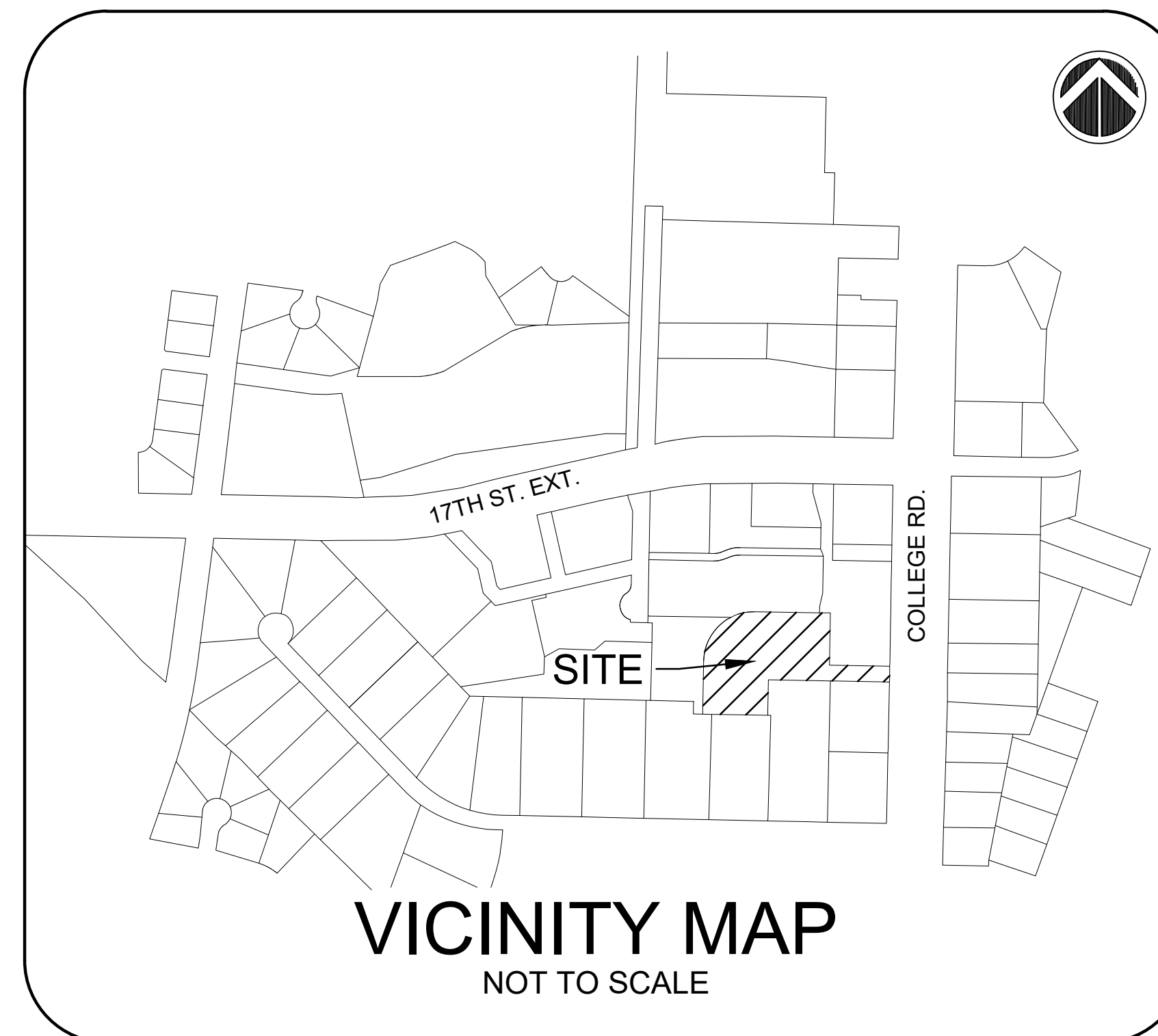


CONSTRUCTION PLANS FOR PINE VALLEY BRANCH LIBRARY

Wilmington, North Carolina



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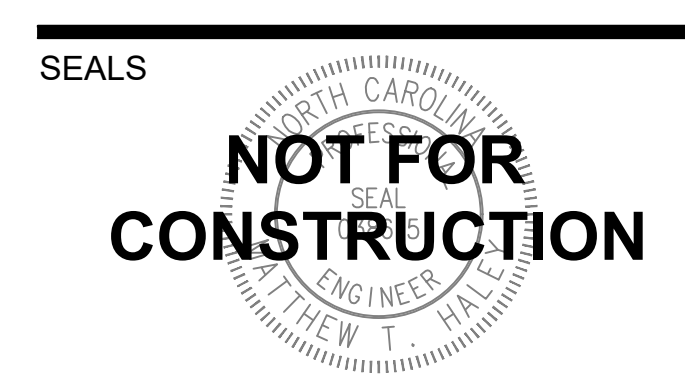
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REVISIONS
 ISSUED FOR TRC REVIEW 2018-06-13



PINE VALLEY BRANCH LIBRARY
 3802 SOUTH COLLEGE ROAD
 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID # -

DRAWING TITLE
Cover

DRAWING NUMBER
C-001

CAPE FEAR ENGINEERING
 151 Poole Rd., Suite 100; Belville, NC, 28451
 TEL (910) 383-1044; FAX (910) 383-1045
 www.capefearengineering.com
 N.C. LICENSE # C-1621

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

NOTICE REQUIRED
 ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.
 NORTH CAROLINA LAW REQUIRES A TWO WORKING DAYS NOTICE BE GIVEN TO THE UTILITY OWNERS BEFORE YOUR DIGGING BEGINS. ONCE ALL UNDERGROUND FACILITIES HAVE BEEN MARKED, YOU MAY BEGIN YOUR EXCAVATION ACTIVITIES.
 CONTACT "CAROLINA ONE CALL" AT 811
 EMERGENCY DIAL 911 POLICE - FIRE - RESCUE

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

Approved Construction Plan

Name	Date
Planning	_____
Traffic	_____
Fire	_____

PATH: F:\550\557-58 PINE VALLEY LIBRARY\DWG\CONSTRUCTION\PINE VALLEY_MASTER.DWG

EXISTING CONDITION NOTES:

1. THE DRAWING IS BASED ON A SURVEY BY BATEMAN CIVIL SURVEY COMPANY.
2. THIS PROJECT IS IN THE CAMA LAND USE CLASSIFICATION OF URBAN.
3. EXISTING UTILITY INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION, VERIFICATION, SUPPORT AND PROTECTION OF ALL ABOVE GROUND AND UNDERGROUND UTILITIES TO REMAIN IN PLACE, INCLUDING ANY UTILITIES NOT INDICATED ON THESE DRAWINGS. ANY CONFLICTS OR DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.
4. CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, TREES, PAVEMENT, UTILITIES, AND OTHER PROPERTY UNLESS THEY ARE TO BE DEMOLISHED. ANY PROPERTY NOT AUTHORIZED FOR REMOVAL, BUT DAMAGED BY THE CONTRACTOR SHALL BE RESTORED BY THE CONTRACTOR TO THE ENGINEER'S OR OWNER'S SATISFACTION AT NO ADDITIONAL EXPENSE TO THE OWNER.
5. CONTRACTOR SHALL MAKE EVERY EFFORT TO SAVE PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES. PROPERTY IRONS, MONUMENTS, AND OTHER PERMANENT POINTS OF REFERENCE DESTROYED BY THE CONTRACTOR SHALL BE REPLACED BY A NORTH CAROLINA LICENSED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
6. THE CONTRACTOR SHALL MAKE SURE THAT WORK PERFORMED ON THIS PROJECT SHALL NOT IMPACT THE OPERATION OF ANY ADJACENT PROPERTIES.
7. THE CONTRACTOR SHALL SEQUENCE WORK AS NECESSARY TO ENSURE THAT ALL UTILITY SERVICES, INCLUDING FIRE HYDRANTS, REMAIN OPERATIONAL DURING CONSTRUCTION.
8. THE CONTRACTOR SHALL RESTORE ANY ACCESS ROADS AND STAGING AREAS USED BACK TO THEIR ORIGINAL CONDITION. ALL DISTURBED AREAS SHALL BE VEGETATED IN ACCORDANCE WITH THE PROJECT PLANS.
9. THE CONTRACTOR SHALL TAKE ADEQUATE PROTECTIVE MEASURES TO INSURE THAT EXISTING PAVEMENT SURFACES ARE NOT DAMAGED FROM TRACKED CONSTRUCTION EQUIPMENT OR ANY OTHER POSSIBLE SOURCE WHEN EQUIPMENT IS BEING MOVED DURING AND AFTER WORK IS BEING CONDUCTED. THE CONTRACTOR SHALL REPAIR ANY PAVED AREAS DAMAGED DURING CONSTRUCTION.
10. EXISTING PAVEMENTS AND ALL OTHER AREAS ADJACENT TO THE SITE SHALL BE KEPT CLEAN AT ALL TIMES. DO NOT ALLOW BUILD UP OF SOIL, MUD, DUST OR OTHER DEBRIS.
11. ANY AND ALL MATERIAL QUANTITIES INDICATED ON THIS PLAN SET ARE FOR REFERENCE ONLY. THE CONTRACTOR MUST VERIFY ALL MATERIAL QUANTITIES SHOWN.

SITE NOTES:

1. IN ALL CASES CONTRACTOR SHALL COMPLY WITH CITY OF WILMINGTON LAND DEVELOPMENT CODE AND PROJECT SPECIFICATIONS. IF A DISCREPANCY IS FOUND, THE MORE STRINGENT SHALL GOVERN.
2. ANY SIGNAGE FOR THE SITE SHALL BE SUBMITTED FOR APPROVAL BY THE CITY OF WILMINGTON AT A LATER DATE. NO SIGNAGE SHALL BE INSTALLED WITHOUT FIRST OBTAINING THE PROPER APPROVALS.
3. ALL DIRECTION AND INCIDENTAL SIGNAGE SHALL CONTAIN NO MARKETING.
4. ALL SIGNAGE AND PAVEMENT MARKINGS MUST COMPLY WITH MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

GENERAL UTILITY NOTES:

1. ALL UTILITY MATERIALS, CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO THE PROJECT SPECIFICATIONS AND SHALL MEET OR EXCEED CAPE FEAR PUBLIC UTILITY AUTHORITY AND NCDEQ STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY LINES PRIOR TO THE INSTALLATION OF ANY NEW LINES. WHERE UTILITY CONFLICTS ARE INDICATED, POT-HOLING UTILITIES WILL BE REQUIRED.
3. EXISTING UTILITIES SHALL BE PROTECTED DURING CONSTRUCTION. CONTRACTOR SHALL HAND EXCAVATE WHEN ADJACENT TO EXISTING UTILITIES.
4. CONTRACTOR SHALL COORDINATE SERVICE AND METER SIZES WITH MECHANICAL ENGINEER. CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY IF THERE ARE ANY DISCREPANCIES OR IF ANY ADJUSTMENTS ARE NEEDED.
5. REFER TO INTERIOR PLUMBING DRAWINGS FOR TIE-IN OF ALL UTILITIES. DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

SANITARY SEWER NOTES:

1. ALL SEWERLINES SHALL HAVE A MINIMUM OF 36-INCHES OF COVER FROM THE ELEVATION OF FINISHED GRADE. AN EXCEPTION IS WHEN DIP IS SPECIFIED FOR SEWER.
2. SANITARY SEWER SEPARATION SHALL COMPLY WITH THE REQUIREMENTS OF 15A NCAC 02T .0305 AS SUMMARIZED BELOW:

WATER	- 10- FEET (LATERALLY)
	- 18-INCHES (VERTICAL - WATER OVER SEWER)
STORM SEWER	- 24-INCHES (VERTICAL)
3. WHERE SANITARY SEWERS PASS UNDER STORMDRAIN PIPE AND THE VERTICAL SEPARATION IS LESS THAN 24", ENGINEERING SOLUTIONS SUCH AS DUCTILE IRON PIPE OR STRUCTURAL BRIDGING SHALL BE PROVIDED TO PREVENT CRUSHING THE UNDERLYING PIPE.
4. WHERE SANITARY SEWERS PASS OVER STORMDRAIN PIPE AND THE VERTICAL SEPARATION IS LESS THAN 24", THE SANITARY SEWER SHALL MEET THE MATERIALS, TESTING METHODS, AND ACCEPTABILITY STANDARDS FOR WATER MAINS (15A NCAC 18C).
5. SANITARY SEWER IS OWNED AND OPERATED BY CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA). ALL SEWERLINES AND SEWERLINE APPURTENANCE CONSTRUCTION SHALL MEET OR EXCEED CFPUA STANDARDS AND SPECIFICATIONS.
7. ALL SEWER WITHIN 50' OF WETLANDS SHALL MEET THE MATERIALS, TESTING, AND ACCEPTABILITY STANDARDS FOR WATERMAINS AS SPECIFIED IN 15A NCAC 18C.

WATER NOTES:

1. MINIMUM UTILITY SEPARATIONS

SANITARY SEWER	- 10- FEET (LATERALLY)
	- 18-INCHES (VERTICAL - WATER OVER SEWER)
STORM SEWER	- 18-INCHES (VERTICAL)
2. WHERE A WATER MAIN PASSES OVER A SEWER, AND THE VERTICAL SEPARATION IS LESS THAN 18" OR WHERE WATER PASSES UNDER SEWER, THE SEWER AND WATERMAIN SHALL BOTH BE DUCTILE IRON PIPE FOR A DISTANCE OF 10' ON EACH SIDE OF THE CROSSING (20' LENGTH CENTERED AT CROSSING - NO JOINTS).
3. WATER IS OWNED AND OPERATED BY CAPE FEAR PUBLIC UTILITY AUTHORITY (CFPUA). ALL WATERLINE AND WATERLINE APPURTENANCE CONSTRUCTION SHALL MEET OR EXCEED CFPUA STANDARDS AND SPECIFICATIONS.

GENERAL STORMWATER NOTES:

1. DURING CONSTRUCTION, CONTRACTOR SHALL PERFORM GRADING IN A MANNER AND SEQUENCE THAT WILL PROVIDE PROPER DRAINAGE AWAY FROM BUILDINGS AT ALL TIMES.
2. ALL STORMWATER RUNOFF SHALL BE DIRECTED AWAY FROM THE BUILDING AND TO THE STORMWATER COLLECTION SYSTEM.
3. NCDEQ STATE STORMWATER AND EROSION CONTROL PERMITS ARE REQUIRED AND WILL BE OBTAINED. NO LAND DISTURBANCE OR INSTALLATION OF ANY IMPERVIOUS SURFACES SHALL BE DONE PRIOR TO OBTAINING PERMIT APPROVALS.
4. ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.

STORMWATER COLLECTION SYSTEM NOTES:

1. ALL PIPES TO BE LAID TO THE SLOPE GRADIENTS NOTED ON THIS PLAN SHEET. THE MAXIMUM VARIATION FROM TRUE SLOPE SHALL BE 1/8-INCH IN 100 FEET.
2. SUFFICIENT BEDDING SHALL BE INSTALLED TO ESTABLISH ELEVATIONS AND PIPE INVERTS AS INDICATED.
3. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED AND CUT FLUSH TO INSIDE OF BOX TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
4. ALL STORMWATER STRUCTURES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT AND SHALL BE HEAVY-DUTY TRAFFIC RATED.
5. UPON THE COMPLETION OF CONSTRUCTION AND SITE STABILIZATION, ALL PROPOSED AND EXISTING PIPES SHALL BE CLEANED OUT TO REMOVE ALL ACCUMULATED SILT AND DEBRIS.

SEDIMENTATION OPERATION & MAINTENANCE NOTES:

1. THE TOTAL AREA OF DISTURBANCE EXCEEDS 1.0 ACRE AND THEREFORE AN EROSION CONTROL PERMIT WILL BE REQUIRED.
2. ALL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF-PRODUCING RAINFALL BUT IN NO CASE LESS THAN ONCE EVERY WEEK. ANY NEEDED REPAIRS WILL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.
3. TEMPORARY CONSTRUCTION ENTRANCES SHALL BE INSPECTED WEEKLY IN ORDER TO KEEP SEDIMENT FROM BEING TRANSPORTED OFFSITE.

SEQUENCE OF PRELIMINARY LAND DISTURBANCE:

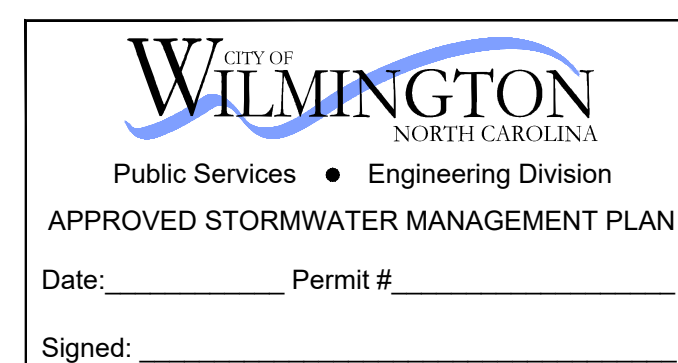
1. PRECONSTRUCTION CONFERENCE TO BE HELD PRIOR TO BEGINNING.
2. DETERMINE AND MARK LIMITS OF DISTURBANCE.
3. INSTALL TREE PROTECTION AND TREE PROTECTION SIGNAGE. TREE PROTECTION SIGNAGE SHOULD BE PLACED ALONG THE LIMITS OF DISTURBANCE AT 100' INTERVALS IN LOCATIONS WHERE TREES TO REMAIN ARE PRESENT.
4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE AND INSTALL SILT FENCE AND SILT FENCE ROCK OUTLETS.
5. INSTALL TEMPORARY SKIMMER SEDIMENT BASINS BEFORE ANY SITE GRADING OCCURS.
6. INSTALL TEMPORARY DIVERSION SWALES TO COLLECT AND CONVEY RUNOFF TO THE SEDIMENT BASINS. CONSTRUCT ADDITIONAL DIVERSION SWALES AS NEEDED TO ENSURE MAXIMUM COLLECTION OF RUNOFF AND TO PREVENT UN-TREATED RUNOFF FROM EXITING THE SITE.
7. THE TEMPORARY SKIMMER SEDIMENT BASINS AND ALL TEMPORARY DIVERSION SWALES SHALL REMAIN IN PLACE UNTIL THE FINAL STORMDRAIN SYSTEM IS INSTALLED AND SKIMMER DEWATERING DEVICE IS INSTALLED ON EXISTING POND OUTLET STRUCTURE.
8. TOPSOIL REMOVAL AND/OR STORAGE. PROVIDE TEMPORARY STOCKPILES WITHIN THE LIMITS OF DISTURBANCE AS REQUIRED.
9. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES EVERY 7 DAYS AND AFTER EACH SIGNIFICANT RAINFALL EVENT (0.5" OR GREATER).
10. PLACE TEMPORARY SEEDING ON ALL PERIMETER SWALES AND ALL AREAS WITH SLOPES GREATER THAN 3:1 THAT ARE TO BE LEFT IDLE FOR MORE THAN 7 DAYS. PLACE TEMPORARY SEEDING ON ALL OTHER DISTURBED AREAS THAT ARE TO BE LEFT IDLE FOR MORE THAN 14 DAYS.

SEQUENCE OF FINAL LAND DISTURBANCE:

1. INSTALL STORMDRAIN INFRASTRUCTURE WITH WIRE/GRAVEL INLET PROTECTION.
2. INSTALL TEMPORARY SKIMMER ON EXISTING OUTLET STRUCTURE AT EXISTING POND.
3. REMOVE TEMPORARY SKIMMER BASIN AND TEMPORARY DIVERSION SWALES.
4. BRING SITE TO FINAL GRADE. PROVIDE TEMPORARY STOCKPILES WITHIN THE LIMITS OF DISTURBANCE AS REQUIRED.
5. MAINTAIN TEMPORARY GRAVEL CONSTRUCTION ENTRANCES, SILT FENCE, AND INLET PROTECTION.
6. INSPECT AND MAINTAIN ALL EROSION CONTROL DEVICES EVERY 7 DAYS AND AFTER EACH SIGNIFICANT RAINFALL EVENT (0.5" OR GREATER).
7. PLACE TEMPORARY SEEDING ON ALL PERIMETER SWALES AND ALL AREAS WITH SLOPES GREATER THAN 3:1 THAT ARE TO BE LEFT IDLE FOR MORE THAN 7 DAYS. PLACE TEMPORARY SEEDING ON ALL OTHER DISTURBED AREAS THAT ARE TO BE LEFT IDLE FOR MORE THAN 14 DAYS.
8. PERMANENT GRASS SHALL BE INSTALLED FOR ALL AREAS AT FINAL GRADE AND IN SEASON. FERTILIZE, WATER AND RESEED AS REQUIRED TO ESTABLISH A VIGOROUS STAND OF GRASS.
9. AFTER COMPLETION OF CONSTRUCTION AND THE SITE IS STABILIZED, REMOVE ALL ACCUMULATED SEDIMENT FROM SILT FENCE AND SPREAD EVENLY ACROSS THE SITE. GRASS THESE AREAS IMMEDIATELY AND REMOVE ALL EROSION CONTROL MEASURES.
10. REMOVE SEDIMENT FROM POND AND REMOVE SKIMMER FROM OUTLET STRUCTURE.

FIRE AND LIFE SAFETY NOTES

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



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



NOTICE REQUIRED

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NORTH CAROLINA LAW REQUIRES A TWO WORKING DAYS NOTICE BE GIVEN TO THE UTILITY OWNERS BEFORE YOUR DIGGING BEGINS. ONCE ALL UNDERGROUND FACILITIES HAVE BEEN MARKED, YOU MAY BEGIN YOUR EXCAVATION ACTIVITIES.

CONTACT "CAROLINA ONE CALL" AT 811

EMERGENCY DIAL 911 POLICE - FIRE - RESCUE



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REVISIONS
ISSUED FOR TRC REVIEW 2018-06-13

SEALS



PINE VALLEY BRANCH LIBRARY

3802 SOUTH COLLEGE ROAD
WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
ISSUE FOR BID
DATE MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID # -

DRAWING TITLE

General Notes

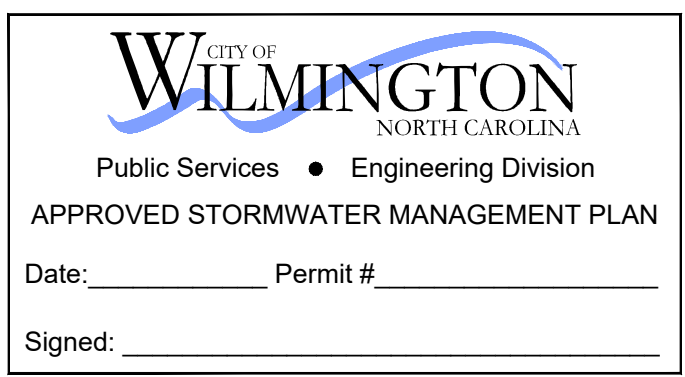
DRAWING NUMBER

C-002

ABBREVIATIONS	
ABC	- AGGREGATE BASE COURSE
ABD	- ABANDONED
AC	- ACRE
ACI	- AMERICAN CONCRETE INSTITUTE
AFF	- AQUEOUS FILM FORMING FOAM
APPROX	- APPROXIMATE
ARV	- AIR RELEASE VALVE
ASC	- ASBESTOS CEMENT
ASTM	- AMERICAN SOCIETY FOR TESTING AND MATERIAL
BEN	- BENCH
BC	- BACK OF CURB
BFP	- BACKFLOW PREVENTER
BLDG	- BUILDING
BMP	- BEST MANAGEMENT PRACTICE
CATV	- CABLE TELEVISION
CB	- CATCH BASIN
CF	- CUBIC FEET
CJ	- CONTRACTION JOINT
CL	- CENTERLINE
CM	- CREPE MYRTLE
CMP	- CORRUGATED METAL PIPE
CO	- SEWER CLEANOUT
COMM	- COMMUNICATION
CONC	- CONCRETE
CRSI	- CONCRETE REINFORCING STEEL INSTITUTE
CVR	- COVER
DB	- DIVERSION BOX
DCJ	- DOWELED CONSTRUCTION JOINT
DI	- DROP INLET
DIA	- DIAMETER
Ø	- DIAMETER
DIM	- DIMENSION
DIP	- DUCTILE IRON PIPE
DOM	- DOMESTIC
E	- EASTING
EJ	- EXPANSION JOINT
EL/ELEV	- ELEVATION
ELEC	- ELECTRIC
EX	- EXISTING
FDC	- FIRE DEPARTMENT CONNECTION
FEMA	- FEDERAL EMERGENCY MANAGEMENT AGENCY
FES	- FLARED END SECTION
FFE	- FINISHED FLOOR ELEVATION
FH	- FIRE HYDRANT
FIRM	- FLOOD INSURANCE RATE MAP
FL	- FLOW LINE
FM	- FORCEMAIN
FO	- FIBER OPTIC
FS	- FIRE SERVICE
G	- GAS
GPM	- GALLONS PER MINUTE
GW	- GUY WIRE
HVAC	- HEATING/AIR CONDITIONING UNIT
IE/INV	- INVERT ELEVATION
L:W	- LENGTH TO WIDTH
LCJ	- LONGITUDINAL CONTRACTION JOINT
LF	- LINEAR FEET
LKJ	- LONGITUDINAL CONSTRUCTION JOINT
LP	- LIGHT POLE
MAP	- MAPLE TREE
MAX	- MAXIMUM
MG	- MATCH GRADE
MH	- MANHOLE
MIN	- MINIMUM
MUTCD	- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
N/A	- NOT APPLICABLE
NAD	- NORTH AMERICA DATUM
NAVD	- NORTH AMERICA VERTICAL DATUM
NCDEQ	- NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY
NCDOT	- NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
NIC	- NOT IN CONTRACT

N	- NORTHING
OC	- ON CENTER
OS	- OUTLET STRUCTURE
OWS	- OIL/WATER SEPARATOR
PIV	- POST INDICATOR VALVE
PN	- PINE TREE
PP	- POWER POLE
PT	- POINT
PVC	- POLYVINYL CHLORIDE
R	- RADIUS
RCP	- REINFORCED CONCRETE PIPE
RD	- ROOF DRAIN
RED	- REDUCER
RPDA	- REDUCED PRESSURE DETECTOR ASSEMBLY
RS	- ROUGH SAWN
RTK	- REAL TIME KINEMATIC
SCH	- SCHEDULE
SD	- STORM DRAIN
SF	- SQUARE FEET
SF#1	- SAND FILTER #1
SHWT	- SEASONAL HIGH WATER TABLE
SPT	- STANDARD PENETRATION TEST
SS	- SANITARY SEWER
SSCO	- SANITARY SEWER CLEANOUT
SSMH	- SANITARY SEWER MANHOLE
ST	- SEDIMENT TRAP
T PED	- TELEPHONE PEDESTAL
TBM	- TEMPORARY BENCHMARK
TC	- TOP OF CURB
TCJ	- TRANSVERSE CONTRACTION JOINT
TD	- TRENCH DRAIN
TE	- THICKENED EDGE
TEJ	- THICKENED EDGE WITH EXPANSION JOINT
TP	- TREE PROTECTION
TSB	- TEMPORARY SKIMMER BASIN
TST	- TEMPORARY SEDIMENT TRAP
TYP	- TYPICAL
UC	- UNDERGROUND COMMUNICATIONS
UFC	- UNIFIED FACILITIES CRITERIA
UNK	- UNKNOWN
W	- WATER
WH	- WALL HYDRANT
WL	- WATER LINE
WM	- WATER METER
WQL	- WATER QUALITY LEVEL
WV	- WATER VALVE
WWF	- WELDED WIRE FABRIC

LEGEND	EXISTING	PROPOSED
PROPERTY LINE	---	---
PROJECT LIMITS	---	---
PROPERTY CORNER	○	○
ZONING LINE	---	---
SETBACKS	---	---
LANDSCAPE BUFFER	---	---
EASEMENT	---	---
CONTOURS	30 30	30 30
SPOT ELEVATIONS	30.63	30.63
ASPHALT PAVEMENT	▨	▨
CONCRETE PAVEMENT	▨	▨
GRAVEL PAVEMENT	▨	▨
SIDEWALK	▨	▨
GRASS PAVERS	▨	▨
BUILDING	▨	▨
SPILL CURB & GUTTER	▨	▨
CATCH CURB & GUTTER	▨	▨
WHEEL STOPS	—	—
WATERLINE	—	— WL
WL VALVE	⊗	⊗
WATER METER	●	⊗
BACKFLOW PREVENTER	—	—
SEWER FORCEMAIN	---	---
SEWERLINE	---	---
SEWER CLEANOUT	---	---
DUPLEX GRINDER PUMP STATION	---	---
SEWER VALVE BOX	---	---
STORMDRAIN PIPE	---	---
STORM INLET	---	---
DOWNSPOUT	---	---
FLARED END SECTION	---	---
STORMWATER BMP	---	---
POWER POLE	PP	PP
GUY WIRE	---	---
TELEPHONE PEDESTAL	T PED	T PED
OVERHEAD ELECTRIC	---	---
LIGHT POLE	---	---
UNDERGROUND COMMUNICATIONS	---	---
MONITORING WELL	⊙	⊙
LIMITS OF DISTURBANCE	---	---
INLET PROTECTION	---	---
TEMPORARY CONSTRUCTION ENTRANCE	---	---
SILT FENCE	---	---
CONCRETE DRAINAGE FLUME	---	---
GRASS (SEED/SOD) (SEE VEGETATION SCHEDULE ON SHEET D-1)	---	---
MULCH	---	---
WETLANDS	---	---
SIGN	---	---
FIRE HYDRANT	FH	FH
FIRE DEPARTMENT CONNECTION	---	---
FENCE	X X	X X
EDGE OF WATER	---	---
LANDSCAPE TIMBER	---	---
POST	---	---
HEAVY DUTY CONCRETE SIDEWALK	---	---
MOUNTABLE CURB	---	---
TREE	XX" BRESS XX" MAGNOLIA XX" OAK/HARDWOOD XX" PALM	XX" BRESS XX" MAGNOLIA XX" OAK/HARDWOOD XX" PALM
TREE PROTECTION	---	---
BAFFLES	---	---



Approved Construction Plan
Name: _____ Date: _____
Planning: _____
Traffic: _____
Fire: _____



NOTICE REQUIRED
ALL EXISTING UNDERGROUND UTILITIES SHALL BE PHYSICALLY LOCATED BY CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION IN THE VICINITY OF SAID UTILITIES.
NORTH CAROLINA LAW REQUIRES A TWO WORKING DAYS NOTICE BE GIVEN TO THE UTILITY OWNERS BEFORE YOUR DIGGING BEGINS. ONCE ALL UNDERGROUND FACILITIES HAVE BEEN MARKED, YOU MAY BEGIN YOUR EXCAVATION ACTIVITIES.
CONTACT "CAROLINA ONE CALL" AT 811
EMERGENCY DIAL 911 POLICE - FIRE - RESCUE



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REVISIONS	ISSUED FOR TRC REVIEW	2018-06-13



PINE VALLEY BRANCH LIBRARY
3802 SOUTH COLLEGE ROAD
WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
ISSUE FOR BID
DATE MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID # -

DRAWING TITLE
Legend and Abbreviations

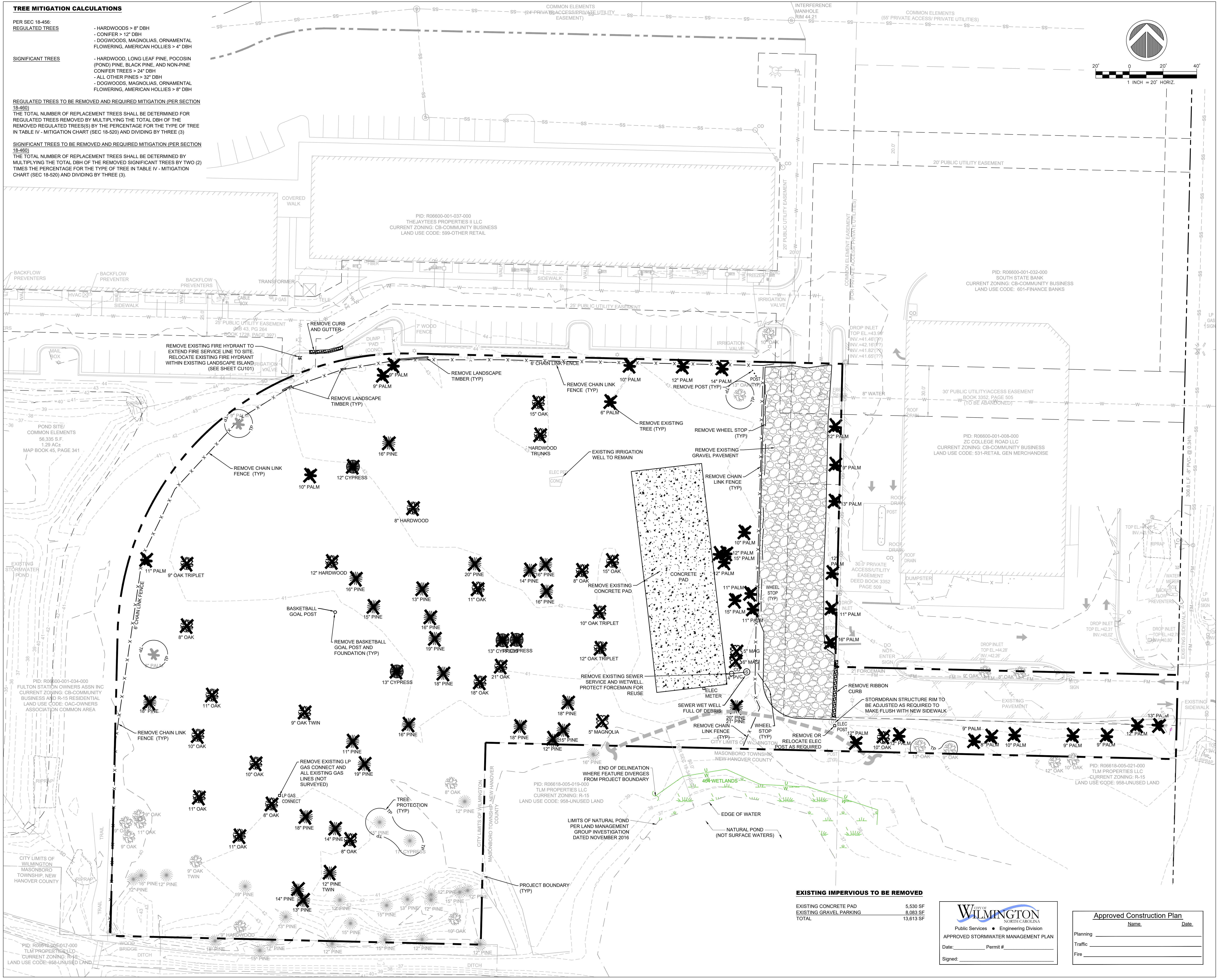
DRAWING NUMBER
C-003

TREE MITIGATION CALCULATIONS

- PER SEC 18-456:
REGULATED TREES
 - HARDWOODS > 8" DBH
 - CONIFER > 12" DBH
 - DOGWOODS, MAGNOLIAS, ORNAMENTAL FLOWERING, AMERICAN HOLLIES > 4" DBH
- SIGNIFICANT TREES**
 - HARDWOOD, LONG LEAF PINE, POCOSIN (POND) PINE, BLACK PINE, AND NON-PINE CONIFER TREES > 24" DBH
 - ALL OTHER PINES > 32" DBH
 - DOGWOODS, MAGNOLIAS, ORNAMENTAL FLOWERING, AMERICAN HOLLIES > 8" DBH

REGULATED TREES TO BE REMOVED AND REQUIRED MITIGATION (PER SECTION 18-460)
 THE TOTAL NUMBER OF REPLACEMENT TREES SHALL BE DETERMINED FOR REGULATED TREES REMOVED BY MULTIPLYING THE TOTAL DBH OF THE REMOVED REGULATED TREE(S) BY THE PERCENTAGE FOR THE TYPE OF TREE IN TABLE IV - MITIGATION CHART (SEC 18-520) AND DIVIDING BY THREE (3)

SIGNIFICANT TREES TO BE REMOVED AND REQUIRED MITIGATION (PER SECTION 18-460)
 THE TOTAL NUMBER OF REPLACEMENT TREES SHALL BE DETERMINED BY MULTIPLYING THE TOTAL DBH OF THE REMOVED SIGNIFICANT TREES BY TWO (2) TIMES THE PERCENTAGE FOR THE TYPE OF TREE IN TABLE IV - MITIGATION CHART (SEC 18-520) AND DIVIDING BY THREE (3).



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PINE VALLEY BRANCH LIBRARY
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OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
DATE ISSUE FOR BID
 MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID #

DRAWING TITLE
Demolition Plan

DRAWING NUMBER
CD101

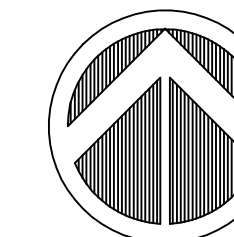
EXISTING IMPERVIOUS TO BE REMOVED

EXISTING CONCRETE PAD	5,530 SF
EXISTING GRAVEL PARKING	8,983 SF
TOTAL	13,513 SF

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

Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	



30' 0 30' 60'
1 INCH = 30' HORIZ.

VINES

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SEALS

NOT FOR CONSTRUCTION

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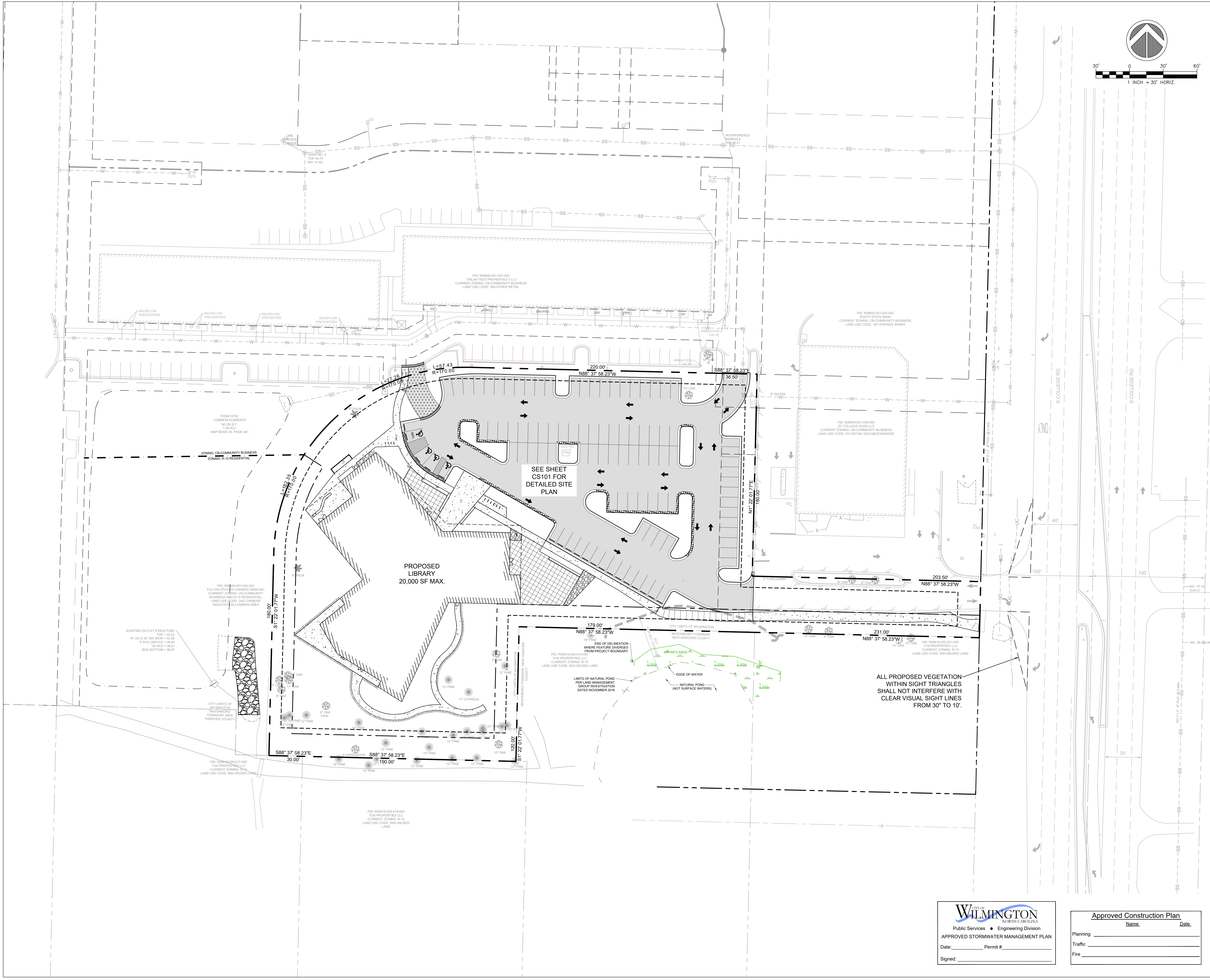
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ISSUE FOR BID
DATE MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID # -

DRAWING TITLE
Overall Site Plan

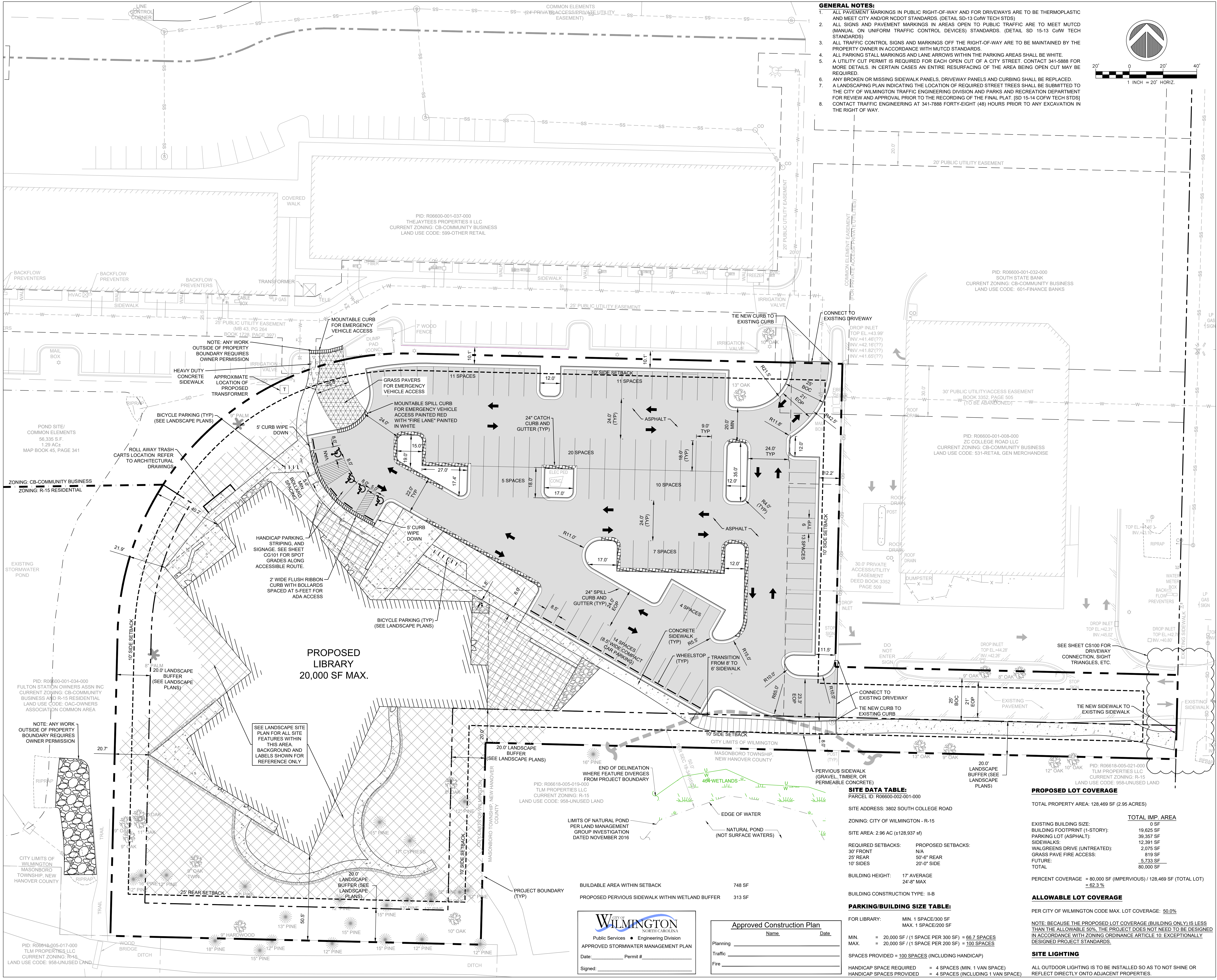
DRAWING NUMBER

CS100

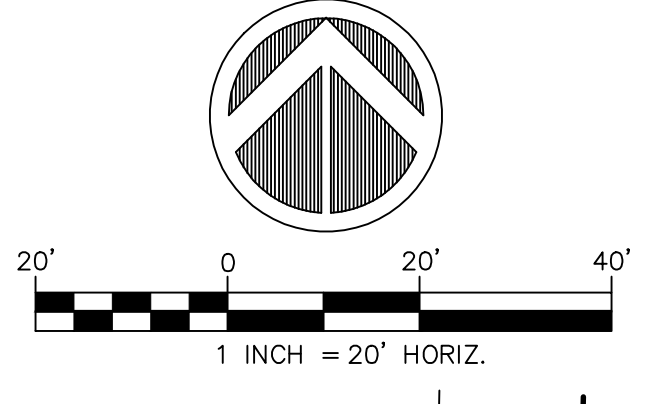


CITY OF WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan
 Name: _____ Date: _____
 Planning: _____
 Traffic: _____
 Fire: _____



- GENERAL NOTES:**
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHT-OF-WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD-13 CoW TECH STD)
 - ALL SIGNS AND PAVEMENT MARKINGS IN AREAS OPEN TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS. (DETAIL SD 15-13 CoW TECH STANDARDS)
 - ALL TRAFFIC CONTROL SIGNS AND MARKINGS OFF THE RIGHT-OF-WAY ARE TO BE MAINTAINED BY THE PROPERTY OWNER IN ACCORDANCE WITH MUTCD STANDARDS.
 - ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
 - A UTILITY CUT PERMIT IS REQUIRED FOR EACH OPEN CUT OF A CITY STREET. CONTACT 341-5888 FOR MORE DETAILS. IN CERTAIN CASES AN ENTIRE RESURFACING OF THE AREA BEING OPEN CUT MAY BE REQUIRED.
 - ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING SHALL BE REPLACED.
 - 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 DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO THE RECORDING OF THE FINAL PLAN. (SD 15-14 CoW TECH STD)
 - CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT (48) HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.



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REVISIONS
 ISSUED FOR TRC REVIEW 2018-06-13



PINE VALLEY BRANCH LIBRARY
 3802 SOUTH COLLEGE ROAD
 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID #

DRAWING TITLE
Site Plan

DRAWING NUMBER
CS101

SITE DATA TABLE:

PARCEL ID: R06600-002-001-000
 SITE ADDRESS: 3802 SOUTH COLLEGE ROAD
 ZONING: CITY OF WILMINGTON - R-15
 SITE AREA: 2.96 AC (±128,937 SF)
 REQUIRED SETBACKS: 30' FRONT, 25' REAR, 10' SIDES
 PROPOSED SETBACKS: N/A, 50'-4" REAR, 20'-0" SIDE
 BUILDING HEIGHT: 17' AVERAGE, 24'-8" MAX
 BUILDING CONSTRUCTION TYPE: II-B

PROPOSED LOT COVERAGE

TOTAL PROPERTY AREA: 128,469 SF (2.95 ACRES)

	TOTAL IMP. AREA
EXISTING BUILDING SIZE:	0 SF
BUILDING FOOTPRINT (1-STORY):	19,625 SF
PARKING LOT (ASPHALT):	39,357 SF
SIDEWALKS:	12,391 SF
WALGREENS DRIVE (UNTREATED):	2,075 SF
GRASS PAVE FIRE ACCESS:	819 SF
FUTURE:	5,733 SF
TOTAL:	80,000 SF

PERCENT COVERAGE = 80,000 SF (IMPERVIOUS) / 128,469 SF (TOTAL LOT) = 62.3%

ALLOWABLE LOT COVERAGE

PER CITY OF WILMINGTON CODE MAX. LOT COVERAGE: 50.0%

NOTE: BECAUSE THE PROPOSED LOT COVERAGE (BUILDING ONLY) IS LESS THAN THE ALLOWABLE 50%, THE PROJECT DOES NOT NEED TO BE DESIGNED IN ACCORDANCE WITH ZONING ORDINANCE ARTICLE 10. EXCEPTIONALLY DESIGNED PROJECT STANDARDS.

SITE LIGHTING

ALL OUTDOOR LIGHTING IS TO BE INSTALLED SO AS TO NOT SHINE OR REFLECT DIRECTLY ONTO ADJACENT PROPERTIES.

BUILDABLE AREA WITHIN SETBACK 748 SF
PROPOSED PERVIOUS SIDEWALK WITHIN WETLAND BUFFER 313 SF

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan

Name: _____ Date: _____

Planning _____
 Traffic _____
 Fire _____

PARKING/BUILDING SIZE TABLE:

FOR LIBRARY:

MIN. 1 SPACE/300 SF	MAX. 1 SPACE/200 SF
MIN. = 20,000 SF / (1 SPACE PER 300 SF) = 66.7 SPACES	MAX. = 20,000 SF / (1 SPACE PER 200 SF) = 100 SPACES
SPACES PROVIDED = 100 SPACES (INCLUDING HANDICAP)	
HANDICAP SPACE REQUIRED = 4 SPACES (MIN. 1 VAN SPACE)	HANDICAP SPACES PROVIDED = 4 SPACES (INCLUDING 1 VAN SPACE)



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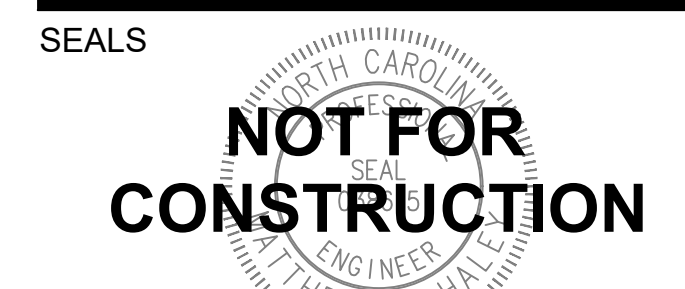
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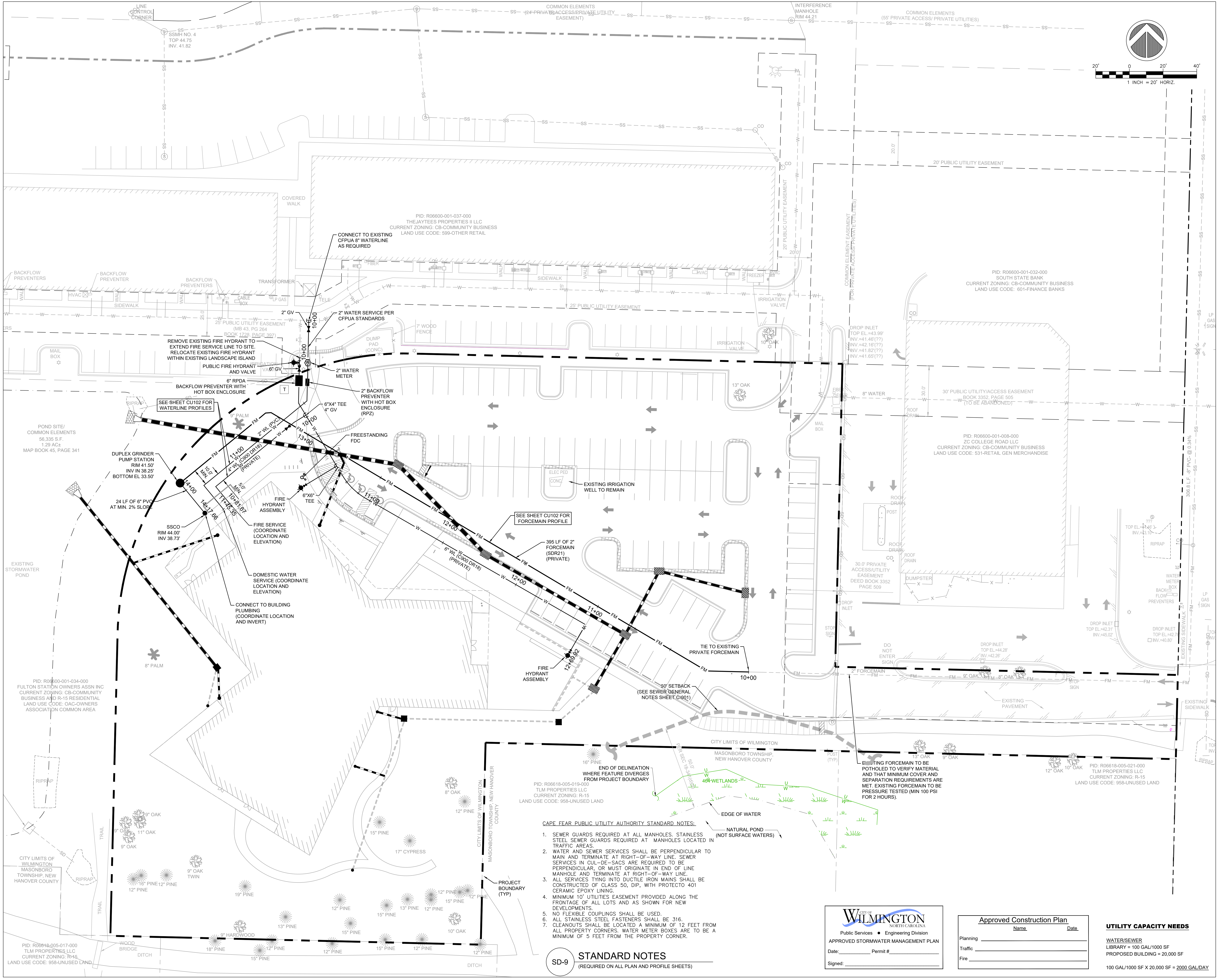
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 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
DATE ISSUE FOR BID MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID #

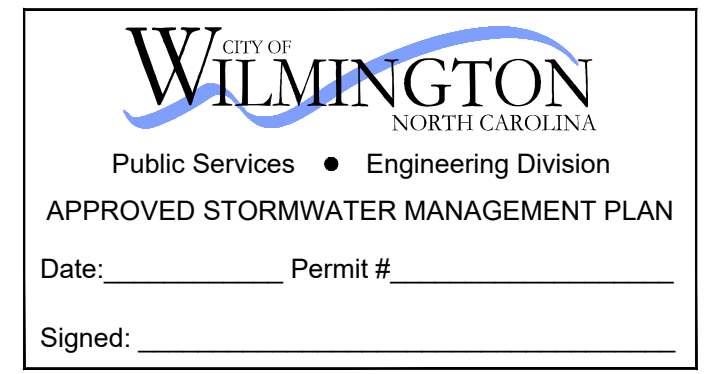
DRAWING TITLE
Utility Plan

DRAWING NUMBER
CU101



- 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.

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



Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

UTILITY CAPACITY NEEDS
 WATER/SEWER
 LIBRARY = 100 GAL/1000 SF
 PROPOSED BUILDING = 20,000 SF
 100 GAL/1000 SF X 20,000 SF = 2000 GAL/DAY



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SEALS



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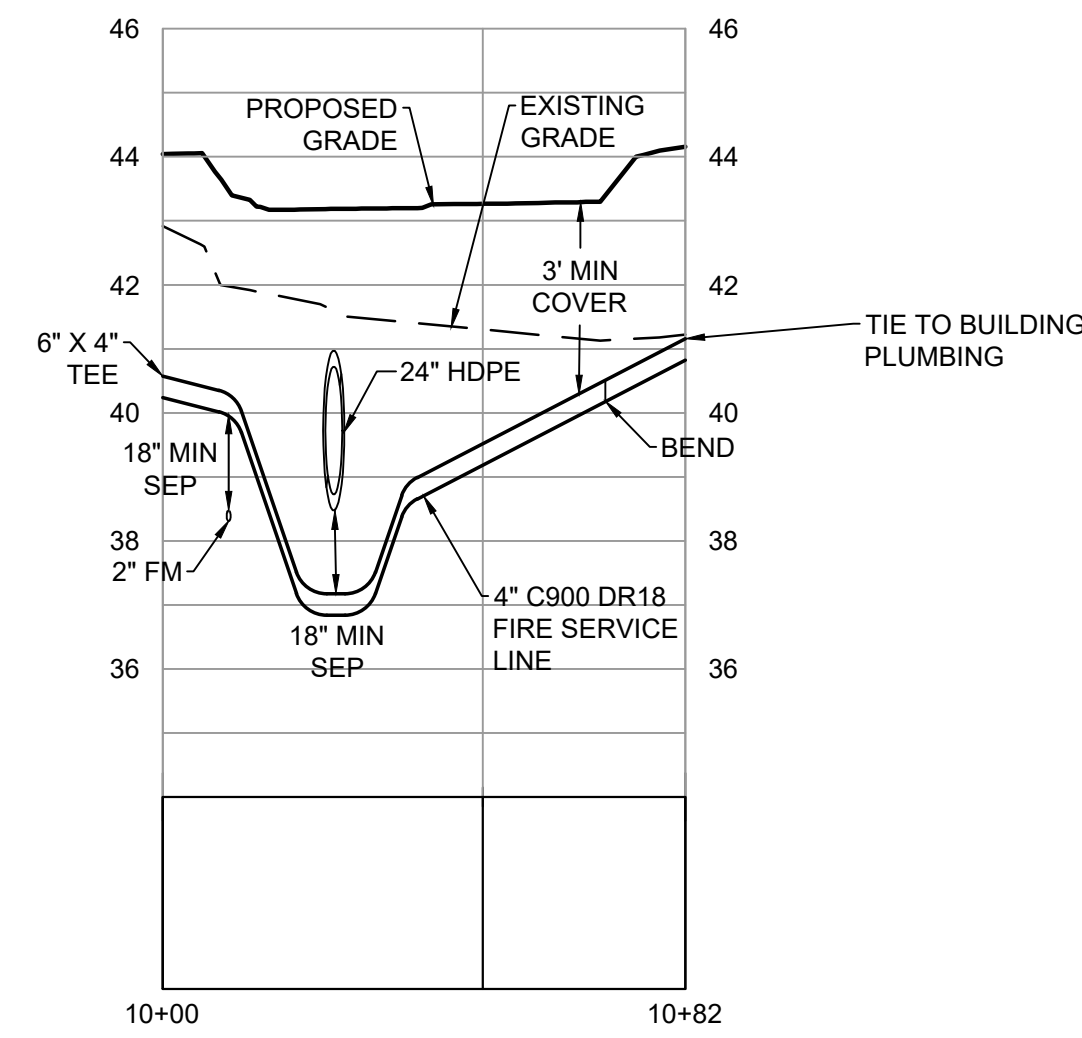
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 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID # -

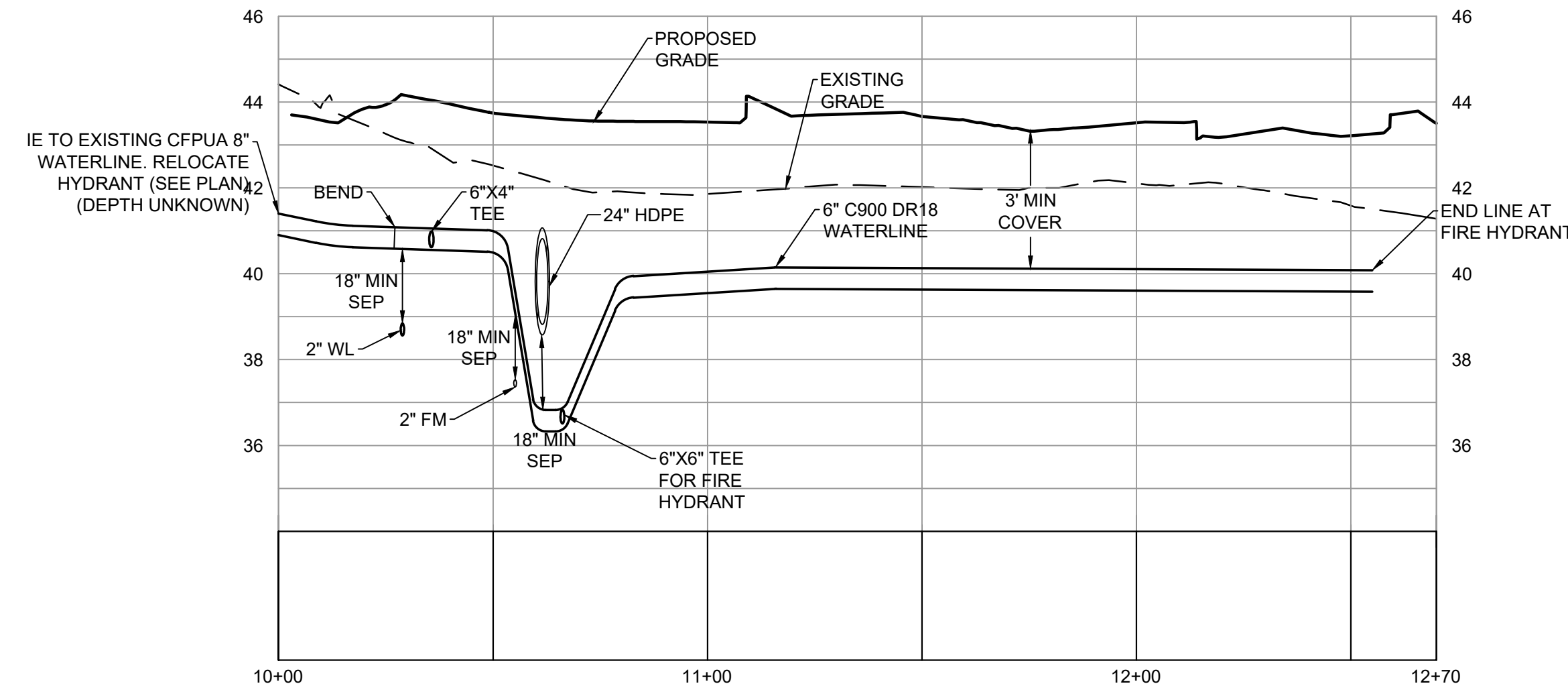
DRAWING TITLE
Utility Profiles

DRAWING NUMBER

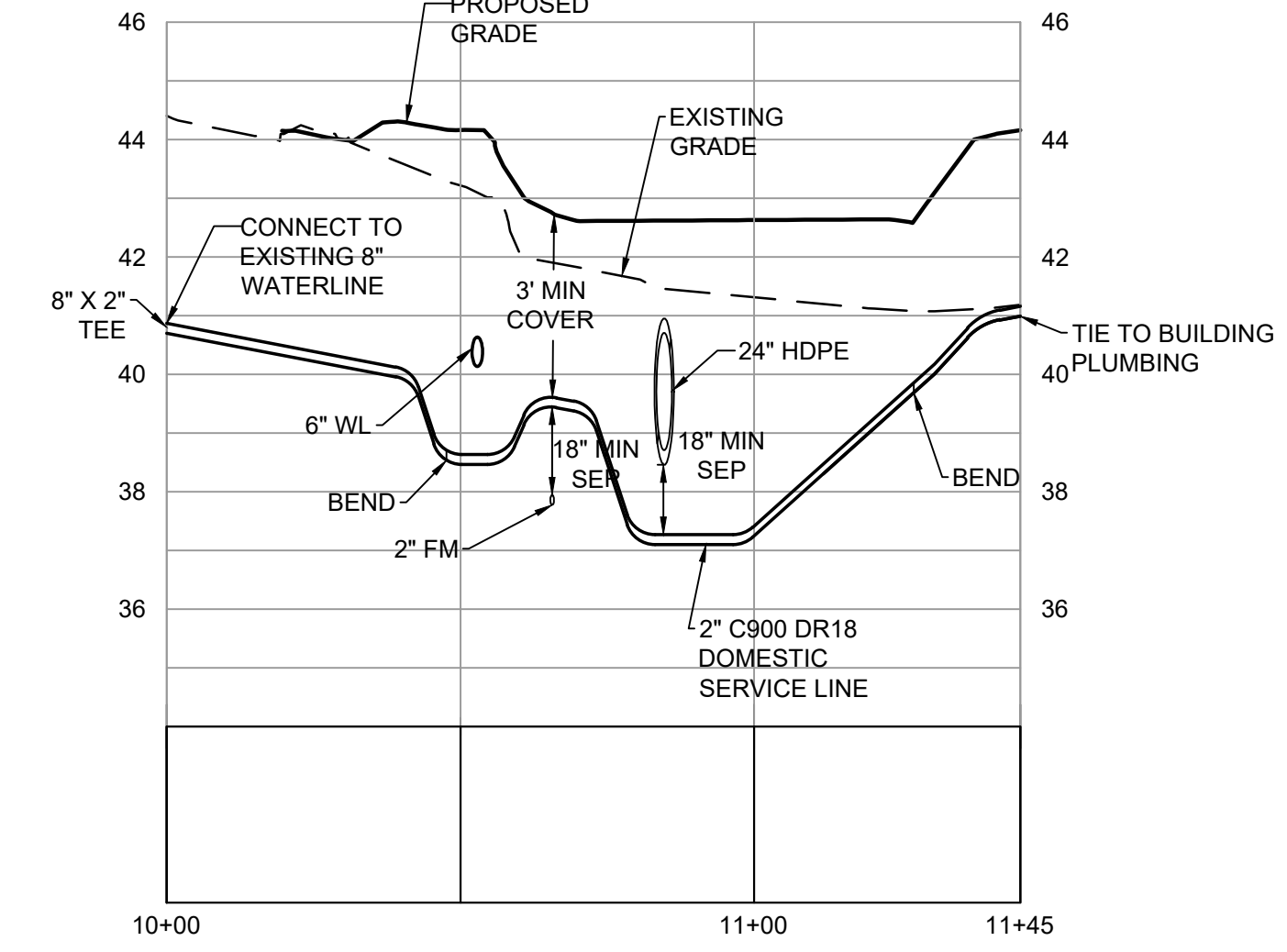
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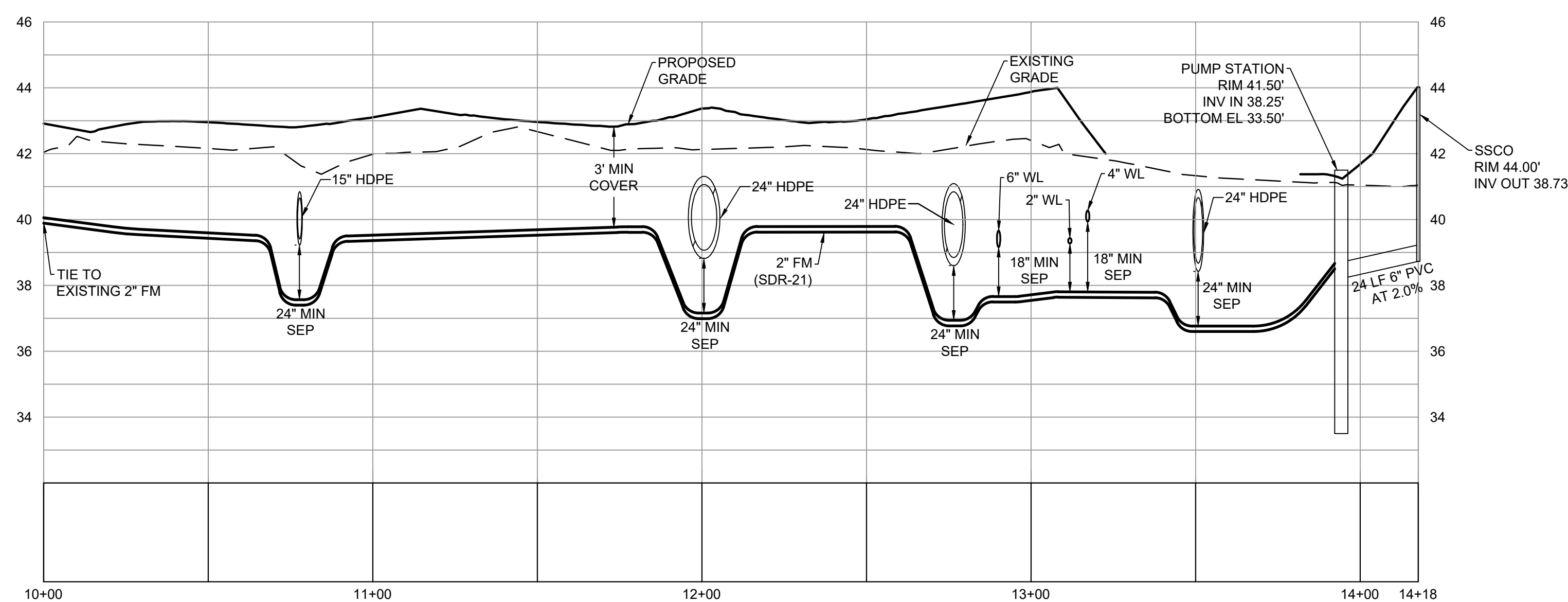
WATER - FIRE SERVICE



WATER - FIRE HYDRANT



WATER - DOMESTIC SERVICE

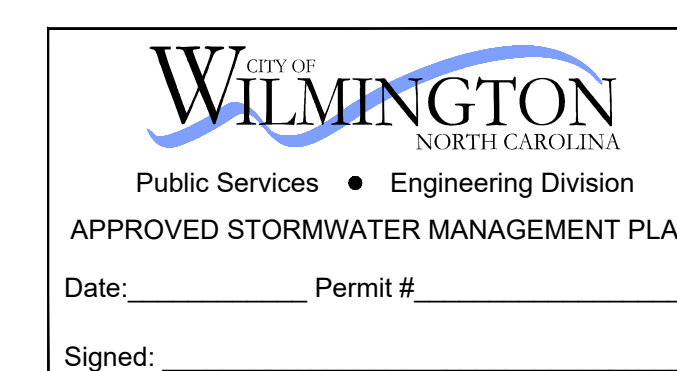


FORCEMAIN

CAPE FEAR PUBLIC UTILITY AUTHORITY STANDARD NOTES:

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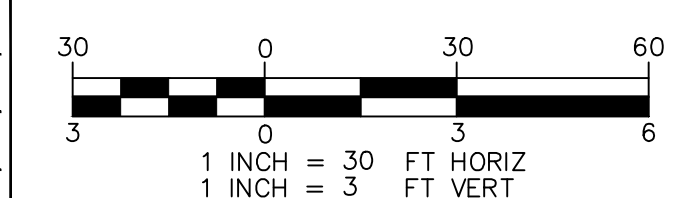
SD-9 STANDARD NOTES
 (REQUIRED ON ALL PLAN AND PROFILE SHEETS)

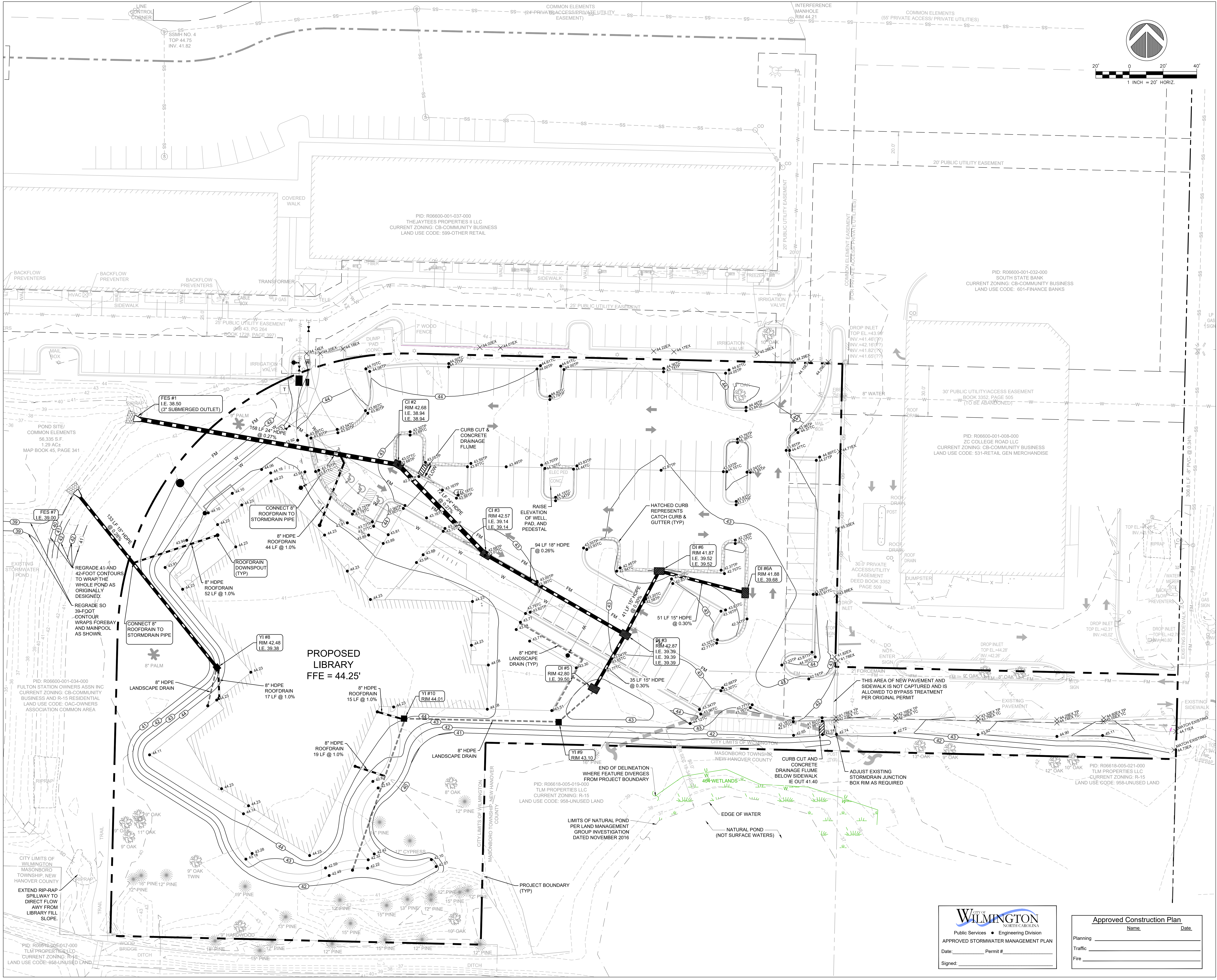


Approved Construction Plan

Name	Date
Planning	
Traffic	
Fire	

Signed: _____





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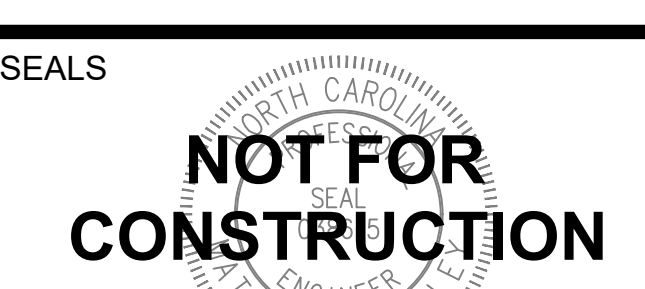
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 610 PEMBROKE ROAD
 SUITE 4465
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 T: 336 230 1990
 WWW.LIGHTDEFINESFORM.COM

REVISIONS
 ISSUED FOR TRC REVIEW 2018-06-13



PINE VALLEY BRANCH LIBRARY
 3802 SOUTH COLLEGE ROAD
 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

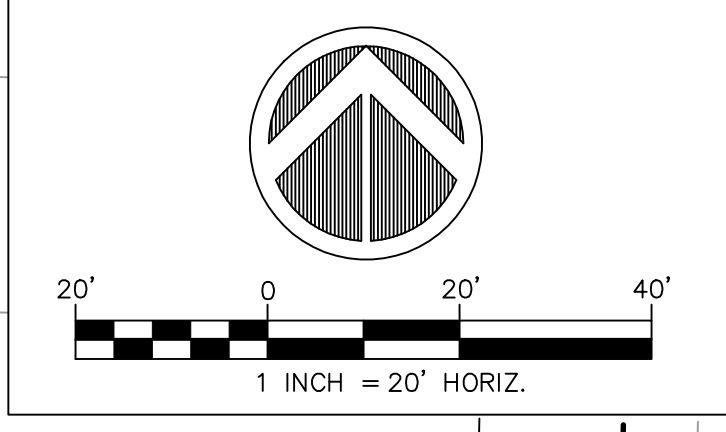
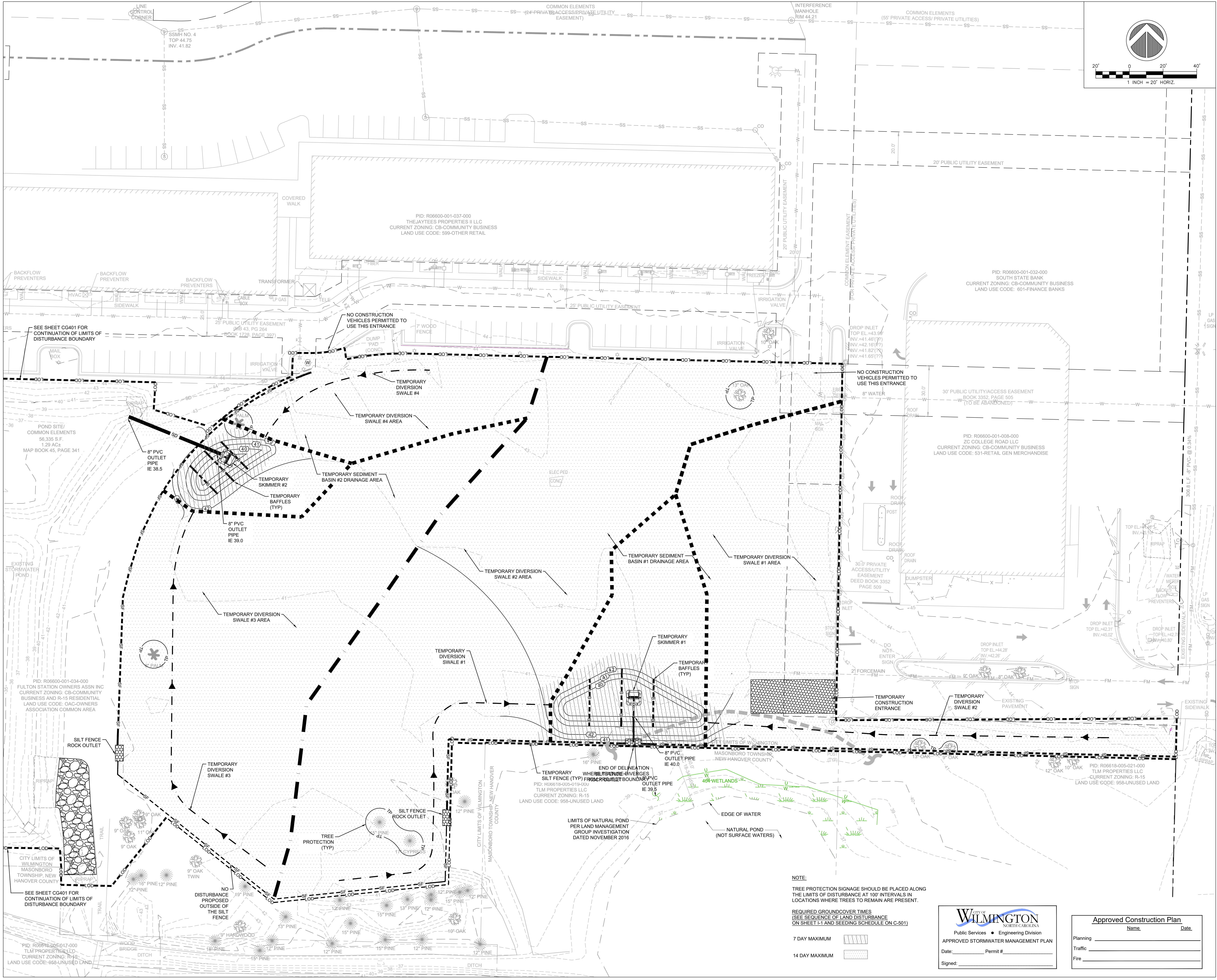
PHASE PRELIMINARY
DATE ISSUE FOR BID
 MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID #

DRAWING TITLE
Stormdrain and Grading Plan

DRAWING NUMBER
CG101

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

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



ARCHITECT OF RECORD
VINES ARCHITECTURE, INC.
 530 HILLSBOROUGH STREET
 RALEIGH, NC 27603
 T: 919 755 1975
 F: 988 800 5946
 www.vinesarc.com

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PHASE PRELIMINARY
DATE ISSUE FOR BID MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID #

DRAWING TITLE
Initial Erosion Control Plan

DRAWING NUMBER
CG102

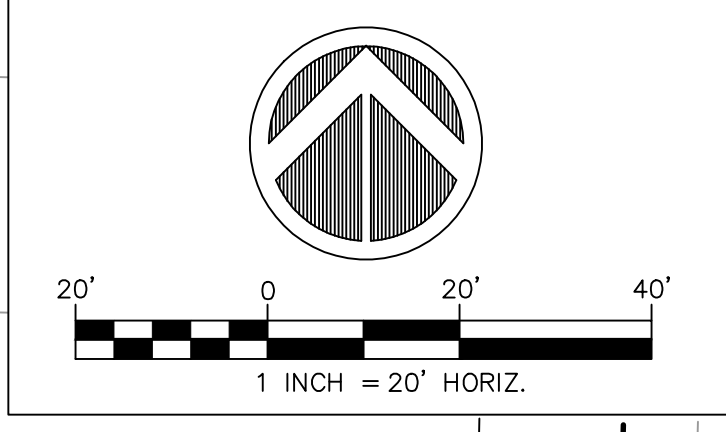
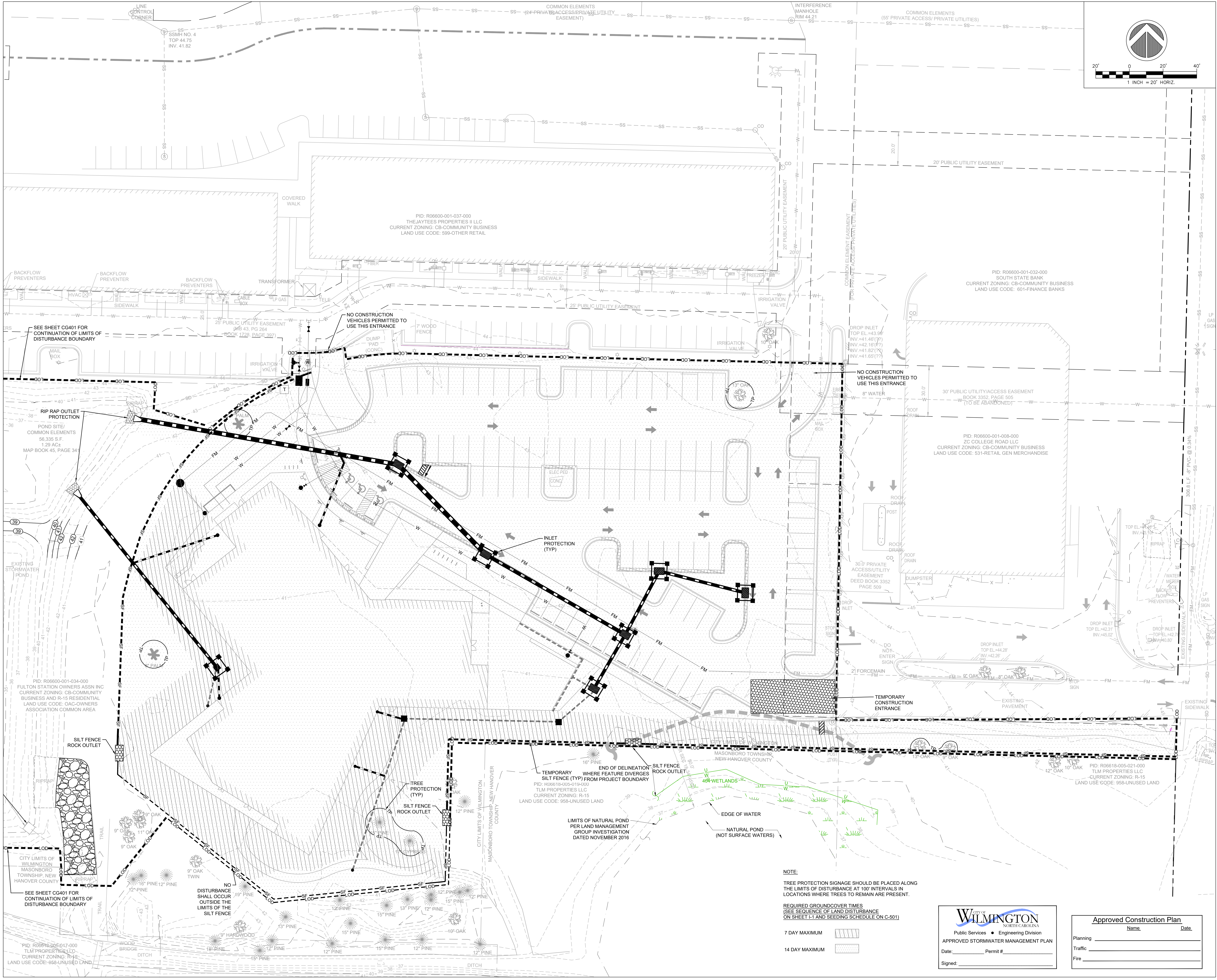
NOTE:
 TREE PROTECTION SIGNAGE SHOULD BE PLACED ALONG THE LIMITS OF DISTURBANCE AT 100' INTERVALS IN LOCATIONS WHERE TREES TO REMAIN ARE PRESENT.

REQUIRED GROUND COVER TIMES
 (SEE SEQUENCE OF LAND DISTURBANCE ON SHEET I-1 AND SEEDING SCHEDULE ON C-501)

- 7 DAY MAXIMUM
- 14 DAY MAXIMUM

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

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



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NEW HANOVER COUNTY

PHASE PRELIMINARY
DATE ISSUE FOR BID MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID #

DRAWING TITLE
Final Erosion Control Plan

DRAWING NUMBER
CG103

NOTE:
 TREE PROTECTION SIGNAGE SHOULD BE PLACED ALONG THE LIMITS OF DISTURBANCE AT 100' INTERVALS IN LOCATIONS WHERE TREES TO REMAIN ARE PRESENT.

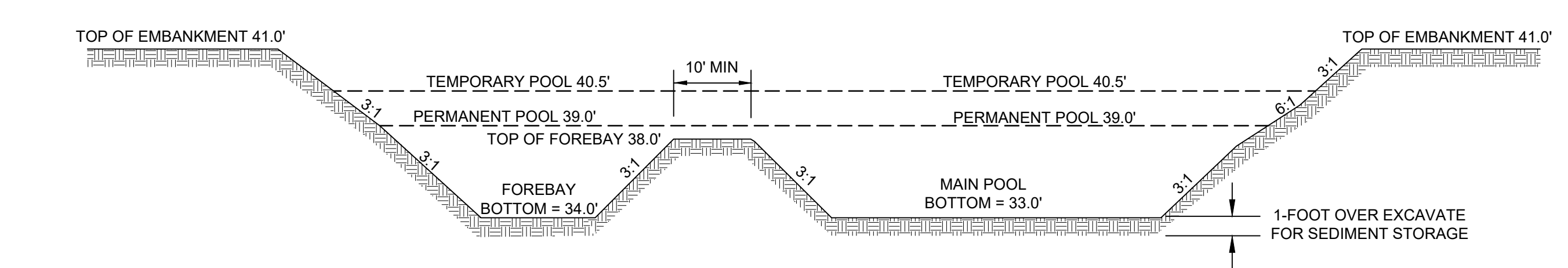
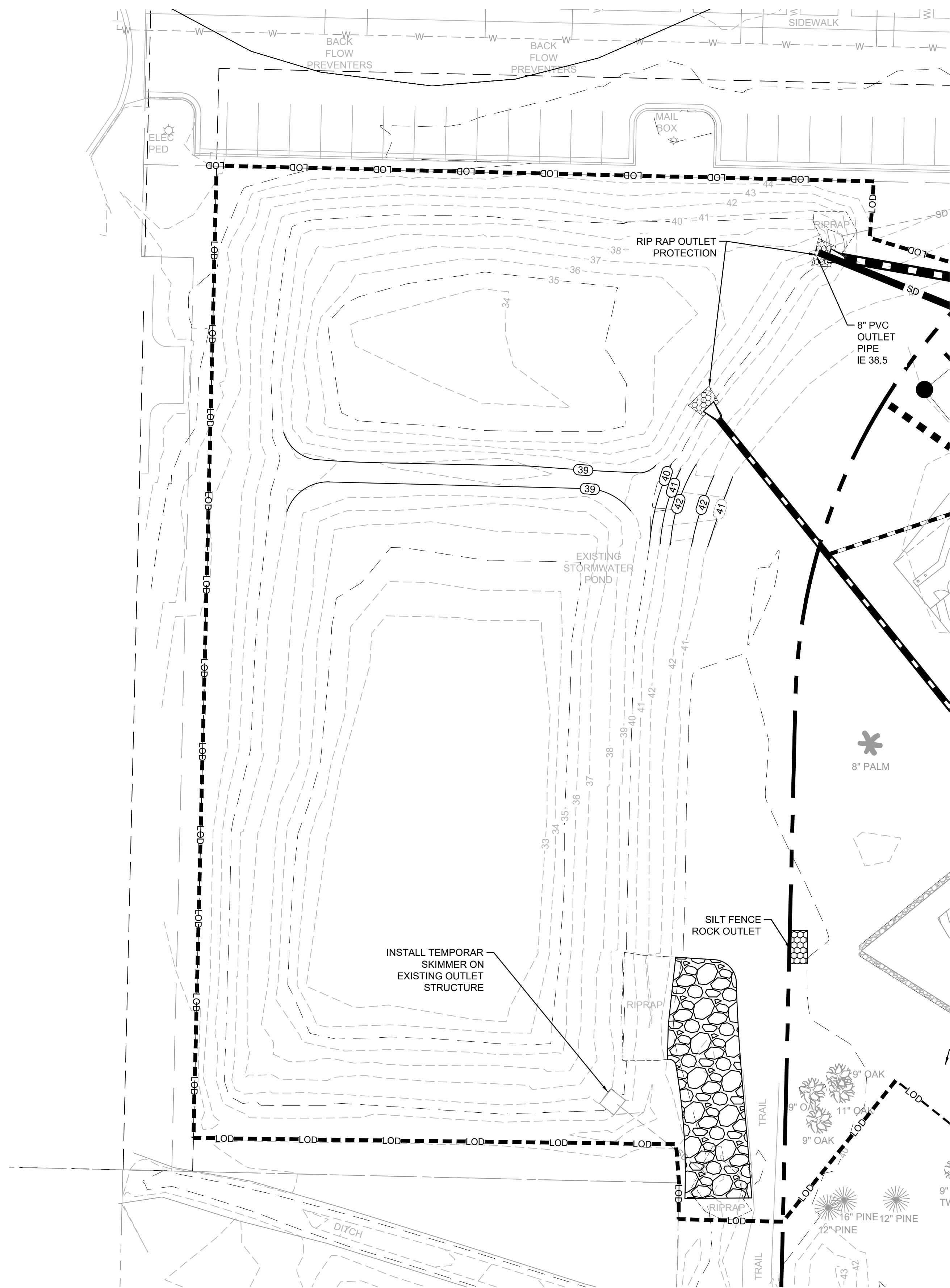
REQUIRED GROUND COVER TIMES
 (SEE SEQUENCE OF LAND DISTURBANCE ON SHEET L1 AND SEEDING SCHEDULE ON C-501)

- 7 DAY MAXIMUM [Symbol]
- 14 DAY MAXIMUM [Symbol]

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

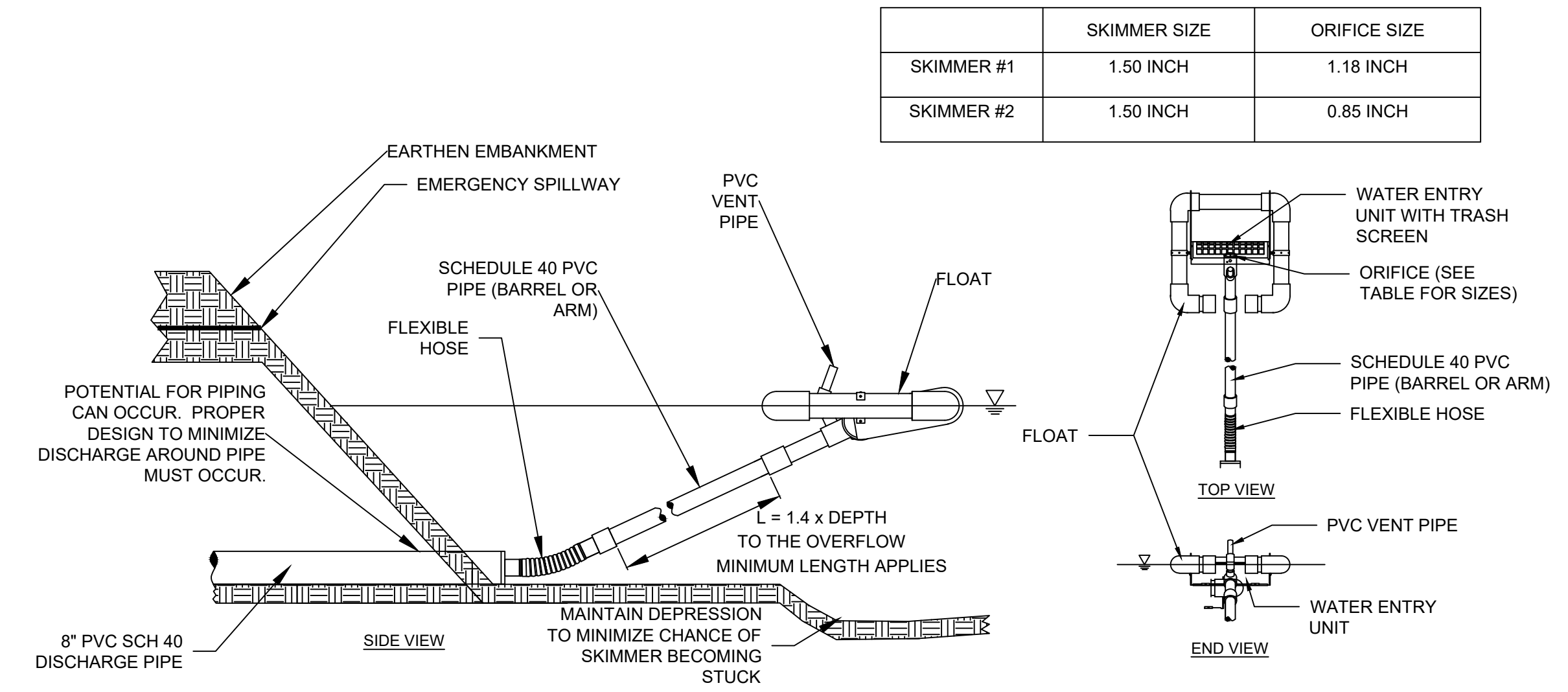
Approved Construction Plan
 Name _____ Date _____
 Planning _____
 Traffic _____
 Fire _____

NOTE: ALL ELEVATIONS ARE BASED ON A VERTICAL DATUM OF NAVD 88 TO MATCH THE MOST UPDATED SURVEY. HOWEVER, ALL THE PERMIT INFORMATION AND POND CALCULATIONS ARE BASED ON A VERTICAL DATUM OF NGVD 29, WHICH IS APPROXIMATELY A FOOT HIGHER THAN NAVD 88.

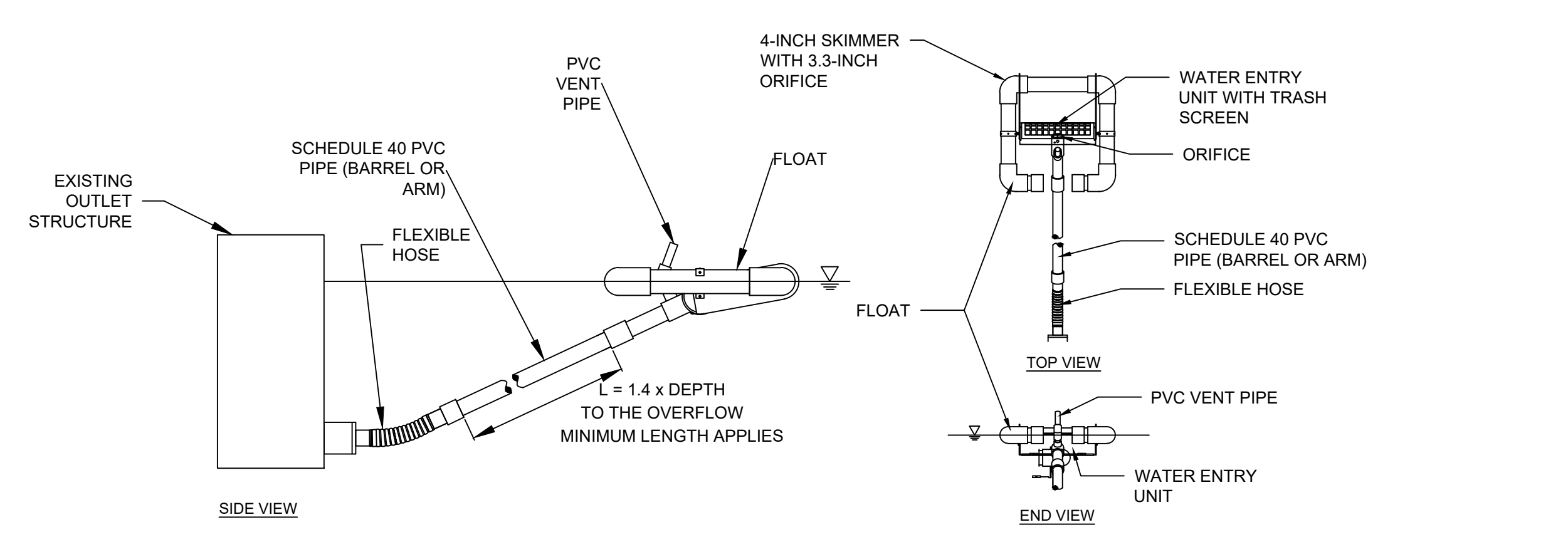


3 FOREBAY & WETPOND SECTION

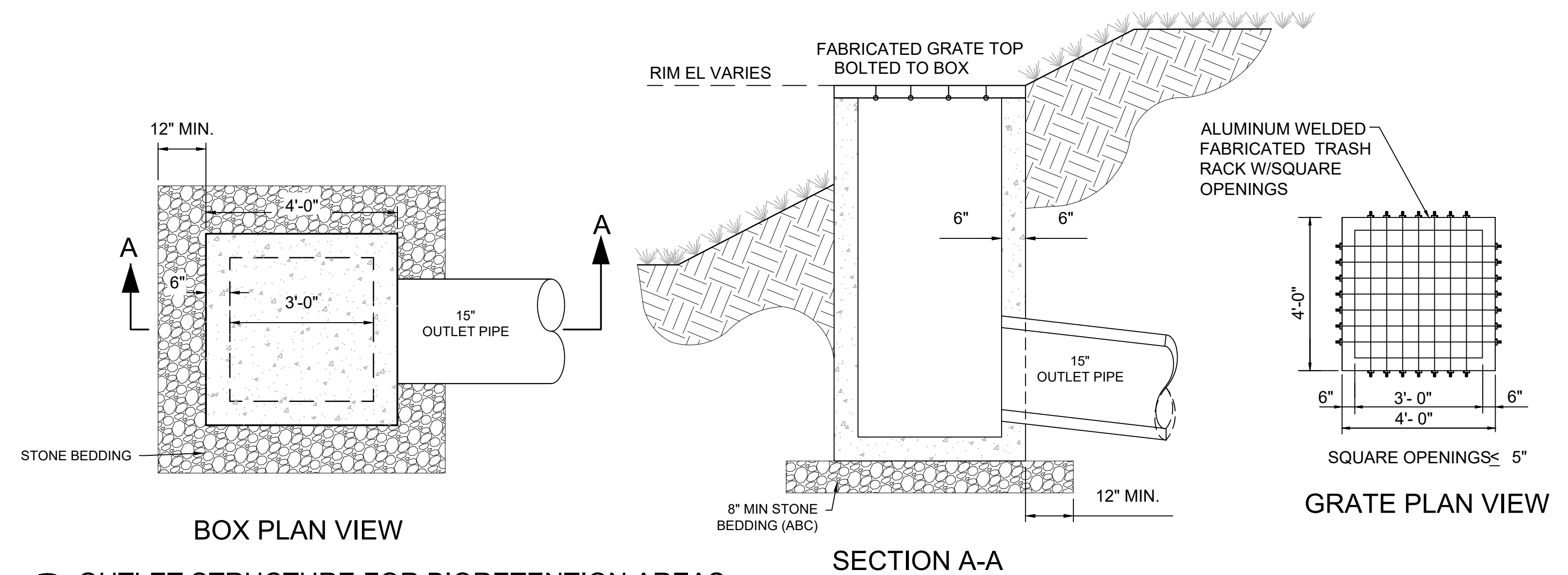
WETLANDS VEGETATION NOTE:
 THE VEGETATED SHELF SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE WETLAND SPECIES. A MINIMUM OF 50 PLANTS PER 200 SF OF SHELF AREA SHALL BE PROVIDED. PLANTS SHOULD GENERALLY BE PLANTED 24" TO 36" ON CENTER AND SHOULD YIELD FULL COVERAGE IN 1-2 YEARS.
 THE FOLLOWING SPECIES OF WETLANDS VEGETATION ARE SUITABLE FOR PLANTING ALONG THE 10:1 VEGETATED SHELF:
 PLANTS SUITED FOR SHELF THAT'S UNDERWATER
 - SAGITTARIA LANCEIFOLIA (BULL TONGUE)
 - SAGITTARIA LATIFOLIA (DUCK POTATO)
 - SAURURUS CERNUUS (LIZARDTAIL)
 PLANTS SUITED FOR SHELF THAT'S ABOVE WATER
 - ASCLEPIAS INCARNATA (SWAMP MILKWEED)
 - CAREX TENERA (QUILL SEDGE)
 - CHELONE GLABRA (WHITE TURTLEHEAD)
 IF ONE OR MORE OF THE SUGGESTED SPECIES IS UNAVAILABLE, APPROPRIATE WETLANDS VEGETATION COMMON TO THE COASTAL NORTH CAROLINA REGION MAY BE SUBSTITUTED. SEE CH 9 OF STATE STORMWATER BMP MANUAL FOR LIST OF OTHER RECOMMENDED WETLANDS PLANTS.



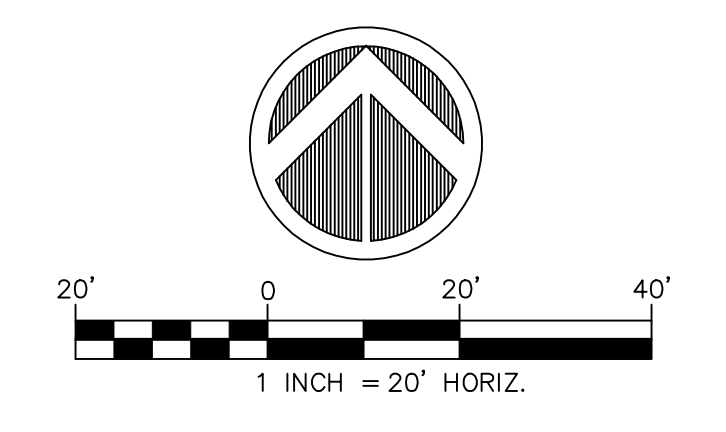
1 TEMPORARY SKIMMER FOR TEMPORARY SEDIMENT BASINS
 NOT TO SCALE



2 TEMPORARY SKIMMER FOR EXISTING OUTLET STRUCTURE
 NOT TO SCALE



1 OUTLET STRUCTURE FOR BIORETENTION AREAS
 NOT TO SCALE



ARCHITECT OF RECORD
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REVISIONS
 ISSUED FOR TRC REVIEW 2018-06-13



PINE VALLEY BRANCH LIBRARY
 3802 SOUTH COLLEGE ROAD
 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
DATE ISSUE FOR BID MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID # -

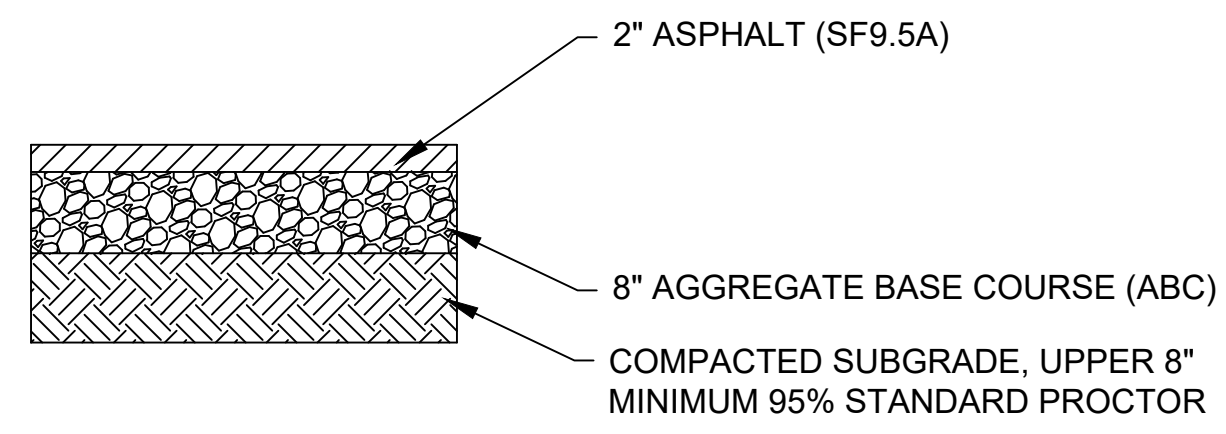
DRAWING TITLE
Pond Details

DRAWING NUMBER

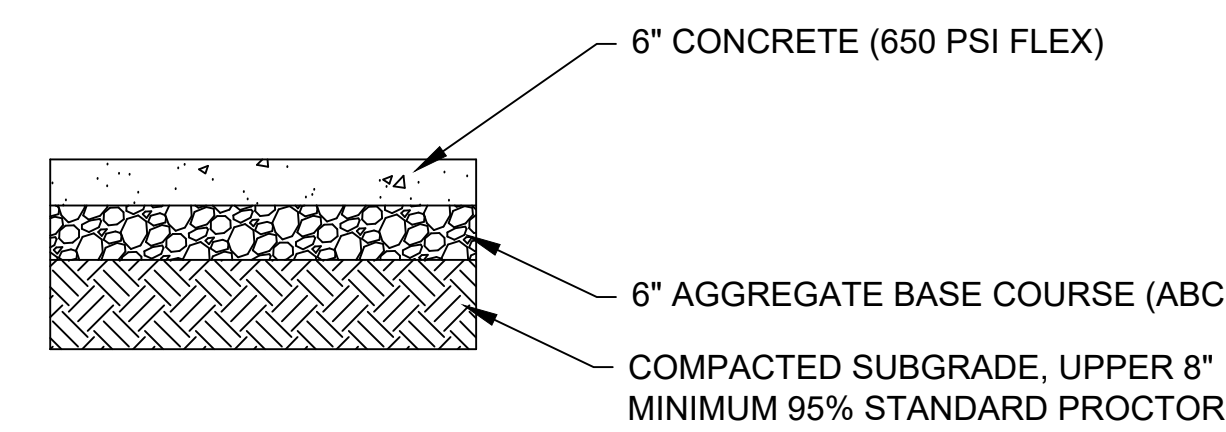
CG401

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

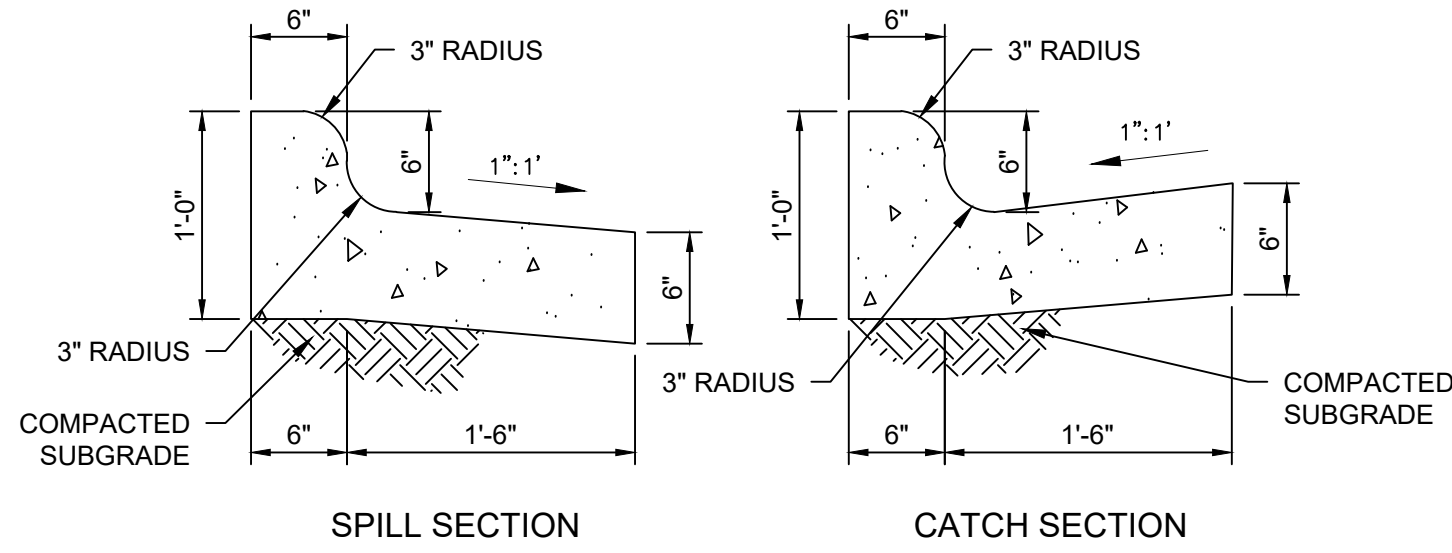
Approved Construction Plan
 Name: Date:
 Planning: _____
 Traffic: _____
 Fire: _____



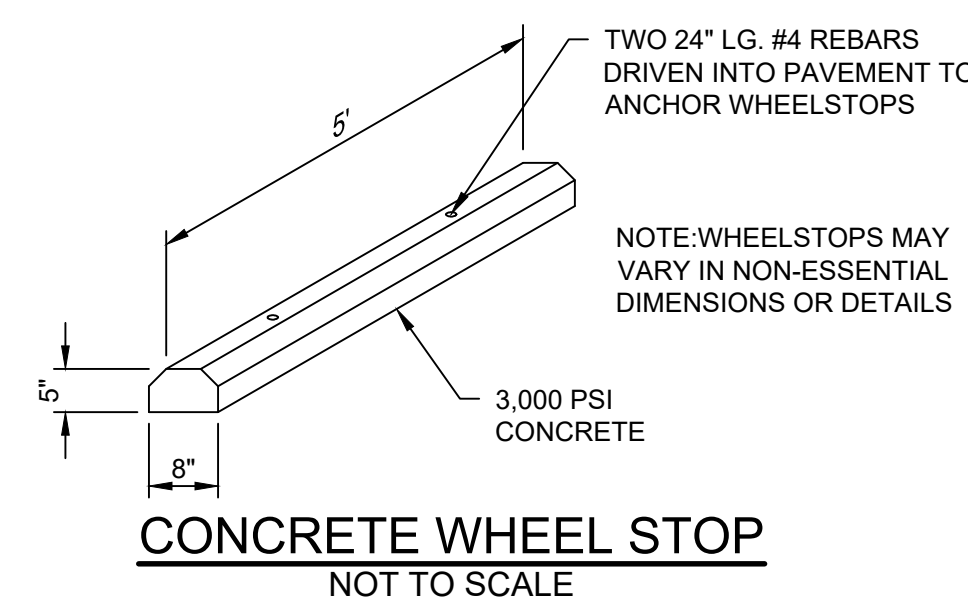
ASPHALT PAVEMENT
NOT TO SCALE



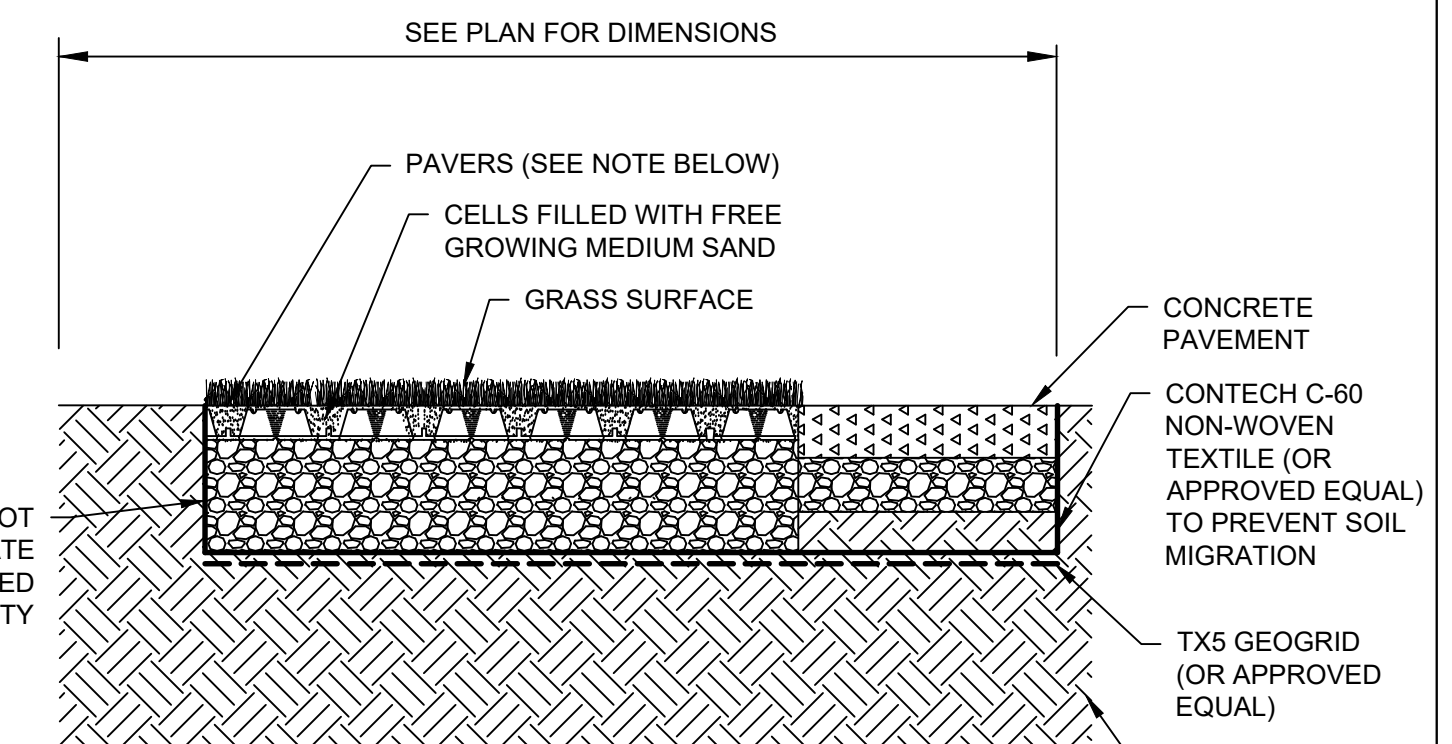
CONCRETE PAVEMENT
NOT TO SCALE



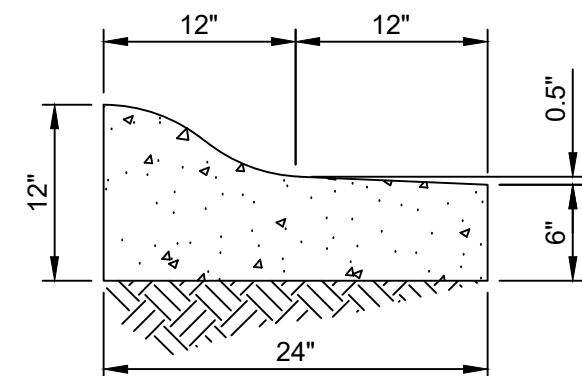
24-INCH STANDARD CURB & GUTTER
NOT TO SCALE



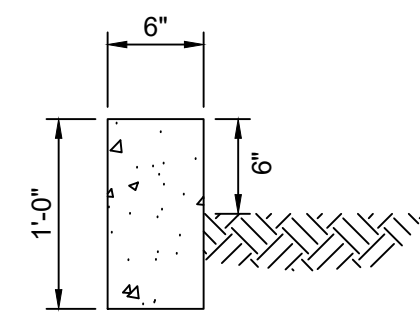
CONCRETE WHEEL STOP
NOT TO SCALE



GRASS PAVERS FIRE ACCESS LANE
NOT TO SCALE



MOUNTABLE CURB
NOT TO SCALE



STANDUP CURB
NOT TO SCALE

STANDARD DETAIL
SIWALK

DATE: OCTOBER, 2010
DRAWN BY: JRS
CHECKED BY: BCP, P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 3-10

STANDARD DETAIL
CURBING

DATE: AUGUST, 2011
DRAWN BY: JRS
CHECKED BY: BCP, P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 3-11

STANDARD DETAIL
PAVEMENT MARKINGS LINE TYPES

DATE: DECEMBER, 2011
DRAWN BY: JRS
CHECKED BY: BCP, P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 11-01

STANDARD DETAIL
STREET SIGNS AND LOCATION

DATE: NOVEMBER, 2011
DRAWN BY: JRS
CHECKED BY: BCP, P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SHEET 1 of 2
SD 15-03

SIGNS

- All signs shall meet the requirements of MUTCD and City Traffic Engineering in effect at the time of construction.
- All Traffic Control Signs including multi-use paths shall be fabricated with 0.080 inch aluminum blanks using high intensity prismatic reflective sheeting Type IV or better. STOP signs shall be a minimum of 30"x30".
- SPECIAL DESIGNATION signs by location and type shall adhere to City of Wilmington signage plan (i.e. downtown, historic, cross-city trail, parks, riverfront, scenic by-way, parking, etc.) and all associated policies.
- POST MOUNTED STREET NAME SIGNS shall be fabricated with 9" extruded aluminum street name sign blanks using a standard cut-out. Minimum sign length is 18" long and increasing in 6" increments to 54" maximum as dictated by the number of letters in the name. The color scheme shall be white letters on a green background without a border. Generally, in the downtown and historic areas or as designated in the City of Wilmington signage plan the background shall be blue and contain a topper.
- Decorative sign posts shall consist of the NEX sign support system, 2" octagonal tube, 14 gauge, powder coated glossy black and include cap, post, base and wedge.
- All other sign posts shall be u-channel posts made of galvanized steel with 8" posts 2lbs/ft or 12" posts 3lbs/ft. Galvanized NEX post may be substituted with approval from the City Signs and Markings Engineer.
- OVERHEAD STREET NAME SIGNS shall be fabricated with 0.080 inch aluminum flat sign blanks 18" in height using a standard cut-out. Sign length will be dictated by the number of letters in the name. For most-arm type traffic sign supports and other overhead support systems refer to the design plans for maximum sign length.
- All sign lettering, colors and fonts shall adhere to the MUTCD in effect at the time of construction. Fluorescent Yellow-Green shall be used on signs in place of Yellow, when listed as an optional color in the MUTCD. Generally, the font will be FHWA series fonts (Highway Gothic). Other font types require prior City Signs and Markings Engineer approval.

LOCATION

- Sign locations depend on the edge of road condition. Generally, signs shall be a minimum 2' from face of a vertical curb, 4' from front of slope face curb, and 8' from edge of pavement without curb. Signs shall not be located more than 12' from any of these locations.
- Sign posts installed in dirt shall be buried a minimum of 36". Concrete posts shall utilize an anti-spr device, 6" in length minimum. Sign posts installed on concrete or brick shall utilize a base cast in concrete 24" x 12" diameter.
- Street name signs shall be installed 8'-6" from the ground to the bottom of the sign. Street name signs co-located with STOP signs shall be installed above the STOP sign. A 6" space shall be maintained between the STOP sign and a Street name sign that is parallel to the STOP sign face. All other signs should be mounted per MUTCD guidelines for Urban Areas.

STANDARD DETAIL
STREET SIGNS AND LOCATION

DATE: NOVEMBER, 2011
DRAWN BY: JRS
CHECKED BY: BCP, P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SHEET 2 of 2
SD 15-03

STANDARD DETAIL
PARKING FACILITY DESIGN NOTES

DATE: 2001
DRAWN BY: JRS/CHR
CHECKED BY: B.P., P.E.
SCALE: NOT TO SCALE

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NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SHEET 1 OF 2
SD 15-12

- Variances on stall widths, angle and other dimensions will be allowed only upon approval of the Traffic Engineer.
- Wheel stops shall be required three (3) feet from the end of parking stall when using eighteen (18) feet deep stalls.
- Curbing, crossties, utility poles, etc., can be used as wheel stops. (Must be anchored down)
- All medians shall be a minimum of six (6) feet wide.
- Parking bays which terminate at a circulation way shall provide for a minimum turning radius of twenty-five (25) feet, as measured from the edge of the travel portion.
- All parking stall markings and lane arrows shall be white.
- All other pavement markings, signs or other traffic control devices shall conform to the latest edition and/or interpretation of the Manual on Uniform Traffic Control Devices (MUTCD).
- No obstructions will be allowed adjacent to a parking stall which would prevent safe ingress and egress from a parked vehicle.
- Parking in fire lanes and in non-residential driveways shall be prevented by standard signs and as needed by portable barricades.

STANDARD DETAIL
PARKING FACILITY DESIGN NOTES

DATE: 2001
DRAWN BY: JRS/CHR
CHECKED BY: B.P., P.E.
SCALE: NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA
CITY OF WILMINGTON ENGINEERING
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 15-13

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

SECTION 4.1.2 (5) OF THE AMERICANS WITH DISABILITIES ACT (ADA), SEE 4.1.2 (5) (6) FOR MEDICAL CARE FACILITIES

NOTES:

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

ACCESSIBLE PARKING/SIGNING REQUIREMENTS
NOT TO SCALE

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

Signed: _____

Approved Construction Plan

Name: _____ Date: _____

Planning _____

Traffic _____

Fire _____



ARCHITECT OF RECORD
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RALEIGH, NC 27603
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REVISIONS
ISSUED FOR TRC REVIEW 2018-06-13



PINE VALLEY BRANCH LIBRARY
3802 SOUTH COLLEGE ROAD
WILMINGTON, NC 28412

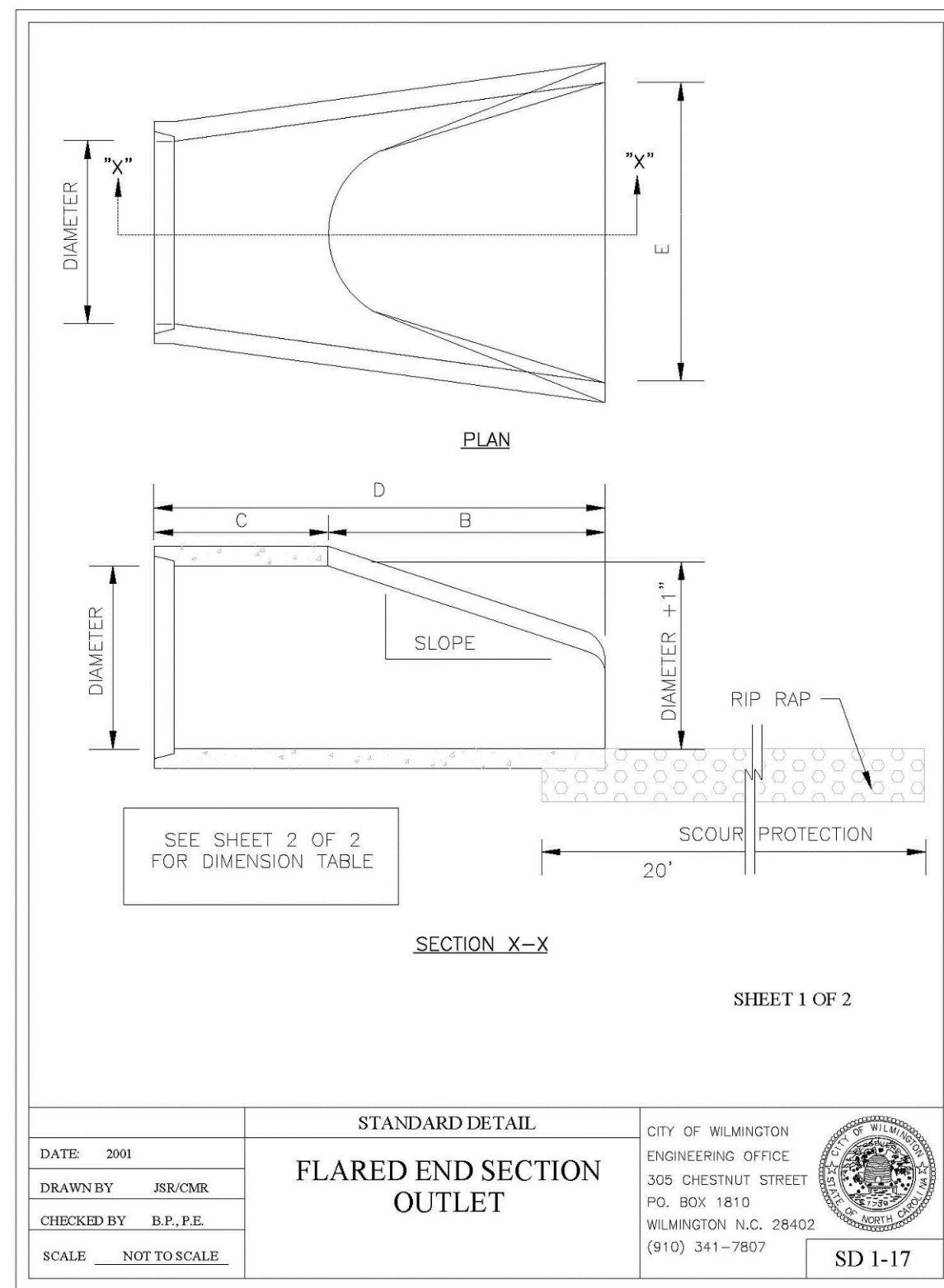
OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
DATE MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID # _____

DRAWING TITLE
Site Details

DRAWING NUMBER

C-500



NOTE:
1. STRUCTURAL DESIGN OF END SECTION SHALL CONFORM WITH THAT OF STANDARD REINFORCED CONCRETE.

PIPE DIAMETER	WALL THICKNESS	SLOPE	B	C	D	E	UNIT WEIGHT
12	2 1/4	3:1	24	49	73	24	730
15	2 1/4	3:1	27	46	73	30	910
18	2 1/2	3:1	27	46	73	36	1190
21	2 3/4	3:1	36	37	73	42	1370
24	3	3:1	42	31	1/2	73	1770
27	3 1/4	3:1	48	25	1/2	73	2130
30	3 1/2	3:1	54	19	3/4	73	2380
33	3 3/4	3:1	60	36	96	66	3870
36	4	3:1	63	34	3/4	87	5320
42	4 1/2	3:1	63	35	98	78	5920
48	5	3:1	72	26	98	84	7470
54	5 1/2	2.4:1	66	34	100	90	8810
60	6	2:1	60	39	99	96	11180
72	7	2:1	78	21	99	108	13980

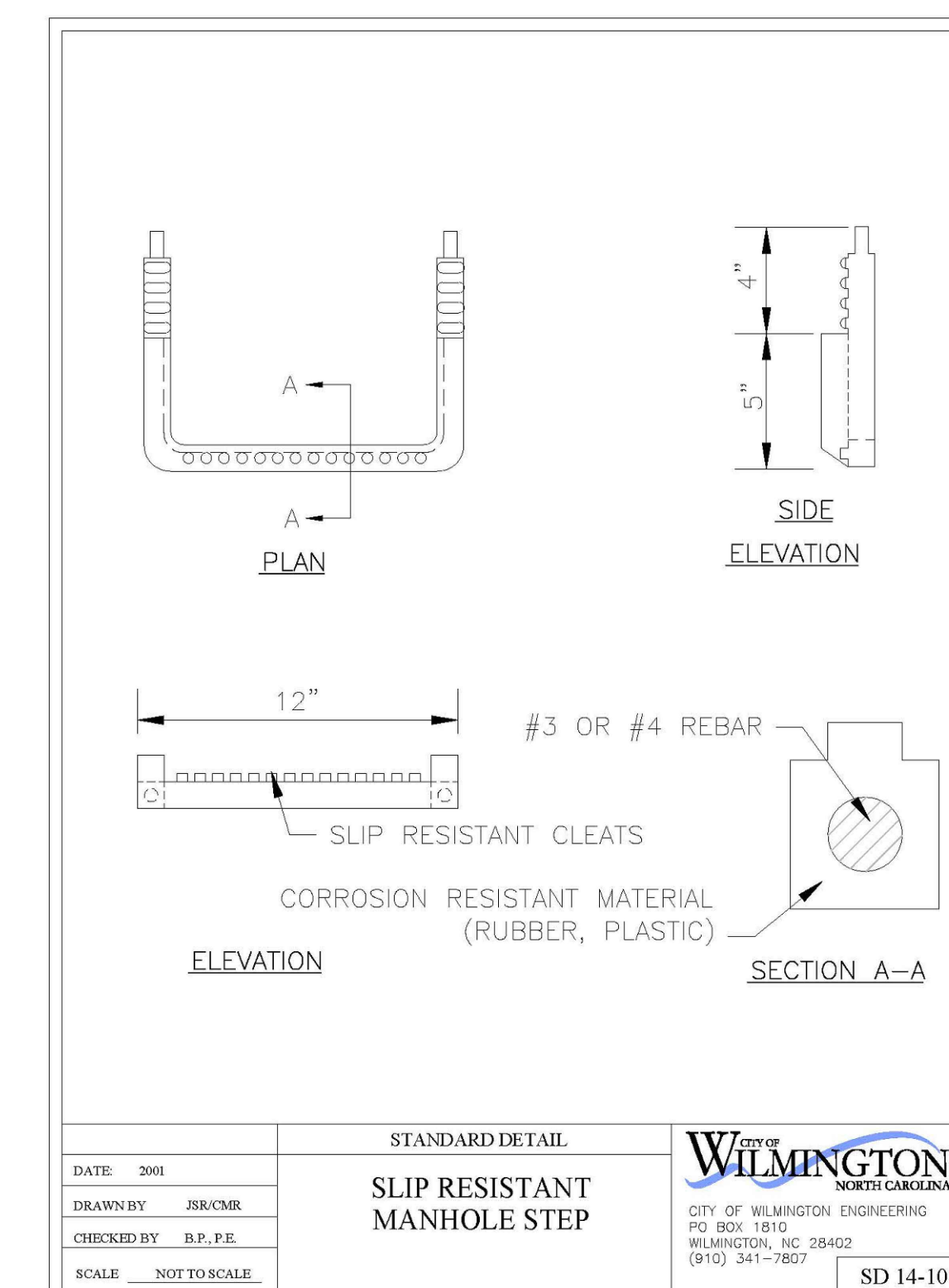
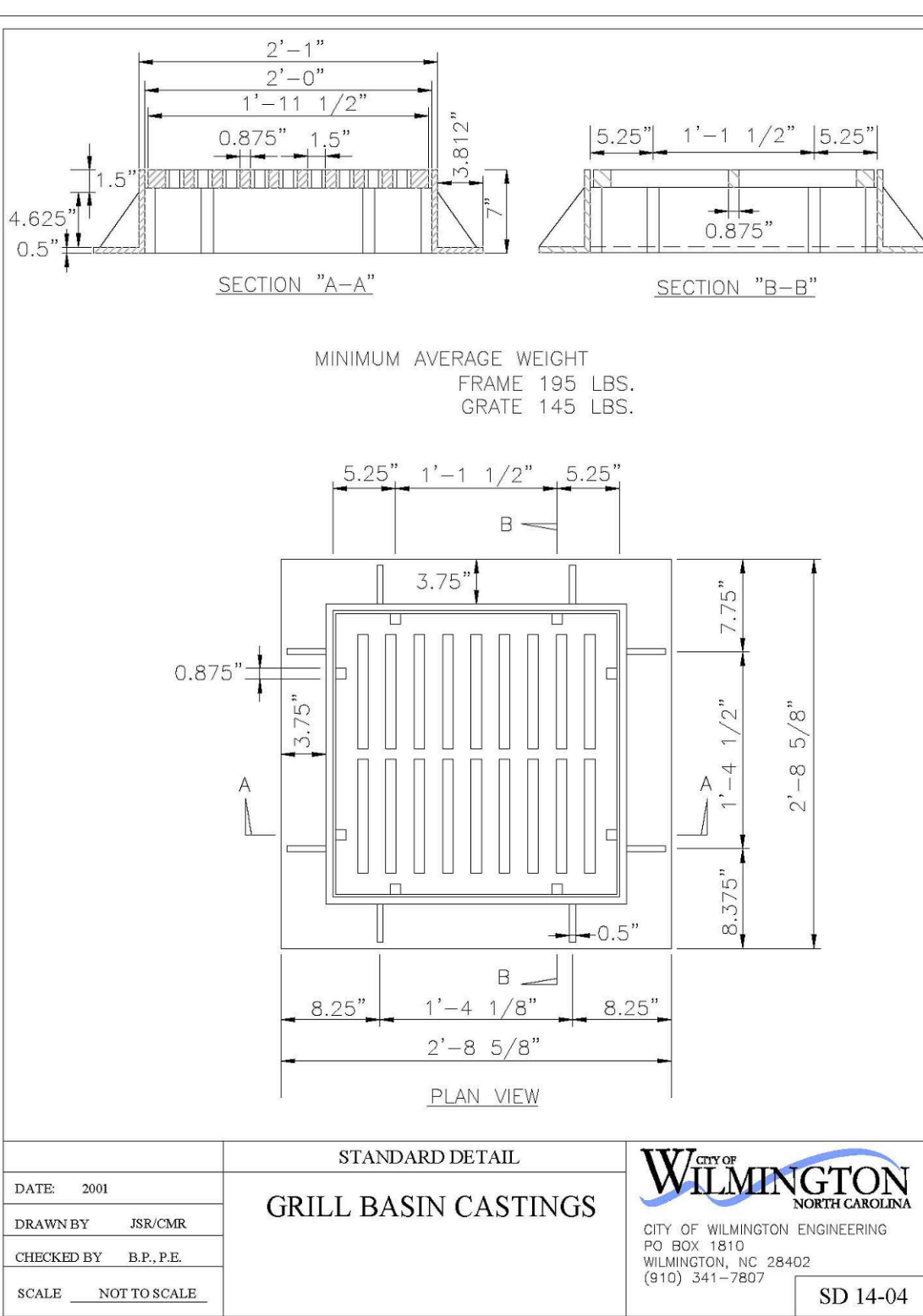
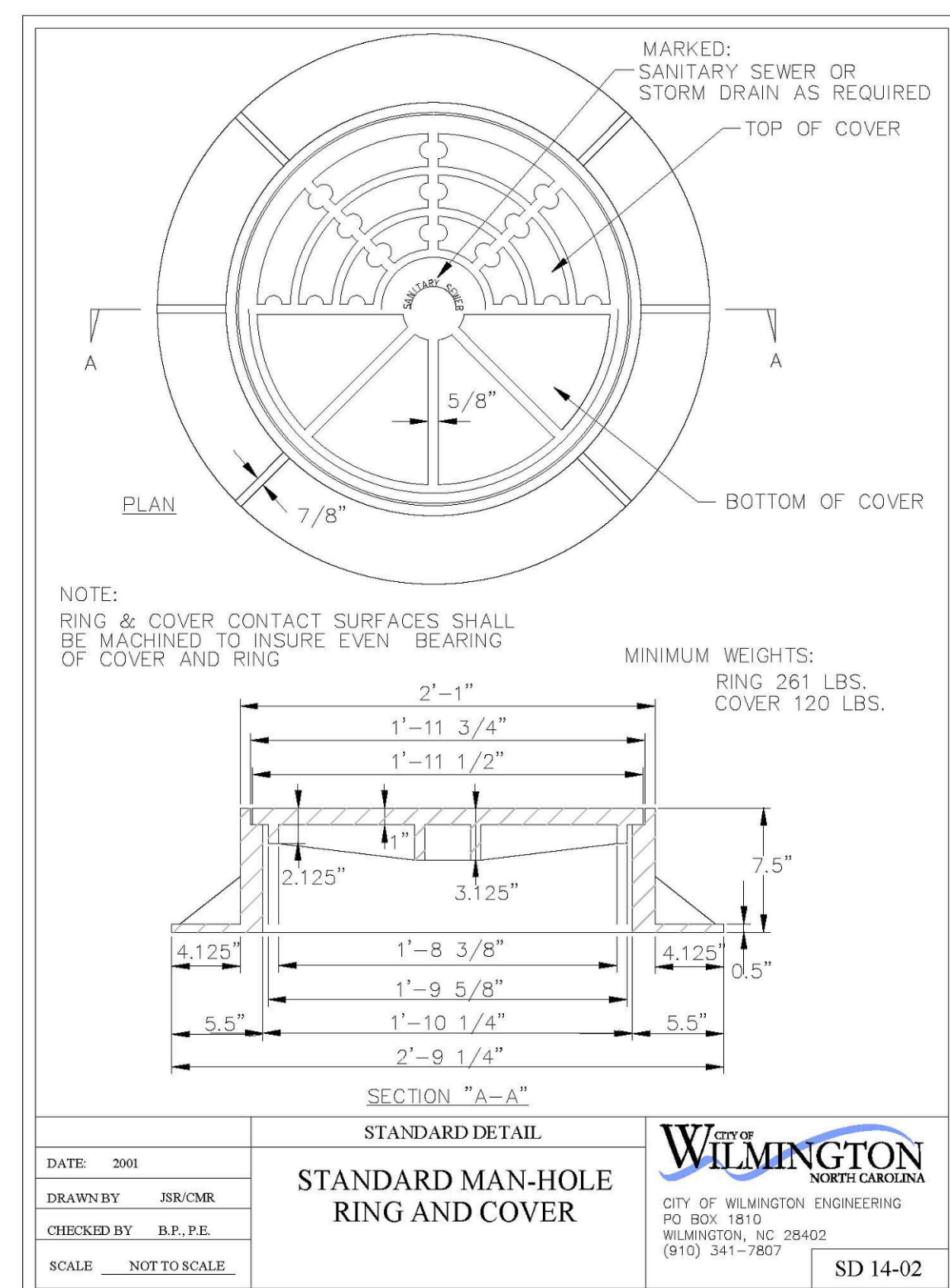
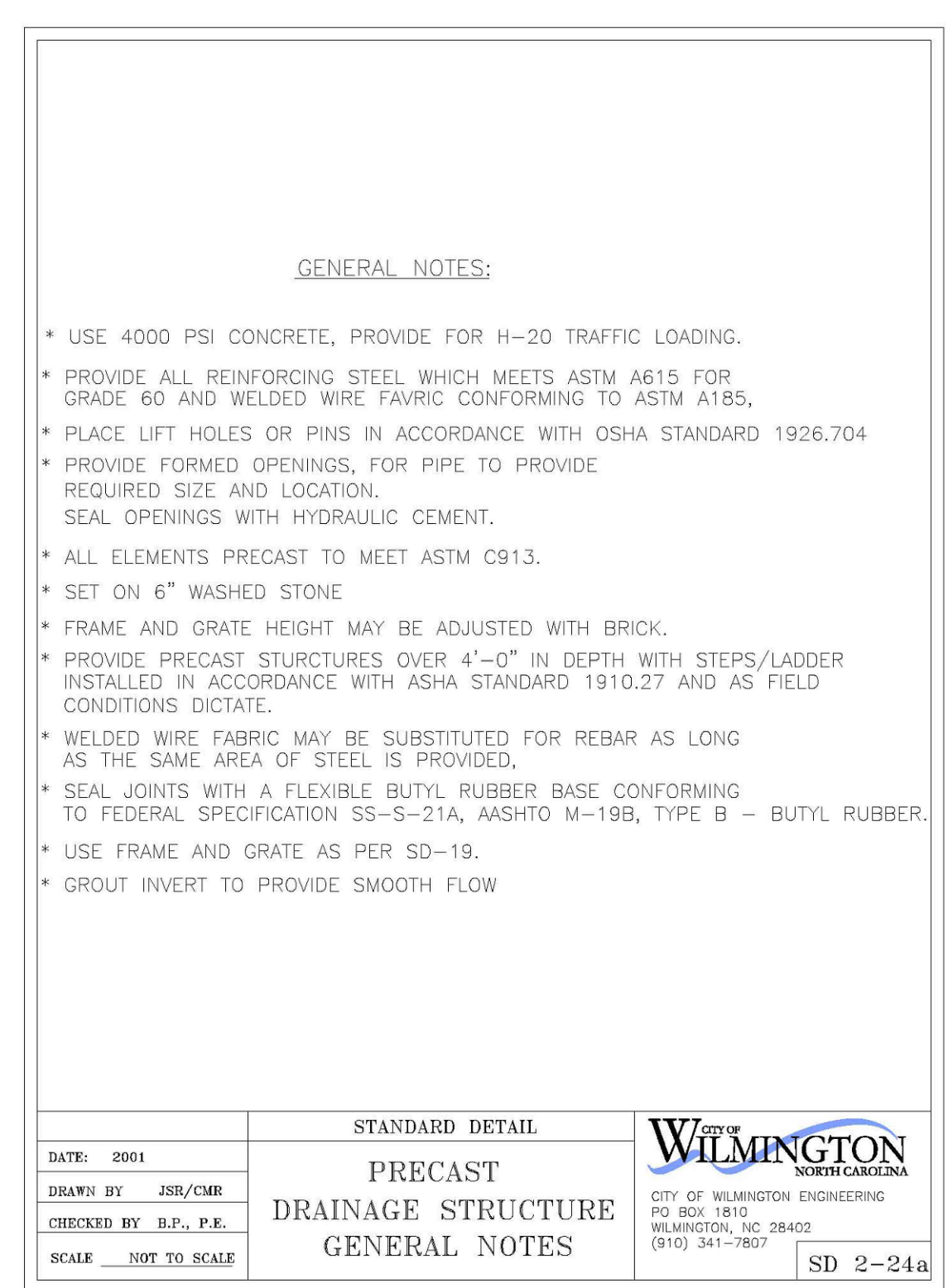
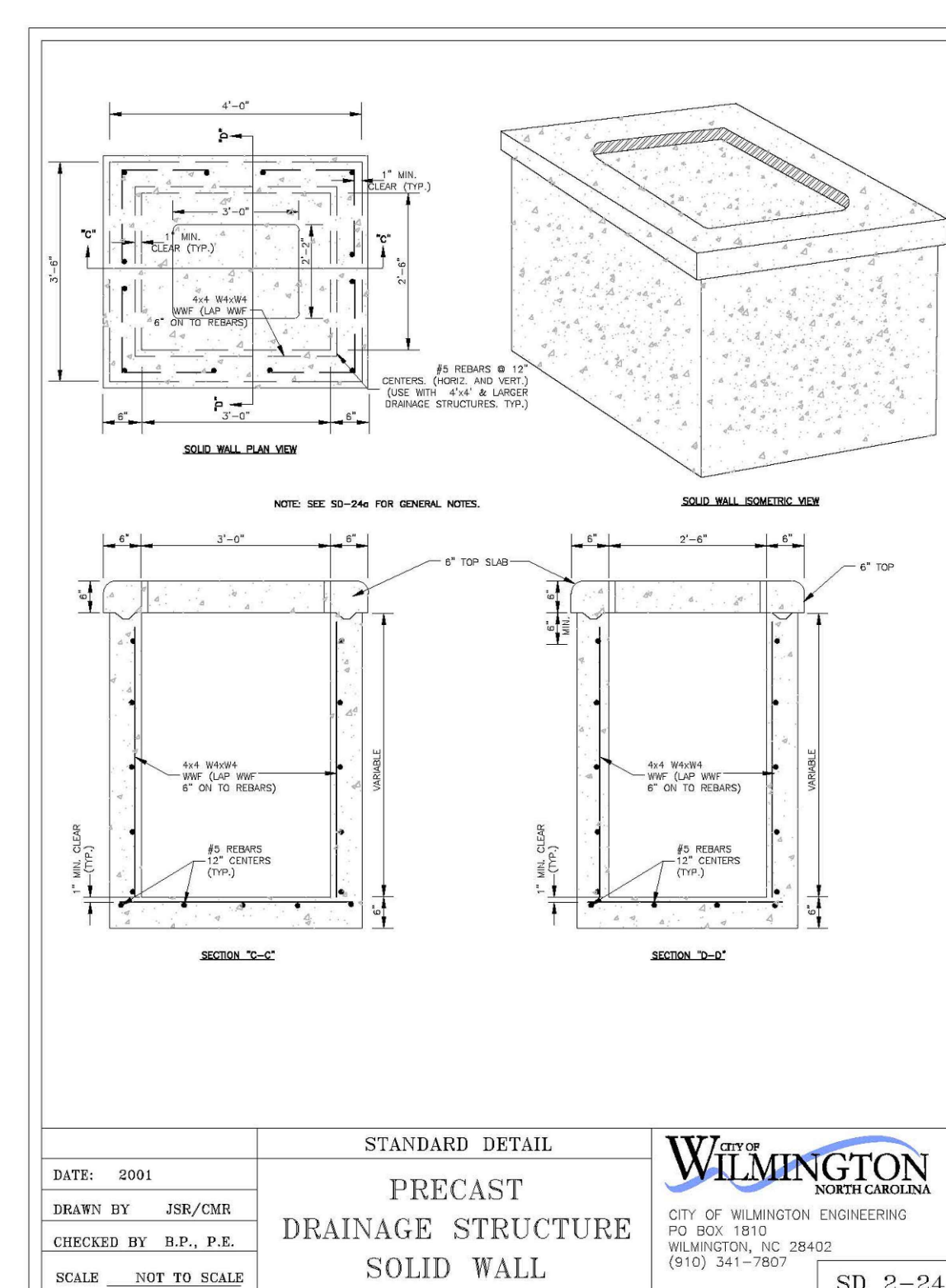
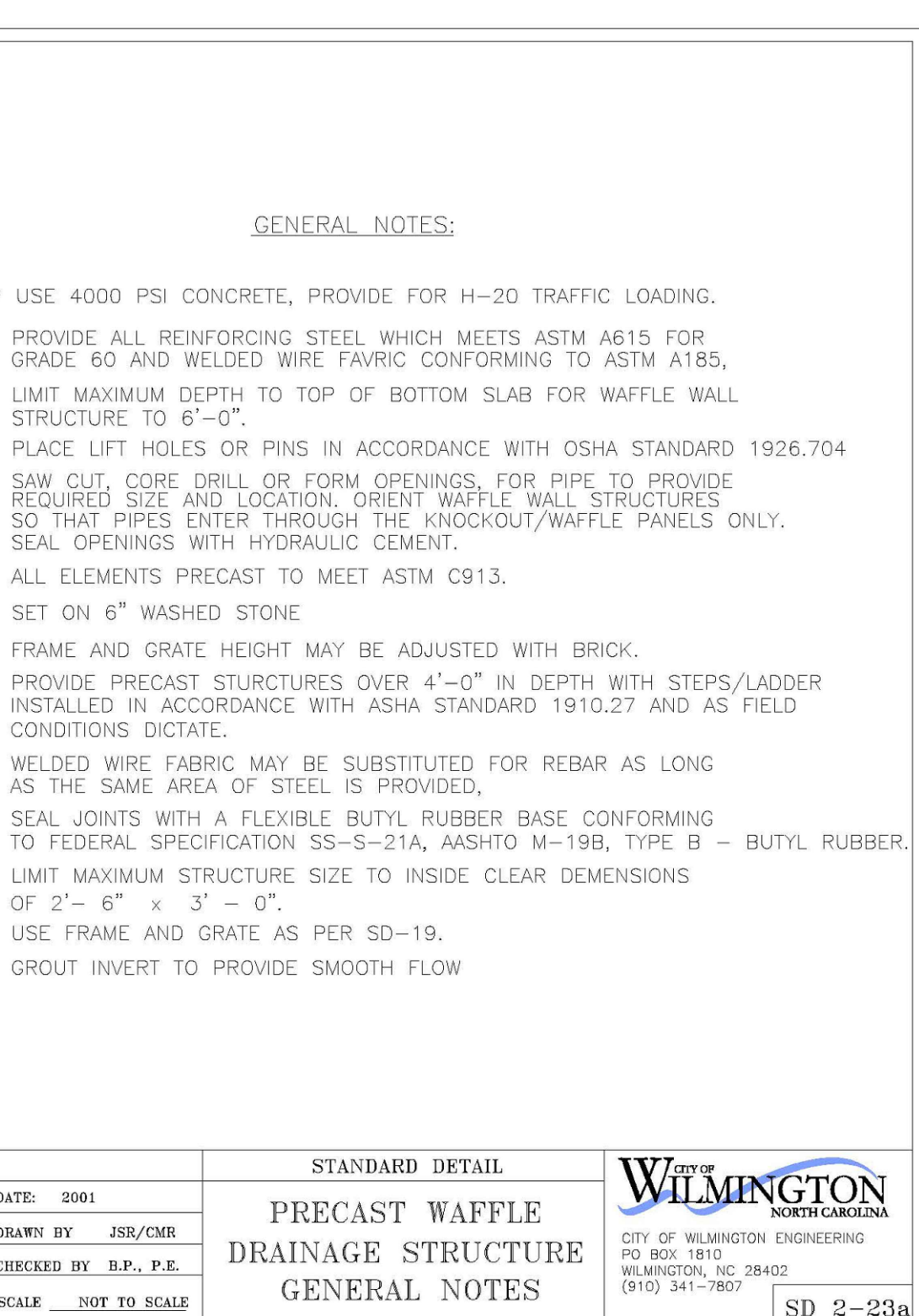
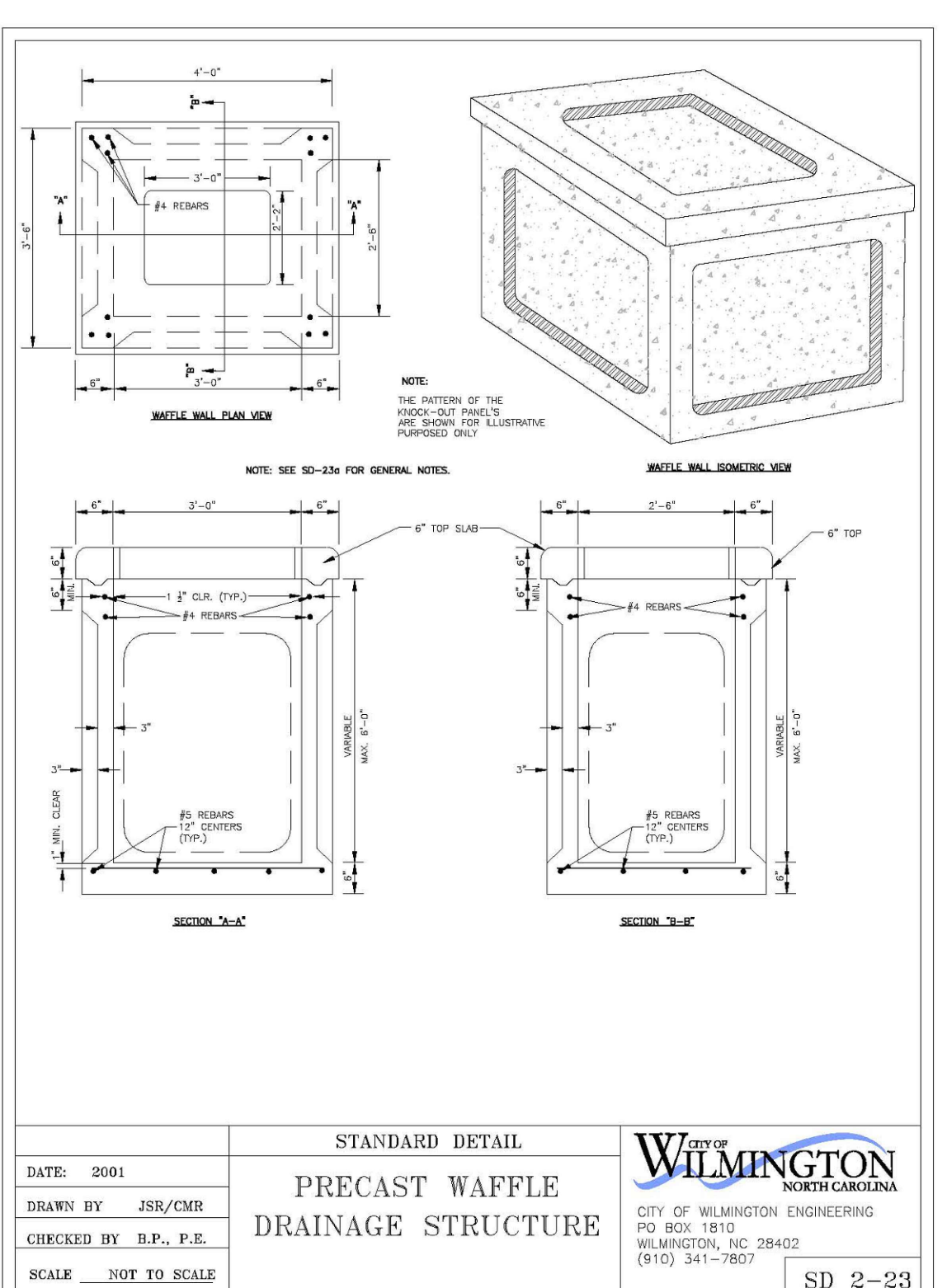
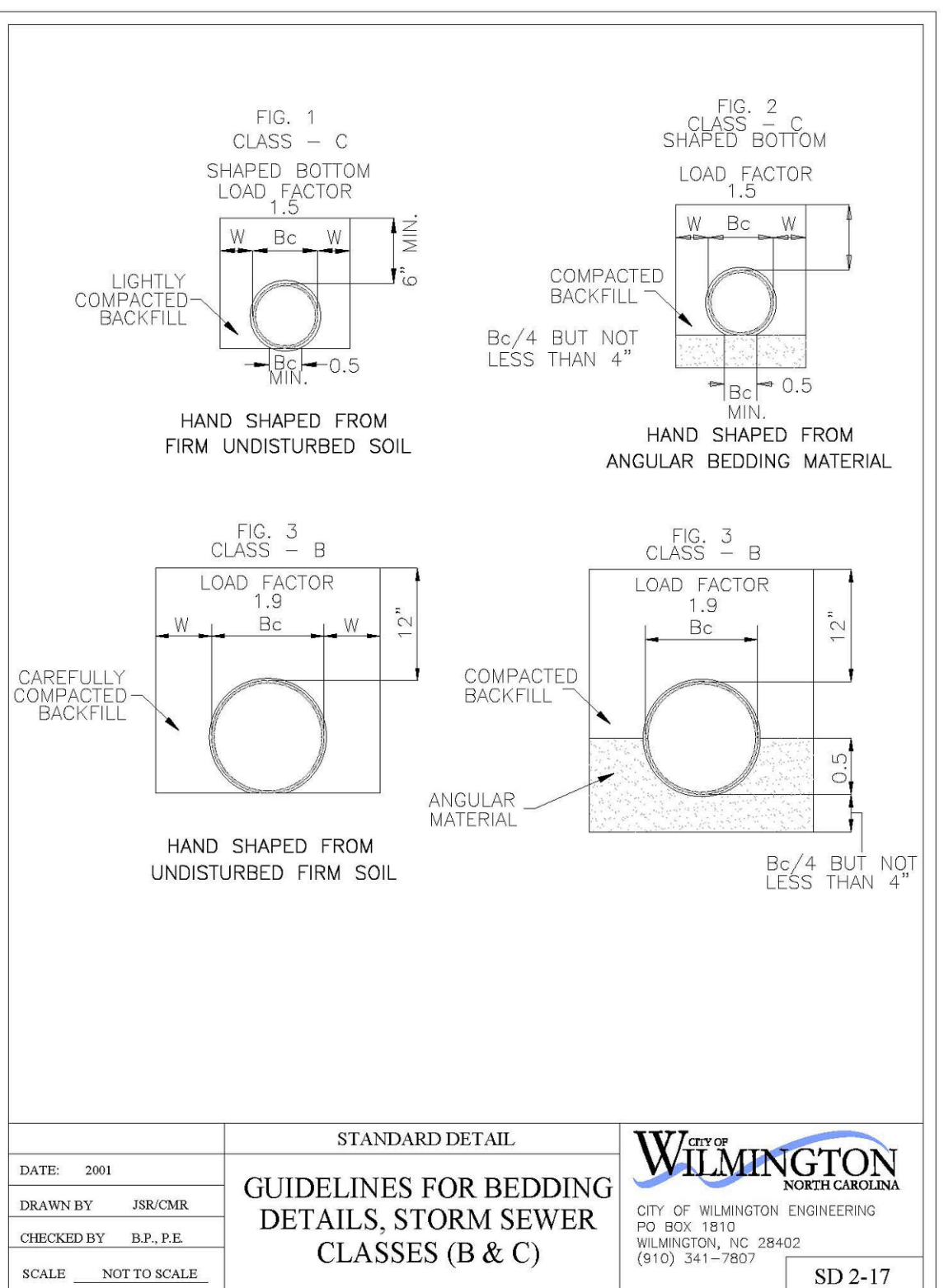
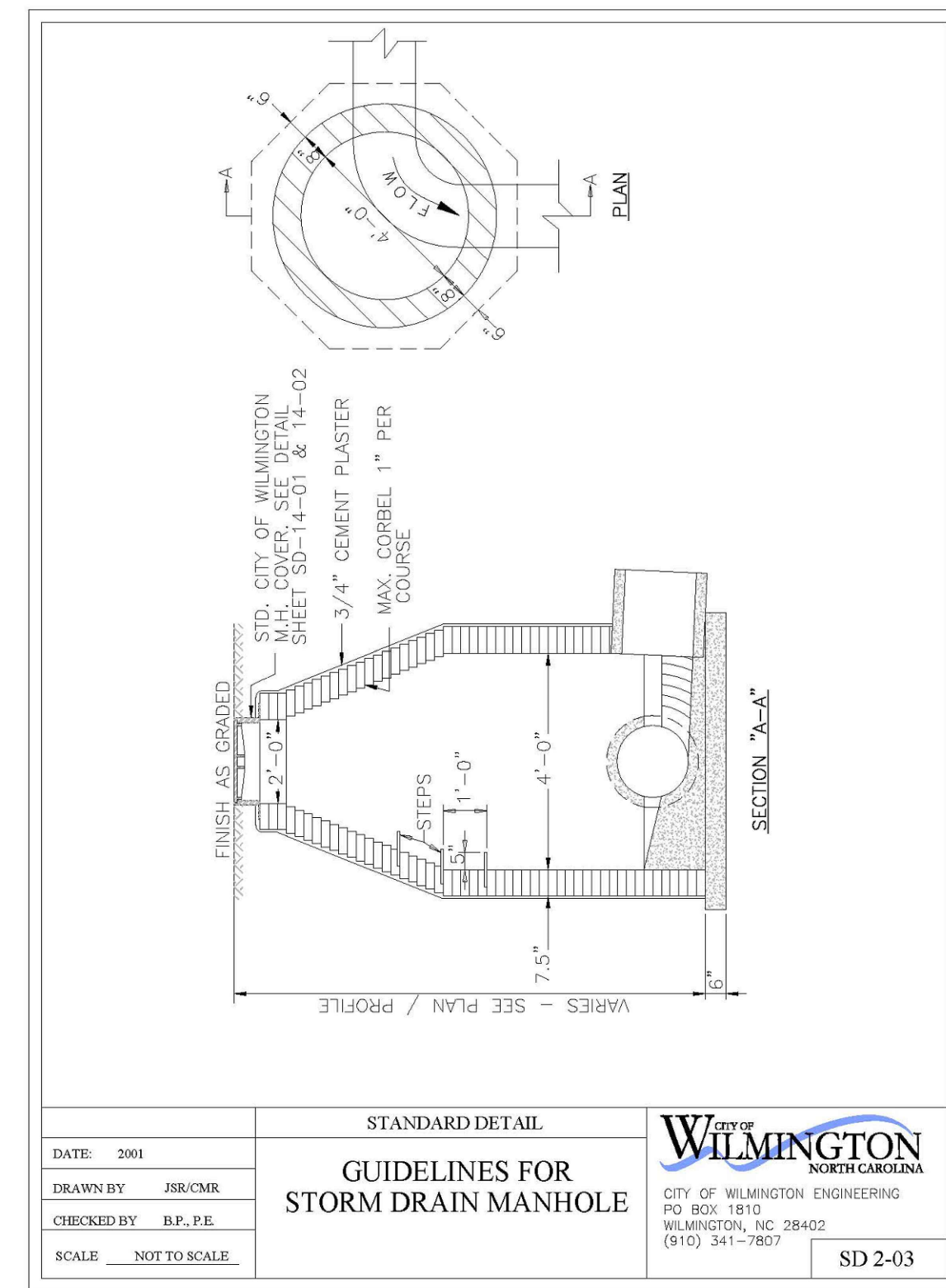
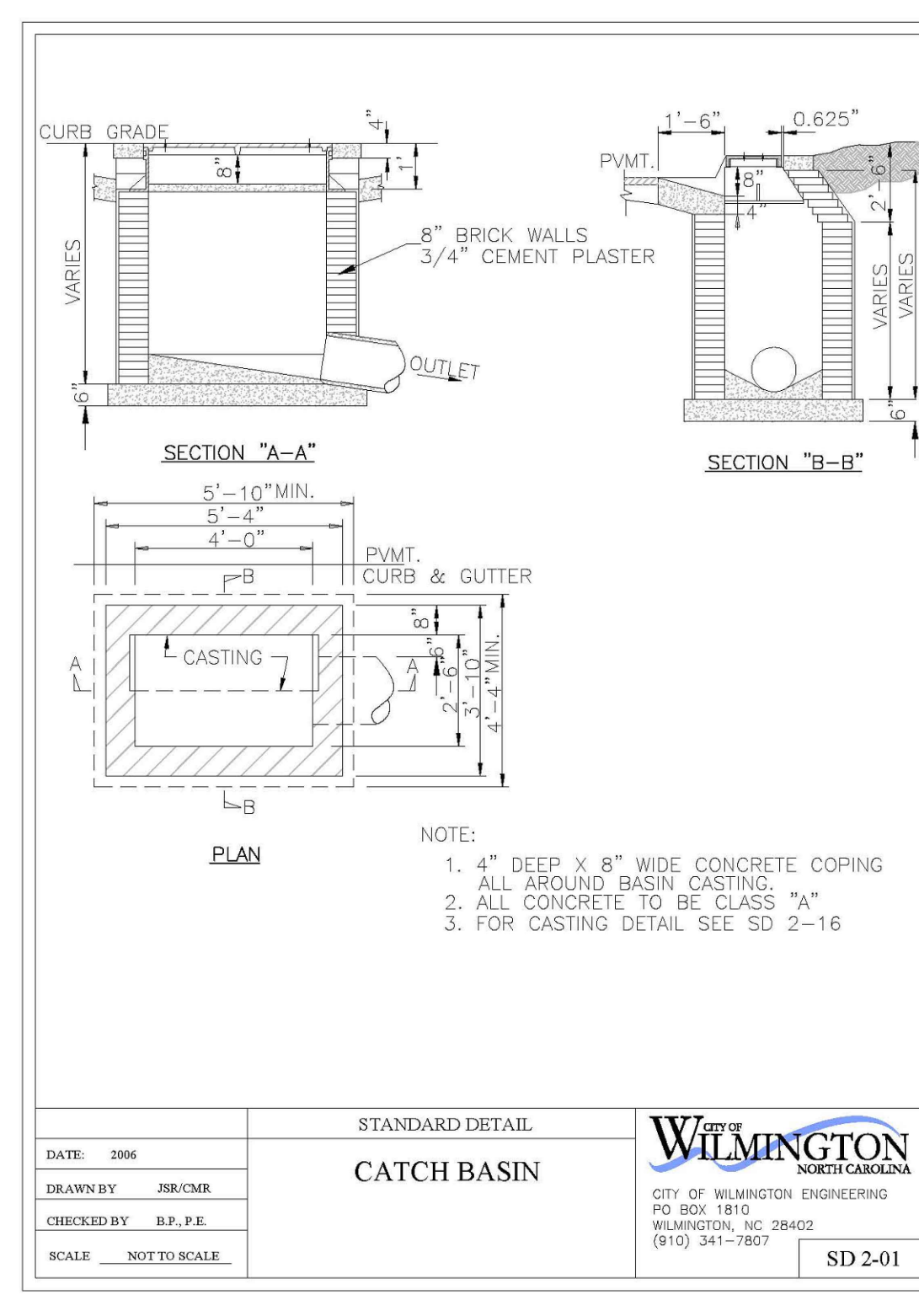
DIMENSIONS IN INCHES WEIGHTS IN POUNDS

DATE: 2001
DRAWN BY: JBC/CMR
CHECKED BY: B.P., P.E.
SCALE: NOT TO SCALE

STANDARD DETAIL
FLARED END SECTION
OUTLET
DIMENSION TABLE

CITY OF WILMINGTON
ENGINEERING DIVISION
300 GRESHAM STREET
PO BOX 1810
WILMINGTON, NC 28402
(910) 341-7807

SD 1-17



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

Date: _____ Permit # _____
Signed: _____

Approved Construction Plan
Name _____ Date _____

Planning _____
Traffic _____
Fire _____



ARCHITECT OF RECORD
VINES ARCHITECTURE, INC.
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RALEIGH, NC 27603
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F: 988 800 5046
www.vinesarc.com

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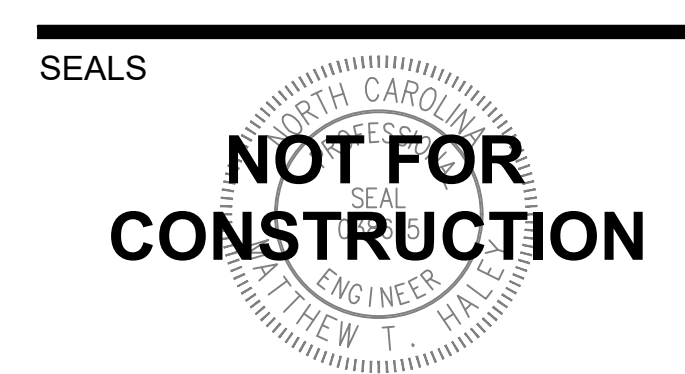
CONSULTANTS
CAPE FEAR ENGINEERING
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SUITE 100
BELVILLE, NC 28451
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WWW.CAPEFEAREENGINEERING.COM

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ISSUED FOR TRC REVIEW 2018-06-13



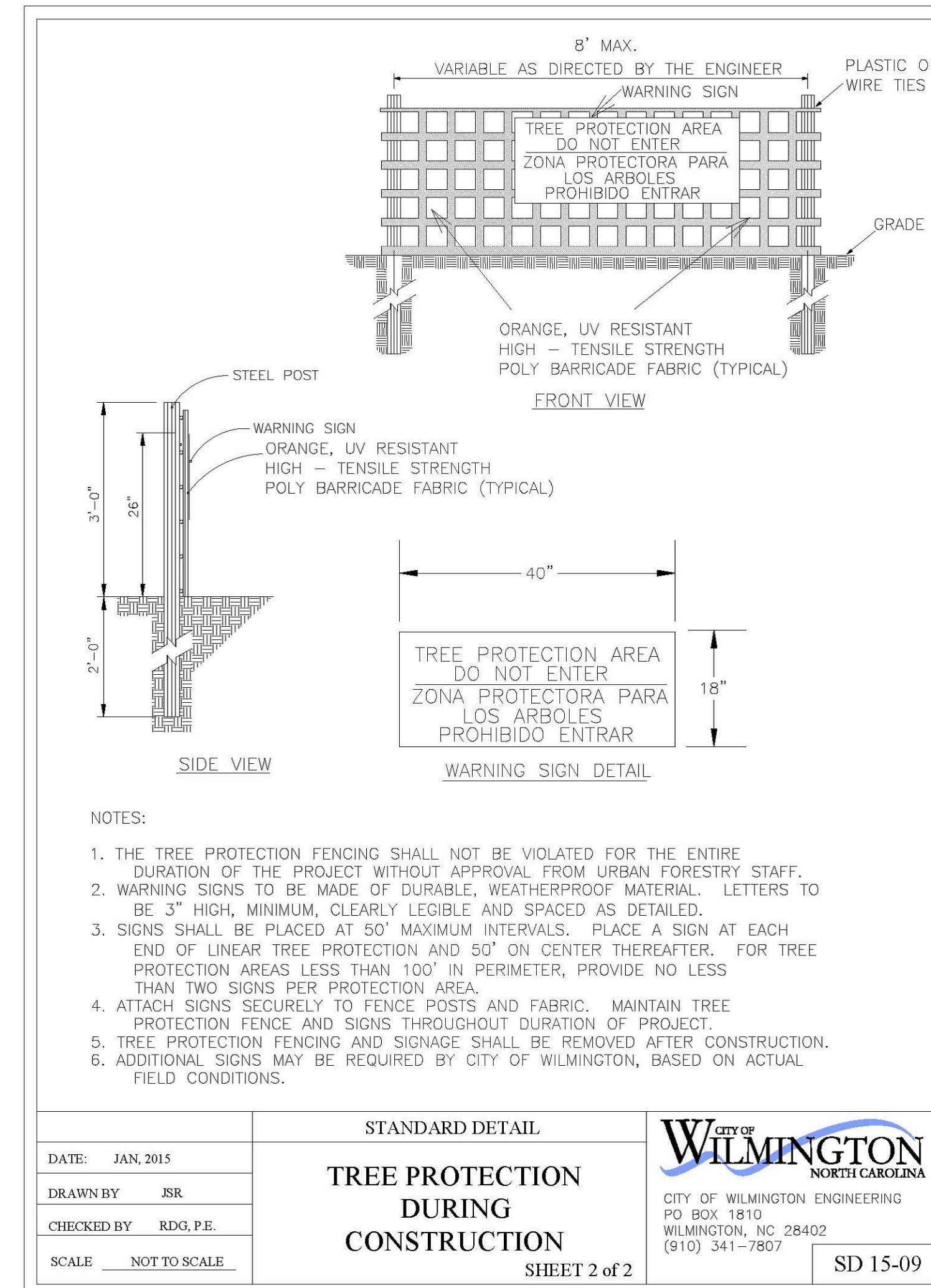
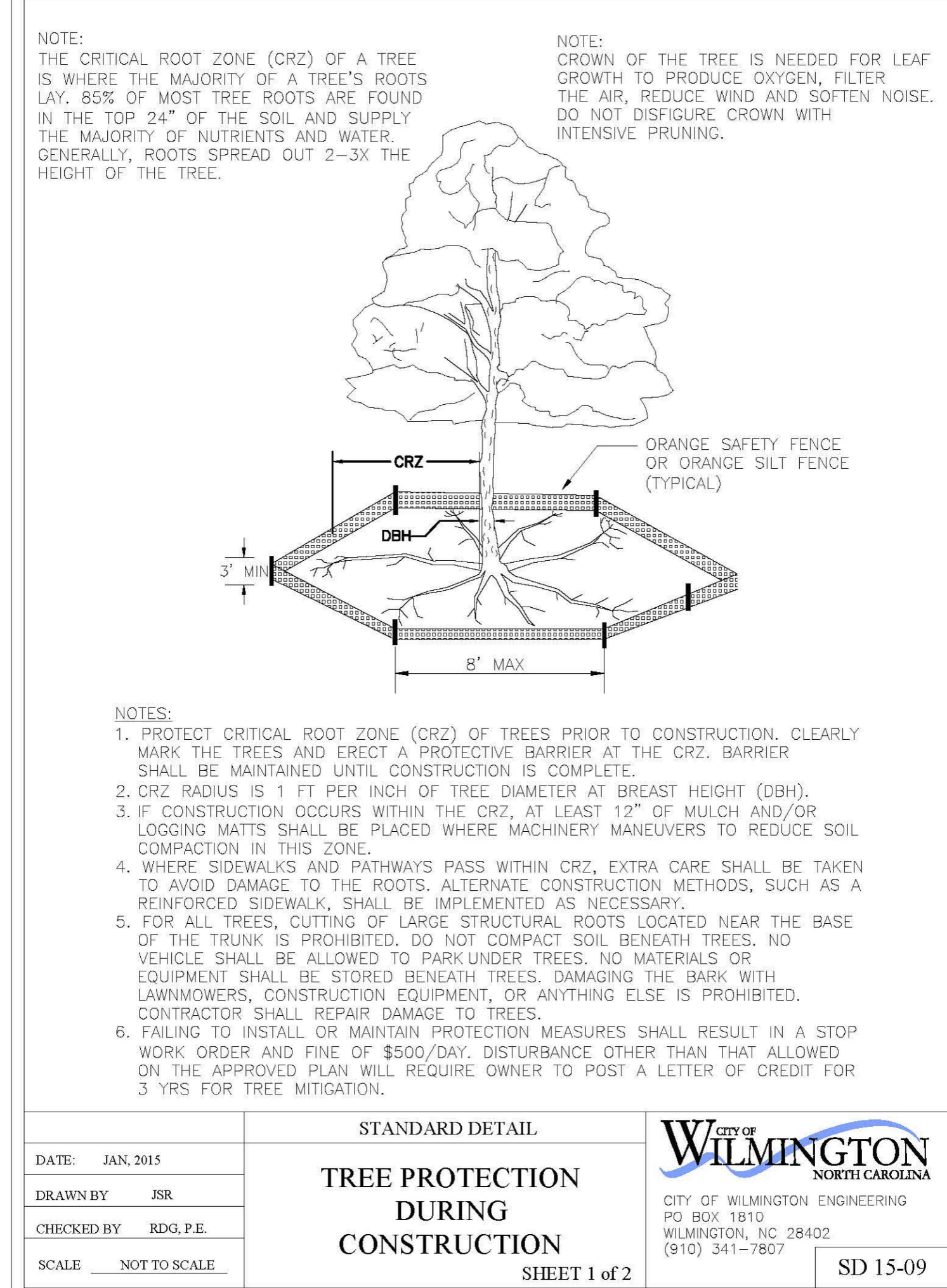
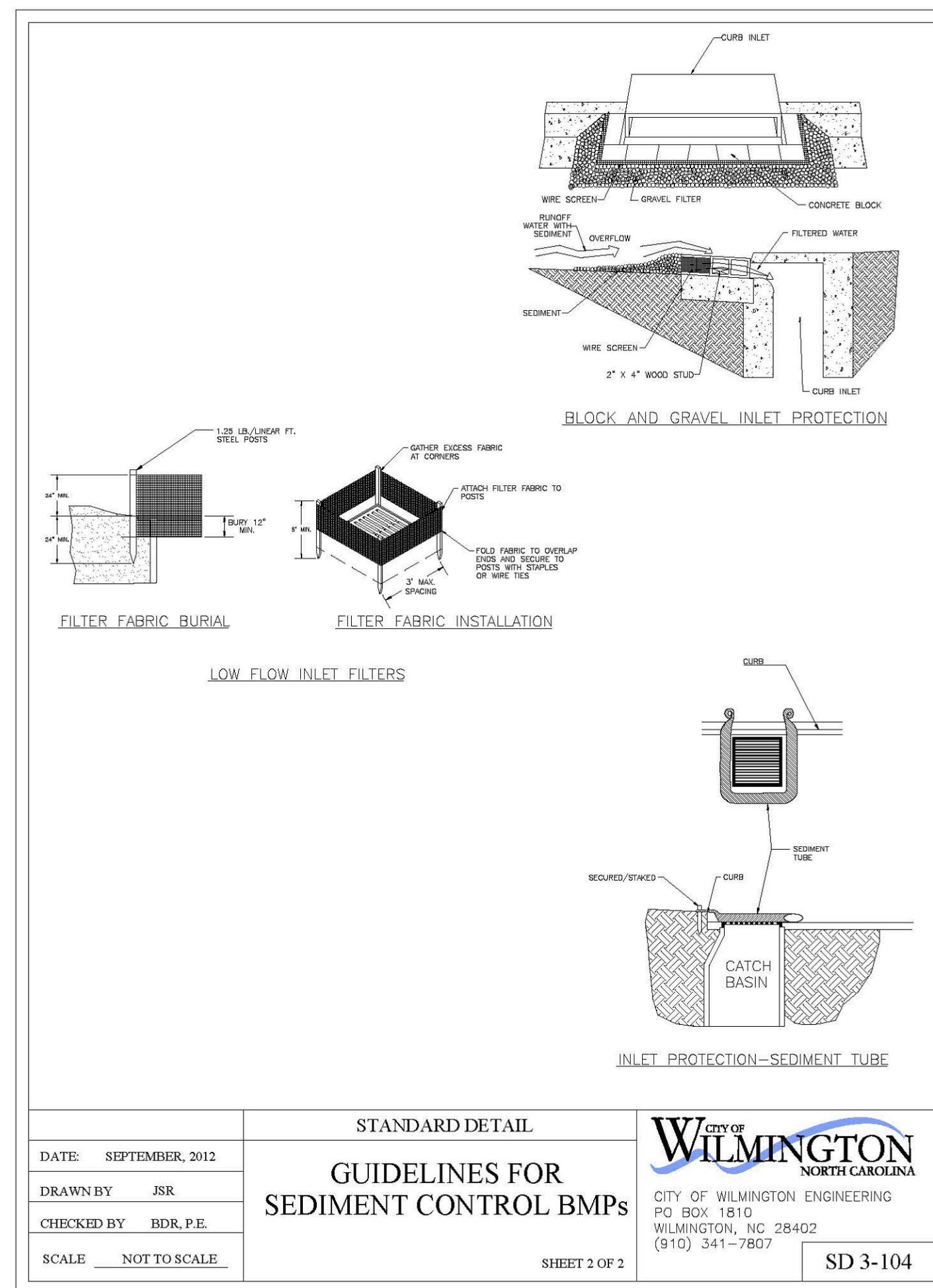
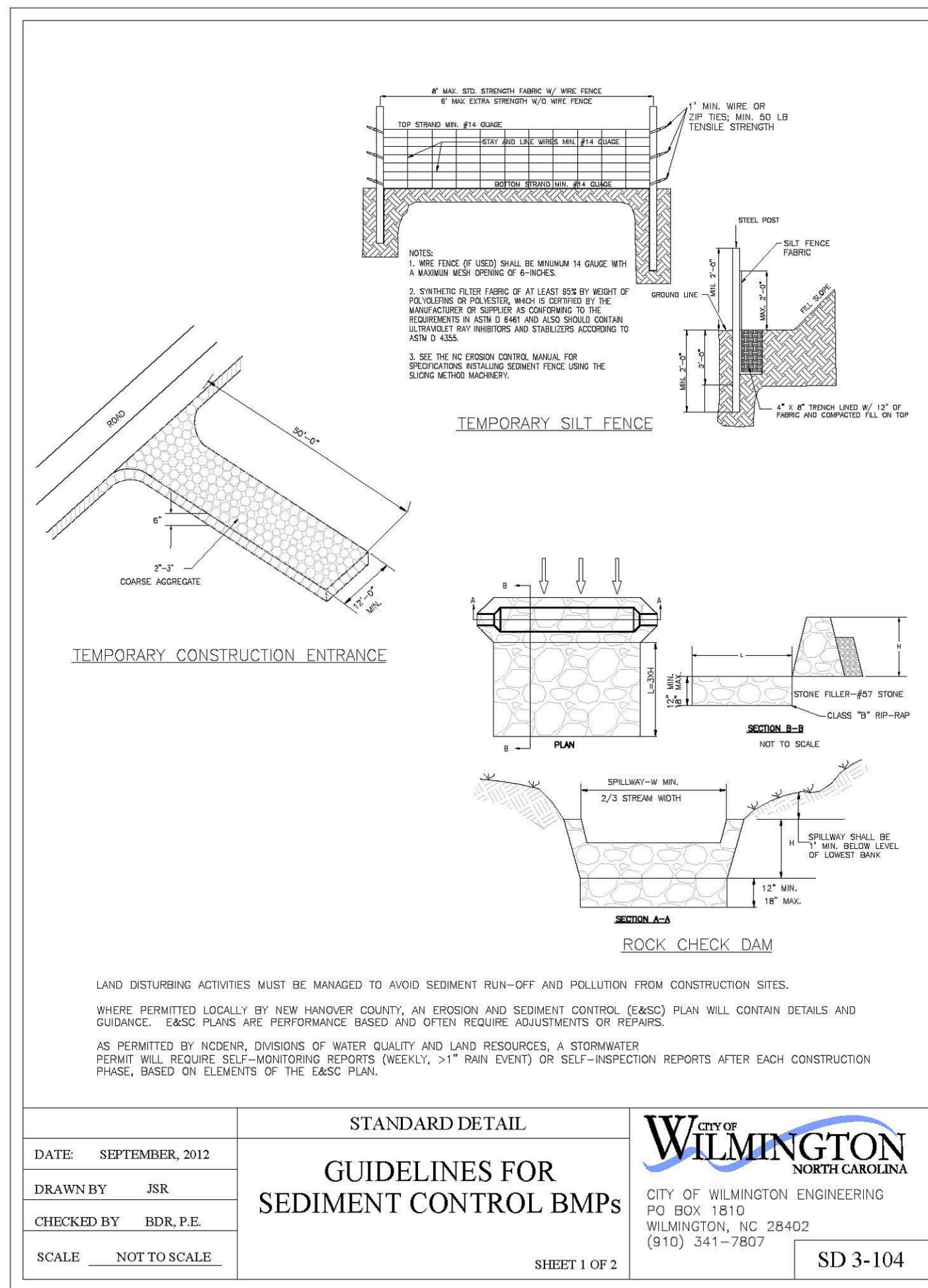
PINE VALLEY
BRANCH LIBRARY
3802 SOUTH COLLEGE ROAD
WILMINGTON, NC 28412

OWNER
NEW HANOVER
COUNTY

PHASE PRELIMINARY
ISSUE FOR BID
DATE MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID # _____

DRAWING TITLE
Stormwater
Details

DRAWING NUMBER
C-501



MULCHING MATERIALS AND APPLICATION RATES

MATERIAL	RATE PER ACRE	QUALITY	NOTES
STRAW	2 TONS	DRY, UNCHOPPED, UNWEATHERED, AVOID WEEDS	SHOULD COME FROM WHEAT OR OATS SPREAD BY HAND OR MACHINE. MUST BE TACKED DOWN

TEMPORARY SEEDING

TIME OF SEEDING	GRASS TYPE	AMOUNT/ACRE	FERTILIZATION/ACRE	FERTILIZATION/ACRE MAINTENANCE
DEC 1-APR 15	RYE (GRAIN) & LESPEDEZA, KOBE	120 LBS. & 50 LBS.	750 LBS. 10-10-10	NA NA
APR 15-AUG 15	GERMAN MILLET	40 LBS.	750 LBS. 10-10-10	NA NA
AUG 15-DEC 30	RYE (GRAIN)	120 LBS.	1,000 LBS. 10-10-10	NA NA

PERMANENT SEEDING

NCDEQ ESCM	TIME OF SEEDING	GRASS TYPE	AMOUNT/ACRE	FERTILIZATION/ACRE
NO. 1CP (WELL TO POORLY DRAINED SOILS W/ GOOD MOISTURE RET. LOW MAINTENANCE)	15 FEB - 30 APR OR 01 SEPT - 31 OCT	TALL FESCUE PENSACOLA BAHIAGRASS SERICICA LESPEDEZE KOBE LESPEDEZE	80 LBS 50 LBS 30 LBS 10 LBS	1,000 LBS 10-10-10 *
NO. 2CP (POORLY DRAINED SOILS W/ GOOD MOISTURE RET. HIGH MAINTENANCE)	15 FEB - 30 APR AND 01 SEPT - 31 OCT	TALL FESCUE RYE (GRAIN)	200 LBS 25 LBS	1,000 LBS 10-10-10 *
NO. 4CP (WELL DRAINED SANDY LOAMS TO DRY SANDS. LOW-MED MAINTENANCE)	01 MAR - 31 JUNE	CENTPEDEGRASS	10-20 LBS 33 BU/AC (SPRINGS)	300 LBS 10-10-10 *
NO. 5CP (WELL DRAINED SANDY LOAMS TO DRY SANDS. LOW MAINTENANCE)	01 APR - 15 JULY	PENSACOLA BAHIAGRASS SERICICA LESPEDEZA COMMON BERMUDAGRASS GERMAN MILLET	50 LBS 30 LBS 10 LBS 10 LBS	500 LBS 10-10-10 *

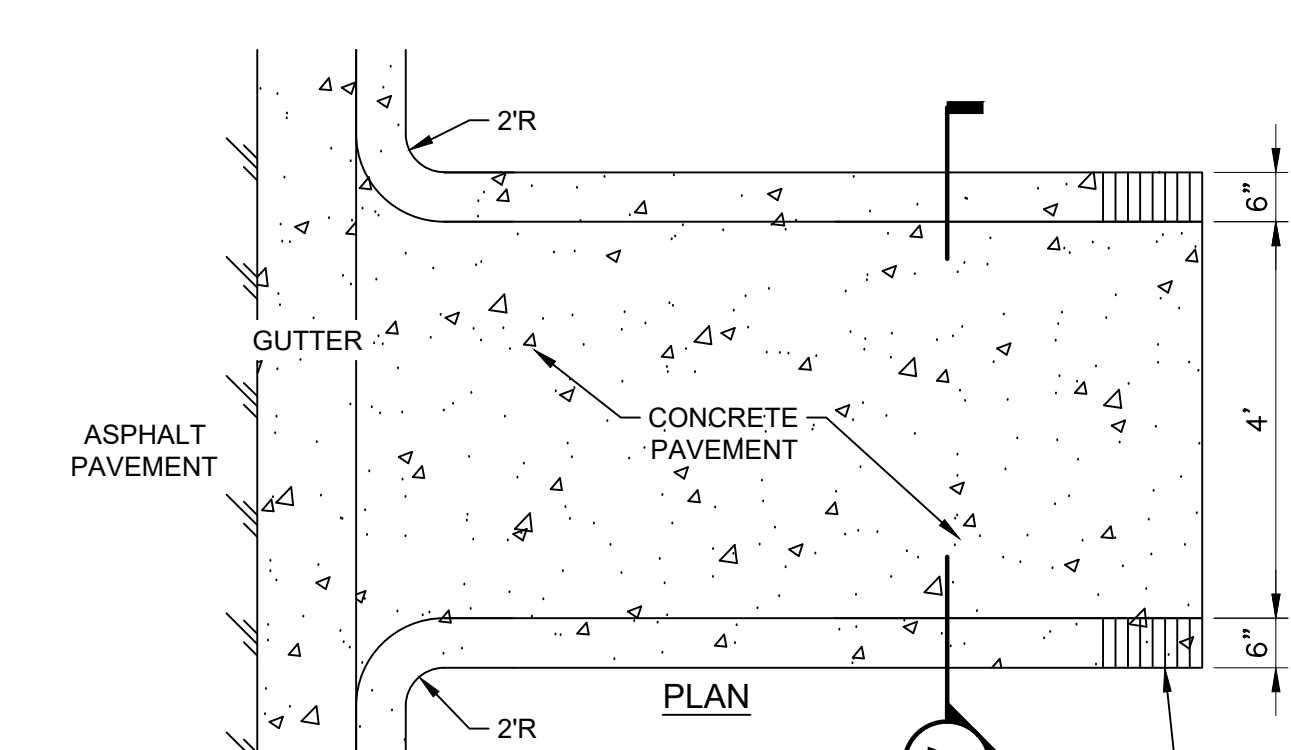
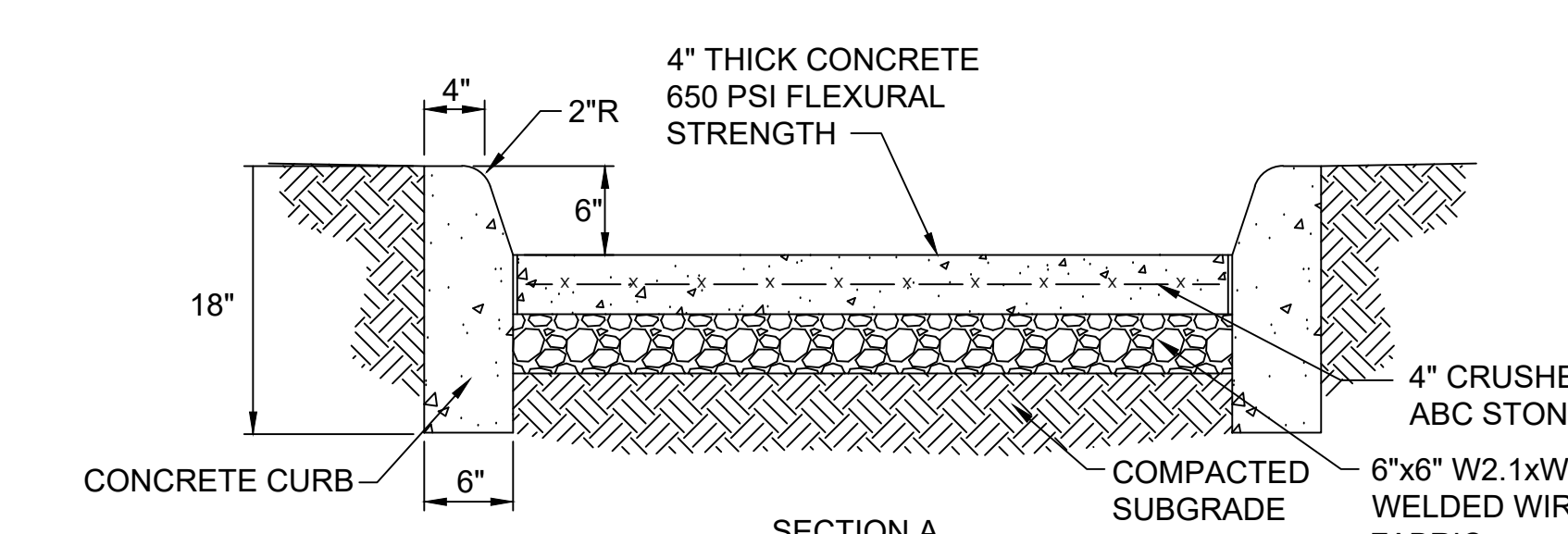
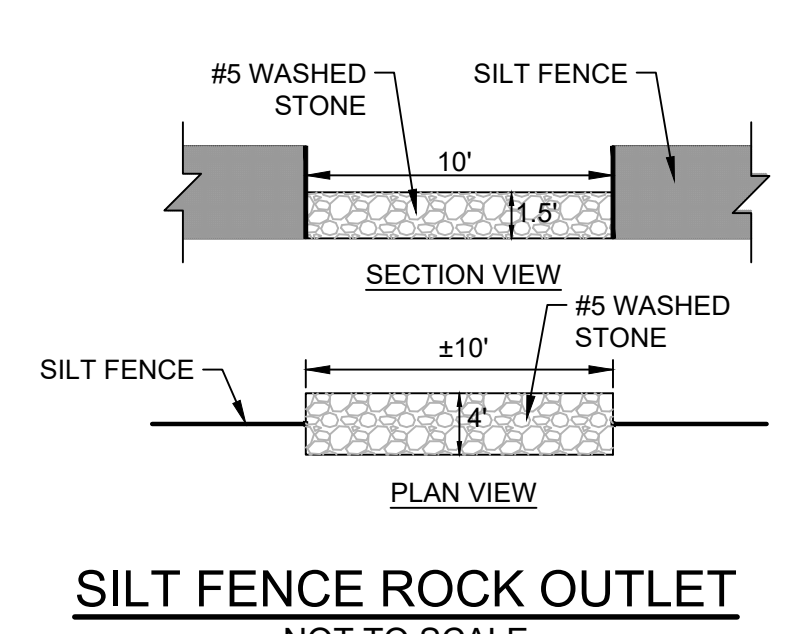
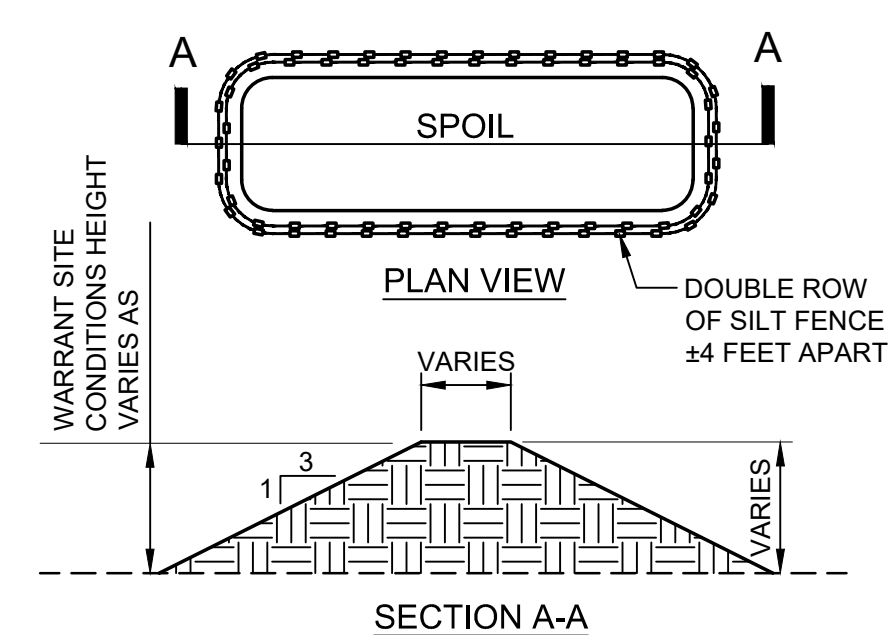
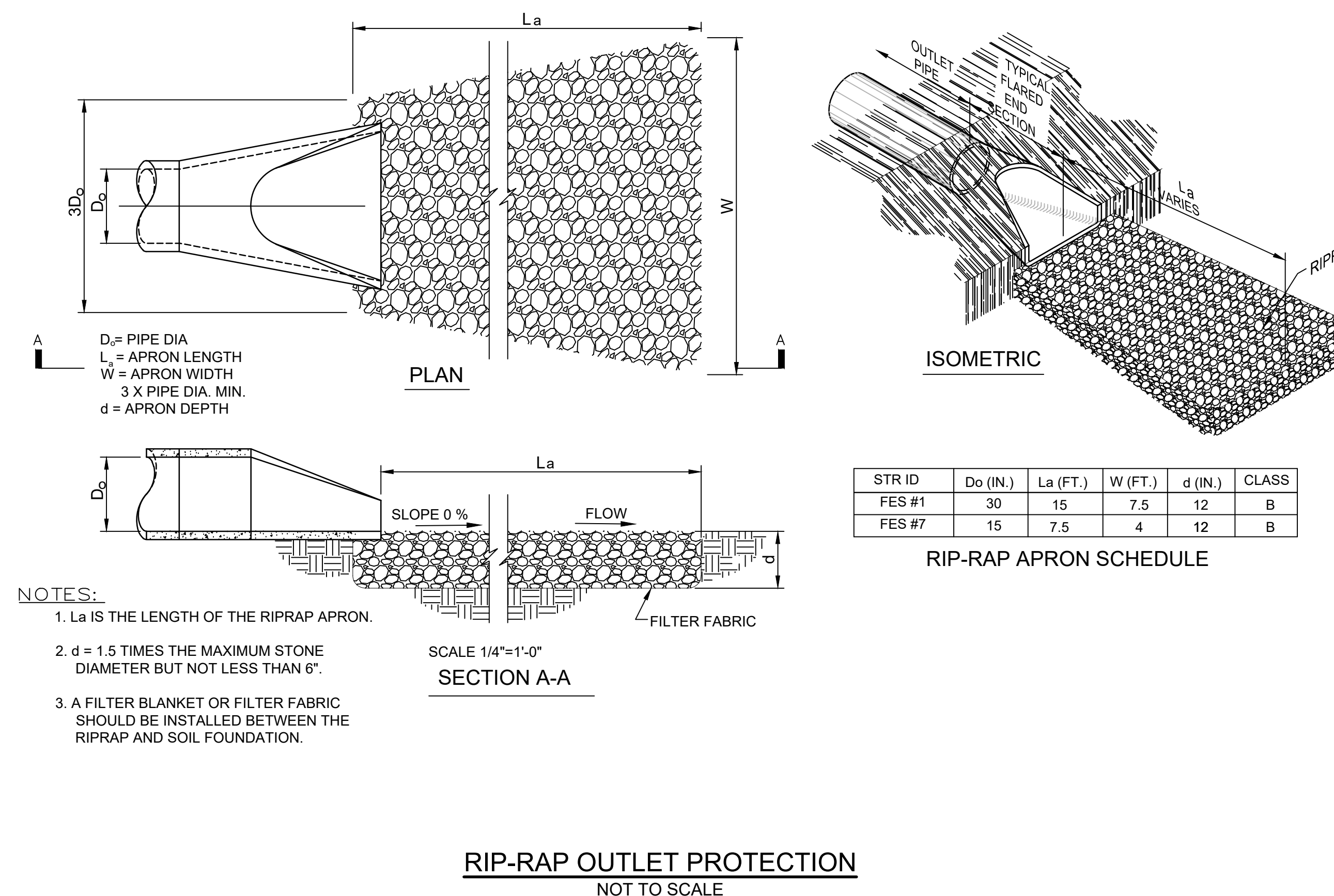
NOTE: FERTILIZATION RATES ABOVE ARE GENERAL GUIDANCE BASED ON THE NORTH CAROLINA SEDIMENTATION AND EROSION CONTROL MANUAL. CONTRACTOR SHALL HAVE THE ON-SITE SOILS TESTED TO DETERMINE THE SPECIFIC NUTRIENT REQUIREMENTS. SUBMIT SOIL TEST RECOMMENDATIONS AND RESULTS FOR ENGINEER REVIEW. CONTRACTOR MAY SUBMIT OTHER SPECIES OF TEMPORARY SEED FOR APPROVAL. PROVIDED SPECIES ARE IN ACCORDANCE WITH NCDEQ ESCM.

NEW STABILIZATION TIMEFRAMES

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES

NOTE: TEMPORARY SEEDING SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH SECTION 6.10 OF THE NCDEQ EROSION CONTROL PLANNING AND DESIGN MANUAL.

VEGETATION SCHEDULE
NOT TO SCALE



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

Approved Construction Plan
 Name: _____ Date: _____
 Planning: _____
 Traffic: _____
 Fire: _____
 Signed: _____



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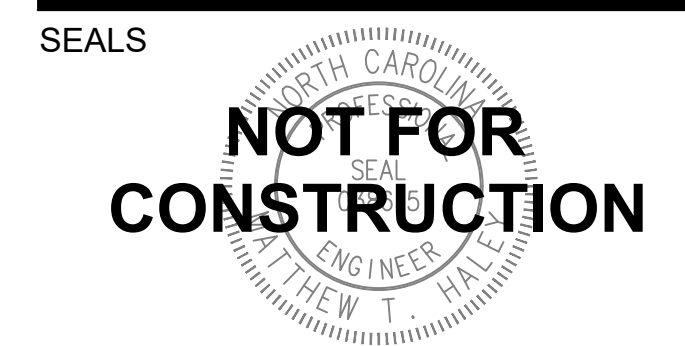
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PINE VALLEY BRANCH LIBRARY
 3802 SOUTH COLLEGE ROAD
 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE: PRELIMINARY
 DATE: ISSUE FOR BID MAY 15, 2018
 PROJECT: PINE VALLEY BRANCH
 VA PROJECT #: 2016005
 SCO ID #: -

DRAWING TITLE
Erosion Control Details

DRAWING NUMBER
C-502

CONSULTANTS

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SEALS



PINE VALLEY BRANCH LIBRARY
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 WILMINGTON, NC 28412

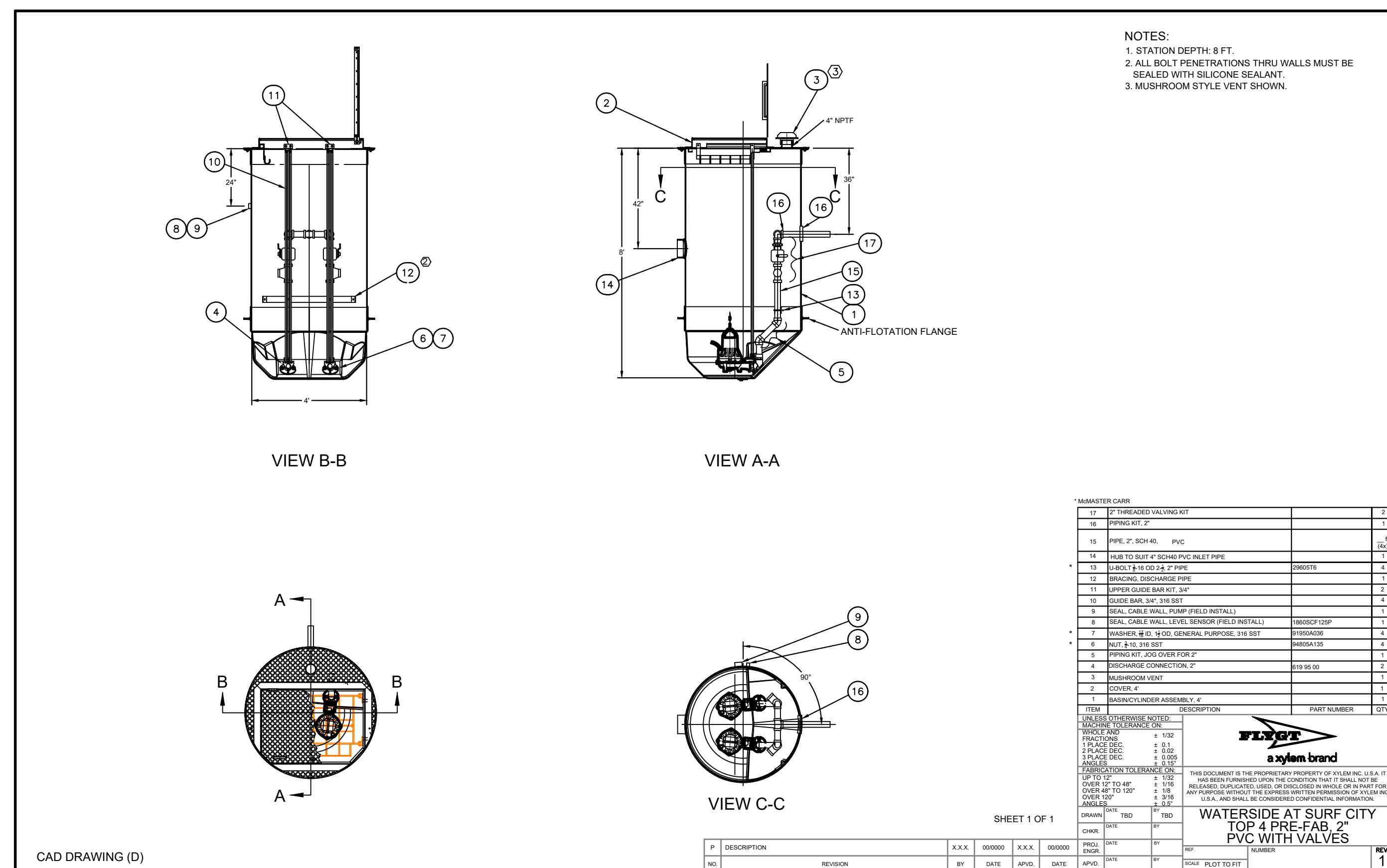
OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID # -

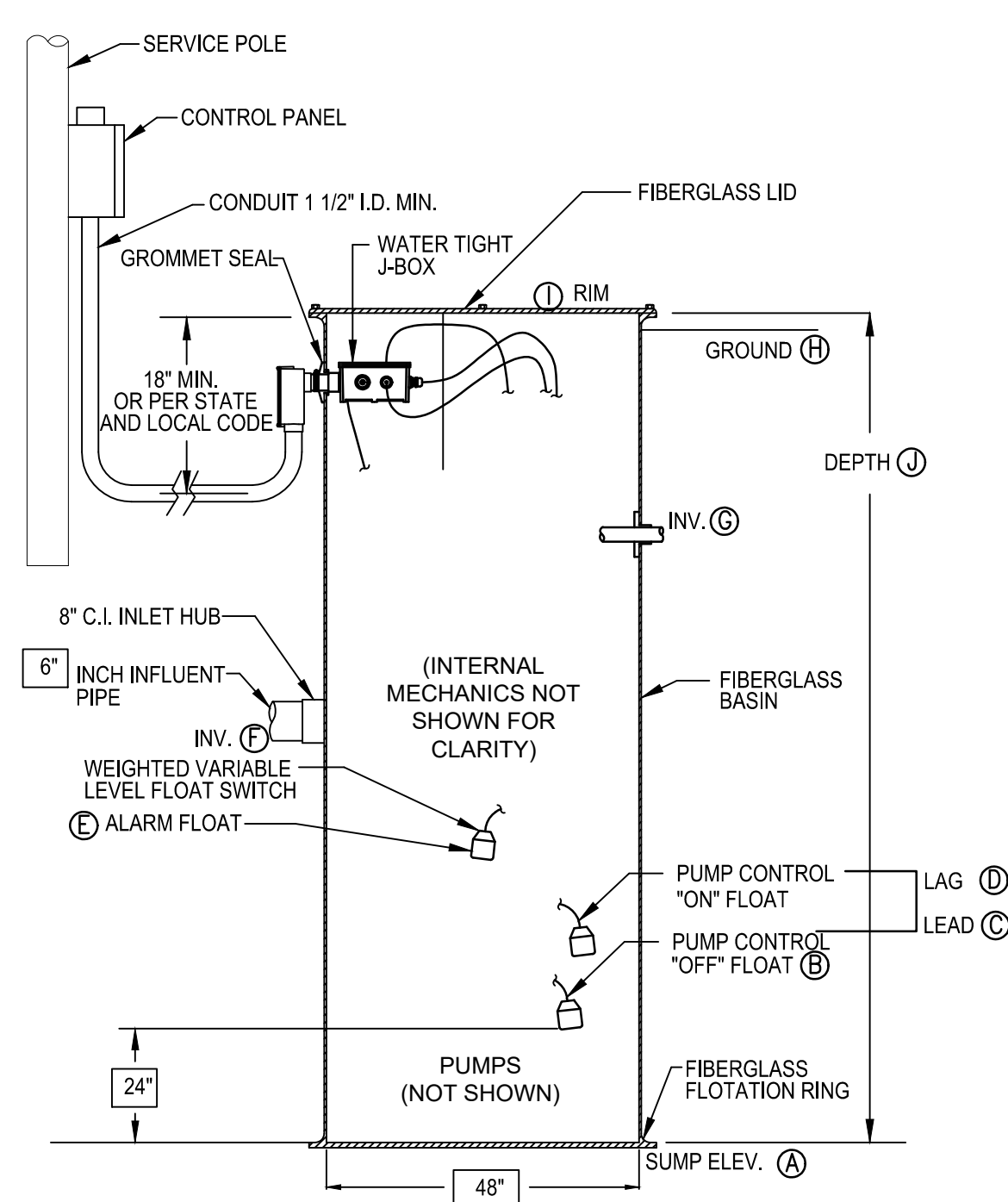
DRAWING TITLE
Pump Station Details

DRAWING NUMBER

C-503



FLYGT PACKAGE PUMP STATION
 NOT TO SCALE



FLYGT GINRDR PUMP STATION UNIT
 NOT TO SCALE

ELEVATION SCHEDULES:

PUMP STATION ELEVATION SCHEDULE (FT)									
A	B	C	D	E	F	G	H	I	J
33.50	35.00	35.75	36.25	36.75	38.25	38.50	41.25	41.50	8.00

PUMP STATION DESIGN DATA:

AVG. DAILY SEWAGE FLOW: = 2,000 G.P.M.
 AVG. FLOW 2,000/20 (12 HR PERIOD) = 2.78 G.P.M.
 PEAK PUMPING RATE PER PUMP: 3 X 2.78 G.P.M. = 8.33 G.P.M.
 FORCE MAIN SIZE: 2"
 FORCE MAIN MATERIAL: SEE PLANS AND ADDITIONAL DETAILS
 CAPACITY (OPERATING POINT) 45 G.P.M. @ 58.4 T.D.H.
 PUMP MODEL: FLYGT MP 3088 HT 3-258
 INFILLER DIAMETER: 127 MM
 VOLTAGE: AS REQ'D HP: 2.7

ADDITIONAL PUMP STATION NOTES:

- CONTRACTOR SHALL FURNISH AND INSTALL A MANUAL TRANSFER SWITCH TO ACCOMMODATE START-UP AND OPERATION OF PUMP STATION VIA PORTABLE GENERATOR.
- CONTRACTOR SHALL PROVIDE A PORTABLE GENERATOR ADEQUATELY RATED TO PROVIDE START-UP AND OPERATION OF THE PUMP STATION IN THE ABSENCE OF A LOCAL UTILITY PROVIDER'S ELECTRICAL SUPPLY.
- CONTRACTOR SHALL FURNISH AND INSTALL A TELEMETRY SYSTEM (AUTO DIALER) AND ALL NECESSARY APPURTENANCE AND CONNECTIONS TO ASSURE REMOTE NOTIFICATION OF PUMP STATION STATUS TO OWNER OR OWNER'S REPRESENTATIVE IN ACCORDANCE WITH NCDEQ MINIMUM DESIGN CRITERIA FOR PUMP STATIONS (CURRENT EDITION).
- MEASURES TO CONTROL ODOR AND CORROSION MAY BE REQUIRED SINCE THE PUMP STATION IS DESIGNED TO CYCLE AT TWO TIMES PER HOUR. IF DETENTION TIMES CAUSE SEPTIC CONDITIONS OR ODOR ISSUES, COORDINATE WITH THE PROFESSIONAL RESPONSIBLE FOR OPERATION AND MAINTENANCE OF THE GRINDER STATION, AS DEFINED IN THE OPERATION AND MAINTENANCE AGREEMENT THAT ACCOMPANIES THE NCDEQ SEWER PERMIT, TO IDENTIFY NECESSARY CORRECTIVE ACTIONS.

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

Approved Construction Plan
 Name: _____ Date: _____
 Planning: _____
 Traffic: _____
 Fire: _____

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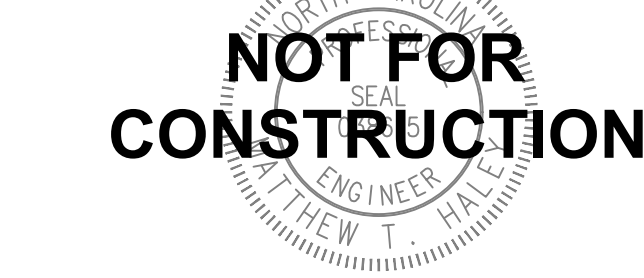
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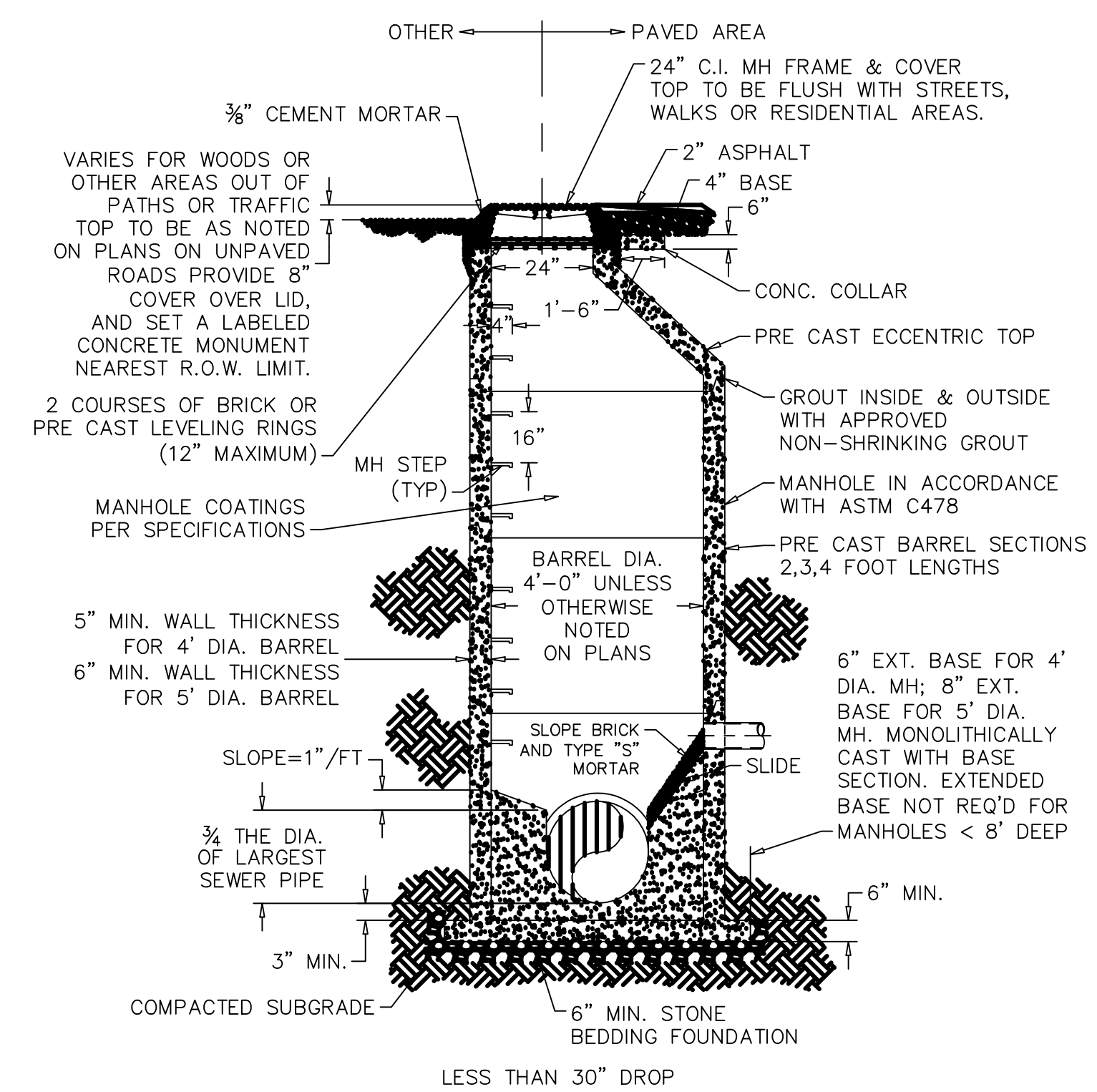
OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID #

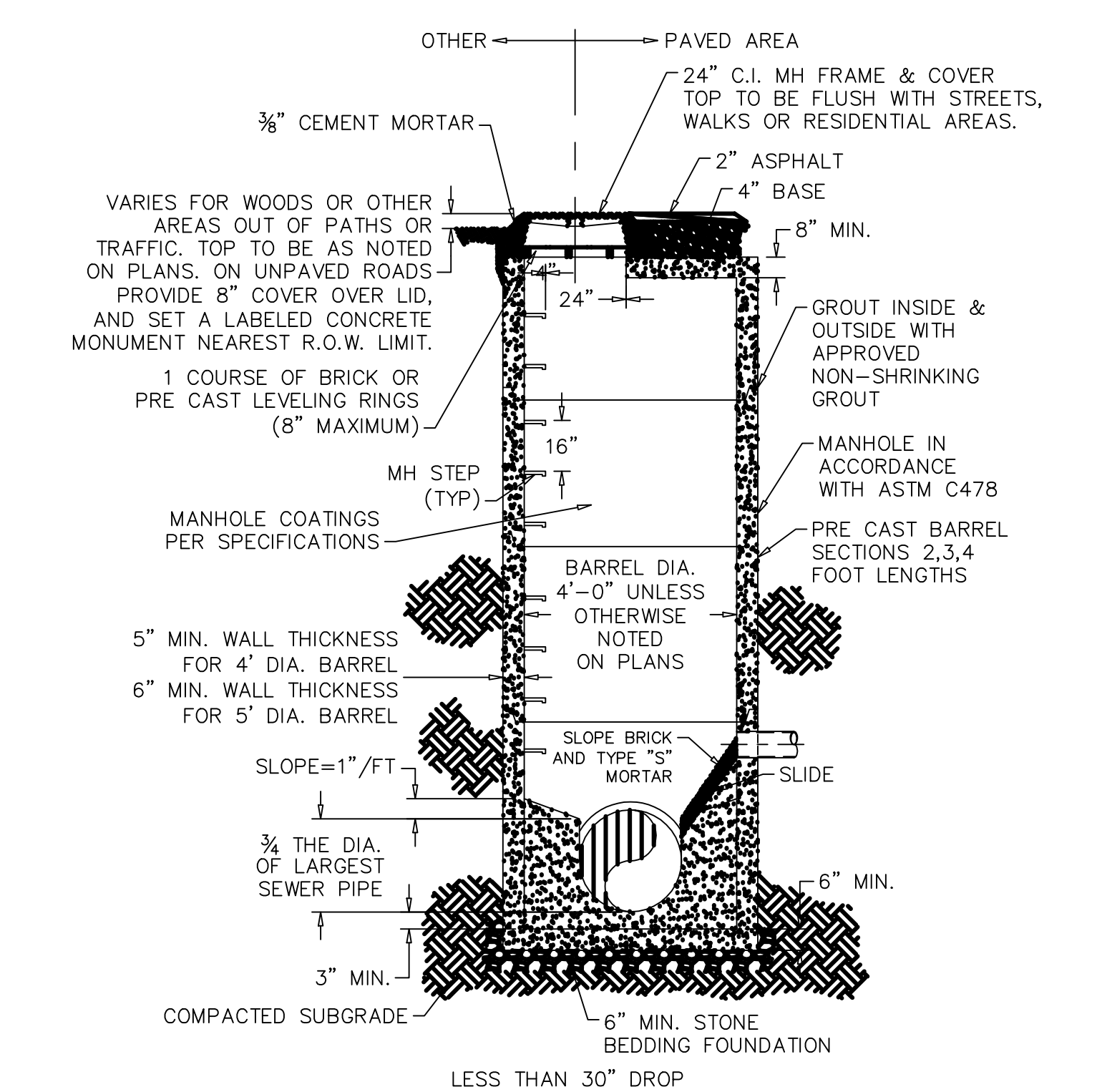
DRAWING TITLE
CFPUA Sanitary Sewer Details

DRAWING NUMBER

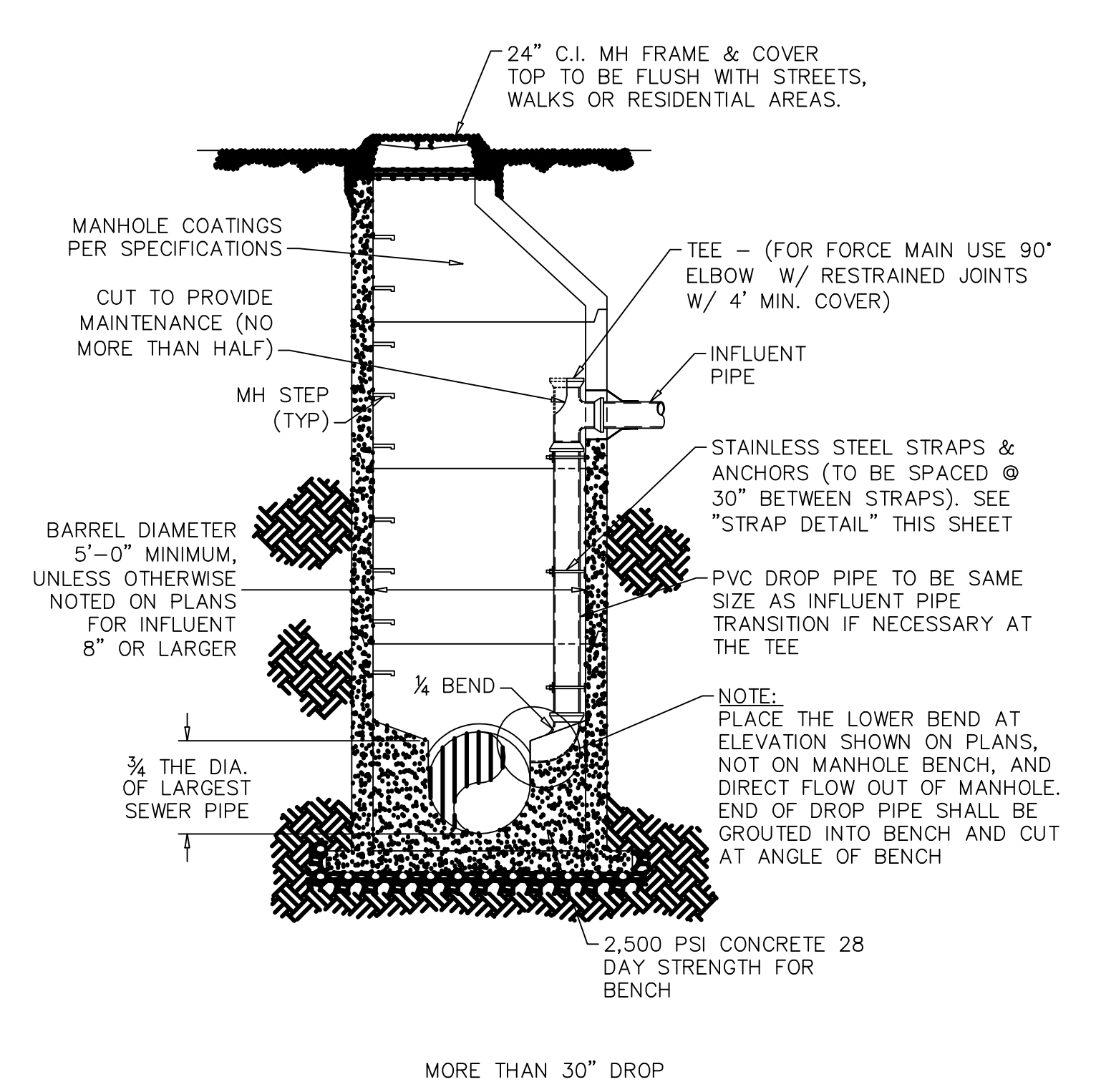
SSD-1



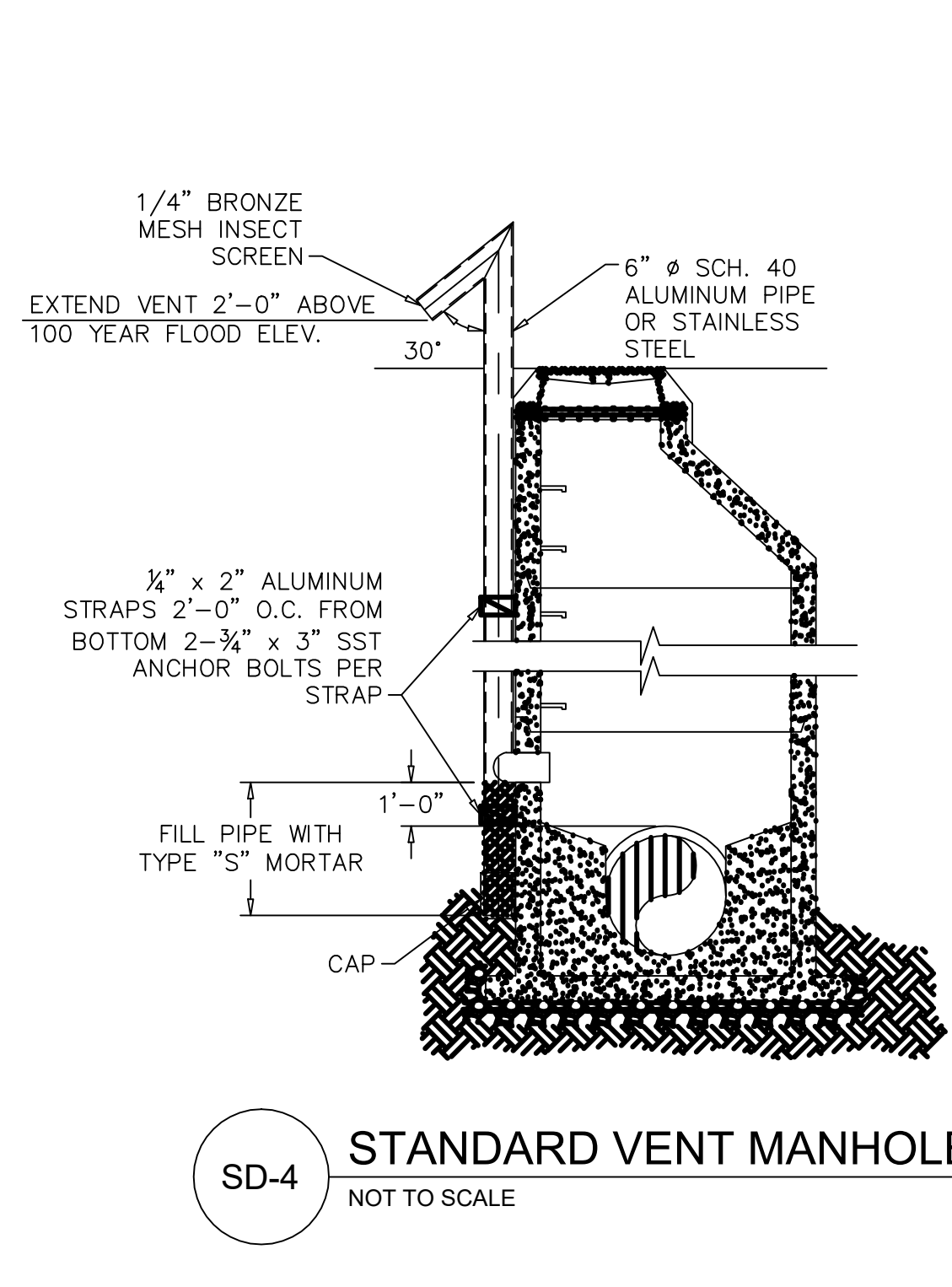
SD-1 PRECAST CONCRETE OFFSET MANHOLE TYPICAL
 NOT TO SCALE



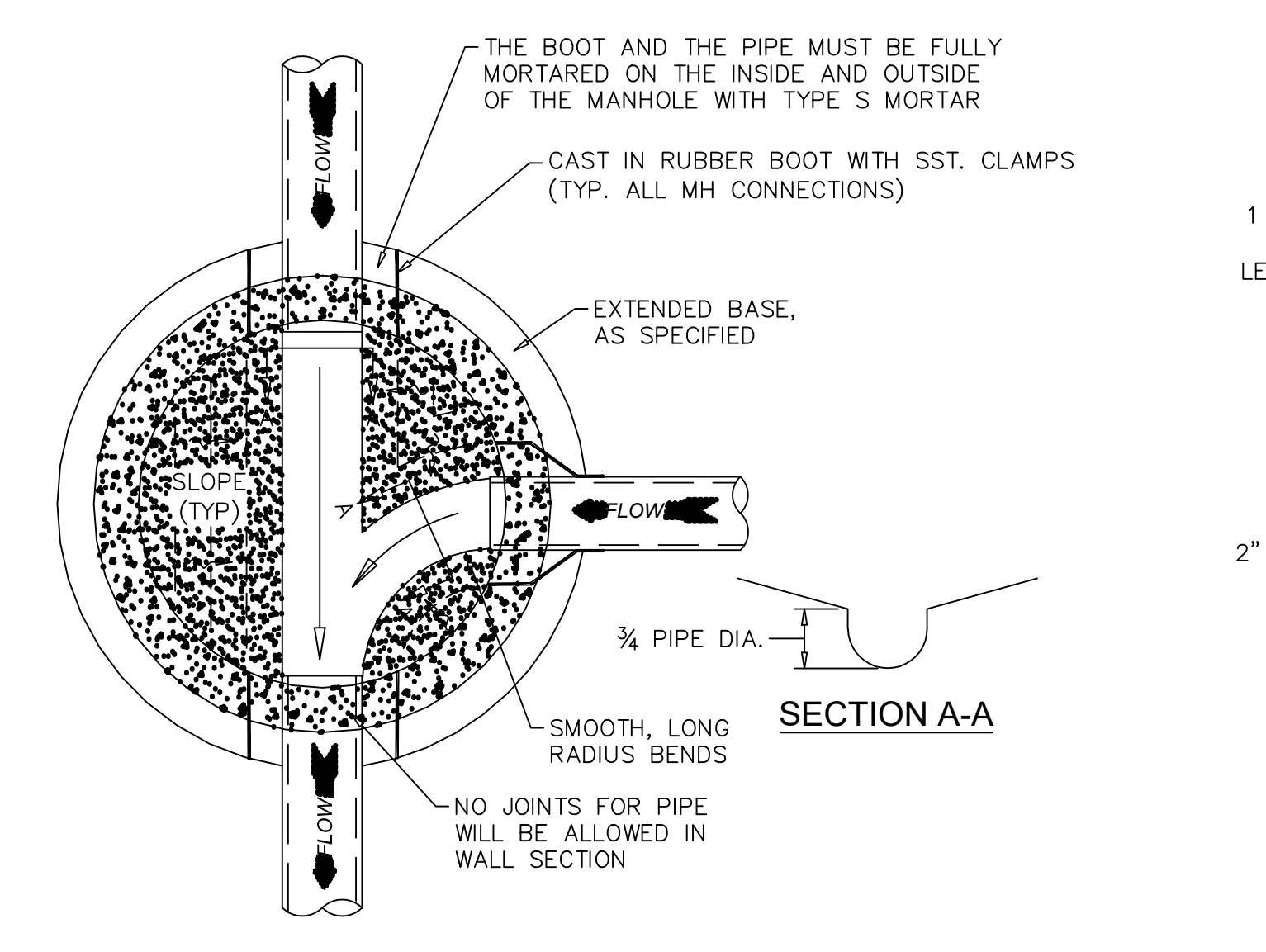
SD-2 PRECAST CONCRETE FLAT TOP MANHOLE TYPICAL
 NOT TO SCALE



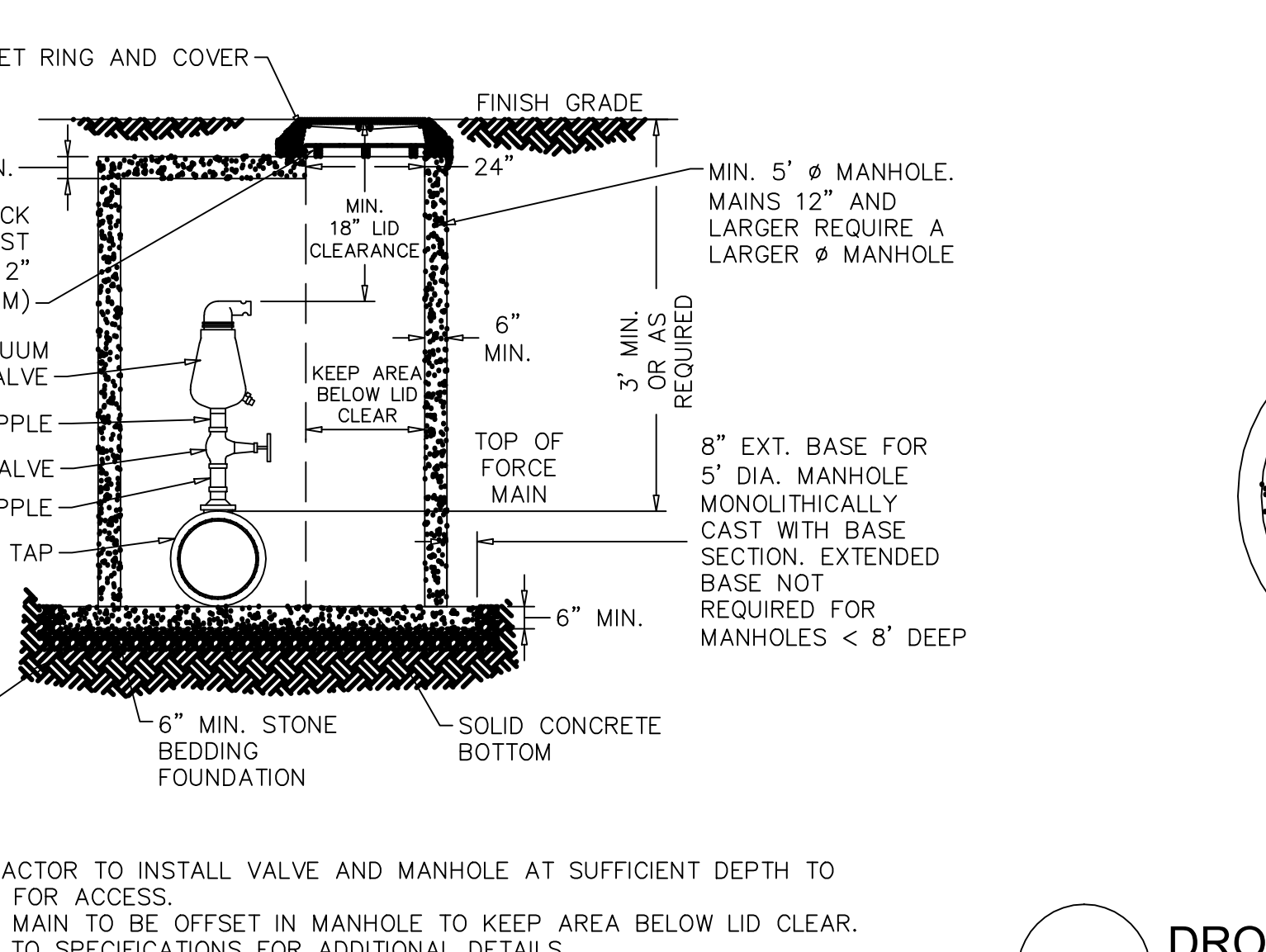
SD-3 DROP MANHOLE
 NOT TO SCALE



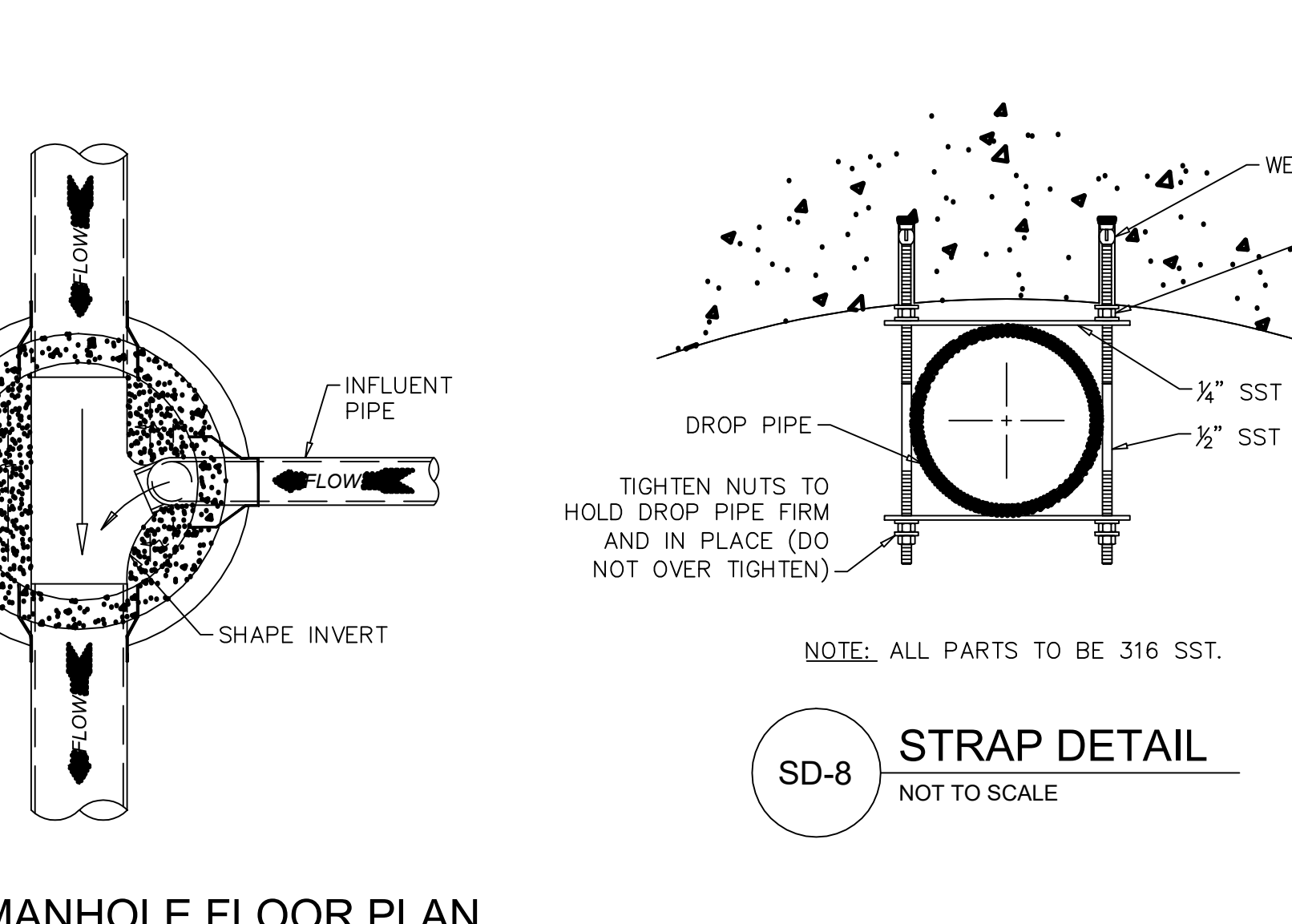
SD-4 STANDARD VENT MANHOLE
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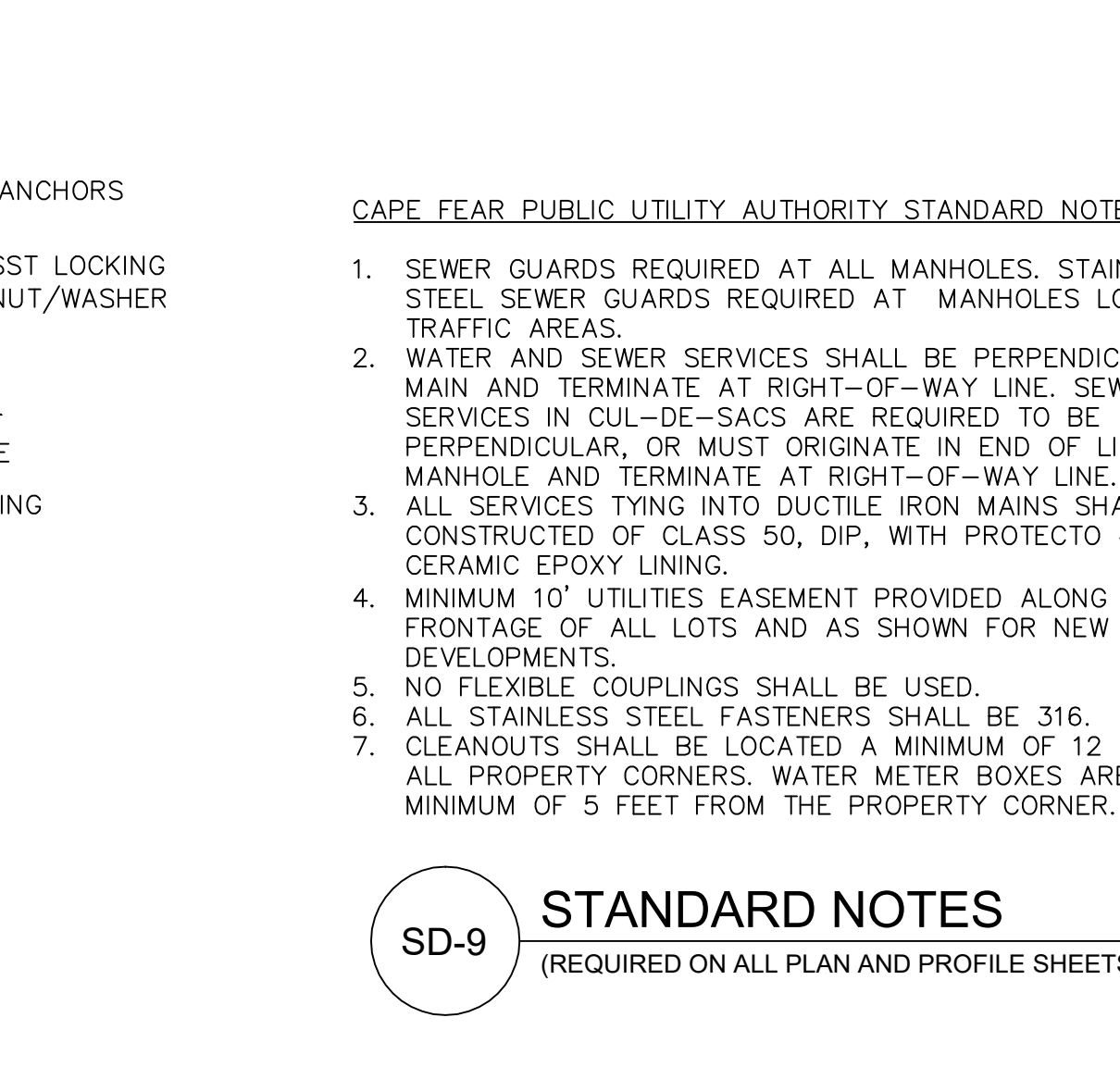
SD-5 MANHOLE FLOOR PLAN
 NOT TO SCALE



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

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 SANITARY SEWER

STANDARD DETAILS

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

DATE: 1/9/12
 SCALE: N/A
 DRAWN BY: CFPUA
 CHECKED BY: CFPUA
 PROJECT NO.:
 SHEET NO: **SSD-1**

REV.	DESCRIPTION:	DATE:
1	AIR / VACUUM AND AIR RELEASE COMBINATION VALVE REVISED	10/26/12
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

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

Date: _____ Permit # _____
 Signed: _____

Approved Construction Plan
 Name _____ Date _____

Planning _____
 Traffic _____
 Fire _____

S:\Vines\CFPUA - Standard Details\CFPUA - Sewer Details.dwg, 2/7/2016, 3:26:45 PM, jpm.acct

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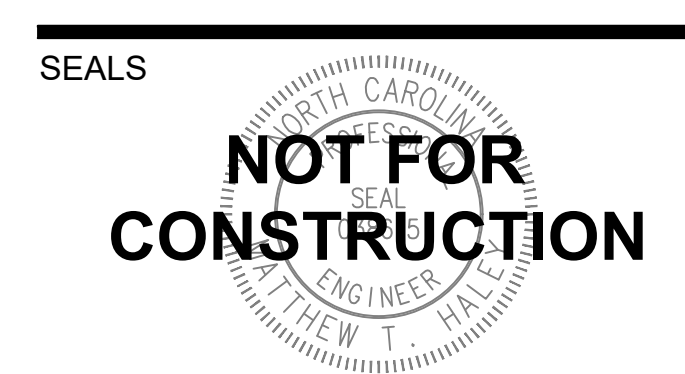
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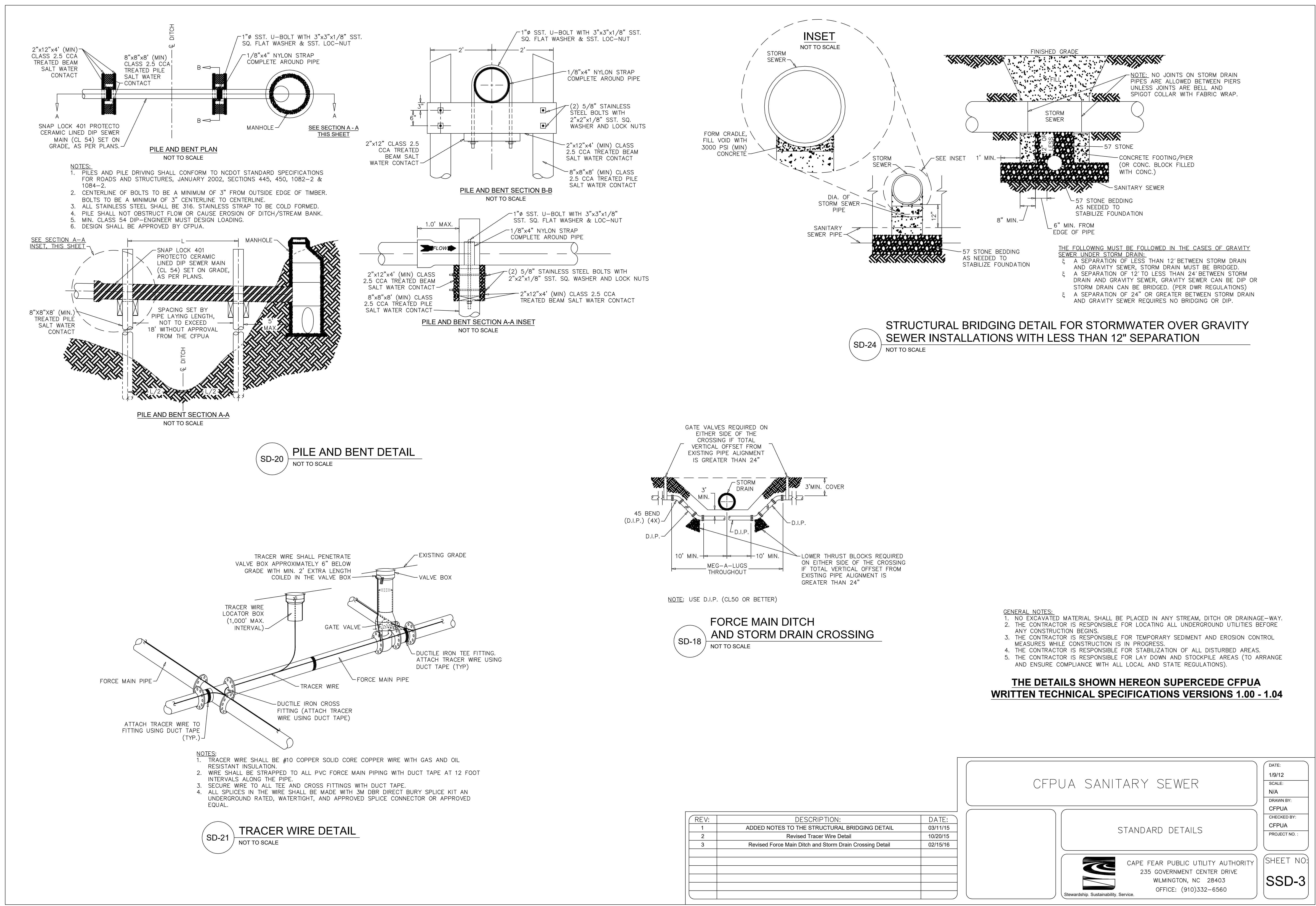
PINE VALLEY BRANCH LIBRARY
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 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID # -

DRAWING TITLE
CFPUA Standard Sanitary Sewer Details

DRAWING NUMBER
SSD-3



S:\Projects\CFPUA - Standard Details\CFPUA - Sewer Details.dwg, 2/15/2018, 3:21:07 PM, jhm,ncst

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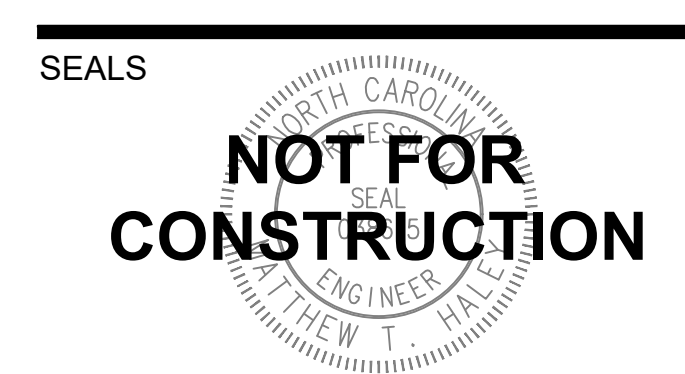
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 WWW.DEWBERRY.COM

LIGHT DEFINES FORM
 610 PEMBROKE ROAD
 SUITE 4465
 GREENSBORO, NC 27408
 T: 336 230 1990
 WWW.LIGHTDEFINESFORM.COM

REVISIONS
 ISSUED FOR TRC REVIEW 2018-06-13



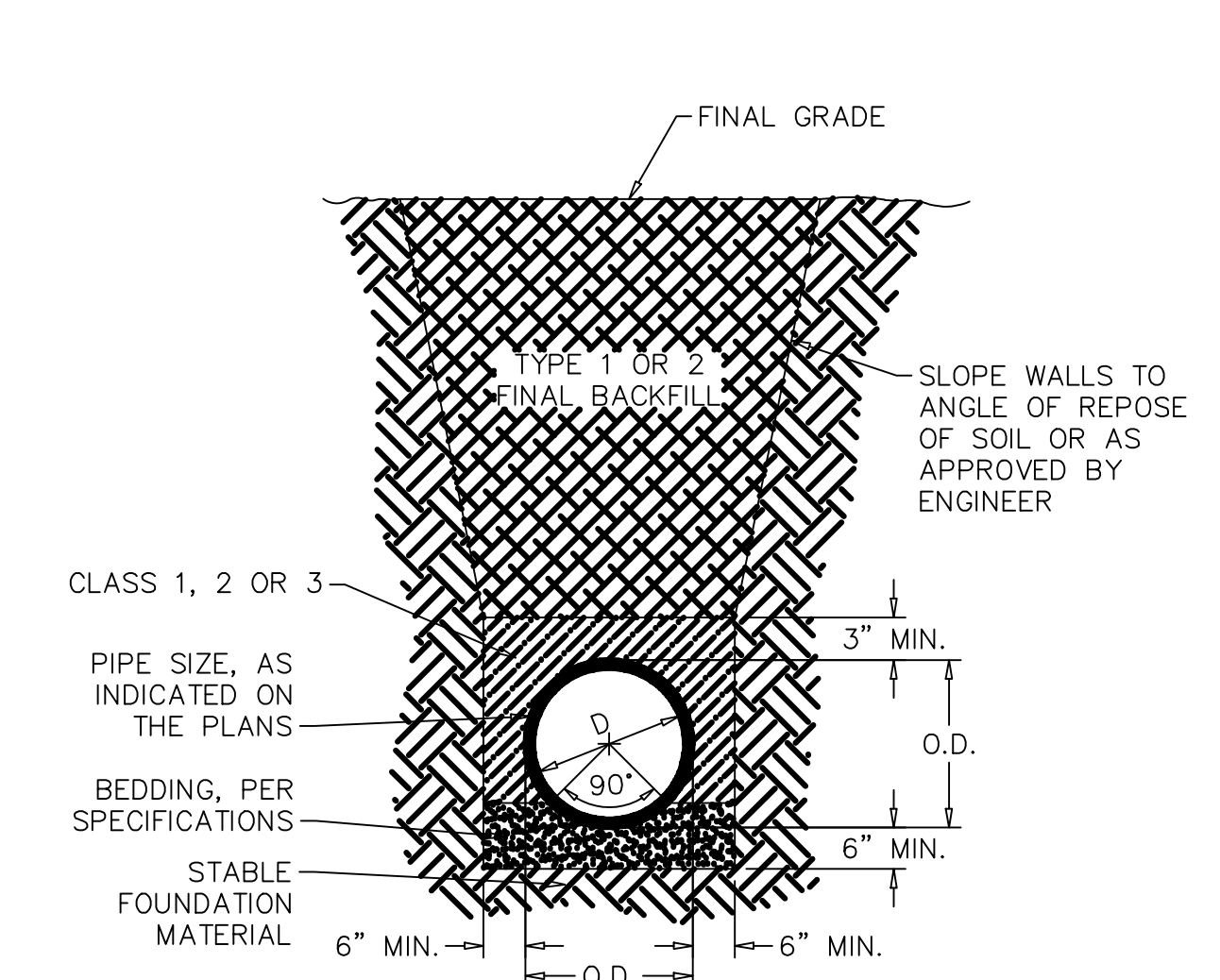
PINE VALLEY BRANCH LIBRARY
 3802 SOUTH COLLEGE ROAD
 WILMINGTON, NC 28412

OWNER
NEW HANOVER COUNTY

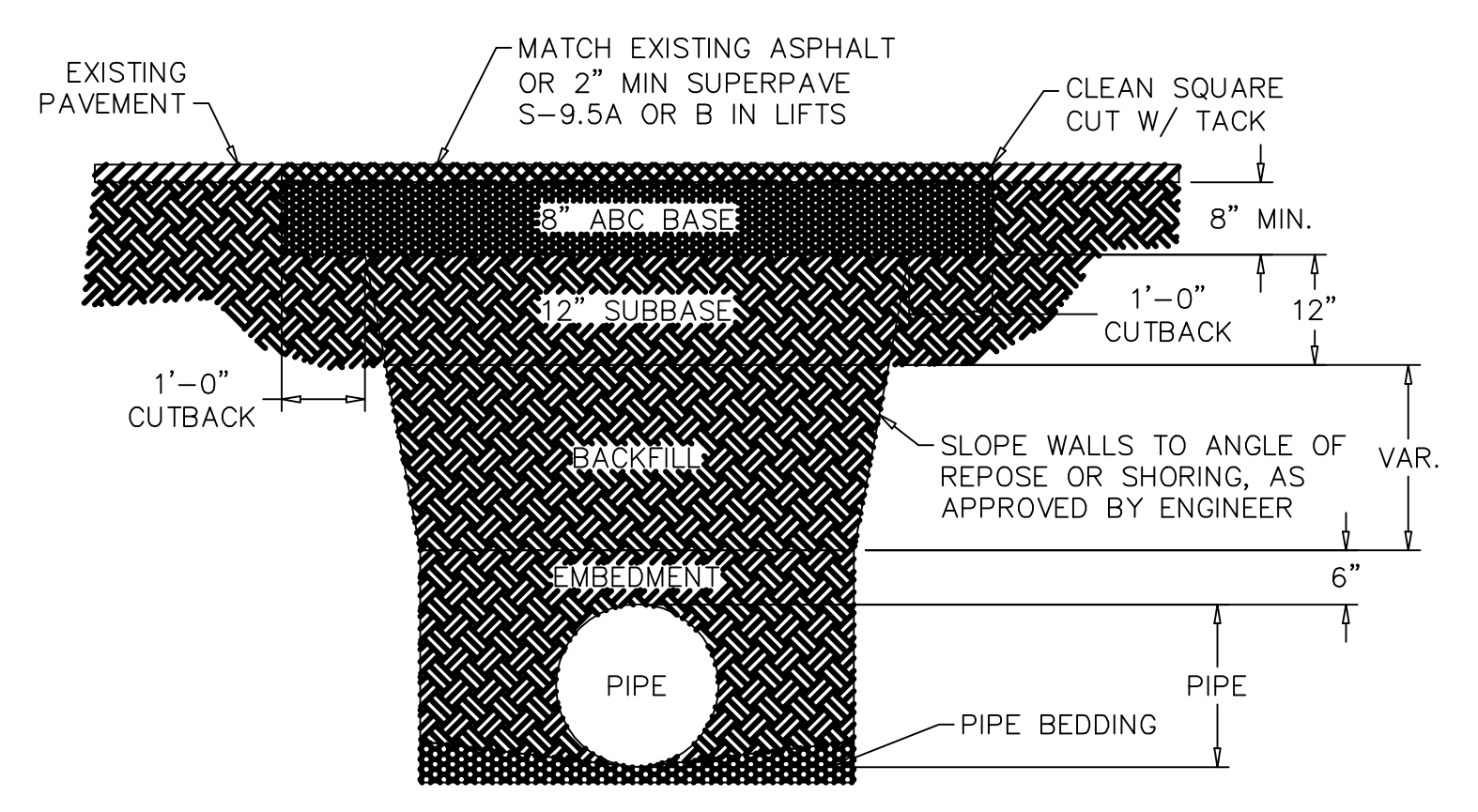
PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID #

DRAWING TITLE
CFPUA Standard Water Details

DRAWING NUMBER
WSD-2



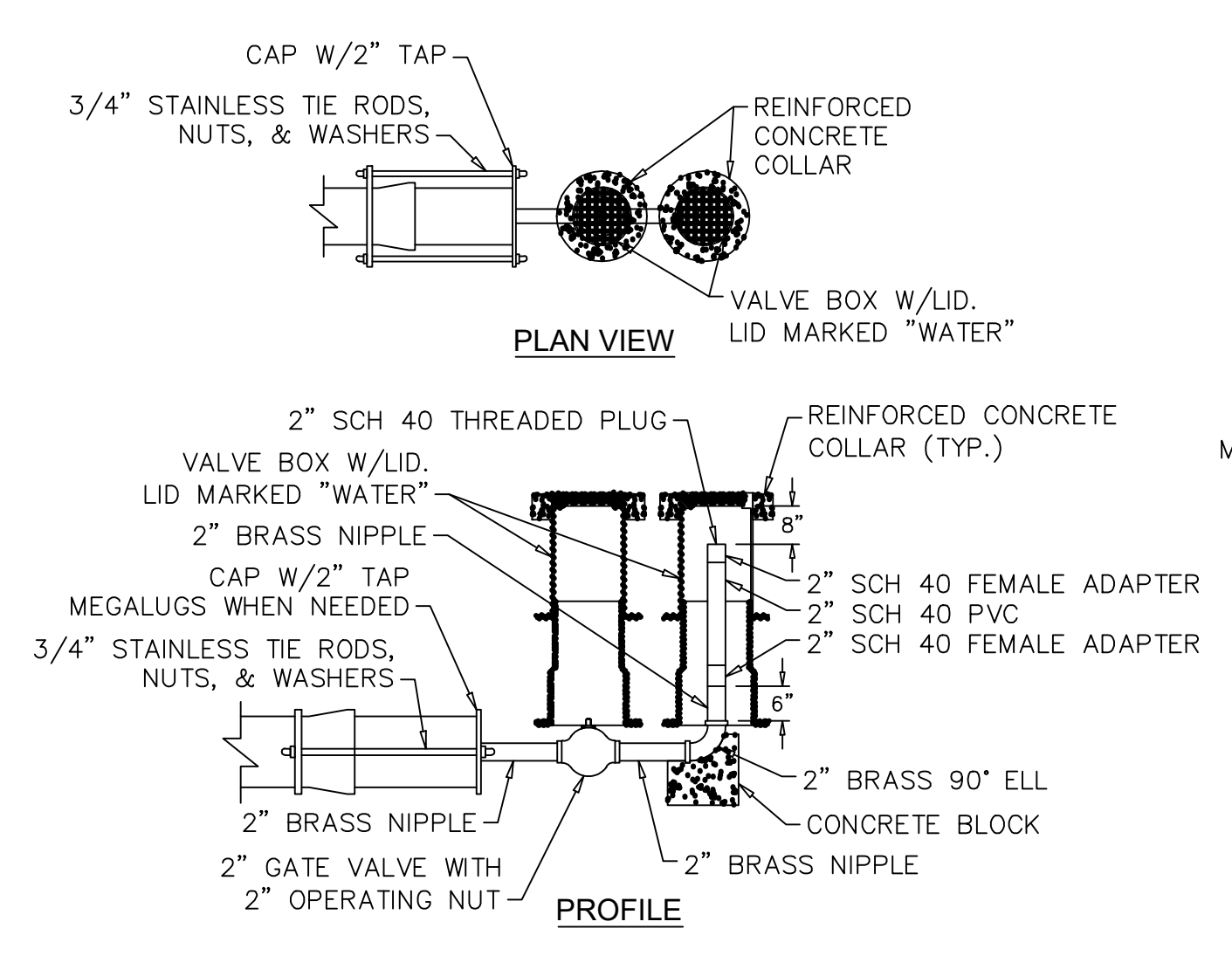
WD-13 TYPICAL TRENCH DETAIL
 NOT TO SCALE



NOTES:
 1. BACKFILL SHALL BE SUITABLE MATERIAL THAT IS FREE FROM HEAVY CLAY, GUMBOS, 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 CUTBACKS OF ASPHALT SHALL BE PREPARED ON UNDISTURBED SOIL. MINIMUM ASPHALT DENSITY IS 90%.

(FOR PRIVATE ROADS AND PAVED AREAS, CONTRACTOR TO MEET MIN. REQUIREMENTS AS DEFINED BY RIGHT-OF-WAY OWNER FOR PUBLIC ROAD REPAIRS)

WD-14 PAVEMENT REPAIR WHERE PIPE INSTALLED
 NOT TO SCALE



WD-5 2\"/>

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

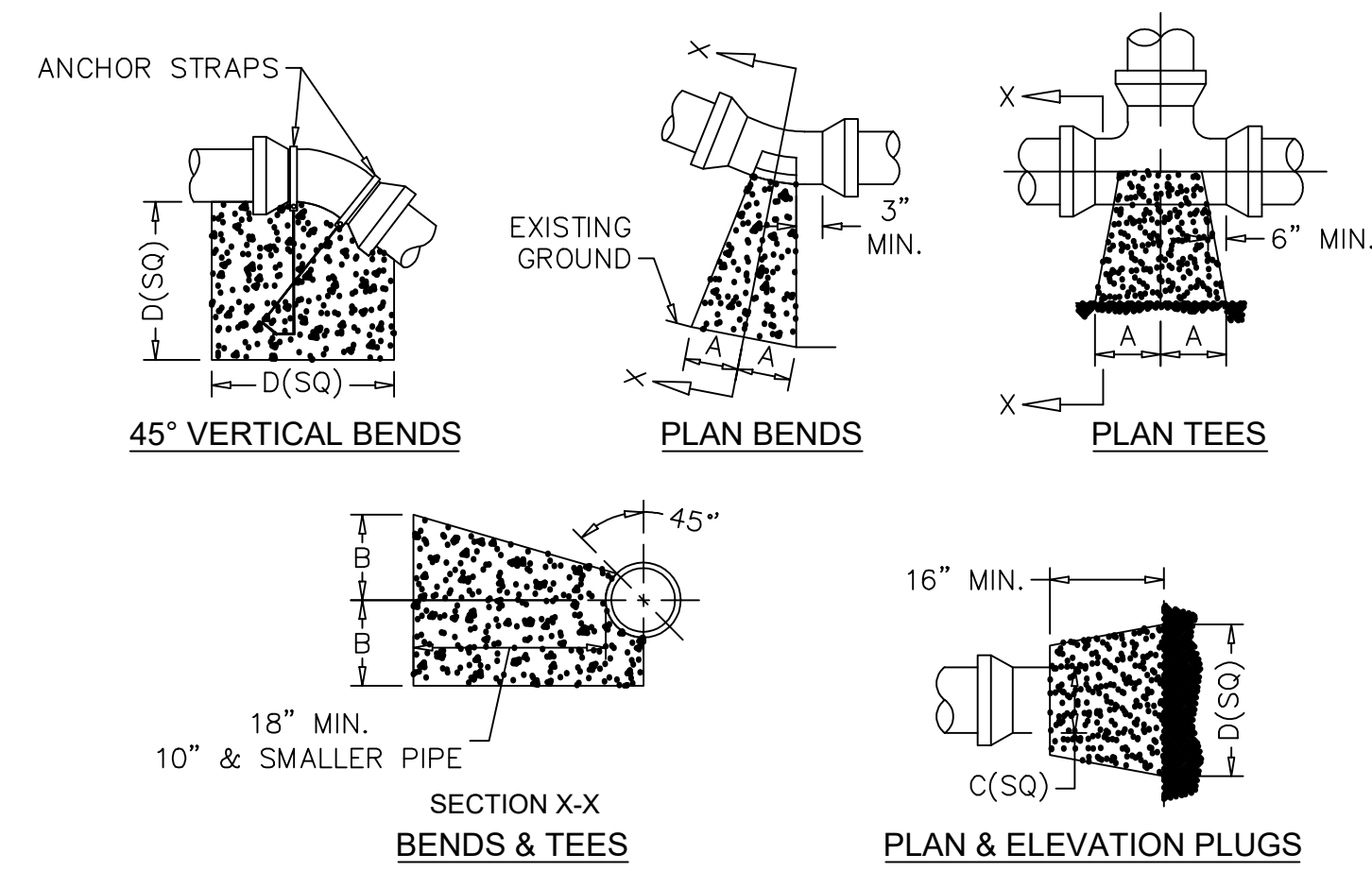
REV.	DESCRIPTION:	DATE:
1	Revised Water Main Ditch and Storm Crossing Detail	11/12/13
2	Revised Water Main Ditch and Storm Crossing Detail	05/05/14
3	Revised Tracer Wire Detail	10/20/15
4	Added Backflow Preventer to Double Service Connection Detail	02/01/16
5	Revised Sampling Station Detail	02/15/16

CFPUA WATER DISTRIBUTION SYSTEM

STANDARD DETAILS

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

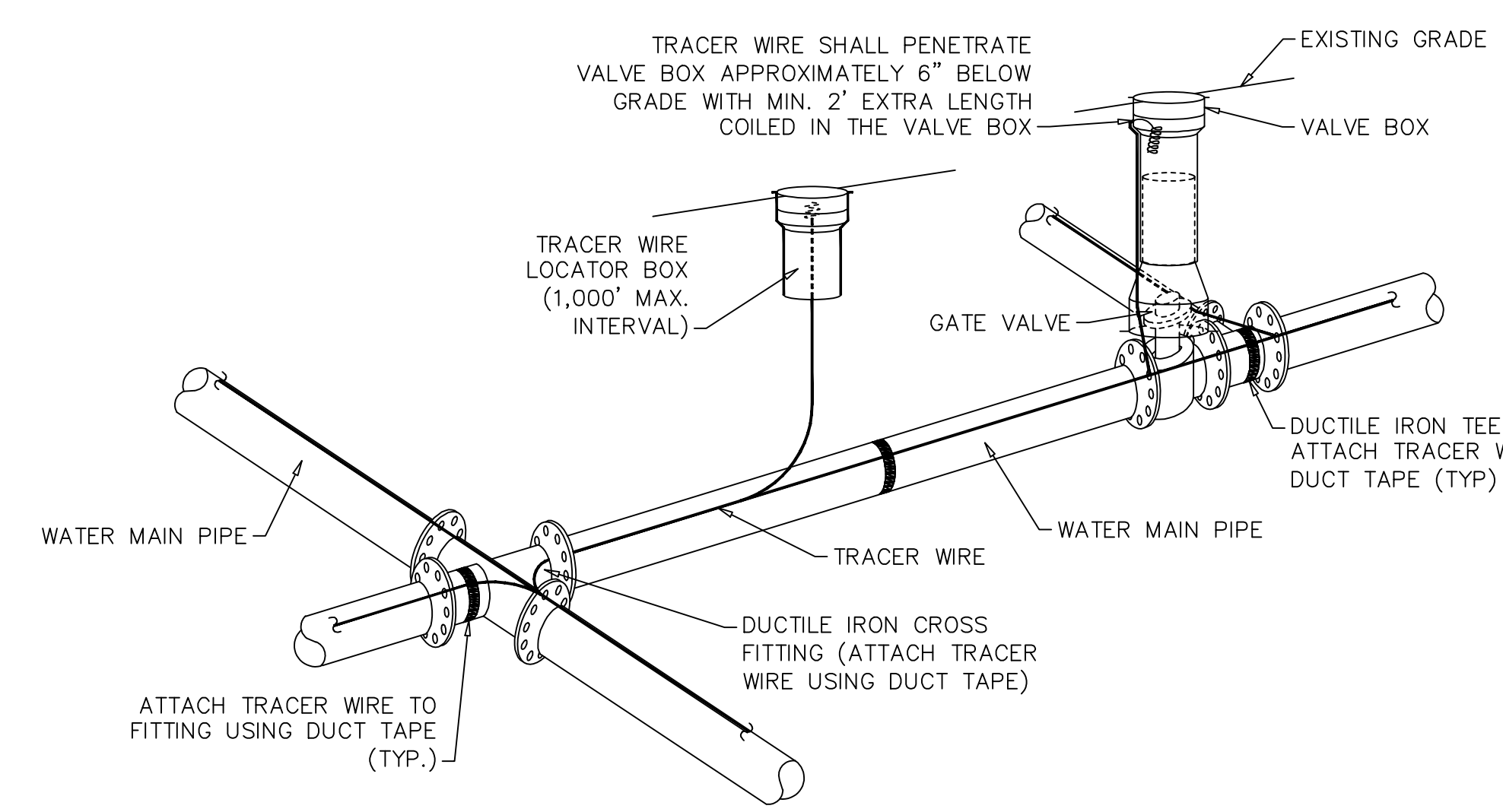
DATE:	1/9/12
SCALE:	N/A
DRAWN BY:	CFPUA
CHECKED BY:	CFPUA
PROJECT NO.:	
SHEET NO.:	WSD-2



SIZE	90° BENDS		45° BENDS		22-1/2° BENDS		TEES/PLUGS		45° VERT. BENDS
	A	B	A	B	A	B	A	B	
3"	8"	6"	5"	6"	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"	16"	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"

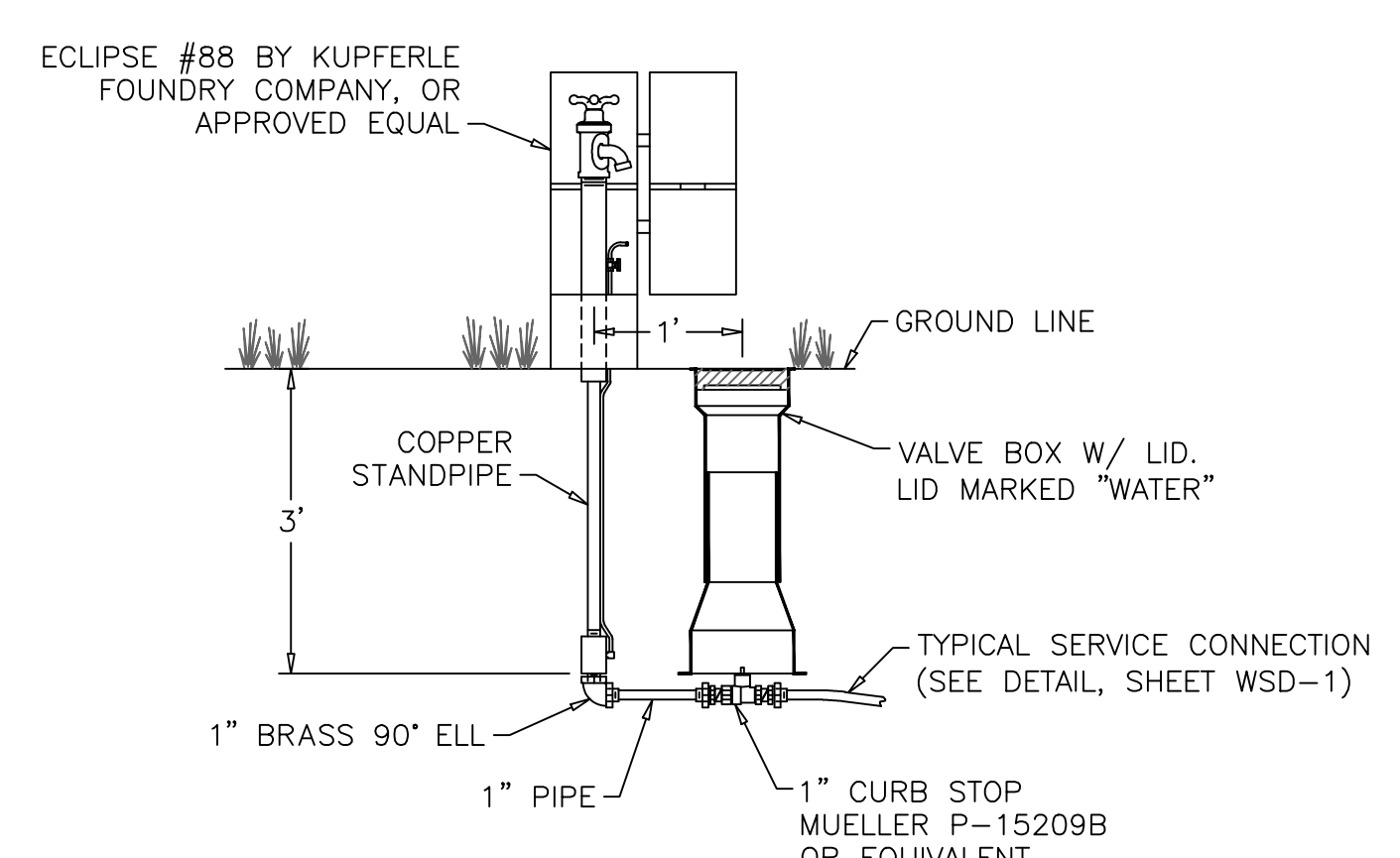
NOTES:
 1. BASED ON 160 PSI TEST PRESSURE AND 2000 PSF SOIL BEARING CAPACITY.
 2. ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED GROUND.
 3. USE MEG-A-LUG (PREFERRED) IN LIEU OF BLOCKING AND RODDING.

WD-4 THRUST BLOCK DETAIL
 NOT TO SCALE

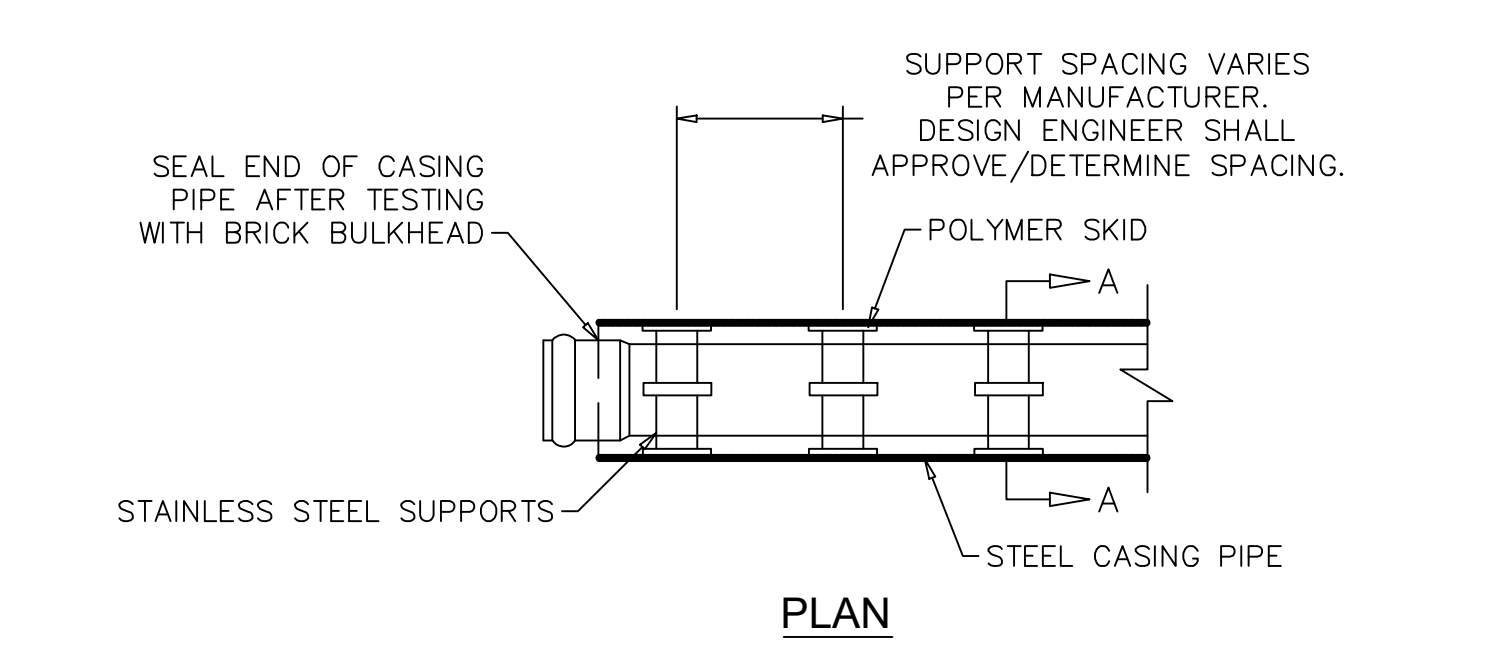


NOTES:
 1. TRACER WIRE SHALL BE #10 COPPER SOLID CORE COPPER WIRE WITH GAS AND OIL RESISTANT INSULATION.
 2. WIRE SHALL BE STRAPPED TO ALL PVC WATER MAIN PIPING WITH DUCT TAPE AT 12 FOOT INTERVALS ALONG THE PIPE.
 3. SECURE WIRE TO ALL TEE AND CROSS FITTINGS WITH DUCT TAPE.
 4. ALL SPLICES IN THE WIRE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

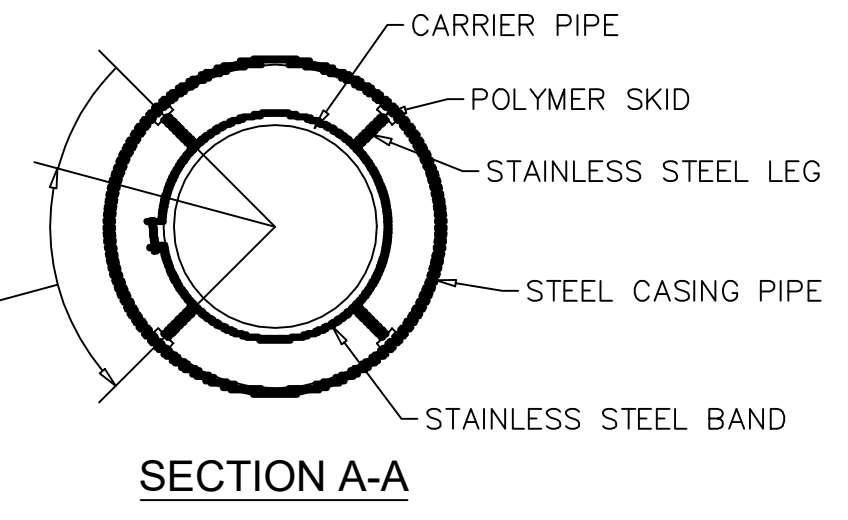
WD-17 TRACER WIRE DETAIL
 NOT TO SCALE



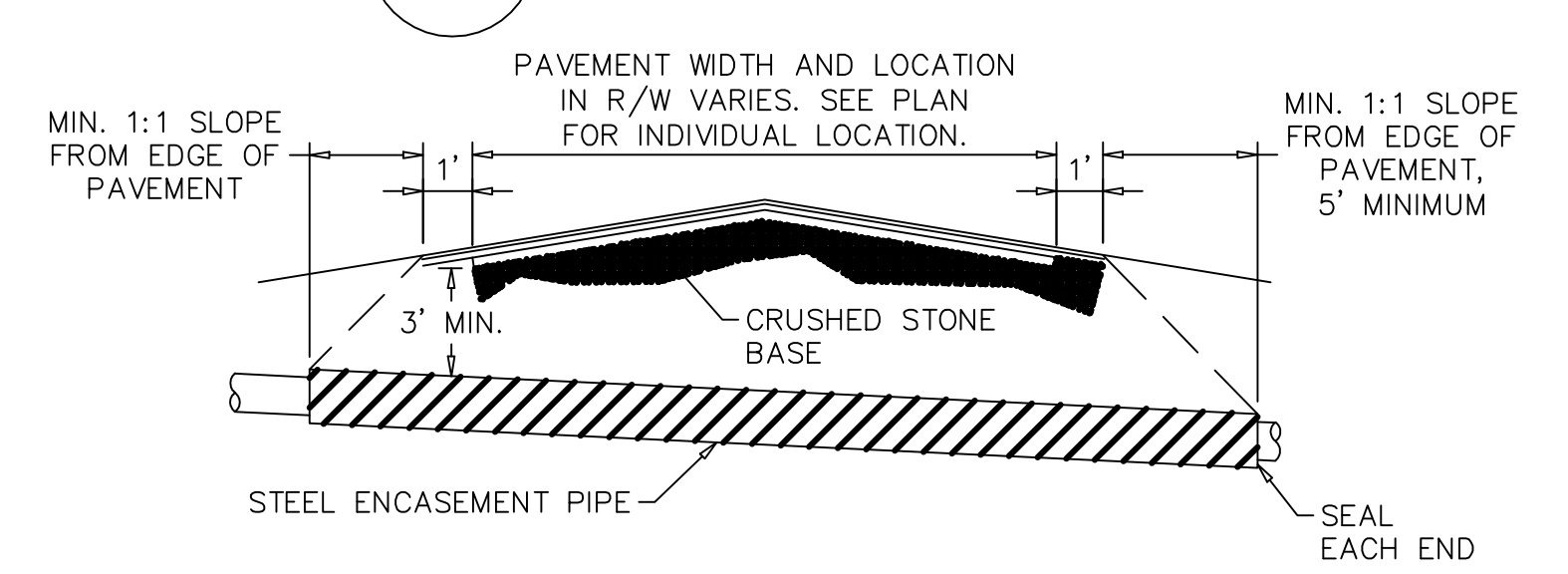
WD-6 SAMPLING STATION
 NOT TO SCALE



NOTE: PIPE SUPPORT TO BE PLACED TO PROVIDE PROPER SUPPORT, ALIGNMENT, AND GRADE AS SPECIFIED. CONTINUOUS SUPPORTS MAY BE USED AS ALTERNATIVE. OIL, GREASE, OR PETROLEUM PRODUCT MAY NOT BE USED AS LUBRICANT.

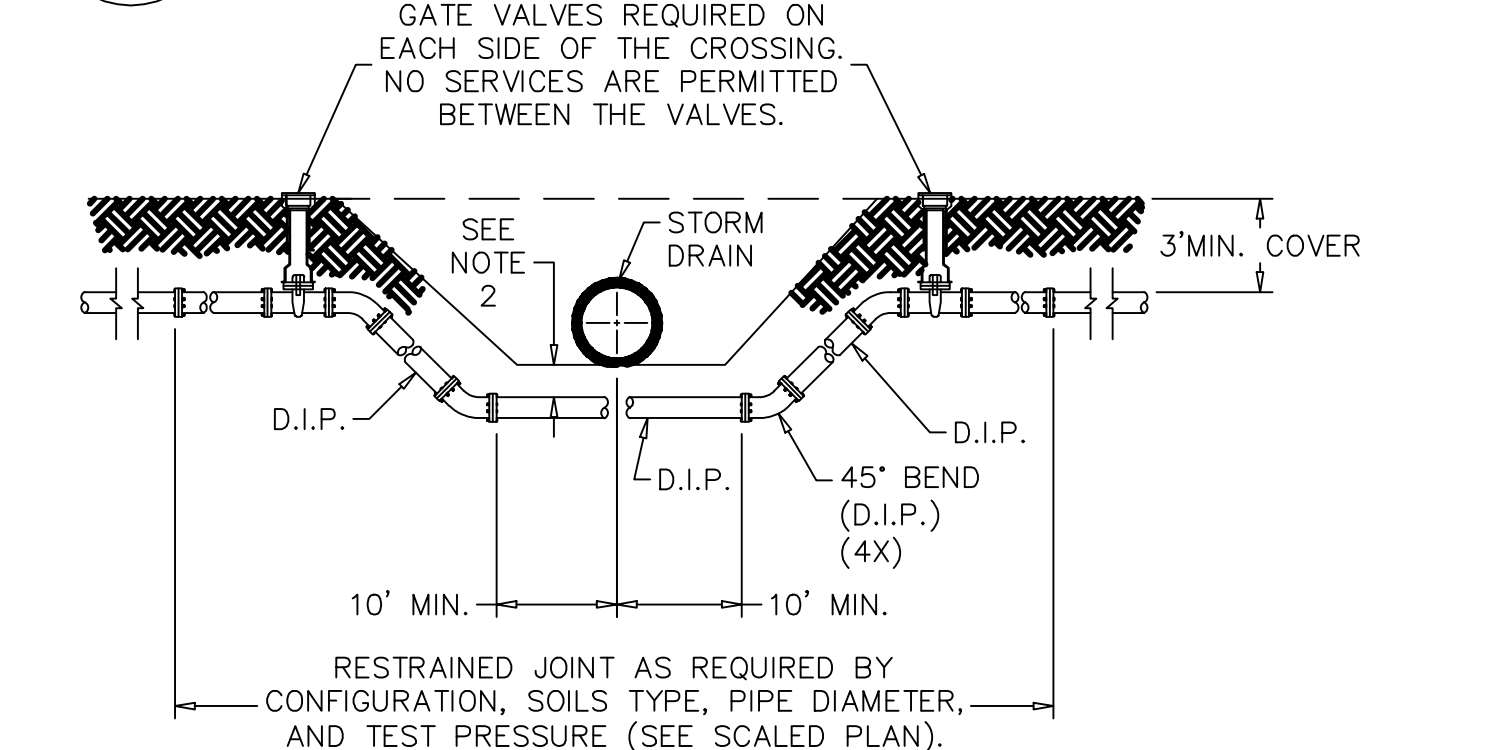


WD-15 PIPE CASING SUPPORT DETAIL
 NOT TO SCALE



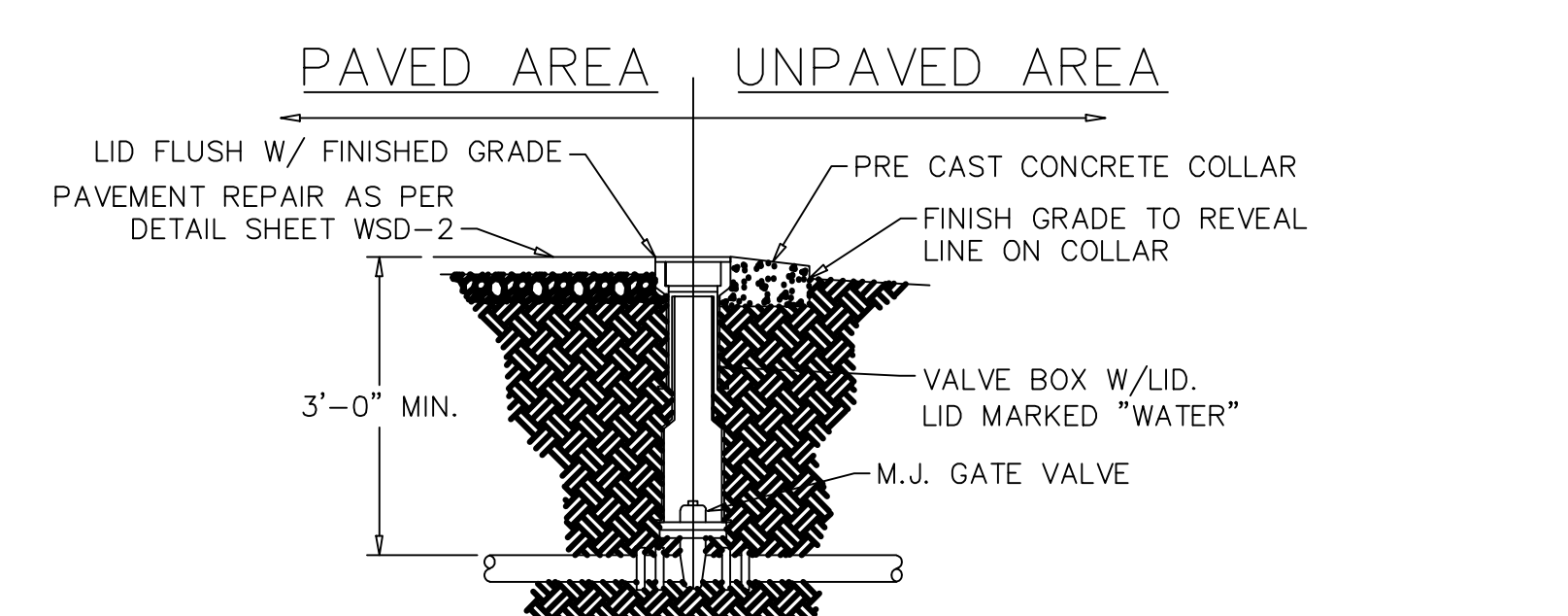
NOTES:
 1. CASING WILL BE INSTALLED AT LINE AND GRADE SHOWN ON INDIVIDUAL PROFILE FOR EACH CROSSING. BORING/JACKING TO LINE AND GRADE IS REQUIRED.
 2. TRACER WIRE SHALL BE CONTINUED THROUGH CASING.

WD-16 TYPICAL BORING/ JACKING DETAIL
 NOT TO SCALE



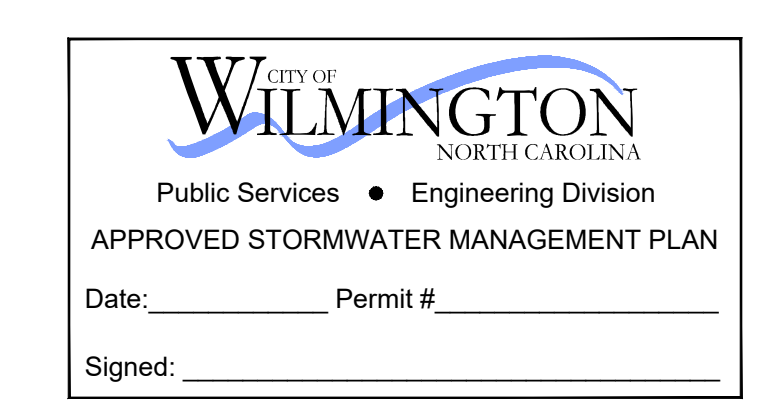
NOTES:
 1. USE PRESSURE CLASS 350 DIP, UNLESS SPECIFIED OTHERWISE.
 2. MINIMUM DEPTH REQUIRED, UNLESS SPECIFIED OTHERWISE BY CFPUA:
 a. IN DOT R/W, 36" MIN. TYPICAL, OR 24" MIN. WHEN CROSSING A DITCH LINE.
 b. ALL OTHER LOCATIONS, 30" MIN.
 c. WHEN STORM DRAIN INVERT IS BURIED AT OR BELOW ABOVE DEPTHS, 18" MIN. CLEARANCE IS REQUIRED.

WD-2 WATER MAIN DITCH AND STORM DRAIN CROSSING
 NOT TO SCALE



WD-3 VALVE DETAIL
 NOT TO SCALE

\\pfs-0000\Department\Engineering\CFPUA Standard Details\CD 1\Draw\CFPUA-Water Details.dwg, 5/16/2016, 8:52:16 AM, jstevens



Approved Construction Plan
 Name: _____ Date: _____
 Planning: _____
 Traffic: _____
 Fire: _____
 Signed: _____



ARCHITECT OF RECORD
VINES ARCHITECTURE, INC.
 530 HILLSBOROUGH STREET
 RALEIGH, NC 27603
 T: 919 755 1975
 F: 888 800 5946
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 151 POOLE ROAD
 SUITE 100
 BELVILLE, NC 28451
 T: 919 383 1044
 WWW.CAPEFEAREENGINEERING.COM

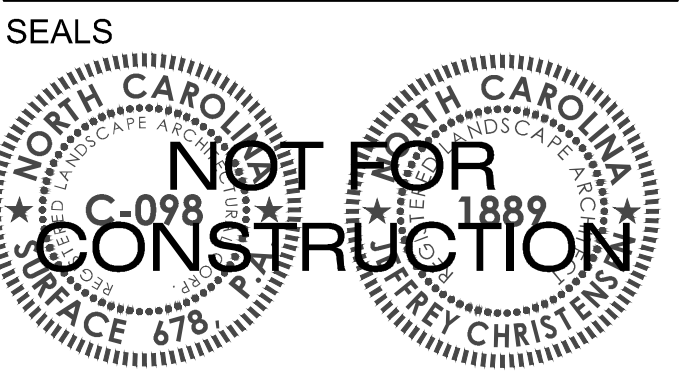
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 RALEIGH, NC 27601
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 GREENSBORO, NC 27408
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 WWW.LIGHTDEFINESFORM.COM

REVISIONS

ISSUED FOR TRC REVIEW 2018-06-13



PINE VALLEY BRANCH LIBRARY

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID -

DRAWING TITLE
MATERIALS PLAN

DRAWING NUMBER

L131

GENERAL NOTES - APPLY TO ALL LANDSCAPE (LXXX) SHEETS

- LOCATION AND TOPOGRAPHICAL INFORMATION WAS TAKEN FROM AN ACTUAL FIELD SURVEY PERFORMED BY BATEMAN CIVIL SURVEY COMPANY, DATED 12/16/2016. SURFACE 678 ASSUMES NO RESPONSIBILITY FOR DESIGN OR CONSTRUCTION CHANGES CAUSED BY INACCURACIES IN SURVEYS.
- THE CONTRACTOR SHALL VISIT THE SITE AND BECOME FAMILIAR WITH EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND FOR ADHERENCE TO ORDINANCES, REGULATIONS, LAWS AND CODES HAVING JURISDICTION OVER THE PROPERTY FOR COMMENCING WORK.
- ALL MATERIALS, CONSTRUCTION, AND WORKMANSHIP SHALL MEET THE CITY OF WILMINGTON AND STATE OF NORTH CAROLINA SPECIFICATIONS AND DESIGN STANDARDS.
- EXISTING UTILITIES SHOWN ARE APPROXIMATE AND SHALL BE VERIFIED IN THE FIELD PRIOR TO BEGINNING WORK. CONTRACTOR SHALL CONTACT NC ONE CALL CENTER AT 1-800-632-4949 FOR LOCATION OF EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN WORKING AROUND EXISTING UTILITIES TO REMAIN.
- ALL WORK WITHIN THE NCDOT ROW SHALL CONFORM TO NCDOT STANDARDS AND SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN ALL NEEDED PERMITS, AGREEMENTS AND SUPPLY NOTIFICATIONS OF CLOSURES FROM THE NCDOT.
- CONSTRUCTION STAKEOUT FOR THIS PROJECT SHALL BE PROVIDED BY THE CONTRACTOR USING A DIGITAL (CAD) FILE PROVIDED THROUGH THE ARCHITECT/GC. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES FOUND BETWEEN THE DIGITAL FILE AND THE STAKING DIMENSIONS SHOWN ON THE PLAN OR DISCREPANCIES FOUND BETWEEN THE LAYOUT AND THE SITE. ANY MODIFICATIONS MADE BY OTHERS TO THE DIGITAL FILE PROVIDED SHALL RENDER IT VOID. IN THE EVENT OF DISCREPANCIES BETWEEN THE CONTRACT DOCUMENTS AND THE DESIGN LAYOUT OR EXISTING CONDITIONS, THE CONTRACT DOCUMENTS TAKE PRECEDENCE OVER THE DIGITAL FILE.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING SLEEVING FOR ELECTRIC, DRAINAGE, AND UTILITIES PRIOR TO THE INSTALLATION OF COMPACTED SUB-GRADE, SUB-BASE AND PAVEMENT AS NECESSARY. SLEEVES TO BE INSTALLED AT A MINIMUM DEPTH BELOW GRADE AS PER LOCAL CODES.
- ROADWAYS AND BUILDINGS MUST BE CAPABLE OF SUPPORTING FIRE AND EMERGENCY APPARATUS DURING CONSTRUCTION.
- SEE CIVIL SHEET FOR SEDIMENTATION AND EROSION CONTROL MEASURES.
- SEE CIVIL SHEET FOR UTILITY AND UNDERGROUND STORM DRAINAGE INFORMATION AND VEHICULAR PAVING AREAS.

SITE PLANNING NOTES

- ALL SIGNS, PAVEMENT MARKINGS, AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION AS AMENDED, AND ARE THE CONTRACTOR'S RESPONSIBILITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL IN OR ADJACENT TO NCDOT OR CITY RIGHT-OF-WAY. ALL METHODS SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NCDOT STANDARDS.
- CONTRACTOR SHALL PROVIDE SAW CUTS AT THE UNION BETWEEN EXISTING CONDITIONS AND PROPOSED CONSTRUCTION UNLESS OTHERWISE NOTED. REFER TO PLANS FOR ADDITIONAL INFORMATION.
- UNLESS NOTED ON THE DRAWINGS ALL BUFFERS, WETLANDS, STREAM CHANNELS, SETBACKS AND TREE PROTECTION AREAS SHALL BE PROTECTED WITH NO CONSTRUCTION ACCESS. STORAGE OR USE OF ANY KIND, THE CONTRACTOR SHALL KEEP CONSTRUCTION ACTIVITIES WITHIN THE PROJECT LIMITS SHOWN ON THE DRAWINGS.
- ALL DIMENSIONS INDICATING "VERIFY" SHALL BE CONFIRMED BY THE CONTRACTOR PRIOR TO STARTING CONSTRUCTION - REPORT ANY DISCREPANCIES IMMEDIATELY TO THE LANDSCAPE ARCHITECT.
- ALL DIMENSIONS LABELED "EQ" ARE TO INDICATE EQUAL MEASUREMENTS BETWEEN THE DIMENSIONS END POINTS ON THE DRAWING.
- STREET AND PARKING DIMENSIONS ARE FROM FACE OF CURB UNLESS OTHERWISE INDICATED.
- THE CONTRACTOR SHALL STAKE THE LAYOUT AND ALIGNMENT OF ALL PAVEMENTS, WALLS, AND OTHER SITE FEATURES IN THE FIELD FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO START OF CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE SMOOTH LAYOUT ALIGNMENTS BETWEEN EXISTING CONDITIONS AND PROPOSED SITE IMPROVEMENTS.
- ALL ANGLES ARE 90 DEGREES UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- UNLESS OTHERWISE NOTED, CONCRETE SCORE AND EXPANSION JOINTS SHALL BE ALIGNED WITH BUILDING FEATURES AND WITH CORNERS OF PAVEMENT. SPACE THE ADDITIONAL JOINTS BETWEEN THESE POINTS EQUALLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL EXISTING JOB CONDITIONS. ANY ADVERSE EXISTING CONDITIONS AFFECTING THE WORK SHOWN ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT FOR POSSIBLE CLARIFICATION OR RECONCILIATION.
- ITEMS LABELED AS "BY OTHERS" OR "NIC" ARE FOR COORDINATION ONLY. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ANY SUCH ITEMS WITH THE OWNER'S REPRESENTATIVE.

MATERIALS LEGEND	
	LIGHT DUTY CONCRETE
	HEAVY DUTY CONCRETE
	DECORATIVE GRAVEL
	BIKE RACK
	TRASH RECEPTACLE
	CAST IN PLACE CONCRETE SEATWALL
	SAW-CUT CONTROL JOINT
	EXPANSION JOINT
	DECORATIVE STONE FRENCH DRAIN
	DETECTABLE WARNING DOME PAVERS
	LANDSCAPE SUBDRAINAGE: 6" HDPE TYPE S SMOOTH WALL PIPE, 1% SLOPE MIN. TIE INTO STORM DRAIN SYSTEM
	SUBDRAINAGE CLEANOUT

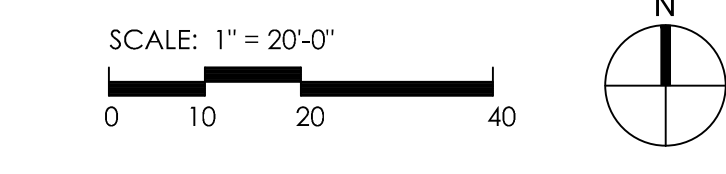
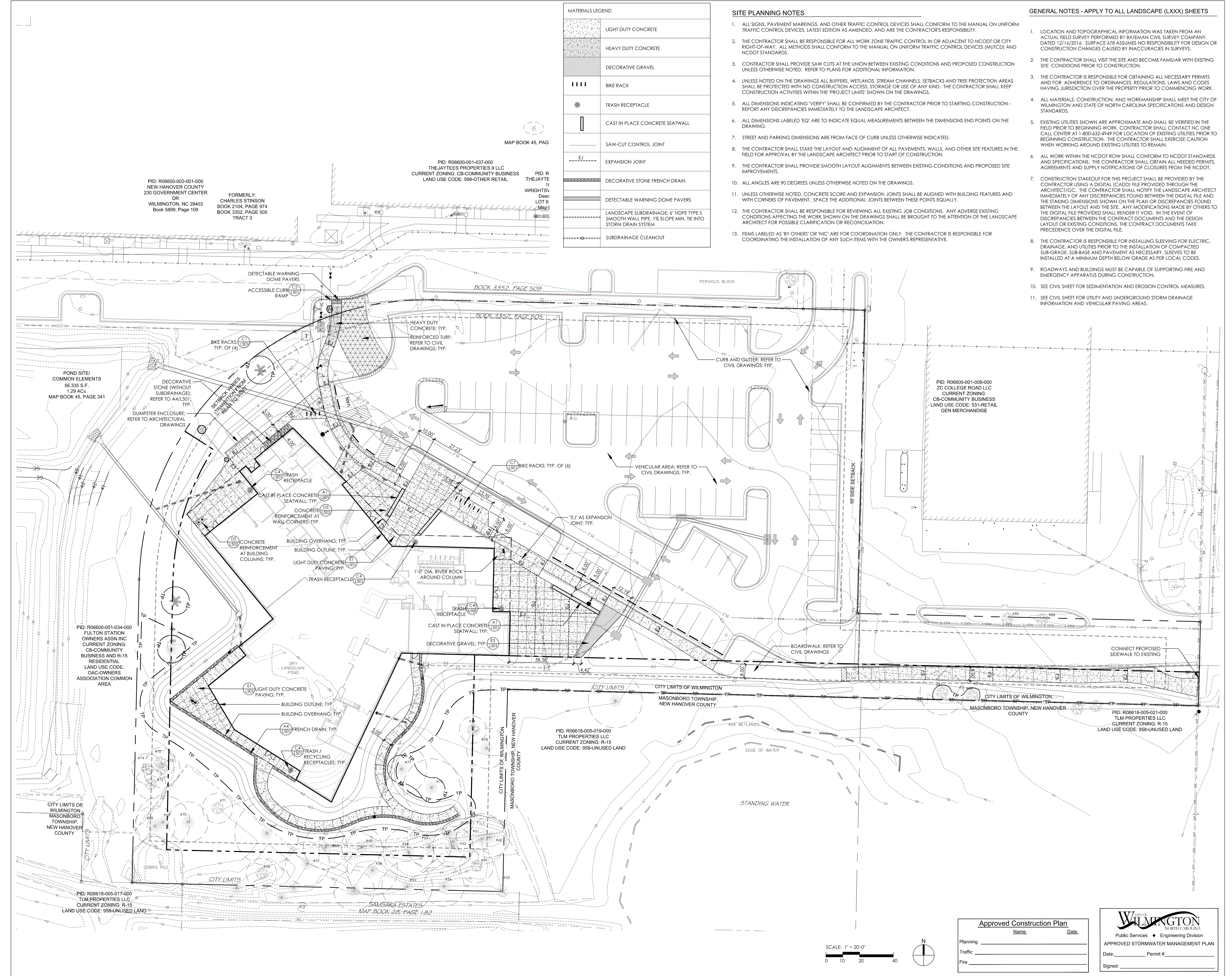
MAP BOOK 45, PAGE 6

PID: R06600-001-037-000
 THEJAYTES PROPERTIES II LLC
 CURRENT ZONING: CB-COMMUNITY BUSINESS
 LAND USE CODE: 599-OTHER RETAIL

PID: R THEJAYTE
 1E
 WRIGHTSV
 Dec
 LOT 6
 (Map)

PID: R06600-002-001-000
 NEW HANOVER COUNTY
 230 GOVERNMENT CENTER
 DR
 WILMINGTON, NC 28403
 Book 5899, Page 109

FORMERLY:
 CHARLES STINSON
 BOOK 2104, PAGE 874
 BOOK 3352, PAGE 505
 TRACT 3



Approved Construction Plan

Name	Date
Planning _____	_____
Traffic _____	_____
Fire _____	_____

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

Date: _____ Permit # _____
 Signed: _____

PID: R06618-005-017-000
 TLM PROPERTIES LLC
 CURRENT ZONING: R-15
 LAND USE CODE: 958-UNUSED LAND

PID: R06618-005-019-000
 TLM PROPERTIES LLC
 CURRENT ZONING: R-15
 LAND USE CODE: 958-UNUSED LAND

PID: R06618-005-021-000
 TLM PROPERTIES LLC
 CURRENT ZONING: R-15
 LAND USE CODE: 958-UNUSED LAND

POND SITE/
 COMMON ELEMENTS
 56,335 S.F.
 1.29 ACs
 MAP BOOK 45, PAGE 341

PID: R06600-001-008-000
 ZC COLLEGE ROAD LLC
 CURRENT ZONING:
 CB-COMMUNITY BUSINESS
 LAND USE CODE: 531-RETAIL
 GEN MERCHANDISE

PID: R06600-001-034-000
 FULTON STATION
 OWNERS ASSN INC
 CURRENT ZONING:
 CB-COMMUNITY
 BUSINESS AND R-15
 RESIDENTIAL
 LAND USE CODE:
 OAC-OWNERS
 ASSOCIATION COMMON
 AREA

SAVANA ESTATES
 MAP BOOK 28, PAGE 182



IMAGE #1: EXISTING PARKING TREES AND BUFFER VEGETATION

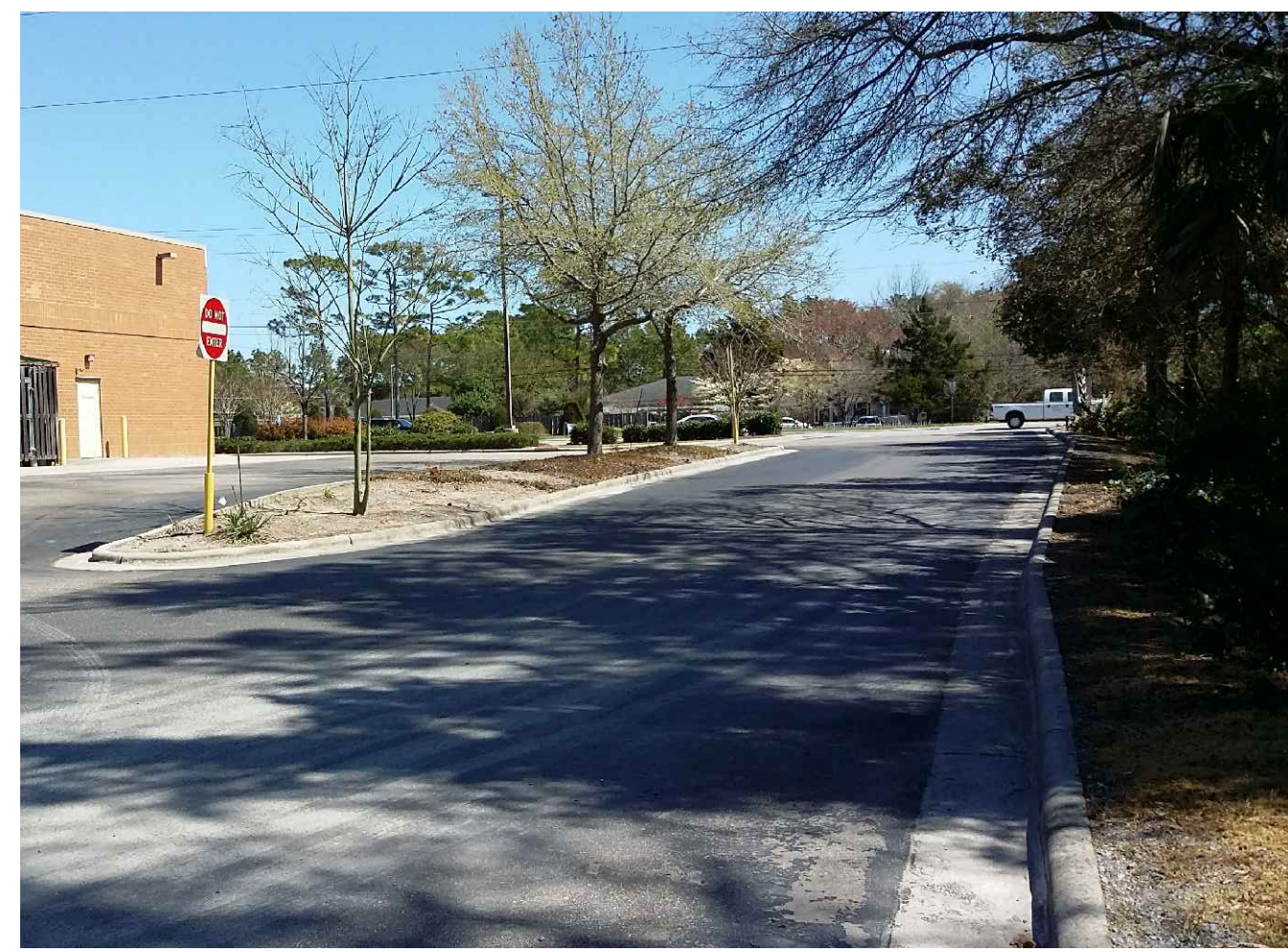


IMAGE #2: EXISTING PARKING TREES

PLANT SCHEDULE - CONTRACTOR SHALL SATISFY ALL MINIMUM MEASUREMENTS NOTED
 *** DENOTES TREES USED TO SATISFY SEC. 18-448J REQUIREMENT OF (15) MIN. TREES PER DISTURBED ACRE

QTY	BOTANICAL NAME	COMMON NAME	MIN. CAL.	MIN. HT.	MIN. SPR.	NOTES
*** 26	QUERCUS LAURIFOLIA 'DARLINGTON'	LAUREL OAK	2.5" CAL.	12'-0"	6'-0"	STRONG CENTRAL LEADER; FULL DENSE, MATCHING; EVENLY BRANCHED
*** 2	TAXODIUM DISTICHUM 'MICKELSON'	SHAWNEE BRAVE BALD CYPRESS	2.5" CAL.	12'-0"	4'-0"	STRONG CENTRAL LEADER; EVENLY BRANCHED; COLUMNAR
3,146	ERAGROSTIS SPECTABILIS	PURPLE LOVEGRASS	2 1/2" PLUG			12" O.C.
FOUNDATION PLANTING REQUIREMENT						
38	AZALEA 'AUTUMN LILY'	AUTUMN LILY ENCORE AZALEA	CONT.	12"	12"	FULL DENSE, MATCHING; 3'-0" O.C.
28	ILEX VOMITORIA 'NANA'	DWARF YAUPON HOLLY	CONT.	12"	12"	FULL DENSE, MATCHING; 2'-6" O.C.
BUFFER PLANTING REQUIREMENT						
7	MAGNOLIA VIRGINIANA	SWEETBAY	2.5" CAL.	12'-0"	3'-0"	STRONG CENTRAL LEADER; FULL TO GROUND, DENSE, EVENLY BRANCHED
10	ILEX VOMITORIA	YAUPON HOLLY	CONT.	3'-0"	2'-0"	FULL TO GROUND, DENSE, 6'-0" O.C.
88	MYRICA CERIFERA	WAX MYRTLE	CONT.	3'-0"	2'-0"	FULL TO GROUND, DENSE, 5'-0" O.C.
5	PRUNUS CAROLINIANA	CAROLINA CHERRY LAUREL	CONT.	3'-0"	2'-0"	FULL TO GROUND, DENSE, 8'-0" O.C.
ADDITIONAL TREES REQUIRED TO PROVIDE (15) TREES MIN. PER DISTURBED ACRE						
*** 8	TAXODIUM DISTICHUM	BALD CYPRESS	2.5" CAL.	12'-0"	6'-0"	STRONG CENTRAL LEADER; EVENLY BRANCHED
*** 2	PINUS PALUSTRIS	LONGLEAF PINE	2.5" CAL.	12'-0"	6'-0"	DENSE, EVENLY BRANCHED

INTERIOR PARKING LOT LANDSCAPING:
 SEC. 18-481
 INTERIOR AREA OF PARKING FACILITY TO BE SHADED BY CANOPY TREES TO PROVIDE 20% OR GREATER CANOPY COVERAGE AT MATURITY FOR R-15 DISTRICT ZONING.
 REQUIRED: 9,216 SF (20% OF SHADE COVER)
 (48,814 SF TOTAL PARKING FACILITY AREA x 20% = 9,763 SF)
 PROVIDED: 14,560 SF (30% OF SHADE COVER)

FOUNDATION PLANTING REQUIREMENT
 SEC. 18-490g
 AREA OF BUILDING FACE ADJACENT TO THE PARKING AREA OR INTERNAL DRIVE AISLE x 12% = REQUIRED SQUARE FEET OF PLANT MATERIAL
 REQUIRED: 520 SF PLANTING AREA
 AREA OF BUILDING FACE AT 17'-0" HT. = 3,910 SF
 (230 LF x 17 FT HT.)
 AREA OF BUILDING FACE BETWEEN 17'-0" HT. AND 24'-0" HT. = 420 SF
 (.5 x 120 LF x 7 FT HT.)
 (3,910 SF + 420 SF) x 12% = 520 SF PLANTING AREA
 PROVIDED: 403 SF PLANTING AREA

CITY OF WILMINGTON PLANTING REQUIREMENTS

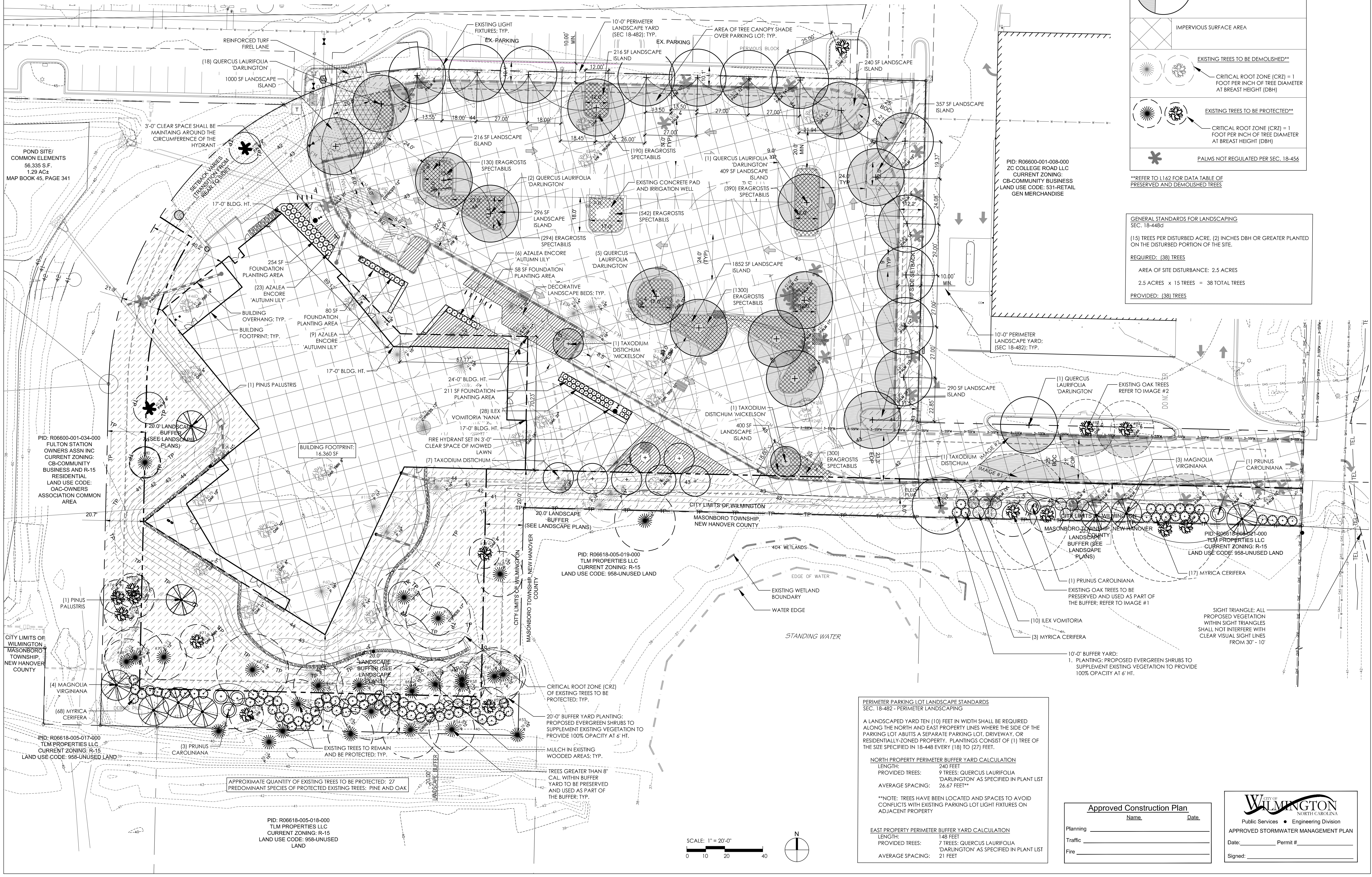
1. PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION ACTIVITY, TREE PROTECTION FENCING WILL BE INSTALLED AROUND PROTECTED TREES OR GROVES OF TREES. NO CONSTRUCTION WORKERS, TOOLS, MATERIALS, OR VEHICLES ARE PERMITTED WITHIN THE TREE PROTECTION FENCING.

PLANTING LEGEND

- SOD: TIFTURF BERMUDA (SAND BASED SOD)
- ORNAMENTAL GRASS PARKING LOT ISLANDS
ERAGROSTIS SPECTABILIS - PURPLE LOVEGRASS
- DECORATIVE PLANTING BEDS - NOT REQUIRED BY THE CITY OF WILMINGTON
- MULCH AREAS
- AREA OF INTERNAL PARKING LOT FOR LANDSCAPE CALCULATIONS
- CANOPY TREES
REFER TO PLANT LIST FOR SPECIES
- AREA OF TREE CANOPY SHADE OVER PARKING LOT; TYP.
- IMPERVIOUS SURFACE AREA
- EXISTING TREES TO BE DEMOLISHED**
CRITICAL ROOT ZONE (CRZ) = 1 FOOT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH)
- EXISTING TREES TO BE PROTECTED**
CRITICAL ROOT ZONE (CRZ) = 1 FOOT PER INCH OF TREE DIAMETER AT BREAST HEIGHT (DBH)
- PALMS NOT REGULATED PER SEC. 18-454

**REFER TO L162 FOR DATA TABLE OF PRESERVED AND DEMOLISHED TREES

GENERAL STANDARDS FOR LANDSCAPING
 SEC. 18-448j
 (15) TREES PER DISTURBED ACRE, (2) INCHES DBH OR GREATER PLANTED ON THE DISTURBED PORTION OF THE SITE.
 REQUIRED: (38) TREES
 AREA OF SITE DISTURBANCE: 2.5 ACRES
 2.5 ACRES x 15 TREES = 38 TOTAL TREES
 PROVIDED: (38) TREES



ARCHITECT OF RECORD
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REVISIONS

ISSUED FOR TRC REVIEW 2018-06-13

SEALS

NOT FOR CONSTRUCTION

PINE VALLEY BRANCH LIBRARY

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 ISSUE FOR BID
 DATE MAY 15, 2018
 PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005
 SCO ID

DRAWING TITLE
**PLANTING PLAN
 REQUIRED BY THE
 CITY OF WILMINGTON**

DRAWING NUMBER
L161

PERIMETER PARKING LOT LANDSCAPE STANDARDS
 SEC. 18-482 - PERIMETER LANDSCAPING

A LANDSCAPED YARD TEN (10) FEET IN WIDTH SHALL BE REQUIRED ALONG THE NORTH AND EAST PROPERTY LINES WHERE THE SIDE OF THE PARKING LOT ADJUTS A SEPARATE PARKING LOT, DRIVEWAY, OR RESIDENTIALLY-ZONED PROPERTY. PLANTINGS CONSIST OF (1) TREE OF THE SIZE SPECIFIED IN 18-448 EVERY (18) TO (27) FEET.

NORTH PROPERTY PERIMETER BUFFER YARD CALCULATION
 LENGTH: 240 FEET
 PROVIDED TREES: 9 TREES: QUERCUS LAURIFOLIA 'DARLINGTON' AS SPECIFIED IN PLANT LIST
 AVERAGE SPACING: 26.67 FEET**

**NOTE: TREES HAVE BEEN LOCATED AND SPACES TO AVOID CONFLICTS WITH EXISTING PARKING LOT LIGHT FIXTURES ON ADJACENT PROPERTY

EAST PROPERTY PERIMETER BUFFER YARD CALCULATION
 LENGTH: 148 FEET
 PROVIDED TREES: 7 TREES: QUERCUS LAURIFOLIA 'DARLINGTON' AS SPECIFIED IN PLANT LIST
 AVERAGE SPACING: 21 FEET

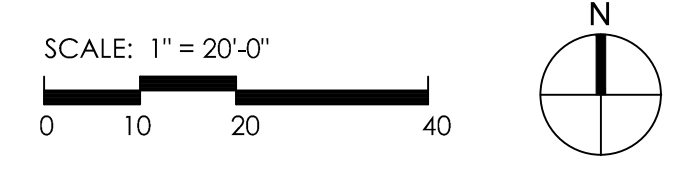
Approved Construction Plan

Name _____ Date _____

Planning _____
 Traffic _____
 Fire _____

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

Date: _____ Permit #: _____
 Signed: _____





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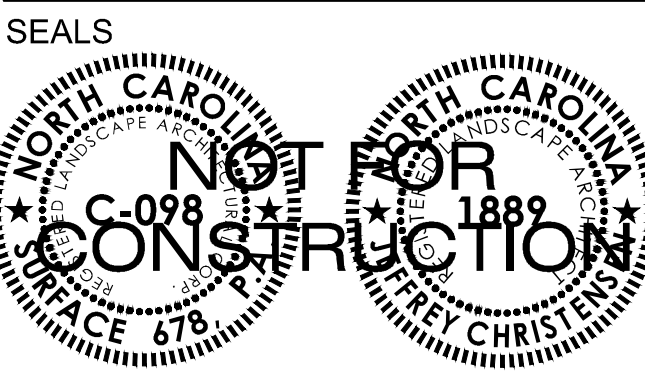
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REVISIONS

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PINE VALLEY BRANCH LIBRARY

OWNER
NEW HANOVER COUNTY

PHASE PRELIMINARY
 DATE MAY 15, 2018

PROJECT PINE VALLEY BRANCH
 VA PROJECT # 2016005

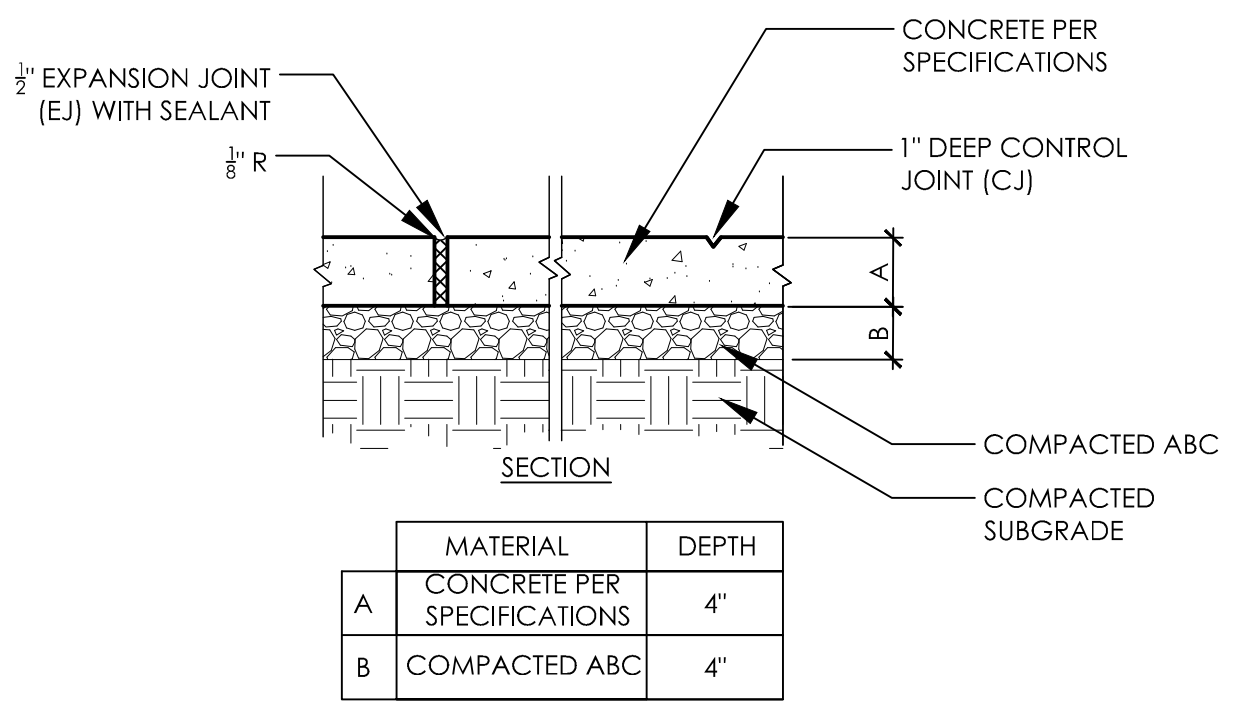
SCO ID -

DRAWING TITLE

DETAILS

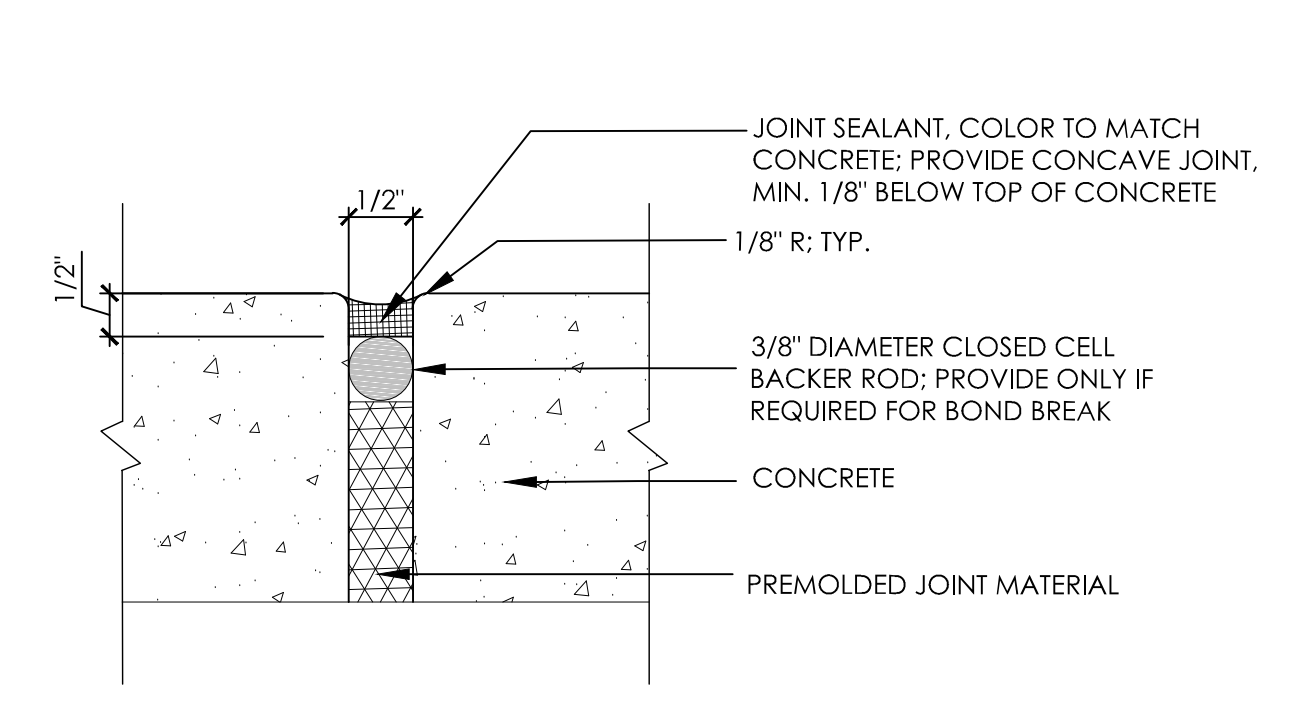
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L501

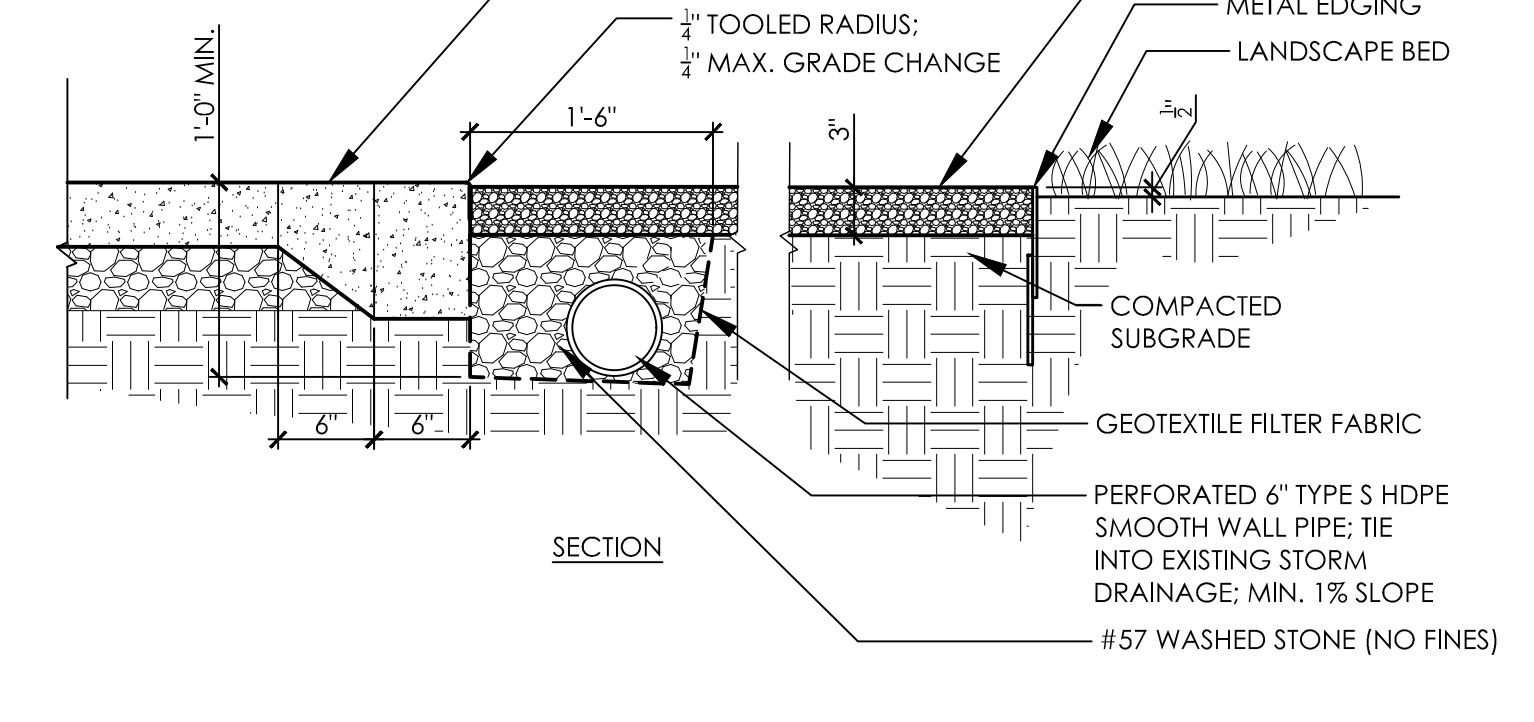


E1 LIGHT DUTY CONCRETE PAVING
 1"=1'-0"

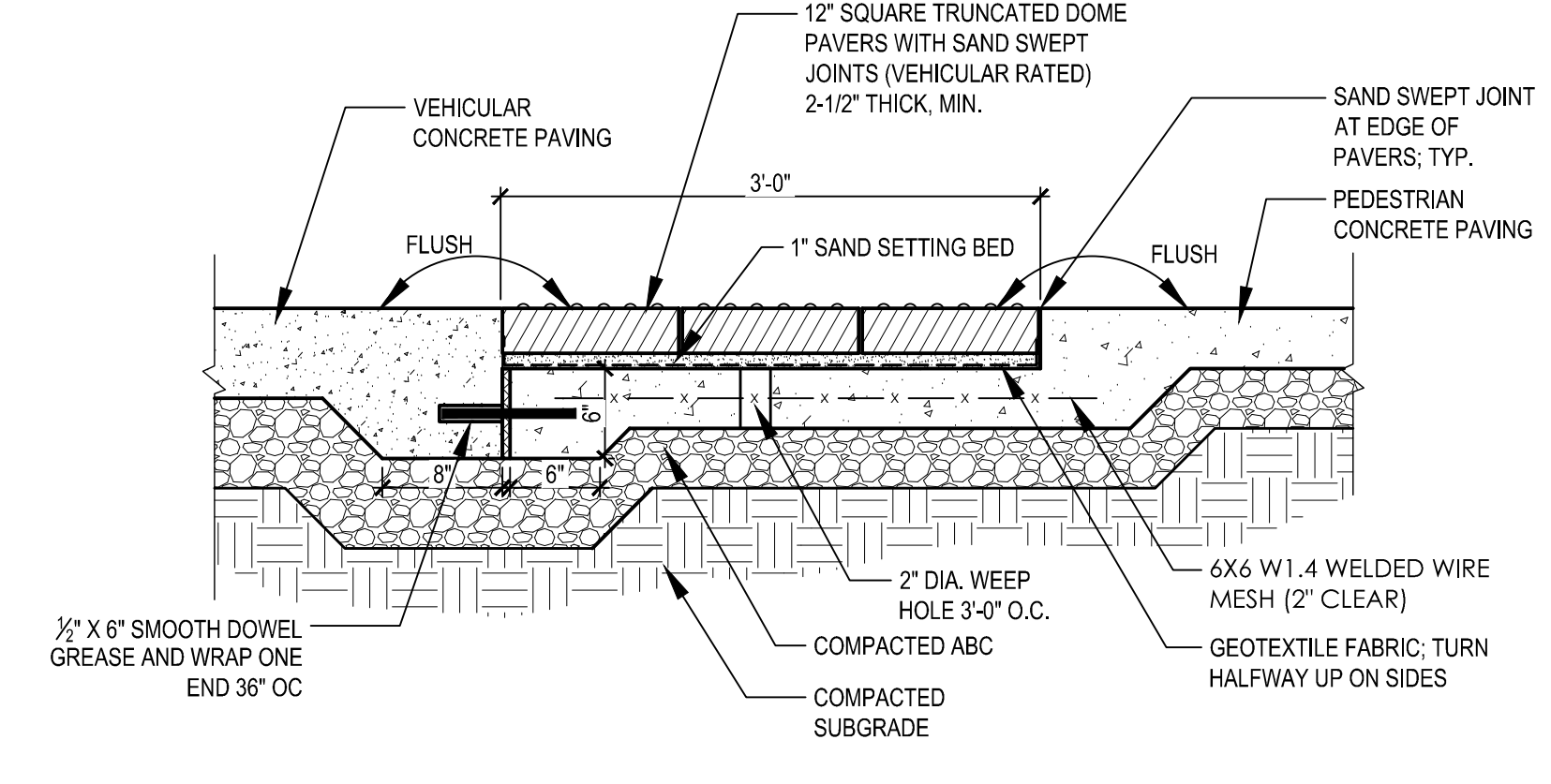
NOTES:
 1. REFER TO CIVIL DRAWINGS FOR HEAVY DUTY CONCRETE DEPTHS IN VEHICULAR AREAS.



E2 EXPANSION JOINT ENLARGEMENT
 1"=1'-0"

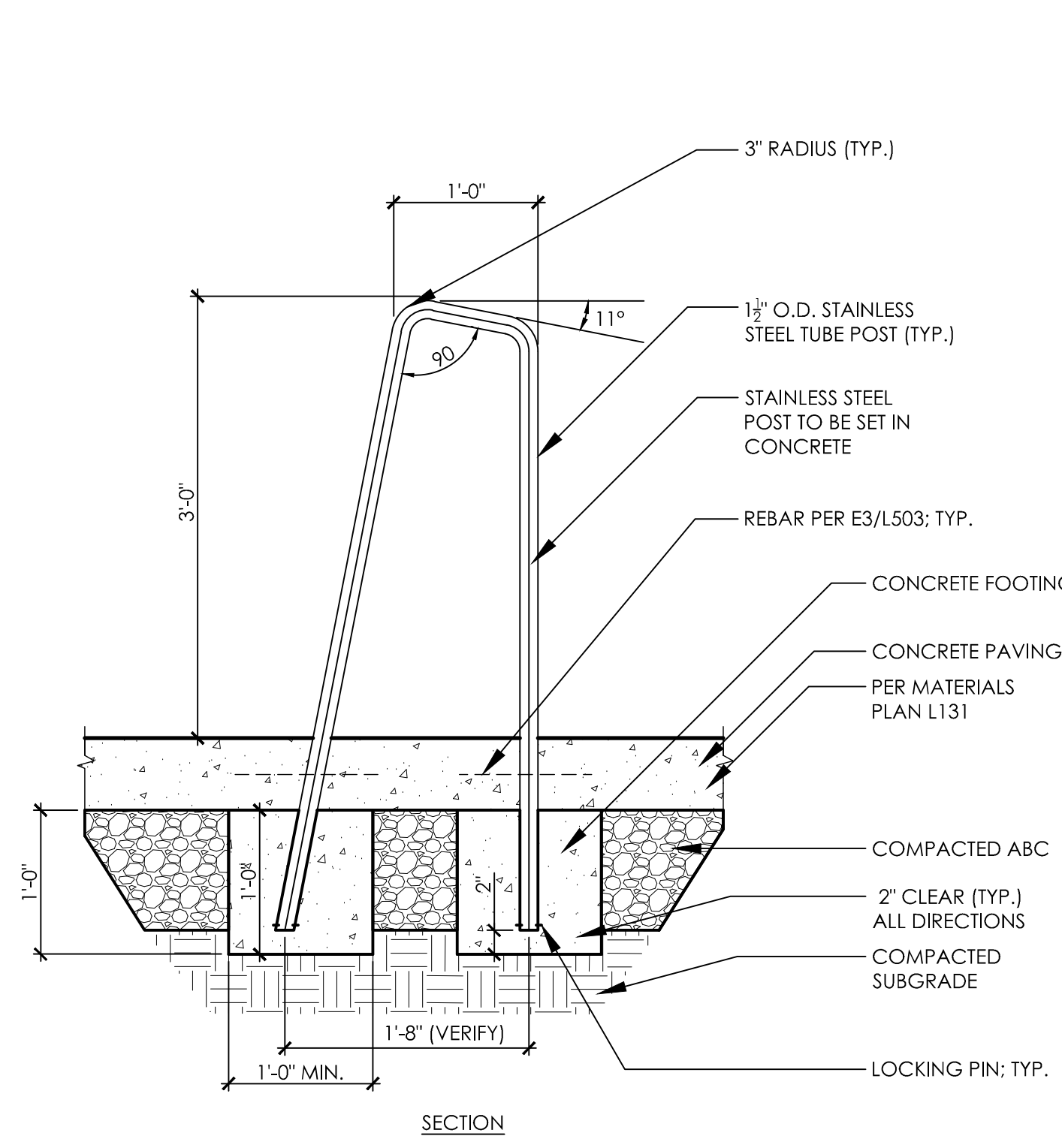


E3 DECORATIVE GRAVEL PAVING
 1"=1'-0"



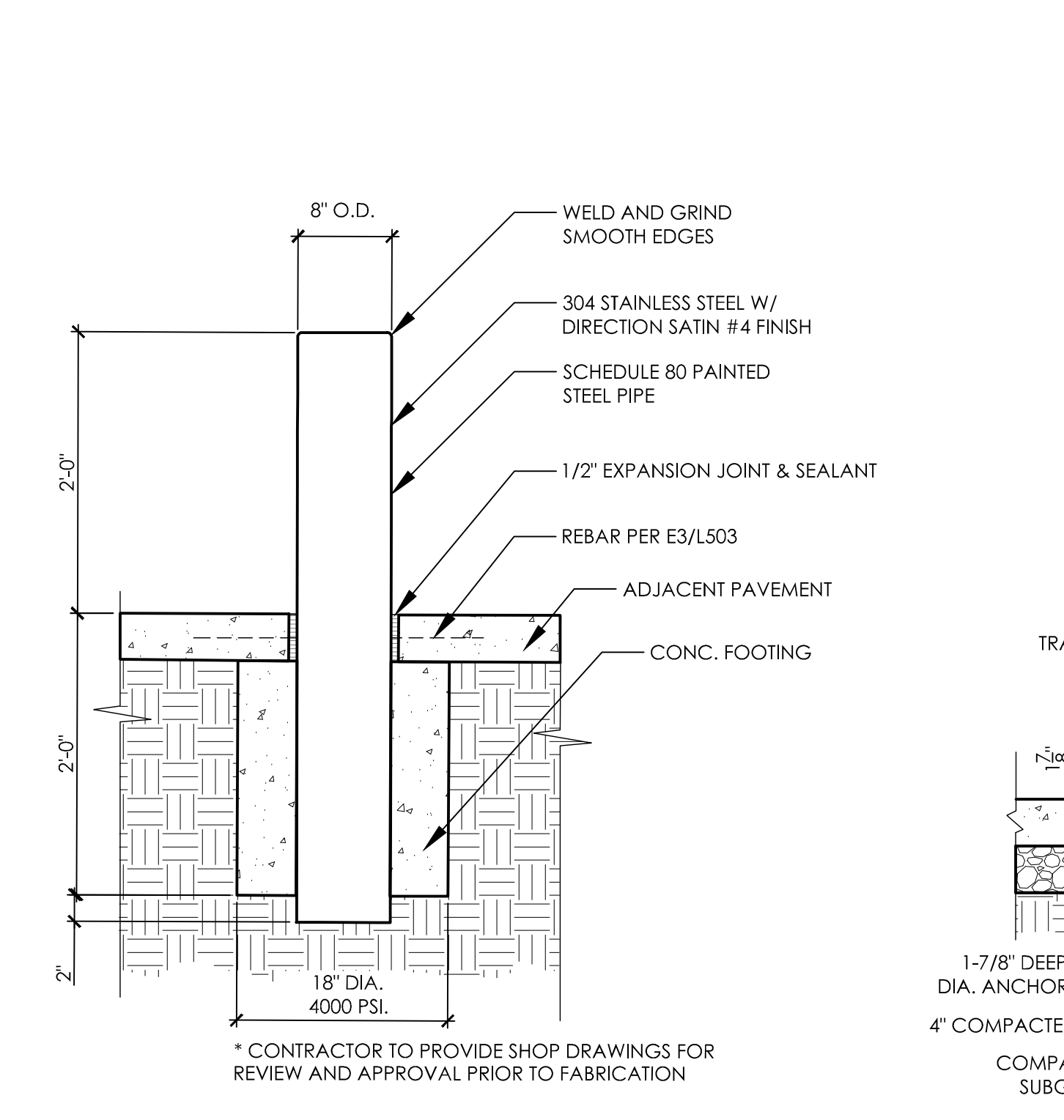
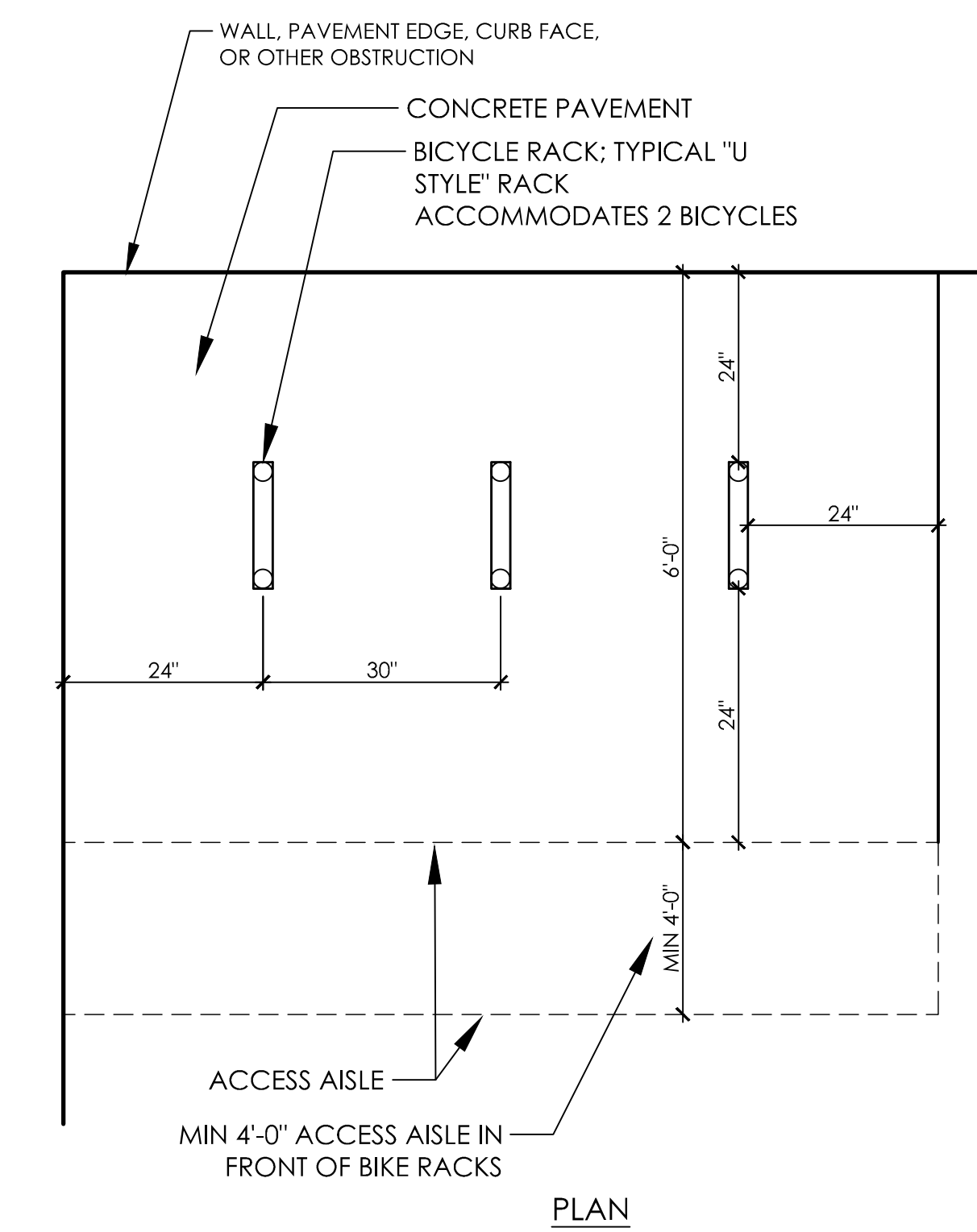
E4 DETECTABLE WARNING DOME PAVERS
 1"=1'-0"

NOTES:
 1. COLOR SHALL BE SELECTED FROM MANUFACTURER'S FULL RANGE
 2. IN THE EVENT THAT INSTALLATION OF DETECTABLE WARNING DOME PAVERS RESULTS IN JOINTS GREATER THAN 2", A POLYMERIC SAND THAT IS RECOMMENDED BY THE MANUFACTURER FOR THE JOINT WIDTH WILL NEED TO BE INSTALLED TO PREVENT WASHOUT



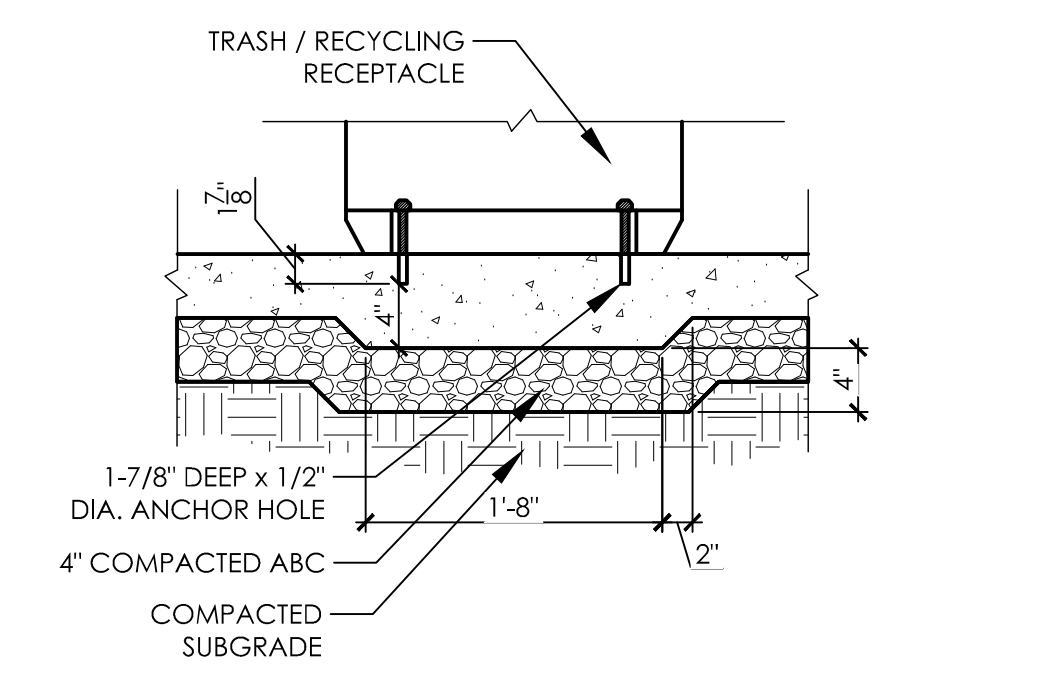
C1 BICYCLE RACK
 1"=1'-0"

NOTES:
 1. BIKE RACKS WILL BE INSTALLED AT A MINIMUM OF 24 INCHES AWAY FROM WALLS, CURB FACES, PAVEMENT EDGES, AND OTHER OBSTRUCTIONS
 2. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION



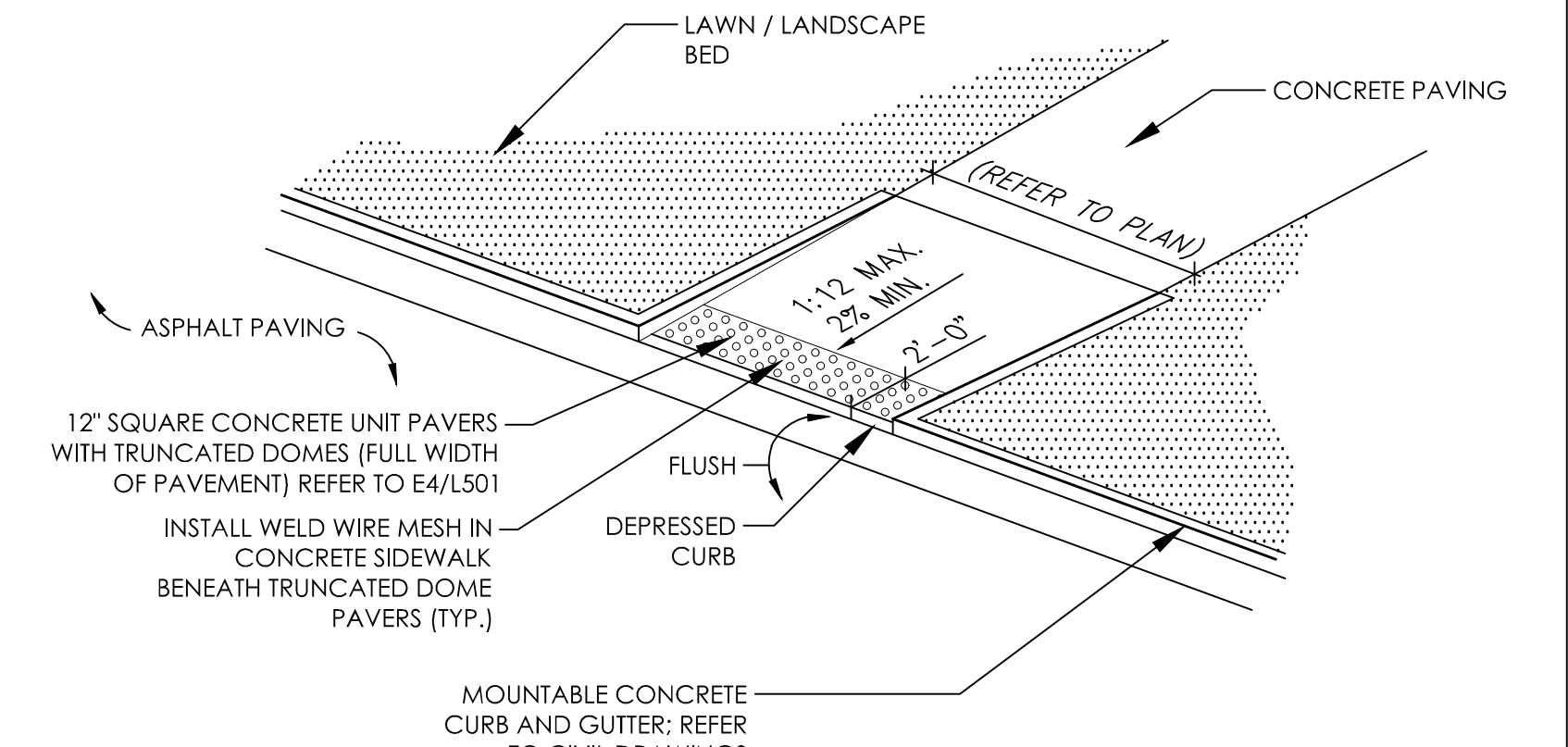
C3 VEHICULAR BOLLARDS
 1"=1'-0"

NOTE:
 1. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR FULL INSTALLATION INSTRUCTIONS
 2. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS

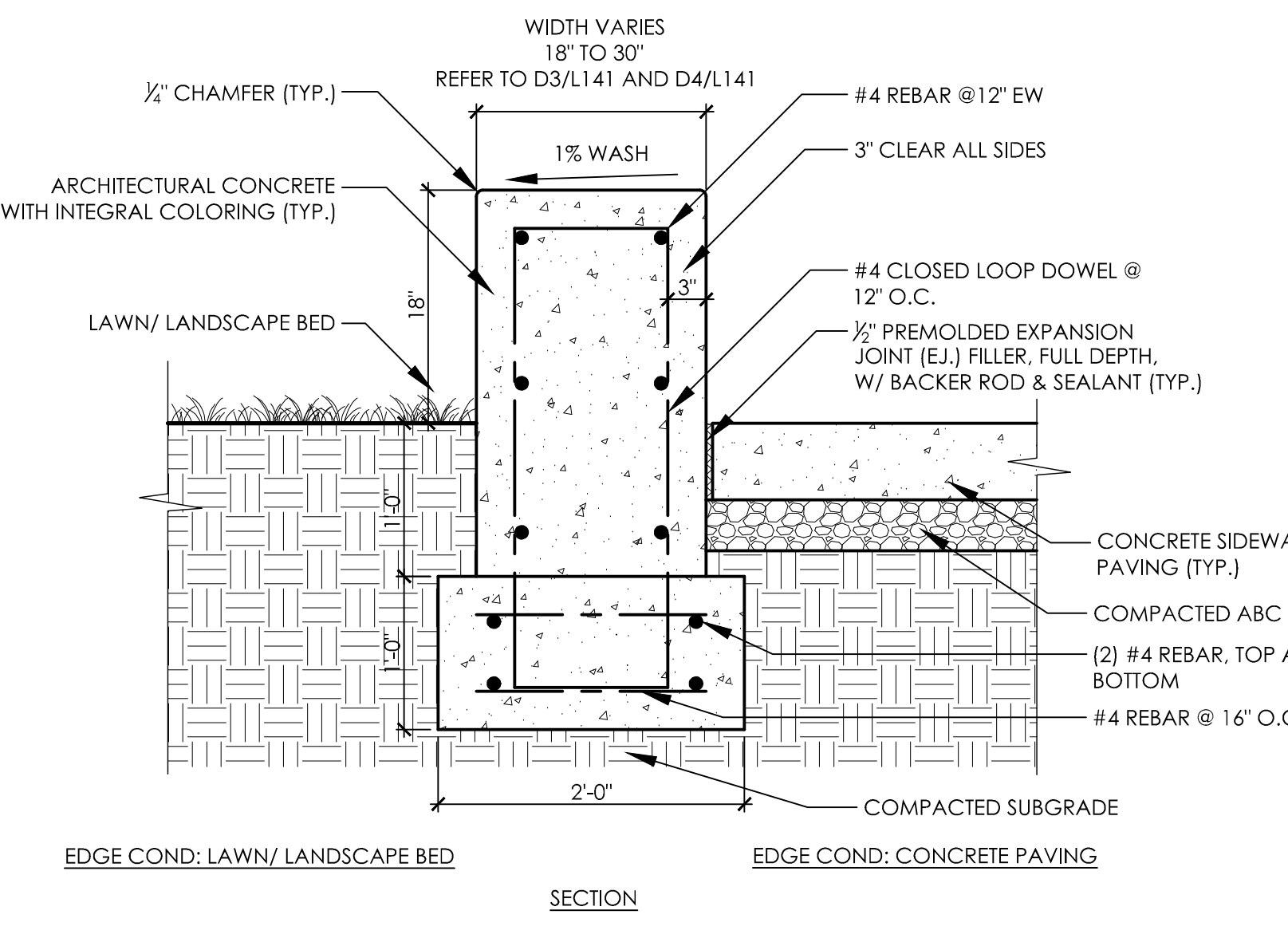


C4 TRASH / RECYCLING RECEPTACLE MOUNTING
 1"=1'-0"

NOTE:
 1. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR FULL INSTALLATION INSTRUCTIONS
 2. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS

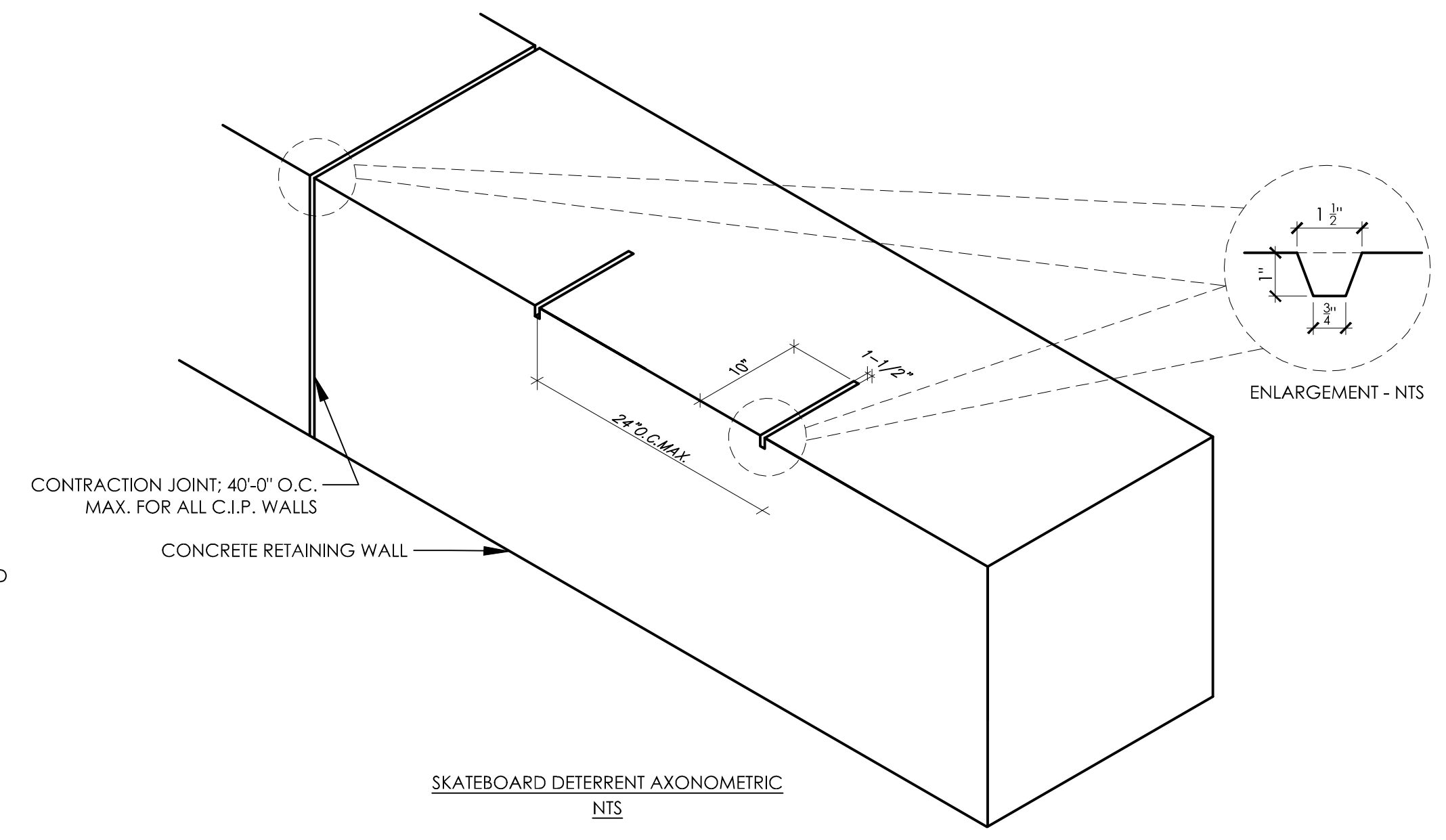


C5 ACCESSIBLE CURB RAMP
 NTS

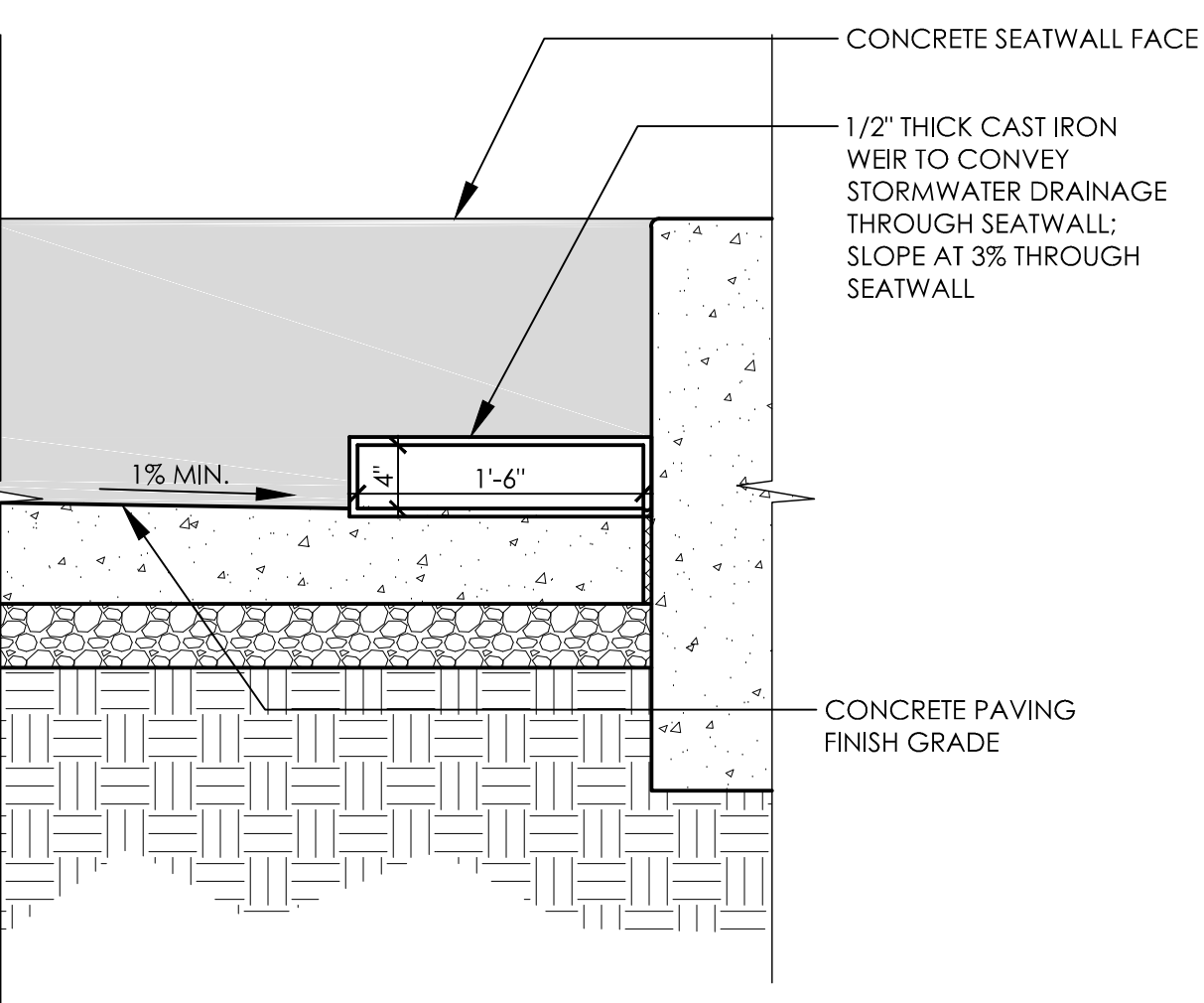


A1 CAST IN PLACE CONCRETE SEATWALL (TYP)
 1"=1'-0"

NOTES:
 1. CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION



A3 METAL WEIR IN CONCRETE SEATWALL
 1"=1'-0"



A4 FRENCH DRAIN
 1"=1'-0"

NOTE:
 RIVER ROCK CHARACTERISTICS:
 COLOR: GRAY, BLUE, GREEN, BURGUNDY
 SIZE: 1" - 3"

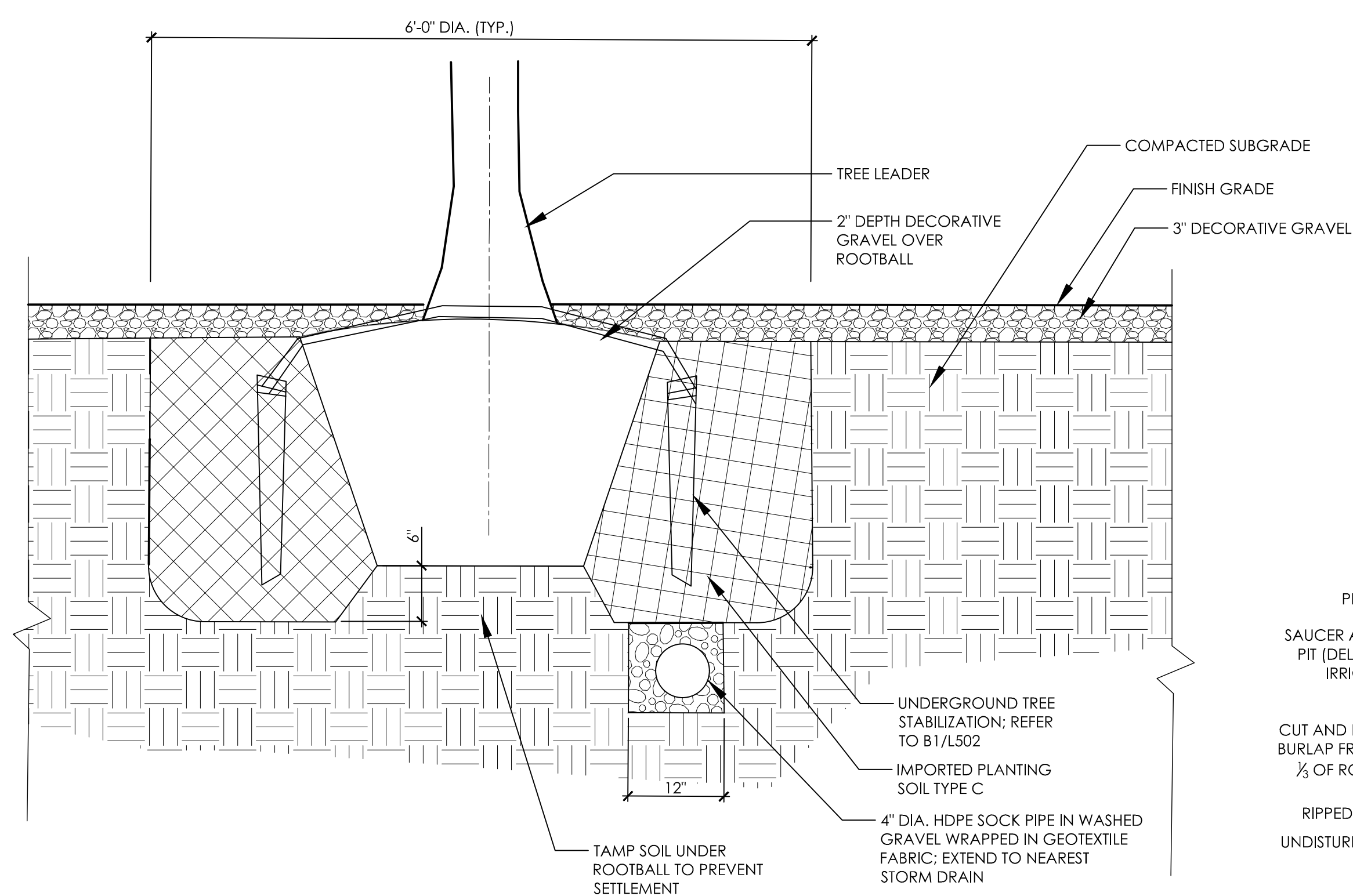
Approved Construction Plan

Planning	Name	Date
Traffic		
Fire		

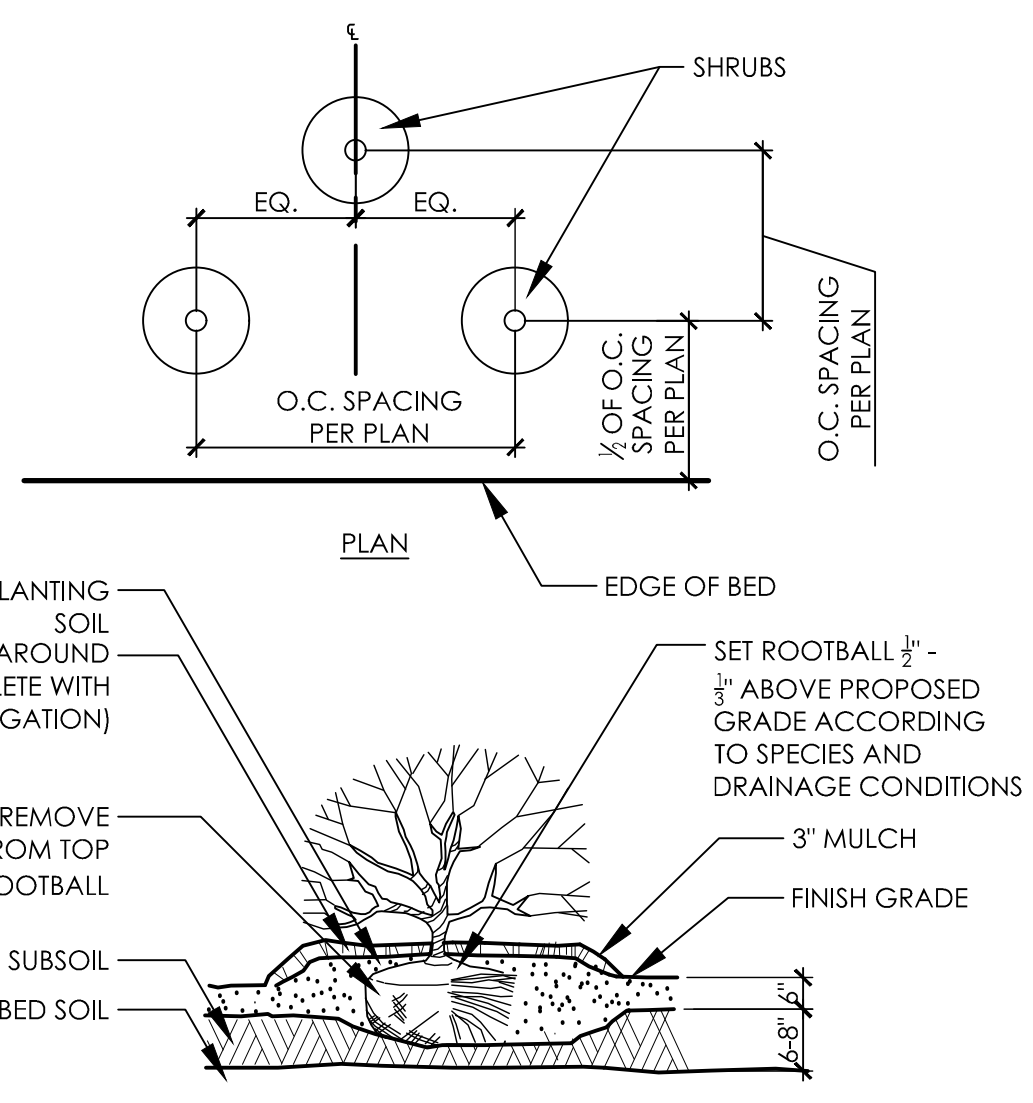
APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

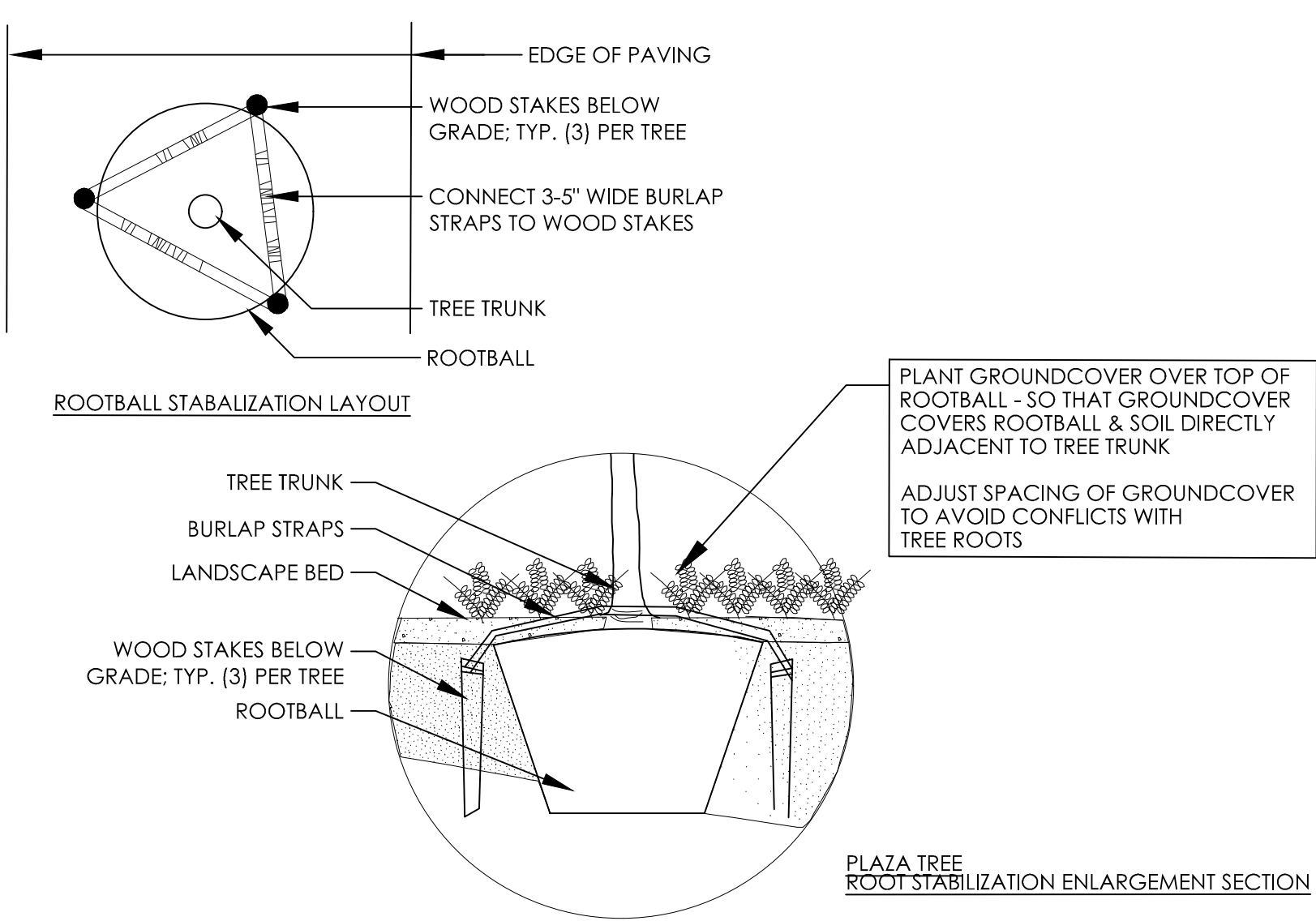
Signed: _____



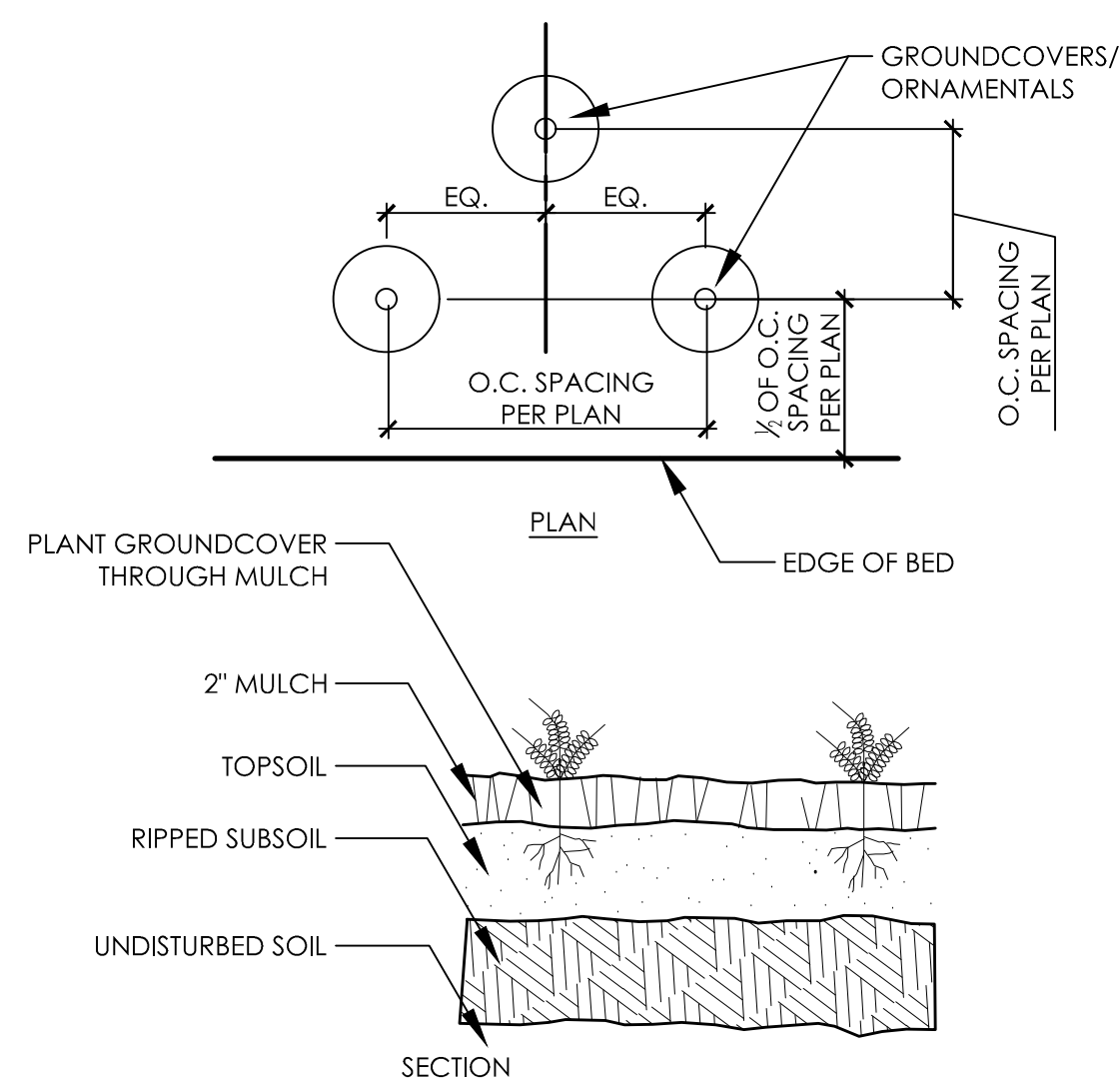
D1 TREE PLANTING IN DECORATIVE GRAVEL
NTS SCALE: NTS



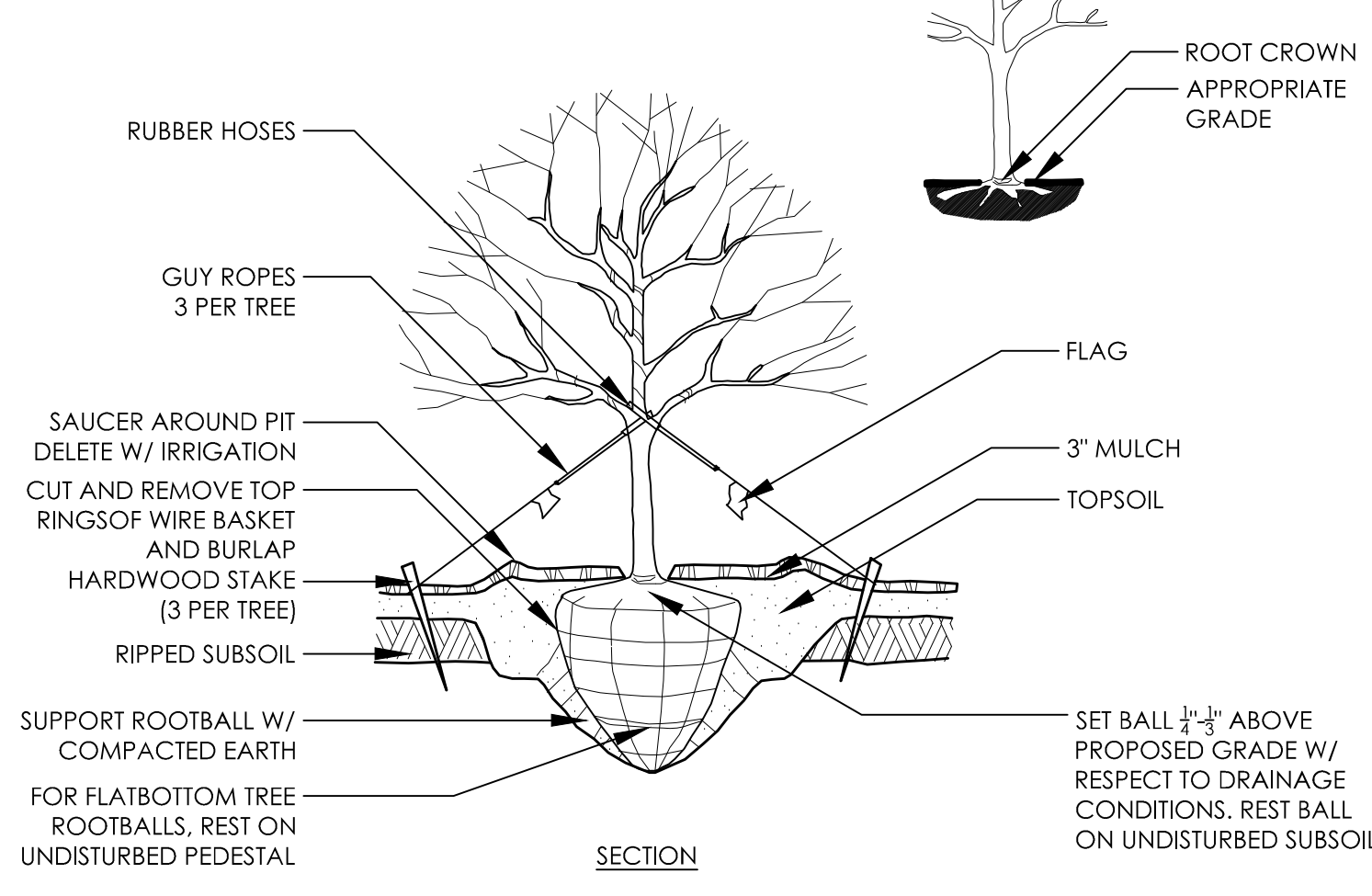
D2 RAISED SHRUB PLANTING
SCALE: NTS



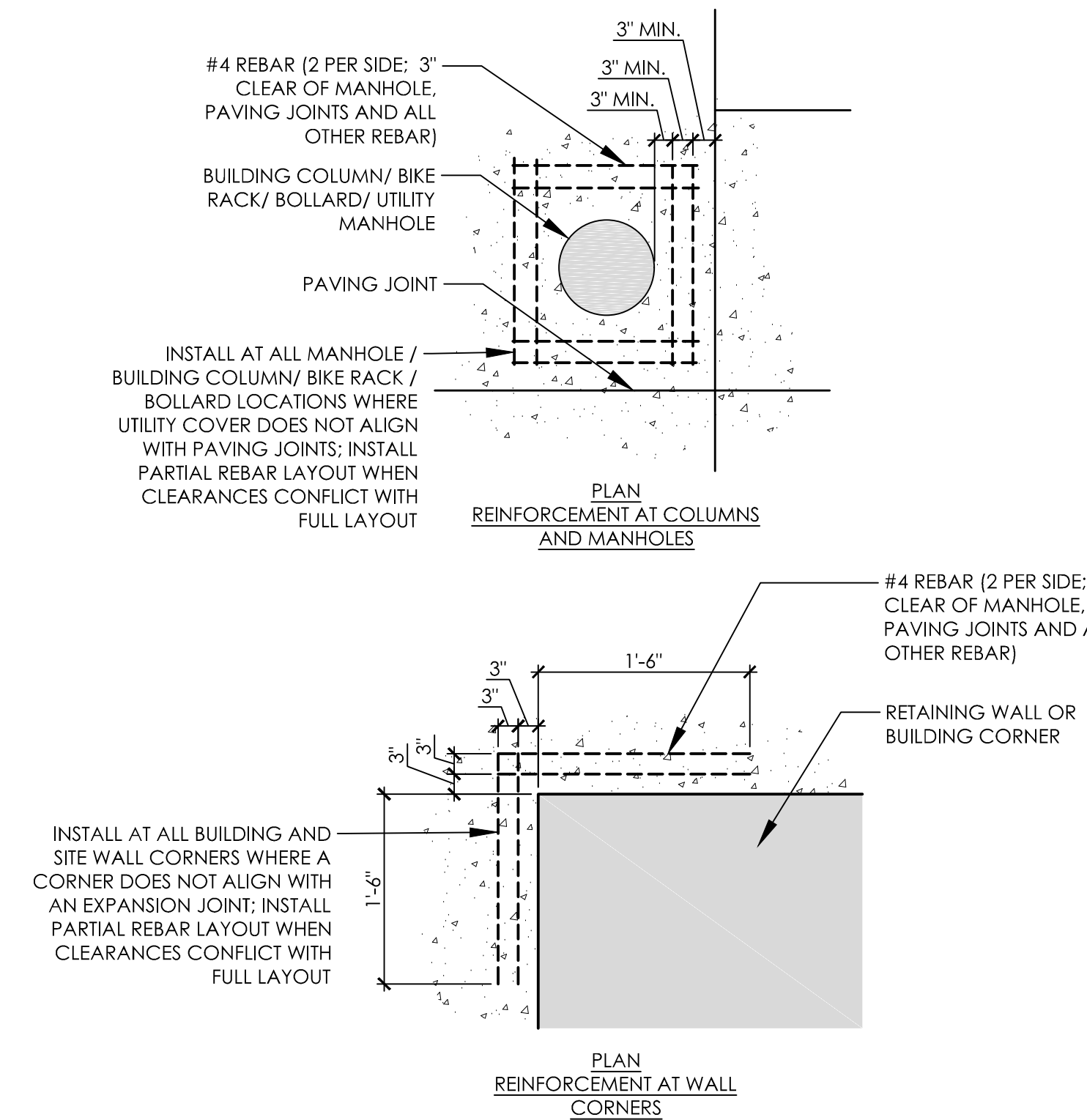
B1 UNDERGROUND TREE STABILIZATION
NTS SCALE: NTS
*NOTE: UNDERGROUND TREE STABILIZATION TO BE USED FOR ALL TREES PLANTED IN DECORATIVE GRAVEL.



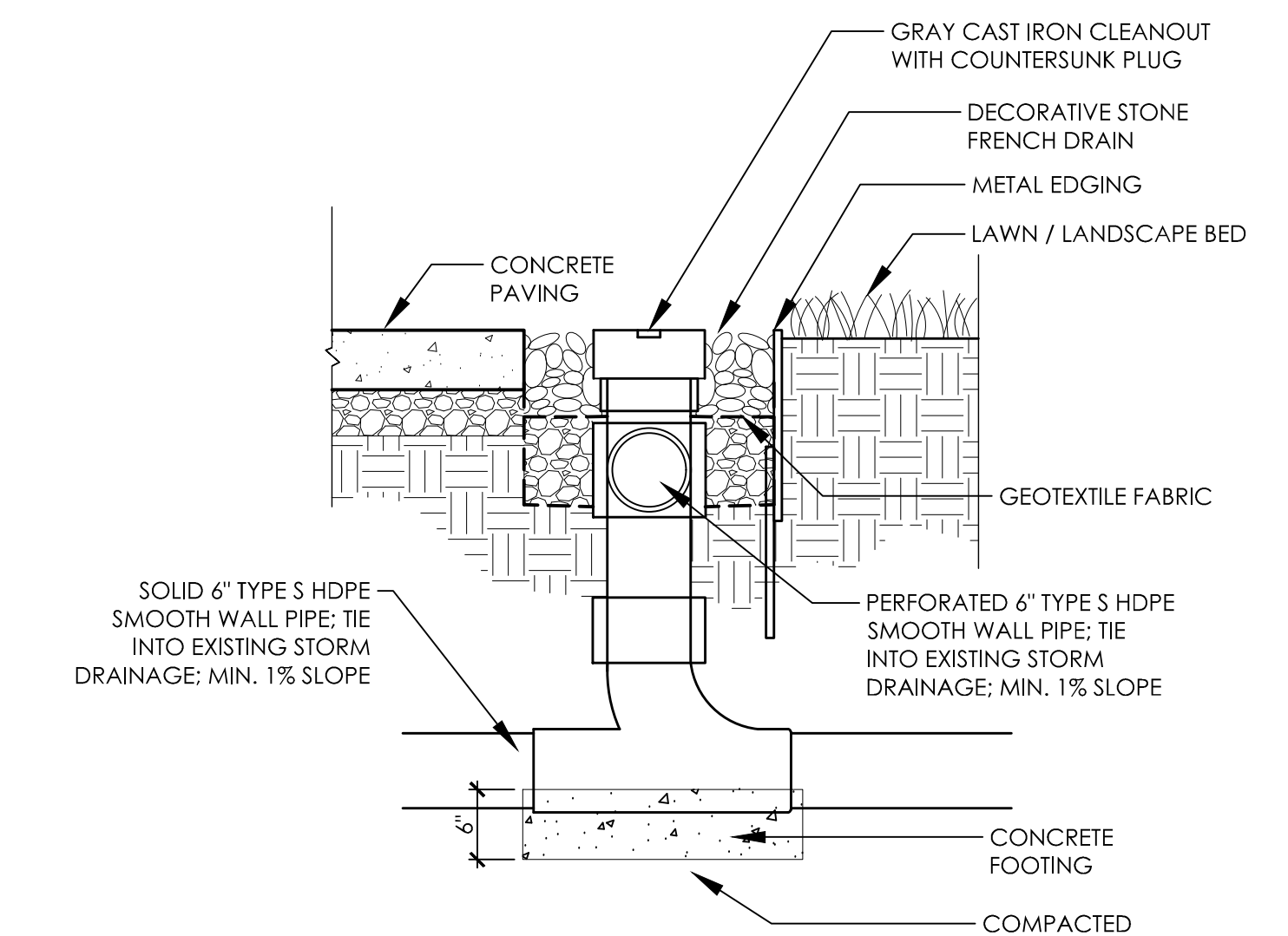
B2 GROUNDCOVER PLANTING
SCALE: NTS



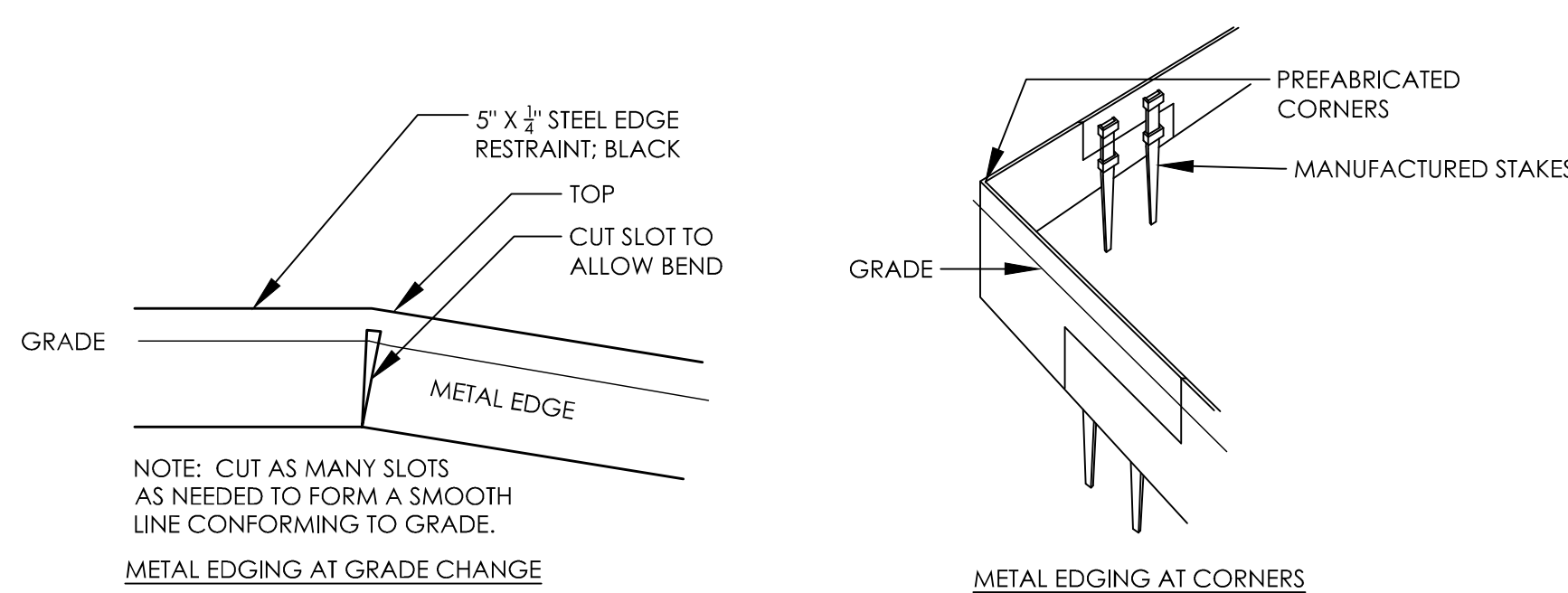
B4 RAISED TREE PLANTING DETAIL
SCALE: NTS



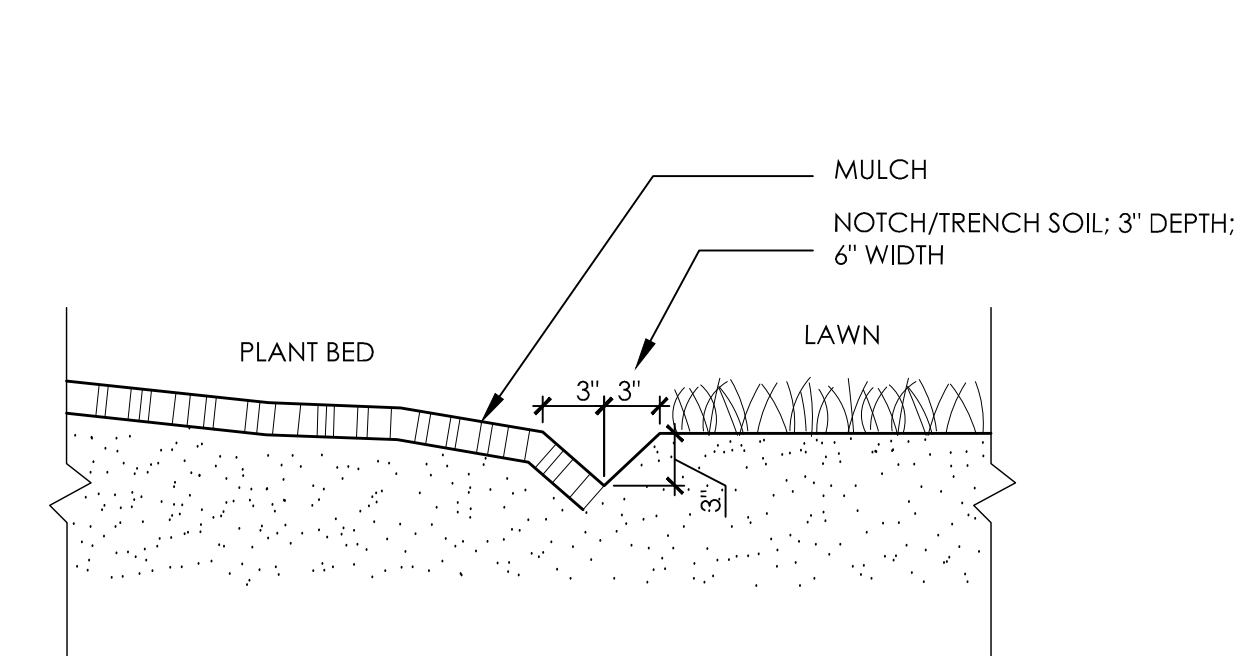
D5 CONCRETE REINFORCEMENT AT PENETRATIONS AND PROTRUSIONS
NTS



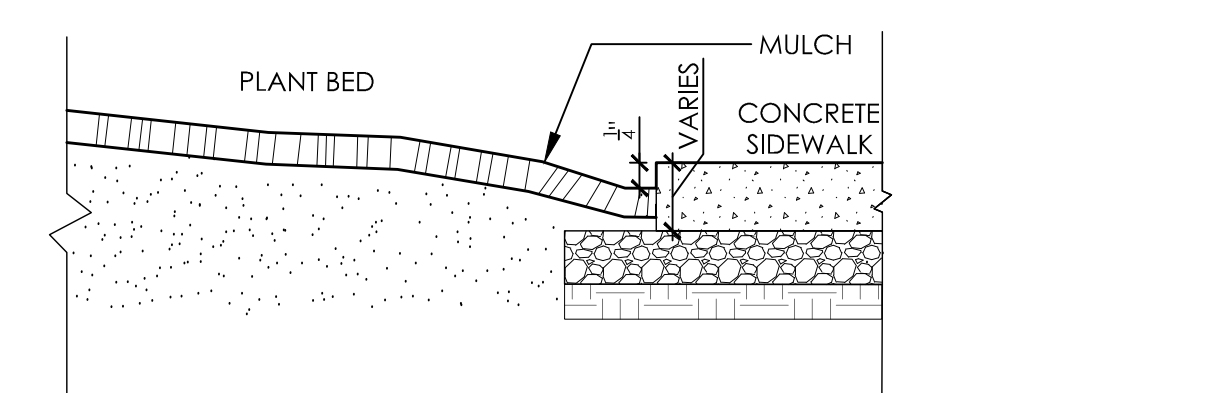
B5 FRENCH DRAIN CLEANOUT
1"=1'-0"
SCALE: NTS
NOTES:
1. CLEANOUT DESCRIPTION: ASME A112.36M, ROUND, GRAY-IRON HOUSING WITH CLAMPING DEVICE AND ROUND, SECURED, SCORiated, GRAY-IRON COVER. INCLUDE GRAY-IRON FERRULE WITH INSIDE CAULK OR SPIGOT CONNECTION AND COUNTERSUNK, TAPERED-THREAD CLOSURE PLUG.
2. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION



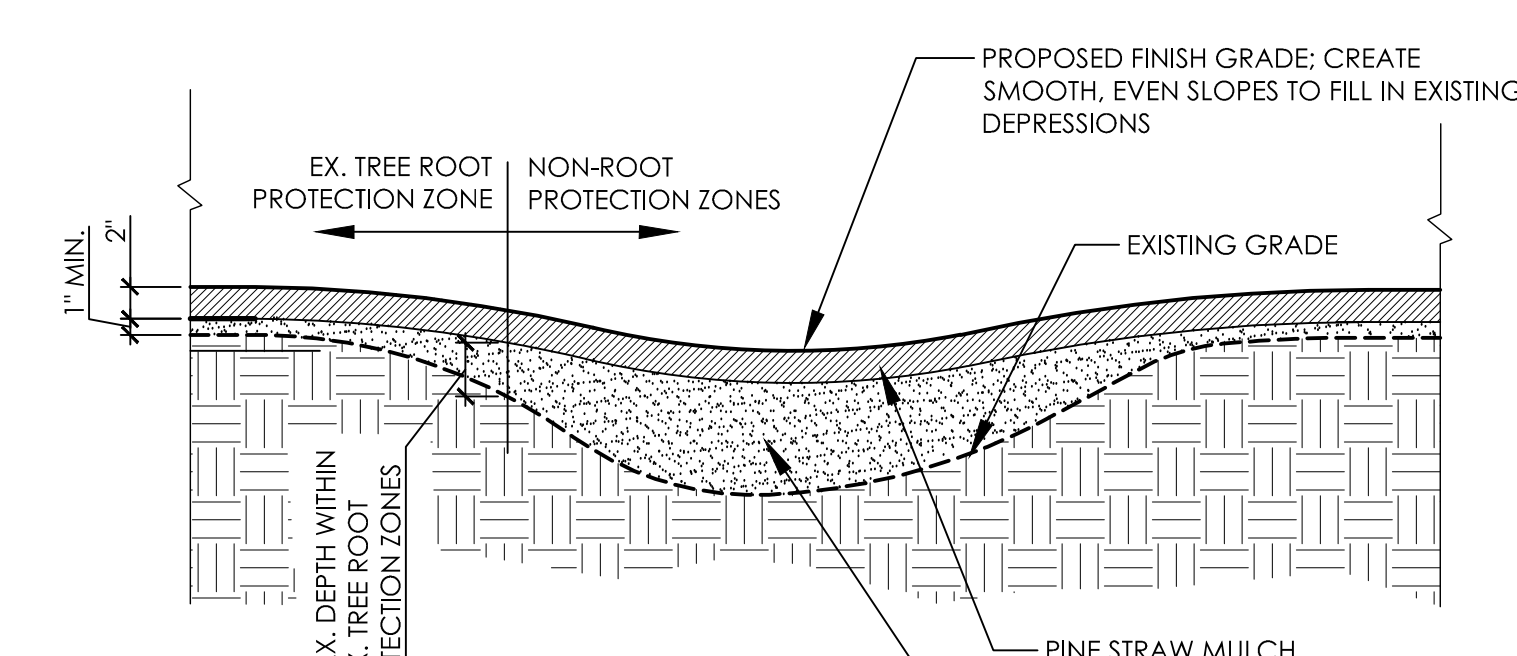
A1 METAL EDGING
SCALE: NTS



A2 LAWN / PLANT BED EDGE
SCALE: NTS



A4 LAWN / HARDSCAPE EDGE
SCALE: NTS



A5 EXISTING DEPRESSIONS IN WOODED AREAS
NTS



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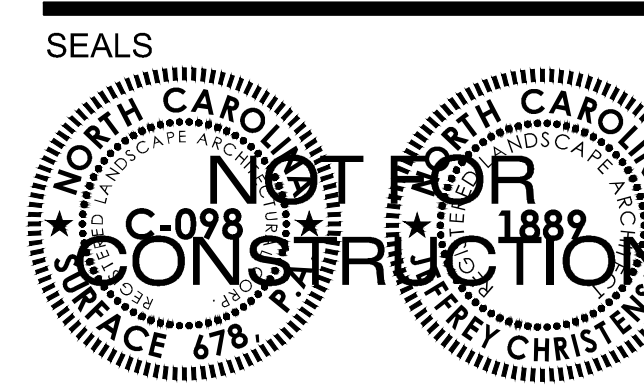
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NEW HANOVER COUNTY

PHASE PRELIMINARY
ISSUE FOR BID
DATE MAY 15, 2018
PROJECT PINE VALLEY BRANCH
VA PROJECT # 2016005
SCO ID -

DRAWING TITLE
DETAILS

DRAWING NUMBER

L502

Approved Construction Plan
Name: _____ Date: _____
Planning _____
Traffic _____
Fire _____

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