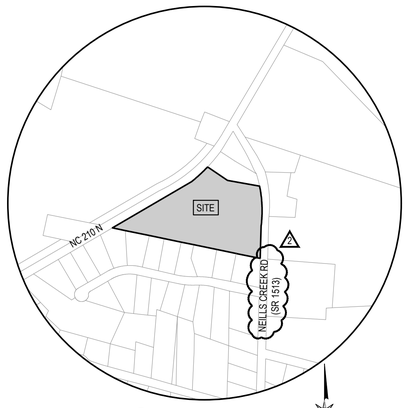
LAKESIDE SELF-STORAGE

HARNETT COUNTY, NORTH CAROLINA

SITE PLAN

1st SUBMITTAL TO HARNETT COUNTY: JULY 29, 2021
2nd SUBMITTAL TO HARNETT COUNTY: OCTOBER 20, 2021
3rd SUBMITTAL TO HARNETT COUNTY: FEBRUARY 1, 2022



VICINITY MAP
SCALE: 1" = 500'

SITE INFORMATION

LOCATION:	5556 NC 210 N ANGIER, NC 27501
MUNICIPALITY:	HARNETT COUNTY
ZONING:	COMM
ACREAGE:	8.23 AC
NC WATERSHED:	WS-IV-P CAPE FEAR RIVER (LILLINGTON)
LAND USE CLASSIFICATION:	LOW DENSITY RESIDENTIAL

BUILDING:

TOTAL DWELLING UNITS:	1
OFFICE SPACE:	2,500 SF
INDUSTRIAL SPACE:	7,100 SF
TOTAL BLDG.:	9,600 SF

PARKING:

TOTAL PROPOSED SPACES:	17 REGULAR SPACES 2 H/C SPACE = 19 SPACES

IMPERVIOUS AREAS

EXISTING:

SIDEWALK:	66 SQ FT
BUILDING:	4,042 SQ FT
TOTAL IMPERVIOUS:	4,108 SQ FT (0.09 AC) (1.1%)

PROPOSED (CURRENT):

PAVEMENT:	21,537 SQ FT (0.49 AC)
GRAVEL:	141,189 FT (3.24 AC)
BUILDING:	39,215 SQ FT (0.90 AC)
TOTAL IMPERVIOUS:	201,941 SQ FT (4.63 AC) (56.3%)

PROPOSED (FUTURE):

PAVEMENT:	21,537 SQ FT (0.49 AC)
GRAVEL:	107,189 SQ FT (2.46 AC)
BUILDING:	73,215 SQ FT (1.68 AC)
TOTAL IMPERVIOUS:	201,941 SQ FT (4.63 AC) (56.3%)

MAX. ALLOWABLE IMPERVIOUS: 4.71 AC (W/ SNIA APPROVAL)

DRAWING INDEX

MINI-STORAGE UDO REQUIREMENTS:

A. MAXIMUM BUILDING HEIGHT OF 20 FEET.
B. A SECURED FENCE OF AT LEAST SIX (6) FEET IN HEIGHT SHALL SURROUND THE PERIMETER OF THE STORAGE FACILITY.
C. ADEQUATE LIGHTING SHALL BE PROVIDED TO ILLUMINATE THE STORAGE FACILITY. THE MINIMUM SIZE STREETLIGHT SHALL BE A 175 WATT MERCURY-VAPOR (APPROXIMATELY 7,000 LUMEN CLASS) OR ITS EQUIVALENT, SPACED AT INTERVALS OF NOT MORE THAN 300 FEET.
D. NO OUTSIDE STORAGE SHALL BE PERMITTED EXCEPT AS PROVIDED BELOW.
E. OUTDOOR STORAGE OF BOATS, VEHICLES (INCLUDING MOTORCYCLES), RECREATIONAL VEHICLES, CAMPERS, EQUIPMENT, MATERIALS, ETC IN DESIGNATED SPACES SHALL MEET THE FOLLOWING REQUIREMENTS:

1. IF OUTDOOR STORAGE SPACE IS PROPOSED THE AREA SHALL BE DESIGNATED AS OUTDOOR STORAGE ON THE REQUIRED SITE PLAN.
   A. EXISTING FACILITIES EXPANDING TO INCLUDE OUTDOOR STORAGE SHALL SUBMIT A REVISED SITE PLAN SHOWING SUCH, IN ACCORDANCE WITH THE PROVISIONS OF THIS ORDINANCE.
2. AREA DESIGNATED FOR OUTDOOR STORAGE SHALL NOT BE VISIBLE FROM ADJACENT RIGHT(S)-OF-WAY AND SHALL INSTALL A TYPE D BUFFER ALONG THE EXTERIOR OF THE PERIMETER FENCING.
3. IF ASSOCIATED WITH A MINI-STORAGE FACILITY THAT WILL HAVE ENCLOSED STORAGE BUILDINGS, OUTDOOR STORAGE SPACE(S) SHALL BE LOCATED AT THE REAR OR SIDE OF THE SITE.

SNIA REFERENCE:

SNIA2005-0001, APPROVED 7/13/20.

General Notes:

1. ORIGINAL TOPOGRAPHICAL AND BOUNDARY DATA PERFORMED BY ROBINSON & PLANTE, PA. SITE BENCHMARK IS AVAILABLE FROM SURVEYOR. CONTOURS SHOWN HEREON ARE FROM AN ACTUAL FIELD SURVEY.
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, AND FIBER OPTIC ON-SITE OR WITHIN CLOSE PROXIMITY. CONTRACTORS SHALL DIG WITH EXTREME CAUTION.
8. CONCRETE SUB SHALL BE RESPONSIBLE FOR ALL SCORE JOINTS AND EXPANSION JOINTS. SHOULD A QUESTION ARISE ABOUT THE PROPOSED PATTERN CONSULT WITH 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 48 HOURS PRIOR TO DIGGING @ 1.800.632.4949. THE SURVEYOR 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, HARNETT COUNTY, AND HARNETT REGIONAL WATER.
13. ALL CONSTRUCTION AND MATERIALS SHALL MEET HARNETT COUNTY 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 III WITH RAM-NEK.
15. THIS PROPERTY IS NOT LOCATED IN A FLOOD HAZARD ZONE PER FEMA MAP. FEMA COMMUNITY MAP #: 3720066200J, DATED OCTOBER 3, 2006.
16. ALL LOT DIMENSIONS SHOWN ARE APPROXIMATE. CONSULT THE BOUNDARY SURVEY OF ACTUAL SITE BOUNDARY INFORMATION.
17. WETLANDS ARE NOT PRESENT ON SITE.
18. 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.
19. PRIOR TO PLACING CABC STONE BASE, THE CONTRACTOR SHOULD NOTIFY THE PROJECT ENGINEER TO INSPECT AND PROOF ROLL THE SUBGRADE. ANY STONE PLACE WITHOUT PRIOR APPROVAL WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
20. 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 CURRY ENGINEERING GROUP, PLLC 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.
21. ALL UTILITY SERVICES, (POWER, TELEPHONE, CABLE, ETC.) ARE PROPOSED TO BE UNDERGROUND. DO NOT SEED OR MULCH DISTURBED AREAS UNTIL ALL UNDERGROUND UTILITIES HAVE BEEN INSTALLED.
22. LIGHTS ARE LEASED AND SUPPLIED BY DUKE ENERGY. SEE PHOTOMETRICS SHEET FOR DETAILS.
23. WATER IS TO BE PROVIDED BY HARNETT REGIONAL WATER.
24. 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.
25. REGULATORY SIGNS, STOPS SIGNS AND STREET NAME SIGNS SHALL BE MANUFACTURED FROM HIGH INTENSITY REFLECTIVE MATERIALS.
26. ALL EXCESS TOPSOIL AND UNCLASSIFIED EXCAVATION IS TO BE HAULED OFF-SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
27. 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.
28. THE SURVEYOR DID NOT VISIBLY SEE ANY CEMETERIES IN ANY OPEN AREAS UNLESS OTHERWISE NOTED.
29. THIS PROPERTY DOES NOT DEPICT ENCUMBRANCES THAT ARE FOUND DURING A THOROUGH TITLE SEARCH.
30. ALL HVAC UNITS FOR THE PROPOSED BUILDING WILL BE SCREENED FROM PUBLIC RIGHT OF WAY.
31. ALL CURB AND GUTTER TO BE 24" STANDARD CURB AND GUTTER. ALL CURB AND GUTTER WITHIN NCDOT R/W SHALL BE 30" STANDARD.
32. ALL CURB AND GUTTER AND SIDEWALK CONCRETE IS TO BE MINIMUM 3,000 PSI AT 28 DAYS, AIR ENTRAINED.
33. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS INDICATED OTHERWISE.
34. PROVIDE HANDICAP SIGNS, MARKING AND RAMPS AS SHOWN.
35. 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 2012 NC STATE BUILDING CODE CHAPTER 11, "ACCESSIBILITY." ALL STREET RETURNS TO HAVE H.C. RAMPS.
36. 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.
37. ALL AREAS NOT COVERED BY BUILDING OR PARKING SHALL BE COVERED WITH 4" MINIMUM OF TOPSOIL, FREE OF ROOT MATTER AND ROCKS AND GRASSED.
38. CONTRACTOR SHALL SAW-CUT TO PROVIDE SMOOTH TRANSITIONS WHERE EXISTING ASPHALT AND/OR CURB AND GUTTER IS TO BE REMOVED.
39. 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.
40. ALL HANDICAP SPACES ARE TO RECEIVE A HANDICAP SIGN AND HANDICAP SYMBOL PAINTED ON THE ASPHALT. NOTE STALLS TO RECEIVE 'VAN ACCESSIBLE' SIGNAGE.
41. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF PRECISE BUILDING DIMENSIONS AND EXACT UTILITY ENTRANCE POINTS.
42. 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 CONSTRUCTION.
43. THE CONTRACTOR SHALL INCLUDE IN HIS CONTRACT PRICE THE REMOVAL AND DISPOSAL OF ANY EXCESS TOPSOIL HE DETERMINES IS NOT REQUIRED TO PERFORM THE FINAL GRADING AND LANDSCAPING OPERATION.
44. 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. HARNETT COUNTY, HARNETT REGIONAL WATER, & CURRY ENGINEERING ACCEPT NO RESPONSIBILITY FOR THE DESIGN TO INSTALL SAID ITEMS.
45. 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.
46. 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 HARNETT REGIONAL WATER .
47. THE LAND DISTURBANCE PERMIT MUST BE KEPT ON THE WORK SITE AND SHOWN UPON REQUEST.
48. 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 & HARNETT REGIONAL WATER.
49. THE CONTRACTOR SHALL INCLUDE IN THE CONTRACT PRICE ANY DE-WATERING NECESSARY TO CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS.
50. NATURAL GAS MAY BE AVAILABLE. SEE CONTACT INFORMATION THIS SHEET.
51. TESTING BY CONTRACTOR: CONTRACTOR SHALL EMPLOY AT HIS EXPENSE AN OUTSIDE INDEPENDENT SOIL TESTING SERVICE (APPROVED BY THE ARCHITECT) 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 ARCHITECT, 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.
52. 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 95% OF MAXIMUM DENSITY FOR LAWNS OR UNPAVED AREAS.
53. THE BUILDING CONTRACTOR AND THE SITE WORK CONTRACTOR ARE TO COORDINATE THE INSTALLATION OF DRAINAGE PIPES AROUND THE BUILDING STRUCTURE.
54. ANY RELOCATION OF EXISTING UTILITIES WILL BE AT THE COST OF THE DEVELOPER/OWNER. THE TOWN WILL NOT ACCEPT RESPONSIBILITY FOR DAMAGES TO CURB AND GUTTER OR STREET IMPROVEMENTS INSTALLED PRIOR TO UNDERGROUND SERVICES, NOR WILL THE TOWN ABSORB THE COST FOR BORINGS TO INSTALL UNDERGROUND SERVICE, PAVEMENT PATCHING OR DAMAGE TO LANDSCAPING. THESE WILL BE THE RESPONSIBILITY OF THE DEVELOPER/OWNER.
55. 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.
56. 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.
57. DISTURBED AREA IS IN EXCESS OF 1 ACRE AND FORMAL SEDIMENTATION & EROSION CONTROL PLAN APPROVAL WAS REQUIRED AS A CONDITION OF CONSTRUCTION PLAN APPROVAL. A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE KEPT ON SITE AT ALL TIMES. THE APPROVED SEDIMENTATION & EROSION CONTROL PLAN 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.
58. (CONSTRUCTION/SITE PLANS) WATER AND SEWER PERMIT APPLICATIONS HAVE BEEN APPROVED BY THE DENR. PERMIT NUMBERS ARE AS FOLLOWS:
    A. WATER PERMIT NUMBER: N / A
    B. SEWER PERMIT NUMBER: N / A
59. 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.
60. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL HARNETT COUNTY, HARNETT REGIONAL WATER AND NCDENR STANDARDS AND SPECIFICATIONS.
61. MAINTAIN MINIMUM 3' COVER FOR ALL WATER PIPE.
62. 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.
63. 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.
64. REFERENCE NC 15A, 18C, .0906 FOR ADDITIONAL CROSSING INFORMATION. THIS CRITERIA SHALL BE MET AT ALL CROSSINGS.
65. THIS DEVELOPMENT IS WITHIN ONE MILE OF A VOLUNTARY AGRICULTURAL DISTRICT.
66. HOURS OF OPERATION WILL BE 7 AM - 6 PM, MONDAY-FRIDAY.

Developer:
Imperial Self-Storage Development, INC.
6917 NC 55 Hw.
Fuquay-Varina, NC 27526
919.369.9872
Contact: John Auton
jauton@issdinc.com

Surveyor:
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970 Trinity Road
Raleigh, NC 27607
919-859-6030 (o)
Contact: Buddy Plante, PLS
buddy@robinsonplante.com

Civil Engineering:
The Curry Engineering Group, PLLC
NC License # P-0799
PO Box 2018
205 S. Fuquay Ave
Fuquay-Varina, NC 27526
919.552.0849 (o)
919.880.9857 (m)
Contact: Don Curry, PE
don@curryeng.com

Architect:
G. Cleveland Pate, PLLC
919.851.0052
Contact: Ginger Anderson
patearchitecture@gmail.com

UTILITY AGENCIES:

WATER & SEWER
HARNETT COUNTY PUBLIC UTILITIES DEPT
700 McKINNEY PARKWAY
LILLINTON, NC 27546
910.893.7575
CONTACT: MR. SHANE CUMMINGS

NCDENR-DWQ SEWER
NCDENR DIVISION OF WATER RESOURCES
FAYETTEVILLE REGIONAL OFFICE
225 GREEN STREET
SUITE 714
FAYETTEVILLE, NC 28301
910.433.3300

NCDENR-PUBLIC WATER SUPPLY
NCDENR DIVISION OF WATER RESOURCES
RALEIGH REGIONAL OFFICE
512 N. SALISBURY STREET
RALEIGH, NC 27604
919.707.9100

GOVERNING AGENCIES:

PLANNING/ZONING/LANDSCAPE
HARNETT COUNTY
PLANNING DEPT.
108 E. FRONT ST.
LILLINGTON, NC 27546
910.893.7525 OPT. 4
CONTACT: MR. LANDON CHANDLER

ENGINEERING
MS CONSULTANTS, INC
920 MAIN CAMPUS DRIVE
RALEIGH, NC 27606
919.818.2235
CONTACT: MR. BILL DREITZLER, PE

STORMWATER
NCDEQ DIVISION OF ENERGY, MINERAL & LAND RESOURCES
RALEIGH REGIONAL OFFICE
512 N. SALISBURY STREET
RALEIGH, NC 27604
919.807.6369
CONTACT: MR. ROBERT PATTERSON, PE

EROSION CONTROL
NCDEQ DIVISION OF ENERGY, MINERAL & LAND RESOURCES
FAYETTEVILLE REGIONAL OFFICE
225 GREEN STREET, SUITE 714
FAYETTEVILLE, NC 28301
910.433.3300
CONTACT: MS. JODI PACE

As the owner of record, I hereby formally consent to the proposed development shown on this site plan and all regulations and requirements of the Harnett County ordinances.

10-15-21 _____
Date Owner Signature

SITE NOTES:

1. NC 210 AND NEILLS CREEK RD. ARE ON THE HARNETT COUNTY COMPREHENSIVE TRANSPORTATION PLAN.
2. THIS DEVELOPMENT IS WITHIN ONE MILE OF A VOLUNTARY AGRICULTURAL DISTRICT.

NOT FOR CONSTRUCTION

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER RONALD L. CURRY
PRELIMINARY
DO NOT USE FOR CONSTRUCTION

REVISIONS		
1	10/20/2021	HARNETT & NCDEQ EC COMMENTS
2	2/01/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ. SCALE: NONE
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
COVER SHEET

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0799

Curry ENGINEERING

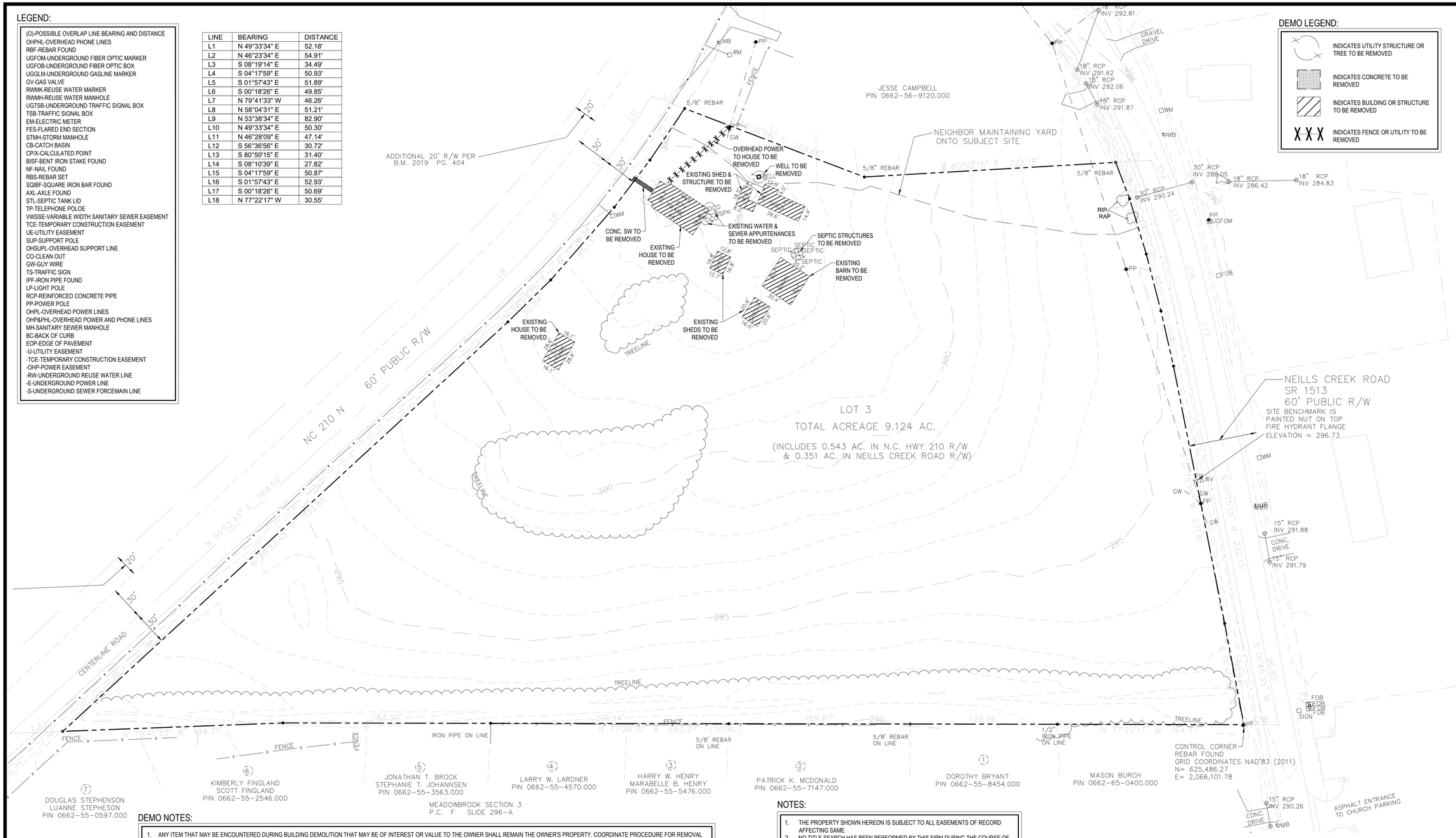
C-00

Z:\PROJECTS-FQ-DER-ZEB\LON\2020\2020-023 BRANTON JONES - 5556 NC 210 - ANGIER\PLANSHEET FILES\C-00 COVER SHEET.DWG
PLOTTED: 2/1/2022 10:04 AM

LEGEND:

(O)-POSSIBLE OVERLAP LINE BEARING AND DISTANCE
OHPHL-OVERHEAD PHONE LINES
RBF-REBAR FOUND
UGFOM-UNDERGROUND FIBER OPTIC MARKER
UGFOB-UNDERGROUND FIBER OPTIC BOX
UGGLM-UNDERGROUND GASLINE MARKER
GV-GAS VALVE
RWMK-REUSE WATER MARKER
RWMH-REUSE WATER MANHOLE
UGTSB-UNDERGROUND TRAFFIC SIGNAL BOX
TSB-TRAFFIC SIGNAL BOX
EM-ELECTRIC METER
FES-FLARED END SECTION
STMH-STORM MANHOLE
CB-CATCH BASIN
CP/X-CALCULATED POINT
BISF-BENT IRON STAKE FOUND
NF-NAIL FOUND
RBS-REBAR SET
SQIBF-SQUARE IRON BAR FOUND
AXL-AXLE FOUND
STL-SEPTIC TANK LID
TP-TELEPHONE POLOE
VWSSE-VARIABLE WIDTH SANITARY SEWER EASEMENT
TCE-TEMPORARY CONSTRUCTION EASEMENT
UE-UTILITY EASEMENT
SUP-SUPPORT POLE
OHSUPL-OVERHEAD SUPPORT LINE
CO-CLEAN OUT
GW-GUY WIRE
TS-TRAFFIC SIGN
IPF-IRON PIPE FOUND
LP-LIGHT POLE
RCP-REINFORCED CONCRETE PIPE
PP-POWER POLE
OHPL-OVERHEAD POWER LINES
OHP&PHL-OVERHEAD POWER AND PHONE LINES
MH-SANITARY SEWER MANHOLE
BC-BACK OF CURB
EOP-EDGE OF PAVEMENT
-U-UTILITY EASEMENT
-TCE-TEMPORARY CONSTRUCTION EASEMENT
-OHP-POWER EASEMENT
-RW-UNDERGROUND REUSE WATER LINE
-E-UNDERGROUND POWER LINE
-S-UNDERGROUND SEWER FORCEMAIN LINE

LINE	BEARING	DISTANCE
L1	N 49°33'34" E	52.18'
L2	N 46°23'34" E	54.91'
L3	S 08°19'14" E	34.49'
L4	S 04°17'59" E	50.93'
L5	S 01°57'43" E	51.89'
L6	S 00°18'26" E	49.85'
L7	N 79°41'33" W	46.26'
L8	N 58°04'31" E	51.21'
L9	N 53°38'34" E	82.90'
L10	N 49°33'34" E	50.30'
L11	N 46°28'09" E	47.14'
L12	S 56°36'56" E	30.72'
L13	S 80°50'15" E	31.40'
L14	S 08°10'39" E	27.82'
L15	S 04°17'59" E	50.87'
L16	S 01°57'43" E	52.93'
L17	S 00°18'26" E	50.69'
L18	N 77°22'17" W	30.55'



DEMO LEGEND:

- INDICATES UTILITY STRUCTURE OR TREE TO BE REMOVED
- INDICATES CONCRETE TO BE REMOVED
- INDICATES BUILDING OR STRUCTURE TO BE REMOVED
- XXX INDICATES FENCE OR UTILITY TO BE REMOVED

DEMO NOTES:

1. ANY ITEM THAT MAY BE ENCOUNTERED DURING BUILDING DEMOLITION THAT MAY BE OF INTEREST OR VALUE TO THE OWNER SHALL REMAIN THE OWNER'S PROPERTY. COORDINATE PROCEDURE FOR REMOVAL AND SALVAGE WITH OWNER.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING PRE-DEMOLITION PHOTOGRAPHS AND/OR VIDEOTAPE SHOWING EXISTING CONDITIONS OF ADJOINING CONSTRUCTION AND SITE IMPROVEMENTS PRIOR TO ANY DEMOLITION WORK.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH GOVERNING EPA REGULATIONS AND HAULING AND DISPOSAL REGULATIONS OF LOCAL JURISDICTION, INCLUDING OBTAINING ALL REQUIRED PERMITS.
4. CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER IN THE EVENT THAT UN-ANTICIPATED HAZARDOUS MATERIALS ARE ENCOUNTERED. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS AND REGULATIONS REGARDING THE HANDLING AND DISPOSAL OF HAZARDOUS MATERIALS.
5. CONTRACTOR RESPONSIBLE FOR LOCATING, IDENTIFYING, DISCONNECTING, AND SEALING OR CAPPING UTILITIES SERVING BUILDINGS AND STRUCTURES TO BE DEMOLISHED.
6. UNLESS OTHERWISE NOTED ON DRAWINGS, DEMOLITION SHALL INCLUDE REMOVAL OF EXISTING OBJECTS OR IMPROVEMENTS (WITH THE EXCEPTION OF TREES) THAT WOULD INTERFERE WITH PROGRESS OR COMPLETION OF PROPOSED WORK.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL DURING DEMOLITION.
8. CONTRACTOR SHALL NOTIFY OWNER AT LEAST 48 HOURS PRIOR TO COMMENCEMENT OF DEMOLITION ACTIVITIES.
9. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO ENSURE THAT UTILITY SERVICES OF ADJOINING PROPERTIES ARE NOT DISTURBED DURING SITE DEMOLITION.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL OFFSITE IMPROVEMENTS DURING DEMOLITION AND COORDINATING RELOCATION OF ANY UTILITY SERVICES DISRUPTED BY DEMOLITION ACTIVITIES.
11. PAVEMENT REMOVAL INCLUDES THE REMOVAL OF ANY ASSOCIATED BASE COURSE AND CURBING.
12. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES BEFORE COMMENCING DEMOLITION ACTIVITIES.
13. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER SHOULD ANY DISCREPANCIES OR CONFLICTS ARISE.
14. REMOVE ALL EXISTING STRUCTURES INCLUDING FOUNDATIONS.
15. REMOVE ALL ITEMS SHOWN ON EXISTING CONDITIONS PLAN AS NEEDED FOR INSTALLATION OF NEW WORK.
16. NO EQUIPMENT IS ALLOWED ON THE SITE UNTIL ALL TREE PROTECTION AND SILT FENCING HAS BEEN INSTALLED AND APPROVED.
17. CONTRACTOR SHALL CONTACT PUBLIC UTILITIES ADMINISTRATION DIVISION PRIOR TO ANY DEMOLITION TO INSURE EXISTING WATER AND SANITARY SEWER DISCONNECTS ARE HANDLED ACCORDING TO CITY GUIDELINES. SEE COVER FOR CONTACT INFO.
18. SEE SITE/UTILITY PLAN & GRADING/DRAINAGE PLAN FOR PROPOSED MODIFICATIONS TO UTILITIES & DRAINAGE STRUCTURES.
19. CONTRACTOR TO COORDINATE WITH UTILITY PROVIDER ON REMOVAL/RELOCATION OF ALL UITILITY POLES, LINES, AND GUY WIRES. SEE COVER SHEET FOR CONTACT INFO.

NOTES:

1. THE PROPERTY SHOWN HEREON IS SUBJECT TO ALL EASEMENTS OF RECORD AFFECTING SAME.
2. NO TITLE SEARCH HAS BEEN PERFORMED BY THIS FIRM DURING THE COURSE OF THIS SURVEY.
3. THIS SURVEYOR DOES NOT CERTIFY TO THE EXISTENCE OR NON-EXISTENCE OF ANY UNDER GROUND UTILITIES THAT MAY OR MAY NOT BE PRESENT ON THIS SITE.
4. THE INFORMATION PRESENTED HERE IS FROM A COMBINATION OF HISTORIC AERIAL BASE FILE INFORMATION, AS-BUILTS, AND RECENT SURVEY.

SURVEYOR NOTES:

1. PROPERTY IS SUBJECT TO ALL EASEMENTS AND RESTRICTIONS OF RECORD. NO TITLE SEARCH HAS BEEN DONE BY ROBINSON & PLANTE, P.C.
2. PROPERTY IS NOT IN A SPECIAL FLOOD HAZARD AREA BY FEMA FIRM MAP NO. 3720066200J PANEL EFFECTIVE DATE 10/03/2006.
3. UNDERGROUND UTILITIES FOUND PAINTED/FLAGGED BY OTHERS AND FIELD LOCATED DURING THE COURSE OF THE SURVEY.
4. ENCROACHMENTS SHOWN ARE VISIBLE PHYSICAL CONDITIONS LOCATED DURING THE COURSE OF THE SURVEY AND ARE NOT TO BE INTERPRETED AS A LEGAL DETERMINATION AS TO WHETHER THEY ARE TRUE ENCROACHMENTS.
5. ELEVATIONS ARE NAVD 88.

Surveyor:
Robinson & Plante, PC
970 Trinity Road
Raleigh, NC 27607
919-859-6030 (o)
Contact: Buddy Plante, PLS
buddy@robinsonplante.com

BEFORE YOU DIG CALL TOLL FREE 1 800 632 4949
NORTH CAROLINA ONE-CALL CENTER

SCALE: 1 IN = 40 FT
40' 20' 0 40' 80'
SCALE IN FEET HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

PROFESSIONAL ENGINEER SEAL NOT AFFIXED TO SHEET AS ENGINEER DOES NOT CERTIFY INFORMATION PROVIDED BY OTHERS

1	3/31/2021	HARNETT & NCDEQ EC COMMENTS
2	7/2/2021	HARNETT & NCDEQ EC COMMENTS

HOR2 SCALE 1"=40'
ORIG SHEET SIZE: 24 x 36
DATE: 7/2021
FILE NO. 2020-023

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EXISTING CONDITIONS & DEMOLITION PLAN

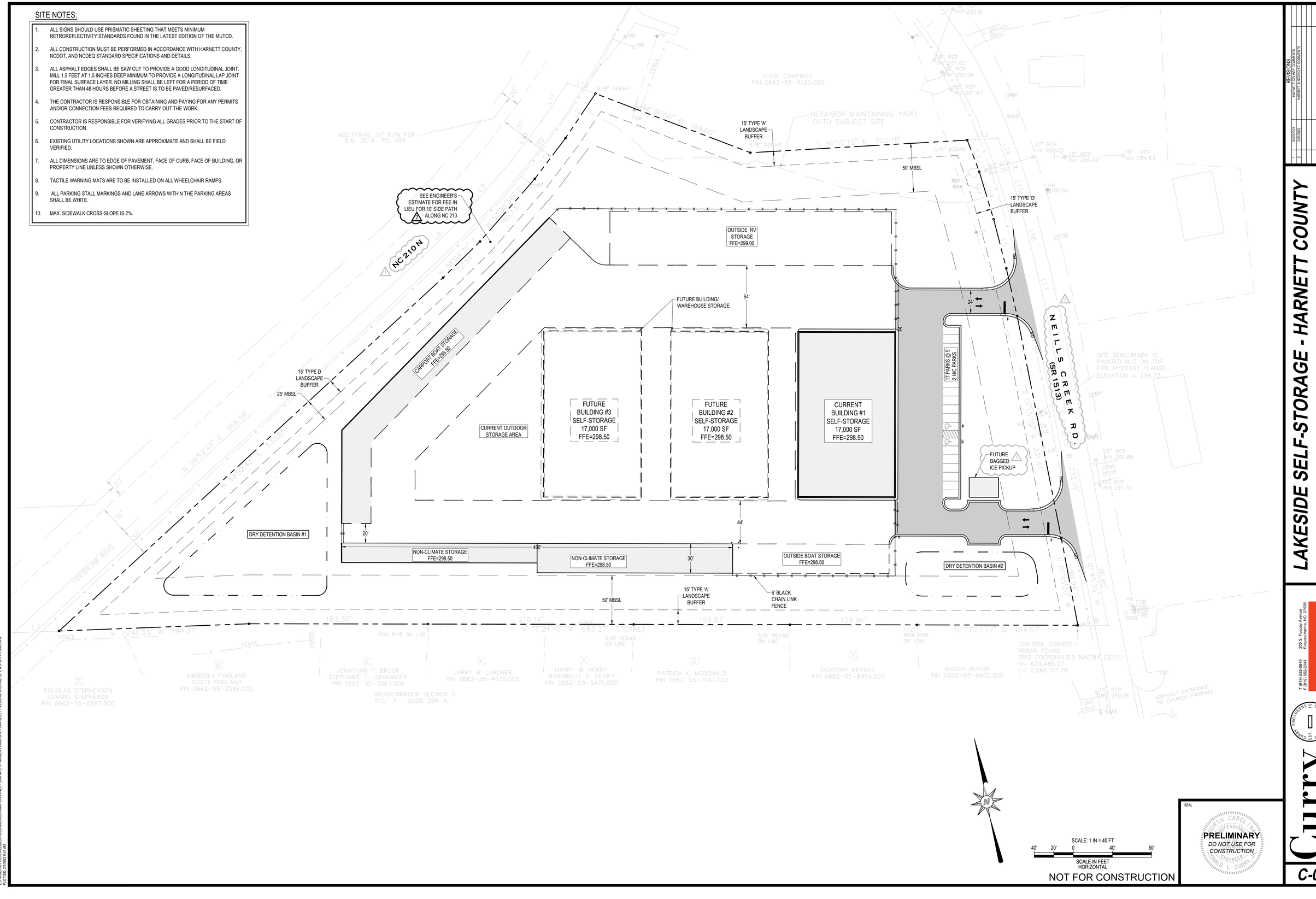
205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
ENGINEERS LAND PLANNERS SURVEYORS EST. 1 NORTH CAROLINA
NC LIC. NO. P-0789
Curry ENGINEERING

C-01

Z:\PROJECTS FOLDER-ZEBU\LOW\2020\2020-023 BRANTON JONES - 5595 NC 210 - ANDERSON\WEBSITE PLANSHEET FILES\C-01 EXISTING CONDITIONS & DEMOLITION PLAN.DWG

SITE NOTES:

1. ALL SIGNS SHOULD USE PRISMATIC SHEETING THAT MEETS MINIMUM RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST EDITION OF THE MUTCD.
2. ALL CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH HARNETT COUNTY, NCDOT, AND NCDEQ STANDARD SPECIFICATIONS AND DETAILS.
3. ALL ASPHALT EDGES SHALL BE SAW CUT TO PROVIDE A GOOD LONGITUDINAL JOINT. MILL 1.5 FEET AT 1.5 INCHES DEEP MINIMUM TO PROVIDE A LONGITUDINAL LAP JOINT FOR FINAL SURFACE LAYER. NO MILLING SHALL BE LEFT FOR A PERIOD OF TIME GREATER THAN 48 HOURS BEFORE A STREET IS TO BE PAVED/RESURFACED.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK.
5. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
6. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
7. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, FACE OF BUILDING, OR PROPERTY LINE UNLESS SHOWN OTHERWISE.
8. TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
9. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
10. MAX. SIDEWALK CROSS-SLOPE IS 2%.



SCALE: 1 IN = 40 FT
40' 20' 0 40' 80'
SCALE IN FEET HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER
ARNOLD L. CURRY, JR.

REVISIONS		
1	10/2/2021	HARNETT CO COMMENTS
2	2/21/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021 | HORZ SCALE: 1"=40'
FILE NO.: 2020-023 | ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

OVERALL SITE & UTILITY PLAN

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0799

Curry ENGINEERING

C-02

Z:\PROJECTS FOLDER JEB\LONG\2020\2020-023 BRAXTON JONES - 5566 NC 210 - ANGIER\PLANS\SITE PLAN\SHEET FILES\C-02 OVERALL SITE & UTILITY PLAN.DWG
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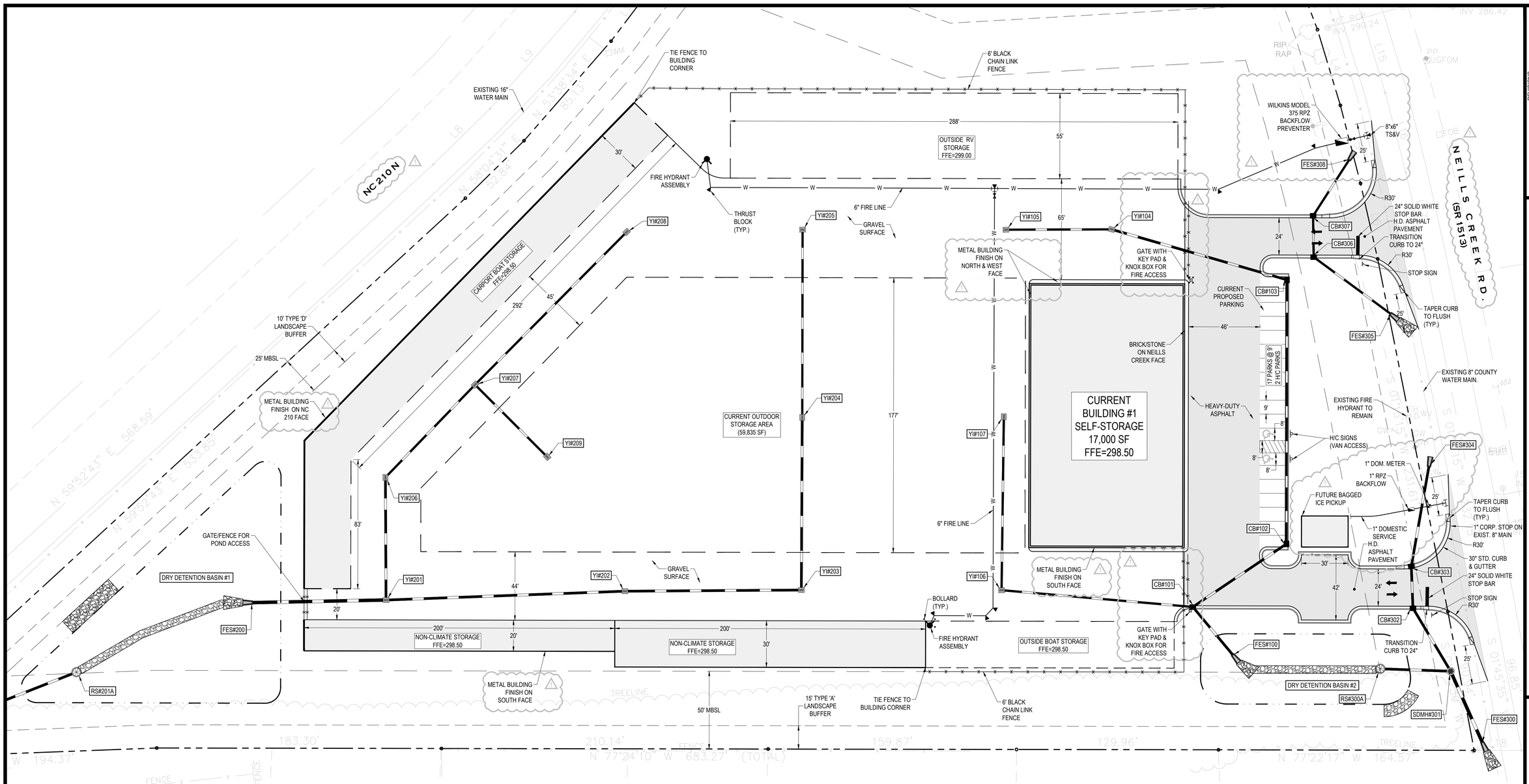

SITE NOTES:

1. ALL SIGNS SHOULD USE PRISMATIC SHEETING THAT MEETS MINIMUM RETROREFLECTIVITY STANDARDS FOUND IN THE LATEST EDITION OF THE MUTCD.
2. ALL CONSTRUCTION MUST BE PERFORMED IN ACCORDANCE WITH HARNETT COUNTY, NCDOT, AND NCDEQ STANDARD SPECIFICATIONS AND DETAILS.
3. ALL ASPHALT EDGES SHALL BE SAW CUT TO PROVIDE A GOOD LONGITUDINAL JOINT. MILL 1.5 FEET AT 1.5 INCHES DEEP MINIMUM TO PROVIDE A LONGITUDINAL LAP JOINT FOR FINAL SURFACE LAYER. NO MILLING SHALL BE LEFT FOR A PERIOD OF TIME GREATER THAN 48 HOURS BEFORE A STREET IS TO BE PAVED/RESURFACED.
4. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK.
5. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
6. EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED.
7. ALL DIMENSIONS ARE TO EDGE OF PAVEMENT, FACE OF CURB, FACE OF BUILDING, OR PROPERTY LINE UNLESS SHOWN OTHERWISE.
8. TACTILE WARNING MATS ARE TO BE INSTALLED ON ALL WHEELCHAIR RAMPS.
9. ALL PARKING STALL MARKINGS AND LANE ARROWS WITHIN THE PARKING AREAS SHALL BE WHITE.
10. MAX. SIDEWALK CROSS-SLOPE IS 2%.
11. PARKING ARES, DRIVE AISLES, AND LANDSCAPE BUFFERS WILL BE INSTALLED BY THE OWNER, LAKESIDE STORAGE.
12. SIGNS SHALL BE SET BACK AT LEAST 10' FROM NCDOT ROW. COORDINATE WITH HARNETT COUNTY FOR APPLICABLE SIGN PERMIT (MAX. 1 PER ROAD FRONTAGE).

UTILITY NOTES:

1. ALL CONSTRUCTION SHALL BE PER HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
2. THERE SHALL BE NO UNPERMITTED DISTURBANCE IN THE EXISTING WETLANDS
3. CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, RIGHT-OF-WAYS AND UTILITIES, PUBLIC OR PRIVATE, BEFORE WORKING IN THESE AREAS.
4. CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL DUE TO CONSTRUCTION OPERATIONS. ALL STREET SURFACES, UTILITY POLES, CULVERTS, DITCHES, CURB AND GUTTER OR OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MANNER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATIONS.
5. IF DEPARTURES FROM THE DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREOF SHALL BE SUBMITTED IN WRITING TO THE FACILITY DESIGNER FOR REVIEW. NO DEPARTURES FROM THE CONTRACT DOCUMENTS WILL BE ALLOWED WITHOUT APPROVAL BY THE FACILITY DESIGNER.
6. ALL UTILITY WORK WITHIN THE PUBLIC RIGHT OF WAY OR PUBLIC EASEMENTS SHALL BE TO THE LATEST EDITION OF THE HARNETT REGIONAL WATER STANDARDS AND THE UTILITY MASTER PLAN.
7. THE FOLLOWING BACKFLOW PREVENTION MODEL NUMBERS SHALL BE PROVIDED:
   - 1" DOMESTIC BACKFLOW RPZ = WILKINS MODEL 975XL.
8. CONTRACTOR SHALL CONTACT HARNETT REGIONAL WATER PRIOR TO MAKING CONNECTION TO ANY COUNTY OWNED INFRASTRUCTURE.
9. A PRE CONSTRUCTION MEETING WILL BE REQUIRED BETWEEN THE CONTRACTOR & HARNETT COUNTY.
10. CONTRACTOR CANNOT TAP WATER MAINS WITHOUT AN APPROVED WATER EXTENSION PERMIT ISSUED BY NCDENR - PUBLIC WATER SUPPLY.
11. WATER MAINS SHALL BE CLASS 200 C900 PVC I.A.W. AWWA C900. DUCTILE IRON PIPE WATER MAINS SHALL BE CLASS 350 DIP I.A.W. AWWA C-111. DIP SHALL BE CEMENT-MORTAR LINED AND SEALED WITH BITUMINOUS MATERIAL I.A.W. AWWA C-104. ALL DIP BURIED PIPE SHALL HAVE AN BITUMINOUS EXTERIOR COATING I.A.W. AWWA C-151. MINIMUM BURIAL DEPTH FOR WATER MAIN IS 36 INCHES BELOW FINISHED GRADE. WATER MAINS SHALL BE INSTALLED WITH TYPE 1 LAYING CONDITION PER HARNETT COUNTY SPECIFICATIONS. ALL FITTINGS SHALL BE MECHANICAL JOINTS I.A.W. AWWA C-111.
12. ALL NON-METALLIC PIPING MUST BE INSTALLED WITH TRACER WIRE PER HARNETT COUNTY STANDARDS.
13. PRIVATE UTILITIES (TELEPHONE, NATURAL GAS, CABLE TV) ARE NOT SHOWN ON THIS PLAN. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THOSE UTILITIES WHEN INSTALLING PUBLIC UTILITIES.
14. WATER METERS SHALL NOT BE LOCATED WITHIN DRIVEWAYS - NO EXCEPTIONS.
15. ELECTRICAL TRANSFORMERS SHALL NOT BE LOCATED WITHIN REQUIRED LANDSCAPED BUFFERS.
16. ALL ELECTRICAL THROUGHOUT THE SITE SHALL BE UNDERGROUND.
17. REFER TO D-01 FOR HARNETT COUNTY PUBLIC UTILITIES REQUIRED NOTES.
18. WATER SUPPLY WATERSHED SPECIAL INTENSITY ALLOCATION PERMIT, BOA2001-0001, FOR 54% IMPERVIOUS WAS APPROVED ON 2/10/2020.
19. ALL UTILITIES, INCLUDING FIRE HYDRANTS, INSTALLED OUTSIDE OF THE PROPOSED ROW MUST BE IN A PUBLIC UTILITY EASEMENT.
20. A LICENSED UTILITY CONTRACTOR WILL INSTALL THE PROPOSED WATER SERVICE.
21. WATER USAGE: 4 STAFF AT 25 GPD PER EMPLOYEE (1 SHIFT) = 100 GPD

SITE LEGEND:

- STREET LIGHT
- SIGN
- WCR — WHEELCHAIR RAMP
- ROADWAY CENTER LINE
- RIGHT OF WAY LINE
- SETBACK LINE
- BMP LIMITS
- BUFFER
- STANDARD CURB & GUTTER
- SPILL CURB & GUTTER
- CHAIN LINK FENCE
- CONCRETE SIDEWALK
- HEAVY-DUTY ASPHALT PAVEMENT
- BUILDING FOOTPRINT

UTILITY LEGEND:

- FIRE HYDRANT ASSEMBLY (FHA)
- GATE VALVE (GV)
- TEE
- THRUST (REACTION) BLOCKING
- BLOW OFF VALVE
- WATER METER
- BACKFLOW PREVENTER
- CLEANOUT
- SANITARY MANHOLE
- WET WELL
- FLARED END SECTION
- RISER STRUCTURE
- CATCH BASIN
- YARD INLET
- STREET LIGHT
- W — WATER LINE
- SS — SANITARY SEWER LINE
- FM — FORCE MAIN LINE
- E — ELECTRICAL LINE
- STORM DRAIN LINE

SCALE: 1 IN = 30 FT

30' 15' 0 30' 60'

SCALE IN FEET HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER DONALD L. CURRY, JR. SEAL 036118

PRELIMINARY

DO NOT USE FOR CONSTRUCTION

REVISIONS		
1	5/07/2021	HARNETT COUNTY COMMENTS
2	2/01/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023

HOR2. SCALE: 1"=30'
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

SITE & UTILITY PLAN

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526

T (919) 552-0849
F (919) 552-2043

CURRY ENGINEERING PLLC EST. 2015 NORTH CAROLINA

NC LIC. NO. P-0739

Curry ENGINEERING

C-03

Z:\PROJECTS FOLDER_FB\BLDN\2020\020-023\BRANTON JONES - 5556 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\C-03 SITE & UTILITY PLAN.DWG
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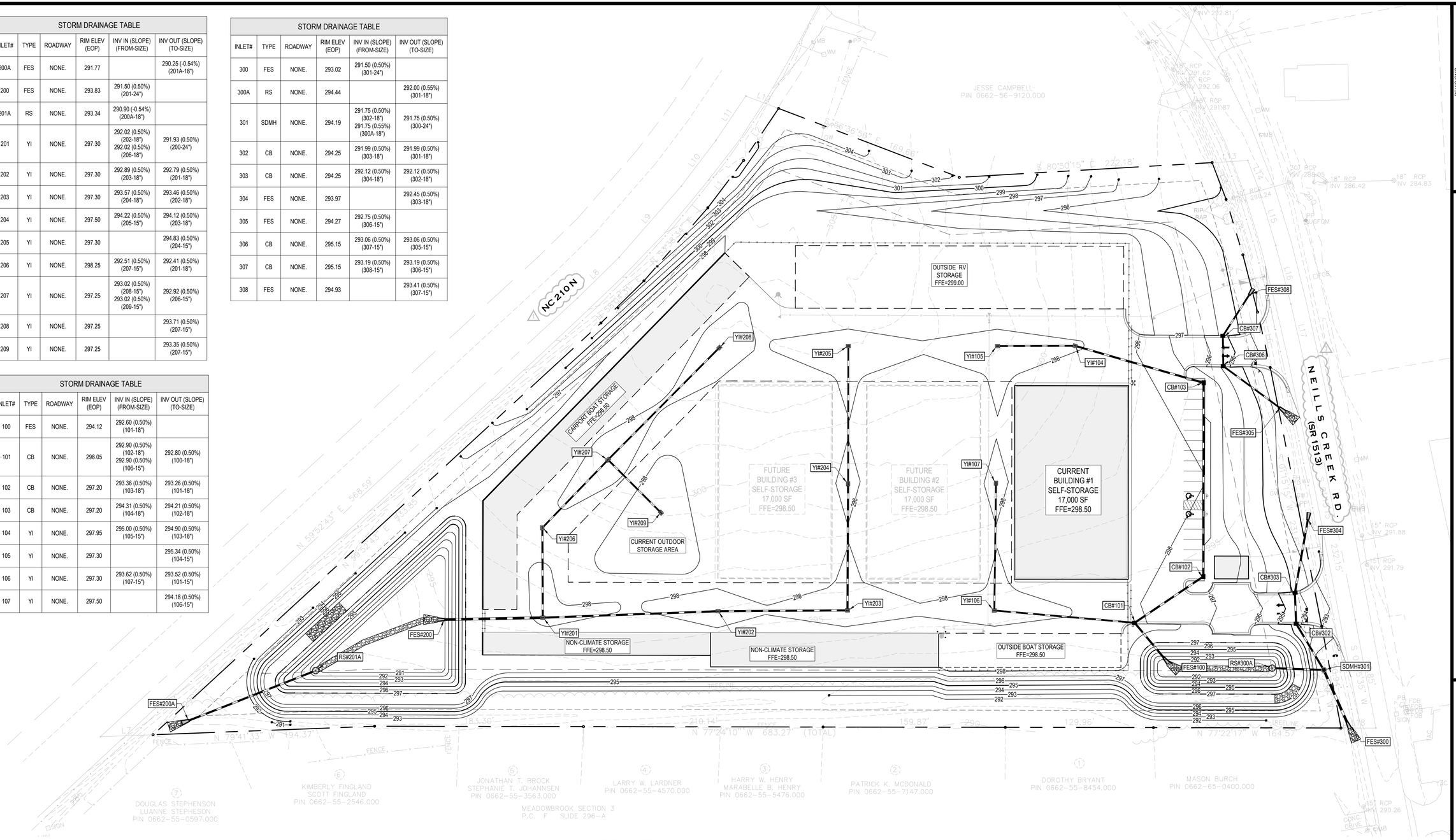
STORM DRAINAGE TABLE					
INLET#	TYPE	ROADWAY	RIM ELEV (EOP)	INV IN (SLOPE) (FROM-SIZE)	INV OUT (SLOPE) (TO-SIZE)
200A	FES	NONE.	291.77		290.25 (-0.54%) (201A-18")
200	FES	NONE.	293.83	291.50 (0.50%) (201-24")	
201A	RS	NONE.	293.34	290.90 (-0.54%) (200A-18")	
201	YI	NONE.	297.30	292.02 (0.50%) (202-18") 292.02 (0.50%) (206-18")	291.93 (0.50%) (200-24")
202	YI	NONE.	297.30	292.89 (0.50%) (203-18")	292.79 (0.50%) (201-18")
203	YI	NONE.	297.30	293.57 (0.50%) (204-18")	293.46 (0.50%) (202-18")
204	YI	NONE.	297.50	294.22 (0.50%) (205-15")	294.12 (0.50%) (203-18")
205	YI	NONE.	297.30		294.83 (0.50%) (204-15")
206	YI	NONE.	298.25	292.51 (0.50%) (207-15")	292.41 (0.50%) (201-18")
207	YI	NONE.	297.25	293.02 (0.50%) (208-15") 293.02 (0.50%) (209-15")	292.92 (0.50%) (206-15")
208	YI	NONE.	297.25		293.71 (0.50%) (207-15")
209	YI	NONE.	297.25		293.35 (0.50%) (207-15")

STORM DRAINAGE TABLE					
INLET#	TYPE	ROADWAY	RIM ELEV (EOP)	INV IN (SLOPE) (FROM-SIZE)	INV OUT (SLOPE) (TO-SIZE)
100	FES	NONE.	294.12	292.60 (0.50%) (101-18")	
101	CB	NONE.	298.05	292.90 (0.50%) (102-18") 292.90 (0.50%) (106-15")	292.80 (0.50%) (100-18")
102	CB	NONE.	297.20	293.36 (0.50%) (103-18")	293.26 (0.50%) (101-18")
103	CB	NONE.	297.20	294.31 (0.50%) (104-18")	294.21 (0.50%) (102-18")
104	YI	NONE.	297.95	295.00 (0.50%) (105-15")	294.90 (0.50%) (103-18")
105	YI	NONE.	297.30		295.34 (0.50%) (104-15")
106	YI	NONE.	297.30	293.62 (0.50%) (107-15")	293.52 (0.50%) (101-15")
107	YI	NONE.	297.50		294.18 (0.50%) (106-15")

STORM DRAINAGE TABLE					
INLET#	TYPE	ROADWAY	RIM ELEV (EOP)	INV IN (SLOPE) (FROM-SIZE)	INV OUT (SLOPE) (TO-SIZE)
300	FES	NONE.	293.02	291.50 (0.50%) (301-24")	
300A	RS	NONE.	294.44		292.00 (0.55%) (301-18")
301	SDMH	NONE.	294.19	291.75 (0.50%) (302-18") 291.75 (0.55%) (300A-18")	291.75 (0.50%) (300-24")
302	CB	NONE.	294.25	291.99 (0.50%) (303-18")	291.99 (0.50%) (301-18")
303	CB	NONE.	294.25	292.12 (0.50%) (304-18")	292.12 (0.50%) (302-18")
304	FES	NONE.	293.97		292.45 (0.50%) (303-18")
305	FES	NONE.	294.27	292.75 (0.50%) (306-15")	
306	CB	NONE.	295.15	293.06 (0.50%) (307-15")	293.06 (0.50%) (305-15")
307	CB	NONE.	295.15	293.19 (0.50%) (308-15")	293.19 (0.50%) (306-15")
308	FES	NONE.	294.93		293.41 (0.50%) (307-15")



GRADING & DRAINAGE NOTES:

1. ALL STORM DRAINAGE PIPING SHALL BE CLASS III RCP UNLESS NOTED OTHERWISE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDEQ, NCDOT, AND HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL COORDINATE ALL GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER, AS APPROPRIATE.
4. CONTRACTOR SHALL MAINTAIN POSITIVE SLOPE AND OUTFALL OF ANY FOUNDATION DRAIN SYSTEMS.
5. SPOT ELEVATIONS ON CURB REFER TO THE BACK OR TOP OF CURB (TOC) ELEVATION. ELEVATIONS ON STORM DRAINAGE TABULATIONS (SEE DETAIL SHEET) REFER TO EDGE OF PAVEMENT (EOP) ELEVATION.
6. ALL STORM DRAIN HOODS, MANHOLE COVERS AND GRATES ARE TO BE LABELED "NO DUMPING DRAINS TO STREAM".
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
8. THIS SITE IS ANTICIPATED TO BE A BALANCE EARTHWORK SITE. IN THE EVENT MATERIAL IS TAKEN OFF-SITE OR RECEIVED FROM AN OFF-SITE SOURCE, NCDEQ MUST BE NOTIFIED AND THE MATERIAL MUST ORIGINATE FROM A PERMITTED FACILITY.
9. RETAINING WALLS OVER 4' IN HEIGHT MUST BE PERMITTED SEPARATELY.

LEGEND:

- FLARED END SECTION
- RISER STRUCTURE
- CATCH BASIN
- YARD INLET
- SW=295.40 FG =295.32 — SPOT ELEVATION
- 4.0% — FLOW DIRECTION
- RIP-RAP OUTLET PROTECTION
- 400 — MAJOR CONTOUR
- STORM DRAIN LINE
- MINOR CONTOUR
- INTERMEDIATE CONTOUR

BEFORE YOU DIG CALL TOLL FREE 1 800 632 4949

NORTH CAROLINA ONE-CALL CENTER

SCALE: 1 IN = 40 FT

40' 20' 0 40' 80'

SCALE IN FEET HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
ENGINEER
DONALD L. CURRY

REVISIONS		
1	10/22/2021	HARNETT COMMENTS
2	2/21/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO. 2020-023

HOR2 SCALE 1"=40'
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

OVERALL GRADING & DRAINAGE PLAN

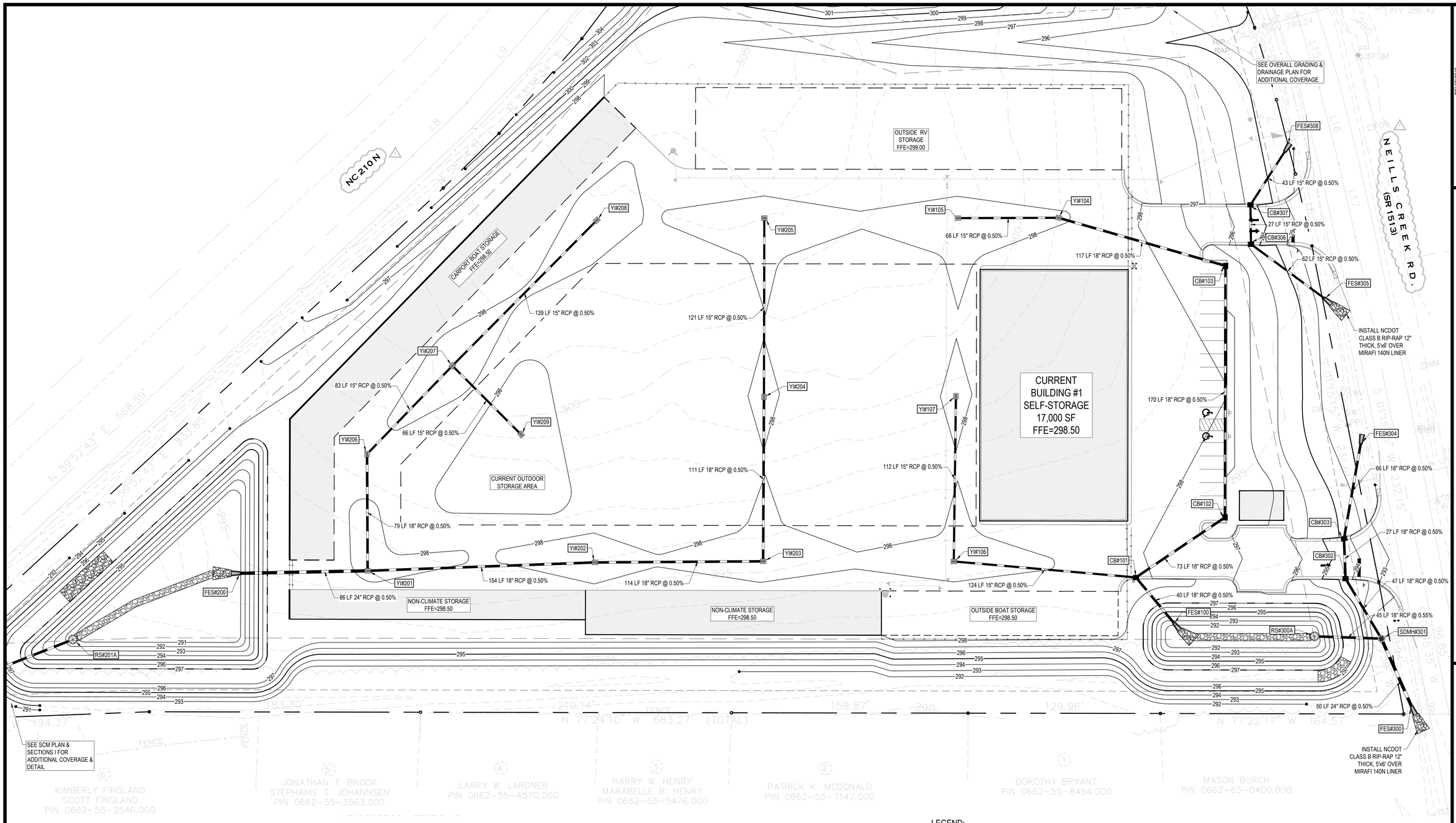
205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043

CURRY ENGINEERS, LLC — NORTH CAROLINA
NC LIC NO. P-0799

Curry ENGINEERING

C-04

Z:\PROJECTS FOLDER\ZEBULON\2020\2020-023 BRAXTON JONES - 5556 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\C-04 OVERALL GRADING & DRAINAGE PLAN.DWG
PLOTTED: 2/1/2022 10:09 AM



GRADING & DRAINAGE NOTES:

1. ALL STORM DRAINAGE PIPING SHALL BE CLASS III RCP UNLESS NOTED OTHERWISE.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NCDEQ, NCDOT, AND HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
3. CONTRACTOR SHALL COORDINATE ALL GRADING OPERATIONS WITH THE OWNER'S GEOTECHNICAL ENGINEER, AS APPROPRIATE.
4. CONTRACTOR SHALL MAINTAIN POSITIVE SLOPE AND OUTFALL OF ANY FOUNDATION DRAIN SYSTEMS.
5. SPOT ELEVATIONS ON CURB REFER TO THE BACK OR TOP OF CURB (TOC) ELEVATION. ELEVATIONS ON STORM DRAINAGE TABULATIONS (SEE DETAIL SHEET) REFER TO EDGE OF PAVEMENT (EOP) ELEVATION.
6. ALL STORM DRAIN HOODS, MANHOLE COVERS AND GRATES ARE TO BE LABELED "NO DUMPING DRAINS TO STREAM".
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL GRADES PRIOR TO THE START OF CONSTRUCTION.
8. THIS SITE IS ANTICIPATED TO BE A BALANCE EARTHWORK SITE. IN THE EVENT MATERIAL IS TAKEN OFF-SITE OR RECEIVED FROM AN OFF-SITE SOURCE, NCDEQ MUST BE NOTIFIED AND THE MATERIAL MUST ORIGINATE FROM A PERMITTED FACILITY.
9. RETAINING WALLS OVER 4' IN HEIGHT MUST BE PERMITTED SEPARATELY.

LEGEND:

- FLARED END SECTION
- RISER STRUCTURE
- CATCH BASIN
- YARD INLET
- SW=295.40 / FG =295.32 — SPOT ELEVATION
- 4.0% — FLOW DIRECTION
- RIP-RAP OUTLET PROTECTION
- 400 — MAJOR CONTOUR
- STORM DRAIN LINE
- MINOR CONTOUR
- INTERMEDIATE CONTOUR

SCALE: 1 IN = 30 FT

30' 15' 0 30' 60'

SCALE IN FEET
HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER DONALD L. CURRY, JR.

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

REVISIONS		
1	10/7/2021	HARNETT & NCDEQ EC COMMENTS
2	2/01/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ. SCALE: 1" = 30'
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
GRADING & DRAINAGE PLAN

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0789
Curry ENGINEERING

C-05

Z:\PROJECTS FOLDER\ZEBULON\2020\2020-023 BRANTON JONES - 5586 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\C-05 GRADING & DRAINAGE PLANDING
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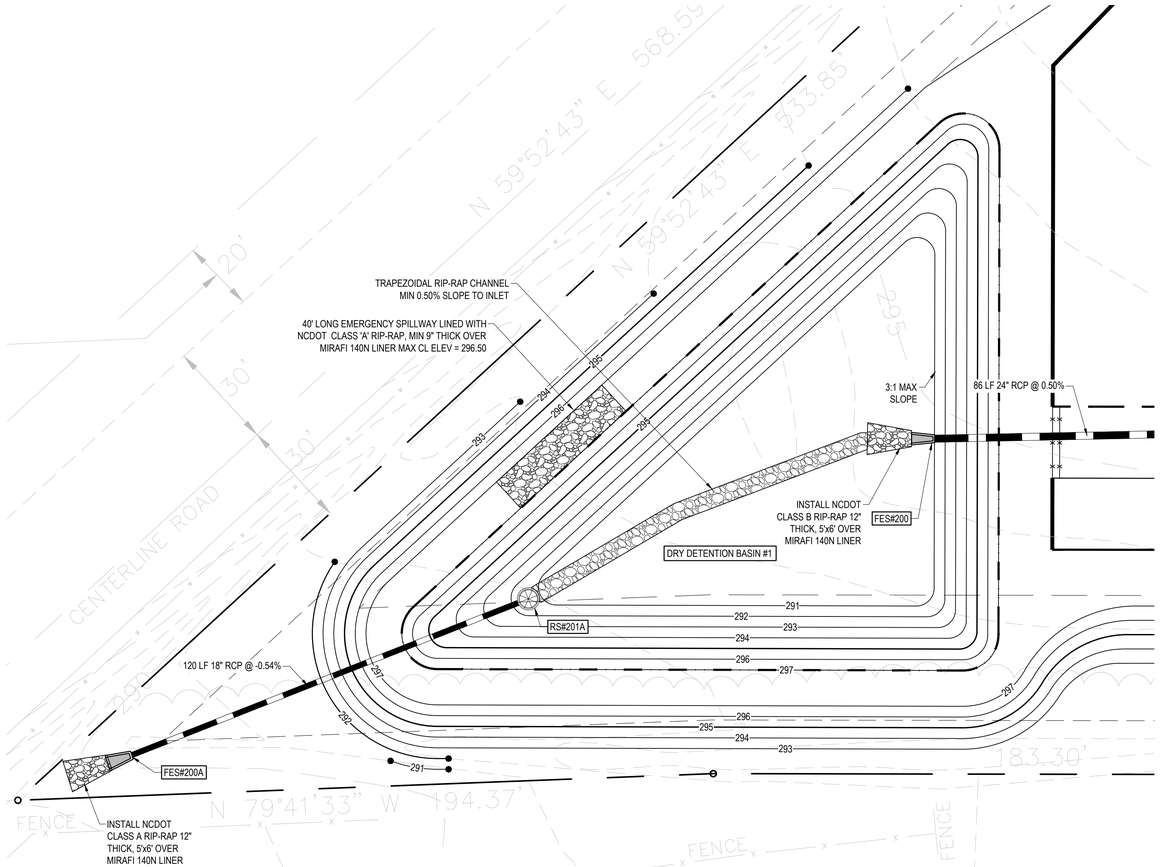
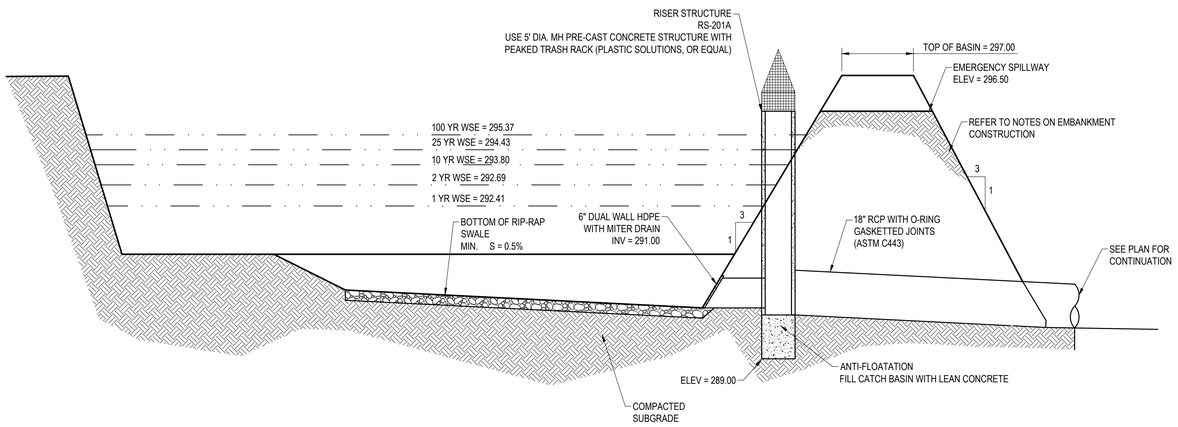


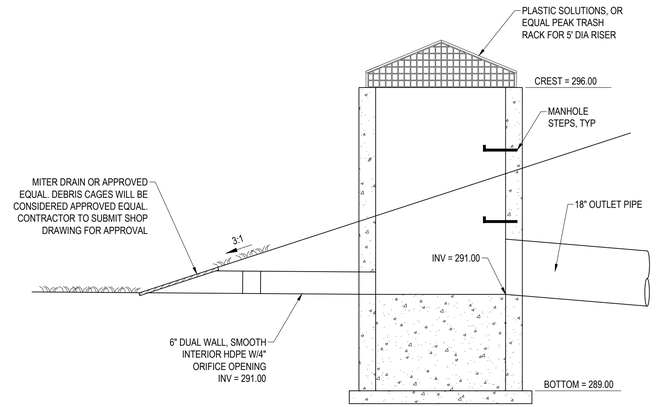
1 C-06 SCM LAYOUT
SCALE: 1"=20'



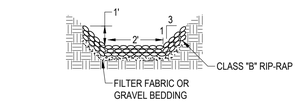
2 C-06 DRY DETENTION - SECTION A
SCALE: N.T.S

GENERAL NOTES:

1. THIS SITE IS LOCATED IN THE CAPE FEAR RIVER BASIN.
2. DRY DETENTION BASIN SHALL BE DESIGNIED AND CONSTRUCTED IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES STORMWATER BMP MANUAL - LATEST EDITION. DRY DETENTION BASIN PROVIDES MINIMAL WATER QUALITY TREATMENT.
3. THE PROJECT MEETS THE REQUIREMENTS OF NCDEQ BMP MANUAL, LATEST EDITION.
4. MAXIMUM SLOPE OF BASIN IS 3:1.
5. ALL SIDE SLOPES, EMBANKMENTS AND SPILLWAYS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR PER ASTM-D698.
6. CONTROLLED FILL, AS SPECIFIED BY THE RESIDENT ENGINEER, IN THE DAM EMBANKMENT SHALL BE PLACED IN 6-INCH LOOSE LAYERS (3-INCH LOOSE LAYERS WITHIN 3-FEET OF EITHER SIDE OF THE PRINCIPAL SPILLWAY PIPE TO A DEPTH OF 2-FEET OVER THE PIPE) AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR - TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM-D698.
7. ALL VISIBLE ORGANIC DEBRIS SUCH AS ROOTS AND LIMBS SHALL BE REMOVED FROM THE FILL MATERIAL PRIOR TO COMPACTION TO THE REQUIRED DENSITY. SOILS WITH ORGANIC MATTER CONTENT EXCEEDING 5% BY WEIGHT SHALL BE USED. STONES GREATER THAN 3-INCH (IN ANY DIRECTION) SHALL BE REMOVED FROM THE FILL PRIOR TO COMPACTION.
8. FILL MATERIAL PLACED AT DENSITIES LOWER THAN SPECIFIED MINIMUM DENSITIES OR AT MOISTURE CONTENTS OUTSIDE THE SPECIFIED RANGES OR OTHERWISE NOT CONFORMING TO SPECIFIED REQUIREMENTS SHALL BE REMOVED AND REPLACED WITH ACCEPTABLE MATERIALS.
9. ANY FILL LAYER THAT IS SMOOTH DRUM ROLLED TO REDUCE MOISTURE PENETRATION DURING A STORM EVENT SHALL BE PROPERLY SCARIFIED PRIOR TO THE PLACEMENT OF THE NEXT SOIL LIFT.
10. SURFACE WATER AND STREAM FLOW SHALL BE CONTINUOUSLY CONTROLLED THROUGHOUT CONSTRUCTION AND THE PLACEMENT OF CONTROLLED FILL.
11. FOUNDATION AREAS MAY REQUIRE UNDERCUTTING OF COMPRESSIBLE AND/OR UNSUITABLE SOILS IN ADDITION TO THAT INDICATED ON THE PLANS. ALL SUCH UNDERCUTTING SHALL BE PERFORMED AT THE DISCRETION OF THE GEOTECHNICAL ENGINEER AND SHALL BE MONITORED AND DOCUMENTED. IN NO CASE SHALLTHERE BE AN ATTEMPT TO STABILIZE AND PORTIONS OF THE FOUNDATION SOILS WITH CRUSHED STONE.
12. TREATMENT OF SEEPAGE AREAS, SUBGRADE PREPARATION, FOUNDATION DEWATERING AND ROCK FOUNDATION PREPARATION (I.E., TREATMENT WITH SLUSH GROUTING, DENTAL CONCRETE, ETC.) MAY BE REQUIRED AT THE DISCRETION OF THE RESIDENTIAL ENGINEER. ALL SUCH ACTIVITIES SHALL BE CLOSELY MONITORED AND DOCUMENTED BY THE GEOTECHNICAL ENGINEER.
13. FILL ADJACENT TO THE RISER AND PRINCIPAL SPILLWAY PIPE SHALL BE PLACED SO THAT LIFTS ARE AT THE SAME LEVEL ON BOTH SIDES OF THE STRUCTURES.
14. EARTHWORK COMPACTION WITHIN 3-FEET OF ANY STRUCTURES SHALL BE ACCOMPLISHED BY MEANS OF HAND TAMPERS, MANUALLY DIRECTED POWER TAMPERS OR PLATE COMPACTORS OR MINIATURE SELF-PROPELLED ROLLERS.
15. COMPACTION BY MEANS OF DROP WEIGHTS FROM A CRANE OR HOIST SHALL NOT BE PERMITTED.
16. HEAVY EQUIPMENT SHALL NOT BE ALLOWED TO PASS OVER CAST-IN-PLACE STRUCTURES UNTIL ADEQUATE CURING TIME HAS ELAPSED.
17. TO RE-ESTABLISH VEGETATION AFTER CONSTRUCTION, A 2- TO 3-INCH LAYER OF TOPSOIL SHALL BE PLACED ON THE DISTURBED EMBANKMENT SURFACE AND THE AREA SEEDED AND MULCHED OR HYDROSEEDED.
18. ALL RISER STRUCTURES, INCLUDING WEIR WALL TYPE STRUCTURES, SHALL BE REINFORCED CONCRETE. BRICK/CONCRETE BLOCK AND MORTAR TYPE STRUCTURES WILL NOT BE ACCEPTED.
19. ALL RISER STRUCTURES SHALL BE LOCATED SUCH THAT DIRECT ACCESS FROM THE DAM EMBANKMENT CAN BE ACHIEVED.
20. RISER STRUCTURES WITH MULTIPLE BARREL SECTIONS SHALL HAVE GASKETTED JOINTS, AND EACH SECTION SHALL BE BOLTED TO ADJACENT SECTIONS WITH STAINLESS STEEL STRAPS.



4 C-06 RISER STRUCTURE DETAIL
SCALE: N.T.S.



STONE CLASSIFICATION	RIP RAP DEPTH
A	12"
B	18"
CLASS 1	24"
CLASS 2	24"-36"

3 C-06 RIP-RAP CHANNEL
SCALE: N.T.S

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

REVISIONS	
1 10/31/2021	HARNETT CO COMMENTS
2 2/21/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ. SCALE: 1"=20'
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

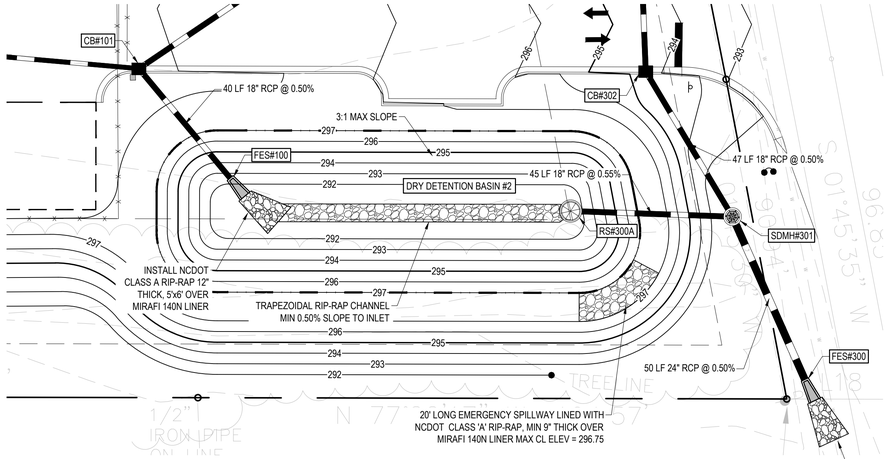
SCM PLAN & SECTIONS I

205 S. Fayetteville Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
NC LIC. NO. P-0793

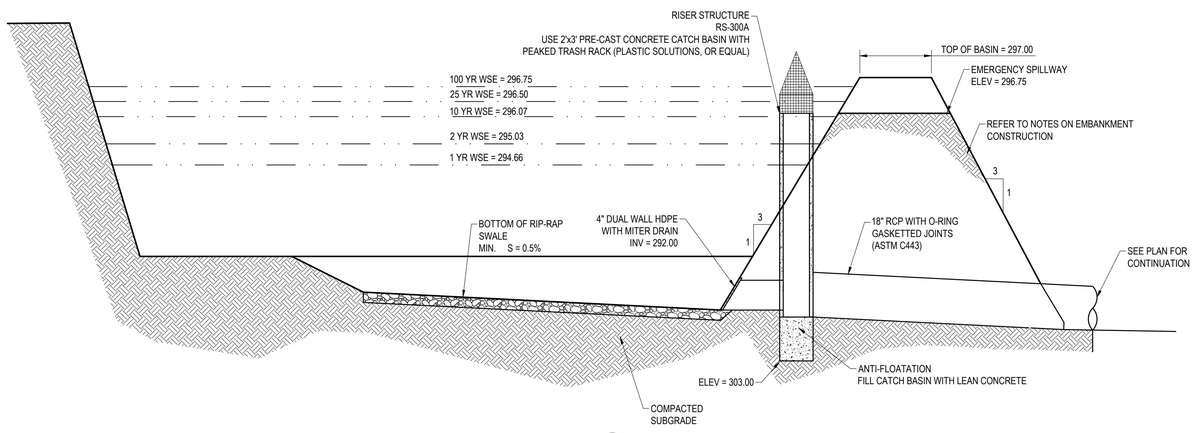
Curry ENGINEERING

C-06

Z:\PROJECTS FOLDER\ZEBULON\2020\020-023 BRAXTON JONES - 5595 NC 210 - ANGIER\PLANS\SITE PLAN\SHEET FILES\C-06 SCM PLAN & SECTIONS I.DWG
PLOTTED: 2/1/2022 9:54 AM



1 / C-07 SCM LAYOUT
SCALE: 1"=20'



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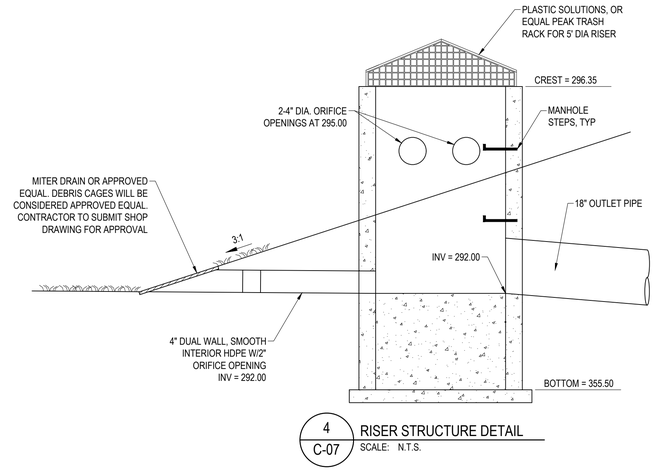
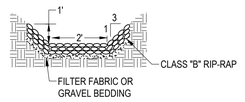


4 / C-07 RISER STRUCTURE DETAIL
SCALE: N.T.S.



STONE CLASSIFICATION	RIP RAP DEPTH
A	12"
B	18"
CLASS 1	24"
CLASS 2	24"-36"

3 / C-07 RIP-RAP CHANNEL
SCALE: N.T.S

NOT FOR CONSTRUCTION

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DONALD L. CURRY, JR.

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

REVISIONS
1 10/2/2021 HARNETT CO COMMENTS
2 2/21/2022 HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO: 2020-023
HORZ. SCALE: 1"=20'
ORIG. SHEET SIZE: 24 x 36

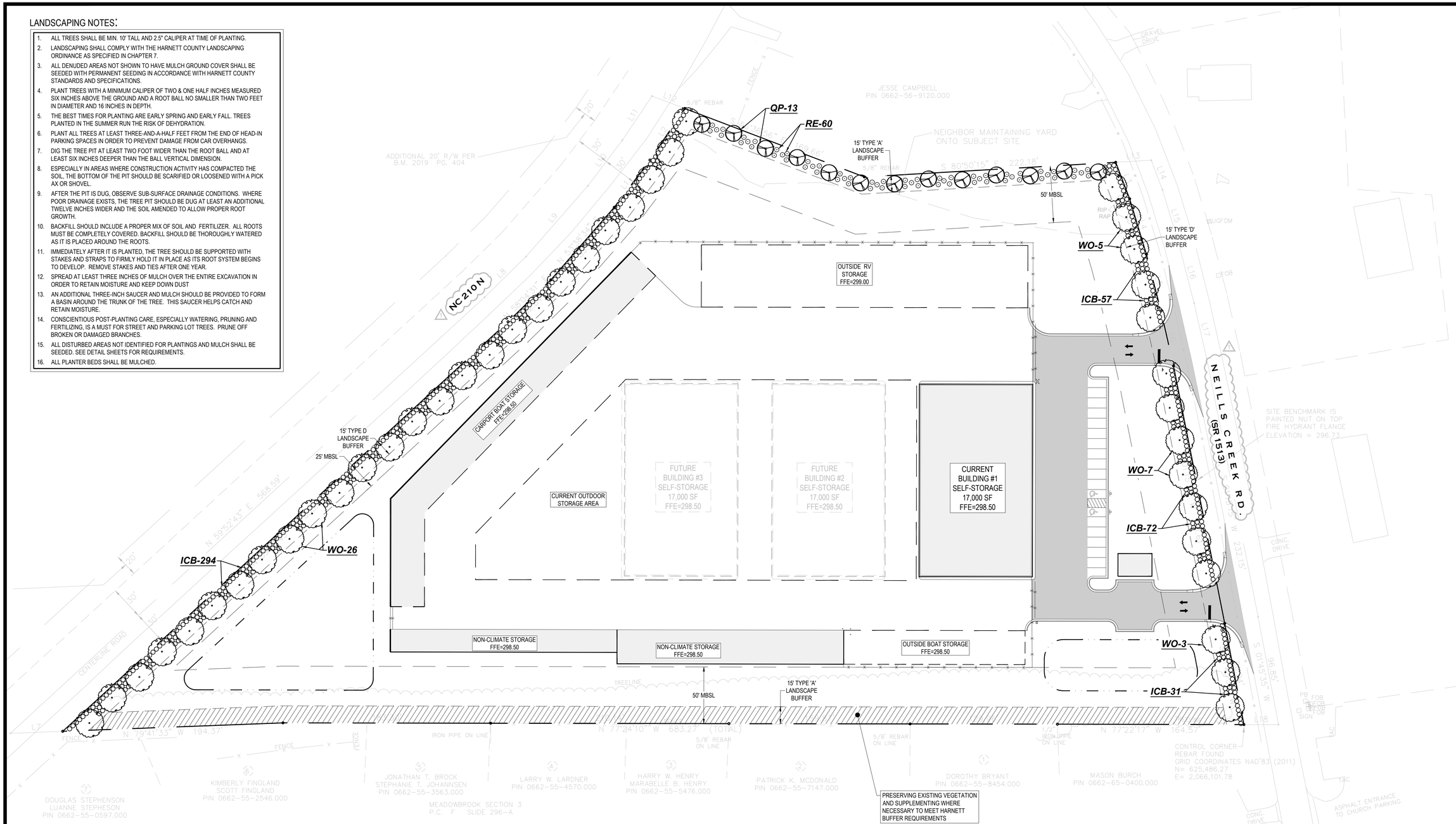
LAKESIDE SELF-STORAGE - HARNETT COUNTY
SCM PLAN & SECTIONS II

205 S. Fayuse Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
ENGINEERS OF CAPE FEAR EST. NORTH CAROLINA
NC LIC. NO. P-0789
Curry ENGINEERING

C-07

LANDSCAPING NOTES:

1. ALL TREES SHALL BE MIN. 10' TALL AND 2.5" CALIPER AT TIME OF PLANTING.
2. LANDSCAPING SHALL COMPLY WITH THE HARNETT COUNTY LANDSCAPING ORDINANCE AS SPECIFIED IN CHAPTER 7.
3. ALL DENUDED AREAS NOT SHOWN TO HAVE MULCH GROUND COVER SHALL BE SEEDED WITH PERMANENT SEEDING IN ACCORDANCE WITH HARNETT COUNTY STANDARDS AND SPECIFICATIONS.
4. PLANT TREES WITH A MINIMUM CALIPER OF TWO & ONE HALF INCHES MEASURED SIX INCHES ABOVE THE GROUND AND A ROOT BALL NO SMALLER THAN TWO FEET IN DIAMETER AND 16 INCHES IN DEPTH.
5. THE BEST TIMES FOR PLANTING ARE EARLY SPRING AND EARLY FALL. TREES PLANTED IN THE SUMMER RUN THE RISK OF DEHYDRATION.
6. PLANT ALL TREES AT LEAST THREE-AND-A-HALF FEET FROM THE END OF HEAD-IN PARKING SPACES IN ORDER TO PREVENT DAMAGE FROM CAR OVERHANGS.
7. DIG THE TREE PIT AT LEAST TWO FOOT WIDER THAN THE ROOT BALL AND AT LEAST SIX INCHES DEEPER THAN THE BALL VERTICAL DIMENSION.
8. ESPECIALLY IN AREAS WHERE CONSTRUCTION ACTIVITY HAS COMPACTED THE SOIL, THE BOTTOM OF THE PIT SHOULD BE SCARIFIED OR LOOSENED WITH A PICK AX OR SHOVEL.
9. AFTER THE PIT IS DUG, OBSERVE SUB-SURFACE DRAINAGE CONDITIONS. WHERE POOR DRAINAGE EXISTS, THE TREE PIT SHOULD BE DUG AT LEAST AN ADDITIONAL TWELVE INCHES WIDER AND THE SOIL AMENDED TO ALLOW PROPER ROOT GROWTH.
10. BACKFILL SHOULD INCLUDE A PROPER MIX OF SOIL AND FERTILIZER. ALL ROOTS MUST BE COMPLETELY COVERED. BACKFILL SHOULD BE THOROUGHLY WATERED AS IT IS PLACED AROUND THE ROOTS.
11. IMMEDIATELY AFTER IT IS PLANTED, THE TREE SHOULD BE SUPPORTED WITH STAKES AND STRAPS TO FIRMLY HOLD IT IN PLACE AS ITS ROOT SYSTEM BEGINS TO DEVELOP. REMOVE STAKES AND TIES AFTER ONE YEAR.
12. SPREAD AT LEAST THREE INCHES OF MULCH OVER THE ENTIRE EXCAVATION IN ORDER TO RETAIN MOISTURE AND KEEP DOWN DUST.
13. AN ADDITIONAL THREE-INCH SAUCER AND MULCH SHOULD BE PROVIDED TO FORM A BASIN AROUND THE TRUNK OF THE TREE. THIS SAUCER HELPS CATCH AND RETAIN MOISTURE.
14. CONSCIENTIOUS POST-PLANTING CARE, ESPECIALLY WATERING, PRUNING AND FERTILIZING, IS A MUST FOR STREET AND PARKING LOT TREES. PRUNE OFF BROKEN OR DAMAGED BRANCHES.
15. ALL DISTURBED AREAS NOT IDENTIFIED FOR PLANTINGS AND MULCH SHALL BE SEEDED. SEE DETAIL SHEETS FOR REQUIREMENTS.
16. ALL PLANTER BEDS SHALL BE MULCHED.



PLANTING SCHEDULE:

KEY	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SIZE	HEIGHT
TREES						
WO	41	Quercus phellos	WILLOW OAK	B&B	2.5" CAL	10' MIN.
QP	13	Quercus palustris	PIN OAK	B&B	2.5" CAL	10' MIN.
SHRUBS						
RE	60	Rhododendron eriocarpum	AZALEA, DWARF INDICA	GAL.	3 GAL.	18" MIN.
ICB	454	Ilex cornuta 'Burfordii Nana'	DWARF BURFORD HOLLY	GAL.	3 GAL.	24" MIN.

LEGEND:

- WILLOW OAK, Quercus Phellos (WO)
- PIN OAK, Quercus Palustris (QP)
- AZALEA, Dwarf Indica (RE)
- DWARF BURFORD HOLLY, Ilex cornuta 'Burfordii Nana' (ICB)

SCALE: 1 IN = 40 FT

40' 20' 0 40' 80'

SCALE IN FEET HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER
DONALD L. CURRY, JR.

REVISIONS

1	10/2/2021	HARNETT CO. COMMENTS
2	2/21/2022	HARNETT & NCDOT EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: 1" = 40'
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
LANDSCAPE PLAN

205 S. Fayetteville Avenue
Fuquay-Varina, NC 27526
T (919) 552-0449
F (919) 552-2043
NC LIC: NO. P-0799
Curry ENGINEERING

C-08

Z:\PROJECTS FOLDER-PZEL\LONG\2020\2020-023 BRANTON JONES - 5595 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\CIVIL\LANDSCAPE PLAN.DWG
PLOTTED: 2/1/2022 9:55 AM

2020 HRW REQUIRED UTILITY NOTES
(Revision B – March 2020)

The following utility notes should be added to the coversheet of utility plans for projects located in Harnett County:

WATER

A. The Fire Marshal's Office shall approve all hydrant types and locations in new subdivisions. However, Harnett Regional Water (HRW) prefers the contractors to install one of the following fire hydrants:
1. Mueller - Super Centurion 250 A-423 model with a 5¼" main valve opening three way (two hose nozzles and one pumper nozzle);
2. American Darling - Mark B-84-B model with a 5¼" main valve opening three way (two hose nozzles and one pumper nozzle);
3. Waterous - Pacer B-67-250 model with a 5¼" main valve opening three way (two hose nozzles and one pumper nozzle) or approved equal for standardization.

B. Fire hydrants are installed at certain elevations. Any grade change near any fire hydrant, which impedes its operation, shall become the responsibility of the Utility Contractor for correction. Corrections will be monitored by the HRW Utility Construction Inspector and the Harnett County Fire Marshal.

C. The Professional Engineer (PE) shall obtain and provide the NCDEQ "Authorization to Construct" permit to the Utility Contractor before the construction of the water line shall begin. The Utility Contractor must post a copy of the NCDEQ "Authorization to Construct" permit issued by the North Carolina Department of Environmental Quality (NCDEQ) on site prior to the start of construction. The permit must be maintained on site throughout the entire construction process of the proposed water lines that will serve this project.

D. The Utility Contractor shall notify Harnett Regional Water (HRW) and the Professional Engineer (PE) at least two days prior to construction commencing. The Utility Contractor must schedule a pre-construction conference with Mr. Alan Moss, HRW Utility Construction Inspector at least two (2) days before construction will begin and the Utility Contractor must coordinate with HRW for regular inspection visitations and acceptance of the water system(s). Construction work shall be performed only during the normal working hours of HRW which is 8:00 am – 5:00 pm Monday through Friday. Holiday and weekend work is not permitted by HRW.

E. The Professional Engineer (PE) shall provide HRW and the Utility Contractor with a set of NCDEQ approved plans marked "Released for Construction" at least two days prior to construction commencing. The Registered Land Surveyor (RLS) should stake out all lot corners and the grade stakes for the proposed finish grade for each street before the Utility Contractor begins construction of the water line(s). The grade stakes should be set with a consistent offset from the street centerline so as not to interfere with the street grading and utility construction.

F. The Utility Contractor shall provide the HRW Utility Construction Inspector with material submittals and shop drawings for all project materials prior to the construction of any water line extension(s), and associated water services in Harnett County. The materials to be used on the project must meet the established specifications of HRW and be approved by the Engineer of Record prior to construction. All substandard materials or materials not approved for use in Harnett County found on the project site must be removed immediately when notified by the HRW Utility Construction Inspector.

G. The water main(s), fire hydrants, service lines, meter setters and all associated appurtenances shall be constructed in strict in accordance with the standard specifications of the Harnett Regional Water (HRW). The Utility Contractor shall be responsible to locate the newly installed water main(s), water service lines and all associated meter setters and meter boxes for other utility companies and their contractors until the new water main(s) have been approved by the North Carolina Department of Environmental Quality, Division of Environmental Health, Public Water Supply Section (NCDEQ, DEH, PWS) and accepted by HRW.

H. Prior to acceptance, all services will be inspected to insure that they are installed at the proper depth. All meter boxes must be flush with the ground level at finish grade and the meter setters must be a minimum of 8" below the meter box lid. Meter setters shall be centered in the meter box and supported by brick, block or stone.

I. The Utility Contractor shall provide the Professional Engineer (PE) and HRW Utility Construction Inspector with a set of red line drawings identifying the complete water system installed for each project. The red line drawings should identify the materials, pipe sizes and approximate depths of the water lines as well as the gate valves, fire hydrants, meter setters, blow off assemblies and all associated appurtenances for all water line(s) constructed in Harnett County. The red line drawings should clearly identify any deviations from the NCDEQ approved plans. All change orders must be approved by HRW and the Professional Engineer (PE) in writing and properly documented in the red line field drawings.

J. Potable water mains crossing other utilities and non-potable water lines (sanitary sewer, storm sewer, RCP, etc.) shall be laid to provide a minimum vertical distance of twenty-four (24") inches between the potable water main and all other utilities. NCDOT requires the new water mains to be installed under the storm water lines. The potable water main shall be installed with twenty-four (24") inches of vertical separation and with ductile iron pipe when designed to be placed under a non-potable water line such as sanitary sewer or storm sewer lines. If these separations cannot be maintained then the water main shall be installed with ductile iron pipe. Both the potable water main and the non-potable water line must be cast iron or ductile iron pipe (DIP) if the state minimum separations cannot be maintained. The ductile iron pipe must be laid so the mechanical joints are at least (10') feet from the point where the potable water main crosses the non-potable water line.

K. Potable water mains installed parallel to non-potable water lines (sanitary sewer, storm sewer, RCP, etc.) shall be laid to provide a minimum horizontal distance of ten (10') feet between the potable water main and sanitary sewer mains, sewer laterals and services. The horizontal separation between the potable water main and any other utility or storm sewer shall not be less than five (5') feet. The potable water main must be ductile iron pipe if this horizontal separation of ten (10') feet cannot be maintained. The ductile iron pipe shall extend at least ten (10') feet beyond the point where the minimum required horizontal separation of ten (10') feet can be re-established.

L. Meter setters shall be installed in pairs on every other lot line where possible to leave adequate space for other utilities to be installed at a later time. The meter setters shall be installed at least one (1') foot inside the right-of-way and at least three (3') to five (5') feet from the property line between the lots.

M. HRW requires that meter boxes for ¾" services shall be 12" wide x 17" long ABS plastic boxes at least 18" in height with cast iron lids/covers. Meter boxes for 1" services shall be 17" wide x 21" long ABS plastic boxes at least 18" in height with plastic lids and cast iron flip covers in the center of the lids. Meter boxes for 2" services shall be 20" wide x 32" long ABS plastic boxes at least 20" in height with plastic lids and cast iron flip covers in the center of the lids.

N. Master meters must be installed in concrete vaults sized for the meter assembly and associated appurtenances so as to provide at least eighteen (18") inches of clearance between the bottom of the concrete vault and the bottom of the meter setter. The master meter must be provided test ports if the meter is not equipped with test ports from the manufacturer in accordance with the HRW established standard specifications and details. Ductile iron pipe must be used for the master meter vault piping and valve vault piping. The Utility Contractor must provide shop drawings for the meter vaults to HRW prior to ordering the concrete vaults.

O. The Utility Contractor will install polyethylene SDR-9 water service lines that cross under the pavement inside a schedule 40 PVC conduit to allow for removal and replacement in the future. Two (2) independent ¾" water service lines may be installed inside one (1) – two (2") inch schedule 40 PVC conduit or two (2) independent 1" water service lines may be installed inside one (1) – three (3") inch schedule 40 PVC conduit, but each water service shall be tapped directly to the water main. Split services are not allowed by HRW. If sidewalks are proposed, the conduit must extend past the sidewalk.

P. The water main(s), fire hydrants, gate valves, service lines, meter setters and associated appurtenances must be rated for 200 psi and hydrostatically pressure tested to 200 psi. The hydrostatic pressure test(s) must be witnessed by the HRW Utility Construction Inspector. The Utility Contractor must notify HRW when they are ready to begin filling in lines and coordinate with Harnett Regional Water to witness all pressure testing.

Q. The Utility Contractor shall conduct a pneumatic pressure test using compressed air or other inert gas on the stainless steel tapping sleeve(s) prior to making the tap on the existing water main. This pneumatic pressure test must be witnessed by the HRW Utility Construction Inspector. The Utility Contractor shall use Romac brand stainless steel tapping sleeve(s) or approved equal for all taps made in Harnett County. All new water line extensions must begin with a resilient wedge type gate valve sized equal to the diameter of the new water line extension in order to provide a means of isolation between Harnett Regional Water's existing water mains and the new water line extensions under construction.

R. All water mains will be constructed with SDR-21 PVC Pipe or Class 50 Ductile Iron Pipe rated for at least 200 psi or greater. All pipes must be protected during loading, transport, unloading, staging, and installation. PVC pipe must be protected from extended exposure to sunlight prior to installation.

S. All water mains will be flushed and disinfected in strict accordance with the standard specifications of the Harnett Regional Water. All water samples collected for bacteria testing will be collected by the HRW Utility Construction Inspector and tested in the HRW Laboratory.

T. All fittings larger than two (2") inches diameter shall be ductile iron. HRW requires that mechanical joints be assembled with grip rings as "Megalug" fittings are not approved by Harnett Regional Water for pipe sizes smaller than twelve inches (12") diameter. PVC pipe used for water mains shall be connected by slip joint or mechanical joint with grip rings. Glued pipe joints are not allowed on PVC pipe used for water mains in Harnett County.

U. HRW requires that the Utility Contractor install tracer wire in the trench with all water lines. The tracer wire shall be 12 ga. insulated, solid copper conductor and it shall be terminated at the top of the valve boxes or manholes. No spliced wire connections shall be made underground on tracer wire installed in Harnett County. The tracer wire may be secured with duct tape to the top of the pipe before backfilling.

V. The Utility Contractor will provide Professional Engineer (PE) and the HRW Utility Construction Inspector with a set of red line field drawings to identify the installed locations of the water line(s) and all associated services. All change orders must be pre-approved by HRW and the Professional Engineer (PE) in writing and properly documented in the red line field drawings.

W. The Utility Contractor shall spot dig to expose each utility pipe or line which may conflict with construction of proposed water line extensions well in advance to verify locations of the existing utilities. The Utility Contractor shall provide both horizontal and vertical clearances to the Professional Engineer (PE) to allow the PE to adjust the water line design in order to avoid conflicts with existing underground utilities. The Utility Contractor shall coordinate with the utility owner and be responsible for temporary relocation and/or securing existing utility poles, pipes, wires, cables, signs and/or utilities including services in accordance with the utility owner requirements during water line installation, grading and street construction.

X. Prior to the commencement of any work within established utility easements or NCDOT right-of-ways the Utility Contractor is required to have a signed NCDOT encroachment agreement posted on site and notify all concerned utility companies in accordance with G.S. 87-102. The Utility Contractor must call the NC One Call Center at 811 or (800) 632-4949 to verify the location of existing utilities prior to the beginning of construction. Existing utilities shown in these plans are taken from maps furnished by various utility companies and have not been physically located or verified by the P.E. (i.e. TELEPHONE, CABLE, WATER, SEWER, ELECTRICAL POWER, FIBER OPTIC, NATURAL GAS, ETC.). The Utility Contractor will be responsible to repair any and all damages to the satisfaction of the related utility company.

Y. The Utility Contractor shall provide HRW with at least one (1) fire hydrant wrench and one (1) break-away flange kit for every subdivision with fire hydrants developed in Harnett County. These items must be provided to HRW before the final inspection will be scheduled by the HRW Utility Construction Inspector. In addition, the Utility Contractor shall install a 4" x 4" concrete valve marker at the edge of the right-of-way to identify the location of each gate valve installed in the new water system with the exception of the fire hydrant isolation valves. The contractor shall measure the distance from the center of the concrete marker to the center of the valve box. This distance (in linear feet) shall be stamped on the brass plate located on the top of the concrete valve marker. In lieu of installing the concrete valve markers, the Utility Contractor may provide at least two measurements from two independent permanent above ground structures to the Professional Engineer (PE) in the red line drawings to identify the valve locations. The Professional Engineer (PE) must include these measurements in the As-Built Record Drawings submitted to HRW.

Z. The Utility Contractor will be responsible for any and all repairs due to leakage damage from poor workmanship during the one (1) year warranty period once the water system improvements have been accepted by Harnett Regional Water. Harnett Regional Water will provide maintenance and repairs when requested and bill the Developer and/or Utility Contractor if necessary due to lack of response within 48 hours of notification of warranty work. The Utility Contractor will be responsible for any and all repairs due to damages resulting from failure to locate the new water lines and associated appurtenances for other utilities and their contractors until the water lines have been approved by NCDEQ and accepted by HRW. The final inspection of water system improvements cannot be scheduled with HRW until the streets have been paved; the rights-of-way and utility easements have been seeded and stabilized with an adequate stand of grass in place to prevent erosion issues on site.

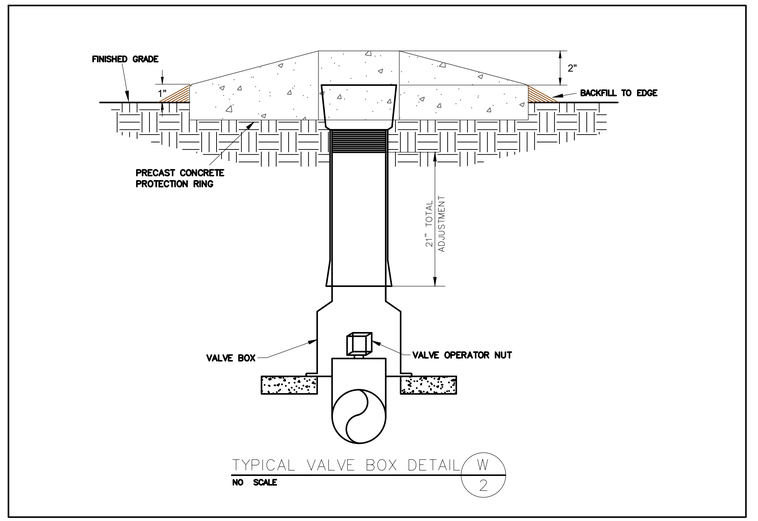
AA The Engineer of Record is responsible to insure that construction is, at all times, in compliance with accepted sanitary engineering practices and approved plans and specifications. No field changes to the approved plans are allowed without prior written approval by HRW. A copy of each engineer's field report is to be submitted to HRW as each such inspection is made on system improvements or testing is performed by the contractor. Water and sewer infrastructure must pass all tests required by HRW specifications and those of all applicable regulatory agencies. These tests include, but are not limited to: air test, vacuum test, mandrel test, visual test, pressure test, bacteriological test, etc. A HRW Inspector must be present during testing and all test results shall be submitted to HRW. All tests must be satisfied before the final inspection will be scheduled with the HRW Inspector. The Engineer of Record must request in writing to schedule the final inspection once all construction is complete. The Developer's Engineer of Record and the HRW Utility Construction Inspector shall prepare a written punch list of any defects or deficiencies noted during the final inspection, should any exist. Upon completion of the punch list, the Developer's Engineer of Record will schedule another inspection. In the event the number of inspections performed by the HRW exceeds two, additional fees may be accessed to the Developer.

SANITARY SEWER

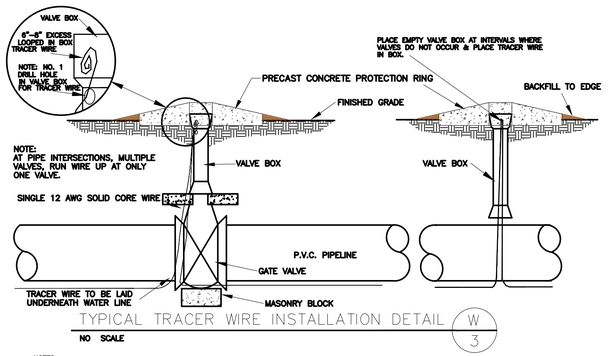
A. The Professional Engineer (PE) shall obtain and supply a copy of the sewer permit for the construction and operation of the wastewater collection system to the Utility Contractor before the construction of the sanitary sewer line, sewer lift station and associated force main shall begin. The Utility Contractor must post a copy of the sewer permit issued by the North Carolina Department of Environmental Quality (NCDEQ) on site prior to the start of construction. The permit must be maintained on site during the construction of the sewer system improvements.

B. The Utility Contractor shall notify Harnett Regional Water (HRW) and the Professional Engineer (PE) at least two days prior to construction commencing. The Utility Contractor must schedule a pre-construction conference with Mr. Alan Moss, HRW Utility Construction Inspector at least two (2) days before construction will begin and the Utility Contractor must coordinate with HRW for regular inspection visitations and acceptance of the wastewater system(s). Construction work shall be performed only during the normal working hours of HRW which is 8:00 am – 5:00 pm Monday through Friday. Holiday and weekend work is not permitted by HRW.

C. The Professional Engineer (PE) shall provide HRW with a set of NCDEQ approved plans marked "Released for Construction" at least two days prior to construction commencing. HRW will stamp the approved plans as "Released for Construction" and provide copies to the utility contractor. The Registered Land Surveyor (RLS) shall stake out all lot corners and establish grade stakes for the proposed finish grade for each street and sewer line before the Utility Contractor begins construction or installation of the manholes, sanitary sewer gravity line(s), sewer lift stations and/or sanitary sewer force main(s). The grade stakes should be set with a consistent offset from the street

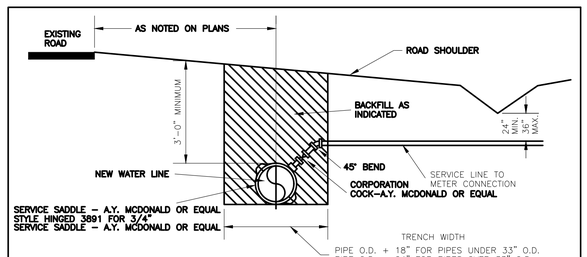


TYPICAL VALVE BOX DETAIL W-2
NO SCALE



TYPICAL TRACER WIRE INSTALLATION DETAIL W-3
NO SCALE

NOTES:
1. DRILL HOLE IN VALVE BOX TO INSERT TRACER WIRE,BRING UP TO INSIDE AND ROLL UP AT LEAST 6"–8" EXCESS
2. PLACE TRACER WIRE IN VALVE BOX AT 1,000' INTERVALS OR AS NOTED ON THE PLANS, TYPICAL.
3. DO NOT SPLICE WIRE WHEN BEGINNING A NEW SPOOL. INSTEAD INSTALL A VALVE BOX AND ATTACH EACH WIRE WITH A BRASS SCREW TO THE VALVE BOX.



NOTE:
1. "SERVICE CONNECTION" IN PROPOSAL TO INCLUDE SERVICE SADDLE, 45° BEND, CORPORATION COCK AND ALL LABOR INVOLVED IN MAKING A COMPLETE SERVICE CONNECTION.
2. SERVICE PIPING TO BE 3/4" SDR–9 PE TUBING
3. ALL BRASS FITTINGS SHALL BE COMPRESSION TYPE

TYPICAL WATER SERVICE CONNECTION USING TAPPING SADDLE DETAIL W-13
NO SCALE

NOT FOR CONSTRUCTION

REVISIONS		
1	10/22/2021	HARNETT COUNTY COMMENTS
2	2/01/2022	HARNETT & HOKE CO. COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: NONE
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
UTILITY DETAILS I

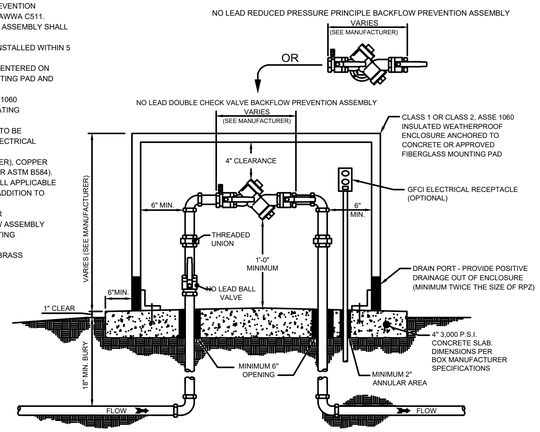
SEAL
PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 041139 RONALD L. CURRY, JR. ENGINEER

Curry ENGINEERING
205 S. Fayette Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
CURRY ENGINEERING CORPORATION EST. NORTH CAROLINA
NC LIC. NO. P-0789

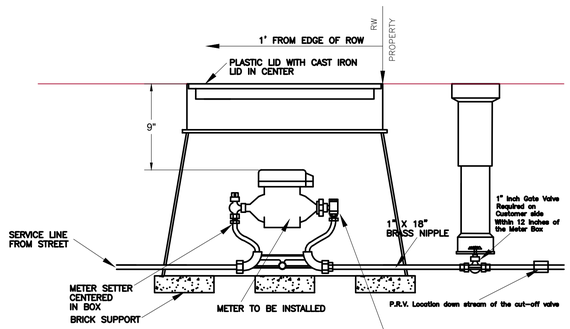
D-01

Z:\PROJECTS FOLDER-PZB\LIVING\2020\2020-023 BRANTON JONES - 5595 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\D-01 UTILITY DETAILS I.DWG
PLOTTED: 2/1/2022 9:55 AM

NOTES:
1. REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1013 & AWWA C511.
2. DOUBLE CHECK VALVE BACKFLOW PREVENTION ASSEMBLY SHALL COMPLY WITH ASSE 1015 & AWWA C510.
3. BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED WITHIN 5 FEET OF THE METER BOX.
4. BACKFLOW PREVENTION ASSEMBLY SHALL BE CENTERED ON CONCRETE OR APPROVED FIBERGLASS MOUNTING PAD AND CENTERED WITHIN ENCLOSURE.
5. MINIMUM INSULATED CLASS I OR CLASS II, ASSE 1060 WEATHERPROOF ENCLOSURE REQUIRED (HEATING OPTIONAL).
6. OPTIONAL 120V GFCI ELECTRICAL RECEPTACLE TO BE INSTALLED IN ACCORDANCE WITH THE N.C. ELECTRICAL CODE FOR OUTDOOR OPERATION.
7. PIPE MATERIAL SHALL BE PVC (SCH. 80 OR BETTER), COPPER (TYPE K), OR 'NO LEAD' BRASS (UNS C89833 PER ASTM B584).
8. INSTALLATION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE TOWN ORDINANCES AND SPECIFICATIONS IN ADDITION TO THE N.C. PLUMBING CODE.
9. PROPERTY OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE AND OPERATION OF BACKFLOW ASSEMBLY AND COMPLIANCE WITH REPORTING AND TESTING REQUIREMENTS.
10. ALL BRASS COMPONENTS SHALL BE 'NO LEAD' BRASS MEETING UNS C89833 AS PER ASTM B584.



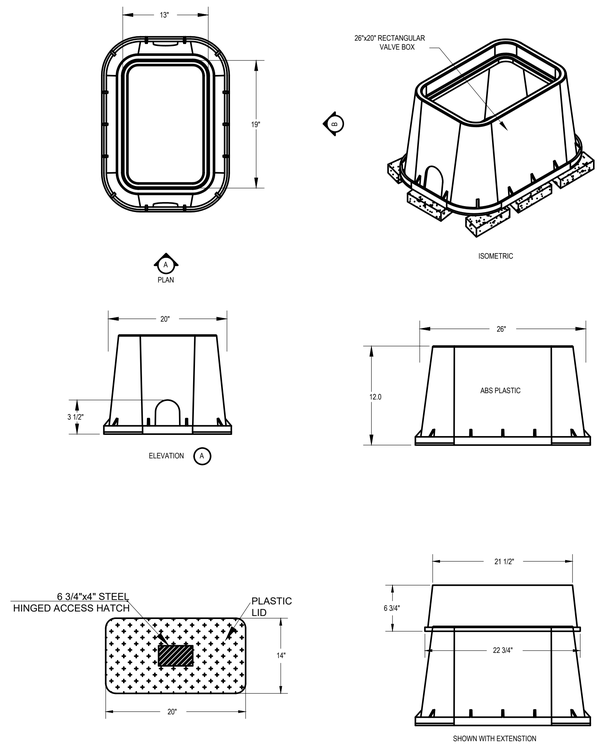
STANDARD 1" to 2" COMMERCIAL OUTDOOR BACKFLOW ASSEMBLY



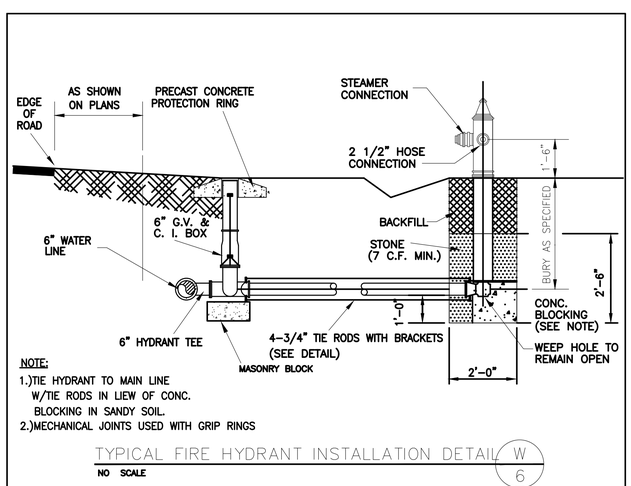
1. METER AND PRIVATE SERVICE LINE NOT IN CONTRACT UNLESS SPECIFIED
2. INCLUDE STONE IN PRICE OF METER BOX.
3. METER SETTER SIZE AS NOTED ON PLANS.
4. ALL BRASS FITTINGS SHALL BE COMPRESSION TYPE.

METER SETTER WITH DOUBLE CHECK VALVE (BACKFLOW PREVENTER)

TYPICAL 1" METER SETTER INSTALLATION DETAIL W 16
NO SCALE



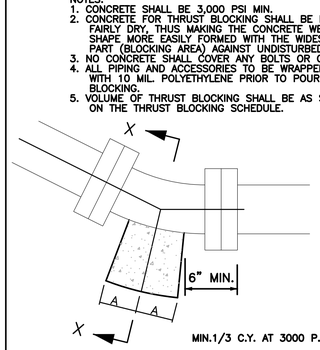
TYPICAL METER BOX DETAIL FOR 1" SERVICE W 17
NO SCALE

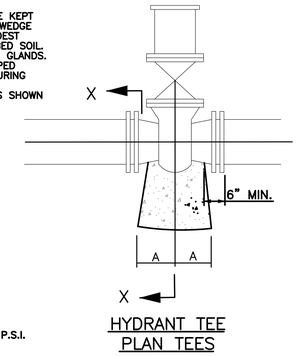


NOTE:
1.)TIE HYDRANT TO MAIN LINE W/TIE RODS IN LIEW OF CONC. BLOCKING IN SANDY SOIL.
2.)MECHANICAL JOINTS USED WITH GRIP RINGS

TYPICAL FIRE HYDRANT INSTALLATION DETAIL W 6
NO SCALE

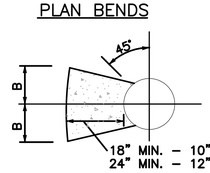
NOTES:
1. CONCRETE SHALL BE 3,000 PSI MIN.
2. CONCRETE FOR THRUST BLOCKING SHALL BE KEPT FAIRLY DRY, THUS MAKING THE CONCRETE WEDGE SHAPE MORE EASILY FORMED WITH THE WIDEST PART (BLOCKING AREA) AGAINST UNDISTURBED SOIL.
3. NO CONCRETE SHALL COVER ANY BOLTS OR GLANDS.
4. ALL PIPING AND ACCESSORIES TO BE WRAPPED WITH 10 MIL. POLYETHYLENE PRIOR TO POURING BLOCKING.
5. VOLUME OF THRUST BLOCKING SHALL BE AS SHOWN ON THE THRUST BLOCKING SCHEDULE.

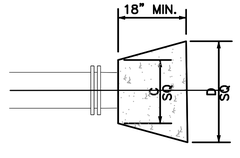




HYDRANT TEE PLAN TEES

PLAN BENDS





PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE			PLUG	
	A	B	A	B	A	B	A	B	A	B		C	D
4"	8"	12"	8"	8"	6"	6"	6"	6"	8"	9"		10"	16"
6"	10"	12"	8"	10"	8"	8"	8"	8"	10"	10"		12"	18"
8"	15"	13"	10"	10"	8"	8"	8"	8"	10"	12"		12"	24"
10"	16"	14"	10"	12"	6"	10"	6"	10"	11"	14"		14"	25"
12"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"		16"	30"
14"	22"	18"	14"	16"	10"	14"	10"	14"	16"	18"		18"	34"
16"	26"	20"	16"	18"	12"	16"	12"	16"	18"	20"		20"	36"

TYPICAL THRUST BLOCK DETAIL W 7
NO SCALE

REVISIONS
1	10/2/2021	HARNETT & NCDOT EC COMMENTS
2	2/21/2022	HARNETT & NCDOT EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ. SCALE: NONE
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

UTILITY DETAILS II

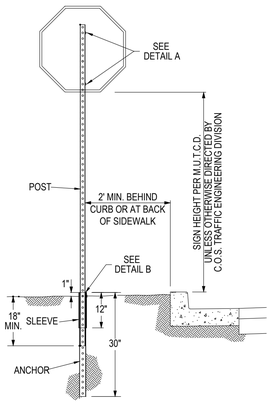
205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
NC LIC. NO. P-0793

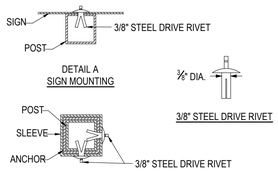
Curry ENGINEERING

D-02

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049102 DONALD L. CURRY JR.
PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NOT FOR CONSTRUCTION



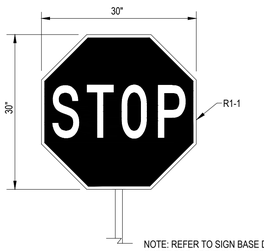


DETAIL B
ANCHOR ASSEMBLY

NOTES:

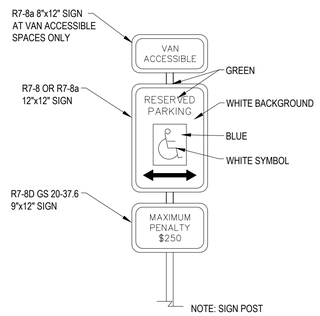
1. POST - 1-3/4" X 1-3/4" SQUARE PERFORATED 0.105" GALVANIZED STEEL TUBING
2. SLEEVE - 2-1/4" X 2-1/4" X 12", SQUARE PERFORATED 0.105 GALVANIZED STEEL TUBING
3. ANCHOR - 2" X 2" X 30", SQUARE PERFORATED 0.105" GALVANIZED STEEL TUBING
4. STOP SIGNS & STREET SIGN SHALL BE INSTALLED ON SAME POST.

1 / D-03 SIGN INSTALLATION DETAIL
SCALE: NTS



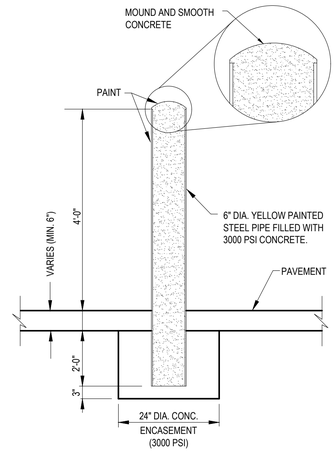
NOTE: REFER TO SIGN BASE DETAIL THIS SHEET FOR ADDITIONAL INFO AND INSTALLATION DETAILS

2 / D-03 STOP SIGN
SCALE: NTS

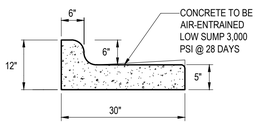


NOTE: SIGN POST DETAIL THIS SHEET

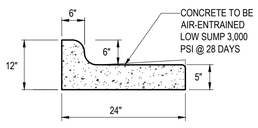
3 / D-03 ACCESSIBLE PARKING SIGNAGE
SCALE: NTS



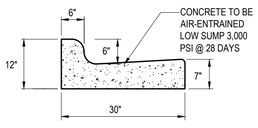
4 / D-03 BOLLARD
SCALE: NTS



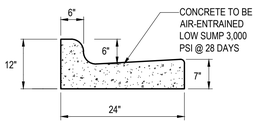
30" SPILL LIP
NOT TO SCALE



24" SPILL LIP
NOT TO SCALE



30" C&G
NOT TO SCALE

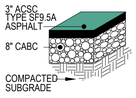


24" C&G
NOT TO SCALE

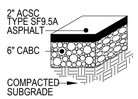
5 / D-03 CURB AND GUTTER
SCALE: NTS

PAVEMENT SECTIONS - PRIVATE DEVELOPMENT

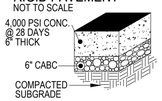
HEAVY DUTY FLEXIBLE PAVEMENT
NOT TO SCALE



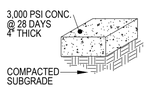
LIGHT DUTY FLEXIBLE PAVEMENT
NOT TO SCALE



DUMPSTER PAD & LOADING AREA HEAVY DUTY RIGID PAVEMENT
NOT TO SCALE

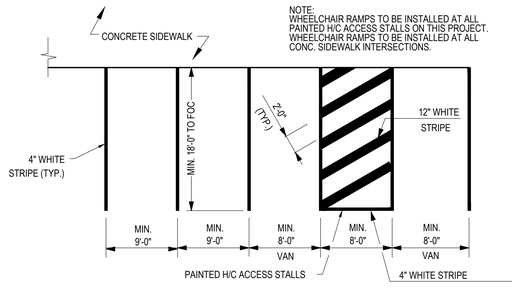


SIDEWALKS & H.C. RAMPS LIGHT DUTY RIGID PAVEMENT
NOT TO SCALE



*NOTE THAT THE HEAVY DUTY FLEXIBLE PAVEMENT MAY BE MODIFIED AT THE OWNER'S DISCRETION.

6 / D-03 PAVEMENT SECTIONS - PRIVATE ROADWAYS & PARKING LOTS
SCALE: NTS



7 / D-03 90 DEG. HANDICAP STALLS - TYPICAL
SCALE: NTS

REVISIONS

1	10/2/2021	HARNETT CO. COMMENTS
2	2/07/2022	HARNETT & NCDOT EC COMMENTS

DATE: 7/2021 | HORZ. SCALE: NONE
FILE NO.: 2020-023 | ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

SITE DETAILS

Curry ENGINEERING
205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0789

SEAL

PRELIMINARY
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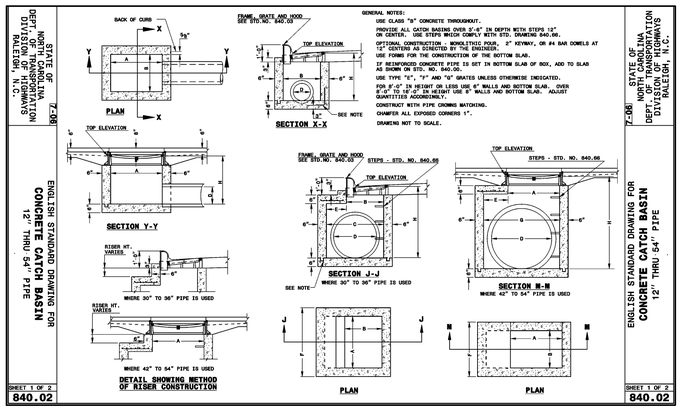
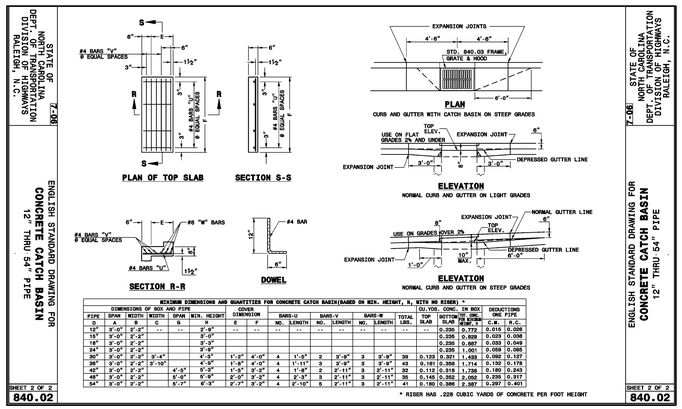
NOT FOR CONSTRUCTION

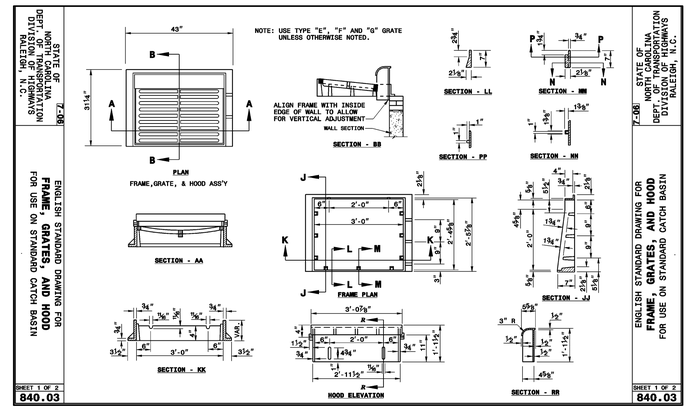
D-03



1 D-04 CONCRETE CATCH BASIN 1 of 2
SCALE: NTS



2 D-04 CONCRETE CATCH BASIN 2 OF 2
SCALE: NTS



3 D-04 FRAME, GRATES, AND HOOD 1 OF 2
SCALE: NTS

4 D-04 FRAME, GRATES, AND HOOD 2 OF 2
SCALE: NTS

5 D-04 CONCRETE DROP INLET
SCALE: NTS

6 D-04 DROP INLET FRAME & GRATE
SCALE: NTS

TABLE OF DIMENSIONS							
D	T	A	B	C	E	L	WT.
12"	2-1/4"	4"	2'-0"	4'-1"	2'-0"	6'-1"	730
15"	2-1/4"	5"	2'-3"	3'-10"	2'-0"	6'-1"	730
18"	2-1/2"	9"	2'-3"	3'-10"	3'-0"	6'-1"	1190
24"	3"	10"	3'-8"	2'-6"	4'-0"	6'-2"	1770
30"	3-1/2"	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"	2380
36"	4"	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	5320
42"	4-1/2"	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	5920
48"	5"	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	7470
54"	5-1/2"	2'-3"	5'-6"	2'-10"	7'-6"	8'-4"	8810
60"	6"	2'-6"	5'-0"	3'-3"	8'-0"	8'-3"	11180
66"	6-1/2"	3'-0"	6'-0"	2'-3"	8'-6"	8'-3"	12530
72"	7"	3'-0"	6'-6"	1'-9"	9'-0"	8'-3"	13980

GENERAL NOTES:

1. SEE FORMER NCDOT STANDARD 310.01 FOR DETAILS.
2. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M170, TABLE 2, WALL B.
3. ALL CONCRETE TO BE 3600 P.S.I COMPRESSIVE STRENGTH.
4. PROVIDE TONGUE OR SPIGOT JOINT AT INLET END SECTION.
5. PROVIDE GROOVE OR BELL JOINT AT OUTLET END SECTION.
6. THE DIMENSIONS FOR END SECTIONS SHALL SUBSTANTIALLY AGREE WITH THE TABLE. MINOR VARIATIONS WILL BE PERMITTED BASED ON THE MANUFACTURER'S STANDARD FORMS AND TEMPLATES.
7. NOT TO BE USED IN NCDOT MAINTAINED RIGHT OF WAY.

7 D-04 FLARED END SECTION
SCALE: NTS

REVISIONS		
1	10/2/2021	HARNETT & KIDDER EC COMMENTS
2	2/21/2022	

DATE: 7/2021
FILE NO: 2020-023
HORZ SCALE: NONE
ORIG SHEET SIZE: 24 x 36

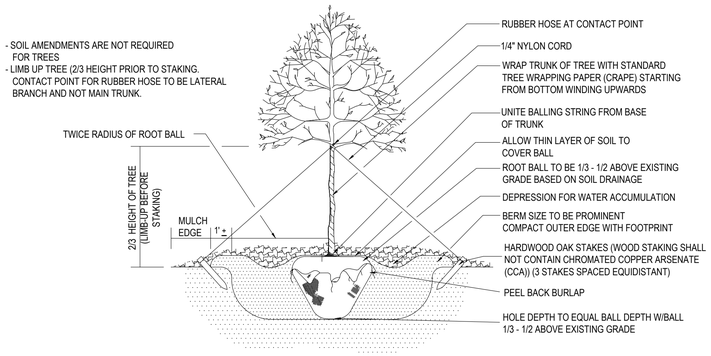
LAKESIDE SELF-STORAGE - HARNETT COUNTY
STORM DRAINAGE DETAILS

NOT FOR CONSTRUCTION

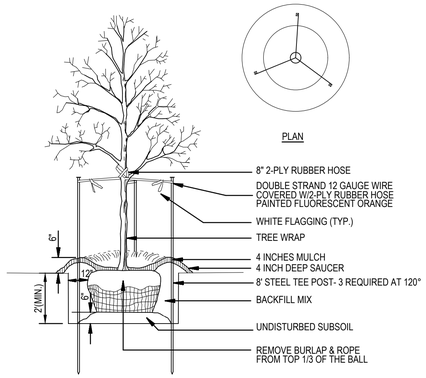
SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER DONALD L. CURRY
PRELIMINARY
DO NOT USE FOR CONSTRUCTION
DONALD L. CURRY, PE

Curry ENGINEERING
205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0789

D-04

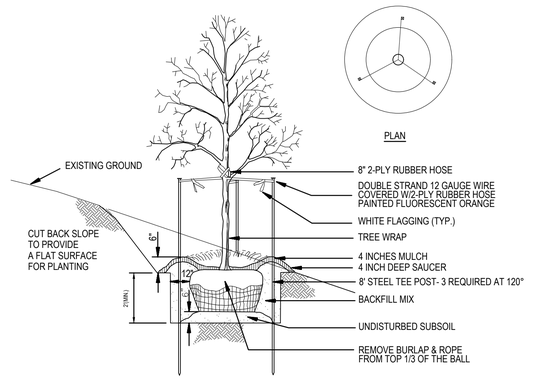


1 / D-05 TREE STAKING & PLANTING DETAIL
SCALE: NTS



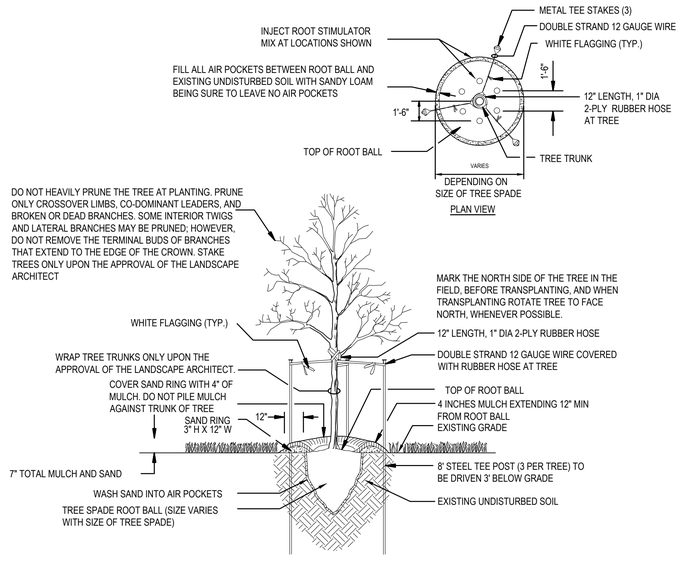
NOTE: SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

2 / D-05 TREE PLANTING
SCALE: NTS



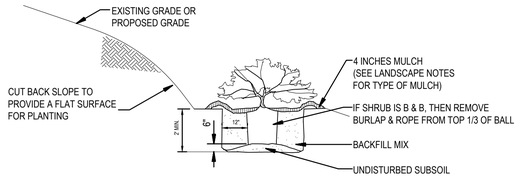
NOTE: SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.

3 / D-05 TREE PLANTING ON SLOPE
SCALE: NTS

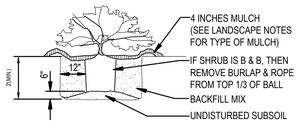


NOTE: PLANT TREE 2"-4" ABOVE GRADE

4 / D-05 MACHINE DUG TREE PLANTING
SCALE: NTS



5 / D-05 SHRUB PLANTING ON SLOPE
SCALE: NTS



5 / D-05 SHRUB PLANTING
SCALE: NTS

NOTE:

1. PLANT TREES WITH A MINIMUM CALIPER OF TWO INCHES MEASURED SIX INCHES ABOVE THE GROUND AND A ROOT BALL NO SMALLER THAN TWO FEET IN DIAMETER AND 16 INCHES IN DEPTH.
2. THE BEST TIMES FOR PLANTING ARE EARLY SPRING AND EARLY FALL. TREES PLANTED IN IN THE SUMMER RUN THE RISK OF DEHYDRATION.
3. PLANT ALL TREES AT LEAST THREE-AND-A-HALF FEET FROM THE END OF HEAD-IN PARKING SPACES IN ORDER TO PREVENT DAMAGE FROM CAR OVERHANGS.
4. DIG THE TREE PIT AT LEAST TWO FOOT WIDER THAN THE ROOT BALL AND AT LEAST SIX INCHES DEEPER THAN THE BALL VERTICAL DIMENSION.
5. ESPECIALLY IN AREAS WHERE CONSTRUCTION ACTIVITY HAS COMPACTED THE SOIL, THE BOTTOM OF THE PIT SHOULD BE SCARIFIED OR LOOSENED WITH A PICK AX OR SHOVEL.
6. AFTER THE PIT IS DUG, OBSERVE SUB-SURFACE DRAINAGE CONDITIONS. WHERE POOR DRAINAGE EXISTS, THE TREE PIT SHOULD BE DUG AT LEAST AN ADDITIONAL TWELVE INCHES WIDER AND THE SOIL AMENDED TO ALLOW ROOTS GROW PROPERLY.
7. BACKFILL SHOULD INCLUDE A PROPER MIX OF SOIL AND FERTILIZER. ALL ROOTS MUST BE COMPLETELY COVERED. BACKFILL SHOULD BE THOROUGHLY WATERED AS IT IS PLACED AROUND THE ROOTS.
8. IMMEDIATELY AFTER IT IS PLANTED, THE TREE SHOULD BE SUPPORTED WITH STAKES AND STRAPS TO FIRMLY HOLD IT IN PLACE AS ITS ROOT SYSTEM BEGINS TO DEVELOP. REMOVE STAKES AND TIES AFTER ONE YEAR.
9. SPREAD AT LEAST THREE INCHES OF MULCH OVER THE ENTIRE EXCAVATION IN ORDER TO RETAIN MOISTURE AND KEEP DOWN WEEDS. AN ADDITIONAL THREE-INCH SAUCER AND MULCH SHOULD BE PROVIDED TO FORM A BASIN AROUND THE TRUNK OF THE TREE. THIS SAUCER HELPS CATCH AND RETAIN MOISTURE.
10. CONSCIENTIOUS POST-PLANTING CARE, ESPECIALLY WATERING, PRUNING AND FERTILIZING, IS A MUST FOR STREET AND PARKING LOT TREES. PRUNE OFF BROKEN OR DAMAGED BRANCHES.

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

REVISIONS
1 10/21/2021 HARNETT CO COMMENTS
2 2/21/2022 HARNETT & NCDOS EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: NONE
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
LANDSCAPE DETAILS

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
NC LIC. NO. P-0193

Curry ENGINEERING

D-05

NOTES:

1. THE TEMPORARY DIVERSION DITCHES, SILT FENCE, AND LIMITS OF DISTURBANCE SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTATION OF THE ACTUAL EROSION CONTROL MEASURES THAT SHALL BE INSTALLED UNDER THIS PROJECT. DUE TO SCALE OF THIS DRAWING, THESE MEASURES ARE GRAPHICALLY DEPICTED AND MAY BE BEYOND WHERE THEY ACTUALLY WILL BE INSTALLED IN THE FIELD.
2. TOTAL DISTURBED AREA = 8.50 AC.
3. REFER TO DETAIL SHEETS FOR CONSTRUCTION SEQUENCE, EROSION CONTROL NARRATIVE, MAINTENANCE NOTES, STABILIZATION INSTRUCTIONS & EROSION CONTROL DETAILS.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT NCDEQ STANDARDS AND REGULATIONS.
5. THERE SHALL BE NO DISTURBANCE OUTSIDE THE LIMITS SHOWN ON THIS PLAN WITHOUT AN APPROVED PLAN AMENDMENT BY NCDEQ.
6. ALL DISTURBED AREAS SHALL BE SEEDED PER STABILIZATION TABLE.
7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SELF-INSPECTION LOG.
8. PERMANENT GROUNDCOVER WILL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS (WHICHEVER IS SHORTER).

NPDES STABILIZATION TABLE

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length
All other areas with slopes fatter than 4:1	14 days	None, except for perimeters and HQW Zones

LEGEND:

- CONSTRUCTION ENTRANCE/EXIT
- SEDIMENT BASIN
- STOCKPILE
- SILT FENCE OUTLET
- ROCK CHECK DAM
- TEMP. SEED/MULCH/PERM. SEED
- OUTLET PROTECTION
- COIR WATTLE
- DIVERSION DITCH
- INLET PROTECTION
- HORSESHOE INLET PROTECTION
- CONCRETE WASH AREA
- SILT FENCE
- TREE PROTECTION FENCE
- DISTURBANCE LIMITS

SILT FENCE

TEMPORARY DIVERSION DITCH (TDD)

NC 210 N

TDD-A

INSTALL NCDOT CL. "B" RIP-RAP TO SEDIMENT BASIN

INSTALL PERM. RISER AND CONNECT SKIMMER AS SHOWN

SILT FENCE OUTLET

TDD-B

TDD-C

TDD-D

TEMP. 18" HDPE DRIVEWAY PIPE (TDD DRAINAGE)

TEMP. 18" HDPE DRIVEWAY PIPE (DITCH DRAINAGE)

CONCRETE WASHOUT AREA (MIN. 50' FROM DITCH)

CONSTRUCTION ENTRANCE

STRAW WATTLE IN DITCH

NEILLS CREEK RD. (SR 1513)

ROCK CHECK DAM

INSTALL TEMP. 18" HDPE TO DRAIN THROUGH SEDIMENT BASIN BERM

BAFFLES (TYP.)

SKIMMER

INSTALL PERM RISER & CONNECT TO SKIMMER AS SHOWN

INSTALL TEMP. 18" HDPE TO DRAIN THROUGH SEDIMENT BASIN BERM

LIMITS OF DISTURBANCE

JESSE CAMPBELL PIN 0662-56-9120.000

KIMBERLY FINGLAND SCOTT FINGLAND PIN 0662-55-2546.000

DOUGLAS STEPHENSON LUANNE STEPHESON PIN 0662-55-0597.000

JONATHAN T. BROCK STEPHANIE T. JOHANNSEN PIN 0662-55-3563.000

LARRY W. LARDNER PIN 0662-55-4570.000

HARRY W. HENRY MARABELLE B. HENRY PIN 0662-55-5476.000

PATRICK K. MCDONALD PIN 0662-55-7147.000

DOROTHY BRYANT PIN 0662-55-8454.000

MASON BURCH PIN 0662-65-0400.000

MEADOWBROOK SECTION 3 P.C. F SLIDE 296-A

TEMPORARY DIVERSION DITCH SCHEDULE

DITCH DESIGNATION	DRAINAGE AREA (AC)	RUNOFF COEFFICIENT	Q10 (CFS)	AVG. SLOPE (%)	FLOW DEPTH (FT)	VELOCITY (FPS)	SHAPE	GEOMETRY (FT)	LINING MATERIAL
A	0.61	0.50	2.18	2.7%	0.44	1.74	TRAPEZOIDAL	b=2', d=18", m=2:1	STRAW w/ NET
B	1.49	0.50	5.30	0.5%	0.76	1.99	TRAPEZOIDAL	b=2', d=18", m=2:1	STRAW w/ NET
C	2.30	0.50	8.15	0.5%	0.94	2.24	TRAPEZOIDAL	b=2', d=18", m=2:1	STRAW w/ NET
D	2.07	0.50	7.36	0.5%	0.89	2.18	TRAPEZOIDAL	b=2', d=18", m=2:1	STRAW w/ NET

SKIMMER SEDIMENT BASIN (1)

MINIMUM DEPTH: 2.0'
VOLUME REQUIRED = 4,983 CF
SURFACE AREA REQUIRED = 4,275 SF
SURFACE AREA PROVIDED = 8,930 SF
TOP OF BASIN ELEVATION = 295.00
SURFACE AREA ELEVATION = 293.00
BOTTOM OF BASIN ELEVATION = 291.00
CLEANOUT ELEVATION = 292.00

EMERGENCY SPILLWAY LENGTH = 15'
EMERGENCY SPILLWAY ELEVATION = 294.00
SKIMMER SIZE = 2 INCH, 1.75 INCH ORIFICE
DEWATERING TIME = 3.05 DAYS

SKIMMER SEDIMENT BASIN (2)

MINIMUM DEPTH: 2.0'
VOLUME REQUIRED = 8,773 CF
SURFACE AREA REQUIRED = 7,526 SF
SURFACE AREA PROVIDED = 7,744 SF
TOP OF BASIN ELEVATION = 296.00
SURFACE AREA ELEVATION = 294.00
BOTTOM OF BASIN ELEVATION = 292.00
CLEANOUT ELEVATION = 293.00

EMERGENCY SPILLWAY LENGTH = 20'
EMERGENCY SPILLWAY ELEVATION = 295.00
SKIMMER SIZE = 3 INCH, 1.75 INCH ORIFICE
DEWATERING TIME = 4.28 DAYS

SCALE: 1 IN = 40 FT
40' 20' 0 40' 80'
SCALE IN FEET HORIZONTAL

BEFORE YOU DIG CALL TOLL FREE 1 800 632 4949
NORTH CAROLINA ONE-CALL CENTER

NOT FOR CONSTRUCTION

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036161 DONALD L. CURRY, JR.
PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NO.	DATE	REVISIONS
1	10/01/2021	HARNETT CO COMMENTS
2	2/01/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: 1"=40'
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EROSION CONTROL PLAN - INITIAL PHASE

205 S. Fayetteville Avenue
Fuquay-Varina, NC 27526
T (919) 552-0449
F (919) 552-2043
NC LIC. NO. P-0789
Curry ENGINEERING

EC-01

Z:\PROJECTS FOLDER-ZEBULON\2020\2020-023 BRAXTON JONES - 5595 NC 210 - ANDERSEN ANSWER\ANSWER LAKESIDE\1 FILES\EC-01 EROSION CONTROL PLAN - INITIAL PHASE.DWG

NOTES:

1. THE TEMPORARY DIVERSION DITCHES, SILT FENCE, AND LIMITS OF DISTURBANCE SHOWN ON THIS PLAN ARE GRAPHICAL REPRESENTATION OF THE ACTUAL EROSION CONTROL MEASURES THAT SHALL BE INSTALLED UNDER THIS PROJECT. DUE TO SCALE OF THIS DRAWING, THESE MEASURES ARE GRAPHICALLY DEPICTED AND MAY BE BEYOND WHERE THEY ACTUALLY WILL BE INSTALLED IN THE FIELD.
2. TOTAL DISTURBED AREA = 8.50 AC.
3. REFER TO DETAIL SHEETS FOR CONSTRUCTION SEQUENCE, EROSION CONTROL NARRATIVE, MAINTENANCE NOTES, STABILIZATION INSTRUCTIONS & EROSION CONTROL DETAILS.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CURRENT NCDEQ STANDARDS AND REGULATIONS.
5. THERE SHALL BE NO DISTURBANCE OUTSIDE THE LIMITS SHOWN ON THIS PLAN WITHOUT AN APPROVED PLAN AMENDMENT BY NCDEQ.
6. ALL DISTURBED AREAS SHALL BE SEEDED PER STABILIZATION TABLE.
7. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SELF-INSPECTION LOG.
8. PERMANENT GROUNDCOVER WILL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 15 WORKING DAYS OR NO MORE THAN 90 CALENDAR DAYS (WHICHEVER IS SHORTER).

NPDES STABILIZATION TABLE

SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS
Perimeter dikes, swales, ditches and slopes	7 days	None
High Quality Water (HQW) Zones	7 days	None
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length
All other areas with slopes fatter than 4:1	14 days	None, except for perimeters and HQW Zones

LEGEND:

- CONSTRUCTION ENTRANCE/EXIT
- SEDIMENT BASIN
- STOCKPILE
- SILT FENCE OUTLET
- ROCK CHECK DAM
- TEMP. SEED/MULCH/PERM. SEED
- OUTLET PROTECTION
- COIR WATTLE
- DIVERSION DITCH
- INLET PROTECTION
- HORSESHOE INLET PROTECTION
- CONCRETE WASH AREA
- SILT FENCE
- TREE PROTECTION FENCE
- DISTURBANCE LIMITS

NORTH DITCH-A
V-DITCH, M=3:1
Q10=1.43 CFS
V10=1.90 FPS
NO PERM. LINER NEEDED
INSTALL SYNTHETIC MAT AS TEMP LINER
IMMEDIATELY UPON CONSTRUCTION

WEST DITCH-B
V-DITCH, M=3:1
Q10=0.61 CFS
V10=1.34 FPS
NO PERM. LINER NEEDED
INSTALL SYNTHETIC MAT AS TEMP LINER
IMMEDIATELY UPON CONSTRUCTION

NC 210 N

CONCRETE WASHOUT AREA (MIN. 50' FROM DITCH)

INLET PROTECTION

CONSTRUCTION ENTRANCE

INSTALL SYNTHETIC NET MATTING IN EXISTING DITCH BETWEEN FES #304 & #305

CURRENT BUILDING #1 SELF-STORAGE 17,000 SF FFE=298.50

HORSESHOE INLET PROTECTION

NO CONSTRUCTION TRAFFIC

NEILLS CREEK RD. (SR 1513)

SILT FENCE OUTLET

SILT FENCE

SILT FENCE

LIMITS OF DISTURBANCE

NOTES:

KIMBERLY FINGLAND
SCOTT FINGLAND
PIN 0662-55-2546.000

JONATHAN T. BROCK
STEPHANIE T. JOHANNSEN
PIN 0662-55-3563.000

LARRY W. LARDNER
PIN 0662-55-4570.000

HARRY W. HENRY
MARABELLE B. HENRY
PIN 0662-55-5476.000

PATRICK K. MCDONALD
PIN 0662-55-7147.000

DOROTHY BRYANT
PIN 0662-55-8454.000

MASON BURCH
PIN 0662-65-0400.000

DOUGLAS STEPHENSON
LUANNE STEPHESON
PIN 0662-55-0597.000

MEADOWBROOK SECTION 3
P.C. F SLIDE 296-A

BEFORE YOU DIG
CALL TOLL FREE
1 800 632 4949

NORTH CAROLINA
ONE-CALL CENTER

SCALE: 1 IN = 40 FT

40' 20' 0 40' 80'

SCALE IN FEET
HORIZONTAL

NOT FOR CONSTRUCTION

SEAL

NORTH CAROLINA PROFESSIONAL ENGINEER DONALD L. CURRY

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

1	10/2/2021	HARNETT CO COMMENTS
2	2/21/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO: 2020-023
HORZ SCALE: 1"=40'
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EROSION CONTROL PLAN - CONSTRUCTION PLAN

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0789
Curry ENGINEERING

EC-02

Z:\PROJECTS FOLDER\ZEBULON\2020\2020-023 BRANTON JONES - 5556 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\EC-02 EROSION CONTROL PLAN - CONSTRUCTION PLAN.DWG

EROSION CONTROL NOTES

1. THE CONTRACTOR SHALL AT A MINIMUM IMPLEMENT THE CONTRACTOR'S REQUIREMENTS OUTLINED BELOW AND THOSE MEASURES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN. IN ADDITION THE CONTRACTOR SHALL UNDERTAKE ADDITIONAL MEASURES REQUIRED TO BE IN COMPLIANCE WITH APPLICABLE PERMIT CONDITIONS AND STATE WATER QUALITY STANDARDS.
2. TOTAL DISTURBANCE LIMITS = 8.50 ACRES.
3. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN IN THE PLAN IS A VIOLATION OF THE NORTH CAROLINA SEDIMENTATION CONTROL LAW & IS SUBJECT TO A FINE.
4. GRADING MORE THAN 1 ACRE WITHOUT AN APPROVED EROSION CONTROL PLAN IS A VIOLATION OF THE THE NORTH CAROLINA SEDIMENTATION CONTROL LAW AND IS SUBJECT TO A FINE.
5. ALL EROSION CONTROL PRACTICES SHALL BE IN ACCORDANCE WITH ALL NCDENR STANDARDS AND SPECIFICATIONS.
8. CONSTRUCTION ENTRANCES SHALL BE MAINTAINED THROUGHOUT THE ENTIRE CONSTRUCTION PROJECT. A MINIMUM OF ONE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AND UTILIZED. THIS ENTRANCE SHALL BE BETWEEN THE LIMITS OF DISTURBANCE AND ANY ROAD RIGHT OF WAY.
9. ADJACENT PROPERTIES AND RIGHT-OF-WAY SHALL BE KEPT FREE OF MUD AND/OR SEDIMENT-LADEN RUNOFF.
10. THE EROSION CONTROL MEASURES SHOWN ON THIS PLAN ARE RECOMMENDED AS A MINIMUM IN ORDER TO CONTROL RUN-OFF. IT IS POSSIBLE THAT MORE STRINGENT MEASURES MAY BE NEEDED AS DETERMINED BY THE CONTRACTOR, PROJECT ENGINEER, AND/OR EROSION CONTROL INSPECTOR. IF IT IS DETERMINED THAT ADDITIONAL RUN-OFF CONTROL IS NEEDED, SUCH MEASURES SHALL BE INSTALLED IMMEDIATELY.
11. SHOULD MAINTENANCE ISSUES ARISE, PLEASE CONTACT JOHN AUTON AT 919-369-9872.
12. CONTRACTOR SHALL LOCATE AND VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING WORK.

EROSION & SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO CLEAR & GRUB AND MASS GRADING FOR A SELF-STORAGE FACILITY. THE PROPERTY IS PRIVATELY OWNED. SEE OWNER INFORMATION ON EXISTING CONDITIONS PLAN. THE SITE IS CURRENTLY UNDEVELOPED.

APPROXIMATELY 8.50 ACRES WILL BE DISTURBED DURING CONSTRUCTION. THE MAXIMUM FILL WILL BE APPROX. 6 FEET AND THE MAXIMUM CUT WILL BE APPROX. 6 FEET. THIS PROJECT WILL INVOLVE REMOVAL OF TOPSOIL AND WIDESPREAD EARTHWORK TO FACILITATE INFRASTRUCTURE INSTALLATION TO SERVE THE FACILITY. AN UNDERGROUND STORM DRAINAGE SYSTEM WILL BE INSTALLED TO CONVEY STORMWATER TO PERMANENT STORMWATER MANAGEMENT AREAS.

THE PROJECT IS SCHEDULED TO BEGIN CONSTRUCTION IN LATE FALL 2021 WITH PROJECT COMPLETION AND FINAL STABILIZATION BY SPRING 2022. THE EROSION AND SEDIMENT CONTROL PROGRAM FOR THIS PROJECT WILL INCLUDE THE INSTALLATION OF A SUITABLE CONSTRUCTION ENTRANCE, TEMPORARY SILT FENCING, SILT FENCE OUTLETS, DIVERSION DITCHES, INLET PROTECTION MEASURES AND SEDIMENT BASINS.

ADJACENT PROPERTY

ADJACENT PROPERTY OWNERS ARE NOTED ON THE EXISTING CONDITIONS PLAN.

NATIVE SOILS

THE SOILS AT THIS SITE ARE PREDOMINATELY LOAMY SANDS. SOILS ARE MOSTLY WELL DRAINED WITH Ksat RANGES FROM MODERATELY HIGH TO HIGH. SLOPES ARE LARGELY BETWEEN 0 TO 6%. SOILS ONSITE ARE FUQUAY (FaB) AND DOTHAM LOAMY SANDS (DoB).

CONSTRUCTION SEQUENCE:

1. OBTAIN A LAND-DISTURBING PERMIT FROM NCDENR.
2. SCHEDULE A PRECONSTRUCTION CONFERENCE WITH NCDENR AT LEAST ONE WEEK PRIOR TO START OF LAND DISTURBANCE.
3. CLEAR THE AREA NEEDED TO CONSTRUCT THE PROPOSED CONSTRUCTION ENTRANCE.
4. CONSTRUCT THE 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 SURFACE, IT IS TO BE REMOVED IMMEDIATELY.
5. CLEAR THE AREA NEEDED TO CONSTRUCT THE REMAINDER OF PERIMETER EROSION CONTROL MEASURES INCLUDING SILT FENCE, ROCKS CHECK DAMS, TEMPORARY DIVERSIONS, SKIMMER BASIN, AND OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. INSTALL PROPOSED DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
6. CLEAR AND INSTALL THE SKIMMER SEDIMENT BASIN. INSTALL COIR MESH BAFFLES, SKIMMER DEVICES, AND OTHER FEATURES AND STABILIZE IMMEDIATELY AFTER CONSTRUCTION. THE PERMANENT RISER STRUCTURES FOR THE FUTURE WET DETENTION BASINS SHALL BE INSTALLED AT THIS TIME.
7. CALL NCDENR FOR AN ONSITE INSPECTION BY THE ONSITE INSPECTOR TO OBTAIN A CERTIFICATE OF COMPLIANCE.
8. BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED.
9. ROUGH GRADE PARKING LOT, DRIVEWAY, AND GENERAL SITE.
10. CONSTRUCT UTILITIES THROUGHOUT PROJECT.
11. INSTALL STORM SEWER, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN.
12. CONTINUE WITH MASS GRADING OF SITE AND BEGIN CONSTRUCTION, BUILDING, ETC.
13. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDED AREAS WITHIN 7 OR 14 DAYS OF COMPLETION OF ANY PHASE OF CONSTRUCTION.
14. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL NCDENR ON SITE INSPECTOR.
15. IF SITE IS APPROVED AND ALL UPSTREAM AREAS ARE STABILIZED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. EXISTING STORM DRAINAGE SYSTEM SHALL BE CLEANED OF ANY SEDIMENT.
16. GRADE BMP AND REMOVE SKIMMER. STABILIZE ALL GRADING FROM BMP EXCAVATION.
17. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ONSITE INSPECTOR. OBTAIN A CERTIFICATE OF COMPLETION.
18. SUBMIT NOTICE OF TERMINATION TO NCDENR.

- INSPECTOR REFERS TO NORTH CAROLINA LAND QUALITY INSPECTOR OR HIS REPRESENTATIVE, FIELD INSPECTIONS MAY REQUIRE ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS DEEMED NECESSARY BY THE INSPECTOR.
- CONSTRUCTION AND MAINTENANCE OF ALL EROSION CONTROL DEVICES SHALL CONFORM TO THE STANDARDS SET FORTH IN THE NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES LAND QUALITY SECTION: EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF EROSION CONTROL MEASURES DURING CONSTRUCTION AND THE OWNER IS RESPONSIBLE FOR ALL PERMANENT EROSION CONTROL METHODS AFTER CONSTRUCTION IS COMPLETE, IF ANY PERMANENT METHODS ARE REQUIRED.

MAINTENANCE/INSPECTION PROCEDURES

THE FOLLOWING ARE INSPECTION AND MAINTENANCE PRACTICES THAT WILL BE USED TO MAINTAIN EROSION AND SEDIMENT CONTROLS.

- ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATION OR SOMEONE APPOINTED BY THE SUPERINTENDENT, DAILY AND WITHIN 24 HOURS OF EVERY RAINFALL EVENT.
- SILT FENCE & FABRIC INLET PROTECTION: INSPECT FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND. BUILT UP SEDIMENT WILL BE REMOVED FROM SILT FENCE WHEN IT HAS REACHED ONE-THIRD THE HEIGHT OF THE FENCE.
- DIVERSION DIKES/SWALES: INSPECT AND ANY BREACHES PROMPTLY REPAIRED. SEDIMENT SHALL BE REMOVED FROM THE FLOW AREA IMMEDIATELY AFTER EACH RAINFALL
- TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT: MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOP-DRESSING WITH 2-3" STONE. AFTER A RAINFALL, IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO ROADWAYS.
- SEDIMENT BASIN: INSPECT AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT AND REPAIR IMMEDIATELY. REMOVE SEDIMENT AND RESTORE THE BASIN TO ITS ORIGINAL DIMENSIONS WHEN IT ACCUMULATES TO ONE-HALF THE DESIGN DEPTH. PLACE REMOVED SEDIMENT IN AN AREA WITH SEDIMENT CONTROLS. 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 RISER AND POOL AREA. REPAIR AND SKIMMERS AS NEEDED.
- INLET PROTECTION: 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.
- SEEDING, FERTILIZING, AND MULCHING: INSPECT SEEDED AREAS FOR FAILURE AND NECESSARY REPAIRS AND RE-SEEDING SHALL BE MADE WITHIN THE SAME SEASON. TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- MAINTAIN THE ON-SITE RAIN GAUGE & DATA AND STORMWATER INSPECTION LOG SHEETS. THIS PERMIT INFORMATION MUST BE COLLECTED AND MAINTAINED UNTIL NC DEMLR HAS CLOSED THE PROJECT & SURETY HAS BEEN RELEASED.
- THE CONTACT PERSON IS REQUIRED TO MAINTAIN A LOG OF SELF-INSPECTIONS PER REQUIREMENTS AS OUTLINED IN NCG01000 PERMIT. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION PLANS, OR STORMWATER MANAGEMENT PLANS. THIS PERMIT INFORMATION MUST BE COLLECTED AND MAINTAINED UNTIL NC DEMLR HAS CLOSED THE PROJECT.
- THE SITE SUPERINTENDENT WILL SELECT UP TO THREE INDIVIDUALS WHO WILL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORT.
- PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE. SUPERINTENDENT: THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ONSITE IN GOOD WORKING ORDER.
- GROUND STABILIZATION: SOIL STABILIZATION SHALL BE ACHIEVED ON ANY AREA OF A SITE WHERE LAND-DISTURBING ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED ACCORDING TO THE FOLLOWING SCHEDULE:
  - A. ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY.
  - B. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS POSSIBLE BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND-DISTURBING ACTIVITY

SEDIMENT & EROSION CONTROLS

IT IS THE CONTRACTORS RESPONSIBILITY TO IMPLEMENT THE EROSION AND SEDIMENT CONTROLS AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THESE CONTROLS ARE PROPERLY INSTALLED, MAINTAINED AND FUNCTIONING PROPERLY TO PREVENT POLLUTED WATER FROM LEAVING THE PROJECT SITE. THE CONTRACTOR WILL ADJUST THE EROSION CONTROLS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN AND ADD ADDITIONAL CONTROL MEASURES, AS REQUIRED, TO ENSURE THE SITE MEETS ALL FEDERAL, STATE AND LOCAL EROSION AND SEDIMENT CONTROL REQUIREMENTS. ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES BE TO THE STANDARDS OF THE NC DEPT. OF ENVIRONMENTAL MANAGEMENT - LAND QUALITY SECTION, LATEST EDITION.

STRUCTURAL PRACTICES

1. SILT FENCE (SEDIMENT FENCE): SILT FENCE CAN BE USED BELOW DISTURBED AREAS SUBJECT TO SHEET AND RILL EROSION. SILT FENCES SHALL BE PROVIDED WHERE SHOWN AND AS NEEDED ON THE SITE PLAN. THESE BARRIERS SHALL BE USED TO CONTAIN SEDIMENT.
2. SILT FENCE OUTLET: GRAVEL SILT FENCE OUTLETS SHALL BE PROVIDED WHERE SHOWN AND AS NEEDED ON THE SITE PLAN. THESE OUTLETS SHALL BE LOCATED AT ALL LOW POINTS IN A RUN OF SILT FENCE AND USED TO DISCHARGE "CLEAN WATER" OFF-SITE.
3. DIVERSION DITCHES: USE DIVERSION DITCHES TO CONVEY SEDIMENT LADEN RUNOFF TO EROSION CONTROL BMPS AS SHOWN ON THE PLANS.
4. CONSTRUCTION ENTRANCE: CONSTRUCTION TRAFFIC SHALL BE LIMITED TO STABILIZED AREAS. AT A MINIMUM, A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE SHALL BE PROVIDED AS SHOWN ON THIS DRAWING. VEHICLE WHEELS SHALL BE CLEAN WHEN LEAVING THE SITE TO PREVENT THE TRACKING OF MUD ON PAVED ROADS.
5. ROCK CHECK DAMS: ROCK CHECK DAMS CAN BE USED TO REDUCE EROSION IN A DRAINAGE CHANNEL TO LIMIT EROSION BY REDUCING VELOCITY IN OPEN CHANNELS.
6. SEDIMENT BASINS: SEDIMENT BASINS WITH SKIMMERS AND POROUS BAFFLES ARE USED TO RETAIN SEDIMENT ON THE CONSTRUCTION SITE, AND PREVENT SEDIMENTATION IN OFF-SITE STREAMS, LAKES, AND DRAINAGE WAYS
7. INLET PROTECTION: HARDWIRE CLOTH AND GRAVEL INLET PROTECTION DEVICES CAN BE USED PREVENT SEDIMENT FROM ENTERING YARD INLETS, GRATED STORM DRAINS OR DROP INLETS DURING CONSTRUCTION. THIS PRACTICE ALLOWS EARLY USE OF THE STORM DRAIN SYSTEM

VEGETATIVE PRACTICES

1. TEMPORARY SEEDING: DISTURBED AREAS THAT ARE NOT ANTICIPATED TO BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 7 OR 14 CALENDAR DAYS MUST RECEIVE TEMPORARY SEEDING (SEE NPDES TABLE). A QUICK GROWING GRASS SPECIES, WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING, SHOULD BE USED. TEMPORARY SEEDING SHALL BE PER WAKE COUNTY REQUIREMENTS.
2. TEMPORARY GRASSING: THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED OR HYDROMULCHED OR OTHER SUITABLE METHODS IF REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
3. TEMPORARY REGRASSING: IF, AFTER 14 DAYS FROM SEEDING, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75 PERCENT GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATIVE COVER. RESEED AND MULCH BARE SPOTS LARGER THAN 9 SQUARE FEET.
4. PERMANENT SEEDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL, AS A MINIMUM, BE SEEDED. PERMANENT SEEDING SHALL BE PER WAKE COUNTY REQUIREMENTS. IF GROWTH IS NOT ESTABLISHED BY FINAL PROJECT INSPECTION, CONTINUE SPECIFIED ATTENTION UNTIL THE STAND OF GRASS IS ACCEPTABLE.

MANAGEMENT STRATEGIES

1. STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORM WATER COLLECTION FACILITY. PER NCDWQ CONSTRUCTION GENERAL PERMIT REVISED AUGUST 4, 2011 ALL EARTHEN MATERIAL STOCKPILES MUST BE LOCATED 50' FROM STORM DRAINS AND STREAMS UNLESS NO OTHER REASONABLE ALTERNATIVE IS AVAILABLE.
2. RIP-RAP OUTLET PROTECTION: ALL RIP-RAP SHALL BE INSTALLED WITH FILTER FABRIC BENEATH.
3. SOIL DISPOSAL: DISPOSE OF ALL STOCKPILED MATERIAL TO AN APPROVED PERMITTED WAKE COUNTY DISPOSAL SITE.
4. DEWATERING: ALL TRENCH/PIT DEWATERING MUST DISCHARGE TO AN APPROVED S&EC MEASURE OR SILT SACK PRIOR TO LEAVING THE SITE.
5. PERMANENT EROSION CONTROL: THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON THE OFFSITE FACILITIES.

NOTIFICATION OF COMBINED SELF-MONITORING AND SELF-INSPECTION FORM:

THE SEDIMENTATION POLLUTION CONTROL ACT WAS AMENDED IN 2006 TO REQUIRE THAT 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, DWQ AND DEMLR DEVELOPED A COMBINED FORM. THE SELF-INSPECTION PROGRAM IS SEPARATE FROM THE WEEKLY SELF-MONITORING PROGRAM OF THE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITIES. THE FOCUS OF THE SELF-INSPECTION REPORT IS THE INSTALLATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROL MEASURES ACCORDING TO THE APPROVED PLAN. THE INSPECTIONS SHOULD BE CONDUCTED AFTER EACH PHASE OF THE PROJECT, AND CONTINUED UNTIL PERMANENT GROUND COVER IS ESTABLISHED. THE FORM CAN BE ACCESSED AT:
HTTP://PORTAL.NCDENR.ORG/WEB/LR/EROSION

IF YOU HAVE QUESTIONS OR CANNOT ACCESS THE FORM, PLEASE CONTACT THE FAYETTEVILLE REGIONAL OFFICE AT (910) 433-3300.

DUST CONTROL

VEGETATIVE COVER
FOR DISTURBED AREAS NOT SUBJECT TO TRAFFIC, VEGETATION PROVIDES THE MOST PRACTICAL METHOD OF DUST CONTROL.

MULCH
WHEN PROPERLY APPLIED, MULCH OFFERS A FAST, EFFECTIVE MEANS OF CONTROLLING DUST.

MAINTENANCE
MAINTAIN DUST CONTROL MEASURES THROUGH DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED.

DEMLR Monitoring Form Rev. 07012020

INSPECTION AND MONITORING RECORDS FOR ACTIVITIES UNDER STORMWATER GENERAL PERMIT NCG010000 AND SELF-INSPECTION RECORDS FOR LAND DISTURBING ACTIVITIES PER G.S. 113A-54.1

Project Name		**Land Quality or Local Program Project/Permit #**	
Approving Authority	**Date of Plan Approval**	**Expiration Date, if applicable**	
NCG010000 Certificate of Coverage Number		**Date of COC Issuance**	

Coverage under the NCG010000 permit must be renewed annually, if issued after April 1, 2019 until Notice of Termination is filed and approved.

PART 1A: Rainfall Data

	Rain Amount (inches) Daily Rainfall Required. If no rain, indicate with a "zero"
M	
T	
W	
Th	
F	
Sat (Inspection Optional)	
Sun (Inspection Optional)	

PART 1B: Phase(s) of the Plan

Check ALL applicable box(es) that apply to completed & current phases	X
Initial installation of erosion and sediment control measures	
Clearing and grubbing of existing ground cover	
Completion of any grading that requires ground cover	
Completion of all land-disturbing activity, construction or development	
Permanent ground cover sufficient to restrain erosion has been established	

Are there any site or project conditions that limit completion of inspection? If yes, explain conditions and areas of site that were inaccessible.	

DEMLR Monitoring Form Rev. 07012020

PART 2: STORMWATER PLANS AND CONTROLS: For each question below, mark the corresponding box as Yes, No or N/A. For all items marked "No", note in Part 3A the Reference letter and provide the Corrective Action and location of the deficiency, the original date noted, and the date it was noted as being corrected. NOTE: Reference letters may be used multiple times.

Reference	Part 2A: Storm Water Plans and Related Documents	Yes	No	N/A
A	Is the approval letter or certificate, COC and a copy of the NPDES Construction General Permit (CGP) on site? (Readily available electronic copy of CGP is acceptable)			
B	Is the approved plan on site and current?			
Reference	**Part 2B: Stormwater Pollutant Controls**	**Yes**	**No**	**N/A**
C	Are erosion and sediment controls that are shown on the approved plan installed and operating properly with no repairs needed?			
D	Are stormwater controls that are shown on the approved plan installed and operating properly with no repairs needed?			
E	Vehicle Tracking: Are construction entrances operating properly with no repairs needed?			
F	Soil Stabilization: Are areas of the site where construction activities have ceased been properly stabilized within the required timeframes?			
G	Are earthen stockpiles stabilized or otherwise protected from sediment loss, and located at least 50 feet away or downhill from drain inlets and surface waters?			
Reference	**Part 2C: Non-Storm Water Pollutant Controls**	**Yes**	**No**	**N/A**
H	Concrete, stucco, paint, etc. washouts: Are washouts installed, properly located, posted and operating with no repairs needed?			
I	Solid & hazardous wastes: Are trash, debris, and hazardous materials properly managed?			
J	Sanitary waste: Are portable toilets properly located and operating with no visible repairs needed?			
K	Equipment and stored fluids: Are fuels, lubricants, hydraulic fluids, etc. contained so as not to enter surface and ground waters?			
	Report oil spills and the release of hazardous substances to the appropriate DEQ Regional Office via phone call or email within 24 hours of discovery. https://deq.nc.gov/contact/regional-offices			

For any items listed in the section below, a full description of sedimentation is required in Part 3A. This includes, but may not be limited to: location, estimated amount of sediment that has left the site and/or entered waters, apparent causes of the sediment loss, and what corrective actions need to be taken to prevent this from recurring.

Reference	Part 2D: Sedimentation	Yes	No	N/A
L	Are sediment or other pollutants noted beyond the approved or permitted limits of disturbance?			
M	Are BMPs detected as releasing sediment or other pollutants into receiving waters?			
	Report visible sedimentation into streams or wetlands to the appropriate DEQ Regional Office via phone call or email within 24 hours of discovery. https://deq.nc.gov/contact/regional-offices			

DEMLR Monitoring Form Rev. 07012020

PART 3A: EROSION AND SEDIMENTATION CONTROL MEASURES: Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT EQUAL TO OR GREATER THAN 1.0 INCH PER 24 HOUR PERIOD. *Add rows as needed.*

Erosion and Sedimentation Control Measures Inspected			Inspection Date	Describe Actions Needed Corrective actions should be performed as soon as possible and before the next storm event	Date Previous Action(s) Observed as Corrected
Measure ID or Location and Description	Reference(s)	Operating Properly? (Y/N)			
Report unanticipated bypasses, or non-compliance conditions that may endanger health or the environment, to the appropriate DEQ Regional Office via phone call or email within 24 hours of discovery. https://deq.nc.gov/contact/regional-offices					

PART 3B: STORMWATER DISCHARGE OUTFALLS (SDOs): SDOs must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT EQUAL TO OR GREATER THAN 1.0 INCH PER 24 HOUR PERIOD. *Add rows as needed.*

Stormwater Discharge Outfalls Inspected					Inspection Date	Describe Actions Needed Corrective actions should be performed as soon as possible and before the next storm event	Date Previous Action(s) Observed as Corrected
Stormwater Discharge Outfall ID or Location	Any Visible Sedimentation in Streams, Wetlands or Outside Site Limits? (Y/N)	Any Increase in Stream Turbidity from Discharge? (Y/N)	Any Visible Erosion below SDO? (Y/N)	Any visible oil sheen, floating or suspended solids or discoloration? (Y/N)			

DEMLR Monitoring Form Rev. 07012020

PART 3C: GROUND STABILIZATION: Must be recorded, at a minimum, after each phase. *Add rows as needed.*

Site area description and location where construction activities have temporarily or permanently ceased	Time Limit for Ground Cover (see table below)	Have stabilization measures been installed? (Y/N)	Temporary or Permanent Stabilization (T/P)	Is Ground Cover Sufficient to Restrain Erosion? (Y/N)	Original Inspection Date	Describe Actions Needed Corrective actions should be performed as soon as possible and before the next storm event	Date Previous Action(s) Observed as Corrected

GROUND STABILIZATION TIMEFRAMES

Site Area Description	Stabilization	Timeframe Variations
Perimeter dikes, swales and slopes	7 Days	None
High Quality Water (HQW) Zones	7 Days	None
Slopes Steeper than 3:1	7 Days	7 days for perimeter dikes, swales, slopes and HWQ zones 14 days for slopes 10 ft or less in length and not steeper than 2:1 10 days for Falls Lake Watershed
Slopes 3:1 to 4:1	14 Days	7 days for perimeter dikes, swales, slopes and HWQ zones 7 days for slopes greater than 50 ft in length 10 days for Falls Lake Watershed
All other areas with slopes flatter than 4:1	14 Days	7 days for perimeter dikes, swales, slopes and HWQ zones 10 days for Falls Lake Watershed

DEMLR Monitoring Form Rev. 07012020

PART 3D: NEW OR REVISED MEASURES: Erosion and sedimentation control measures omitted or installed, at a minimum since the last inspection, shall be documented here or by initialing and dating each measure or practice shown on a copy of the approved erosion and sedimentation control plan. Alterations and relocations of measures shall also be documented if they significantly deviate from the approved plan. The removal of measures should also be documented. List dimensions of measures such as Sediment Basins and Dissipator Pads. Add rows as needed. Corrective actions should be included in Part 3A.

Measure ID or Location and Description	Proposed Dimensions (ft.)	Actual Dimensions (ft.)	Significant Deviation* from Plan? (Y/N)	Date measure observed as installed, altered, relocated or removed	Installed (I) Altered (A) Relocated (R) Removed (X)

*Significant deviation means any omission, alteration or relocation of an erosion or sedimentation control measure that prevents it from performing as intended.

PART 4: Signature of Inspector

Financially Responsible Party (FRP) / Permittee		**County**	
INSPECTOR	Name	Employer	
Inspector Type (Mark) X	Address		
FRP/Permittee			
Agent/Designee	Phone Number	Email Address	
By this signature, I certify in accordance with the NCG010000 permit & G.S. 113A-54.1 that this report is accurate and complete to the best of my knowledge.			
Financially Responsible Party / Permittee or Agent / Designee		Date & Time of Inspection	

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER
DONALD L. CURRY JR.

NOT FOR CONSTRUCTION

REVISIONS

1	10/2/2021	HARNETT & NCDOT EC COMMENTS
2	2/21/2022	HARNETT & NCDOT EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: NONE
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EROSION CONTROL DETAILS I

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
NC LIC. NO. P-0793
Curry ENGINEERING

EC-03

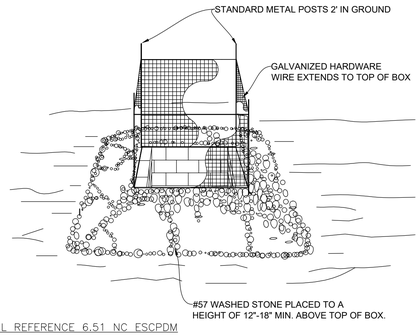
Z:\PROJECTS FOLDER\ZEBULON\2020\020-03 BRAYTON JONES - 5595 NC 210 - ANGIER\PLANS\SITE PLAN\SHEET FILES\EC-01\EROSION CONTROL DETAILS I.DWG
PLOTTED: 2/1/2022 9:58 AM

CONSTRUCTION SPECIFICATIONS

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.
2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.
3. 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.
4. 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.
5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.
6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUNDCOVER.

MAINTENANCE:

INSPECT INLETS DAILY 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.



DETAIL REFERENCE 6.51 NC ESCPDM

1 EC-04 INLET PROTECTION
SCALE: NTS

CONSTRUCTION SPECIFICATIONS

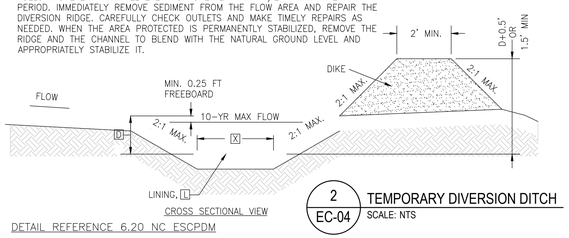
1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
4. PROVIDE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

GENERAL NOTES:

1. DIVERSION TO BE USED TO CONVEY SEDIMENT LADEN WATER INTO AN APPROVED EROSION AND SEDIMENT CONTROL BMP.
2. IMMEDIATELY LINE AND STABILIZE BEFORE ANY DOWNSLOPE GRADING BEGINS (STABILIZATION MUST OCCUR BEFORE ISSUANCE OF A CERTIFICATE OF COMPLIANCE). STABILIZATION METHOD IS BASED ON VELOCITY OF DRAINAGE.
3. DIVERSIONS SHOULD ONLY BE USED FOR DRAINAGE AREAS 5 ACRES OR LESS.
4. MINIMUM LONGITUDINAL SLOPE OF DIVERSION SHALL BE 0.3%.
5. DEPTHS SHOWN SHALL BE FINAL AFTER SETTLEMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING DITCHES IN FIELD TO MEET DESIGN CRITERIA IF SETTLEMENT OCCURS.
6. REFER TO SKIMMER BASIN DETAIL FOR DIVERSION DITCH/SKIMMER BASIN ENTRANCE.

MAINTENANCE:

INSPECT TEMPORARY DIVERSIONS DAILY AND REPAIR, AS NECESSARY AND FOLLOWING EVERY RAINFALL EVENT OF GREATER THAN 1/2" WITHIN A 24HR PERIOD. 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.

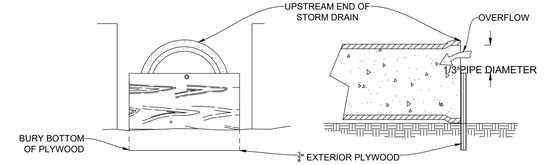


DETAIL REFERENCE 6.20 NC ESCPDM

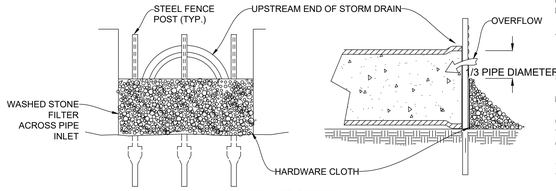
2 EC-04 TEMPORARY DIVERSION DITCH
SCALE: NTS

GENERAL NOTE:

1. ALL PARTIALLY COMPLETED STORM DRAINS SHALL BE PROTECTED AT THE END OF EACH DAY IN ACCORDANCE WITH THESE DETAILS.
2. THIS IS NOT AN APPROVED NC METHOD OF INLET PROTECTION AND WILL ONLY BE USED TO PROTECT THE CONTRACTORS WORK OVERNIGHT. LONGER PERIODS OF PROTECTION WILL REQUIRE THE STONE INLET PROTECTION DETAIL PER THE NCDENR ESCPDM.



PLYWOOD INLET PROTECTION



STONE FILTER INLET PROTECTION

3 EC-04 PIPE INLET PROTECTOIN
SCALE: NTS

MIXTURE

AGRICULTURAL LIMESTONE	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
FERTILIZER	1,000 LBS/ACRE - 10-10-10
SUPERPHOSPHATE	500 LBS/ACRE - 20% ANALYSIS
MULCH	2 TONS/ACRE - SMALL GRAIN STRAW
ANCHOR	ASPHALT EMULSION AT 300 GALS/ACRE

SEEDING SCHEDULE

FOR SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1):

DATE	TYPE	PLANTING RATE
AUG 15 - NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 - MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1 - APR 15	TALL FESCUE	300 LBS/ACRE
APR 15-JUN 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUL 1- AUG 15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	125 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1):

DATE	TYPE	PLANTING RATE
MAR 1 - JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND USE THE FOLLOWING COMBINATIONS:	50 LBS/ACRE (SERICEA LESPEDEZA);
MAR 1 - APR 15	ADD TALL FESCUE	120 LBS/ACRE
MAR 1 - JUN 30	OR ADD WEEPING LOVE GRASS	10 LBS/ACRE
MAR 1 - JUN 30	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN 1 - SEPT 1	TALL FESCUE AND BROWNTOP MULLET OR SORGHUM-SUDAN HYBRIDS***	120 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MULLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)
SEPT 1 - MAR 1	SERICEA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE (SERICEA LESPEDEZA); 120 LBS/ACRE (TALL FESCUE)
NOV 1 - MAR 1	AND ABRUZZI RYE	25 LBS/ACRE

CONSULT S&EC ENVIRONMENTAL ENGINEERS FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE THAT DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

*** TEMPORARY: RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW MORE THAN 12" IN HEIGHT BEFORE MOWING; OTHERWISE, FESCUE MAY BE SHADED OUT.

SEEDBED PREPARATION:

1. CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
2. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
3. REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
4. APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE MIXTURE).
5. CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
6. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
7. MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
8. INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON.IF POSSIBLE. IF STAND SHOULD BE MORE THAN 60% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
9. CONSULT S&EC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED..

4 EC-04 SEEDING SCHEDULE
SCALE: NTS

CONSTRUCTION SPECIFICATIONS

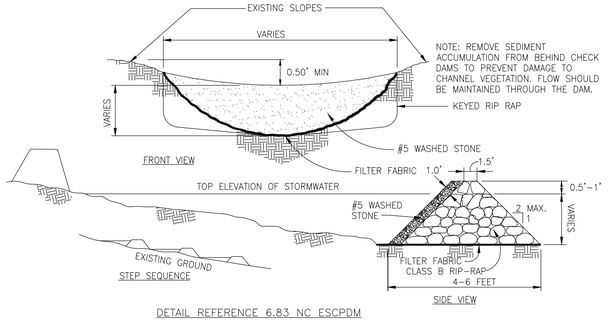
1. PLACE STONE TO THE LINES AND DIMENSIONS SHOWN IN THE PLAN ON A FILTER FABRIC FOUNDATION.
2. KEEP THE CENTER STONE SECTION AT LEAST 9 INCHES BELOW NATURAL GROUND LEVEL WHERE THE DAM ABUTS THE CHANNEL BANKS.
3. EXTEND STONE AT LEAST 1.5 FEET BEYOND THE DITCH BANK TO KEEP WATER FROM CUTTING AROUND THE ENDS OF THE CHECK DAM.
4. SET SPACING BETWEEN DAMS TO ASSURE THAT THE ELEVATION AT THE TOP OF THE LOWER DAM IS THE SAME AS THE TOE ELEVATION OF THE UPPER DAM.
5. PROTECT THE CHANNEL AFTER THE LOWEST CHECK DAM FROM HEAVY FLOW THAT COULD CAUSE EROSION.
6. MAKE SURE THAT THE CHANNEL REACH ABOVE THE MOST UPSTREAM DAM IS STABLE.
7. ENSURE THAT OTHER AREAS OF THE CHANNEL, SUCH AS CULVERT ENTRANCES BELOW THE CHECK DAMS, ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONES.

MAINTANENCE:

INSPECT CHECK DAMS AND CHANNELS DAILY AND REPAIR, AS NECESSARY FOLLOWING EVERY RAINFALL EVENT OF GREATER THAN 1/2" WITHIN A 24HR PERIOD. CLEAN OUT SEDIMENT, STRAW, LIMBS, OR OTHER DEBRIS THAT COULD CLOG THE CHANNEL WHEN NEEDED.

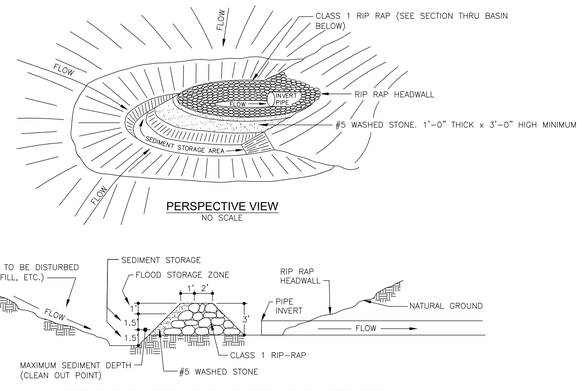
ANTICIPATE SUBMERGENCE AND DEPOSITION ABOVE THE CHECK DAM AND EROSION FROM HIGH FLOWS AROUND THE EDGES OF THE DAM. CORRECT ALL DAMAGE IMMEDIATELY. IF SIGNIFICANT EROSION OCCURS BETWEEN DAMS, ADDITIONAL MEASURES CAN BE TAKEN SUCH AS, INSTALLING A PROTECTIVE RIPRAP LINER IN THAT PORTION OF THE CHANNEL (PRACTICE 6.31, RIPRAP-LINE AND PAVED CHANNELS).

REMOVE SEDIMENT ACCUMULATED BEHIND THE DAMS AS NEEDED TO PREVENT DAMAGE TO CHANNEL VEGETATION, ALLOW THE CHANNEL TO DRAIN THROUGH THE STONE CHECK DAM, AND PREVENT LARGE FLOWS FROM CARRYING SEDIMENT OVER THE DAM. ADD STONES TO DAMS AS NEEDED TO MAINTAIN DESIGN HEIGHT AND CROSS SECTION.

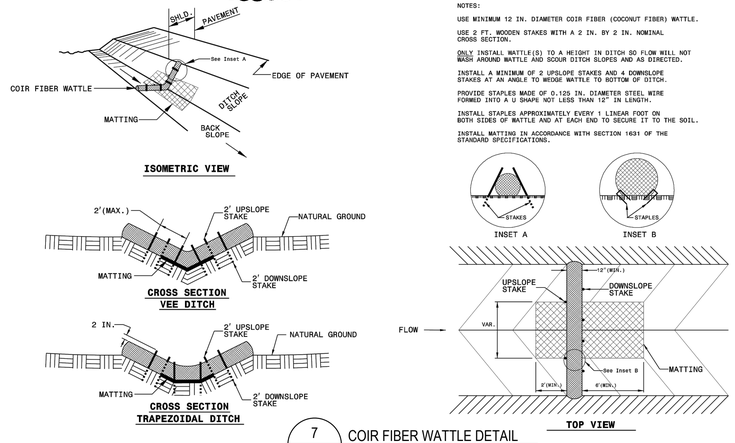


DETAIL REFERENCE 6.83 NC ESCPDM

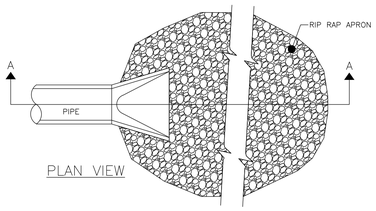
5 EC-04 CHECK DAM
SCALE: NTS

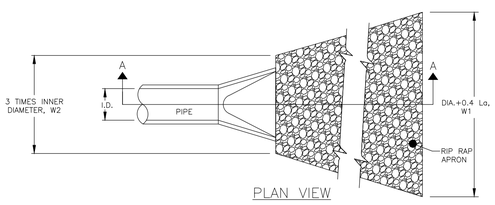


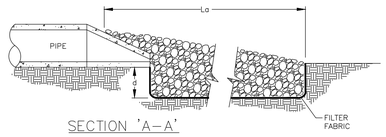
6 EC-04 HORSESHOE INLET PROTECTION
SCALE: NTS



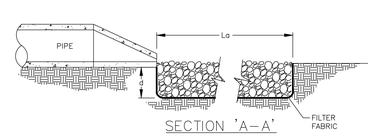
7 EC-04 COIR FIBER WATTLE DETAIL
SCALE: NTS







PIPE OUTLET TO WELL DEFINED CHANNEL



PIPE OUTLET TO FLAT AREA - NO WELL DEFINED CHANNEL

DETAIL REFERENCE 6.41 NC ESCPDM

CONSTRUCTION SPECIFICATIONS

1. ENSURE THAT THE SUBGRADE FOR THE FILTER AND RIPRAP FOLLOWS THE REQUIRED LINES AND GRADES SHOWN IN THE PLAN. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO THE DENSITY OF THE SURROUNDING UNDISTURBED MATERIAL. LOW AREAS IN THE SUBGRADE ON UNDISTURBED SOIL MAY ALSO BE FILLED BY INCREASING THE RIPRAP THICKNESS.
2. THE RIPRAP AND GRAVEL FILTER MUST CONFORM TO THE SPECIFIED GRADING LIMITS SHOWN ON THE PLANS.
3. FILTER CLOTH, WHEN USED, MUST MEET DESIGN REQUIREMENTS AND BE PROPERLY PROTECTED FROM PUNCHING OR TEARING DURING INSTALLATION. REPAIR ANY DAMAGE BY REMOVING THE RIPRAP AND PLACING ANOTHER PIECE OF FILTER CLOTH OVER THE DAMAGED AREA. ALL CONNECTING JOINTS SHOULD OVERLAP SO THE TOP LAYER IS ABOVE THE DOWNSTREAM LAYER A MINIMUM OF 1 FOOT. IF THE DAMAGE IS EXTENSIVE, REPLACE THE ENTIRE FILTER CLOTH.
4. RIPRAP MAY BE PLACED BY EQUIPMENT, BUT TAKE CARE TO AVOID DAMAGING THE FILTER.
5. THE MINIMUM THICKNESS OF THE RIPRAP SHOULD BE 1.5 TIMES THE MAXIMUM STONE DIAMETER.
6. RIPRAP MAY BE FIELD STONE OR ROUGH QUARRY STONE. IT SHOULD BE HARD, ANGULAR, HIGHLY WEATHER-RESISTANT AND WELL GRADED.
7. CONSTRUCT THE APRON ON ZERO GRADE WITH NO OVERFILL AT THE END. MAKE THE TOP OF THE RIPRAP AT THE DOWNSTREAM END LEVEL WITH THE RECEIVING AREA OR SLIGHTLY BELOW IT.
8. ENSURE THAT THE APRON IS PROPERLY ALIGNED WITH THE RECEIVING STREAM AND PREFERABLY STRAIGHT THROUGHOUT ITS LENGTH. IF A CURVE IS NEEDED TO FIT SITE CONDITIONS, PLACE IT IN THE UPPER SECTION OF THE APRON.
9. IMMEDIATELY AFTER CONSTRUCTION, STABILIZE ALL DISTURBED AREAS WITH VEGETATION

MAINTENANCE:

INSPECT RIP-RAP OUTLET STRUCTURES DAILY AND AFTER SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIPRAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

NOTES:

1) L = THE LENGTH OF THE RIPRAP APRON.

2) d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6" (inches).

3) IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" (inches) 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 RIPRAP AND SOIL FOUNDATION.

8 EC-04 RIP-RAP OUTLET PROTECTION
SCALE: NTS

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER
DONALD L. CURRY, JR.

REVISIONS		
1	3/02/2021	HARNETT COUNTY COMMENTS
2	3/31/2022	HARNETT & NCDEQ EC COMMENTS

DATE: 7/2021
FILE NO.: 2020-023
HOR2 SCALE: NONE
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EROSION CONTROL DETAILS II

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043

CURRY ENGINEERING
NC LIC. NO. P-0798

EC-04

Z:\PROJECTS FOLDER-JEBU\LOW\2020\2020-023 BRANTON JONES - 5556 NC 210 - ANGIER\PLANS\SITE PLAN\SHEET FILES\EC-04 EROSION CONTROL DETAILS II.DWG
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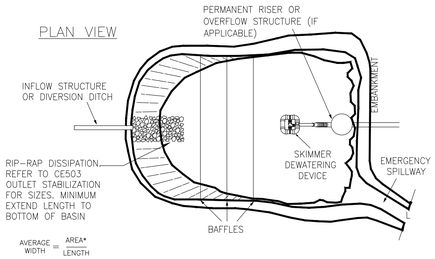

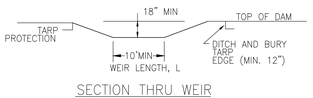

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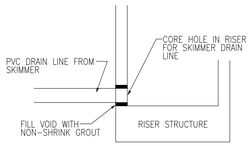
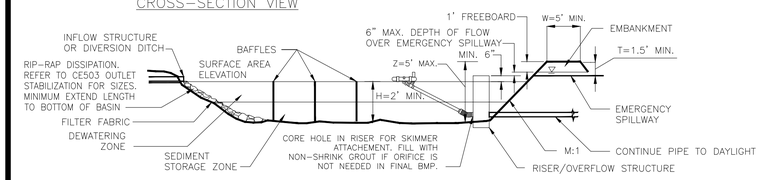


SKIMMER CONNECTION



GENERAL NOTES:

1. REFER TO NCESCPDM SECTION #6.64 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING SKIMMER SEDIMENT BASINS.

2. DEFINITIONS:
- H – DEPTH FROM BOTTOM BASIN TO SURFACE AREA ELEVATION
- Z – HEIGHT OF BASIN
- L – WIDTH OF EMERGENCY SPILLWAY
- T – DISTANCE BETWEEN EMERGENCY SPILWWAY AND BERM.
- M – SIDE SLOPE
- W – BERM WIDTH

MAINTENANCE

INSPECT SKIMMER SEDIMENT BASINS DAILY 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.

CONSTRUCTION SPECIFICATION

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. CONDUIT SPILLWAYS (RISERS) – SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATERTIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN THE BARREL SECTIONS BY APPROVED WATERTIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON 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 FIRM CONTACT WITH ITS FOUNDATION WHEN CONPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2-FT OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. ANCHOR THE RISER IN PLACE BY CONCRETE OR ONTHER SATISFACTORY MEANS TO PREVENT FLOTATATION. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.

5. SKIMMER – 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 FORM 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.

6. ASSEMBLE THE SKIMMER FOLLOWING THE MANUFACTURERS INSTRUCTIONS, OR AS DESIGNED.

7. 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.

8. 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 THAT WATER CANNOT FLOW UNDER THE FABRIC. SECURE THE UPPER EDGE AND SIDES OF THE FABRIC IN A TRENCH WITH STAPLES OR PINS. (ADAPTED FROM "A MANUAL FOR DESIGNING, INSTALLING AND MAINTAINING SKIMMER SEDIMENT BASINS." FEBRUARY, 1999. J. W. FAIRCLOTH & SON.).

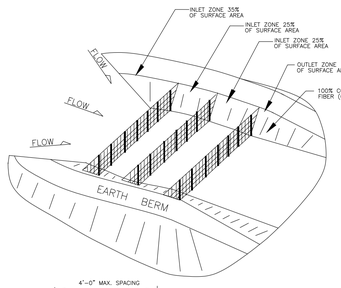
9. INLETS - DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE TEMPORARY SLOPE DRAINS OR DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY (REFERENCES: RUNOFF CONTROL MEASURES AND OUTLET PROTECTION).

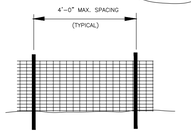
10. EROSION CONTROL - CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION (REFERENCES: SURFACE STABILIZATION).

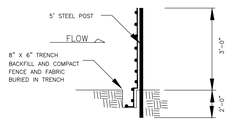
11. INSTALL POROUS BAFFLES AS SPECIFIED IN PRACTICE 6.65, POROUS BAFFLES.

12. 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 (REFERENCES: SURFACE STABILIZATION).

1 EC-05 SKIMMER SEDIMENT BASIN
SCALE: NTS







DETAIL REFERENCE 6.65 NC ESCPDM

GENERAL NOTES:

1. DRIVE 5' STEEL POST AT LEAST 24" INTO SOLID GROUND.
2. USE STAPLES 1' APART HORIZONTALLY AND VERTICALLY TO ATTACH THE FILTER FABRIC TO THE WIRE FENCE.
3. MINIMUM BAFFLE SPACING IS 10'.
4. THE FLOOR OF THE BASIN IN THE OUTLET ZONE AND BERMS SHOULD BE SEEDED IMMEDIATELY AFTER THE BASIN IS CONSTRUCTED.
5. REFER TO NCESCPDM SECTION #6.65 FOR ADDITIONAL SPECIFICATIONS

MAINTENANCE

INSPECT BAFFLES DAILY AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.

BE SURE TO MAINTAIN ACCESS TO THE BAFFLES. SHOULD THE FABRIC OF A BAFFLE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.

REMOVE SEDIMENT DEPOSITS WHEN IT REACHES HALF FULL TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE BAFFLES. TAKE CARE TO AVOID DAMAGING THE BAFFLES DURING CLEANOUT. SEDIMENT DEPTH SHOULD NEVER EXCEED HALF THE DESIGNED STORAGE DEPTH.

AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED, REMOVE ALL BAFFLE MATERIALS AND UNSTABLE SEDIMENT DEPOSITS, BRING THE AREA TO GRADE, AND STABILIZE IT.

CONSTRUCTION SPECIFICATION

1. GRADE THE BASIN SO THAT THE BOTTOM IS LEVEL FRONT TO BACK AND SIDE TO SIDE.
2. INSTALL POSTS OR SAW HORSES ACROSS THE WIDTH OF THE SEDIMENT TRAP (PRACTICE 6.62, SEDIMENT FENCE).
3. STEEL POSTS SHOULD BE DRIVEN TO A DEPTH OF 24 INCHES, SPACED A MAXIMUM OF 4 FEET APART, AND INSTALLED UP THE SIDES OF THE BASIN AS WELL. THE TOP OF THE FABRIC SHOULD BE 6 INCHES HIGHER THAN THE INVERT OF THE SPILLWAY. TOPS OF BAFFLES SHOULD BE 2 INCHES LOWER THAN THE TOP OF THE BERMS.
4. INSTALL AT LEAST THREE ROWS OF BAFFLES BETWEEN THE INLET AND OUTLET DISCHARGE POINT. BASINS LESS THAN 20 FEET IN LENGTH MAY USE 2 BAFFLES.
5. WHEN USING POSTS, ADD A SUPPORT WIRE OR ROPE ACROSS THE TOP OF THE MEASURE TO PREVENT SAGGING.
6. WRAP POROUS MATERIAL, LIKE JUTE BACKED BY COIR MATERIAL, OVER A SAWHORSE OR THE TOP WIRE. HAMMER REBAR INTO THE SAWHORSE LEGS FOR ANCHORING. THE FABRIC SHOULD HAVE FIVE TO TEN PERCENT OPENINGS IN THE WEAVE. ATTACH FABRIC TO A ROPE AND A SUPPORT STRUCTURE WITH ZIP TIES, WIRE, OR STAPLES.
7. THE BOTTOM AND SIDES OF THE FABRIC SHOULD BE ANCHORED IN A TRENCH OR PINNED WITH 8-INCH EROSION CONTROL MATTING STAPLES.
8. DO NOT SPLICE THE FABRIC, BUT USE A CONTINUOUS PIECE ACROSS THE BASIN.

2 EC-05 POROUS BAFFLE
SCALE: NTS

MAINTENANCE

INSPECT SKIMMER DAILY. REPAIR AS NECESSARY.

TRASH: IF THE INLET SCREEN CLOGS AND THERE IS WATER IN THE BASIN, TUGGING ON THE ROPE SEVERAL TIMES WILL USUALLY WASH THE TRASH OFF AND RESTORE FLOW. IF NOT, PULL THE INLET TO THE SIDE OF THE BASIN AND USE A STICK TO CLEAN THE SCREEN. OPEN THE SCREEN DOOR AND REMOVE ANY TRASH OR SEDIMENT INSIDE SO GRASS OR TREES DO NOT GROW IN THE INLET. (YES, THIS CAN HAPPEN!)

SEDIMENT ACCUMULATION AROUND SKIMMER: A SHALLOW, LONG BASIN, USING BAFFLES, AND INFLOW IN THE BASIN AT THE OPPOSITE END FROM THE OUTLET HELP KEEP SEDIMENT AWAY FROM THE SKIMMER. IF SEDIMENT RESTRICTS SKIMMER MOVEMENT, PULL THE SKIMMER TO ONE SIDE AND EXCAVATE UNDER IT.

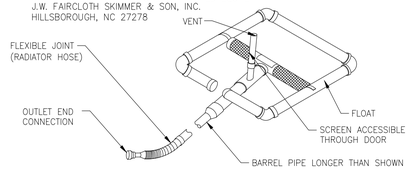
ICE: TRY TO KEEP ICE BROKEN UP AT THE INLET AND AROUND THE BARREL TO KEEP WATER FLOWING, MAKING IT LESS LIKELY THE INLET WILL FREEZE. SPRAY PAINTING THE FLOAT BLACK TO ABSORB HEAT IS RECOMMENDED. USE PAINT THAT WILL STICK TO PVC PLASTIC.

HANDLING THE SKIMMER: THE SKIMMER IS MADE OF PLASTIC AND WILL WITHSTAND HEAT, COLD AND SUNLIGHT BUT IT NEEDS TO BE HANDLED BY HAND, NOT GRABBED WITH A BACKHOE BUCKET AND YANKED AROUND, ESPECIALLY IN COLD WEATHER. TO REMOVE THE SKIMMER, DISCONNECT THE HOSE FIRST, THEN DISCONNECT THE BARREL FROM THE INLET EXTENSION. DO NOT TRY TO PULL THE SKIMMER LOOSE WITH A BACKHOE.

VANDALISM: KEEP UNAUTHORIZED PERSONS THAT MAY DO DAMAGE OFF THE SITE. DO NOT PROVIDE ROCKS CLOSE TO THE SKIMMER IF POSSIBLE. IF POSSIBLE, TAKING OTHER CONSIDERATIONS INTO ACCOUNT, POSITION THE SKIMMER OUT IN THE BASIN AWAY FROM THE BANKS TO DECREASE THE POTENTIAL FOR A SUCCESSFUL HIT.

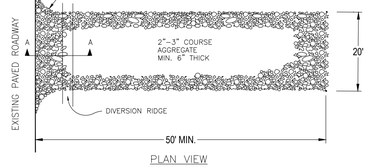
CONSTRUCTION SPECIFICATIONS

USE FAIRCLOTH SKIMMER® OR APPROVED EQUAL
J.W. FAIRCLOTH SKIMMER & SON, INC.
HILLSBOROUGH, NC 27278



DETAIL REFERENCE 6.64 NC ESCPDM

3 EC-05 DEWATERING SKIMMER
SCALE: NTS



4 EC-05 STANDARD CONSTRUCTION ENTRANCE
SCALE: NTS

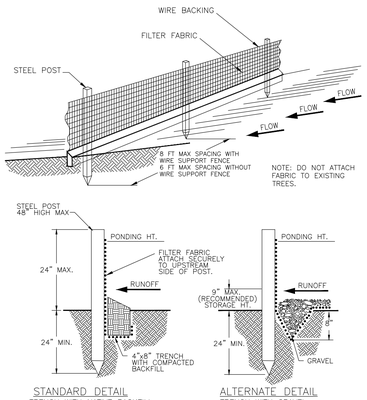
CONSTRUCTION SPECIFICATIONS

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 DAILY AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.

DETAIL REFERENCE 6.06 NC ESCPDM



CONSTRUCTION SPECIFICATIONS

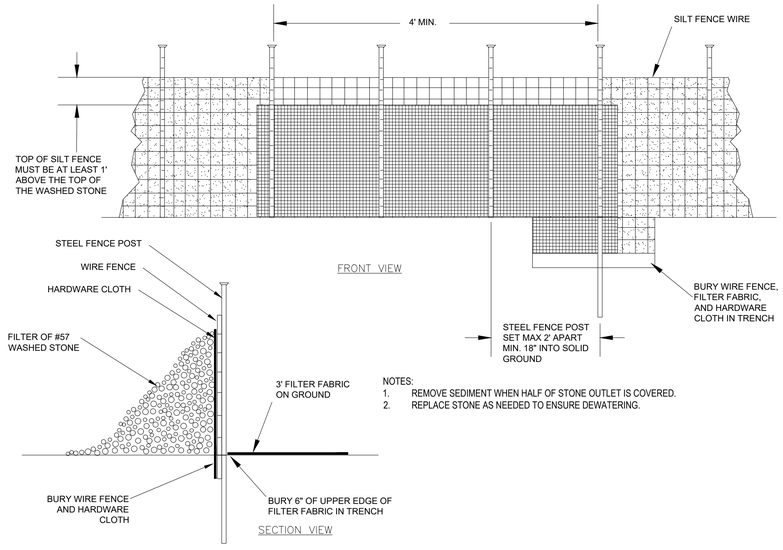
1. USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.
2. ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.33 LB/LINEAR FT STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
3. FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

MAINTENANCE

INSPECT SEDIMENT FENCES DAILY AND AFTER EACH RAINFALL EVENT. 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.

DETAIL REFERENCE 6.62 NC ESCPDM

5 EC-05 STANDARD TEMPORARY SILT FENCE
SCALE: NTS



NOTES:
1. REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED.
2. REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

6 EC-05 STANDARD SILT FENCE OUTLET
SCALE: NTS

REVISIONS

1	10/2/2021	HARNETT & NCDEQ EC COMMENTS
2	2/21/2022	

DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: NONE
ORIG SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EROSION CONTROL DETAILS III

205 S. Fayetteville Avenue
Fuquay-Varina, NC 27526
T (919) 552-0649
F (919) 552-2043
NC LIC. NO. P-0793

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NOT FOR CONSTRUCTION

EC-05

Z:\PROJECTS FOLDER_FUSE\ON\2020\020-03 BRAXTON JONES - 5595 NC 210 - ANGIER\PLANSHEET FILES\EC-05 EROSION CONTROL DETAILS III.DWG
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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.

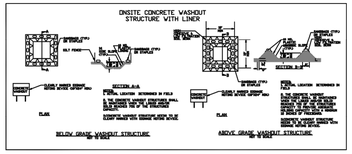
PORTABLE TOILETS

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.

NORTH CAROLINA Environmental Quality



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

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 (anc 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.

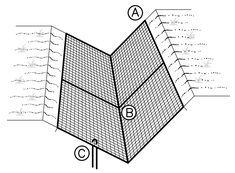
PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

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.

NORTH CAROLINA Environmental Quality

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING | EFFECTIVE: 04/01/19



A — TURNDOWN NETTING MINIMUM BURY 6"
B — OVERLAP NETTING MINIMUM OVERLAP 18"
C — TYPICAL STAPLE USE #6 GAUGE WIRE

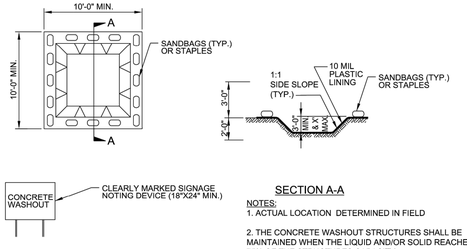
GENERAL NOTES:

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/FIBERGLASS NETTING.
2. STAPLE EVERY 24" ALONG PERIMETER EDGES AND OVERLAPS. STAPLE EVERY 36" TO 48" RANDOMLY TO SECURE NETTING.
3. INSTALL TEMPORARY STRAW MATTING ALONG PROPOSED 3:1 FILL SLOPES TO PROMOTE VEGETATION/SLOPE STABILIZATION, AS NEEDED.
4. SLOPE STABILITY AND MATTING SHALL BE REGULARLY MONITORED, ESPECIALLY AFTER RAIN EVENTS. ADDITIONAL MATTING SHALL BE INSTALLED TO REPLACE DAMAGED OR MISSING MATTING MATERIAL UNTIL VEGETATION HAS BEEN PROPERLY ESTABLISHED AND SITE IS ACCEPTED.

1 / EC-06 — TEMPORARY LINER
SCALE: NTS

WITH LINER, NO GRAVEL APPROACH

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN

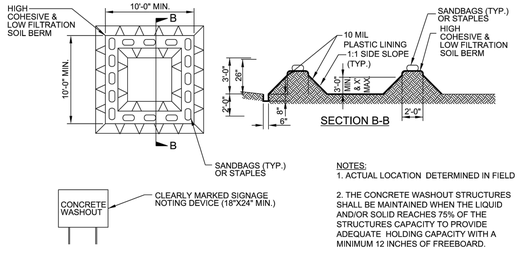
SECTION A-A

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE



PLAN

SECTION B-B

NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

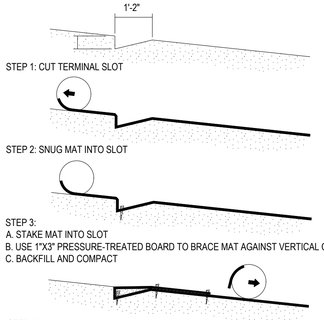
3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

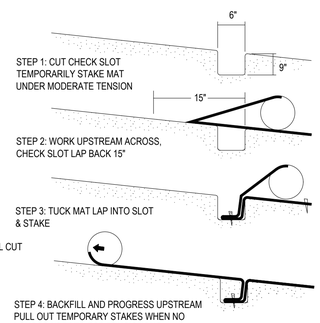
2 / EC-06 — CONCRETE WASHOUT STRUCTURE
SCALE: NTS

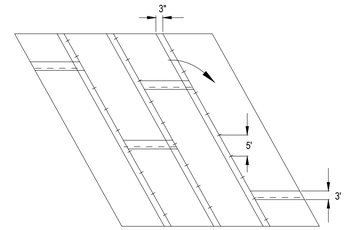
PRELIMINARY DESIGN
NOT FOR CONSTRUCTION

UPSTREAM TERMINAL

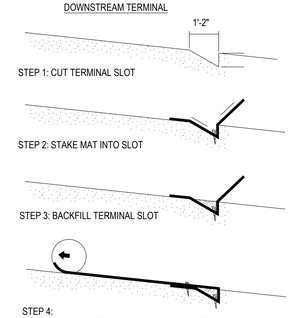


TRANSVERSE CHECK SLOT





DOWNSTREAM TERMINAL

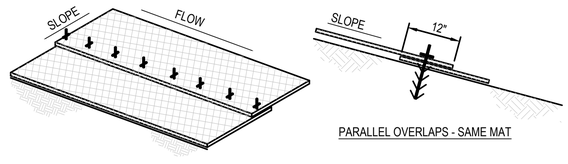


MAINTENANCE

1. INSPECT ROLLED EROSION CONTROL PRODUCTS DAILY AND AFTER EVERY 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.

ROLLED EROSION CONTROL PRODUCT
DETAIL REFERENCE 6.17 NC ESCPDM

3 / EC-06 — INSTALLATION OF EROSION CONTROL BLANKET ON SLOPES
SCALE: NTS



PARALLEL OVERLAPS - SAME MAT

NOTES

1. INSTALLATION OF EROSION CONTROL MAT/BLANKETS SHALL COMPLY WITH MANUFACTURER'S SPECIFICATIONS.
2. TEMPORARY EROSION CONTROL BLANKET USE ONE 9" BIO-STAKE OR SOD PIN (SEE DETAIL).
3. PERMANENT EROSION CONTROL BLANKETS USE 12" SOD PIN (SEE DETAIL)

4 / EC-06 — EROSION CONTROL MAT
SCALE: NTS

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL DONALD L. CURRY JR.

REVISIONS
HARNETT & KODIS EC COMMENTS

1	10/2/2021	HARNETT & KODIS EC COMMENTS
2	2/21/2022	

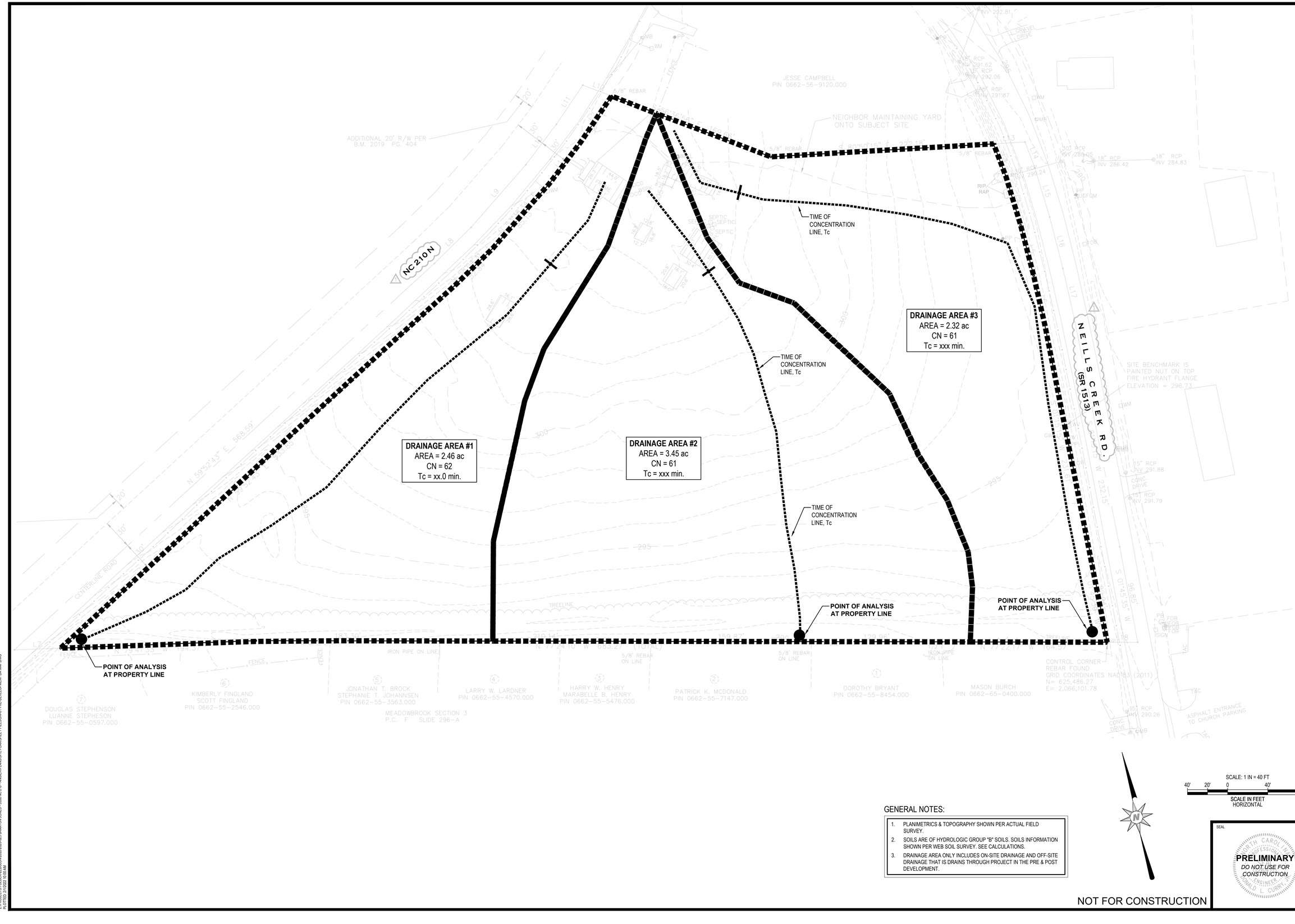
DATE: 7/2021
FILE NO.: 2020-023
HORZ SCALE: NONE
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
EROSION CONTROL DETAILS IV

Curry ENGINEERING
205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0789

EC-06

Z:\PROJECTS FOLDER_ATB\ILON\2020\020-023 BRANTON, JONES - 5566 NC-210 - ANGIER\PLANSHEET FILES\EC\EROSION CONTROL DETAILS IV.DWG
PLOTTED: 2/10/22 10:00 AM



GENERAL NOTES:

1. PLANIMETRICS & TOPOGRAPHY SHOWN PER ACTUAL FIELD SURVEY.
2. SOILS ARE OF HYDROLOGIC GROUP "B" SOILS. SOILS INFORMATION SHOWN PER WEB SOIL SURVEY. SEE CALCULATIONS.
3. DRAINAGE AREA ONLY INCLUDES ON-SITE DRAINAGE AND OFF-SITE DRAINAGE THAT IS DRAINS THROUGH PROJECT IN THE PRE & POST DEVELOPMENT.

NOT FOR CONSTRUCTION

SEAL

PRELIMINARY
DO NOT USE FOR CONSTRUCTION

NORTH CAROLINA PROFESSIONAL ENGINEER
DONALD L. CURRY, JR.

REVISIONS

1	10/2/2021	HARNETT & NCDOS EC COMMENTS
2	2/21/2022	HARNETT & NCDOS EC COMMENTS

DATE: 7/2021 | HORZ. SCALE: 1"=40'
FILE NO: 2020-023 | ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY

PRE-DEVELOPMENT DA MAP

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2043
NC LIC. NO. P-0789

Curry ENGINEERING

SW-01

Z:\PROJECTS FOLDER-JESH LON\2020\2020-023 BRAXTON JONES - 5556 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\SW-01 PRE-DEVELOPMENT DA MAP.DWG
PLOTTED: 2/1/2022 10:00 AM

POA #1 & 2 (HYD #4, 13)				
Storm Event	Pre-Development Peak Flow (cfs)	Post-Development Peak Flow w/SCM (cfs)	Net Change (cfs)	Net Change (%)
1 yr	2.12	2.12	0.00	0%
2 yr	3.43	2.85	-0.58	-17%
10 yr	10.83	6.99	-3.84	-35%
25 yr	16.19	10.70	-5.49	-34%
100 yr	25.67	26.17	0.50	2%

1 / SW-02 SCM RUNOFF SUMMARY
SCALE: N.T.S

DRAINAGE AREA #4 BYPASS
AREA = 0.70 ac
CN = 61
Tc = 5 min.

DRAINAGE AREA #5 TO SCM #1
AREA = 3.12 ac
CN = 73
Tc = 5 min.

FUTURE BUILDING #3 SELF-STORAGE 17,000 SF FFE=298.50

FUTURE BUILDING #2 SELF-STORAGE 17,000 SF FFE=298.50

DRAINAGE AREA #6 TO SCM #2
AREA = 1.98 ac
CN = 91
Tc = 5 min.

DRAINAGE AREA #7 BYPASS
AREA = 1.70 ac
CN = 66
Tc = 5 min.

DRAINAGE AREA #8 BYPASS
AREA = 0.73 ac
CN = 61
Tc = 5 min.

POINT OF ANALYSIS AT PROPERTY LINE

POINT OF ANALYSIS AT SCM

POINT OF ANALYSIS AT PROPERTY LINE

POINT OF ANALYSIS AT PROPERTY LINE

POINT OF ANALYSIS AT SCM

NC 210 N

NEILLS CREEK RD. (SR 1513)

JESSE CAMPBELL PIN 0662-56-9120.000

KIMBERLY FINGLAND SCOTT FINGLAND PIN 0662-55-2546.000

DOUGLAS STEPHENSON LUANNE STEPHENSON PIN 0662-55-0597.000

JONATHAN T. BROCK STEPHANIE T. JOHANNSEN PIN 0662-55-3563.000

LARRY W. LARDNER PIN 0662-55-4570.000

HARRY W. HENRY MARABELLE B. HENRY PIN 0662-55-5476.000

DOROTHY BRYANT PIN 0662-55-8454.000

MASON BURCH PIN 0662-65-0400.000

MEADOWBROOK SECTION 3 P.C. F SLIDE 296-A

GENERAL NOTES:

1. PLANIMETRICS & TOPOGRAPHY SHOWN PER ACTUAL FIELD SURVEY.
2. SOILS ARE OF HYDROLOGIC GROUP "B" SOILS. SOILS INFORMATION SHOWN PER WEB SOIL SURVEY. SEE CALCULATIONS.
3. DRAINAGE AREA ONLY INCLUDES ON-SITE DRAINAGE AND OFF-SITE DRAINAGE THAT IS DRAINS THROUGH PROJECT IN THE PRE & POST DEVELOPMENT.

SCALE: 1 IN = 40 FT
40' 20' 0 40' 80'
SCALE IN FEET HORIZONTAL

NOT FOR CONSTRUCTION

SEAL
NORTH CAROLINA PROFESSIONAL ENGINEER DONALD L. CURRY, JR.
PRELIMINARY
DO NOT USE FOR CONSTRUCTION

REVISIONS
1 10/21/2021 HARNETT CO. COMMENTS
2 2/21/2022 HARNETT & NCDOT EC COMMENTS

DATE: 7/2021
FILE NO: 2020-023
HORZ. SCALE: 1"=40'
ORIG. SHEET SIZE: 24 x 36

LAKESIDE SELF-STORAGE - HARNETT COUNTY
POST-DEVELOPMENT DA MAP

205 S. Fuquay Avenue
Fuquay-Varina, NC 27526
T (919) 552-0849
F (919) 552-2943
NC LIC. NO. P-0789

Curry ENGINEERING

SW-02

Z:\PROJECTS FOLDER\ZEBULON\2020\2020-023 BRANTON JONES - 5586 NC 210 - ANGIER\PLANS\SITE PLANS\SHEET FILES\SW-03 POST-DEVELOPMENT DA MAP.DWG
PLOTTED: 2/1/2022 10:01 AM