ALSO BE BONDED FOR WARRANTY BY LOCAL ORDINANCE OR DEVELOPMENT CONDITIONS IN THE EVENT THAT LANDSCAPE MAINTENANCE IS PROVIDED BY ANOTHER CONTRACTOR, 90 DAY WARRANTY SHALL BE TRANSFERABLE TO MAINTENANCE CONTRACTOR.
- CONTRACTOR SHALL REMOVE ALL LUMPS OF CLAY, STONES OVER 1" IN DIAMETER AND ALL COMPACTED SOIL OR CONSTRUCTION DEBRIS INCLUDING PAVEMENT, GRAVEL, ROOTS, LIMBS AND OTHER DELETERIOUS MATTER WHICH WOULD BE HARMFUL OR PREVENT PROPER ESTABLISHMENT AND/OR MAINTENANCE OF LAWN AND TREE PLANTING AREAS.
- CONTRACTOR SHALL REPAIR (RESEED OR SOD) ANY LAWN AREAS DAMAGED DUE TO PLANT MATERIAL INSTALLATION.
- CONTRACTOR SHALL COORDINATE ALL PLANTINGS IN ANY RIGHT-OF-WAY WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION AND LOCAL TRANSPORTATION DEPARTMENT AND RECEIVE ANY NECESSARY ENCROACHMENT AGREEMENTS.
- CONTRACTOR IS FULLY RESPONSIBLE FOR CONTACTING APPROPRIATE PARTIES AND ASSURING THAT ALL UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR PLACING BARRICADES, USING FLAG MEN, AND MAINTENANCE OF TRAFFIC AS NECESSARY TO INSURE PUBLIC SAFETY.
- ALL STRAPPING AND TOP 3/4 OF WIRE BASKET MUST BE CUT AWAY AND REMOVED FROM ROOT BALL PRIOR TO BACK FILLING PLANTING PITS. REMOVE TOP 3/4 OF BURLAP FROM BALL.
- CONTRACTOR RESPONSIBLE FOR VERIFYING ALL SPECIFICATIONS AND INSTALLATION REQUIREMENTS OF IRRIGATION, LIGHTING, AND VINYL FENCING TO ENSURE THAT PRODUCTS ARE INSTALLED PROPERLY AND PER MANUFACTURER REQUIREMENTS AND LOCAL AGENCY CODES & RESTRICTIONS.
- DEWBERRY ENGINEERS INC. IS NOT RESPONSIBLE FOR INSTALLATION OR DESIGN OF LIGHTING, FENCING, OR IRRIGATION. THE INSTALLATION REQUIREMENTS AND DESIGN IS THE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR RESPONSIBLE FOR LOCATING SIGHT DISTANCE AND SIGHT TRIANGLES PRIOR TO INSTALLATION OF PLANT MATERIALS, MONUMENTS, SIGNS, LIGHTING, AND/OR FENCES. CONTRACTOR SHALL INSTALL PLANT MATERIALS, MONUMENTS, SIGNS, LIGHTING, AND/OR FENCES OUTSIDE OF SIGHT TRIANGLES AND/OR SIGHT DISTANCE LINES WHERE PLANT MATERIAL HAS TO BE INSTALLED IN ROW. SHRUBS SHALL BE TRIMMED TO 36" HEIGHT, AND TREES SHALL BE LIMBED UP TO 72".
- CANOPY TREES SHALL BE MINIMUM OF 2" CALIPER AND HAVE A MINIMUM HEIGHT OF 10 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING. UNDERSTORY TREES SHALL BE A MINIMUM OF 2" CALIPER AND HAVE A MINIMUM HEIGHT OF 8 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING. EVERGREEN TREES SHALL BE A MINIMUM OF 3" CALIPER AND HAVE A MINIMUM OF 6 FT FROM THE GROUND SURFACE AT THE TIME OF PLANTING.

SOIL AMENDMENTS

ALL PLANTING BEDS/PLANTING PITS TO BE TILLED AT A MINIMUM OF 1'-0" DEPTH AND RECEIVE AN AMENDED TOPSOIL MIXTURE APPROPRIATE FOR GOOD PLANT GROWTH AND ADEQUATE DRAINAGE. SOIL MIXTURE SHALL BE COMPOSED OF A MINIMUM 20% GOOD GARDEN SOIL (3/4 PARTS GOOD GARDEN SOIL, 1/4 PART COMPOST OR ORGANIC MATTER, 1 POUND OF LIME PER CUBIC FOOT) OR RECOMMENDED SOIL AMENDMENTS AND SOIL COMPOSITE BASED UPON RECOMMENDATION FROM SOIL TESTS. A MINIMUM OF ONE SOIL TEST IS REQUIRED FOR THIS SITE.

NOTES:

- REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
- SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
- STAKING IS REQUIRED FOR ALL TREES IN R.O.W. OR UPON REQUEST OF ARBORIST.
- REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
- RESEED UNMULCHED, DISTURBED AREAS.



ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004)
 FOR EXAMPLE: CALIPER HEIGHT (RANGE) MAX. HEIGHT MIN. ROOT BALL DIA. MIN. ROOT BALL DEPTH

APPROVED DATE: 02/2007

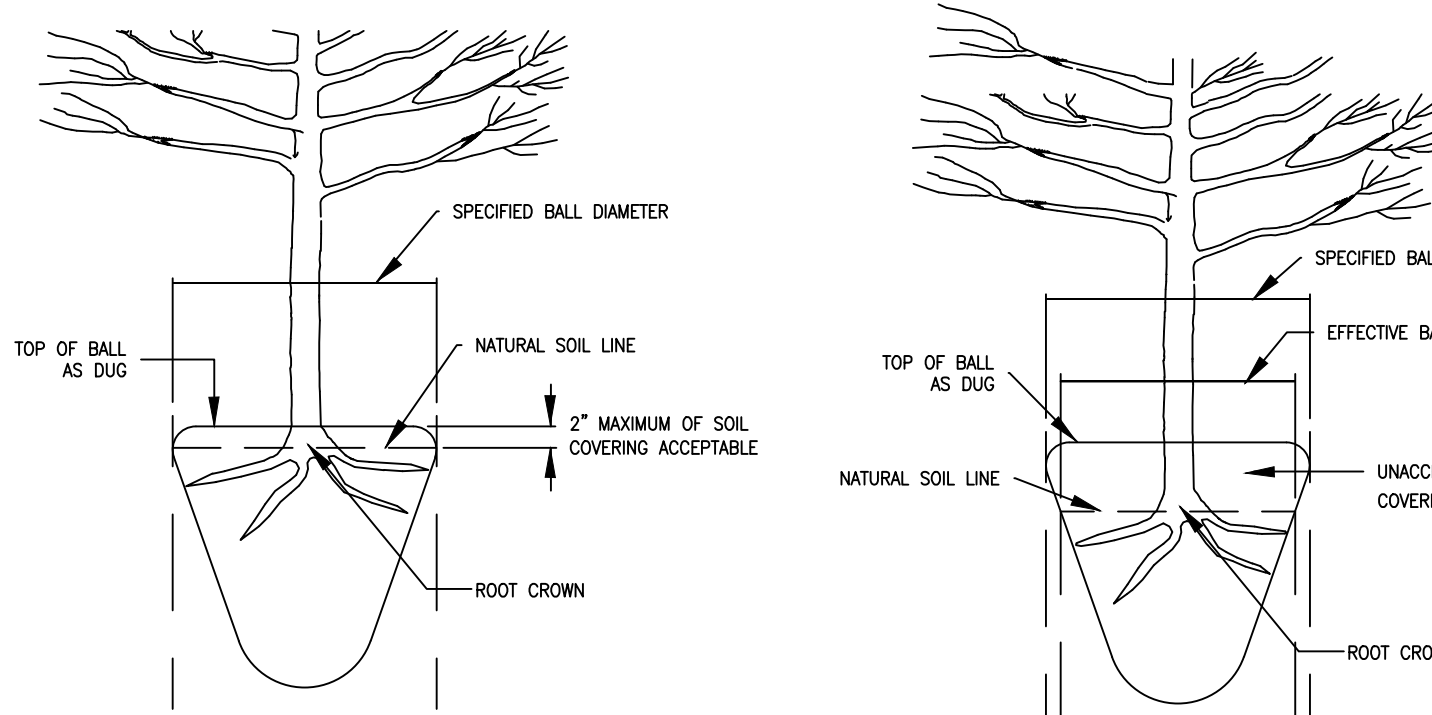
NOT TO SCALE

MECKLENBURG COUNTY
 LAND DEVELOPMENT
 STANDARDS



TREE PLANTING
 (FOR SINGLE AND MULTI-STEM TREES)

STD. NO. REV.
 40.01



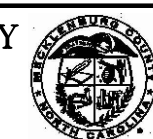
ACCEPTABLE CONDITION
 (AS DELIVERED)

UNACCEPTABLE CONDITION
 (AS DELIVERED)

NOTE:
 A ROOT COLLAR EXCAVATION FOR ALL TREES SPECIFIED WILL BE INSPECTED BY THE INSPECTOR TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF INSPECTOR DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.

APPROVED DATE: 02/2007

MECKLENBURG COUNTY
 LAND DEVELOPMENT
 STANDARDS

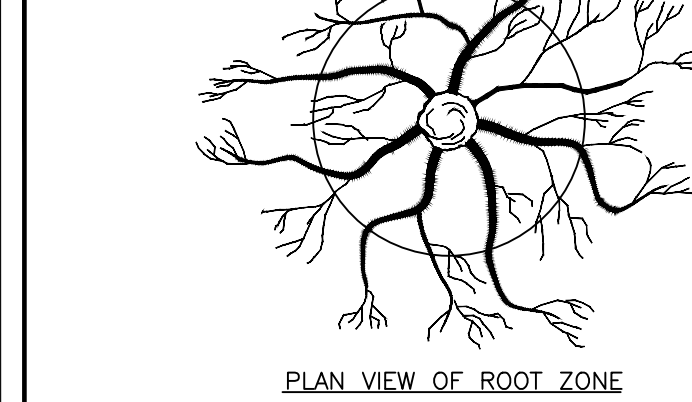


ROOT CROWN DEPTHS
 (TREE ROOT BALL CONDITION ON TREES FROM SUPPLIERS)

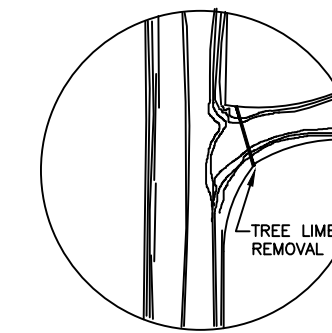
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NOTES:

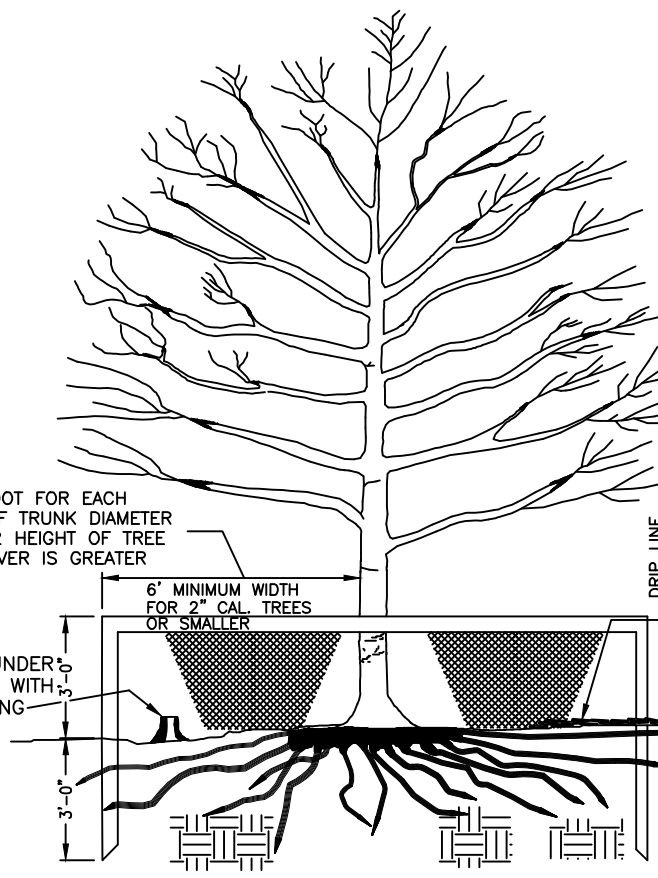
- REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
- LANDSCAPING PLANS SHALL SHOW THE LOCATIONS OF ALL TREE PROTECTION FENCES.
- REFER TO CITY OF CHARLOTTE LANDSCAPE CONSTRUCTION STANDARDS SECTION 01000 FOR GENERAL SPECIFICATION REGARDING TREE PROTECTION.



PLAN VIEW OF ROOT ZONE



FOR PRUNING SEE INTERNATIONAL SOCIETY OF ARBORICULTURE SPECS.
 DEAD TREES AND SCRUB OR UNDERGROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. NO CRUISING ALLOWED UNDER DRIP LINE.
 2"x4" STANDARDS + 1"x4" RAILS OR ORANGE SAFETY FENCING MAY BE USED.



ONE FOOT FOR EACH INCH OF TRUNK DIAMETER OR 1/2 HEIGHT OF TREE WHICHEVER IS GREATER.
 6" MINIMUM WIDTH FOR 2" CAL. TREES OR CALIPER.
 6" BARK MULCH. PLACE BARK MULCH AT AREAS NOT PROTECTED BY BARRIER.

APPROVED DATE: 02/2007

MECKLENBURG COUNTY
 LAND DEVELOPMENT
 STANDARDS



TREE PROTECTION

STD. NO. REV.
 40.02

PLANTINGS IN STREET RIGHT-OF-WAY

GENERAL NOTES

- TREE GRATES AND ASSOCIATED IRRIGATION SYSTEMS REQUIRED BY TOWN ARE TO COMPLY WITH THE TOWN ZONING REQUIREMENTS. ALL INSTALLATIONS OF IRRIGATION SYSTEMS WITHIN THE RIGHT-OF-WAY OF STATE MAINTAINED STREETS REQUIRE AN ENCROACHMENT AGREEMENT EXECUTED THROUGH NCDOT. TREES INSTALLED WITHIN TOWN MAINTAINED RIGHT-OF-WAY LIMITS SHALL BE PER TOWN REQUIREMENTS. TREES INSTALLED WITHIN THE RIGHT OF WAY OF STATE MAINTAINED STREETS REQUIRE A PLANTING PERMIT FROM NCDOT. NCDOT'S REVIEW AND APPROVAL PROCESS MAY INCLUDE ADDITIONAL REQUIREMENTS.
- A DRAINAGE SYSTEM IS REQUIRED FOR ALL IRRIGATED PLANTING AREAS LOCATED ADJACENT TO STREETS. ALL IRRIGATION/DRAINAGE SYSTEMS REQUIRE AN ENCROACHMENT AGREEMENT EXECUTED BY NCDOT FOR STATE-MAINTAINED ROADS. CONTACT NCDOT FOR ADDITIONAL INFORMATION REGARDING COST, SUBMITTAL AND LIABILITY INSURANCE COVERAGE REQUIREMENTS.
- LANDSCAPE INSPECTIONS MAY INCLUDE THE FOLLOWING:
 SUBDRAINAGE INSPECTION
 TREE PIT/Well OR PLANTING STRIP INSPECTION
 SOIL MIX APPROVALS/INSPECTIONS
 TREE APPROVALS/INSPECTIONS
 TREE PLANTING INSPECTION
 IRRIGATION INSPECTION
 FINAL WALK THROUGH

ALL INSPECTIONS SHALL BE PERFORMED BY TOWN AND/OR COUNTY.

APPROVED DATE: 02/2007

MECKLENBURG COUNTY
 LAND DEVELOPMENT
 STANDARDS



TREE PLANTING-NOTES
 (DRAINAGE AND INSPECTION)

STD. NO. REV.
 40.10

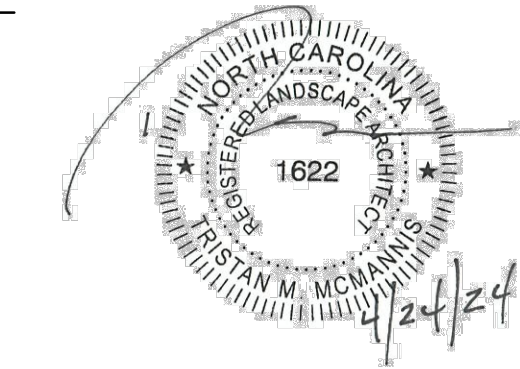


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 www.dewberry.com
 NCBELS #F-0829
 NCBOLA #C-478

**BAILEY ROAD PARK
 EXPANSION - PHASE I**

CONSTRUCTION DOCUMENTS
 11536 BAILEY ROAD
 CORNELIUS, NORTH CAROLINA 28031

SEAL:



SEAL:

SCALE:

REVISIONS

NO.	DATE	BY	DESCRIPTION
1	04/24/2024	BN/DB	AGENCY COMMENTS

DRAWN BY: BN
 APPROVED BY: TM
 CHECKED BY: DJ
 DATE: FEBRUARY 9, 2024

TITLE
LANDSCAPE NOTES AND DETAILS

DEI PROJECT NO: 50168691

SHEET NO.

L1.02