

TIP PROJECT: U-3422A

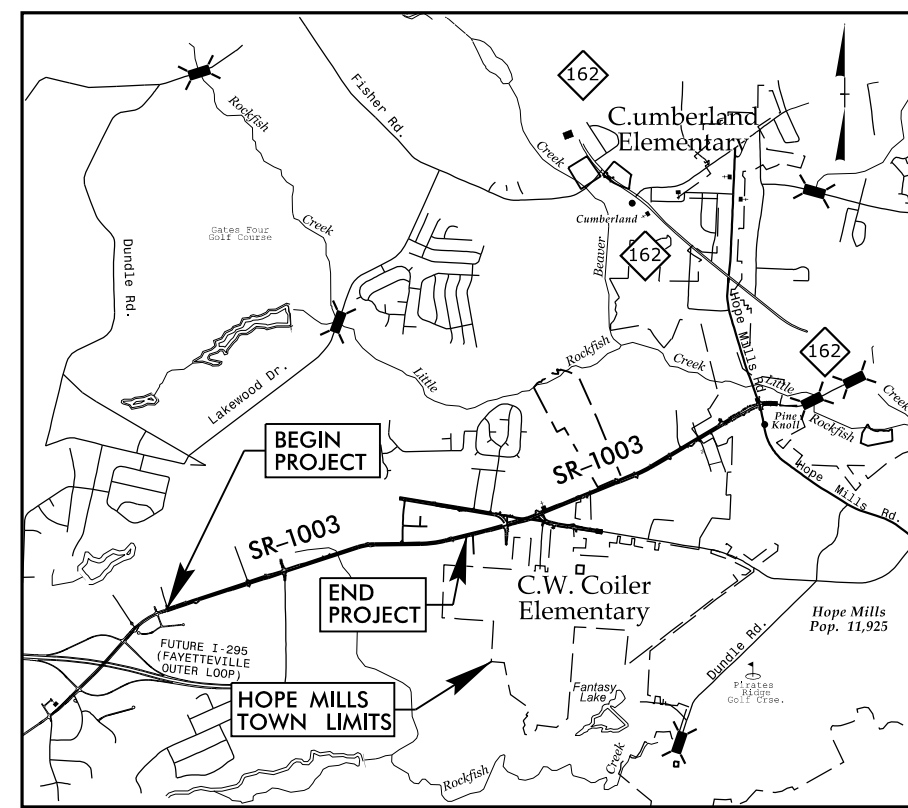
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

CUMBERLAND COUNTY

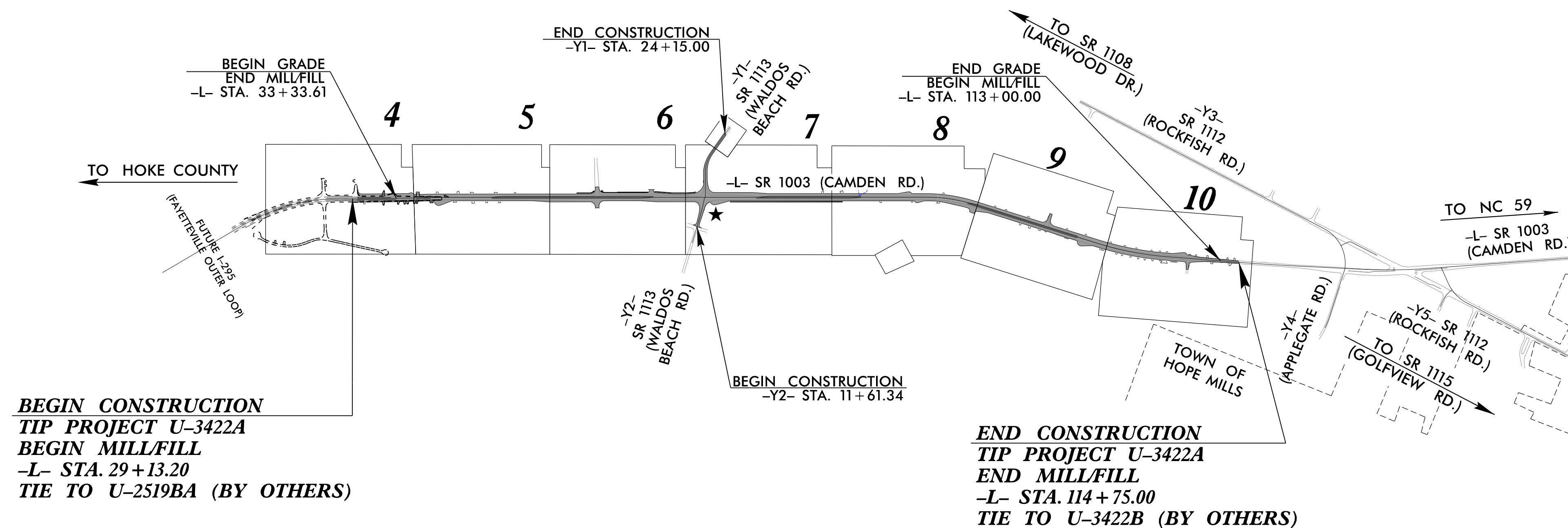
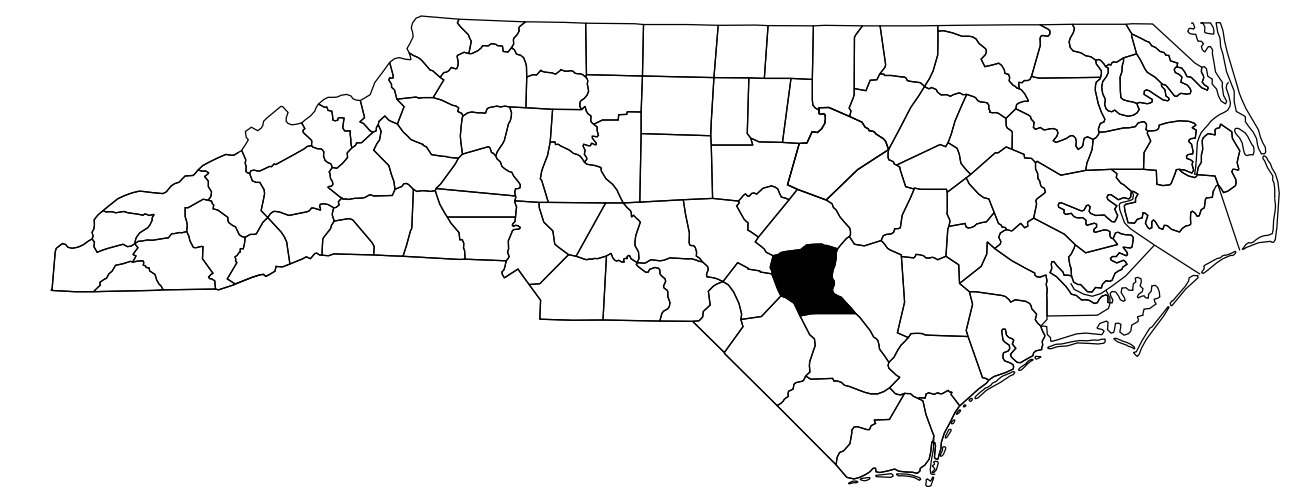
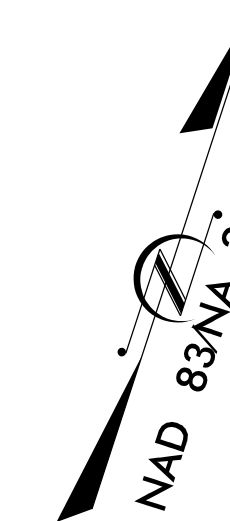
**LOCATION: LOCATION: SR 1003 (Camden Road) from Future I-295 (Fayetteville Outer Loop)
To Approx. 0.3 Miles West of SR 1112 (Rockfish Road)**

TYPE OF WORK: GRADING, PAVING, DRAINAGE AND SIGNALS



VICINITY MAP
(NOT TO SCALE)

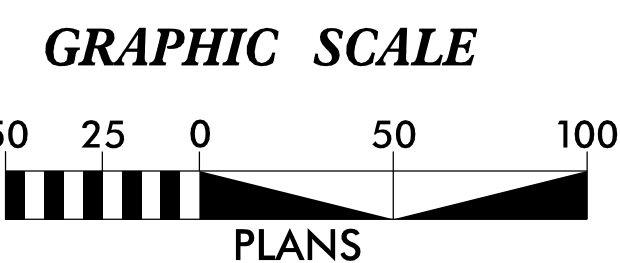
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3422A	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
39001.1.1	STP-1003 (131)	P.E.	
39001.2.1	STP-1003 (179)	ROW	
39001.2.2	STP-1003 (179)	UTILITIES	
39001.3.1		CONSTRUCTION	



THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.

BEGIN CONSTRUCTION
TIP PROJECT U-3422A
BEGIN MILL/FILL
-L- STA. 29 + 13.20
TIE TO U-2519BA (BY OTHERS)

END CONSTRUCTION
TIP PROJECT U-3422A
END MILL/FILL
-L- STA. 114 + 75.00
TIE TO U-3422B (BY OTHERS)



**THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH
THE REGULATIONS SET FORTH BY THE NCG010000 GENERAL
CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY,
MINERAL, AND LAND RESOURCES.**



Prepared in the Office of:
HDR Engineering, Inc. of the Carolinas
555 Fayetteville St, Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116
2024 STANDARD SPECIFICATIONS

Designed by:
David R. Wagner II, PE 4286
NAME LEVEL III CERTIFICATION NO.

Roadway Standard Drawings

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

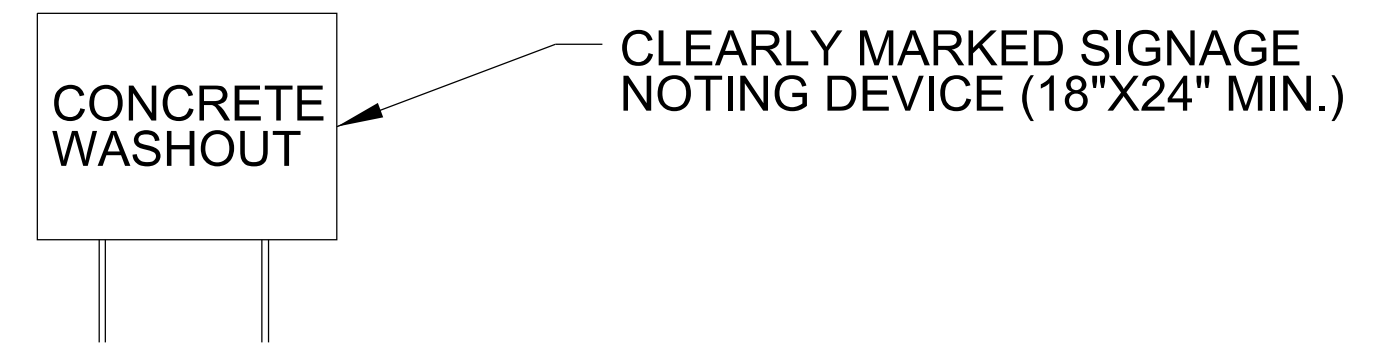
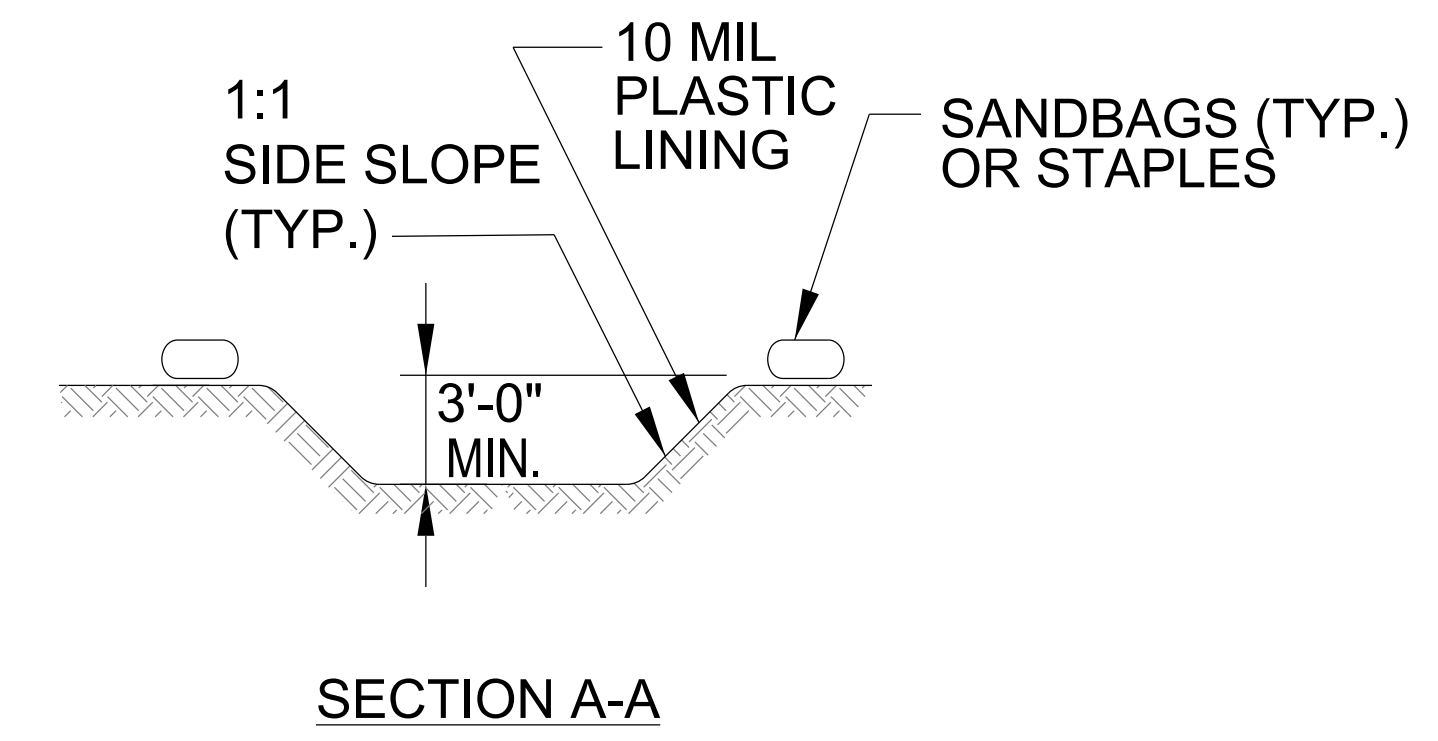
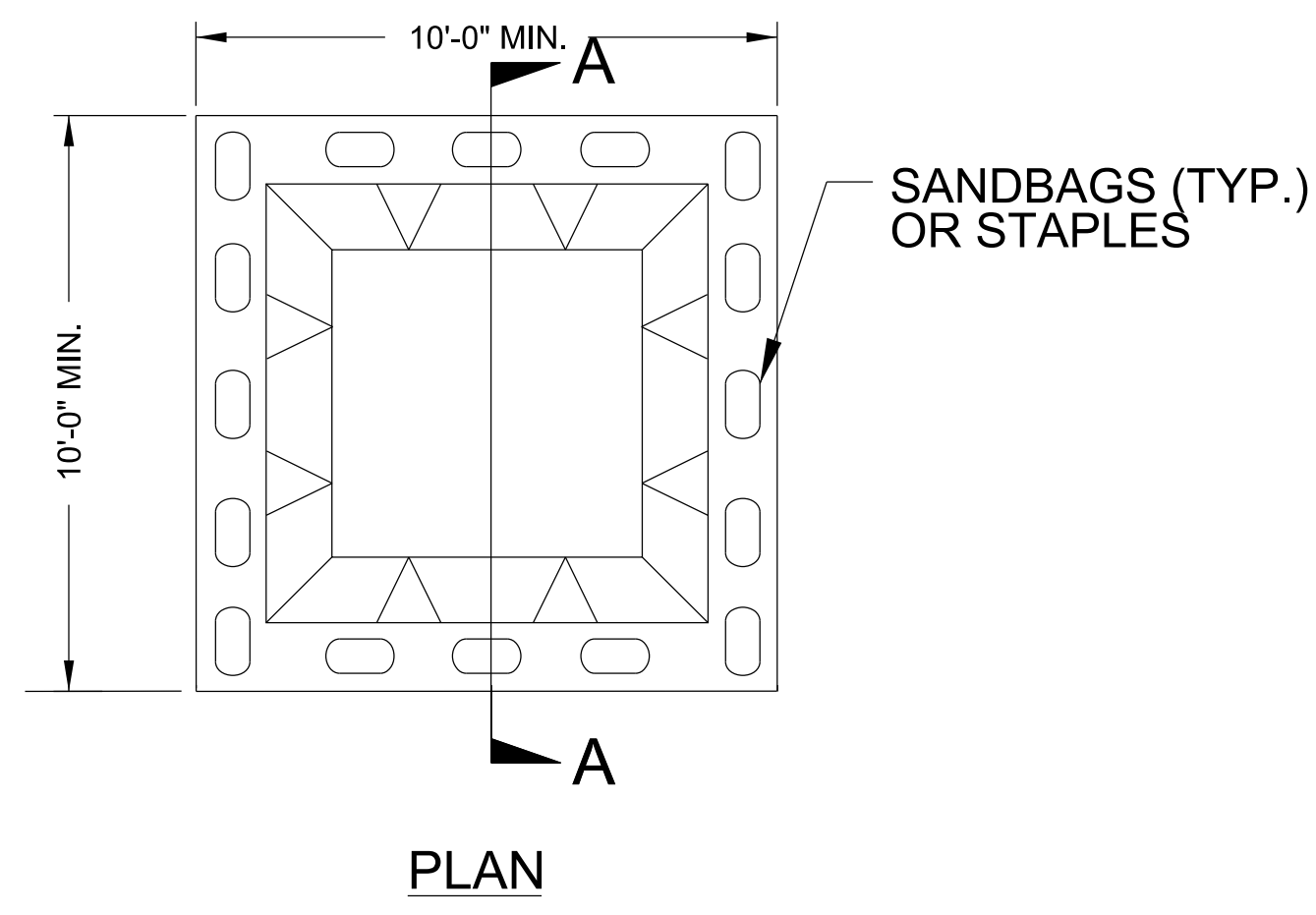
PROJECT REFERENCE NO. U-3422A	SHEET NO. EC-02
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol	Std. #	Description	Symbol
1605.01	Temporary Silt Fence		1633.01	Temporary Rock Silt Check Type A	
1606.01	Special Sediment Control Fence		1633.02	Temporary Rock Silt Check Type B	
1622.01	Temporary Berms and Slope Drains		1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1630.02	Silt Basin Type B		1634.01	Temporary Rock Sediment Dam Type A	
1630.03	Temporary Silt Ditch		1634.02	Temporary Rock Sediment Dam Type B	
1630.04	Stilling Basin		1635.01	Rock Pipe Inlet Sediment Trap Type A	
1630.05	Temporary Diversion		1635.02	Rock Pipe Inlet Sediment Trap Type B	
1630.06	Special Stilling Basin		1636.01	Excelsior Wattle Check	
1630.07	Skimmer Basin		1636.01	Excelsior Wattle Check with Flocculant	
1630.08	Tiered Skimmer Basin		1636.01	Coir Fiber Wattle Check	
1630.09	Earthen Dam with Skimmer		1636.01	Coir Fiber Wattle Check with Flocculant	
	Infiltration Basin		1636.02	Silt Fence Excelsior Wattle Break	
	Rock Inlet Sediment Trap:			Silt Fence Coir Fiber Wattle Break	
1632.01	Type A		1636.03	Excelsior Wattle Barrier	
1632.02	Type B		1636.03	Coir Fiber Wattle Barrier	
1632.03	Type C				

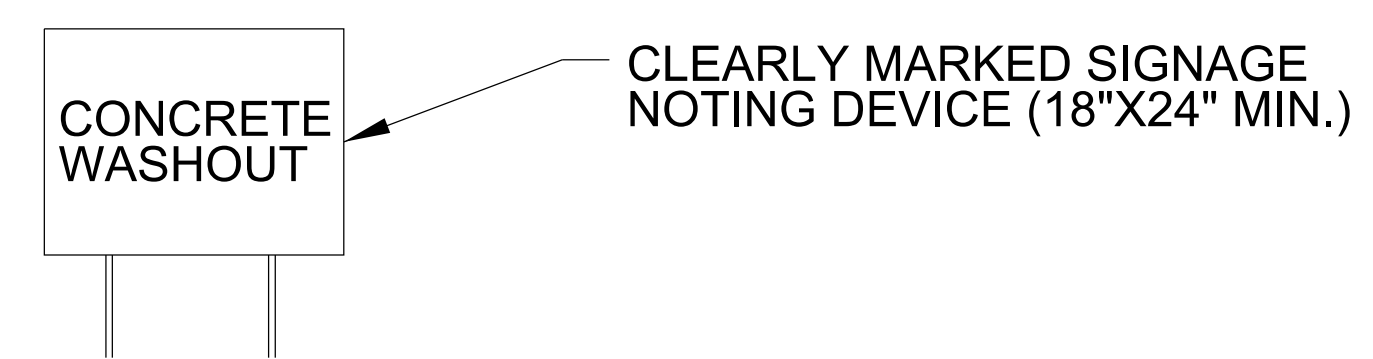
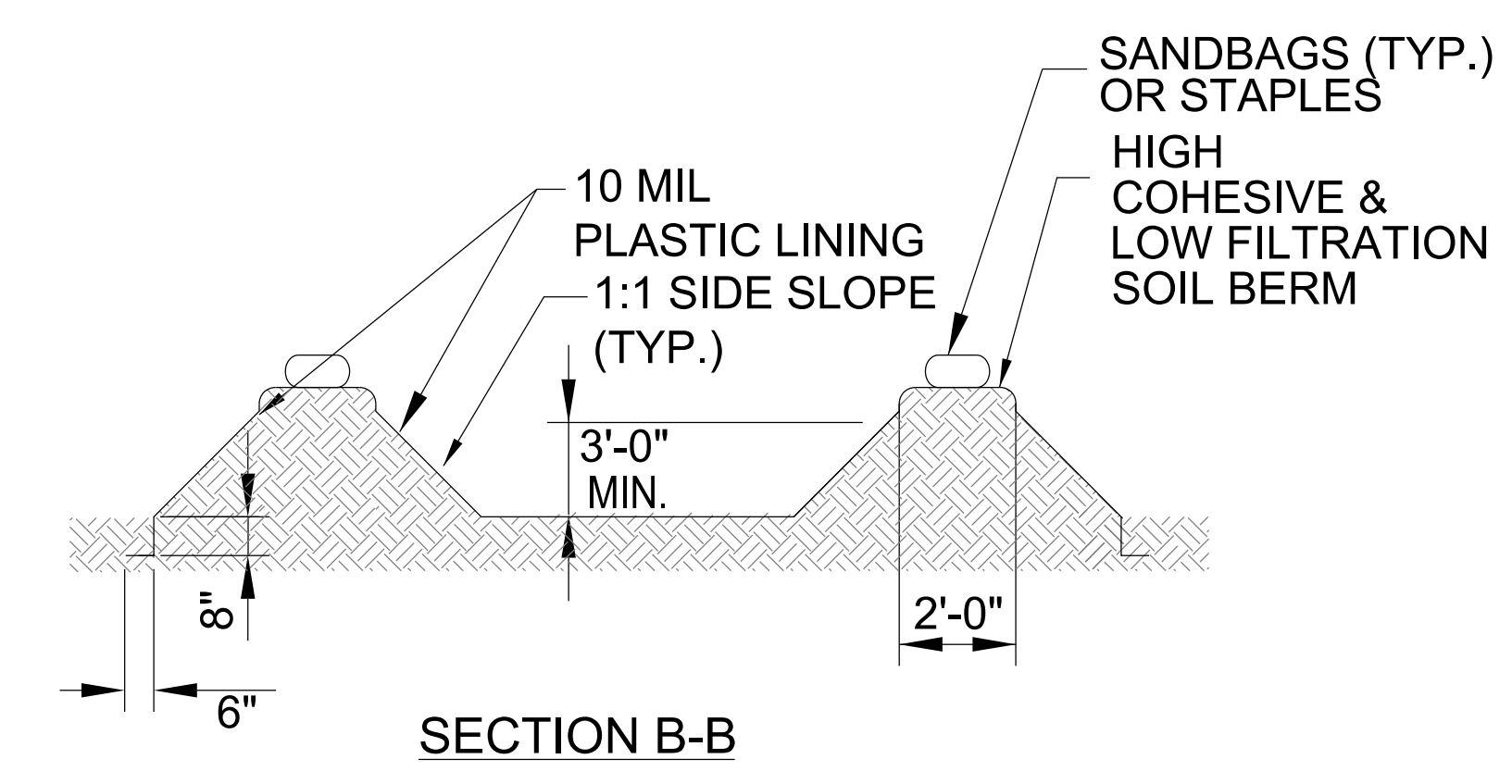
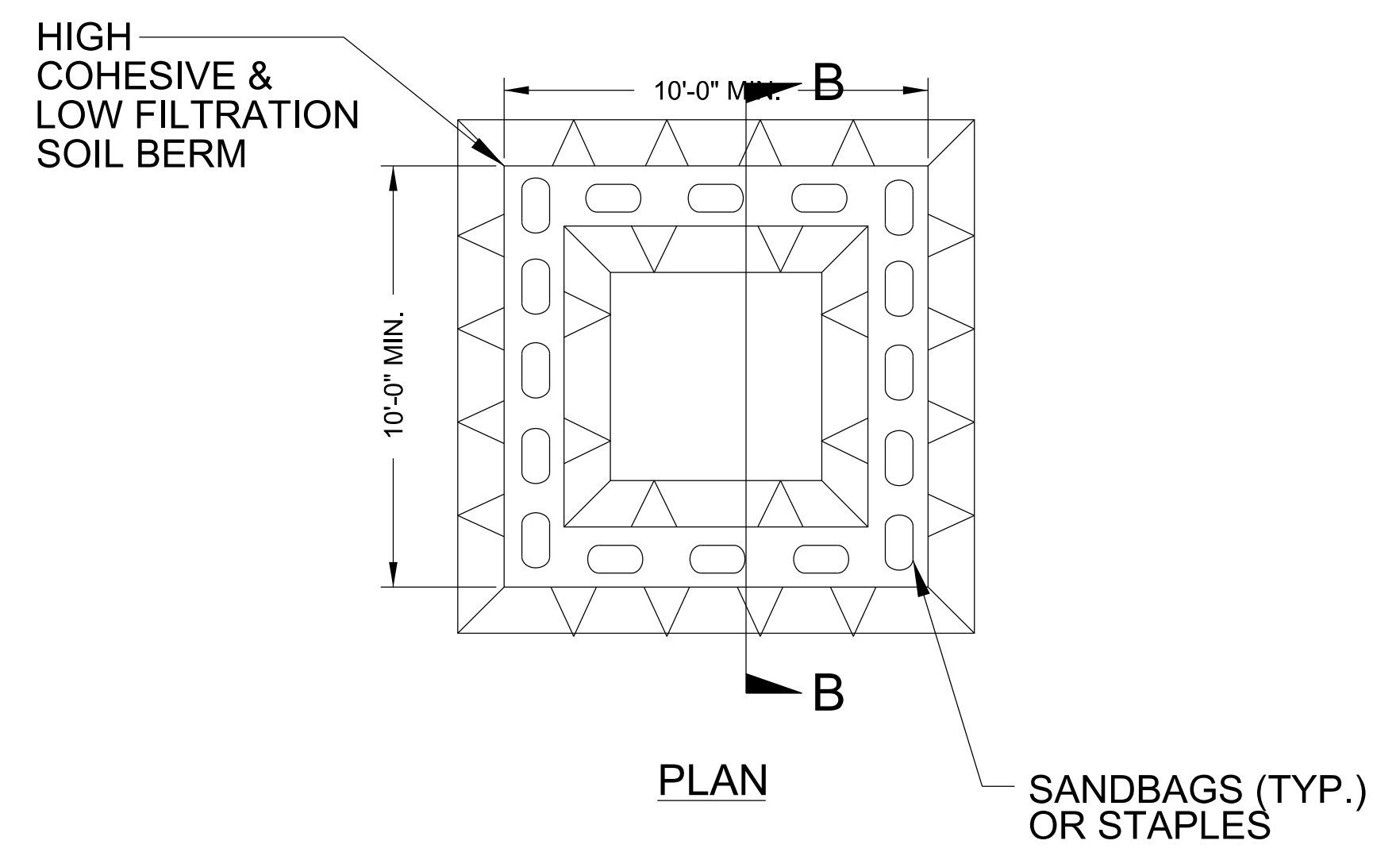
PROJECT REFERENCE NO. U-3422A	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- 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 CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

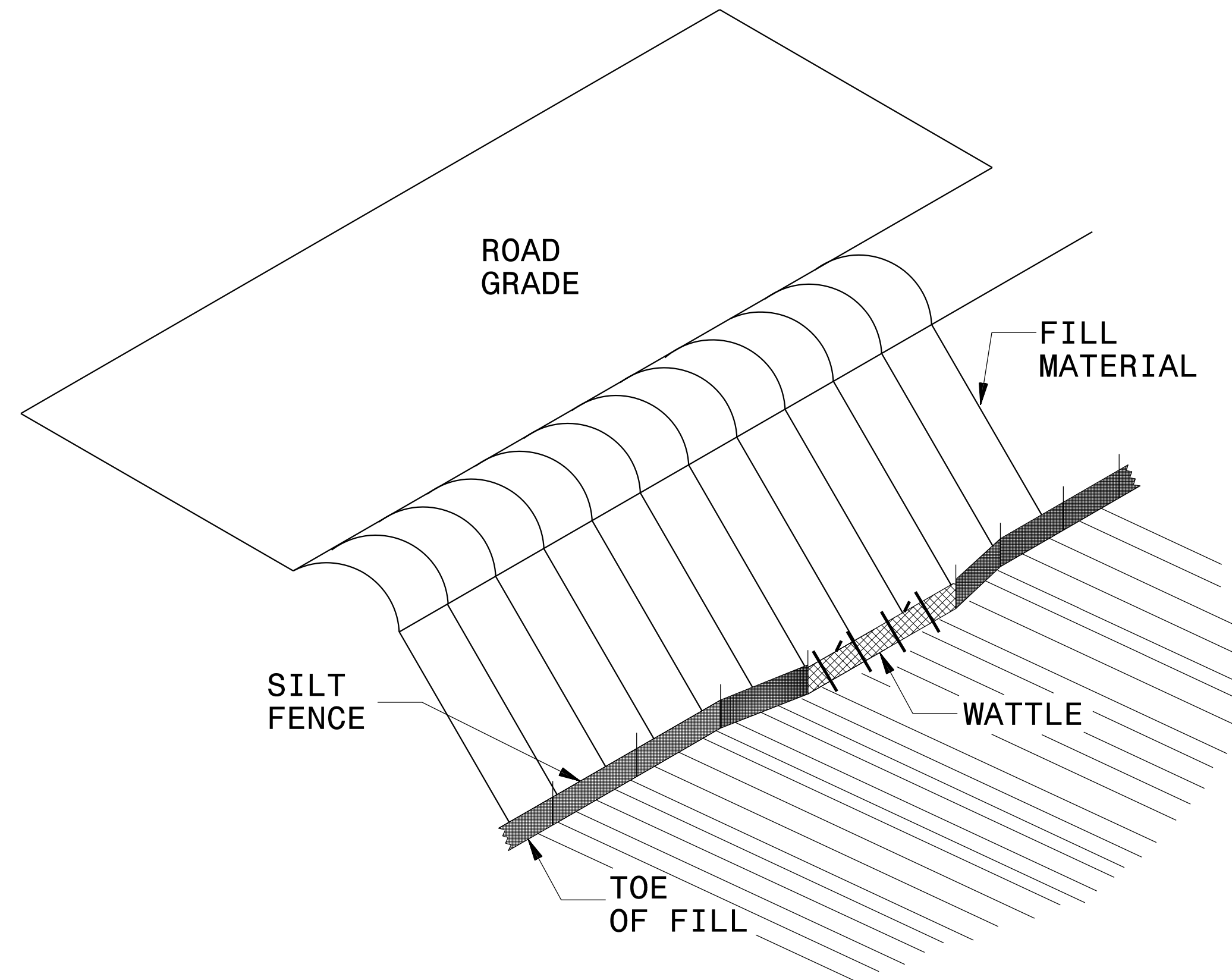


ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

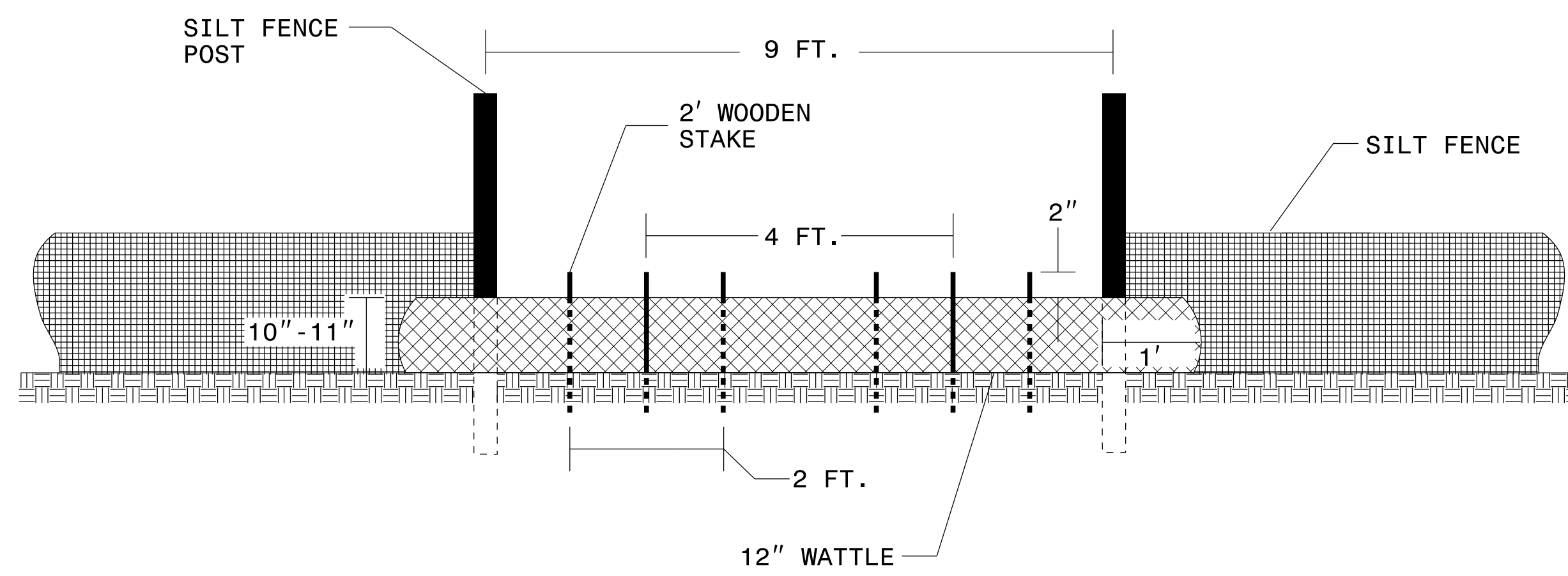
- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

SILT FENCE COIR FIBER WATTLE BREAK DETAIL

PROJECT REFERENCE NO. U-3422A	SHEET NO. EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



ISOMETRIC VIEW



VIEW FROM SLOPE

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

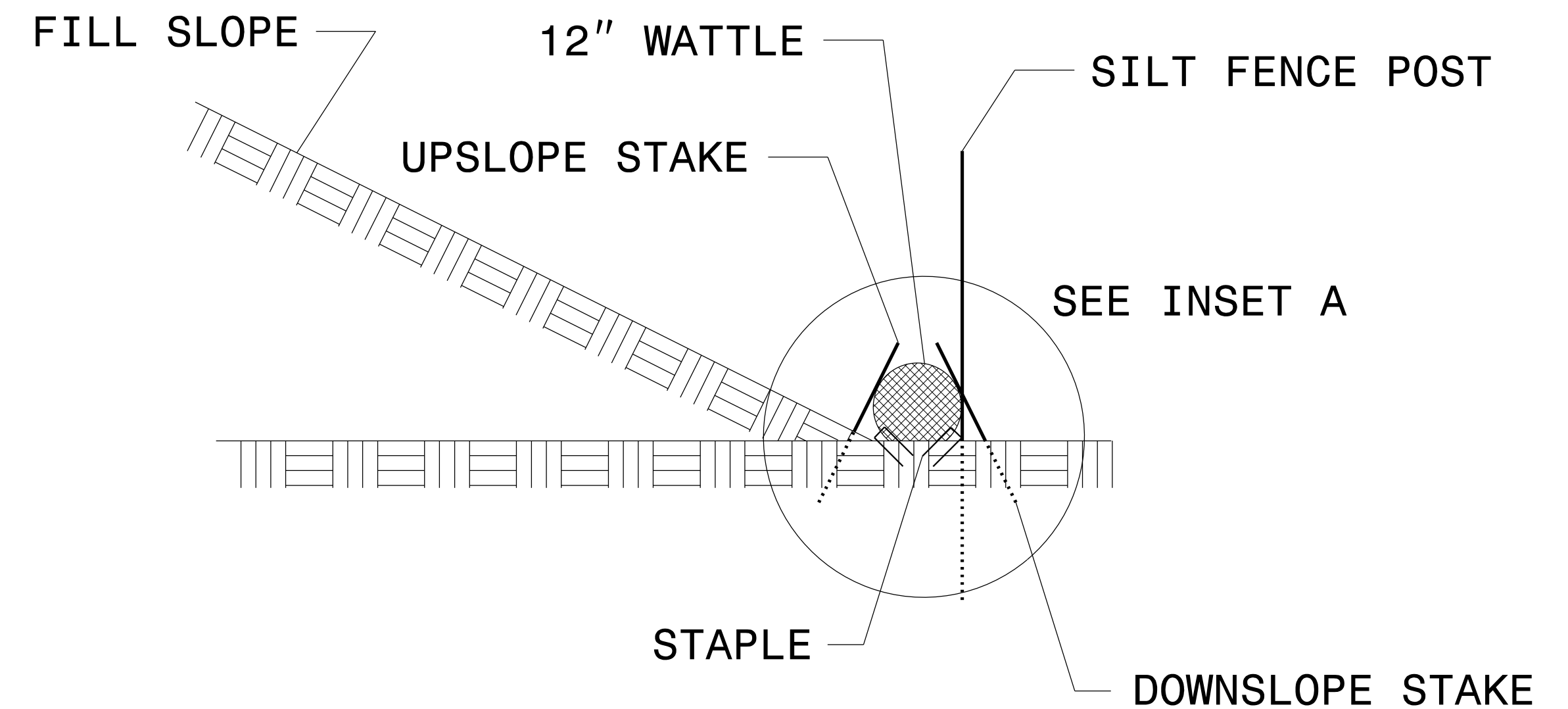
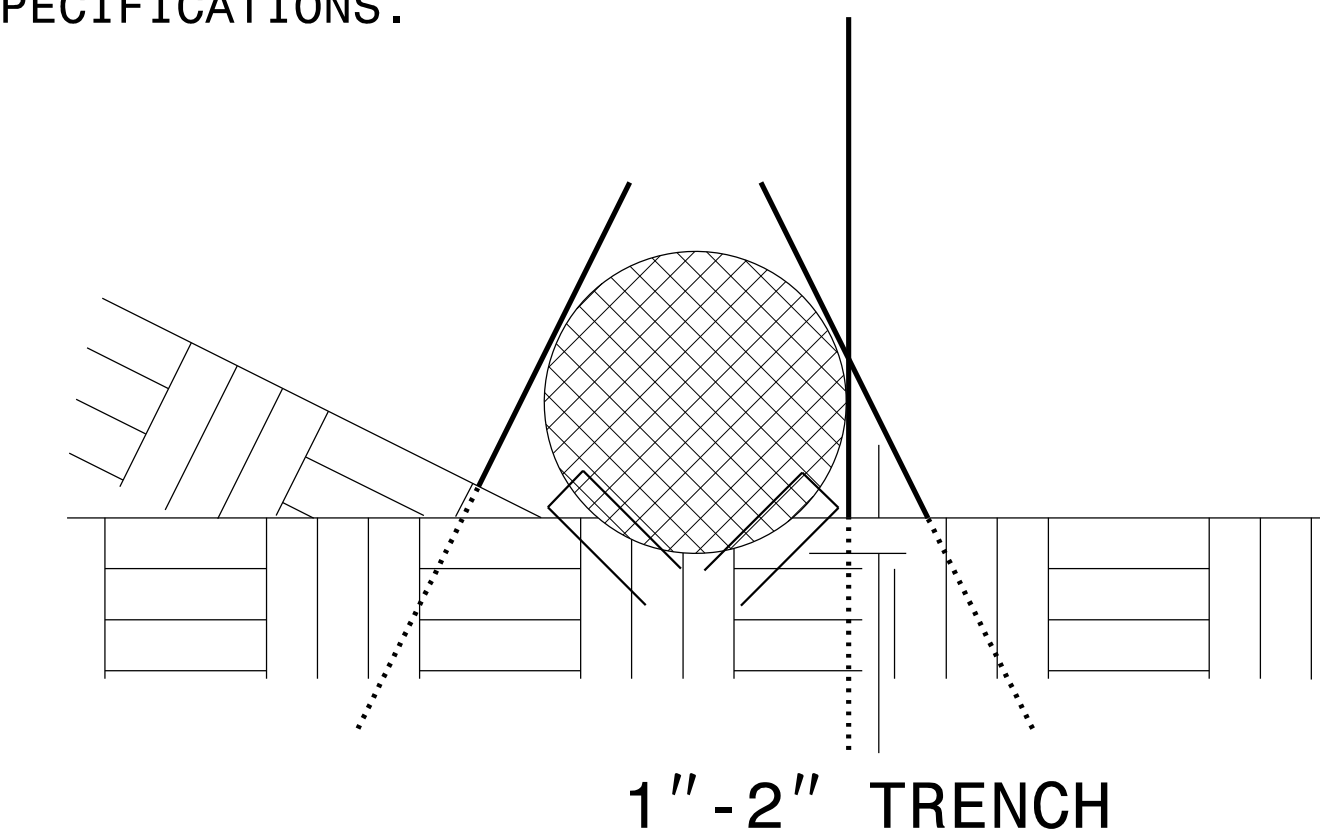
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.


WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A



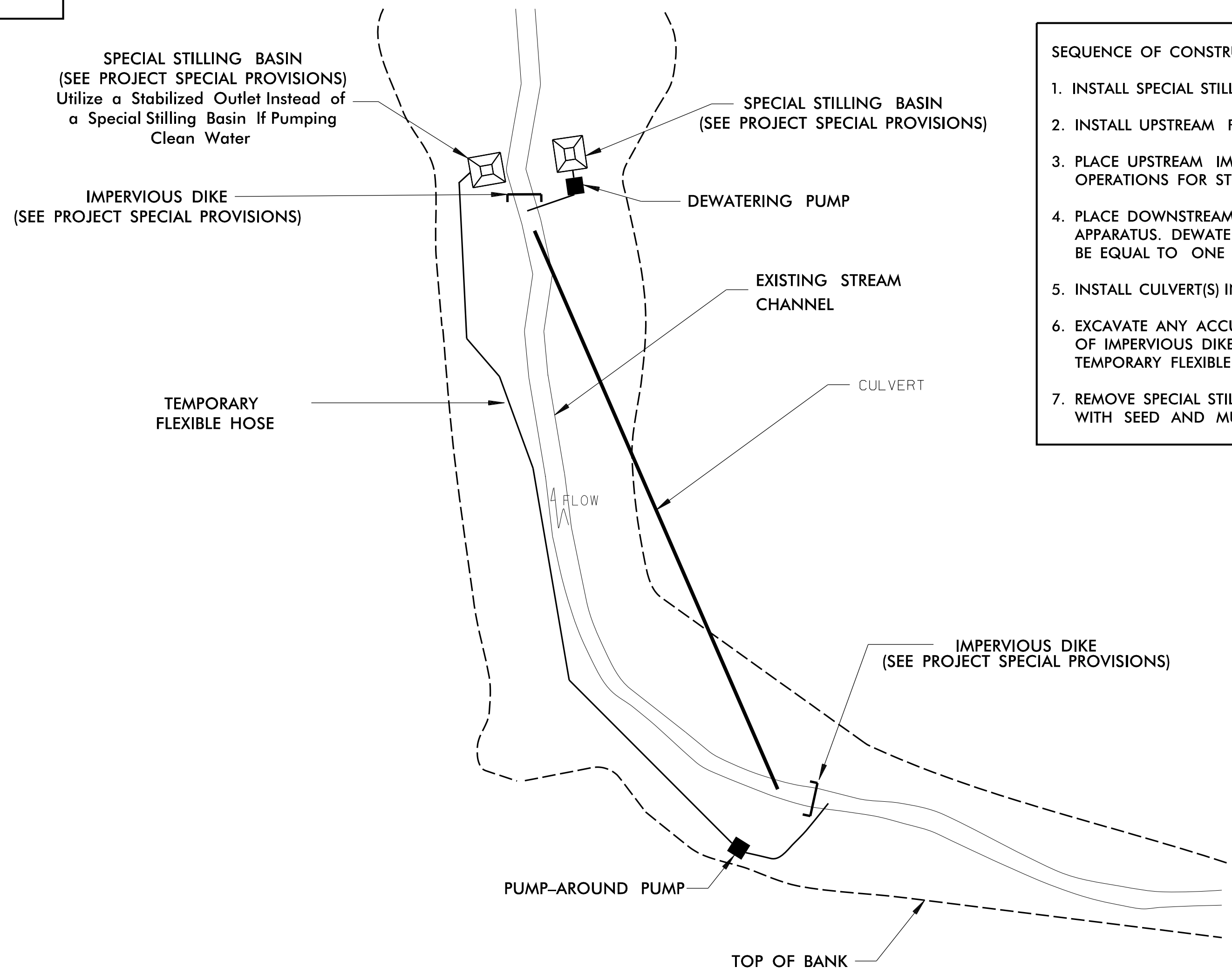
SIDE VIEW

PROJECT REFERENCE NO.		SHEET NO.	
U-3422A		EC-2C	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
 HDR Engineering, Inc. of the Carolinas 555 Fayetteville St, Suite 900 Raleigh, N.C. 27601 N.C.B.E.L.S. License Number: F-0116			

PUMP-AROUND OPERATION

NOTES:

- 1) All excavation shall be performed in only dry or isolated areas of the work zone.
- 2) Impervious dikes are to be used to isolate work from stream flow when necessary.
- 3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
- 4) Pumps and hoses shall be of sufficient size to dewater the work area and maintain stream bypass flow.



SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. INSTALL CULVERT(S) IN ACCORDANCE WITH THE PLANS.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

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 USER: DWAGNER
 FILE: \

PENTABLE: NCDOT_TSH.tbl
 TIME: 10:48:25 AM
 DATE: 8/7/2024

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-3422A</i>	SHEET NO. <i>EC-3</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING ON DITCHES - STRAW

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
6	-L-	52+13	52+18	LT	280
6	-L-	52+79	52+86	LT	250
7	-L-	63+82	65+00	RT	105
7	-Y1-	19+00	20+50	LT	135
7	-Y1-	19+00	20+50	RT	200
7	-Y1-	20+50	21+59	LT	100
7	-Y1-	20+50	21+97	RT	195
7	-Y1-	21+97	23+50	RT	205
7	-Y1-	21+59	24+15	LT	455
7	-Y1-	23+50	24+15	RT	90
7	-Y2-	11+90	13+00	LT	100
7	-Y2-	12+00	14+00	RT	180
8	-L-	80+80	84+57	RT	1430
TOTAL MATTING FOR DITCHES - STRAW					3725 SY

MATTING FOR SLOPES

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
8	-L-	77+00	79+00	LT	500
8	-L-	77+00	78+00	RT	325
TOTAL FOR SLOPES					825 SY
TOTAL FOR DITCHES					3725 SY
TOTAL FOR SLOPES					825 SY
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					10,000 SY
OVERALL TOTAL					14,550 SY
SAY					14,600 SY

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>U-3422A</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
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 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

NOTE:
USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

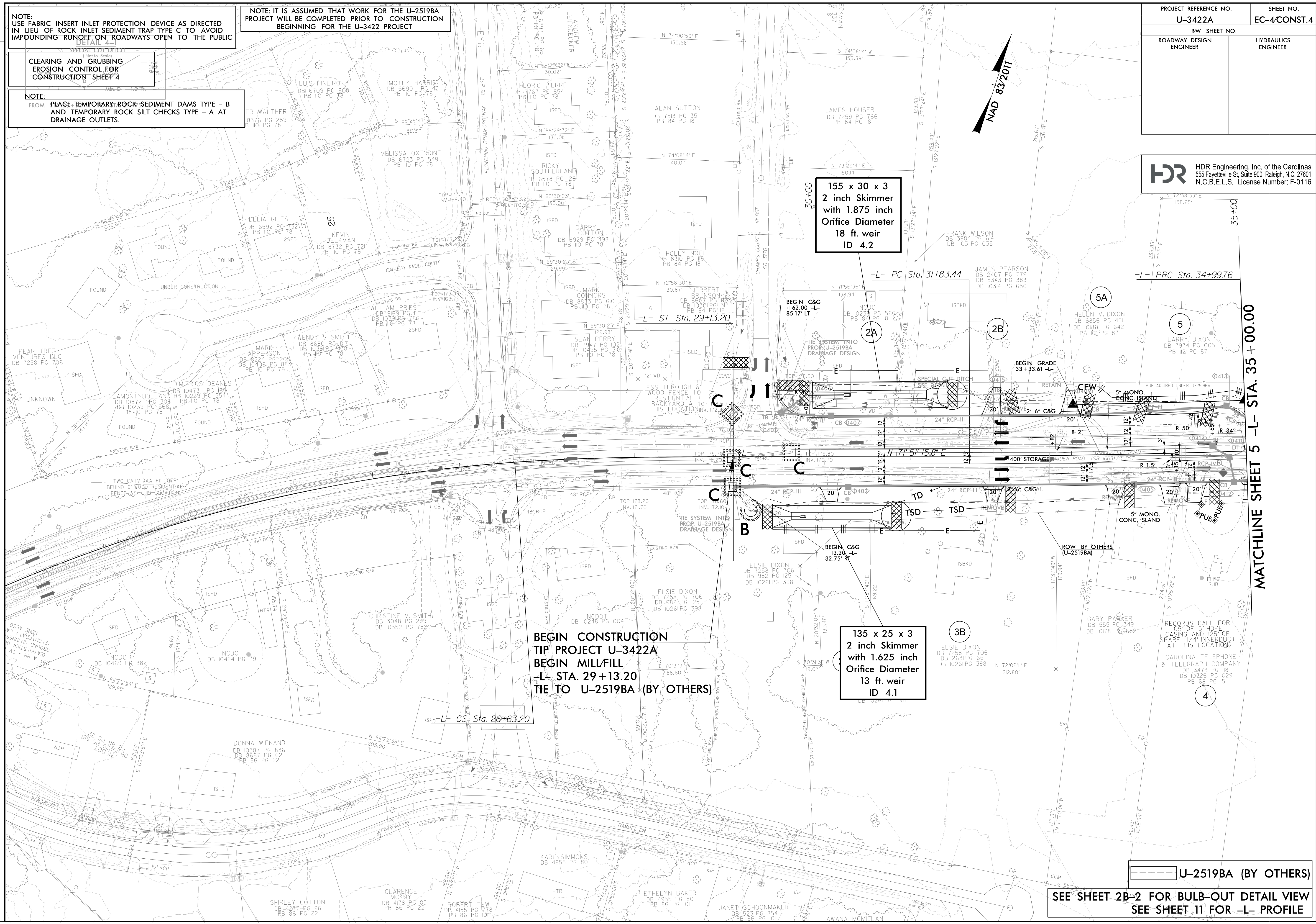
NOTE: IT IS ASSUMED THAT WORK FOR THE U-2519BA
PROJECT WILL BE COMPLETED PRIOR TO CONSTRUCTION
BEGINNING FOR THE U-3422 PROJECT

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE:
FROM PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-4CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116



155 x 30 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
18 ft. weir
ID 4.2

BEGIN CONSTRUCTION
TIP PROJECT U-3422A
BEGIN MILLFILL
-L- STA. 29+13.20
TIE TO U-2519BA (BY OTHERS)

135 x 25 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
13 ft. weir
ID 4.1

==== U-2519BA (BY OTHERS)

SEE SHEET 2B-2 FOR BULB-OUT DETAIL VIEW
SEE SHEET 11 FOR -L- PROFILE

REVISIONS

PLOT DRIVER: NCDOT_color_eng_100.plt
USER: DWAGNER
FILE: \

PENTABLE: NCDOT_EC_C&G_BW.tbl
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TIME: 10:48:35 AM

9302021: PARCEL OWNER NAME REVISED; PARCELS 2A, 2C, AND 5A
3252022: PARCELS 1, 2, 3 PUE REMOVED; PARCEL 4, 5 PUE REVISED
10272022: PARCEL 2C, TCE REMOVED

MATCHLINE SHEET 5 -L- STA. 35+00.00

NOTE: IT IS ASSUMED THAT WORK FOR THE U-2519BA PROJECT WILL BE COMPLETED PRIOR TO CONSTRUCTION BEGINNING FOR THE U-3422 PROJECT

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

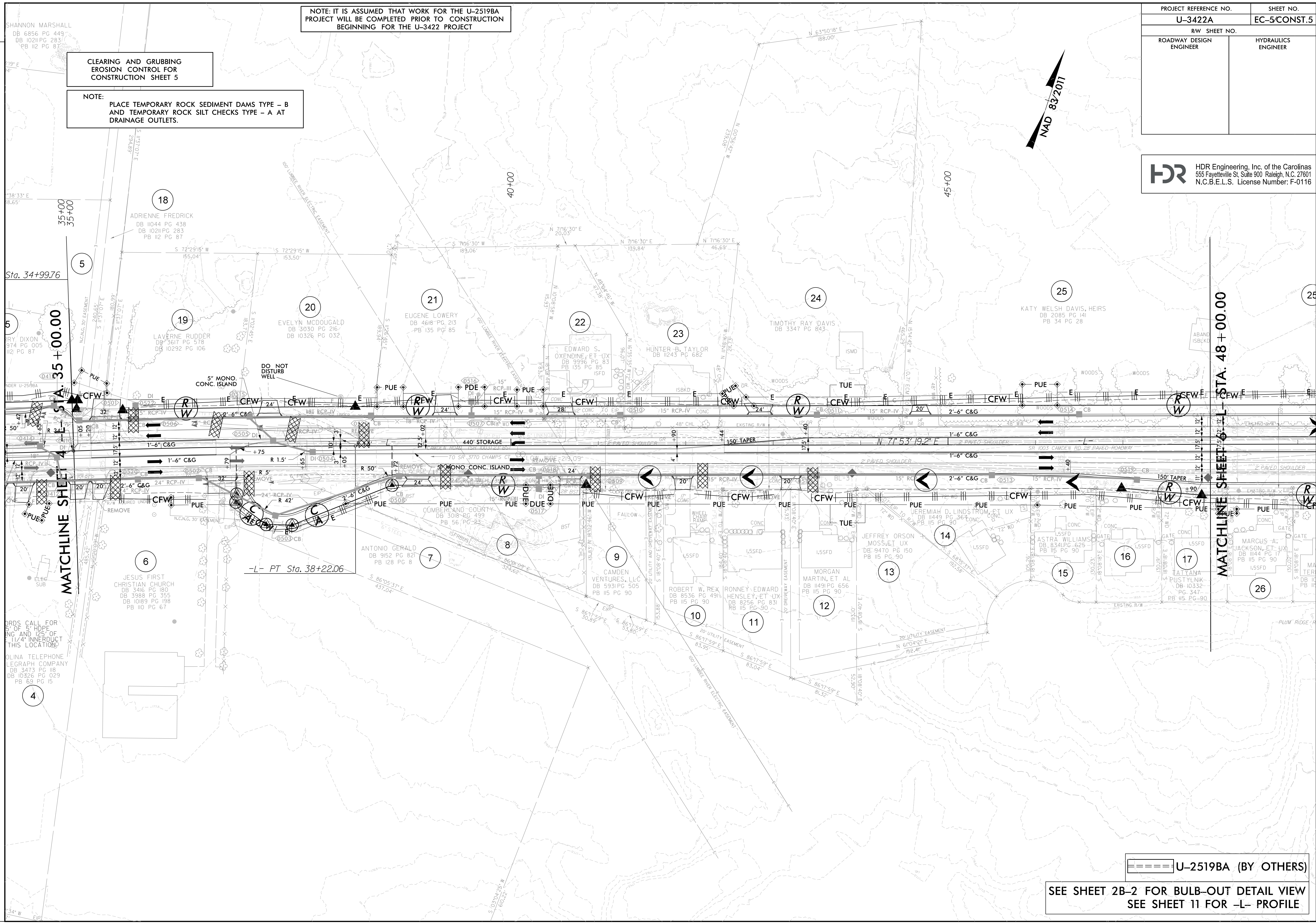
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-5/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116



REVISIONS
 32/2022: PARCELS 6-9, 21 PUE REVISED; PARCELS 12, 13, 24, TUE ADDED; PARCELS 19-20, 22-24 PUE REMOVED AND TCE ADDED; PARCEL 25 PUE REVISED AND TCE ADDED
 22/2023: PARCELS 9-15 ROW LINE WORK REMOVED; PARCELS SETTLED



MATCHLINE SHEET 4 - STA. 35+00.00

MATCHLINE SHEET 6 - STA. 48+00.00

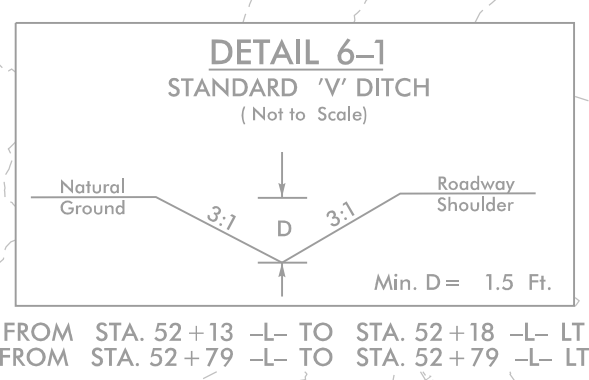
==== U-2519BA (BY OTHERS)

SEE SHEET 2B-2 FOR BULB-OUT DETAIL VIEW
SEE SHEET 11 FOR -L- PROFILE

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 USER: DWAGNER
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PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-6/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

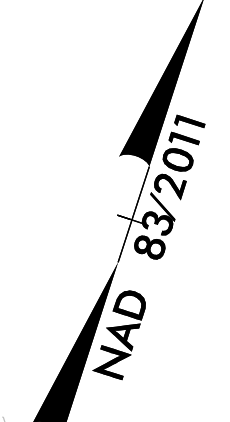
HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116



NOTE: USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

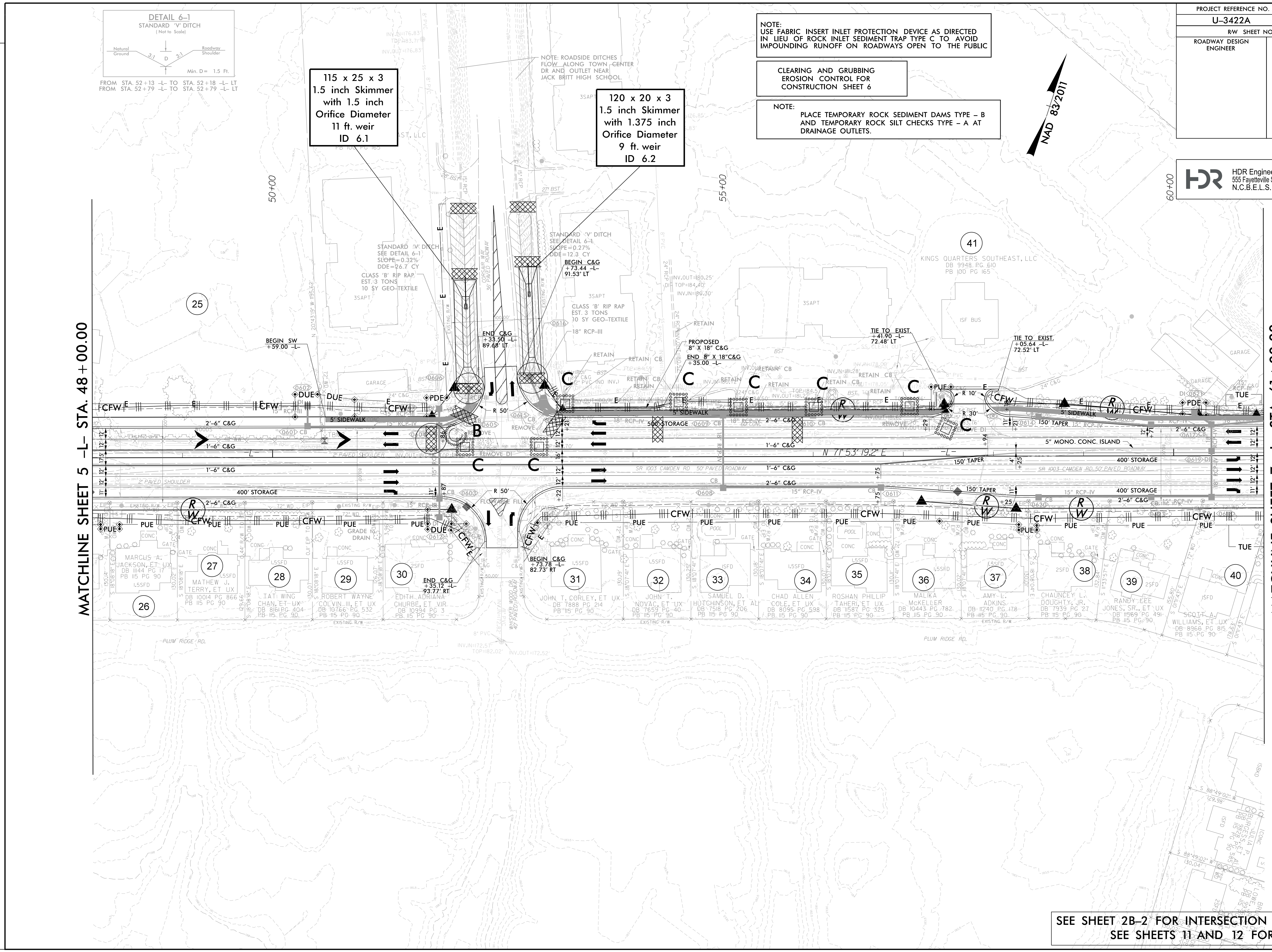
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.



MATCHLINE SHEET 5 -L- STA. 48 + 00.00

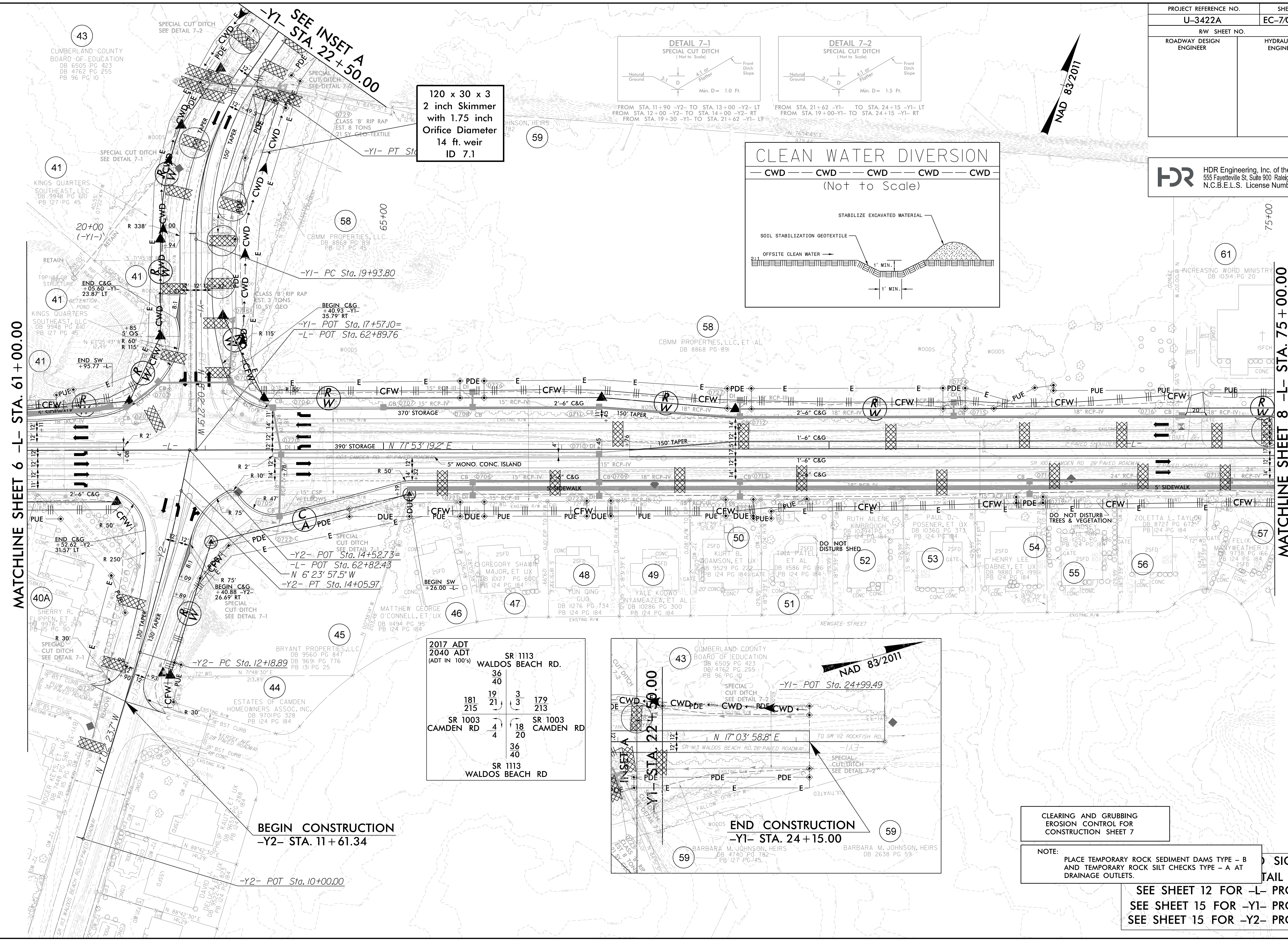
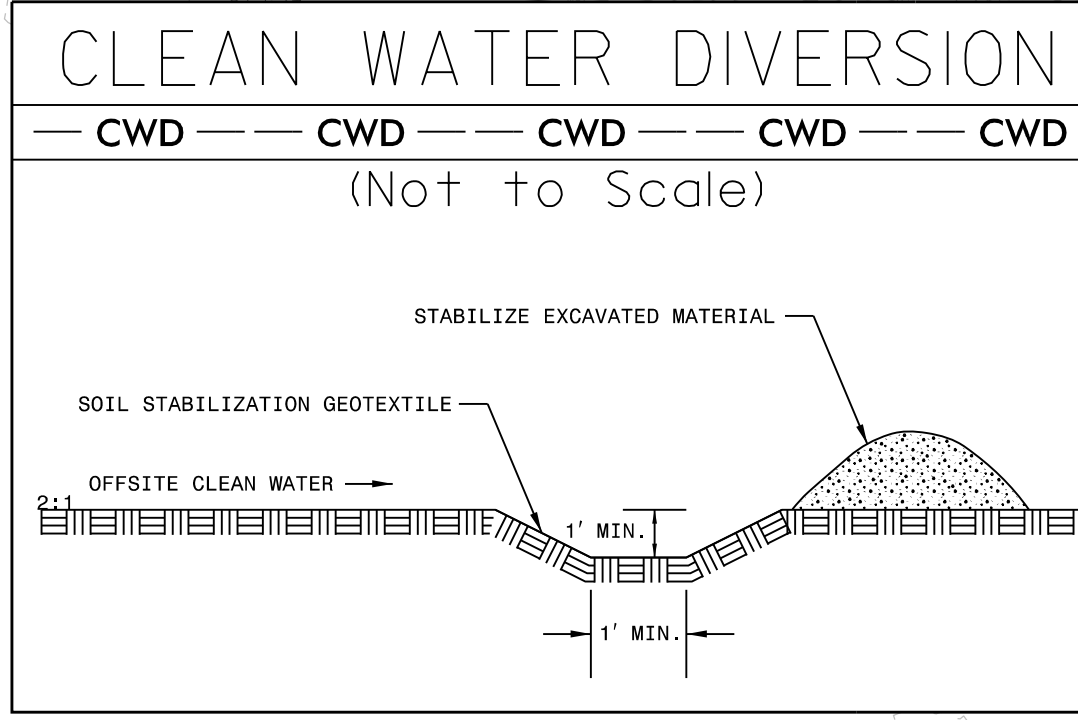
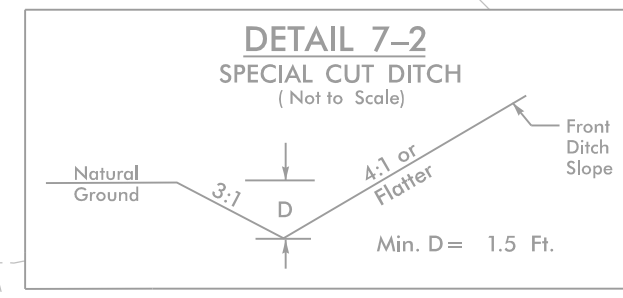
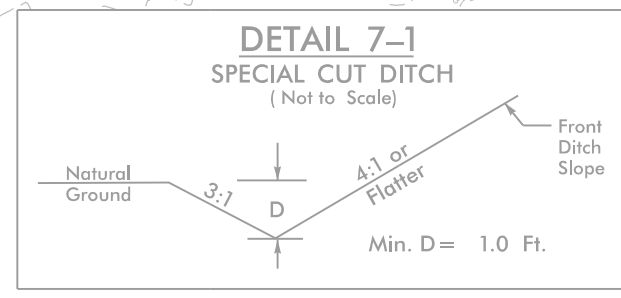
MATCHLINE SHEET 7 -L- STA. 61 + 00.00



SEE SHEET 2B-2 FOR INTERSECTION DETAIL VIEW
 SEE SHEETS 11 AND 12 FOR -L- PROFILE

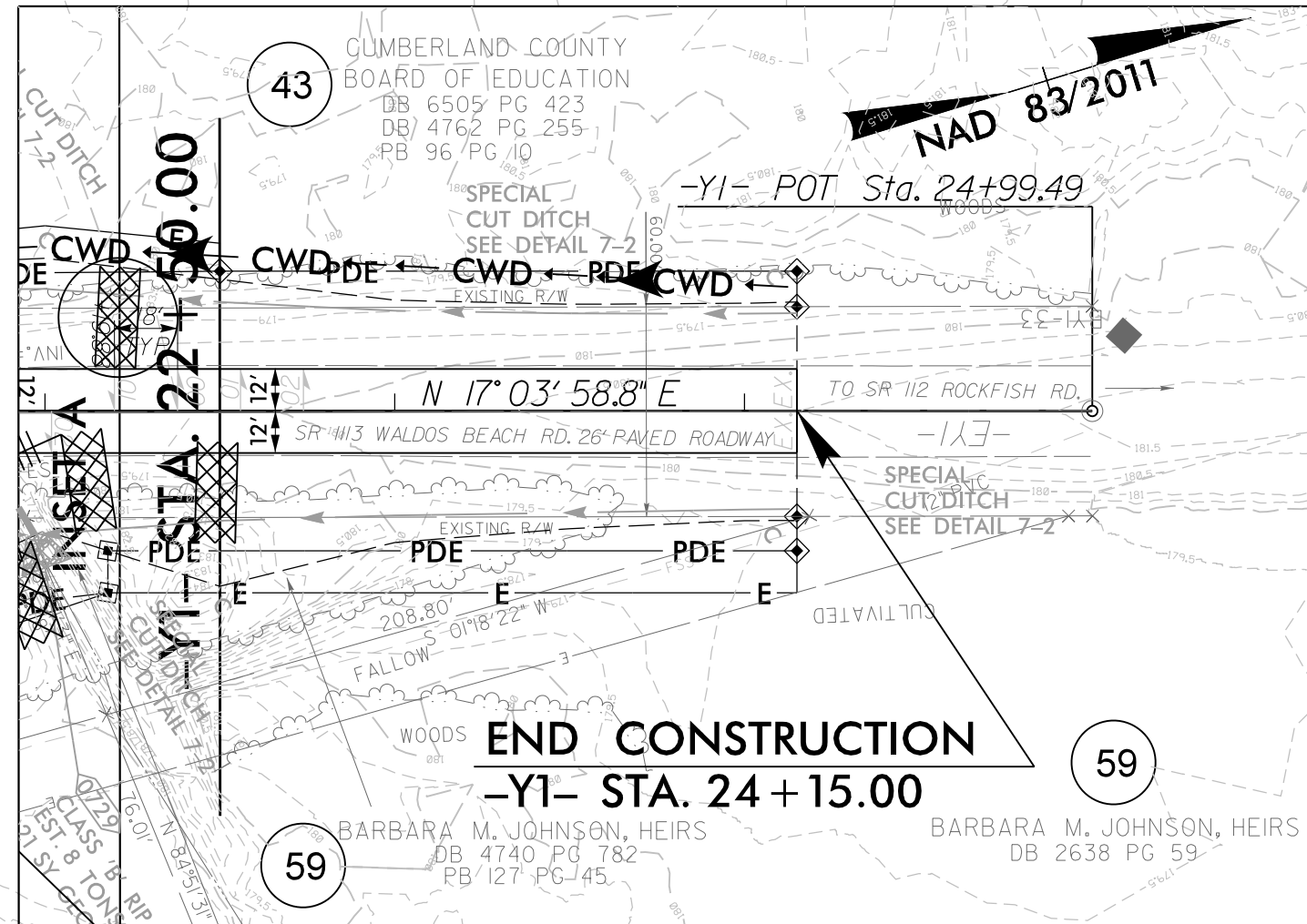
REVISIONS
 325/2022: PARCEL 25 PUE REMOVED, TCE ADDED, DUE ADDED, PDE REMOVED, PARCELS 40,41 TUE ADDED, PUE REVISED, DUE ADDED, TCE REVISED, PDE ADDED
 13/2023: PARCEL 41 ROW REVISED, PUE REVISED, TCE REVISED

PLOT DRIVER: NCDOT_color_eng_100.plt
 USER: DWAGNER
 DATE: 8/7/2024
 TIME: 10:48:44 AM
 FILE: \



120 x 30 x 3
 2 inch Skimmer
 with 1.75 inch
 Orifice Diameter
 14 ft weir
 ID 7.1

2017 ADT	SR 1113	SR 1003	SR 1003
2040 ADT	WALDOS BEACH RD.	CAMDEN RD	CAMDEN RD
(ADT IN 100'S)			
	36	4	36
	40	4	40
	181	18	179
	215	20	213
	19	3	3
	21	18	213



CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 7

NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
 DRAINAGE OUTLETS.

SIGNAL
 TAIL VIEW

SEE SHEET 12 FOR -L- PROFILE
 SEE SHEET 15 FOR -Y1- PROFILE
 SEE SHEET 15 FOR -Y2- PROFILE

REVISIONS
 MATCHLINE SHEET 6 -L- STA. 61+00.00
 MATCHLINE SHEET 8 -L- STA. 75+00.00
 3/25/2022: PARCELS 40A, 41, 45, 46, 60 PUE REVISED; PARCELS 40A, 41, 59, 60, 62 TCE REVISED; PARCELS 45, 46 DUE ADDED; PARCELS 45, 59, 62 PDE REVISED; PARCEL 60 DUE REMOVED; PARCEL 60 PDE ADDED
 1/5/2023: PARCELS 42, 42A, AND 42B CHANGED TO PARCEL 41
 3/15/2023: PARCELS 62, 70, 71, 72, AND 80 CHANGED TO PARCEL 59
 3/21/2023: PARCEL 60 CHANGED TO PARCEL 58

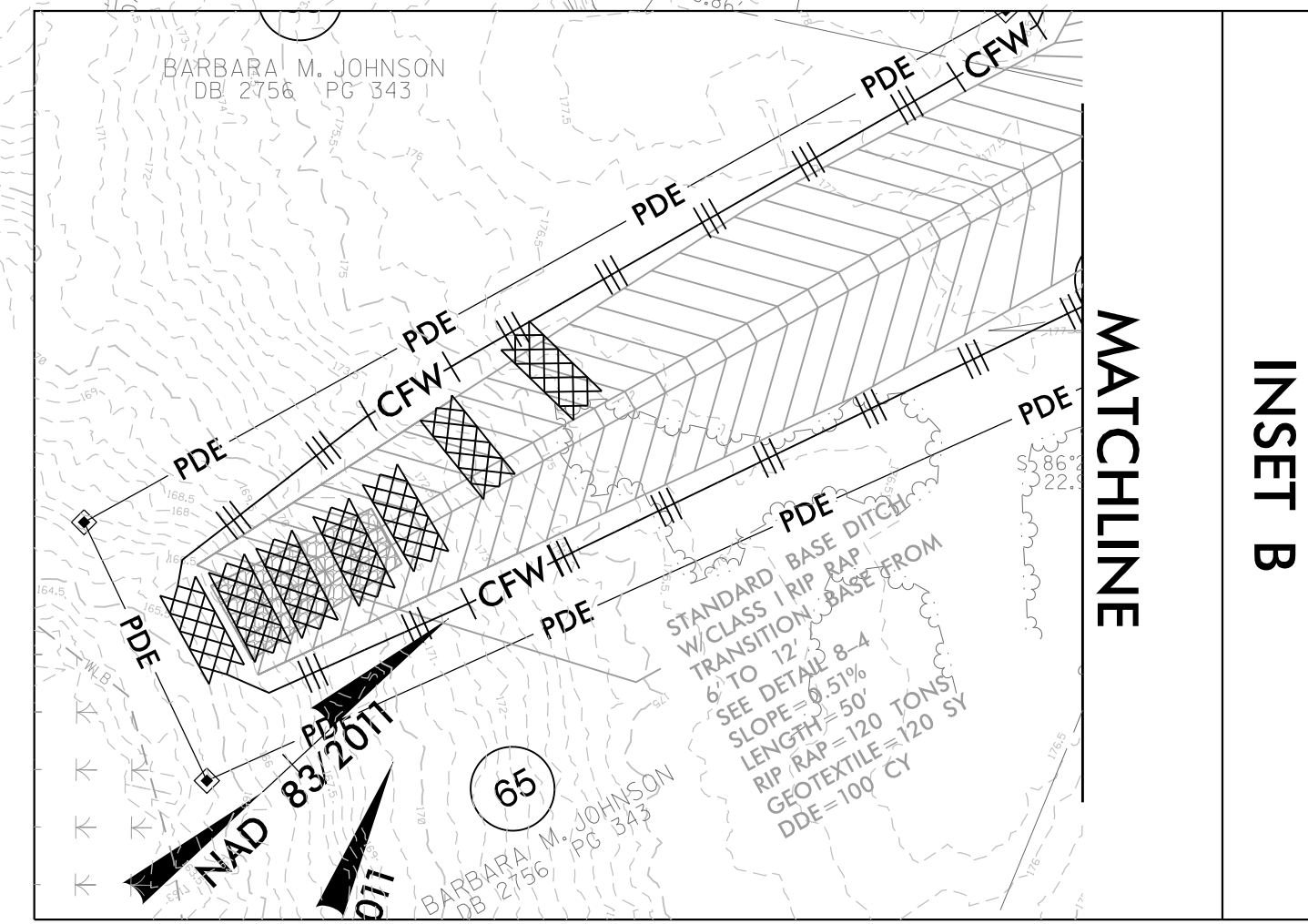
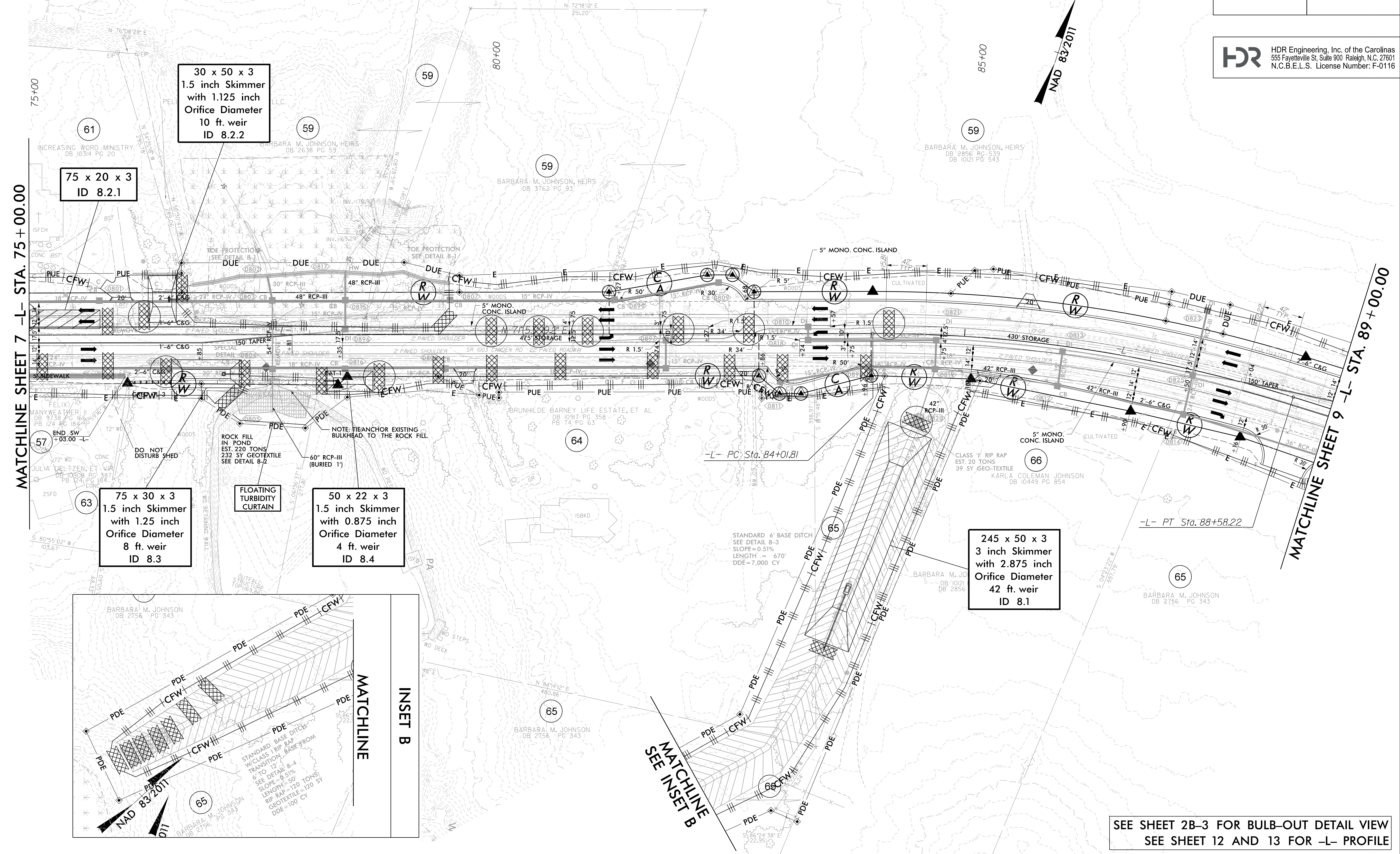
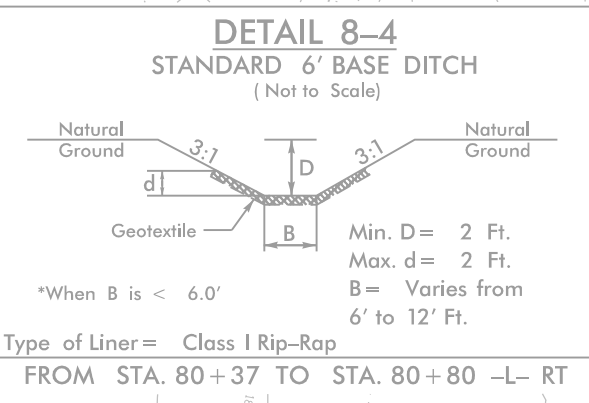
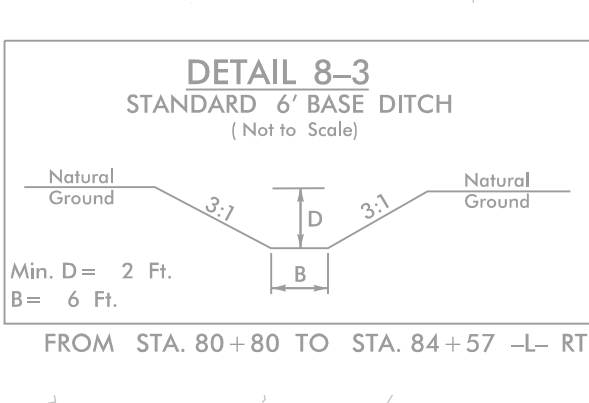
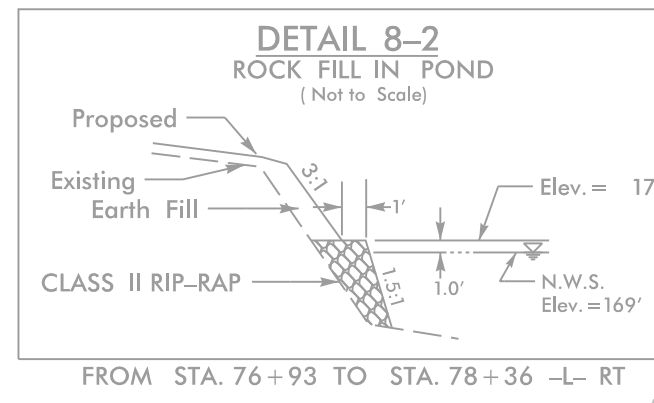
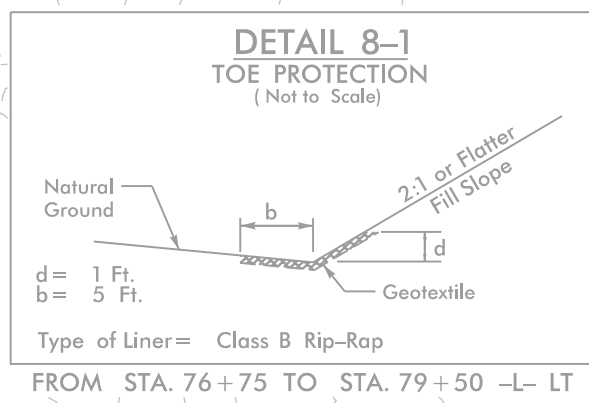
PLOT DRIVER: NCDOT_pdf_color_eng_100.plt
 USER: DWAGNER
 DATE: 8/7/2024
 TIME: 10:48:52 AM
 FILE: \

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-8/CONST.8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 8

NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
 DRAINAGE OUTLETS.



SEE SHEET 2B-3 FOR BULB-OUT DETAIL VIEW
 SEE SHEET 12 AND 13 FOR -L- PROFILE

9/30/2021: PARCEL OWNER ADDED; PARCEL 68
 3/25/2022: PARCEL 71 PUE, DUE AND TCE REVISED; PDE ADDED; PARCEL 72 PUE REMOVED
 10/27/2022: PARCELS 64, 65, & 72 CA ADDED; PARCELS 66, 67, & 71 CA REVISED; PARCELS 64-67 & 71-72 TCE REVISED
 2/22/2023: PARCELS 66 & 67 ROW LABELS ADDED
 3/15/2023: PARCELS 67 AND 68 CHANGED TO PARCEL 65

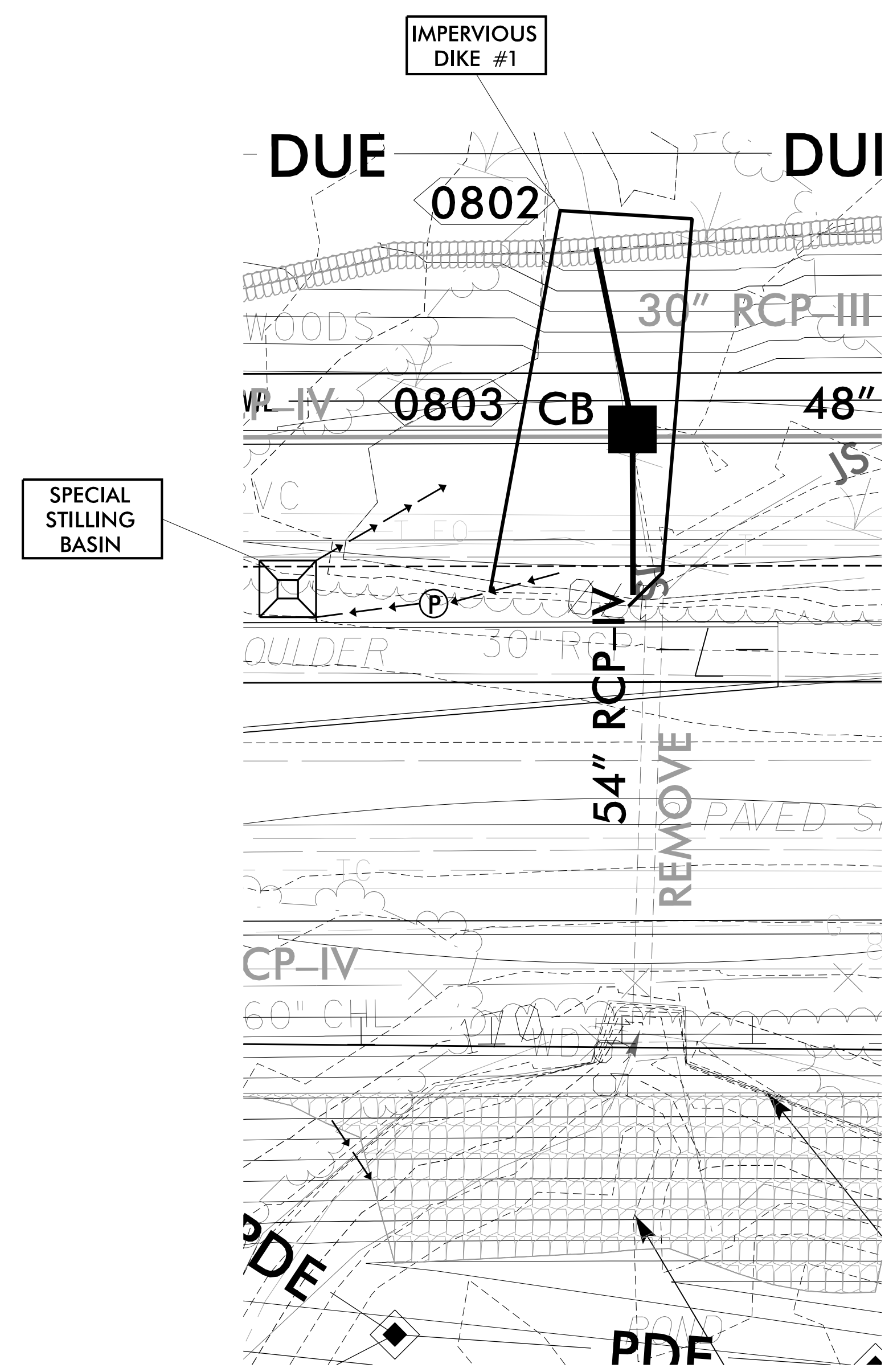
REVISIONS

PLOT DRIVER: NCDOT_pdf_color_eng_100.plt
 USER: DWAGNER
 FILE: \

PENTABLE: NCDOT_EC_C&G_BW.tbl
 TIME: 10:49:01 AM
 DATE: 8/7/2024

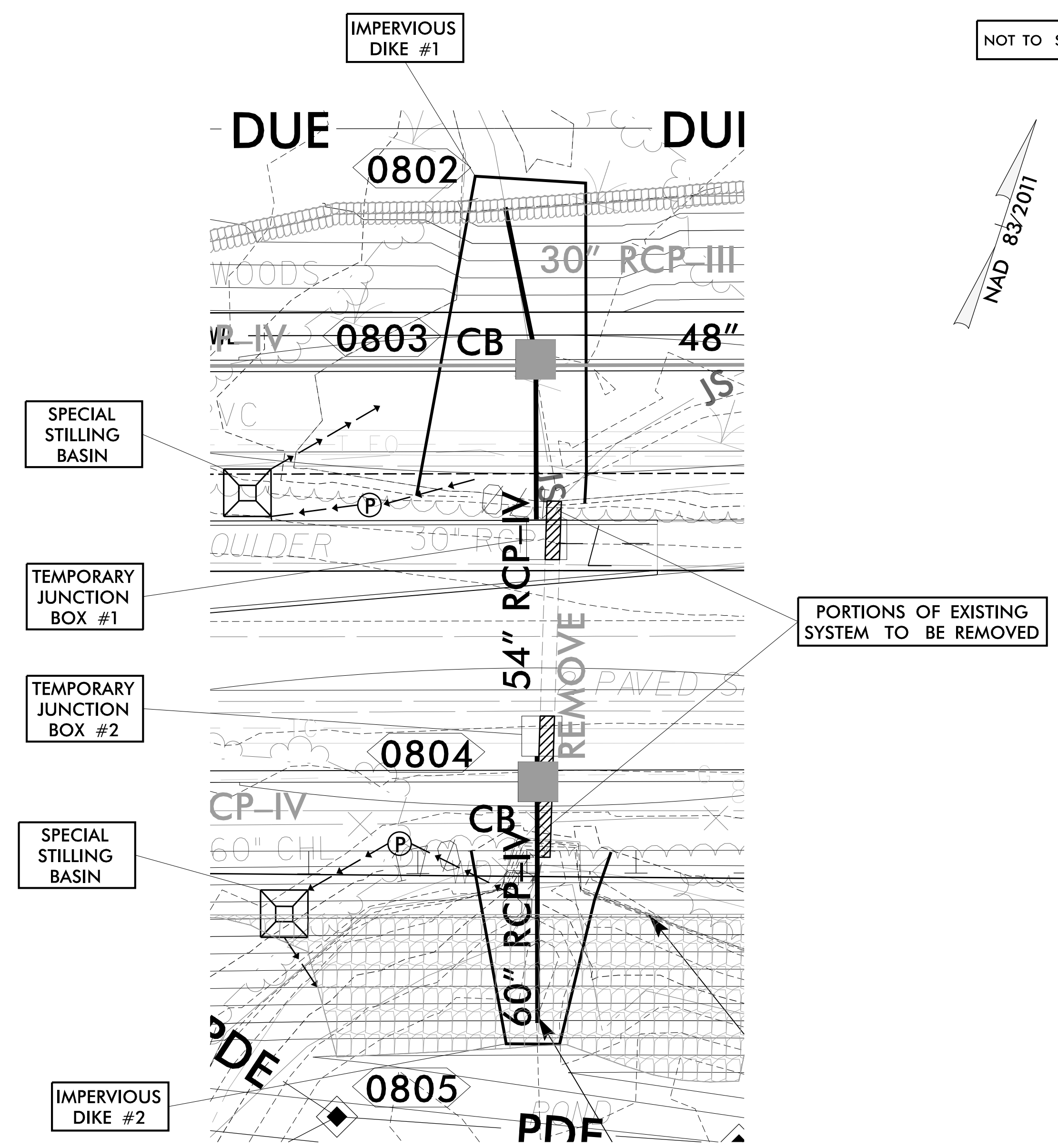
54/60" RCP CONSTRUCTION SEQUENCE STA. 76+60 -L-

PROJECT REFERENCE NO. U-3422A	SHEET NO. EC-8A/CONST.B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PHASE I

1. INSTALL IMPERVIOUS DIKE #1 AND PROVIDE PUMP AND SPECIAL STILLING BASIN(S) FOR DEWATERING OF THE WORK ZONE.
2. INSTALL PORTIONS OF PROPOSED STORM DRAIN SYSTEM 0805 AS SHOWN.
3. MAINTAIN FLOW THROUGH EXISTING 30" RCP.



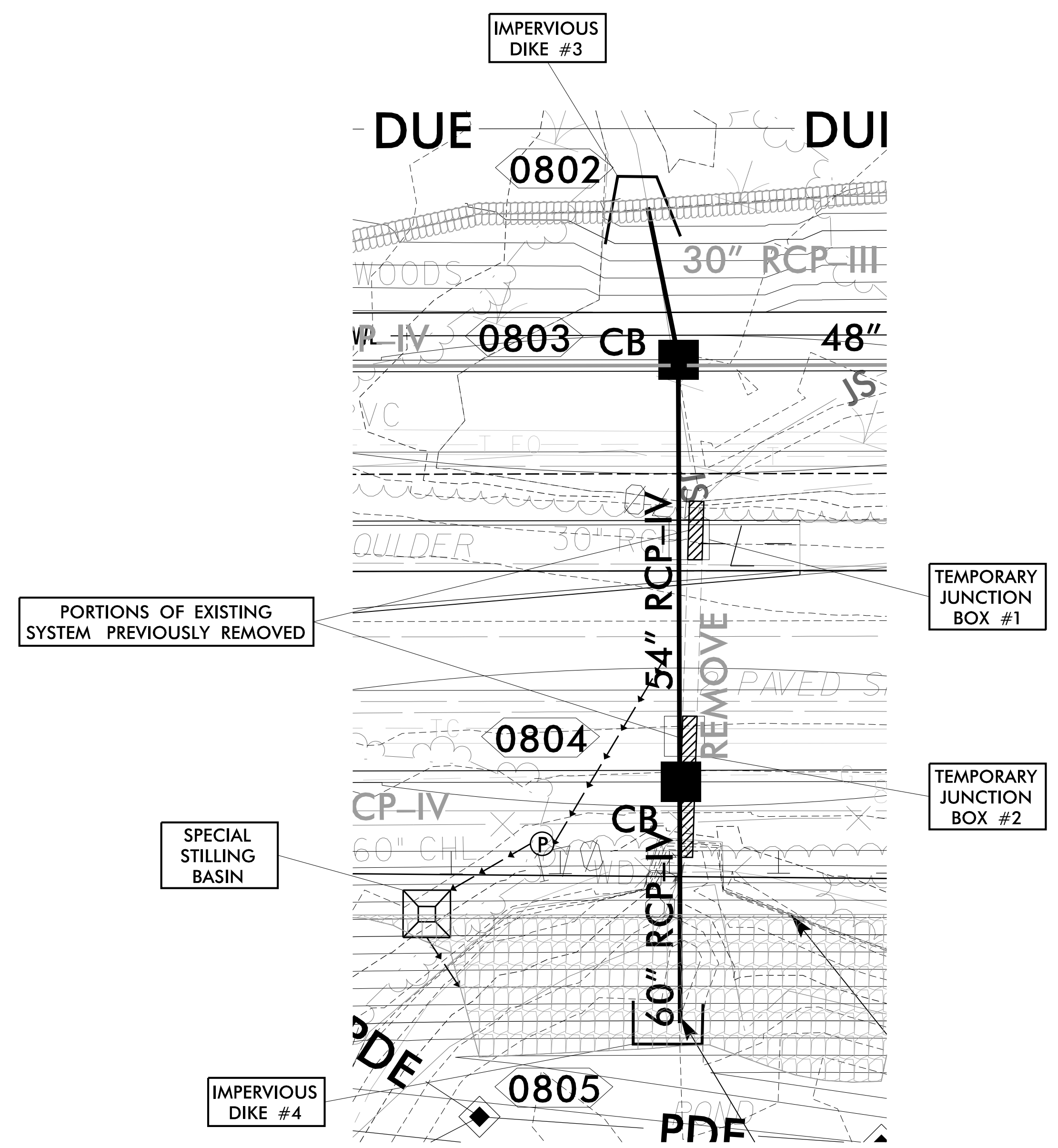
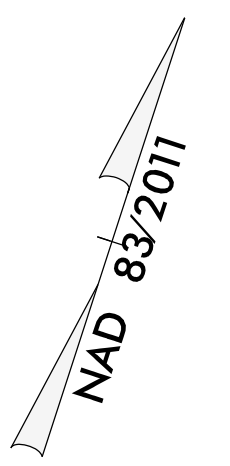
PHASE II

1. WORK IN PHASE II TO BE PERFORMED UNDER DRY CONDITIONS.
2. ADJUST IMPERVIOUS DIKE #1 AND INSTALL IMPERVIOUS DIKE #2 AND PROVIDE PUMP AND SPECIAL STILLING BASIN(S) FOR DEWATERING OF THE WORK ZONE.
3. UTILIZE PUMP AROUND OPERATION TO CONVEY CLEAN WATER THROUGH THE WORK ZONE DURING THIS PHASE. THIS CLEAN WATER PUMP AROUND WILL NEED TO BE ADJUSTED AS WORK PROGRESSES.
4. REMOVE PORTIONS OF EXISTING 30" RCP AS SHOWN.
5. INSTALL TEMPORARY JUNCTION BOX #1 AND #2 AND PORTIONS OF PROPOSED STORM DRAIN SYSTEM 0805 AS SHOWN.
6. REMOVE IMPERVIOUS DIKES #1 AND #2 AND ALLOW FLOW TO ENTER AT STRUCTURE 0802.
7. COMPLETE ROADWAY CONSTRUCTION UNDER PHASE I STEP 1 OF THE TCP.

PROJECT REFERENCE NO. U-3422A	SHEET NO. EC-8B/CONST.B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

54/60" RCP CONSTRUCTION SEQUENCE STA. 76+60 -L-

NOT TO SCALE



PHASE III

1. WORK IN PHASE III TO BE PERFORMED UNDER DRY CONDITIONS.
2. INSTALL IMPERVIOUS DIKES #3 AND #4 AND PROVIDE PUMP AND SPECIAL STILLING BASIN(S) FOR DEWATERING OF THE WORK ZONE.
3. UTILIZE PUMP AROUND OPERATION TO CONVEY CLEAN WATER THROUGH THE WORK ZONE DURING THIS PHASE. THIS CLEAN WATER PUMP AROUND WILL NEED TO BE ADJUSTED AS WORK PROGRESSES.
4. REMOVE REMAINING PORTION OF EXISTING 30" RCP AND TEMPORARY JUNCTION BOX #1 AND #2.
5. INSTALL REMAINING PORTION OF PROPOSED 54" RCP AS SHOWN.
6. REMOVE IMPERVIOUS DIKES #3 AND #4 AND ANY REMAINING SPECIAL STILLING BASIN(S) AND ALLOW FLOW TO ENTER AT STRUCTURE 0802.
7. COMPLETE ROADWAY CONSTRUCTION UNDER PHASE I STEP 2 OF THE TCP.

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-9/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 N.C.B.E.L.S. License Number: F-0116

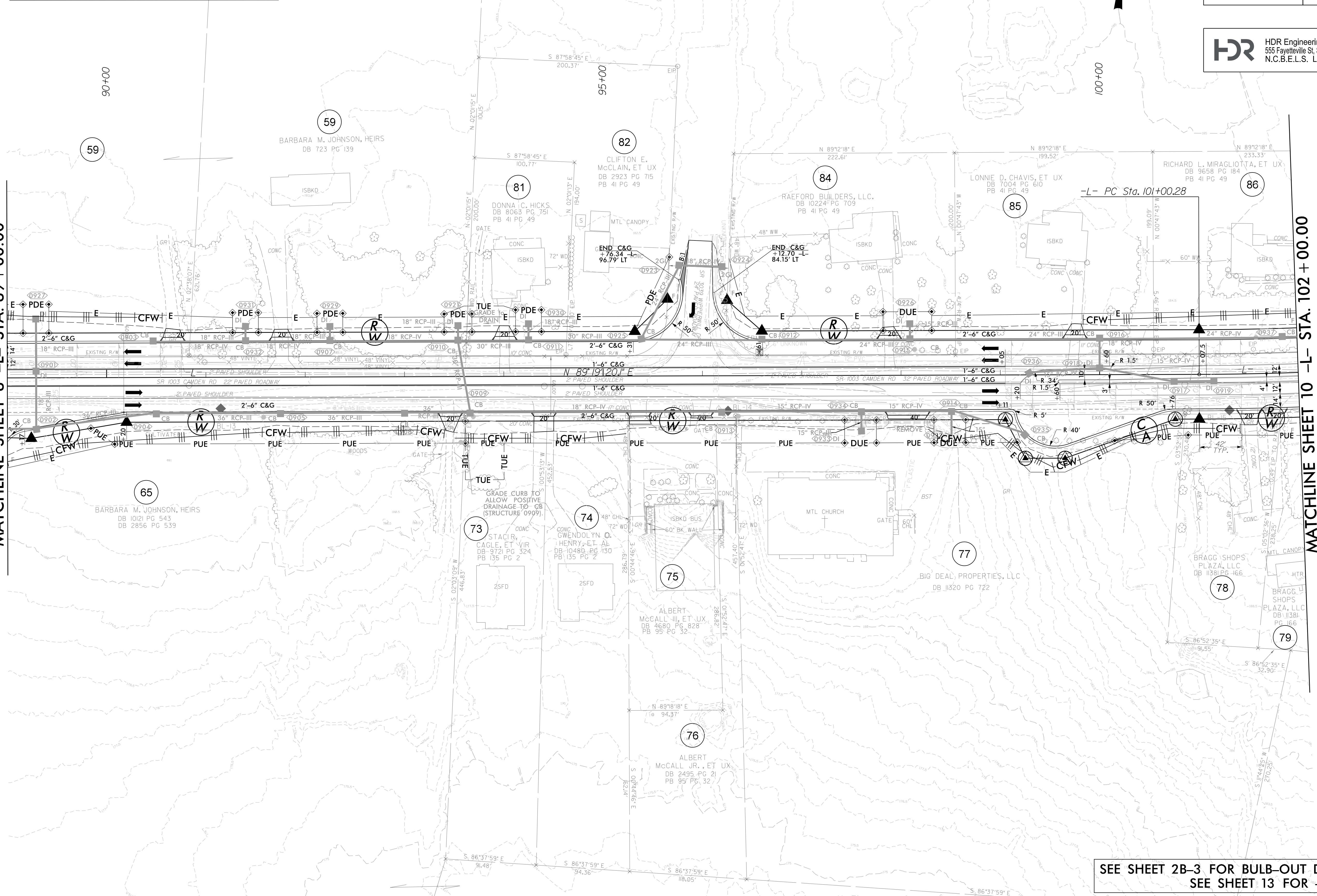
CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 9

NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
 DRAINAGE OUTLETS.



MATCHLINE SHEET 8 -L- STA. 89 + 00.00

MATCHLINE SHEET 10 -L- STA. 102 + 00.00



SEE SHEET 2B-3 FOR BULB-OUT DETAIL VIEW
 SEE SHEET 13 FOR -L- PROFILE

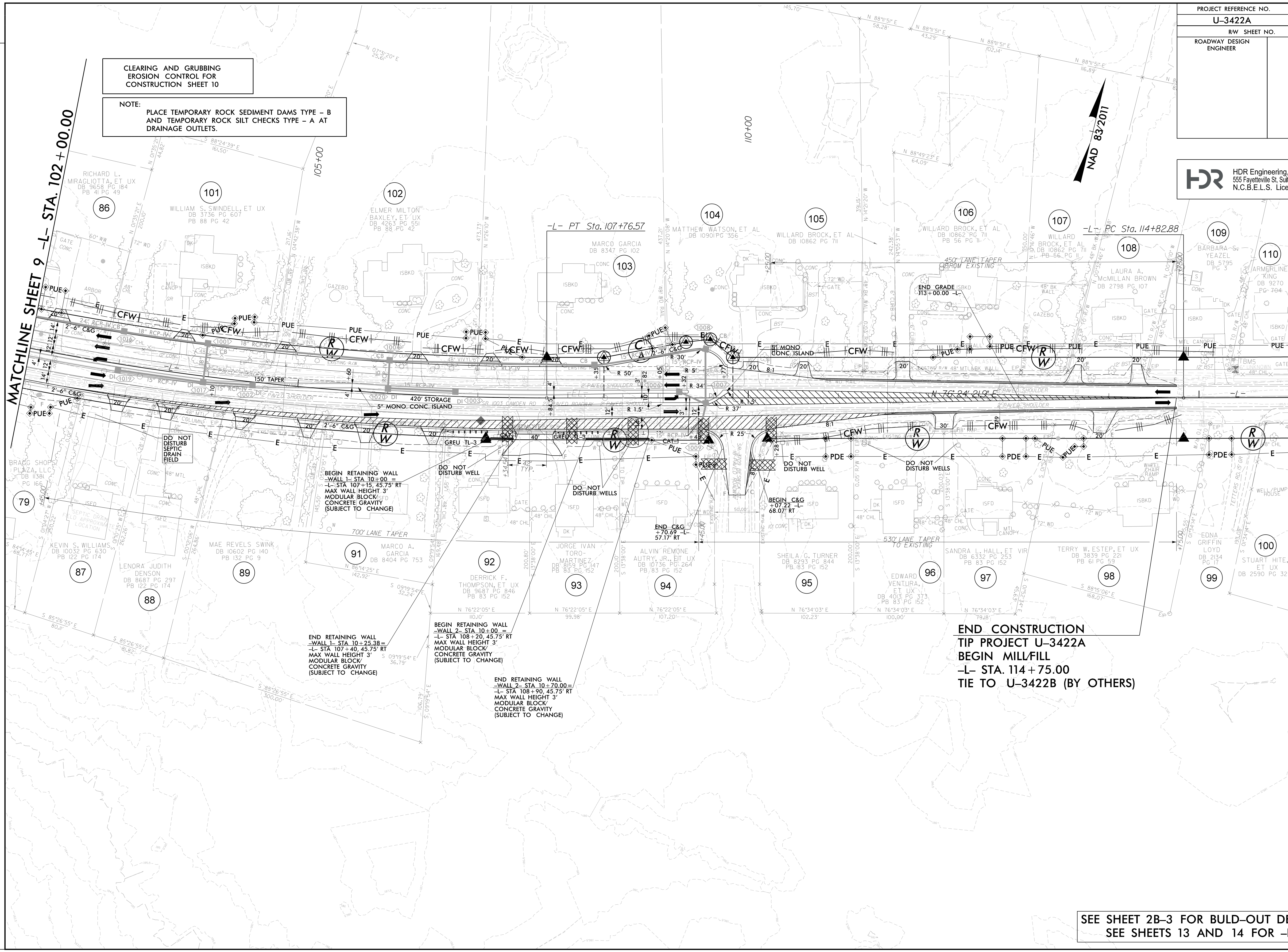
REVISIONS

3252022: PARCELS 71, 80-82, 84-86, PUE REMOVED; PARCELS 73, 77, 80 TCE REVISED; PARCEL 71, 73, 80 TCE REVISED; PARCEL 84 DUE REVISED; PARCEL 71, 80, 81 DUE REMOVED; PDE ADDED
 10/27/2022: PARCEL 67 ROW, PUE, & TCE REVISED; PARCEL 73 PUE REVISED & TCE REMOVED
 2/2/2023: PARCEL 67 ROW LABELS ADDED

PLOT DRIVER: NCDOT_pdf_color_eng_100.plt
 USER: DWAGNER
 DATE: 8/7/2024
 TIME: 10:49:24 AM

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC10/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116



CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 10

NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
 AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
 DRAINAGE OUTLETS.

END CONSTRUCTION
TIP PROJECT U-3422A
BEGIN MILL/FILL
 -L- STA. 114 + 75.00
 TIE TO U-3422B (BY OTHERS)

SEE SHEET 2B-3 FOR BULD-OUT DETAIL VIEW
 SEE SHEETS 13 AND 14 FOR -L- PROFILE

REVISIONS
 3/25/2022: PARCELS 85, 87-93, 95, 96, 99, 100, 105 PUE REMOVED; PARCELS 79, 86, 94, 97, 98, 101, 103, 104, 106 PUE REVISED; PARCELS 99, 100 TCE ADDED; PARCELS 95, 97, 99 PDE ADDED DUE REMOVED
 8/10/2022: PARCEL 89 OWNER CHANGE; PARCEL 90 REMOVED
 9/20/2022: PARCELS 92-94 ROW REVISED & TECE REVISED; PARCEL 94 PUE REVISED

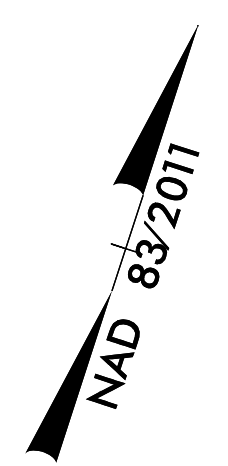
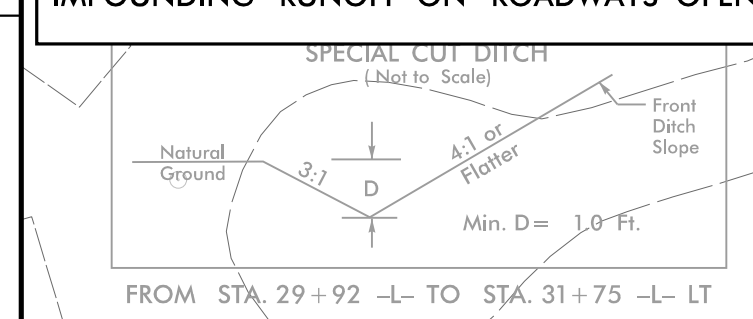
PLOT DRIVER: NCDOT_ec_eng_100.plt
 USER: DWAGNER
 PENTABLE: NCDOT_EC_C&G_BW.tbl
 DATE: 8/7/2024
 TIME: 10:49:32 AM

NOTE:
USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

NOTE: IT IS ASSUMED THAT WORK FOR THE U-2519BA
PROJECT WILL BE COMPLETED PRIOR TO CONSTRUCTION
BEGINNING FOR THE U-3422 PROJECT

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-11/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HDR HDR Engineering, Inc. of the Carolinas
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N.C.B.E.L.S. License Number: F-0116

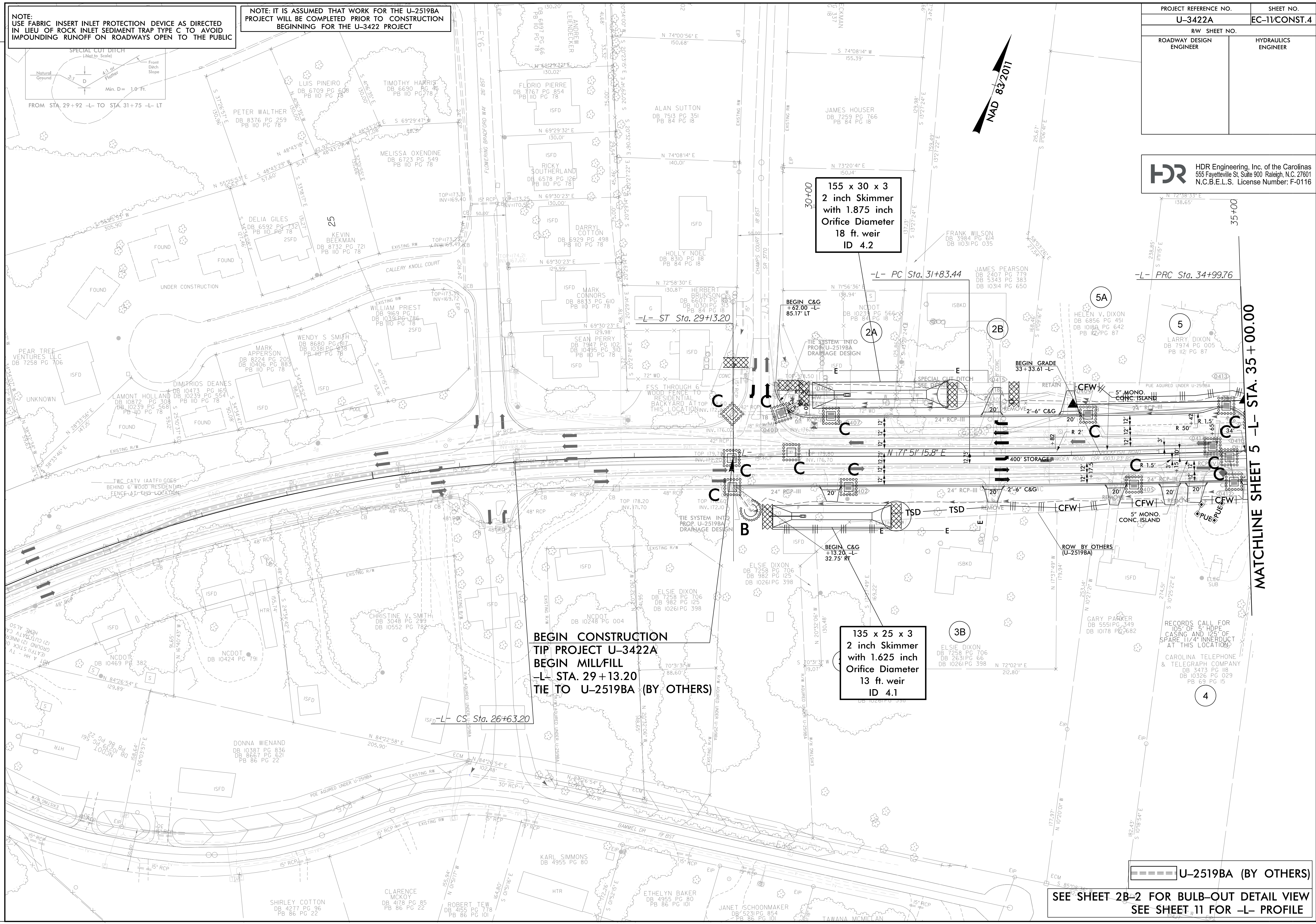


REVISIONS

MATCHLINE SHEET 5 -L- STA. 35 + 00.00

PLOT DRIVER: NCDOT_color_eng_100.plt
USER: DWAGNER
DATE: 8/7/2024
TIME: 10:49:44 AM

9/30/2021: PARCEL OWNER NAME REVISED; PARCELS 2A, 2C, AND 5A
3/25/2022: PARCELS 1, 2, 3 PUE REMOVED; PARCEL 4.5 PUE REVISED
10/27/2022: PARCEL 2C TCE REMOVED



BEGIN CONSTRUCTION
TIP PROJECT U-3422A
BEGIN MILLFILL
-L- STA. 29 + 13.20
TIE TO U-2519BA (BY OTHERS)

135 x 25 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
13 ft. weir
ID 4.1

155 x 30 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
18 ft. weir
ID 4.2

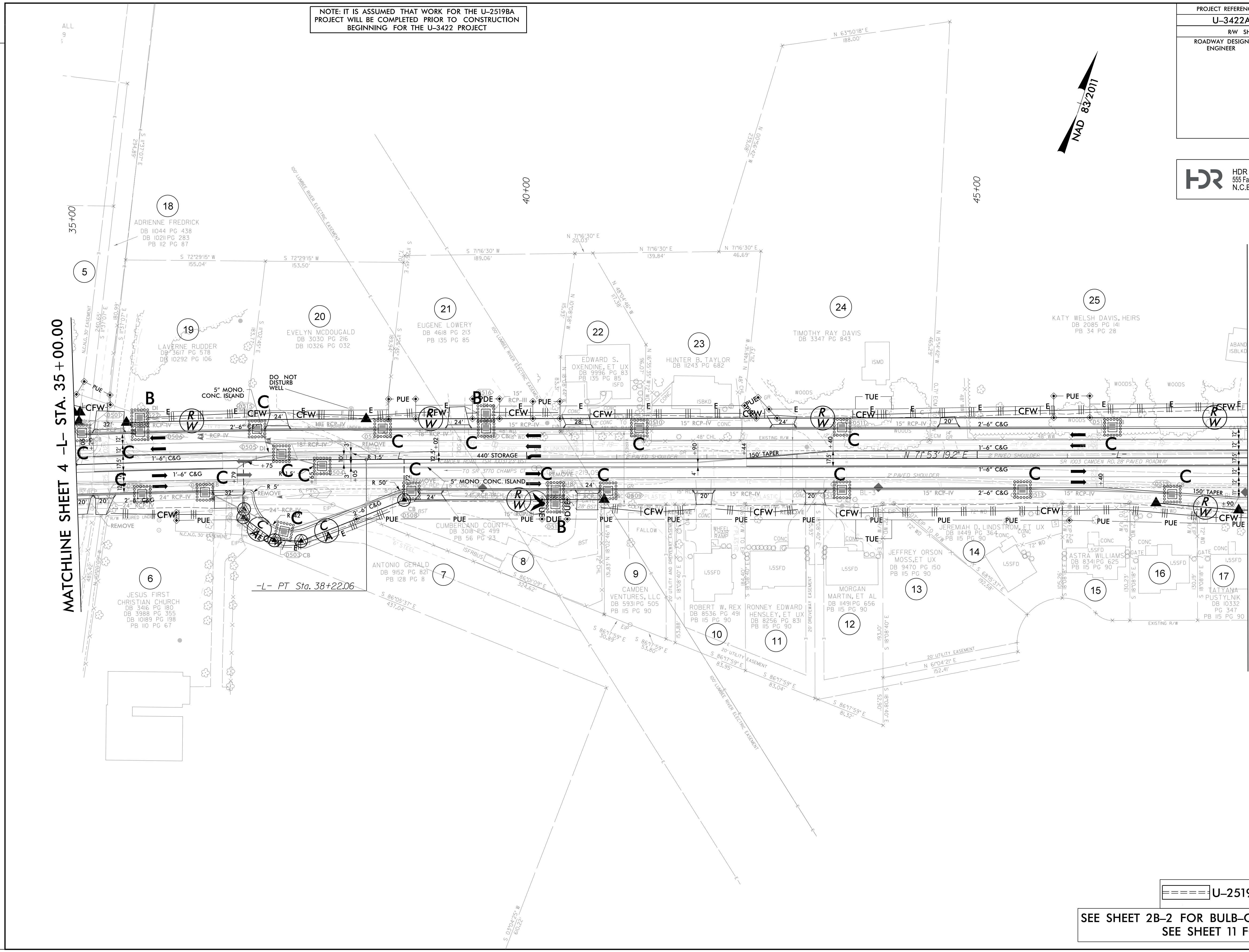
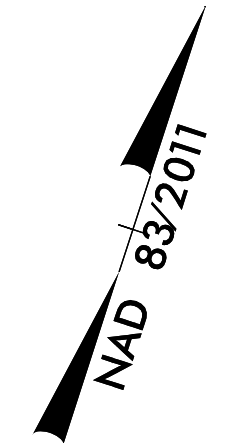
==== U-2519BA (BY OTHERS)

SEE SHEET 2B-2 FOR BULB-OUT DETAIL VIEW
SEE SHEET 11 FOR -L- PROFILE

NOTE: IT IS ASSUMED THAT WORK FOR THE U-2519BA PROJECT WILL BE COMPLETED PRIOR TO CONSTRUCTION BEGINNING FOR THE U-3422 PROJECT

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-12/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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N.C.B.E.L.S. License Number: F-0116



MATCHLINE SHEET 4 -L- STA. 35+00.00

MATCHLINE SHEET 6 -L- STA. 48+00.00

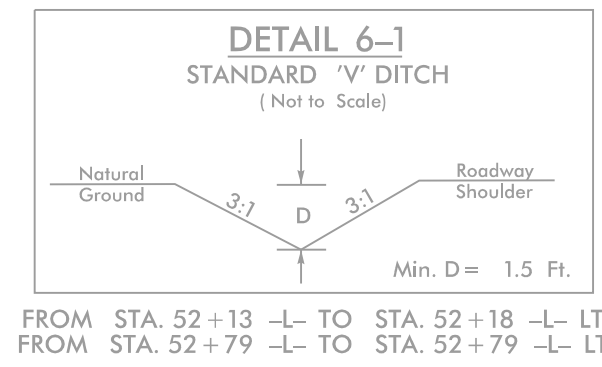
REVISIONS
3/25/2022: PARCELS 6-9, 21 PUE REVISED; PARCELS 12, 13, 24 TUE ADDED; PARCELS 19-20, 22-24 PUE REMOVED AND TCE ADDED; PARCEL 21 DUE REMOVED AND PDE ADDED; PARCEL 25 PUE REVISED AND TCE ADDED
2/22/2023: PARCELS 9-15 ROW LINE WORK REMOVED; PARCELS SETTLED

PLOT DRIVER: NCDOT_pdr_color_eng_100.plt
USER: DWAGNER
FILE: \

PENTABLE: NCDOT_EC_FINAL_BW.tbl
DATE: 8/7/2024
TIME: 10:49:51 AM

==== U-2519BA (BY OTHERS)

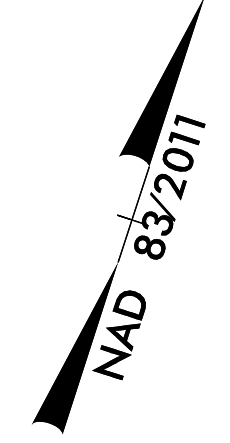
SEE SHEET 2B-2 FOR BULB-OUT DETAIL VIEW
SEE SHEET 11 FOR -L- PROFILE



NOTE:
USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

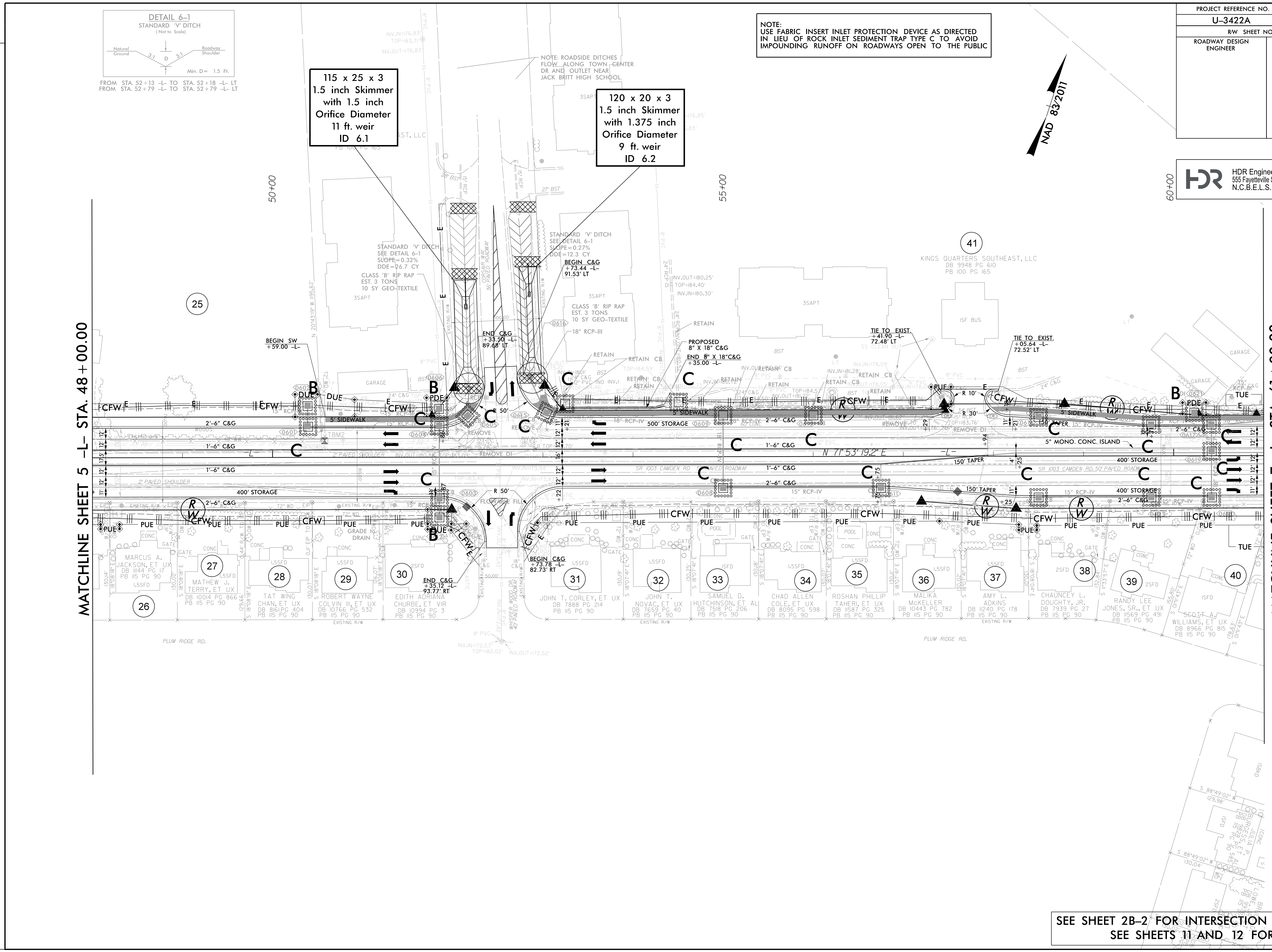
PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-13/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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N.C.B.E.L.S. License Number: F-0116



MATCHLINE SHEET 5 -L- STA. 48+00.00

MATCHLINE SHEET 7 -L- STA. 61+00.00



SEE SHEET 2B-2 FOR INTERSECTION DETAIL VIEW
SEE SHEETS 11 AND 12 FOR -L- PROFILE

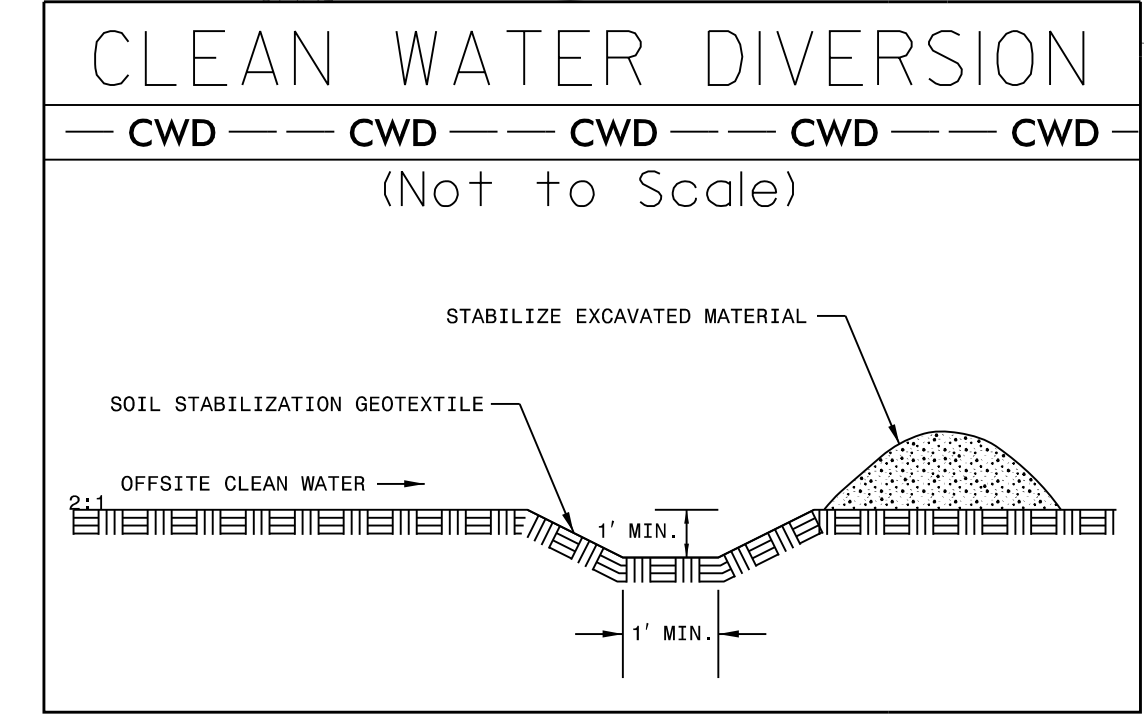
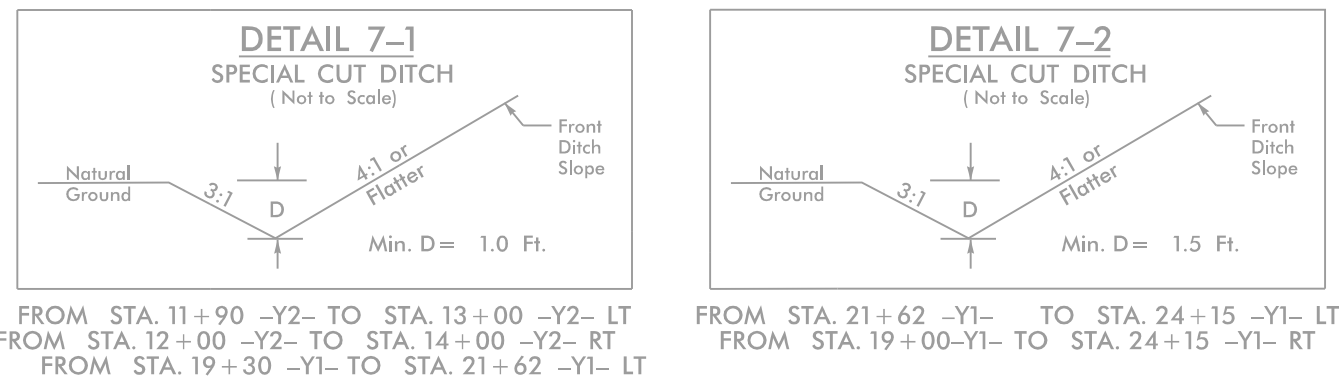
REVISIONS
 3/25/2022: PARCEL 25 PUE REMOVED, TCE ADDED, DUE ADDED, PDE REMOVED, PARCELS 40,41 TUE ADDED, PARCEL 41 PUE REVISED, DUE ADDED, TCE REVISED, PDE ADDED
 12/20/2023: PARCEL 41 ROW REVISED, PUE REVISED, TCE REVISED

PLOT DRIVER: NCDOT_color_eng_100.plt
 USER: DWAGNER
 FILE: \

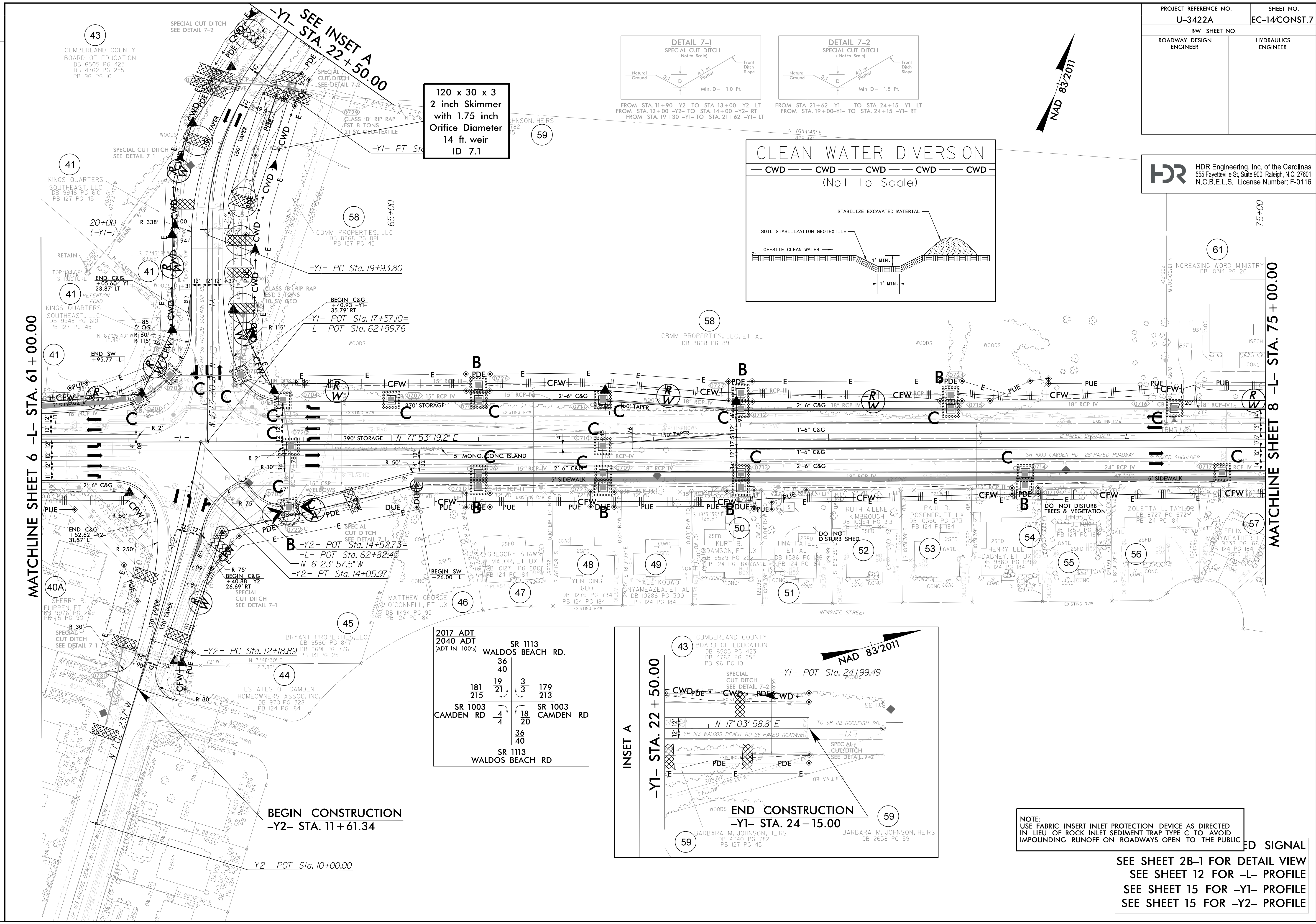
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 DATE: 8/7/2024
 TIME: 10:49:59 AM

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-14/CONST.7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HDR HDR Engineering, Inc. of the Carolinas
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 N.C.B.E.L.S. License Number: F-0116

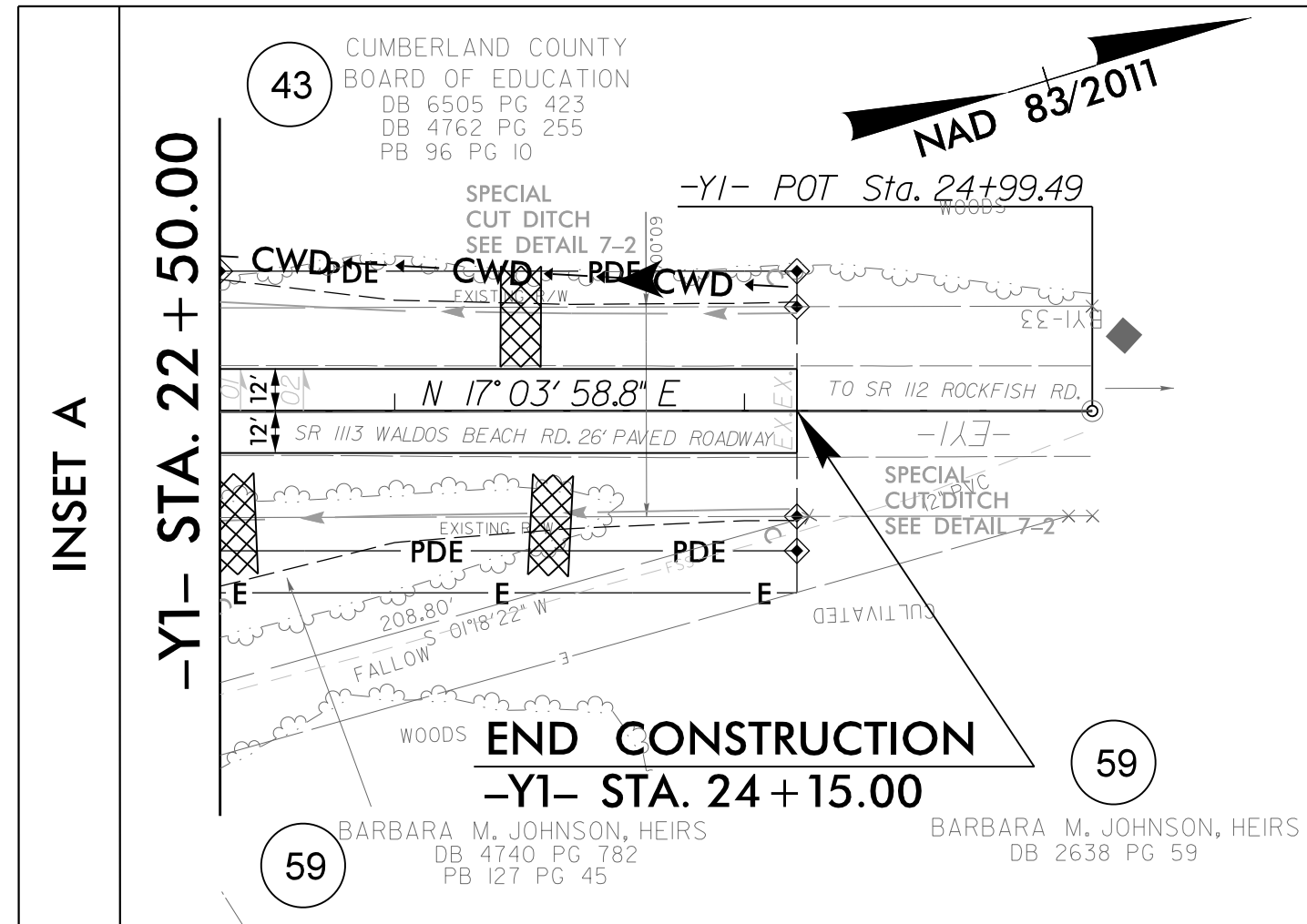


120 x 30 x 3
 2 inch Skimmer
 with 1.75 inch
 Orifice Diameter
 14 ft weir
 ID 7.1



2017 ADT
 2040 ADT
 (ADT IN 100'S)

SR 1113 WALDOS BEACH RD.	36 40	3 3	179 213
SR 1003 CAMDEN RD	181 215	4 4	18 20
SR 1003 CAMDEN RD			36 40
SR 1113 WALDOS BEACH RD			



NOTE:
 USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
 IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
 IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

RED SIGNAL
 SEE SHEET 2B-1 FOR DETAIL VIEW
 SEE SHEET 12 FOR -L- PROFILE
 SEE SHEET 15 FOR -Y1- PROFILE
 SEE SHEET 15 FOR -Y2- PROFILE

REVISIONS
 PARCELS 40A, 41, 45, 46, 60 PUE REVISED; PARCELS 45, 46 DUE ADDED; PARCELS 45, 59, 62 TCE REVISED; PARCELS 45, 59, 62 PDE REVISED; PARCEL 60 DUE REMOVED; PARCEL 60 PDE ADDED
 15/2023: PARCELS 42, 42A, AND 42B CHANGED TO PARCEL 41
 3/15/2023: PARCELS 62, 70, 71, 72, AND 80 CHANGED TO PARCEL 59
 3/21/2023: PARCEL 60 CHANGED TO PARCEL 58

PLOT DRIVER: NCDOT_pdf_color_eng_100.pht
 USER: DWAGNER
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 DATE: 8/7/2024
 TIME: 10:50:03 AM

MATCHLINE SHEET 6 -L- STA. 61+00.00

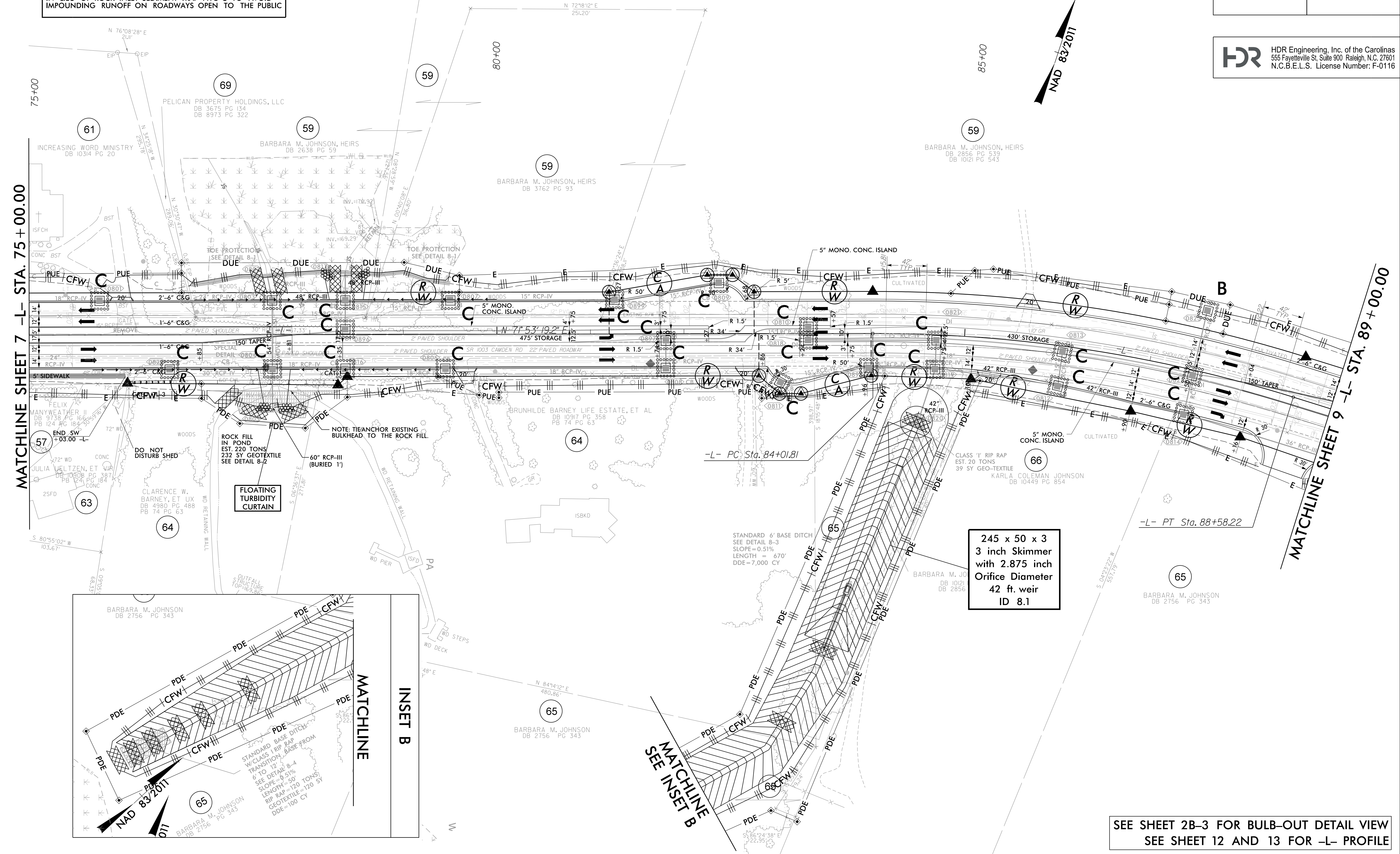
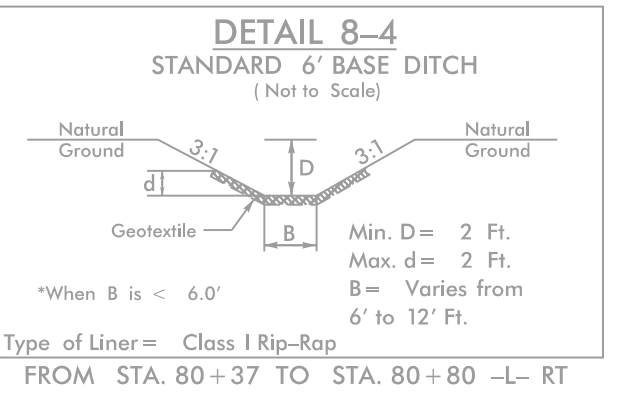
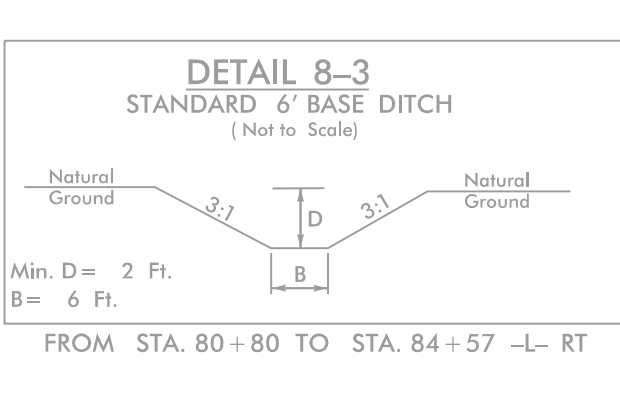
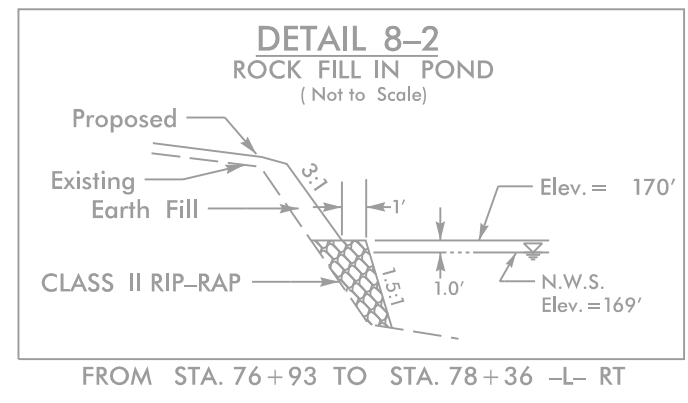
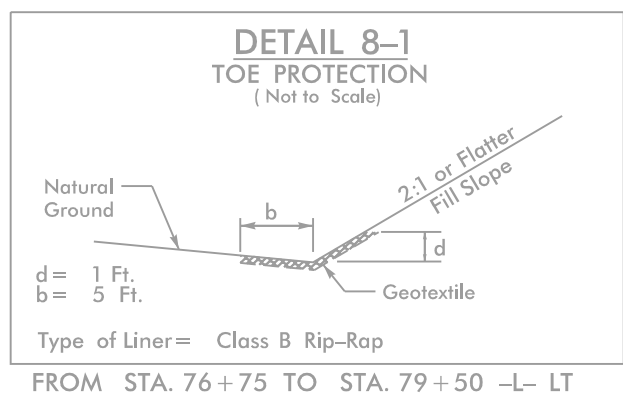
MATCHLINE SHEET 8 -L- STA. 75+00.00

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-15/CONST.8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 N.C.B.E.L.S. License Number: F-0116

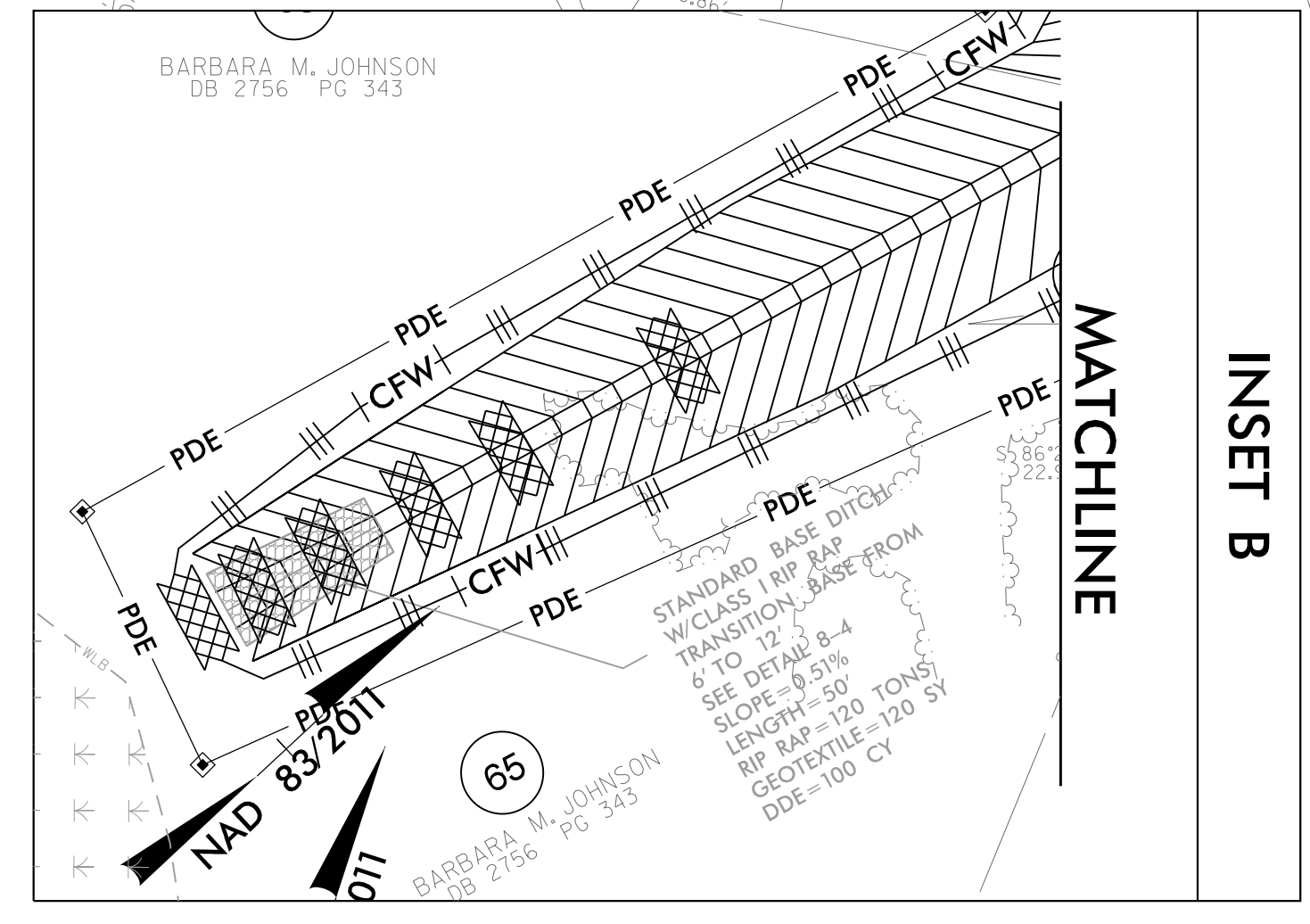
Place Matting for Erosion Control on Slope as Work Allows.
 Sta. 77+00 to Sta. 79+00 -L- LT
 Sta. 77+00 to Sta. 78+00 -L- RT

NOTE:
 USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
 IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
 IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC



MATCHLINE SHEET 7 -L- STA. 75+00.00

MATCHLINE SHEET 9 -L- STA. 89+00.00



245 x 50 x 3
 3 inch Skimmer
 with 2.875 inch
 Orifice Diameter
 42 ft. weir
 ID 8.1

SEE SHEET 2B-3 FOR BULB-OUT DETAIL VIEW
 SEE SHEET 12 AND 13 FOR -L- PROFILE

9/30/2021: PARCEL OWNER ADDED; PARCEL 68
 3/25/2022: PARCEL 71 PUE, DUE AND TCE REVISED; PARCEL 72 PUE REMOVED
 10/27/2022: PARCELS 64, 65, & 72 CA ADDED; PARCELS 66, 67, & 71 CA REVISED; PARCELS 64-67 & 71-72 TCE REVISED
 2/22/2023: PARCELS 66 & 67 ROW LABELS ADDED
 3/15/2023: PARCELS 67 AND 68 CHANGED TO PARCEL 65
 PLOT DRIVER: NCDOT_pdf_color_eng_100.plt
 USER: DWAGNER
 FILE: PENTABLE; NCDOT_EC_FINAL_BW.tbl
 DATE: 8/7/2024
 TIME: 10:50:09 AM

REVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC-16/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

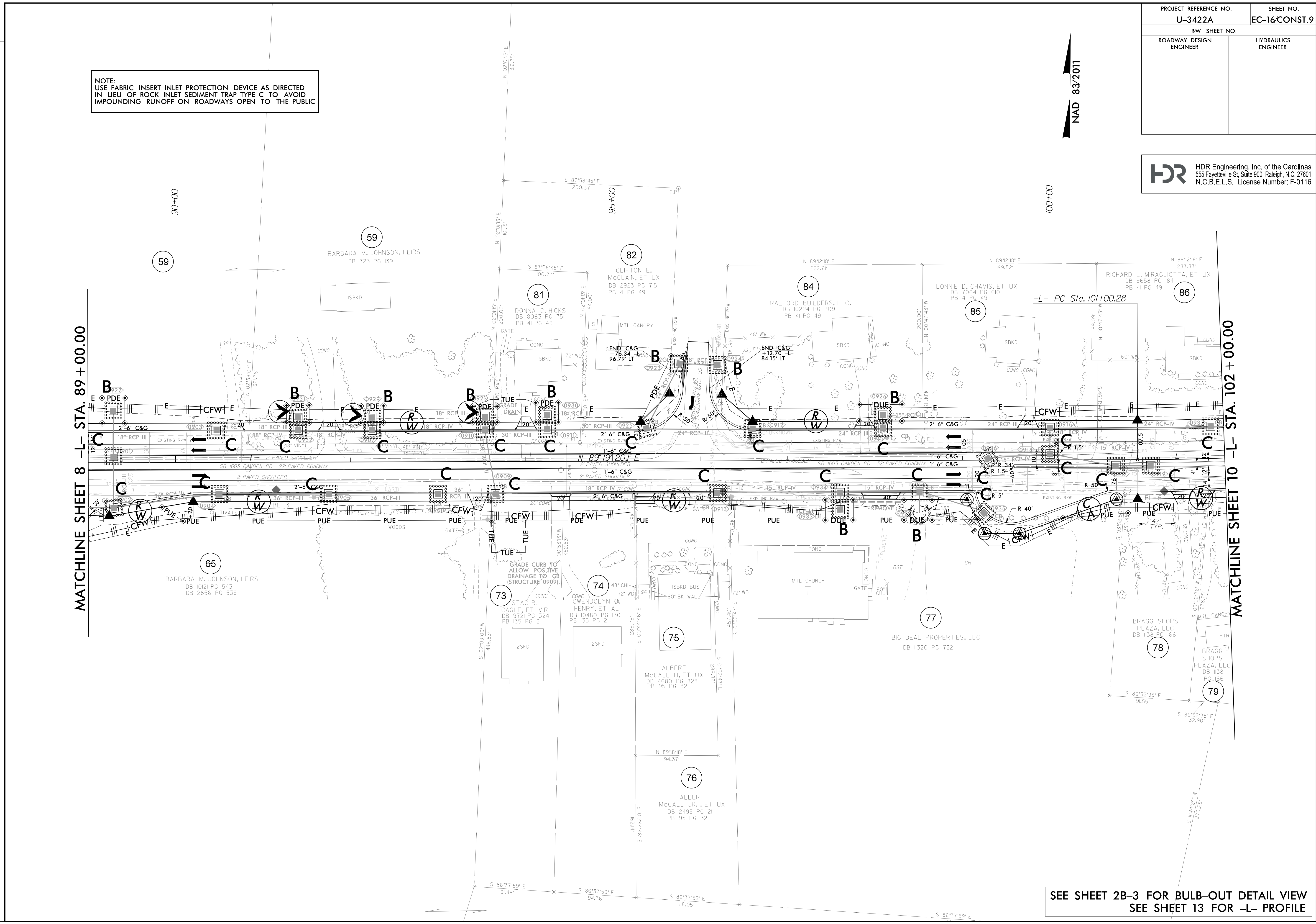
HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116

NAD 83/2011

NOTE:
 USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
 IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
 IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC

MATCHLINE SHEET 8 -L- STA. 89+00.00

MATCHLINE SHEET 10 -L- STA. 102+00.00



SEE SHEET 2B-3 FOR BULB-OUT DETAIL VIEW
 SEE SHEET 13 FOR -L- PROFILE

REVISIONS

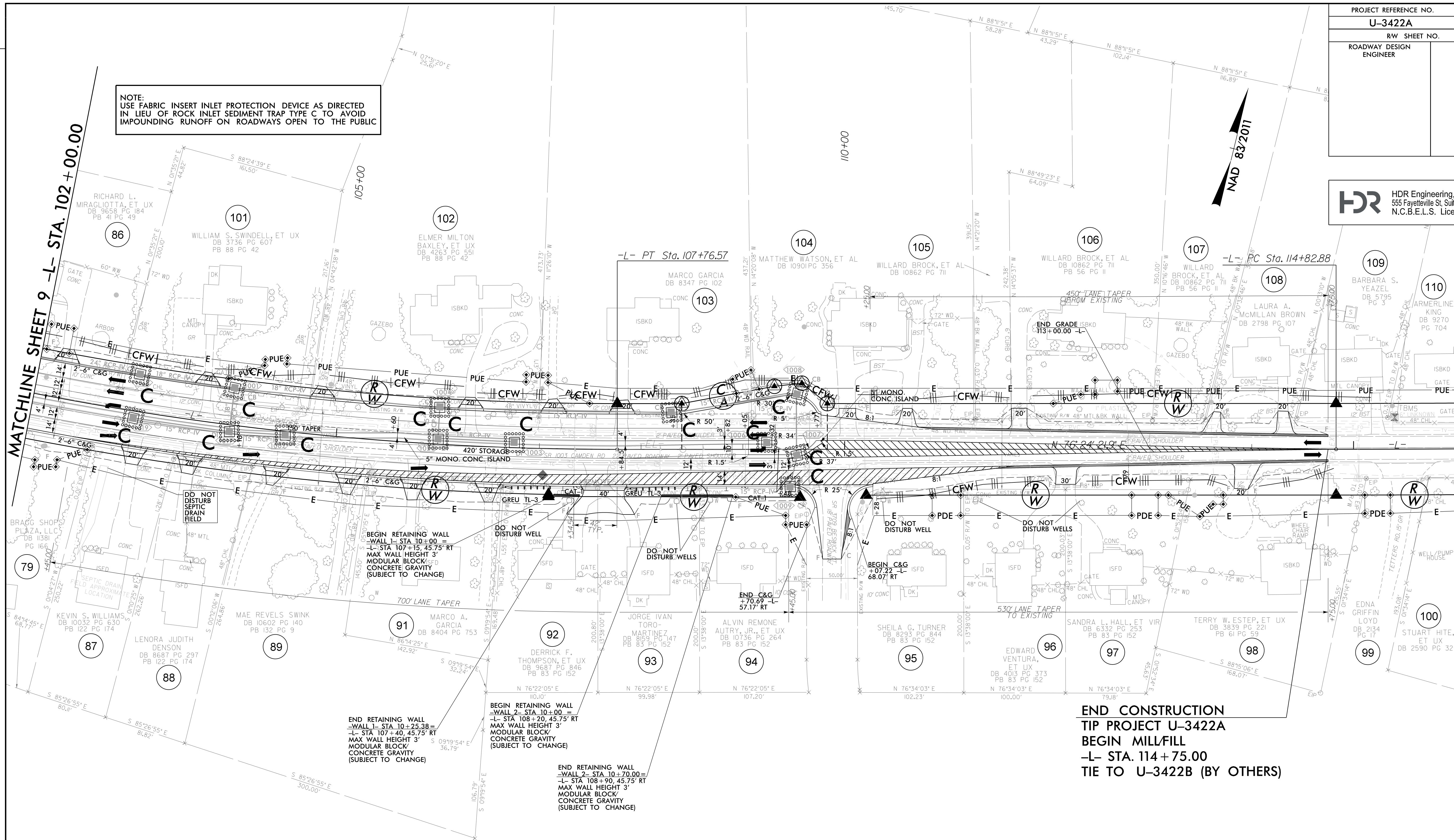
3252022: PARCELS 71, 80-82, 84-86, PUE REMOVED; PARCELS 73-77 PUE REVISED; PARCEL 71, 73, 80 TCE REVISED; PARCELS 73, 80, 81 TUE ADDED; PARCEL 84 DUE REVISED; PARCEL 71, 80, 81 DUE REMOVED; PDE ADDED
 10/27/2022: PARCEL 67 ROW, PUE, & TCE REVISED; PARCEL 73 PUE REVISED & TCE REMOVED
 2/2/2023: PARCEL 67 ROW LABELS ADDED

PLOT DRIVER: NCDOT_pdf_color_eng_100.pht
 USER: DWAGNER
 DATE: 8/7/2024
 TIME: 10:50:13 AM

PROJECT REFERENCE NO.	SHEET NO.
U-3422A	EC17/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

HDR HDR Engineering, Inc. of the Carolinas
 555 Fayetteville St. Suite 900 Raleigh, N.C. 27601
 N.C.B.E.L.S. License Number: F-0116

NOTE:
 USE FABRIC INSERT INLET PROTECTION DEVICE AS DIRECTED
 IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C TO AVOID
 IMPOUNDING RUNOFF ON ROADWAYS OPEN TO THE PUBLIC



END CONSTRUCTION
TIP PROJECT U-3422A
BEGIN MILL/FILL
-L- STA. 114+75.00
TIE TO U-3422B (BY OTHERS)

SEE SHEET 2B-3 FOR BULD-OUT DETAIL VIEW
 SEE SHEETS 13 AND 14 FOR -L- PROFILE

REVISIONS
 3/25/2022: PARCELS 85, 87-93, 95, 96, 99, 100, 105 PUE REMOVED; PARCELS 79, 86, 94, 97, 98, 101, 103, 104, 106 PUE REVISED; PARCELS 99, 100 TCE ADDED; PARCELS 95, 97, 99 PDE ADDED DUE REMOVED
 8/12/2022: PARCEL 89 OWNER CHANGE; PARCEL 90 REMOVED
 9/20/2022: PARCELS 92-94 ROW REVISED & TECE REVISED; PARCEL 94 PUE REVISED

PLOT DRIVER: NCDOT_pdf_color_eng_100.plt
 USER: DWAGNER
 FILE: \PENTABLE; NCDOT_EC_FINAL_BW.tbl
 DATE: 8/7/2024
 TIME: 10:50:18 AM