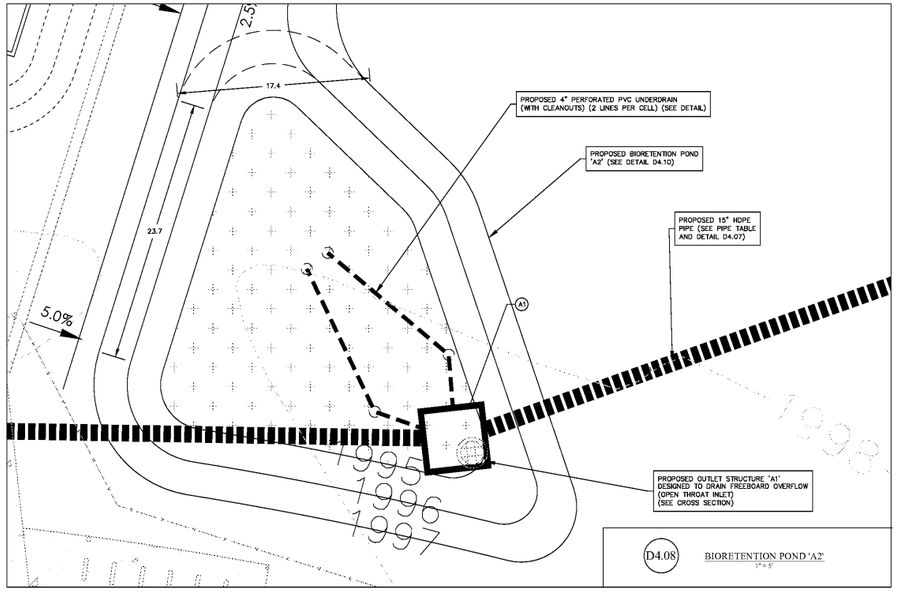
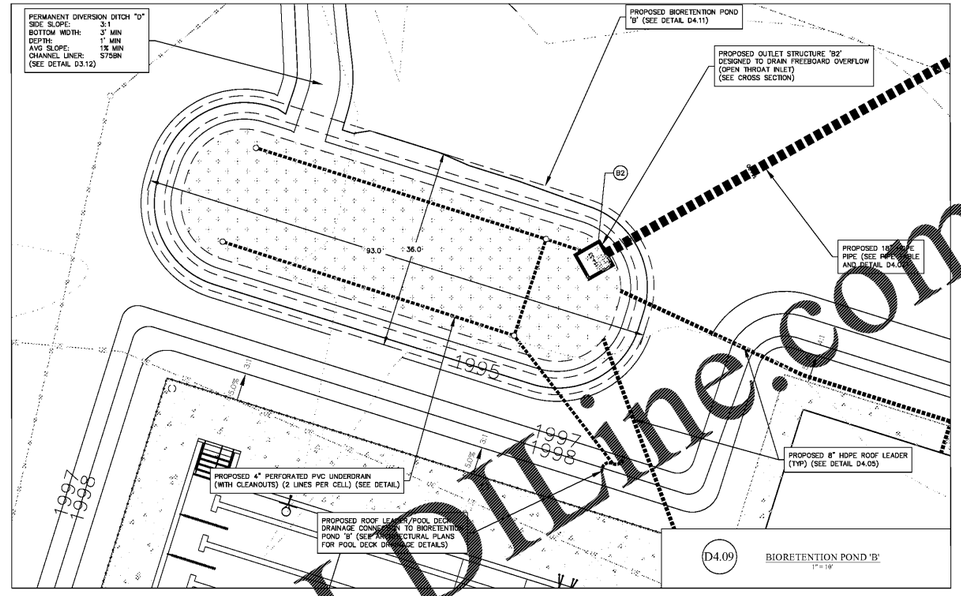
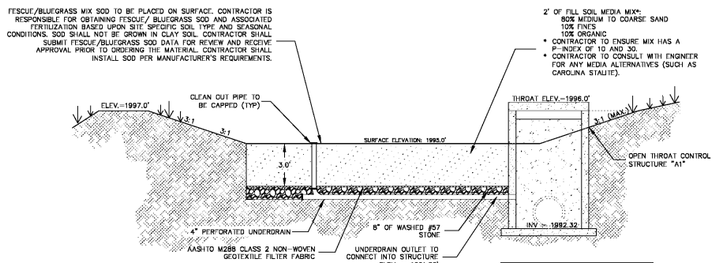


D4.08 BIORETENTION POND 'A2'
1" = 5'

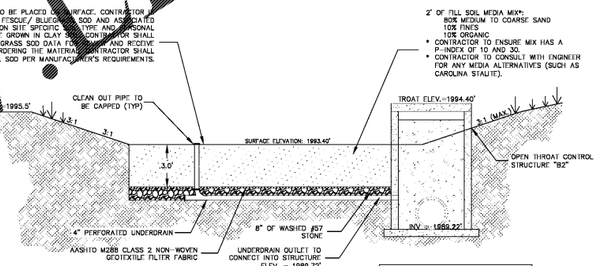


D4.09 BIORETENTION POND 'B'
1" = 10'



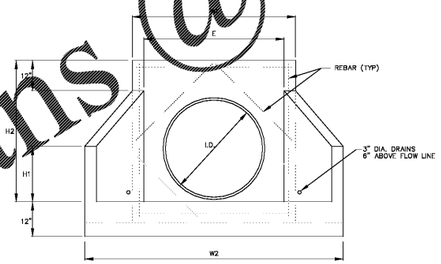
D4.10 BIORETENTION CELL "A2" CROSS SECTION
NOT TO SCALE

THE BIORETENTION CELL SHALL BE MAINTAINED IN A MANNER THAT RESULTS IN A DRAWDOWN OF AT LEAST ONE INCH PER HOUR AT THE PLANTING SURFACE.

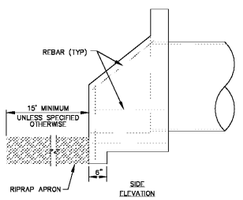


D4.11 BIORETENTION CELL "B" CROSS SECTION
NOT TO SCALE

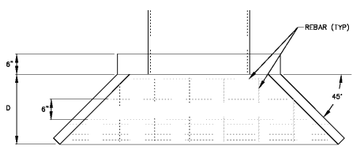
THE BIORETENTION CELL SHALL BE MAINTAINED IN A MANNER THAT RESULTS IN A DRAWDOWN OF AT LEAST ONE INCH PER HOUR AT THE PLANTING SURFACE.



FRONT ELEVATION



SIDE ELEVATION



PLAN

HEADWALL DIMENSIONS (METAL PIPE) NOTE: USE NEXT LARGEST SIZE FOR CONCRETE PIPE.								
INSIDE DIAMETER OF PIPE	W1	W2	H1	H2	D	E	WEIGHT	SQ. FT. BASE AREA
12"-15"-18"	3'-2"	4'-10"	1'-3"	3'-2"	1'-3"	1'-9"	1,550	7.34
21"-24"	3'-8"	6'-1"	1'-9"	3'-8"	1'-6"	2'-3"	2,100	9.90
30"	4'-2"	7'-2"	2'-0"	4'-2"	1'-10"	2'-9"	2,850	13.50
36"	4'-8"	8'-4"	2'-4"	4'-8"	2'-2"	3'-3"	3,700	17.65
42"-48"	5'-8"	10'-10"	3'-3"	5'-8"	2'-11"	4'-3"	5,600	28.60
54"-60"	6'-10"	11'-9"	3'-6"	6'-8"	3'-4"	5'-2"	7,500	36.27
66"-72"	8'-1"	12'-0"	3'-8"	7'-7"	3'-4"	6'-2"	8,500	40.00
84"-96"	9'-4"	12'-8"	4'-0"	9'-5"	3'-4"	7'-6"	10,000	44.00

NOTE:
1. 4000 PSI CONCRETE STANDARD

NOTE:
1. CONCRETE HEADWALL REINFORCEMENT PER N.C.D.O.T. STANDARD NO. 838.39 REVISION A.
2. WORK MUST BE ACCOMPLISHED SO THAT WET CONCRETE DOES NOT CONTACT STREAM WATER.

D4.12 REINFORCED CONCRETE HEADWALL
NOT TO SCALE

Order Plans @ WWW.DLine.com

City of Asheville/ Parks & Recreation

DR. WESLEY GRANT SR. CENTER EXPANSION

285 LIVINGSTON STREET
ASHEVILLE, NC 28801

DESIGNER
CLARKNEXSEN
301 COLLEGE STREET, SUITE 300
ASHEVILLE, NORTH CAROLINA 28801
828.252.6608
www.clarknexsen.com
CLARK NEXSEN LICENSE NUMBER: C-1028

CONSULTANT
CDC Civil Design Concepts, PA
ASHEVILLE OFFICE
168 PATTON AVENUE
ASHEVILLE, NC 28801
PHONE (828) 255-5388
FAX (828) 252-2964
NCBELS LICENSE #: C-0194
WAYNESVILLE OFFICE
69 WALNUT STREET - SUITE 9
WAYNESVILLE, NC 28786
PHONE (828) 452-4410
FAX (828) 452-5426
www.civildesignconcepts.com

PROFESSIONAL SEAL
SEAL 035093 9-13-21 ENGINEER CHRISTOPHER R. CRAWFORD

SUBMITTAL
03.12.2021
CONSTRUCTION DOCUMENTS

REVISIONS

KEY PLAN

SHEET
STORM DRAINAGE DETAILS

C942

DESIGN: DS
DRAWN: DS
REVIEW: CSR

CN 7904-A