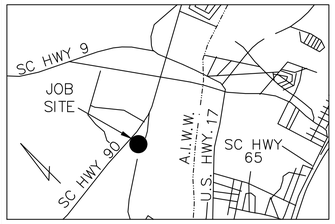


VICINITY MAP
(NOT TO SCALE)

SHEET INDEX
C1: OVERALL SITE PLAN
C2: EROSION CONTROL PLAN-STAGE I (V1)
C3: EROSION CONTROL PLAN-STAGE I (V2)
C4: PROPOSED SITE PLAN (V1)
C5: PROPOSED SITE PLAN (V2)
C6: SCDOT STRIPING DETAILS
C7: PROPOSED DRAINAGE PLAN (V1)
C8: PROPOSED DRAINAGE PLAN (V2)
C9: CONSTRUCTION DETAILS
C10: EROSION CONTROL PLAN-STAGE II (V1)
C11: EROSION CONTROL PLAN-STAGE II (V2)
C12: EROSION CONTROL DETAILS
C13: EROSION CONTROL PLAN-STAGE III (V1)
C14: EROSION CONTROL PLAN-STAGE III (V2)
L1: PROPOSED LANDSCAPING PLAN (V1)
L2: PROPOSED LANDSCAPING PLAN (V2)
L3: PROPOSED LANDSCAPING DETAILS

HORRY COUNTY NOTES:
1. THERE ARE NO LIVE OAKS 24" OR GREATER IN DBH THAT SHALL BE REMOVED, DAMAGED OR DESTROYED
2. THERE IS NO SITE LIGHTING ASSOCIATED WITH THE PROPOSED PLAN.

EXISTING TREE NOTES:
1. ANY ENCROACHMENTS IN TO THE ROOT PROTECTION ZONE WILL REQUIRE A CERTIFIED ARBORIST TO PROVIDE DOCUMENTATION THAT THE PROPOSED WORK WILL NOT ADVERSELY AFFECT THE LIFE OF THE TREE. ENCROACHMENTS IN TO THE ROOT PROTECTION ARE TO BE DONE BEFORE CONSTRUCTION ACTIVITY BEGINS

ZONING TABLE	
TMS #	130-00-09-028
PIN #	350-00-00-0002
CURRENT OWNER	HORRY COUNTY BOARD OF EDUCATION
ZONING	CFA
OVERLAY	N/A
AREA	54.61 ACRES±
	2,378,698 SQ.FT.±
DISTURBED AREA	6.50 ACRES±
BUILDING USE	EXISTING ELEMENTARY SCHOOL

REQUIRED PERMITS

NPDES LAND DISTURBANCE PERMIT:	PENDING
HORRY COUNTY PLANNING & ZONING:	PENDING
HORRY COUNTY STORMWATER:	PENDING
HORRY COUNTY ENGINEERING:	PENDING
OFFICE OF SCHOOLS FACILITIES:	PENDING

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1 inch = 60 ft.

MAGNETIC

GSWSA WATER TOWER SITE (EXISTING)

E&K PROPERTIES OF S.C., INC. PIN 349-00-00-0032

VIEW-2

EXISTING GRAVEL DRIVE

TEMPORARY FENCING

PROPOSED PARENT LOOP

PLAYGROUND (EXISTING)

PLAYGROUND (EXISTING)

PARENT LOOP FOR NMBMS (EXISTING)

GSWSA PUMPSTATION (EXISTING)

COMMUNICATION TOWER (EXISTING)

NORTH MYRTLE BEACH MIDDLE SCHOOL (EXISTING)

EXISTING FIRE LANE

PROPOSED RETENTION POND

MATCHLINE

E&K PROPERTIES OF S.C., INC. PIN 349-00-00-0032

WATERWAY ELEMENTARY SCHOOL (EXISTING)

EXISTING BUS PICK UP

EXISTING STAFF PARKING

SOUTH CAROLINA PUBLIC SERVICE AUTHORITY PIN 350-08-02-0001

PROPOSED PARENT LOOP

EXISTING GRAVEL DRIVE

TEMPORARY FENCING

PROPOSED FIRE LANE

EXISTING FIRE HYDRANT

PROPOSED PARENT LOOP

EXISTING VISITOR PARKING

SAND RIDGE ROAD 66' PUBLIC R/W (OFF-SYSTEM)

SAND RIDGE ROAD 66' PUBLIC R/W (OFF-SYSTEM)

ACE WAY 50' PUBLIC R/W (OFF SYSTEM)

VIEW-1

South Carolina 811 Call 811 Before you Dig

DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

HCS Horry County Schools

PROPOSED SITE PLAN

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD, LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE:	SEE PLAN
JOB NO.	WES-LOOP
DESIGNED BY:	M.NORRIS
DRAWN BY:	M.NORRIS
CHECKED BY:	D.NORRIS
DATE:	MARCH 23, 2022

DATE	REVISIONS

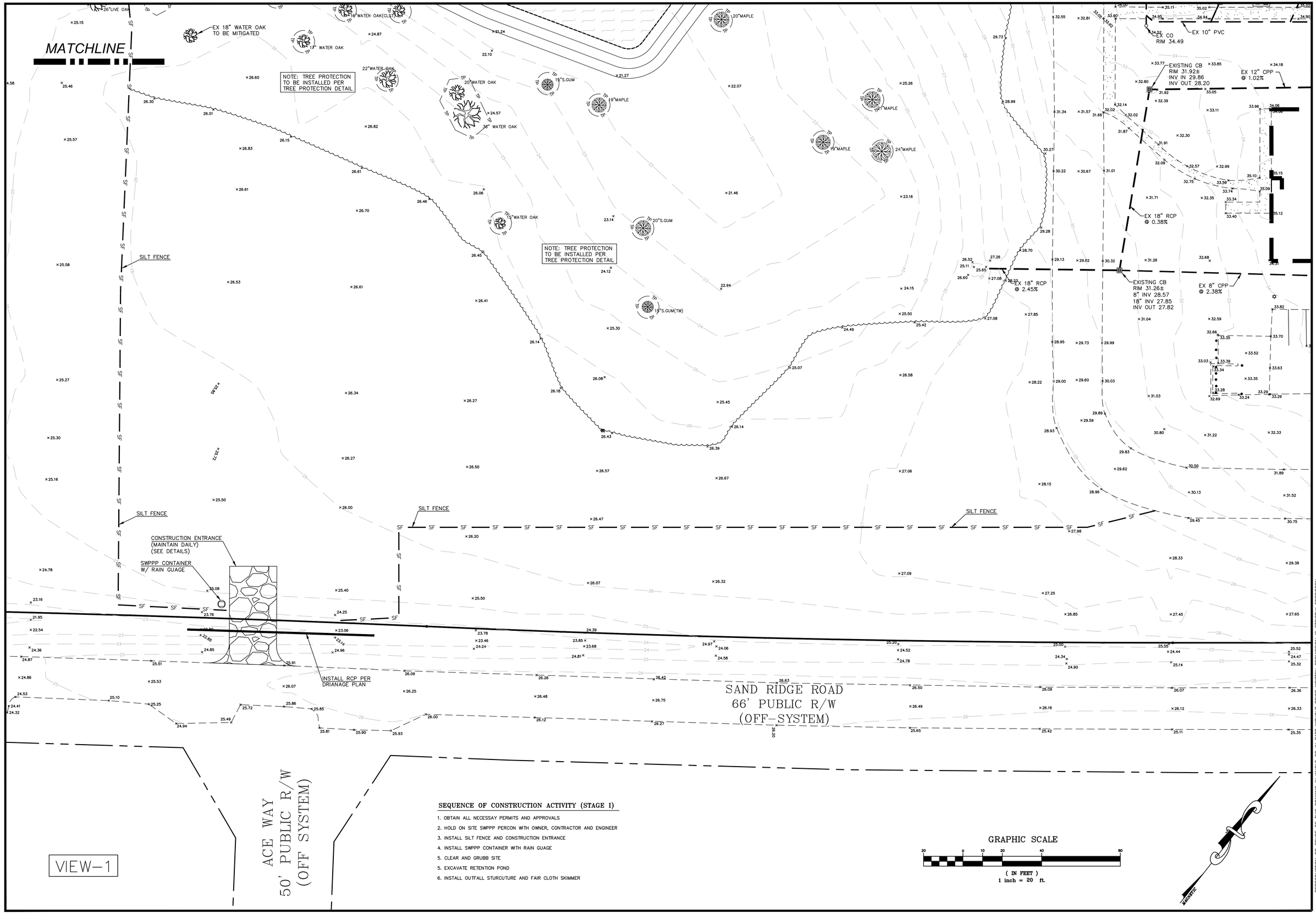
SOUTH CAROLINA PROFESSIONAL ENGINEER CERTIFICATE OF AUTHORIZATION DAVID W. NORRIS DN ENGINEERING INC. 4664 DOCK ROAD CONWAY, SC 29526 No. 002384

SOUTH CAROLINA PROFESSIONAL ENGINEER No. 18001 DAVID W. NORRIS

03/23/2022

REPRODUCTION OR REUSE OF THIS DRAWING IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN PERMISSION IS STRICTLY FORBIDDEN

SHEET NUMBER:
C1



SEQUENCE OF CONSTRUCTION ACTIVITY (STAGE I)

1. OBTAIN ALL NECESSAY PERMITS AND APPROVALS
2. HOLD ON SITE SWPPP PERCON WITH OWNER, CONTRACTOR AND ENGINEER
3. INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE
4. INSTALL SWPPP CONTAINER WITH RAIN GUAGE
5. CLEAR AND GRUBB SITE
5. EXCAVATE RETENTION POND
6. INSTALL OUTFALL STURCUTURE AND FAIR CLOTH SKIMMER

DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

Horry County Schools

EROSION CONTROL PLAN-STAGE I (V1)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE:	SEE PLAN
JOB NO.	WES-LOOP
DESIGNED BY:	M.NORRIS
DRAWN BY:	M.NORRIS
CHECKED BY:	D.NORRIS
DATE:	MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. NORRIS
DN ENGINEERING, INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00336A
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 19001
DAVID W. NORRIS
03/23/2022

SHEET NUMBER:
C2
2 OF 17

REPRODUCTION OR REUSE OF THIS DRAWING IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN PERMISSION IS STRICTLY FORBIDDEN

VIEW–2

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

SEQUENCE OF CONSTRUCTION ACTIVITY (STAGE I)

1. OBTAIN ALL NECESSAY PERMITS AND APPROVALS
2. HOLD ON SITE SWPPP PERCON WITH OWNER, CONTRACTOR AND ENGINEER
3. INSTALL SILT FENCE AND CONSTRUCTION ENTRANCE
4. INSTALL SWPPP CONTAINER WITH RAIN GUAGE
5. CLEAR AND GRUBB SITE
6. EXCAVATE RETENTION POND
7. INSTALL OUTFALL STURCUTURE AND FAIR CLOTH SKIMMER

SILT FENCE

EX 25" SWEET GUM TO BE REMOVED

EX 17" SWEET GUM TO BE REMOVED

EX 21" SWEET GUM TO BE REMOVED

EX 21" SWEET GUM TO BE REMOVED

NOTE: TREE PROTECTION TO BE INSTALLED PER TREE PROTECTION DETAIL

INSTALL RCP PER DRIANAGE PLAN

INSTALL OUTFALL STRUCTURE PER DRIANAGE PLAN

FAIRCLOTH SKIMMER

RETENTION POND
AREA TOB: 0.70 ACRES±
TOP BANK: 23.50±
NORM WL: 20.50±
TOP ELEV: 23.50±
BOT ELEV: 14.50±
SIDE SLOPE: 5H–1V
(2H–1V UNDER NWL)

RETENTION POND TO BE USED AS SEDIMENT BASIN DURING CONSTRUCTION ACTIVITY

NOTE: TREE PROTECTION TO BE INSTALLED PER TREE PROTECTION DETAIL

EX 18" WATER OAK TO BE MITIGATED

MATCHLINE

LOW PT IN HAUL RD

DEMO SECTION OF EXISTING CHAIN LINK FENCE–COORDIANTE REINSTALLATION WITH HORRY COUNTY SCHOOL DISTRICT

WOODS LINE

EXISTING CB
RIM 34.05±
INV IN 31.24
INV OUT 31.20

EX DUAL 8" PVC@34.00

REMOVE EXISING BASKETBALL GOAL

DEMO SECTION OF EXISTING ASPHALT

DEMO SECTION OF EXISTING CHAIN LINK FENCE–COORDIANTE REINSTALLATION WITH HORRY COUNTY SCHOOL DISTRICT

EX 10" PVC

EX 18" RCP

EX 18" RCP @ 0.45%

EX 18" RCP @ 0.36%

EXISTING CB
RIM 32.47±
15" INV 29.74
18" INV 29.88
INV OUT 29.61

EXISTING CO
RIM 34.95±
INV IN 30.25
INV OUT 30.08

EXISTING CB
RIM 34.41±
INV OUT 33.71

EX CO
RIM 34.49

EXISTING CB
RIM 31.92±
INV IN 29.86
INV OUT 28.20

EX 12" CPP @ 1.02%

DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

Horry County Schools

EROSION CONTROL PLAN–STAGE I (V2)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES–LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00336
CERTIFICATE OF AUTHORIZATION

REGISTERED PROFESSIONAL ENGINEER
No. 18001
STATE OF SOUTH CAROLINA

03/23/2022

SHEET NUMBER:
C3
3 OF 17

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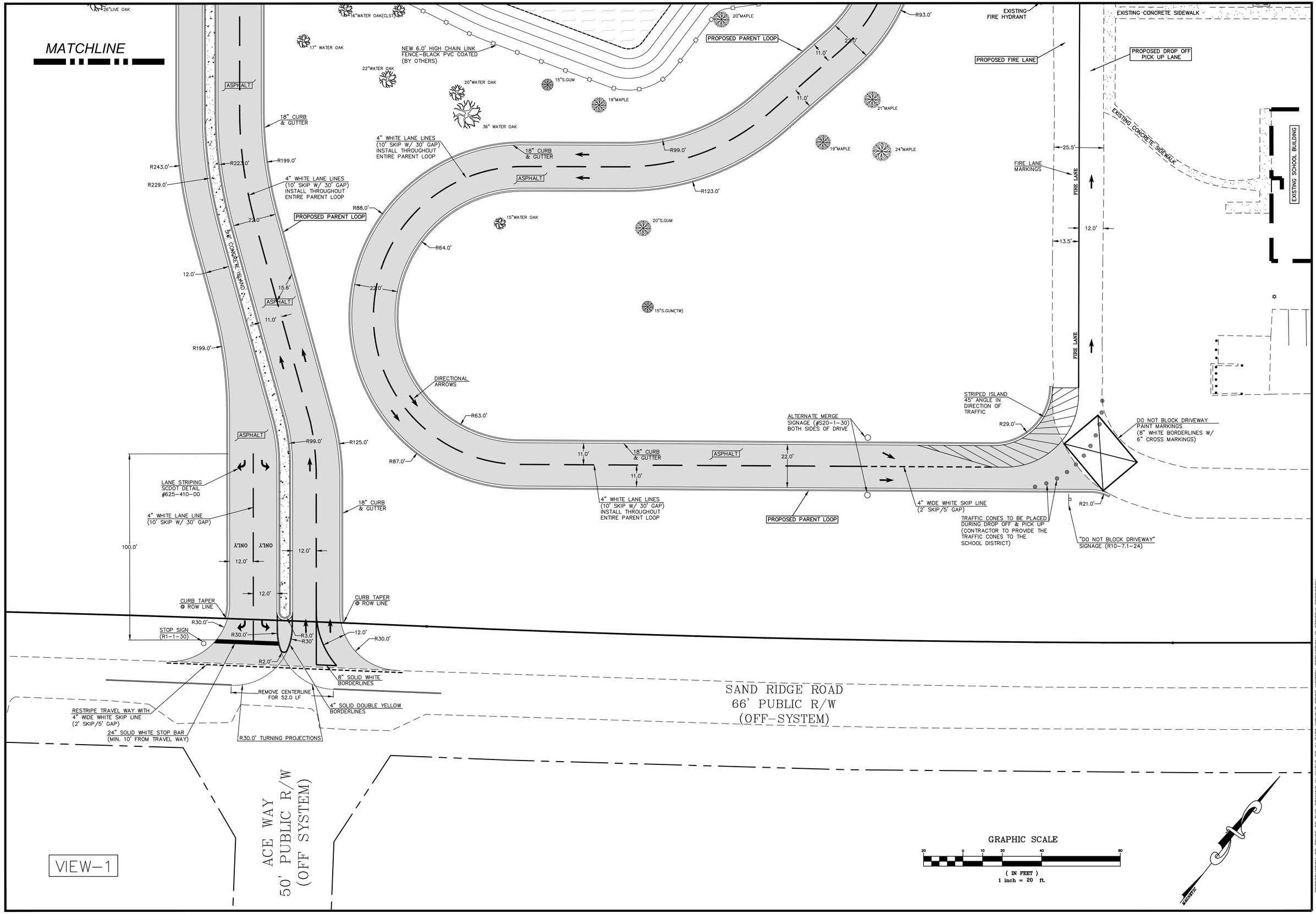

DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

Horry County Schools

PROPOSED SITE PLAN

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00304
PROFESSIONAL ENGINEER

SOUTH CAROLINA
DANIEL W. LEWIS
No. 18001
PROFESSIONAL ENGINEER
03/23/2022

SHEET NUMBER:
C4
4 OF 17

REPRODUCTION OR REUSE OF THIS DRAWING IN WHOLE OR IN PART WITHOUT PRIOR WRITTEN PERMISSION IS STRICTLY FORBIDDEN

VIEW–2

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

BASKETBALL COURT NOTE:
1. NEW COURT IS IS TO BE 2" ASPHALT W/ 6" BASE
2. COURT IS TO BE STRIPED FOR ELEMENTARY SCHOOL BASKETBALL LAYOUT.
3. NEW GOAL POST ARE TO BE 4" GALVANIZED AND FULLY CONCRETE TO 36" DEPTH, HEIGHT TO BE ADJUSTABLE FOR ELEMENTARY SCHOOL PLAY CONDITIONS, CLEAR BACKBOARDS.
4. BASKETBALL COURT SHOULD BE CONSTRUCTED AT A GRADE LESS THAN 1.00%

21"OAK(TW)
22"S.GUM
16"WATER OAK
15"OAK
15" S.GUM(CLST)
16"OAK
16"S.GUM
WOODS LINE
PROPOSED PARENT LOOP
18" CURB & GUTTER
ASPHALT
R73.0'
R59.0'
12.0'
R87.0'
R101.0'
R94.0'
5.0' CONCRETE ISLAND
4" WHITE LANE LINES (10' SKIP W/ 30' GAP) INSTALL THROUGHOUT ENTIRE PARENT LOOP
R93.0'
R80.0'
11.0'
22.0'
R74.0'
R50.0'
DIRECTIONAL ARROWS
R69.0'
18"S.GUM
6' WIDE GATE FOR MAINTENANCE ACCESS (BLACK PVC COATED)
21"MAPLE(TW)
15"S.GUM
19"S.GUM
18"MAPLE(TW)
NEW 6.0' HIGH CHAIN LINK FENCE–BLACK PVC COATED (BY OTHERS)
19"MAPLE
22"MAPLE(CLST)
21"MAPLE(CLST)
16"MAPLE
15"S.GUM
RETENTION POND
AREA TOB: 0.70 ACRES±
TOP BANK: 23.50±
NORM WL: 20.50±
TOP ELEV: 23.50±
BOT ELEV: 14.50±
SIDE SLOPE: 5H–1V
(2H–1V UNDER NWL)
16"HOLLY
15"S.GUM
NEW 6.0' HIGH CHAIN LINK FENCE–BLACK PVC COATED
LOW PT IN HAUL RD
5.0' CONCRETE ISLAND
R127.0'
R151.0'
R107.0'
R121.0'
15"S.GUM(TW)
17"S.GUM
21"L.OAK
24"LIVE OAK
16"LIVE OAK
26"LIVE OAK
26"LIVE OAK
DIRECTIONAL ARROWS
15"WATER OAK
18"WATER OAK
22"LIVE OAK
18"WATER OAK(CLST)
16"WATER OAK(CLST)
17" WATER OAK
NEW 6.0' HIGH CHAIN LINK FENCE–BLACK PVC COATED (BY OTHERS)
22"WATER OAK
20"WATER OAK
15"S.GUM
19"MAPLE
20"MAPLE
21"MAPLE
R69.0'
R93.0'
PROPOSED PARENT LOOP
MATCHLINE
EXISTING CONCRETE SIDEWALK
EXISTING CONCRETE SIDEWALK
NEW ASPHALT FOR BASKETBALL COURT
TRAFFIC CONES TO BE PLACED DURING DROP OFF & PICK UP (CONTRACTOR TO PROVIDE CONES TO SCHOOL DISTRICT)
R29.0'
"DO NOT BLOCK DRIVEWAY" SIGNAGE (R10–7.1–24)
DO NOT BLOCK DRIVEWAY PAINT MARKINGS (8" WHITE BORDERLINES W/ 6" CROSS MARKINGS)
EXISTING PROPANE TANK
PROPANE TANK
FIRE LANE
12.0'
EXISTING SCHOOL BUILDING
13.5'
25.5'
EXISTING CONCRETE SIDEWALK
EXISTING METAL SHED
FIRE LANE MARKINGS
EXISTING FIRE HYDRANT
EXISTING CONCRETE SIDEWALK
PROPOSED FIRE LANE
PROPOSED DROP OFF PICK UP LANE

DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843–365–0187
EMAIL: DNORRIS@DNENGINEERING.COM

Horry County Schools

PROPOSED SITE PLAN

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE:	SEE PLAN
JOB NO.	WES–LOOP
DESIGNED BY:	M.NORRIS
DRAWN BY:	M.NORRIS
CHECKED BY:	D.NORRIS
DATE:	MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 002384
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. NORRIS
No. 19601
CERTIFICATE OF AUTHORIZATION

03/23/2022

SHEET NUMBER:
C5
5 OF 17

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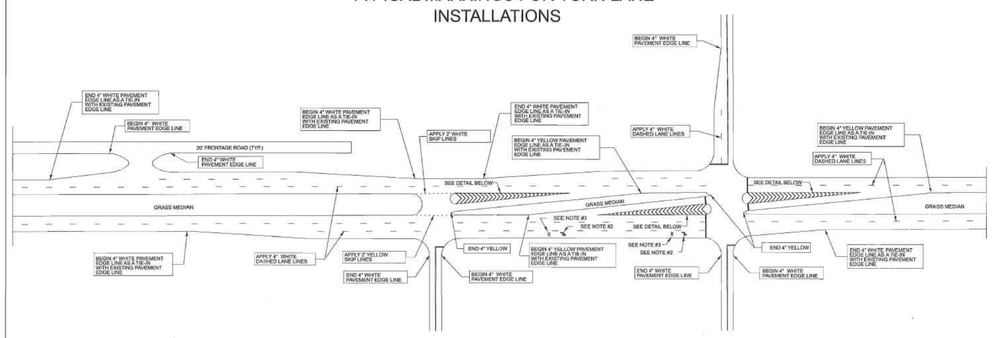
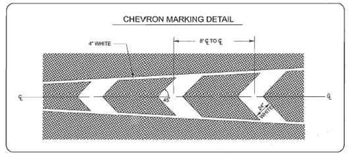
PAVEMENT MARKING TYPICAL
TYPICAL MARKINGS FOR TURN LANE INSTALLATIONS



NOTES:

1. LENGTH OF TAPERS & CHEVRONS VARY. SEE PLAN SHEETS FOR DIMENSIONS.
2. APPLY ARROWS, SEE STANDARD DRAWING NO.: 625-410-09
3. APPLY "ONLY" COPY, SEE STANDARD DRAWING NO.: 625-410-00
4. NO RAISED MARKERS ARE TO BE APPLIED ON CHEVRONS.
5. STOPLINES SHOWN ON MAINLINE ARE TO BE APPLIED ONLY AT SIGNALIZED INTERSECTIONS.

CHEVRON MARKING DETAIL



THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

2-5-08

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

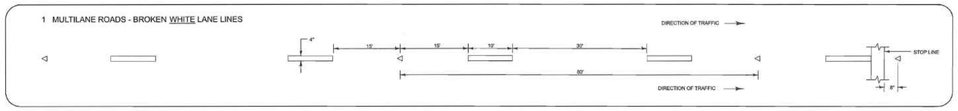
TYPICAL MARKINGS FOR TURN LANE INSTALLATIONS

625-310-00

EFFECTIVE LETTING DATE MAY 2008

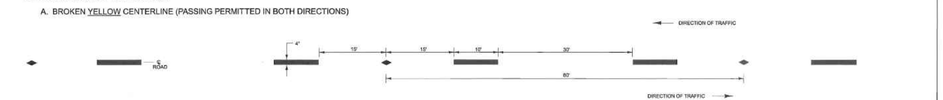
PAVEMENT MARKING TYPICAL
LINE PATTERNS AND RAISED MARKER PLACEMENT

1 MULTILANE ROADS - BROKEN WHITE LANE LINES

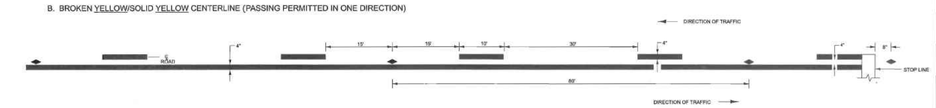


2 TWO LANE ROADS - CENTER LINES

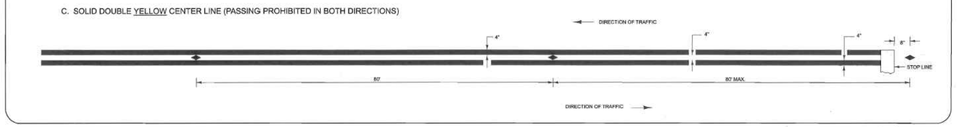
A. BROKEN YELLOW CENTERLINE (PASSING PERMITTED IN BOTH DIRECTIONS)



B. BROKEN YELLOW/SOLID YELLOW CENTERLINE (PASSING PERMITTED IN ONE DIRECTION)



C. SOLID DOUBLE YELLOW CENTER LINE (PASSING PROHIBITED IN BOTH DIRECTIONS)



IDENTIFICATION KEY FOR RAISED MARKERS:

- WHITE MONODIRECTIONAL
- YELLOW BI-DIRECTIONAL
- ALL MARKERS ARE TO BE SURFACE MOUNTED

THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

2-5-08

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

PAVEMENT MARKING TYPICAL LINE PATTERNS AND RAISED MARKER PLACEMENT

630-205-00

EFFECTIVE LETTING DATE MAY 2008

SCDOT School Area Signs — Alternate Merge

S20-1-30

When double stacking on school grounds requires that two lanes merge to one when picking up or dropping off students, S20-1-30 may be used to help provide an orderly merging condition.

S20-1-30:
1.85" Radius, 0.75" Border, 0.50" Indent, Black on Bright yellow green;
[STUDENT] C; [LOADING] C; [ZONE] C;
1.85" Radius, 0.75" Border, 0.50" Indent, Black on White;
[ALTERNATE] C; [MERGE] C;
Table of distances between letter and object lefts.

5.43	2.08	2.08	3.05	5.43	2.08	2.08	2.08	5.43			
5.75	2.08	2.08	3.17	5.05	1.41	5.05	2.10	5.75			
6.40	2.08	3.10	5.05	2.00	6.40						
1.25	27.50	1.25									
2.08	5.17	5.10	2.17	2.08	5.10	5.10	2.08	5.75	2.17	5.10	2.08
5.20	5.43	2.08	2.08	5.20	2.00	5.20					

SCDOT TRAFFIC ENGINEERING

1.75	7.13	2.78	10.59
1.75	20.5		1.75
1.75	20.5		1.75
1.75	24		1.75

R10-7.1-24:
1.50" Radius, 0.63" Border, 0.38" Indent, Black on White;
[DO NOT] C specified length;
[BLOCK] C specified length;
[DRIVEWAY] C 80% spacing;
Table of distances between letter and object lefts.

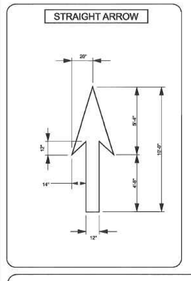
	D	O	N	O	T				
1.75	3.66	6.25	3.75	3.84	3.00	1.75			
	B	L	O	C	K				
1.75	4.51	3.99	4.45	4.27	3.28	1.75			
	D	R	I	V	E	W	A	Y	
1.75	2.85	2.86	1.10	2.97	2.36	3.18	2.68	2.50	1.75

SIGN NO.: R10-7.1-24
DATE: March 27, 2015

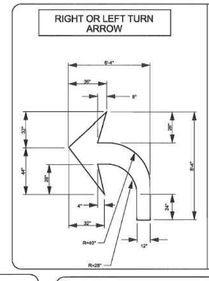
FILE NAME: R10-7.1-24.DGN FADD DIRECTORY: T:\SIGNMS\STANDARD SIGNS DESIGNED BY: JTF

STANDARD PAVEMENT MARKINGS
FOR ARROWS & ONLY(S)

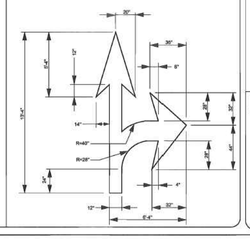
STRAIGHT ARROW



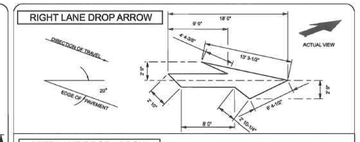
RIGHT OR LEFT TURN ARROW



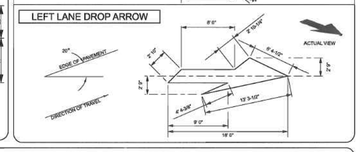
COMBINATION STRAIGHT AND LEFT OR RIGHT TURN ARROW



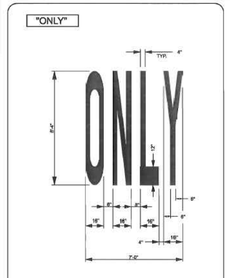
RIGHT LANE DROP ARROW



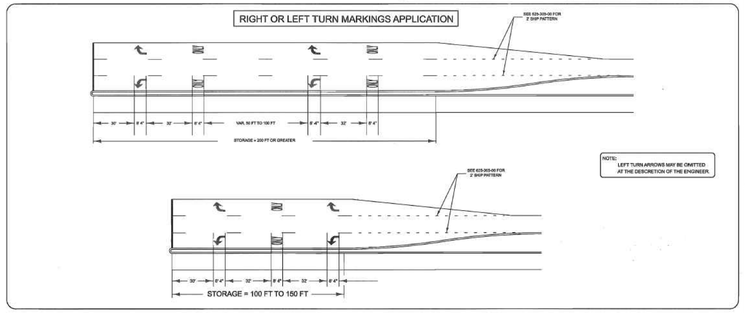
LEFT LANE DROP ARROW



"ONLY"



RIGHT OR LEFT TURN MARKINGS APPLICATION



NOTE:
LEFT TURN ARROWS MAY BE OMITTED AT THE DISCRETION OF THE ENGINEER.

THIS DRAWING IS NOT TO SCALE

REFERENCES

SIGNING AND MARKING ENGINEER

SOUTH CAROLINA REGISTERED PROFESSIONAL ENGINEER NO. 23845 MARK H. ANTHONY

SIGNATURE

1-20-09

DATE

#	DATE	CHK	DESCRIPTION
6			
5			
4			
3			
2			
1			
0			

SCDOT

SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION

DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

FOR ARROWS & ONLY(S)

625-410-00

EFFECTIVE LETTING DATE MAY 2009

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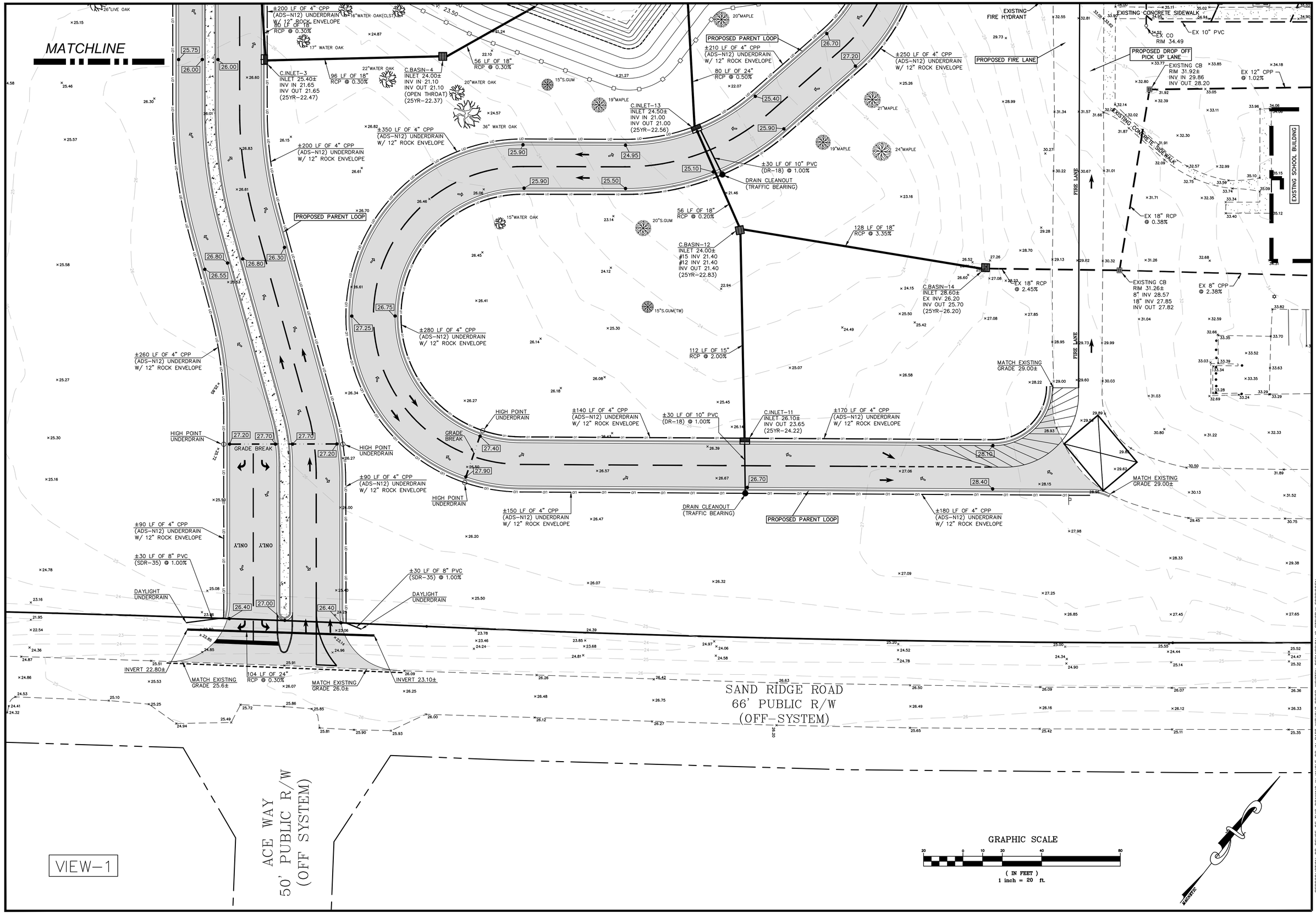
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

Horry County Schools

SCDOT STRIPING PLAN

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022



DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
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Horry County Schools

PROPOSED DRAINAGE PLAN

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00384
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 18001
DAVID W. NORRIS
03/23/2022

SHEET NUMBER:
C7
7 OF 17

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VIEW–2

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

POND DATA		
	STAGE	STORAGE
25 YR	22.34	1.23 AC–FT
100 YR	22.96	1.63 AC–FT

±320 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

C.INLET–7 INLET 33.00± INV OUT 30.00 (25YR–30.37)

±370 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

112 LF OF 15" RCP @ 4.20%

PROPOSED PARENT LOOP

MATCH EXISTING GRADE 36.32

±160 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

C.INLET–5 INLET 23.80± INV OUT 21.30 (25YR–22.38)

48 LF OF 15" RCP @ 0.50%

±320 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

C.BASIN–8 INLET 28.00± INV IN 25.30 INV OUT 24.80 (25YR–25.88)

TIE IN UNDERDRAIN TO CATCH BASIN #8

EXISTING CONCRETE SIDEWALK

EXISTING CB RIM 34.05± INV IN 31.24 INV OUT 31.20

EX DUAL 8" PVC

C.INLET–9 INLET 27.80± INV IN 24.40 INV OUT 24.40 (25YR–25.53)

40 LF OF 18" RCP @ 1.00%

48 LF OF 18" RCP @ 10.60%

±90 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

±120 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

HIGH POINT UNDERDRAIN

GRADE BREAK

C.INLET–6 INLET 23.50± INV IN 21.05 INV OUT 21.05 (25YR–22.38)

PROPOSED PARENT LOOP

±210 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

±80 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

112 LF OF 15" RCP @ 0.40%

40 LF OF 15" RCP @ 1.00%

INVERT 20.50±

INVERT 21.00±

INVERT 21.00±

EXISTING 30" PVC @ 0.65%

48 LF OF 24" RCP @ 0.30%

EXISTING INV. 18.65

LOW PT IN HAUL RD

INVERT 18.90±

EXISTING INV. 18.40

16 LF OF 24" RCP @ 1.00%

C.INLET–16 INLET 24.00± INV IN 19.05 INV OUT 19.05 (25 YR–21.50)

OUTFALL STRUCTURE
ORIFICE ELEV: 20.50
WEIR ELEV: 20.75
INVERT OUT: 19.50

96 LF OF 24" RCP @ 0.30%

C.INLET–15 INLET 23.80± INV IN 19.20 INV OUT 19.20 (25YR–21.50)

RETENTION POND
AREA TOB: 0.70 ACRES±
TOP BANK: 23.50±
NORM WL: 20.50±
TOP ELEV: 23.50±
BOT ELEV: 14.50±
SIDE SLOPE: 5H–1V
(2H–1V UNDER NWL)

BOT: 14.50

ELEV: 20.50
ELEV: 21.50
ELEV: 22.50
ELEV: 23.50

±65 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

C.INLET–1 INLET 24.90± INV OUT 22.20 (25YR–22.74)

48 LF OF 15" RCP @ 0.30%

C.INLET–2 INLET 24.70± INV IN 21.90 INV OUT 21.90 (25YR–22.55)

±200 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

80 LF OF 18" RCP @ 0.30%

17" WATER OAK

C.INLET–3 INLET 25.40± INV IN 21.65 INV OUT 21.65 (25YR–22.47)

96 LF OF 18" RCP @ 0.30%

C.BASIN–4 INLET 24.00± INV IN 21.10 INV OUT 21.10 (OPEN THROAT) (25YR–22.37)

56 LF OF 18" RCP @ 0.30%

C.INLET–13 INLET 24.50± INV IN 21.00

PROPOSED PARENT LOOP

±210 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

80 LF OF 24" RCP @ 0.50%

±250 LF OF 4" CPP (ADS–N12) UNDERDRAIN W/ 12" ROCK ENVELOPE

PROPOSED FIRE LANE

EXISTING PROPANE TANK

EX 18" RCP

72 LF OF 18" RCP @ 9.70%

EX 18" RCP @ 0.45%

EX 18" RCP @ 0.36%

EXISTING CB RIM 32.47± 15" INV 29.74 18" INV 29.88 INV OUT 29.61

C.BASIN–10 INLET 32.00± EX INV 29.52 INV OUT 28.00 (25YR–28.48)

EXISTING METAL SHED

EXISTING FIRE HYDRANT

FIRE LANE

EXISTING SCHOOL BUILDING

EXISTING CO RIM 34.95± INV IN 30.25 INV OUT 30.08

EX 10" PVC

EXISTING CB RIM 34.41± INV OUT 33.71

EXISTING CONCRETE SIDEWALK

EX CO RIM 34.49

PROPOSED DROP OFF PICK UP LANE

EXISTING CB RIM 31.92± INV IN 29.86 INV OUT 28.20

EX 12" CPP @ 1.02%

MATCHLINE

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Horry County Schools

PROPOSED DRAINAGE PLAN

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
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PREPARED FOR:
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SCALE: SEE PLAN
JOB NO. WES–LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

REVISIONS	
	DATE

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 10030
03/23/2022

SHEET NUMBER:
C8
8 OF 17

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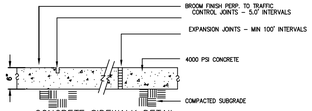
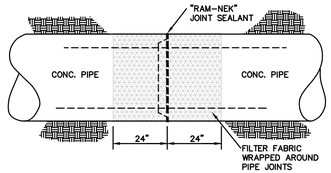
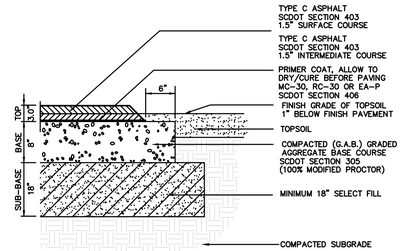


CONCRETE SIDEWALK DETAIL
N.T.S. (FRONT OF BLDG.)



CONCRETE PIPE JOINT DETAIL
N.T.S.



NOTES

1. ALL MATERIALS SHALL MEET APPLICABLE STANDARDS SET FORTH IN THE SCDOT CONSTRUCTION STANDARDS, LATEST EDITION.

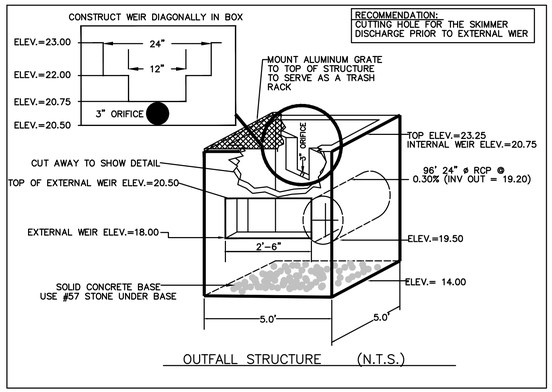
2. SUB-BASE SHALL BE FREE OF ALL ROCKS AND DEBRIS LARGER THAN 1" DIAMETER. CERTIFIED COMPACTION TESTS MUST BE SUBMITTED TO ENGINEER PRIOR TO APPLICATION OF BASE MATERIAL.

3. SUB-BASE SHALL BE FILL MATERIAL OF SOIL TYPES 'SP', 'SM' AND 'SC' WITH FINES HAVING LIQUID LIMITS LESS THAN 45%, PLACED IN MAXIMUM LIFT THICKNESSES OF 8 INCHES AND COMPACTED TO 95% OF mODIFIED PROCTOR MAXIMUM DRY DENSITY.

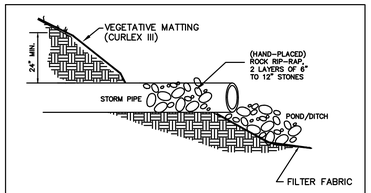
4. SUBGRADE SHALL BE GRADED AND SLOPED TOWARD DRAINAGE STRUCTURES AND DITCHES TO PREVENT THE ENTRAPMENT OF WATER WITHIN SUB-BASE AND BASE MATERIAL. SUBGRADE SHALL BE INSPECTED AND APPROVED BY OWNERS REPRESENTATIVE PRIOR TO THE INSTALLATION OF BASE MATERIAL.

PAVEMENT SECTION RECOMMENDATION
NOT TO SCALE

PAVEMENT SECTION PER TERRACON GEOREPORT DATED: DEC 8, 2020



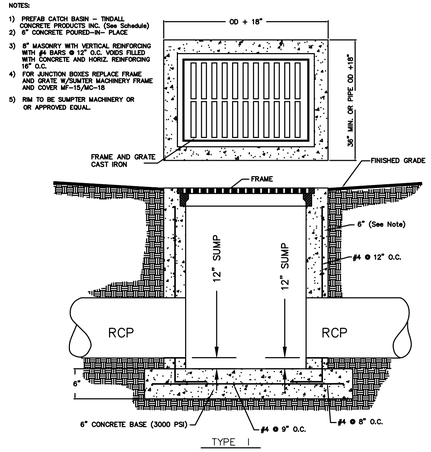
OUTFALL STRUCTURE (N.T.S.)



PIPE SIZES (INCHES)	AVERAGE ROCK DIAMETER (INCHES)	APRON WIDTH (FEET)	APRON LENGTH FOR LOW FLOW (FEET)	APRON LENGTH FOR HIGH FLOW (FEET)
8	3	2-3	3-5	5-7
12	5	3-4	4-6	8-12
18	8	4-6	6-8	12-18
24	10	6-8	8-12	18-22
30	12	8-10	12-14	22-28
36	14	10-12	14-16	28-32
42	16	12-14	16-18	32-38
48	20	14-16	18-25	38-44

OUTFALL STABILIZER DETAIL
NOT TO SCALE

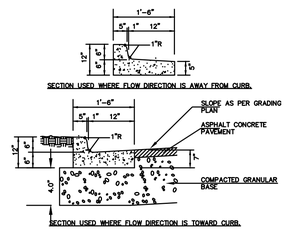
NOTES:
1) PREFAB CATCH BASIN – TINDALL CONCRETE PRODUCTS INC. (See Schedule)
2) 8" CONCRETE POURED-IN- PLACE
3) 8" MASONRY WITH VERTICAL REINFORCING WITH #4 BARS @ 12" O.C. VOIDS FILLED WITH CONCRETE AND HORIZ. REINFORCING 16" O.C.
4) FOR JUNCTION BOXES REPLACE FRAME AND GRATE W/SUMTER MACHINERY FRAME AND COVER MF-15/MC-18
5) RIM TO BE SUMPTER MACHINERY OR OR APPROVED EQUAL.



TYPE I

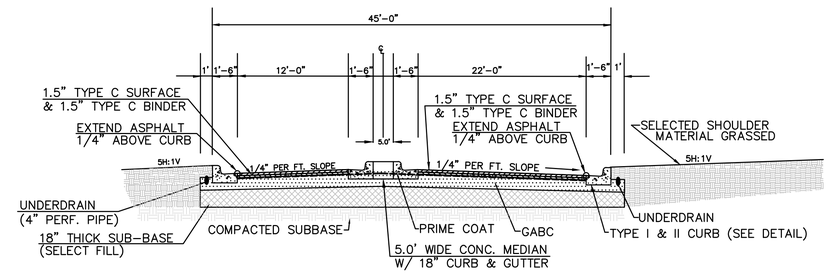
CATCH BASIN DETAIL
N.T.S

MINIMUM 3.0 FT x 3.0 FT BOXES PER SCDOT SPECIFICATIONS

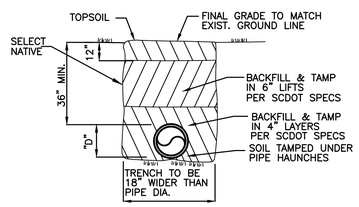


NOTES
1. CONCRETE SHALL BE FIBER REINFORCED AND SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. MAXIMUM AGGREGATE SIZE SHALL BE 1/2" DIAMETER.
2. CONTROL JOINTS SHALL BE PLACED AT 8' O.C. MAX. EXPANSION JOINTS SHALL BE PLACED AT 32' O.C. MAX.

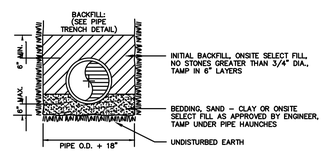
18" CURB AND GUTTER DETAIL
NOT TO SCALE



TYP. ROADWAY CROSSECTION
N.T.S.

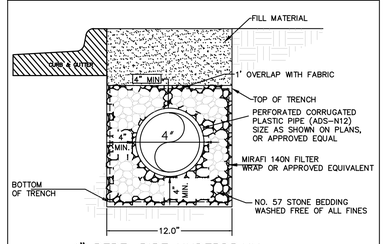


TYPICAL PIPE BEDDING DETAIL



BEDDING DETAIL DRAINAGE PIPE
NOT TO SCALE

INSTALL BACK OF CURBING & PAVEMENT

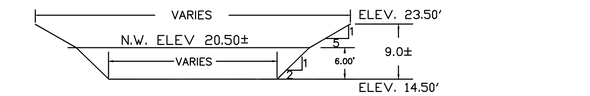


4" PERF. PIPE UNDERDRAIN
(NOT TO SCALE)

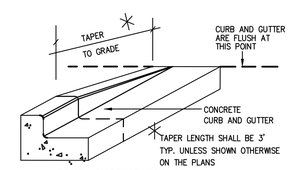
GRADING NOTES:
1. ALL DISTURBED AREAS MUST BE SEEDED IMMEDIATELY AFTER CONSTRUCTION.
2. ALL SEDIMENT & EROSION CONTROL FEATURES SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.
3. 38.20 REPRESENTS PROPOSED ASPHALT GRADES.
4. ELEV. 39.50 REPRESENTS CONCRETE/SIDEWALK GRADES.
5. x37.70 REPRESENTS EXISTING GRADES.
6. ⟹ REPRESENTS PROPOSED DRAINAGE FLOW.
7. SELECT FILL SHALL BE PLACED OVER ALL PROPOSED DRAINAGE LINES.
8. FILTER FABRIC IS REQUIRED TO BE WRAPPED AROUND ALL PIPE JOINTS.
9. IT IS THE CONTRACTOR SOLE RESPONSIBILITY TO MAKE SURE ALL ADA REQUIREMENTS ARE MET WHEN INSTALLING RAMPS & SIDEWALKS.

DRAINAGE NOTES:
1. ALL DISTURBED AREAS MUST BE SEEDED IMMEDIATELY AFTER CONSTRUCTION.
2. ALL SEDIMENT & EROSION CONTROL FEATURES SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER ABOUT ANY DISCREPANCIES BETWEEN THE ALIGNMENT & ELEVATIONS OF EXISTING UTILITIES AND THE DESIGN PLANS.
4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE REPAIRING AND/OR REPLACING ANY UTILITIES THAT MAY BECOME DAMAGE DURING THE CONSTRUCTION OF THIS PROJECT.
5. #12 TRACER WIRE SHALL BE PLACED IN THE TRENCH ABOVE ALL PLASTIC DRAINAGE LINES FOR EASE OF LOCATION.
6. THE SITE CONTRACTOR IS RESPONSIBLE FOR MAKING THE TIE IN OF ALL WATER, SEWER, AND DRAINAGE LINES–TYPICALLY 5.0 FT OUTSIDE BUILDING LINE. PVC SDR–18 AND SCH–40 SEWER PIPE CAN BE USED FOR THE DRAIN LATERALS (DOWN–SPOUTS & ROOF LEADERS). ALL BEND FITTINGS SHALL BE THE LONG RADIUS TYPE. THE SITE CONTRACTOR SHALLBE RESPONSIBLE FOR FURNISHING THE FITTINGS NEEDED TO MAKE ALL UTILITY AND DRAINAGE CONNECTIONS.
7. ALL SEWER & DRAINAGE CLEAN–OUTS SHALL BE TRAFFIC BEARING ANS INSTALLED TO FINAL GRADE. ALL CLEAN–OUTS IN GRASSED & LANDSCAPE AREAS SHALL HAVE CONCRETE COLLARS PLACED AROUND THE CLEAN–OUT FOR PROTECTION.

INSPECTION NOTES:
1. WEEKLY INSPECTIONS AND REPORTS BY THE CONTRACTOR SHALL BE KEPT ON SITE AND BE READY AVAILABLE FOR THE ENGINEER AND/OR HORRY COUNTY STORMWATER.
2. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED DAILY–ALL MUD REMOVED.
3. FINAL DRAINAGE ASBUILTS SHALL BE REQUIRED AND APPROVED BY HORRY COUNTY STORMWATER DEPT. PRIOR TO THE ISSUANCE OF CERTIFICATE OF OCCUPANCY (CO).
4. THE LAND DISTURBANCE ACTIVITY WILL BE ACCOMPLISHED PURSUANT TO THE CONCEPT PLAN AND THE COUNTY HAS THE RIGHT OT CONDUCT ONSITE INSPECTIONS.



RETENTION POND-1
NTS



CONC. CURBING TAPER
N.T.S.

CENTIPEDE SOD–NO MESH BACKING

DISTRICT REQUIREMENTS:
1. ALL IMPACTED AREAS INCLUDING, BUT NOT LIMITED TO: SITE ACCESS, DRAINAGE INSTALLATION, CONCRETE, DEMOLISHING, CONCRETE WASHOUT, AND STAGING AREAS ARE TO BE GRADED AND SODDED AT CONCLUSION ACTIVITIES.
2. ALL IRRIGATION LINES DAMAGED SHALL BE REPAIRED PER THE DISTRICT CURRENT SPECIFICATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL NEW SOD UNTIL THE ROOT IS ESTABLISHED AND THE GRASS HAS A HEALTHY GROWTH.
4. THE SITE SHALL BE CLEANED OF ALL TRASH AND DEBRIS ON A DAILY BASIS.

DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

Horry County Schools

CONSTRUCTION DETAILS

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

SHEET NUMBER:
C9
9 OF 17

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MATCHLINE

26"LIVE OAK

16"WATER OAK(CLST)

17" WATER OAK

22"WATER OAK

20"WATER OAK

36" WATER OAK

15"S.GUM

19"MAPLE

20"MAPLE

FINE GRADE & SOD POND BANKS

INLET PROTECTION

NOTE: TREE PROTECTION TO BE INSTALLED PER TREE PROTECTION DETAIL

PROPOSED PARENT LOOP

PROPOSED FIRE LANE

EXISTING FIRE HYDRANT

EXISTING CONCRETE SIDEWALK

EX CO RIM 34.49

EX 10" PVC

PROPOSED DROP OFF PICK UP LANE

EXISTING CB RIM 31.92± INV IN 29.86 INV OUT 28.20

EX 12" CPP @ 1.02%

EXISTING CONCRETE SIDEWALK

EXISTING SCHOOL BUILDING

FIRE LANE

EX 18" RCP @ 0.38%

EX 18" RCP @ 2.45%

EXISTING CB RIM 31.26± 8" INV 28.57 18" INV 27.85 INV OUT 27.82

EX 8" CPP @ 2.38%

15"WATER OAK

20"S.GUM

15"S.GUM(TW)

SILT FENCE

CONSTRUCTION ENTRANCE (MAINTAIN DAILY) (SEE DETAILS)

SWPPP CONTAINER W/ RAIN GUAGE

RIP-RAP PIPE PERIMETER

ONLY

SAND RIDGE ROAD
66' PUBLIC R/W
(OFF-SYSTEM)

ACE WAY
50' PUBLIC R/W
(OFF SYSTEM)

VIEW-1

SEQUENCE OF CONSTRUCTION ACTIVITY-STAGE II

1. MONITOR SILT FENCE. REPAIR ANY FAILURES IMMEDIATLEY
2. MONITOR CONSTRUCTION ENTRANCE (ADD ADDITIONAL ROCK-IF NEEDED)
3. INSTALL DRAINAGE SYSTEM & INLET PROTECTION.
4. INSTALL UTILITY LINES (IF APPLICABLE)
5. FINE GRADE LOOP ROAD AND COMPACT SUBGRADE
6. INSTALL CURBING AND PAVEMENT BASE
7. FINE GRADE DISTURBED AREAS
8. PAVEMENT INSTALLATION

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

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DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

HCS Horry County Schools

EROSION CONTROL PLAN-STAGE II (V1)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA PROFESSIONAL ENGINEER
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00304
03/23/2022

SOUTH CAROLINA PROFESSIONAL LAND SURVEYOR
No. 18001
03/23/2022

SHEET NUMBER:
C10
10 OF 17

VIEW–2

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

21"OAK(TW)
22"S.GUM
16"WATER OAK
15"OAK
15" S.GUM(CLST)
16"OAK
16"S.GUM
WOODS LINE

SILT FENCE
INLET PROTECTION
PROPOSED PARENT LOOP
RIP–RAP PIPE PERIMETER
FINE GRADE & SOD POND BANKS
NOTE: TREE PROTECTION TO BE INSTALLED PER TREE PROTECTION DETAIL
LOW PT IN HAUL RD
21"MAPLE(TW)
15"S.GUM
19"S.GUM
18"MAPLE(TW)
19"MAPLE
22"MAPLE(CLST)
21"MAPLE(CLST)
16"MAPLE
15"S.GUM
RETENTION POND
AREA TOB: 0.70 ACRES±
TOP BANK: 23.50±
NORM WL: 20.50±
TOP ELEV: 23.50±
BOT ELEV: 14.50±
SIDE SLOPE: 5H–1V
(2H–1V UNDER NWL)
FAIRCLOTH SKIMMER
16"HOLLY
15"S.GUM(TW)
17"S.GUM
21"L.OAK
24"LIVE OAK
16"LIVE OAK
20"LIVE OAK
26"LIVE OAK
15"WATER OAK
12"WATER OAK
22"LIVE OAK
19"WATER OAK(CLST)
16"WATER OAK(CLST)
14" WATER OAK
22"WATER OAK
20"WATER OAK
15"S.GUM
19"MAPLE
20"MAPLE
MATCHLINE
EXISTING CONCRETE SIDEWALK
EXISTING CB
RIM 34.05±
INV IN 31.24
INV OUT 31.20
EX DUAL 8" PVC
EX 10" PVC
EXISTING SCHOOL BUILDING
EXISTING CO
RIM 34.95±
INV IN 30.25
INV OUT 30.08
EXISTING PROPANE TANK
EX 18" RCP
EX 18" RCP @ 0.45%
EX 18" RCP @ 0.36%
EXISTING CB
RIM 32.47±
15" INV 29.74
18" INV 29.88
INV OUT 29.61
EXISTING METAL SHED
EXISTING FIRE HYDRANT
FIRE LANE
PROPOSED FIRE LANE
EXISTING CB
RIM 34.41±
INV OUT 33.71
EX CO
RIM 34.49
PROPOSED DROP OFF PICK UP LANE
EXISTING CB
RIM 31.92±
INV IN 29.86
INV OUT 28.20
EX 12" CPP @ 1.02%

DN
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HCS Horry County Schools

EROSION CONTROL PLAN–STAGE II (V2)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE:	SEE PLAN
JOB NO.	WES–LOOP
DESIGNED BY:	M.NORRIS
DRAWN BY:	M.NORRIS
CHECKED BY:	D.NORRIS
DATE:	MARCH 23, 2022

REVISIONS	DATE

SOUTH CAROLINA
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00304
PROFESSIONAL ENGINEER
03/23/2022

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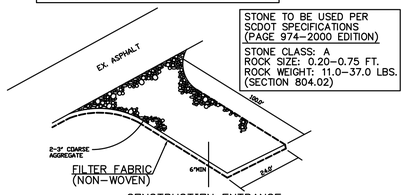
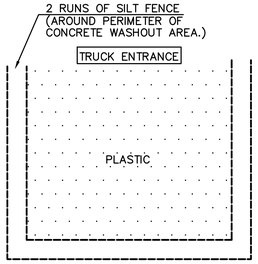
SHEET NUMBER:
C11
11 OF 17



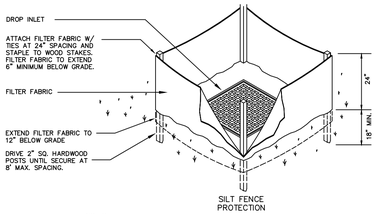
THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED DAILY.

NTS



CONCRETE WASHOUT DETAIL

(NOT TO SCALE)



NOTES

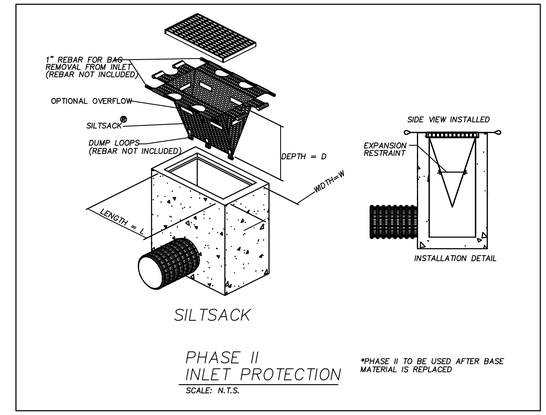
1. SILT FENCE PROTECTION SHALL BE USED UNTIL SITE IS FINE GRADED. FABRIC INSERTS MAY BE SUBSTITUTED FOR SILT FENCE AT TIME OF FINE GRADING.

2. FILTER FABRIC TO REMAIN IN PLACE UNTIL LAWN HAS BEEN ESTABLISHED AND PAVING COMPLETE. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF INLET PROTECTION AND FINAL CLEANUP INCLUDING REMOVAL OF ANY SEDIMENT ACCUMULATIONS.

3. INLET PROTECTION TO BE INSPECTED AND SEDIMENT REMOVED AS NEEDED DURING CONSTRUCTION.

DROP INLET PROTECTION DETAIL

NOT TO SCALE



DIRT STOCKPILE DETAIL

(NOT TO SCALE)

PERMANANT SEEDING - COASTAL AREAS

SPECIES	LBS./AC.	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.	DEC.
SANDY, DROUGHTY SITES													
Browntop Millet	10 lbs./ac.												
Bahiagrass	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahiagrass	30 lbs./ac.												
Sericea Lespedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Atlantic Coastal Panicgrass PLS	15 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Switchgrass (Alamo) PLS	8 lbs./ac.												
Little Bluestem	4 lbs./ac.												
Sericea Lespedeza	20 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Weeping Lovegrass	8 lbs./ac.												
WELL DRAINED, CLAYEY/ LOAMEY SITES													
Browntop Millet	10 lbs./ac.												
Bahiagrass	40 lbs./ac.												
Rye, Grain	10 lbs./ac.												
Bahiagrass	40 lbs./ac.												
Clover, Crimson (Annual)	5 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahiagrass	30 lbs./ac.												
Sericea Lespedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bermuda, Common	10 lbs./ac.												
Sericea Lespedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bermuda, Common	12 lbs./ac.												
Kobe Lespedeza (Annual)	10 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Bahiagrass	20 lbs./ac.												
Bermuda, Common	6 lbs./ac.												
Sericea Lespedeza	40 lbs./ac.												
Browntop Millet	10 lbs./ac.												
Switchgrass	8 lbs./ac.												
Little Bluestem PLS													
Indiangrass PLS	3 lbs./ac.												

TEMPORARY SEEDING - COASTAL AREAS

SPECIES	LBS./AC.	JAN.	FEB.	MAR.	APR.	MAY.	JUN.	JUL.	AUG.	SEP.	OCT.	NOV.
SANDY, DROUGHTY SITES												
Browntop Millet	40 lbs./ac.											
Rye, Grain	56 lbs./ac.											
WELL DRAINED, CLAYEY/ LOAMEY SITES												
Browntop Millet or Japanese Millet	40 lbs./ac.											
Rye, Grain or Oats	56 lbs./ac. 75 lbs./ac.											

INSPECTION NOTES:

1. WEEKLY INSPECTIONS AND REPORTS BY THE CONTRACTOR SHALL BE KEPT ON SITE AND BE READY AVAILABLE FOR THE ENGINEER AND/OR HORRY COUNTY STORMWATER.
2. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED DAILY-ALL MUD REMOVED.
3. FINAL DRAINAGE ASBUILTS SHALL BE REQUIRED AND APPROVED BY HORRY COUNTY STORMWATER DEPT. PRIOR TO THE ISSUANCE OF CERTIFICATE OF OCCUPANCY (CO).
4. THE LAND DISTURBANCE ACTIVITY WILL BE ACCOMPLISHED PURSUANT TO THE CONCEPT PLAN AND THE COUNTY HAS THE RIGHT OT CONDUCT ONSITE INSPECTIONS.

DISTRICT REQUIREMENTS:

1. ALL IMPACTED AREAS INCLUDING, BUT NOT LIMITED TO: SITE ACCESS, DRAINAGE INSTALLATION, CONCRETE, DEMOLISHING, CONCRETE WASHOUT, AND STAGING AREAS ARE TO BE GRADED AND SODDED AT CONCLUSION ACTIVITIES.
2. ALL IRRIGATION LINES DAMAGED SHALL BE REPAIRED PER THE DISTRICT CURRENT SPECIFICATIONS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING ALL NEW SOD UNTIL THE ROOT IS ESTABLISHED AND THE GRASS HAS A HEALTHY GROWTH.
4. THE SITE SHALL BE CLEANED OF ALL TRASH AND DEBRIS ON A DAILY BASIS.

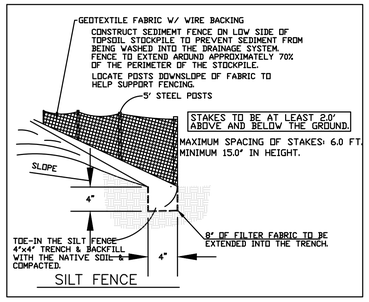
GENERAL NOTE:

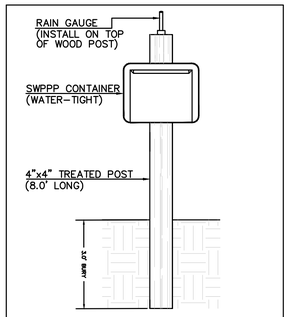
CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO START OF ANY CONSTRUCTION AND PARTICIPATE IN ANY PRE-CONSTRUCTION CONFERENCES AS MAY BE REQUIRED.

ANY INFORMATION SHOWN ON THESE DRAWINGS PERTAINING TO THE EXISTENCE, LOCATION OR ELEVATION OF EXISTING UTILITIES HAS BEEN TAKEN FROM INFORMATION SUPPLIED BY OTHERS. THE ENGINEER HAS PERFORMED NO EXCAVATIONS TO VERIFY THE ACCURACY OF THIS INFORMATION. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE APPROPRIATE AGENCIES TO OBTAIN AN ACCURATE FIELD LOCATION OF ANY AND ALL UTILITIES THAT MAY BE IN THE VICINITY OF THE PROPOSED WORK. THE CONTRACTOR SHALL VERIFY, BY FIELD MEASUREMENT, THE LOCATION AND ELEVATION OF ANY UTILITIES THAT MAY AFFECT CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE INFORMATION AS SHOWN ON THE DRAWINGS AND THAT OBTAINED BY FIELD MEASUREMENTS, AND OF ANY POSSIBLE CONFLICTS OR INTERFERENCES WITH THE PROPOSED WORK. THE ENGINEER SHALL BE ALLOWED THE TIME NECESSARY TO MAKE DESIGN REVISIONS REQUIRED TO MINIMIZE OR ELIMINATE DISCOVERED CONFLICTS.

STANDARD NOTES:

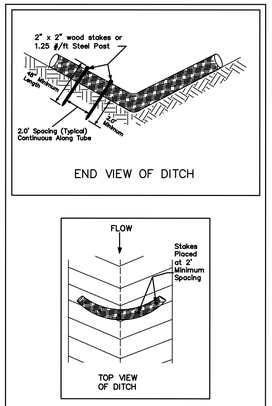
1. IF NECESSARY, SLOPES, WHICH EXCEED EIGHT (8) VERTICAL FEET SHOULD BE STABILIZED WITH SYNTHETIC OR VEGETATIVE MATS, IN ADDITION TO HYDROSEEDING. IT MAY BE NECESSARY TO INSTALL TEMPORARY SLOPE DRAINS DURING CONSTRUCTION. TEMPORARY BERMS MAY BE NEEDED UNTIL THE SLOPE IS BROUGHT TO GRADE.
2. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTION OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN FOURTEEN (14) DAYS AFTER WORK HAS CEASED EXCEPT AS STATED BELOW:
   - ** WHERE STABILIZATION BY THE 14TH DAY IS PRECLUDED BY SNOW COVER OR FROZEN GROUND CONDITIONS, STABILIZATION MEASURES MUST BE INITIATED AS SOON AS PRACTICABLE.
   - ** WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH-DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 14 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF THE SITE.
3. ALL SEDIMENT AND EROSION CONTROL DEVICES SHALL BE INSPECTED ONCE CALENDAR WEEK. IF PERIODIC INSPECTION OR OTHER INFORMATION INDICATES THAT A BMP HAS BEEN INAPPROPRIATELY, OR INCORRECTLY, THE PERMITTEE MUST ADDRESS THE NECESSARY REPLACEMENT OR MODIFICATION REQUIRED TO CORRECT THE BMP WITHIN 48 HOURS OF IDENTIFICATION.
4. PROVIDE SILT FENCE AND/OR OTHER CONTROL DEVICES, AS MAY BE REQUIRED TO CONTROL SILT EROSION DURING UTILITY CONSTRUCTION. ALL DISTURBED AREAS SHALL BE CLEANED, GRADED, AND STABILIZED WITH GRASSING IMMEDIATELY AFTER THE UTILITY INSTALLATION. FILL, COVER, AND TEMPORARY SEEDING AT THE END OF EACH DAY ARE RECOMMENDED. IF WATER IS ENCOUNTERED WHILE TRENCHING THE WATER SHOULD BE FILTERED TO REMOVED SEDIMENT BEFORE BEING PUMPED BACK INTO ANY WATERS OF THE STATE.
5. ALL EROSION CONTROL DEVICES SHALL BE PROPERLY MAINTAINED DURING ALL PHASES OF CONSTRUCTION UNTIL THE COMPLETION OF ALL CONSTRUCTION ACTIVITIES AND ALL DISTURBED AREAS HAVE BEEN STABILIZED. ADDITIONAL CONTROL DEVICES MAY BE REQUIRED DURING CONSTRUCTION IN ORDER TO CONTROL EROSION AND/OR OFFSITE SEDIMENTATION. ALL TEMPORARY CONTROL DEVICES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE IS STABILIZED.
6. THE CONTRACTOR MUST TAKE NECESSARY ACTION TO MINIMIZE THE TRACKING OF MUD ONTO THE PAVED ROADWAY FROM CONSTRUCTION AREAS. THE CONTRACTOR SHALL DAILY REMOVE MUD/SOIL FROM PAVEMENT, AS MAY BE REQUIRED.
7. RESIDENTIAL SUBDIVISIONS REQUIRE EROSION CONTROL FEATURES FOR INFRASTRUCTURE AS WELL AS FOR INDIVIDUAL LOT CONSTRUCTION. INDIVIDUAL PROPERTY OWNERS SHALL FOLLOW THESE PLANS DURING CONSTRUCTION OR OBTAIN APPROVAL OF AN INDIVIDUAL PLAN IN ACCORDANCE WITH S.C. REG. 72-300 ET SEQ. AND SCR100000.
8. TEMPORARY DIVERSION BERMS AND/OR DITCHES WILL BE PROVIDED AS NEEDED DURING CONSTRUCTION TO PROTECT WORK AREAS FROM UPSLOPE RUNOFF AND/OR TO DIVERT SEDIMENT LADEN WATER TO APPROPRIATE TRAPS OR STABLE OUTLETS.
9. ALL WATERS OF THE STATE (WoS) INCLUDING WETLANDS, ARE TO BE FLAGGED OR OTHERWISE CLEARLY MARKED IN THE FIELD. A DOUBLE ROW OF SILT FENCE IS TO BE INSTALLED IN ALL AREAS WHERE A 50-FOOT BUFFER CAN'T BE MAINTAINED BETWEEN THE DISTURBED AREA AND ALL WoS. A 10-FOOT BUFFER SHOULD BE MAINTAINED BETWEEN THE LAST ROW OF SILT FENCE AND ALL WoS.
10. LITTER, CONSTRUCTION DEBRIS, OILS, FUELS, AND BUILDING PRODUCTS WITH SIGNIFICANT POTENTIAL FOR IMPACT (SUCH AS STOCKPILES OF FRESHLY TREATED LUMBER) AND CONSTRUCTION CHEMICALS THAT COULD BE EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE IN STORMWATER DISCHARGES.
11. A COPY OF THE SWPPP, INSPECTIONS RECORDS AND RAINFALL DATA MUST BE RETAINED AT THE CONSTRUCTION SITE OF NEARBY LOCATION EASILY ACCESSIBLE DURING NORMAL BUSINESS HOURS, FROM THE DATE OF COMMENCEMENT OF CONSTRUCTION ACTIVITIES TO THE DATE OF THE FINAL STABILIZATION IS REACHED.
12. INITIATE STABILIZATION MEASURES ON ANY EXPOSED STEEP SLOPE (3H:1V OR GREATER) WHERE LAND DISTURBING ACTIVITIES HAVE PERMANENTLY OR TEMPORARILY CEASED, AND WILL NOT RESUME FOR A PERIOD OF 7 CALENDAR DAYS.
13. MINIMIZE SOIL COMPACTION AND, UNLESS INFEASIBLE, PRESERVE TOPSOIL.
14. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM EQUIPMENT AND VEHICLE WASHING, WHEEL WASH WATER, AND OTHER WASH WATERS. WASH WATERS MUST BE TREATED IN A SEDIMENT BASIN OR ALTERNATIVE CONTROL THAT PROVIDES EQUIVALENT OR BETTER TREATMENT PRIOR TO DISCHARGE.
15. MINIMIZE THE DISCHARGE OF POLLUTANTS FROM DEWATERING OF TRENCHES AND EXCAVATED AREAS. THESE DISCHARGES ARE TO BE ROUTED THROUGH APPROPRIATE BMPs (SEDIMENT BASIN, FILTER BAG, ETC.)
16. THE FOLLOWING DISCHARGES FROM SITES ARE PROHIBITED:
   - ** WATERWATER FROM WASHOUT OF CONCRETE, UNLESS MANAGED BY AN APPROPRIATE CONTROL;
   - ** WASTEWATER FROM WASHOUT AND CLEANOUT OF STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS;
   - ** FUELS, OILS, OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; AND
   - ** SOAPS OR SOLVENTS USED IN VEHICLE AND EQUIPMENT WASHING.
17. AFTER CONSTRUCTION ACTIVITIES BEGIN, INSPECTIONS MUST BE CONDUCTED AT A MINIMUM OF AT LEAST ONCE EVERY CALENDAR WEEK AND MUST BE CONDUCTED UNTIL FINAL STABILIZATION IS REACH ON ALL AREAS OF THE CONSTRUCTION SITE.
18. IF EXISTING BMPs NEED TO BE MODIFIED OR IF ADDITIONAL BMPs ARE NECESSARY TO COMPLY WITH THE REQUIREMENTS OF THIS PERMIT AND/OR SC's WATER QUALITY STANDARD, IMPLEMENTATION MUST BE COMPLETED BEFORE THE NEXT STORM EVENT IS IMPRACTICABLE, THE SITUATION MUST BE DOCUMENTED IN THE SWPPP AND ALTERNATIVE BMPs MUST BE IMPLEMENTED AS SOON AS REASONABLE POSSIBLE.
19. A PRE-CONSTRUCTION CONFERENCE MUST BE HELD FOR EACH CONSTRUCTION SITE WITH AN APPROVED ON-SITE SWPPP PRIOR TO THE IMPLEMENTATION OF CONSTRUCTION ACTIVITIES. FOR NON-LINEAR PROJECTS THAT DISTURB 10 ACRES OR MORE THIS CONFERENCE MUST BE HELD ON-SITE UNLESS THE DEPARTMENT HAS APPROVED OTHERWISE.



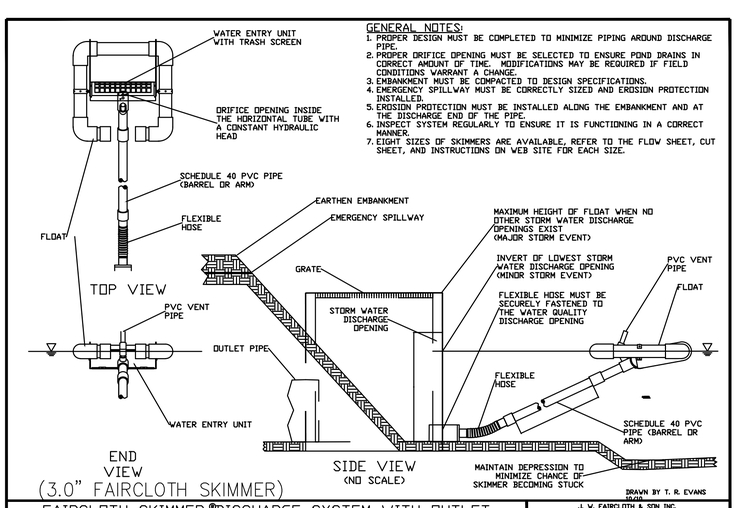


SWPPP CONTAINER & RAIN GAUGE DETAIL

(NOT TO SCALE)



SEDIMENT TUBE DETAIL



GENERAL NOTES:

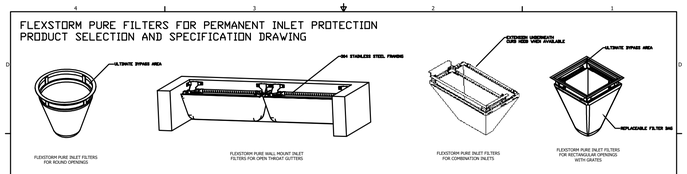
1. PROPER DESIGN MUST BE COMPLETED TO MINIMIZE PIPING AROUND DISCHARGE PIPE.
2. PROPER ORIFICE OPENING MUST BE SELECTED TO ENSURE POND DRAINS IN CORRECT AMOUNT OF TIME. MODIFICATIONS MAY BE REQUIRED IF FIELD CONDITIONS WARRANT A CHANGE.
3. EMBANKMENT MUST BE COMPACTED TO DESIGN SPECIFICATIONS.
4. EMERGENCY SPILLWAY MUST BE CORRECTLY SIZED AND EROSION PROTECTION INSTALLED.
5. EROSION PROTECTION MUST BE INSTALLED ALONG THE EMBANKMENT AND AT THE DISCHARGE END OF THE PIPE.
6. INSPECT SYSTEM REGULARLY TO ENSURE IT IS FUNCTIONING IN A CORRECT MANNER.
7. EIGHT SIZES OF SKIMMERS ARE AVAILABLE, REFER TO THE FLOW SHEET, CUT SHEET, AND INSTRUCTIONS ON WEB SITE FOR EACH SIZE.

FAIRCLOTH SKIMMER ®DISCHARGE SYSTEM WITH OUTLET STRUCTURE

DRAWN BY T. R. EVANS 10/05

J. V. FAIRCLOTH & SON INC.
WWW.FAIRCLOTHSKIMMER.COM
TELEPHONE: (919) 732-1244
FAX: (919) 732-1266
EMAIL: WARREN@FAIRCLOTHSKIMMER.COM

FLEXSTORM PURE FILTERS FOR PERMANENT INLET PROTECTION
PRODUCT SELECTION AND SPECIFICATION DRAWING



For Round Openings with Grates		Minimum Bypass Flow Rates (CFS)* Based on Nominal Frame Size with minimum 2" Bypass flow gap		
Drop Thru Opening Size Dia	Flexstorm Frame P/N	FX	PC	TL
Small: 10" - 15" - 17"	62x10X	1.6	1.2	0.8
Medium: 18" - 21" - 24"	62x18	2.1	1.7	1.2
Large: 24" - 36"	62x24	3.8	2.7	1.8
XL: 42" - 54"	62x36	4.2	3.6	2.4

For Open Throat Curb Inlets - Mounted to Wall Beneath Curb Opening	
Curb Opening Size	Flexstorm Frame P/N
Up to 4' curb openings (1 Inlet)	62x50X/LT
Between 4' and 8' curb openings (2 Inlets)	62x50X/LT
Between 8' and 12' curb openings (3 Inlets)	62x50X/LT
Between 12' and 16' curb openings (4 Inlets)	62x50X/LT

For Rectangular/Square Openings with Grates				Minimum Bypass Flow Rates (CFS)* Based on Nominal Frame Size with minimum 2" Bypass flow gap		
Drop Thru Opening Size (inch and gate width)	Flexstorm Frame P/N	Combination P/N		FX	PC	TL
Small: 12" x 12" up to 14" x 12" (or 14" max perimeter)	62XHD	62XHD/CB		1.6	1.2	0.8
Medium: 18" x 18" up to 24" x 24" (or 96" max perimeter)	62MHD	62MHD/CB		2.1	1.7	1.2
Large: 36" x 36" up to 36" x 36" (or 144" max perimeter)	62LHD	62LHD/CB		3.8	2.7	1.8
XL: 32" x 32" up to 48" x 48" (or 192" max perimeter) Typ 2 gal. set	62XLHD	62XLHD/CB		4.2	3.6	2.4

CREATE YOUR ADS FLEXSTORM PART NUMBER BY COMBINING FRAME P/N AND BAG P/N

1. IDENTIFY YOUR FLEXSTORM FRAME PART NUMBER FROM TABLES ABOVE
2. SELECT YOUR BAG PART NUMBER BASED ON APPLICATION NEEDS

FLEXSTORM FILTER BAGS	12" depth	12" depth	Clean Water Flow	Min A.O.S.
	STD Bag P/N	Short Bag P/N	Rate (GPM/SqFt)	(US Sieve)
FX: Standard Woven Bag	FX	FX-S	200	40
FXH: Woven - for MyCelx	FXP	FXP-S	200	40
FXO: Woven w/ Oil Boom	FXO	FXO-S	200	40
PC: Post Construction Bag	PC	PC-S	137	140
PCH: PC Bag w/ MyCelx	PCP	PCP-S	137	140
LL: Litter and Leaf Bag	LL	LL-S	High	3.3
IL: IDOT Non-Woven Bag	IL	IL-S	145	70

3. CREATE YOUR FLEXSTORM INLET FILTER PART NUMBER

Frame P/N from Step 1. Filter Bag P/N from Step 2.

SPECIFICATIONS FOR STANDARD BAGS BY COMBINING BAG / FRAME SIZE

Nominal Bag Size *Matched to Frame Size*	Solids Storage (Cu Ft)	Filtered Flow Rate at 50% Max (CFS) * FX (Woven)	* PC (Post Consrtr)	* TL (Non Woven)	**FX-Oil Retention (Qs)	**PC-OIL Retention (Qs)	**TL-Oil Retention (Qs)
Small	1.6	1.2	0.8	0.9	79	158	89
Medium	2.1	1.7	1.2	1.3	115	204	89
Large	3.8	2.7	1.8	1.9	173	262	89
XL	4.2	3.6	2.4	2.6	230	319	178
Filtration Efficiency		82%	NA	Large scale 3rd party testing per ASTM D-7351 using 7% concentration USGB Sandy Loam			
TSS (total suspended solids sediment)		NA	99%	Large Scale testing at 99 GPM with closed circuit sediment feed (1750 mg/L measuring TSS per SM 2540D)			
TPH (hot petroleum hydrocarbons)		NA	96%	Large Scale testing at 99 GPM with closed circuit oil at 747 mg/L measuring per 1664 Method 1664A			

* PC filter bag at 50% max adsorption capacity
** PC filter bag at 50% capacity and MyCelx skimmer at 100% capacity

NOTES:

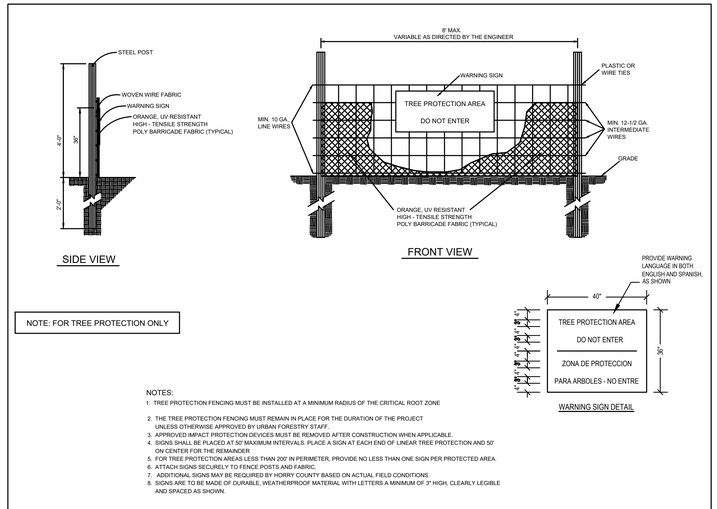
1. ALL FRAMING IS CONSTRUCTED OF 304 STAINLESS STEEL FOR 25 YEAR SERVICE LIFE RATING
2. TOTAL BYPASS CAPACITY: BYPASS CAPACITY WILL VARY WITH EACH SIZE DRAINAGE STRUCTURE. FLEXSTORM DESIGNS FRAMING BYPASS TO MEET OR EXCEED THE DESIGN FLOW OF THE PARTICULAR DRAINAGE STRUCTURE.
3. UPON ORDERING CONFIRMATION OF THE DOT CALLOUT, PRECAST OR CASTING MAKE AND MODEL, OR DETAILED DIMENSIONAL FORMS MUST BE PROVIDED TO CONFIGURE AND ASSEMBLE YOUR CUSTOMIZED FLEXSTORM INLET FILTER. PART NUMBER ALONE IS NOT SUFFICIENT.
4. FOR WRITTEN SPECIFICATIONS AND MAINTENANCE GUIDELINES VISIT WWW.INLETFILTERS.COM

INSTALLATION:

1. REMOVE GRATE
2. DROP FLEXSTORM INLET FILTER INTO LOAD BEARING LIP OF CASTING OR CONCRETE STRUCTURE
3. REPLACE GRATE

ALL PRODUCTS MANUFACTURED BY INLET & PIPE PROTECTION, INC A DIVISION OF ABS, INC.
WWW.INLETFILTERS.COM
(866) 287-8655 PH
(630) 355-3477 FX
INF@INLETFILTERS.COM

SIZE	DWG NO	REV
C	FLEXSTORM_PURE	A
SCALE	SHEET 1 OF 1	



NOTE: FOR TREE PROTECTION ONLY

NOTES:

1. TREE PROTECTION FENCING MUST BE INSTALLED AT A MINIMUM RADIUS OF THE CRITICAL ROOT ZONE
2. THE TREE PROTECTION FENCING MUST REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE APPROVED BY URBAN FORESTRY STAFF.
3. APPROVED IMPACT PROTECTION DEVICES MUST BE REMOVED AFTER CONSTRUCTION WHEN APPLICABLE.
4. SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS. PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER FOR THE REMAINDER
5. FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTED AREA.
6. ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
7. ADDITIONAL SIGNS MAY BE REQUIRED BY HORRY COUNTY BASED ON ACTUAL FIELD CONDITIONS.
8. SIGNS ARE TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL WITH LETTERS A MINIMUM OF 3" HIGH, CLEARLY LEGIBLE AND SPACED AS SHOWN.

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CONWAY, SC 29526
PHONE: 843-365-0187
EMAIL: DNORRIS@DNENGINEERING.COM

HCS Horry County Schools

EROSION CONTROL DETAILS

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

REVISIONS

DATE

SHEET NUMBER:

C12

12 OF 17

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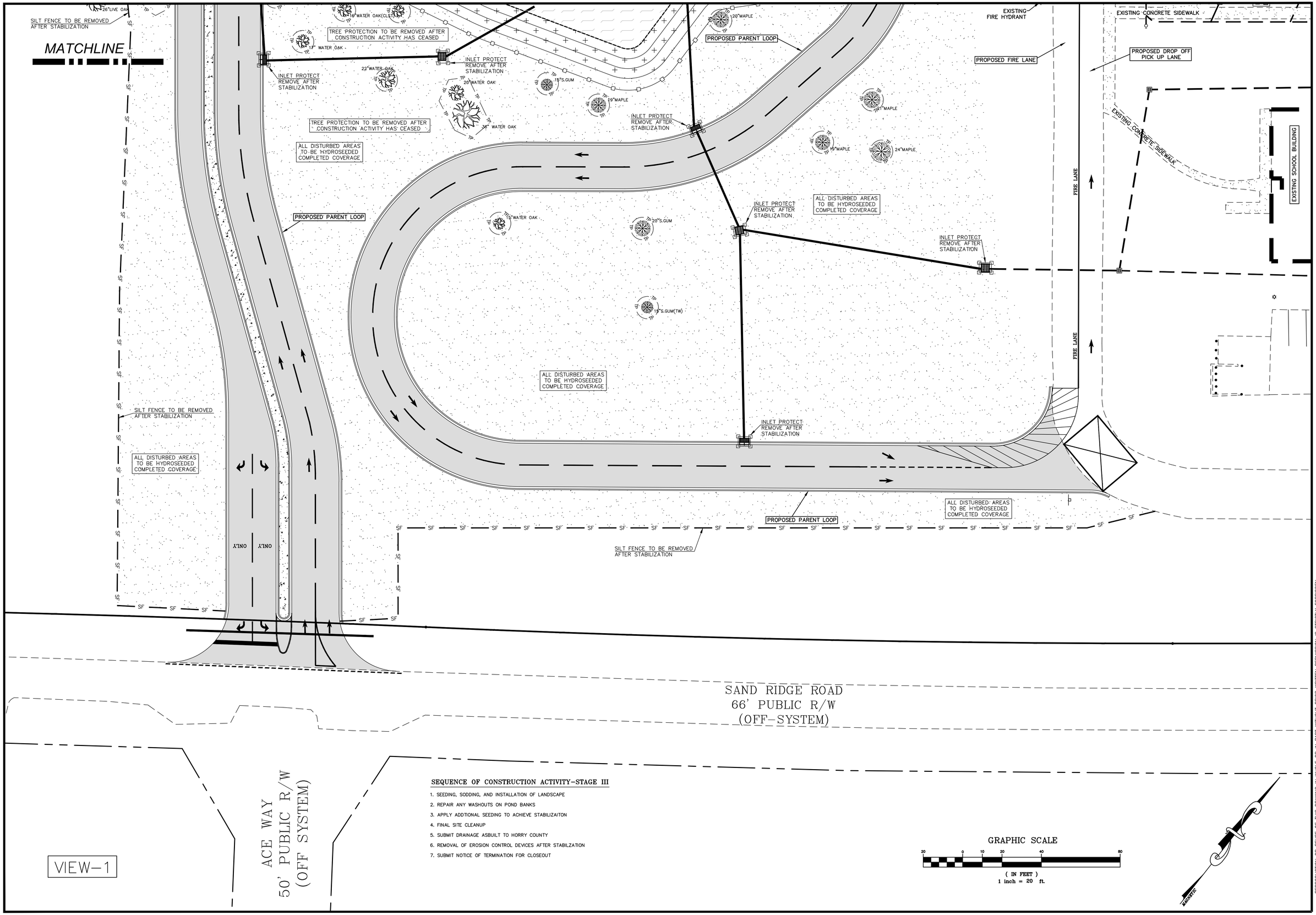

SEQUENCE OF CONSTRUCTION ACTIVITY-STAGE III

1. SEEDING, SODDING, AND INSTALLATION OF LANDSCAPE
2. REPAIR ANY WASHOUTS ON POND BANKS
3. APPLY ADDTIONAL SEEDING TO ACHIEVE STABILIZAITON
4. FINAL SITE CLEANUP
5. SUBMIT DRAINAGE ASBUILT TO HORRY COUNTY
6. REMOVAL OF EROSION CONTROL DEVICES AFTER STABILZATION
7. SUBMIT NOTICE OF TERMINATION FOR CLOSEOUT

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

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Horry County Schools

EROSION CONTROL PLAN-STAGE III (V1)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

SOUTH CAROLINA
DAVID W. NORRIS
DN ENGINEERING INC.
4664 DOCK ROAD
CONWAY, SC 29526
No. 00304
PROFESSIONAL ENGINEER

SOUTH CAROLINA
DAVID W. NORRIS
No. 18001
PROFESSIONAL LAND SURVEYOR
03/23/2022

SHEET NUMBER:
C13
13 OF 17

VIEW–2

GRAPHIC SCALE

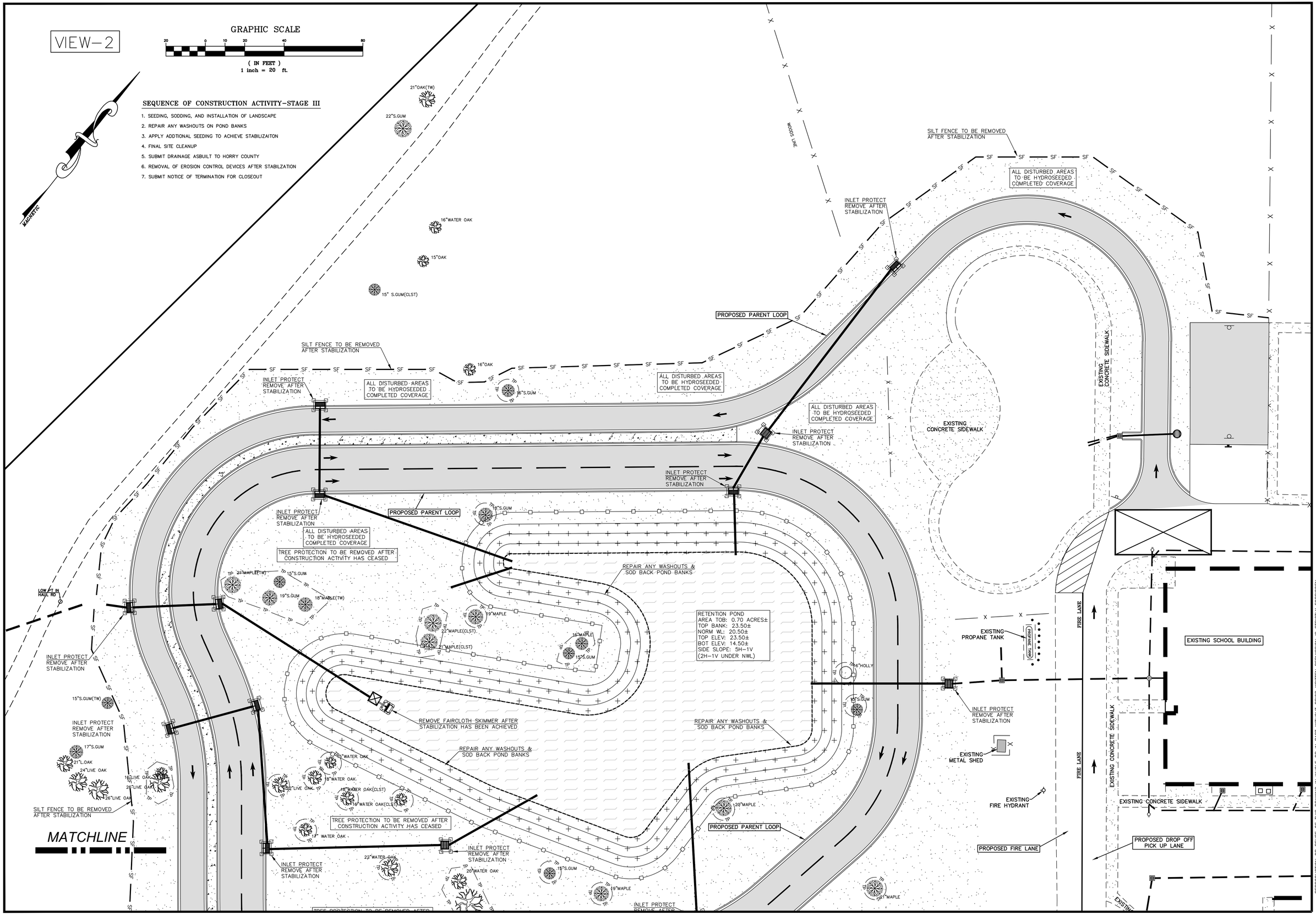
20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

SEQUENCE OF CONSTRUCTION ACTIVITY–STAGE III

1. SEEDING, SODDING, AND INSTALLATION OF LANDSCAPE
2. REPAIR ANY WASHOUTS ON POND BANKS
3. APPLY ADDTIONAL SEEDING TO ACHIEVE STABILIZAITON
4. FINAL SITE CLEANUP
5. SUBMIT DRAINAGE ASBUILT TO HORRY COUNTY
6. REMOVAL OF EROSION CONTROL DEVICES AFTER STABILZATION
7. SUBMIT NOTICE OF TERMINATION FOR CLOSEOUT



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Horry County Schools

EROSION CONTROL PLAN–STAGE III (V2)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE:	SEE PLAN
JOB NO.	WES–LOOP
DESIGNED BY:	M.NORRIS
DRAWN BY:	M.NORRIS
CHECKED BY:	D.NORRIS
DATE:	MARCH 23, 2022

DATE	REVISIONS

03/23/2022

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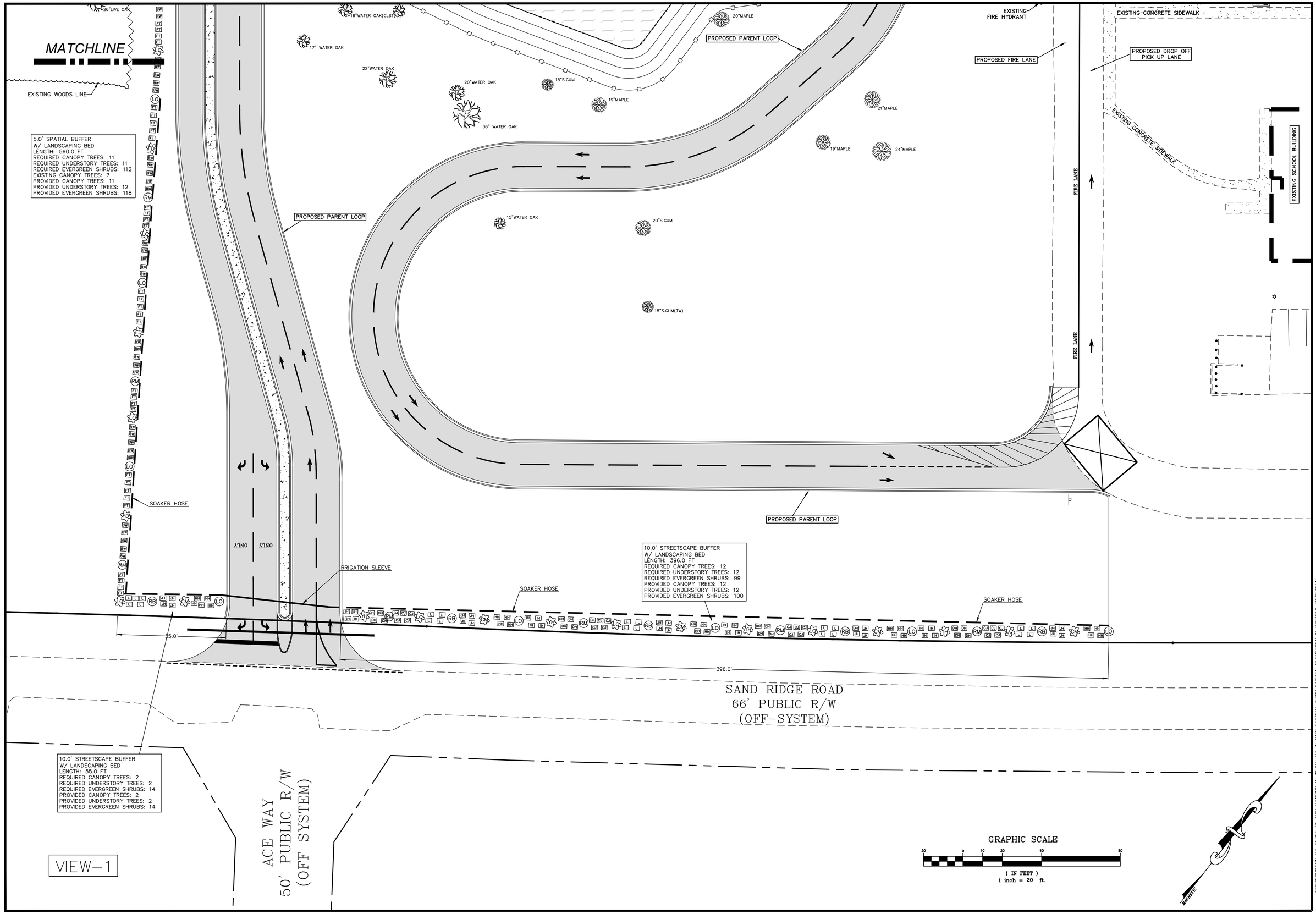

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Horry County Schools

PROPOSED LANDSCAPING PLAN (V1)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
JOB NO. WES-LOOP
DESIGNED BY: M.NORRIS
DRAWN BY: M.NORRIS
CHECKED BY: D.NORRIS
DATE: MARCH 23, 2022

DATE	REVISIONS

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VIEW–2

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

MAGNETIC

5.0' SPATIAL BUFFER
W/ LANDSCAPING BED
LENGTH: 560.0 FT
REQUIRED CANOPY TREES: 11
REQUIRED UNDERSTORY TREES: 11
REQUIRED EVERGREEN SHRUBS: 112
EXISTING CANOPY TREES: 7
PROVIDED CANOPY TREES: 11
PROVIDED UNDERSTORY TREES: 12
PROVIDED EVERGREEN SHRUBS: 118

21"OAK(TW)
22"S.GUM
16"WATER OAK
15"OAK
15" S.GUM(CLST)
16"OAK
16"S.GUM
EXISTING WOODS LINE
WOODS LINE
PROPOSED PARENT LOOP
SOAKER HOSE
EXISTING CONCRETE SIDEWALK
EXISTING CONCRETE SIDEWALK
PROPOSED PARENT LOOP
18"S.GUM
21"MAPLE(TW)
15"S.GUM
19"S.GUM
18"MAPLE(TW)
19"MAPLE
22"MAPLE(CLST)
21"MAPLE(CLST)
16"MAPLE
15"S.GUM
RETENTION POND
AREA TOB: 0.70 ACRES±
TOP BANK: 23.50±
NORM WL: 20.50±
TOP ELEV: 23.50±
BOT ELEV: 14.50±
SIDE SLOPE: 5H–1V
(2H–1V UNDER NWL)
16"HOLLY
15"S.GUM
LOW PT IN HAUL RD
15"S.GUM(TW)
17"S.GUM
21"L.OAK
24"LIVE OAK
26"LIVE OAK
26"LIVE OAK
26"LIVE OAK
MATCHLINE
15"WATER OAK
18"WATER OAK
22"LIVE OAK
18"WATER OAK(CLST)
16"WATER OAK(CLST)
17" WATER OAK
22"WATER OAK
20"WATER OAK
15"S.GUM
19"MAPLE
20"MAPLE
PROPOSED PARENT LOOP
21"MAPLE
EXISTING WOODS LINE
EXISTING PROPANE TANK
PROPANE TANK
FIRE LANE
EXISTING METAL SHED
EXISTING FIRE HYDRANT
PROPOSED FIRE LANE
FIRE LANE
EXISTING SCHOOL BUILDING
EXISTING CONCRETE SIDEWALK
EXISTING CONCRETE SIDEWALK
PROPOSED DROP OFF PICK UP LANE

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Horry County Schools

PROPOSED LANDSCAPING PLAN (V2)

WATERWAY ELEMENTARY SCHOOL
NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE:	SEE PLAN
JOB NO.	WES–LOOP
DESIGNED BY:	M.NORRIS
DRAWN BY:	M.NORRIS
CHECKED BY:	D.NORRIS
DATE:	MARCH 23, 2022

DATE	REVISIONS

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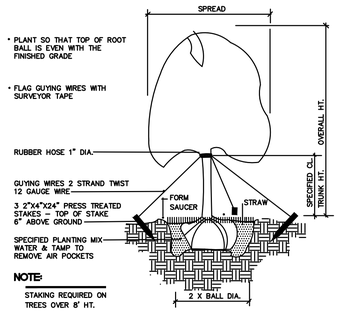
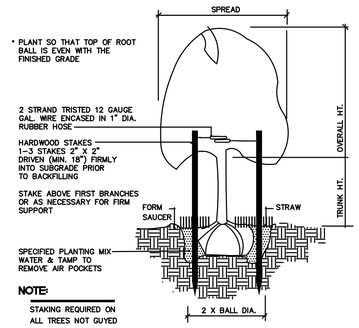


A TREE PLANTING–GUY WIRES

N.T.S.



B TREE PLANTING–STAKES

N.T.S.

LANDSCAPE NOTES

L/1 – ALL NEWLY INSTALLED TREES SHALL BE PROPERLY STAKED. SEE DETAIL THIS SHEET

L/2 – ALL PLANT MATERIAL SHALL MEET THE STANDARDS OF THE AMERICAN NURSERYMENS ASSOCIATION.

L/3 – PLACEMENT OF ALL PLANT MATERIAL IN THE FIELD MUST BE INSPECTED AND APPROVED PRIOR TO INSTALLATION.

L/4 – ALL PLANTED BEDS SHALL BE BROUGHT UP TO WITHIN 1" OF FINISHED GRADE WITH APPROVED TOPSOIL (SEE NOTE L/9) AND COVERED WITH STRAW.

L/5– THE LANDSCAPE CONTRACTOR SHALL INSURE THAT ALL BERMING AND GRADING OPERATIONS ARE COMPLETE PRIOR TO BEGINNING INSTALLATION OF PLANT MATERIAL.

L/6 – LANDSCAPE CONTRACTOR SHALL COORDINATE ALL RELATED TRADES (IRRIGATION, LANDSCAPE LIGHTING, ETC.) TO AVOID CONFLICTS DURING INSTALLATION PROCEDURES.

L/7– ALL PLANT MATERIAL (NEW) SHALL BE GUARANTEED FOR A ONE YEAR PERIOD FOLLOWING ACCEPTANCE BY THE OWNER. ALL REPLACEMENTS SHALL ALSO RECEIVE THIS SAME GUARANTEE.

L/8 – QUANTITIES INDICATED ON THE PLANS ARE FOR THE CONVENIENCE OF THE CONTRACTOR. CONTRACTOR SHALL VERIFY ALL QUANTITIES PRIOR TO SUBMITTING BID.

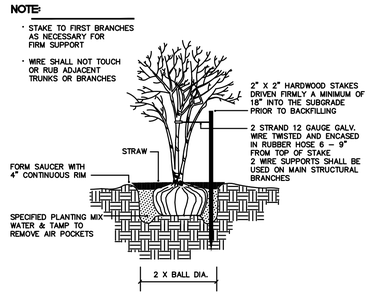
L/9 – TOPSOIL PLACED IN LANDSCAPED AREAS SHALL BE A SANDY LOAM, FRIABLE AND FERTILE IN NATURE, WITH NO GREATER THAN 25% CLAY CONTENT. IT SHALL BE FREE OF CLODS, ROOTS, GRAVEL AND INERT MATERIAL. IT SHALL CONTAIN NO NOXIOUS VEGETATION OR REGENERATIVE MATERIAL. THE CONTRACTOR SHALL INCLUDE THE COST OF TOPSOIL IN HIS UNIT PRICES FOR EARTHWORK.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES AND ORDINANCES REGARDING LANDSCAPING.
2. THE GENERAL CONTRACTOR IS TO CLEAN & RAKE LANDSCAPE AREA.
3. THE CONTRACTOR SHALL APPLY 2" OF LANDSCAPE GRADE TOP SOIL IN PLANTING AREAS. PLANT GRASS SEED AND SPREAD STRAW OVER ALL SEEDED AREAS.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTABLISH A HEALTHY STAND OF GRASS ON ALL SEEDED AREAS.
5. IN THE EVENT OF PLANTING BEDS AND STRAW ARE REQUIRED, THE CONTRACTOR SHALL INSTALL BLACK FABRIC MESH UNDER THE STRAW TO PREVENT WEED GROWTH.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE WATERING AND THE MAINTENANCE OF ALL LANDSCAPED AREAS UNTIL THIRTY (30) DAYS FOLLOWING THE PLANTING OF THE GRASS, TREES, AND SHRUBS.

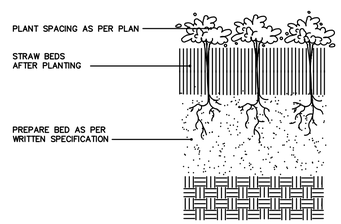
*TYPE "C" STREETSCAPE PLANT SCHEDULE:

SYMBOL	COMMON NAME	COMMON NAME	SPACING	SIZE @ PLANTING	SIZE @ MATURITY	TOTAL
	CANOPY TREES		3 PER 100'	MIN. 10.0' HEIGHT MIN. 2.5" CALIPER	MIN. 30' HEIGHT	14
LO	LAUREL OAK	EVERGREEN				5
RM	RED MAPLE	DECIDUOUS				4
RB	RIVER BIRCH	DECIDUOUS				5
	UNDERSTORY TREES		3 PER 100'	MIN. 5.0' HEIGHT	10.0' TO 30' HEIGHT	14
YH	YAUPON HOLLY	EVERGREEN				4
LQ	LOQUAT	EVERGREEN				5
CM	CRAPE MYRTLE	DECIDIUOUS				5
	EVERGREEN SHRUB		25 PER 100'	MIN. 15.0" HEIGHT	MIN. 3.0' HEIGHT	114
IH	INDIAN HAWTHORNE	EVERGREEN				16
DH	DWARF YAUPON HOLLY	EVERGREEN				16
L	LOROPETALUM	EVERGREEN				21
JH	JAPANESE HOLLY	EVERGREEN				20
HH	HELLERI HOLLY	EVERGREEN				21
CJ	CREEPING JUNIPER	EVERGREEN				20



C MULTI–TRUNK TREE STAKING

N.T.S.

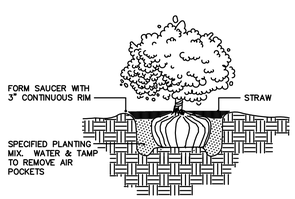


D GROUND COVER PLANTING

N.T.S.

*TYPE "B" SPATIAL SCHEDULE:

SYMBOL	COMMON NAME	COMMON NAME	SPACING	SIZE @ PLANTING	SIZE @ MATURITY	TOTAL
	CANOPY TREES		3 PER 100'	MIN. 10.0' HEIGHT MIN. 2.0" CALIPER	MIN. 30' HEIGHT	11
LO	LAUREL OAK	EVERGREEN				5
RM	RED MAPLE	DECIDUOUS				6
	UNDERSTORY TREES		3 PER 100'	MIN. 5.0' HEIGHT	10.0' TO 30' HEIGHT	12
FD	FLOWERING DOGWOOD	EVERGREEN				6
LQ	LOQUAT	EVERGREEN				6
	EVERGREEN SHRUB		28 PER 100'	MIN. 15.0" HEIGHT	MIN. 3.0' HEIGHT	118
BW	BOXWOOD	EVERGREEN				60
FT	FIRETHORN	EVERGREEN				58



E SHRUB PLANTING DETAIL

N.T.S.

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CONWAY, SC 29526
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Horry County Schools

PROPOSED LANDSCAPING DETAILS

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NEW PARENT LOOP
ADDRESS: 700 SANDRIDGE RD. LITTLE RIVER, SC 29566
PREPARED FOR:
HORRY COUNTY SCHOOL DISTRICT

SCALE: SEE PLAN
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DESIGNED BY: M.NORRIS
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CHECKED BY: D.NORRIS
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