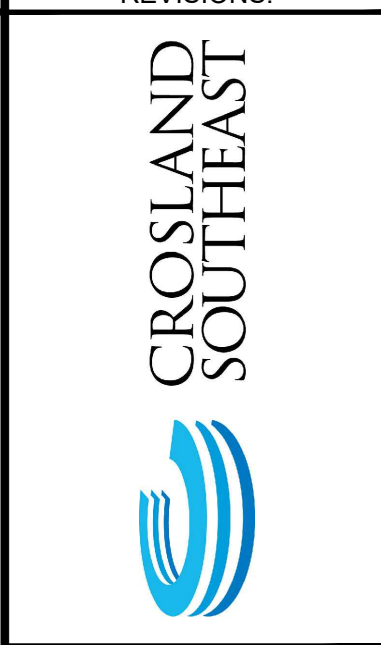


# SITE DEVELOPMENT PLAN / CONSTRUCTION INFRASTRUCTURE DRAWINGS FOR PUBLIX AT WALLBROOK / WALLBROOK ROADWAY IMPROVEMENTS

Town of Rolesville Project Numbers: SDP 23-05 & CID 23-01

Main St / US 401 Business - Rolesville - Wake County - North Carolina

#	DATE	DESCRIPTION
1	12/26/23	ISSUED FOR CONSTRUCTION
2	11/14/2023	SDP 23-05 / CID 23-01 COMBINED REVIEW



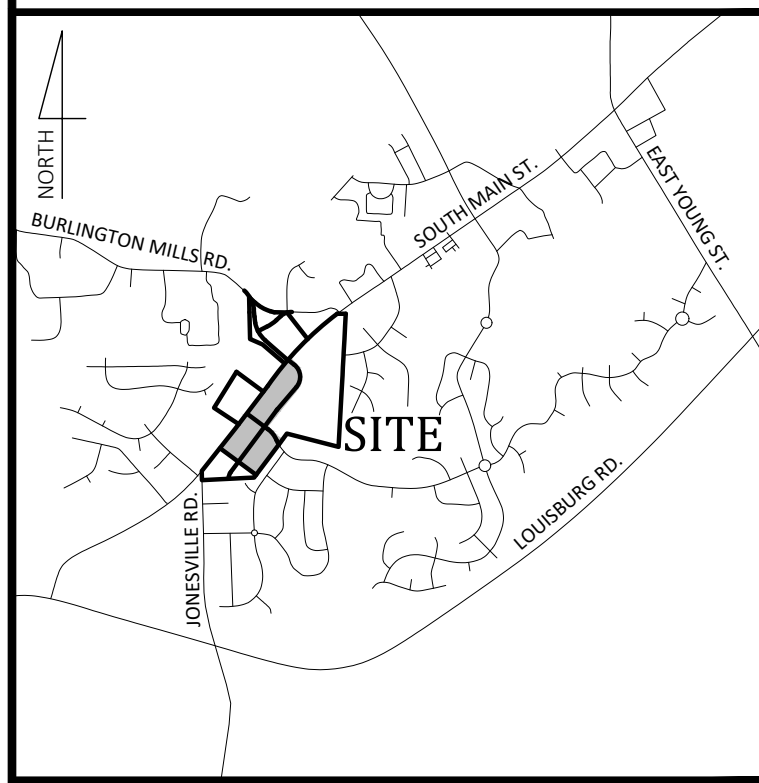
**COVER**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

NC License: P1129  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Charlotte, NC 28208  
 (754) 558-0888  
 www.arkconsultinggroup.com

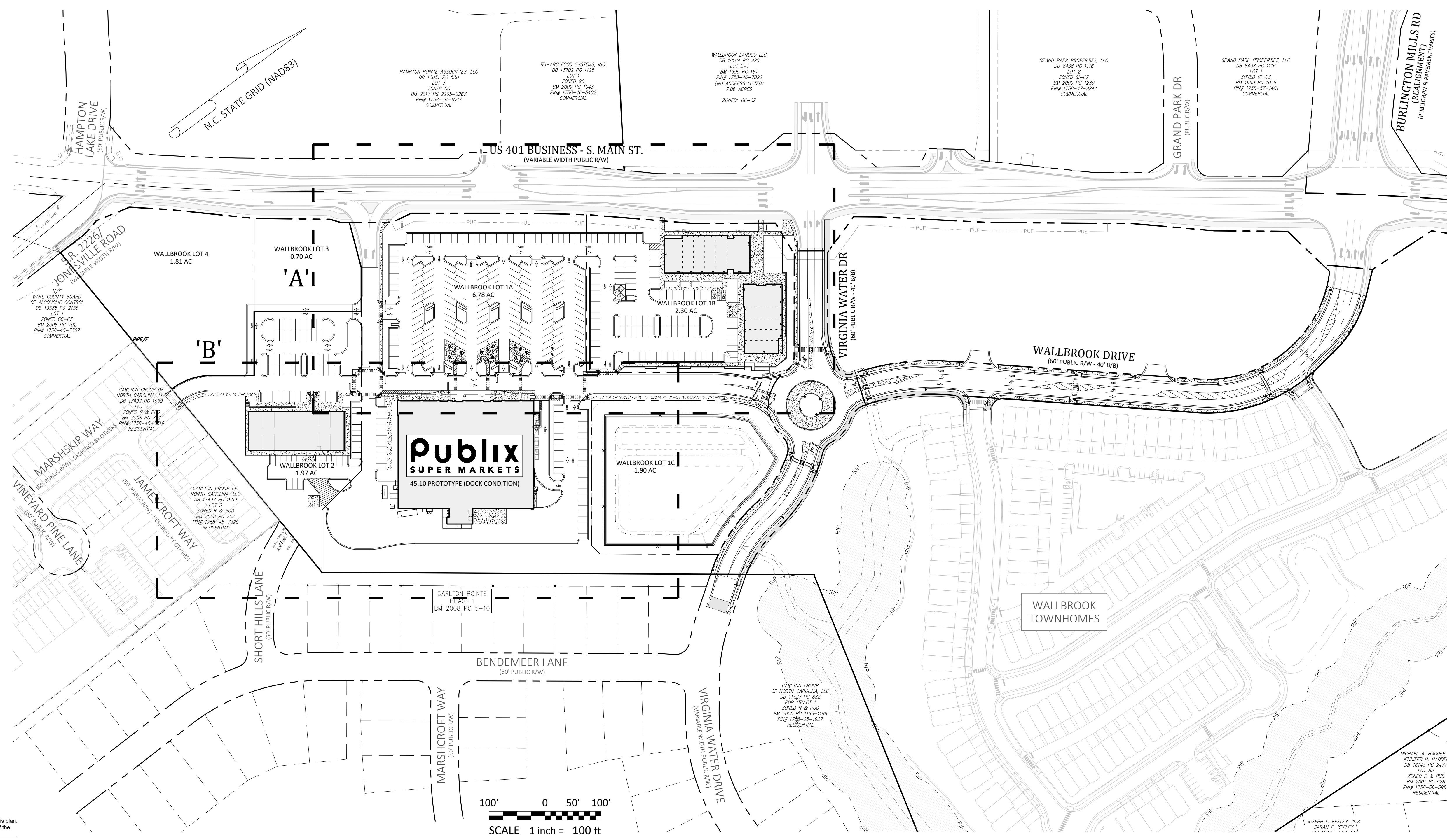
10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C0.01**  
 CID SDP



Vicinity Map  
 NOT TO SCALE



**ATTENTION CONTRACTORS**  
 The Construction Contractor responsible for the extension for water, sewer, and/or gas, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-5340 at least twenty-four hours prior to beginning any of their construction.  
 Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.  
 Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Job site, or any other violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5381

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074

The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5380(P)

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Official below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval  
 City of Raleigh Review Official

**Survey Note:**  
 BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON WAS PREPARED BY JOHNSON, MIRMIRAN & THOMPSON, AS SHOWN ON DRAWING ENTITLED "ALTA/NSPS LAND TITLE SURVEY FOR WALLBROOK LANDCO, LLC", DATED MARCH 25, 2020.

TOPOGRAPHIC INFORMATION SHOWN AT THE CONNECTION TO MARSHSKIP WAY WAS PREPARED BY CAWTHORNE, MOSS & PANCIERA, PC PROFESSIONAL LAND SURVEYORS, AS SHOWN ON PRELIMINARY DRAWING ENTITLED "TOPOGRAPHIC SURVEY FOR WALLBROOK LANDSCO, LLC".

JMT & CMP SURVEYS ARE ATTACHED TO THIS DRAWING FOR REFERENCE.

TREES WITHIN PRESERVATION AREAS LOCATED BY STEWART, INC. BETWEEN 6/27/22 & 7/1/22.

**TOWN OF ROLESVILLE DEVELOPMENT APPLICATIONS**

<b>SUP 20-02</b>	SPECIAL USE PERMIT
<b>ANX 21-06</b>	ANNEXATION
<b>PR 21-04 REV</b>	PRELIMINARY SUBDIVISION PLAT (REVISED)
<b>FSP 23-09</b>	INTERMEDIATE SUBDIVISION PLAT
<b>CID 23-01</b>	CONSTRUCTION INFRASTRUCTURE DRAWING (CURRENT APPLICATION)
<b>SDP 23-05</b>	SITE DEVELOPMENT PLAN (CURRENT APPLICATION)

**EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT**

**APPROVED**

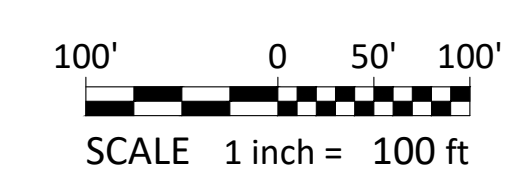
EROSION CONTROL  SEC-105438-2023  
 STORMWATER MGMT.  SWF-105582-2023  
 FLOOD STUDY  S-  
 DATE \_\_\_\_\_

ENVIRONMENTAL CONSULTANT SIGNATURE

**Rolesville**  
 Planning

SDP-23-05 & CID-23-01 / Publix at Wallbrook & Wallbrook Roadway Improvements  
**APPROVED**  
 Date: November 14, 2023

Town of Rolesville Planning Department



SHEET INDEX			ISSUED <input type="radio"/>		REVISSED <input checked="" type="radio"/>	
ToR PERMIT REVIEW	#	TITLE	DATE	DESCRIPTION	DATE	DESCRIPTION
<b>CIVIL</b>						
CID	SDP C0.01	COVER				
CID	SDP C0.02	SHEET INDEX				
	SDP C0.03	LEGEND AND NOTES				
CID	SDP C0.04	EXISTING CONDITIONS AND DEMOLITION PLAN				
CID	SDP C1.00	EROSION CONTROL NOTES				
CID	SDP C1.01	EROSION CONTROL DETAILS				
	SDP C1.10	EROSION CONTROL PLAN - PHASE 1				
CID	C1.11	EROSION CONTROL PLAN - PHASE 1				
	SDP C1.20	EROSION CONTROL PLAN - PHASE 2				
CID	C1.21	EROSION CONTROL PLAN - PHASE 2				
	SDP C1.30	EROSION CONTROL PLAN - PHASE 3				
CID	C1.31	EROSION CONTROL PLAN - PHASE 3				
	SDP C2.00	SITE PLAN - OVERALL				
	SDP C2.10	SITE PLAN 'A'				
	SDP C2.20	SITE PLAN 'B'				
	SDP C2.30	TEMPORARY SITE ACCESS PLAN				
	SDP C2.31	TRUCK ACCESS PLAN				
	SDP C2.32	DRIVE-THRU ACCESS PLAN				
CID	C2.40	ROADWAY - LAYOUT PLAN				
CID	C2.41	ROADWAY - STRIPING AND SIGNAGE PLAN				
	SDP C3.00	UTILITY PLAN - OVERALL				
	SDP C3.10	UTILITY PLAN 'A'				
	SDP C3.20	UTILITY PLAN 'B'				
CID	C3.30	PLAN-PROFILE - SANITARY SEWER RELOCATION				
	SDP C3.31	PLAN-PROFILE - PRIVATE SEWER - CORNER SHOPS				
	SDP C3.32	PLAN-PROFILE - PRIVATE SEWER - PUBLIX				
	SDP C3.33	PLAN-PROFILE - PRIVATE SEWER - SHOP BLDG				
	SDP C4.00	GRADING & DRAINAGE PLAN - OVERALL				
	SDP C4.10	GRADING & DRAINAGE PLAN 'A'				
	SDP C4.11	GRADING & DRAINAGE PLAN 'A' - ENLARGEMENT				
	SDP C4.20	GRADING & DRAINAGE PLAN 'B'				
	SDP C4.21	GRADING & DRAINAGE PLAN - OUTPARCELS				
	SDP C4.22	PLAN-PROFILE - RETAINING WALL - CORNER SHOPS				
	SDP C4.31	SITE ACCESSIBILITY PLAN 'A'				
	SDP C4.32	SITE ACCESSIBILITY PLAN 'B'				
	SDP C4.33	SITE ACCESSIBILITY PLAN 'C'				
CID	C5.00	PLAN-PROFILE - VIRGINIA WATER DRIVE				
CID	C5.01	PLAN-PROFILE - WALLBROOK DRIVE				
CID	C5.02	PLAN-PROFILE - WALLBROOK DRIVE				
CID	C5.10	GRADING PLAN - LOT 5				
CID	C6.00	SCM DETAIL - PLAN				
CID	C6.01	SCM PLANTING PLAN				
CID	C6.10	SCM DETAILS				
CID	C6.20	SCM SECTION & RETAINING WALL PLAN-PROFILE				
CID	SDP C7.01	MISC. DETAILS				
CID	SDP C7.02	MISC. DETAILS				
CID	SDP C7.03	MISC. DETAILS				
CID	SDP C7.04	MISC. DETAILS				
CID	SDP C7.05	MISC. DETAILS				
CID	SDP C7.06	MISC. DETAILS				

SEPARATE REVISION/SUBMITTAL HISTORY FOR  
SDP 23-05 (ARK DWG No. D-1219-CD) AND  
CID 23-01 (ARK DWG No. D-1219-RDY)  
PROVIDED FOR REFERENCE

#	DATE	DESCRIPTION
7	22-SEP-23	REVISED PER REVIEW COMMENTS - SDP SUBMITTAL #2
6	18-AUG-23	REVISED PER REVIEW COMMENTS - SDP SUBMITTAL #2
5	19-JUL-23	CART CORRAL DETAIL REVISED
4	29-JUN-23	REVISED PER REVIEW COMMENTS
3	23-JUN-23	REVISED PER REVIEW COMMENTS SDP PERMIT REVIEW SUBMITTAL #1
2	24-APR-23	REVISED PER REVIEW COMMENTS
1	10-FEB-23	SHIFTED BUILDING LOCATION PER OWNER REQUEST CID PERMIT REVIEW SUBMITTAL #1

CID	#	DATE	DESCRIPTION
4A	12-OCT-23	REVISED PER REVIEW COMMENTS	
4	20-SEP-23	REVISED PER REVIEW COMMENTS - CID SUBMITTAL #4	
3	30-AUG-23	REVISED PER REVIEW COMMENTS - CID SUBMITTAL #3	
2	21-JUN-23	REVISED PER REVIEW COMMENTS - CID SUBMITTAL #2	
1	1-FEB-23	ISSUED FOR INITIAL REVIEW	

SHEET INDEX			ISSUED <input type="radio"/>		REVISSED <input checked="" type="radio"/>	
ToR PERMIT REVIEW	#	TITLE	DATE	DESCRIPTION	DATE	DESCRIPTION
<b>LANDSCAPING</b>						
	SDP L0.00	DRAWING INDEX & GENERAL NOTES				
	SDP L2.00	SITE PLAN - OVERALL				
	SDP L2.11	SITE PLAN - NORTHEAST				
	SDP L2.14	SITE PLAN - BLDG 4				
	SDP L3.10	MATERIAL & FURNISHING SCHEDULE				
	SDP L3.11	MATERIAL & FURNISHING PLAN - NORTHEAST				
	SDP L3.13	MATERIAL & FURNISHING PLAN - BLDG 4				
	SDP L3.90	SITE DETAILS				
	SDP L3.91	SITE DETAILS				
	SDP L3.92	SITE DETAILS				
	SDP L3.93	SITE DETAILS				
	SDP L3.94	SITE DETAILS				
	SDP L4.11	LAYOUT PLAN - NORTHEAST				
	SDP L4.14	LAYOUT PLAN - BLDG 4				
	SDP L7.00	PLANTING PLAN - OVERALL				
	SDP L7.01	PLANTING SCHEDULE - OVERALL				
	SDP L7.10	PLANTING PLAN				
	SDP L7.11	PLANTING PLAN				
	SDP L7.12	PLANTING PLAN				
	SDP L7.13	PLANTING PLAN				
	SDP L7.14	PLANTING PLAN				
	SDP L7.91	PLANTING DETAILS				
	SDP L7.92	PLANTING DETAILS				
	SDP L9.00	SITE LIGHTING - OVERALL				
	SDP L9.11	SITE LIGHTING - NORTHEAST				
	SDP L9.14	SITE LIGHTING - BLDG 4				
	SDP L9.91	SITE LIGHTING - DETAILS				
	SDP L9.92	SITE LIGHTING - DETAILS				
	SDP IR1.10	IRRIGATION - SHEET LAYOUT PLAN				
	SDP IR1.11	IRRIGATION - SCHEDULES AND NOTES				
	SDP IR1.12	ENHANCED IRRIGATION PLAN - NORTHWEST				
	SDP IR1.13	ENHANCED IRRIGATION PLAN - NORTHEAST				
	SDP IR1.14	ENHANCED IRRIGATION PLAN - SOUTHWEST				
	SDP IR1.15	ENHANCED IRRIGATION PLAN - SOUTHEAST				
	SDP IR1.16	ENHANCED IRRIGATION PLAN - SOUTHWEST				
	SDP IR1.17	IRRIGATION DETAILS				
	SDP IR1.18	IRRIGATION DETAILS				
	SDP S0.00	STRUCTURAL - GENERAL NOTES, ABBREVIATIONS, AND LEGEND				
	SDP S0.01	STRUCTURAL - STATEMENT OF SPECIAL INSPECTIONS				
	SDP S1.00	STRUCTURAL - FOUNDATION PLAN				
	SDP S3.03	STRUCTURAL - FOUNDATION DETAILS				
	SDP S3.12	STRUCTURAL - FOUNDATION DETAILS				
<b>REFERENCE</b>						
	REF	Survey - Johnson, Mirmiran & Thompson (3 Sheets)				
	REF	Survey - Cawthorne, Moss & Panciera, PC Professional Land Surveyors				
	REF	Retaining Wall Design - NV5 Engineers and Consultants, Inc. (13 Sheets)				
	REF	Concrete Retaining Wall Design - NV5 Engineers and Consultants, Inc. (3 Sheets)				
	REF	Site Lighting Plan - Hiscutt & Associates / Savant Engineering, PLLC (4 Sheets)				
	REF	Dumpster Enclosure & Details - Hiscutt & Associates (2 Sheets)				
	REF	Building Elevations - Hiscutt & Associates (5 Sheets)				
	REF	Tree Preservation Plan - PR-21-04 REVISED (1 Sheet)				



Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C0.02**

CID SDP



**SHEET INDEX**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

#	DATE	DESCRIPTION
2	14-NOV-23	ISSUED FOR CONSTRUCTION
1	26-OCT-23	SDP 23-05 / CID 23-01 COMBINED REVIEW

Legend

Table with columns EXISTING and PROPOSED. Lists various symbols and their corresponding descriptions for utility lines, structures, and features like FOUND MONUMENT, SET IRON PIN, SANITARY SEWER FORCE MAIN, etc.

Construction Sequence:

- 1. NOTIFY NCDQG-DEMLR A MINIMUM OF 10 DAYS PRIOR TO INITIATING THE FOLLOWING SEQUENCE, PER NCG01.
2. EROSION AND SEDIMENT CONTROL (E&S) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES OCCUR.
3. CALL WAKE COUNTY WATERSHED MANAGER JEEVAN NEUPANE AT (919) 819-8907 A MINIMUM OF 48 HOURS IN ADVANCE TO SCHEDULE A PRE-CONSTRUCTION MEETING AND FOR NOTIFICATION OF PROJECT START UP.

Erosion Control Provisions:

- 1. NO PERSON MAY INITIATE A LAND DISTURBING ACTIVITY BEFORE NOTIFYING WAKE COUNTY WATERSHED MANAGEMENT OF THE DATE THAT THE LAND DISTURBING ACTIVITY WILL BEGIN.
2. LAND DISTURBING ACTIVITY BEYOND THAT REQUIRED TO INSTALL APPROPRIATE EROSION CONTROL MAY NOT PROCEED UNTIL EROSION CONTROL MEASURES ARE INSPECTED AND APPROVED BY THE ENGINEER.
3. SCHEDULING OF A PRE-CONSTRUCTION CONFERENCE WITH THE WAKE COUNTY WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) PRIOR TO INITIATING LAND DISTURBING ACTIVITIES IS REQUIRED.

General Notes:

- 1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:
- ALTA/NSPS LAND TITLE SURVEY, PREPARED BY JOHNSON, MIRMIRAN & THOMPSON FOR C4 INVESTMENTS, LLC, LAST REVISED
- "REPORT OF SUBSURFACE EXPLORATION AND GEOTECHNICAL ENGINEERING EVALUATION" PREPARED BY NV5 ENGINEERS AND CONSULTANTS, INC., DATED FEBRUARY 1, 2022

CORPUD Standard Utility Notes:

- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK)
2. UTILITY SEPARATION REQUIREMENTS:
a) A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER.

Demolition Notes:

- 1. CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE-CALL CENTER (NC 811) BY DIALING 811 OR 1-800-632-4949 AT LEAST 72 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY OR DIGGING AND HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO EXCAVATING OR TRENCHING.
2. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL LOCAL AND STATE PERMITS REQUIRED FOR DEMOLITION WORK.
3. THE CONTRACTOR SHALL INDEMNIFY AND HOLD HARMLESS THE OWNER AND/OR ENGINEER FOR ANY AND ALL INJURIES AND/OR DAMAGES TO PERSONNEL, EQUIPMENT AND/OR EXISTING FACILITIES IN THE DEMOLITION AND CONSTRUCTION DESCRIBED IN THE PLANS AND SPECIFICATIONS.

Wake County Basin Removal Sequence:

- 1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
2. CONTACT NCDQG - RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAYS PRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDQG-DEMLR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU ONSITE. THE EMAIL SHOULD INCLUDE: E&S JURISDICTION: WAKE COUNTY, WAKE COUNTY PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING: A) REASON FOR CONVERSION, B) BASIN (M, C) DEWATERING METHOD, AND D) ALL OTHER NECESSARY INFO FROM PART II, SECTION G, ITEM 4 OF THE NCG01. KEEP EMAIL FOR YOUR NPDES MONITORING DOCUMENTATION

Site Data

Table with columns for PIN NUMBERS, REAL ESTATE ID, CURRENT ZONING, DEVELOPMENT STANDARDS, DISTURBED ACREAGE, WATERSHED, RIVER BASIN, CURRENT USE, PROPOSED USE(S), CURRENT IMPERVIOUS, ACREAGE IN SDP 23-05, BUILDING HEIGHT, GROSS FLOOR AREA, PROPOSED IMPERVIOUS, OPEN SPACE CALCULATIONS, PARKING CALCULATIONS, PLANTING CALCULATIONS, PUBLIC SEWER, PRIVATE SEWER, ACREAGE IN CID 23-01, ACREAGE IN PUBLIC R/W, PROPOSED IMPERVIOUS IN R/W, PROPOSED IMPERVIOUS LOT 5, PUBLIC STREET, PUBLIC SEWER, PUBLIC WATER.

References:

Table with columns TAX PARCEL NUMBERS, DEED REFERENCES, and their corresponding values.

Developer

Wallbrook PLX, LLC
121 W Trade St
Charlotte, NC 28202
(919) 610-7875
Contact: Michael Isaac
misac@csere.com

Owner

Wallbrook Landco, LLC
3 Keel St, Ste 2
Wrightsville Beach, NC 28480

Table with columns for project information including project name, location, and dates.



LEGEND AND NOTES
PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS
Town of Rolesville Project No. SDP 23-05 & CID 23-01
Rolesville, Wake County, North Carolina



ATTENTION CONTRACTORS
The Contractor responsible for the extension for water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least twenty four hours prior to beginning any of their construction.
Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.
Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobfile, or any other violation of City of Raleigh Standards will result in a Fine and Possible Exclosure from future work in the City of Raleigh.

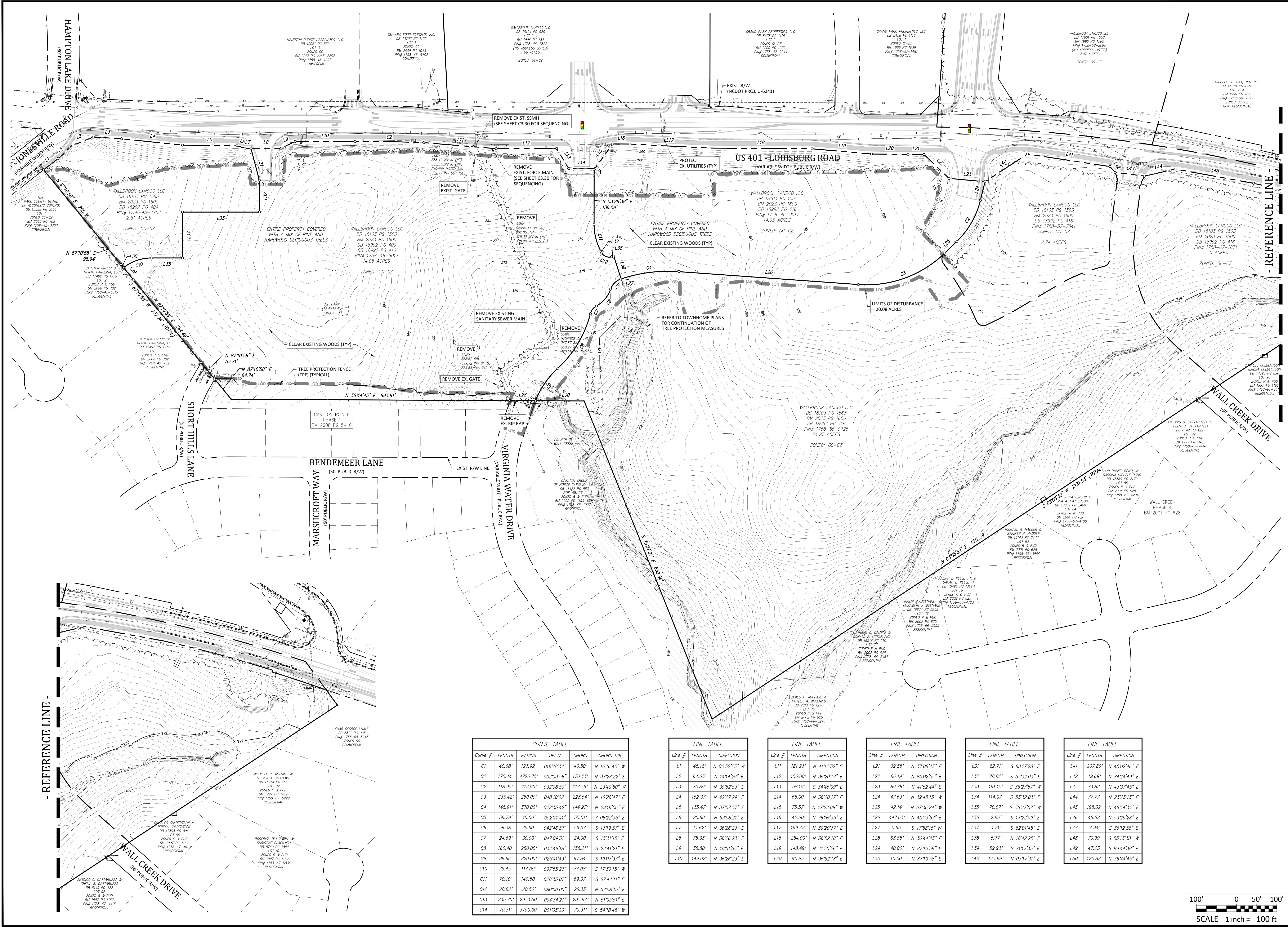
SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)
The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #... S-5381
The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #... W-4074
The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit #... S-5380(P)
CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all local, State, and Federal Rules and Regulations.
Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will plan a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.
City of Raleigh Development Approval
City of Raleigh Review Officer

Special Use Plan (SUP 20-02) Conditions:

- 1. USES AND MAXIMUM DENSITIES ARE LIMITED TO THOSE SHOWN ON EACH SITE OF THE CONCEPT PLAN. ANY RESIDENTIAL UNITS NOT DESIGNATED ON THE RESIDENTIAL - TOWNHOMES TRACT MAY BE USED ON ANY OF THE TRACTS LABELED FOR NON-RESIDENTIAL USE.
2. PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR THE FIRST RESIDENTIAL UNIT IN THE EAST SITE AS SHOWN ON THE CONCEPT PLAN, DEVELOPER WILL COMPLETE THE EXTENSION OF WALL CREEK DRIVE TO MAIN STREET.
3. IF APPLICANT SEEKS A CERTIFICATE OF OCCUPANCY PRIOR TO THE COMMENCEMENT OF WORK ON THE LAPP GRANT PROJECT IMPROVEMENTS, THEN PRIOR TO THE ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY OF THE FIRST RESIDENTIAL UNIT IN THE EAST SITE AND IN ACCORDANCE WITH THE "WALLBROOK DEVELOPMENT TIA ADDENDUM - RESIDENTIAL-OHIO PLAZA" DATED FEBRUARY 13, 2020, DEVELOPER WILL CONSTRUCT A 100' NORTHBOUND RIGHT TURN LANE AND A 100' SOUTHBOUND LEFT TURN LANE AT THE INTERSECTION OF WALL CREEK DRIVE (AS EXTENDED) AND MAIN STREET. IF WORK ON THE LAPP GRANT PROJECT IMPROVEMENTS IS COMMENCED BEFORE THE FIRST CERTIFICATE OF OCCUPANCY IS REQUESTED, DEVELOPER IS NOT REQUIRED TO CONSTRUCT THE AFOREMENTIONED IMPROVEMENTS.

C0.03
CID SDP



REVISIONS:

#	DATE	DESCRIPTION
1	12-06-23	ISSUED FOR CONSTRUCTION
2	10-26-23	SDP 23-05 / CID 23-01 COMBINED REVIEW



**EXISTING CONDITIONS AND DEMOLITION PLAN**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

NC License: PL 129

**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS

2755-B Charles Blvd.  
 #251  
 Lenoir, NC 28540  
 (757) 558-0888  
 www.arkconsultinggroup.com

10/26/2023

Project Manager: BCF  
 Drawn by: DLC  
 Checked by: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C0.04**  
 CID

**CURVE TABLE**

Curve #	LENGTH	RADIUS	DELTA	CHORD	CHORD DIR
C1	40.68'	123.92'	018°48'34"	40.50'	N 107°04'40" W
C2	170.44'	4726.75'	002°03'58"	170.43'	N 37°28'22" E
C3	235.42'	280.00'	048°10'22"	228.54'	N 16°28'47" E
C4	145.91'	370.00'	022°35'42"	144.97'	N 29°16'06" E
C5	36.79'	40.00'	052°41'41"	35.51'	S 08°22'35" E
C6	56.38'	75.50'	042°46'57"	55.07'	S 13°19'57" E
C7	24.69'	30.00'	047°09'31"	24.00'	S 15°31'15" E
C8	160.40'	280.00'	032°49'18"	158.21'	S 22°41'21" E
C9	98.66'	220.00'	025°41'43"	97.84'	S 19°07'33" E
C10	75.45'	114.00'	037°55'23"	74.08'	S 17°30'15" W
C11	70.10'	140.50'	028°35'07"	69.37'	S 67°44'11" E
C12	28.62'	20.50'	080°00'00"	26.35'	N 57°58'15" E
C13	235.70'	2953.50'	004°34'21"	235.64'	N 51°05'51" E
C14	70.31'	3700.00'	001°05'20"	70.31'	S 54°18'48" W

**LINE TABLE**

Line #	LENGTH	DIRECTION
L1	45.18'	N 00°52'23" W
L2	64.65'	N 147°42'29" E
L3	70.80'	N 39°52'53" E
L4	152.37'	N 42°27'29" E
L5	135.47'	N 37°07'57" E
L6	20.88'	N 53°08'21" E
L7	14.62'	N 36°26'23" E
L8	75.38'	N 36°26'23" E
L9	38.80'	N 10°51'55" E
L10	149.02'	N 36°26'23" E

**LINE TABLE**

Line #	LENGTH	DIRECTION
L11	181.23'	N 41°12'32" E
L12	150.00'	N 80°02'05" E
L13	58.10'	S 84°45'09" E
L14	65.00'	N 36°20'17" E
L15	75.57'	N 07°36'24" W
L16	42.60'	N 36°56'35" E
L17	199.42'	N 39°20'37" E
L18	254.00'	N 36°52'18" E
L19	148.49'	N 41°30'26" E
L20	90.93'	N 36°52'18" E

**LINE TABLE**

Line #	LENGTH	DIRECTION
L21	39.55'	N 37°06'45" E
L22	86.19'	N 80°02'05" E
L23	89.78'	N 41°52'44" E
L24	47.63'	N 39°45'15" W
L25	42.14'	N 07°36'24" W
L26	447.63'	N 40°33'57" E
L27	0.95'	S 17°58'15" W
L28	63.55'	N 36°44'45" E
L29	40.00'	N 87°10'58" E
L30	10.00'	N 87°10'58" E

**LINE TABLE**

Line #	LENGTH	DIRECTION
L31	82.71'	S 68°17'28" E
L32	78.82'	S 53°32'03" E
L33	191.15'	S 36°27'57" W
L34	114.07'	S 53°32'03" E
L35	76.67'	S 36°27'57" W
L36	2.86'	S 17°22'09" E
L37	4.21'	S 82°01'45" E
L38	5.77'	N 18°42'25" E
L39	59.93'	S 71°17'35" E
L40	125.89'	N 03°17'31" E

**LINE TABLE**

Line #	LENGTH	DIRECTION
L41	207.86'	N 45°02'46" E
L42	19.69'	N 84°24'49" E
L43	73.82'	N 43°37'45" E
L44	77.77'	N 23°25'13" E
L45	198.32'	N 46°44'34" E
L46	46.62'	N 53°29'28" E
L47	4.34'	S 36°12'58" E
L48	70.99'	S 55°13'38" W
L49	47.23'	S 89°44'38" E
L50	120.82'	N 36°44'45" E



**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. -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
(d) Slopes 3:1 to 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
(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"> <li>Temporary grass seed covered with straw or other mulches and tackifiers</li> <li>Hydroseeding</li> <li>Roller erosion control products with or without temporary grass seed</li> <li>Appropriately applied straw or other mulch</li> <li>plastic sheeting</li> </ul>	<ul style="list-style-type: none"> <li>Permanent grass seed covered with straw or other mulches and tackifiers</li> <li>Geotextile fabrics such as permanent soil reinforcement matting</li> <li>Hydroseeding</li> <li>Shrubs or other permanent plantings covered with mulch</li> <li>Uniform and evenly distributed ground cover sufficient to restrain erosion</li> <li>Structural methods such as concrete, asphalt, or retaining walls</li> <li>Roller erosion control products with grass seed</li> </ul>

**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**

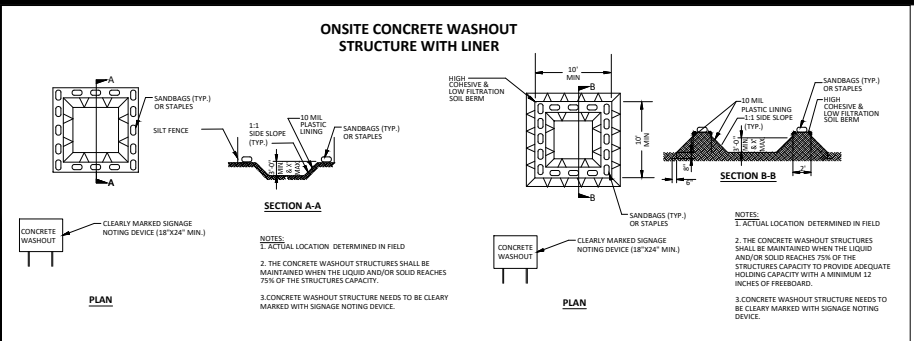
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
- Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
- Contain liquid wastes in a controlled area.
- Containment must be labeled, 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 loadings 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 loadings 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.

**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.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained and good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual day rainfall information is available, record the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero". The permittee may use another rain-measuring device approved by the Division.
(2) EESC Measures	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the measures inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Indication of whether the measures were operating properly. 5. Description of maintenance needs for the measure. 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration. 5. Indication of visible sediment leaving the site. 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits. 2. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	If the stream or wetland has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence, and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter EESC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

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

**PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**

**SECTION B: RECORDKEEPING**

**1. EESC Plan Documentation**

The approved EESC plan as well as any approved deviation shall be kept on the site. The approved EESC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the EESC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each EESC Measure has been installed and does not significantly deviate from the location, dimensions and relative elevations shown on the approved EESC Plan.	Initial and date each EESC Measure on a copy of the approved EESC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(b) A phase of grading has been completed.	Initial and date a copy of the approved EESC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved EESC Plan.	Initial and date a copy of the approved EESC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all EESC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to EESC Measures.	Initial and date a copy of the approved EESC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

**2. Additional Documentation**

In addition to the EESC Plan documents above, the following items shall be kept on the site and available for agency 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:

- This general permit as well as the certificate of coverage, after it is received.
- Records of inspections made during the previous 30 days. 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.
- All data used to complete the Notice of Intent and older 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:

- Visible sediment deposition in a stream or wetland.
- 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).
- 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.
- Anticipated noncompliance and unanticipated bypasses.
- Noncompliance with the conditions of this permit that may endanger health or the environment.

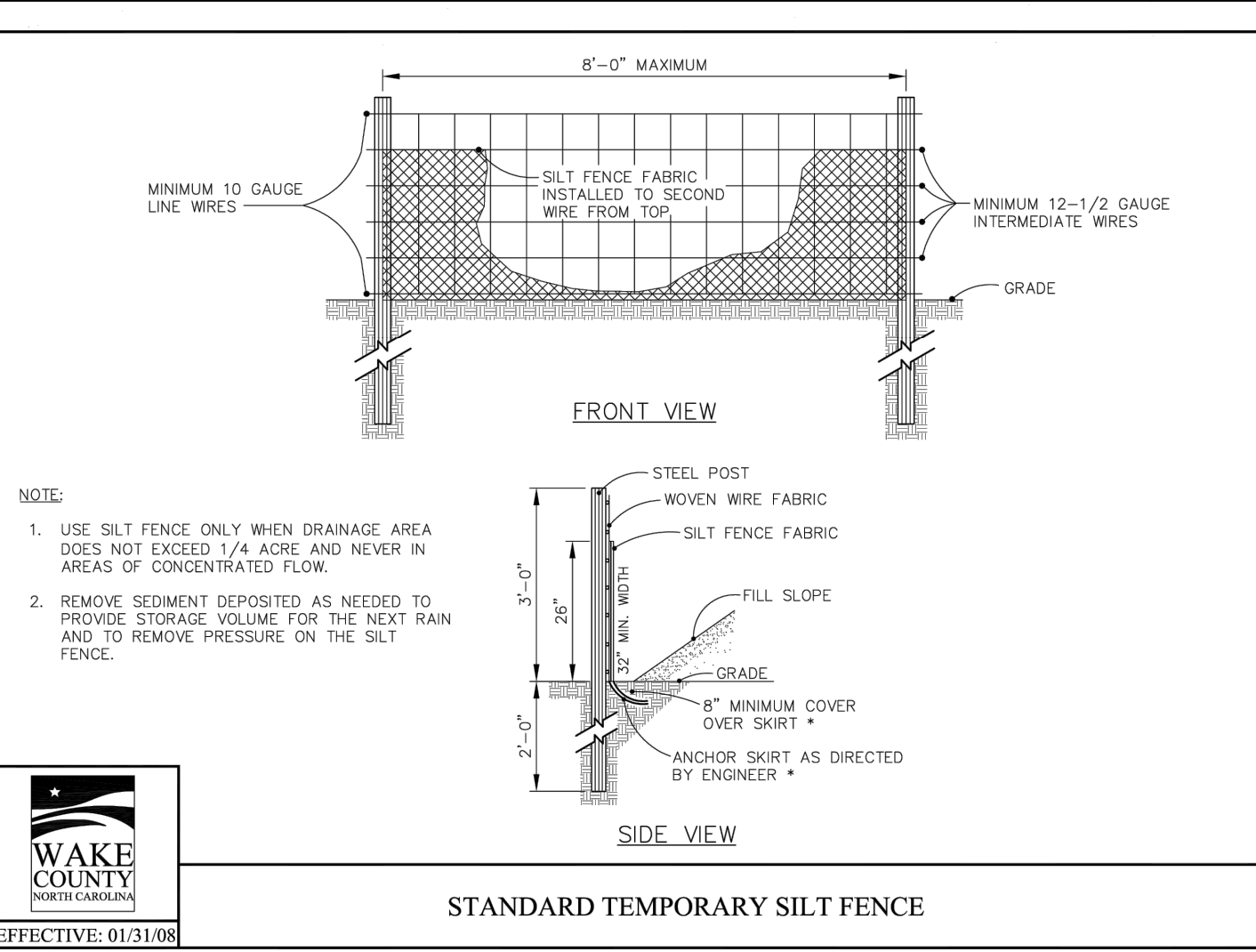
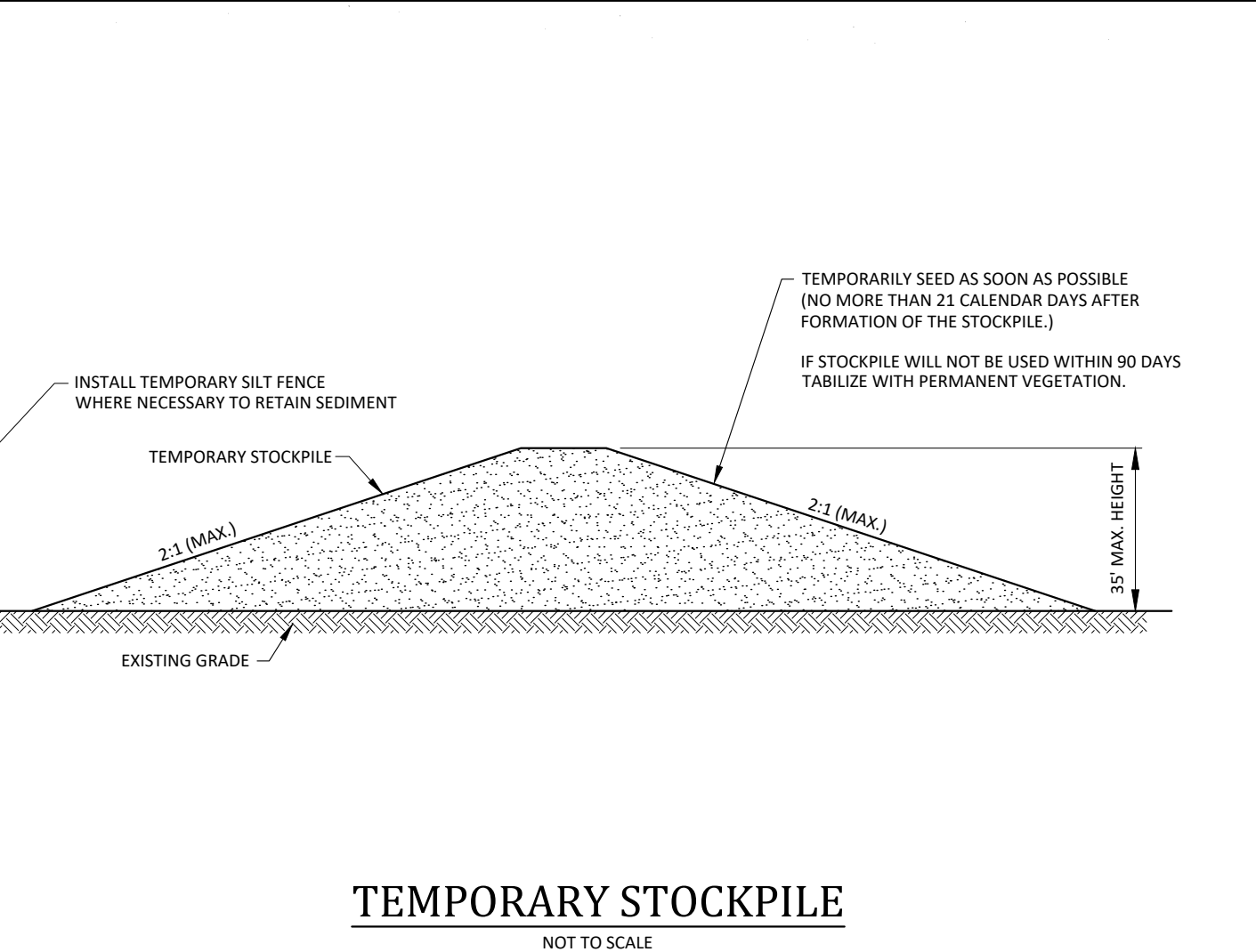
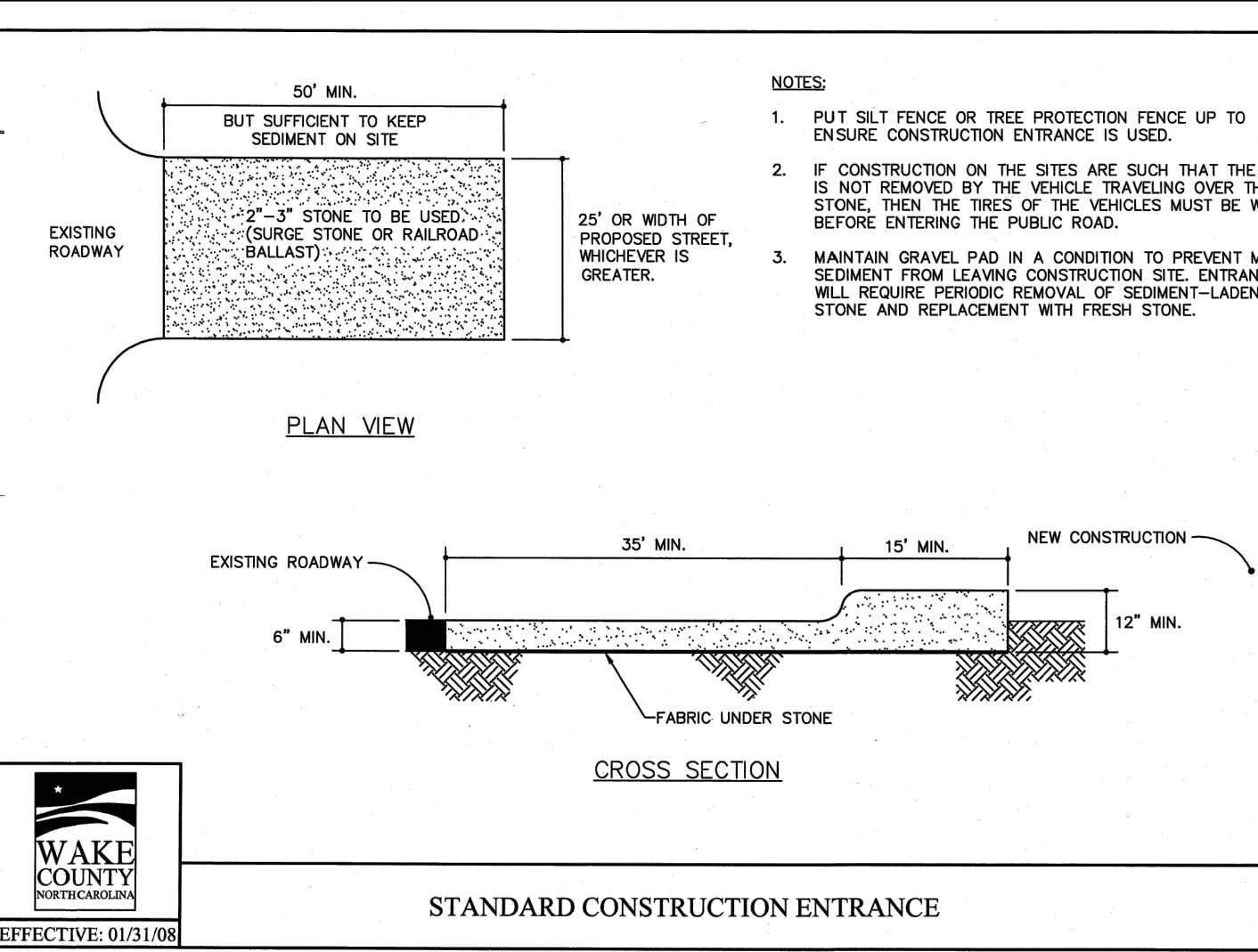
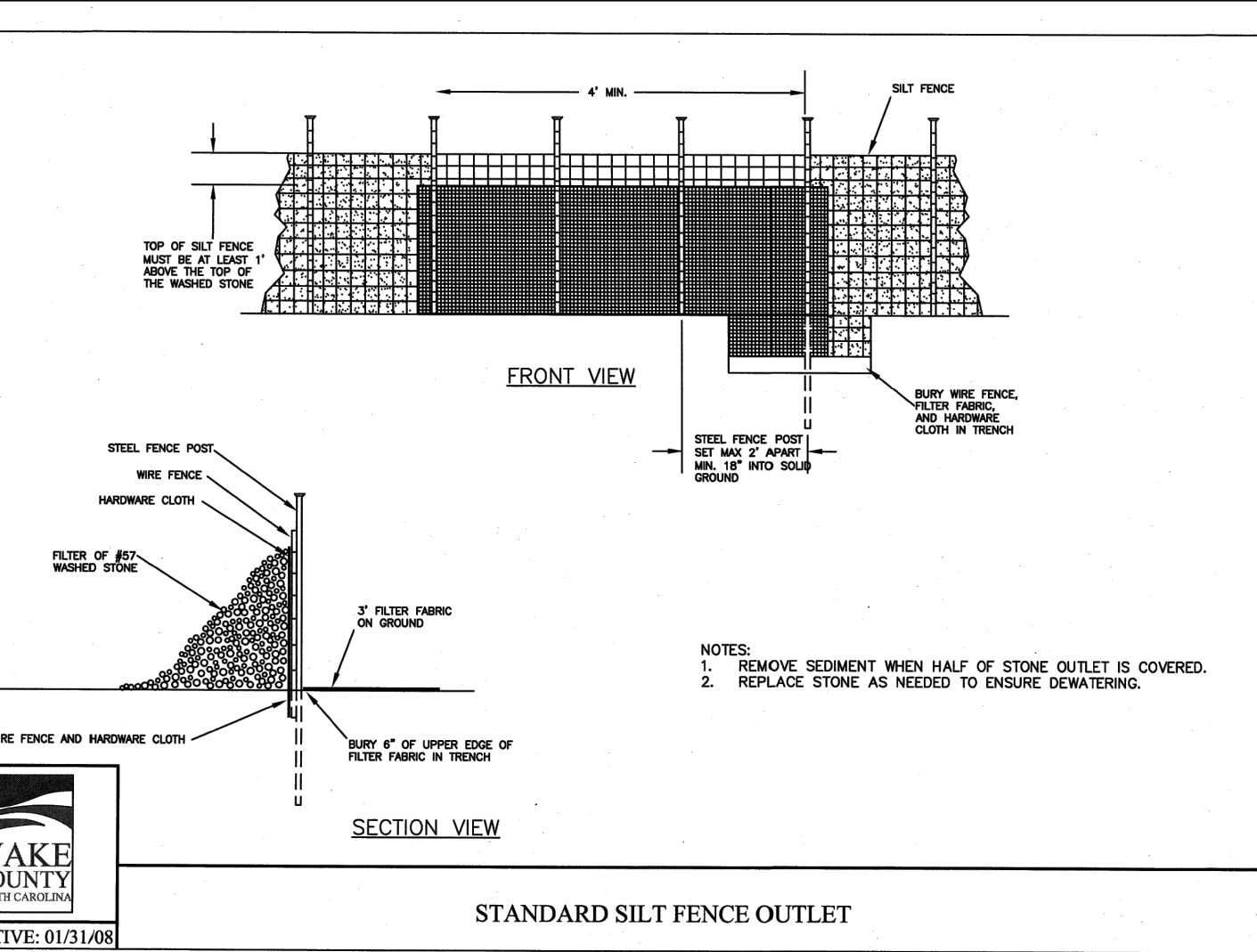
**2. Reporting Timeframes and Other Requirements**

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 Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<b>Within 24 hours:</b> an oral or electronic notification. <b>Within 7 calendar days:</b> a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired waters conditions.
(b) Oil spills and release of hazardous substances per item 1(b)-(c) above	<b>Within 24 hours:</b> an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	<b>A report at least ten days before the date of the bypass, if possible.</b> The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	<b>Within 7 calendar days:</b> a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(i)(7)]	<b>Within 24 hours:</b> an oral or electronic notification. <b>Within 7 calendar days:</b> a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including dates and times; and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(i)(6)]. Division staff may waive the requirement for a written report on a case-by-case basis.

**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING** EFFECTIVE: 04/01/19

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING** EFFECTIVE: 04/01/19



**Seeding Specifications**

NPDES Stormwater Discharge Permit for Construction Activities (NCG01-41/19) NCDEQ/Division of Energy, Mineral and Land Resources

Planting Schedule	Planting Rate
Mar 1 - Jun 1	50 lbs/acre (Sericea Lespedeza); 100 lbs/acre - 10-10-10
Mar 1 - Apr 15	500 lbs/acre - 20% analysis
Mar 1 - Jun 30	2 tons/acre - small grain straw
Mar 1 - Jun 30	Asphalt emulsion at 400 gals/acre

**Seeding Preparation:**

- Chisel compacted areas and spread topsoil three inches deep over adverse soil conditions, if available.
- Rip the entire area to six inches deep.
- Remove all loose rock, roots and other obstructions, leaving surface reasonably smooth and uniform.
- Apply agricultural lime, fertilizer and superphosphate uniformly and mix with soil (see mixture below).
- Continue tillage until a well-pulverized, firm, reasonably uniform seedbed is prepared four to six inches deep.
- Seed on a freshly prepared seedbed and cover seed lightly with seeding equipment or outpack after seeding.
- Mulch immediately after seeding and anchor mulch.
- Inspect all seeded areas and make necessary repairs or reseedings within the planting season, if possible. If stand should be more than 60% damaged, re-establish following the original time, fertilizer and seeding rates.
- Consult Wake County Soil & Water or NC State Cooperative Extension on maintenance treatment and fertilization after permanent cover is established.

**Maintenance Requirements to be Noted on the Plan**

- Seeding or covering stockpiles with tarp or mulch is required and will reduce erosion problems. Tarp or mulch is required at the top of the slope to keep water from running underneath the plastic.
- If a stockpile is to remain for future use after the project is complete (builders, etc.), the financial responsible party must notify Wake County of a new responsible party for that stockpile.
- The approved plan shall provide for the use of staged seeding and mulching on a continual basis while the stockpile is in use.
- Establish and maintain a vegetative buffer at the toe of the slope (where practical).

**For Shoulders, Side Ditches, Slopes (3:1 to 2:1):**

Date	Type	Planting Rate
Mar 1 - Jun 1	Sericea Lespedeza (scarified) and use the following combinations:	50 lbs/acre (Sericea Lespedeza); 100 lbs/acre - 10-10-10
Mar 1 - Apr 15	Add Tall Fescue	120 lbs/acre
Mar 1 - Jun 30	Or add Weeping Love grass	10 lbs/acre
Mar 1 - Jun 30	Or add Hulled Common Bermudagrass	25 lbs/acre
Jun 1 - Sept 1	Tall Fescue AND Browntop Mullet or Sorghum-Sudan Hybrids**	120 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Mullet); 30 lbs/acre (Sorghum-Sudan Hybrids)
Sept 1 - Mar 1	Sericea Lespedeza (unhulled) - unscarified AND Tall Fescue	70 lbs/acre (Sericea Lespedeza); 120 lbs/acre (Tall Fescue)
Nov 1 - Mar 1	AND Abruzzi Rye	25 lbs/acre

**Seeding Schedule**

Date	Type	Planting Rate
Aug 15 - Nov 1	Tall Fescue	300 lbs/acre
Nov 1 - Mar 1	Tall Fescue & Abruzzi Rye	300 lbs/acre
Mar 1 - Apr 15	Tall Fescue	300 lbs/acre
Apr 15 - Jun 30	Hulled Common Bermudagrass	25 lbs/acre
Jul 1 - Aug 15	Tall Fescue AND Browntop Mullet or Sorghum-Sudan Hybrids**	125 lbs/acre (Tall Fescue); 35 lbs/acre (Browntop Mullet); 30 lbs/acre (Sorghum-Sudan Hybrids)

**Consult Wake County Soil & Water Conservation District or NC State Cooperative Extension for additional information concerning other alternatives for vegetation of denuded areas. The above vegetation rates are those that will under local conditions; other seeding rate combinations are possible.**

**\*\*\* TEMPORARY** Reseed according to optimum season for desired permanent vegetation. Do not allow temporary cover to grow more than 12" in height before mowing; otherwise, fescue may be shaded out.



**EROSION CONTROL NOTES**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

S Main St. / US 401 and Virginia Water Drive

NC License # P11199

**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS

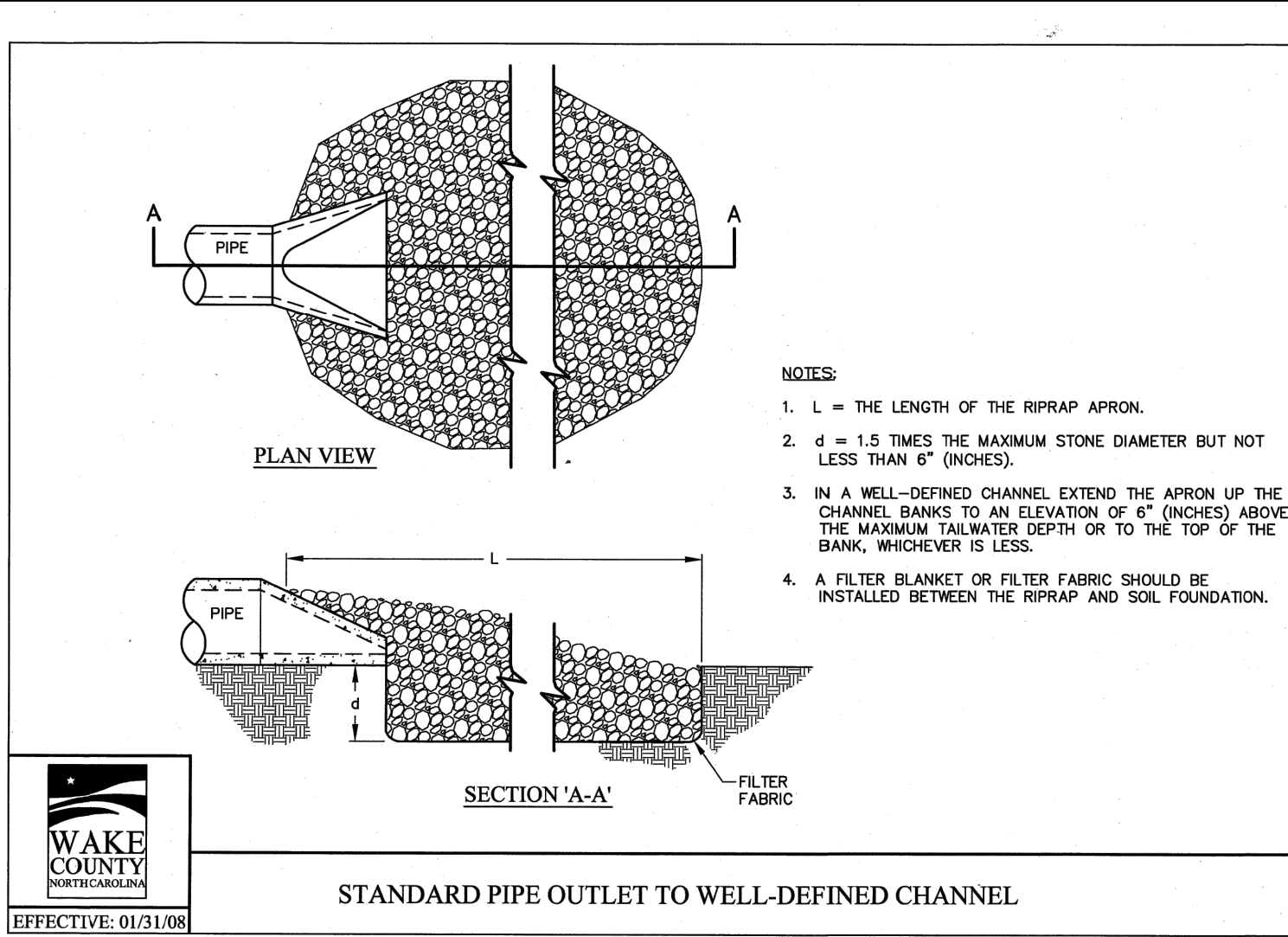
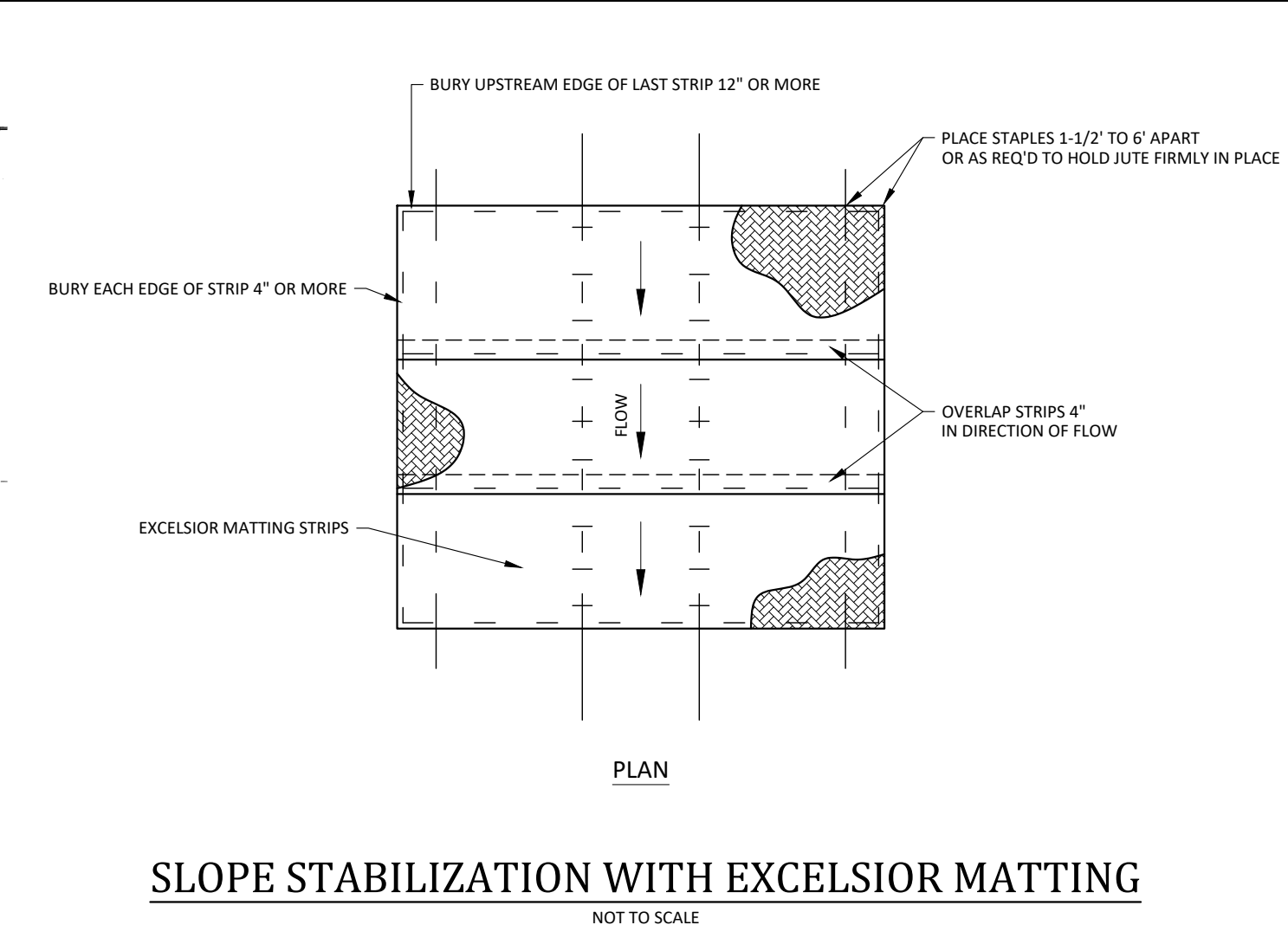
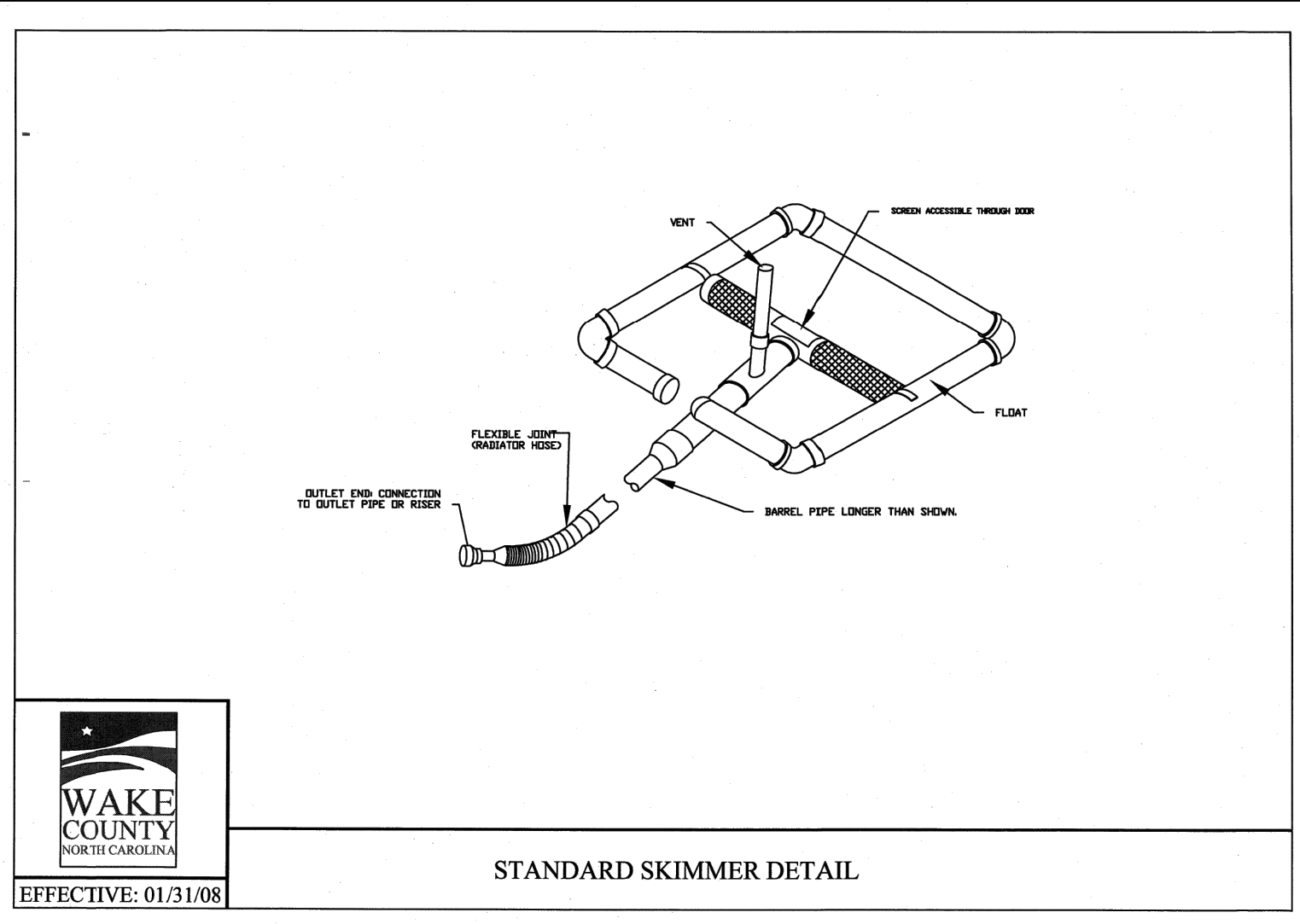
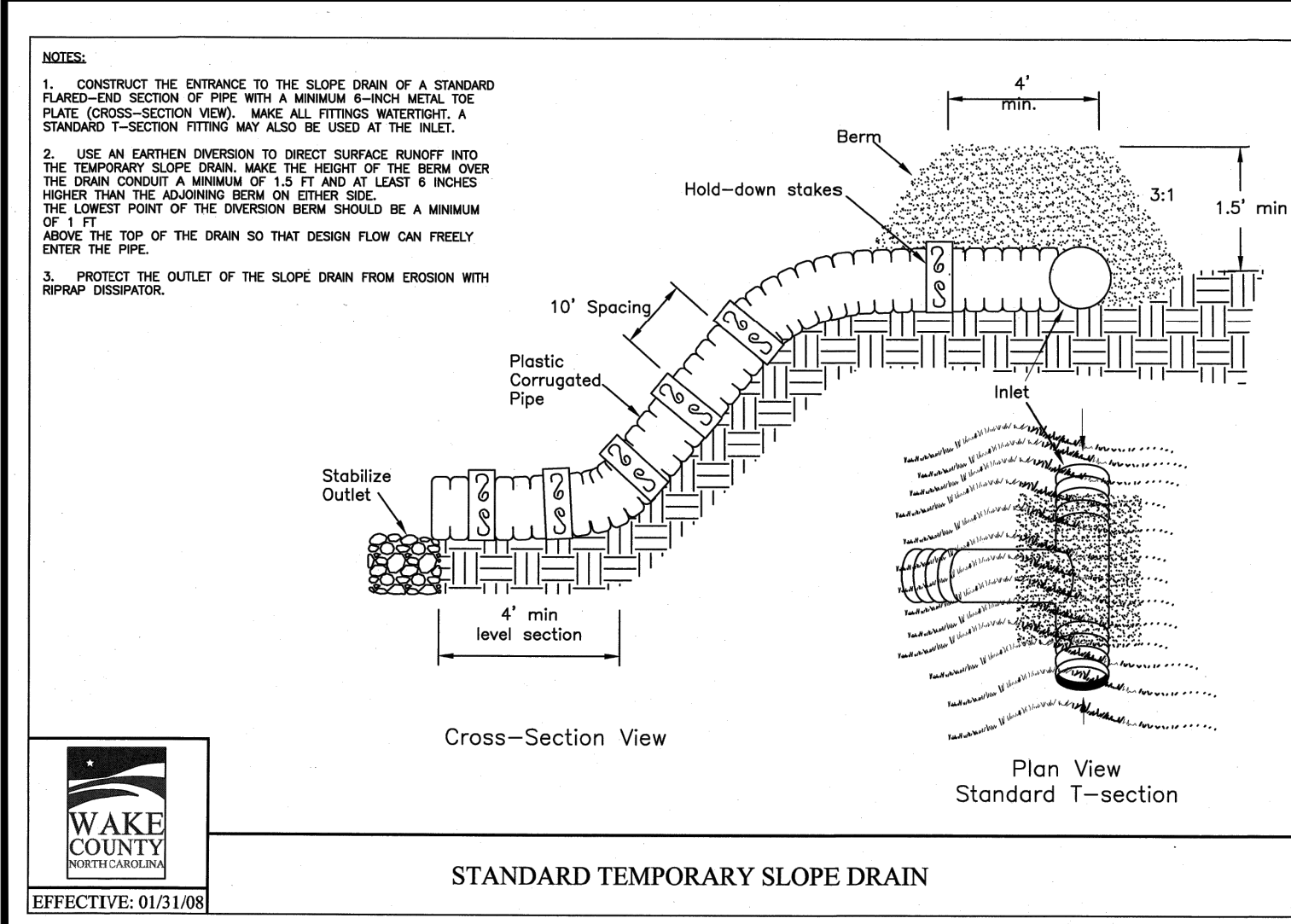
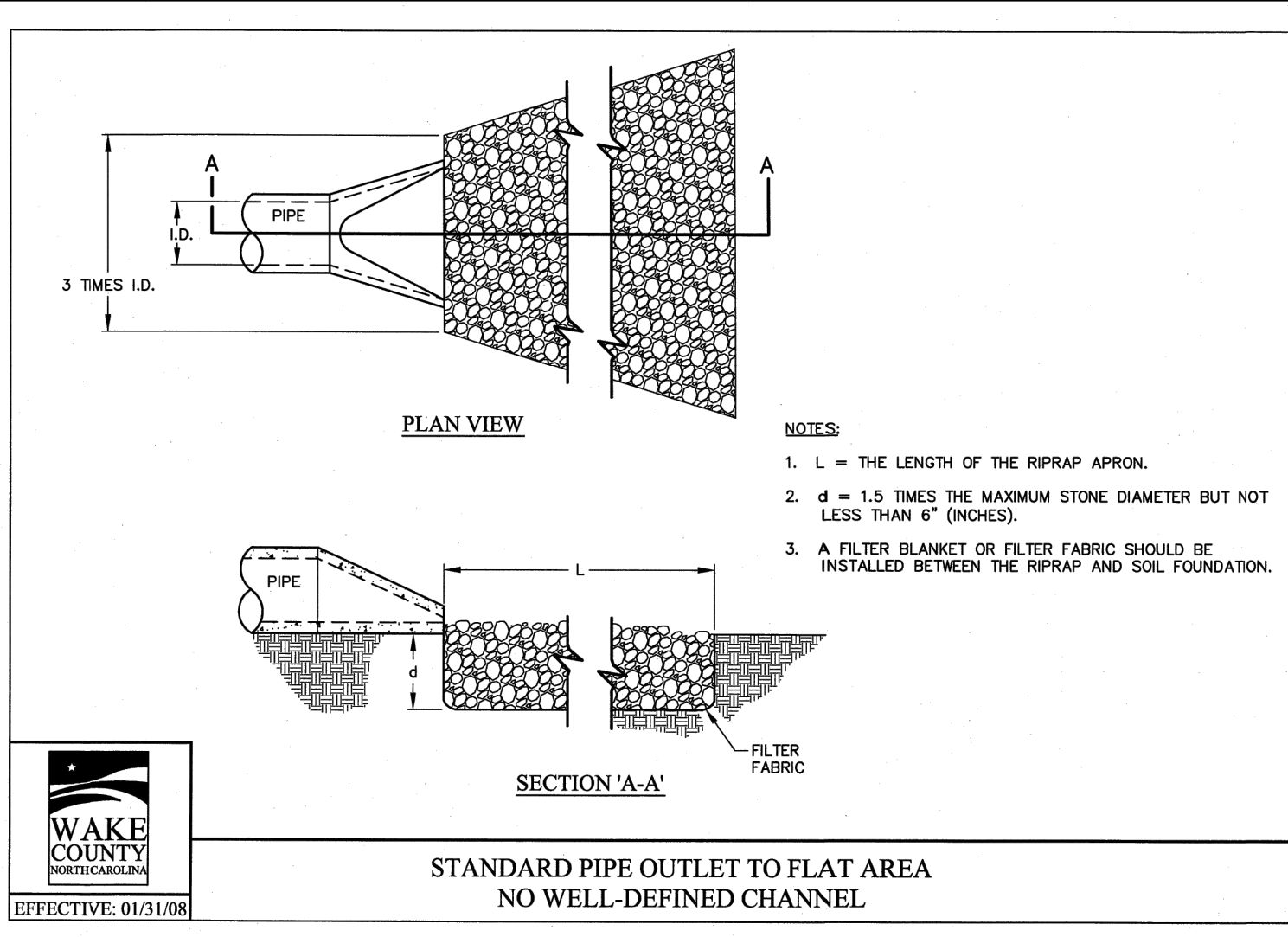
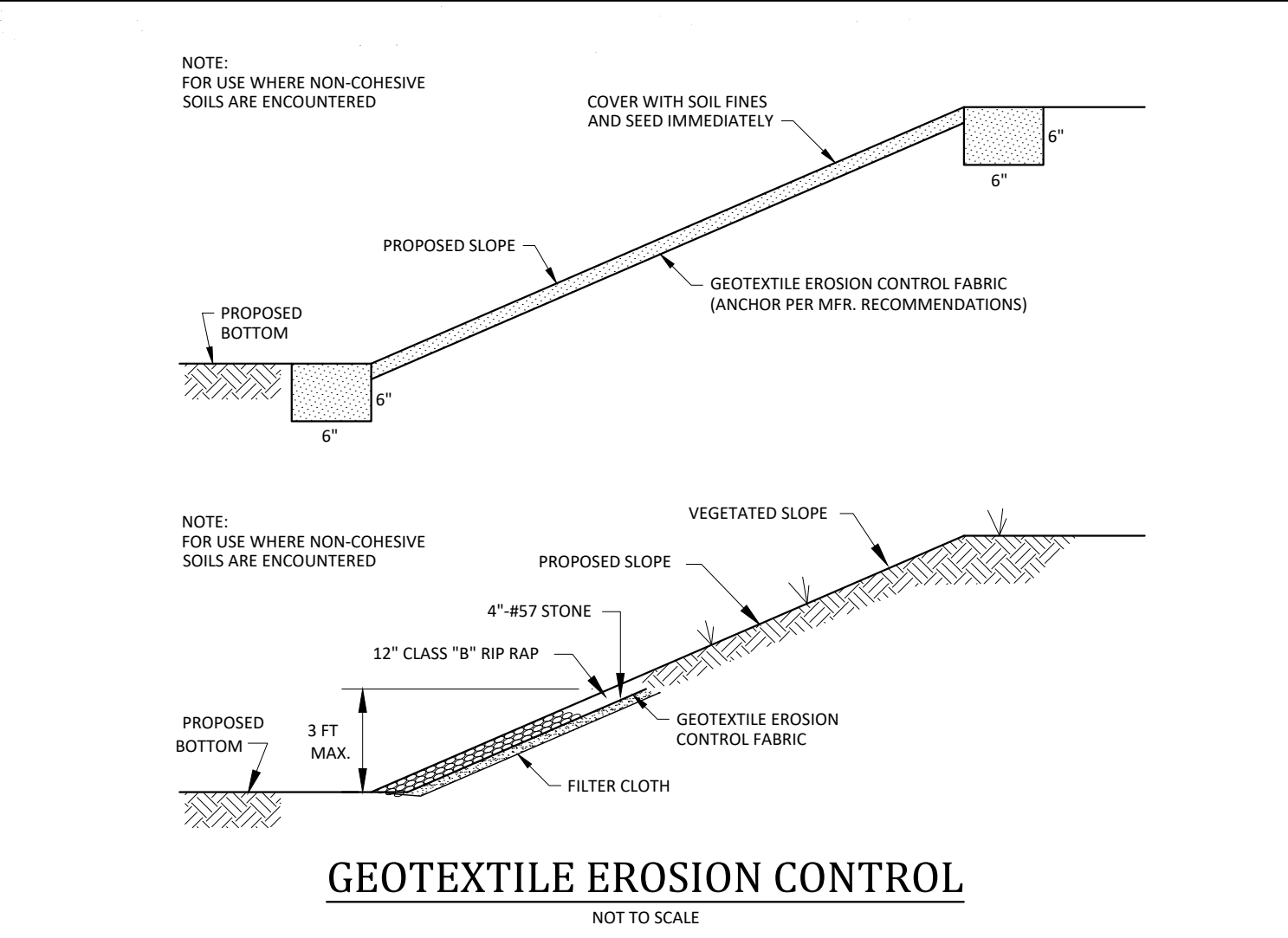
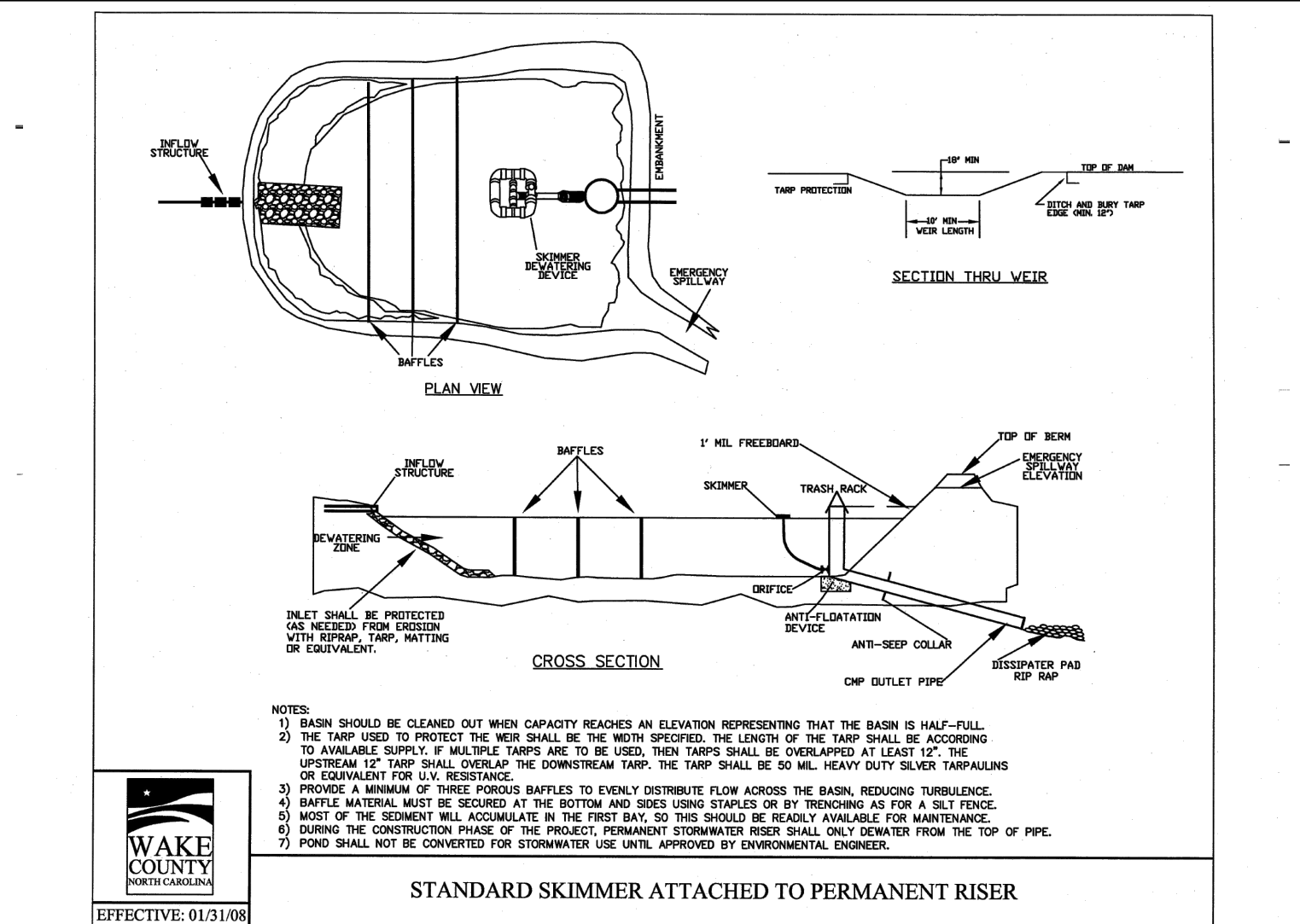
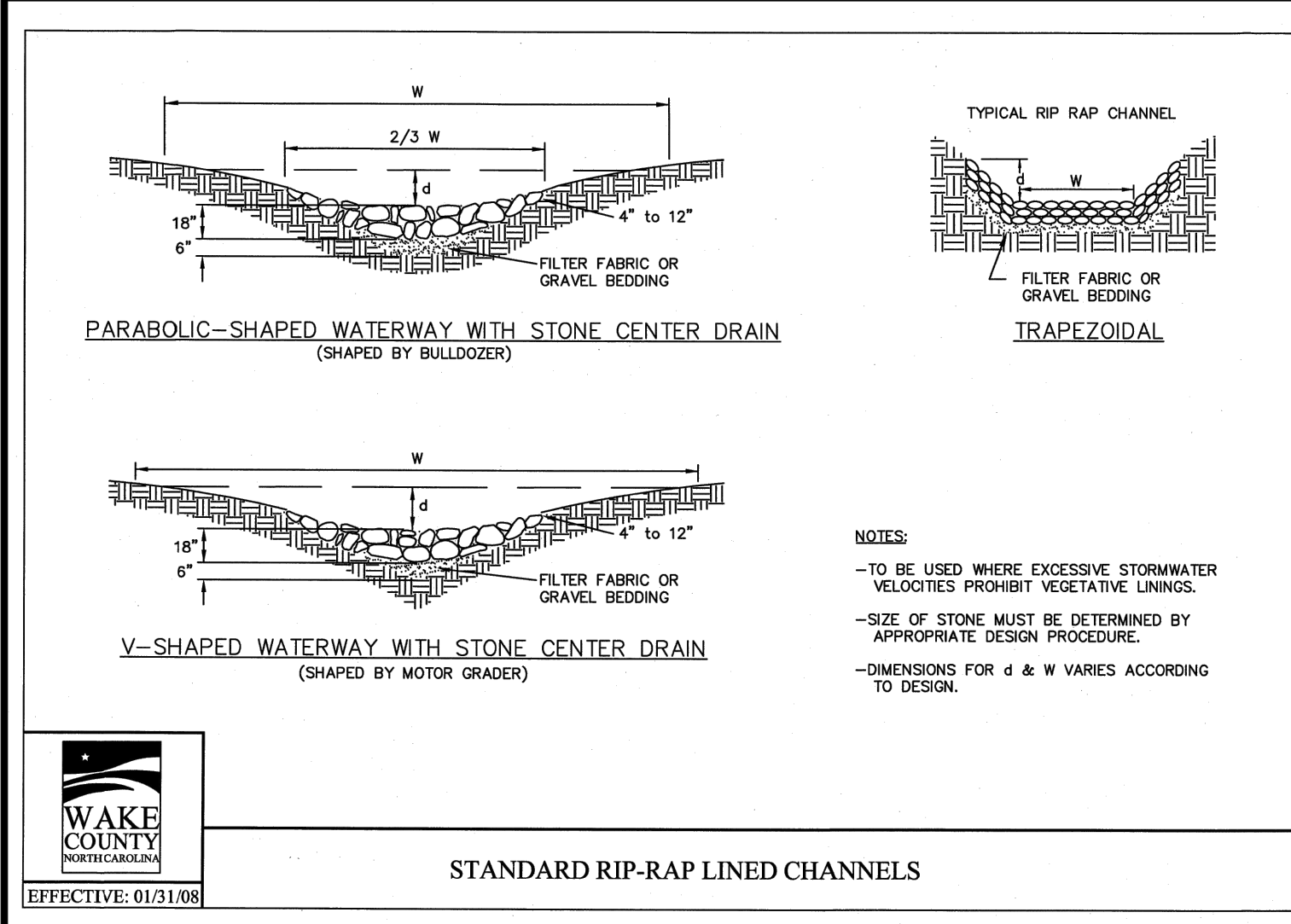
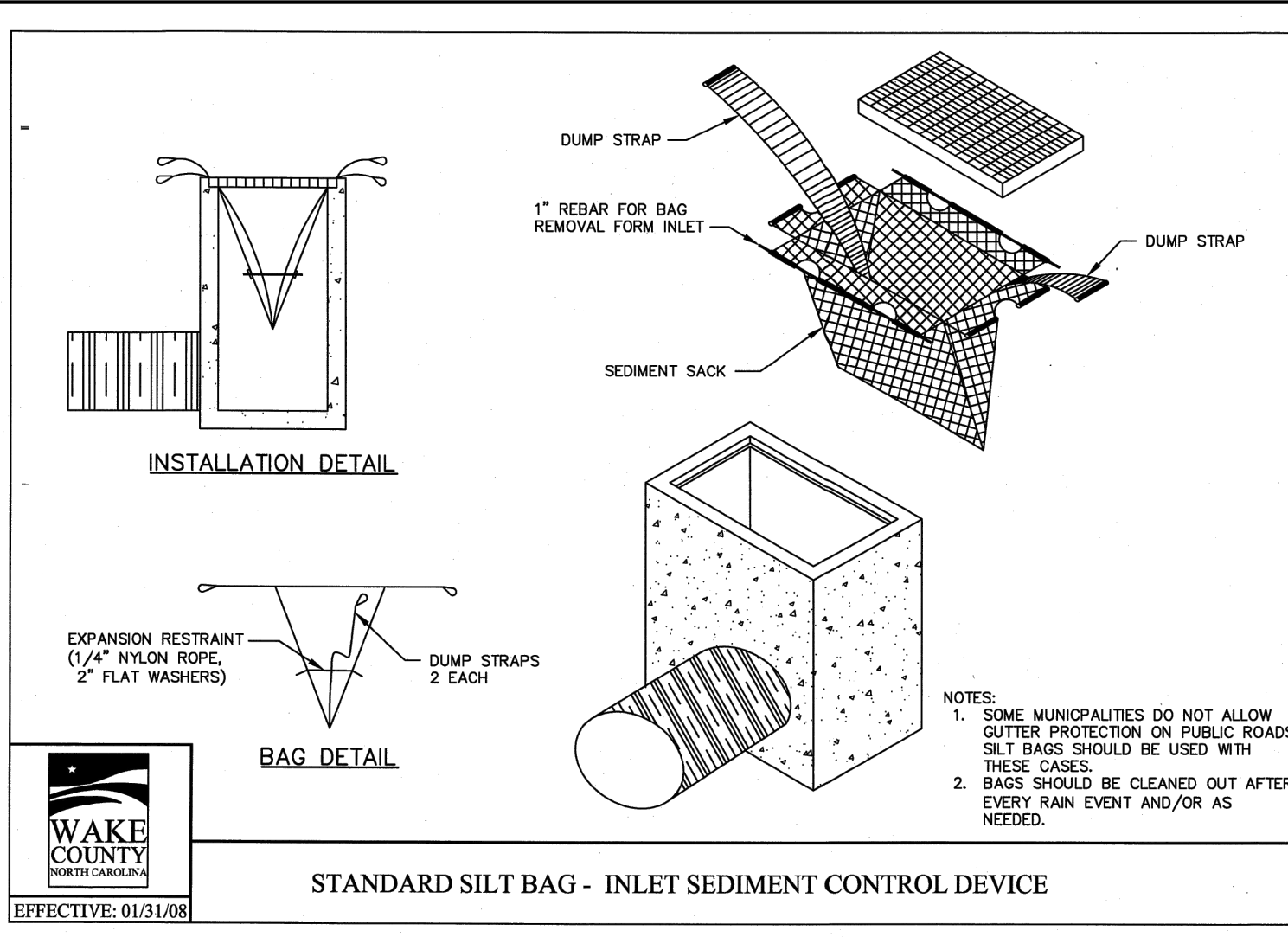
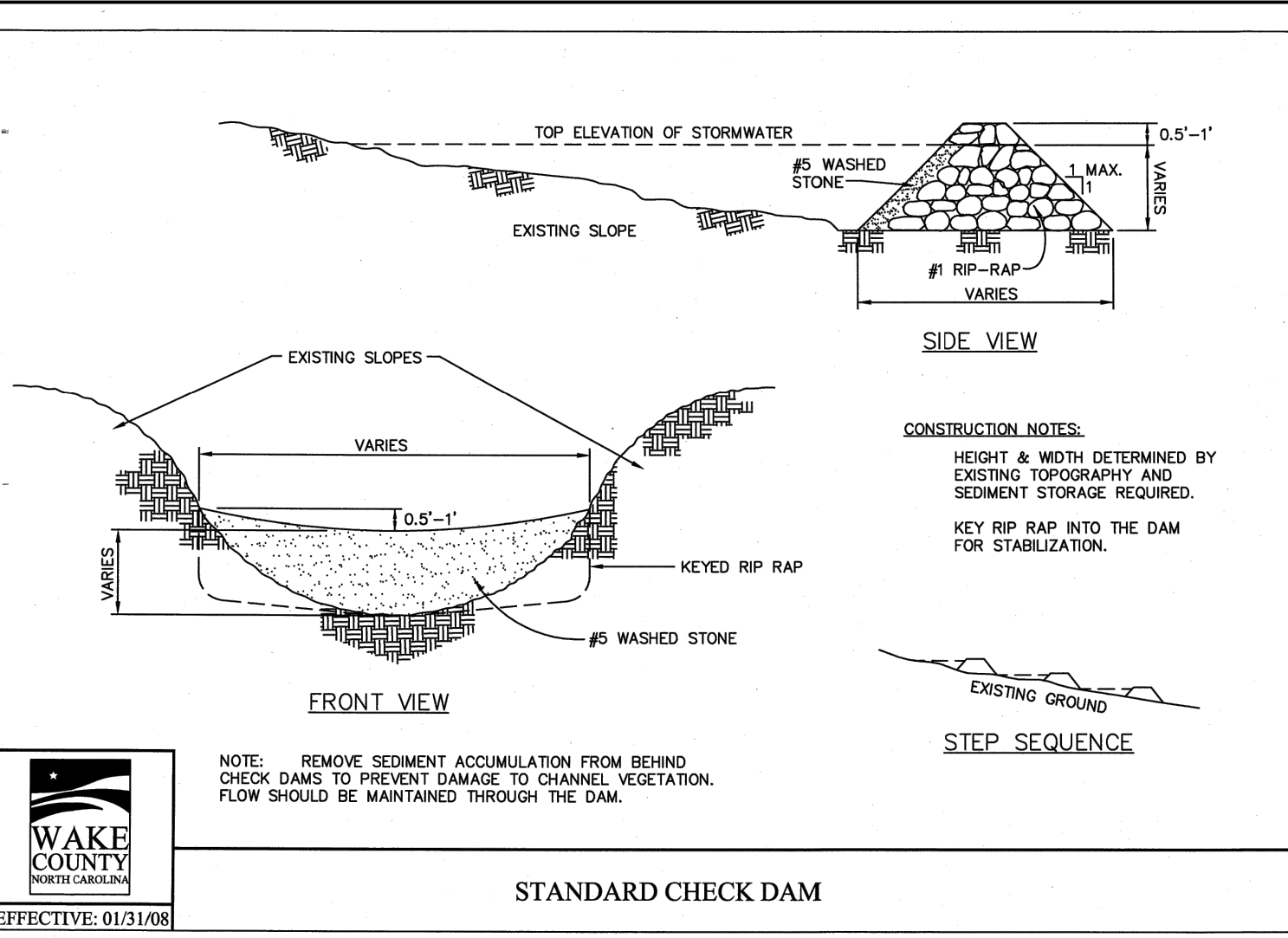
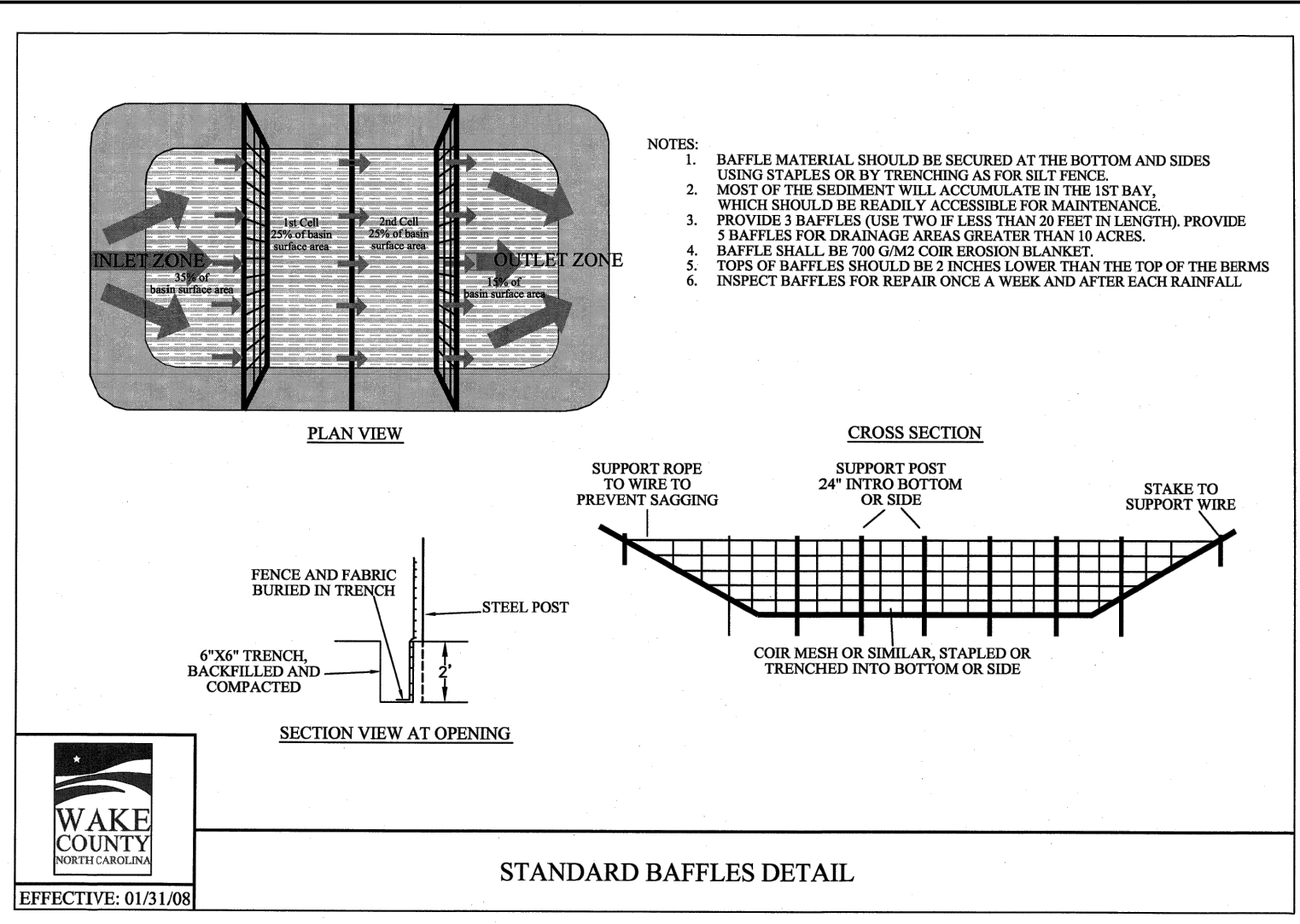
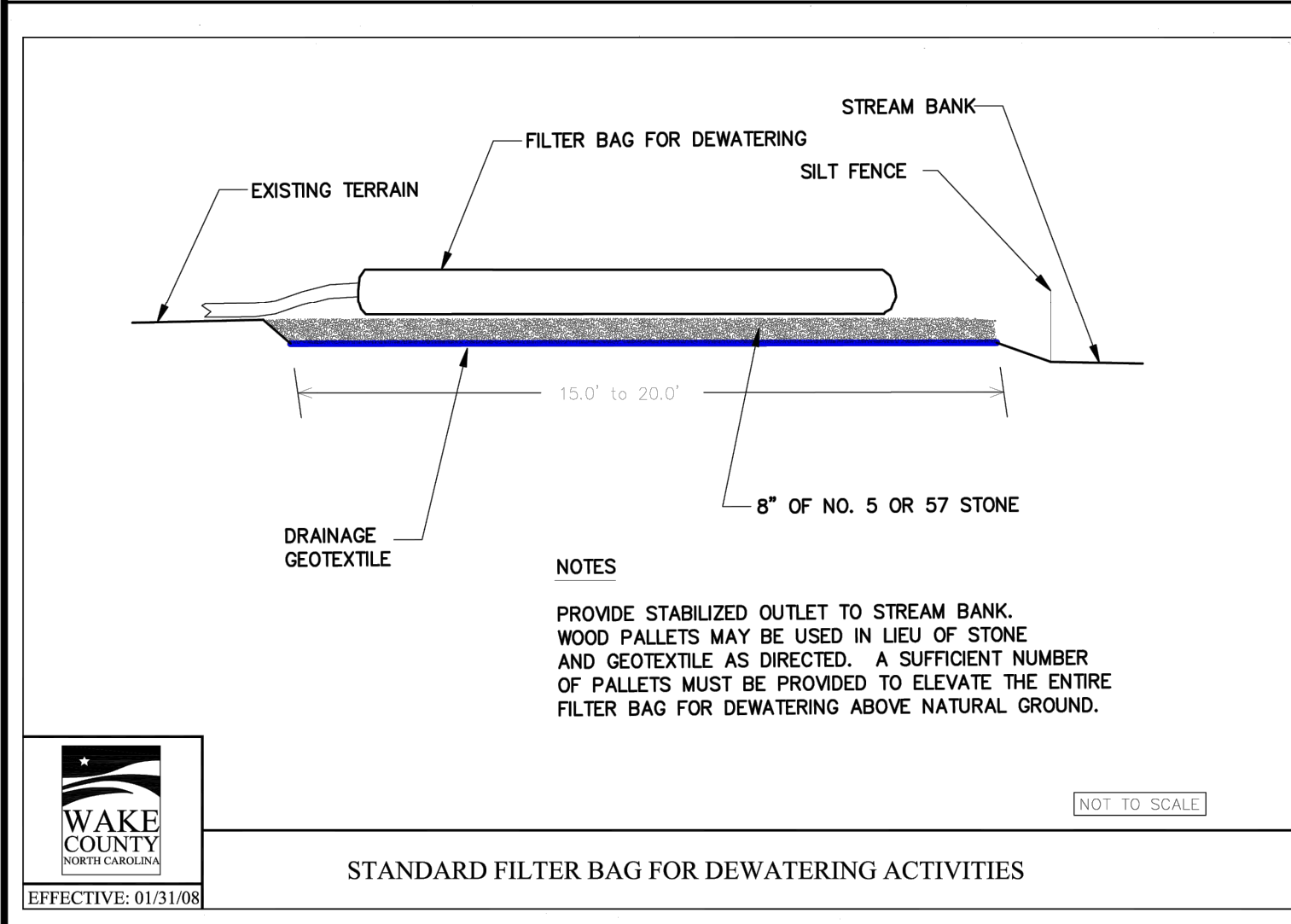
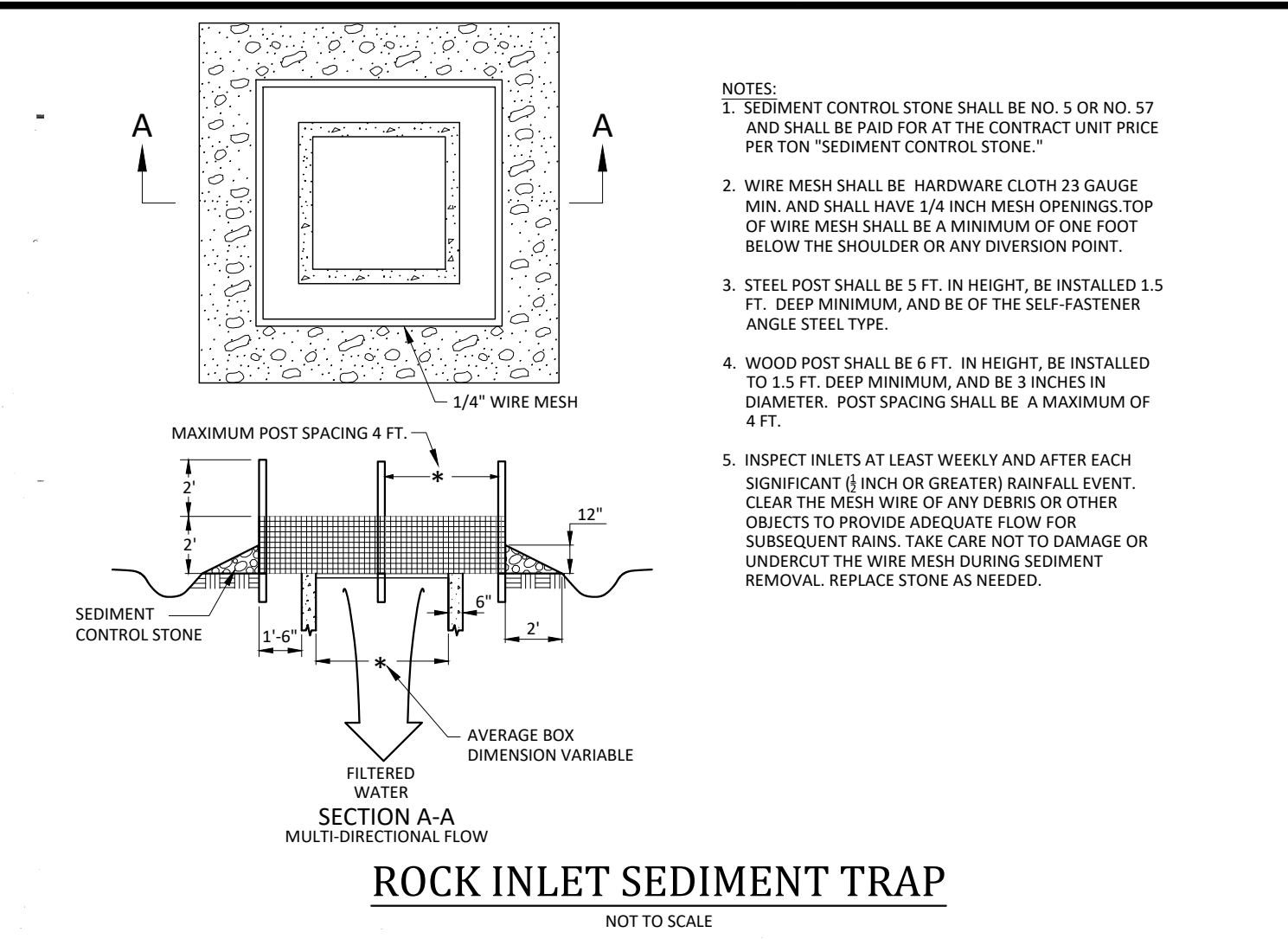
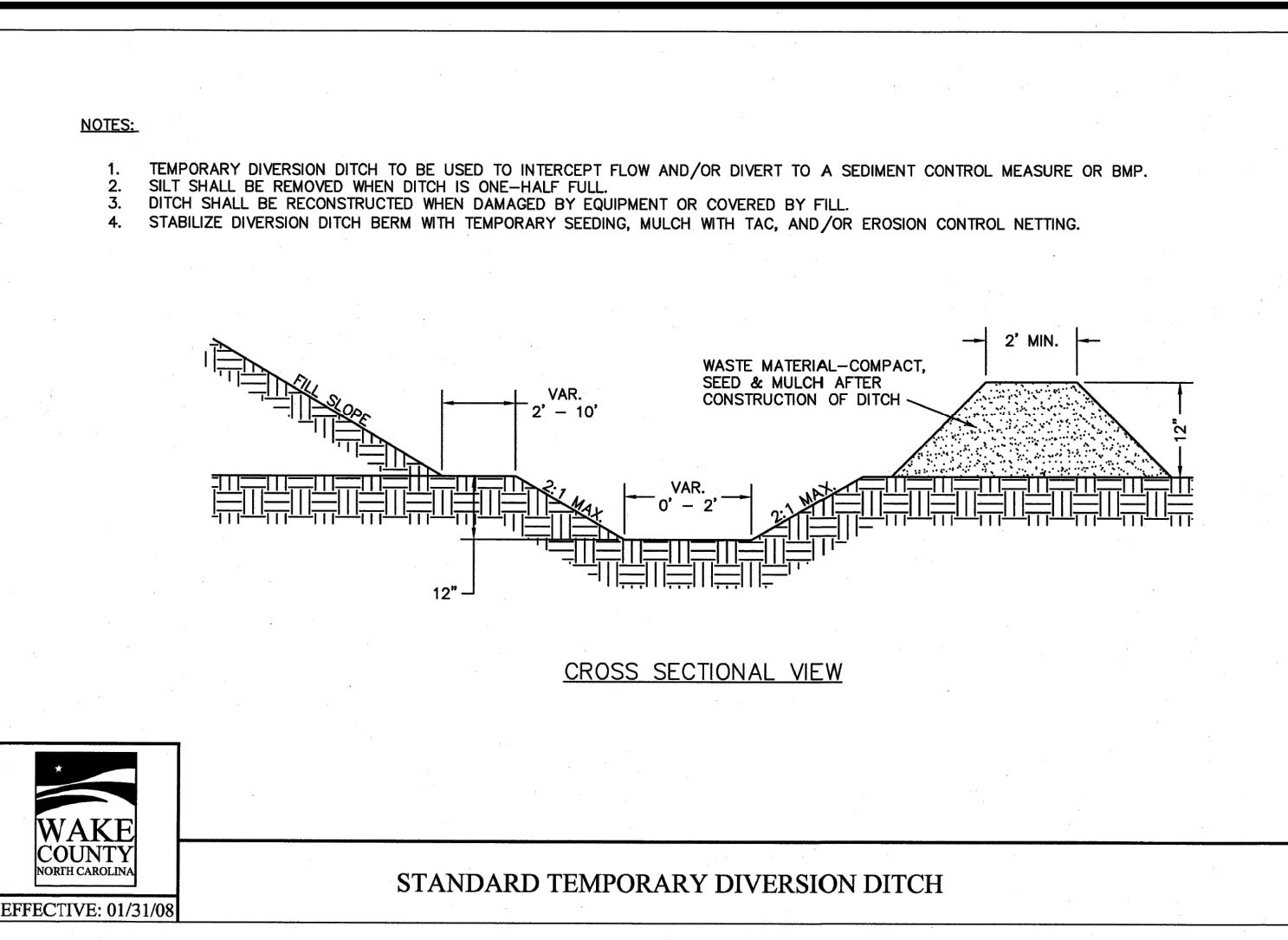
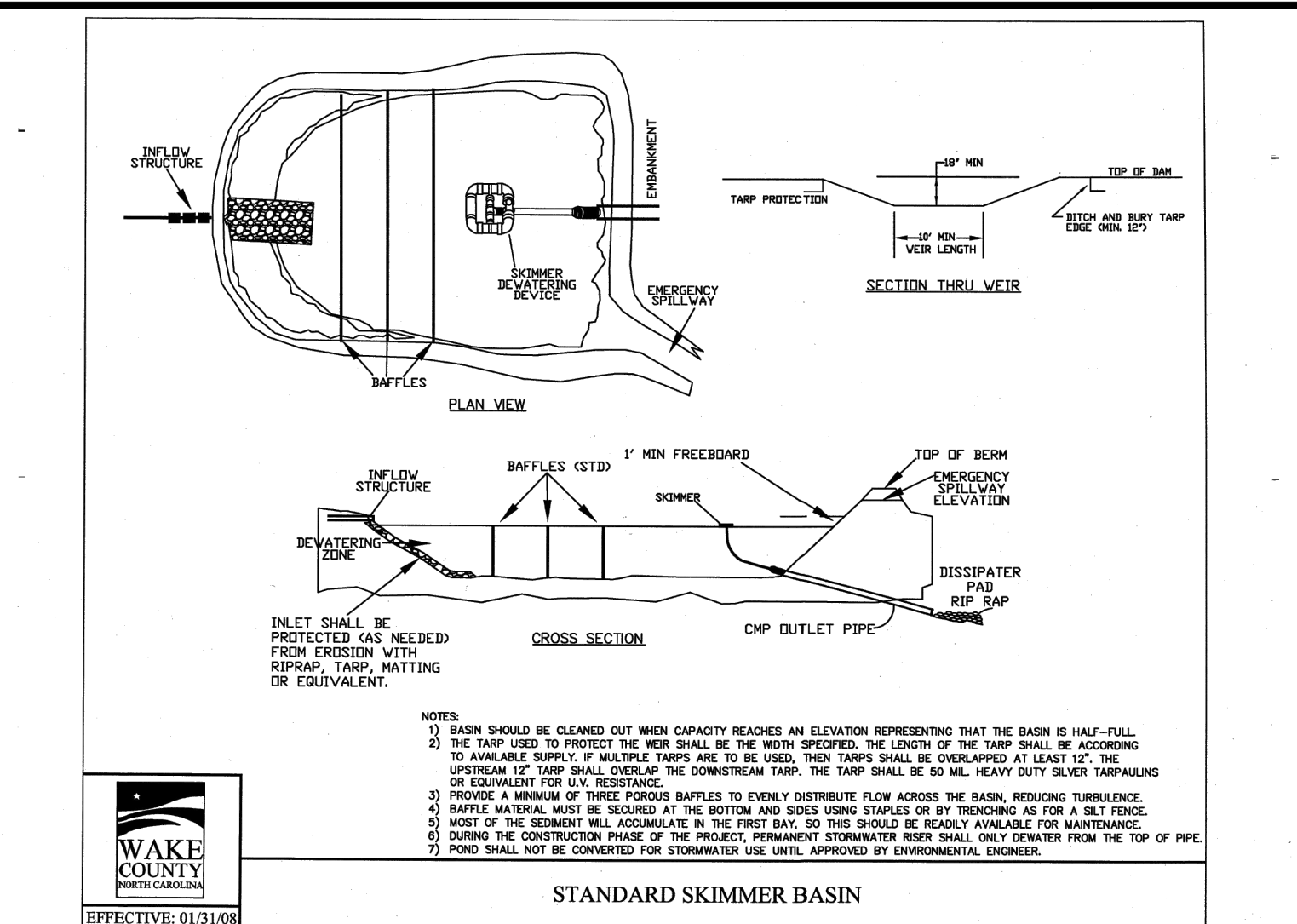
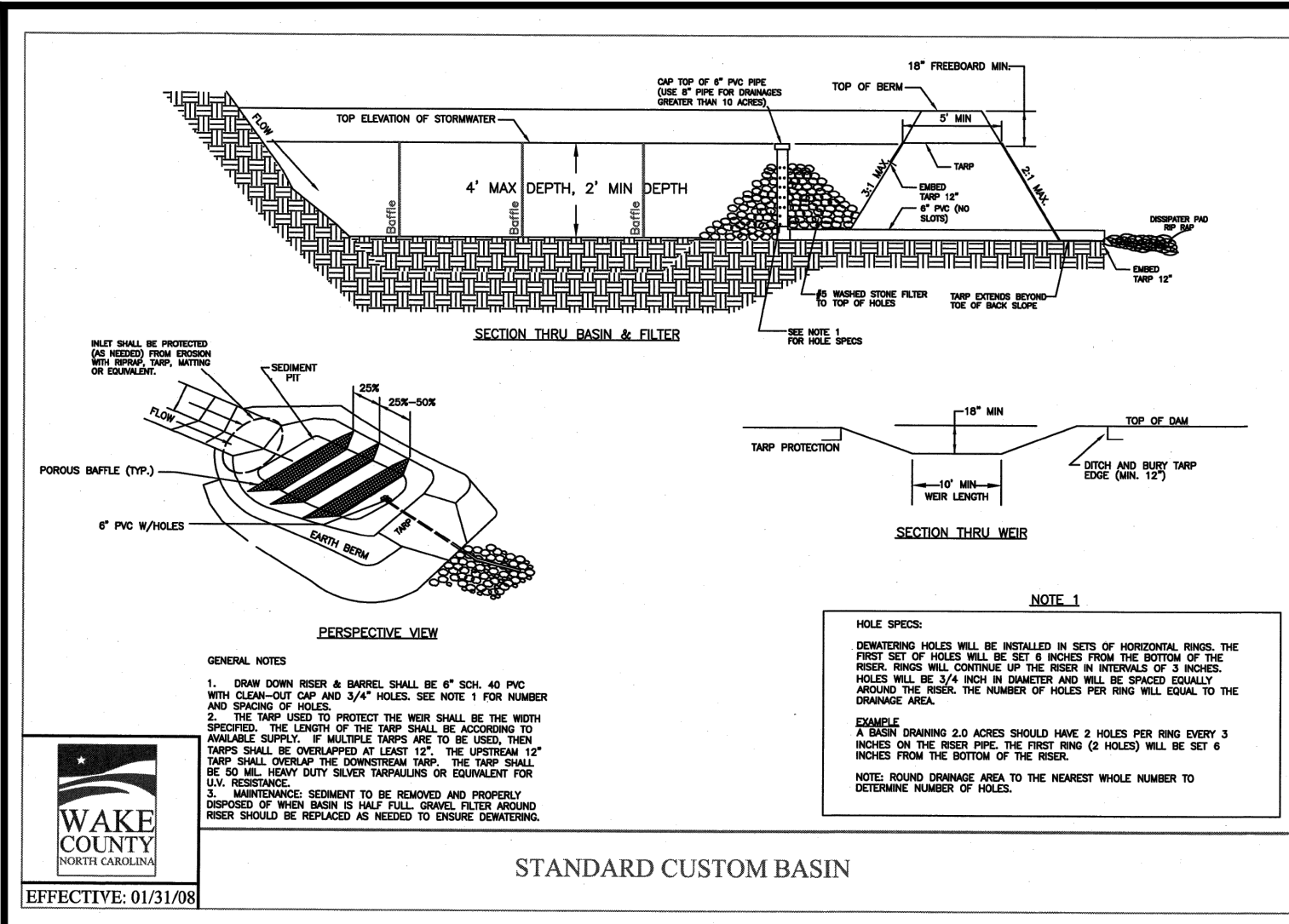
2755-B Charles Blvd.  
Raleigh, NC 27608  
(919) 555-0888  
www.arkconsultinggroup.com

Professional Engineer Seal: JOHN W. HARRIS, No. 31970, State of North Carolina, Exp. 10/26/2023

Project Manager: BCF  
Drawn By: DCL  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C1.00**

CID SDP



**WAKE COUNTY**  
 NORTH CAROLINA

**CROSLAND SOUTHEAST**

**EROSION CONTROL DETAILS**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

S Main St. / US 401 and Virginia Water Drive

NC License: PL1199

**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS

2755-B Charles Blvd.  
 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

Professional Engineer  
 C. FABRIZIO  
 31970

10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C1.01**

CID SDP

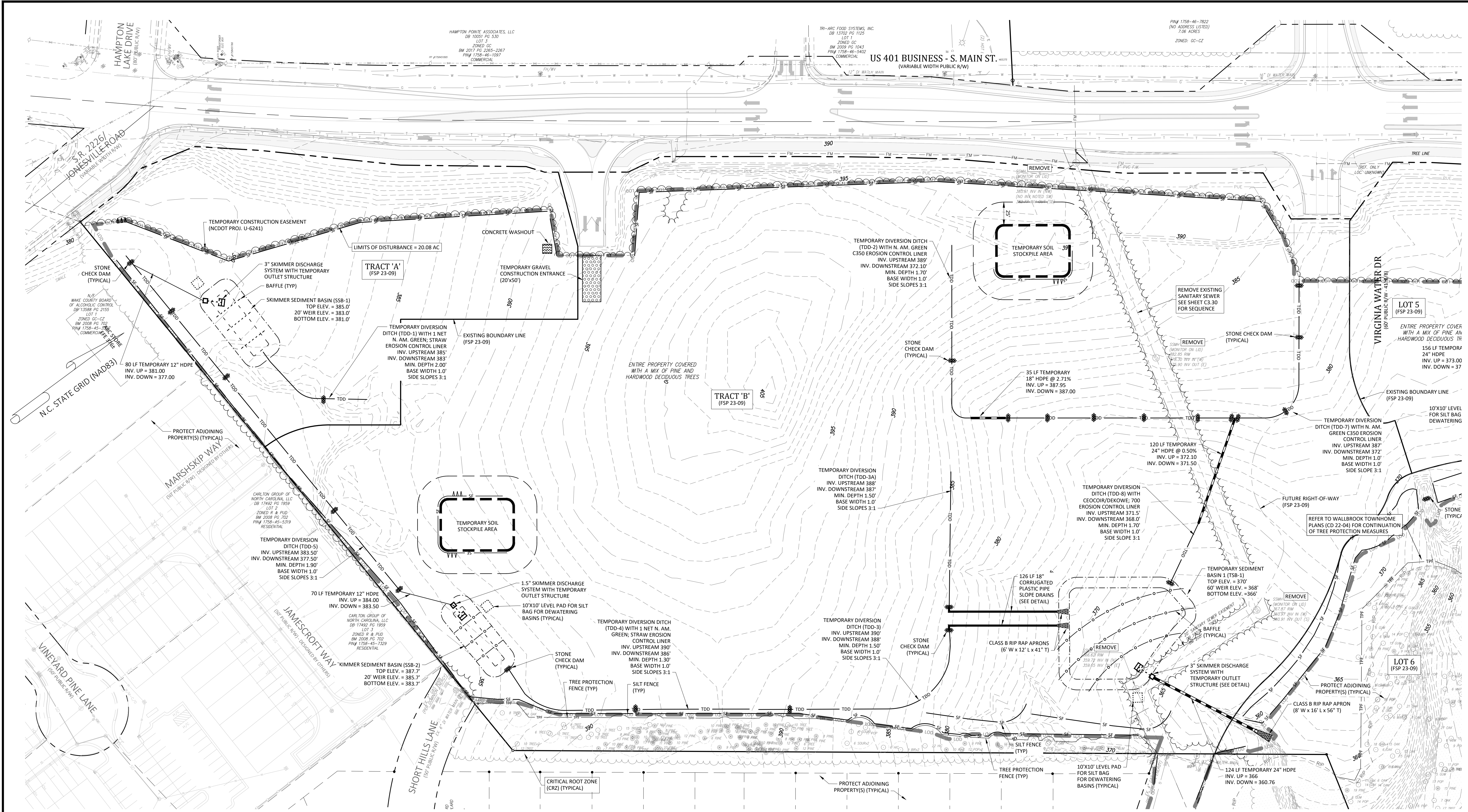
REVISIONS:

1. 12/02/23 (ISSUED FOR CONSTRUCTION) SDP-23-05 / CID-23-01 COMBINED REVIEW

2. 12/02/23 (ISSUED FOR CONSTRUCTION) SDP-23-05 / CID-23-01 COMBINED REVIEW

DATE

DESCRIPTION



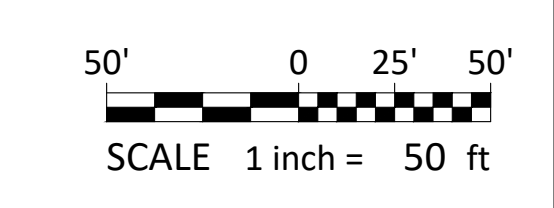
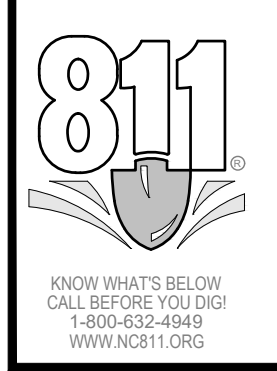
Device ID	Device Type	Add'l Flow (cfs)	Disturbed Area (AC)	Tc (min)	Intensity (in/hr)*	C	Qreq (cfs)	Up Invert	Down Invert	Length (ft)	Base Width (ft)	Left Slope (x:1)	Right Slope (x:1)	Flow Depth (ft)	Manning's n	Slope (ft/ft)	Wetted Area (sf)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Velocity (ft/s)	Qa (cfs)	Qa-Qreq?	τ (lbs/ft²)	Liner Type
TDD-1	Temporary Diversion	0	1.90	5	7.18	0.5	6.82	385	383	225	1	3	3	2.02	0.020	0.00889	14.28	8.23	1.73	0.48	6.82	Yes	1.12102182	N. Am. Green; Straw; 1 nets
TDD-2	Temporary Diversion	0	4.45	5	7.18	0.5	15.98	389	372	480	1	3	3	1.68	0.020	0.03542	10.20	7.88	1.29	1.57	15.98	Yes	3.722902183	North Am. Green C350; Bare soil
TDD-3	Temporary Diversion	0	0.65	5	7.18	0.5	2.33	390	387	330	1	3	3	1.39	0.020	0.00509	7.17	7.61	0.94	0.33	2.33	Yes	0.787596206	N. Am. Green; Straw; 1 nets
TDD-3A	Temporary Diversion	0	0.55	5	7.18	0.5	1.97	388	387	152	1	3	3	1.46	0.020	0.00658	7.90	7.68	1.03	0.25	1.97	Yes	0.601397066	N. Am. Green; Straw; 1 nets
TDD-4	Temporary Diversion	0	0.68	5	7.18	0.5	2.44	390	386	260	1	3	3	1.18	0.020	0.01538	5.33	7.44	0.72	0.46	2.44	Yes	1.129058959	N. Am. Green; Straw; 1 nets
TDD-5	Temporary Diversion	0	1.90	5	7.18	0.5	6.82	383.5	377.5	470	1	3	3	1.79	0.020	0.01277	11.35	7.98	1.42	0.60	6.82	Yes	1.422092466	N. Am. Green; Straw; 1 nets
TDD-6	Temporary Diversion	0	4.20	5	7.18	0.5	15.08	389	375.5	705	1	3	3	2.04	0.020	0.01915	14.51	8.25	1.76	1.04	15.08	Yes	2.436423008	North Am. Green C350; Bare soil
TDD-7	Temporary Diversion	0	0.75	5	7.18	0.5	2.69	387	372	280	1	3	3	0.79	0.020	0.05357	2.64	7.20	0.37	1.02	2.69	Yes	2.625893726	North Am. Green C350; Bare soil
TDD-8	Temporary Diversion	18.7	0.48	5	7.18	0.5	20.39	371.5	368	72	1	3	3	1.64	0.020	0.04861	9.74	7.84	1.24	2.09	20.39	Yes	4.984271571	Geocorr/Dekowe; 700

Temporary Sediment Traps, Skimmer Sediment Basins, and Temporary Sediment Basins

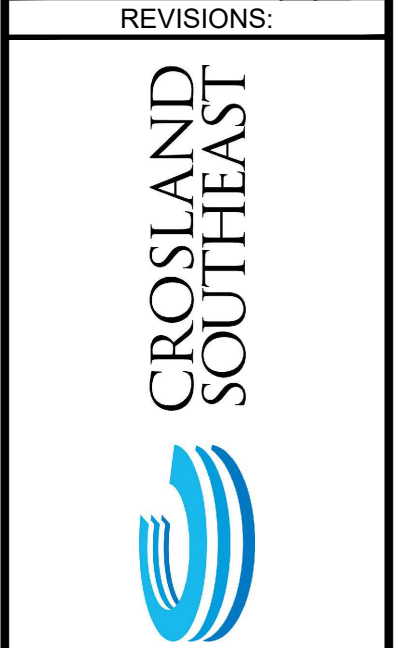
Device	Type	Weir				Top Length (ft)	Skimmer Orifice Size (in)	Skimmer Orifice Size (in)	
		Width (ft)	Depth (ft)	Depth Below Weir (ft)	Slope (x:1)				
SSB-1	Skimmer Sediment Basin	20	0.3	1.5	2.0	103	51	3.00	1.00
SSB-2	Skimmer Sediment Basin	20	0.2	1.5	2.0	97	37	1.50	0.75
SSB-3	Skimmer Sediment Basin	25	0.4	1.5	2.0	151	59	3.00	1.50
TSB-1	Temporary Sediment Basin	40	0.4	1.5	2.0	187	87	3.00	2.00

Rip Rap Aprons

Outlet	Size (in)	Entry (ft)	Exit (ft)	Length (ft)	Depth (ft)	Stone Class
Slope Drain	18	3	6	12	41	B
SSB-3	24	4	8	12	23	B
TSB-1	24	4	8	16	56	B



NO.	DATE	DESCRIPTION
1	12/06/23	ISSUED FOR CONSTRUCTION
2	11/26/23	SDP 23-05 / CID 23-01 COMBINED REVIEW



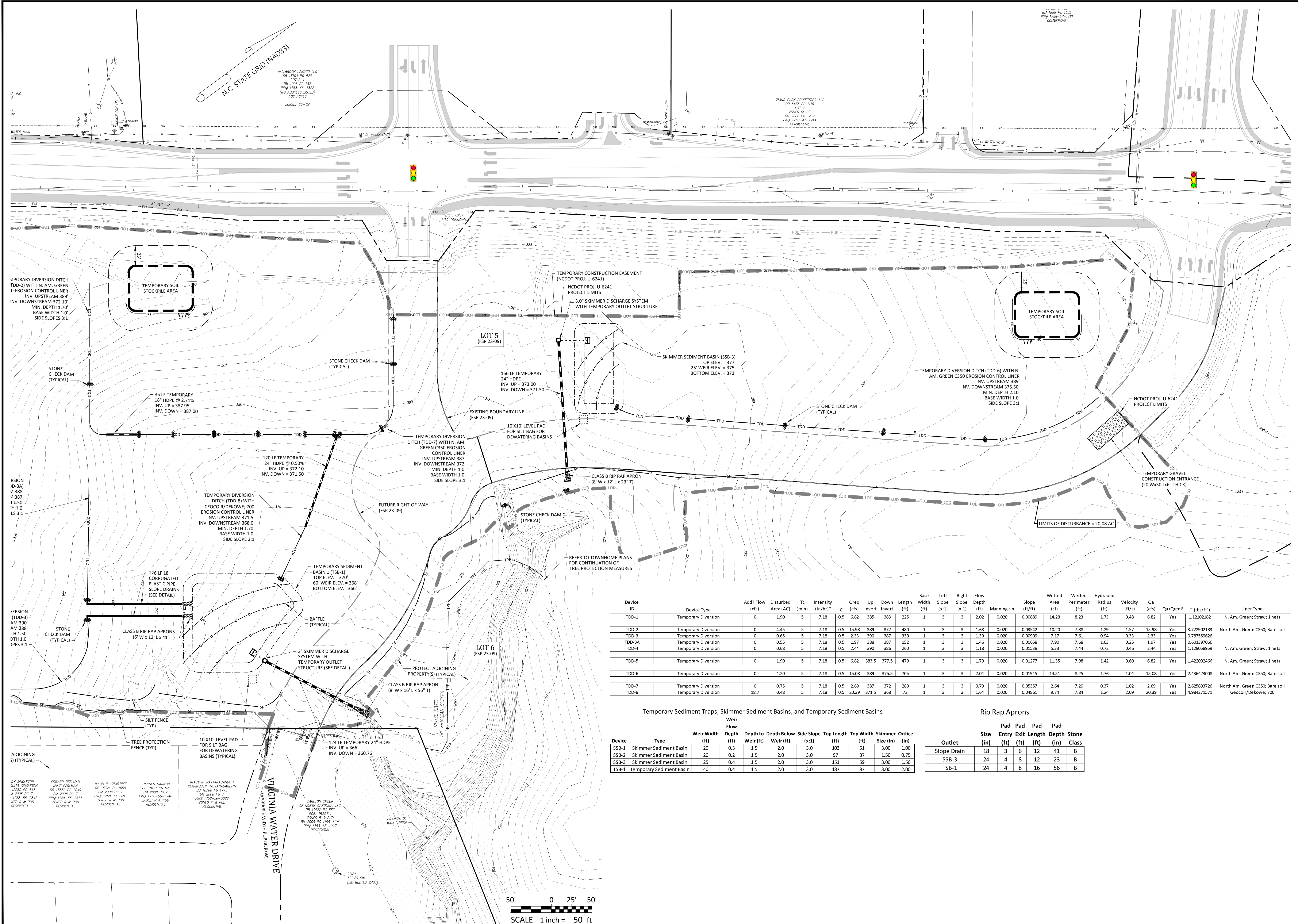
**EROSION CONTROL PLAN - PHASE 1**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina

NC License: P11199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd  
 (757) 558-0888  
 www.arkconsultinggroup.com

10/26/2023

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C1.10**  
SDP



Device ID	Device Type	Add'l Flow (cfs)	Disturbed Area (AC)	Tc (min)	Intensity (in/hr)*	C	Qreq (cfs)	Up Invert	Down Invert	Length (ft)	Base Width (ft)	Left Slope (x:1)	Right Slope (x:1)	Flow Depth (ft)	Manning's n	Slope (ft/ft)	Wetted Area (sf)	Wetted Perimeter (ft)	Hydraulic Radius (ft)	Velocity (ft/s)	Qa (cfs)	Qa>Qreq?	T (lbz/ft²)	Liner Type
TDD-1	Temporary Diversion	0	1.90	5	7.18	0.5	6.82	385	383	225	1	3	3	2.02	0.020	0.00889	14.28	8.23	1.73	0.48	6.82	Yes	1.12102182	N. Am. Green; Straw; 1 nets
TDD-2	Temporary Diversion	0	4.45	5	7.18	0.5	15.98	389	372	480	1	3	3	1.68	0.020	0.03542	10.20	7.88	1.29	1.57	15.98	Yes	3.722902183	North Am. Green C350; Bare soil
TDD-3	Temporary Diversion	0	0.65	5	7.18	0.5	2.33	390	387	330	1	3	3	1.39	0.020	0.00909	7.17	7.61	0.94	0.33	2.33	Yes	0.787599626	0.601397066
TDD-3A	Temporary Diversion	0	0.55	5	7.18	0.5	1.97	388	387	152	1	3	3	1.46	0.020	0.00558	7.90	7.68	1.03	0.25	1.97	Yes	1.129058959	N. Am. Green; Straw; 1 nets
TDD-4	Temporary Diversion	0	0.68	5	7.18	0.5	2.44	390	386	260	1	3	3	1.18	0.020	0.01538	5.33	7.44	0.72	0.46	2.44	Yes	1.129058959	N. Am. Green; Straw; 1 nets
TDD-5	Temporary Diversion	0	1.90	5	7.18	0.5	6.82	383.5	377.5	470	1	3	3	1.79	0.020	0.01277	11.35	7.98	1.42	0.60	6.82	Yes	1.422092466	N. Am. Green; Straw; 1 nets
TDD-6	Temporary Diversion	0	4.20	5	7.18	0.5	15.08	389	375.5	705	1	3	3	2.04	0.020	0.01915	14.51	8.25	1.76	1.04	15.08	Yes	2.436423008	North Am. Green C350; Bare soil
TDD-7	Temporary Diversion	0	0.75	5	7.18	0.5	2.69	387	372	280	1	3	3	0.79	0.020	0.05357	2.64	7.20	0.37	1.02	2.69	Yes	2.625893726	North Am. Green C350; Bare soil
TDD-8	Temporary Diversion	18.7	0.48	5	7.18	0.5	20.39	371.5	368	72	1	3	3	1.64	0.020	0.04861	9.74	7.84	1.24	2.09	20.39	Yes	4.984271571	Geocoll/Dekowe; 700

Temporary Sediment Traps, Skimmer Sediment Basins, and Temporary Sediment Basins

Device	Type	Weir		Depth to Weir (ft)	Depth Below Weir (ft)	Side Slope (x:1)	Top Length (ft)	Top Width (ft)	Skimmer Office Size (in)
		Width (ft)	Depth (ft)						
SSB-1	Skimmer Sediment Basin	20	0.3	1.5	2.0	3.0	103	51	3.00
SSB-2	Skimmer Sediment Basin	20	0.2	1.5	2.0	3.0	97	37	1.50
SSB-3	Skimmer Sediment Basin	25	0.4	1.5	2.0	3.0	151	59	3.00
TSB-1	Temporary Sediment Basin	40	0.4	1.5	2.0	3.0	187	87	3.00

Rip Rap Aprons

Outlet	Size (in)	Pad Entry		Pad Exit		Pad Length (ft)	Pad Depth (ft)	Stone Class
		Width (ft)	Depth (ft)	Width (ft)	Depth (ft)			
Slope Drain	18	3	6	6	12	41	B	
SSB-3	24	4	8	12	23	B		
TSB-1	24	4	8	16	56	B		



**EROSION CONTROL PLAN - PHASE 1**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

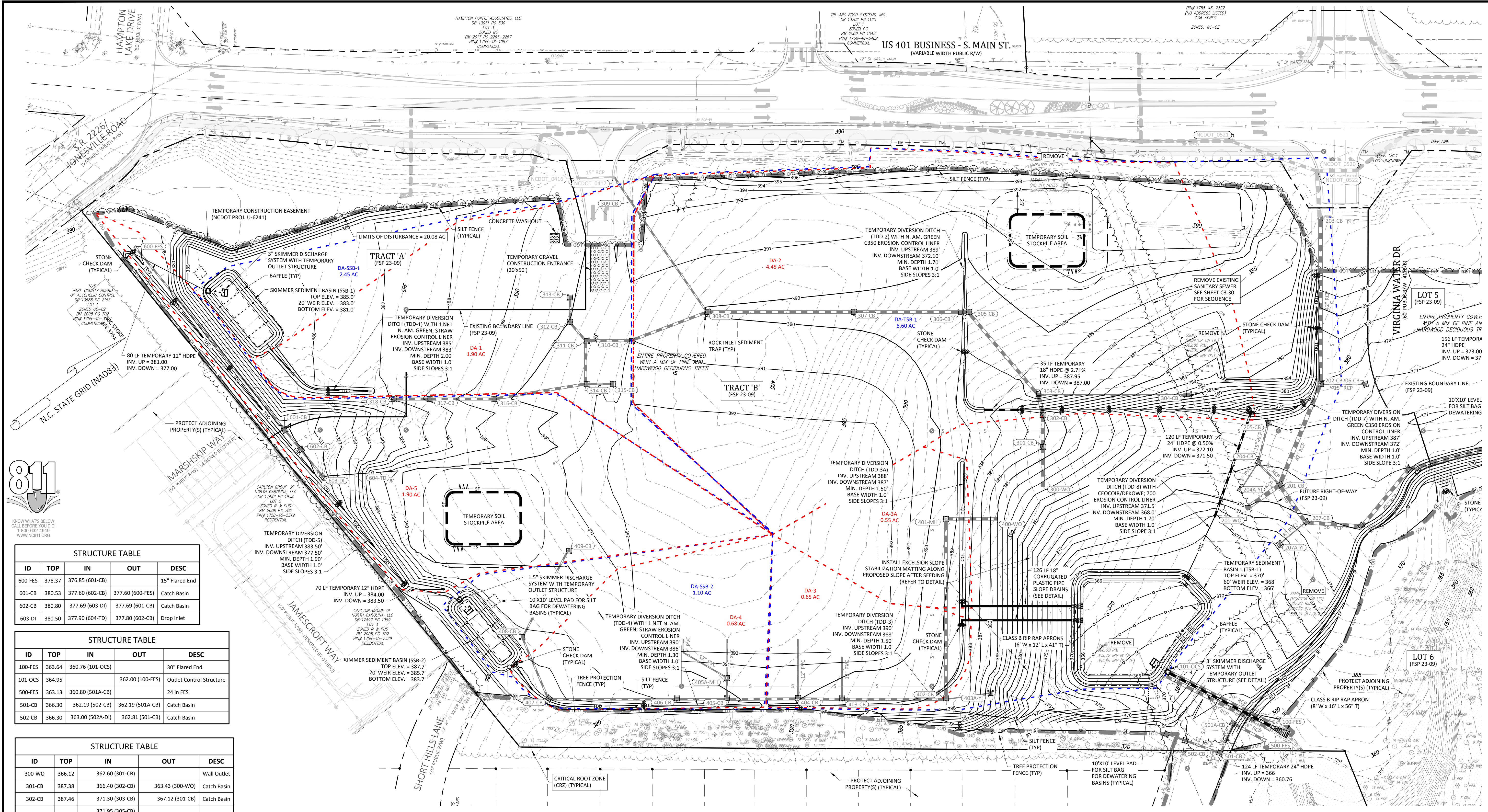
NC License: P11199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 #251 SSB-0888  
 www.arkconsultinggroup.com  
 758-7858  
 758-8888  
 10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C1.11**  
 CID

2/14/2023 ISSUED FOR CONSTRUCTION  
 1/26/2023 SDP 23-05 / CID 23-01 COMBINED REVIEW  
 # DATE DESCRIPTION





**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
600-FES	378.37	376.85 (601-CB)	377.60 (600-FES)	15" Flared End
601-CB	380.53	377.60 (602-CB)	377.60 (600-FES)	Catch Basin
602-CB	380.80	377.69 (603-D)	377.69 (601-CB)	Catch Basin
603-DI	380.50	377.90 (604-TD)	377.80 (602-CB)	Drop Inlet

**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
100-FES	363.64	360.76 (101-OC)		30" Flared End
101-OC	364.95		362.00 (100-FES)	Outlet Control Structure
500-FES	363.13	360.80 (501A-CB)		24 in FES
501-CB	366.30	362.19 (502-CB)	362.19 (501A-CB)	Catch Basin
502-CB	366.30	363.00 (502A-D)	362.83 (501-CB)	Catch Basin

**STRUCTURE TABLE**

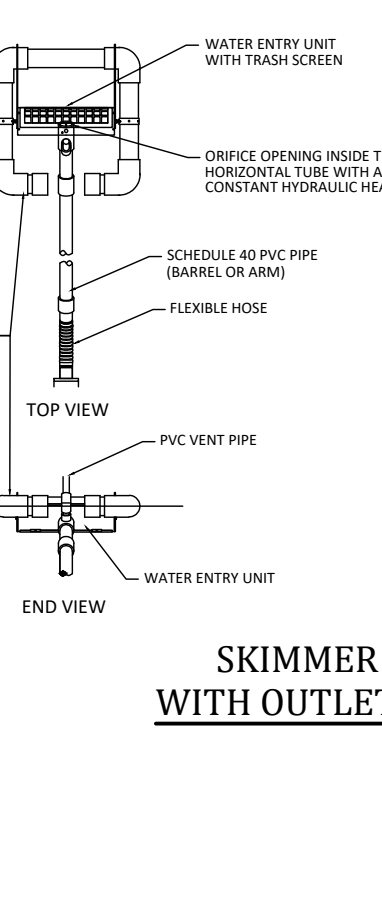
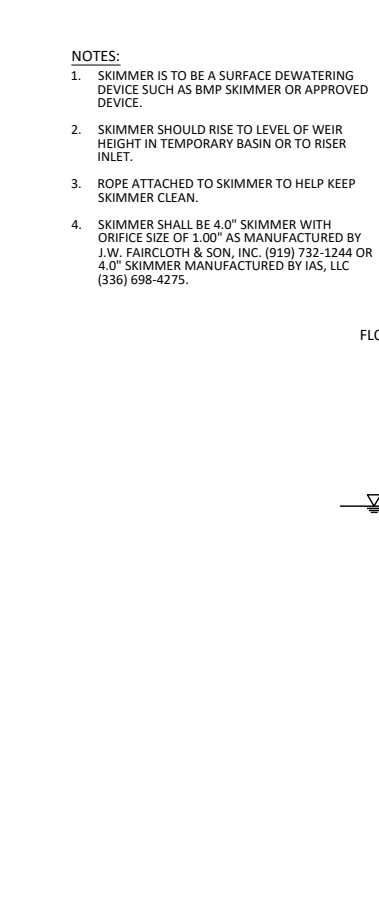
ID	TOP	IN	OUT	DESC
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
302-CB	387.46	371.30 (303-CB)	367.12 (301-CB)	Catch Basin
303-CB	388.35	371.95 (305-CB)	371.55 (302-CB)	Catch Basin
304-CB	391.55	387.30 (304A-CO)	386.30 (303-CB)	Catch Basin
305-CB	388.20	373.34 (306-CB)	373.34 (303-CB)	Catch Basin
306-CB	388.50	373.42 (307-CB)	373.42 (305-CB)	Catch Basin
307-CB	390.53	374.78 (308-CB)	374.78 (306-CB)	Catch Basin
308-CB	390.56	381.90 (403-CB)	376.67 (307-CB)	Catch Basin
309-CB	392.90	384.75 (NCDOT_0417)	384.75 (308-CB)	Catch Basin
310-CB	391.65	378.11 (311-CB)	378.11 (308-CB)	Catch Basin
311-CB	391.47	378.69 (314-CB)	379.69 (310-CB)	Catch Basin
312-CB	391.36	380.25 (313-CB)	380.25 (311-CB)	Catch Basin
313-CB	391.32		380.59 (312-CB)	Catch Basin
314-CB	391.81	379.24 (316-CB)	379.24 (311-CB)	Catch Basin
315-CB	391.66	385.16 (315-CB)		Catch Basin
316-CB	389.88	380.24 (317-CB)	380.24 (314-CB)	Catch Basin
317-CB	388.44	380.93 (318-CB)	380.93 (316-CB)	Catch Basin
318-CB	387.30		381.31 (317-CB)	Catch Basin
NCDOT_0416	387.52		385.58 (NCDOT_0417)	Catch Basin
NCDOT_0417	387.32	385.38 (NCDOT_0416)		Catch Basin

**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
400-WO	365.55	362.60 (401-MH)		Wall Outlet
401-MH	389.89	377.49 (402-CB)	363.43 (400-WO)	60 in MH
402-CB	388.30	379.91 (403-CB)	379.41 (401-MH)	Catch Basin
403-CB	389.10	381.02 (404-CB)	381.02 (402-CB)	Catch Basin
404-CB	389.32	381.49 (405-CB)	381.49 (403-CB)	Catch Basin
405-CB	390.60	386.59 (405A-MH)	382.24 (404-CB)	Catch Basin
405A-MH	390.43	386.82 (RD-5)	386.82 (405-CB)	48 in MH
406-CB	390.05	383.27 (407-CB)	383.27 (405-CB)	Catch Basin
407-CB	388.60	384.89 (408-CB)	384.64 (406-CB)	Catch Basin
408-CB	389.07	385.61 (409-CB)	385.61 (407-CB)	Catch Basin
409-CB	390.90		386.65 (408-CB)	Catch Basin

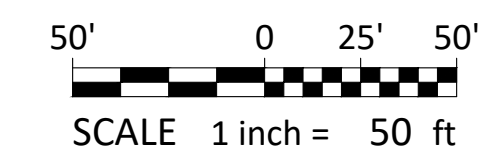
**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
200-WO	366.69	362.60 (201-CB)		Wall Outlet
201-CB	377.09	366.31 (207-CB)	363.26 (200-WO)	Catch Basin
202-CB	378.87	369.44 (202-CB)	370.10 (204-CB)	Catch Basin
203-CB	378.70	373.78 (206-CB)	371.53 (203-CB)	Catch Basin
204-CB	387.70	380.40 (202-CB)		Catch Basin
205-CB	377.50	371.68 (204A-YI)	371.09 (201-CB)	Catch Basin
206-CB	379.12	371.09 (205-CB)		Catch Basin
207-CB	376.34	367.03 (208-CB)	367.03 (201-CB)	Catch Basin
208-CB	376.41	367.94 (209-CB)	367.94 (207-CB)	Catch Basin
209-CB	377.39	369.12 (210-CB)	369.12 (208-CB)	Catch Basin
210-CB	377.08	370.92 (211-CB)	370.92 (209-CB)	Catch Basin
211-CB	377.08	372.03 (212-CB)	371.53 (210-CB)	Catch Basin
		373.03 (211A-D)		



SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR SSB-1  
NOT TO SCALE

SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR SSB-2  
NOT TO SCALE



2.14.NOV.23 ISSUED FOR CONSTRUCTION  
1.26.OCT.23 SDP-23-05 / CID-23-01 COMBINED REVIEW

REVISIONS:

**CROSLAND SOUTHEAST**

**EROSION CONTROL PLAN - PHASE 2**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

S Main St. / US 401 and Virginia Water Drive

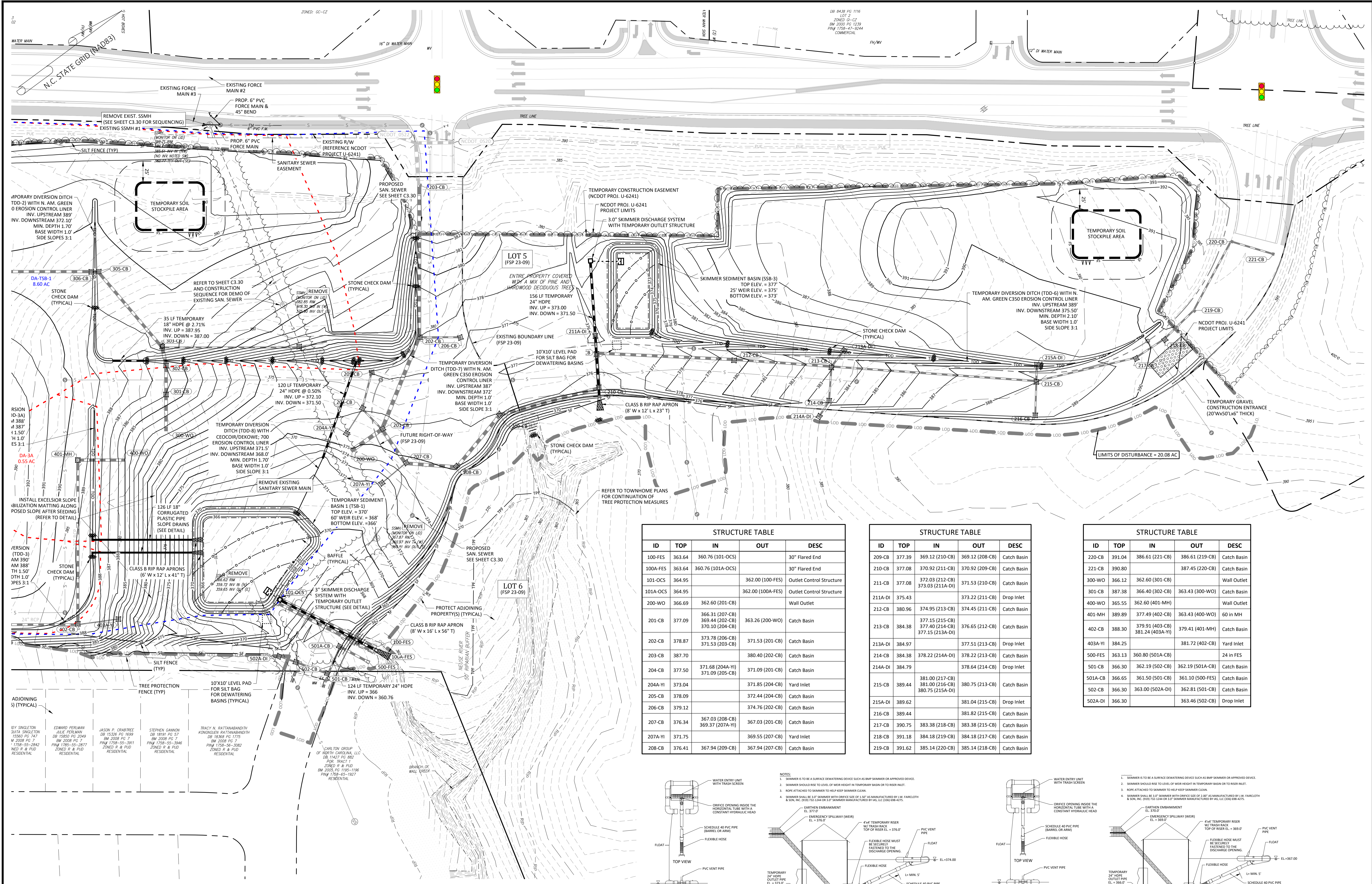
Project Manager: BCF  
Drawn by: DLC  
Checked by: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS  
2755-B Charles Blvd., #7858  
(757) 558-0888  
www.arkconsultinggroup.com

Professional Engineer Seal: 31970, State of North Carolina, Exp. 10/26/2023

**C1.20**

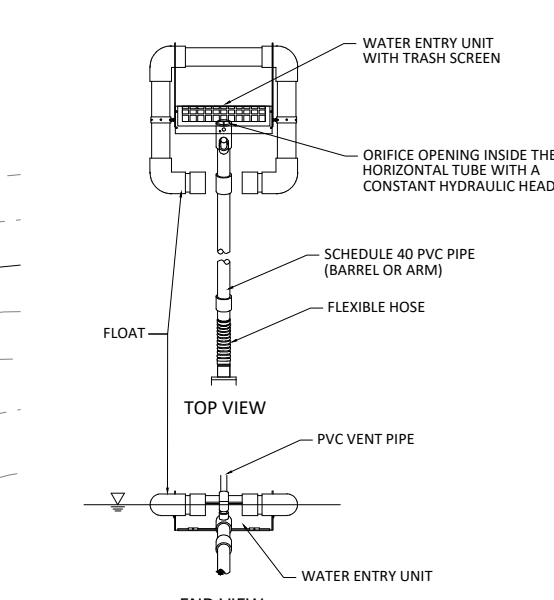
SDP



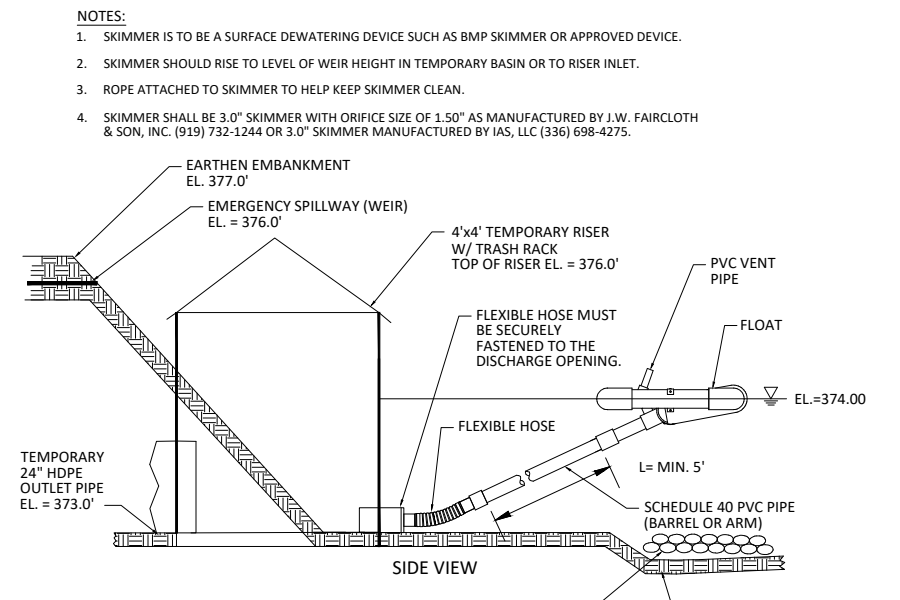
STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
100-FES	363.64	360.76 (101-OCS)		30" Flared End
100A-FES	363.64	360.76 (101A-OCS)		30" Flared End
101-OCS	364.95		362.00 (100-FES)	Outlet Control Structure
101A-OCS	364.95		362.00 (100A-FES)	Outlet Control Structure
200-WO	366.69	362.60 (201-CB)		Catch Basin
201-CB	377.09	366.31 (207-CB) 369.44 (202-CB) 370.10 (204-CB)	363.26 (200-WO)	Catch Basin
202-CB	378.87	373.78 (206-CB) 371.53 (203-CB)	371.53 (201-CB)	Catch Basin
203-CB	387.70		380.40 (202-CB)	Catch Basin
204-CB	377.50	371.68 (204A-YI) 371.09 (205-CB)	371.09 (201-CB)	Catch Basin
204A-YI	373.04		371.85 (204-CB)	Yard Inlet
205-CB	378.09		372.44 (204-CB)	Catch Basin
206-CB	379.12		374.76 (202-CB)	Catch Basin
207-CB	376.34	367.03 (208-CB) 369.37 (207A-YI)	367.03 (201-CB)	Catch Basin
207A-YI	371.75		369.55 (207-CB)	Yard Inlet
208-CB	376.41	367.94 (209-CB)	367.94 (207-CB)	Catch Basin

STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
209-CB	377.39	369.12 (210-CB)	369.12 (208-CB)	Catch Basin
210-CB	377.08	370.92 (211-CB)	370.92 (209-CB)	Catch Basin
211-CB	377.08	372.03 (212-CB) 373.03 (211A-DI)	371.53 (210-CB)	Catch Basin
211A-DI	375.43		373.22 (211-CB)	Drop Inlet
212-CB	380.96	374.95 (213-CB)	374.45 (212-CB)	Catch Basin
213-CB	384.38	377.15 (215-CB) 377.15 (214-DI)	376.65 (212-CB)	Catch Basin
213A-DI	384.97		377.51 (213-CB)	Drop Inlet
214-CB	384.38	378.22 (214A-DI)	378.22 (213-CB)	Catch Basin
214A-DI	384.79		378.64 (214-CB)	Drop Inlet
215-CB	389.44	381.00 (217-CB) 381.00 (216-CB) 380.75 (215A-DI)	380.75 (212-CB)	Catch Basin
215A-DI	389.62		381.04 (215-CB)	Drop Inlet
216-CB	389.44		381.82 (215-CB)	Catch Basin
217-CB	390.75	383.38 (218-CB)	383.38 (215-CB)	Catch Basin
218-CB	391.18	384.18 (219-CB)	384.18 (217-CB)	Catch Basin
219-CB	391.62	385.14 (220-CB)	385.14 (218-CB)	Catch Basin

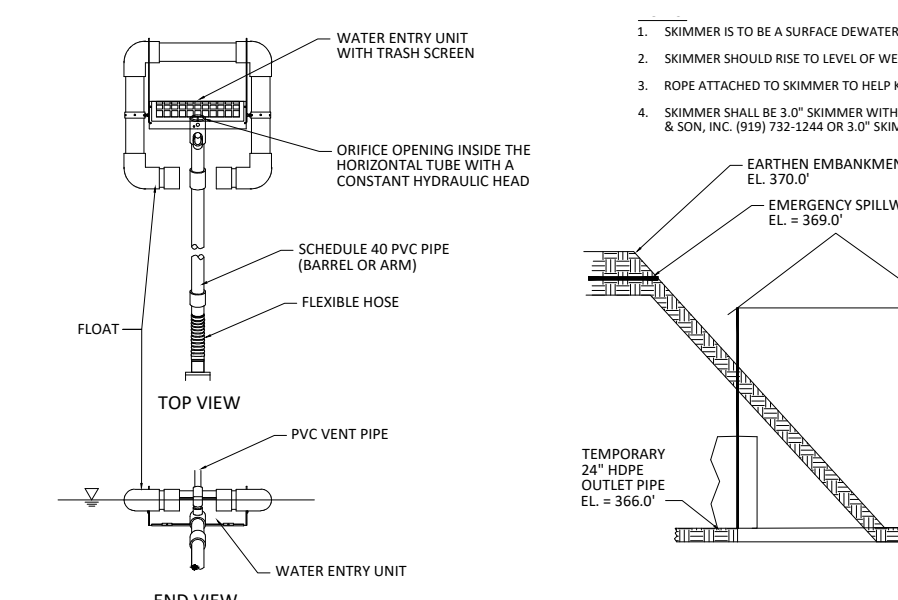
STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
220-CB	391.04	386.61 (221-CB)	386.61 (219-CB)	Catch Basin
221-CB	390.80		387.45 (220-CB)	Catch Basin
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
400-WO	365.55	362.60 (401-MH)		Wall Outlet
401-MH	389.89	377.49 (402-CB)	363.43 (400-WO)	60 in MH
402-CB	388.30	379.91 (403-YI) 381.24 (403A-YI)	379.41 (401-MH)	Catch Basin
403A-YI	384.25		381.72 (402-CB)	Yard Inlet
500-FES	363.13	360.80 (501A-CB)		24 in FES
501-CB	366.30	362.19 (502-CB)	362.19 (501A-CB)	Catch Basin
501A-CB	366.65	361.50 (501-CB)	361.10 (500-FES)	Catch Basin
502-CB	366.30	363.00 (502A-DI)	362.81 (501-CB)	Catch Basin
502A-DI	366.30		363.46 (502-CB)	Drop Inlet



Outlet	Pad Pad Pad Pad				Stone
	Size (in)	Entry (ft)	Exit (ft)	Length (ft)	
100	30	5	10	13	24
200	42	7	14	28	48
300	36	6	12	21	40
400	30	5	10	13	24
500	24	4	8	10	16
600	15	3	5	5	7



SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR SSB-3  
NOT TO SCALE



SKIMMER DISCHARGE SYSTEM WITH OUTLET STRUCTURE FOR TSB-1  
NOT TO SCALE



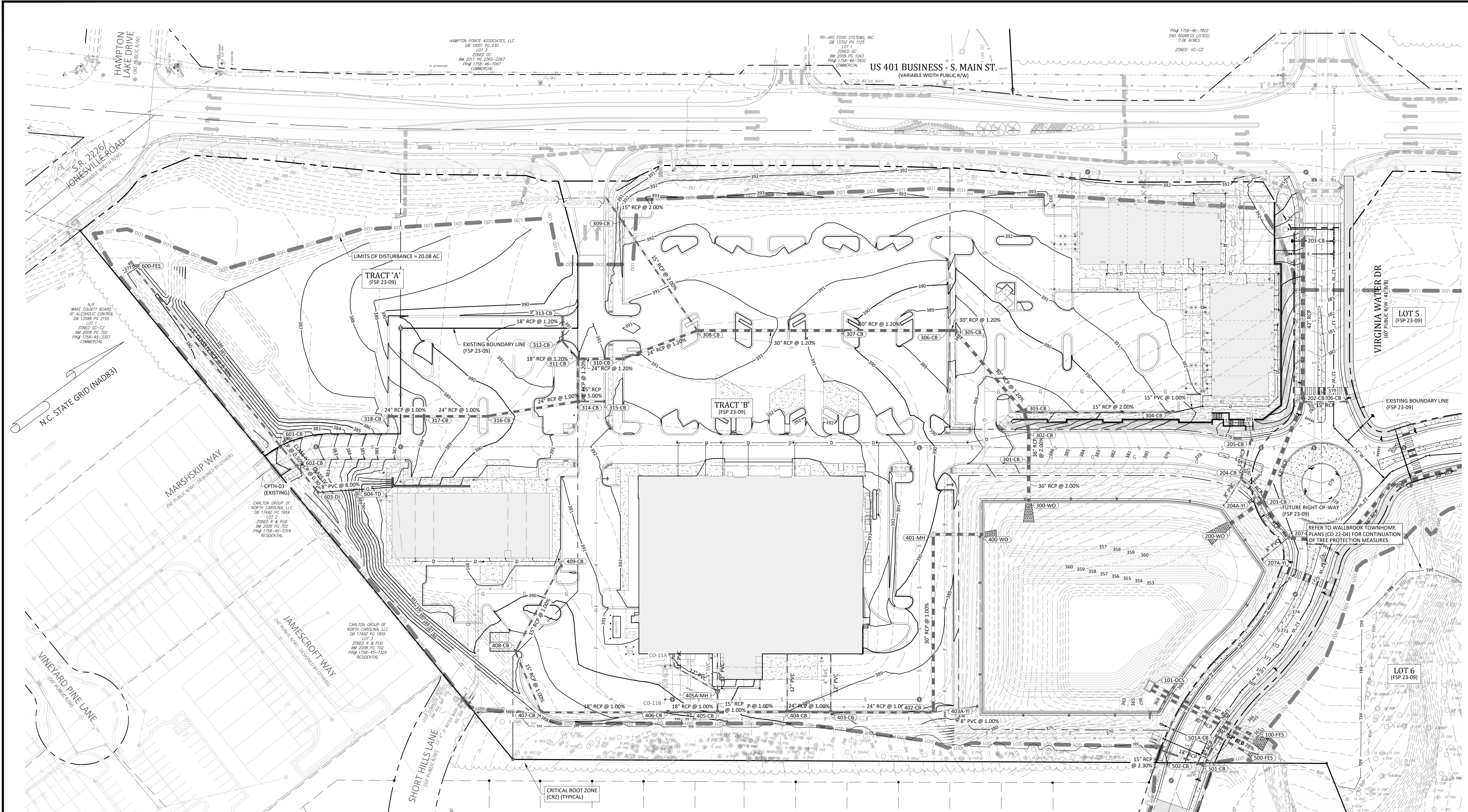
2. 14-NOV-23 ISSUED FOR CONSTRUCTION  
 1. 26-OCT-23 SDP 23-05 / CID 23-01 COMBINED REVIEW  
 # DATE DESCRIPTION

**EROSION CONTROL PLAN - PHASE 2**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

N.C. License: P11199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 (757) 558-0888  
 www.arkconsultinggroup.com

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C1.21**  
 CID



NOTE:  
EXISTING CONTOURS WITHIN THE LOD REPRESENT  
DESIGN CONDITIONS FROM PHASE 1 GRADING AND  
EROSION CONTROL.

Rip Rap Aprons

Outlet	Size (in)	Pad				Pad Stone Class
		Entry (ft)	Exit (ft)	Length (ft)	Depth (in)	
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B

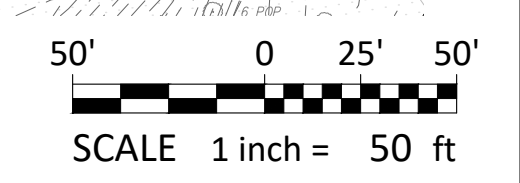
STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
302-CB	387.46	371.30 (303-CB)	367.12 (301-CB)	Catch Basin
303-CB	388.35	371.95 (305-CB)	371.55 (302-CB)	Catch Basin
304-CB	391.55	387.30 (304A-CO)	386.30 (303-CB)	Catch Basin
305-CB	388.20	373.34 (306-CB)	373.34 (303-CB)	Catch Basin
306-CB	388.50	373.42 (307-CB)	373.42 (305-CB)	Catch Basin
307-CB	390.53	374.78 (308-CB)	374.78 (306-CB)	Catch Basin
308-CB	390.56	381.90 (309-CB)	376.67 (307-CB)	Catch Basin
309-CB	392.90	384.75 (NCDOT_0417)	384.75 (308-CB)	Catch Basin
310-CB	391.65	378.11 (311-CB)	378.11 (308-CB)	Catch Basin
311-CB	391.47	378.69 (314-CB)	379.95 (312-CB)	Catch Basin
312-CB	391.36	380.25 (313-CB)	380.25 (311-CB)	Catch Basin
313-CB	391.32		380.59 (312-CB)	Catch Basin
314-CB	391.81	379.24 (316-CB)	379.24 (311-CB)	Catch Basin

315-CB	391.66		386.66 (314-CB)	Catch Basin
316-CB	389.88	380.24 (317-CB)	380.24 (314-CB)	Catch Basin
317-CB	388.44	380.93 (318-CB)	380.93 (316-CB)	Catch Basin
318-CB	387.30		381.31 (317-CB)	Catch Basin
NCDOT_0416	387.52		385.58 (NCDOT_0417)	Catch Basin
NCDOT_0417	387.32	385.38 (NCDOT_0416)		Catch Basin

STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
400-WO	365.55	362.60 (401-MH)		Wall Outlet
401-MH	389.89	377.49 (402-CB)	363.43 (400-WO)	60 in MH
402-CB	388.30	379.91 (403-CB)	379.41 (401-MH)	Catch Basin
403-CB	389.10	381.02 (404-CB)	381.02 (402-CB)	Catch Basin
404-CB	389.32	381.49 (405-CB)	381.49 (403-CB)	Catch Basin
405-CB	390.60	386.59 (405A-MH)	382.24 (404-CB)	Catch Basin
405A-MH	390.43	386.82 (RD-5)	386.82 (RD-3)	48 in MH
406-CB	390.05	383.27 (407-CB)	383.27 (405-CB)	Catch Basin
407-CB	388.60	384.89 (408-CB)	384.64 (406-CB)	Catch Basin
408-CB	389.07	385.61 (409-CB)	385.61 (407-CB)	Catch Basin
409-CB	390.90		386.65 (408-CB)	Catch Basin

STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
600-FES	378.37	376.85 (601-CB)		15" Flared End
601-CB	380.53	377.60 (602-CB)	377.60 (600-FES)	Catch Basin
602-CB	380.80	377.69 (603-DI)	377.69 (601-CB)	Catch Basin
603-DI	380.50	377.90 (604-TD)	377.80 (602-CB)	Drop Inlet

STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
302-CB	387.46	371.30 (303-CB)	367.12 (301-CB)	Catch Basin



2 | 14/NOV/23 ISSUED FOR CONSTRUCTION  
1 | 26/OCT/23 SDP-23-05 / CID-23-01 COMBINED REVIEW

REVISIONS:

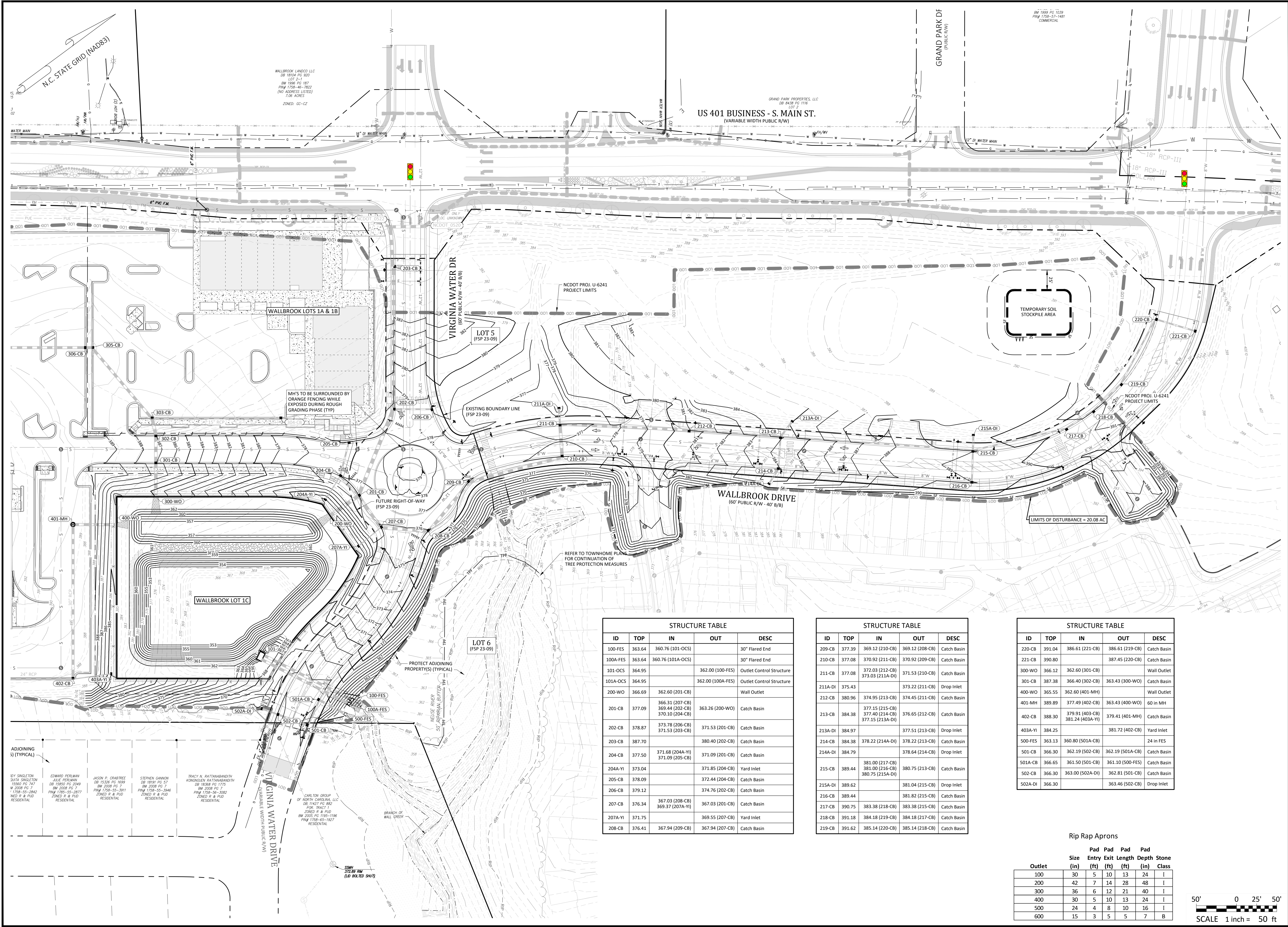
# | DATE | DESCRIPTION

**EROSION CONTROL PLAN - PHASE 3**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

NC License: P1129  
**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS  
2755-B Charles Blvd  
Raleigh, NC 27608  
(919) 558-0888  
www.arkconsultinggroup.com

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C1.30**  
SDP



**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
100-FES	363.64	360.76 (101-OCS)		30" Flared End
100A-FES	363.64	360.76 (101A-OCS)		30" Flared End
101-OCS	364.95		362.00 (100-FES)	Outlet Control Structure
101A-OCS	364.95		362.00 (100A-FES)	Outlet Control Structure
200-WO	366.69	362.60 (201-CB)		Wall Outlet
201-CB	377.09	366.31 (207-CB) 369.44 (202-CB) 370.10 (204-CB)	363.26 (200-WO)	Catch Basin
202-CB	378.87	373.78 (206-CB) 371.53 (203-CB)	371.53 (201-CB)	Catch Basin
203-CB	387.70		380.40 (202-CB)	Catch Basin
204-CB	377.50	371.68 (204A-YI) 371.09 (205-CB)	371.09 (201-CB)	Catch Basin
204A-YI	373.04		371.85 (204-CB)	Yard Inlet
205-CB	378.09		372.44 (204-CB)	Catch Basin
206-CB	379.12		374.76 (202-CB)	Catch Basin
207-CB	376.34	367.03 (208-CB) 369.37 (207A-YI)	367.03 (201-CB)	Catch Basin
207A-YI	371.75		369.55 (207-CB)	Yard Inlet
208-CB	376.41	367.94 (209-CB)	367.94 (207-CB)	Catch Basin

**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
209-CB	377.39	369.12 (210-CB)	369.12 (208-CB)	Catch Basin
210-CB	377.08	370.92 (211-CB)	370.92 (209-CB)	Catch Basin
211-CB	377.08	373.03 (212-CB) 373.03 (211A-DI)	371.53 (210-CB)	Catch Basin
211A-DI	375.43		373.22 (211-CB)	Drop Inlet
212-CB	380.96	374.95 (213-CB)	374.45 (211-CB)	Catch Basin
213-CB	384.38	377.15 (215-CB) 377.40 (214-CB) 377.15 (213A-DI)	376.65 (212-CB)	Catch Basin
213A-DI	384.97		377.51 (213-CB)	Drop Inlet
214-CB	384.38	378.22 (214A-DI)	378.22 (213-CB)	Catch Basin
214A-DI	384.79		378.64 (214-CB)	Drop Inlet
215-CB	389.44	381.00 (217-CB) 381.00 (216-CB) 380.75 (215A-DI)	380.75 (213-CB)	Catch Basin
215A-DI	389.62		381.04 (215-CB)	Drop Inlet
216-CB	389.44		381.82 (215-CB)	Catch Basin
217-CB	390.75	383.38 (218-CB)	383.38 (215-CB)	Catch Basin
218-CB	391.18	384.18 (219-CB)	384.18 (217-CB)	Catch Basin
219-CB	391.62	385.14 (220-CB)	385.14 (218-CB)	Catch Basin

**STRUCTURE TABLE**

ID	TOP	IN	OUT	DESC
220-CB	391.04	386.61 (221-CB)	386.61 (219-CB)	Catch Basin
221-CB	390.80		387.45 (220-CB)	Catch Basin
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
400-WO	365.55	362.60 (401-MH)		Wall Outlet
401-MH	389.89	377.49 (402-CB)	363.43 (400-WO)	60 in MH
402-CB	388.30	379.91 (403-CB) 381.24 (403A-YI)	379.91 (401-MH)	Catch Basin
403A-YI	384.25		381.72 (402-CB)	Yard Inlet
500-FES	363.13	360.80 (501A-CB)		24 in FES
501-CB	366.30	362.19 (502-CB)	362.19 (501A-CB)	Catch Basin
501A-CB	366.65	361.50 (501-CB)	361.10 (500-FES)	Catch Basin
502-CB	366.30	363.00 (502A-DI)	362.81 (501-CB)	Catch Basin
502A-DI	366.30		363.46 (502-CB)	Drop Inlet

**Rip Rap Aprons**

Outlet	Size (in)	Pad		Pad Length (ft)	Pad Depth (ft)	Stone Class
		Entry (ft)	Exit (ft)			
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B



**EROSION CONTROL PLAN - PHASE 3**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

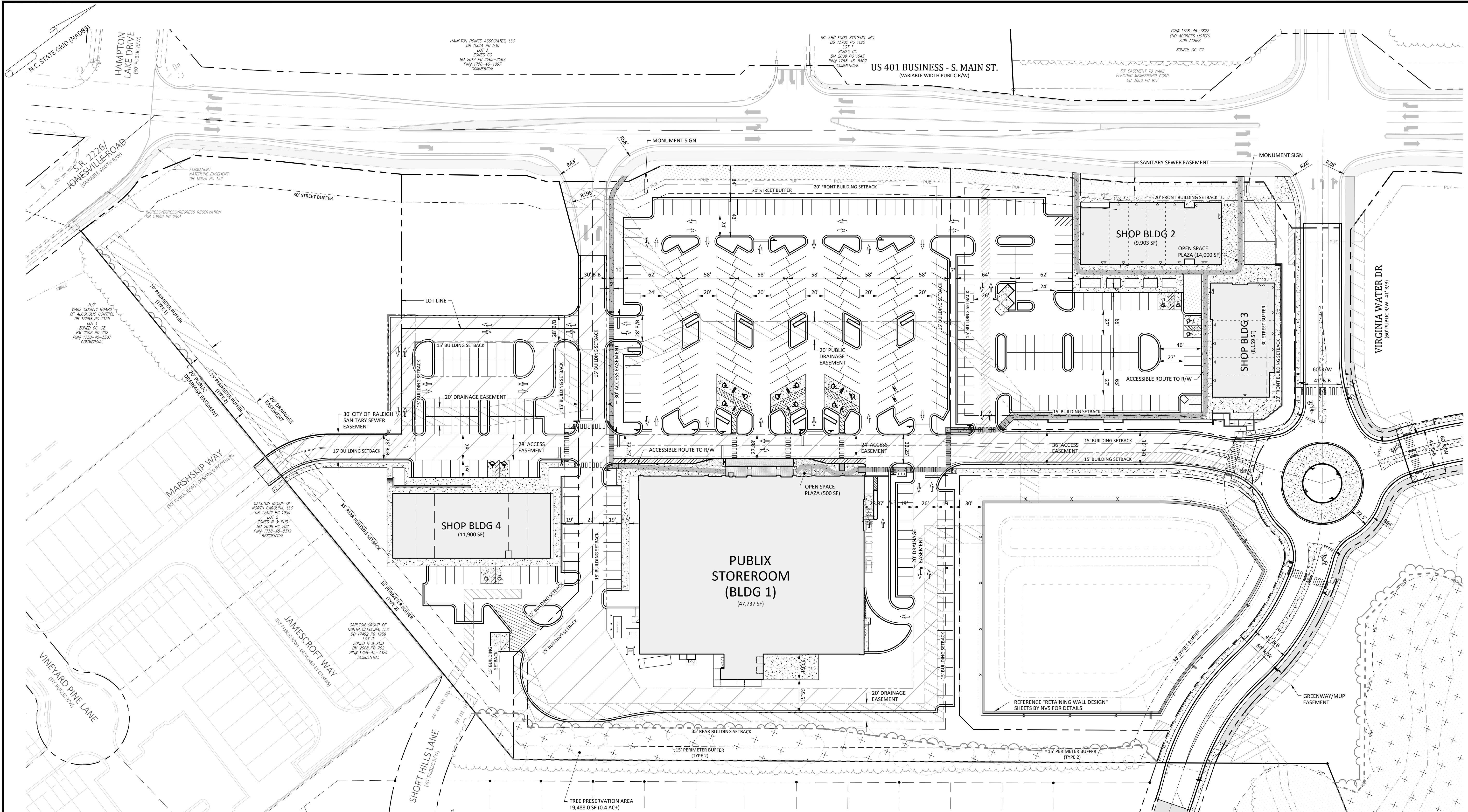
NC License: P1139  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd  
 Cary, NC 27513  
 (919) 458-0888  
 www.arkconsultinggroup.com

10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C1.31**  
 CID

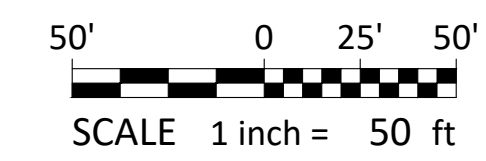
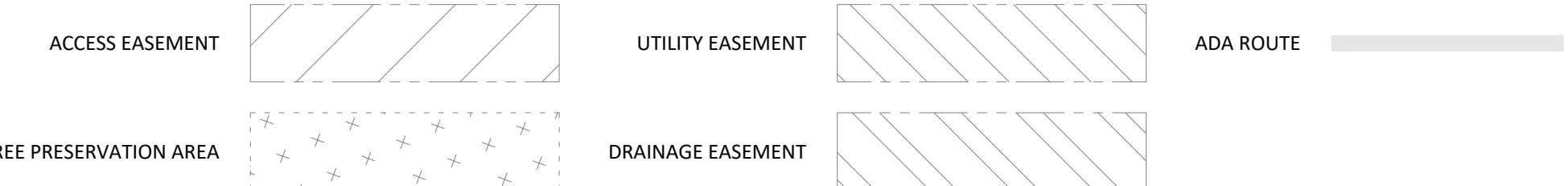
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 1:16/OCT/23 SDP 23-05 / CID 23-01 COMBINED REVIEW  
 # DATE DESCRIPTION



**Parking Requirements:**

<b>PARKING REQUIRED:</b>	<b>BICYCLE PARKING:</b>
(LDO SECTION 6.4.3) RETAIL SALES AND SERVICES (SHOPPING CENTER) 2.5 SPACES / 1,000 SF (MAX 7.5 / 1,000 SF)	(LDO SECTION 6.4.7) 1 SPACE / 5,000 SF
<b>AGGREGATE BUILDING AREA (GROSS FLOOR AREA):</b>	<b>AGGREGATE BUILDING AREA: (GROSS FLOOR AREA)</b>
77,699 / 1,000 X 2.5 =	77,699 / 5,000 X 1 =
<b>TOTAL REQUIRED PARKING:</b> 194 SPACES	<b>16 SPACES REQUIRED</b> <b>16 SPACES PROVIDED</b>
<b>REQUIRED HANDICAP PARKING:</b> 6 SPACES (INCLUDING 1 VAN ACCESSIBLE)	<b>REQUIRED LOADING AREAS:</b> (LDO SECTION 6.4.5) COMMERCIAL USE = 1 SPACE / 20,000 SF GROSS FLOOR AREA
<b>PARKING PROVIDED:</b>	<b>AGGREGATE BUILDING AREA: 77,699 SF</b>
<b>TOTAL PARKING SPACES:</b> 429 SPACES (INCLUDES 17 H/C SPACES)	<b>77,699 / 20,000 X 1 =</b> 4 LOADING SPACES REQUIRED 4 LOADING SPACES PROVIDED (2 - LOADING DOCKS FOR PUBLIX) (1 - 9'x19' FOR SHOP BLDGS 2 & 3) (1 - 22'x40' FOR SHOP BLDG 4)

**Hatch Legend:**



REVISIONS:

#	DATE	DESCRIPTION
1	12-06-23	ISSUED FOR CONSTRUCTION
2	14-NOV-23	ISSUED FOR CONSTRUCTION

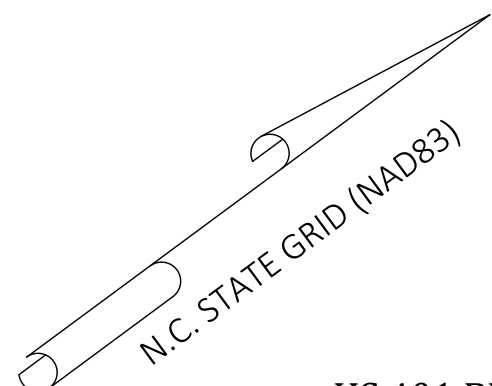


**SITE PLAN - OVERALL**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

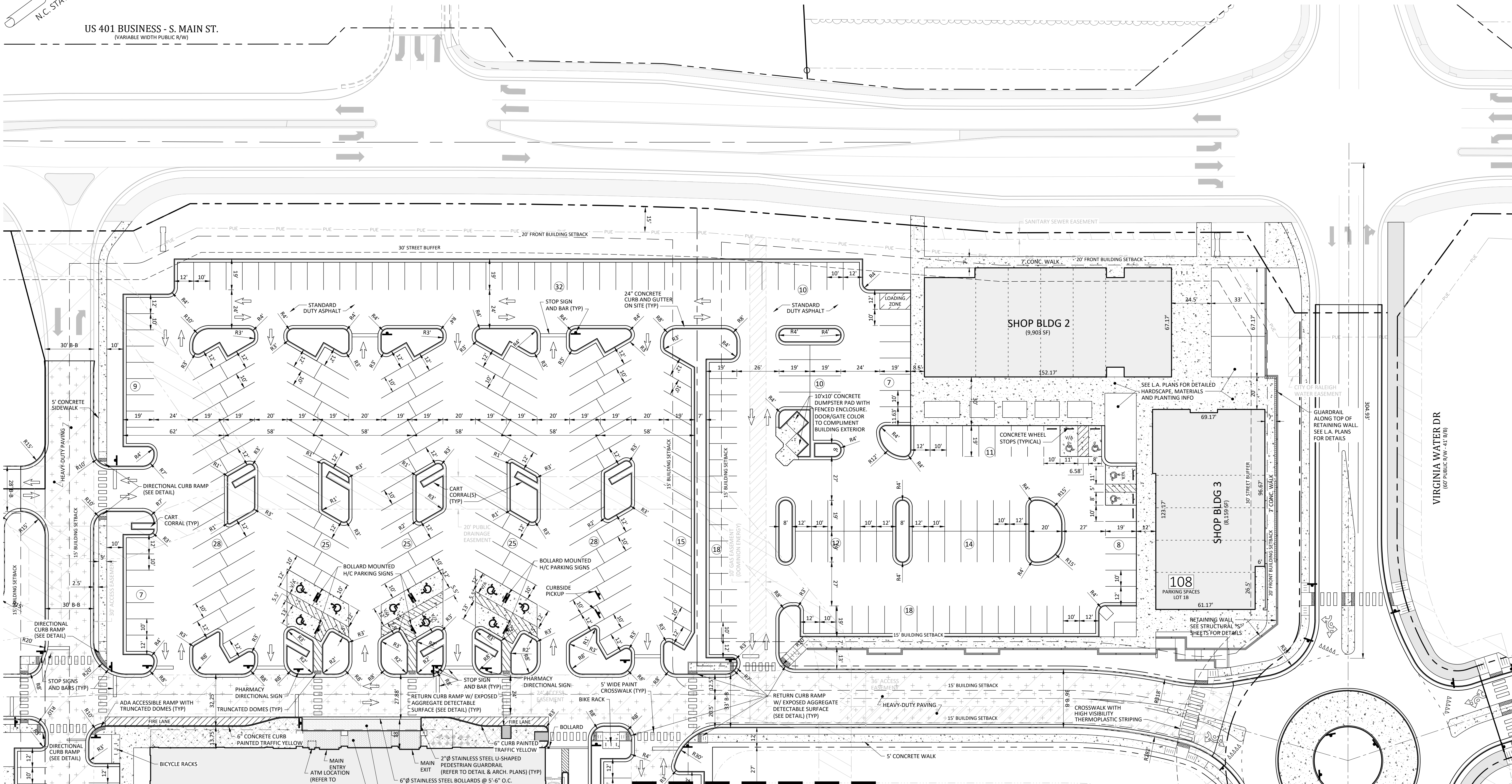
NC License: P-1199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Suite 200  
 Cary, NC 27513  
 (919) 467-8888  
 www.arkconsultinggroup.com

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C2.00**  
 SDP



US 401 BUSINESS - S. MAIN ST.  
(VARIABLE WIDTH PUBLIC R/W)



REFERENCE LINE - SEE SHEET C2.20

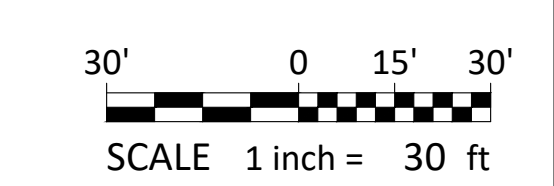
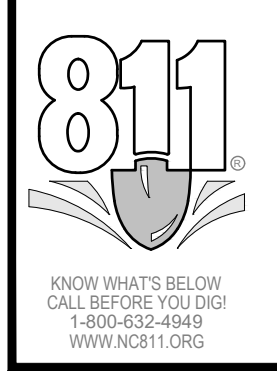


**SITE PLAN 'A'**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
Rolesville, Wake County, North Carolina

NC License: P11561  
**ARK CONSULTING GROUP PLLC**  
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2755-B Charles Blvd.  
Charlotte, NC 28205  
(754) 558-0888  
www.arkconsultinggroup.com

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

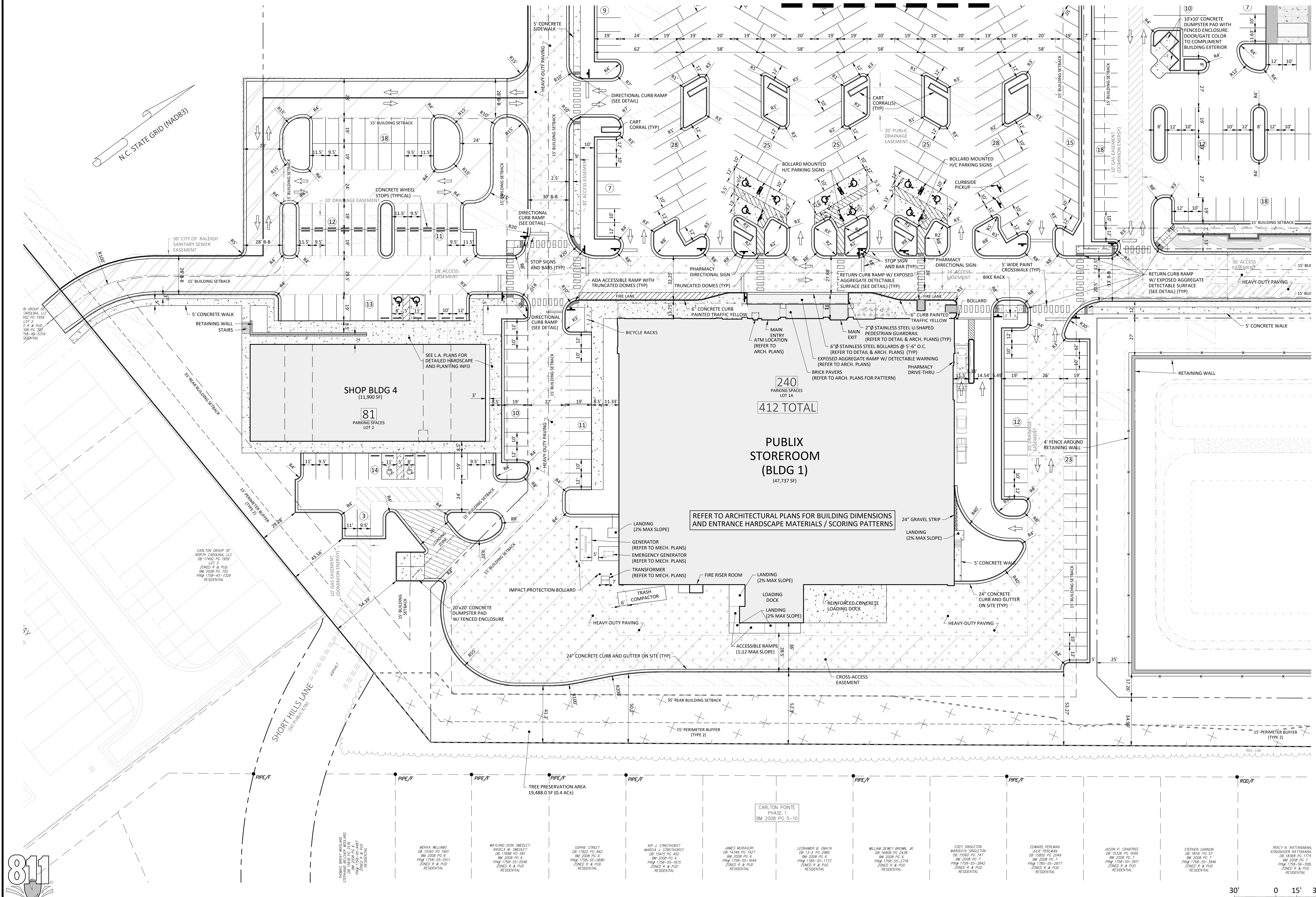
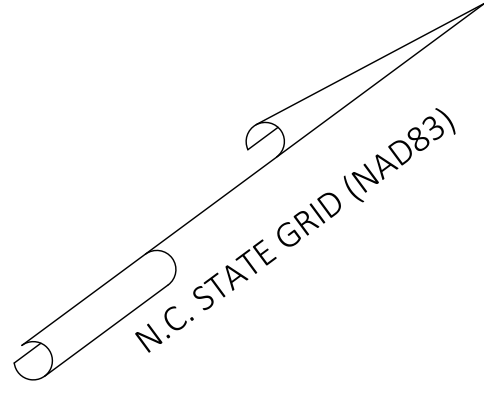
**C2.10**  
SDP



#	DATE	DESCRIPTION
1	12/06/23	ISSUED FOR CONSTRUCTION
2	14/NOV/23	ISSUED FOR CONSTRUCTION

REVISIONS:

REFERENCE LINE - SEE SHEET C2.10



SHOP BLDG 4  
(11,900 SF)  
81  
PARKING SPACES  
LOT 2

240  
PARKING SPACES  
LOT 1A  
412 TOTAL

PUBLIX  
STOREROOM  
(BLDG 1)  
(47,737 SF)

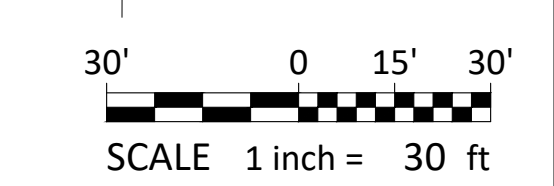
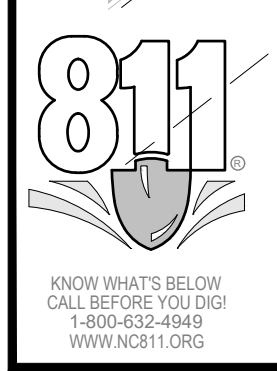
REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS  
AND ENTRANCE HARDSCAPE MATERIALS / SCORING PATTERNS



**SITE PLAN 'B'**  
**PUBLIX AT WALLBROOK AND  
WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

NC License: P11159  
**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS  
2755-B Charles Blvd.  
Charlotte, NC 28205  
(754) 558-0888  
www.arkconsultinggroup.com

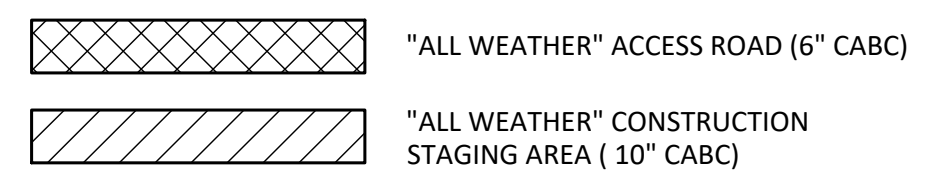
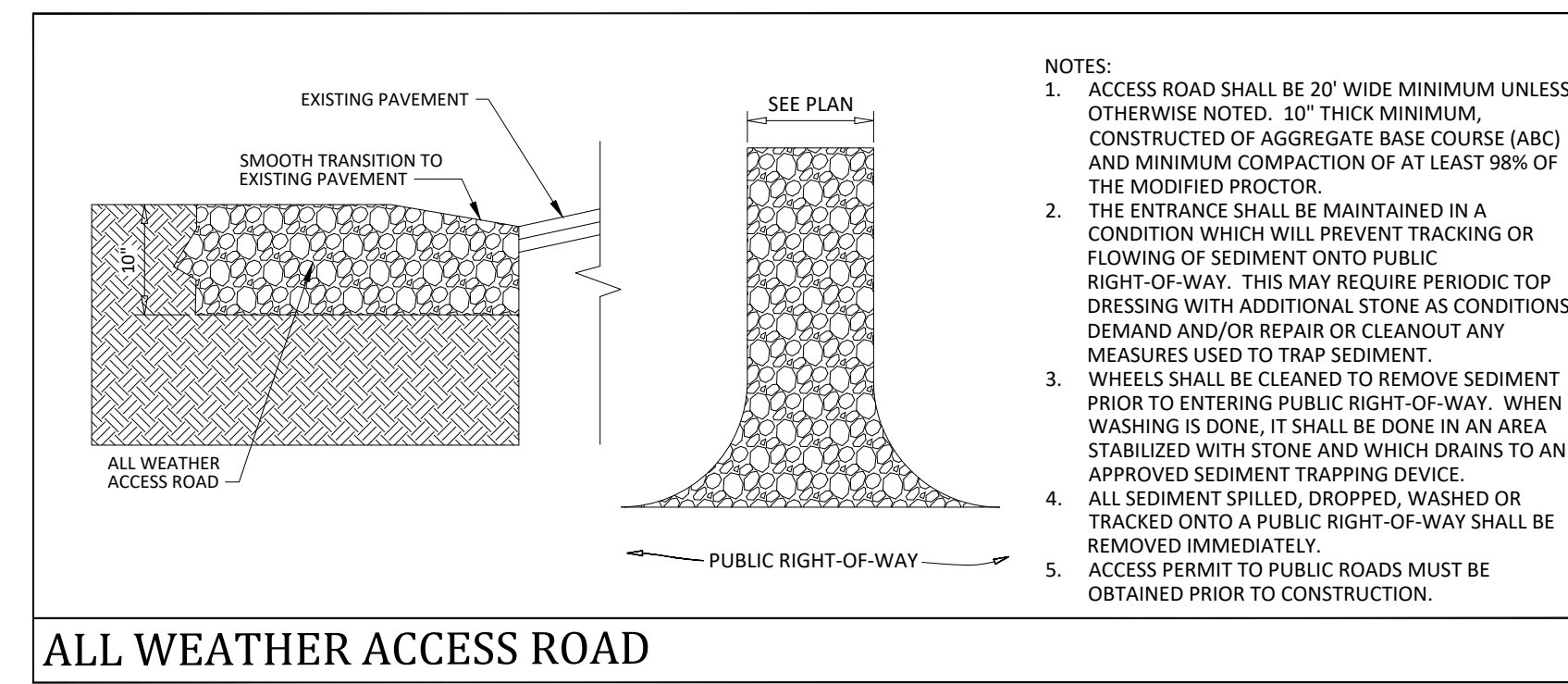
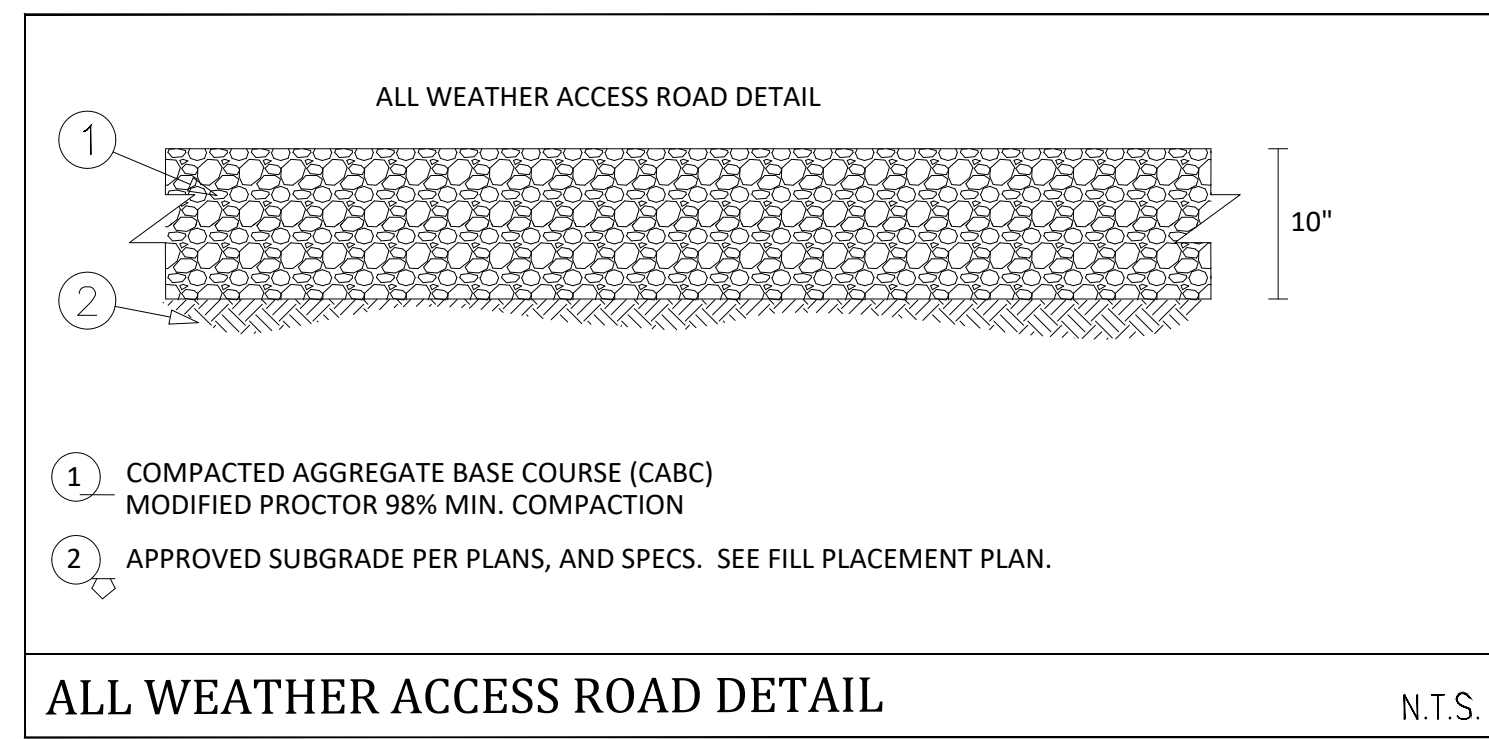
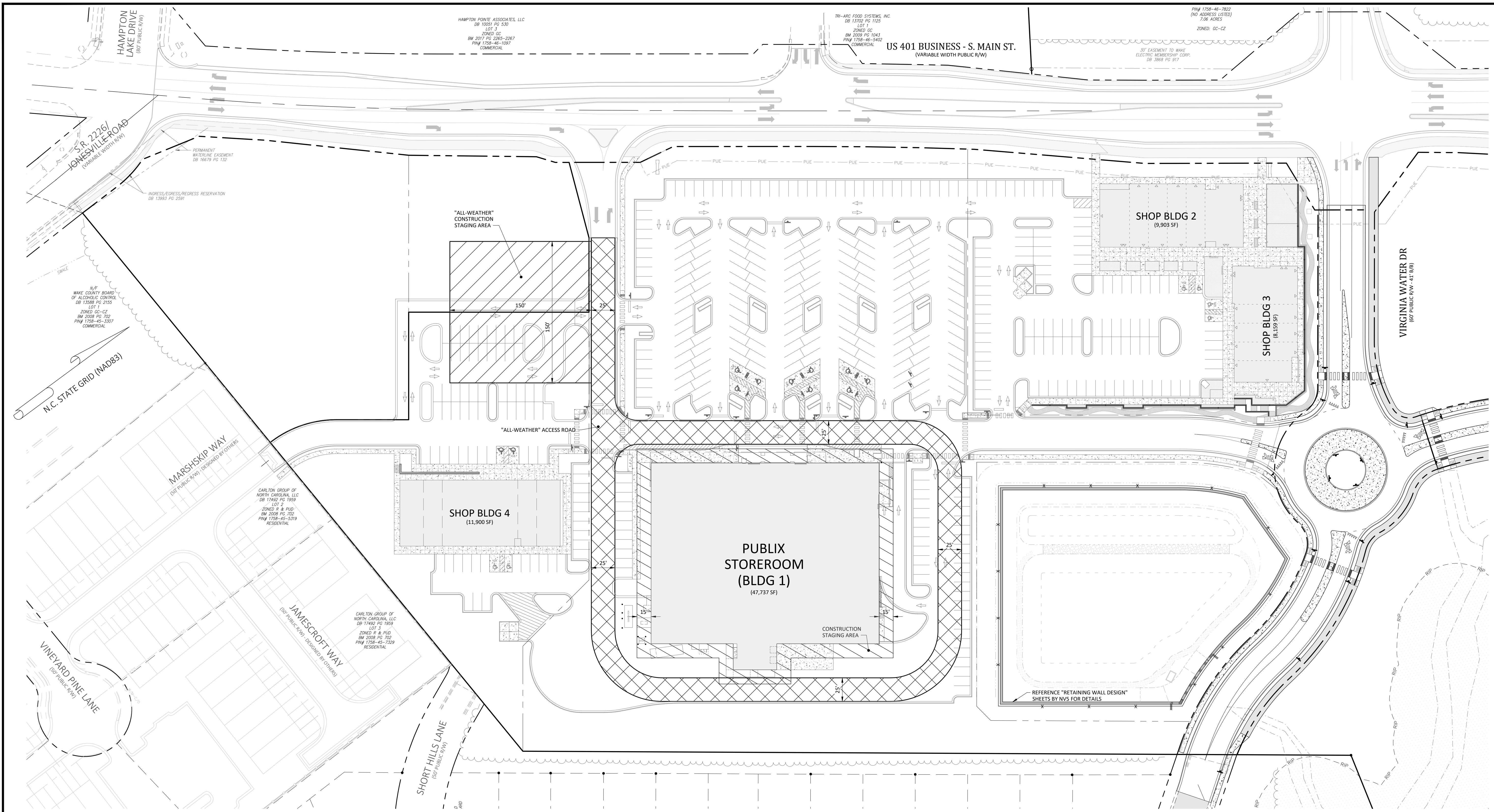
Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023



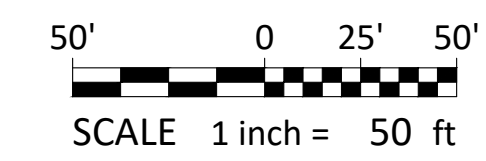
**C2.20**  
SDP

REVISIONS:

#	DATE	DESCRIPTION
1	12/02/23	ISSUED FOR CONSTRUCTION
2	10/26/23	SDP 23-05 / CID 23-01 COMBINED REVIEW



CRUSHED ROCK MAY BE SUBSTITUTED FOR CAB PENDING FIELD VERIFICATION AND REQUIRED TESTING AT THE GEOTECHNICAL ENGINEER'S RECOMMENDATION.



REVISIONS:

#	DATE	DESCRIPTION
1	26-OCT-23	SDP-23-05 / CID-23-01 COMBINED REVIEW
2	14-NOV-23	ISSUED FOR CONSTRUCTION



**TEMPORARY SITE ACCESS PLAN**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

S Main St. / US 401 and Virginia Water Drive

Rolesville, Wake County, North Carolina

NC License: P-1159

**ARK CONSULTING GROUP PLLC**

ENGINEERS & PLANNERS

2755-B Charles Blvd  
Raleigh, NC 27608  
(919) 858-0888  
www.arkconsultinggroup.com

10/26/2023

Professional Engineer Seal: C. FABRYN, No. 31970, State of North Carolina, expires 10/26/2025.

Project Manager: BCF

Drawn By: DLC

Checked By: STA

Project Number: 21089 / 22012

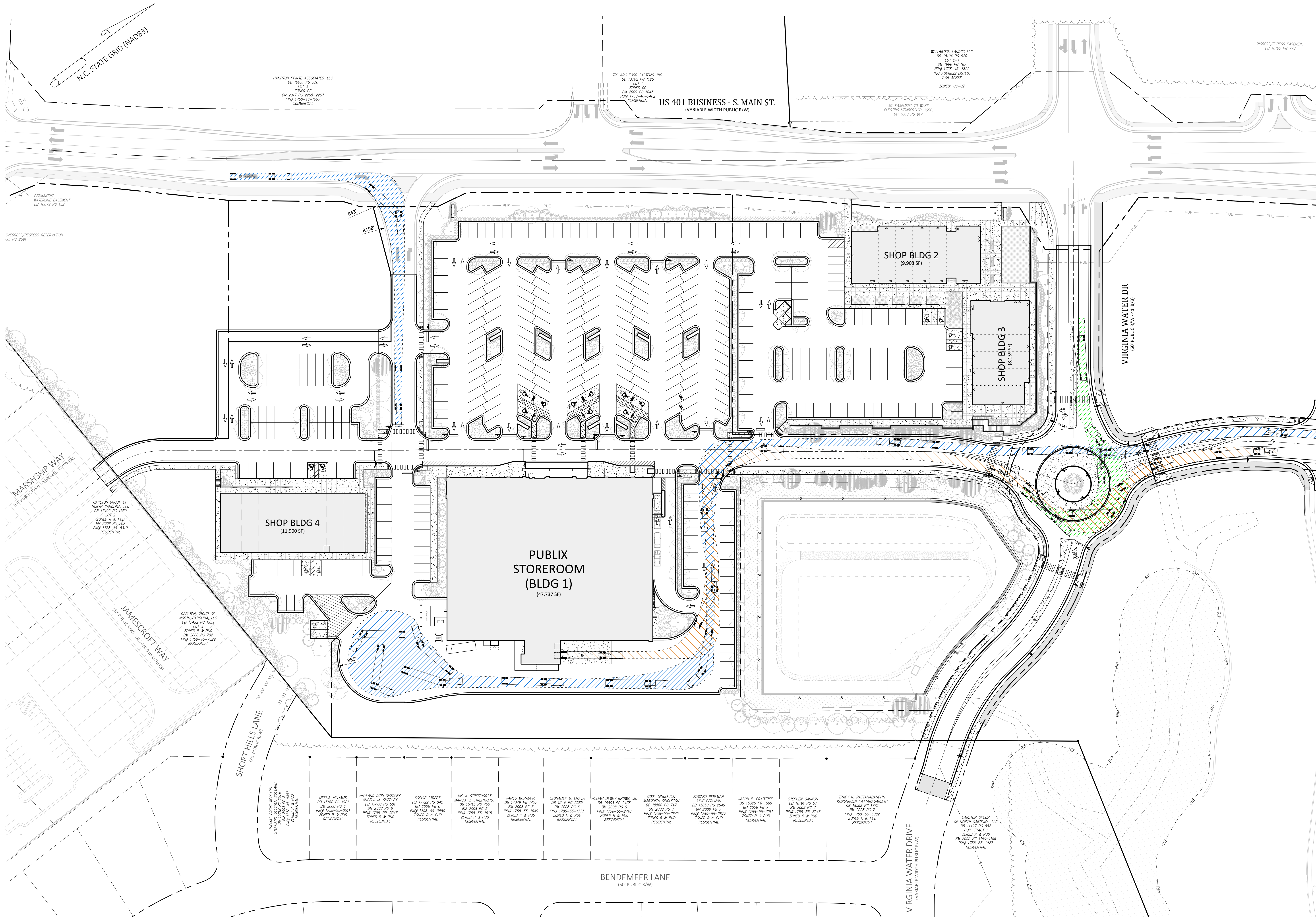
Drawing Number: D-1219-CD

Date: October 26, 2023

**C2.30**

SDP





**TRUCK ACCESS PLAN**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina

NC License: P1129  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

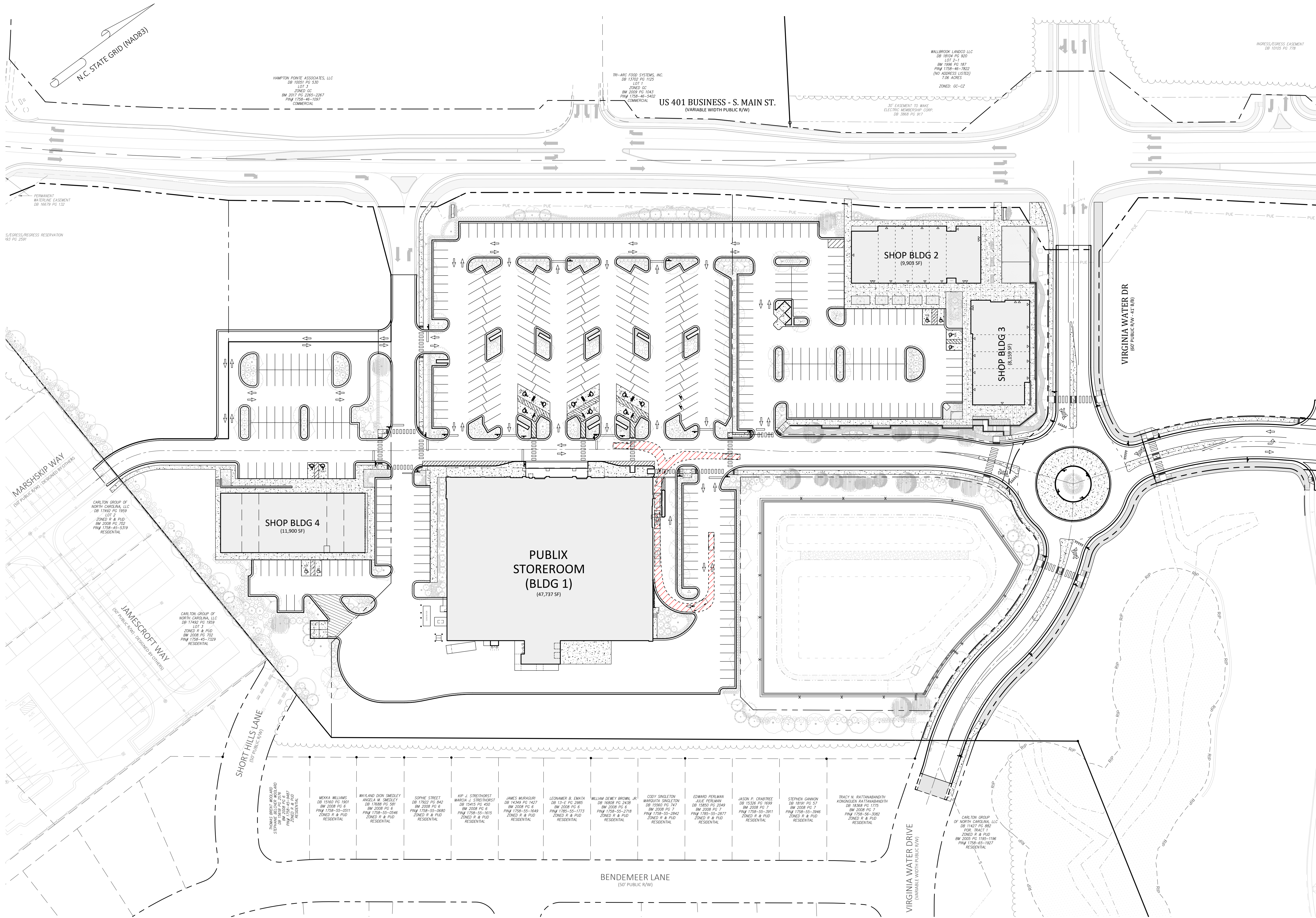
10/26/2023

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C2.31**  
 SDP

#	DATE	DESCRIPTION
1	12/02/23	ISSUED FOR CONSTRUCTION
2	10/26/23	SDP 23-05 / CID 23-01 COMBINED REVIEW

REVISIONS:



N.C. STATE GRID (MAD83)

HAMPTON POINTE ASSOCIATES, LLC  
 DB 10851 PG 530  
 LOT 1  
 ZONED CC  
 RM 2017 PG 2265-2267  
 PNM 1758-46-1097  
 COMMERCIAL

RR-ARC FOOD SYSTEMS, INC.  
 DB 12702 PG 1124  
 LOT  
 ZONED CC  
 RM 2009 PG 1043  
 PNM 1758-46-5402  
 COMMERCIAL

WALLBROOK LANDCO, LLC  
 DB 1804 PG 307  
 LOT 2-1  
 RM 1904 PG 187  
 PNM 1758-46-7822  
 (NO ADDRESS LISTED)  
 7.06 ACRES  
 ZONED: CC-CZ

US 401 BUSINESS - S. MAIN ST.  
 (VARIABLE WIDTH PUBLIC R/W)

BY EASEMENT TO BULK  
 ELECTRIC MEMBERSHIP CORP.  
 DB 3868 PG 917

INGRESS/EGRESS EASEMENT  
 DB 10193 PG 778

PERMANENT  
 WATERING EASEMENT  
 DB 16679 PG 132

INGRESS/EGRESS RESERVATION  
 DB PG 2591

MARSHSKIP WAY  
 (50' PUBLIC R/W) DESIGNED BY OTHERS

CARLTON GROUP OF  
 NORTH CAROLINA, LLC  
 DB 17420 PG 1929  
 LOT 2  
 ZONED R & PUD  
 RM 2008 PG 702  
 PNM 1758-45-5219  
 RESIDENTIAL

SHOP BLDG 4  
 (11,900 SF)

CARLTON GROUP OF  
 NORTH CAROLINA, LLC  
 DB 17420 PG 1929  
 LOT 3  
 ZONED R & PUD  
 RM 2008 PG 702  
 PNM 1758-45-7229  
 RESIDENTIAL

JAMESCROFT WAY  
 (50' PUBLIC R/W) DESIGNED BY OTHERS

PUBLIX  
 STOREROOM  
 (BLDG 1)  
 (47,737 SF)

SHOP BLDG 2  
 (9,909 SF)

SHOP BLDG 3  
 (8,139 SF)

VIRGINIA WATER DR  
 (50' PUBLIC R/W - AT 100')

SHORT HILLS LANE  
 (50' PUBLIC R/W)

THOMAS BERRY MORGAN  
 STEPHANIE BERRY MORGAN  
 DB 2008 PG 6  
 RM 2008 PG 6  
 PNM 1758-55-1977  
 ZONED R & PUD  
 RESIDENTIAL

MEKHA WILLIAMS  
 DB 15160 PG 1901  
 RM 2008 PG 6  
 PNM 1758-55-0511  
 ZONED R & PUD  
 RESIDENTIAL

WAYLAND DION SMEDLEY  
 ANGELA M. SMEDLEY  
 DB 17688 PG 291  
 RM 2008 PG 6  
 PNM 1758-55-0546  
 ZONED R & PUD  
 RESIDENTIAL

SOPHIE STREET  
 DB 17502 PG 842  
 RM 2008 PG 6  
 PNM 1758-55-0680  
 ZONED R & PUD  
 RESIDENTIAL

KIP J. STRETHORST  
 MARCIA J. STRETHORST  
 DB 14513 PG 459  
 RM 2008 PG 6  
 PNM 1758-55-1815  
 ZONED R & PUD  
 RESIDENTIAL

JAMES MURAGURI  
 DB 14140 PG 1427  
 RM 2008 PG 6  
 PNM 1758-55-1649  
 ZONED R & PUD  
 RESIDENTIAL

LEONAMOR B. EMATA  
 DB 16008 PG 2438  
 RM 2008 PG 6  
 PNM 1758-55-1773  
 ZONED R & PUD  
 RESIDENTIAL

WILLIAM DENEY BROWN, JR.  
 DB 16008 PG 2438  
 RM 2008 PG 6  
 PNM 1758-55-2718  
 ZONED R & PUD  
 RESIDENTIAL

CODY SINGLETON  
 MARGUITA SINGLETON  
 DB 15560 PG 717  
 RM 2008 PG 6  
 PNM 1758-55-2842  
 ZONED R & PUD  
 RESIDENTIAL

EDWARD PERLMAN  
 JALE PERLMAN  
 DB 15850 PG 2049  
 RM 2008 PG 7  
 PNM 1758-55-2977  
 ZONED R & PUD  
 RESIDENTIAL

JASON P. CRABTREE  
 DB 15526 PG 1699  
 RM 2008 PG 7  
 PNM 1758-55-3911  
 ZONED R & PUD  
 RESIDENTIAL

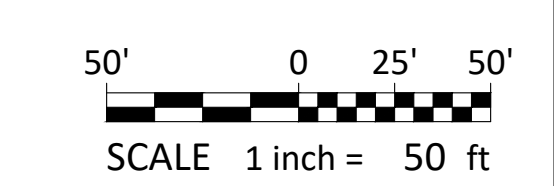
STEPHEN GANNON  
 DB 18191 PG 57  
 RM 2008 PG 7  
 PNM 1758-55-3946  
 ZONED R & PUD  
 RESIDENTIAL

TRACY N. RATTANABANDITH  
 KONGKONGEN RATTANABANDITH  
 DB 18268 PG 1273  
 RM 2008 PG 7  
 PNM 1758-55-3982  
 ZONED R & PUD  
 RESIDENTIAL

CARLTON GROUP OF  
 NORTH CAROLINA, LLC  
 DB 11427 PG 892  
 NOOK TRACT 17  
 ZONED R & PUD  
 RM 2008 PG 1185-1196  
 PNM 1758-45-1927  
 RESIDENTIAL

BENEMEER LANE  
 (50' PUBLIC R/W)

VIRGINIA WATER DRIVE  
 (VARIABLE WIDTH PUBLIC R/W)



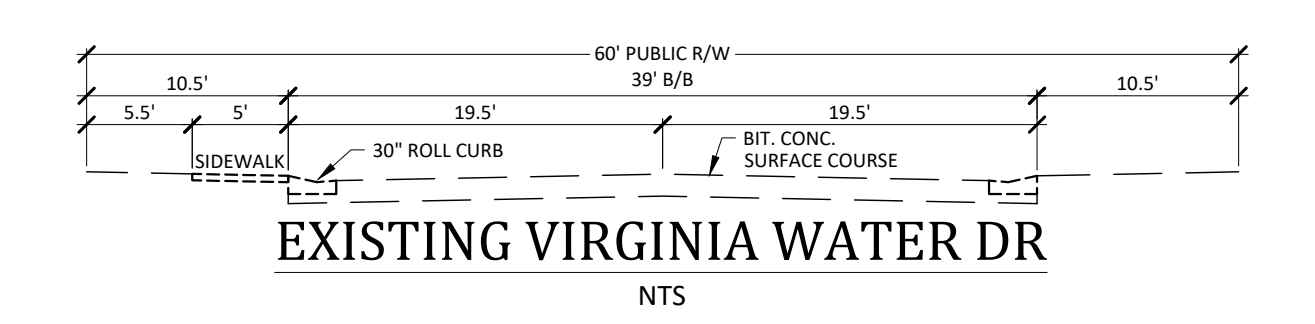
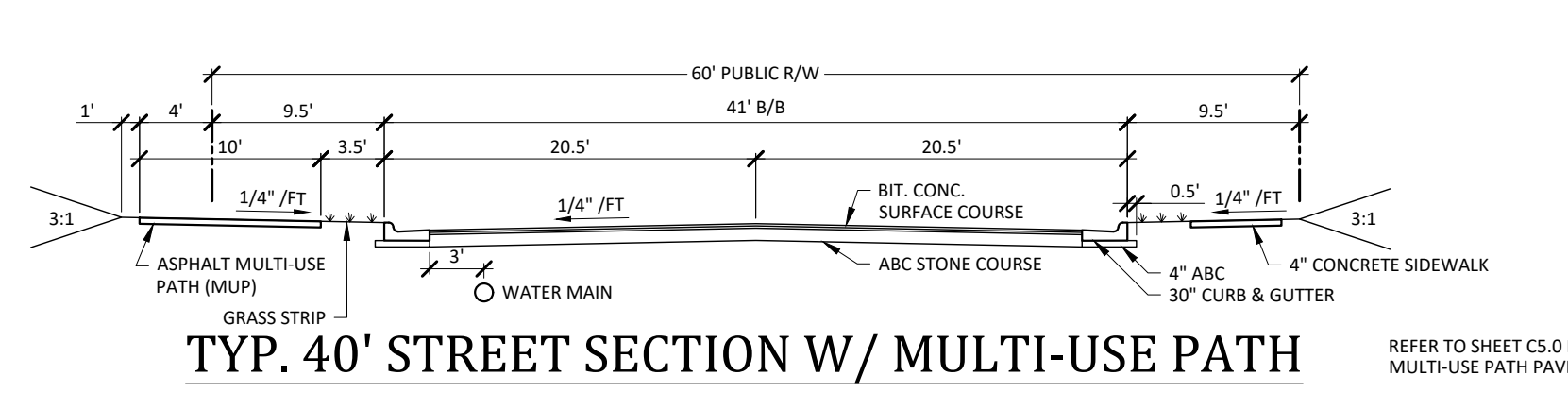
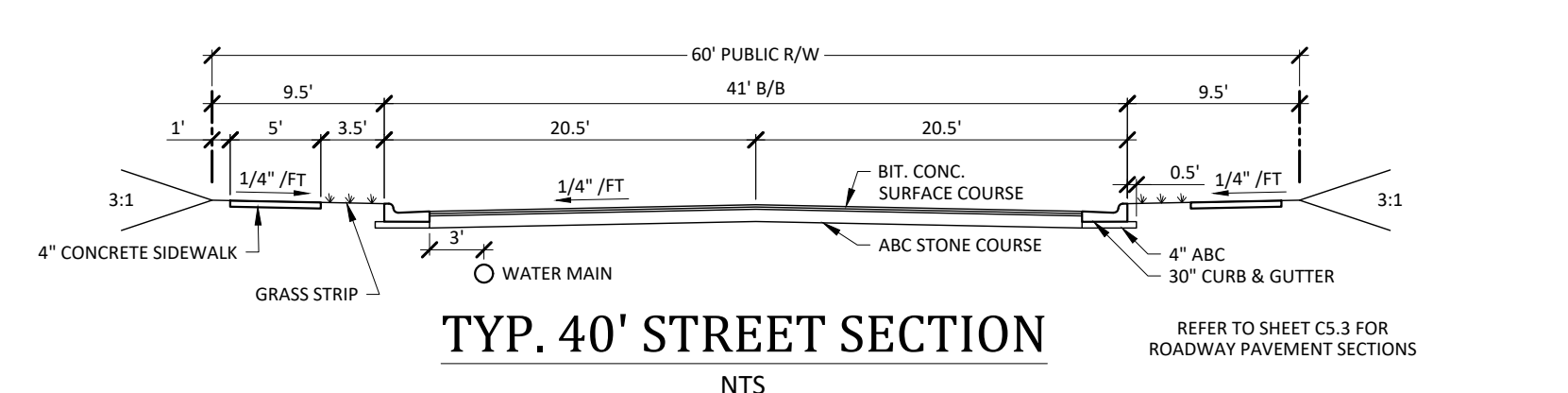
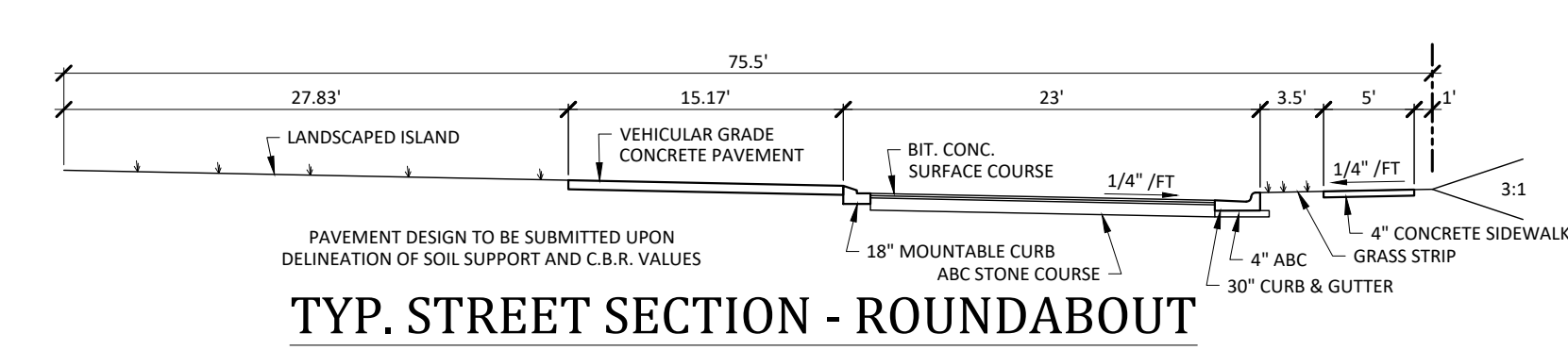
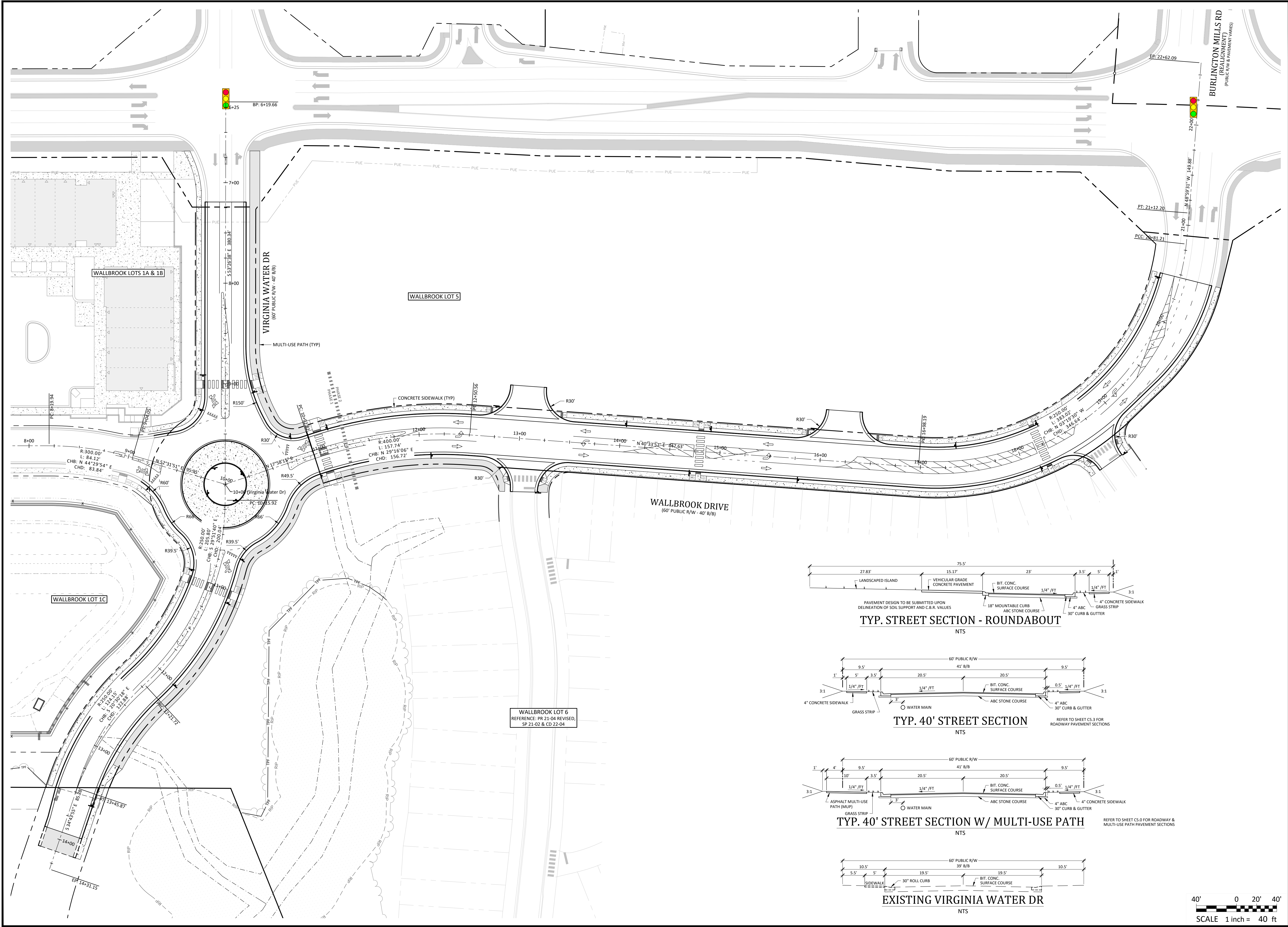
**DRIVE-THRU ACCESS PLAN**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina

NC License: P-1159  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd  
 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C2.32**  
 SDP

#	DATE	DESCRIPTION
1	1/26/OCT/23	SDP 23-05 / CID 23-01 COMBINED REVIEW
2	11/24/NOV/23	ISSUED FOR CONSTRUCTION



#	DATE	DESCRIPTION
1	26 OCT 23	SDP 23-05 / CID 23-01 COMBINED REVIEW
2	14 NOV 23	ISSUED FOR CONSTRUCTION

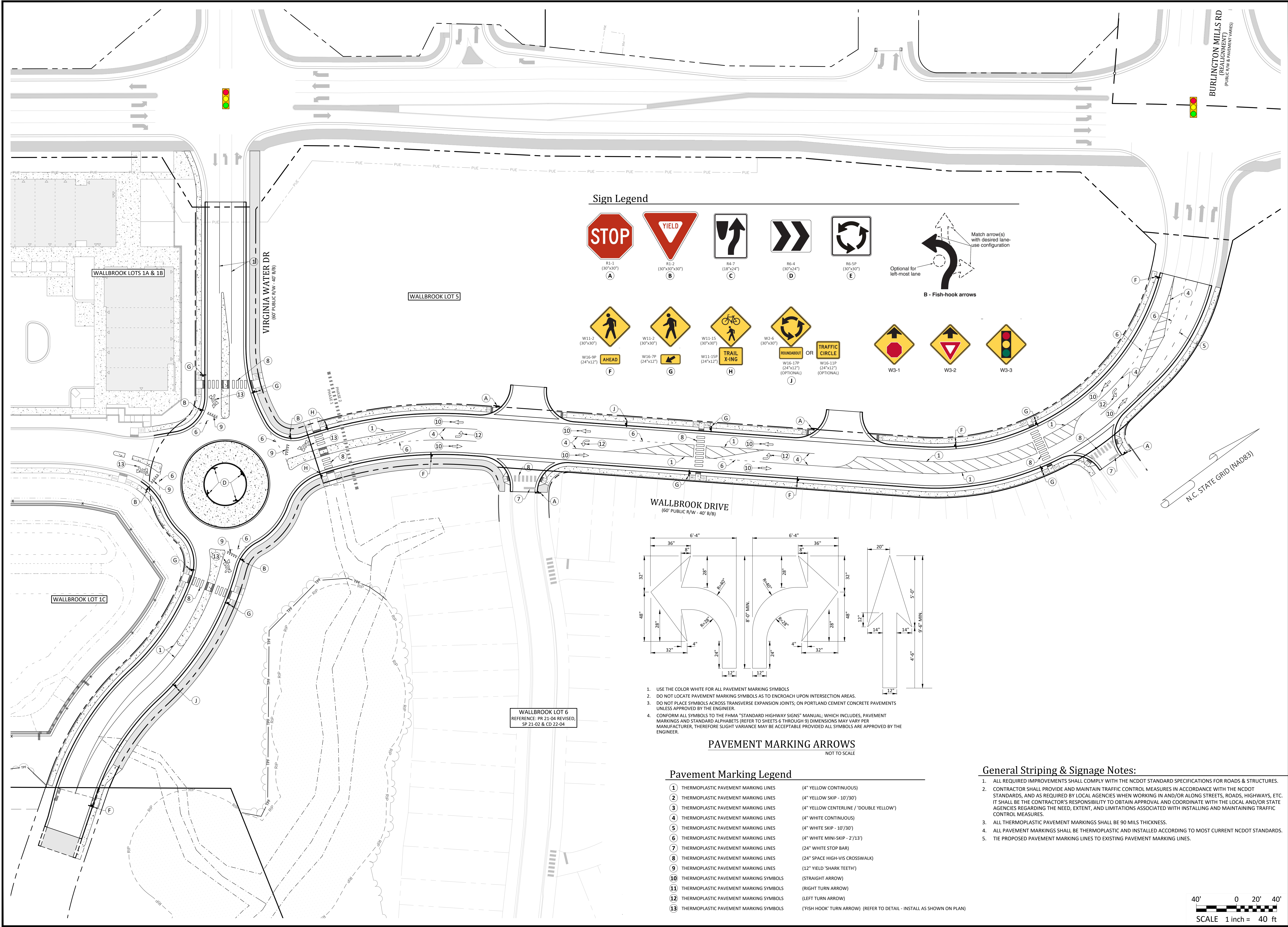
REVISIONS:

**ROADWAY - LAYOUT PLAN**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

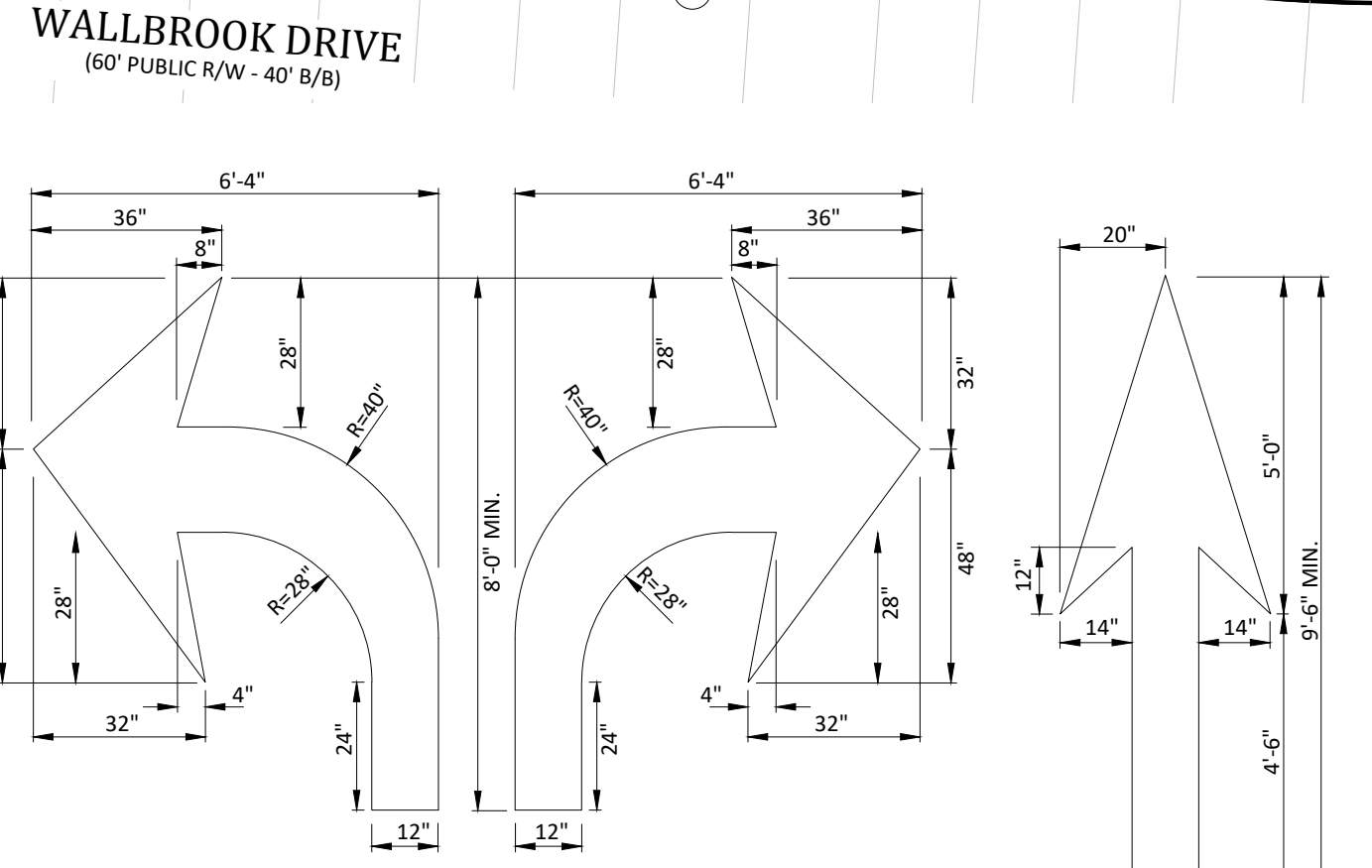
NC License: P11199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Cary, NC 27513  
 (757) 558-0888  
 www.arkconsultinggroup.com

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C2.40**  
 CID



**Sign Legend**

- USE THE COLOR WHITE FOR ALL PAVEMENT MARKING SYMBOLS
- DO NOT LOCATE PAVEMENT MARKING SYMBOLS AS TO ENCRoACH UPON INTERSECTION AREAS.
- DO NOT PLACE SYMBOLS ACROSS TRANSVERSE EXPANSION JOINTS; ON PORTLAND CEMENT CONCRETE PAVEMENTS UNLESS APPROVED BY THE ENGINEER.
- CONFORM ALL SYMBOLS TO THE FHWA "STANDARD HIGHWAY SIGNS" MANUAL; WHICH INCLUDES, PAVEMENT MARKINGS AND STANDARD ALPHABETS (REFER TO SHEETS 6 THROUGH 9) DIMENSIONS MAY VARY PER MANUFACTURER, THEREFORE SLIGHT VARIANCE MAY BE ACCEPTABLE PROVIDED ALL SYMBOLS ARE APPROVED BY THE ENGINEER.

**Pavement Marking Legend**

1	THERMOPLASTIC PAVEMENT MARKING LINES	(4" YELLOW CONTINUOUS)
2	THERMOPLASTIC PAVEMENT MARKING LINES	(4" YELLOW SKIP - 10'/30')
3	THERMOPLASTIC PAVEMENT MARKING LINES	(4" YELLOW CENTERLINE / DOUBLE YELLOW)
4	THERMOPLASTIC PAVEMENT MARKING LINES	(4" WHITE CONTINUOUS)
5	THERMOPLASTIC PAVEMENT MARKING LINES	(4" WHITE SKIP - 10'/30')
6	THERMOPLASTIC PAVEMENT MARKING LINES	(4" WHITE MINI-SKIP - 2'/13')
7	THERMOPLASTIC PAVEMENT MARKING LINES	(24" WHITE STOP BAR)
8	THERMOPLASTIC PAVEMENT MARKING LINES	(24" SPACE HIGH-VIS CROSSWALK)
9	THERMOPLASTIC PAVEMENT MARKING LINES	(12" YIELD 'SHARK TEETH')
10	THERMOPLASTIC PAVEMENT MARKING SYMBOLS	(STRAIGHT ARROW)
11	THERMOPLASTIC PAVEMENT MARKING SYMBOLS	(RIGHT TURN ARROW)
12	THERMOPLASTIC PAVEMENT MARKING SYMBOLS	(LEFT TURN ARROW)
13	THERMOPLASTIC PAVEMENT MARKING SYMBOLS	(FISH HOOK TURN ARROW) (REFER TO DETAIL - INSTALL AS SHOWN ON PLAN)

**General Striping & Signage Notes:**

- ALL REQUIRED IMPROVEMENTS SHALL COMPLY WITH THE NCDOT STANDARD SPECIFICATIONS FOR ROADS & STRUCTURES.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN TRAFFIC CONTROL MEASURES IN ACCORDANCE WITH THE NCDOT STANDARDS, AND AS REQUIRED BY LOCAL AGENCIES WHEN WORKING IN AND/OR ALONG STREETS, ROADS, HIGHWAYS, ETC. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL AND COORDINATE WITH THE LOCAL AND/OR STATE AGENCIES REGARDING THE NEED, EXTENT, AND LIMITATIONS ASSOCIATED WITH INSTALLING AND MAINTAINING TRAFFIC CONTROL MEASURES.
- ALL THERMOPLASTIC PAVEMENT MARKINGS SHALL BE 90 MILS THICKNESS.
- ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND INSTALLED ACCORDING TO MOST CURRENT NCDOT STANDARDS.
- TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.



BURLINGTON MILLS RD  
(60' PUBLIC R/W - 40' B/B)  
(PUBLIC ROW & PARKWAY VARIES)

N.C. STATE GRID (NAD83)

**ROADWAY - STRIPING AND SIGNAGE PLAN**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

CROSLAND SOUTHEAST

REVISIONS:

#	DATE	DESCRIPTION
1	26-OCT-23	SDP 23-05 / CID 23-01 COMBINED REVIEW
2	14-NOV-23	ISSUED FOR CONSTRUCTION

ARK CONSULTING GROUP PLLC  
ENGINEERS & PLANNERS

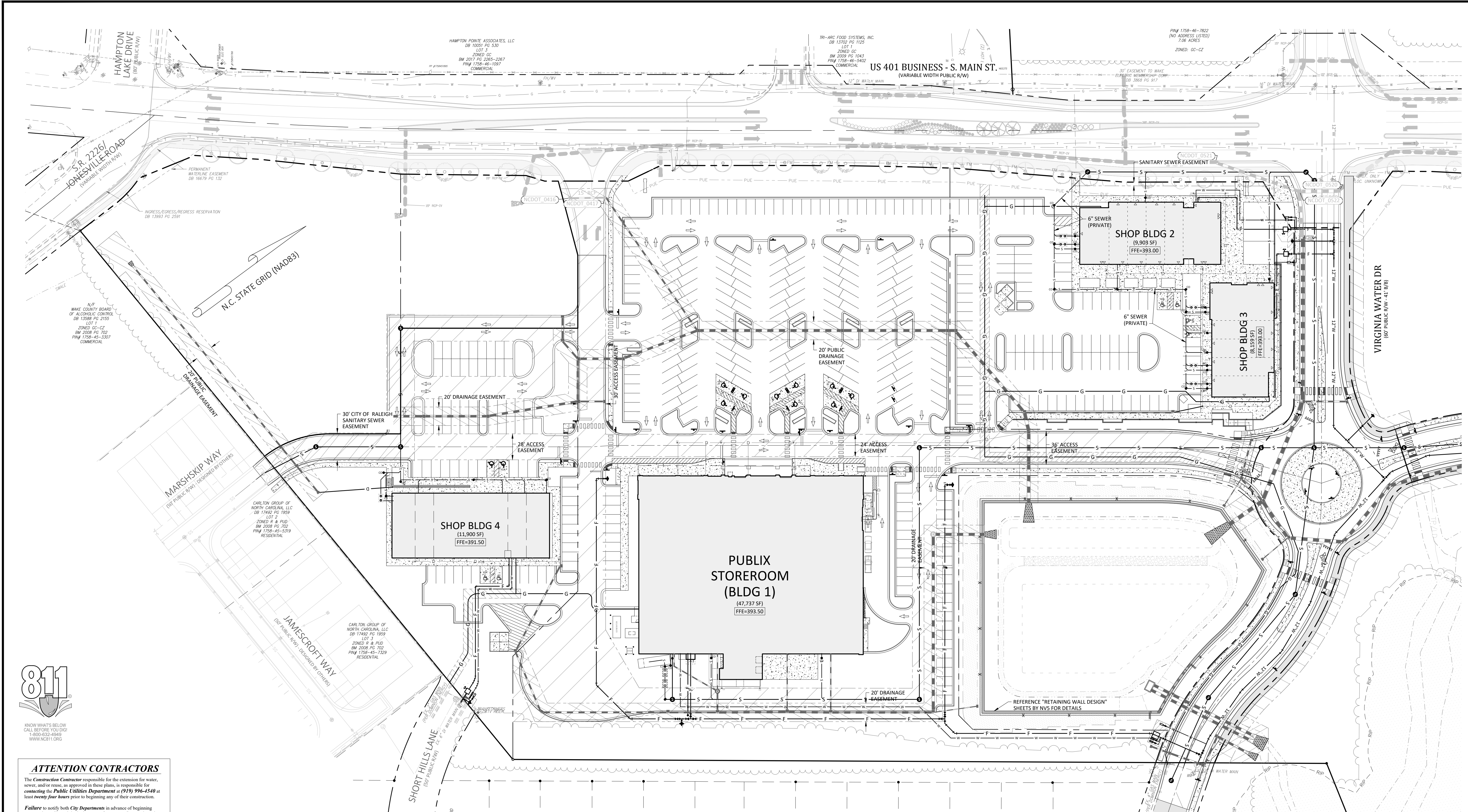
2755-B Charles Blvd  
Charlotte, NC 28205  
(704) 558-0888  
www.arkconsultinggroup.com

NORTH CAROLINA PROFESSIONAL ENGINEER  
31970  
10/26/2023

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C2.41**

CID



**ATTENTION CONTRACTORS**

The Construction Contractor responsible for the extension for water, sewer, and/or gas, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least twenty-four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5381

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074

The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5380(P)

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

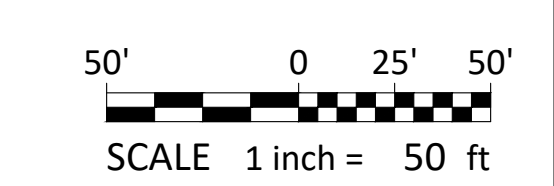
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval  
City of Raleigh Review Officer

**Utility Notes:**

- CONTRACTOR SHALL CONTACT NORTH CAROLINA ONE-CALL CENTER, INC. (INC ONE-CALL) AT 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED AT LEAST 72 HOURS PRIOR TO EXCAVATING OR TRENCHING.
- CONTRACTOR SHALL NOTIFY THE TOWN OF ROLESVILLE AND THE NC DEPARTMENT OF TRANSPORTATION, 72 HOURS PRIOR TO CLOSURE OF ROADWAY AND CUTTING PAVEMENT IN ROADWAY RIGHT-OF-WAY.
- ALL REQUIRED IMPROVEMENTS SHALL CONFORM TO THE CITY OF RALEIGH PUBLIC UTILITIES HANDBOOK, EFFECTIVE JANUARY 21, 2014, UPDATED OCTOBER 16, 2023.
- THE CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH CITY OF RALEIGH REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY INSTALLATION AS IDENTIFIED OR REQUIRED FOR THE PROJECT.
- ALL NEW UTILITIES, INCLUDING ELECTRIC, TELEPHONE, CABLE TV SHALL BE INSTALLED UNDERGROUND.
- THE SITE UTILITY CONTRACTOR SHALL INSTALL DOMESTIC WATER SERVICE PIPING TO WITHIN 5' OF THE BUILDING ENTRY POINT.
- THE SITE UTILITY CONTRACTOR SHALL INSTALL THE FIRE SPRINKLER SERVICE PIPING TO TERMINATE IN THE FIRE RISER ROOM, TERMINATING 1' ABOVE FFE WITH A BLIND FLANGE CONNECTION.
- THE SITE UTILITY CONTRACTOR'S PRICE FOR WATER SERVICE SHALL INCLUDE ALL FEES AND APPURTENANCES REQUIRED BY THE UTILITY TO PROVIDE A COMPLETE WORKING SERVICE.
- THE SITE UTILITY CONTRACTOR SHALL INSTALL SANITARY SEWER SERVICE PIPING TO THE CLEANOUT WITHIN 5' OF THE BUILDING ENTRY POINT.
- NO SEWER SERVICE SHALL BE PROVIDED WITHIN THIS PROJECT UNTIL ALL MAINS HAVE BEEN INSTALLED AND ACCEPTED FOR MAINTENANCE BY THE CITY OF RALEIGH.
- THE SITE UTILITY CONTRACTOR SHALL INSTALL STORM DRAINAGE ROOF LEADER PIPING TO WITHIN 5' OF THE CONNECTION POINT AT THE BUILDING.
- THE SITE UTILITY CONTRACTOR SHALL INSTALL ALL STORM AND SANITARY SEWER COMPONENTS WHICH FUNCTION BY GRAVITY PRIOR TO THE INSTALLATION OF ALL OTHER UTILITIES.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER FOR MATERIALS TO BE USED IN THE CONSTRUCTION OF UTILITY IMPROVEMENTS. SHOP DRAWINGS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ORDERING MATERIALS.
- COORDINATE WITH MEP PLANS FOR ELECTRICAL SERVICE INFORMATION.
- THE SITE UTILITY CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS / DETAILS, DOOR ACCESS AND EXTERIOR GRADING.
- LOCATION OF ALL EXISTING AND PROPOSED UTILITIES ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH UTILITY OWNERS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. UTILITY SERVICE CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR IN THE FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UPSTREAM. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL UTILITIES AND SERVICES INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE WITHIN THE LIMITS OF DISTURBANCE SHALL BE VERTICALLY AND HORIZONTALLY LOCATED. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITIES DURING CONSTRUCTION AT NO COST TO THE OWNER.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THE PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR THE RELATIVE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO COMMENCING CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF WORK AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH LOCAL AND STATE REGULATIONS AND CODES.
- THE SITE UTILITY CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE SITE UTILITY CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.
- THE SITE UTILITY CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES / SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS, AND TO ENSURE PROPER DEPTHS ARE ACHIEVED. THE SITE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH UTILITY REQUIREMENTS HAVING JURISDICTION, AND SHALL BE RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS / CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY / SERVICE. WHERE CONFLICTS EXIST WITH THESE PLANS, OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION POINTS DIFFER, THE SITE UTILITY CONTRACTOR SHALL IMMEDIATELY NOTIFY THE GENERAL CONTRACTOR, PROJECT ARCHITECT, AND CIVIL ENGINEER PRIOR TO CONSTRUCTION COMMENCEMENT TO RESOLVE.
- THE SITE UTILITY CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH UTILITY PROVIDERS FOR THE RELOCATION / ABANDONMENT OF EXISTING UTILITIES AND INSTALLATION OF NEW UTILITY SERVICES AS WELL AS FEES ASSOCIATED WITH SUCH WORK.
- THE SITE UTILITY CONTRACTOR SHALL DEFINE AND LOCATE VERTICALLY AND HORIZONTALLY ALL ACTIVE UTILITY SERVICE SYSTEMS THAT ARE TO BE REMOVED. THE SITE UTILITY CONTRACTOR IS RESPONSIBLE TO PROTECT AND MAINTAIN ALL ACTIVE SYSTEMS THAT ARE NOT BEING REMOVED OR RELOCATED DURING SITE ACTIVITIES.



REVISIONS:

#	DATE	DESCRIPTION
1	12-06-2023	SDP-23-05 / CID-23-01 COMBINED REVIEW
2	10-26-2023	ISSUED FOR CONSTRUCTION



**UTILITY PLAN - OVERALL**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

S Main St. / US 401 and Virginia Water Drive

NC License: P1129

**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS

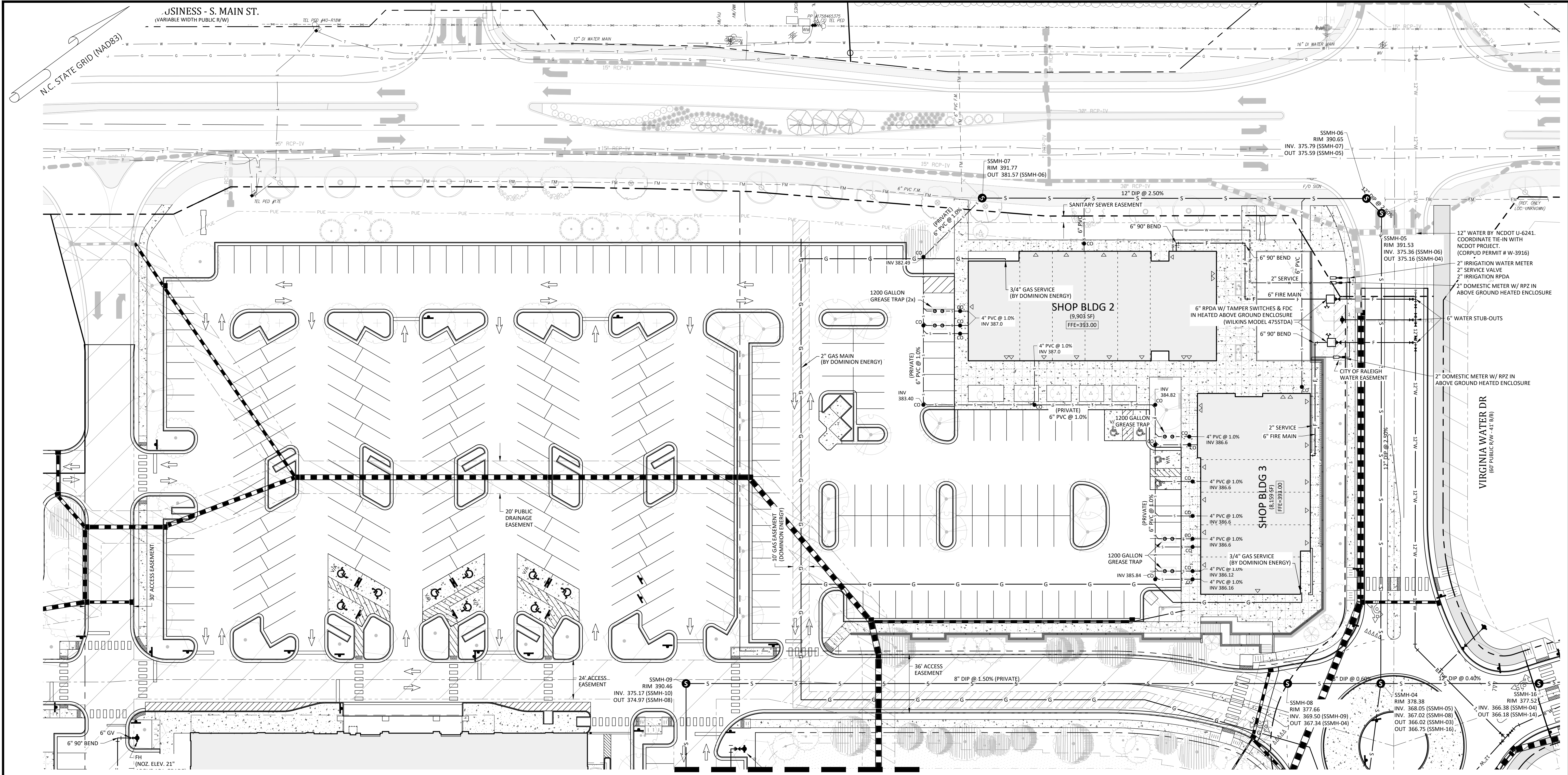
2755-B Charles Blvd  
Raleigh, NC 27608  
(919) 558-0888  
www.arkconsultinggroup.com

10/26/2023

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C3.00**

SDP



REFERENCE LINE - SEE SHEET C3.20



**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5381

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074

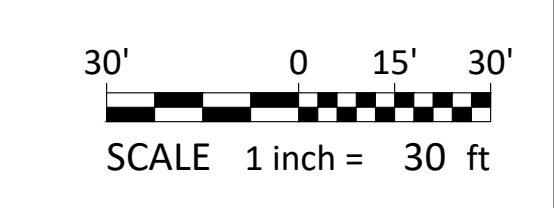
The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5380(P)

**ATTENTION CONTRACTORS**

The Construction Contractor responsible for the extension for water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the **Public Utilities Department at (919) 996-4540** at least **two business hours** prior to beginning any of their construction.

**Failure** to notify both City Departments in advance of beginning construction will result in the issuance of **monetary fines**, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.

**Failure** to call for **Inspection, Install a Downstream Plug**, have **Permitted Plans** on the **Jobite**, or any other **Violation of City of Raleigh Standards** will result in a **Fine and Possible Exclusion** from future work in the **City of Raleigh**.



#	DATE	DESCRIPTION
2	14/NOV/23	ISSUED FOR CONSTRUCTION
1	26/OCT/23	SDP 23-05 / CID 23-01 COMBINED REVIEW



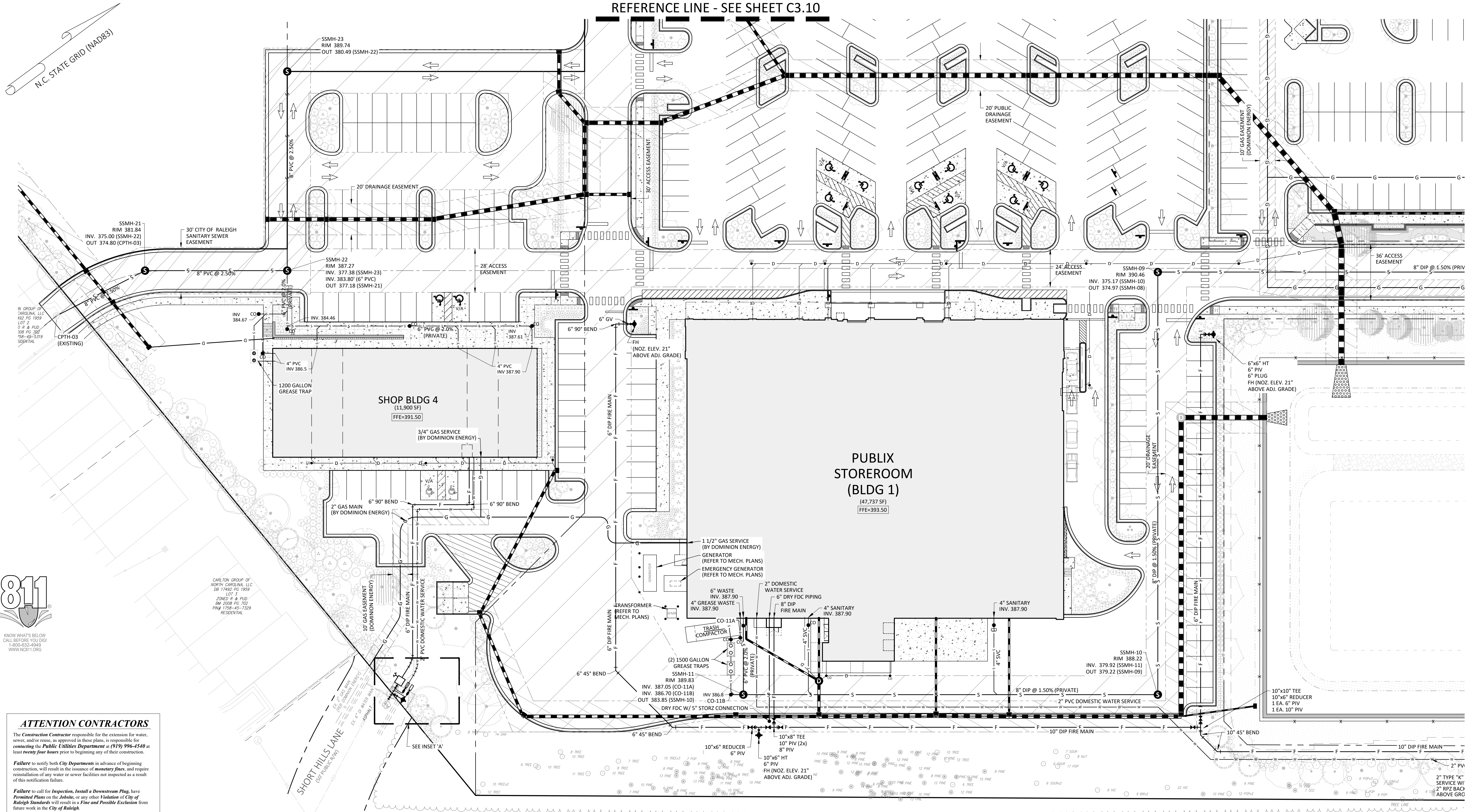
**UTILITY PLAN 'A'**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

NC License: P1129  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C3.10**  
 SDP

REFERENCE LINE - SEE SHEET C3.10

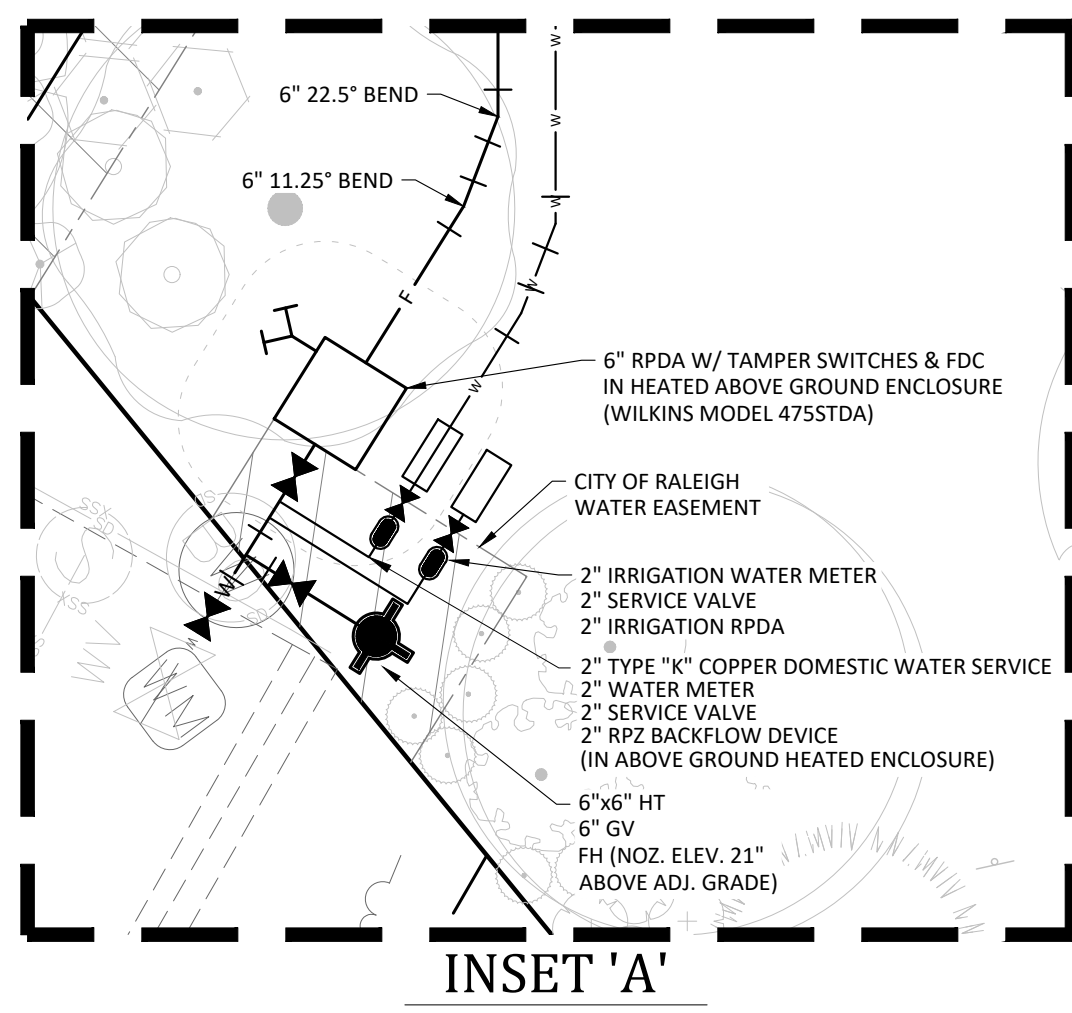


**ATTENTION CONTRACTORS**

The Construction Contractor responsible for the extension for water, sewer, and/or gas, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least twenty-four hours prior to beginning any of their construction.

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**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5381

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074

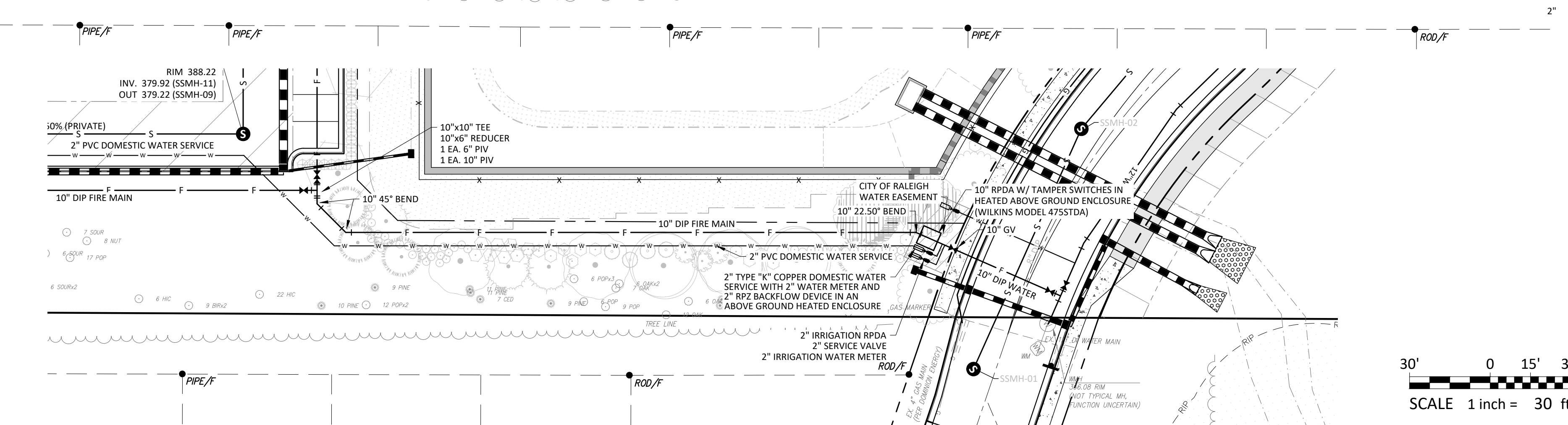
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CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State, and Federal Rules and Regulations.

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City of Raleigh Development Approval  
City of Raleigh Review Officer



REVISIONS:

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1	26-OCT-23	SDP-23-05 / CID-23-01 COMBINED REVIEW



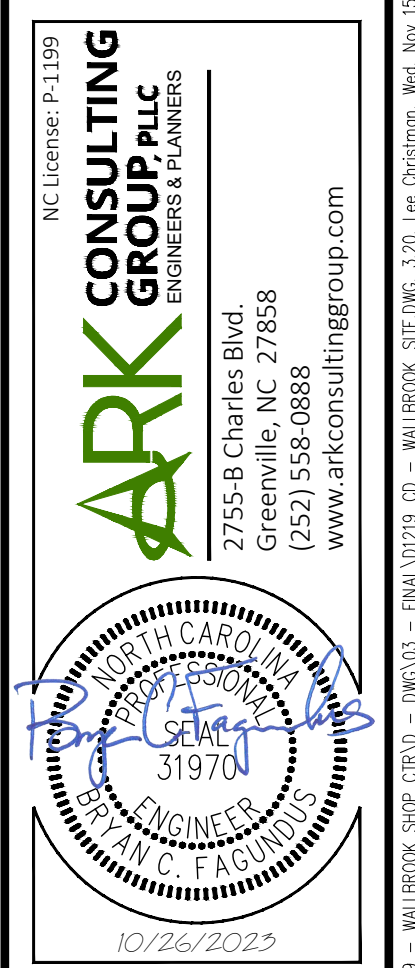
**UTILITY PLAN 'B'**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

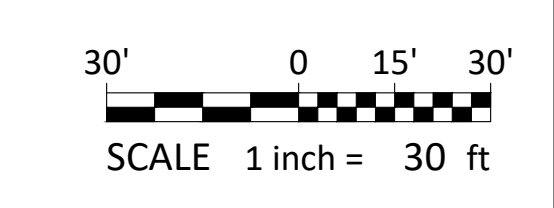
S Main St. / US 401 and Virginia Water Drive



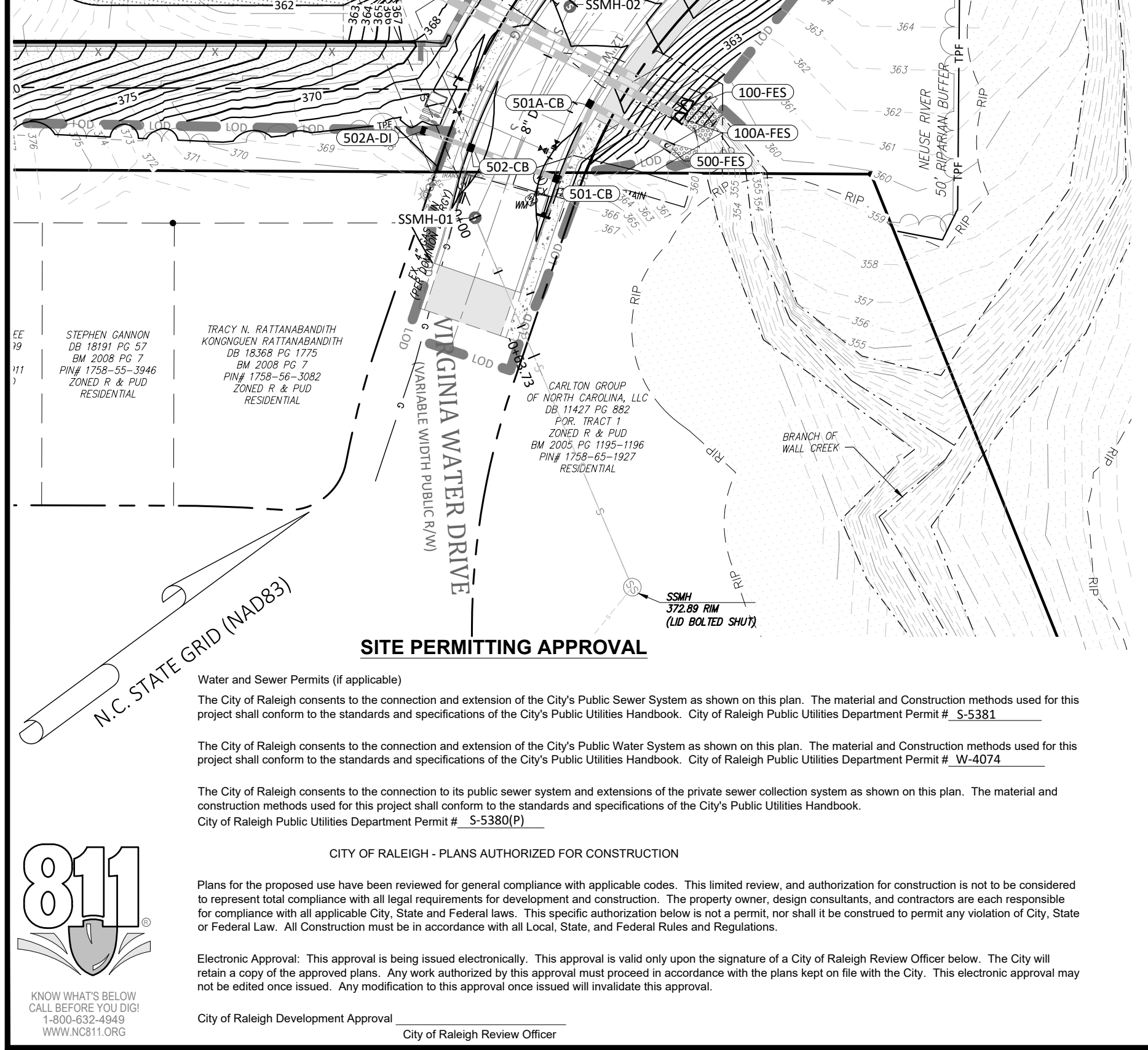
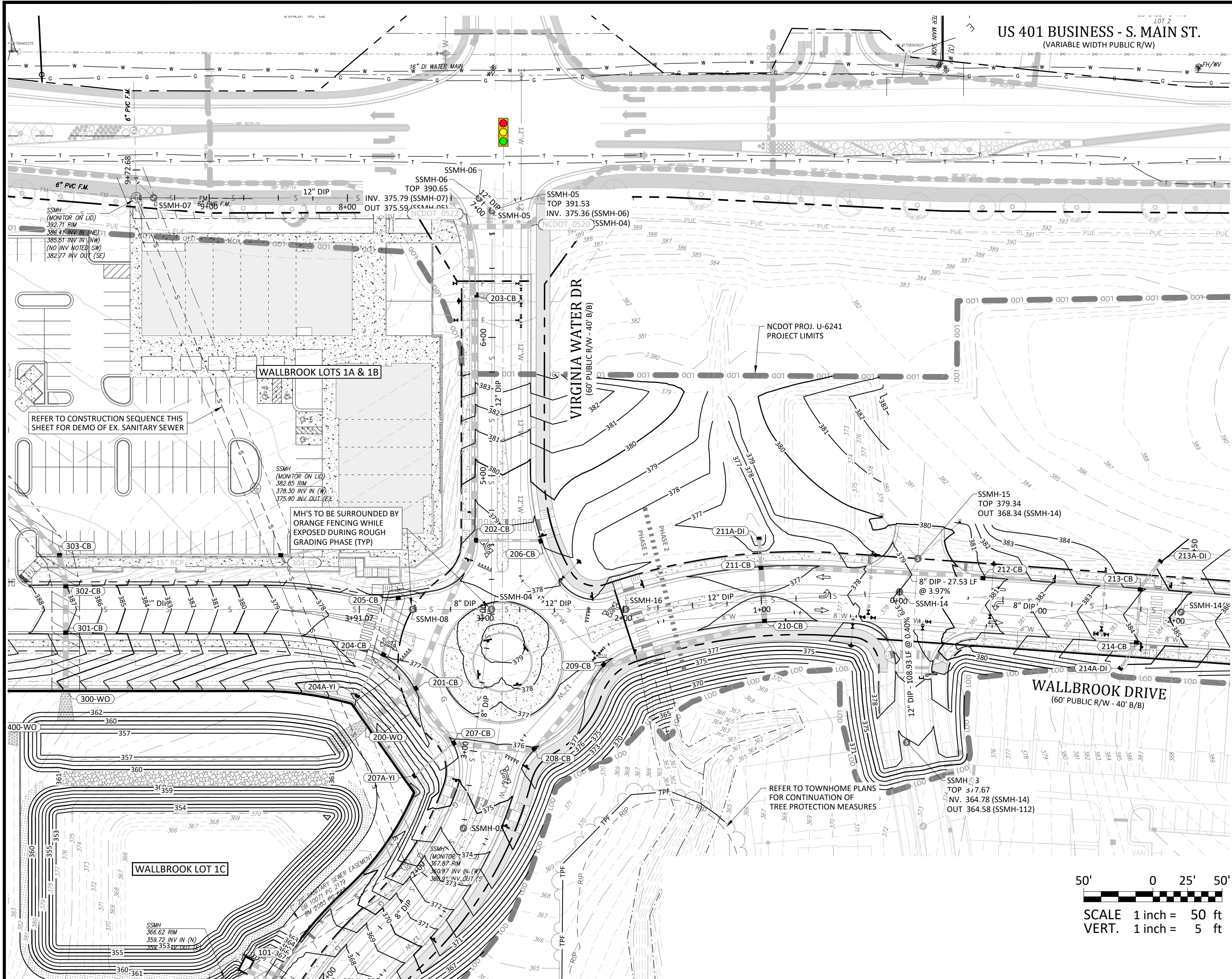
Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C3.20**

SDP



**US 401 BUSINESS - S. MAIN ST.**  
(VARIABLE WIDTH PUBLIC R/W)



**Sanitary Sewer Construction Sequence:**

1. CONTRACTOR SHALL VERIFY EXISTING INVERT ELEVATIONS PRIOR TO BEGINNING CONSTRUCTION. NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING SANITARY SEWER INSTALLATION.
2. INSTALL DOGHOUSE SSMH-1, LEAVING THE EXISTING SANITARY SEWER MAIN IN SERVICE. EXISTING MAIN SHALL NOT BE CUT UNTIL ACCEPTANCE OF NEW MAIN IN ITS ENTIRETY.
3. INSTALL NEW SANITARY SEWER MAIN FROM SSMH-1 UP TO SSMH-5. PERFORM SATISFACTORY VACUUM AND AIR TESTING OF NEW SANITARY SYSTEM BETWEEN SSMH-1 AND SSMH-5.
4. INSTALL PIPE STUB WITH CAP OUT OF SSMH-4 TOWARDS SSMH-8 AND SSMH-13. INSTALLATION OF MAIN TOWARDS SSMH-8 AND SSMH-13 SHALL NOT OCCUR UNTIL AFTER THE COMPLETION OF THE TIE-IN OF EXISTING FORCE MAIN #3 TO SSMH-7.
5. UPON COMPLETION OF SATISFACTORY VACUUM AND AIR TESTING OF NEW SANITARY SEWER BETWEEN SSMH-1 AND SSMH-5, COORDINATE WITH THE CITY OF RALEIGH TO CUT EXISTING MAIN THROUGH SSMH-5 TO FACILITATE FLOW FROM NEW SANITARY SEWER SYSTEM THROUGH SSMH-5.
6. COORDINATE WITH THE CITY OF RALEIGH TO ABANDON THE EXISTING FORCE MAIN #1 CONNECTION TO THE EXISTING SSMH-1 AND PERFORM THE TIE-IN OF THE EXISTING FORCE MAIN #1 TO SSMH-5. TIE-IN SHALL BE PERFORMED DURING A LOW-FLOW PERIOD.
7. UPON COMPLETION OF THE TIE-IN OF EXISTING FORCE MAIN #1 TO SSMH-5, REMOVE THE REMAINDER OF EXISTING FORCE MAIN #1 AND INSTALL NEW SANITARY SEWER FROM SSMH-5 UP TO SSMH-7. PERFORM SATISFACTORY VACUUM AND AIR TESTING OF NEW SANITARY SYSTEM BETWEEN SSMH-5 AND SSMH-7.
8. UPON COMPLETION OF SATISFACTORY VACUUM AND AIR TESTING OF NEW SANITARY SEWER BETWEEN SSMH-5 AND SSMH-7, COORDINATE WITH THE CITY OF RALEIGH TO CONNECT THE EXISTING FORCE MAIN #2 TO SSMH-7. TIE-IN SHALL BE PERFORMED DURING A LOW-FLOW PERIOD.
9. UPON COMPLETION OF THE TIE-IN OF EXISTING FORCE MAIN #2 TO SSMH-7, COORDINATE WITH THE CITY OF RALEIGH FOR THE REMOVAL OF THE EXISTING SSMH-1 AND PERFORM THE TIE-IN OF THE EXISTING FORCE MAIN #3 TO SSMH-7.
10. UPON COMPLETION OF THE TIE-IN OF THE EXISTING FORCE MAIN #3 TO SSMH-7, REMOVAL OF THE REMAINDER OF THE EXISTING GRAVITY SANITARY SEWER BETWEEN EXISTING SSMH-1 AND PROPOSED SSMH-5 MAY BE PERFORMED.

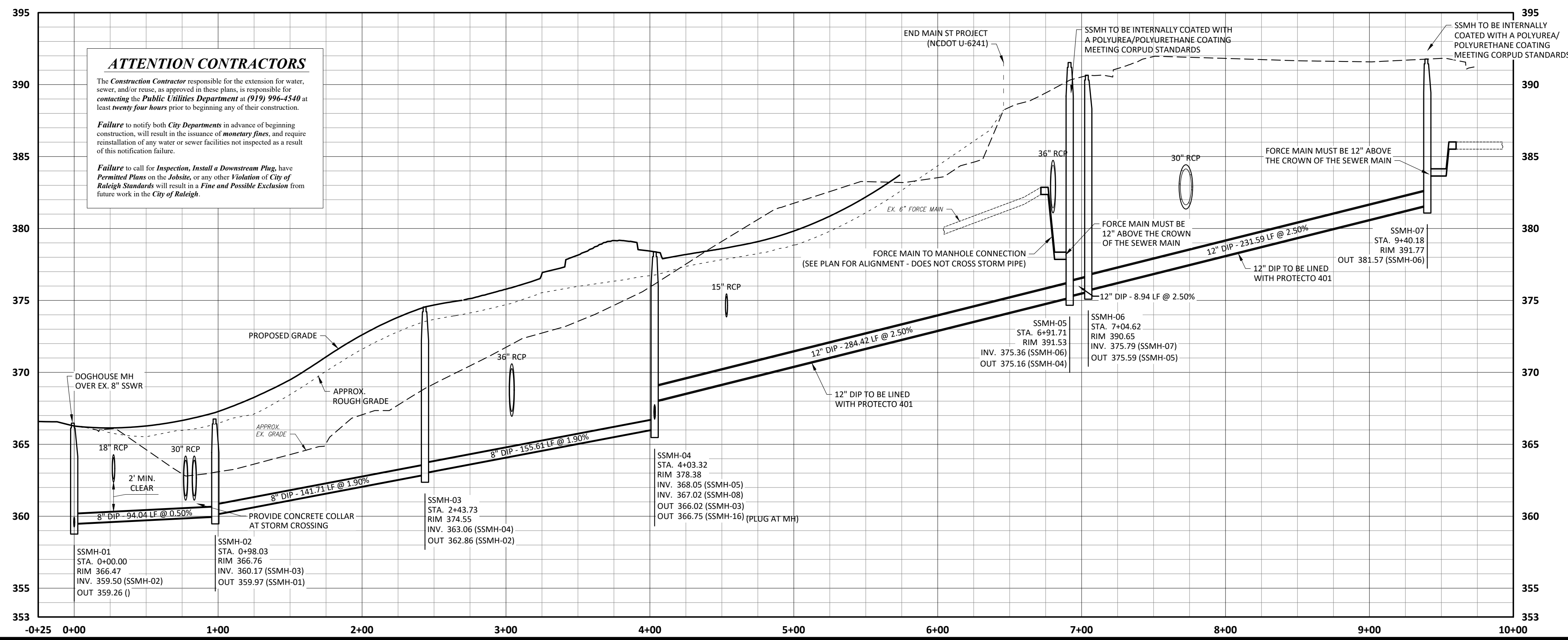
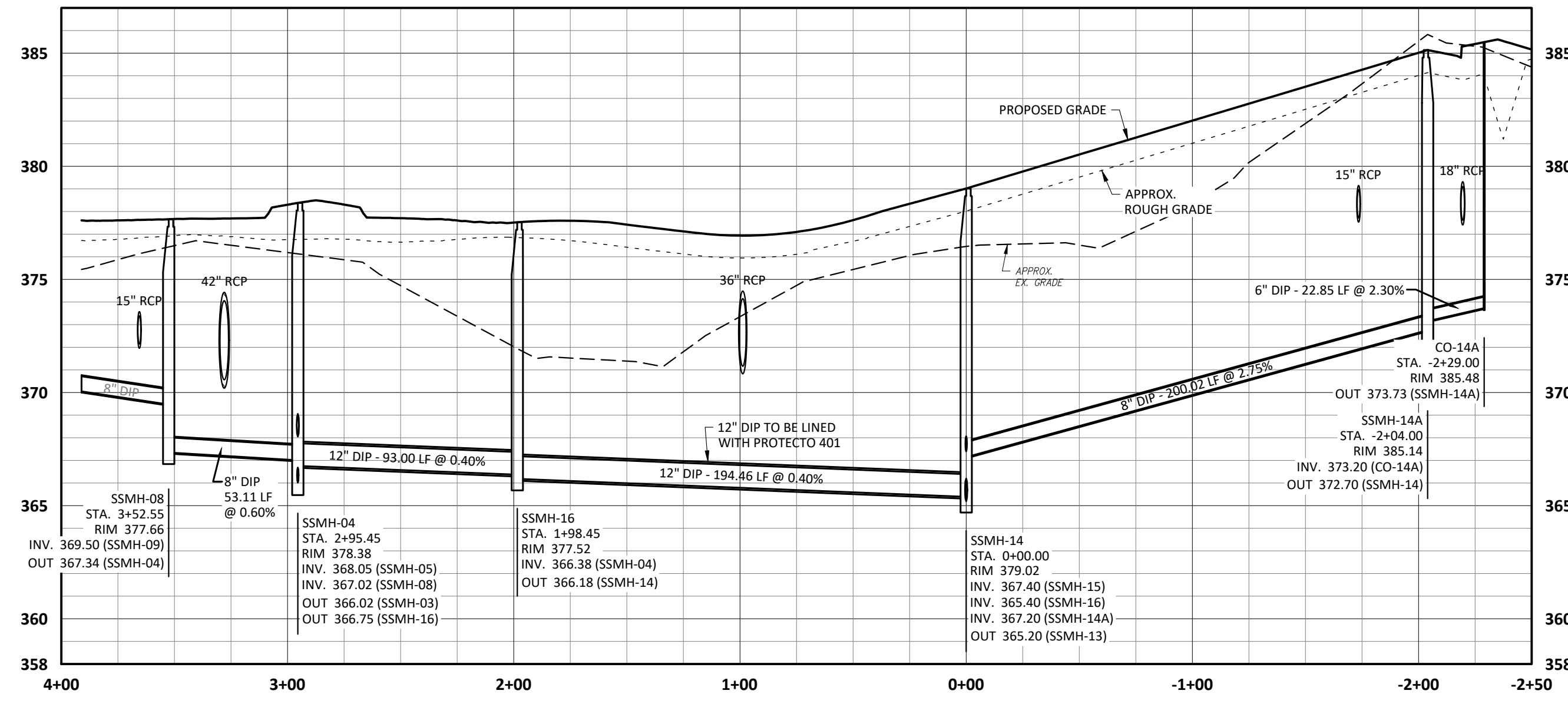
**Sequence For Sanitary Sewer Abandonment:**

1. UPON THE COMPLETION AND ACCEPTANCE OF THE WALLBROOK TOWNHOME SANITARY SEWER (REF. CD 22-04 & CORPUD PERMIT # 5-5230), SANITARY SEWER FROM SSMH-13 TO SSMH-04 SHALL BE INSTALLED
2. UPON THE COMPLETION OF THE TIE-IN AT SSMH-13, INSTALLATION FROM SSMH-13 TO SSMH-04, AND TIE-IN AT SSMH-04 CONTRACTOR SHALL PERFORM VACUUM AND AIR TESTING IN ACCORDANCE WITH CITY OF RALEIGH REQUIREMENTS FOR ACCEPTANCE
3. UPON ACCEPTANCE OF THE SANITARY SEWER BETWEEN SSMH-13 AND SSMH-04, THE DOWNSTREAM SANITARY SEWER FROM SSMH-04 TO SSMH-01 SHALL BE ABANDONED IN PLACE WITH THE FOLLOWING SEQUENCE:
  1. INSTALL FLOWABLE FILL TO THE CROWN OF THE SEWER MAIN
  2. FILL MANHOLE RISER WITH #67 STONE
  3. REMOVE CONE SECTION OF MANHOLE & BACKFILL WITH COMPACTED SELECT BACKFILL
  4. INSTALL STONE BASE & ASPHALT PAVEMENT PATCH AS SHOWN ON THE ASPHALT PAVEMENT SECTIONS

**Sewer Bypass Pumping:**

A BYPASS PLAN SEALED BY A PROFESSIONAL ENGINEER MUST BE SUBMITTED TO PUBLIC UTILITIES PRIOR TO PUMPING OPERATIONS TO COORDINATE WITH ADMINISTRATION ENGINEERING STAFF. PUMPS SHOULD BE SIZED TO HANDLE THE PEAK DAILY FLOW (2.5 TIMES THE AVERAGE DAILY FLOW WITH A MINIMUM OF 50 GPM) FOR THE LINE OR AREA OF WORK. THE CONTRACTOR SHALL SECURE PUMPS FROM A PUMP SUPPLIER ACCORDING TO THE PROVIDED FLOW INFORMATION. PUMPING OPERATIONS MUST BE MONITORED 24 HOURS A DAY FOR EACH DAY OF THE PUMPING OPERATION BY QUALIFIED PERSONNEL IN ORDER TO RESPOND TO PROBLEMS OR FAILURES. 100% REDUNDANCY IS REQUIRED FOR PUMPING OPERATIONS. IN ADDITION, BACK UP PUMPS ARE TO BE CONNECTED TO THE BYPASS FORCE MAIN TO FACILITATE IMMEDIATE USE UPON FAILURE OF THE PRIMARY PUMPS. SEWER SERVICE OUTAGES MUST BE SCHEDULED ONE WEEK IN ADVANCE AND MAY NOT LAST LONGER THAN EIGHT HOURS.

WALLBROOK: SUGGESTED SEWER BYPASS PUMPING PLAN				
SUCTION MH	DISCHARGE MH	WORK TO BE PERFORMED	(GPM) AVG DAILY FLOW	(GPM) PEAK FLOW
EX. SSMH 1 (EX. SSMH166722)	SSMH 5	REPLACE EX. SSMH-1 WITH SSMH-7 RECONNECT FORCE MAIN FROM EX. SSMH-1 TO SSMH-7	317 GPM	800 GPM



**ATTENTION CONTRACTORS**  
The Construction Contractor responsible for the extension for water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4340 at least twenty four hours prior to beginning any of their construction.  
**Failure** to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require reinstallation of any water or sewer facilities not inspected as a result of this notification failure.  
**Failure** to call for inspection, install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

REVISIONS:

#	DATE	DESCRIPTION
1	12-06-2023	ISSUED FOR CONSTRUCTION
2	11-26-2023	SDP 23-05 / CID 23-01 COMBINED REVIEW

CROSLAND SOUTHEAST

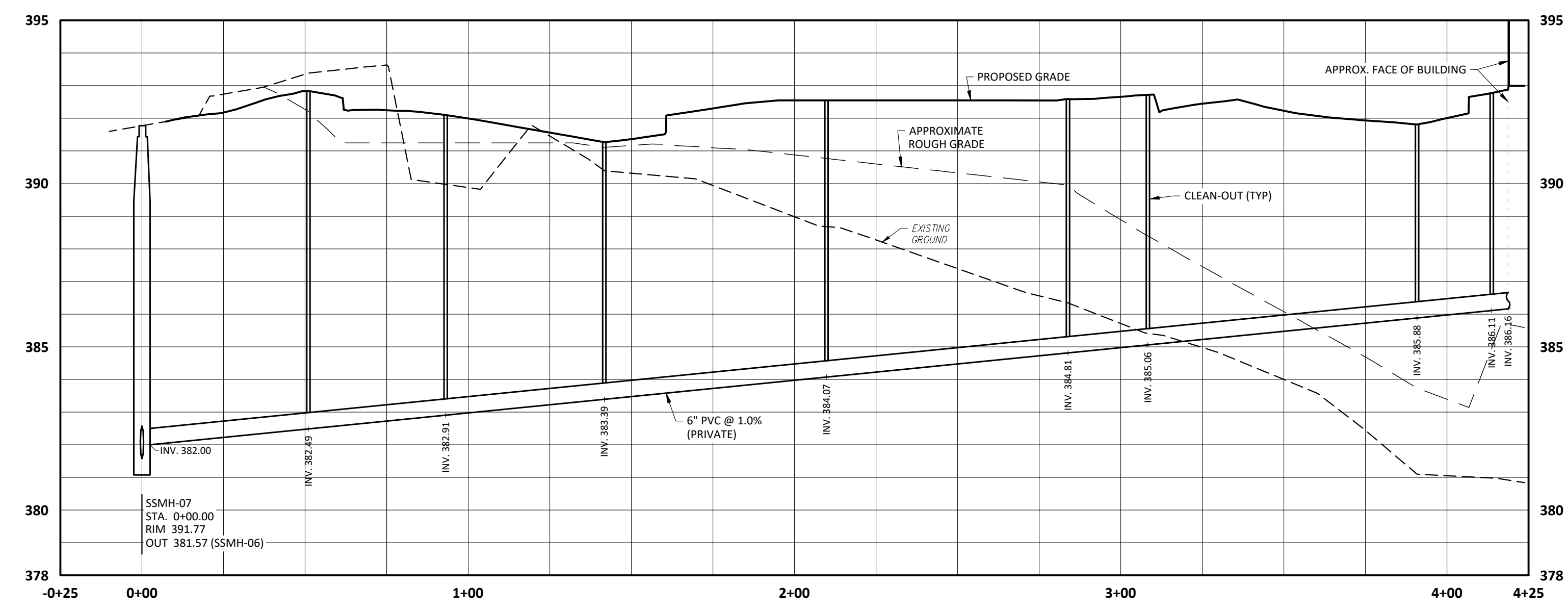
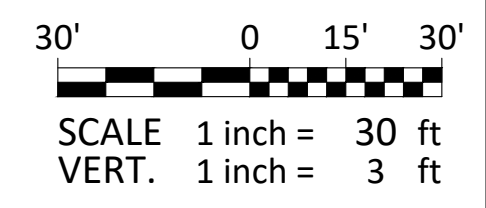
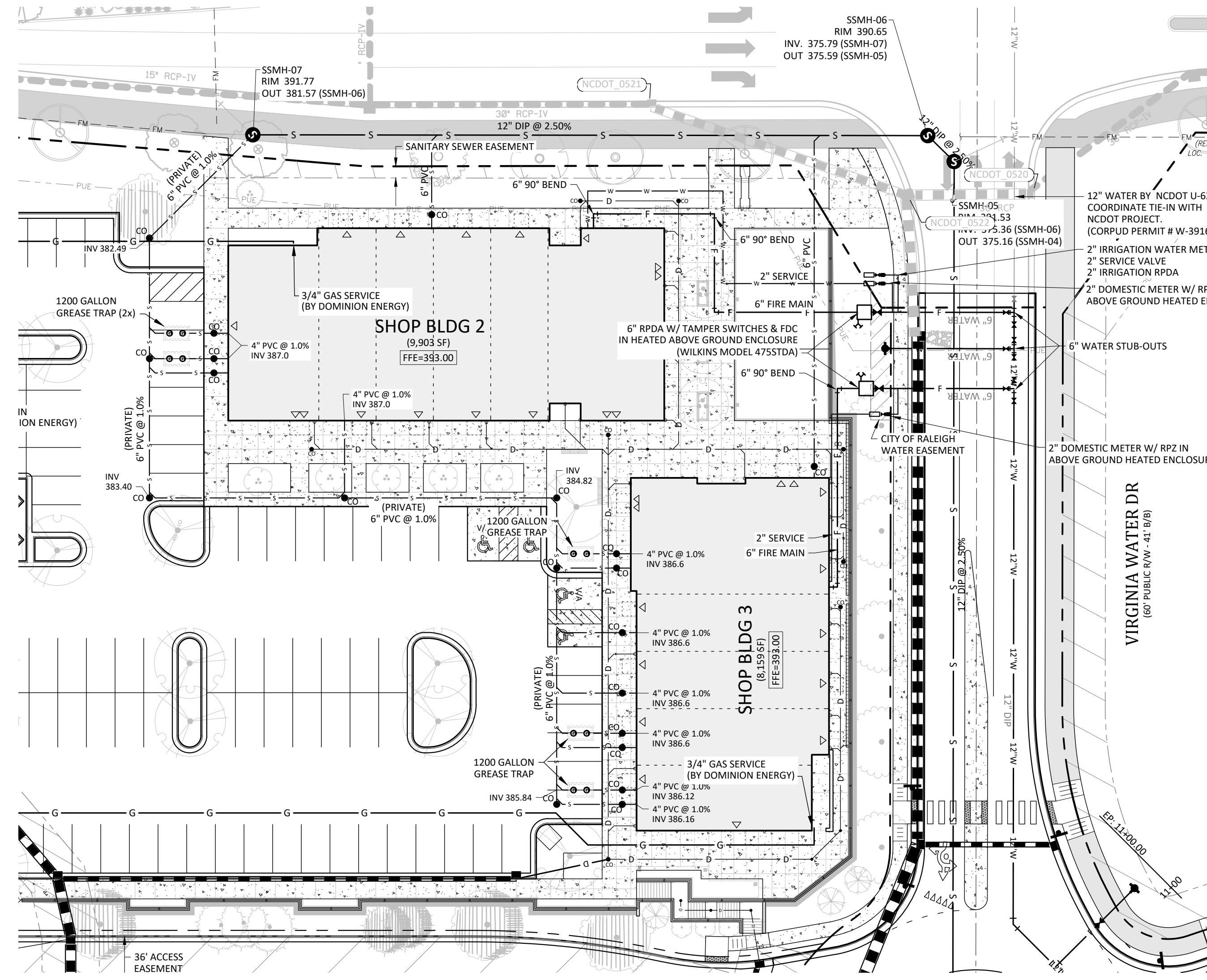
**PLAN PROFILE - SANITARY SEWER RELOCATION  
PUBLIX AT WALLBROOK AND  
WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

ARK CONSULTING GROUP PLLC  
ENGINEERS & PLANNERS  
2755-B Charles Blvd  
#2551 SLSB-0888  
www.arkconsultinggroup.com

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C3.30**  
CID





SHOP BLDGS 2 & 3 SERVICE PRIVATE SEWER EXTENSION

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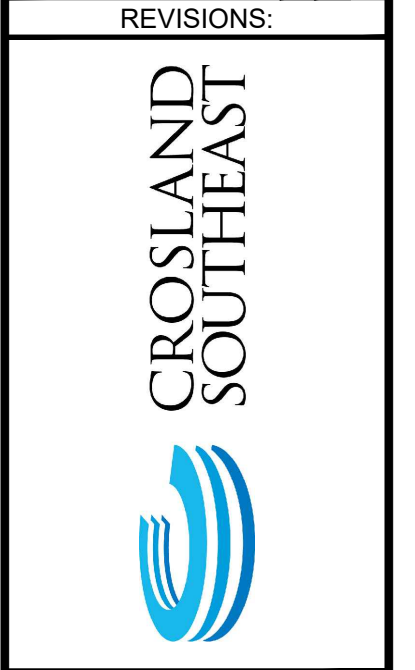
**SITE PERMITTING APPROVAL**  
 Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5381  
 The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074  
 The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5380(P).

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION  
 Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval  
 City of Raleigh Review Officer

#	DATE	DESCRIPTION
1	26-OCT-23	SDP 23-05 / CID 23-01 COMBINED REVIEW
2	14-NOV-23	ISSUED FOR CONSTRUCTION

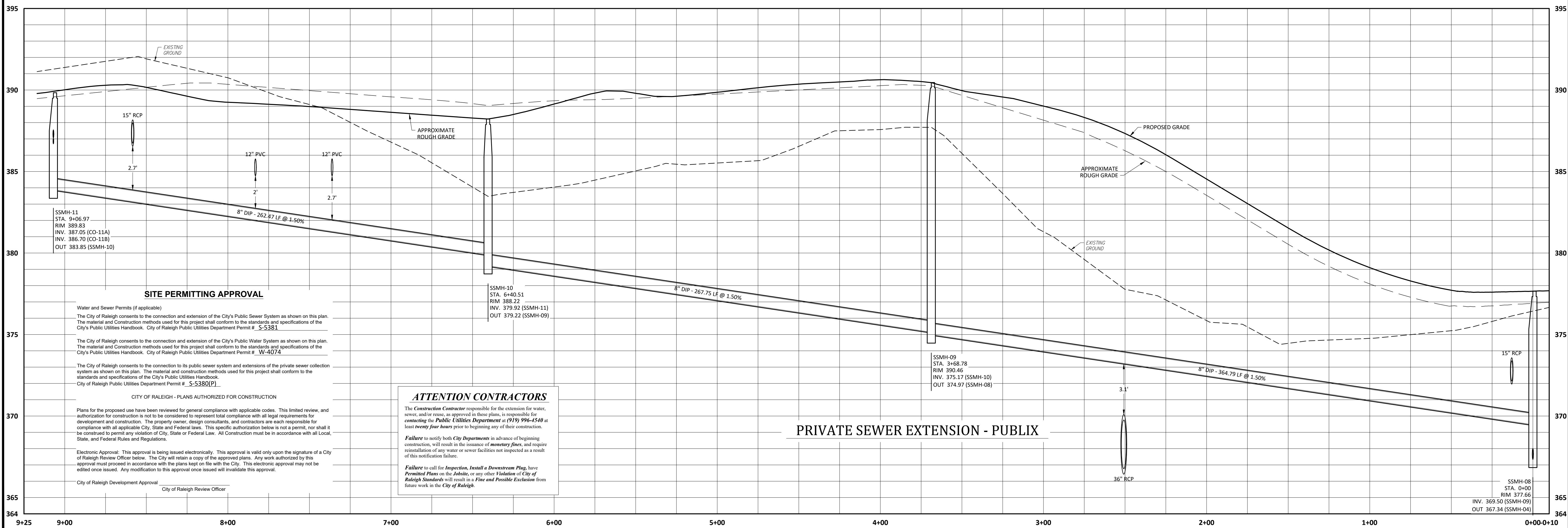
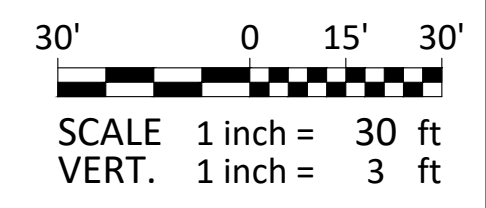
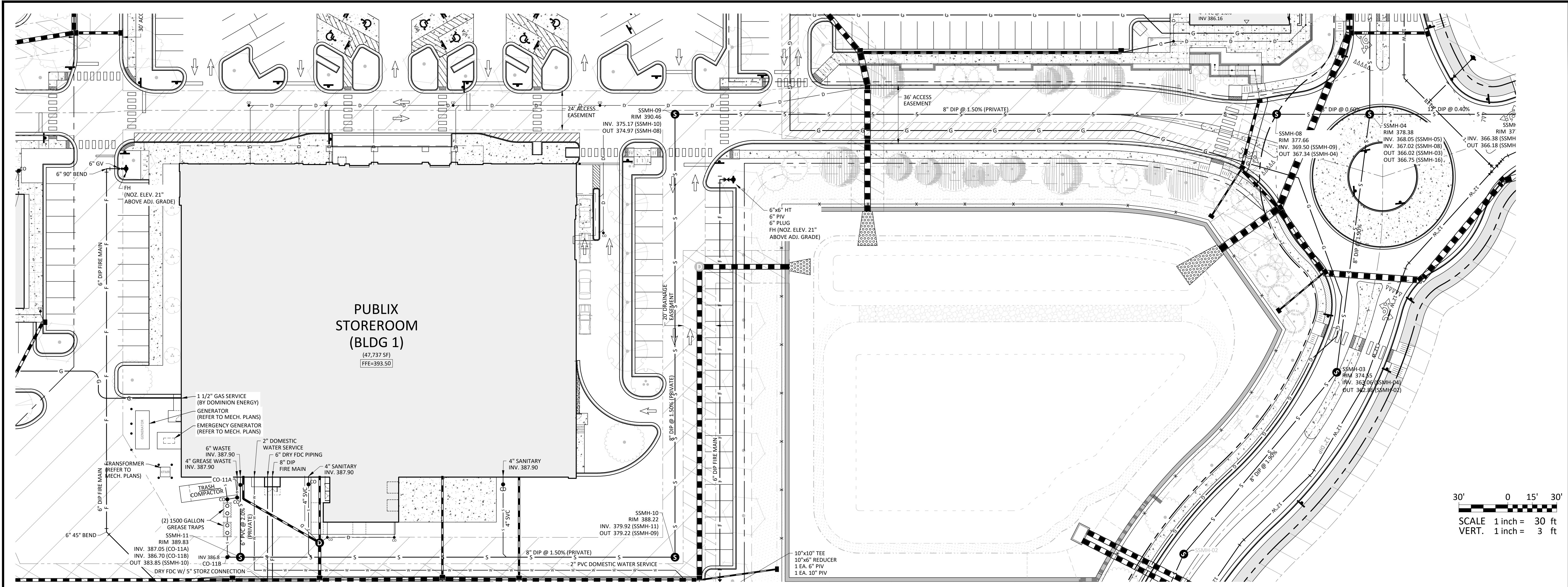


**PLAN-PROFILE - PRIVATE SEWER - CORNER SHOPS**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

NC License: P-1129  
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 ENGINEERS & PLANNERS  
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 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com  
 10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C3.31**  
 SDP



**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **S-5381**

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **W-4074**

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CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

**ATTENTION CONTRACTORS**

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**PRIVATE SEWER EXTENSION - PUBLIX**

2 | 14-NOV-23 | ISSUED FOR CONSTRUCTION  
 1 | 26-OCT-23 | SDP-23-05 / CID-23-01 COMBINED REVIEW

REVISIONS:

**CROSLAND SOUTHEAST**

**PLAN-PROFILE - PRIVATE SEWER - PUBLIX**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

NC License: P11199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
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 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C3.32**

SDP

N/F  
WAKE COUNTY BOARD  
OF ALCOHOLIC CONTROL  
DB 1388 PG 2155  
LOT 1  
ZONED CC-CZ  
BM 2008 PG 702  
PWA 1708-45-1307  
COMMERCIAL

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**CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION**

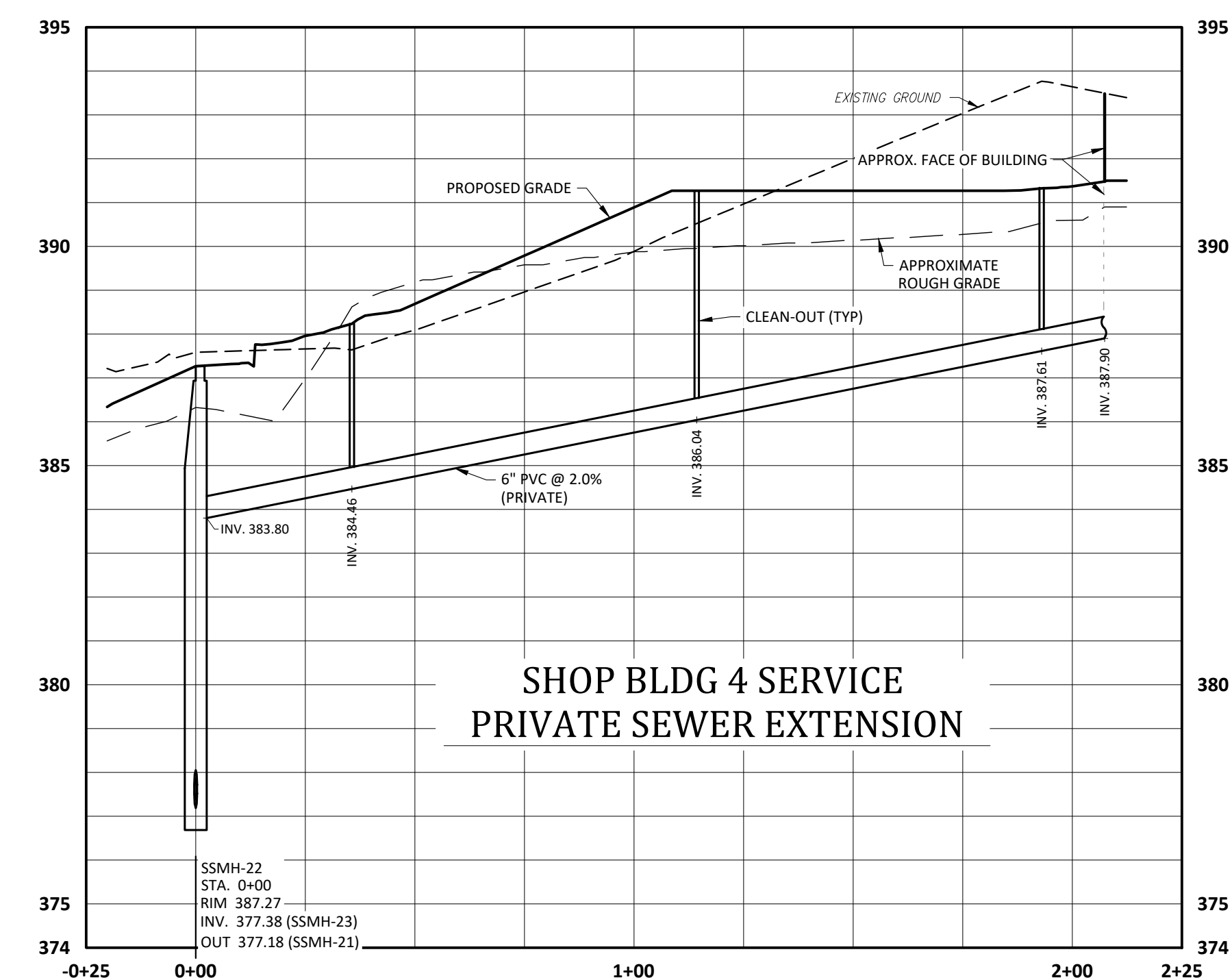
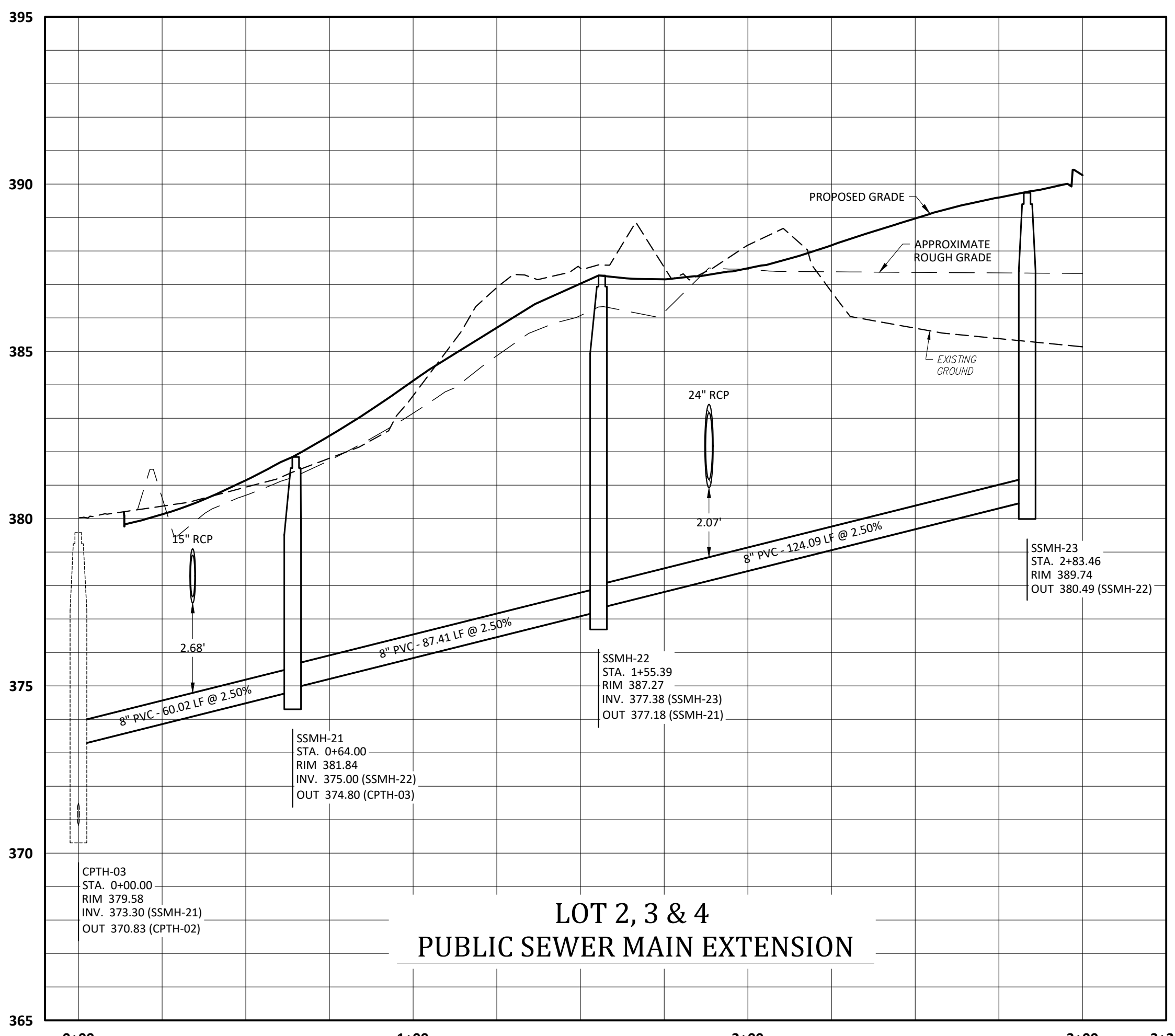
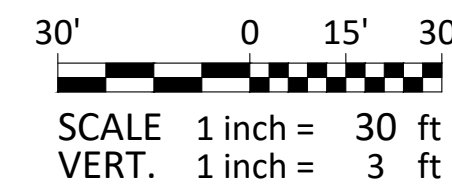
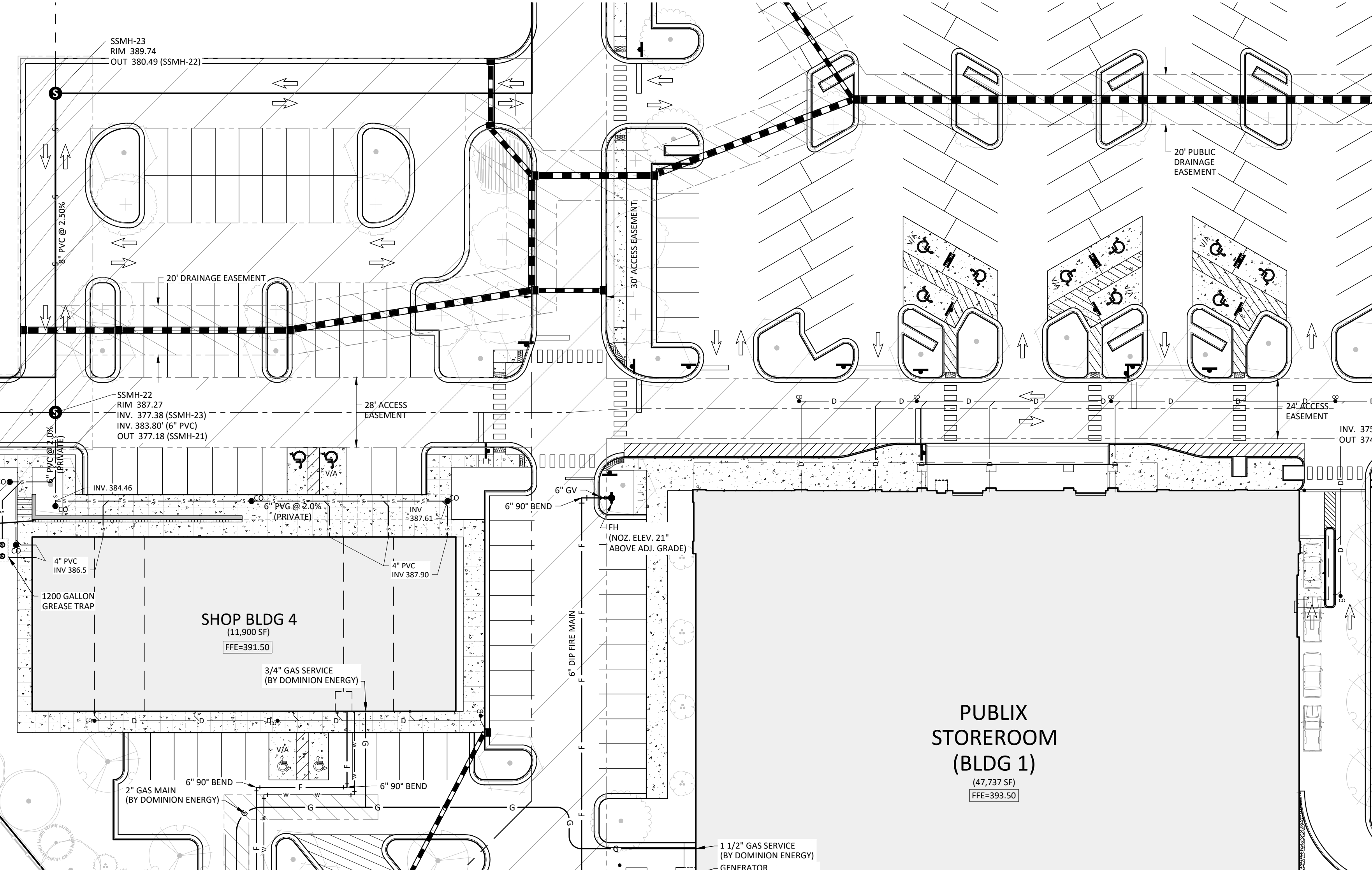
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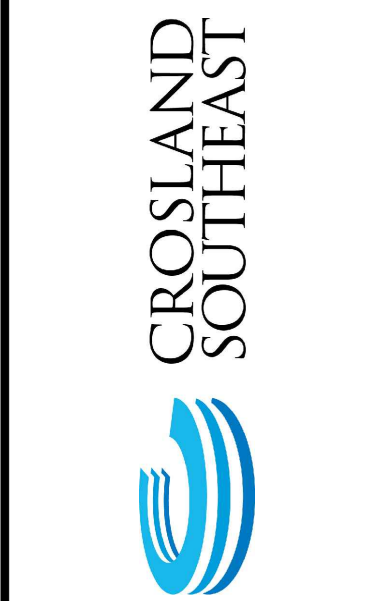
MARSHSKIP WAY  
(60' PUBLIC R/W) DESIGNED BY OTHERS

CARLTON GROUP  
NORTH CAROLINA, LLC  
DB 17402 PG 1659  
LOT 2  
ZONED R-1 & PLD  
BM 2008 PG 382  
PWA 1708-45-1119  
RESIDENTIAL



REVISIONS:

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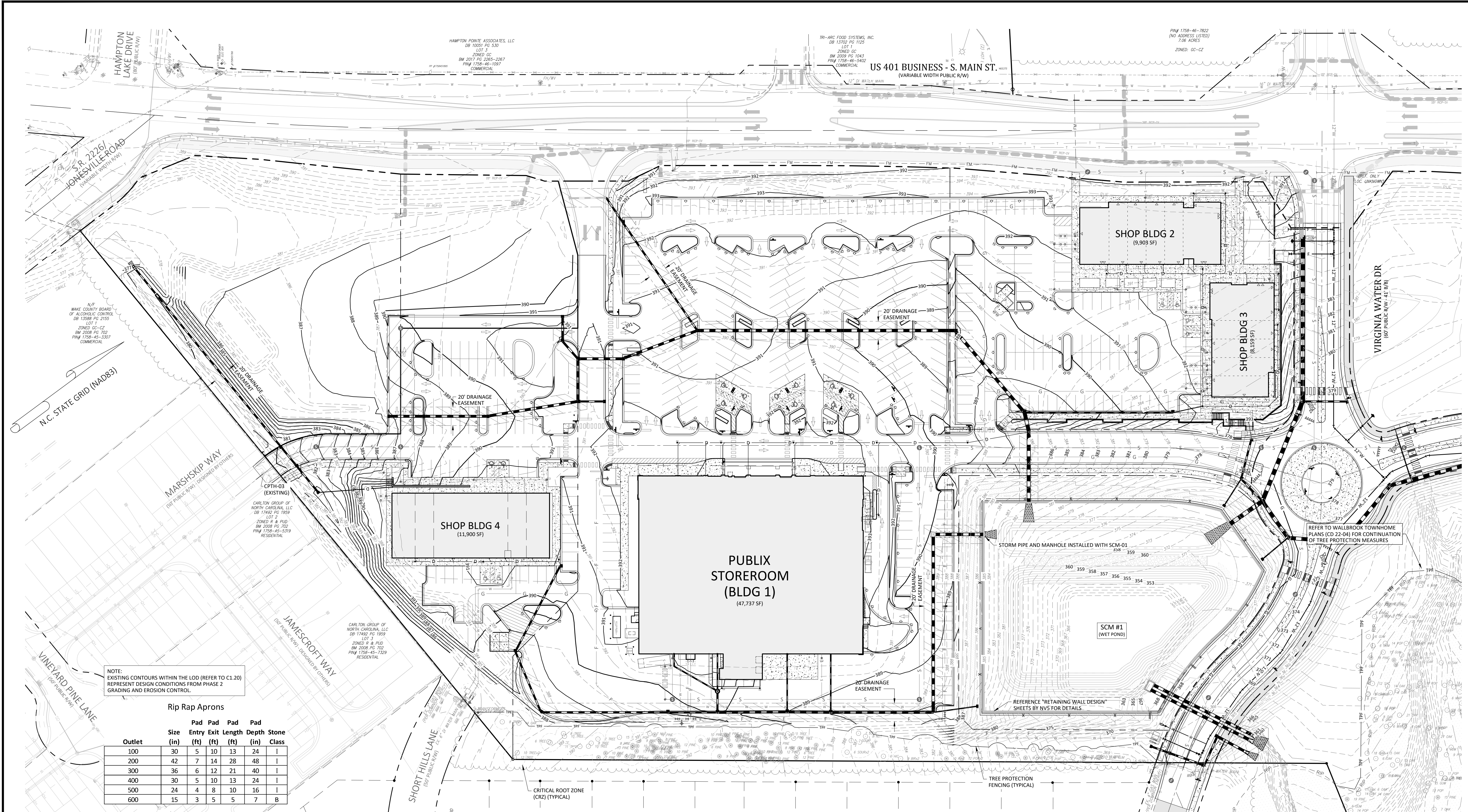
**PLAN-PROFILE - PRIVATE SEWER - SHOP BLDG #4**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
Rolesville, Wake County, North Carolina  
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Professional Engineer  
KRYN C. FABRO  
10/26/2023

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C3.33**  
SDP



NOTE:  
EXISTING CONTOURS WITHIN THE LOD (REFER TO C1.20)  
REPRESENT DESIGN CONDITIONS FROM PHASE 2  
GRADING AND EROSION CONTROL.

Rip Rap Aprons

Outlet	Size (in)	Pad Entry (ft)	Pad Exit (ft)	Pad Length (ft)	Pad Depth (in)	Stone Class
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B

**Rock Excavation Specifications:**

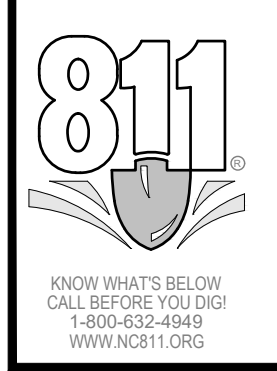
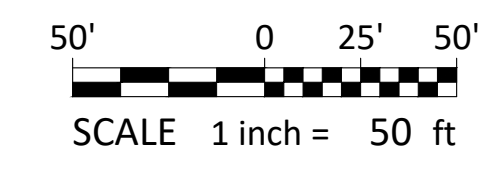
EXCAVATION CLASSIFICATIONS: THE CLASSIFICATIONS OF EXCAVATION BELOW WILL BE MADE WHEN ROCK EXCAVATION IS ENCOUNTERED IN WORK. DO NOT PERFORM SUCH WORK UNTIL MATERIAL TO BE EXCAVATED HAS BEEN CROSS-SECTIONED AND CLASSIFIED BY THE GEOTECHNICAL ENGINEER. SUCH EXCAVATION WILL BE PAID ON BASIS OF CONTRACT CONDITIONS RELATIVE TO CHANGES IN WORK.

- EARTH EXCAVATION INCLUDES REMOVAL AND DISPOSAL OF PAVEMENTS AND OTHER OBSTRUCTIONS VISIBLE ON SURFACE; UNDERGROUND STRUCTURES AND UTILITIES INDICATED TO BE DEMOLISHED AND REMOVED; ALONG WITH EARTH AND OTHER MATERIALS ENCOUNTERED THAT ARE NOT CLASSIFIED AS ROCK OR UNAUTHORIZED EXCAVATION.
- RIPPABLE ROCK EXCAVATION CONSISTS OF REMOVAL AND DISPOSAL OF A FORMATION THAT CANNOT BE REMOVED WITH STANDARD SOIL EXCAVATION EQUIPMENT SUCH AS BACKHOES AND PANS, BUT CAN BE REMOVED WITH A CATERPILLAR D-8 OR EQUIVALENT BULLDOZER MOUNTED WITH A SINGLE TOOTH RIPPER. MASS ROCK EXCAVATION CONSISTS OF THE REMOVAL AND DISPOSAL OF A FORMATION THAT CANNOT BE EXCAVATED WITH A CATERPILLAR D-8 BULLDOZER OR EQUIVALENT, MOUNTED WITH A SINGLE TOOTH RIPPER. TRENCHES IN EXCESS OF 10' IN WIDTH AND PITS IN EXCESS OF 30' HIGH IN EITHER LENGTH OR WIDTH ARE CLASSIFIED AS MASS ROCK EXCAVATION.
- IN TRENCH EXCAVATIONS FOR FOOTINGS AND UTILITIES, TRENCH RIPPABLE ROCK EXCAVATION SHALL BE THE REMOVAL AND DISPOSAL OF A FORMATION THAT CANNOT BE EXCAVATED USING STANDARD SOIL EXCAVATION EQUIPMENT SUCH AS A BACKHOE, BUT CAN BE REMOVED WITH A CATERPILLAR 322 TRACK MOUNTED EXCAVATOR OR SIMILAR EQUIPMENT, EQUIPPED WITH A 2 CUBIC YARD BUCKET EQUIPPED WITH ROCK TEETH. IN TRENCH EXCAVATIONS FOR FOOTINGS AND UTILITIES, TRENCH ROCK EXCAVATION SHALL BE THE REMOVAL AND DISPOSAL OF A FORMATION THAT CANNOT BE EXCAVATED WITH A CATERPILLAR 322 TRACK MOUNTED EXCAVATOR OR EQUIVALENT, EQUIPPED WITH A 2 CUBIC YARD BUCKET EQUIPPED WITH ROCK TEETH.
- THE OWNER'S TESTING AGENCY OR ENGINEER SHALL BE THE FINAL JUDGE AS TO WHAT IS TO BE CLASSIFIED AS ROCK EXCAVATION. THE CONTRACTOR SHALL PROVIDE THE SPECIFIED EQUIPMENT AT THE SITE TO CONFIRM ROCK EXCAVATION.

- INTERMITTENT RIPPING OR DRILLING AND BLASTING TO INCREASE PRODUCTION AND NOT NECESSARY TO PERMIT EXCAVATION WILL BE CLASSIFIED AS EARTH EXCAVATION.
- RIPPABLE ROCK AND ROCK PAYMENT LINES ARE AS FOLLOWS:
  - TWO FEET OUTSIDE OF CONCRETE WORK FOR WHICH FORMS ARE REQUIRED, EXCEPT FOOTINGS.
  - ONE FOOT OUTSIDE PERIMETER OF FOOTINGS.
  - IN PIPE TRENCHES, 6" BELOW INVERT ELEVATION OF PIPE AND TWO FEET WIDER THAN INSIDE DIAMETER OF PIPE, BUT NOT LESS THAN 3" MINIMUM TRENCH WIDTH.
  - FOR DRAINAGE STRUCTURES, 18" OUTSIDE OF STRUCTURE DIMENSION, AND 6" BELOW BOTTOM OF STRUCTURE.
  - NEAT OUTSIDE DIMENSIONS OF CONCRETE WORK WHERE NO FORMS ARE REQUIRED.
  - UNDER SLABS-ON-GRADE, 6" BELOW BOTTOM OF CONCRETE SLAB.
  - UNDER PAVEMENTS, 6" BELOW PLANNED SUBGRADE ELEVATION.
- FIELD VERIFICATION OF RIPPABLE ROCK AND ROCK QUANTITIES SHALL BE PERFORMED BY THE OWNER'S TESTING AGENCY, THE ENGINEER, OR A REGISTERED LAND SURVEYOR.
- REMOVE ALL EXCAVATED MATERIAL CLASSIFIED AS ROCK FROM THE SITE. UNLESS EXCAVATED ROCK IS TO BE CRUSHED, SCREENED AND GRADED FOR USE AS STRUCTURAL FILL OR AGGREGATE BASE COURSE. APPROVAL BY THE CIVIL ENGINEER IS REQUIRED PRIOR TO UTILIZING EXCAVATED MATERIAL CLASSIFIED AS ROCK AS STRUCTURAL FILL OR AGGREGATE BASE COURSE.
- UNAUTHORIZED EXCAVATION CONSISTS OF REMOVAL OF MATERIALS BEYOND INDICATED SUBGRADE ELEVATIONS OR DIMENSIONS WITHOUT SPECIFIC DIRECTION OF THE CIVIL ENGINEER. UNAUTHORIZED EXCAVATION, AS WELL AS REMEDIAL WORK ASSOCIATED WITH UNAUTHORIZED EXCAVATION, SHALL BE AT THE EXCAVATING CONTRACTOR'S EXPENSE.

**Grading Notes:**

- SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT REFERENCED IN THIS PLAN SET.
- SITE CONTRACTOR TO GRADE ALL AREAS WITHIN THE LIMITS OF DISTURBANCE FROM BUILDING TO PROPERTY LINES AND TO EDGE OF PAVEMENT ON STREET SIDES, INCLUDING ROW.
- TREES OUTSIDE OF CONSTRUCTION LIMITS OR TREES NOT INDICATED TO BE REMOVED SHALL BE PROTECTED.
- TOP SOIL SHALL BE STRIPPED FROM ALL CUT AND FILL AREAS, STOCKPILED AND REDISTRIBUTED OVER GRADED AREAS. PROVIDE EROSION AND SEDIMENTATION CONTROLS AROUND STOCKPILES DURING CONSTRUCTION.
- TILL TOP SOIL TO A DEPTH OF 4" MINIMUM AND REMOVE ALL ROCKS LARGER THAN 1" MEASURED IN LARGEST DIRECTION.
- GRADE ALL AREAS TO MAINTAIN POSITIVE SLOPE AWAY FROM BUILDING.
- ALL GRADED AREAS TO RECEIVE SEED OR SOD, TOP SOIL, STRAW AND WATER UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- INSTALL TEMPORARY TURF REINFORCEMENT MATTING ON ALL SLOPES STEEPER THAN 3:1. MATTING SHALL BE CONTECH LANDLOK C2 OR EQUAL.
- REFER TO CIVIL DETAILS FOR PAVEMENT IN PARKING AND DRIVE AREAS.
- ALL SIDEWALKS SHALL BE CONSTRUCTED OF 3,500 PSI CONCRETE AND SHALL HAVE TOOLED CONTROL JOINTS PER THE JOINT SPACING REFERENCED ON THE PLAN.
- MATERIALS SELECTED FOR USE AS STRUCTURAL FILL SHALL BE FREE OF VEGETABLE MATTER, WASTE CONSTRUCTION DEBRIS, AND OTHER DELETERIOUS MATERIALS. THE MATERIAL SHALL NOT CONTAIN ROCKS HAVING A DIAMETER OVER 3 INCHES.
- SOILS REPRESENTED BY THEIR USCS GROUP SYMBOLS WILL TYPICALLY BE SUITABLE FOR USE AS STRUCTURAL FILL: (ML), (CL), (SM), AND (SC).
- THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3' OF LOW PERMEABILITY SOILS CAN BE USED AS COVER: (SW), (SP), (SP-SM), AND (SP-SC).
- THE FOLLOWING SOILS ARE CONSIDERED SUITABLE IN AREAS WHERE A MINIMUM THICKNESS OF 3' OF NON-EXPANSIVE SOILS CAN BE USED AS COVER: (MH) AND (CH).
- THE FOLLOWING SOIL TYPES ARE CONSIDERED UNSUITABLE: (OL), (OH), AND (Pt).
- ALL STRUCTURAL FILL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698). ADDITIONALLY, THE IN-PLACE MAXIMUM DRY DENSITY OF STRUCTURAL FILL SHOULD BE NO LESS THAN 90 PCF.
- THE UPPER 12" OF BUILDING FLOOR SLAB SUBGRADES SHALL BE COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D698).
- FILL PLACEMENT IN PAVEMENT AREAS SHALL BE PERFORMED IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS.
- SUITABLE FILL MATERIAL SHALL BE PLACED IN 8" LIFTS AND COMPACTED BY MECHANICAL MEANS. PROOFROLLING WITH RUBBER Tired, HEAVILY LOADED VEHICLES MAY BE DESIRABLE AT INTERVALS OF APPROXIMATELY 2 VERTICAL FEET TO BIND THE LIFTS TOGETHER AND TO SEAL THE SURFACE OF THE COMPACTED AREAS.
- ALL BUILDING, SIDEWALK, AND PAVEMENT SUB-GRADE COMPACTIONS SHALL BE INTERMEDIATELY TESTED THROUGHOUT FILL PLACEMENT OPERATIONS AND APPROVED BY THE GEOTECHNICAL ENGINEER. ALL SUB-GRADES SHALL BE THOROUGHLY PROOF-ROLLED TO IDENTIFY SMALL LOCALIZED AREAS OF UNSUITABLE SOILS. ALL UNSUITABLE SOILS SHALL BE UNDERCUT, REPLACED WITH STRUCTURAL FILL, AND COMPACTED AS DESCRIBED ABOVE.
- WHERE REQUIRED, PAVEMENT SHALL BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, SHALL EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS SHALL BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPIILING OF DEBRIS WILL NOT BE PERMITTED.
- THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, CLEANOUTS, ETC. SHALL BE ADJUSTED, AS REQUIRED, TO MATCH PROPOSED GRADES.
- SITE CONTRACTOR SHALL BE REQUIRED TO SECURE ALL NECESSARY PERMITS AND APPROVALS FOR OFF SITE MATERIAL SOURCES AND / OR DISPOSAL FACILITIES. CONTRACTOR SHALL SUPPLY A COPY OF APPROVALS TO OWNER PRIOR TO INITIATING WORK.
- UNLESS INDICATED OTHERWISE, ALL STORM DRAINAGE PIPE SHALL BE REINFORCED CONCRETE PIPE (RCP) CLASS III WITH SOIL TIGHT JOINTS.
- SITE CONTRACTOR SHALL INSTALL BUILDING ROOF DRAINS TO WITHIN 2' OF THE BUILDING EXTERIOR WALL, CAP AND PROVIDE ABOVE GROUND MARKER FOR LOCATION PURPOSES. GENERAL CONTRACTOR IS RESPONSIBLE FOR TIE-INS OF BUILDING DOWNSPOUTS TO SITE ROOF DRAIN PIPING.



2. 14/NOV/23 ISSUED FOR CONSTRUCTION  
 1. 26/OCT/23 SDP-23-05 / CID-23-01 COMBINED REVIEW

# DATE DESCRIPTION

REVISIONS:

**GRADING & DRAINAGE PLAN - OVERALL**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

S Main St. / US 401 and Virginia Water Drive

Rolesville, Wake County, North Carolina

NC License: PL1159

**ARK CONSULTING GROUP PLLC**

ENGINEERS & PLANNERS

2755-B Charles Blvd

Charlotte, NC 28205

(754) 558-0888

www.arkconsultinggroup.com

Project Manager: BCF

Drawn By: DLC

Checked By: STA

Project Number: 21089 / 22012

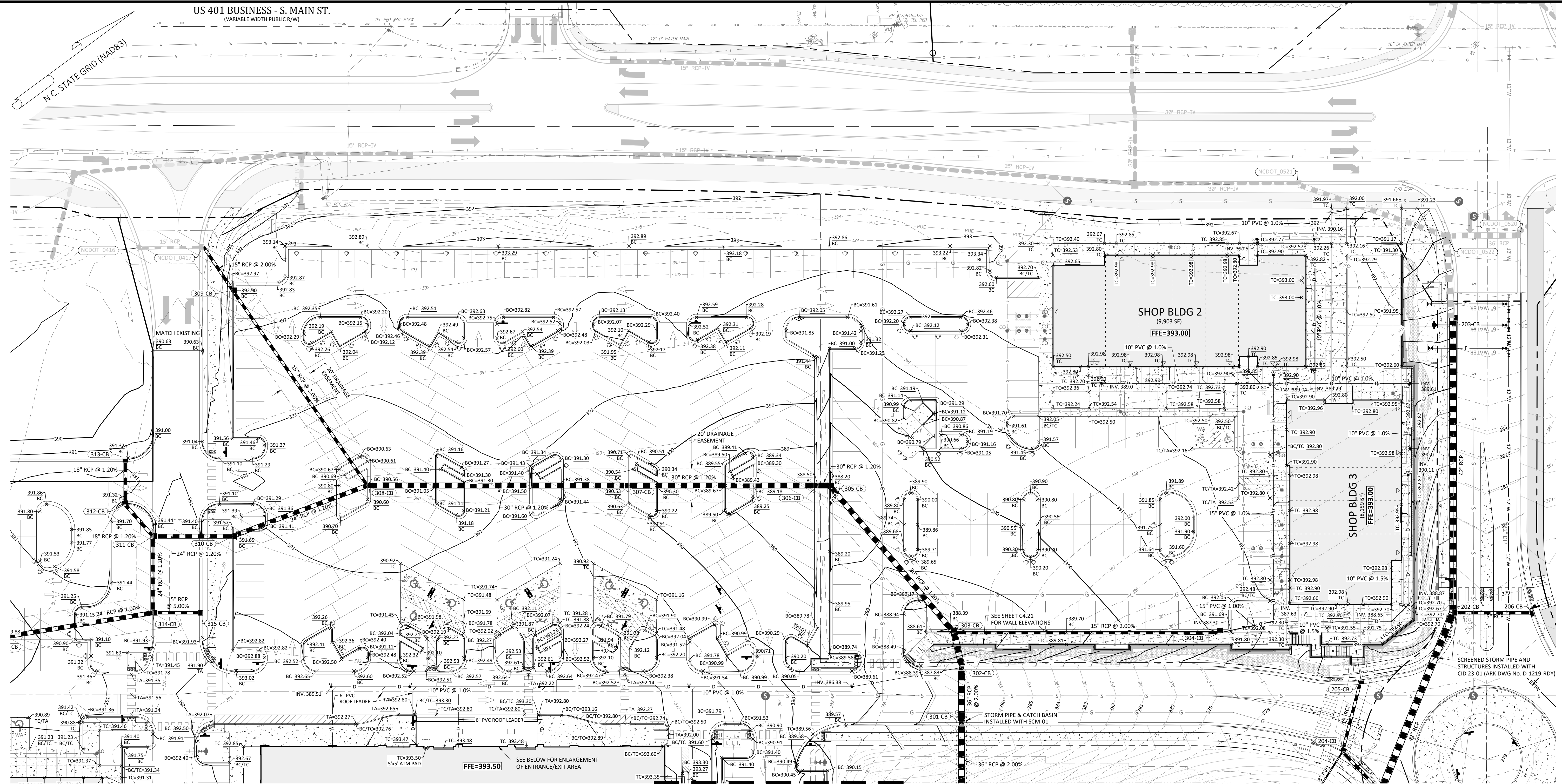
Drawing Number: D-1219-CD

Date: October 26, 2023

C4.00

SCALE 1 inch = 50 ft

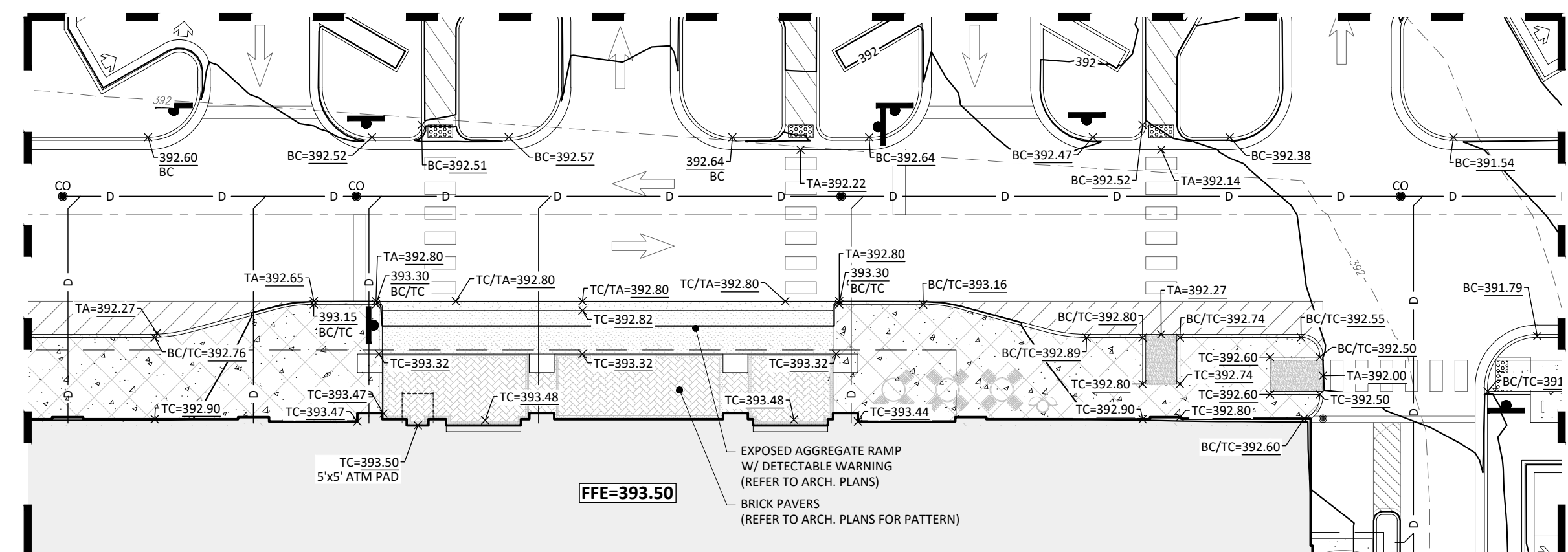
SDP



REFERENCE LINE - SEE SHEET C4.20

ID	TOP	IN	OUT	DESC
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
302-CB	387.46	371.30 (303-CB)	367.12 (301-CB)	Catch Basin
303-CB	388.35	371.95 (305-CB) 383.10 (304-CB)	371.55 (302-CB)	Catch Basin
304-CB	391.55	387.30 (304A-CO)	386.30 (303-CB)	Catch Basin
305-CB	388.20	373.34 (306-CB)	373.34 (303-CB)	Catch Basin
306-CB	388.50	373.42 (307-CB)	373.42 (305-CB)	Catch Basin
307-CB	390.53	374.78 (308-CB)	374.78 (306-CB)	Catch Basin
308-CB	390.56	381.90 (309-CB) 377.07 (310-CB)	376.67 (307-CB)	Catch Basin
309-CB	392.90	384.75 (NCDOT_0417)	384.75 (308-CB)	Catch Basin
310-CB	391.65	378.11 (311-CB)	378.11 (308-CB)	Catch Basin
311-CB	391.47	378.69 (314-CB) 379.95 (312-CB)	378.69 (310-CB)	Catch Basin
312-CB	391.36	380.25 (313-CB)	380.25 (311-CB)	Catch Basin
313-CB	391.32		380.59 (312-CB)	Catch Basin
314-CB	391.81	379.24 (316-CB) 385.16 (315-CB)	379.24 (311-CB)	Catch Basin
315-CB	391.66		386.66 (314-CB)	Catch Basin
316-CB	389.88	380.24 (317-CB)	380.24 (314-CB)	Catch Basin
317-CB	388.44	380.93 (318-CB)	380.93 (316-CB)	Catch Basin
318-CB	387.30		381.31 (317-CB)	Catch Basin
NCDOT_0416	387.52		385.58 (NCDOT_0417)	Catch Basin
NCDOT_0417	387.32	385.38 (NCDOT_0416)		Catch Basin

NOTE:  
EXISTING CONTOURS WITHIN THE LOD (REFER TO C1.20)  
REPRESENT DESIGN CONDITIONS FROM PHASE 2  
GRADING AND EROSION CONTROL.



ENLARGEMENT - ENTRANCE/EXIT RAMP

SCALE: 1" = 20'

Rip Rap Aprons

Outlet	Pad Pad Pad Pad				Stone	
	Size (in)	Entry (ft)	Exit (ft)	Length (ft)		Depth (in)
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B



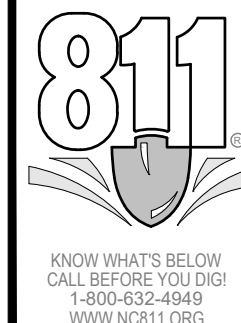
**GRADING & DRAINAGE PLAN 'A'**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

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www.arkconsultinggroup.com

Professional Engineer  
NORTH CAROLINA  
31970  
10/26/2023

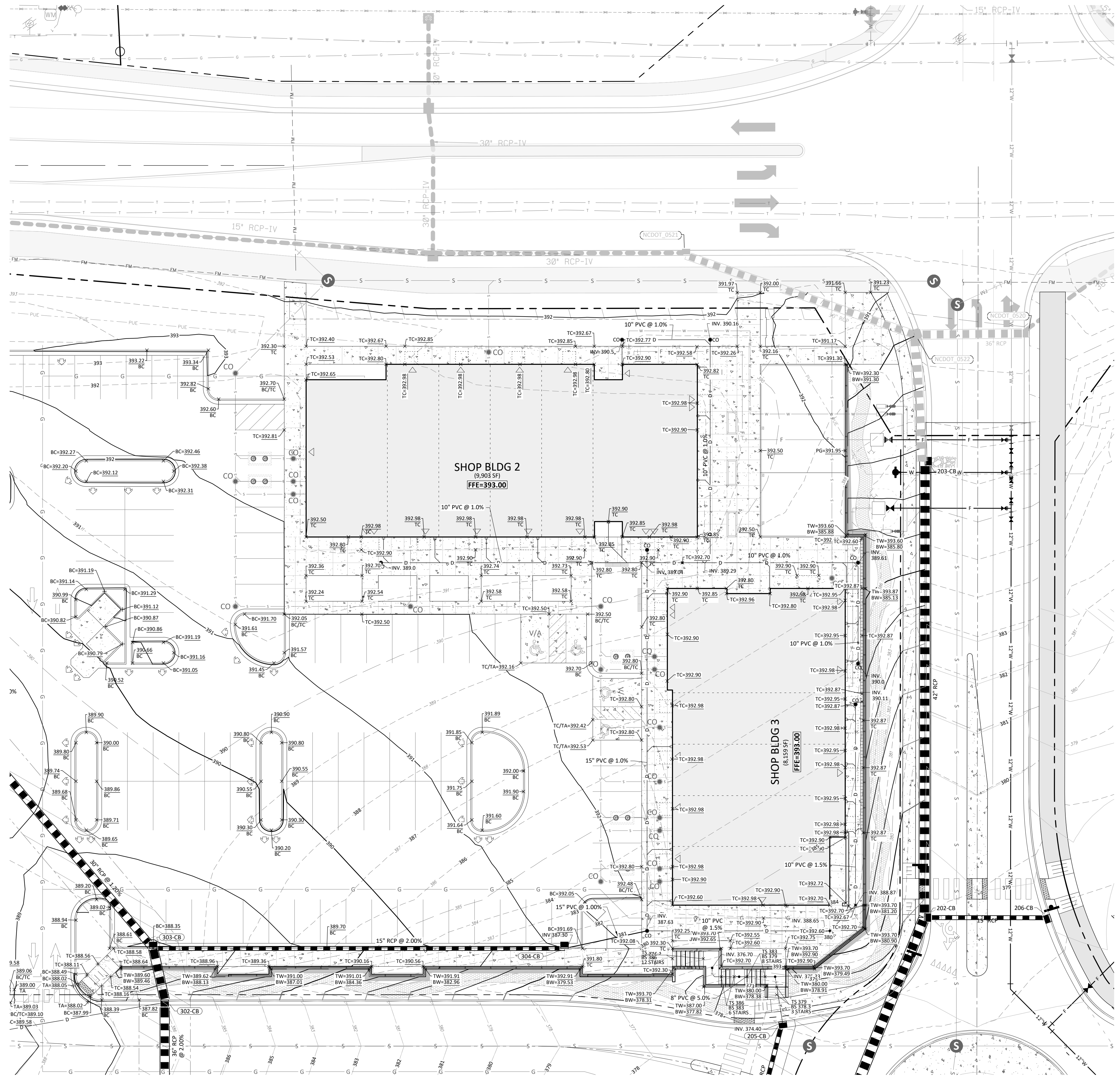
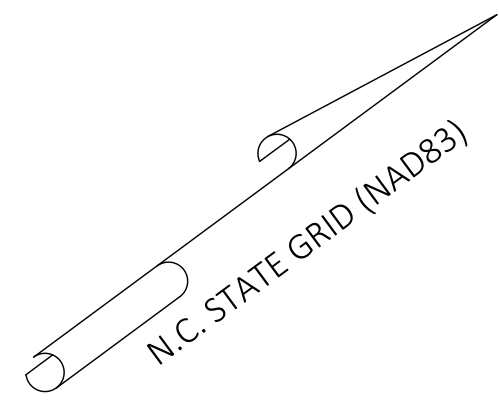
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Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C4.10**  
SDP

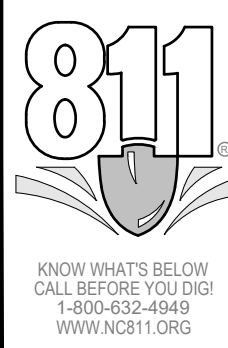
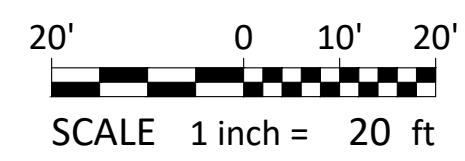


2:14/NOV/23 ISSUED FOR CONSTRUCTION  
1:16/OCT/23 SDP 23-05 / CID 23-01 COMBINED REVIEW  
# DATE DESCRIPTION

REVISIONS:



NOTE:  
EXISTING CONTOURS WITHIN THE LOD (REFER TO C1.20)  
REPRESENT DESIGN CONDITIONS FROM PHASE 2  
GRADING AND EROSION CONTROL.



**GRADING & DRAINAGE PLAN 'A' - ENLARGEMENT**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

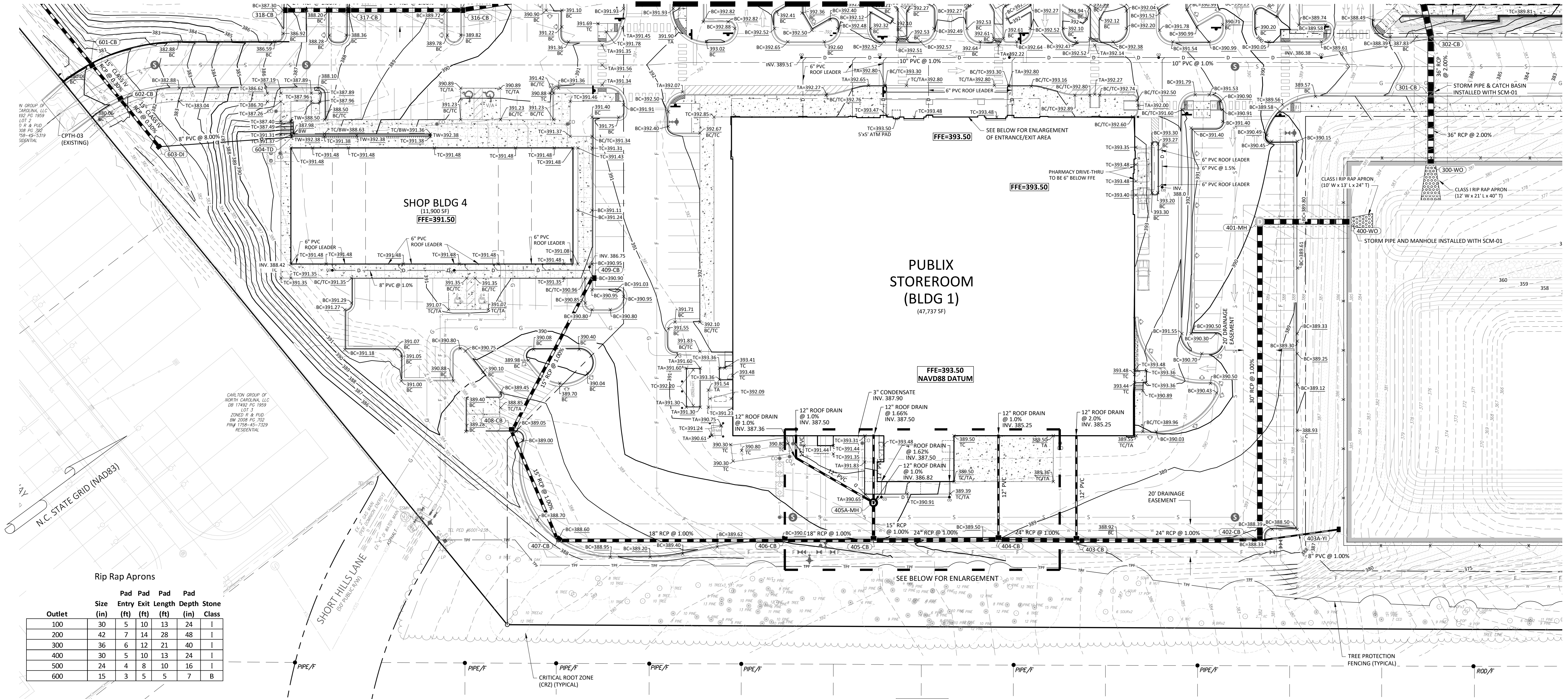
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Charlotte, NC 28205  
(754) 558-0888  
www.arkconsultinggroup.com

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C4.11**  
SDP

#	DATE	DESCRIPTION
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2	11/06/23	ISSUED FOR CONSTRUCTION

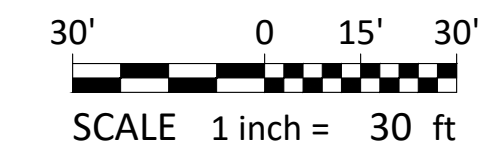
REFERENCE LINE - SEE SHEET C4.10



Rip Rap Aprons

Outlet	Size (in)	Pad Entry (ft)	Pad Exit (ft)	Pad Length (ft)	Pad Depth (in)	Stone Class
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B

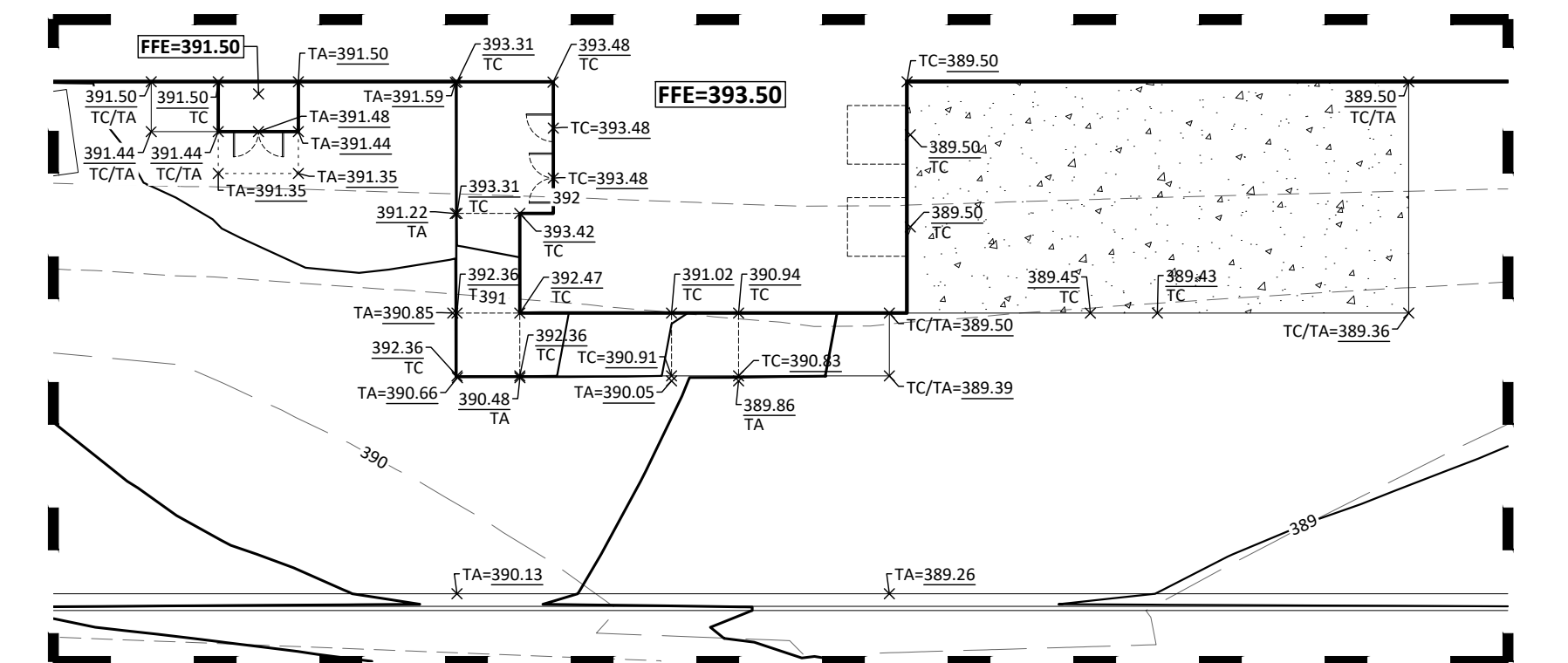
NOTE:  
EXISTING CONTOURS WITHIN THE LOD (REFER TO C1.20)  
REPRESENT DESIGN CONDITIONS FROM PHASE 2  
GRADING AND EROSION CONTROL.



ID	TOP	IN	OUT	DESC
400-WO	365.55	362.60 (401-MH)		Wall Outlet
401-MH	389.89	377.49 (402-CB)	363.43 (400-WO)	60 in MH
402-CB	388.30	379.91 (403-CB) 381.24 (403A-YI)	379.41 (401-MH)	Catch Basin
403-CB	389.10	381.02 (404-CB) 384.62 (RD-1)	381.02 (402-CB)	Catch Basin
404-CB	389.32	381.49 (405-CB) 384.62 (RD-2)	381.49 (403-CB)	Catch Basin
405-CB	390.60	386.59 (405A-MH) 382.74 (406-CB)	382.24 (404-CB)	Catch Basin
405A-MH	390.43	386.82 (RD-5) 386.82 (RD-3)	386.82 (405-CB)	48 in MH
406-CB	390.05	383.27 (407-CB)	383.27 (405-CB)	Catch Basin
407-CB	388.60	384.89 (408-CB)	384.64 (406-CB)	Catch Basin
408-CB	389.07	385.61 (409-CB)	385.61 (407-CB)	Catch Basin
409-CB	390.90		386.65 (408-CB)	Catch Basin

ID	TOP	IN	OUT	DESC
600-FES	378.37	376.85 (601-CB)		15" Flared End
601-CB	380.53	377.60 (602-CB)	377.60 (600-FES)	Catch Basin
602-CB	380.80	377.69 (603-DI)	377.69 (601-CB)	Catch Basin
603-DI	380.50	377.90 (604-TD)	377.80 (602-CB)	Drop Inlet

ID	TOP	IN	OUT	DESC
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
302-CB	387.46	371.30 (303-CB)	367.12 (301-CB)	Catch Basin



ENLARGEMENT - SERVICE AREA RAMP / RISER ROOM / GREASE BARREL PAD  
SCALE: 1" = 20'



**GRADING & DRAINAGE PLAN 'B'**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

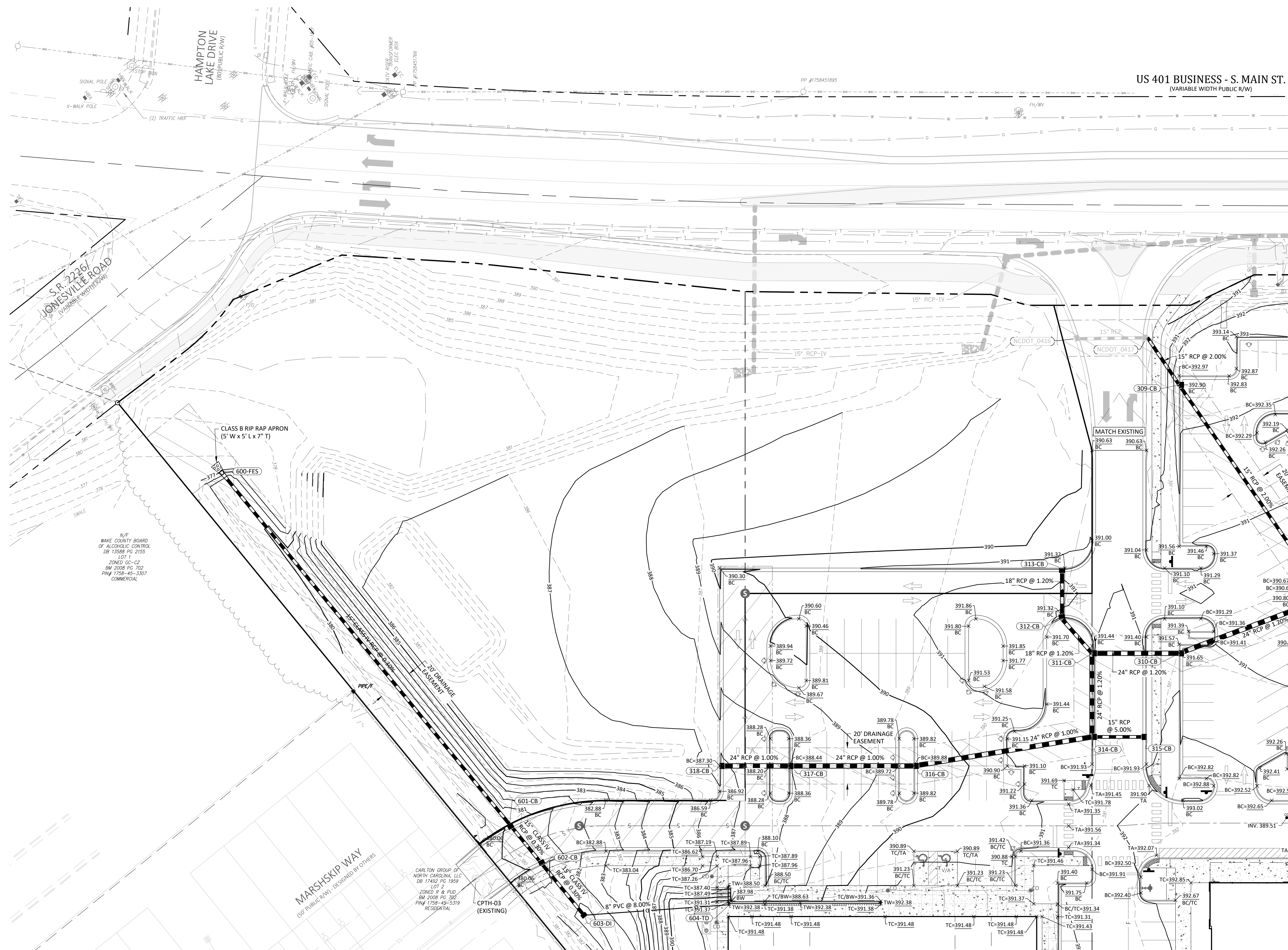
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Charlotte, NC 28205  
(754) 558-0888  
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Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C4.20**  
SDP



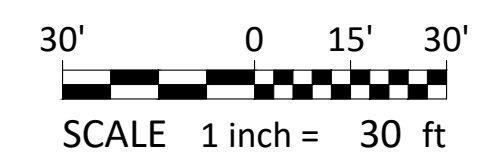
REVISIONS: 2 14 NOV 23 ISSUED FOR CONSTRUCTION 1 26 OCT 23 SDP 23-05 / CID 23-01 COMBINED REVIEW # DATE DESCRIPTION



NOTE:  
EXISTING CONTOURS WITHIN THE LOD (REFER TO C1.20)  
REPRESENT DESIGN CONDITIONS FROM PHASE 2  
GRADING AND EROSION CONTROL.

STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
600-FES	378.37	376.85 (601-CB)		15" Flared End
601-CB	380.53	377.60 (602-CB)	377.60 (600-FES)	Catch Basin
602-CB	380.80	377.69 (603-DI)	377.69 (601-CB)	Catch Basin
603-DI	380.50	377.90 (604-TD)	377.80 (602-CB)	Drop Inlet

STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
300-WO	366.12	362.60 (301-CB)		Wall Outlet
301-CB	387.38	366.40 (302-CB)	363.43 (300-WO)	Catch Basin
302-CB	387.46	371.30 (303-CB)	367.12 (301-CB)	Catch Basin
303-CB	388.35	371.95 (305-CB) 383.10 (304-CB)	371.55 (302-CB)	Catch Basin
304-CB	391.55	387.30 (304A-CO)	386.30 (303-CB)	Catch Basin
305-CB	388.20	373.34 (306-CB)	373.34 (303-CB)	Catch Basin
306-CB	388.50	373.42 (307-CB)	373.42 (305-CB)	Catch Basin
307-CB	390.53	374.78 (308-CB)	374.78 (306-CB)	Catch Basin
308-CB	390.56	381.90 (309-CB) 377.07 (310-CB)	376.67 (307-CB)	Catch Basin
309-CB	392.90	384.75 (NCDOT_0417)	384.75 (308-CB)	Catch Basin
310-CB	391.65	378.11 (311-CB)	378.11 (308-CB)	Catch Basin
311-CB	391.47	378.69 (314-CB) 379.95 (312-CB)	378.69 (310-CB)	Catch Basin
312-CB	391.36	380.25 (313-CB)	380.25 (311-CB)	Catch Basin
313-CB	391.32		380.59 (312-CB)	Catch Basin
314-CB	391.81	379.24 (316-CB) 385.16 (315-CB)	379.24 (311-CB)	Catch Basin
315-CB	391.66		386.66 (314-CB)	Catch Basin
316-CB	389.88	380.24 (317-CB)	380.24 (314-CB)	Catch Basin
317-CB	388.44	380.93 (318-CB)	380.93 (316-CB)	Catch Basin
318-CB	387.30		381.31 (317-CB)	Catch Basin
NCDOT_0416	387.52		385.58 (NCDOT_0417)	Catch Basin
NCDOT_0417	387.32	385.38 (NCDOT_0416)		Catch Basin



REVISIONS:

#	DATE	DESCRIPTION
2	14/NOV/23	ISSUED FOR CONSTRUCTION
1	12/OCT/23	SDP 23-05 / CID 23-01 COMBINED REVIEW

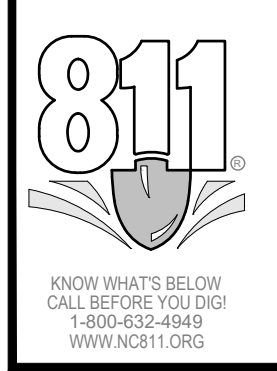
**GRADING & DRAINAGE PLAN - OUTPARCELS**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

NC License: P11159  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

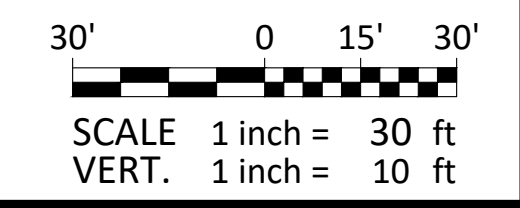
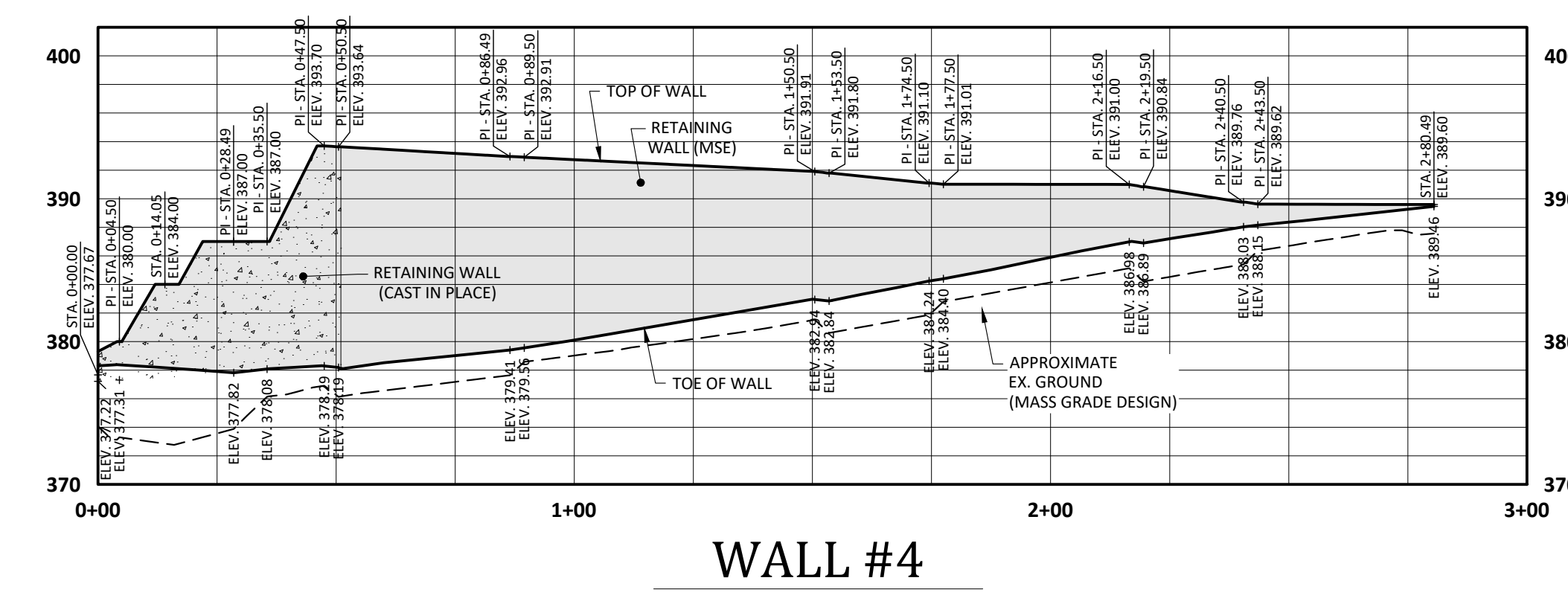
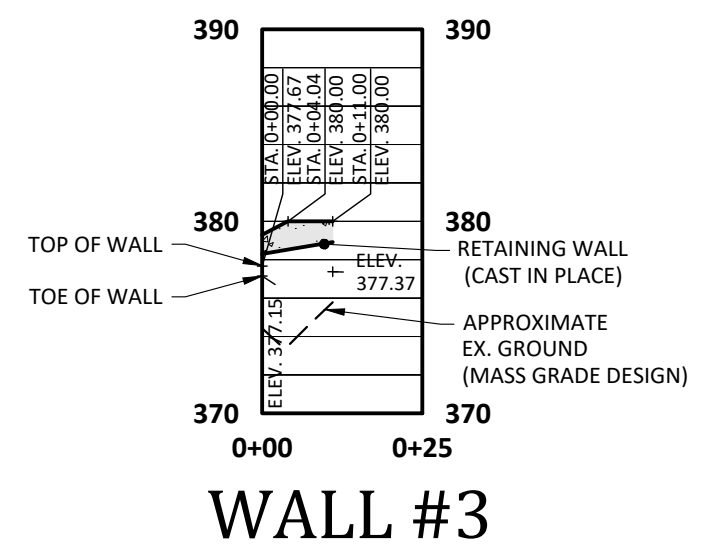
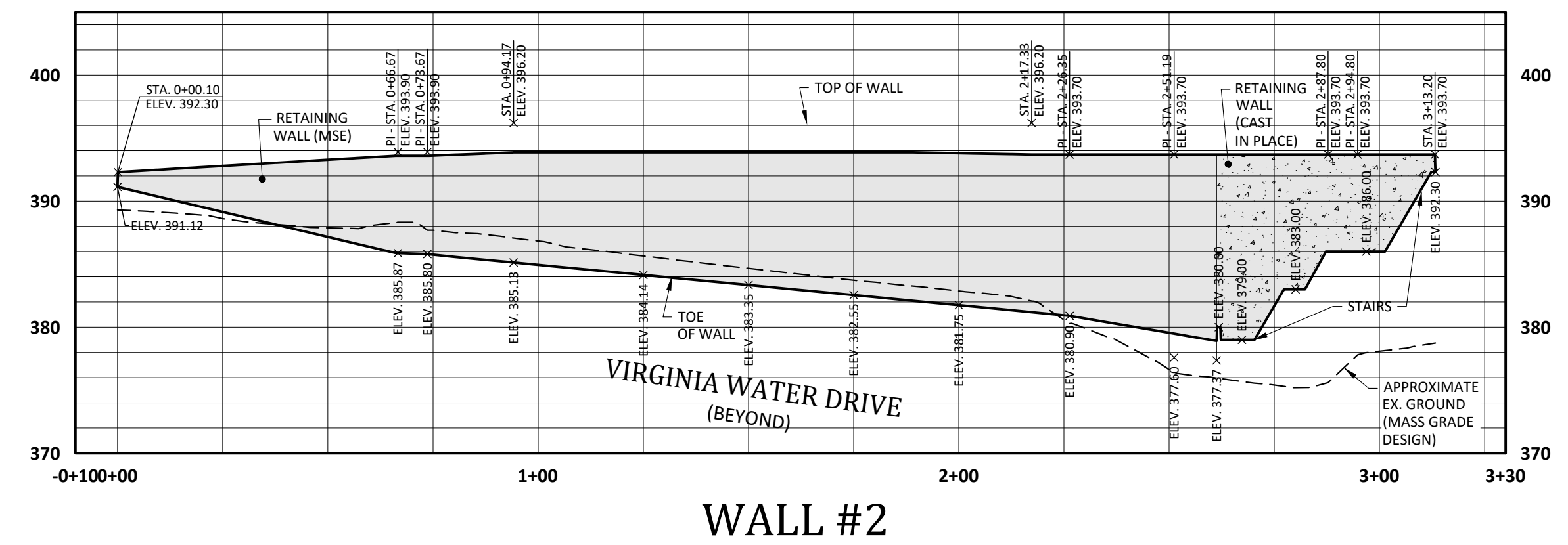
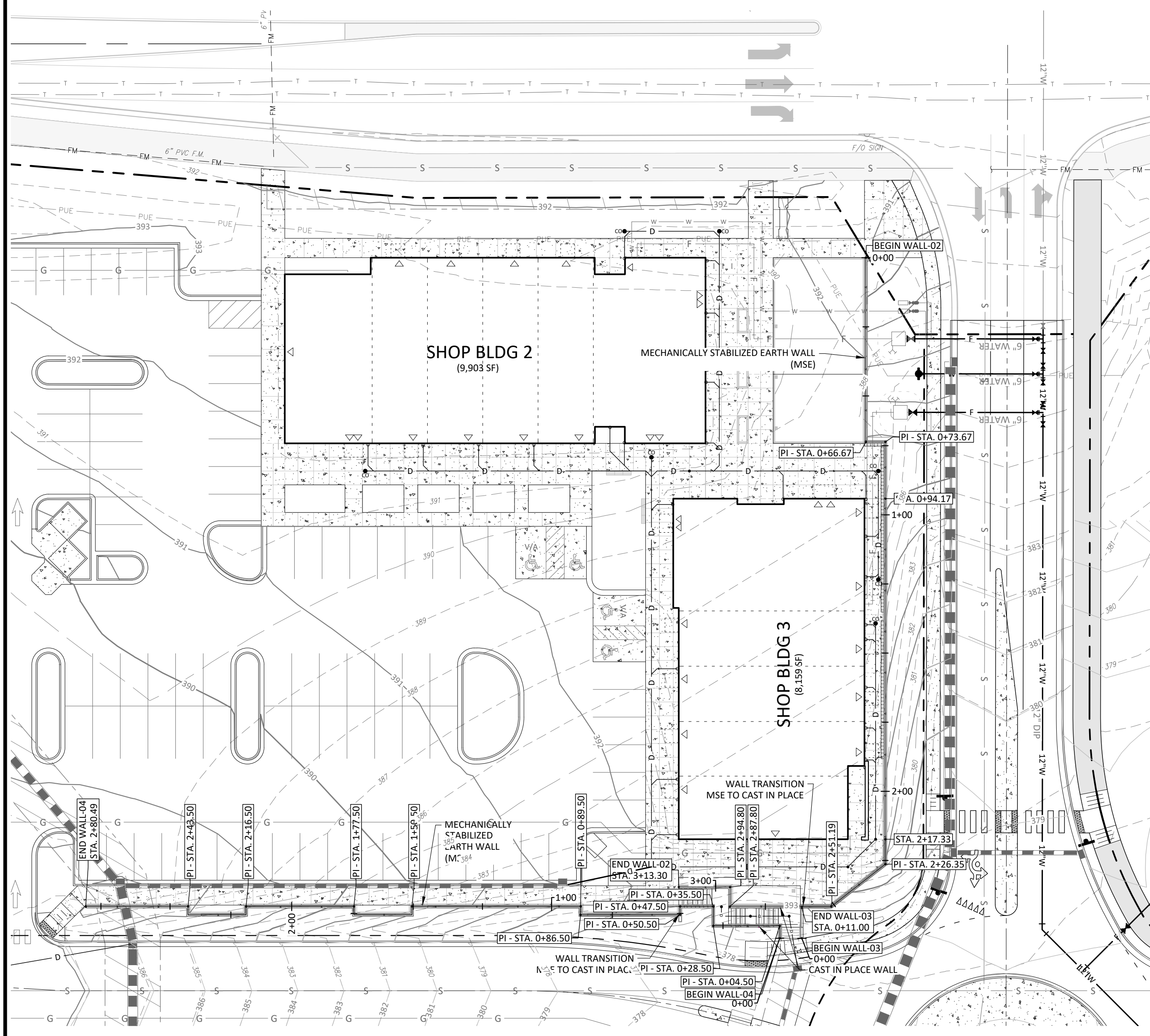
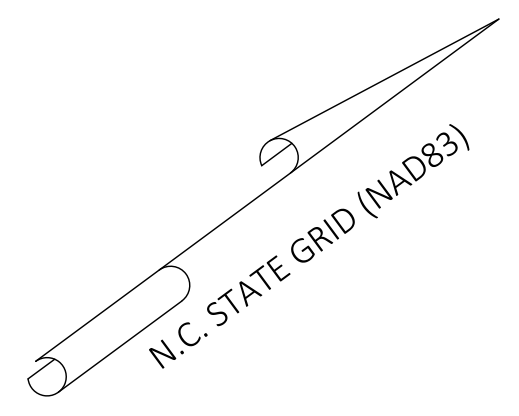
10/26/2023

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C4.21**  
SDP

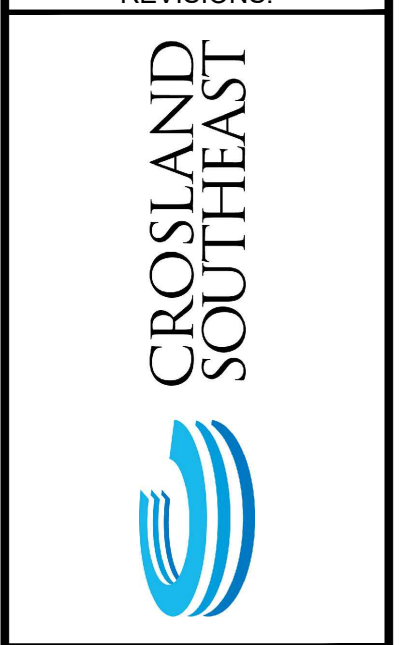






REVISIONS:

#	DATE	DESCRIPTION
1	12/26/23	SDP-23-05 / CID-23-01 COMBINED REVIEW
2	1/14/2024	ISSUED FOR CONSTRUCTION



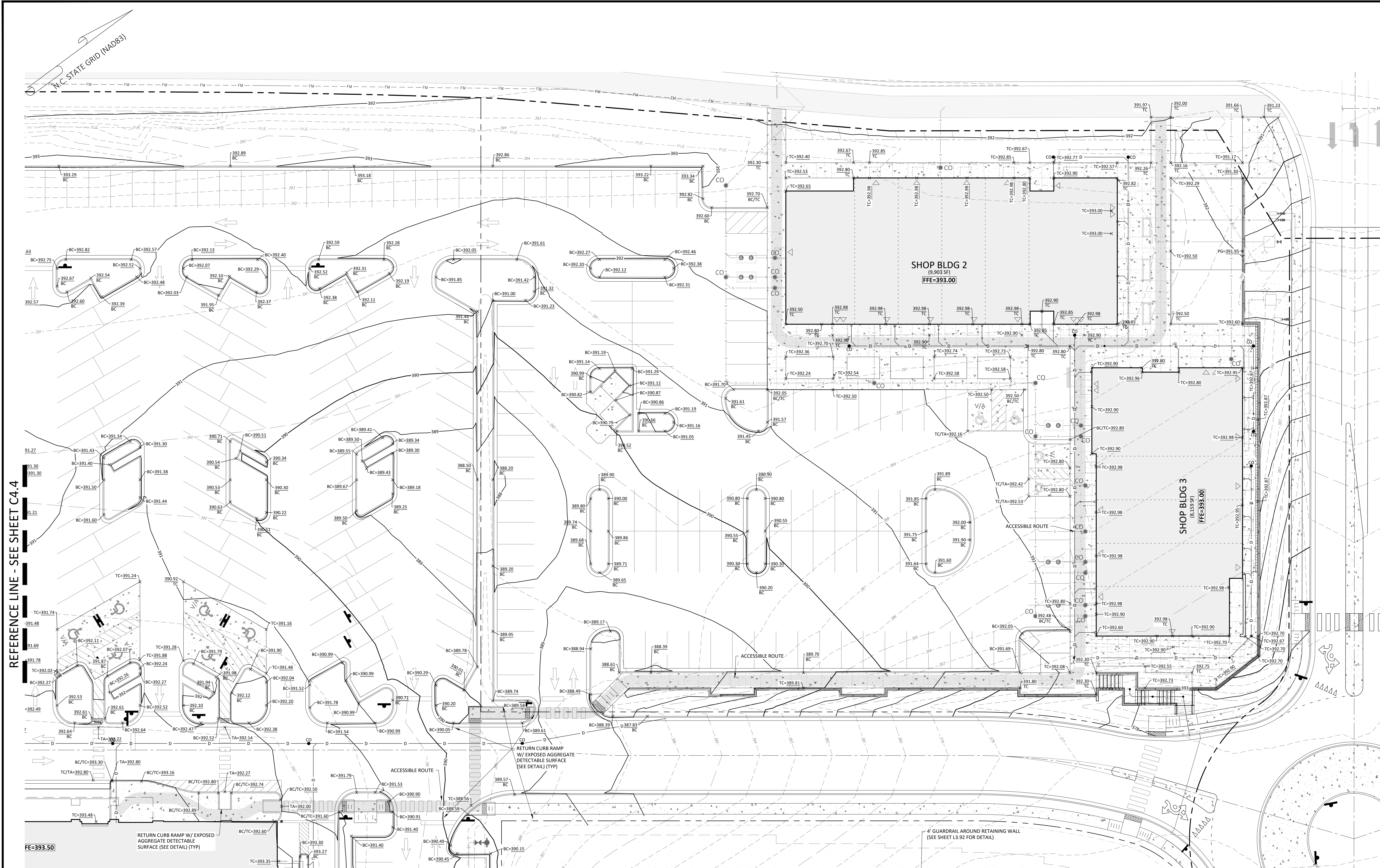
**PLAN-PROFILE - RETAINING WALL - CORNER SHOPS**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

NC License: P11199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 Cary, NC 27513  
 (919) 558-0888  
 www.arkconsultinggroup.com

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C4.22**  
 SDP





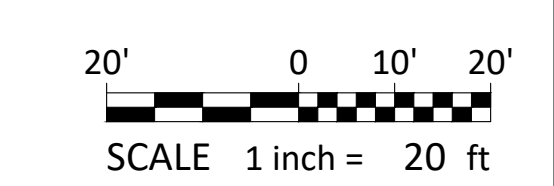
REFERENCE LINE - SEE SHEET C4.4

**ADA Notes:**

CONTRACTORS SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAPPED) ACCESSIBLE COMPONENTS FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTES OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCES / EXITS, SHALL COMPLY WITH THESE ADA CODE REQUIREMENTS. THE CODE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES - SHALL NOT EXCEED 1/2" PER FOOT OR NOMINALLY 2% IN ANY DIRECTION.
- CURB RAMPS - SLOPE SHALL NOT EXCEED 1:10 FOR A MAXIMUM OF SIX FEET.
- LANDINGS - SHALL BE PROVIDED AT EACH END OF RAMPS, SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1/2" PER FOOT CROSS SLOPE.
- PATH OF TRAVEL ALONG ACCESSIBLE ROUTE SHALL PROVIDE A 48" OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS CANNOT REDUCE THIS MINIMUM WIDTH), THE SLOPE ALONG THE ROUTE SHALL BE NO GREATER THAN 1:20 (5%) IN THE DIRECTION OF TRAVEL, AND THE CROSS SLOPE SHALL NOT EXCEED 1/2" PER FOOT (NOMINALLY 2%). AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:10 FOR A MAXIMUM DISTANCE OF 30 FEET SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1/2" PER FOOT (NOMINALLY 2%) FOR POSITIVE DRAINAGE.
- DOORWAYS SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1/2" PER FOOT (NOMINALLY 2%) TO PROVIDE POSITIVE DRAINAGE. THE LANDING AREA SHALL BE NO LESS THAN 60" (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS.

IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL PRIOR TO COMMENCING WORK.



REVISIONS:

#	DATE	DESCRIPTION
2	14-NOV-23	ISSUED FOR CONSTRUCTION
1	26-OCT-23	SDP-23-05 / CID-23-01 COMBINED REVIEW



**SITE ACCESSIBILITY PLAN 'B'**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

S Main St. / US 401 and Virginia Water Drive

Rolesville, Wake County, North Carolina

NC License: P11159

**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS

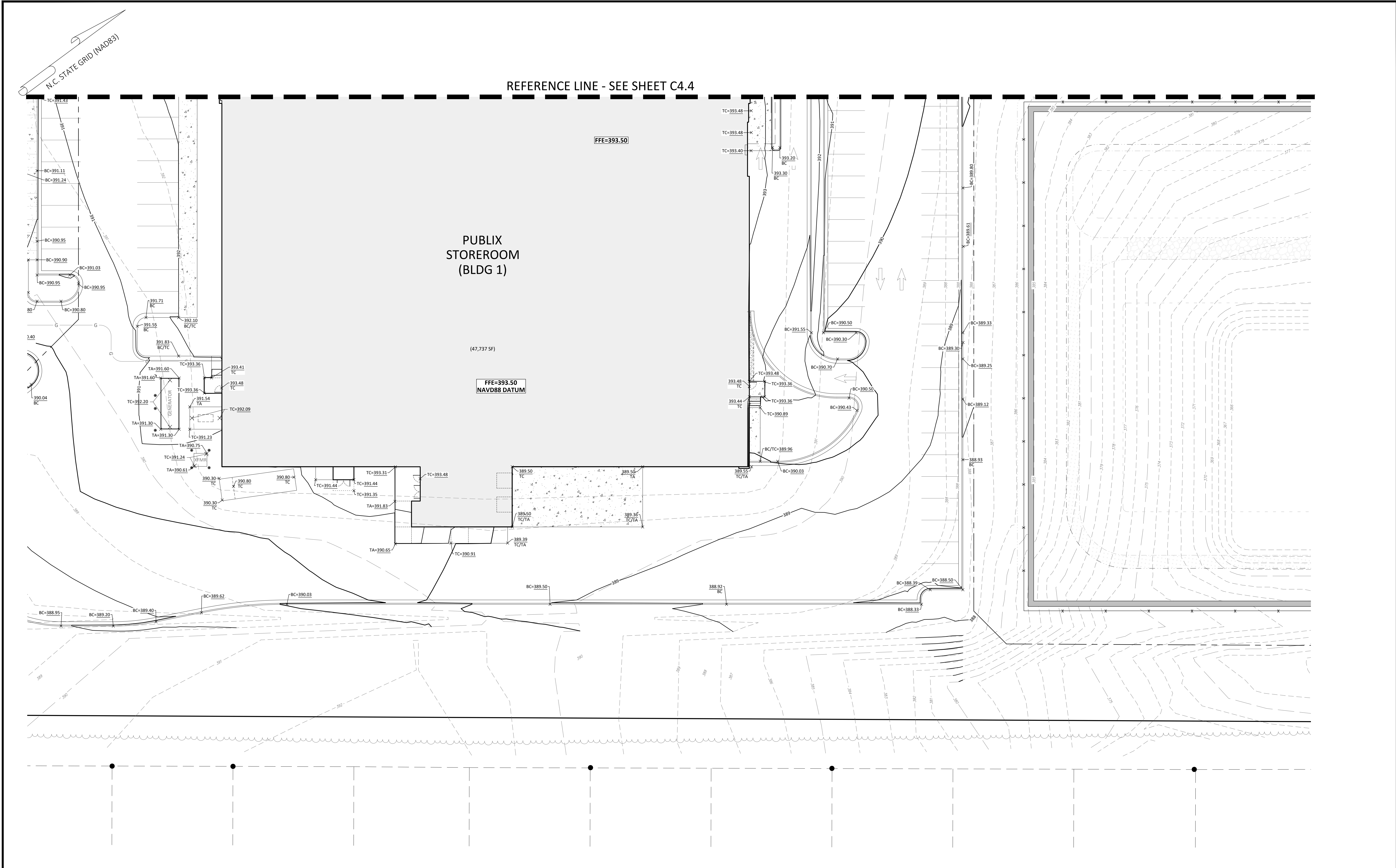
2755-B Charles Blvd.  
Charlotte, NC 28205  
(754) 558-0888  
www.arkconsultinggroup.com

10/26/2023

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C4.32**

SDP

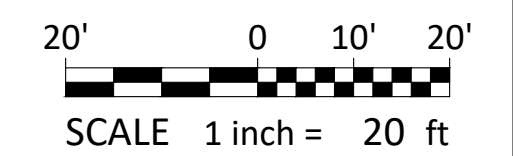


**ADA Notes:**

CONTRACTORS SHALL EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ADA (HANDICAPPED) ACCESSIBLE COMPONENTS FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTES OF TRAVEL FROM PARKING SPACES, PUBLIC TRANSPORTATION, PEDESTRIAN ACCESS, INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCES / EXITS, SHALL COMPLY WITH THESE ADA CODE REQUIREMENTS. THE CODE REQUIREMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- PARKING SPACES AND PARKING AISLES - SHALL NOT EXCEED 1/4" PER FOOT OR NOMINALLY 2% IN ANY DIRECTION.
- CURB RAMP - SLOPE SHALL NOT EXCEED 1:10 FOR A MAXIMUM OF SIX FEET.
- LANDINGS - SHALL BE PROVIDED AT EACH END OF RAMP, SHALL PROVIDE POSITIVE DRAINAGE, AND SHALL NOT EXCEED 1/4" PER FOOT CROSS SLOPE.
- PATH OF TRAVEL ALONG ACCESSIBLE ROUTE SHALL PROVIDE A 48" OR GREATER UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS CANNOT REDUCE THIS MINIMUM WIDTH). THE SLOPE ALONG THE ROUTE SHALL BE NO GREATER THAN 1:20 (5%) IN THE DIRECTION OF TRAVEL, AND THE CROSS SLOPE SHALL NOT EXCEED 1/4" PER FOOT (NOMINALLY 2%). AN ADA RAMP WITH A MAXIMUM SLOPE OF 1:10 FOR A MAXIMUM DISTANCE OF 30 FEET SHALL BE PROVIDED. THE RAMP SHALL HAVE ADA HAND RAILS AND "LEVEL" LANDINGS ON EACH END THAT ARE CROSS SLOPED NO MORE THAN 1/4" PER FOOT (NOMINALLY 2%) FOR POSITIVE DRAINAGE.
- DOORWAYS SHALL HAVE A "LEVEL" LANDING AREA ON THE EXTERIOR SIDE OF THE DOOR THAT IS SLOPED NO MORE THAN 1/4" PER FOOT (NOMINALLY 2%) TO PROVIDE POSITIVE DRAINAGE. THE LANDING AREA SHALL BE NO LESS THAN 60" (5 FEET) LONG, EXCEPT WHERE OTHERWISE PERMITTED BY ADA STANDARDS FOR ALTERNATIVE DOORWAY OPENING CONDITIONS.

IT IS RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION WITH THE LOCAL BUILDING CODE OFFICIAL PRIOR TO COMMENCING WORK.



#	DATE	DESCRIPTION
1	26 OCT 23	SDP 23-05 / CID 23-01 COMBINED REVIEW
2	14 NOV 23	ISSUED FOR CONSTRUCTION

REVISIONS:

**SITE ACCESSIBILITY PLAN 'C'**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

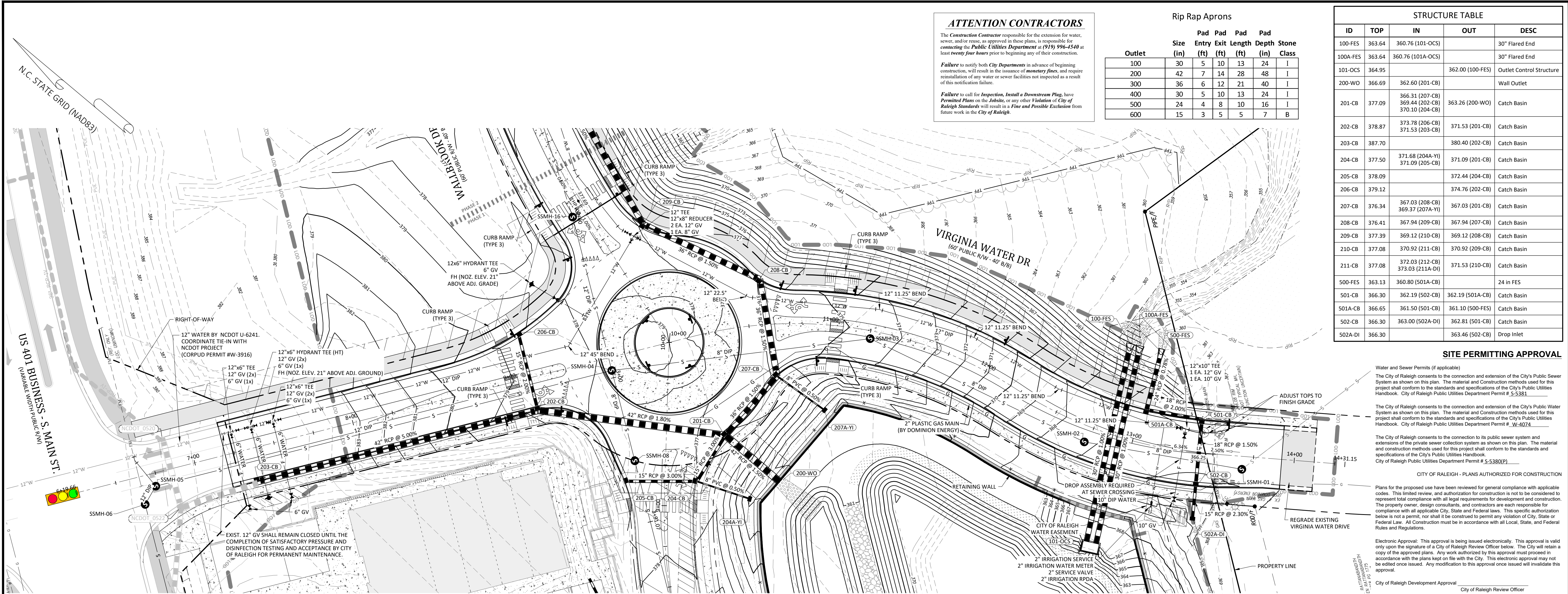
NC License: P-1129  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd  
 Charlotte, NC 28205  
 (754) 558-0888  
 www.arkconsultinggroup.com

10/26/2023

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C4.33**

SDP



**ATTENTION CONTRACTORS**

The Construction Contractor responsible for the extension for water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the Public Utilities Department at (919) 996-4540 at least twenty four hours prior to beginning any of their construction.

Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require removal of any water or sewer facilities not inspected as a result of this notification failure.

Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclusion from future work in the City of Raleigh.

Rip Rap Aprons

Outlet	Size (in)	Pad Entry (ft)	Pad Exit (ft)	Pad Length (ft)	Pad Depth (in)	Pad Stone Class
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B

STRUCTURE TABLE

ID	TOP	IN	OUT	DESC
100-FES	363.64	360.76 (101-OCS)		30" Flared End
100A-FES	363.64	360.76 (101A-OCS)		30" Flared End
101-OCS	364.95		362.00 (100-FES)	Outlet Control Structure
200-WO	366.69	362.60 (201-CB)		Wall Outlet
201-CB	377.09	366.31 (207-CB) 369.44 (202-CB) 370.10 (204-CB)	363.26 (200-WO)	Catch Basin
202-CB	378.87	373.78 (206-CB) 371.53 (203-CB)	371.53 (201-CB)	Catch Basin
203-CB	387.70		380.40 (202-CB)	Catch Basin
204-CB	377.50	371.68 (204A-YI) 371.09 (205-CB)	371.09 (201-CB)	Catch Basin
205-CB	378.09		372.44 (204-CB)	Catch Basin
206-CB	379.12		374.76 (202-CB)	Catch Basin
207-CB	376.34	367.03 (208-CB) 369.37 (207A-YI)	367.03 (201-CB)	Catch Basin
208-CB	376.41	367.94 (209-CB)	367.94 (207-CB)	Catch Basin
209-CB	377.39	369.12 (210-CB)	369.12 (208-CB)	Catch Basin
210-CB	377.08	370.92 (211-CB)	370.92 (209-CB)	Catch Basin
211-CB	377.08	372.03 (212-CB) 373.03 (211A-DI)	371.53 (210-CB)	Catch Basin
500-FES	363.13	360.80 (501A-CB)		24 in FES
501-CB	366.30	362.19 (502-CB)	362.19 (501A-CB)	Catch Basin
501A-CB	366.65	361.50 (501-CB)	361.10 (500-FES)	Catch Basin
502-CB	366.30	363.00 (502A-DI)	362.81 (501-CB)	Catch Basin
502A-DI	366.30		363.46 (502-CB)	Drop Inlet

**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # 5-5381

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074

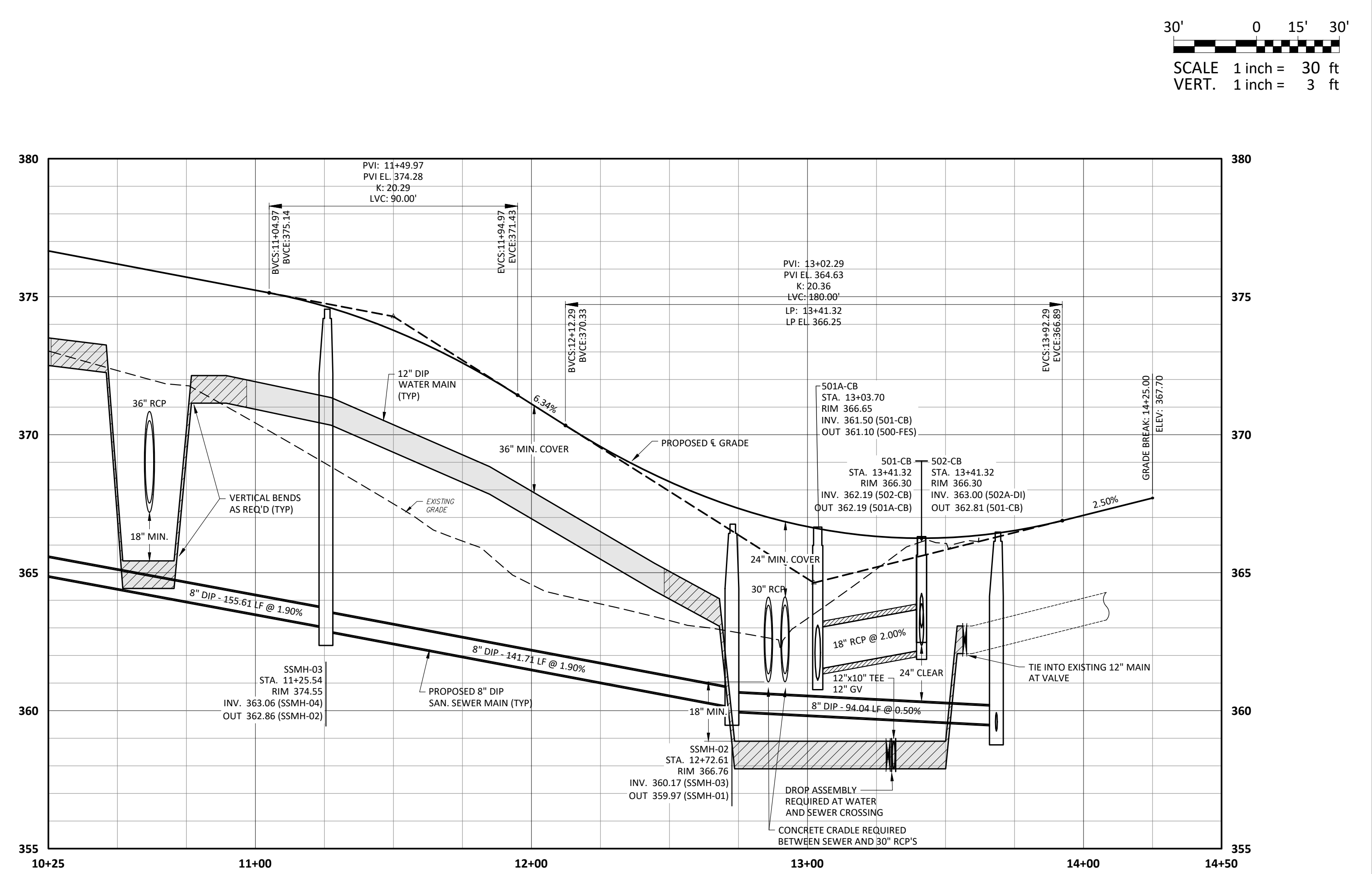
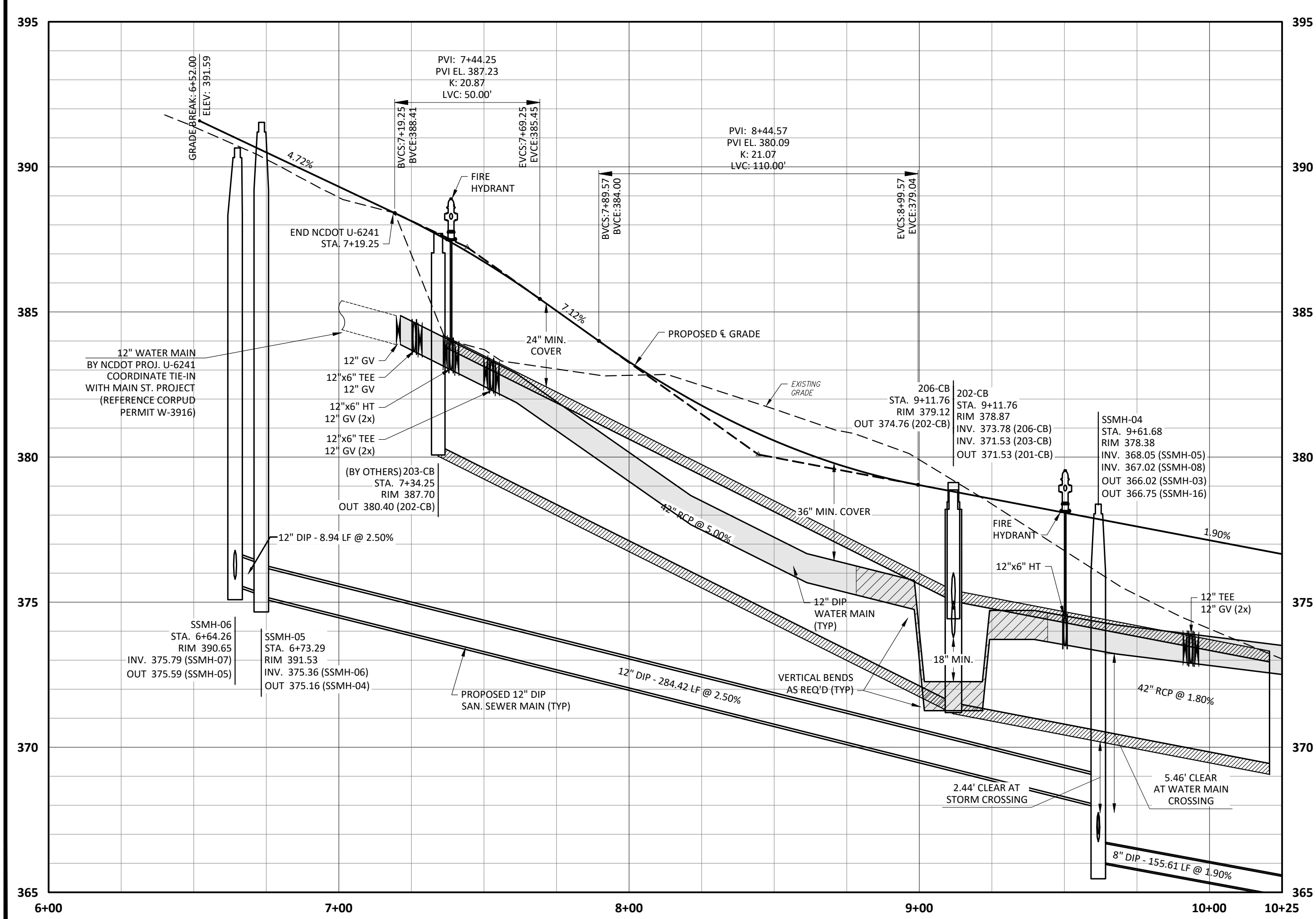
The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # 5-5380(P)

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate the approval.

City of Raleigh Development Approval \_\_\_\_\_  
City of Raleigh Review Officer \_\_\_\_\_



1.14.NOV.23 ISSUED FOR CONSTRUCTION  
1.26.OCT.23 SDP 23-05 / CID 23-01 COMBINED REVIEW DESCRIPTION

REVISIONS:

**CROSLAND SOUTHEAST**

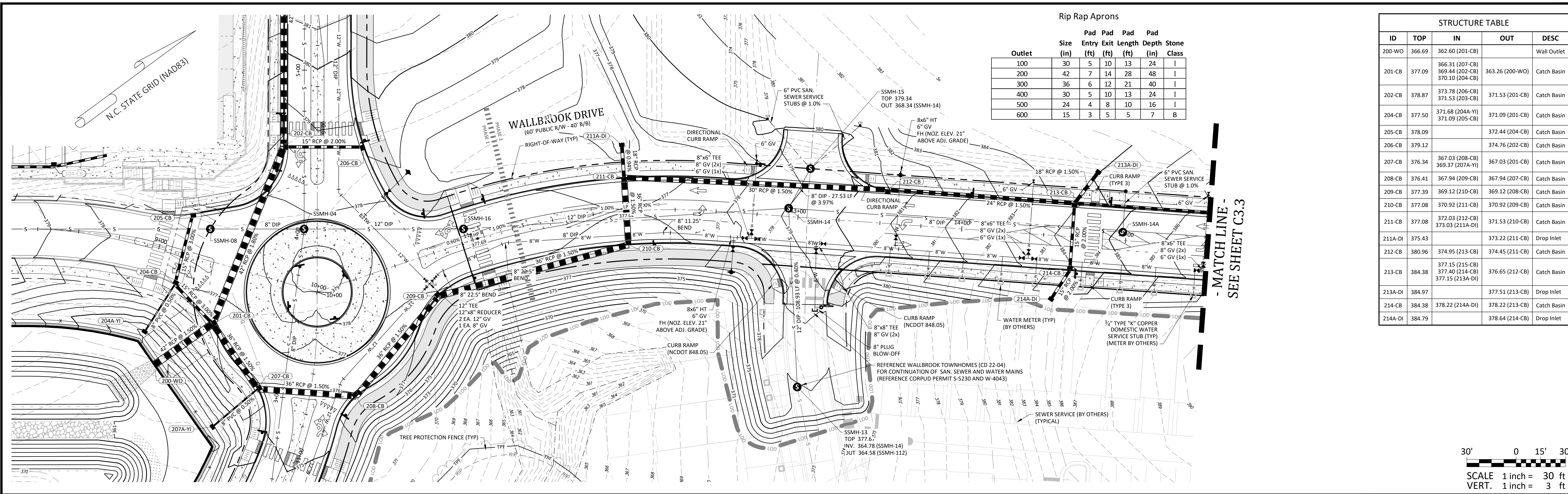
**PLAN PROFILE - VIRGINIA WATER DRIVE  
PUBLIX AT WALLBROOK AND  
WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina

NC License: P11199  
**ARK CONSULTING GROUP PLLC**  
ENGINEERS & PLANNERS  
2755-B Charles Blvd.  
Raleigh, NC 27608  
(757) 558-0888  
www.arkconsultinggroup.com

10/26/2023

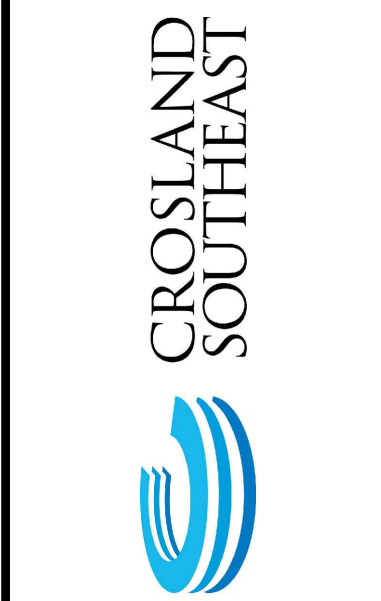
Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C5.00**  
CID

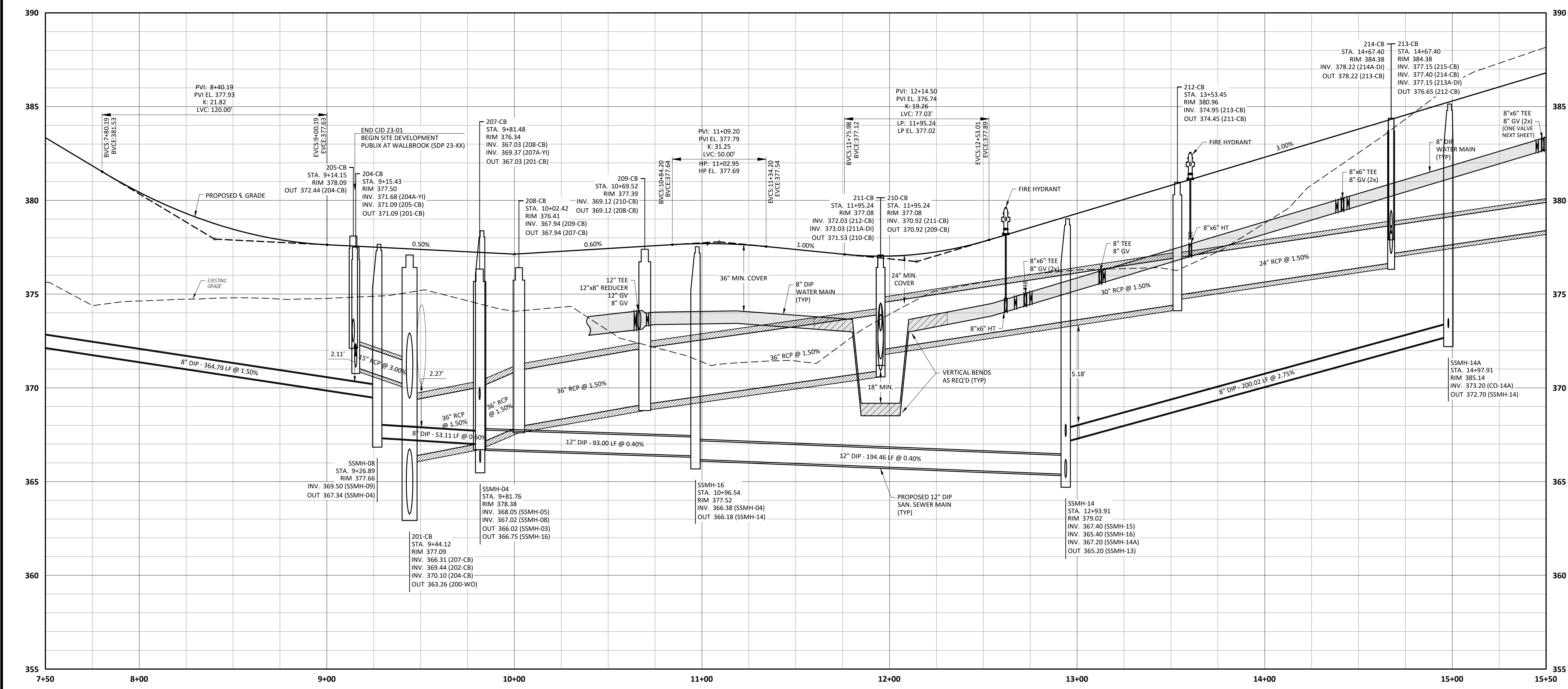


ID	TOP	IN	OUT	DESC
200-WO	366.69	362.60 (201-CB)		Wall Outlet
201-CB	377.09	366.31 (207-CB) 369.44 (202-CB) 370.10 (204-CB)	363.26 (200-WO)	Catch Basin
202-CB	378.87	373.78 (206-CB) 371.53 (203-CB)	371.53 (201-CB)	Catch Basin
204-CB	377.50	371.68 (204A-YI) 371.09 (205-CB)	371.09 (201-CB)	Catch Basin
205-CB	378.09		372.44 (204-CB)	Catch Basin
206-CB	379.12		374.76 (202-CB)	Catch Basin
207-CB	376.34	367.03 (208-CB) 369.37 (207A-YI)	367.03 (201-CB)	Catch Basin
208-CB	376.41	367.94 (209-CB)	367.94 (207-CB)	Catch Basin
209-CB	377.39	369.12 (210-CB)	369.12 (208-CB)	Catch Basin
210-CB	377.08	370.92 (211-CB)	370.92 (209-CB)	Catch Basin
211-CB	377.08	372.03 (212-CB) 373.03 (211A-DI)	371.53 (210-CB)	Catch Basin
211A-DI	375.43		373.22 (211-CB)	Drop Inlet
212-CB	380.96	374.95 (213-CB)	374.45 (211-CB)	Catch Basin
213-CB	384.38	377.15 (215-CB) 377.40 (214-CB) 377.15 (213A-DI)	376.65 (212-CB)	Catch Basin
213A-DI	384.97		377.51 (213-CB)	Drop Inlet
214-CB	384.38	378.22 (214A-DI)	378.22 (213-CB)	Catch Basin
214A-DI	384.79		378.64 (214-CB)	Drop Inlet

#	DATE	DESCRIPTION
1	12/02/23	ISSUED FOR CONSTRUCTION
2	12/02/23	SDP 23-05 / CID 23-01 COMBINED REVIEW



**PLAN-PROFILE - WALLBROOK DRIVE**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina



**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # 5-5383.

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074.

The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # 5-5380(P).

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations.

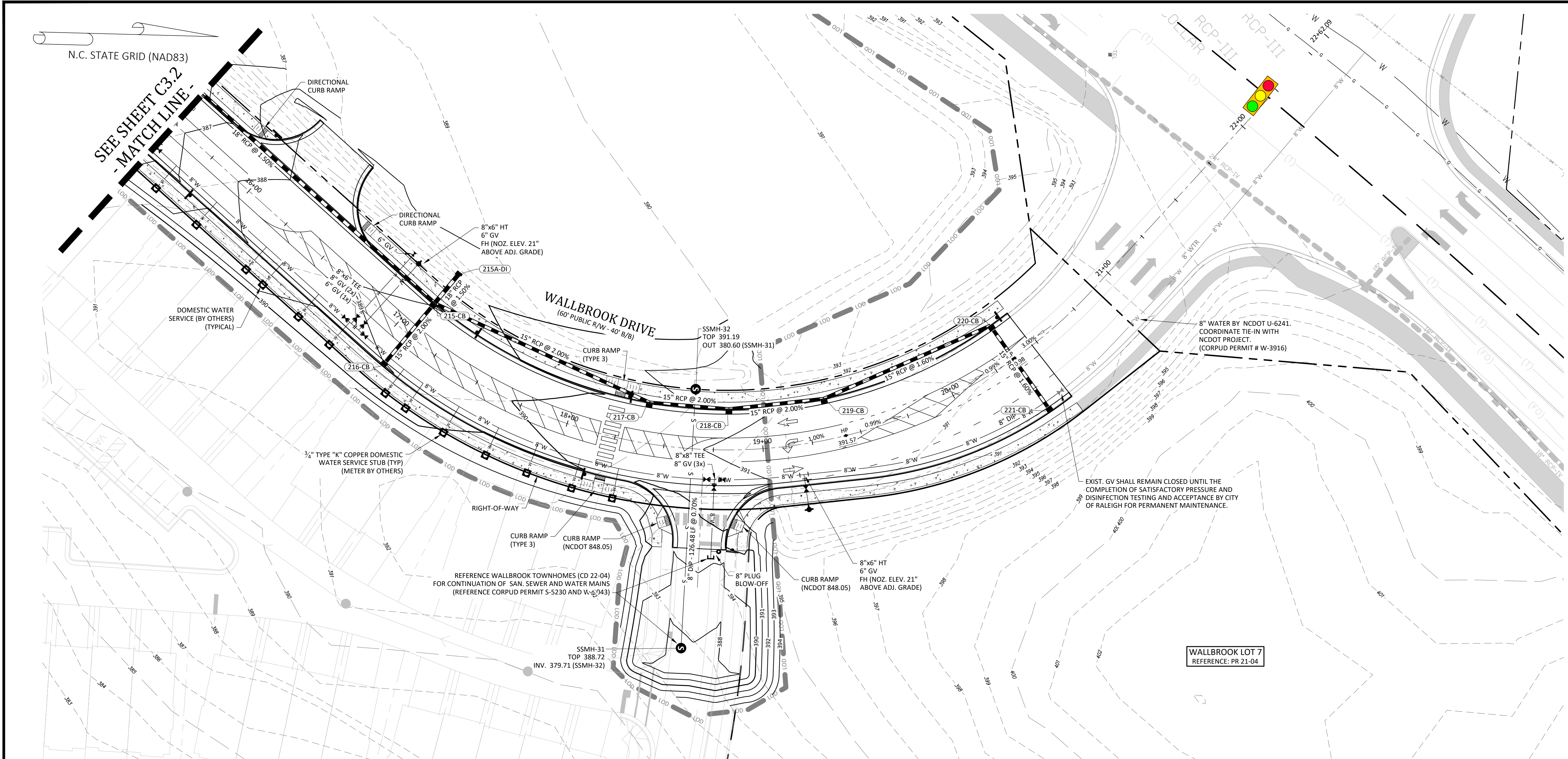
Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval  
 City of Raleigh Review Officer

NC License: P-1199  
**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd  
 Raleigh, NC 27608  
 (919) 558-0888  
 www.arkconsultinggroup.com

Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C5.01**  
 CID

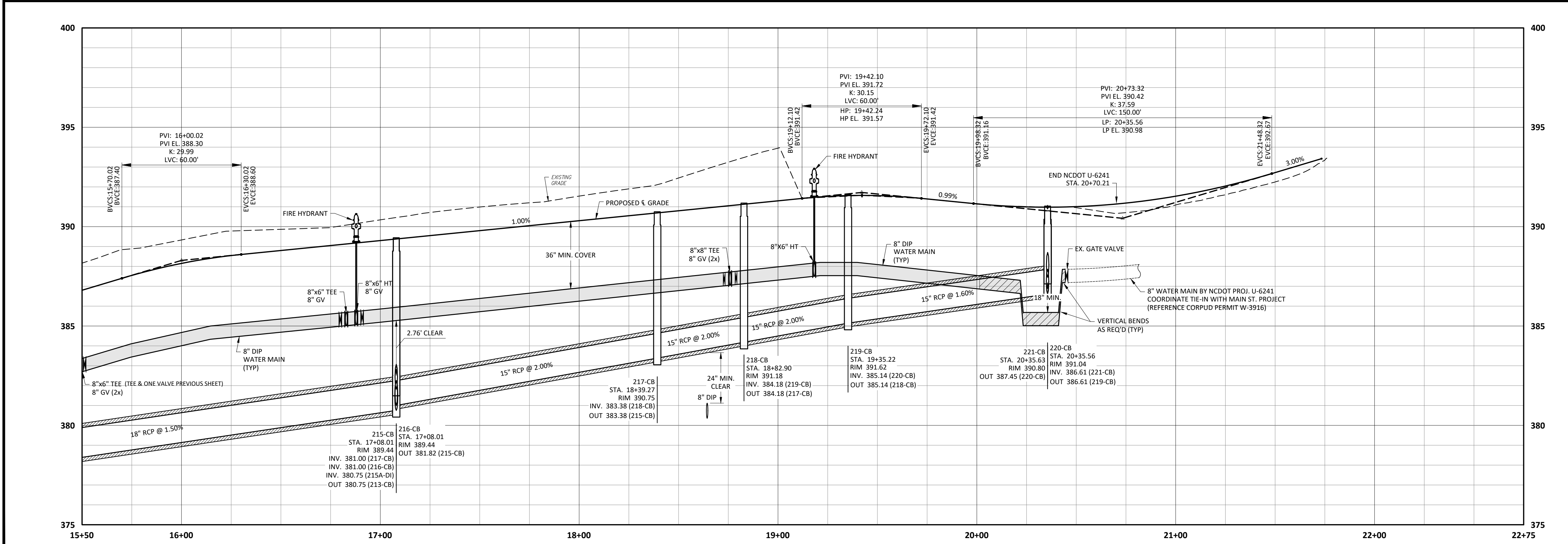
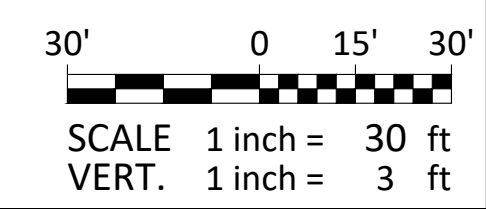


STRUCTURE TABLE				
ID	TOP	IN	OUT	DESC
215-CB	389.44	381.00 (217-CB) 381.00 (216-CB) 380.75 (215A-DI)	380.75 (213-CB)	Catch Basin
215A-DI	389.62		381.04 (215-CB)	Drop Inlet
216-CB	389.44		381.82 (215-CB)	Catch Basin
217-CB	390.75	383.38 (218-CB)	383.38 (215-CB)	Catch Basin
218-CB	391.18	384.18 (219-CB)	384.18 (217-CB)	Catch Basin
219-CB	391.62	385.14 (220-CB)	385.14 (218-CB)	Catch Basin
220-CB	391.04	386.61 (221-CB)	386.61 (219-CB)	Catch Basin
221-CB	390.80		387.45 (220-CB)	Catch Basin

REVISIONS:	
#	DATE
2	14/NOV/23 ISSUED FOR CONSTRUCTION
1	26/OCT/23 SDP 23-05 / CID 23-01 COMBINED REVIEW



**PLAN-PROFILE - WALLBROOK DRIVE**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina



**SITE PERMITTING APPROVAL**

Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # S-5381

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # W-4074

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CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

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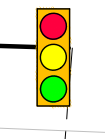
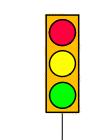
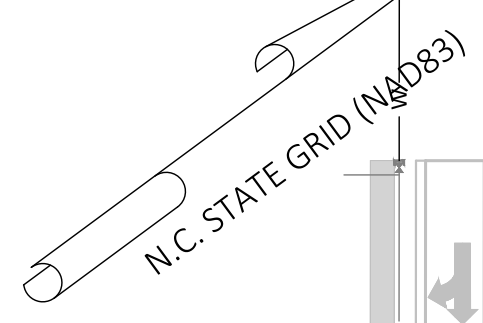
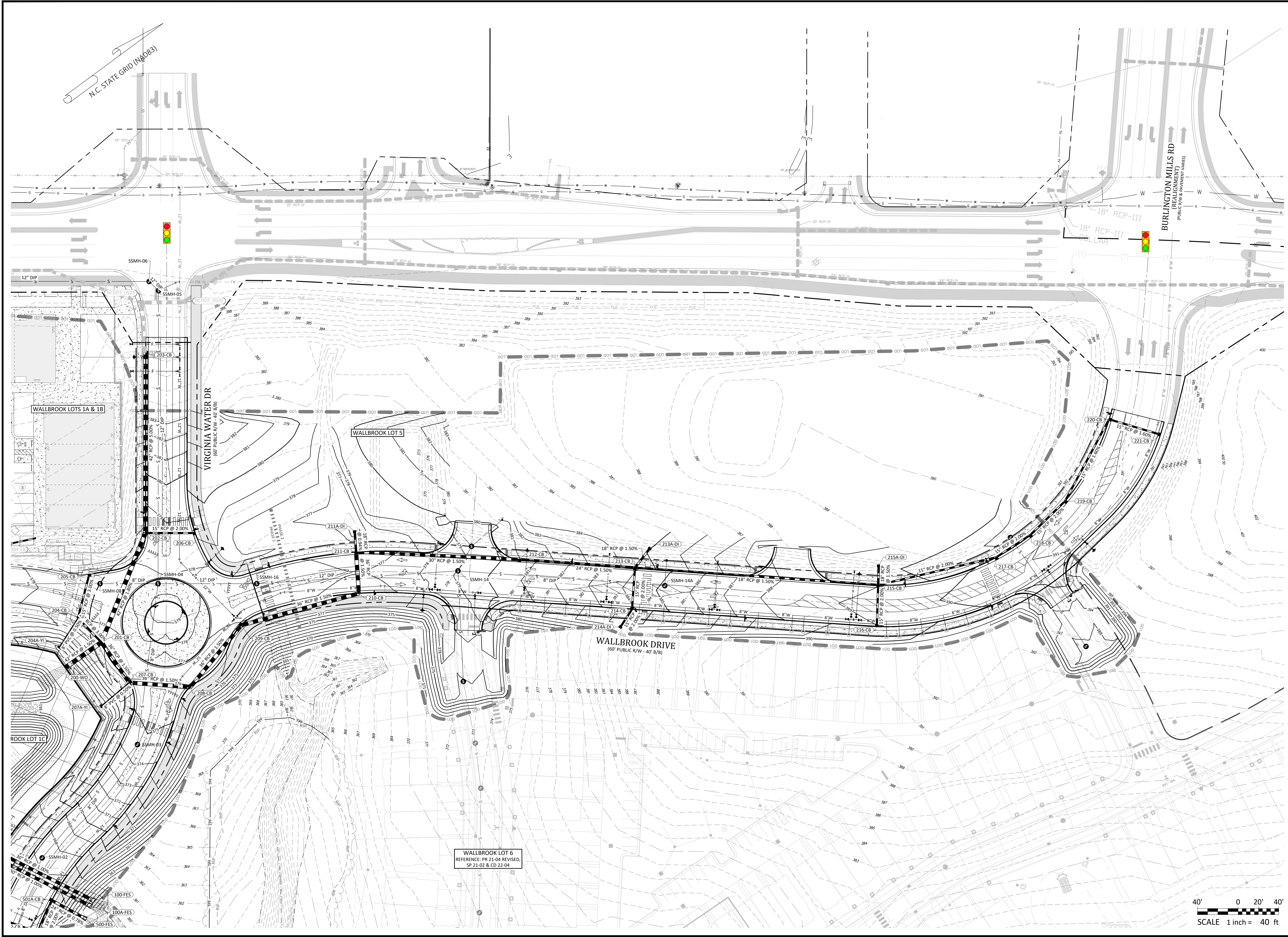
City of Raleigh Development Approval  
 City of Raleigh Review Officer

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 2755-B Charles Blvd  
 Raleigh, NC 27608  
 (919) 558-0888  
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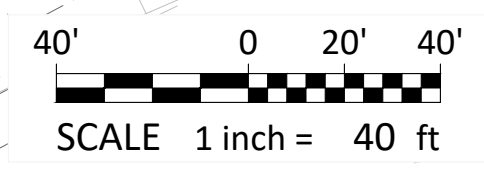
Professional Engineer Seal for C. F. FABRIZIO, No. 31970, State of North Carolina, expires 10/26/2023.

Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CID
Date:	October 26, 2023

**C5.02**  
 CID



WALLBROOK LOT 6  
 REFERENCE: PR 21-04 REVISED,  
 SP 21-02 & CD 22-04



**GRADING PLAN - LOT 5**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

NC License: P1139  
**ARK CONSULTING GROUP PLLC**  
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 2755-B Charles Blvd  
 Cary, NC 27513  
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Project Manager:	BCF
Drawn By:	DLC
Checked By:	STA
Project Number:	21089 / 22012
Drawing Number:	D-1219-CD
Date:	October 26, 2023

**C5.10**  
 CID



REVISIONS:

#	DATE	DESCRIPTION
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1	26/OCT/23	SDP 23-05 / CID 23-01 COMBINED REVIEW



Rip Rap Aprons

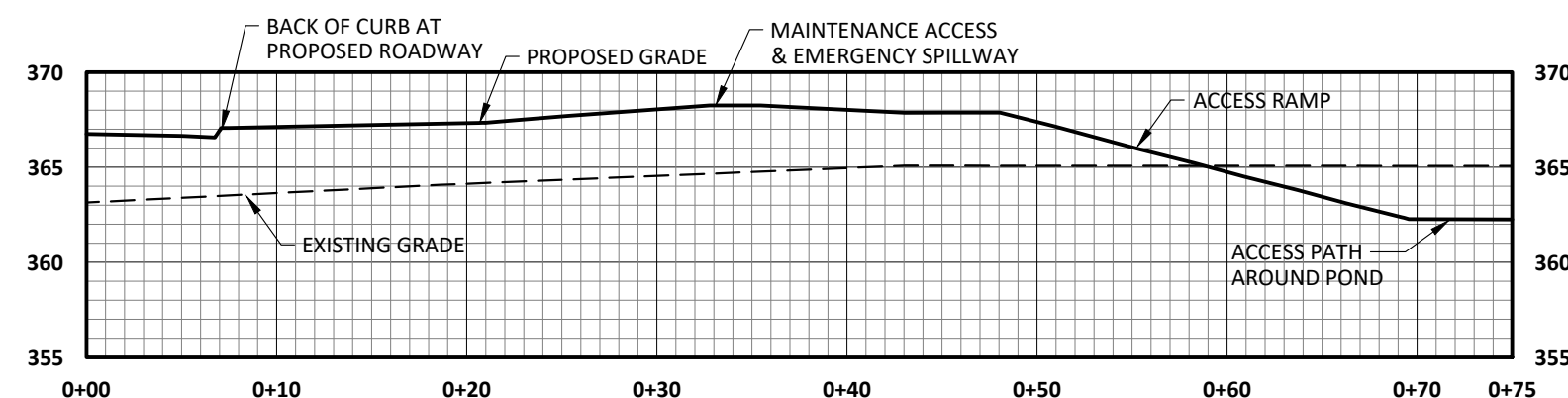
Outlet	Size (in)	Pad Entry (ft)	Pad Exit (ft)	Pad Length (ft)	Pad Depth (ft)	Stone Class
100	30	5	10	13	24	I
200	42	7	14	28	48	I
300	36	6	12	21	40	I
400	30	5	10	13	24	I
500	24	4	8	10	16	I
600	15	3	5	5	7	B

CONSTRUCTION NOTES

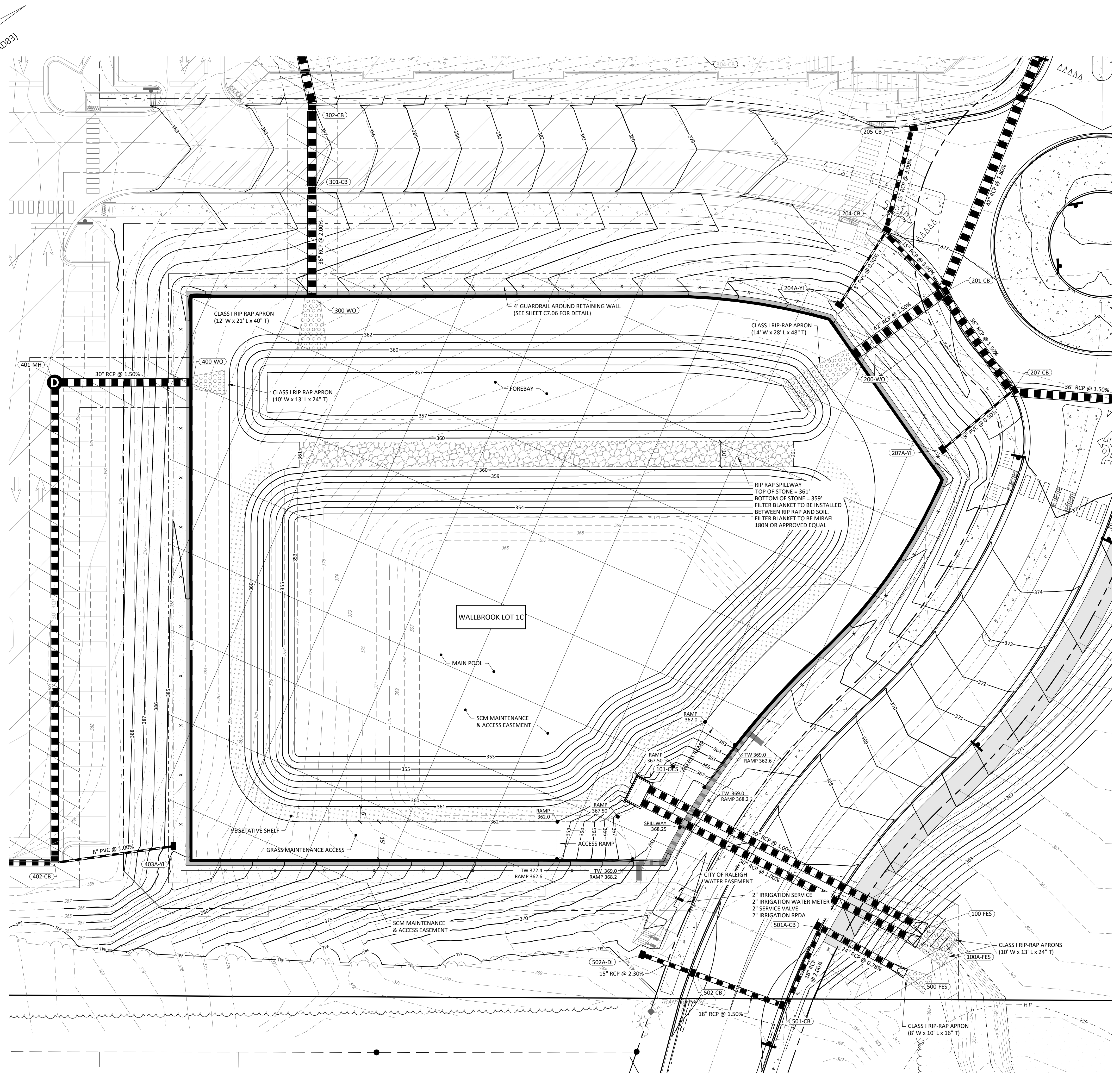
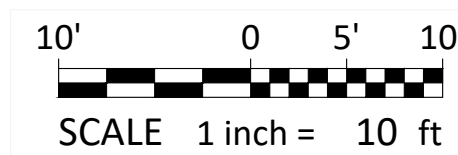
- POND SHALL BE EXCAVATED TO 4" BELOW FINISHED GRADE TO ALLOW FOR TOPSOIL PLACEMENT.
- CONTRACTOR SHALL COMPACT IN-SITU CLAY IN PLACE UPON EXCAVATION OF ATTENUATION POND PRIOR TO TOPSOIL PLACEMENT.
- GEOTECHNICAL ENGINEER SHALL PERFORM COMPACTION TEST ON THE IN-SITU CLAY MATERIAL TO VERIFY COMPACTION IS AT LEAST 95%.
- UPON CONSTRUCTION COMPLETION OF THE ATTENUATION POND AND PRIOR TO ISSUANCE OF A FINAL CERTIFICATE OF OCCUPANCY, AN AS-BUILT SURVEY SHALL BE COMPLETED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NORTH CAROLINA. THE AS-BUILT SHALL BE CERTIFIED AS MEETING THE DESIGN REQUIREMENTS BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA. THE SURVEY SHALL INCLUDE REQUIRED AND AS-BUILT ELEVATIONS OF THE BASIN BOTTOM, ORIFICE, WEIR, TOP OF EMBANKMENT AND SPILLWAY.

STRUCTURE TABLE

ID	TOP	IN	OUT	DESC
100-FES	363.64	360.76 (101-OCS)		30" Flared End
100A-FES	363.64	360.76 (101A-OCS)		30" Flared End
101-OCS	364.95		362.00 (100-FES)	Outlet Control Structure
200-WO	366.69	362.60 (201-CB)		Wall Outlet
201-CB	377.09	366.31 (207-CB) 369.44 (202-CB) 370.10 (204-CB)	363.26 (200-WO)	Catch Basin
204-CB	377.50	371.68 (204A-YI) 371.09 (205-CB)	371.09 (201-CB)	Catch Basin
204A-YI	373.04		371.85 (204-CB)	Yard Inlet
207-CB	376.34	367.03 (208-CB) 369.37 (207A-YI)	367.03 (201-CB)	Catch Basin
207A-YI	371.75		369.55 (207-CB)	Yard Inlet
403A-YI	384.25		381.72 (402-CB)	Yard Inlet
500-FES	363.13	360.80 (501A-CB)		24 in FES
501-CB	366.30	362.19 (502-CB)	362.19 (501A-CB)	Catch Basin
501A-CB	366.65	361.50 (501-CB)	361.10 (500-FES)	Catch Basin
502-CB	366.30	363.00 (502A-DI)	362.81 (501-CB)	Catch Basin
502A-DI	366.30		363.46 (502-CB)	Drop Inlet



ROADWAY TO SCM MAINTENANCE ACCESS/EMERGENCY SPILLWAY



REVISIONS:

#	DATE	DESCRIPTION
1	12/02/23	SDP 23-05 / CID 23-01 COMBINED REVIEW
2	11/02/23	ISSUED FOR CONSTRUCTION

**CROSLAND SOUTHEAST**

**SCM DETAIL - PLAN**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
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Charlotte, NC 28205  
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www.arkconsultinggroup.com

NC License: P11199

Professional Engineer Seal: **31970**

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C6.00**  
CID



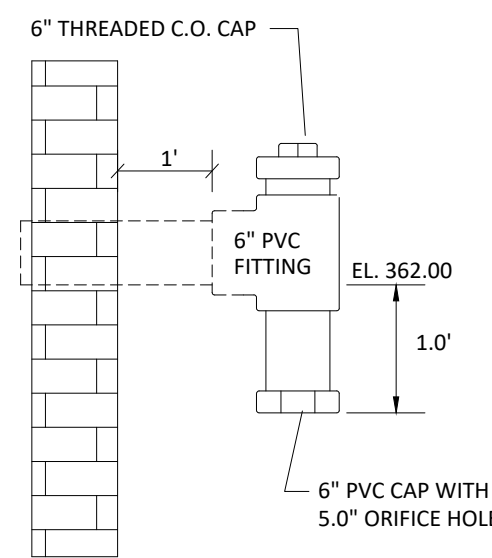
**Vegetative Shelf Notes:**

THE VEGETATIVE SHELF SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF VEGETATION AS SELECTED FROM THE SCHEDULE BELOW AT A MINIMUM DENSITY OF 50 PLANTS PER 200 SF OF SHELF AREA (APPROXIMATELY 2' O.C.)

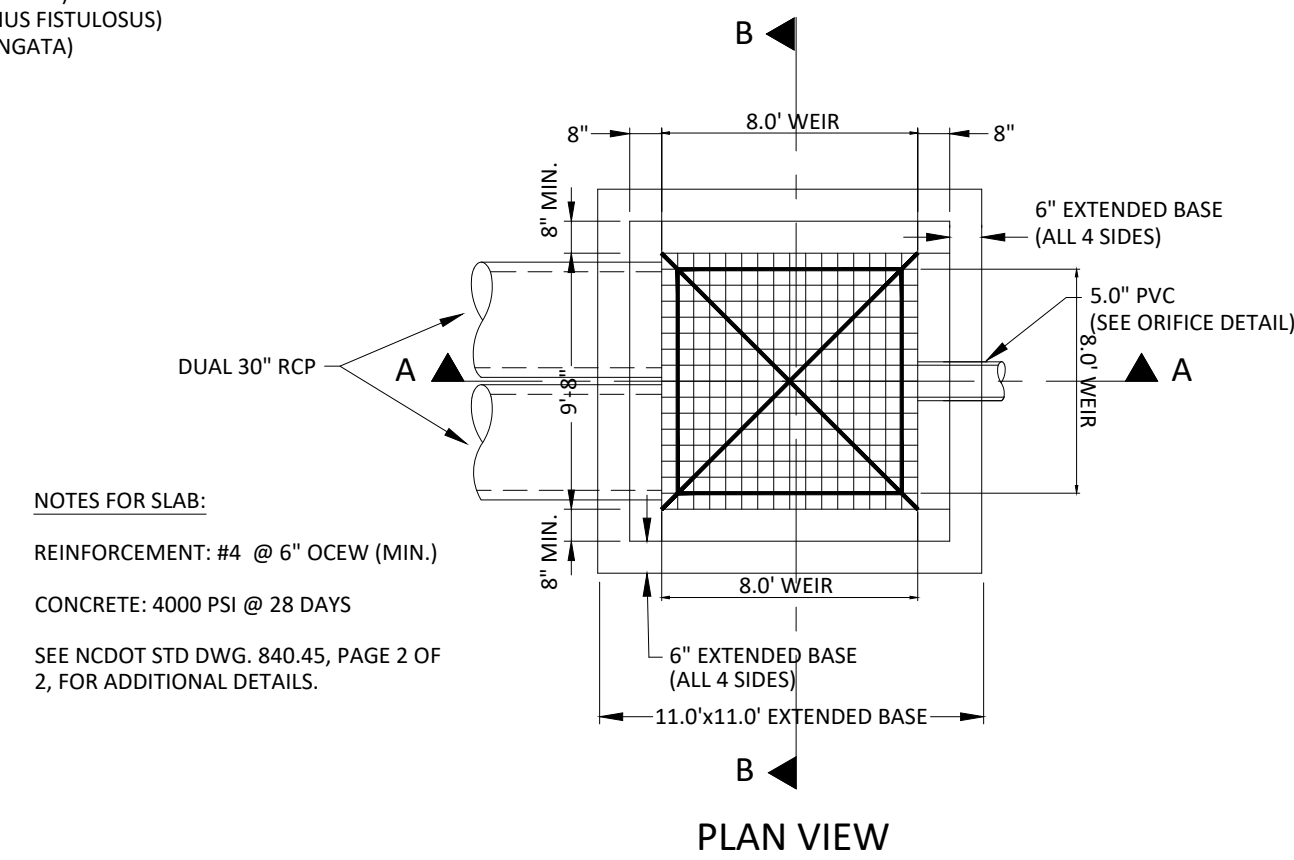
- SWAMP MILKWEED (ASCLEPIAS INCARNATA)
- WHITE TURTLEHEAD (CHELONE GLABRA)
- JOE PYE WEED (EUPATORIADDELPHUS FISTULOSUS)
- LONGLEAF LOBELIA (LOBELIA ELONGATA)

**General Planting Notes:**

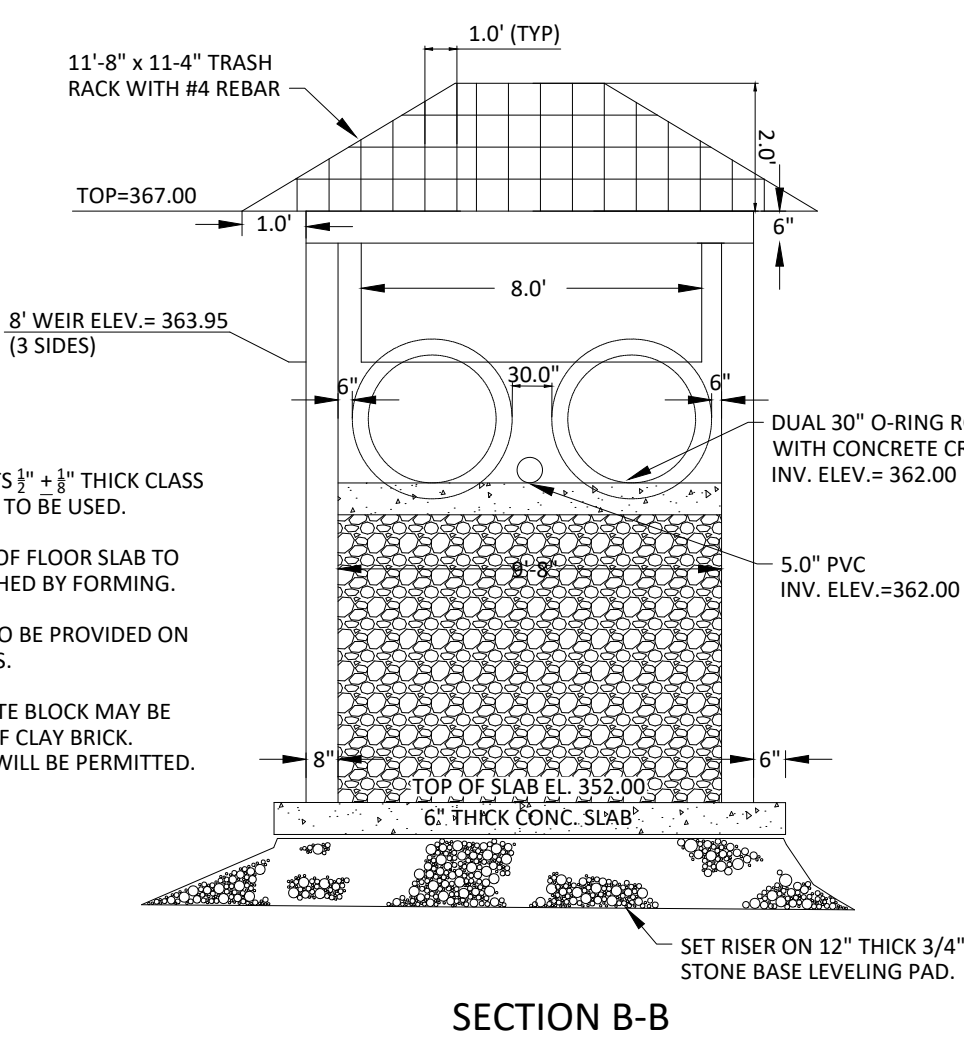
1. STOCKPILE ALL TOPSOIL FOR LATER USE. EXCAVATE POND SLIGHTLY DEEPER THAN FINISHED GRADE ON ALL PLANTED SLOPES TO ALLOW FOR REPLACEMENT OF TOPSOIL.
2. CATTAILS NOT TO BE USED.
3. COORDINATE PLANTINGS WITH ENGINEER.



**ORIFICE DETAIL**  
NTS

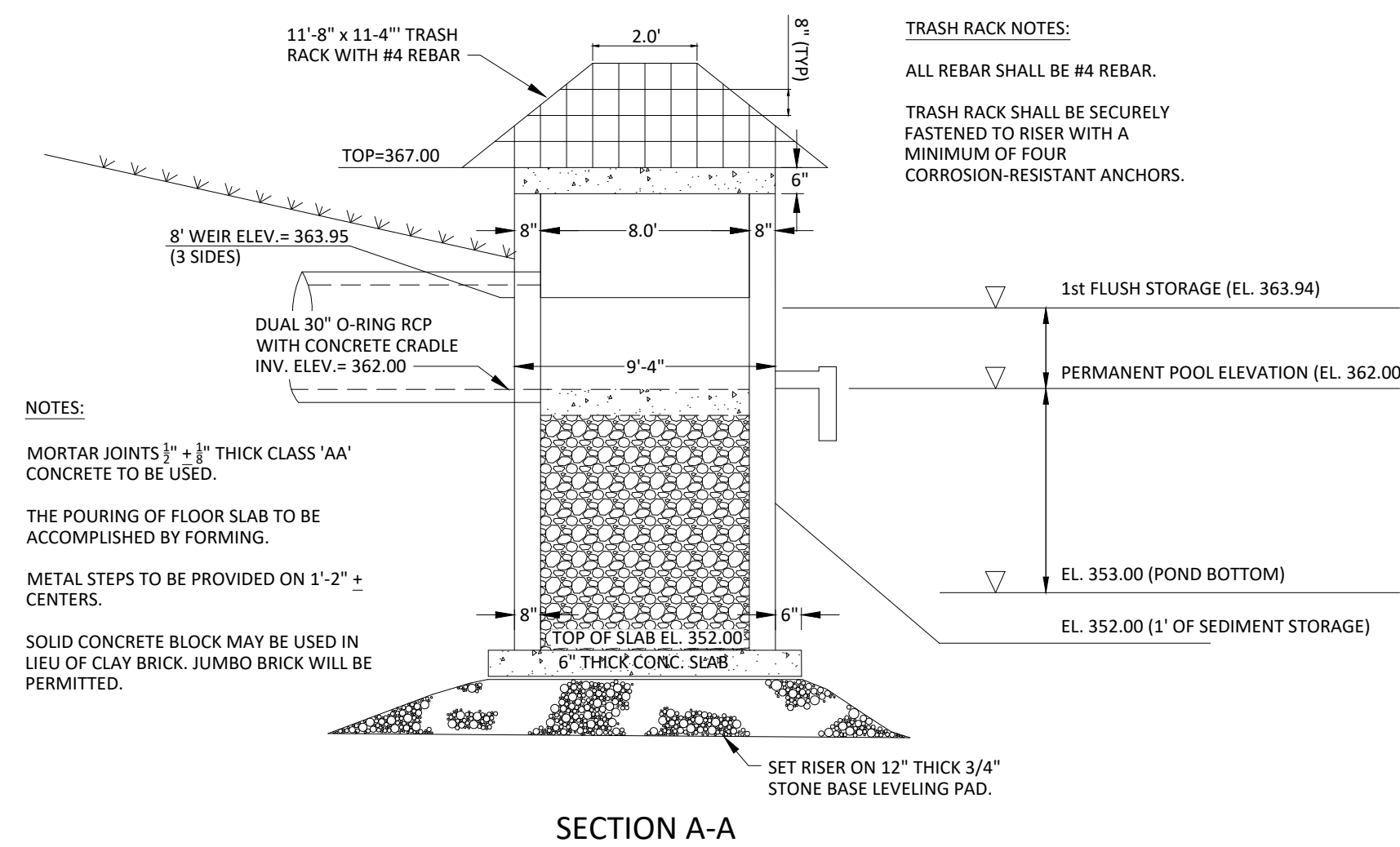


**NOTES FOR SLAB:**  
REINFORCEMENT: #4 @ 6" OCEW (MIN.)  
CONCRETE: 4000 PSI @ 28 DAYS  
SEE NCDOT STD DWG. 840.45, PAGE 2 OF 2, FOR ADDITIONAL DETAILS.



**NOTES:**  
MORTAR JOINTS 3/4" x 1/4" THICK CLASS 'AA' CONCRETE TO BE USED.  
THE POURING OF FLOOR SLAB TO BE ACCOMPLISHED BY FORMING.  
METAL STEPS TO BE PROVIDED ON 1'-2" + CENTERS.  
SOLID CONCRETE BLOCK MAY BE USED IN LIEU OF CLAY BRICK. JUMBO BRICK WILL BE PERMITTED.

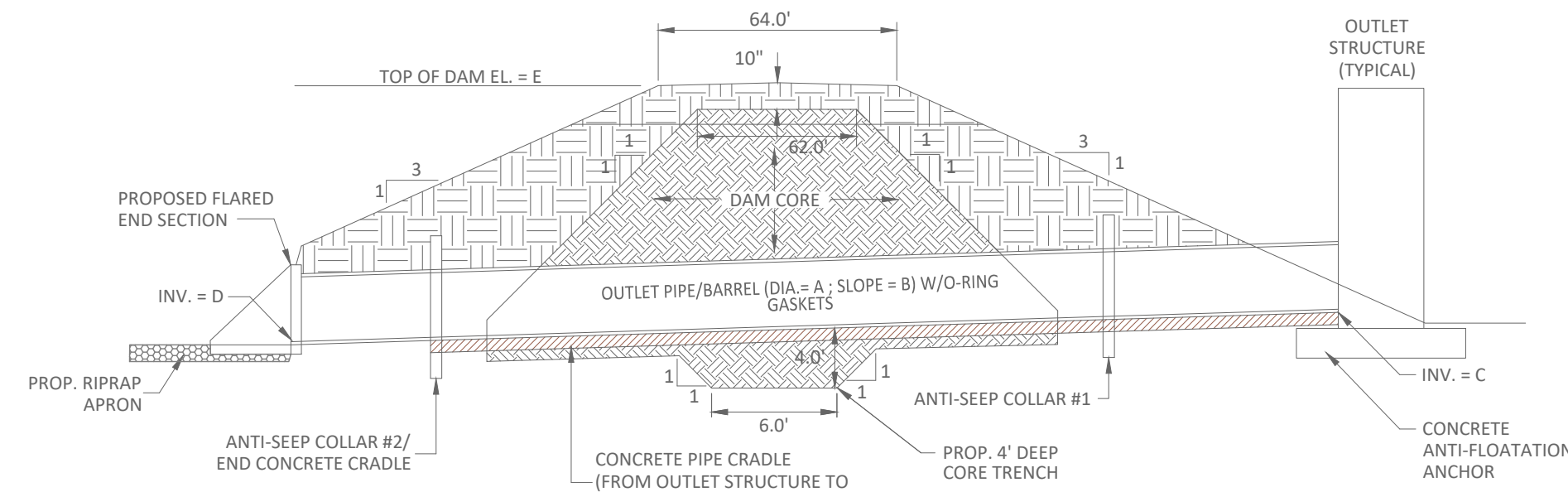
**SECTION B-B**



**NOTES:**  
MORTAR JOINTS 3/4" x 1/4" THICK CLASS 'AA' CONCRETE TO BE USED.  
THE POURING OF FLOOR SLAB TO BE ACCOMPLISHED BY FORMING.  
METAL STEPS TO BE PROVIDED ON 1'-2" + CENTERS.  
SOLID CONCRETE BLOCK MAY BE USED IN LIEU OF CLAY BRICK. JUMBO BRICK WILL BE PERMITTED.

**TRASH RACK NOTES:**  
ALL REBAR SHALL BE #4 REBAR.  
TRASH RACK SHALL BE SECURELY FASTENED TO RISER WITH A MINIMUM OF FOUR CORROSION-RESISTANT ANCHORS.

**OUTLET STRUCTURE DETAIL**  
NTS



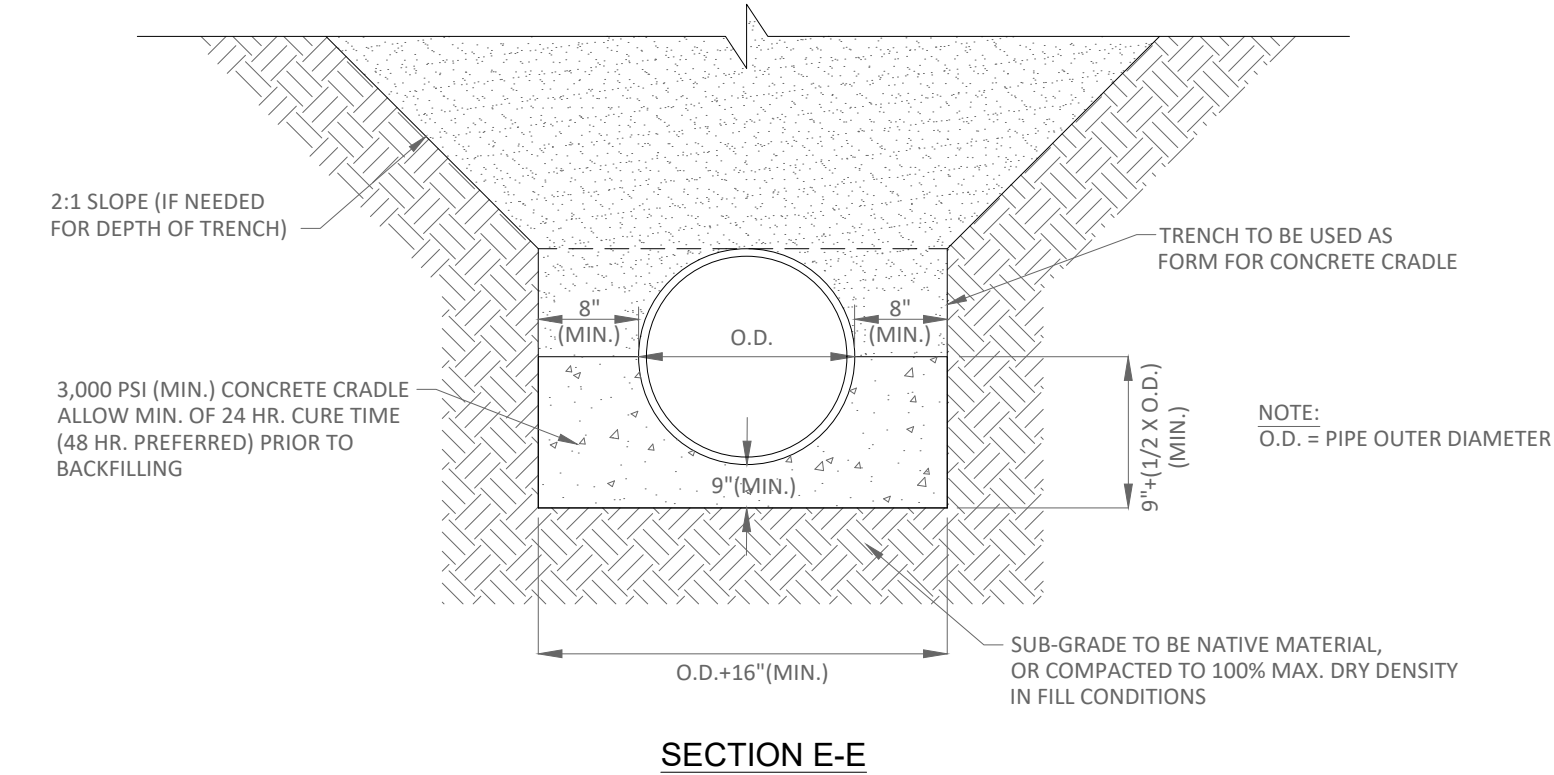
SCM	A	B	C	D	E
1	DUAL 30"	1.00%	362.00	360.76	368.20

**EARTHEN DAM EMBANKMENT TYPICAL SECTION**

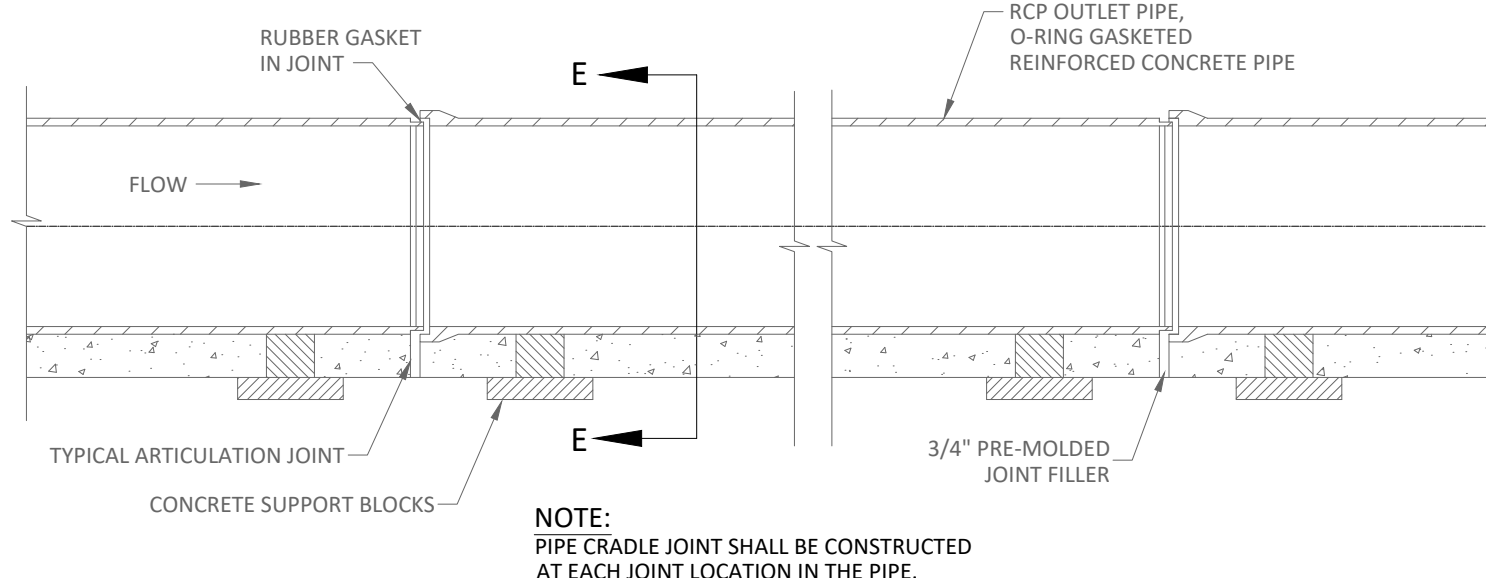
SCALE: NOT TO SCALE

**DAM CONSTRUCTION SPECIFICATIONS:**

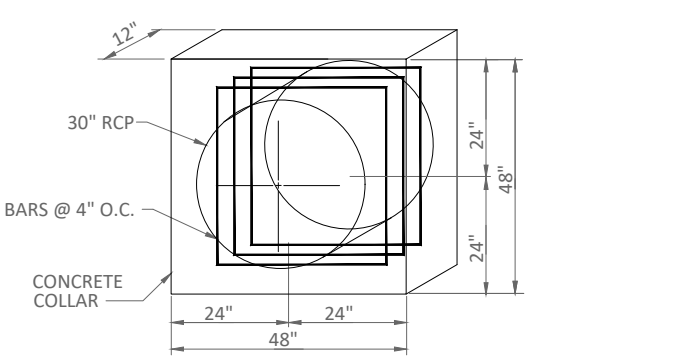
1. SITE PREPARATIONS-CLEAR, GRUB, AND STRIP TOPSOIL FROM AREAS UNDER THE EMBANKMENT TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. DELAY CLEARING POOL AREA UNTIL THE DAM IS COMPLETE AND THEN REMOVE BRUSH, TREES, AND OTHER OBJECTIONABLE MATERIALS TO FACILITATE SEDIMENT CLEANOUT. STOCKPILE ALL TOPSOIL OR SOIL CONTAINING ORGANIC MATTER FOR USE ON THE OUTER SHELL OF THE EMBANKMENT TO FACILITATE VEGETATIVE ESTABLISHMENT. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW BASIN AS NEEDED.
2. CUT-OFF TRENCH-EXCAVATE A CUT-OFF TRENCH ALONG THE CENTER LINE OF THE EARTH FILL EMBANKMENT. CUT THE TRENCH TO STABLE SOIL MATERIAL, BUT IN NO CASE MAKE IT LESS THAN 4 FEET DEEP. THE CUT-OFF TRENCH MUST EXTEND INTO BOTH ABUTMENTS TO AT LEAST THE ELEVATION OF THE RISER CREST. MAKE THE MINIMUM BOTTOM WIDTH WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT, BUT IN NO CASE LESS THAN 6 FEET. MAKE SLOPE SIDES OF THE TRENCH NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS ARE THE SAME AS THOSE FOR THE EMBANKMENT. KEEP THE TRENCH DRY DURING BACKFILLING AND COMPACTION OPERATIONS.
3. GEOTECHNICAL SPECIFICATIONS FOR DAM CONSTRUCTION:
  - A. A MINIMUM OF ONE (1) IN-PLACE DENSITY TEST SHOULD BE PERFORMED IN ACCORDANCE WITH ASTM D-1556 FOR EACH 2,500 S.F. OF LIFT AREA WITH A MINIMUM OF TWO TESTS PER LIFT. IMPROPER COMPACTION MAY RESULT IN PREMATURE DETERIORATION OF THE EMBANKMENT AREA AND/OR DIFFERENTIAL SETTLEMENT OF FOUNDATIONS. SEE GEOTECHNICAL REPORT FOR MORE DETAILED SPECIFICATIONS RELATING TO SELECTION AND PLACEMENT OF STRUCTURAL FILL.
  - B. FILL PLACED WITHIN THE CONSTRUCTED DAM EMBANKMENTS SHOULD BE COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR). ALL FILL PLACED WITHIN THE UPPER ONE (1) FOOT OF THE RISER FOUNDATION AND THE SPILLWAY SUBGRADE SHOULD BE COMPACTED TO A MINIMUM OF 98 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-698 (STANDARD PROCTOR). ALL FILL MATERIAL SHOULD BE PLACED AND MECHANICALLY COMPACTED IN UNIFORM LIFTS NOT EXCEEDING NINE (9) INCHES IN LOOSE THICKNESS. THE MOISTURE CONTENT OF ALL FILL AT THE TIME OF THE PLACEMENT SHOULD BE WITHIN +3 PERCENT OF THE OPTIMUM MOISTURE CONTENT AS ESTABLISHED BY THE STANDARD PROCTOR TEST. SEE GEOTECHNICAL REPORT FOR MORE DETAILED SPECIFICATIONS RELATING TO THE SELECTION AND PLACEMENT OF STRUCTURAL FILL.
  - C. ALL FILL TO BE UTILIZED AT THE SITE SHOULD BE SELECTED ON THE BASIS OF ITS PLASTICITY CHARACTERISTICS AND LABORATORY COMPACTION TESTS. ON-SITE SOILS WHICH ARE FOUND TO CONTAIN DELETERIOUS MATERIAL, INCLUDING ORGANICS AND TOPSOIL, SHOULD NOT BE USED AS STRUCTURAL FILL FOR THE EMBANKMENT.
  - D. DAM CORE AND CORE TRENCH MATERIAL - THE CORE MATERIAL SHOULD HAVE A USCS CLASSIFICATION OF MH, CH, CL OR ML. PRIOR TO EXCAVATION THE CONTRACTOR SHOULD HAVE THE CORE TRENCH MATERIAL TESTED AND APPROVED BY THE GEOTECHNICAL ENGINEER. THIS TESTING SHOULD INCLUDE DOUBLE HYDROMETER TESTING TO ENSURE THAT THE SOILS ARE NOT DISPERSIVE IN NATURE.
  - E. IMPERMEABLE LINER AND CUT-OFF WALL MATERIAL - MATERIAL UTILIZED SHALL HAVE A CLASSIFICATION OF CH OR MH ONLY. HYDRAULIC CONDUCTIVITY RATES OF MATERIAL UTILIZED MUST BE 0.01 FT/DAY MAXIMUM. LINER MATERIAL SHALL BE TESTED AND APPROVED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION. BENTONITE MAY BE UTILIZED TO SUPPLEMENT LINER MATERIAL TO ACHIEVE A LOWER INFILTRATION RATE. LINER MATERIAL SHALL BE FREE FROM ALL TOPSOIL, ORGANICS AND ROCK FRAGMENTS HAVING A MAJOR DIAMETER GREATER THAN 3 INCHES. FILL PLACEMENT SHOULD BE IN MAXIMUM 6-INCH THICK, LOOSE HORIZONTAL LIFTS COMPACTED UNIFORMLY WITH THE PROPER EQUIPMENT. FILL SHOULD BE COMPACTED TO AT LEAST 92 PERCENT OF THE MAXIMUM DRY DENSITY AS ESTABLISHED BY ASTM D698 TEST METHOD. THE MOISTURE CONTENT OF THE FILL SHOULD BE WITHIN PLUS 4 PERCENTAGE POINTS ABOVE THE OPTIMUM MOISTURE CONTENT.
  - F. IMPERMEABLE LINER - LINER SHALL HAVE A 2.0' MINIMUM THICKNESS.
  - G. CORE TRENCH - CORE TRENCH SHALL BE 8.0' WIDE MINIMUM. IN THE LOCATION SHOWN ON THE PLAN, CORE TRENCH MATERIAL SHALL BE SUPPLEMENTED WITH BENTONITE TO ACHIEVE A MAXIMUM HYDRAULIC CONDUCTIVITY OF 0.001 FT/DAY. BENTONITE MATERIAL SHALL BE APPROVED BY GEOTECHNICAL ENGINEER.
  - H. CONTRACTOR TO COORDINATE CONSTRUCTION OF DAMS WITH A GEOTECHNICAL FIRM EXPERIENCED IN FIELD TESTING SERVICES FOR EARTHEN DAM CONSTRUCTION. SPECIFICATIONS GIVEN ON THESE PLANS ARE RECOMMENDATIONS ONLY. REFER TO GEOTECHNICAL REPORT FOR ADDITIONAL SPECIFICATIONS.
  - I. ALL FILL MATERIAL USED FOR CONSTRUCTION OF DAM CORE AND EMBANKMENTS TO BE INSPECTED AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT.
4. CONDUIT SPILLWAYS-SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATER-TIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN BARREL SECTIONS BY APPROVED WATER-TIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS, AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTION UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. ANCHOR THE RISER IN PLACE BY CONCRETE OR OTHER SATISFACTORY MEANS TO PREVENT FLOTATION. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
5. EMERGENCY SPILLWAYS-INSTALL THE EMERGENCY SPILLWAY IN UNDISTURBED SOIL. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE EMERGENCY SPILLWAY. INSTALL NAG S75 EROSION CONTROL MATTING IMMEDIATELY AFTER THE SPILLWAY IS CONSTRUCTED.
6. INLETS-DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY (REFERENCES: RUNOFF CONTROL MEASURES AND OUTLET PROTECTION).
7. EROSION CONTROL-CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION.
8. INSTALL POROUS Baffles AS SPECIFIED IN PRACTICE 6.65, POROUS Baffles, IF WET POND IS TO BE USED TEMPORARILY AS A SEDIMENT BASIN.
9. IMPERMEABLE LINER-AN IMPERMEABLE LINER SHALL BE INSTALLED ACROSS THE ENTIRE BOTTOM OF THE MAIN POND AND THE FOREBAY. REFER TO THE GEOTECHNICAL REPORT FOR LINER SPECIFICATIONS.
10. EMBANKMENT STABILIZATION - ALL EMBANKMENTS SHALL BE STABILIZED IMMEDIATELY WITH NAG S75 EROSION CONTROL MATTING.



**SECTION E-E**



**CONCRETE PIPE CRADLE DETAIL**  
NOT TO SCALE



**CONCRETE ANTI-SEEP COLLAR DETAIL**  
NOT TO SCALE

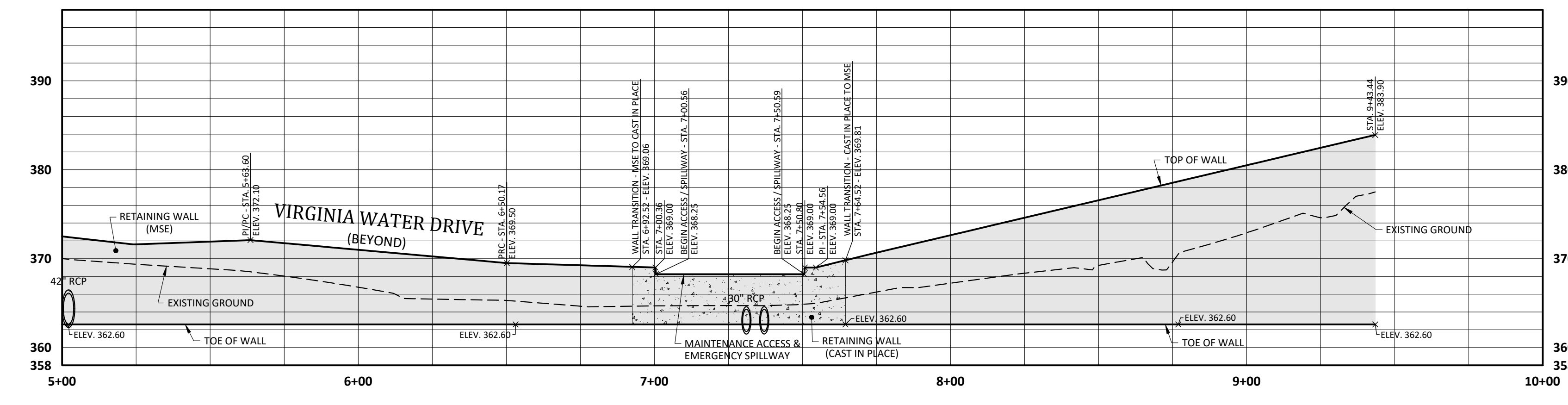
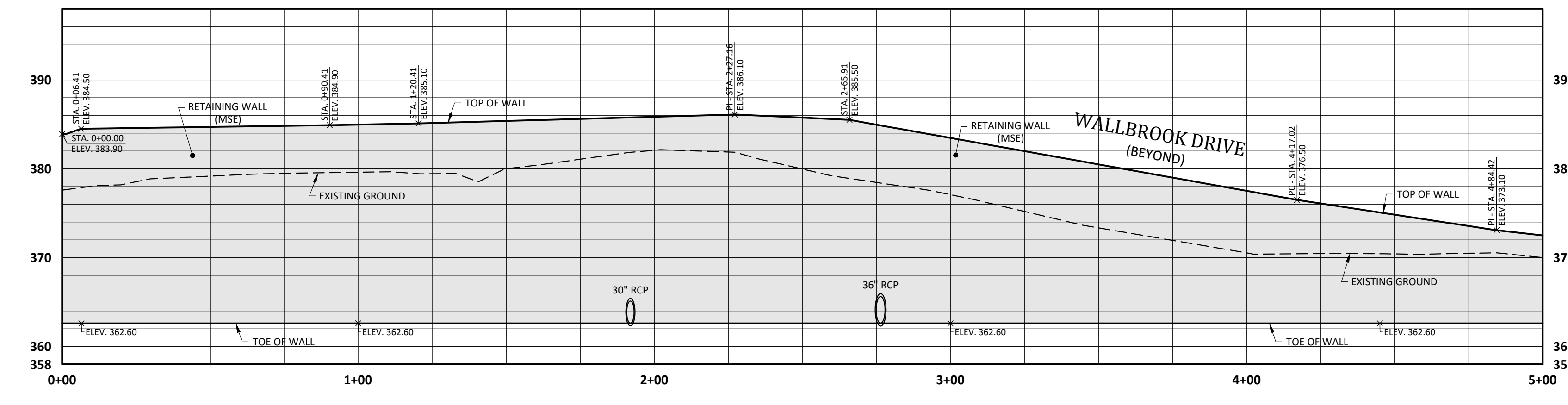
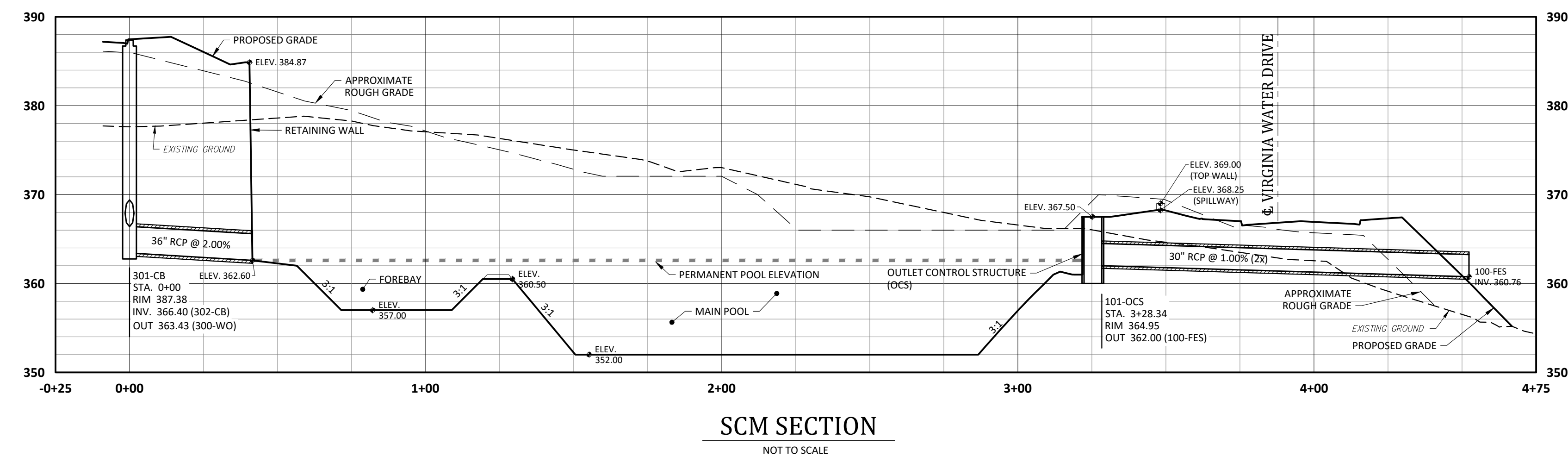
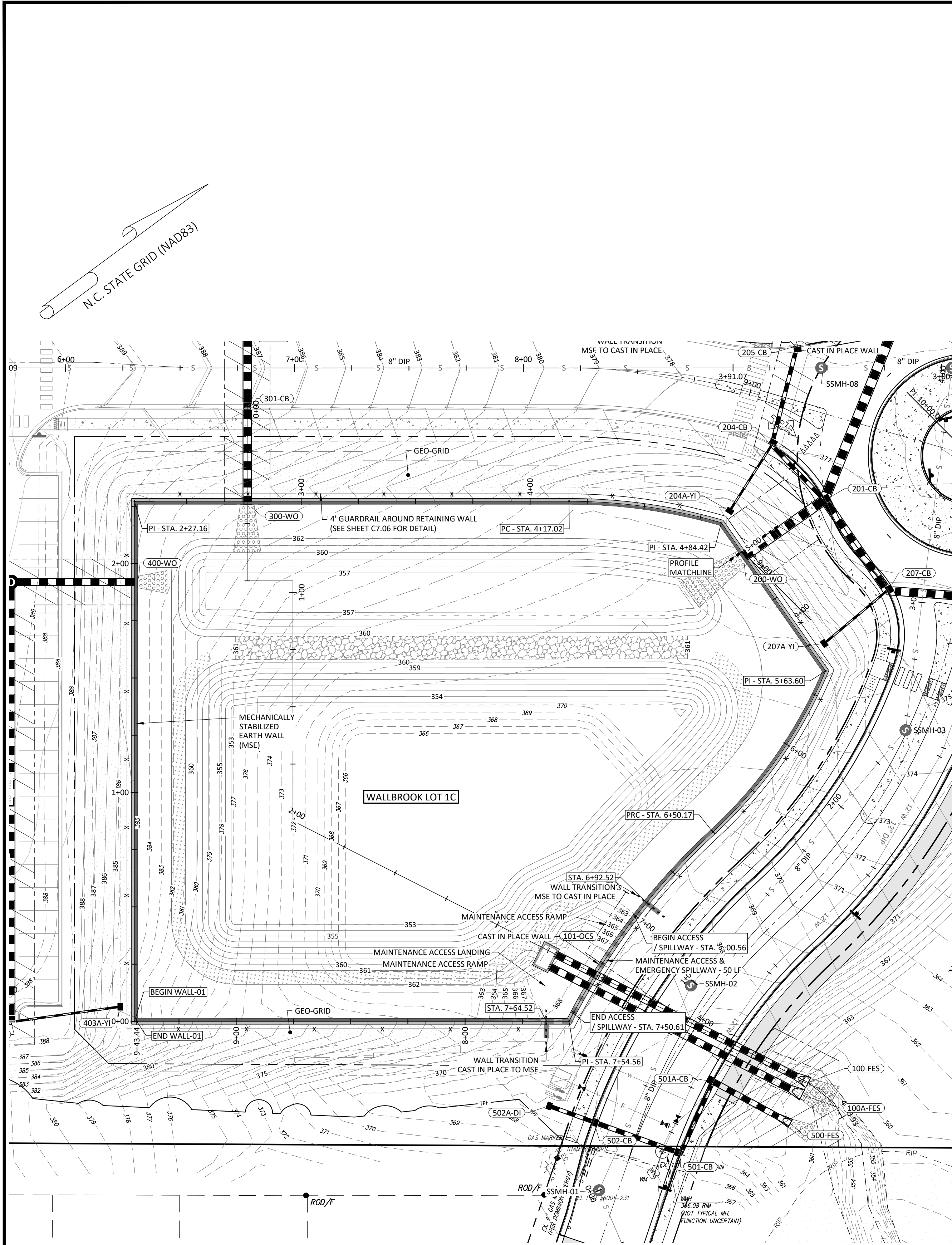


**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
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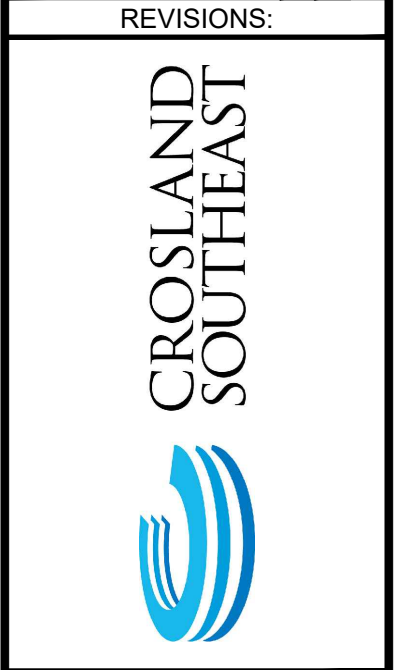


Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C6.10**  
CID



#	DATE	DESCRIPTION
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2	14/NOV/23	ISSUED FOR CONSTRUCTION

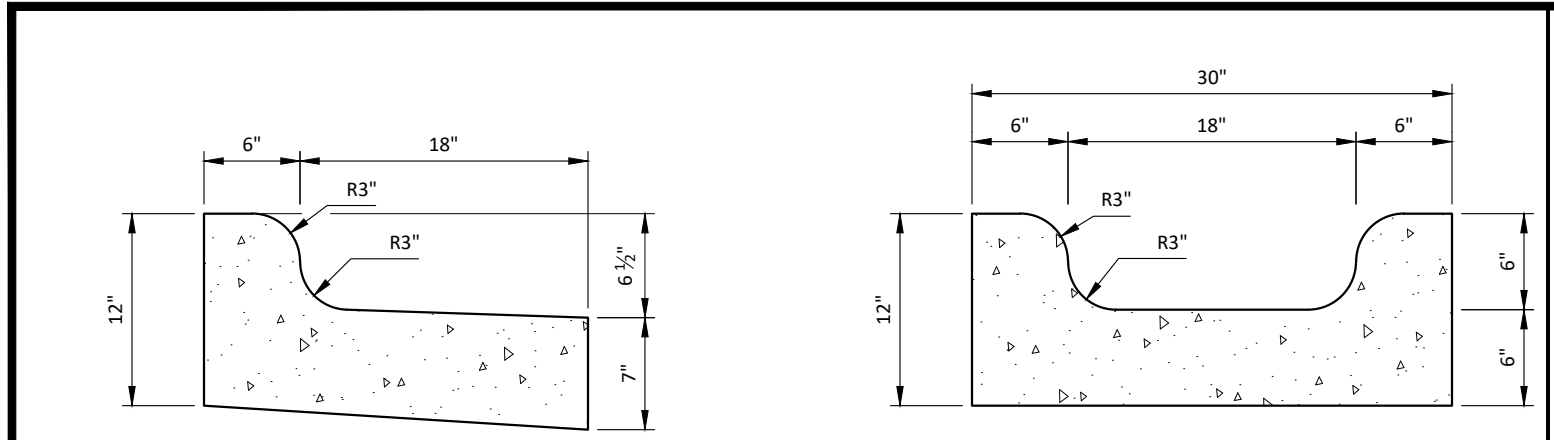


**SCM SECTION & RETAINING WALL PLAN-PROFILE**  
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 Rolesville, Wake County, North Carolina  
 S Main St. / US 401 and Virginia Water Drive

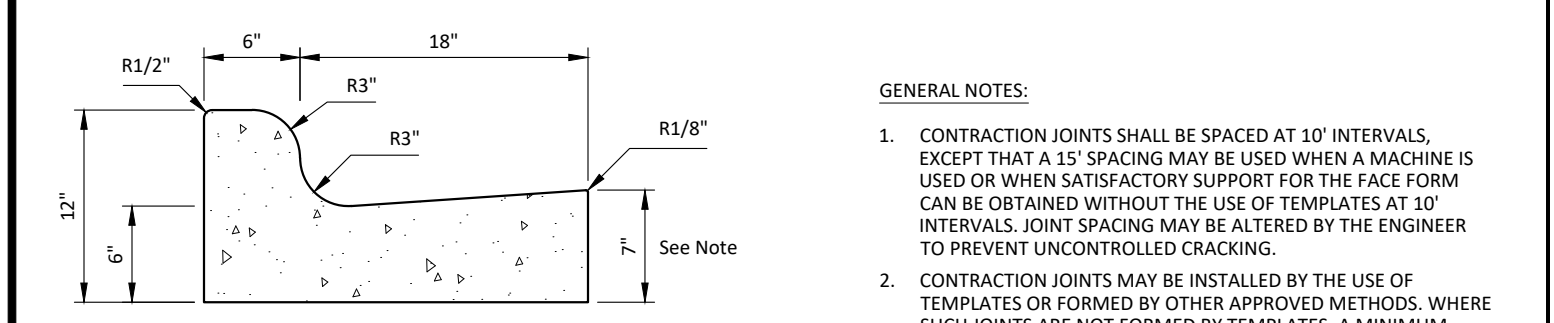
NC License: P11199  
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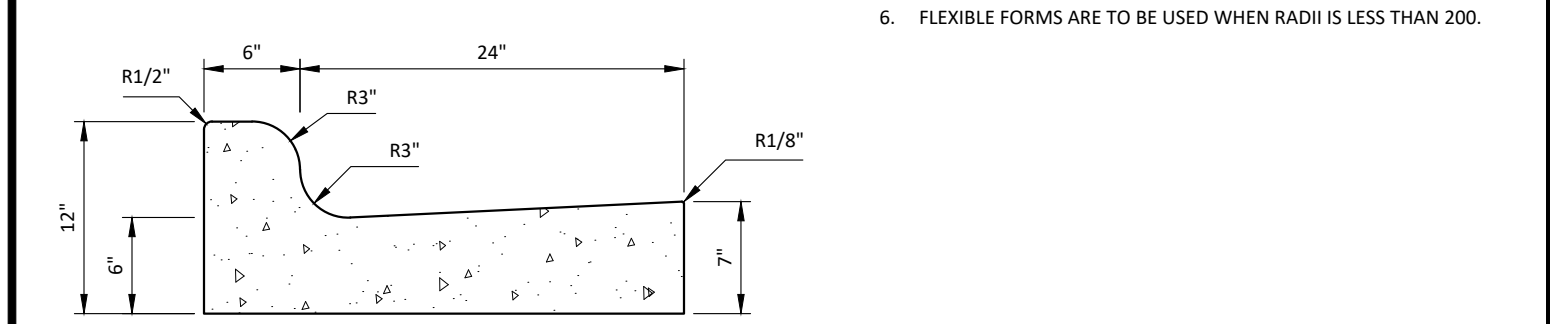
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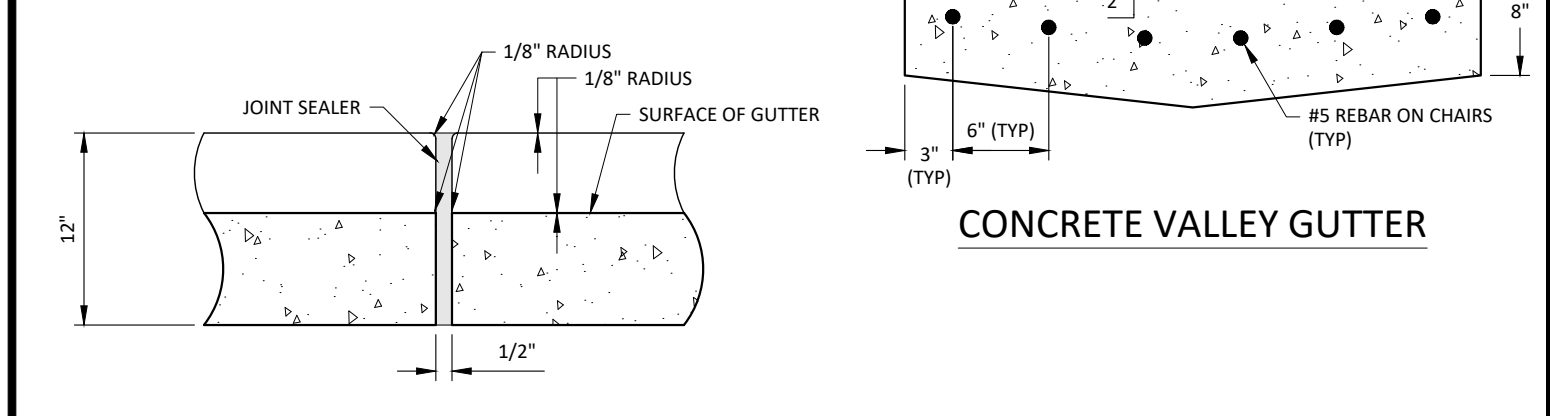
24" CONCRETE CURB AND GUTTER - SPILL SPECIAL GUTTER



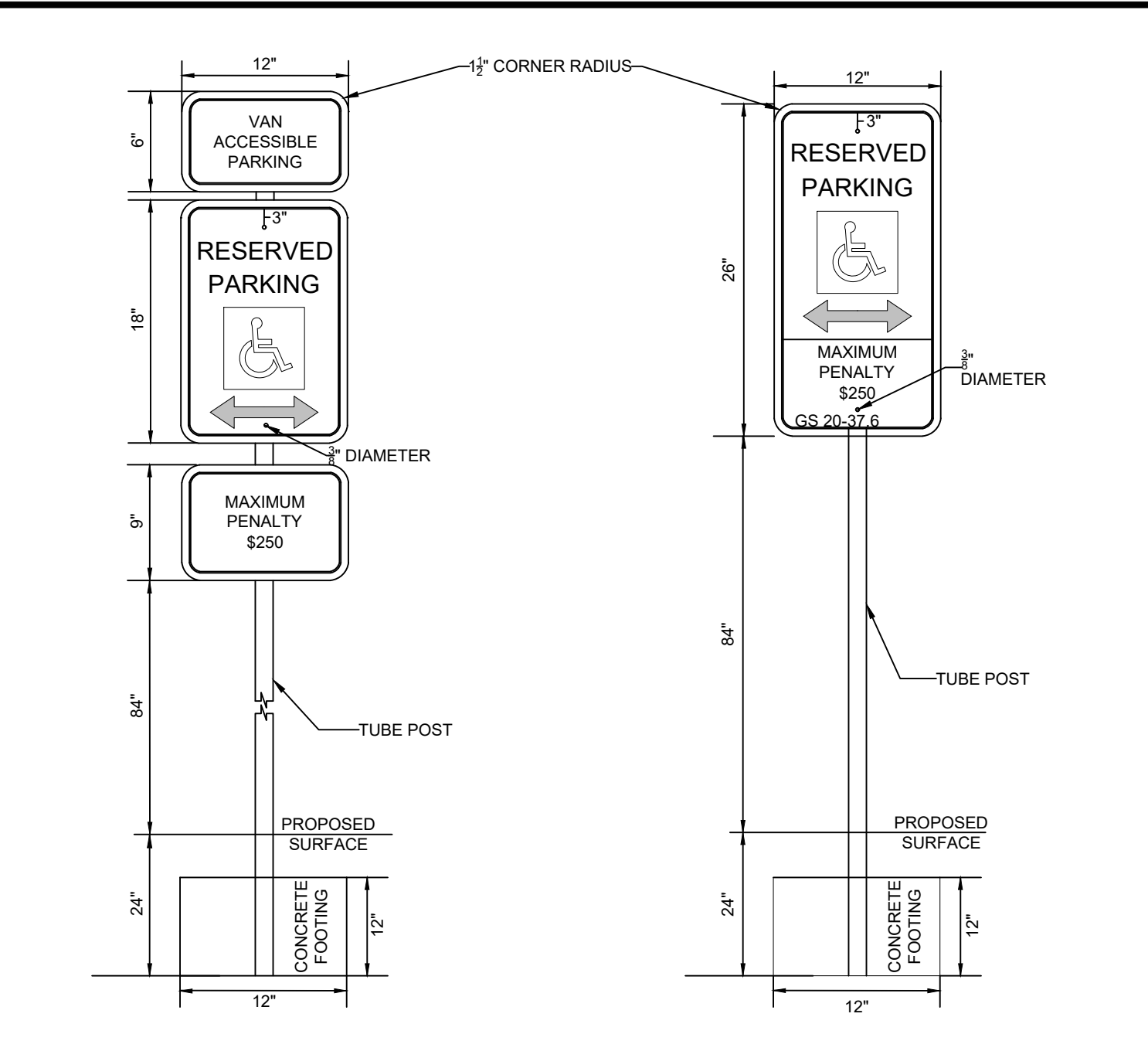
24" CONCRETE CURB AND GUTTER



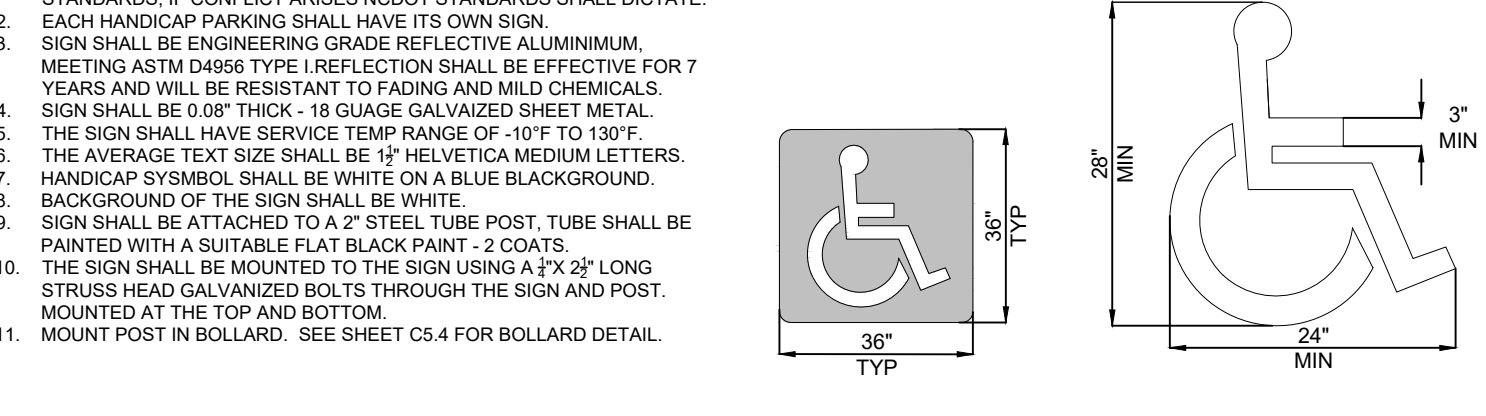
30" CONCRETE CURB AND GUTTER



CURB AND GUTTER DETAIL

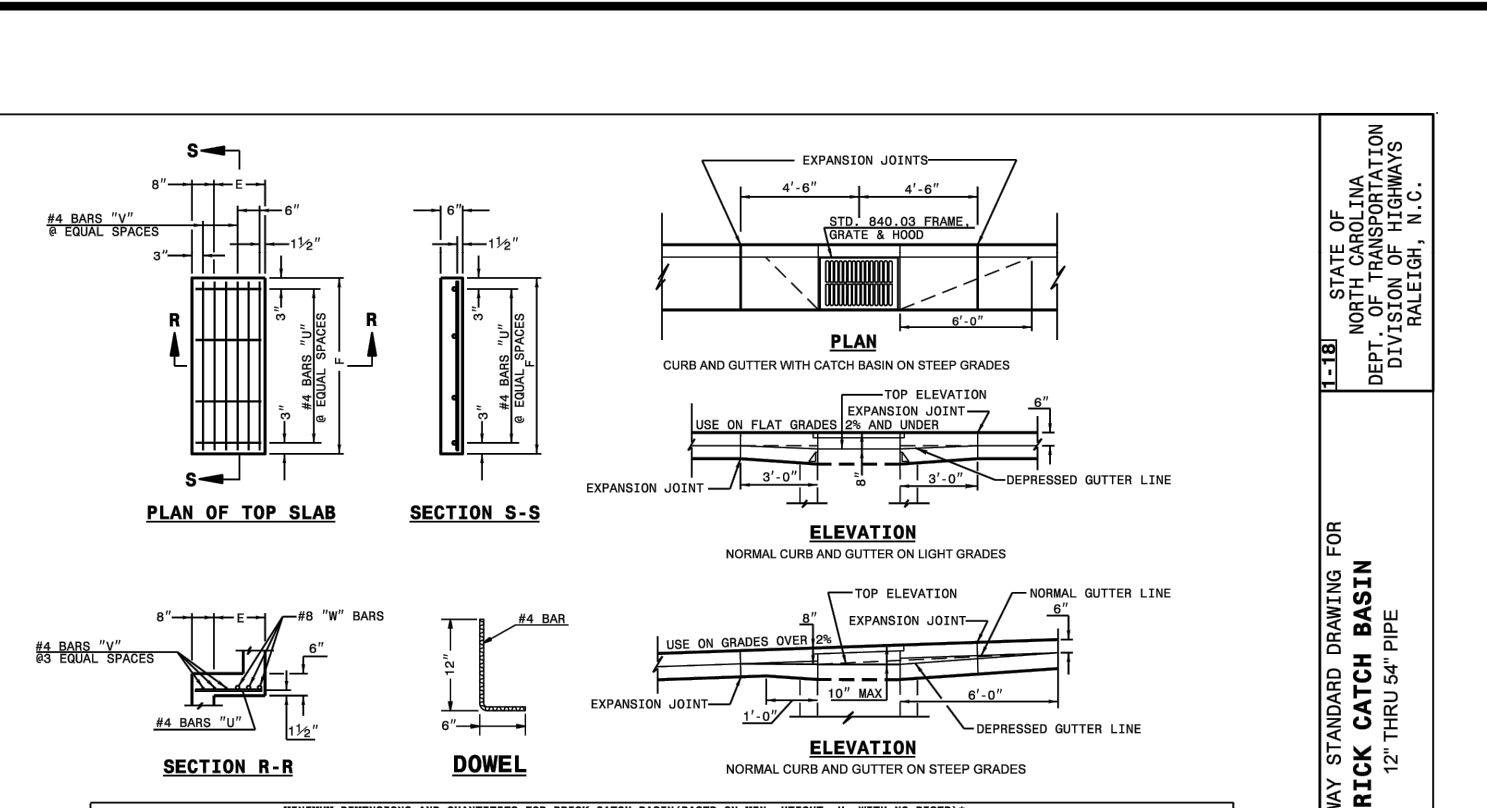


PARKING LOT STRIPING

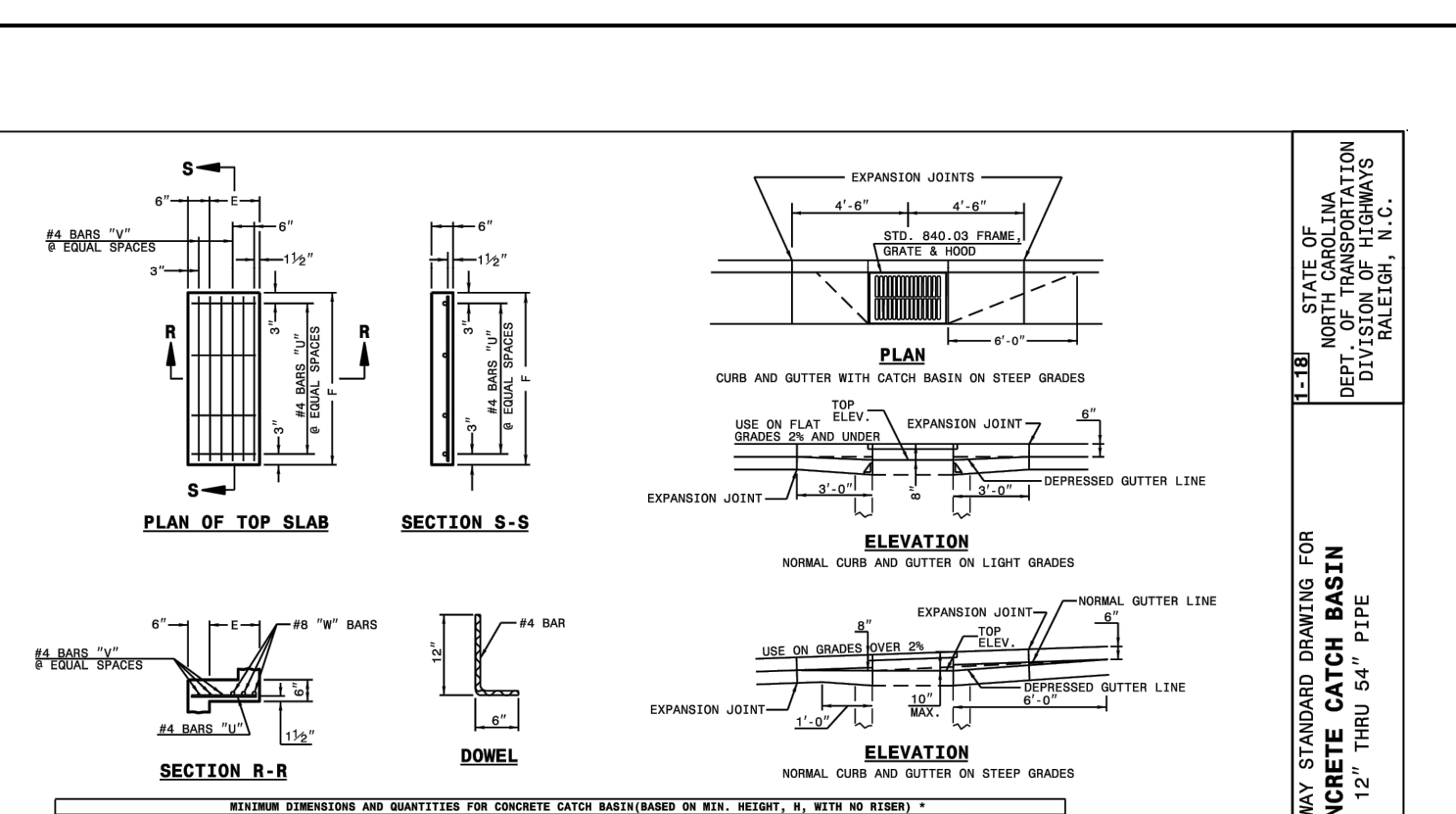


ACCESSIBLE PARKING SIGN

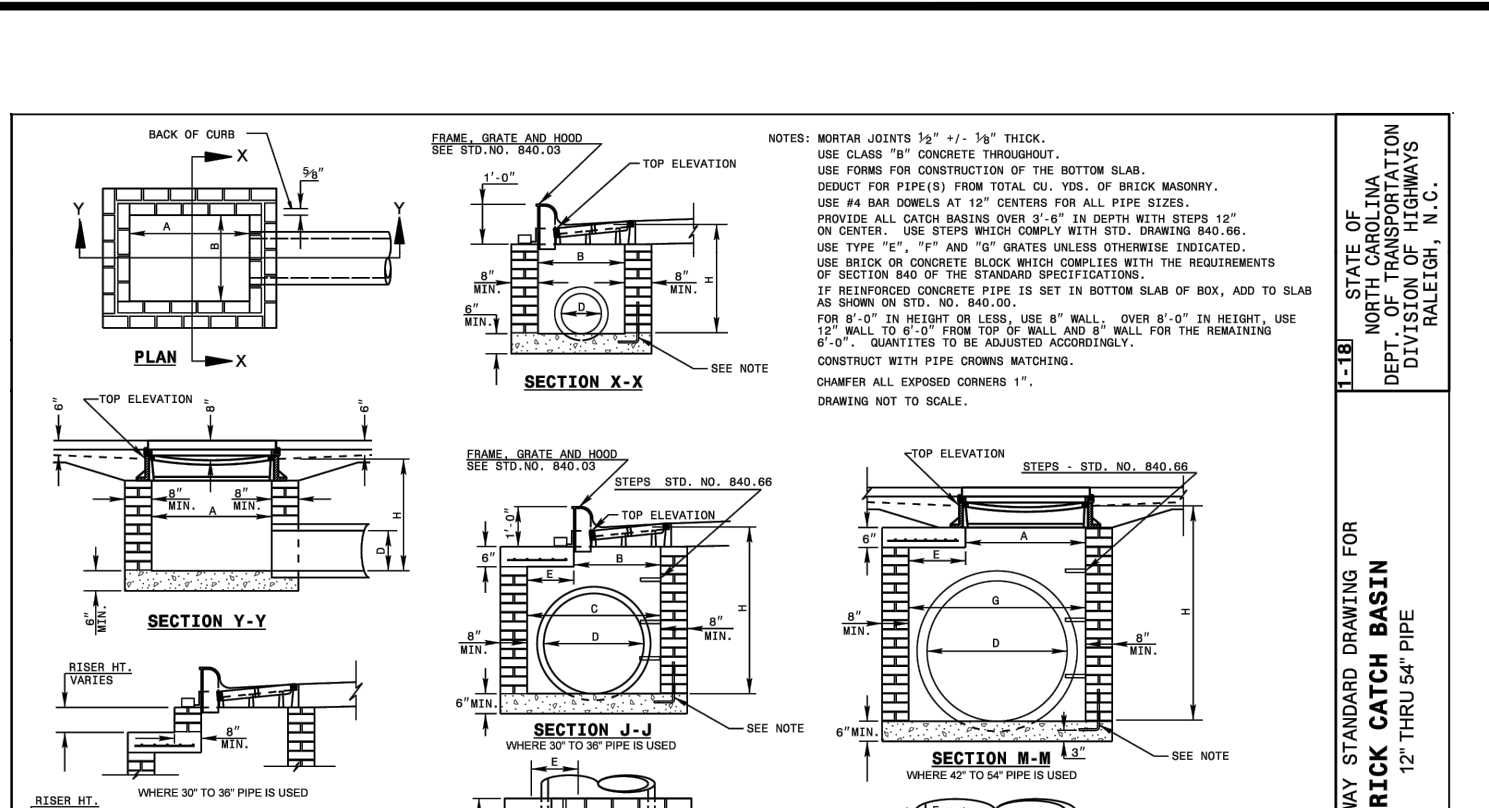
- NOTES:**
- ALL INFORMATION MUST MEET THE CURRENT NORTH CAROLINA DOT STANDARDS, IF CONFLICT ARISES NCDOT STANDARDS SHALL DICATE.
  - EACH HANDICAP PARKING SHALL HAVE ITS OWN SIGN.
  - SIGN SHALL BE ENGINEERING GRADE REFLECTIVE ALUMINUM.
  - MEETING ASTM D895 TYPE I REFLECTION SHALL BE EFFECTIVE FOR 7 YEARS AND WILL BE RESISTANT TO FADING AND MILD CHEMICALS.
  - SIGN SHALL BE 0.03" THICK - 18 GAUGE GALVANIZED SHEET METAL.
  - THE SIGN SHALL HAVE SERVICE TEMP RANGE OF -10°F TO 130°F.
  - THE AVERAGE TEXT SIZE SHALL BE 1 1/2" HELVETICA MEDIUM LETTERS.
  - HANDICAP SYMBOL SHALL BE WHITE ON A BLUE BACKGROUND.
  - BACKGROUND OF THE SIGN SHALL BE WHITE.
  - SIGN SHALL BE ATTACHED TO A 2" STEEL TUBE POST. TUBE SHALL BE PAINTED WITH A SUITABLE FLAT BLACK PAINT - 2 COATS.
  - THE SIGN SHALL BE MOUNTED TO THE SIGN USING A 1/2" LONG STRUTS HEAD GALVANIZED BOLTS THROUGH THE SIGN AND POST. MOUNTED AT THE TOP AND BOTTOM.
  - MOUNT POST IN BOLLARD. SEE SHEET CS.4 FOR BOLLARD DETAIL.



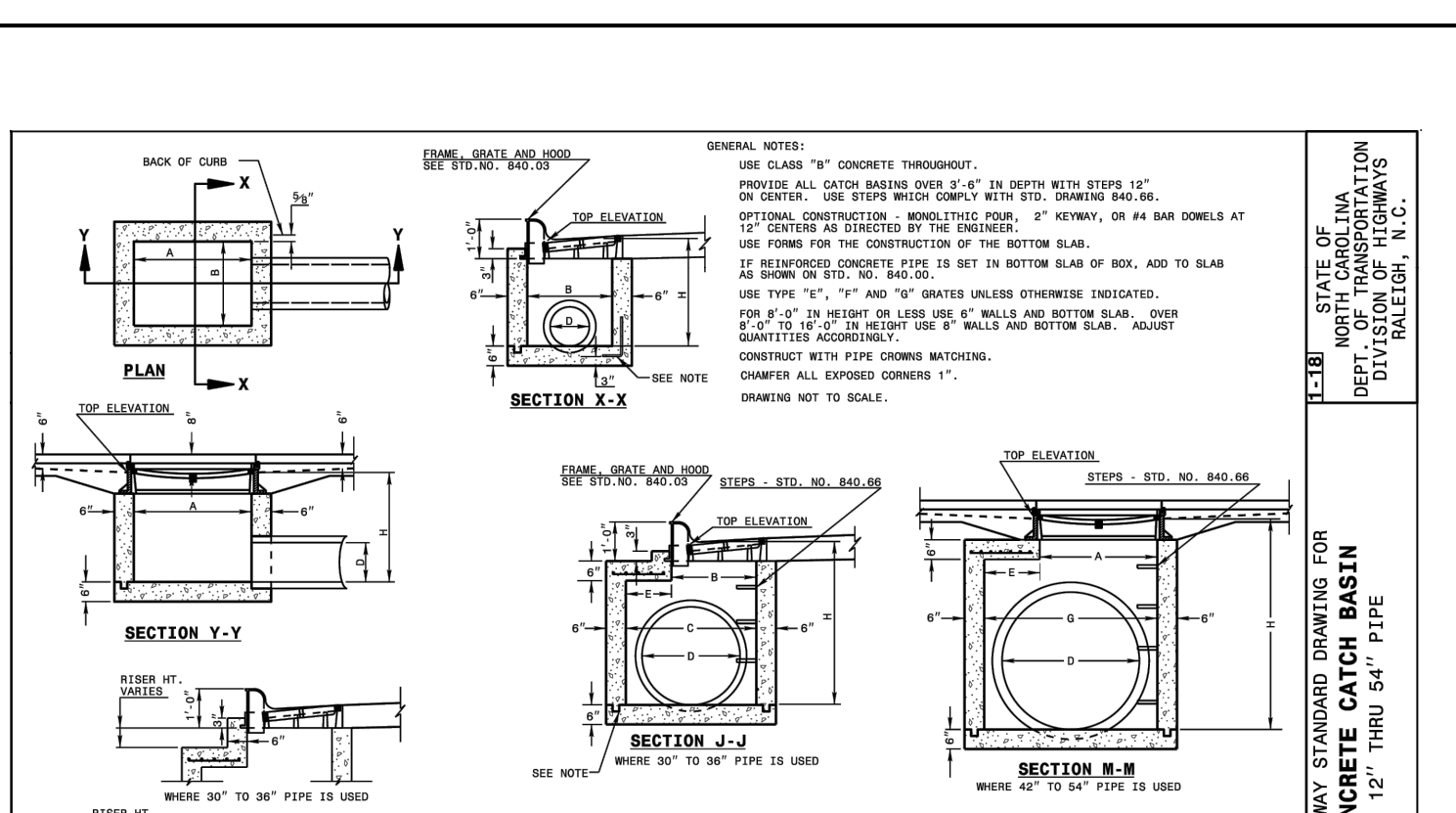
BRICK CATCH BASIN



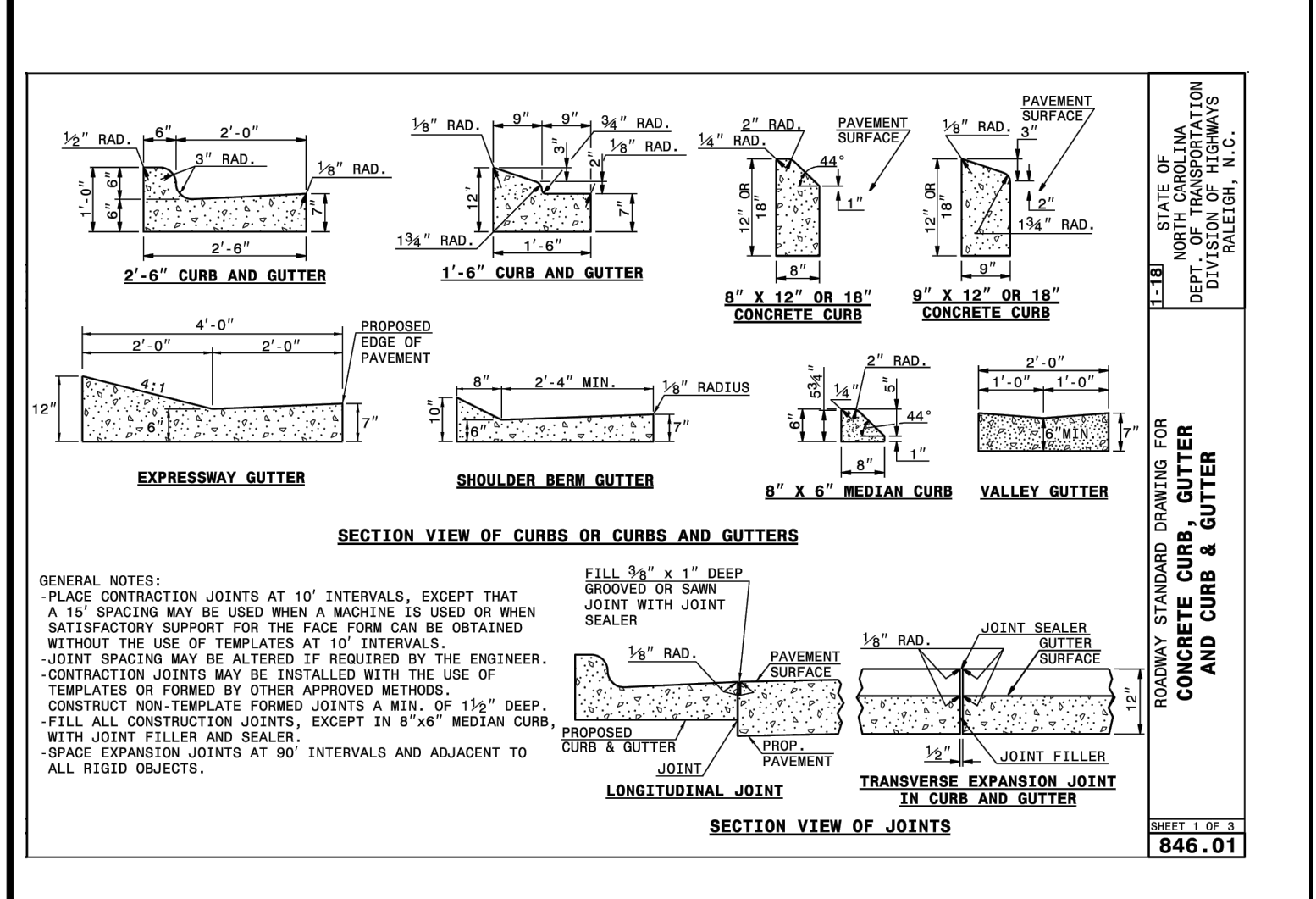
CONCRETE CATCH BASIN



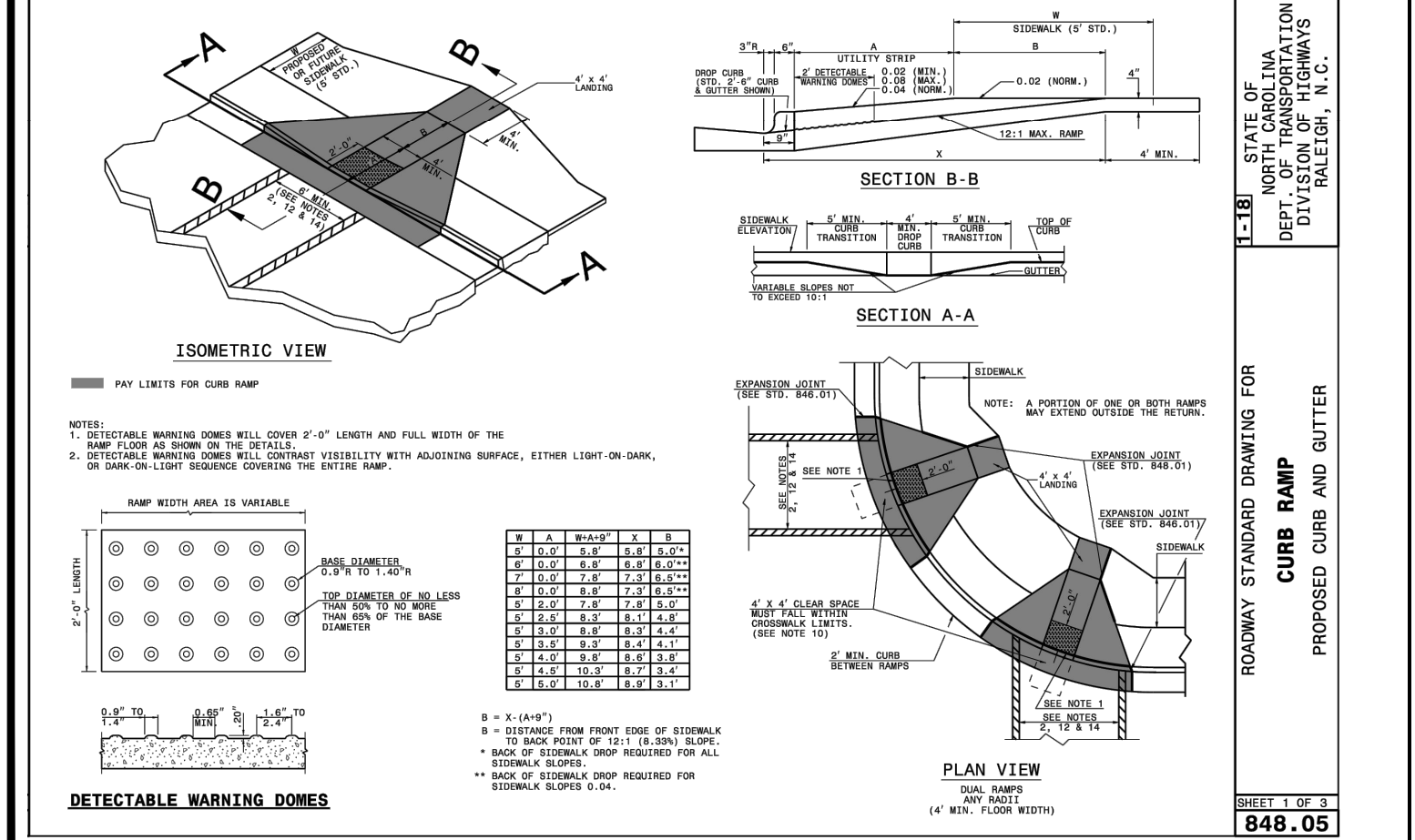
BRICK CATCH BASIN



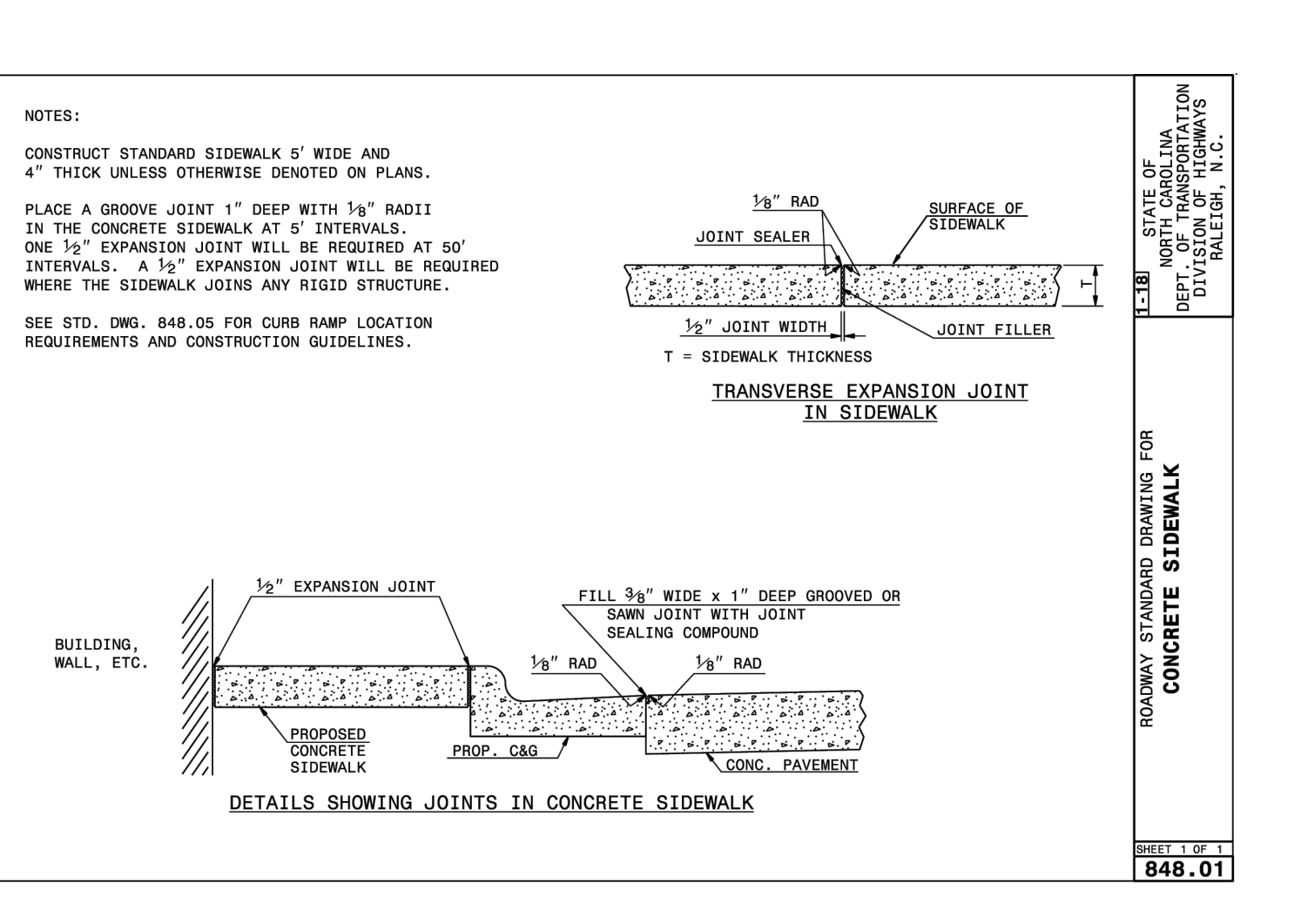
CONCRETE CATCH BASIN



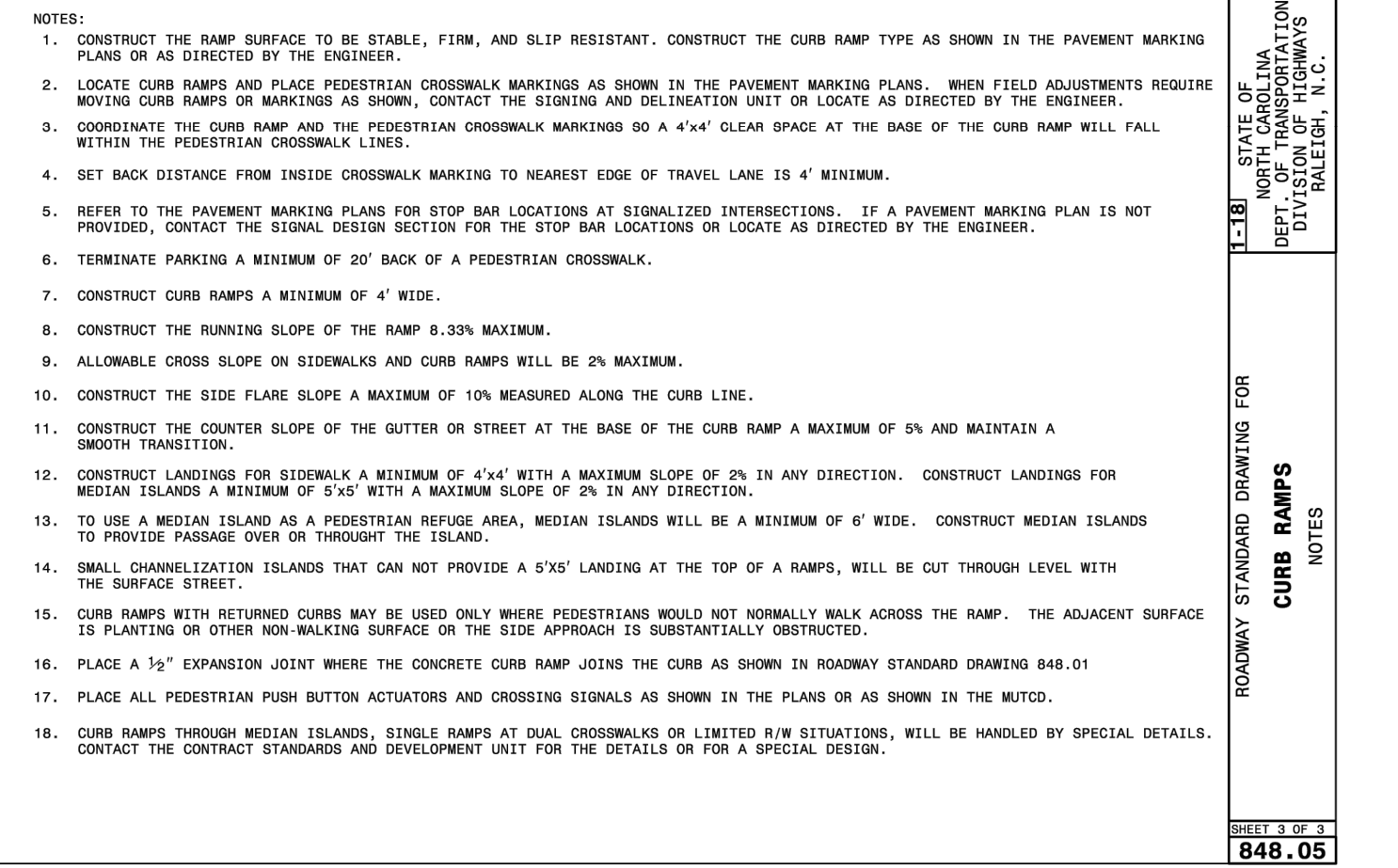
SECTION VIEW OF CURBS OR CURBS AND GUTTERS



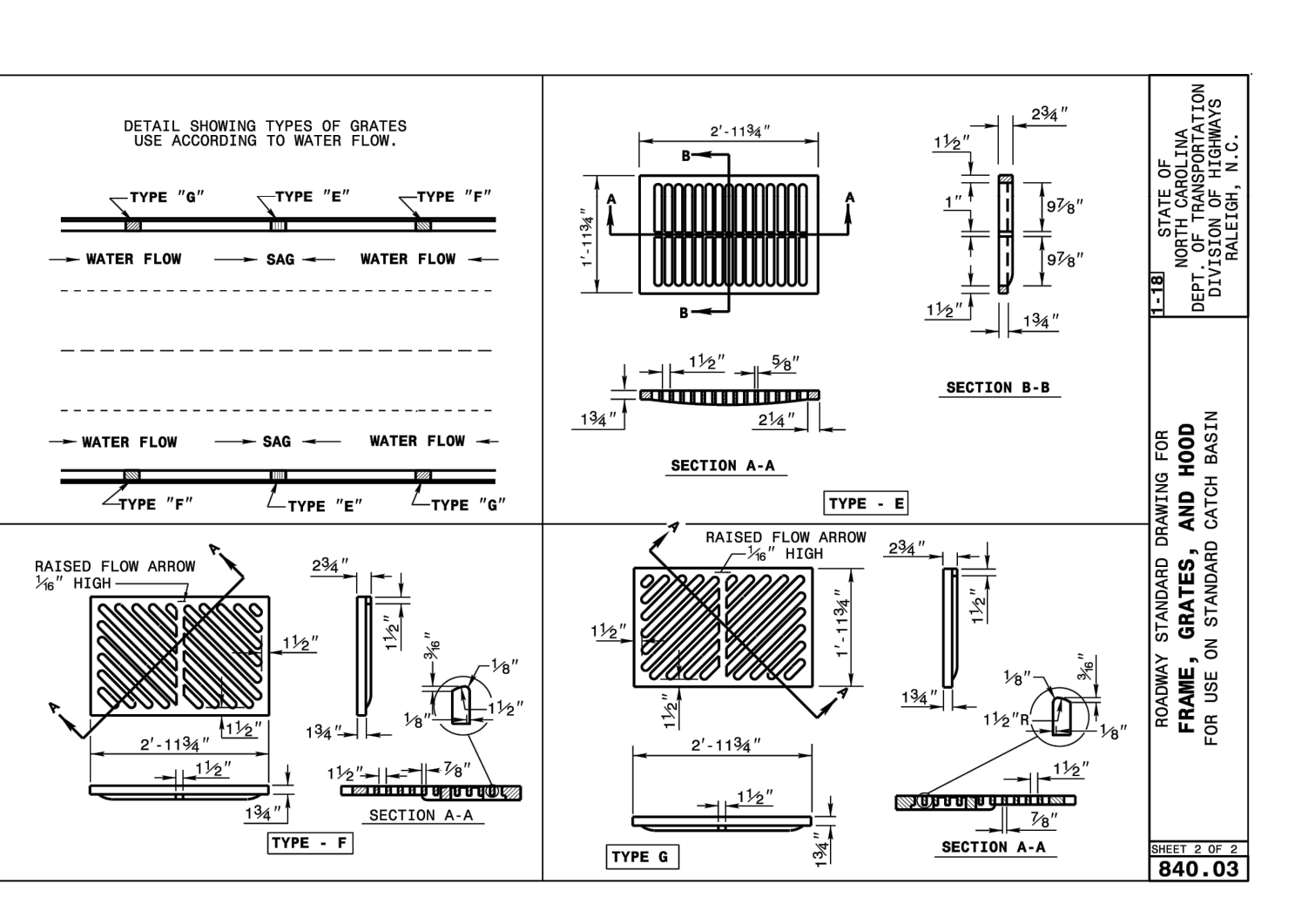
CURB RAMP



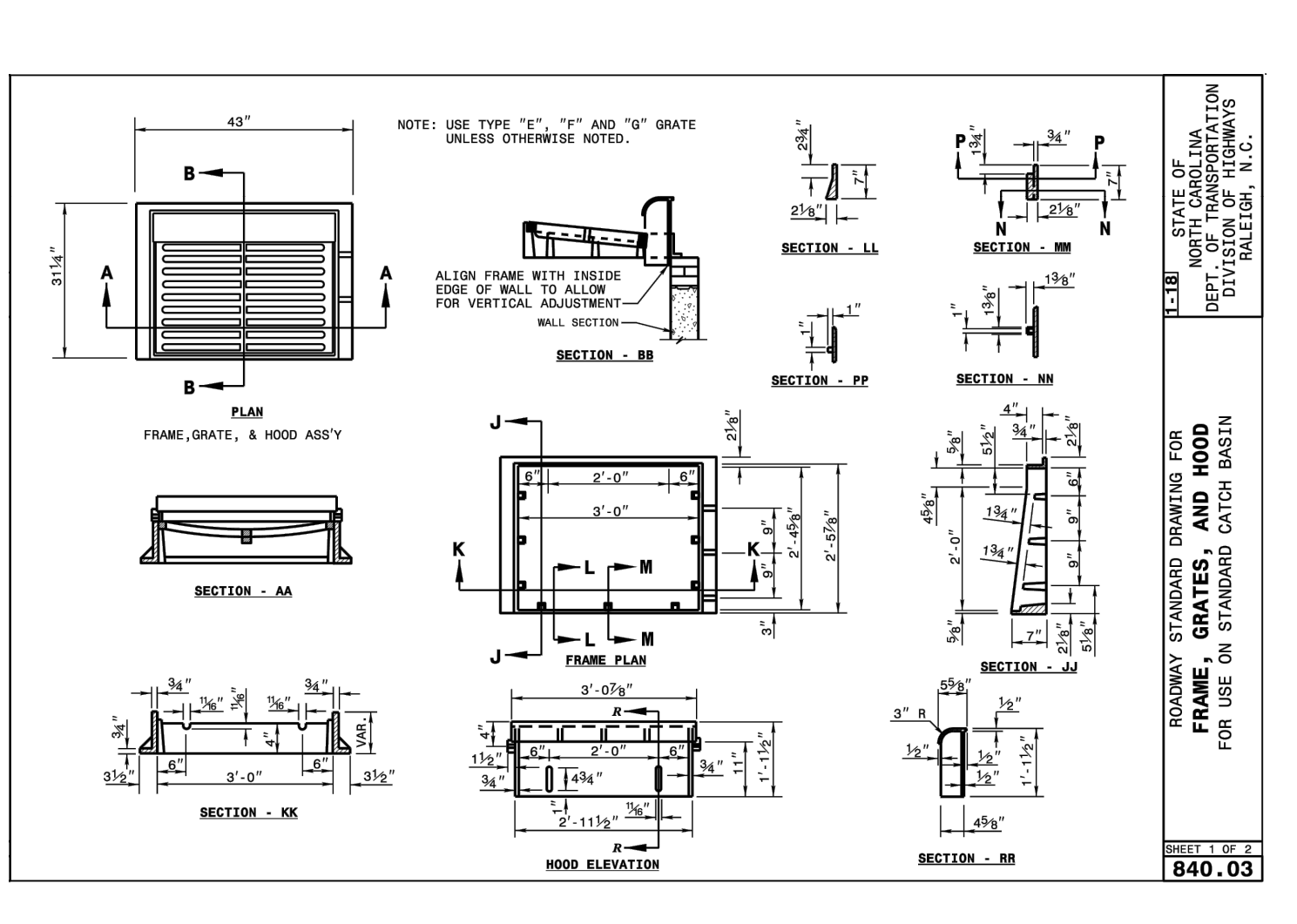
CONCRETE SIDEWALK



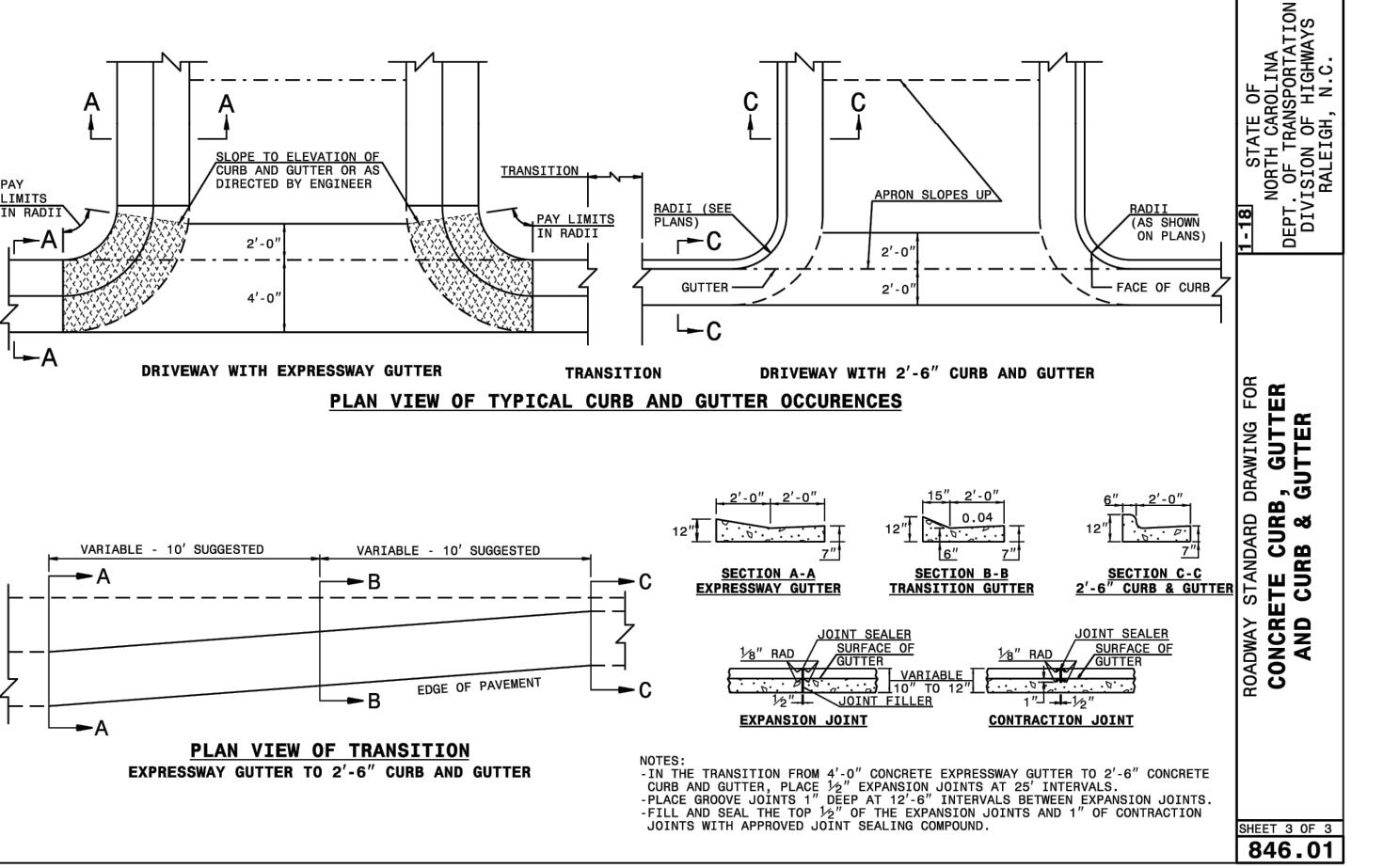
CURB RAMP



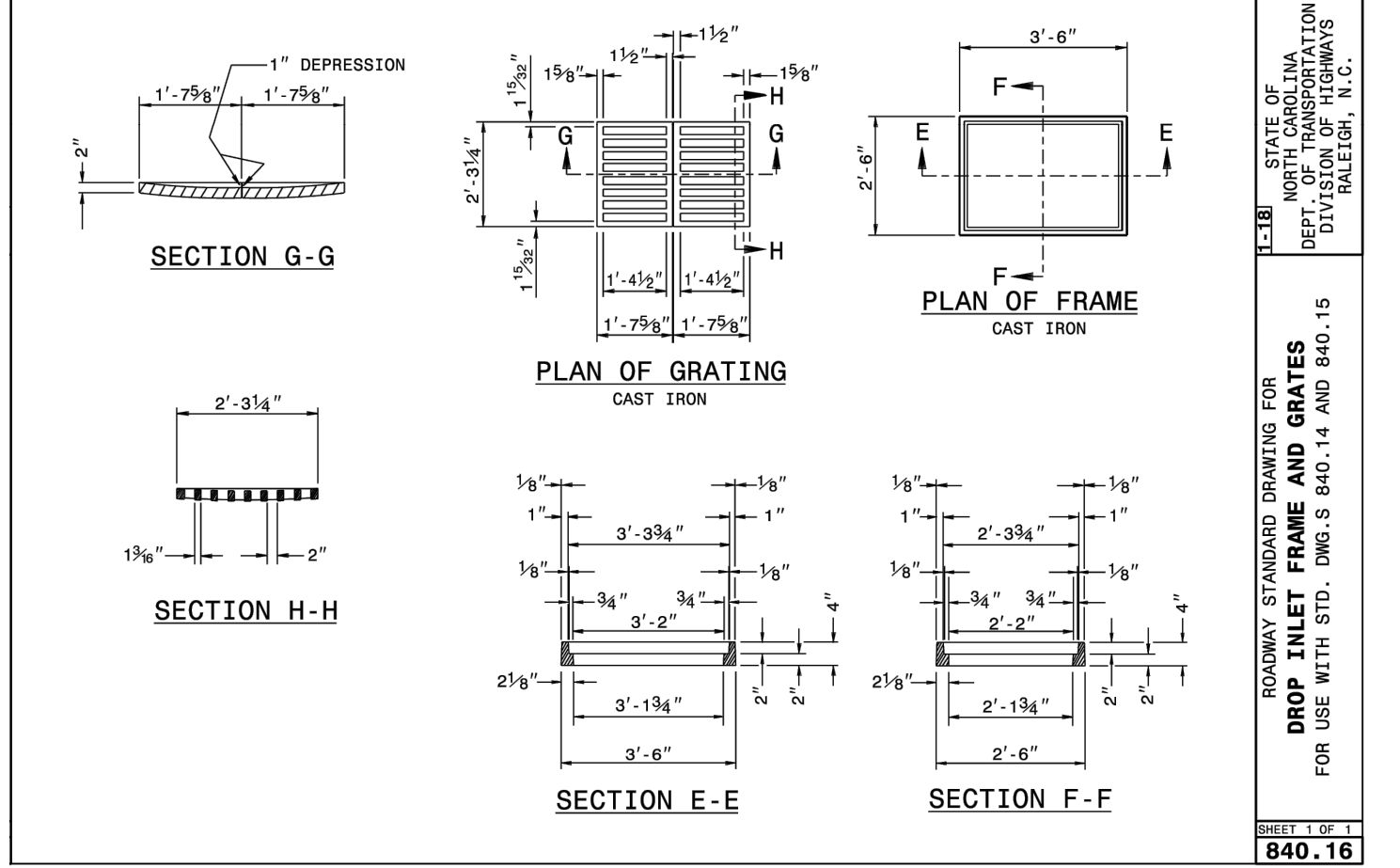
FRAME, GRATINGS, AND HOOD



FRAME, GRATINGS, AND HOOD



CONCRETE CURB & GUTTER



DROP INLET FRAME AND GRATINGS

**CROSLAND SOUTHEAST**

**MISC. DETAILS**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

S Main St. / US 401 and Virginia Water Drive

**ARK CONSULTING GROUP PLLC**

2755-B Charles Blvd #7858  
(757) 558-0888  
www.arkconsultinggroup.com

Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C7.01**

CID SDP

### SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **S-5381**

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **W-4074**

The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **S-5380(P)**

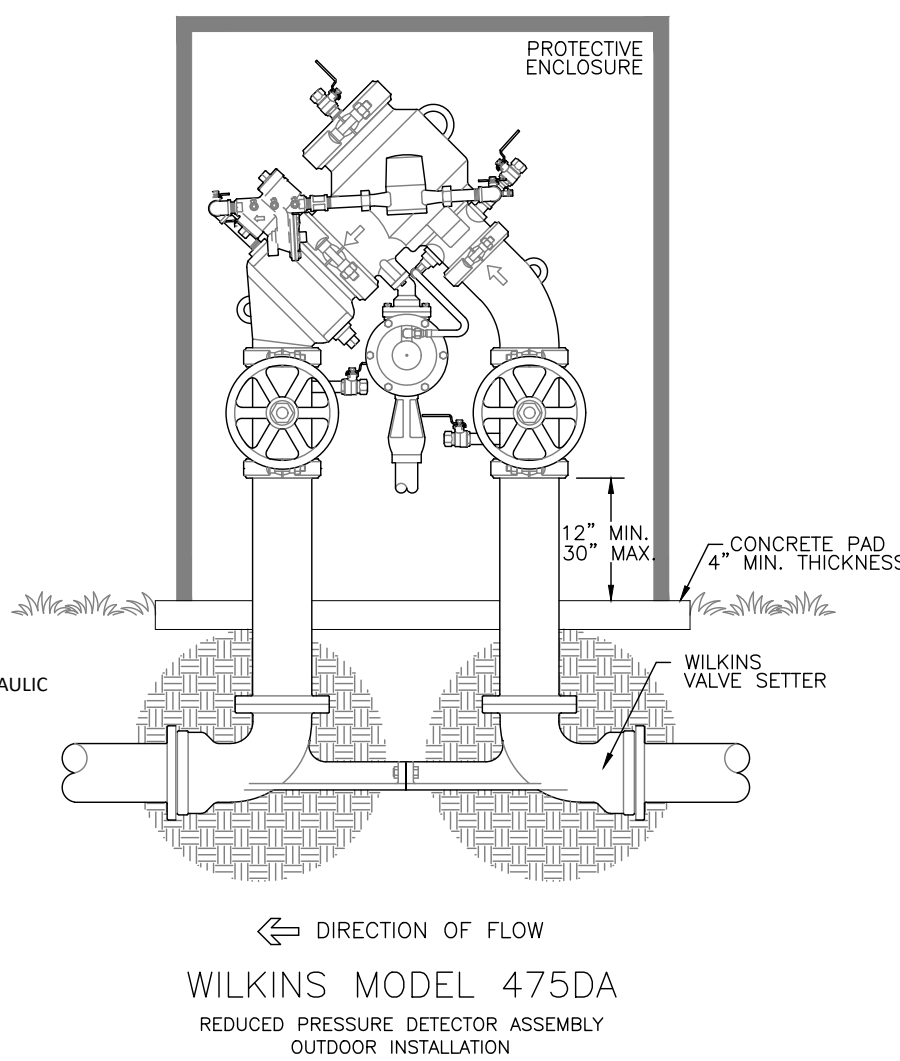
CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all Local, State, and Federal Rules and Regulations.

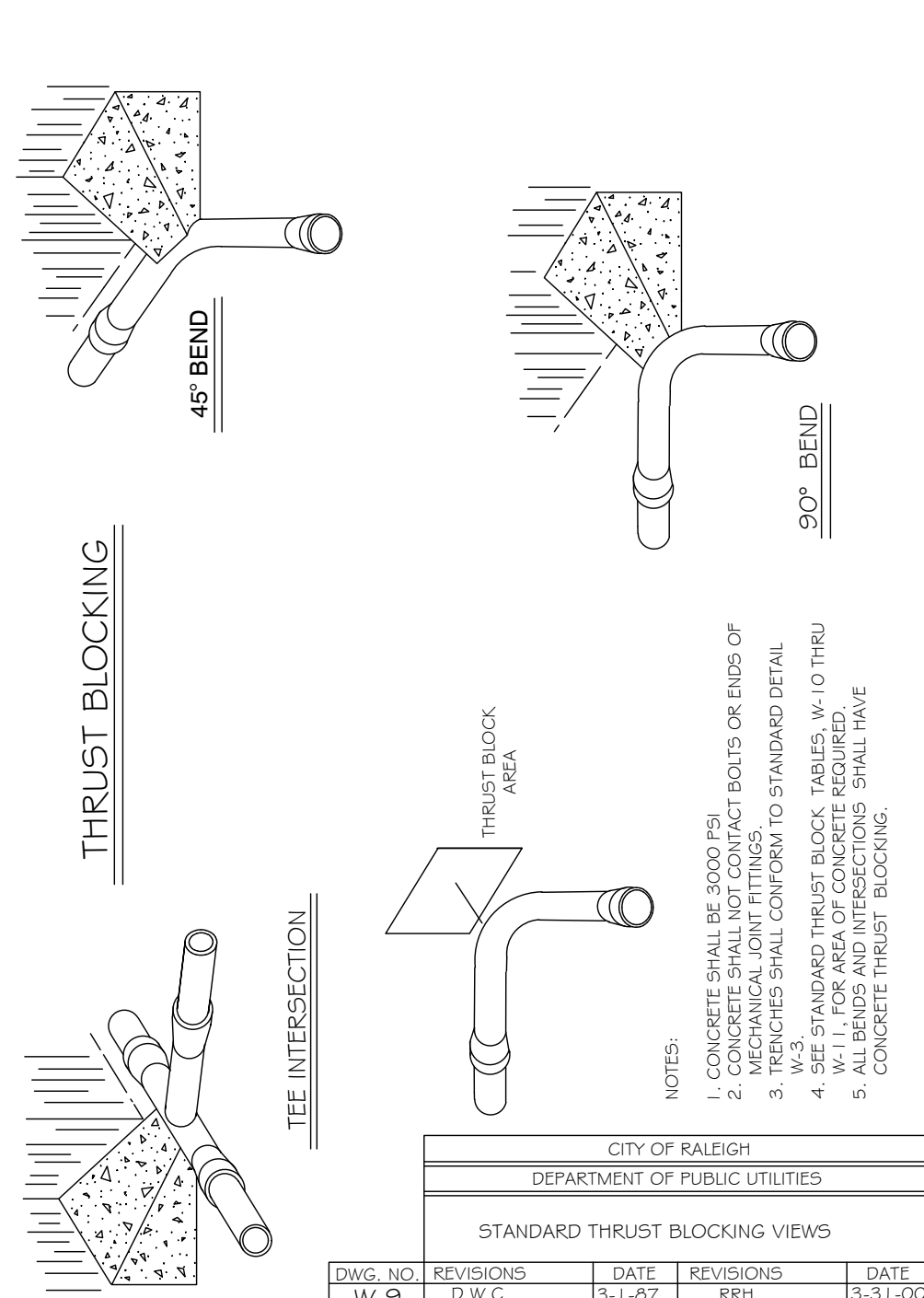
Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval \_\_\_\_\_  
 City of Raleigh Review Officer \_\_\_\_\_

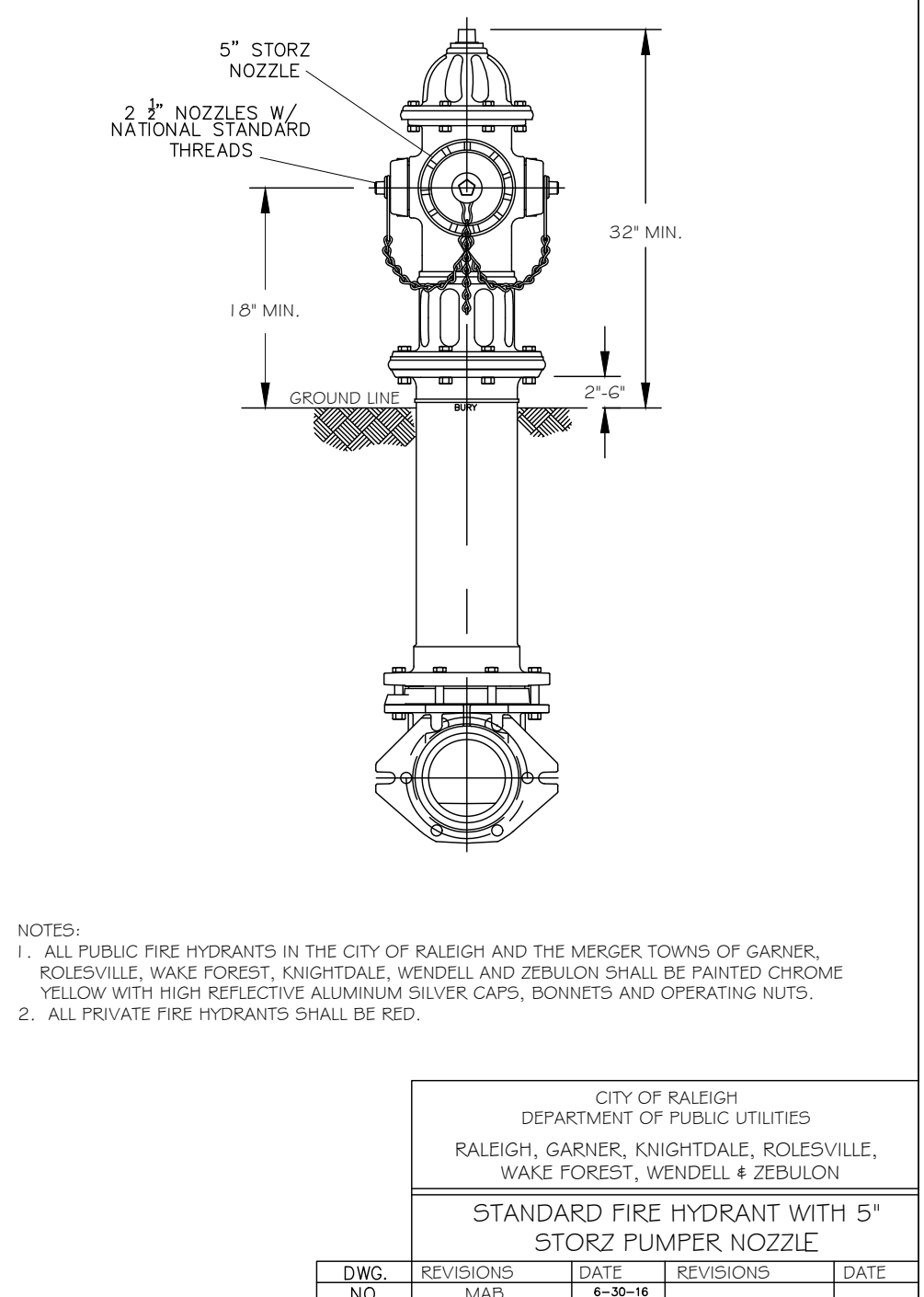
1. ALL FLANGE BOLTS SHALL BE GALVANIZED
2. USE ONLY CONTROL DEVICES APPROVED BY GUC AND THE FOUNDATION FOR CROSS-CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA.
3. PROVIDE SHOP DRAWING SUBMITTAL SHOWING ALL PIPING & APPURTENANCES WITHIN THE PROTECTIVE ENCLOSURE WITH MEASUREMENTS & CLEARANCES CLEARLY LABELED.
4. PROVIDE ALUMINUM ENCLOSURE SIZED TO ALLOW ADEQUATE ROOM FOR TESTING, MAINTENANCE AND OPERATION.
5. DRAIN OPENINGS SHALL BE SIZED TO ADEQUATELY RELIEVE MAXIMUM DISCHARGE OF APPROPRIATE DEVICE.
6. REDUCED PRESSURE PRINCIPLE ASSEMBLIES (RPP) SHALL REQUIRE AN ABOVE GROUND INSTALLATION.
7. PROVIDE ELECTRIC HEATER FOR ADEQUATE FREEZE PROTECTION.
8. REFER TO DETAIL ON THIS SHEET FOR REACTION BLOCKING.



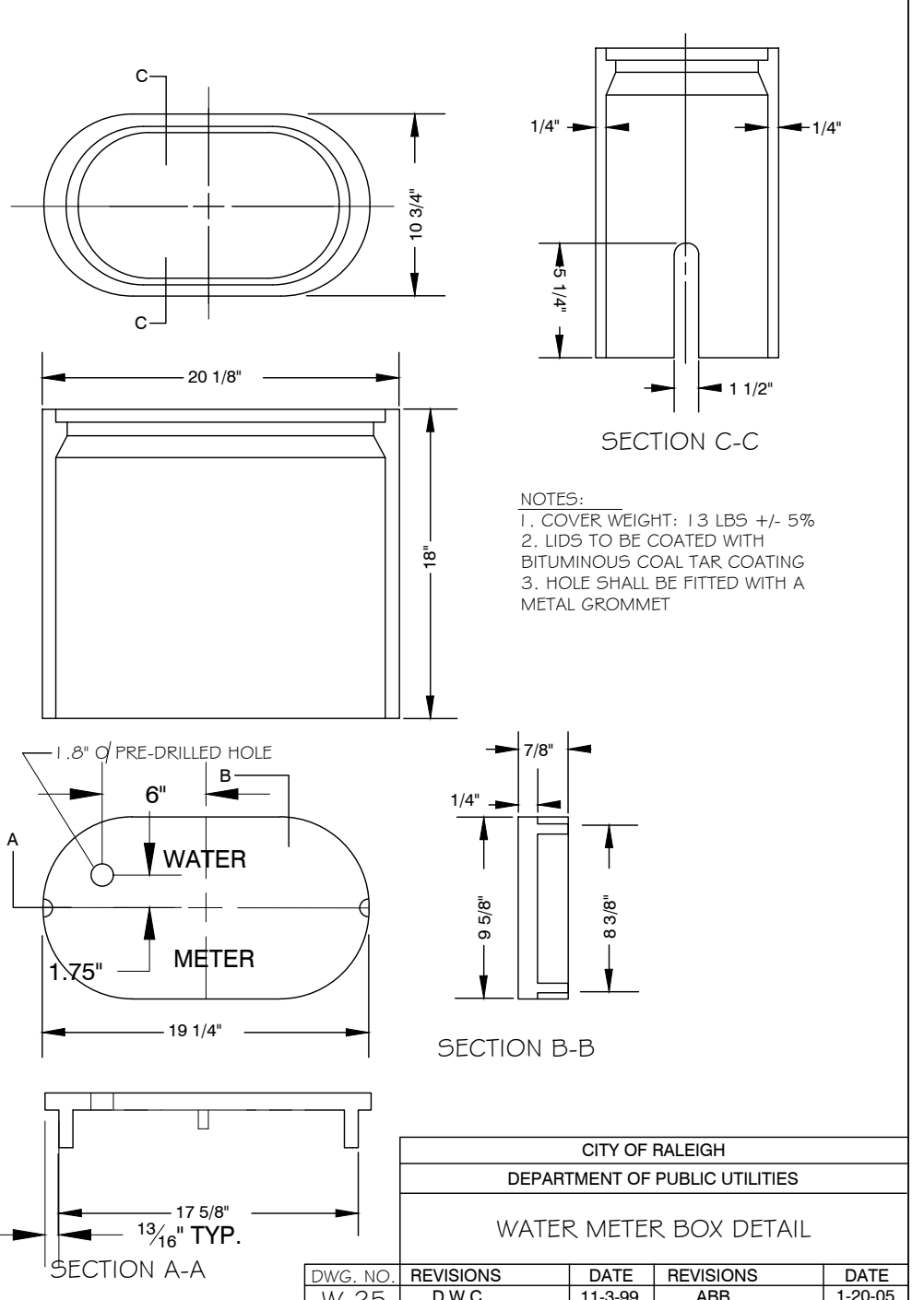
**REDUCED PRESSURE DETECTOR ASSEMBLY**  
 NOT TO SCALE



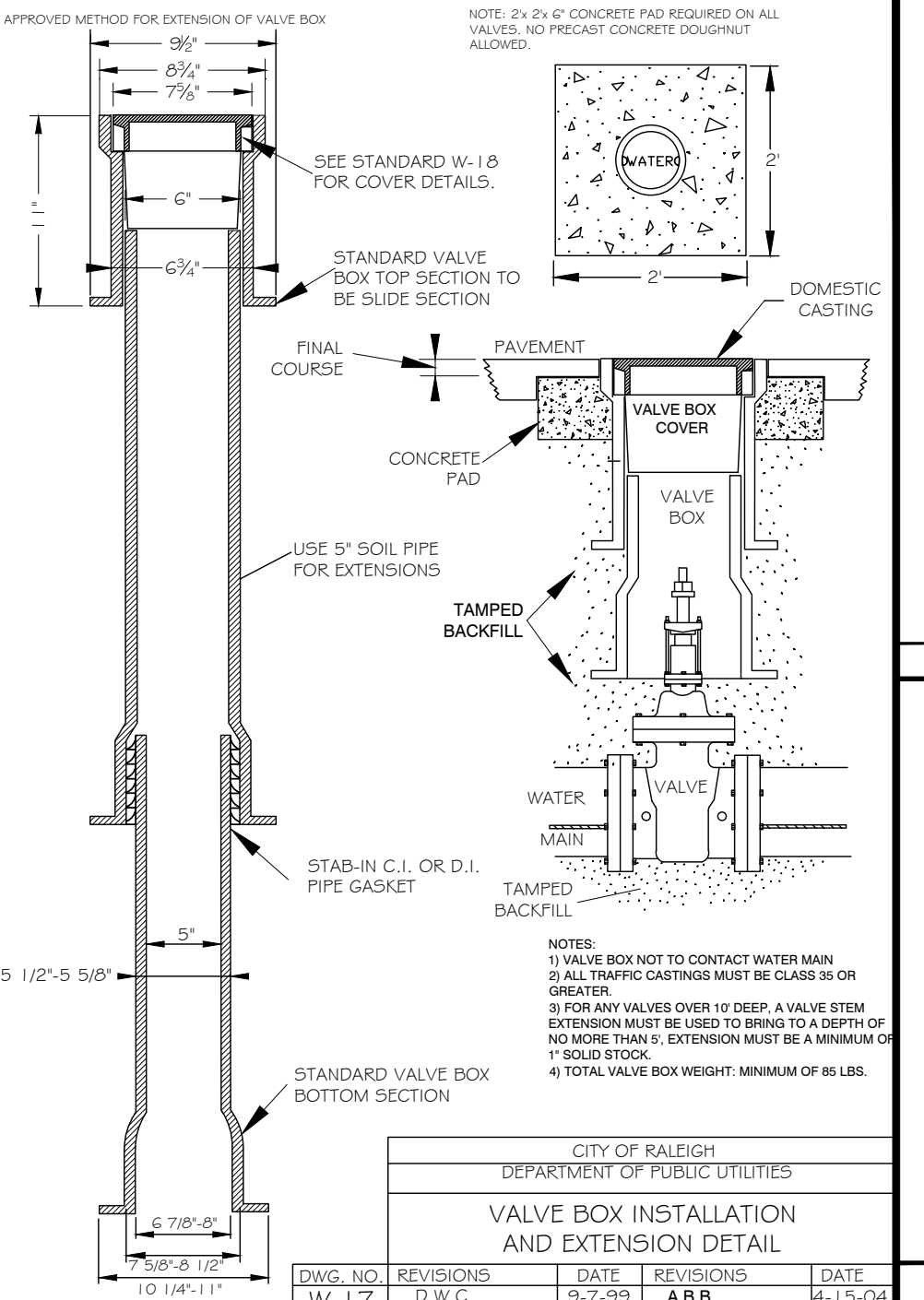
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-9	D.W.C.	3-1-87	RRH	3-31-00
		9-7-99	D.H.L.	6-16-08



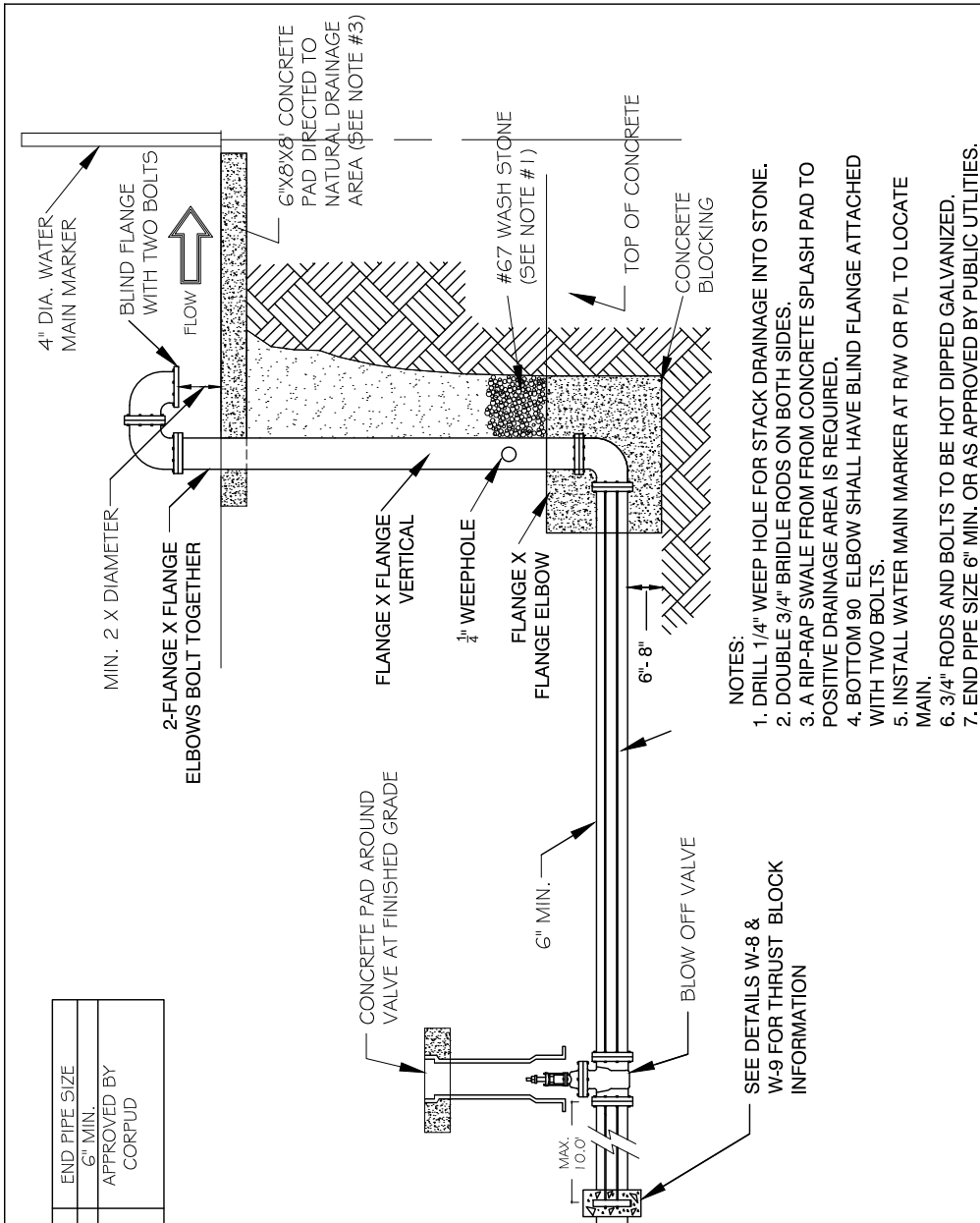
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-3	MAB	4-30-16	REVISIONS	
	KAT	9-15-17		



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-25	D.W.C.	11-3-99	ABB	1-20-05
	RRH	3-31-00	J.P.S.	11-4-10



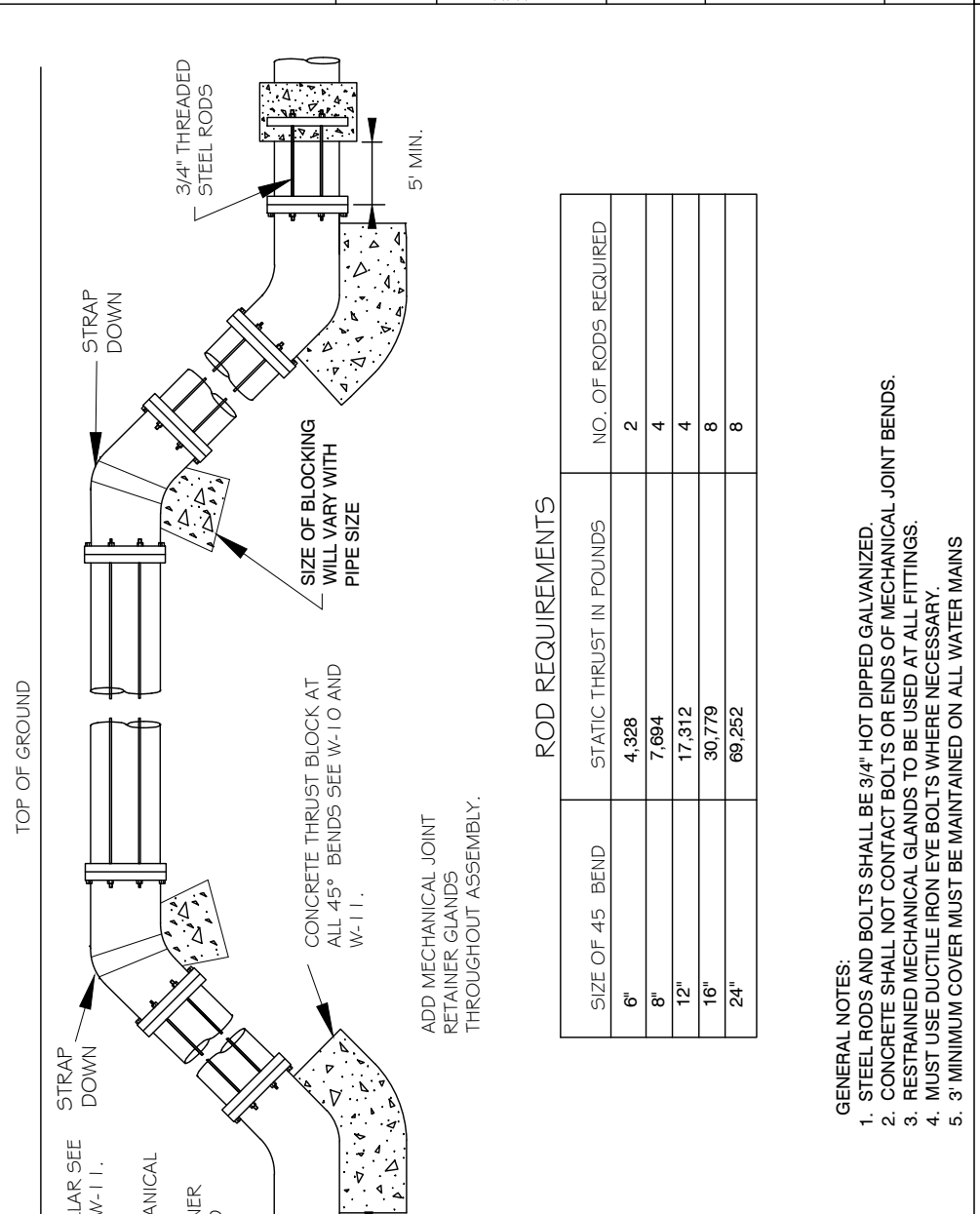
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-17	D.W.C.	9-7-99	ABB	4-15-04
	RRH	3-31-00	DHL	9-16-07



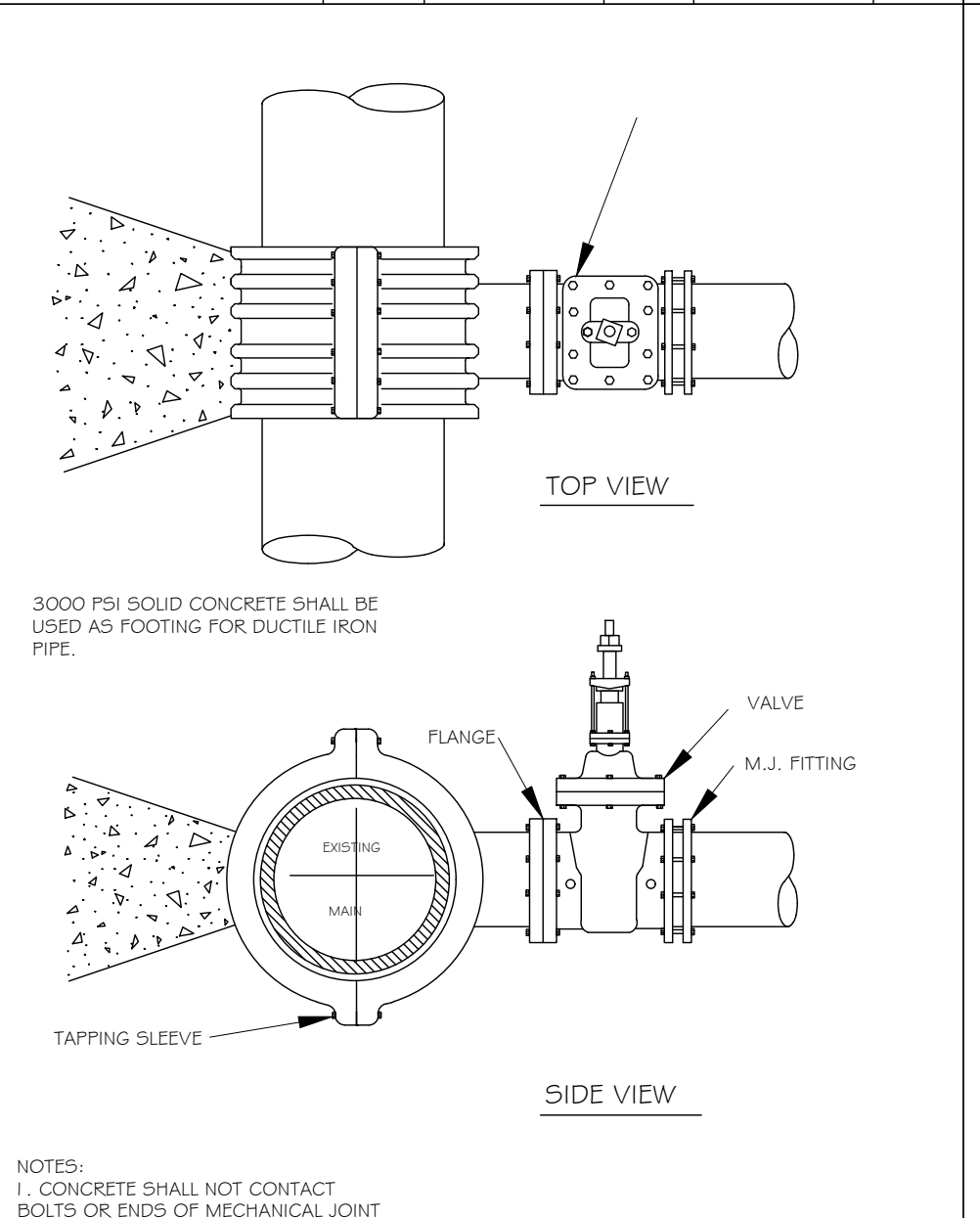
**REACTION BEARING AREAS FOR HORIZONTAL WATER PIPE BENDS**  
 BASED ON TEST PRESSURE OF 200 P.S.I.

ALL AREAS GIVEN IN SQUARE FEET

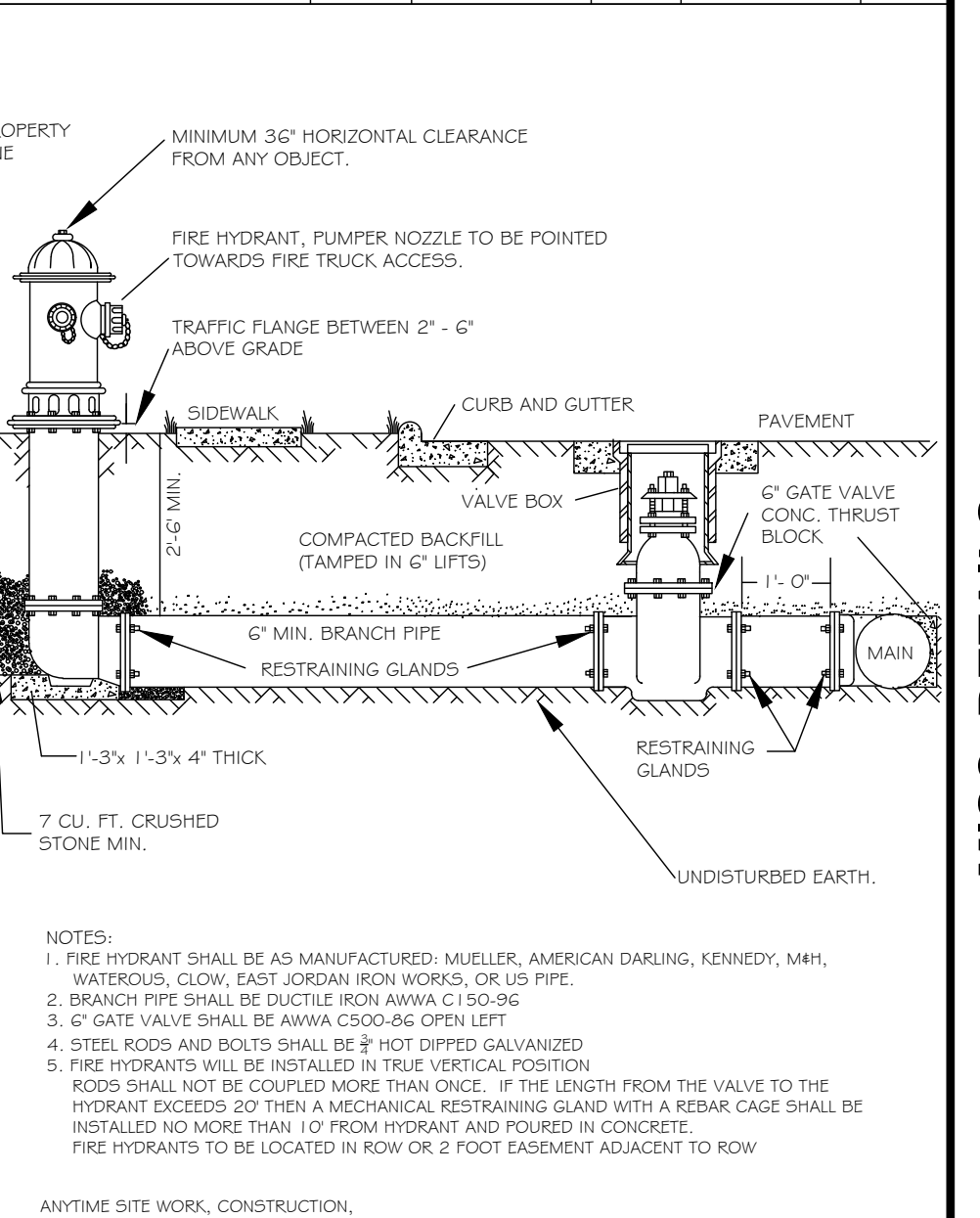
PIPE SIZE	90°	45°	15°	15°	15°	15°	15°	15°	15°
6"	1,108	1	1	1	1	1	1	1	1
8"	1,970	1	1	1	1	1	1	1	1
10"	2,832	1	1	1	1	1	1	1	1
12"	3,694	1	1	1	1	1	1	1	1
14"	4,556	1	1	1	1	1	1	1	1
16"	5,418	1	1	1	1	1	1	1	1
18"	6,280	1	1	1	1	1	1	1	1
20"	7,142	1	1	1	1	1	1	1	1
22"	8,004	1	1	1	1	1	1	1	1
24"	8,866	1	1	1	1	1	1	1	1
26"	9,728	1	1	1	1	1	1	1	1
28"	10,590	1	1	1	1	1	1	1	1
30"	11,452	1	1	1	1	1	1	1	1
32"	12,314	1	1	1	1	1	1	1	1
34"	13,176	1	1	1	1	1	1	1	1
36"	14,038	1	1	1	1	1	1	1	1
38"	14,900	1	1	1	1	1	1	1	1
40"	15,762	1	1	1	1	1	1	1	1
42"	16,624	1	1	1	1	1	1	1	1
44"	17,486	1	1	1	1	1	1	1	1
46"	18,348	1	1	1	1	1	1	1	1
48"	19,210	1	1	1	1	1	1	1	1
50"	20,072	1	1	1	1	1	1	1	1
52"	20,934	1	1	1	1	1	1	1	1
54"	21,796	1	1	1	1	1	1	1	1
56"	22,658	1	1	1	1	1	1	1	1
58"	23,520	1	1	1	1	1	1	1	1
60"	24,382	1	1	1	1	1	1	1	1



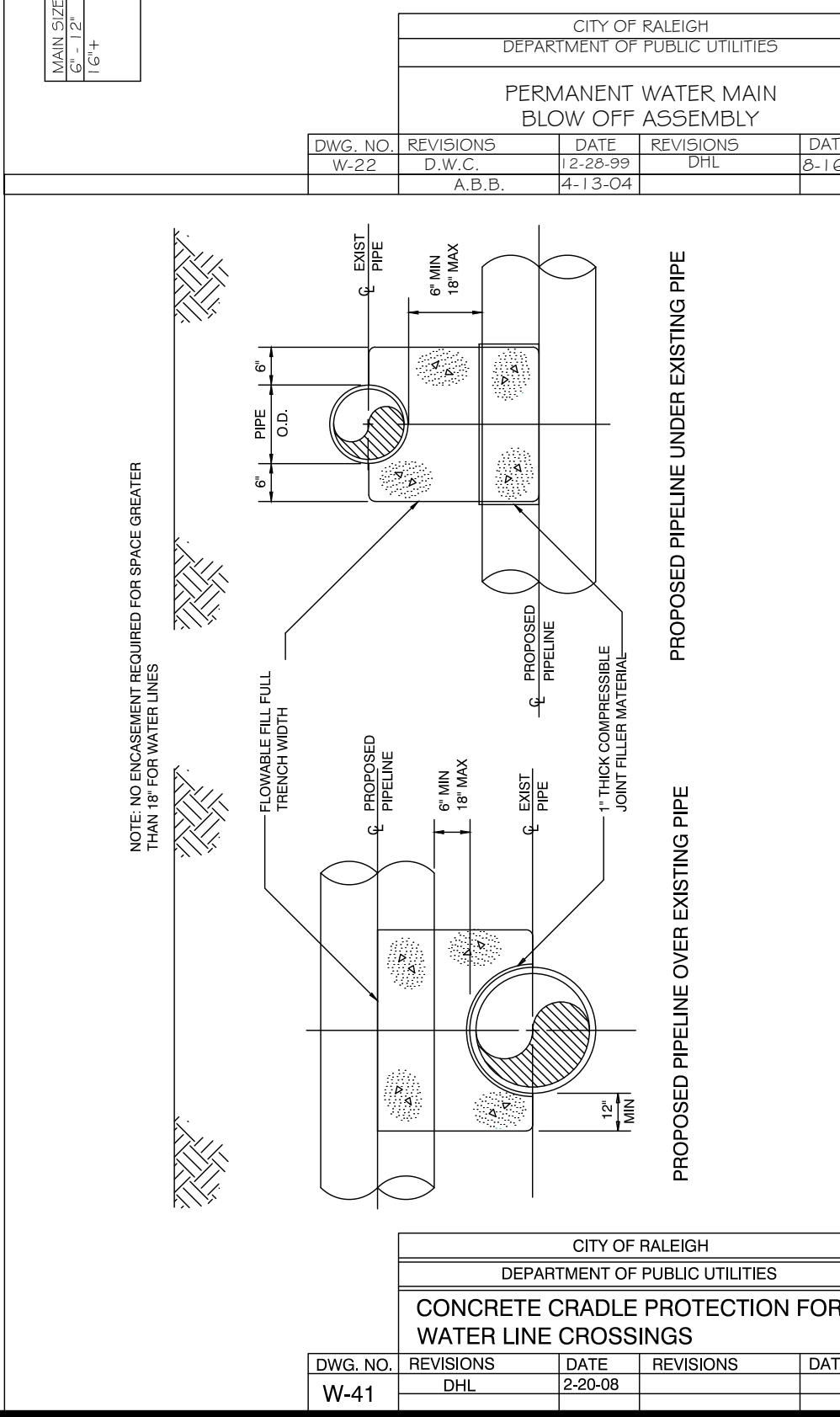
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-12	Y.C.A.	4-6-04	J.P.S.	11-1-10
	D.H.L.	6-18-08		



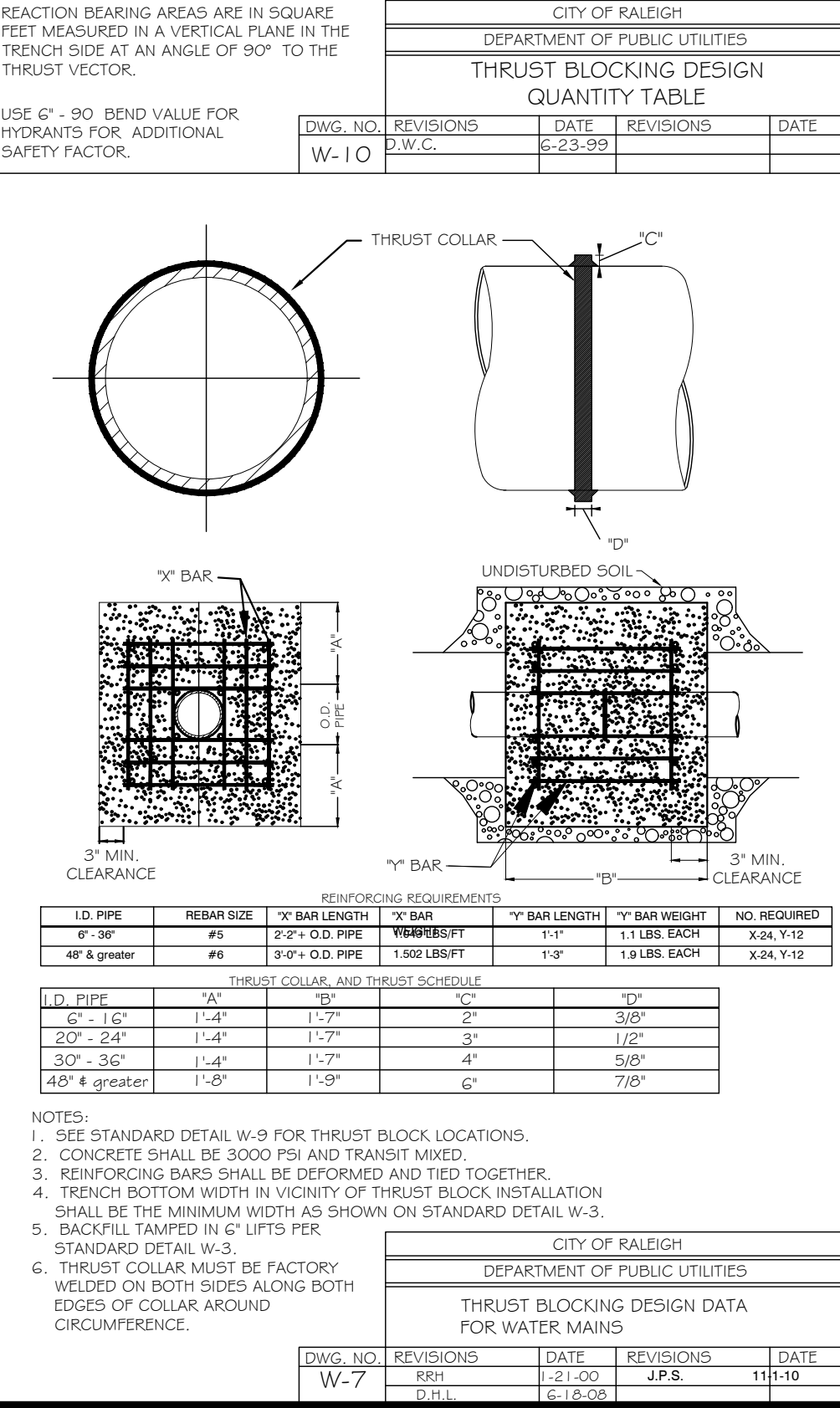
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-14	Y.C.A.	12-31-91	RRH	3-31-00
	D.W.C.	9-7-99	J.P.S.	11-1-10



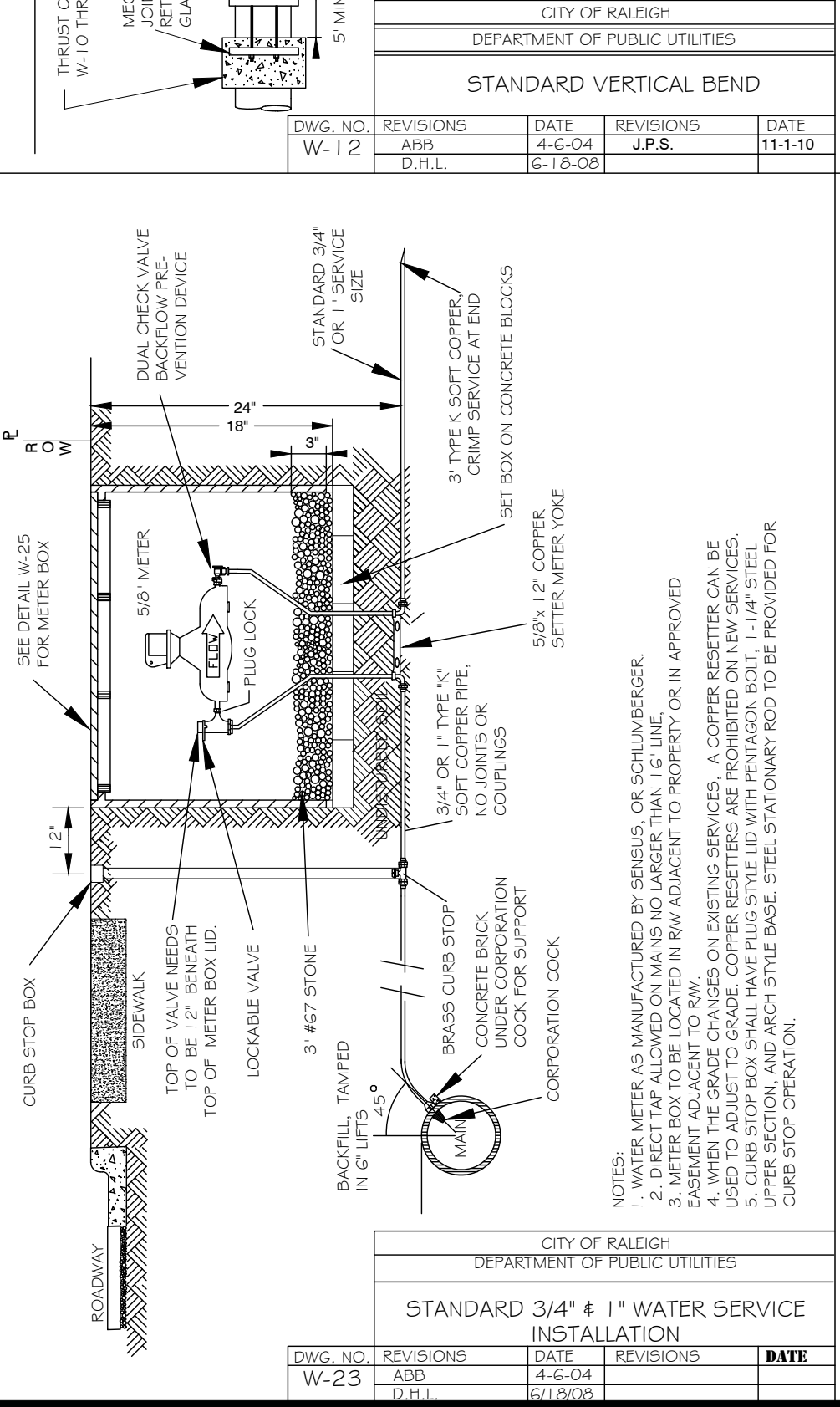
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-4	ABB	4-6-04	FAP	2/7/00
	DHL	2/14/08		



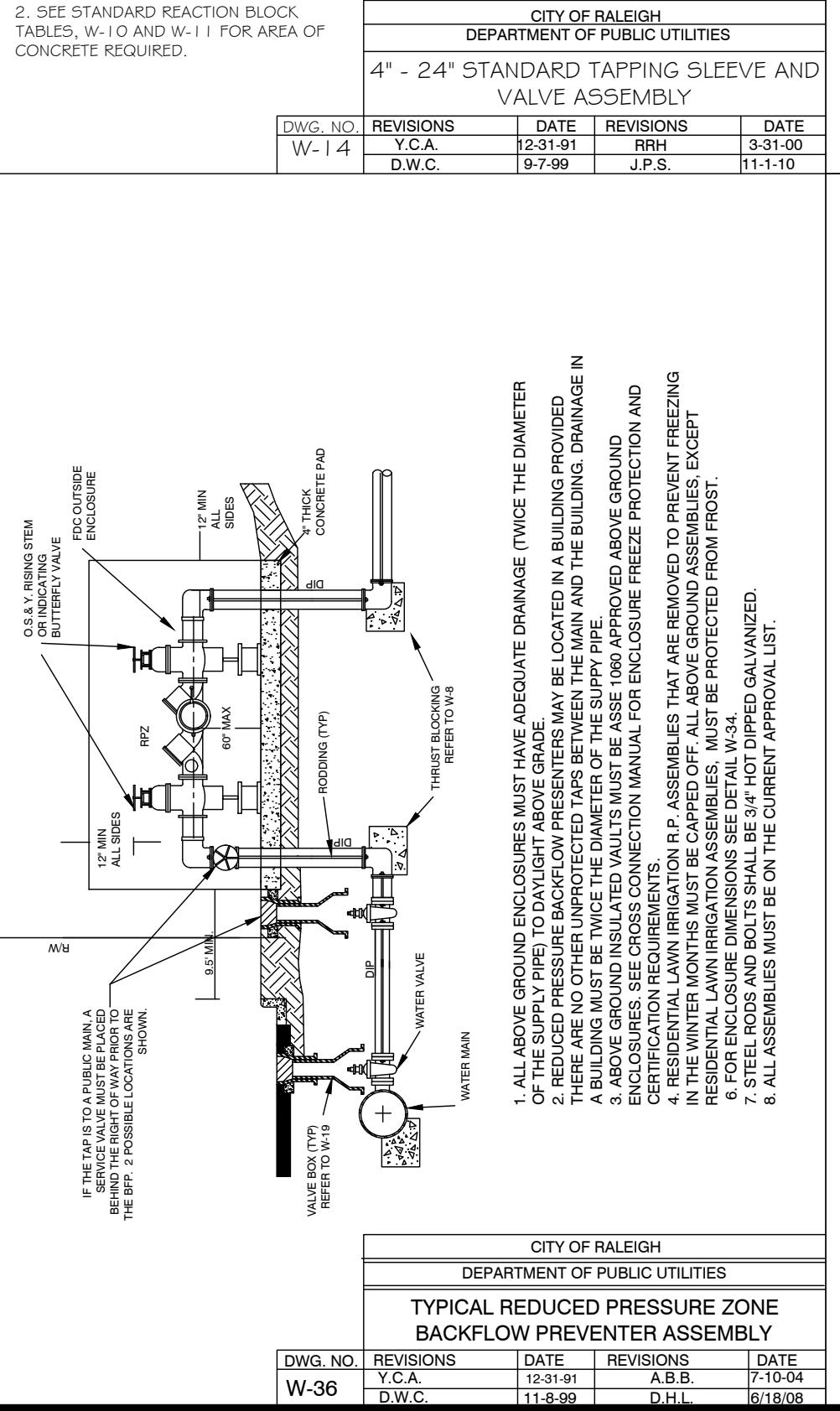
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-22	D.W.C.	2-28-99	DHL	8-1-07
	A.B.B.	8-1-04		



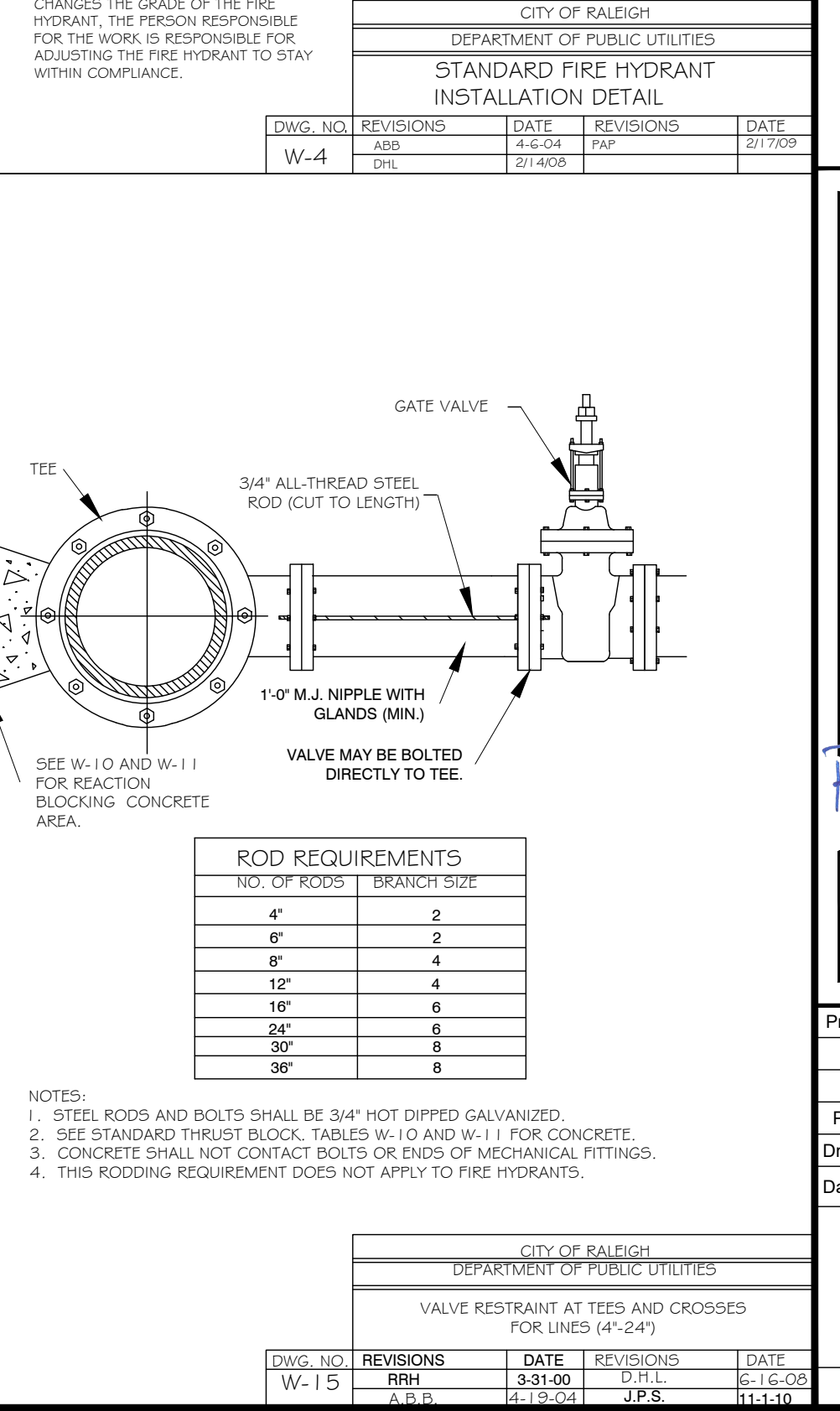
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-10	D.W.C.	6-23-99		



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-23	Y.C.A.	4-6-04	A.B.B.	7-10-04
	D.H.L.	6/18/08		



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-36	Y.C.A.	12-31-91	A.B.B.	7-10-04
	D.W.C.	11-8-99	DHL	6/18/08



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-15	RRH	3-31-00	A.B.B.	6-16-08
	A.B.B.	2-12-04	J.P.S.	11-4-10

**CROSLAND SOUTHEAST**

REVISIONS:

#	DATE	DESCRIPTION
2	14-NOV-21	ISSUED FOR CONSTRUCTION
1	16-OCT-23	SDP 23-05 / CID 23-01 COMBINED REVIEW

**MISC. DETAILS**

**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**

Town of Rolesville Project No. SDP 23-05 & CID 23-01

Rolesville, Wake County, North Carolina

S Main St. / US 401 and Virginia Water Drive

**ARK CONSULTING GROUP PLLC**

7755-B Charles Blvd  
 (757) 558-0888  
 www.arkconsultinggroup.com

Professional Engineer  
 License No. 31970  
 State of North Carolina

Project Manager: BCF  
 Drawn by: DLC  
 Checked by: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C7.02**

CID SDP

**SITE PERMITTING APPROVAL**

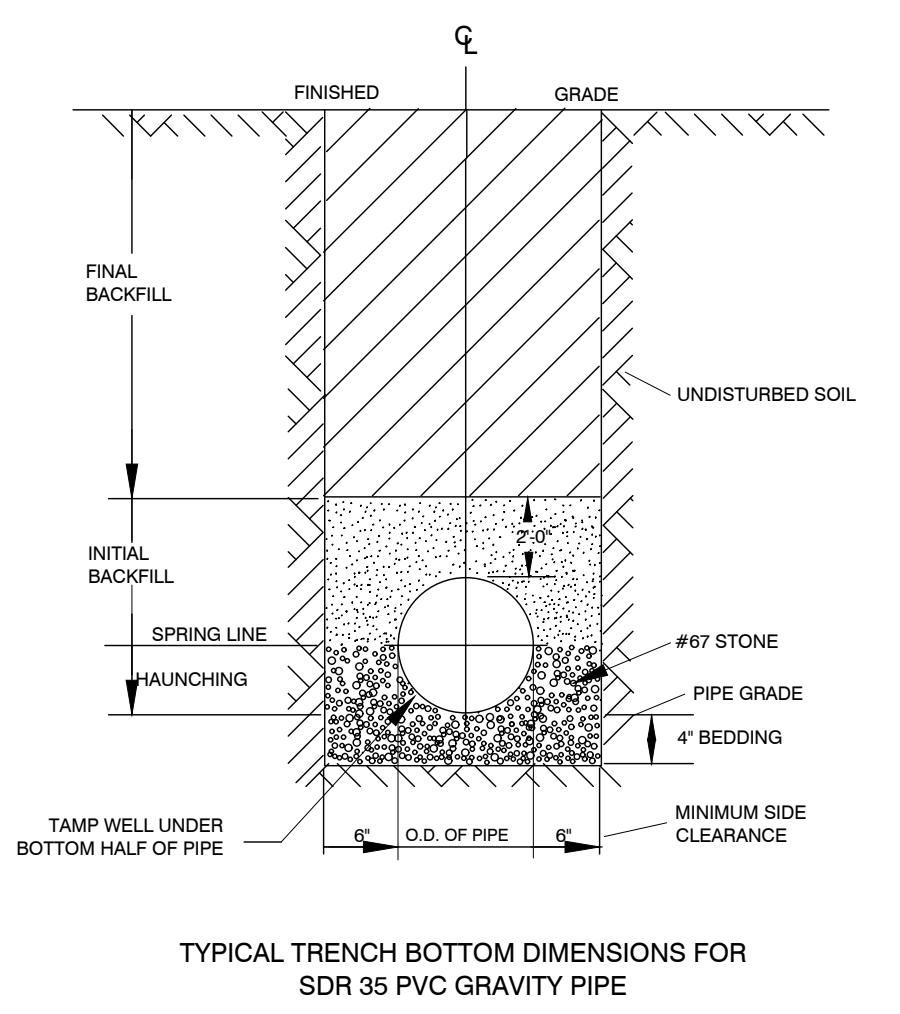
Water and Sewer Permits (if applicable)  
 The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **S-5381**  
 The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and Construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **W-4074**  
 The City of Raleigh consents to the connection to its public sewer system and extensions of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook. City of Raleigh Public Utilities Department Permit # **S-5380(P)**

**CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION**

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to the approval once issued will invalidate this approval.

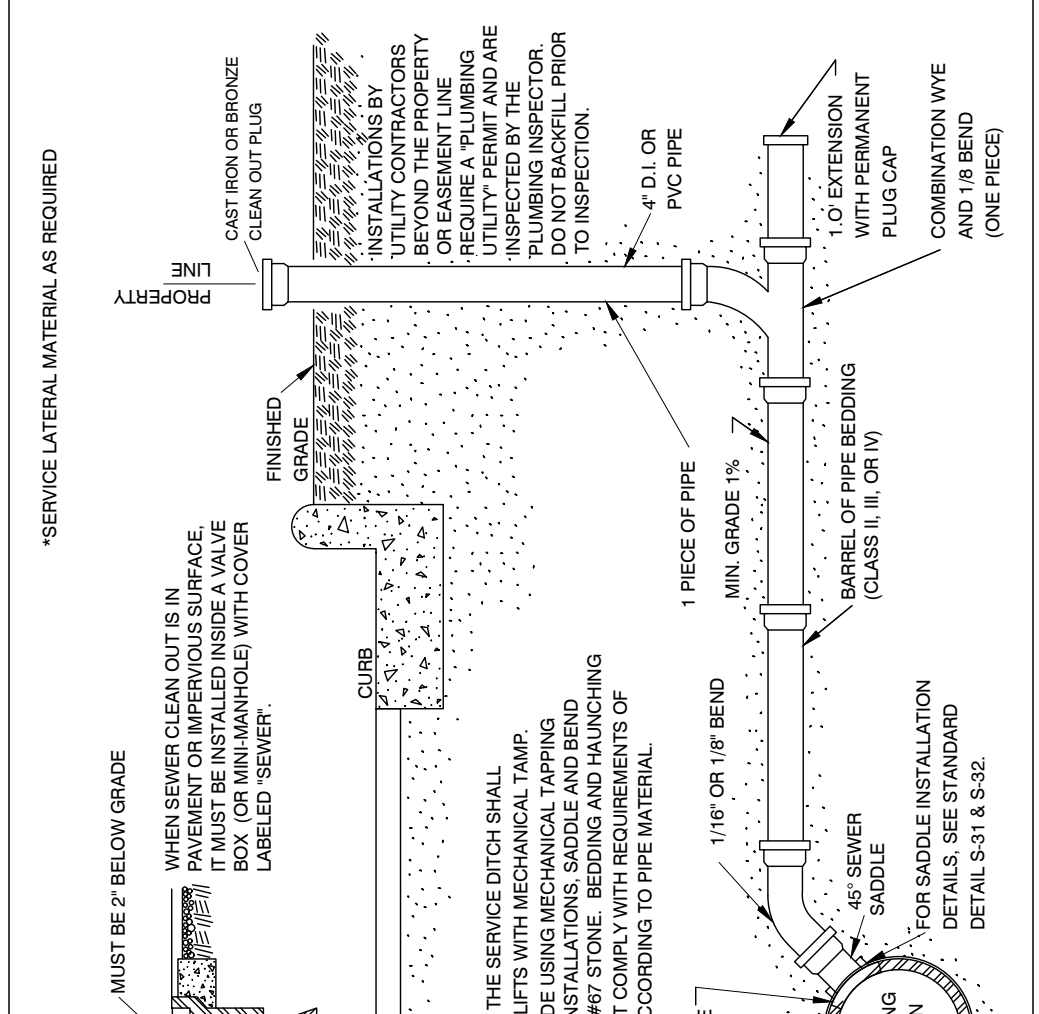
City of Raleigh Development Approval: \_\_\_\_\_  
 City of Raleigh Review Officer: \_\_\_\_\_



**TYPICAL TRENCH BOTTOM DIMENSIONS FOR SDR 35 PVC GRAVITY PIPE**

NOTES:  
 1. FOR TRENCHES REQUIRING SHORING AND BRACING, DIMENSIONS SHALL BE TAKEN FROM THE INSIDE FACE OF THE SHORING AND BRACING.  
 2. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL.  
 3. ALL BACKFILL MATERIAL SHALL BE SUITABLE NATIVE MATERIAL.  
 4. BACKFILL SHALL BE TAMPED IN 6" LIFTS IN TRAFFIC AREAS, 12" IN NON-TRAFFIC AREAS.

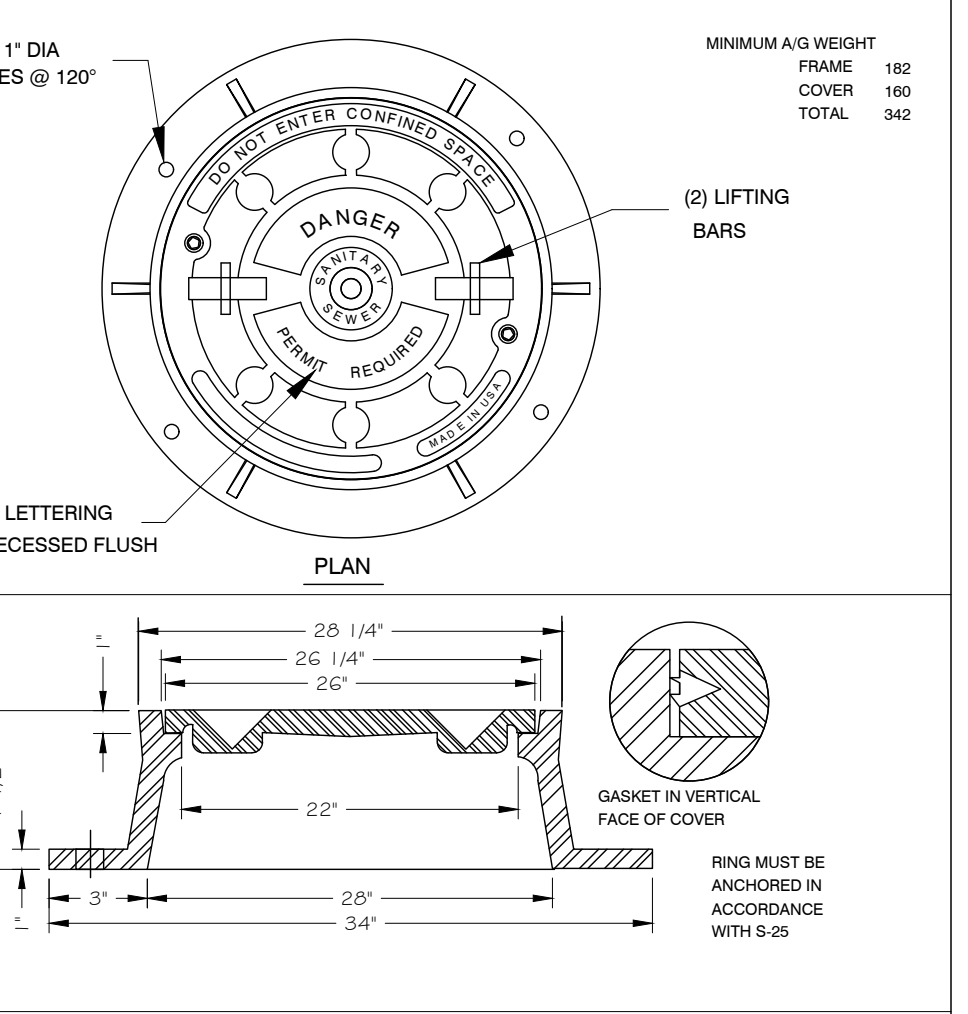
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
TRENCH BOTTOM DIMENSIONS AND BACKFILLING REQUIREMENTS FOR PVC GRAVITY SEWER MAIN			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-5			
	TO NOTES	3-1-87	D.W.C.
		7-2-82	RRH
			3-30-00



**TYPICAL SANITARY SEWER LATERAL CONNECTION**

NOTES:  
 THE FULL LENGTH OF THE SERVICE DITCH SHALL BE COMPACTED IN 6" LIFTS WITH MECHANICAL TAMP. NO ROCKS OR BOULDERS 4" OR LARGER TO BE USED IN INITIAL BACKFILL. FOR PIPE INSTALLATIONS, SADDLE AND BEND MUST BE REDDED IN #67 STONE. BEDDING AND HAUNCHING DETAILS SHALL BE AS SHOWN IN THE STANDARD DETAILS S-401 THROUGH S-405.  
 SADDLE OR IN-LINE WYE: 87, 101 OR 12" TAPPING  
 1/16" OR 1/8" BEND

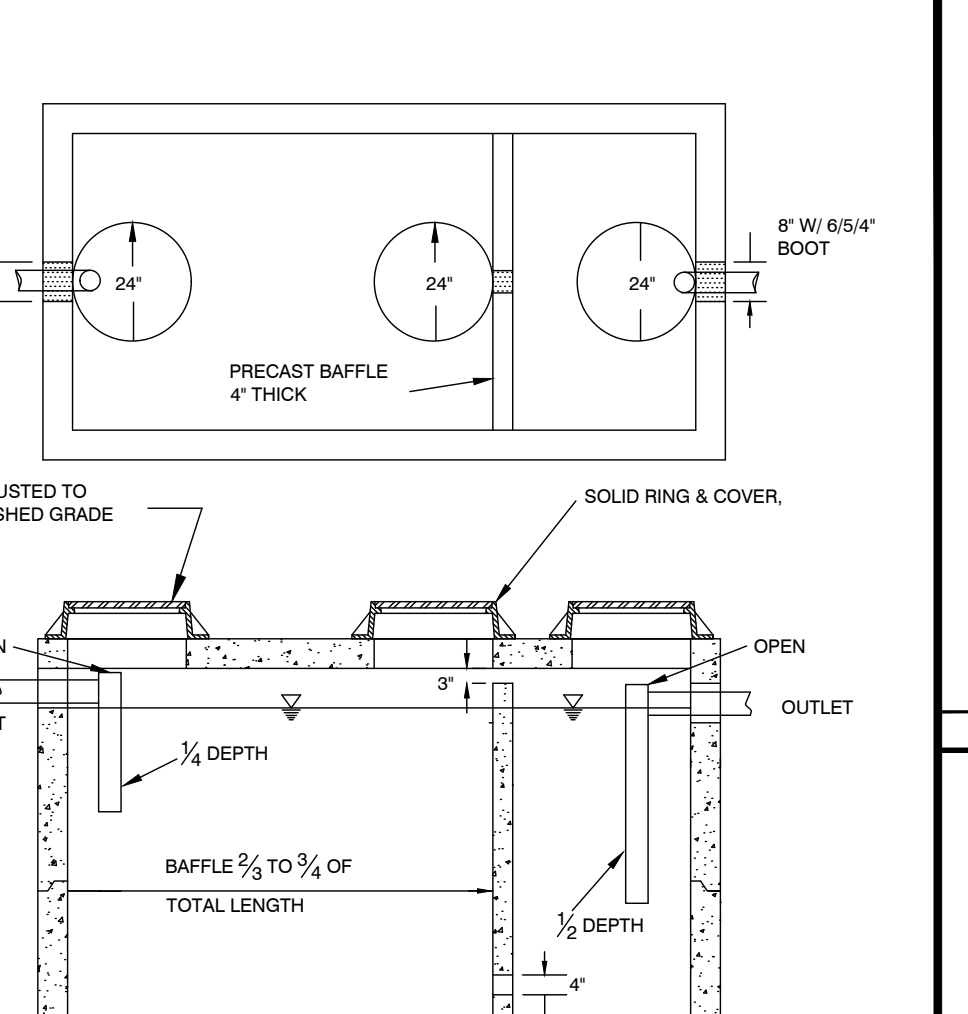
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
TYPICAL SANITARY SEWER LATERAL CONNECTION			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-30			
	Y.C.A.	6-92	A.B.B.
	RRH	3-30-00	D.H.L.
			6-18-08



**TYPICAL LIFTING DEVICE**

NOTES:  
 RING MUST BE ANCHORED IN ACCORDANCE WITH S-25  
 5/8" Ø STAINLESS STEEL ROD

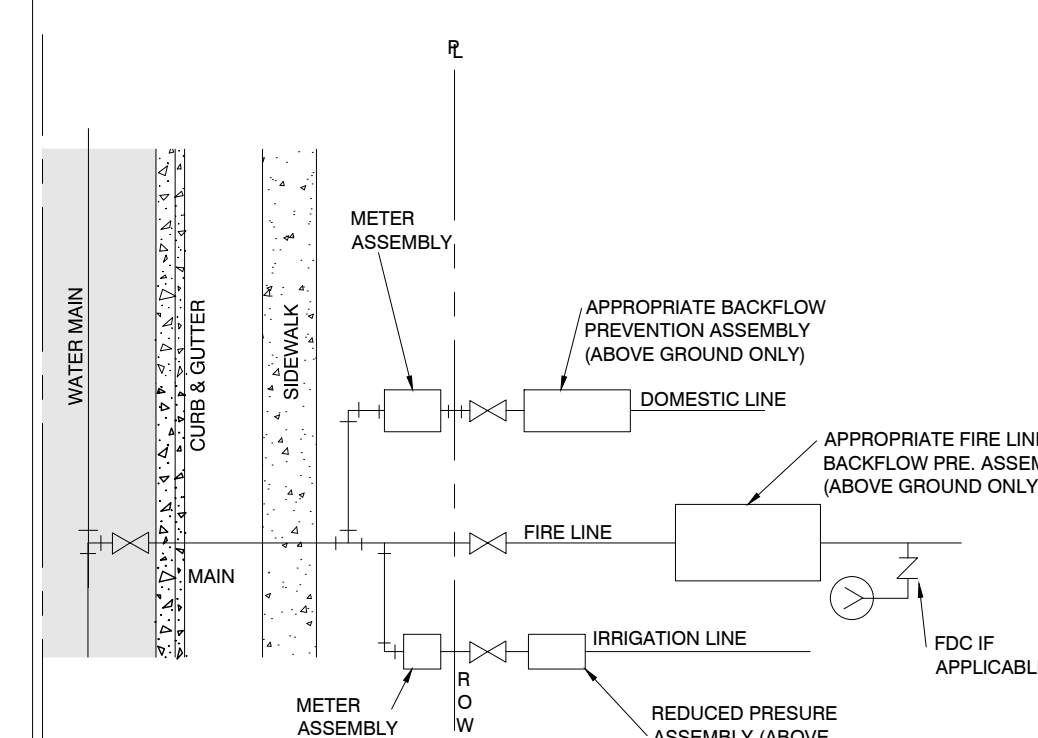
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
MANHOLE FRAME AND WATERTIGHT COVER			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-26			
	Y.C.A.	3-1-87	A.B.B.
	RRH	3-30-00	D.H.L.
			6-18-08



**GREASE INTERCEPTOR**

NOTES:  
 1. REINFORCEMENT: H-20 BRIDGE LOADING (TRAFFIC RATED)  
 2. CONCRETE: 4000 PSI @ 28 DAYS  
 3. EARTH COVER: 0 TO 5 MAX.

CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
GREASE INTERCEPTOR			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-40			
	RRH	3/9/00	D.H.L.
	ABB	3/19/04	
			6/18/08

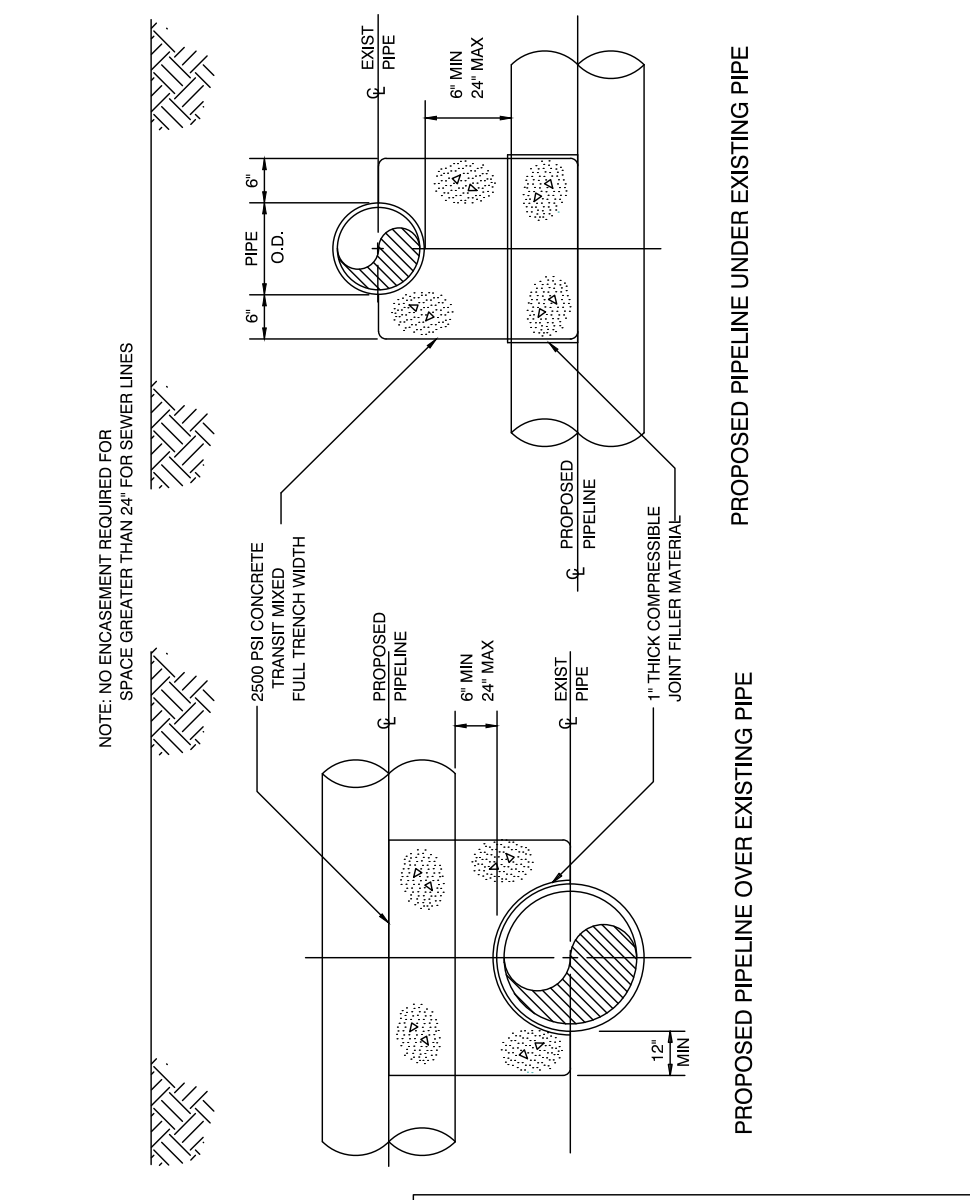


**FIRE, DOMESTIC & IRRIGATION OPTIONS SCHEMATIC**

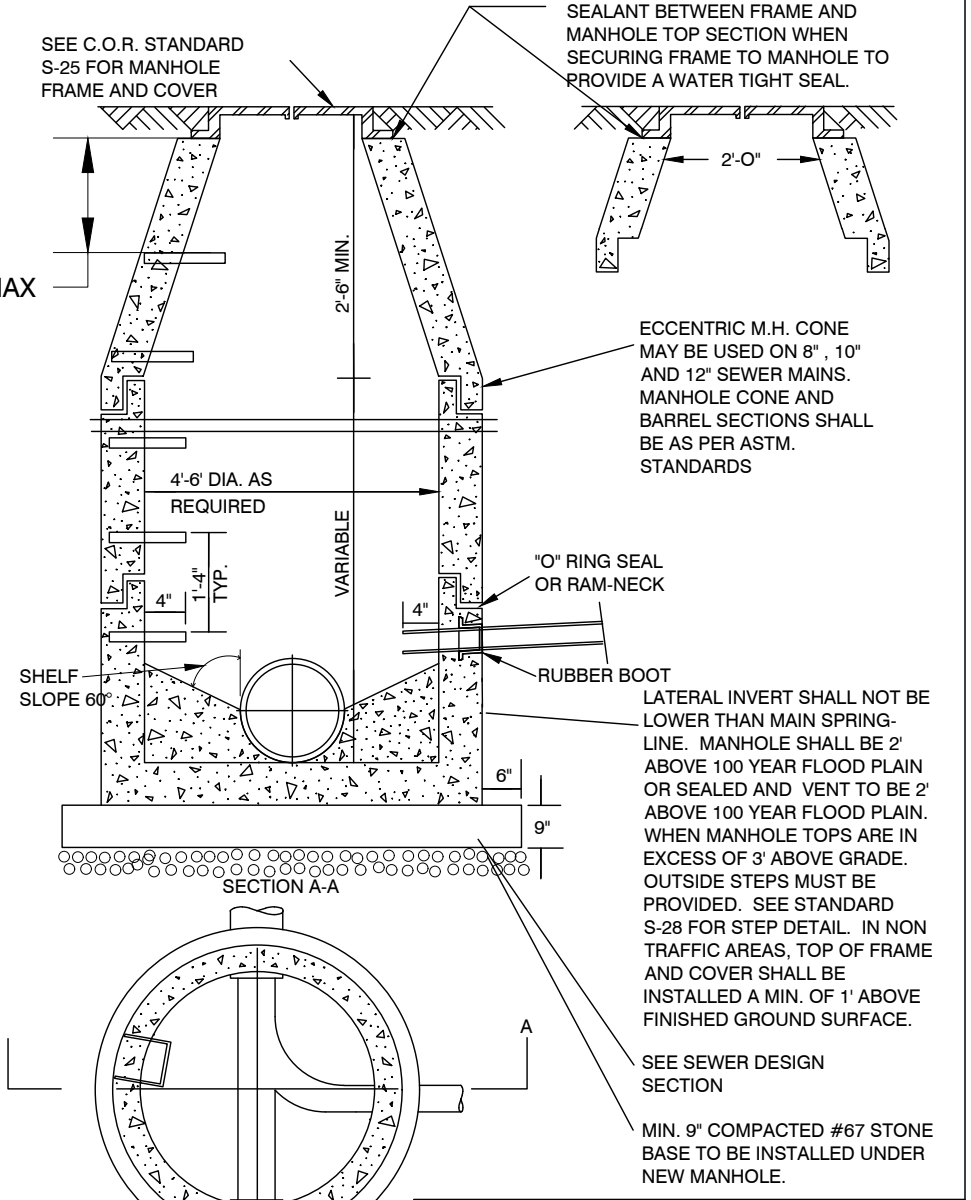
NOTE: NO ENGAGEMENT REQUIRED FOR PROTECTIVE TAP OF FIRE LINES

1. SERVICE TAPS FOR 2" AND SMALLER DOMESTIC SERVICES MAY BE BY CORPORATION COCKS. LARGER SERVICES WILL REQUIRE A TEE AND GATE VALVE OR TAPPING SLAVE AND VALVE ASSEMBLY AND 90° BEND.  
 2. DOMESTIC SERVICE TAPS SHALL BE ALLOWED ONLY ON 6" OR LARGER FIRE LINES BEFORE THE BACKFLOW ASSEMBLY.  
 3. ONE DOMESTIC TAP PER FIRE LINE ON STREET SIDE OF BACKFLOW. 4. FIRE LINE SHALL HAVE A FIRE HYDRANT OR BLOW OFF ASSEMBLY AT ITS END TO FACILITATE FLUSHING WHEN NEEDED.  
 5. IRRIGATION METER SHALL BE LOCATED ON THE SIDE OF DOMESTIC METER WITH INCREASING ADDRESSES.  
 6. THE BACKFLOW SHALL BE INSTALLED NO MORE THAN 10' FROM THE METER IN A VISIBLE LOCATION.  
 7. DOMESTIC/IRRIGATION BACKFLOW RISER STANDPIPE SHALL BE OF COPPER OR BRASS.  
 8. THE RP RELIEF VALVE SHALL BE A MINIMUM OF 12" ABOVE ANY MATERIAL (MULCH INCLUDED) OR GRADE.  
 9. A SERVICE VALVE IS REQUIRED AFTER THE METER BUT BEFORE THE BACKFLOW ASSEMBLY FOR MAINTENANCE AND REPLACEMENT PURPOSES.  
 10. THE INSTALLATION MUST ALSO MEET ALL CODE REQUIREMENTS PER THE NC PLUMBING CODE.

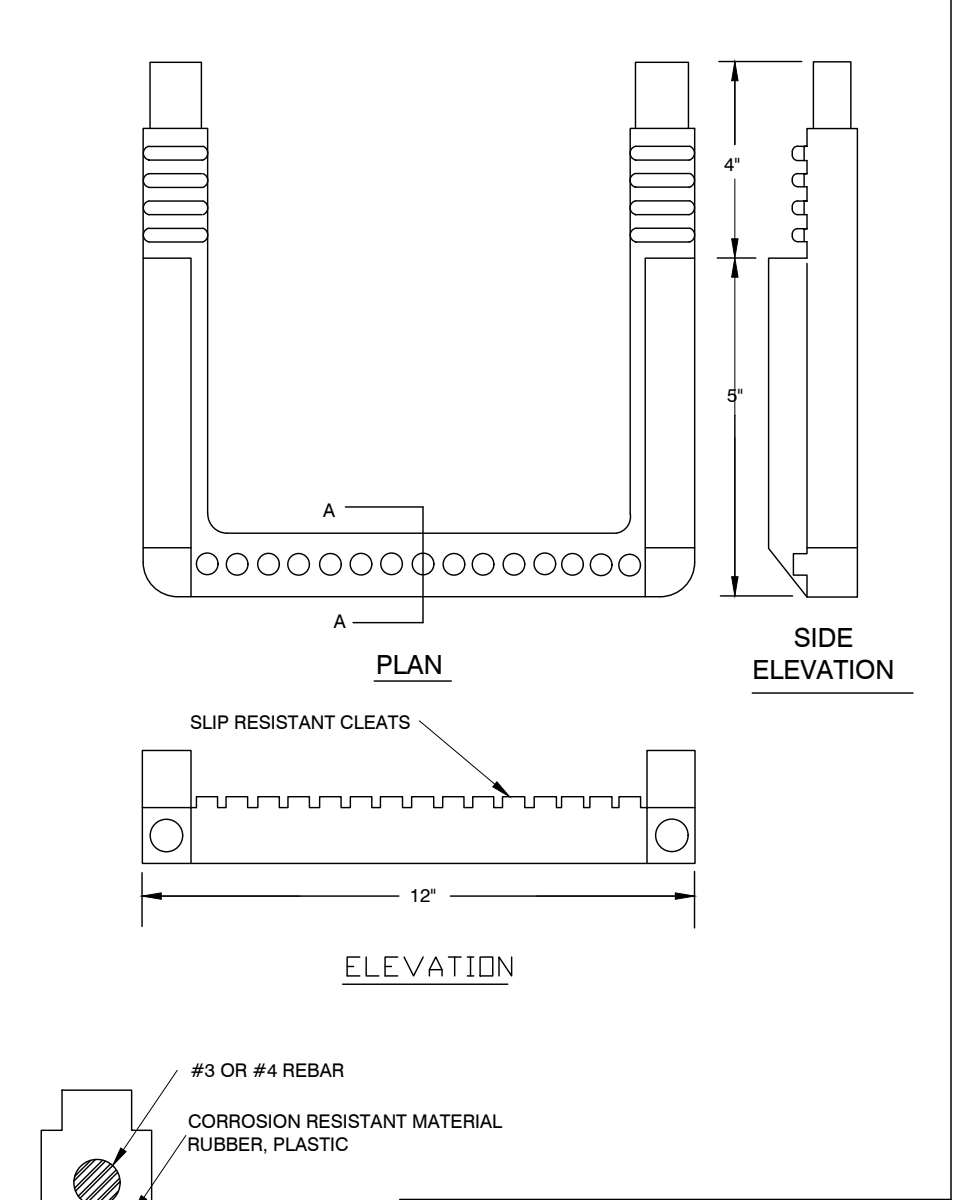
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
FIRE, DOMESTIC & IRRIGATION OPTIONS SCHEMATIC			
DWG. NO.	REVISIONS	DATE	REVISIONS
W-34			
	D.W.C.	11-18-99	A.B.B.
	RRH	3-31-00	D.H.L.
			6/18/08



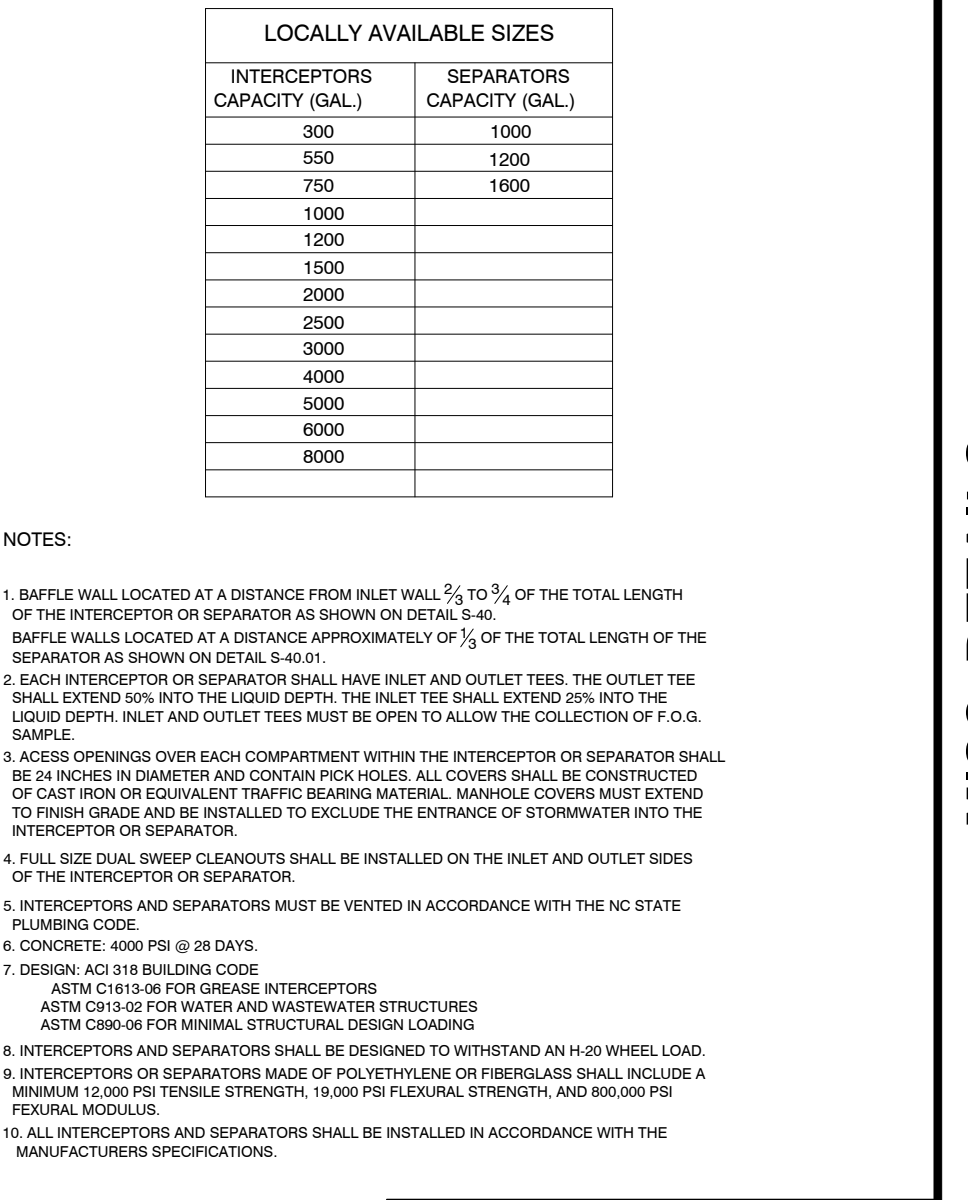
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
CONCRETE CRADLE PROTECTION FOR SEWER LINE CROSSINGS			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-49			
	D.H.L.	2-20-08	
			6/18/08



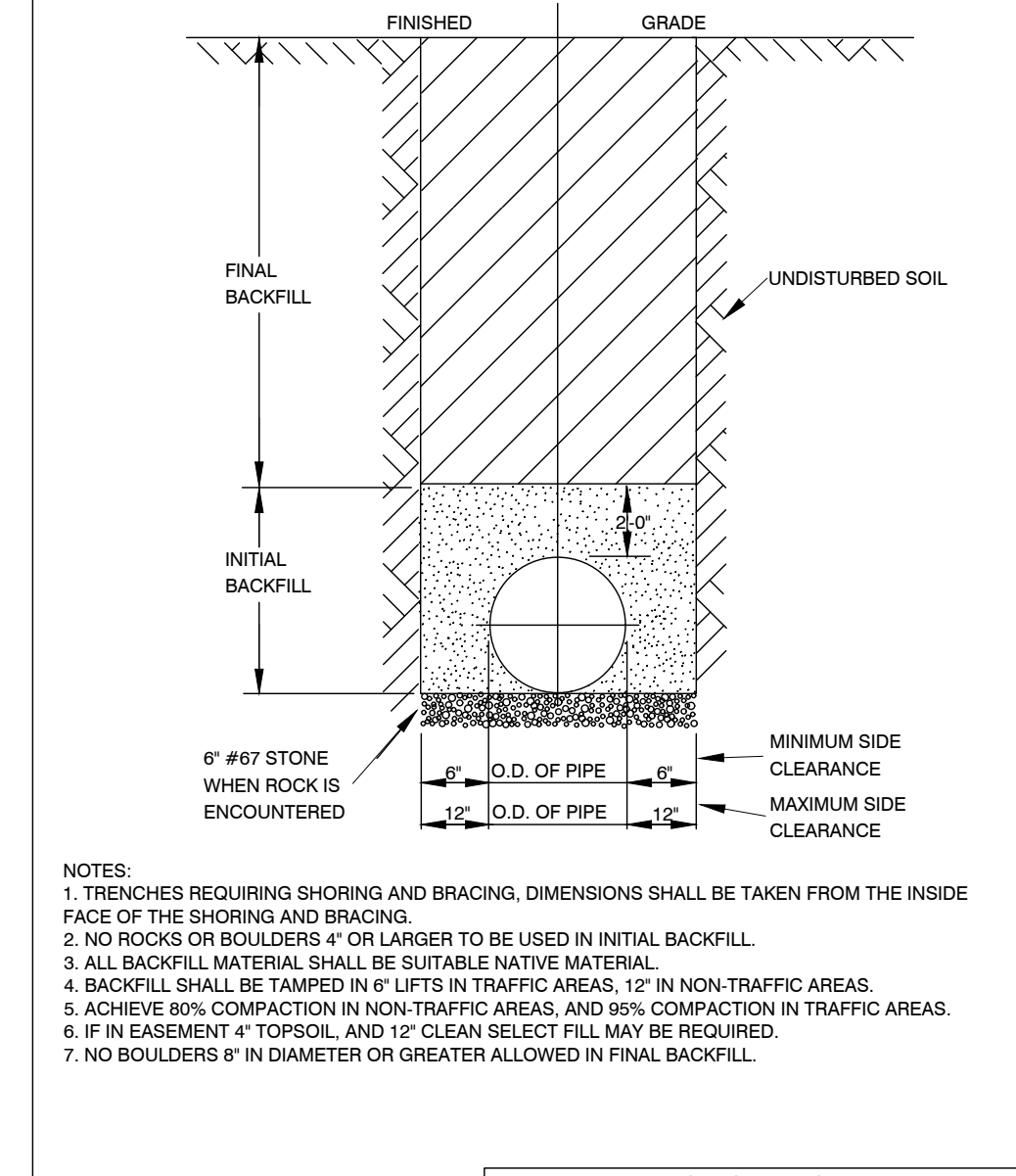
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
STANDARD PRECAST SANITARY SEWER MANHOLE			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-20			
	Y.C.A.	12-31-92	ABB
	RRH	3-30-00	D.H.L.
			6-18-08



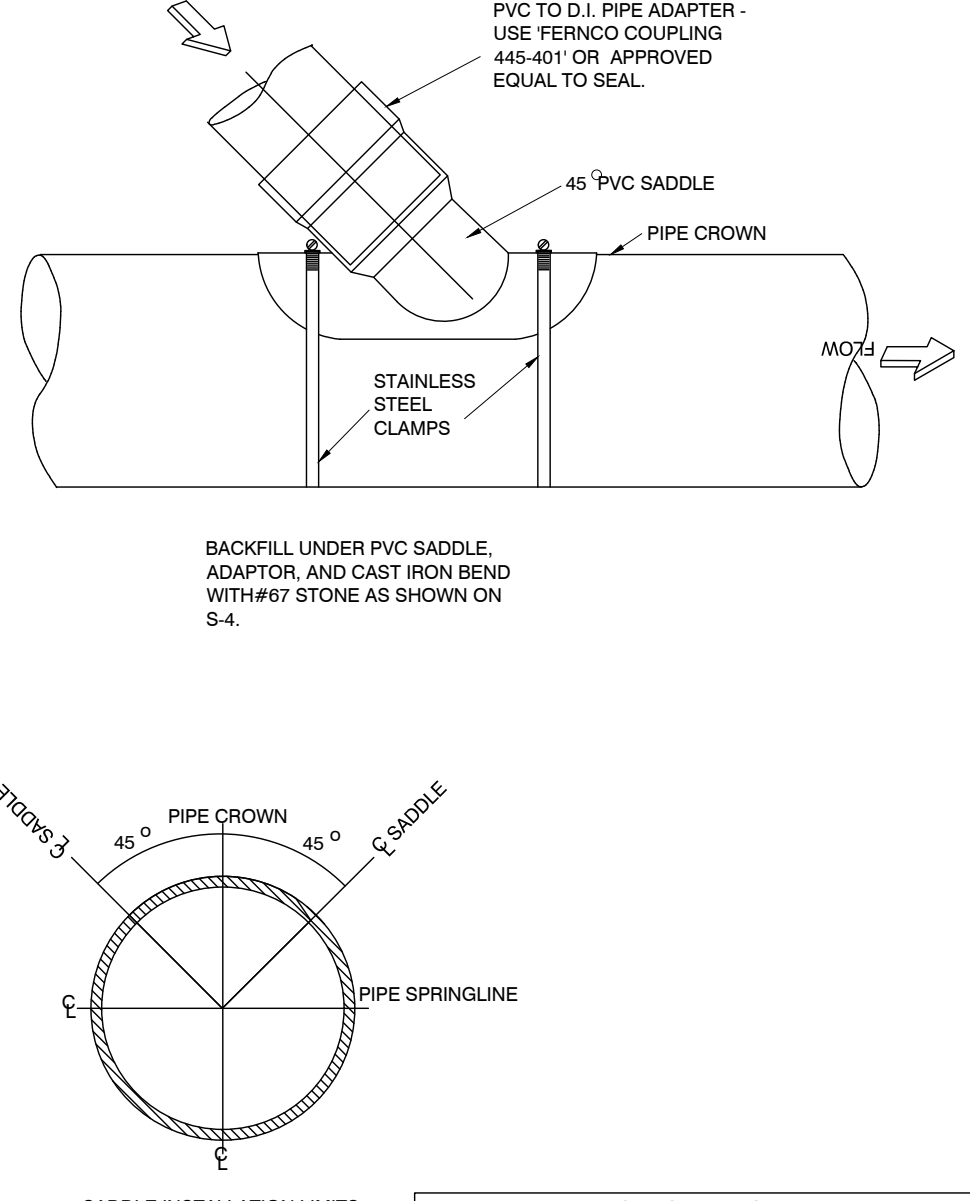
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
STANDARD SLIP RESISTANT MANHOLE STEP DETAIL			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-28			
	RRH	3-30-00	
			6/18/08



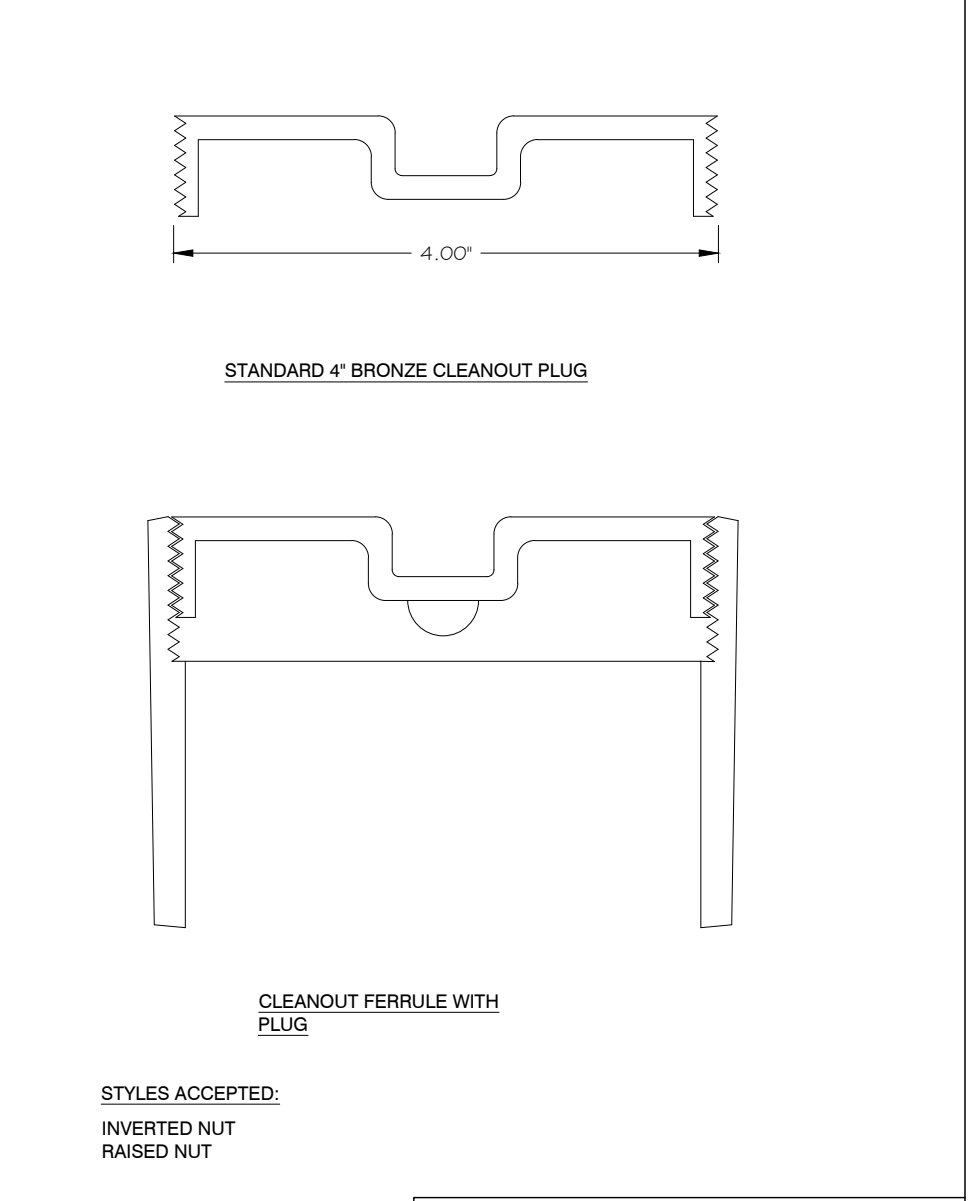
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
DIMENSIONS: GREASE INTERCEPTORS OIL-WATER SAND SEPARATORS			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-41			
	RRH	3/9/00	D.H.L.
	ABB	3/19/04	
			6/18/08



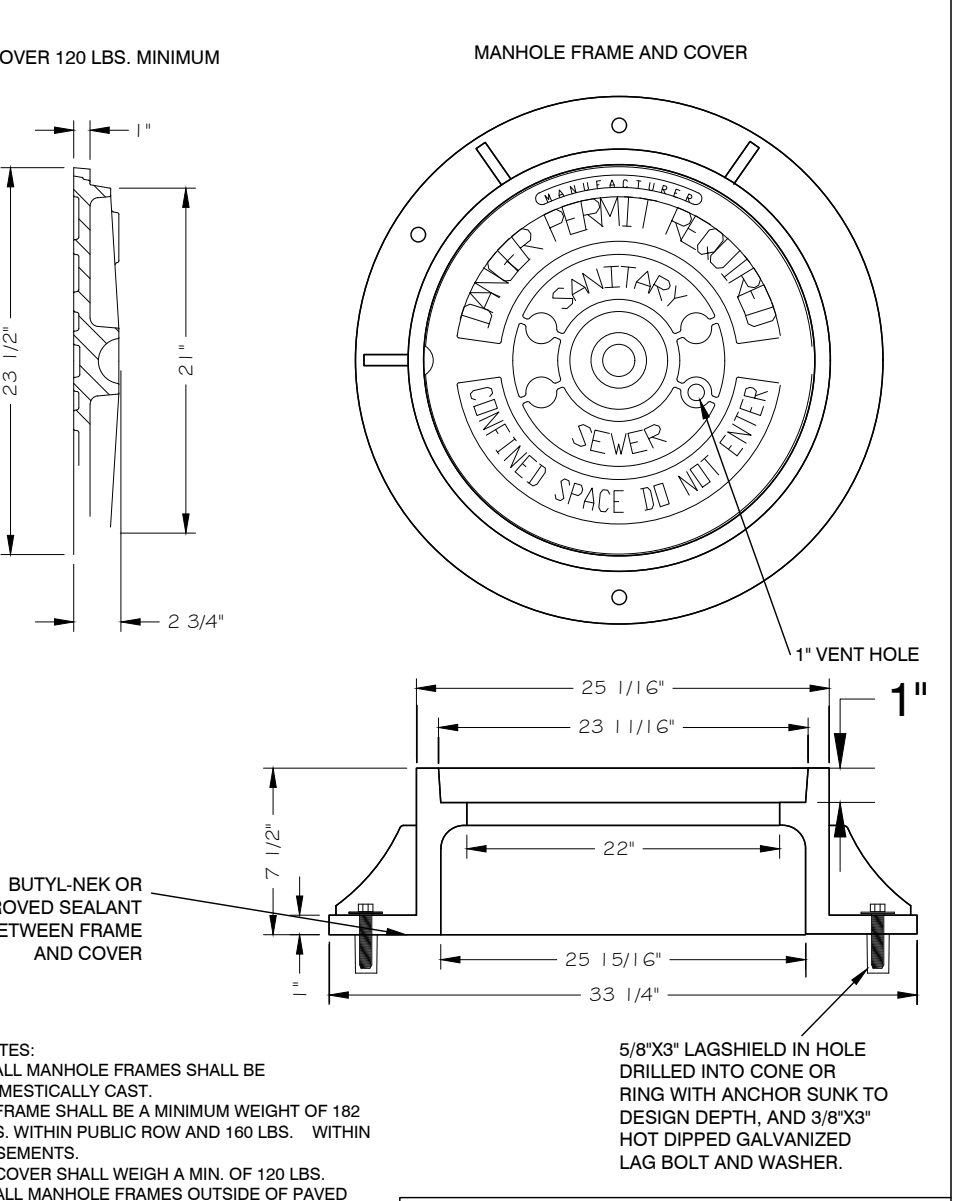
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
TRENCH BOTTOM DIMENSIONS & BACKFILLING REQUIREMENTS FOR DUCTILE IRON			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-4			
	D.W.C.	9-3-99	
	RRH	3-30-00	
			6/18/08



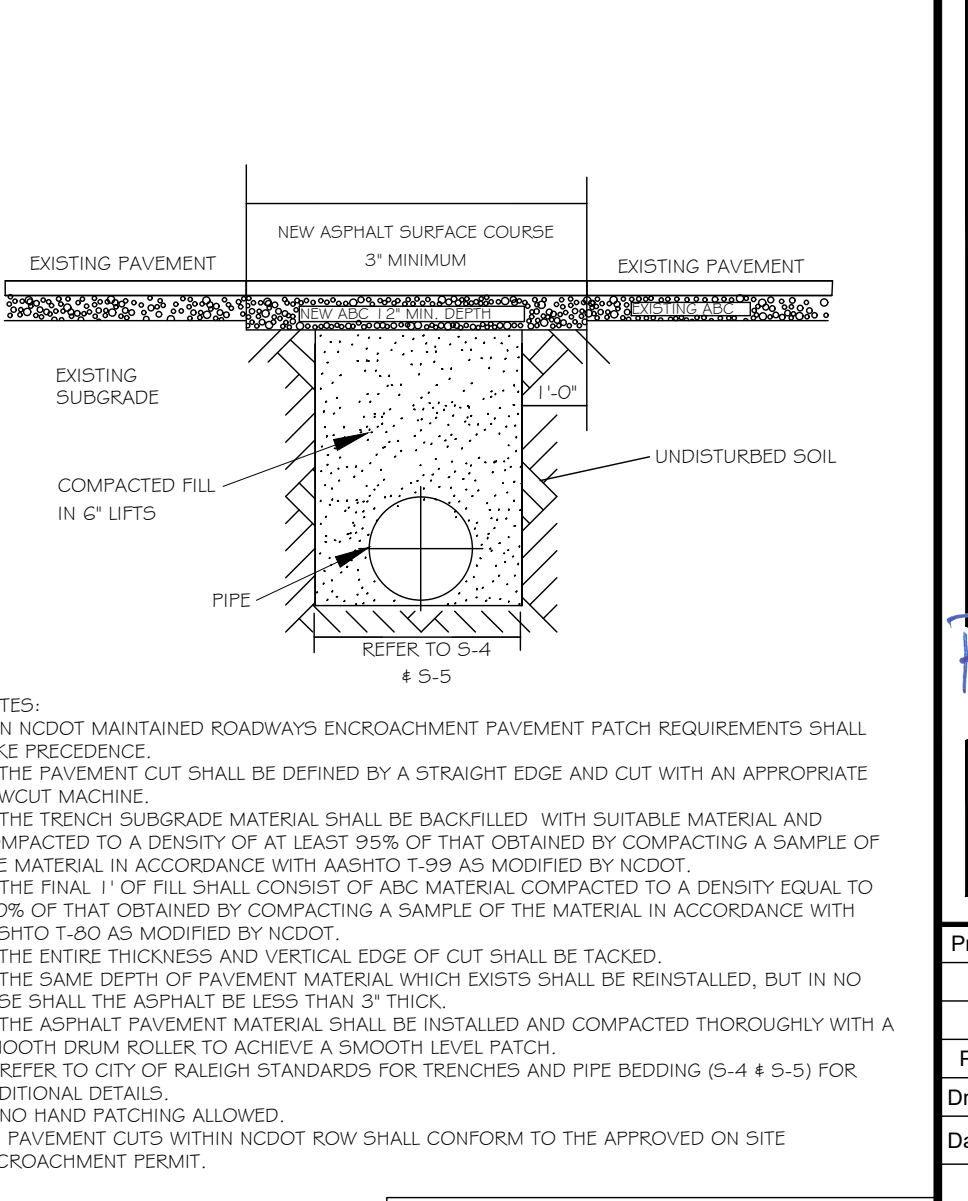
CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
LATERAL SADDLE INSTALLATION DETAIL FOR PVC PIPE			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-31			
	RRH	3-30-00	
			6/18/08



CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
4" CLEANOUT PLUG			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-34			
	D.W.C.	3-1-87	RRH
		3-27-88	
			3-30-00



CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
STANDARD MANHOLE COVER			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-25			
	Y.C.A.	3-1-87	A.B.B.
	RRH	3-30-00	D.H.L.
			6-18-08



CITY OF RALEIGH			
DEPARTMENT OF PUBLIC UTILITIES			
STANDARD ASPHALT PAVEMENT PATCH DETAIL			
DWG. NO.	REVISIONS	DATE	REVISIONS
S-3			
	D.W.C.	11-1-99	A.B.B.
	RRH	3-30-00	J.F.S.
			6-18-08

**CROSLAND SOUTHEAST**

**MISC. DETAILS**

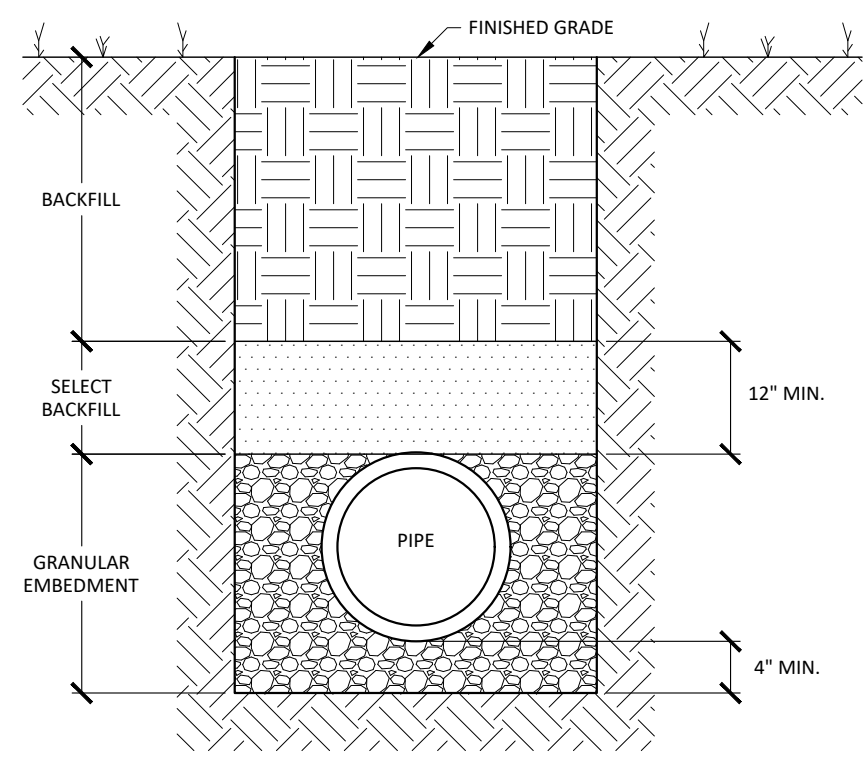
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina

**ARK CONSULTING GROUP PLLC**  
 ENGINEERS & PLANNERS  
 2755-B Charles Blvd.  
 (757) 558-0888  
 www.arkconsultinggroup.com

**C7.03**

**CID SDP**

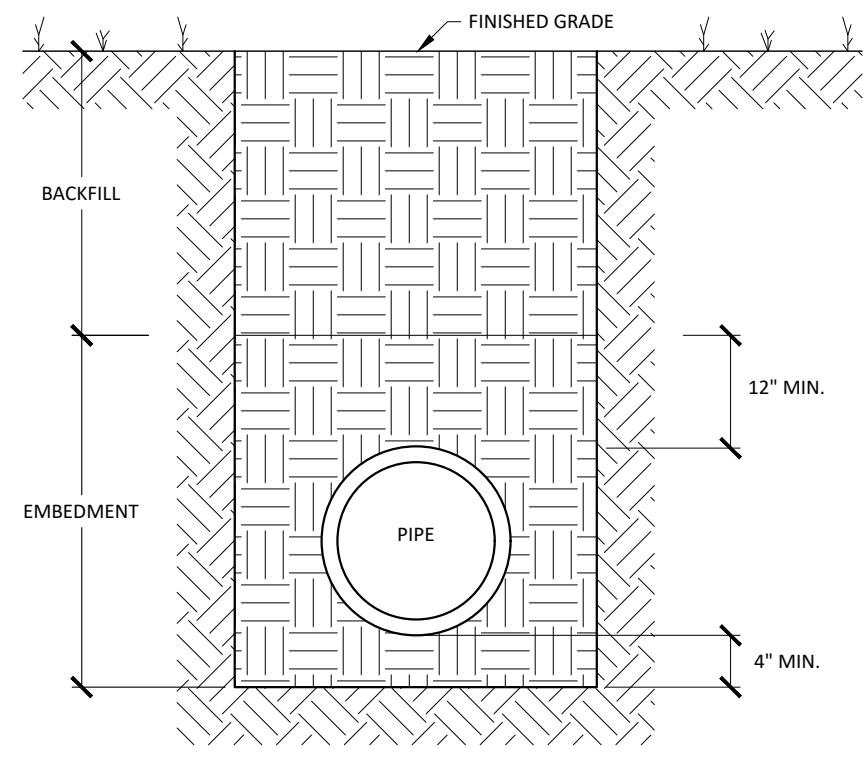
Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023



CLASS 'D'

**TRENCH SECTION DETAIL FOR THE INSTALLATION OF PVC GRAVITY STORM DRAIN & SANITARY SEWER PIPING**

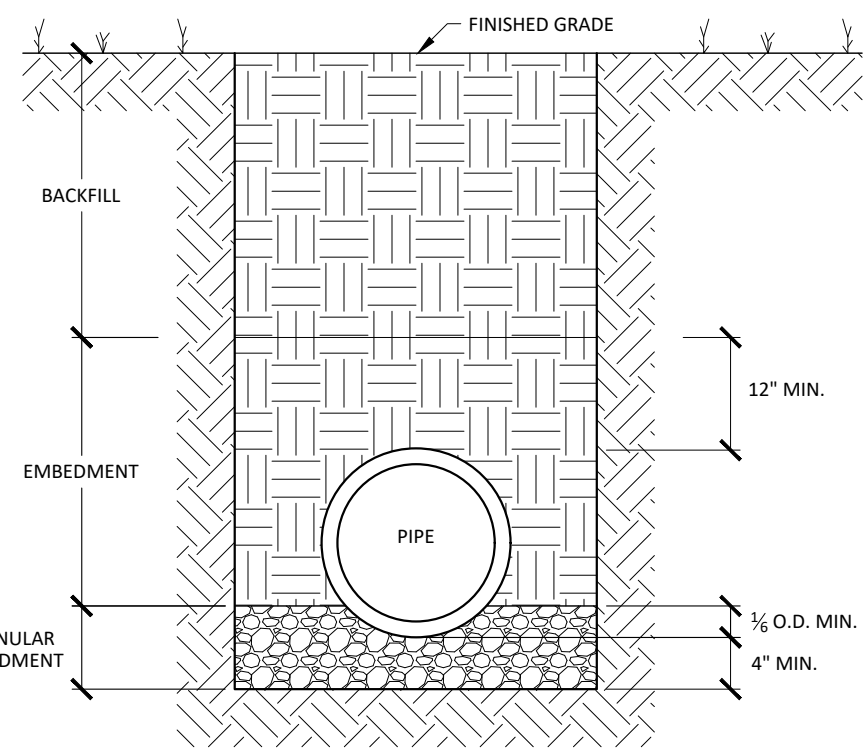
NOT TO SCALE



CLASS 'F'

**TRENCH SECTION FOR THE INSTALLATION OF REINFORCED CONCRETE PIPE**

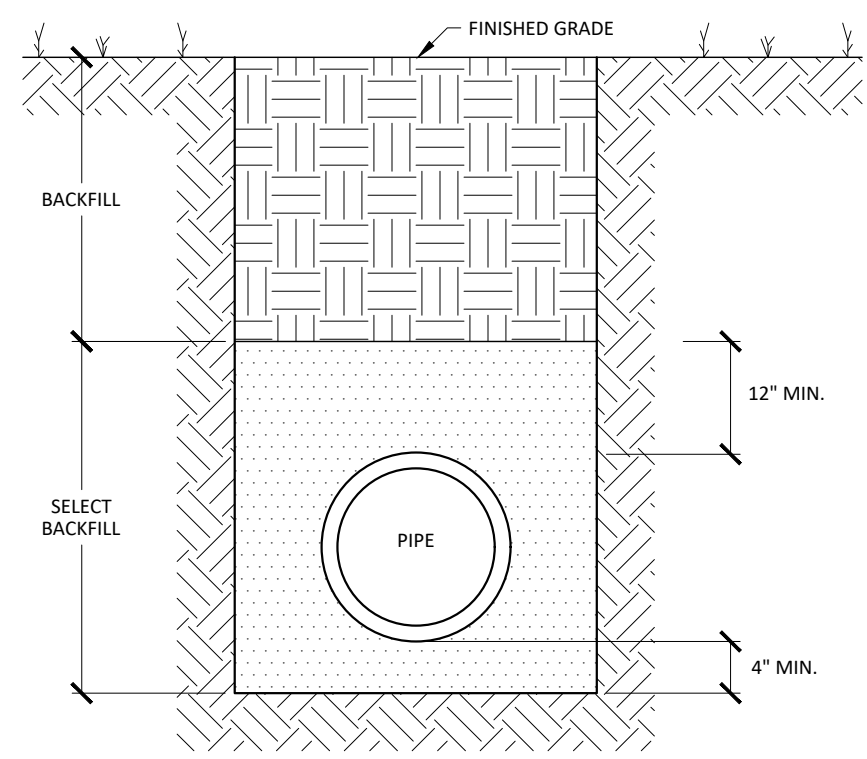
NOT TO SCALE



CLASS 'C'

**TRENCH SECTION DETAIL FOR THE INSTALLATION OF 42" & LARGER RCP & ALL DIP STORM DRAINAGE PIPING**

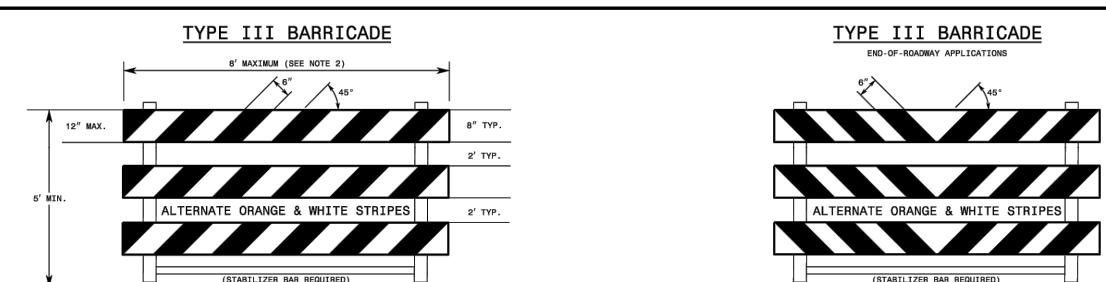
NOT TO SCALE



CLASS 'E'

**TRENCH SECTION DETAIL FOR THE INSTALLATION OF PVC PRESSURE PIPE**

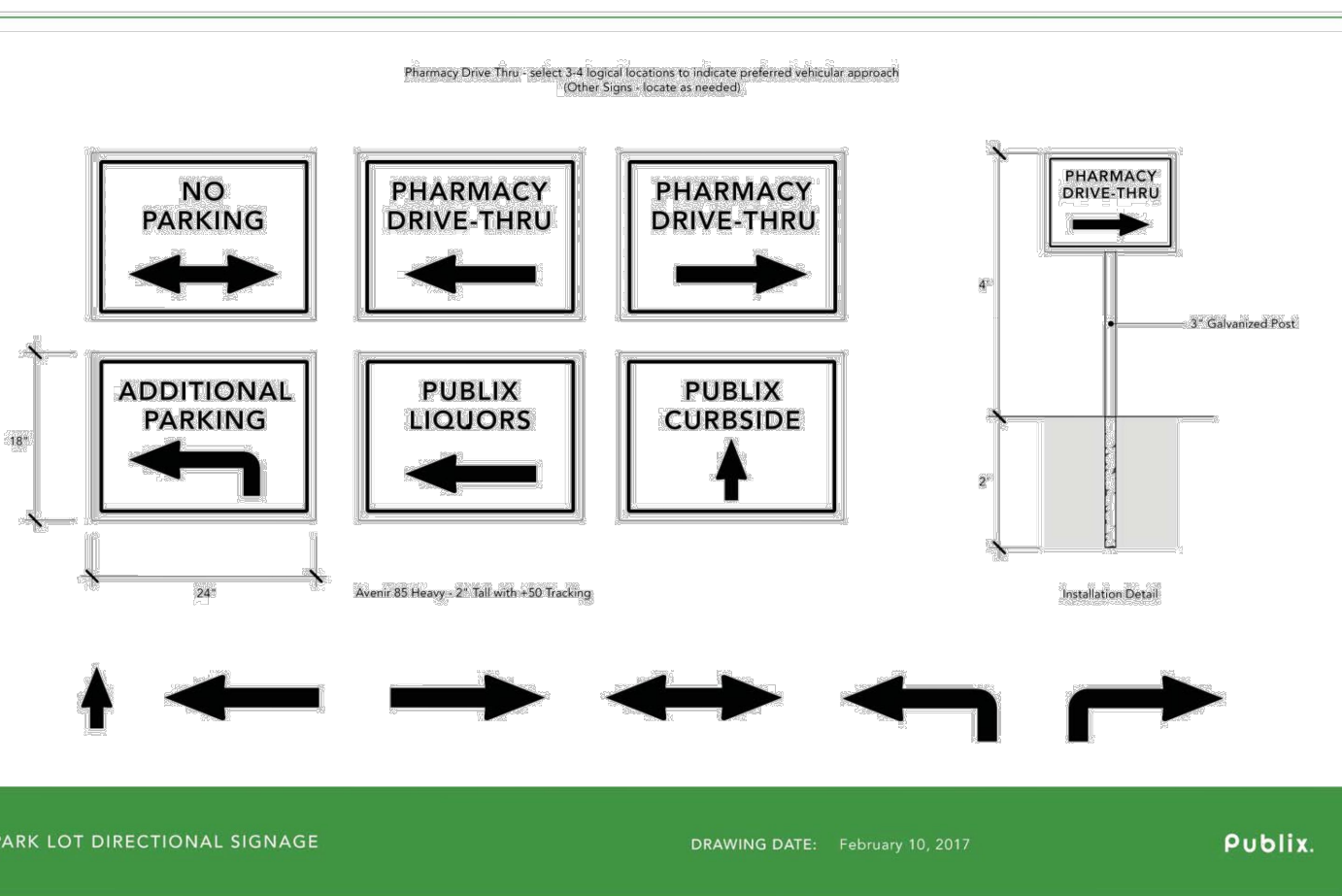
NOT TO SCALE



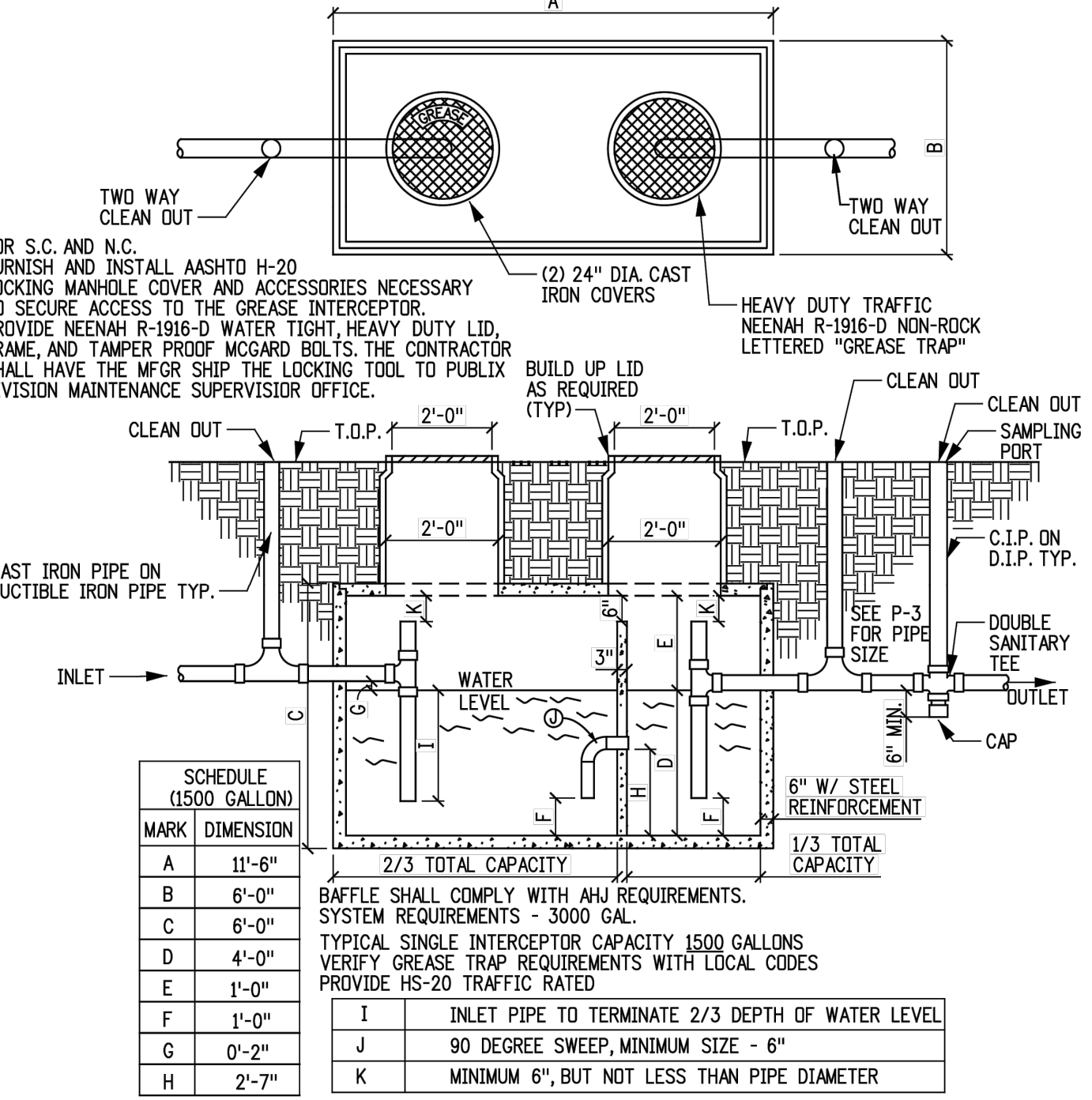
GENERAL NOTES

- HORIZONTAL BARRICADES SHALL BE CONSTRUCTED OF APPROVED COMPOSITE, HELIX/COMPOSITE, EXTRUDED ROAD POLYOLEFIN, HIGH DENSITY POLYETHYLENE, OR OTHER MOST APPROVED MATERIAL.
- BARRICADES SHALL BE LISTED TO A MAXIMUM LENGTH OF 8 FT UNLESS SHOWN OTHERWISE FOR CATEGORY II DEVICES AND MOST APPROVED.
- ONLY MOST APPROVED COMPOSITE AND ROLL-UP SIGNS MAY BE MOUNTED ON THE BARRICADE RAILS. MOUNT SIGNS TO BARRICADE RAILS TO PREVENT SIGNS FROM BEING DETACHED UNDER NORMAL WIND AND TRAFFIC CONDITIONS.
- SEMI RAILS BE MOUNTED A MINIMUM OF 1 FOOT FROM THE GRASS TO THE BOTTOM OF THE SIGN UNLESS SIGNS 811-3 OR 811-4 ARE REQUIRED BY THE PLANS OR DIRECTED BY THE ENGINEER.
- BARRICADES MUST BE NCHRP 350 FOR CATEGORY II DEVICES AND MOST APPROVED WITH STABILIZER BAR OR INTEGRATE LATERAL BRACING.
- ASSEMBLY OF THE BARRICADES MUST BE SELF CERTIFIED BY THE ASSEMBLER.
- BARRICADES USED TO CLOSE A ROADWAY SHALL EXTEND ACROSS THE ENTIRE ROADWAY, WHERE LOCAL TRAFFIC MUST BE REDIRECTED, THEY MAY BE PLACED IN A STAGGERED PATTERN.
- STRIPES ON WORK ZONE BARRICADE RAILS SHALL BE ALTERNATE ORANGE AND WHITE RETROREFLECTIVE STRIPES, PLACED DOWNWARD TOWARD THE EDGE BEING TRAFFIC IS TO PASS ON TURN IN DIRECTION. WHEN NO TURN ARE ANTICIPATED, THE STRIPES SHOULD SLOPE DOWNWARD TOWARD THE CENTER OF THE BARRICADE OR BARRICADES.
- USE RED AND WHITE STRIPES FOR PERMANENT BARRICADES.
- ALL BARRICADES MUST BE LISTED ON THE DEPARTMENT'S APPROVED PRODUCTS LIST.
- PLACED MANUFACTURER'S NAME AND FEDERAL REGISTER NUMBER/REGISTRATION'S NCHRP 350 APPROVAL LETTER NUMBER ON BARRICADE FRAME.
- PLACE BARRICADES ON OTHER APPROVED BALLASTS BETWEEN THE FEET OF THE FRAME. DO NOT PLACE BARRICADES ON TOP OF A PROPOSED ROAD OR STREETSIDE SHOULDER. DO NOT PLACE BARRICADES ON TOP OF A PROPOSED ROAD OR STREETSIDE SHOULDER UNLESS THEY WOULD CHANGE THE PROFILE OF THE BARRICADE OR OTHER ITEMS THAT WOULD CHANGE THE PROFILE OF THE BARRICADE IF STRUCK BY A VEHICLE.

STATE OF NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
TYPE III BARRICADES  
ROADWAY STANDARD DRAWING FOR BARRICADES  
TYPE III  
SHEET 1 OF 1  
1145-01



PARK LOT DIRECTIONAL SIGNAGE  
DRAWING DATE: February 10, 2017  
Publix

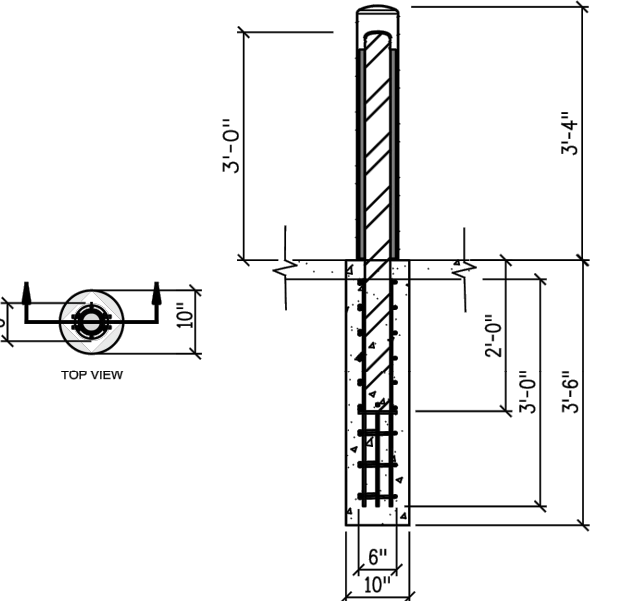


**GREASE INTERCEPTOR DETAIL**

1,500 GAL. GREASE INTERCEPTOR DETAIL  
N.T.S.

**MCCUE CRASHCORE BOLLARD REQUIRED AT ENTRY/EXIT AND CUSTOMER SEATING AREAS**

PLACE @ 5'-6" OC



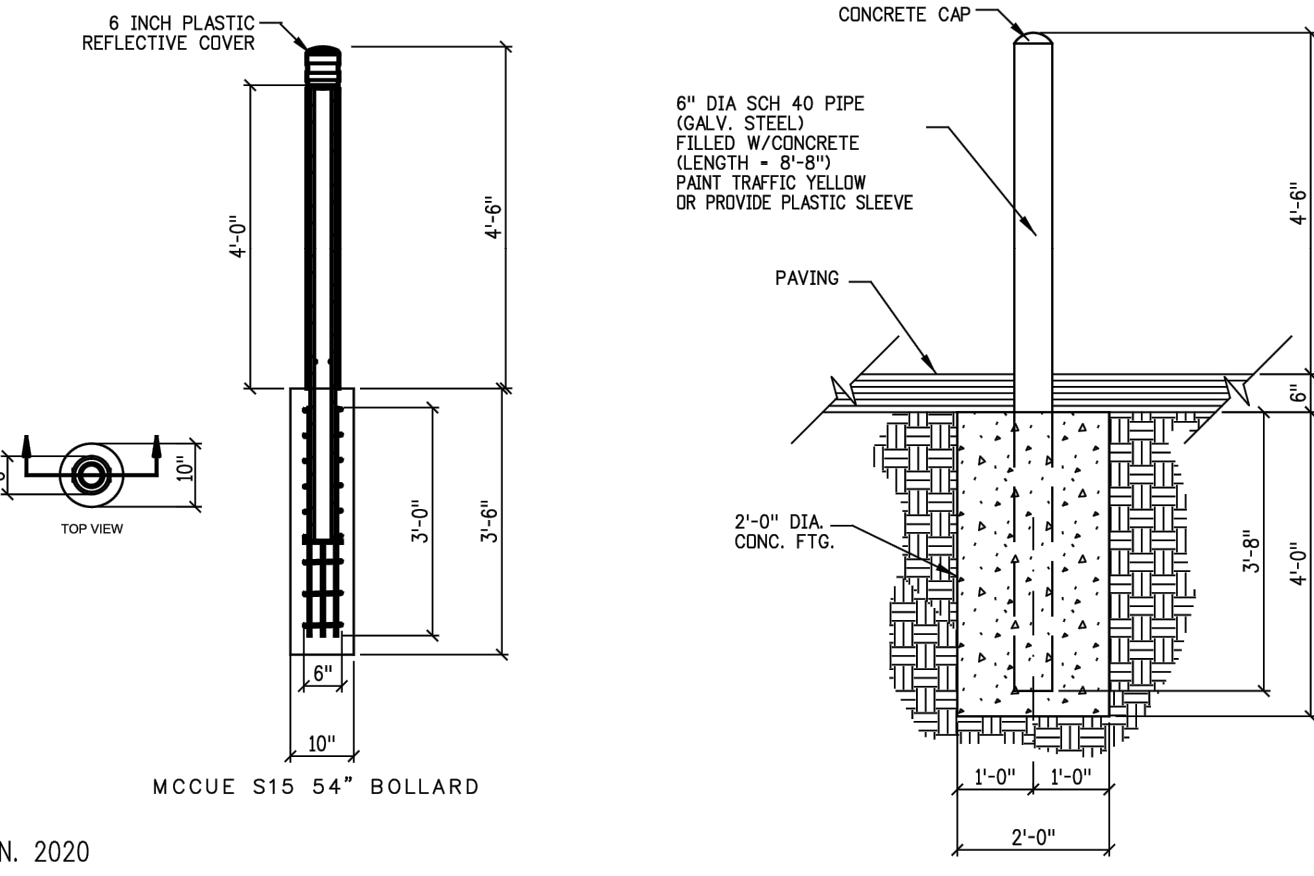
CONTRACTOR'S NOTE:  
BOLLARDS SUPPLIED AND INSTALLED BY MCCUE PRIOR TO SIDEWALK BEING POURED.  
NO SUBSTITUTIONS.  
CONTACT MCCUE AND PUBLIX TO RECEIVE PUBLIX NATIONAL ACCOUNT PRICING FOR MATERIALS AND INSTALLATION.

ORDER: 4 WEEKS PRIOR TO SIDEWALK POUR  
RECEIVE: 2 WEEKS PRIOR TO SIDEWALK POUR  
INSTALLATION: 1 WEEK PRIOR TO SIDEWALK POUR

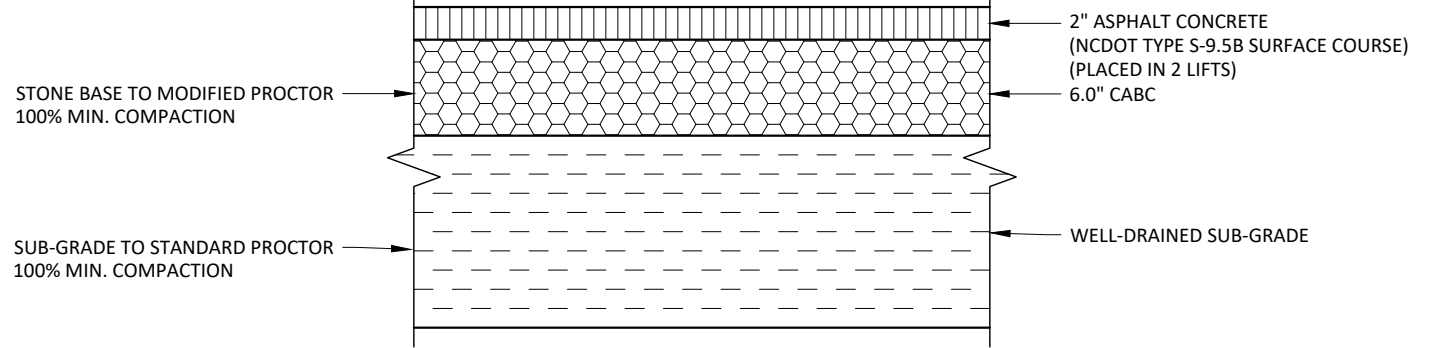
CONTACT INFO:  
EMAIL: YVONNE@MCCUE.COM  
978-219-5282  
DIRECT: MCCUE, 13 CENTENNIAL DRIVE, PEABODY, MA 01960  
WEBSITE: MCCUE.COM

**ACCEPTABLE DETAILS FOR BOLLARDS PROTECTING EQUIPMENT AND BUILDING COMPONENTS**

PLACE AS NEEDED

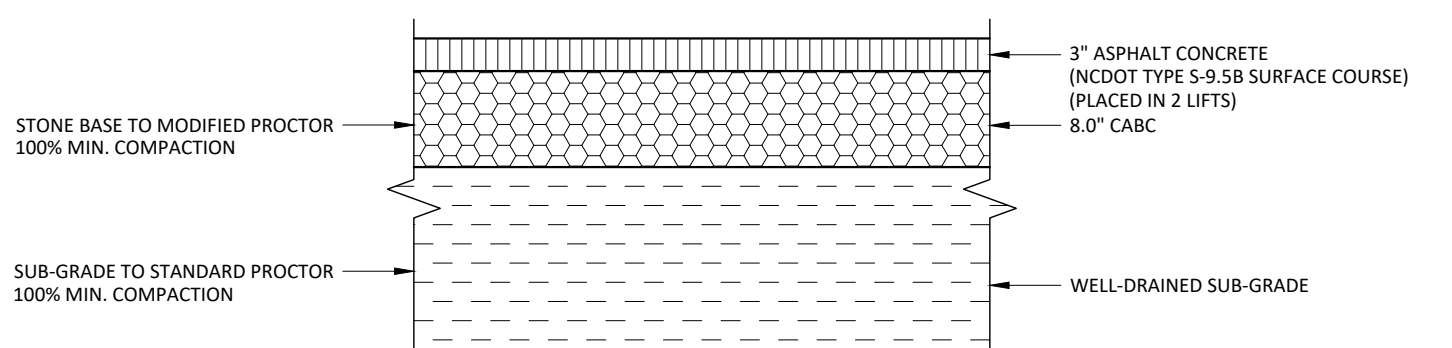


MCCUE S15 54 BOLLARD  
JAN. 2020  
Exhibits 8-32  
August 2021



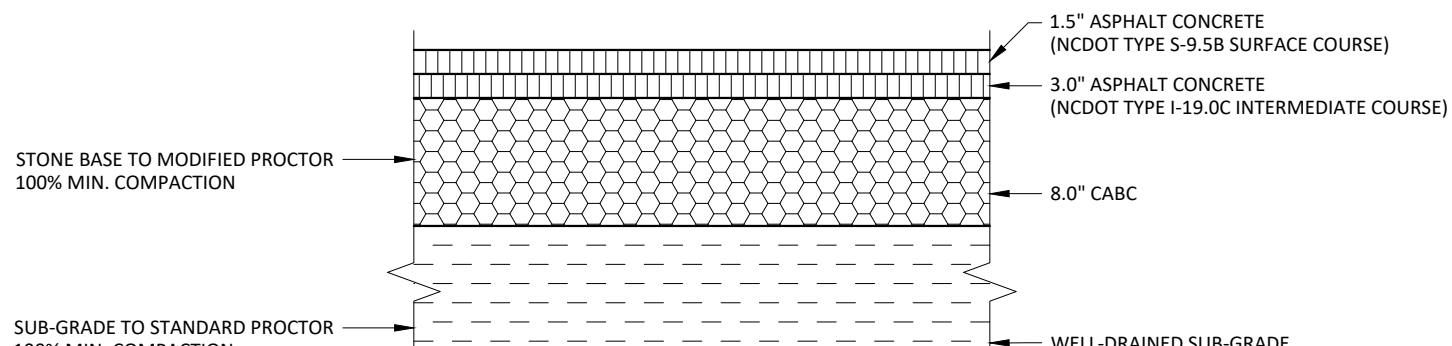
**STANDARD ASPHALT PAVEMENT SECTION TO BE USED IN PARKING STALLS**

NOT TO SCALE



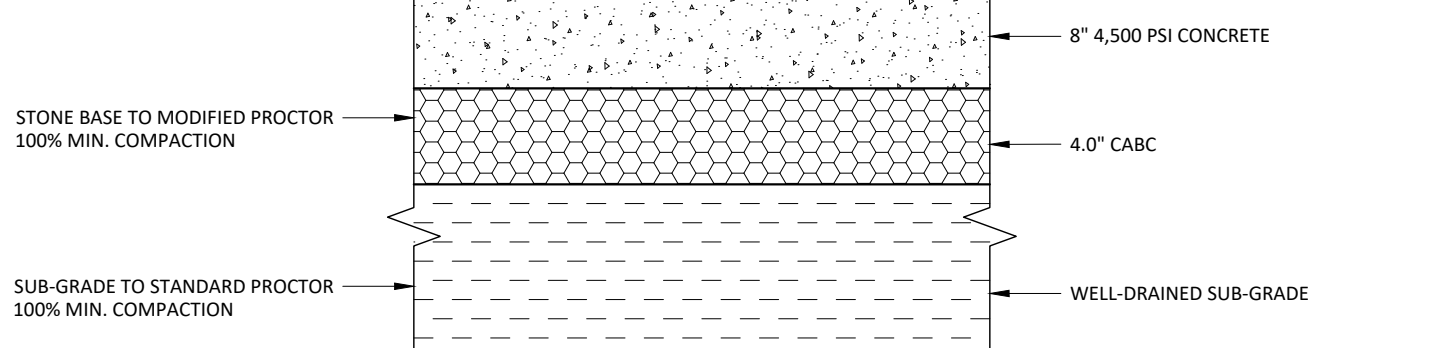
**STANDARD ASPHALT PAVEMENT SECTION TO BE USED IN DRIVE AISLES**

NOT TO SCALE



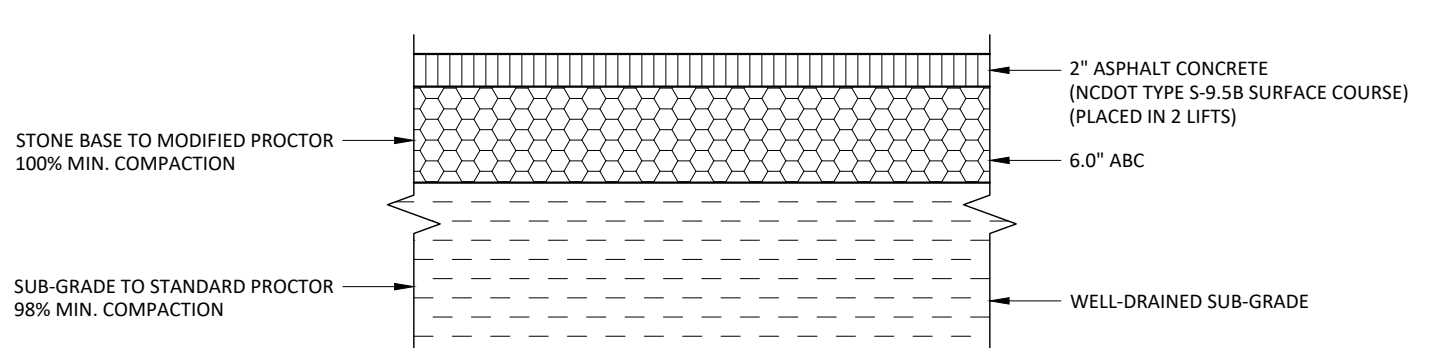
**HEAVY DUTY ASPHALT PAVEMENT SECTION**

NOT TO SCALE



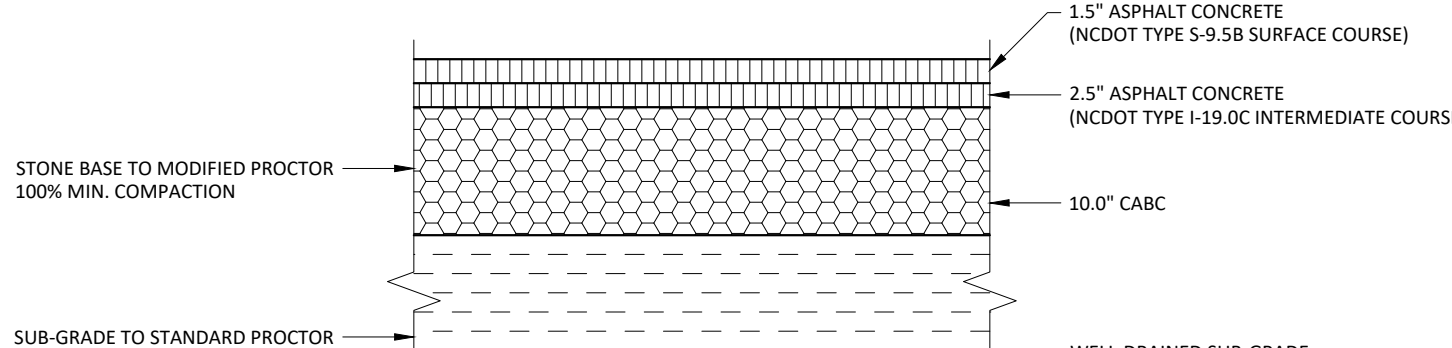
**CONCRETE PAVEMENT SECTION**

NOT TO SCALE



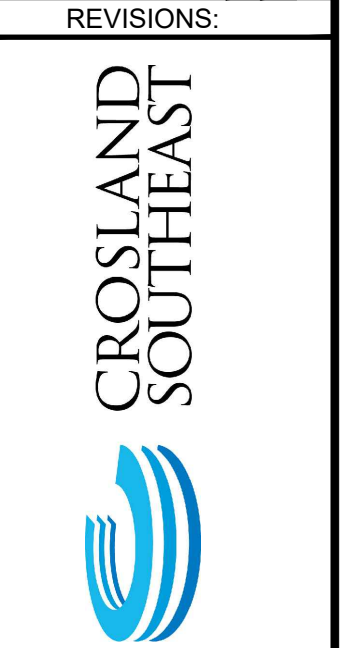
**10' MULTI-USE PATH SECTION**

NOT TO SCALE



**ASPHALT PAVEMENT SECTION FOR USE IN PUBLIC ROADWAYS**

NOT TO SCALE



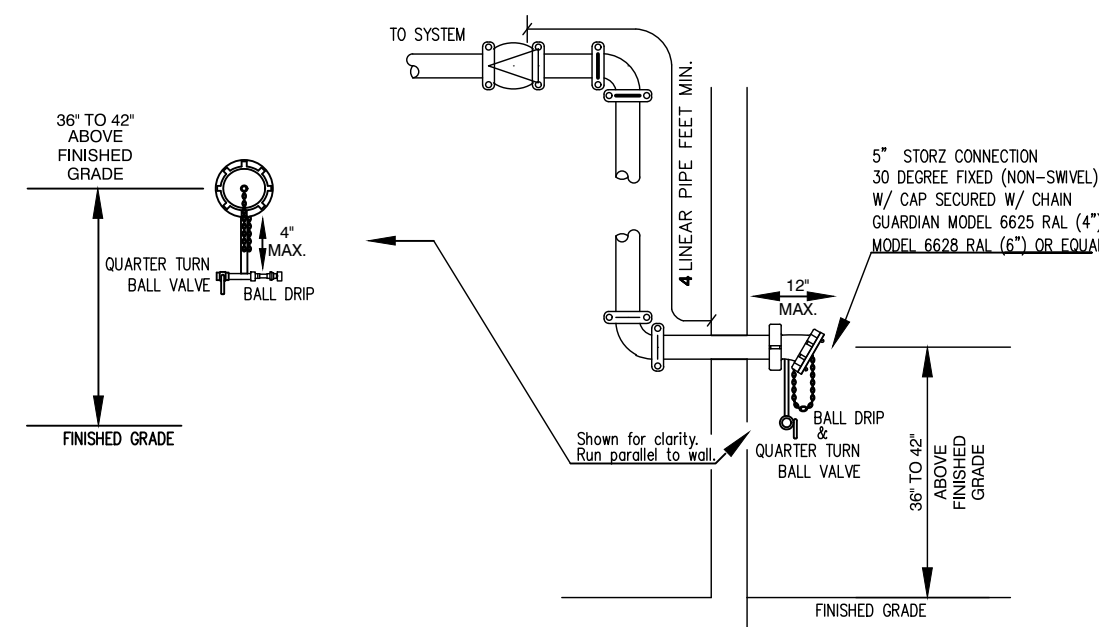
**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
Town of Rolesville Project No. SDP 23-05 & CID 23-01  
S Main St. / US 401 and Virginia Water Drive  
Rolesville, Wake County, North Carolina



Project Manager: BCF  
Drawn By: DLC  
Checked By: STA  
Project Number: 21089 / 22012  
Drawing Number: D-1219-CD  
Date: October 26, 2023

**C7.04**  
CID SDP

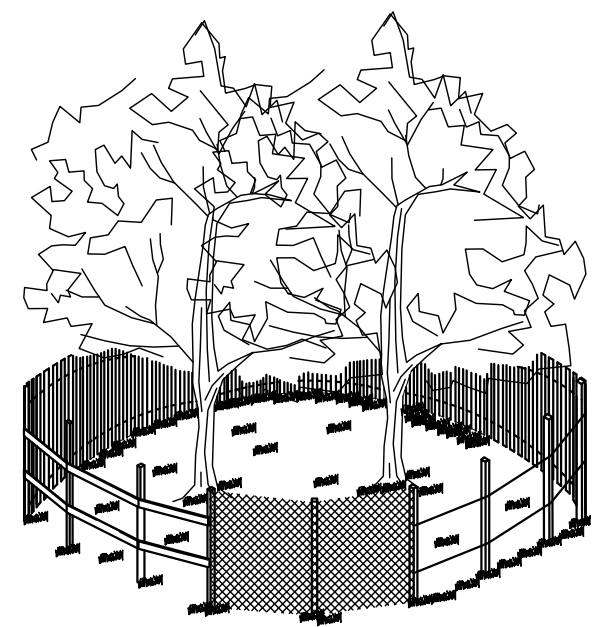




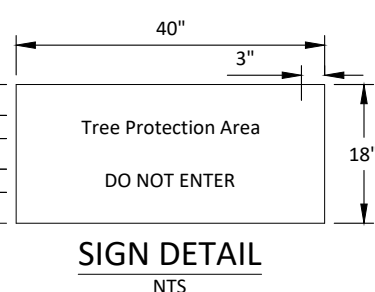
**TYPICAL NOTES:**  
 1) ALL EXPOSED PIPING AND FITTINGS TO BE GALVANIZED WITH EXCEPTION OF STORZ CONNECTION  
 2) 40' MAX. FROM FDC TO APPARATUS ACCESS LOCATION  
 3) FOR NFPA 13R SYSTEMS (2 1/2" RISER AND SMALLER) SINGLE FDC  
 4) FOR HIGH RISE BUILDINGS USE SIAMISE

**FLUSH FDC DETAIL**

NTS

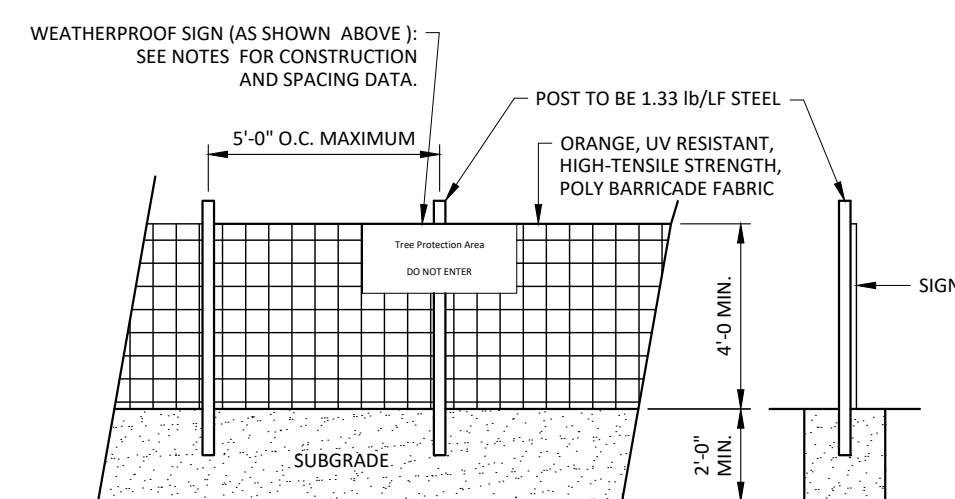


**NOTES:**  
 1. SIGNS ARE TO BE PLACED NO GREATER THAN 200' ON CENTER. PLACE SIGN AT EACH END OF LINEAR TREE PROTECTION AREA AND 200' ON CENTER THEREAFTER.  
 2. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.  
 3. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.  
 4. WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.  
 5. LETTERS ARE TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE, AND SPACED AS DETAIL.  
 6. INSTALL TREE PROTECTION FENCE & SIGNAGE PRIOR TO CALLING FOR THE INITIAL ON-SITE INSPECTION BY A NCDENR INSPECTOR. MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT. ADDITIONAL SIGNS MAY BE REQUIRED BY NCDENR BASED ON ACTUAL FIELD CONDITIONS.



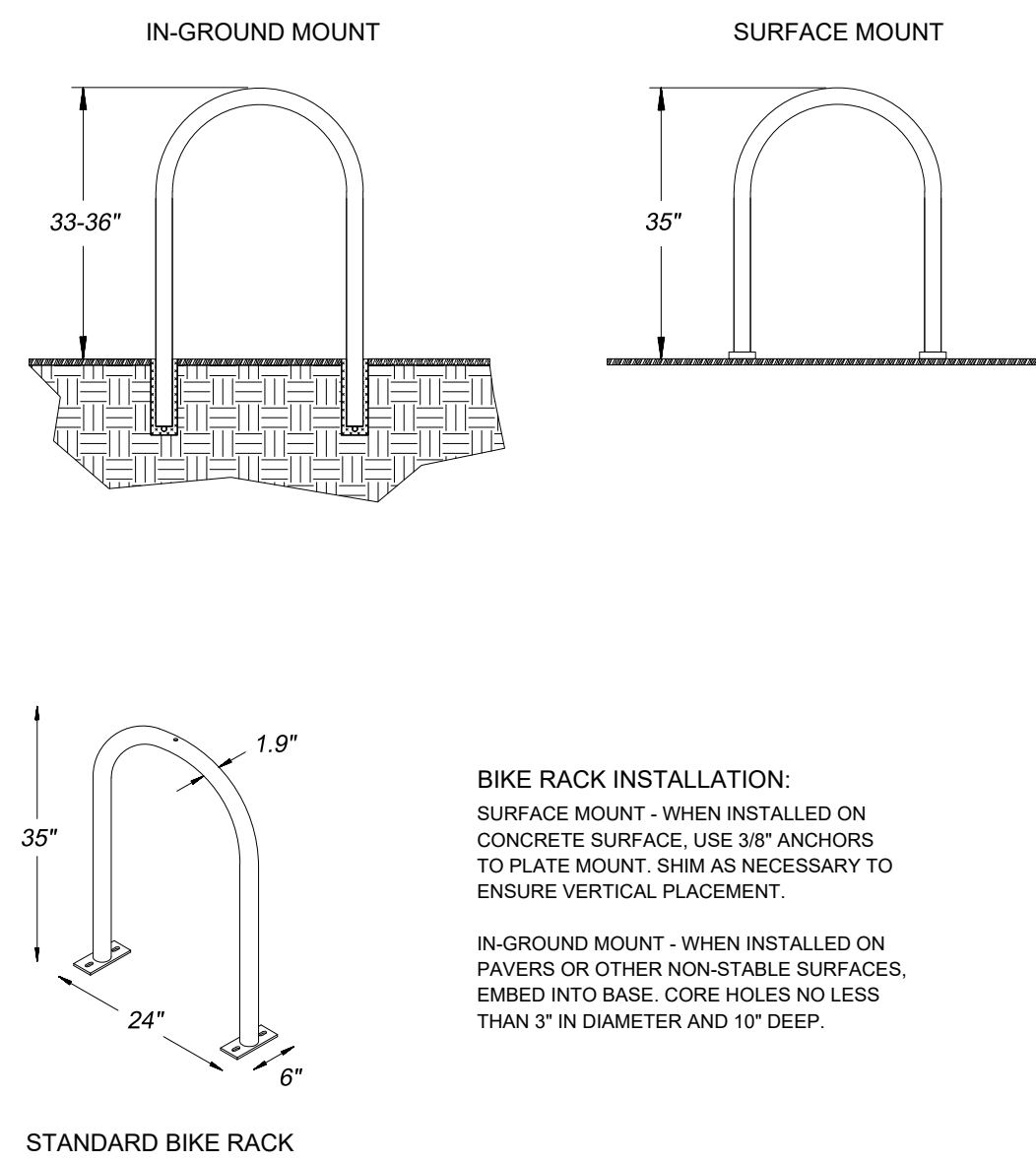
**SIGN DETAIL**

NTS

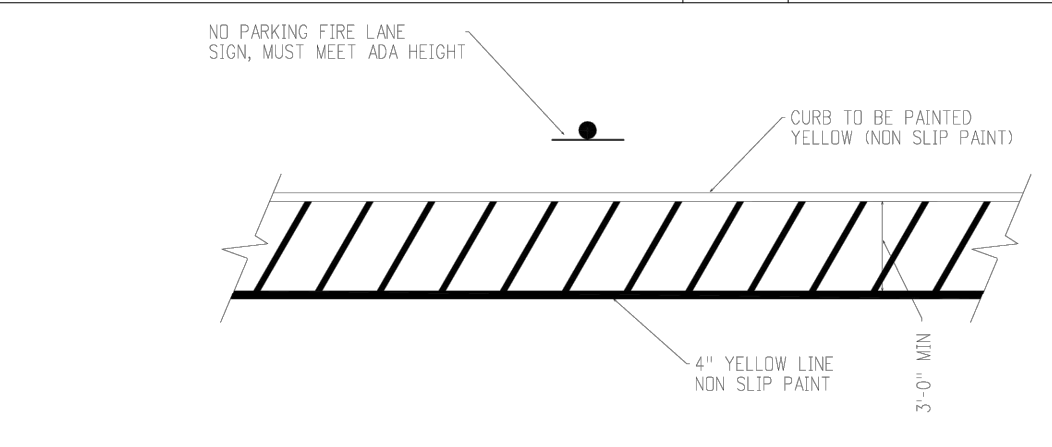


**TREE PROTECTION FENCE**

NOT TO SCALE



**BIKE RACK INSTALLATION:**  
 SURFACE MOUNT - WHEN INSTALLED ON CONCRETE SURFACE, USE 3/8" ANCHORS TO PLATE MOUNT. SHIM AS NECESSARY TO ENSURE VERTICAL PLACEMENT.  
 IN-GROUND MOUNT - WHEN INSTALLED ON PAVERS OR OTHER NON-STABLE SURFACES, EMBED INTO BASE. CORE HOLES NO LESS THAN 3" IN DIAMETER AND 10" DEEP.



**FIRE LANE DETAIL**

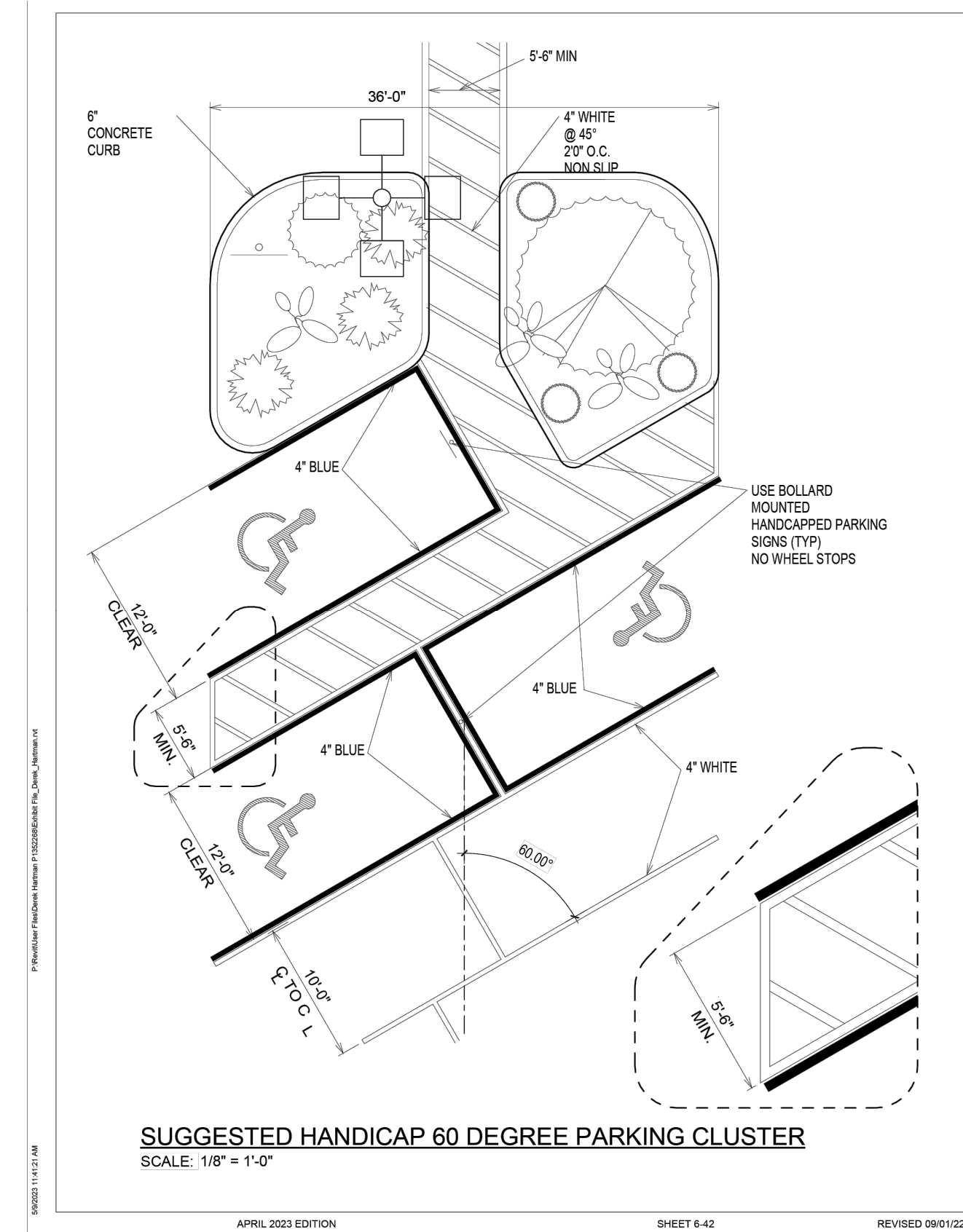
PLOT SCALE 1/4" = 1'-0"  
 SUGGESTED FIRE LANE DETAIL  
 IF LOCAL JURISDICTION DOES NOT Dictate, PROVIDED FOR INFORMATIONAL PURPOSES ONLY. FIRE LANE SHOULD BE LOCATED ON EITHER SIDE OF THE MAIN ENTRANCE/EXIT SIDEWALK RAMP.

REV	DESCRIPTION	DATE
01	ISSUED FOR CONSTRUCTION	SEP 20 2021
02	ISSUED FOR CONSTRUCTION	SEP 20 2021

**BIKE RACK DETAILS**

**B-20.03**

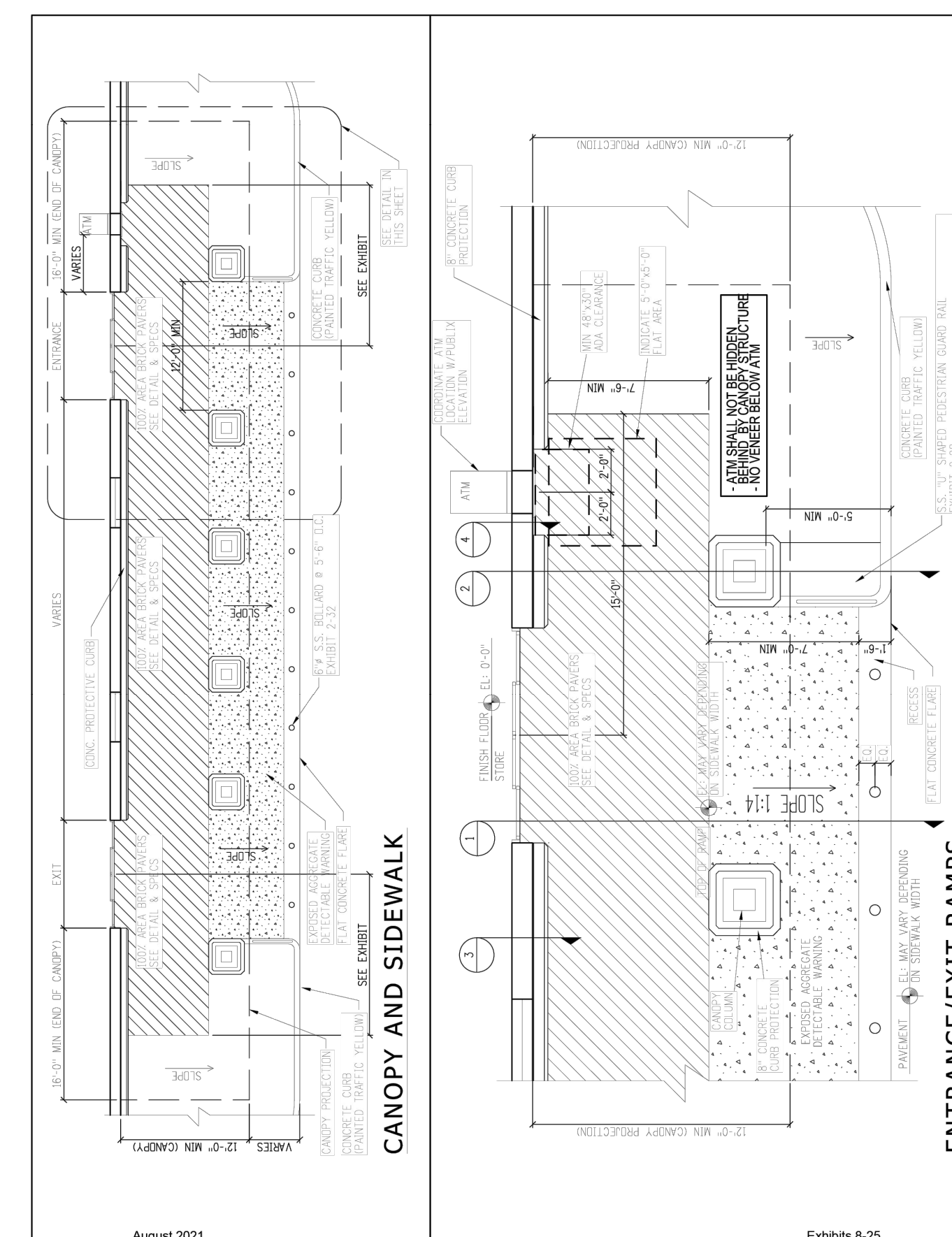
SEP 20 2021



**SUGGESTED HANDICAP 60 DEGREE PARKING CLUSTER**

SCALE: 1/8" = 1'-0"

APRIL 2023 EDITION SHEET 6-42 REVISED 09/01/22



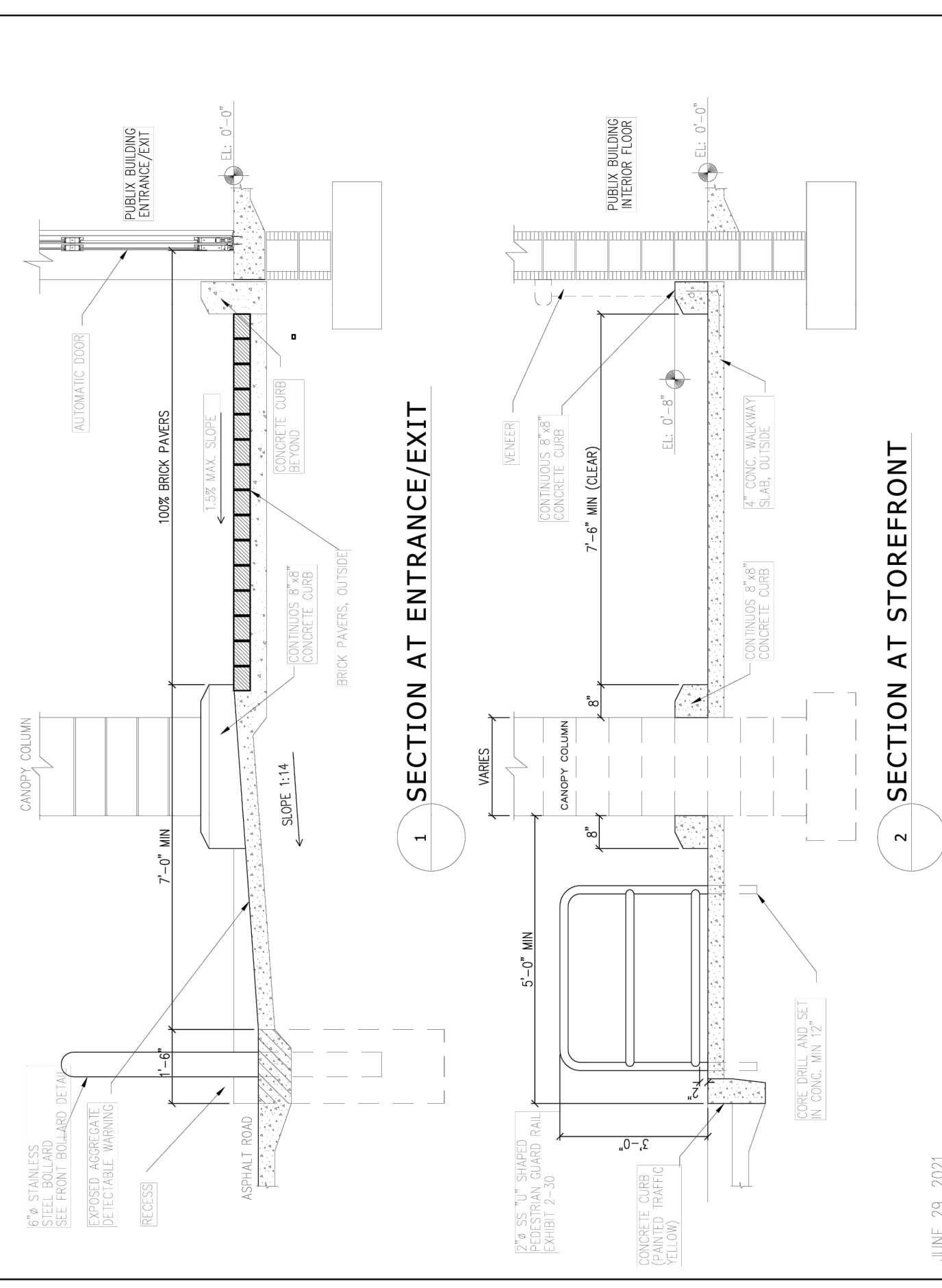
**CANOPY AND SIDEWALK**

August 2021

Exhibits 9-25

**ENTRANCE/EXIT RAMPS**

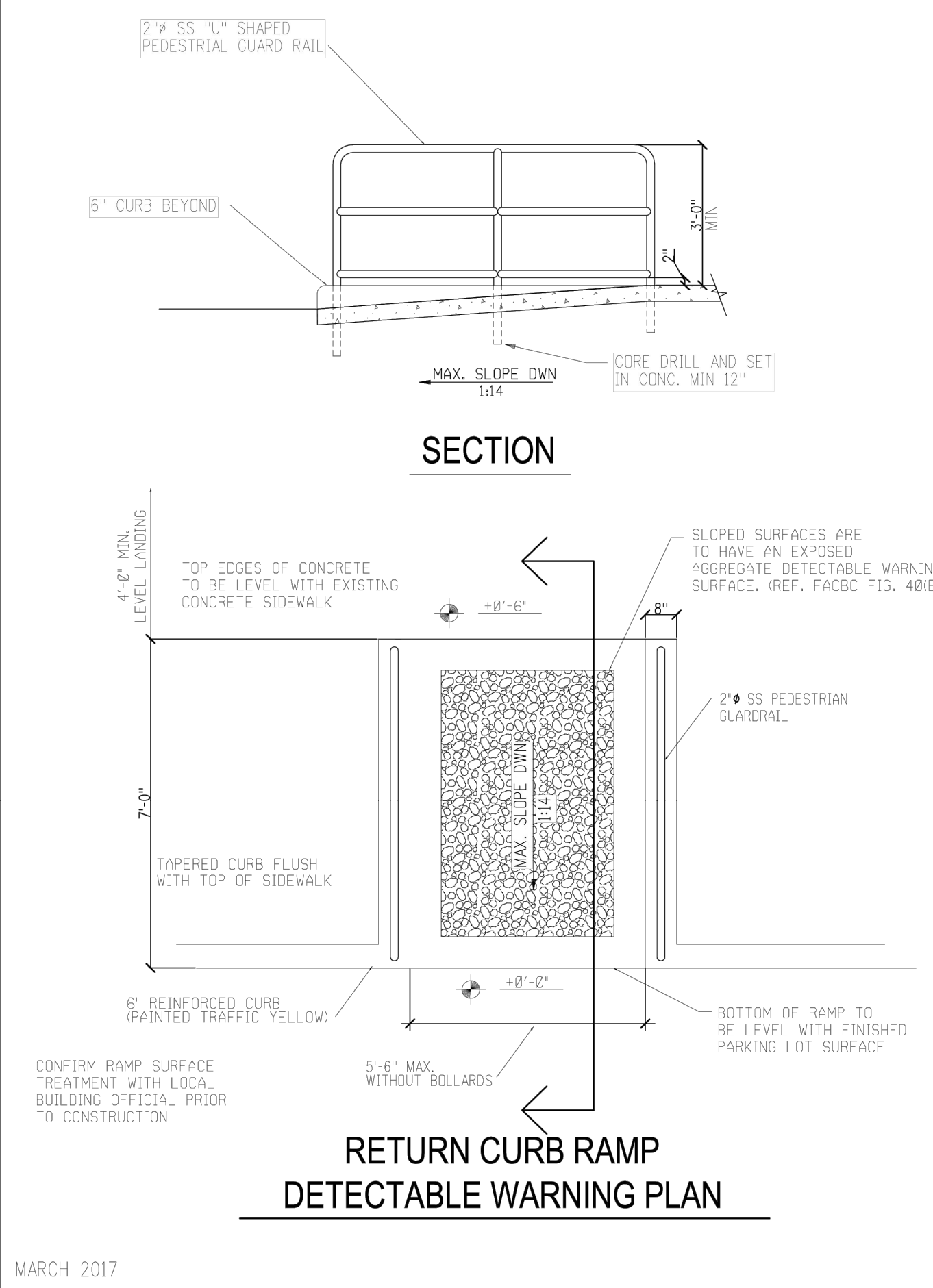
SEP 20 2021



**SECTION AT ENTRANCE/EXIT**

**SECTION AT STOREFRONT**

Exhibits 8-26 August 2021



**RETURN CURB RAMP DETECTABLE WARNING PLAN**

MARCH 2017

Exhibits 8-30

August 2021



**PUBLIX AT WALLBROOK AND WALLBROOK ROADWAY IMPROVEMENTS**  
 Town of Rolesville Project No. SDP 23-05 & CID 23-01  
 S Main St. / US 401 and Virginia Water Drive  
 Rolesville, Wake County, North Carolina



Project Manager: BCF  
 Drawn By: DLC  
 Checked By: STA  
 Project Number: 21089 / 22012  
 Drawing Number: D-1219-CD  
 Date: October 26, 2023

**C7.05**  
 CID SDP

REVISIONS:

2 | 14/NOV/23 | ISSUED FOR CONSTRUCTION

1 | 26/OCT/23 | SDP 23-05 / CID 23-01 COMBINED REVIEW

# | DATE | DESCRIPTION

