

AMBERLEIGH SHORES - PHASE II

WILMINGTON, NORTH CAROLINA

CIVIL DESIGN DRAWINGS

DECEMBER 2018

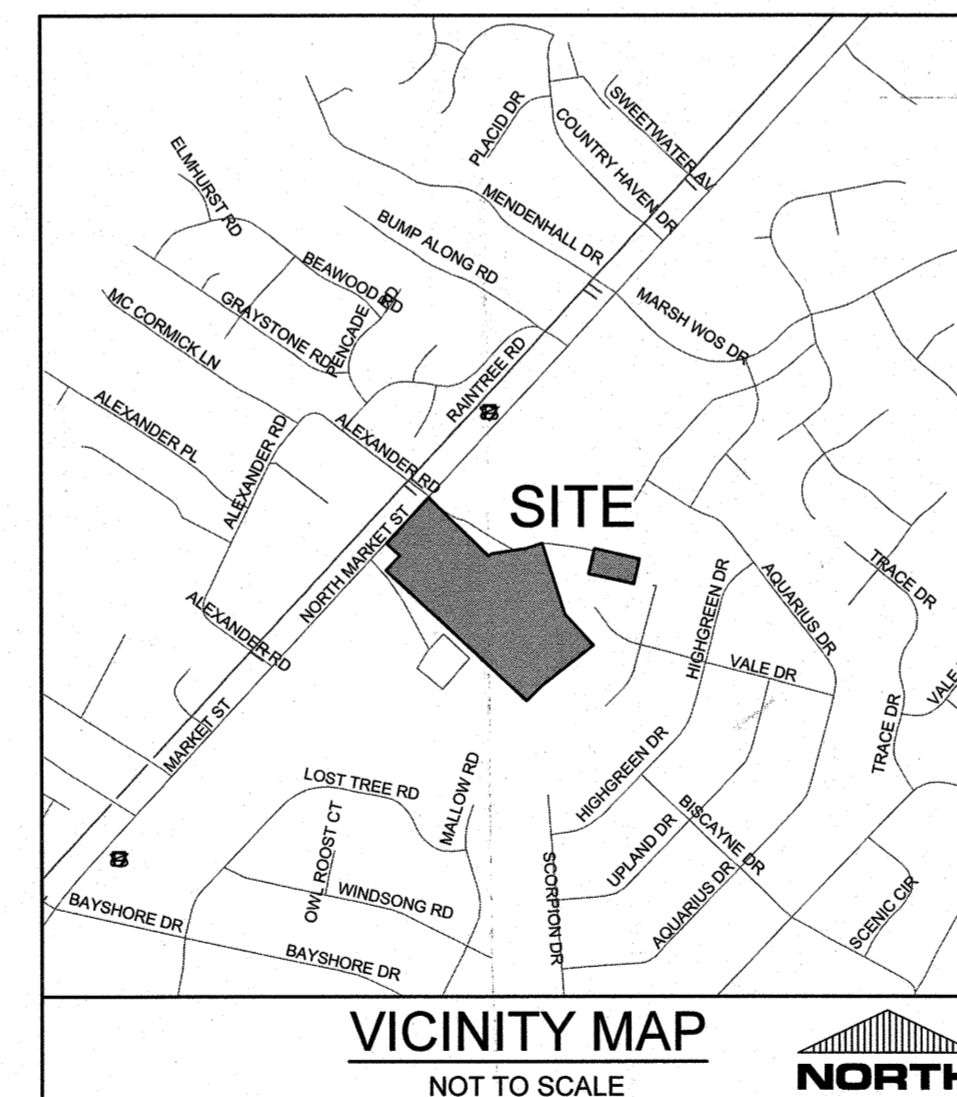
FOR

FDC Amberleigh Shores II SPE, LLC

900 Brookstone Centre Parkway

Columbus, GA 31904

SHEET INDEX	
SHEET NUMBER	SHEET TITLE
	COVER SHEET
C-1.0A	GENERAL NOTES
C-1.0B	GENERAL NOTES
C-1.1	OVERALL SITE INVENTORY PLAN
C-1.1A	SITE INVENTORY PLAN
C-1.1B	SITE INVENTORY PLAN
C-1.1C	SITE INVENTORY PLAN
C-1.2	DEMOLITION PLAN
C-1.3	TREE REMOVAL & MITIGATION PLAN
C-1.3A	TREE REMOVAL & MITIGATION PLAN
C-1.3B	TREE REMOVAL & MITIGATION PLAN
C-1.3C	TREE REMOVAL & MITIGATION PLAN
C-2.0	OVERALL SITE PLAN
C-2.3	OPEN SPACE EXHIBIT
C-3.0	PHASE I EROSION CONTROL PLAN
C-3.1	PHASE II EROSION CONTROL PLAN
C-4.0	OVERALL GRADING & STORMWATER MANAGEMENT PLAN
C-4.1	FINE GRADING PLAN
C-4.2	FINE GRADING PLAN
C-4.3	FINE GRADING PLAN
C-5.0	UTILITY INDEX MAP
C-5.1	PLAN & PROFILE
C-5.2	PLAN & PROFILE
C-5.3	PLAN & PROFILE
C-5.4	PLAN & PROFILE
C-5.5	PLAN & PROFILE
C-5.6	PLAN & PROFILE
C-7.0	DETAILS
C-7.1	DETAILS
C-7.2	DETAILS
C-7.3	DETAILS
C-7.4	DETAILS
C-7.5	DETAILS
C-7.6	DETAILS
C-7.7	DETAILS
C-7.8	DETAILS
C-7.9	DETAILS
C-7.10	DETAILS
C-7.11	PRIVATE PUMP STATION DETAIL
C-7.12	DETAILS
T-1.1	OFFSITE TRAFFIC IMPROVEMENTS GEOMETRIC & STRIPING PLAN
T-4.0	OFFSITE TRAFFIC IMPROVEMENTS TRAFFIC DETAILS
T-4.1	OFFSITE TRAFFIC IMPROVEMENTS TRAFFIC DETAILS



OWNER/DEVELOPER:
 FLOURNOY DEVELOPMENT COMPANY, LLC
 900 BROOKSTONE CENTRE PARKWAY
 COLUMBUS, GA 31904
 PHONE: (706) 243-9476
 ATTN: LUKE ADDISON

CIVIL ENGINEER:
 PARAMOUNTE ENGINEERING, INC.
 122 CINEMA DRIVE
 WILMINGTON, NORTH CAROLINA 28403
 ATTN: JEREMY BLAIR, PE
 PHONE: (910) 791-6707

SURVEYOR:
 PARAMOUNTE ENGINEERING, INC.
 122 CINEMA DRIVE
 WILMINGTON, NORTH CAROLINA 28403
 ATTN: CHRIS GAGNE, PLS
 PHONE: (910) 791-6707

LANDSCAPE ARCHITECT:
 MULTIFAMILY LANDSCAPE DESIGN ASSOCIATES, LLC
 P.O. BOX 1968
 WOODSTOCK, GA 30188
 ATTN: STEVE MIDDENDORF
 PHONE: (678) 764-8482

NOTICE REQUIRED

ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AT LEAST TWO WORKING DAYS, BUT NOT MORE THAN TEN WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION.

CONTRACTORS SHALL CONTACT OVERHEAD ELECTRIC PROVIDER TO COMPLY WITH FEDERAL OSHA 1910.333 MINIMUM APPROACH DISTANCE TO ENERGIZED POWERLINES AND OSH 29 CFR 1926.1407-1411 MUST BE FOLLOWED.

CONTACT THESE UTILITIES

CITY OF WILMINGTON PLANNING & DEVELOPMENT
 ATTN: JEFF WALTON, PLANNER
 PH: 910-342-2782

ATTN: ZONING INSPECTIONS
 PH: 910-254-0900

PIEDMONT NATURAL GAS
 ATTN: CATHY PLEASANT
 PH: 910-251-2827

EMERGENCY DIAL 911
 POLICE - FIRE - RESCUE

CAPE FEAR PUBLIC UTILITY AUTHORITY (WATER & SEWER)
 ENGINEERING/INSPECTIONS
 PH: 910-332-6560

OPERATIONS/MAINTENANCE
 PH: 910-332-6550

DUKE ENERGY
 DISTRIBUTION CONSTRUCTION SERVICE
 PH: 910-256-7223
 DEP CSC PH: 1-800-452-2777

AT&T/BELL SOUTH
 ATTN: JAMES BATSON, ENGINEERING
 PH: 910-341-1821

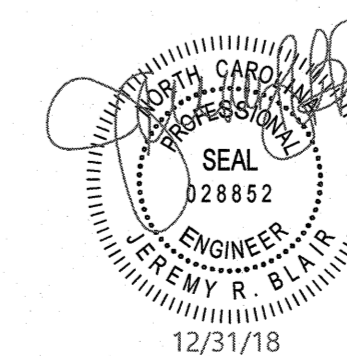
TIME WARNER CABLE
 PH: 910-763-4638

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 1/4/19 Permit # 2018045
 Signed: [Signature]

Approved Construction Plan
 Name: YMC Date: 1-4-2019
 Planning: YMC
 Traffic: AK
 Fire: [Signature]
 Date: 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

RECEIVED
 JAN 04 2019
 PLANNING DIVISION



PARAMOUNTE
 ENGINEERING, INC.

122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (C) (910) 791-6760 (F)
 NC License #: C-2846

PROJECT # 16296.PE



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

GENERAL NOTES

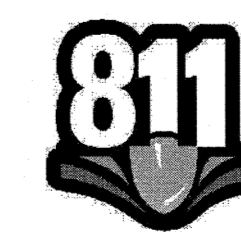
- 1. PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING SHALL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.
2. ANY TREES AND/OR AREAS DESIGNATED TO BE PROTECTED MUST BE PROPERLY BARRICADED WITH FENCING AND PROTECTED THROUGHOUT CONSTRUCTION TO ENSURE THAT NO CLEARING, GRADING, OR STAGING OF MATERIALS WILL OCCUR IN THOSE AREAS.
3. NO EQUIPMENT IS ALLOWED ON SITE UNTIL ALL TREE PROTECTION FENCING AND SILT FENCING IS INSTALLED AND APPROVED. PROTECTIVE FENCING IS TO BE MAINTAINED THROUGHOUT THE DURATION OF THE PROJECT, AND CONTRACTORS SHALL RECEIVE ADEQUATE INSTRUCTION ON TREE PROTECTION METHODS.
4. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS.
5. ONCE STREETS ARE OPEN TO TRAFFIC, CONTACT TRAFFIC ENGINEERING REGARDING THE INSTALLATION OF TRAFFIC AND STREET NAME SIGNS. PROPOSED STREET NAMES MUST BE APPROVED PRIOR TO INSTALLATION OF STREET NAME SIGNS.
6. TRAFFIC CONTROL DEVICES (INCLUDING SIGNS AND PAVEMENT MARKINGS) IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS.
7. CONTACT TRAFFIC ENGINEERING AT 910-341-7888 TO ENSURE THAT ALL TRAFFIC SIGNAL FACILITIES AND EQUIPMENT ARE SHOWN ON THE PLAN.
8. CALL TRAFFIC ENGINEERING AT 910-341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT-OF-WAY.
9. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING PRIOR TO ACTUAL STRIPING.
10. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
11. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
12. STOP SIGNS AND STREET SIGNS TO REMAIN IN PLACE DURING CONSTRUCTION.
13. TACTILE WARNING MATS WILL BE INSTALLED ON ALL WHEELCHAIR RAMPS.
14. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET.
15. ANY BROKEN OR MISSING SIDEWALK PANELS WILL BE REPLACED.
16. CONTACT TRAFFIC ENGINEERING AT 910-341-7888 TO DISCUSS STREET LIGHTING OPTIONS.
17. WATER AND SEWER SERVICE SHALL MEET CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) DETAILS AND SPECIFICATIONS.
18. PROJECT SHALL COMPLY WITH CFPUA CROSS CONNECTION CONTROL REQUIREMENTS. WATER METER(S) CANNOT BE RELEASED UNTIL ALL REQUIREMENTS ARE MET AND THE STATE HAS GIVEN THEIR FINAL APPROVAL. CALL 910-343-3910 FOR INFORMATION.
19. IF THE CONTRACTOR DESIRES CFPUA WATER FOR CONSTRUCTION, HE SHALL APPLY IN ADVANCE FOR THIS SERVICE AND MUST PROVIDE A REDUCED PRESSURE ZONE (RPZ) BACKFLOW PREVENTION DEVICE ON THE DEVELOPER'S SIDE OF THE WATER METER BOX.
20. ANY IRRIGATION SYSTEM SUPPLIED BY CFPUA WATER SHALL COMPLY WITH THE CFPUA CROSS CONNECTION REGULATION. CALL 919-343-3910 FOR INFORMATION.
21. ANY IRRIGATION SYSTEM SHALL BE EQUIPPED WITH A RAIN AND FREEZER SENSOR.
22. ANY BACKFLOW PREVENTION DEVICES REQUIRED BY THE CFPUA WILL NEED TO BE ON THE LIST OF APPROVED DEVICES BY USCFPCOCHR OR ASSSE.
23. CONTRACTOR TO FIELD VERIFY EXISTING WATER AND SEWER SERVICE LOCATIONS, SIZES AND MATERIALS PRIOR TO CONSTRUCTION. ENGINEER TO BE NOTIFIED OF ANY CONFLICTS.
24. CONTRACTOR SHALL MAINTAIN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
25. UNDERGROUND FIRE LINE(S) MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PUBLIC RIGHT-OF-WAY TO THE BUILDING. CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-341-0696.
26. NO OBSTRUCTIONS ARE PERMITTED IN THE SPACE BETWEEN THIRTY (30) INCHES AND TEN (10) FEET ABOVE THE GROUND WITHIN THE TRIANGULAR SIGHT DISTANCE.
27. CONTACT THE NORTH CAROLINA ONE CALL CENTER AT 1-800-632-4949 PRIOR TO DOING ANY DIGGING, CLEARING, OR GRADING.
28. COORDINATE WITH CITY TRAFFIC ENGINEERING THE REMOVAL AND STORAGE OF ANY TRAFFIC EQUIPMENT, OR SIGNS DURING THE DEMOLITION, CONSTRUCTION, AND OPENING OF THIS DEVELOPMENT.

FIRE & LIFE SAFETY NOTES:

- 1. CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION
2. NEW HYDRANTS MUST BE BROUGHT INTO SERVICE PRIOR TO COMBUSTIBLE MATERIALS DELIVERED TO THE JOB SITE
3. HYDRANT MUST BE WITHIN 150' OF THE FDC (MEASURED AS THE TRUCK DRIVES FOR PRACTICAL USE)
4. FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT
5. LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT (3') CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF HYDRANTS AND FDC.
6. ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
7. PRIVATE UNDERGROUND FIRE LINES REQUIRE A SEPARATE UNDERGROUND FIRE LINE PERMIT FROM THE WILMINGTON FIRE AND LIFE SAFETY DIVISION (910) 343-0696
8. ALL ISOLATION VALVES WITHIN THE "HOT BOX" SHALL BE ELECTRICALLY SUPERVISED. PLEASE WORK CLOSELY WITH YOUR FIRE SPRINKLER AND ALARM INSTALLER IN REGARDS TO RUNNING WIRE FOR TAMPER SWITCH

CONDITIONS FROM SECTION 2 OF REZONING ORDINANCE DATED 6/19/18:

- 1. THE USE AND DEVELOPMENT OF THE PROPERTY SHALL COMPLY WITH ALL REGULATIONS AND REQUIREMENTS IMPOSED BY THE LAND DEVELOPMENT CODE, THE CITY OF WILMINGTON TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL AND ANY OTHER APPLICABLE FEDERAL, STATE OR LOCAL LAW, ORDINANCE OR REGULATION, AS WELL AS ANY CONDITION STATED BELOW. IN THE EVENT OF A CONFLICT, THE MOST STRINGENT REQUIREMENT OR HIGHER STANDARD SHALL APPLY.
2. APPROVAL OF THIS CONDITIONAL DISTRICT ZONING REQUEST DOES NOT CONSTITUTE TECHNICAL APPROVAL OF THE SITE PLAN. FINAL APPROVAL BY THE TECHNICAL REVIEW COMMITTEE AND THE ISSUANCE OF ALL REQUIRED PERMITS MUST OCCUR PRIOR TO RELEASE OF THE PROJECT FOR CONSTRUCTION.
3. IF, FOR ANY REASON, ANY CONDITION FOR APPROVAL IS FOUND TO BE ILLEGAL OR INVALID OR IF THE APPLICANT SHOULD FAIL TO ACCEPT ANY CONDITION FOLLOWING APPROVAL, A MODIFICATION OF THE APPROVED CONDITION DISTRICT ZONING SHALL BE REQUIRED.
4. THE USE AND DEVELOPMENT OF THE SUBJECT PROPERTY SHALL BE IN ACCORDANCE WITH THE PLAN AS SUBMITTED 6/28/16 AND APPROVED.
5. ALL EXISTING PROTECTED TREES NOT IMPACTED BY ESSENTIAL SITE IMPROVEMENTS SHALL BE PRESERVED OR MITIGATED. PRESERVATION OF EXISTING TREES SHALL BE INCLUDED IN THE OVERALL DESIGN OF THE PROJECT SUCH AS ADDITIONAL LANDSCAPE ISLANDS AND PRESERVATION ALONG THE PERIMETER OF THE SITE.
6. ANY SURFACE PARKING ABOVE THE MINIMUM ALLOWED SHALL BE OF PERVIOUS MATERIALS, IF THE SOIL IS DEEMED SUITABLE.
7. THE PROPOSED MULTI-USE PATH SHALL CONNECT WITH THE EXISTING PATH ALONG MARKET STREET WITH THE AMBERLEIGH SHORES PHASE ONE PROJECT.
8. A CONCEPTUAL LIGHTING PLAN SHALL BE REQUIRED PRIOR TO CONSTRUCTION RELEASE. LIGHTING SHALL BE PROHIBITED FROM SHINING INTO THE ADJACENT RESIDENTIAL PROPERTIES.
9. ALL REQUIREMENTS OF THE TRAFFIC IMPACT ANALYSIS (TIA) SHALL BE FOLLOWED.
10. ALL CITY, STATE AND FEDERAL REGULATIONS SHALL BE FOLLOWED.
11. BUILDING 6 AND BUILDING 7 SHALL BE SHIFTED AS FAR NORTH AS POSSIBLE TO PROVIDE A BUFFER WITH EXISTING VEGETATION WHILE SAVING THE LARGEST OAK TREE (58' LIVE OAK).
12. IN ADDITION TO THE 20-FOOT BUFFER, AN 8-FOOT TALL WOODEN FENCE MUST BE CONSTRUCTED ADJACENT TO BUILDINGS 6 AND 7.
13. LEFT TURN MOVEMENTS SHALL BE PROHIBITED ALONG MARKET STREET IN FRONT OF THE PROPOSED PHASE 2 RIGHT-IN/RIGHT-OUT DRIVEWAY, BUILT TO NCDOT STANDARDS.



Know what's below. Call before you dig.

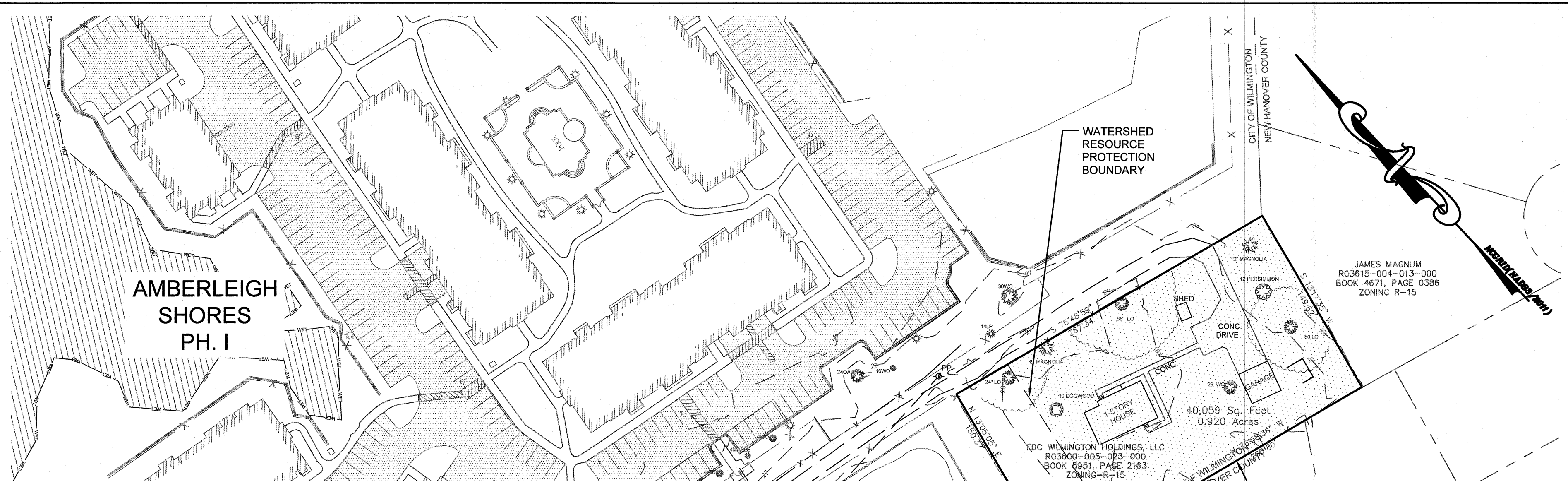
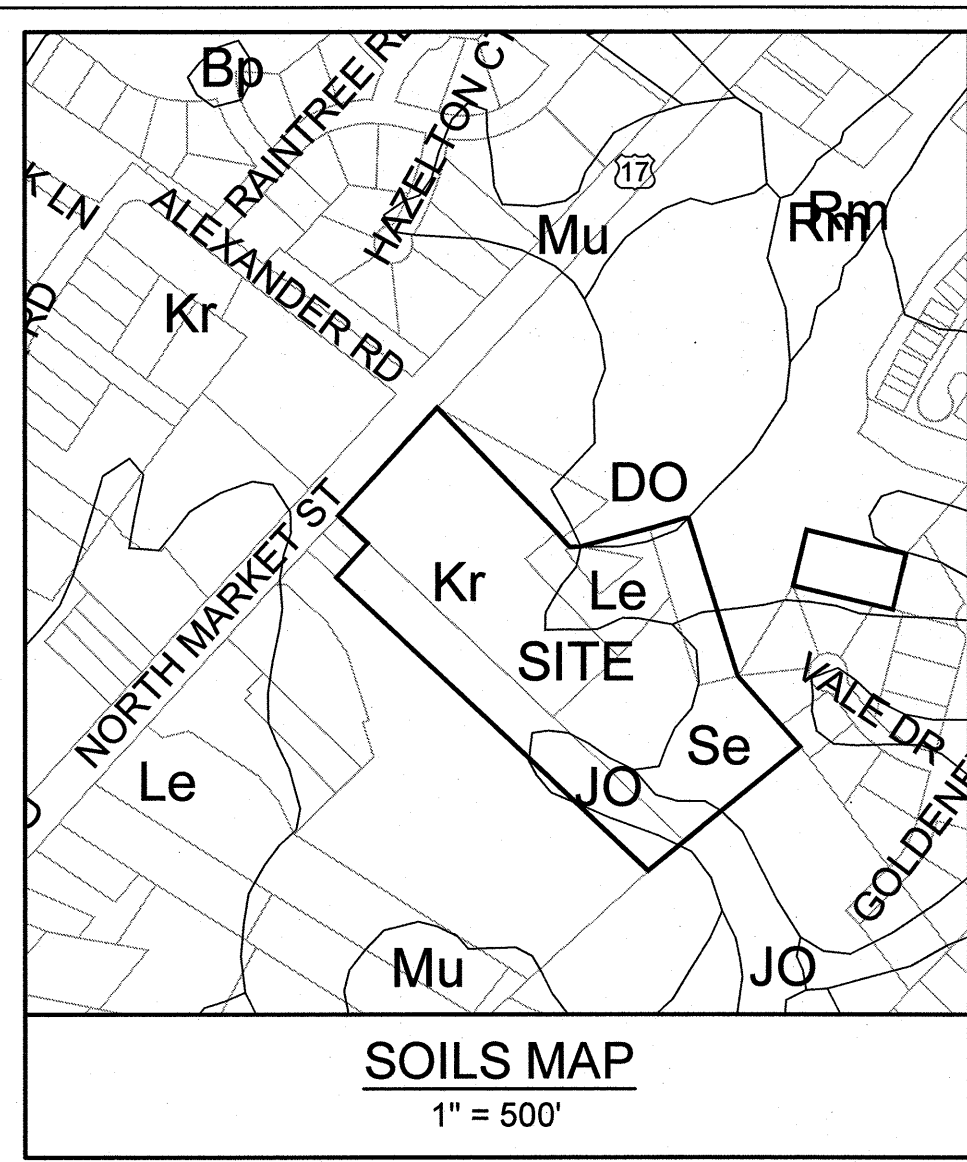
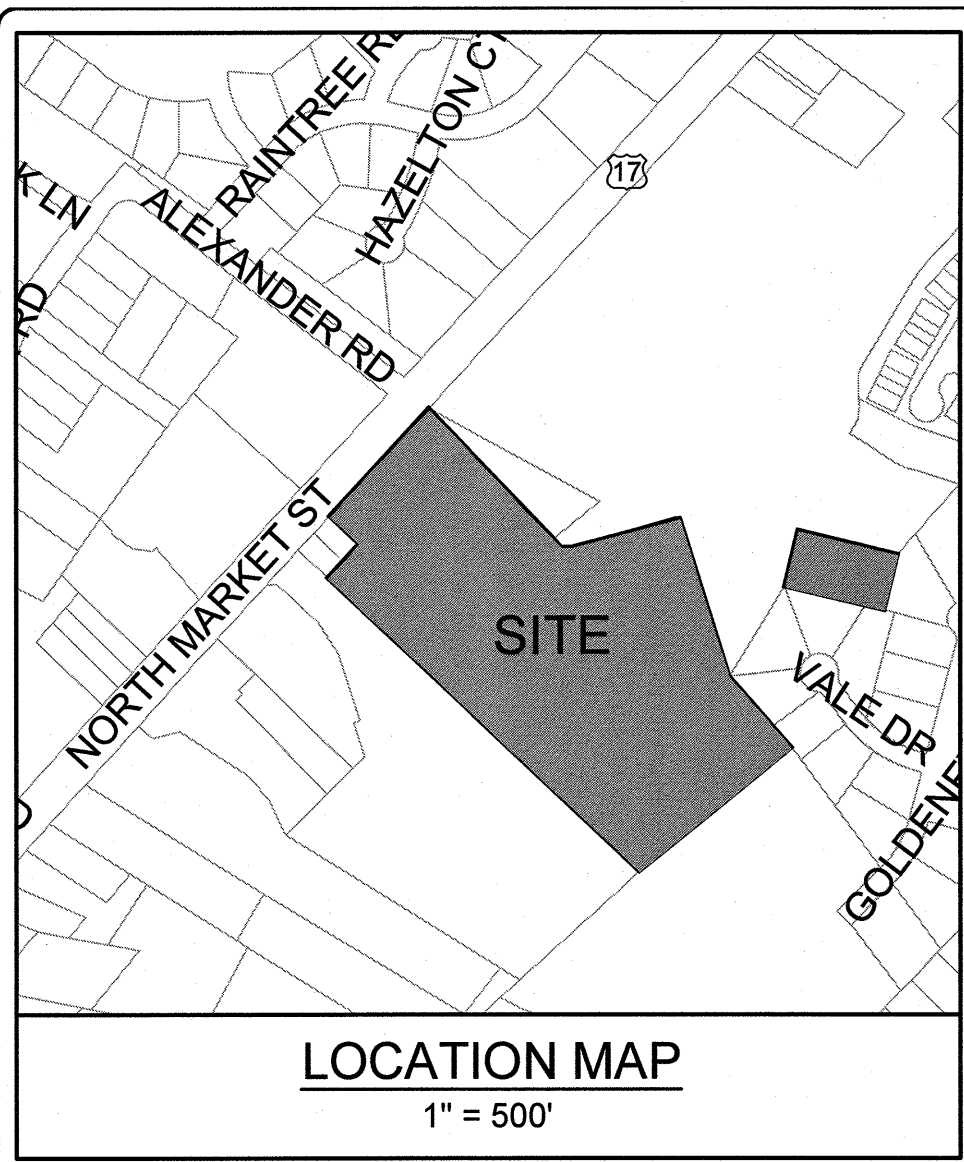
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan
Name: YMC, Date: 1-4-2019
Traffic: AK, Date: 1-4-19
Fire: [Signature], Date: 1-4-19

WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/21/19 Permit #: 2018095
Signed: [Signature]

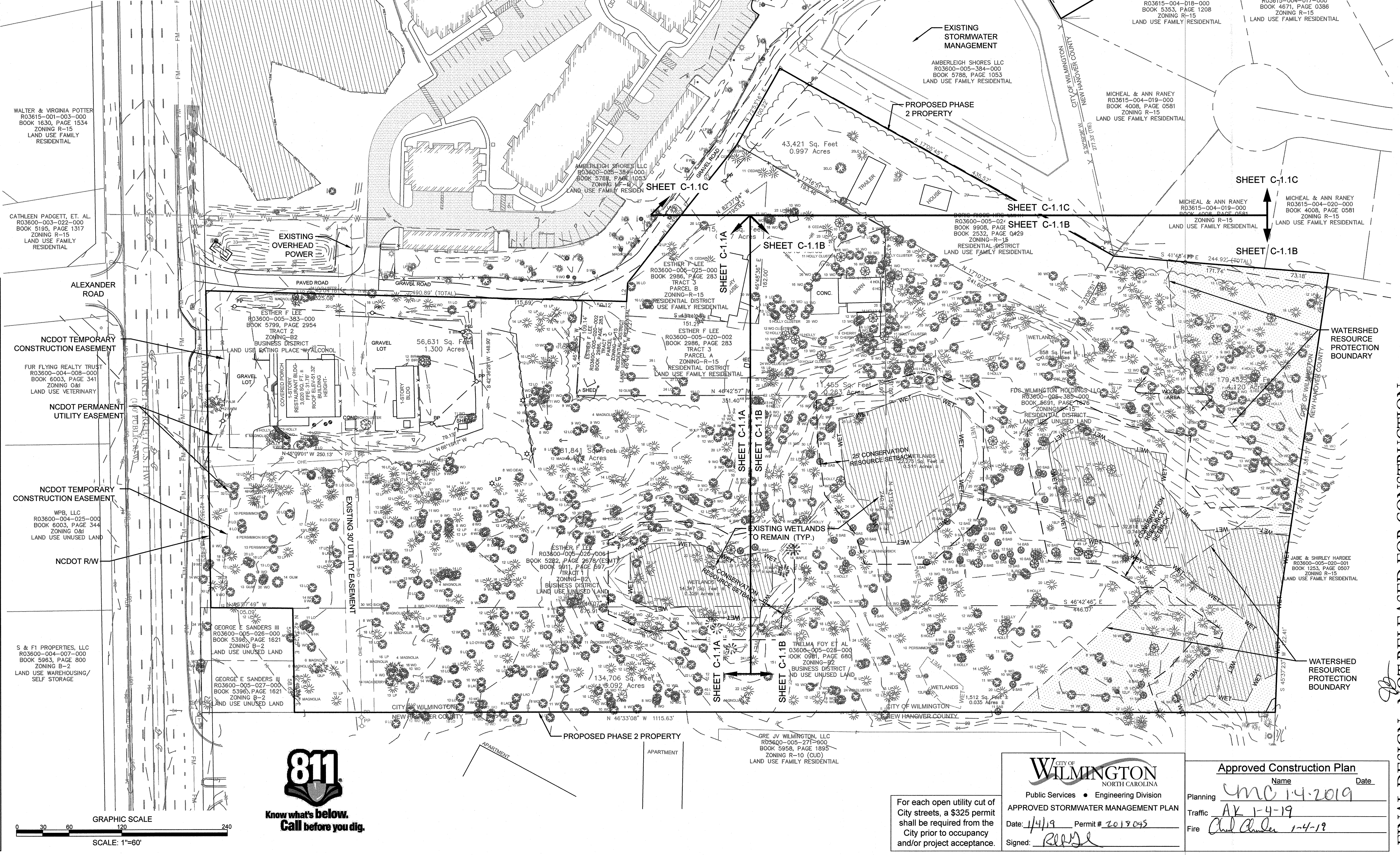
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

PARAMOUNT ENGINEERING INC. 122 Cinema Drive Wilmington, North Carolina 28403 (910) 791-6707 (O) (910) 791-6700 (F) NC License #: C-2846
GENERAL NOTES AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA
C-1.0B



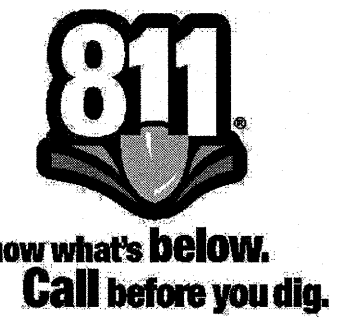
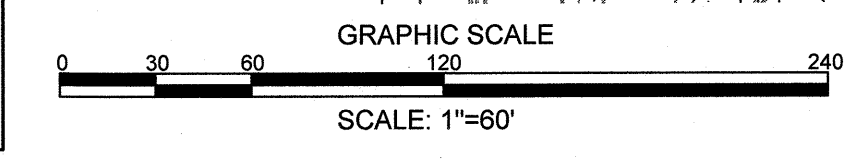
SITE INVENTORY DATA

- PREPARER OF THE PLAN: PARAMOUNTE ENGINEERING, 122 CINEMA DRIVE, WILMINGTON, NC 28403
- APPLICANT NAME: FDC AMBERLEIGH SHORES II SPE, LLC
- SITE ADDRESS: 7766 MARKET STREET, 7810 MARKET STREET, 7802 MARKET STREET, 7802 MARKET STREET, 7806 MARKET STREET, 7770 MARKET STREET, 7764 MARKET STREET, 7758 MARKET STREET, 7910 MARKET STREET
- PROPERTY OWNER: SEE PLAN
- DEVELOPER: FLOURNOY DEVELOPMENT COMPANY, LLC
- PROPERTY BOUNDARY: SEE PLAN
- CURRENT ZONING: CITY - MFM(CD)
- ADJACENT PROPERTY INFO. (OWNER AND ZONING): SEE PLAN
- VICINITY MAP: SEE MAP ABOVE
- TOPOGRAPHY: SEE PLAN
- 100 YEAR FLOOD PLAIN: SITE IS NOT LOCATED IN THE 100 YEAR FLOOD PLAIN
- LOCATION OF EXISTING DITCHES, CREEKS, AND STREAMS: SEE PLAN
- SOILS: Le (LEON SAND), K1 (KUREB SAND), Ss (SEAGATE FINE SAND), JO (JOHNSTON), Mu (MURVILLE FINE SAND)
- CAMA AEC & ASSOCIATED SETBACKS: N/A
- CAMA LAND CLASSIFICATION: TRANSITION & WATERSHED PROTECTION
- CONSERVATION RESOURCES: SEE PLAN
- LOCAL, STATE, OR FEDERAL HISTORIC OR ARCHAEOLOGICAL SITE: N/A
- LOCATION OF CEMETERIES, BURIAL SITES, OR BURIAL GROUNDS: N/A
- SQUARE FOOTAGE OF FORESTED AREA, HABITAT, AND DOMINANT SPECIES: N/A
- SECTION 404 WETLANDS AND SECTION 10 WATERS: SEE PLAN
- PROTECTED SPECIES OR HABITAT: N/A
- THOROUGHFARES, BIKE ROUTES, SIDEWALKS, TRANSIT FACILITIES (EXISTING OR PROPOSED): SEE PLAN & VICINITY MAP



CONSTRUCTION EASEMENTS

- NCDOT TEMPORARY CONSTRUCTION EASEMENT
- FUR FLYING REALTY TRUST (R-15)
- NCDOT PERMANENT UTILITY EASEMENT
- NCDOT TEMPORARY CONSTRUCTION EASEMENT
- NCDOT RW



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/4/19 Permit # 2019045
Signed: [Signature]

Approved Construction Plan

Name: [Blank] Date: [Blank]
 Planning: YMC 1-4-2019
 Traffic: AK 1-4-19
 Fire: [Signature] 1-4-19

PARAMOUNTE ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

OVERALL SITE INVENTORY PLAN
AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS: FINAL DESIGN, PRELIMINARY LAYOUT, RELEASED FOR CONST.
DRAWING INFORMATION: DATE: 1-4-19, SCALE: AS SHOWN, DRAWN: [Signature], CHECKED: [Signature]

SEAL: [Professional Engineer Seal]

C-1.1

PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

CATHLEEN PADGETT, ET. AL.
R03600-003-022-000
BOOK 5195, PAGE 1317
ZONING R-15
LAND USE FAMILY
RESIDENTIAL

ALEXANDER
ROAD

FUR FLYING REALTY TRUST
R03600-004-008-000
BOOK 6003, PAGE 341
ZONING O&I
LAND USE VETERINARY

WPB, LLC
R03600-004-025-000
BOOK 6003, PAGE 344
ZONING O&I
LAND USE UNUSED LAND

AMBERLEIGH
SHORES
PH. I

AMBERLEIGH SHORES LLC
R03600-005-384-000
BOOK 5788, PAGE 1053
ZONING MF-M
LAND USE FAMILY RESIDENTIAL

ESTHER F LEE
R03600-005-025-000
BOOK 2986, PAGE 283
TRACT 3
PARCEL B-15
ZONING-R-15
RESIDENTIAL DISTRICT
LAND USE FAMILY RESIDENTIAL

ESTHER F LEE
R03600-005-020-002
BOOK 2986, PAGE 283
TRACT 3
PARCEL A
ZONING-R-15
RESIDENTIAL DISTRICT
LAND USE FAMILY RESIDENTIAL

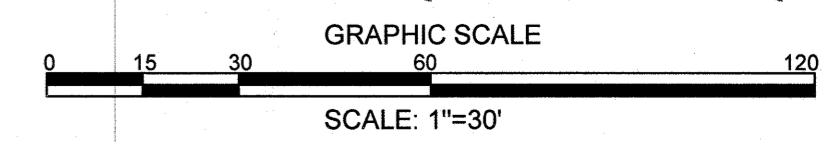
ESTHER F LEE
R03600-005-020-006
BOOK 5282, PAGE 2678 (ESMT)
BOOK 9911, PAGE 597
TRACT 1
ZONING-B2
BUSINESS DISTRICT
LAND USE UNUSED LAND

GEORGE E SANDERS III
R03600-005-026-000
BOOK 5396, PAGE 1621
ZONING B-2
LAND USE UNUSED LAND

GEORGE E SANDERS III
R03600-005-027-000
BOOK 5396, PAGE 1621
ZONING B-2
LAND USE UNUSED LAND

CITY OF WILMINGTON
NEW HANOVER COUNTY

PROPOSED PHASE 2 PROPERTY N 46°33'08" W 1115.63'



Approved Construction Plan

Name	Date
Planning <i>cmc 1-4-2019</i>	
Traffic <i>AK 1-4-19</i>	
Fire <i>AK 1-4-19</i>	

APPROVED STORMWATER MANAGEMENT PLAN

Date: *1-4-19* Permit # *2612843*

Signed: *[Signature]*



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Public Services • Engineering Division

REVISIONS

08.06.18	1 PER CITY AND OWNER COMMENTS
11.28.18	2 PER CITY AND OWNER COMMENTS
12.17.18	3 PER CITY COMMENTS

CLIENT INFORMATION

FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6700 (F)
NC License #: C2846

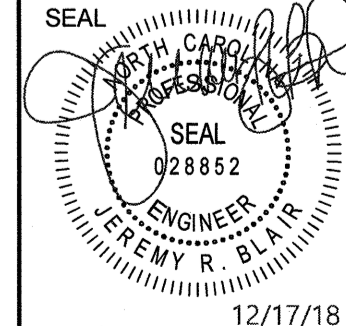
SITE INVENTORY PLAN
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS

CONCEPTUAL LAYOUT	PRELIMINARY LAYOUT	RELEASED FOR CONST.
-------------------	--------------------	---------------------

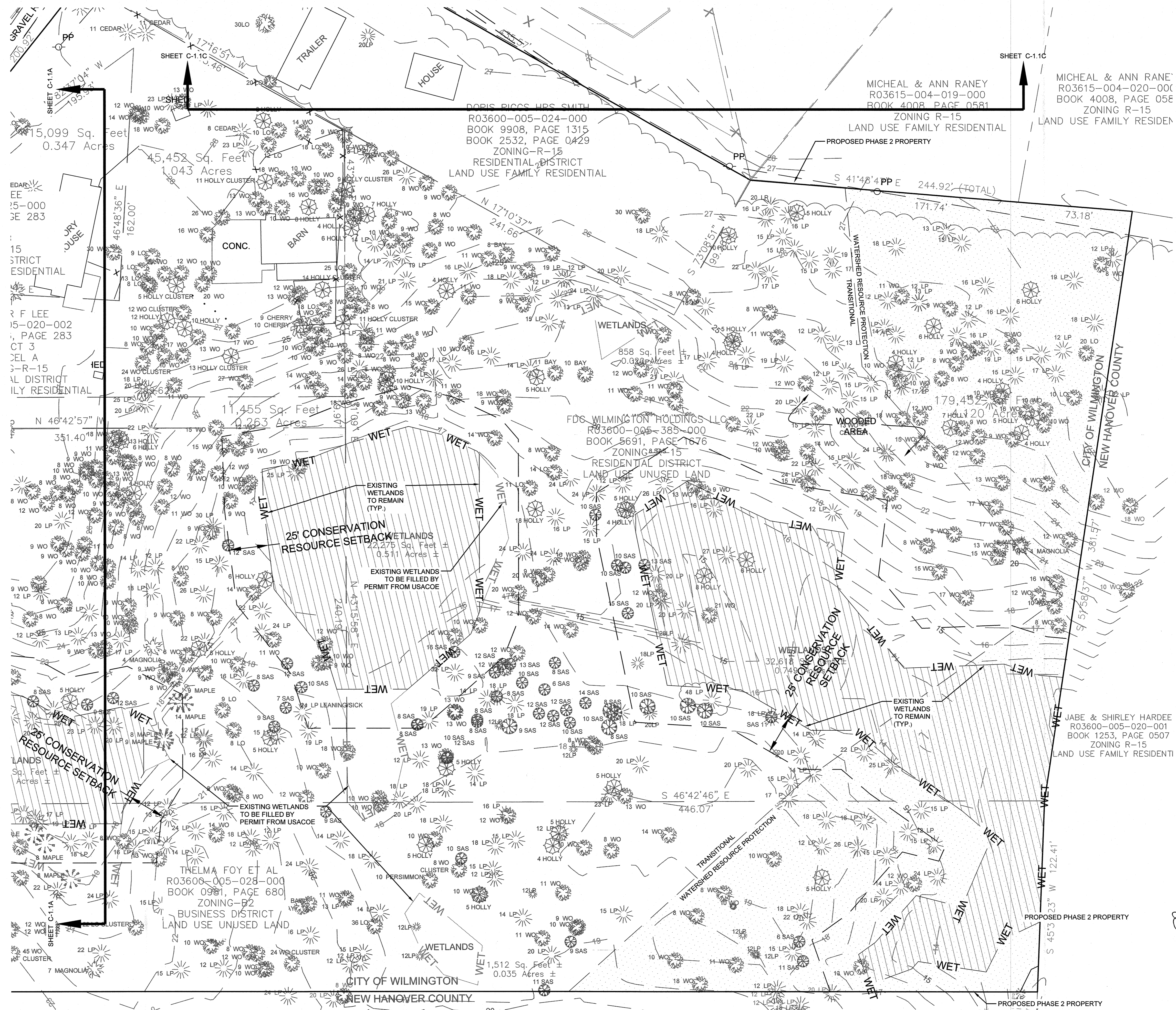
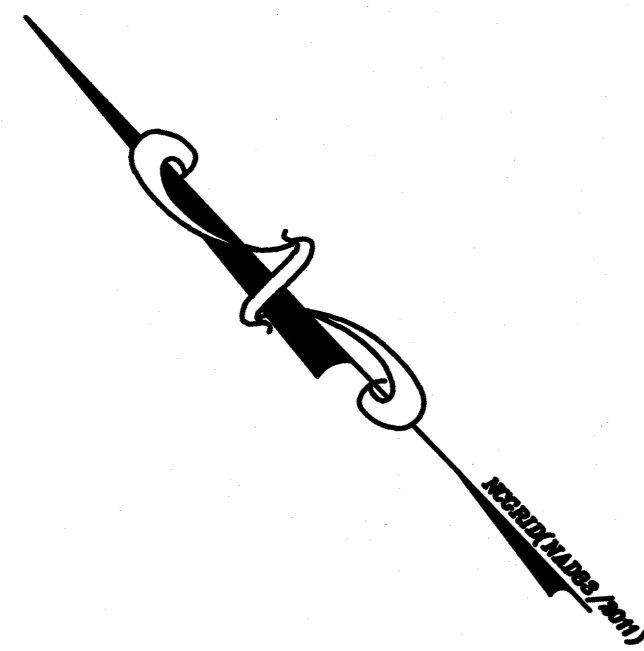
DRAWING INFORMATION

DATE	DESIGNED	DRAWN	CHECKED



C-1.1A
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



Approved Construction Plan

Name: YMC 14-2019 Date: _____

Planning: AY 1-4-19

Traffic: AY 1-4-19

Fire: AY 1-4-19

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

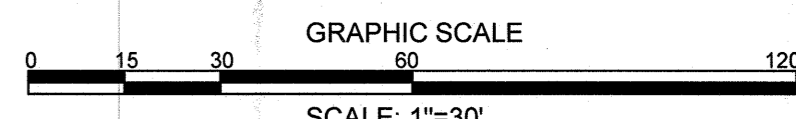
APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/4/19 Permit # 2018045

Signed: [Signature]



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



REVISIONS:	DATE	BY	DESCRIPTION
1/ PER CITY AND OWNER COMMENTS	08.08.18		
2/ PER CITY AND OWNER COMMENTS	11.08.18		
3/ PER CITY COMMENTS	12.17.18		

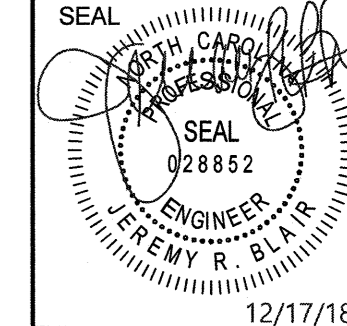
CLIENT INFORMATION:

FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

SITE INVENTORY PLAN
AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

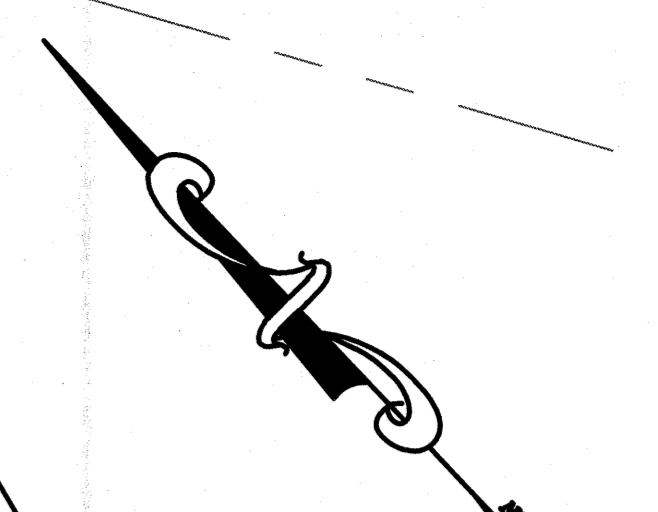
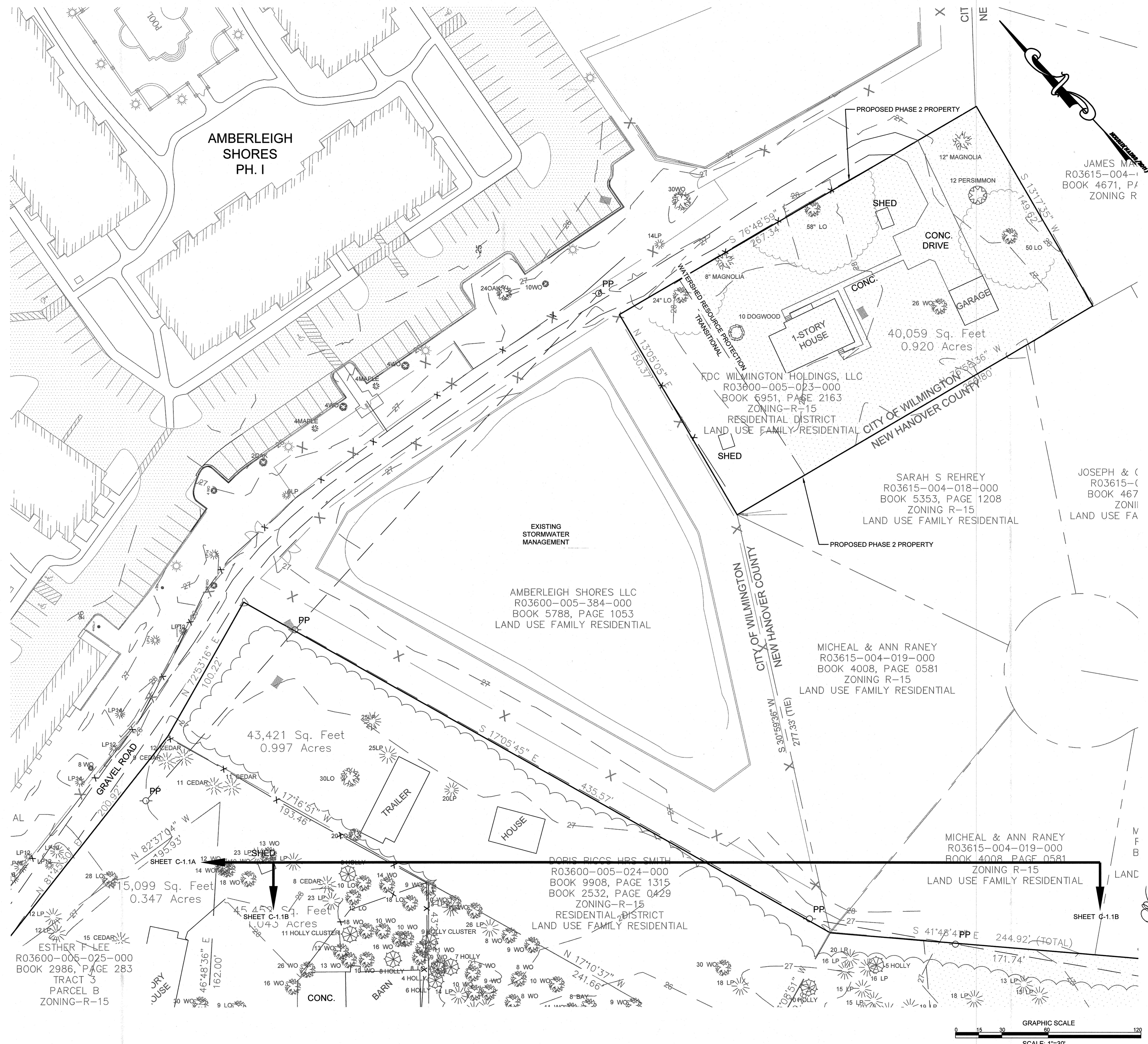
PROJECT STATUS	DATE	BY
FINAL DESIGN	05.08.18	
RELEASED FOR CONST.	05.08.18	



C-1.1B

PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



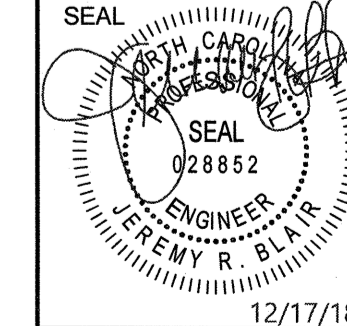
REVISIONS:	DATE
1/ PER CITY AND OWNER COMMENTS	08/28/18
2/ PER CITY AND OWNER COMMENTS	11/28/18
3/ PER CITY COMMENTS	12/17/18

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

SITE INVENTORY PLAN
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS	DRAWING INFORMATION
CONCEPTUAL LAYOUT	12/18/18
FINAL DESIGN LAYOUT	11/30/18
RELEASED FOR CONSTRUCTION	11/30/18
DATE	11/30/18
SCALE	1" = 30'
SCALE CHECKED	DFB
DRAWN	DFB
CHECKED	DFB



C-1.1C
 PEI JOB#: 16105.PE

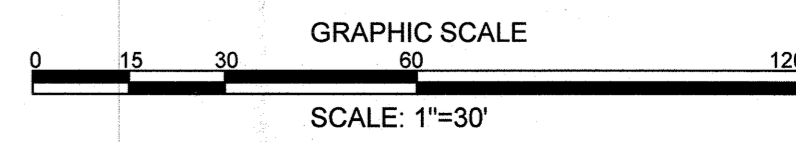
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

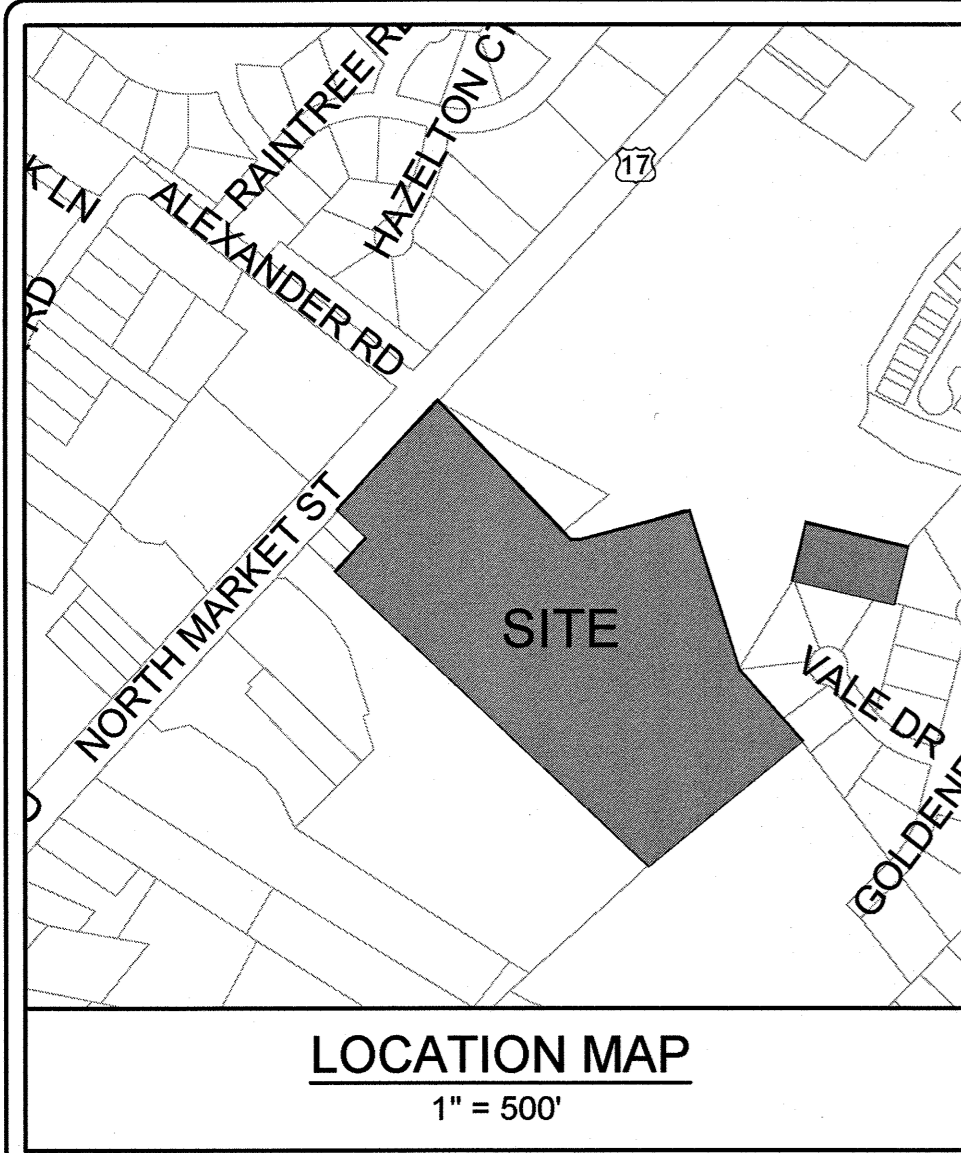
Approved Construction Plan	
Name	Date
Planning <i>cmc</i>	<i>1-4-2019</i>
Traffic <i>AK</i>	<i>1-4-19</i>
Fire <i>AK</i>	<i>1-4-19</i>

City of Wilmington
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: *1/9/19* Permit # *2018695*
 Signed: *[Signature]*



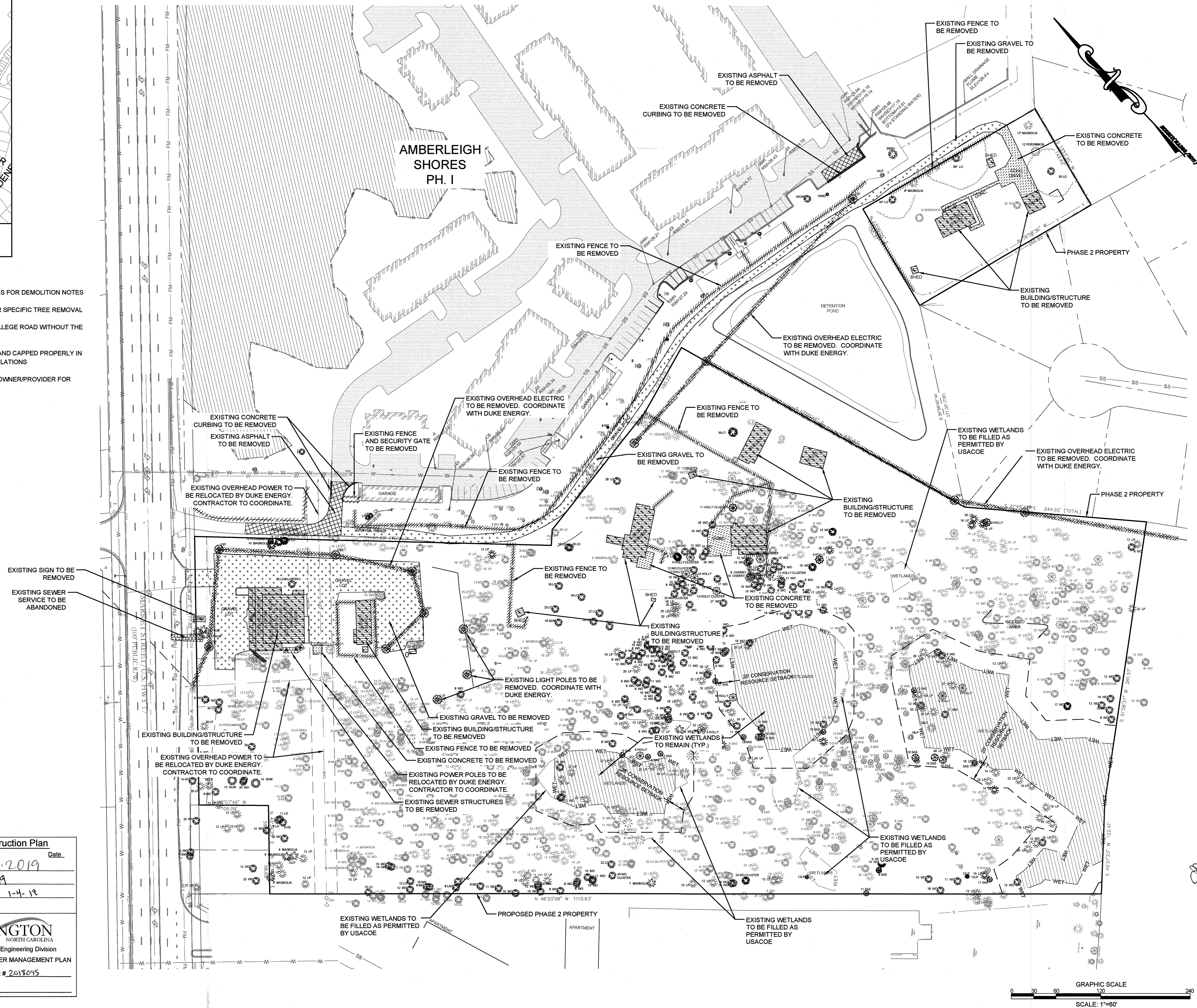
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.





- DEMOLITION NOTES:**
- 1) CONTRACTOR SHALL REFER TO SHEET C-1.0 GENERAL NOTES FOR DEMOLITION NOTES
 - 2) CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANS FOR SPECIFIC TREE REMOVAL
 - 3) CONTRACTOR SHALL MAKE NO PAVEMENT CUTS INTO S. COLLEGE ROAD WITHOUT THE WRITTEN PERMISSION OF NCDOT
 - 4) ALL UTILITIES SHALL BE ABANDONED AND/OR DEMOLISHED AND CAPPED PROPERLY IN ACCORDANCE WITH THE UTILITY OWNERS RULES AND REGULATIONS
 - 5) CONTRACTOR SHALL COORDINATE WITH ELECTRIC UTILITY OWNER/PROVIDER FOR DEMOLITION

SYMBOLS LEGEND	
REFER TO SURVEY FOR EXISTING CONDITION SYMBOLS LEGEND	
	EXISTING SIGN/LIGHT/UTILITY POLE TO BE REMOVED
	EXISTING OVERHEAD POWER TO BE REMOVED
	EXISTING FENCE TO BE REMOVED
	EXISTING STORM SEWER LINE TO BE REMOVED
	EXISTING BUILDING/STRUCTURE TO BE REMOVED
	EXISTING CONCRETE PAVEMENT/PAD TO BE REMOVED
	EXISTING GRAVEL TO BE REMOVED
	EXISTING ASPHALT PAVEMENT TO BE REMOVED
	EXISTING CONCRETE CURBING TO BE REMOVED
	EXISTING SEWER STRUCTURE TO BE REMOVED



Approved Construction Plan

Name: YMC Date: 1-4-2019

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: AK 1-4-19

City of WILMINGTON, NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 2/13/19 Permit # 2013015
Signed: [Signature]



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

03.08.18	1. PER CITY AND OWNER COMMENTS
12.26.18	2. PER CITY AND OWNER COMMENTS
12.31.18	3. PER CITY COMMENTS

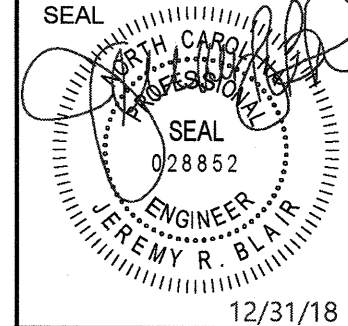
CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT
ENGINEERING, P.C.
122 Cinema Drive
Wilmington, North Carolina, 28403
(910) 797-6707 (C) (910) 791-6700 (F)
NC License #: C-2846

DEMOLITION PLAN
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT
FINAL LAYOUT
FINAL DESIGN
RELEASED FOR CONSTRUCTION

DRAWING INFORMATION:
DATE: 12.28.18
SCALE: 1" = 60'
DRAWN: [Signature]
CHECKED: [Signature]



C-1.2
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

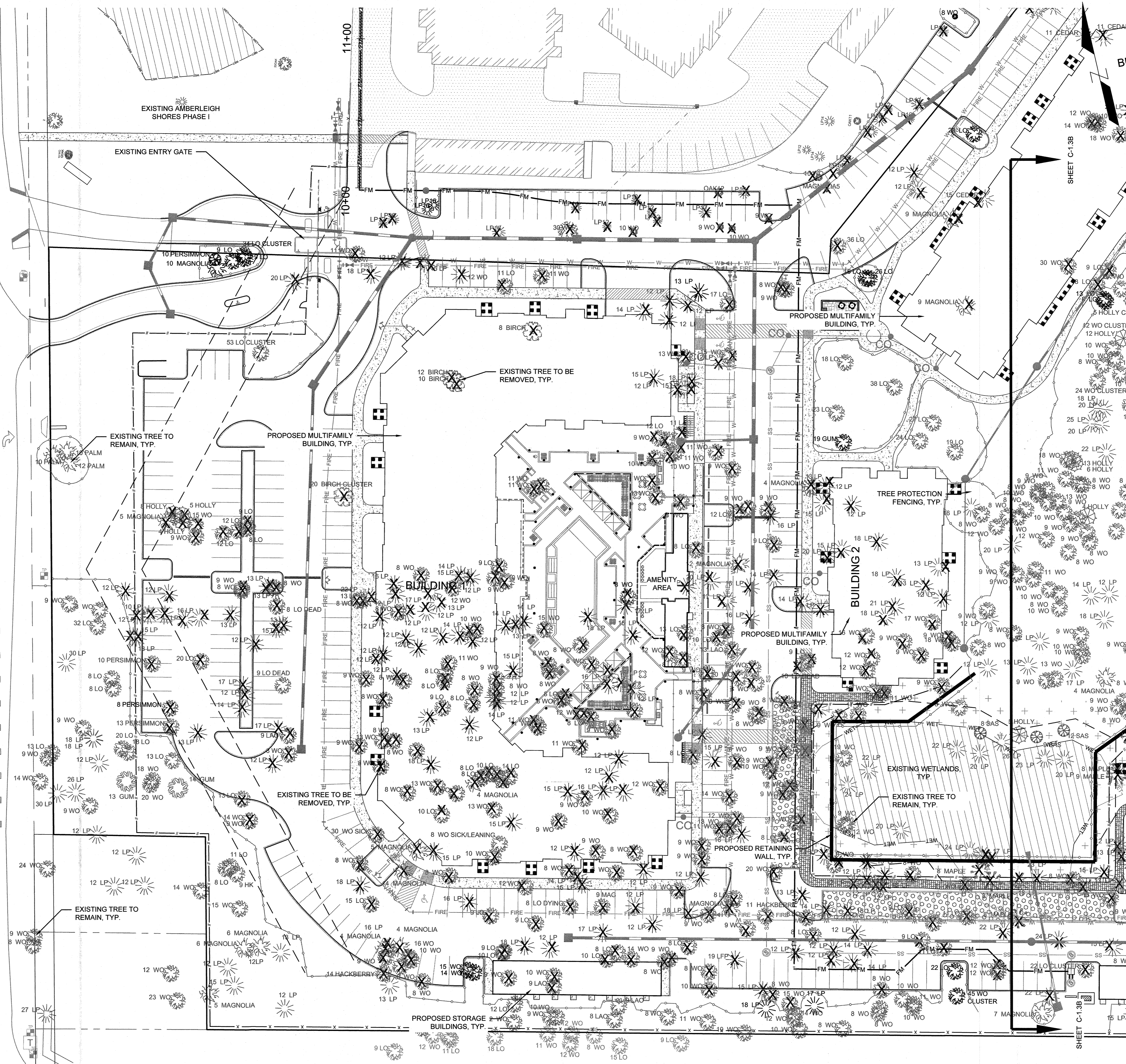
TREE REMOVAL NOTES:

1. PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN TREE PROTECTION FENCING.
2. HAND CUT ROOTS OF ALL TREES TO BE PRESERVED NEAR PROPOSED UTILITIES, PAVING OR OTHER IMPROVEMENTS IMPACTING ROOT ZONE AND PRESERVED TREES IN LANDSCAPE ISLANDS.
3. CONTRACTOR SHALL WORK WITH THE PROJECT'S ARBORIST AND LANDSCAPE ARCHITECT TO ASSURE PROPER TREE CARE, PRUNING, PRESERVATION, AND ROOT PROTECTION OCCURS ON SITE.

TREE REMOVAL PLAN NOTES:

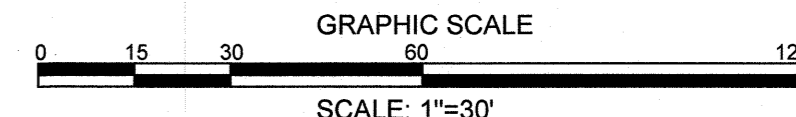
1. ALL TREES IDENTIFIED WITH SIZE, TREE TYPE AND THE WORD "CLUSTER" INDICATE THAT THERE ARE MULTIPLE TRUNKS ADDED TOGETHER AND LABELED ON PLAN WITH THE CUMULATIVE CALIPER INCH SIZE IN ACCORDANCE WITH THE "DIAMETER AT BREAST HEIGHT" DEFINITION IN THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.

MARKET STREET / U.S. HWY 1
(100' PUBLIC R/W)



CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/14/19 Permit # 2018015
Signed: [Signature]
Approved Construction Plan
Name: [Name] Date: [Date]
Planning: [Signature] 1-4-2019
Traffic: [Signature] 1-4-19
Fire: [Signature] 1-4-19

811
Know what's below.
Call before you dig.
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

08.08.18	1) PER CITY AND OWNER COMMENTS
10.05.18	2) PER CITY AND OWNER COMMENTS
11.28.18	3) PER CITY AND OWNER COMMENTS
12.17.18	4) PER CITY COMMENTS
12.31.18	5) PER CITY COMMENTS

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

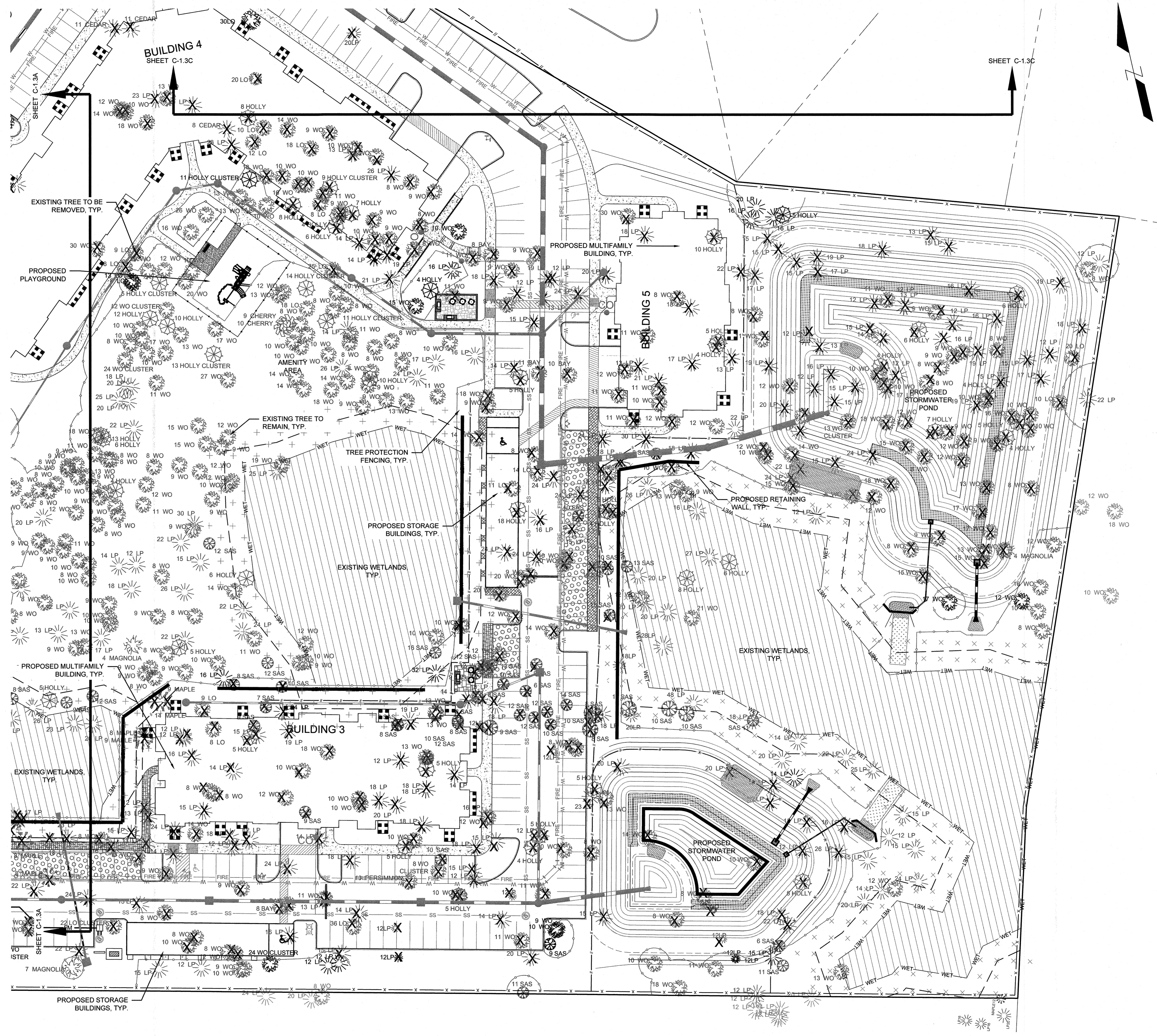
PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

TREE REMOVAL & MITIGATION PLAN
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT
PRELIMINARY LAYOUT
RELEASED FOR CONSTRUCTION
DRAWING INFORMATION:
SCALE: AS SHOWN ON DRAWING
DESIGNED: [Signature]
CHECKED: [Signature]

SEAL:
[Signature]
ENGINEER
12/31/18

C-1.3A
PEI JOB#: 16105.PE



TREE REMOVAL NOTES:

1. PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN TREE PROTECTION FENCING.
2. HAND CUT ROOTS OF ALL TREES TO BE PRESERVED NEAR PROPOSED UTILITIES, PAVING OR OTHER IMPROVEMENTS IMPACTING ROOT ZONE AND PRESERVED TREES IN LANDSCAPE ISLANDS.
3. CONTRACTOR SHALL WORK WITH THE PROJECT'S ARBORIST AND LANDSCAPE ARCHITECT TO ASSURE PROPER TREE CARE, PRUNING, PRESERVATION, AND ROOT PROTECTION OCCURS ON SITE.

TREE REMOVAL PLAN NOTES:

1. ALL TREES IDENTIFIED WITH SIZE, TREE TYPE AND THE WORD "CLUSTER" INDICATE THAT THERE ARE MULTIPLE TRUNKS ADDED TOGETHER AND LABELED ON PLAN WITH THE CUMULATIVE CALIPER INCH SIZE IN ACCORDANCE WITH THE "DIAMETER AT BREAST HEIGHT" DEFINITION IN THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.

Approved Construction Plan

Name	Date
Planning <i>umc 1-4-2019</i>	
Traffic <i>AX 1-4-19</i>	
Fire <i>Ant Andra 1-4-19</i>	



Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: *1/11/19* Permit # *213045*
 Signed: *RWJ*

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



Know what's below. Call before you dig.

REVISIONS:

06.08.18	1. PER CITY AND OWNER COMMENTS
10.03.18	2. PER CITY AND OWNER COMMENTS
11.28.18	3. PER CITY AND OWNER COMMENTS
12.17.18	4. PER CITY COMMENTS
12.18.18	5. PER CITY COMMENTS

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 N.C. License #: C-2846

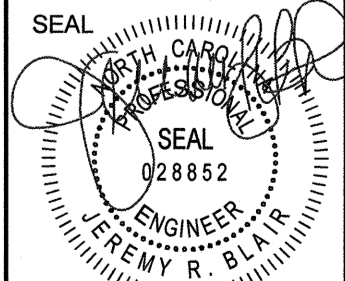
TREE REMOVAL & MITIGATION PLAN
 AMBERLEIGH SHORES
 PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA

PROJECT STATUS:

FINAL DESIGN	12/18/17
PRELIMINARY LAYOUT	AS NOTED
RELEASED FOR CONSTRUCTION	AS NOTED

DRAWING INFORMATION:

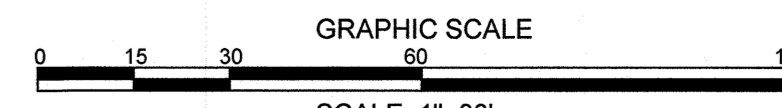
DATE	SCALE	DRAWN	CHECKED



C-1.3B

PEI JOB#: 18105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

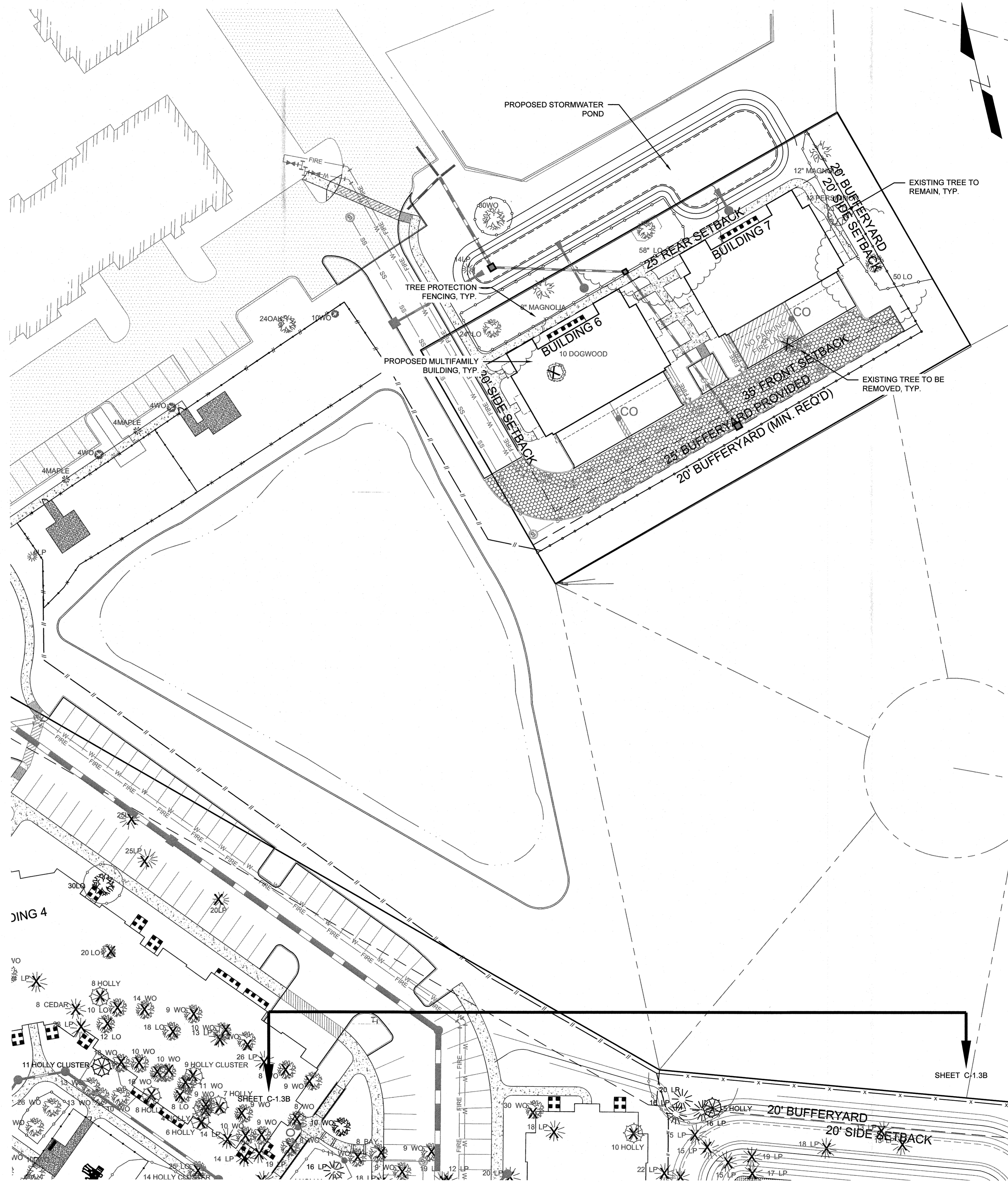


TREE REMOVAL NOTES:

1. PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS OR VEHICLES ARE PERMITTED WITHIN TREE PROTECTION FENCING.
2. HAND CUT ROOTS OF ALL TREES TO BE PRESERVED NEAR PROPOSED UTILITIES, PAVING OR OTHER IMPROVEMENTS IMPACTING ROOT ZONE AND PRESERVED TREES IN LANDSCAPE ISLANDS.
3. CONTRACTOR SHALL WORK WITH THE PROJECT'S ARBORIST AND LANDSCAPE ARCHITECT TO ASSURE PROPER TREE CARE, PRUNING, PRESERVATION, AND ROOT PROTECTION OCCURS ON SITE.

TREE REMOVAL PLAN NOTES:

1. ALL TREES IDENTIFIED WITH SIZE, TREE TYPE AND THE WORD "CLUSTER" INDICATE THAT THERE ARE MULTIPLE TRUNKS ADDED TOGETHER AND LABELED ON PLAN WITH THE CUMULATIVE CALIPER INCH SIZE IN ACCORDANCE WITH THE "DIAMETER AT BREAST HEIGHT" DEFINITION IN THE CITY OF WILMINGTON LAND DEVELOPMENT CODE.



Know what's below.
Call before you dig.

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan	
Name	Date
Planning <i>ymc 1-4-2019</i>	
Traffic <i>1-4-19</i>	
Fire <i>1-4-19</i>	
Public Services • Engineering Division APPROVED STORMWATER MANAGEMENT PLAN	
Date: <i>1-4-19</i>	Permit # <i>2018015</i>
Signed: <i>[Signature]</i>	

REVISIONS	DATE
1) PER CITY AND OWNER COMMENTS	08.08.18
2) PER CITY AND OWNER COMMENTS	10.05.18
3) PER CITY AND OWNER COMMENTS	11.28.18
4) PER CITY COMMENTS	12.17.18
5) PER CITY COMMENTS	12.31.18

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA. 31904

PARAMOUNT ENGINEERING
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

TREE REMOVAL & MITIGATION PLAN
 AMBERLEIGH SHORES
 PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA

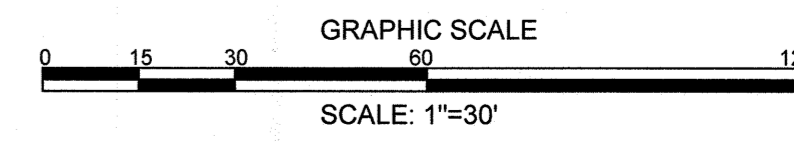
PROJECT STATUS:
 CONCEPTUAL LAYOUT
 PRELIMINARY LAYOUT
 RELEASED FOR CONST.
 DRAWING INFORMATION:
 SCALE
 DESIGNED
 CHECKED

SEAL

 12/31/18

C-1.3C
 PEI JOB#: 18105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



SITE INFORMATION
 APPLICANT INFORMATION: FDC AMBERLEIGH SHORES II SPE, LLC
 900 BROOKSTONE CENTRE PARKWAY
 COLUMBUS, GA 31904

SITE PARCEL INFORMATION:

PARCEL ID	ADDRESS	CURRENT OWNER
R03600-005-385-000	7766 MARKET STREET	FDC WILMINGTON HOLDINGS, LLC
R03600-005-023-000	7810 MARKET STREET	FDC HOLDINGS, LLC
R03600-005-020-002	7802 MARKET STREET	ESTHER F. LEE
R03600-005-025-000	7802 MARKET STREET	ESTHER F. LEE
R03600-005-024-000	7806 MARKET STREET	JAMES G. SMITH
R03600-005-393-000	7770 MARKET STREET	ESTHER F. LEE
R03600-005-020-006	7764 MARKET STREET	ESTHER F. LEE
R03600-005-028-000	7758 MARKET STREET	CHARLES FOY, ET. AL
PART OF R03600-005-384-000	7910 MARKET ST	AMBERLEIGH SHORES, LLC

CURRENT ZONING: CITY - MFM(CD-14-616)

PROPOSED USE: MULTI-FAMILY APARTMENTS

TOTAL SITE AREA: PHASE 1 - 26.57
 PHASE 2 - 15.24 AC. + 0.92 AC. (16.16 TOTAL)
 TOTAL - 42.73

DENSITY ALLOWABLE IN MFM: 17 DU/AC (726 UNITS)

DENSITY PROVIDED IN MFM: 13.3 DU/AC (669 UNITS TOTAL)
 PHASE 1 EXISTING - 282 UNITS
 PHASE 2 PROPOSED - 287 UNITS

FLOOD INFORMATION: THIS PARCEL IS NOT LOCATED IN A 100-YEAR FLOOD ZONE AS INDICATED BY FEMA FLOOD ZONE PANEL 3720316900K BEARING AN EFFECTIVE DATE OF AUGUST 28, 2018.

CAMA LAND USE CLASSIFICATION: TRANSITION & WATERSHED PROTECTION

CONSERVATION RESOURCE: HEADWATER SWAMP/SWAMP FOREST WETLANDS; 25' SETBACK OFF WETLAND BOUNDARY, AS ESTABLISHED BY IMPACTS APPROVED BY THE US ARMY CORPS OF ENGINEERS; ENCROACHMENT INTO SETBACK AREA CALCULATED TO BE 10.85%.

WASTE DISPOSAL: SOLID WASTE DISPOSAL WILL BE THROUGH PHASE 1 OF AMBERLEIGH SHORES.

CONSTRUCTION TYPE: V-A (SEE ARCH. PLANS)

DIMENSIONAL REQUIREMENTS

- MFM - MULTI-FAMILY MEDIUM DENSITY
- MINIMUM LOT AREA: 20,000 SF
- MINIMUM LOT WIDTH: 100'
- MAXIMUM LOT COVERAGE: 30%
- MINIMUM FRONT SETBACK: 35'
- MINIMUM REAR SETBACK: 25'
- MINIMUM SIDE SETBACK: 20'
- MAXIMUM BUILDING HEIGHT: *96'

*BUILDING HEIGHTS ABOVE 35' MUST PROVIDE ADDITIONAL SIDE AND REAR YARDS AS SET FORTH IN SEC. 18-184 (f) (2) OF THE CITY LAND DEVELOPMENT CODE. SEE CALCULATIONS BELOW.

BUILDINGS 1 - HEIGHT = 50'-10" (50.83')
 SETBACK (SIDE) = 20' FOR FIRST 35' + 4' FOR NEXT 10' + [5.83' x (6'/10')] = 27.5' REQUIRED
 SETBACK PROVIDED (NORTH SIDE) = 27' (ENCROACHMENT ALLOWED FOR COVERED PORCH/BALCONY)
 SETBACK PROVIDED (SOUTH SIDE) = 99'
 SETBACK PROVIDED (FRONT) = 199'

BUILDINGS 2 - HEIGHT = 48'-6" (48.5')
 SETBACK (SIDE) = 20' FOR FIRST 35' + 4' FOR NEXT 10' + [3.5' x (6'/10')] = 26.1' REQUIRED
 SETBACK PROVIDED (NORTH SIDE) = 119.7'
 SETBACK PROVIDED (SOUTH SIDE) = 215'

BUILDINGS 3 - HEIGHT = 48'-6" (48.5')
 SETBACK (SIDE) = 20' FOR FIRST 35' + 4' FOR NEXT 10' + [3.5' x (6'/10')] = 26.1' REQUIRED
 SETBACK PROVIDED (SOUTH SIDE) = 101.9'
 SETBACK PROVIDED (REAR) = 354'

BUILDINGS 4 - HEIGHT = 50'-10" (50.83')
 SETBACK (SIDE) = 20' FOR FIRST 35' + 4' FOR NEXT 10' + [5.83' x (6'/10')] = 27.5' REQUIRED
 SETBACK PROVIDED (NORTH SIDE) = 46.1'

BUILDING 5 - HEIGHT = 27'-8" (27.67')
 SETBACKS = MINIMUM REQUIRED - NO ADDITIONAL
 SETBACK PROVIDED (NORTH SIDE) = 26.2'
 SETBACK PROVIDED (REAR) = 230.6'

BUILDING 6 - HEIGHT = 24'-0" (24.0')
 SETBACKS = MINIMUM REQUIRED - NO ADDITIONAL
 SETBACK PROVIDED (FRONT) = 72.7'
 SETBACK PROVIDED (REAR) = 25.2'
 SETBACK PROVIDED (WEST SIDE) = 36.5'

BUILDING 7 - HEIGHT = 24'-0" (24.0')
 SETBACKS = MINIMUM REQUIRED - NO ADDITIONAL
 SETBACK PROVIDED (FRONT) = 72.7'
 SETBACK PROVIDED (REAR) = 25.2'
 SETBACK PROVIDED (EAST SIDE) = 39.2'

DETACHED GARAGE BUILDINGS - HEIGHT = 12'-0" (12.0')
 SETBACKS = MINIMUM REQUIRED - NO ADDITIONAL
 SETBACK PROVIDED (SOUTH SIDE) = 23'

BUILDING AREAS (TOTAL GROSS S.F.)

BUILDING	GROUND FLOOR	2ND FLOOR	3RD FLOOR	4TH FLOOR	TOTAL
BUILDING 1	38559	36220	36220	35737	146736
BUILDING 2	8665	8396	8396	8052	33509
BUILDING 3	13428	13163	13163	12819	52573
BUILDING 4	27490	27298	27298	26986	109072
BUILDING 5	8231	7612	-	-	15843
BUILDING 6	4237	3816	-	-	8053
BUILDING 7	4237	3816	-	-	8053
GARAGE	2124	-	-	-	2124
GARAGE-HC ACCESS	2239	-	-	-	2239
GARAGE-CARWASH	2150	-	-	-	2150
POOL PAVILION	2175	-	-	-	2175
TOTAL	113535	-	-	-	382527

BUILDING LOT COVERAGE
 TOTAL # OF PROPOSED BUILDINGS: 11
 BUILDING LOT COVERAGE PROVIDED: [113,535 SF BLDG AREA/703,810 SF (16.16 ac.) LOT AREA] X 100% = 16.13%

BUILDING LOT COVERAGE ALLOWED: 30%

PARKING - PHASE 2 (PROPOSED)

MINIMUM REQUIRED: 514 SPACES FOR PHASE 2 (SEE CALCULATIONS BELOW)
 MAXIMUM ALLOWED: 718 SPACES (2.5 PER UNIT)
 MINIMUM HANDICAP: 11 (2% OF TOTAL SPACES PROVIDED)
 2 HANDICAP VAN (1 PER EVERY 8 HANDICAP SPACES)
 15 (INCLUDING 8 VAN)
 TOTAL PROVIDED: 551 SPACES (501 SURFACE SPACES + 50 GARAGES)
 PEROUS PROVIDED: 51 SPACES

PROVIDED BUILDING & PARKING DATA - PHASE 2 (PROPOSED)

BLDG 1 (107 UNITS, 4 STORY):
 PROPOSED HEIGHT: 50'-10"
 1 BDRM 54 UNITS X 1.5 SPACE = 81 REQ'D SPACES
 2 BDRM 53 UNITS X 2.0 SPACE = 106 REQ'D SPACES
 3 BDRM 8 UNITS X 2.25 SPACE = 18 REQ'D SPACES
 BLDG 1 = 187 REQ'D SPACES

BLDG 2 (23 UNITS, 4 STORY):
 PROPOSED HEIGHT: 48'-6"
 1 BDRM 4 UNITS X 1.5 SPACE = 6 REQ'D SPACES
 2 BDRM 11 UNITS X 2.0 SPACE = 22 REQ'D SPACES
 3 BDRM 8 UNITS X 2.25 SPACE = 18 REQ'D SPACES
 BLDG 2 = 46 REQ'D SPACES

BLDG 3 (39 UNITS, 4 STORY):
 PROPOSED HEIGHT: 48'-6"
 1 BDRM 11 UNITS X 1.5 SPACE = 17 REQ'D SPACES
 2 BDRM 12 UNITS X 2.0 SPACE = 24 REQ'D SPACES
 3 BDRM 16 UNITS X 2.25 SPACE = 36 REQ'D SPACES
 BLDG 3 = 77 REQ'D SPACES

BLDG 4 (95 UNITS, 4 STORY):
 PROPOSED HEIGHT: 50'-10"
 1 BDRM 54 UNITS X 1.5 SPACE = 81 REQ'D SPACES
 2 BDRM 33 UNITS X 2.0 SPACE = 66 REQ'D SPACES
 3 BDRM 8 UNITS X 2.25 SPACE = 18 REQ'D SPACES
 BLDG 4 = 165 REQ'D SPACES

BLDG 5 (11 UNITS, 2 STORY):
 PROPOSED HEIGHT: 27'-8"
 1 BDRM 2 UNITS X 1.5 SPACE = 3 REQ'D SPACES
 2 BDRM 9 UNITS X 2.0 SPACE = 18 REQ'D SPACES
 BLDG 5 = 21 REQ'D SPACES

BLDG 6 (6 UNITS, 2 STORY):
 PROPOSED HEIGHT: 24'-0"
 1 BDRM 6 UNITS X 1.5 SPACE = 9 REQ'D SPACES

BLDG 7 (6 UNITS, 2 STORY):
 PROPOSED HEIGHT: 24'-0"
 1 BDRM 6 UNITS X 1.5 SPACE = 9 REQ'D SPACES

3 DETACHED GARAGE BUILDINGS
 PROPOSED HEIGHT: 12'-0"
 8 PARKING SPACES PER GARAGE (24 TOTAL)

IMPERVIOUS AREA
 EXISTING IMPERVIOUS: N/A (TO BE DEMOLISHED)

PROPOSED IMPERVIOUS (TOTAL):

BUILDINGS (PROPOSED FOOTPRINT)	113,535 SF
ON-SITE ROADWAYS & PARKING	157,067 SF
ON-SITE SIDEWALKS	47,754 SF
MISC. / FUTURE	20,755 SF
TOTAL ON SITE PROPOSED IMP. AREA	339,111 SF
TOTAL OFFSITE PROPOSED IMP. AREA	40,191 SF
ON-SITE PEROUS PAVEMENT (100% CREDIT)	5,848 SF

PROPOSED (ON-SITE) % IMPERVIOUS: 339,111 / 708,286 SF = 47.9%

WATERSHED RESOURCE PROTECTION AREA (WRPA)

TOTAL AREA IN WRPA	103,718 SF
IMPERVIOUS AREA IN WRPA (INCLUDES PEROUS PAVING)	17,193 SF (16.6%)
BASE IMPERVIOUS AREA ALLOWED IN WRPA	25%
DWELLING UNITS PROPOSED IN WRPA	12 (5.04 DU/AC)
BASE DENSITY ALLOWED IN WRPA	2.5 DU/AC
DENSITY BONUS CLAIMED THROUGH EXCEPTIONAL DESIGN	6 DU/AC

WATER & SEWER REQUIREMENTS

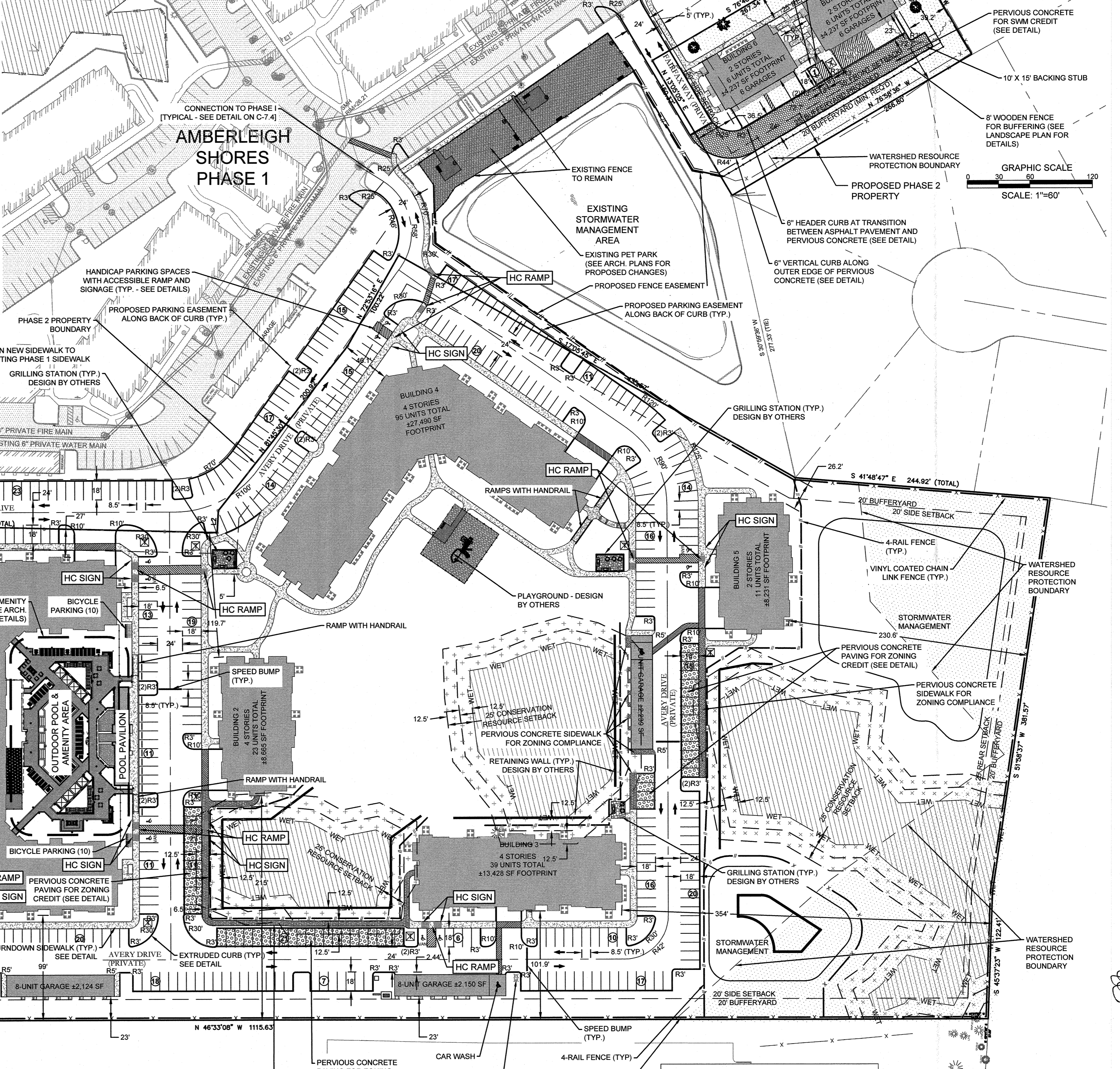
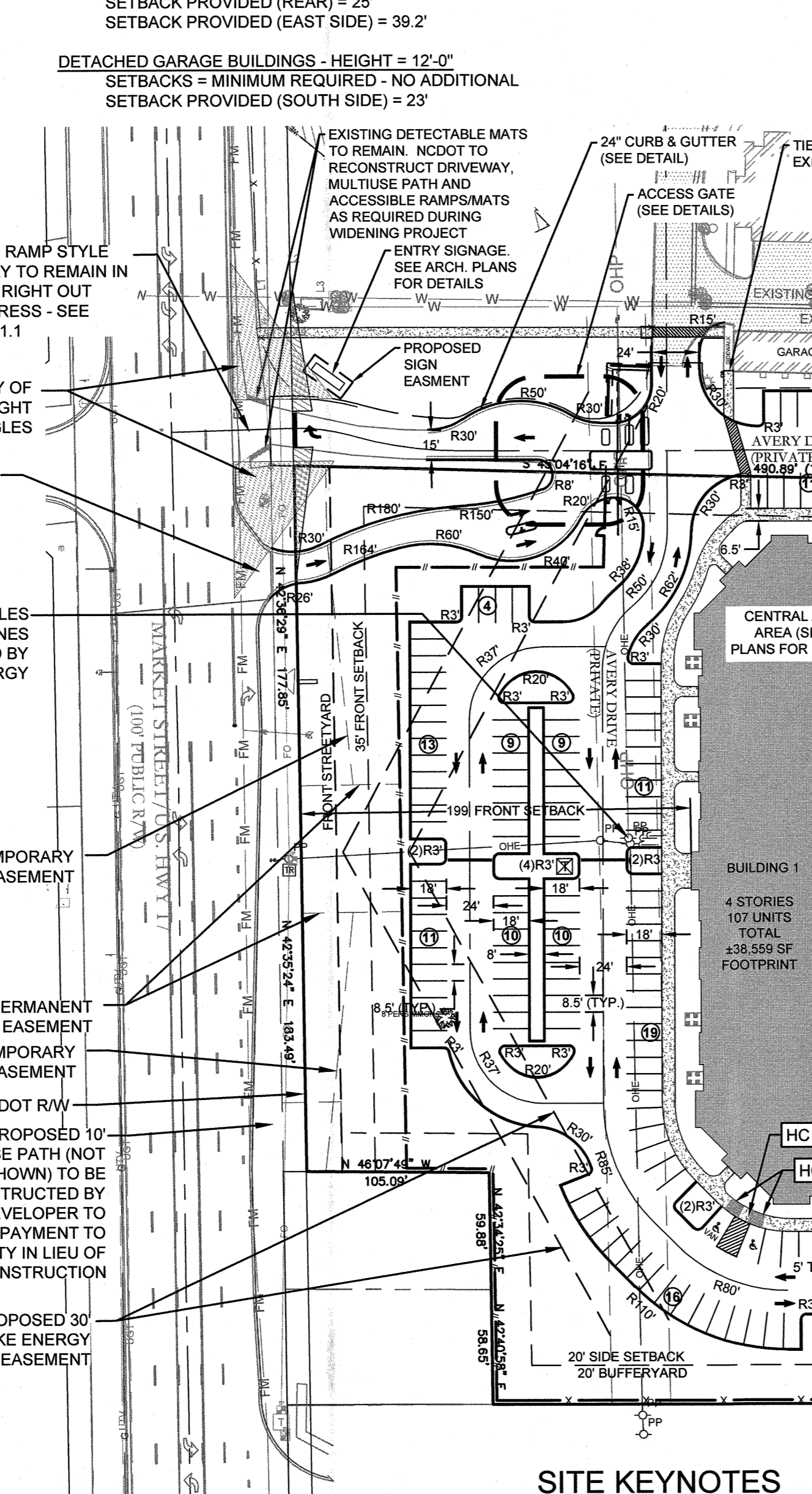
- WATER REQUIRED: 114,800 GPD
- SEWER REQUIRED: 77,020 GPD

BICYCLE PARKING
 AS REQ'D BY THE CITY, 20 BICYCLE PARKING SPACES ARE PROVIDED NEAR THE CENTRAL AMENITY (PARK AND FACILITIES MODEL #509-2032). ADDITIONAL BICYCLE PARKING WILL BE PROVIDED ON GROUND FLOOR ENTRYWAYS IN EACH BUILDING.

SIDEWALK NOTE
 ALL SIDEWALKS ADJACENT TO 90° PARKING SHALL BE 6.5' WIDE. ALL OTHER SIDEWALKS SHALL BE 5' WIDE.

811
 Know what's below. Call before you dig.

GRAPHIC SCALE
 SCALE: 1"=60'



APPROVED CONSTRUCTION PLAN

Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/11/19 Permit #: 2019045
 Signed: [Signature]

Planning: cme 1-4-2019
 Traffic: AK 1-4-19
 Fire: Chad Chiles 1-4-19

12/31/18

C-2.0

PEI JOB#: 16105.PE

REVISIONS:

07/26/18	1/ PER ENGINEERING COMMENTS
08/08/18	2/ PER CITY AND OWNER COMMENTS
10/08/18	3/ PER CITY AND OWNER COMMENTS
11/26/18	4/ PER CITY AND OWNER COMMENTS
12/17/18	5/ PER CITY COMMENTS
12/31/18	6/ PER CITY COMMENTS

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
 122 Cinema Drive
 Wilmington, North Carolina, 28403
 (910) 791-0707 (O) (910) 791-6760 (F)
 NC License #: C-2846

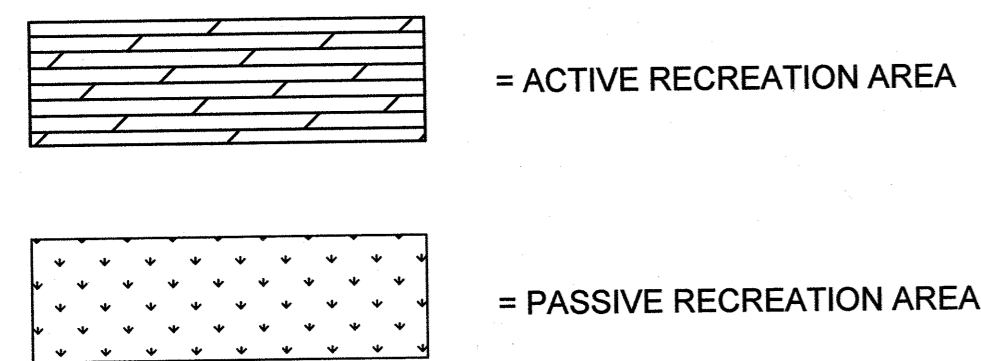
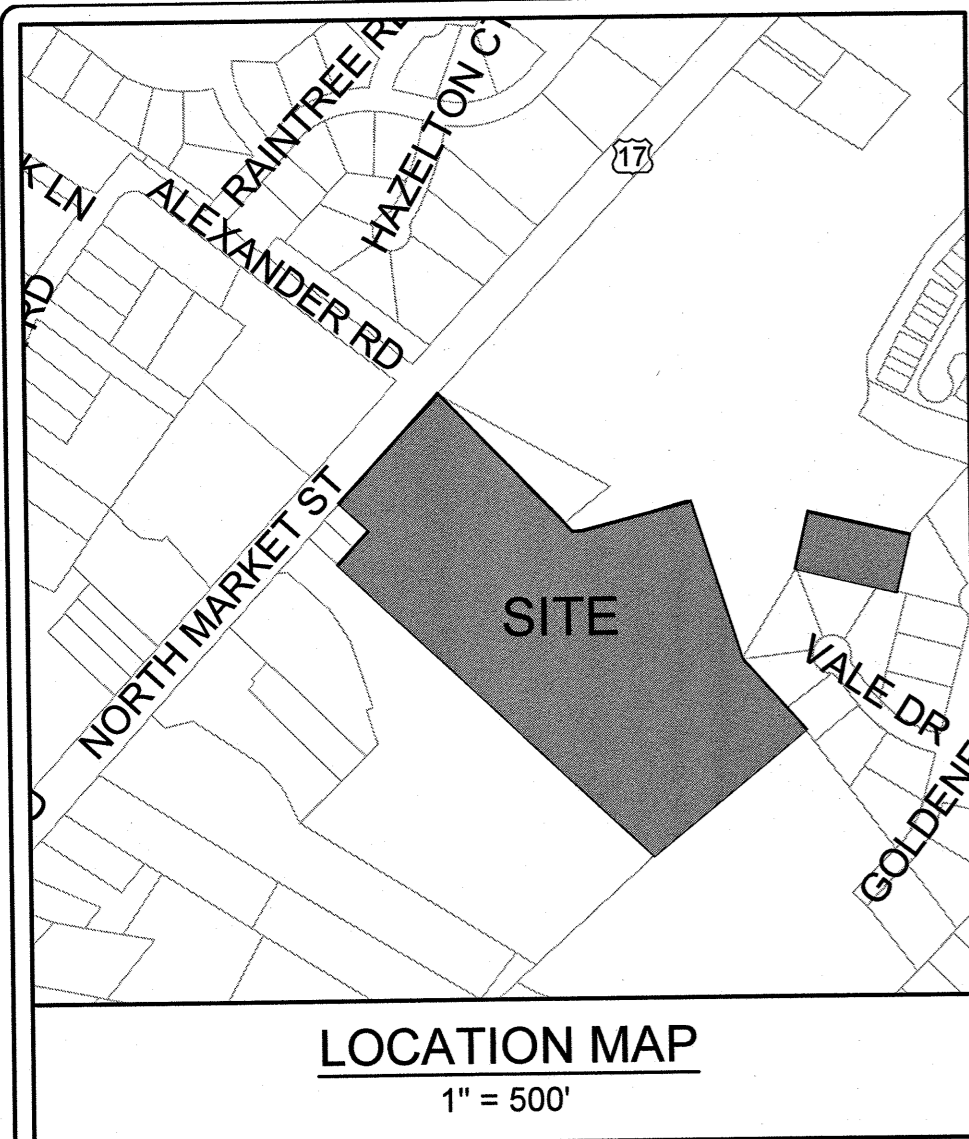
OVERALL SITE PLAN
 AMBERLEIGH SHORES PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA

PROJECT STATUS:
 CONCEPTUAL LAYOUT: []
 FINAL DESIGN LAYOUT: []
 RELEASED FOR CONST: []

DRAWING INFORMATION:
 DATE: 1/11/19
 SCALE: AS NOTED
 DESIGNED: []
 CHECKED: []

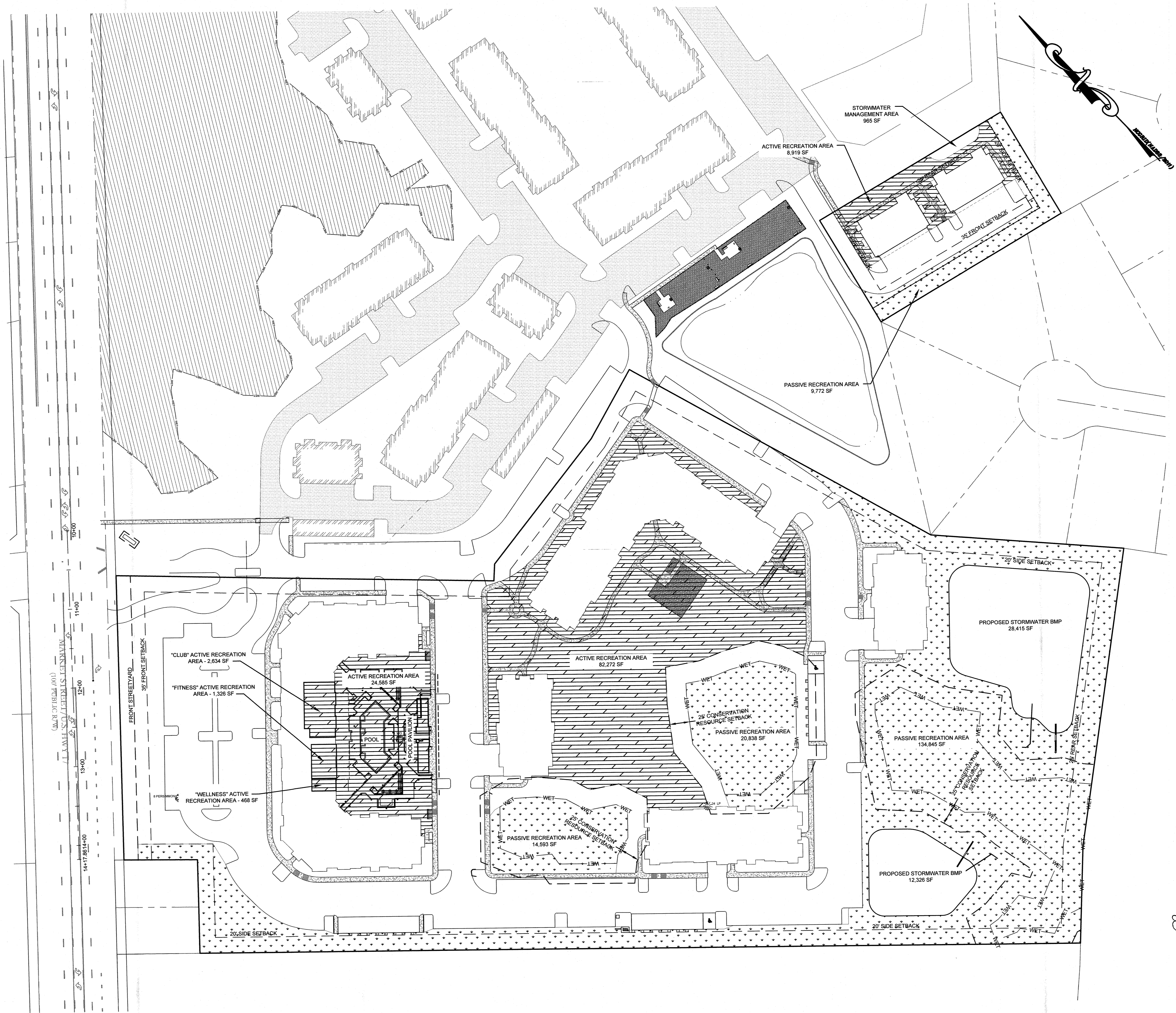
SEAL:
 [Professional Engineer Seal]

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

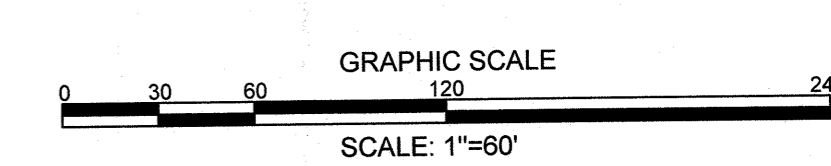


PHASE 2 OPEN SPACE DATA TABLE

GROSS TRACT AREA:	703,810 SF (16.16 AC.)
PROPOSED STORMWATER BMP AREA:	41,706 SF (0.96 AC.)
REMAINING DEVELOPMENT AREA:	662,104 SF (15.20 AC.)
REQUIRED OPEN SPACE	
(35% OF REMAINING DEVELOPMENT AREA):	231,736 SF (5.32 AC.)
REQUIRED ACTIVE RECREATION AREA (17.5%):	115,868 SF (2.66 AC.)
REQUIRED PASSIVE RECREATION AREA (17.5%):	115,868 SF (2.66 AC.)
OPEN SPACE PROVIDED (45.4%)	
ACTIVE RECREATION AREA PROVIDED (18.2%):	300,525 SF (6.90 AC.)
PASSIVE RECREATION AREA PROVIDED (27.2%):	120,477 SF (2.77 AC.)



Approved Const. Plan
 Name: UNO Date: 1-4-2019
 Planning: AK
 Public Utilities: AK
 Traffic: AK
 Fire: AK



REVISIONS:

11.26.18	17 PER CITY AND OWNER COMMENTS
12.17.18	21 PER CITY COMMENTS
12.31.18	31 PER CITY COMMENTS

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

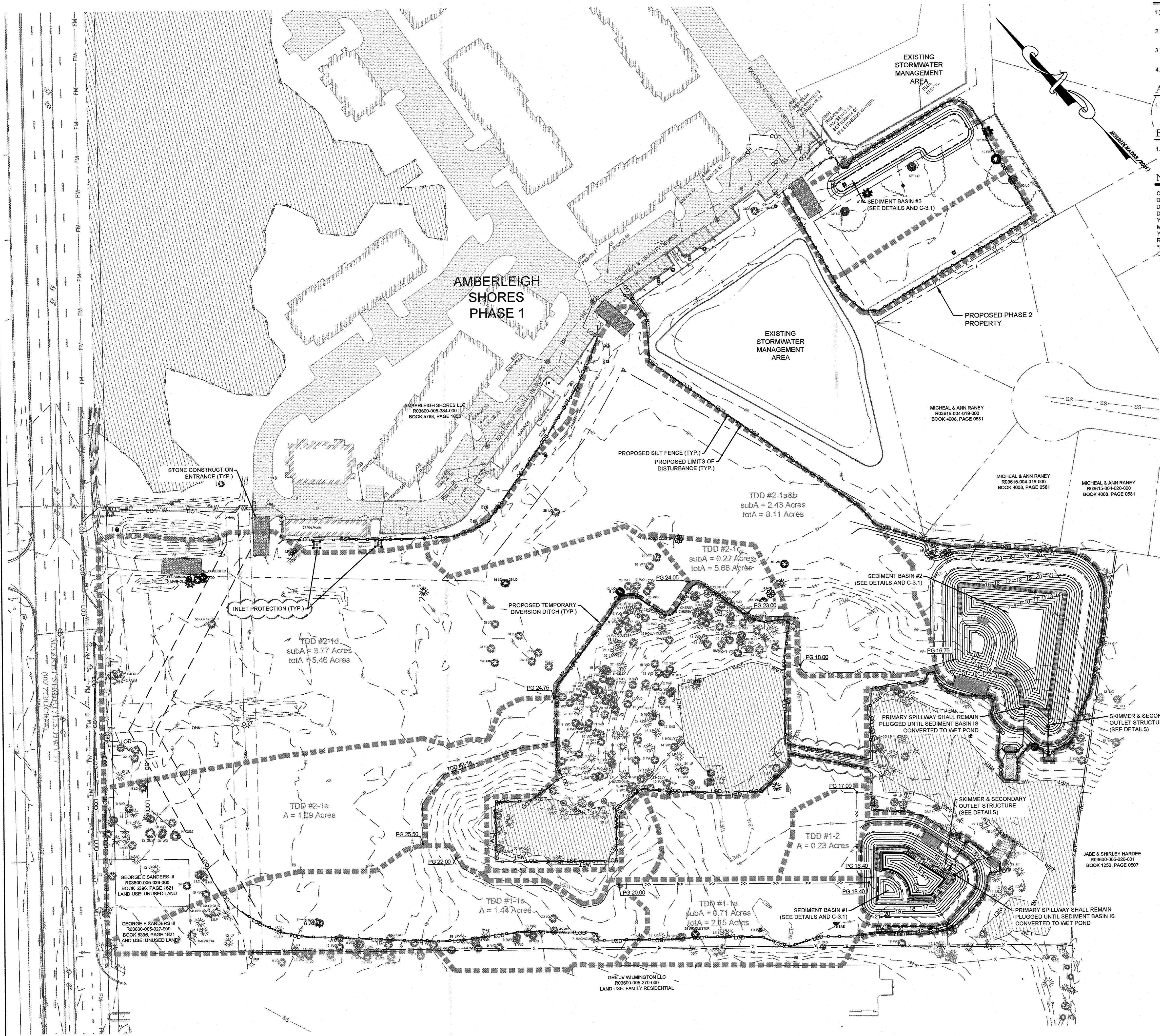
PARAMOUNT ENGINEERING, INC.
 122 Circus Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

OPEN SPACE EXHIBIT
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
 CONCEPT LAYOUT:
 PRELIMINARY LAYOUT:
 FINAL DESIGN:
 RELEASED FOR CONSTRUCTION:
12.22.17
 DATE:
 AS NOTED
 DATE:
 AS NOTED
 DATE:
 AS NOTED

SEAL
 ENGINEER
 12/31/18
C-2.3
 PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



NOTES:

- SEE GENERAL NOTES SHEET (C-1.0) FOR GRADING, DRAINAGE AND EROSION CONTROL NOTES AND DETAILS FOR MORE INFORMATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND NEW HANOVER COUNTY STANDARDS AND SPECIFICATIONS.
- GEOTECHNICAL TESTING HAS BEEN PERFORMED ON-SITE (REFER TO REPORT). A GEOTECHNICAL ENGINEER SHALL BE CONSULTED TO CONFIRM SUITABILITY OF SUBGRADE MATERIAL AND PROPER COMPACTION IN FILL AREAS.
- LIMITS OF DISTURBANCE SHOULD BE SIGNED AS TREE PROTECTION AREA WHERE TREES ARE GROWING ON ADJACENT PROPERTIES.

ASPHALT AREA NOTE:

- SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED SUBGRADE, IN ACCORDANCE WITH THE SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.

BUILDING PAD NOTE:

- SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED BUILDING PAD, IN ACCORDANCE WITH THE SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.

NOTATION:

LEGEND:

- LOD = LIMITS OF DISTURBANCE
- LOD = LIMITS OF DISTURBANCE
- SILT FENCE
- TEMPORARY DIVERSION DITCH
- INLET PROTECTION
- EROSION CONTROL DRAINAGE AREA

NOTATION:

- CB = CATCH BASIN
- DCB = DOUBLE CATCH BASIN
- DI = DROP INLET
- DDI = DOUBLE DROP INLET
- YI = YARD INLET (2-SIDE OPEN THROAT)
- MH = STORM MANHOLE
- YD = YARD DRAIN
- RD = ROOF DRAIN CONNECTION
- TC = TOP OF CURB ELEVATION
- BC = BOTTOM OF CURB (GUTTER) ELEVATION
- PG = PROPOSED GRADE
- HP = HIGH POINT ELEVATION
- SW = SIDEWALK ELEVATION
- FLUME = CONCRETE DRAINAGE FLUME FLOWLINE ELEVATION
- RP = RAMP
- PAD = DUMPSTER PAD ELEVATION

*PROVIDE IN-LINE CLEANOUT AND CONNECTION TO DOWNSPOUT - SEE ARCHITECTURAL & PLUMBING PLANS FOR DOWNSPOUT CONNECTIONS. PROVIDE INSERT-A-TEE FOR RD-4-02.

REVISIONS:	DATE	BY	DESCRIPTION
1	08.15.18	JLR	ISSUE FOR PERMITS
2	09.05.18	JLR	FOR CITY AND OWNER COMMENTS
3	11.21.18	JLR	FOR CITY AND OWNER COMMENTS
4	12.31.18	JLR	FOR CITY COMMENTS

CLIENT INFORMATION:

FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

PHASE I EROSION CONTROL PLAN
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
 CONCEPTUAL LAYOUT: _____
 PRELIMINARY LAYOUT: _____
 FINAL DESIGN: _____
 RELEASED FOR CONSTRUCTION: _____

DRAWING INFORMATION:
 DATE: 12.20.17
 AS NOTED: _____
 DRAWN: _____
 CHECKED: _____

SEAL:
 PEI JOB#: 16105 PE



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan

Name: ymc Date: 1-4-2019

Planning: ymc 1-4-2019

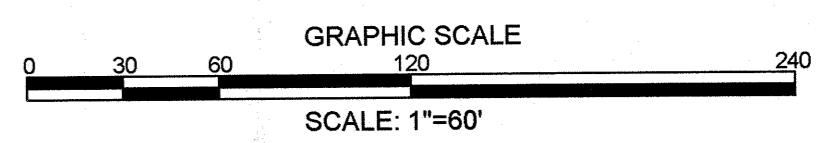
Traffic: AK 1-4-19

Fire: Chad 1-4-19

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/3/19 Permit # 2015045

Signed: [Signature]



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

NOTES:

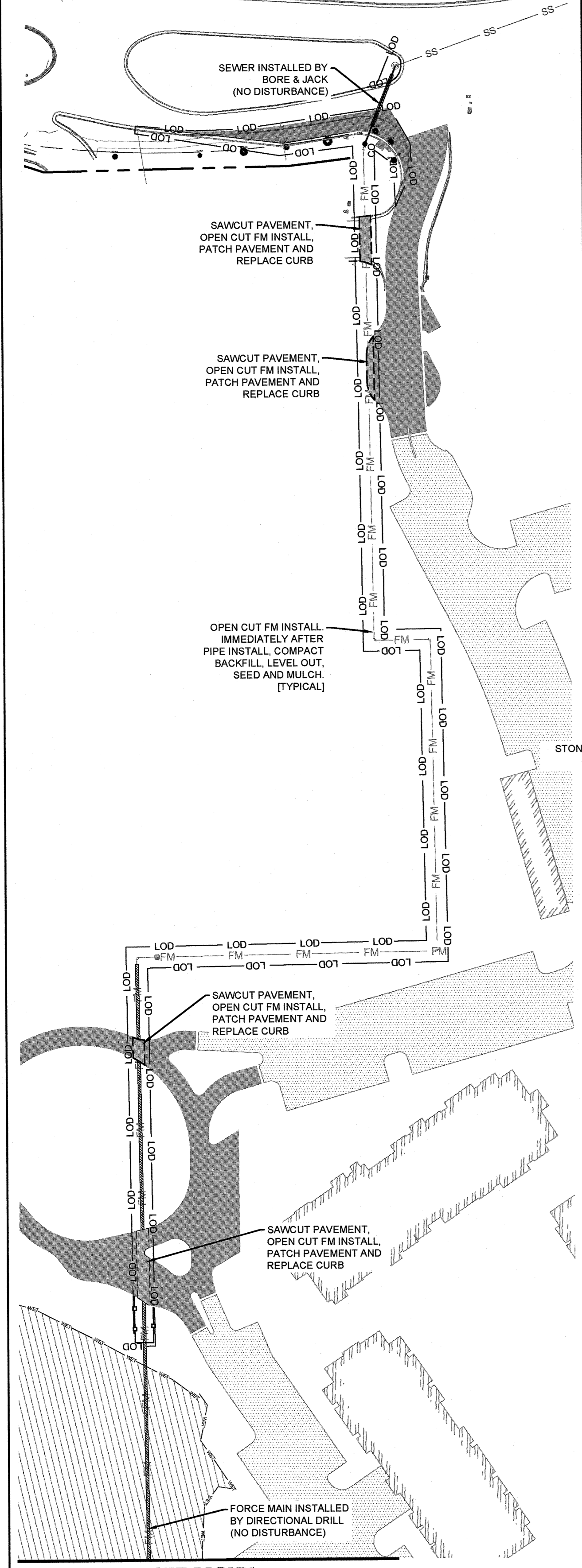
- SEE GENERAL NOTES SHEET (C-1.0) FOR GRADING, DRAINAGE AND EROSION CONTROL NOTES AND DETAILS FOR MORE INFORMATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND NEW HANOVER COUNTY STANDARDS AND SPECIFICATIONS.
- GEOTECHNICAL TESTING HAS BEEN PERFORMED ON-SITE (REFER TO REPORT). A GEOTECHNICAL ENGINEER SHALL BE CONSULTED TO CONFIRM SUITABILITY OF SUBGRADE MATERIAL AND PROPER COMPACTION IN FILL AREAS.
- LIMITS OF DISTURBANCE SHOULD BE SIGNED AS TREE PROTECTION AREA IN ANY LOCATION WHERE TREES ARE GROWING ON ADJACENT PROPERTIES.

ASPHALT AREA NOTE:

- SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED SUBGRADE, IN ACCORDANCE WITH THE SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.

BUILDING PAD NOTE:

- SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED BUILDING PAD, IN ACCORDANCE WITH THE SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.



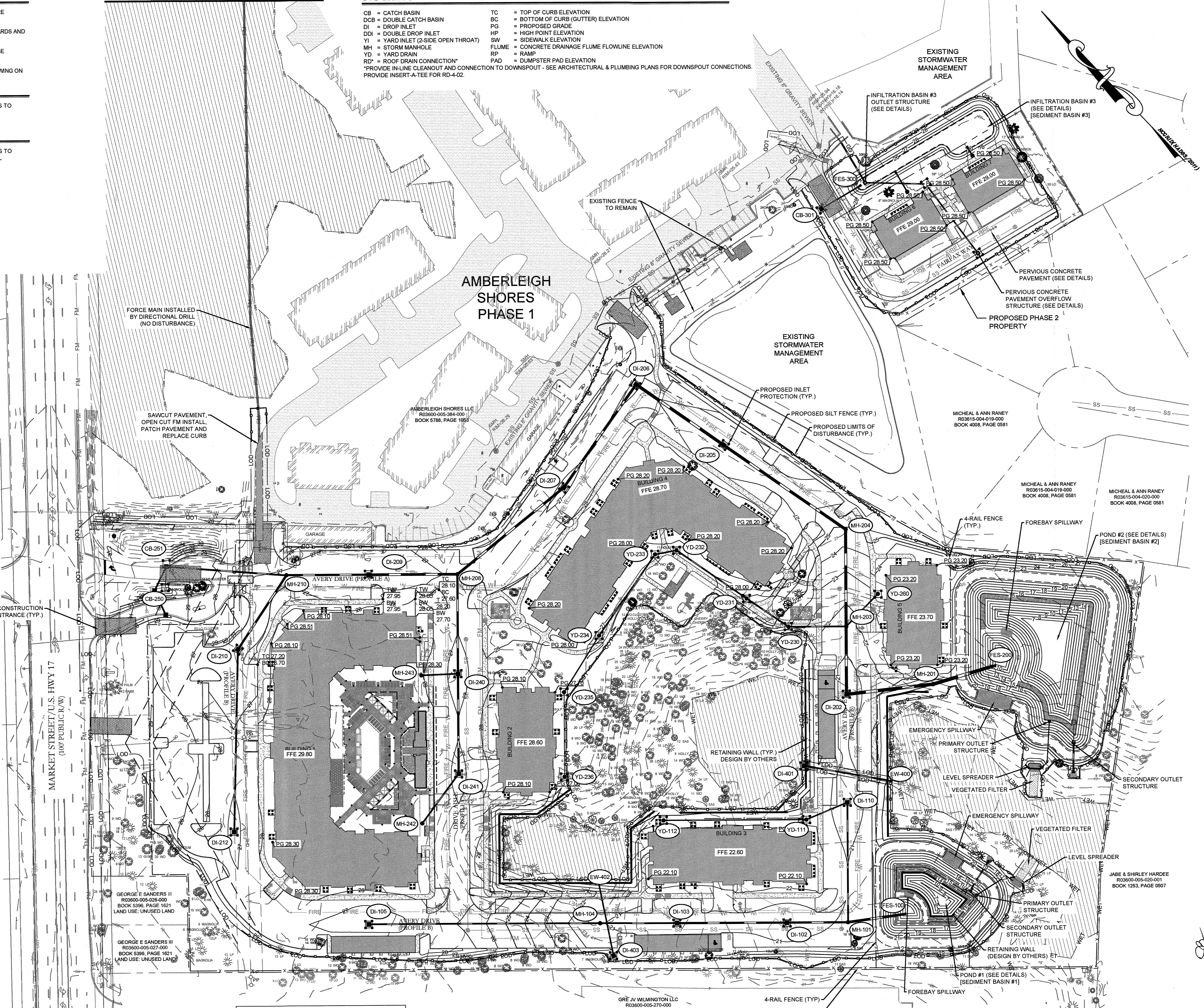
SEE RIGHT

SEE LEFT

NOTATION:

CB = CATCH BASIN	TC = TOP OF CURB ELEVATION
DCB = DOUBLE CATCH BASIN	BC = BOTTOM OF CURB (GUTTER) ELEVATION
DI = DROP INLET	PG = PROPOSED GRADE
DDI = DOUBLE DROP INLET	HP = HIGH POINT ELEVATION
YI = YARD INLET (2-SIDE OPEN THROAT)	SW = SIDEWALK ELEVATION
MH = STORM MANHOLE	FLUME = CONCRETE DRAINAGE FLUME FLOWLINE ELEVATION
YD = YARD DRAIN	RP = RAMP
RDY = ROOF DRAIN CONNECTION*	PAD = DUMPSTER PAD ELEVATION

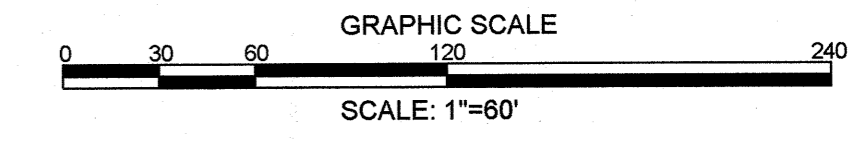
*PROVIDE IN-LINE CLEANOUT AND CONNECTION TO DOWNSPOUT - SEE ARCHITECTURAL & PLUMBING PLANS FOR DOWNSPOUT CONNECTIONS. PROVIDE INSERT-A-TEE FOR RD-4.02.



CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: 1/11/19 Permit #: 2018245
 Signed: [Signature]

Approved Construction Plan
 Name: [Name] Date: [Date]
 Planning: [Signature] 1-4-2019
 Traffic: [Signature] 1-4-19
 Fire: [Signature] 1-7-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



REVISIONS:

08.12.18	1) PER N.C. COMMENTS
08.08.18	2) PER CITY AND OWNER COMMENTS
10.05.18	3) PER CITY AND OWNER COMMENTS
11.26.18	4) PER CITY AND OWNER COMMENTS
12.17.18	5) PER CITY COMMENTS
12.31.18	6) PER CITY COMMENTS

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

**PHASE II
 EROSION CONTROL PLAN
 AMBERLEIGH SHORES
 PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA**

PROJECT STATUS:

PRELIMINARY LAYOUT:	12/20/17
FINAL DESIGN:	AS NOTED
RELEASED FOR CONSTRUCTION:	12/31/18

SEAL
 [Professional Engineer Seal]
 12/31/18

C-3.1
 PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

STORM SCHEDULE:

Upstream Node	Downstream Node	Diameter (in)	Upstream Invert	Downstream Invert	Pipe Length (ft)	Slope (%)	Upstream Rim Elev	Downstream Rim Elev	Pipe Material
MH-101	FES-100	30.00	12.27	12.00	68	0.40	21.27	-	RCP III
DI-102	MH-101	24.00	12.57	12.27	75	0.40	20.54	21.27	RCP III
DI-103	DI-102	24.00	15.37	14.83	135	0.40	20.36	20.54	RCP III
MH-104	DI-103	18.00	15.75	15.37	94	0.40	21.09	20.36	RCP III
DI-105	MH-104	18.00	22.78	15.75	284	2.47	26.51	21.09	RCP III
DI-110	MH-101	15.00	13.01	12.27	147	0.50	20.61	21.27	RCP III
YD-111	DI-110	12.00	13.56	13.01	55	1.00	21.53	20.61	HDPE
YD-112	YD-111	12.00	15.31	13.56	175	1.00	20.21	21.53	HDPE
MH-201	FES-200	42.00	11.53	10.00	77	2.00	20.69	-	RCP III
DI-202	MH-201	42	13.67	11.53	107	2.00	20.63	20.69	RCP III
MH-203	DI-202	36	14.50	13.67	83	1.00	21.52	20.63	RCP III
MH-204	MH-203	36	15.70	14.50	119	1.00	24.90	21.52	RCP III
DI-205	MH-204	36	17.52	15.70	182	1.00	26.34	24.90	RCP III
DI-206	DI-205	36	18.17	17.52	130	0.50	26.89	26.34	RCP III
DI-207	DI-206	30	18.95	18.17	155	0.50	26.87	26.89	RCP III
MH-208	DI-207	30	19.79	18.95	169	0.50	27.26	26.87	RCP III
DI-209	MH-208	30	20.33	19.79	109	0.50	26.12	27.26	RCP III
MH-210	DI-209	24	20.84	20.33	101	0.50	26.75	26.12	RCP III
DI-211	MH-210	24	21.38	20.84	109	-0.50	26.13	26.75	RCP III
DI-212	DI-211	18	22.51	21.38	224	0.50	26.84	26.13	RCP III
YD-230	MH-203	18	15.40	14.69	71	1.00	23.83	21.52	RCP III
YD-231	YD-230	15	18.46	17.84	62	1.00	25.76	23.83	HDPE
YD-232	YD-231	15	19.50	18.46	104	1.00	27.53	25.76	HDPE
YD-233	YD-232	12	19.77	19.50	27	1.01	27.56	27.53	HDPE
YD-234	YD-233	12	20.98	19.77	121	1.00	26.70	27.56	HDPE
YD-235	YD-234	8	21.80	20.98	82	1.00	27.51	26.70	HDPE
YD-236	YD-235	3	22.84	21.80	104	1.00	25.28	27.51	HDPE
DI-240	MH-208	24	21.40	20.79	122	0.50	26.73	27.26	RCP III
DI-241	DI-240	24	22.02	21.40	123	0.50	26.81	26.73	RCP III
MH-242	DI-241	15	22.89	22.02	76	0.50	28.31	26.81	RCP III
MH-244	DI-240	15	21.63	21.40	45	0.52	28.04	26.73	RCP III
CB-251	MH-210	18	21.58	20.84	148	0.50	29.05	26.75	RCP III
CB-250	CB-251	15	24.25	24.08	33	0.50	27.51	29.05	RCP III
CB-252	CB-250	15	24.41	24.25	33	0.50	29.62	27.51	RCP III
YD-260	MH-203	12	15.36	14.69	56	1.19	23.43	21.52	RCP III
CB-301	FES-300	12	24.75	24.60	53	0.28	27.00	-	RCP III
RD-311	FES-310	12	25.88	25.75	26	0.50	28.23	-	HDPE
RD-321	FES-320	12	25.80	25.75	10	0.50	28.05	-	HDPE
DI-401	EW-400	15	14.80	14.50	106	0.28	15.50	-	RCP III
DI-403	EW-402	12	18.31	17.50	93	0.87	21.25	-	RCP III

NOTES:

- SEE GENERAL NOTES SHEET (C-1.0) FOR GRADING, DRAINAGE AND EROSION CONTROL NOTES AND DETAILS FOR MORE INFORMATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL CITY OF WILMINGTON AND NEW HANOVER COUNTY STANDARDS AND SPECIFICATIONS.
- GEOTECHNICAL TESTING HAS BEEN PERFORMED ON-SITE (REFER TO REPORT). A GEOTECHNICAL ENGINEER SHALL BE CONSULTED TO CONFIRM SUITABILITY OF SUBGRADE MATERIAL AND PROPER COMPACTION IN FILL AREAS.

ASPHALT AREA NOTE:

- SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED SUBGRADE, IN ACCORDANCE WITH THE SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.

BUILDING PAD NOTE:

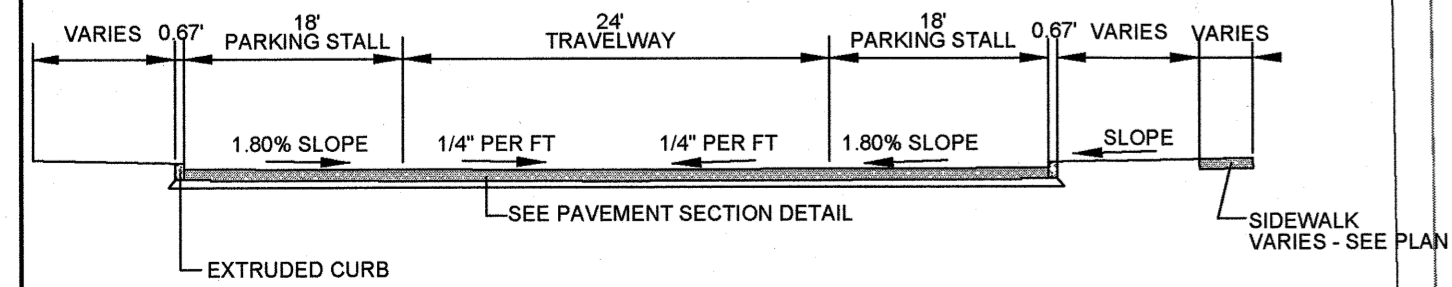
- SITE CONTRACTOR SHALL STRIP TOPSOIL AND ANY UNSUITABLE MATERIAL AND PROVIDE CUT/FILL OPERATIONS TO PROVIDE A COMPACTED CONTROLLED BUILDING PAD, IN ACCORDANCE WITH THE SUBSURFACE GEOTECHNICAL EXPLORATION AND TECHNICAL SPECIFICATIONS.

NOTATION:

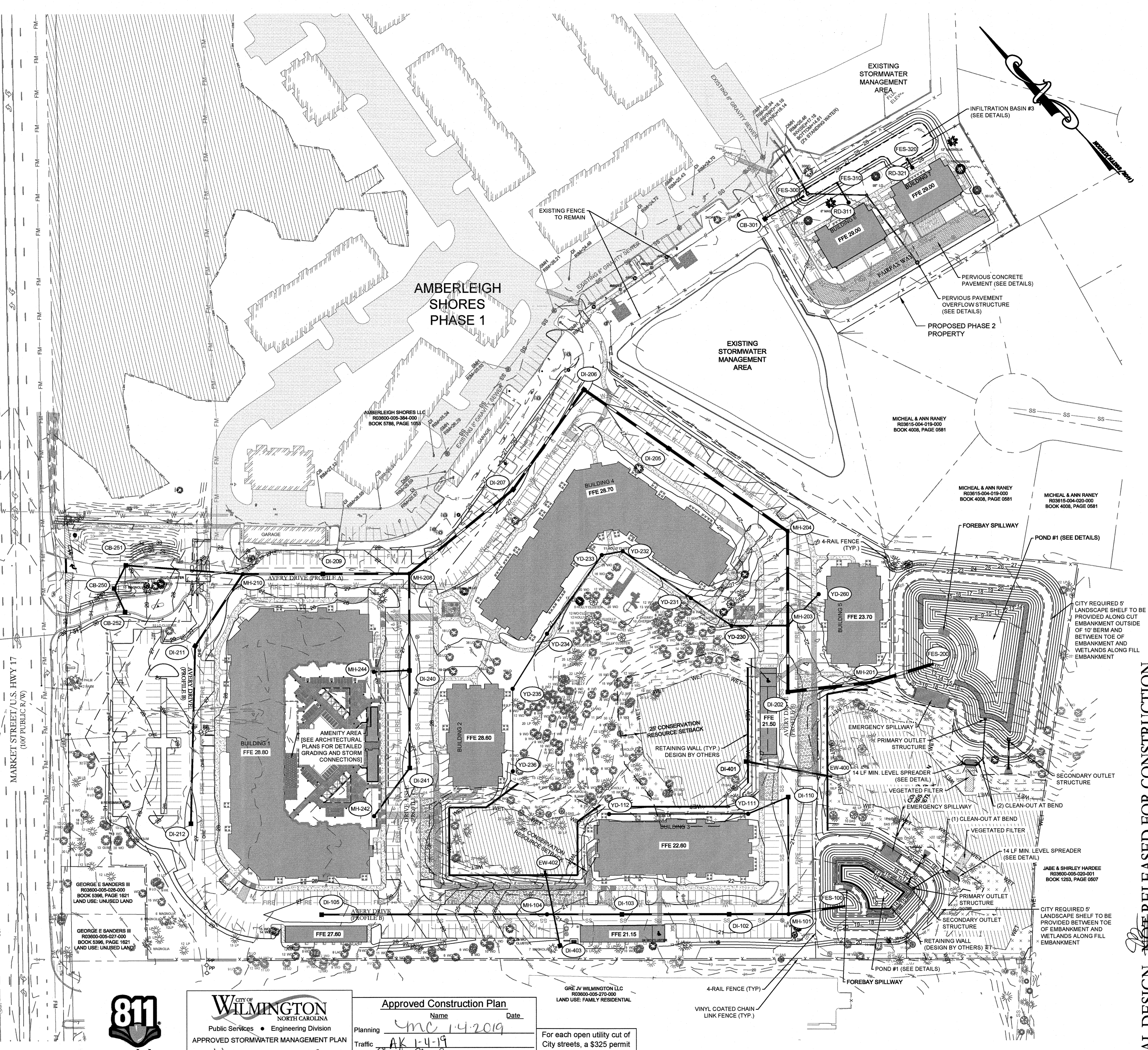
- CB = CATCH BASIN
- DCB = DOUBLE CATCH BASIN
- DI = DROP INLET
- DI = DOUBLE DROP INLET
- YI = YARD INLET (2-SIDE OPEN THROAT)
- MH = STORM MANHOLE
- YD = YARD DRAIN
- RD = ROOF DRAIN CONNECTION
- *PROVIDE IN-LINE CLEANOUT AND CONNECTION TO DOWNSPOUT - SEE ARCHITECTURAL & PLUMBING PLANS FOR DOWNSPOUT CONNECTIONS.
- TC = TOP OF CURB ELEVATION
- BC = BOTTOM OF CURB (GUTTER) ELEVATION
- PG = PROPOSED GRADE
- HP = HIGH POINT ELEVATION
- SW = SIDEWALK ELEVATION
- FLUME = CONCRETE DRAINAGE FLUME FLOWLINE ELEVATION
- RAMP = RAMP
- PAD = DUMPSTER PAD ELEVATION

DRAINAGE NOTES:

- DRAINAGE EASEMENT AND STORMWATER SYSTEM MAINTENANCE IS THE RESPONSIBILITY OF THE DEVELOPER OR HOA, INCLUDING PONDS, PIPES, AND INFILTRATION BASINS AND TRENCHES.
- ALL IMPERVIOUS MUST DRAIN TO THE DESIGNED STORMWATER SYSTEM, PER THE APPROVED PLANS.
- NO OBSTRUCTIONS ARE ALLOWED IN DRAINAGE EASEMENTS, INCLUDING FENCES.
- ALL STORM DRAINAGE STRUCTURES SHALL MEET NCDOT STANDARDS AND SPECIFICATIONS AND SHALL BE TRAFFIC RATED FOR H-20 LOADS AT A MINIMUM.
- ALL CATCH BASIN (CB) RIM ELEVATIONS AND YARD INLET (YI) THROAT ELEVATIONS ARE LISTED AS THE 'GUTTER OF FLOWLINE ELEVATION' WITHIN THE CURB SECTION. THE CONTRACTOR SHALL MAINTAIN A UNIFORM EDGE OF PAVEMENT (EOP) WHEN PLACING THE STORM INLETS WITHIN THE CURB-LINE (SEE 'CURB TRANSITION' DETAIL). FOR CATCH BASINS WITHIN A TRANSITION FROM 24" STANDARD CURB & GUTTER, THE RIM ELEVATION GIVEN IS 1 INCH BELOW EOP.
- MANHOLE RIM ELEVATION SHOWN ABOVE IS FLUSH WITH PROPOSED GRADE. CONTRACTOR SHALL PROVIDE 5" CLEARANCE ABOVE PROPOSED GRADE WHEN PLACED IN A GRASS/PERVIOUS AREA; AND A FLUSH CONDITION WITH PROPOSED PAVEMENT OR IMPERVIOUS COVER.
- PROPOSED BUILDINGS SHALL DIVERT ROOF DRAINAGE TO STORMWATER COLLECTION SYSTEM.
- CONTRACTOR SHALL ADJUST ALL FRAMES OF EX. UTILITY INFRASTRUCTURE WITHIN ASPHALT OVERLAY AREAS TO MATCH PROPOSED GRADES.
- THE CONTRACTOR SHALL USE EITHER RCP (CL III) OR HDPE PIPE FOR THE STORM DRAINAGE SYSTEM. IF THE CONTRACTOR CHOOSES TO USE HDPE PIPE, IT SHALL BE ADS N-12 WT STORM PIPE OR APPROVED EQUAL AND SHALL BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS. IN ADDITION, THE CONTRACTOR SHALL BE SURE TO PROVIDE CONCRETE COLLARS AROUND EACH F.E.S. TO PREVENT FLOATATION IF HDPE PIPE IS CHOSEN.



TYPICAL APARTMENT DRIVE WITH PARKING CROSS SECTION
NOT TO SCALE



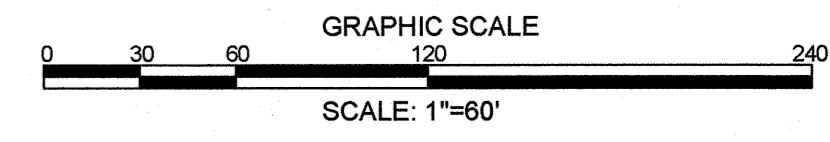
City of WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

Date: 11/13 Permit # 2618045
Signed: [Signature]

Approved Construction Plan
Name: [Name] Date: [Date]

Planning: MC 1-4-2019
Traffic: AK 1-4-19
Fire: [Signature] 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

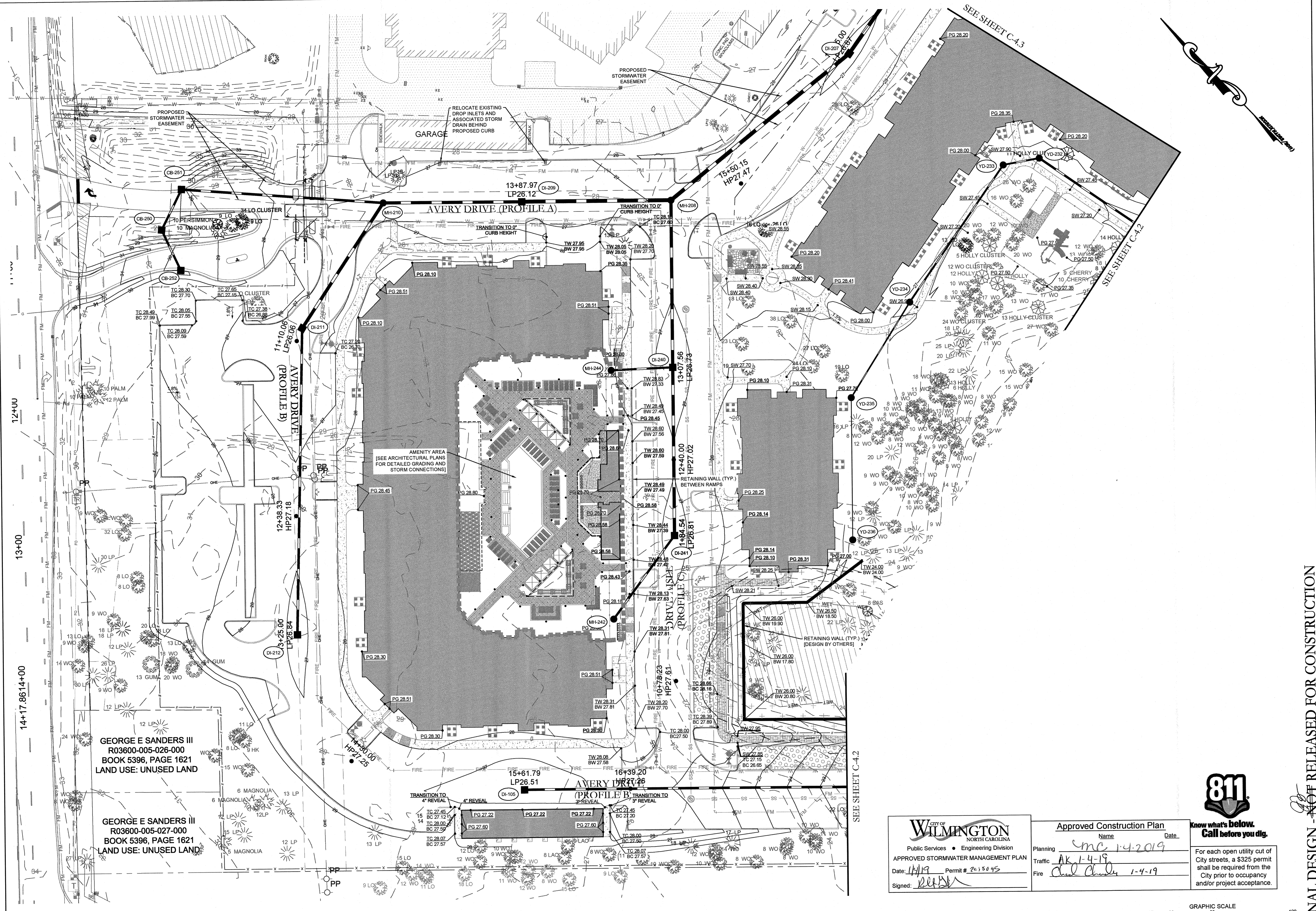
AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

OVERALL GRADING AND STORMWATER MANAGEMENT PLAN

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

C-4.0

PEI JOB#: 16105.PE



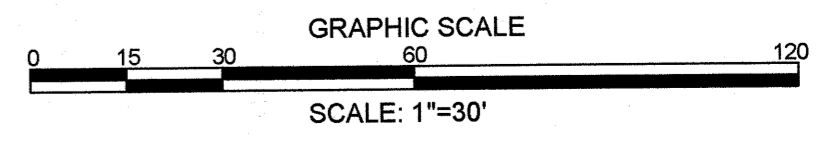
GEORGE E SANDERS III
R03600-005-026-000
BOOK 5396, PAGE 1621
LAND USE: UNUSED LAND

GEORGE E SANDERS III
R03600-005-027-000
BOOK 5396, PAGE 1621
LAND USE: UNUSED LAND

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/1/19 Permit # 2015045
Signed: *[Signature]*

Approved Construction Plan
Name: *[Signature]* Date: 1-4-2019
Planning: *[Signature]*
Traffic: AK 1-4-19
Fire: *[Signature]* 1-4-19

811
Know what's below.
Call before you dig.
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

PROJECT STATUS:
CONCEPTUAL LAYOUT
PRELIMINARY LAYOUT
RELEASED FOR CONSTRUCTION

DRAWING INFORMATION:
DATE: 06.08.18
SCALE: 1"=30'
DRAWN: JRM
CHECKED: JRM

CLIENT INFORMATION:
PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (C) (910) 791-6760 (F)
NC License #: C-2846

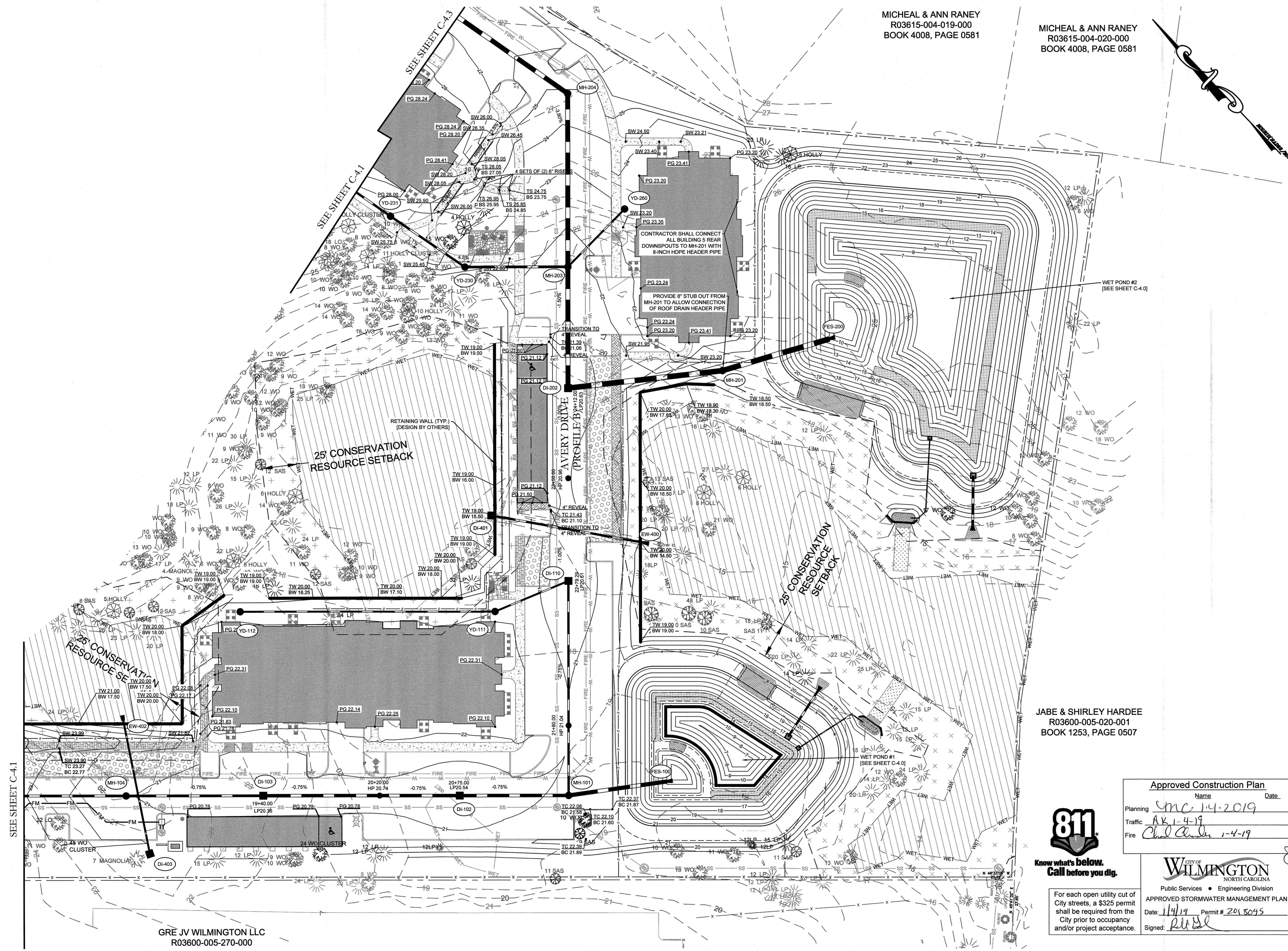
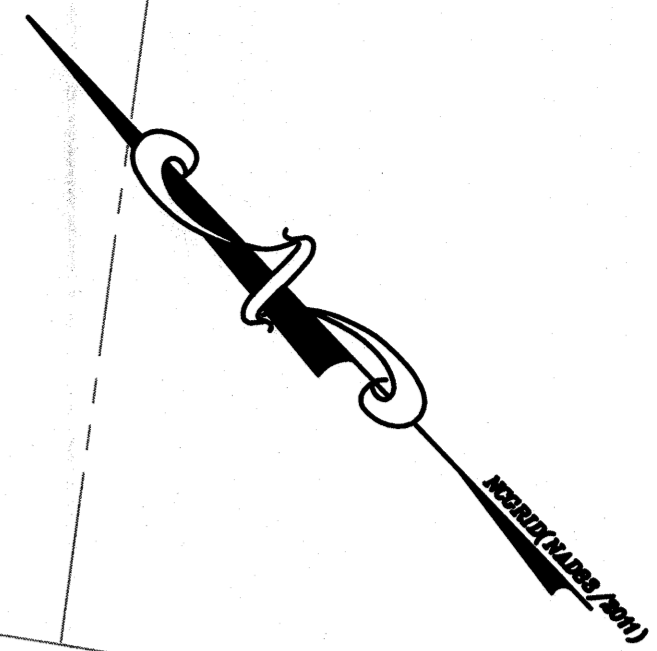
AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

REVISIONS:
07/25/18 1) PER ENGINEERING COMMENTS
08/09/18 2) PER CITY AND OWNER COMMENTS
08/26/18 3) REISED GRADING ELEVATIONS AND ADJACENT PARKING
10/25/18 4) PER CITY AND OWNER COMMENTS
11/28/18 5) PER CITY AND OWNER COMMENTS
12/18/18 6) PER CITY COMMENTS
12/19/18 7) PER CITY COMMENTS

PEI JOB#: 16105 PE

MICHEAL & ANN RANEY
R03615-004-019-000
BOOK 4008, PAGE 0581

MICHEAL & ANN RANEY
R03615-004-020-000
BOOK 4008, PAGE 0581



GRE JV WILMINGTON LLC
R03600-005-270-000

JABE & SHIRLEY HARDEE
R03600-005-020-001
BOOK 1253, PAGE 0507

Approved Construction Plan

Name: mc 14-2019 Date: _____

Planning: AK 1-4-19

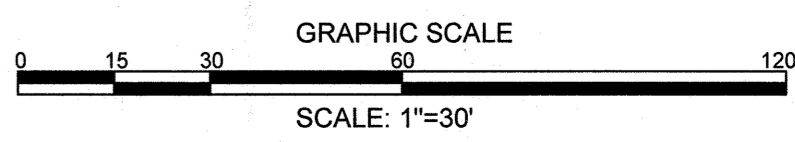
Traffic: Chad Chandler 1-4-19

Fire: _____



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 11/9/19 Permit # 2018045
Signed: [Signature]



REVISIONS	DATE	DESCRIPTION
1	07.25.18	PER ENGINEERING COMMENTS
2	08.08.18	PER CITY AND OWNER COMMENTS
3	10.05.18	PER CITY AND OWNER COMMENTS
4	11.28.18	PER CITY AND OWNER COMMENTS
5	12.17.18	PER CITY COMMENTS
6	12.31.18	PER CITY COMMENTS

CLIENT INFORMATION
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

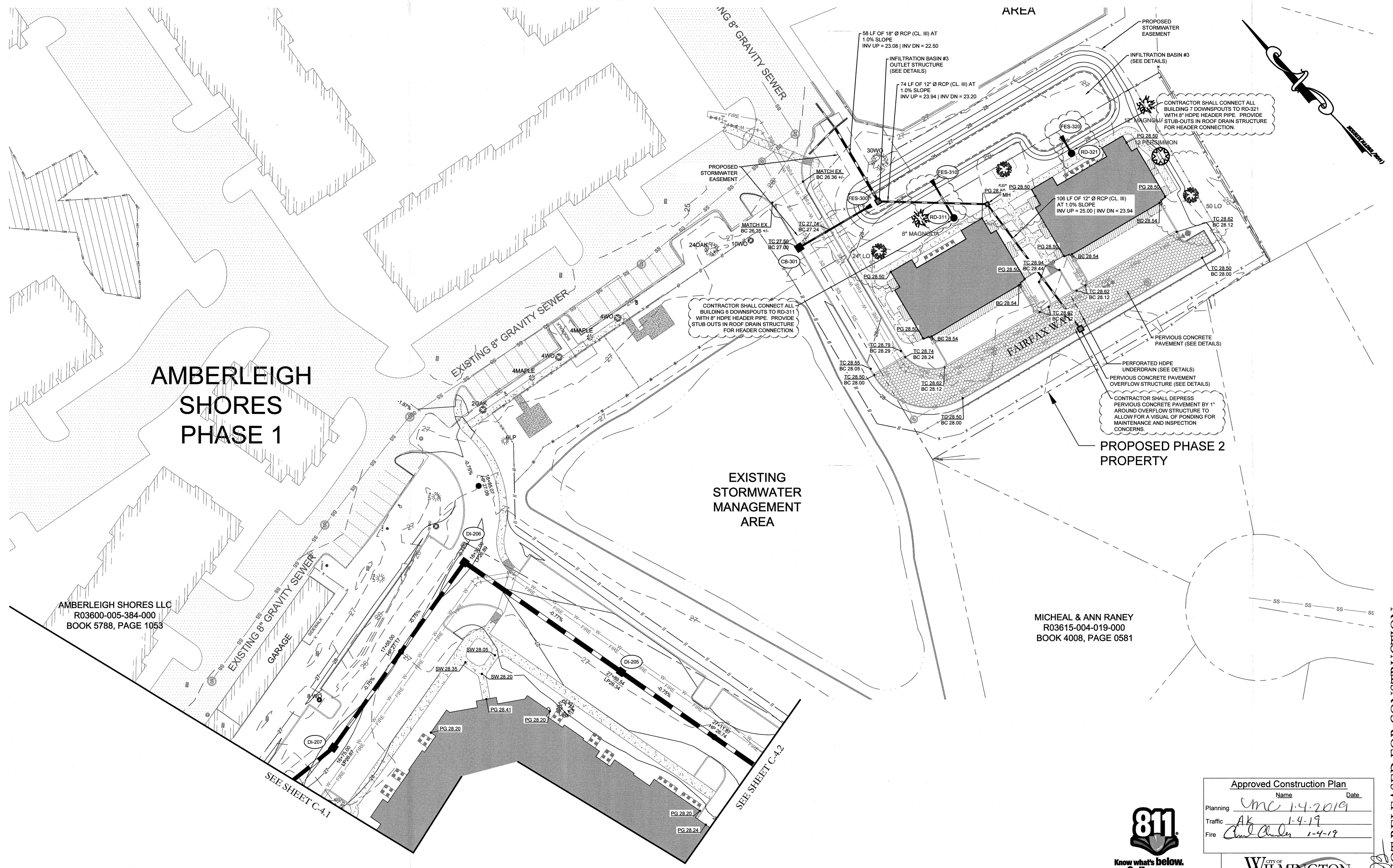
PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

PROJECT STATUS
CONCEPTUAL LAYOUT
PRELIMINARY LAYOUT
RELEASED FOR CONST.
DRAWING INFORMATION
DATE: 08.08.18
1"=30'
DESIGNED: JABE & SHIRLEY HARDEE
DRAWN: JABE & SHIRLEY HARDEE
CHECKED: JABE & SHIRLEY HARDEE

SEAL
JABE & SHIRLEY HARDEE
ENGINEER
JEREMY R. HARDEE
12/31/18

C-4.2
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



AMBERLEIGH SHORES PHASE 1

AMBERLEIGH SHORES LLC
R03600-005-384-000
BOOK 5788, PAGE 1053

EXISTING STORMWATER MANAGEMENT AREA

PROPOSED PHASE 2 PROPERTY

MICHEAL & ANN RANEY
R03615-004-019-000
BOOK 4008, PAGE 0581

SEE SHEET C-4.1

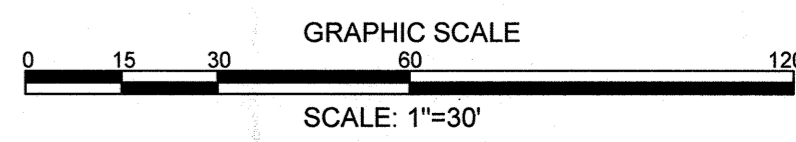
SEE SHEET C-4.2



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan	
Name	Date
Planning <i>mc</i>	1-4-2019
Traffic <i>AK</i>	1-4-19
Fire <i>Chad Chandler</i>	1-4-19

CITY OF WILMINGTON NORTH CAROLINA	
Public Services	Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN	
Date: <i>1/11/19</i>	Permit # <i>2018075</i>
Signed: <i>[Signature]</i>	



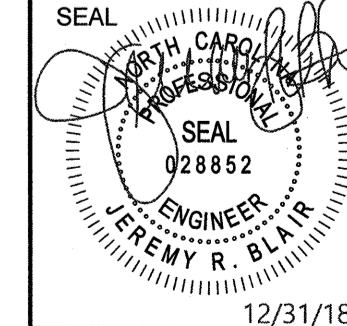
REVISIONS:	DATE	BY
1) PER ENGINEERING COMMENTS	07/25/18	
2) PER CITY AND OWNER COMMENTS	08/08/18	
3) PER CITY AND OWNER COMMENTS	10/05/18	
4) PER CITY AND OWNER COMMENTS	11/28/18	
5) PER CITY COMMENTS	12/11/18	
6) PER CITY COMMENTS	12/11/18	

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

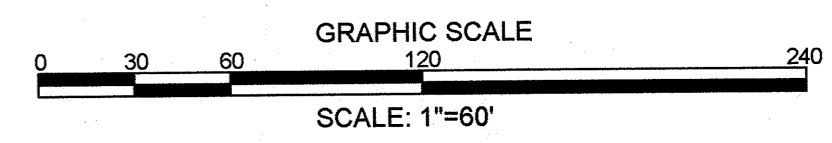
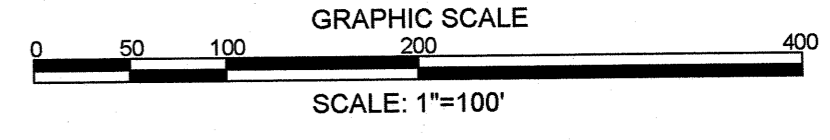
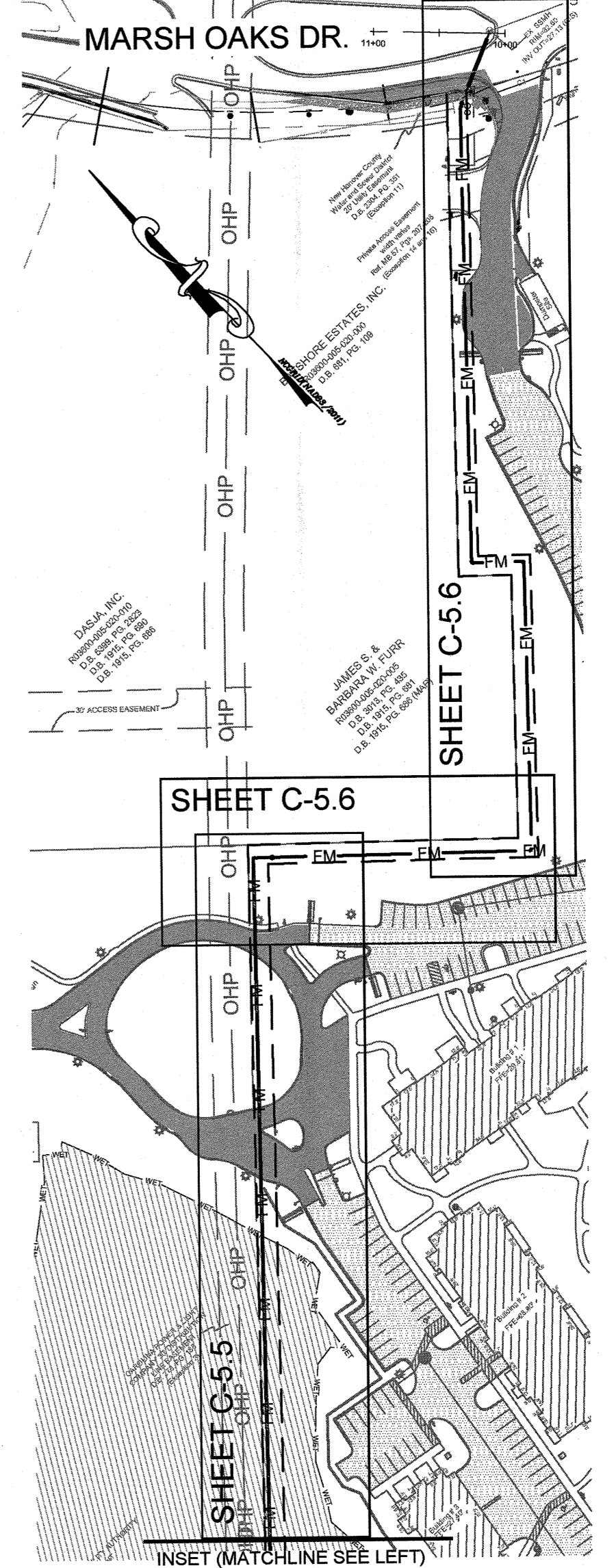
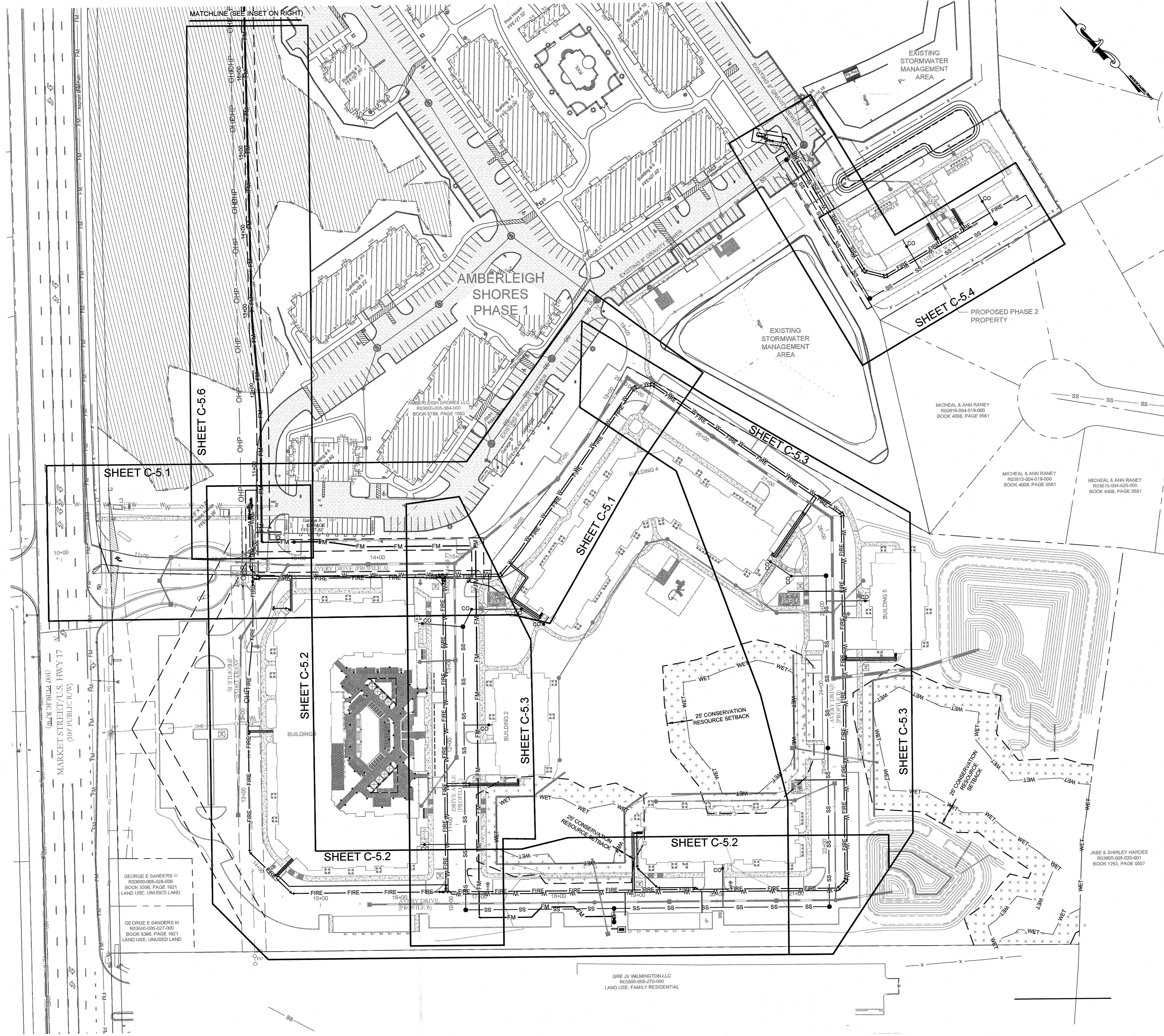
FINE GRADING PLAN
AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON NORTH CAROLINA

PROJECT STATUS	DATE	BY
FINAL DESIGN	05/08/18	
PRELIMINARY LAYOUT	11/20/18	
RELEASED FOR CONST.	11/20/18	



C-4.3
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



GEORGE E SANDERS III
R03800-006-029-000
BOOK 5396, PAGE 1621
LAND USE: UNUSED LAND

GEORGE E SANDERS III
R03800-006-029-000
BOOK 5396, PAGE 1621
LAND USE: UNUSED LAND

GRE JV WILMINGTON LLC
R03800-005-070-000
LAND USE: FAMILY RESIDENTIAL

JABE & SHIRLEY HARDEE
R03900-005-020-001
BOOK 1293, PAGE 0907

MICHEAL & ANN RANEY
R03815-004-019-000
BOOK 4008, PAGE 0581

MICHEAL & ANN RANEY
R03815-004-023-000
BOOK 4008, PAGE 0581

AMBERLEIGH PHASE 1 LLC
R03800-005-384-000
BOOK 5788, PAGE 1953

Approved Construction Plan

Name: mc 1-4-2019 Date: _____

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: AK 1-4-19

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/4/19 Permit # 2013045

Signed: [Signature]



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

REVISIONS:

01/31/18	1. REVISED PER CITY COMMENTS
04/15/18	2. REVISED TO SHOW ALL FLOW TO COUNTRY HAVENS POND
08/08/18	3. PER CITY AND OWNER COMMENTS
10/05/18	4. PER CITY AND OWNER COMMENTS
11/26/18	5. PER CITY AND OWNER COMMENTS
12/17/18	6. PER CITY COMMENTS
12/31/19	7. PER CITY COMMENTS

CLIENT INFORMATION:

FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING

122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

UTILITY INDEX MAP
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPT LAYOUT:
PRELIMINARY LAYOUT:
FINAL DESIGN:
RELEASED FOR CONSTRUCTION

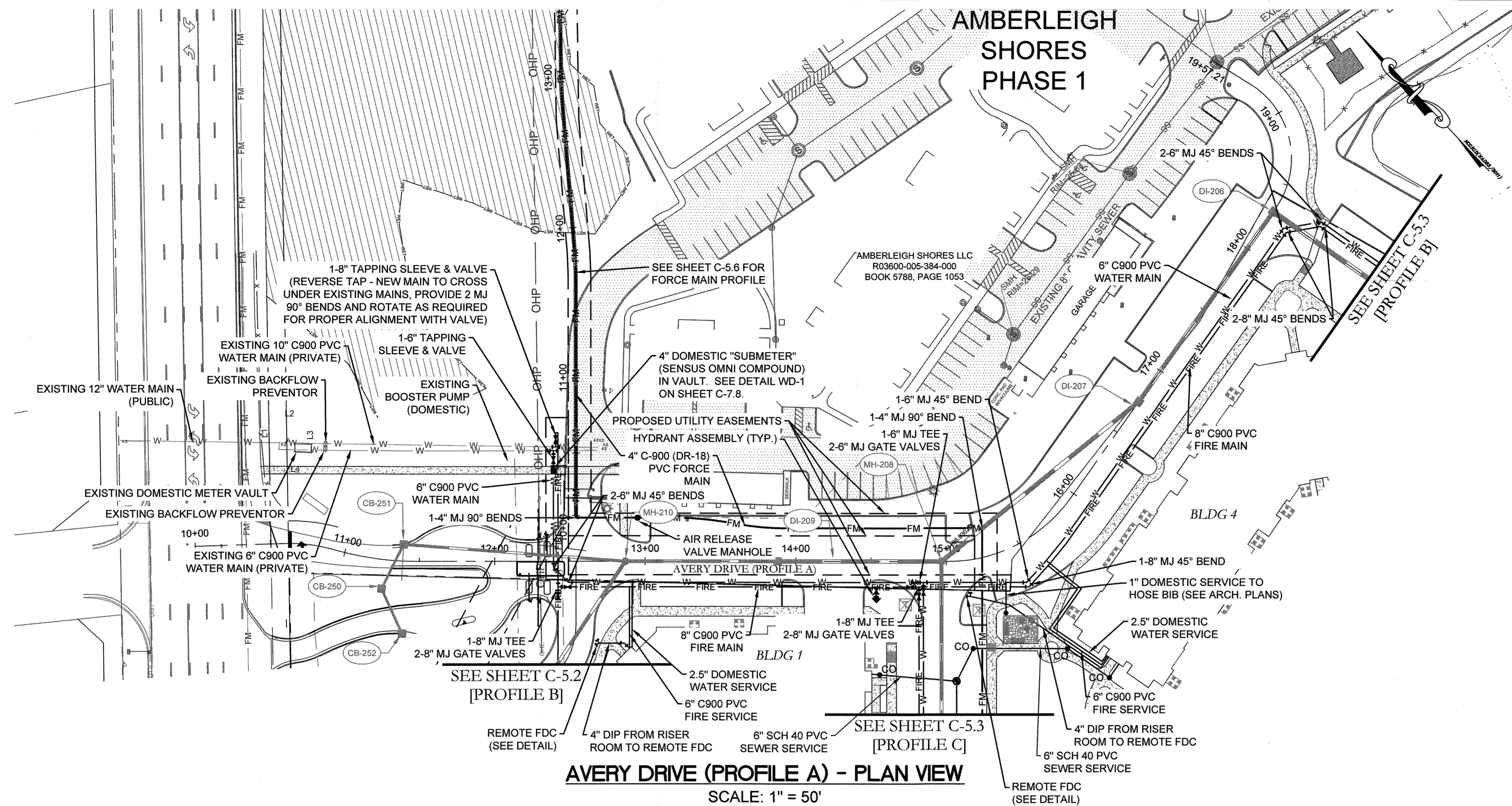
DRAWING INFORMATION

DATE: 01/31/18
SCALE: AS NOTED
DRAWN: JABE & SHIRLEY HARDEE
CHECKED: JABE & SHIRLEY HARDEE

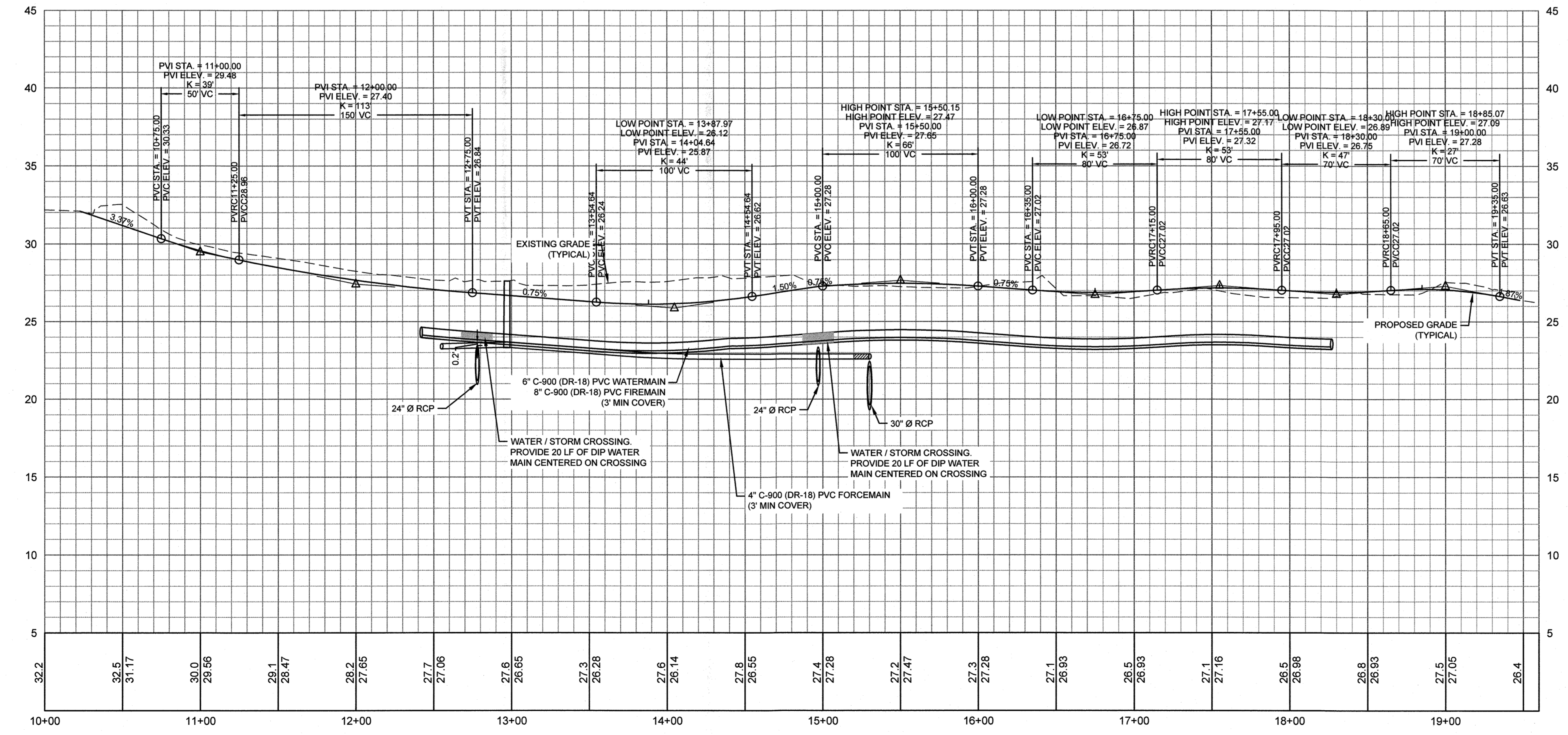
C-5.0

PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



- UTILITY NOTES:** (NCAC 15A.02T.0305 / T15A.18C.0906)
- WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.
 - WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.
 - CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
 - WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
 - WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
- GRAVITY SEWER NOTES:**
- ALL MANHOLES LOCATED WITHIN 50' OF WETLANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - SEAMS SHALL BE EXTERNALLY TAPED / SEALED WITH WATER TIGHT MATERIAL.
 - ALL MANHOLE INTERIORS SHALL BE FULLY LINED WITH WATERPROOF COATING.
 - MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1242 STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL.
 - ALL SEWER PIPE MATERIALS, INSTALLATION, AND TESTING SHALL MEET WATER MAIN STANDARDS WHEN LOCATED WITHIN 50' OF WETLANDS.



Approved Construction Plan

Name: *Umc* Date: *1-4-2019*

Planning: *Umc*

Traffic: *AK 1-4-19*

Fire: *Anal Charles 1-4-19*

CITY OF WILMINGTON
NORTH CAROLINA

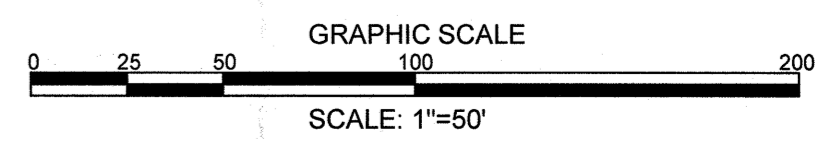
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: *1/17/19* Permit # *2018045*

Signed: *Ret Yel*

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.



REVISIONS:

01.31.18	1. REVISION PER OFFICIAL COMMENTS
04.18.18	2. REVISION TO SEND ALL FLOTT TO COUNTRY MAINS PS
08.08.18	3. PER CITY AND OWNER COMMENTS
10.05.18	4. PER CITY AND OWNER COMMENTS
11.28.18	5. PER CITY AND OWNER COMMENTS
12.17.18	6. PER CITY COMMENTS
12.31.18	7. PER CITY COMMENTS

CLIENT INFORMATION:

PARAMOUNT ENGINEERING INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

PLAN & PROFILE

AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT: _____
FINAL DESIGN: _____
RELEASED FOR CONST: _____

DRAWING INFORMATION:
DATE: 12/18/18
SCALE: AS NOTED
DRAWN: _____
CHECKED: _____

SEAL:
JEREMY R. BLAIR
ENGINEER
028852
12/31/18

C-5.1

PEI JOB#: 16105.PE

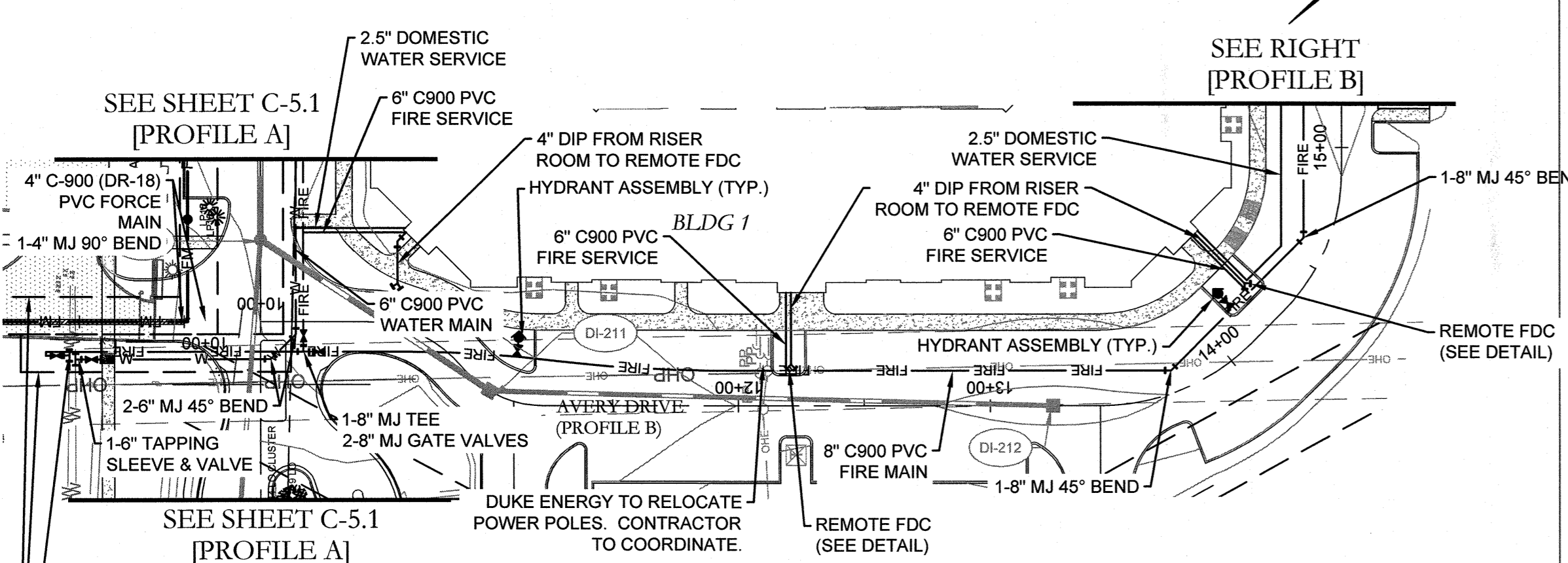
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

UTILITY NOTES: (NC AC 15-A.02T.0305 / T15-A.18C.0906)

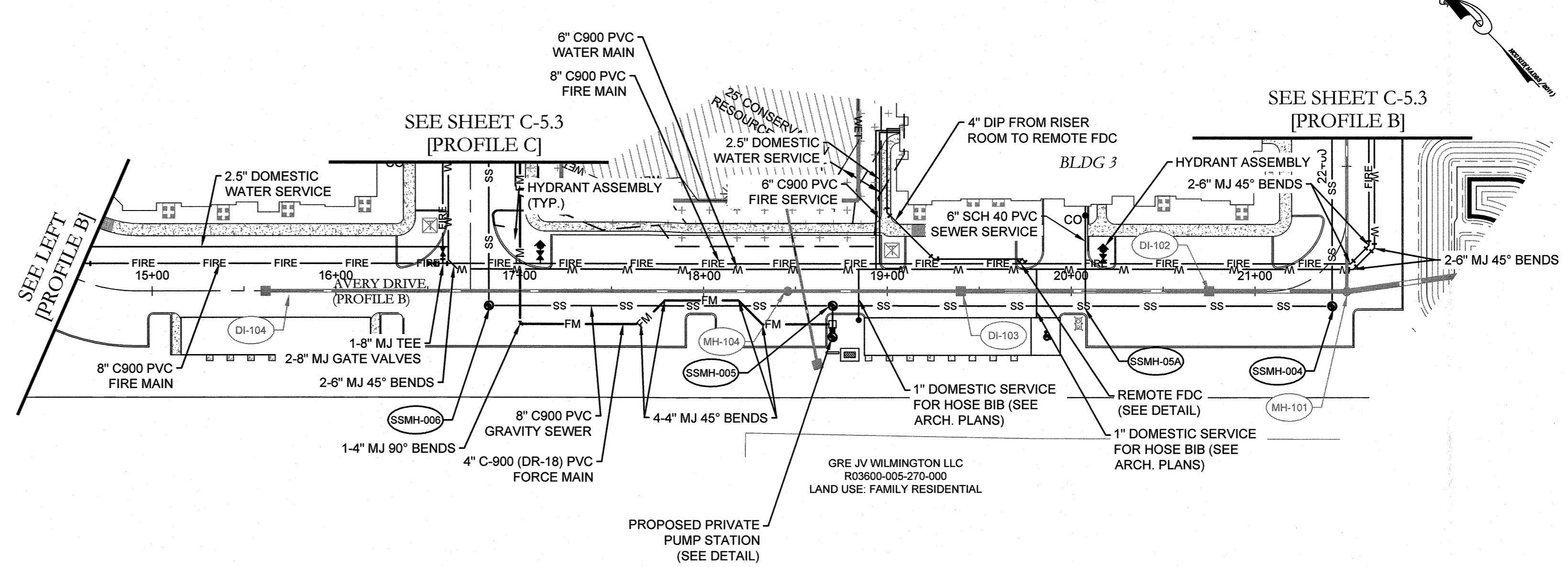
- WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.
- WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.
- CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
- WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
- WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.

GRAVITY SEWER NOTES:

- ALL MANHOLES LOCATED WITHIN 50' OF WETLANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - SEAMS SHALL BE EXTERNALLY TAPED / SEALED WITH WATER TIGHT MATERIAL.
 - ALL MANHOLE INTERIORS SHALL BE FULLY LINED WITH WATERPROOF COATING.
 - MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL.
- ALL SEWER PIPE MATERIALS, INSTALLATION, AND TESTING SHALL MEET WATER MAIN STANDARDS WHEN LOCATED WITHIN 50' OF WETLANDS.

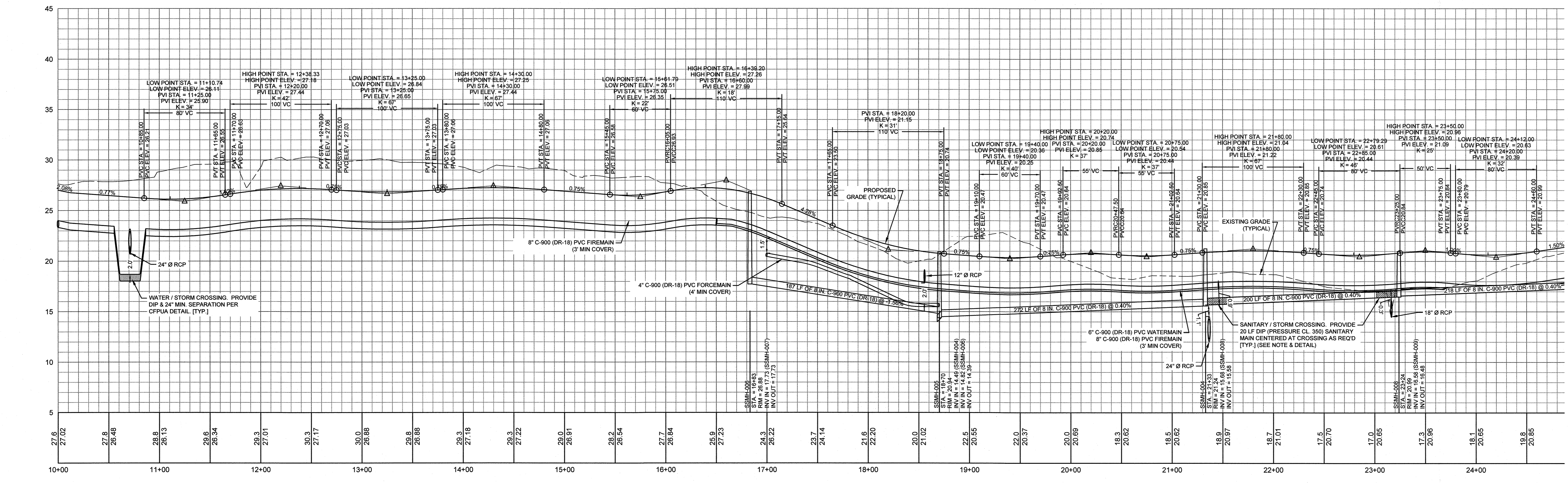


AVERY DRIVE (PROFILE B) - PLAN VIEW
SCALE: 1" = 50'



AVERY DRIVE (PROFILE B) - PLAN VIEW
SCALE: 1" = 50'

PROPOSED UTILITY EASEMENTS

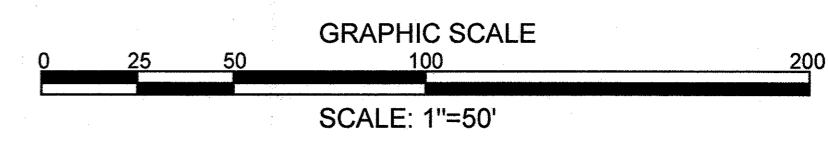


AVERY DRIVE (PROFILE B) - PROFILE VIEW
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/4/19 Permit # 2019045
Signed: [Signature]

Approved Construction Plan
Name: unc Date: 1-4-2019
Planning: unc
Traffic: AK 1-4-19
Fire: Chad Chula 1-4-19



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA

C-5.2

PEI JOB#: 16105.PE

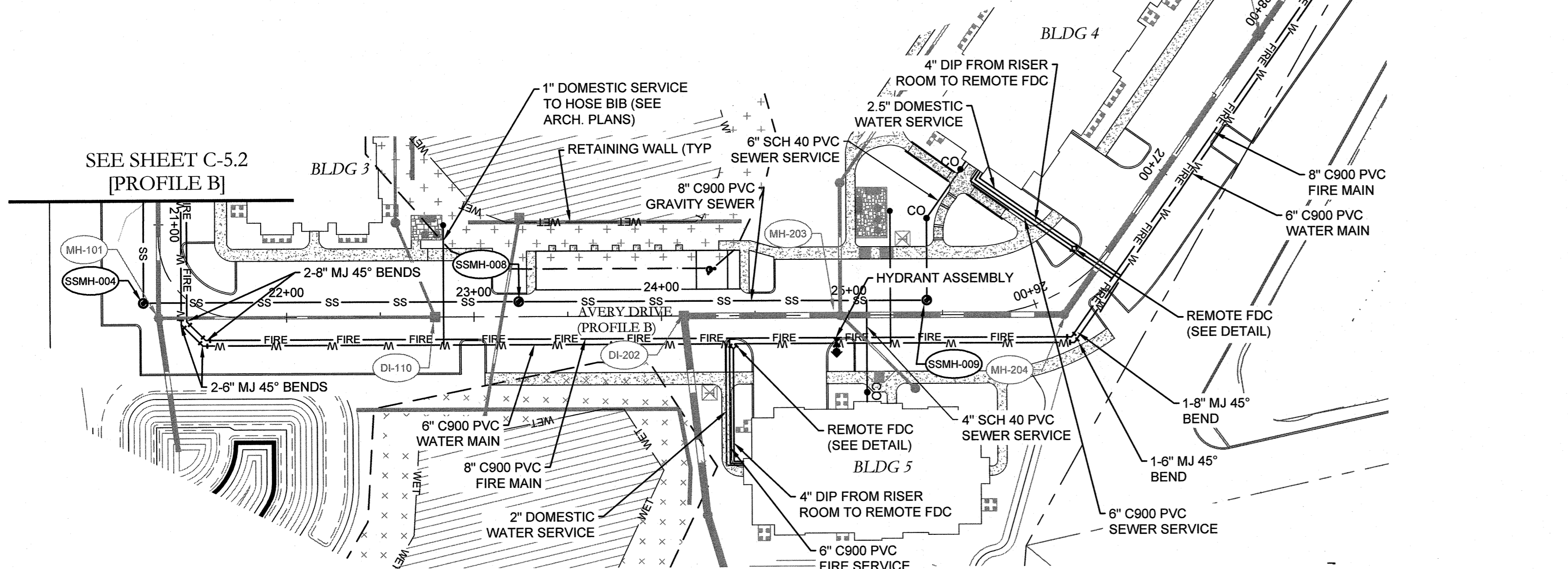
REVISIONS
1. REVISED PER CFPWA COMMENTS
2. REVISED TO SHOW ALL FLOW TO COUNTRY WADEN PFS
3. PER CITY AND OWNER COMMENTS
4. PER CITY AND OWNER COMMENTS
5. PER CITY AND OWNER COMMENTS
6. PER CITY COMMENTS
7. PER CITY COMMENTS

UTILITY NOTES: (NCAC 15A.02T.0305 / 15A.18C.0906)

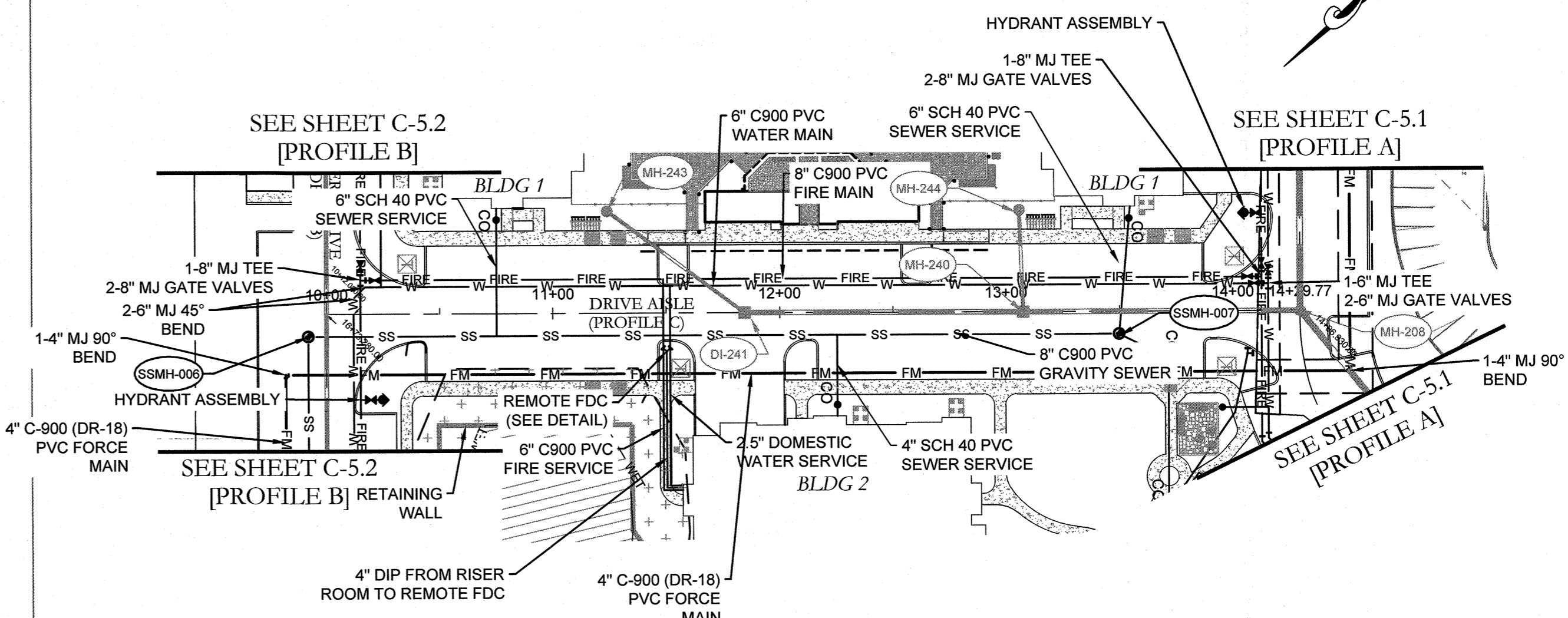
1. WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.
2. WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.
3. CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
4. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
5. WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.

GRAVITY SEWER NOTES:

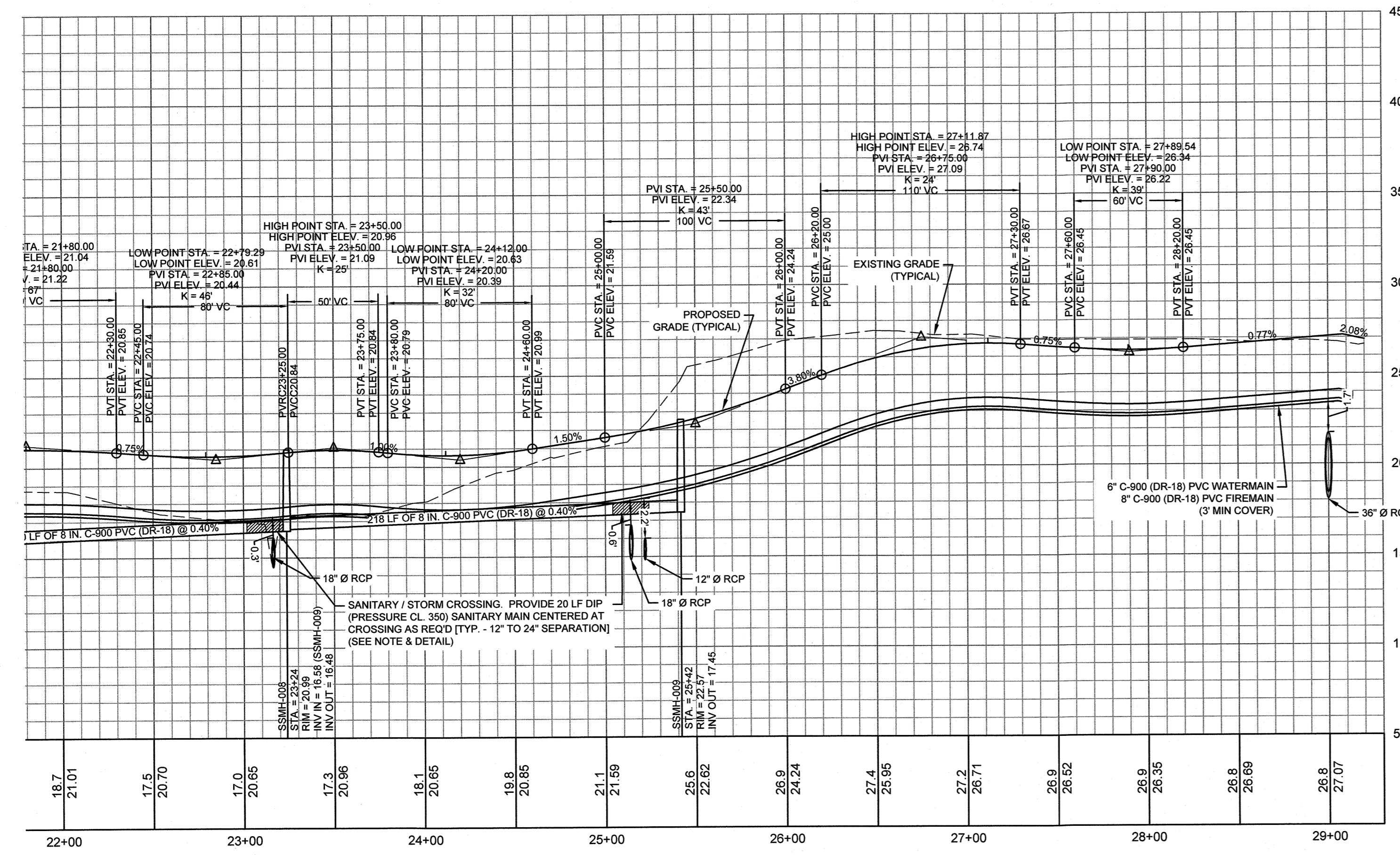
1. ALL MANHOLES LOCATED WITHIN 50' OF WETLANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - 1.1. SEAMS SHALL BE EXTERNALLY TAPED / SEALED WITH WATER TIGHT MATERIAL.
 - 1.2. ALL MANHOLE INTERIORS SHALL BE FULLY LINED WITH WATERPROOF COATING.
 - 1.3. MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL.
2. ALL SEWER PIPE MATERIALS, INSTALLATION, AND TESTING SHALL MEET WATER MAIN STANDARDS WHEN LOCATED WITHIN 50' OF WETLANDS.



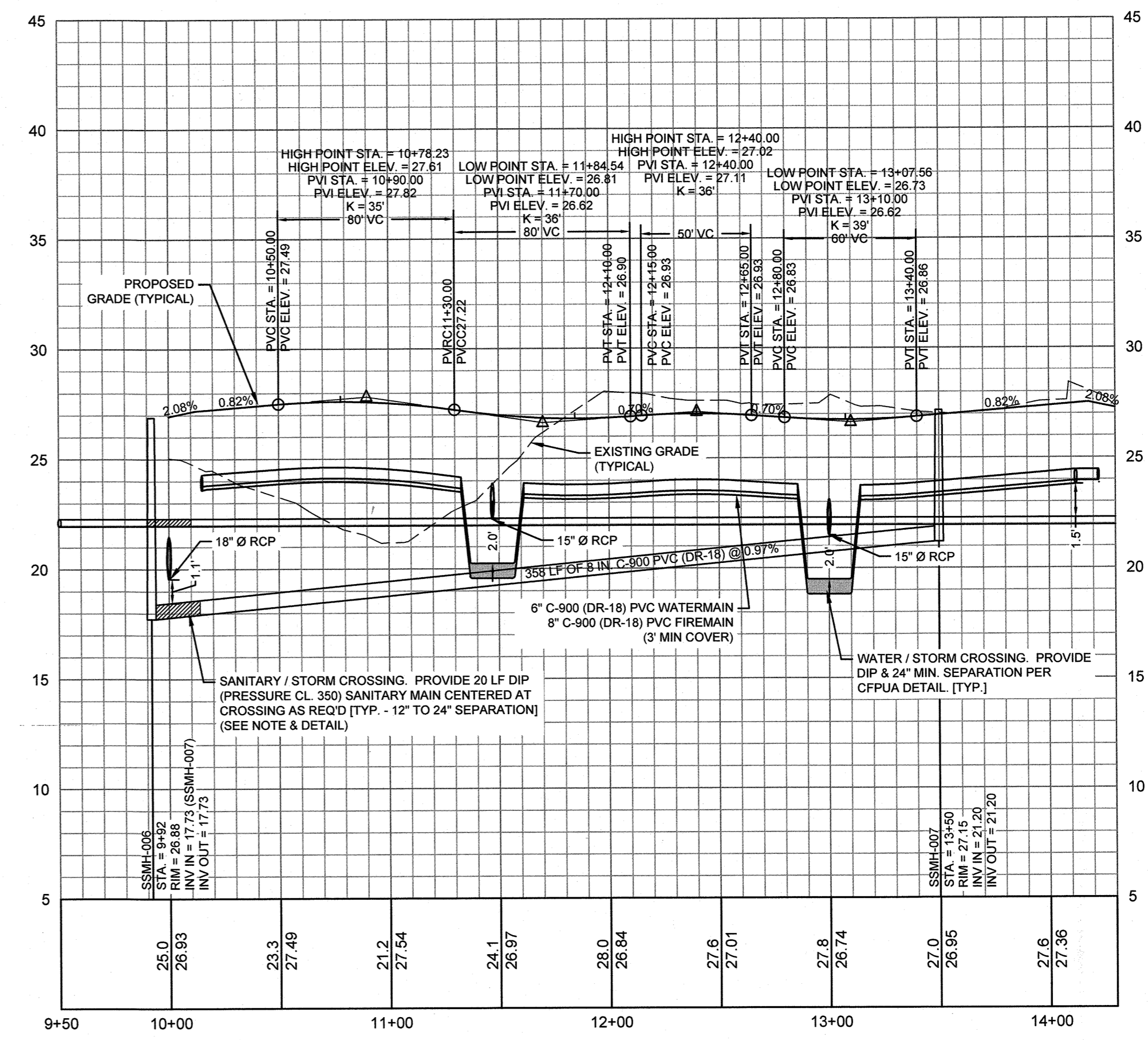
AVERY DRIVE (PROFILE B) - PLAN VIEW
SCALE: 1" = 50'



DRIVE AISLE (PROFILE C) - PLAN VIEW
SCALE: 1" = 50'



AVERY DRIVE (PROFILE B) - PROFILE VIEW
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'



DRIVE AISLE (PROFILE C) - PROFILE VIEW
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 11/19/19 Permit # 2019045

Signed: [Signature]

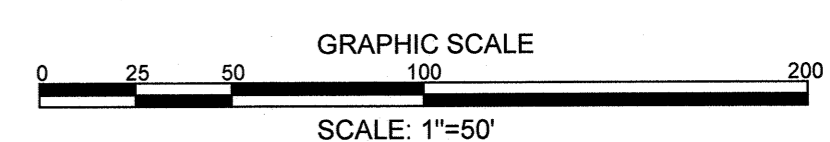
Approved Construction Plan

Name: [Name] Date: [Date]

Planning: [Signature] Date: 1-4-2019

Traffic: [Signature] Date: 1-4-19

Fire: [Signature] Date: 1-4-19



REVISIONS:

NO.	DATE	DESCRIPTION
1.	01/31/19	REVISED PER CFPWA COMMENTS
2.	04/18/19	REVISED TO SHOW ALL FLOW TO COUNTRY HAVENS
3.	08/08/19	PER CITY AND OWNER COMMENTS
4.	10/08/19	PER CITY AND OWNER COMMENTS
5.	12/18/19	PER CITY AND OWNER COMMENTS
6.	12/18/19	PER CITY COMMENTS
7.	12/19/19	PER CITY COMMENTS

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT
ENGINEERS ARCHITECTS INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

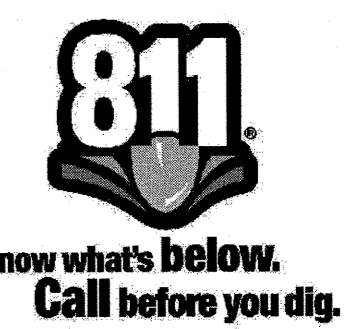
PLAN & PROFILE
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT:
FINAL DESIGN:
RELEASED FOR CONSTRUCTION:
DATE: 1/4/2019
SCALE: AS NOTED
DESIGNED: [Signature]
CHECKED: [Signature]

SEAL
[Professional Engineer Seal]
12/31/18

C-5.3
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

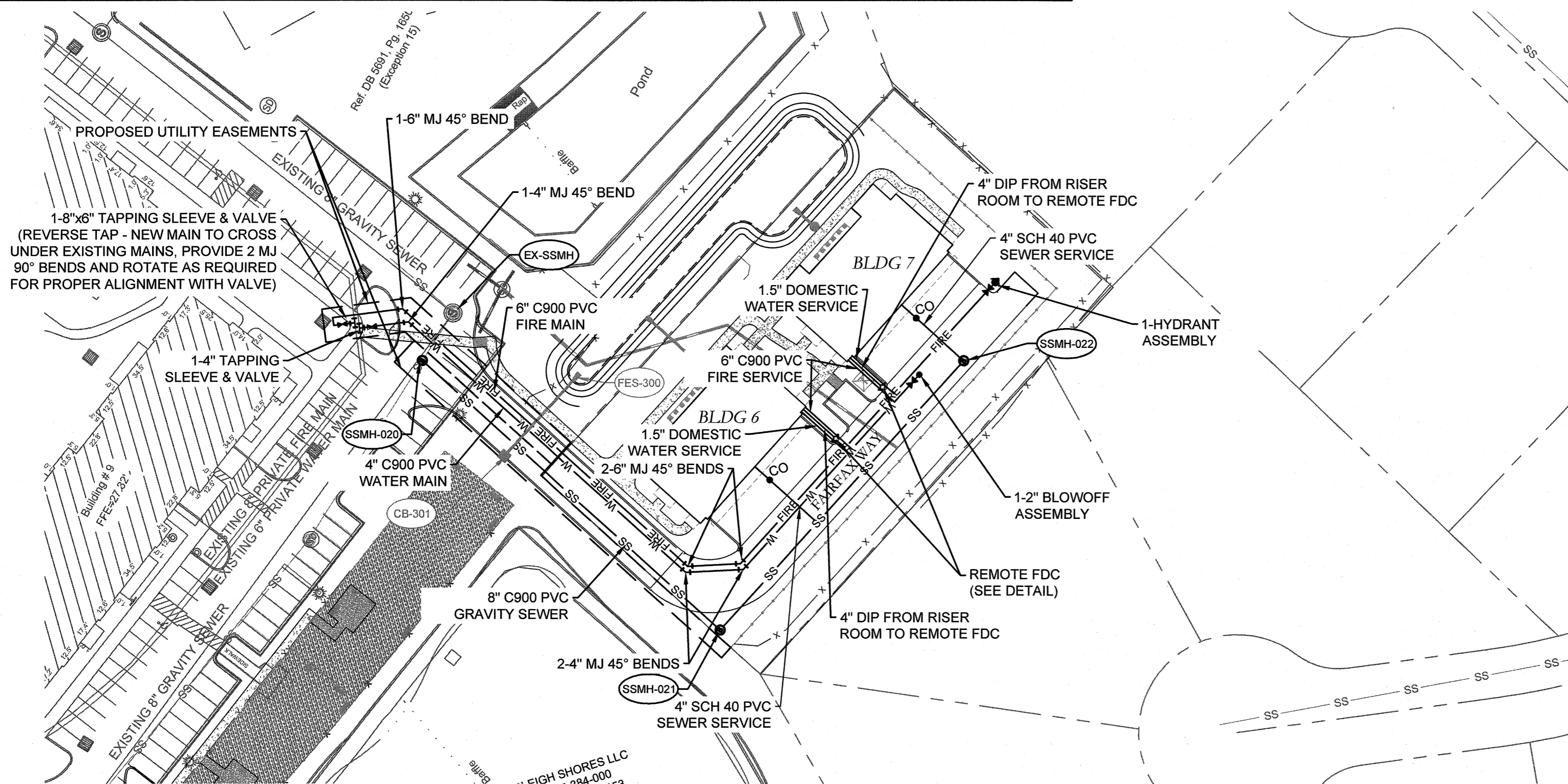


UTILITY NOTES: (NCAC 15A.02T.0305 / T15A.18C.0906)

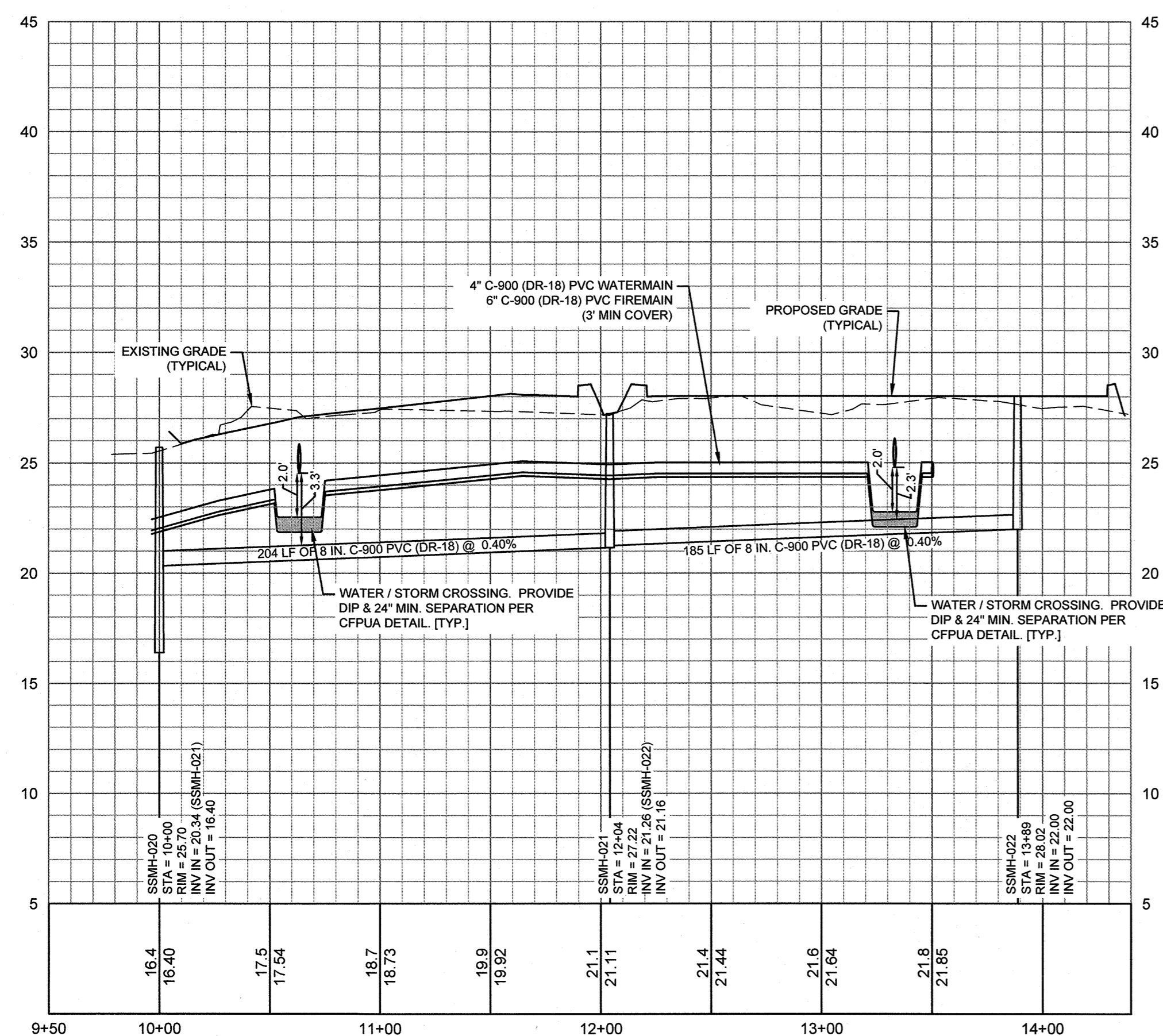
1. WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.
2. WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.
3. CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
4. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
5. WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.

GRAVITY SEWER NOTES:

1. ALL MANHOLES LOCATED WITHIN 50' OF WETLANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - 1.1. SEAMS SHALL BE EXTERNALLY TAPED / SEALED WITH WATERPROOF MATERIAL.
 - 1.2. ALL MANHOLE INTERIORS SHALL BE FULLY LINED WITH WATERPROOF COATING.
 - 1.3. MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL.
2. ALL SEWER PIPE MATERIALS, INSTALLATION, AND TESTING SHALL MEET WATER MAIN STANDARDS WHEN LOCATED WITHIN 50' OF WETLANDS.



FAIRFAX WAY (SSMH-020 TO SSMH-022) - PLAN VIEW
SCALE: 1" = 50'



FAIRFAX WAY (SSMH-020 TO SSMH-022) - PROFILE VIEW
HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/14/19 Permit # 2018045
Signed: [Signature]

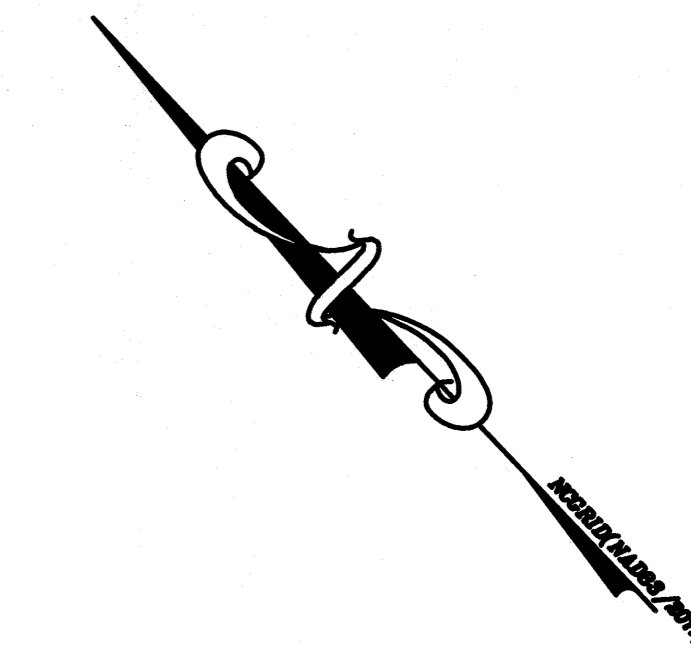
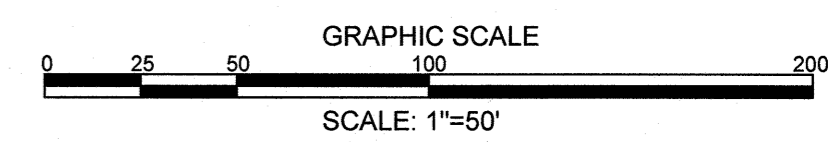
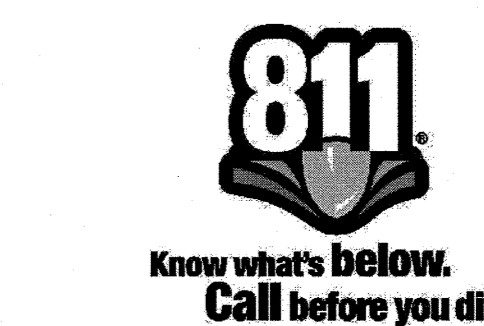
Approved Construction Plan

Name: [Name] Date: [Date]

Planning: [Signature] 1-4-2019

Traffic: AK 1-4-19

Fire: [Signature] 1-4-19



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

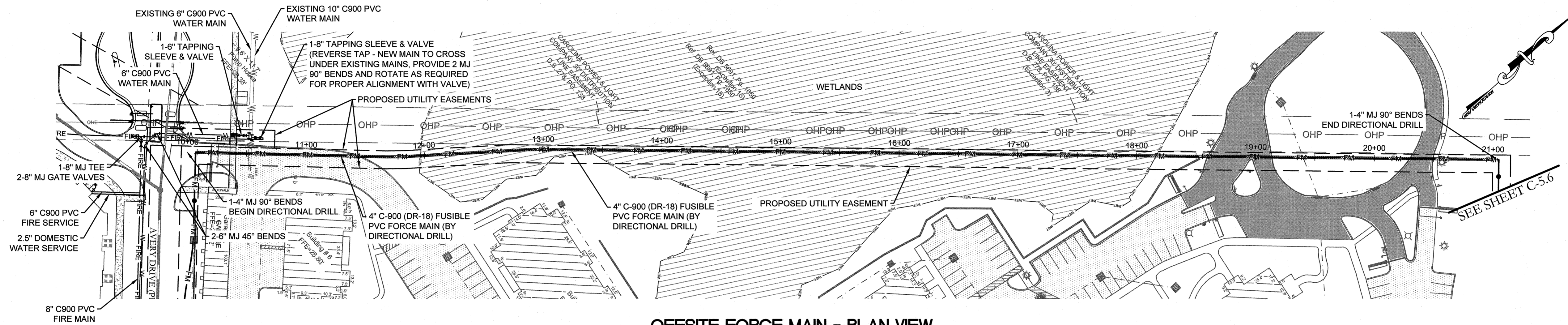
<p>REVISIONS:</p> <table border="1"> <tr><td>1.</td><td>REVISED PER CFPWA COMMENTS</td><td>01/31/18</td></tr> <tr><td>2.</td><td>REVISED TO SEND ALL FLOW TO COUNTRY HAVEN PDS</td><td>04/18/18</td></tr> <tr><td>3.</td><td>PER CITY AND OWNER COMMENTS</td><td>08/08/18</td></tr> <tr><td>4.</td><td>PER CITY AND OWNER COMMENTS</td><td>10/05/18</td></tr> <tr><td>5.</td><td>PER CITY AND OWNER COMMENTS</td><td>11/28/18</td></tr> <tr><td>6.</td><td>PER CITY COMMENTS</td><td>12/17/18</td></tr> <tr><td>7.</td><td>PER CITY COMMENTS</td><td>12/31/18</td></tr> </table>		1.	REVISED PER CFPWA COMMENTS	01/31/18	2.	REVISED TO SEND ALL FLOW TO COUNTRY HAVEN PDS	04/18/18	3.	PER CITY AND OWNER COMMENTS	08/08/18	4.	PER CITY AND OWNER COMMENTS	10/05/18	5.	PER CITY AND OWNER COMMENTS	11/28/18	6.	PER CITY COMMENTS	12/17/18	7.	PER CITY COMMENTS	12/31/18
1.	REVISED PER CFPWA COMMENTS	01/31/18																				
2.	REVISED TO SEND ALL FLOW TO COUNTRY HAVEN PDS	04/18/18																				
3.	PER CITY AND OWNER COMMENTS	08/08/18																				
4.	PER CITY AND OWNER COMMENTS	10/05/18																				
5.	PER CITY AND OWNER COMMENTS	11/28/18																				
6.	PER CITY COMMENTS	12/17/18																				
7.	PER CITY COMMENTS	12/31/18																				
<p>CLIENT INFORMATION:</p> <p>FDC Amberleigh Shores II SPE, LLC 900 Brookstone Centre Parkway Columbus, GA 31904</p>																						
<p>PARAMOUNT ENGINEERING, INC. 122 Cinema Drive Wilmington, North Carolina 28403 (910) 791-6707 (O) (910) 791-6760 (F) NC License #: C-2846</p>																						
<p>PLAN & PROFILE</p> <p>AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA</p>																						
<p>PROJECT STATUS</p> <p>CONCEPTUAL LAYOUT: PRELIMINARY LAYOUT: RELEASED FOR CONST.</p>	<p>DRAWING INFORMATION</p> <p>DATE: 1/14/19 DESIGNED: [Signature] DRAWN: [Signature] CHECKED: [Signature] DATE PLOTTED: 1/23/19</p>																					
<p>C-5.4</p> <p>PEI JOB#: 18105.PE</p>																						

UTILITY NOTES: (NCAC 15A.02T.0305 / T15A.18C.0906)

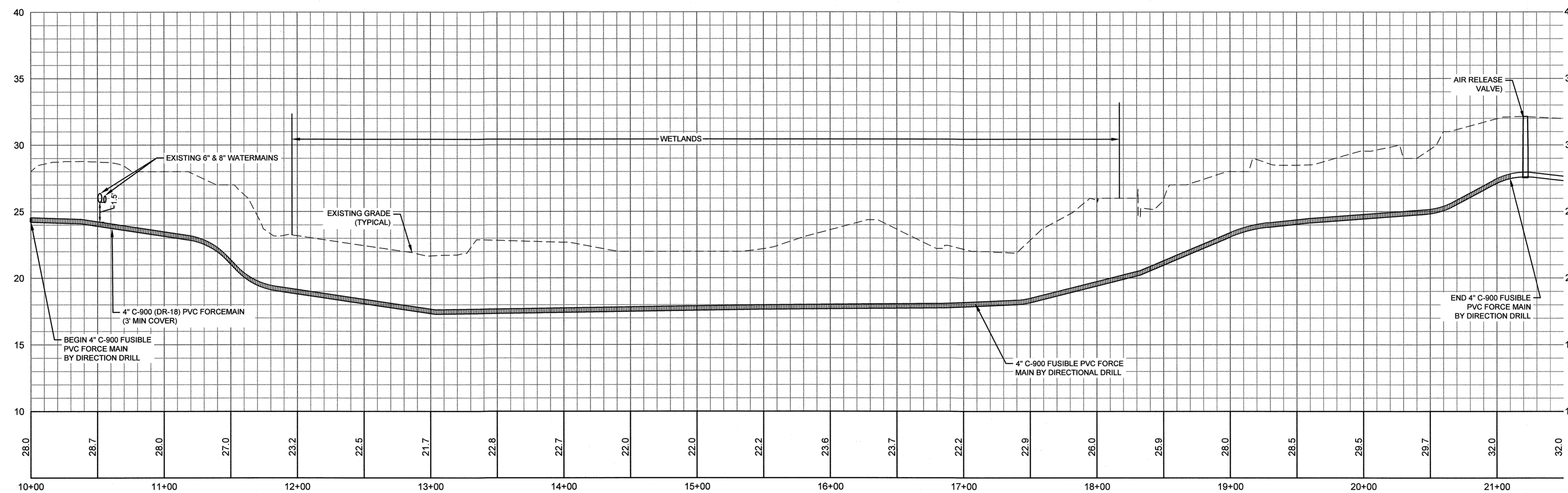
1. WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.
2. WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.
3. CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
4. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
5. WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.

GRAVITY SEWER NOTES:

1. ALL MANHOLES LOCATED WITHIN 50' OF WETLANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - 1.1. SEAMS SHALL BE EXTERNALLY TAPED / SEALED WITH WATERTIGHT MATERIAL.
 - 1.2. ALL MANHOLE INTERIORS SHALL BE FULLY LINED WITH WATERPROOF COATING.
 - 1.3. MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL."
2. ALL SEWER PIPE MATERIALS, INSTALLATION, AND TESTING SHALL MEET WATER MAIN STANDARDS WHEN LOCATED WITHIN 50' OF WETLANDS.



OFFSITE FORCE MAIN - PLAN VIEW
 STA. 10+00 TO STA. 21+04.75
 SCALE: 1" = 50'

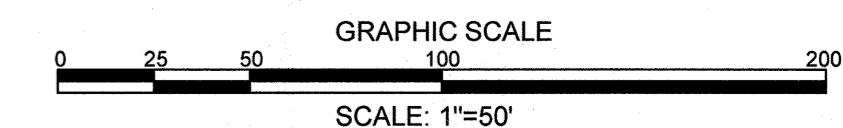
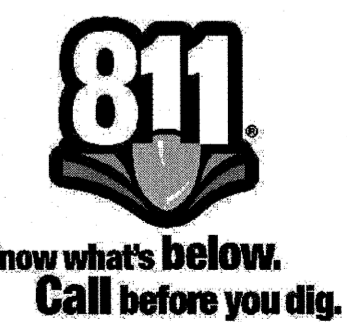


OFFSITE FORCE MAIN - PROFILE VIEW
 STA. 10+00 TO STA. 21+04.75
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 11/14/19 Permit # 2018045
 Signed: [Signature]

Approved Construction Plan
 Name: [Blank] Date: [Blank]
 Planning: mc 11-2019
 Traffic: AK 1-4-19
 Fire: Chad Chisler 1-4-19



REVISIONS:

01/31/18	1. REVISED PER OFFICIAL COMMENTS
04/18/18	2. REVISED TO SEND ALL FLOW TO COUNTRY HARBOR PDS
06/28/18	3. PER CITY AND OWNER COMMENTS
11/28/18	4. PER CITY AND OWNER COMMENTS
12/31/18	5. PER CITY COMMENTS

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6766 (F)
 NC License #: C-2846

PLAN & PROFILE
 AMBERLEIGH SHORES
 PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA

PROJECT STATUS
 CONCEPT LAYOUT: [Blank]
 PRELIMINARY LAYOUT: [Blank]
 FINAL DESIGN: [Blank]
 RELEASED FOR CONSTRUCTION: [Blank]

DRAWING INFORMATION
 DATE: 01/11/18
 AS NOTED: [Blank]
 SCALE: [Blank]
 DRAWN: [Blank]
 CHECKED: [Blank]

SEAL: [Signature]
 028852
 ENGINEER
 JERRY R. BARR
 12/31/18

C-5.5
 PEI JOB#: 16105.PE

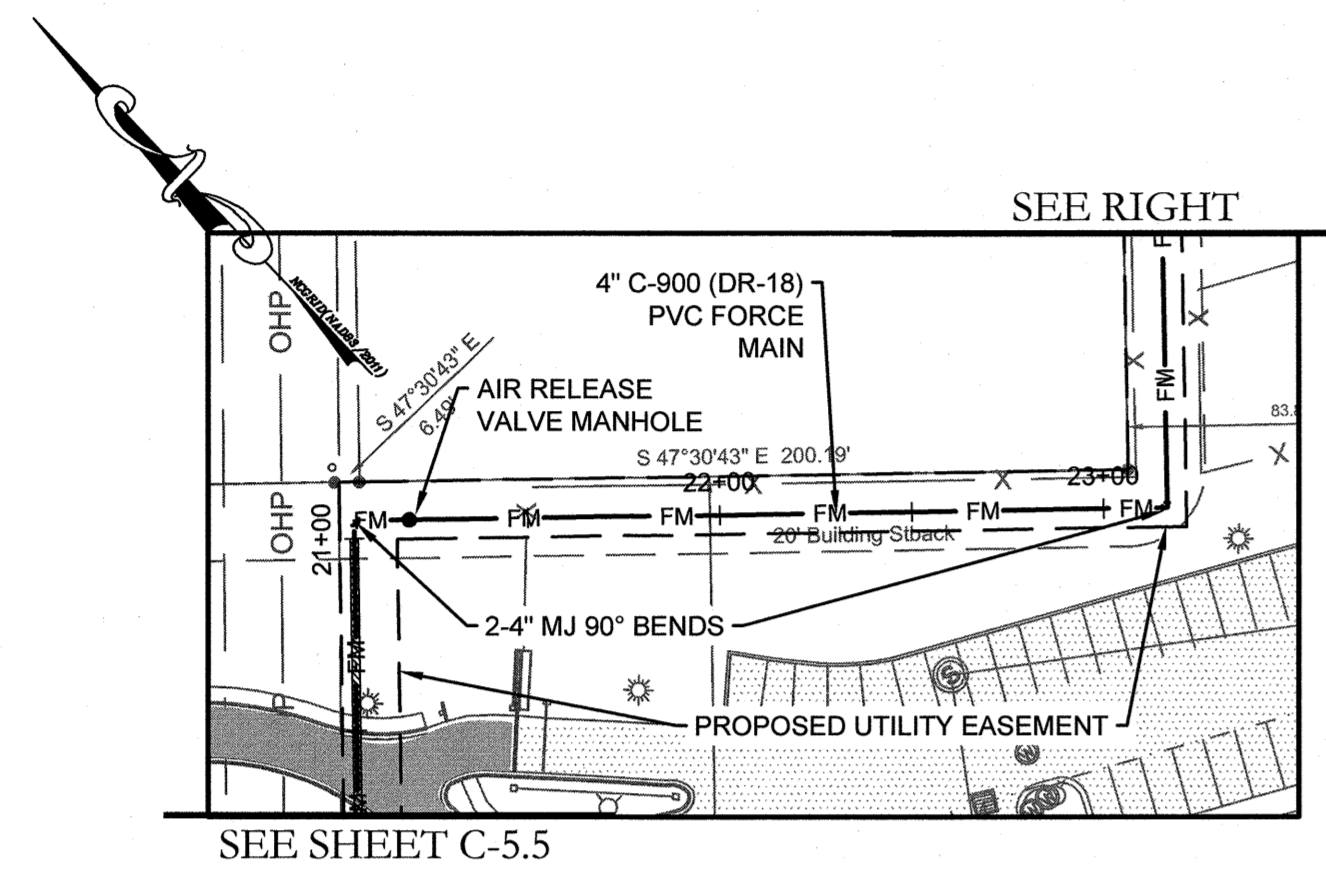
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

UTILITY NOTES: (NCAC 15A.02T.0305 / T15A.18C.0906)

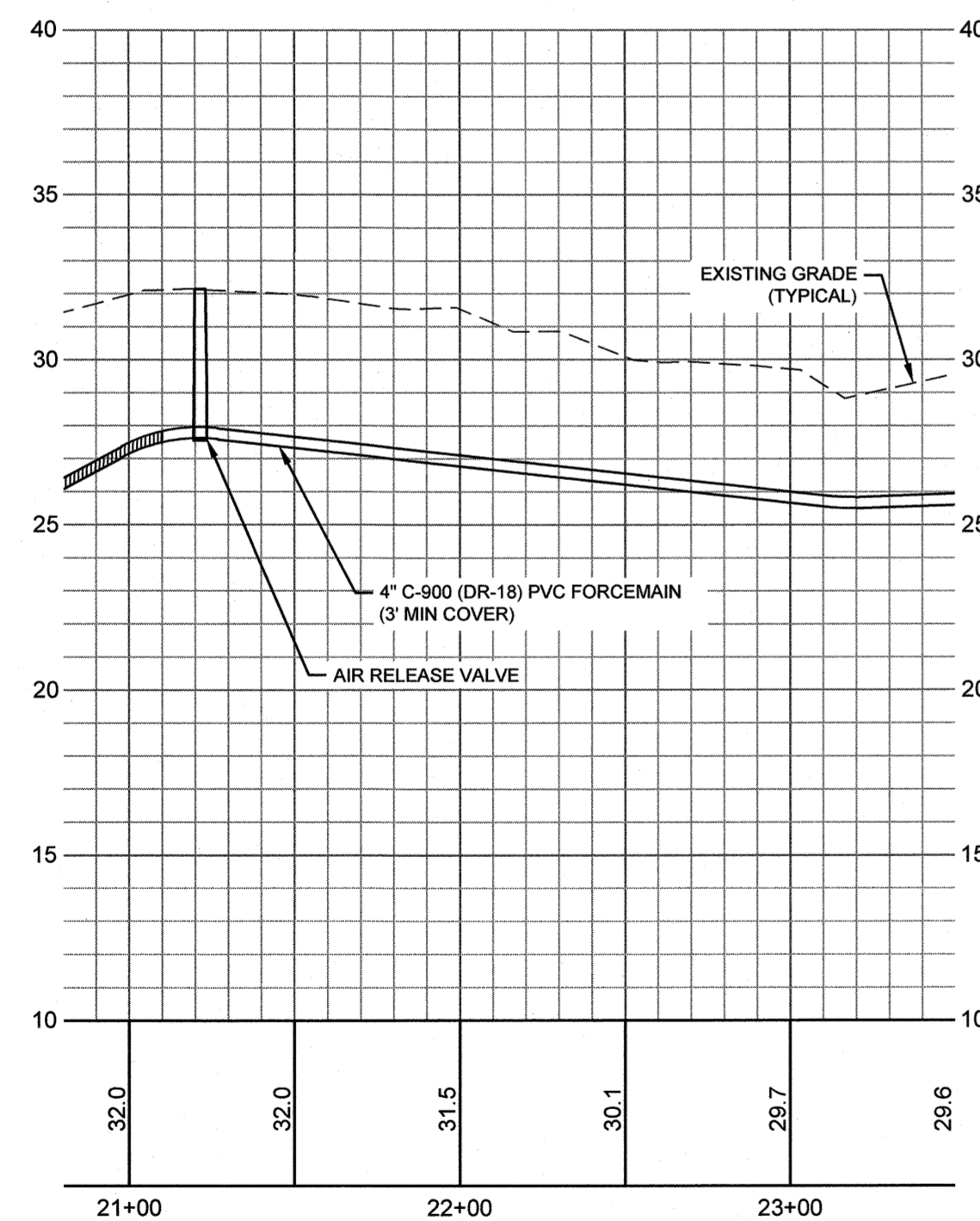
1. WATER MAINS SHALL BE LAID SO AS TO PROVIDE A MINIMUM HORIZONTAL SEPARATION OF 10 FEET FROM SEWERS. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, THE WATER MAIN CAN BE INSTALLED AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER, EITHER IN A SEPARATE TRENCH, OR IN THE SAME TRENCH ON A BENCH OF UNDISTURBED EARTH.
2. WHEN CROSSING A WATER MAIN OVER A SEWER, THE WATER MAIN SHALL BE LAID AT LEAST 18 INCHES ABOVE THE SEWER. IF CONDITIONS EXIST SUCH THAT THIS SEPARATION CANNOT BE ACHIEVED, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH JOINTS THAT MEET WATER MAIN STANDARDS. THE DUCTILE IRON PIPE SHALL EXTEND 10 FEET ON EACH SIDE OF THE CROSSING WITH A SECTION OF WATER MAIN PIPE CENTERED ON THE CROSSING.
3. CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.
4. WHERE VERTICAL CLEARANCE IS LESS THAN 24" BETWEEN SANITARY SEWER AND STORM DRAIN, SANITARY SEWER SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.
5. WHERE VERTICAL CLEARANCE IS LESS THAN 18" BETWEEN WATER MAIN AND STORM DRAIN, WATER MAIN SHALL BE DUCTILE IRON PIPE FOR A MINIMUM OF 10' EITHER SIDE OF CROSSING AND STORM DRAIN SHALL BE RC PIPE.

GRAVITY SEWER NOTES:

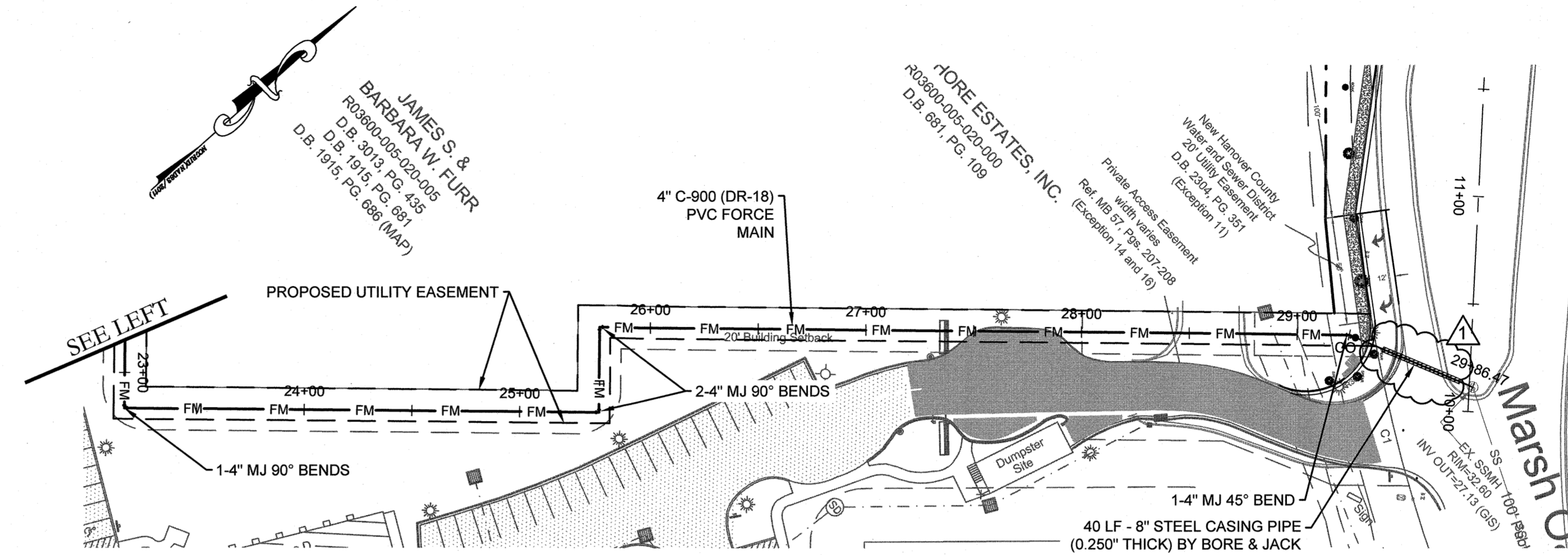
1. ALL MANHOLES LOCATED WITHIN 50' OF WETLANDS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - 1.1. SEAMS SHALL BE EXTERNALLY TAPED / SEALED WITH WATER TIGHT MATERIAL.
 - 1.2. ALL MANHOLE INTERIORS SHALL BE FULLY LINED WITH WATERPROOF COATING.
 - 1.3. MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ASTM C1244 "STANDARD TEST METHOD FOR CONCRETE SEWER MANHOLES BY NEGATIVE AIR PRESSURE (VACUUM) TEST PRIOR TO BACKFILL."
2. ALL SEWER PIPE MATERIALS, INSTALLATION, AND TESTING SHALL MEET WATER MAIN STANDARDS WHEN LOCATED WITHIN 50' OF WETLANDS.



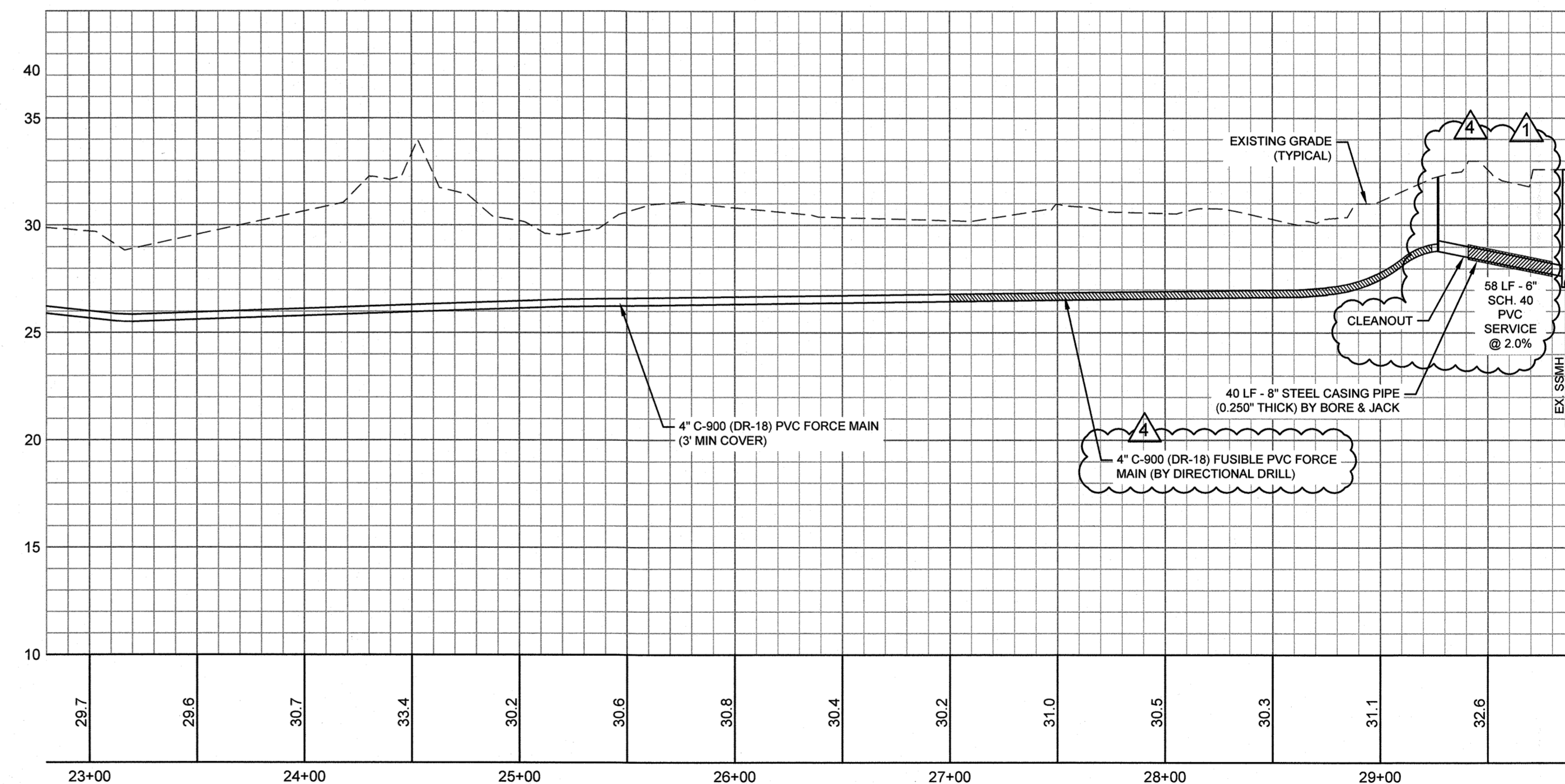
OFFSITE FORCE MAIN - PLAN VIEW
 STA. 21+04.75 TO STA. 23+16.52
 SCALE: 1" = 50'



OFFSITE FORCE MAIN - PROFILE VIEW
 STA. 21+04.75 TO STA. 23+16.52
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'



OFFSITE FORCE MAIN - PLAN VIEW
 STA. 23+16.52 TO END
 SCALE: 1" = 50'



OFFSITE FORCE MAIN - PROFILE VIEW
 STA. 23+16.52 TO END
 HORIZONTAL SCALE: 1" = 50'
 VERTICAL SCALE: 1" = 5'

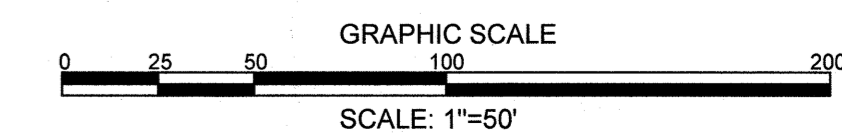
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 1/7/19 Permit # 2019045
 Signed: [Signature]

Approved Construction Plan
 Name: [Name] Date: [Date]
 Planning: [Signature] 1-4-2019
 Traffic: [Signature] 1-4-19
 Fire: [Signature] 1-4-19



Know what's below.
 Call before you dig.



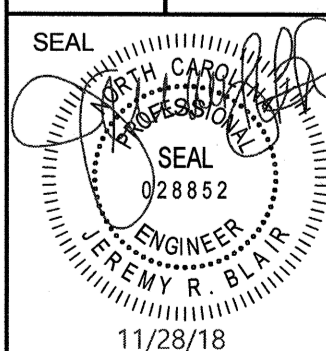
REVISIONS:	DATE	BY	DESCRIPTION
1. REVISED PER CIVIL COMMENTS	01.31.18		
2. REVISED TO SHOW ALL FLOW TO COUNTRY HAVENS	04.18.18		
3. PER CITY AND OWNER COMMENTS	08.08.18		
4. PER CITY AND OWNER COMMENTS	11.28.18		

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

PLAN & PROFILE
 AMBERLEIGH SHORES
 PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA

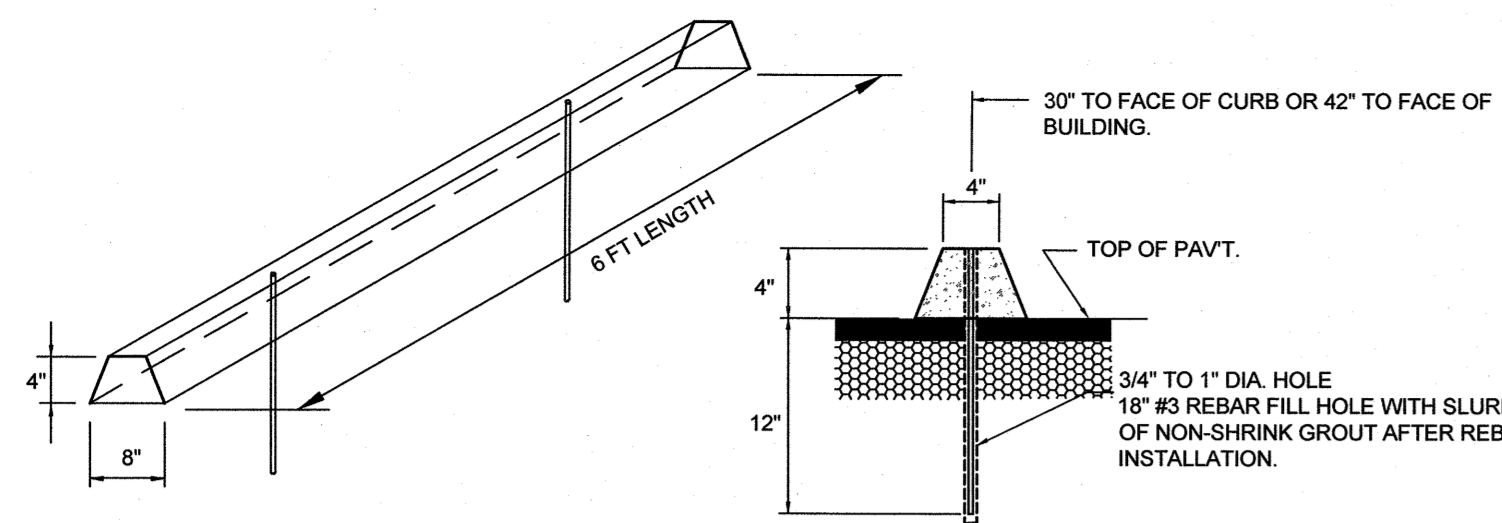
PROJECT STATUS
 CONCEPTUAL LAYOUT
 PRELIMINARY LAYOUT
 PREPARED FOR CONSTRUCTION
DRAWING INFORMATION
 DATE: 11/28/18
 SCALE: AS NOTED
 DRAWN: [Signature]
 CHECKED: [Signature]



C-5.6

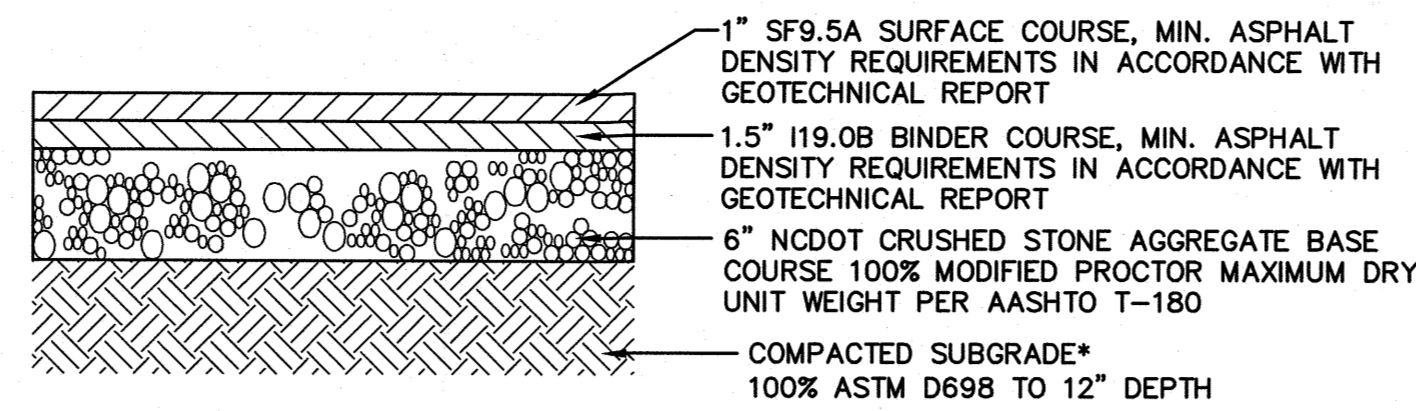
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

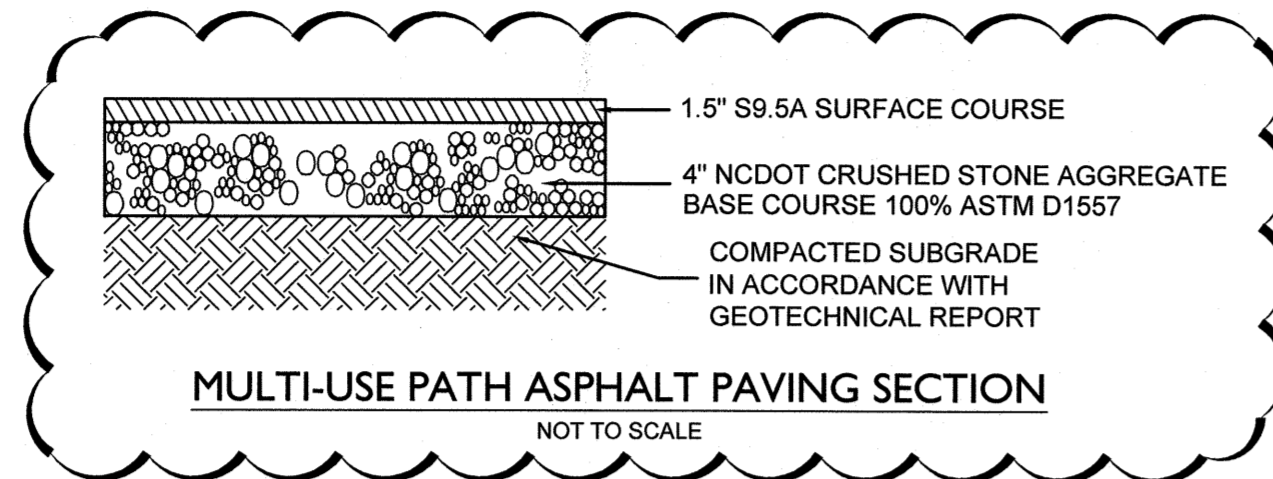


NOTE: REBAR SPACING AND HOLE SIZES SHALL BE COORDINATED WITH WHEEL STOP MANUFACTURER.

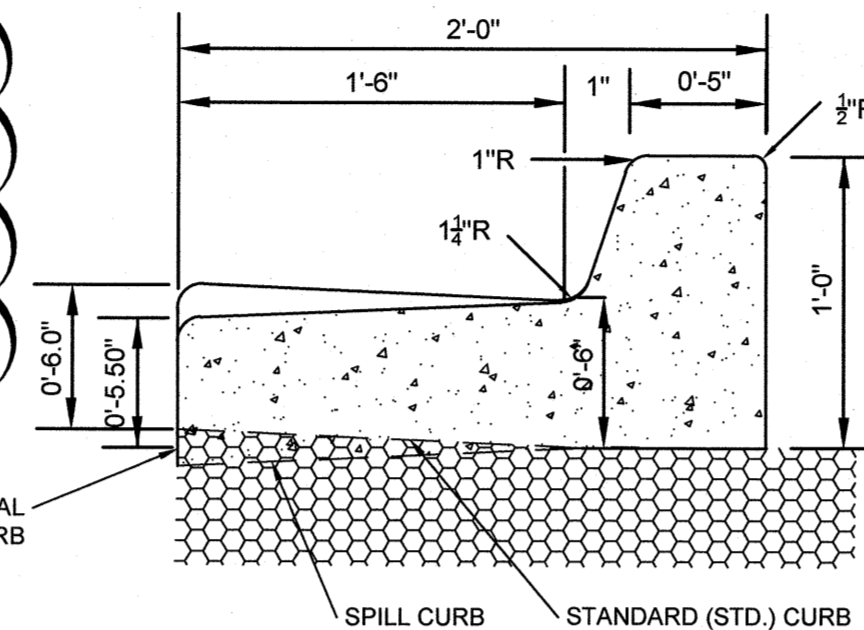
CONCRETE WHEEL STOP DETAIL
NOT TO SCALE



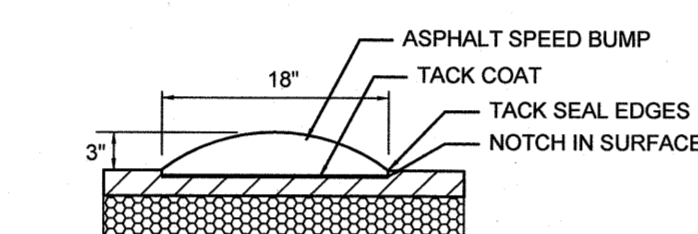
LIGHT DUTY PAVEMENT SECTION
NOT TO SCALE



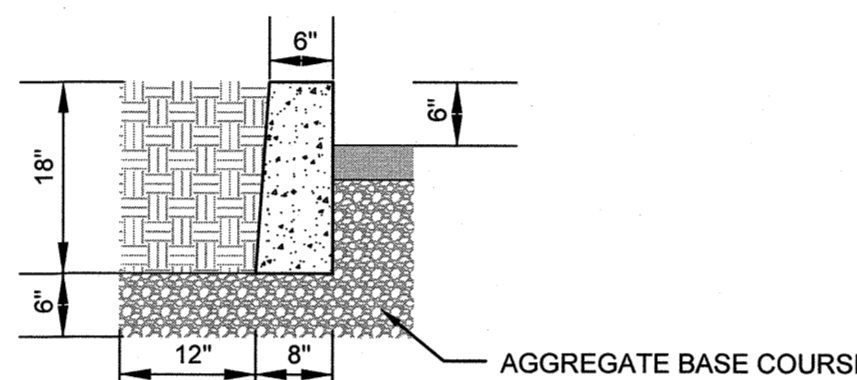
MULTI-USE PATH ASPHALT PAVING SECTION
NOT TO SCALE



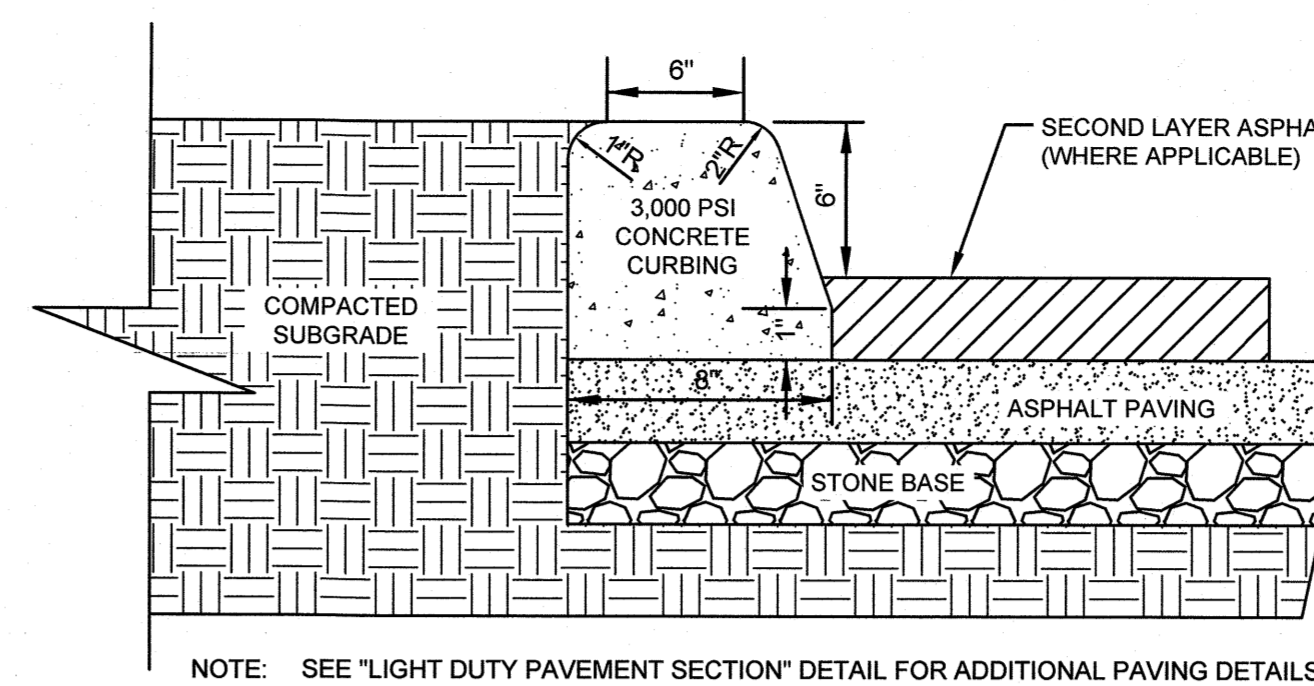
24" CURB AND GUTTER (STD. & SPILL)
NOT TO SCALE



ASPHALT SPEED BUMP DETAIL
NOT TO SCALE

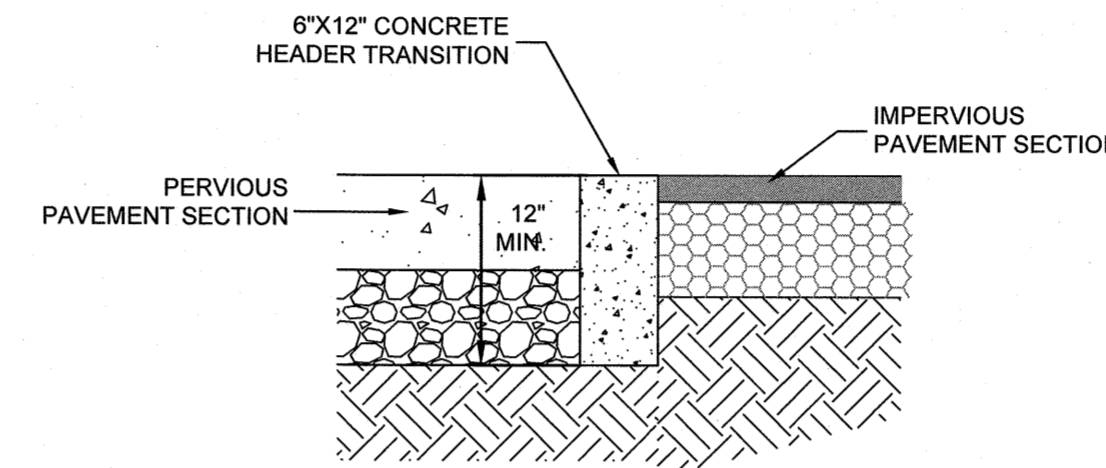


VERTICAL CURB
NOT TO SCALE

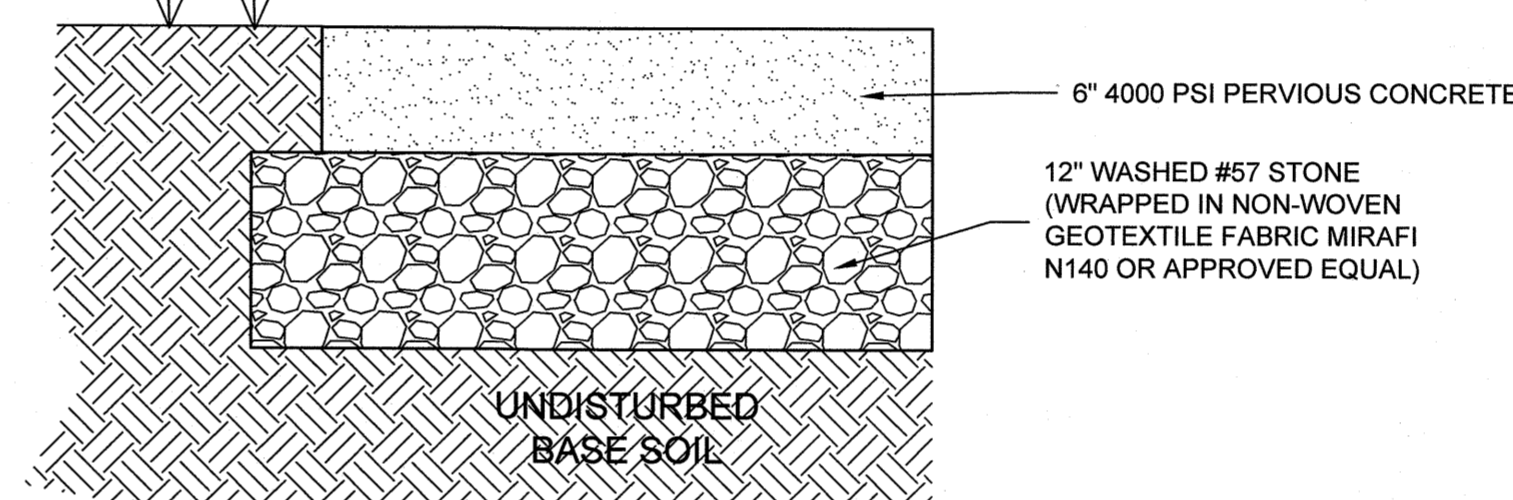


NOTE: SEE "LIGHT DUTY PAVEMENT SECTION" DETAIL FOR ADDITIONAL PAVING DETAILS

TYPICAL EXTRUDED CONCRETE CURB
NOT TO SCALE

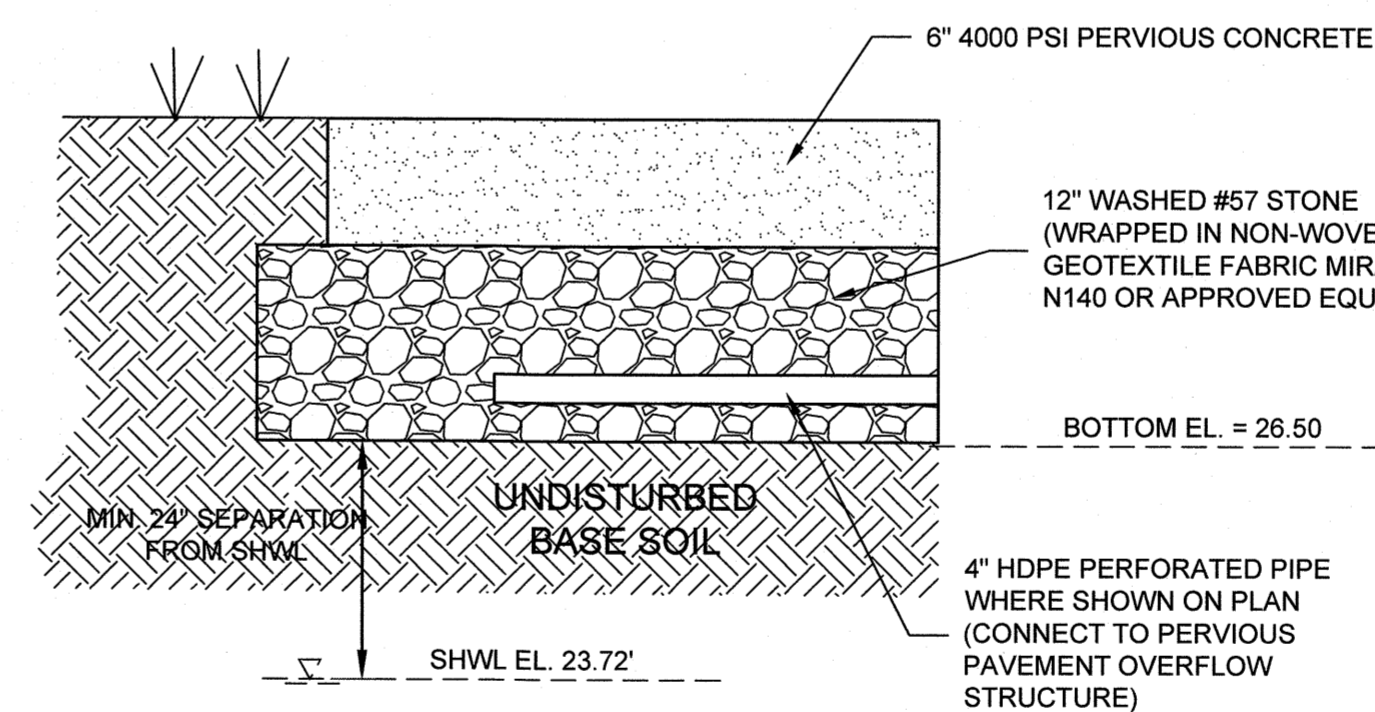


ASPHALT TO PERVIOUS CONCRETE TRANSITION



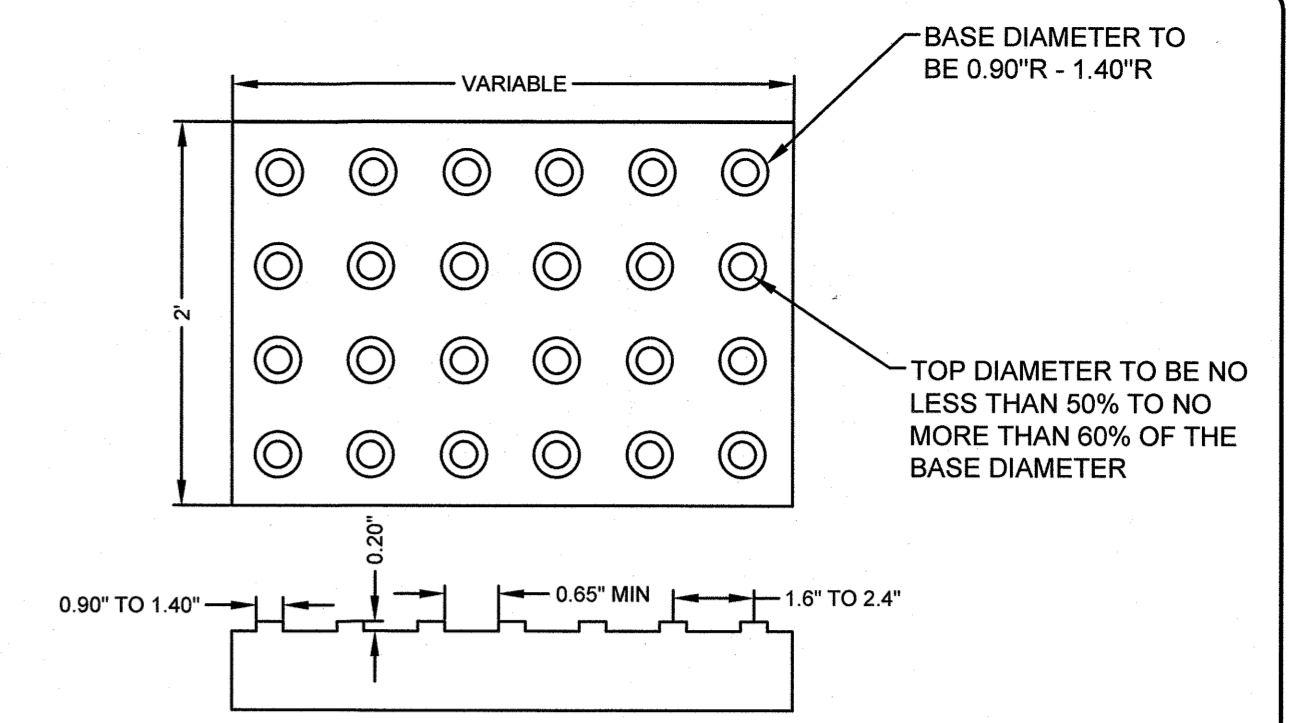
NOTES:
1. PERVIOUS CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 522.1, 'SPECIFICATION FOR PERVIOUS CONCRETE PAVEMENT', PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, FARMINGTON HILLS, MICHIGAN, EXCEPT AS MODIFIED BY THESE CONTRACT DOCUMENTS.

PERVIOUS CONCRETE PAVEMENT SECTION FOR ZONING
NOT TO SCALE

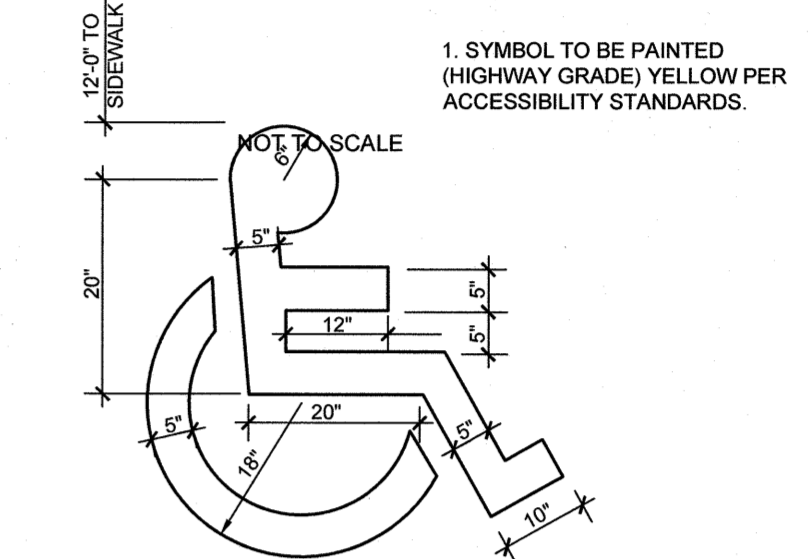


NOTES:
1. PERVIOUS CONCRETE SHALL CONFORM TO ALL REQUIREMENTS OF ACI 522.1, 'SPECIFICATION FOR PERVIOUS CONCRETE PAVEMENT', PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE, FARMINGTON HILLS, MICHIGAN, EXCEPT AS MODIFIED BY THESE CONTRACT DOCUMENTS.
2. IN-FIELD INFILTRATION TESTING SHALL CONFIRM RFTS SOIL TESTS OF EXISTING CONDITIONS.

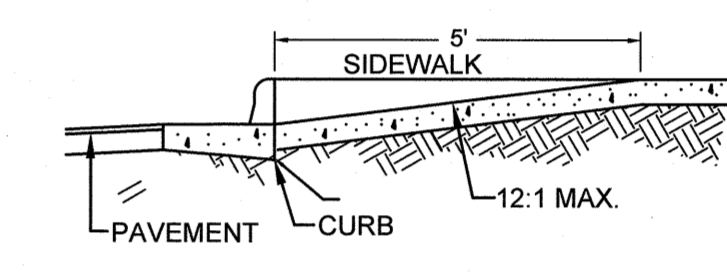
PERVIOUS CONCRETE PAVEMENT SECTION FOR SWM CREDIT
NOT TO SCALE



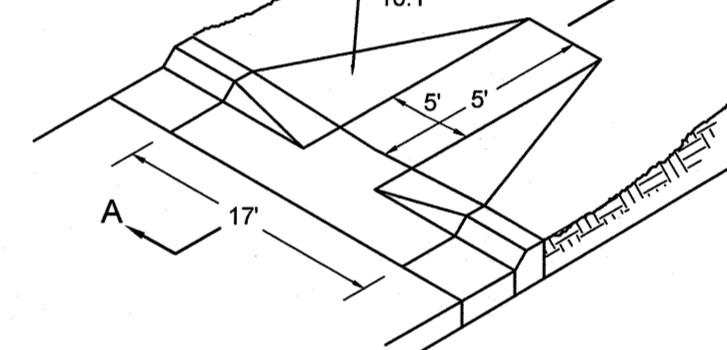
DETECTABLE WARNING MAT



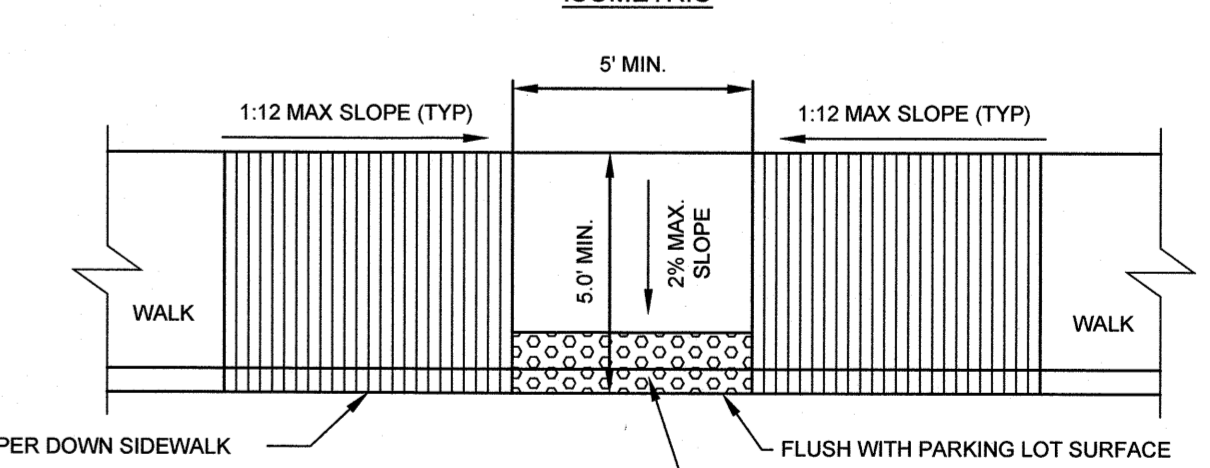
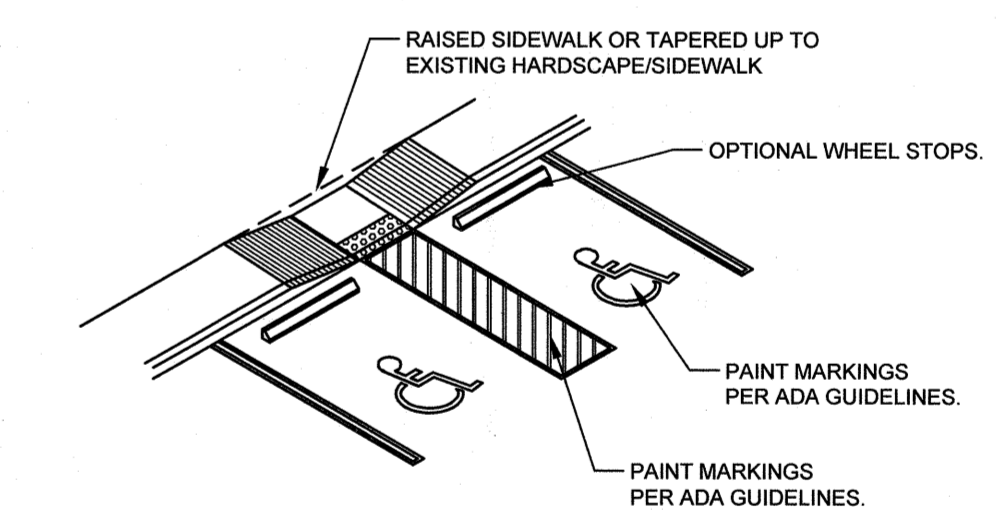
HANDICAPPED PARKING SYMBOL
NOT TO SCALE



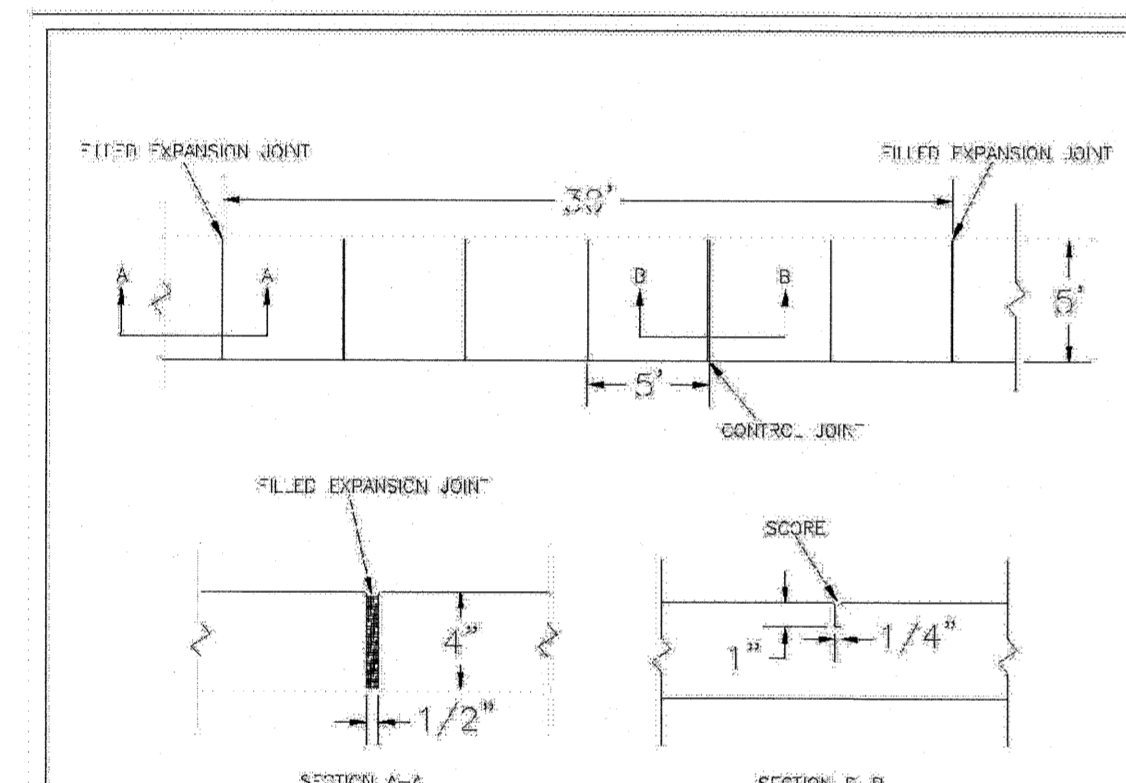
SECTION A-A



WHEEL CHAIR RAMP (DROP CURB)
NOT TO SCALE

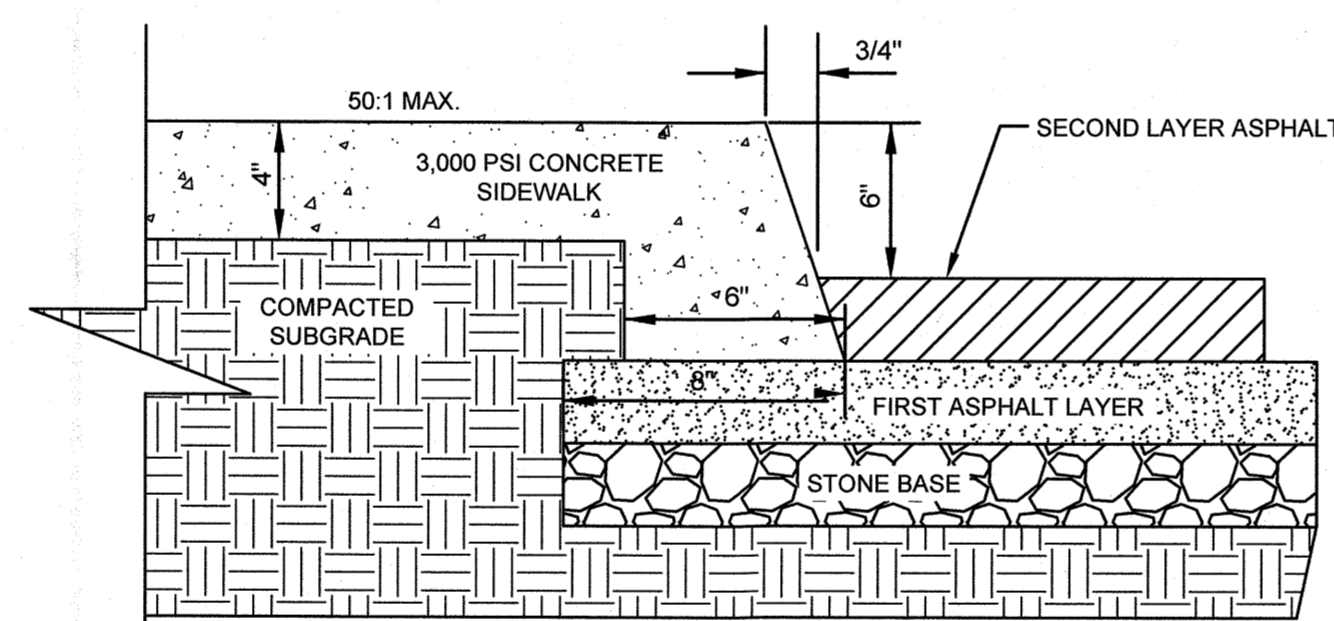


HANDICAP CURB ACCESS RAMP AND MARKINGS DETAIL
NOT TO SCALE



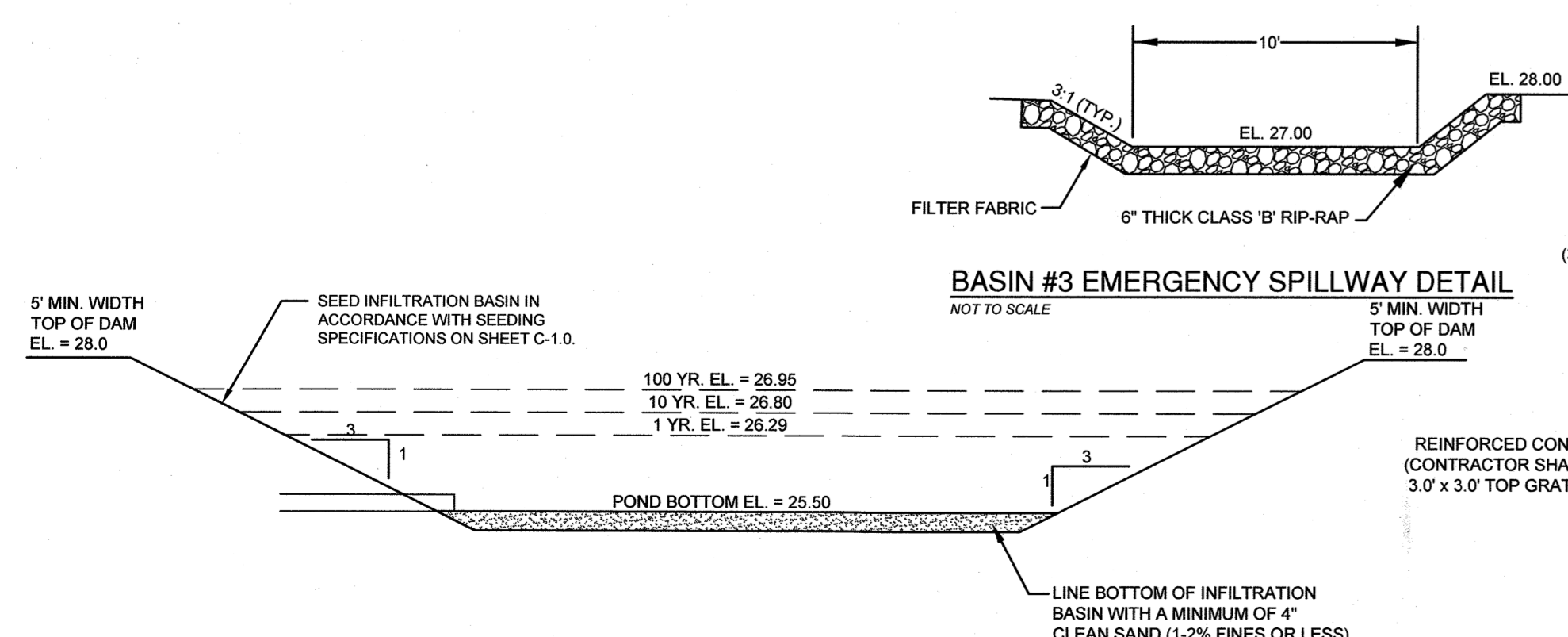
NOTES:
1. JOINT MATERIAL TO COMPLY WITH CURRENT NCDOT STANDARDS.
2. SECONDARY SLEEVES SHALL BE LOCATED OUTSIDE SIDEWALK WHERE FEASIBLE.
3. MINIMUM SIDEWALK WIDTH TO BE 6' MINIMUM 1" PLACED AT BRK OF CURB.
4. CONCRETE FOR ALL SIDEWALKS (EXCEPT ANY PAVEMENT CURB) WITH A MINIMUM 4" THICKNESS AND 3,000 PSI.
5. MINIMUM REINFORCEMENT FOR REBARS IS A 3" X 3" PANEL.
6. 4" STONE BASE MAY BE REQUIRED FOR POOR SOIL CONDITIONS.
7. MINIMUM WIDTH FOR TURNING BELLOW SIDEWALK IS 12".
8. MAX. ADJACENT SIDEWALKS 4" OFF WITHOUT DAILING IS 2".
9. MIN. GRADE FOR PROPER DRAINAGE IS 1/4" AT LEAST 1" DIRECTION MAX CROSS SLOPE IN 25' MAX. FUNCTIONAL SLOPE IS 1/4" IN 10' UNLESS OTHERWISE SPECIFIED. NO SLOPE OF THE EXISTING ADJACENT ROAD.

STANDARD DETAIL
SIDEWALK
SD 3-10

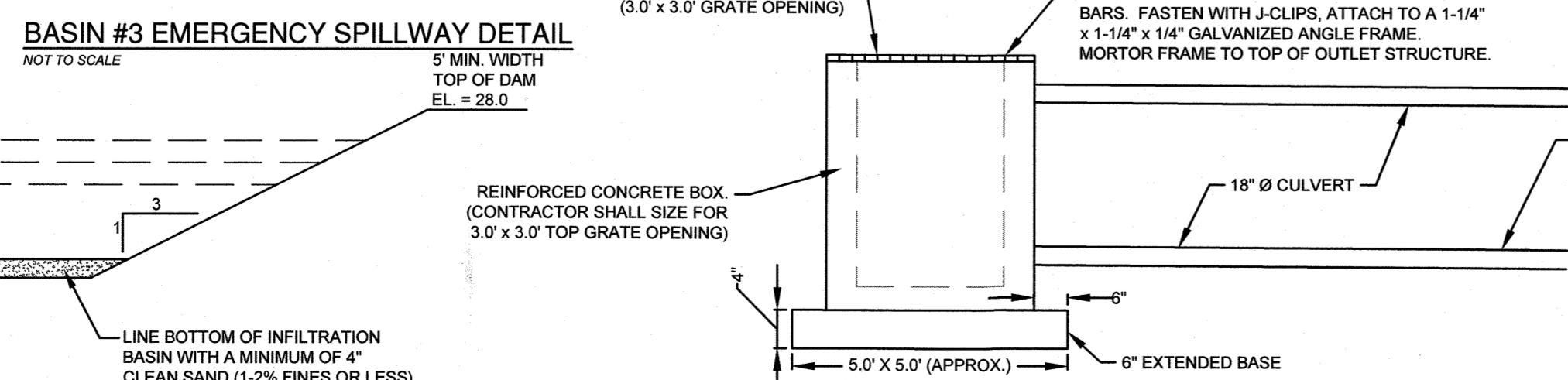


RAISED SIDEWALK WITH THICKENED EDGE DETAIL
NOT TO SCALE

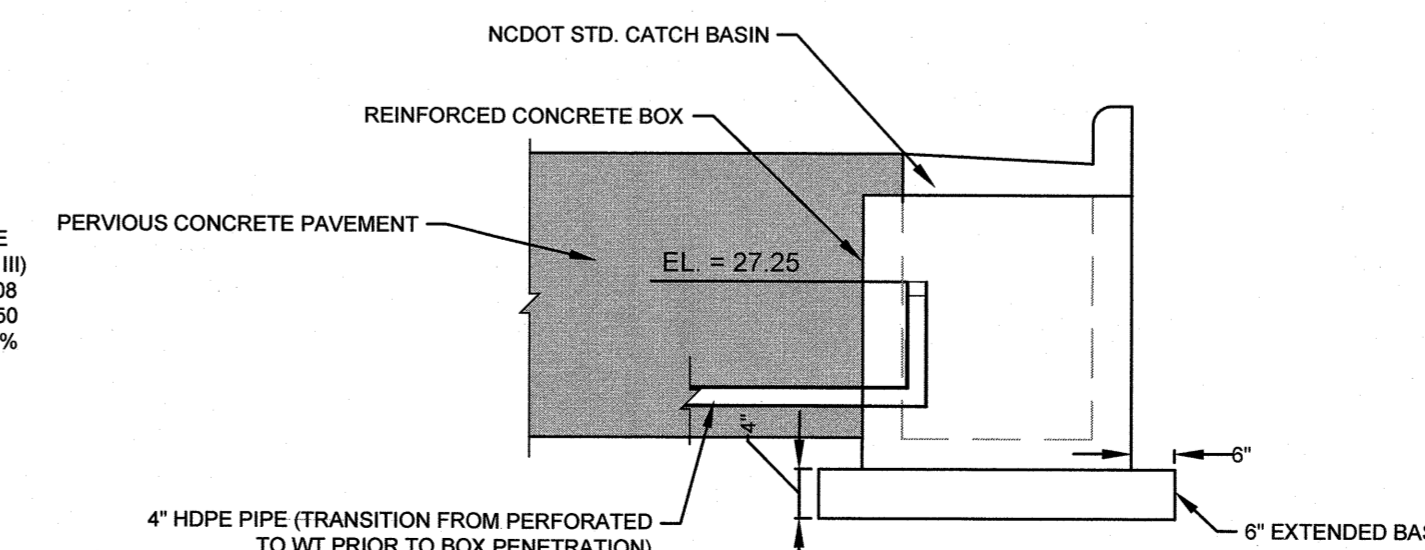
NOTES:
1. LONGITUDINAL SLOPE FOR SIDEWALK SHALL BE NO GREATER THAN 1:20 (5%).
2. ALL CONSTRUCTION SHALL CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL CODES AND THE TECHNICAL SPECIFICATIONS (SEE CITY OF WILMINGTON SIDEWALK DETAIL FOR REFERENCE).
3. CURB RAMPS SHALL BE INSTALLED AT EACH INTERSECTION OR DESIGNATED CROSSWALK.
4. ON ACCESSIBLE ROUTES WHERE SIDEWALK IS LESS THAN 5' WIDE, PASSING SPACES AT LEAST 5'x5' SHALL BE LOCATED AT REASONABLE INTERVALS NOT TO EXCEED 200'.
5. SEE "LIGHT DUTY PAVEMENT SECTION" DETAIL FOR ADDITIONAL PAVING DETAILS



INFILTRATION BASIN #3 SECTION
NOT TO SCALE



INFILTRATION BASIN #3 OUTLET STRUCTURE
NOT TO SCALE



PERVIOUS PAVEMENT OVERFLOW STRUCTURE
NOT TO SCALE

Approved Construction Plan

Name: cmc 1-4-2019 Date: 1-4-2019

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: Chad Chiles 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN

811
Know what's below.
Call before you dig.

Date: 1/19/19 Permit # 2018 645
Signed: Ruse

REVISIONS:	DATE	DESCRIPTION
1) PER ENGINEERING COMMENTS	07/25/18	
2) PER CITY AND OWNER COMMENTS	08/08/18	
3) PER CITY AND OWNER COMMENTS	10/05/18	
4) PER CITY AND OWNER COMMENTS	11/28/18	

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

DETAILS
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONST.
DRAWING INFORMATION:
DESIGNED BY: [Signature]
SCALE: AS SHOWN
DATE: 1/19/19

SEAL
11/28/18

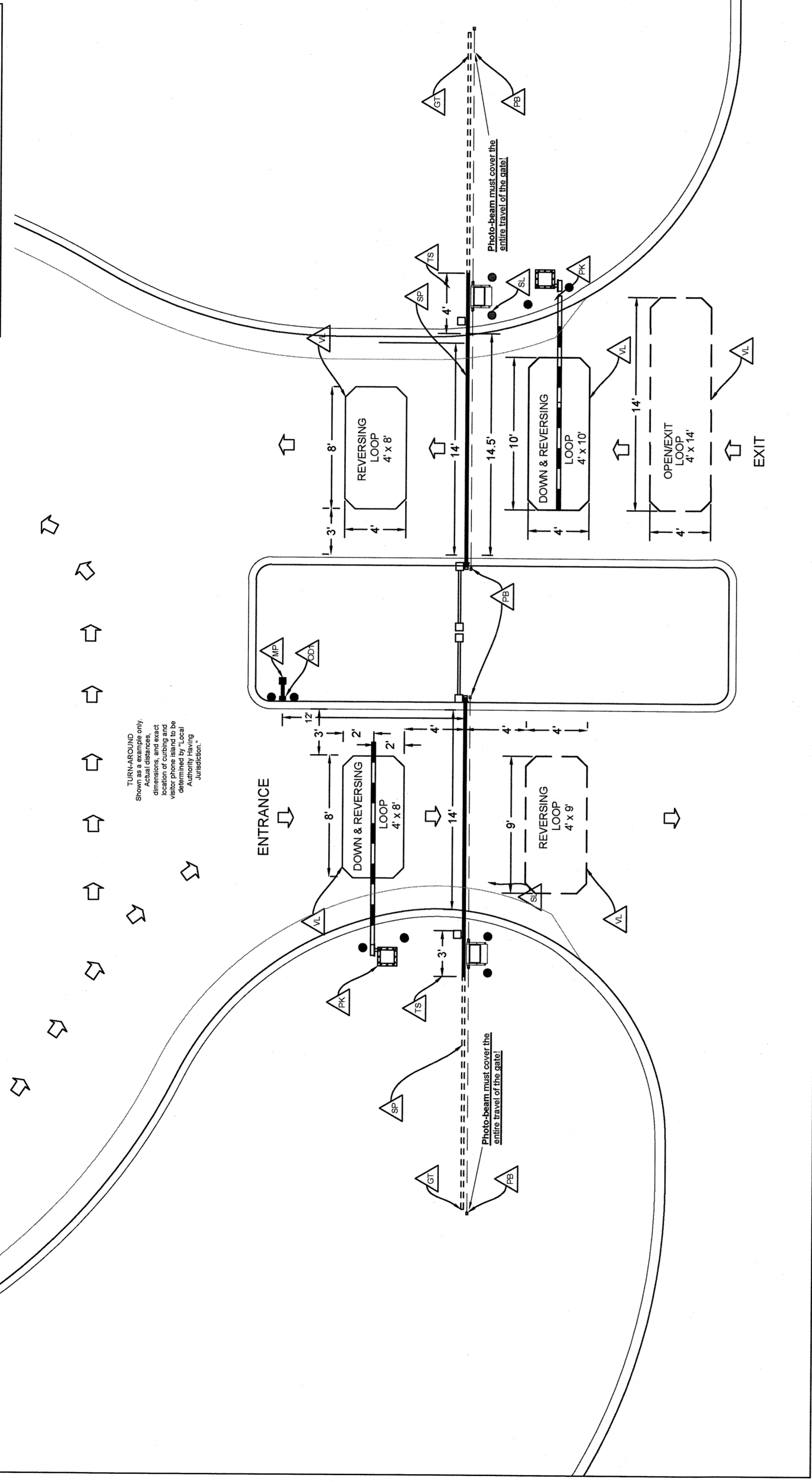
C-7.0
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

COMPONENTS	
SL	Slide Gate Operator: DoorKing Model 8150
SW	Swing Gate Operator
PK	Parking Barrier Operator
PB	Photo Beam: DoorKing Model 8080-xxx
RE	Reversing Edge: DoorKing Model 8080-0xx
VL	Vehicle Detecting Loop - DoorKing - Type 9402-xxx
OD1	Opening Device 1: DoorKing DKProx Card Reader
OD2	Opening Device 2: DoorKing Telephone Entry Sys
OD3	Opening Device 3
MP	Mounting Post: DoorKing Model 1200-xxx
SP	Slide Gate Panel
SWP	Swing Gate Panel
GT	Gate Travel
TS	Trail Section

GENERAL NOTES

- Automated vehicular gates shall be designed and installed to be in strict compliance with the UL 325 Safety Standard and the ASTM F2200 Construction Standard.
- Automated vehicular gates that do not meet the requirements of these standards shall not be allowed.
- This drawing is for the sole purpose of general gate operator footprint and location, photo beam coverage and placement, and vehicular loop dimensions and placement. Drawings are not of inclusive or guaranteed to scale.
- No considerations have been made for grade, existing public utilities, landscape, drainage, site peculiarities, or requirements by the authority having jurisdiction, i.e. Fire Marshal, Building Inspector, Street and Alley Department.
- Warning Signs must be installed and must be highly visible upon both entry and exit of the property, and must remain in place for the life of the gate operating system.
- Proper lane identification and vehicular direction signs should be highly visible upon entry onto the property.
- Gate dimensions, posts, guide rollers, photo beams, reversing edges, hinges, and other gate hardware may vary in size, dimension, and placement and should not be used as an exact reference.
- All loop sizing and placement dimensions indicated are solely intended for reference only, and not intended to be the final criterion for determining the loop sizing and placement on any automated vehicular gate project.
- DoorKing, Inc. does not assume responsibility or liability for the installation and unauthorized use of any equipment, or alterations to the final site plan, equipment, or alterations to the final site plan.
- DoorKing, Inc. does not assume responsibility or liability for the installation and unauthorized use of any equipment, or alterations to the final site plan, equipment, or alterations to the final site plan.



THIS DRAWING SHOWS A GENERAL LAYOUT OF THE GATE OPERATOR, PHOTO BEAM, AND LOOP. THE EXACT DIMENSIONS AND PLACEMENT OF THE GATE OPERATOR, PHOTO BEAM, AND LOOP SHALL BE DETERMINED BY THE AUTHORITY HAVING JURISDICTION.

Photo-beam must cover the entire level of the gate in both directions.

Photo-beam must cover the entire level of the gate in both directions.

Photo-beam must cover the entire level of the gate in both directions.

Photo-beam must cover the entire level of the gate in both directions.

Photo-beam must cover the entire level of the gate in both directions.

Photo-beam must cover the entire level of the gate in both directions.

AMBERLEIGH SHORES PHASE II RESIDENTIAL & VISITOR ENTRY & EXIT

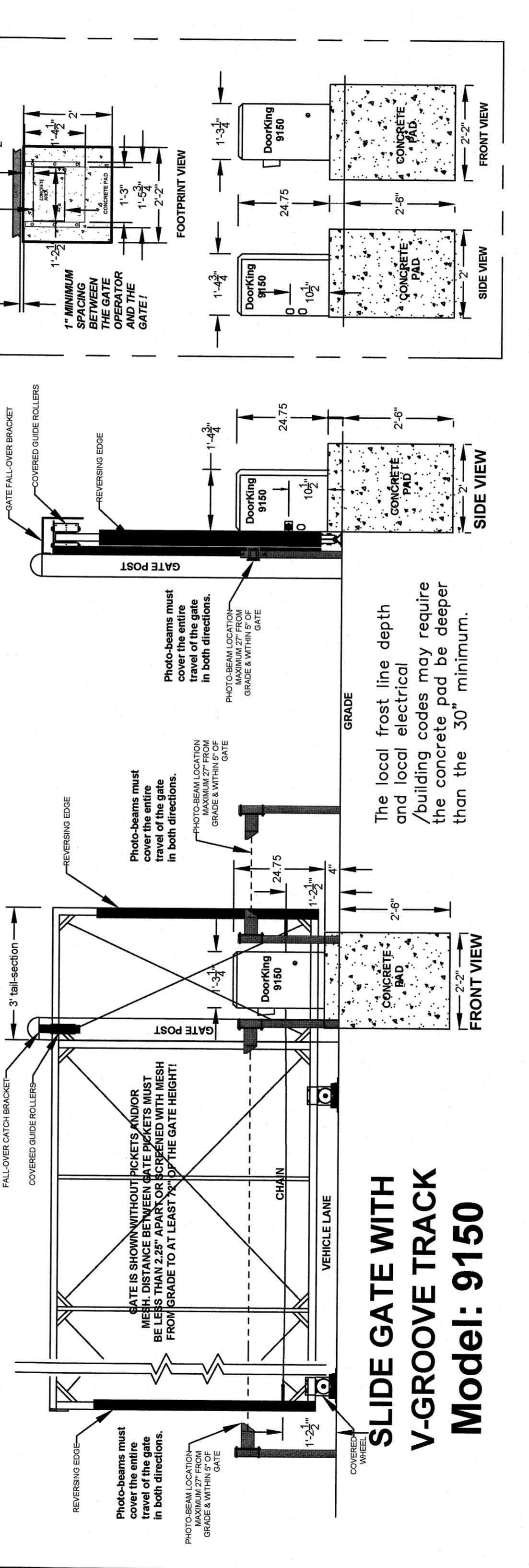
NTS
NOT TO SCALE

DKS® DOORING®

120 Glasgow Avenue
Ingleswood, California 90301
Toll Free: 1-866-400-3600
Website: www.doorking.com
Email: ghendrx@doorking.com

GENERAL NOTES

- Automated vehicular gates shall be designed and installed to be in strict compliance with the UL 325 Safety Standard and the ASTM F2200 Construction Standard.
- Automated vehicular gates that do not meet the requirements of these standards shall not be allowed.
- This drawing is for the sole purpose of general gate operator footprint and location, photo beam coverage and placement, and vehicular loop dimensions and placement. Drawings are not of inclusive or guaranteed to scale.
- No considerations have been made for grade, existing public utilities, landscape, drainage, site peculiarities, or requirements by the authority having jurisdiction, i.e. Fire Marshal, Building Inspector, Street and Alley Department.
- Warning Signs must be installed and must be highly visible upon both entry and exit of the property, and must remain in place for the life of the gate operating system.
- Proper lane identification and vehicular direction signs should be highly visible upon entry onto the property.
- Gate dimensions, posts, guide rollers, photo beams, reversing edges, hinges, and other gate hardware may vary in size, dimension, and placement and should not be used as an exact reference.
- All loop sizing and placement dimensions indicated are solely intended for reference only, and not intended to be the final criterion for determining the loop sizing and placement on any automated vehicular gate project.
- DoorKing, Inc. does not assume responsibility or liability for the installation and unauthorized use of any equipment, or alterations to the final site plan, equipment, or alterations to the final site plan.



SLIDE GATE WITH V-GROOVE TRACK Model: 9150

Photo-beams must cover the entire level of the gate in both directions.

Photo-beams must cover the entire level of the gate in both directions.

Photo-beams must cover the entire level of the gate in both directions.

The local frost line depth and local electrical/building codes may require the concrete pad be deeper than the 30" minimum.

Photo-beams must cover the entire level of the gate in both directions.

Photo-beams must cover the entire level of the gate in both directions.

Photo-beams must cover the entire level of the gate in both directions.

Approved Construction Plan

Name: YMC Date: 1-4-2019

Planning: AK 1-4-19

Traffic: Chad 1-4-19

Fire: Chad 1-4-19

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/19 Permit #: 2019075

Signed: [Signature]

811

Know what's below.
Call before you dig.

FINAL DESIGN - ~~NOT~~ RELEASED FOR CONSTRUCTION

REVISIONS:

1/ PER CITY AND OWNER COMMENTS	08/06/18
2/ PER CITY AND OWNER COMMENTS	10/05/18
3/ PER CITY AND OWNER COMMENTS	11/26/18
4/ PER CITY AND OWNER COMMENTS	12/31/18

CLIENT INFORMATION:

FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING

122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

DETAILS

AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONSTRUCTION

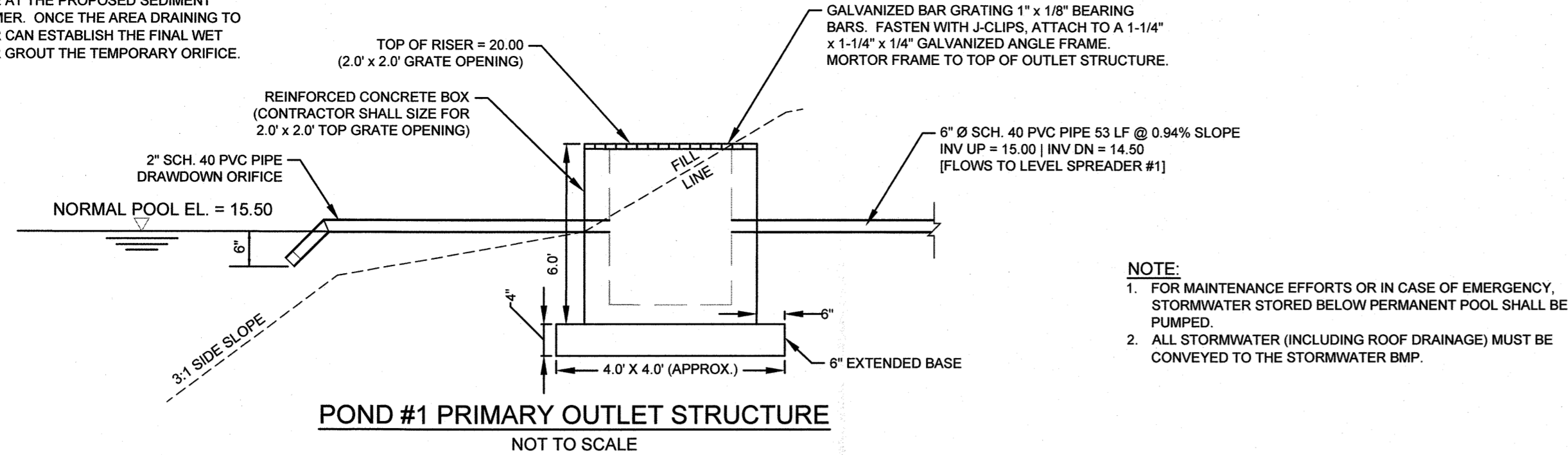
DRAWING INFORMATION:
SCALE: AS SHOWN
DATE: 1/4/19
DESIGNED: [Signature]
CHECKED: [Signature]

12/31/18

C-7.1

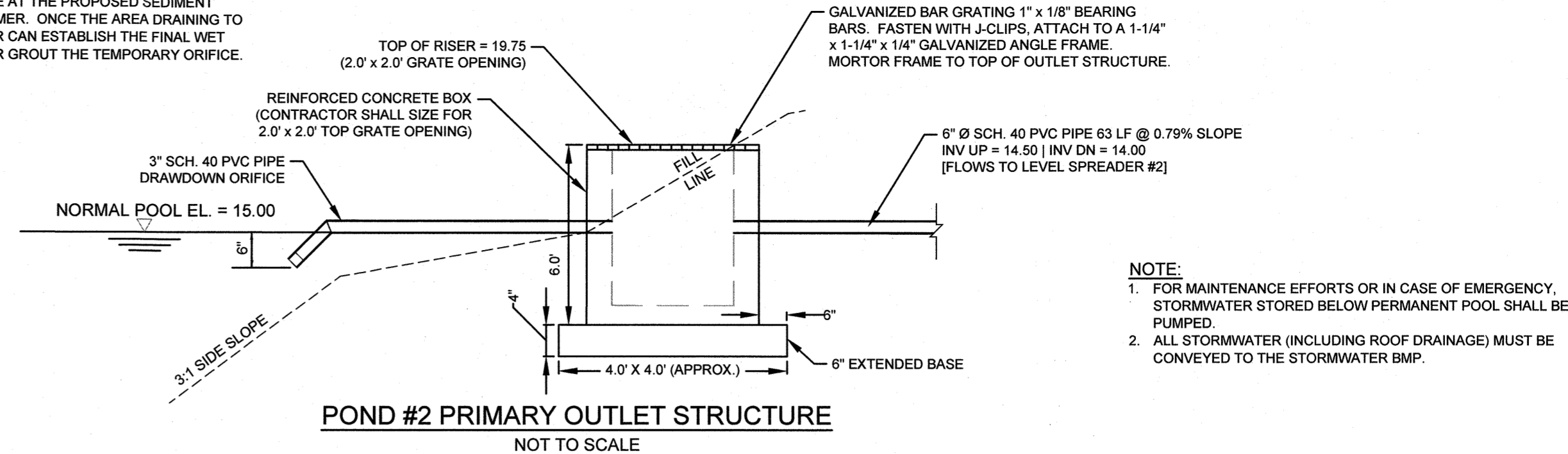
PEI JOB#: 16105.PE

***NOTE:**
THE CONTRACTOR SHALL CUT IN AN ORIFICE AT THE PROPOSED SEDIMENT STORAGE ELEVATION TO ATTACH THE SKIMMER. ONCE THE AREA DRAINING TO THE BASIN IS STABILIZED, THE CONTRACTOR CAN ESTABLISH THE FINAL WET POND, REMOVE THE SKIMMER, AND PLUG OR GROUT THE TEMPORARY ORIFICE.

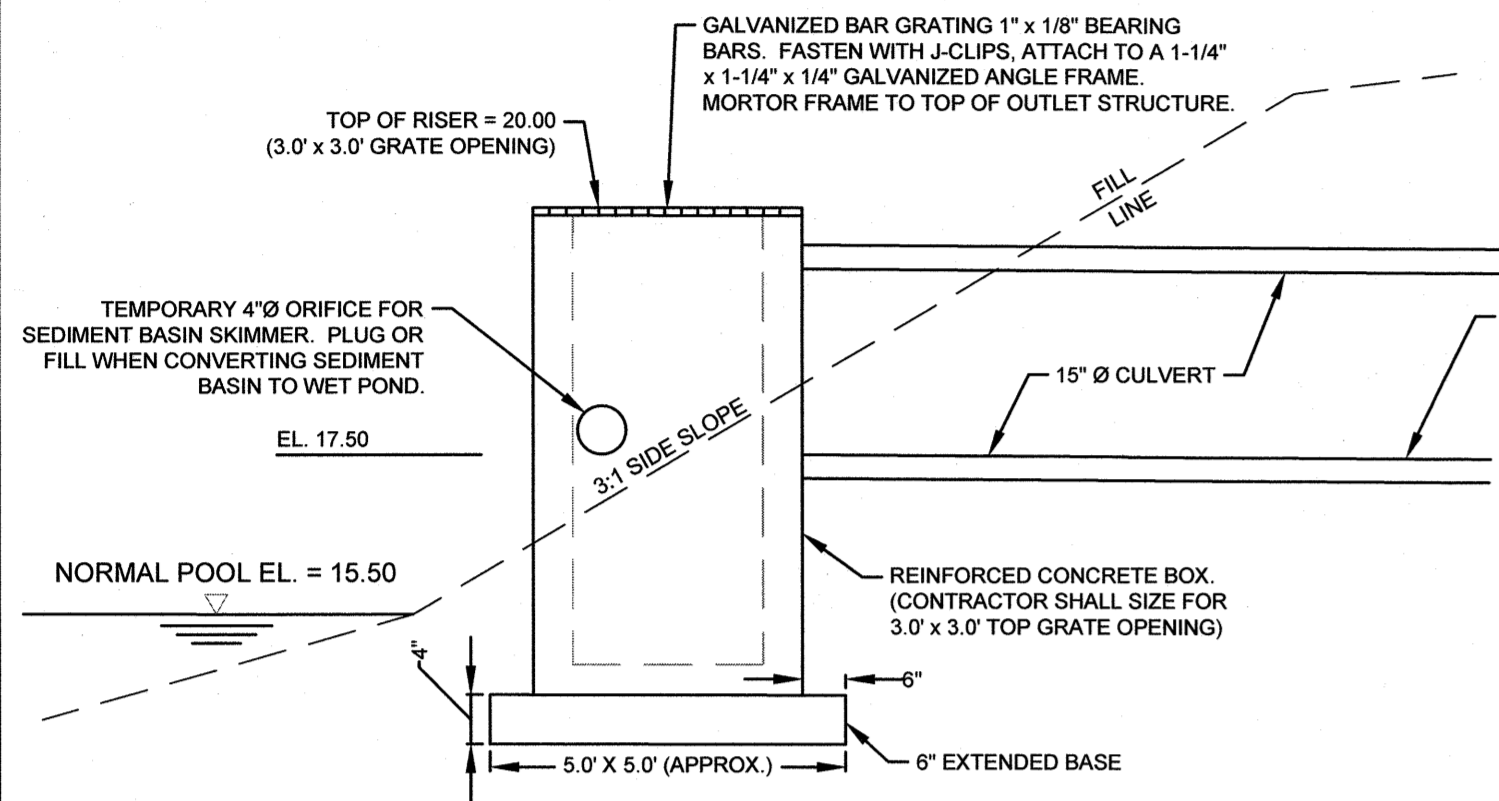


POND #1 PRIMARY OUTLET STRUCTURE
NOT TO SCALE

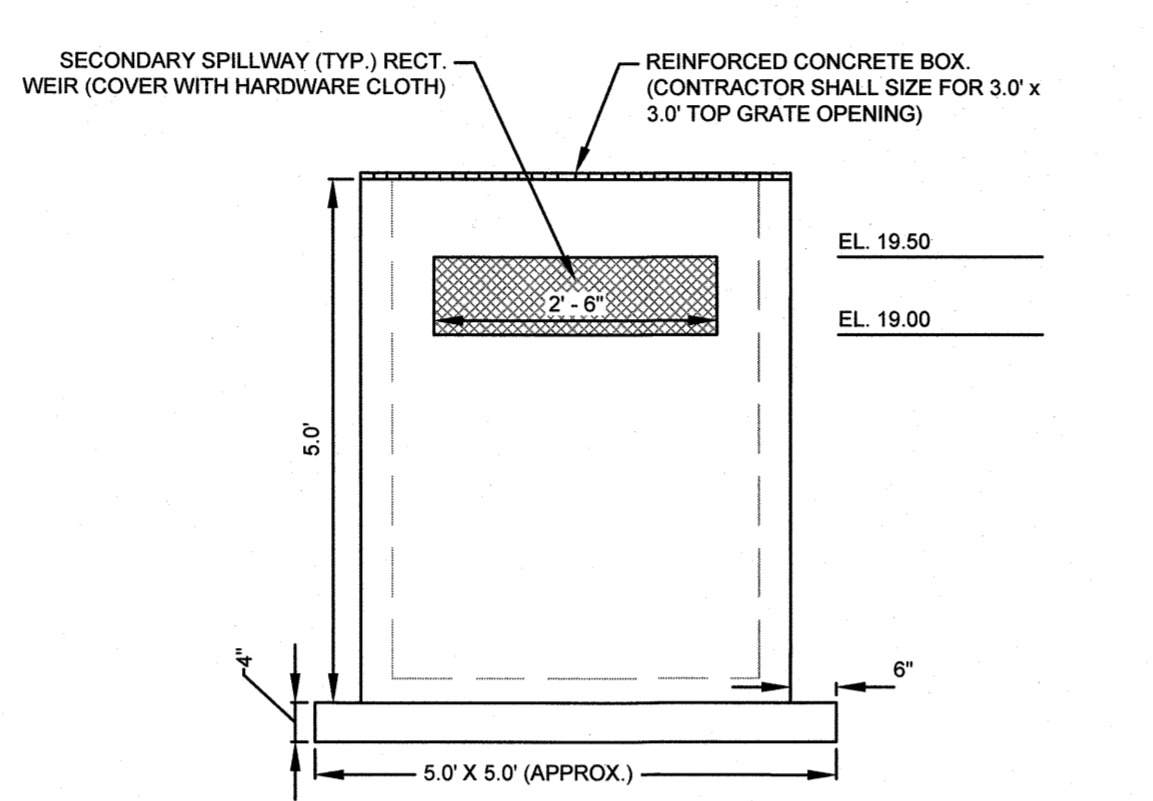
***NOTE:**
THE CONTRACTOR SHALL CUT IN AN ORIFICE AT THE PROPOSED SEDIMENT STORAGE ELEVATION TO ATTACH THE SKIMMER. ONCE THE AREA DRAINING TO THE BASIN IS STABILIZED, THE CONTRACTOR CAN ESTABLISH THE FINAL WET POND, REMOVE THE SKIMMER, AND PLUG OR GROUT THE TEMPORARY ORIFICE.



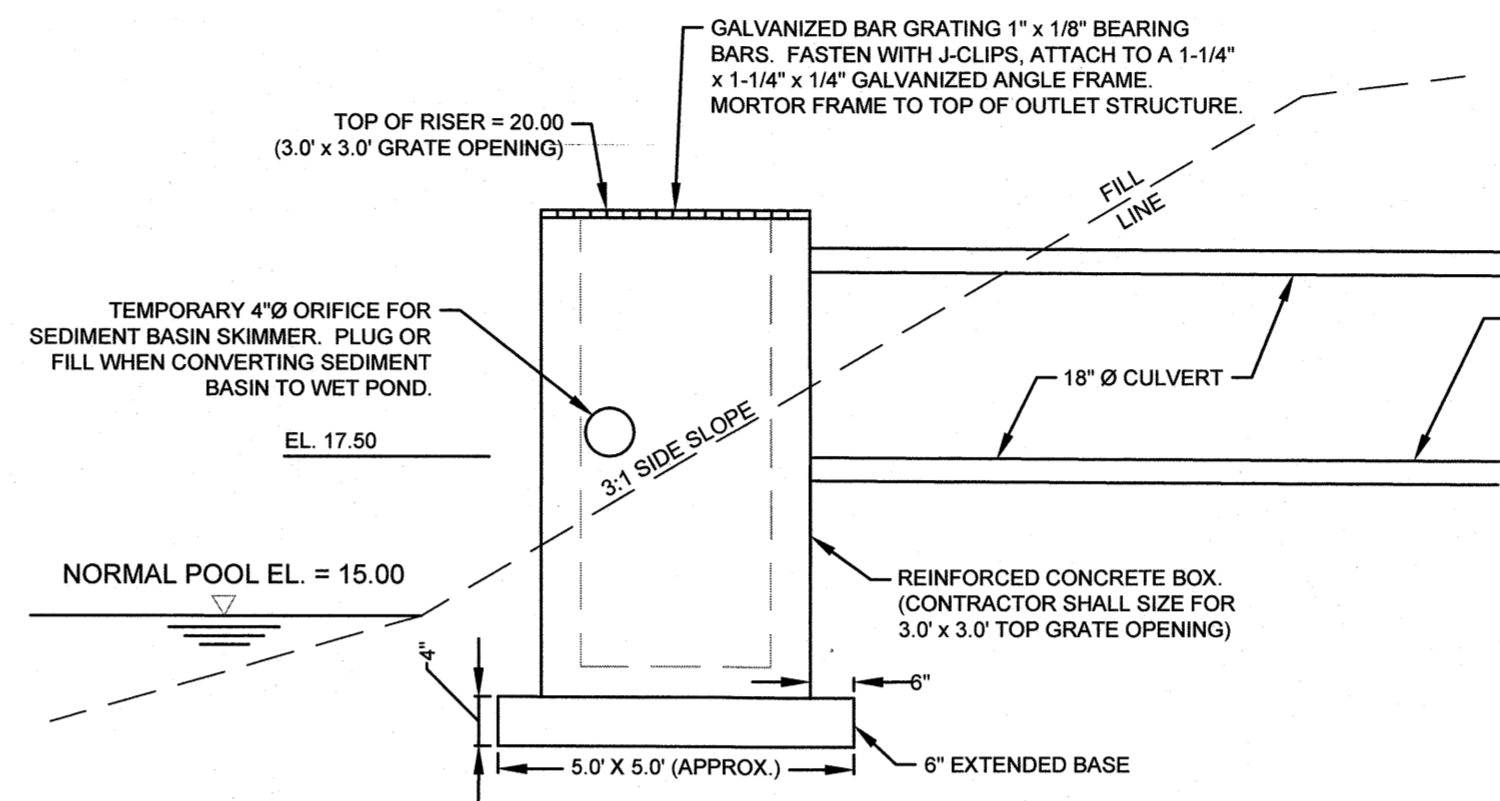
POND #2 PRIMARY OUTLET STRUCTURE
NOT TO SCALE



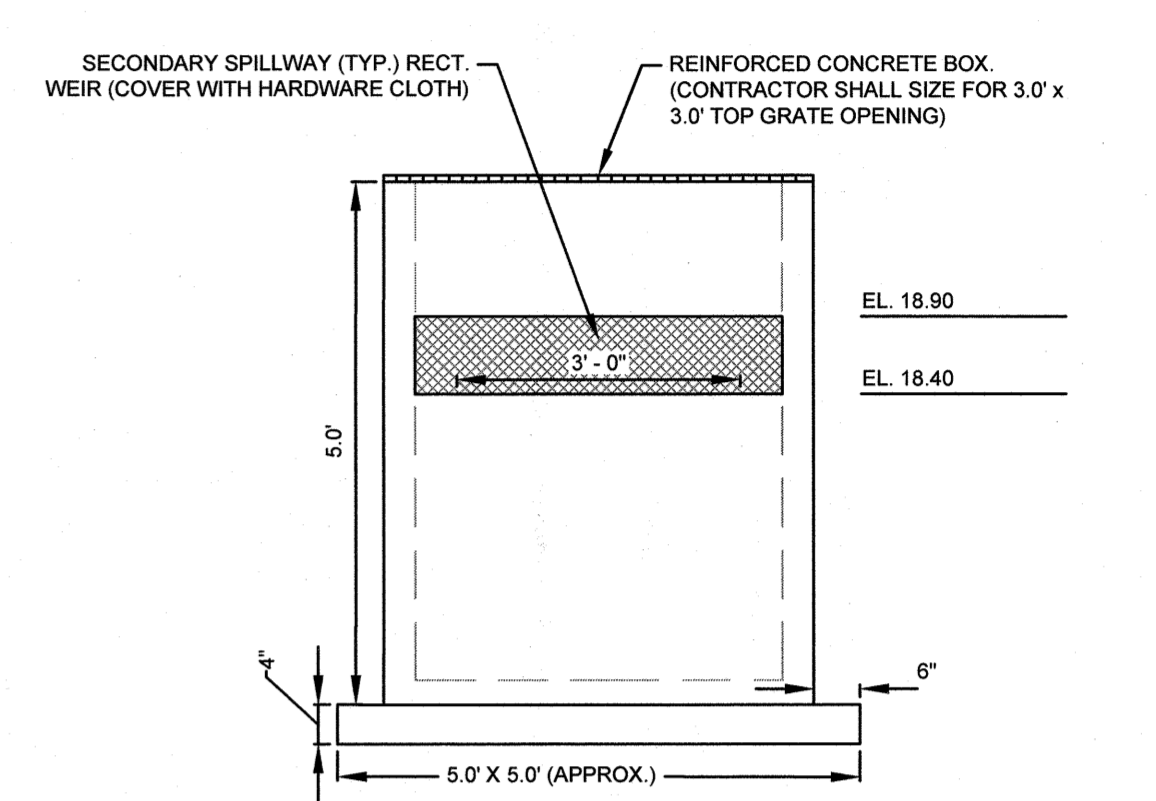
POND #1 SECONDARY OUTLET STRUCTURE SECTION (SIDE)
NOT TO SCALE



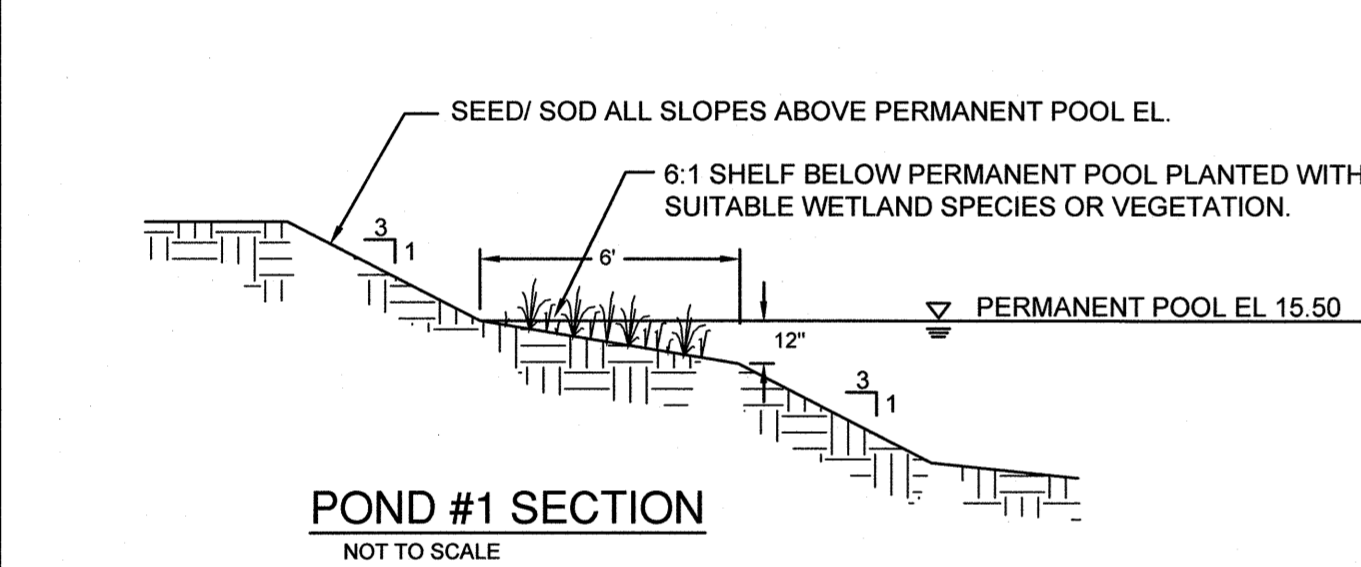
POND #1 SECONDARY OUTLET STRUCTURE SECTION (FRONT)
NOT TO SCALE



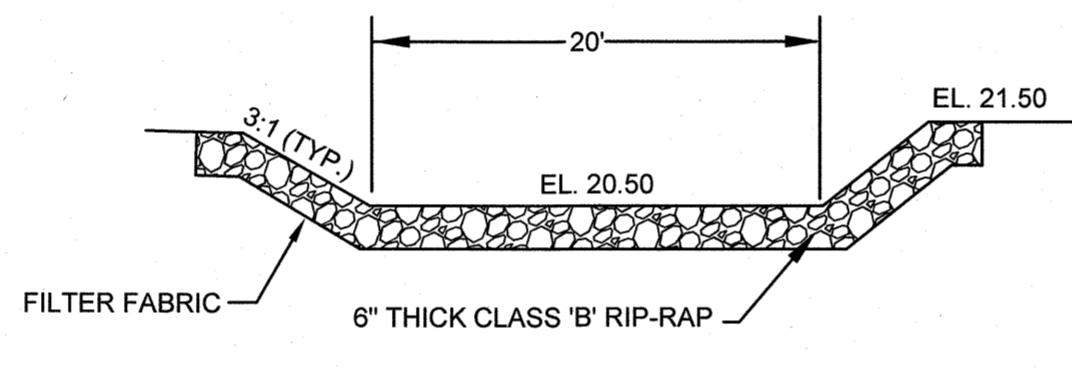
POND #2 SECONDARY OUTLET STRUCTURE SECTION (SIDE)
NOT TO SCALE



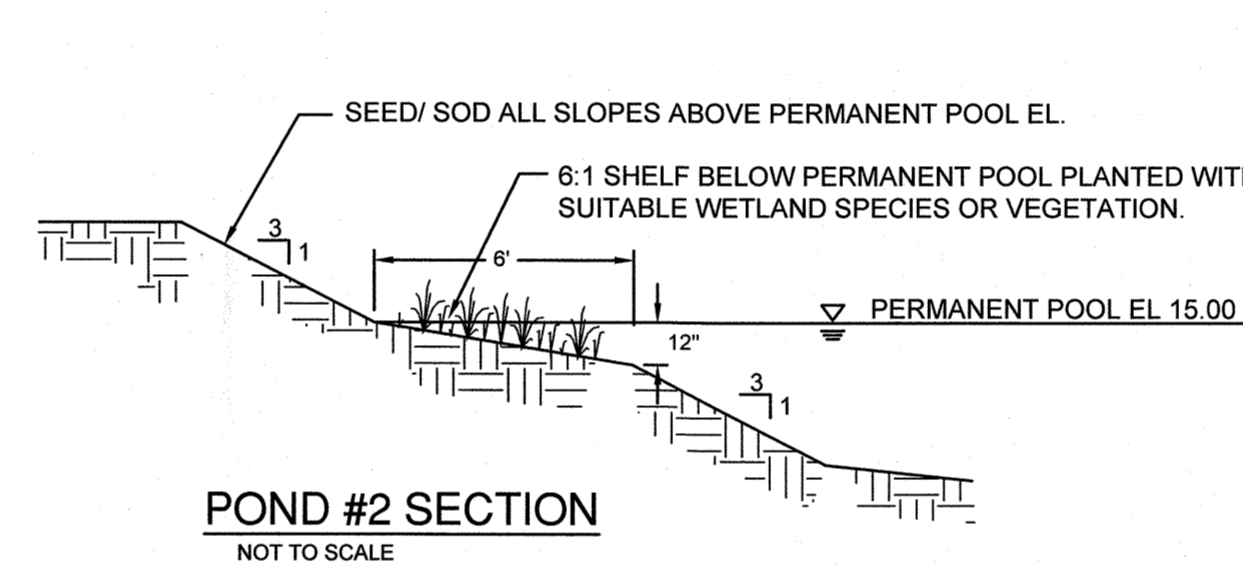
POND #2 SECONDARY OUTLET STRUCTURE SECTION (FRONT)
NOT TO SCALE



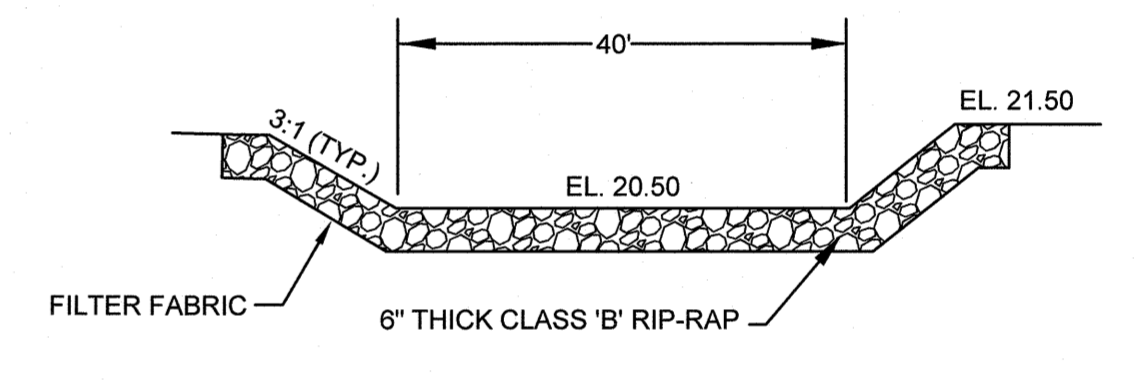
POND #1 SECTION
NOT TO SCALE



POND #1 EMERGENCY SPILLWAY DETAIL
NOT TO SCALE



POND #2 SECTION
NOT TO SCALE



POND #2 EMERGENCY SPILLWAY DETAIL
NOT TO SCALE

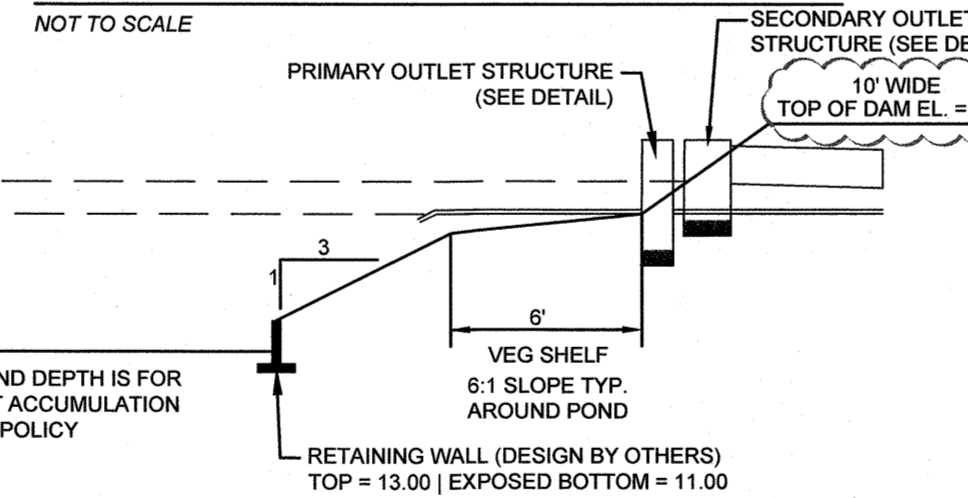
- SUITABLE PLANTS**
PICKERELWEED (PONTEDERIA CORDATA)
DUCK POTATO (SAGGITARIA LATIFOLIA AND SAGGITARIA CARDINALIS)
SWAMP ROSE (HIBISCUS MOSHEUTOS)
BLUE FLAG (IRIS VIRGINICA)
CARDINAL FLOWER (LOBELIA CARDINALIS)

WET DETENTION POND PLANTING
CONTRACTOR TO INSTALL ON THE 6:1 SLOPED SHELF, EQUAL NUMBERS OF EACH OF THE LISTED SUITABLE PLANTS. DURING INSTALLATION, GROUP SIMILAR SPECIES OF PLANTS TOGETHER. INSTALL PLANTS 24" O.C. IN A CHECKERBOARD PATTERN.

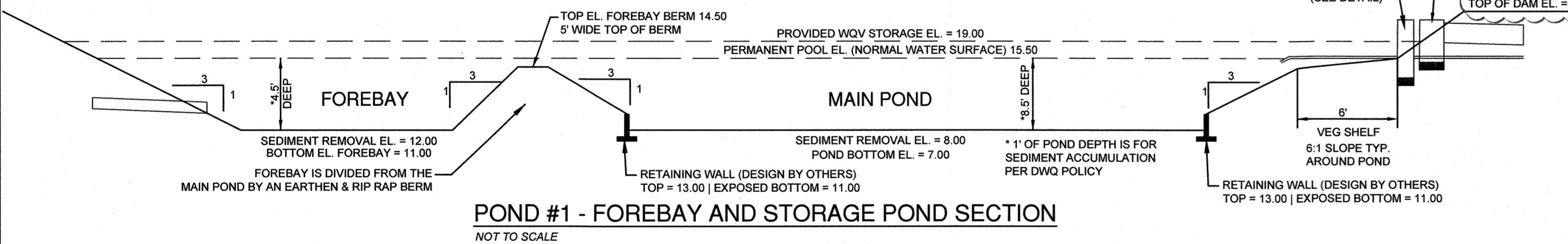
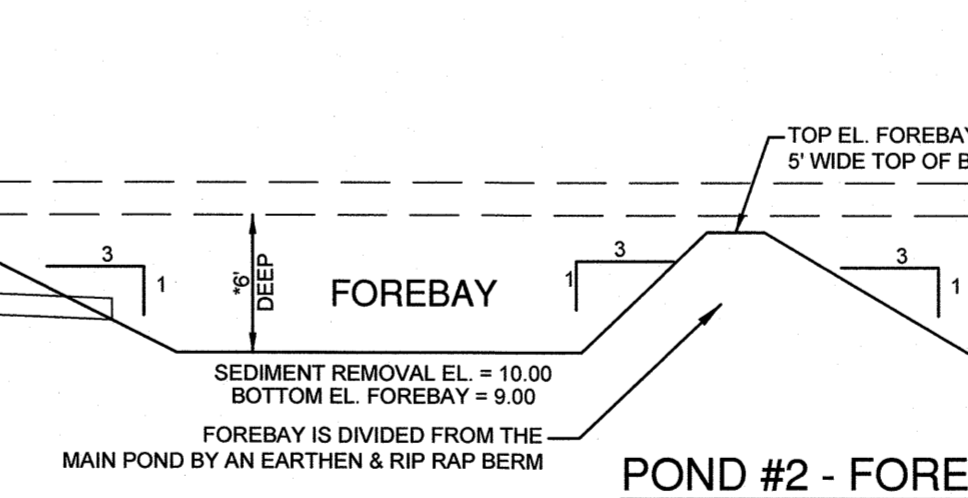
- SUITABLE PLANTS**
PICKERELWEED (PONTEDERIA CORDATA)
DUCK POTATO (SAGGITARIA LATIFOLIA AND SAGGITARIA CARDINALIS)
SWAMP ROSE (HIBISCUS MOSHEUTOS)
BLUE FLAG (IRIS VIRGINICA)
CARDINAL FLOWER (LOBELIA CARDINALIS)

WET DETENTION POND PLANTING
CONTRACTOR TO INSTALL ON THE 6:1 SLOPED SHELF, EQUAL NUMBERS OF EACH OF THE LISTED SUITABLE PLANTS. DURING INSTALLATION, GROUP SIMILAR SPECIES OF PLANTS TOGETHER. INSTALL PLANTS 24" O.C. IN A CHECKERBOARD PATTERN.

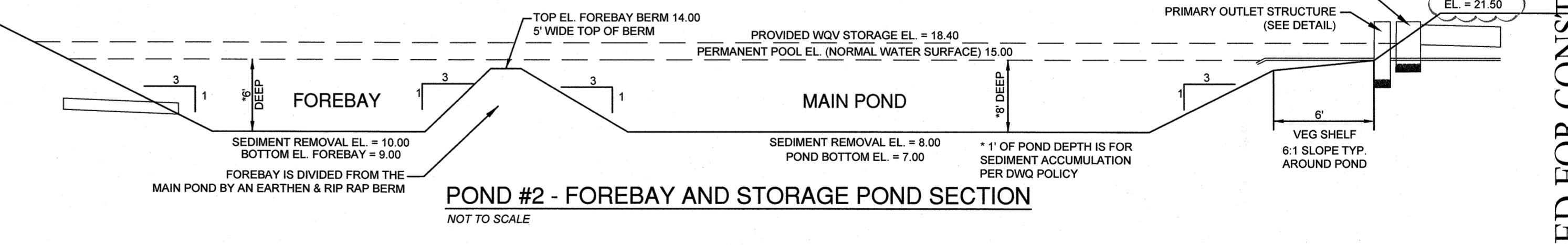
POND #1 FOREBAY SPILLWAY DETAIL
NOT TO SCALE



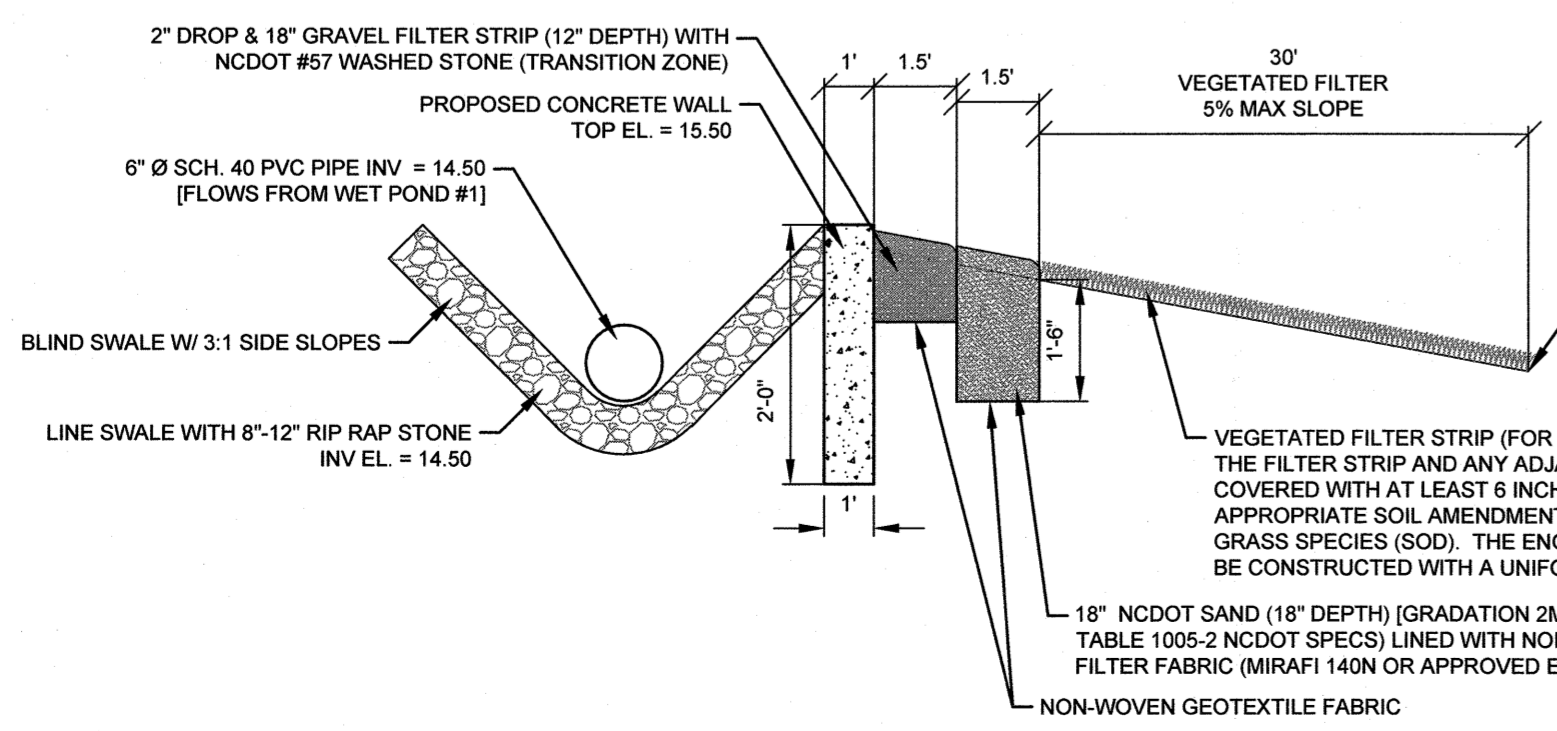
POND #2 FOREBAY SPILLWAY DETAIL
NOT TO SCALE



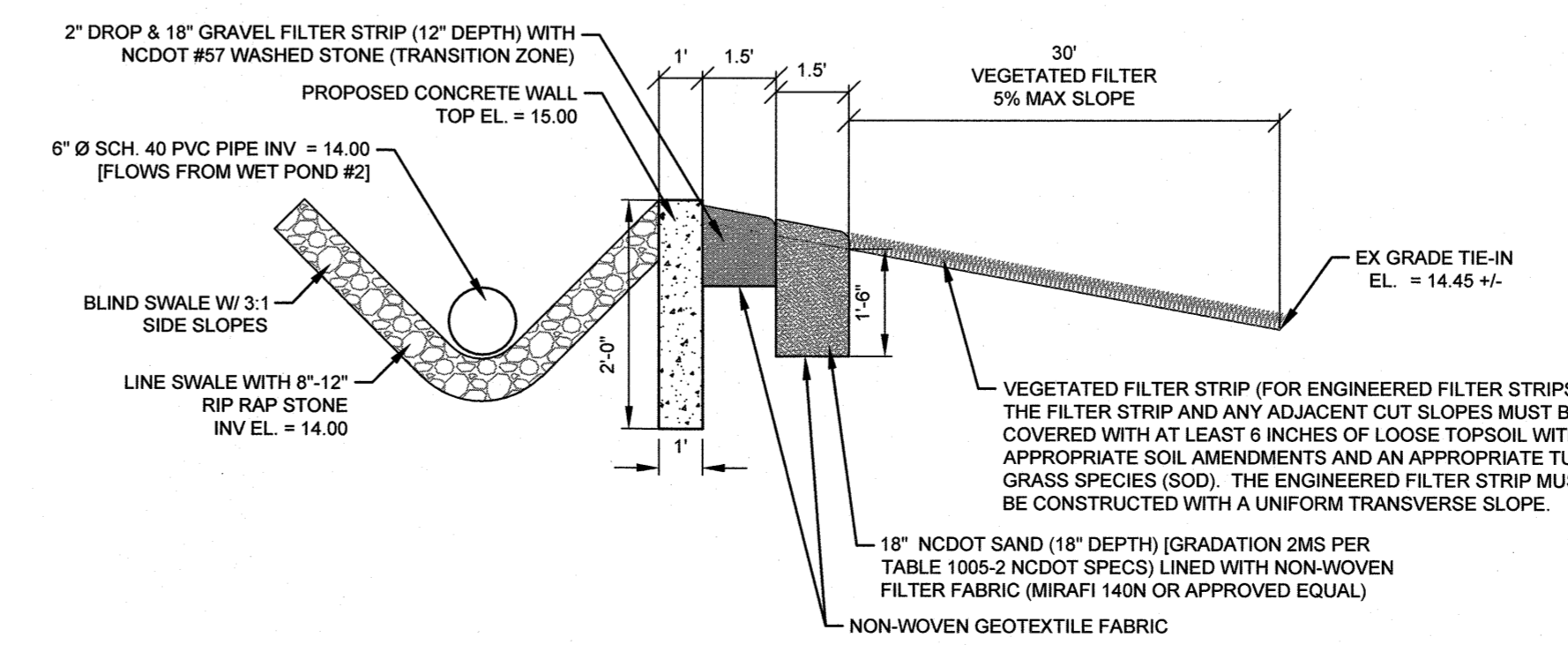
POND #1 - FOREBAY AND STORAGE POND SECTION
NOT TO SCALE



POND #2 - FOREBAY AND STORAGE POND SECTION
NOT TO SCALE



VEGETATED FILTER AND LEVEL SPREADER #1 SECTION
NOT TO SCALE



VEGETATED FILTER AND LEVEL SPREADER #2 SECTION
NOT TO SCALE

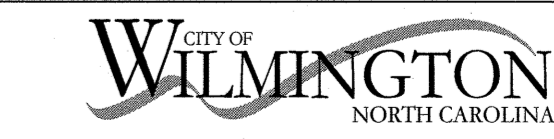
Approved Construction Plan

Name: *mc* Date: *1-4-2019*

Planning: *AK-4-19*

Traffic: *AK-4-19*

Fire: *AK-4-19*



Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: *1/19* Permit # *2018045*
Signed: *[Signature]*

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

REVISIONS:

07.25.18	
08.08.18	

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

DETAILS
AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

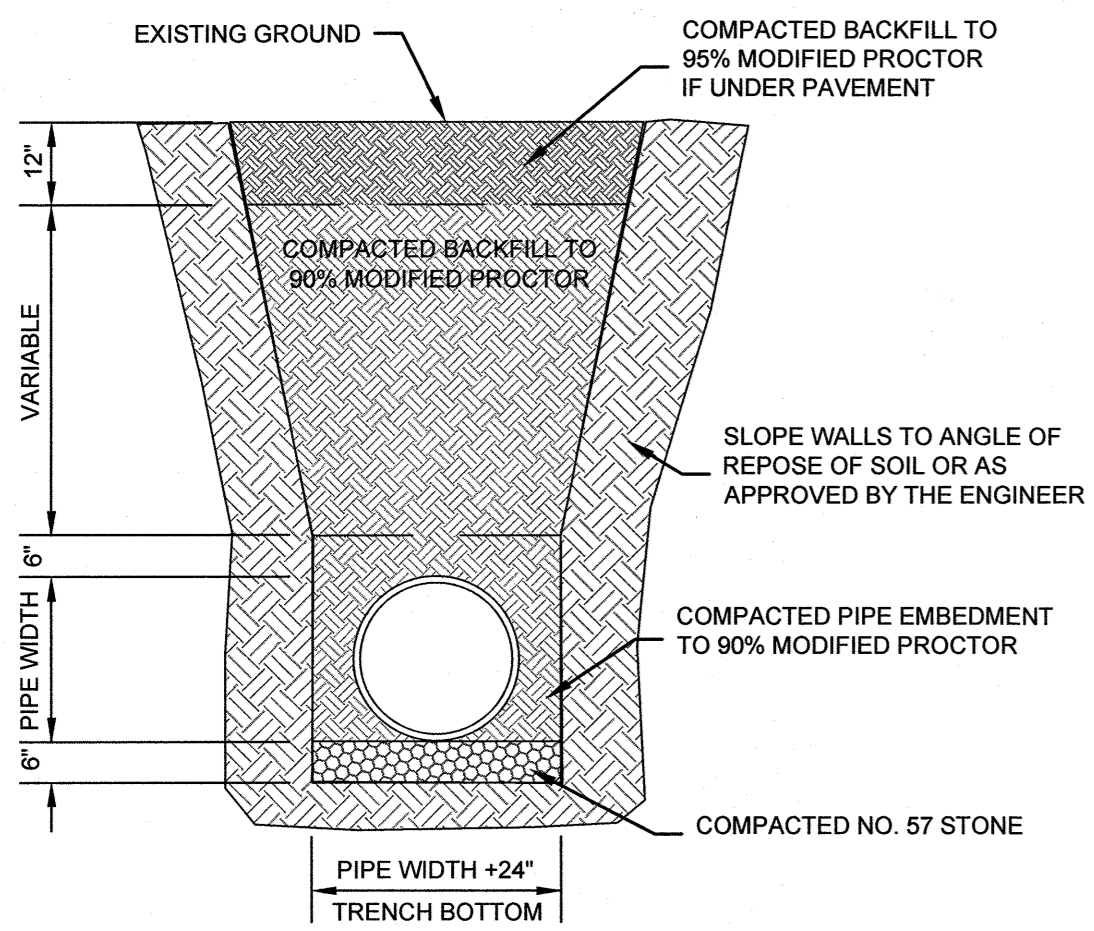
PROJECT STATUS:
CONCEPTUAL LAYOUT:
PRELIMINARY LAYOUT:
RELEASED FOR CONSTRUCTION

DRAWING INFORMATION:
DESIGNED BY: *[Signature]*
CHECKED BY: *[Signature]*
SCALE: AS NOTED
DATE: 1-4-19

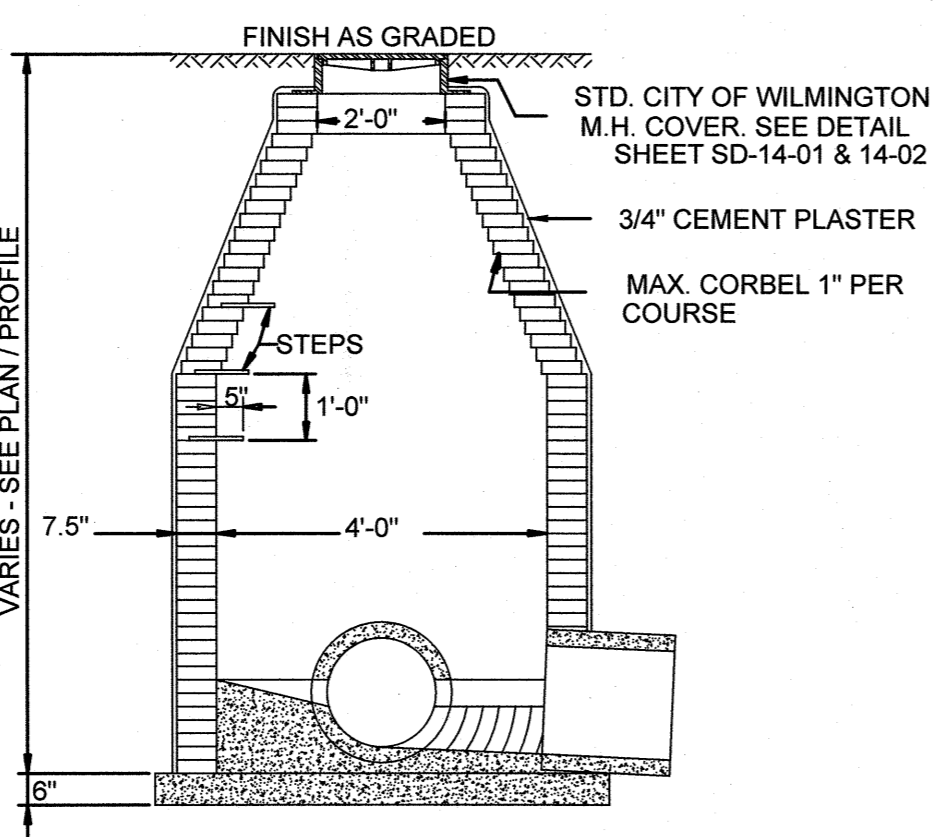
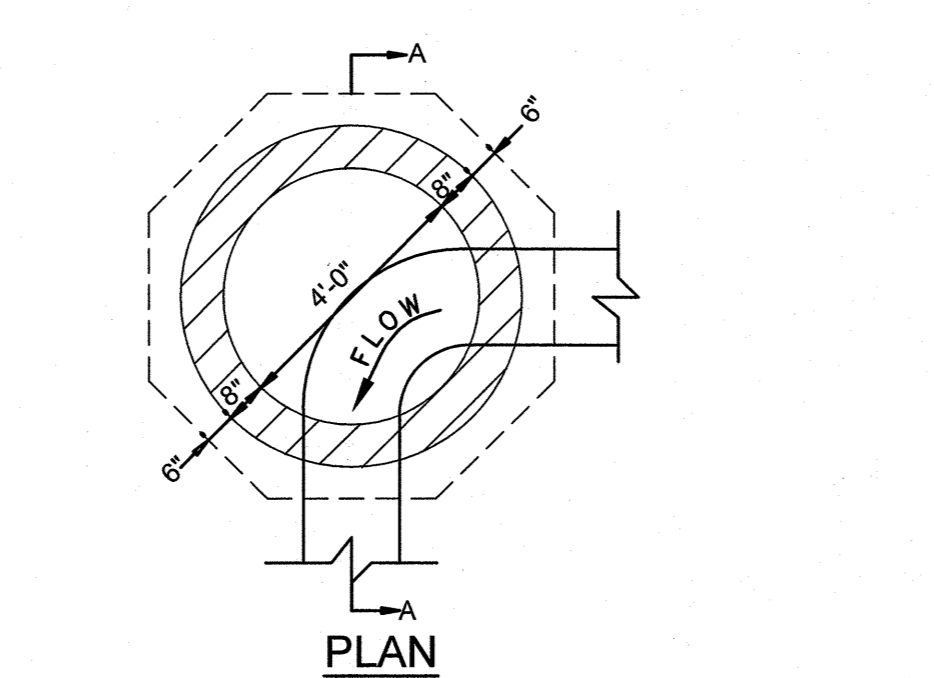
SEAL:
ENGINEER
STATE OF NORTH CAROLINA
028852
08/08/18

C-7.2
PEI JOB#: 16105.PE

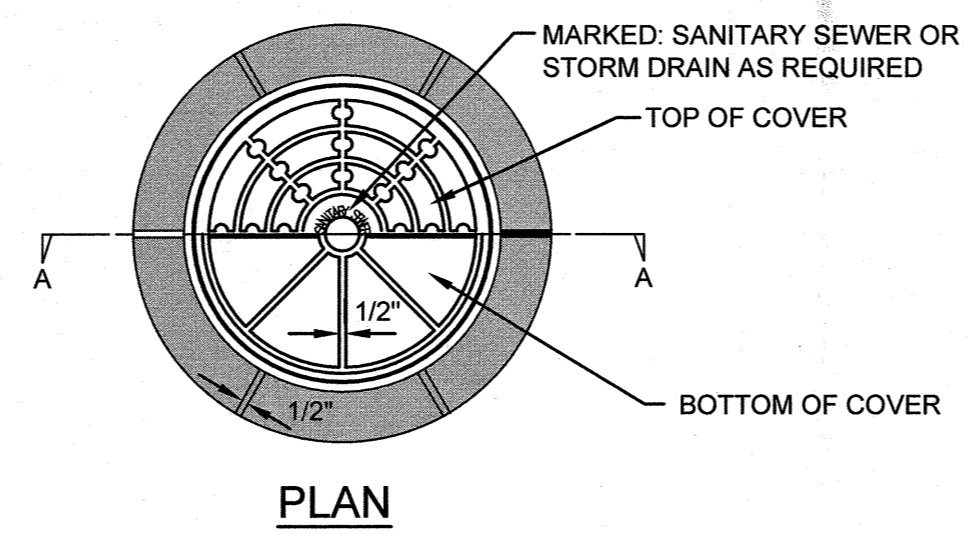
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



STANDARD PIPE TRENCH DETAIL
SD 1-07
NOT TO SCALE



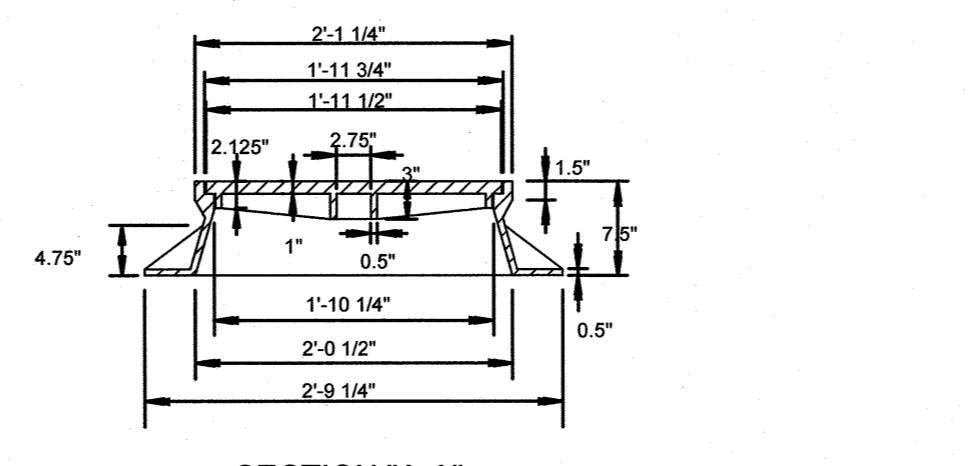
SECTION "A-A"
GUIDELINES FOR STORM DRAIN MANHOLE
SD 2-03



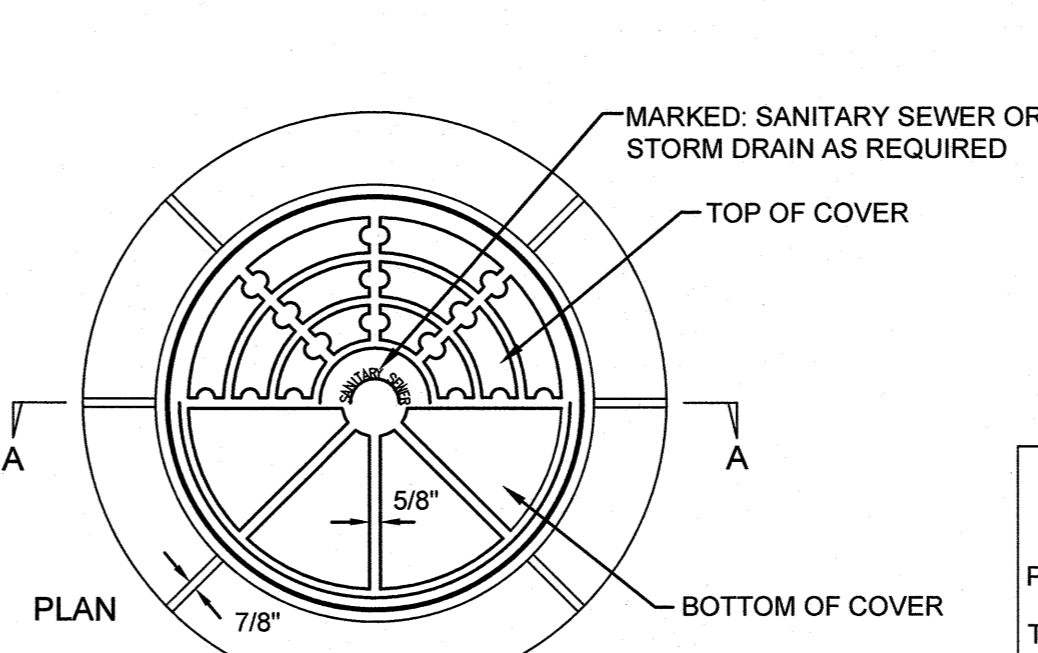
MARKED: SANITARY SEWER OR STORM DRAIN AS REQUIRED
TOP OF COVER
BOTTOM OF COVER

RING & COVER CONTACT SURFACES SHALL BE MACHINED TO INSURE EVEN BEARING OF COVER AND RING

MINIMUM WEIGHTS:
RING 180 LBS.
COVER 120 LBS.



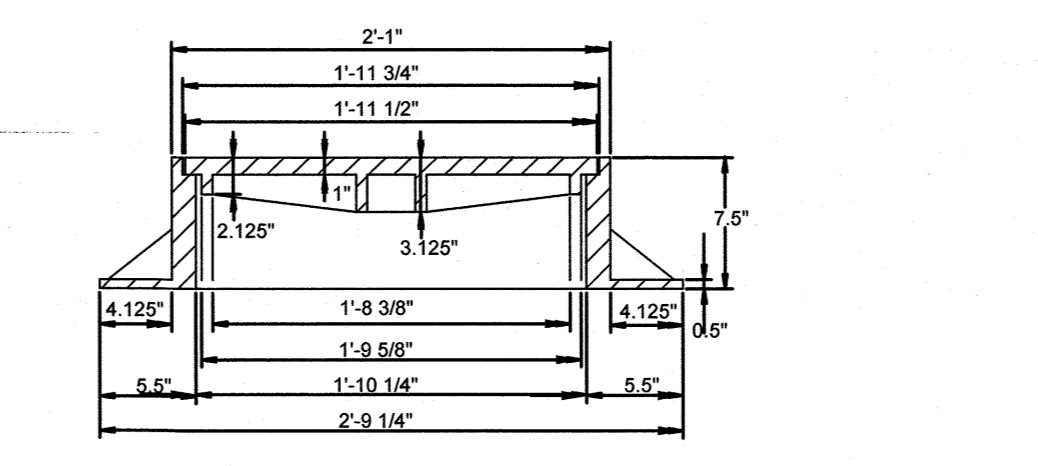
SECTION "A-A"
STANDARD MANHOLE RING AND COVER
SD 14-01
NOT TO SCALE



MARKED: SANITARY SEWER OR STORM DRAIN AS REQUIRED
TOP OF COVER
BOTTOM OF COVER

NOTE:
RING & COVER CONTACT SURFACES SHALL BE MACHINED TO INSURE EVEN BEARING OF COVER AND RING

MINIMUM WEIGHTS:
RING 261 LBS.
COVER 120 LBS.

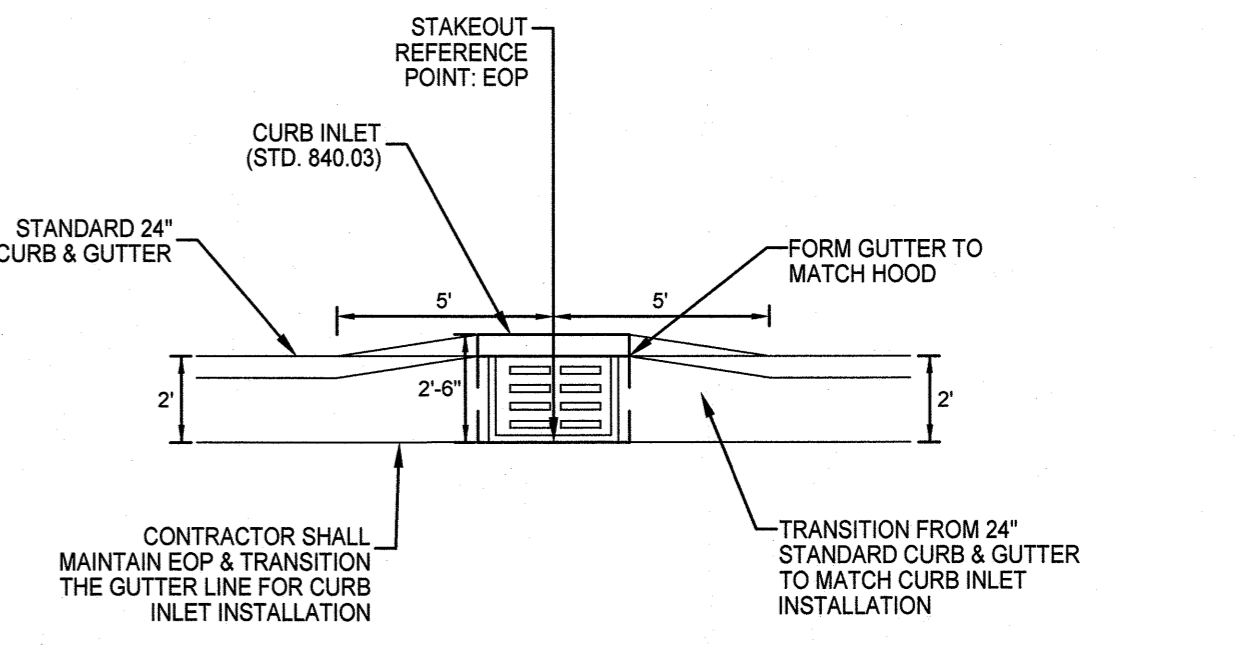


SECTION "A-A"
STANDARD MANHOLE RING & COVER
SD 14-02
NOT TO SCALE

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan
Name: mc 14 2019 Date: _____
Planning: AK 1-4-17
Traffic: Chad Chiles 1-4-19
Fire: _____

CITY OF WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/19/19 Permit # 2019045
Signed: [Signature]



CURB TRANSITION DETAIL (24" STANDARD)
NOT TO SCALE

PIPE	SPAN	WIDTH	HEIGHT	MIN. HEIGHT	MAX. HEIGHT	CONC. IN BOX	REINFORCING	C.M.	R.C.
12"	8'-0"	2'-0"	2'-0"	0.222	0.222	0.015	0.020	0.020	0.020
18"	12'-0"	3'-0"	3'-0"	0.222	0.222	0.015	0.020	0.020	0.020
24"	16'-0"	4'-0"	4'-0"	0.222	0.222	0.015	0.020	0.020	0.020
30"	20'-0"	5'-0"	5'-0"	0.222	0.222	0.015	0.020	0.020	0.020
36"	24'-0"	6'-0"	6'-0"	0.222	0.222	0.015	0.020	0.020	0.020
42"	28'-0"	7'-0"	7'-0"	0.222	0.222	0.015	0.020	0.020	0.020
48"	32'-0"	8'-0"	8'-0"	0.222	0.222	0.015	0.020	0.020	0.020
54"	36'-0"	9'-0"	9'-0"	0.222	0.222	0.015	0.020	0.020	0.020

PIPE	SPAN	WIDTH	HEIGHT	MIN. HEIGHT	MAX. HEIGHT	CONC. IN BOX	REINFORCING	C.M.	R.C.
12"	8'-0"	2'-0"	2'-0"	0.222	0.222	0.015	0.020	0.020	0.020
18"	12'-0"	3'-0"	3'-0"	0.222	0.222	0.015	0.020	0.020	0.020
24"	16'-0"	4'-0"	4'-0"	0.222	0.222	0.015	0.020	0.020	0.020
30"	20'-0"	5'-0"	5'-0"	0.222	0.222	0.015	0.020	0.020	0.020
36"	24'-0"	6'-0"	6'-0"	0.222	0.222	0.015	0.020	0.020	0.020
42"	28'-0"	7'-0"	7'-0"	0.222	0.222	0.015	0.020	0.020	0.020
48"	32'-0"	8'-0"	8'-0"	0.222	0.222	0.015	0.020	0.020	0.020
54"	36'-0"	9'-0"	9'-0"	0.222	0.222	0.015	0.020	0.020	0.020

PIPE	SPAN	WIDTH	HEIGHT	MIN. HEIGHT	MAX. HEIGHT	CONC. IN BOX	REINFORCING	C.M.	R.C.
12"	8'-0"	2'-0"	2'-0"	0.222	0.222	0.015	0.020	0.020	0.020
18"	12'-0"	3'-0"	3'-0"	0.222	0.222	0.015	0.020	0.020	0.020
24"	16'-0"	4'-0"	4'-0"	0.222	0.222	0.015	0.020	0.020	0.020
30"	20'-0"	5'-0"	5'-0"	0.222	0.222	0.015	0.020	0.020	0.020
36"	24'-0"	6'-0"	6'-0"	0.222	0.222	0.015	0.020	0.020	0.020
42"	28'-0"	7'-0"	7'-0"	0.222	0.222	0.015	0.020	0.020	0.020
48"	32'-0"	8'-0"	8'-0"	0.222	0.222	0.015	0.020	0.020	0.020

PIPE	SPAN	WIDTH	HEIGHT	MIN. HEIGHT	MAX. HEIGHT	CONC. IN BOX	REINFORCING	C.M.	R.C.
12"	8'-0"	2'-0"	2'-0"	0.222	0.222	0.015	0.020	0.020	0.020
18"	12'-0"	3'-0"	3'-0"	0.222	0.222	0.015	0.020	0.020	0.020
24"	16'-0"	4'-0"	4'-0"	0.222	0.222	0.015	0.020	0.020	0.020
30"	20'-0"	5'-0"	5'-0"	0.222	0.222	0.015	0.020	0.020	0.020
36"	24'-0"	6'-0"	6'-0"	0.222	0.222	0.015	0.020	0.020	0.020
42"	28'-0"	7'-0"	7'-0"	0.222	0.222	0.015	0.020	0.020	0.020
48"	32'-0"	8'-0"	8'-0"	0.222	0.222	0.015	0.020	0.020	0.020

PIPE	SPAN	WIDTH	HEIGHT	MIN. HEIGHT	MAX. HEIGHT	CONC. IN BOX	REINFORCING	C.M.	R.C.
12"	8'-0"	2'-0"	2'-0"	0.222	0.222	0.015	0.020	0.020	0.020
18"	12'-0"	3'-0"	3'-0"	0.222	0.222	0.015	0.020	0.020	0.020
24"	16'-0"	4'-0"	4'-0"	0.222	0.222	0.015	0.020	0.020	0.020
30"	20'-0"	5'-0"	5'-0"	0.222	0.222	0.015	0.020	0.020	0.020

PIPE	SPAN	WIDTH	HEIGHT	MIN. HEIGHT	MAX. HEIGHT	CONC. IN BOX	REINFORCING	C.M.	R.C.
12"	8'-0"	2'-0"	2'-0"	0.222	0.222	0.015	0.020	0.020	0.020
18"	12'-0"	3'-0"	3'-0"	0.222	0.222	0.015	0.020	0.020	0.020
24"	16'-0"	4'-0"	4'-0"	0.222	0.222	0.015	0.020	0.020	0.020
30"	20'-0"	5'-0"	5'-0"	0.222	0.222	0.015	0.020	0.020	0.020

REVISIONS:
1) PER CITY AND OWNER COMMENTS
08/08/18

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

DETAILS
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONSULTANT LAYOUT:
PRELIMINARY LAYOUT:
FINAL DESIGN:
RELEASED FOR CONST.:

DRAWING INFORMATION:
DATE: 08/08/18
SCALE: AS SHOWN
DRAWN: JTB
CHECKED: JTB

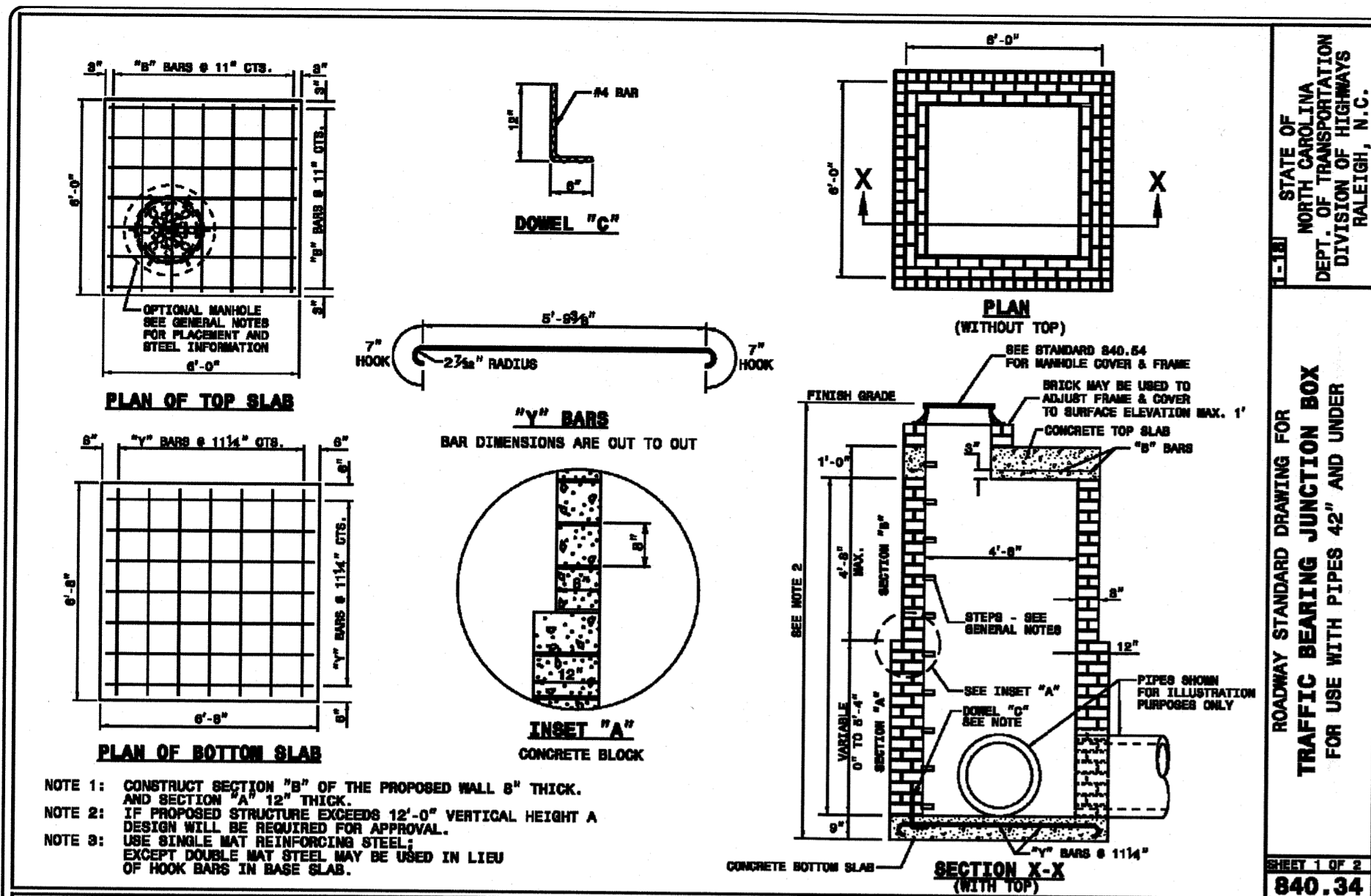
SEAL
JTB
REGISTERED PROFESSIONAL ENGINEER
STATE OF NORTH CAROLINA
NO. 28852

08/08/18

C-7.3

PEI JOB#: 16105.PE

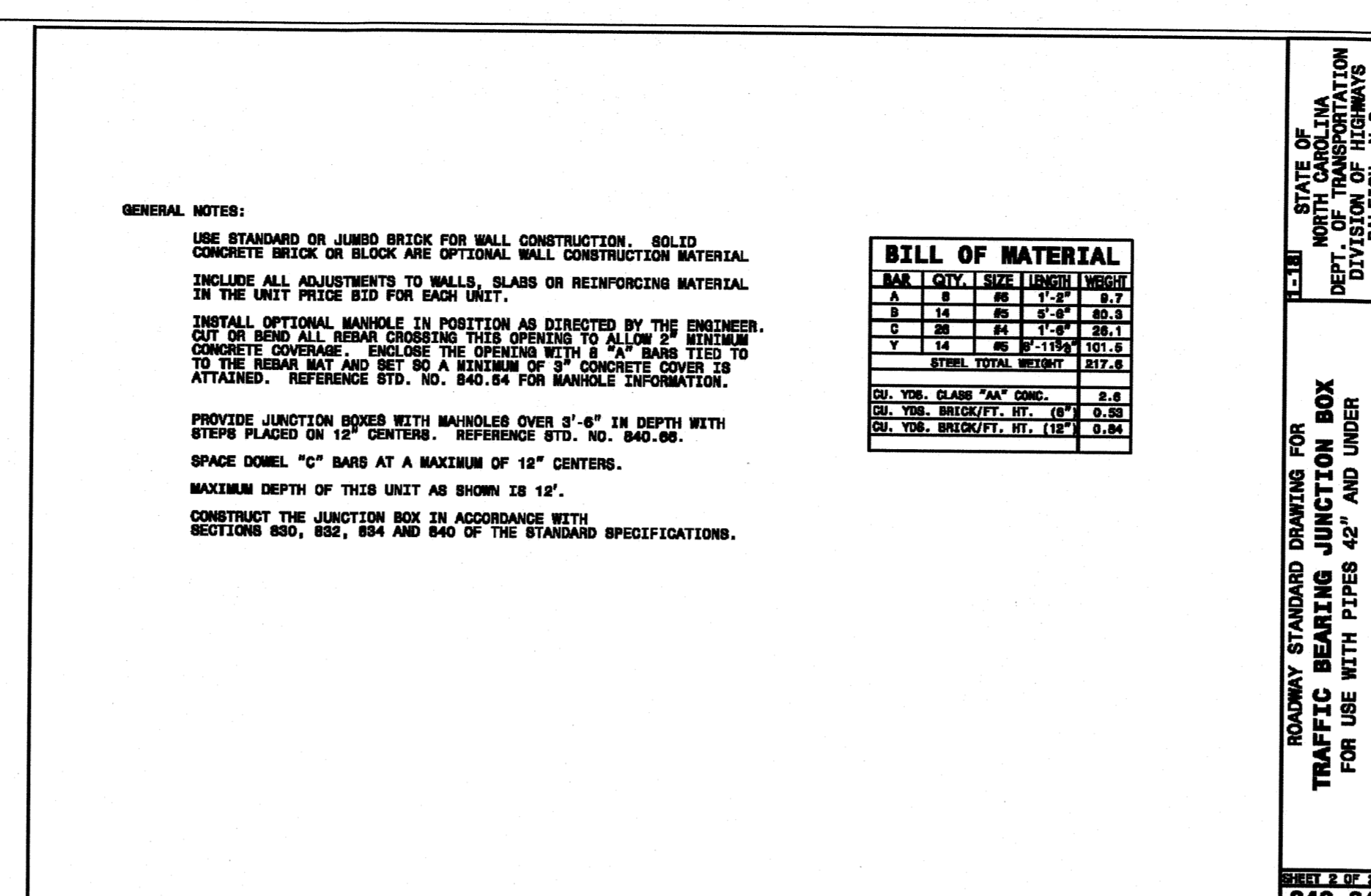
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



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

ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING JUNCTION BOX
FOR USE WITH PIPES 42" AND UNDER

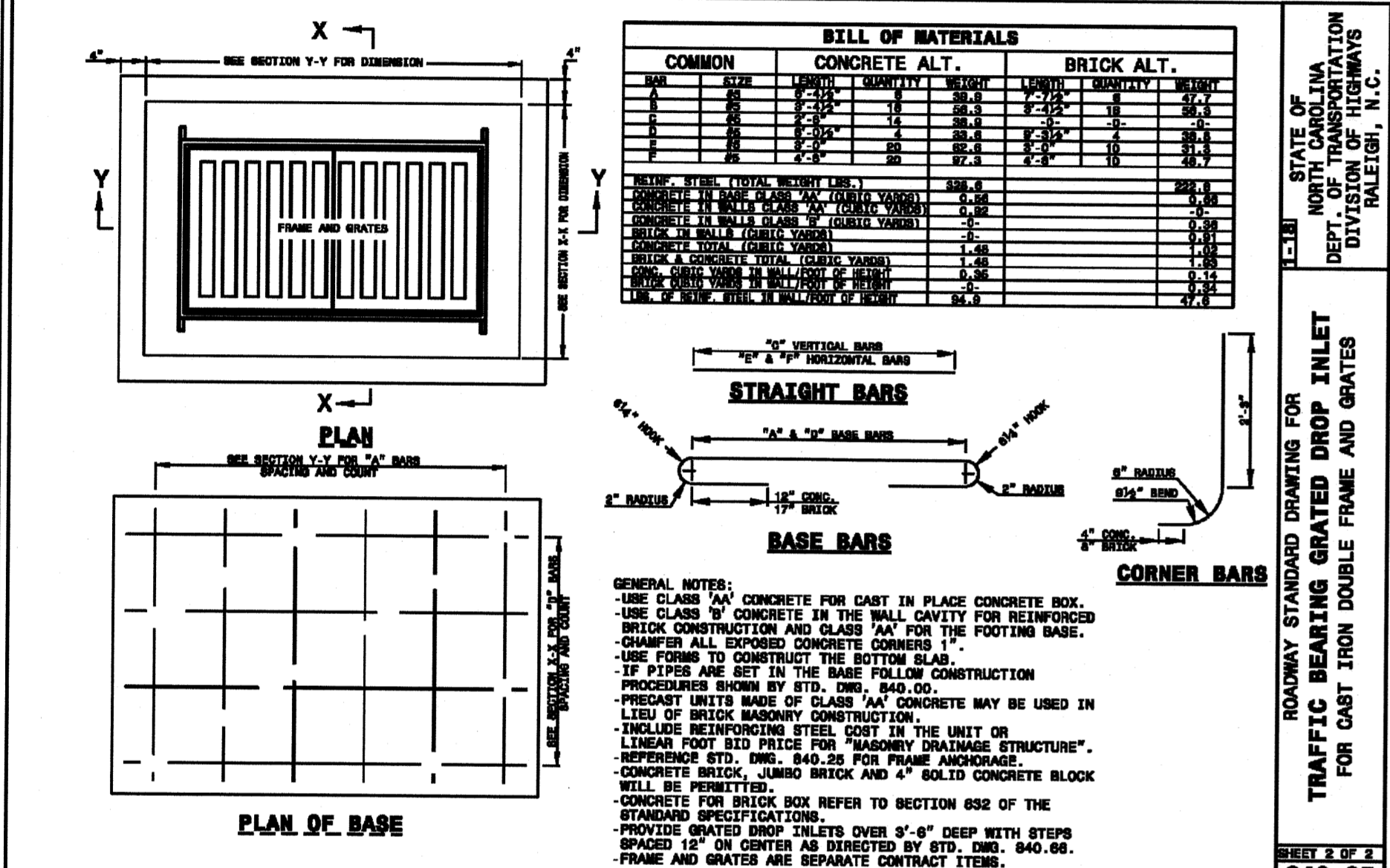
SHEET 1 OF 2
840.34



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

ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING JUNCTION BOX
FOR USE WITH PIPES 42" AND UNDER

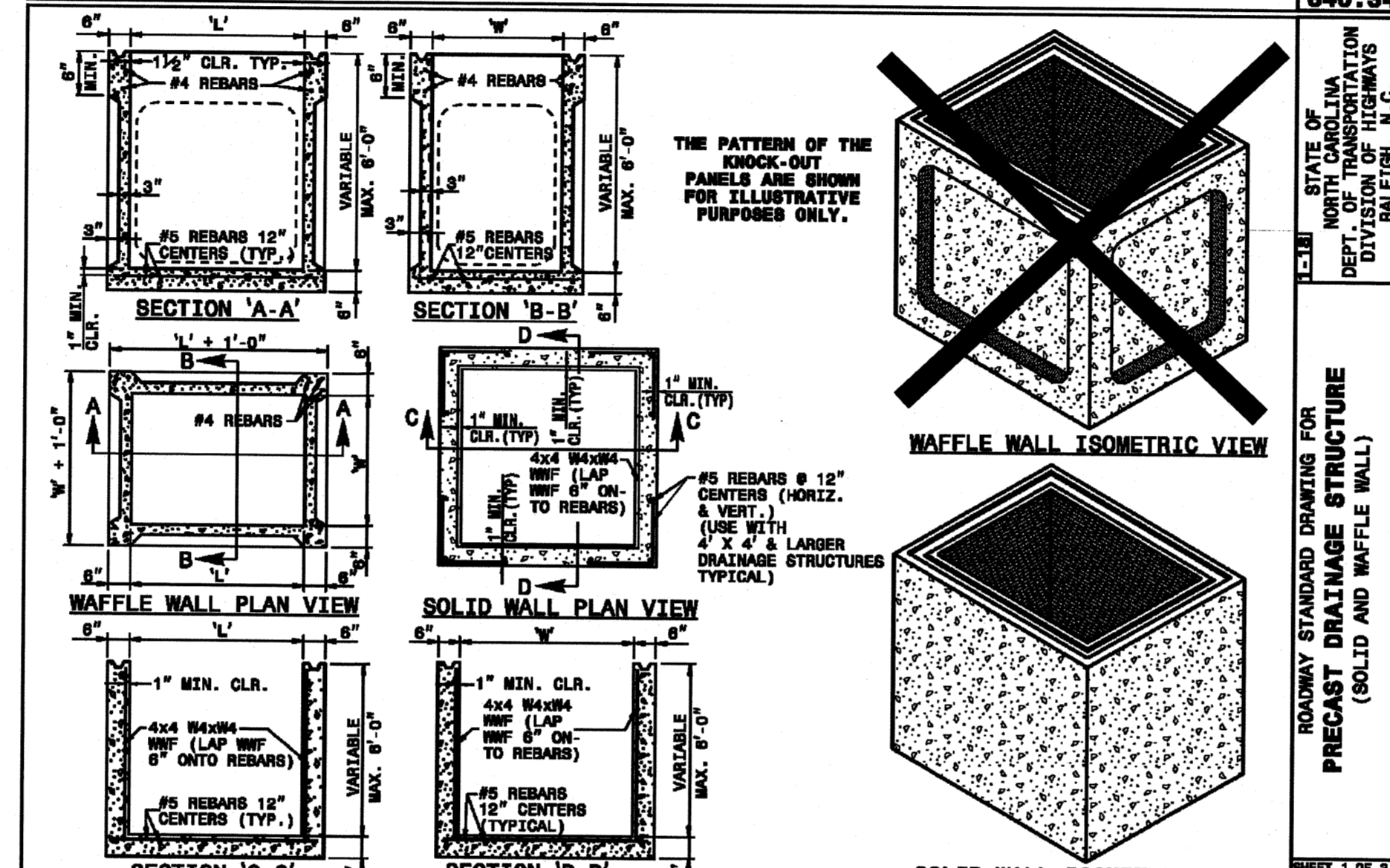
SHEET 2 OF 2
840.34



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

ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING GRADED DROP INLET
FOR CAST IRON DOUBLE FRAME AND GRATES

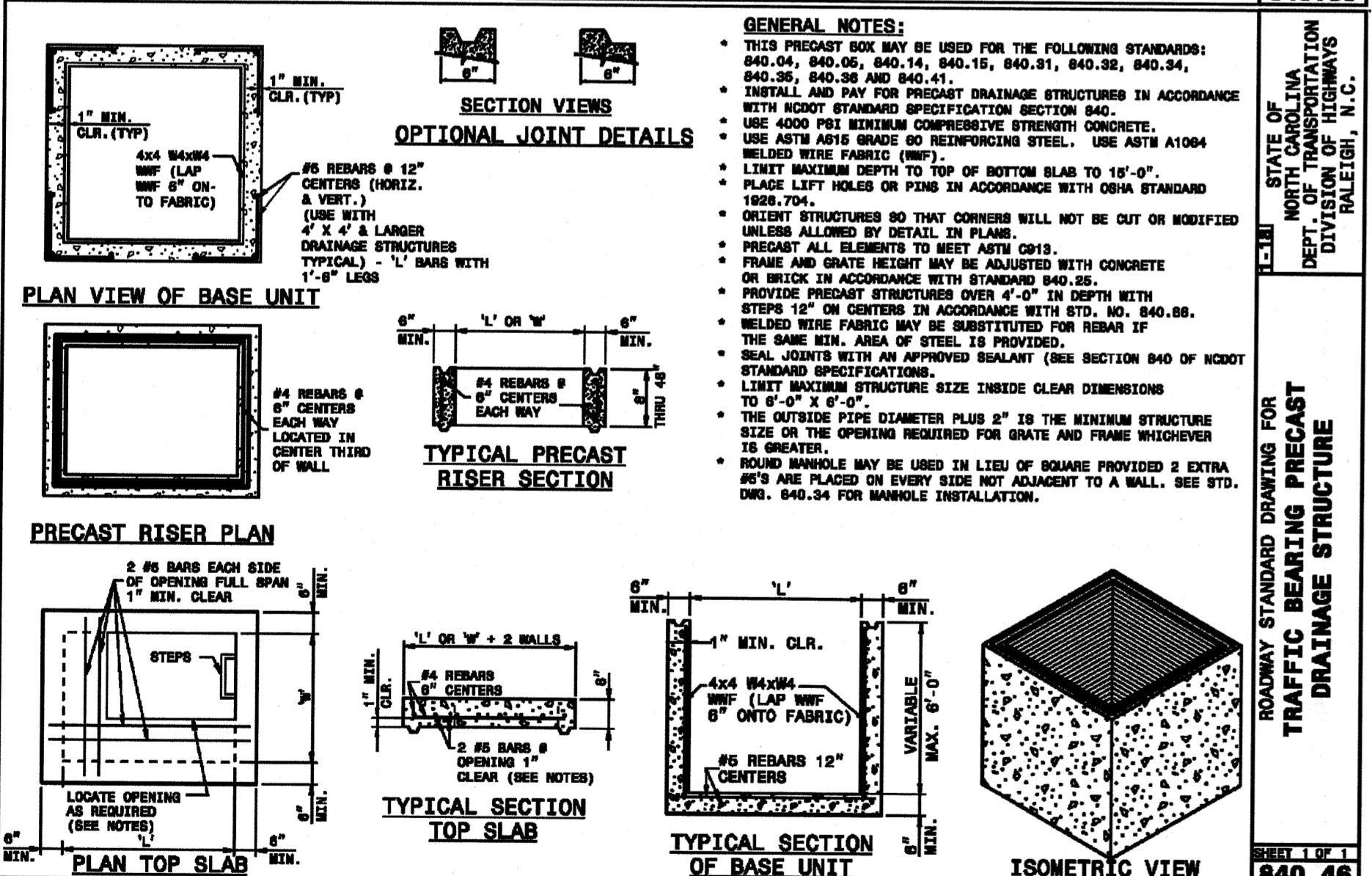
SHEET 2 OF 2
840.35



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

ROADWAY STANDARD DRAWING FOR
PRECAST DRAINAGE STRUCTURE
(SOLID AND WAFFLE WALL)

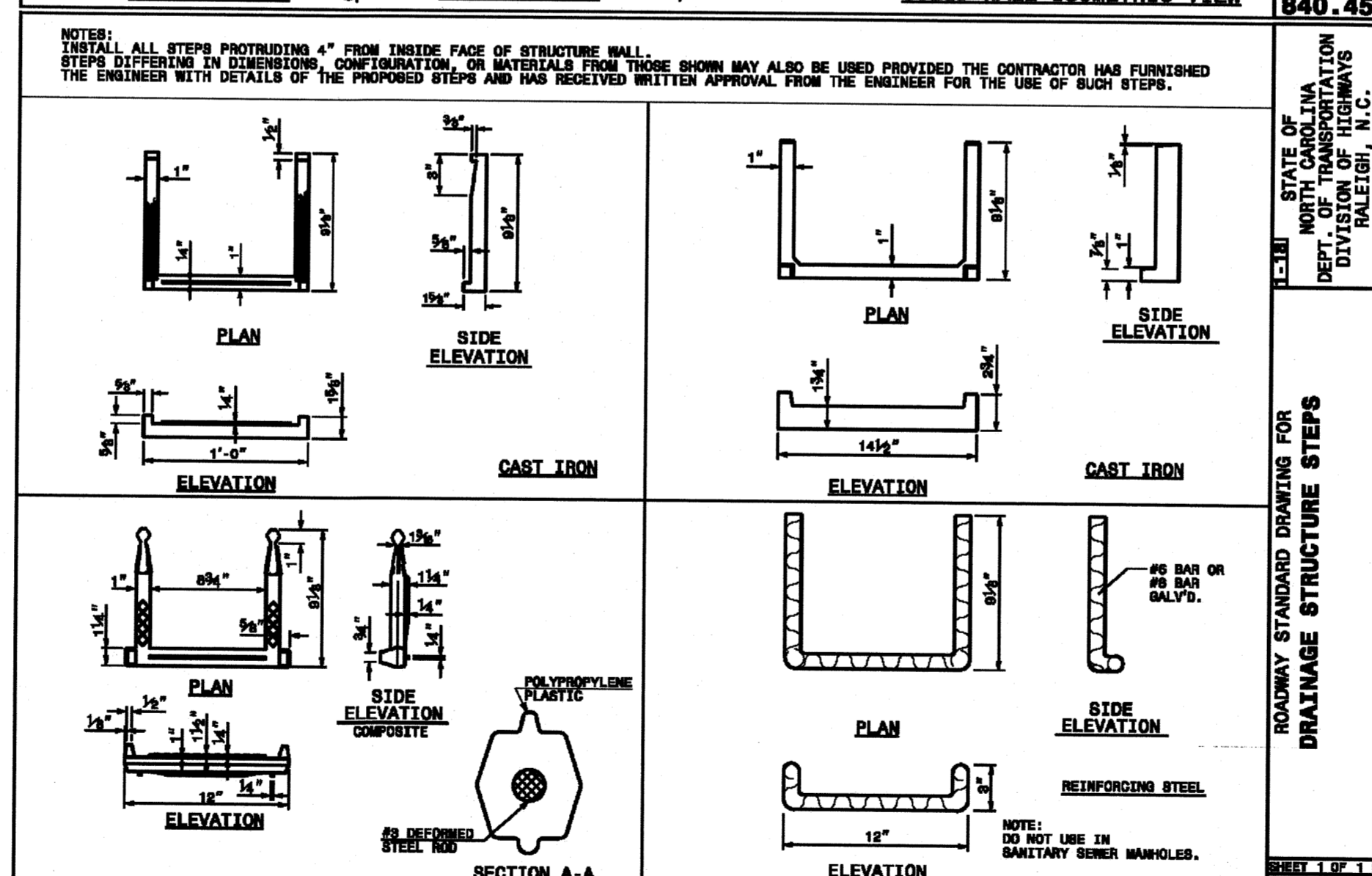
SHEET 1 OF 2
840.45



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

ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING PRECAST
DRAINAGE STRUCTURE

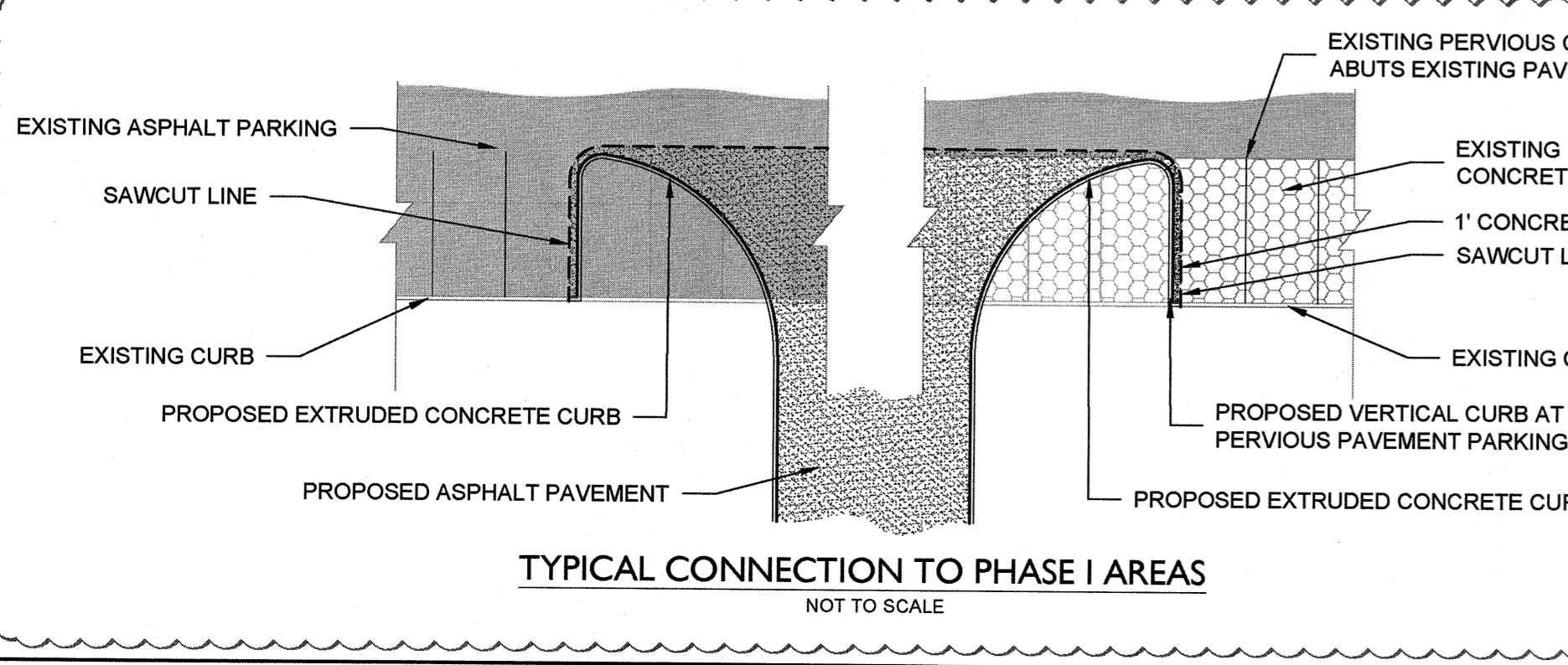
SHEET 1 OF 2
840.46



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

ROADWAY STANDARD DRAWING FOR
DRAINAGE STRUCTURE STEPS

SHEET 1 OF 1
840.66



EXISTING ASPHALT PARKING
SAWCUT LINE
EXISTING CURB
PROPOSED EXTRUDED CONCRETE CURB
PROPOSED ASPHALT PAVEMENT

EXISTING PERVIOUS CONCRETE PAVING
EXISTING PERVIOUS CONCRETE PARKING
1" CONCRETE PAVEMENT AT PARKING STALL
SAWCUT LINE
EXISTING CURB
PROPOSED VERTICAL CURB AT PERVIOUS PAVEMENT PARKING STALL
PROPOSED EXTRUDED CONCRETE CURB

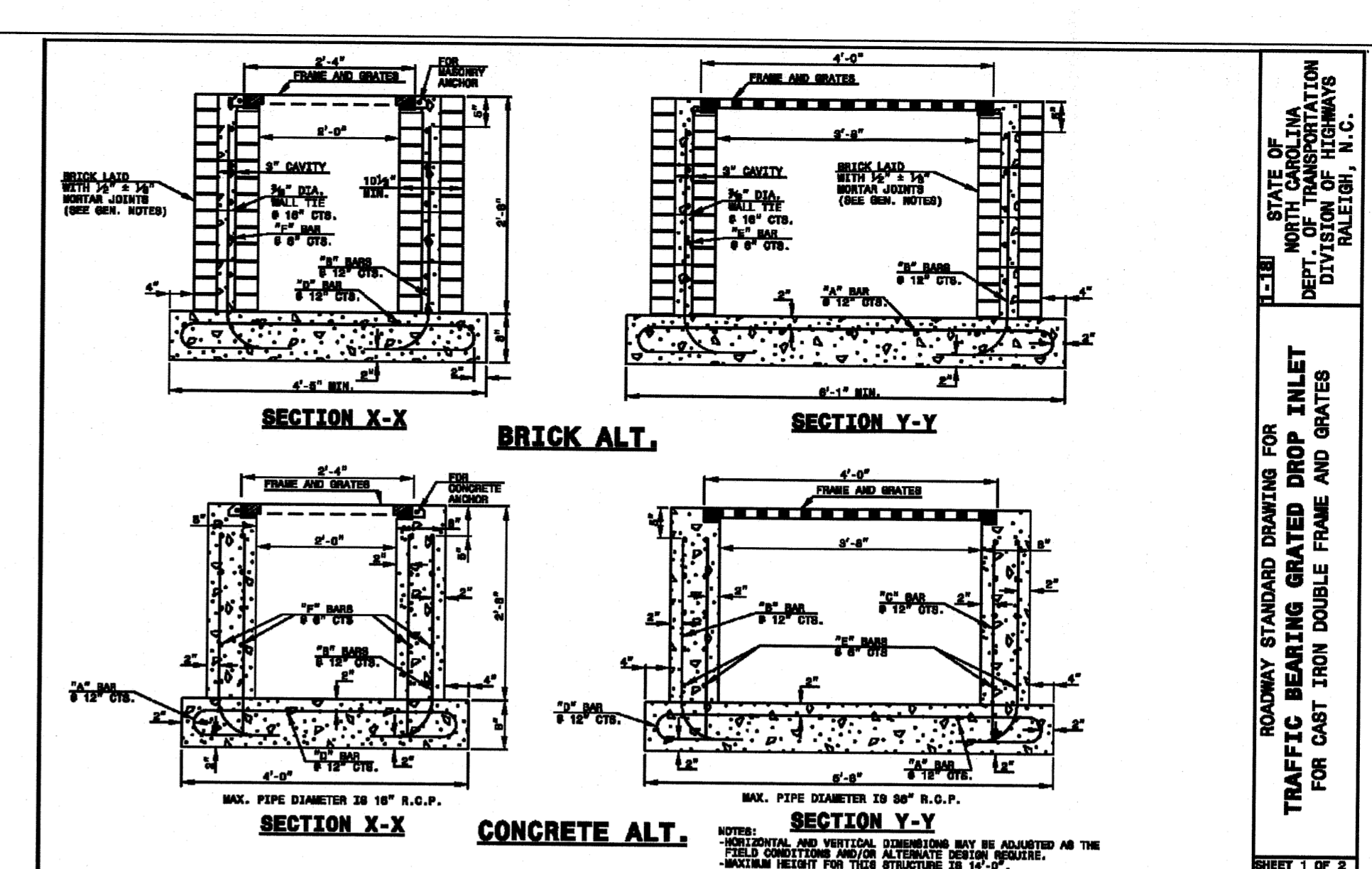
TYPICAL CONNECTION TO PHASE I AREAS
NOT TO SCALE

NCDENR PWSS WATER PERMIT #: _____
WATER CAPACITY: _____ GPD
DWQ SEWER PERMIT #: _____
SEWER CAPACITY: _____ GPD
SEWER SHED # AND PLANT: _____
SEWER TO FLOW THROUGH NEI: YES OR NO (CIRCLE ONE)

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan
Name _____ Date _____
Planning _____
Traffic _____
File _____

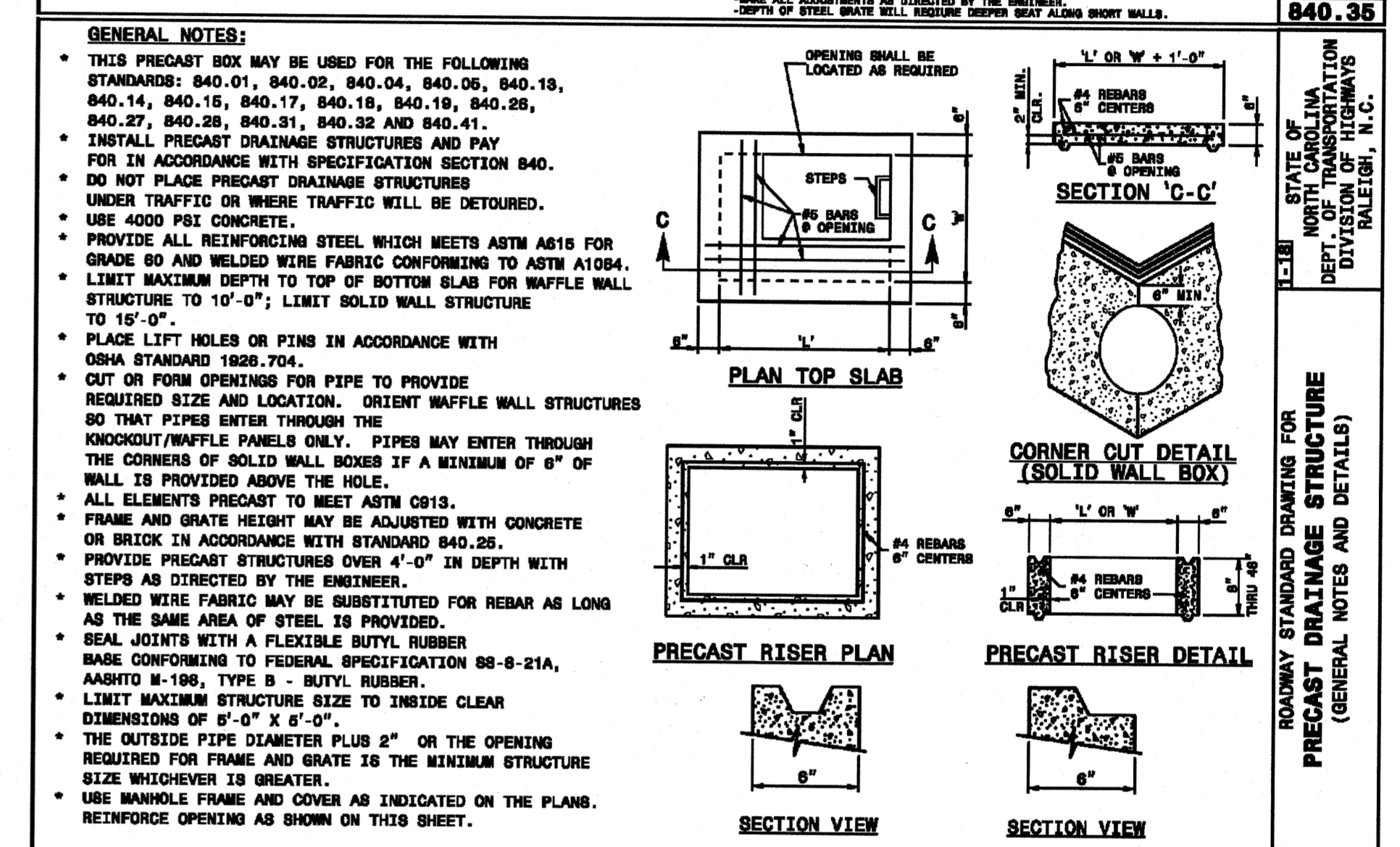
WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/14/19 Permit # 2019049
Signed: [Signature]



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

ROADWAY STANDARD DRAWING FOR
TRAFFIC BEARING GRADED DROP INLET
FOR CAST IRON DOUBLE FRAME AND GRATES

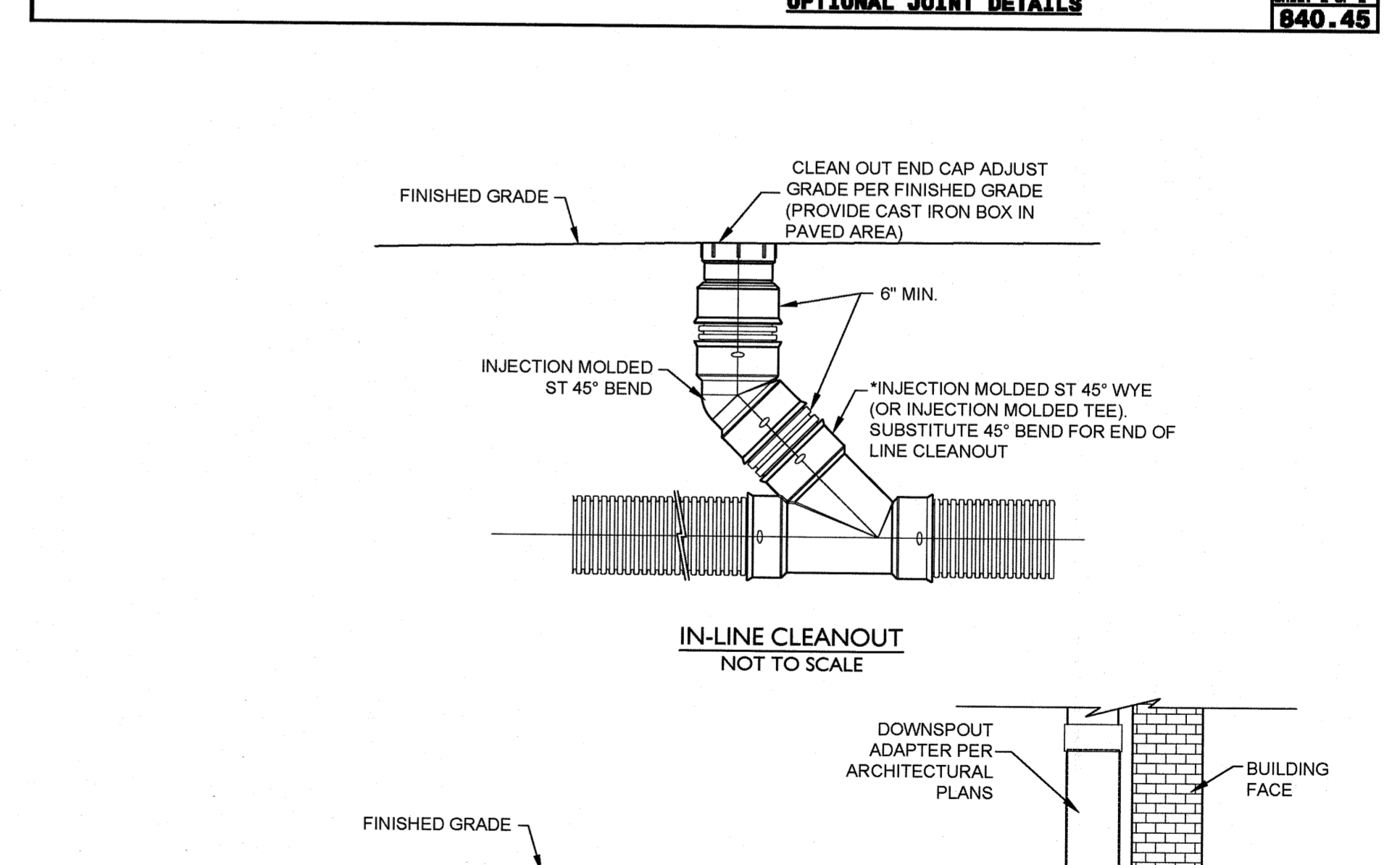
SHEET 1 OF 2
840.35



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

ROADWAY STANDARD DRAWING FOR
PRECAST DRAINAGE STRUCTURE
(GENERAL NOTES AND DETAILS)

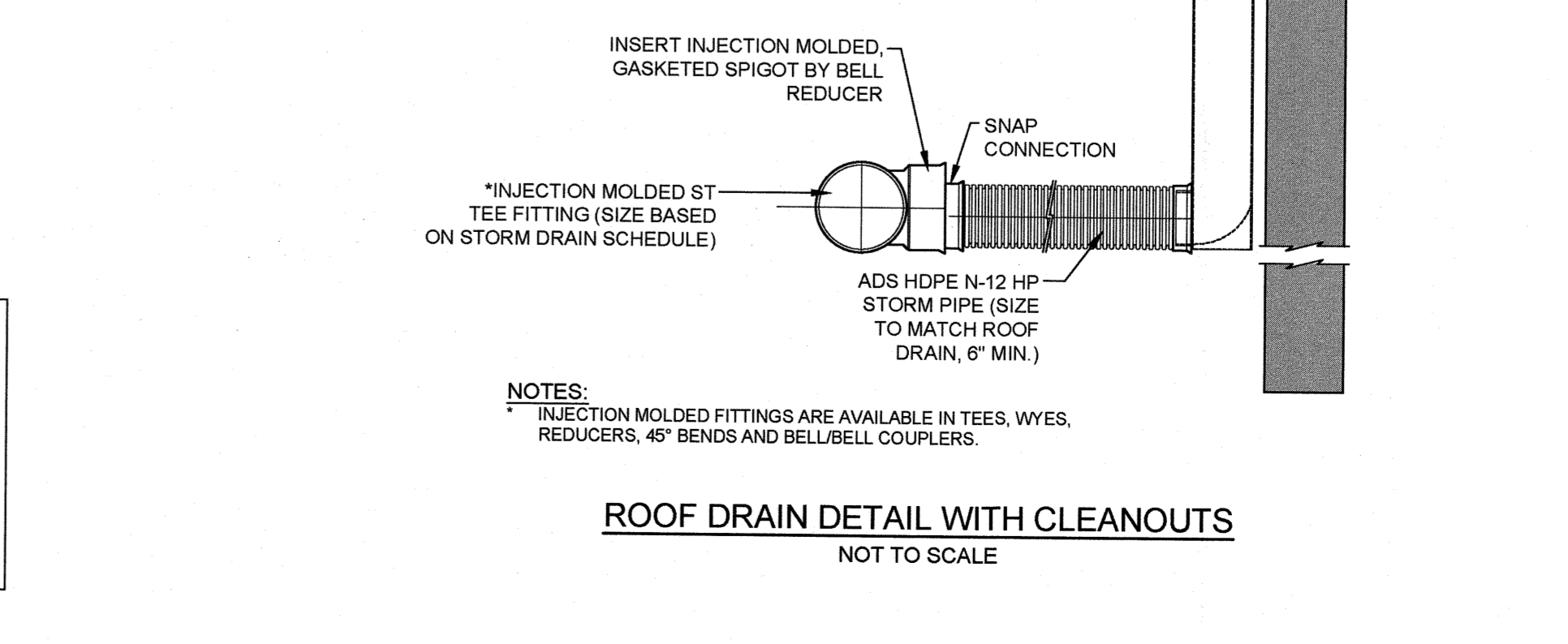
SHEET 2 OF 2
840.45



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

ROADWAY STANDARD DRAWING FOR
DRAINAGE STRUCTURE STEPS

SHEET 1 OF 1
840.66



FINISHED GRADE
CLEAN OUT END CAP ADJUST GRADE PER FINISHED GRADE (PROVIDE CAST IRON BOX IN PAVED AREA)
6" MIN.
INJECTION MOLDED ST 45° BEND
INJECTION MOLDED ST 45° WYE (OR INJECTION MOLDED TEE)
SUBSTITUTE 45° BEND FOR END OF LINE CLEANOUT
IN-LINE CLEANOUT NOT TO SCALE
FINISHED GRADE
DOWNSPOUT ADAPTER PER ARCHITECTURAL PLANS
BUILDING FACE
INSERT INJECTION MOLDED, GASKETED SPIGOT BY BELL REDUCER
SNAP CONNECTION
ADS HOPE N-12 HP STORM PIPE (SIZE TO MATCH ROOF DRAIN, 6" MIN.)

NOTES:
INJECTION MOLDED FITTINGS ARE AVAILABLE IN TEES, WYES, REDUCERS, 45° BENDS AND BELL/BELL COUPLERS.

ROOF DRAIN DETAIL WITH CLEANOUTS
NOT TO SCALE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:
1. PER ENGINEERING COMMENTS
2. PER CITY AND OWNER COMMENTS

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

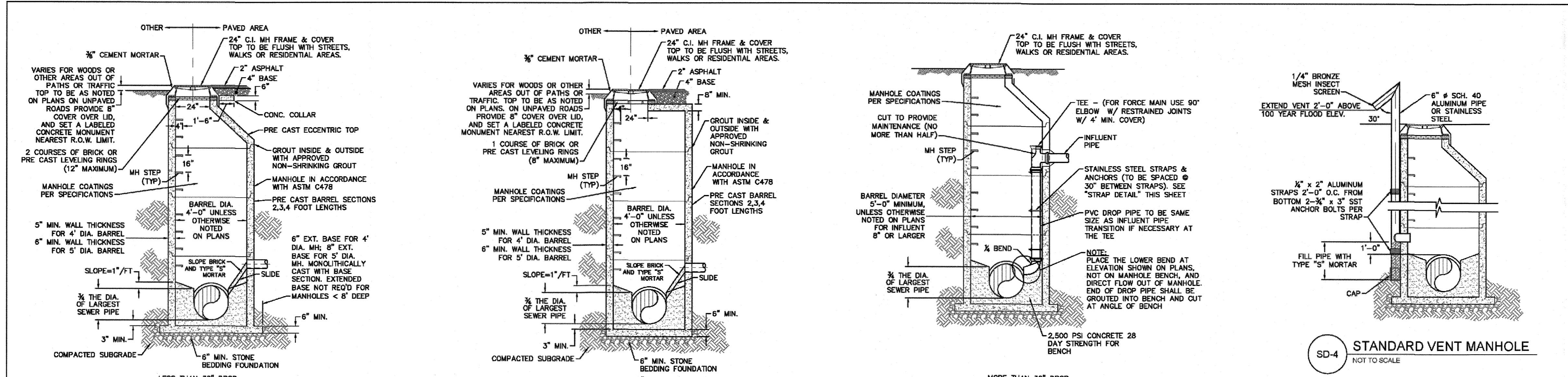
PARAMOUNT ENGINEERING INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6766 (F)
NC License #: C-2846

DETAILS
AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
CONCEPTUAL LAYOUT:
FINAL DESIGN:
RELEASED FOR CONSTRUCTION:
DRAWING INFORMATION:
DATE: 08/08/18
SCALE: AS NOTED
DESIGNED BY: [Signature]
CHECKED BY: [Signature]

SEAL
ENGINEER
028852
08/08/18

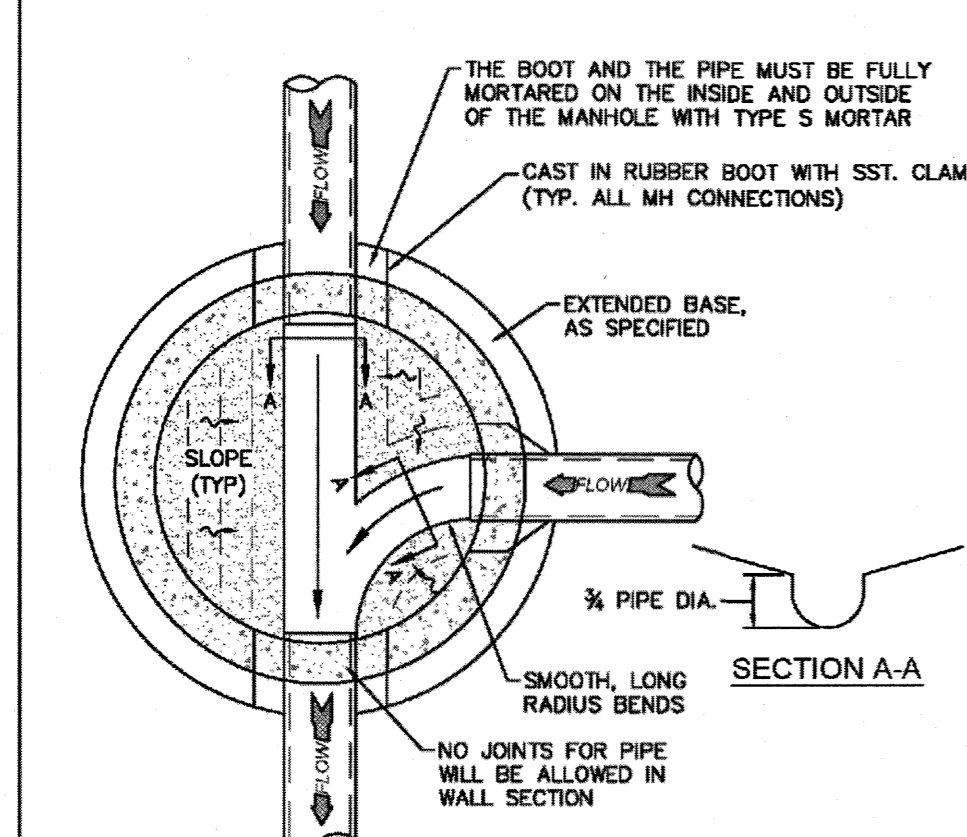
C-7.4
PEI JOB#: 16105.PE



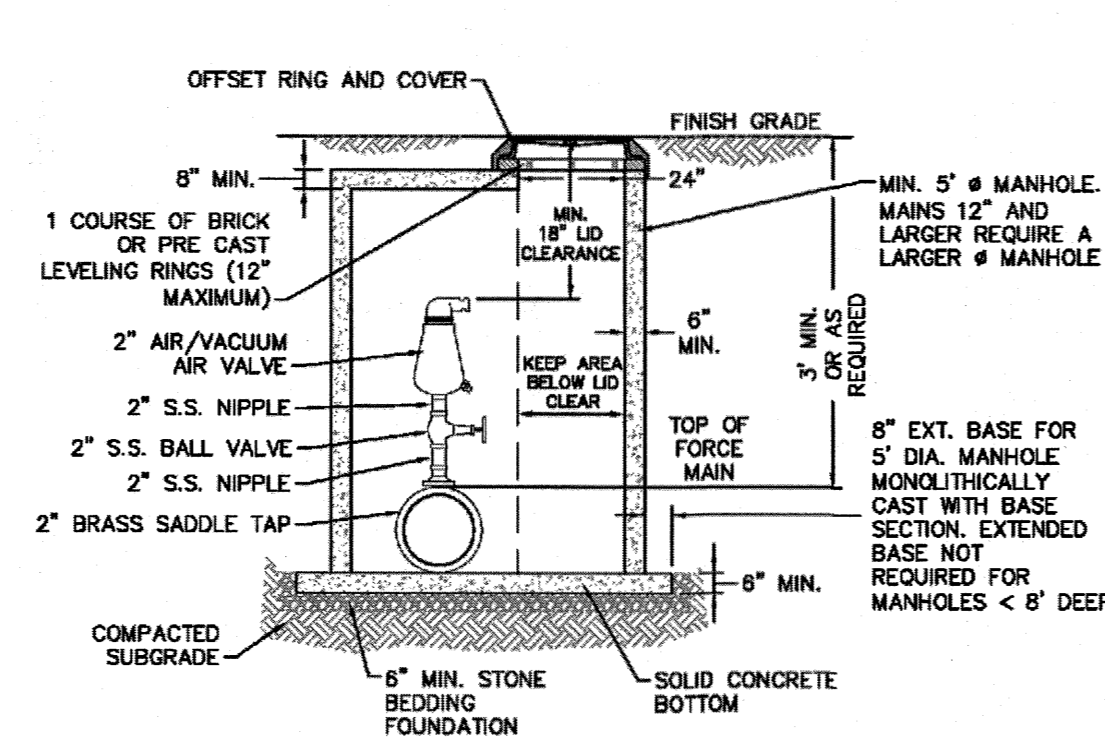
SD-1 PRECAST CONCRETE OFFSET MANHOLE TYPICAL
NOT TO SCALE

SD-2 PRECAST CONCRETE FLAT TOP MANHOLE TYPICAL
NOT TO SCALE

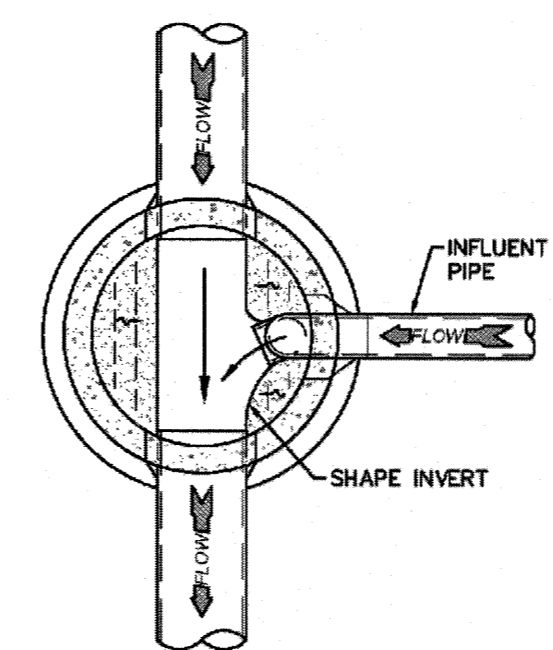
SD-3 DROP MANHOLE
NOT TO SCALE



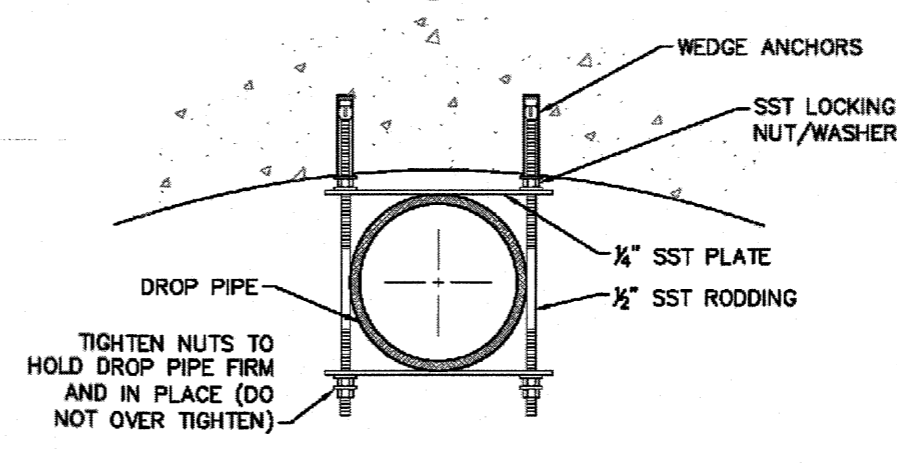
SD-5 MANHOLE FLOOR PLAN
NOT TO SCALE



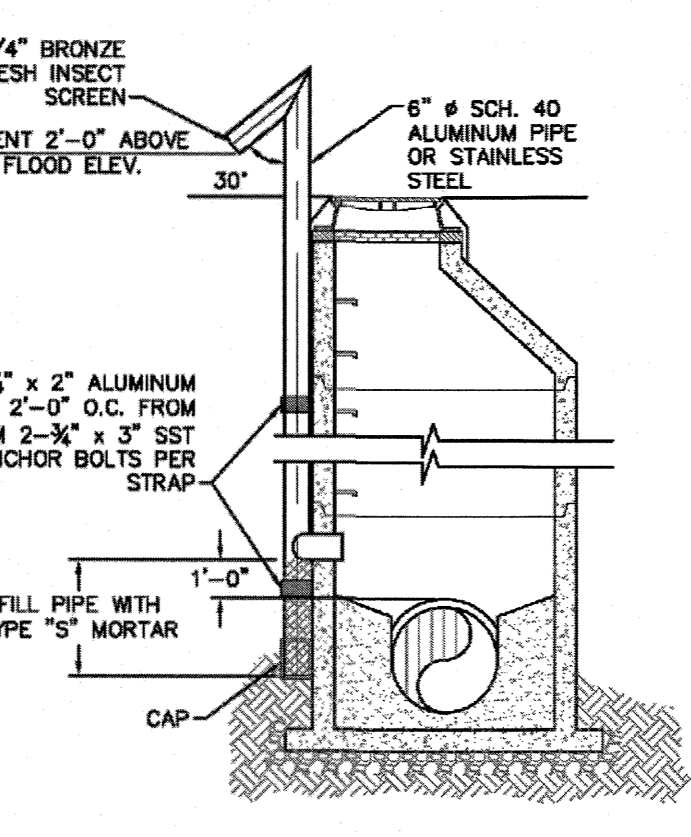
SD-6 AIR/VACUUM AND AIR RELEASE COMBINATION VALVE
NOT TO SCALE



SD-7 DROP MANHOLE FLOOR PLAN
NOT TO SCALE



SD-8 STRAP DETAIL
NOT TO SCALE



SD-4 STANDARD VENT MANHOLE
NOT TO SCALE

- CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:**
- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
 - WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
 - ALL SERVICES TYPING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 401 CERAMIC EPOXY LINING.
 - MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
 - NO FLEXIBLE COUPLINGS SHALL BE USED.
 - ALL STAINLESS STEEL FASTENERS SHALL BE 316.
 - CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.

SD-9 STANDARD NOTES
(REQUIRED ON ALL PLAN AND PROFILE SHEETS)

GENERAL NOTES:

- NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
- THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
- THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
- THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN AND STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

REV.	DESCRIPTION:	DATE:
1	AIR / VACUUM AND AIR RELEASE COMBINATION VALVE REVISED	10/28/12
2	STANDARD SEWER NOTE #6 REVISED	12/10/12
3	REVISED STANDARD VENT MANHOLE TO EXTEND VENT 2'-0" ABOVE 100 YR FLOOD	11/20/14
4	Revised Multiple Details	02/15/16

CFPUA SANITARY SEWER		DATE: 1/5/12
STANDARD DETAILS		SCALE: N/A
CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6600		DRAWN BY: CFPLJA
		CHECKED BY: CFPLJA
		PROJECT NO.:
		SHEET NO.:
		SSD-1

Approved Construction Plan

Name: YMC Date: 1-4-2019

Planning: YMC 1-4-2019

Traffic: AK 1-4-19

Fire: Chel 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 1/14/19 Permit # 20136415
 Signed: Russell

Know what's below. Call before you dig.

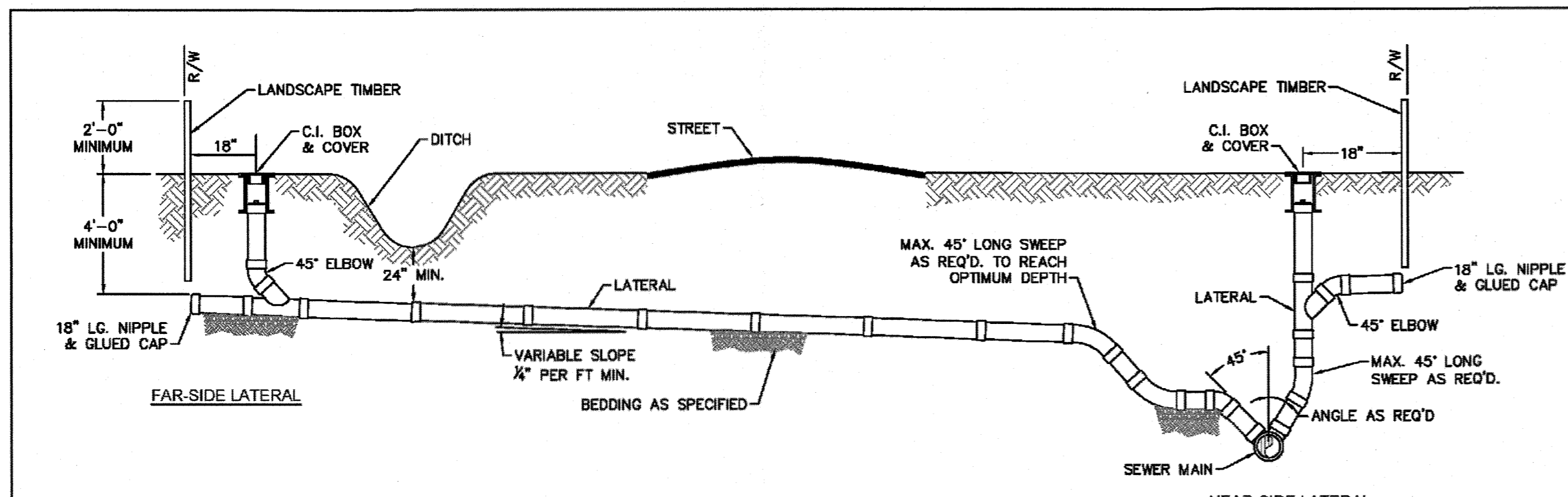
PROJECT STATUS: PROJECT DESIGN, PRELIMINARY LAYOUT, RELEASED FOR CONSTRUCTION
 DRAWING INFORMATION: DATE: 12/16/17, SCALE: AS NOTED, DWF, DIF, PDF, PLOT, CHECKED: [Signature]
 PROJECT NO.: [Blank]
 SHEET NO.: [Blank]
 DATE: 08/08/18
C-7.5
 PEI JOB#: 16105 PE

CLIENT INFORMATION:
 FDC Amberleigh Shores II SPE, LLC
 900 Brookstone Centre Parkway
 Columbus, GA 31904

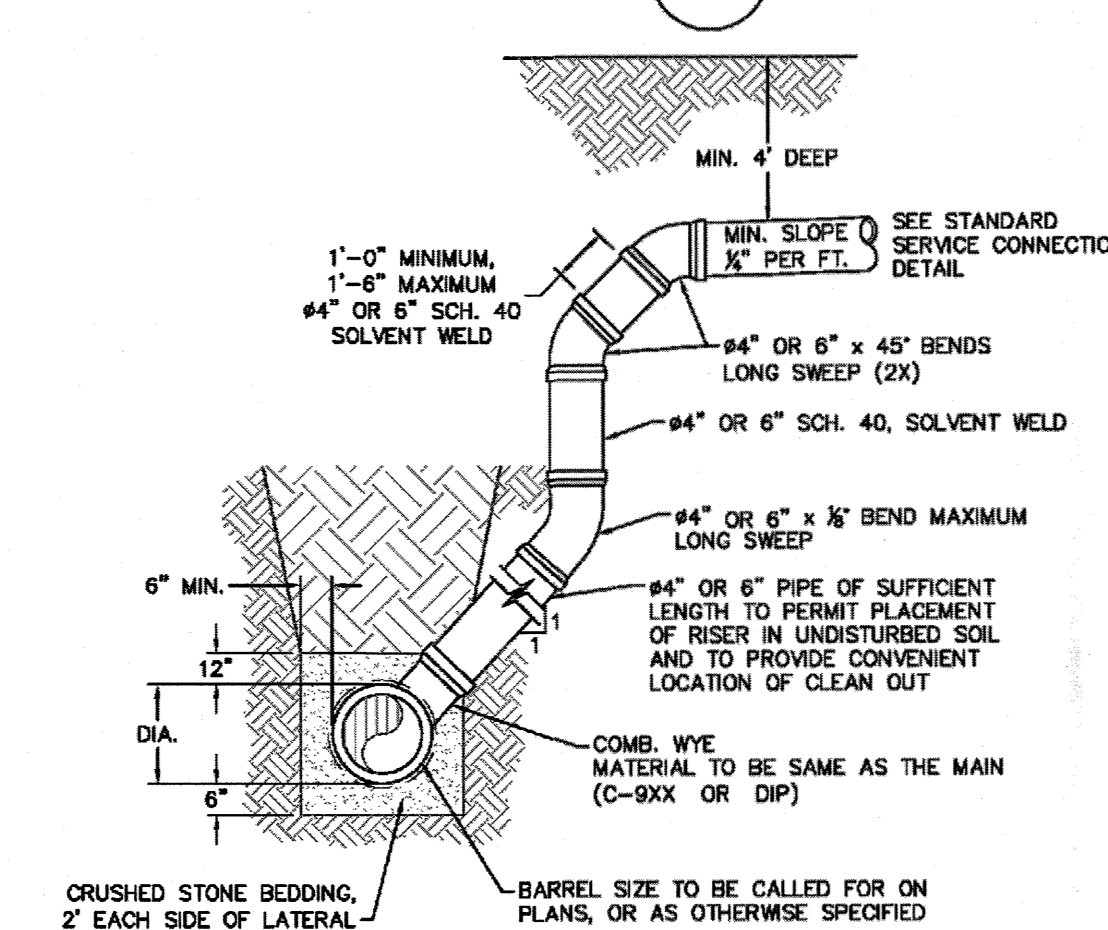
REVISIONS:
 1) PER CITY AND OWNER COMMENTS

DETAILS
 AMBERLEIGH SHORES
 PHASE II
 CITY OF WILMINGTON
 NORTH CAROLINA

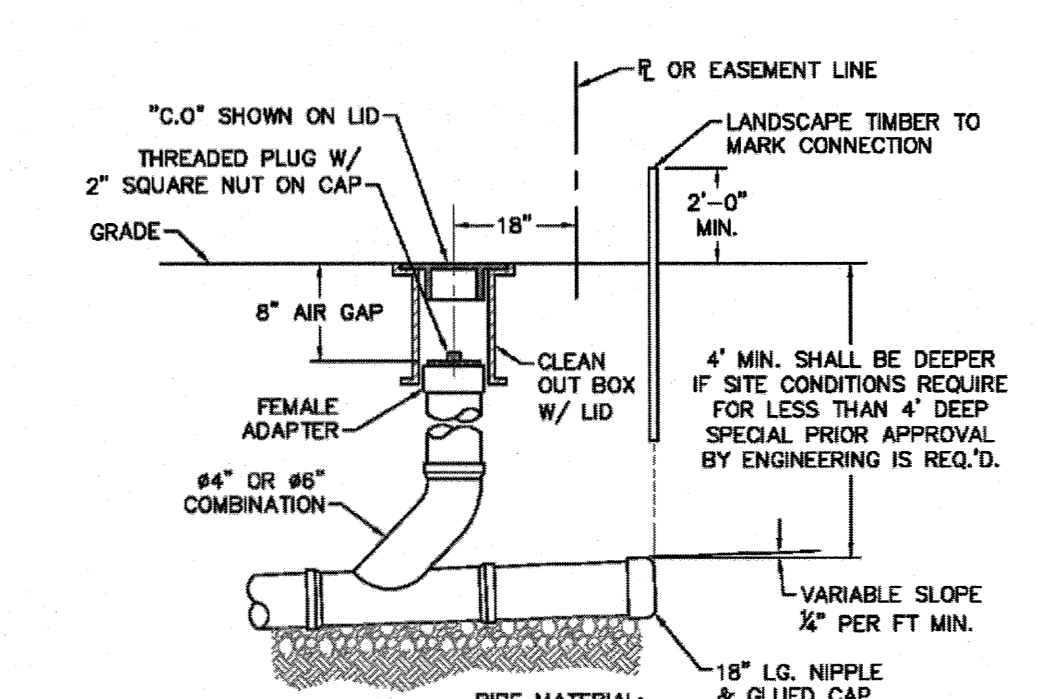
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



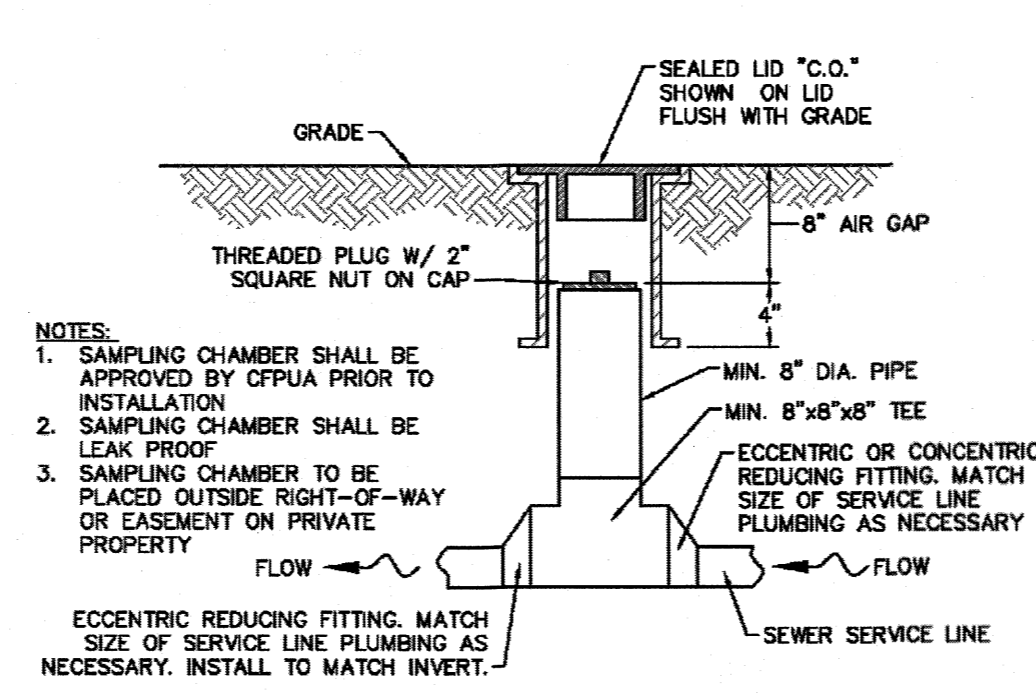
SD-19 STANDARD SERVICE CONNECTION TO SANITARY SEWER
NOT TO SCALE



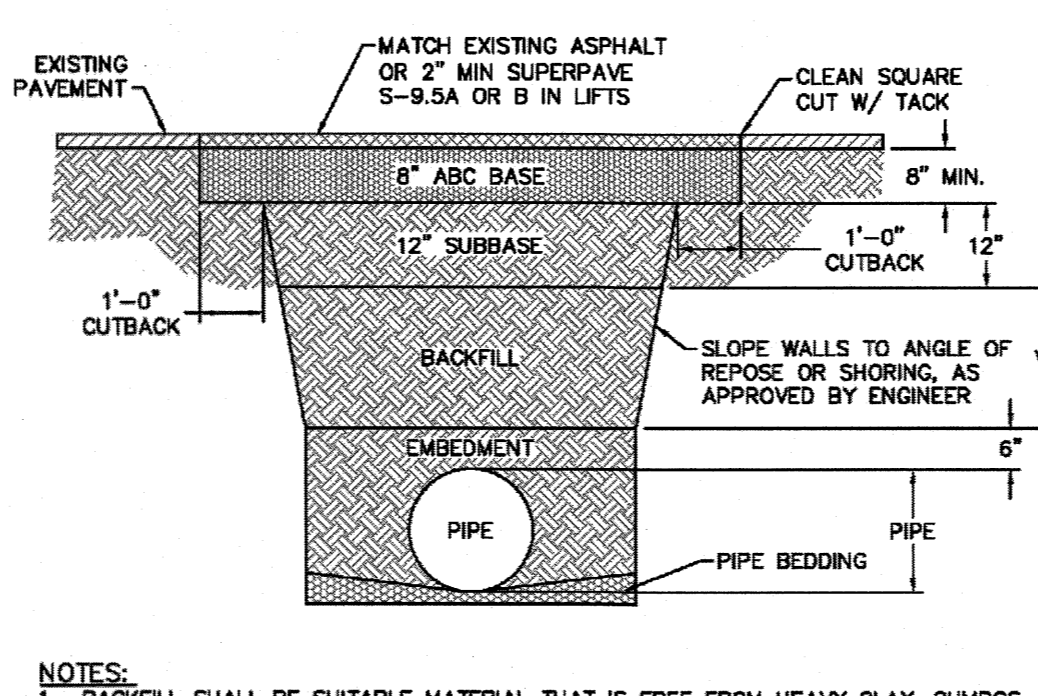
SD-10 STANDARD SERVICE LATERAL
NOT TO SCALE



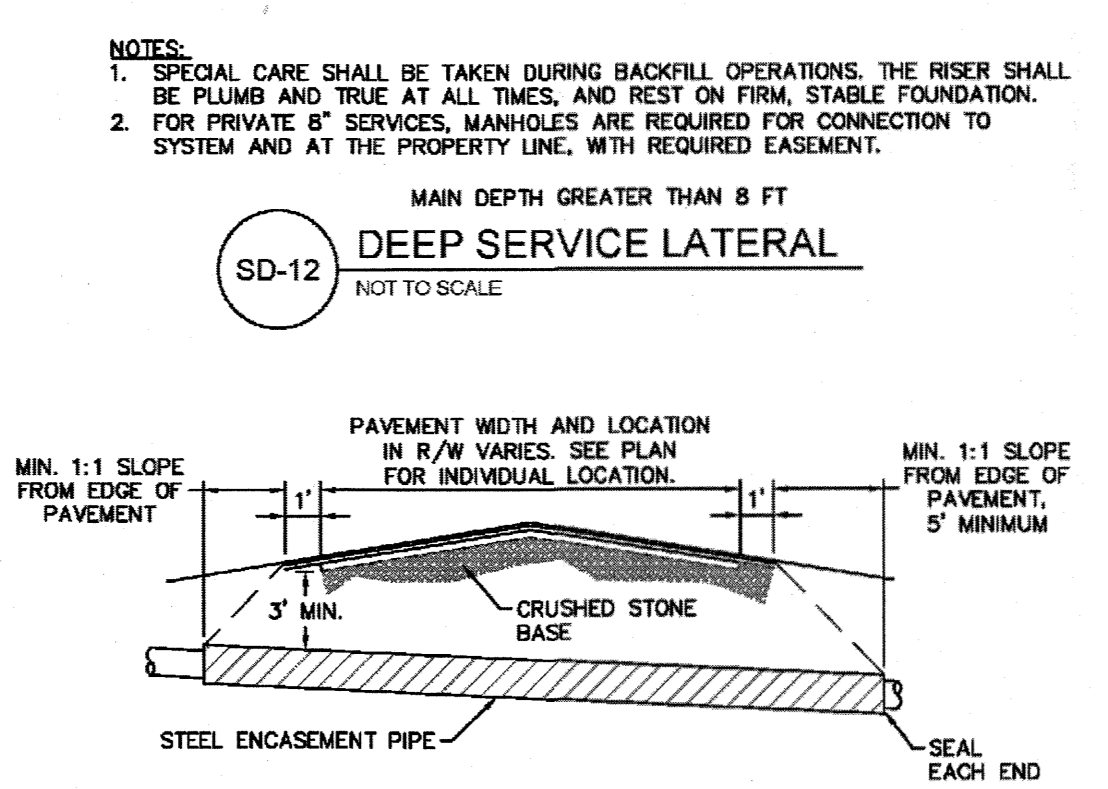
SD-11 SERVICE CONNECTION AND CLEAN-OUT
NOT TO SCALE



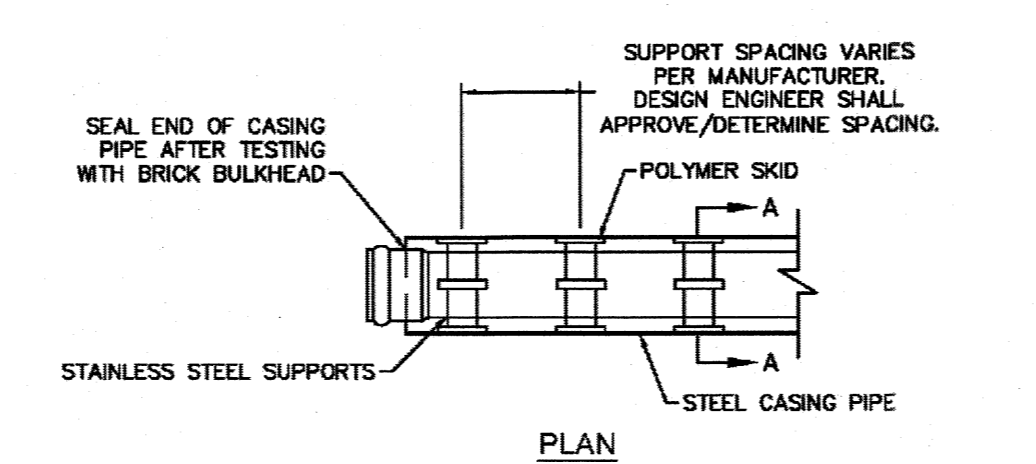
SD-13 SAMPLING CHAMBER
NOT TO SCALE



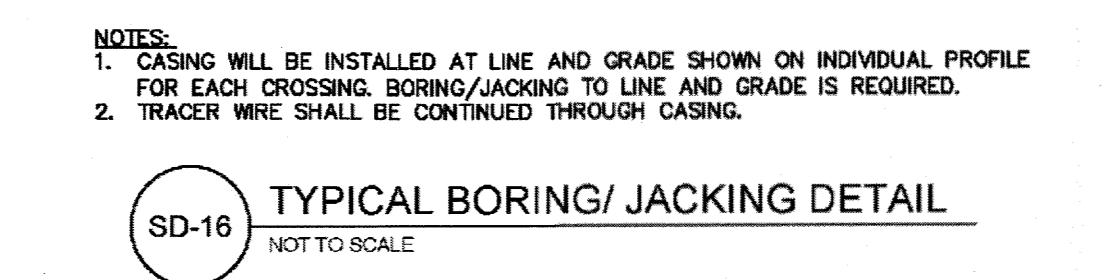
SD-15 TYPICAL TRENCH DETAIL
NOT TO SCALE



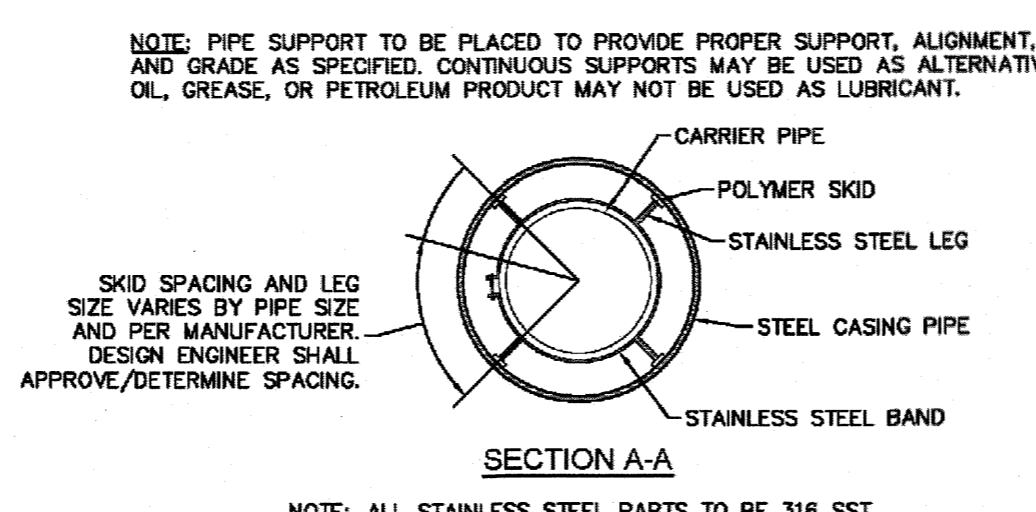
SD-12 DEEP SERVICE LATERAL
NOT TO SCALE



SD-14 PAVEMENT REPAIR WHERE PIPE INSTALLED
NOT TO SCALE



SD-16 TYPICAL BORING/JACKING DETAIL
NOT TO SCALE



SD-17 PIPE CASING SUPPORT DETAIL
NOT TO SCALE

- NOTES:**
- BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBOS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
 - SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION. (I.E. #57, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC).
 - 8-INCH OF ABC BASE MATERIAL SHALL BE USED ON CITY STREETS.
 - BACKFILL AND BASE MATERIALS SHALL BE COMPACTED 12" MINIMUM LIFTS.
 - SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
 - ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
 - ABC BASE AND SUBBASE COMPACTED TO 98% AND BACKFILL AND EMBEDMENT COMPACTED TO 90% AS DETERMINED BY THE MODIFIED PROCTOR AASHTO METHOD T-99.
 - 1-FOOT OUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM ASPHALT DENSITY IS 90%.

- GENERAL NOTES:**
- NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
 - THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
 - THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
 - THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
 - THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN AND STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

REV.	DESCRIPTION	DATE
1	SAMPLING CHAMBER REVISED	10/29/12
2	Revised Multiple Details	02/15/16

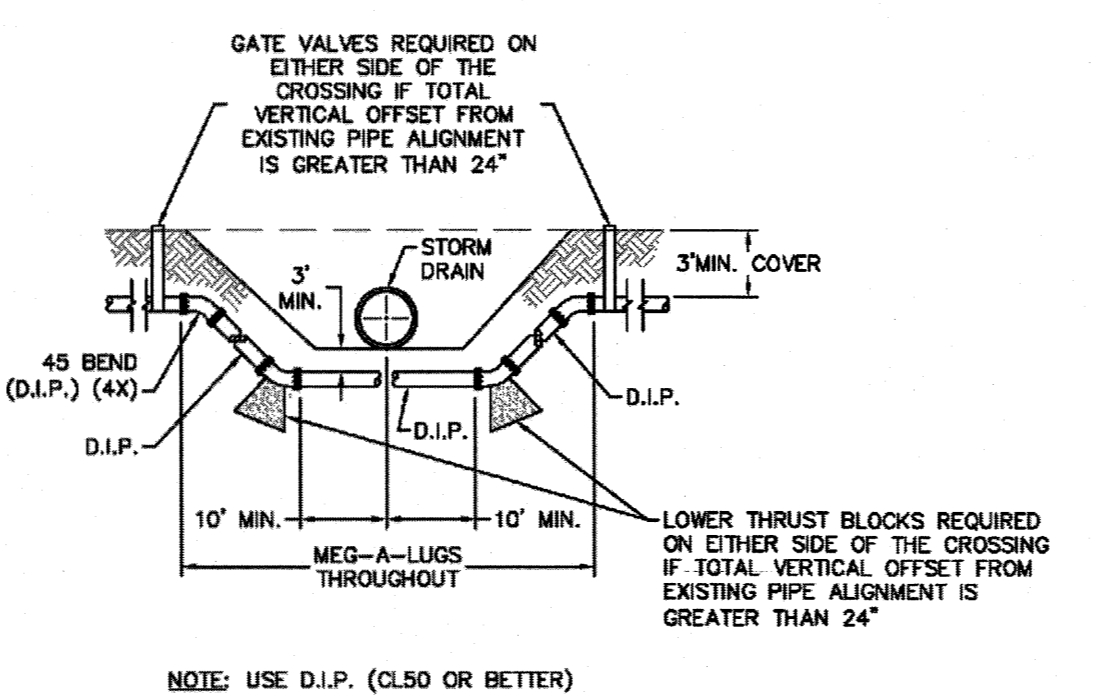
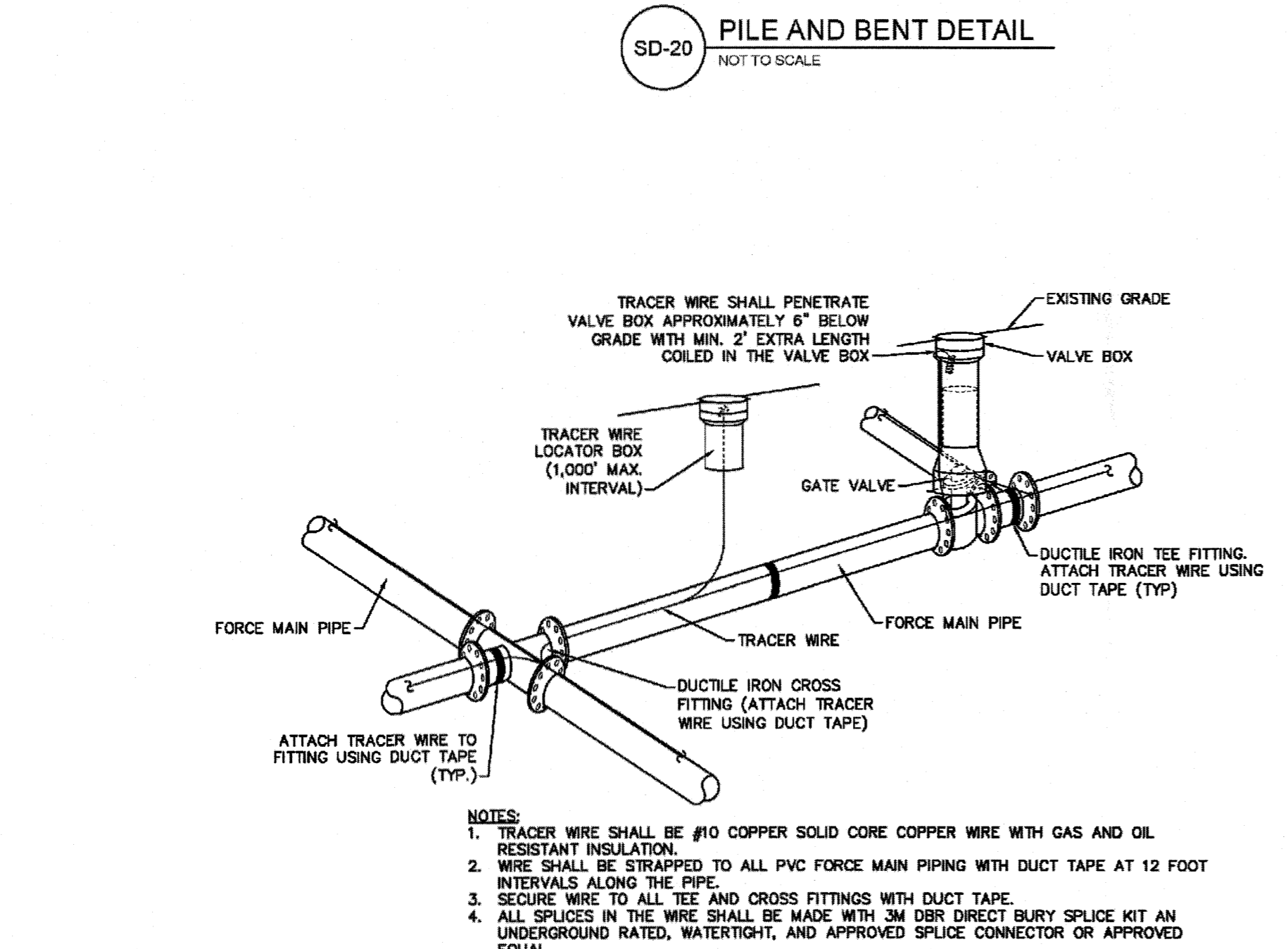
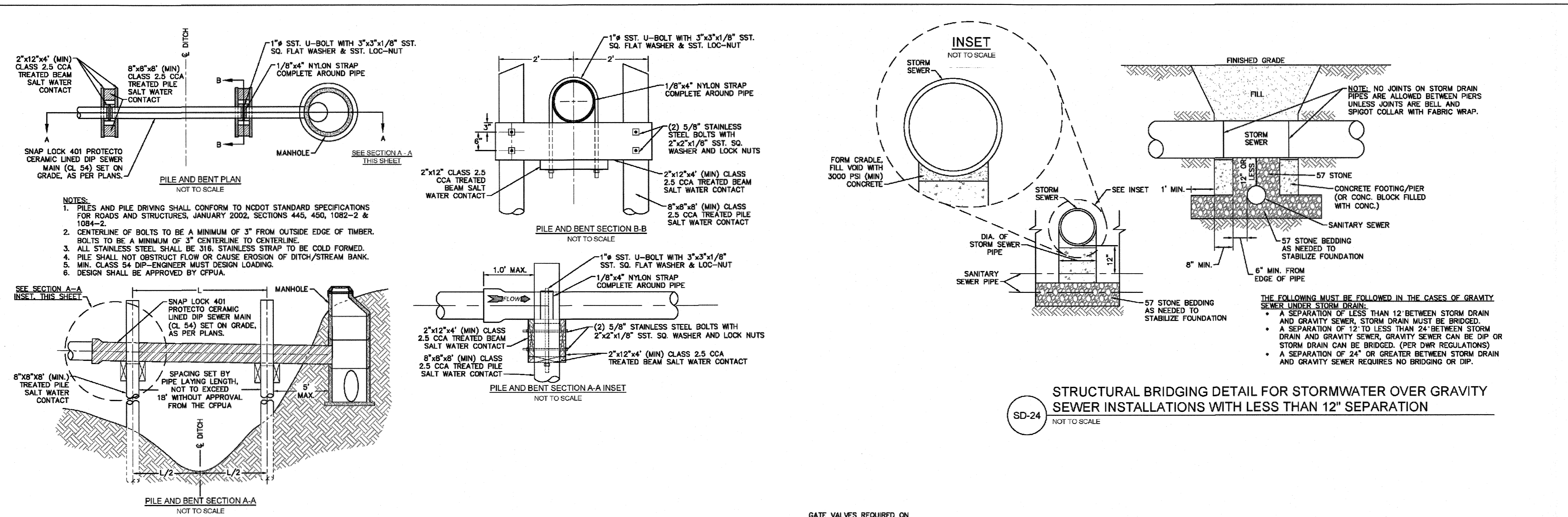
CFPUA SANITARY SEWER		DATE: 1/6/12
STANDARD DETAILS		SCALE: N/A
 CAPE FEAR PUBLIC UTILITY AUTHORITY 235 GOVERNMENT CENTER DRIVE WILMINGTON, NC 28403 OFFICE: (910)332-6560 <small>Partnership. Sustainability. Service.</small>		DRAWN BY: CFPLJA
 CITY OF WILMINGTON NORTH CAROLINA		CHECKED BY: CFPLJA
 811 Know what's below. Call before you dig.		PROJECT NO.:
 Approved Construction Plan Name: <i>cmc</i> Date: <i>1-4-2019</i>		SHEET NO.:
 SEAL 28852 JEREMY BLUM ENGINEER 08/08/18		SSD-2

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Date: *1/4/19* Permit # *2013015*
Signed: *[Signature]*

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS: 1) PER CITY AND OWNER COMMENTS 08/08/18	CLIENT INFORMATION: FDC Amberleigh Shores II SPE, LLC 900 Brookstone Centre Parkway Columbus, GA 31904
PARAMOUNT ENGINEERING 122 Cinema Drive Wilmington, North Carolina 28403 (910) 791-6707 (C) (910) 791-6760 (F) N.C. License #: C-2846	AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA
PROJECT STATUS: CONCEPTUAL LAYOUT: PRELIMINARY LAYOUT: FINAL DESIGN: RELEASED FOR CONSTRUCTION: DATE: 12/18/17 SCALE: AS NOTED DRAWN BY: CDF CHECKED BY: JRB	PEI JOB#: 16105.PE



THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

REV.	DESCRIPTION:	DATE:
1	ADDED NOTES TO THE STRUCTURAL BRIDGING DETAIL.	03/11/15
2	Revised Tracer Wire Detail	10/20/15
3	Revised Force Main Ditch and Storm Drain Crossing Detail	02/15/16

CFPUA SANITARY SEWER

STANDARD DETAILS

CAPE FEAR PUBLIC UTILITY AUTHORITY
255 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6556

DATE: 1/5/12
SCALE: N/A
DRAWN BY: CFPUA
CHECKED BY: CFPUA
PROJECT NO.:
SHEET NO: SSD-3

Approved Construction Plan

Name: CMC 14-2019 Date: _____

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: AK 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/1/19 Permit # 2018045
Signed: [Signature]

811
Know what's below.
Call before you dig.

PRELIMINARY DESIGN NOT RELEASED FOR CONSTRUCTION
FINAL DESIGN NOT RELEASED FOR CONSTRUCTION

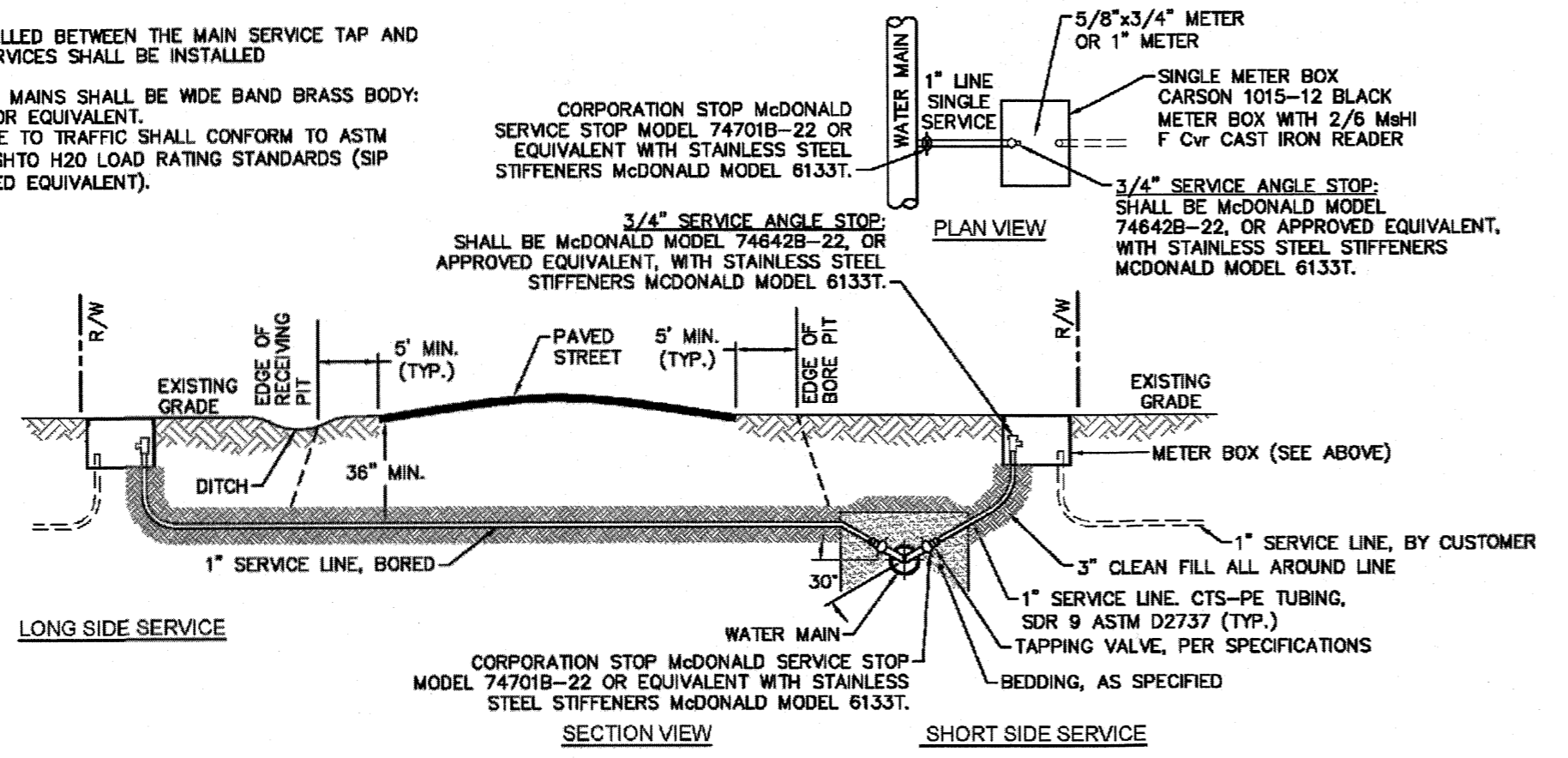
PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6700 (F)
NC License #: C-2846

AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA

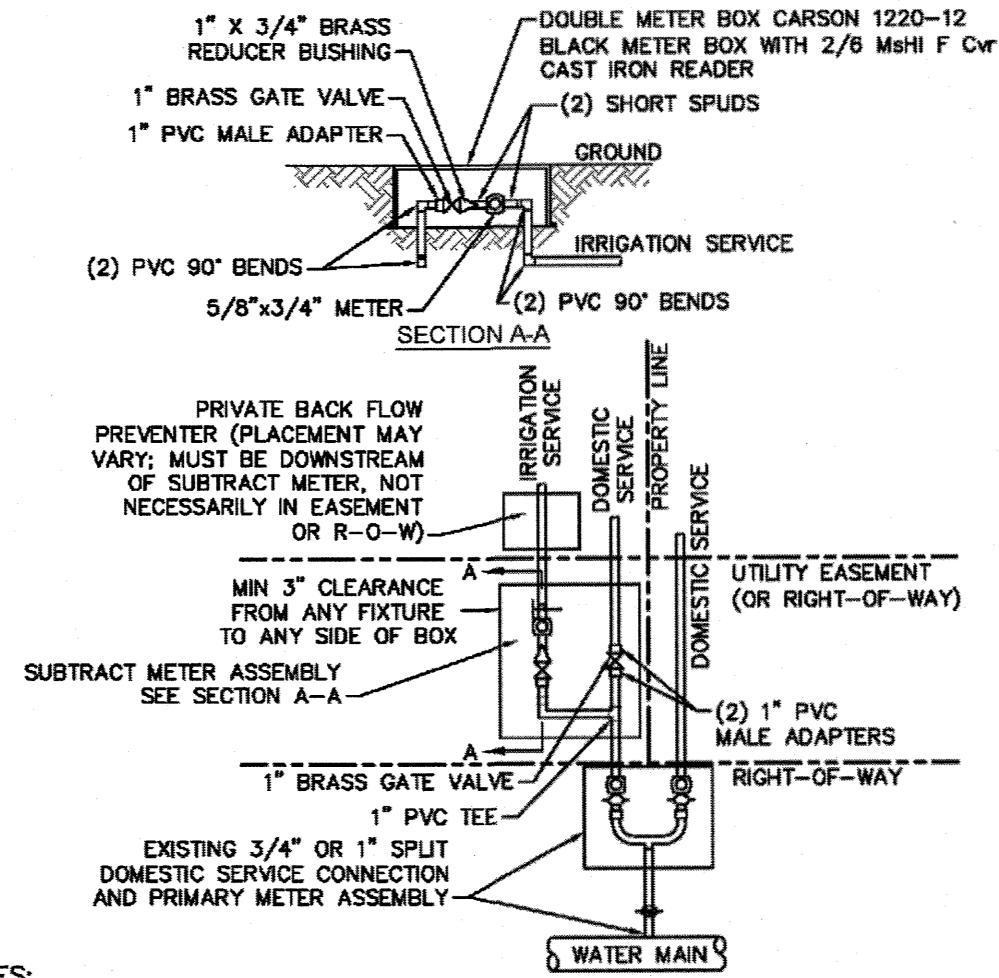
C-7.7

PEI JOB#: 16105.PE

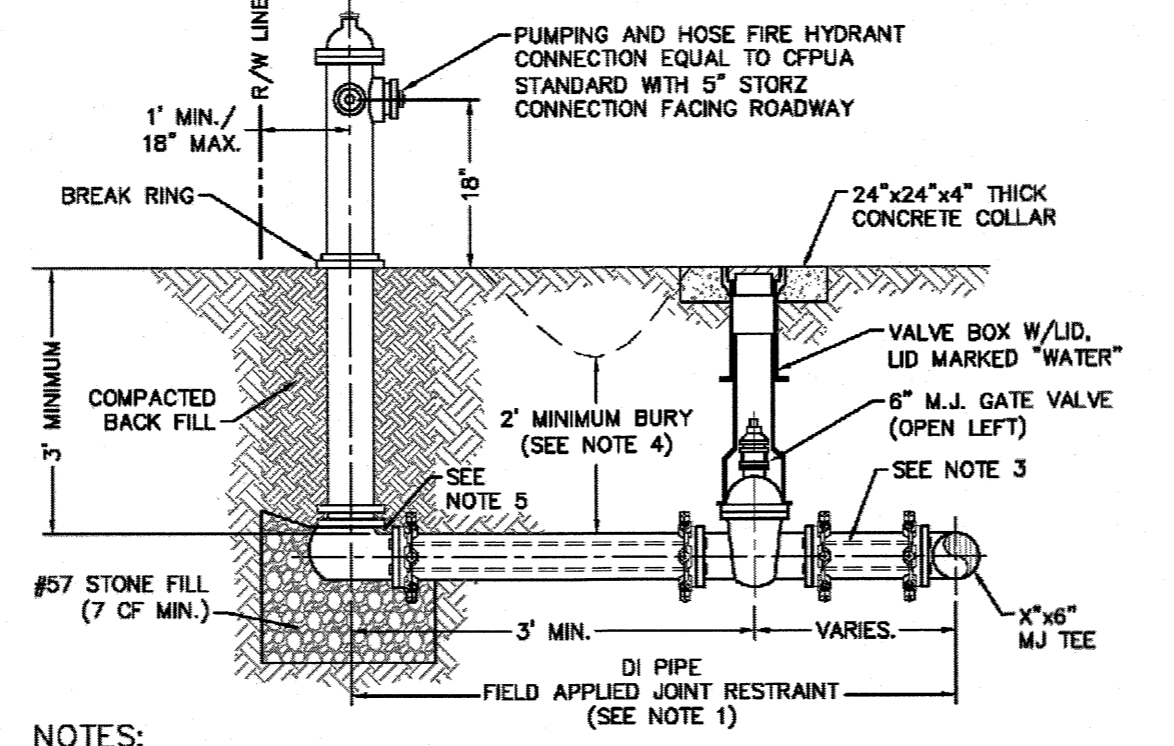
- NOTES:**
- NO JOINT SHALL BE INSTALLED BETWEEN THE MAIN SERVICE TAP AND THE METER STOP. ALL SERVICES SHALL BE INSTALLED PERPENDICULAR TO MAIN.
 - SERVICE SADDLES ON PVC MAINS SHALL BE WIDE BAND BRASS BODY: SADDLE McDONALD 3801 OR EQUIVALENT.
 - METER BOXES SUSCEPTIBLE TO TRAFFIC SHALL CONFORM TO ASTM A48, CLASS 30B AND AASHTO H20 LOAD RATING STANDARDS (SIP MODEL 4242, OR APPROVED EQUIVALENT).



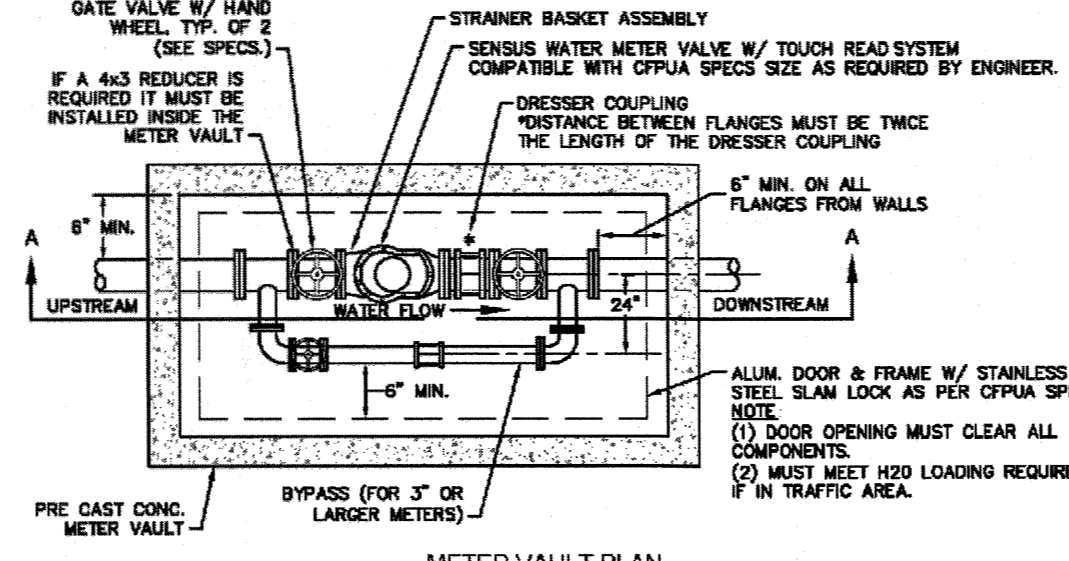
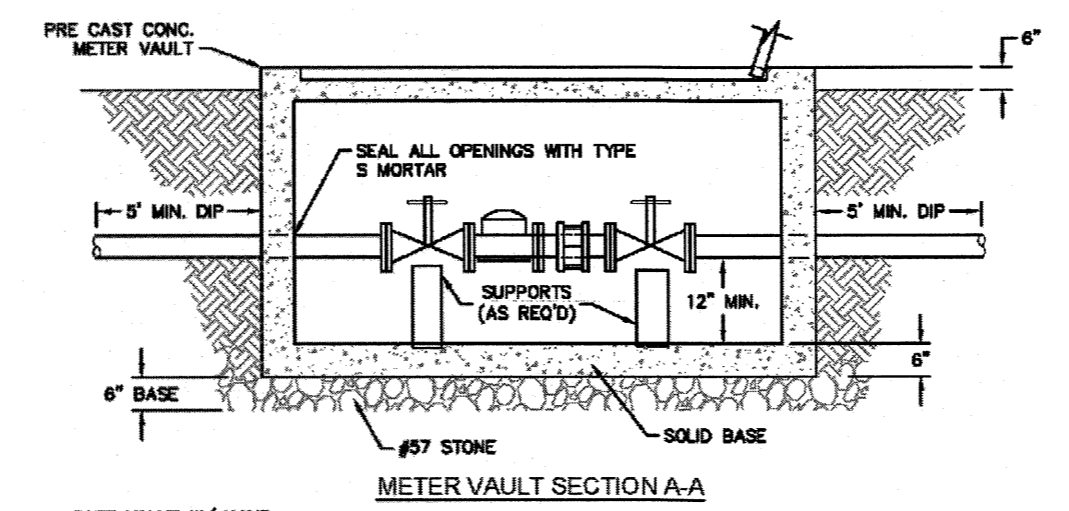
WD-18 SINGLE SERVICE CONNECTION
NOT TO SCALE



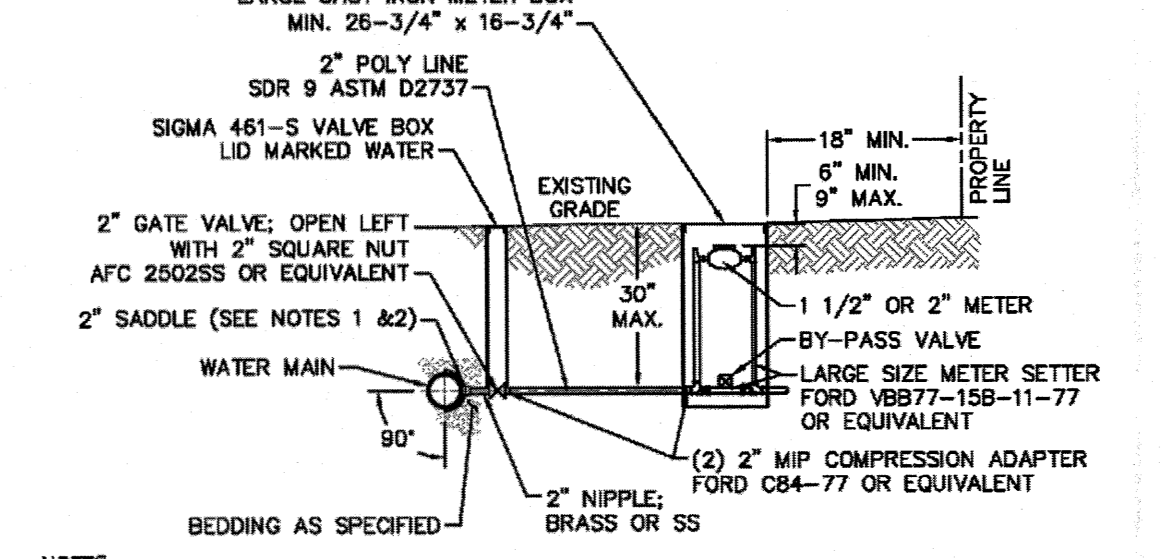
WD-8 DOUBLE SERVICE CONNECTION USING SUBTRACT METER
NOT TO SCALE



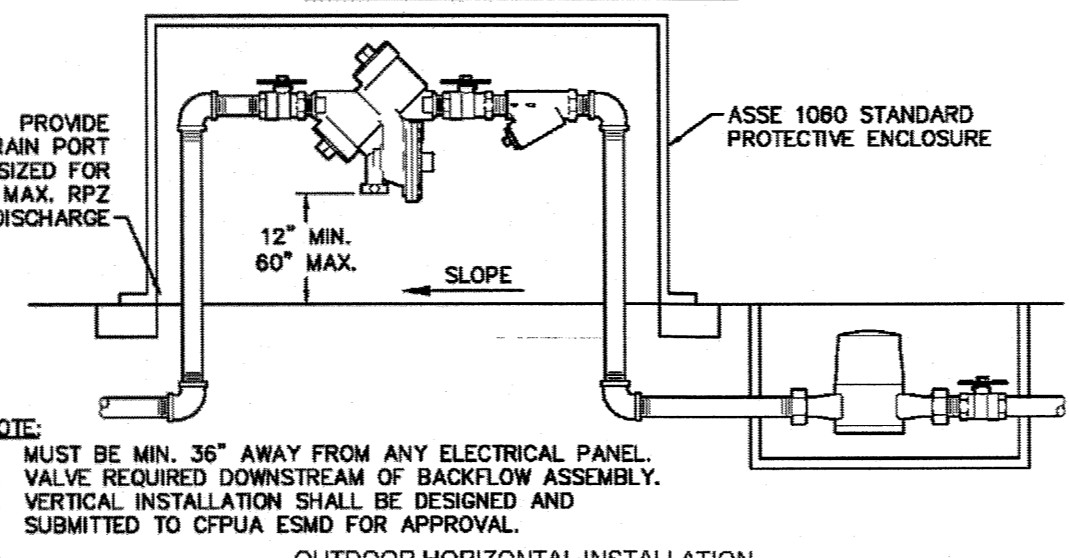
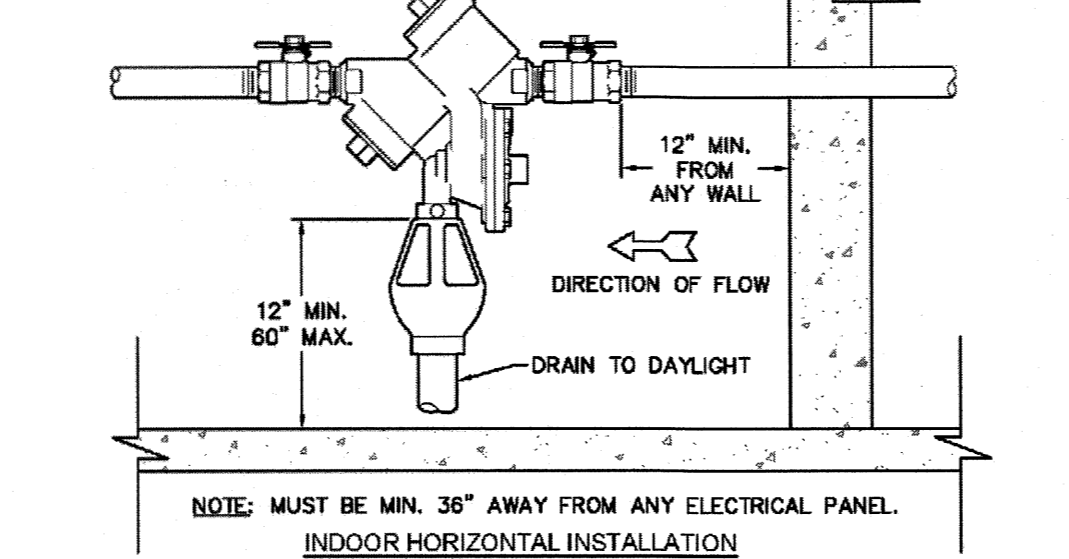
WD-10 FIRE HYDRANT ASSEMBLY
NOT TO SCALE



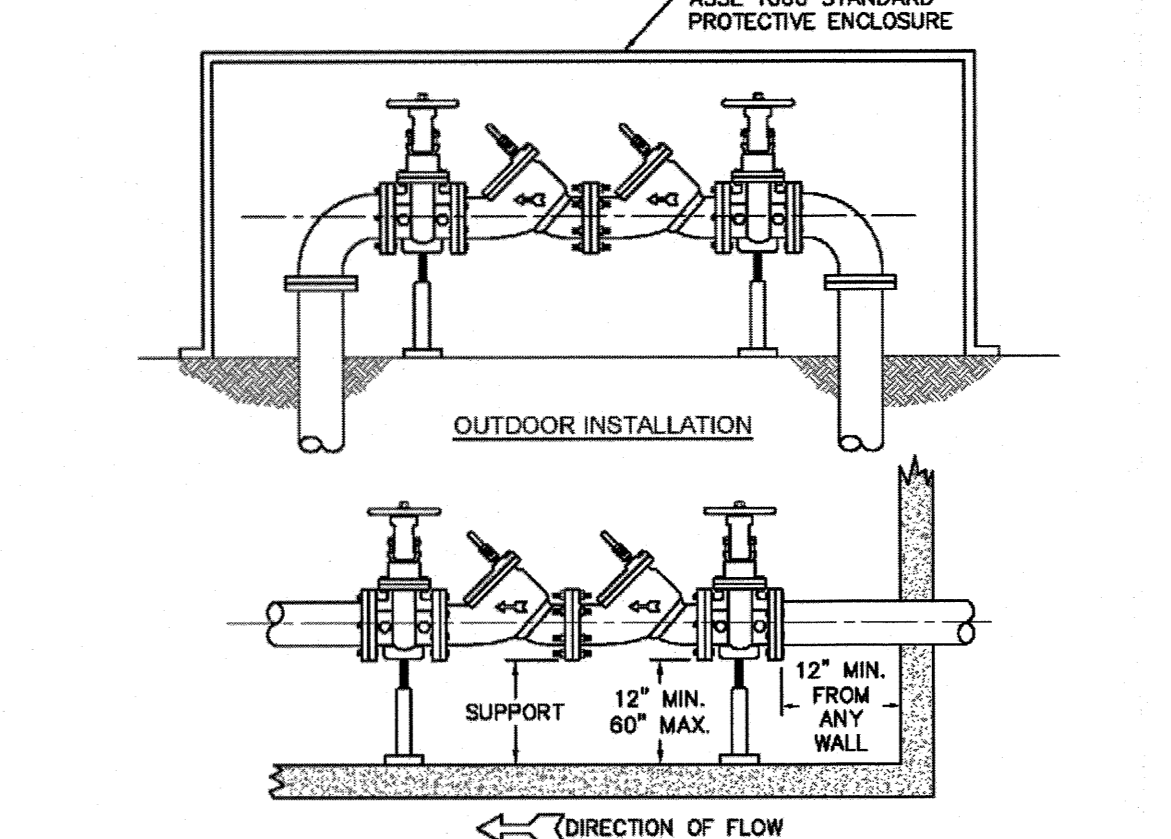
WD-1 WATER METER VAULT
NOT TO SCALE



WD-11 LARGE METER
NOT TO SCALE



WD-12 REDUCED PRESSURE PRINCIPLE ASSEMBLY
NOT TO SCALE



WD-7 DOUBLE CHECK VALVE ASSEMBLY
NOT TO SCALE

- CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:**
- SEWER GUARDS REQUIRED AT ALL MANHOLES. STAINLESS STEEL SEWER GUARDS REQUIRED AT MANHOLES LOCATED IN TRAFFIC AREAS.
 - WATER AND SEWER SERVICES SHALL BE PERPENDICULAR TO MAIN AND TERMINATE AT RIGHT-OF-WAY LINE. SEWER SERVICES IN CUL-DE-SACS ARE REQUIRED TO BE PERPENDICULAR, OR MUST ORIGINATE IN END OF LINE MANHOLE AND TERMINATE AT RIGHT-OF-WAY LINE.
 - ALL SERVICES TYING INTO DUCTILE IRON MAINS SHALL BE CONSTRUCTED OF CLASS 50, DIP, WITH PROTECTO 40 CERAMIC EPOXY LINING.
 - MINIMUM 10' UTILITIES EASEMENT PROVIDED ALONG THE FRONTAGE OF ALL LOTS AND AS SHOWN FOR NEW DEVELOPMENTS.
 - NO FLEXIBLE COUPLINGS SHALL BE USED.
 - ALL STAINLESS STEEL FASTENERS SHALL BE 316.
 - CLEANOUTS SHALL BE LOCATED A MINIMUM OF 12 FEET FROM ALL PROPERTY CORNERS. WATER METER BOXES ARE TO BE A MINIMUM OF 5 FEET FROM THE PROPERTY CORNER.

WD-19 STANDARD NOTES
(REQUIRED ON ALL PLAN AND PROFILE SHEETS)

GENERAL NOTES:

- NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
- THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
- THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
- THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN AND STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

REV.	DESCRIPTION	DATE
1	Single Service Connection, Double Service Connection, and Large Meter	10/29/12
2	Single Service Connection and Fire Hydrant Details	7/23/13
3	Fire Hydrant Detail	5/12/14
4	Revised Fire Hydrant Assembly To Show 5" STORZ Connection	5/4/15
5	Revised Fire Hydrant Assembly To Show Full DiP Hydrant Leg	01/19/16
6	Revised Water Meter Vault and Large Meter Details, Added Standard Notes	02/15/19

CFPUA WATER DISTRIBUTION SYSTEM

DATE: 1/6/12
SCALE: N/A
DRAWN BY: CFPJA
CHECKED BY: CFPJA
PROJECT NO.:
SHEET NO.: WSD-1

STANDARD DETAILS

CAPE FEAR PUBLIC UTILITY AUTHORITY
235 GOVERNMENT CENTER DRIVE
WILMINGTON, NC 28403
OFFICE: (910)332-6560

Approved Construction Plan

Name: mc 1-4-2019 Date: _____

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: Chad Chiles 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 1/4/19 Permit # 2018075

Signed: [Signature]

811
Know what's below. Call before you dig.

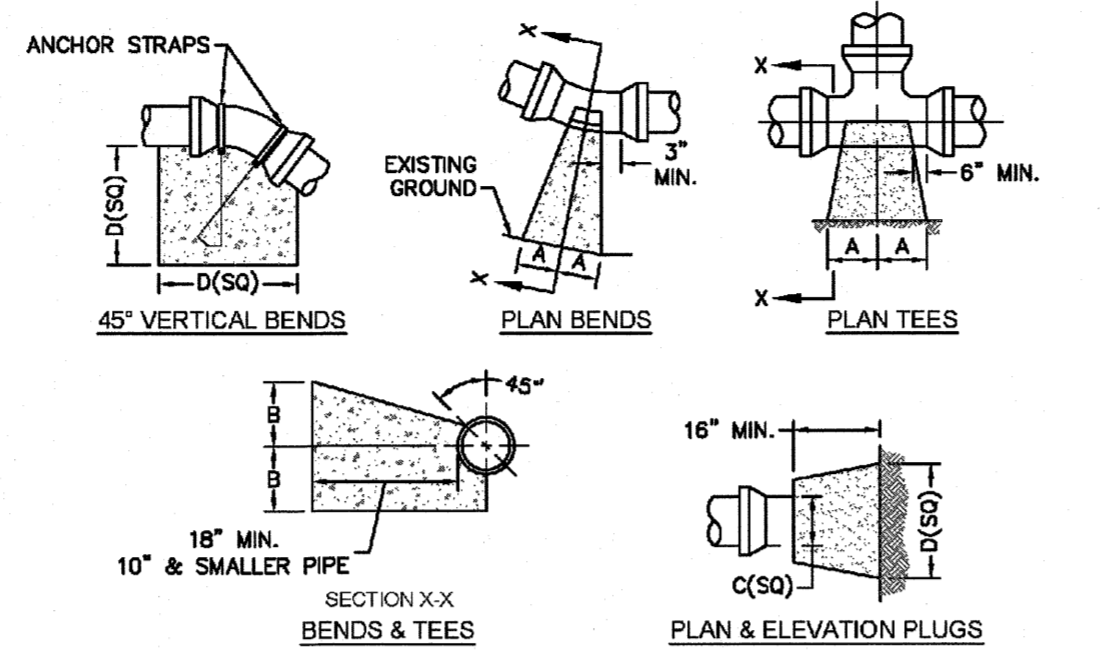
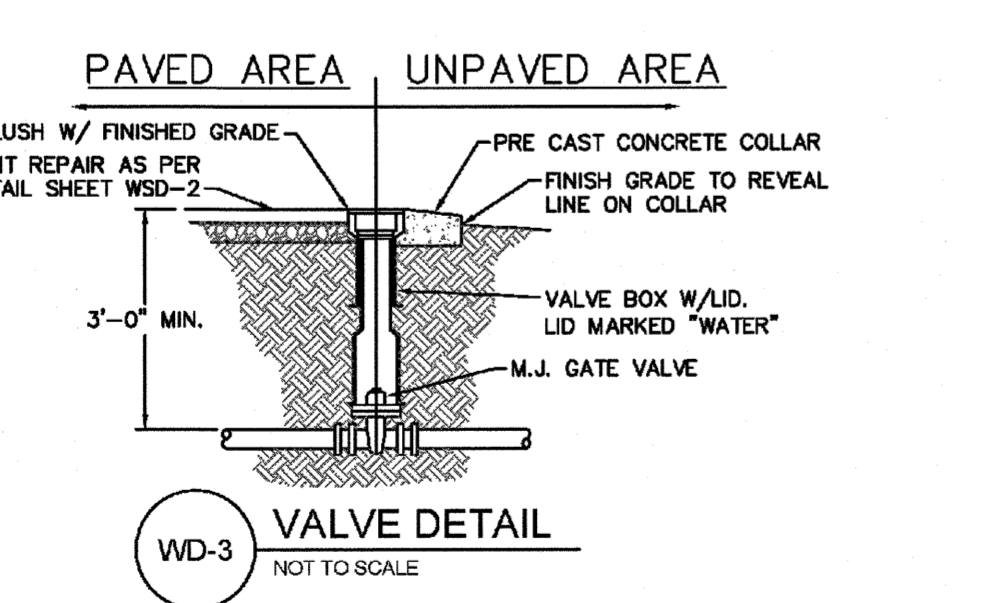
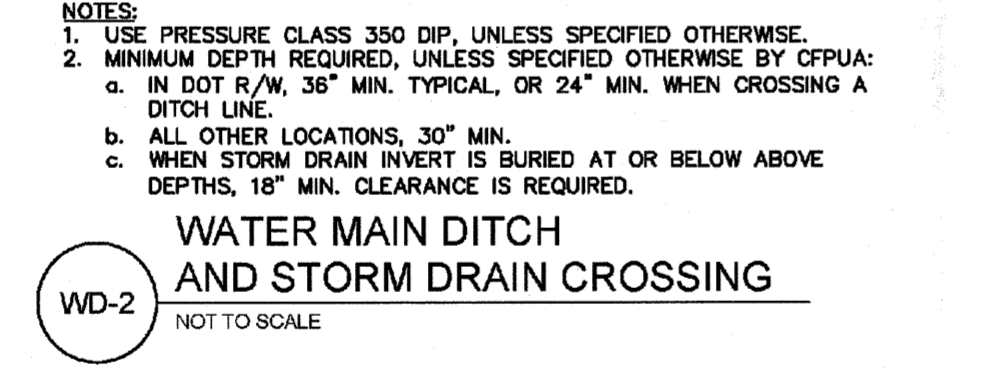
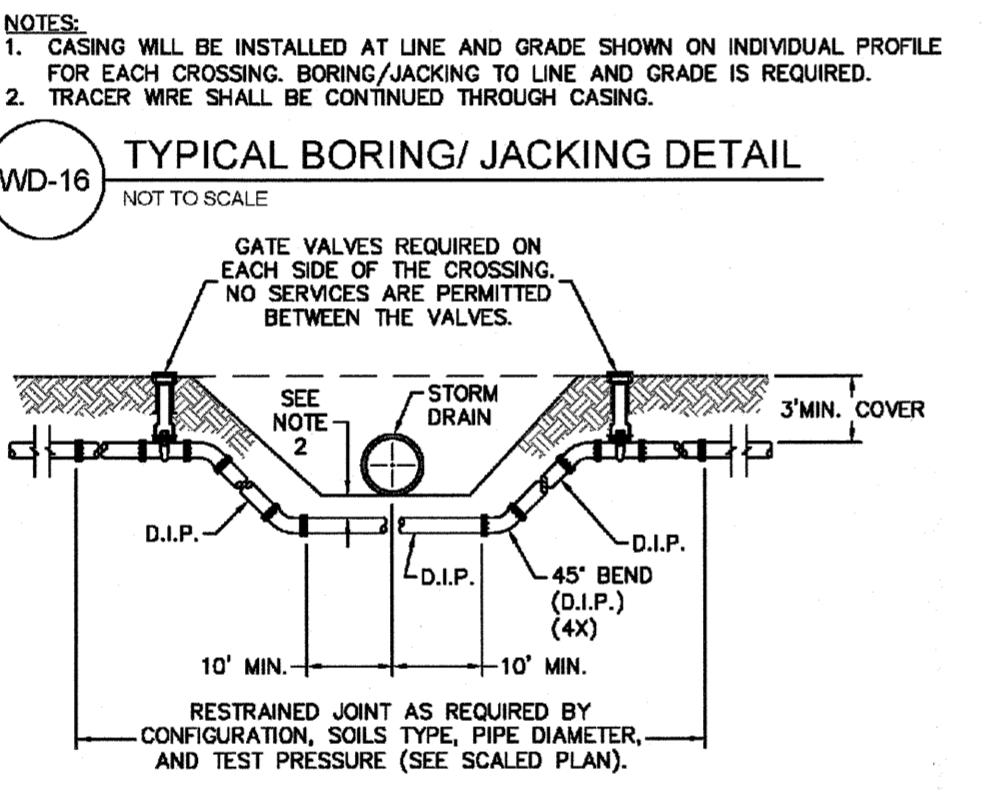
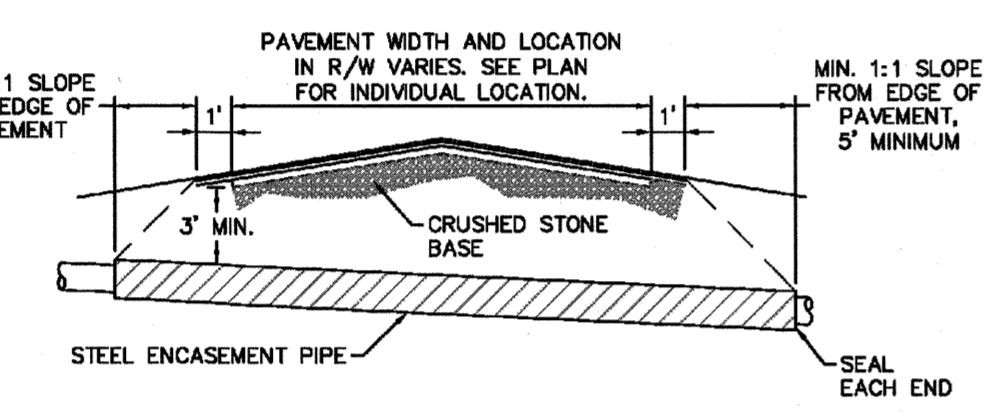
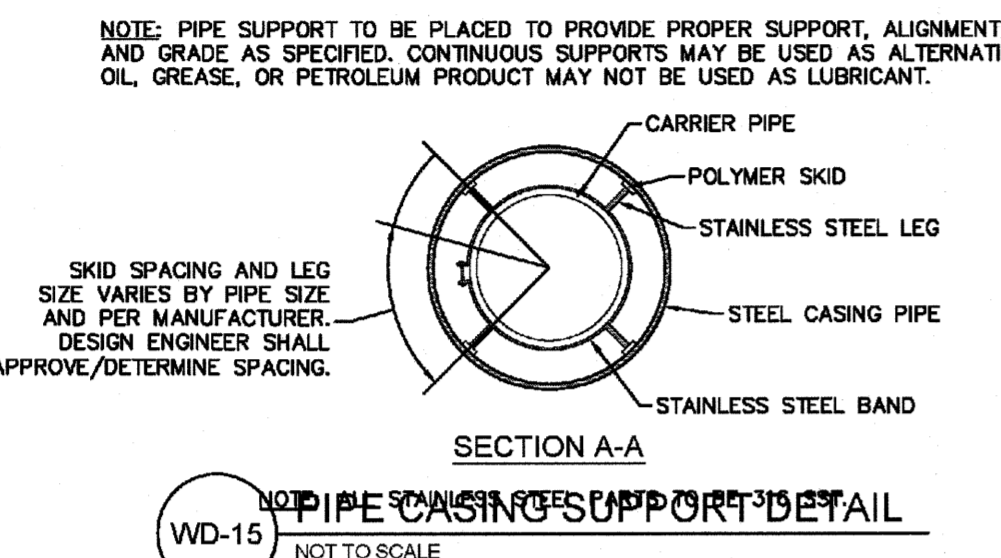
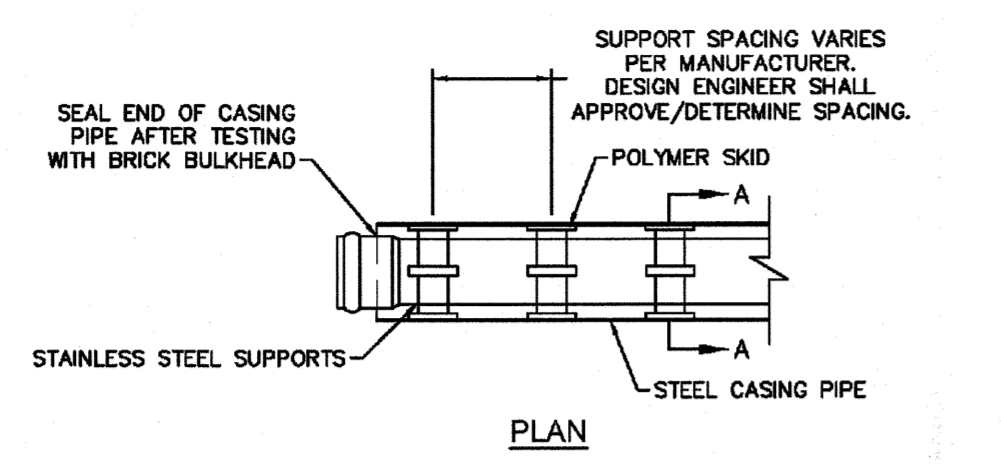
FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA

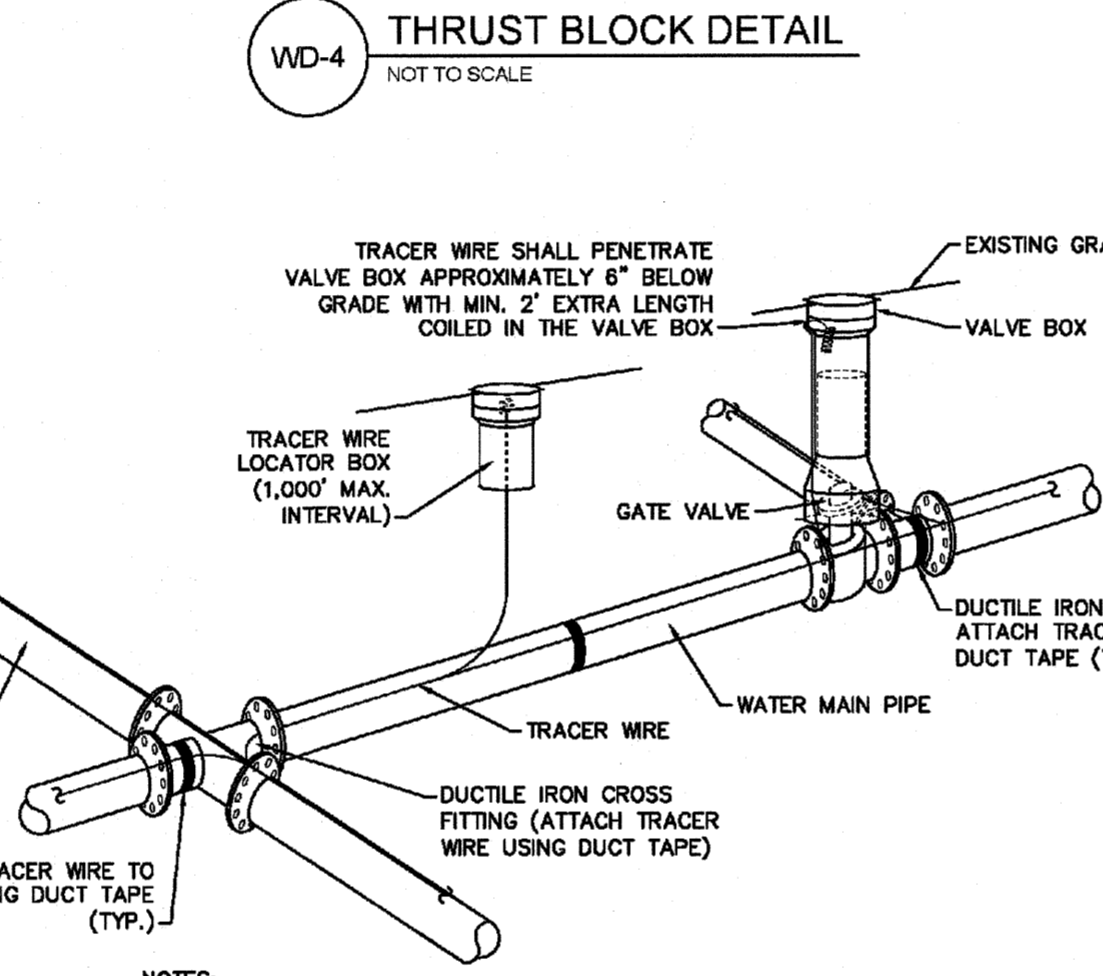
C-7.8

PEI JOB#: 18105.PE

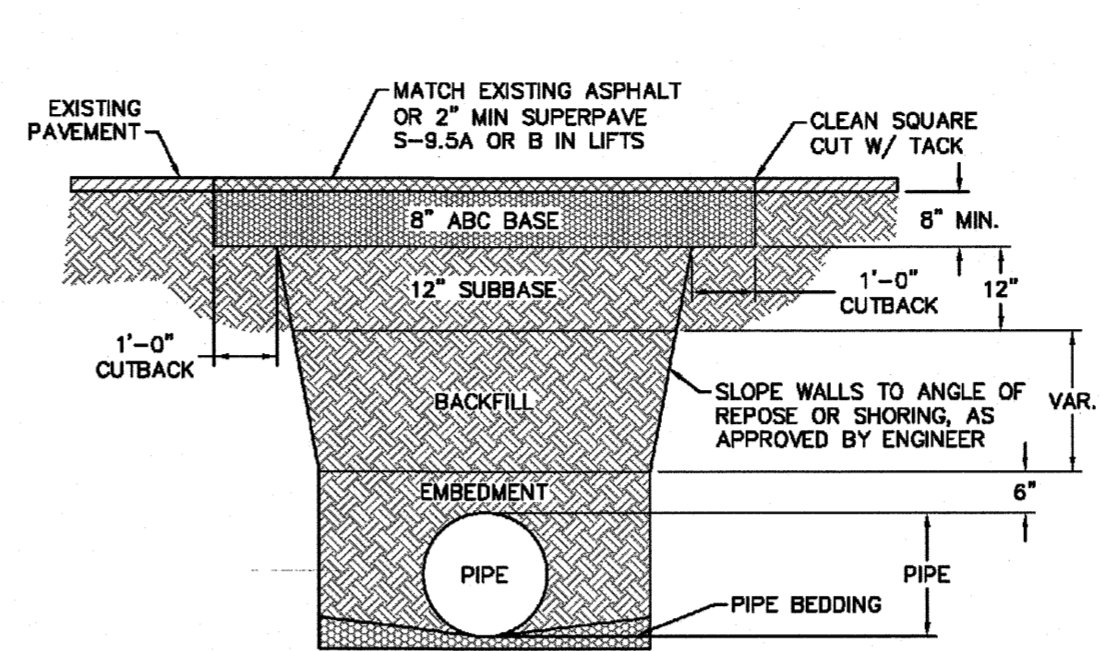
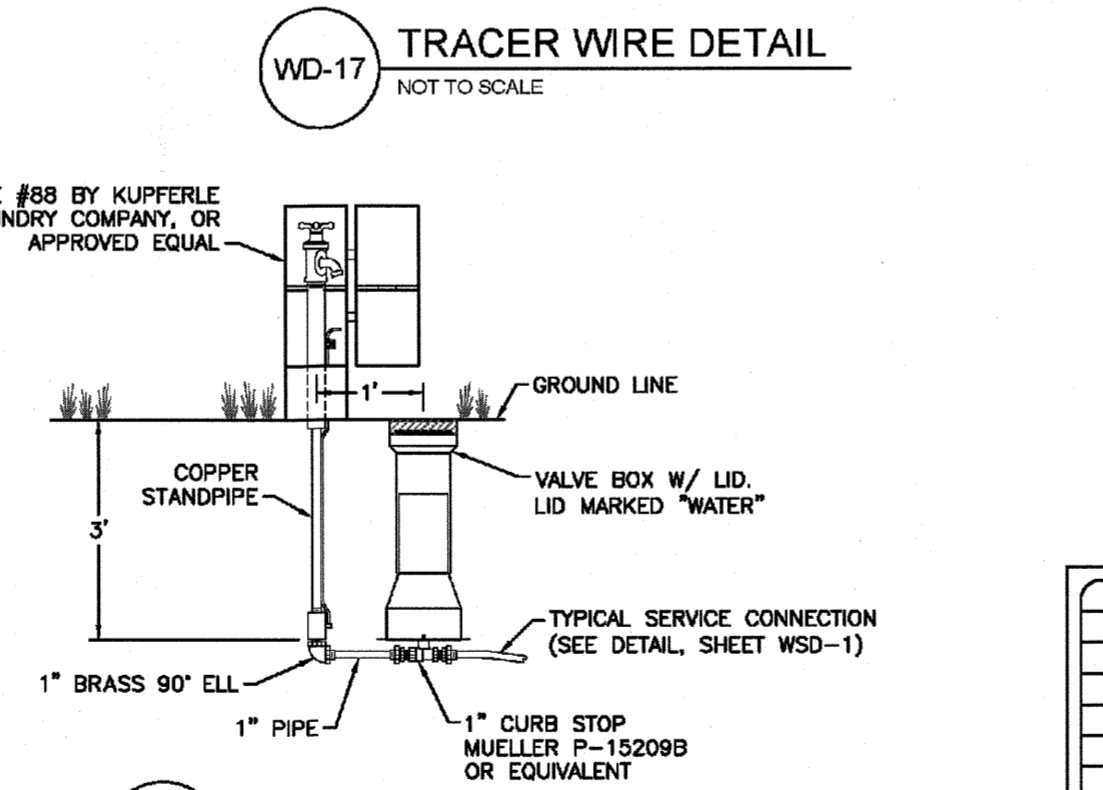


SIZE	90 BENDS		45 BENDS		22-1/2 BENDS		TEES/PLUGS		45 VERT. BENDS
	A	B	A	B	A	B	A	B	
3"	8"	8"	5"	8"	3"	7"	6"	8"	27"
4"	8"	9"	5"	8"	3"	11"	6"	9"	28"
6"	14"	11"	9"	9"	8"	8"	12"	9"	36"
8"	16"	16"	12"	12"	10"	13"	14"	13"	42"
10"	18"	22"	15"	14"	14"	18"	18"	15"	50"
12"	20"	28"	18"	17"	16"	16"	22"	18"	62"
14"	26"	29"	21"	19"	18"	18"	26"	20"	72"
16"	33"	29"	25"	21"	20"	21"	32"	21"	83"
18"	40"	30"	28"	24"	22"	23"	36"	24"	88"

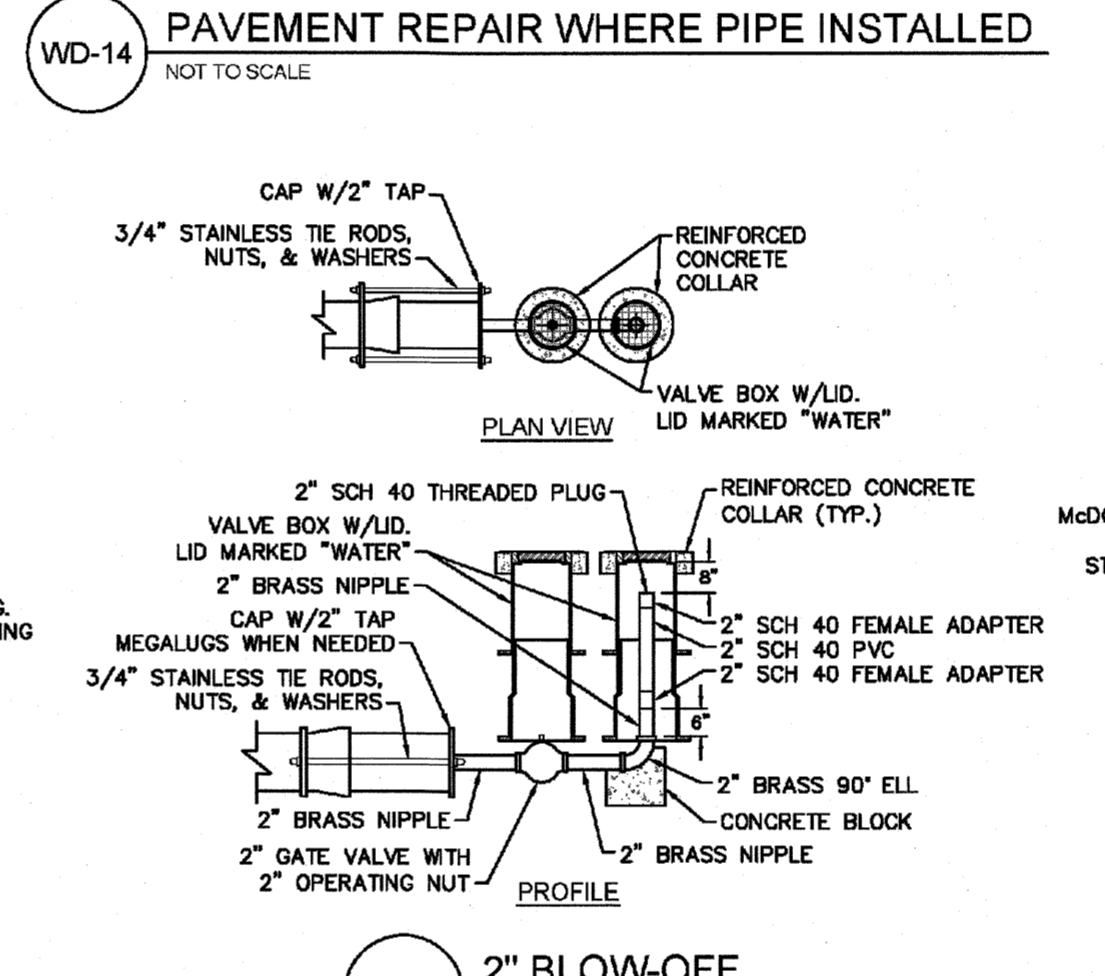
NOTES:
 1. BASED ON 160 PSI TEST PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
 2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
 3. USE MEG-A-LUG (PREFERRED) IN LIEU OF BLOCKING AND RODDING.



NOTES:
 1. TRACER WIRE SHALL BE #10 COPPER SOLID CORE COPPER WIRE WITH GAS AND OIL RESISTANT INSULATION.
 2. WIRE SHALL BE STRAPPED TO ALL PVC WATER MAIN PIPING WITH DUCT TAPE AT 12 FOOT INTERVALS ALONG THE PIPE.
 3. SECURE WIRE TO ALL TEE AND CROSS FITTINGS WITH DUCT TAPE.
 4. ALL SPLICES IN THE WIRE SHALL BE MADE WITH 3M DBR DIRECT BURY SPLICE KIT AN UNDERGROUND RATED, WATERTIGHT, AND APPROVED SPLICE CONNECTOR OR APPROVED EQUAL.



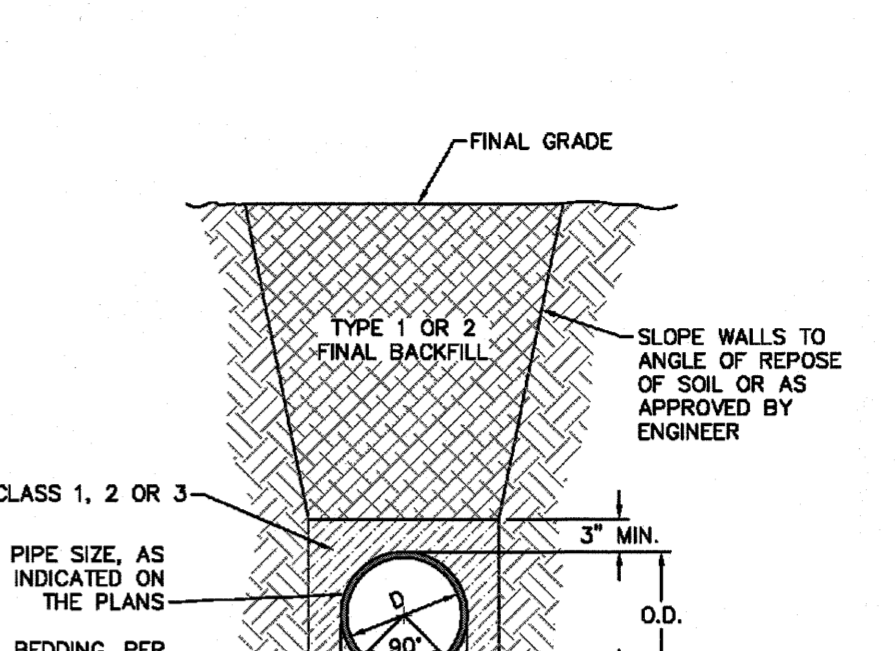
NOTES:
 1. BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
 2. SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION, (I.E. #57, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC).
 3. 8-INCH OF ABC BASE MATERIAL SHALL BE USED ON CITY STREETS.
 4. BACKFILL AND BASE MATERIALS SHALL BE COMPACTED 12" MINIMUM LIFTS.
 5. SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
 6. ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
 7. ABC BASE AND SUBBASE COMPACTED TO 98% AND BACKFILL AND EMBEDMENT COMPACTED TO 90% AS DETERMINED BY THE MODIFIED PROCTOR AASHTO METHOD T-99.
 8. 1-FOOT OUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM ASPHALT DENSITY IS 90%.



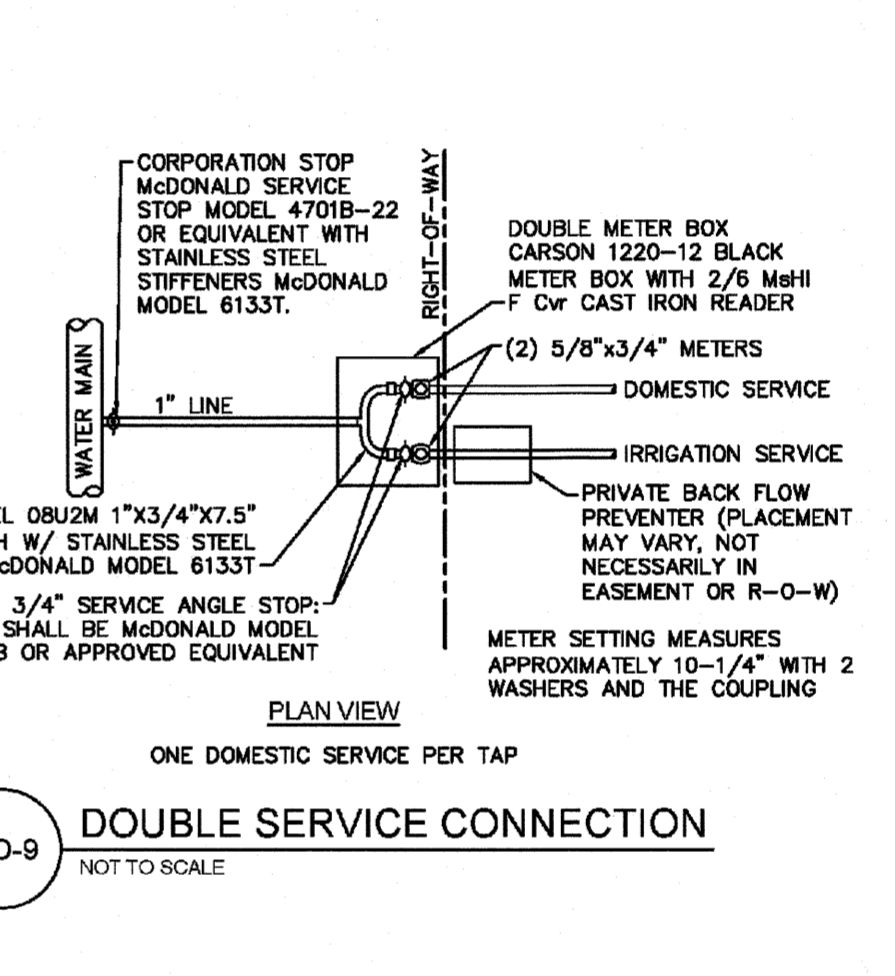
GENERAL NOTES:
 1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
 2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
 3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
 4. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
 5. THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN AND STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

REV.	DESCRIPTION:	DATE:
1	Revised Water Main Ditch and Storm Crossing Detail	11/12/13
2	Revised Water Main Ditch and Storm Crossing Detail	02/05/14
3	Revised Tracer Wire Detail	10/22/15
4	Added Backflow Preventer to Double Service Connection Detail	02/07/16
5	Revised Sampling Station Detail	02/15/16



NOTES:
 1. BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBS, DEBRIS, ORGANICS AND LITTLE TO NO EXCESSIVE MOISTURE.
 2. SELECT BACKFILL MAY BE SUBSTITUTED OR REQUIRED BY CITY TO ACHIEVE COMPACTION, (I.E. #57, ABC, CRUSHED LIMESTONE, CLEAN SAND, FLOWABLE FILL, ETC).
 3. 8-INCH OF ABC BASE MATERIAL SHALL BE USED ON CITY STREETS.
 4. BACKFILL AND BASE MATERIALS SHALL BE COMPACTED 12" MINIMUM LIFTS.
 5. SOIL SHALL BE COMPACTED BY A MECHANIZED TAMPER (I.E. JUMPING JACK), HOWEVER, VIBRATORY ROLLERS > 18" WIDTH MAY BE USED FOR LARGER EXCAVATIONS. THE PLATE TAMP METHOD SHALL NOT BE USED.
 6. ALL APPROVED CASTINGS SHALL BE SET FLUSH TO GRADE AND SUPPORTED IF APPLICABLE.
 7. ABC BASE AND SUBBASE COMPACTED TO 98% AND BACKFILL AND EMBEDMENT COMPACTED TO 90% AS DETERMINED BY THE MODIFIED PROCTOR AASHTO METHOD T-99.
 8. 1-FOOT OUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM ASPHALT DENSITY IS 90%.



GENERAL NOTES:
 1. NO EXCAVATED MATERIAL SHALL BE PLACED IN ANY STREAM, DITCH OR DRAINAGE-WAY.
 2. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES BEFORE ANY CONSTRUCTION BEGINS.
 3. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES WHILE CONSTRUCTION IS IN PROGRESS.
 4. THE CONTRACTOR IS RESPONSIBLE FOR STABILIZATION OF ALL DISTURBED AREAS.
 5. THE CONTRACTOR IS RESPONSIBLE FOR LAY DOWN AND STOCKPILE AREAS (TO ARRANGE AND ENSURE COMPLIANCE WITH ALL LOCAL AND STATE REGULATIONS).

THE DETAILS SHOWN HEREON SUPERCEDE CFPUA WRITTEN TECHNICAL SPECIFICATIONS VERSIONS 1.00 - 1.04

CFPUA WATER DISTRIBUTION SYSTEM

STANDARD DETAILS

CAPE FEAR PUBLIC UTILITY AUTHORITY
 235 GOVERNMENT CENTER DRIVE
 WILMINGTON, NC 28403
 OFFICE: (910)332-6560

DATE: 1/3/12
 SCALE: N/A
 DRAWN BY: CFPUA
 CHECKED BY: CFPUA
 PROJECT NO.:
 SHEET NO.: WSD-2

Approved Construction Plan

Name: umc Date: 1-4-2019

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Planning: umc
 Traffic: AK
 Fire: al ch

WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 1/1/19 Permit # 2018045
 Signed: [Signature]

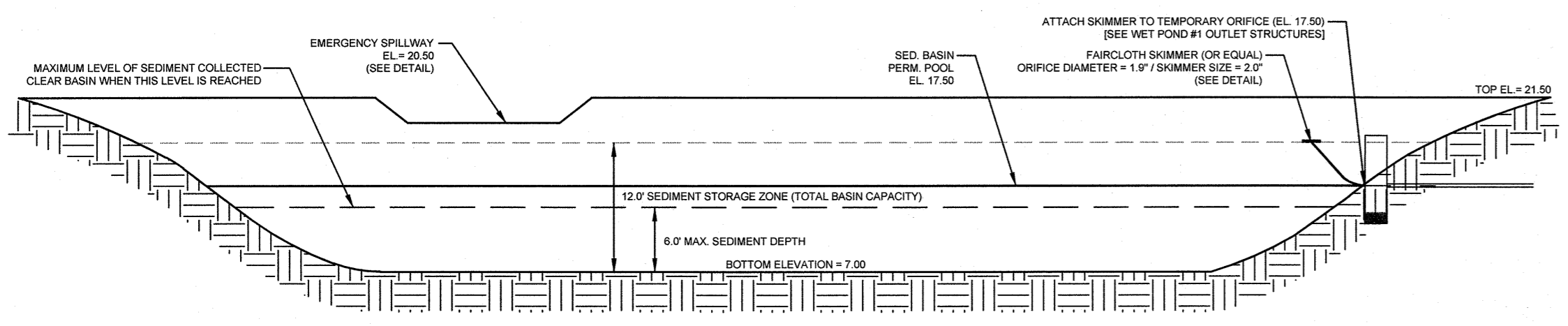
811
 Know what's below.
 Call before you dig.

PARAMOUNT ENGINEERING
 122 Cinema Drive
 Wilmington, North Carolina 28403
 (910) 791-6707 (O) (910) 791-6760 (F)
 NC License #: C-2846

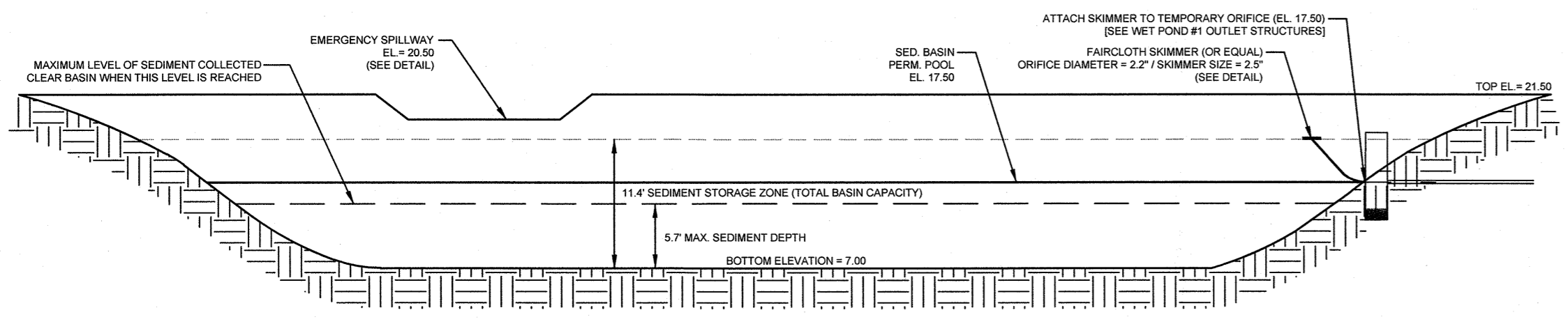
AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA

C-7.9

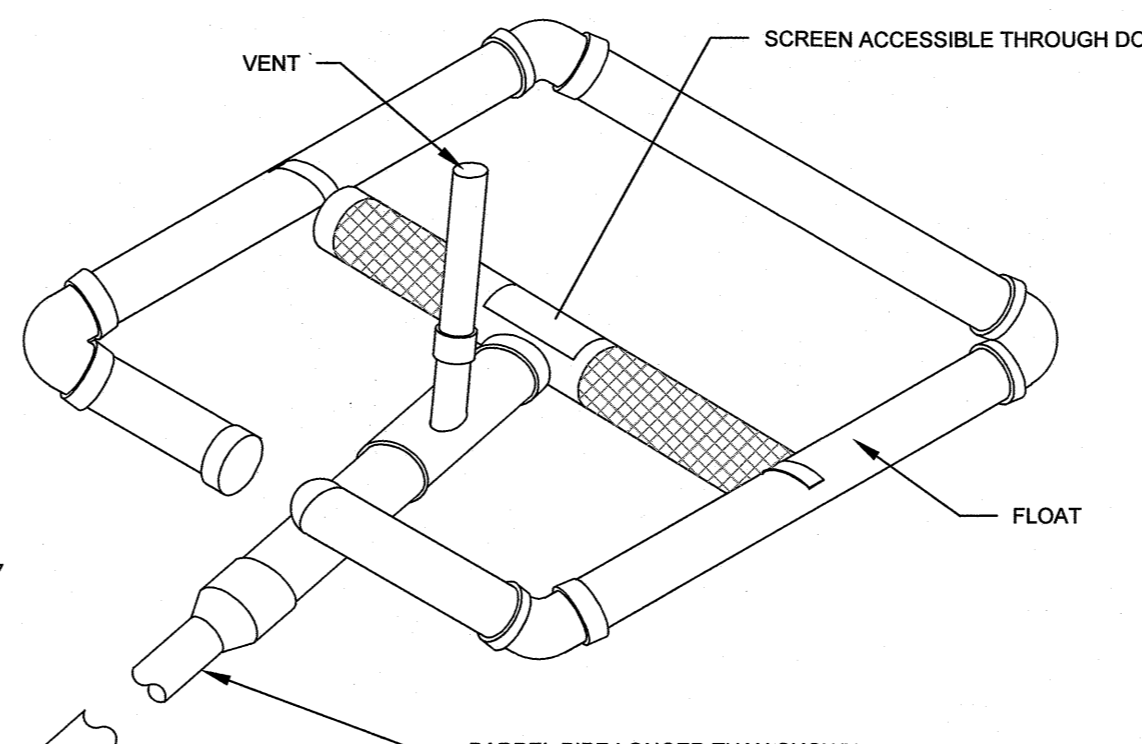
PEI JOB#: 16105.PE



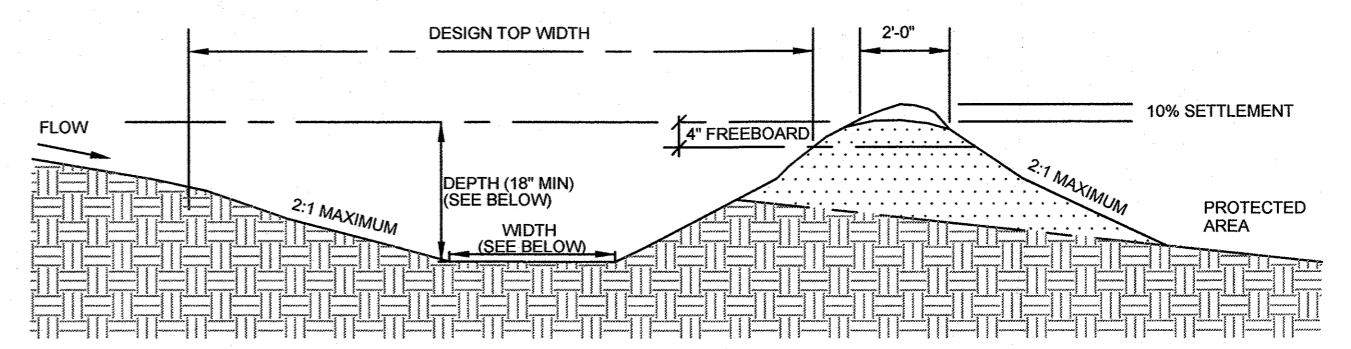
TEMP. SKIMMER BASIN #1 DETAIL
NOT TO SCALE



TEMP. SKIMMER BASIN #2 DETAIL
NOT TO SCALE



FAIRCLOTH SKIMMER DETAIL
NOT TO SCALE



TEMPORARY DIVERSION DITCH
NOT TO SCALE

TDD #	LENGTH (FT)	INV UP	INV DN	SLOPE (FT/FT)	WIDTH (FT)	DEPTH (FT)
1-1a	320	20.00	18.40	0.0050	1.5	1.5
1-1b	240	22.00	20.00	0.0083	1.5	1.5
1-2	120	17.00	16.40	0.0050	1.5	1.5
2-1a	200	18.00	16.75	0.0063	3.5	1.5
2-1b	130	23.00	18.00	0.0385	3.5	1.5
2-1c	90	24.05	23.00	0.0117	3.5	1.5
2-1d	270	24.75	24.05	0.0026	3.5	1.5
2-1e	300	25.50	24.75	0.0025	1.5	1.5

PROVIDE TEMPORARY LINING (NA GREEN S75 OR APPROVED EQUAL)

BAFFLES
CONSTRUCTION SPECIFICATION

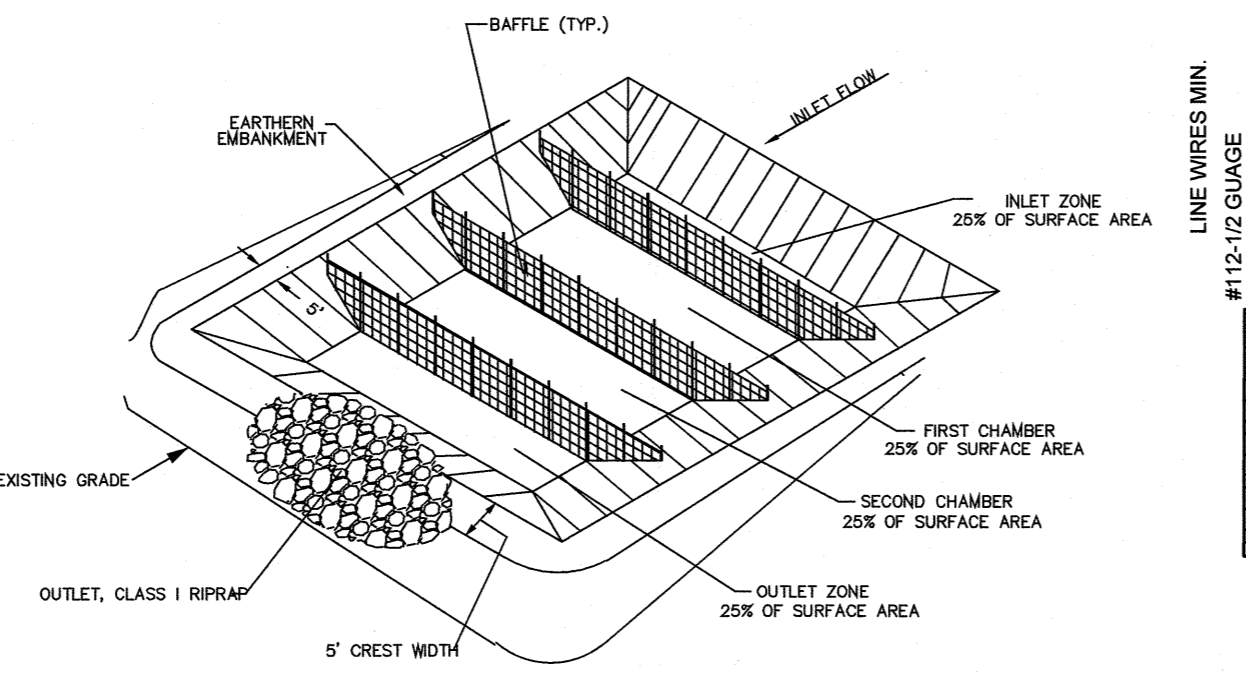
- Grade the basin so that the bottom is level front to back and side to side.
- Install posts or saw horses across the width of the sediment trap (Practice 6.62, *Sediment Fence*).
- Steel posts should be driven to a depth of 24 inches, spaced a maximum of 4 feet apart, and installed up the side of the basin as well. The top of the fabric should be 6 inches higher than the invert of the spillway. Tops of baffles should be 2 inches lower than the top of the berms.
- Install at least three rows of baffles between the inlet and outlet discharge point. Basins less than 20 feet in length may use 2 baffles.
- When using posts, add a support wire or rope across the top of the measure to prevent sagging.
- Wrap jute, backed by coir material, over a sawhorse or the top wire. Hammer rebar into the sawhorse legs for anchoring. The fabric should have five to ten percent openings in the weave. Attach fabric to a rope and a support structure with zip ties, wire or staples.
- The bottom and sides of the fabric should be anchored in a trench or pinned with 8-inch erosion control matting staples.
- Do not splice the fabric, but use a continuous piece across the basin.

MAINTENANCE

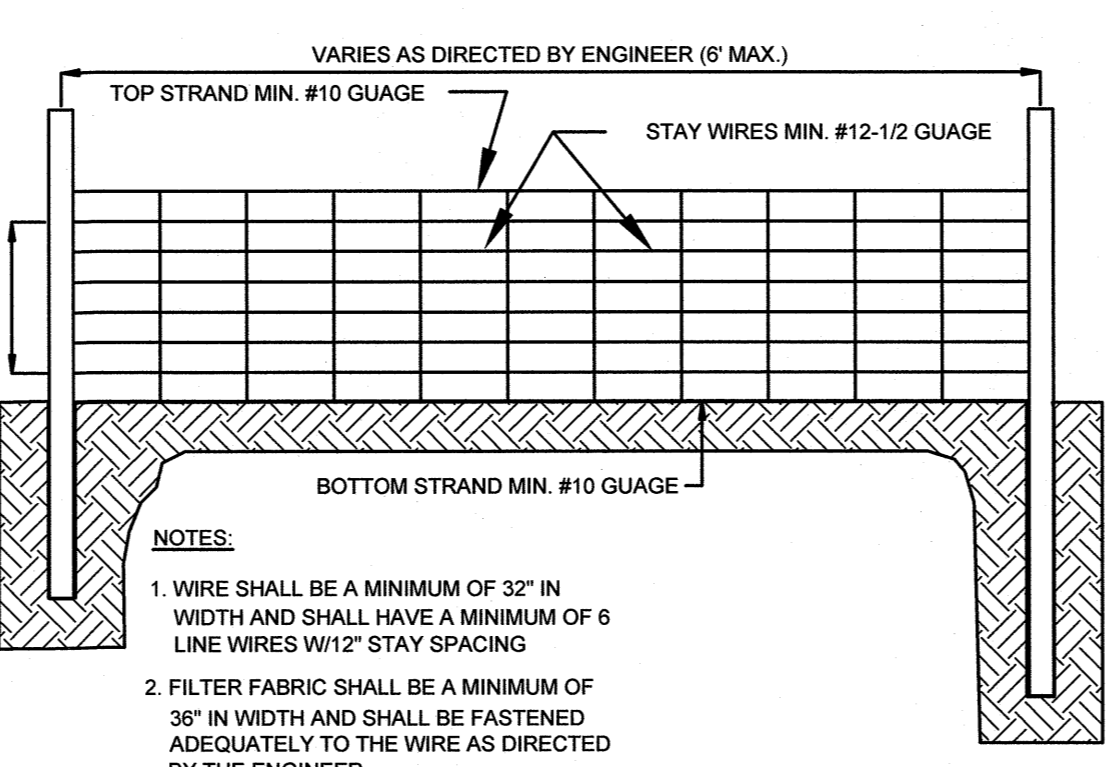
Inspect baffles at least once a week and after each rainfall. Make any required repairs immediately. Be sure to maintain access to the baffles. Should the fabric of a baffle collapse, tear, decompose, or become ineffective, replace it promptly.

Remove sediment deposits when it reaches half full to provide adequate storage volume for the next rain and to reduce pressure on the baffles. Take care to avoid damaging the baffles during cleanout. Sediment depth should never exceed half the designed storage depth.

After the contributing drainage area has been properly stabilized, remove all baffle materials and unstable sediment deposits, bring the area to grade, and stabilize it.



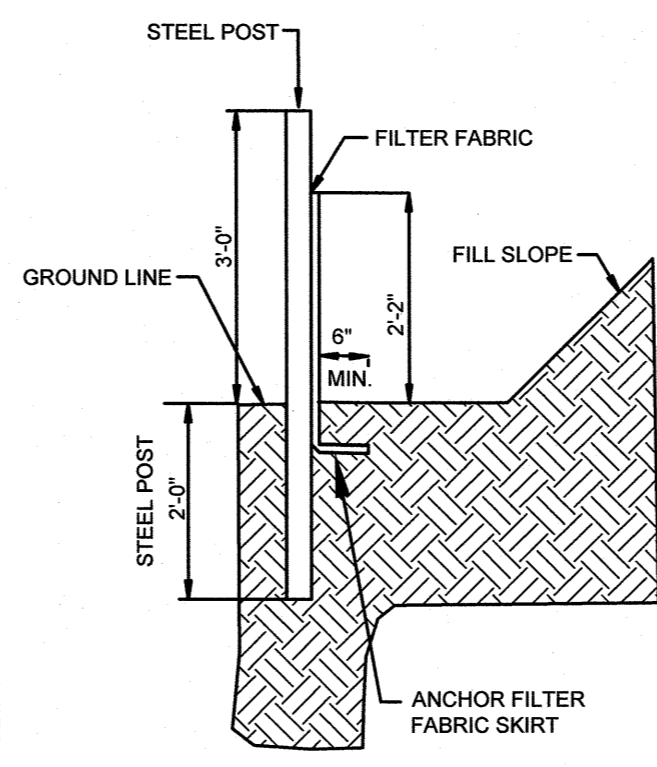
BAFFLE DETAIL
NOT TO SCALE



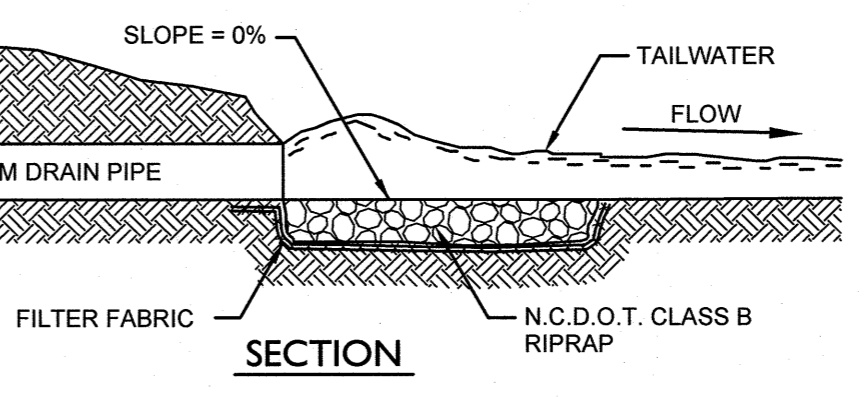
GUIDELINES FOR TEMPORARY SILT FENCE DETAIL
NOT TO SCALE

APRON #	PIPE DIA. (IN.)	LENGTH (FT.)	UP. WIDTH (FT.)	DWN. WIDTH (FT.)	THICKNESS (IN.)
FES-100	30	11	7.5	7.5	18
FES-200	42	14	10.5	10.5	18
FES-300	12	4	3	3	18
EW-400	15	6	3.75	3.75	18
EW-402	12	4	3	3	18
Pond #1 OS	15	8	3.75	9.25	18
Pond #2 OS	18	9	4.5	10.5	18

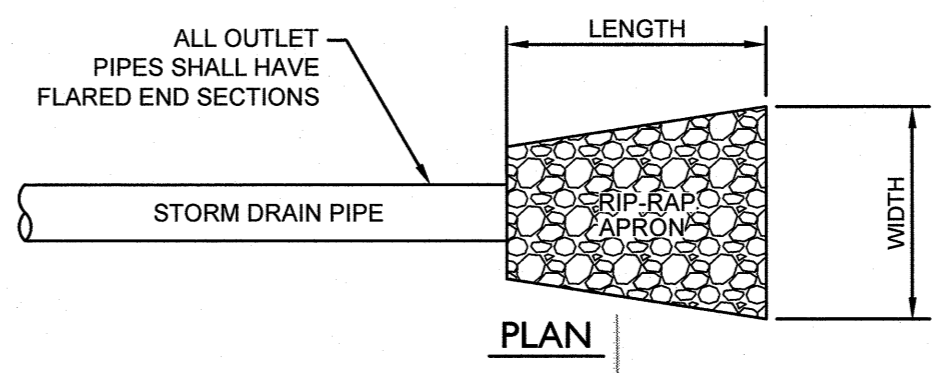
RIP-RAP APRON
NTS



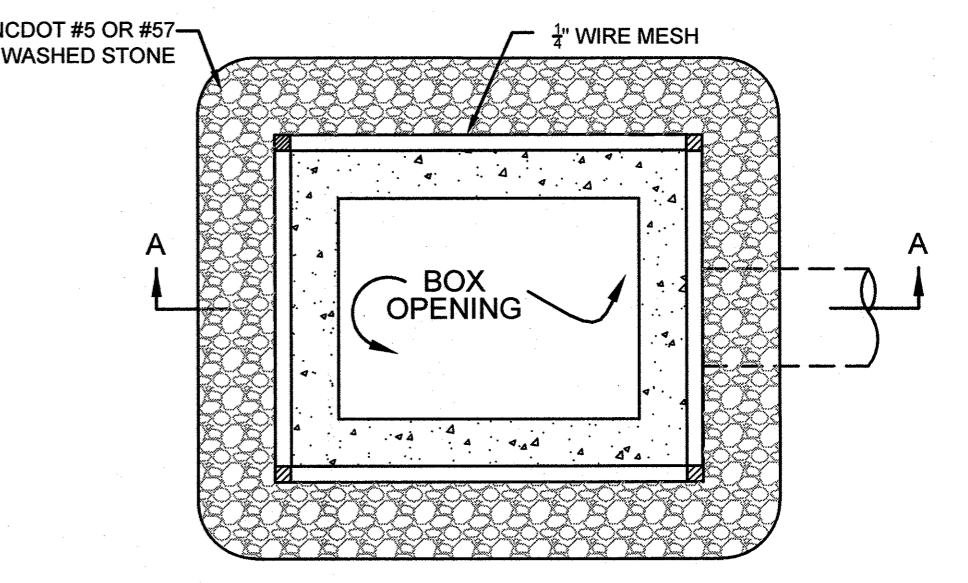
TEMPORARY CONSTRUCTION ENTRANCE
NOT TO SCALE



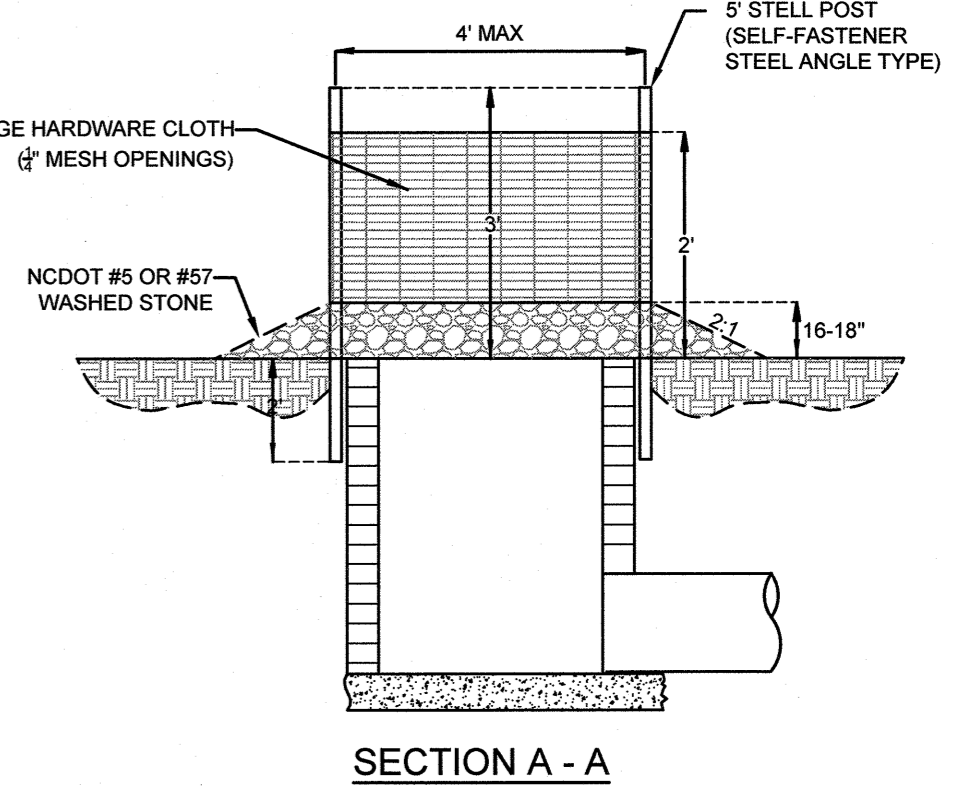
SECTION



PLAN



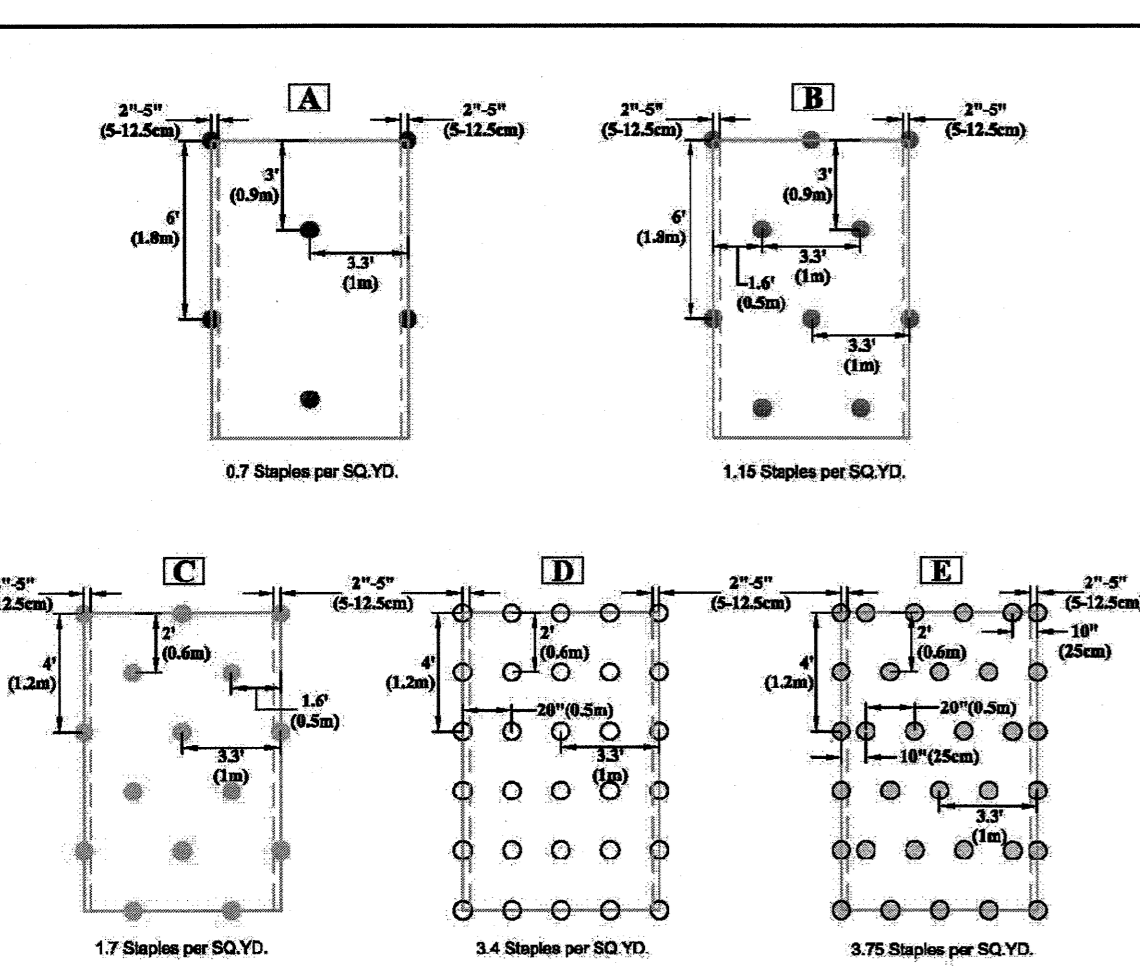
SECTION A-A



SECTION A-A

NOTE:
FOR CURB INLETS AND DROP INLETS

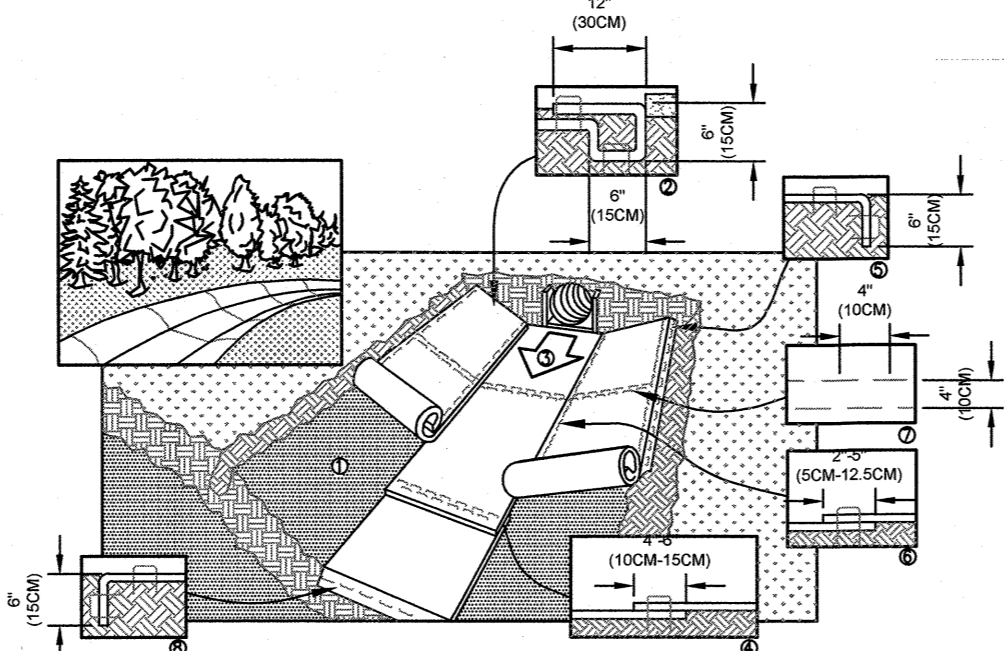
INLET PROTECTION
NOT TO SCALE



STAPLE PATTERN GUIDE

- 4:1 Slopes (A)
 - 3:1 Slopes (B)
 - 2:1 Slopes (C)
 - 1:1 & Steeper Slopes (D)
 - Medium/High Flow Channel (D)
 - High Flow Channel And Shoals (E)
- NOTES:
* Use ECMD5 for more accurate staple pattern selection.

Drawing Not To Scale



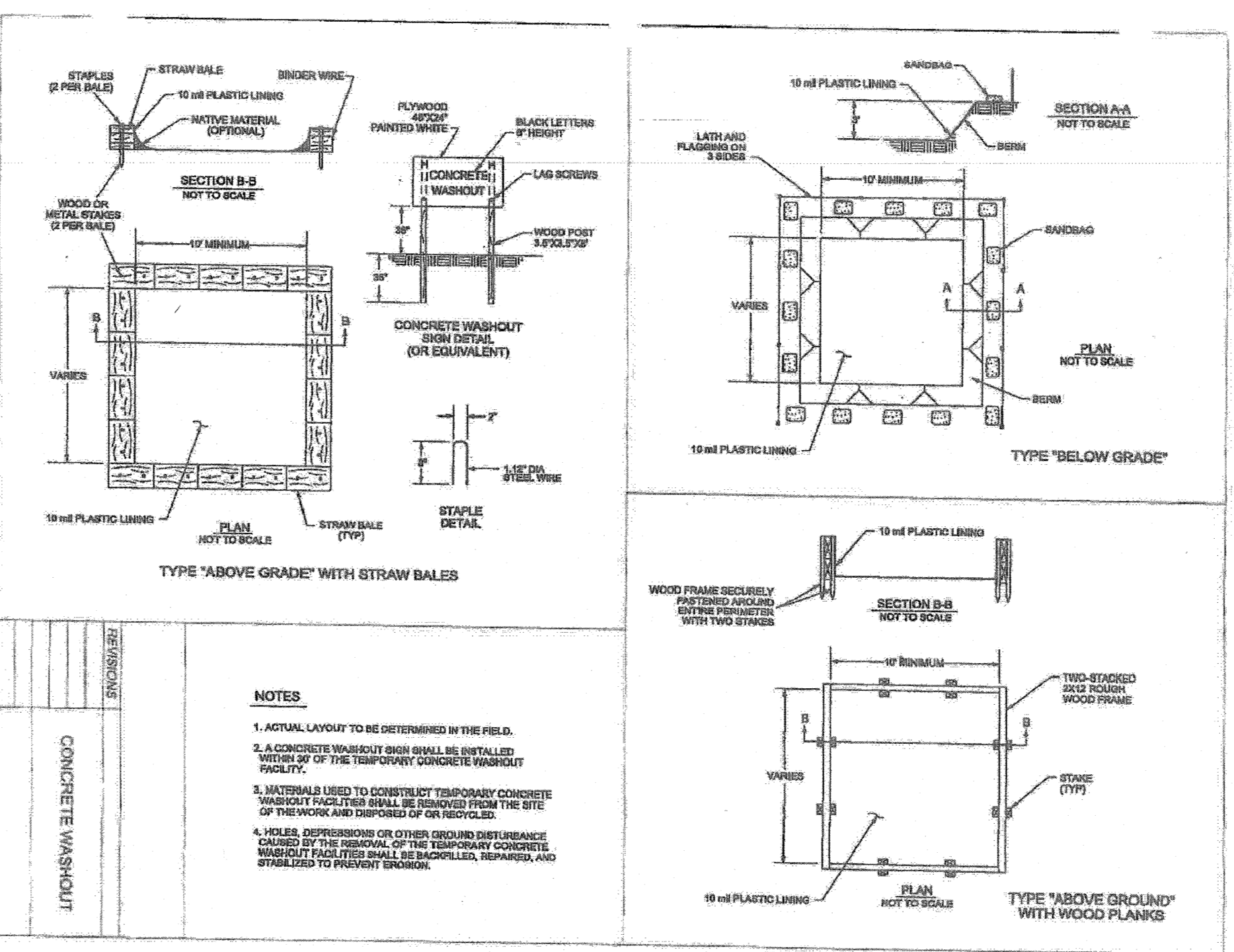
CRITICAL POINTS
A. OVERLAPS AND SEAMS
B. PROJECTED WATER LINE
C. CHANNEL BOTTOMSIDE SLOPE VERTICES

* HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.

** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAPLE LENGTHS GREATER THAN 10 CM MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.

ROLLED EROSION CONTROL LINING
NOT TO SCALE



NOTES
1. ACTUAL LAYOUT TO BE DETERMINED BY THE FIELD.
2. A CONCRETE WASHOUT BASIN SHALL BE INSTALLED WITHIN 50' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. WASHOUT BASIN TO BE CONSTRUCTED WITH TEMPORARY CONCRETE WASHOUT FACILITY SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER OBSTACLES CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITY SHALL BE BACKFILLED, REPAIRED AND STABILIZED TO PREVENT EROSION.

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

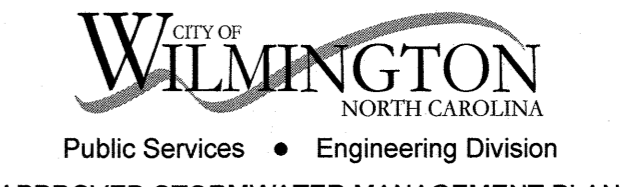
Approved Construction Plan

Name: *YMC* Date: *1-4-2019*

Planning: *AK* 1-4-19

Traffic: *AK* 1-4-19

Fire: *AK* 1-4-19



Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: *1/19* Permit #: *201805*

Signed: *AK*



FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION

REVISIONS:

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING

122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (C) (910) 791-6760 (F)
NC License #: C-2846

DETAILS

AMBERLEIGH SHORES
PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

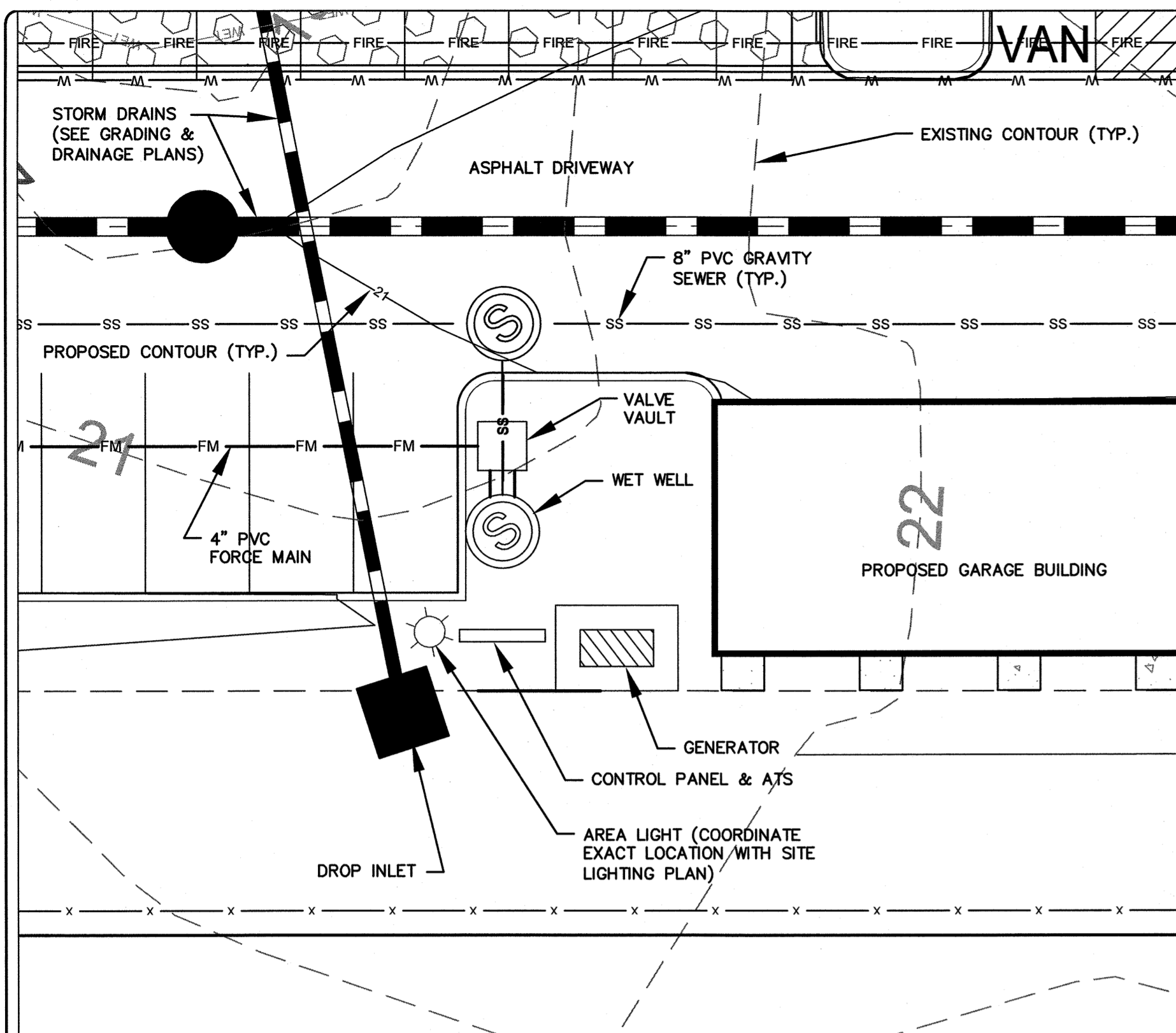
PROJECT STATUS:
CONCEPTUAL LAYOUT
PRELIMINARY LAYOUT
RELEASED FOR CONSTRUCTION

DRAWING INFORMATION:
DATE: 12/20/17
AS NOTED DWF
SCALE: 1/8" = 1'-0"
DRAWN: JEB
CHECKED: JEB

SEAL
JEB
12/20/17
28852
ENGINEER
JEB
08/08/18

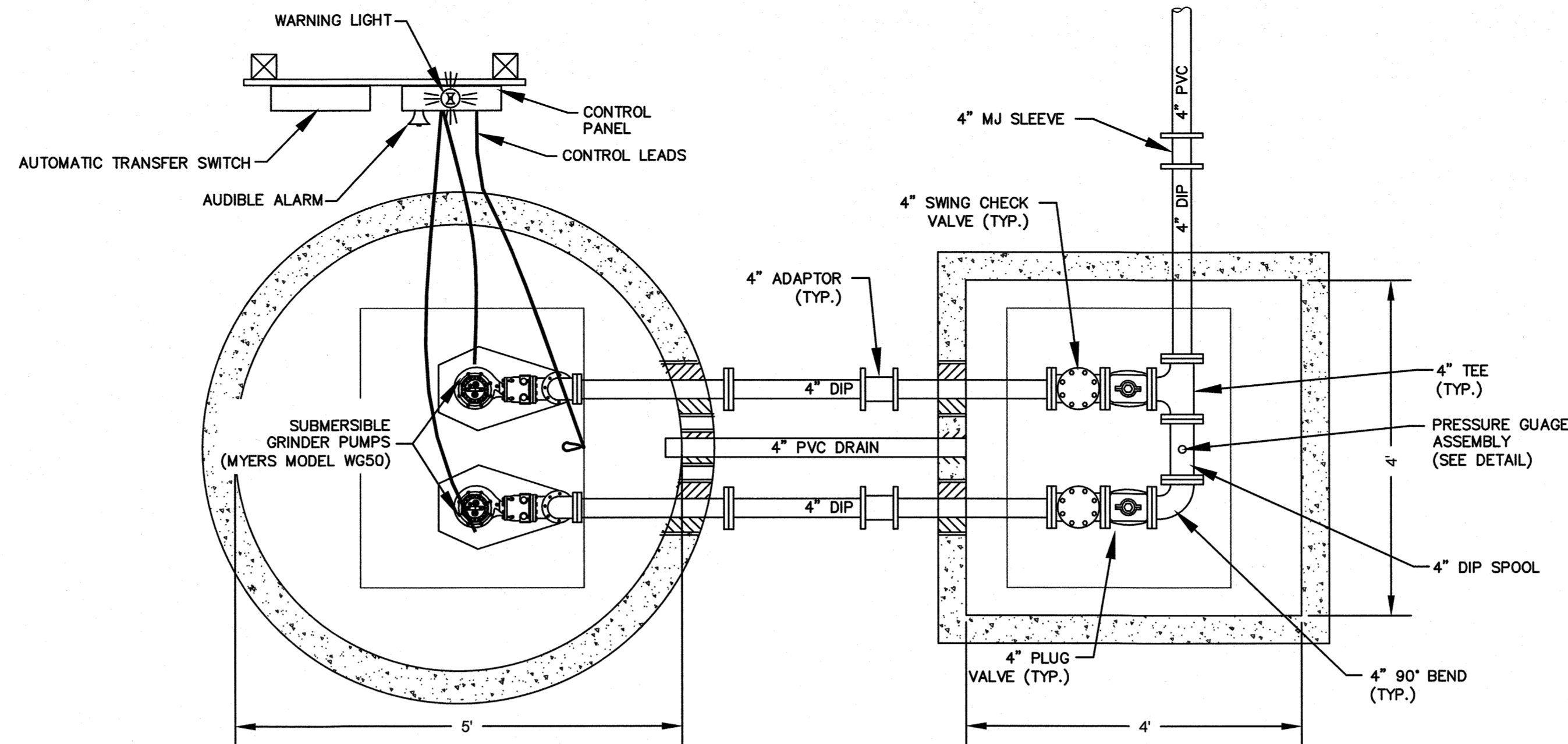
C-7.10

PEI JOB#: 16105.PE

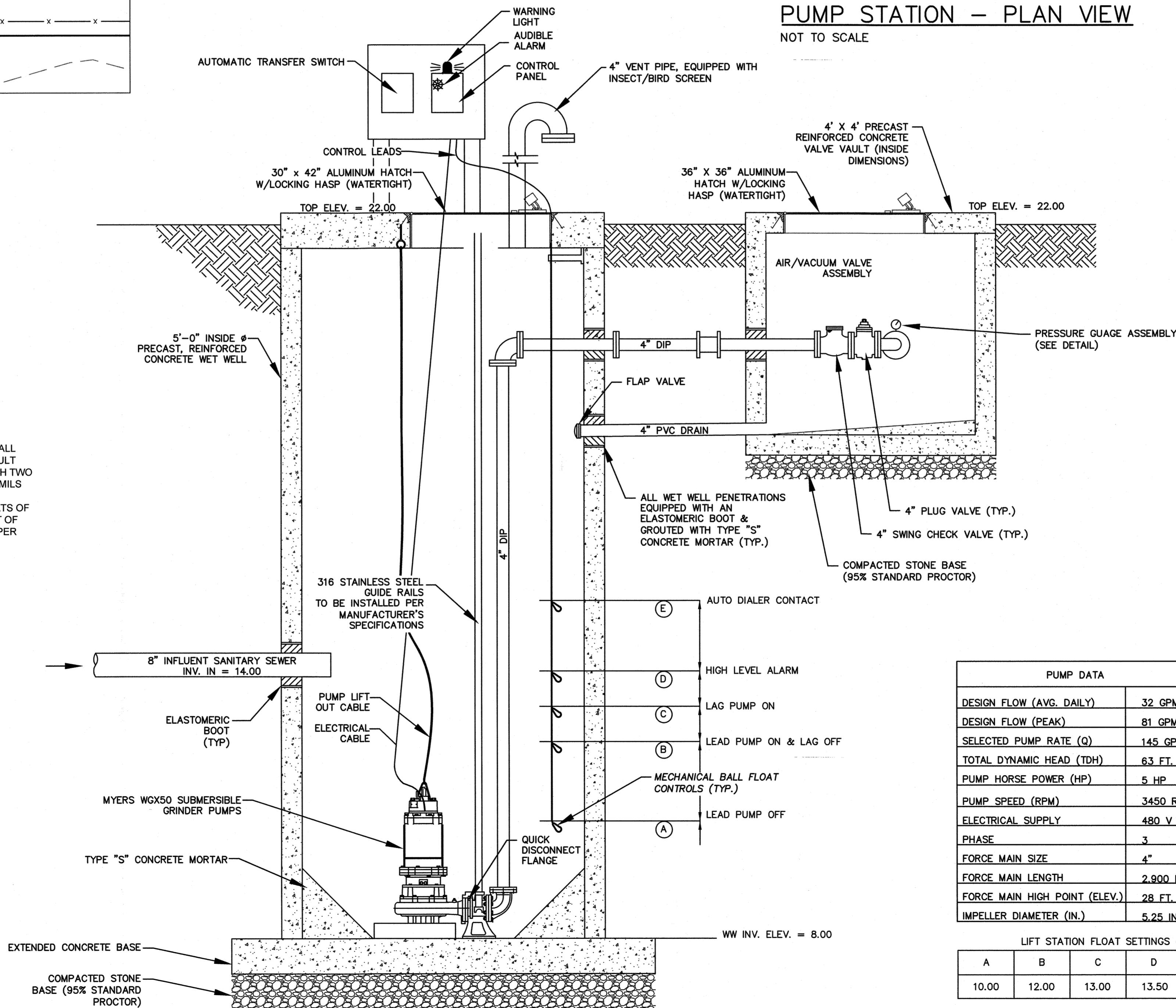


PUMP STATION-SITE LAYOUT
SCALE: 1"=10'

- NOTE:**
- INTERIOR SURFACES OF WETWELL AND VAULT AND ALL PIPING, FITTINGS, AND VALVES IN WETWELL AND VAULT SHALL BE FACTORY PRIMED AND FIELD COATED WITH TWO COATS OF HIGH BUILD COAL TAR EPOXY (10-12 DRY MILS EACH).
 - PAINT ABOVE GRADE PIPING AND FITTINGS W/ 2 COATS OF EPOXY POLYAMIDE (4-8 DRY MILS EACH) AND 1 COAT OF ALIPHATIC POLYURETHANE (3-5 DRY MILS). COLOR PER OWNER SELECTION.



PUMP STATION - PLAN VIEW
NOT TO SCALE



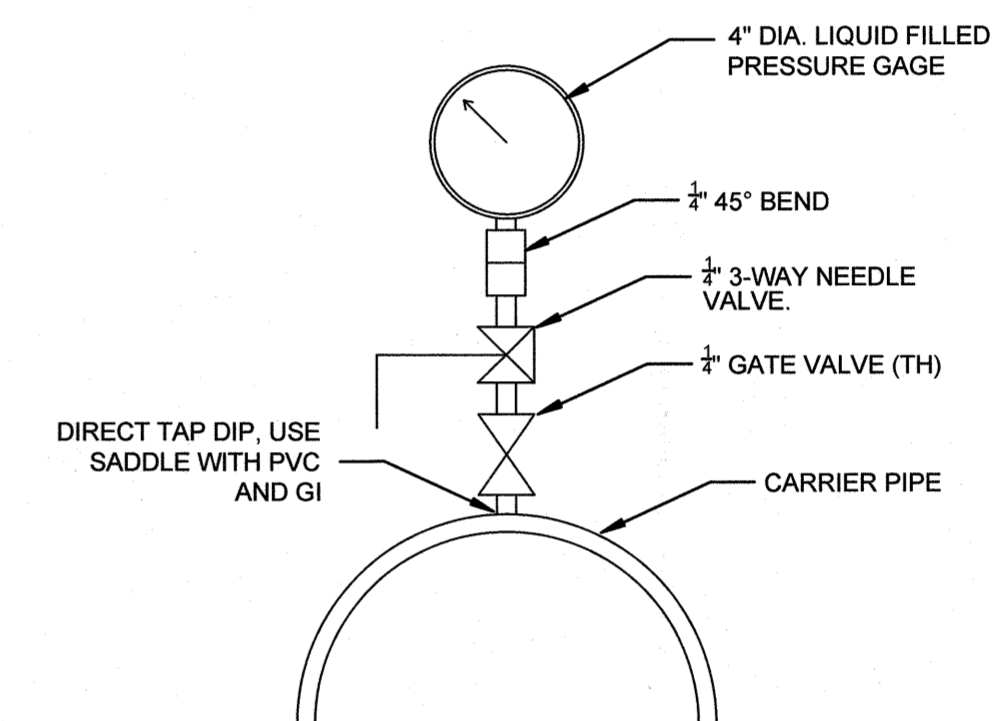
PUMP STATION - SECTION VIEW
NOT TO SCALE

PUMP DATA	
DESIGN FLOW (AVG. DAILY)	32 GPM
DESIGN FLOW (PEAK)	81 GPM
SELECTED PUMP RATE (Q)	145 GPM
TOTAL DYNAMIC HEAD (TDH)	63 FT.
PUMP HORSE POWER (HP)	5 HP
PUMP SPEED (RPM)	3450 RPM
ELECTRICAL SUPPLY	480 V
PHASE	3
FORCE MAIN SIZE	4"
FORCE MAIN LENGTH	2,800 FT.
FORCE MAIN HIGH POINT (ELEV.)	28 FT.
IMPELLER DIAMETER (IN.)	5.25 IN.

LIFT STATION FLOAT SETTINGS (ELEVATIONS)				
A	B	C	D	WET WELL DIA.
10.00	12.00	13.00	13.50	5'-0"

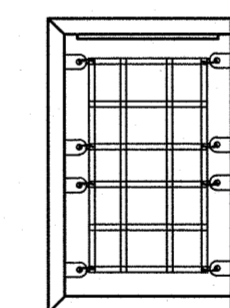
PUMP STATION NOTES:

- ALL PIPE ENTRANCES IN STRUCTURAL WALLS SHALL INCLUDE ELASTOMERIC BOOT AND BE GROUTED WITH TYPE "S" MORTAR.
- PROPER OPERATION OF VALVE BOX DRAIN LINE TO BE VERIFIED BY CONTRACTOR PRIOR TO COMPLETION.
- PUMP CONTROL FLOAT ELEVATIONS TO BE ESTABLISHED PRIOR TO PUMP OPERATION. PROPER CONTROL FLOAT OPERATION TO BE VERIFIED BY OWNER PRIOR TO CONTINUOUS PUMP STATION OPERATION.
- PUMP GUIDE RAILS TO BE INSTALLED IN ACCORDANCE WITH PUMP MANUFACTURER'S SPECIFICATIONS PROPER GUIDE RAIL OPERATION TO BE VERIFIED BY CONTRACTOR PRIOR TO COMPLETION.
- ALL GASKETED JOINTS SHALL BE INSPECTED FOR LEAKS PRIOR TO CONTINUOUS PUMP STATION OPERATION.
- PUMP STATION PIPE AND FITTINGS SHALL BE CLASS 350 DUCTILE IRON CONFORMING TO ANSI/AWWA C151/A21.50.
- PIPE LENGTHS SHOWN AS APPROXIMATE. EXACT PIPE LENGTHS SHALL BE VERIFIED BY CONTRACTOR PRIOR TO INSTALLATION.
- GUIDE RAIL BASE SHALL BE ANCHORED WITH 3/4 INCH DIAMETER 316 STAINLESS STEEL ANCHORS AND BOLTS.
- TOP OF VALVE BOX SHALL BE SET AT LEVEL ELEVATION WITH LIFT STATION WET WELL TOP.
- ALL INTERIOR WET WELL HARDWARE, INCLUDING ANCHORS AND BOLTS, SHALL BE TYPE 316 STAINLESS STEEL OR BETTER.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL WASTED OR EXCESS MATERIALS UNLESS OTHERWISE DIRECTED BY THE OWNER.
- ALL UNDERGROUND UTILITIES IN AREA OF EXCAVATION SHALL BE LOCATED BY CONTRACTOR PRIOR TO COMMENCING CONSTRUCTION.
- ALL PRECAST CONCRETE STRUCTURES (WELL, VALVE BOX, METER BOX) SHALL BE REINFORCED WITH STEEL RODS AS NECESSARY AND APPROPRIATE FOR WIDTH AND DEPTH AND SO INDICATED ON SHOP DRAWINGS SUBMITTED TO ENGINEER FOR APPROVAL.



- NOTES:**
- 1/2" DIA. NIPPLES, FITTINGS, AND VALVES TO BE SS.
 - SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS ON WASTEWATER AND SLUDGE LINES.

PRESSURE GAUGE ASSEMBLY DETAIL
NO SCALE



- NOTES:**
- HATCH SAFETY NET SHALL BE INSTALLED WITH EVERY HATCH.
 - MANUFACTURER SHALL BE U.S.F. FABRICATION INC.

SAFETY NET DETAIL
NO SCALE



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan

Name: unc Date: 1-4-2019

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: AK 1-4-19

City of Wilmington
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/4/19 Permit # 2018095
Signed: [Signature]

08/08/18

REVISIONS:

1) PER CITY AND OWNER COMMENTS

CLIENT INFORMATION:

FDC Ambertleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6700 (F)
NC License #: C-2846

PRIVATE PUMP STATION DETAIL

AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:
FINAL DESIGN: []
PRELIMINARY LAYOUT: []
RELEASED FOR CONST: []

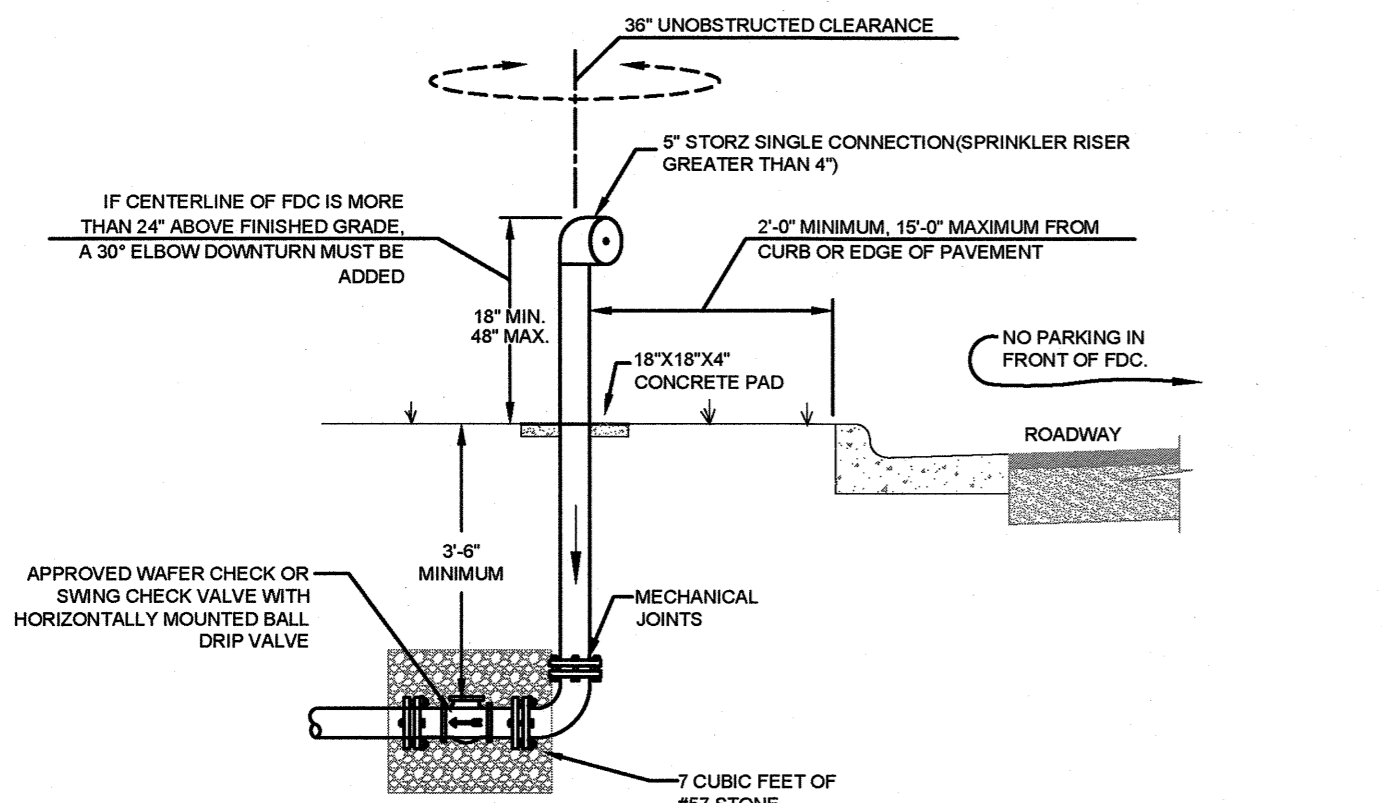
DRAWING INFORMATION:
DATE: 01.10.17
SCALE: AS NOTED
DRAWN: []
CHECKED: []

SEAL: []
ENGINEER: []
REGISTERED PROFESSIONAL ENGINEER
STATE OF NORTH CAROLINA
08/08/18

C-7.11

PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



- NOTES:**
1. THE VALVE PIT SHALL BE SIZED TO ACCOMMODATE ALL PROPOSED EQUIPMENT.
 2. THERE SHALL BE NO SHUTOFF VALVE IN THE FIRE DEPT. CONNECTION RING (PER NFPA 13).
 3. ALL FITTINGS SHALL BE FLANGED.
 4. ALL PIPING SHALL BE STEEL OR DUCTILE IRON.
 5. SEE SITE PLANS FOR SIZES OF PIPES AND FITTINGS. SIAMISE CONNECTION TO BE IN ACCORDANCE WITH NFPA 13.
 6. PROVIDE DRAINAGE AWAY FROM STRUCTURE.
 7. A 2" MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN THE BOTTOM OF THE VAULT LID AND THE RISING STEM OF THE OSSY VALVE IN THE FULLY OPEN POSITION.
 8. KNOX LOCKING PLUG SHALL BE PROVIDED ON THE FDC INLET.
 9. APPROVED WAFFER CHECK OR SWING CHECK VALVE WITH HORIZONTAL MOUNTED BALL DRIP VALVE.
 10. THE FDC SHALL BE CONNECTED TO THE PIPING SYSTEM LOCATED DOWNSTREAM OF THE POST INDICATOR VALVE.

FREE STANDING FIRE DEPARTMENT CONNECTION
NOT TO SCALE

Section 2721
Engineered Surface Drainage Products

GENERAL:
PVC surface drainage inlets shall include the drain basin type as indicated on the contract drawing and referenced within the contract specifications. The ductile iron grates for each of these fittings shall be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer. The surface drainage inlets shall be as manufactured by Nyloplast a division of Advanced Drainage Systems, Inc., or prior approved equal.

MATERIALS:
The drain basins required for this contract shall be manufactured from PVC pipe stock, utilizing a thermoforming process to reform the pipe stock to the specified configuration. The drainage pipe connection shall be manufactured from PVC pipe stock and formed to provide a water-tight connection with the specified pipe system. The joint gaskets shall conform to ASTM D2222 for joints to drain and sewer plastic pipe using flexible elastomer seals. The flexible elastomer seals shall conform to ASTM F422. The pipe stock shall be joined to the main body of the drain basin or catch basin. The seal material used to manufacture the pipe stock that is used to manufacture the main body and pipe stock of the surface drainage inlets shall conform to ASTM D1778 and Class 15054.

The grates and frames furnished for all surface drainage inlets shall be ductile iron for sizes of 10", 12", 14", 16", 18", 20" and 24" and shall be made specifically for each basin so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for drain basins shall be capable of supporting various wheel loads as specified by Nyloplast. 12" and 16" square grates will be ligged to the frame using pins. Ductile iron used in the manufacture of the castings shall conform to ASTM A536, grades 70-50-02. Grates and covers shall be provided painted black.

INSTALLATION:
The specified PVC surface drainage inlet shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of class 1, class 2, or class 3 material as defined in ASTM D2221. Bedding and backfill for surface drainage inlets shall be well placed and compacted uniformly in accordance with ASTM D2221. The drain basin body will be cut at the time of the final grade. No brick, stone or concrete block will be required to set the grate to the final grade height. For final inlet installation, a concrete slab shall be poured under and around the grate and frame. The concrete slab must be designed taking into consideration local soil conditions, traffic loading, and other applicable design factors. For other installation considerations such as migration of trees, ground water, and soil foundations refer to ASTM D2221 guidelines.

DESIGN CHECKED BY: DALE THOMPSON	DATE: 05/16/16	SCALE: 1/8" = 1'-0"
DRAWN BY: DALE THOMPSON	DATE: 05/16/16	SCALE: 1/8" = 1'-0"
CHECKED BY: RANDALL GLAZIER	DATE: 05/16/16	SCALE: 1/8" = 1'-0"
SCALE: NOT TO SCALE		

NYLOPLAST DRAIN BASIN WITH PEDESTRIAN GRATE

NYLOPLAST DRAIN BASIN WITH DOME GRATE

DESIGN CHECKED BY: DALE THOMPSON	DATE: 05/16/16	SCALE: 1/8" = 1'-0"
DRAWN BY: DALE THOMPSON	DATE: 05/16/16	SCALE: 1/8" = 1'-0"
CHECKED BY: RANDALL GLAZIER	DATE: 05/16/16	SCALE: 1/8" = 1'-0"
SCALE: NOT TO SCALE		

YARD INLET/ROOF DRAIN DETAILS
NOT TO SCALE

R7-8a and R7-8d Signage
Figure A1.1

R7-8e Signage
Figure A1.2

VAN ACCESSIBLE Signage
Figure A1.3

FOR DESIGN OF ACCESSIBLE SIGNS, SEE THE FOLLOWING:

- 2009 MUTCD OR LATEST EDITION.
- 2004 EDITION OF THE STANDARD HIGHWAY SIGNS AND THE 2012 SUPPLEMENT OR LATEST EDITION.
- NORTH CAROLINA 2009 SUPPLEMENT TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES OR LATEST EDITION
- NCDOT DRAWING H-1.1_S FOR SIGNS SP00075, SP00076, AND SP00077.

DATE: NOVEMBER 8, 2016	ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS	
DRAWN BY: DALE THOMPSON	SHEET A1 OF 5	
CHECKED BY: RANDALL GLAZIER		
SCALE: NOT TO SCALE		

Signage Height
Figure A2.1

DATE: NOVEMBER 8, 2016	ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS	
DRAWN BY: DALE THOMPSON	SHEET A2 OF 5	
CHECKED BY: RANDALL GLAZIER		
SCALE: NOT TO SCALE		

Approved Construction Plan

Name: mc 1-4-2019 Date: _____

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: AK 1-4-19

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 11/2/19 Permit # 20190845

Signed: [Signature]

811
Know what's below. Call before you dig.

PARAMOUNT ENGINEERING
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA

DETAILS

PROJECT STATUS: CONCEPTUAL LAYOUT, PRELIMINARY LAYOUT, RELEASED FOR CONSTRUCTION

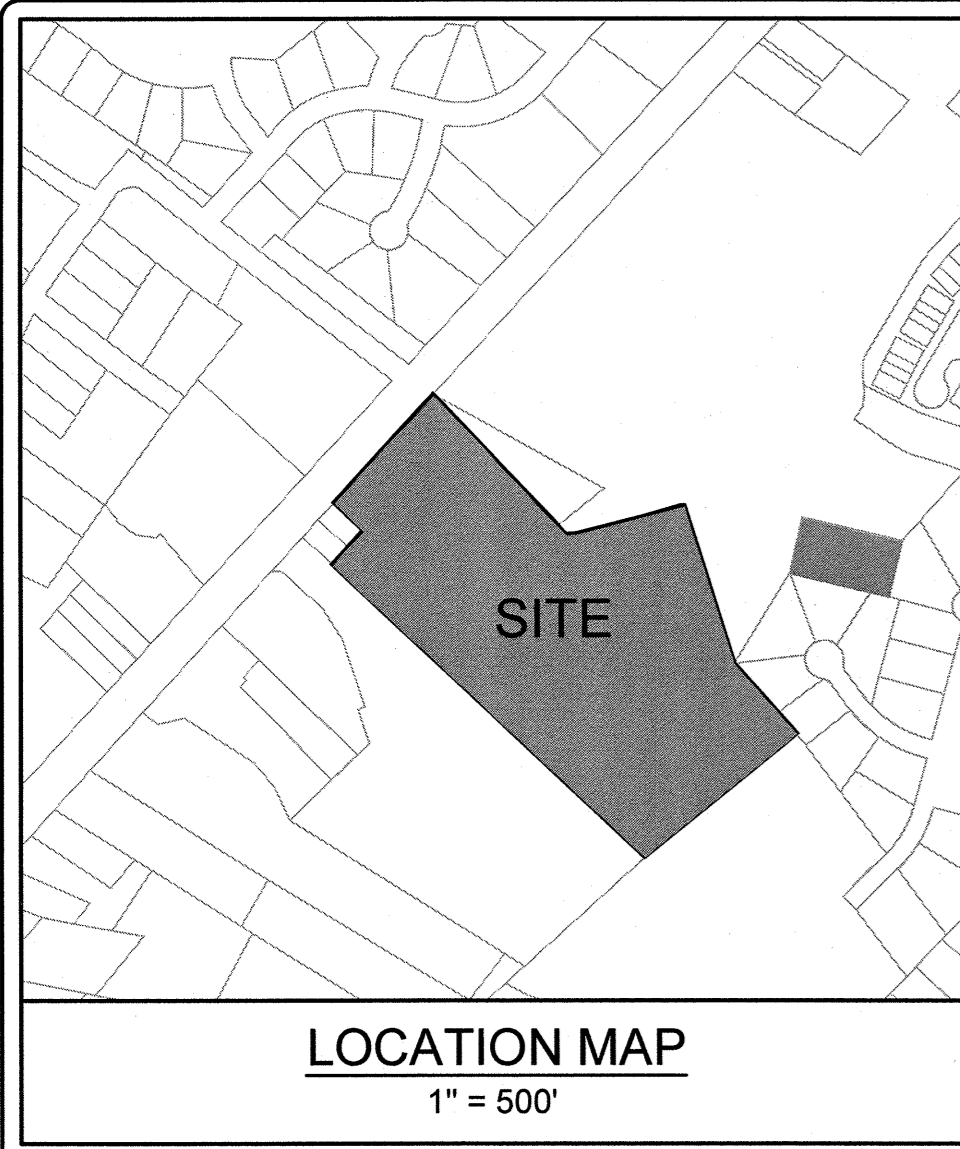
DRAWING INFORMATION: DATE: 12/20/17, AS NOTED DWF, DATE: 11/28/18

SEAL: [Seal]

C-7.12

PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



COORDINATION NOTES:

- THE CONTRACTOR IS REQUIRED TO OBTAIN ANY/ALL PERMITS REQUIRED FOR CONSTRUCTION OF THESE PLANS.
- THE CONTRACTOR IS TO ESTABLISH AND CHECK ALL HORIZONTAL AND VERTICAL CONTROLS TO BE USED WITH THE PROJECT. IN ADDITION, THE CONTRACTOR IS TO COMPUTE THE LAYOUT OF THE ENTIRE SITE PLAN IN ADVANCE OF BEGINNING ANY WORK ASSOCIATED WITH THE SUBJECT PLANS. CONTRACTOR SHALL EMPLOY A PROFESSIONAL SURVEYOR TO PERFORM SITE IMPROVEMENT STAKEOUT(S).
- THE CONTRACTOR AND OWNER SHALL BE RESPONSIBLE FOR ANY EROSION CONTROL MEASURES IN THE ROW WHETHER OR NOT AN APPROVED EROSION CONTROL PERMIT IS ACTIVE ON THE SITE OR NOT.
- ANYTIME WORK IS PERFORMED OFF-SITE OR WITHIN AN EXISTING EASEMENT, THE CONTRACTOR IS TO NOTIFY THE HOLDER OF SAID EASEMENT AS TO THE NATURE OF PROPOSED WORK, AND TO FOLLOW ANY GUIDELINES OR STANDARDS WHICH ARE ASSOCIATED WITH OR REFERENCED IN THE RECORDED EASEMENT.

PAVEMENT SCHEDULE

- US HWY 17 / MARKET STREET RIGHT-TURN LANE EXTENSION:
 - NEW ASPHALT AREA = 132 SY
 - ASPHALT OVERLAY AREA = 140 SY
- SEE SHEETS T-1.4 FOR NCDOT STANDARD DETAILS.

DRIVEWAY AND TRAFFIC CONTROL PLAN GENERAL NOTES

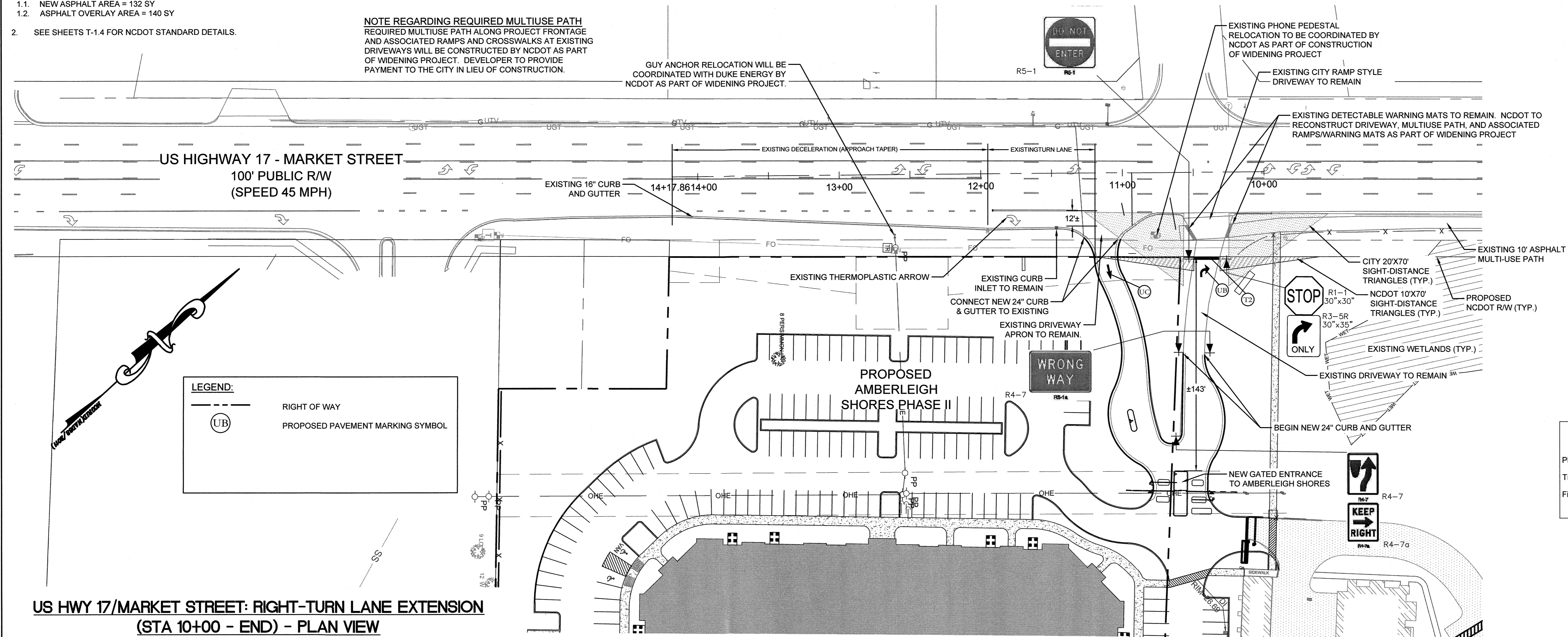
- BEGINNING WORK AND STREET CLOSING: TRAFFIC CONTROL FOR THIS CONTRACT SHALL BE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, ALONG WITH THE FOLLOWING SECTION OF THESE SPECIAL PROVISIONS.
- THE OWNER AND CONTRACTOR ARE RESPONSIBLE FOR HAVING A DRIVEWAY OR ENCROACHMENT PERMIT FROM NCDOT PRIOR TO ANY WORK WITHIN THE ROW. THE OWNER OR CONTRACTOR MUST SCHEDULE A PRE-CON WITH DISTRICT OFFICE AT (910) 398-9100 OR THE INSPECTOR AS LISTED ON THE PERMIT.
- THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE NCDOT BEFORE ANY ROAD OR LANE CLOSURE. THE CONTRACTOR SHALL CALL THE DIVISION ENGINEER (DIVISION 3) AT (910) 341-2000 WHEN CLOSING A ROAD OR LANE SO THAT EMERGENCY SERVICES CAN BE NOTIFIED.
- TRAFFIC CONTROL PLAN: TRAFFIC CONTROL WILL BE PERFORMED BY THE CONTRACTOR BASED ON THE TRAFFIC CONTROL SPECIAL PROVISIONS. THE TRAFFIC CONTROL SPECIAL PROVISIONS MAY REFER TO PLAN SHEET FOR MAJOR WORK ITEMS. THE CONTRACTOR SHALL BE THOROUGHLY FAMILIAR WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE CURRENT EDITION OF THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) SUPPLEMENT TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, THE NCDOT ROADWAY STANDARD DRAWINGS, AND THE CURRENT EDITION OF THE NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
- THE CONTRACTOR SHALL MAINTAIN THE TRAFFIC CONTROL AS DESCRIBED HEREIN UNLESS THE CONTRACTOR SUBMITS AN ALTERNATE TRAFFIC CONTROL PLAN TO NCDOT AND IS APPROVED BY NCDOT. NCDOT MAY DIRECT THE CONTRACTOR TO MODIFY TRAFFIC CONTROL AT ANY TIME DURING CONSTRUCTION.
- PAVEMENT MARKINGS: THE CONTRACTOR SHALL HAVE THE PAVEMENT MARKINGS PRE-MARKED, INSPECTED, AND APPROVED BY NCDOT PERSONNEL PRIOR TO THE PLACEMENT OF FINAL PAVEMENT MARKINGS. CONTACT TRAFFIC SERVICES AT (910) 341-2200 FOR PRE-MARKING INSPECTIONS OR FIELD CHANGES. CENTERLINE PAVEMENT MARKINGS SHALL BE INSTALLED THE SAME DAY RESURFACING IS ACCOMPLISHED. ALL OTHER PAVEMENT MARKINGS SHALL BE COMPLETED WITHIN 5 DAYS OF RESURFACING. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND MEET THE NCDOT'S STANDARD SPECIFICATIONS.
- WHERE NOT REMOVED BY NEW PAVEMENT, CONFLICTING STRIPING SHALL BE GROUND OFF. MINIMIZE GROOVING OF PAVEMENT DURING SUCH OPERATIONS.
- IN AREAS OF DROP-OFFS AND LOW SHOULDER, THE CONTRACTOR SHALL BACKFILL UP TO THE EDGE AND ELEVATION OF THE EXISTING PAVEMENT IN THE PROJECT AREA. THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN INGRESS AND EGRESS TO ALL BUSINESSES AND DWELLINGS, AND EASY ACCESS TO FIRE HYDRANTS. THE CONTRACTOR SHALL NOT WORK ON BOTH SIDES OF THE ROAD SIMULTANEOUSLY WITHIN THE PROJECT AREA FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL MARK ALL HAZARDS WITHIN THE PROJECT LIMITS WITH WELL-MAINTAINED SIGNS, BARRICADES, WARNING AND/OR CHANNELING DEVICES.
- PEDESTRIAN CONSIDERATION: THE CONTRACTOR SHALL REASONABLY ACCOMMODATE THE NEEDS OF ALL PEDESTRIANS.

US HWY. 17 / MARKET STREET PAVEMENT MARKING LEGEND
CONTRACTOR SHALL REFER TO NCDOT STANDARD DETAILS FOR PAVEMENT MARKINGS

SYMBOL	DESCRIPTION	PAVEMENT MARKINGS
UB	RIGHT TURN ARROW	THERMOPLASTIC SYMBOLS (90 MIL)
UC	STRAIGHT ARROW	
T2	WHITE STOP BAR	THERMOPLASTIC (24", 120 MIL)

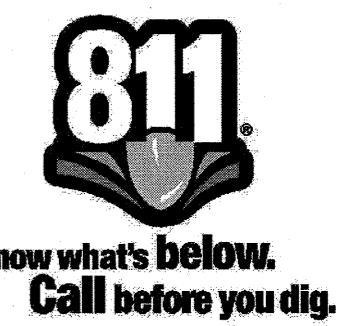
NOTE REGARDING REQUIRED MULTIUSE PATH
REQUIRED MULTIUSE PATH ALONG PROJECT FRONTAGE AND ASSOCIATED RAMPS AND CROSSWALKS AT EXISTING DRIVEWAYS WILL BE CONSTRUCTED BY NCDOT AS PART OF WIDENING PROJECT. DEVELOPER TO PROVIDE PAYMENT TO THE CITY IN LIEU OF CONSTRUCTION.

GUY ANCHOR RELOCATION WILL BE COORDINATED WITH DUKE ENERGY BY NCDOT AS PART OF WIDENING PROJECT.



LEGEND:

(---)	RIGHT OF WAY
(UB)	PROPOSED PAVEMENT MARKING SYMBOL



For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

Approved Construction Plan

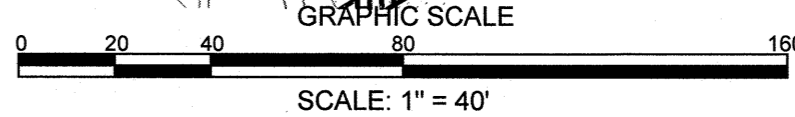
Name: Ymc 14-2019 Date: _____

Planning: AK 1-4-19

Traffic: AK 1-4-19

Fire: AK 1-4-19

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/4/19 Permit # 2018715
Signed: [Signature]



US HWY 17/MARKET STREET: RIGHT-TURN LANE EXTENSION (STA 10+00 - END) - PLAN VIEW
SCALE: 1" = 40'

REVISIONS:

06.06.18	
10.05.18	1) PER CITY AND OWNER COMMENTS
11.26.18	2) PER CITY AND OWNER COMMENTS
12.17.18	3) PER CITY AND OWNER COMMENTS
12.17.18	4) PER CITY COMMENTS
12.31.18	5) PER CITY COMMENTS

CLIENT INFORMATION:
FDC Amberleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING, INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (O) (910) 791-6760 (F)
NC License #: C-2846

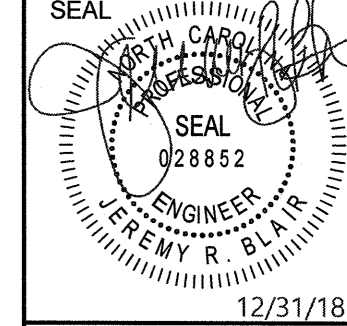
OFFSITE TRAFFIC IMPROVEMENTS GEOMETRIC & STRIPING PLAN AMBERLEIGH SHORES PHASE II
CITY OF WILMINGTON
NORTH CAROLINA

PROJECT STATUS:

CONCEPTUAL LAYOUT	RELEASED FOR CONST.
FINAL DESIGN LAYOUT	RELEASED FOR CONST.

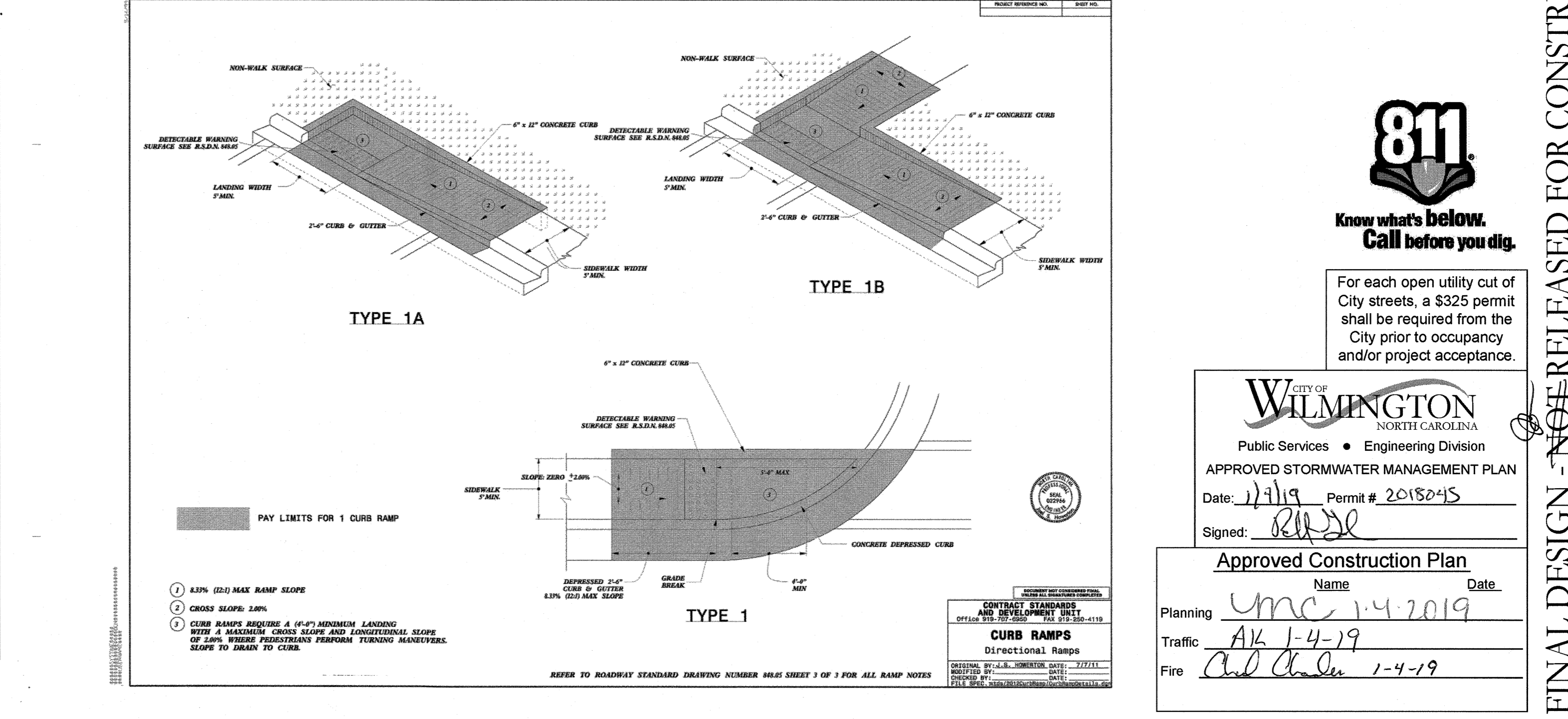
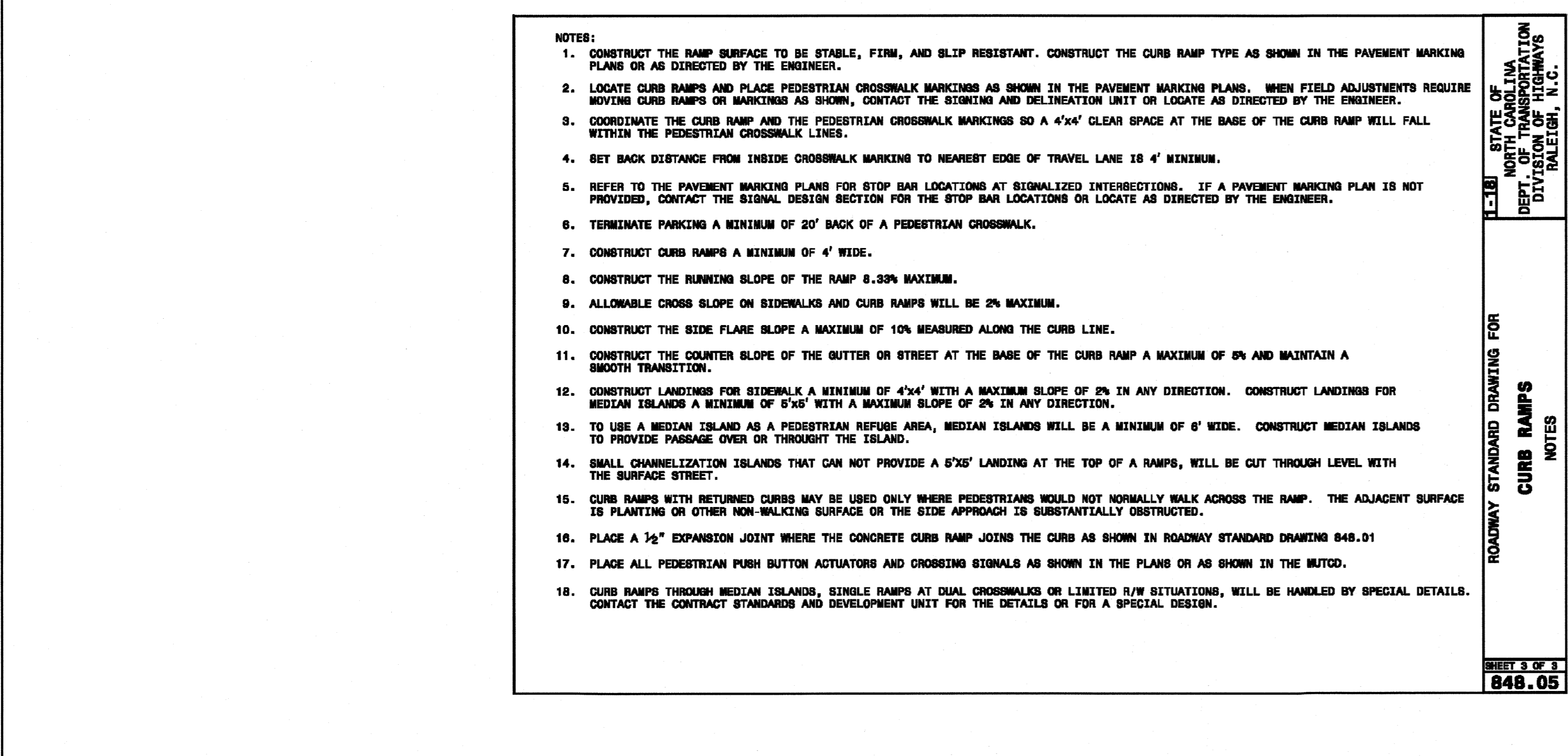
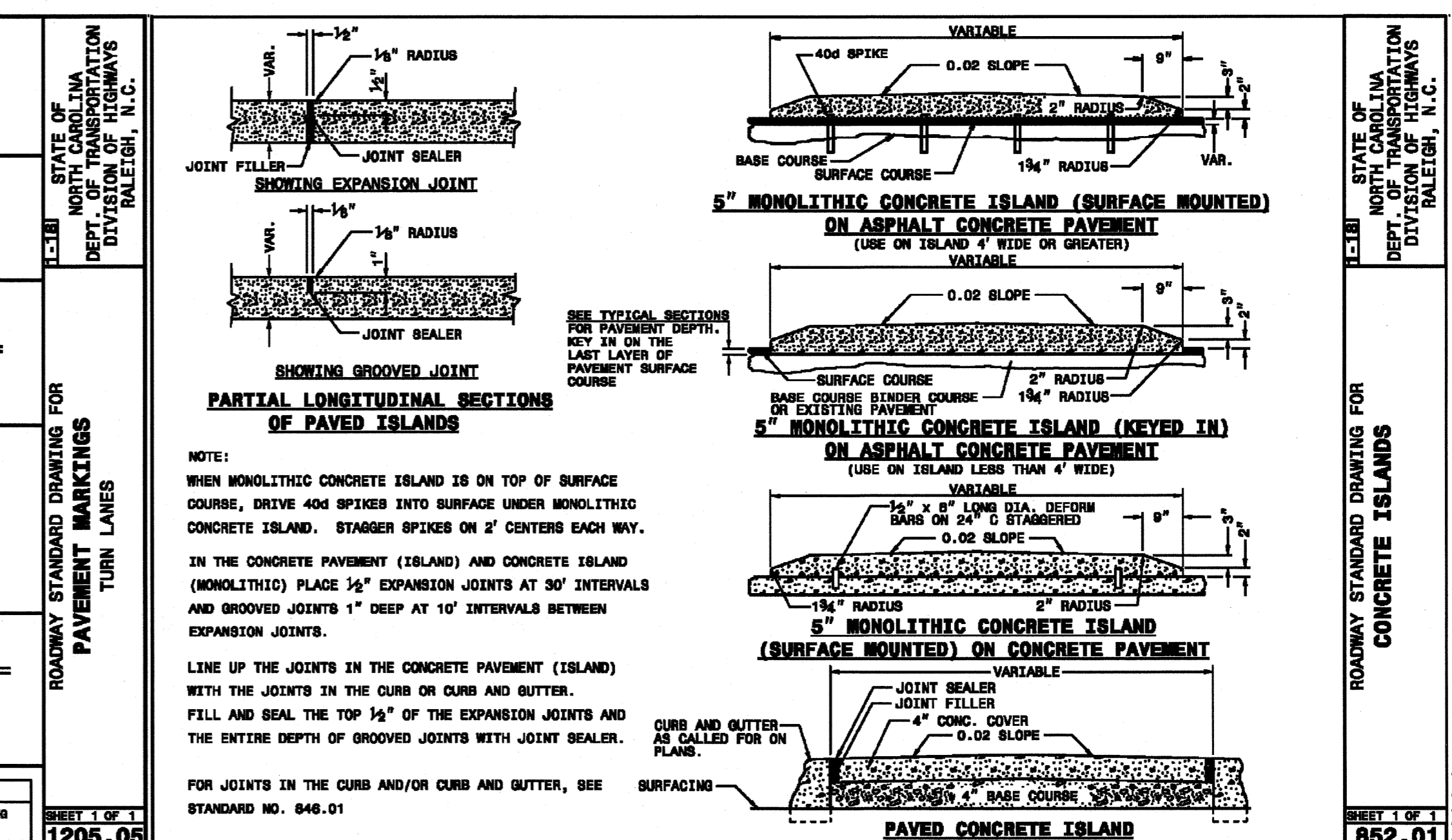
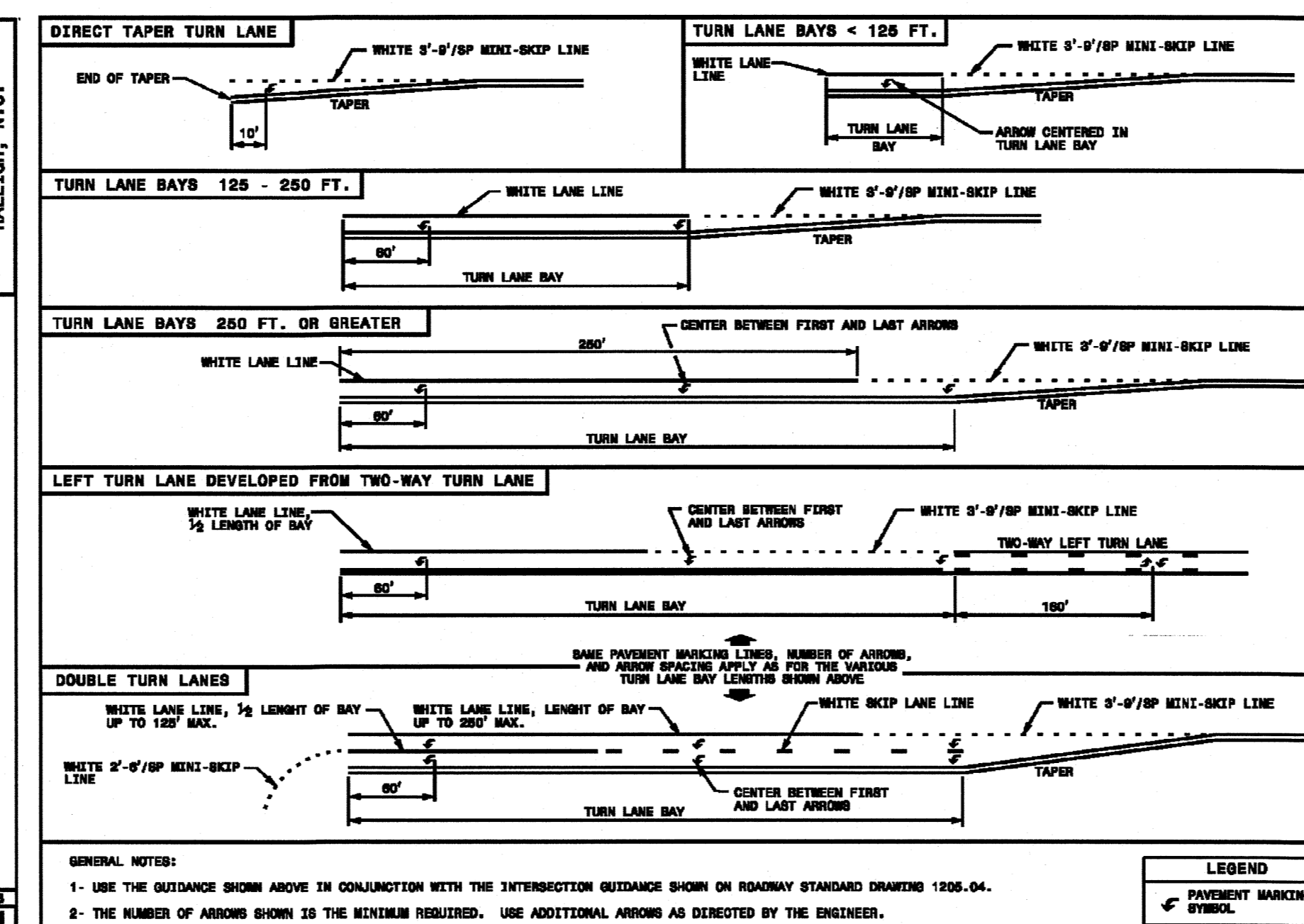
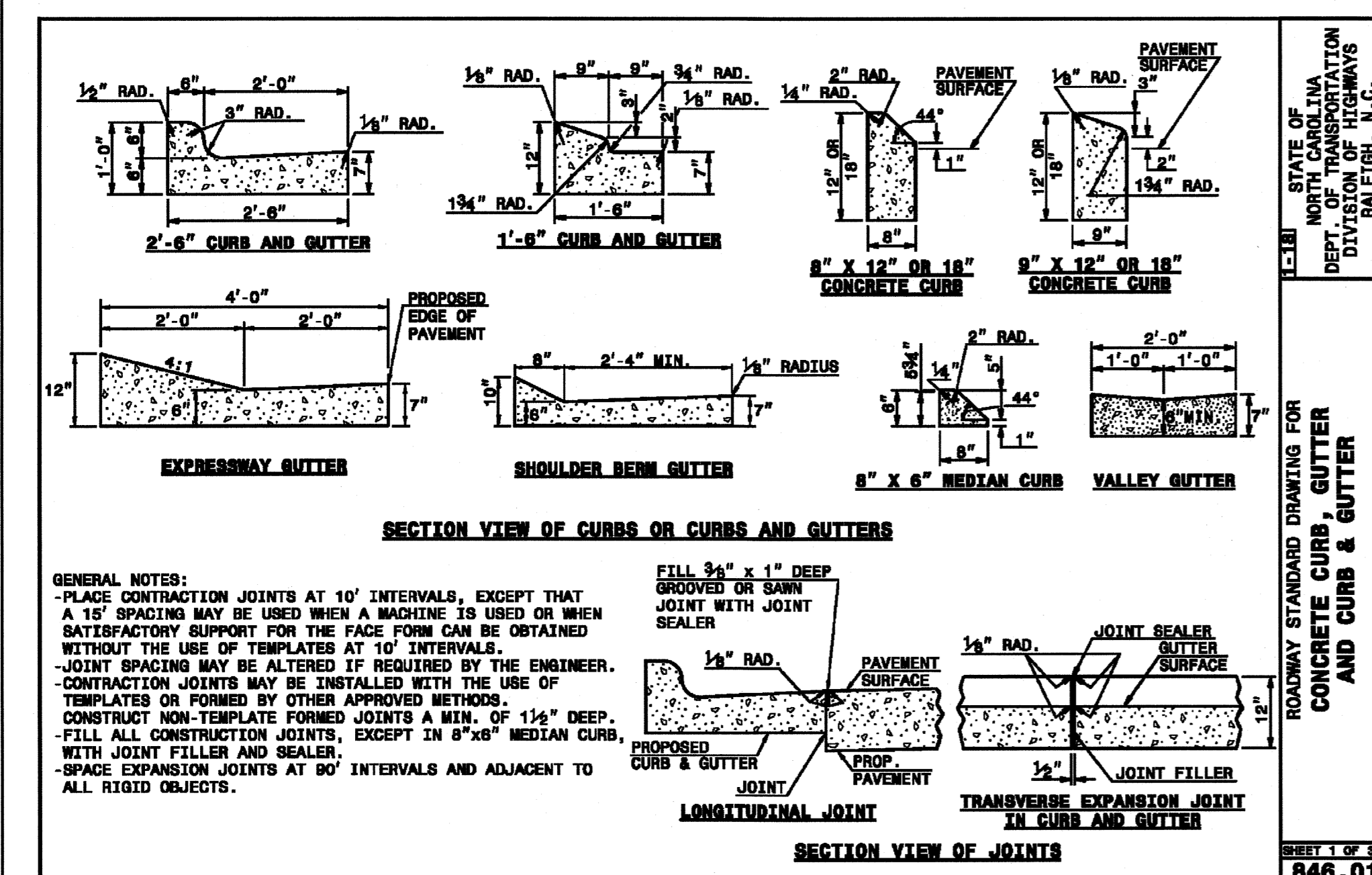
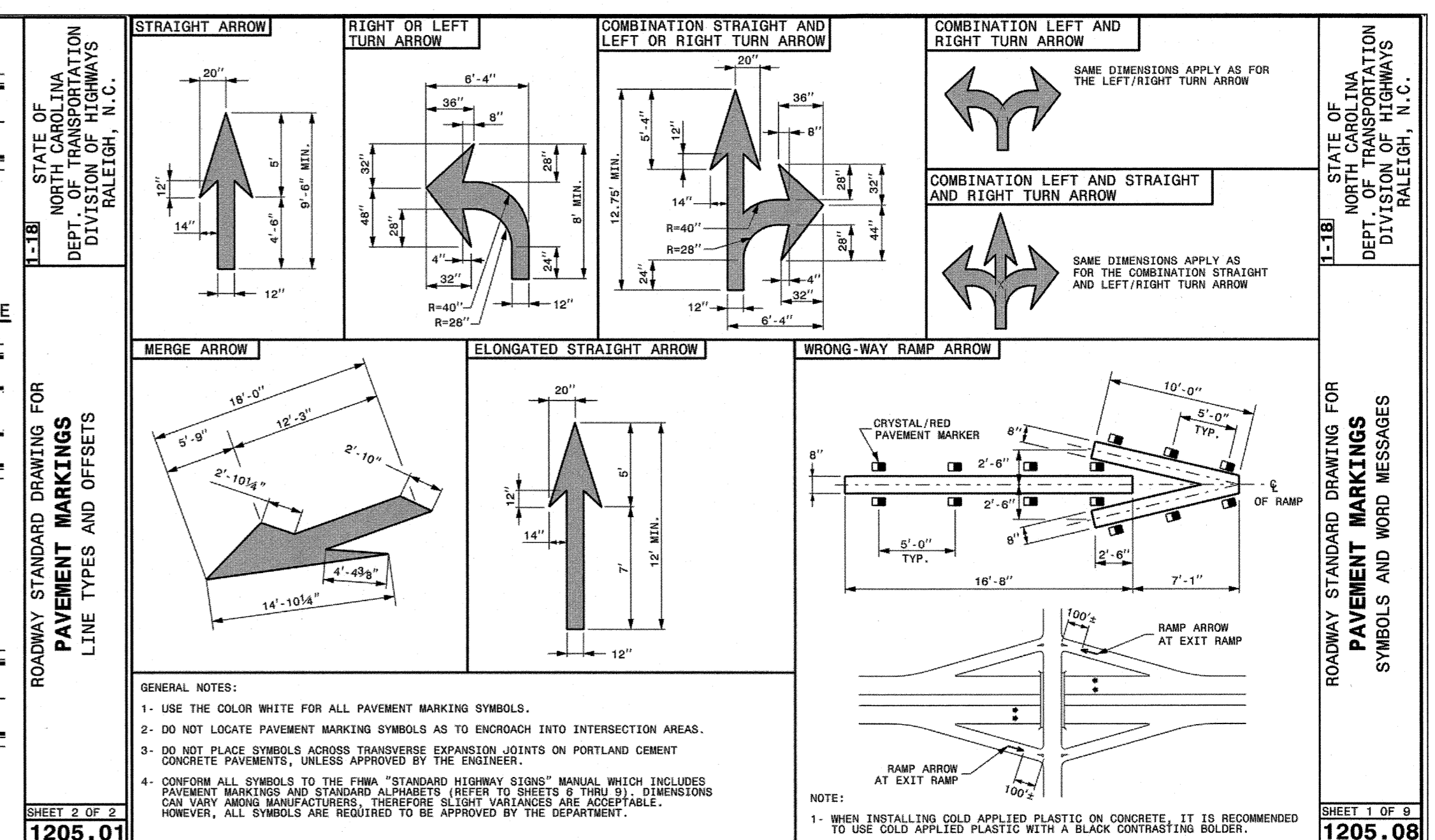
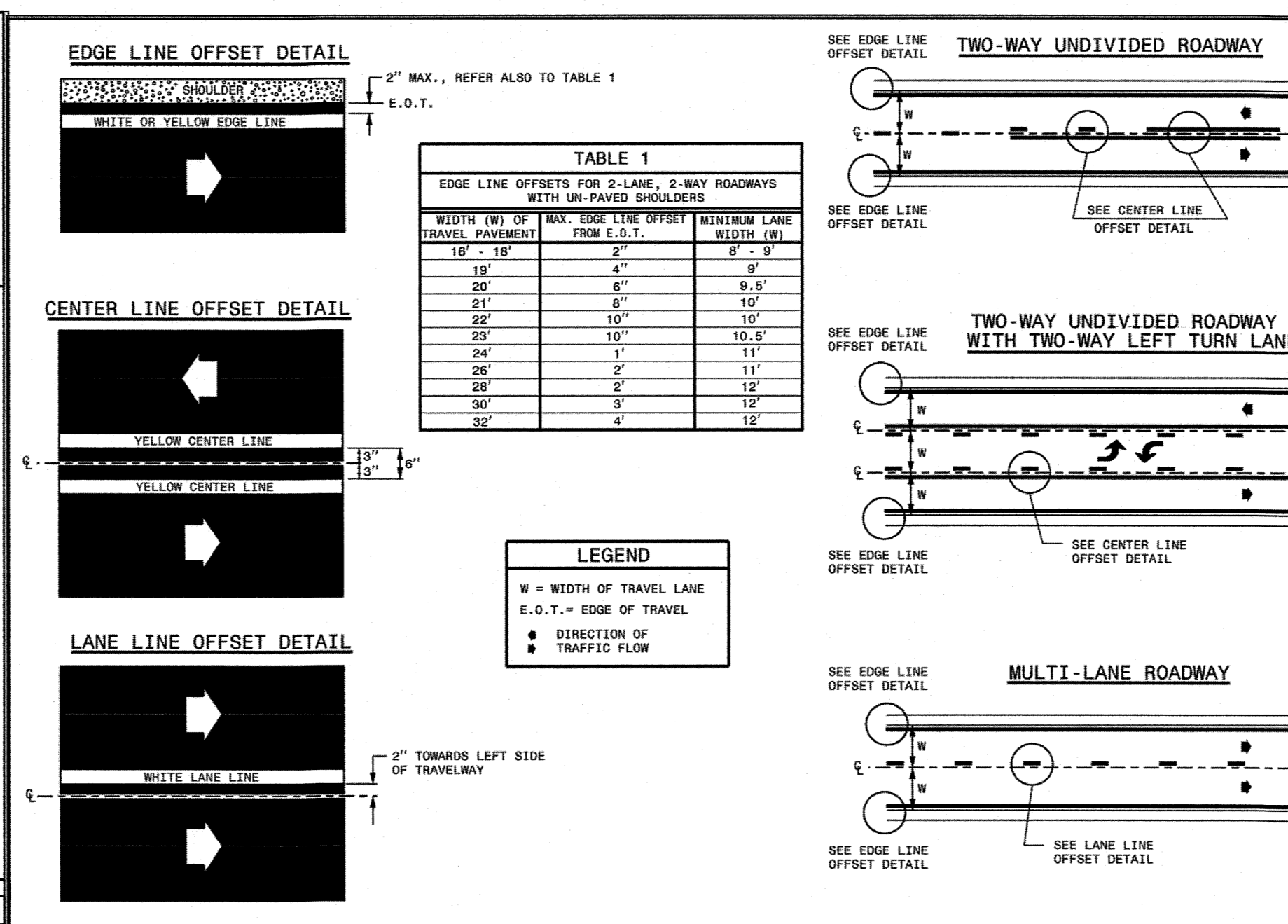
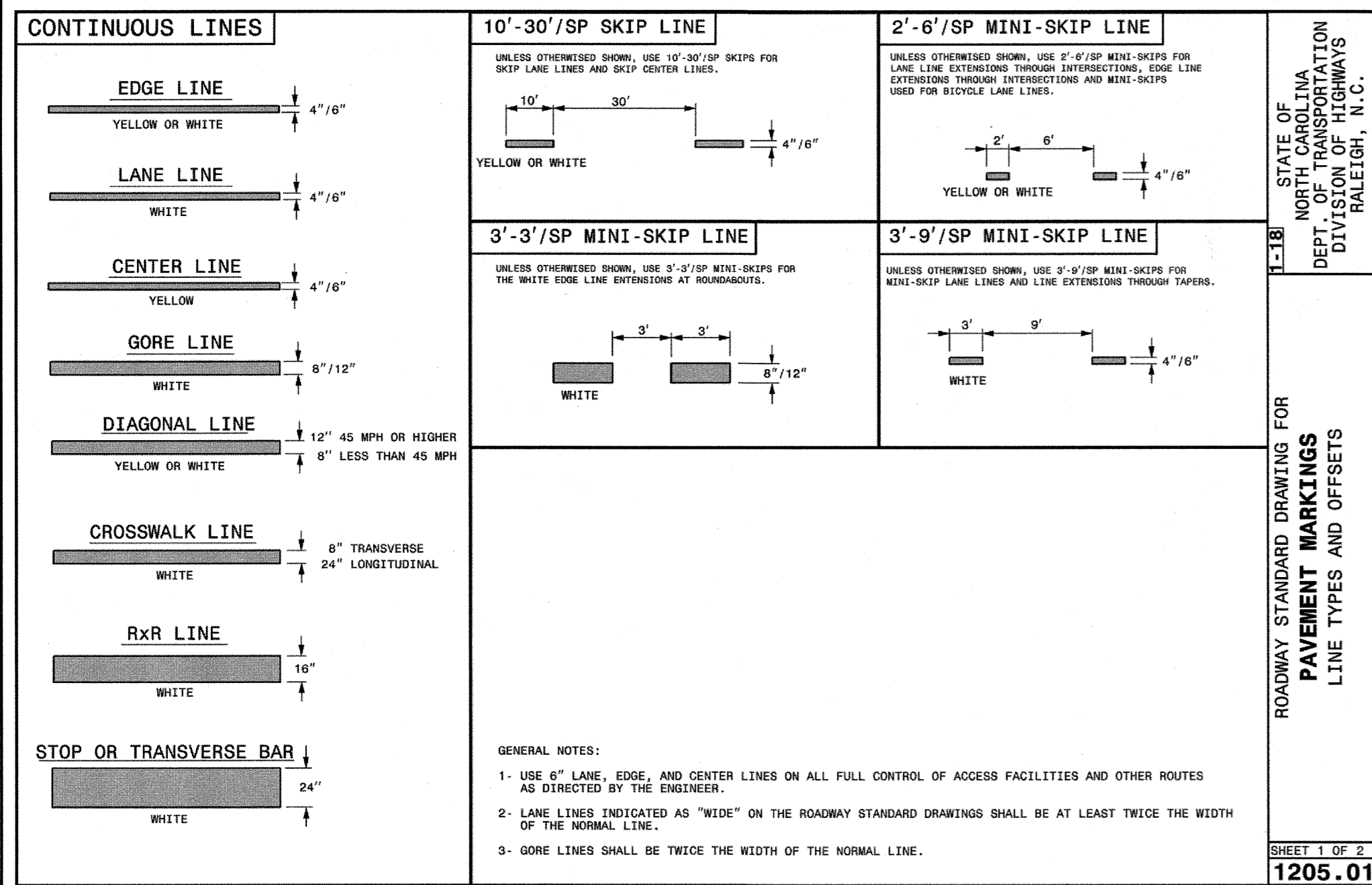
DRAWING INFORMATION:

DATE	BY	CHK	APP
12/31/18	AK	AK	AK



T-1.1
PEI JOB#: 16105.PE

FINAL DESIGN - NOT RELEASED FOR CONSTRUCTION



REVISIONS:

1) PER CITY AND OWNER COMMENTS

CLIENT INFORMATION:

FDC Ambergleigh Shores II SPE, LLC
900 Brookstone Centre Parkway
Columbus, GA 31904

PARAMOUNT ENGINEERING INC.
122 Cinema Drive
Wilmington, North Carolina 28403
(910) 791-6707 (F) (910) 791-6700 (P)
NC License #: C-2846

OFFSITE TRAFFIC IMPROVEMENTS TRAFFIC DETAILS AMBERLEIGH SHORES PHASE II CITY OF WILMINGTON NORTH CAROLINA

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

For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

WILMINGTON NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 1/21/19 Permit #: 2018045
Signed: [Signature]

Approved Construction Plan
Name: [Name] Date: [Date]
Planning: YMC 1-4-2019
Traffic: AK 1-4-19
Fire: [Signature] 1-4-19

CONTRACT STANDARDS
OFFICE NO. 201-280-1111 FAX NO. 201-280-1118
DESIGNED BY: [Name] DATE: [Date]
CHECKED BY: [Name] DATE: [Date]
DRAWN BY: [Name] DATE: [Date]
SCALE: [Scale]

SEAL
ENGINEER
TERRY R. BLAIR
11/28/18

T-4.0

PEI JOB#: 16105 PE

