

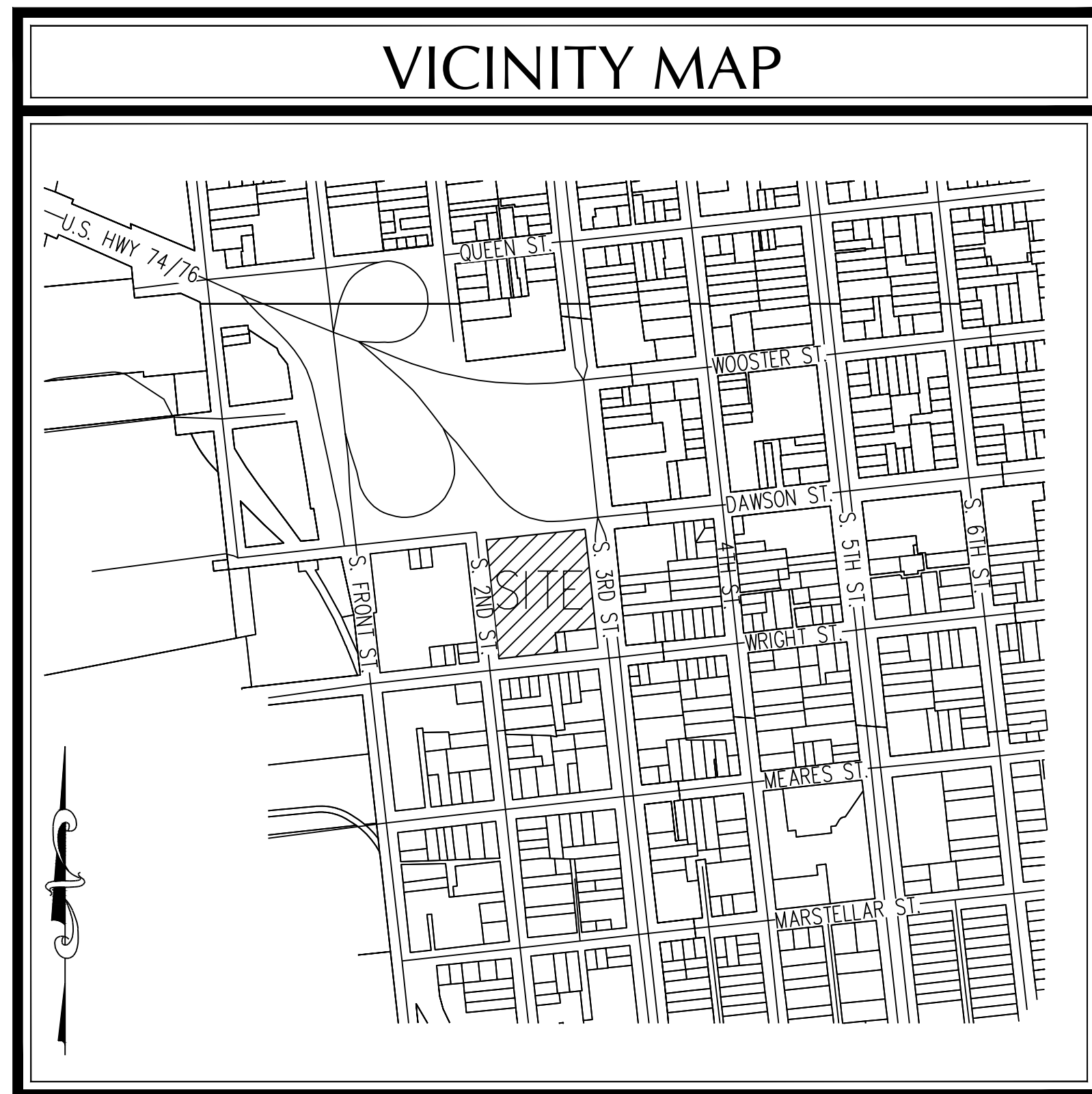
SITE DEVELOPMENT PLAN

FOR

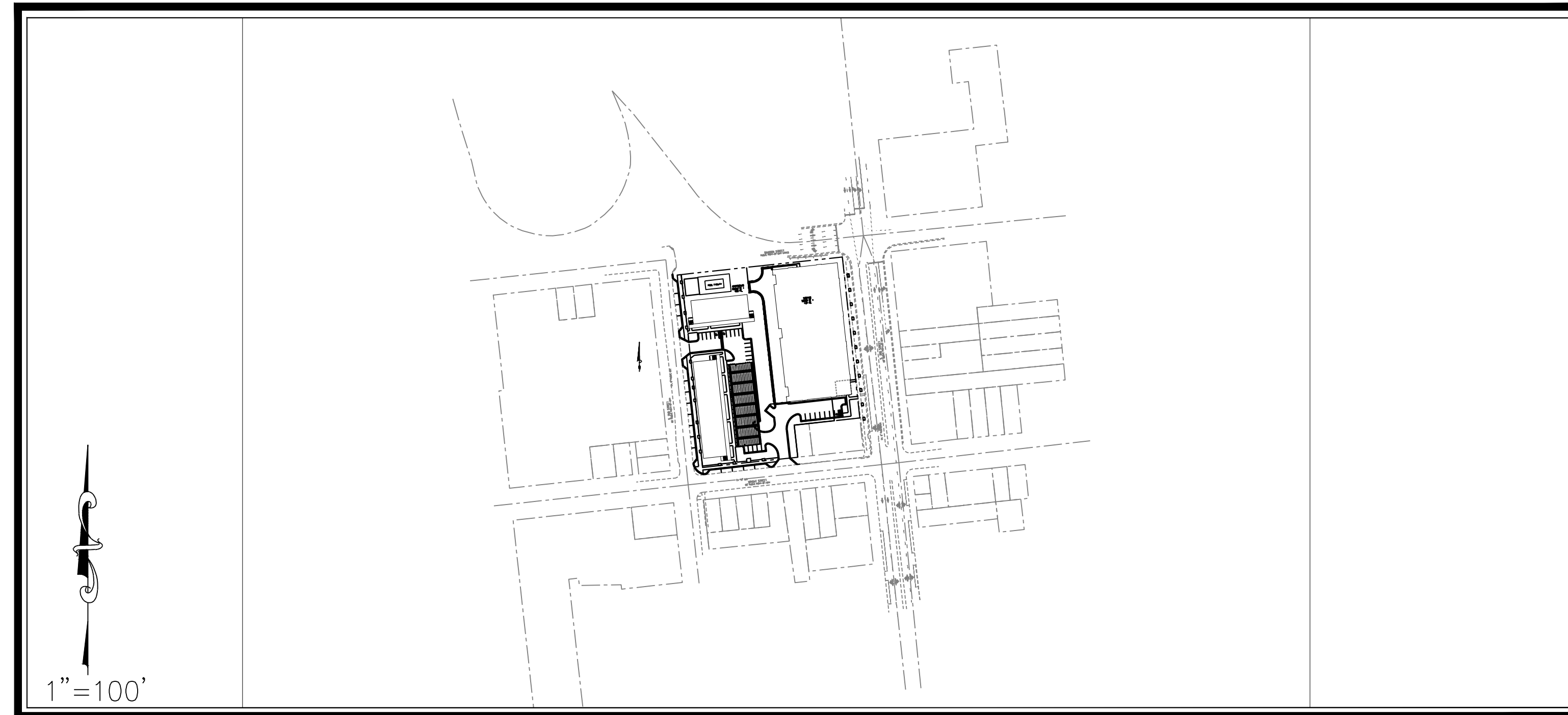
PINNACLE 3RD STREET

WILMINGTON, NORTH CAROLINA

AUGUST 2018



VICINITY MAP
(NTS)



DESCRIPTION	EXISTING	PROPOSED
1' CONTOUR INTERVAL	—	—
5' CONTOUR INTERVAL	- - - - -	—
PROPERTY LINE	—	—
ROADWAY CENTERLINE	—	—
RIGHT OF WAY LIMITS	—	—
EASEMENT LINE	—	—
CURB & GUTTER	—	—
SANITARY SEWER FACILITIES	—	—
STORM SEWER FACILITIES	—	—
WATERLINE	—	—
FIRE HYDRANT ASSEMBLY	—	—
WATERWAYS	—	N/A
PROPOSED LOT AND S.F.	—	—
OPEN SPACE LABEL	—	—
OPEN SPACE	—	—
BUILDING SET BACKS	—	—
PRIVATE SANITARY SET BACKS	—	—

DEVELOPER/OWNER

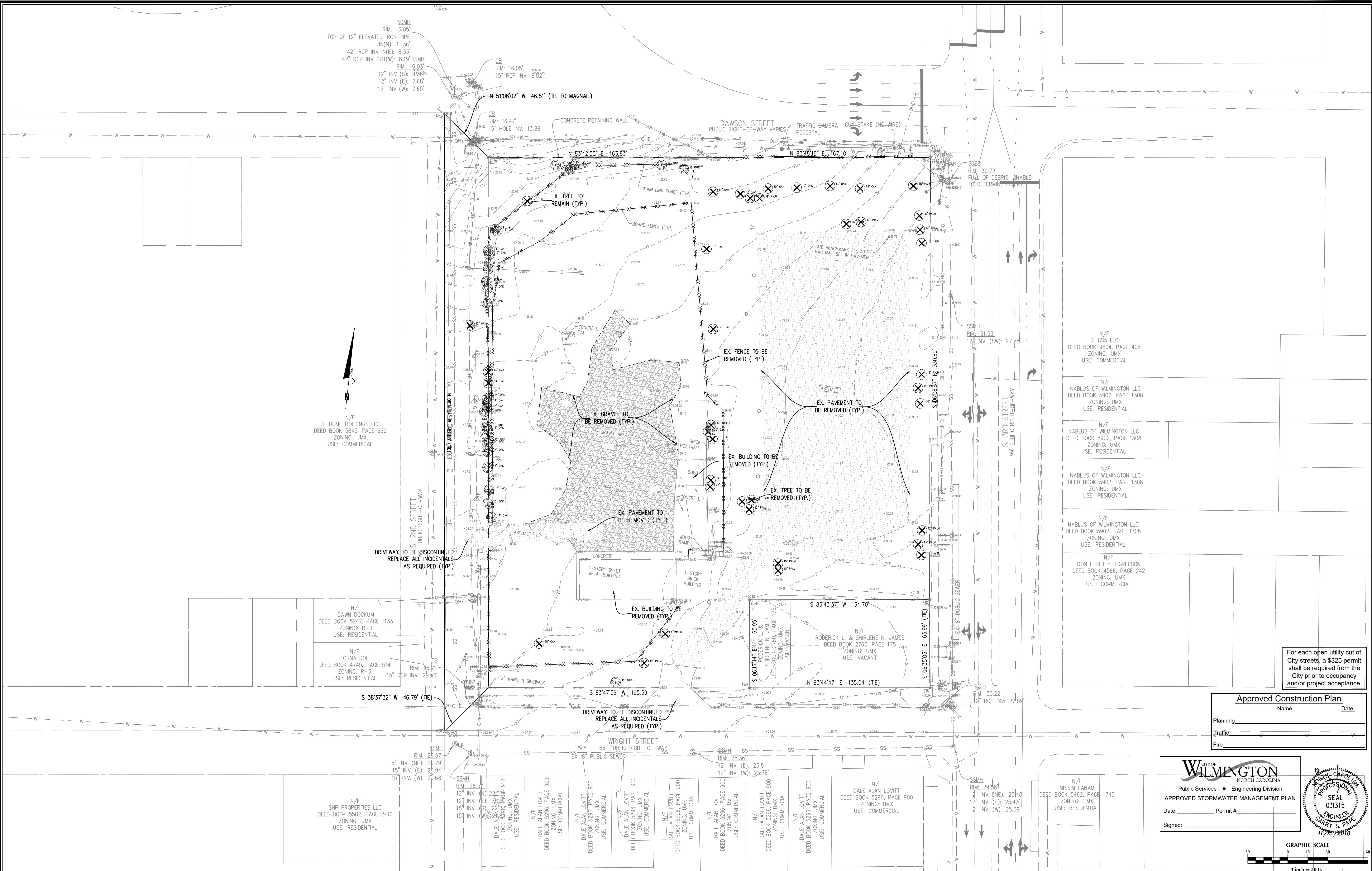
ROBERT HIGH DEVELOPMENT, LLC
 223 GREENVILLE AVENUE
 WILMINGTON, NC 28403
 PHONE: (910) 790-9490

PREPARED BY:

GSP CONSULTING, PLLC
ENGINEERING
 6626 Gordon Road, Unit C, Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659 License # P-0718

INDEX OF SHEETS	
SHT C-0	COVER SHEET
SHT C-1	GENERAL NOTES
SHT C-2.1	EXISTING CONDITIONS PLAN
SHT C-2.2	SITE INVENTORY PLAN
SHT C-3	SITE PLAN
SHT C-4	UTILITY PLAN
SHT C-5	GRADING, DRAINAGE & E&SC PLAN
SHT C-6	INFILTRATION TRENCH DETAILS
SHT C-7	STANDARD DETAILS
SHT C-8	STANDARD DETAILS
SHT C-9	STANDARD DETAILS

SITE DATA TABLE	
GENERAL NOTES:	
1.	NEW HANOVER COUNTY PARCEL NOS. PIN 311716.83.7834.000 / PID R05413-003-001-000 PIN 311716.84.6177.000 / PID R05409-032-001-000 PIN 311716.84.9008.000 / PID R05409-032-002-000 SITE ADDRESS: 201 WRIGHT STREET
2.	TOTAL TRACT AREA: 2.81 AC.± (122,286 S.F.) DISTURBED AREA - 2.81 AC.±
3.	ZONING DISTRICT: UMX SETBACKS: NO SETBACKS REQUIRED.
4.	THIS PROPERTY IS NOT WITHIN A SPECIAL FLOOD HAZARD ZONE PER FEMA FLOOD INSURANCE RATE MAP #3720311700L, EFFECTIVE DATE AUGUST 28, 2018.
5.	CAMA LAND CLASSIFICATION: URBAN.
DEVELOPMENT DATA:	
TOTAL TRACT AREA = 2.81 AC. (122,286 S.F.) STORAGE TRACT AREA = 1.21 AC. (52,684 S.F.) MULTI-FAMILY TRACT AREA = 1.60 AC. (69,602 S.F.)	
CONSTRUCTION TYPES: STORAGE - TYPE 2B MULTI-FAMILY - TYPE VB - SPRINKLED	
MULTI-FAMILY DENSITY - 25 UNITS/AC. PROPOSED DENSITY 40 UNITS - 25 UNITS/AC	
BUILDING COVERAGE - 54,284 S.F. (44.4%) 2-2 STORY APARTMENT BUILDINGS AND 1-2 STORY MINI-WAREHOUSE BUILDING	
TOTAL GROSS FLOOR AREA - 108,600 S.F. GFA MINI-WAREHOUSING = 71,000 S.F.± APARTMENTS = 37,600 S.F.± 108,600 SF (88.8%)	
TOTAL BEDROOMS - 80 40 X 2 BR = 80 BR	
BUILDING HEIGHT - MAXIMUM - 45' MEAN ROOF PROPOSED - STORAGE BUILDING - 32'-10" MULTI-FAMILY - 30'	
PARKING - REQUIRED: 40 - 2 BR UNITS X 2.5 MAX. SP./UNIT = 100 900 SF OFFICE - 1 SP./200 SF = 5 ** 105 MAXIMUM SPACES **	
PROVIDED: 63 ONSITE SPACES W/5 HC SPACES 23 STREET SPACES ** 86 TOTAL SPACES PROV'D. (5 H/C) ** PER ADA REGS FOR PARKING FACILITY WITH 51-75 SPACES 3 H/C SPACES REQUIRED BIKE PARKING REQ'D = 1 SPACE/DWELLING UNIT & 2 SPACES/OFFICE SPACE = 38+2=40 BIKE PARKING PROV'D = 40	
NEW IMPERVIOUS SURFACES -	
BUILDINGS -	54,284 S.F.
PAVEMENT -	35,430 S.F.
CONCRETE -	7,000 S.F.
POOL FACILITY -	3,222 S.F.
TOTAL -	99,936 S.F. (81.7%)
UTILITY CAPACITY REQUESTS: PROPOSED SEWER CAPACITY - 40 UNITS @ 240 GPD/BR + 900 SF OFFICE SPACE @ 60 GPD/100SF + 20 PERSON CLUBHOUSE @ 10 GPD/PERSON = 9,600 GPD + 540 GPD + 200 GPD = 10,340 GPD PROPOSED WATER CAPACITY - 40 UNITS @ 400 GPD/BR + 900 SF OFFICE SPACE @ 60 GPD/100SF + 20 PERSON CLUBHOUSE @ 10 GPD/PERSON = 16,000 GPD + 540 GPD + 200 GPD = 16,740 GPD	
Approved Construction Plan	
Planning _____	Name _____ Date _____
Traffic _____	
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.	
APPROVED STORMWATER MANAGEMENT PLAN Date: _____ Permit # _____ Signed: _____	
NOTE: ALL DESIGN AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE CITY OF WILMINGTON LAND DEVELOPMENT CODE, TECHNICAL STANDARDS MANUAL & THE STATE OF NORTH CAROLINA	



SDMH
RIM: 16.05'
TOP OF 12" ELEVATED IRON PIPE
IN(N): 11.36'
42" RCP INV IN(E): 8.33'
42" RCP INV OUT(W): 8.19'

N/F
LE DOME HOLDINGS LLC
DEED BOOK 5845, PAGE 629
ZONING: UMX
USE: COMMERCIAL

N/F
DAWN DOCKUM
DEED BOOK 5247, PAGE 1133
ZONING: R-3
USE: RESIDENTIAL

N/F
LORNA ROE
DEED BOOK 4745, PAGE 514
ZONING: R-3
USE: RESIDENTIAL

N/F
SNP PROPERTIES LLC
DEED BOOK 5296, PAGE 2410
ZONING: UMX
USE: RESIDENTIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 909
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 906
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOWITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
NISSIM LAHAM
DEED BOOK 5462, PAGE 1745
ZONING: UMX
USE: RESIDENTIAL

N/F
RI CSS LLC
DEED BOOK 9804, PAGE 408
ZONING: UMX
USE: COMMERCIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
RODERICK L. & SHIRLENE N. JAMES
DEED BOOK 2760, PAGE 175
ZONING: UMX
USE: VACANT

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 _____

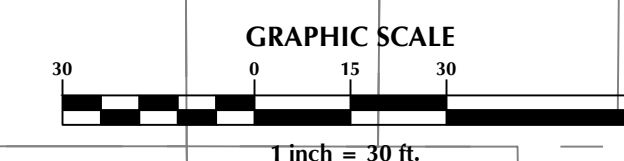
Fire _____

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

Date: _____ Permit # _____

Signed: _____

PROFESSIONAL SEAL
031315
ENGINEER
GARY S. PIPE
11/19/2018



No.	Revision	Date	By

Designer: GSP
Scale: 1" = 30'
Date: August 2018
Drawn By: GSP
Job No.:
License #: P-0718
2018-0006

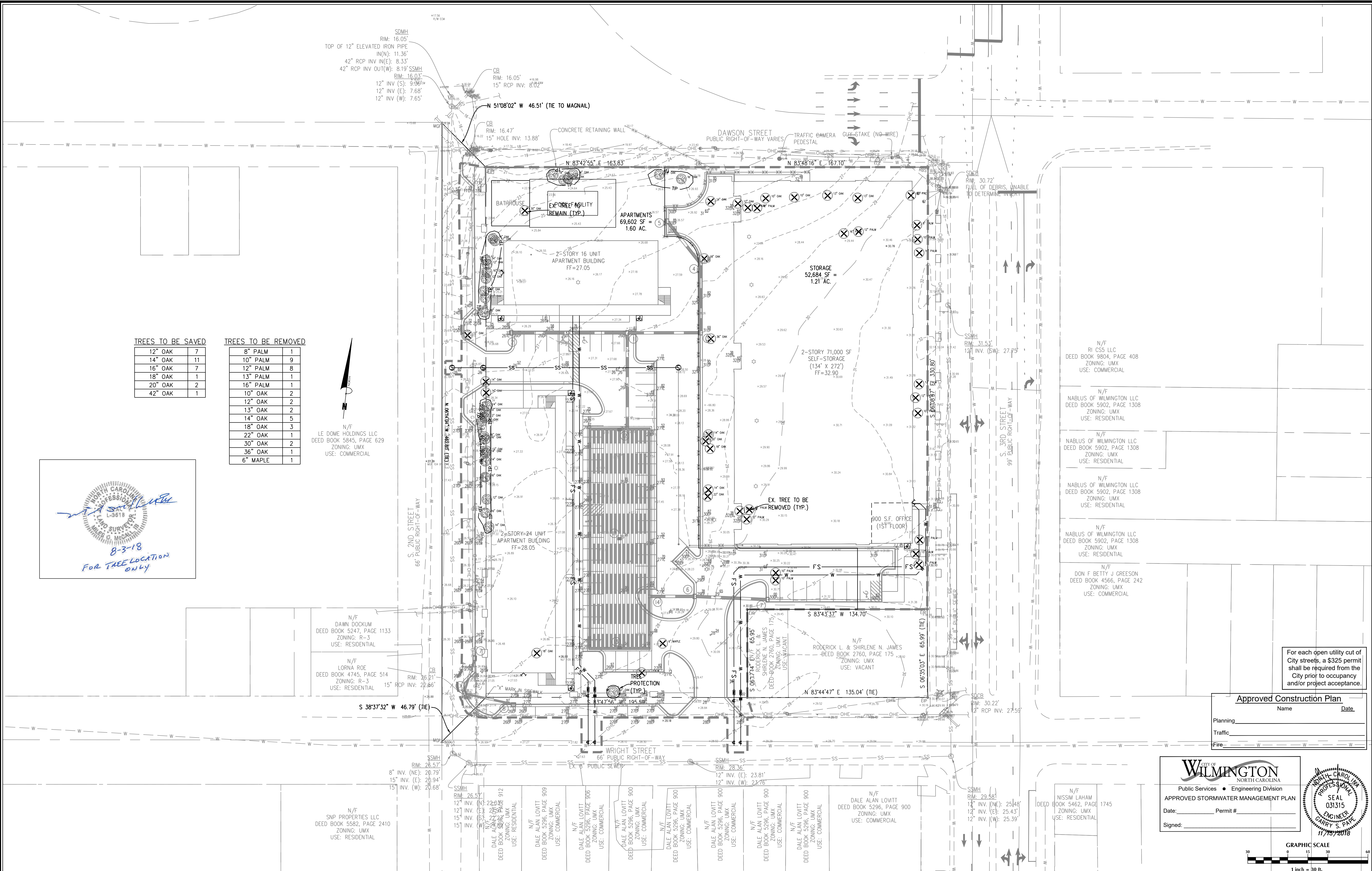
Pinnacle 3rd Street
New Hanover County
North Carolina

EXISTING CONDITIONS

PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-2.1



TREES TO BE SAVED

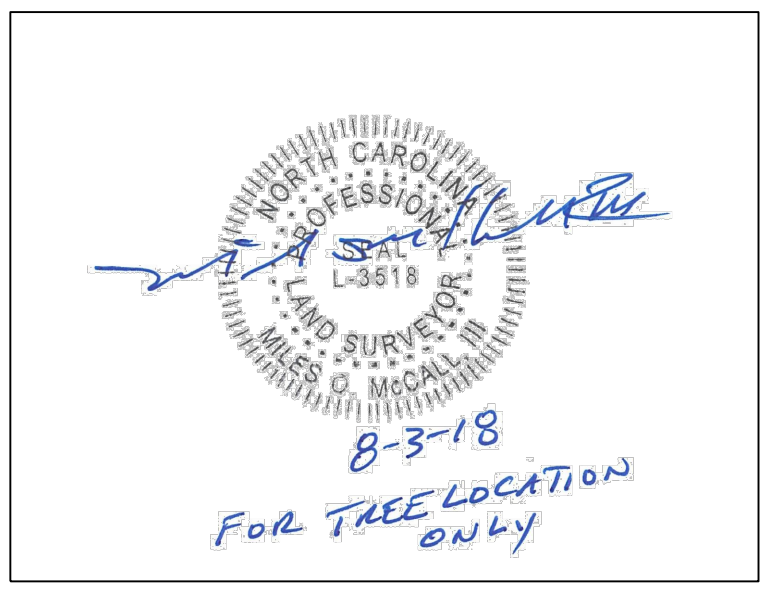
12" OAK	7
14" OAK	11
16" OAK	7
18" OAK	1
20" OAK	2
42" OAK	1

TREES TO BE REMOVED

8" PALM	1
10" PALM	9
12" PALM	8
13" PALM	1
16" PALM	1
10" OAK	2
12" OAK	2
13" OAK	2
14" OAK	5
18" OAK	3
22" OAK	1
30" OAK	2
36" OAK	1
6" MAPLE	1



N/F
LE DOME HOLDINGS LLC
DEED BOOK 5845, PAGE 629
ZONING: UMX
USE: COMMERCIAL



N/F
RI CSS LLC
DEED BOOK 9804, PAGE 408
ZONING: UMX
USE: COMMERCIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DAWN DOCKUM
DEED BOOK 5247, PAGE 1133
ZONING: R-3
USE: RESIDENTIAL

N/F
LORNA ROE
DEED BOOK 4745, PAGE 514
ZONING: R-3
USE: RESIDENTIAL

N/F
RODERICK L. & SHIRLENE N. JAMES
DEED BOOK 2760, PAGE 175
ZONING: UMX
USE: VACANT

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 _____

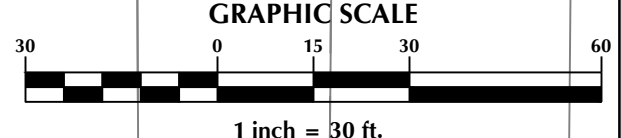
Fire _____

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

Date: _____ Permit # _____

Signed: _____

WILMINGTON
NORTH CAROLINA
PROFESSIONAL
SEAL
031315
ENGINEER
CARY S. PIPE
11/19/2018



No.	Revision	Date	By

Designer: GSP
Scale: 1" = 30'
Drawn By: GSP
Date: August 2018
License #: P-0718
2018-0006

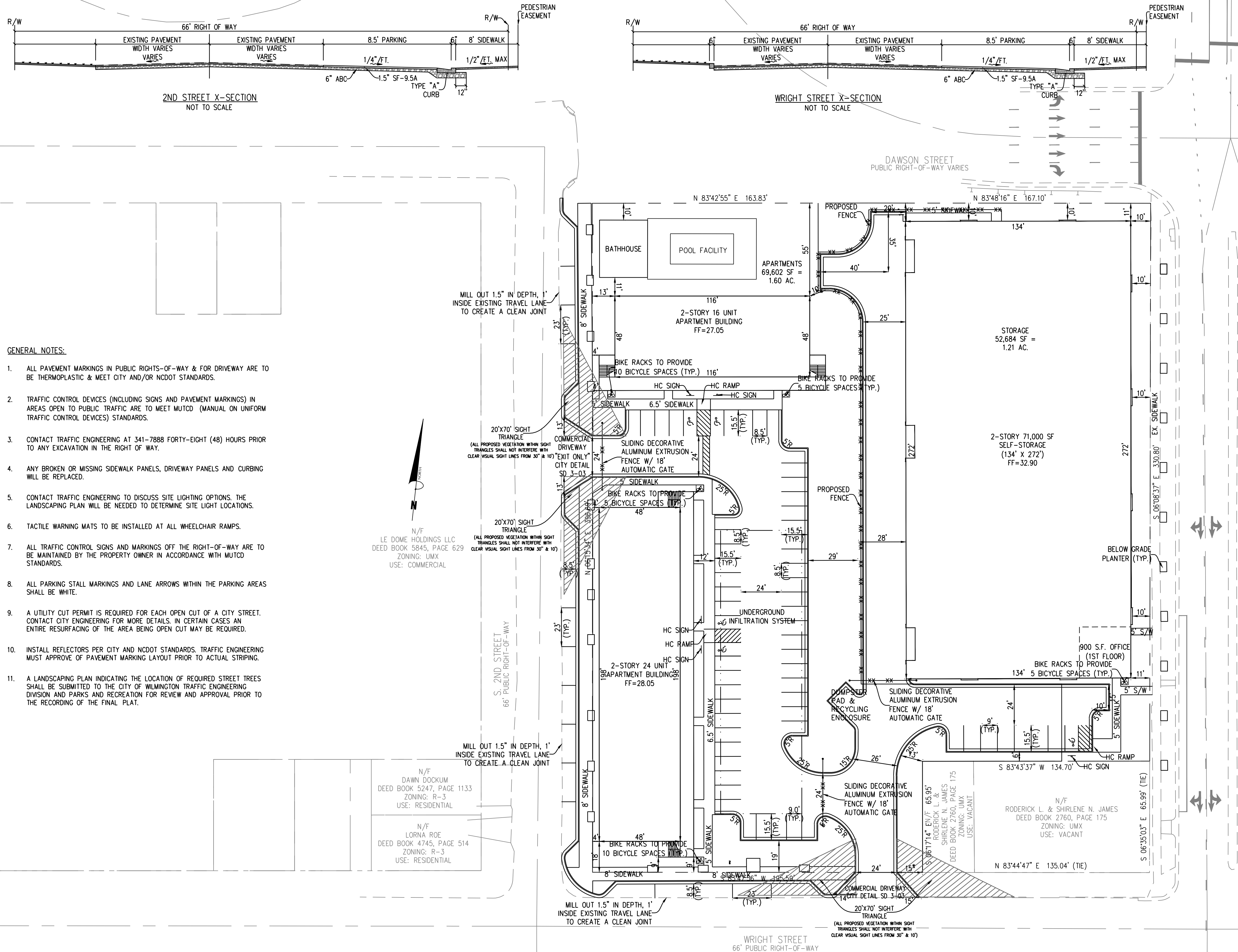
PINNACLE 3RD STREET
New Hanover County
North Carolina

SITE INVENTORY PLAN

PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-2.2



- GENERAL NOTES:**
1. ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS-OF-WAY & FOR DRIVEWAY ARE TO BE THERMOPLASTIC & MEET CITY AND/OR NCDOT STANDARDS.
 2. 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.
 3. CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
 4. ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
 5. CONTACT TRAFFIC ENGINEERING TO DISCUSS SITE LIGHTING OPTIONS. THE LANDSCAPING PLAN WILL BE NEEDED TO DETERMINE SITE LIGHT LOCATIONS.
 6. TACTILE WARNING MATS TO BE INSTALLED AT ALL WHEELCHAIR RAMPS.
 7. ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
 8. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
 9. A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT CITY ENGINEERING FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
 10. INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
 11. A LANDSCAPING PLAN INDICATING THE LOCATION OF REQUIRED STREET TREES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION AND PARKS AND RECREATION FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAT.

- SITE NOTES:**
1. MINI-WAREHOUSE UNITS SHALL BE USED FOR "DEAD" STORAGE ONLY (NO COMMERCIAL ENTERPRISE CAN BE CONDUCTED FROM AN INDIVIDUAL UNIT OR UNITS).
 2. THERE SHALL BE NO OUTSIDE STORAGE OF MATERIALS.
 3. THERE SHALL BE NO STORAGE OF HAZARDOUS OR FLAMMABLE MATERIALS.
 4. ALL PROPOSED VEGETATION WITHIN SIGHT TRIANGLES SHALL NOT INTERFERE WITH CLEAR VISUAL SIGHT LINE FROM 30'-10'. SIGNS SHALL NOT BE WITHIN THE SIGHT DISTANCE TRIANGLE AREA.
 5. AUTOMATIC GATE SHALL PROVIDE SIREN ACTIVATED FEATURE FOR AFTER HOURS RESPONSE.

- LIGHTING NOTES:**
1. ALL OUTDOOR LIGHTING SHALL BE INSTALLED SO AS NOT TO EXCEED TEN (10) FEET IN HEIGHT AND NOT TO SHINE OR REFLECT DIRECTLY ON SURROUNDING PROPERTIES.
 2. LIGHTING SPECIFICATIONS, SIZES & LOCATIONS PROVIDED BY OWNER.

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UM-X
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UM-X
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UM-X
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UM-X
USE: RESIDENTIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UM-X
USE: COMMERCIAL

N/F
LE DOME HOLDINGS LLC
DEED BOOK 5845, PAGE 629
ZONING: UM-X
USE: COMMERCIAL

N/F
DAWN DOCKUM
DEED BOOK 5247, PAGE 1133
ZONING: R-3
USE: RESIDENTIAL

N/F
LORNA ROE
DEED BOOK 4745, PAGE 514
ZONING: R-3
USE: RESIDENTIAL

N/F
SNP PROPERTIES LLC
DEED BOOK 5582, PAGE 2410
ZONING: UM-X
USE: RESIDENTIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 912 ZONING: UM-X USE: RESIDENTIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 909 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 906 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

N/F DALE ALAN LOWITT DEED BOOK 5296, PAGE 900 ZONING: UM-X USE: COMMERCIAL

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 _____

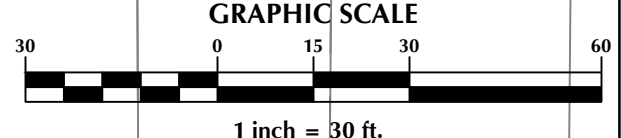
Fire _____

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

Date: _____ Permit # _____

Signed: _____

WILMINGTON PROFESSIONAL SEAL
SEAL 031315
ENGINEER GARY S. PIPE
11/19/2018



No.	Revision	Date	By

PINNACLE 3RD STREET
Wilmington North Carolina

SITE PLAN

PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-3

GENERAL UTILITY NOTES:

- PROJECT SHALL COMPLY WITH CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA) CROSS CONNECTION REQUIREMENTS. WATER METER(S) CANNOT BE SET AND ACTIVATED ON NEW MAINS UNTIL ALL REQUIREMENTS ARE MET AND NCCENR HAS ISSUED THEIR "FINAL APPROVAL". CALL 332-6558 FOR INFORMATION.
- 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.
- TO USE CFPUA WATER FOR IRRIGATION IT MUST BE METERED SEPARATELY.
- WHEN PVC WATER MAINS AND/OR POLYETHYLENE SERVICES ARE PROPOSED, THE PIPES ARE TO BE MARKED WITH NO. 10 INSULATED COPPER WIRE INSTALLED THE ENTIRE LENGTH AND STRAPPED TO THE PIPES WITH DUCT TAPE. THE INSULATED WIRE IS TO BE STRIPPED TO BARE WIRE AND SECURED TO ALL VALVES AND FITTINGS. THIS WIRE IS TO BE ACCESSIBLE AT ALL VALVES, FIRE HYDRANTS, AND WATER METER BOXES TO AID IN FUTURE LOCATIONS OF FACILITIES.
- TREES ARE NOT TO BE PLANTED OVER WATER MAINS OR WITHIN UTILITY EASEMENTS.
- STATE WATER AND SEWER PERMITS SHALL BE OBTAINED PRIOR TO RELEASE OF THE PROJECT FOR CONSTRUCTION.
- ALL WATERMANS WITHIN PUBLIC RIGHT OF WAY TO BE PUBLIC AND ALL WATERMANS LOCATED ON PRIVATE PROPERTY TO BE PRIVATE.
- ALL WATERLINES TO HAVE MINIMUM 10' SEPARATION FROM ALL SEWER LINES, MANHOLES AND CLEANOUTS & TO HAVE 3" OF COVER AND 18" CLEARANCE WHERE WATER CROSSES OTHER UTILITY LINES.
- ANY SANITARY SEWER SYSTEM OR ANY PORTION THEREOF SHALL BE LOCATED AT LEAST A MINIMUM OF 10- FEET FROM ANY WATER LINE. SEWER LINES MAY CROSS A WATER LINE IF 18-INCH CLEAR SEPARATION DISTANCE IS MAINTAINED, WITH THE SEWER LINE CROSSING UNDER THE WATER LINE. WHEN CONDITIONS PREVENT AN 18-INCH CLEAR SEPARATION FROM BEING MAINTAINED OR WHENEVER IT IS NECESSARY FOR THE WATER LINE TO CROSS UNDER THE SEWER, THE SEWER LINE SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR ITS EQUIVALENT AND THE WATER LINE SHALL BE CONSTRUCTED OF FERROUS MATERIALS EQUIVALENT TO WATER MAIN STANDARDS WITH FOR A DISTANCE OF AT LEAST TEN FEET ON EACH SIDE OF THE POINT OF CROSSING, WITH FULL SECTIONS OF PIPE CENTERED AT THE POINT OF CROSSING.

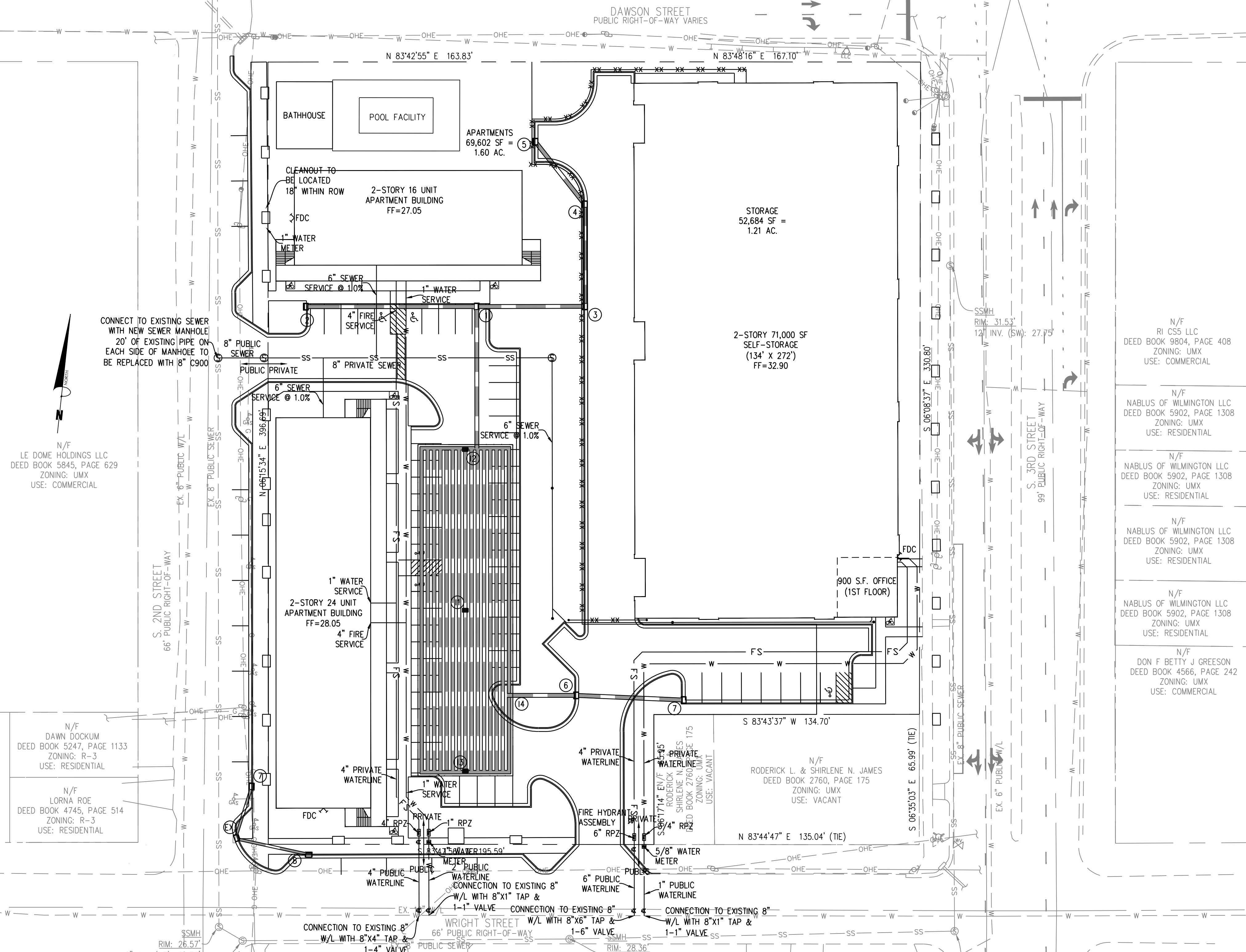
CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

- 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 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.

FIRE DEPARTMENT NOTES:

- HYDRANT MUST BE WITHIN 150' OF THE FDC.
- THE FDC MUST BE WITHIN 40' OF FIRE APPARATUS PLACEMENT.
- LANDSCAPING OR PARKING CANNOT BLOCK OR IMPEDE THE FDC OR FIRE HYDRANTS. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE HYDRANT AND FDC.
- HYDRANTS MUST BE LOCATED WITHIN 8' OF THE CURB.
- NEW HYDRANTS MUST BE AVAILABLE FOR USE PRIOR TO CONSTRUCTION OF THE BUILDING(S).
- CONTRACTOR SHALL MAINTAIN AN ALL WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
- UNDERGROUND FIRE LINE AND PRIVATE WATER MAINS MUST BE PERMITTED AND INSPECTED BY THE WILMINGTON FIRE DEPARTMENT FROM THE PRIVATE RIGHT-OF-WAY TO THE BUILDING, CONTACT THE WILMINGTON FIRE DEPARTMENT DIVISION OF FIRE AND LIFE SAFETY AT 910-343-0696 FOR ADDITIONAL INFORMATION.
- ADDITIONAL FIRE PROTECTION AND/OR ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES CONCERNING THE PROJECT.
- ALL ISOLATION VALVES WITHIN THE "HOT BOX" MUST BE ELECTRICALLY SUPERVISED.

SSMH
RIM: 16.03'
12" INV (S): 9.36'
12" INV (E): 7.68'
12" INV (W): 7.65'



N/F
LE DOME HOLDINGS LLC
DEED BOOK 5845, PAGE 629
ZONING: UMX
USE: COMMERCIAL

N/F
DAWN DOCKUM
DEED BOOK 5247, PAGE 1133
ZONING: R-3
USE: RESIDENTIAL

N/F
LORNA ROE
DEED BOOK 4745, PAGE 514
ZONING: R-3
USE: RESIDENTIAL

N/F
SNP PROPERTIES LLC
DEED BOOK 5582, PAGE 2410
ZONING: UMX
USE: RESIDENTIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 909
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
RI CSS LLC
DEED BOOK 9804, PAGE 408
ZONING: UMX
USE: COMMERCIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
NABLUS OF WILMINGTON LLC
DEED BOOK 5902, PAGE 1308
ZONING: UMX
USE: RESIDENTIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DON F BETTY J GREESON
DEED BOOK 4566, PAGE 242
ZONING: UMX
USE: COMMERCIAL

N/F
DAWN DOCKUM
DEED BOOK 5247, PAGE 1133
ZONING: R-3
USE: RESIDENTIAL

N/F
LORNA ROE
DEED BOOK 4745, PAGE 514
ZONING: R-3
USE: RESIDENTIAL

N/F
SNP PROPERTIES LLC
DEED BOOK 5582, PAGE 2410
ZONING: UMX
USE: RESIDENTIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 909
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

N/F
DALE ALAN LOVITT
DEED BOOK 5296, PAGE 900
ZONING: UMX
USE: COMMERCIAL

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 _____

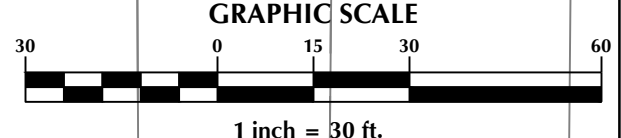
Fire _____

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

Date: _____ Permit # _____

Signed: _____

Professional Engineer
SEAL
031315
CARY S. PIPE
11/19/2018



No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	August 2018
License #	P-0718	Job No.	2018-0006

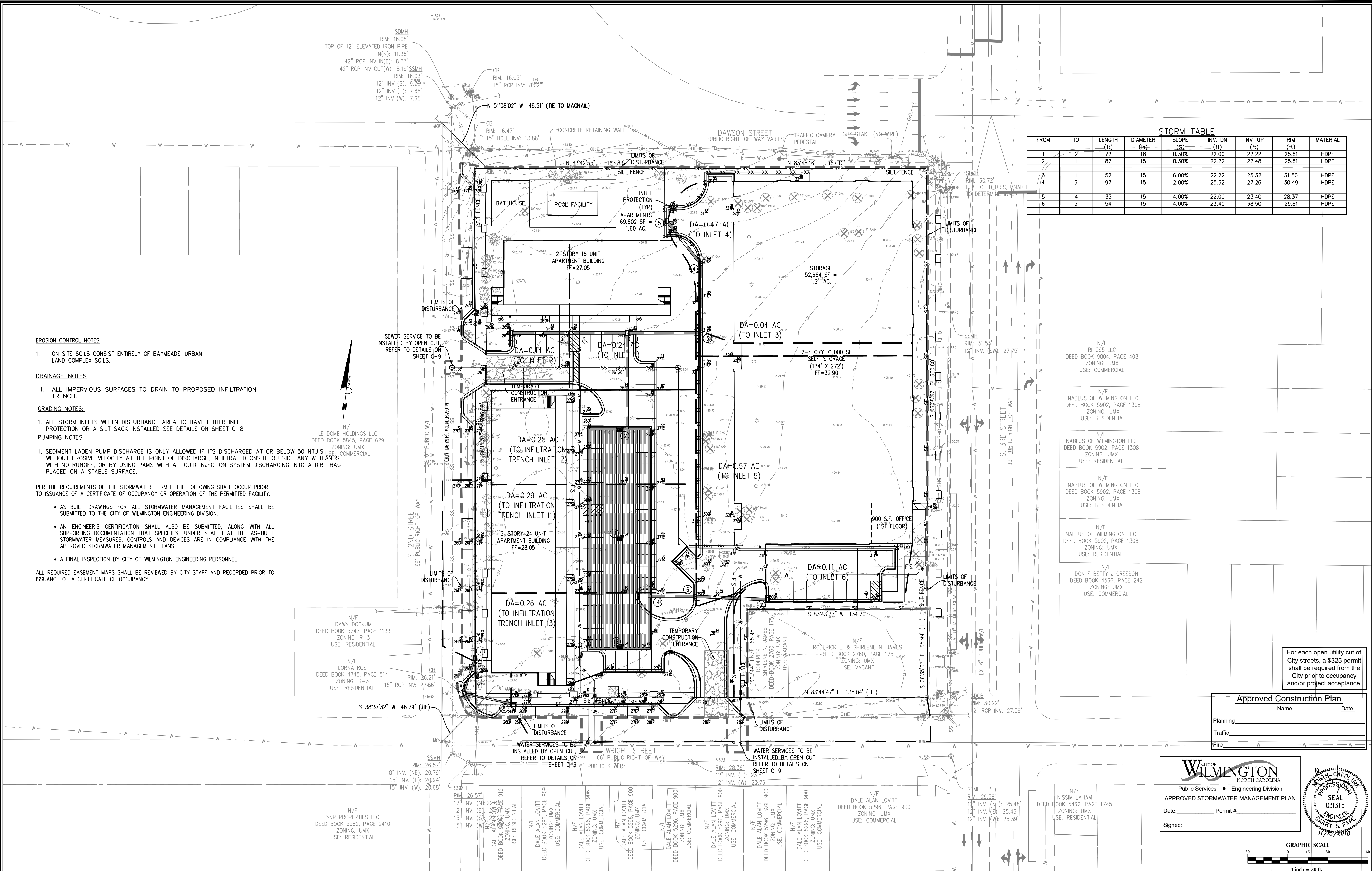
Pinnacle 3rd Street
North Carolina
New Hanover County

UTILITY PLAN

PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-4



STORM TABLE

FROM	TO	LENGTH (ft)	DIAMETER (in)	SLOPE (%)	INV. DN (ft)	INV. UP (ft)	RIM (ft)	MATERIAL
1	12	72	18	0.30%	22.00	22.22	25.81	HDPE
2	1	87	15	0.30%	22.22	22.48	25.81	HDPE
3	1	52	15	6.00%	22.22	25.32	31.50	HDPE
4	3	97	15	2.00%	25.32	27.26	30.49	HDPE
5	14	35	15	4.00%	22.00	23.40	28.37	HDPE
6	5	54	15	4.00%	23.40	38.50	29.81	HDPE

- EROSION CONTROL NOTES**
- ON SITE SOILS CONSIST ENTIRELY OF BAYMEADE-URBAN LAND COMPLEX SOILS.
- DRAINAGE NOTES**
- ALL IMPERVIOUS SURFACES TO DRAIN TO PROPOSED INFILTRATION TRENCH.
- GRADING NOTES:**
- ALL STORM INLETS WITHIN DISTURBANCE AREA TO HAVE EITHER INLET PROTECTION OR A SILT SACK INSTALLED SEE DETAILS ON SHEET C-8.
- PUMPING NOTES:**
- SEDIMENT LADEN PUMP DISCHARGE IS ONLY ALLOWED IF ITS DISCHARGED AT OR BELOW 50 NTU'S WITHOUT EROSION VELOCITY AT THE POINT OF DISCHARGE, INFILTRATED ON SITE OUTSIDE ANY WETLANDS WITH NO RUNOFF, OR BY USING PAMS WITH A LIQUID INJECTION SYSTEM DISCHARGING INTO A DIRT BAG PLACED ON A STABLE SURFACE.
- PER THE REQUIREMENTS OF THE STORMWATER PERMIT, THE FOLLOWING SHALL OCCUR PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR OPERATION OF THE PERMITTED FACILITY.
- AS-BUILT DRAWINGS FOR ALL STORMWATER MANAGEMENT FACILITIES SHALL BE SUBMITTED TO THE CITY OF WILMINGTON ENGINEERING DIVISION.
 - AN ENGINEER'S CERTIFICATION SHALL ALSO BE SUBMITTED, ALONG WITH ALL SUPPORTING DOCUMENTATION THAT SPECIFIES, UNDER SEAL THAT THE AS-BUILT STORMWATER MEASURES, CONTROLS AND DEVICES ARE IN COMPLIANCE WITH THE APPROVED STORMWATER MANAGEMENT PLANS.
 - A FINAL INSPECTION BY CITY OF WILMINGTON ENGINEERING PERSONNEL.
- ALL REQUIRED EASEMENT MAPS SHALL BE REVIEWED BY CITY STAFF AND RECORDED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

- N/F RI CSS LLC DEED BOOK 9804, PAGE 408 ZONING: UM-X USE: COMMERCIAL
- N/F NABLUS OF WILMINGTON LLC DEED BOOK 5902, PAGE 1308 ZONING: UM-X USE: RESIDENTIAL
- N/F NABLUS OF WILMINGTON LLC DEED BOOK 5902, PAGE 1308 ZONING: UM-X USE: RESIDENTIAL
- N/F NABLUS OF WILMINGTON LLC DEED BOOK 5902, PAGE 1308 ZONING: UM-X USE: RESIDENTIAL
- N/F DON F BETTY J GREESON DEED BOOK 4566, PAGE 242 ZONING: UM-X USE: COMMERCIAL

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 _____

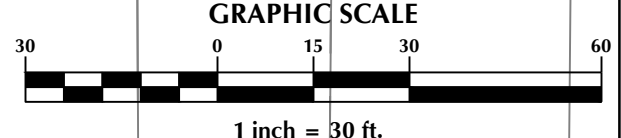
Fire _____

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

Date: _____ Permit # _____

Signed: _____

WILMINGTON PROFESSIONAL ENGINEER
SEAL 031315
CARRY S. PIPE
11/19/2018



No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	August 2018
License #	P-0718	Job No.	2018-0006

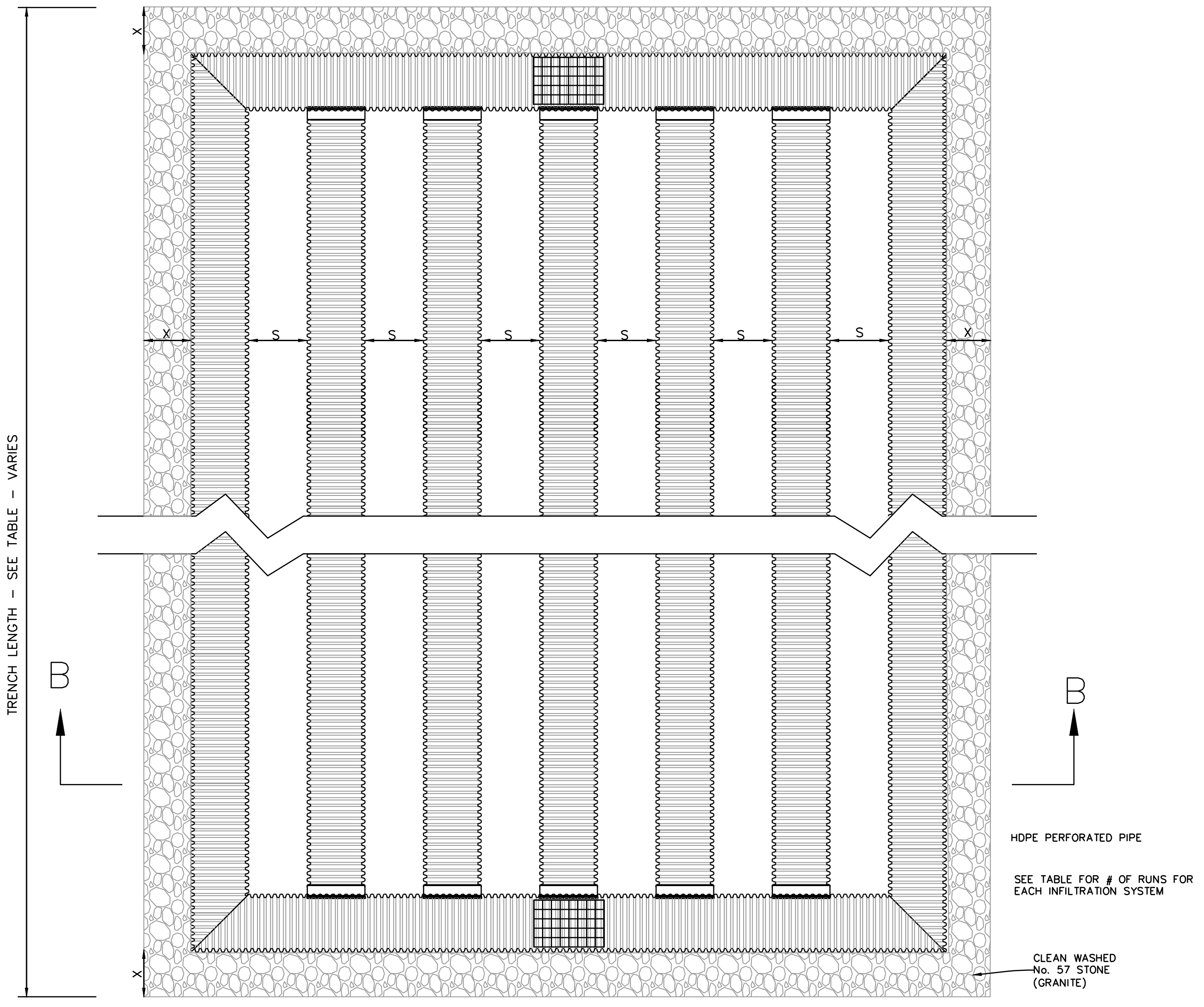
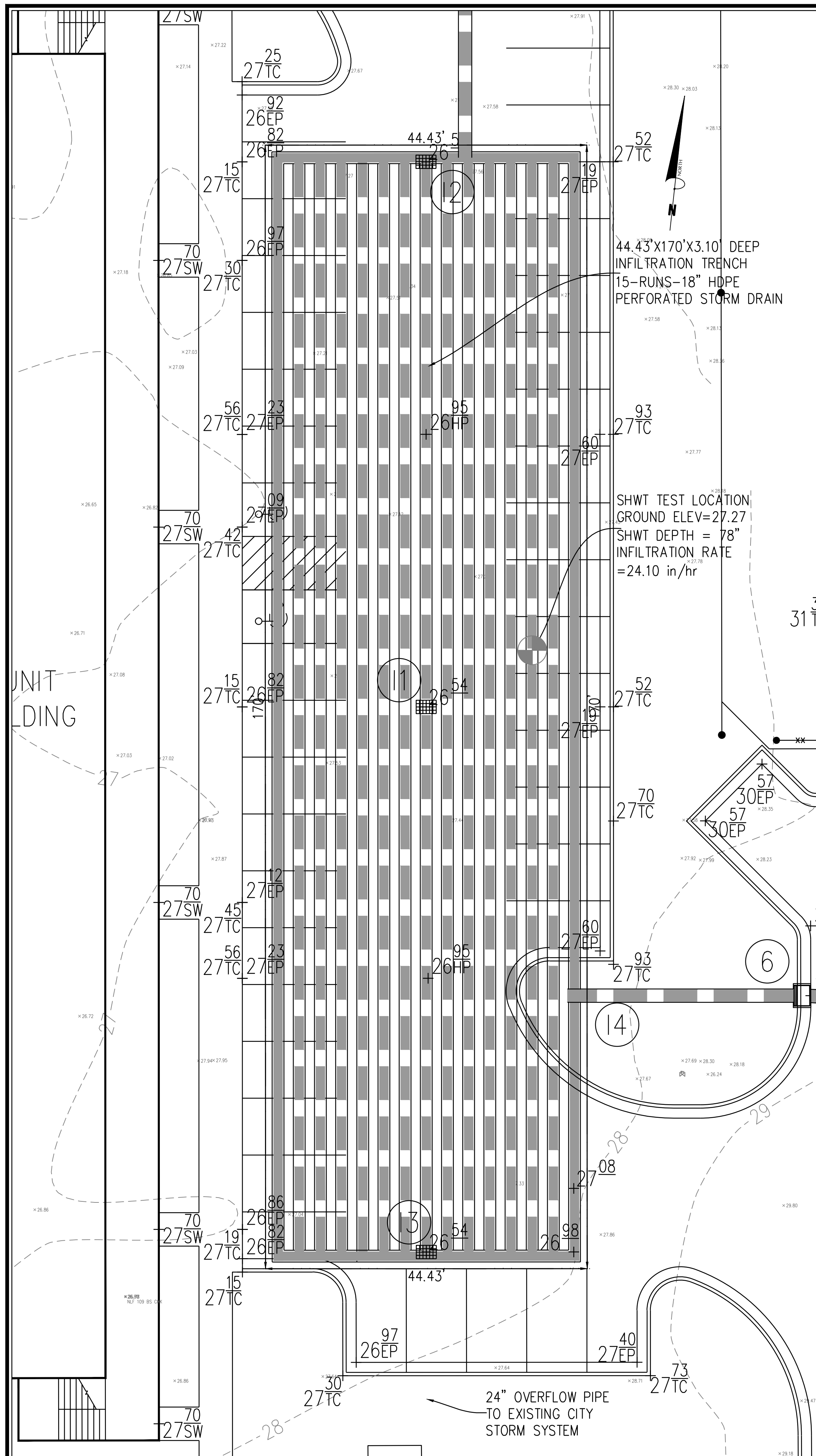
PINNACLE 3RD STREET
Wilmington New Hanover County North Carolina

GRADING, DRAINAGE & EROSION & SEDIMENT CONTROL PLAN

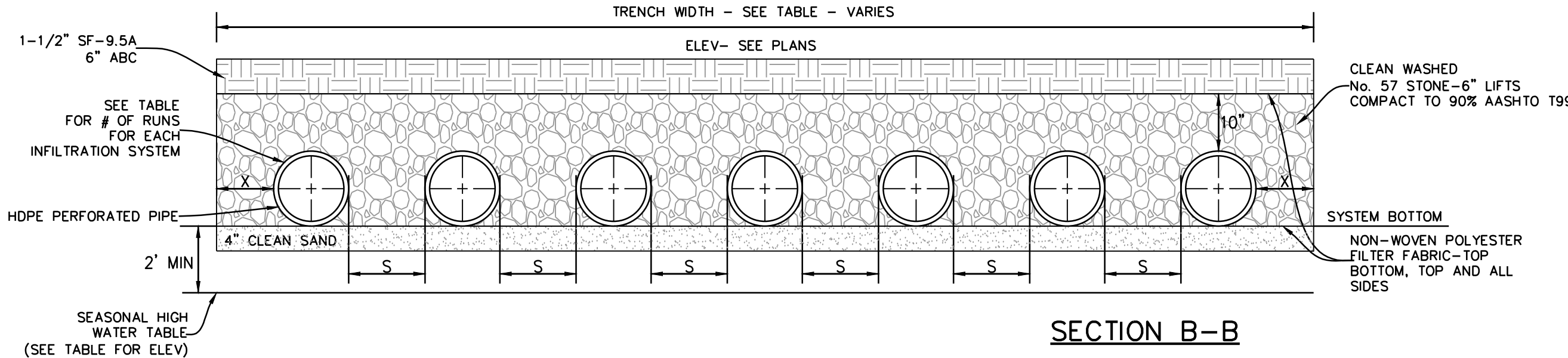
PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-5



PLAN
INFILTRATION TRENCH
N.T.S.



SECTION B-B

INFILTRATION TRENCH TABLE

TRENCH #	# OF RUNS	PIPE DIAMETER	MIN. X (in.)	MIN. S (in.)	TRENCH WIDTH (FT.)	TRENCH LENGTH (FT.)	SYSTEM BOTTOM ELEV.	SHWT ELEV.
1	15	18"	9	14.3	44.43	170	22.77	20.77

NOTE:
ALL HDPE PIPE TO BE ADS N-12 PIPE (DESIGNED TO SUPPORT H=20 LIVE LOADS) OR EQUIVALENT & INSTALLED PER MANUFACTURER'S RECOMMENDATIONS. ALL JOINTS TO BE SOIL TIGHT OR BETTER.

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

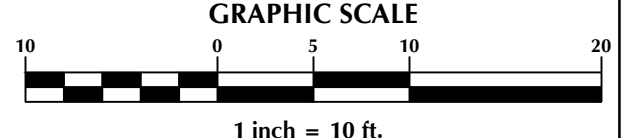
Name _____ Date _____

Planning _____

Traffic _____

Fire _____

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____



No.	Revision	Date	By

Designer: GSP
Scale: 1" = 10'
Drawn By: GSP
Date: August 2018
License #: P-0718
Job No.: 2018-0006

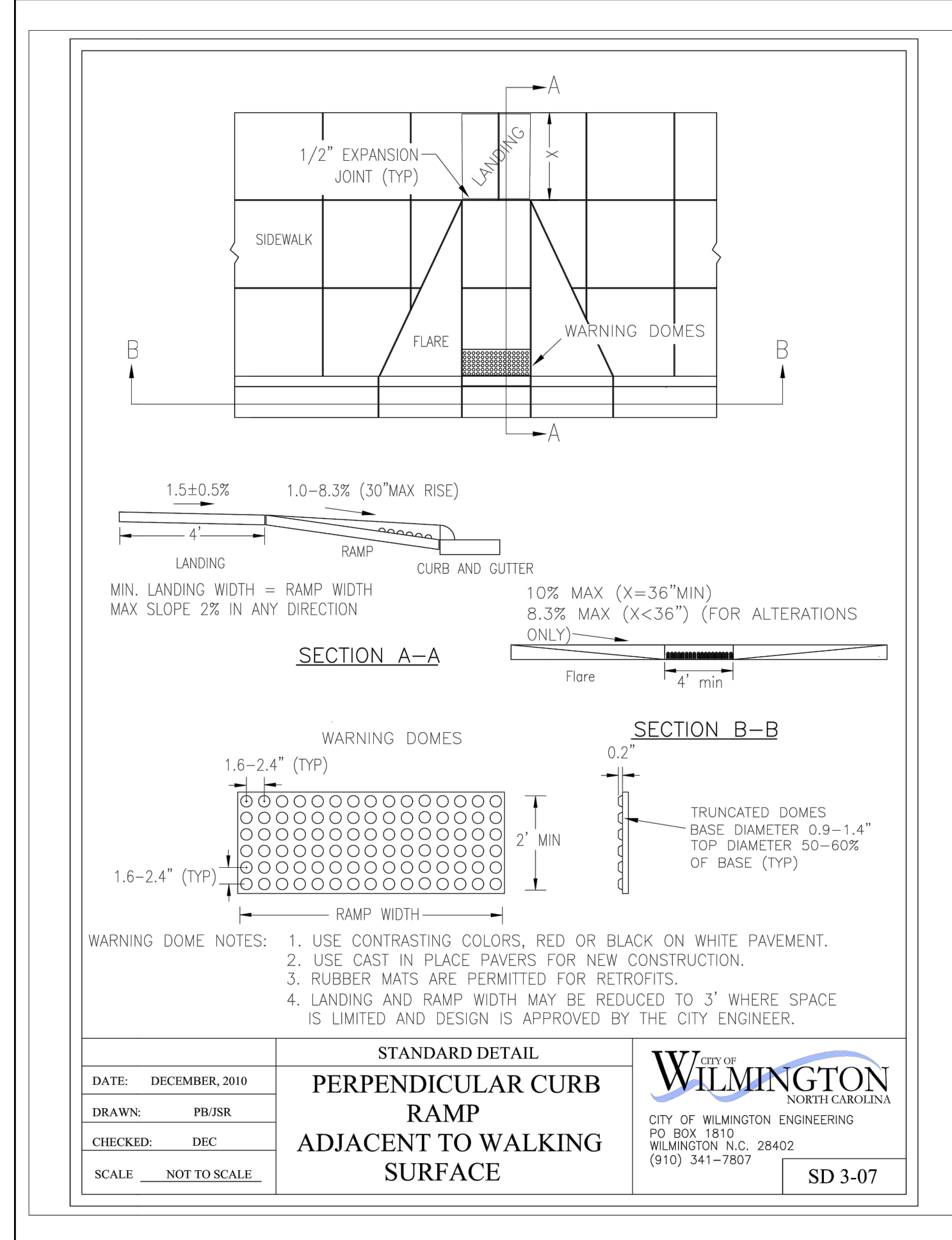
PINNACLE 3RD STREET
New Hanover County
North Carolina

INFILTRATION TRENCH DETAILS

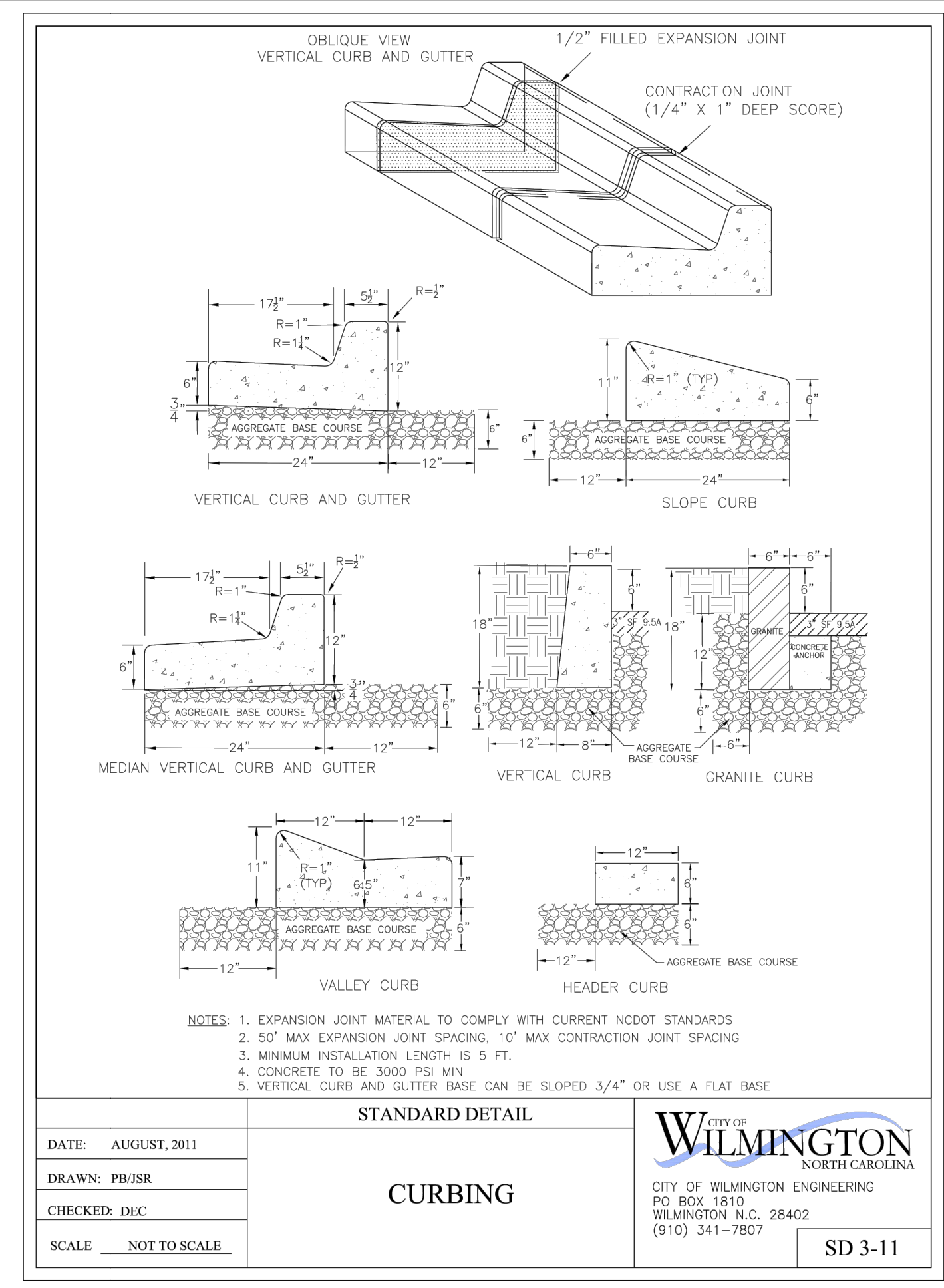
PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING
6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

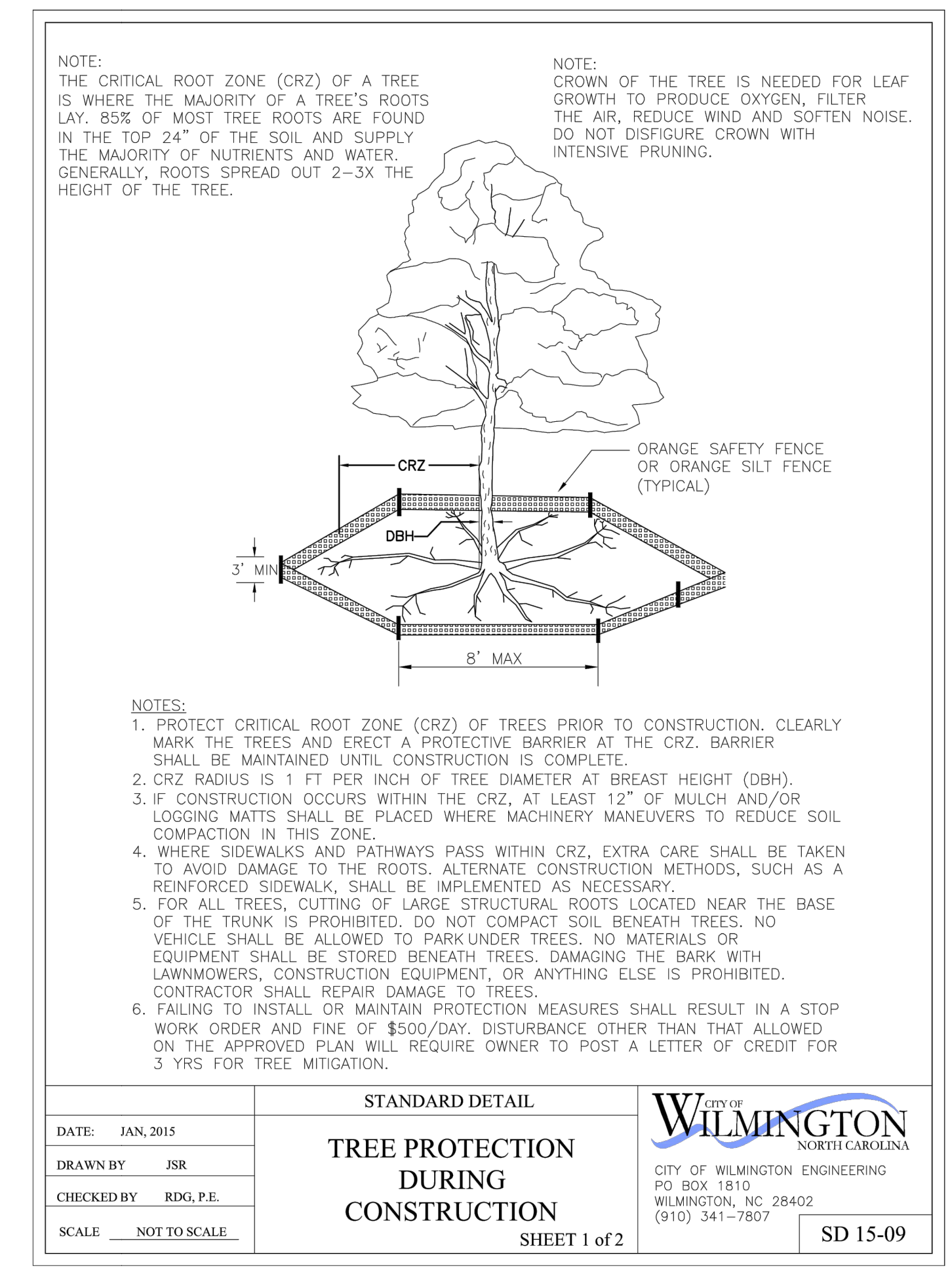
Sheet No.
C-6



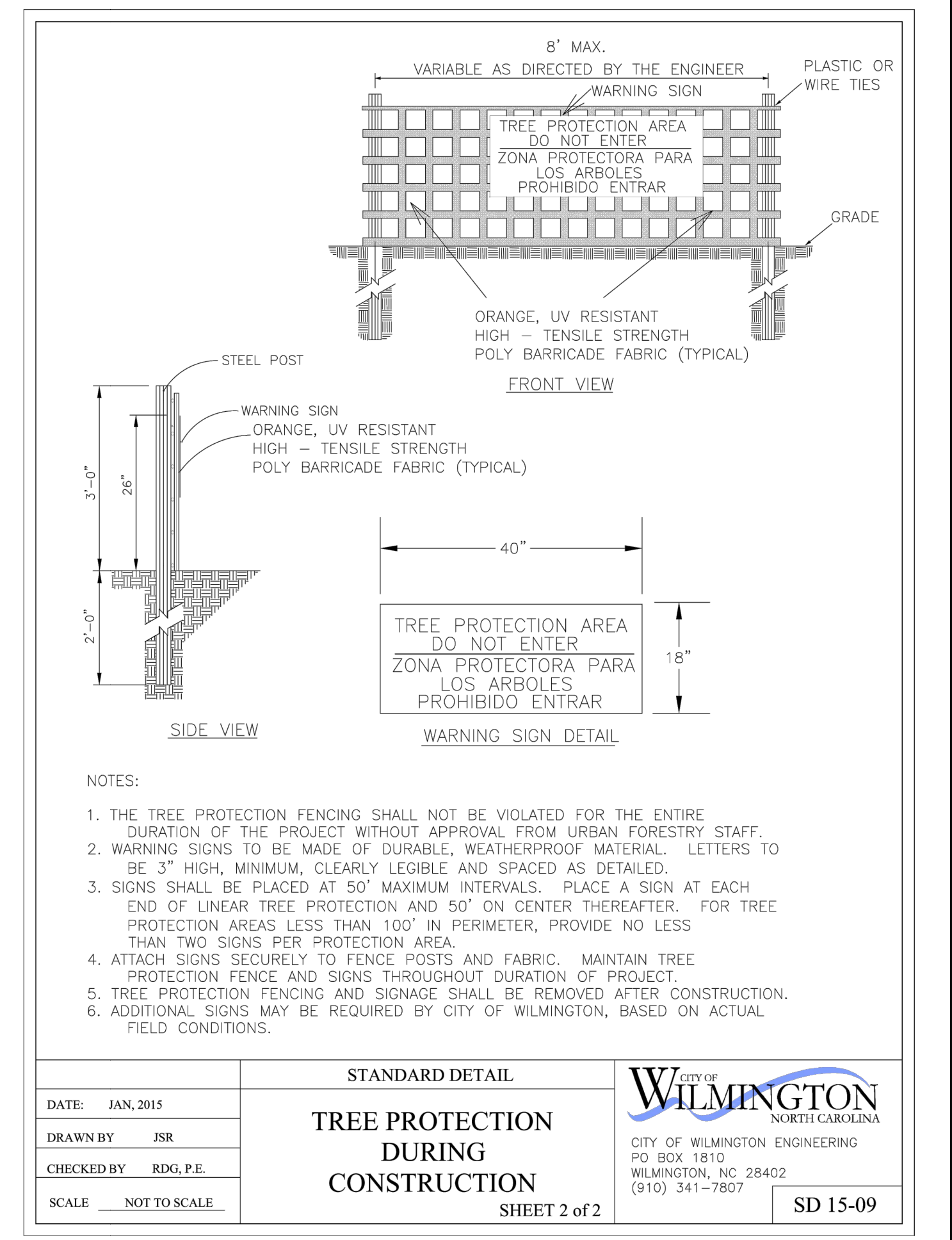
DATE: DECEMBER, 2010	STANDARD DETAIL	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, N.C. 28402 (910) 341-7807</p>	SD 3-07
DRAWN: PBZ/SR	PERPENDICULAR CURB RAMP ADJACENT TO WALKING SURFACE		
CHECKED: DEC			
SCALE: NOT TO SCALE			



DATE: AUGUST, 2011	STANDARD DETAIL	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, N.C. 28402 (910) 341-7807</p>	SD 3-11
DRAWN: PBZ/SR	CURBING		
CHECKED: DEC			
SCALE: NOT TO SCALE			

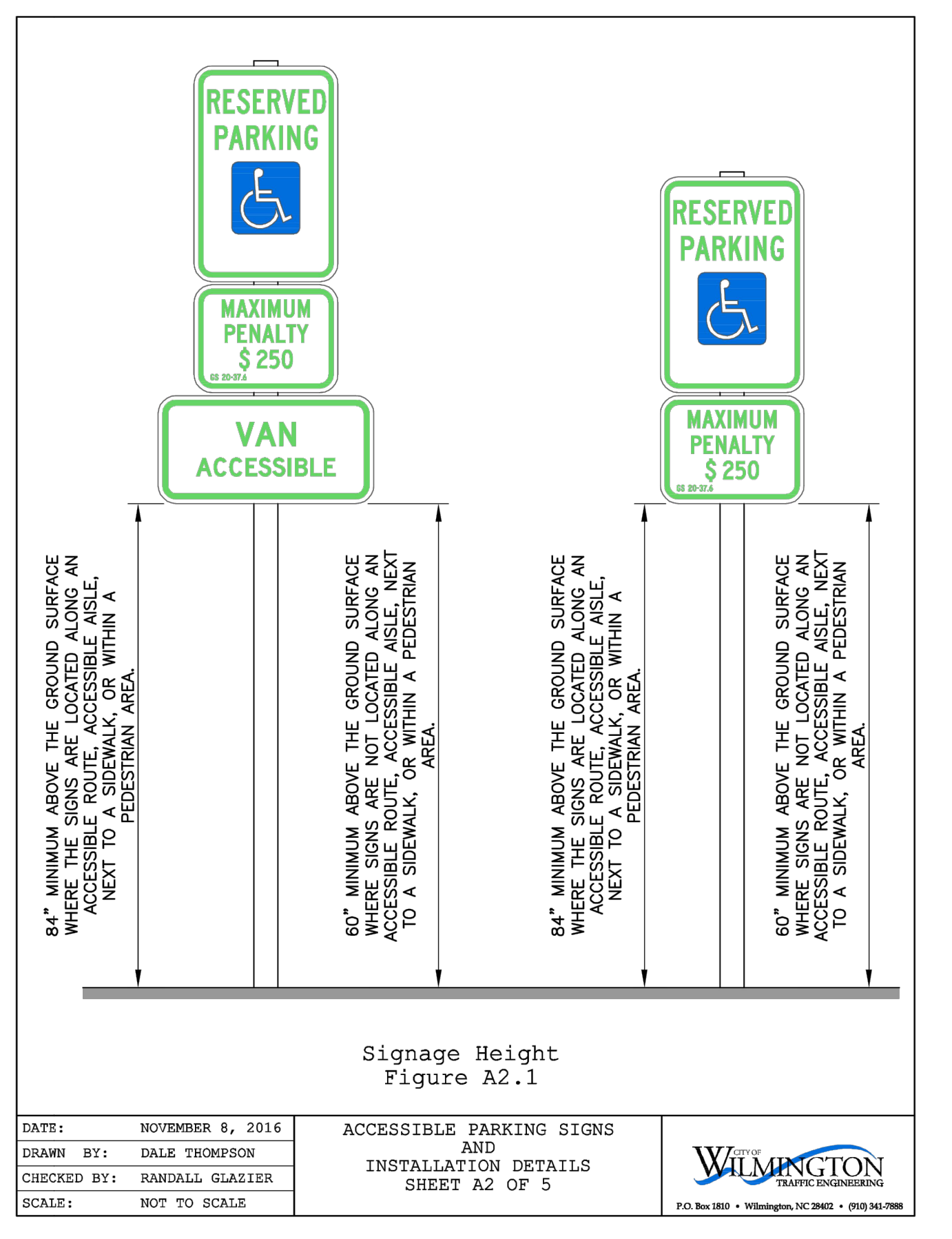


DATE: JAN, 2015	STANDARD DETAIL	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 15-09
DRAWN BY: JSR	TREE PROTECTION DURING CONSTRUCTION		
CHECKED BY: RDG, P.E.			
SCALE: NOT TO SCALE			

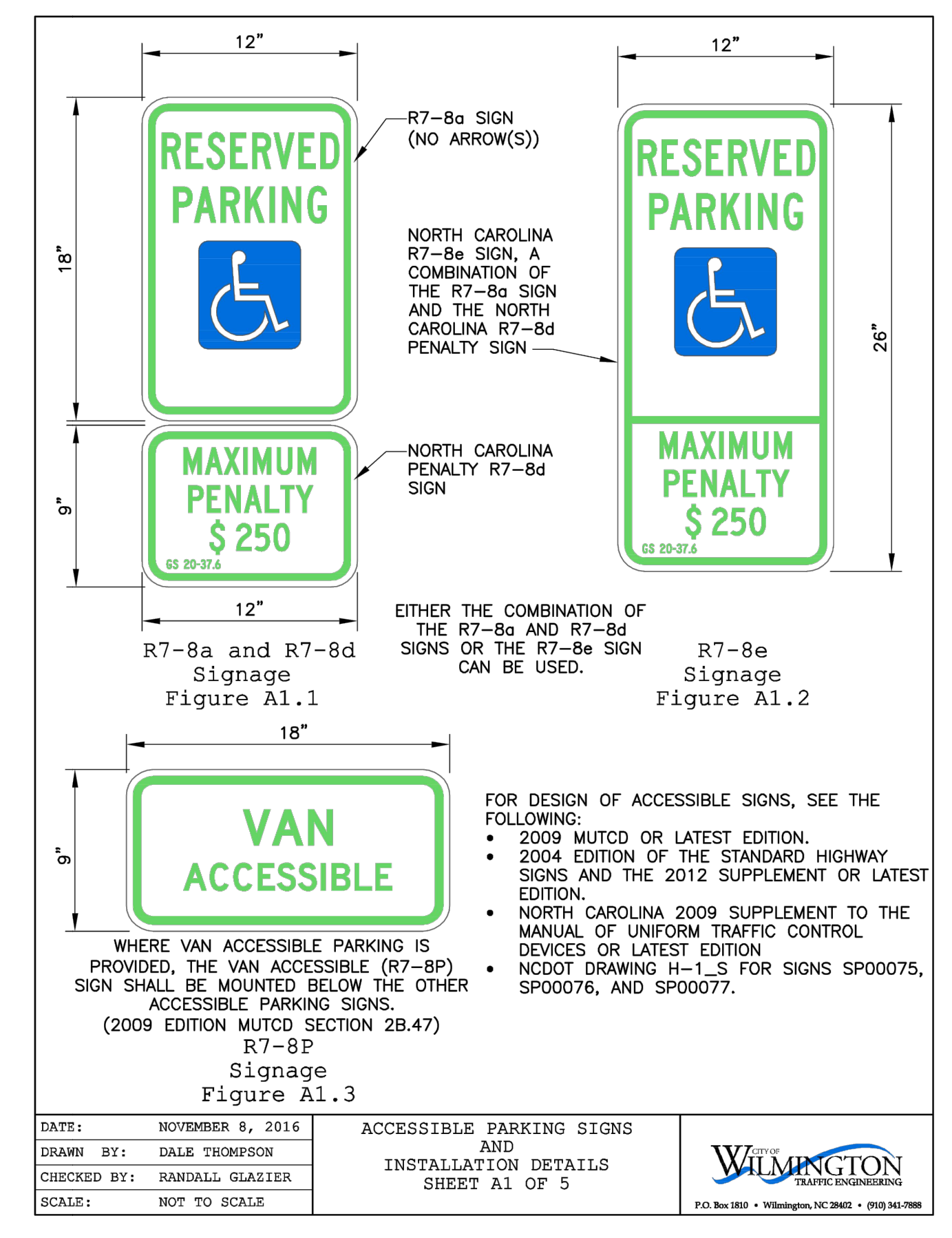


DATE: JAN, 2015	STANDARD DETAIL	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 15-09
DRAWN BY: JSR	TREE PROTECTION DURING CONSTRUCTION		
CHECKED BY: RDG, P.E.			
SCALE: NOT TO SCALE			

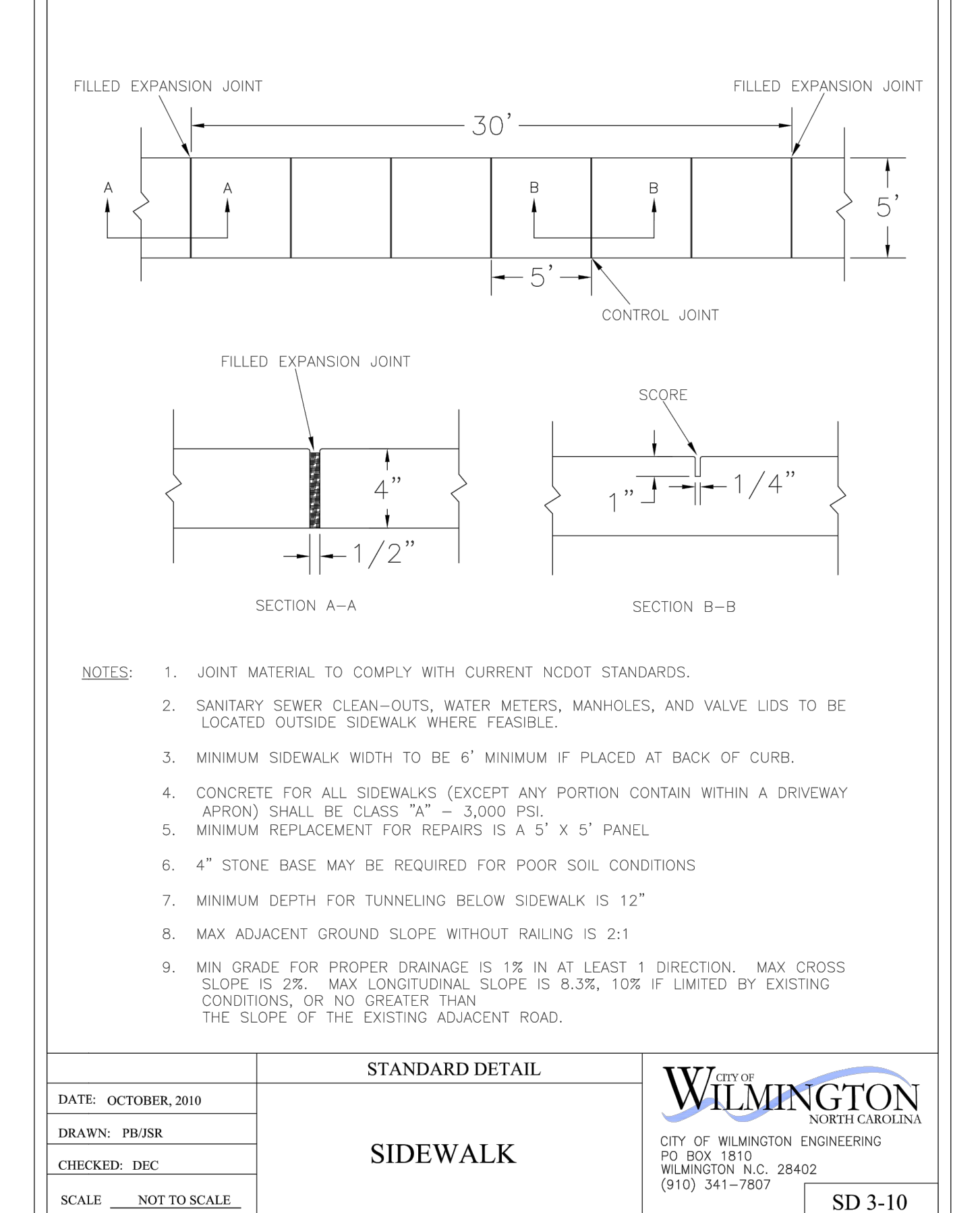
- SEQUENCE OF CONSTRUCTION**
LIMITS OF CONSTRUCTION = 2.81 ACRES
- INSTALL TEMPORARY CONSTRUCTION ENTRANCE AS SHOWN ON EROSION & SEDIMENT CONTROL PLAN.
 - INSTALL PERIMETER CONTROLS (TEMPORARY SILT FENCE, TREE PROTECTION FENCING) AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN. THIS STEP NEEDS TO BE COMPLETED PRIOR TO UPSLOPE LAND DISTURBING ACTIVITIES.
 - ONCE PERIMETER CONTROLS AND SEDIMENT TRAPPING MEASURES ARE INSTALLED CLEAR AND GRUB SITE WITHIN LIMITS OF DISTURBANCE. THE SEDIMENT BASIN WILL BE PUMPED DOWN BY MECHANICAL MEANS AS NEEDED TO MUCK OUT SEDIMENT WHEN THE SEDIMENT REACHES 50% CAPACITY.
 - UPON BRINGING THE SITE TO ROUGH GRADE, STABILIZE ALL AREAS WITH TEMPORARY VEGETATION IF LEFT UNDISTURBED FOR 15 WORKING DAYS AND ALL SLOPES WITHIN 21 CALENDAR DAYS.
 - ONCE THE PARKING AREAS, SANITARY SEWERS, WATERLINES AND STORM SEWERS ARE IN PLACE, INSTALL INLET PROTECTION AS SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN.
 - UPON BRINGING THE PARKING AREA TO SUBGRADE ELEVATIONS, STABILIZE THE AREAS BY PLACING STONE BASE AS EARLY AS POSSIBLE
 - FOR TEMPORARY VEGETATIVE STABILIZATION OF ALL DENUDED AREAS SEE NOTE REFERENCING THE EROSION CONTROL PROGRAM AND SPECIFICATIONS ON SHEET C-1.
 - AFTER CONSTRUCTION OPERATIONS HAVE ENDED AND ALL DISTURBED AREAS HAVE BEEN STABILIZED, MECHANICAL SEDIMENT CONTROLS SHALL BE REMOVED. SEDIMENT FROM TEMPORARY SEDIMENT TRAPPING DEVICES SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR HAULING AWAY IF NOT SUITABLE FOR FILL. ALL DENUDED AREAS ARE TO BE PERMANENTLY STABILIZED WITH PERMANENT VEGETATION.



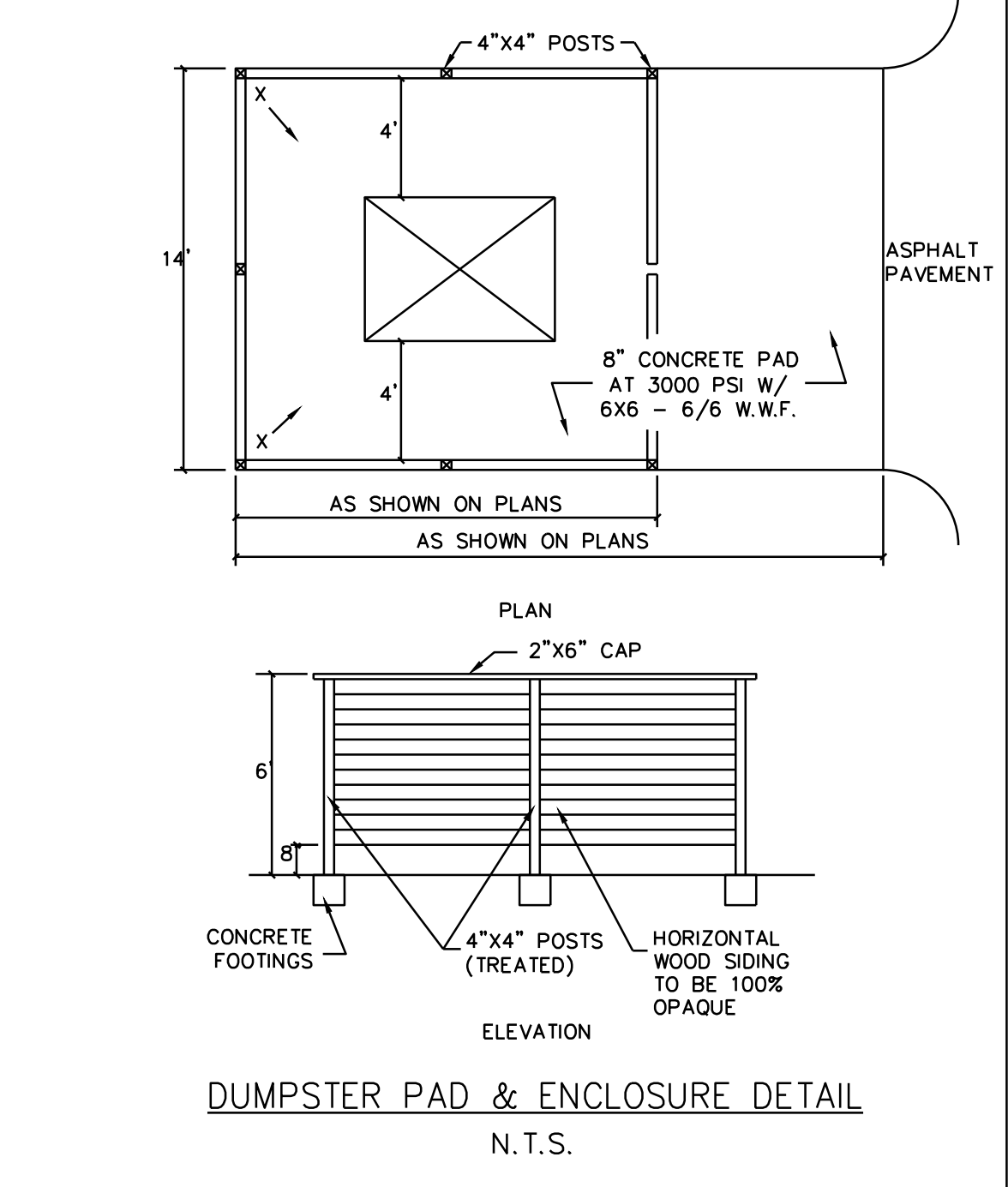
DATE: NOVEMBER 8, 2016	ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 3-11
DRAWN BY: DALE THOMPSON			
CHECKED BY: RANDALL GLAZIER			
SCALE: NOT TO SCALE			



DATE: NOVEMBER 8, 2016	ACCESSIBLE PARKING SIGNS AND INSTALLATION DETAILS	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, NC 28402 (910) 341-7807</p>	SD 3-11
DRAWN BY: DALE THOMPSON			
CHECKED BY: RANDALL GLAZIER			
SCALE: NOT TO SCALE			



DATE: OCTOBER, 2010	STANDARD DETAIL	<p>CITY OF WILMINGTON NORTH CAROLINA CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, N.C. 28402 (910) 341-7807</p>	SD 3-10
DRAWN: PBZ/SR	SIDEWALK		
CHECKED: DEC			
SCALE: NOT TO SCALE			



Approved Construction Plan

Name: _____ Date: _____

Planning: _____

Traffic: _____

Fire: _____

Signed: _____

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

No.	Revision	Date	By

Designer	GSP	Scale	1" = 30'
Drawn By	GSP	Date	August 2018
License #	P-0718	Job No.	2018-0006

PINNACLE 3RD STREET

Wilmington New Hanover County North Carolina

STANDARD DETAILS

PREPARED FOR:
ROBERT HIGH DEVELOPMENT, LLC
223 GREENVILLE AVENUE
WILMINGTON, NC 28403
910-790-9490

GSP CONSULTING, PLLC
ENGINEERING

6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-7

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

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR. 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
USE TYPE "E", "F", AND "G" GRATES UNLESS OTHERWISE INDICATED.
FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 18'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
CONSTRUCT WITH PIPE CHAINS MATCHING.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

ENGLISH STANDARD DRAWING FOR
CONCRETE CATCH BASIN
12" THRU 54" PIPE

SHEET 1 OF 2
840.02

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

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

SHEET 1 OF 2
840.03

NOTE: USE TYPE "E", "C", AND "B" GRATE UNLESS OTHERWISE NOTED.

ALIGN FRAME WITH INSIDE EDGE OF WALL TO ALLOW FOR VERTICAL ADJUSTMENT.
WALL SECTION

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

SHEET 1 OF 2
840.03

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

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR. 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CHAINS MATCHING.
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 7MM STONE IN A FORMED FABRIC BAG OR MAT, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

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

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

SHEET 2 OF 2
840.03

GENERAL NOTES:
CHAMFER ALL EXPOSED CORNERS 1".
USE CLASS "B" CONCRETE THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.
PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTERS IN ACCORDANCE WITH STD. NO. 840.66.
ADJUST THE STEEL, CONCRETE AND BRICK MASONRY QUANTITIES TO INCLUDE THE WIDTH OF THE MANHOLE (I.E. DIAGONAL BARS SHORTENED AROUND OPENING IN TOP SLAB, ADDITIONAL VARIABLE HEIGHT BRICK MASONRY, OPENING IN TOP SLAB).
MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.

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

SHEET 2 OF 2
840.03

NO.	REVISION	DATE	BY	DESIGNER	SCALE
				GSP	1" = 30'
				CSP	August 2018
				P-0718	2018-0006

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

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR. 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CHAINS MATCHING.
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 7MM STONE IN A FORMED FABRIC BAG OR MAT, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

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

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR. 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CHAINS MATCHING.
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 7MM STONE IN A FORMED FABRIC BAG OR MAT, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

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

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR. 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.
CONSTRUCT WITH PIPE CHAINS MATCHING.
SEE STANDARD DRAWING 840.25 FOR ATTACHMENT OF FRAMES AND GRATES NOT SHOWN.
INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 7MM STONE IN A FORMED FABRIC BAG OR MAT, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.
CHAMFER ALL EXPOSED CORNERS 1".
DRAWING NOT TO SCALE.

ENGLISH STANDARD DRAWING FOR
CONCRETE DROP INLET
12" THRU 30" PIPE

SHEET 1 OF 1
840.14

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

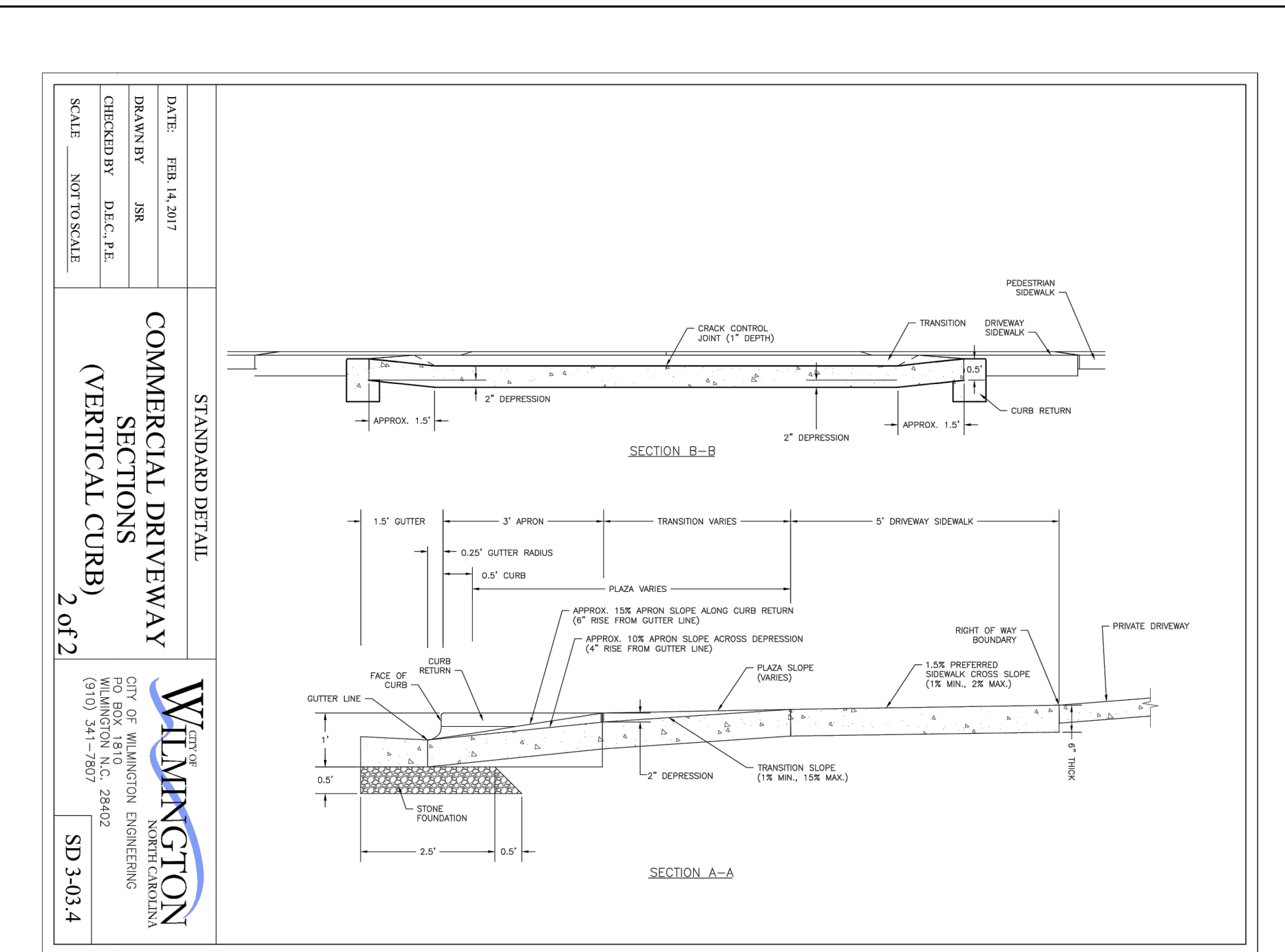
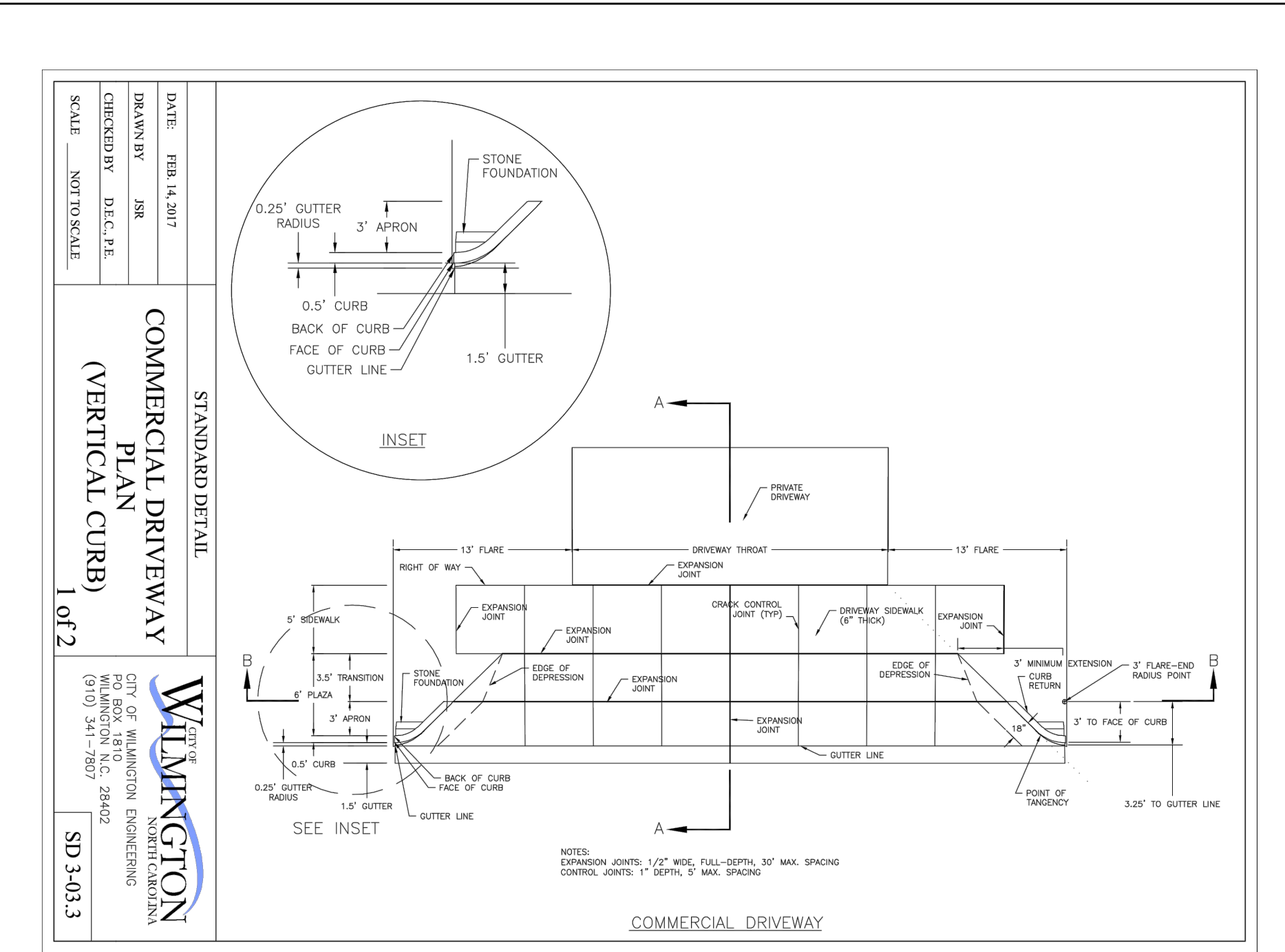
ENGLISH STANDARD DRAWING FOR
CONCRETE JUNCTION BOX
(WITH OPTIONAL MANHOLE)
12" THRU 66" PIPE

SHEET 1 OF 1
840.31

GENERAL NOTES:
CHAMFER ALL EXPOSED CORNERS 1".
USE CLASS "B" CONCRETE THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.
PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTERS IN ACCORDANCE WITH STD. NO. 840.66.
ADJUST THE STEEL, CONCRETE AND BRICK MASONRY QUANTITIES TO INCLUDE THE WIDTH OF THE MANHOLE (I.E. DIAGONAL BARS SHORTENED AROUND OPENING IN TOP SLAB, ADDITIONAL VARIABLE HEIGHT BRICK MASONRY, OPENING IN TOP SLAB).
MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.

ENGLISH STANDARD DRAWING FOR
CONCRETE JUNCTION BOX
(WITH OPTIONAL MANHOLE)
12" THRU 66" PIPE

SHEET 1 OF 1
840.31



ASPHALT DETAIL FOR PARKING LOT

PAVEMENT DETAIL
N.T.S.

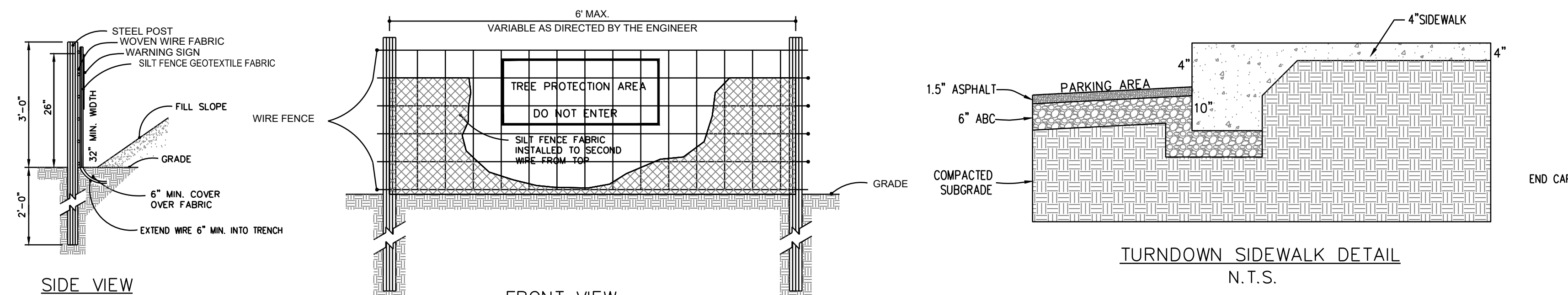
Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____

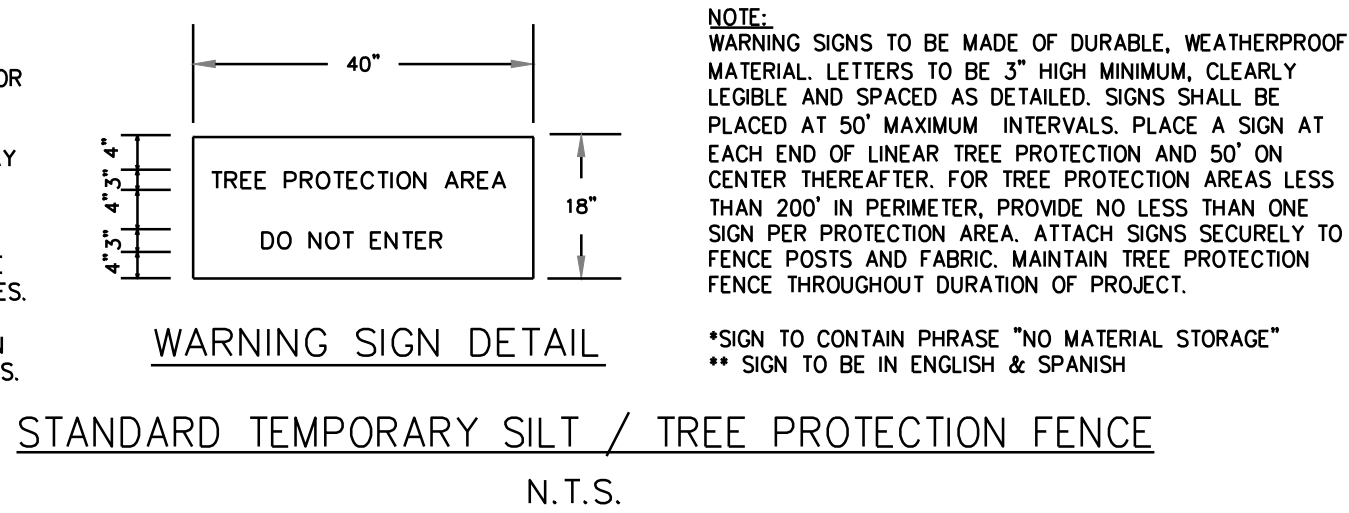
For each open utility cut of City streets, a \$325 permit shall be required from the City prior to occupancy and/or project acceptance.

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: _____ Permit # _____
Signed: _____

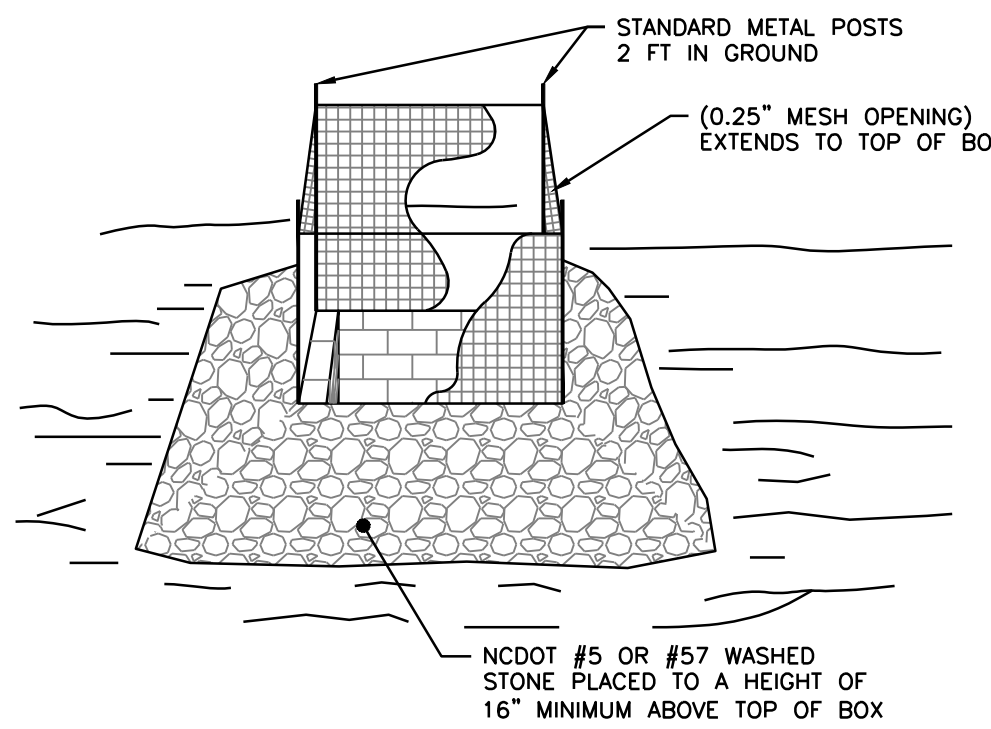
SEAL
031315
ENGINEER
CARY S. PIER
11/18/2018



- NOTES:**
1. SYNTHETIC FILTER FABRIC SHOULD BE OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER PER ASTM D 6461 AND SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS PER ASTM D 4355.
 2. WIRE FENCE SHALL BE MINIMUM 14 GAUGE WITH A MAXIMUM MESH OPENING OF 6-INCHES.
 3. SEE THE NC EROSION AND SEDIMENTATION CONTROL MANUAL FOR OTHER SPECIFICATIONS.

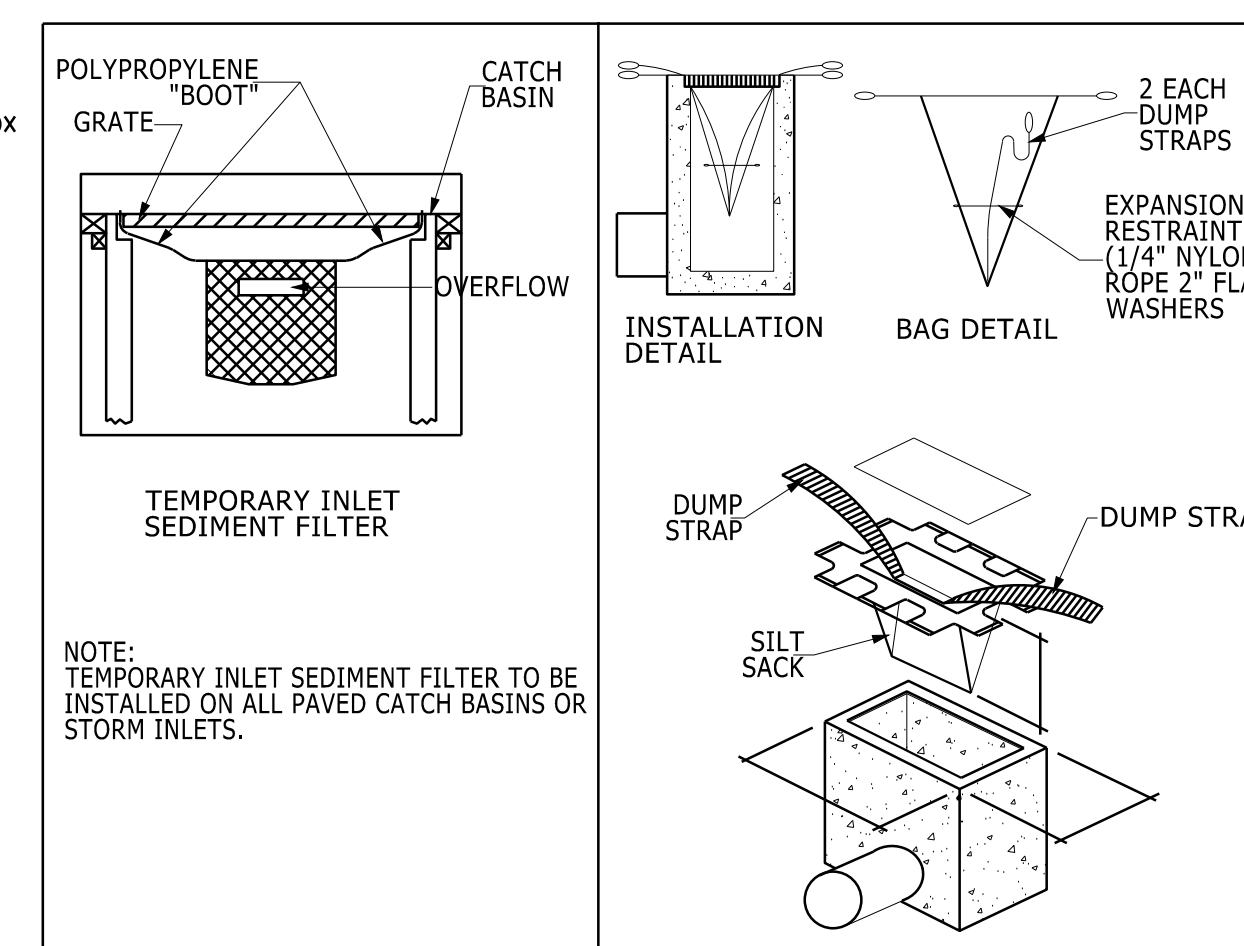


STANDARD TEMPORARY SILT / TREE PROTECTION FENCE
 N.T.S.



- NOTES:**
1. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
 2. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 1-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
 3. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A MIN HEIGHT OF 16 INCHES AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.

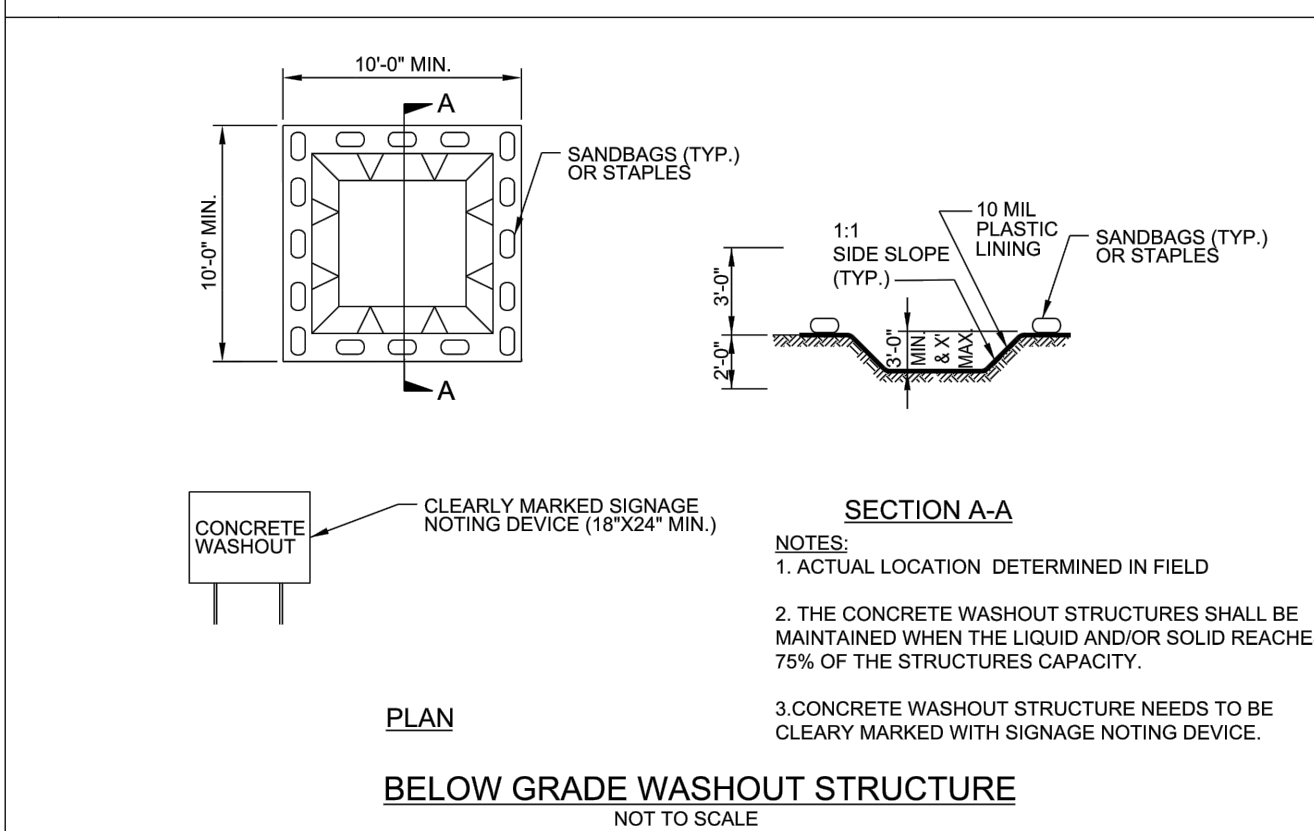
STANDARD INLET PROTECTION
 NOT TO SCALE



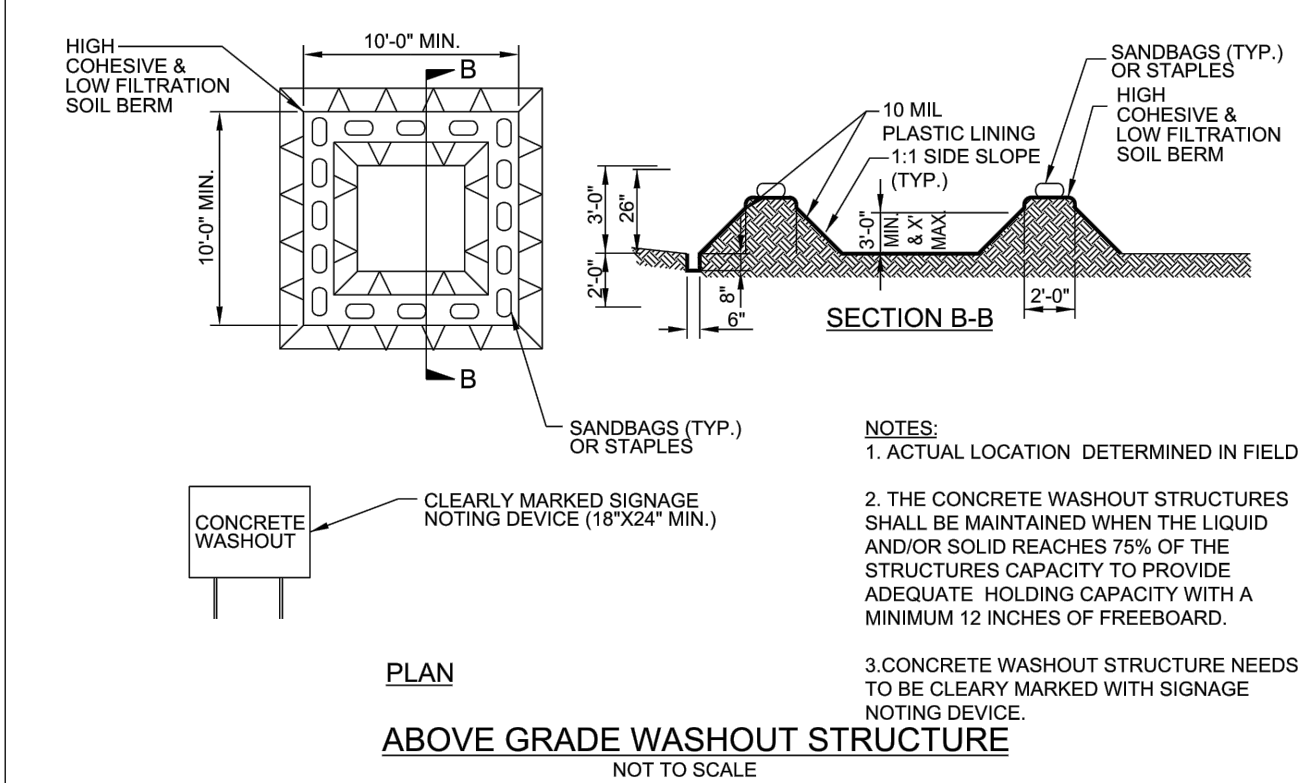
SILT SACK DETAIL
 NOT TO SCALE

WITH LINER, NO GRAVEL APPROACH

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER

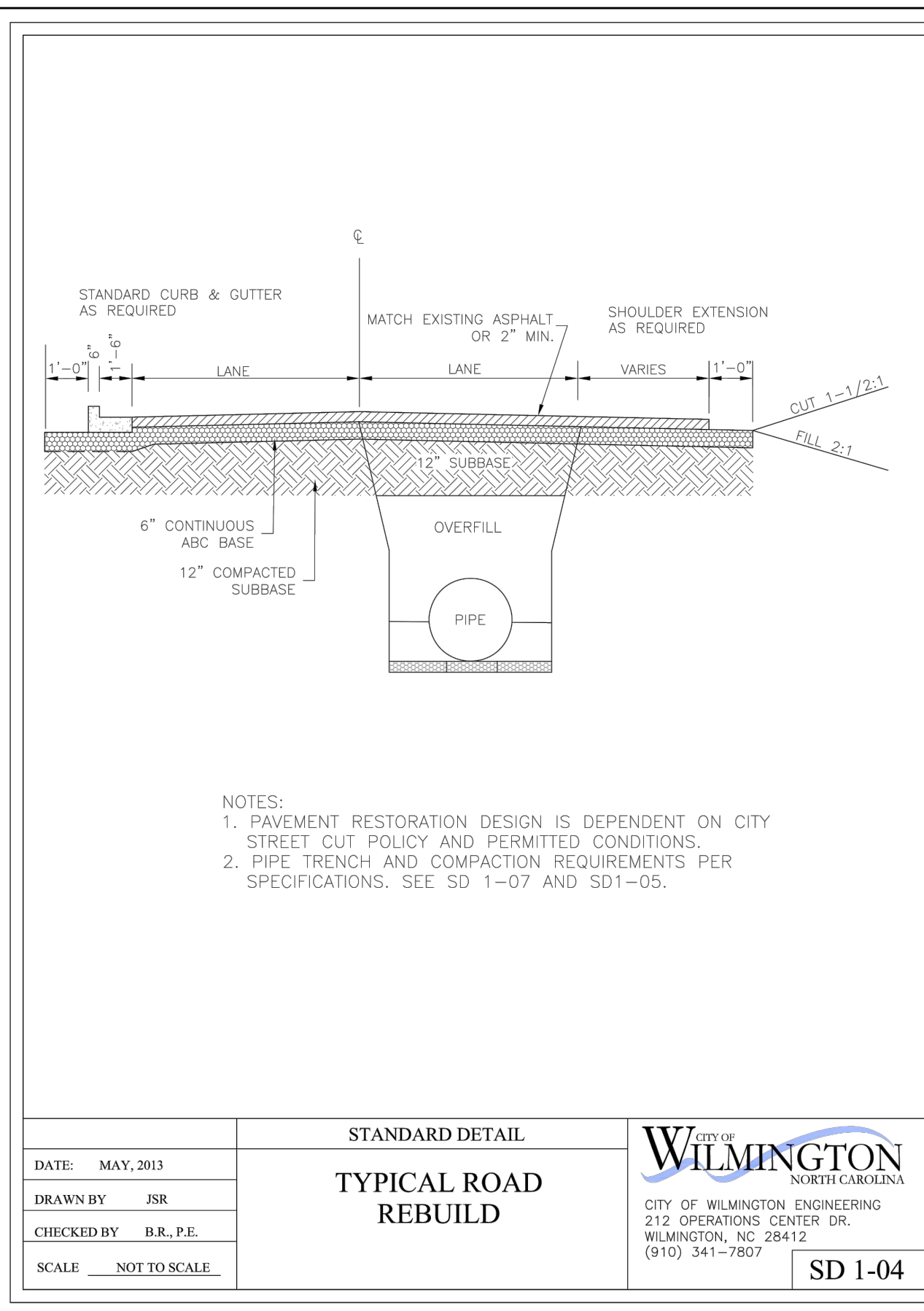


BELOW GRADE WASHOUT STRUCTURE
 NOT TO SCALE



ABOVE GRADE WASHOUT STRUCTURE
 NOT TO SCALE

PRELIMINARY DESIGN
 NOT FOR CONSTRUCTION

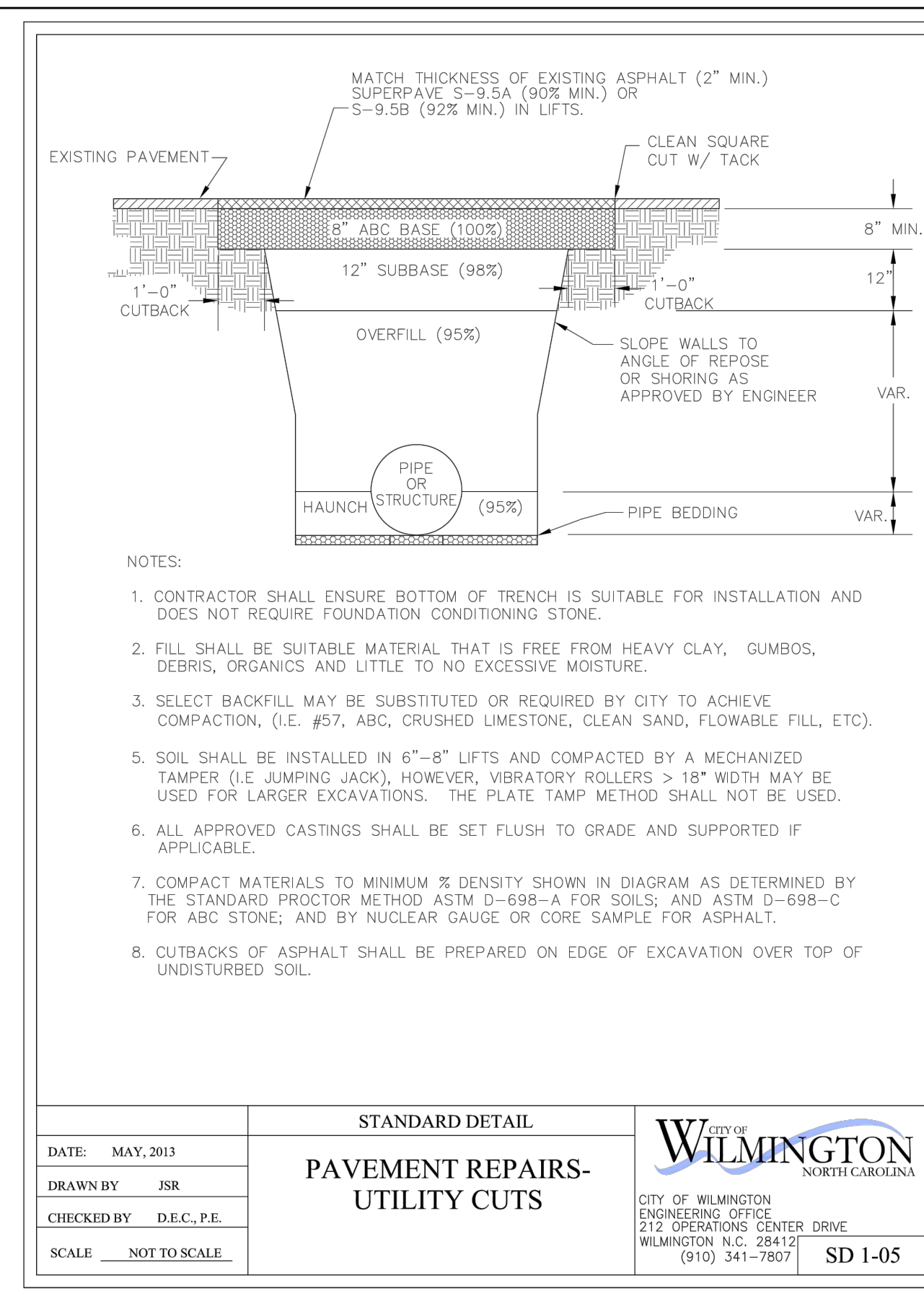


STANDARD DETAIL
TYPICAL ROAD REBUILD

DATE: MAY, 2013
 DRAWN BY: JSR
 CHECKED BY: B.R., P.E.
 SCALE: NOT TO SCALE

CITY OF WILMINGTON
 NORTH CAROLINA
 CITY OF WILMINGTON ENGINEERING
 212 OPERATIONS CENTER DR.
 WILMINGTON, NC 28412
 (910) 341-7907

SD 1-04

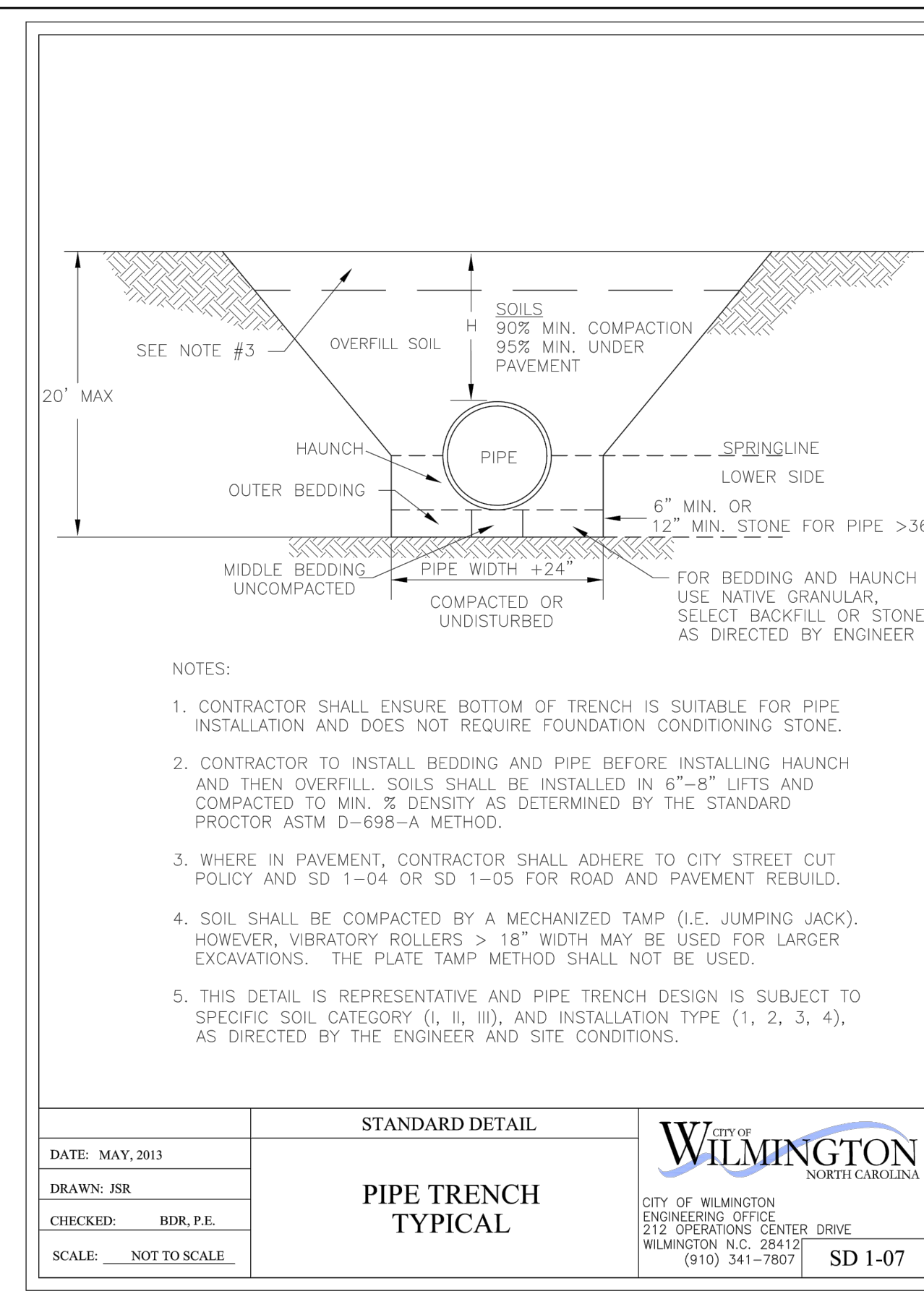


STANDARD DETAIL
PAVEMENT REPAIRS- UTILITY CUTS

DATE: MAY, 2013
 DRAWN BY: JSR
 CHECKED BY: D.E.C., P.E.
 SCALE: NOT TO SCALE

CITY OF WILMINGTON
 NORTH CAROLINA
 CITY OF WILMINGTON ENGINEERING OFFICE
 212 OPERATIONS CENTER DRIVE
 WILMINGTON, N.C. 28412
 (910) 341-7907

SD 1-05

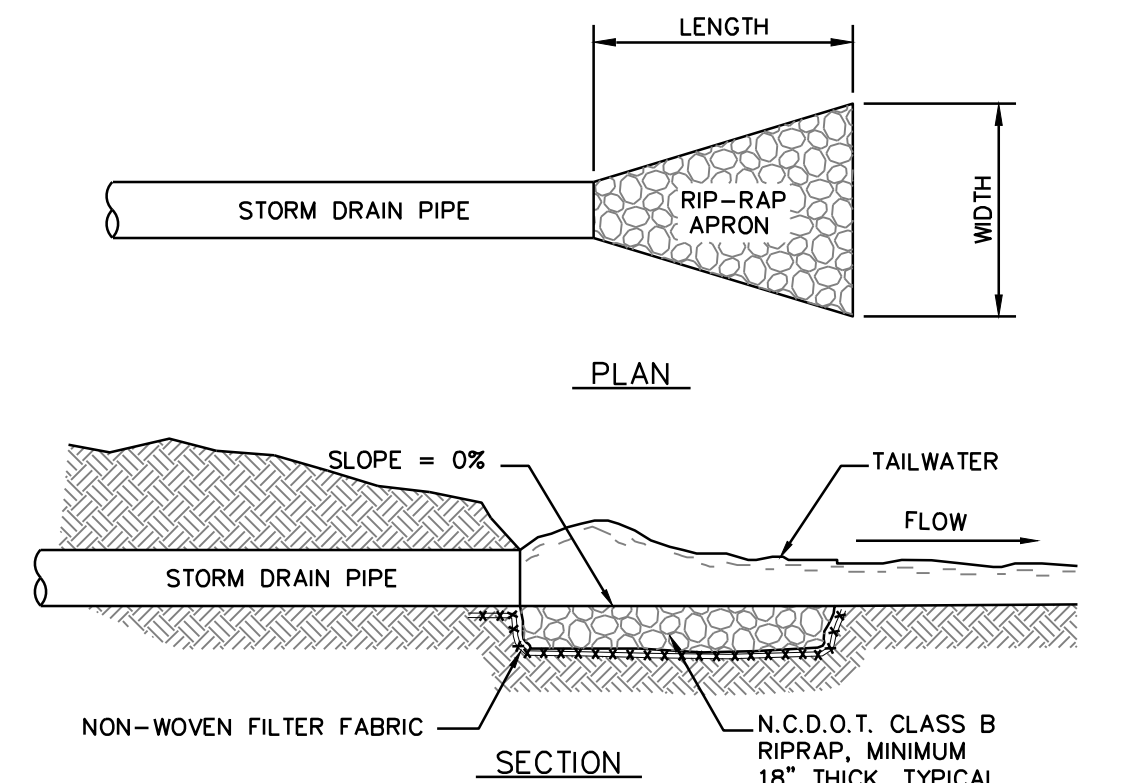
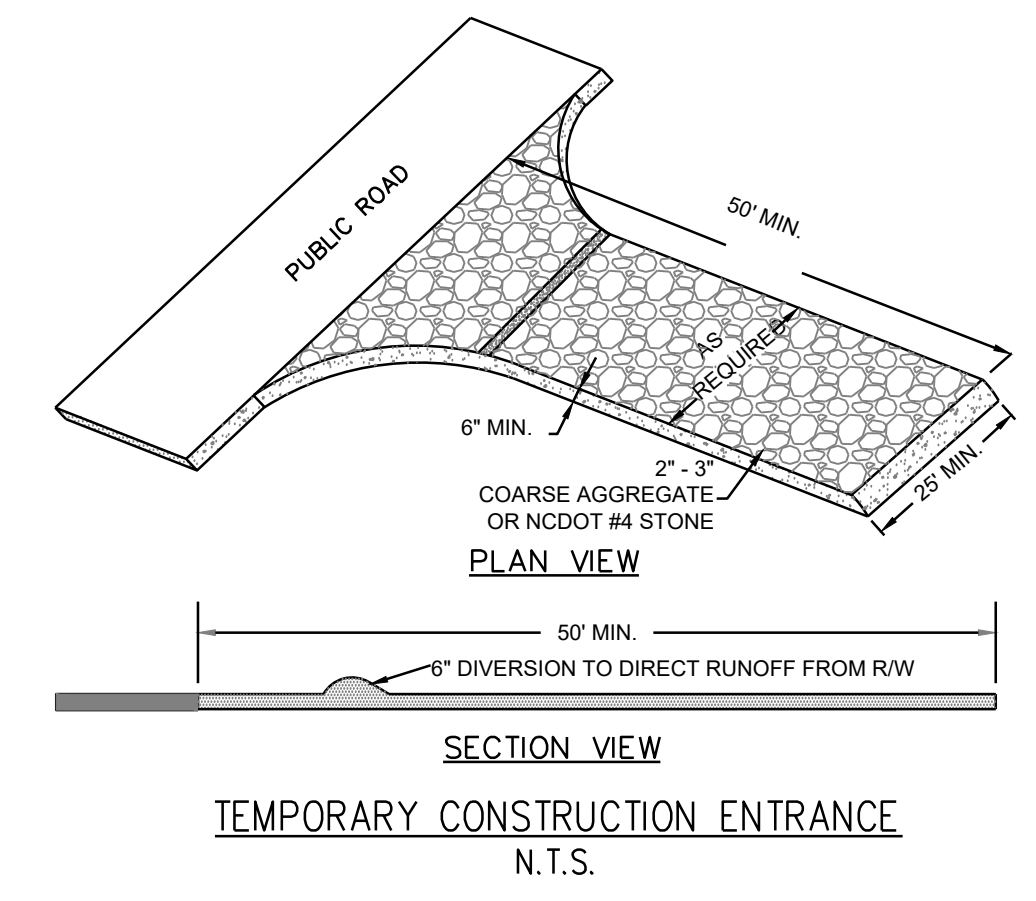


STANDARD DETAIL
PIPE TRENCH TYPICAL

DATE: MAY, 2013
 DRAWN BY: JSR
 CHECKED BY: BDR, P.E.
 SCALE: NOT TO SCALE

CITY OF WILMINGTON
 NORTH CAROLINA
 CITY OF WILMINGTON ENGINEERING OFFICE
 212 OPERATIONS CENTER DRIVE
 WILMINGTON, N.C. 28412
 (910) 341-7907

SD 1-07



RIP-RAP OUTLET PROTECTION
 N.T.S.

RIPRAP LOCATIONS	LENGTH (FT.)	UPSTREAM WIDTH (FT.)	DOWNSTREAM WIDTH (FT.)
15" CULVERT	7.5	3.75	5.0
18" CULVERT	9.0	4.5	6.0
24" CULVERT	12.0	6.0	8.0
30" CULVERT	15.0	7.5	10.0
36" CULVERT	18.0	9.0	12.0
48" CULVERT	24.0	12.0	16.0

Approved Construction Plan

Name _____ Date _____

Planning _____
 Traffic _____
 Fire _____

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

Date: _____ Permit # _____
 Signed: _____

SEAL
 031315
 ENGINEER
 CARRY S. PARR
 11/19/2018

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

No.	Revision	Date	By	Designer	Scale
				GSP	1" = 30'
				CSP	August 2018
				P-0718	2018-0006

Pinnacle 3rd Street
 Wilmington North Carolina
 New Hanover County

STANDARD DETAILS

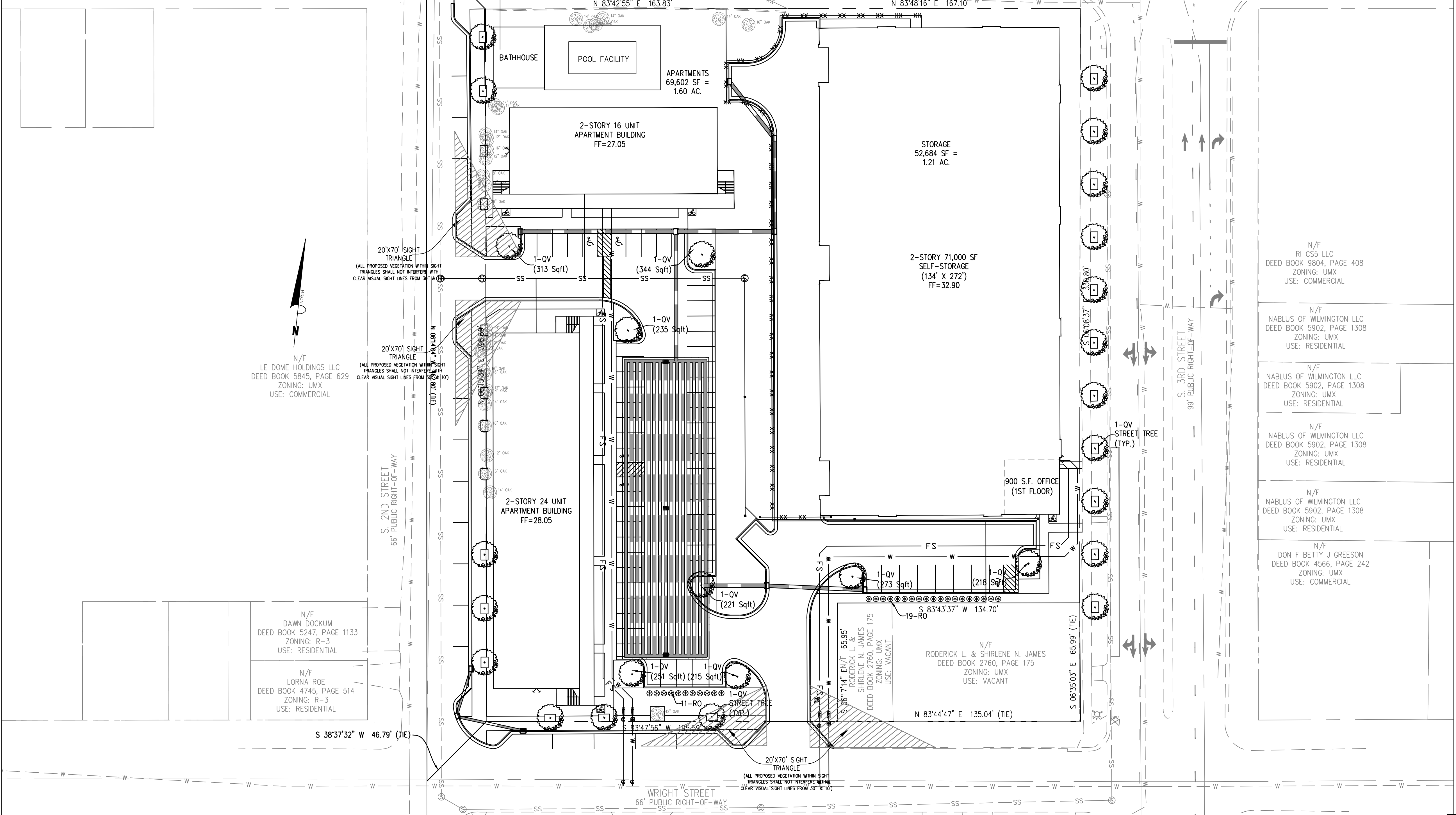
PREPARED FOR:
 ROBERT HIGH DEVELOPMENT, LLC
 223 GREENVILLE AVENUE
 WILMINGTON, NC 28403
 910-790-9490

GSP CONSULTING, PLLC
 ENGINEERING
 6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
C-9

KEY	NO.	BOTANICAL NAME	COMMON NAME	MIN. SIZE	TYPE (SHRUB, CANOPY TREE OR UNDERSTORY TREE)	SIZE (LARGE OR SMALL)	SHADING SF GIVEN (TREES ONLY)	PLANTING REMARKS
OV	28	QUERCUS VIRGINIANA	LIVE OAK	8"-10" HI. 2.5" CAL.	CANOPY	LARGE	707	SPACING AS SHOWN
RO	30	RHODODENDRON OBTUSUM	KURUME AZALEA NANDINA	24" MIN. 3 GAL.	SHRUB			

O.C. = "ON CENTER" CAL. = "CALIPER AT 6" ABOVE GRADE" GAL. = "GALLON CONTAINER"
 MIN. PLANTING SIZE: SHADE TREES=2-2.5" CAL. MULTI-STEM=8-10" SHRUBS=12"



Landscape Calculations: (Note: All regulated & significant trees have been field located and are labeled.)

	Req'd.	Prov'd.
Street Trees 3rd Street =301 l.f. Street Frontage @ 1 tree / 30 ft.	10	11
Wright Street =165 l.f.-25 driveway = 140 l.f. Street Frontage @ 1 tree / 30 ft.	4	3-PROPOSED 1-EXISTING 4-TOTAL
2nd Street =367 l.f.-25 driveway = 342 l.f. Street Frontage @ 1 tree / 30 ft.	11	5-PROPOSED 6-EXISTING 11-TOTAL
Parking Area Interior (20% Shading)- 20,178 s.f. x 20%	4,036 s.f.	4,949 s.f.
7 PROPOSED LIVE OAKS AT FULL CREDIT (@707 SF)		
Overall Development Area - 2.81 ac.± development area x 15 trees/ac.	42	28 PROPOSED 6-EXISTING 93 EXISTING 121 TOTAL
Signif. Tree removal mitigation -	64 (SEE CHART)	
	30" OAK 30" OAK 36" OAK	
TOTAL TREES REQUIRED	106	

MITIGATION CALCULATIONS

TREE TO BE REMOVED	DIAMETER (in)	# OF TREES REQUIRED
OAK	30	20
OAK	30	20
OAK	36	24
TOTAL		64*

*64 EXISTING TREES 2"-5" DBH TO BE RETAINED ON SITE AND SUPPLEMENTED WITH NEW PLANTINGS AS REQUIRED

- LANDSCAPE AREAS
- STREET YARD LANDSCAPING
 - FOUNDATION LANDSCAPING
 - PARKING INTERIOR PLANTING

- TREE LEGEND / INVENTORY
- DOGWOOD
 - GUM
 - OAK
 - CREPE MYRTLE
 - SYCAMORE
 - PINE
 - BIRCH
 - ELM
 - MAGNOLIA
 - MAPLE
 - POPLAR
 - HICKORY

- Plant Key
- Trees
- OV - LIVE OAK
- Shrubs
- RO - KURUME AZALEA

Approved Construction Plan

Name _____ Date _____

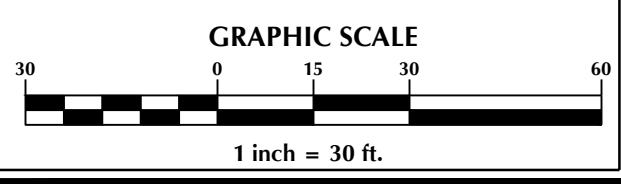
Planning _____

Traffic _____

Fire _____

City of WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

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



No.	Revision	Date	By

Designer: GSP
 Scale: 1" = 30'
 Drawn By: GSP
 Date: August 2018
 License #: P-0718
 Job No.: 2018-0006

PINNACLE 3RD STREET
 New Hanover County
 North Carolina

LANDSCAPE PLAN

PREPARED FOR:
 ROBERT HIGH DEVELOPMENT, LLC
 223 GREENVILLE AVENUE
 WILMINGTON, NC 28403
 910-790-9490

GSP CONSULTING, PLLC
 ENGINEERING
 6626 Gordon Road Unit C Wilmington, North Carolina 28411 tel: 910-442-7870 fax: 910-799-6659

Sheet No.
L-1