TIP PROJECT: R-3432

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-3432	EC-1	

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

STATE OF NORTH CAROLINA

DIVISION OF HIGHWAYS

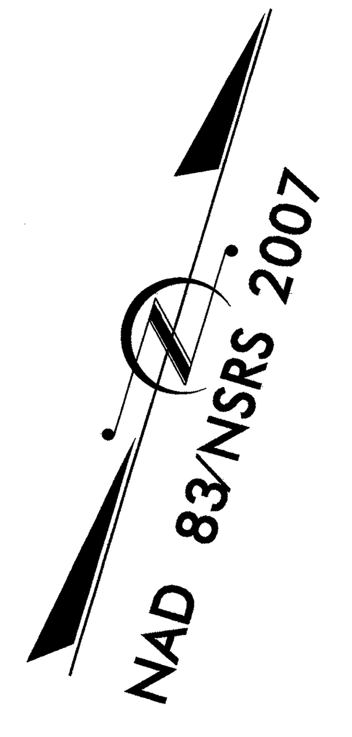
PLAN FOR PROPOSED

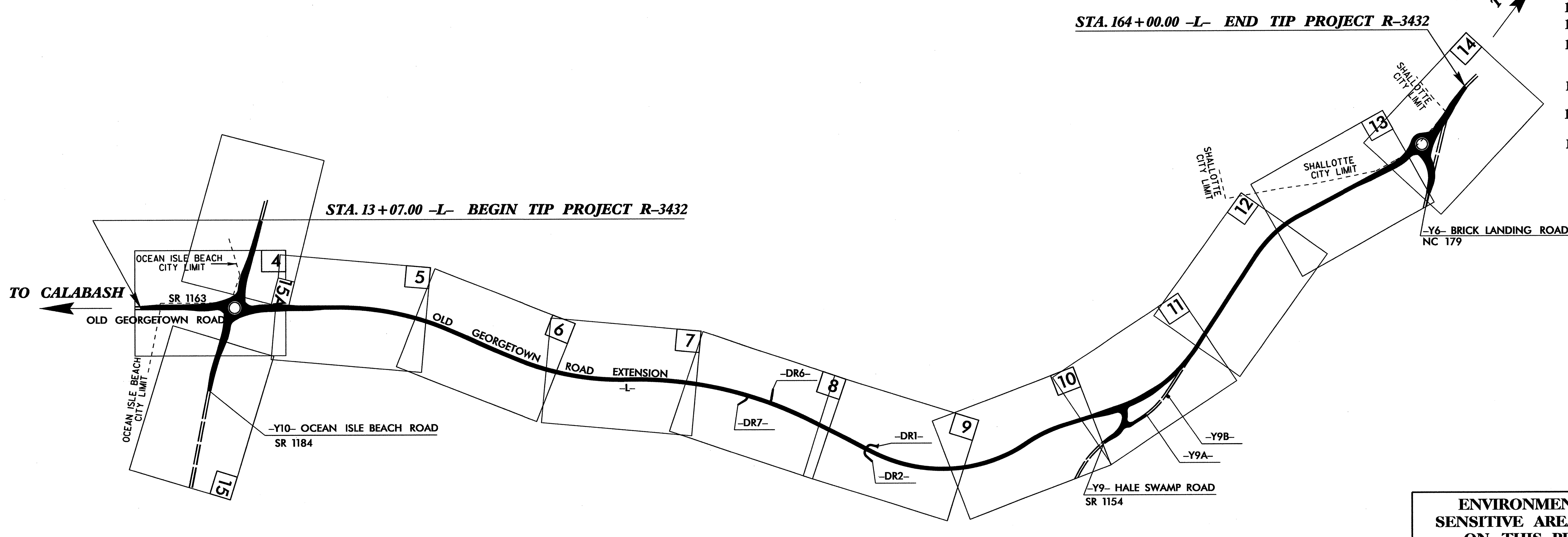
HIGHWAY EROSION CONTROL

BRUNSWICK COUNTY

LOCATION: SR 1163 (OLD GEORGETOWN ROAD EXTENSION) FROM SR 1184 (OCEAN ISLE BEACH ROAD) TO NC 179

TYPE OF WORK: GRADING, DRAINAGE, AND PAVING





EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
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	
	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.

HIGH QUALITY WATER(S) EXIST ON THIS PROJECT

High Quality Water Zone(s) Exist
From Sta. Begin
to Sta. End
Refer To E. C. Special Provisions for Special Considerations.

GRAPHIC SCALE

0

PLANS

0

PROFILE (HORIZONTAL)

0

PROFILE (VERTICAL)

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared In the Office of:

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

2012 STANDARD SPECIFICATIONS

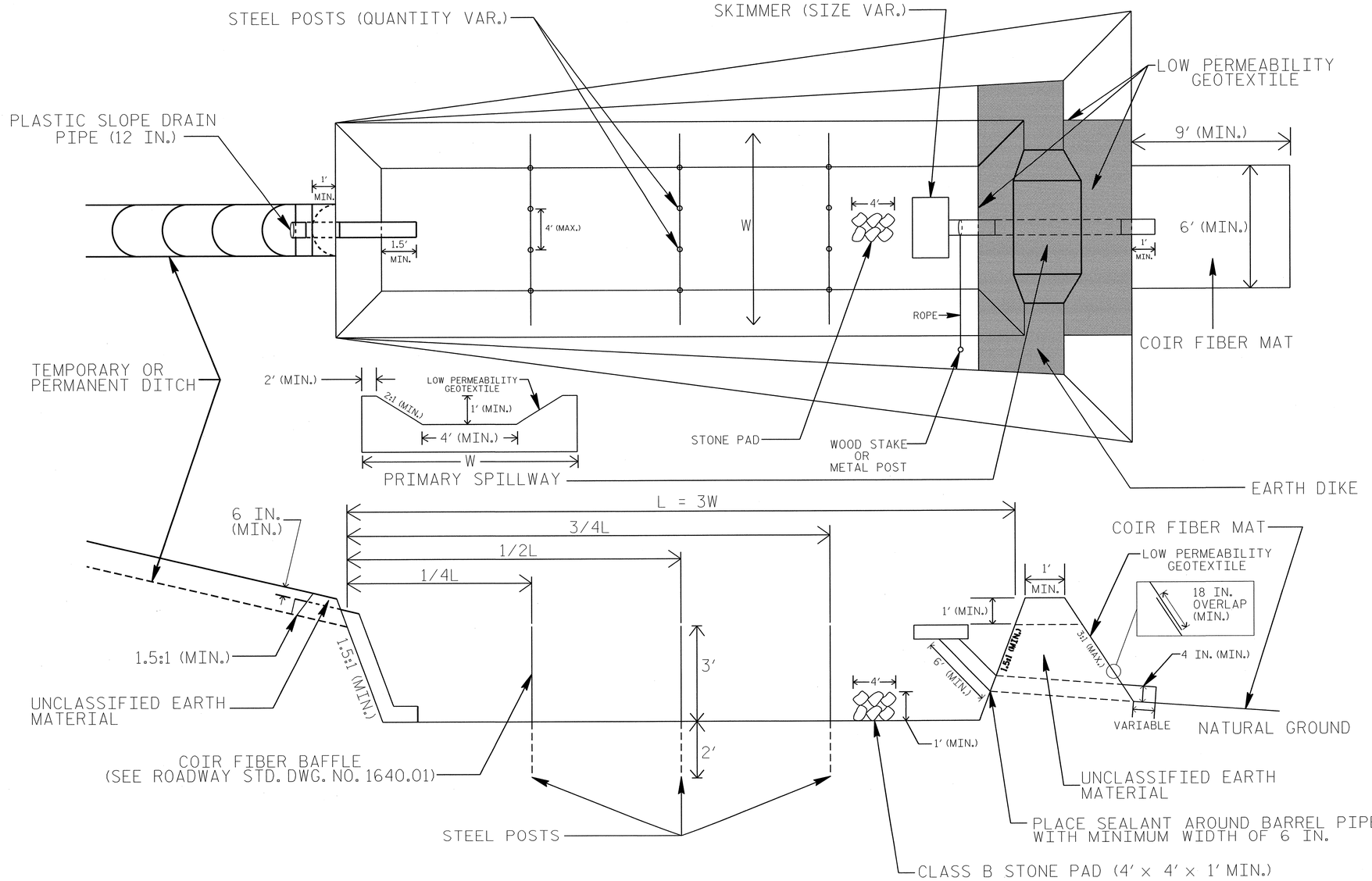
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

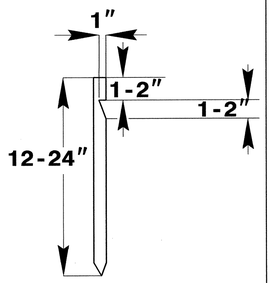
1604.01	Railroad Erosion Control Detail	1632.01	Rock Inlet Sediment Trap Type A
1605.01	Temporary Silt Fence	1632.02	Rock Inlet Sediment Trap Type B
1606.01	Special Sediment Control Fence	1632.03	Rock Inlet Sediment Trap Type C
1607.01	Gravel Construction Entrance	1633.01	Temporary Rock Silt Check Type 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		

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

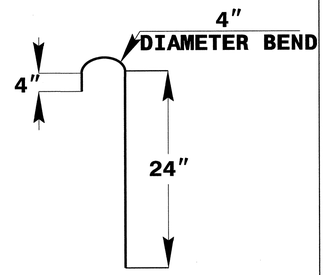
SKIMMER BASIN WITH BAFFLES DETAIL (EAST)



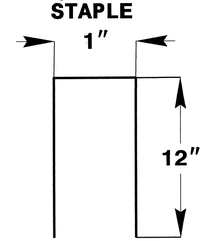
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

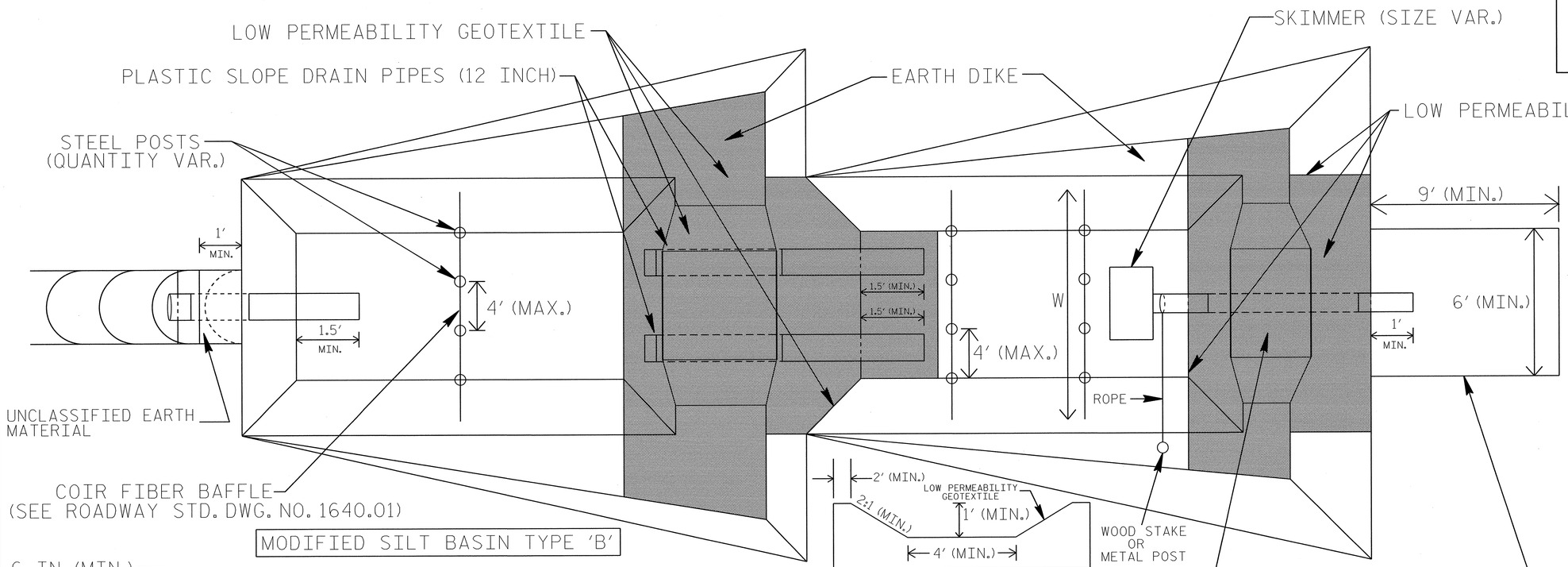
NOTES

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/0.4, 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. LOW PERMEABILITY GEOTEXTILE FOR PRIMARY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

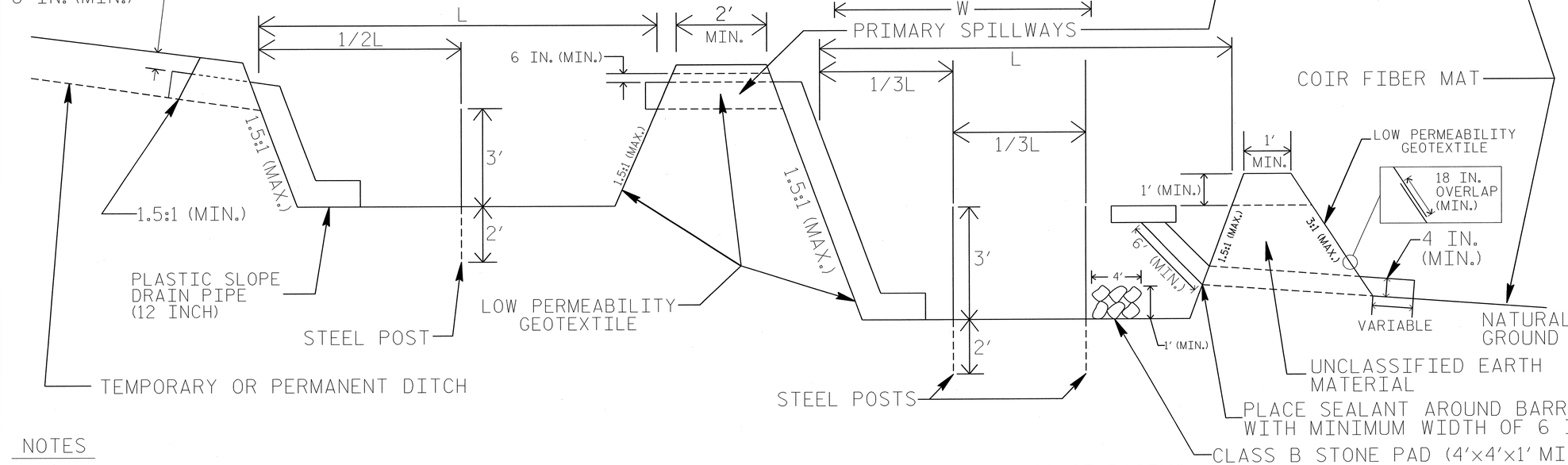
NOT TO SCALE

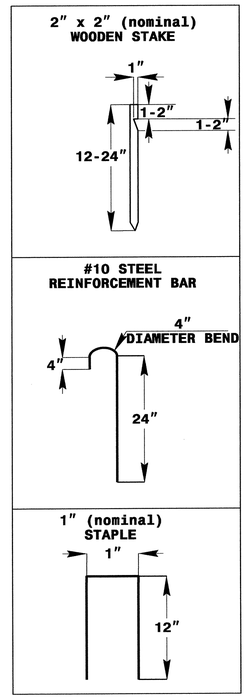
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TIERED SKIMMER BASIN DETAIL (EAST)



MODIFIED SILT BASIN TYPE 'B'





COIR FIBER MAT ANCHOR OPTIONS

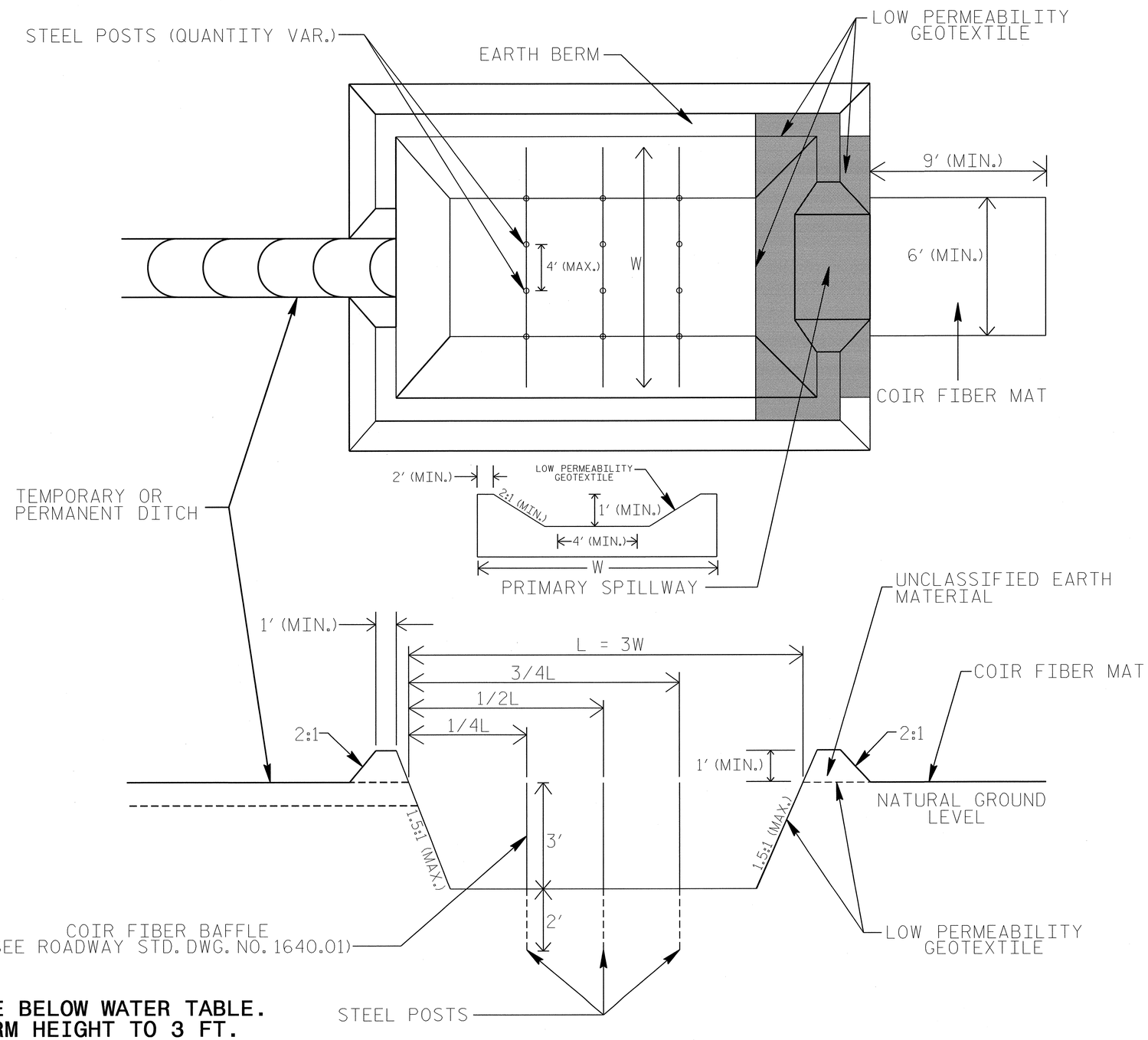
NOTES

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 LENGTHS (FT.) USING Q/0.4, WHERE Q IS FLOW RATE (CFS) INTO UPPER BASIN.
6. LOW PERMEABILITY GEOTEXTILE FOR PRIMARY SPILLWAYS SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

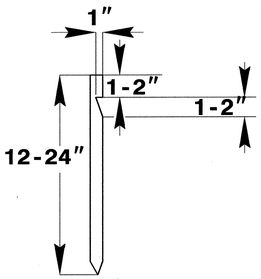
NOT TO SCALE

INFILTRATION BASIN WITH BAFFLES DETAIL (EAST)

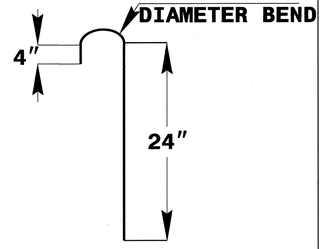
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



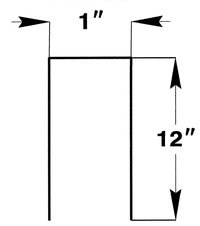
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

NOT TO SCALE

NOTES

1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.
4. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
5. DETERMINE PRIMARY SPILLWAY LENGTH (FT.) USING Q/0.4, WHERE Q IS FLOW RATE (CFS) INTO BASIN.

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

BORROW PIT DEWATERING BASIN DETAIL

GENERAL NOTES:

DETERMINE BORROW PIT DEWATERING BASIN SIZE USING V = 8.0203 * Q * T, WHERE V IS VOLUME (FT^3), Q IS PUMP FLOW RATE (GPM), AND T IS DEWATERING TIME (HR). USE MAXIMUM FLOW RATE OF 1000 GPM AND A MINIMUM DEWATERING TIME OF 2 HOURS.

RISER SHALL BE A NON-PERFORATED, SMOOTH OR CORRUGATED MATERIAL WITH A FLASHBOARD OPTION.

CONSTRUCT THE COIR FIBER BAFFLE IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 1640.01 AND WITH MATERIAL THAT MEETS THE SPECIFICATIONS OF ROADWAY STANDARD 1060-14.

PROVIDE 5′ STEEL POSTS OF THE SELF-FASTENER ANGLE STEEL TYPE. INSTALL STEEL POSTS WITH NO MORE THAN 3′ OF THE POST APPEARING ABOVE THE GROUND.

ATTACH THE COIR FIBER MAT TO THE STEEL POSTS WITH WIRE OR OTHER ACCEPTABLE MEANS AND STAPLED INTO THE BOTTOM AND SIDE SLOPES OF THE BASIN WITH 12″ STAPLES.

INSTALL TYPE 2 GEOTEXTILE ON SIDESLOPES AND BOTTOM OF BASIN AT INLET AS SHOWN IN THE DETAIL.

USE THE TYPICAL SECTION SHOWN FOR THE BORROW PIT DEWATERING BASIN AS A GUIDE. THE BASIN MAY HAVE ANY TYPE CONFIGURATION AS LONG AS SUFFICIENT VOLUME IS PROVIDED AND PROVISIONS ARE MADE FOR A NON-PERFORATED RISER.

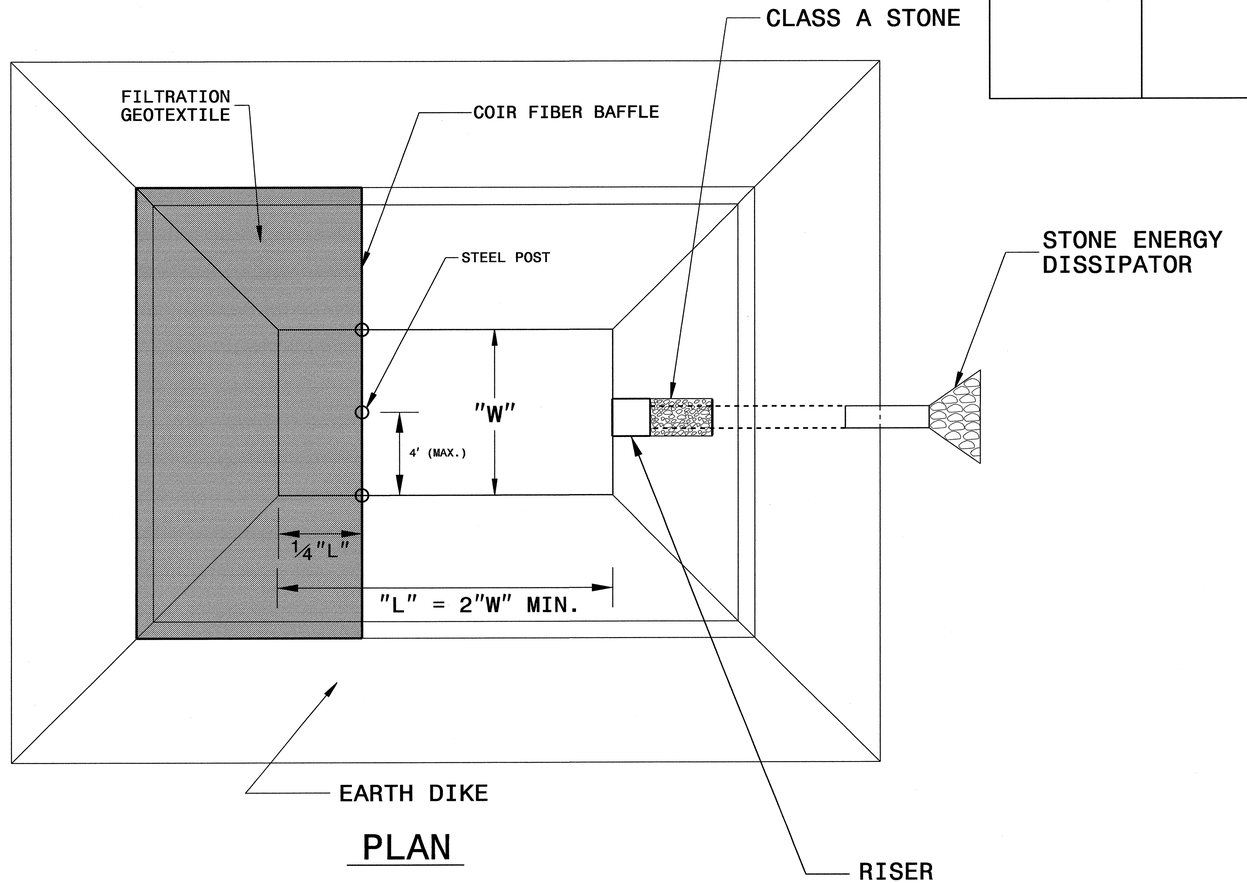
DO NOT EXCEED 3½ FT. IN HEIGHT FOR THE EARTH DIKES REQUIRED FOR BORROW PIT DEWATERING BASIN.

THE BORROW PIT DEWATERING BASIN SIZE IS VARIABLE AND DEPENDENT ON SPECIFIC SITE REQUIREMENTS AS WELL AS PROPOSED CONSTRUCTION OPERATIONS.

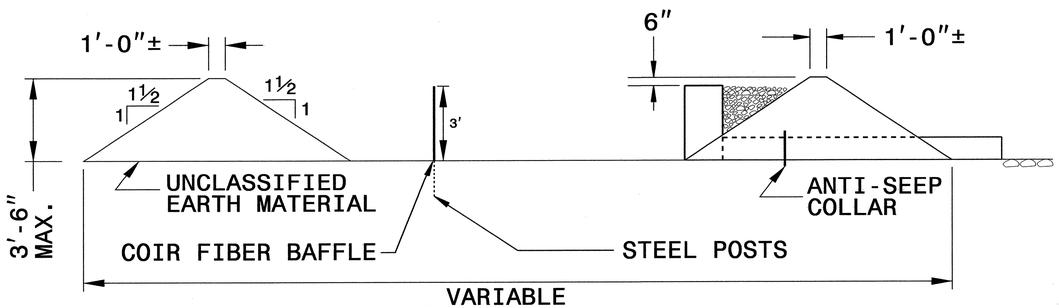
SUBMIT THE SIZE, LOCATION AND RISER PIPE MATERIAL FOR APPROVAL PRIOR TO CONSTRUCTION.

PUMP THE EFFLUENT INTO THE BORROW PIT DEWATERING BASIN TO A MAXIMUM DEPTH OF 6 IN. BELOW TOP OF EARTH DIKE.

PROVIDE A STONE ENERGY DISSIPATOR PAD AT THE OUTLET OF THE PUMP DISCHARGE HOSE AND OUTLET OF THE RISER BARREL IN ACCORDANCE WITH ROADWAY STANDARD DRAWING 876.02 FOR OUTLET W/O DITCH.



PLAN

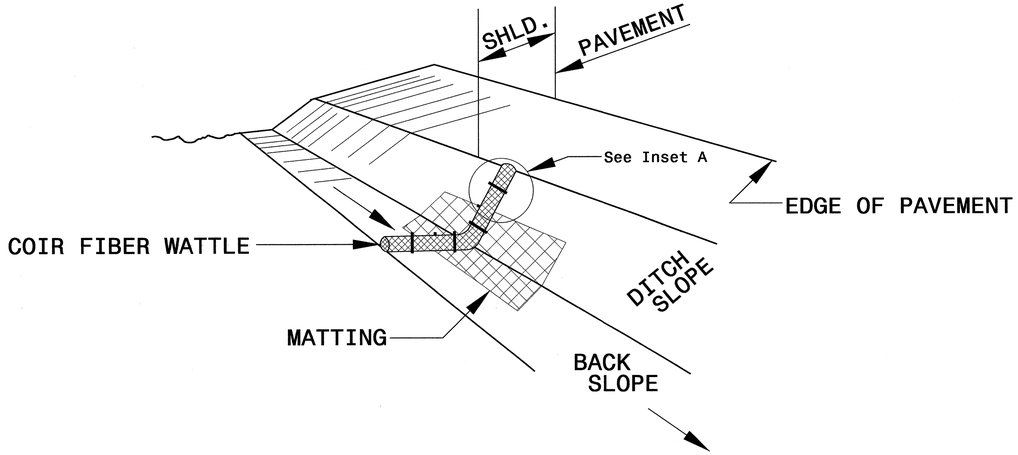


TYPICAL SECTION VIEW

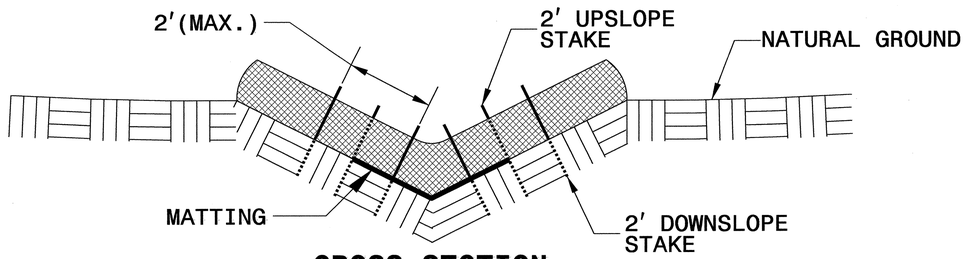
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

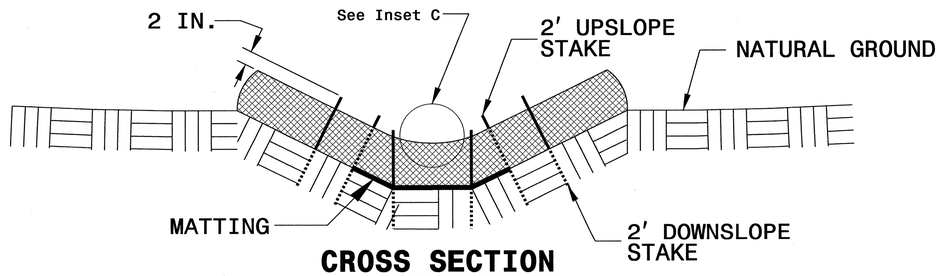
COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



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.

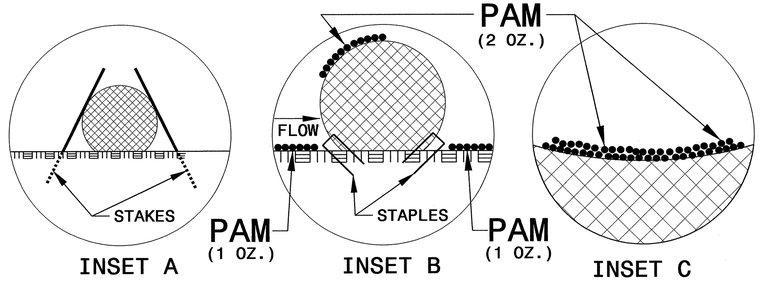
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

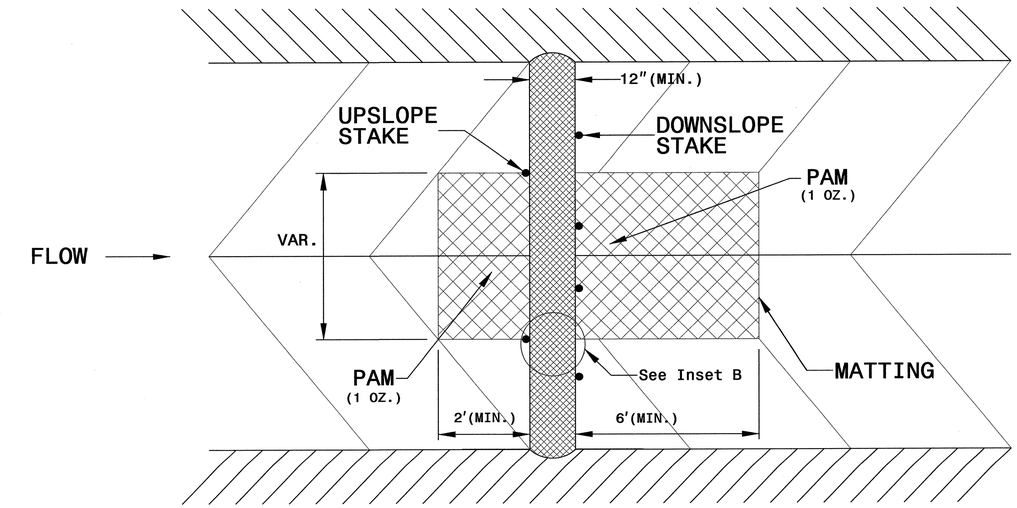
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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.

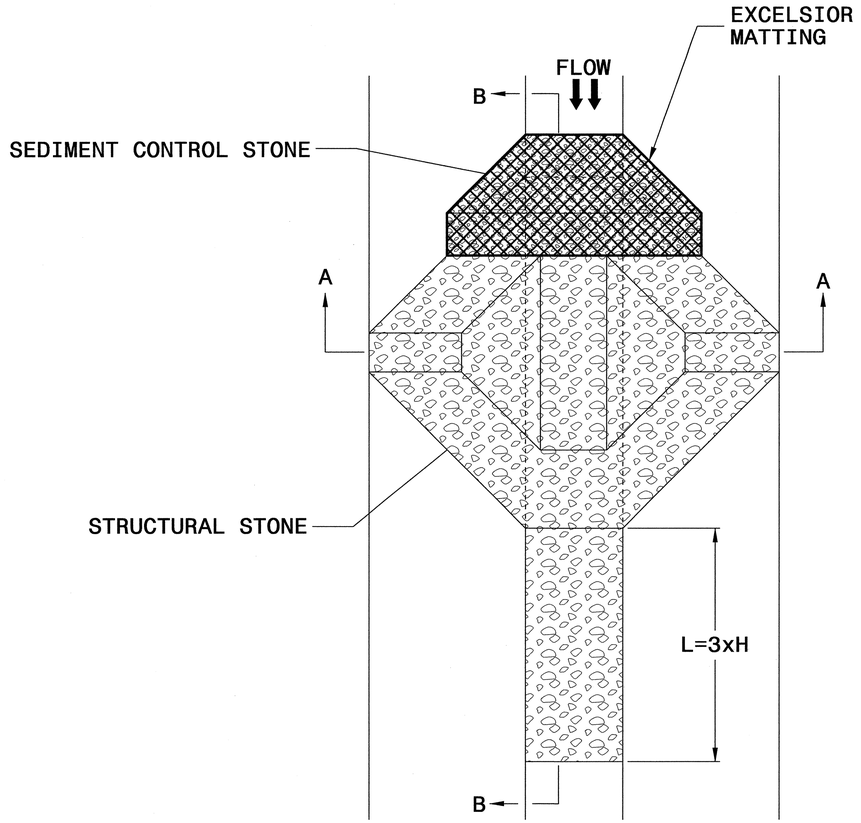




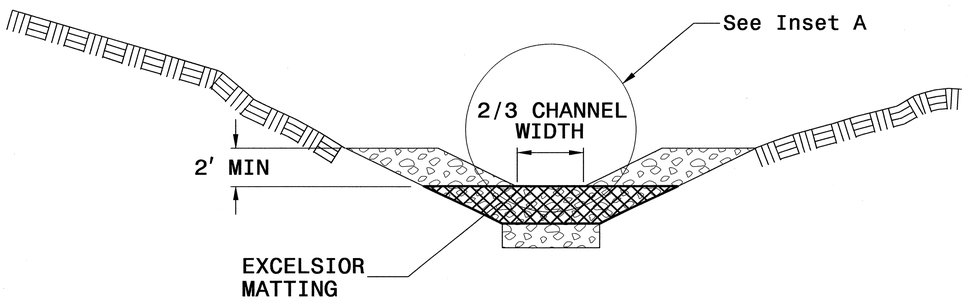
TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-2E
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN



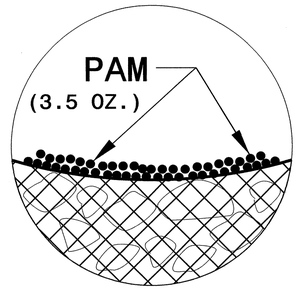
SECTION A-A

NOTES

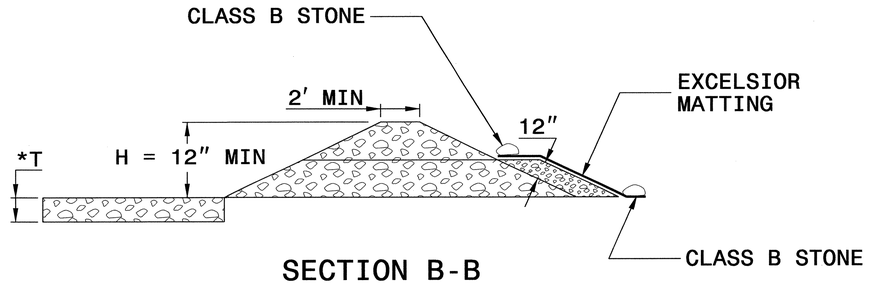
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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 3.5 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

*T = 12" MIN., 18" MAX.

NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-3432	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	20+50	LT	855
4	-L-	14+00	14+50	RT	35
4	-L-	20+00	21+00	RT	35
4	-L-	24+00	26+50	RT	405
4	-L-	24+00	27+27	LT	505
4	-Y10-	20+00	22+50	LT	540
4	-Y10-	25+03	29+50	RT	1560
4	-Y10-	25+03	28+96	LT	485
9	-L-	88+50	91+50	RT	605
9	-L-	88+50	93+00	LT	905
9	-L-	91+50	94+50	RT	485
9	-L-	95+50	99+00	RT	565
10	-L-	101+00	103+50	LT	320
10	-L-	105+50	111+50	RT	1600
10	-L-	105+50	107+00	LT	315
11	-L-	127+00	128+00	LT	205
11	-Y9-	11+11	12+92	RT	145
11	-Y9-	12+92	14+00	RT	90
11	-Y98-	10+20	10+40	RT	20
11	-Y98-	10+20	10+40	LT	20
15	-Y10-	30+00	33+50	RT	370
15	-Y10-	30+00	33+50	LT	285
			SUBTOTAL		10350
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					10490
				TOTAL	20840
				SAY	21000

PERMANENT SOIL REINFORCEMENT MAT

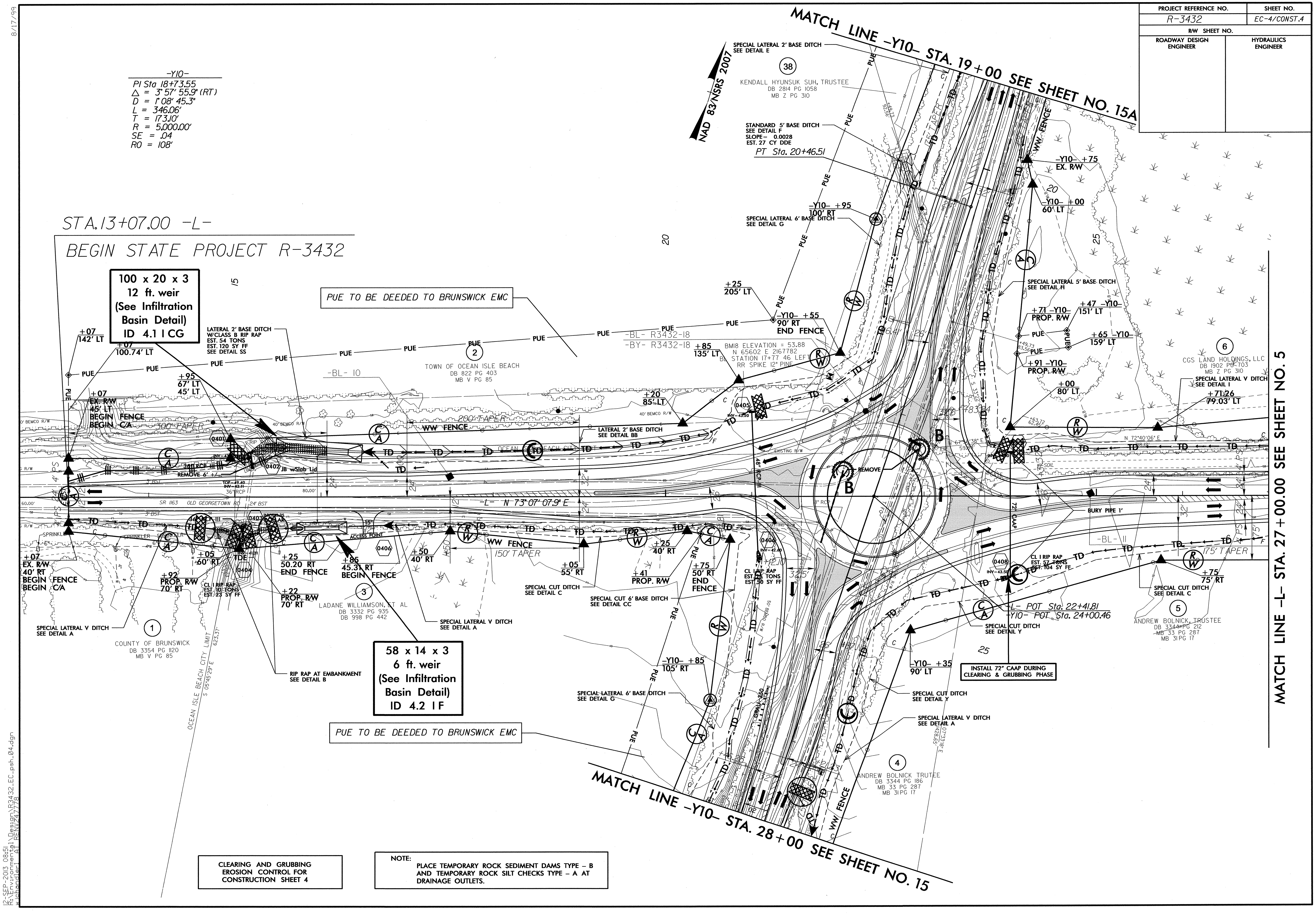
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
9	-L-	93+00	94+50	LT	245
9	-L-	94+50	96+50	LT	325
10	-L-	107+00	108+50	LT	400
			SUBTOTAL		970
		ADDITIONAL PSRM TO BE INSTALLED			0
				TOTAL	970
				SAY	1000

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-3A
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.



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12-SEP-2013 08:51
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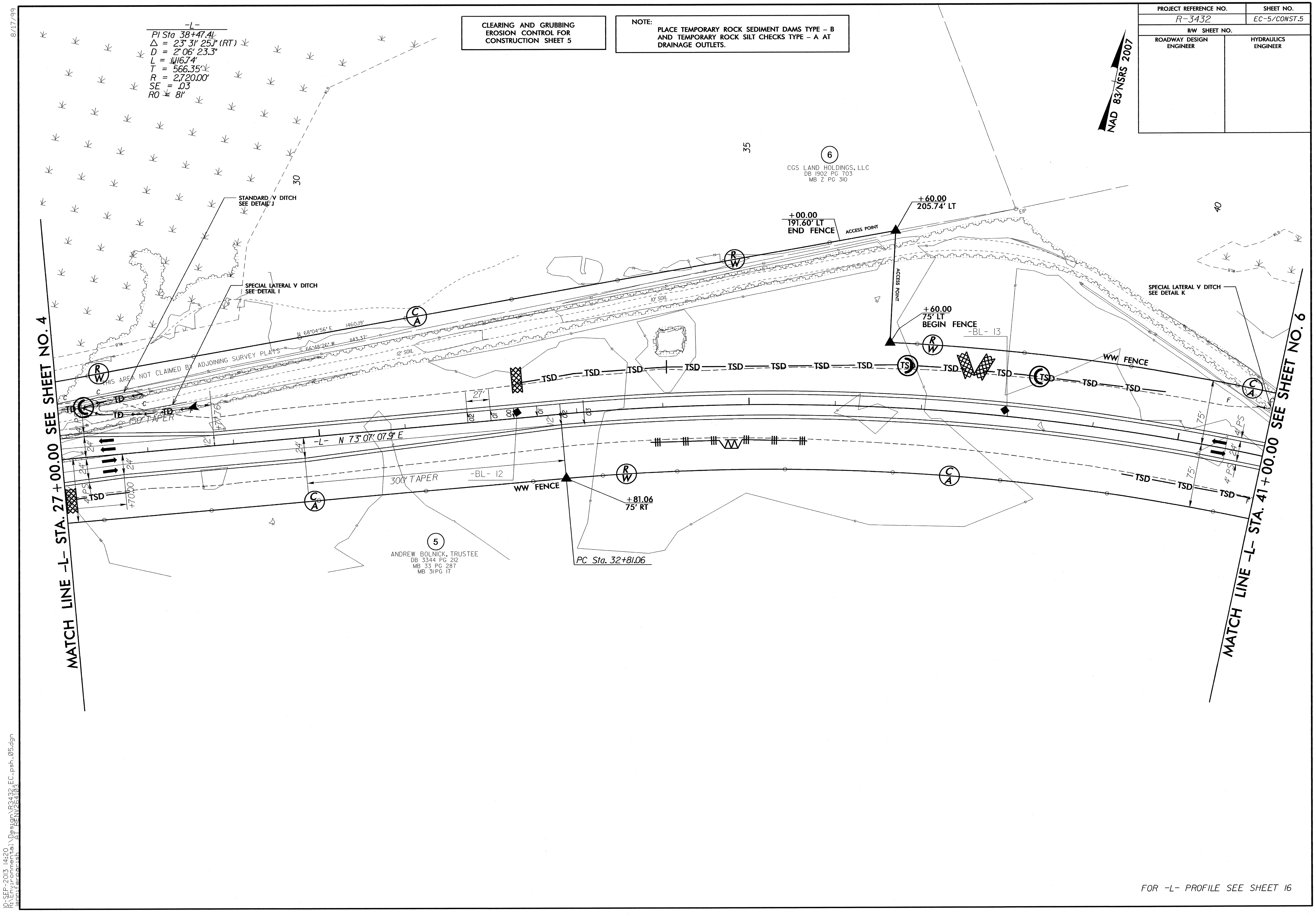
PROJECT REFERENCE NO.
R-3432
SHEET NO.
EC-5/CONST.5
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
NAD 83/NSRS 2007
-L-
PI Sta 38+47.41
Δ = 23° 31' 25.1" (RT)
D = 2° 06' 23.3"
L = 1116.74'
T = 566.35'
R = 2,720.00'
SE = .03
RO = 81'
STANDARD V DITCH
SEE DETAIL J
SPECIAL LATERAL V DITCH
SEE DETAIL I
SPECIAL LATERAL V DITCH
SEE DETAIL K
THIS AREA NOT CLAIMED BY ADJOINING SURVEY PLATS
6
CGS LAND HOLDINGS, LLC
DB 1902 PG 703
MB Z PG 310
5
ANDREW BOLNICK, TRUSTEE
DB 3344 PG 212
MB 33 PG 287
MB 31 PG 17
+00.00
191.60' LT
END FENCE
+60.00
205.74' LT
ACCESS POINT
+60.00
75' LT
BEGIN FENCE
-BL- 13
-BL- 12
WW FENCE
+81.06
75' RT
PC Sta. 32+81.06
-L- N 73° 07' 07.9" E
300' TAPER
150' TAPER
TSD
TD
MATCH LINE -L- STA. 27+00.00 SEE SHEET NO. 4
MATCH LINE -L- STA. 41+00.00 SEE SHEET NO. 6
FOR -L- PROFILE SEE SHEET 16
8/17/99
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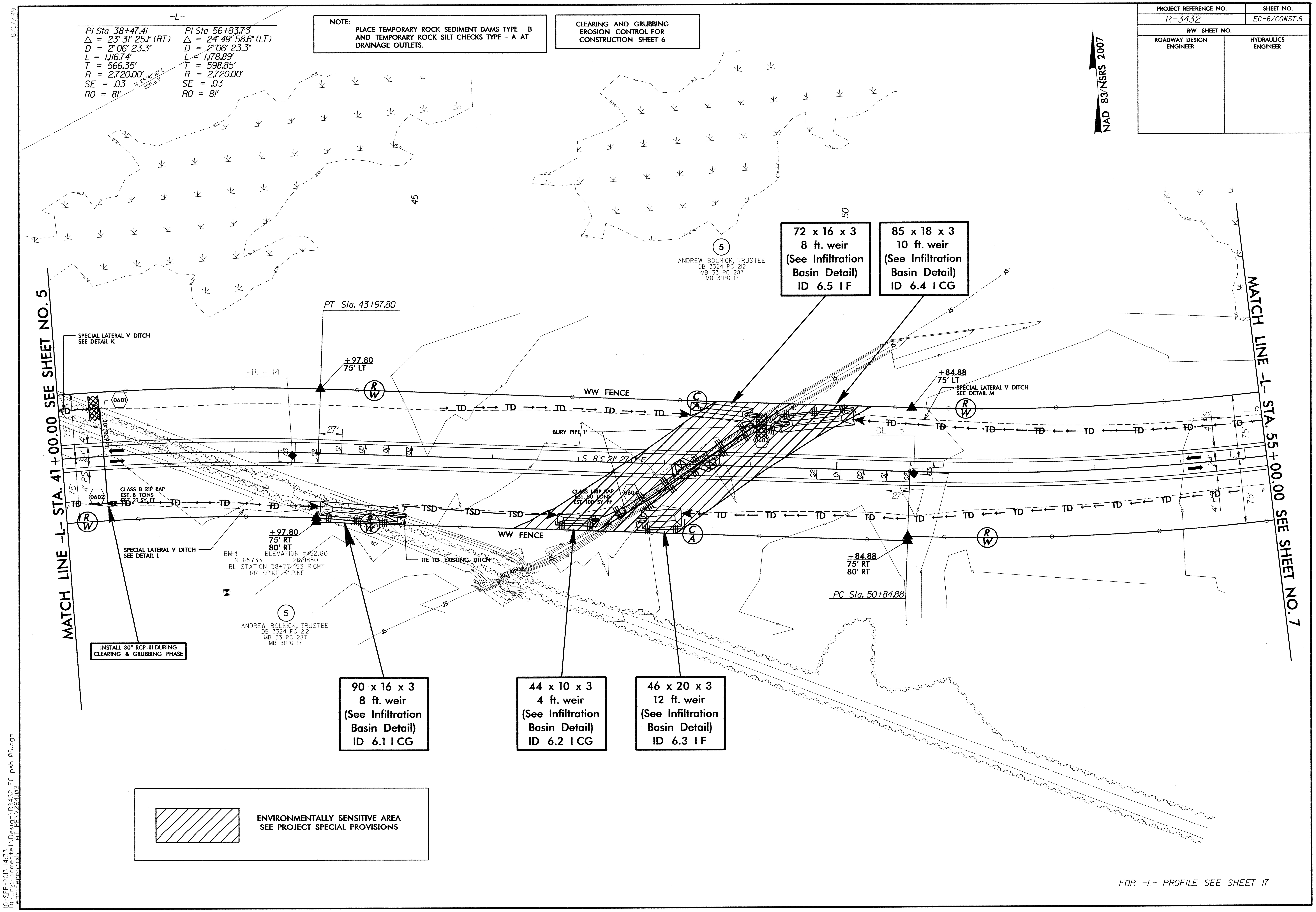


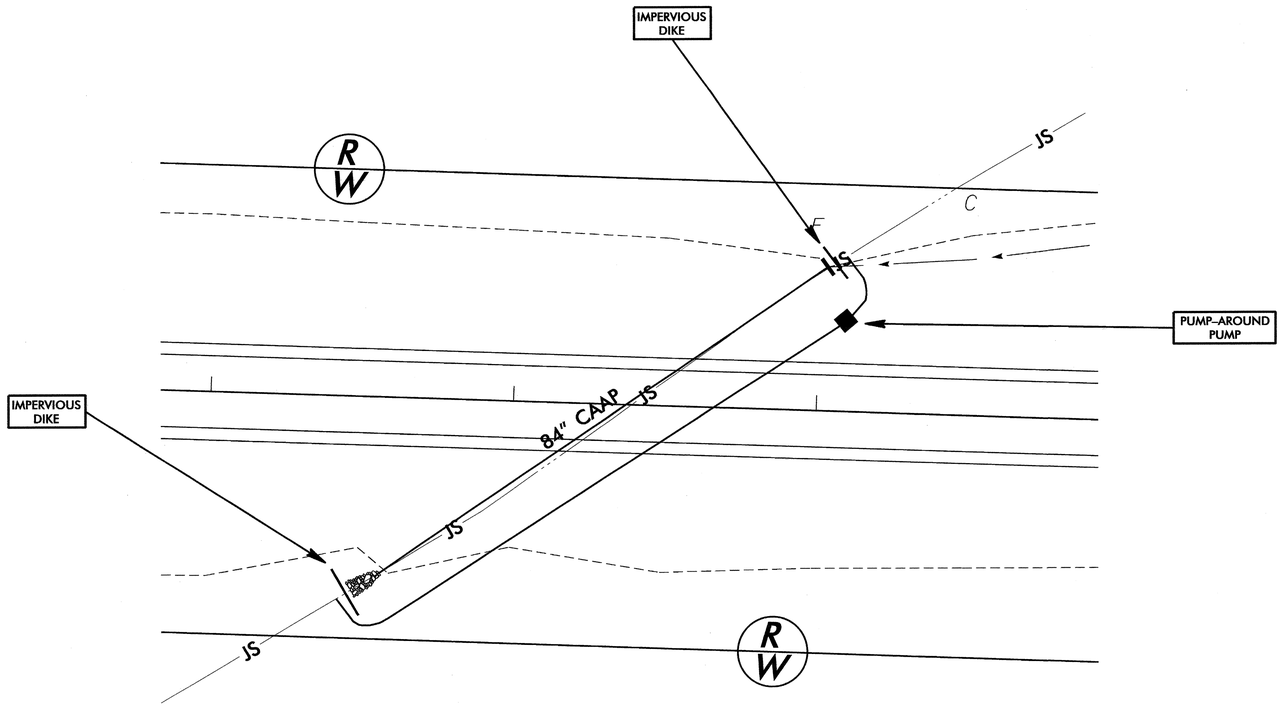
PROJECT REFERENCE NO. R-3432
SHEET NO. EC-6/CONST.6
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
NAD 83/NSRS 2007
-L-
PI Sta 38+47.41
Δ = 23° 31' 25.1" (RT)
D = 2° 06' 23.3"
L = 1,116.74'
T = 566.35'
R = 2,720.00'
SE = .03
RO = 81'
PI Sta 56+83.73
Δ = 24° 49' 58.6" (LT)
D = 2° 06' 23.3"
L = 1,178.89'
T = 598.85'
R = 2,720.00'
SE = .03
RO = 81'
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 6
MATCH LINE -L- STA. 41+00.00 SEE SHEET NO. 5
MATCH LINE -L- STA. 55+00.00 SEE SHEET NO. 7
ANDREW BOLNICK, TRUSTEE DB 3324 PG 212 MB 33 PG 287 MB 31 PG 17
72 x 16 x 3 8 ft. weir (See Infiltration Basin Detail) ID 6.5 I F
85 x 18 x 3 10 ft. weir (See Infiltration Basin Detail) ID 6.4 I CG
PT Sta. 43+97.80
SPECIAL LATERAL V DITCH SEE DETAIL K
+97.80 75' LT
WW FENCE
+84.88 75' LT
SPECIAL LATERAL V DITCH SEE DETAIL M
BURY PIPE 1'
S 83° 31' 27.1" E
CLASS B RIP RAP EST. 8 TONS EST. 21 SY FF
CLASS I RIP RAP EST. 50 TONS EST. 100 SY FF
+97.80 75' RT 80' RT
SPECIAL LATERAL V DITCH SEE DETAIL L
BM14 ELEVATION = 52.60 N 65733 E 2169850 BL STATION 38+77.153 RIGHT RR SPIKE 8" PINE
TIE TO EXISTING DITCH
+84.88 75' RT 80' RT
PC Sta. 50+84.88
INSTALL 30" RCP-III DURING CLEARING & GRUBBING PHASE
90 x 16 x 3 8 ft. weir (See Infiltration Basin Detail) ID 6.1 I CG
44 x 10 x 3 4 ft. weir (See Infiltration Basin Detail) ID 6.2 I CG
46 x 20 x 3 12 ft. weir (See Infiltration Basin Detail) ID 6.3 I F
ENVIRONMENTALLY SENSITIVE AREA SEE PROJECT SPECIAL PROVISIONS
FOR -L- PROFILE SEE SHEET 17

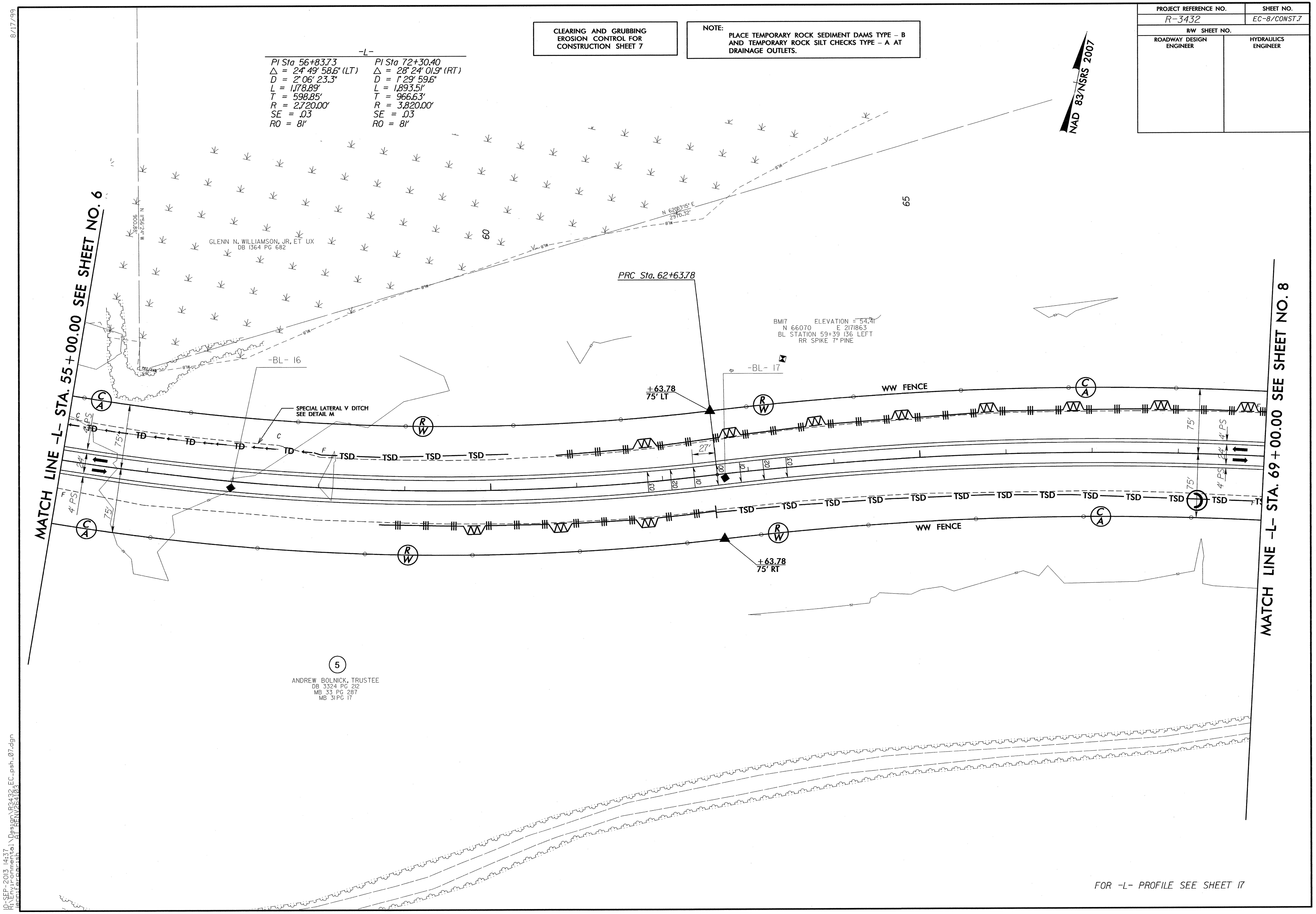
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-7/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PIPE INSTALLATION SEQUENCE STA. 48+37 –L–

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT PIPE INSTALLATION.
2. CONSTRUCT IMPERVIOUS DIKES AND INSTALL PUMP–AROUND PUMP, DIVERTING FLOW AROUND WORK AREA.
3. INSTALL PROPOSED 84" CAAP AND CONSTRUCT ANY NECESSARY CHANNEL IMPROVEMENTS.
4. REMOVE IMPERVIOUS DIKES AND PUMP–AROUND PUMP.
5. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S).
6. COMPLETE ROADWAY.

NAD 83/NSRS 2007




PROJECT REFERENCE NO.
R-3432
SHEET NO.
EC-8/CONST.7
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
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.
NAD 83/NSRS 2007
-L-
PI Sta 56+83.73
△ = 24° 49' 58.6" (LT)
D = 2° 06' 23.3"
L = 1,178.89'
T = 598.85'
R = 2,720.00'
SE = .03
RO = 81'
PI Sta 72+30.40
△ = 28° 24' 01.9" (RT)
D = 1° 29' 59.6"
L = 1,893.51'
T = 966.63'
R = 3,820.00'
SE = .03
RO = 81'
GLENN N. WILLIAMSON, JR, ET UX
DB 1364 PG 682
N 62°03'15" E
2976.32'
60
65
PRC Sta. 62+63.78
BM17 ELEVATION = 54.41
N 66070 E 2171863
BL STATION 59+39 136 LEFT
RR SPIKE 7" PINE
-BL- 16
-BL- 17
SPECIAL LATERAL V DITCH
SEE DETAIL M
+63.78
75' LT
+63.78
75' RT
WW FENCE
WW FENCE
TD
TSD
27'
75'
4' PS
24'
MATCH LINE -L- STA. 55+00.00 SEE SHEET NO. 6
MATCH LINE -L- STA. 69+00.00 SEE SHEET NO. 8
5
ANDREW BOLNICK, TRUSTEE
DB 3324 PG 212
MB 33 PG 287
MB 31 PG 17
FOR -L- PROFILE SEE SHEET 17
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PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-9/CONST.8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

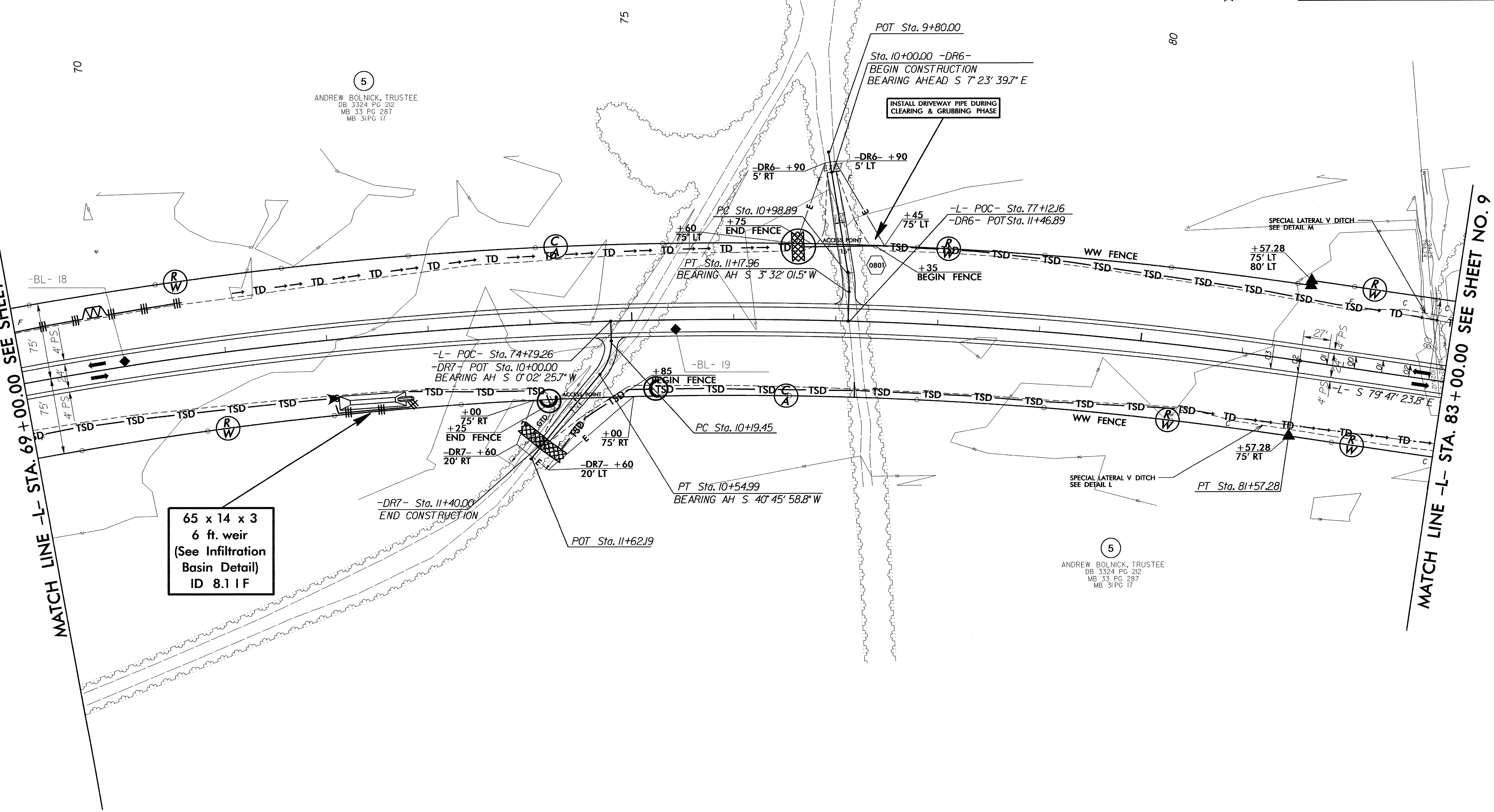
8/17/99

-L-
PI Sta 72+30.40
△ = 28° 24′ 01.9″ (RT)
D = 1° 29′ 59.6″
L = 1,893.51′
T = 966.63′
R = 3,820.00′
SE = .03
RO = 81′

-DR6-
PI Sta 11+08.45
△ = 10° 55′ 41.3″ (RT)
D = 57° 17′ 44.8″
L = 19.07′
T = 9.57′
R = 100.00′
SE = SEE PLANS

-DR7-
PI Sta 10+38.01
△ = 40° 43′ 33.1″ (RT)
D = 114° 35′ 29.6″
L = 35.54′
T = 18.56′
R = 50.00′
SE = SEE PLANS

NAD 83/NSRS 2007



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.

NOTE: DRIVEWAY RADII ARE 10′ UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 18
FOR -DR6- PROFILE SEE SHEET 23
FOR -DR7- PROFILE SEE SHEET 23

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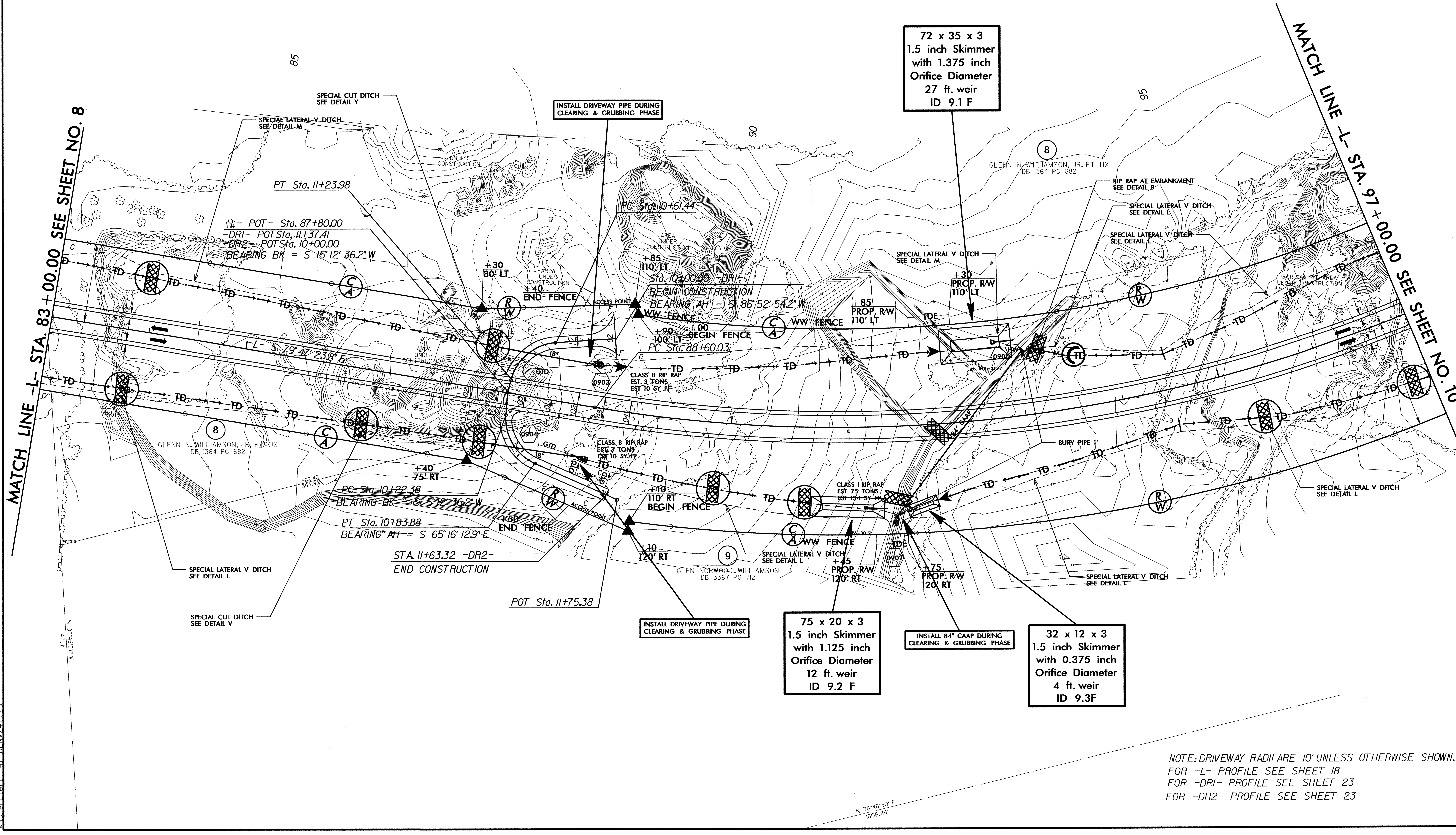
jenniferparish AT RENV264103

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.

NAD 83/NSRS 2007

-L-	-DR1-	-DR2-
PI Sta 97+39.71	PI Sta 10+97.55	PI Sta 10+57.70
Δ = 60° 46' 46.1" (LT)	Δ = 71° 40' 18.0" (LT)	Δ = 70° 28' 49.1" (LT)
D = 3° 49' 11.0"	D = 114° 35' 29.6"	D = 114° 35' 29.6"
L = 1,591.20'	L = 62.55'	L = 61.51'
T = 879.68'	T = 36.11'	T = 35.32'
R = 1,500.00'	R = 50.00'	R = 50.00'
SE = .04	SE = SEE PLANS	SE = SEE PLANS
RO = 108'		



NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 18
FOR -DR1- PROFILE SEE SHEET 23
FOR -DR2- PROFILE SEE SHEET 23

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mchandler1 AT RENV24778

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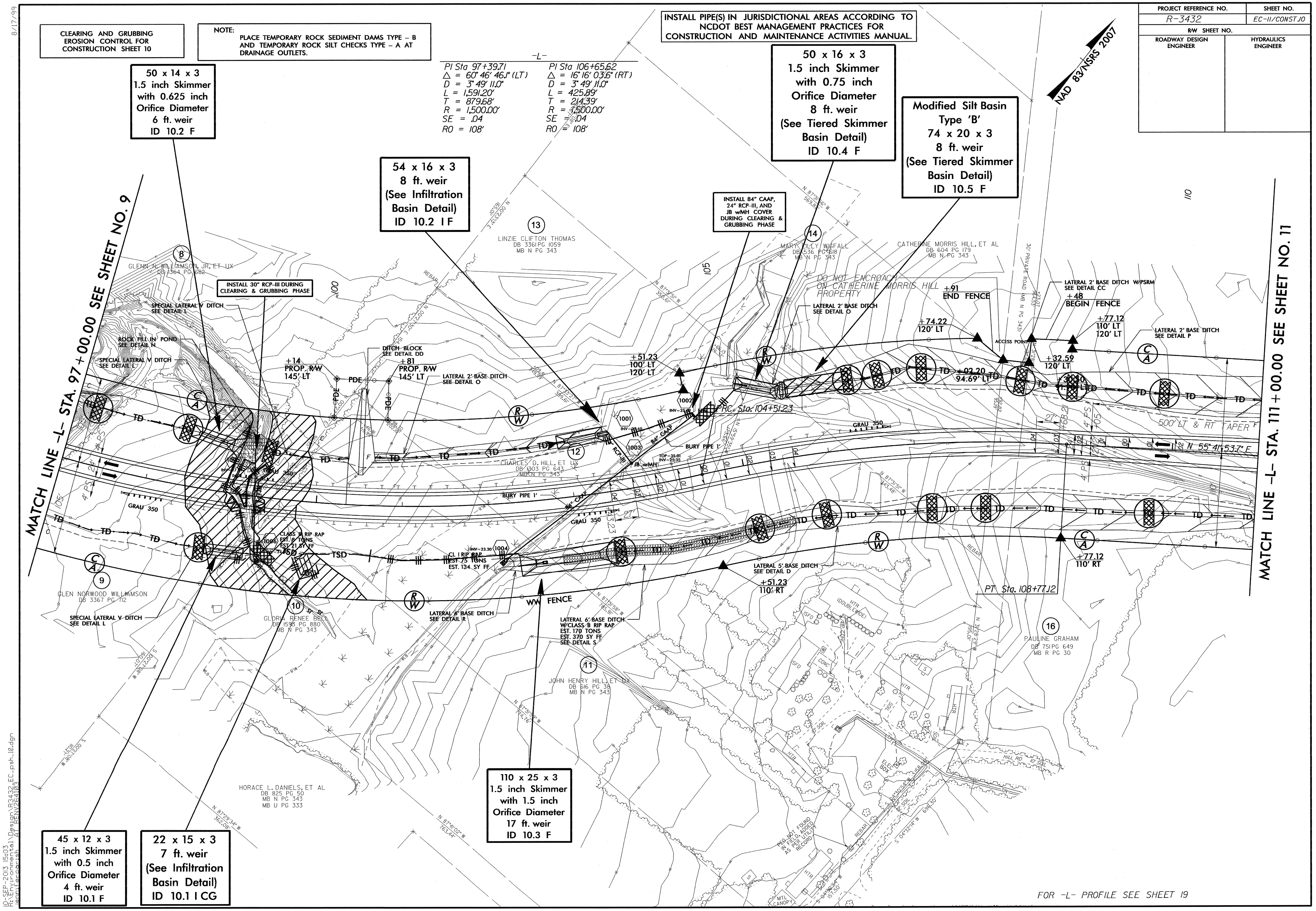

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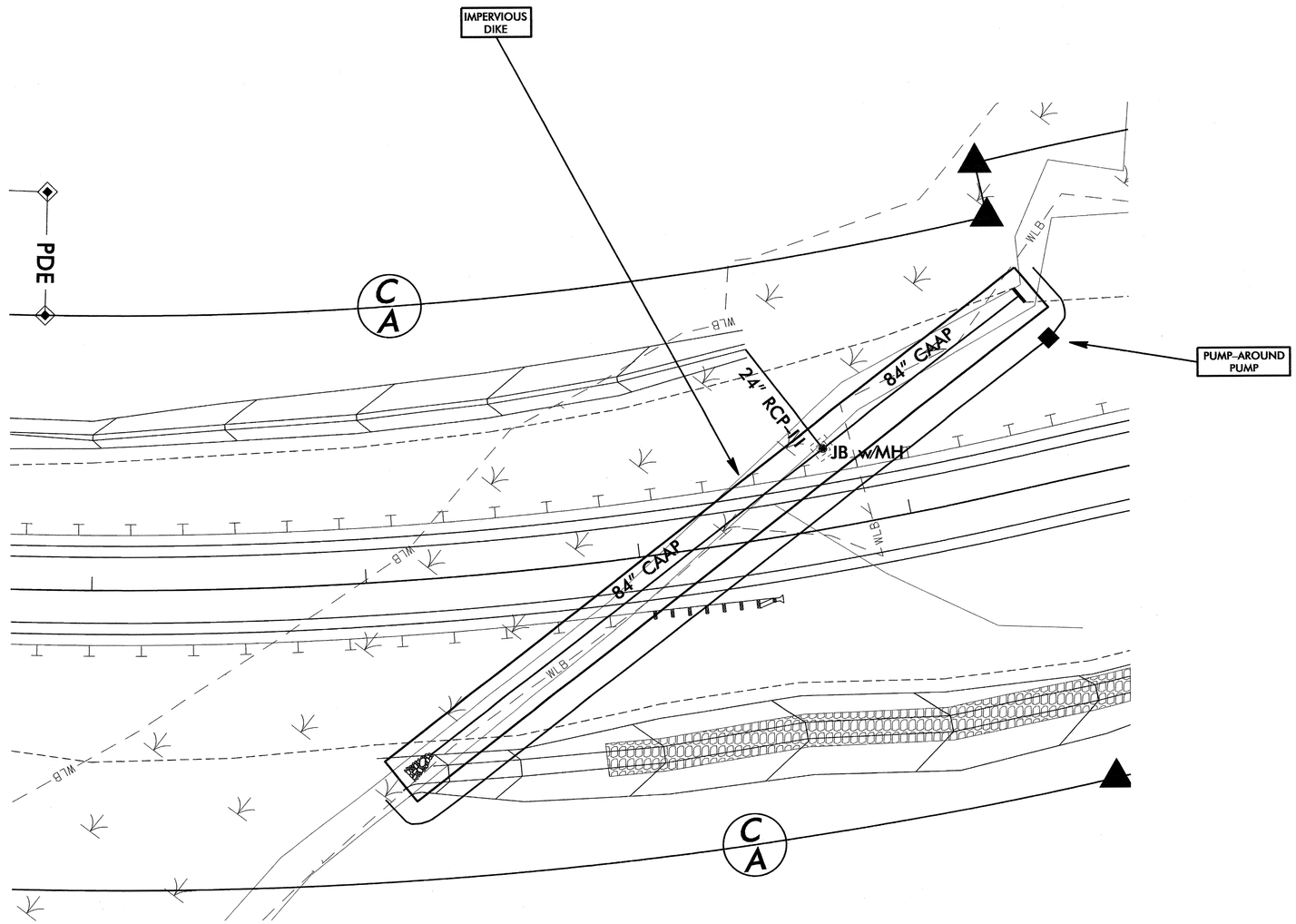
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-12/CONST.10
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PIPE INSTALLATION SEQUENCE STA. 103+20 –L–

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT PIPE INSTALLATION.
2. CONSTRUCT IMPERVIOUS DIKE(S) AND INSTALL PUMP–AROUND PUMP, DIVERTING FLOW AROUND WORK AREA.
3. INSTALL PROPOSED 84" CAAP AND CONSTRUCT ANY NECESSARY CHANNEL IMPROVEMENTS.
4. REMOVE IMPERVIOUS DIKE(S) AND PUMP–AROUND PUMP.
5. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S).
6. COMPLETE ROADWAY.



PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-13/CONSTJI
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 11

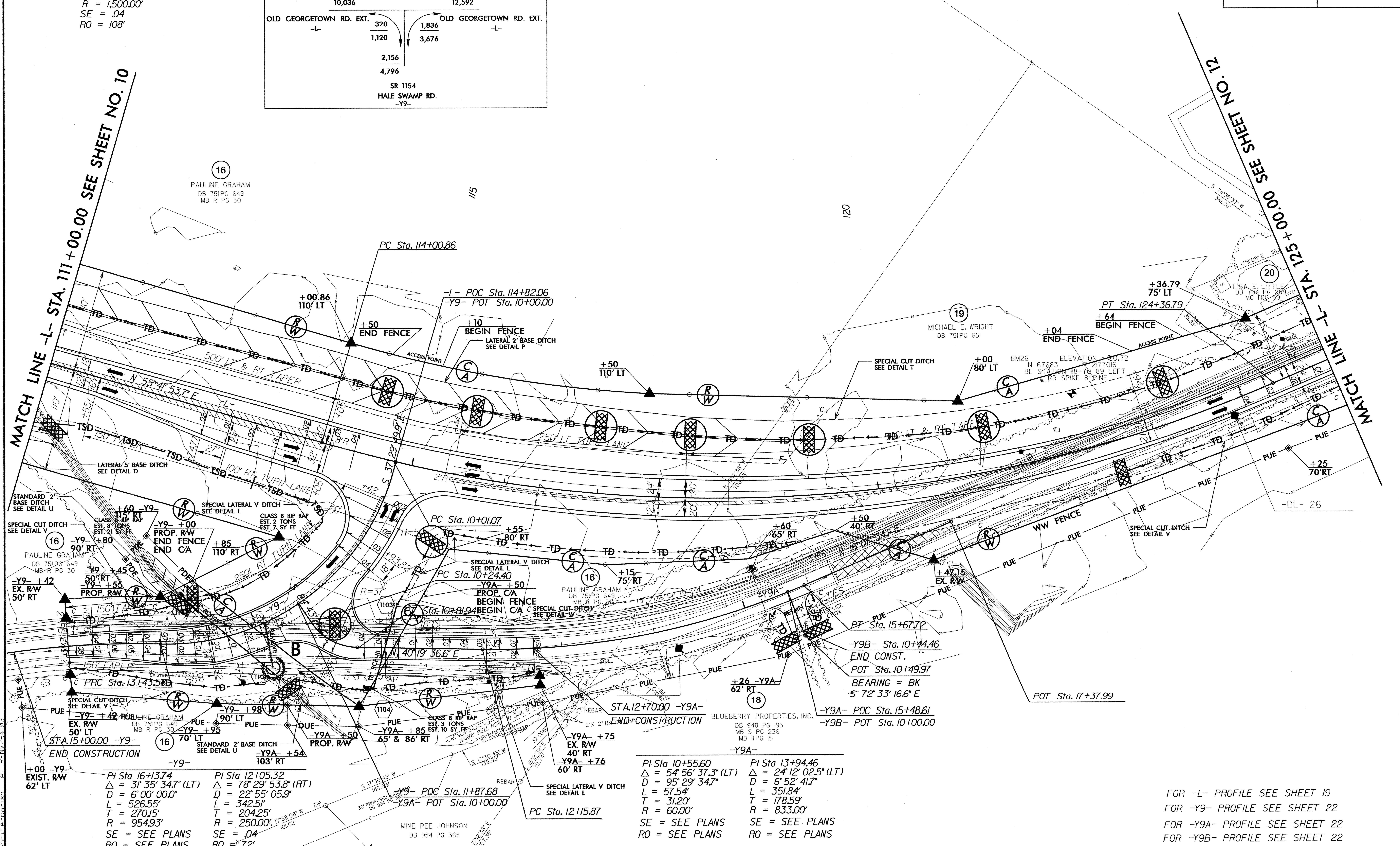
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

-L-
PI Sta 119+40.44
Δ = 39° 34' 10.4" (LT)
D = 3° 49' 11.0"
L = 1,035.93'
T = 539.58'
R = 1,500.00'
SE = .04
RO = 108'

2013 ADT
2033 ADT

OLD GEORGETOWN RD. EXT. -L-: 5,796 / 10,036
OLD GEORGETOWN RD. EXT. -L-: 7,312 / 12,592
320 / 1,120
1,836 / 3,676
SR 1154 HALE SWAMP RD. -Y9-: 2,156 / 4,796

NAD 83/NSRS 2007



SHEFFIELD SEAFOOD & GROCERY, INC
DB 1503 PG 859
MB R PG 90
MATCH LINE -L- STA. 111+00.00 SEE SHEET NO. 10
MATCH LINE -L- STA. 125+00.00 SEE SHEET NO. 12
PAULINE GRAHAM
DB 751 PG 649
MB R PG 30
MICHAEL E. WRIGHT
DB 751 PG 651
LISA E. LITTLE
BLUEBERRY PROPERTIES, INC.
DB 948 PG 195
MB S PG 236
MB 11 PG 15
MINE REE JOHNSON
DB 954 PG 368
PC Sta. 114+00.86
-L- POC Sta. 114+82.06
-Y9- POT Sta. 10+00.00
PT Sta. 124+36.79
END FENCE
BEGIN FENCE
LATERAL 2' BASE DITCH SEE DETAIL P
SPECIAL CUT DITCH SEE DETAIL T
BM26 N 67683 ELEVATION = 30.72
BL STATION 118+70.89 LEFT
RR SPIKE 8" PINE
LATERAL 5' BASE DITCH SEE DETAIL D
STANDARD 2' BASE DITCH SEE DETAIL U
SPECIAL CUT DITCH SEE DETAIL V
SPECIAL LATERAL V DITCH SEE DETAIL L
PC Sta. 10+01.07
PC Sta. 10+24.40
Sta. 10+81.94
PRC Sta. 13+43.53
PT Sta. 15+67.72
-Y9B- Sta. 10+44.46
END CONST.
POT Sta. 10+49.97
BEARING = BK
S 72° 33' 16.6" E
POT Sta. 17+37.99
-Y9A- POC Sta. 15+48.61
-Y9B- POT Sta. 10+00.00
STA. 12+70.00 -Y9A-
END CONSTRUCTION
STA. 15+00.00 -Y9-
END CONSTRUCTION
-Y9- POC Sta. 11+87.68
-Y9A- POT Sta. 10+00.00
PC Sta. 12+15.87
N 55° 41' 53.7" E
N 40° 19' 36.6" E
500' LT & RT TAPER
250' LT TURN LANE
100' RT TURN LANE
250' RT TURN LANE
150' TAPER
-BL- 26

-Y9-
PI Sta 16+13.74
Δ = 31° 35' 34.7" (LT)
D = 6° 00' 00.0"
L = 526.55'
T = 270.15'
R = 954.93'
SE = SEE PLANS
RO = SEE PLANS

PI Sta 12+05.32
Δ = 78° 29' 53.8" (RT)
D = 22° 55' 05.9"
L = 342.51'
T = 204.25'
R = 250.00'
SE = .04
RO = 72'

-Y9A-
PI Sta 10+55.60
Δ = 54° 56' 37.3" (LT)
D = 95° 29' 34.7"
L = 57.54'
T = 31.20'
R = 60.00'

SE = SEE PLANS
RO = SEE PLANS

PI Sta 13+94.46
Δ = 24° 12' 02.5" (LT)
D = 6° 52' 41.7"
L = 351.84'
T = 178.59'
R = 833.00'
SE = SEE PLANS
RO = SEE PLANS

FOR -L- PROFILE SEE SHEET 19
FOR -Y9- PROFILE SEE SHEET 22
FOR -Y9A- PROFILE SEE SHEET 22
FOR -Y9B- PROFILE SEE SHEET 22

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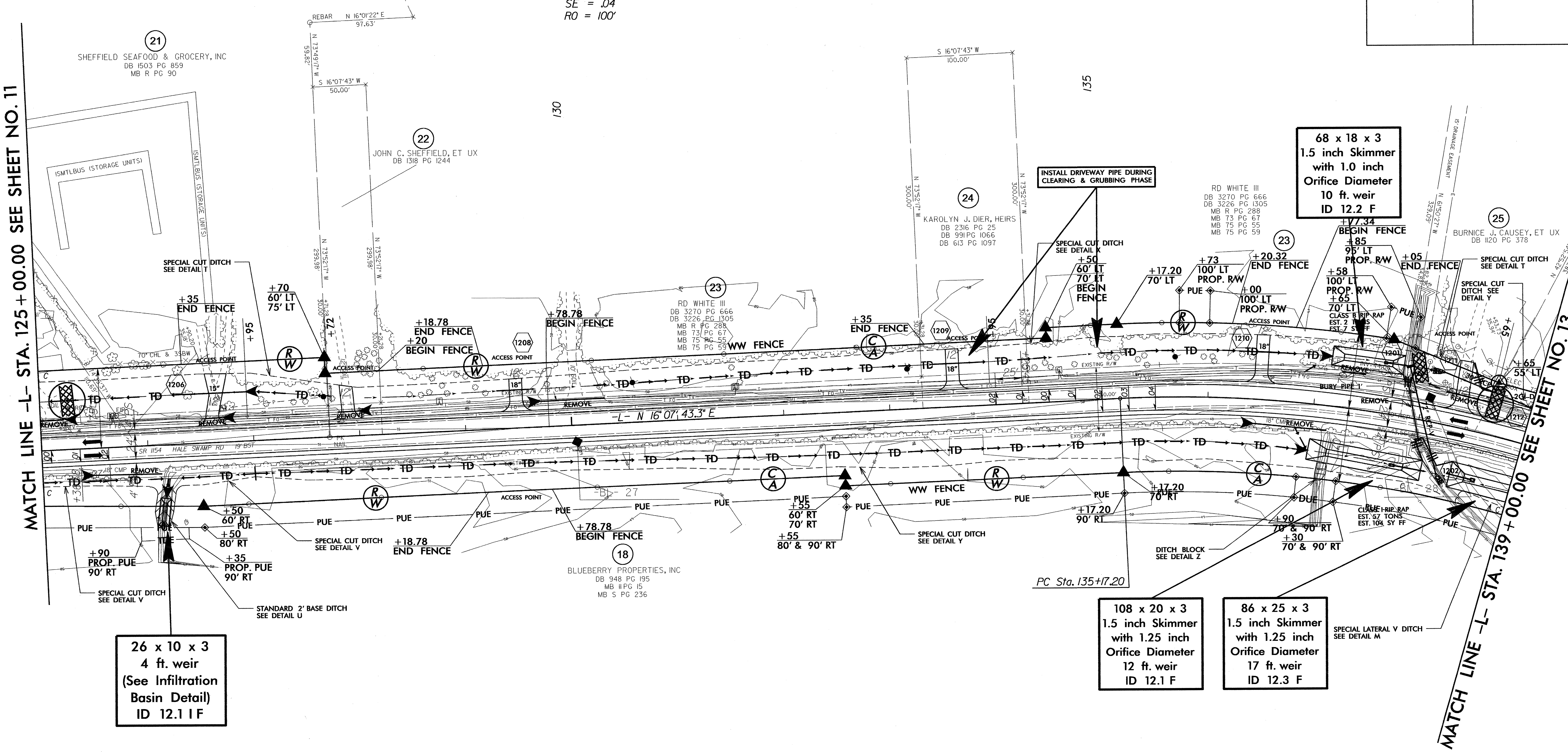
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-14/CONST J2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-
PI Sta 138+23.07
△ = 28° 49' 49.1" (RT)
D = 4° 48' 53.2"
L = 598.79'
T = 305.88'
R = 1,190.00'
SE = .04
RO = 100'

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.

NAD 83/NSRS 2007



MATCH LINE -L- STA. 125+00.00 SEE SHEET NO. 11
MATCH LINE -L- STA. 139+00.00 SEE SHEET NO. 13
SHEFFIELD SEAFOOD & GROCERY, INC
DB 1503 PG 859
MB R PG 90
JOHN C. SHEFFIELD, ET UX
DB 1318 PG 1244
KAROLYN J. DIER, HEIRS
DB 2316 PG 25
DB 991 PG 1066
DB 613 PG 1097
RD WHITE III
DB 3270 PG 666
DB 3226 PG 1305
BURNICE J. CAUSEY, ET UX
DB 1120 PG 378
BLUEBERRY PROPERTIES, INC
DB 948 PG 195
MB 11 PG 15
MB S PG 236
-L- N 16° 07' 43.3" E
SR 1154 HALE SWAMP RD
INSTALL DRIVEWAY PIPE DURING CLEARING & GRUBBING PHASE
68 x 18 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
10 ft. weir
ID 12.2 F
26 x 10 x 3
4 ft. weir
(See Infiltration
Basin Detail)
ID 12.1 I F
108 x 20 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
12 ft. weir
ID 12.1 F
86 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 12.3 F
SPECIAL CUT DITCH SEE DETAIL T
SPECIAL CUT DITCH SEE DETAIL V
SPECIAL CUT DITCH SEE DETAIL Y
SPECIAL CUT DITCH SEE DETAIL K
STANDARD 2' BASE DITCH SEE DETAIL U
DITCH BLOCK SEE DETAIL Z
SPECIAL LATERAL V DITCH SEE DETAIL M
PC Sta. 135+17.20

NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 20

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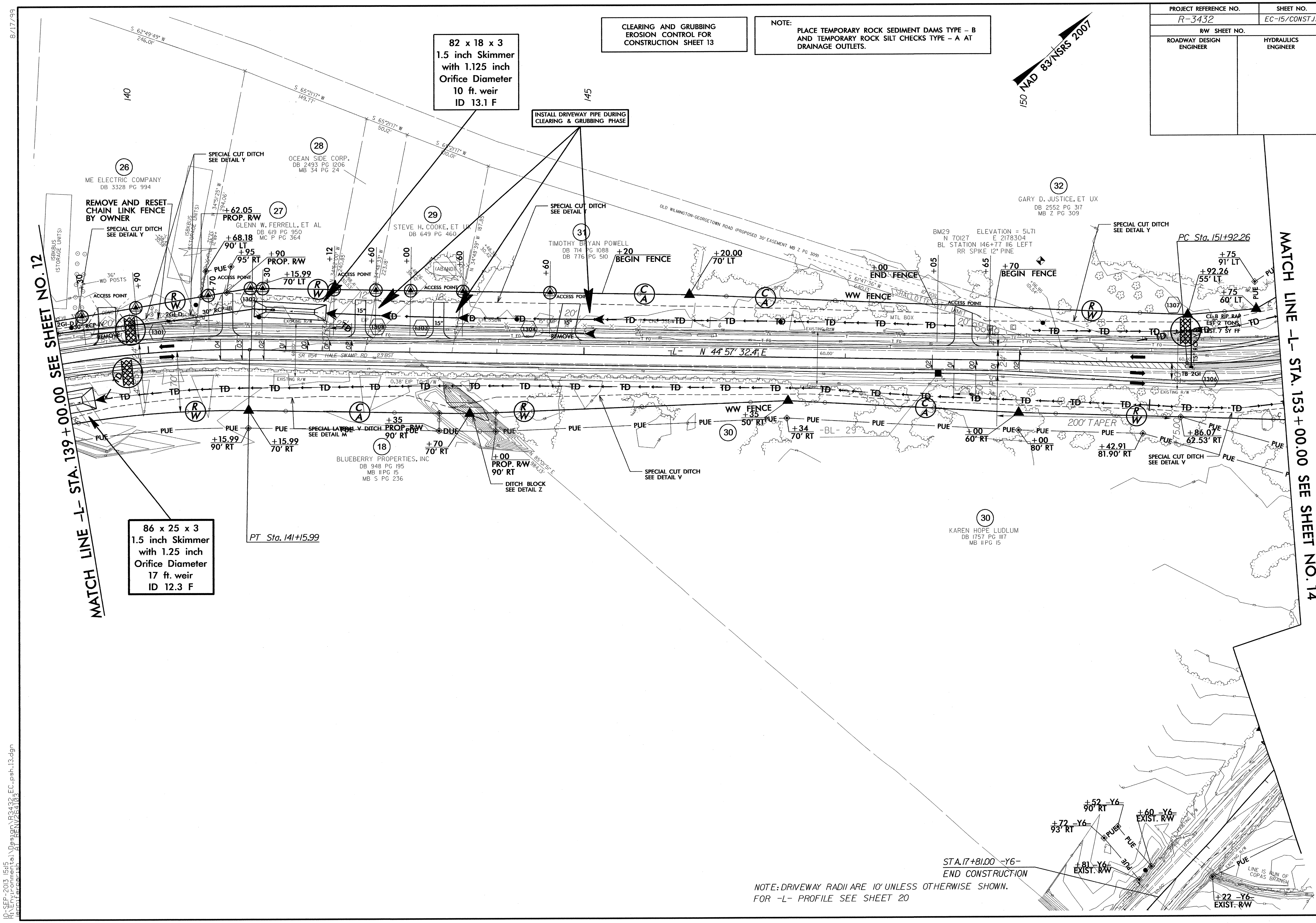
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-15/CONST J3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 13

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



8/17/99
150 NAD 83/NSRS 2007
82 x 18 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
10 ft. weir
ID 13.1 F
INSTALL DRIVEWAY PIPE DURING CLEARING & GRUBBING PHASE
86 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 12.3 F
MATCH LINE -L- STA. 139+00.00 SEE SHEET NO. 12
MATCH LINE -L- STA. 153+00.00 SEE SHEET NO. 14
ME ELECTRIC COMPANY DB 3328 PG 994
OCEAN SIDE CORP. DB 2493 PG 1206 MB 34 PG 24
GLENN W. FERRELL, ET AL DB 619 PG 950 MC P PG 364
STEVE H. COOKE, ET UX DB 649 PG 460
TIMOTHY BRYAN POWELL DB 714 PG 1088 DB 776 PG 510
GARY D. JUSTICE, ET UX DB 2552 PG 317 MB Z PG 309
BLUEBERRY PROPERTIES, INC DB 948 PG 195 MB 11 PG 15 MB S PG 236
KAREN HOPE LUDLUM DB 1757 PG 1117 MB 11 PG 15
REMOVE AND RESET CHAIN LINK FENCE BY OWNER
SPECIAL CUT DITCH SEE DETAIL Y
SPECIAL CUT DITCH SEE DETAIL V
SPECIAL LATERAL V DITCH SEE DETAIL M
DITCH BLOCK SEE DETAIL Z
BM29 ELEVATION = 51.71 N 70127 E 2178304 BL STATION 146+77 116 LEFT RR SPIKE 12" PINE
-L- N 44°57' 32.4" E
SR 1154 HALE SWAMP RD
OLD WILMINGTON-GEORGETOWN ROAD (PROPOSED 30' EASEMENT MB Z PG 309)
PT Sta. 141+15.99
PC Sta. 151+92.26
+20 BEGIN FENCE
+00 END FENCE
+70 BEGIN FENCE
WW FENCE
200' TAPER
STA. 17+81.00 -Y6- END CONSTRUCTION
NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 20
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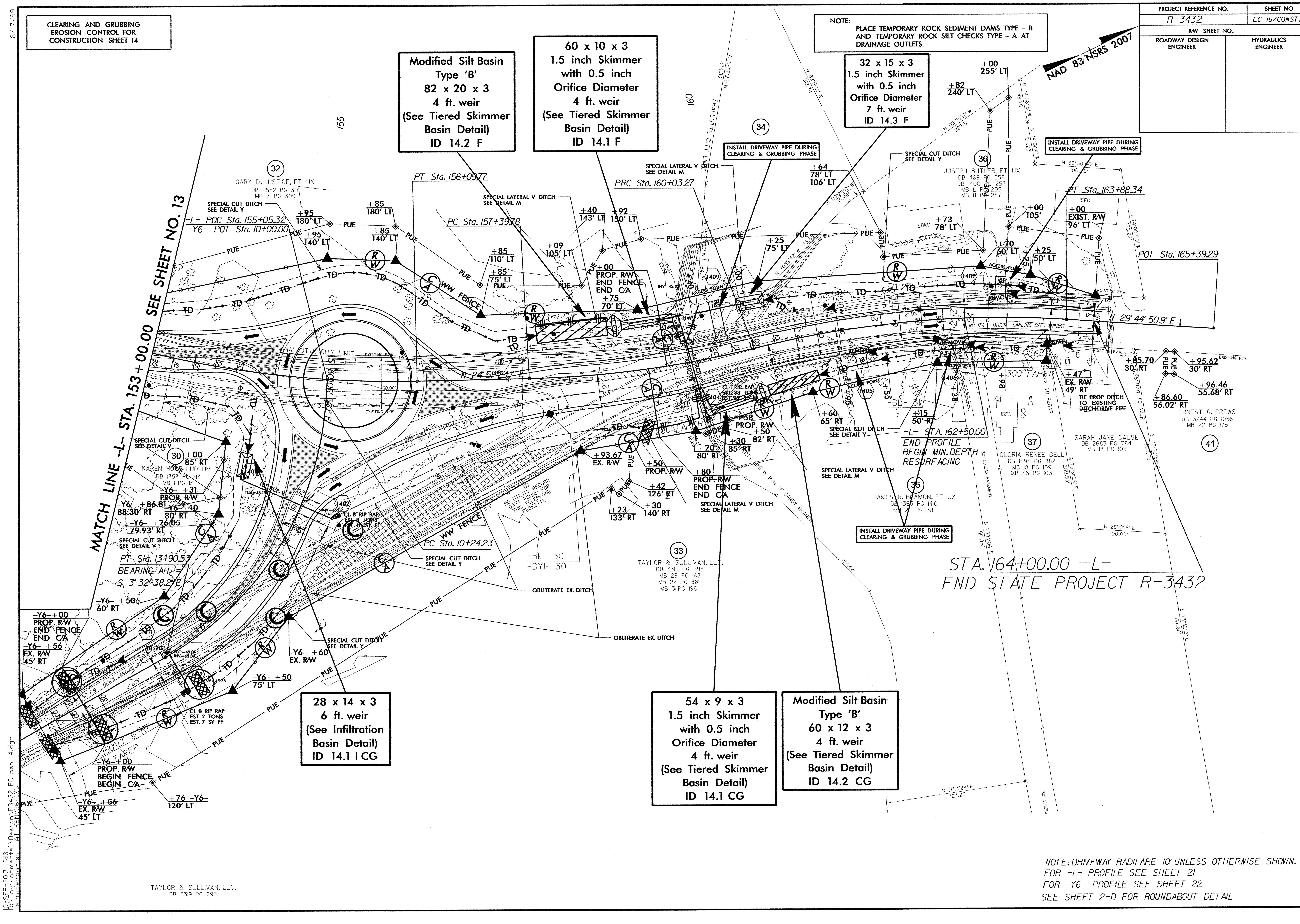
PROJECT REFERENCE NO. R-3432
SHEET NO. EC-16/CONST.14
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 14
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
NAD 83/NSRS 2007
Modified Silt Basin Type 'B' 82 x 20 x 3 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.2 F
60 x 10 x 3 1.5 inch Skimmer with 0.5 inch Orifice Diameter 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.1 F
32 x 15 x 3 1.5 inch Skimmer with 0.5 inch Orifice Diameter 7 ft. weir ID 14.3 F
INSTALL DRIVEWAY PIPE DURING CLEARING & GRUBBING PHASE
MATCH LINE -L- STA. 153+00.00 SEE SHEET NO. 13
-L- POC Sta. 155+05.32
-Y6- POT Sta. 10+00.00
PT Sta. 156+09.77
PC Sta. 157+39.78
PRC Sta. 160+03.27
PT Sta. 163+68.34
POT Sta. 165+39.29
PT Sta. 13+90.53
BEARING AH = S 3° 32' 38.2" E
PC Sta. 10+24.23
-L- STA. 162+50.00 END PROFILE BEGIN MIN. DEPTH RESURFACING
N 29° 44' 50.9" E
N 24° 51' 24.7" E
GARY D. JUSTICE, ET UX DB 2552 PG 317 MB Z PG 309
KAREN HOLE LUDLUM DB 1757 PG 1117 MB 11 PG 15
JOSEPH BUTLER, ET UX DB 469 PG 256 DB 1400 PG 257 MB L PG 205 MB H PG 257
GLORIA RENEE BELL DB 1593 PG 882 MB 18 PG 109 MB 35 PG 103
JAMES R. BEAMON, ET UX DB 1365 PG 1410 MB 22 PG 381
SARAH JANE GAUSE DB 2683 PG 784 MB 18 PG 109
ERNEST G. CREWS DB 3244 PG 1055 MB 22 PG 175
TAYLOR & SULLIVAN, LLC. DB 3319 PG 293 MB 29 PG 168 MB 22 PG 381 MB 31 PG 198
SPECIAL CUT DITCH SEE DETAIL Y
SPECIAL LATERAL V DITCH SEE DETAIL M
OBLITERATE EX. DITCH
NO UTILITY RECORD DATA FOUND FOR THIS TELEPHONE PEDESTAL
STA. 164+00.00 -L- END STATE PROJECT R-3432
28 x 14 x 3 6 ft. weir (See Infiltration Basin Detail) ID 14.1 I CG
54 x 9 x 3 1.5 inch Skimmer with 0.5 inch Orifice Diameter 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.1 CG
Modified Silt Basin Type 'B' 60 x 12 x 3 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.2 CG
NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 21
FOR -Y6- PROFILE SEE SHEET 22
SEE SHEET 2-D FOR ROUNDABOUT DETAIL
TAYLOR & SULLIVAN, LLC. DB 3319 PG 293
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10-SEP-2013 15:18
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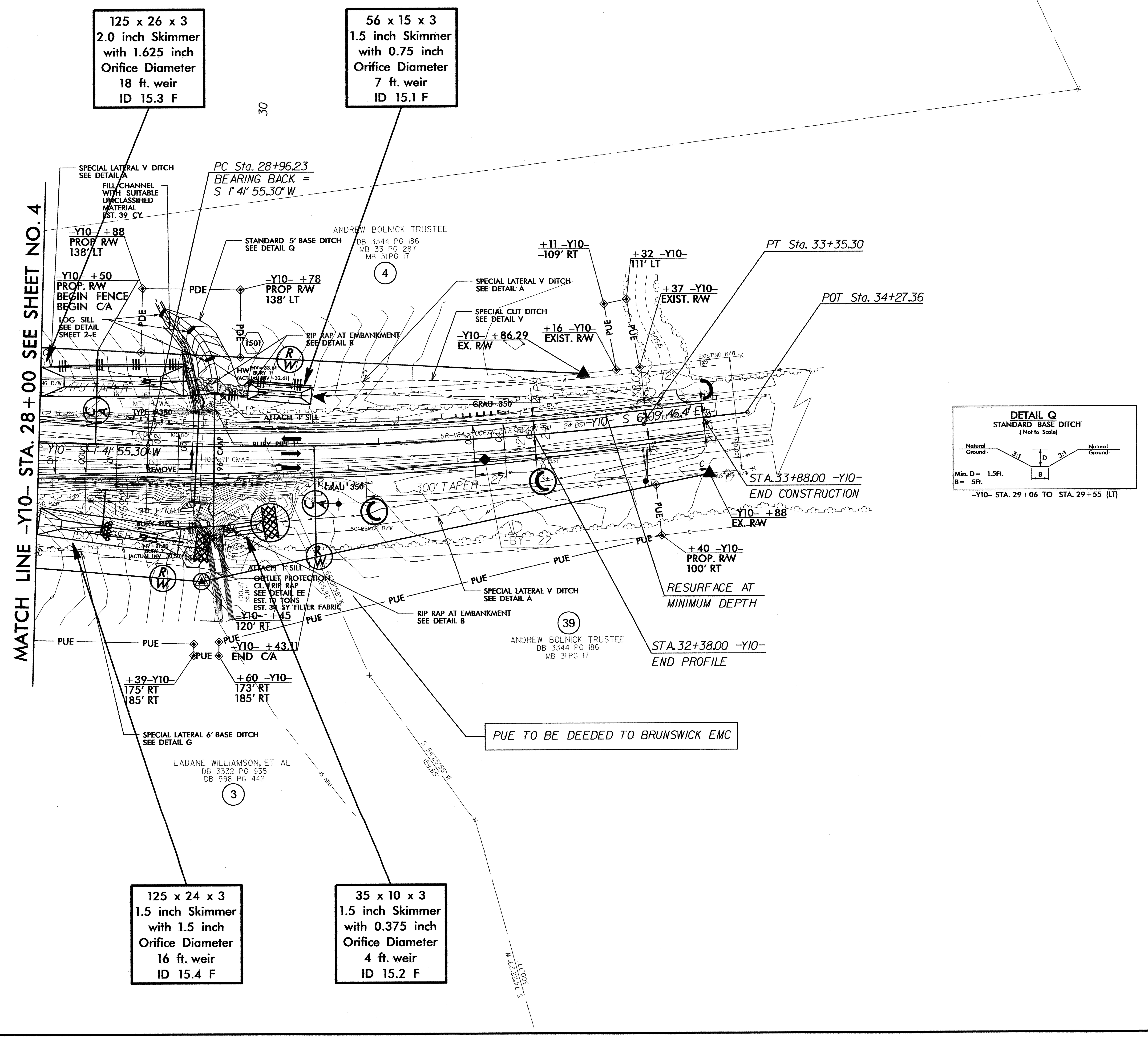
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-17/CONST.15
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 15

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

-Y10-
PI Sta 31+16.11
Δ = 7° 51' 41.7" (LT)
D = 1° 47' 25.8"
L = 439.07'
T = 219.88'
R = 3,200.00'
SE = .03
RO = 81'



FOR -Y10- PROFILE SEE SHEET 21A

8/17/99
10-SEP-2013 15:24
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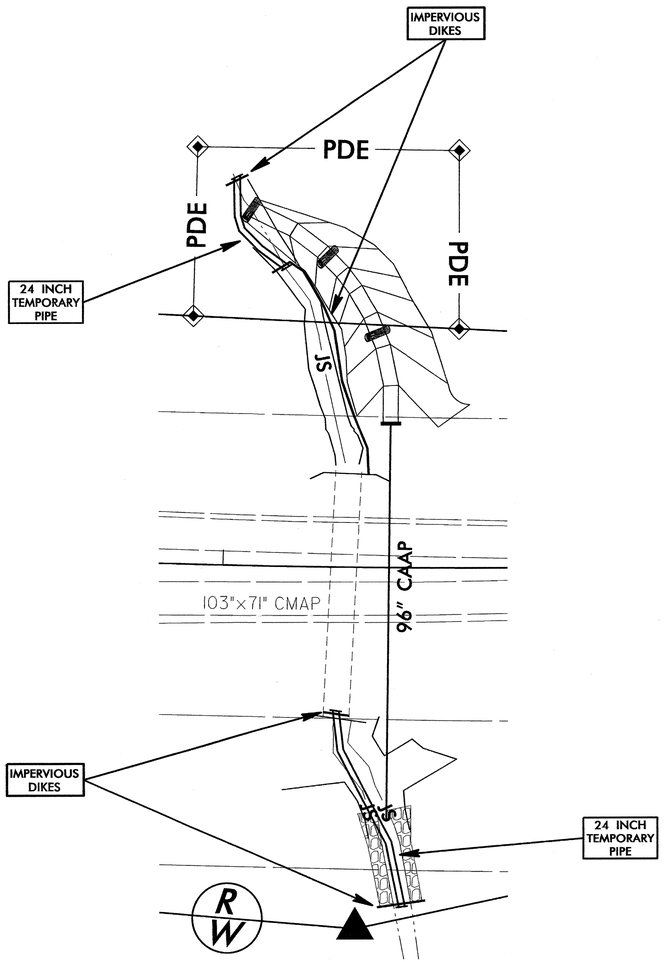
PIPE INSTALLTION SEQUENCE STA. 29+55 –Y10–

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-18/CONST15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PHASE I

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT PIPE INSTALLATION.
2. CONSTRUCT IMPERVIOUS DIKES AND INSTALL 24" TEMPORARY PIPES, DIVERTING FLOW.
3. INSTALL PROPOSED 96" CAAP.
4. CONSTRUCT ANY NECESSARY UPSTREAM/DOWNSTREAM CHANNEL IMPROVEMENTS.

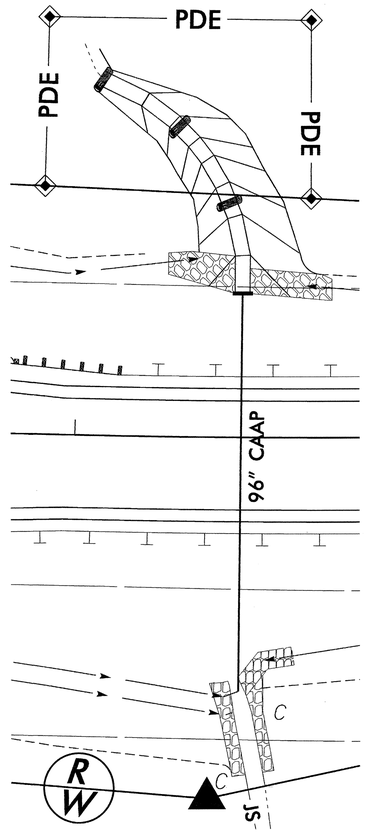
NAD 83/NSRS 2007



PHASE II

5. REMOVE IMPERVIOUS DIKES AND 24" TEMPORARY PIPES, ALLOWING NORMAL FLOW THROUGH PROPOSED CAAP.
6. REMOVE EXISTING CMAP.
7. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S).
8. COMPLETE ROADWAY.

NAD 83/NSRS 2007

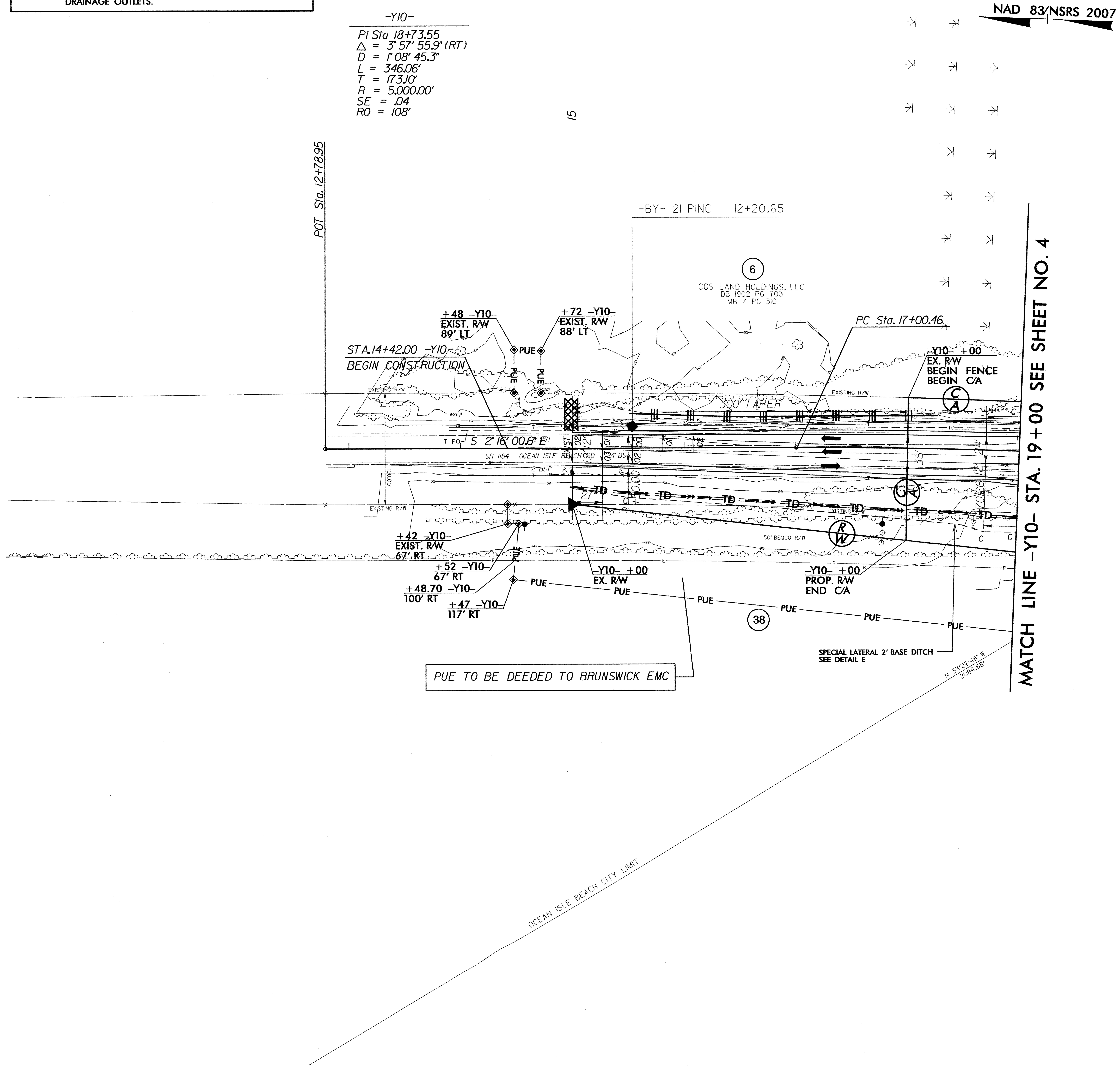


PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-19/CONST.15A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 15A

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



FOR -Y10- PROFILE SEE SHEET 21A

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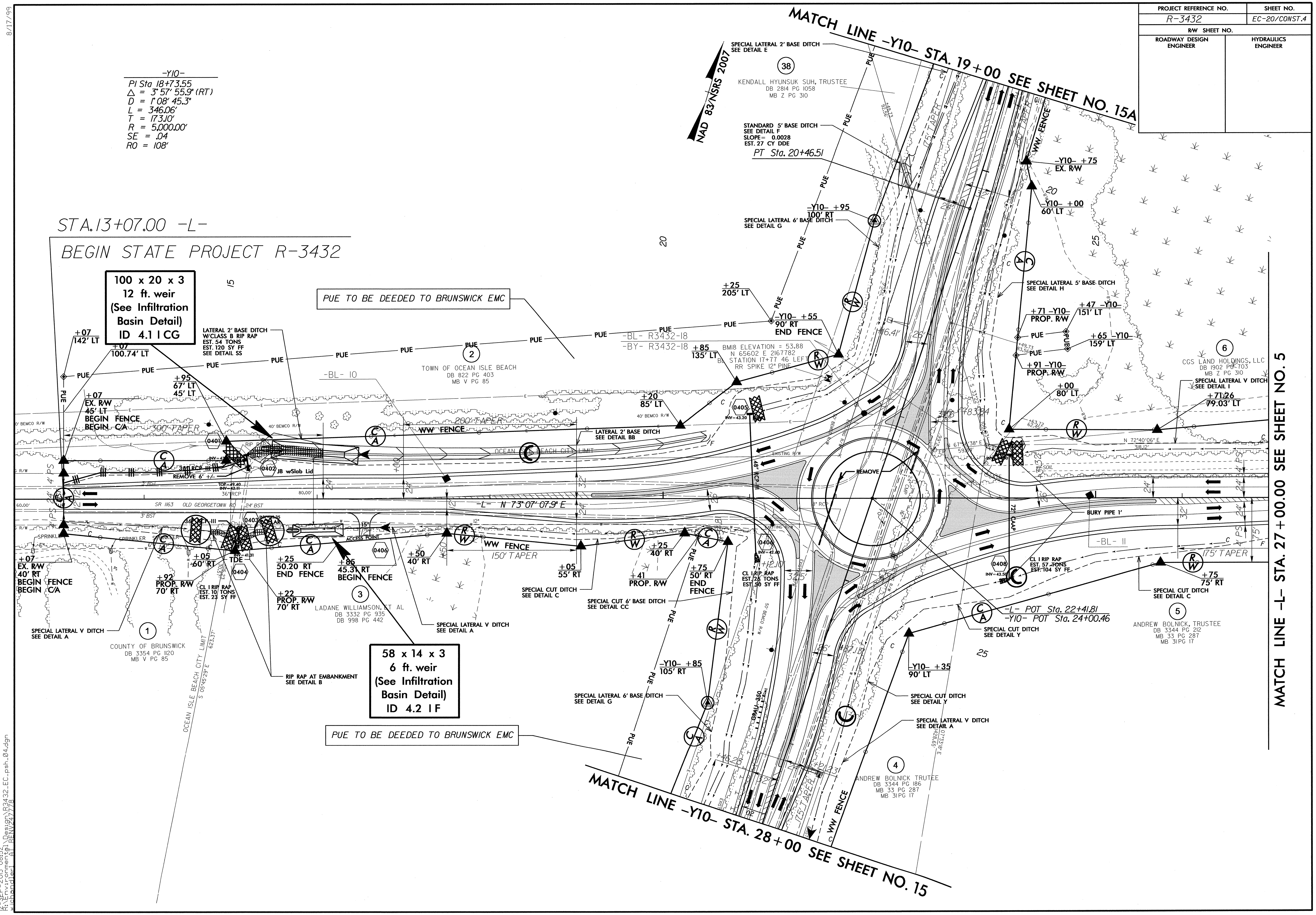
jennifer.parish AT RENV264103

8/17/99



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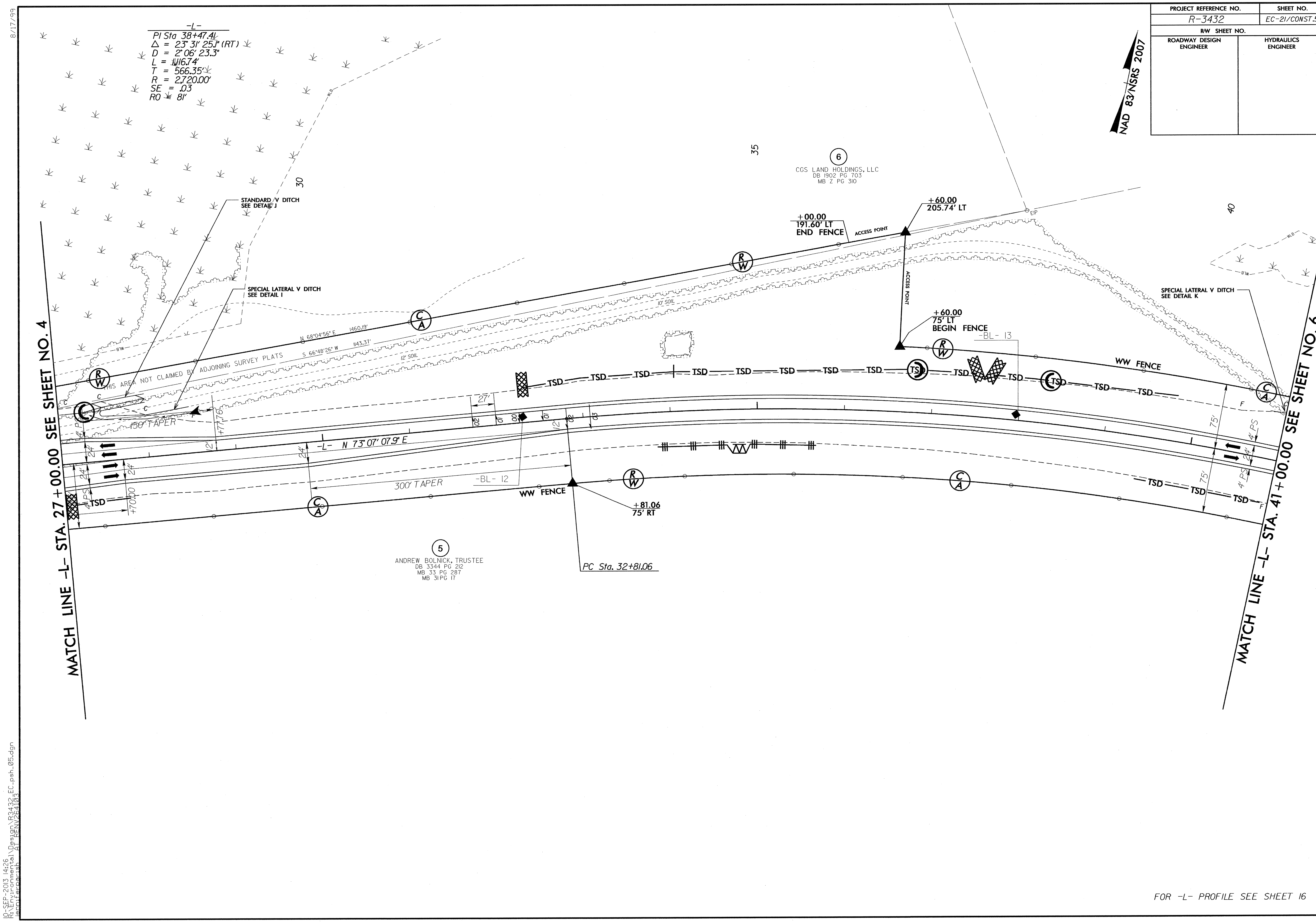
#chandler1 AT BENV24778



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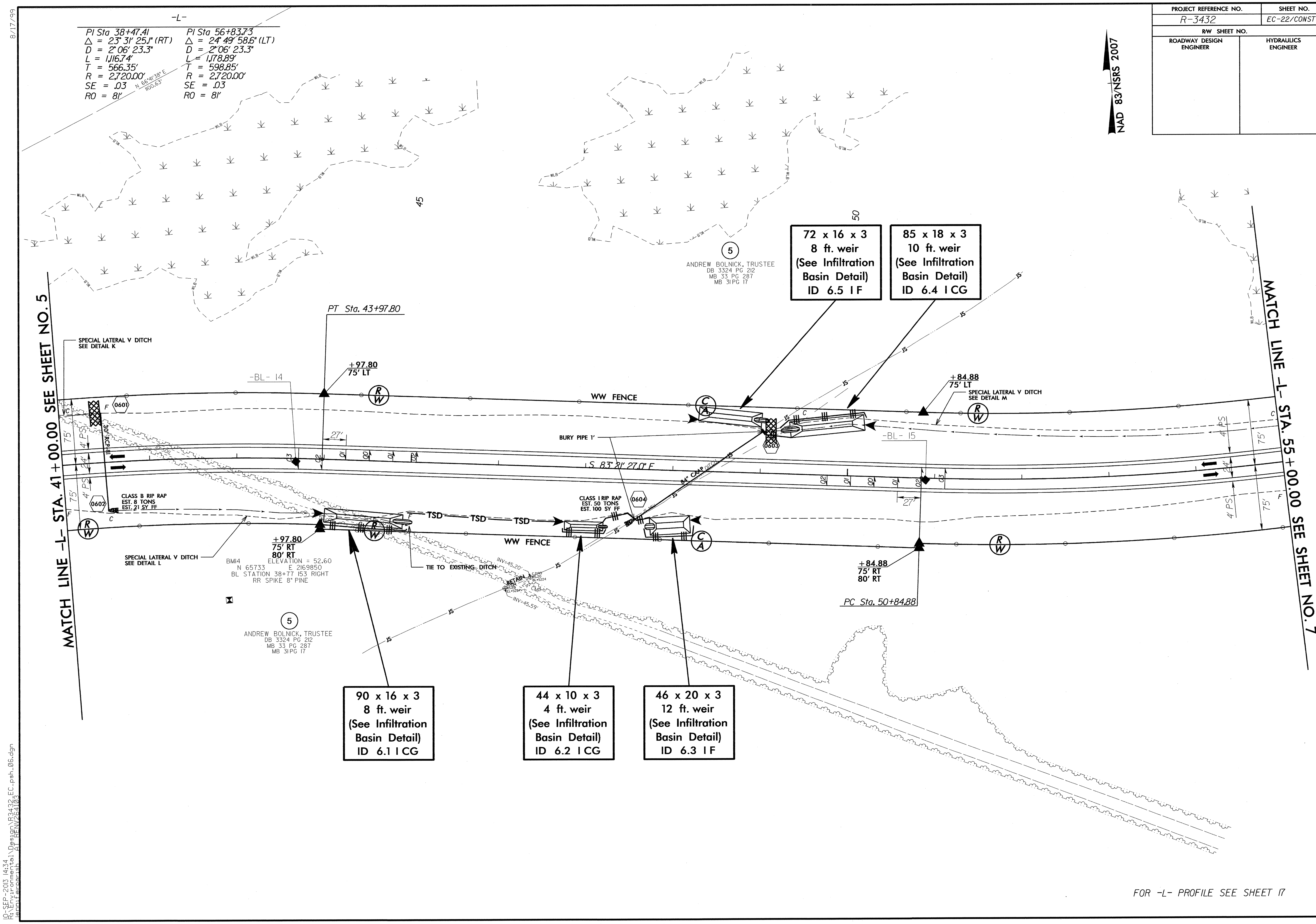
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-22/CONST.6
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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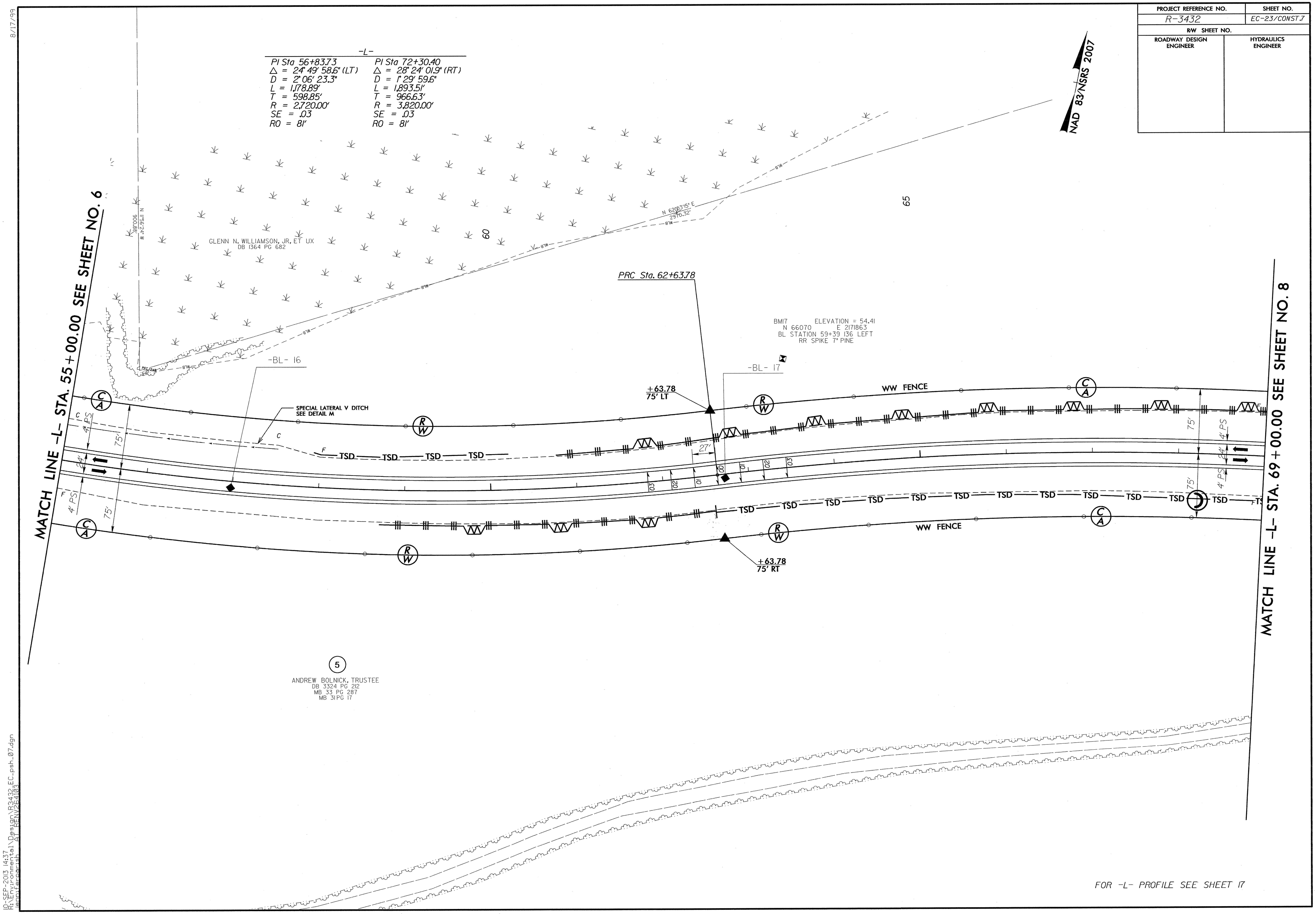
jenniferparish AT RENV264103


PROJECT REFERENCE NO.
R-3432
SHEET NO.
EC-23/CONST.7
R/W SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
8/17/99
-L-
PI Sta 56+83.73
△ = 24° 49' 58.6" (LT)
D = 2° 06' 23.3"
L = 1,178.89'
T = 598.85'
R = 2,720.00'
SE = .03
RO = 81'
PI Sta 72+30.40
△ = 28° 24' 01.9" (RT)
D = 1° 29' 59.6"
L = 1,893.51'
T = 966.63'
R = 3,820.00'
SE = .03
RO = 81'
NAD 83/NSRS 2007
GLENN N. WILLIAMSON, JR. ET UX
DB 1364 PG 682
60
65
PRC Sta. 62+63.78
BM17 ELEVATION = 54.41
N 66070 E 2171863
BL STATION 59+39 136 LEFT
RR SPIKE 7" PINE
-BL- 16
-BL- 17
SPECIAL LATERAL V DITCH
SEE DETAIL M
+63.78
75' LT
+63.78
75' RT
WW FENCE
TSD
27'
75'
4' PS
24'
MATCH LINE -L- STA. 55+00.00 SEE SHEET NO. 6
MATCH LINE -L- STA. 69+00.00 SEE SHEET NO. 8
5
ANDREW BOLNICK, TRUSTEE
DB 3324 PG 212
MB 33 PG 287
MB 31 PG 17
FOR -L- PROFILE SEE SHEET 17
10-SEP-2013 14:37
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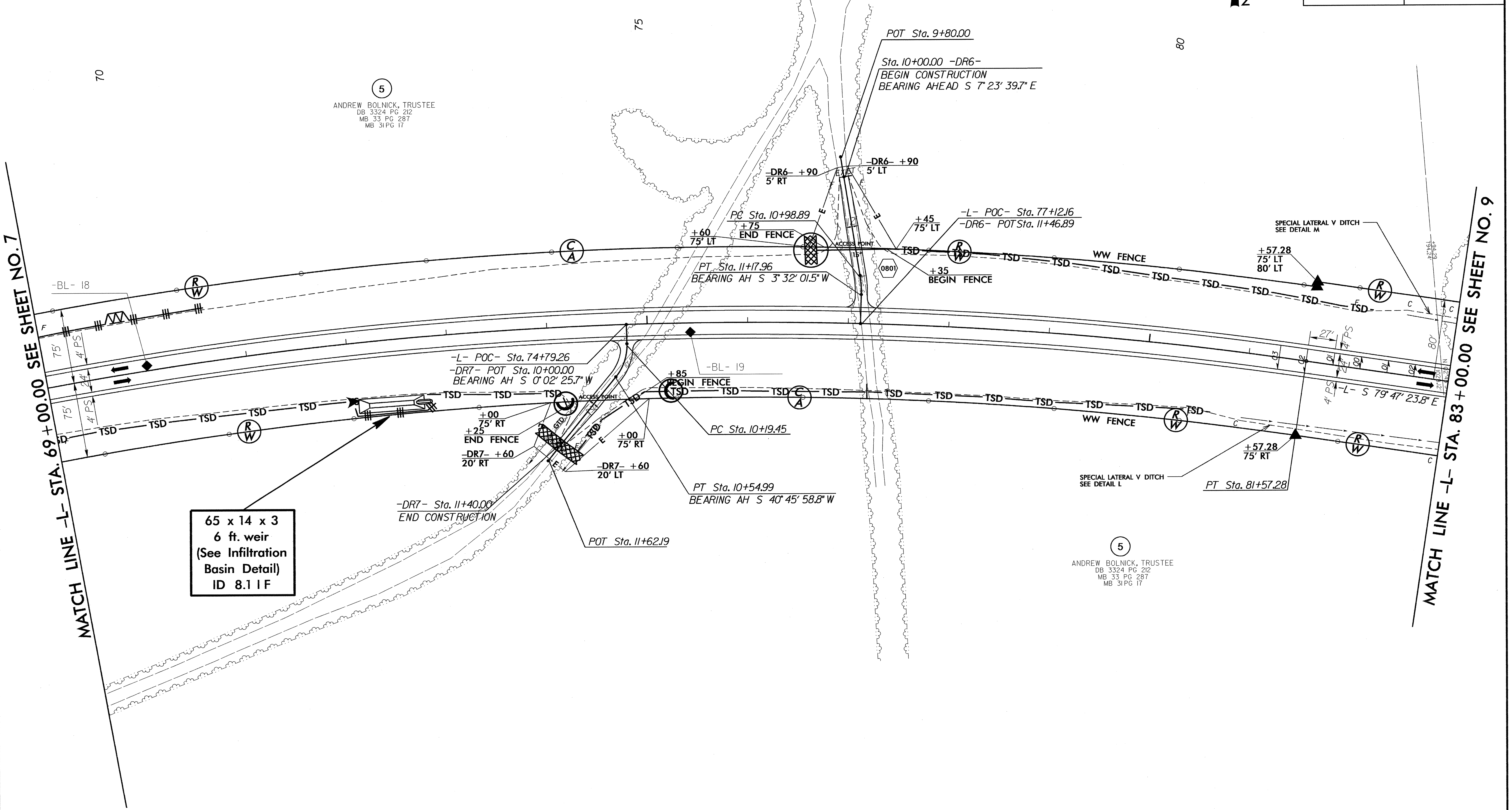
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-24/CONST.8
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

8/17/99

-L-	-DR6-	-DR7-
PI Sta 72+30.40	PI Sta 11+08.45	PI Sta 10+38.01
Δ = 28° 24' 01.9" (RT)	Δ = 10° 55' 41.3" (RT)	Δ = 40° 43' 33.1" (RT)
D = 1° 29' 59.6"	D = 57° 17' 44.8"	D = 114° 35' 29.6"
L = 1,893.51'	L = 19.07'	L = 35.54'
T = 966.63'	T = 9.57'	T = 18.56'
R = 3,820.00'	R = 100.00'	R = 50.00'
SE = .03	SE = SEE PLANS	SE = SEE PLANS
RO = 81'		

NAD 83/NSRS 2007



65 x 14 x 3
6 ft. weir
(See Infiltration Basin Detail)
ID 8.1 I F

NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 18
FOR -DR6- PROFILE SEE SHEET 23
FOR -DR7- PROFILE SEE SHEET 23

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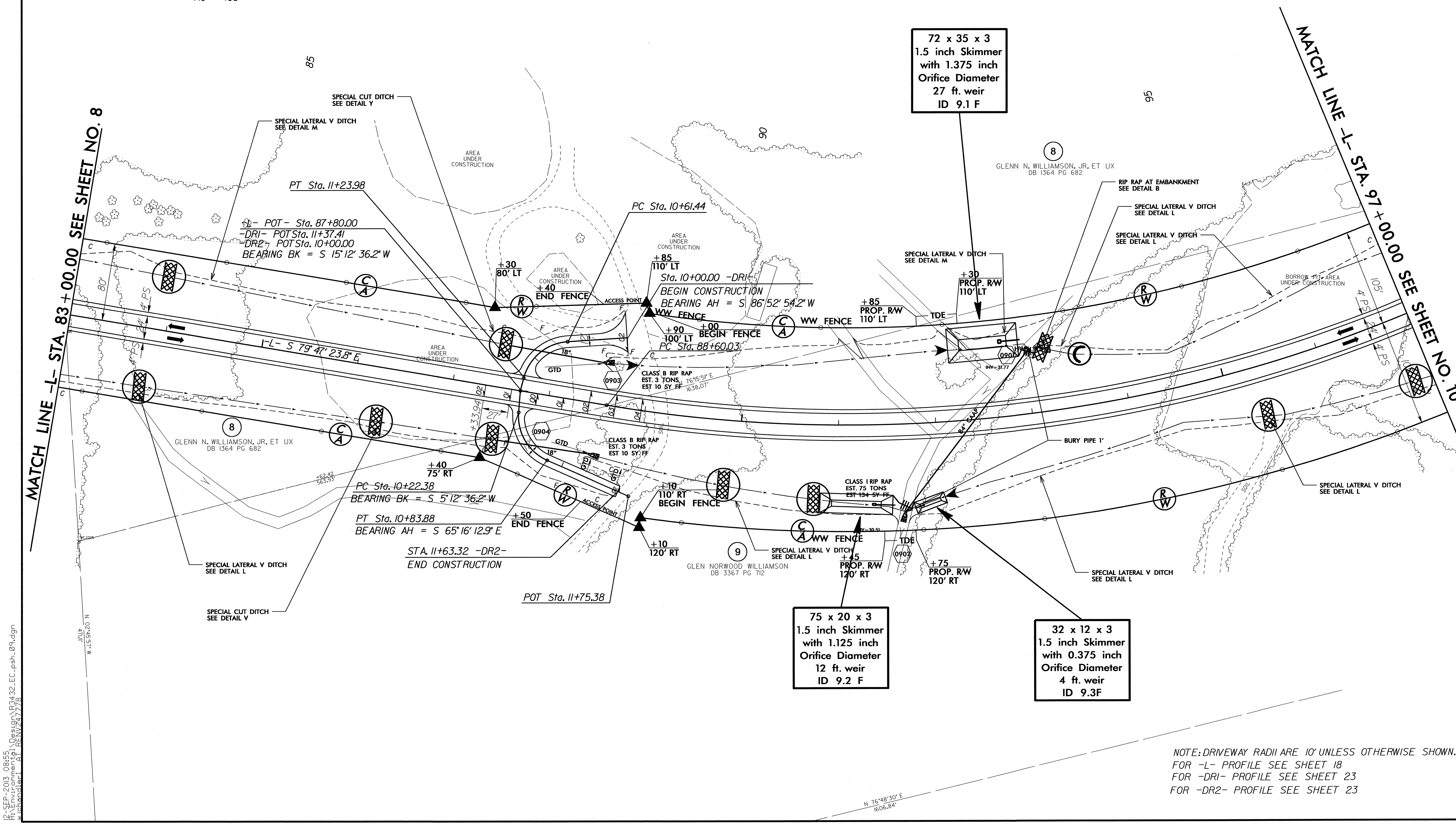
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-25/CONST.9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NAD 83/NSRS 2007

-L-	-DR1-	-DR2-
PI Sta 97+39.71	PI Sta 10+97.55	PI Sta 10+57.70
Δ = 60° 46' 46.1" (LT)	Δ = 71° 40' 18.0" (LT)	Δ = 70° 28' 49.1" (LT)
D = 3° 49' 11.0"	D = 114° 35' 29.6"	D = 114° 35' 29.6"
L = 1,591.20'	L = 62.55'	L = 61.51'
T = 879.68'	T = 36.11'	T = 35.32'
R = 1,500.00'	R = 50.00'	R = 50.00'
SE = .04	SE = SEE PLANS	SE = SEE PLANS
RO = 108'		



NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 18
FOR -DR1- PROFILE SEE SHEET 23
FOR -DR2- PROFILE SEE SHEET 23

8/17/99

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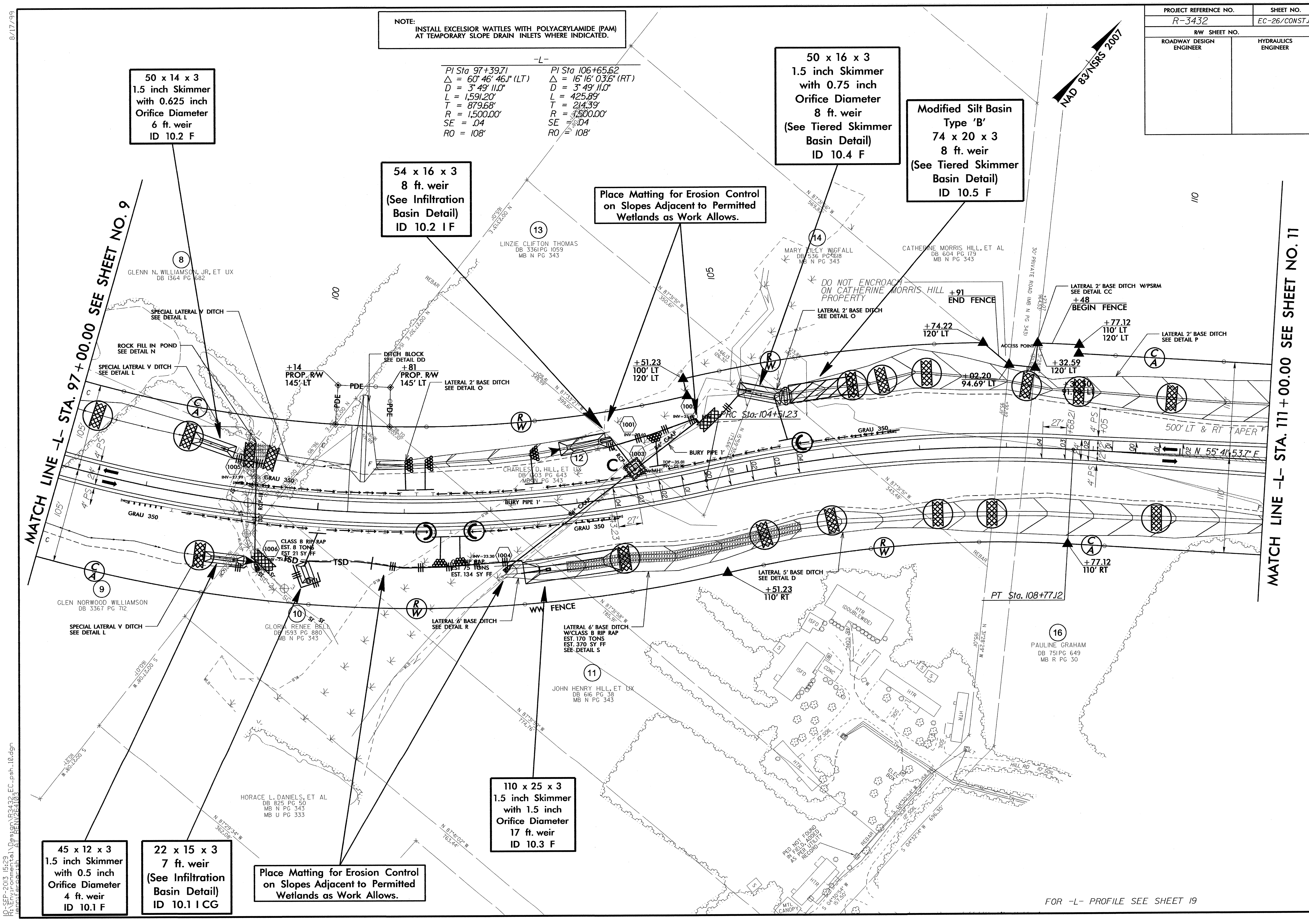
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-26/CONSTJ0
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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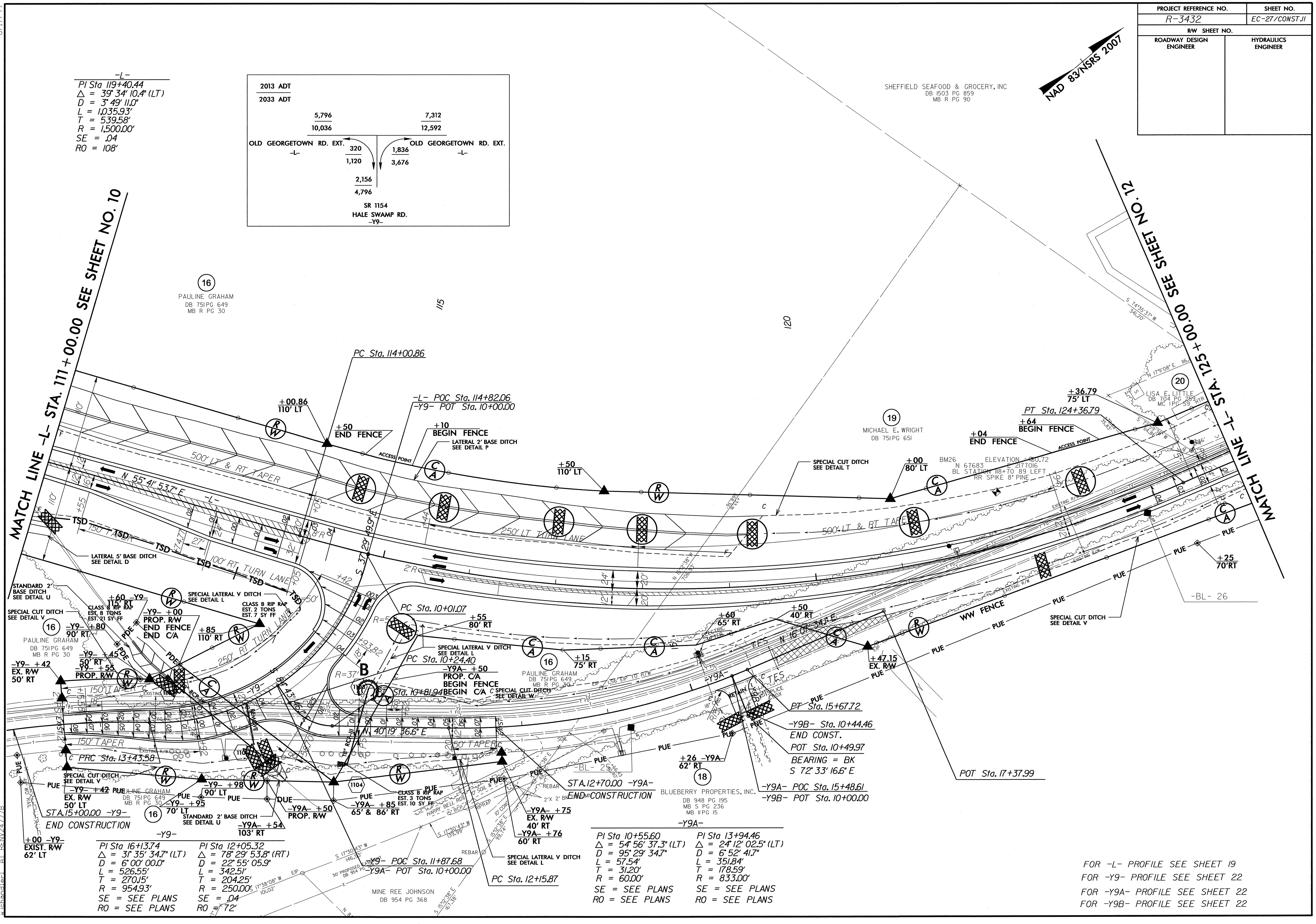
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-27/CONSTJI
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-L-
PI Sta 119+40.44
△ = 39° 34' 10.4" (LT)
D = 3° 49' 11.0"
L = 1,035.93'
T = 539.58'
R = 1,500.00'
SE = .04
RO = 108'



2013 ADT
2033 ADT
5,796
10,036
7,312
12,592
OLD GEORGETOWN RD. EXT. -L-
OLD GEORGETOWN RD. EXT. -L-
320
1,120
1,836
3,676
2,156
4,796
SR 1154
HALE SWAMP RD.
-Y9-
NAD 83/NSRS 2007
SHEFFIELD SEAFOOD & GROCERY, INC
DB 1503 PG 859
MB R PG 90
MATCH LINE -L- STA. 111+00.00 SEE SHEET NO. 10
MATCH LINE -L- STA. 125+00.00 SEE SHEET NO. 12
PAULINE GRAHAM
DB 751 PG 649
MB R PG 30
MICHAEL E. WRIGHT
DB 751 PG 651
LISA E. LITTLE
BLUEBERRY PROPERTIES, INC.
DB 948 PG 195
MB S PG 236
MB 11 PG 15
MINE REE JOHNSON
DB 954 PG 368
PC Sta. 114+00.86
-L- POC Sta. 114+82.06
-Y9- POT Sta. 10+00.00
+00.86 110' LT
+50 END FENCE
+10 BEGIN FENCE
LATERAL 2' BASE DITCH SEE DETAIL P
+50 110' LT
SPECIAL CUT DITCH SEE DETAIL T
+00 80' LT
BM26 ELEVATION = 30.72
N 67683 E 2177016
BL STATION 118+70.89 LEFT
RR SPIKE 8" PINE
+04 END FENCE
+64 BEGIN FENCE
PT Sta. 124+36.79
+36.79 75' LT
+25 70' RT
-BL- 26
N 55° 41' 53.7" E
500' LT & RT TAPER
250' LT TURN LANE
150' TAPER
100' RT TURN LANE
250' RT TURN LANE
LATERAL 5' BASE DITCH SEE DETAIL D
STANDARD 2' BASE DITCH SEE DETAIL U
SPECIAL CUT DITCH SEE DETAIL V
CLASS B RIP RAP EST. 8 TONS EST. 21 SY FF
SPECIAL LATERAL V DITCH SEE DETAIL L
CLASS B RIP RAP EST. 2 TONS EST. 7 SY FF
+60 -Y9- 115' RT
-Y9- +00 PROP. R/W END FENCE END C/A
+85 110' RT
-Y9- +80 90' RT
-Y9- +45 50' RT
-Y9- +55 PROP. R/W
-Y9- +42 EX. R/W 50' RT
PC Sta. 10+01.07
+55 80' RT
SPECIAL LATERAL V DITCH SEE DETAIL L
PC Sta. 10+24.40
-Y9A- +50 PROP. C/A BEGIN FENCE BEGIN C/A
SPECIAL CUT DITCH SEE DETAIL W
Sta. 10+81.94
+15 75' RT
+60 65' RT
+50 40' RT
WW FENCE
SPECIAL CUT DITCH SEE DETAIL V
+47.15 EX. R/W
PT Sta. 15+67.72
-Y9B- Sta. 10+44.46
END CONST.
POT Sta. 10+49.97
BEARING = BK
S 72° 33' 16.6" E
POT Sta. 17+37.99
-Y9A- POC Sta. 15+48.61
-Y9B- POT Sta. 10+00.00
+26 -Y9A- 62' RT
STA. 12+70.00 -Y9A-
END CONSTRUCTION
N 40° 19' 36.6" E
PRC Sta. 13+43.58
150' TAPER
SPECIAL CUT DITCH SEE DETAIL V
-Y9- +42 EX. R/W 50' LT
STA. 15+00.00 -Y9-
END CONSTRUCTION
-Y9- +98 90' LT
-Y9- +95 70' LT
STANDARD 2' BASE DITCH SEE DETAIL U
-Y9A- +50 PROP. R/W
-Y9A- +54 103' RT
-Y9A- +85 65' & 86' RT
CLASS B RIP RAP EST. 3 TONS EST. 10 SY FF
-Y9A- +75 EX. R/W 40' RT
-Y9A- +76 60' RT
SPECIAL LATERAL V DITCH SEE DETAIL L
+00 -Y9- EXIST. R/W 62' LT
-Y9- POC Sta. 11+87.68
-Y9A- POT Sta. 10+00.00
PC Sta. 12+15.87
PUE

-Y9-

PI Sta 16+13.74	PI Sta 12+05.32
△ = 31° 35' 34.7" (LT)	△ = 78° 29' 53.8" (RT)
D = 6° 00' 00.0"	D = 22° 55' 05.9"
L = 526.55'	L = 342.51'
T = 270.15'	T = 204.25'
R = 954.93'	R = 250.00'
SE = SEE PLANS	SE = .04
RO = SEE PLANS	RO = 72'

-Y9A-

PI Sta 10+55.60	PI Sta 13+94.46
△ = 54° 56' 37.3" (LT)	△ = 24° 12' 02.5" (LT)
D = 95° 29' 34.7"	D = 6° 52' 41.7"
L = 57.54'	L = 351.84'
T = 31.20'	T = 178.59'
R = 60.00'	R = 833.00'
SE = SEE PLANS	SE = SEE PLANS
RO = SEE PLANS	RO = SEE PLANS

FOR -L- PROFILE SEE SHEET 19
FOR -Y9- PROFILE SEE SHEET 22
FOR -Y9A- PROFILE SEE SHEET 22
FOR -Y9B- PROFILE SEE SHEET 22

8/17/99

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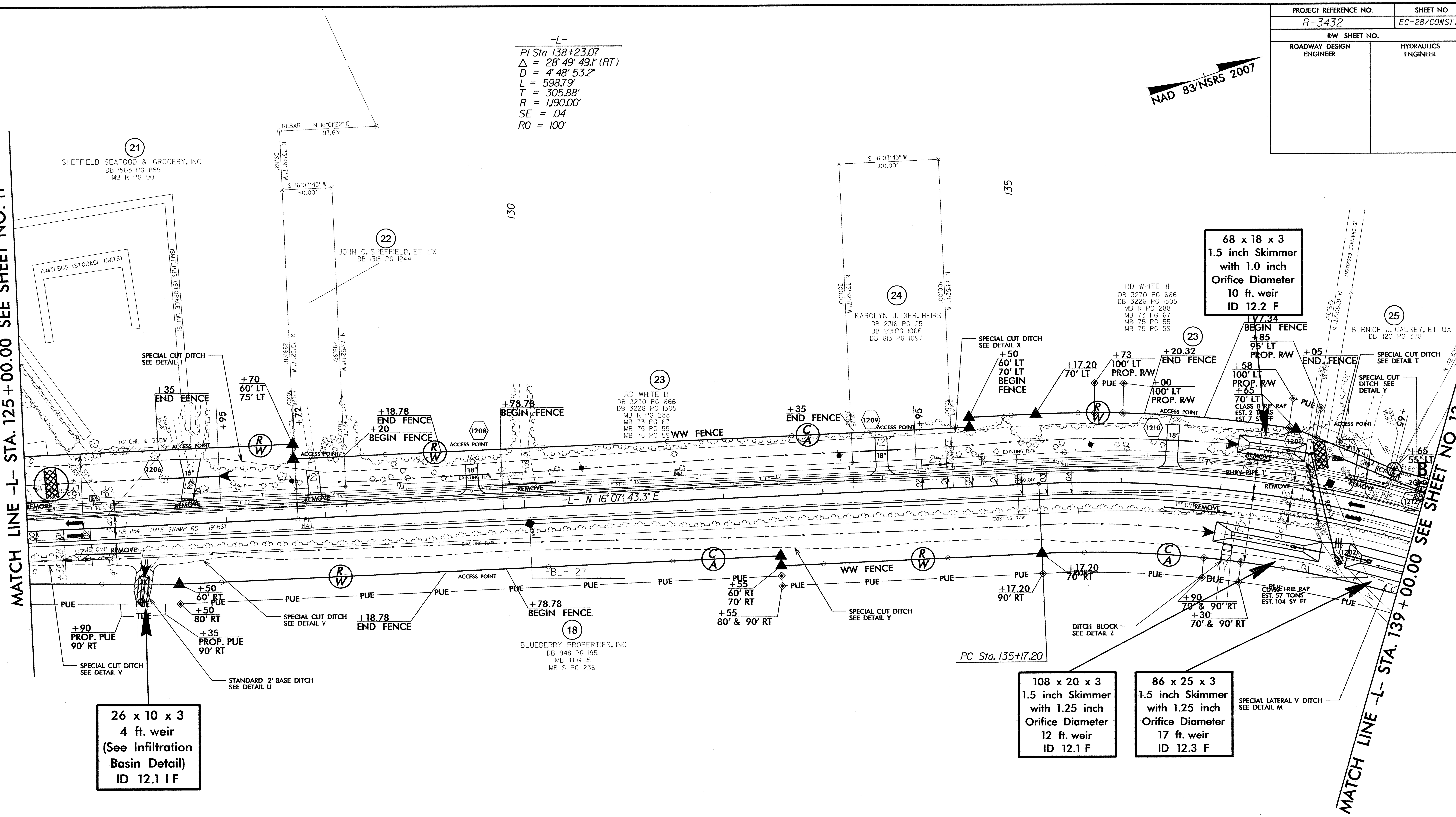
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-28/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE: DRIVEWAY RADII ARE 10′ UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 20

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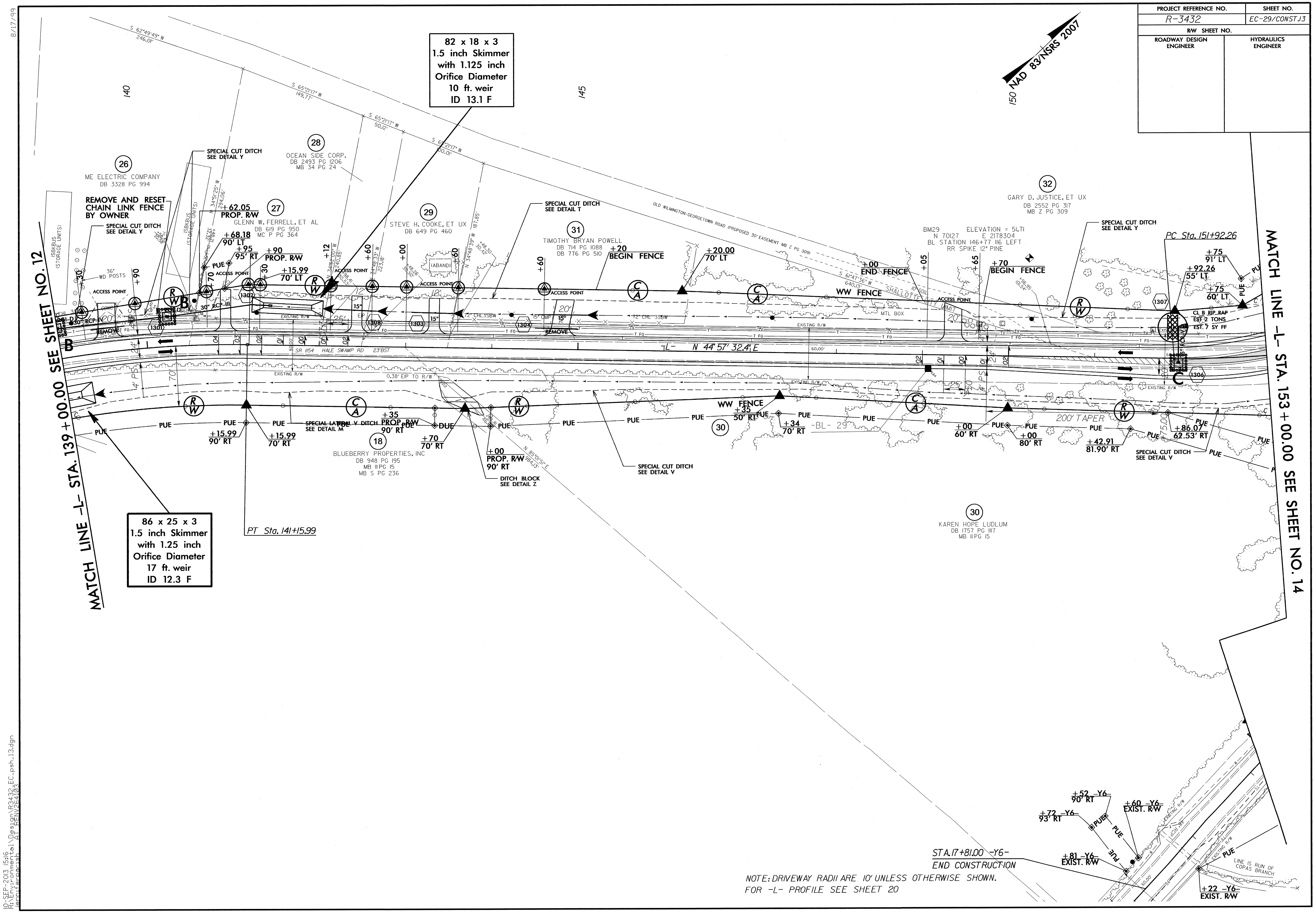
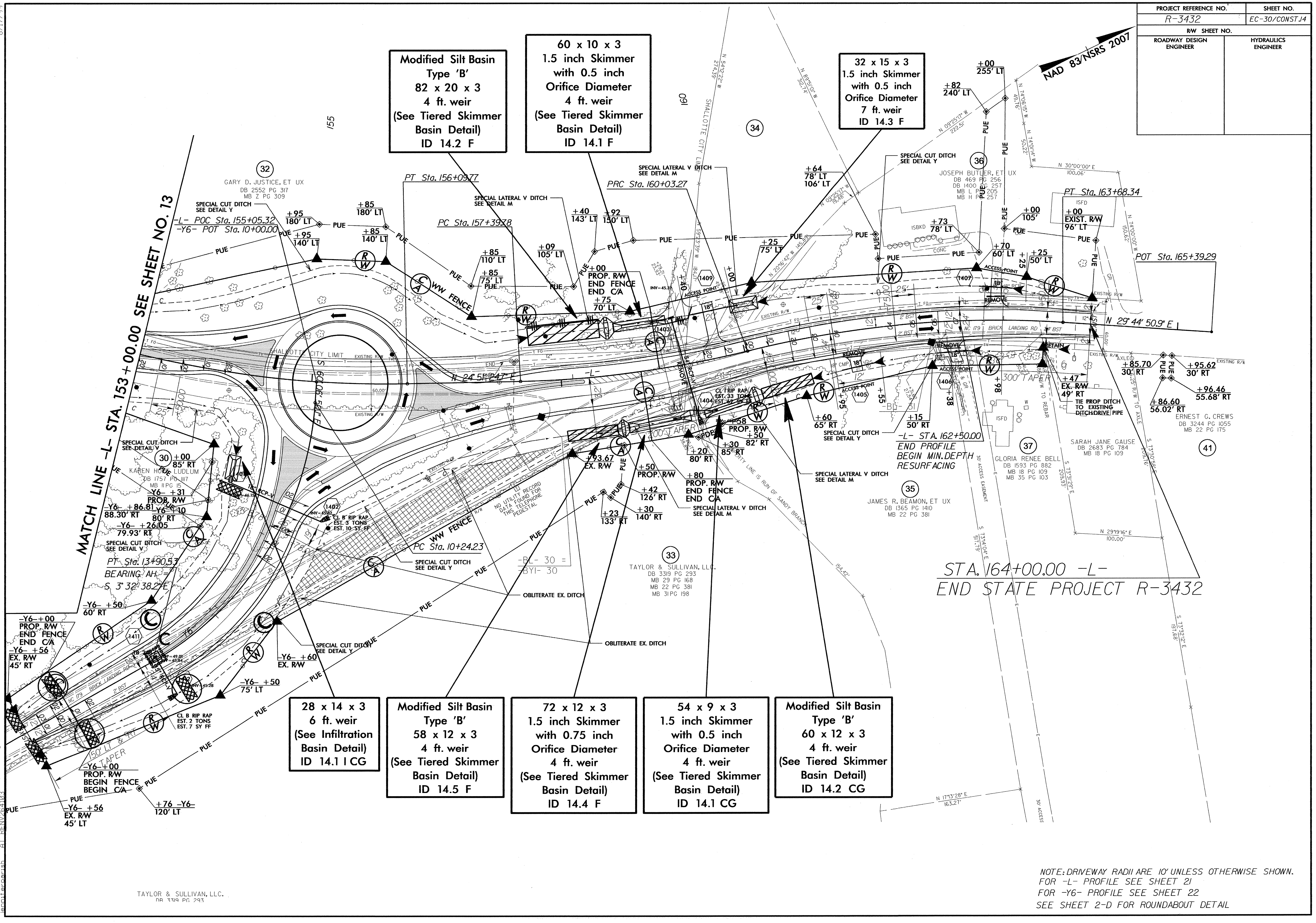
jenniferparish AT RENV264103

PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-29/CONSTJ3
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-30/CONSTJ4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NAD 83/NSRS 2007
Modified Silt Basin Type 'B' 82 x 20 x 3 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.2 F
60 x 10 x 3 1.5 inch Skimmer with 0.5 inch Orifice Diameter 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.1 F
32 x 15 x 3 1.5 inch Skimmer with 0.5 inch Orifice Diameter 7 ft. weir ID 14.3 F
28 x 14 x 3 6 ft. weir (See Infiltration Basin Detail) ID 14.1 I CG
Modified Silt Basin Type 'B' 58 x 12 x 3 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.5 F
72 x 12 x 3 1.5 inch Skimmer with 0.75 inch Orifice Diameter 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.4 F
54 x 9 x 3 1.5 inch Skimmer with 0.5 inch Orifice Diameter 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.1 CG
Modified Silt Basin Type 'B' 60 x 12 x 3 4 ft. weir (See Tiered Skimmer Basin Detail) ID 14.2 CG
MATCH LINE -L- STA. 153+00.00 SEE SHEET NO. 13
-L- POC Sta. 155+05.32
-Y6- POT Sta. 10+00.00
PT Sta. 156+09.77
PC Sta. 157+39.78
PRC Sta. 160+03.27
PT Sta. 163+68.34
POT Sta. 165+39.29
N 29° 44' 50.9" E
N 24° 51' 24.7" E
PC Sta. 10+24.23
PT Sta. 13+90.53
BEARING AH = S 3° 32' 38.2" E
-L- STA. 162+50.00 END PROFILE BEGIN MIN. DEPTH RESURFACING
STA. 164+00.00 -L- END STATE PROJECT R-3432
GARY D. JUSTICE, ET UX DB 2552 PG 317 MB Z PG 309
JOSEPH BUTLER, ET UX DB 469 PG 256 DB 1400 PG 257 MB L PG 205 MB H PG 257
KAREN HOLE LUDLUM DB 1757 PG 1117 MB 11 PG 15
TAYLOR & SULLIVAN, LLC. DB 3319 PG 293 MB 29 PG 168 MB 22 PG 381 MB 31 PG 198
JAMES R. BEAMON, ET UX DB 1365 PG 1410 MB 22 PG 381
GLORIA RENEE BELL DB 1593 PG 882 MB 18 PG 109 MB 35 PG 103
SARAH JANE GAUSE DB 2683 PG 784 MB 18 PG 109
ERNEST G. CREWS DB 3244 PG 1055 MB 22 PG 175
TAYLOR & SULLIVAN, LLC. DB 3319 PG 293
SPECIAL CUT DITCH SEE DETAIL Y
SPECIAL LATERAL V DITCH SEE DETAIL M
OBLITERATE EX. DITCH
WW FENCE
SHALLOTTE CITY LIMIT

NOTE: DRIVEWAY RADII ARE 10' UNLESS OTHERWISE SHOWN.
FOR -L- PROFILE SEE SHEET 21
FOR -Y6- PROFILE SEE SHEET 22
SEE SHEET 2-D FOR ROUNDABOUT DETAIL

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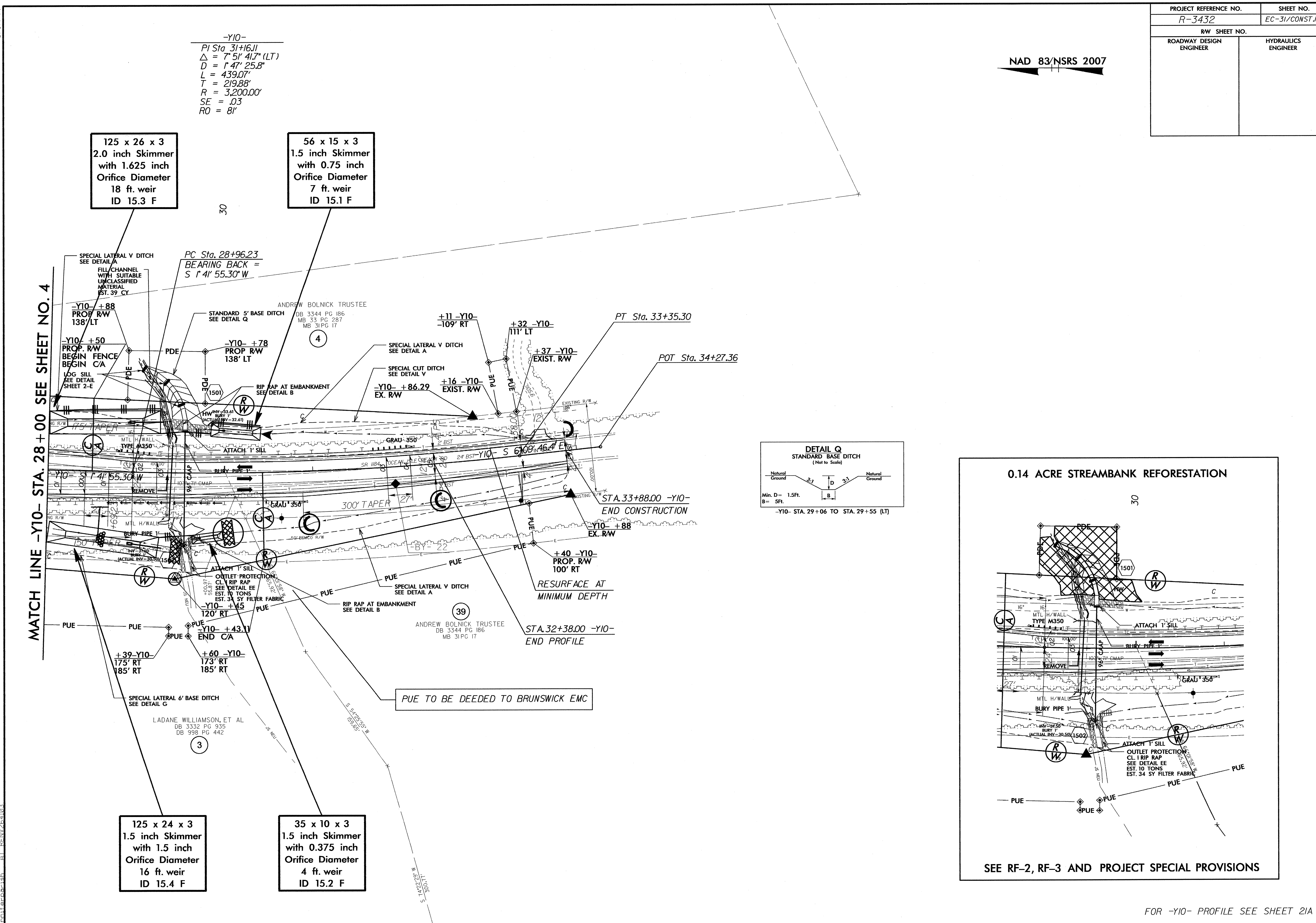
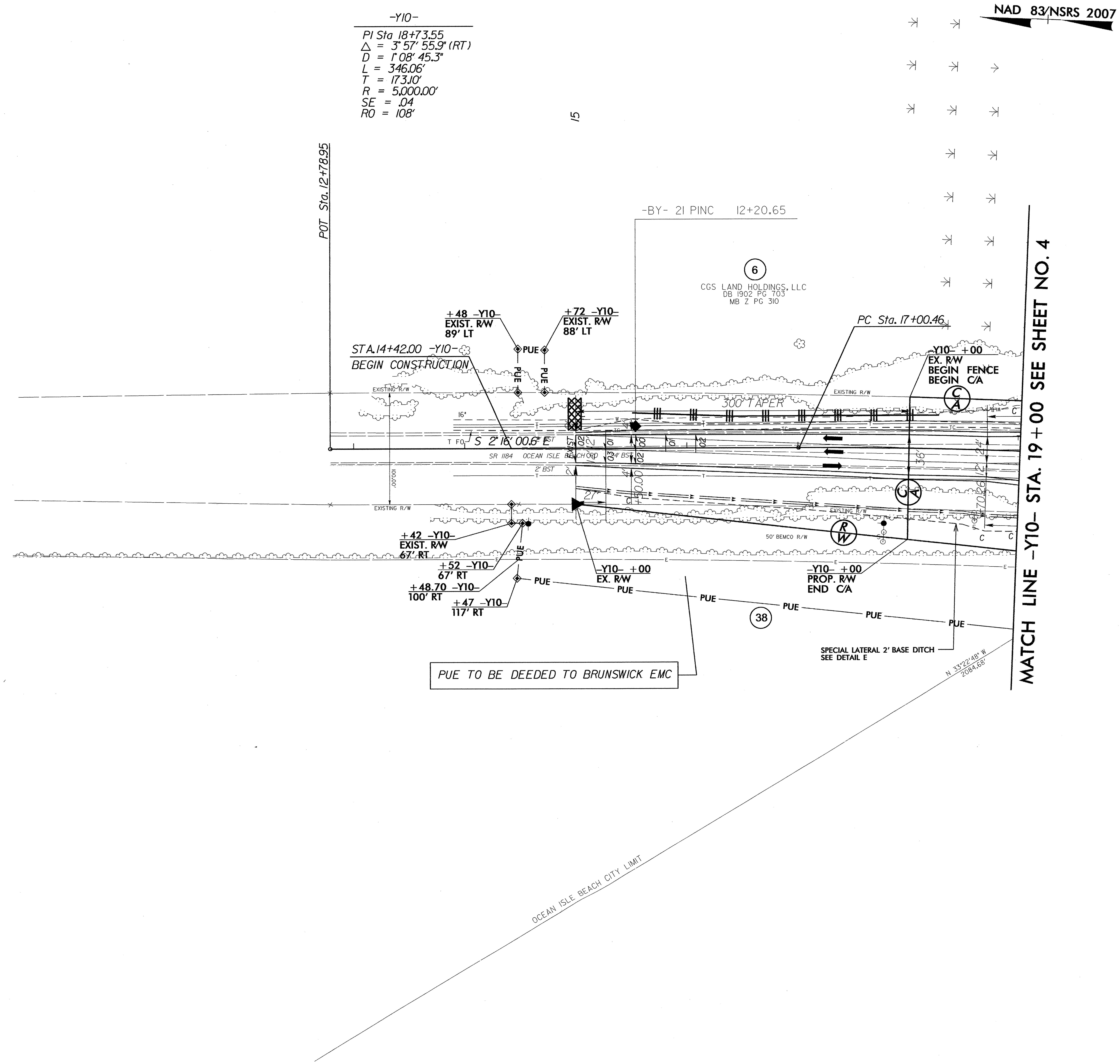
PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-31/CONSTJ5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PROJECT REFERENCE NO.	SHEET NO.
R-3432	EC-32/CONSTJ5A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



FOR -Y10- PROFILE SEE SHEET 21A

8/17/99

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jenniferparish AT RENV264103