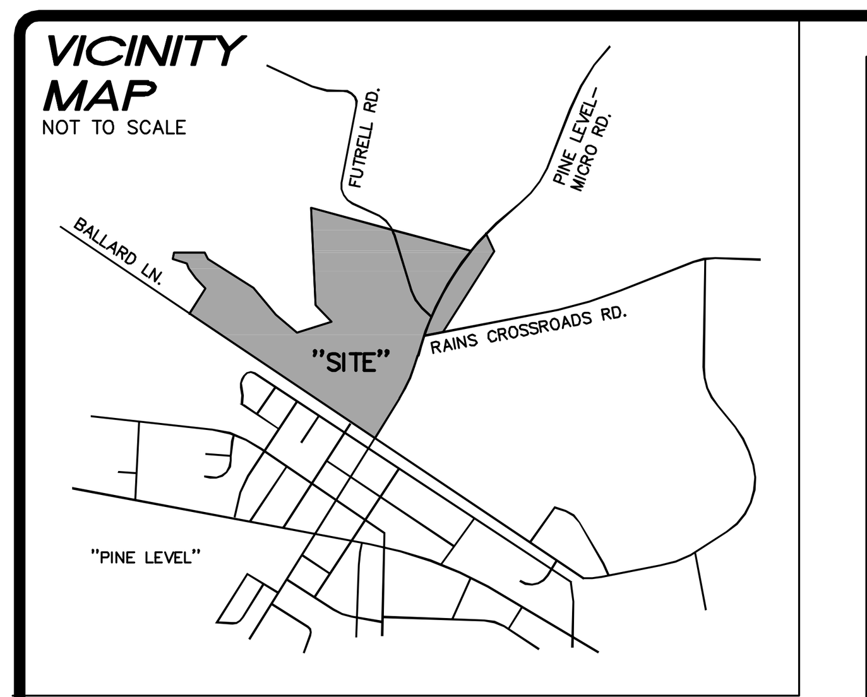
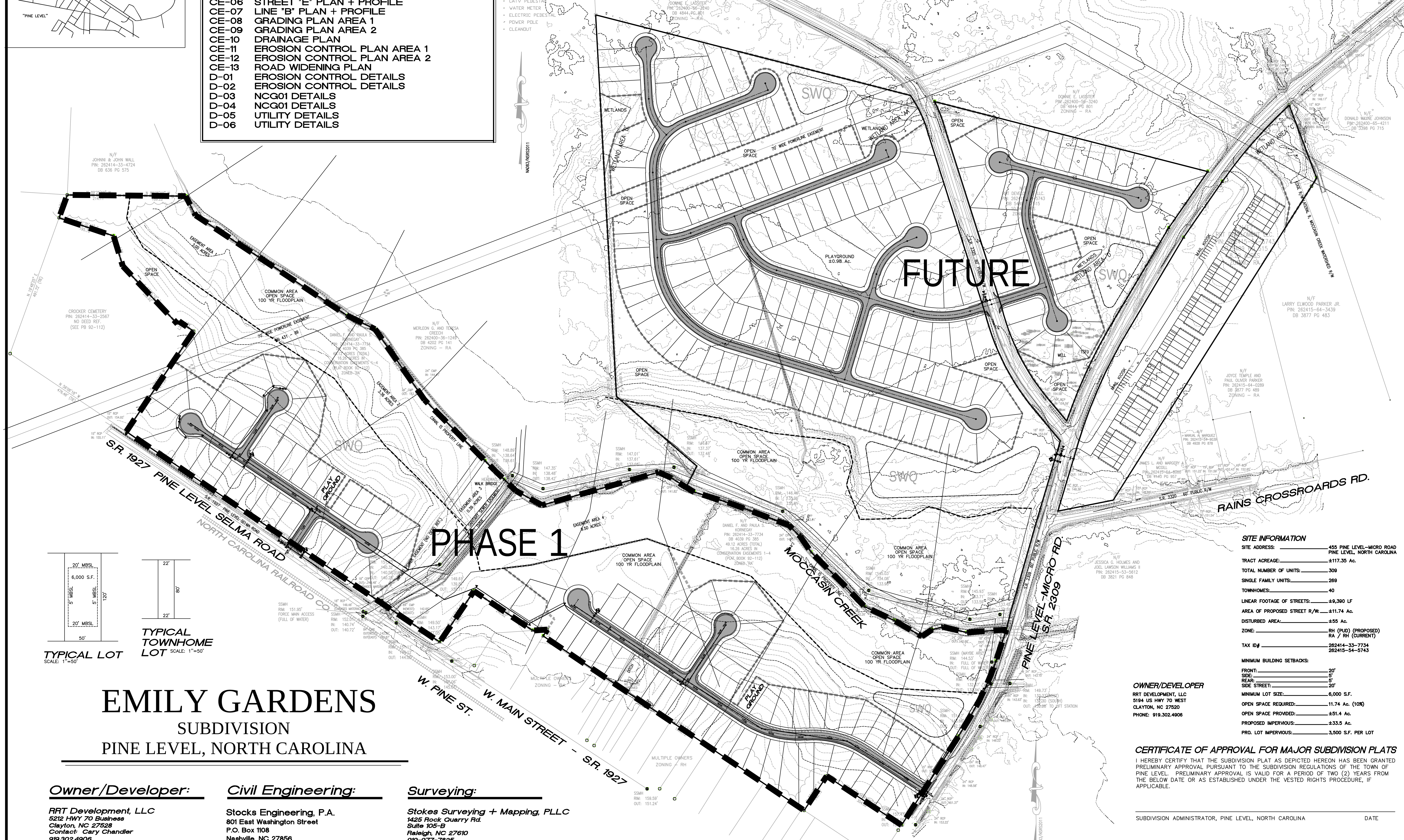


INDEX OF SHEETS



EMILY GARDENS

SUBDIVISION

PINE LEVEL, NORTH CAROLINA

Owner/Developer:

RRT Development, LLC
5212 HWY 70 Business
Clayton, NC 27528
Contact: Cary Chandler
919.302.4906
cary@carolinacomfortair.com

Civil Engineering:

Stocks Engineering, P.A.
801 East Washington Street
P.O. Box 1108
Nashville, NC 27856
252.459.8196 (v)
Contact: Mike Stocks, PE
mstocks@stocksengineering.com

Surveying:

Stokes Surveying + Mapping, PLLC
1425 Rock Quarry Rd.
Suite 105-B
Raleigh, NC 27610
919-977-7825
Contact: Mike Stokes

SITE INFORMATION

SITE ADDRESS:	455 PINE LEVEL-MICRO ROAD PINE LEVEL, NORTH CAROLINA
TRACT ACREAGE:	±117.35 Ac.
TOTAL NUMBER OF UNITS:	309
SINGLE FAMILY UNITS:	269
TOWNHOMES:	40
LINEAR FOOTAGE OF STREETS:	±9,390 LF
AREA OF PROPOSED STREET R/W:	±11.74 Ac.
DISTURBED AREA:	±55 Ac.
ZONE:	RH (PUD) (PROPOSED) RA / RH (CURRENT)
TAX ID#	262414-33-7734 262415-54-5743
MINIMUM BUILDING SETBACKS:	
FRONT:	20'
SIDE:	5'
REAR:	5'
SIDE STREET:	20'
MINIMUM LOT SIZE:	6,000 S.F.
OPEN SPACE REQUIRED:	11.74 Ac. (10%)
OPEN SPACE PROVIDED:	±51.4 Ac.
PROPOSED IMPERVIOUS:	±33.5 Ac.
PRO. LOT IMPERVIOUS:	3,500 S.F. PER LOT

OWNER/DEVELOPER

RRT DEVELOPMENT, LLC
5194 US HWY 70 WEST
CLAYTON, NC 27520
PHONE: 919.302.4906

CERTIFICATE OF APPROVAL FOR MAJOR SUBDIVISION PLATS

I HEREBY CERTIFY THAT THE SUBDIVISION PLAT AS DEPICTED HEREON HAS BEEN GRANTED PRELIMINARY APPROVAL PURSUANT TO THE SUBDIVISION REGULATIONS OF THE TOWN OF PINE LEVEL. PRELIMINARY APPROVAL IS VALID FOR A PERIOD OF TWO (2) YEARS FROM THE BELOW DATE OR AS ESTABLISHED UNDER THE VESTED RIGHTS PROCEDURE, IF APPLICABLE.

SUBDIVISION ADMINISTRATOR, PINE LEVEL, NORTH CAROLINA DATE

SCALE: 1" = 150'
0 150 300 375 450

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

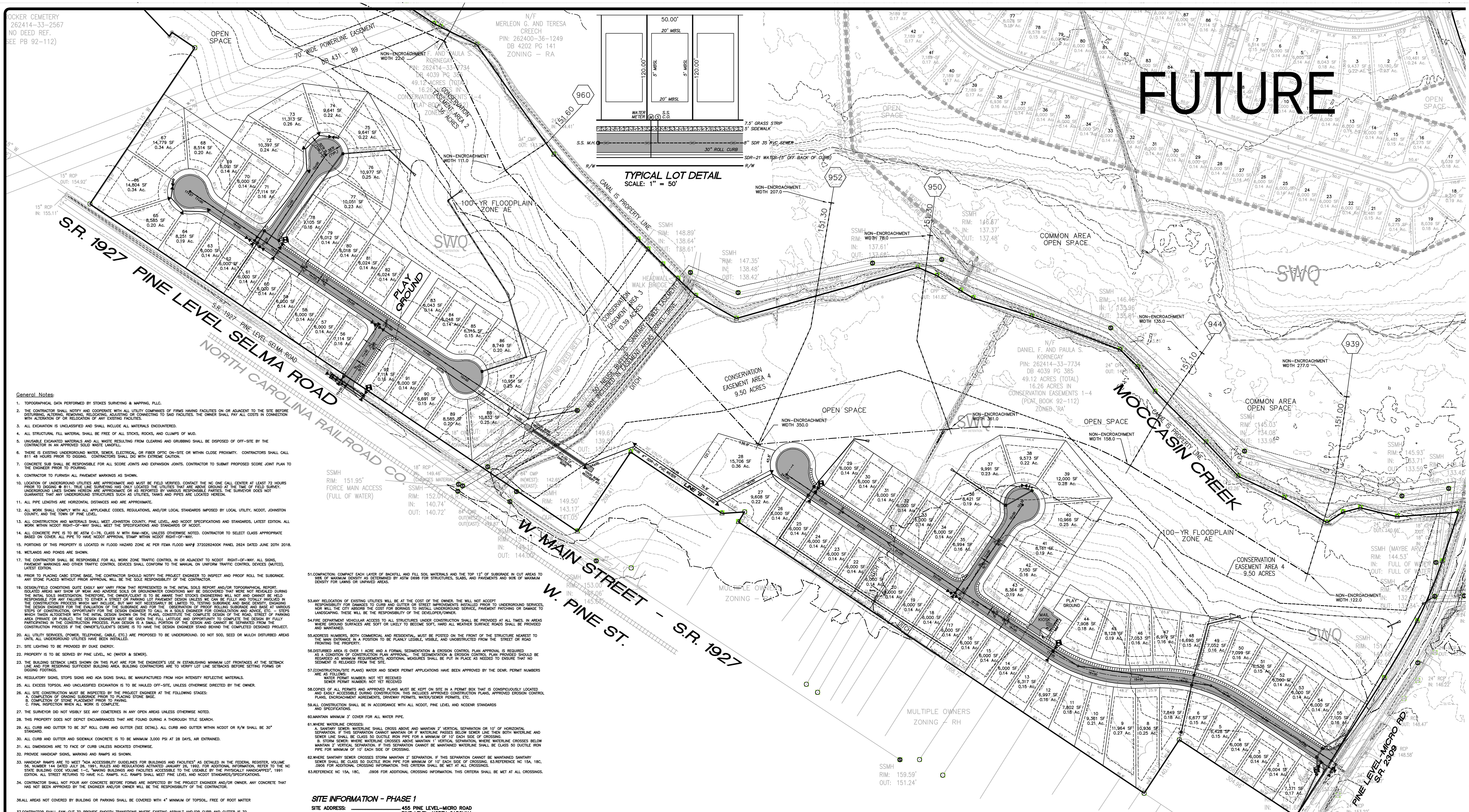
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 6/22/23

OVERALL PLAN

REVISIONS
3/15/23 - FLOODPLAIN

FILE NO.	2019-074
HORZ. SCALE:	1"=150'
VERT. SCALE:	N/A

CE-01

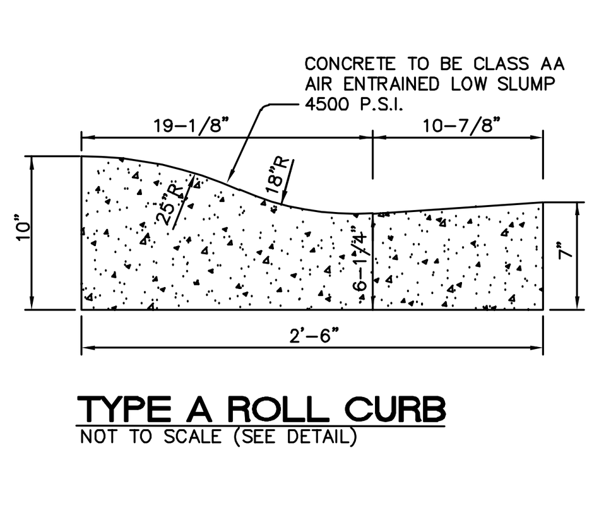

FUTURE
TYPICAL LOT DETAIL
SCALE: 1" = 50'
S.R. 1927 PINE LEVEL SELMA ROAD
NORTH CAROLINA RAILROAD CO.
W. MAIN STREET - S.R. 1927
W. PINE ST.
MOCCASIN CREEK
PINE LEVEL-MICRO RD S.R. 2309
CONSERVATION EASEMENT AREA 4 9.50 ACRES
100-YR FLOODPLAIN ZONE AE
COMMON AREA OPEN SPACE
OPEN SPACE
PLAY GROUND
MULTIPLE OWNERS ZONING - RH
N/F DANIEL F. AND PAULA S. KORNEGAY PIN: 262414-33-7734 DB 4039 PG 385 49.12 ACRES (TOTAL) 16.26 ACRES IN CONSERVATION EASEMENTS 1-4 (PLAT BOOK 92-112) ZONED 'RA'
N/F MERLEON G. AND TERESA CREECH PIN: 262400-36-1249 DB 4202 PG 141 ZONING - RA
70' WIDE POWERLINE EASEMENT DB 431 - 89
SCALE: 1" = 100'

General Notes:

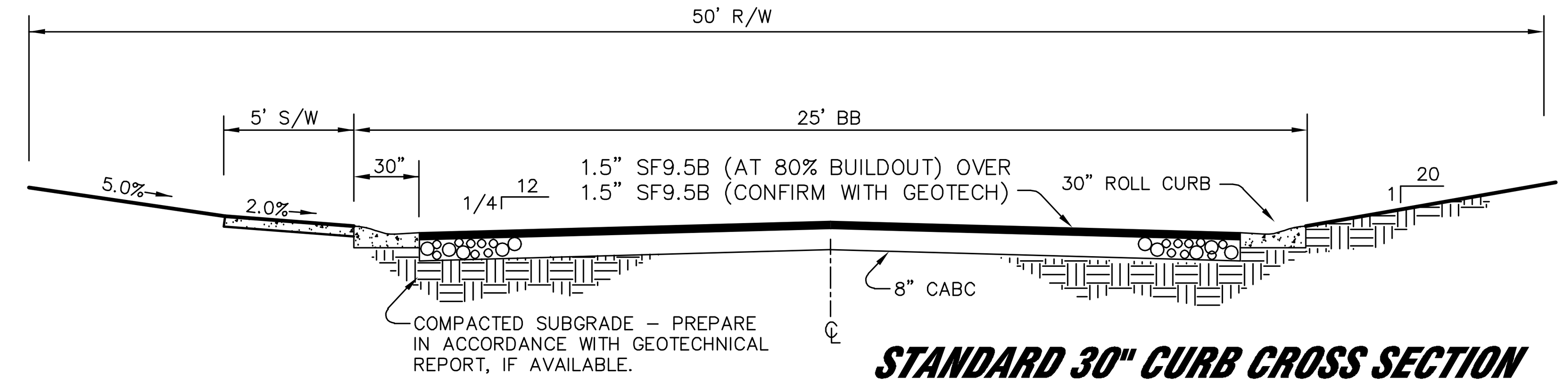
1. TOPOGRAPHICAL DATA PERFORMED BY STOKES SURVEYING & MAPPING, PLLC.
2. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH ALL UTILITY COMPANIES OF FIRMS HAVING FACILITIES ON OR ADJACENT TO THE SITE BEFORE DISTURBING, ALTERING, REMOVING, RELOCATING, ADJUSTING OR CONNECTING TO SAID FACILITIES. THE OWNER SHALL PAY ALL COSTS IN CONNECTION WITH ALTERATION OF OR RELOCATION OF ANY EXISTING FACILITIES.
3. ALL EXCAVATION IS UNCLASSIFIED AND SHALL INCLUDE ALL MATERIALS ENCOUNTERED.
4. ALL STRUCTURAL FILL MATERIAL SHALL BE FREE OF ALL STICKS, ROCKS, AND CLUMPS OF MUD.
5. UNUSABLE EXCAVATED MATERIALS AND ALL WASTE RESULTING FROM CLEARING AND GRUBBING SHALL BE DISPOSED OF OFF-SITE BY THE CONTRACTOR IN AN APPROVED SOLID WASTE LANDFILL.
6. THERE IS EXISTING UNDERGROUND WATER, SEWER, ELECTRICAL, OR FIBER OPTIC ON-SITE OR WITHIN CLOSE PROXIMITY. CONTRACTORS SHALL CALL 811 48 HOURS PRIOR TO DIGGING. CONTRACTORS SHALL DIG WITH EXTREME CAUTION.
7. CONCRETE SUB SHALL BE RESPONSIBLE FOR ALL SCORE JOINTS AND EXPANSION JOINTS. CONTRACTOR TO SUBMIT PROPOSED SCORE JOINT PLAN TO THE ENGINEER PRIOR TO POURING.
9. CONTRACTOR TO FURNISH ALL PAVEMENT MARKINGS AS SHOWN.
10. LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AND MUST BE FIELD VERIFIED. CONTACT THE NC ONE CALL CENTER AT LEAST 72 HOURS PRIOR TO DIGGING @ 811. TRUE LINE SURVEYING HAS ONLY LOCATED THE UTILITIES THAT ARE ABOVE GROUND AT THE TIME OF FIELD SURVEY. UNDERGROUND LINES SHOWN HEREON ARE APPROXIMATE OR AS REPORTED BY VARIOUS RESPONSIBLE PARTIES. THE SURVEYOR DOES NOT GUARANTEE THAT ANY UNDERGROUND STRUCTURES SUCH AS UTILITIES, TANKS AND PIPES ARE LOCATED HEREON.
11. ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
12. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, REGULATIONS, AND/OR LOCAL STANDARDS IMPOSED BY LOCAL UTILITY, NCDOT, JOHNSTON COUNTY, AND THE TOWN OF PINE LEVEL.
13. ALL CONSTRUCTION AND MATERIALS SHALL MEET JOHNSTON COUNTY, PINE LEVEL, AND NCDOT SPECIFICATIONS AND STANDARDS, LATEST EDITION. ALL WORK WITHIN NCDOT RIGHT-OF-WAY SHALL MEET THE SPECIFICATIONS AND STANDARDS OF NCDOT.
14. ALL CONCRETE PIPE IS TO BE ASTM C-76, CLASS IV WITH RAM-NEK, UNLESS OTHERWISE NOTED. CONTRACTOR TO SELECT CLASS APPROPRIATE BASED ON COVER. ALL PIPE TO HAVE NCDOT APPROVAL STAMP WITHIN NCDOT RIGHT-OF-WAY.
15. PORTIONS OF THIS PROPERTY IS LOCATED IN FLOOD HAZARD ZONE AE PER FEMA FLOOD MAP# 3720262400K PANEL 2624 DATED JUNE 20TH 2018.
16. WETLANDS AND PONDS ARE SHOWN.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE TRAFFIC CONTROL IN OR ADJACENT TO NCDOT RIGHT-OF-WAY. ALL SIGNS, PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), LATEST EDITION.
18. PRIOR TO PLACING CABC STONE BASE, THE CONTRACTOR SHOULD NOTIFY THE PROJECT ENGINEER TO INSPECT AND PROOF ROLL THE SUBGRADE. ANY STONE PLACED WITHOUT PRIOR APPROVAL WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
19. DESIGN/FIELD CONDITIONS QUITE EASILY MAY VARY FROM THAT REPRESENTED IN THE INITIAL SOILS REPORT AND/OR TOPOGRAPHICAL REPORT. ISOLATED AREAS MAY SHOW UP WEAK AND ADVERSE SOILS OR GROUNDWATER CONDITIONS MAY BE DISCOVERED THAT WERE NOT REVEALED DURING THE INITIAL SOILS INVESTIGATION. THEREFORE, THE OWNER/CLIENT IS TO BE AWARE THAT STOCKS ENGINEERING WILL NOT AND CANNOT BE HELD RESPONSIBLE FOR ANY FAILURES TO EITHER A STREET OR PARKING LOT PAVEMENT DESIGN UNLESS WE CAN BE FULLY AND TOTALLY INVOLVED IN THE CONSTRUCTION PROCESS WHICH MAY INCLUDE, BUT MAY NOT NECESSARILY BE LIMITED TO, TESTING SUBGRADE AND BASE DENSITY, ENGAGING THE DESIGN ENGINEER FOR THE EVALUATION OF THE SUBGRADE AND FOR THE OBSERVATION OF PROOF ROLLING SUBGRADE AND BASE AT VARIOUS STEPS OF CONSTRUCTION, OPPORTUNITY FOR THE DESIGN ENGINEER TO CALL IN A SOILS ENGINEER FOR CONSULTATION AND ADVICE, ETC. - STEPS WHICH TAKEN ALTOGETHER WITH THE INITIAL DESIGN SHOWN ON THE PLANS, CONSTITUTE THE COMPLETE DESIGN OF THE ROAD, STREET OF PARKING AREA (PRIVATE OR PUBLIC). THE DESIGN ENGINEER MUST BE GIVEN THE FULL LATITUDE AND OPPORTUNITY TO COMPLETE THE DESIGN BY FULLY PARTICIPATING IN THE CONSTRUCTION PROCESS. PLAN DESIGN IS A SMALL PORTION OF THE DESIGN AND CANNOT BE SEPARATED FROM THE CONSTRUCTION PROCESS IF THE OWNER'S/CLIENT'S DESIRE IS TO HAVE THE DESIGN ENGINEER STAND BEHIND THE COMPLETED DESIGNED PROJECT.
20. ALL UTILITY SERVICES, (POWER, TELEPHONE, CABLE, ETC.) ARE PROPOSED TO BE UNDERGROUND. DO NOT SOD, SEED OR MULCH DISTURBED AREAS UNTIL ALL UNDERGROUND UTILITIES HAVE BEEN INSTALLED.
21. SITE LIGHTING TO BE PROVIDED BY DUKE ENERGY.
22. PROPERTY IS TO BE SERVED BY PINE LEVEL, NC (WATER & SEWER).
23. THE BUILDING SETBACK LINES SHOWN ON THIS PLAT ARE FOR THE ENGINEER'S USE IN ESTABLISHING MINIMUM LOT FRONTAGES AT THE SETBACK LINE AND FOR RESERVING SUFFICIENT BUILDING AREA. BUILDING CONTRACTORS ARE TO VERIFY LOT LINE SETBACKS BEFORE SETTING FORMS OR DIGGING FOOTINGS.
24. REGULATORY SIGNS, STOPS SIGNS AND ADA SIGNS SHALL BE MANUFACTURED FROM HIGH INTENSITY REFLECTIVE MATERIALS.
25. ALL EXCESS TOPSOIL AND UNCLASSIFIED EXCAVATION IS TO BE HAULED OFF-SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
26. ALL SITE CONSTRUCTION MUST BE INSPECTED BY THE PROJECT ENGINEER AT THE FOLLOWING STAGES:
    A. COMPLETION OF GRADING SUBGRADE PRIOR TO PLACING STONE BASE.
    B. COMPLETION OF STONE PLACEMENT PRIOR TO PAVING.
    C. FINAL INSPECTION WHEN ALL WORK IS COMPLETE.
27. THE SURVEYOR DID NOT VISIBLY SEE ANY CEMETERIES IN ANY OPEN AREAS UNLESS OTHERWISE NOTED.
28. THIS PROPERTY DOES NOT DEPICT ENCUMBRANCES THAT ARE FOUND DURING A THOROUGH TITLE SEARCH.
29. ALL CURB AND GUTTER TO BE 30" ROLL CURB AND GUTTER (SEE DETAIL). ALL CURB AND GUTTER WITHIN NCDOT OR R/W SHALL BE 30" STANDARD.
30. ALL CURB AND GUTTER AND SIDEWALK CONCRETE IS TO BE MINIMUM 3,000 PSI AT 28 DAYS, AIR ENTRAINED.
31. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS INDICATED OTHERWISE.
32. PROVIDE HANDICAP SIGNS, MARKING AND RAMPS AS SHOWN.
33. HANDICAP RAMPS ARE TO MEET "ADA ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES" AS DETAILED IN THE FEDERAL REGISTER, VOLUME 56, NUMBER 144 DATED JULY 26, 1991, RULES AND REGULATIONS ACTIVATED JANUARY 26, 1992. FOR ADDITIONAL INFORMATION, REFER TO THE NC STATE BUILDING CODE VOLUME 1-C, "MAKING BUILDINGS AND FACILITIES ACCESSIBLE TO THE USEABLE BY THE PHYSICALLY HANDICAPPED", 1991 EDITION. ALL STREET RETURNS TO HAVE H.C. RAMPS. H.C. RAMPS SHALL MEET PINE LEVEL AND NCDOT STANDARDS/SPECIFICATIONS.
34. CONTRACTOR SHALL NOT POUR ANY CONCRETE BEFORE FORMS ARE INSPECTED BY THE PROJECT ENGINEER AND/OR OWNER. ANY CONCRETE THAT HAS NOT BEEN APPROVED BY THE ENGINEER AND/OR OWNER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
36. ALL AREAS NOT COVERED BY BUILDING OR PARKING SHALL BE COVERED WITH 4" MINIMUM OF TOPSOIL, FREE OF ROOT MATTER
37. CONTRACTOR SHALL SAW-CUT TO PROVIDE SMOOTH TRANSITIONS WHERE EXISTING ASPHALT AND/OR CURB AND GUTTER IS TO
38. THE CONTRACTOR SHALL PROVIDE ALL THE MATERIAL AND APPURTENANCES NECESSARY FOR THE COMPLETE INSTALLATION OF THE UTILITIES. ALL PIPE AND FITTINGS SHALL BE INSPECTED PRIOR TO BEING COVERED.
39. ALL HANDICAP SPACES ARE TO RECEIVE A HANDICAP SIGN AND HANDICAP SYMBOL PAINTED ON THE ASPHALT. NOTE STALLS TO RECEIVE 'VAN ACCESSIBLE' SIGNAGE.
40. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE POINTS.
41. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS AND FIELD CONDITIONS WHEN POSSIBLE, BUT THE CONTRACTOR MUST DETERMINE THE EXACT LOCATION AND ELEVATION OF ALL EXISTING UTILITIES BY DIGGING TEST PITS BY HAND AT ALL UTILITY CROSSINGS WELL IN ADVANCE OF TRENCHING. IF THE CLEARANCES ARE LESS THAN SPECIFIED ON THE PLANS OR 12 INCHES, WHICH EVER IS LESS, CONTACT THE PROJECT ENGINEER PRIOR TO PROCEEDING WITH
42. THE CONTRACTOR SHALL INCLUDE IN HIS CONTRACT PRICE THE REMOVAL AND DISPOSAL OF ANY EXCESS TOPSOIL/UNCLASSIFIED HE DETERMINES IS NOT REQUIRED TO PERFORM THE FINAL GRADING AND LANDSCAPING OPERATION.
43. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF ALL REQUIRED/NECESSARY SHEETING, SHORING, AND SPECIAL EXCAVATION MEASURES REQUIRED ON THE PROJECT TO MEET OSHA, FEDERAL, STATE AND LOCAL REGULATIONS PURSUANT TO THE INSTALLATION OF THE WORK INDICATED ON THE DRAWINGS. THE OWNER, THE TOWN OF PINE LEVEL & STOCKS ENGINEERING ACCEPT NO RESPONSIBILITY FOR THE DESIGN TO INSTALL SAID ITEMS.
44. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE DAILY RECORD KEEPING OF THE AS-BUILT CONDITION OF ALL OF THE UNDERGROUND UTILITIES, CONSTRUCTION STAKEOUT ASSOCIATED WITH THE PROJECT.
45. ALL WATER LINE AND SEWER LINE INSTALLATION SHALL CONFORM TO THE STANDARDS AND DETAILS OF THE STATE OF NORTH CAROLINA DEPARTMENT OF HEALTH CONSTRUCTION PERMIT, AND NCDEQ DWR.
46. ASPHALT PAVEMENT SHALL BE SMOOTH, WITH STRAIGHT OVERLAPPING SEAMS, FREE OF SEGREGATION, STAINS, BIRD BATHS, AND IMPERFECTIONS. ASPHALT PATCHING, SKIN PATCHES, OR RE-HEATING AND ROLLING WILL NOT BE ALLOWED. AREAS THAT ARE NOT ACCEPTABLE TO THE OWNER/ENGINEER WILL BE SAWCUT AND REMOVED. NO PATCH SMALLER THAN 200 SF WILL ALLOWED AND THE SAWCUTS MUST FALL ON A PAINT LINE OR EXISTING SEAM.
47. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ALL MATERIAL AND LABOR ASSOCIATED WITH THE TESTING OF THE WATER AND SEWER LINES REQUIRED BY THE STATE OF NORTH CAROLINA DEPARTMENT OF HEALTH & THE TOWN OF PINE LEVEL.
48. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY DE-WATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS.
50. TESTING BY CONTRACTOR: CONTRACTOR SHALL EMPLOY AT HIS EXPENSE AN OUTSIDE INDEPENDENT SOIL TESTING SERVICE (APPROVED BY THE OWNER) TO PERFORM SOIL TESTING AND INSPECTION SERVICE FOR QUALITY CONTROL TESTING DURING EARTHWORK OPERATIONS. COPIES OF RESULTS OF TESTS SHALL BE SUBMITTED BY THE TESTING SERVICE DIRECTLY TO THE CONTRACTOR, THE OWNER, AND THE STRUCTURAL ENGINEER. --THE TESTING SERVICE WILL CLASSIFY PROPOSED ON-SITE AND BORROW SOILS TO VERIFY THAT SOILS COMPLY WITH SPECIFIED REQUIREMENTS AND TO PERFORM REQUIRED FIELD AND LABORATORY TESTING. (MINIMUM REQUIRED SOIL BEARING CAPACITY IS NOTED ON THE STRUCTURAL DRAWINGS). --IN PAVED AND BUILDING SLAB AREAS, THE TESTING SERVICE SHALL MAKE AT LEAST ONE FIELD DENSITY TEST FOR EACH 2000 SQUARE FEET OF FILL IN EACH COMPACTED FILL LAYER. IF A TEST SHOULD FAIL TO MEET REQUIRED DENSITY, THE CONTRACTOR SHALL RE-COMPACT THAT LAYER. THE SOIL TESTING SERVICE SHALL PERFORM ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE TO SHOW THAT THE FAILED LAYER HAS REACHED THE REQUIRED COMPACTION. --IN FOUNDATION WALL AREAS, THE TESTING SERVICE SHALL MAKE AT LEAST ONE FIELD DENSITY TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH OF FILL IN EACH COMPACTED FILL LAYER, WITH NO LESS THAN TWO TESTS ALONG A WALL FACE. IF A TEST SHOULD FAIL TO MEET REQUIRED DENSITY, THE CONTRACTOR SHALL RE-COMPACT THAT LAYER. THE SOIL TESTING SERVICE SHALL PERFORM ADDITIONAL TESTS AT THE CONTRACTOR'S EXPENSE TO SHOW THAT THE FAILED LAYER HAS REACHED THE REQUIRED COMPACTION.
51. COMPACTION: COMPACT EACH LAYER OF BACKFILL AND FILL SOIL MATERIALS AND THE TOP 12" OF SUBGRADE IN CUT AREAS TO 98% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D698 FOR STRUCTURES, SLABS, AND PAVEMENTS AND 90% OF MAXIMUM DENSITY FOR LAWNS OR UNPAVED AREAS.
53. ANY RELOCATION OF EXISTING UTILITIES WILL BE AT THE COST OF THE OWNER. THE WILL NOT ACCEPT RESPONSIBILITY FOR DAMAGES TO CURB AND GUTTER OR STREET IMPROVEMENTS INSTALLED PRIOR TO UNDERGROUND SERVICES, NOR WILL THE CITY ABSORB THE COST FOR BORINGS TO INSTALL UNDERGROUND SERVICE, PAVEMENT PATCHING OR DAMAGE TO LANDSCAPING. THESE WILL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER.
54. FIRE DEPARTMENT VEHICULAR ACCESS TO ALL STRUCTURES UNDER CONSTRUCTION SHALL BE PROVIDED AT ALL TIMES. IN AREAS WHERE GROUND SURFACES ARE SOFT OR LIKELY TO BECOME SOFT, HARD ALL WEATHER SURFACE ROADS SHALL BE PROVIDED AND MAINTAINED.
55. ADDRESS NUMBERS, BOTH COMMERCIAL AND RESIDENTIAL, MUST BE POSTED ON THE FRONT OF THE STRUCTURE NEAREST TO THE MAIN ENTRANCE IN A POSITION TO BE PLAINLY LEGIBLE, VISIBLE, AND UNOBSTRUCTED FROM THE STREET OR ROAD FRONTING THE PROPERTY.
56. DISTURBED AREA IS OVER 1 ACRE AND A FORMAL SEDIMENTATION & EROSION CONTROL PLAN APPROVAL IS REQUIRED AS A CONDITION OF CONSTRUCTION PLAN APPROVAL. THE SEDIMENTATION & EROSION CONTROL PLAN PROVIDED SHOULD BE REGARDED AS MINIMUM REQUIREMENTS; ADDITIONAL MEASURES SHALL BE PUT IN PLACE AS NEEDED TO ENSURE THAT NO SEDIMENT IS RELEASED FROM THE SITE.
57. (CONSTRUCTION/SITE PLANS) WATER AND SEWER PERMIT APPLICATIONS HAVE BEEN APPROVED BY THE DENR. PERMIT NUMBERS ARE AS FOLLOWS:
    WATER PERMIT NUMBER: NOT YET RECEIVED
    SEWER PERMIT NUMBER: NOT YET RECEIVED
58. COPIES OF ALL PERMITS AND APPROVED PLANS MUST BE KEPT ON SITE IN A PERMIT BOX THAT IS CONSPICUOUSLY LOCATED AND EASILY ACCESSIBLE DURING CONSTRUCTION. THIS INCLUDES APPROVED CONSTRUCTION PLANS, APPROVED EROSION CONTROL PLANS, ENCROACHMENT AGREEMENTS, DRIVEWAY PERMITS, WATER/SEWER PERMITS, ETC.
59. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL NCDOT, PINE LEVEL AND NCDENR STANDARDS AND SPECIFICATIONS.
60. MAINTAIN MINIMUM 3' COVER FOR ALL WATER PIPE.
61. WHERE WATERLINE CROSSES:
    A. SANITARY SEWER: WATERLINE SHALL CROSS ABOVE AND MAINTAIN 2' VERTICAL SEPARATION OR 10' OF HORIZONTAL SEPARATION. IF THIS SEPARATION CANNOT MAINTAIN OR IF WATERLINE PASSES BELOW SEWER LINE THEN BOTH WATERLINE AND SEWER LINE SHALL BE CLASS 50 DUCTILE IRON PIPE FOR A MINIMUM OF 10' EACH SIDE OF CROSSING.
    B. STORM SEWER: WHERE WATERLINE CROSSES ABOVE MAINTAIN 1' VERTICAL SEPARATION, WHERE WATERLINE CROSSES BELOW MAINTAIN 2' VERTICAL SEPARATION. IF THIS SEPARATION CANNOT BE MAINTAINED WATERLINE SHALL BE CLASS 50 DUCTILE IRON PIPE FOR MINIMUM OF 10' EACH SIDE OF CROSSING.
62. WHERE SANITARY SEWER CROSSES STORM MAINTAIN 2' SEPARATION. IF THIS SEPARATION CANNOT BE MAINTAINED SANITARY SEWER SHALL BE CLASS 50 DUCTILE IRON PIPE FOR MINIMUM OF 10' EACH SIDE OF CROSSING. 63.REFERENCE NC 15A, 18C, .0906 FOR ADDITIONAL CROSSING INFORMATION. THIS CRITERIA SHALL BE MET AT ALL CROSSINGS.
63. REFERENCE NC 15A, 18C, .0906 FOR ADDITIONAL CROSSING INFORMATION. THIS CRITERIA SHALL BE MET AT ALL CROSSINGS.

SITE INFORMATION - PHASE 1

SITE ADDRESS:	455 PINE LEVEL-MICRO ROAD PINE LEVEL, NORTH CAROLINA
TRACT ACREAGE:	49.12 Ac.
TOTAL NUMBER OF UNITS:	92
SINGLE FAMILY UNITS:	92
TOWNHOMES:	0
LINEAR FOOTAGE OF STREETS:	±3,000 LF
AREA OF PROPOSED STREET R/W:	4.01 Ac.
DISTURBED AREA:	24.24 Ac.
ZONE:	RA - SPECIAL USE PERMIT
TAX ID#	262414-33-7734
MINIMUM BUILDING SETBACKS:	
FRONT:	20'
SIDE:	5'
REAR:	20'
SIDE STREET:	20'
MINIMUM LOT SIZE:	6,000 S.F.
OPEN SPACE REQUIRED:	4.91 Ac. (10%)
OPEN SPACE PROVIDED:	27.78 Ac.
CONSERVATION EASEMENT AREA:	16.26 Ac.
PROPOSED IMPERVIOUS:	±33.5 Ac.
PRO. LOT IMPERVIOUS:	3,500 S.F. PER LOT



TYPE A ROLL CURB
NOT TO SCALE (SEE DETAIL)



STANDARD 30" CURB CROSS SECTION
NOT TO SCALE

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

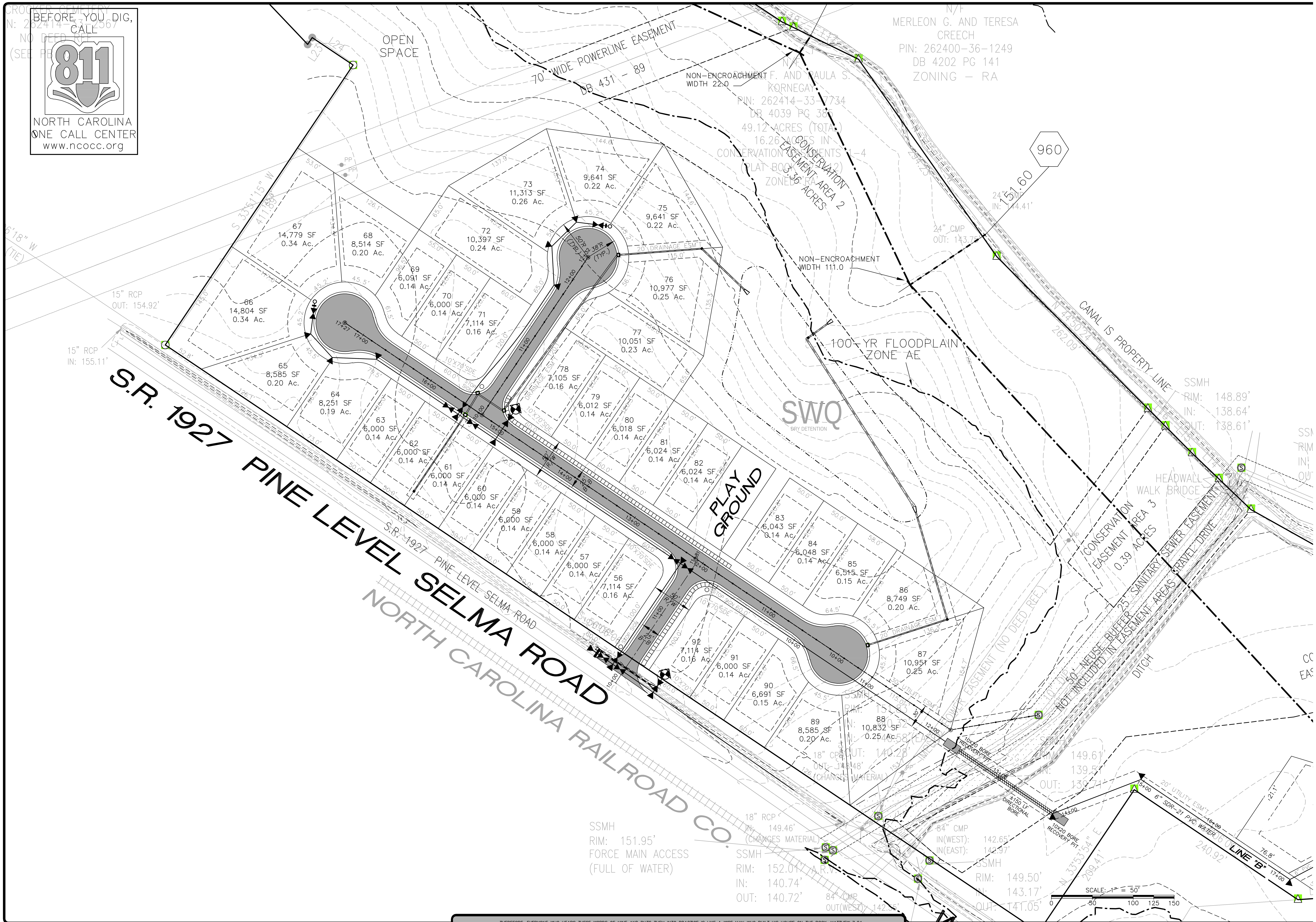
EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 6/22/23

CONSTRUCTION PLAT

REVISIONS	
4/25/23 - FLOODPLAIN	
6/28/23 - PHASE 1 REV	
FILE NO.	2019-074
HORZ. SCALE:	1"=100'
VERT. SCALE:	N/A

CE-02


BEFORE YOU DIG, CALL
811
NORTH CAROLINA ONE CALL CENTER
www.ncocc.org
OPEN SPACE
70' WIDE POWERLINE EASEMENT
DB 431 - 89
N/F
MERLEON G. AND TERESA CREECH
PIN: 262400-36-1249
DB 4202 PG 141
ZONING - RA
NON-ENCROACHMENT WIDTH 22.0
F. AND PAULA S. KORNEGAY
PIN: 262414-33-7734
DB 4039 PG 359
49.12 ACRES (TOTAL)
16.26 ACRES IN CONSERVATION EASEMENTS 1-4
ZONED RA
CONSERVATION EASEMENT AREA 2
3.36 ACRES
960
151.60
NON-ENCROACHMENT WIDTH 111.0
24" CMP
100-YR FLOODPLAIN ZONE AE
CANAL IS PROPERTY LINE
SWQ
DRY DETENTION
PLAY GROUND
SSMH
RIM: 148.89'
IN: 138.64'
OUT: 138.61'
HEADWALL
WALK BRIDGE
CONSERVATION EASEMENT AREA 3
0.39 ACRES
50' NEUSE BUFFER
25' SANITARY SEWER EASEMENT
GRAVEL DRIVE
NOT INCLUDED IN EASEMENT AREAS
DITCH
15" RCP
OUT: 154.92'
15" RCP
IN: 155.11'
67 14,779 SF 0.34 Ac.
68 8,514 SF 0.20 Ac.
66 14,804 SF 0.34 Ac.
65 8,585 SF 0.20 Ac.
64 8,251 SF 0.19 Ac.
63 6,000 SF 0.14 Ac.
62 6,000 SF 0.14 Ac.
61 6,000 SF 0.14 Ac.
60 6,000 SF 0.14 Ac.
59 6,000 SF 0.14 Ac.
58 6,000 SF 0.14 Ac.
57 6,000 SF 0.14 Ac.
56 7,114 SF 0.16 Ac.
69 6,091 SF 0.14 Ac.
70 6,000 SF 0.14 Ac.
71 7,114 SF 0.16 Ac.
72 10,397 SF 0.24 Ac.
73 11,313 SF 0.26 Ac.
74 9,641 SF 0.22 Ac.
75 9,641 SF 0.22 Ac.
76 10,977 SF 0.25 Ac.
77 10,051 SF 0.23 Ac.
78 7,105 SF 0.16 Ac.
79 6,012 SF 0.14 Ac.
80 6,018 SF 0.14 Ac.
81 6,024 SF 0.14 Ac.
82 6,024 SF 0.14 Ac.
83 6,043 SF 0.14 Ac.
84 6,048 SF 0.14 Ac.
85 6,515 SF 0.15 Ac.
86 8,749 SF 0.20 Ac.
87 10,951 SF 0.25 Ac.
88 10,832 SF 0.25 Ac.
89 8,585 SF 0.20 Ac.
90 6,691 SF 0.15 Ac.
91 6,000 SF 0.14 Ac.
92 7,114 SF 0.16 Ac.
20' DRAINAGE ESM'T
S.R. 1927 PINE LEVEL SELMA ROAD
NORTH CAROLINA RAILROAD CO.
SSMH
RIM: 151.95'
FORCE MAIN ACCESS
(FULL OF WATER)
18" RCP
IN: 149.46'
(CHANGES MATERIAL)
SSMH
RIM: 152.01' A.R.V.
IN: 140.74'
OUT: 140.72'
84" CMP
IN(WEST): 142.65'
IN(EAST): 142.97'
SSMH
RIM: 149.50'
IN: 143.17'
OUT: 141.05'
SSMH
RIM: 149.61'
10X20 BORE RECOVERY PIT
±150 LF DIRECTIONAL BORE
20' UTILITY ESM'T
6" SDR-21 PVC WATER
LINE "B"
240.92'
76.8'
SCALE: 1" = 50'
0 50 100 125 150

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER MICHAEL STOCKS
4/19/21

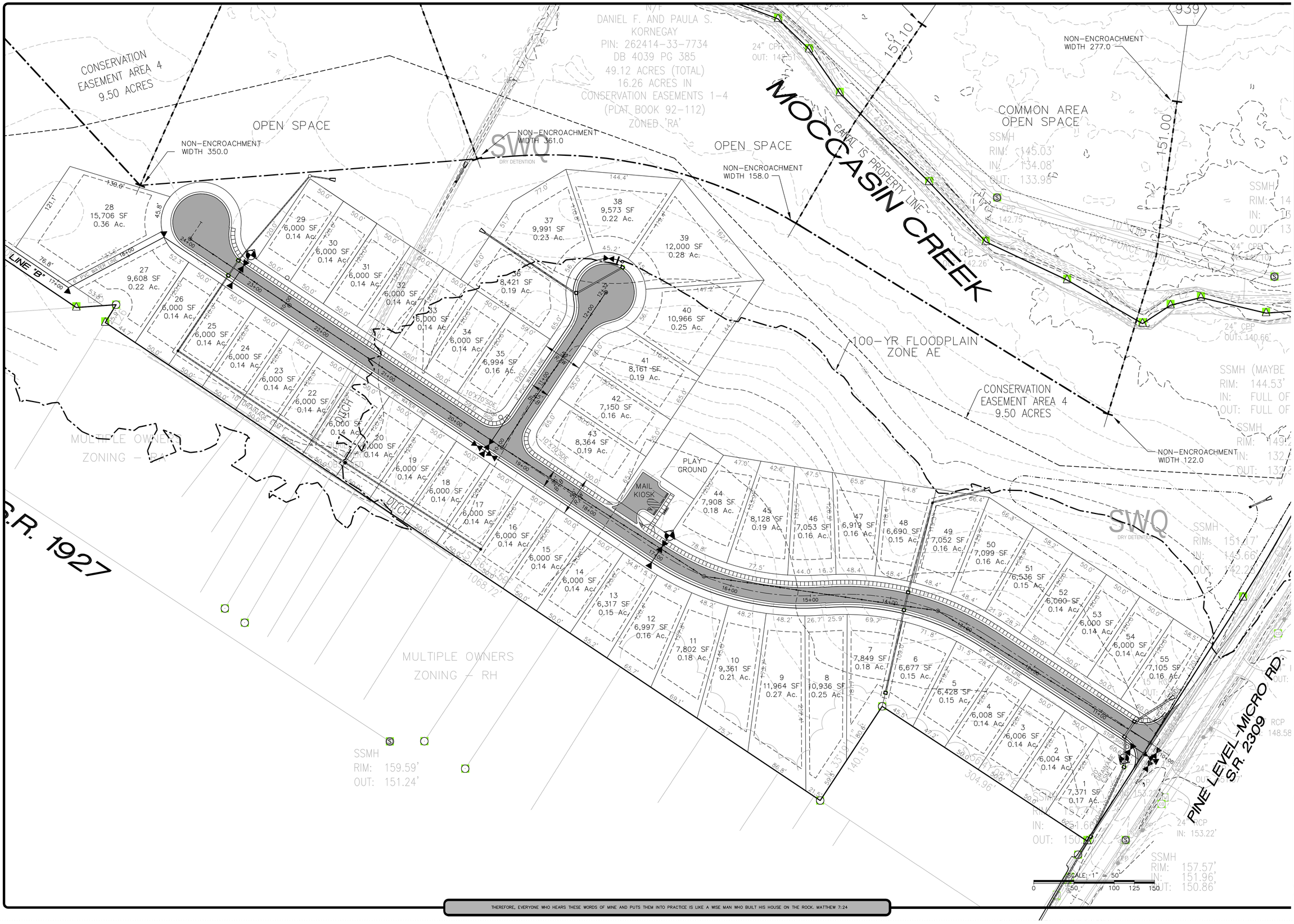
CONSTRUCTION PLAT AREA 1

REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	N/A

CE-02A

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24



THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

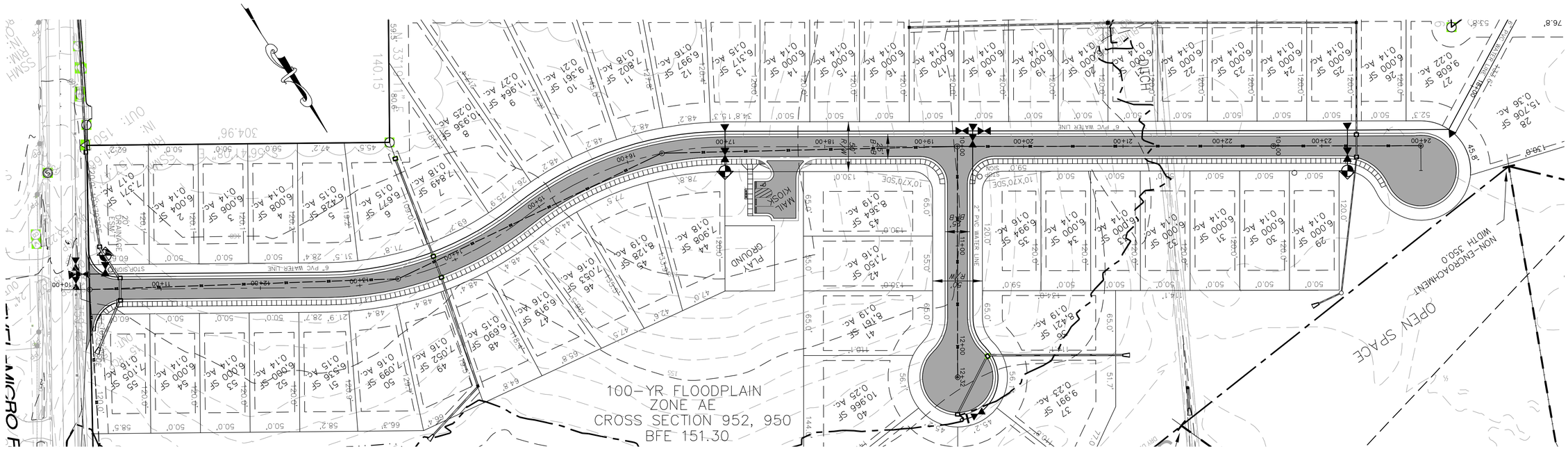
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER MICHAEL STOCKS
J. Michael Stocks 6/22/23

CONSTRUCTION PLAT AREA 2

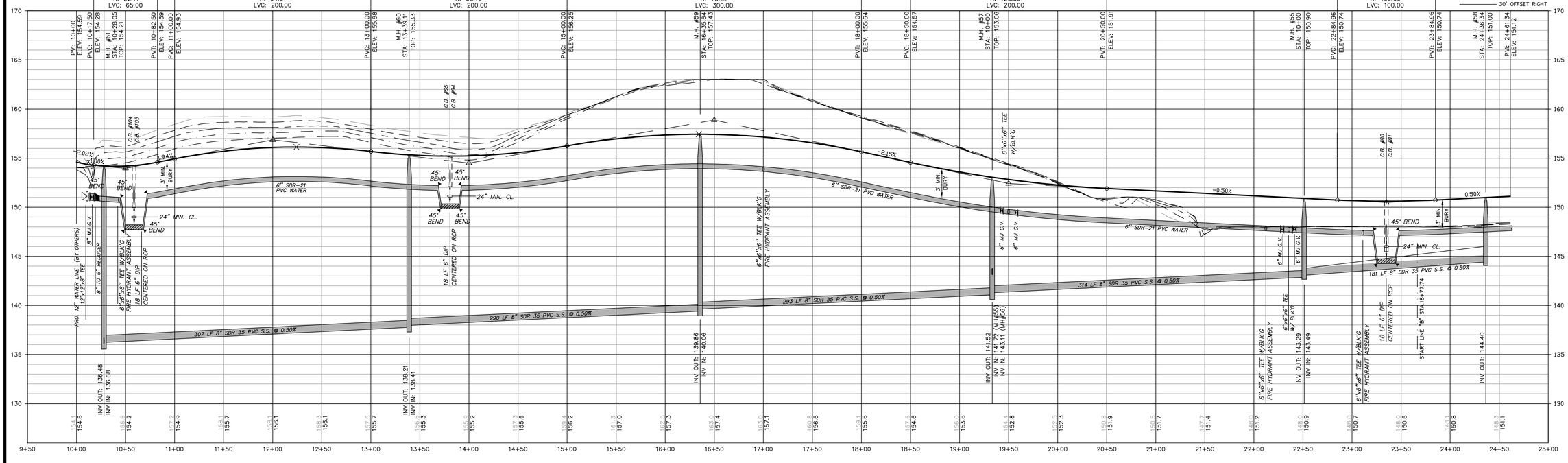
REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	N/A

CE-02B



Street A



THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459-8196
P.O. BOX 1108
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

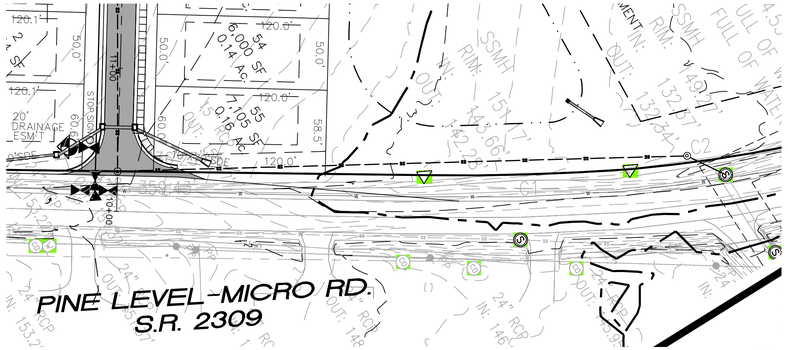
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER MICHAEL STOCKS
J. Michael Stocks 4/19/21

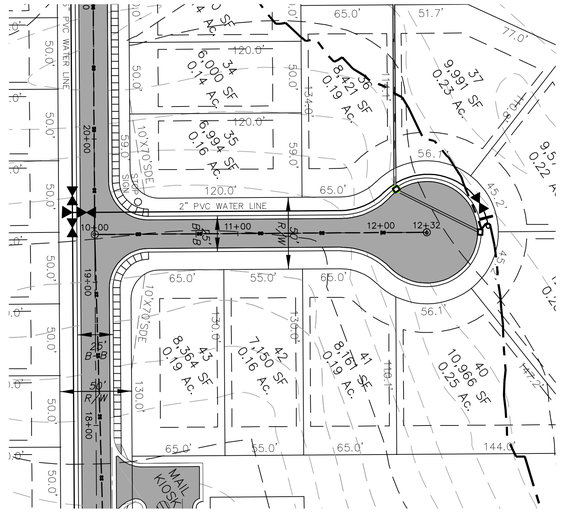
STREET "A" PLAN + PROFILE

REVISIONS
3/15/23 – FLOODPLAIN

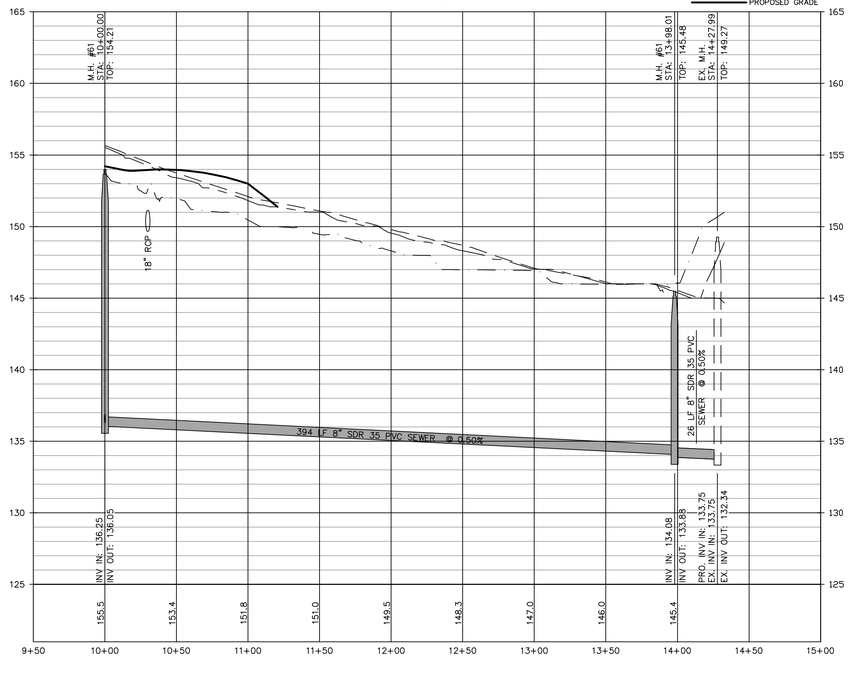
FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	1"=5'

CE-03

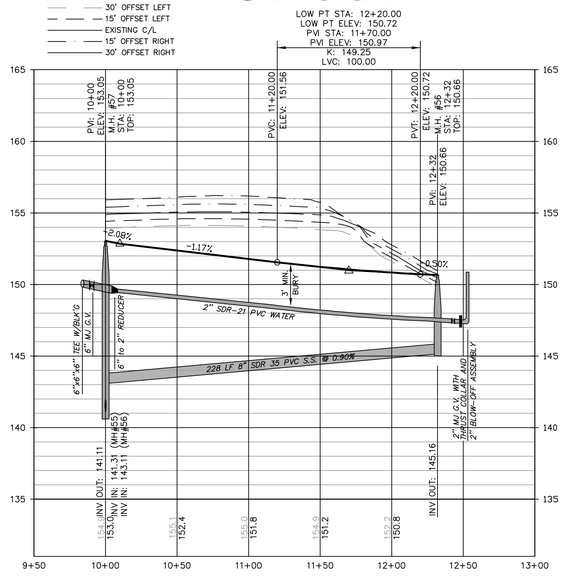




Line A



Street B



SCALE: 1" = 50'

0 50 100 125 150

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

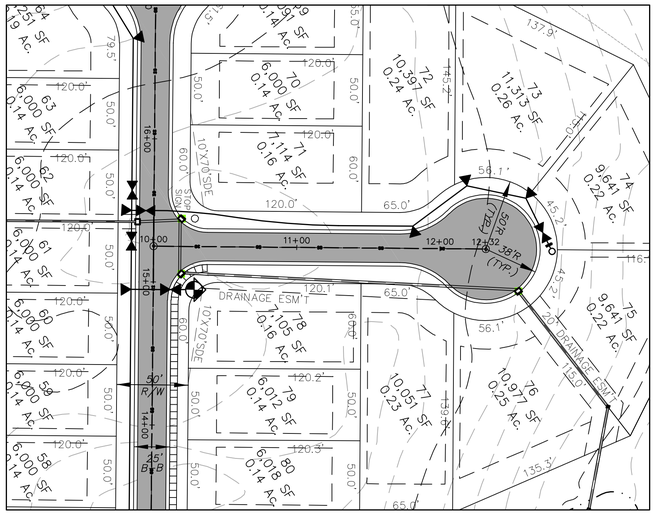
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS 4/19/21

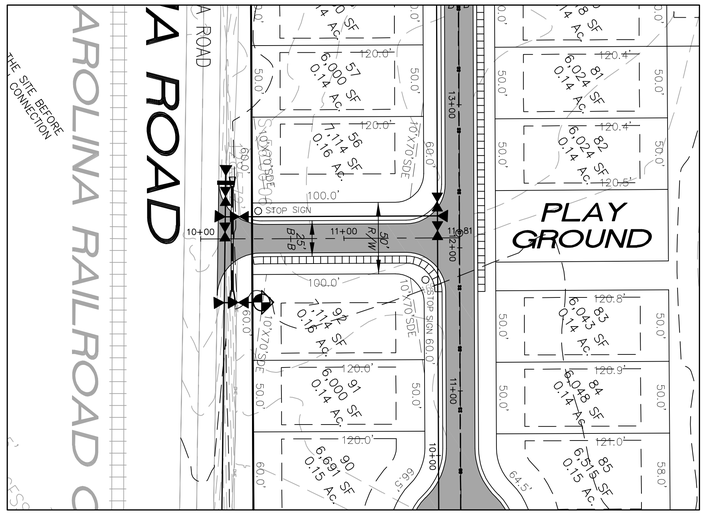
STREET "B" + "C" PLAN + PROFILE

REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	1"=5'

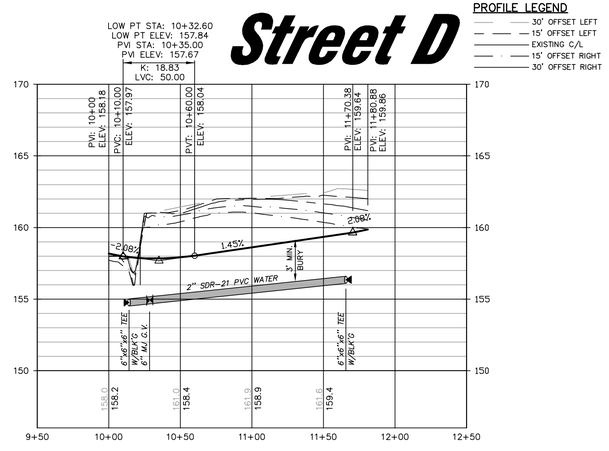
CE-04





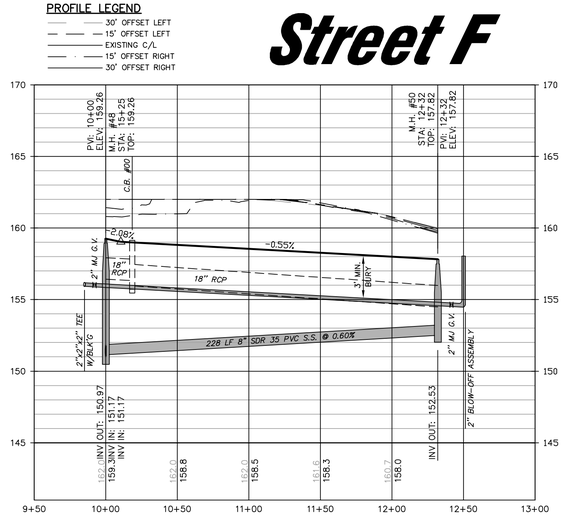
Street D

PROFILE LEGEND
- 30' OFFSET LEFT
- 15' OFFSET LEFT
- EXISTING C/L
- 15' OFFSET RIGHT
- 30' OFFSET RIGHT



Street F

PROFILE LEGEND
- 30' OFFSET LEFT
- 15' OFFSET LEFT
- EXISTING C/L
- 15' OFFSET RIGHT
- 30' OFFSET RIGHT



SCALE: 1" = 50'

0 50 100 125 150

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

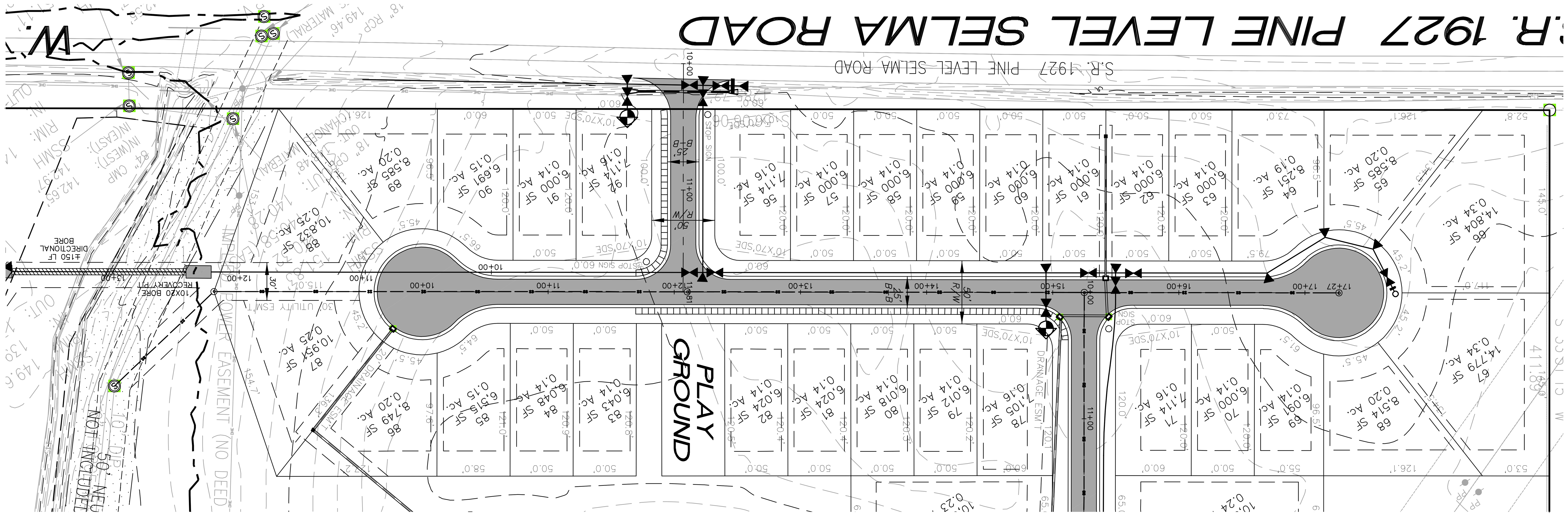
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 4/19/21

STREET 'D' + 'F' PLAN + PROFILE

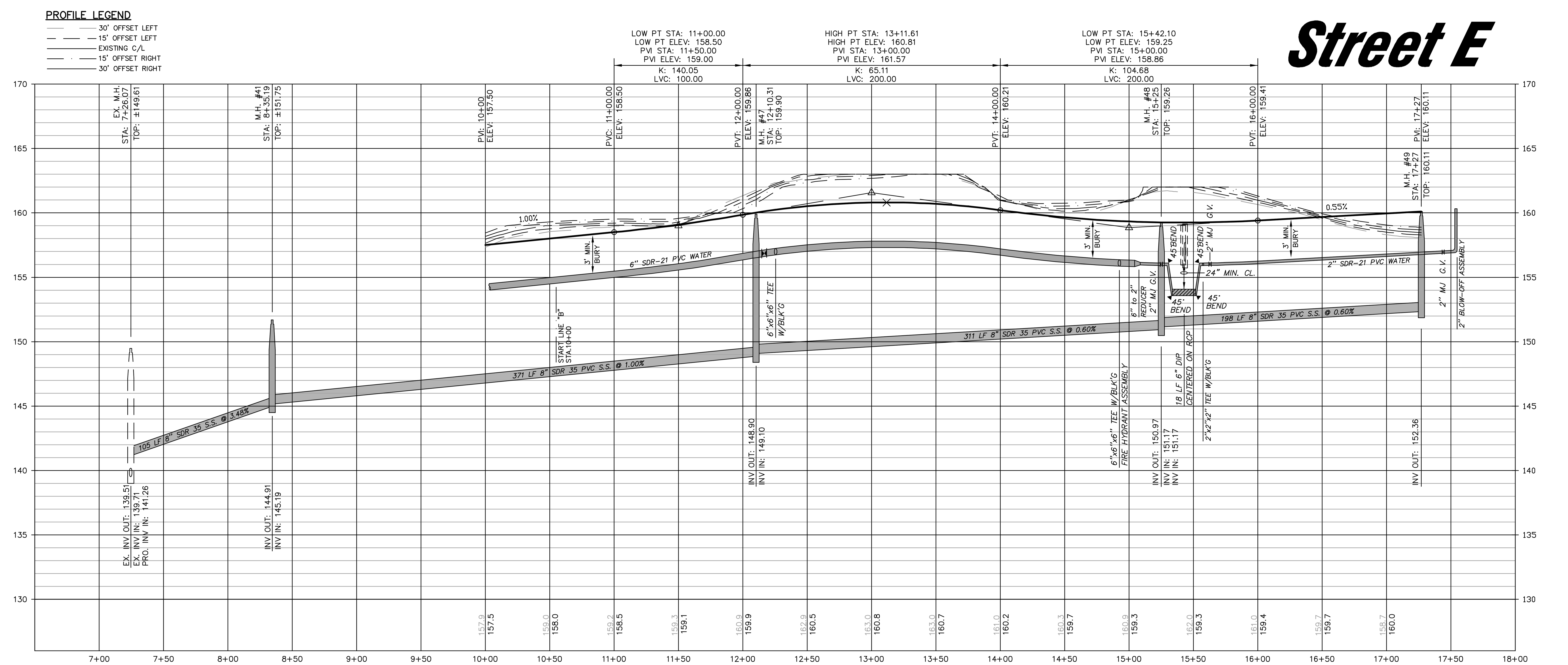
REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	1"=5'

CE-05



Street E



SCALE: 1" = 50'

0 50 100 125 150

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1

PINE LEVEL, NORTH CAROLINA

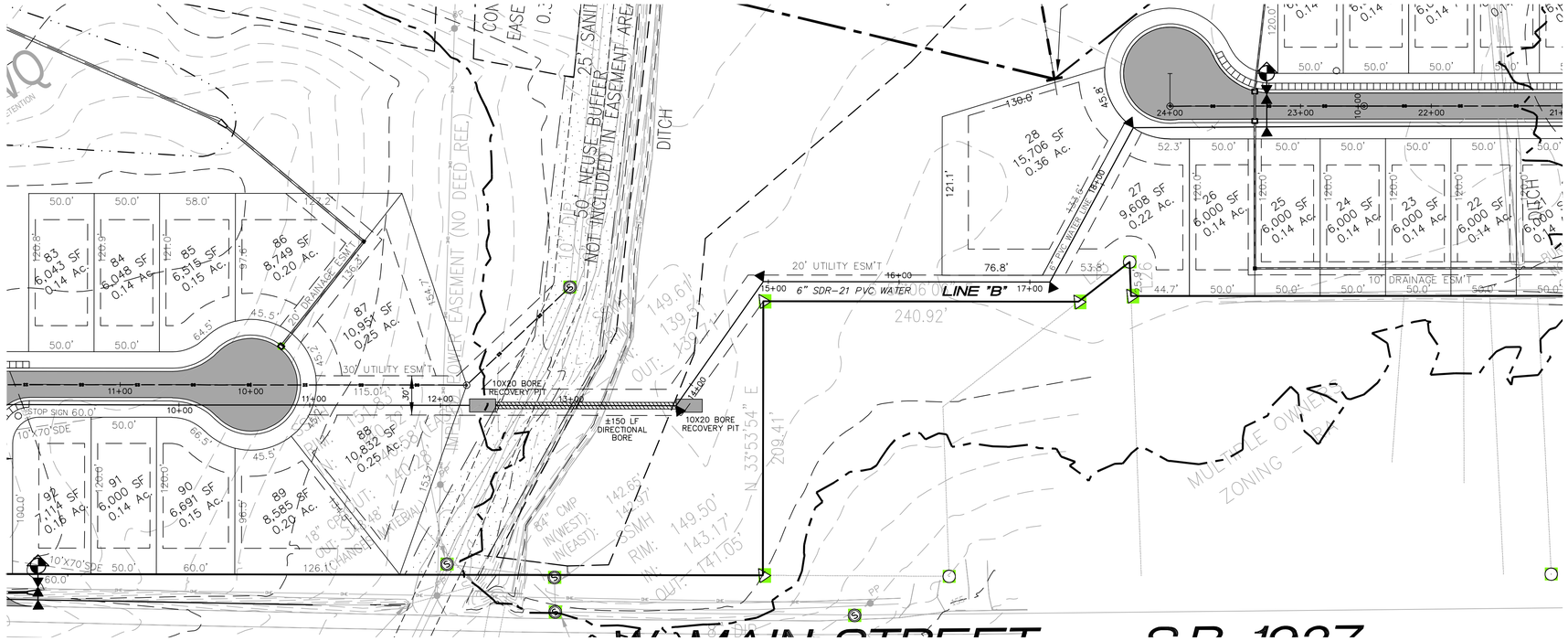
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS 4/19/21

STREET 'E' PLAN + PROFILE

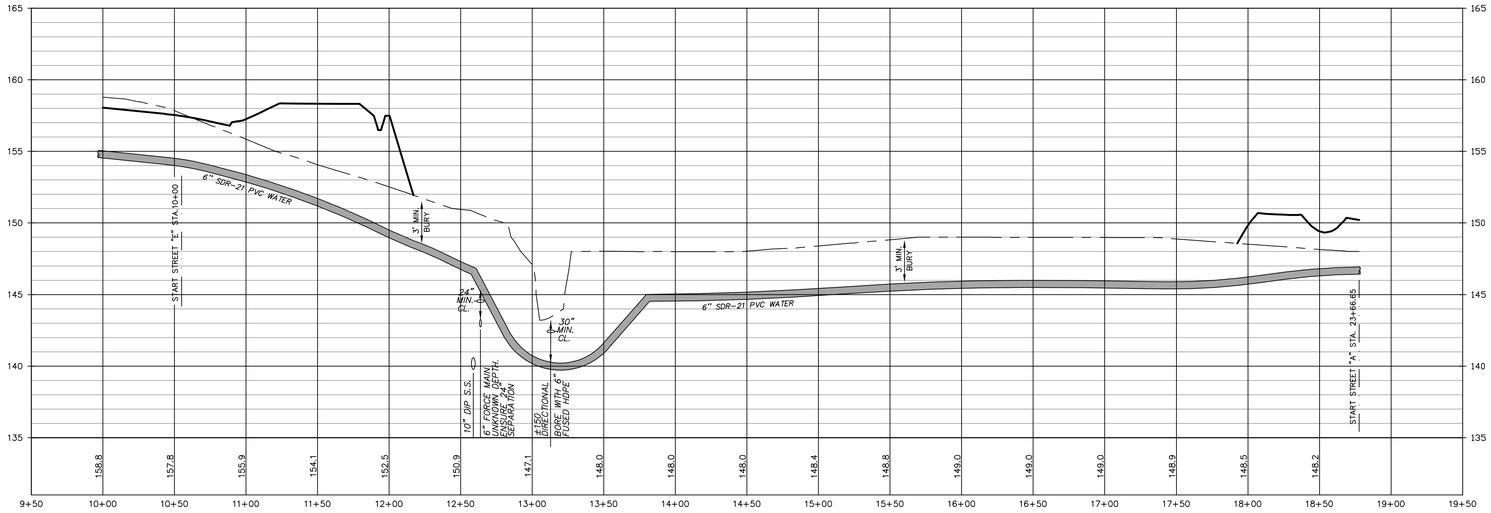
REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	1"=5'

CE-06



Line B



SCALE: 1" = 50'

0 50 100 125 150

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 4/19/21

LINE "B" PLAN + PROFILE

REVISIONS
DWR COMMENTS 9/6/2022

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	1"=5'

CE-07

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
P.O. BOX 1108
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER MICHAEL STOCKS
J. Michael Stocks 6/22/23

GRADING PLAN AREA 2

REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	N/A

CE-08

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

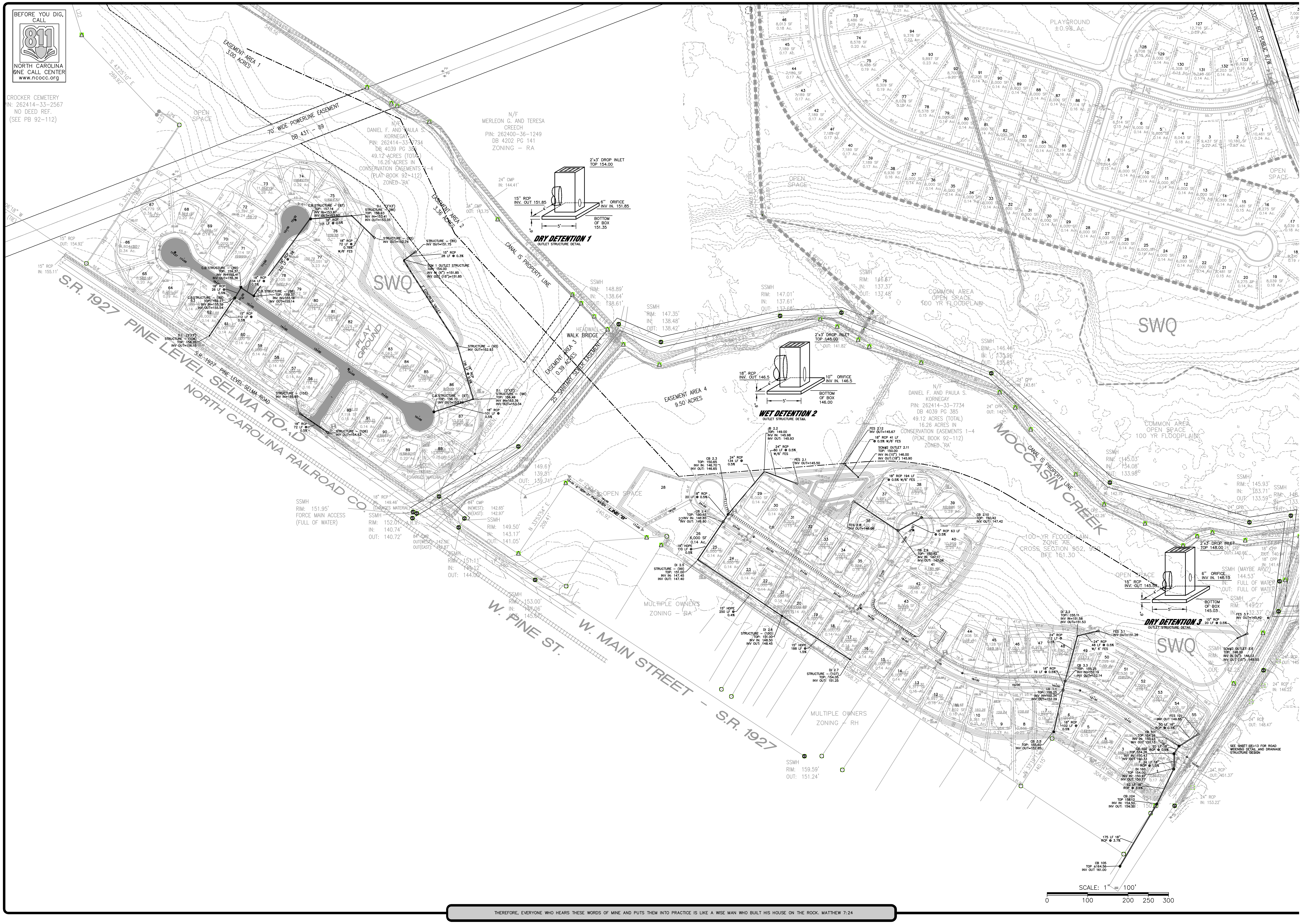
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19843 MICHAEL STOCKS 6/22/23

GRADING PLAN AREA 2

REVISIONS
3/15/23 – FLOODPLAIN

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	N/A

CE-09



STOCKS ENGINEERING

801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19843 MICHAEL STOCKS
J. Michael Stocks 6/22/23

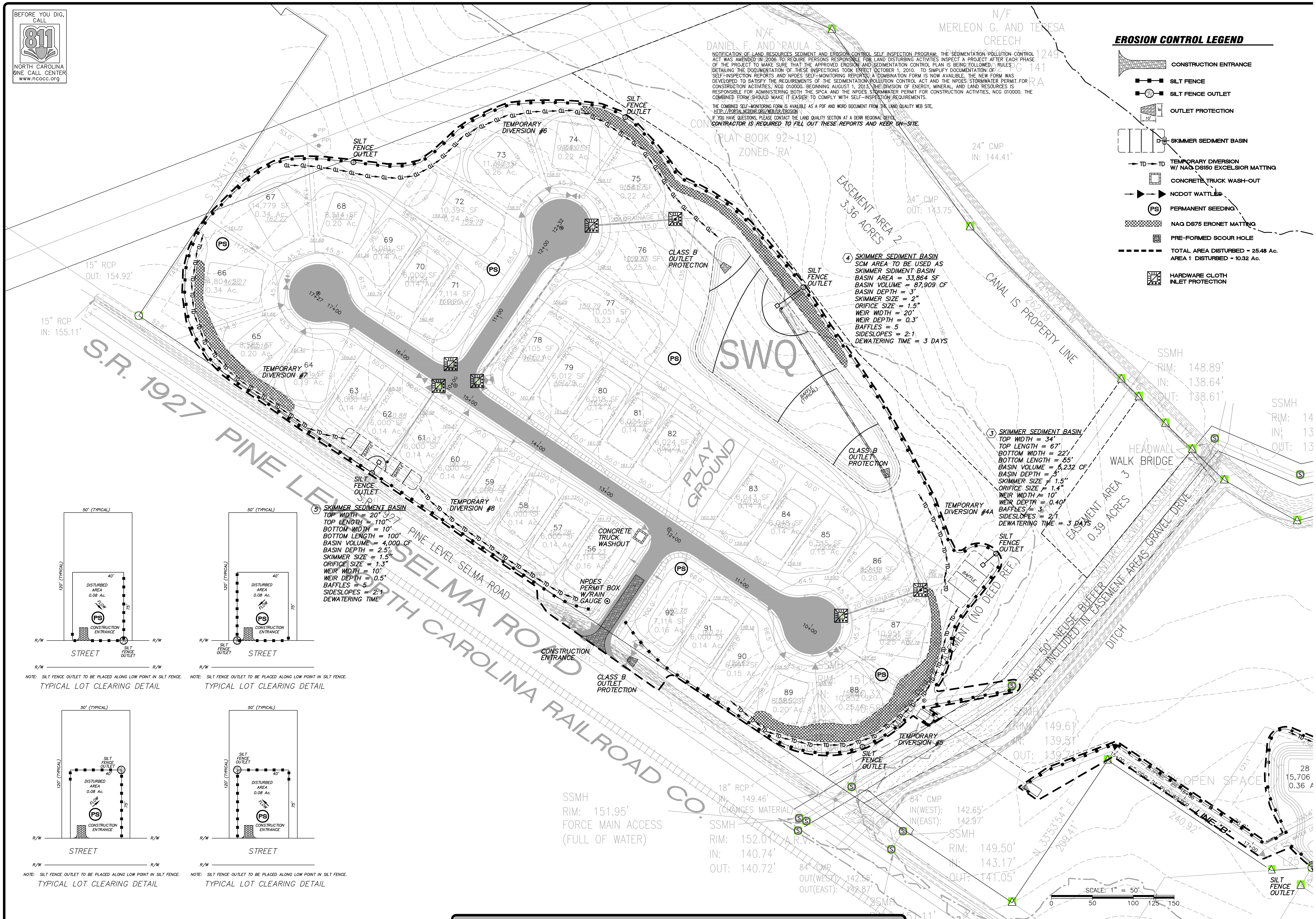
DRAINAGE PLAN

REVISIONS
3/15/23 - FLOODPLAIN

FILE NO.	2019-074
HORZ. SCALE:	1"=100'
VERT. SCALE:	N/A

CE-10

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24



THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 6/22/23

EROSION CONTROL AREA 1

REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	N/A

CE-11

(2) SKIMMER SEDIMENT BASIN
SCM AREA TO BE USED AS SKIMMER SIDIMENT BASIN
BASIN AREA = 14,156 SF
BASIN VOLUME = 32,384 CF
BASIN DEPTH = 2.5'
SKIMMER SIZE = 2.5"
ORIFICE SIZE = 2.2"
WEIR WIDTH = 25'
WEIR DEPTH = 0.46'
BAFFLES = 3
SIDESLOPES = 2:1
DEWATERING TIME = 3 DAYS

(1) SKIMMER SEDIMENT BASIN
SCM AREA TO BE USED AS SKIMMER SIDIMENT BASIN
BASIN AREA = 27,864 SF
BASIN VOLUME = 34,493 CF
BASIN DEPTH = 2'
SKIMMER SIZE = 2.5"
ORIFICE SIZE = 1.8"
WEIR WIDTH = 20'
WEIR DEPTH = 0.42'
BAFFLES = 5
SIDESLOPES = 2:1
DEWATERING TIME = 3 DAYS

NOTIFICATION OF LAND RESOURCES SEDIMENT AND EROSION CONTROL SELF INSPECTION PROGRAM: THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE PERSONS RESPONSIBLE FOR LAND DISTURBING ACTIVITIES INSPECT A PROJECT AFTER EACH PHASE OF THE PROJECT TO MAKE SURE THAT THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN IS BEING FOLLOWED... RULES DETAILING THE DOCUMENTATION OF THESE INSPECTIONS TOOK EFFECT OCTOBER 1, 2010. TO SIMPLIFY DOCUMENTATION OF SELF-INSPECTION REPORTS AND NPDES SELF-MONITORING REPORTS, A COMBINATION FORM IS NOW AVAILBLE. THE NEW FORM WAS DEVELOPED TO SATISFY THE REQUIREMENTS OF THE SEDIMENTATION POLLUTION CONTROL ACT AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000. BEGINNING AUGUST 1, 2013, THE DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES IS RESPONSIBLE FOR ADMINISTERING BOTH THE SPCA AND THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES, NCG 010000. THE COMBINED FORM SHOULD MAKE IT EASIER TO COMPLY WITH SELF-INSPECTION REQUIREMENTS.

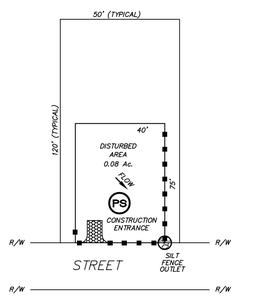
THE COMBINED SELF-MONITORING FORM IS AVAILBLE AS A PDF AND WORD DOCUMENT FROM THE LAND QUALITY WEB SITE, HTTP://PORTAL.NCDENR.ORG/WEB/LR/EROSION

IF YOU HAVE QUESTIONS, PLEASE CONTACT THE LAND QUALITY SECTION AT A DENR REGIONAL OFFICE.

CONTRACTOR IS REQUIRED TO FILL OUT THESE REPORTS AND KEEP ON-SITE.

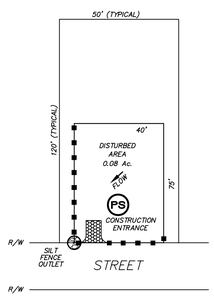
EROSION CONTROL LEGEND

- CONSTRUCTION ENTRANCE
- SILT FENCE
- SILT FENCE OUTLET
- OUTLET PROTECTION (10')
- SKIMMER SEDIMENT BASIN
- TD — TD TEMPORARY DIVERSION W/ NAG DS150 EXCELSIOR MATTING
- CONCRETE TRUCK WASH-OUT
- NCDOT WATTLES
- PS PERMANENT SEEDING
- NAG DS75 ERONET MATTING
- PRE-FORMED SCOUR HOLE
- TOTAL AREA DISTURBED = 24.24 Ac. PHASE 1 DISTURBED = 13.91Ac.
- HARDWARE CLOTH INLET PROTECTION



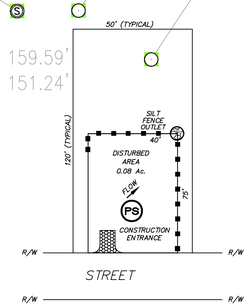
NOTE: SILT FENCE OUTLET TO BE PLACED ALONG LOW POINT IN SILT FENCE.

TYPICAL LOT CLEARING DETAIL



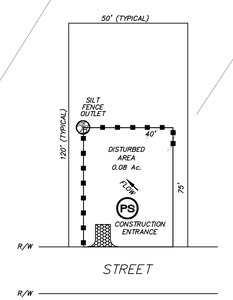
NOTE: SILT FENCE OUTLET TO BE PLACED ALONG LOW POINT IN SILT FENCE.

TYPICAL LOT CLEARING DETAIL



NOTE: SILT FENCE OUTLET TO BE PLACED ALONG LOW POINT IN SILT FENCE.

TYPICAL LOT CLEARING DETAIL



NOTE: SILT FENCE OUTLET TO BE PLACED ALONG LOW POINT IN SILT FENCE.

TYPICAL LOT CLEARING DETAIL

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

SCALE: 1" = 50'
0 50 100 125 150

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459-8196
P.O. BOX 1108
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 6/22/23

EROSION CONTROL AREA 2

REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	1"=50'
VERT. SCALE:	N/A

CE-12

BEFORE YOU DIG, CALL 811
NORTH CAROLINA ONE CALL CENTER
www.ncocc.org

NOTES:

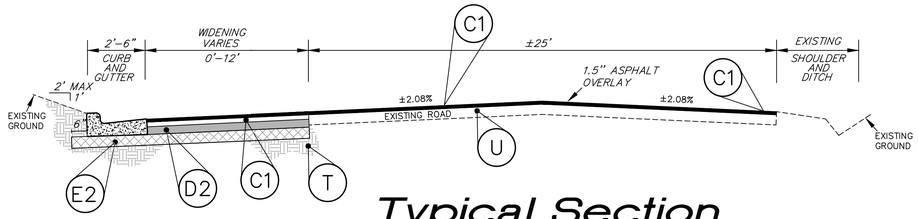
1. CONTRACTOR TO ENSURE POSITIVE DRAINAGE PRIOR TO POURING CONCRETE
2. CONTRACTOR TO INCLUDE IN BASE BID THE BACKFILLING BEHIND CURB, OFFSITE DISPOSAL OF EXCESS MATERIAL, OFF-SITE BORROW, SEED, STRAW & TACK.
3. CONTRACTOR TO INCLUDE IN BASE BID THE SAW-CUTTING, REMOVAL, & REPLACEMENT OF ASPHALT REQUIRED TO INSTALL CURB & GUTTER.
4. ASPHALT SHALL BE SAW-CUT TO PROVIDE SMOOTH EDGE TO PLACE CURB & GUTTER.
5. TWO-WAY TRAFFIC TO BE MAINTAINED AT ALL TIMES.
6. WIDENING, STRIPING AND SIGNAGE TO MATCH NCDOT STANDARDS AND DETAILS LATEST EDITION.
7. ALL STRIPING TO BE THERMOPLASTIC PER NCDOT STANDARDS AND SPECIFICATIONS.
8. CONCRACTOR IS RESPONSIBLE FOR THE LOCATION AND OR RELOCATION OF EXISTING UTILITIES, DRIVEWAY REPAIR, AND TRAFFIC CONTROL PER THE MUTCD, LATEST EDITION.
9. RAISED REFLECTIVE SNOW PLOWABLE PAVEMENT MARKERS SHALL ALSO BE INSTALLED WITHIN TURN LANE CONSTRUCTION LIMITS IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS
10. THERE SHALL BE A 2' PAVED SHOULDER OUTSIDE OF TYPICAL WIDENING SHOWN BELOW.

LEGEND

- (D2) 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I-19.0C
- (E2) 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C @ AN AVERAGE RATE OF 684 LBS. PER SQUARE YARD.
- (C1) 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C (OVERLAY)
- (U) EXISTING PAVEMENT
- (T) EXISTING EARTH

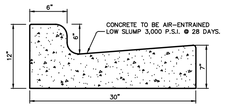
PAVEMENT MARKING LEGEND

- (T16) YELLOW DOUBLE CENTER LINE (6" @ 120 MIL)
- (T6) WHITE EDGELINE (6" @ 90 MIL)
- (UA) LEFT TURN ARROW (90 MIL)
- (UC) STRAIGHT ARROW (90 MIL)
- (TK) 3 FT.-9 FT./SP WHITE MINI-SKIP (6", 120 MIL)
- (TP) YELLOW DIAGONAL (8", 90 MIL)

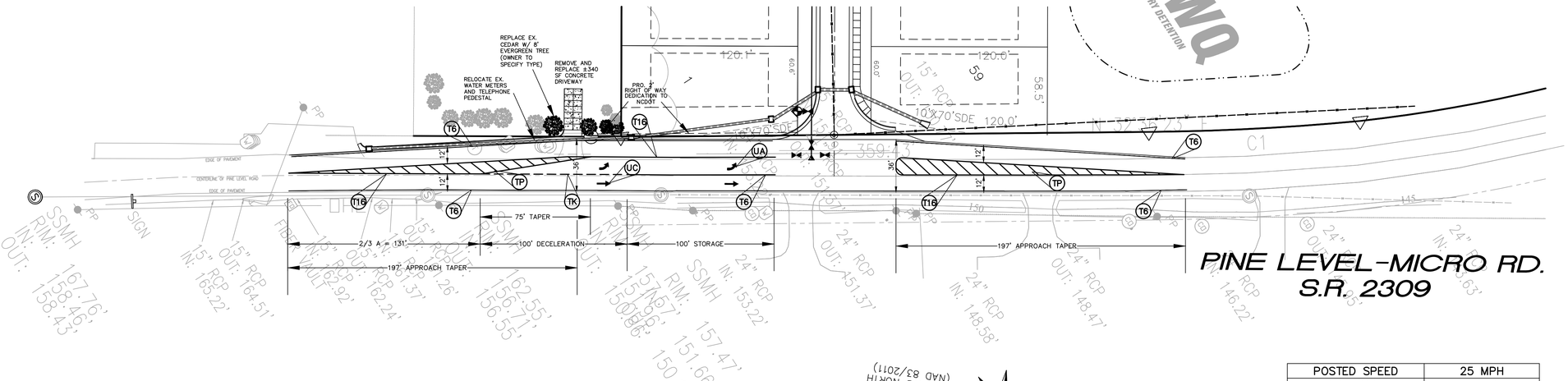


Typical Section

NEAR SIDE WIDENING: NOT TO SCALE



NCDOT STANDARD 30" CURB AND GUTTER STD. 846.01

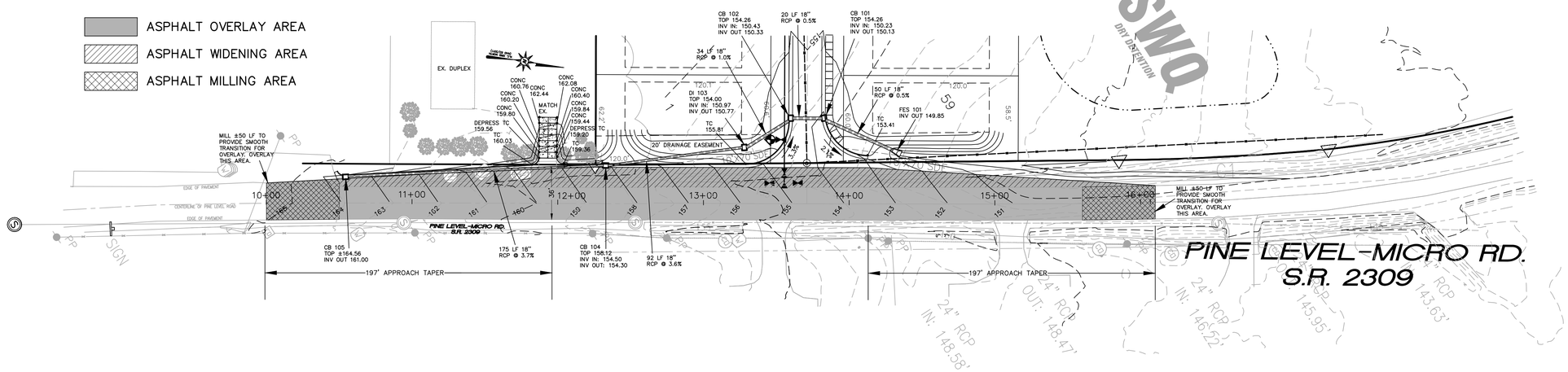


PINE LEVEL-MICRO RD. S.R. 2309

POSTED SPEED	25 MPH
DESIGN SPEED	30 MPH
LATERAL SHIFT	13.1'
STORAGE LENGTH	100'
BAY TAPER	75'
DECELERATION LENGTH	100'
APPROACH/DEPARTURE TAPER	197'

EVANS, ANNIE S
PO BOX 642
PIKEVILLE, NC 27863
DB 1491 PG 913
PIN 262414-42-8716

ASPHALT OVERLAY AREA
ASPHALT WIDENING AREA
ASPHALT MILLING AREA



PINE LEVEL-MICRO RD. S.R. 2309

SCALE: 1" = 40'
0 40 80 100 120

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

STOCKS ENGINEERING
P.O. BOX 1108
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 4/19/21

ROAD WIDENING PLAN

REVISIONS
11/28/22 - NCDOT COMMENT
6/28/23 - OWNER COMMENT

FILE NO.	2019-074
HORZ. SCALE:	1"=40'
VERT. SCALE:	N/A

CE-13

EROSION AND SEDIMENTATION CONTROL NARRATIVE

PROJECT DESCRIPTION
The purpose of this project is for construction of Emily Gardens – Phase 1 residential subdivision. The property is currently owned by RRT Development, Inc. The site is currently undeveloped and development will include a streets, storm drainage and utilities.

Approximately 25.48 acres will be disturbed during construction. The maximum fill will be ±5 feet.

The project is scheduled to begin construction in summer 2022 with project completion and final stabilization by Early 2023. The erosion and sediment control program for this project will include the installation of a suitable construction entrance, silt fence, outlet protection, and skimmer basins with temporary seeding of the site.

ADJACENT PROPERTY
The adjacent property is mostly undeveloped agriculture land.

SOILS
The soil at this site is a sandy clay.

EROSION AND SEDIMENT CONTROL MEASURES
All vegetative and structural erosion and sediment control practices shall be constructed and maintained by the contractor according to these plans and specifications and the minimum standards of the Dept. of Environmental Management, Land Quality Section. The contractor shall also follow any additional requirements as outlined by the Project Engineer.

Structural Practices
1. Vehicle wheels shall be clean when leaving the site to prevent the tracking of mud on paved roads.
2. Construction Road Stabilization: Construction traffic shall be limited to stabilized areas. At a minimum, a temporary gravel construction entrance shall be provided as shown on this drawing.
3. Silt Fence: Silt fences shall be provided where shown and as needed on the site plan. These barriers shall be used to contain sediment.
4. Rip Rap/Gravel Filter Sediment Basins: Construct basin to the shape and dimensions shown in the details. The basin is to be placed below the existing ditch flow line by 2' with the berm built above as dimensioned.

Management Strategies
1. Perimeter measures are to be installed prior to grubbing or grading.
2. Tail Ditches shall be stabilized immediately following their construction. As an alternate, rock check dams may be provided at their outlets and/or the terminal downstream end of disturbance until ground cover is implemented.
3. Stockpile and/or waste areas must be maintained within the limits of the areas protected by the proposed measures and otherwise temporarily seeded if to be left stockpiled over 15 calender days.
4. Construction shall be planned so that grading operations can begin and end as quickly as possible.
5. Silt Fences shall also be installed prior to or as a first step in construction.
6. The Contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices.

Vegetative Ground Cover
Immediately following grading, all areas shall receive either permanent or temporary seeding, as applicable, as follows:

Site Area Description:	Stabilization Time Frame:	Stabilization Time Frame Exceptions:
Perimeter dikes, swales, ditches & slopes.	7 Days	None
High Quality Water (HQW) Zones.	7 Days	None
Slope steeper than 3:1	7 Days	If slopes are 10' or less in length & are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter.	14 Days	7 Days for slopes greater than 50 feet in length.
All other areas with slopes flatter than 4:1	14 Days	None (Except for perimeters and HQW Zones)

TEMPORARY SEEDING SPECIFICATIONS
SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
WINTER/EARLY SPRING – RYE (GRAIN)	120
KOBE LESPEDEZA	50
SUMMER – GERMAN MILLET	40

MULCH/TACKING AGENTS
APPLY 4,000 LB/ACRE GRAIN STRAW. ANCHOR STRAW BY TAKING WITH ASPHALT, NETTING, OR A MULCH ANCHORING TOOL. A DISK WITH BLADES SET NEARLY STRAIGHT CAN BE USED AS A MULCH ANCHORING TOOL.

PERMANENT SEEDING SPECIFICATIONS
SEEDING MIXTURE

SPECIES	RATE (LB/ACRE)
TALL FESCUE	200
CENTIPEDE	25

NURSE PLANTS
BETWEEN APR. 15 AND AUG. 15, ADD 10 LB/ACRE GERMAN MILLET OR 15 LB/ACRE SUDANGRASS. PRIOR TO MAY 1 OR AFTER AUG. 15 ADD 25 LB/ACRE RYE (GRAIN).

SEEDING DATES

	BEST	POSSIBLE
EARLY SPRING:	FEB. 15–MAR. 20	FEB. 15–APR. 30
FALL:	SEPT. 1–SEPT. 30	SEPT. 1–OCT. 31

SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST. IF SOIL TEST IS NOT AVAILABLE APPLY 2 TONS/ACRE AGRICULTURAL GRADE LIMESTONE AND 1,000 LBS/ACRE OF 10–10–10 FERTILIZER, OR APPLY 3,000–5,000 LB/ACRE SEDANGRASS. PRIOR TO MAY 1 OR AFTER AUG 15, ADD 25 LB/ACRE RYE (GRAIN).

Maintenance
1. Reseed and mulch bare spots larger than 9 square feet (limited to 5% maximum of site area.)
2. Maintain all seeded areas until uniform stand is acceptable.
3. If growth is not established by final project inspection, continue specified attention until the stand is acceptable.
4. Correct and repair all undue settling and erosion within 1 year after final inspection.
5. Remove from the site, all erosion control structures after complete stabilization at end of construction period.
6. Remove silt from sediment pits and from behind check dams when silt is within half depth of the pit or spillway. Dispose of in an area where silt cannot re-enter pit / trap.

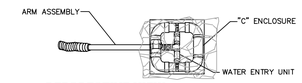
Calculations
The practice utilized for the proposed site did require formal calculations. Calculations have been provided.

OWNER
RRT DEVELOPMENT, LLC
5212 HWY 70 BUSINESS
CLAYTON, NC 27528
Contact: CARY CHANDLER
919.302.4906

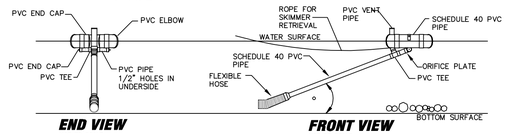
CONSTRUCTION SEQUENCE:

1. Obtain erosion control plan approval prior to beginning land disturbance. Retain a copy of the approved erosion control plan and permit on site. Call Johnston County to notify the Inspector of a start date prior to land disturbance.
2. Schedule and attend pre–construction meeting with Johnston County.
3. Construct the construction entrance as shown on the plans. Maintain the construction entrance daily to ensure that mud and silt will not be tracked onto the paved surface. If mud is tracked onto the road surface, it is to be removed immediately.
4. Construction entrance location may not vary without prior approval from Engineer and Johnston County.
5. Clear the area needed to construct the perimeter erosion control measures.
6. Construct the silt fence, silt fence outlets and sediment basin.
7. Begin clearing, grubbing, and topsoil stripping.
8. Rough grade all roadways and lots.
9. Construct the storm sewer system throughout the project. Install inlet protection devices.
10. Place CABC on roadway.
11. Seed, straw and tack areas that are graded to their final disposition.
12. Construct permanent outlet protection devices at pipe outlet.
13. Upon completion of the project, contact Johnston County to inspect prior to removing EC measures.
14. Seed, straw and tack any remaining exposed areas.

SKIMMER SEDIMENT BASIN
NOT TO SCALE

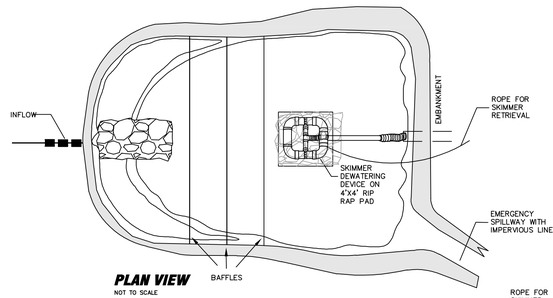


PERSPECTIVE VIEW
NOT TO SCALE

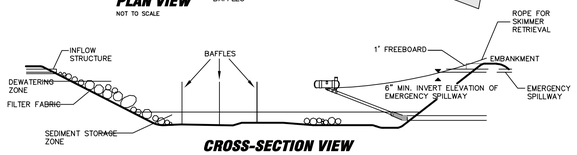


END VIEW NOT TO SCALE

FRONT VIEW NOT TO SCALE



PLAN VIEW NOT TO SCALE



CROSS-SECTION VIEW NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:
1. Clear, grub, and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area. Place temporary sediment control measures below basin as needed.
2. Ensure that fill material for the embankment is free of roots, woody vegetation, organic matter, and other objectionable material. Place the fill in lifts not to exceed 9 inches, and machine compact it. Over fill the embankment 6 inches to allow for settlement.
3. Shape the basin to the specified dimensions. Prevent the skimming device from settling into the mud by excavating a shallow pit under the skimmer or providing a low support under the skimmer of stone or timber.
4. Place the barrel (typically 4–inch Schedule 40 PVC pipe) on a firm, smooth foundation of impervious soil. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill material around the pipe spillway in 4–inch layers and compact it under and around the pipe to at least the same density as the adjacent embankment. Care must be taken not to raise the pipe from the firm contact with its foundation when compacting under the pipe haunches.
Place a minimum depth of 2 feet of compacted backfill over the pipe spillway before crossing it with construction equipment. In no case should the pipe conduit be installed by cutting a trench through the dam after the embankment is complete.
5. Assemble the skimmer following the manufacturers instructions, or as designed.
6. Lay the assembled skimmer on the bottom of the basin with the flexible joint at the inlet of the barrel pipe. Attach the flexible joint to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach a rope to the skimmer and anchor it to the side of the basin. This will be used to pull the skimmer to the side for maintenance.
7. Earthen spillways – Install the spillway in undisturbed soil to the greatest extent possible. The achievement of planned elevations, grade, design width, and entrance and exit channel slopes are critical to the successful operation of the spillway. The spillway should be lined with laminated plastic or impermeable geotextile fabric. The fabric must be wide and long enough to cover the bottom and sides and extend onto the top of the dam for anchoring in a trench. The edges may be secured with 8–inch staples or pins. The fabric must be long enough to extend down the slope and exit onto stable ground. The width of the fabric must be one piece, not joined or spliced; otherwise water can get under the fabric. If the length of the fabric is insufficient for the entire length of the spillway, multiple sections, spanning the complete width, may be used. The upper section(s) should overlap the lower section(s) so the water cannot flow under the fabric. Secure the upper edge and sides of the fabric in a trench with staples or pins.
8. Inlets – Discharge water into the basin in a manner to prevent erosion. Use temporary slope drains or diversions with outlet protection to divert sediment–laden water to the upper end of the pool area to improve basin trap efficiency.
9. Erosion control – Construct the structure so that the disturbed area is minimized. Divert surface water away from bare areas. Complete the embankment before the area is cleared. Stabilize the emergency spillway embankment and all other disturbed areas above the crest of the principal spillway immediately after construction.
10. Install porous baffles as specified.
11. After all the sediment–producing areas have been permanently stabilized, remove the structure and all the unstable sediment. Smooth the area to blend with the adjoining areas and stabilize properly.

MAINTENANCE:
Inspect skimmer sediment basins at least weekly and after each significant (one–half inch or greater) rainfall event and repair immediately. Remove sediment and restore the basin to its original dimensions when sediment accumulates to one–half the height of the first baffle. Pull the skimmer to one side so that the sediment underneath it can be excavated. Excavate the sediment from the entire basin, not just around the skimmer or the first cell. Make sure vegetation growing in the bottom of the basin does not hold down the skimmer.

Repair the baffles if they are damaged. Re–anchor the baffles if water is flowing underneath or around them.

If the skimmer is clogged with trash and there is water in the basin, usually jerking on the rope will make the skimmer bob up and down and dislodge the debris and restore flow. If this does not work, pull the skimmer over to the side of the basin and remove the debris. Also check the orifice inside the skimmer to see if it is clogged; if so, remove the debris.

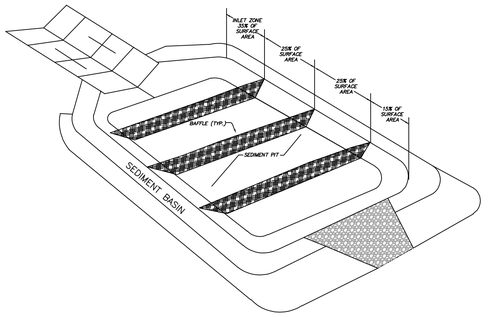
If the skimmer arm or barrel pipe is clogged, the orifice can be removed and the obstruction cleared with a plumber's snake or by flushing with water. Be sure and replace the orifice before repositioning the skimmer.

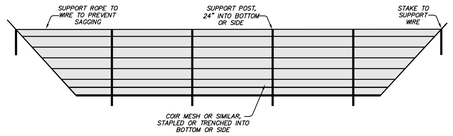
Check the fabric lined spillway for damage and make any required repairs with fabric that spans the full width of the spillway. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement. Make all necessary repairs immediately. Remove all trash and other debris from the skimmer and pool areas.

Freezing weather can result in ice forming in the basin. Some special precautions should be taken in the winter to prevent the skimmer from plugging with ice.

Maintenance Notes:

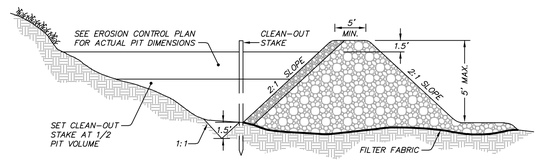
1. Do not let any area remained exposed for more than 7 or 14 calendar days according to chart without applying temporary seeding.
2. Maintain all erosion control measures daily and reseed disturbed areas as needed.
3. Inspect all erosion control measures weekly and after each rainfall event. Repair as needed.
4. At the end of each day's storm drainage operation, construct a temporary pipe inlet protection device until the next day's operation continues.



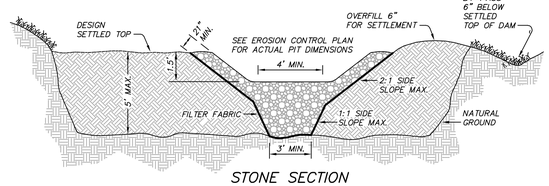


SED BASIN BAFFLES
SCALE: N.T.S.

GENERAL NOTES:
1. Clear, grub, and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area.
2. Ensure that fill material for the embankment is free of roots, woody vegetation, organic matter, and other objectionable material. Place the fill in lifts not to exceed 9 inches and machine compact it. Over fill the embankment 6 inches to allow for settlement.
3. Construct the outlet section in the embankment. Protect the connection between the riprap and the soil from piping by using filter fabric or a keyway cutoff trench between the riprap structure and the soil.
   Place the filter fabric between the riprap and soil. Extend the fabric across the spillway foundation and sides to the top of the dam; or
   Excavate a keyway trench along the centerline of the spillway foundation extending up the sides to the height of the dam. The trench should be at least 2 ft. deep and 2 ft. wide with 1:1 side slopes.
4. Clear the pond area below the elevation of the crest of the spillway to facilitate sediment cleanout.
5. All cut and fill slopes should be 2:1 or flatter.
6. Ensure that the stone (drainage) section of the embankment has a minimum bottom width of 3 ft. and a maximum side slopes of 1:1 that extend to the bottom of the spillway section.
7. Construct the minimum impermeable lined spillway bottom width, as shown on the plans, with 2:1 side slopes extending to the top of the over filled embankment. Keep the thickness of the sides of the spillway outlet structure at a minimum of 21 inches. The weir must be level and constructed to grade to assure design capacity.
8. Ensure that the impermeable spillway outlet section extends downstream past the toe of the embankment until stable conditions are reached and outlet velocity is acceptable for the receiving stream. Keep the edges of the outlet section flush with the surrounding ground and shape the center to confine the outflow stream (References: Outlet Protection).
9. Direct emergency bypass to natural, stable areas. Locate bypass outlets so that flow will not damage the embankment.
10. Stabilize the embankment and all disturbed areas above the sediment pool and downstream from the trap immediately after construction (References: Surface Stabilization).
11. Show the distance from the top of the spillway to the sediment cleanout level (one–half the design depth) on the plans and mark it in the field.



CROSS SECTION



STONE SECTION

SEDIMENT BASIN
SCALE: N.T.S.

Conversion Procedure – Sediment Basin to Dry Detention Pond

1. After the site is completely stabilized, contact Stocks Engineering @ 252–459–8196 for verification of completion and stabilization.
2. Contact Johnston County Public Utilities for approval to remove all temporary erosion control measures.
3. Upon approval from Johnston County Public Utilities, begin the conversion of the dry pond from a temporary sediment trap to a permanent BMP as follows.
4. If standing water is in the basin, contractor shall pump the water out discharging through a silt bag.
5. Bring the side slopes surrounding the pond and vegetated shelf to the proposed grade.
6. Contractor shall excavate the bottom of the pond to the depth of the proposed basin.
7. Excavated material must be disposed of in an approved off–site location.
8. Care must be taken to prevent any sedimentation/re–sedimentation during this process, as sediment deposits in the bottom of the pond may affect the depth.
   If any sedimentation occurs during this process, Contractor shall remove sediment immediately.
9. Contact Stocks Engineering @ 252–459–8196 to inspect excavated pond before continuing construction.
10. Upon approval of Stocks Engineering, continue constructing pond per details. Establish appropriate permanent vegetation around pond as soon as possible.
11. Upon completion of pond construction, remove sediment from silt fence and dispose of at an approved off–site location. Seed and mulch side slopes.
12. Contact Stocks Engineering @ 252–459–8196 to inspect completed pond before placing pond in service.

BEFORE YOU DIG, CALL 811
NORTH CAROLINA ONE CALL CENTER
www.ncocc.org

STOCKS ENGINEERING
P.O. BOX 1108
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459–8196
WWW.STOCKSENGINEERING.COM

BLN–C–1874

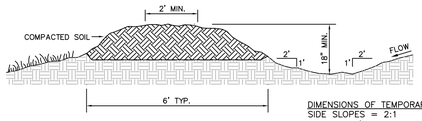
EMILY GARDENS SUBDIVISION – PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 4/19/21

EROSION CONTROL DETAILS

REVISIONS
FILE NO. 2019–074
HORZ. SCALE: N/A
VERT. SCALE: N/A

D–01



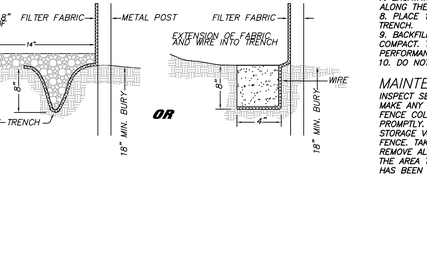
DIMENSIONS OF TEMPORARY DIVERSION (GRASSED):
SIDE SLOPES = 2:1
DEPTH = 2'
SLOPE = 0.50% MIN. (SPECIFIED BY GRADE)

CONSTRUCTION SPECIFICATIONS:
1 REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
4. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.
5. VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

MAINTENANCE:
INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

TEMPORARY DIVERSION
NOT TO SCALE

CONSTRUCTION ENTRANCE
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:
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.

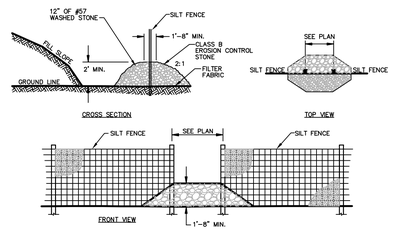
MAINTENANCE:
MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2–INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE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

SILT FENCE
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:
1. CONSTRUCT THE SEDIMENT BARRIER OF STANDARD OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS.
2. ENSURE THAT THE HEIGHT OF THE SEDIMENT FENCE DOES NOT EXCEED 24 INCHES ABOVE GROUND SURFACE. (HIGHER FENCES MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
3. CONSTRUCT THE FILTER FABRIC FROM A CONTINUOUS ROLL CUT TO THE LENGTH OF THE BARRIER TO AVOID JOINTS. WHEN JOINTS ARE NECESSARY, SECURELY FASTEN THE FILTER CLOTH ONLY AT A SUPPORT POST WITH 4 FEET MINIMUM OVERLAP TO THE NEXT POST.
4. SUPPORT STANDARD FILTER FABRIC BY WIRE MESH FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS. EXTEND THE WIRE MESH SUPPORT TO THE BOTTOM OF THE TRENCH. FASTEN THE WIRE REINFORCEMENT, THEN FABRIC ON THE UPSLOPE SIDE OF THE FENCE POST. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
5. WHEN A WIRE MESH SUPPORT FENCE IS USED, SPACE POSTS A MAXIMUM OF 8 FEET APART. SUPPORT POSTS SHOULD BE DRIVEN SECURELY INTO THE GROUND A MINIMUM OF 24 INCHES.
6. EXTRA STRENGTH FILTER FABRIC WITH 6 FEET POST SPACING DOES NOT REQUIRE WIRE MESH SUPPORT FENCE. SECURELY FASTEN THE FILTER FABRIC DIRECTLY TO POSTS. WIRE OR PLASTIC ZIP TIES SHOULD HAVE MINIMUM 50 POUND TENSILE STRENGTH.
7. EXCAVATE A TRENCH APPROXIMATELY 4 INCHES WIDE AND 8 INCHES DEEP ALONG THE PROPOSED LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
8. PLACE 12 INCHES OF THE FABRIC ALONG THE BOTTOM AND SIDE OF THE TRENCH.
9. BACKFILL THE TRENCH WITH SOIL PLACED OVER THE FILTER FABRIC AND COMPACT. THOROUGH COMPACTION OF THE BACKFILL IS CRITICAL TO SILT FENCE PERFORMANCE.
10. DO NOT ATTACH FILTER FABRIC TO EXISTING TREES.

MAINTENANCE:
INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER 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 SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

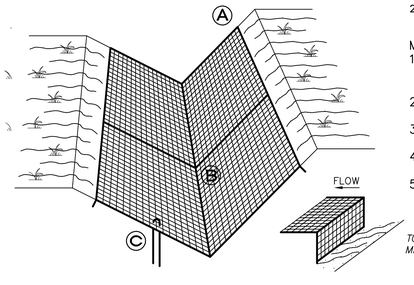
SILT FENCE OUTLET
NOT TO SCALE



CONSTRUCTION SPECS:
1. *CLEAR & GRUB THE AREA AROUND THE SILT FENCE OUTLET AND PROPERLY DISPOSE OF DEBRIS.*
2. *PLACE GRAVEL TO THE SPECIFIC GRADE AS SHOWN PER THE DETAIL.*
3. *PROPERLY OVERLAP STONE BEYOND EDGES OF SILT FENCE OPENING.*

MAINTENANCE:
INSPECT OUTLETS WEEKLY AND AFTER EACH RAIN EVENT. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR AS NEEDED. CAREFULLY CHECK OUTLETS FOR EROSION AND REPAIR IMMEDIATELY. ENSURE THERE IS NO SCOURING APPARENT DOWNSTREAM OF OUTLET. IMMEDIATELY STABILIZE ANY AREAS THAT NEED REPAIR.

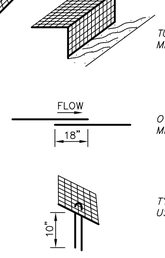
EXCELSIOR MATTING
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:
1. APPLY SEED, STRAW AND TACK WITH RS OR CRS LIQUID EMULSIFIED ASPHALT AT A RATE EQUAL TO 10 GAL. PER 1000 S.F. COVER W/EXCELSIOR MATTING.
2. STAPLE EVERY 24" ALONG PERIMETER EDGES AND OVERLAPS. STAPLE EVERY 36" TO 48" RANDOMLY TO SECURE MATTING.

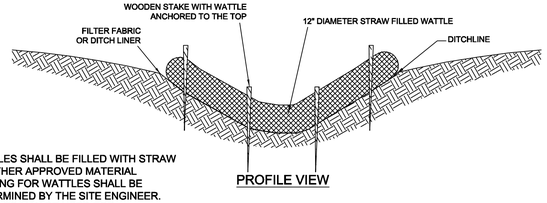
Maintenance:
1. Inspect Rolled Erosion Control Products at least weekly and after each significant (1/2 inch or greater) rain fall event repair immediately.
2. Good contact with the ground must be maintained, and erosion must not occur beneath the RECP.
3. Any areas of the RECP that are damaged or not in close contact with the ground shall be repaired and stapled.
4. If erosion occurs due to poorly controlled drainage, the problem shall be fixed and the eroded area protected.
5. Monitor and repair the RECP as necessary until ground cover is established.

Ⓐ
TURNDOWN NETTING MINIMUM BURY 6"



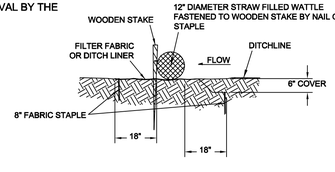
Ⓑ
OVERLAP NETTING MINIMUM OVERLAP 18"

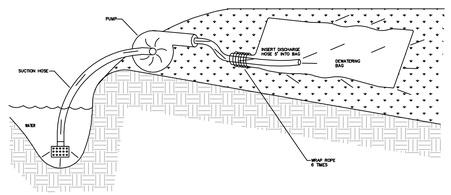
Ⓒ
TYPICAL STAPLE USE #6 GAUGE WIRE



NOTES:
1. WATTLES SHALL BE FILLED WITH STRAW OR OTHER APPROVED MATERIAL
2. SPACING FOR WATTLES SHALL BE DETERMINED BY THE SITE ENGINEER.
3. WATTLES MAY BE USED FOR PROTECTION OF CATCH BASINS AND DROP INLETS WITH APPROVAL BY THE ENGINEER.

NCDOT WATTLE
NOT TO SCALE



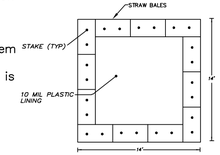


Installation and Use:
1. Place Dewatering Bag on the ground or on a trailer over a relatively level, stabilized area.
2. Insert discharge pipe a minimum of 5ft. inside dewatering bag and secure with a rope wrapped 6 times around the snout over a 6 inch width of the bag.
3. Replace Dewatering Bag when half full of sediment or when the sediment has reduced the flow rate of the pump discharge to an impractical amount.

Maintenance and Disposal:
1. Remove and dispose of accumulated sediment away from waterways or environmentally sensitive areas. Slit open Sediment Bag and remove accumulated sediment. Dispose of bag at an appropriate recycling or solid waste facility. OR; as directed by engineer or inspector.

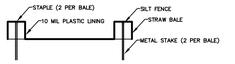
DEWATERING BAG
SCALE: N.T.S.

CONCRETE TRUCK WASHOUT
NOT TO SCALE

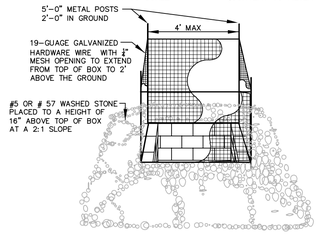


CONSTRUCTION SPECIFICATIONS:
1. CONCRETE WASHOUT SIGN SHALL BE INSTALLED NO FURTHER THAN 25' FROM THE FACILITY AND SHALL BE VISIBLE TO ALL CONSTRUCTION TRAFFIC.
2. POLYETHYLENE SHEETING SHALL BE 10 MILS FREE OF HOLES, TEARS, OR LEAKS.

MAINTENANCE:
FACILITY SHALL NOT BE FILLED MORE THAN 12" FROM THE TOP BEFORE DISPOSING OF CONCRETE. CONCRETE SHALL BE DISPOSED OF IN THE SAME MANNER AS OTHER NON–HAZORDOUS MATERIALS FROM THE SITE OR MAY BE BROKEN UP AND USED AS FILL IN NON–STRUCTURAL AREAS.



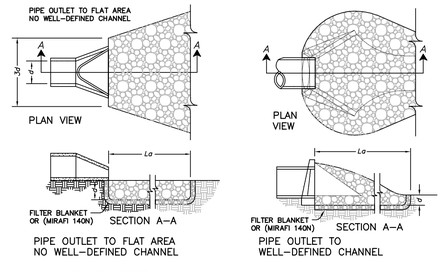
HARDWARE CLOTH & GRAVEL INLET PROTECTION
NOT TO SCALE *(CONVERT TO FILTER SOCK ONCE CURB OR SIDEWALK IS POURED)*



CONSTRUCTION SPECS
1. *Uniformly grade a shallow depression approaching the inlet.*
2. *Drive 5–foot steel posts 2 feet into the ground surrounding the inlet.*
3. *Space posts evenly around the perimeter of the inlet, a maximum of 4 feet apart.*
4. *Surround the posts with wire mesh hardware cloth. Secure the wire mesh to the steel posts at the top, middle, and bottom. Placing a 2–foot flap of the wire mesh under the gravel for anchoring is recommended.*
5. *Place clean gravel (NC DOT #5 or #57 stone) on a 2:1 slope with a height of 16 inches around the wire, and smooth to an even grade.*
6. *Once the contributing drainage area has been stabilized, remove accumulated sediment, and establish final grading elevations.*
7. *Compact the area properly and stabilized it with groundcover*

MAINTENANCE:
Inspect inlets at least weekly and after each significant (½ 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.

PIPE OUTLET PROTECTION
NOT TO SCALE



GENERAL NOTES:
1. La = THE LENGTH OF THE RIP RAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL–DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP RAP AND SOIL FOUNDATION.
5. FLARED END SECTION IS OPTIONAL. SEE PLANS FOR REQUIREMENT.
6. SEE PLAN AND PROFILES FOR ACTUAL DIMENSIONS.

BEFORE YOU DIG, CALL 811
NORTH CAROLINA ONE CALL CENTER
www.ncocc.org

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459–8196
P.O. BOX 1108
WWW.STOCKSENGINEERING.COM

BLN–C–1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
4/19/21

EROSION CONTROL DETAILS

REVISIONS
FILE NO. 2019–074
HORZ. SCALE: N/A
VERT. SCALE: N/A

D–02

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

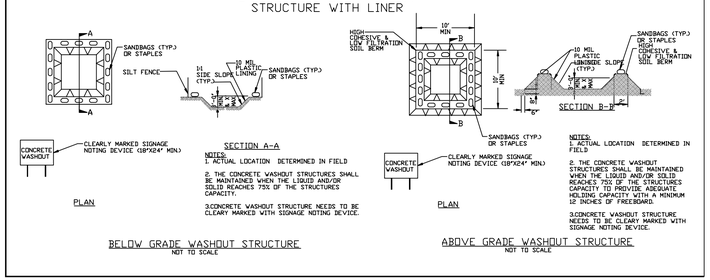
PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 4/19/21

EROSION CONTROL DETAILS

REVISIONS

FILE NO. 2019-074
HORZ. SCALE: N/A
VERT. SCALE: N/A

D-03

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

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

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

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

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

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,

(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,

(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,

(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,

(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and

(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24

BEFORE YOU DIG, CALL 811 NORTH CAROLINA ONE CALL CENTER www.ncocc.org

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459-8196
P.O. BOX 1108
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

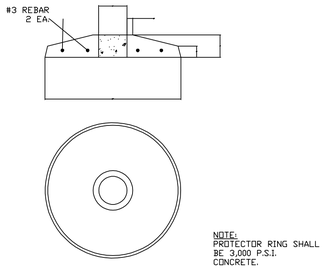
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS 4/19/21

EROSION CONTROL DETAILS

REVISIONS

FILE NO. 2019-074
HORZ. SCALE: N/A
VERT. SCALE: N/A

D-04



CONCRETE PROTECTOR RING

NOT TO SCALE

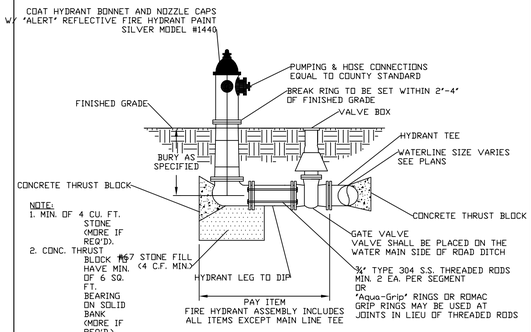
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Concrete Protector Ring

PAGE 14 of 47



FIRE HYDRANT ASSEMBLY

NOT TO SCALE

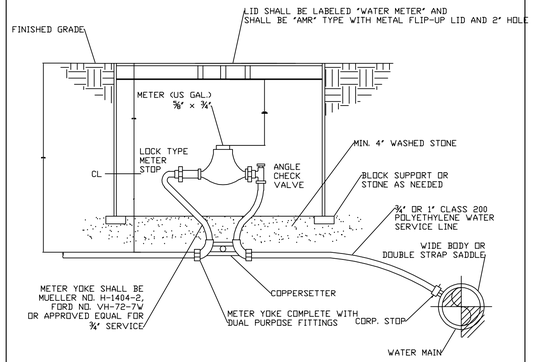
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Fire Hydrant Assembly

PAGE 4 of 47



NOTE:
1. CONTRACTOR SHALL PLACE METER BOX IN NON TRAFFIC AREA ONLY.
2. PLASTIC METER BOX SHALL BE CENTURY #1015, NDS D1200, OR APPROVED EQUAL
3. CONTRACTOR SHALL CENTER METER YOKE IN METER BOX.
4. METER YOKE TO MUELLER No. H-1404-2, FORD No. VH-72-7W OR APPROVED EQUAL.
5. METER TO MEET AWWA C-700-71 STDS. AND SPECS.

3/4" & 1" WATER METER SERVICE DETAIL

NOT TO SCALE

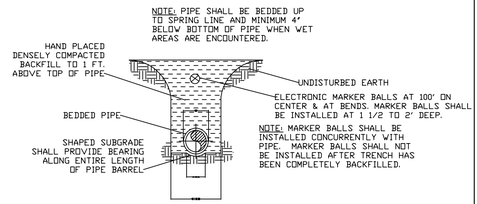
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
¾" and 1" Water Meter Service

PAGE 20 of 47



NOTE:
WATER MAINS 8"Ø AND SMALLER SHALL HAVE MINIMUM OF 3' COVER. WATER MAINS LARGER THAN 8"Ø SHALL HAVE A MINIMUM OF 3'-6" COVER.

PIPE LAYING CONDITION

NOT TO SCALE

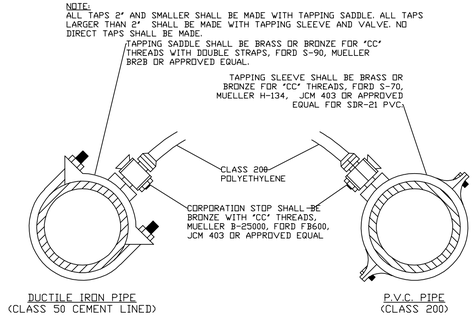
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Pipe Laying Condition

PAGE 16 of 47



NOTE: ALL TAPS TO BE MADE ON TOP QUARTER OF MAIN.

STANDARD WATER TAP DETAIL

NOT TO SCALE

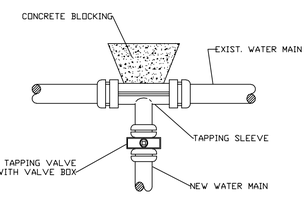
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Standard Water Tap

PAGE 19 of 47



TAPPING SLEEVE & VALVE ASSEMBLY

NOT TO SCALE

NOTE: TAPPING SLEEVE SHALL BE FABRICATED OF TYPE 304 S.S. AND PROVIDE A 360° SEAL AROUND EXISTING PIPE WITH FULL CIRCUMFERENTIAL GASKET.

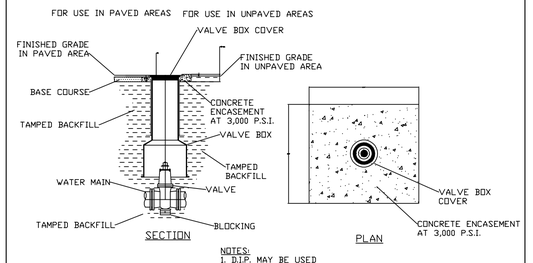
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Tapping Sleeve and Valve Assembly

PAGE 5 of 47



NOTES:
1. D.I.P. MAY BE USED FOR VALVE BOX EXTENSIONS.
2. VALVE BOX SHOULD NOT CONTACT WATER MAIN OR VALVE.
3. CONCRETE PROTECTOR RING MAY BE USED IN LIEU OF CONCRETE ENCASEMENT IN UNPAVED AREAS.

VALVE AND VALVE BOX INSTALLATION

NOT TO SCALE

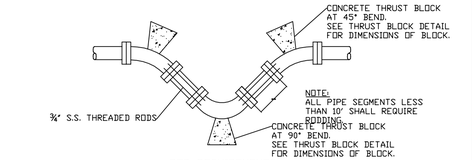
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Valve and Valve Box Installation

PAGE 13 of 47



ROD REQUIREMENTS

SIZE OF 45° BEND	STATIC THRUST IN POUNDS	NUMBER OF RODS REQUIRED
6"	4,328	2
8"	7,694	2
12"	17,312	2
16"	30,779	4
20"	48,091	6
24"	69,252	8

GENERAL NOTES
1. RODS AND NUTS SHALL BE OF TYPE 304 OR TYPE 316 STAINLESS STEEL.
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT BENDS.

VERTICAL BEND RODDING AND BLOCKING DETAIL

NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

WATER STANDARD DETAIL
Critical Bend Rodding and Blocking Details

PAGE 7 of 47

STOCKS ENGINEERING
P.O. BOX 1108
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

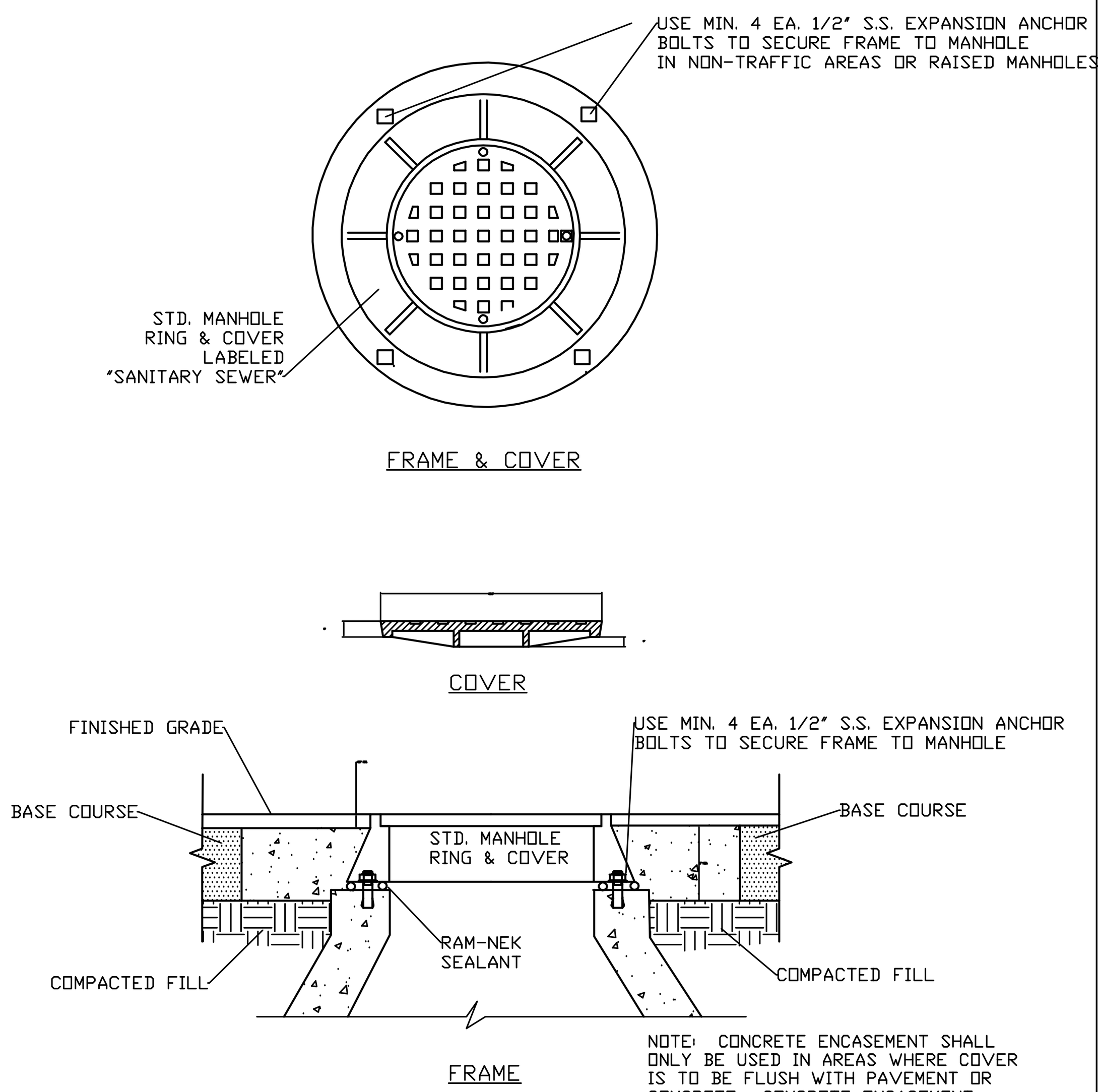
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 4/19/21

UTILITY DETAILS

REVISIONS

FILE NO. 2019-074
HORZ. SCALE: N/A
VERT. SCALE: N/A

D-05



NOTE: CONCRETE ENCASEMENT SHALL ONLY BE USED IN AREAS WHERE COVER IS TO BE FLUSH WITH PAVEMENT OR CONCRETE. CONCRETE ENCASEMENT SHALL NOT BE USED IN NON-TRAFFIC AREAS AND ABOVE GRADE INSTALLATIONS. MANHOLES IN STREETS TO HAVE NO HOLE LIDS.

STANDARD MANHOLE FRAME & COVER

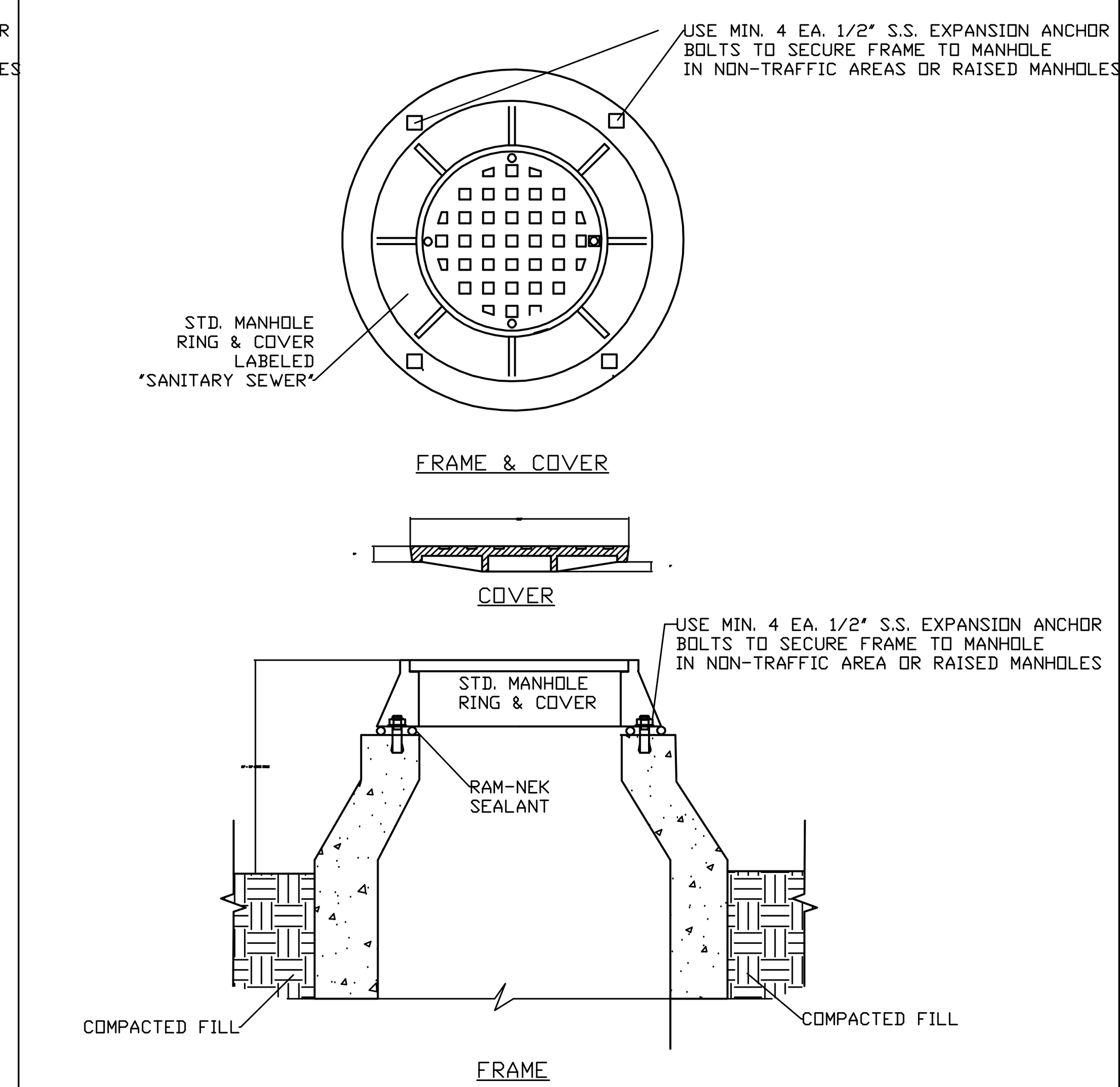
NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Standard Manhole Frame & Cover

PAGE 27



STANDARD OUTFALL MANHOLE FRAME & COVER

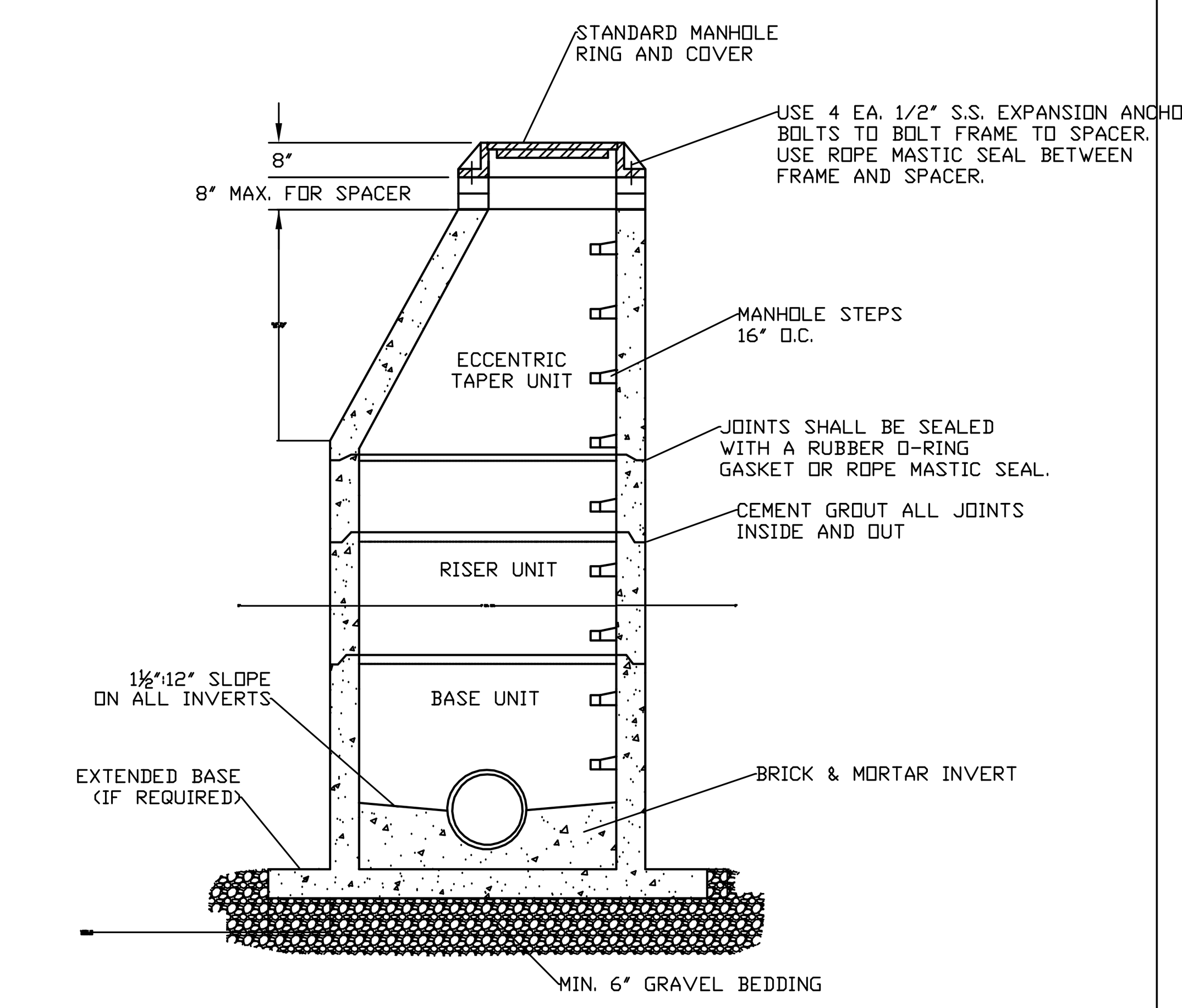
NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Standard Manhole Frame & Cover

PAGE 28



NOTE: 18' & DEEPER – 5' DIA.

STANDARD PRECAST CONCRETE MANHOLE

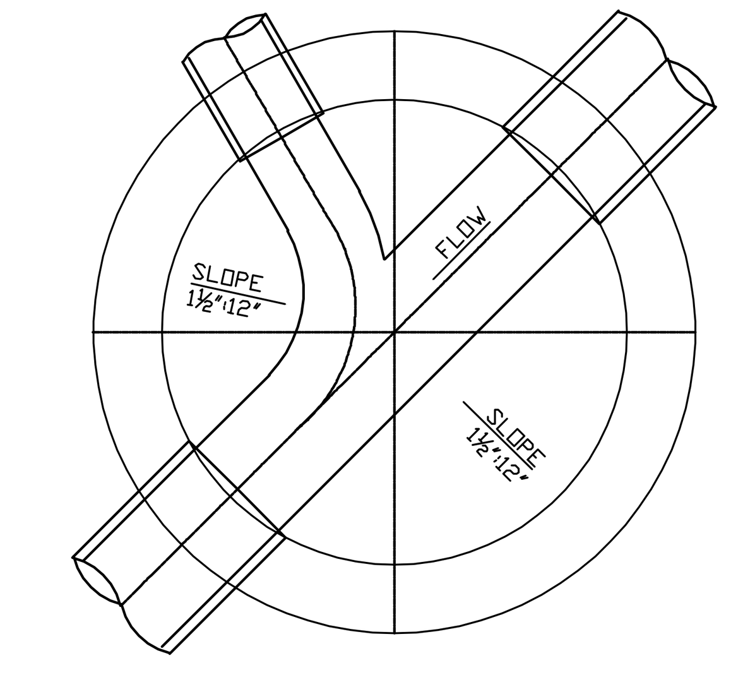
NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Standard Precast Manhole

PAGE 30



PLAN

TYPICAL MANHOLE INVERT

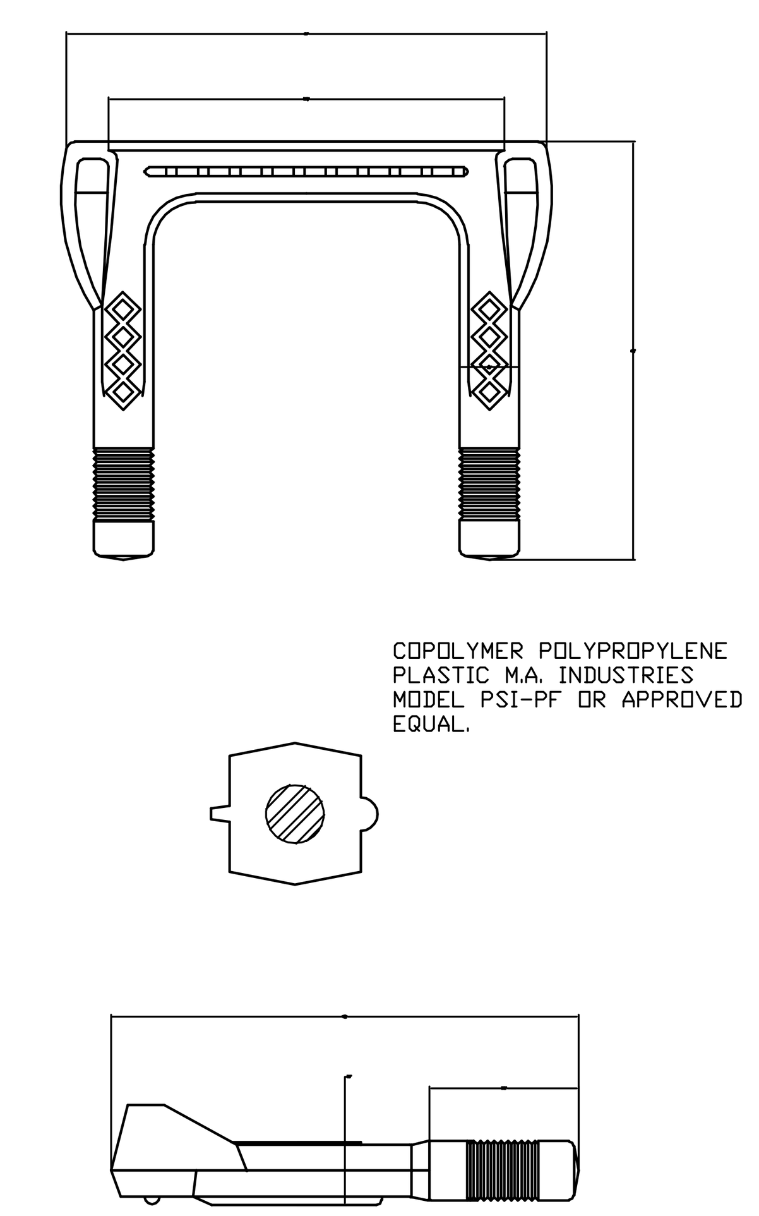
NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Typical Manhole Invert

PAGE 34



POLYPROPYLENE PLASTIC STEP

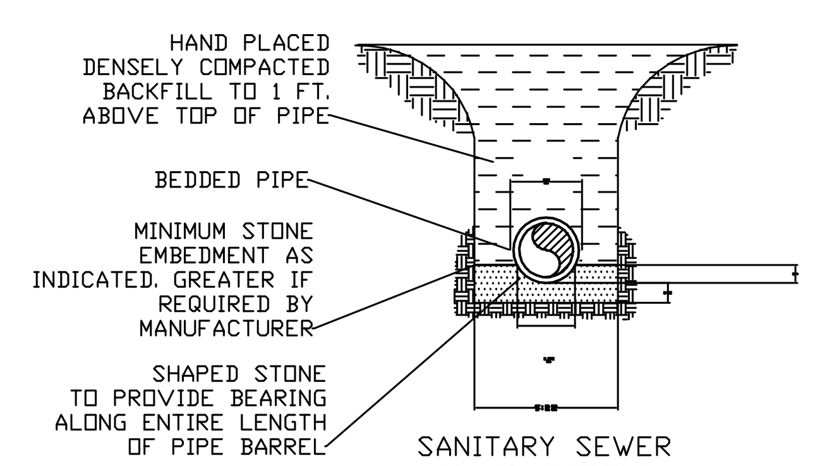
NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

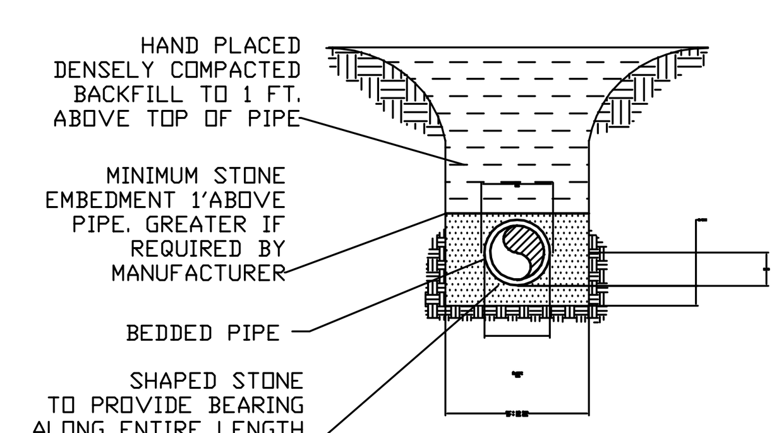
SANITARY SEWER STANDARD DETAIL
Polypropylene Plastic Manhole Step

PAGE 35



SANITARY SEWER (0'-10' DEPTH) PIPE LAYING CONDITION "A"

NOTE:
C-900 MUST BE USED FOR DEPTHS OF 14 - 18 FEET OR DUCTILE IRON PIPE AT DEPTHS OF 18 FEET AND GREATER.



SANITARY SEWER (10'-18' DEPTH) PIPE LAYING CONDITION "B"

PIPE LAYING CONDITIONS

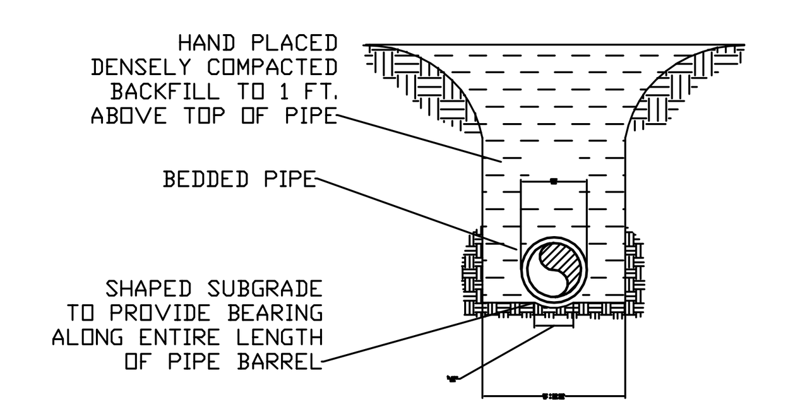
NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

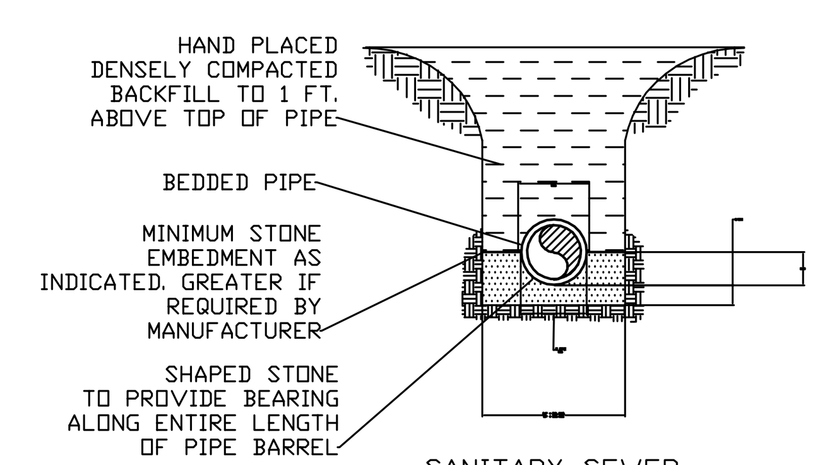
JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Pipe Laying Conditions

PAGE 36



SANITARY SEWER (DUCTILE IRON ONLY) (0'-16' DEPTH) PIPE LAYING CONDITION "C"



SANITARY SEWER (DUCTILE IRON ONLY) (>16' DEPTH) PIPE LAYING CONDITION "D"

PIPE LAYING CONDITIONS

NOT TO SCALE

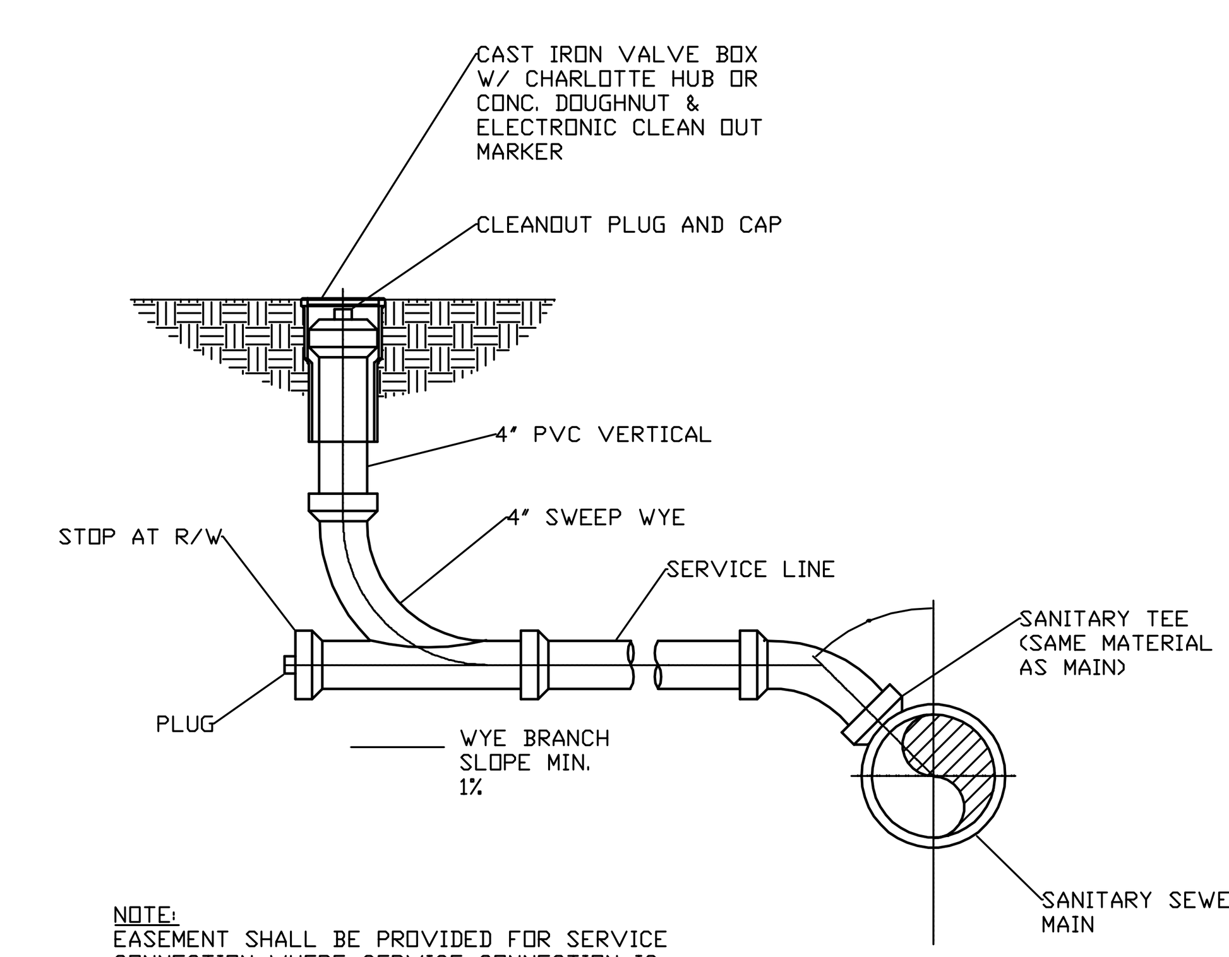
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Pipe Laying Conditions C & D

PAGE 37

NOTE:
IN LIEU OF INSTALLING CAST IRON VALVE BOXES, CAPS CONTAINING LOCATE DEVICES CAN BE USED WITH A CONCRETE PROTECTOR RING.



NOTE:
EASEMENT SHALL BE PROVIDED FOR SERVICE CONNECTION WHERE SERVICE CONNECTION IS PLACED OUTSIDE OF R/W DUE TO PHYSICAL CONSTRAINTS.

TYPICAL SEWER SERVICE CONNECTION

NOT TO SCALE

	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		
Rev. Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Typical Sewer Service Connection

PAGE 41

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

EMILY GARDENS SUBDIVISION - PHASE 1
PINE LEVEL, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19843 J. MICHAEL STOCKS 4/19/21

UTILITY DETAILS

REVISIONS

FILE NO.	2019-074
HORZ. SCALE:	N/A
VERT. SCALE:	N/A

D-06

THEREFORE, EVERYONE WHO HEARS THESE WORDS OF MINE AND PUTS THEM INTO PRACTICE IS LIKE A WISE MAN WHO BUILT HIS HOUSE ON THE ROCK. MATTHEW 7:24