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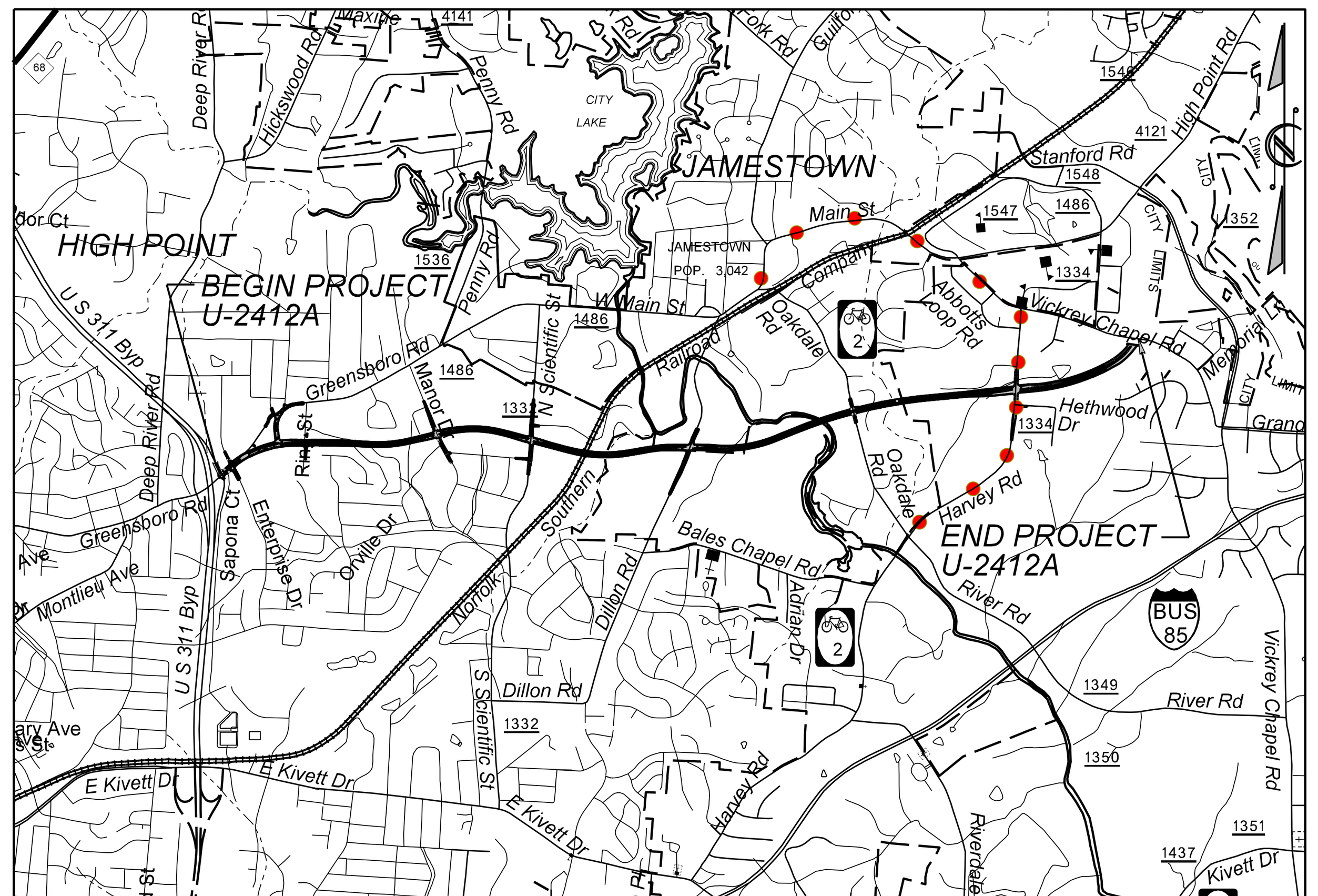
TIP PROJECT: U-2412A

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-2412A	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
34802.1.1	STP-4121(3)	PE
34802.2.2	STP-4121(3)	R/W & UTL.

SEE SHEET 1A FOR INDEX OF SHEETS
SEE SHEET 1B FOR CONVENTIONAL SYMBOLS



VICINITY MAP

DETOUR FOR OAKDALE ROAD BRIDGE CONSTRUCTION

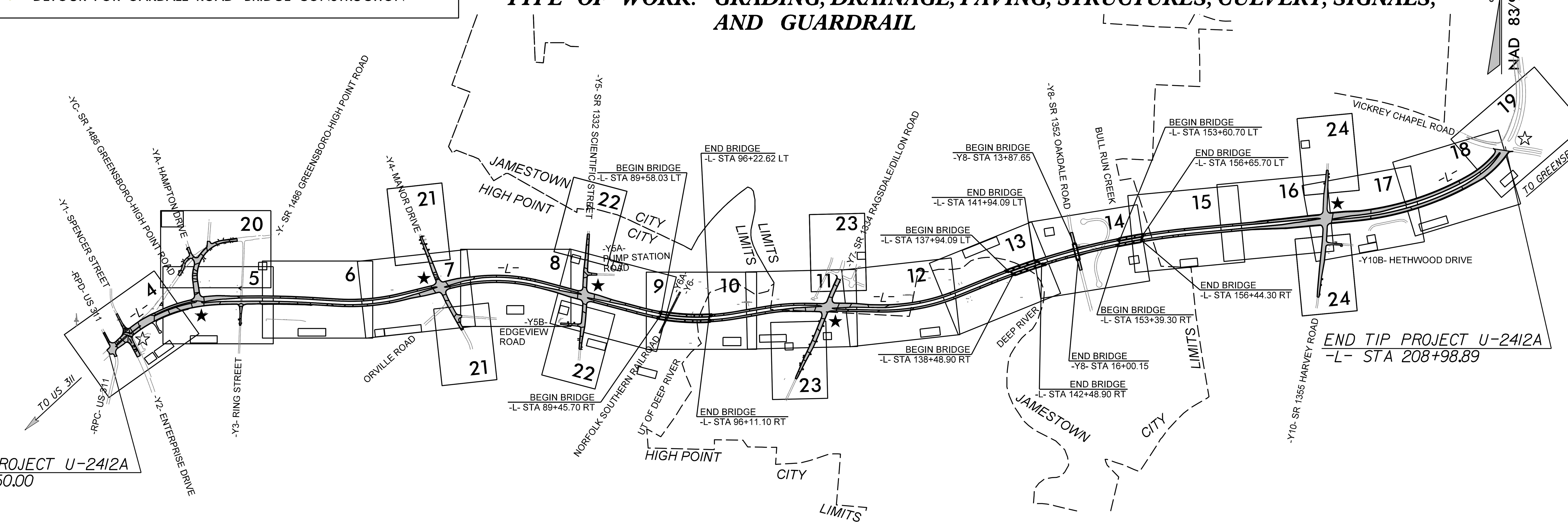
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

GUILFORD COUNTY

LOCATION: ***SR-1486 /SR-4121 (GREENSBORO/HIGH POINT ROAD) FROM PROPOSED US 311 BYPASS TO WEST OF SR 1480 (VICKREY CHAPEL ROAD)***

TYPE OF WORK: ***GRADING, DRAINAGE, PAVING, STRUCTURES, CULVERT, SIGNALS, AND GUARDRAIL***



EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle/ Coir Fiber Wattle	EW / CFW
	Wattle/ Coir Fiber Wattle with Polyacrylamide (PAM)	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	
	Tiered Skimmer Basin	
	Infiltration Basin	

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

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

Refer To E. C. Special Provisions for Special Considerations.

THIS IS A CONTROLLED ACCESS FACILITY WITH ACCESS BEING LIMITED TO INTERSECTIONS.
THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF HIGH POINT AND JAMESTOWN.
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II
NCDOT CONTACT: GARY LOVERING, PE

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
FEBRUARY 20, 2009

LETTING DATE:
JUNE 19, 2018

GRAPHIC SCALE

50′ 25′ 0 50′ 100′

SCALE: 1″ = 50′

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 1, 2016 AND ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER RESOURCES.

Prepared in the Office of:

SUNGATE DESIGN GROUP, P.A.

905 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243
ENG FIRM LICENSE NO. C-890

Designed by:

MATTHEW C. EDWARDS, EI — ***3992***
NAME — ***LEVEL III CERTIFICATION NO.***

Reviewed in the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2018 STANDARD SPECIFICATIONS

Reviewed by:

JENNIFER PARISH, EI, CPESC, CPSWQ

Roadway Standard Drawings

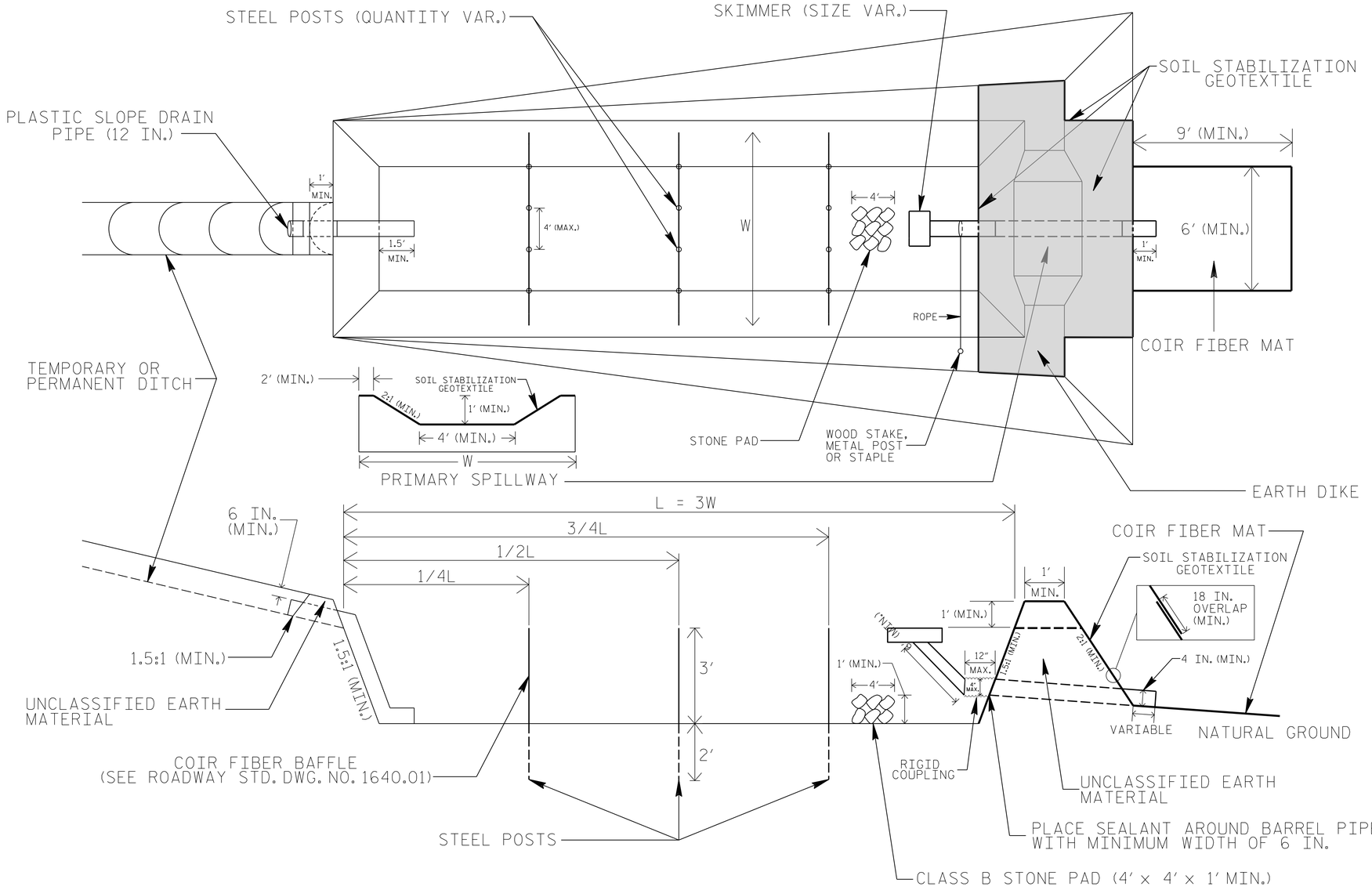
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2018 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type A
1622.01	Temporary Berms and Slope Drains	1633.02	Temporary Rock Silt Check Type B
1630.01	Riser Basin	1634.01	Temporary Rock Sediment Dam Type A
1630.02	Silt Basin Type B	1634.02	Temporary Rock Sediment Dam Type B
1630.03	Temporary Silt Ditch	1635.01	Rock Pipe Inlet Sediment Trap Type A
1630.04	Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B
1630.05	Temporary Diversion	1640.01	Coir Fiber Baffle
1630.06	Special Stilling Basin	1645.01	Temporary Stream Crossing
1631.01	Matting Installation		

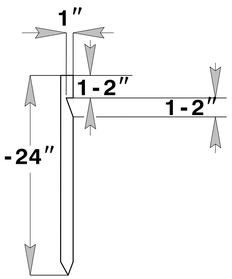
1/30/2018
U-2412A_EC_dsn_psh_01.dgn
MEdwards

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

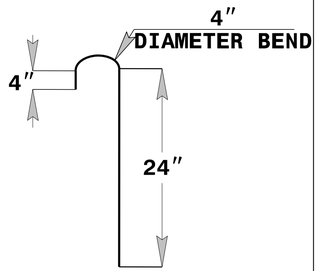
SKIMMER BASIN WITH BAFFLES DETAIL



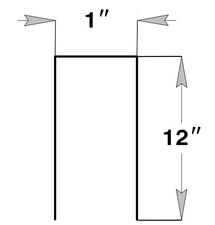
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

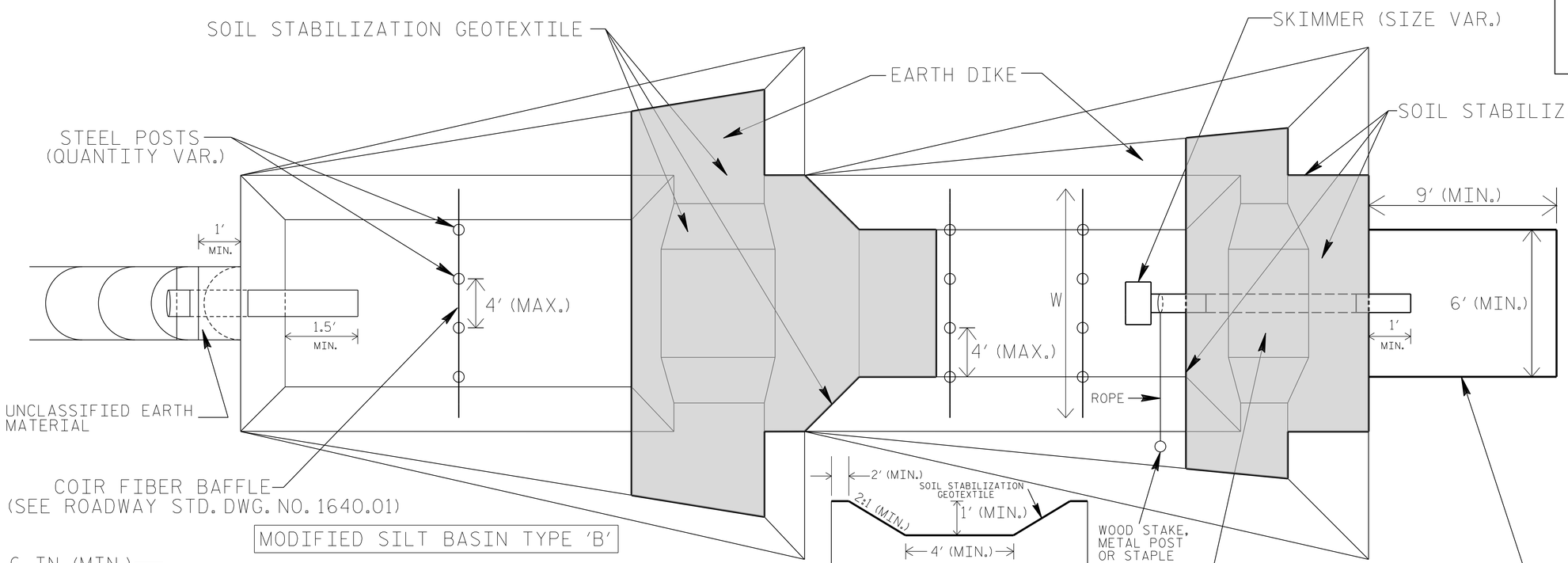
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE PRIMARY SPILLWAY WEIR LENGTH (FT.) USING Q/0.8, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE OR TARP AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

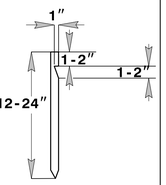
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

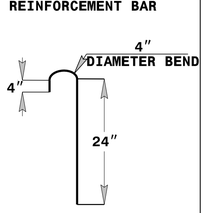
TIERED SKIMMER BASIN DETAIL



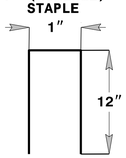
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

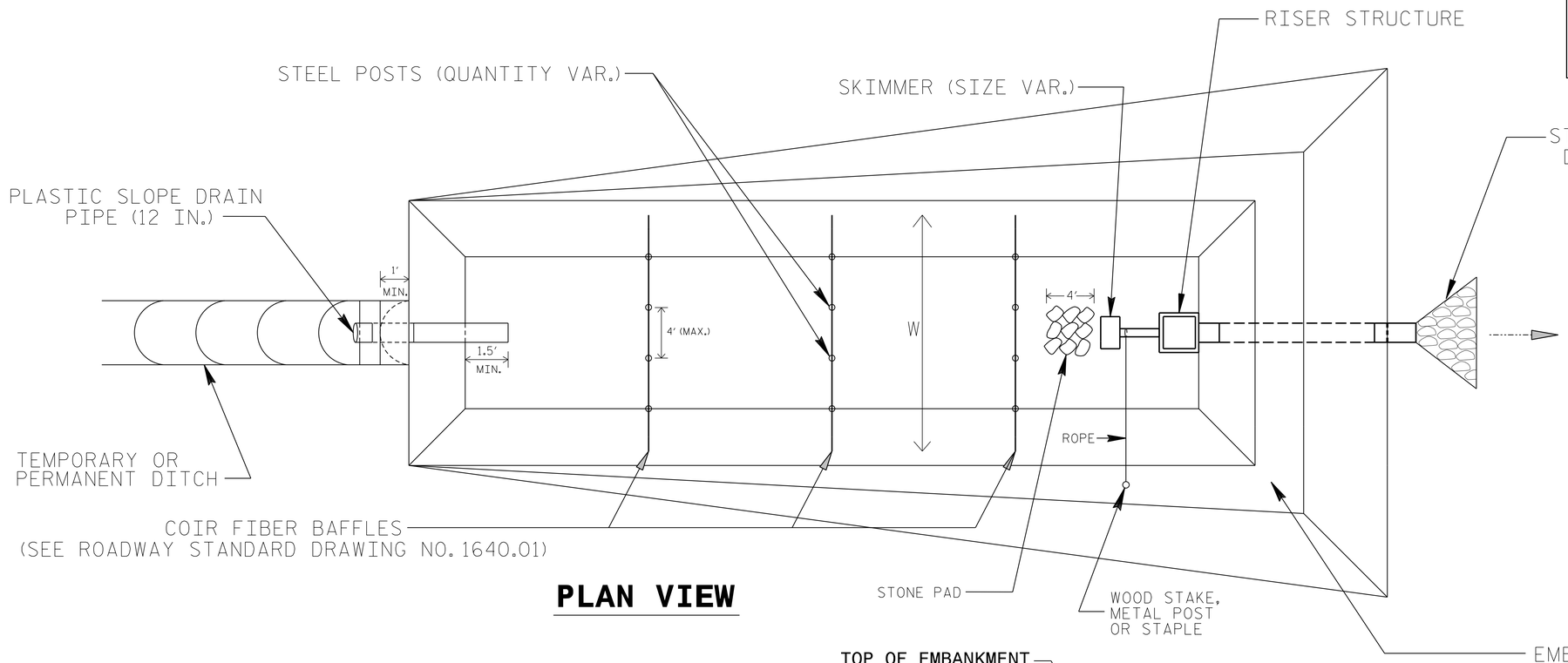
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY WEIR LENGTHS (FT.) USING Q/0.8, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. SOIL STABILIZATION GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

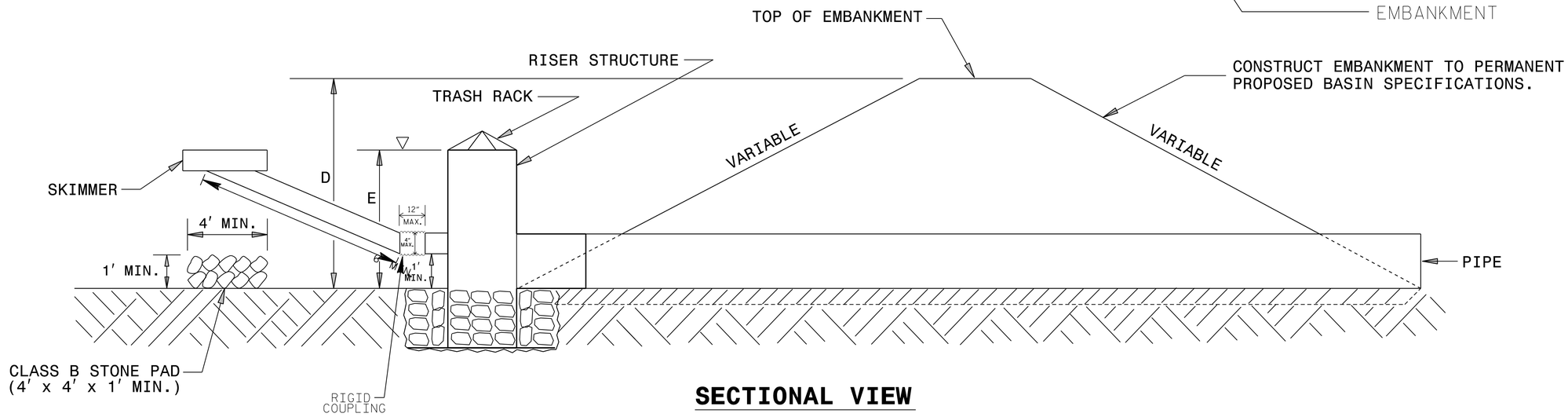
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

STORMWATER BASIN WITH SKIMMER



PLAN VIEW



SECTIONAL VIEW

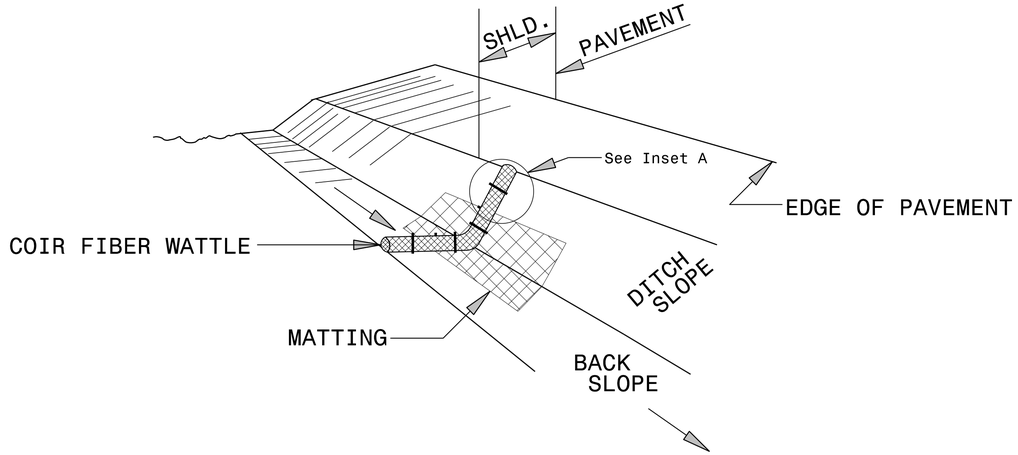
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. INSTALL A MINIMUM OF 3 COIR FIBER BAFFLES IN ACCORDANCE WITH ROADWAY STD. DRAWING 1640.01.
3. INSTALL SKIMMER AND COUPLING TO RISER STRUCTURE OR DIRECTLY INTO EMBANKMENT 1 FT. FROM BOTTOM OF BASIN.
4. THE ARM PIPE SHALL HAVE A MINIMUM LENGTH OF 6 FT. BETWEEN THE SKIMMER AND COUPLING.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. THE DIFFERENCE BETWEEN LENGTHS "D" AND "E" REPRESENT THE FREEBOARD AND SHOULD BE 1 FT. MINIMUM.

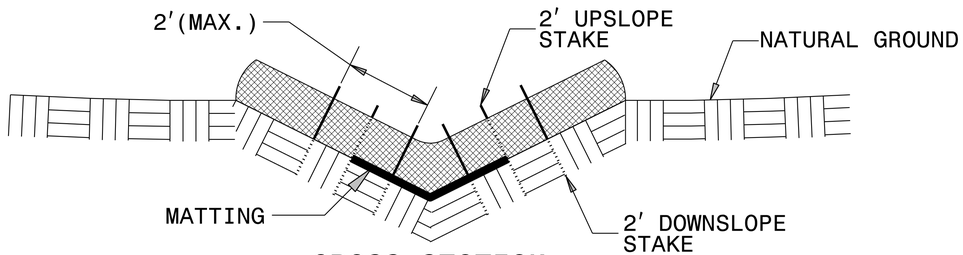
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

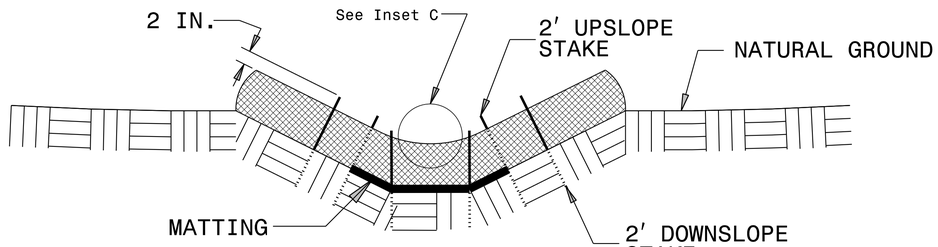
COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE.

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

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

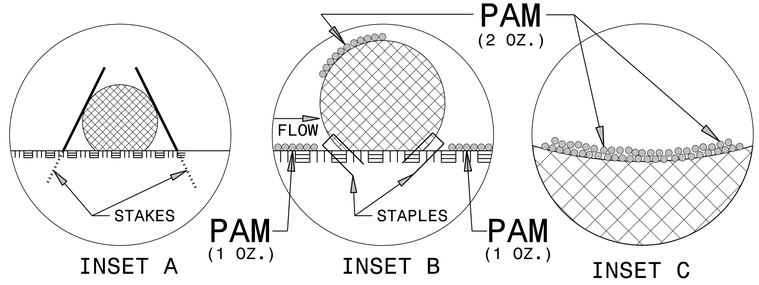
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12″ IN LENGTH.

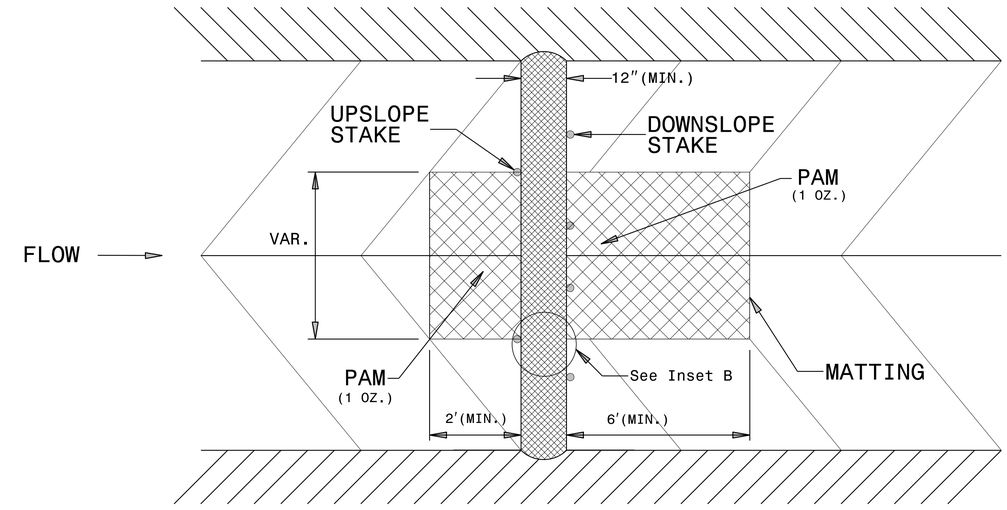
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

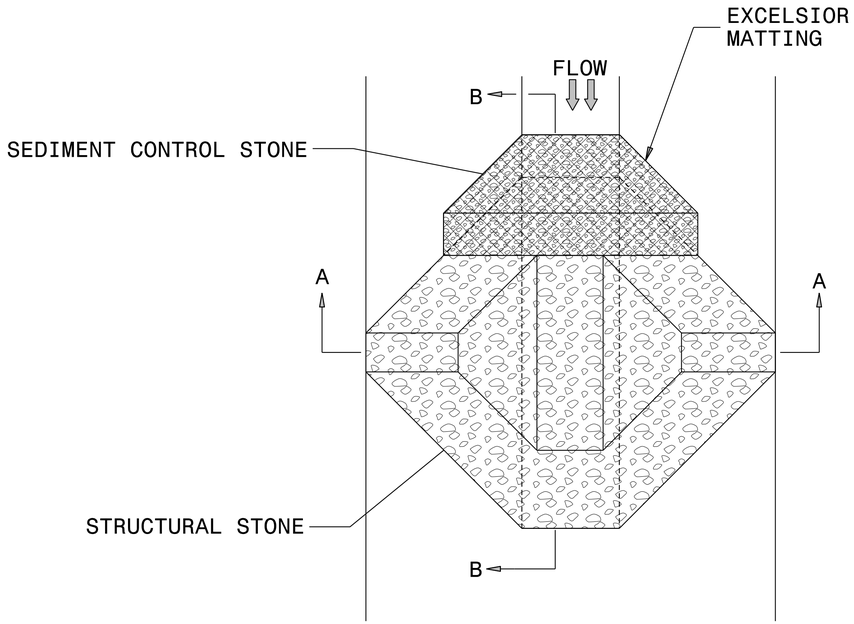




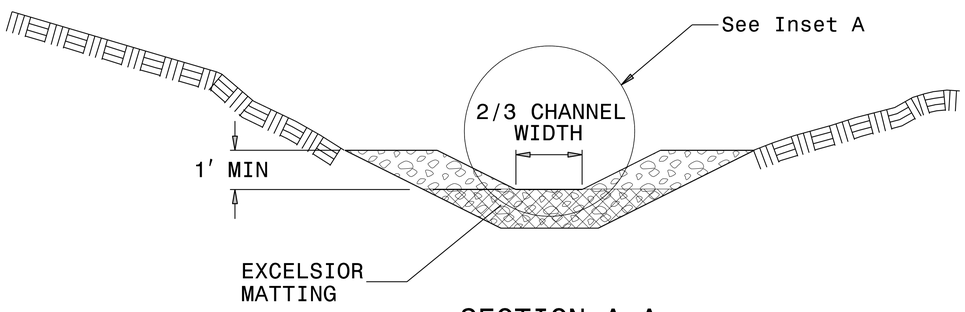
TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'A' WITH EXCELSIOR MATTING AND POLYACRYLAMIDE (PAM)



PLAN



SECTION A-A

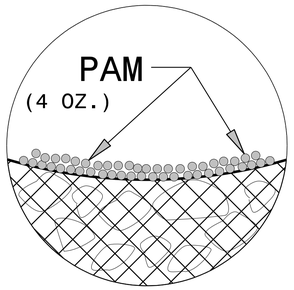
NOTES:

INSTALL TEMPORARY ROCK SILT CHECK TYPE A IN ACCORDANCE WITH ROADWAY STANDARD DRAWING NO. 1633.01.

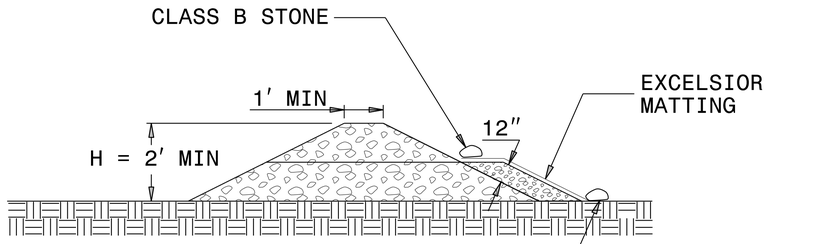
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH ROCK SILT CHECK.

INITIALLY APPLY 4 OUNCES OF POLYACRYLAMIDE (PAM) TO TOP OF MATTING SECTION AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.



INSET A



SECTION B-B

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	15+50	19+00	RT	470
5	-L-	24+50	32+00	RT	1005
5	-L-	27+00	35+00	MED	3005
5	-Y3-	16+50	18+50	LT	420
5	-Y3-	16+50	18+50	RT	330
6	-L-	35+00	38+50	MED	1270
7	-L-	48+50	49+00	RT	70
7	-L-	62+00	63+00	LT	205
8	-L-	65+50	76+00	MED	3535
8	-L-	67+50	70+00	LT	285
8	-L-	72+50	75+00	LT	335
8	-L-	68+50	70+00	RT	205
8	-L-	72+00	76+00	RT	540
9	-L-	76+00	78+00	MED	675
9	-L-	80+00	88+50	MED	955
9	-L-	76+00	78+00	RT	270
9	-Y5-	13+50	14+00	LT	60
9	-Y5-	15+00	15+50	LT	60
9	-Y5-	13+50	17+00	RT	480
9	-Y5-	20+50	21+50	RT	105
10	-L-	88+50	89+00	MED	70
10	-L-	97+00	102+00	MED	1685
10	-L-	98+75	99+28	RT	55
11	-L-	104+50	111+00	MED	2400
11	-L-	114+00	115+50	MED	230
11	-L-	107+50	111+00	RT	605
11	-L-	112+50	114+00	RT	180
11	-L-	113+00	115+00	RT	270
12	-L-	115+50	129+00	MED	4985
12	-L-	127+50	130+00	LT	335

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
12	-L-	125+00	129+00	RT	540
13	-L-	129+00	133+00	MED	1480
13	-L-	132+50	133+50	LT	135
13	-L-	129+00	130+50	RT	270
13	-L-	132+00	133+50	RT	205
14	-L-	143+00	150+50	MED	2820
14	-L-	144+50	147+00	LT	425
15	-L-	165+50	169+50	LT	540
15	-L-	165+50	169+35	RT	520
16	-L-	169+50	180+00	MED	3500
16	-L-	169+50	173+50	LT	450
16	-L-	169+50	171+00	RT	205
16	-L-	176+50	177+85	RT	185
16	-L-	178+17	180+00	RT	245
17	-L-	183+00	193+50	MED	3875
17	-L-	183+50	188+00	LT	905
17	-L-	180+00	181+00	RT	135
17	-L-	182+10	187+50	RT	740
17	-Y10-	22+50	25+50	LT	315
17	-Y10-	22+50	25+50	RT	335
17	-Y100-	11+00	12+50	LT	160
17	-Y100-	11+50	12+50	RT	105
18	-L-	193+50	198+00	MED	1735
18	-L-	195+50	199+00	LT	470
18	-L-	204+00	204+50	LT	70
18	-L-	204+50	205+00	LT	105
18	-L-	195+50	198+00	RT	505
20	-Y-	16+00	17+50	LT	205
20	-Y-	14+00	15+50	RT	185
20	-Y-	15+65	17+75	RT	365

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
20	-Y-	19+77	21+00	RT	145
21	-Y4-	11+00	13+00	LT	545
21	-Y4-	10+10	11+50	RT	100
22	-Y5-	10+50	12+50	LT	340
22	-Y5-	10+50	13+50	RT	460
22	-Y5-	21+50	22+50	RT	120
22	-Y5-	23+50	26+00	RT	285
23	-Y7-	26+00	26+50	LT	55
23	-Y7-	26+00	26+50	RT	55
23	-Y7-	30+00	31+00	RT	105
24	-Y10-	28+00	29+00	RT	115
				SUBTOTAL	49150
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					225500
				TOTAL	274650
				SAY	274700

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-Y1-	13+00	14+00	LT	140
4	-Y1-	13+00	14+50	RT	160
5	-L-	32+00	34+00	RT	270
5	-L-	27+00	30+50	LT	805
9	-YA-	10+50	11+00	RT	55
11	-L-	110+50	111+00	RT	50
11	-Y7-	18+00	19+00	LT	105
11	-Y7-	22+50	26+00	LT	370
11	-Y7-	22+50	26+00	RT	370
14	-L-	143+00	143+50	RT	70
14	-L-	144+00	145+00	RT	135
15	-L-	164+00	167+00	RT	300
18	-L-	200+50	202+00	LT	105
19	-L-	205+00	205+50	LT	55
21	-L-	11+00	11+50	RT	65
22	-Y50-	10+00	11+70	LT	310
23	-Y7-	17+50	18+00	LT	80
24	-Y10-	29+50	30+80	LT	305
24	-Y10-	31+00	32+00	LT	85
				SUBTOTAL	3835
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					0
				TOTAL	3835
				SAY	3850

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-3B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

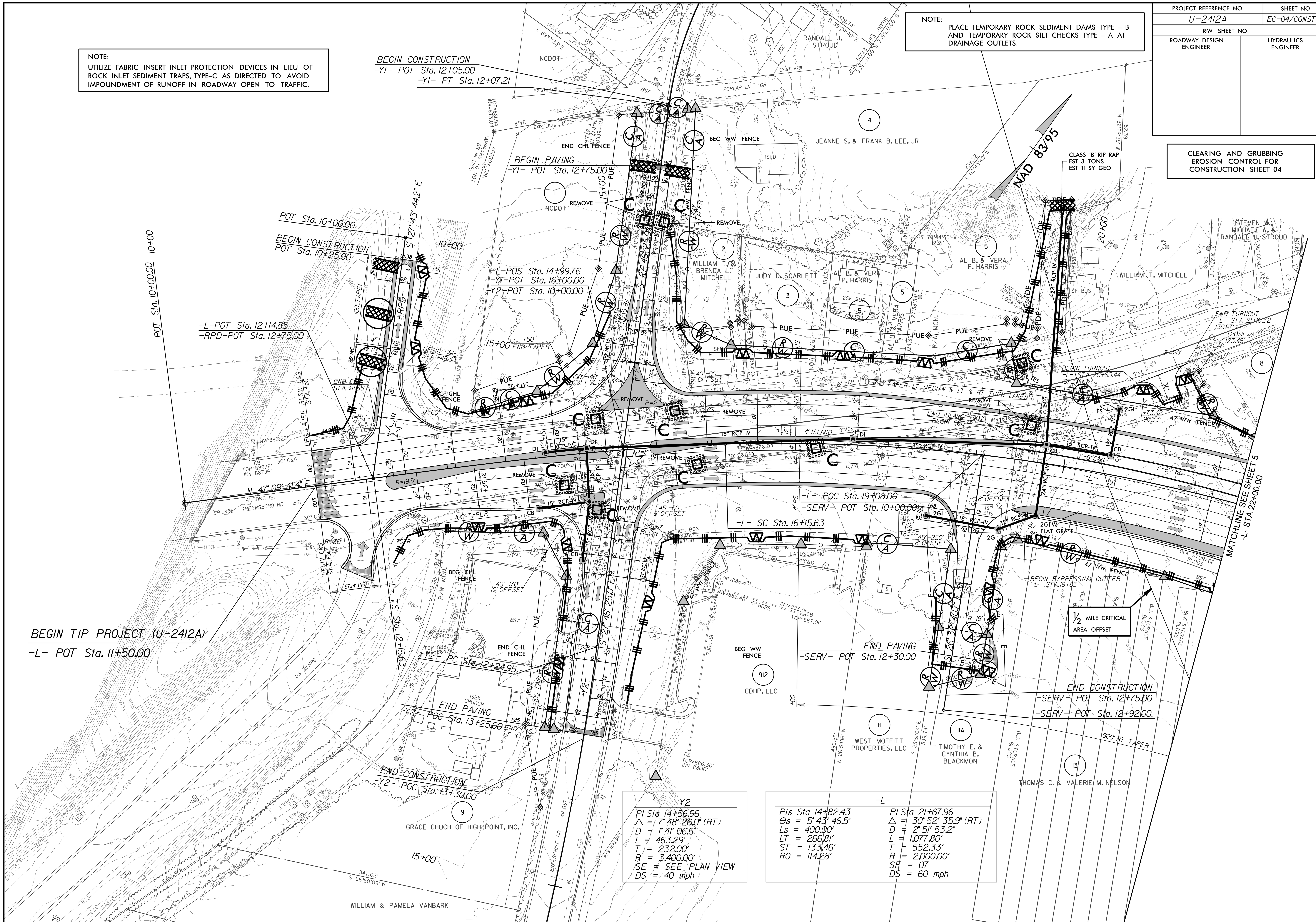
SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-04/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 04

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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



BEGIN CONSTRUCTION
-Y1- POT Sta. 12+05.00
-Y1- PT Sta. 12+07.21
BEGIN PAVING
-Y1- POT Sta. 12+75.00
POT Sta. 10+00.00
BEGIN CONSTRUCTION
POT Sta. 10+25.00
-L-POS Sta. 14+99.76
-Y1-POT Sta. 16+00.00
-Y2-POT Sta. 10+00.00
-L-POT Sta. 12+14.85
-RPD-POT Sta. 12+75.00
BEGIN TIP PROJECT (U-2412A)
-L- POT Sta. 11+50.00
N 47° 09' 41.4" E
-L- POC Sta. 19+08.00
-SERV- POT Sta. 10+00.00
-L- SC Sta. 16+15.63
END PAVING
-SERV- POT Sta. 12+30.00
END CONSTRUCTION
-SERV- POT Sta. 12+75.00
-SERV- POT Sta. 12+92.00
END PAVING
-Y2- POC Sta. 13+25.00
END CONSTRUCTION
-Y2- POC Sta. 13+30.00
MATCHLINE SEE SHEET 5
-L- STA 22+00.00
NAD 83/95
CLASS 'B' RIP RAP
EST 3 TONS
EST 11 SY GEO
1/2 MILE CRITICAL AREA OFFSET
JEANNE S. & FRANK B. LEE, JR
RANDALL H. STROUD
WILLIAM T. & BRENDA L. MITCHELL
JUDY D. SCARLETT
AL B. & VERA P. HARRIS
WILLIAM T. MITCHELL
CDHP, LLC
WEST MOFFITT PROPERTIES, LLC
TIMOTHY E. & CYNTHIA B. BLACKMON
THOMAS C. & VALERIE M. NELSON
GRACE CHUCH OF HIGH POINT, INC.
WILLIAM & PAMELA VANBARK

-Y2-
PI Sta 14+56.96
Δ = 7° 48' 26.0" (RT)
D = 1° 41' 06.6"
L = 463.29'
T = 232.00'
R = 3,400.00'
SE = SEE PLAN VIEW
DS = 40 mph

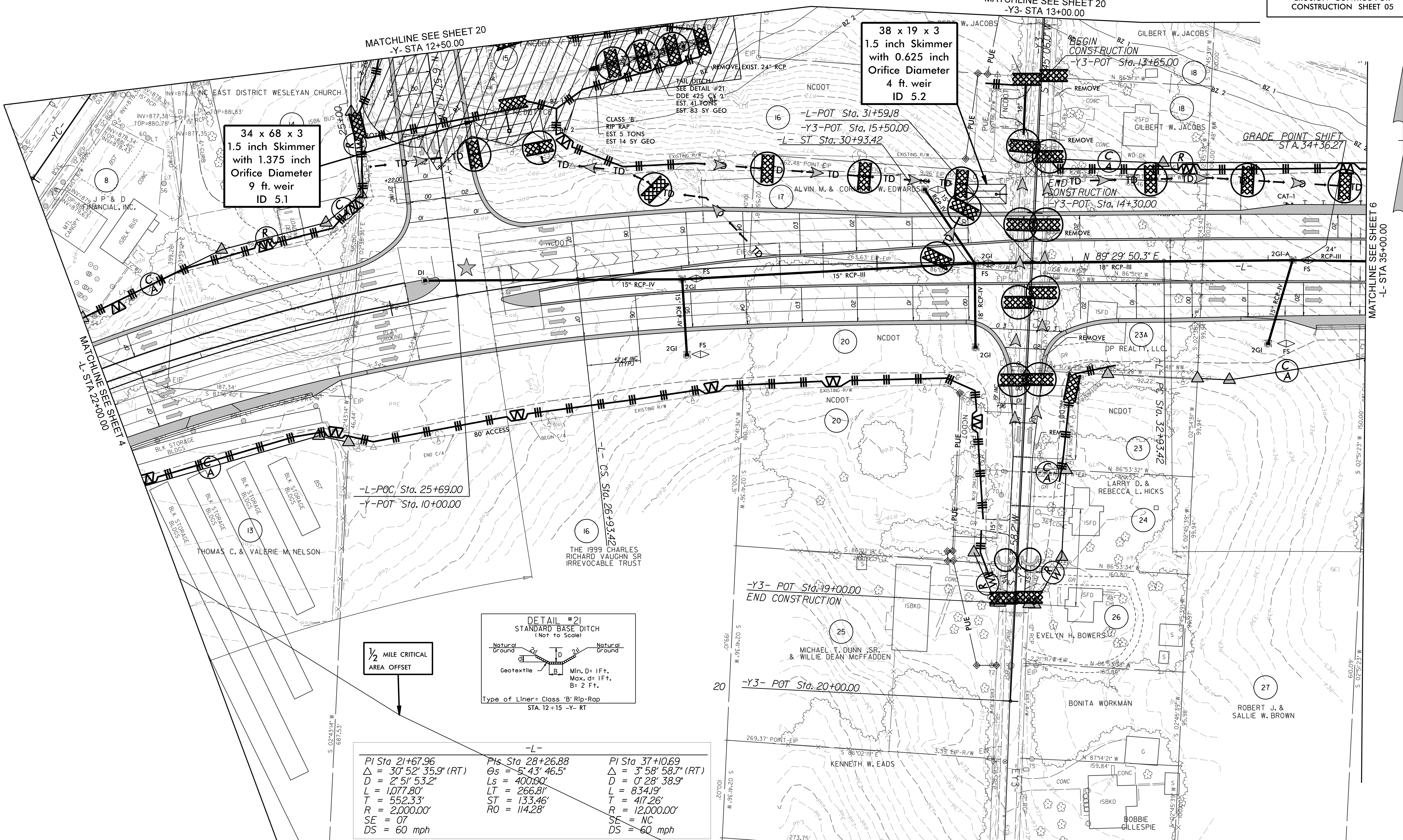
-L-	
PIs Sta 14+82.43	PI Sta 21+67.96
θs = 5° 43' 46.5"	Δ = 30° 52' 35.9" (RT)
Ls = 400.00'	D = 2° 51' 53.2"
LT = 266.81'	L = 1,077.80'
ST = 133.46'	T = 552.33'
RO = 114.28'	R = 2,000.00'
	SE = .07
	DS = 60 mph

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-05/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05

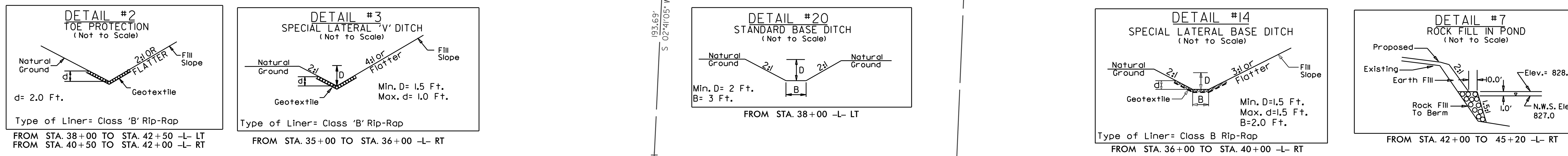


MATCHLINE SEE SHEET 20
-Y- STA 12+50.00
MATCHLINE SEE SHEET 20
-Y3- STA 13+00.00
MATCHLINE SEE SHEET 4
-L- STA 22+00.00
MATCHLINE SEE SHEET 6
-L- STA 35+00.00
NAD 83/95
34 x 68 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
9 ft. weir
ID 5.1
38 x 19 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 5.2
NC EAST DISTRICT WESLEYAN CHURCH
J P & D FINANCIAL, INC.
TAIL DITCH
SEE DETAIL #21
DDE 425 CY
EST. 41 TONS
EST. 83 SY GEO
CLASS 'B' RIP RAP
EST 5 TONS
EST 14 SY GEO
REMOVE EXIST. 24" RCP
NCDOT
-L-POT Sta. 31+59.18
-Y3-POT Sta. 15+50.00
-L- ST Sta. 30+93.42
BEGIN CONSTRUCTION
-Y3-POT Sta. 13+65.00
END CONSTRUCTION
-Y3-POT Sta. 14+30.00
GILBERT W. JACOBS
ALVIN M. & CORA W. EDWARDS
GRADE POINT SHIFT
STA 34+36.27
N 89° 29' 50.3" E
DP REALTY, LLC
-L- PC Sta. 32+93.42
LARRY D. & REBECCA L. HICKS
-L-POC Sta. 25+69.00
-Y-POT Sta. 10+00.00
-L- CS Sta. 26+93.42
THE 1999 CHARLES RICHARD VAUGHN SR IRREVOCABLE TRUST
THOMAS C. & VALERIE M. NELSON
-Y3- POT Sta. 19+00.00
END CONSTRUCTION
-Y3- POT Sta. 20+00.00
EVELYN H. BOWERS
MICHAEL T. DUNN SR. & WILLIE DEAN McFADDEN
BONITA WORKMAN
ROBERT J. & SALLIE W. BROWN
KENNETH W. EADS
BOBBIE GILLESPIE
80' ACCESS
1/2 MILE CRITICAL AREA OFFSET
DETAIL #21
STANDARD BASE DITCH
(Not to Scale)
Natural Ground
Geotextile
Min. D= 1Ft.
Max. d= 1Ft.
B= 2 Ft.
Type of Liner= Class 'B' Rip-Rap
STA. 12+15 -Y- RT

-L-

PI Sta 21+67.96	PIs Sta 28+26.88	PI Sta 37+10.69
Δ = 30° 52' 35.9" (RT)	Θs = 5° 43' 46.5"	Δ = 3° 58' 58.7" (RT)
D = 2° 51' 53.2"	Ls = 400.00'	D = 0° 28' 38.9"
L = 1,077.80'	LT = 266.81'	L = 834.19'
T = 552.33'	ST = 133.46'	T = 417.26'
R = 2,000.00'	RO = 114.28'	R = 12,000.00'
SE = 07		SE = NC
DS = 60 mph		DS = 60 mph

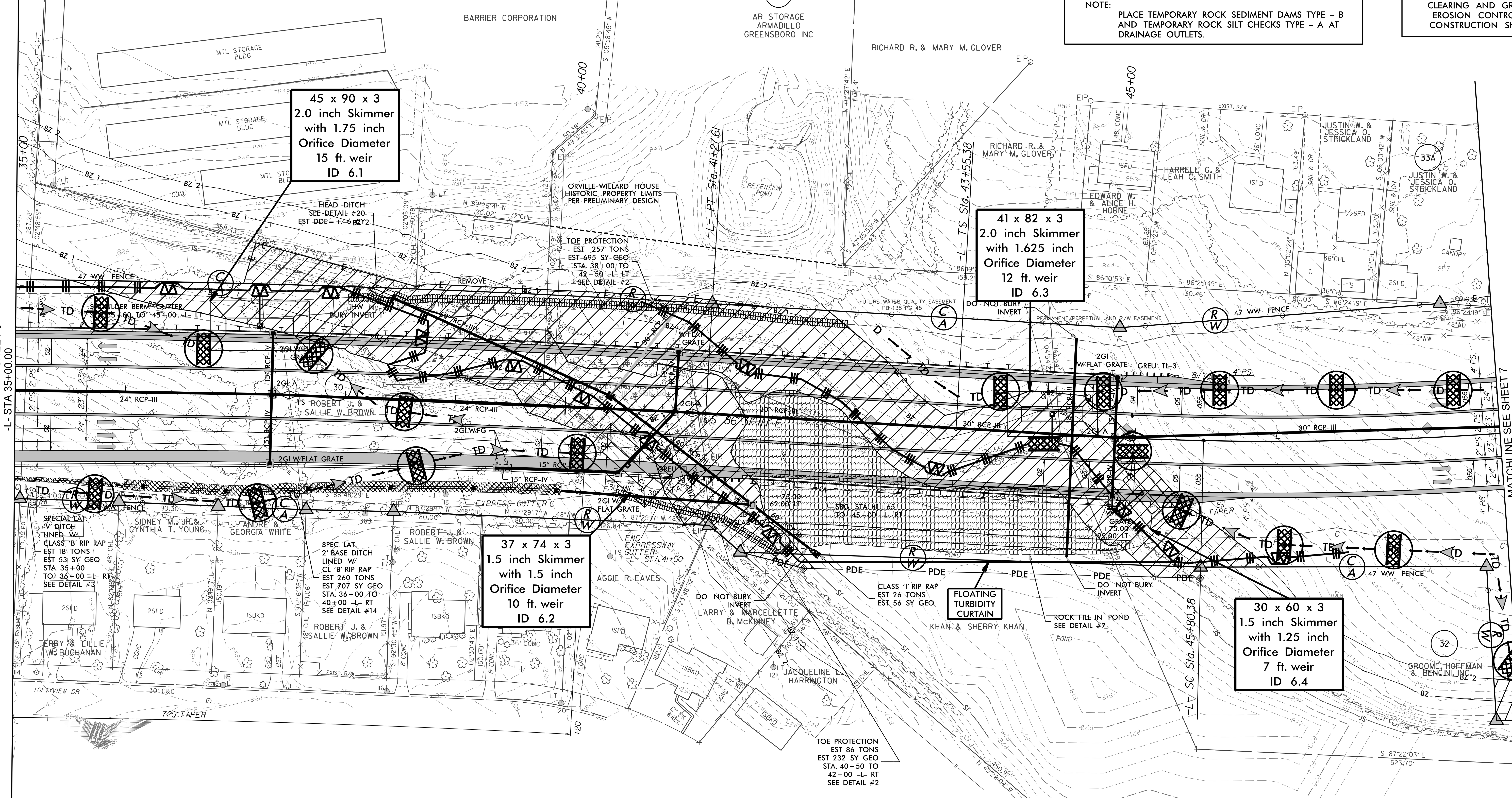
PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-06/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DETAIL #2
TOE PROTECTION
(Not to Scale)
Natural Ground
2d or FLATTER
Fill Slope
Geotextile
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 38+00 TO STA. 42+50 -L- LT
FROM STA. 40+50 TO STA. 42+00 -L- RT
DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground
4d or Flatter
Fill Slope
Geotextile
Min. D= 1.5 Ft.
Max. d= 1.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 35+00 TO STA. 36+00 -L- RT
DETAIL #20
STANDARD BASE DITCH
(Not to Scale)
Natural Ground
Min. D= 2 Ft.
B= 3 Ft.
FROM STA. 38+00 -L- LT
DETAIL #14
SPECIAL LATERAL BASE DITCH
(Not to Scale)
Natural Ground
3d or Flatter
Fill Slope
Geotextile
Min. D=1.5 Ft.
Max. d=1.5 Ft.
B=2.0 Ft.
Type of Liner= Class B Rip-Rap
FROM STA. 36+00 TO STA. 40+00 -L- RT
DETAIL #7
ROCK FILL IN POND
(Not to Scale)
Proposed
Existing Earth Fill
Rock Fill To Berm
Elev.= 828.0
N.W.S. Elev.= 827.0
FROM STA. 42+00 TO 45+20 -L- RT

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06



BARRIER CORPORATION
AR STORAGE ARMADILLO GREENSBORO INC
RICHARD R. & MARY M. GLOVER
MTL STORAGE BLDG
45 x 90 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
15 ft. weir
ID 6.1
41 x 82 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 6.3
37 x 74 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
10 ft. weir
ID 6.2
30 x 60 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 6.4
ORVILLE WILLARD HOUSE HISTORIC PROPERTY LIMITS PER PRELIMINARY DESIGN
TOE PROTECTION
EST 257 TONS
EST 695 SY GEO
STA. 38+00 TO 42+50 -L- LT
SEE DETAIL #2
HEAD DITCH
SEE DETAIL #20
RETENTION POND
-L- PT Sta. 41+27.61
-L- TS Sta. 43+55.38
-L- SC Sta. 45+80.38
JUSTIN W. & JESSICA O. STRICKLAND
HARRELL G. & LEAH C. SMITH
EDWARD W. & ALICE H. HORNE
MATCHLINE SEE SHEET 5
-L- STA 35+00.00
MATCHLINE SEE SHEET 7
-L- STA 48+50.00
ROBERT J. & SALLIE W. BROWN
SIDNEY M., JR. & CYNTHIA T. YOUNG
ANDRE & GEORGIA WHITE
TERRY & LILLIE W. BUCHANAN
AGGIE R. EAVES
LARRY & MARCELLETTE B. McKINNEY
JACQUELINE L. HARRINGTON
KHAN & SHERRY KHAN
GROOME, HOFFMAN & BENCINI, INC.
SPECIAL LAT. 'V' DITCH LINED W/ CLASS 'B' RIP RAP
EST 18 TONS
EST 53 SY GEO
STA. 35+00 TO 36+00 -L- RT
SEE DETAIL #3
SPEC. LAT. 2' BASE DITCH LINED W/ CL 'B' RIP RAP
EST 260 TONS
EST 707 SY GEO
STA. 36+00 TO 40+00 -L- RT
SEE DETAIL #14
CLASS 'I' RIP RAP
EST 26 TONS
EST 56 SY GEO
FLOATING TURBIDITY CURTAIN
ROCK FILL IN POND
SEE DETAIL #7
DO NOT BURY INVERT
TOE PROTECTION
EST 86 TONS
EST 232 SY GEO
STA. 40+50 TO 42+00 -L- RT
SEE DETAIL #2
47 WW FENCE
NAD 83/95

	ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS

-L-

PI Sta 37+10.69	PIs Sta 45+05.39	PI Sta 49+09.57
Δ = 3° 58' 58.7" (RT)	Θs = 2° 13' 21.7"	Δ = 12° 57' 07.6" (LT)
D = 0° 28' 38.9"	Ls = 225.00'	D = 1° 58' 32.6"
L = 834.19'	LT = 150.01'	L = 655.56'
T = 417.26'	ST = 75.01'	T = 329.19'
R = 12,000.00'		R = 2,900.00'
SE = NC		SE = 055
DS = 60 mph		DS = 60 mph

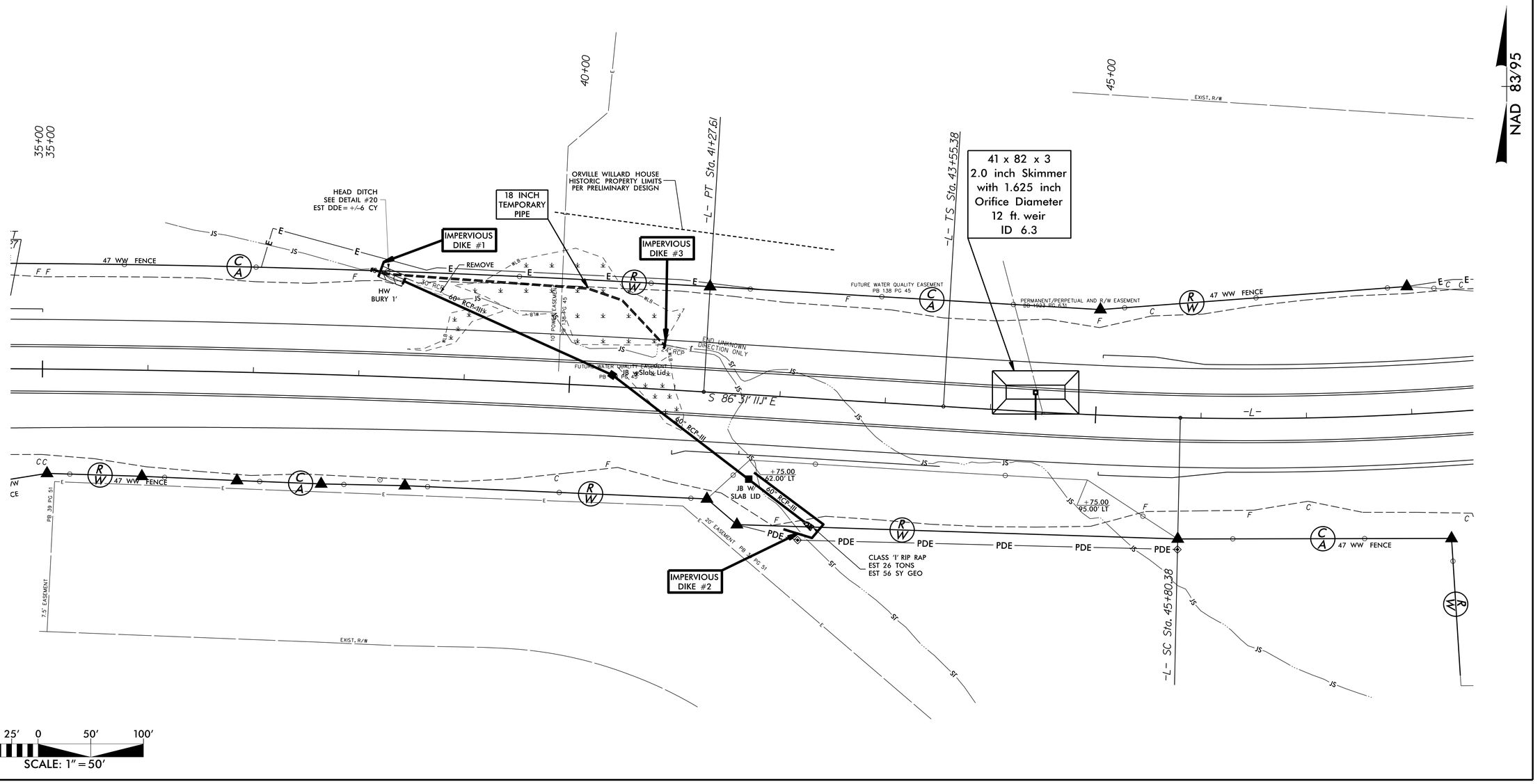
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

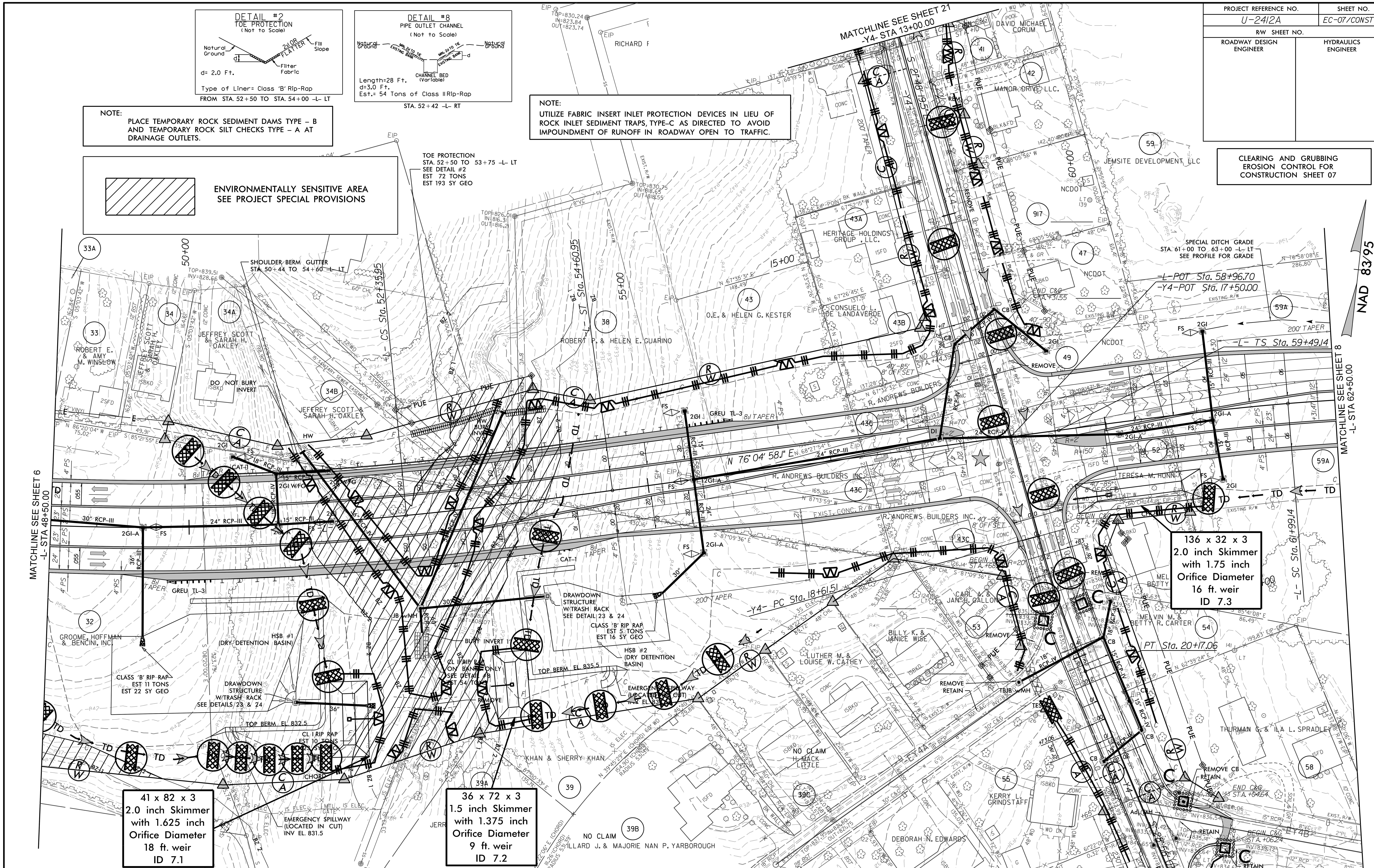
PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-06A/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

60" RCP III CONSTRUCTION SEQUENCE
STA. 38+50 –L– LT UT TO TRIANGLE LAKE

PHASE I

1) CONSTRUCT SKIMMER BASIN 6.3.
2) INSTALL IMPERVIOUS DIKE #1, TEMPORARY 18" FLEXIBLE PIPE. IMPERVIOUS DIKE #2, AND IMPERVIOUS DIKE #3.
3) DEWATER CONSTRUCTION AREA USING SKIMMER BASIN 6.3 FOR PUMPED EFFLUENT AND REMOVE EXISTING 30" RCP.
4) INSTALL JUNCTION BOX WITH SLAB LID #616, 60" RCP–III, AND CLASS 'I' RIP RAP ON DOWNSTREAM SIDE.
5) INSTALL 60" RCP–III AND JUNCTION BOX WITH SLAB LID #614.
6) INSTALL 60" RCP–III AND HEADWALL #612.
7) CONSTRUCT HEAD DITCH.
8) EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPEVIOUS DIKES.
9) REMOVE TEMPORARY 18" FLEXIBLE PIPE AND IMPERVIOUS DIKES AND DIRECT FLOW THROUGH 60" RCP.
10) COMPLETE ROADWAY.




PROJECT REFERENCE NO. U-2412A
SHEET NO. EC-07/CONST.07
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 07
DETAIL #2 TOE PROTECTION (Not to Scale)
Natural Ground
2:1 OR FLATTER
Fill Slope
Filter Fabric
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 52+50 TO STA. 54+00 -L- LT
DETAIL #8 PIPE OUTLET CHANNEL (Not to Scale)
Natural Ground
CHANNEL BED (Variable)
Length=28 Ft.
d=3.0 Ft.
Est.= 54 Tons of Class II Rip-Rap
STA. 52+42 -L- RT
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.
ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS
TOE PROTECTION STA. 52+50 TO 53+75 -L- LT SEE DETAIL #2 EST 72 TONS EST 193 SY GEO
SHOULDER BERM GUTTER STA. 50+44 TO 54+60 -L- LT
MATCHLINE SEE SHEET 21 -Y4- STA 13+00.00
MATCHLINE SEE SHEET 6 -L- STA 48+50.00
MATCHLINE SEE SHEET 8 -L- STA 62+50.00
MATCHLINE SEE SHEET 21 -Y4- STA 23+00.00
NAD 83/95
SPECIAL DITCH GRADE STA. 61+00 TO 63+00 -L- LT SEE PROFILE FOR GRADE
-L- POT Sta. 58+96.70
-Y4- POT Sta. 17+50.00
-L- TS Sta. 59+49.14
-L- SC Sta. 61+99.14
-Y4- PC Sta. 18+61.51
PT Sta. 20+17.06
N 76°04'58" E
DRAWDOWN STRUCTURE W/TRASH RACK SEE DETAIL 23 & 24
CLASS 'B' RIP RAP EST 5 TONS EST 16 SY GEO
HSB #1 (DRY DETENTION BASIN)
HSB #2 (DRY DETENTION BASIN)
TOP BERM EL 835.5
TOP BERM EL 832.5
CLASS 'B' RIP RAP EST 11 TONS EST 22 SY GEO
DRAWDOWN STRUCTURE W/TRASH RACK SEE DETAILS 23 & 24
EMERGENCY SPILLWAY (LOCATED IN CUT) INV EL. 831.5
41 x 82 x 3 2.0 inch Skimmer with 1.625 inch Orifice Diameter 18 ft. weir ID 7.1
36 x 72 x 3 1.5 inch Skimmer with 1.375 inch Orifice Diameter 9 ft. weir ID 7.2
136 x 32 x 3 2.0 inch Skimmer with 1.75 inch Orifice Diameter 16 ft. weir ID 7.3
ROBERT E. & AMY M. WINSLOW
JEFFREY SCOTT & SARAH H. OAKLEY
ROBERT P. & HELEN E. GUARINO
O.E. & HELEN G. KESTER
CONSUELO L. DE LANDAVERDE
HERITAGE HOLDINGS GROUP, LLC.
MANOR DRIVE LLC.
DAVID MICHAEL CORUM
JEMSITE DEVELOPMENT LLC
NCDOT
R. ANDREWS BUILDERS INC.
TERESA M. HUNN
MELVIN M. & BETTY R. CARTER
CARL A. & JANE H. GALLOWAY
BILLY K. & JANICE WISE
LUTHER M. & LOUISE W. CATHEY
THURMAN G. & ILA L. SPRADLEY
GROOME, HOFFMAN & BENCINI, INC.
KHAN & SHERRY KHAN
NO CLAIM H. MACK LITTLE
KERRY L. GRINDSTAFF
DEBORAH N. EDWARDS
NO CLAIM
WILLARD J. & MAJORIE NAN P. YARBOROUGH
JOSEPH E. LOFLIN
RICHARD F
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

-Y4-

PI Sta 19+39.39
△ = 7° 07' 47.5" (LT)
D = 4° 35' 01.2"
L = 155.55'
T = 77.88'
R = 1,250.00'
SE = 04
DS = 40 mph

-L-

PI Sta 49+09.57	PIs Sta 53+10.96	PIs Sta 61+15.83	PI Sta 66+82.76
△ = 12° 57' 07.6" (LT)	θs = 2° 13' 21.7"	θs = 2° 59' 03.0"	△ = 22° 47' 10.2" (RT)
D = 1° 58' 32.6"	Ls = 225.00'	Ls = 250.00'	D = 2° 23' 14.4"
L = 655.56'	LT = 150.01'	LT = 166.69'	L = 954.46'
T = 329.19'	ST = 75.01'	ST = 83.35'	T = 483.62'
R = 2,900.00'	R0 = 81.82'	R0 = 81.82'	R = 2,400.00'
SE = 055			SE = 06
DS = 60 mph			DS = 60 mph

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-08/CONST.08

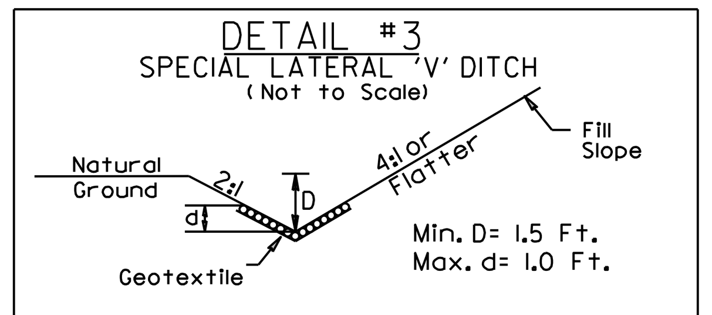
R/W SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08

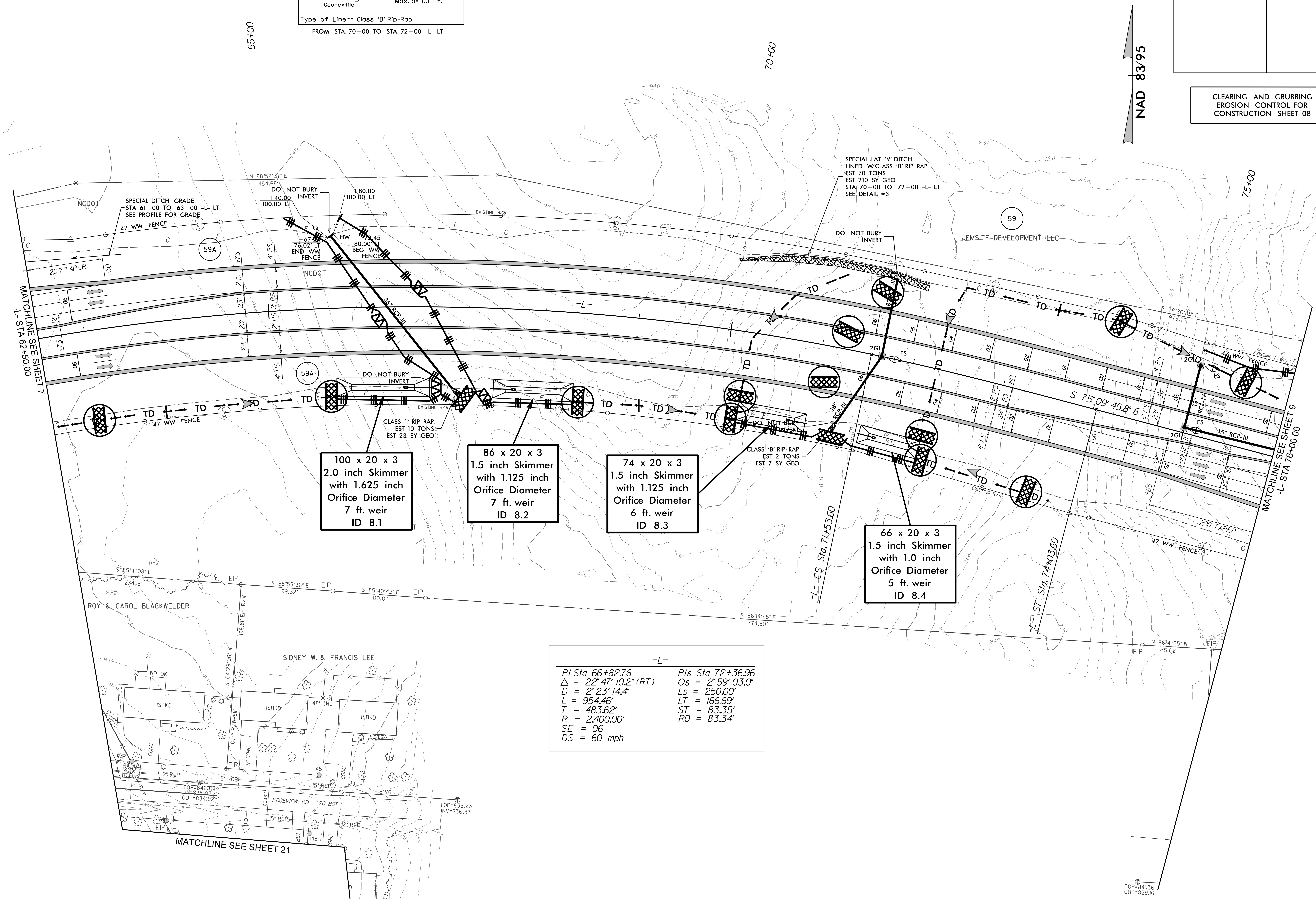
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



Type of Liner= Class 'B' Rip-Rap

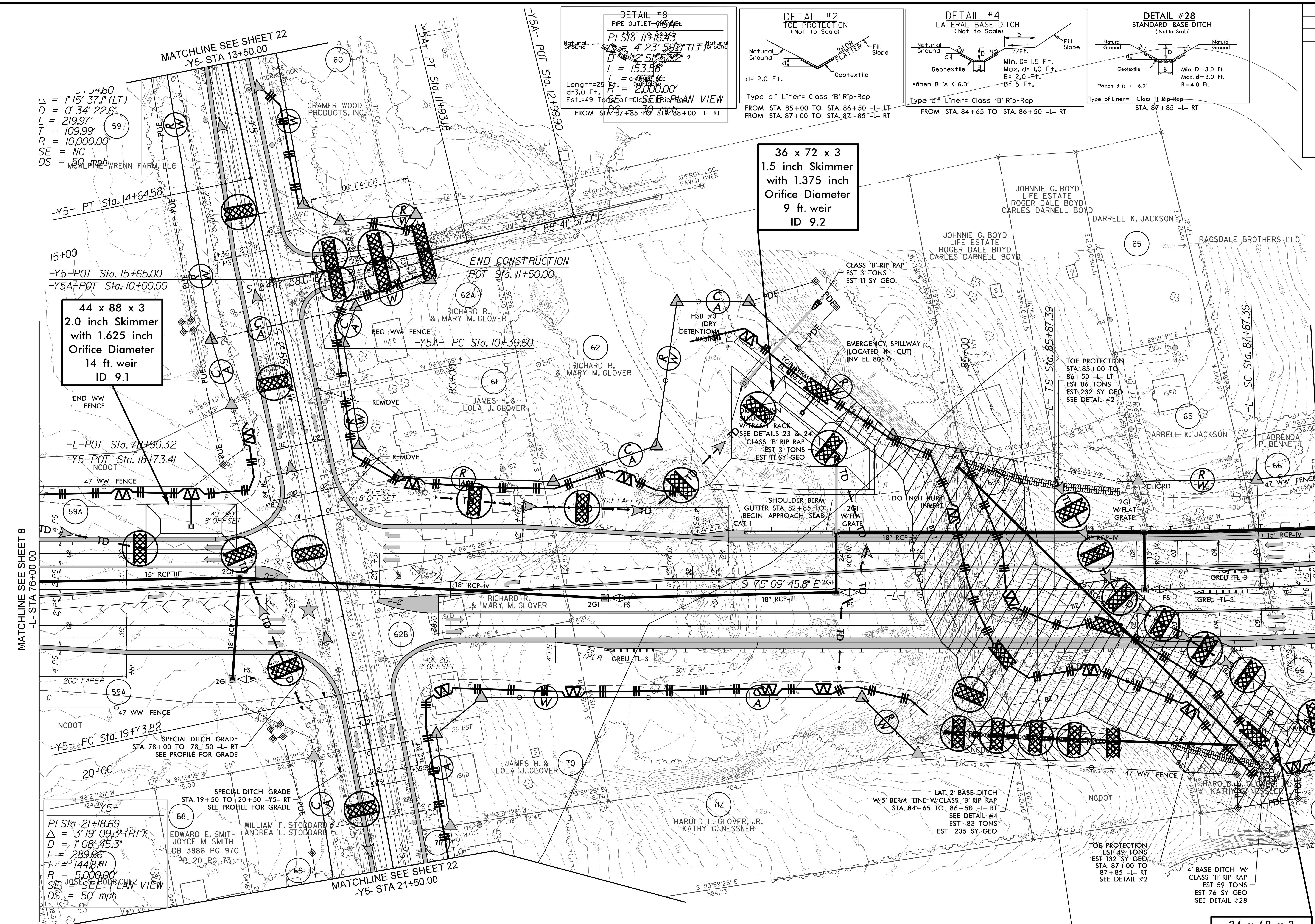
FROM STA. 70+00 TO STA. 72+00 -L- LT



NAD 83/95
65+00
70+00
75+00
MATCHLINE SEE SHEET 7 -L- STA 62+50.00
MATCHLINE SEE SHEET 9 -L- STA 76+00.00
MATCHLINE SEE SHEET 21
SPECIAL DITCH GRADE STA. 61+00 TO 63+00 -L- LT SEE PROFILE FOR GRADE
47 WW FENCE
200' TAPER
NCDOT
DO NOT BURY INVERT
+40.00 100.00' LT
+80.00 100.00' LT
+67.33 76.02' LT END WW FENCE
+73.45 80.00' LT BEG WW FENCE
SPECIAL LAT. 'V' DITCH LINED W/CLASS 'B' RIP RAP EST 70 TONS EST 210 SY GEO STA. 70+00 TO 72+00 -L- LT SEE DETAIL #3
JEMSITE DEVELOPMENT LLC
S 75°09' 45.8" E
CLASS 'I' RIP RAP EST 10 TONS EST 23 SY GEO
CLASS 'B' RIP RAP EST 2 TONS EST 7 SY GEO
100 x 20 x 3 2.0 inch Skimmer with 1.625 inch Orifice Diameter 7 ft. weir ID 8.1
86 x 20 x 3 1.5 inch Skimmer with 1.125 inch Orifice Diameter 7 ft. weir ID 8.2
74 x 20 x 3 1.5 inch Skimmer with 1.125 inch Orifice Diameter 6 ft. weir ID 8.3
66 x 20 x 3 1.5 inch Skimmer with 1.0 inch Orifice Diameter 5 ft. weir ID 8.4
-L- CS Sta. 71+53.60
-L- ST Sta. 74+03.60
ROY & CAROL BLACKWELDER
SIDNEY W. & FRANCIS LEE
EDGEVIEW RD
TOP=839.23 INV=836.33
TOP=841.36 OUT=829.16
-L-
PI Sta 66+82.76
Δ = 22° 47' 10.2" (RT)
D = 2° 23' 14.4"
L = 954.46'
T = 483.62'
R = 2,400.00'
SE = 06
DS = 60 mph
PIs Sta 72+36.96
θs = 2° 59' 03.0"
Ls = 250.00'
LT = 166.69'
ST = 83.35'
RO = 83.34'

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-09/CONST.09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 09



DETAIL #8
DETAIL #2
TOE PROTECTION
(Not to Scale)
Type of Liner= Class 'B' Rip-Rap
FROM STA. 85+00 TO STA. 86+50 -L- LT
FROM STA. 87+00 TO STA. 87+85 -L- RT
DETAIL #4
LATERAL BASE DITCH
(Not to Scale)
Type of Liner= Class 'B' Rip-Rap
FROM STA. 84+65 TO STA. 86+50 -L- RT
DETAIL #28
STANDARD BASE DITCH
(Not to Scale)
STA. 87+85 -L- RT
MATCHLINE SEE SHEET 22
-Y5- STA 13+50.00
36 x 72 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
9 ft. weir
ID 9.2
44 x 88 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
14 ft. weir
ID 9.1
END CONSTRUCTION
POT Sta. 11+50.00
-Y5- PT Sta. 14+64.58
-Y5-POT Sta. 15+65.00
-Y5A-POT Sta. 10+00.00
-Y5A- PC Sta. 10+39.60
-L-POT Sta. 78+90.32
-Y5-POT Sta. 18+73.41
-Y5- PC Sta. 19+73.82
MATCHLINE SEE SHEET 8
-L- STA 76+00.00
MATCHLINE SEE SHEET 10
-L- STA 88+50.00
MATCHLINE SEE SHEET 22
-Y5- STA 21+50.00
JOHNNIE G. BOYD
LIFE ESTATE
ROGER DALE BOYD
CARLES DARNELL BOYD
DARRELL K. JACKSON
RAGSDALE BROTHERS LLC
RICHARD R. & MARY M. GLOVER
JAMES H. & LOLA J. GLOVER
CRAMER WOOD PRODUCTS, INC.
EDWARD E. SMITH
JOYCE M. SMITH
WILLIAM F. STODDARD
ANDREA L. STODDARD
HAROLD L. GLOVER, JR.
KATHY G. NESSLER
NCDOT
NAD 83/95
34 x 68 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
9 ft. weir
ID 9.3
1/2 MILE CRITICAL AREA OFFSET

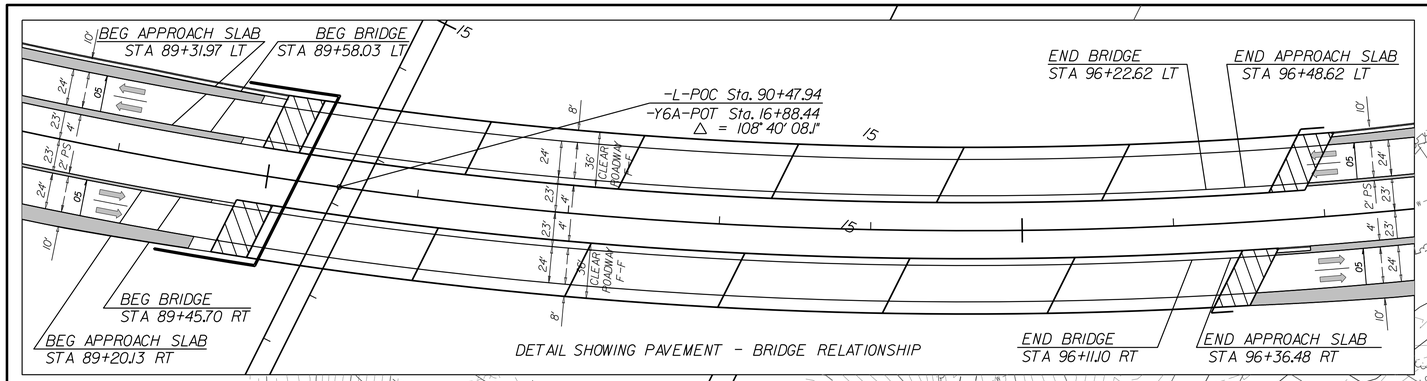
ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-10/CONST JO
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 10



DETAIL SHOWING PAVEMENT - BRIDGE RELATIONSHIP

59 x 118 x 3
2.5 inch Skimmer
with 2.25 inch
Orifice Diameter
26 ft. weir
ID 10.3

30 x 60 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
6 ft. weir
ID 10.2

32 x 64 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 10.1

NAD 83/95

MATCHLINE SEE SHEET 9
-L- STA 88+50.00

MATCHLINE SEE SHEET 11
-L- STA 102+00.00

RAGSDALE BROTHERS LLC
DB 6557 PG 2076

LABRENDA P. BENNETT
DB 5660 PG 41

NANCY T. GUITON
DB 3324 PG 182

CITY OF HIGH POINT

-L- CS Sta. 98+84.71

-L- ST Sta. 100+84.71

-L- POC Sta. 90+47.94
-Y6A-POT Sta. 16+88.44

PUMP STATION RD

UT DEEP RIVER

20' SANITARY SEWER EASEMENT

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

-L-

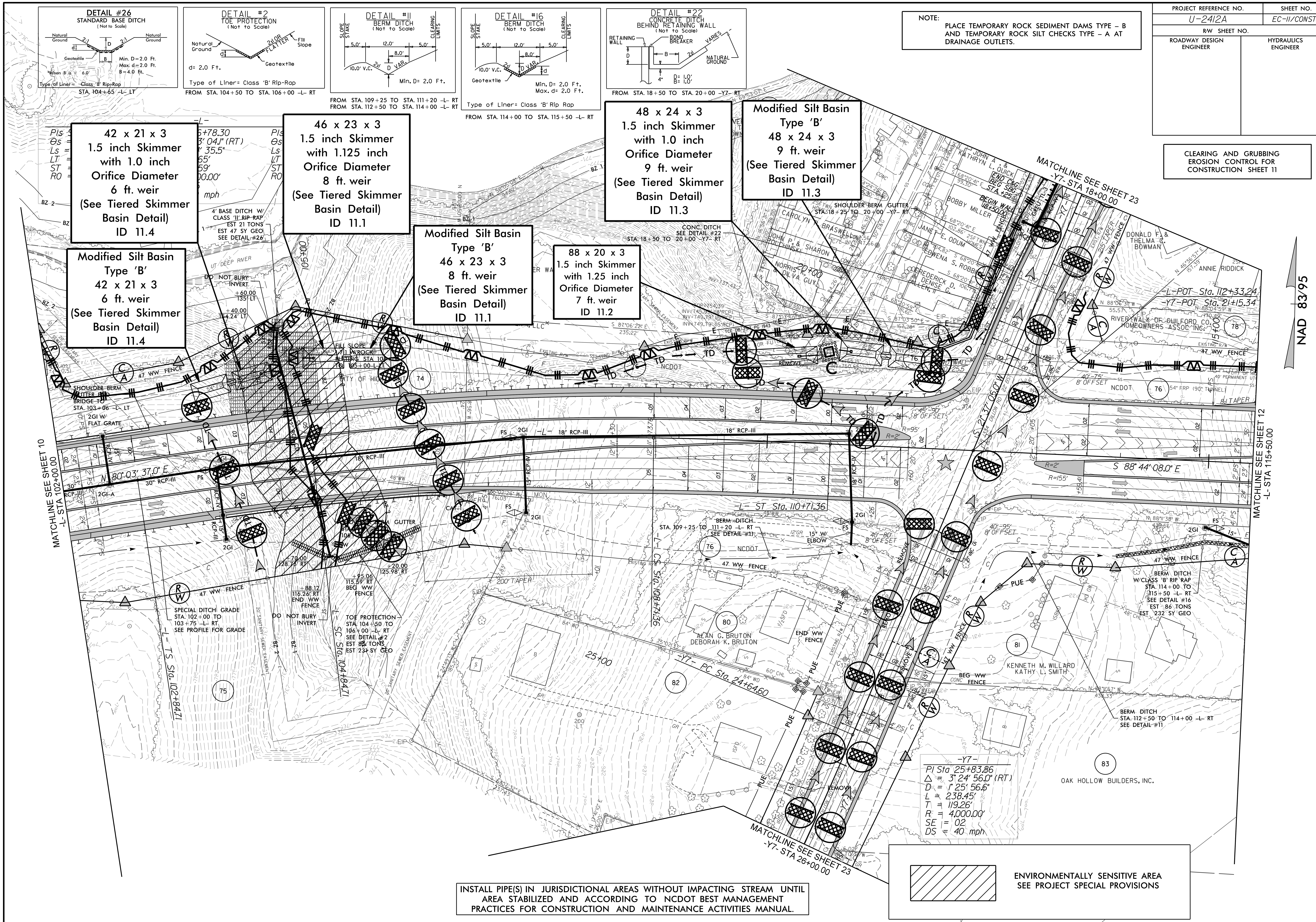
PI Sta 93+42.25	PIs Sta 99+51.38
Δ = 20° 57' 26.2" (LT)	Θs = 1° 54' 35.5"
D = 1° 54' 35.5"	Ls = 200.00'
L = 1,097.32'	LT = 133.34'
T = 554.86'	ST = 66.67'
R = 3,000.00'	R0 = 80.00'
SE = 05	
DS = 60 mph	

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

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-11/CONSTJ1
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11



DETAIL #26
STANDARD BASE DITCH
(Not to Scale)
Type of Liner= Class 'II' Rip-Rap
STA. 104+65 -L- LT
DETAIL #2
TOE PROTECTION
(Not to Scale)
Type of Liner= Class 'B' Rip-Rap
FROM STA. 104+50 TO STA. 106+00 -L- RT
DETAIL #11
BERM DITCH
(Not to Scale)
FROM STA. 109+25 TO STA. 111+20 -L- RT
FROM STA. 112+50 TO STA. 114+00 -L- RT
DETAIL #16
BERM DITCH
(Not to Scale)
Type of Liner= Class 'B' Rip Rap
FROM STA. 114+00 TO STA. 115+50 -L- RT
DETAIL #22
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)
FROM STA. 18+50 TO STA. 20+00 -Y7- RT
42 x 21 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
6 ft. weir
(See Tiered Skimmer Basin Detail)
ID 11.4
Modified Silt Basin
Type 'B'
42 x 21 x 3
6 ft. weir
(See Tiered Skimmer Basin Detail)
ID 11.4
46 x 23 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
8 ft. weir
(See Tiered Skimmer Basin Detail)
ID 11.1
Modified Silt Basin
Type 'B'
46 x 23 x 3
8 ft. weir
(See Tiered Skimmer Basin Detail)
ID 11.1
88 x 20 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 11.2
48 x 24 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
9 ft. weir
(See Tiered Skimmer Basin Detail)
ID 11.3
Modified Silt Basin
Type 'B'
48 x 24 x 3
9 ft. weir
(See Tiered Skimmer Basin Detail)
ID 11.3
MATCHLINE SEE SHEET 23 -Y7- STA 18+00.00
MATCHLINE SEE SHEET 10 -L- STA 102+00.00
MATCHLINE SEE SHEET 12 -L- STA 115+50.00
MATCHLINE SEE SHEET 23 -Y7- STA 26+00.00
NAD 83/95
-L- POT Sta. 112+33.24
-Y7- POT Sta. 21+15.34
-L- ST Sta. 110+71.36
-L- TS Sta. 102+84.71
-L- SC Sta. 104+84.71
-L- CS Sta. 108+71.36
-Y7- PC Sta. 24+64.60
N 80° 03' 37.0" E
S 88° 44' 08.0" E
S 21° 37' 05.0" W
-Y7-
PI Sta 25+83.86
Δ = 3° 24' 56.0" (RT)
D = 1° 25' 56.6"
L = 238.45'
T = 119.26'
R = 4,000.00'
SE = .02
DS = 40 mph
BERM DITCH W/CLASS 'B' RIP RAP STA. 114+00 TO 115+50 -L- RT SEE DETAIL #16 EST 86 TONS EST 232 SY GEO
BERM DITCH STA. 112+50 TO 114+00 -L- RT SEE DETAIL #11
BERM DITCH STA. 109+25 TO 111+20 -L- RT SEE DETAIL #11
TOE PROTECTION STA. 104+50 TO 106+00 -L- RT SEE DETAIL #2 EST 88 TONS EST 234 SY GEO
SPECIAL DITCH GRADE STA. 102+00 TO 103+75 -L- RT SEE PROFILE FOR GRADE
4' BASE DITCH W/ CLASS 'II' RIP RAP EST 21 TONS EST 47 SY GEO SEE DETAIL #26
CONC. DITCH SEE DETAIL #22 STA. 18+50 TO 20+00 -Y7- RT
SHOULDER BERM GUTTER STA. 18+25 TO 20+00 -Y7- RT
SHOULDER BERM GUTTER TO BRIDGE TO STA. 103+06 -L- LT
DO NOT BURY INVERT
ALAN G. BRUTON
DEBORAH K. BRUTON
KENNETH M. WILLARD
KATHY L. SMITH
OAK HOLLOW BUILDERS, INC.
DONALD F. & THELMA G. BOWMAN
ANNIE RIDDICK
RIVER WALK OF GUILFORD CO. HOMEOWNERS ASSOC. INC.

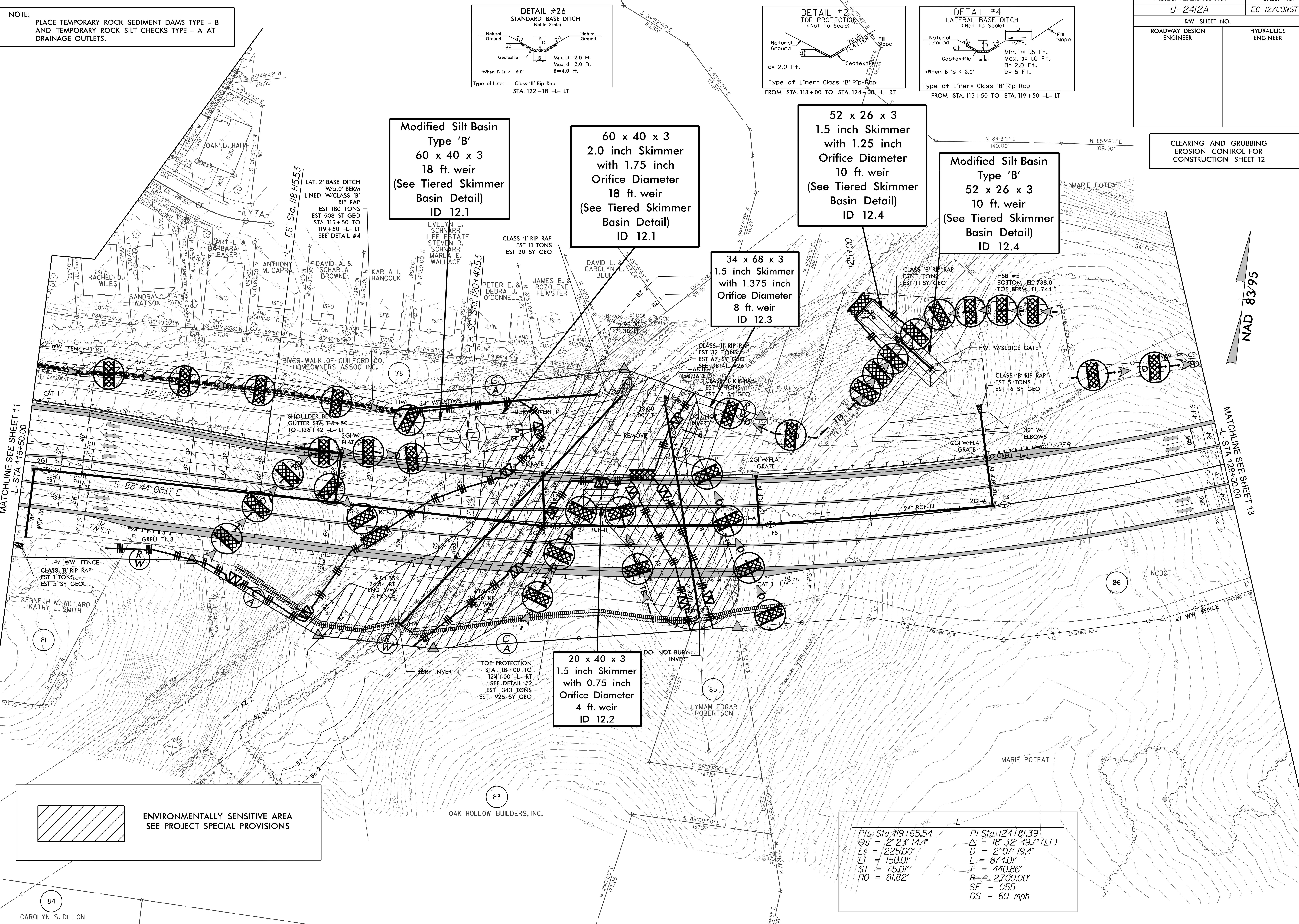
[hatched symbol]	ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-12/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12

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



DETAIL #26
STANDARD BASE DITCH
(Not to Scale)
Natural Ground
Geotextile
Min. D=2.0 Ft.
Max. d=2.0 Ft.
B=4.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'II' Rip-Rap
STA. 122+18 -L- LT
DETAIL #2
TOE PROTECTION
(Not to Scale)
Natural Ground
2:1 OR FLATTER
Fill Slope
Geotextile
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 118+00 TO STA. 124+00 -L- RT
DETAIL #4
LATERAL BASE DITCH
(Not to Scale)
Natural Ground
Fill Slope
Geotextile
Min. D= 1.5 Ft.
Max. d= 1.0 Ft.
B= 2.0 Ft.
b= 5 Ft.
•When B is < 6.0'
Type of Liner= Class 'B' Rip-Rap
FROM STA. 115+50 TO STA. 119+50 -L- LT
Modified Silt Basin
Type 'B'
60 x 40 x 3
18 ft. weir
(See Tiered Skimmer Basin Detail)
ID 12.1
60 x 40 x 3
2.0 inch Skimmer
with 1.75 inch Orifice Diameter
18 ft. weir
(See Tiered Skimmer Basin Detail)
ID 12.1
52 x 26 x 3
1.5 inch Skimmer
with 1.25 inch Orifice Diameter
10 ft. weir
(See Tiered Skimmer Basin Detail)
ID 12.4
Modified Silt Basin
Type 'B'
52 x 26 x 3
10 ft. weir
(See Tiered Skimmer Basin Detail)
ID 12.4
34 x 68 x 3
1.5 inch Skimmer
with 1.375 inch Orifice Diameter
8 ft. weir
ID 12.3
20 x 40 x 3
1.5 inch Skimmer
with 0.75 inch Orifice Diameter
4 ft. weir
ID 12.2
LAT. 2' BASE DITCH W/5.0' BERM LINED W/CLASS 'B' RIP RAP
EST 180 TONS
EST 508 ST GEO
STA. 115+50 TO 119+50 -L- LT
SEE DETAIL #4
CLASS 'I' RIP RAP
EST 11 TONS
EST 30 SY GEO
CLASS 'II' RIP RAP
EST 32 TONS
EST 67 SY GEO
SEE DETAIL #26
CLASS 'II' RIP RAP
EST 4 TONS
EST 12 SY GEO
CLASS 'B' RIP RAP
EST 3 TONS
EST 11 SY GEO
HSB #5
BOTTOM EL. 738.0
TOP BERM EL. 744.5
HW W/SLUICE GATE
CLASS 'B' RIP RAP
EST 5 TONS
EST 16 SY GEO
30" W/ ELBOWS
2GI W/FLAT GRATE
GREU TL-3
24" RCP-III
2GI-A
FS
SHOULDER BERM GUTTER STA. 115+50 TO 126+42 -L- LT
24" W/ELBOWS
BURY INVERT 1'
DO NOT BURY INVERT
REMOVE
CLASS 'B' RIP RAP
EST 1 TONS
EST 5 SY GEO
47 WW FENCE
TOE PROTECTION
STA. 118+00 TO 124+00 -L- RT
SEE DETAIL #2
EST 343 TONS
EST 925 SY GEO
MATCHLINE SEE SHEET 11 -L- STA 115+50.00
MATCHLINE SEE SHEET 13 -L- STA 129+00.00
S 88° 44' 08.0" E
-L- TS Sta. 118+15.53
-L- SC Sta. 120+40.53
125+00
JOAN B. HAITH
RACHEL D. WILES
SANDRA C. WATSON
JERRY L & BARBARA L BAKER
ANTHONY M. CAPRA
DAVID A. & SCHARLA BROWNE
KARLA I. HANCOCK
EVELYN E. SCHNARR LIFE ESTATE STEVEN R. SCHNARR MARLA E. WALLACE
PETER E. & DEBRA J. O'CONNELL
JAMES E. & ROZOLENE FEIMSTER
DAVID L. & CAROLYN L. BLUE
RIVER WALK OF GUILFORD CO. HOMEOWNERS ASSOC INC.
KENNETH M. WILLARD KATHY L. SMITH
LYMAN EDGAR ROBERTSON
OAK HOLLOW BUILDERS, INC.
CAROLYN S. DILLON
MARIE POTEAT
NCDOT
NAD 83/95

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

-L-

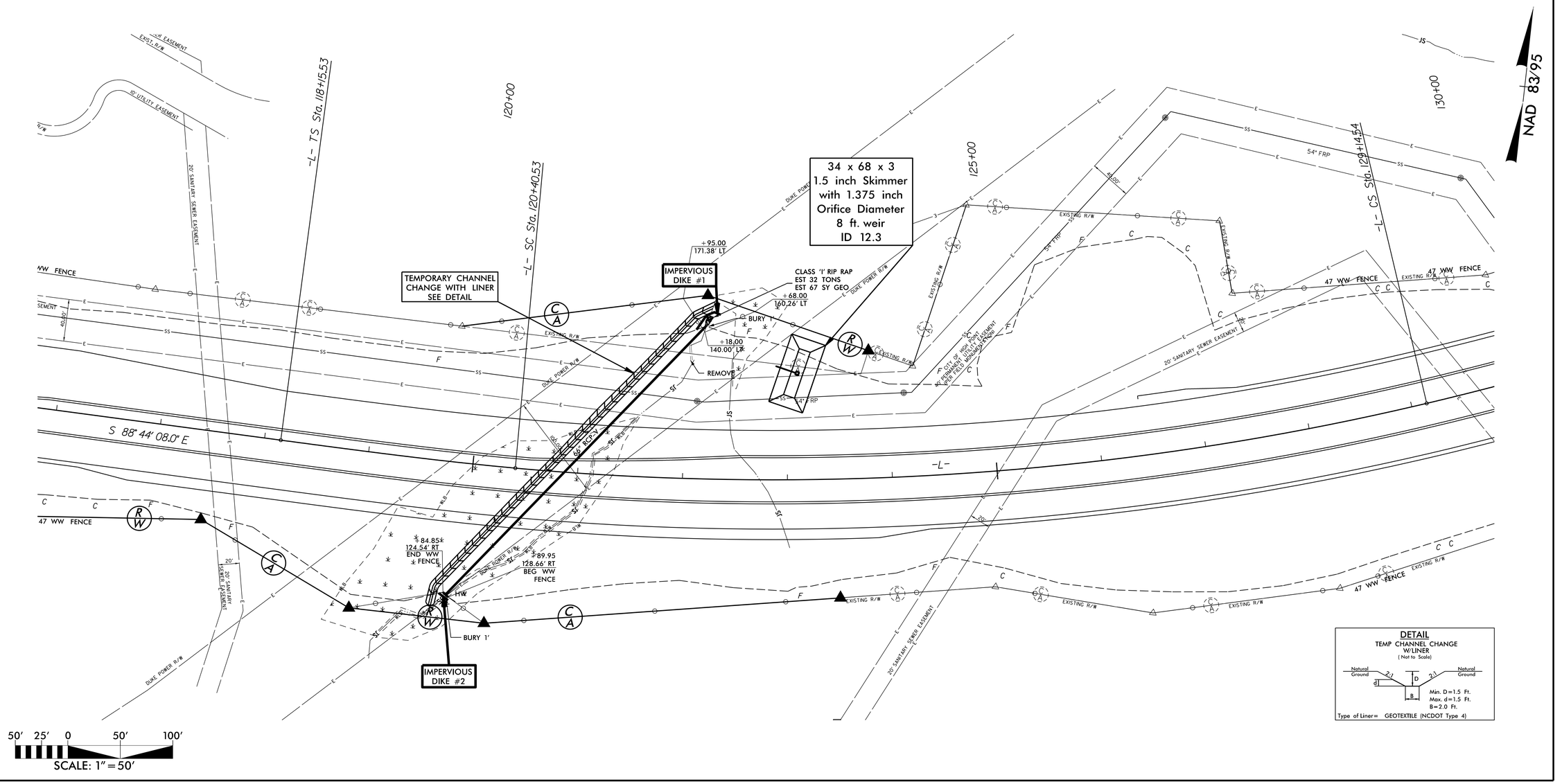
PIs Sta 119+65.54	PI Sta 124+81.39
θs = 2° 23' 14.4"	Δ = 18° 32' 49.7" (LT)
Ls = 225.00'	D = 2° 07' 19.4"
LT = 150.01'	L = 874.01'
ST = 75.01'	T = 440.86'
RO = 81.82'	R = 2,700.00'
	SE = 055
	DS = 60 mph

66" RCP–V CONSTRUCTION SEQUENCE
STA. 119 + 88 –L– RT UT TO DEEP RIVER

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-12A/CONST 12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

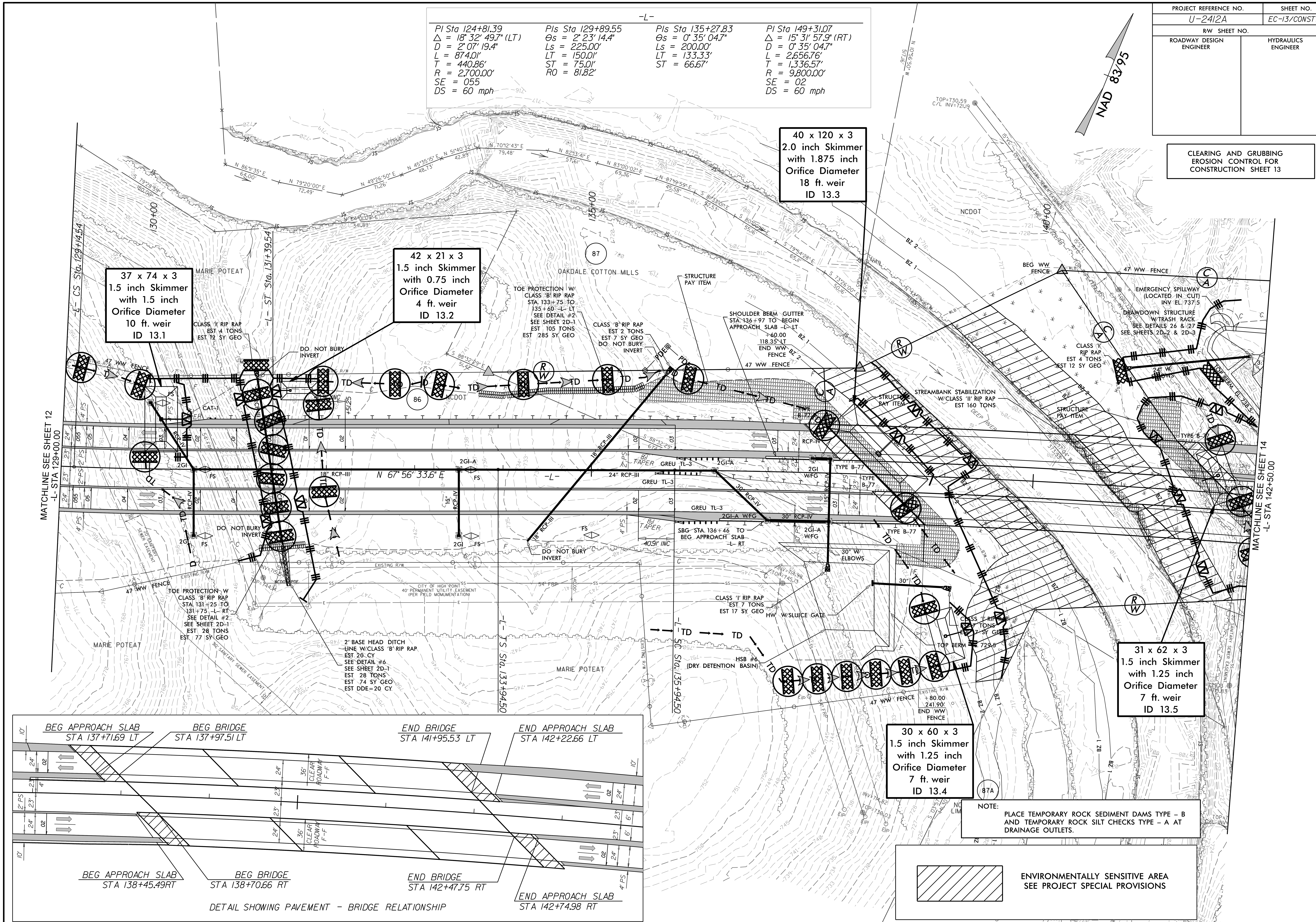
PHASE 1

1.) CONSTRUCT SKIMMER BASIN 12.3.
2.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (SEE DETAIL).
3.) INSTALL IMPEVERIOUS DIKES #1 AND #2 AND DIVERT FLOW INTO TEMPORARY CHANNEL.
4.) DEWATER CONSTRUCTION AREA USING SKIMMER BASIN 12.3 FOR PUMPED EFFLUENT.
5.) REMOVE 18" EXISTING PIPE.
6.) INSTALL 66" RCP–V WITH HEADWALL AND CLASS 'I' RIP RAP IN ACCORDANACE WITH THE PLANS.
7.) EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES.
8.) REMOVE IMPERVIOUS DIKES #1, #2, AND TEMPORARY CHANNEL CHANGE AND DIRECT FLOW THROUGH 66" RCP–V.
9.) COMPLETE ROADWAY.



DETAIL
TEMP CHANNEL CHANGE W/LINER
(Not to Scale)

Type of Liner= GEOTEXTILE (NCDOT Type 4)



PROJECT REFERENCE NO.
U-2412A
SHEET NO.
EC-13/CONSTJ3
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NAD 83/95
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 13
-L-
PI Sta 124+81.39
△ = 18° 32′ 49.7″ (LT)
D = 2° 07′ 19.4″
L = 874.01′
T = 440.86′
R = 2,700.00′
SE = 055
DS = 60 mph
PIs Sta 129+89.55
Θs = 2° 23′ 14.4″
Ls = 225.00′
LT = 150.01′
ST = 75.01′
RO = 81.82′
PIs Sta 135+27.83
Θs = 0° 35′ 04.7″
Ls = 200.00′
LT = 133.33′
ST = 66.67′
PI Sta 149+31.07
△ = 15° 31′ 57.9″ (RT)
D = 0° 35′ 04.7″
L = 2,656.76′
T = 1,336.57′
R = 9,800.00′
SE = 02
DS = 60 mph
37 x 74 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
10 ft. weir
ID 13.1
42 x 21 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
4 ft. weir
ID 13.2
40 x 120 x 3
2.0 inch Skimmer
with 1.875 inch
Orifice Diameter
18 ft. weir
ID 13.3
30 x 60 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 13.4
31 x 62 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
7 ft. weir
ID 13.5
MATCHLINE SEE SHEET 12
-L- STA 129+00.00
MATCHLINE SEE SHEET 14
-L- STA 142+50.00
-L- CS Sta. 129+14.54
-L- ST Sta. 131+39.54
-L- TS Sta. 133+94.50
-L- SC Sta. 135+94.50
MARIE POTEAT
OAKDALE COTTON MILLS
NCDOT
N 67° 56′ 33.6″ E
TOE PROTECTION W/ CLASS 'B' RIP RAP STA. 133+75 TO 135+60 -L- LT SEE DETAIL #2 SEE SHEET 2D-1 EST 105 TONS EST 285 SY GEO
CLASS 'B' RIP RAP EST 2 TONS EST 7 SY GEO DO NOT BURY INVERT
CLASS 'I' RIP RAP EST 4 TONS EST 12 SY GEO
DO NOT BURY INVERT
STRUCTURE PAY ITEM
SHOULDER BERM GUTTER STA. 136+97 TO BEGIN APPROACH SLAB -L- LT
STREAMBANK STABILIZATION W/CLASS 'II' RIP RAP EST 160 TONS
BEG WW FENCE
47 WW FENCE
EMERGENCY SPILLWAY (LOCATED IN CUT) INV EL 737.5
DRAWDOWN STRUCTURE W/TRASH RACK SEE DETAILS 26 & 27 SEE SHEETS 2D-2 & 2D-3
CLASS 'K' RIP RAP EST 4 TONS EST 12 SY GEO
TOE PROTECTION W/ CLASS 'B' RIP RAP STA. 131+25 TO 131+75 -L- RT SEE DETAIL #2 SEE SHEET 2D-1 EST 28 TONS EST 77 SY GEO
2' BASE HEAD DITCH LINE W/CLASS 'B' RIP RAP EST 20 CY SEE DETAIL #6 SEE SHEET 2D-1 EST 28 TONS EST 74 SY GEO EST DDE=20 CY
CITY OF HIGH POINT 40' PERMANENT UTILITY EASEMENT (PER FIELD MONUMENTATION)
SBG STA. 136+46 TO BEG APPROACH SLAB -L- RT
CLASS 'I' RIP RAP EST 7 TONS EST 17 SY GEO
HW W/SLUICE GATE
HSB #6 (DRY DETENTION BASIN)
TOP BERM 729.5
END WW FENCE
BEG APPROACH SLAB STA 137+71.69 LT
BEG BRIDGE STA 137+97.51 LT
END BRIDGE STA 141+95.53 LT
END APPROACH SLAB STA 142+22.66 LT
BEG APPROACH SLAB STA 138+45.49RT
BEG BRIDGE STA 138+70.66 RT
END BRIDGE STA 142+47.75 RT
END APPROACH SLAB STA 142+74.98 RT
DETAIL SHOWING PAVEMENT - BRIDGE RELATIONSHIP
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-14/CONST14
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 14

65 x 65 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
16 ft. weir
ID 14.1

54 x 108 x 3
2.5 inch Skimmer
with 2.125 inch
Orifice Diameter
22 ft. weir
ID 14.2

-Y8-
PI Sta 11+83.37
△ = 6° 20' 46.0" (LT)
D = 4° 05' 33.2"
L = 155.06'
T = 77.61'
R = 1,400.00'
SE = SEE PLAN VIEW
DS = 40 mph

-L-
PI Sta 149+31.07
△ = 15° 31' 57.9" (RT)
D = 0° 35' 04.7"
L = 2,656.76'
T = 1,336.57'
R = 9,800.00'
SE = 02
DS = 60 mph

-Y8- PC Sta. 11+05.76
-Y8- PT Sta. 12+60.82
BEGIN CONSTRUCTION
-Y8- POC Sta. 12+25.00
END CONSTRUCTION
-Y8- POT Sta. 17+70.00
POT Sta. 10+00.00
-L-POC Sta. 147+48.15
Y8-POT Sta. 14+97.65

MATCHLINE SEE SHEET 13
-L- STA 142+50.00

MATCHLINE SEE SHEET 15
-L- STA 156+00.00

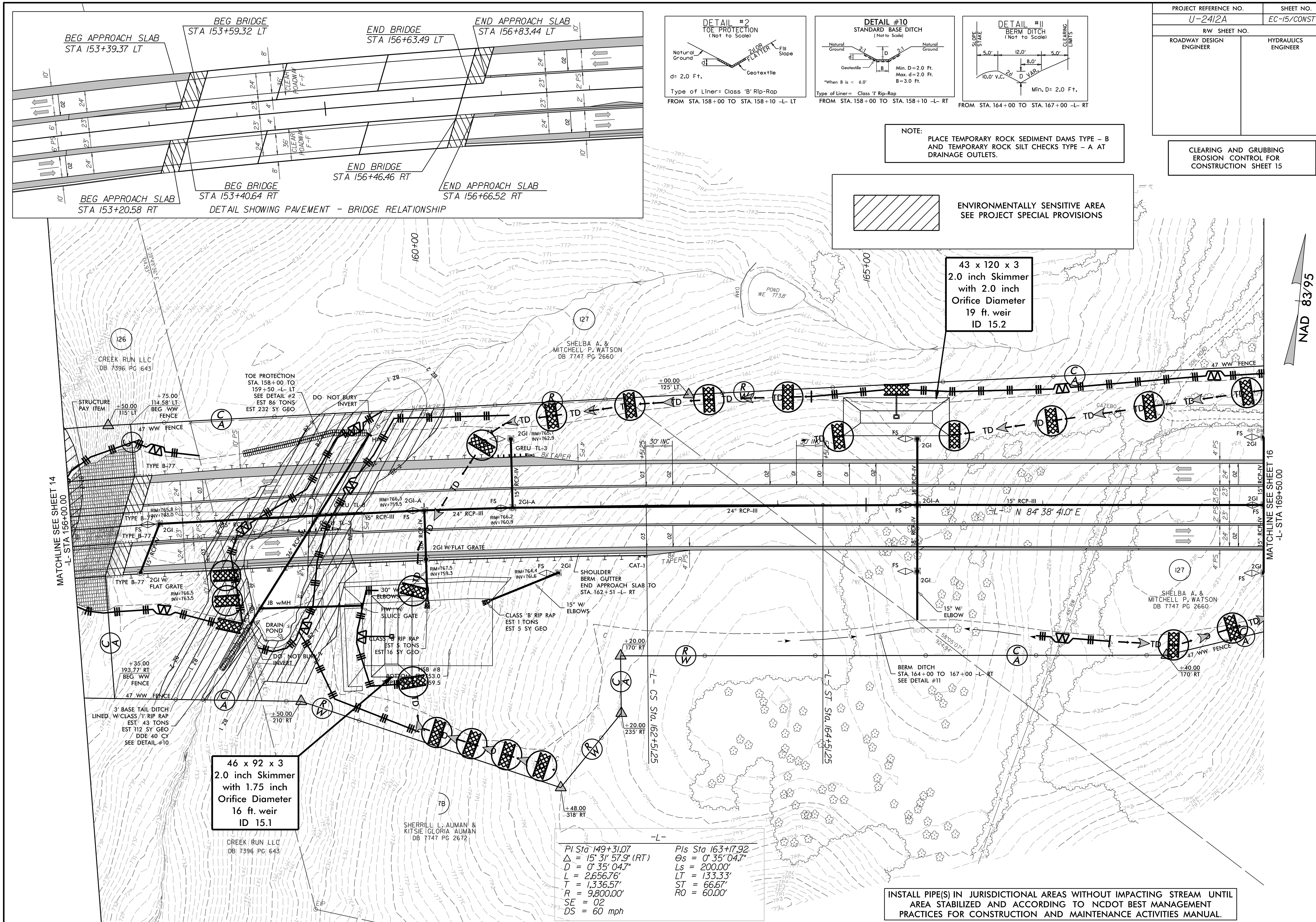
NAD 83/95

DETAIL SHOWING PAVEMENT BRIDGE RELATIONSHIP

-L-POT Sta. 147+48.15
-Y8-POT Sta. 14+97.65
△ = 90° 20' 28.3"
BEG BRIDGE
STA 13+87.65
END BRIDGE
STA 16+00.15
BEG APPROACH SLAB
STA 13+73.65
END APPROACH SLAB
STA 16+14.15
20+00

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

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



BEG APPROACH SLAB STA 153+39.37 LT
BEG BRIDGE STA 153+59.32 LT
END BRIDGE STA 156+63.49 LT
END APPROACH SLAB STA 156+83.44 LT
END BRIDGE STA 156+46.46 RT
BEG BRIDGE STA 153+40.64 RT
END APPROACH SLAB STA 156+66.52 RT
BEG APPROACH SLAB STA 153+20.58 RT
DETAIL SHOWING PAVEMENT - BRIDGE RELATIONSHIP
CLEAR ROADWAY F-F
DETAIL #2 TOE PROTECTION (Not to Scale)
Natural Ground
2:1 OR FLATTER
Fill Slope
Geotextile
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 158+00 TO STA. 158+10 -L- LT
DETAIL #10 STANDARD BASE DITCH (Not to Scale)
Natural Ground
Geotextile
Min. D=2.0 Ft.
Max. d=2.0 Ft.
B=3.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'I' Rip-Rap
FROM STA. 158+00 TO STA. 158+10 -L- RT
DETAIL #11 BERM DITCH (Not to Scale)
SLOPE STAKE
CLEARING LIMITS
5.0' 12.0' 5.0' 8.0'
10.0' V.C.
D VAR.
Min. D= 2.0 Ft.
FROM STA. 164+00 TO STA. 167+00 -L- RT
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS
43 x 120 x 3 2.0 inch Skimmer with 2.0 inch Orifice Diameter 19 ft. weir ID 15.2
46 x 92 x 3 2.0 inch Skimmer with 1.75 inch Orifice Diameter 16 ft. weir ID 15.1
NAD 83/95
MATCHLINE SEE SHEET 14 -L- STA 156+00.00
MATCHLINE SEE SHEET 16 -L- STA 169+50.00
126 CREEK RUN LLC DB 7396 PG 643
127 SHELBA A. & MITCHELL P. WATSON DB 7747 PG 2660
78 SHERRILL L. AUMAN & KITSIE GLORIA AUMAN DB 7747 PG 2672
CREEK RUN LLC DB 7396 PG 643
POND WE 773.8'
TOE PROTECTION STA. 158+00 TO 159+50 -L- LT SEE DETAIL #2 EST 86 TONS EST 232 SY GEO
DO NOT BURY INVERT
STRUCTURE PAY ITEM
+50.00 115' LT
+75.00 114.58' LT BEG WW FENCE
47 WW FENCE
TYPE B-77
+35.00 193.77' RT BEG WW FENCE
3' BASE TAIL DITCH LINED W/CLASS 'I' RIP RAP EST 43 TONS EST 112 SY GEO DDE 40 CY SEE DETAIL #10
+50.00 210' RT
DRAIN POND
JB w/MH
HW W/ SLUICE GATE
CLASS 'B' RIP RAP EST 5 TONS EST 16 SY GEO
30" W/ ELBOWS
HSB #8
SHOULDER BERM GUTTER END APPROACH SLAB TO STA. 162+51 -L- RT
CLASS 'B' RIP RAP EST 1 TONS EST 5 SY GEO
15" W/ ELBOWS
+20.00 170' RT
+20.00 235' RT
+48.00 318' RT
-L- CS Sta. 162+51.25
-L- ST Sta. 164+51.25
+00.00 125' LT
-L- N 84° 38' 41.0" E
24" RCP-III
15" RCP-III
BERM DITCH STA. 164+00 TO 167+00 -L- RT SEE DETAIL #11
+40.00 170' RT
47 WW FENCE
GAZEBO
160+00
165+00
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

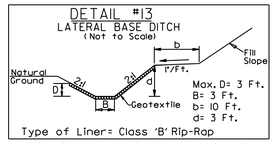
PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-15/CONST15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 15

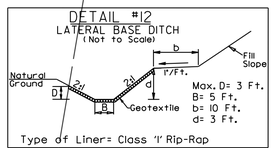
-L-	
PI Sta 149+31.07	PIs Sta 163+17.92
Δ = 15° 31' 57.9" (RT)	θs = 0° 35' 04.7"
D = 0° 35' 04.7"	Ls = 200.00'
L = 2,656.76'	LT = 133.33'
T = 1,336.57'	ST = 66.67'
R = 9,800.00'	RO = 60.00'
SE = 02	
DS = 60 mph	

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-16/CONST16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

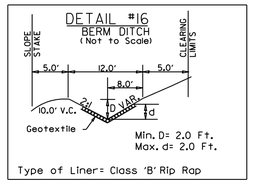
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 16



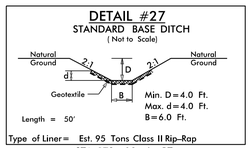
FROM STA. 176+50 TO STA. 179+00 -L- LT



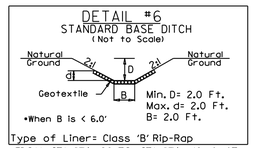
FROM STA. 174+55 TO STA. 176+50 -L- LT



FROM STA. 177+75 TO STA. 180+50 -L- RT

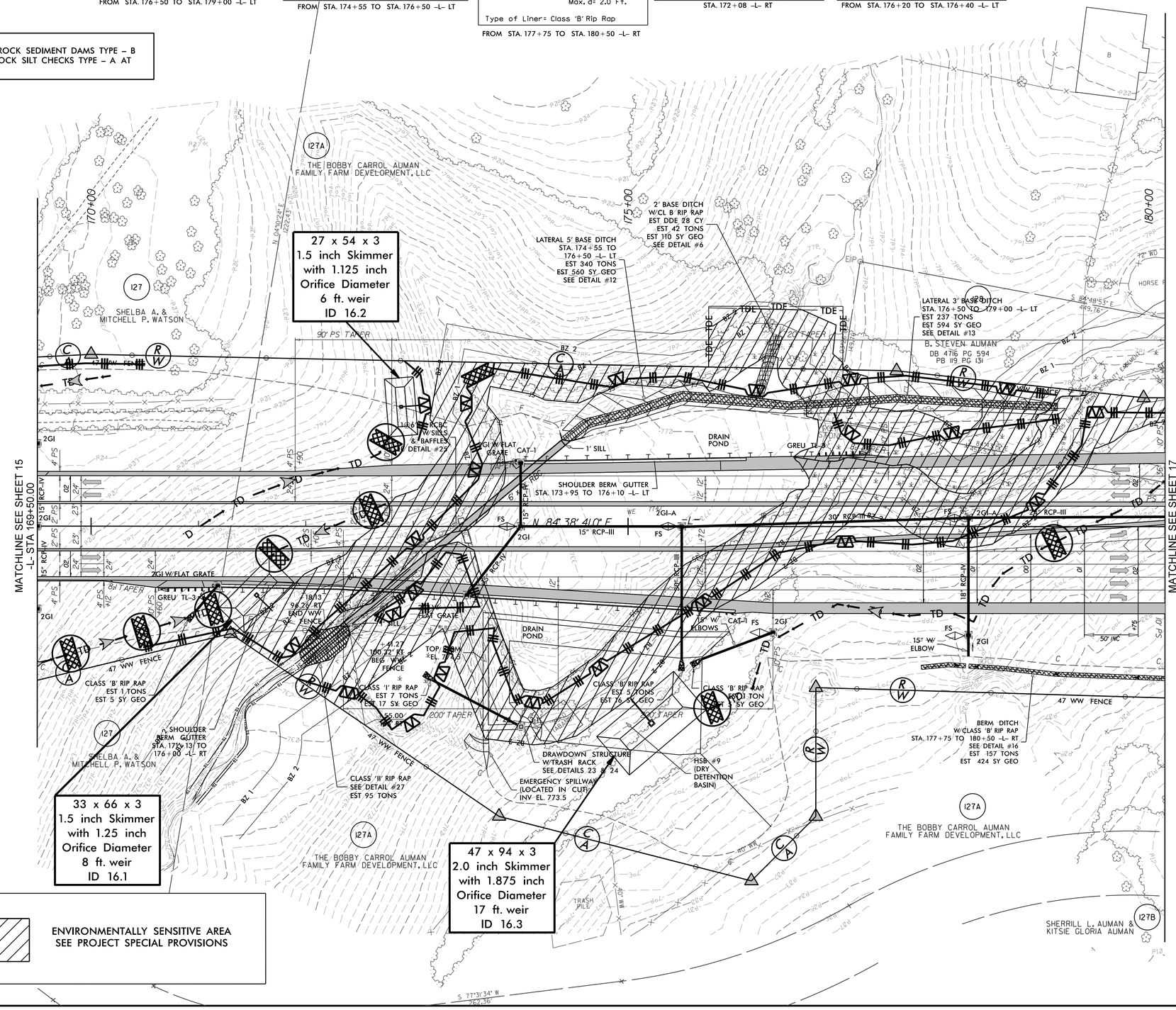


STA. 172+08 -L- RT



FROM STA. 176+20 TO STA. 176+40 -L- LT

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

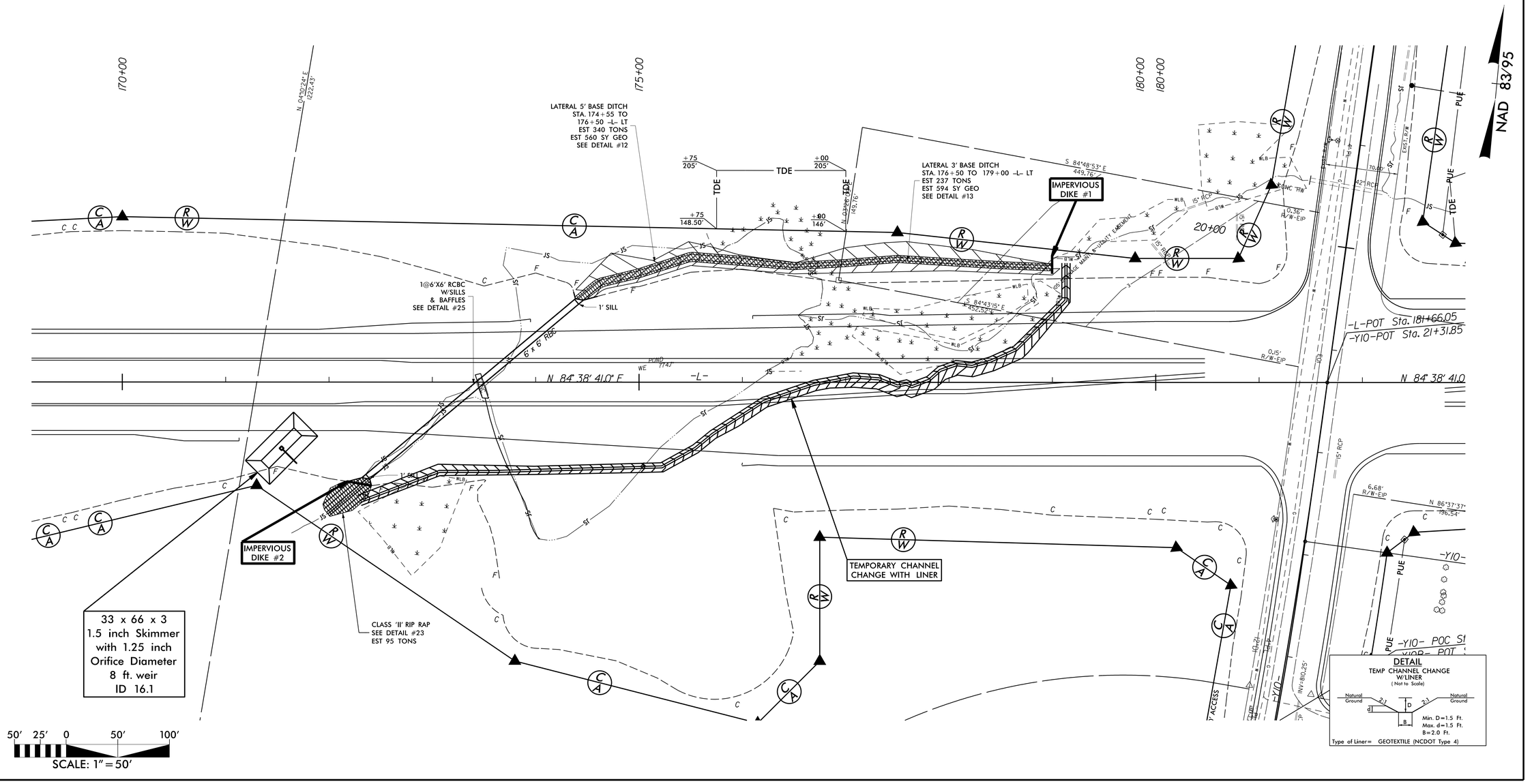


PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-16A/CONST.16
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

1@6'x6' RBC CONSTRUCTION SEQUENCE
STA. 174+40 –L– LT UT TO BULL RUN

PHASE I

1.) DRAIN POND IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR EROSION CONTROL.
2.) CONSTRUCT SKIMMER BASIN 16.1.
3.) CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (SEE DETAIL).
4.) INSTALL IMPERVIOUS DIKES #1 AND #2 AND DIVERT FLOW INTO TEMPORARY CHANNEL.
5.) DEWATER CONSTRUCTION AREA, USING SKIMMER BASIN 16.3 FOR PUMPED EFFLUENT.
6.) REMOVE EXISTING DAM AND INSTALL 1@6'X6' RCBC W/SILLS & BAFFLES.
7.) CONSTRUCT LATERAL 5' BASE DITCH AND LATERAL 3' BASE DITCH IN ACCORDANCE WITH THE PLANS.
8.) REMOVE IMPERVIOUS DIKES #1, #2, AND TEMPORARY CHANNEL CHANGE AND DIRECT FLOW THROUGH 6'X6' RCBC.
9.) COMPLETE ROADWAY.



DETAIL
TEMP CHANNEL CHANGE W/LINER
(Not to Scale)

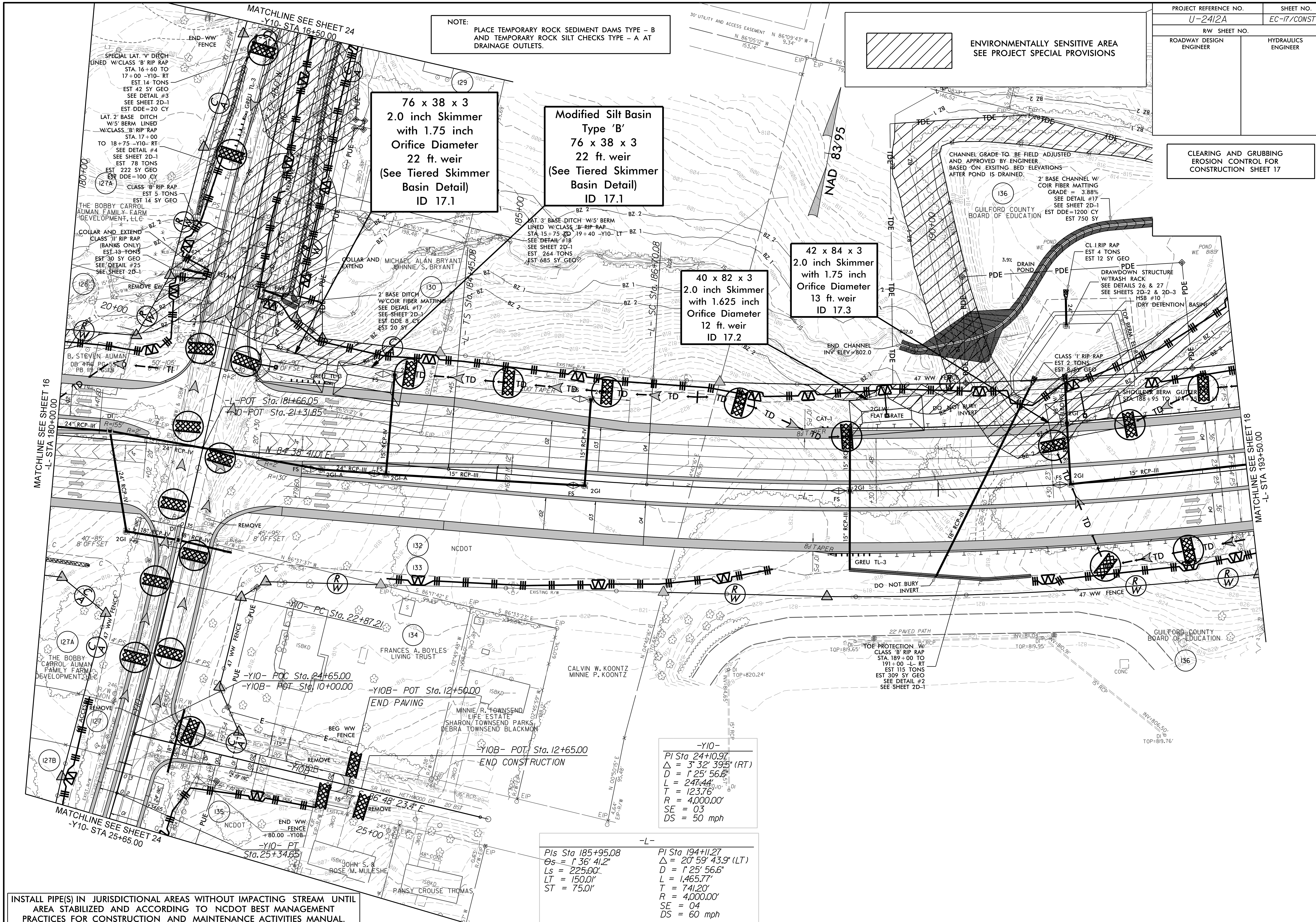
Type of Liner= GEOTEXTILE (NCDOT Type 4)

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-17/CONST17
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 17



MATCHLINE SEE SHEET 24 -Y10- STA 16+50.00
76 x 38 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
22 ft. weir
(See Tiered Skimmer Basin Detail)
ID 17.1
Modified Silt Basin Type 'B'
76 x 38 x 3
22 ft. weir
(See Tiered Skimmer Basin Detail)
ID 17.1
NAD 83/95
40 x 82 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 17.2
42 x 84 x 3
2.0 inch Skimmer
with 1.75 inch
Orifice Diameter
13 ft. weir
ID 17.3
GUILFORD COUNTY BOARD OF EDUCATION
MICHAEL ALAN BRYANT JOHNNIE S. BRYANT
THE BOBBY CARROL AUMAN FAMILY FARM DEVELOPMENT, LLC
-L- POT Sta. 181+66.05
-Y10- POT Sta. 21+31.85
N 84° 38' 41.0" E
MATCHLINE SEE SHEET 16 -L- STA 180+00.00
MATCHLINE SEE SHEET 18 -L- STA 193+50.00
NCDOT
FRANCES A. BOYLES LIVING TRUST
CALVIN W. KOONTZ MINNIE P. KOONTZ
-Y10- PC Sta. 22+87.21
-Y10- POC Sta. 24+65.00
-Y10B- POT Sta. 10+00.00
-Y10B- POT Sta. 12+00.00
END PAVING
MINNIE R. TOWNSEND LIFE ESTATE SHARON TOWNSEND PARKS DEBRA TOWNSEND BLACKMON
-Y10B- POT Sta. 12+65.00
END CONSTRUCTION
-Y10- PT Sta. 25+34.65
JOHN S. & ROSE M. MULESHE
PANSY CROUSE THOMAS
MATCHLINE SEE SHEET 24 -Y10- STA 25+65.00

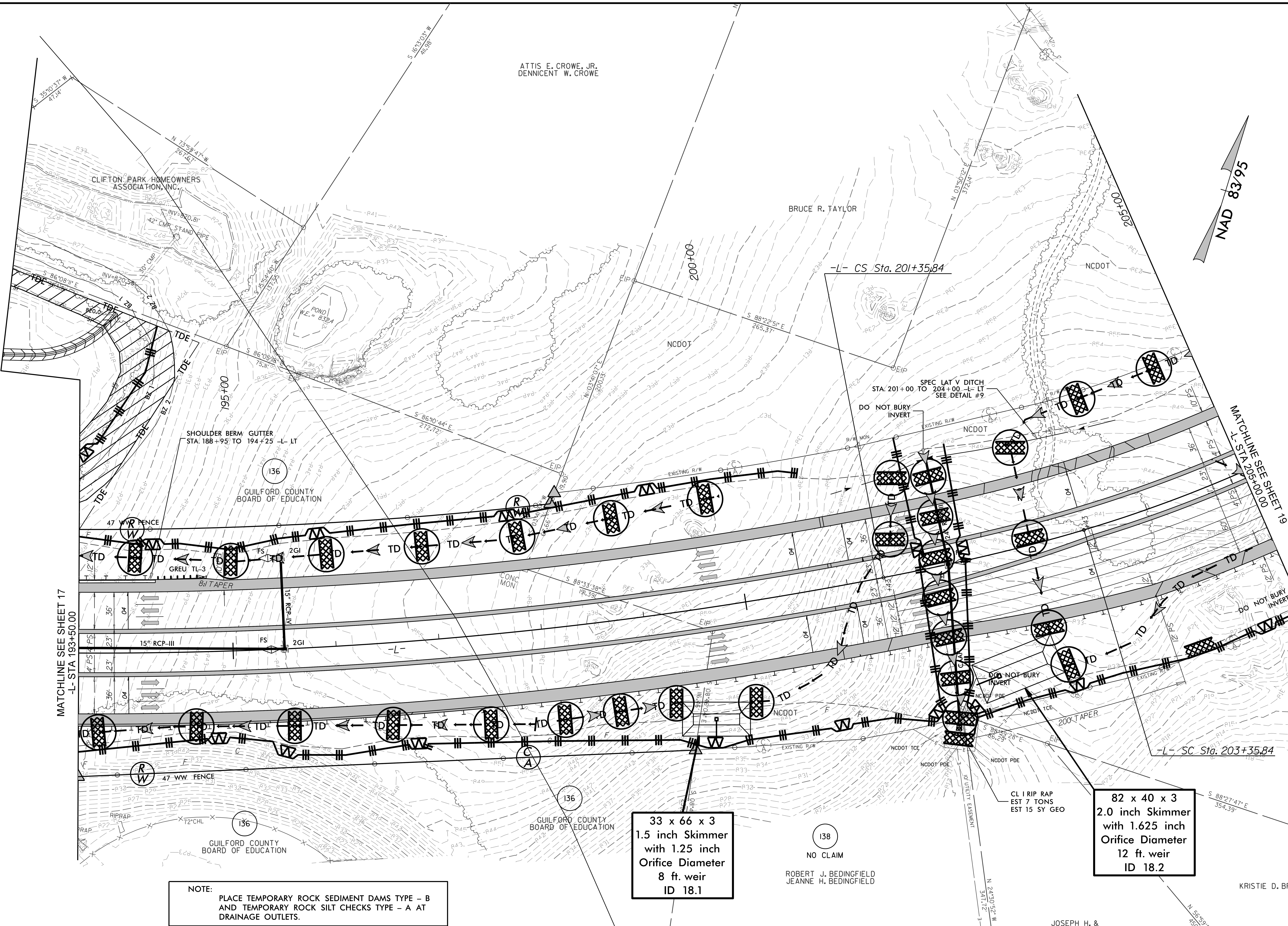
-Y10-
PI Sta 24+10.97
Δ = 3° 32' 39.5" (RT)
D = 1° 25' 56.6"
L = 247.44'
T = 123.76'
R = 4,000.00'
SE = .03
DS = 50 mph

-L-	
PIs Sta 185+95.08	PI Sta 194+11.27
θs = 1° 36' 41.2"	Δ = 20° 59' 43.9" (LT)
Ls = 225.00'	D = 1° 25' 56.6"
LT = 150.01'	L = 1,465.77'
ST = 75.01'	T = 741.20'
	R = 4,000.00'
	SE = .04
	DS = 60 mph

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-18/CONSTJ8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 18



ATTIS E. CROWE, JR.
DENNICENT W. CROWE
CLIFTON PARK HOMEOWNERS ASSOCIATION, INC.
BRUCE R. TAYLOR
NCDOT
NAD 83/95
-L- CS Sta. 201+35.84
SPEC LAT V DITCH STA. 201+00 TO 204+00 -L- LT SEE DETAIL #9
DO NOT BURY INVERT
SHOULDER BERM GUTTER STA. 188+95 TO 194+25 -L- LT
GUILFORD COUNTY BOARD OF EDUCATION
47 WW FENCE
GREU TL-3
MATCHLINE SEE SHEET 17 -L- STA 193+50.00
MATCHLINE SEE SHEET 19 -L- STA 205+00.00
15" RCP-III
-L-
200' TAPER
-L- SC Sta. 203+35.84
CL I RIP RAP EST 7 TONS EST 15 SY GEO
33 x 66 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 18.1
82 x 40 x 3
2.0 inch Skimmer
with 1.625 inch
Orifice Diameter
12 ft. weir
ID 18.2
NO CLAIM
ROBERT J. BEDINGFIELD
JEANNE H. BEDINGFIELD
JOSEPH H. &
MARTITIA FINISON
KRISTIE D. BRIGGS

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

-L-

PI Sta 194+11.27	PIs Sta 202+52.43	PI Sta 210+99.13
Δ = 20° 59' 43.9" (LT)	Θs = 1° 25' 56.0"	Δ = 58° 58' 01.9" (LT)
D = 1° 25' 56.6"	Θs = 4° 14' 39.5"	D = 4° 14' 38.9"
L = 1,465.77'	Ls = 200.00'	L = 1,389.38'
T = 741.20'	LT = 116.59'	T = 763.28'
R = 4,000.00'	ST = 83.56'	R = 1,350.00'
SE = .04		SE = .04
DS = 60 mph		DS = 55 mph

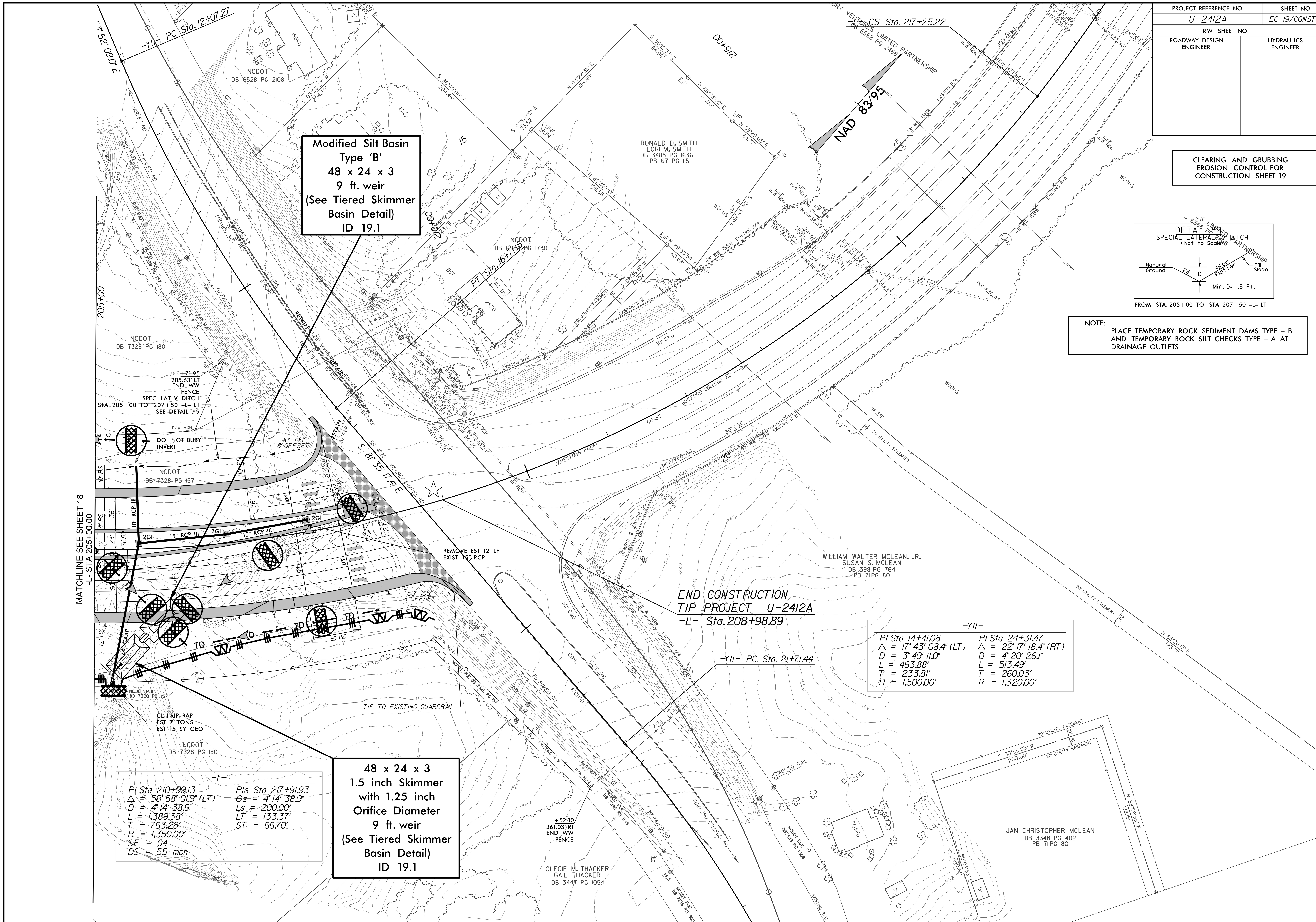
1/2 MILE CRITICAL AREA OFFSET

DETAIL #9
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground — 2:1 — D — 4:1 or Flatter — Fill Slope
Min. D= 1.5 Ft.
FROM STA. 201+00 TO STA. 204+00 -L- LT

ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-19/CONST19
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 19



Modified Silt Basin
Type 'B'
48 x 24 x 3
9 ft. weir
(See Tiered Skimmer Basin Detail)
ID 19.1
48 x 24 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
9 ft. weir
(See Tiered Skimmer Basin Detail)
ID 19.1
-Y11- PC Sta. 12+07.27
-Y11- PC Sta. 21+71.44
CS Sta. 217+25.22
PT Sta. 16+14.45
NAD 83/95
END CONSTRUCTION
TIP PROJECT U-2412A
-L- Sta. 208+98.89
MATCHLINE SEE SHEET 18
-L- STA 205+00.00
S 81° 35' 17.4" E
NCDOT
DB 6528 PG 2108
NCDOT
DB 7328 PG 180
NCDOT
DB 7328 PG 157
RONALD D. SMITH
LORI M. SMITH
DB 3485 PG 1636
PB 67 PG 115
WILLIAM WALTER MCLEAN, JR.
SUSAN S. MCLEAN
DB 3981 PG 764
PB 71 PG 80
JAN CHRISTOPHER MCLEAN
DB 3348 PG 402
PB 71 PG 80
CLECIE M. THACKER
GAIL THACKER
DB 3447 PG 1054
+71.95
205.63' LT
END WW
FENCE
SPEC LAT V DITCH
STA. 205+00 TO 207+50 -L- LT
SEE DETAIL #9
DO NOT BURY
INVERT
REMOVE EST 12 LF
EXIST. 15" RCP
CL I RIP-RAP
EST 7 TONS
EST 15 SY GEO
TIE TO EXISTING GUARDRAIL
+52.10
361.03' RT
END WW
FENCE
GUILFORD COLLEGE RD
JAMESTOWN PKWY
VICKREY CHAPEL RD
WOODS

DETAIL #9
SPECIAL LATERAL V DITCH
(Not to Scale)
Natural Ground
2:1
D
4:1 or Flatter
Fill Slope
Min. D= 1.5 Ft.

FROM STA. 205+00 TO STA. 207+50 -L- LT

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

-Y11-

PI Sta 14+41.08	PI Sta 24+31.47
Δ = 17° 43' 08.4" (LT)	Δ = 22° 17' 18.4" (RT)
D = 3° 49' 11.0"	D = 4° 20' 26.1"
L = 463.88'	L = 513.49'
T = 233.81'	T = 260.03'
R = 1,500.00'	R = 1,320.00'

-L-

PI Sta 210+99.13	PIs Sta 217+91.93
Δ = 58° 58' 01.9" (LT)	Θs = 4° 14' 38.9"
D = 4° 14' 38.9"	Ls = 200.00'
L = 1,389.38'	LT = 133.37'
T = 763.28'	ST = 66.70'
R = 1,350.00'	
SE = .04	
DS = 55 mph	

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-20/CONST.20
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y-
PI Sta 17+86.26
△ = 90° 50' 28.0" (RT)
D = 11° 48' 48.8"
L = 768.96'
T = 492.17'
R = 485.00'
SE = 06
DS = 40 mph

-YA-
PI Sta 11+85.92
△ = 32° 50' 02.0" (LT)
D = 22° 55' 05.9"
L = 143.26'
T = 73.66'
R = 250.00'
SE = SEE PLAN VIEW
DS = 30 mph

-YC-
PI Sta 14+00.19
△ = 22° 15' 26.6" (LT)
D = 19° 05' 54.9"
L = 116.54'
T = 59.01'
R = 300.00'
SE = SEE PLAN VIEW
DS = 25 mph

PI Sta 15+19.13
△ = 44° 32' 05.6" (RT)
D = 38° 11' 49.9"
L = 116.59'
T = 61.42'
R = 150.00'
SE = SEE PLAN VIEW
DS = 25 mph

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE–C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 20

-Y3-
PI Sta 11+49.51
△ = 0° 45' 08.0" (RT)
D = 0° 34' 22.6"
L = 131.29'
T = 65.64'
R = 10,000.00'
SE = NC
DS = 30 mph

32 x 16 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
4 ft. weir
ID 20.1

NAD 83/95

MATCHLINE SEE SHEET 5
-Y- STA 12+50.00

MATCHLINE SEE SHEET 5
-Y3- STA 13+00.00

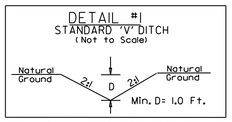
PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-21/CONST.21
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 21

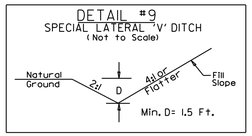
NAD 83/95

DETAIL #1
STANDARD 'V' DITCH
(Not to Scale)



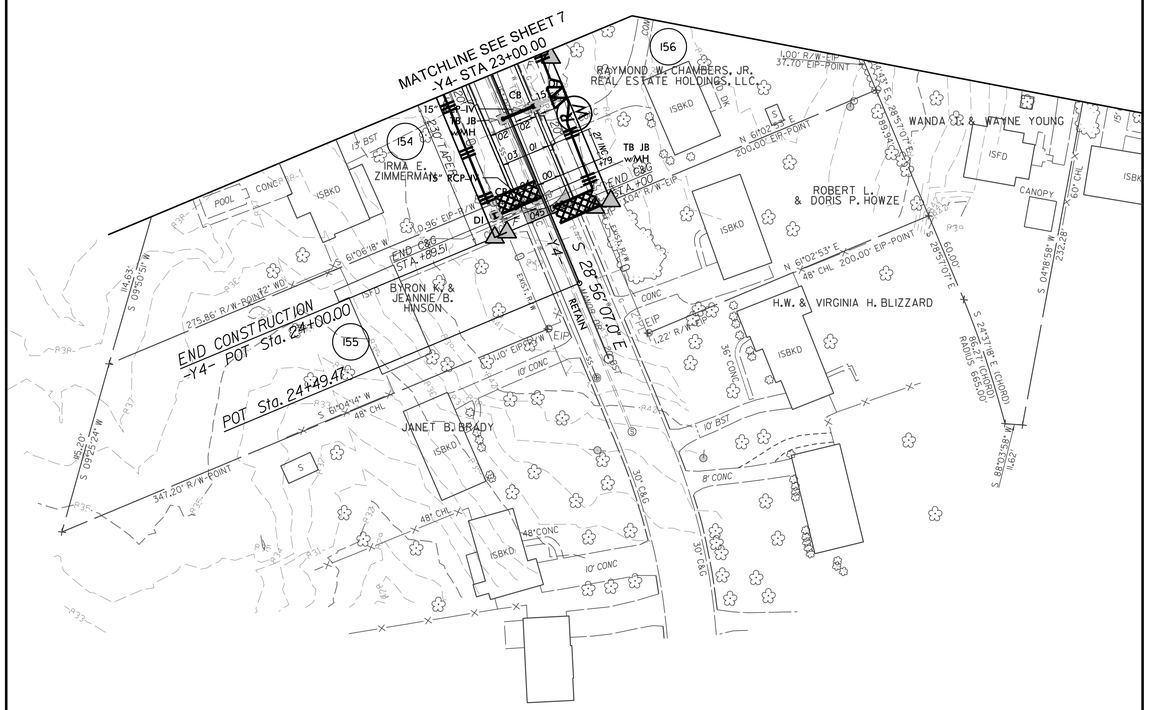
FROM STA. 10+30 TO STA. 11+00 -Y4- LT

DETAIL #9
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



FROM STA. 10+10 TO STA. 11+50 -Y4- RT

NAD 83/95



PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-22/CONST.22
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

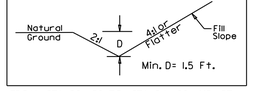
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 22

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

NAD 83/95

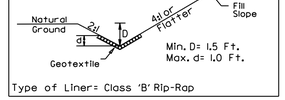
NAD 83/95

DETAIL #9
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



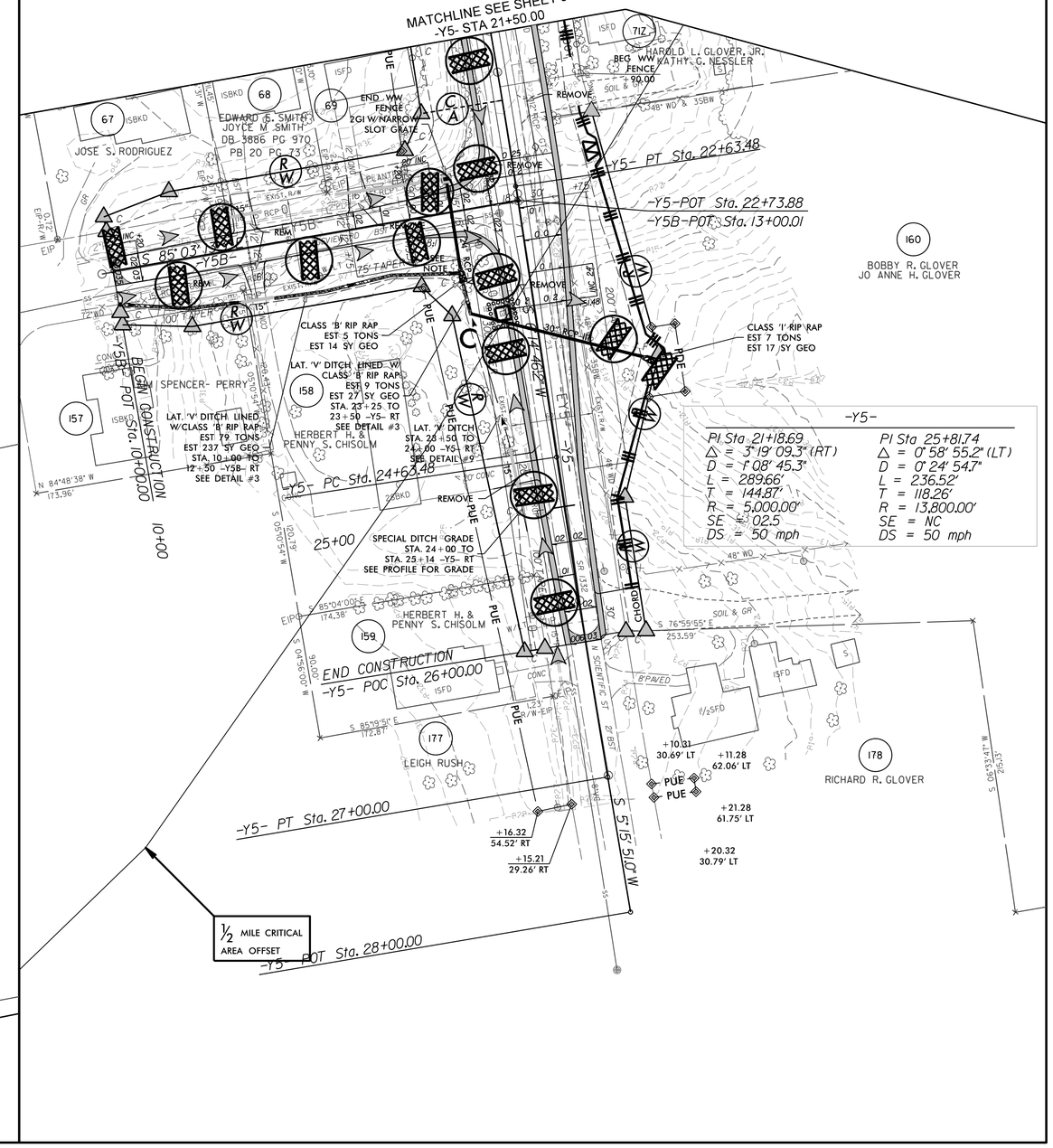
FROM STA. 23+50 TO STA. 24+00 -Y5- RT

DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



Type of Liner= Class 'B' Rip-Rap

FROM STA. 10+00 TO STA. 12+50 -Y5B- RT



PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-23/CONST.23

R/W SHEET NO.

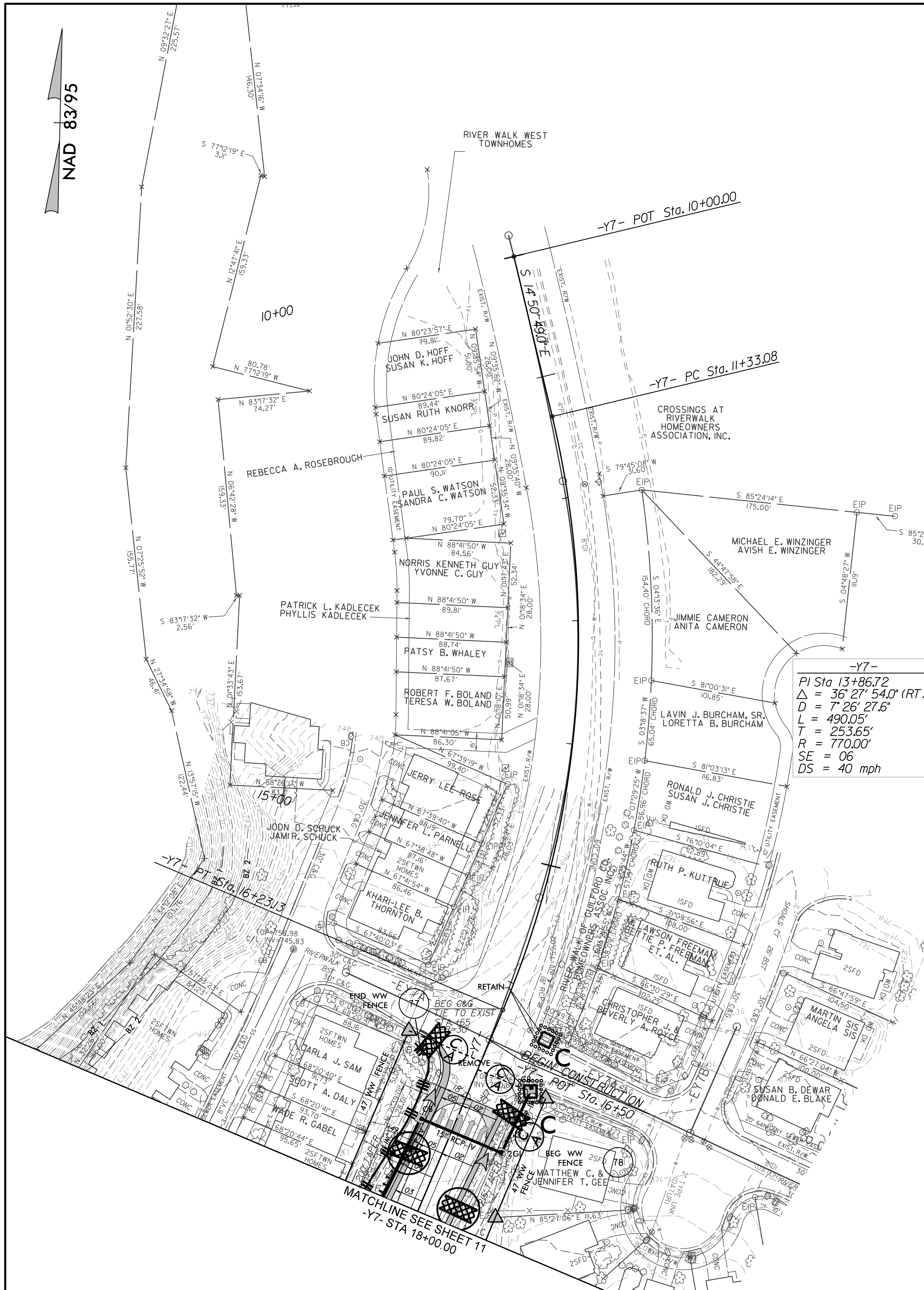
ROADWAY DESIGN ENGINEER

HYDRAULICS ENGINEER

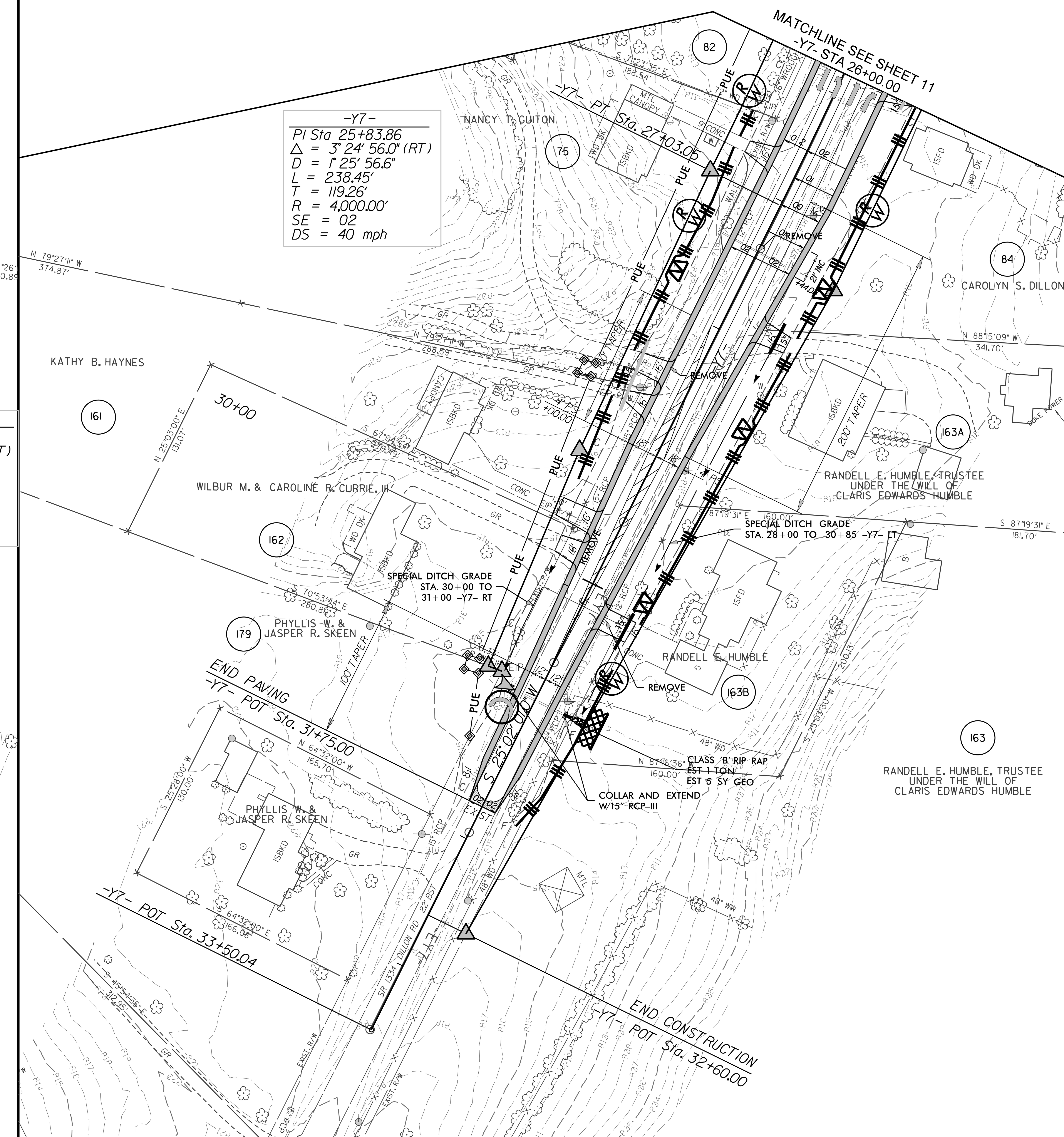
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 23

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

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE–C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.



NAD 83/95
RIVER WALK WEST TOWNHOMES
-Y7- POT Sta. 10+00.00
-Y7- PC Sta. 11+33.08
CROSSINGS AT RIVERWALK HOMEOWNERS ASSOCIATION, INC.
REBECCA A. ROSEBROUGH
JOHN D. HOFF
SUSAN K. HOFF
SUSAN RUTH KNORR
PAUL S. WATSON
SANDRA C. WATSON
NORRIS KENNETH GUY
YVONNE C. GUY
PATRICK L. KADLECEK
PHYLLIS KADLECEK
PATSY B. WHALEY
ROBERT F. BOLAND
TERESA W. BOLAND
MICHAEL E. WINZINGER
AVISH E. WINZINGER
JIMMIE CAMERON
ANITA CAMERON
LAVIN J. BURCHAM, SR.
LORETTA B. BURCHAM
RONALD J. CHRISTIE
SUSAN J. CHRISTIE
RUTH P. KUTTRUFF
JERRY LEE ROSE
JENNIFER L. PARNELL
KHARI-LEE B. THORNTON
JODN D. SCHUCK
JAMI R. SCHUCK
-Y7- PT Sta. 16+23.13
-Y7-
PI Sta 13+86.72
Δ = 36° 27' 54.0" (RT)
D = 7° 26' 27.6"
L = 490.05'
T = 253.65'
R = 770.00'
SE = 06
DS = 40 mph
CHRISTOPHER L. & BEVERLY A. ROYCE
MARTIN SIS
ANGELA SIS
SUSAN B. DEWAR
DONALD E. BLAKE
CARLA J. SAM
SCOTT A. DALY
WADE R. GABEL
END WW FENCE
BEG C&G TIE TO EXIST
BEGIN CONSTRUCTION
-Y7- POT Sta. 16+50
BEG WW FENCE
MATTHEW C. & JENNIFER T. GEE
REMOVE
RETAIN
MATCHLINE SEE SHEET 11
-Y7- STA 18+00.00



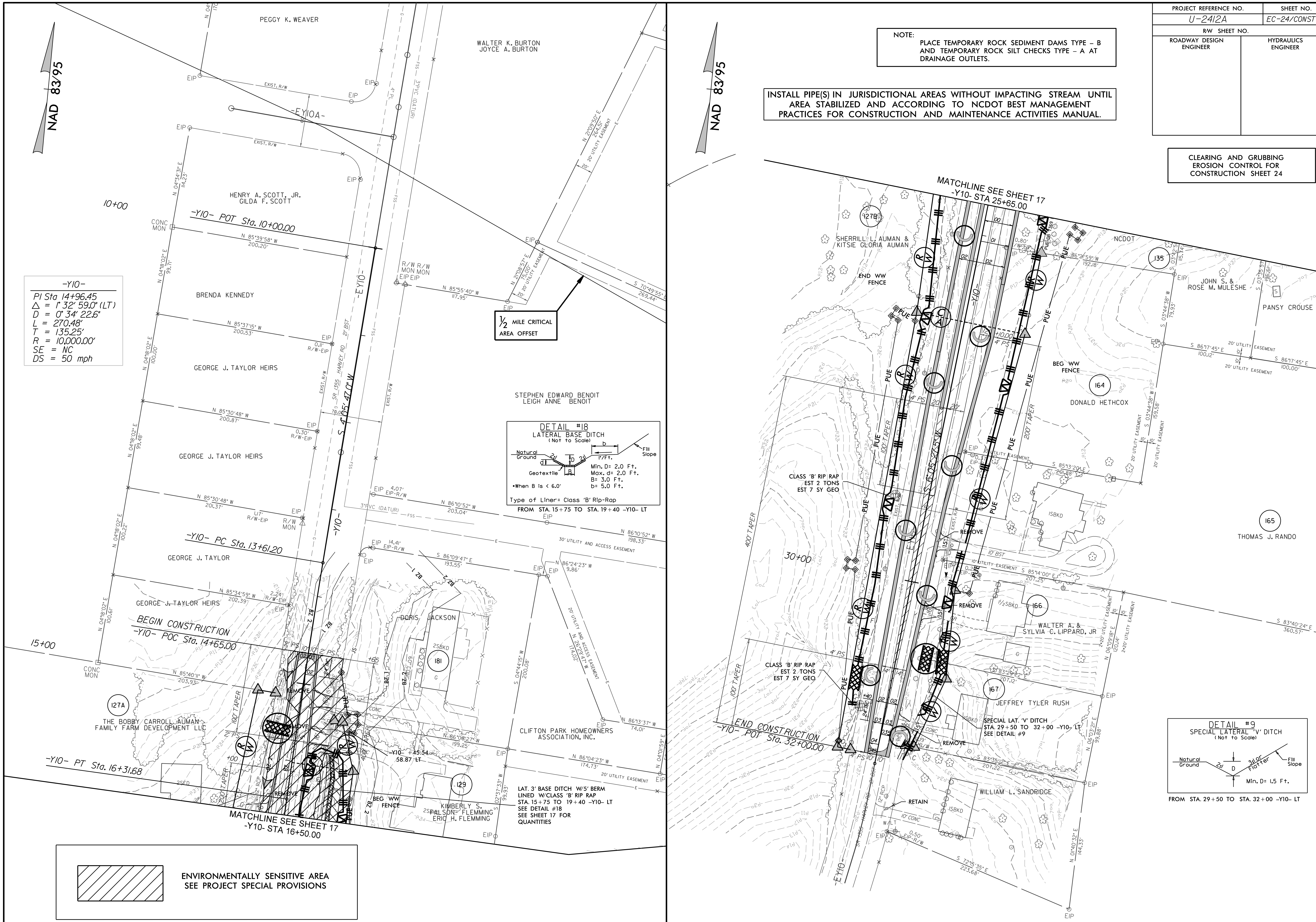
NAD 83/95
MATCHLINE SEE SHEET 11
-Y7- STA 26+00.00
-Y7-
PI Sta 25+83.86
Δ = 3° 24' 56.0" (RT)
D = 1° 25' 56.6"
L = 238.45'
T = 119.26'
R = 4,000.00'
SE = 02
DS = 40 mph
-Y7- PT Sta. 27+03.05
NANCY T. GUITON
CAROLYN S. DILLON
KATHY B. HAYNES
WILBUR M. & CAROLINE R. CURRIE, III
RANDELL E. HUMBLE, TRUSTEE UNDER THE WILL OF CLARIS EDWARDS HUMBLE
SPECIAL DITCH GRADE STA. 28+00 TO 30+85 -Y7- LT
SPECIAL DITCH GRADE STA. 30+00 TO 31+00 -Y7- RT
PHYLLIS W. & JASPER R. SKEEN
RANDELL E. HUMBLE
REMOVE
END PAVING
-Y7- POT Sta. 31+75.00
CLASS 'B' RIP RAP EST 1 TON EST 5 SY GEO
COLLAR AND EXTEND W/15" RCP-III
-Y7- POT Sta. 33+50.04
END CONSTRUCTION
-Y7- POT Sta. 32+60.00

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-24/CONST.24
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 24

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

INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.



NAD 83/95
PEGGY K. WEAVER
WALTER K. BURTON
JOYCE A. BURTON
HENRY A. SCOTT, JR.
GILDA F. SCOTT
-Y10- POT Sta. 10+00.00
BRENDA KENNEDY
GEORGE J. TAYLOR HEIRS
GEORGE J. TAYLOR
STEPHEN EDWARD BENOIT
LEIGH ANNE BENOIT
1/2 MILE CRITICAL AREA OFFSET
-Y10- PC Sta. 13+61.20
BEGIN CONSTRUCTION
-Y10- POC Sta. 14+65.00
-Y10- PT Sta. 16+31.68
THE BOBBY CARROLL AUMAN FAMILY FARM DEVELOPMENT LLC
DORIS JACKSON
CLIFTON PARK HOMEOWNERS ASSOCIATION, INC.
KIMBERLY S. PALSON-FLEMMING
ERIC H. FLEMMING
MATCHLINE SEE SHEET 17
-Y10- STA 16+50.00
LAT. 3' BASE DITCH W/5' BERM LINED W/CLASS 'B' RIP RAP STA. 15+75 TO 19+40 -Y10- LT SEE DETAIL #18 SEE SHEET 17 FOR QUANTITIES
-Y10-
PI Sta 14+96.45
Δ = 1° 32' 59.0" (LT)
D = 0° 34' 22.6"
L = 270.48'
T = 135.25'
R = 10,000.00'
SE = NC
DS = 50 mph
DETAIL #18
LATERAL BASE DITCH
(Not to Scale)
Min. D= 2.0 Ft.
Max. d= 2.0 Ft.
B= 3.0 Ft.
b= 5.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'B' Rip-Rap
FROM STA. 15+75 TO STA. 19+40 -Y10- LT
ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS
MATCHLINE SEE SHEET 17
-Y10- STA 25+65.00
SHERRILL L. AUMAN &
KITSIE GLORIA AUMAN
NCDOT
JOHN S. & ROSE M. MULESHE
PANSY CROUSE THO
DONALD HETHCOX
CLASS 'B' RIP RAP
EST 2 TONS
EST 7 SY GEO
THOMAS J. RANDO
WALTER A. & SYLVIA C. LIPPARD, JR
JEFFREY TYLER RUSH
SPECIAL LAT. 'V' DITCH STA. 29+50 TO 32+00 -Y10- LT SEE DETAIL #9
END CONSTRUCTION
-Y10- POT Sta. 32+00.00
WILLIAM L. SANDRIDGE
DETAIL #9
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Min. D= 1.5 Ft.
FROM STA. 29+50 TO STA. 32+00 -Y10- LT

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-25/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 16+00 to Sta. 17+50 -L- LT

FINAL GRADING EROSION CONTROL FOR CONSTRUCTION SHEET 04

BEGIN CONSTRUCTION
-Y1- POT Sta. 12+05.00
-Y1- PT Sta. 12+07.21

BEGIN PAVING
-Y1- POT Sta. 12+75.00

POT Sta. 10+00.00
BEGIN CONSTRUCTION
POT Sta. 10+25.00

POT Sta. 10+00.00

-L-POT Sta. 12+14.85
-RPD-POT Sta. 12+75.00

L-POS Sta. 14+99.76
-Y1-POT Sta. 16+00.00
-Y2-POT Sta. 10+00.00

BEGIN TIP PROJECT (U-2412A)
-L- POT Sta. 11+50.00

-L- TS Sta. 12+19.63

-Y2- PC Sta. 12+24.95

END PAVING
-Y2- POC Sta. 13+25.00

END CONSTRUCTION
-Y2- POC Sta. 13+30.00

-L- POS Sta. 19+08.00

-L- SC Sta. 16+13.63

END PAVING
-SERV- POT Sta. 12+30.00

END CONSTRUCTION
-SERV- POT Sta. 12+75.00
-SERV- POT Sta. 12+92.00

-Y2-

PI Sta 14+56.96
Δ = 7° 48' 26.0" (RT)
D = 1° 41' 06.6"
L = 463.29'
T = 232.00'
R = 3,400.00'
SE = SEE PLAN VIEW
DS = 40 mph

-L-

PIs Sta 14+82.43
Θs = 5° 43' 46.5"
Ls = 400.00'
LT = 266.81'
ST = 133.46'
RO = 114.28'

PI Sta 21+67.96
Δ = 30° 52' 35.9" (RT)
D = 2° 51' 53.2"
L = 1,077.80'
T = 552.33'
R = 2,000.00'
SE = 07
DS = 60 mph

2@72 x 12 x 3
ID 4.1

½ MILE CRITICAL AREA OFFSET

CLASS 'B' RIP RAP
EST 3 TONS
EST 11 SY GEO

NAD 83/95

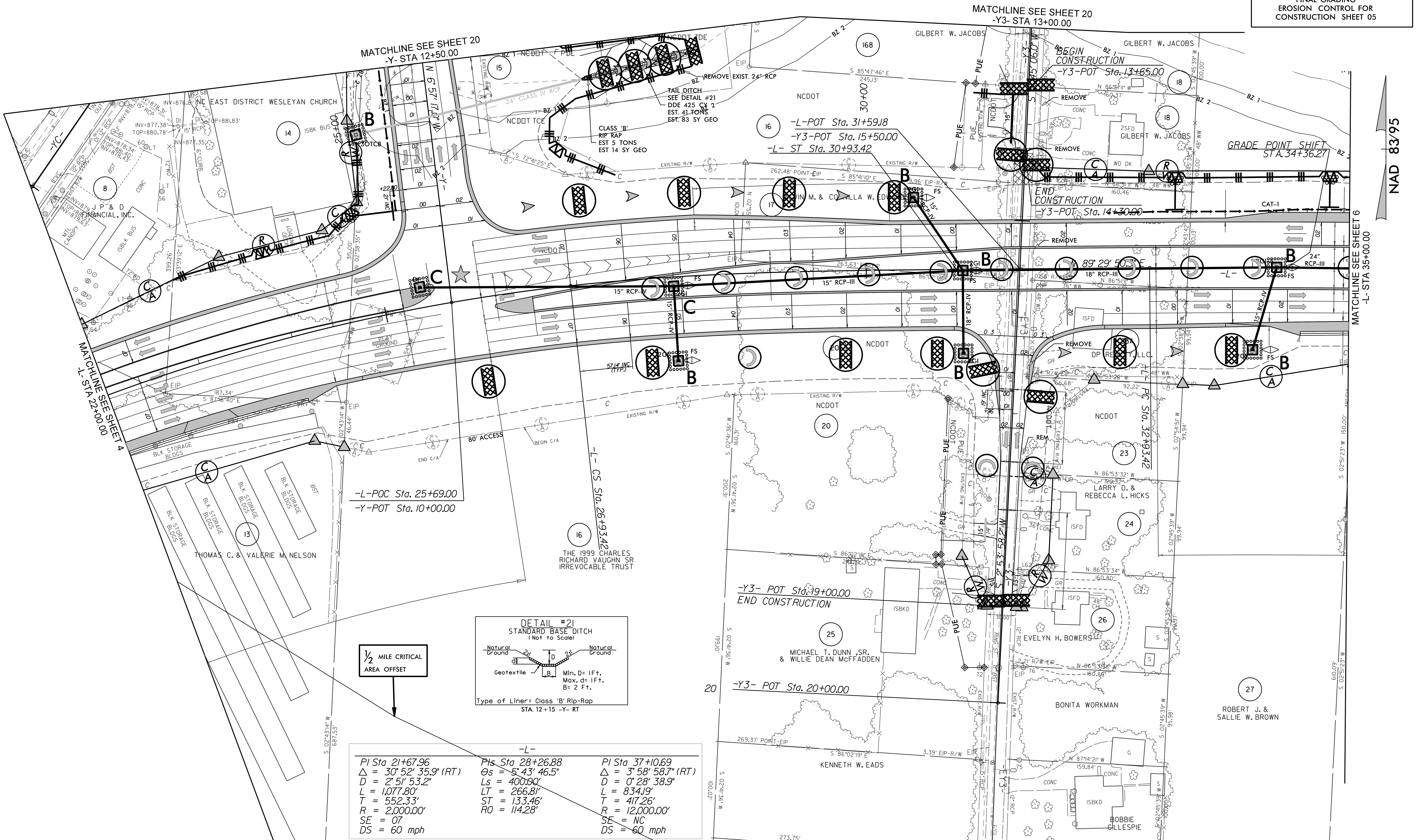
MATCHLINE SEE SHEET 5
-L- STA 22+00.00

RANDALL H. STROUD
JEANNE S. & FRANK B. LEE, JR
WILLIAM T. & BRENDA L. MITCHELL
JUDY D. SCARLETT
AL, B. & VERA P. HARRIS
STEVEN W., MICHAEL W. & RANDALL H. STROUD
WILLIAM T. MITCHELL
CDHP, LLC
WEST MOFFITT PROPERTIES, LLC
TIMOTHY E. & CYNTHIA B. BLACKMON
THOMAS C. & VALERIE M. NELSON
GRACE CHUCH OF HIGH POINT, INC.
WILLIAM & PAMELA VANBARK
NCDOT

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-26/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 11+00 to Sta. 12+50 -Y- LT
Sta. 32+50 to Sta. 35+00 -L- LT

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 05



MATCHLINE SEE SHEET 20
-Y- STA 12+50.00
MATCHLINE SEE SHEET 20
-Y3- STA 13+00.00
MATCHLINE SEE SHEET 4
-L- STA 22+00.00
MATCHLINE SEE SHEET 6
-L- STA 35+00.00
NAD 83/95
NC EAST DISTRICT WESLEYAN CHURCH
J P & D FINANCIAL, INC.
GILBERT W. JACOBS
NCDOT
TAIL DITCH
SEE DETAIL #21
DDE 425 CY
EST. 41 TONS
EST. 83 SY GEO
CLASS 'B'
RIP RAP
EST 5 TONS
EST 14 SY GEO
REMOVE EXIST. 24" RCP
-L-POT Sta. 31+59.18
-Y3-POT Sta. 15+50.00
-L- ST Sta. 30+93.42
BEGIN
CONSTRUCTION
-Y3-POT Sta. 13+65.00
END
CONSTRUCTION
-Y3-POT Sta. 14+30.00
GRADE POINT SHIFT
STA 34+36.27
REMOVE
15" RCP-IV
15" RCP-III
18" RCP-III
24" RCP-III
N 89° 29' 50" E
DP REALTY LLC
LARRY D. & REBECCA L. HICKS
-L- PC Sta. 32+93.42
-L-POC Sta. 25+69.00
-Y-POT Sta. 10+00.00
-L- CS Sta. 26+93.42
THE 1999 CHARLES RICHARD VAUGHN SR IRREVOCABLE TRUST
THOMAS C. & VALERIE M. NELSON
BLK STORAGE BLDGS
80' ACCESS
BEGIN C/A
END C/A
-Y3- POT Sta. 19+00.00
END CONSTRUCTION
-Y3- POT Sta. 20+00.00
MICHAEL T. DUNN SR. & WILLIE DEAN McFADDEN
EVELYN H. BOWERS
BONITA WORKMAN
ROBERT J. & SALLIE W. BROWN
KENNETH W. EADS
BOBBIE GILLESPIE
1/2 MILE CRITICAL AREA OFFSET

DETAIL #21
STANDARD BASE DITCH
(Not to Scale)

Natural Ground — Natural Ground — Geotextile

Min. D= 1Ft.
Max. d= 1Ft.
B= 2 Ft.

Type of Liner= Class 'B' Rip-Rap
STA. 12+15 -Y- RT

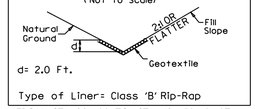
-L-

PI Sta 21+67.96	PIs Sta 28+26.88	PI Sta 37+10.69
Δ = 30° 52' 35.9" (RT)	θs = 5° 43' 46.5"	Δ = 3° 58' 58.7" (RT)
D = 2° 51' 53.2"	Ls = 400.00'	D = 0° 28' 38.9"
L = 1,077.80'	LT = 266.81'	L = 834.19'
T = 552.33'	ST = 133.46'	T = 417.26'
R = 2,000.00'	RO = 114.28'	R = 12,000.00'
SE = 07		SE = NC
DS = 60 mph		DS = 60 mph

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-27/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 06

DETAIL #2
TOE PROTECTION
(Not to Scale)

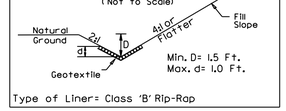


d= 2.0 Ft.

Type of Liner= Class 'B' Rip-Rap

FROM STA. 38+00 TO STA. 42+50 -L- LT
FROM STA. 40+50 TO STA. 42+00 -L- RT

DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)

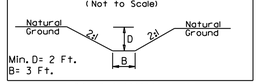


Min. D= 1.5 Ft.
Max. d= 1.0 Ft.

Type of Liner= Class 'B' Rip-Rap

FROM STA. 35+00 TO STA. 36+00 -L- RT

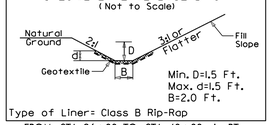
DETAIL #20
STANDARD BASE DITCH
(Not to Scale)



Min. D= 2 Ft.
B= 3 Ft.

FROM STA. 38+00 -L- LT

DETAIL #14
SPECIAL LATERAL BASE DITCH
(Not to Scale)

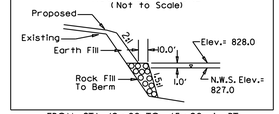


Min. D=1.5 Ft.
Max. d=1.5 Ft.
B=2.0 Ft.

Type of Liner= Class B Rip-Rap

FROM STA. 36+00 TO STA. 40+00 -L- RT

DETAIL #7
ROCK FILL IN POND
(Not to Scale)



FROM STA. 42+00 TO 45+20 -L- RT

NAD 83/95

MATCHLINE SEE SHEET 5
-L- STA 35+00.00

MATCHLINE SEE SHEET 7
-L- STA 48+50.00

BARRIER CORPORATION

28
AR STORAGE
ARMADILLO
GREENSBORO INC

RICHARD R. & MARY M. GLOVER

MTL STORAGE BLDG

ORVILLE WILLARD HOUSE
HISTORIC PROPERTY LIMITS
PER PRELIMINARY DESIGN

HEAD DITCH
SEE DETAIL #20
EST DDE= +/-6 SY

TOE PROTECTION
EST 257 TONS
EST 695 SY GEO
STA. 38+00 TO
42+50 -L- LT
SEE DETAIL #2

-L- PT Sta. 41+27.61

RETENTION POND

-L- Sta. 43+55.38

RICHARD R. & MARY M. GLOVER

EDWARD W. & ALICE H. HORNE

HARRELL G. & LEAH C. SMITH

JUSTIN W. & JESSICA O. STRICKLAND

33A

CANOPY

47 WW FENCE

REMOVE

SHOULDER BERM GUTTER
STA. 35+00 TO 45+00 -L- LT

DO NOT BURY INVERT

FUTURE WATER QUALITY EASEMENT
PB 138 PG 45

PERMANENT/PERPETUAL AND E/W EASEMENT

2GI W/FLAT GRATE

GREU TL-3

FS ROBERT J. & SALLIE W. BROWN

30

FS S 86°37'11" E

EXPRESS GUTTER C

END EXPRESSWAY GUTTER
LT -L- STA. 41+00

SBG STA 41+65
TO 45+00 -L- RT

JB W/ SLAB LID

+75.00
95.00' LT

CAT-1

TAPER

SPECIAL LAT. 'V' DITCH
LINED W/
CLASS 'B' RIP RAP
EST 18 TONS
EST 53 SY GEO
STA. 35+00
TO 36+00 -L- RT
SEE DETAIL #3

SPEC. LAT. 2' BASE DITCH LINED W/ CL 'B' RIP RAP
EST 260 TONS
EST 707 SY GEO
STA. 36+00 TO
40+00 -L- RT
SEE DETAIL #14

SIDNEY W., JR. & CYNTHIA T. YOUNG

ANDRE' & GEORGIA WHITE

ROBERT J. & SALLIE W. BROWN

JOYCE B. & NATASHA E. BASKINS

AGGIE R. EAVES

TERRY & LILLIE W. BUCHANAN

LARRY & MARCELLETTE B. McKINNEY

JACQUELINE L. HARRINGTON

KHAN & SHERRY KHAN

DO NOT BURY INVERT

CLASS 'I' RIP RAP
EST 26 TONS
EST 56 SY GEO

FLOATING TURBIDITY CURTAIN

ROCK FILL IN POND
SEE DETAIL #7

TOE PROTECTION
EST 86 TONS
EST 232 SY GEO
STA. 40+50 TO
42+00 -L- RT
SEE DETAIL #2

94 x 22 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
8 ft. weir
ID 6.5

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 35+00 to Sta. 43+00 -L- LT
Sta. 41+50 to Sta. 46+50 -L- RT

NOTE:
INSTALL SILT FENCE ABOVE ROCK FILL TO CONTAIN FILL SLOPE. SEE DETAIL #7 FOR APPROXIMATE LOCATION.

-L- SC Sta. 45+80.38

GROOME, HOFFMAN & BENCINI, INC

32

LOFTYVIEW DR

720' TAPER

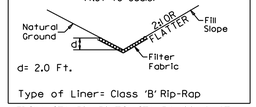
-L-

PI Sta 37+10.69	PIs Sta 45+05.39	PI Sta 49+09.57
Δ = 3° 58' 58.7" (RT)	Θs = 2° 13' 21.7"	Δ = 12° 57' 07.6" (LT)
D = 0° 28' 38.9"	Ls = 225.00'	D = 1° 58' 32.6"
L = 834.19'	LT = 150.01'	L = 655.56'
T = 417.26'	ST = 75.01'	T = 329.19'
R = 12,000.00'		R = 2,900.00'
SE = NC		SE = 055
DS = 60 mph		DS = 60 mph

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-28/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADING EROSION CONTROL FOR CONSTRUCTION SHEET 07

DETAIL #2
TOE PROTECTION
(Not to Scale)

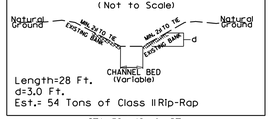


d= 2.0 Ft.

Type of Liner= Class 'B' Rip-Rap

FROM STA. 52+50 TO STA. 54+00 –L– LT

DETAIL #8
PIPE OUTLET CHANNEL
(Not to Scale)



Length=28 Ft.
d=3.0 Ft.
Est.= 54 Tons of Class II Rip-Rap

STA. 52+42 –L– RT

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE–C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 51+00 to Sta. 55+00 –L– LT
Sta. 51+00 to Sta. 54+50 –L– RT

TOE PROTECTION
STA. 52+50 TO 53+75 –L– LT
SEE DETAIL #2
EST 72 TONS
EST 193 SY GEO

SHOULDER BERM GUTTER
STA. 50+44 TO 54+60 –L– LT

SPECIAL DITCH GRADE
STA. 61+00 TO 63+00 –L– LT
SEE PROFILE FOR GRADE

–L–POT Sta. 58+96.70
–Y4–POT Sta. 17+50.00

–L– TS Sta. 59+49.14

–L– CS Sta. 52+35.95

–L– ST Sta. 54+60.95

–Y4– PC Sta. 18+61.51

–Y4– PT Sta. 20+17.06

–L– SC Sta. 61+49.14

MATCHLINE SEE SHEET 21
–Y4– STA 13+00.00

MATCHLINE SEE SHEET 6
–L– STA 48+50.00

MATCHLINE SEE SHEET 8
–L– STA 62+50.00

MATCHLINE SEE SHEET 21
–Y4– STA 23+00.00

NAD 83/95

4.0 inch Skimmer with 3.875 inch Orifice Diameter ID 7.4

4.0 inch Skimmer with 3.75 inch Orifice Diameter ID 7.5

–Y4–
PI Sta 19+39.39
△ = 7° 07' 47.5" (LT)
D = 4° 35' 01.2"
L = 155.55'
T = 77.88'
R = 1,250.00'
SE = 04
DS = 40 mph

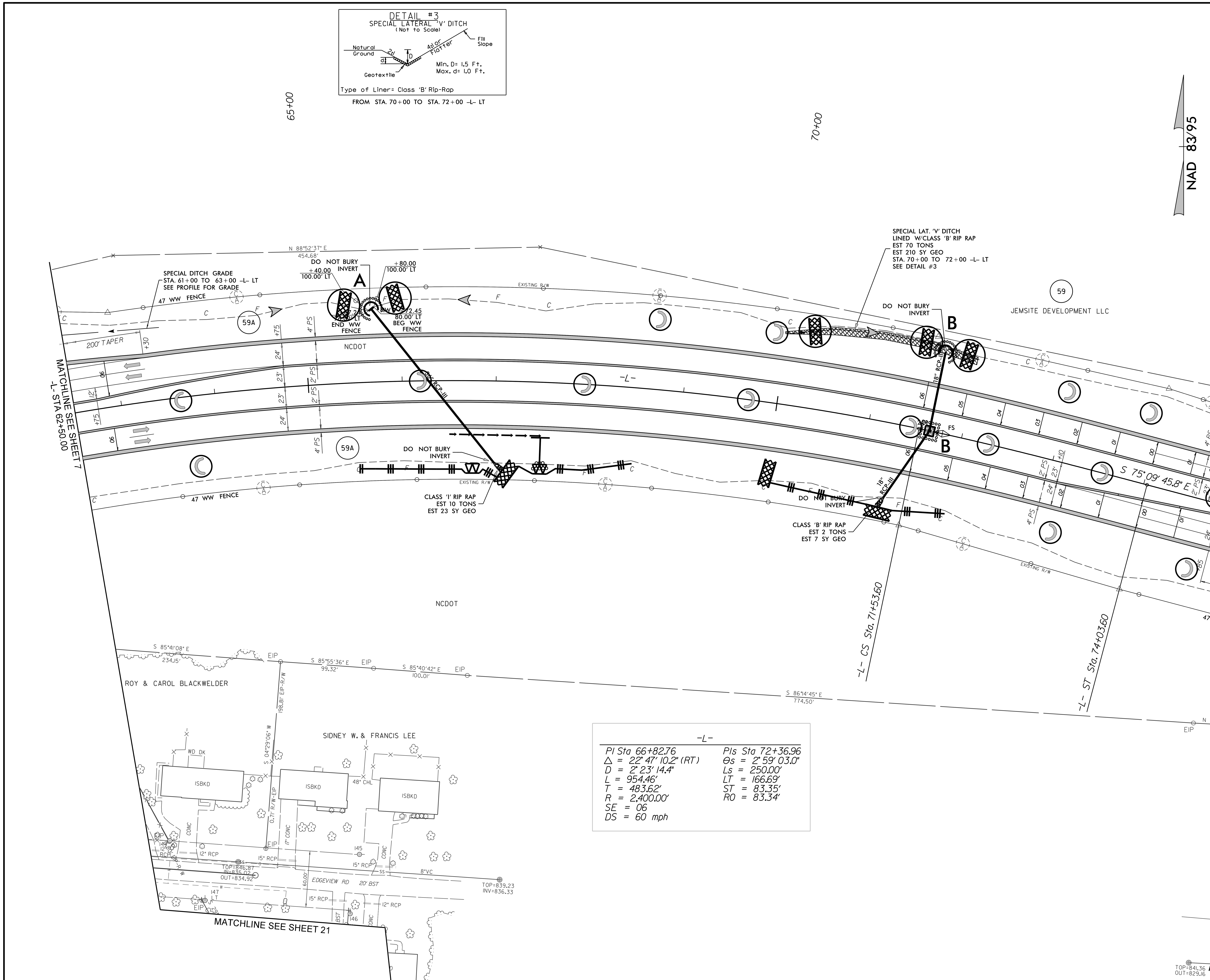
–L–				
PI Sta 49+09.57	PIs Sta 53+10.96	PIs Sta 61+15.83	PI Sta 66+82.76
△ = 12° 57' 07.6" (LT)	Θs = 2° 13' 21.7"	Θs = 2° 59' 03.0"	△ = 22° 47' 10.2" (RT)
D = 1° 58' 32.6"	Ls = 225.00'	Ls = 250.00'	D = 2° 23' 14.4"
L = 655.56'	LT = 150.01'	LT = 166.69'	L = 954.46'
T = 329.19'	ST = 75.01'	ST = 83.35'	T = 483.62'
R = 2,900.00'	R0 = 81.82'	R0 = 81.82'	R = 2,400.00'
SE = 055			SE = 06
DS = 60 mph			DS = 60 mph

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-29/CONST.08

R/W SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

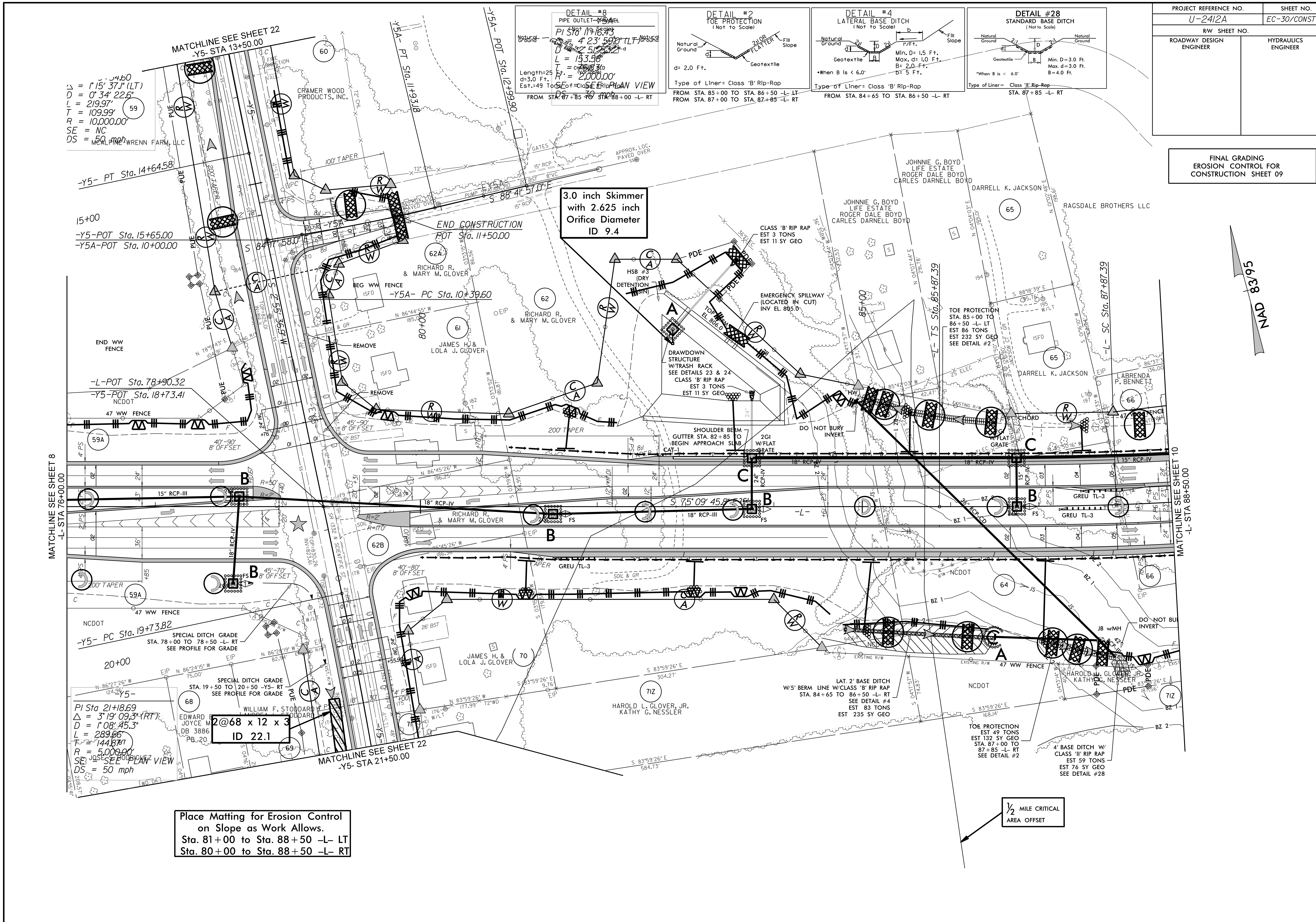
FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 08



DETAIL #3
SPECIAL LATERAL 'V' DITCH
(Not to Scale)
Natural Ground
Fill Slope
4:1 or Flatter
Min. D= 1.5 Ft.
Max. d= 1.0 Ft.
Geotextile
Type of Liner= Class 'B' Rip-Rap
FROM STA. 70+00 TO STA. 72+00 -L- LT
65+00
70+00
75+00
NAD 83/95
SPECIAL DITCH GRADE
STA. 61+00 TO 63+00 -L- LT
SEE PROFILE FOR GRADE
47 WW FENCE
DO NOT BURY INVERT
+40.00 100.00' LT
+80.00 100.00' LT
END WW FENCE
BEG WW FENCE
N 88°52'37" E 454.68'
SPECIAL LAT. 'V' DITCH
LINED W/CLASS 'B' RIP RAP
EST 70 TONS
EST 210 SY GEO
STA. 70+00 TO 72+00 -L- LT
SEE DETAIL #3
59
JEMSITE DEVELOPMENT LLC
59A
NCDOT
200' TAPER
MATCHLINE SEE SHEET 7
-L- STA 62+50.00
-L-
CLASS 'I' RIP RAP
EST 10 TONS
EST 23 SY GEO
CLASS 'B' RIP RAP
EST 2 TONS
EST 7 SY GEO
S 75°09' 45.8" E
S 78°20'39" E 979.77'
15" RCP-III
18" RCP-III
MATCHLINE SEE SHEET 9
-L- STA 76+00.00
-L- CS Sta. 71+53.60
-L- ST Sta. 74+03.60
S 85°41'08" E 234.15'
S 85°55'36" E 99.32'
S 85°40'42" E 100.01'
S 86°14'45" E 774.50'
N 86°41'25" W 75.02'
EIP
ROY & CAROL BLACKWELDER
SIDNEY W. & FRANCIS LEE
EDGEVIEW RD 20' BST
TOP=839.23 INV=836.33
TOP=841.36 OUT=829.16
MATCHLINE SEE SHEET 21
-L-
PI Sta 66+82.76
Δ = 22° 47' 10.2" (RT)
D = 2° 23' 14.4"
L = 954.46'
T = 483.62'
R = 2,400.00'
SE = 06
DS = 60 mph
PIs Sta 72+36.96
Θs = 2° 59' 03.0"
Ls = 250.00'
LT = 166.69'
ST = 83.35'
RO = 83.34'

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-30/CONST.09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 09

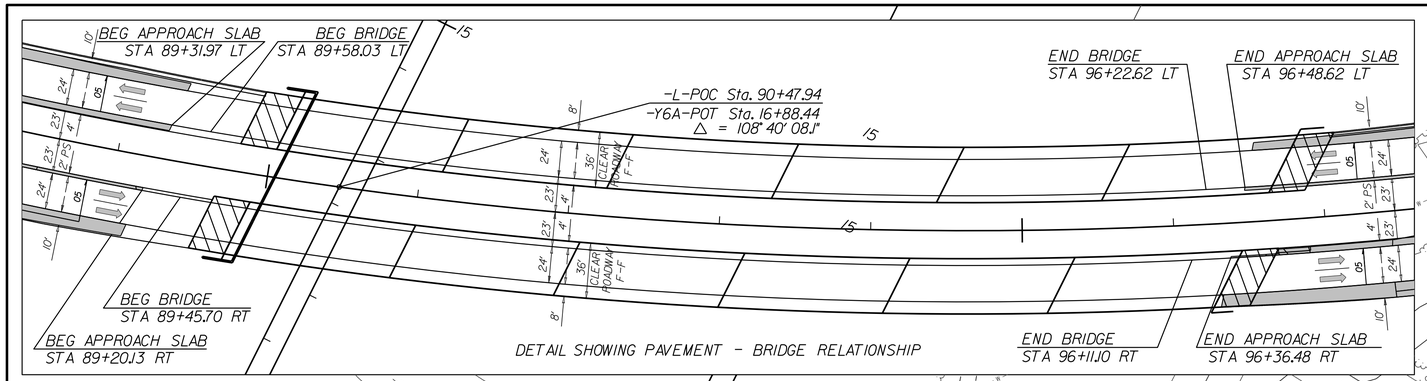


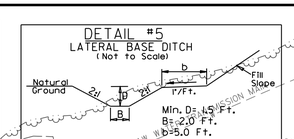
DETAIL #8
PIPE OUTLET
Length=25 Ft.
d=3.0 Ft.
FROM STA. 87+85 TO STA. 88+00 -L- RT
DETAIL #2
TOE PROTECTION
(Not to Scale)
Natural Ground
Geotextile
Fill Slope
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 85+00 TO STA. 86+50 -L- LT
FROM STA. 87+00 TO STA. 87+85 -L- RT
DETAIL #4
LATERAL BASE DITCH
(Not to Scale)
Min. D= 1.5 Ft.
Max. d= 1.0 Ft.
B= 2.0 Ft.
b= 5 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 84+65 TO STA. 86+50 -L- RT
DETAIL #28
STANDARD BASE DITCH
(Not to Scale)
Min. D=3.0 Ft.
Max. d=3.0 Ft.
B=4.0 Ft.
Type of Liner= Class 'II' Rip-Rap
STA. 87+85 -L- RT
MATCHLINE SEE SHEET 22
-Y5- STA 13+50.00
MATCHLINE SEE SHEET 8
-L- STA 76+00.00
MATCHLINE SEE SHEET 10
-L- STA 88+50.00
MATCHLINE SEE SHEET 22
-Y5- STA 21+50.00
3.0 inch Skimmer
with 2.625 inch
Orifice Diameter
ID 9.4
2@68 x 12 x 3
ID 22.1
END CONSTRUCTION
POT Sta. 11+50.00
-Y5- PT Sta. 14+64.58
-Y5-POT Sta. 15+65.00
-Y5A-POT Sta. 10+00.00
-Y5A- PC Sta. 10+39.60
-Y5A- PT Sta. 11+93.18
-L-POT Sta. 78+90.32
-Y5-POT Sta. 18+73.41
-Y5- PC Sta. 19+73.82
-L- TS Sta. 85+87.39
-L- SC Sta. 87+87.39
CLASS 'B' RIP RAP
EST 3 TONS
EST 11 SY GEO
EMERGENCY SPILLWAY
(LOCATED IN CUT)
INV EL. 805.0
DRAWDOWN STRUCTURE
W/TRASH RACK
SEE DETAILS 23 & 24
CLASS 'B' RIP RAP
EST 3 TONS
EST 11 SY GEO
TOE PROTECTION
STA. 85+00 TO
86+50 -L- LT
EST 86 TONS
EST 232 SY GEO
SEE DETAIL #2
SHOULDER BERM
GUTTER STA. 82+85 TO
BEGIN APPROACH SLAB
DO NOT BURY INVERT
SPECIAL DITCH GRADE
STA. 78+00 TO 78+50 -L- RT
SEE PROFILE FOR GRADE
SPECIAL DITCH GRADE
STA. 19+50 TO 20+50 -Y5- RT
SEE PROFILE FOR GRADE
LAT. 2' BASE DITCH
W/5' BERM LINE W/CLASS 'B' RIP RAP
STA. 84+65 TO 86+50 -L- RT
SEE DETAIL #4
EST 83 TONS
EST 235 SY GEO
TOE PROTECTION
EST 49 TONS
EST 132 SY GEO
STA. 87+00 TO
87+85 -L- RT
SEE DETAIL #2
4' BASE DITCH W/
CLASS 'II' RIP RAP
EST 59 TONS
EST 76 SY GEO
SEE DETAIL #28
1/2 MILE CRITICAL
AREA OFFSET
NAD 83/95
JOHNNIE G. BOYD LIFE ESTATE
ROGER DALE BOYD
CARLES DARNELL BOYD
DARRELL K. JACKSON
RAGSDALE BROTHERS LLC
RICHARD R. & MARY M. GLOVER
JAMES H. & LOLA J. GLOVER
HAROLD L. GLOVER, JR.
KATHY G. NESSLER
CRAMER WOOD PRODUCTS, INC.
MCALPINE WRENN FARM, LLC
NCDOT

Place Matting for Erosion Control
on Slope as Work Allows.
Sta. 81+00 to Sta. 88+50 -L- LT
Sta. 80+00 to Sta. 88+50 -L- RT

PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-31/CONSTJO
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10





4.0 inch Skimmer with 3.125 inch Orifice Diameter ID 10.4

Place Matting for Erosion Control on Slope as Work Allows.
Sta. 88+50 to Sta. 89+50 -L- LT
Sta. 88+50 to Sta. 89+00 -L- RT
Sta. 97+00 to Sta. 102+00 -L- LT
Sta. 96+50 to Sta. 100+50 -L- RT

-L-	
PI Sta 93+42.25	PIs Sta 99+51.38
Δ = 20° 57' 26.2" (LT)	Θs = 1° 54' 35.5"
D = 1° 54' 35.5"	Ls = 200.00'
L = 1,097.32'	LT = 133.34'
T = 554.86'	ST = 66.67'
R = 3,000.00'	R0 = 80.00'
SE = 05	
DS = 60 mph	

NAD 83/95

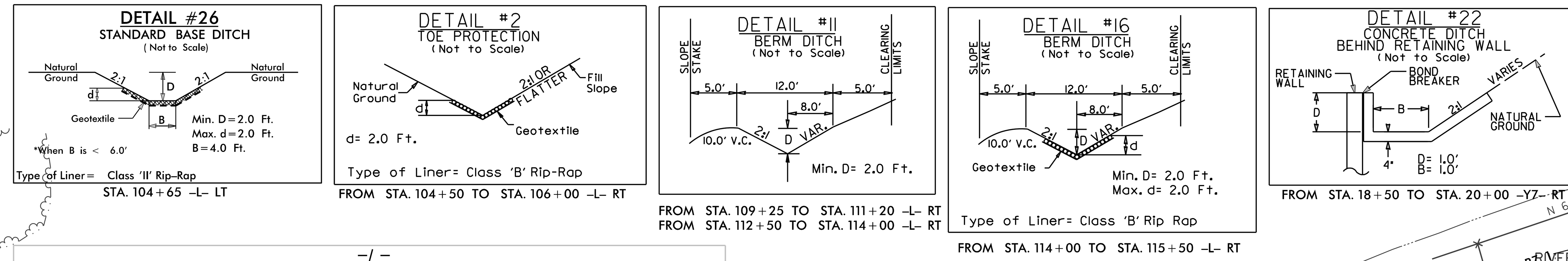
PROJECT REFERENCE NO.	SHEET NO.
U-2412A	EC-32/CONST.11

R/W SHEET NO.

ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADING EROSION CONTROL FOR CONSTRUCTION SHEET 11

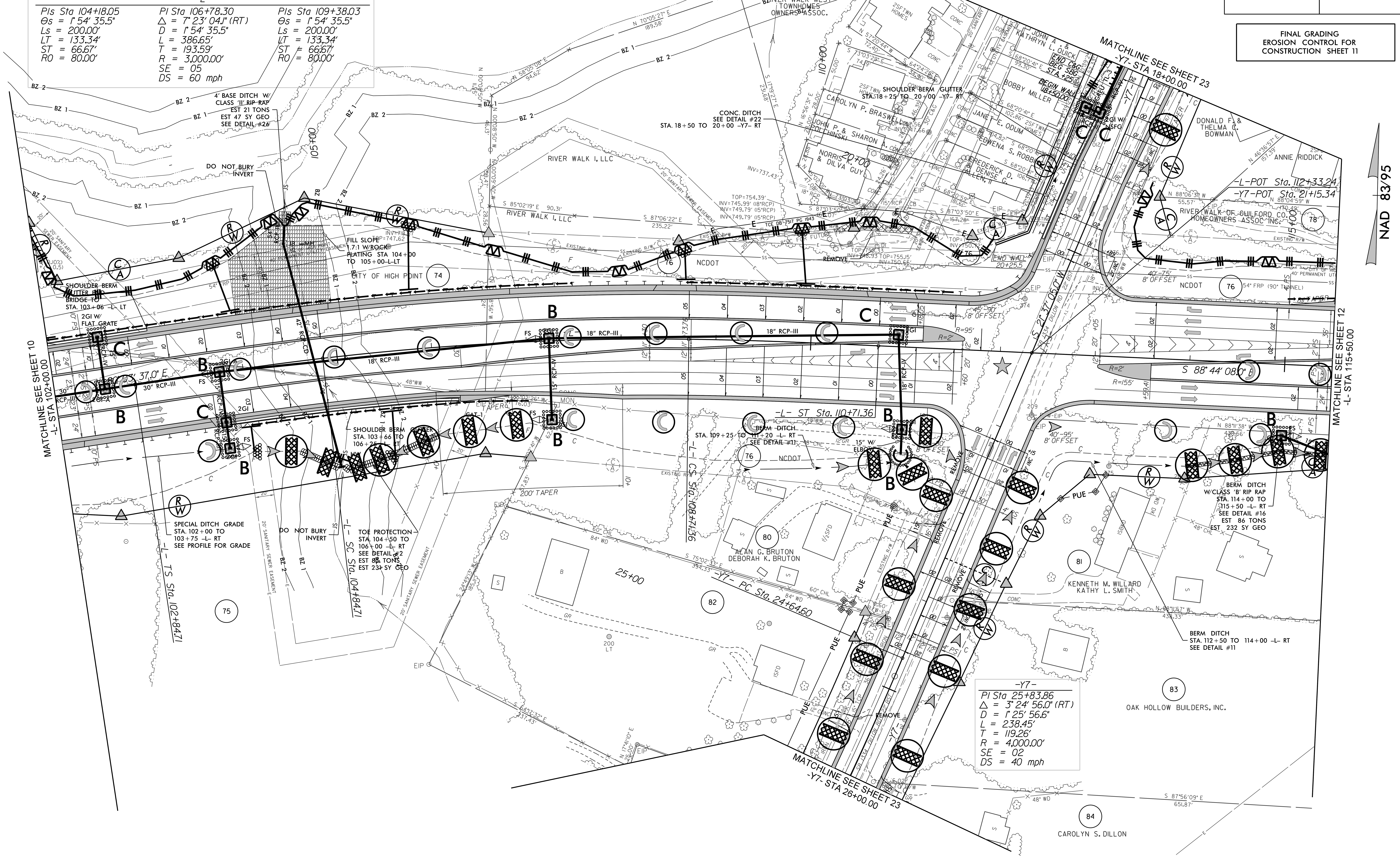
Place Matting for Erosion Control on Slope as Work Allows.
Sta. 102+00 to Sta. 107+50 –L– LT
Sta. 108+00 to Sta. 111+50 –L– LT
Sta. 115+00 to Sta. 115+50 –L– LT
Sta. 104+00 to Sta. 107+00 –L– RT



DETAIL #26
STANDARD BASE DITCH
(Not to Scale)
Natural Ground
2:1
D
d
Geotextile
B
Min. D=2.0 Ft.
Max. d=2.0 Ft.
B=4.0 Ft.
*When B is < 6.0'
Type of Liner= Class 'II' Rip-Rap
STA. 104+65 –L– LT
DETAIL #2
TOE PROTECTION
(Not to Scale)
Natural Ground
2:1 OR FLATTER
Fill Slope
Geotextile
d= 2.0 Ft.
Type of Liner= Class 'B' Rip-Rap
FROM STA. 104+50 TO STA. 106+00 –L– RT
DETAIL #11
BERM DITCH
(Not to Scale)
SLOPE STAKE
CLEARING LIMITS
5.0'
12.0'
8.0'
10.0' V.C.
D VAR.
Min. D= 2.0 Ft.
FROM STA. 109+25 TO STA. 111+20 –L– RT
FROM STA. 112+50 TO STA. 114+00 –L– RT
DETAIL #16
BERM DITCH
(Not to Scale)
Geotextile
Min. D= 2.0 Ft.
Max. d= 2.0 Ft.
Type of Liner= Class 'B' Rip Rap
FROM STA. 114+00 TO STA. 115+50 –L– RT
DETAIL #22
CONCRETE DITCH
BEHIND RETAINING WALL
(Not to Scale)
RETAINING WALL
BOND BREAKER
VARIES
NATURAL GROUND
D= 1.0'
B= 1.0'
FROM STA. 18+50 TO STA. 20+00 –Y7– RT

–L–		
PIs Sta 104+18.05	PI Sta 106+78.30	PIs Sta 109+38.03
θs = 1° 54' 35.5"	Δ = 7° 23' 04.1" (RT)	θs = 1° 54' 35.5"
Ls = 200.00'	D = 1° 54' 35.5"	Ls = 200.00'
LT = 133.34'	L = 386.65'	LT = 133.34'
ST = 66.67'	T = 193.59'	ST = 66.67'
RO = 80.00'	R = 3,000.00'	RO = 80.00'
	SE = 05	
	DS = 60 mph	

–Y7–
PI Sta 25+83.86
Δ = 3° 24' 56.0" (RT)
D = 1° 25' 56.6"
L = 238.45'
T = 119.26'
R = 4,000.00'
SE = 02
DS = 40 mph



NAD 83/95
MATCHLINE SEE SHEET 10 -L- STA 102+00.00
MATCHLINE SEE SHEET 12 -L- STA 115+50.00
MATCHLINE SEE SHEET 23 -Y7- STA 18+00.00
MATCHLINE SEE SHEET 23 -Y7- STA 26+00.00
4' BASE DITCH W/ CLASS 'II' RIP-RAP EST 21 TONS EST 47 SY GEO SEE DETAIL #26
DO NOT BURY INVERT
FILL SLOPE 1.7:1 W/ROCK PLATING STA 104+00 TO 105+00 -L- LT
SHOULDER BERM GUTTER END BRIDGE TO STA. 103+06 -L- LT
SHOULDER BERM GUTTER STA. 103+66 TO 106+20 -L- RT
SHOULDER BERM GUTTER STA. 18+25 TO 20+00 -Y7- RT
CONC. DITCH SEE DETAIL #22 STA. 18+50 TO 20+00 -Y7- RT
SPECIAL DITCH GRADE STA. 102+00 TO 103+75 -L- RT SEE PROFILE FOR GRADE
TOE PROTECTION STA. 104+50 TO 106+00 -L- RT SEE DETAIL #2 EST 88 TONS EST 231 SY GEO
BERM DITCH STA. 109+25 TO 111+20 -L- RT SEE DETAIL #11
BERM DITCH W/CLASS 'B' RIP RAP STA. 114+00 TO 115+50 -L- RT SEE DETAIL #16 EST 86 TONS EST 232 SY GEO
BERM DITCH STA. 112+50 TO 114+00 -L- RT SEE DETAIL #11
-L- TS Sta. 102+84.71
-L- SC Sta. 104+84.71
-L- CS Sta. 108+71.36
-L- ST Sta. 110+71.36
-L- POT Sta. 112+33.24
-Y7- POT Sta. 21+15.34
-Y7- PC Sta. 24+64.60
RIVER WALK I, LLC
RIVER WALK WEST TOWNHOMES OWNERS ASSOC.
RIVER WALK OF GUILFORD CO. HOMEOWNERS ASSOC. INC.
CITY OF HIGH POINT
NCDOT
ALAN G. BRUTON
DEBORAH K. BRUTON
KENNETH M. WILLARD
KATHY L. SMITH
OAK HOLLOW BUILDERS, INC.
CAROLYN S. DILLON
DONALD F. & THELMA G. BOWMAN
ANNIE RIDDICK
JOHN A. & KATHRYN L. QUICK
BOBBY MILLER
CAROLYN P. BRASWELL
NORRIS & DILVA GUY
18" RCP-III
30" RCP-III
200' TAPER