

VICINITY MAP
N.T.S.

Sunnyvale Road

60' R/W

Carolina Beach Road
US Highway 421 45 MPH

100' R/W

SITE INVENTORY DATA	
PLAN PREPARER:	NORRIS & TUNSTALL CONSULTING ENGINEERS.
APPLICANT NAME:	J. PHILLIP NORRIS, P.E.
SITE ADDRESS:	3606 CAROLINA BEACH RD
PROPERTY OWNER:	WORSLEY INVESTMENT & DEVELOPMENT CO., LLC
DEVELOPER:	PAR 5 DEVELOPMENT GROUP, LLC
PARCEL #:	R06500-007-054-000
ZONING:	CB (CD)
ADJACENT PROPERTY OWNER:	SEE SITE PLAN
VICINITY MAP:	SEE PLAN
TOPOGRAPHIC DATA:	SEE PLAN
100 YR FLOOD ELEVATION:	N/A
LOCATION OF WATER FEATURES:	N/A
SOILS TYPE:	Le - LEON FINE SAND, Be - BAYMADE FINE SAND Ss - SEAGATE FINE SAND
CAMA DATA:	N/A
CAMA CLASSIFICATION:	URBAN
CONSERVATION RESOURCES:	N/A
RECOGNIZED SITE:	NO RECOGNITION
CEMETERIES:	N/A
FORESTED AREAS:	WOODED BUT NO REGULATED TREES
WETLANDS:	NONE PRESENT
PROTECTED SPECIES:	N/A
TRANSPORTATION DATA:	SEE PLAN

LEGEND	
	PROPERTY LINE
	RIGHT OF WAY
	OVERHEAD ELECTRIC
	EXISTING WATERMAIN
	EXISTING SEWERMAIN
	EXISTING CONTOUR
	EXISTING SPOT ELEVATION

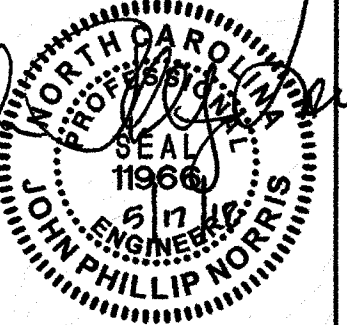
SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

EXISTING CONDITIONS / SITE INVENTORY PLAN
DOLLAR GENERAL - CAROLINA BEACH RD.
3606 CAROLINA BEACH RD (US 421)
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER:
PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNBER LAKE RD.
WEST END, NC 27376
910-994-9881

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28401
PHONE (910) 345-3625

Licence #C-3641
17033
DES. TJC
CHK. JPN
DRWN. NSB
DATE 05/17/18



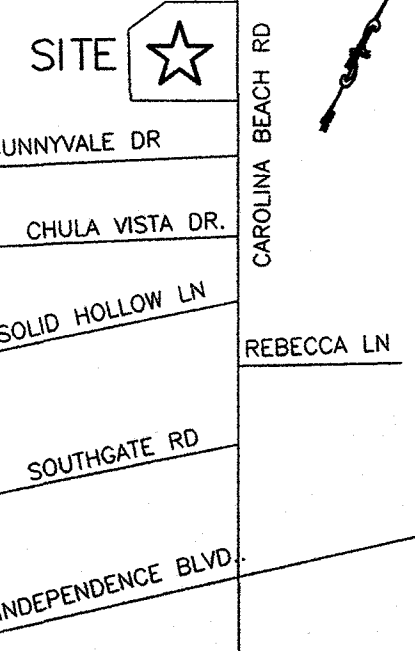
C1

Approved Construction Plan	
Name	Date
Planning: Nicole Smith	5/22/18
Traffic: W. Smith	5-17-18
Fire: C. Dalk	5-22-18

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/17/18 Permit # 2018021
Signed: [Signature]

NOTE:
1. PRIOR TO ANY FIELD MODIFICATION, REVISIONS SHALL BE APPROVED BY N&T. ANY DEVIATIONS FROM APPROVED PLANS MAY RESULT IN NON CONFORMANCE WITH PERMITS OR PERMITTED CONDITIONS. REVISIONS MAY REQUIRE RE-ANALYSIS & PERMIT MODIFICATION AT OWNERS EXPENSE AND COULD POTENTIALLY DELAY C.O. OR REQUIRE WORK STOPPAGE UNTIL PROJECT IS BROUGHT BACK INTO PERMIT COMPLIANCE.

RECEIVED
MAY 17 2018
PLANNING DIVISION
SCALE: 1" = 30'



VICINITY MAP
N.T.S.

Sunnyvale Road
60' R/W

Carolina Beach Road
US Highway 421 45 MPH

100' R/W

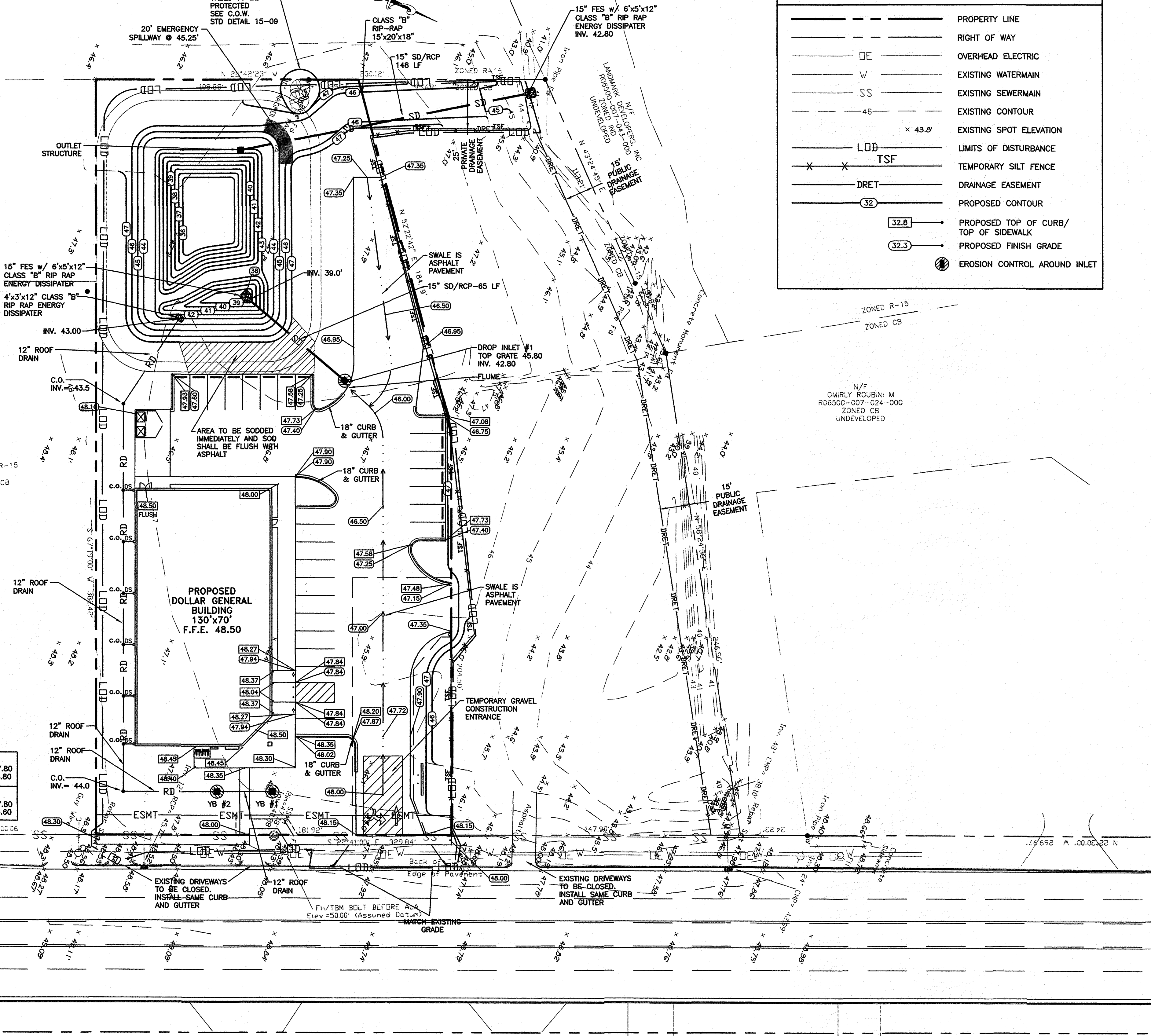
N 76222 W 12.27.22 N

N/F HARDEE TRUST
R06500-007-017-000
ZONED R-15
RESIDENCE

N/F COSTA PETRA
R06500-007-016-000
ZONED R-15
RESIDENCE

LEGEND	
---	PROPERTY LINE
---	RIGHT OF WAY
OE	OVERHEAD ELECTRIC
W	EXISTING WATERMAIN
SS	EXISTING SEWERMAIN
- - -	EXISTING CONTOUR
x 43.0'	EXISTING SPOT ELEVATION
LOB	LIMITS OF DISTURBANCE
x x	TEMPORARY SILT FENCE
DRET	DRAINAGE EASEMENT
32	PROPOSED CONTOUR
32.8	PROPOSED TOP OF CURB/ TOP OF SIDEWALK
32.3	PROPOSED FINISH GRADE
⊙	EROSION CONTROL AROUND INLET

YB #1	TOP = 47.80	INV. = 44.80
YB #2	TOP = 47.80	INV. = 44.60



BY	DESCRIPTION
	REVISIONS
SYMBOL	DATE

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GRADING AND DRAINAGE PLAN
DOLLAR GENERAL - CAROLINA BEACH RD.
3606 CAROLINA BEACH RD (US 421)
NEW HANOVER COUNTY, NORTH CAROLINA

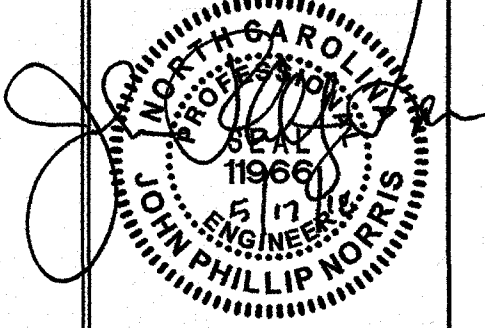
OWNER:
PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNIPER LAKE RD.
WILMINGTON, NC 27516
910-994-6881

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1427 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28401
PHONE (910) 345-5965

License #C-3641

17033

DES. TJC
CHK. JPN
DRWN. NSB
DATE 05/17/18



Approved Construction Plan

Name: Nicole Smith Date: 5/22/18

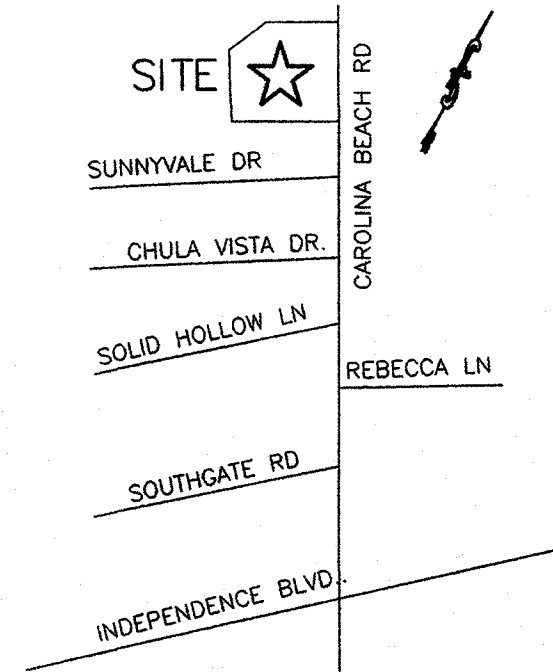
Planning: [Signature] Traffic: [Signature] Fire: [Signature]

City of WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/18/18 Permit # 2018021
Signed: [Signature]

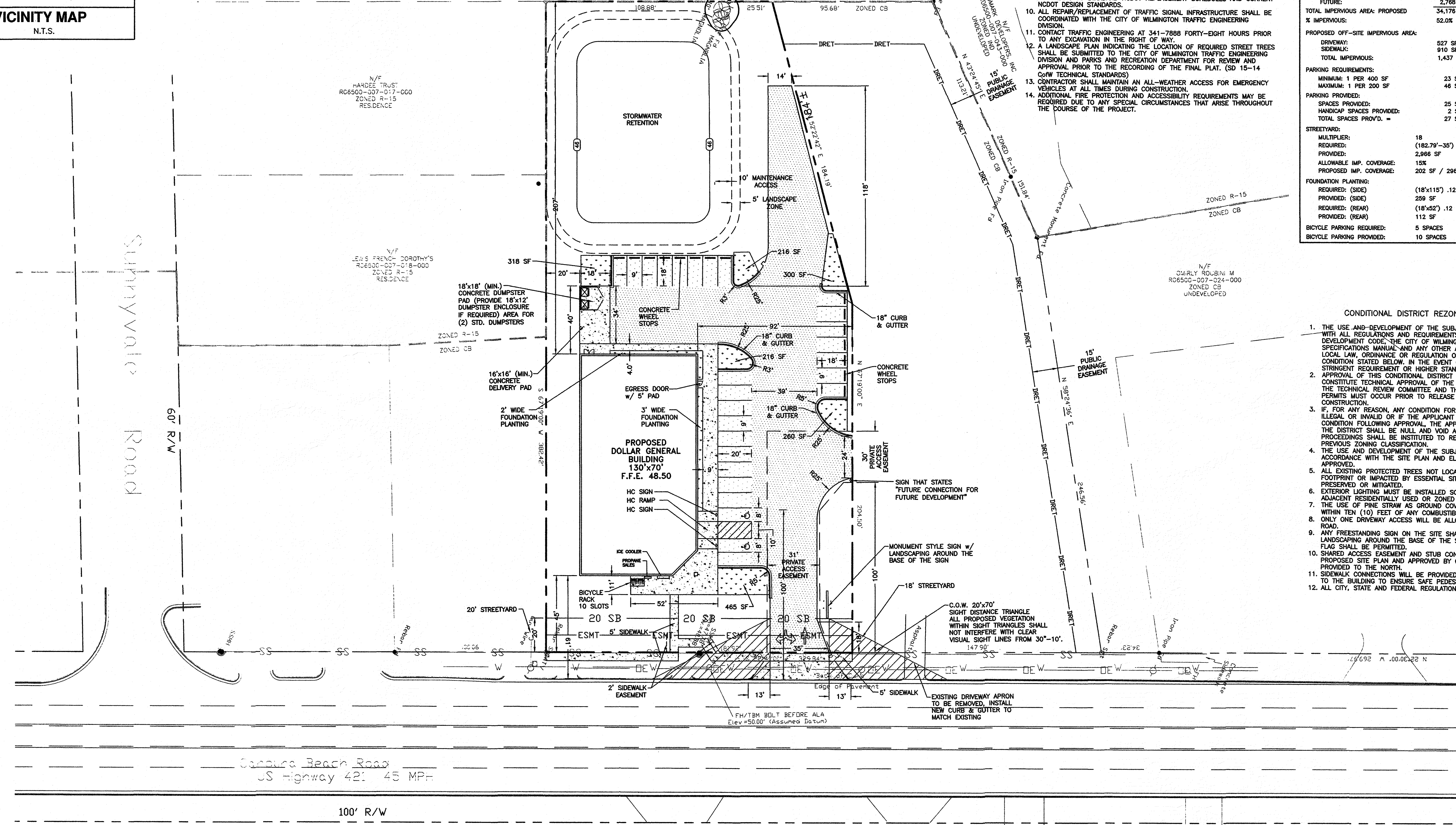
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SCALE: 1" = 30'

C2



VICINITY MAP
N.T.S.



- NOTES:
- ALL PAVEMENT MARKINGS IN PUBLIC RIGHTS OF WAY AND FOR DRIVEWAYS ARE TO BE THERMOPLASTIC AND MEET CITY AND/OR NCDOT STANDARDS. (DETAIL SD-13 CoW TECHNICAL STANDARDS)
 - ALL SIGNS AND PAVEMENT MARKINGS IN OPEN AREAS TO PUBLIC TRAFFIC ARE TO MEET MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) STANDARDS (DETAIL SD 15-13 CoW TECHNICAL 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.
 - INSTALL REFLECTORS PER CITY AND NCDOT STANDARDS. TRAFFIC ENGINEERING MUST APPROVE OF PAVEMENT MARKING LAYOUT PRIOR TO ACTUAL STRIPING.
 - ANY BROKEN OR MISSING SIDEWALK PANELS, DRIVEWAY PANELS AND CURBING WILL BE REPLACED.
 - IMMEDIATELY NOTIFY CITY OF WILMINGTON TRAFFIC ENGINEERING AT 910-341-7888 IF ANY TRAFFIC SIGNAL FACILITIES OR CITY-OWNED STREETLIGHT FACILITIES ARE DAMAGED.
 - DAMAGED FACILITIES SHALL BE REPLACED, BY AN APPROVED CONTRACTOR, ACCORDING TO STANDARD NCDOT REPLACEMENT SCHEDULES AND CURRENT NCDOT DESIGN STANDARDS.
 - ALL REPAIR/REPLACEMENT OF TRAFFIC SIGNAL INFRASTRUCTURE SHALL BE COORDINATED WITH THE CITY OF WILMINGTON TRAFFIC ENGINEERING DIVISION.
 - CONTACT TRAFFIC ENGINEERING AT 341-7888 FORTY-EIGHT HOURS PRIOR TO ANY EXCAVATION IN THE RIGHT OF WAY.
 - A LANDSCAPE 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 PLAT. (SD 15-14 CoW TECHNICAL STANDARDS)
 - CONTRACTOR SHALL MAINTAIN AN ALL-WEATHER ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES DURING CONSTRUCTION.
 - ADDITIONAL FIRE PROTECTION AND ACCESSIBILITY REQUIREMENTS MAY BE REQUIRED DUE TO ANY SPECIAL CIRCUMSTANCES THAT ARISE THROUGHOUT THE COURSE OF THE PROJECT.

SITE DATA	
PARCEL NUMBER:	R06500-007-024-000 (111,930.35 SF) TO BE SUBDIVIDED
NEW SITE AREA:	65,351 SF
ZONING:	CS (C2) CONDITIONAL DISTRICT
DISTURBED AREA:	67,540 SF
BUILDING USE:	RETAIL
BUILDING CONSTRUCTION TYPE:	2B
BUILDING HEIGHT:	18' - 1 STORY - 9,100 SF
BUILDING LOT COVERAGE:	13.92%
WATER/SEWER DEMAND:	200 GALLONS PER DAY
BUILDING SETBACKS:	
SIDE:	20' - ADJACENT TO RESIDENTIAL
STREET SIDE:	20'
BUFFER:	20' - ADJACENT TO RESIDENTIAL
PROPOSED IMPERVIOUS AREA:	
BUILDING:	9,100 SF
DRIVE ISLE / PARKING:	19,267 SF
WALKS / CONCRETE:	3,041 SF
FUTURE:	2,768 SF
TOTAL IMPERVIOUS AREA: PROPOSED	34,176 SF/0.78 AC
% IMPERVIOUS:	52.0%
PROPOSED OFF-SITE IMPERVIOUS AREA:	
DRIVEWAY:	527 SF
SIDEWALK:	910 SF
TOTAL IMPERVIOUS:	1,437 SF
PARKING REQUIREMENTS:	
MINIMUM: 1 PER 400 SF	23 SPACES
MAXIMUM: 1 PER 200 SF	46 SPACES
PARKING PROVIDED:	
SPACES PROVIDED:	25 SPACES
HANDICAP SPACES PROVIDED:	2 SPACES
TOTAL SPACES PROVIDED:	27 SPACES
STREETVARD:	
MULTIPLIER:	18
REQUIRED:	(182.79'-35') 18=2,660.22 SF
PROVIDED:	2,866 SF
ALLOWABLE IMP. COVERAGE:	15%
PROPOSED IMP. COVERAGE:	202 SF / 2866 SF= 7%
FOUNDATION PLANTING:	
REQUIRED (SIDE):	(18'x115') .12 = 248 SF
PROVIDED (SIDE):	259 SF
REQUIRED (REAR):	(18'x52') .12 = 112 SF
PROVIDED (REAR):	112 SF
BICYCLE PARKING REQUIRED:	5 SPACES
BICYCLE PARKING PROVIDED:	10 SPACES

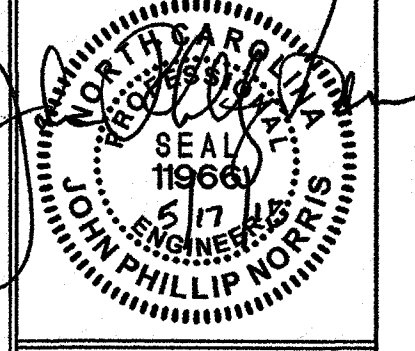
- CONDITIONAL DISTRICT REZONING CONDITIONS:
- THE USE AND DEVELOPMENT OF THE SUBJECT PROPERTY SHALL COMPLY WITH ALL REGULATIONS AND REQUIREMENTS IMPOSED BY THE LAND DEVELOPMENT CODE, THE CITY OF WILMINGTON TECHNICAL STANDARDS AND SPECIFICATIONS MANUAL, AND ANY OTHER APPLICABLE FEDERAL, STATE OR LOCAL LAW, ORDINANCE OR REGULATION OR REGULATION, AS WELL AS ANY CONDITION STATED BELOW. IN THE EVENT OF A CONFLICT, THE MORE STRINGENT REQUIREMENT OR HIGHER STANDARD SHALL APPLY.
 - APPROVAL OF THIS CONDITIONAL DISTRICT REZONING DOES NOT CONSTITUTE TECHNICAL APPROVAL OF THE SITE PLAN. FINAL APPROVAL BY THE TECHNICAL REVIEW COMMITTEE AND THE ISSUANCE OF ALL REQUIRED PERMITS MUST OCCUR PRIOR TO RELEASE OF THE PROJECT FOR CONSTRUCTION.
 - IF, FOR ANY REASON, ANY CONDITION FOR APPROVAL IS FOUND TO BE ILLEGAL OR INVALID OR IF THE APPLICANT SHOULD FAIL TO ACCEPT ANY CONDITION FOLLOWING APPROVAL, THE APPROVAL OF THE SITE PLAN FOR THE DISTRICT SHALL BE NULL AND VOID AND NO EFFECT AND NO PROCEEDINGS SHALL BE INSTITUTED TO REZONE THE PROPERTY TO ITS PREVIOUS ZONING CLASSIFICATION.
 - THE USE AND DEVELOPMENT OF THE SUBJECT PROPERTY SHALL BE IN ACCORDANCE WITH THE SITE PLAN AND ELEVATIONS SUBMITTED AND APPROVED.
 - ALL EXISTING PROTECTED TREES NOT LOCATED WITHIN THE BUILDING FOOTPRINT OR IMPACTED BY ESSENTIAL SITE IMPROVEMENTS SHALL BE PRESERVED OR MITIGATED.
 - EXTERIOR LIGHTING MUST BE INSTALLED SO AS NOT TO SHINE ONTO ADJACENT RESIDENTIALLY USED OR ZONED PROPERTY.
 - THE USE OF PINE STRAW AS GROUND COVER SHALL BE PROHIBITED WITHIN TEN (10) FEET OF ANY COMBUSTIBLE EXTERIOR CONSTRUCTION.
 - ONLY ONE DRIVEWAY ACCESS WILL BE ALLOWED ON CAROLINA BEACH ROAD.
 - ANY FREESTANDING SIGN ON THE SITE SHALL BE MONUMENT STYLE WITH LANDSCAPING AROUND THE BASE OF THE SIGN, NO POLE OF FEATHER FLAG SHALL BE PERMITTED.
 - SHARED ACCESS EASEMENT AND STUB CONNECTION, AS SHOWN ON THE PROPOSED SITE PLAN AND APPROVED BY CITY COUNCIL, SHALL BE PROVIDED TO THE NORTH.
 - SIDEWALK CONNECTIONS WILL BE PROVIDED FROM CAROLINA BEACH ROAD TO THE BUILDING TO ENSURE SAFE PEDESTRIAN MOVEMENTS.
 - ALL CITY, STATE AND FEDERAL REGULATIONS SHALL BE MET.

LAYOUT PLAN
DOLLAR GENERAL - CAROLINA BEACH RD.
3606 CAROLINA BEACH RD (US 421)
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER:
PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNIPER LAKE RD.
WILMINGTON, NC 27516
910-994-6881

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASHLITTLE RIVER RD. NW
ASH, NC 28420
PHONE (910) 287-5900

License #C-3641
17033
DES. TJC
C.D. JPN
DRWN. NSB
DATE 05/17/18



C3

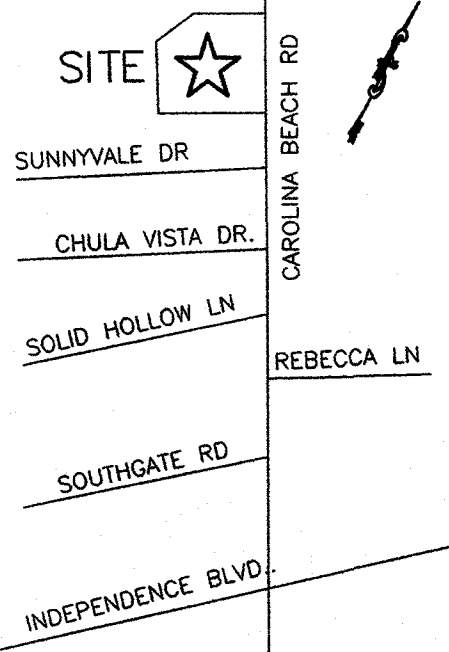
Approved Construction Plan	
Name	Date
Planning: <i>Nicole Smith</i>	5/22/18
Traffic: <i>W. Gibson</i>	5-17-18
Site: <i>C. Hall</i>	5/22/18

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/18/18 Permit # 2319021
Signed: *Phillip Norris*

LEGEND	
---	PROPERTY LINE
---	RIGHT OF WAY
---	OVERHEAD ELECTRIC
---	EXISTING WATERMAIN
---	DRAINAGE EASEMENT

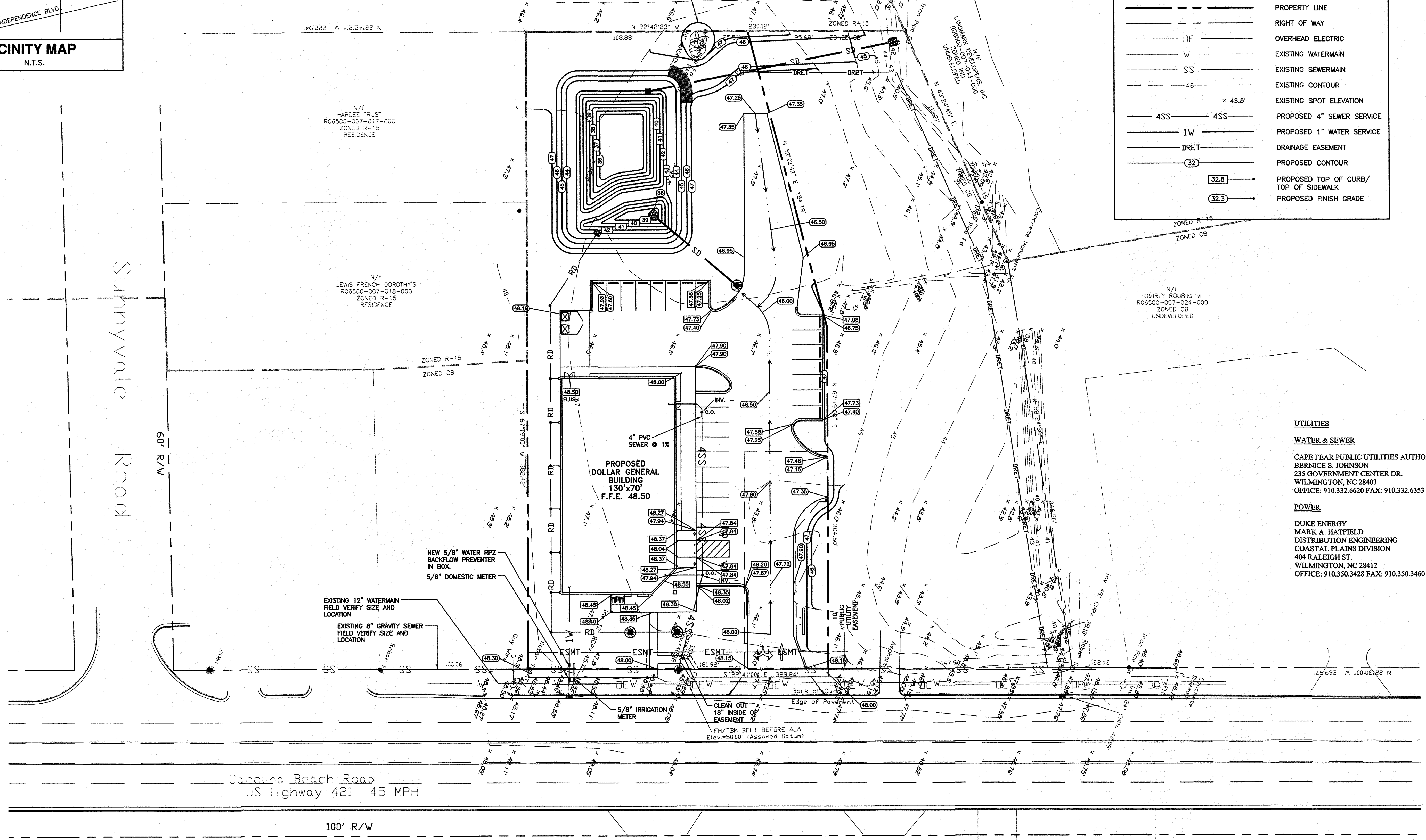
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SCALE: 1" = 30'
0 30 60 90



VICINITY MAP
N.T.S.

LEGEND	
---	PROPERTY LINE
- - -	RIGHT OF WAY
⊠	OVERHEAD ELECTRIC
W	EXISTING WATERMAIN
SS	EXISTING SEWERMAIN
- - -	EXISTING CONTOUR
x 43.8'	EXISTING SPOT ELEVATION
4SS	PROPOSED 4" SEWER SERVICE
1W	PROPOSED 1" WATER SERVICE
DRET	DRAINAGE EASEMENT
○	PROPOSED CONTOUR
32.8	PROPOSED TOP OF CURB/ TOP OF SIDEWALK
32.5	PROPOSED FINISH GRADE



UTILITIES

WATER & SEWER
CAPE FEAR PUBLIC UTILITIES AUTHORITY (CFPUA)
BERNICE S. JOHNSON
235 GOVERNMENT CENTER DR.
WILMINGTON, NC 28403
OFFICE: 910.332.6620 FAX: 910.332.6353

POWER
DUKE ENERGY
MARK A. HATFIELD
DISTRIBUTION ENGINEERING
COASTAL PLAINS DIVISION
404 RALEIGH ST.
WILMINGTON, NC 28412
OFFICE: 910.350.3428 FAX: 910.350.3460

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

UTILITY PLAN
DOLLAR GENERAL - CAROLINA BEACH RD.
3606 CAROLINA BEACH RD (US 421)
NEW HANOVER COUNTY, NORTH CAROLINA

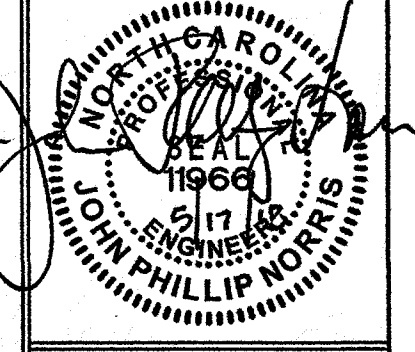
OWNER:
PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNIPER LAKE RD.
WEST END, NC 27376
910-994-0861

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
902 MARKET STREET
WILMINGTON, NC 28401
PHONE (910) 343-9653

Licence #C-3641

17033

DES. TJC
CHK. JPN
DRWN. NSB
DATE 05/17/18



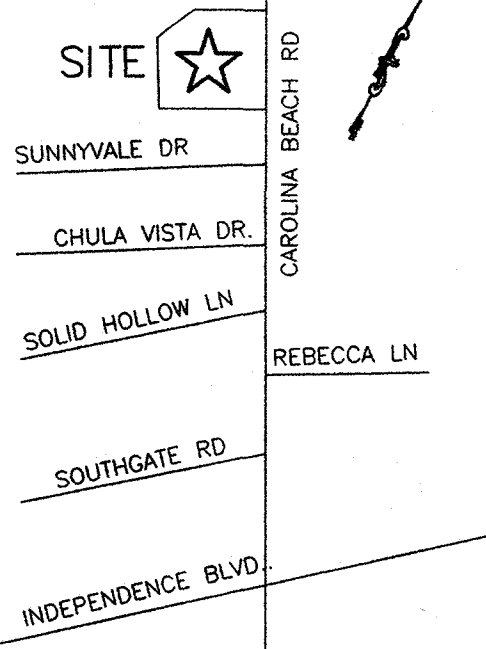
Approved Construction Plan
Name: Nicole Demuth Date: 5/22/18
Planning: Nicole Demuth 5/22/18
Traffic: W. Gumbert 5/17/18
Fire: C. Val 5/22/18

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/18/18 Permit # 2019021
Signed: [Signature]

NOTE:
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SCALE: 1" = 30'
0 30 60 90

C4



VICINITY MAP
N.T.S.

Sunnyvale Road

60' R/W

Carolina Beach Road
US Highway 421 45 MPH

100' R/W

N/F HARDEF TRUST
R06500-007-017-000
ZONED R-15
RESIDENCE

N/F LEWIS FRENCH DOROTHY'S
R06500-007-018-000
ZONED R-15
RESIDENCE

POND DRAINAGE
AREA = 49,362 SF

ZONED R-15
ZONED CB

N/F COSTA PETRA
R06500-007-016-000
ZONED R-15
RESIDENCE

LEGEND

- PROPERTY LINE
- - - RIGHT OF WAY
- OVERHEAD ELECTRIC
- EXISTING WATERMAIN
- EXISTING SEWERMAIN
- EXISTING CONTOUR
- EXISTING SPOT ELEVATION
- DA DRAINAGE AREA
- LOD LIMITS OF DISTURBANCE
- TSF TEMPORARY SILT FENCE
- DRET DRAINAGE EASEMENT
- PROPOSED CONTOUR
- PROPOSED TOP OF CURB/TOP OF SIDEWALK
- PROPOSED FINISH GRADE
- EROSION CONTROL AROUND INLET

DRAINAGE AREAS

DA#	TOTAL AREA	IMPERVIOUS AREA
1	14,488	13,973
2	3,100	3,100
3A	1,201	432
3B	1,210	350
3C	8,900	8,900
4	4,467	4,467

SYMBOL	DATE	DESCRIPTION	REVISIONS

DRAINAGE AREA PLAN
DOLLAR GENERAL - CAROLINA BEACH RD.
3606 CAROLINA BEACH RD (US 421)
NEW HANOVER COUNTY, NORTH CAROLINA

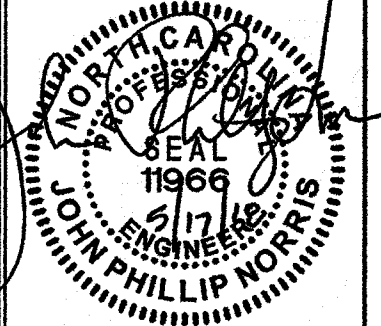
OWNER:
PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNIPER LAKE RD.
WEST END, NC 27176
910-994-1881

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD., NW
WILMINGTON, NC 28403
PHONE (910) 343-3653

Licence #C-3641

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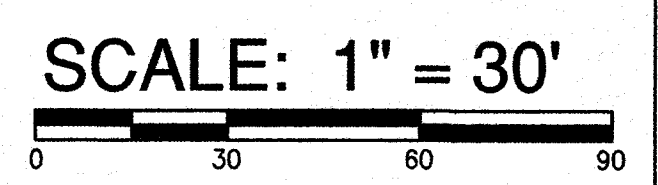
DES. TJC
CHK. JPN
DRWN. NSB
DATE 05/17/18

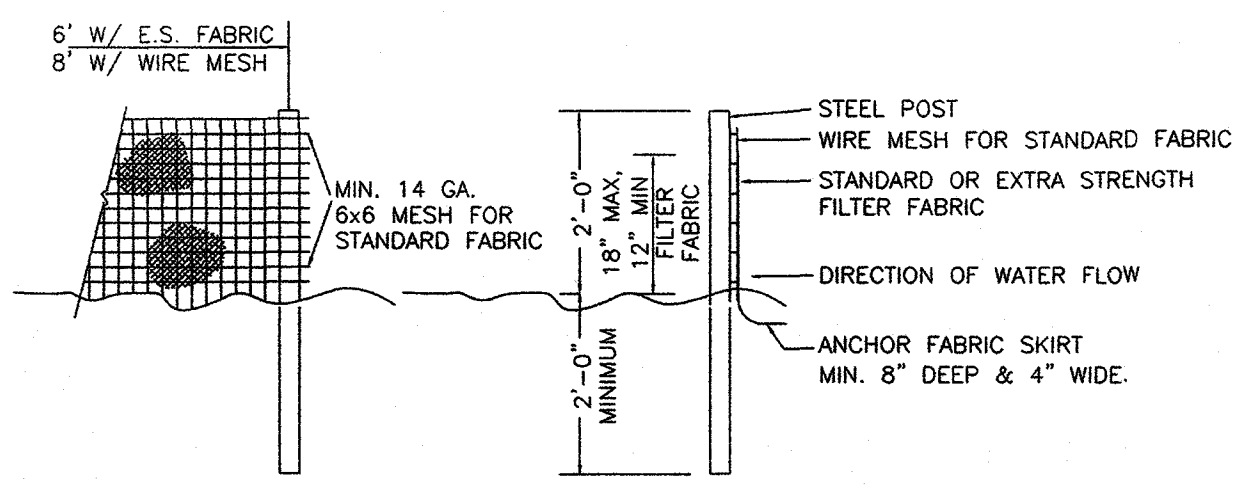


C5

Approved Construction Plan
Name: Nicole Smith Date: 5/22/18
Traffic: W & M 5-17-18
Fire: C. K. K. 5/22/18

CITY OF WILMINGTON
NORTH CAROLINA
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/18/18 Permit # 2018021
Signed: [Signature]

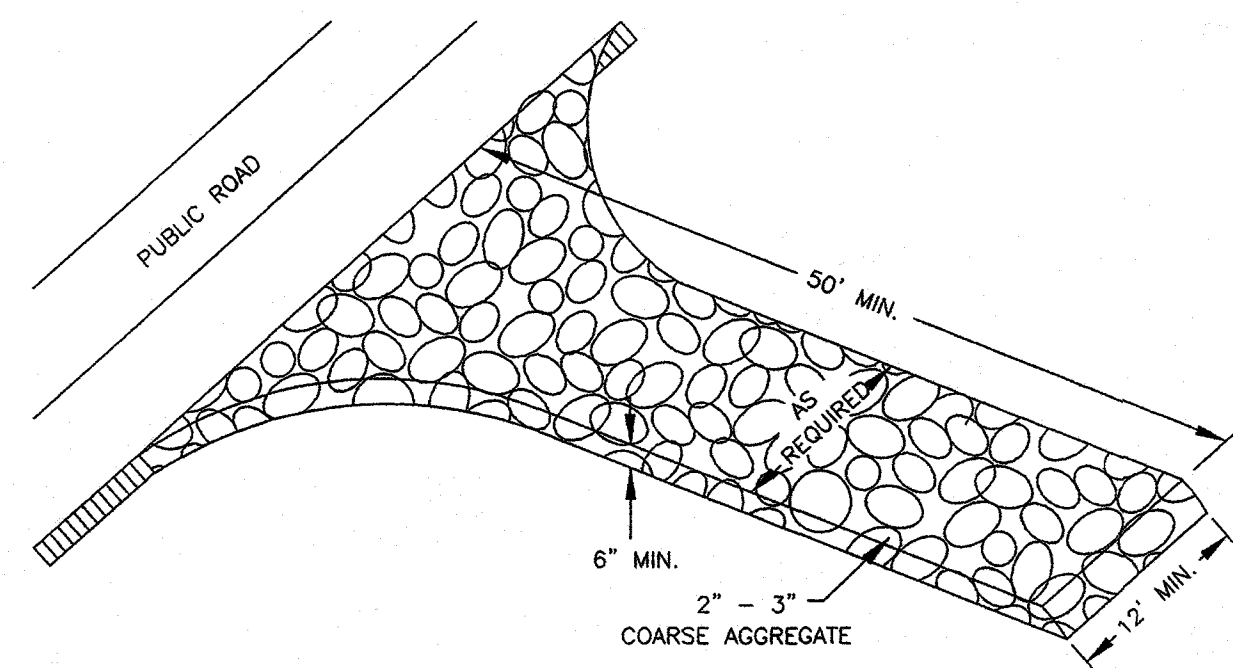




NOTES:
 1. SYN. FENCE FABRIC SHALL BE MIN. OF 30" IN WIDTH WITH 30 LB/IN TENSILE STRENGTH FOR STANDARD FABRIC AND 50 LB/IN FOR EXTRA STRENGTH.
 2. FABRIC SHALL BE CONTINUOUS LENGTH. IF JOINTS ARE NECESSARY, LAP FABRIC POST TO POST.
 3. STEEL POST SHALL BE MIN. 4" IN HEIGHT AND BE OF THE SELF-FASTENER STEEL ANGLE TYPE.

TEMPORARY SILT FENCE
 NTS

TEMPORARY SILT FENCE MAINTENANCE
 INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
 REMOVE ALL FENCING MATERIALS AND UNSTABLE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

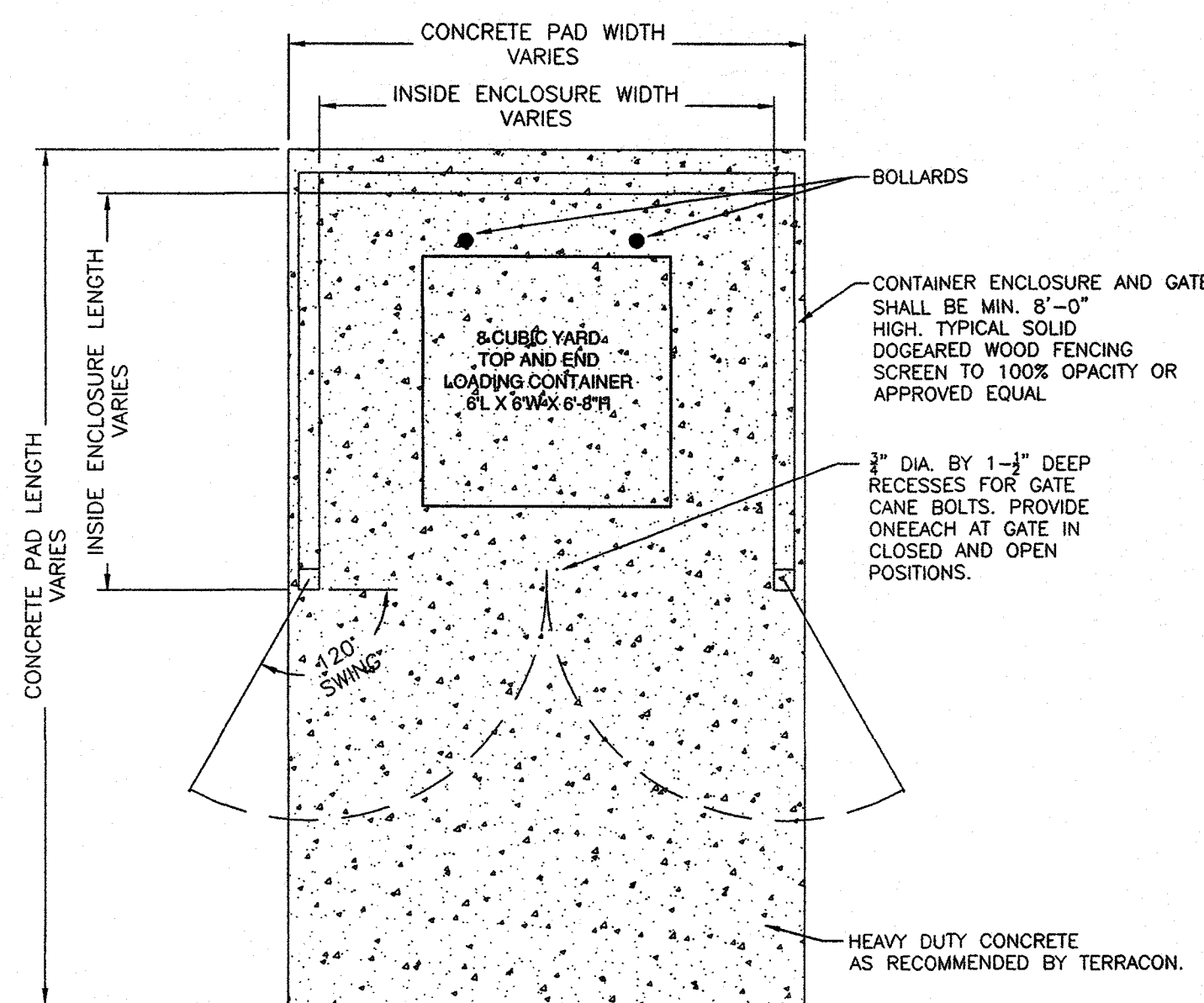


TEMPORARY GRAVELLED CONSTRUCTION ENTRANCE
 NTS

GRAVEL CONSTRUCTION ENTRANCE

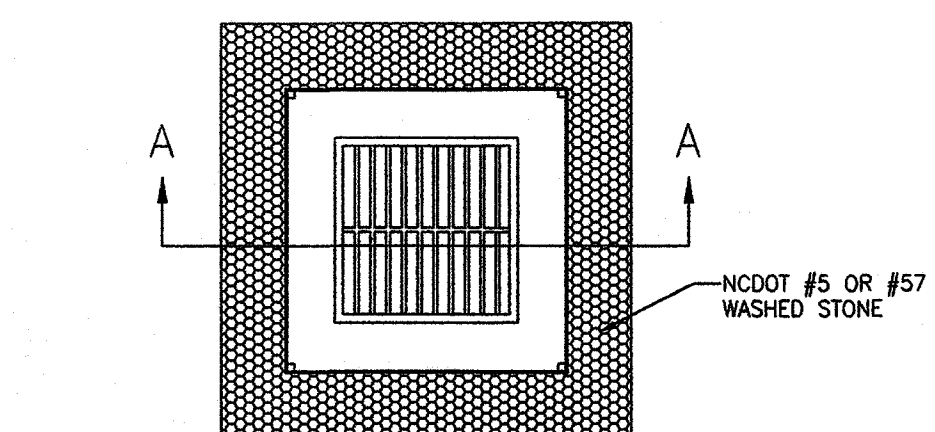
CONSTRUCTION SPECIFICATION:
 1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
 2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
 3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
 4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

MAINTENANCE:
 MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH 2 INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.



TYPICAL CONTAINER ENCLOSURE PLAN
 NTS

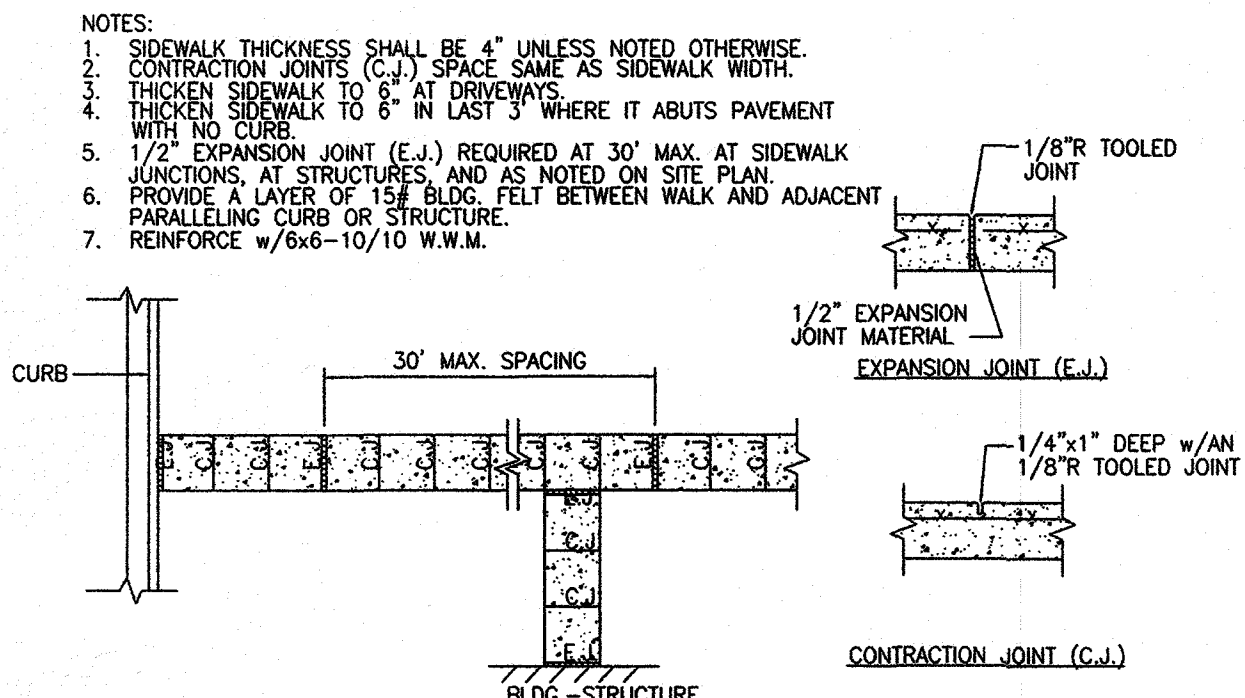
NOTE: DUMPSTER PAD AND ENCLOSURE VARY DEPENDING UPON CONTAINER REQUIREMENTS PER DOLLAR GENERAL. CONTRACTOR SHALL PROVIDE SCREENING SO THAT PROPER CLEARANCES ARE MAINTAINED TO ALLOW LOADING & UNLOADING OF CONTAINER.



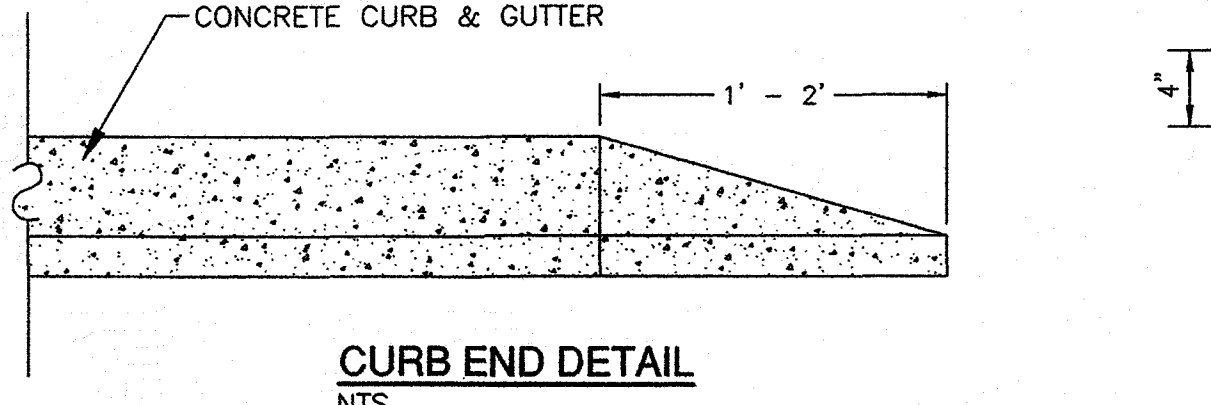
HARDWARE CLOTH & GRAVEL INLET PROTECTION
 NTS

CONSTRUCTION SEQUENCE:
 1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
 2. DRIVE 5" STEEL POST 2" INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4' APART.
 3. SURROUND THE POST WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POST AT THE TOP, MIDDLE AND BOTTOM. PLACING A 2' FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.
 4. PLACE CLEAN GRAVEL (NCDOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16" TO 18" AROUND THE WIRE, AND SMOOTH TO AN EVEN GRADE.
 5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
 6. COMPACT THE AREA PROPERLY AND STABILIZE IT WITH GROUNDCOVER.

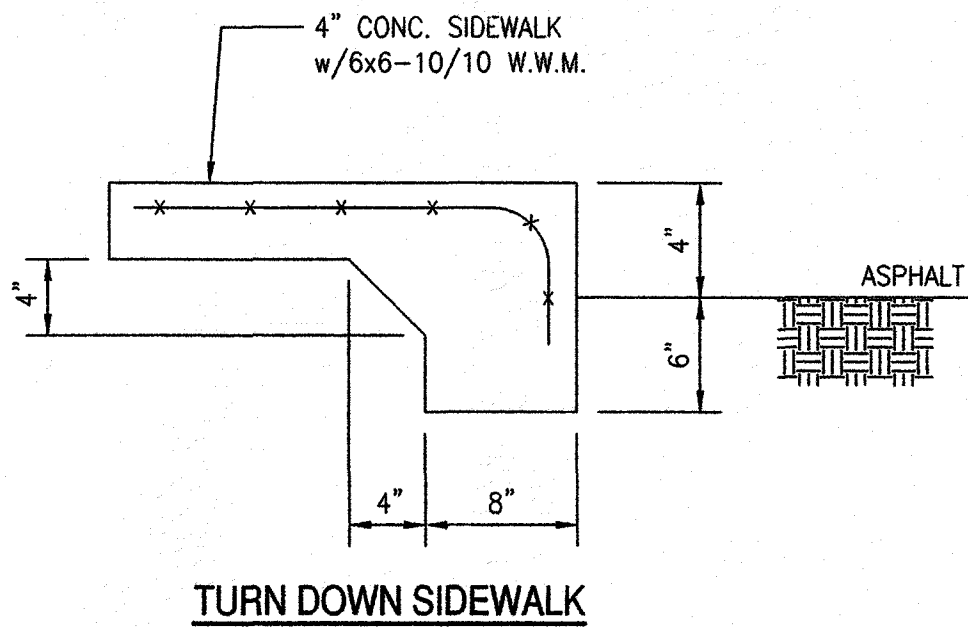
MAINTENANCE:
 INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.



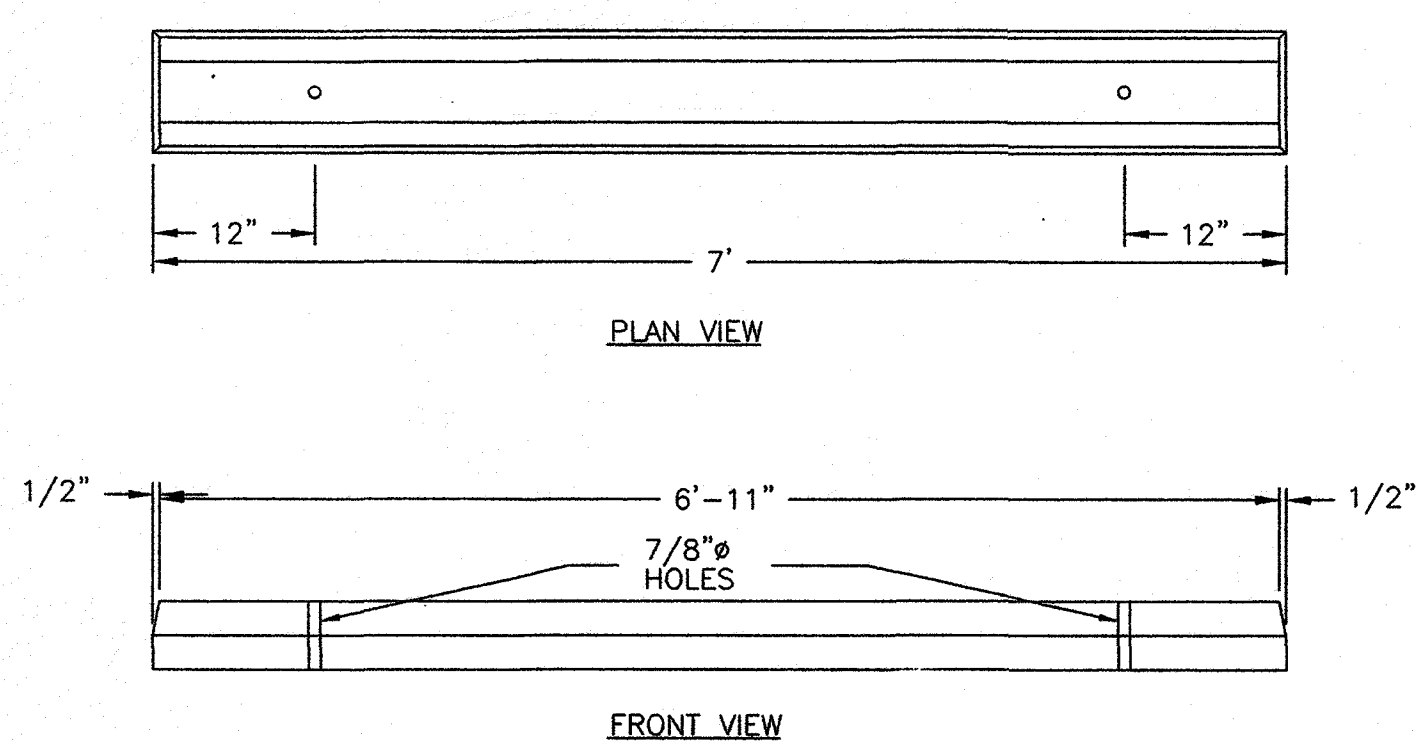
SIDEWALK JOINT DETAILS
 NTS



CURB END DETAIL
 NTS

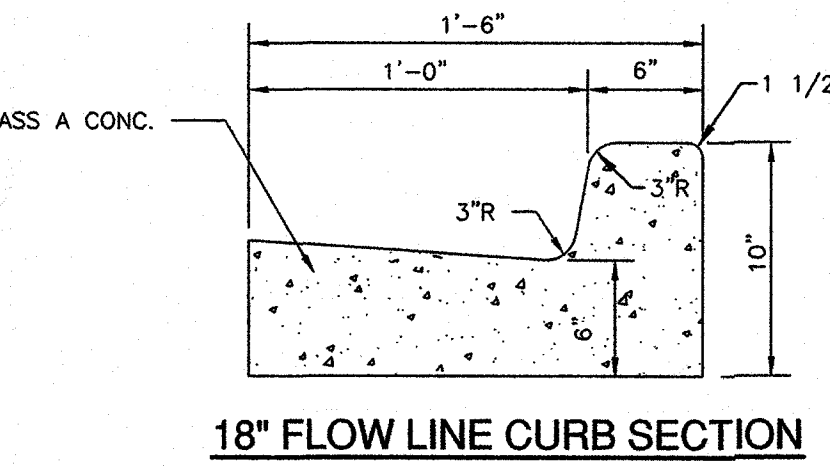


TURN DOWN SIDEWALK
 NTS



WHEEL STOP DETAIL
 NTS

REINFORCING:
 4 - #4 REBAR
 CONCRETE:
 4000 PSI @ 28 DAYS
 WIDTH x LENGTH x HEIGHT
 9" x 7'-0" x 4"



18" FLOW LINE CURB SECTION
 NTS

NOTE: CURB TYPE DEPENDS ON GRADES SHOWN ON GRADING PLAN. GRADES INDICATING FALL AWAY FROM CURB SHALL BE SPILL OFF TYPE CURB. GRADES INDICATING CURB ACCEPTING FLOW SHALL BE FLOW LINE TYPE.

NOTE:
 1. PRIOR TO ANY FIELD MODIFICATION, REVISIONS SHALL BE APPROVED BY N&T. ANY DEVIATIONS FROM APPROVED PLANS MAY RESULT IN NON CONFORMANCE WITH PERMITS OR PERMITTED CONDITIONS. REVISIONS MAY REQUIRE RE-ANALYSIS & PERMIT MODIFICATION AT OWNERS EXPENSE AND COULD POTENTIALLY DELAY C.O. OR REQUIRE WORK STOPPAGE UNTIL PROJECT IS BROUGHT BACK INTO PERMIT COMPLIANCE.

TEMPORARY/PERMANENT GRASS SPECIFICATION

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL 3 INCHES DEEP OVER ADVERSE SOIL CONDITIONS.
2. RIP THE ENTIRE AREA TO A 6 INCH DEPTH.
3. REMOVE ALL ROCKS, ROOTS AND OTHER OBSTRUCTIONS LEAVING SURFACES SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME AND FERTILIZER UNIFORMLY AND MIX WITH SOIL. LIME: 45 LBS. PER 1000 S.F. PHOSPHORUS: 20 LBS PER 1000 S.F. FERTILIZER: 17 LBS. PER 1000 S.F.
5. CONTINUE TILLAGE UNTIL A WELL PULVERIZED, FIRM, UNIFORM SEED BED IS PREPARED 4-6 INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEED BED AND COVER SEED LIGHTLY. 2 - 3 LBS PER 1000 S.F. (SEE MIXTURE BELOW)
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH. GRAIN STRAW & HAY AT 75 TO 100 LBS PER 1000 S.F. WOOD CHIPS AT 500 LBS. PER 1000 S.F. JUTE & MESH AS PER MANUFACTURER
8. ASPHALT FOR ANCHORING MULCH SHALL BE TYPE SS-1 EMULSION AND APPLIED AT A RATE OF 1000 GAL. PER ACRE FOR SLOPE STABILIZATION, AND 150 GAL. PER TON OF STRAW FOR ANCHORING STRAW.
9. INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEED WITHIN THE PLANTING SEASON, IF POSSIBLE. IF GRASS STAND SHOULD BE OVER 80% DAMAGED, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
10. CONSULT CONSERVATION INSPECTOR ON MAINTENANCE, TREATMENT, AND FERTILIZATION AFTER PERMIT COVER IS ESTABLISHED.
11. SEED FOR TEMPORARY AND PERMANENT APPLICATIONS SHALL BE:
 20% CARPET GRASS
 24% BERBERA GRASS
 20% TURF FESCUE 10% CREEPING RED FESCUE
 24% ANNUAL RYE GRASS
 *BERBERA SEED SHALL BE HULLED FOR WARM WEATHER PLANTING. PURITY OF SEED SHALL BE A MIN. OF 98% AND GERMINATION SHALL BE A MIN. OF 85%.

NPDES STABILIZATION TIMEFRAMES

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) 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 HOW ZONES

TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE
 SPECIES RATE (lb/acre)
 RYE (GRAIN) 120
 ANNUAL LESPEDEZA 50

SEEDING DATES
 MOUNTAINS - AUG. 15 - DEC. 15
 COASTAL PLAIN AND PIEDMONT - AUG. 15 - DEC. 15

SOIL AMENDMENTS
 FOLLOW SOIL TEST OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 1,000 lb/acre 10-10-10 FERTILIZER.

MULCH
 APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
 REPAIR AND REFERTILIZE DAMAGE AREAS IMMEDIATELY. TOP DRESS WITH 50 lb/acre OF NITROGEN IN MARCH, IF IT IS NECESSARY TO EXTEND TEMPORARY COVER BEYOND JUNE 15, OVERSEED WITH 50 lb/acre KOBE (PIEDMONT AND COASTAL PLAIN) OR KOREAN (MOUNTAINS) LESPEDEZA IN LATE FEBRUARY OR EARLY MARCH.

TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE
 SPECIES RATE (lb/acre)
 RYE (GRAIN) 120
 ANNUAL LESPEDEZA 50

SEEDING DATES
 MOUNTAINS - ABOVE 2,500 FEET: FEB. 15 - MAY 15
 BELOW 2,500 FEET: FEB. 1 - MAY 1
 PIEDMONT - JAN. 1 - MAY 1
 COASTAL PLAIN - DEC. 1 - APRIL 15

SOIL AMENDMENTS
 FOLLOW RECOMMENDATIONS OF SOIL TESTS OR APPLY 2,000 lb/acre GROUND AGRICULTURAL LIMESTONE AND 750 lb/acre 10-10-10 FERTILIZER.

MULCH
 APPLY 4,000 lb/acre STRAW. ANCHOR STRAW BY TACKLING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

MAINTENANCE
 REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

- SITE WORK NOTES:
 1. THE CONTRACTOR SHALL VISIT THE SITE TO BECOME FAMILIAR WITH FIELD CONSTRUCTION CONDITIONS.
 2. CONTRACTOR SHALL COORDINATE WORK WITHIN NCDOT AND LOCAL RIGHT OF WAY WITH PROPER AUTHORITIES AND SHALL MEET ANY REQUIREMENTS AS TO TRAFFIC CONTROL AND CONNECTION TO EXISTING STREETS.
 3. CLEARING AND GRUBBING: REMOVE ALL TREES AS REQUIRED UNLESS OTHERWISE NOTED TO REMAIN. STUMPS, ROOTS, SHRUBBERY, ASPHALT CONCRETE, STRUCTURES, BURIED UTILITIES, STORAGE TANKS, ETC. WITHIN LIMITS OF CONSTRUCTION.
 4. STRIPPING: BEFORE EXCAVATING OR FILLING, REMOVE ALL TOPSOIL, WOOD, LEAVES, AND ANY OTHER UNSUITABLE MATERIAL.
 5. MUCKING: REMOVE ANY SOFT, ORGANIC SILT MATERIALS AND EXISTING BURIED CONSTRUCTION DEBRIS AS REQUIRED AND FILL TO SUBGRADE ELEVATION WITH 2" OF SELECT MATERIAL COMPACTED AS SPECIFIED BELOW.
 6. DISPOSAL: CLEARED, GRUBBED, STRIPPED OR EXCAVATED SOIL SHALL BE REMOVED FROM SITE AND DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE LOCAL AND STATE CODES.
 7. BORROW MATERIAL: THE CONTRACTOR SHALL FURNISH BORROW MATERIAL REQUIRED FROM OFF SITE AND OBTAIN ALL REQUIRED PERMITS ASSOCIATED WITH BORROW OPERATIONS.
 8. FILL AND COMPACTION: AFTER STRIPPING THOSE AREAS DESIGNATED TO RECEIVE FILL SHOULD BE PROFFERED. THE TOP 8" OF SUBGRADE SHALL BE COMPACTED TO AT LEAST 98% OF MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT. ANY AREA WHICH PUMPS OR RUNS EXCESSIVELY SHOULD BE UNDERCUT AND REPLACED WITH A CLEAN, SILTY OR CLAYEY SAND HAVING A UNIFIED SOIL CLASSIFICATION OF SP, SM, OR SC. FILL MATERIAL 5' OUTSIDE OF BUILDING AREAS SHALL THEN BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698) WITH THE UPPER 12 INCHES OF SUBGRADE BEING COMPACTED TO 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. FILL MATERIALS WITHIN BUILDING AREAS TO A LINE OUTSIDE THE BUILDING AREAS SHALL BE PLACED IN LAYERS NOT TO EXCEED 8" AND COMPACTED TO AT LEAST 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D-698) WITH THE UPPER 12 INCHES OF SUBGRADE BEING COMPACTED TO 98% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. IF THE MATERIAL IS TOO WET TO SECURE PROPER COMPACTION, IT SHALL BE HARROWED REPEATEDLY OR OTHERWISE AERATED WITH SUITABLE EQUIPMENT UNTIL OPTIMUM MOISTURE CONTENT IS OBTAINED. FILL SHALL BE PLACED IN SUCH A MANNER THAT THE SURFACE WILL DRAIN READILY AT ALL TIMES. SEE STRUCTURAL NOTES AND SOILS REPORT FOR ADDITIONAL REQUIREMENTS.
 9. LAYOUT: THE CONTRACTOR SHALL PROVIDE ALL LAYOUT REQUIRED TO CONSTRUCT HIS WORK.
 10. THE CONTRACTOR IS RESPONSIBLE FOR THE LOCATION AND PROTECTION OF EXISTING UTILITIES DURING CONSTRUCTION.
 11. EXISTING BOUNDARY AND TOPOGRAPHIC INFORMATION FROM SURVEY BY NORRIS & WARD LAND SURVEYING AND PROVIDED BY OWNER.
 12. THE CONTRACTOR SHALL VERIFY DIMENSIONS AT JOBSITE.
 13. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF RELOCATION OR DISCONNECTION OF ALL EXISTING UTILITIES WITH APPLICABLE AGENCIES AND AUTHORITIES.
 14. ALL PAVEMENT AND BASE MATERIALS AND WORKMANSHIP SHALL CONFORM TO NCDOT STANDARDS.
 15. WATER AND SEWER SERVICES SHALL BE INSTALLED TO MEET LOCAL AND STATE PLUMBING CODES. METER AND TAPS SHALL MEET ALL LOCAL REQUIREMENTS.
 16. ALL AREAS SHALL BE GRADED FOR POSITIVE DRAINAGE.
 17. SEE GEOTECHNICAL REPORT FOR ADDITIONAL REQUIREMENTS.
 18. CONTRACTOR SHALL NOTE THAT EARTHWORK QUANTITIES ARE HIS RESPONSIBILITY. PLANS DO NOT REPRESENT A BALANCED EARTHWORK CONDITION.
 19. REIN. CONC. PIPE SHALL BE CLASS III W/RUBBER GASKETED JOINT OR "RAM NECK". INSTALL PER MANUFACTURER'S REQUIREMENTS.
 20. USE WHITE LANE MARKING PAINT FOR ALL PAVEMENT MARKINGS. PAINT SHALL BE A CHLORINATED RUBBER ALKYL, FS TT-P-115, TYPE III, FACTORY MIXED, QUICK DRYING, NON-BLEEDING.
 21. REFER TO THE PLUMBING DRAWINGS FOR LOCATION AND INVERTS OF NEW WASTE AND WATER LINES.
 22. THE FINISHED GROUND ELEVATION AT THE BUILDING PERIMETER SHALL BE A MINIMUM OF 6 INCHES BELOW THE BUILDING FINISH FLOOR ELEVATION EXCEPT AT ENTRANCES AND ENTRANCE TRANSITIONS OR AS NOTED.

EROSION CONTROL NOTES AND MAINTENANCE PLAN
 1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RAINFALL EXCEPT FOR RAINFALL BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF-INCH RAINFALL.
 2. ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY WITH AN ADDITIONAL 2 INCHES OF #4 STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL, SPILLED WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
 3. SEDIMENT WILL BE REMOVED FROM HARDWARE CLOTH AND GRAVEL INLET PROTECTION, BLOCK AND GRAVEL INLET PROTECTION, ROCK DOUGHNUT INLET PROTECTION AND ROCK PIPE INLET PROTECTION WHEN THE DESIGNED STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS AS DESIGNED. DEBRIS WILL BE REMOVED FROM THE ROCK AND HARDWARE CLOTH TO ALLOW PROPER DRAINAGE. SILT SACKS WILL BE EMPTIED ONCE A WEEK AND AFTER EVERY RAIN EVENT. SEDIMENT WILL BE REMOVED FROM AROUND BEAVER DAMS, DANDY SACKS AND SOCKS ONCE A WEEK AND AFTER EVERY RAIN EVENT.
 4. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6 FEET MAX. WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL BE 8 FEET MAX. WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE SEDIMENT FENCE, ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF-FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED.
 5. SEDIMENT WILL BE REMOVED FROM THE SEDIMENT BASIN WHEN THE DESIGN STORAGE CAPACITY HAS BEEN HALF FILLED WITH SEDIMENT. ROCK WILL BE CLEANED OR REPLACED WHEN THE SEDIMENT POOL NO LONGER DRAINS OR IF THE ROCK IS DISLOGGED. BAFFLES WILL BE REPAIRED OR REPLACED IF THEY COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE. THEY WILL BE REPLACED PROMPTLY. SEDIMENT WILL BE REMOVED FROM BAFFLES WHEN DEPOSITS REACH HALF THE HEIGHT OF THE 1ST BAFFLE. FLOATING SKIMMERS WILL BE INSPECTED WEEKLY AND WILL BE KEPT CLEAN.
 LAND QUALITY REQUIRES

6. ALL SEEDING AREAS WILL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED, ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN, TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 14 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 14 WORKING DAYS. WATER QUALITY REQUIRES ALL SEEDING AREAS BE FERTILIZED, RESEED AS NECESSARY AND MULCHED ACCORDING TO SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL PERIMETER DIKES, SWALES, HORIZONTAL TO DITCHES, PERIMETER SLOPES, ALL SLOPES STEEPER THAN (3:1) VERTICAL AND ALL HIGH QUALITY WATER (HOW) ZONES SHALL PROVIDE TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICAL BUT IN ANY EVENT WITHIN SEVEN (7) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL PROVIDE TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICAL BUT IN ANY EVENT WITHIN FOURTEEN (14) CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
7. BASIN OUTLET STRUCTURES AND SKIMMERS SHALL WITHDRAW WATER FROM THE SURFACE.

Approved Construction Plan
 Name: Nicole D Smith Date: 5/22/18
 Planning: W Anderson 5-17-18
 Fire: C. Child 5/22/18

WILMINGTON
 NORTH CAROLINA
 Public Services • Engineering Division
 APPROVED STORMWATER MANAGEMENT PLAN
 Date: 5/18/18 Permit # 2018021
 Signed: R. White

OWNER: PAR 5 DEVELOPMENT GROUP, LLC
 2075 JUNCTION LAKE RD.
 WEST END, NC 27576
 910-994-0681

EROSION CONTROL NOTES AND MAINTENANCE PLAN

17033

DES: TJC
 CDR: JPN
 DRWN: NSB

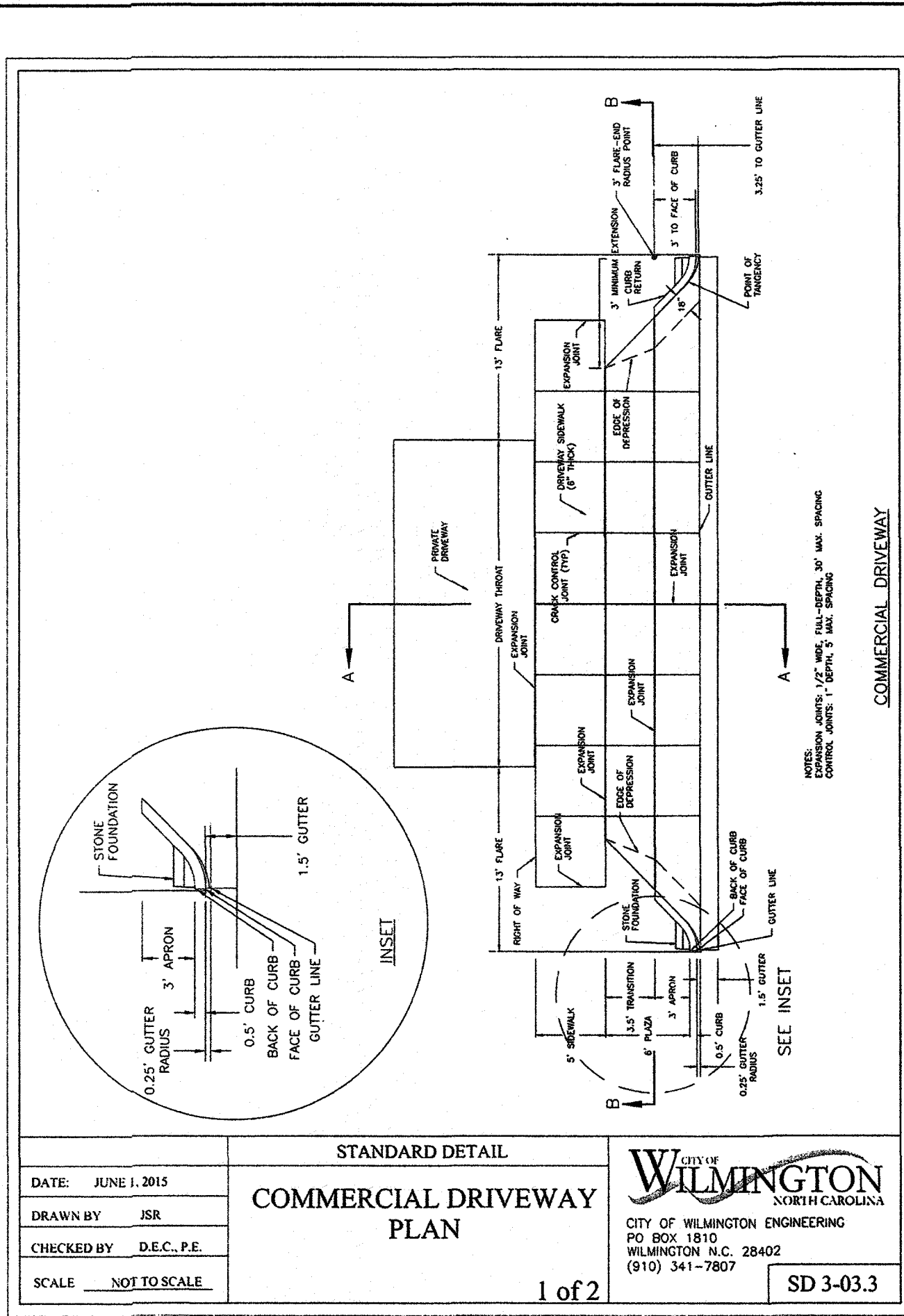
DATE: 05/17/18

WILMINGTON ENGINEERS & ARCHITECTS
 902 MARKET STREET
 WILMINGTON, NC 28401
 PHONE (910) 343-9653

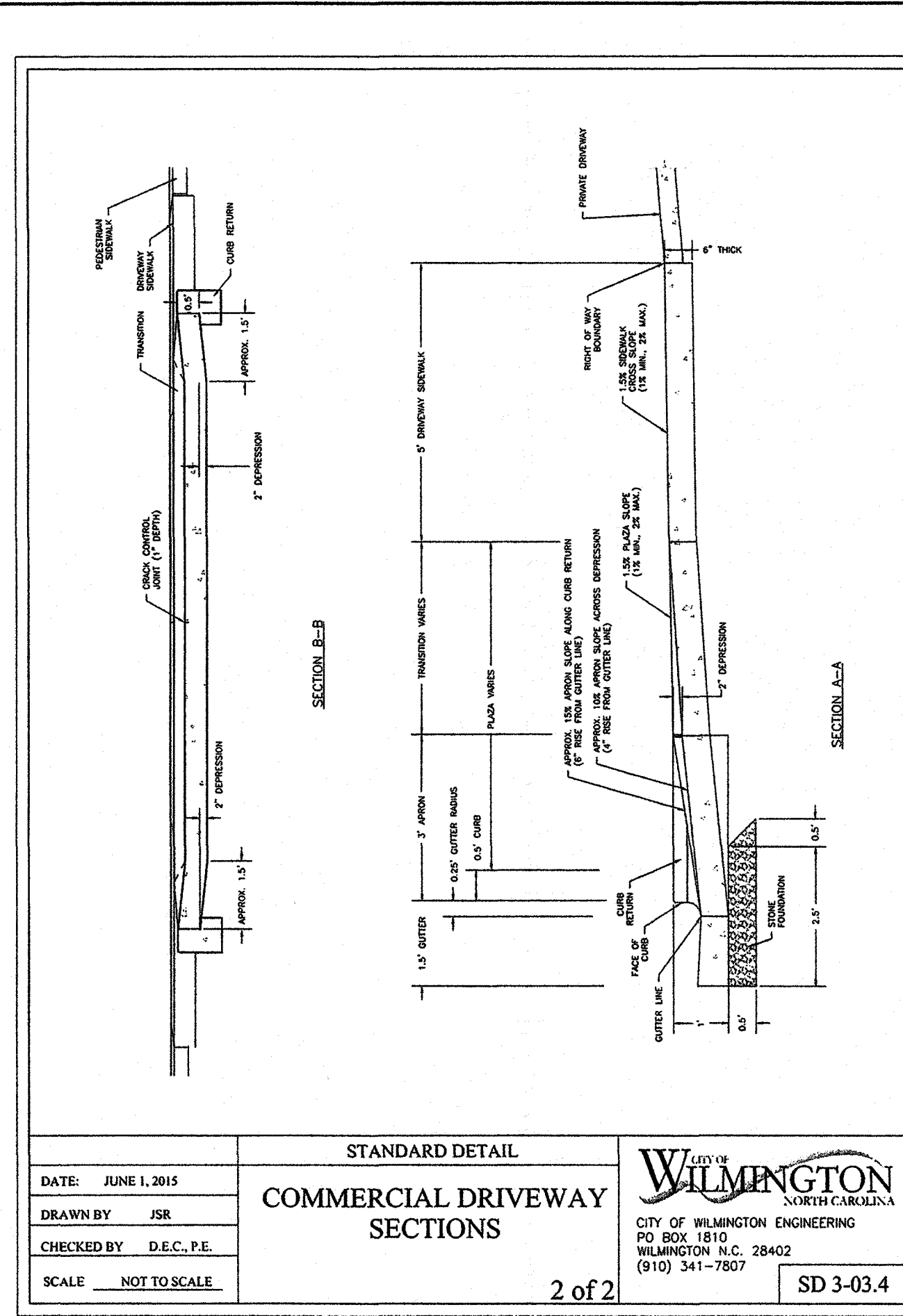
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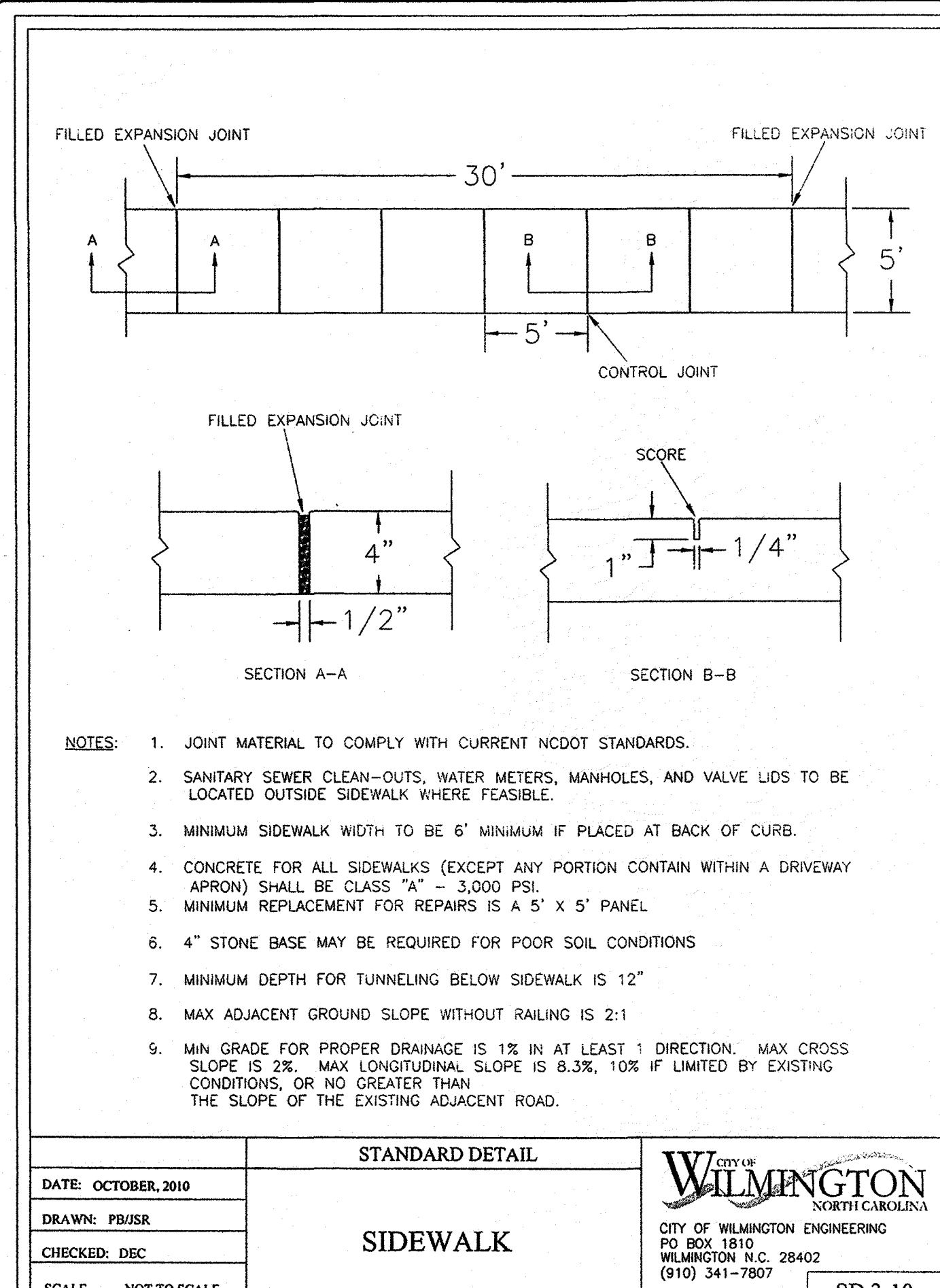
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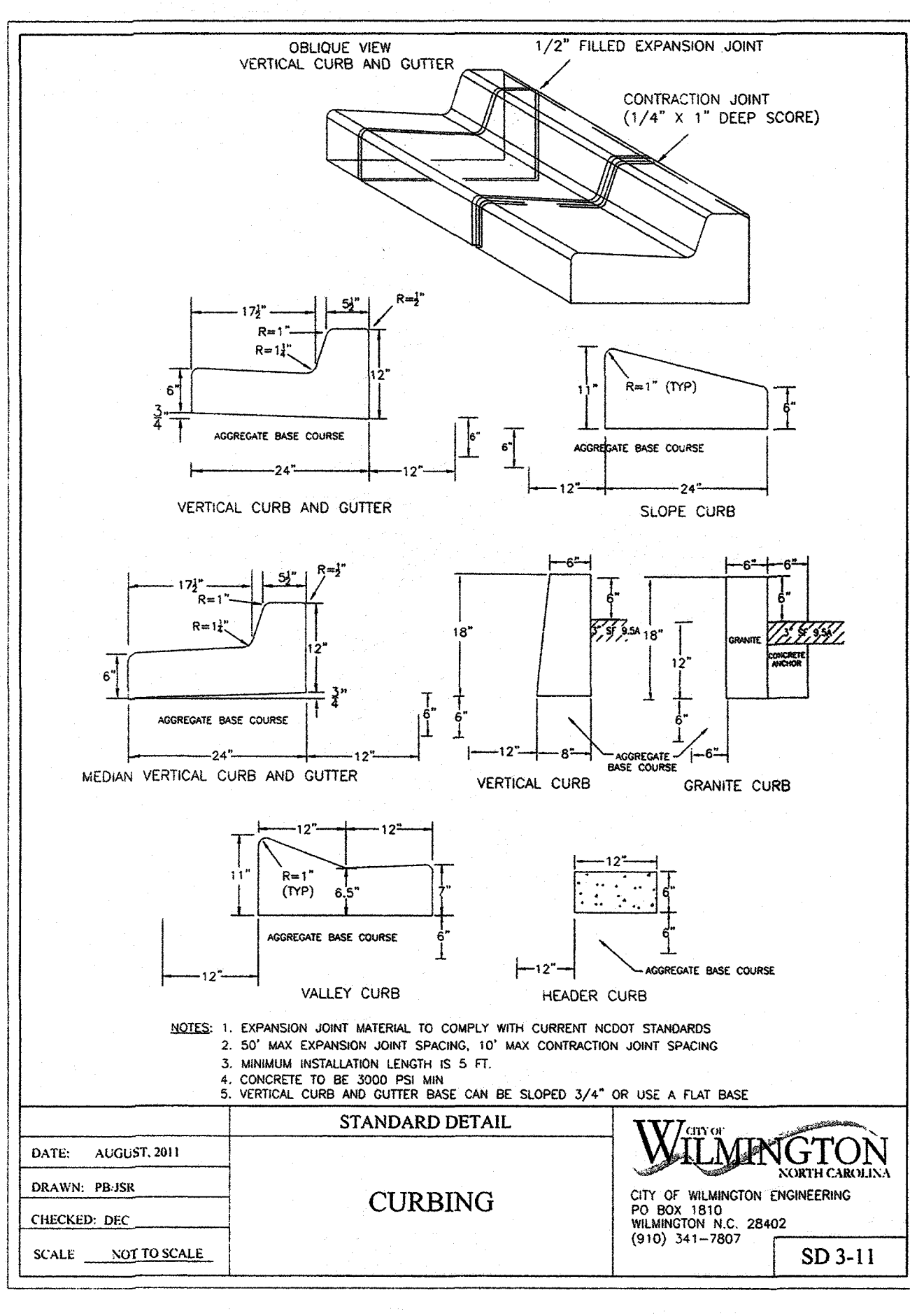
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CHECKED BY: D.E.C. P.E.		
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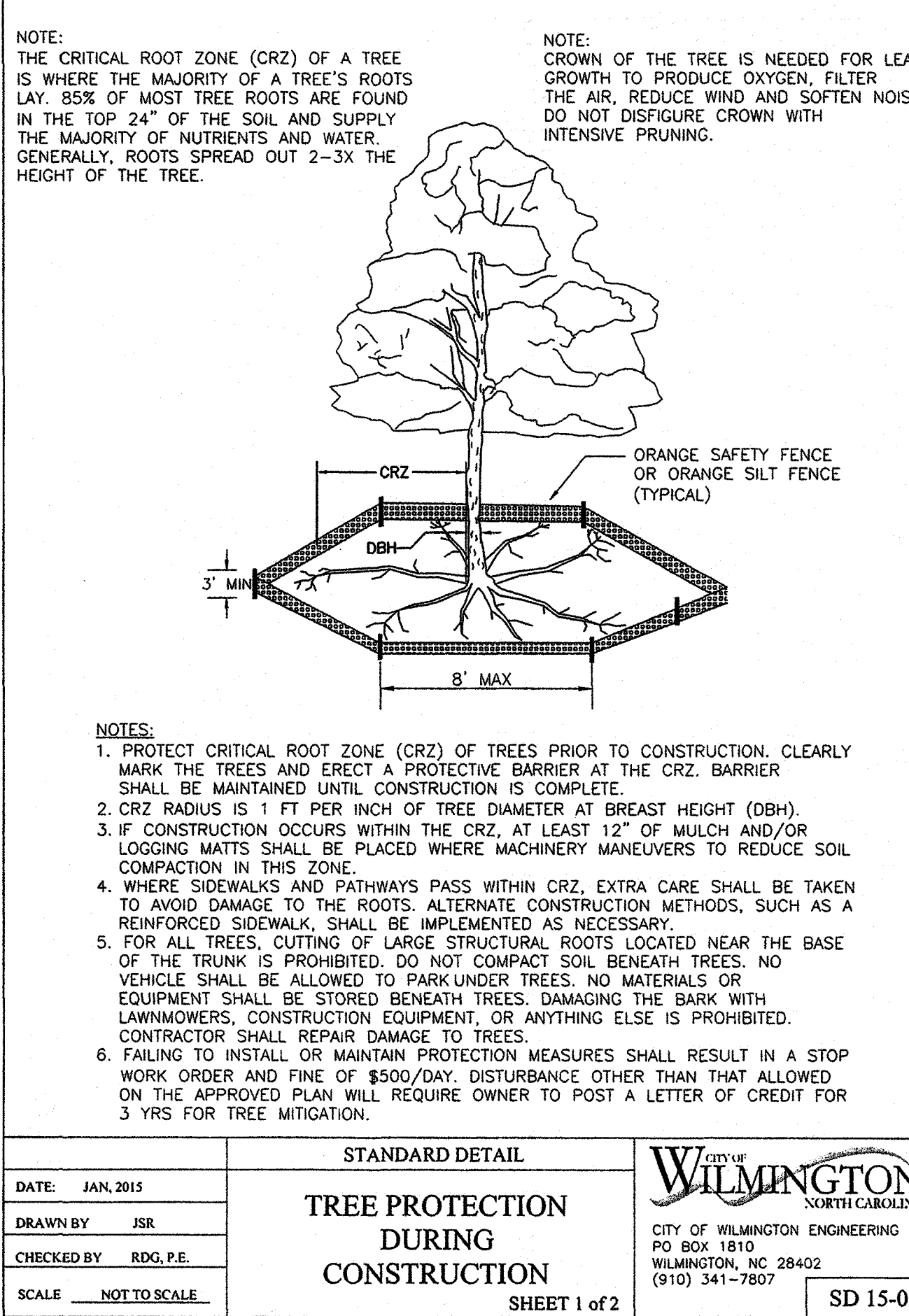
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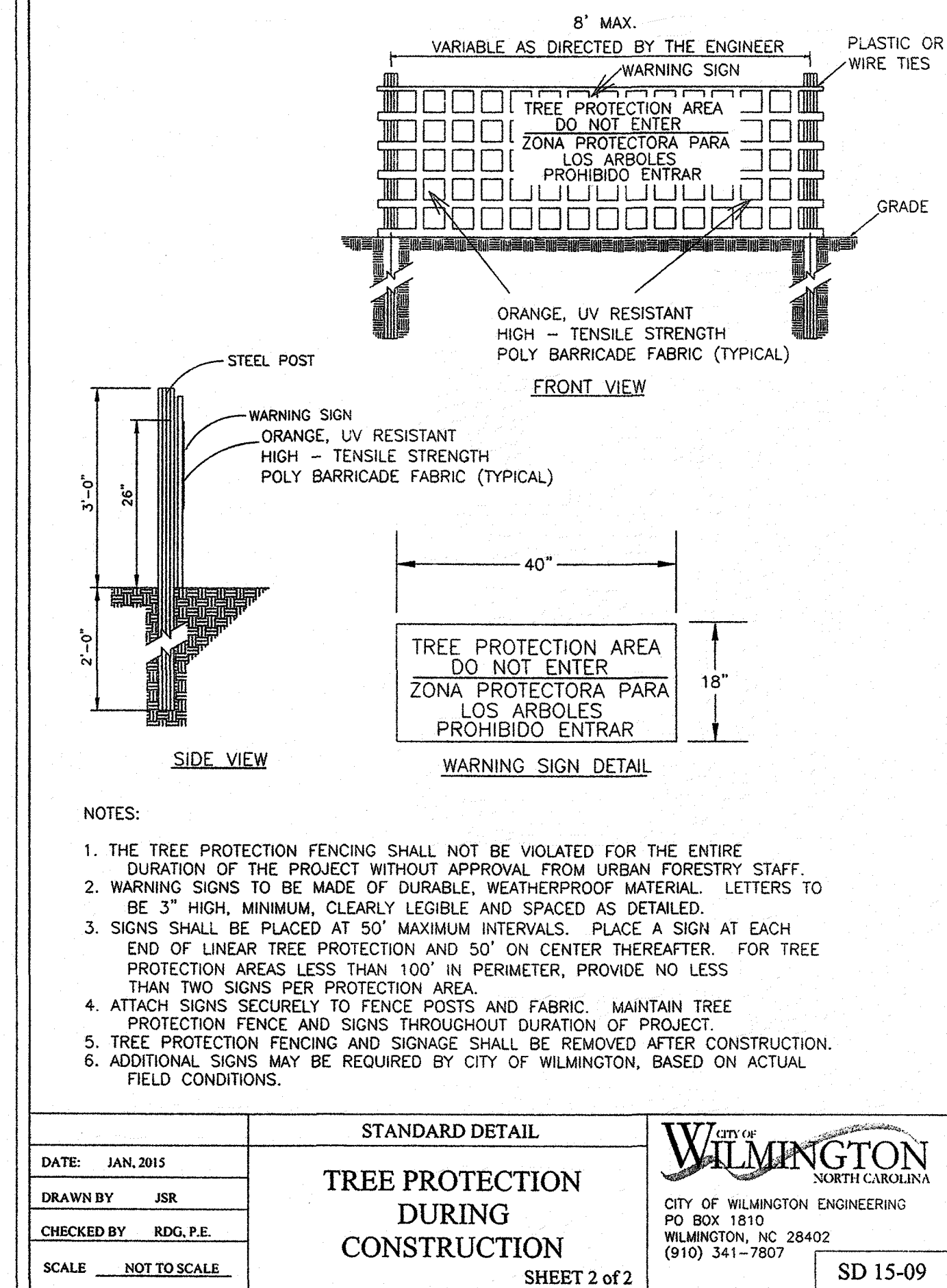
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CHECKED BY: DEC		
SCALE: NOT TO SCALE		



DATE: AUGUST, 2011	 CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, N.C. 28402 (910) 341-7807	SD 3-11
DRAWN BY: PBJ/SR		
CHECKED BY: DEC		
SCALE: NOT TO SCALE		



DATE: JAN, 2015	 CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, N.C. 28402 (910) 341-7807	SD 15-09
DRAWN BY: JSR		
CHECKED BY: RDG, P.E.		
SCALE: NOT TO SCALE		



DATE: JAN, 2015	 CITY OF WILMINGTON ENGINEERING PO BOX 1810 WILMINGTON, N.C. 28402 (910) 341-7807	SD 15-09
DRAWN BY: JSR		
CHECKED BY: RDG, P.E.		
SCALE: NOT TO SCALE		

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

OWNER: PAR 5 DEVELOPMENT GROUP, LLC
 2075 JUNIPER LAKE RD.
 WEST END, NC 27576
 910-994-0881

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DETAILS
 DOLLAR GENERAL - CAROLINA BEACH RD.
 3606 CAROLINA BEACH RD (US 421)
 NEW HANOVER COUNTY, NORTH CAROLINA

NORRIS & TUNSTALL
 CONSULTING ENGINEERS P.C.
 1429 ASH-LITTLE RIVER RD., NW
 ASH, NC 28420
 PHONE (910) 287-5900

License #C-3641
17033

DES. TJC
 CDD. JPN
 DRWN. NSB

DATE: 05/17/18

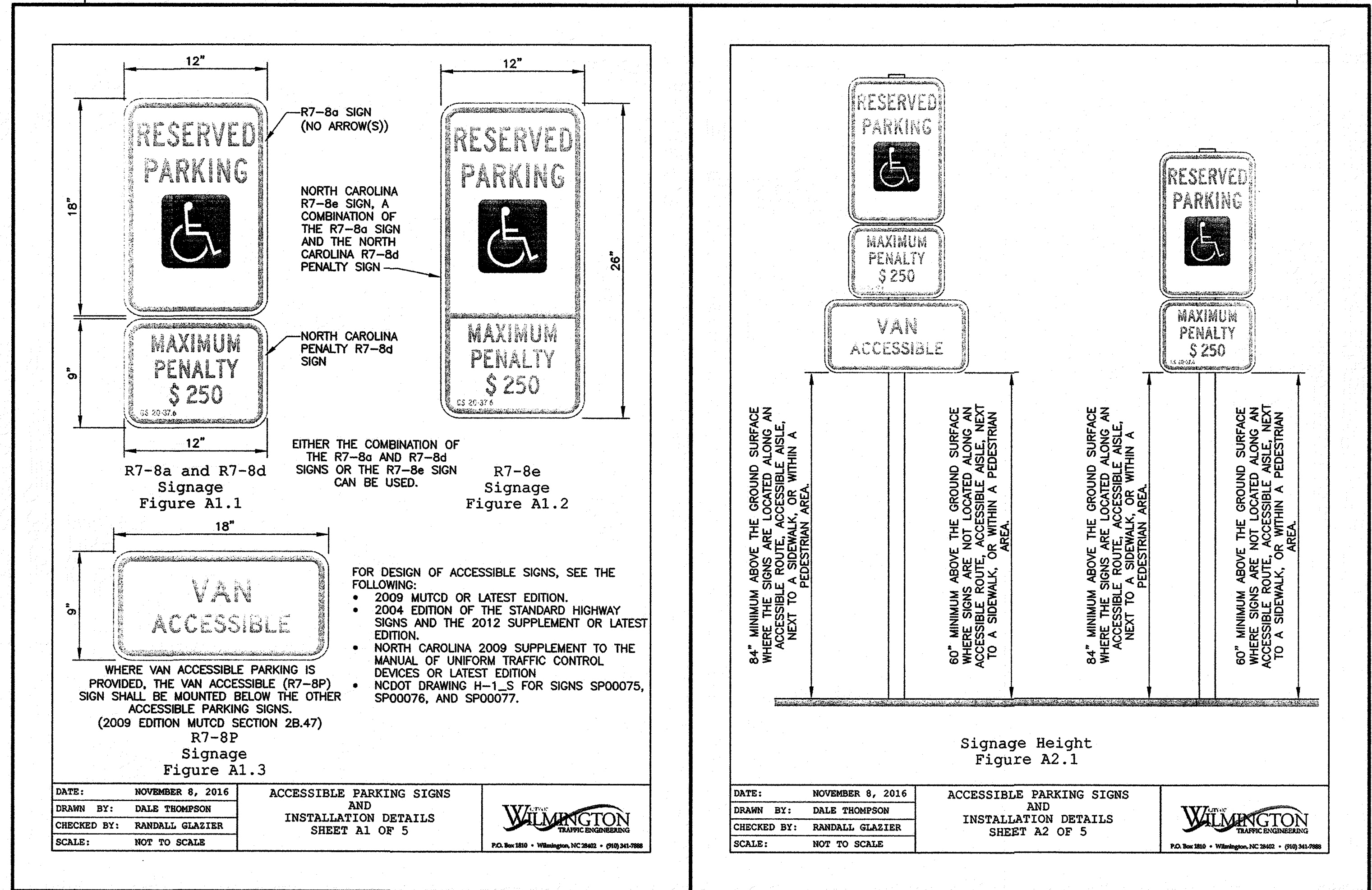
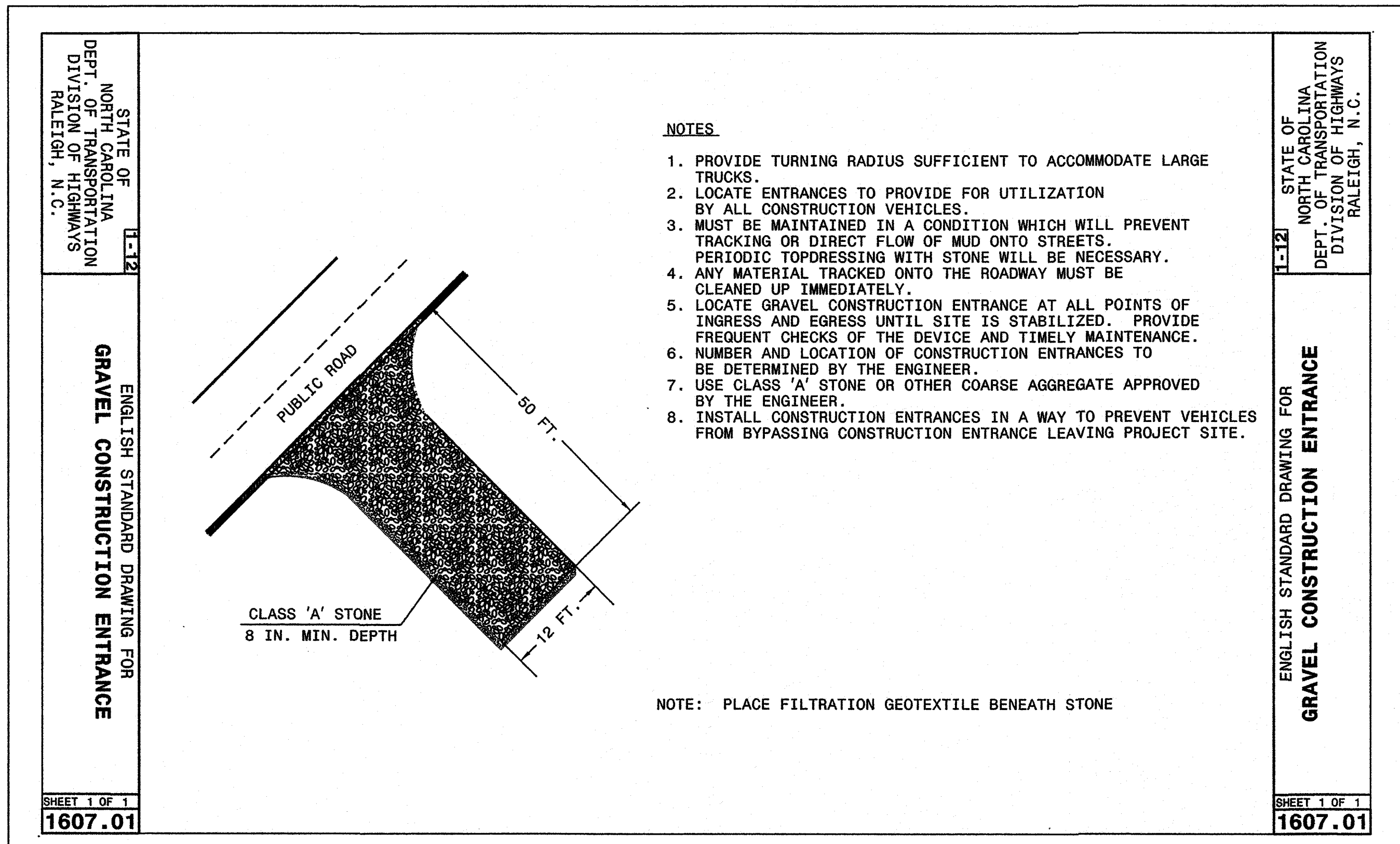
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
 Date: 5/22/18 Permit # 2018021
 Signed: *Nicole Smith for R. Borden*

Approved Construction Plan

Name: *Nicole Smith* Date: *5/22/18*
 Planning: *Nicole Smith*
 Traffic: *W. Borden* 5-22-18
 Fire: *C. Webb* 5/22/18

RECEIVED
 MAY 21 2018
 PLANNING DIVISION

C7



Approved Construction Plan

Name: Nicole Smith Date: 5/22/18

Planning: Nicole Smith 5/22/18

Traffic: W. Smith 5/17/18

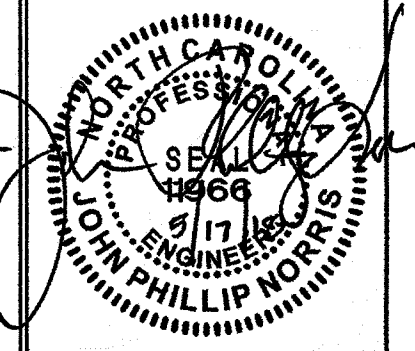
Fire: C. Miller 5/22/18

WILMINGTON NORTH CAROLINA
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 5/17/18 Permit # 2018021

Signed: R. Smith



C8

SYMBOL	DATE	DESCRIPTION	BY
		REVISIONS	

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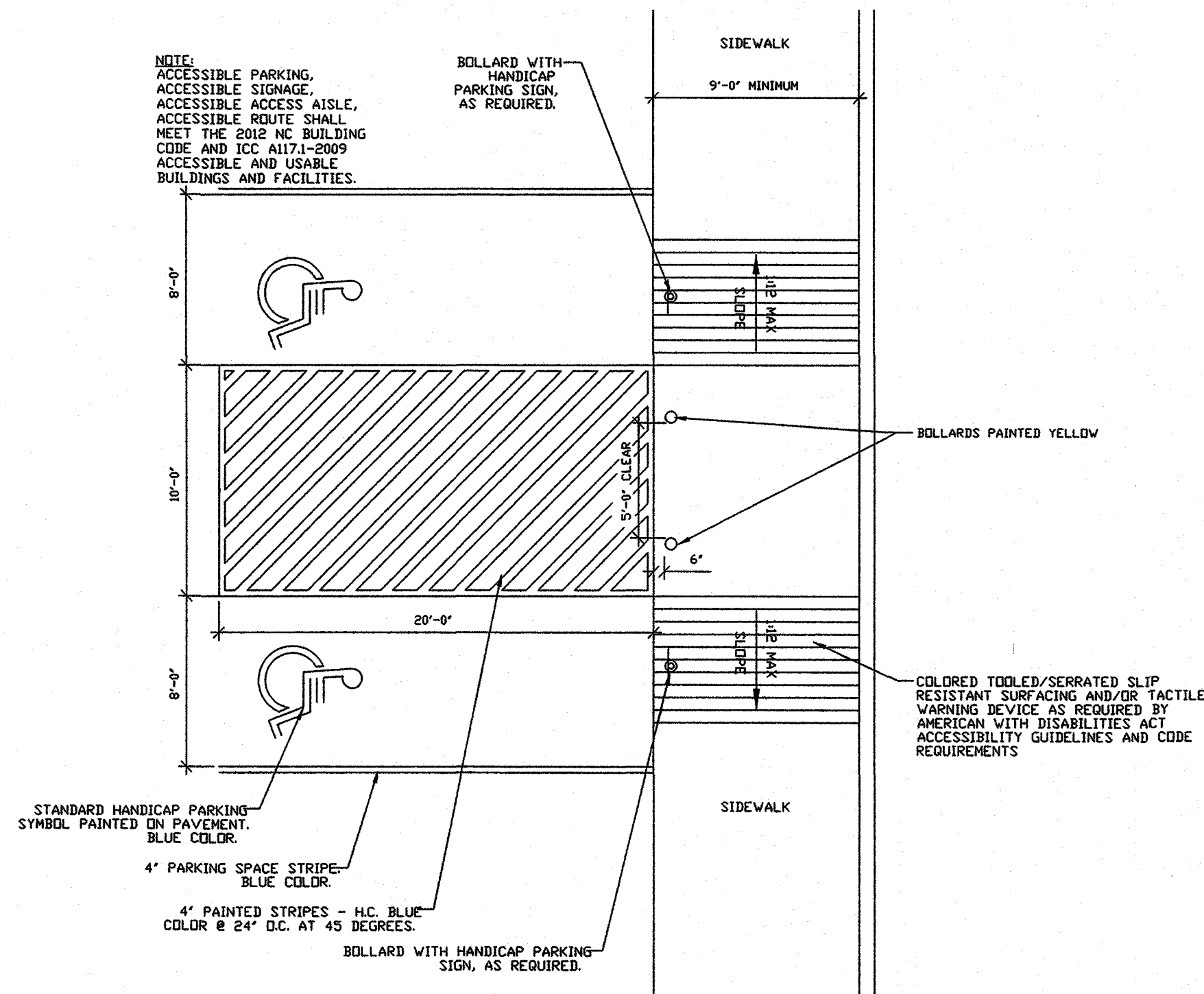
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1429 ASH-LITTLE RIVER RD, NW
WILMINGTON, NC 28401
PHONE (910) 343-9653

License #C-3641

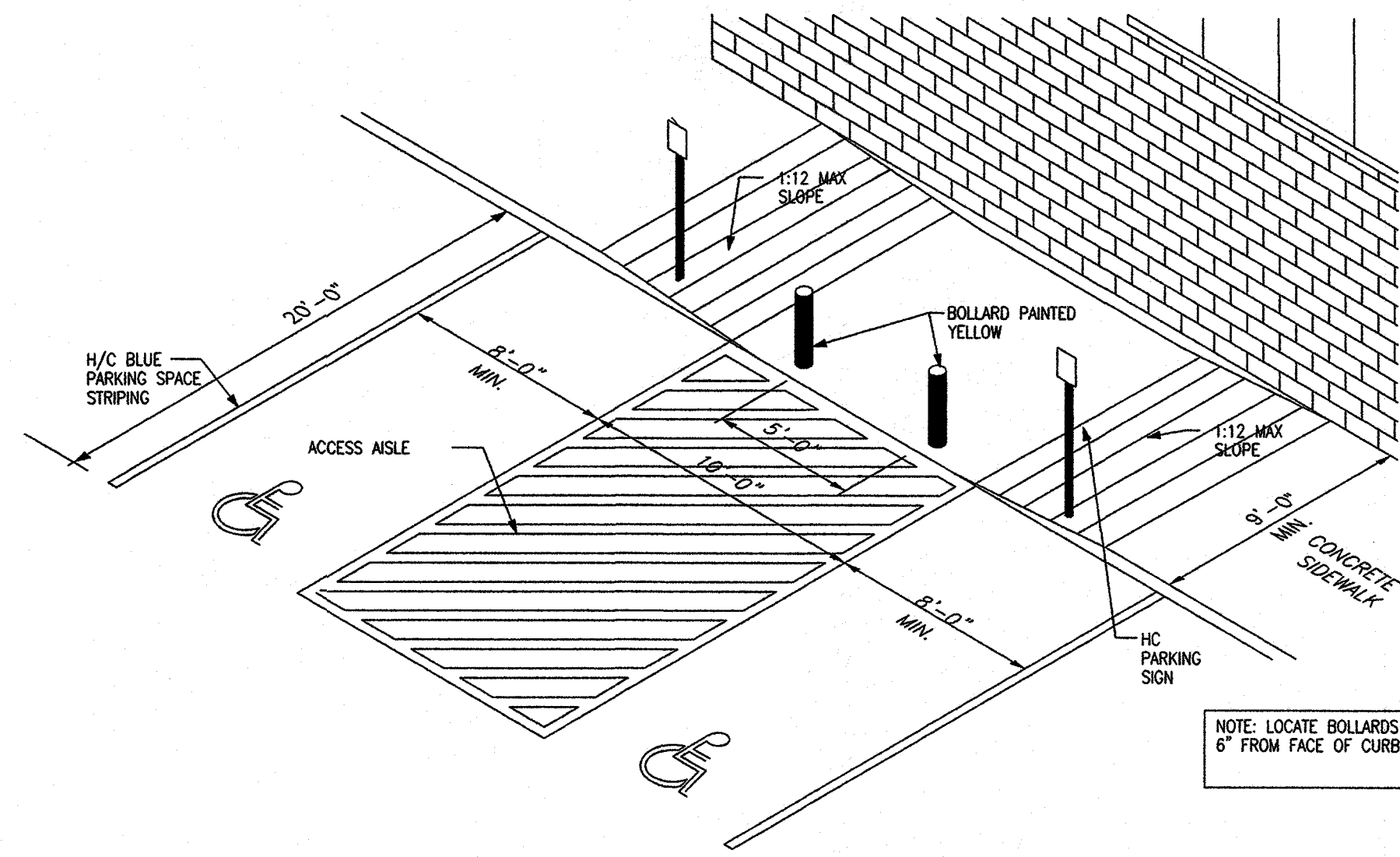
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DES. TJC
CHK. JPN
DRWN. NSB

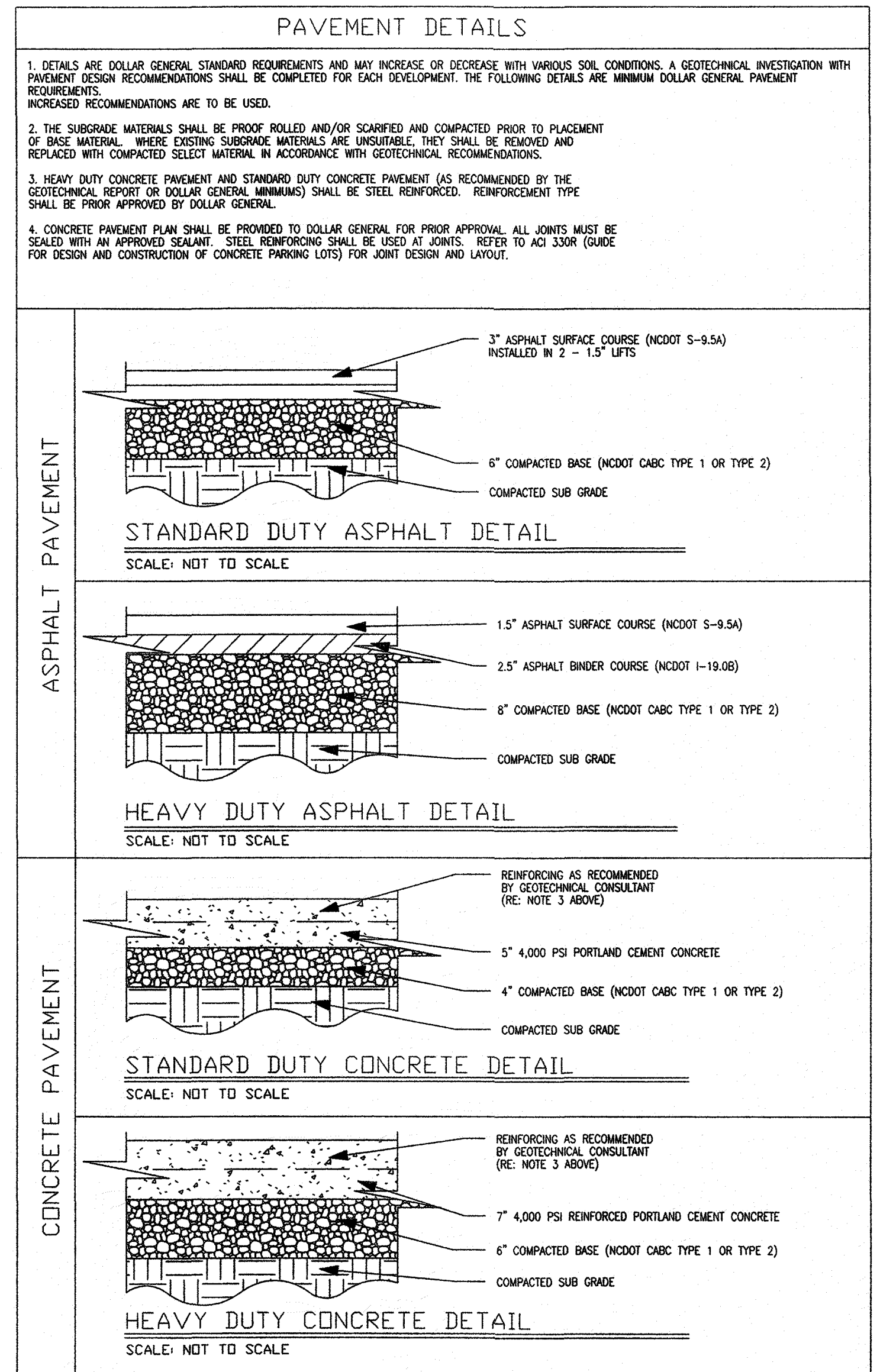
DATE 05/17/18



HANDICAP PARKING DETAIL
NTS



HANDICAP PARKING, ACCESS RAMP AND ACCESS AISLE DETAILS
NTS



Approved Construction Plan	
Name	Date
Planning: <i>Nicole Smith</i>	5/22/18
Traffic: <i>N. Smith</i>	5-17-18
Fire: <i>C. Hill</i>	5/22/18

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: *5/18/18* Permit # *2018021*

Signed: *[Signature]*

BY	DESCRIPTION

REVISIONS

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NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.

902 MARKET STREET
WILMINGTON, NC 28401
PHONE (910) 345-9653

1429 ASH-LITTLE RIVER RD, NW
ASH, NC 28420
PHONE (910) 287-5900

License #C-3641

17033

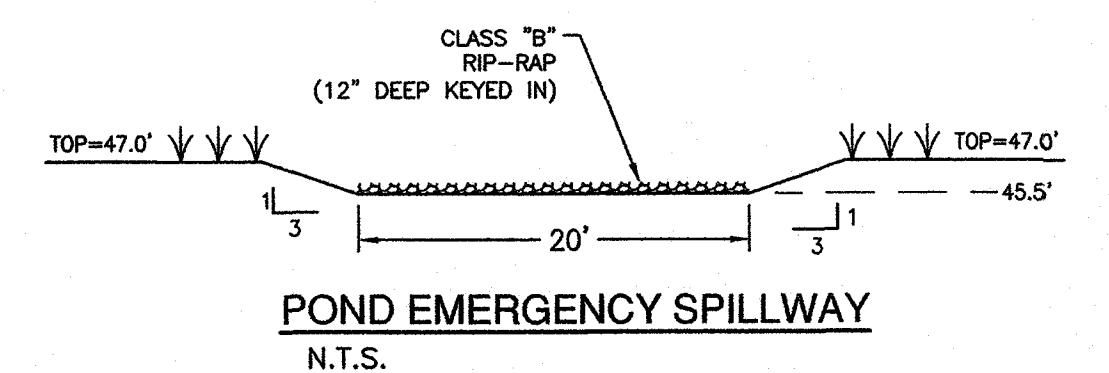
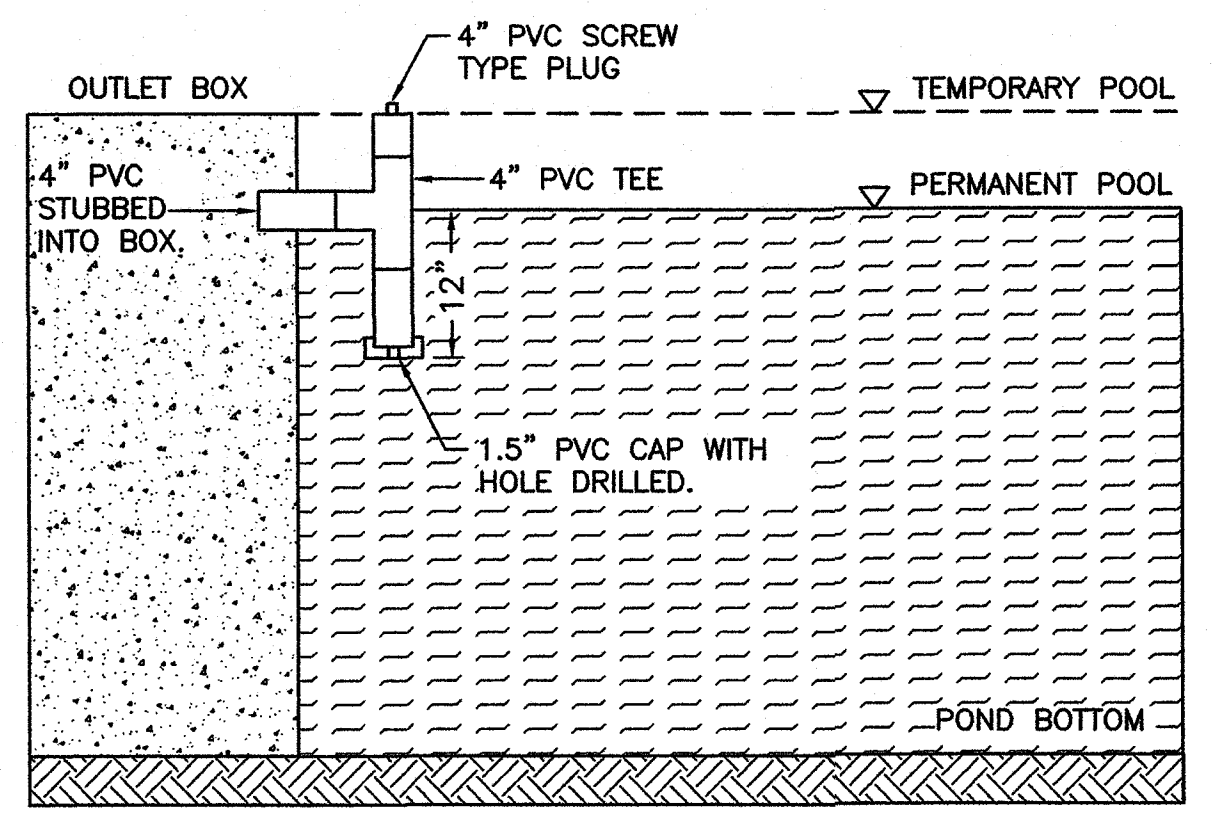
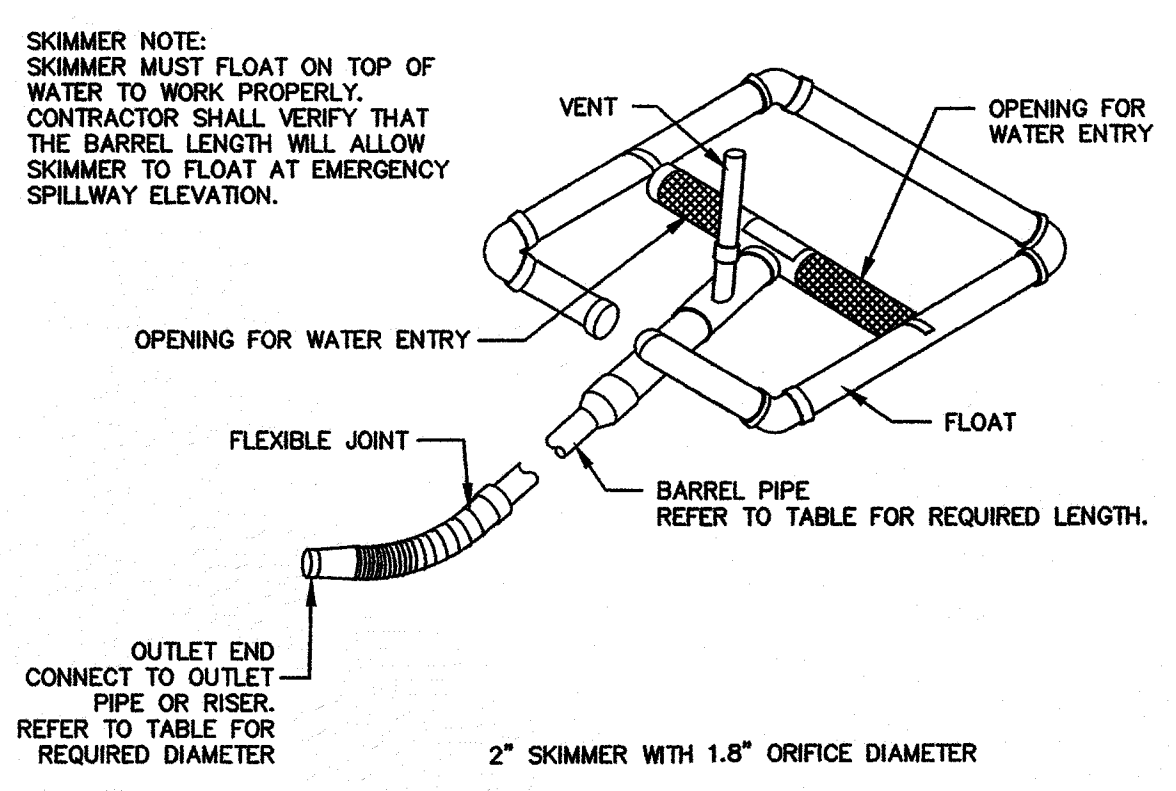
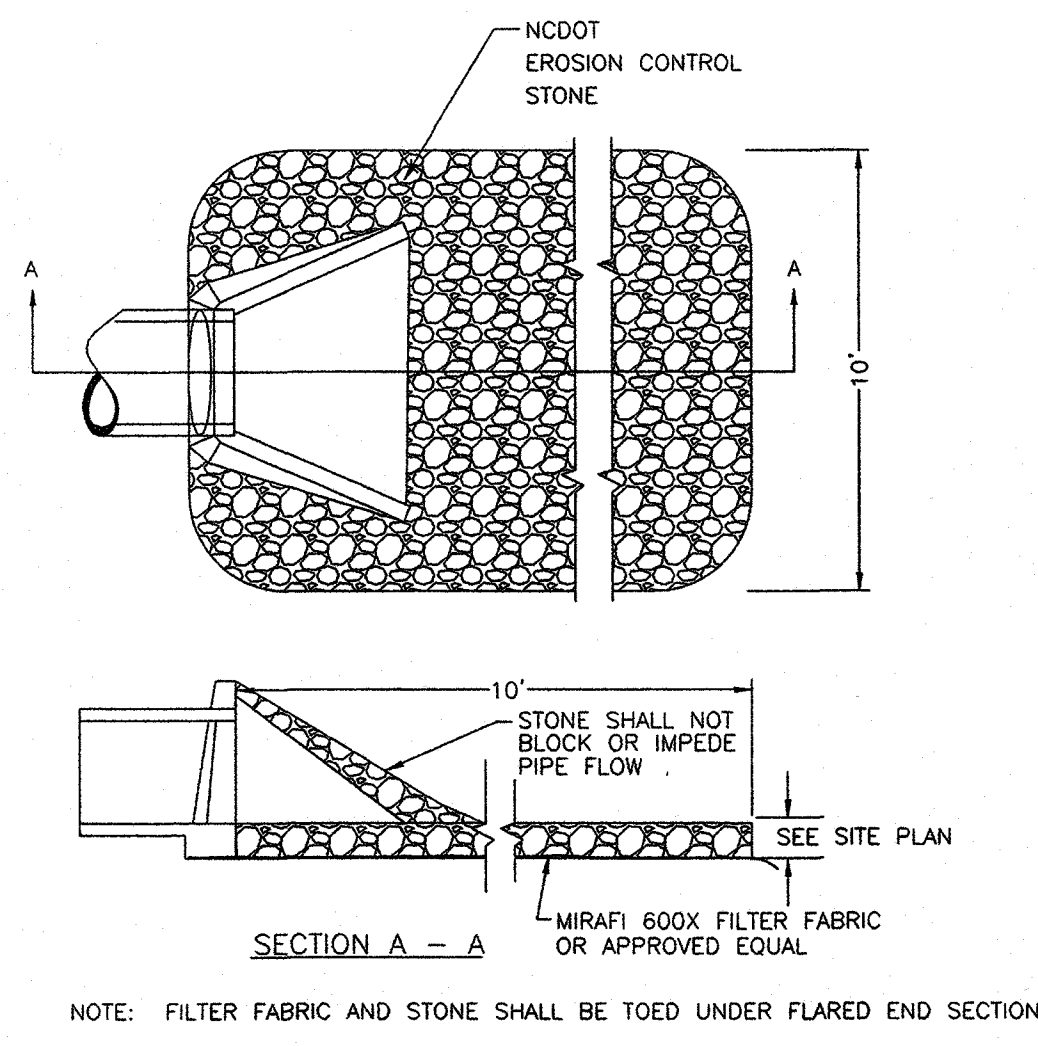
DES. JPN
O.D. JPN
DRAW. NSB

DATE 05/17/18

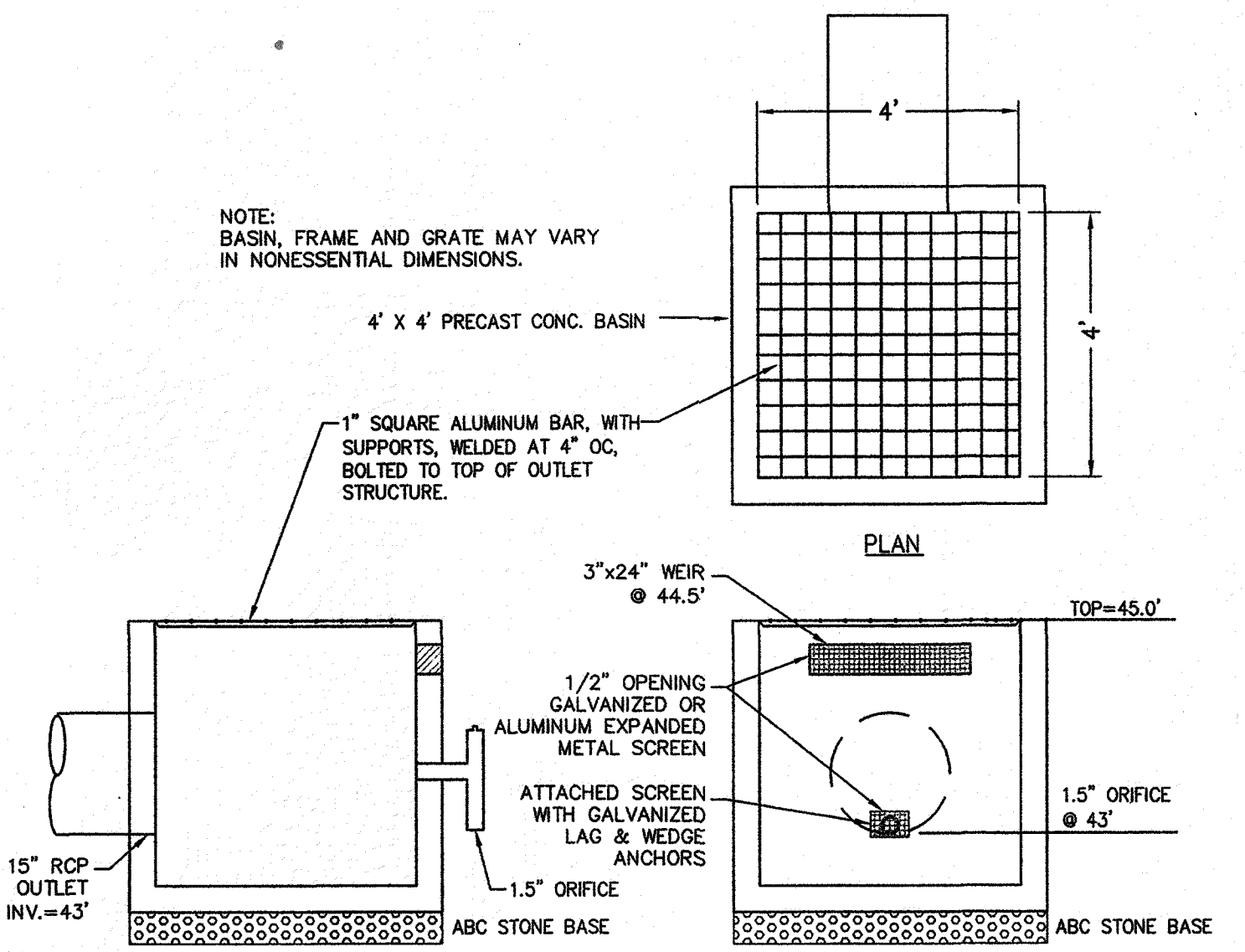
[Professional Engineer Seal]

NOTE:
1. PRIOR TO ANY FIELD MODIFICATION, REVISIONS SHALL BE APPROVED BY N&T. ANY DEVIATIONS FROM APPROVED PLANS MAY RESULT IN NON CONFORMANCE WITH PERMITS OR PERMITTED CONDITIONS. REVISIONS MAY REQUIRE RE-ANALYSIS & PERMIT MODIFICATION AT OWNERS EXPENSE AND COULD POTENTIALLY DELAY C.O. OR REQUIRE WORK STOPPAGE UNTIL PROJECT IS BROUGHT BACK INTO PERMIT COMPLIANCE.

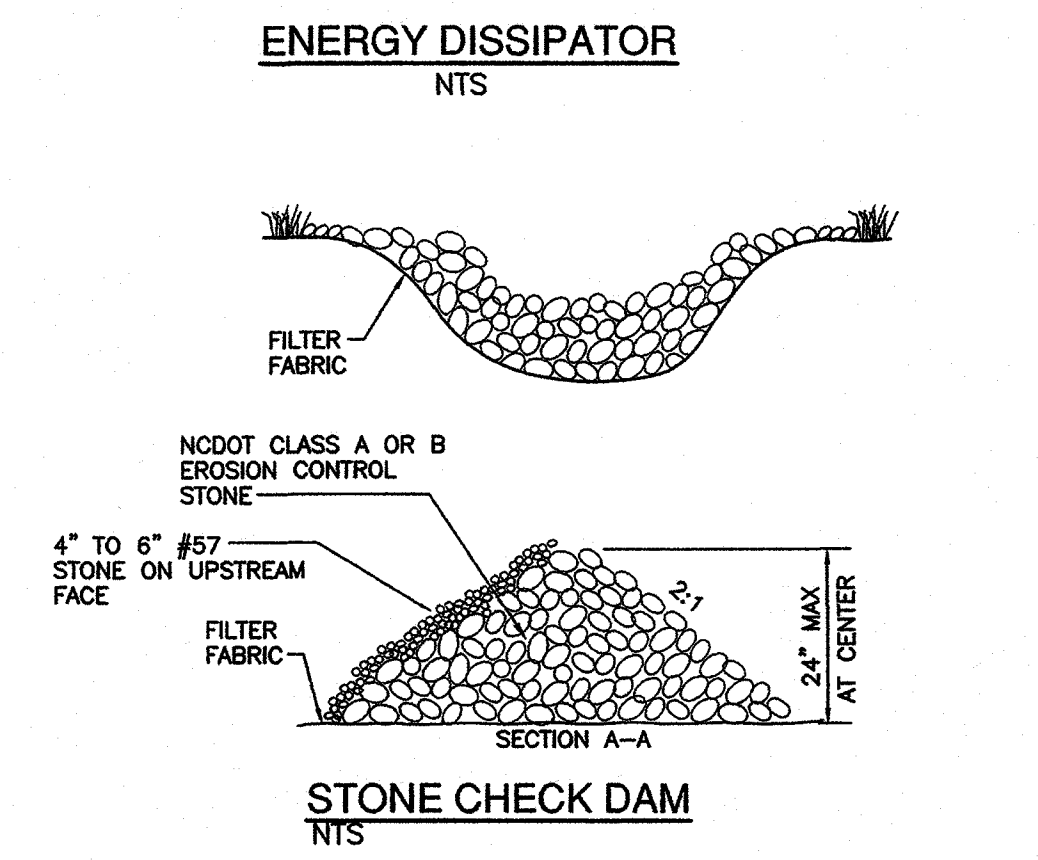
C9



POND EMERGENCY SPILLWAY
N.T.S.



OUTLET STRUCTURE
N.T.S.



ENERGY DISSIPATOR
N.T.S.

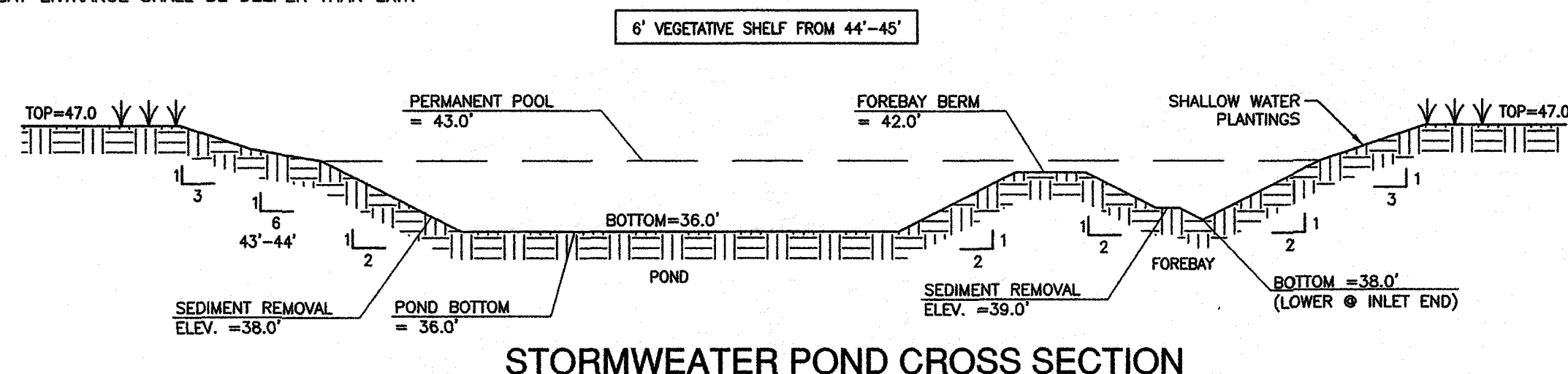
STANDARD SKIMMER DETAIL (FAIRCLOTH)

SUBMERGED ORIFICE OUTLET CONFIGURATION

DETENTION POND NOTES:

- UPON STABILIZATION OF SITE, RESTORE POND TO DESIGN SIZE AND SHAPE.
- INSTALL TOPSOIL ON SIDE SLOPES ABOVE NORMAL POOL AND SEED WITH A MIX OF 20% CARPET GRASS, 24% BERMUDA, 20% FESCUE, 10% CREEPING RED FESCUE, AND 24% RYE. SEED AT A RATE OF 2-3 POUNDS PER 1000 SF.
- VEGETATED SHELF: THE CONTRACTOR SHALL INSTALL EQUAL NUMBERS OF THE LISTED SUITABLE SPECIES. GROUP SIMILAR SPECIES OF PLANTS TOGETHER (APPROX. 10-15 PLANTS PER GROUP). NO PLANTS SHALL BE PLANTED WITHIN 10 FEET OF THE OUTLET STRUCTURE.
- BOTTOM HALF OF VEGETATED SHELF SHALL BE PLANTED WITH SHALLOW WATER PLANT SPECIES, A MINIMUM OF (3) DIVERSE SPECIES, SEE TABLE.
- TOP HALF OF VEGETATED SHELF SHALL BE PLANTED WITH SHALLOW LAND PLANT SPECIES, A MINIMUM OF (3) DIVERSE SPECIES, SEE TABLE.
- THE VEGETATED SHELF SHALL BE PLANTED WITH PLUGS OR POTS (MIN. 2 CU IN) AT 24"-36" O.C. IN A CHECKERBOARD PATTERN. A MINIMUM OF 50 PLANTS PER 200 SF OF SHELF AREA SHALL BE PLANTED.
- STORMWATER POND IS BEING USED AS SEDIMENT BASIN. ONCE SITE IS STABLE STORMWATER POND MUST BE CLEANED OUT AND RETURNED TO DESIGN CONDITIONS.
- FOREBAY ENTRANCE SHALL BE DEEPER THAN EXIT.

APPROVED SHALLOW WATER PLANTS	APPROVED SHALLOW LAND PLANTS
SWEETFLAG	SWAMP MILKWEED
WATER PLANTAIN	QUILL SEDGE
WATERPOD	WHITE TURTLEHEAD
BLUE FLAG IRIS	DWARF JOE PYE WEED
SOFT RUSH	JOE PYE WEED
ARROW ARUM	SPOTTED TRUMPETWEED
FRIMROSE WILLOW	SCARLET ROSE MALLOW
PICKERELWEED	HALBERDLEAF ROSEMALLOW
DUCK POTATO	SEASHORE MALLOW
BULLTONGUE	CARDINAL FLOWER
LIZARD'S TAIL	LONGLEAF LOBELIA
SOFT STEM BULRUSH	GREAT BLUE LOBELIA
THREE-SQUARE BULRUSH	STARRUSH WHITETOP
WOOLGRASS	NARROW PLUMEGRASS
GIANT CUTGRASS	



STORMWATER POND CROSS SECTION

Approved Construction Plan

Name: Nicole Demuth Date: 5/22/18

Planning: Nicole Demuth 5/22/18

Traffic: W. Anderson 5-17-18

Fire: C. White 5/22/18

CITY OF WILMINGTON
NORTH CAROLINA

Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: 5/18/18 Permit # 2018-021

Signed: Bob De

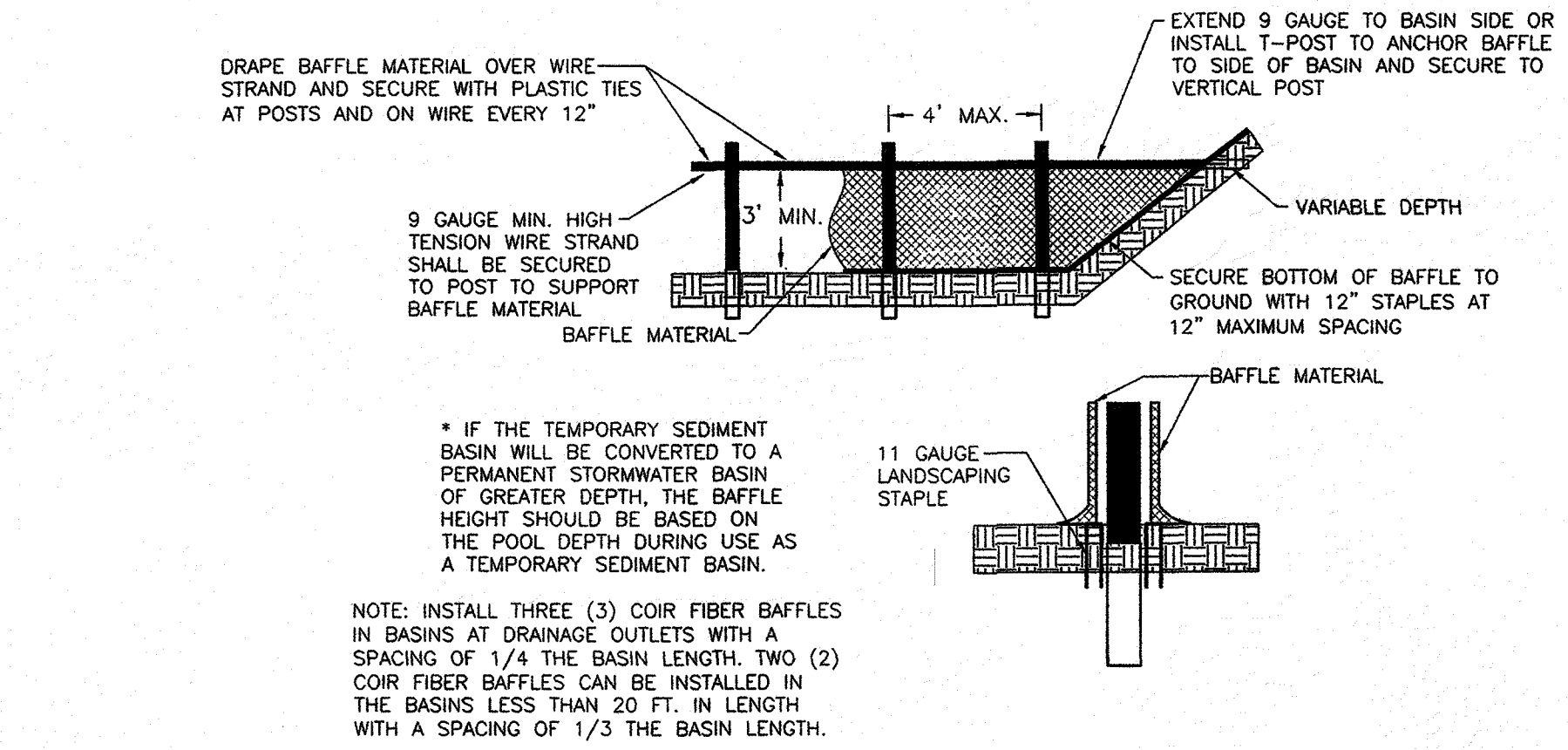
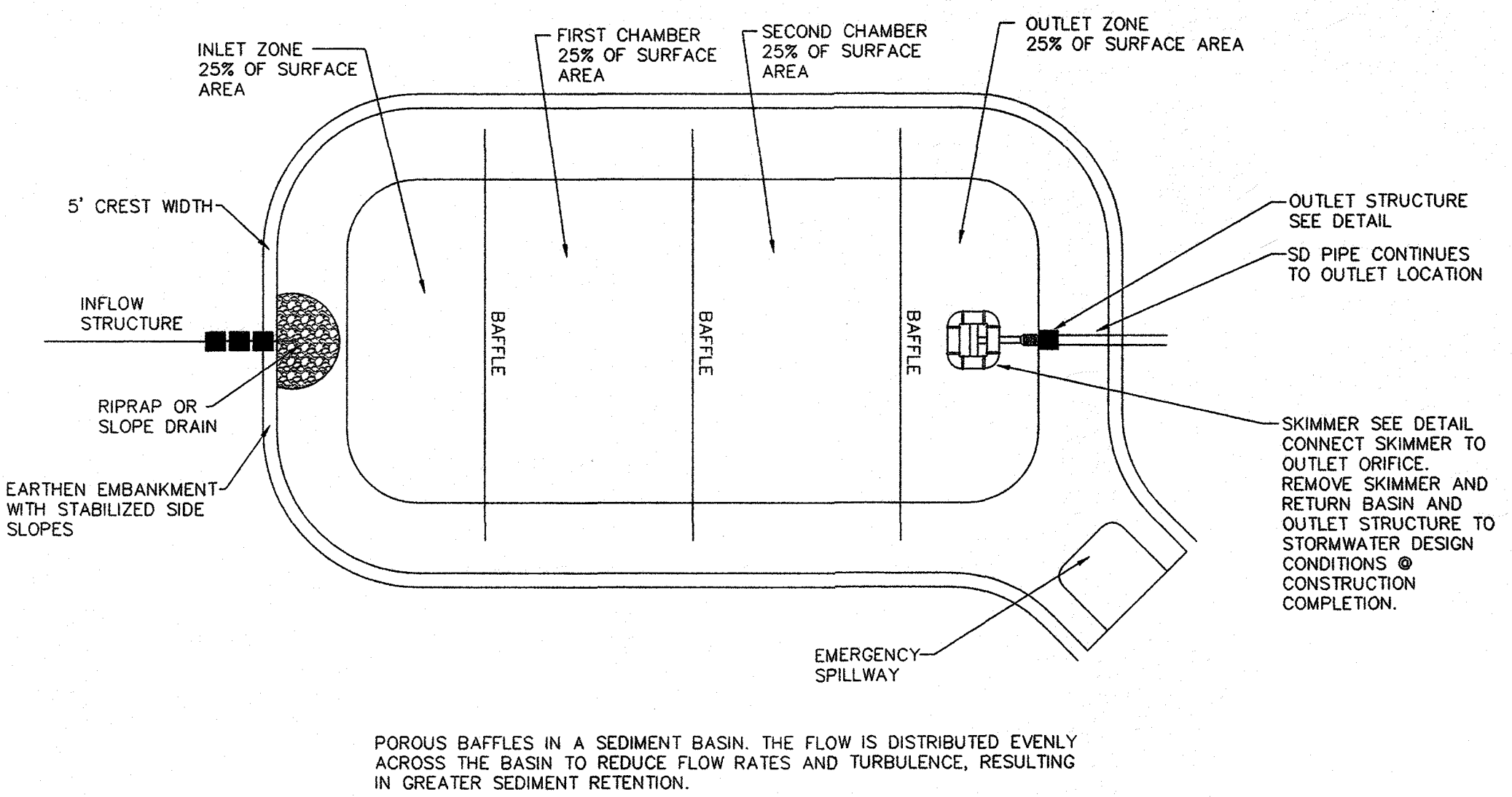


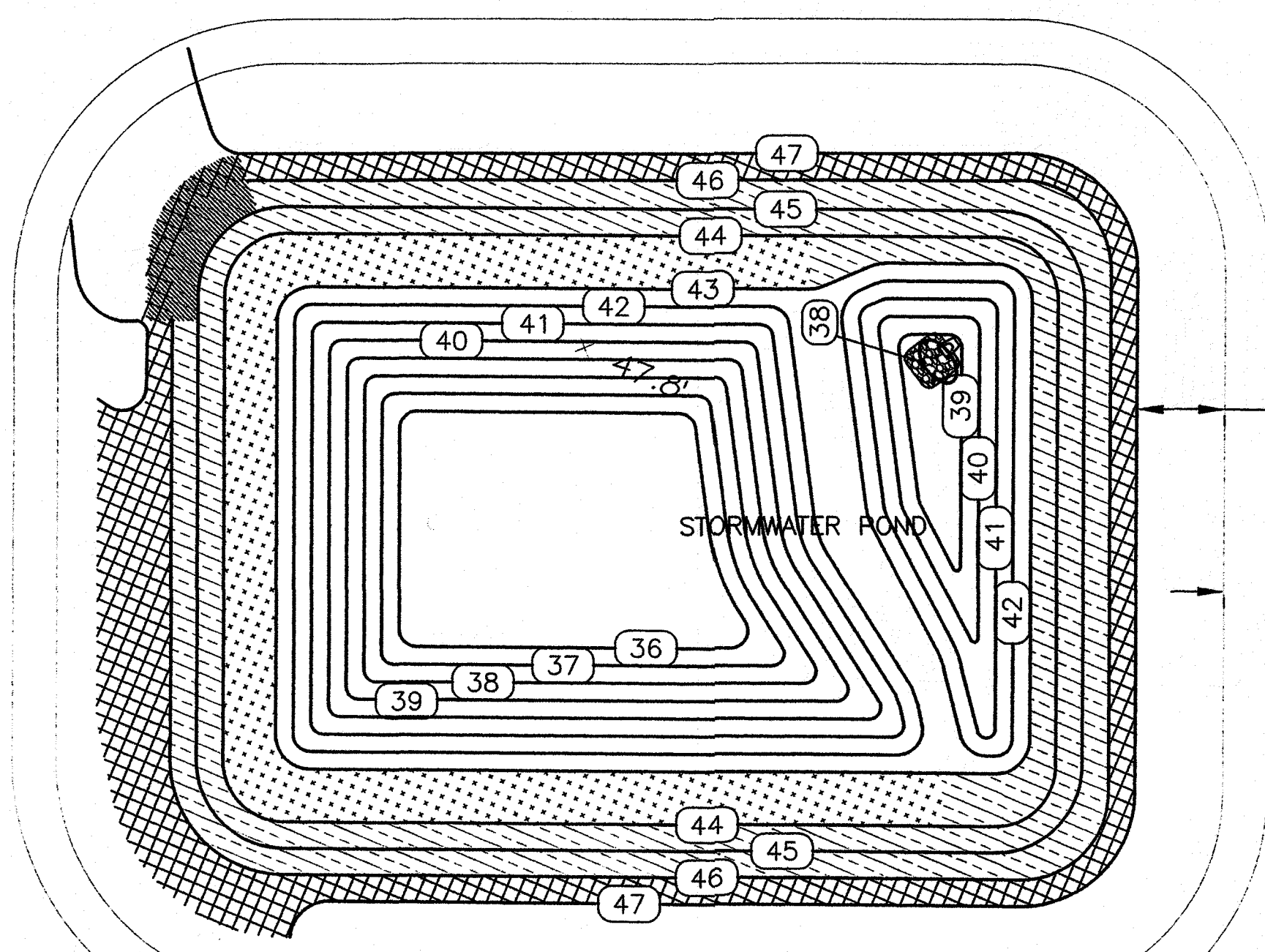
FIGURE 6.65b COIR FIBER BAFFLE DETAIL CROSS SECTION OF A POROUS BAFFLE IN A SEDIMENT BASIN.



TYPICAL SKIMMER SEDIMENT BASIN & POROUS BAFFLE DETAIL
N.T.S.

NOTE: SEE GRADING PLAN FOR BAFFLE LOCATIONS.

POND AREAS		
Elevation	Forebay	Main Pond
36	--	947
37	--	1,225
38	14	1,538
39	134	1,886
40	288	2,270
41	503	2,686
42	752	3,123
43	--	4,723
44	--	6,259
45	--	7,219
46	--	8,292
47	--	9,724



STORMWATER POND DETAIL

POND LEGEND:

- TOP OF POND/BERM SHALL BE PLANTED WITH NON-CLUMPING TURF GRASS. TREES AND WOODY SHRUBS SHALL NOT BE ALLOWED. BERMUDA GRASS SOD SHALL BE PLANTED ON THE MAINTENANCE SHELF/BERM, OR THE BERM MAY BE MATTED AND SEEDED WITH BERMUDA GRASS SEED.
- VEGETATED SHELF (43"-44") 50 PLANTS PER 200 SF. PLANTS ARE TO BE EVENLY DISTRIBUTED AND SPACED AT 2' ON CENTER. PLANTS ARE TO BE SWAMP MILKWEED, SCARLET ROSE MALLOW, AND NARROW PLUMEGRASS.
- POND SLOPES ARE TO BE PLANTED WITH PERENNIAL TURF GRASS-HYBRID BERMUDA GRASS. POND SLOPE PLANTINGS SHALL BE EITHER SOD (BERMUDA GRASS) OR OR MATTED AND SEEDED WITH BERMUDA GRASS SEED.

NOTES:

- THE VEGETATED SHELF SHALL BE PLANTED WITH A MINIMUM OF THREE DIVERSE SPECIES OF HERBACEOUS, NATIVE VEGETATION AT A MINIMUM DENSITY OF 50 PLANTS PER 200 SF OF SHELF AREA.
- CATTAILS ARE NOT TO BE PLANTED IN OR AROUND POND.

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.

1429 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28401
PHONE (910) 343-9653

License #C-3641

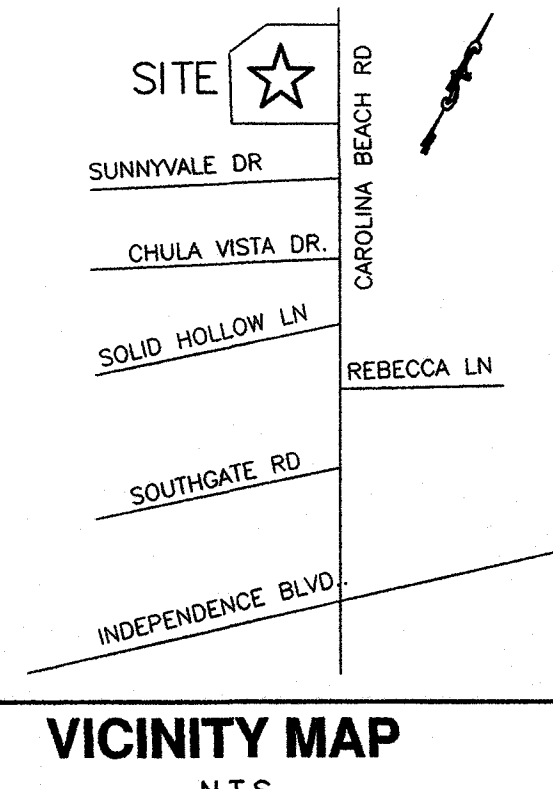
17033

DES. TJC
CKD. JPN
DRWN. NSB

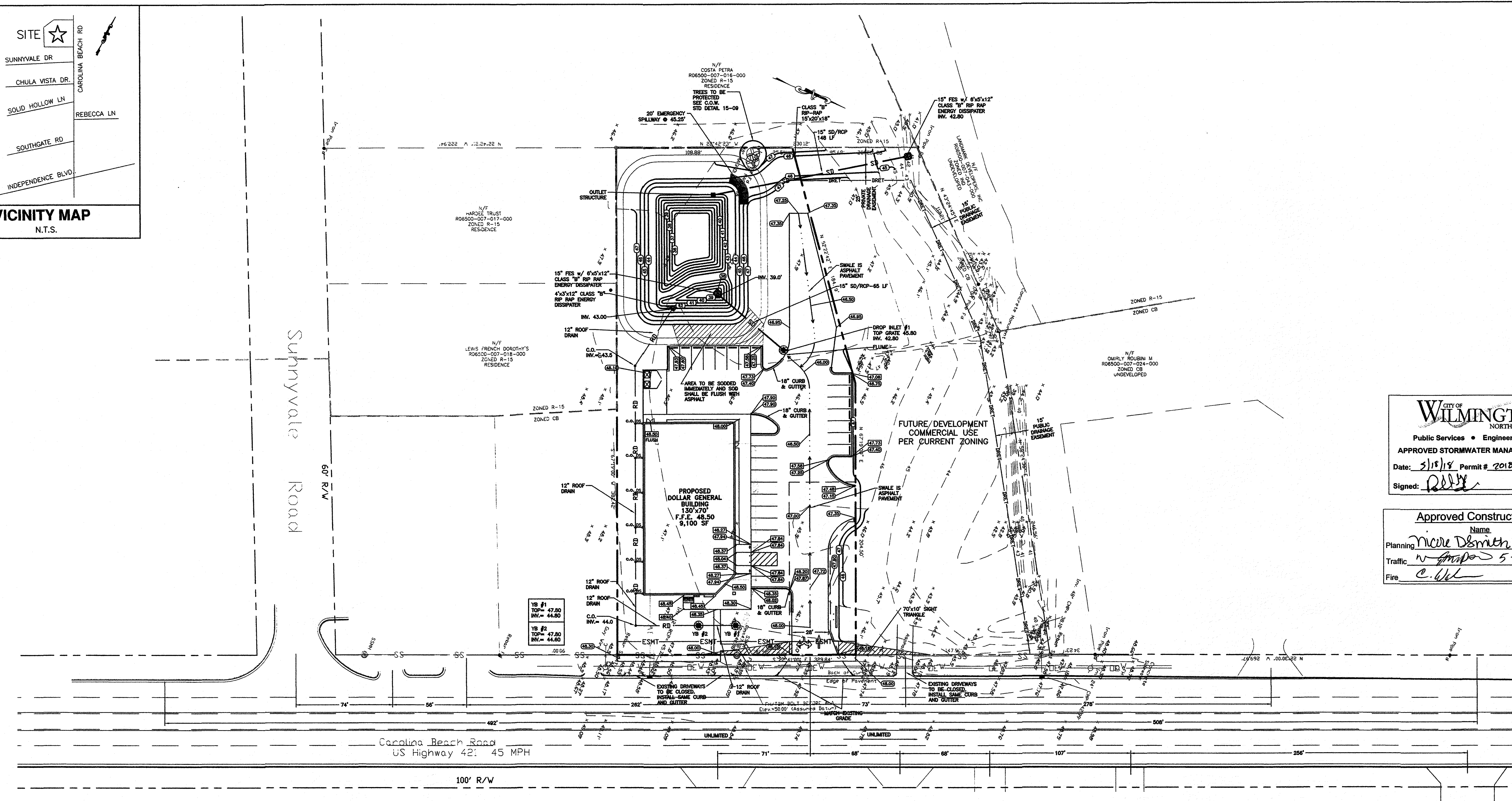
DATE 05/17/18

OWNER: PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNIPER LAKE RD.
WES. END, NC 27156
910-994-0861

C10



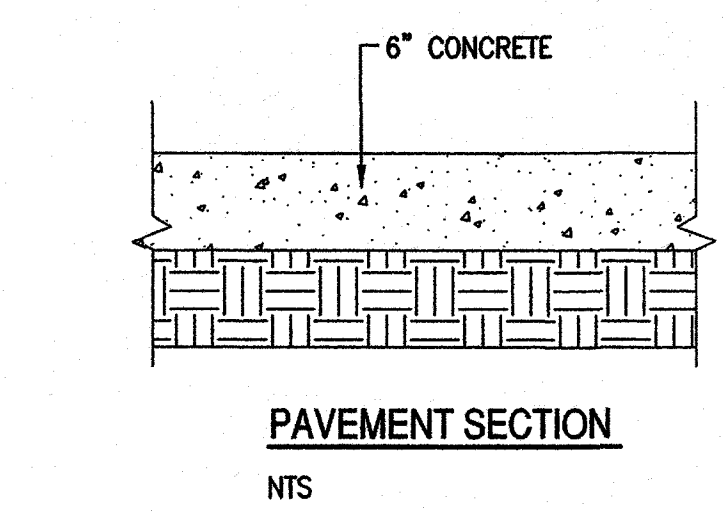
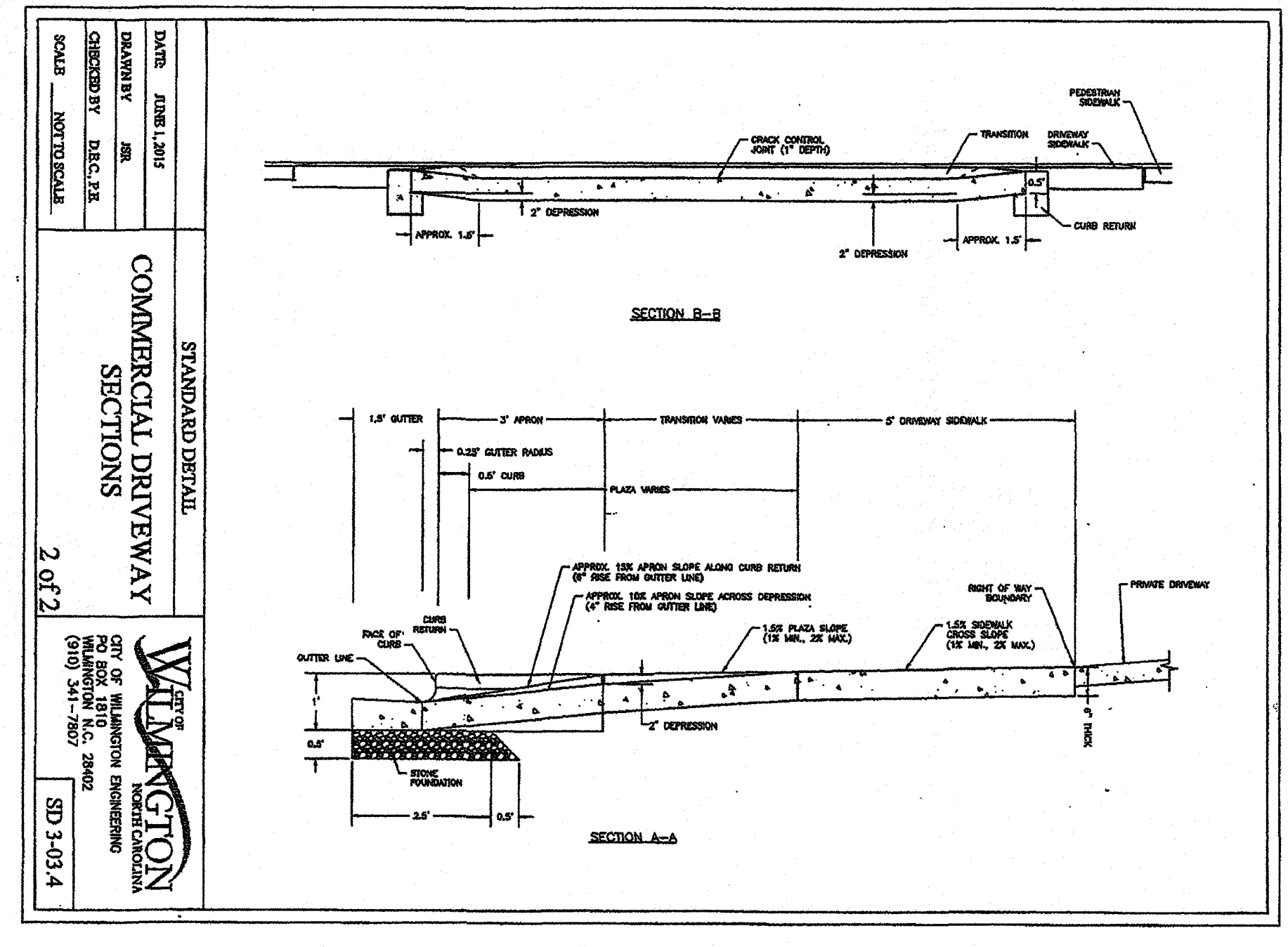
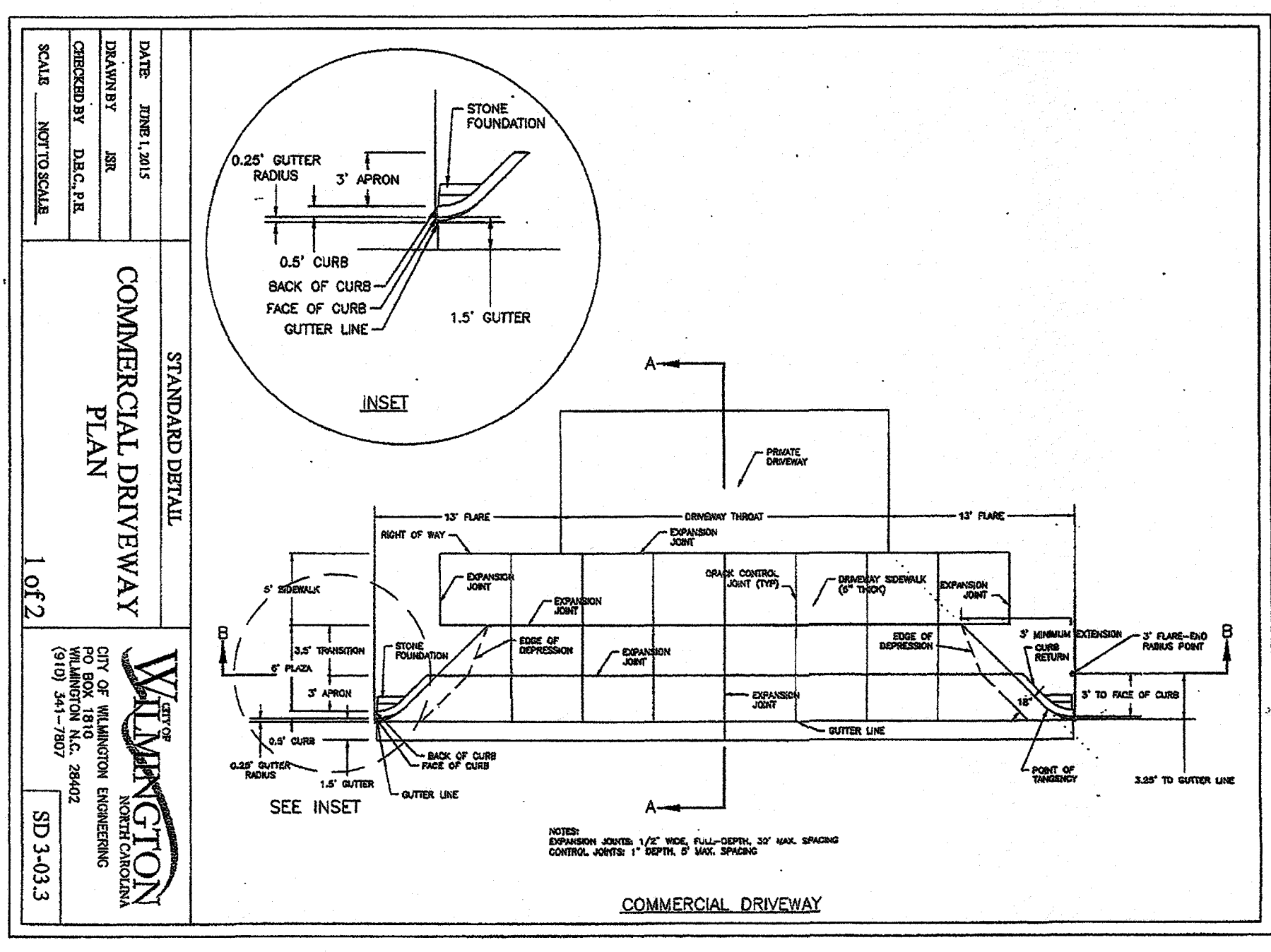
VICINITY MAP
N.T.S.



City of WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/18/18 Permit # 2018021
Signed: [Signature]

Approved Construction Plan
Name: Nicole Desmeth Date: 5/22/18
Traffic: [Signature] 5-17-18
Fire: C. [Signature] 5/22/18

LEGEND	
[Symbol]	PROPERTY LINE
[Symbol]	RIGHT OF WAY
[Symbol]	OVERHEAD ELECTRIC
[Symbol]	EXISTING WATERMAIN
[Symbol]	EXISTING SEWERMAIN
[Symbol]	EXISTING CONTOUR
[Symbol]	EXISTING SPOT ELEVATION
[Symbol]	LIMITS OF DISTURBANCE
[Symbol]	TEMPORARY SILT FENCE
[Symbol]	DRAINAGE EASEMENT
[Symbol]	PROPOSED CONTOUR
[Symbol]	PROPOSED TOP OF CURB/ TOP OF SIDEWALK
[Symbol]	PROPOSED FINISH GRADE



NOTE:
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SCALE: 1" = 40'

DRIVEWAY PLAN
DOLLAR GENERAL - CAROLINA BEACH RD.
3606 CAROLINA BEACH RD (US 421)
NEW HANOVER COUNTY, NORTH CAROLINA

OWNER:
PAR 5 DEVELOPMENT GROUP, LLC
2075 JUNIPER LAKE RD.
WEST END, NC 27576
910-994-0861

City of WILMINGTON
Public Services • Engineering Division
APPROVED STORMWATER MANAGEMENT PLAN
Date: 5/18/18 Permit # 2018021
Signed: [Signature]

Approved Construction Plan
Name: Nicole Desmeth Date: 5/22/18
Traffic: [Signature] 5-17-18
Fire: C. [Signature] 5/22/18

NORRIS & TUNSTALL
CONSULTING ENGINEERS P.C.
1429 ASH-LITTLE RIVER RD. NW
WILMINGTON, NC 28401
PHONE (910) 343-9653

DRIVEWAY

SITE DATA	
TOTAL AREA	100,000 SF
AREA TO BE DEVELOPED	10,000 SF
AREA OF EXISTING DRIVEWAY	3,000 SF
AREA OF EXISTING PARKING	10,000 SF
AREA OF EXISTING DRIVEWAY	3,000 SF
AREA OF EXISTING PARKING	10,000 SF
AREA OF EXISTING DRIVEWAY	3,000 SF
AREA OF EXISTING PARKING	10,000 SF
AREA OF EXISTING DRIVEWAY	3,000 SF
AREA OF EXISTING PARKING	10,000 SF
AREA OF EXISTING DRIVEWAY	3,000 SF
AREA OF EXISTING PARKING	10,000 SF

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.

Landscaping shall be complete before issuance of a C.O.

All landscape beds are to be mulched with 3" of pine straw

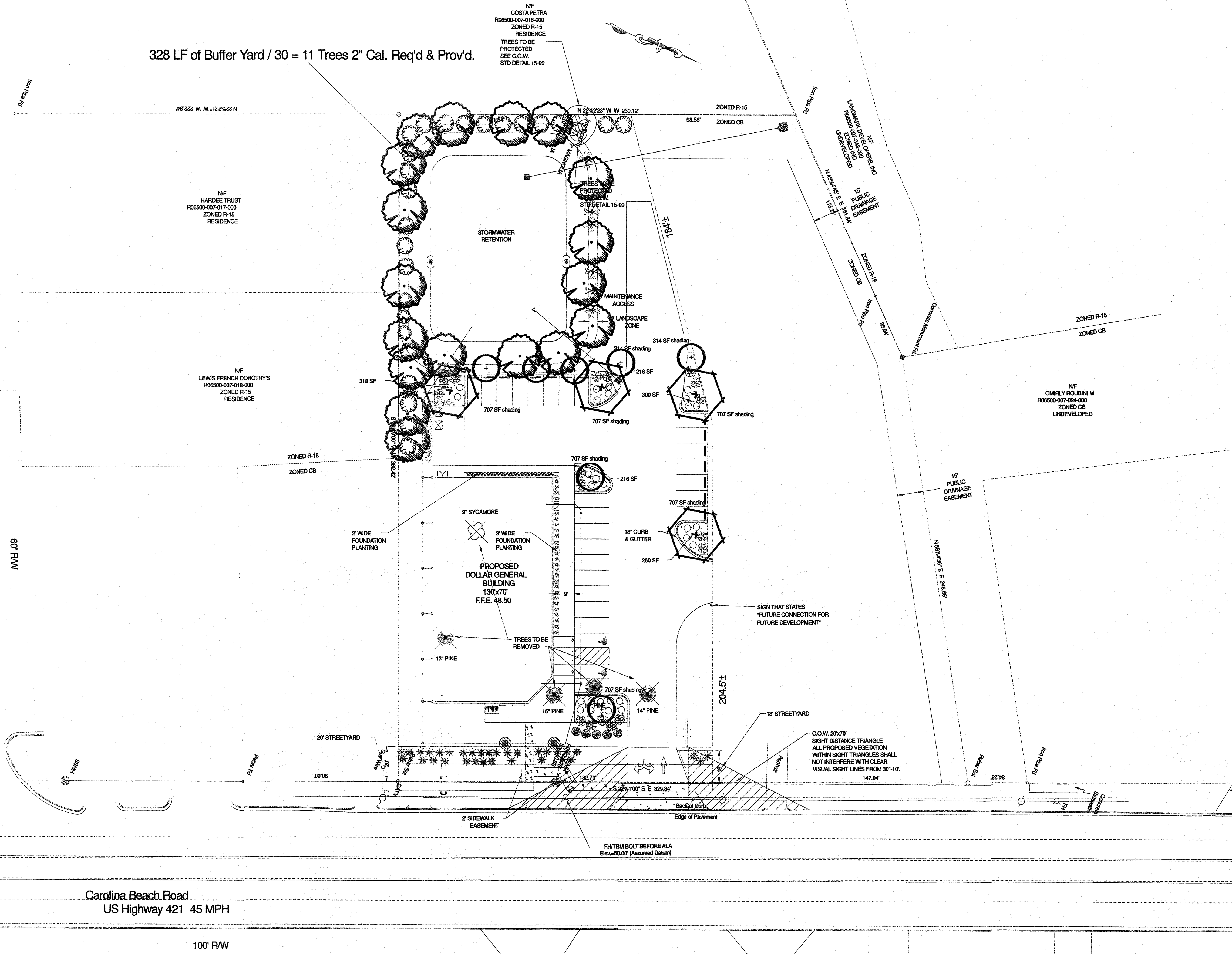
The areas within the triangular sight distance shall be maintained free of all obstructions between 30' and 10'.

A rain/freeze sensor shall be used if there is an irrigation system.

Legend			
Common Name	Size	Qty	Remarks
Shrub			
☉ Liriope 'Emerald Goddess'	1 Gal.	26	24" O.C., Cont.
☉ Boxwood, wintergreen	3 Gal.	27	12" Ht./Spr. Cont.
☉ miscanthus sinensis	3 Gal.	33	12" Ht./Spr., 5' O.C., Cont.
☉ Holly, needlepoint	7 Gal.	5	36" Ht., 6' O.C., Cont.
☉ Holly, Yaupon, Dwarf	3 Gal.	27	12" Ht./Spr. Cont.
☉ knockout rose	3 Gal.	17	12" Ht./Spr. Cont.
☉ Viburnum, suspensum	3 Gal.	11	12" Ht./Spr. Cont.
☉ Japanese Yew	3 Gal.	12	12" Ht./Spr., 4' O.C. Cont.
Large Shade Tree			
☉ bald cypress	2" cal.	18	Straight Trunk, Full Crown
☉ allee elm	2" cal.	4	Straight Trunk, Full Crown
☉ trident maple	2" cal.	7	Straight Trunk, Full Crown
Large Shrub / Small Tree			
☉ Juniper, Spartan	4.5-5' Ht.	25	11' O.C.

Sunnyvale Road

328 LF of Buffer Yard / 30 = 11 Trees 2" Cal. Req'd & Prov'd.



Carolina Beach Road
US Highway 421 45 MPH

100' R.W.

FREEMAN LANDSCAPE, INC.
Landscape Installation Professionals
jim@freemanlandscape.com
910-796-1166

Approved Construction Plan	
Name: <u>Nicole Smith</u>	Date: <u>5/22/18</u>
Planning: <u>N/A</u>	Public Services: <u>Engineering Division</u>
Public Utilities: <u>N/A</u>	APPROVED DRAINAGE PLAN
Traffic: <u>W. Shado</u>	Date: <u>5/15/18</u> Permit # <u>2018021</u>
Fire: <u>C. W. L.</u>	Signed: <u>[Signature]</u>

Property Address:
3606 Carolina Beach Rd
Wilmington, NC 28412

Revision #:
Date: 5/15/2018

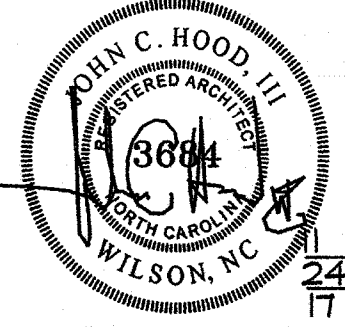
Scale:
1" = 30'

Landscape Plan: 4

Dollar General, Carolina Beach

Freeman Landscape, Inc.

Landscape Design by: James Freeman Jr.



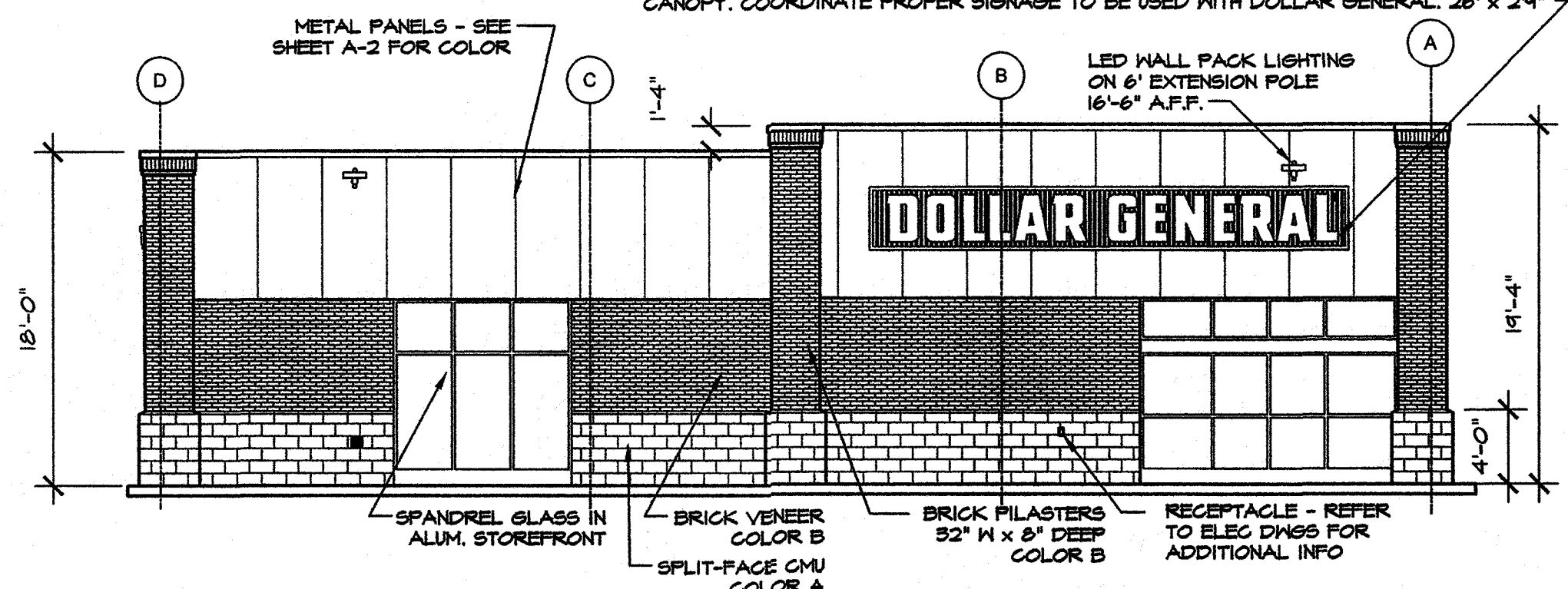
ISSUED FROM:
 WILMINGTON OFFICE
 805 North Fourth Street
 Wilmington, NC 28401
 Phone: 910.251.8899
 Facsimile: 910.251.9989

WILSON OFFICE
 1000 West 10th Street
 Wilson, NC 27893
 Phone: 252.399.2700
 Facsimile: 252.399.2701

HOOD • HERRING
 ARCHITECTURE
 PLLP

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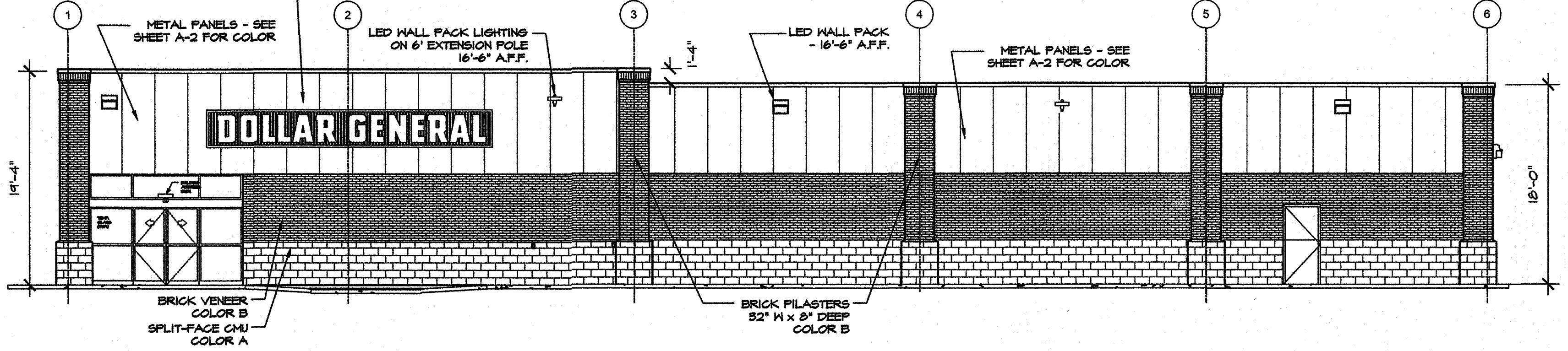
DESIGN FEATURES -
 1. FILAESTERS
 2. ROOF LINE
 3. COLOR CHANGES



FRONT ELEVATION (STREET FACE)

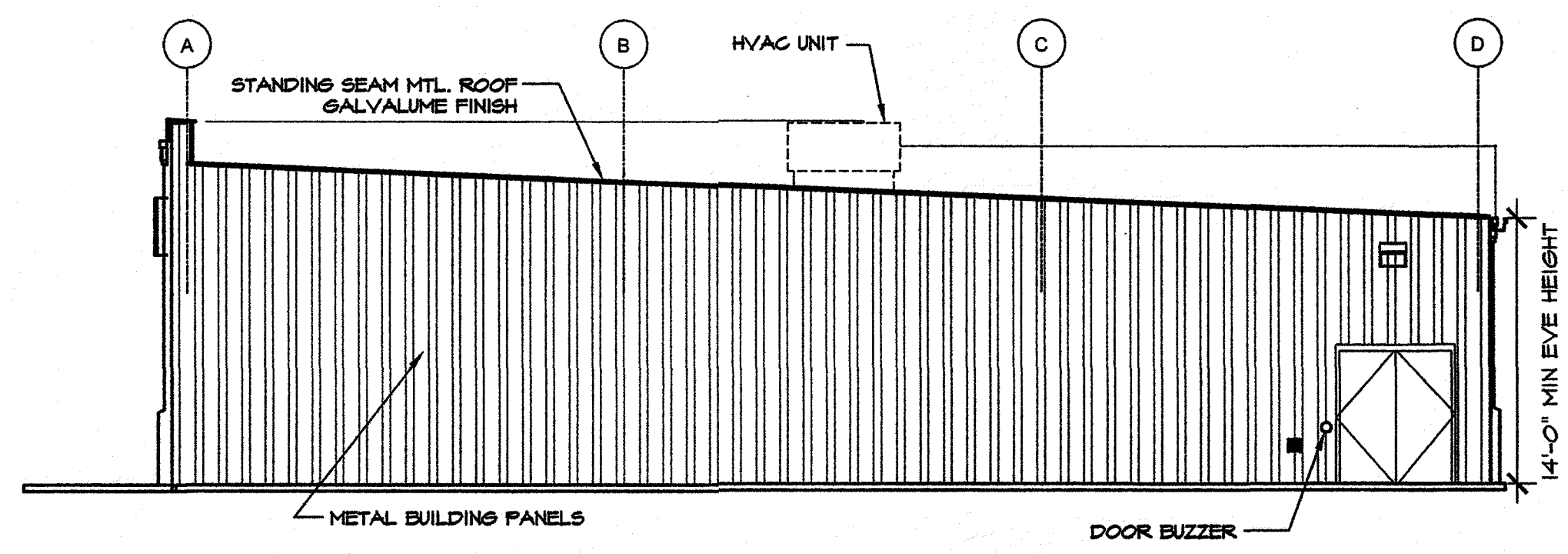
SCALE: 1/8" = 1'-0"

SIGN FURNISHED & INSTALLED BY DOLLAR GENERAL CORP. W/ CIRCUIT AS NOTED ON ELECTRICAL PLAN. SIGN TO BE CENTERED ON FRONT OF BUILDING. CONTRACTOR TO PROVIDE ADEQUATE BLOCKING AS REQUIRED BY SIGN MANUFACTURER TO SUPPORT SIGN HEIGHT UP TO 1400 LBS. EXTERIOR CANOPY SIGN SHALL BE SUPPORTED BY THE FACE OF CANOPY. COORDINATE PROPER SIGNAGE TO BE USED WITH DOLLAR GENERAL.



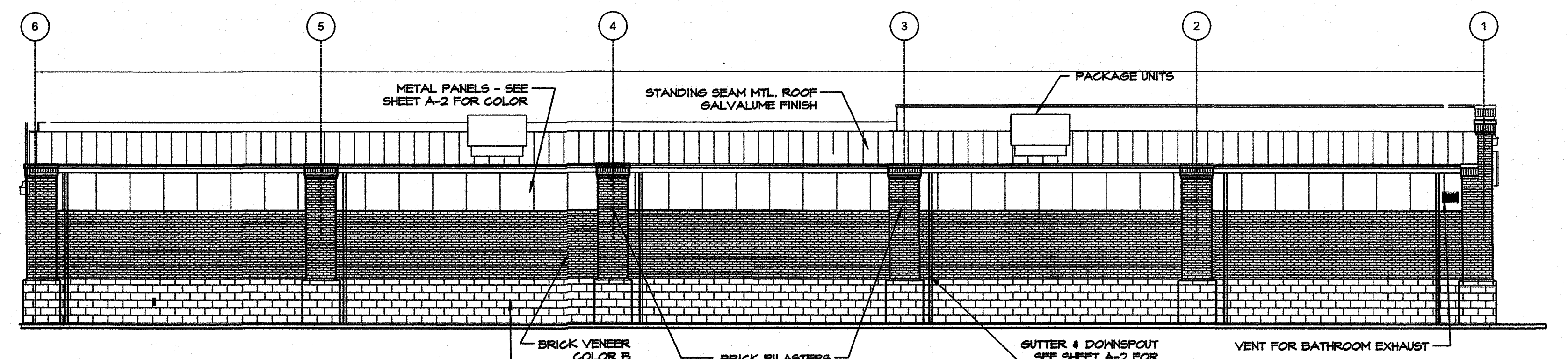
RIGHT SIDE ELEVATION

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



REAR ELEVATION

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



LEFT SIDE ELEVATION

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

Approved Construction Plan

Name: _____ Date: _____

Planning: Michelle Dorman 5/22/18

Traffic: W. S. Dorman 5-17-18

Fire: _____

CITY OF WILMINGTON
 NORTH CAROLINA

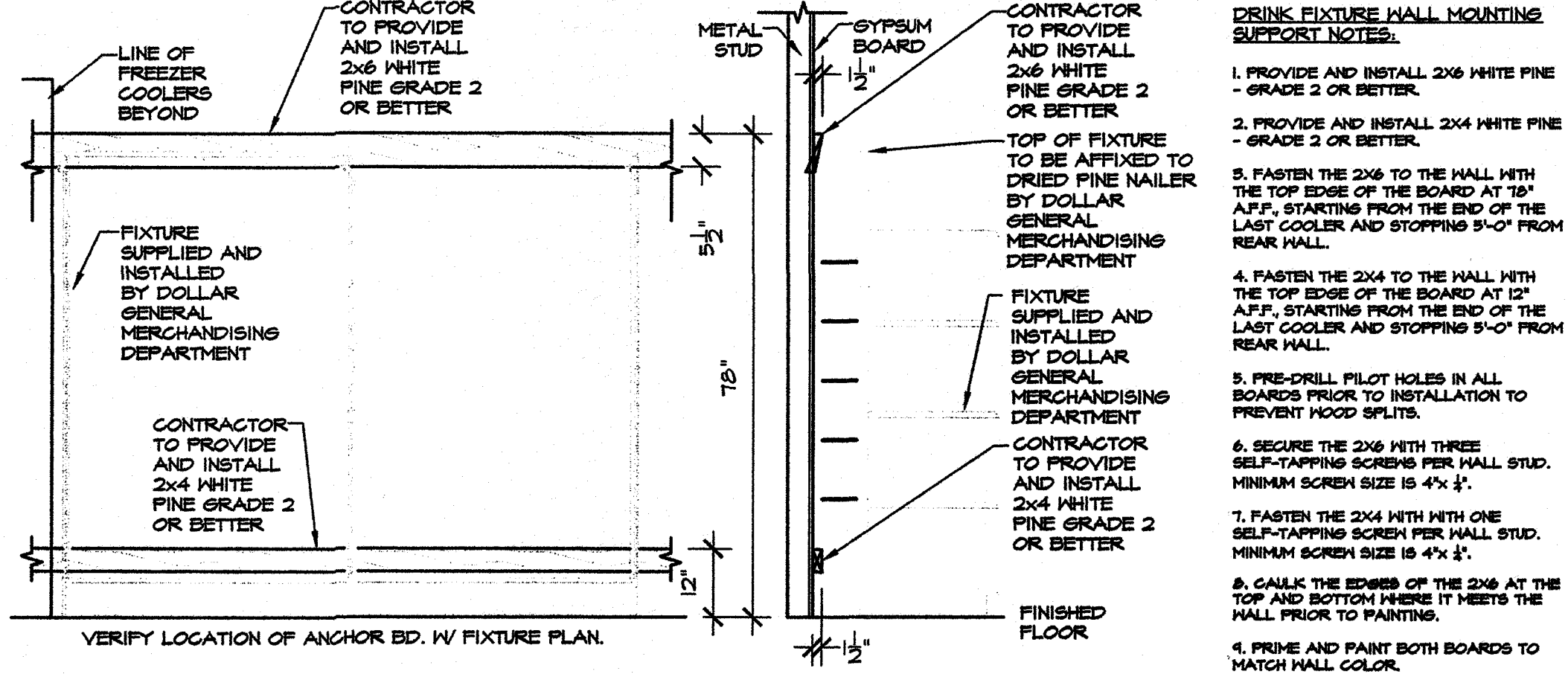
Public Services • Engineering Division

APPROVED STORMWATER MANAGEMENT PLAN

Date: _____ Permit # _____

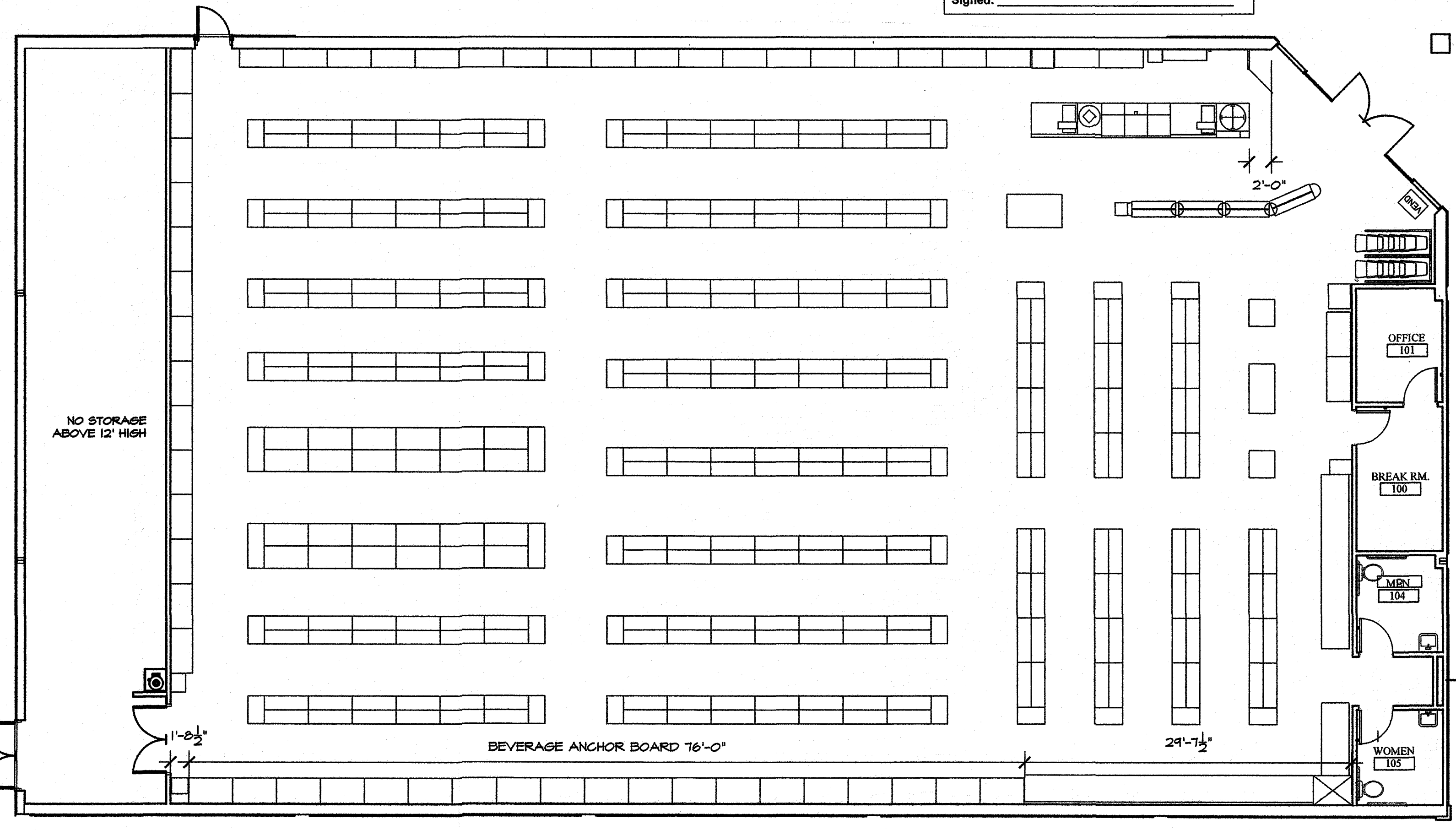
Signed: _____

	PRE-ENGINEERED METAL BUILDING VENDOR	VP BUILDINGS ATTN: DAVID ENGLISH (801) 748-6103	STAR BUILDINGS SYSTEMS ATTN: JEFF HORN (866) 684-8899	NUCOR BUILDING SYSTEMS ATTN: BOB BARRY (315) 622-4440 (260) 837-7891	BIG BEE STEEL BUILDINGS, INC. ATTN: KEVIN BUSLER (800) 833-3378	CHIEF BUILDINGS ATTN: ERIN SULLIVAN (308) 385-4628 (308) 390-8199																				
EXTERIOR FINISHES	COOL CRYPTAN WHITE	PATRICIAN BRONZE RYNAR 800	BRONZE	COOL COTTON WHITE	GALVALUME	LIGHTSTONE	MEDIUM BRONZE RYNAR 800	BRONZE	POLAR WHITE	GALVALUME	LIGHTSTONE	MEDIUM BRONZE RYNAR 800	BRONZE	POLAR WHITE	GALVALUME	SANDSTONE	BURNISHED SLATE	BRONZE	POLAR WHITE	GALVALUME	PARCHMENT	ANTIQUE BRONZE	BRONZE	POLAR WHITE	GALVALUME	
EXTERIOR FINISHES ARE TO MATCH OR BE EQUAL TO VP METAL BUILDING SYSTEMS' FINISH SELECTION.																										
GUTTERS																										
DOWN SPOUTS																										
SIDE AND REAR METAL WALL PANELS & TRIM, RECEIVING & EMERGENCY EXIT DOORS																										
SPLIT-FACE CMU PREFINISHED OR PAINTED (2 COATS LOXON XP MASONRY COATING A24W400 SERIES) TO MATCH METAL WALL PANELS																										
FLAT METAL SOFFIT AT STOREFRONT VESTIBULE AREA																										
BUILDING PARAPET WALL AND CANOPY																										
STOREFRONT SYSTEM																										
STANDING SEAM METAL ROOF PANELS																										
LINER PANELS (INTERIOR SALES FLOOR)																										



DRINK FIXTURE SUPPORT DETAIL

SCALE: 1/2" = 1'-0"



FIXTURE LAYOUT (CONFIRM W/ DOLLAR GENERAL PLANS)

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

DOLLAR GENERAL
 STORE # 18991
 CAROLINA BEACH ROAD
 WILMINGTON, NORTH CAROLINA

JOB NUMBER
 DRAWN BY: **MNH**
 DATE: 11/24/17
 REVISIONS: 10/25/17 - EXT. LIGHTS
 5/16/17 - EXTERIOR

SHEET NUMBER

A-2

OF