

TIP PROJECT: R-3825A

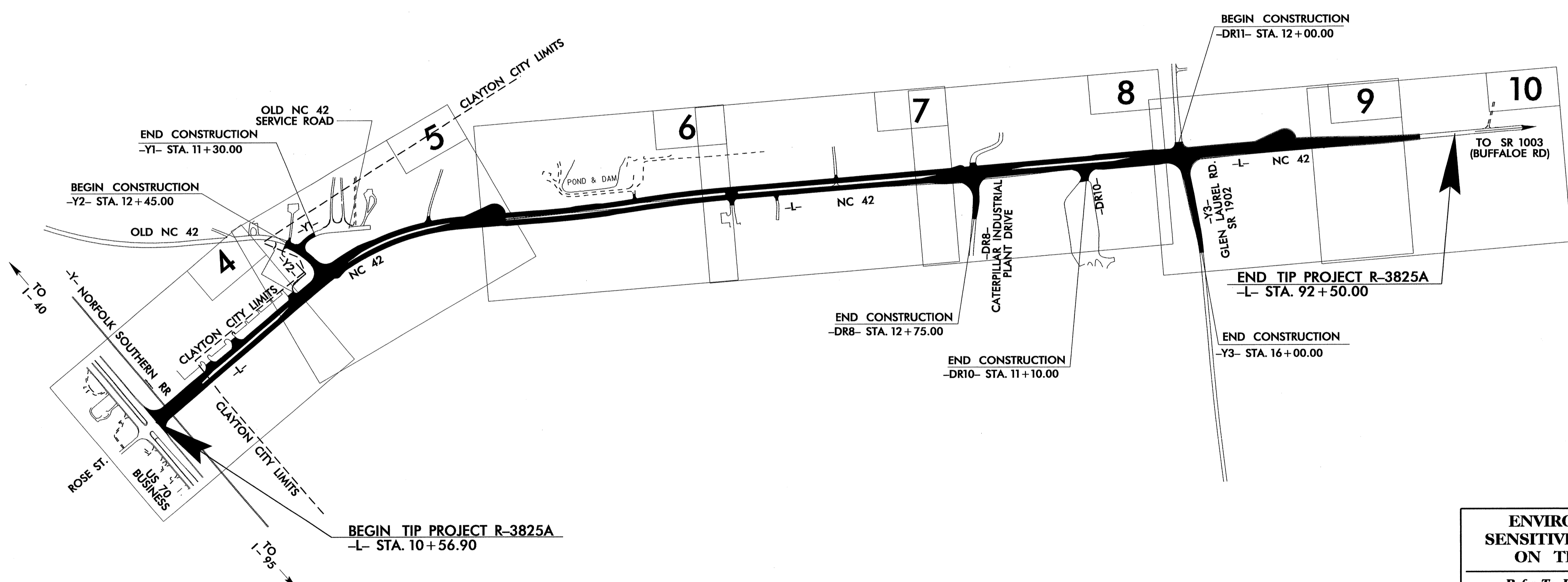
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL
JOHNSTON COUNTY

**LOCATION: NC 42 FROM US 70 IN CLAYTON TO
0.31 MI EAST OF SR 1902 (GLEN LAUREL RD)
TYPE OF WORK: GRADING, PAVING, WIDENING, DRAINAGE AND SIGNALS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-3825A	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

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

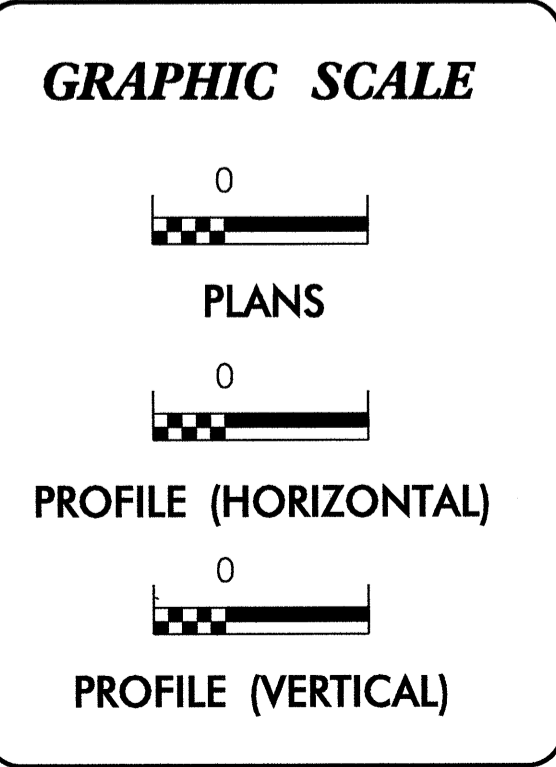


**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**

**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.*

**303(d) IMPAIRED WATER(S) EXIST
ON THIS PROJECT**
*303(d) Impaired Water Zone(s) Exist
From Sta. Beginning _____
to Sta. End _____
Refer To E. C. Special Provisions
for Special Considerations.*



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

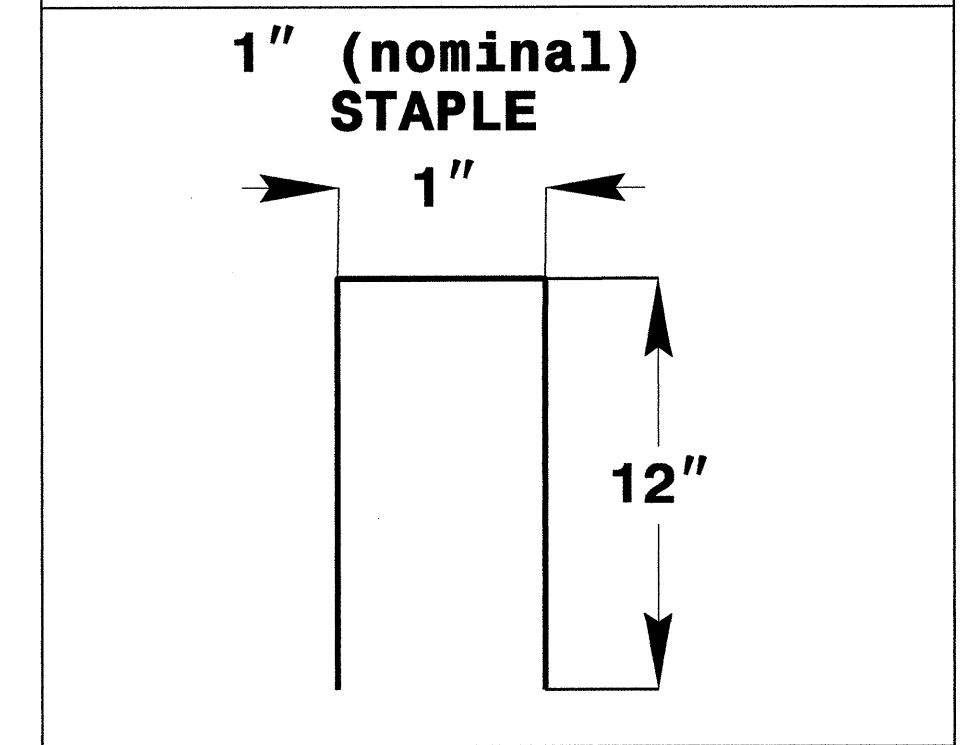
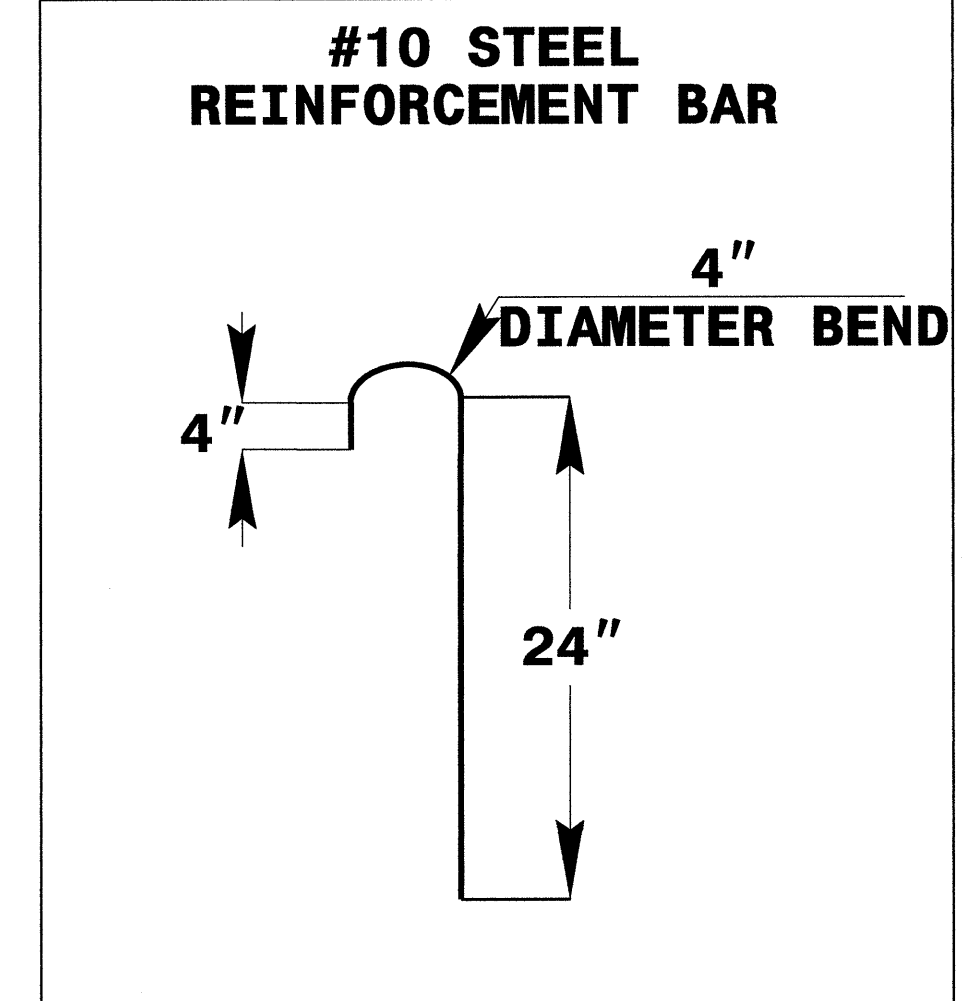
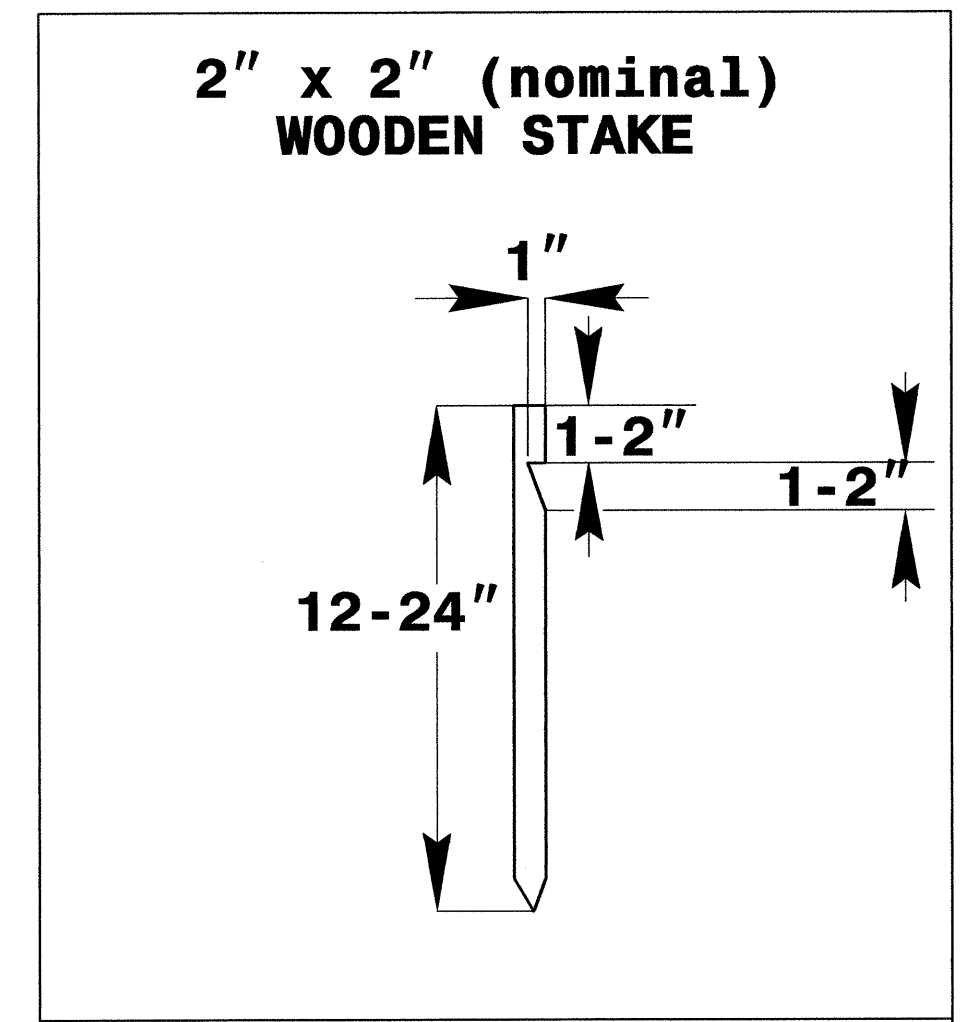
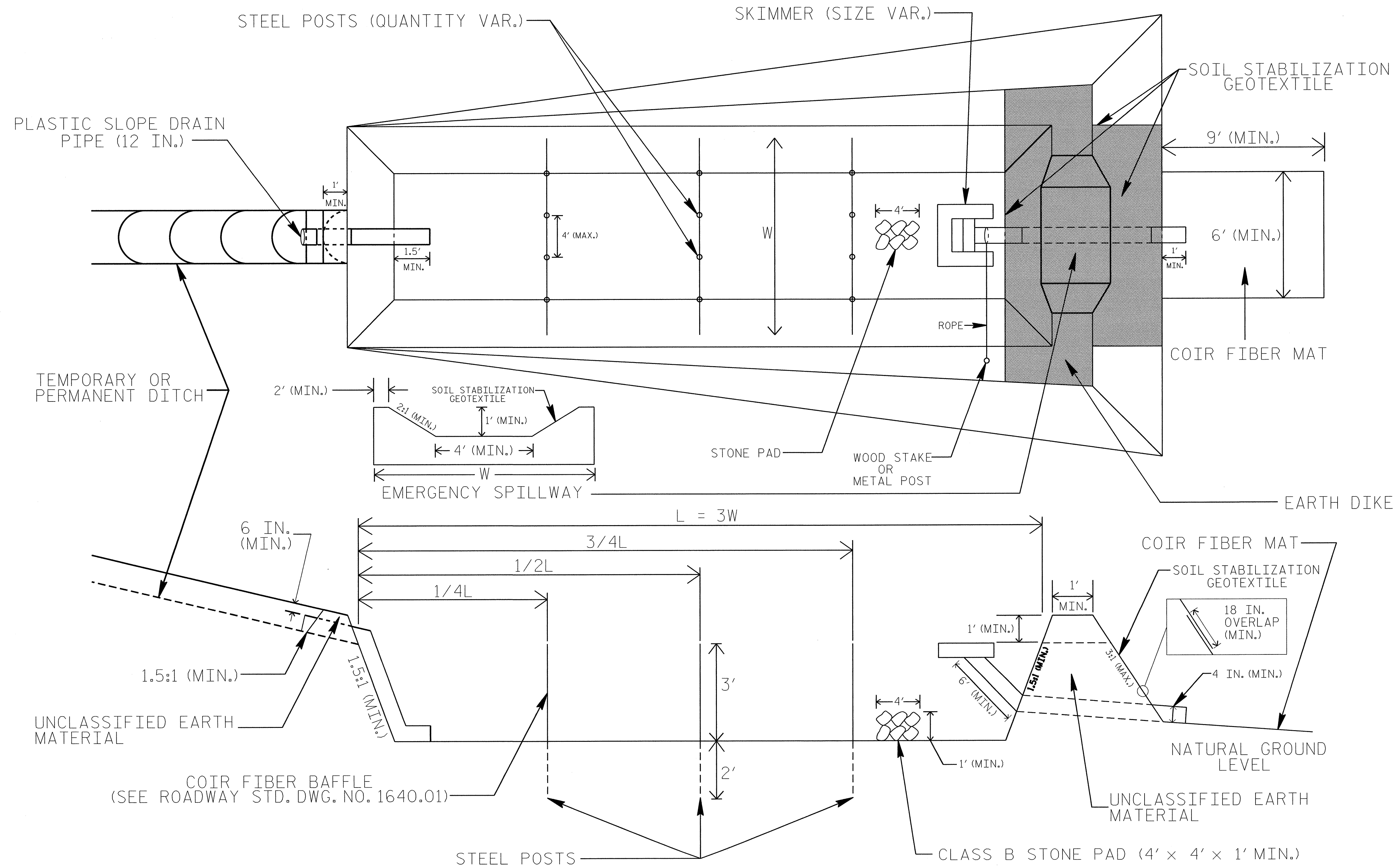
The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

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	

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me\hobcock

PROJECT REFERENCE NO.		SHEET NO.	
R-3825A		EC-2	
RW SHEET NO.			
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	

SKIMMER BASIN WITH BAFFLES DETAIL



COIR FIBER MAT ANCHOR OPTIONS

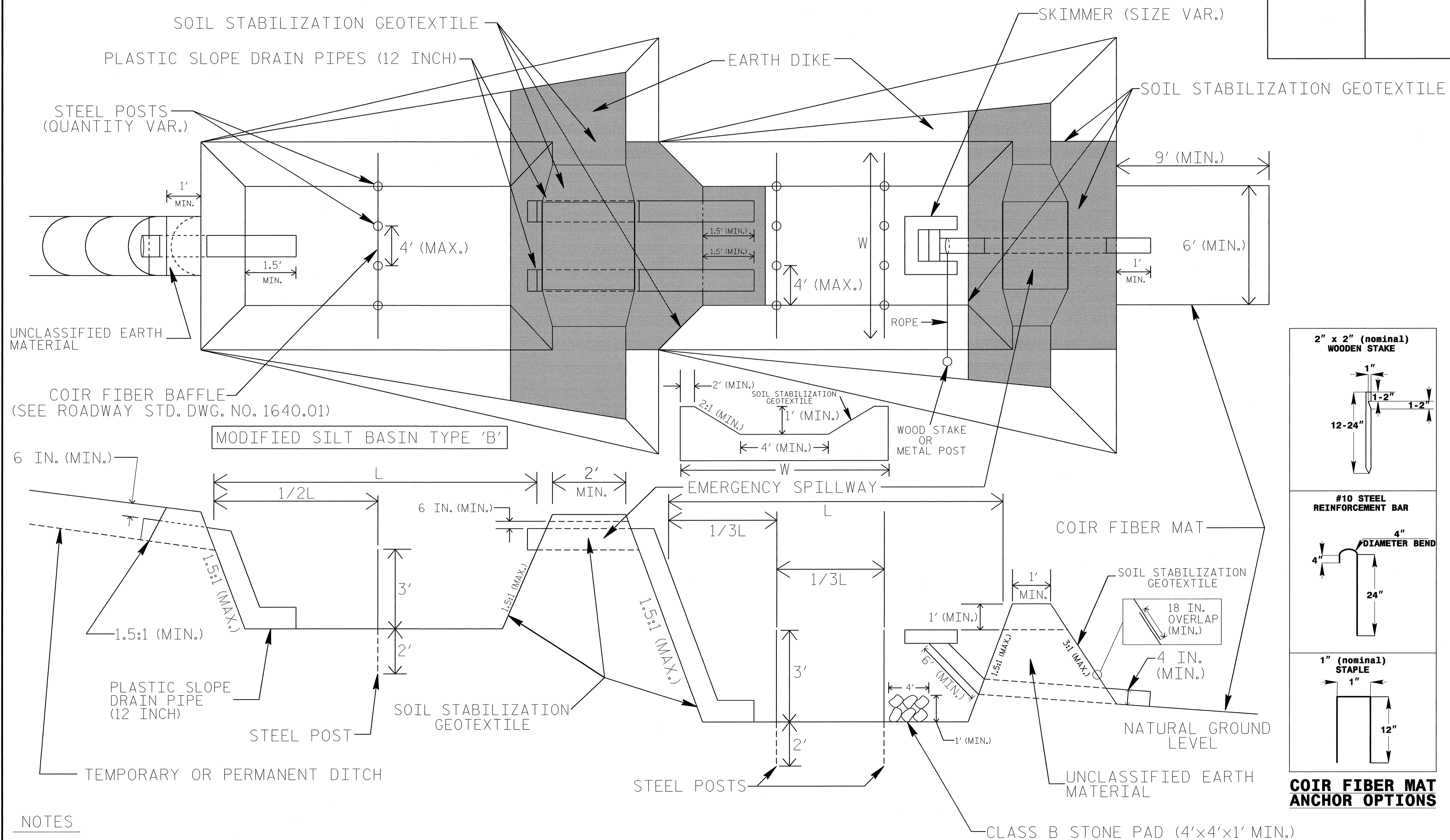
NOTES

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 EMERGENCY SPILLWAY 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 AS DIRECTED.
6. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.)

NOT TO SCALE

TIERED SKIMMER BASIN DETAIL

PROJECT REFERENCE NO. R-3825A	SHEET NO. EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



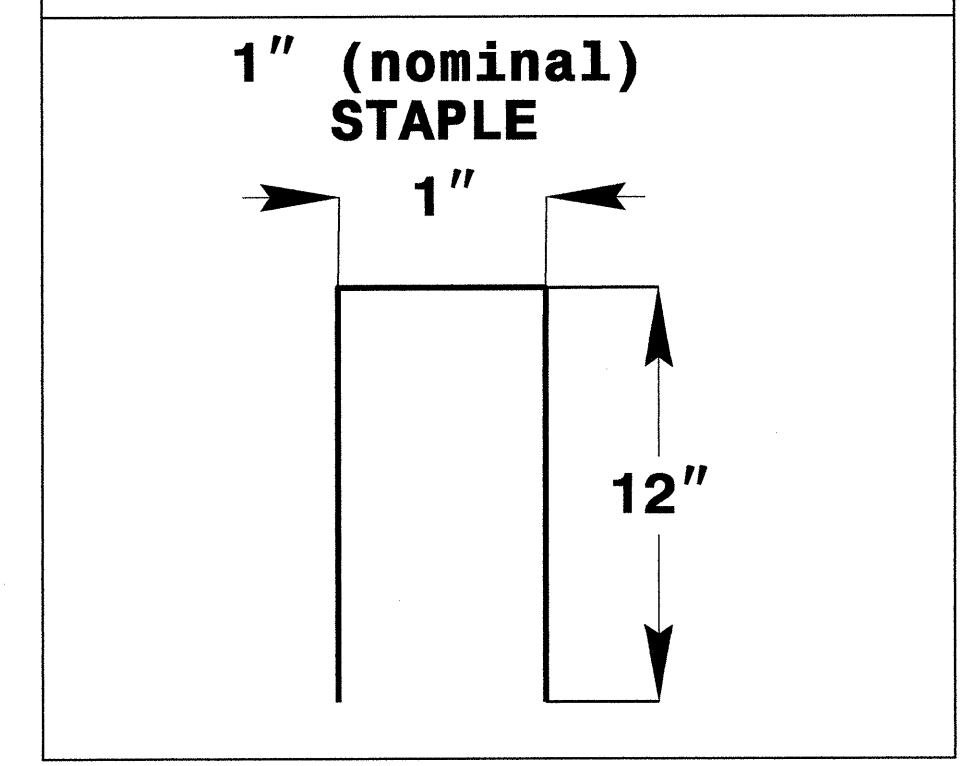
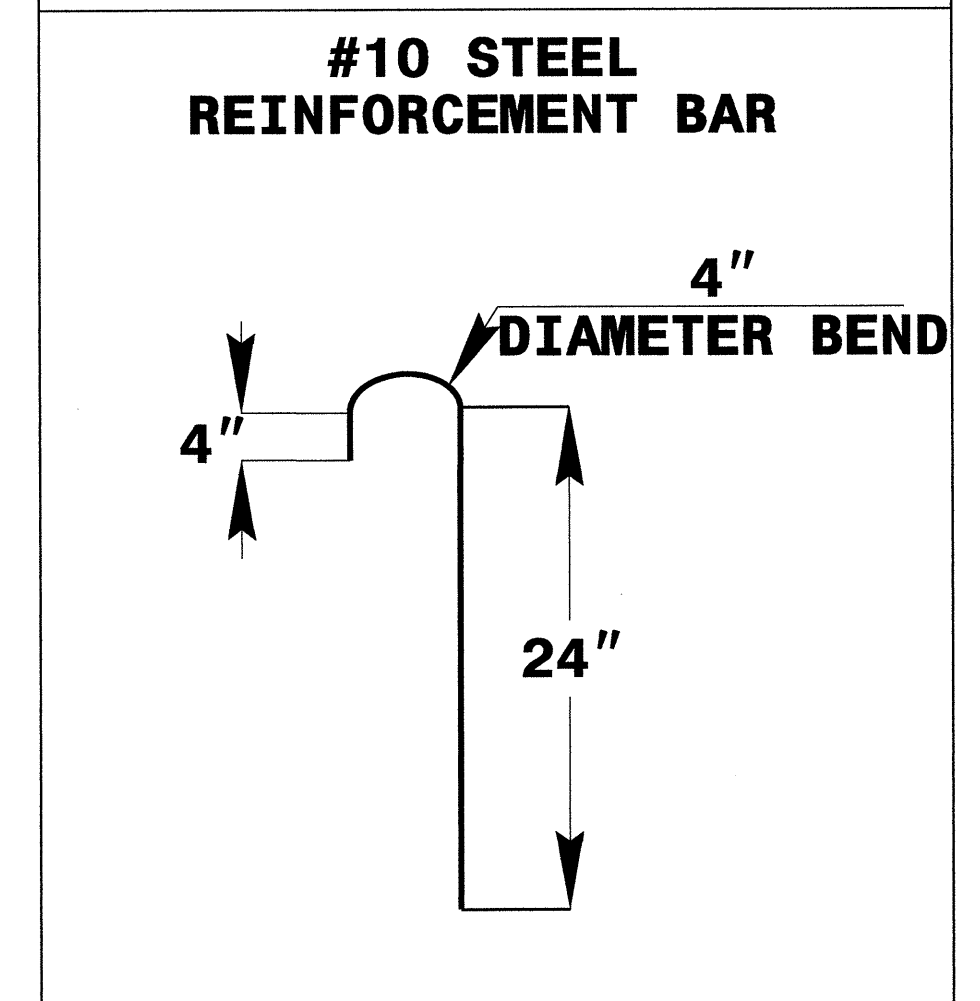
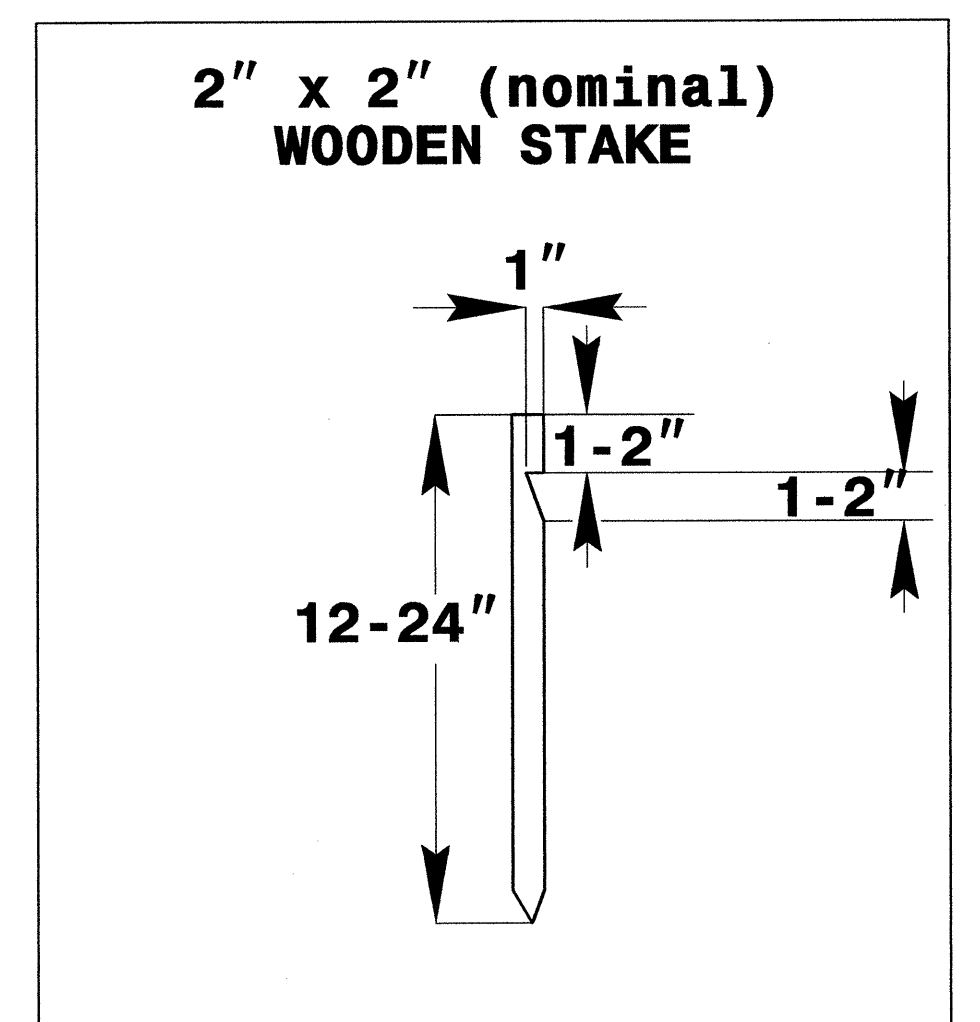
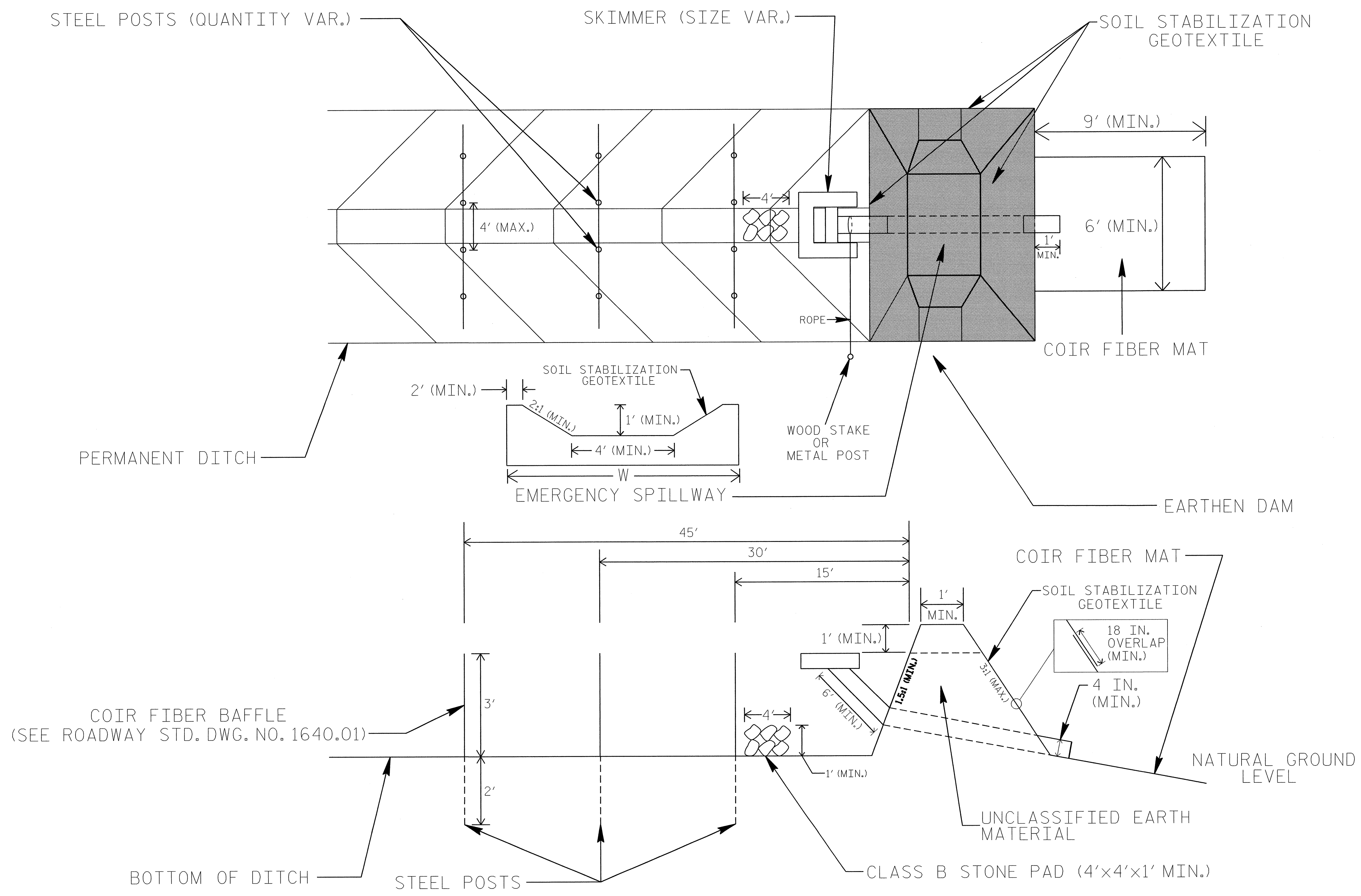
NOTES

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

NOT TO SCALE

PROJECT REFERENCE NO. R-3825A	SHEET NO. EC-2B
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EARTHEN DAM WITH SKIMMER



COIR FIBER MAT ANCHOR OPTIONS

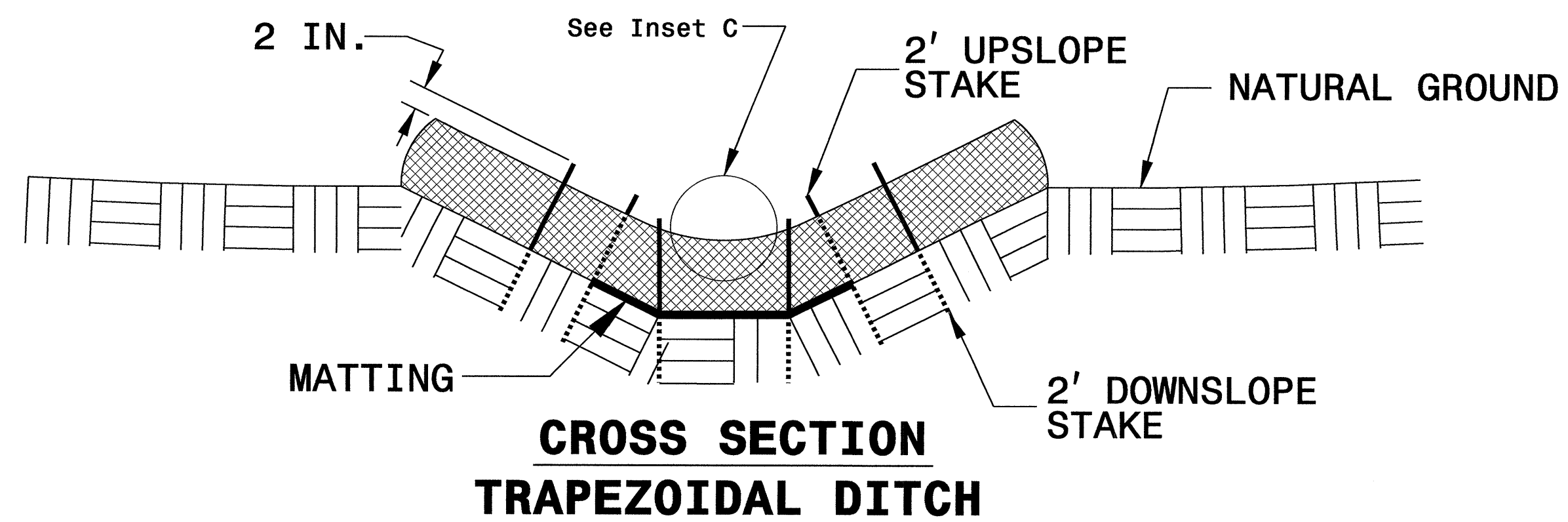
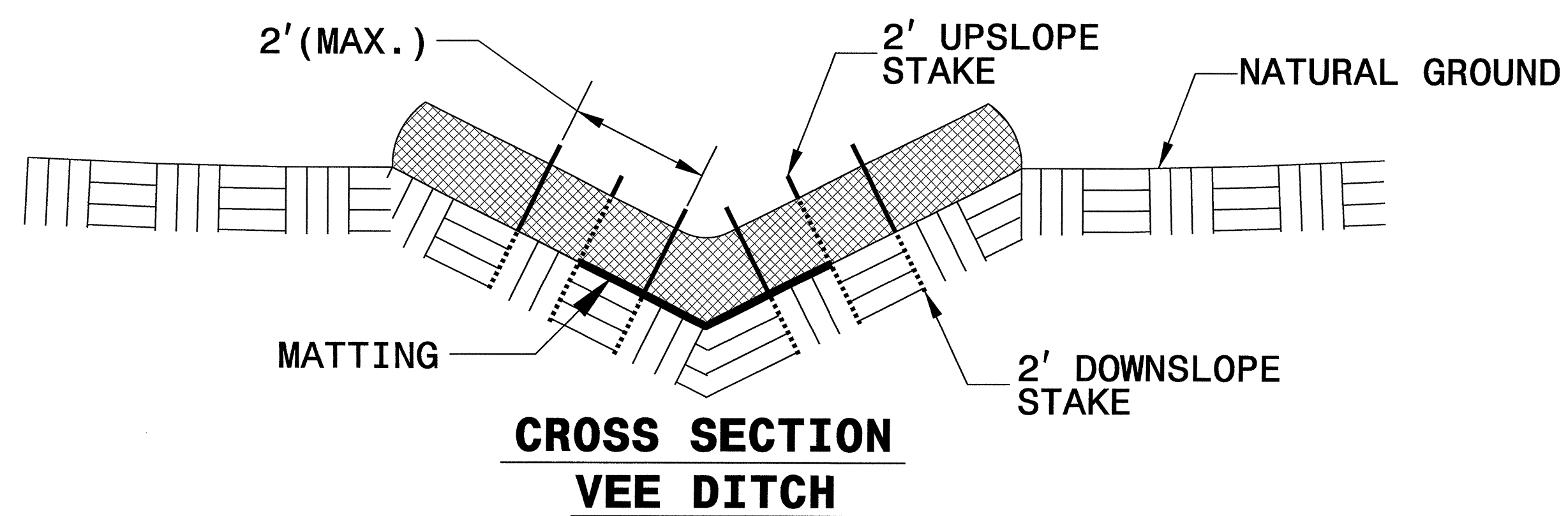
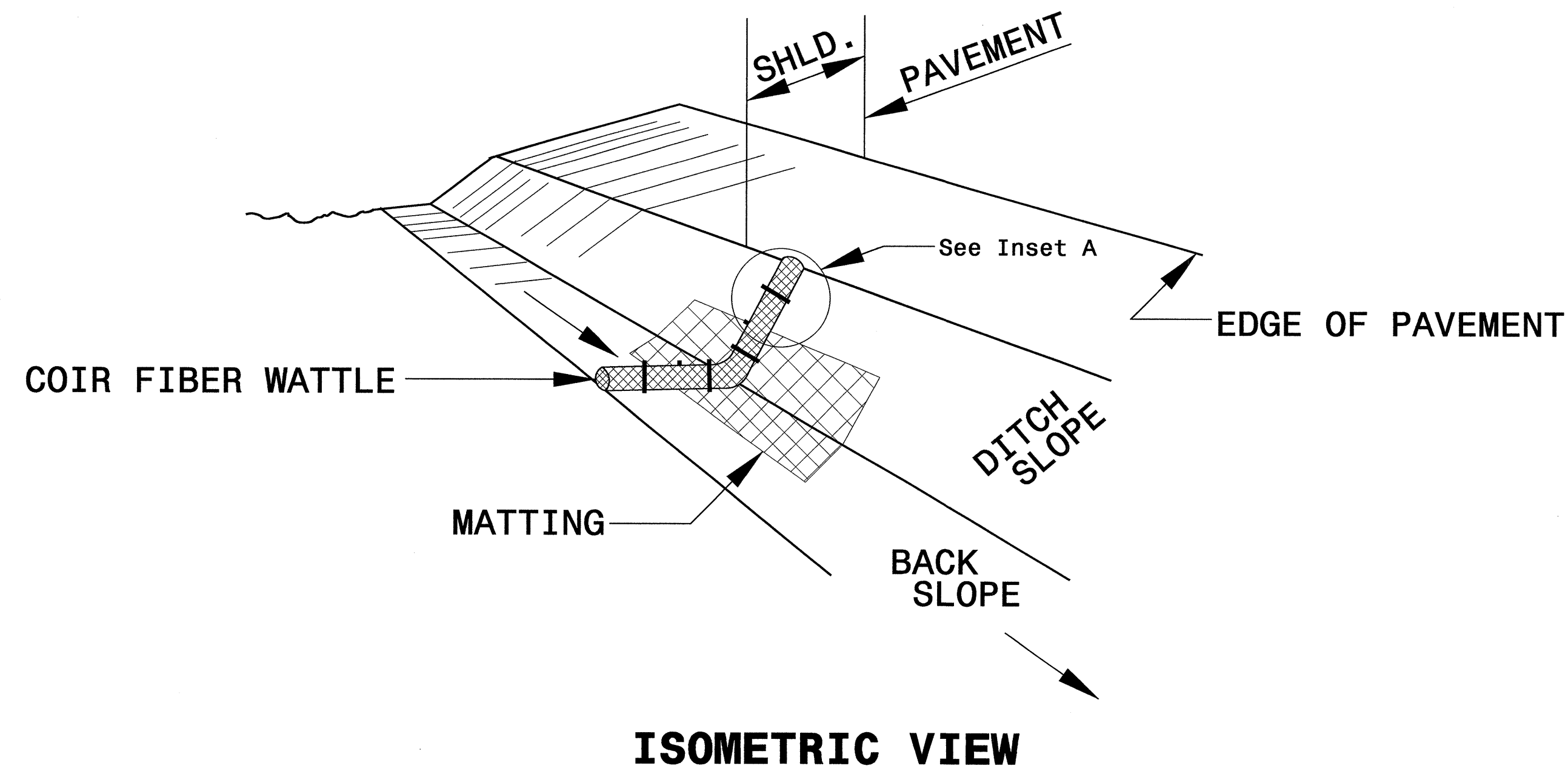
NOTES

1. LIMIT EARTHEN DAM HEIGHT TO 5 FT.
2. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING $Q/0.8$, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
3. SOIL STABILIZATION GEOTEXTILE FOR EMERGENCY SPILLWAY SHALL BE ONE CONTINUOUS PIECE OF MATERIAL OR OVERLAPPED 18 IN. (MIN.).

NOT TO SCALE

PROJECT REFERENCE NO. R-3825A	SHEET NO. EC-2C
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



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.

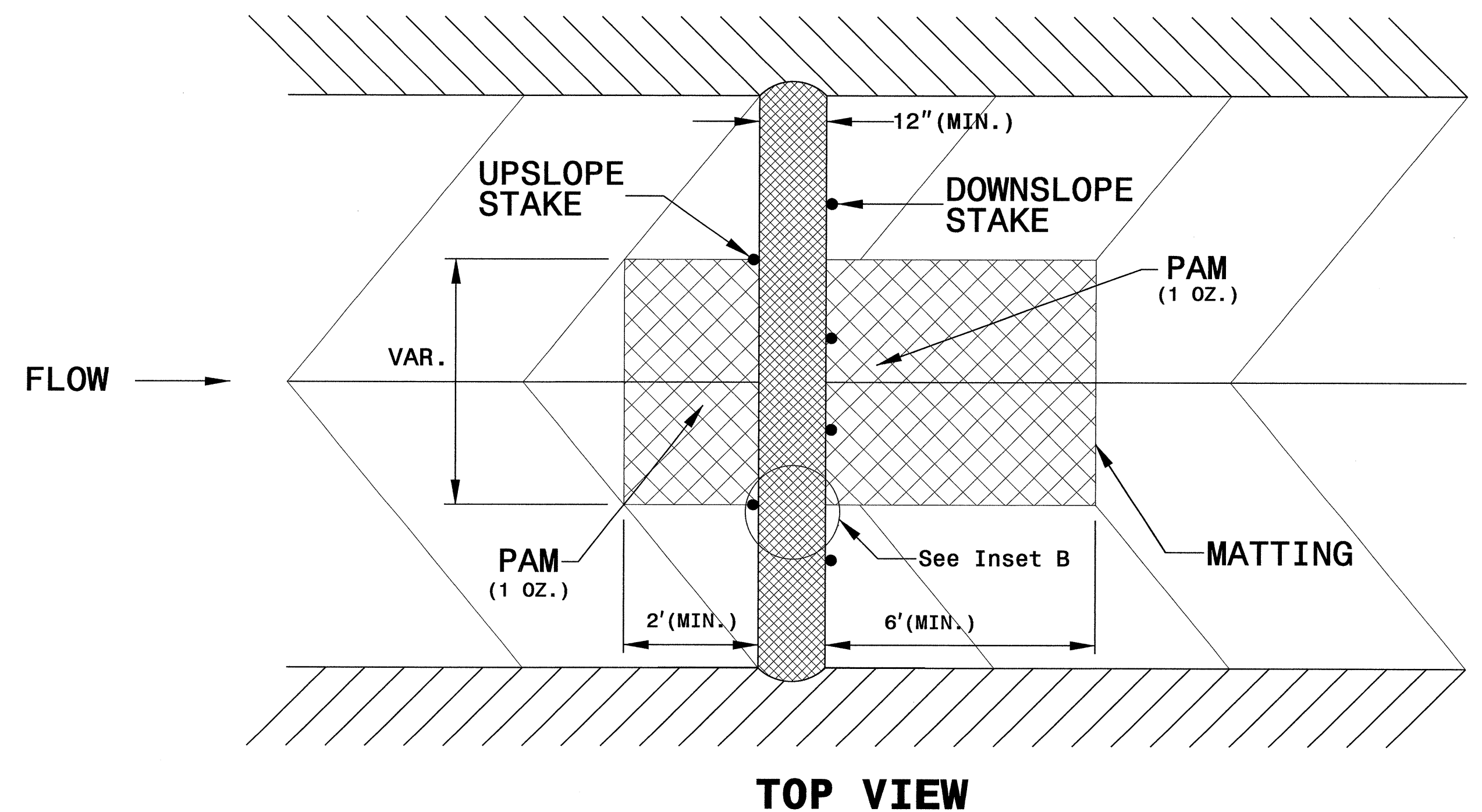
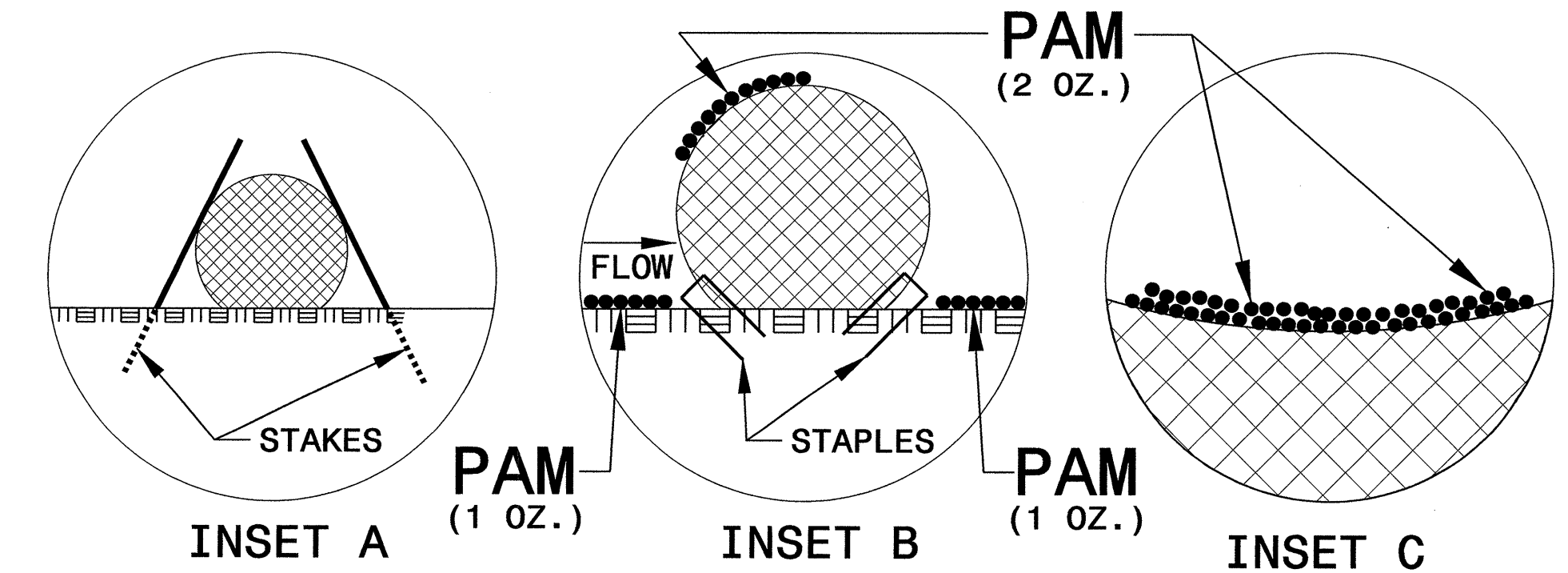
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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.



DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. R-3825A	SHEET NO. EC-3
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION SUMMARY SHEET

MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	12+00	18+50	LT	2085
4	-L-	19+50	21+05	RT	660
5	-L-	21+05	23+05	LT	645
5	-L-	24+50	31+05	LT	2100
5	-L-	25+50	34+50	RT	5055
6	-L-	35+00	36+00	LT	325
6	-L-	36+00	37+50	LT	410
6	-L-	37+50	39+50	LT	595
6	-L-	44+50	47+85	LT	1220
6	-L-	41+50	47+85	RT	2140
7	-L-	47+85	52+00	RT	1400
8	-DR8-	11+00	12+50	LT	275
9	-L-	73+15	74+00	LT	180
9	-L-	75+50	80+00	LT	2145
9	-L-	76+50	83+50	RT	2140
9	-Y3-	11+00	15+50	LT	905
			SUBTOTAL		22280
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					6955
			TOTAL		29235
			SAY		29250

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
9	-L-	73+50	74+50	RT	125
10	-L-	85+00	89+00	RT	505
			SUBTOTAL		630
			ADDITIONAL PSRM TO BE INSTALLED		4195
			TOTAL		4825
			SAY		4830

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>R-3825A</i>	SHEET NO. <i>EC-3A</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

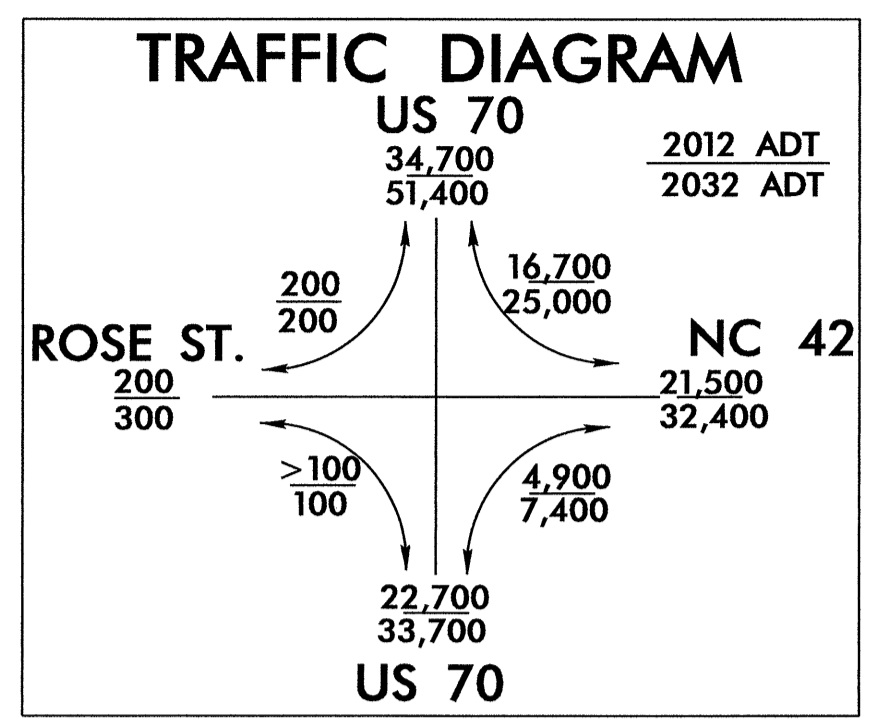
SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 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.
R-3825A	EC-04/CONST.04
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 4



48 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 4.3C

50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
17 ft. weir
ID 4.2C

DO NOT DISTURB
LIGHT POLE

DO NOT DISTURB
LIGHT POLE

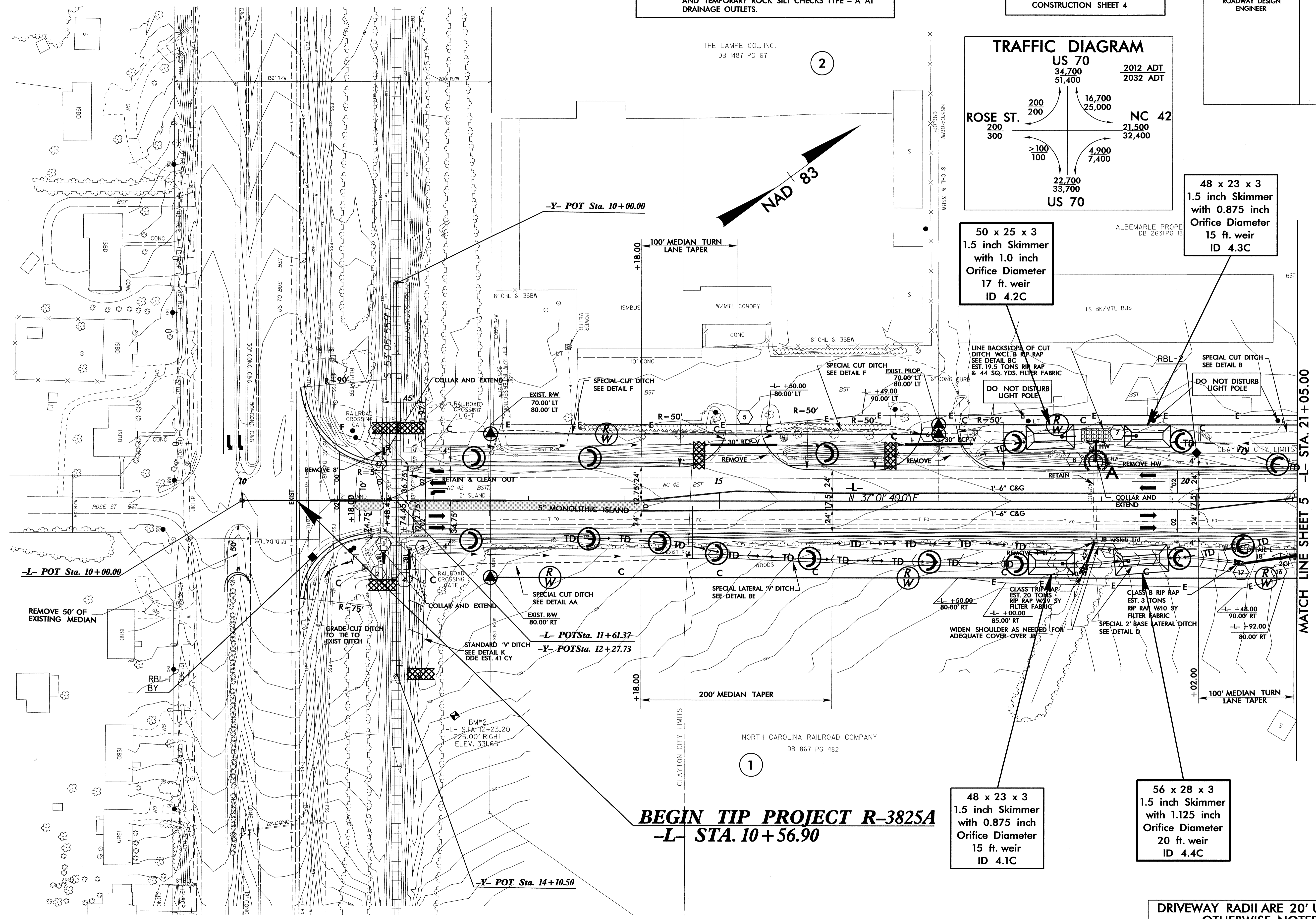
WIDEN SHOULDER AS NEEDED FOR
ADEQUATE COVER-OVER

48 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 4.1C

56 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
20 ft. weir
ID 4.4C

DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEET 11

BEGIN TIP PROJECT R-3825A
-L- STA. 10 + 56.90



THE LAMPE CO., INC.
DB 1487 PG 67

NORTH CAROLINA RAILROAD COMPANY
DB 867 PG 482

7/2/99

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AL REWZ 4/7/08

MATCH LINE SHEET 5 -L- STA. 21 + 05.00

PROJECT REFERENCE NO. R-3825A	SHEET NO. EC-05/CONST.05
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
RW SHEET NO.	

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

END CONSTRUCTION
-Y1- POC Sta. 11+30.00

BEGIN CONSTRUCTION
-Y2- STA. 12+45.00

36 x 18 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
10 ft. weir
ID 5.1C

76 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 5.2C

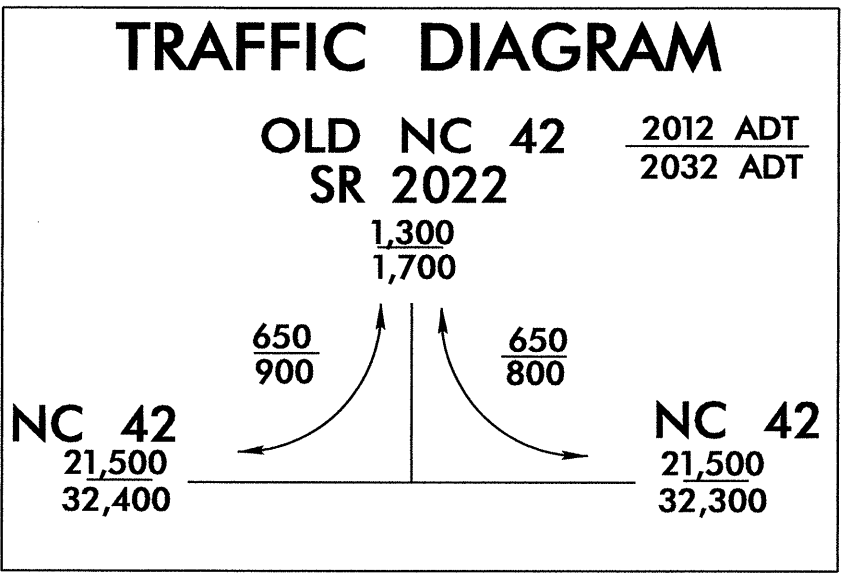
DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED

FOR -L- PROFILE SEE SHEET 11

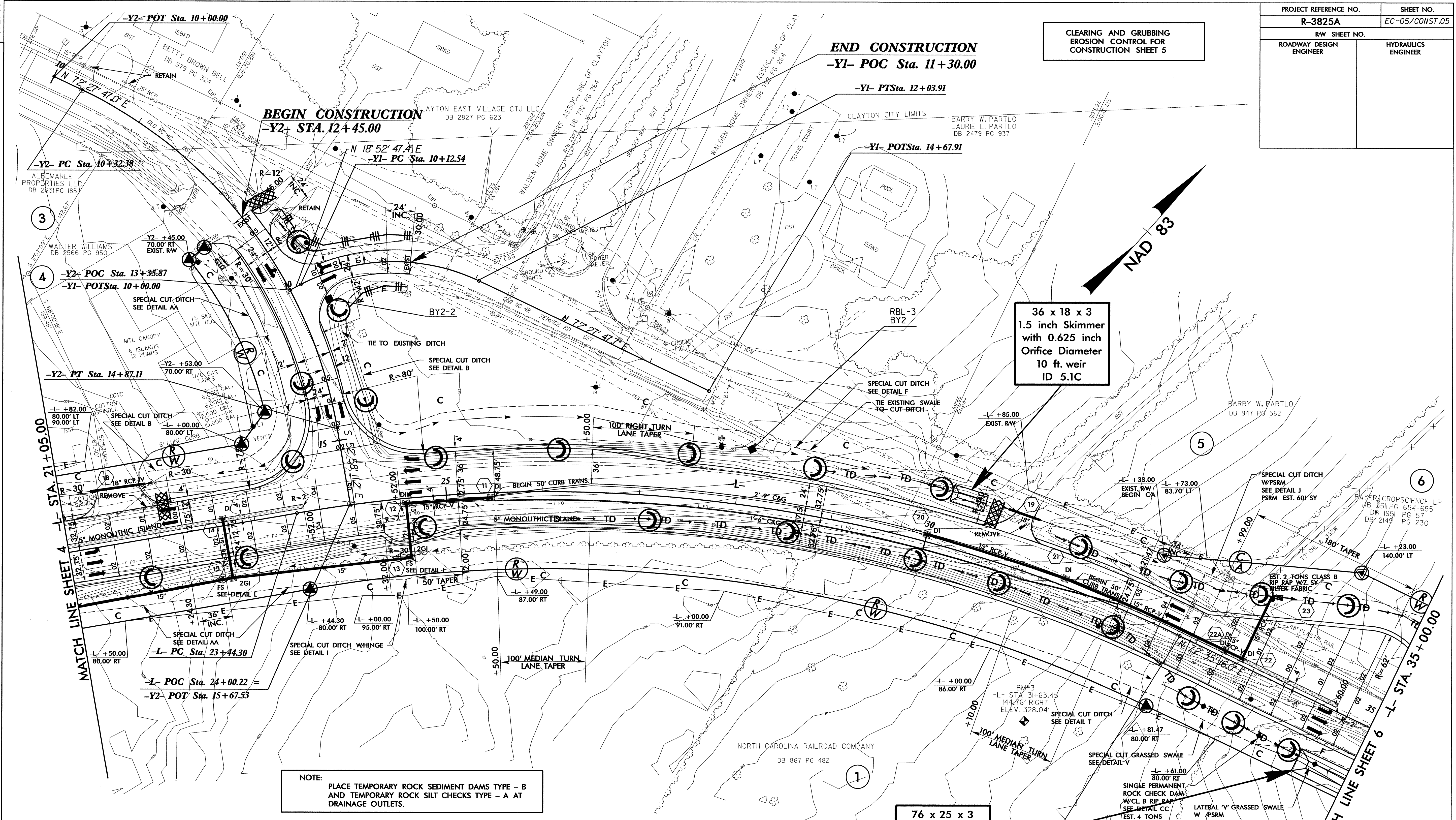
FOR -Y1- PROFILE SEE SHEET 14

FOR -Y2- PROFILE SEE SHEET 14

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



-L-	-Y2-	-Y1-
PI Sta 28+28.53	PI Sta 12+78.64	PI Sta 11+15.87
Δ = 35° 33' 36.0" (RT)	Δ = 54° 34' 01.8" (RT)	Δ = 53° 35' 00.3" (RT)
D = 3' 47' 39.9"	D = 12' 00' 00.0"	D = 28' 00' 00.0"
L = 937.17'	L = 454.73'	L = 191.37'
T = 484.23'	T = 246.26'	T = 103.33'
R = 1,510.00'	R = 477.46'	R = 204.63'
SE = 0.05	SE = 0.05	SE = SEE PLANS
INC = 36'	INC = 24'	INC = 24'
RUNOFF = 180'	RUNOFF = SEE PLANS	RUNOFF = SEE PLANS



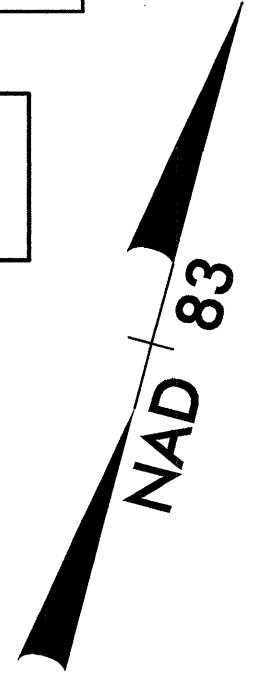
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PROJECT REFERENCE NO.	SHEET NO.
R-3825A	EC-06/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6

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

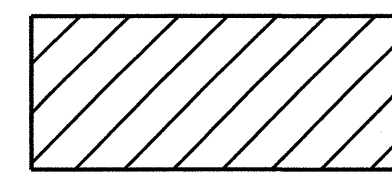


38 x 18 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
10 ft. weir
ID 6.1C

40 x 20 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
12 ft. weir
ID 6.4C

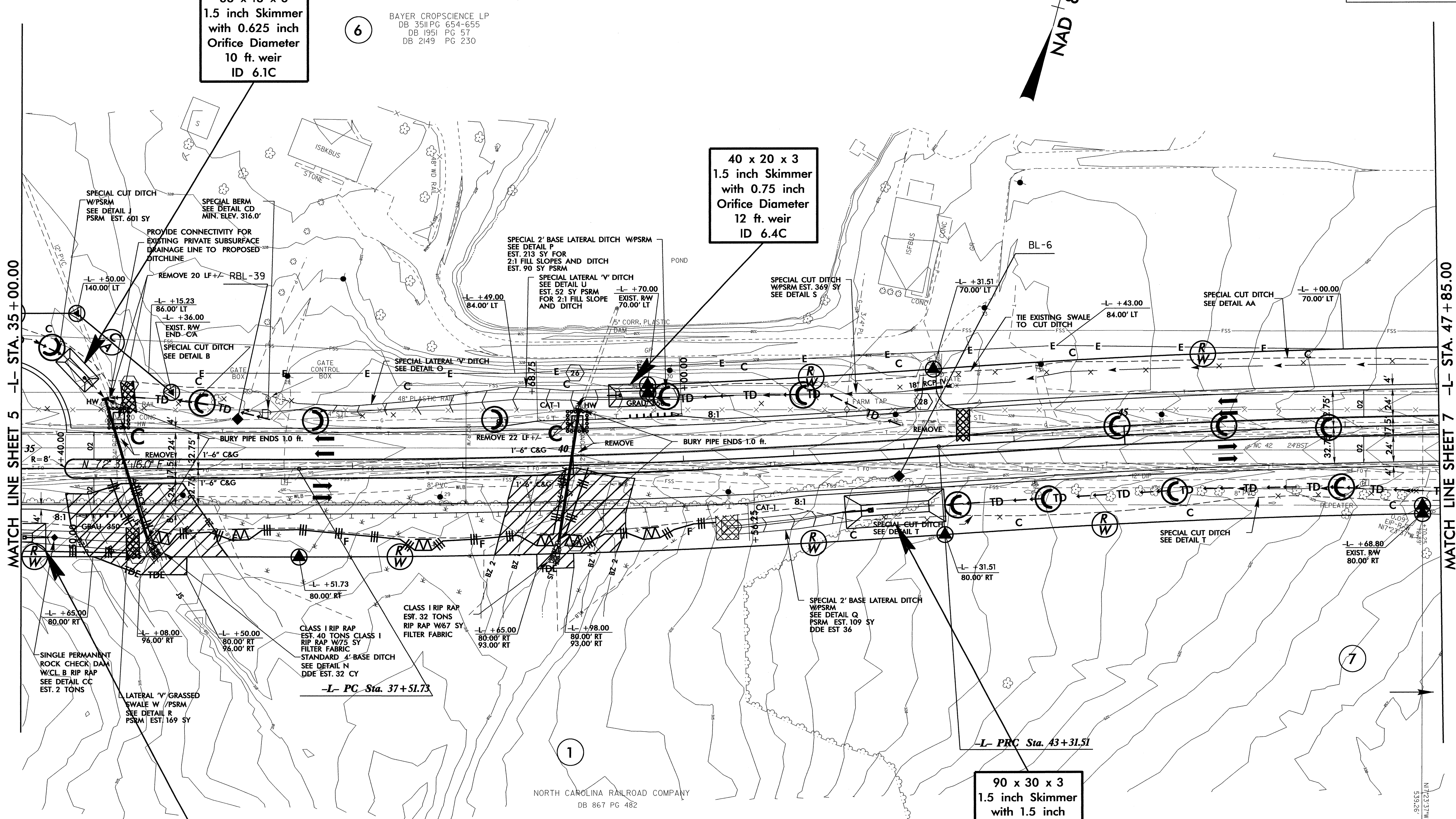
90 x 30 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
22 ft. weir
ID 6.3C

76 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 5.2C

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

-L-	
PI Sta 40+41.74 Δ = 4° 09' 08.6" (LT) D = 0° 42' 58.3" L = 579.78' T = 290.02' R = 8,000.00' SE = NC	PI Sta 46+21.53 Δ = 4° 09' 08.6" (RT) D = 0° 42' 58.3" L = 579.78' T = 290.02' R = 8,000.00' SE = NC

DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
FOR -L- PROFILE SEE SHEETS 11 & 12



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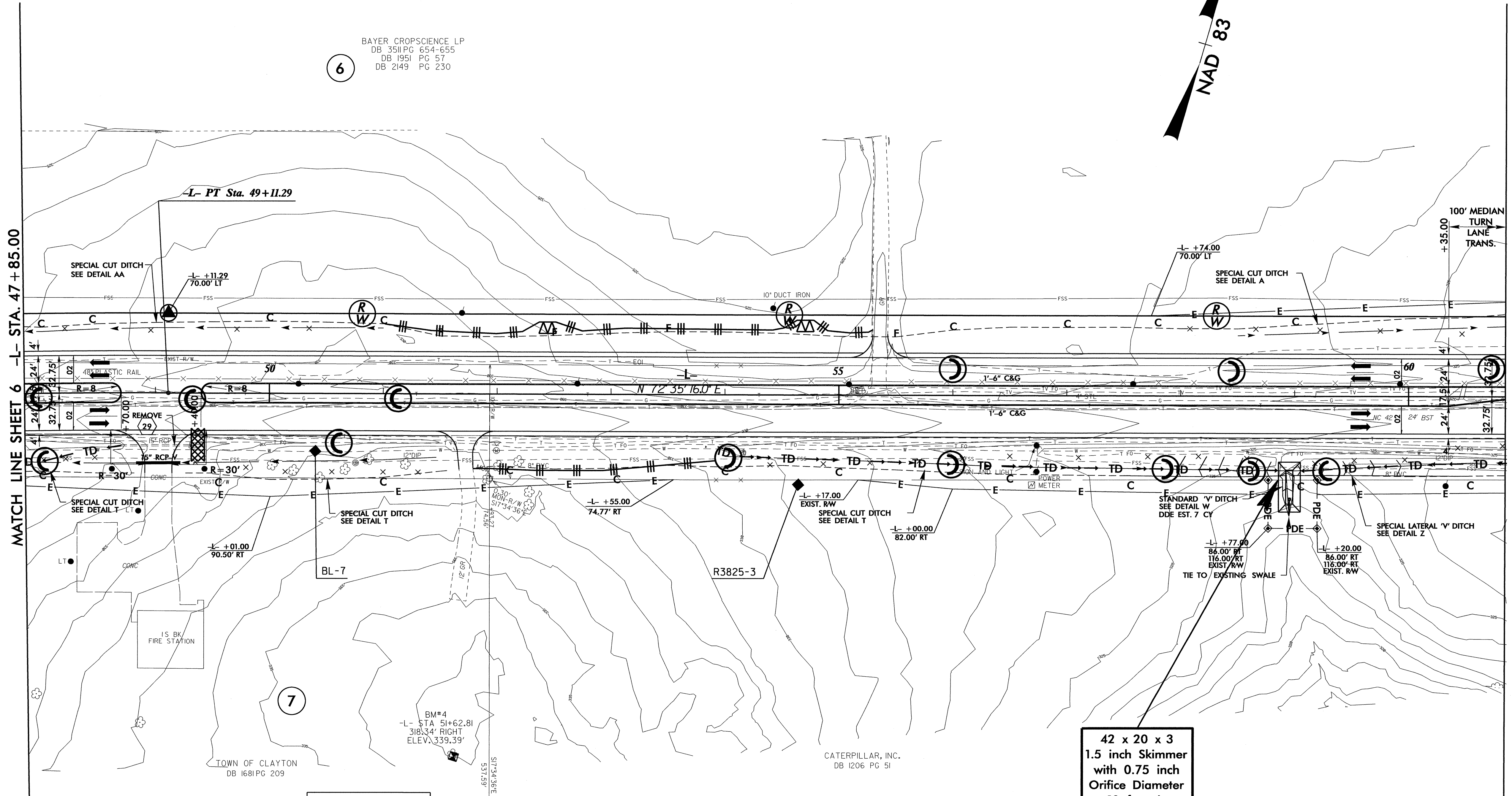
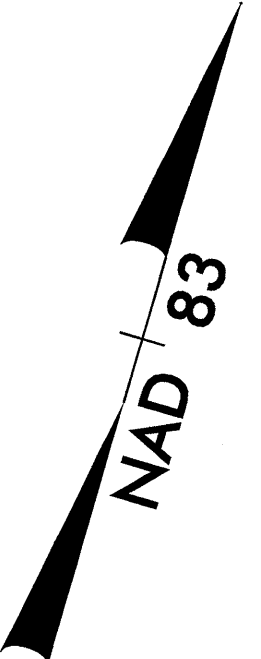
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RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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 7

7/2/09

6
BAYER CROPSCIENCE LP
DB 3511 PG 654-655
DB 1951 PG 57
DB 2149 PG 230



MATCH LINE SHEET 6 -L- STA. 47 + 85.00

MATCH LINE SHEET 8 -L- STA. 60 + 85.00

-L-
PI Sta 46+21.53
 $\Delta = 4^{\circ} 09' 08.6''$ (RT)
 $D = 0^{\circ} 42' 58.3''$
 $L = 579.78'$
 $T = 290.02'$
 $R = 8,000.00'$
 $SE = NC$

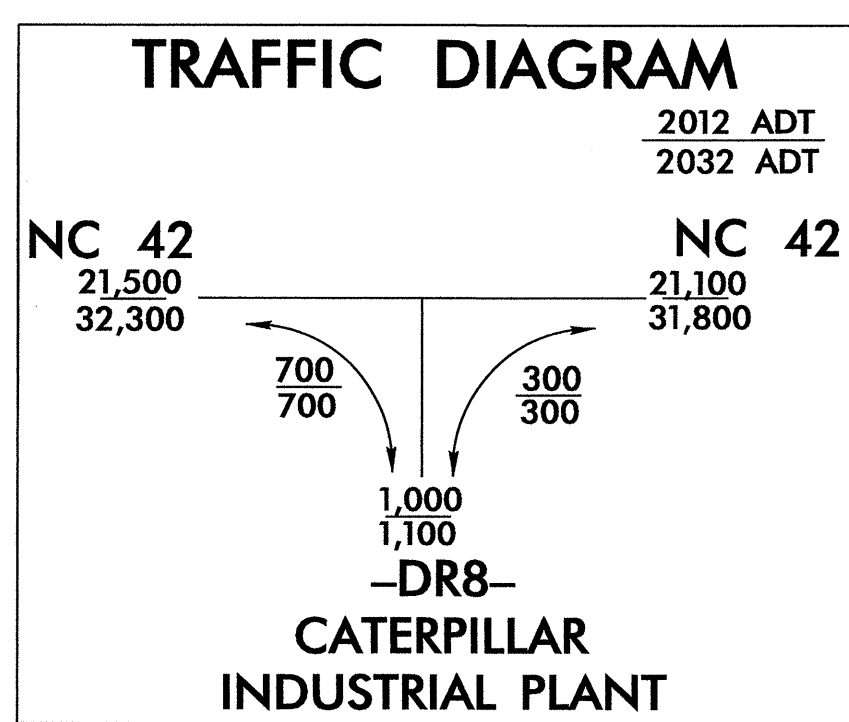
42 x 20 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
12 ft. weir
ID 7.1C

DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEET 12

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mechanick AT NEWZ47768

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK CONTROL FOR DRAINAGE OUTLETS.

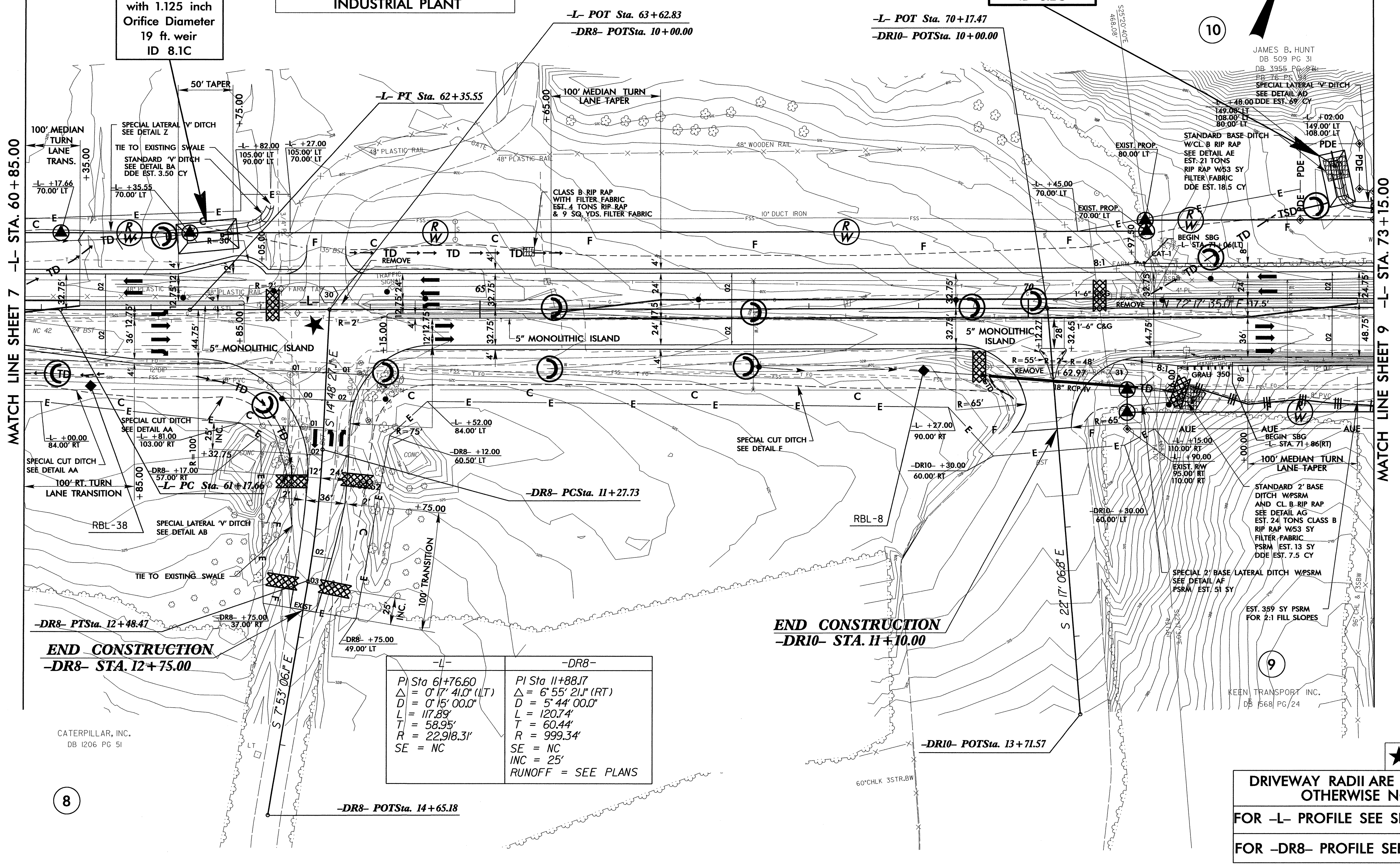
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 8



BAYER CROPSOURCE LP
DB 3511 PG 654-655
DB 1951 PG 57
DB 2149 PG 230

48 x 24 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
16 ft. weir
ID 8.2C

55 x 27 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
19 ft. weir
ID 8.1C



-L-	-DR8-
PI Sta 61+76.60	PI Sta 11+88.17
$\Delta = 0^{\circ} 17' 41.0''$ (LT)	$\Delta = 6^{\circ} 55' 21.1''$ (RT)
$D = 0^{\circ} 15' 00.0''$	$D = 5^{\circ} 44' 00.0''$
$L = 117.89'$	$L = 120.74'$
$T = 58.95'$	$T = 60.44'$
$R = 22,918.31'$	$R = 999.34'$
SE = NC	SE = NC
	INC = 25'
	RUNOFF = SEE PLANS

END CONSTRUCTION
-DR8- STA. 12+75.00

END CONSTRUCTION
-DR10- STA. 11+10.00

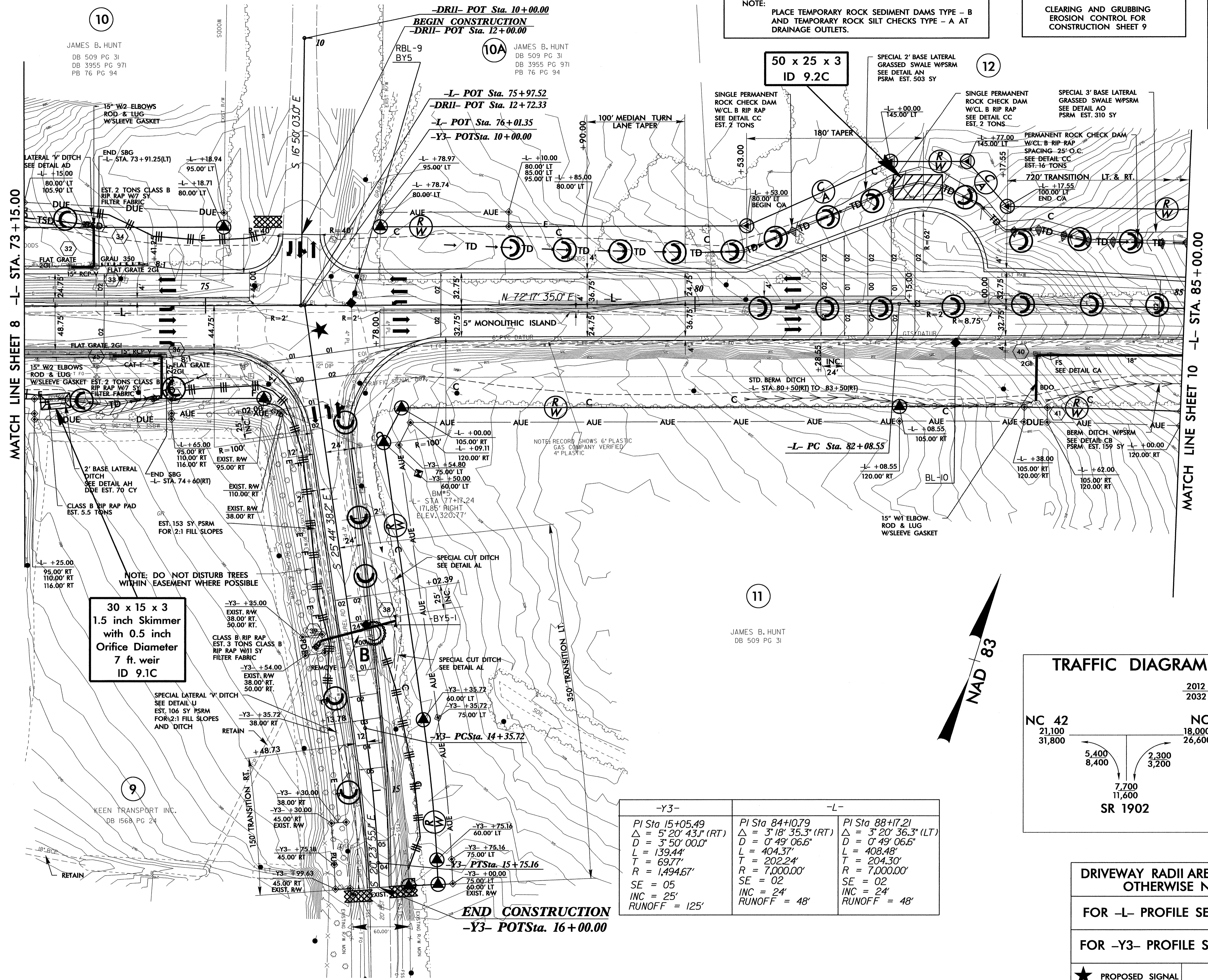
★ PROPOSED SIGNAL

DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED
FOR -L- PROFILE SEE SHEETS 12 & 13
FOR -DR8- PROFILE SEE SHEET 14

7/2/99
92-DEC-2010 09:4
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AL NEWZ47768

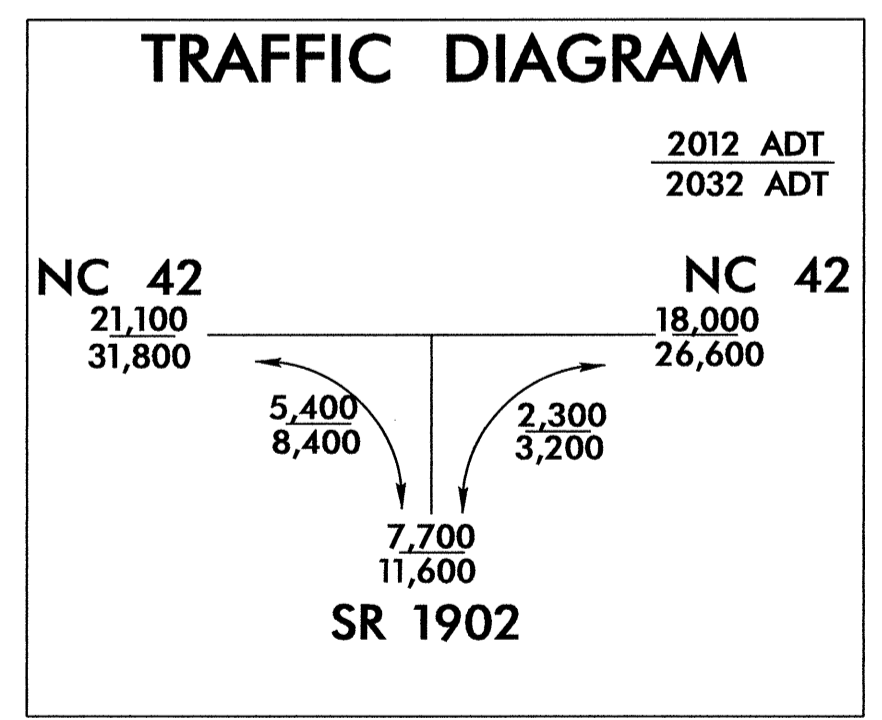
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 9



30 x 15 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
7 ft. weir
ID 9.1C

-Y3-	-L-	
PI Sta 15+05.49	PI Sta 84+10.79	PI Sta 88+17.21
$\Delta = 5' 20'' 43.1''$ (RT)	$\Delta = 3' 18'' 35.3''$ (RT)	$\Delta = 3' 20'' 36.3''$ (LT)
$D = 3' 50'' 00.0''$	$D = 0' 49'' 06.6''$	$D = 0' 49'' 06.6''$
$L = 139.44'$	$L = 404.37'$	$L = 408.48'$
$T = 69.77'$	$T = 202.24'$	$T = 204.30'$
$R = 1,494.67'$	$R = 7,000.00'$	$R = 7,000.00'$
SE = 05	SE = 02	SE = 02
INC = 25'	INC = 24'	INC = 24'
RUNOFF = 125'	RUNOFF = 48'	RUNOFF = 48'



DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED

FOR -L- PROFILE SEE SHEET 13

FOR -Y3- PROFILE SEE SHEET 14

★ PROPOSED SIGNAL

7/12/99
 02-DEC-2011 09:11
 R:\enviro\com\m\1\1\Drawings\15-3825A-EC-phs\p.dgn
 RT: REN\247768

JAMES B. HUNT
DB 509 PG 31
DB 3955 PG 971
PB 76 PG 94

JAMES B. HUNT
DB 509 PG 31
DB 3955 PG 971
PB 76 PG 94

JAMES B. HUNT
DB 509 PG 31

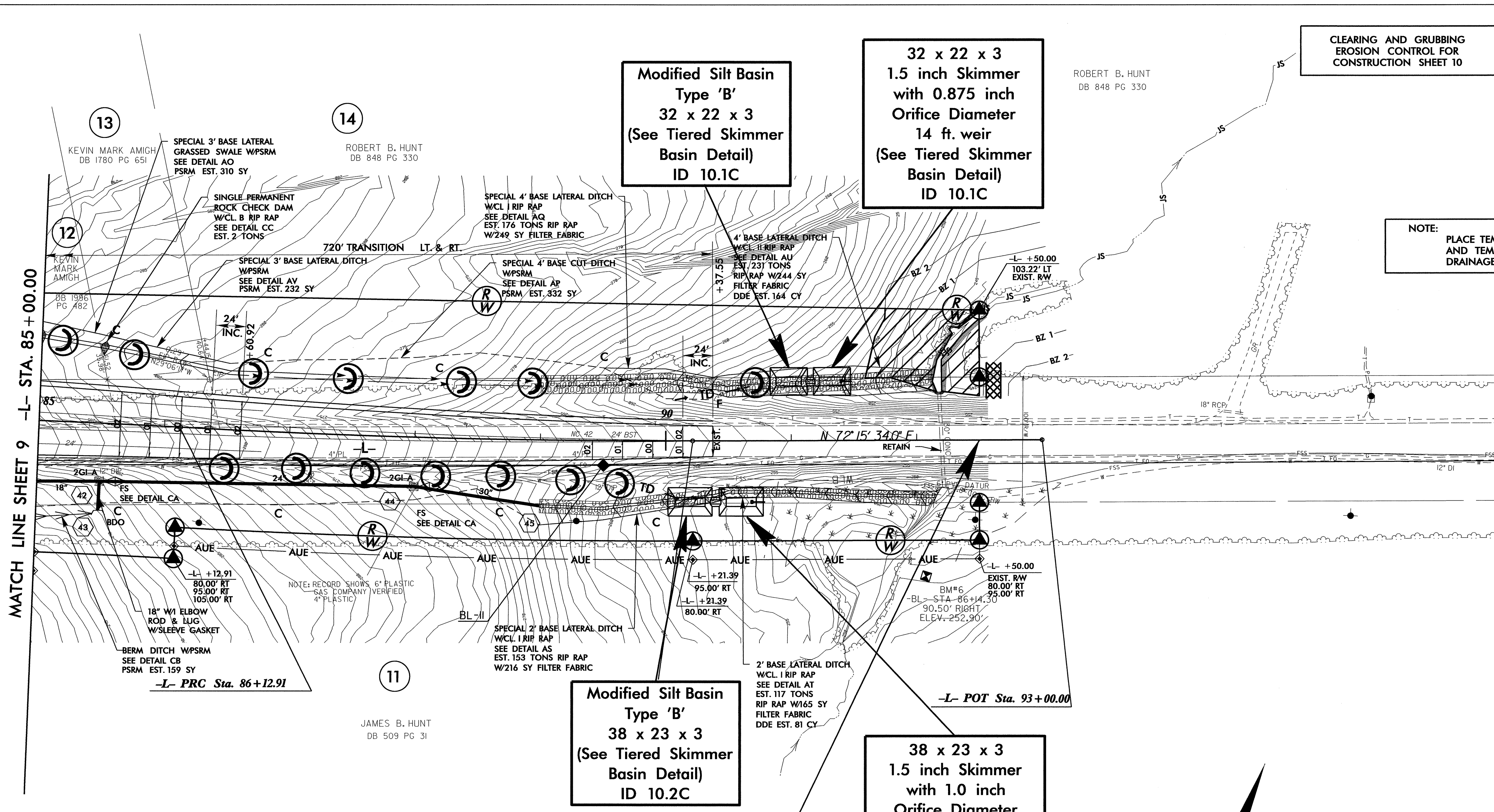
KEEN TRANSPORT INC.
DB 1568 PG 24

END CONSTRUCTION
-Y3- POT Sta. 16+00.00

PROJECT REFERENCE NO.	SHEET NO.
R-3825A	EC-10/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

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



Modified Silt Basin
Type 'B'
32 x 22 x 3
(See Tiered Skimmer
Basin Detail)
ID 10.1C

32 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
14 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 10.1C

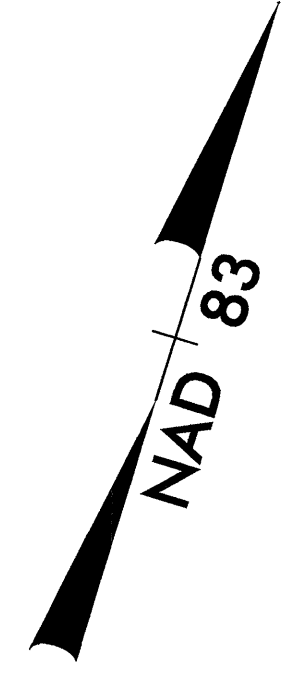
Modified Silt Basin
Type 'B'
38 x 23 x 3
(See Tiered Skimmer
Basin Detail)
ID 10.2C

38 x 23 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
15 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 10.2C

END TIP PROJECT R-3825A
-L- POT STA. 92+50.00

 ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

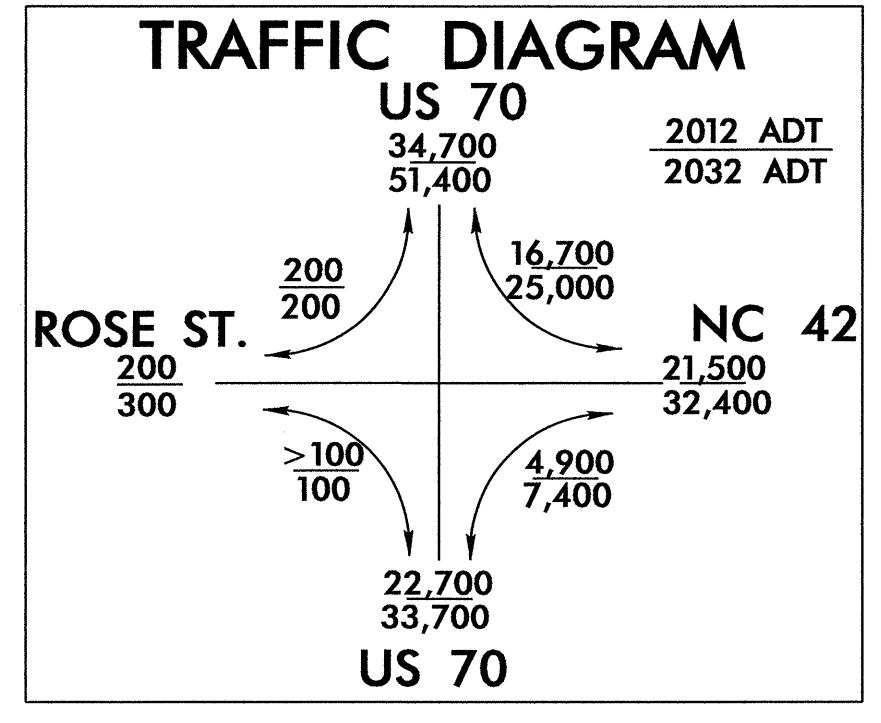
DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEET 13



REVISIONS

7/2/99
02-DEC-2011 09:04
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melanck AT REN247768

PROJECT REFERENCE NO.	SHEET NO.
R-3825A	EC-II/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



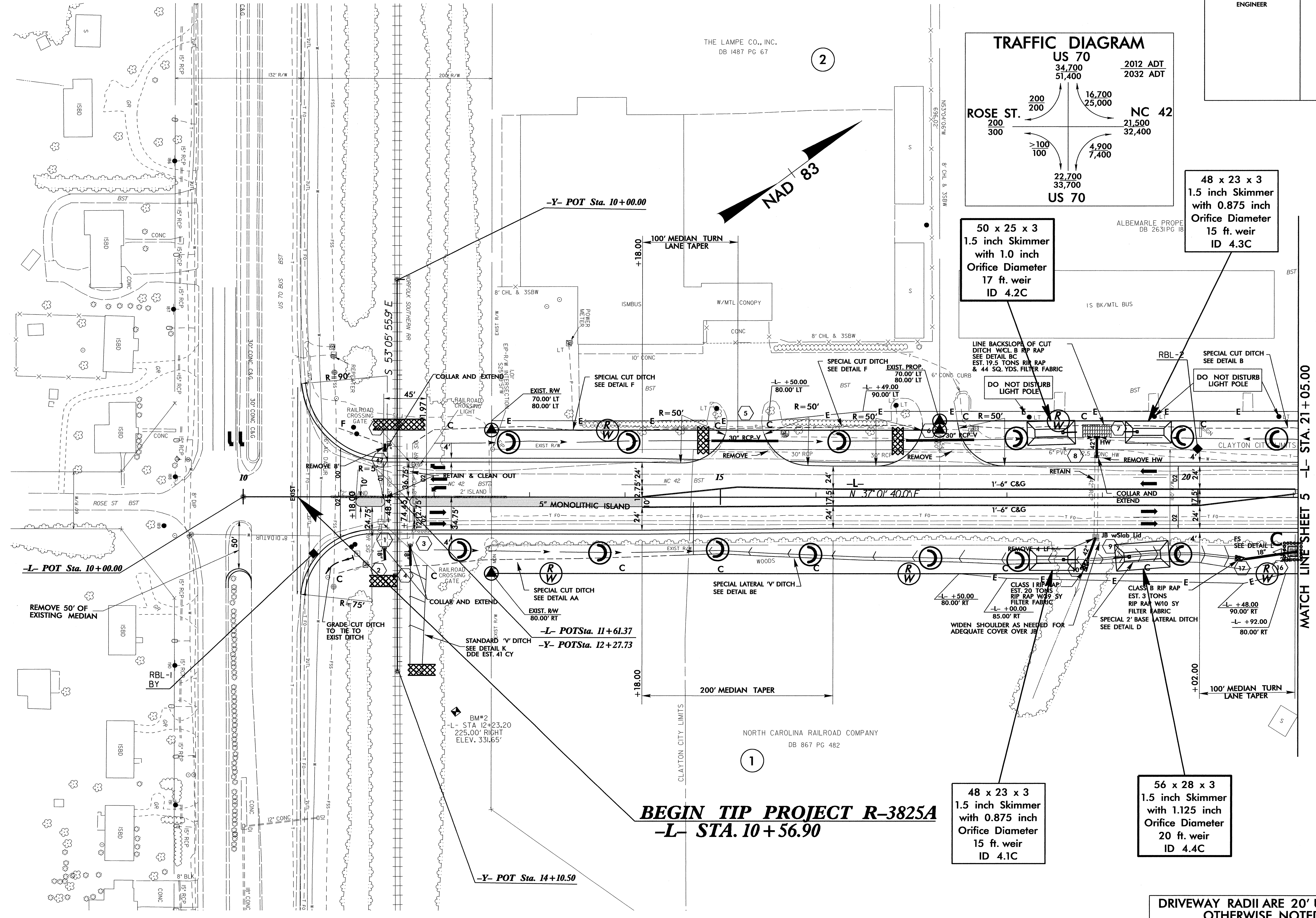
50 x 25 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
17 ft. weir
ID 4.2C

48 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 4.3C

48 x 23 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
15 ft. weir
ID 4.1C

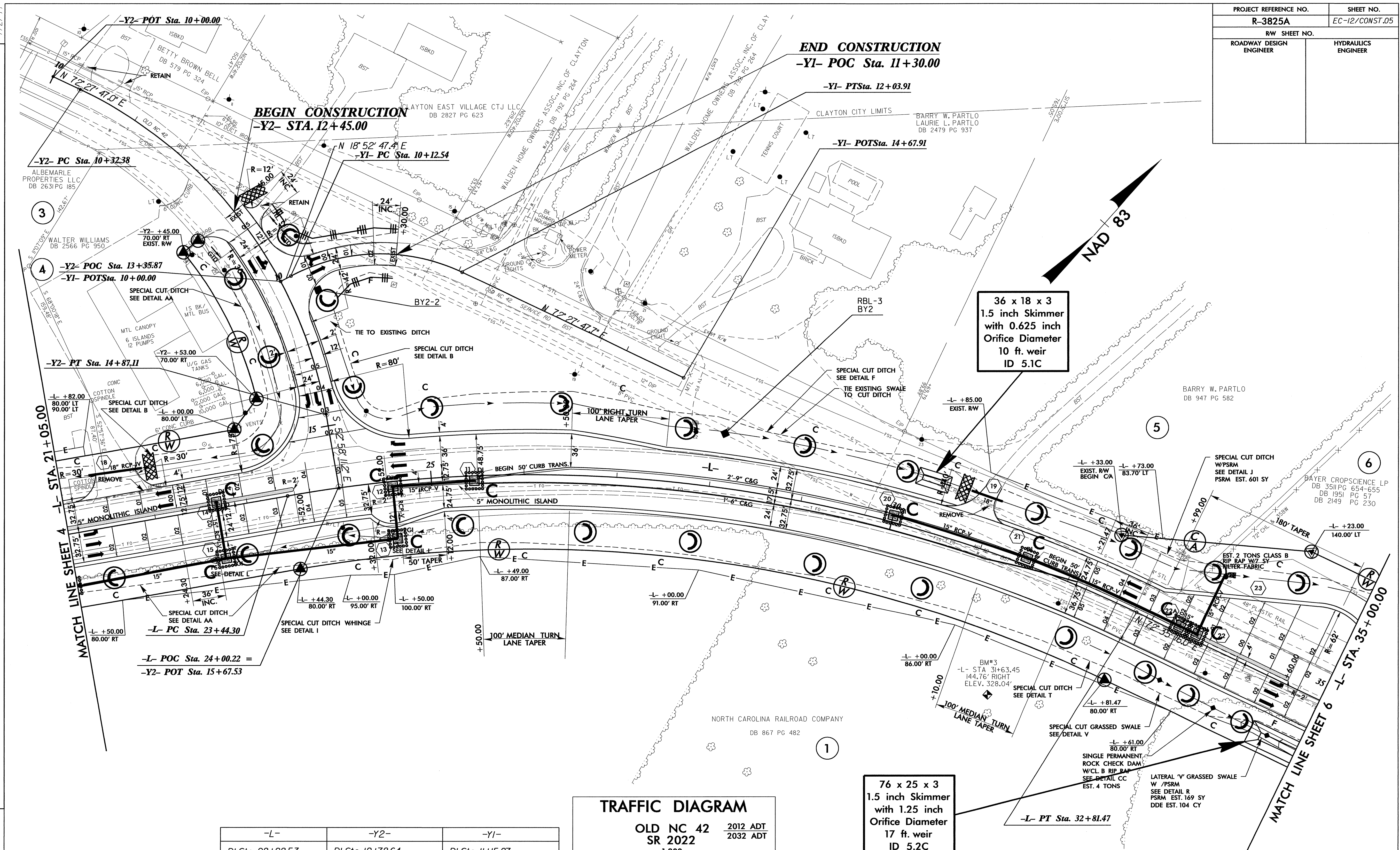
56 x 28 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
20 ft. weir
ID 4.4C

DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEET 11

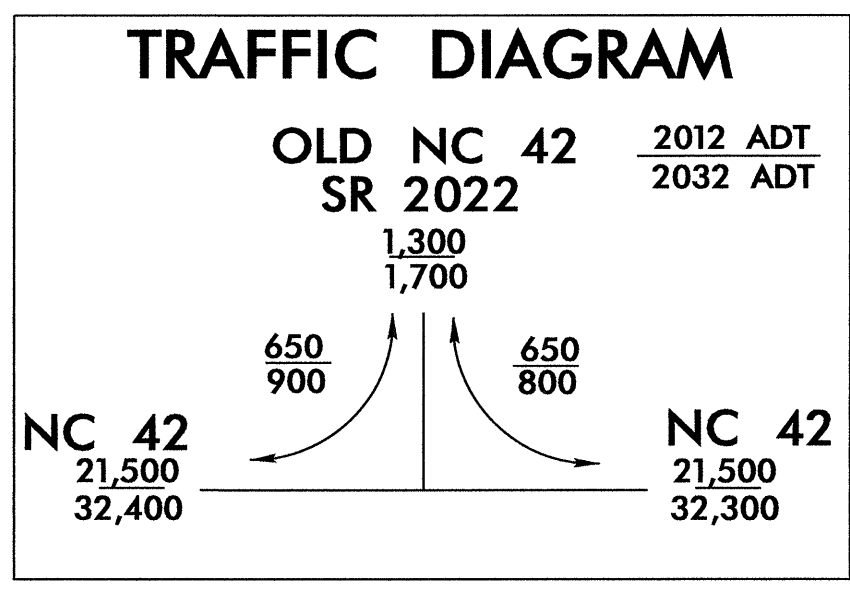


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 mehencok AT RENZI7768

PROJECT REFERENCE NO.	SHEET NO.
R-3825A	EC-12/CONST.05
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



-L-	-Y2-	-Y1-
PI Sta 28+28.53	PI Sta 12+78.64	PI Sta 11+15.87
$\Delta = 35^{\circ} 33' 36.0''$ (RT)	$\Delta = 54^{\circ} 34' 01.8''$ (RT)	$\Delta = 53^{\circ} 35' 00.3''$ (RT)
D = 3' 47' 39.9"	D = 12' 00' 00.0"	D = 28' 00' 00.0"
L = 937.17'	L = 454.73'	L = 191.37'
T = 484.23'	T = 246.26'	T = 103.33'
R = 1,510.00'	R = 477.46'	R = 204.63'
SE = 0.05	SE = 0.05	SE = SEE PLANS
INC = 36'	INC = 24'	INC = 24'
RUNOFF = 180'	RUNOFF = SEE PLANS	RUNOFF = SEE PLANS



DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED

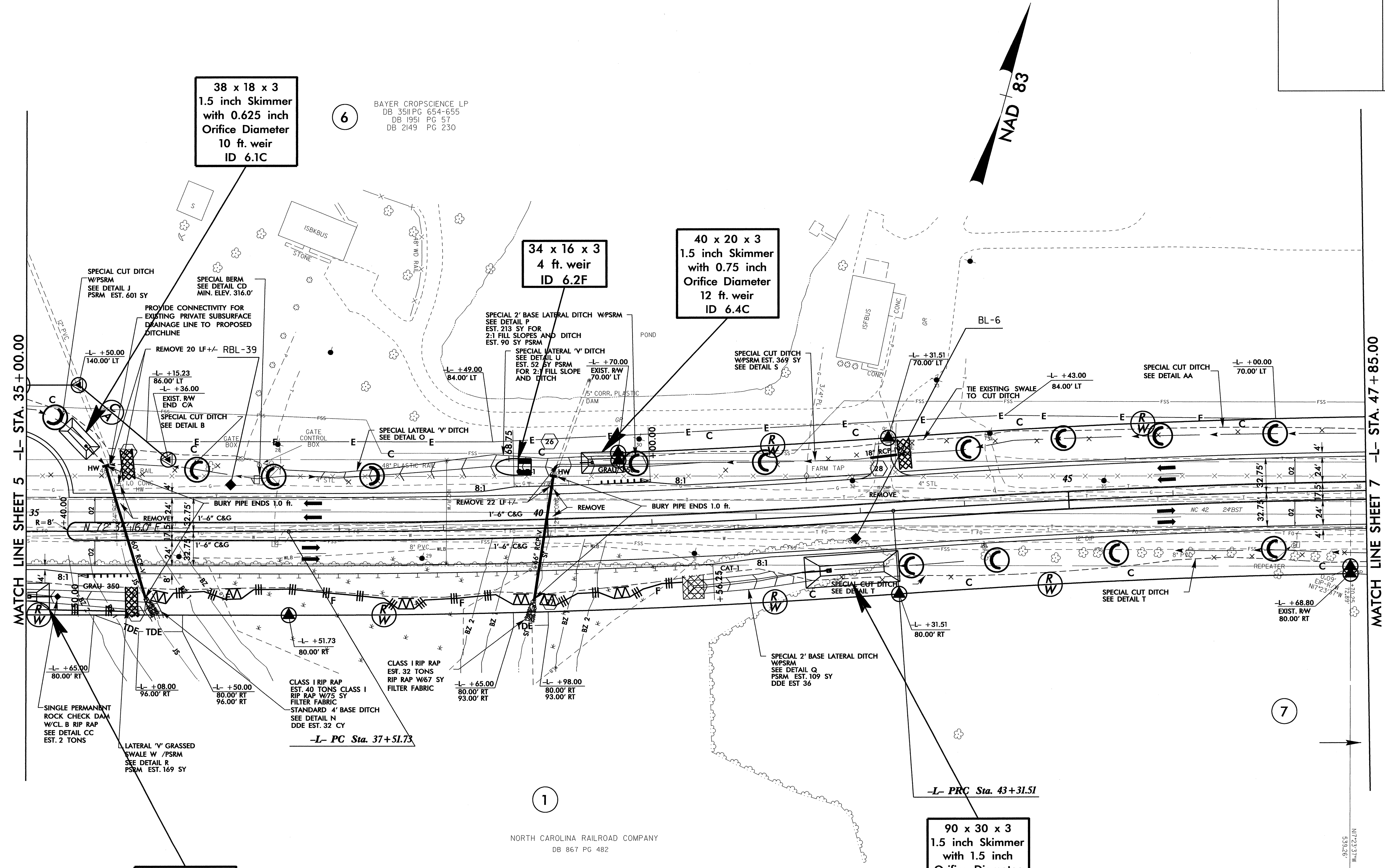
FOR -L- PROFILE SEE SHEET 11

FOR -Y1- PROFILE SEE SHEET 14

FOR -Y2- PROFILE SEE SHEET 14

7/2/09
 02-DEC-2011 10:28
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 mehancock AT RENV24768

7/2/99



38 x 18 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
10 ft. weir
ID 6.1C

34 x 16 x 3
4 ft. weir
ID 6.2F

40 x 20 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
12 ft. weir
ID 6.4C

90 x 30 x 3
1.5 inch Skimmer
with 1.5 inch
Orifice Diameter
22 ft. weir
ID 6.3C

76 x 25 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
17 ft. weir
ID 5.2C

6 BAYER CROPSCIENCE LP
DB 3511 PG 654-655
DB 1951 PG 57
DB 2149 PG 230

1 NORTH CAROLINA RAILROAD COMPANY
DB 867 PG 482

-L-	
PI Sta 40+41.74	PI Sta 46+21.53
$\Delta = 4' 09'' 08.6'' (LT)$	$\Delta = 4' 09'' 08.6'' (RT)$
$D = 0' 42'' 58.3''$	$D = 0' 42'' 58.3''$
$L = 579.78'$	$L = 579.78'$
$T = 290.02'$	$T = 290.02'$
$R = 8,000.00'$	$R = 8,000.00'$
SE = NC	SE = NC

DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEETS 11 & 12

MATCH LINE SHEET 5 -L- STA. 35+00.00

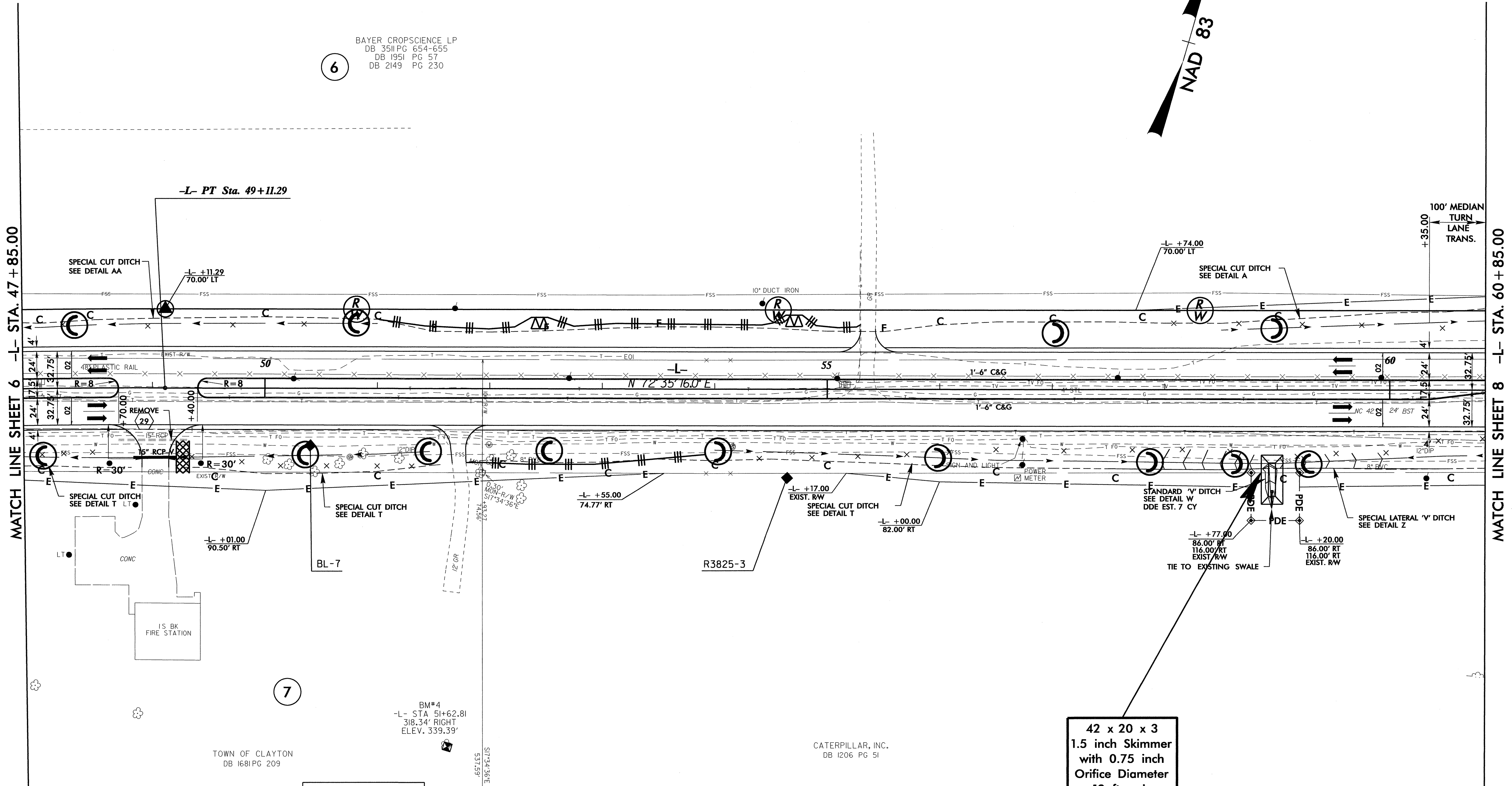
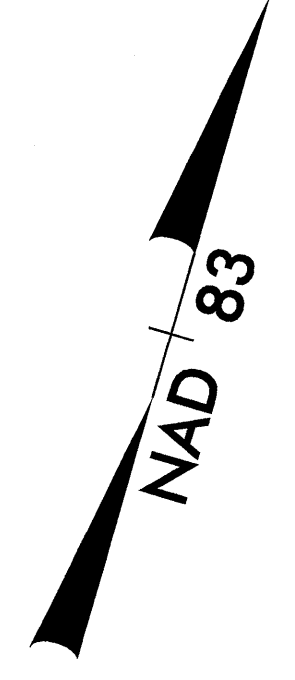
MATCH LINE SHEET 7 -L- STA. 47+85.00

02-DEC-2010 10:01
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metincoc AT RENZ47768

NIT233737
538327
CLAYTON CITY LIMITS

PROJECT REFERENCE NO.	SHEET NO.
R-3825A	EC-14/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

6
 BAYER CROPSCIENCE LP
 DB 351 PG 654-655
 DB 1951 PG 57
 DB 2149 PG 230



MATCH LINE SHEET 6 -L- STA. 47 + 85.00

MATCH LINE SHEET 8 -L- STA. 60 + 85.00

-L- PT Sta. 49+11.29

SPECIAL CUT DITCH
SEE DETAIL AA

SPECIAL CUT DITCH
SEE DETAIL A

SPECIAL CUT DITCH
SEE DETAIL T

SPECIAL CUT DITCH
SEE DETAIL T

SPECIAL CUT DITCH
SEE DETAIL T

STANDARD 'V' DITCH
SEE DETAIL W
DDE EST. 7 CY

SPECIAL LATERAL 'V' DITCH
SEE DETAIL Z

15 BK
FIRE STATION

BM#4
-L- STA 51+62.81
318.34' RIGHT
ELEV. 339.39'

CATERPILLAR, INC.
DB 1206 PG 51

42 x 20 x 3
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
12 ft. weir
ID 7.1C

DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED

FOR -L- PROFILE SEE SHEET 12

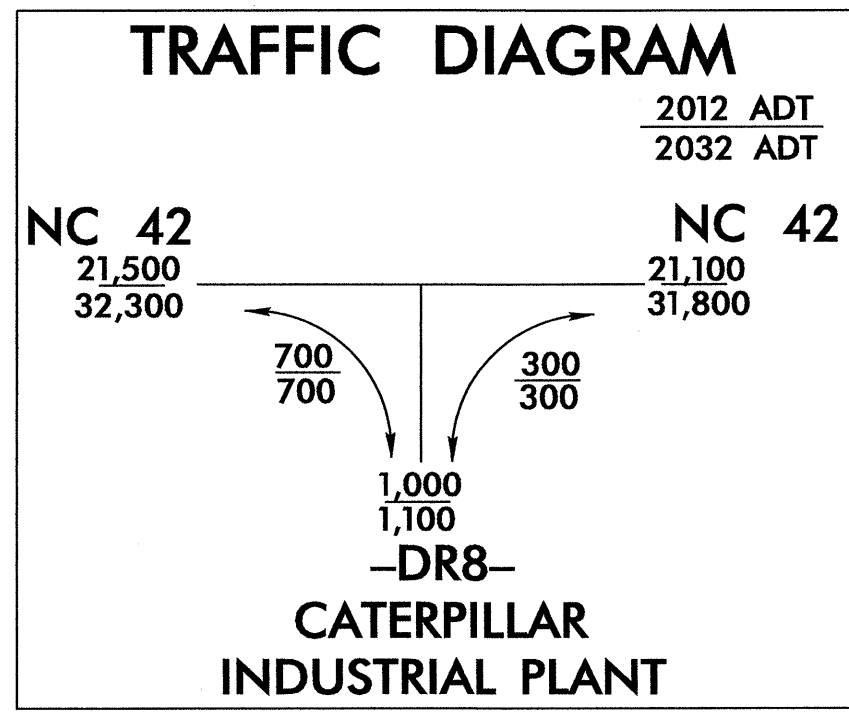
-L-
 PI Sta 46+21.53
 $\Delta = 4^{\circ} 09' 08.6''$ (RT)
 $D = 0^{\circ} 42' 58.3''$
 $L = 579.78'$
 $T = 290.02'$
 $R = 8,000.00'$
 $SE = NC$

7/2/99

Q2-DEC-2011 09:43
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 mchanock AT RENZ47768

CLAYTON CITY LIMITS

PROJECT REFERENCE NO. R-3825A	SHEET NO. <i>EC-15/CONST.08</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



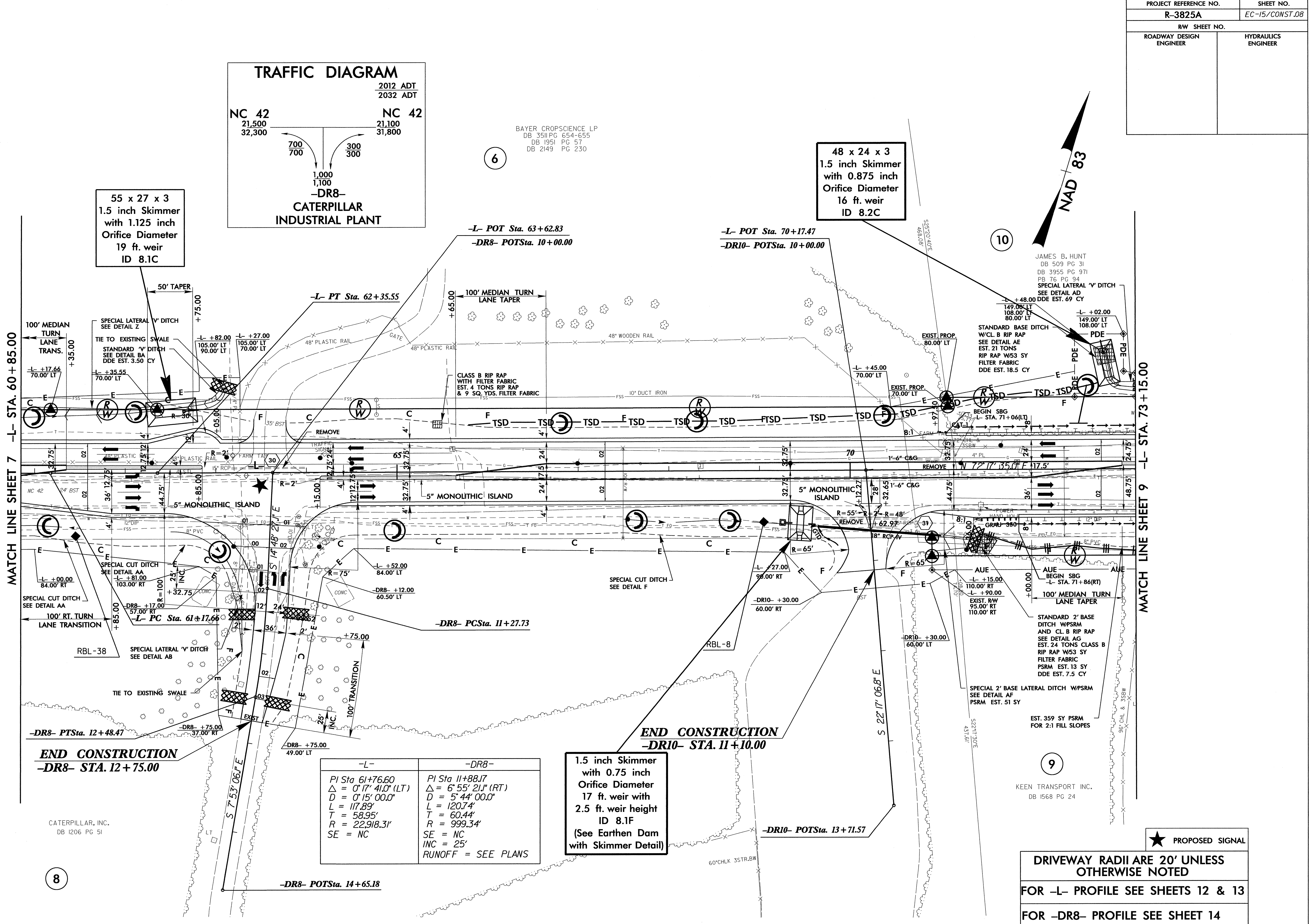
BAYER CROPSOURCE LP
DB 3511 PG 654-655
DB 1951 PG 57
DB 2149 PG 230

**48 x 24 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
16 ft. weir
ID 8.2C**

**55 x 27 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
19 ft. weir
ID 8.1C**

**1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
17 ft. weir with
2.5 ft. weir height
ID 8.1F
(See Earthen Dam
with Skimmer Detail)**

-L-	-DR8-
PI Sta 61+76.60	PI Sta 11+88.17
$\Delta = 0' 17" 41.0" (LT)$	$\Delta = 6' 55" 21.1" (RT)$
$D = 0' 15" 00.0"$	$D = 5' 44" 00.0"$
$L = 117.89'$	$L = 120.74'$
$T = 58.95'$	$T = 60.44'$
$R = 22,918.31'$	$R = 999.34'$
SE = NC	SE = NC
	INC = 25'
	RUNOFF = SEE PLANS



MATCH LINE SHEET 7 -L- STA. 60+85.00

MATCH LINE SHEET 9 -L- STA. 73+15.00

**END CONSTRUCTION
-DR8- STA. 12+75.00**

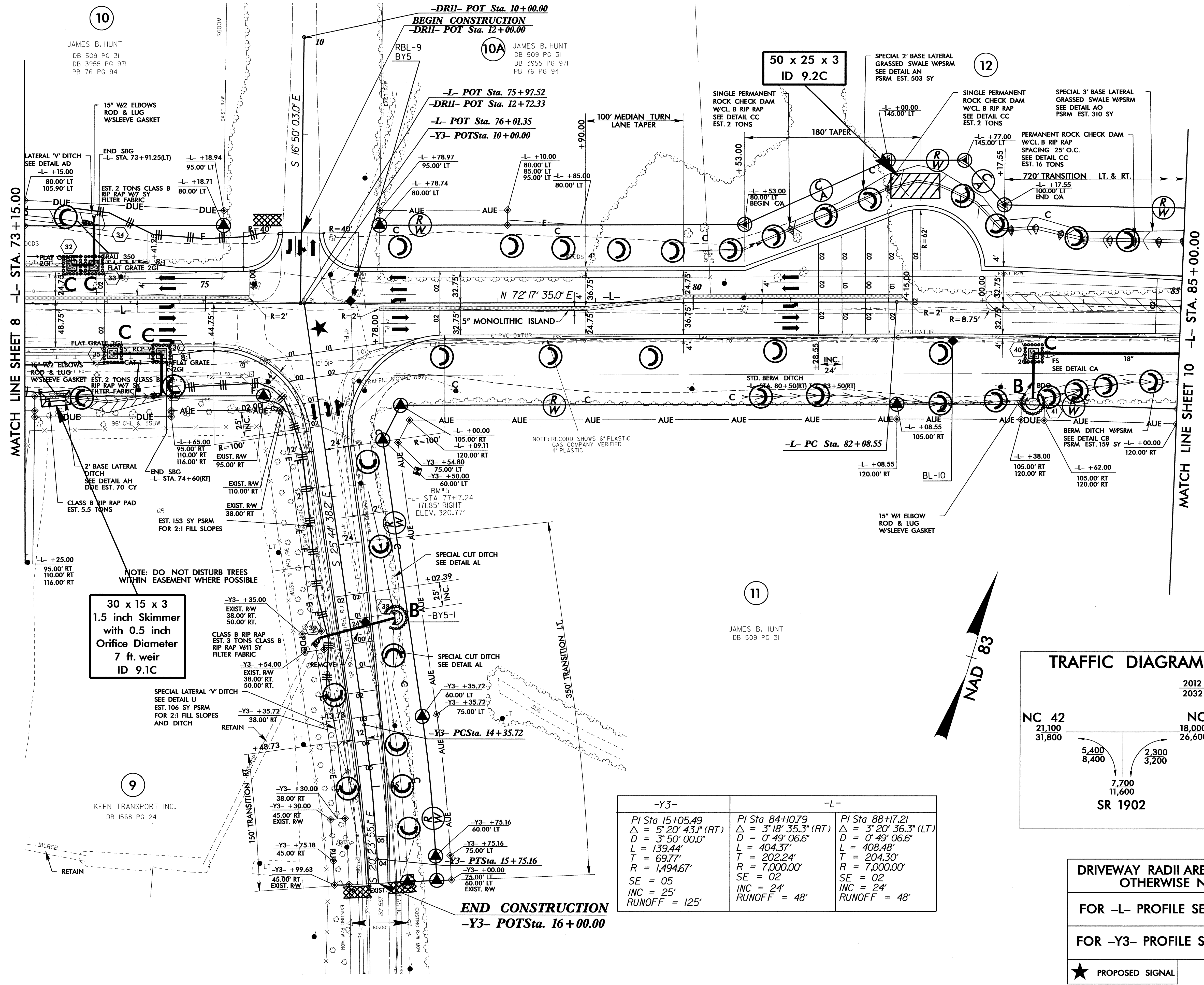
**END CONSTRUCTION
-DR10- STA. 11+10.00**

CATERPILLAR, INC.
DB 1206 PG 51

**DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEETS 12 & 13
FOR -DR8- PROFILE SEE SHEET 14**

02-DEC-2011 09:45 R:\Environmental\3825A_EC_psh.dgn 7/12/09
mehancock AT RENW247768

PROJECT REFERENCE NO.	SHEET NO.
R-3825A	EC-16/CONST.09
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

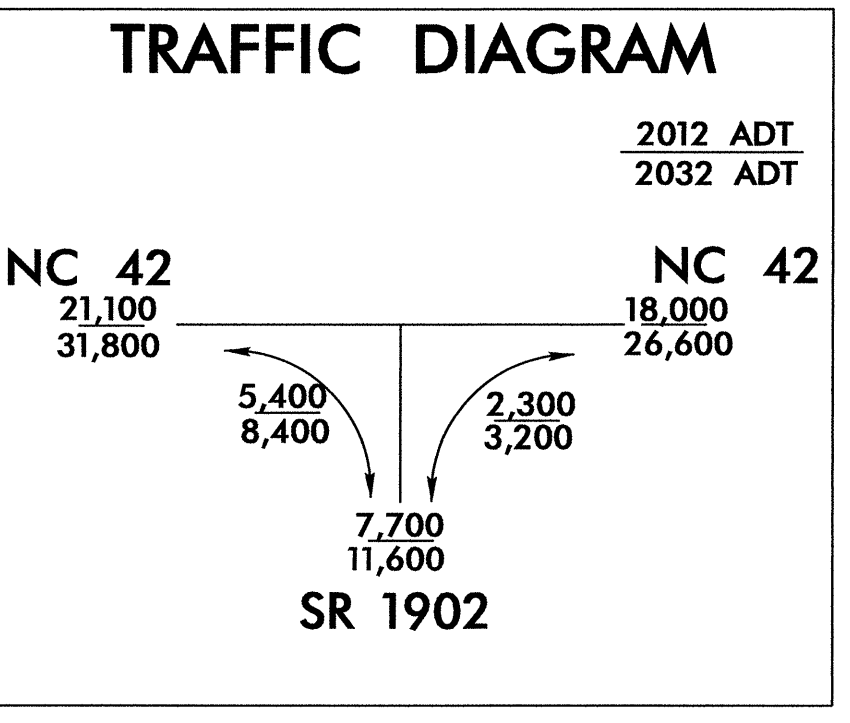


MATCH LINE SHEET 8 -L- STA. 73+15.00

MATCH LINE SHEET 10 -L- STA. 85+00.00

30 x 15 x 3
1.5 inch Skimmer
with 0.5 inch
Orifice Diameter
7 ft. weir
ID 9.1C

50 x 25 x 3
ID 9.2C



-Y3-	-L-	-L-
PI Sta 15+05.49	PI Sta 84+10.79	PI Sta 88+17.21
$\Delta = 5^{\circ}20'43.1''$ (RT)	$\Delta = 3^{\circ}18'35.3''$ (RT)	$\Delta = 3^{\circ}20'36.3''$ (LT)
$D = 3^{\circ}50'00.0''$	$D = 0^{\circ}49'06.6''$	$D = 0^{\circ}49'06.6''$
$L = 139.44'$	$L = 404.37'$	$L = 408.48'$
$T = 69.77'$	$T = 202.24'$	$T = 204.30'$
$R = 1,494.67'$	$R = 7,000.00'$	$R = 7,000.00'$
SE = 05	SE = 02	SE = 02
INC = 25'	INC = 24'	INC = 24'
RUNOFF = 125'	RUNOFF = 48'	RUNOFF = 48'

DRIVEWAY RADII ARE 20' UNLESS OTHERWISE NOTED

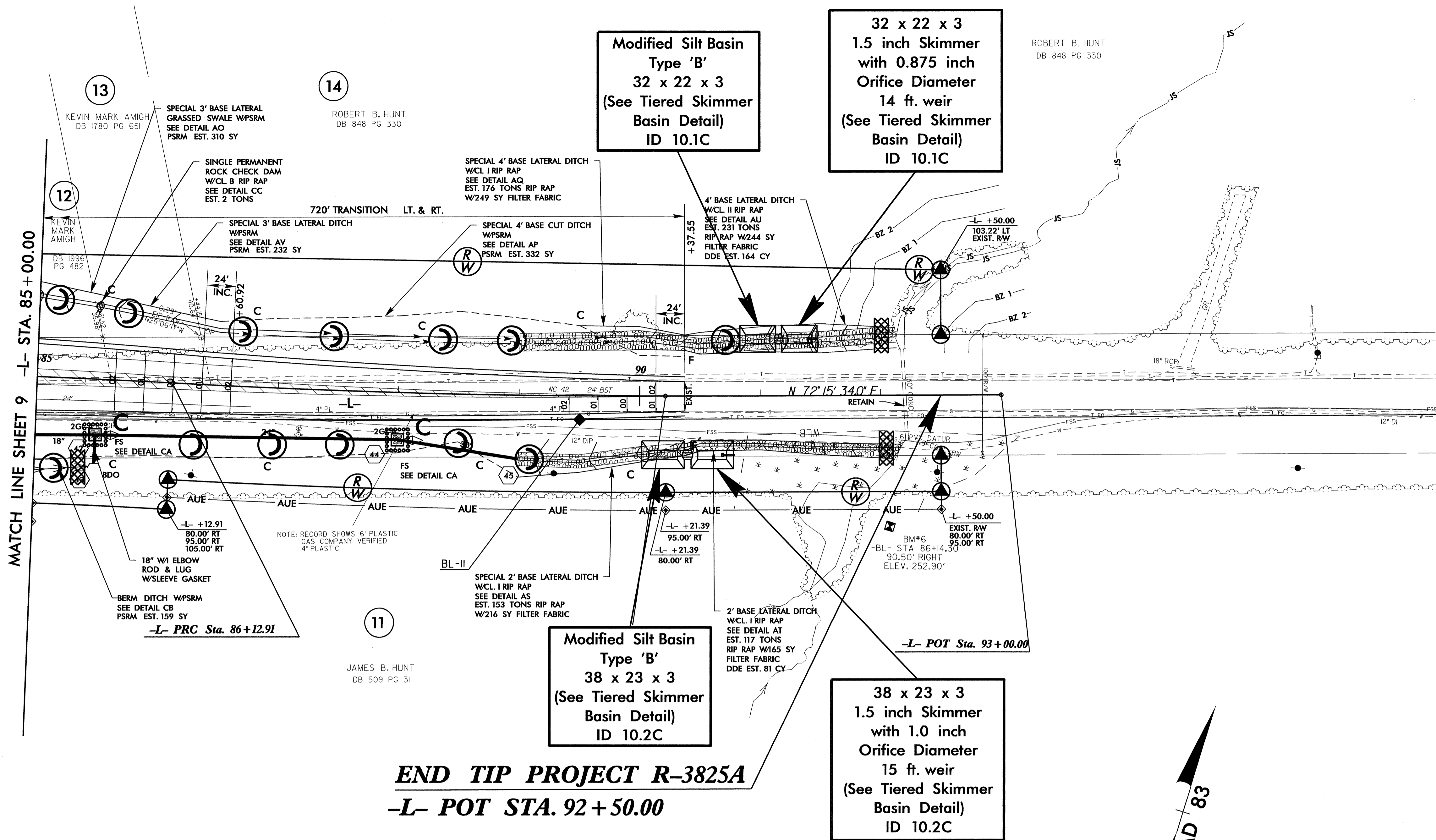
FOR -L- PROFILE SEE SHEET 13

FOR -Y3- PROFILE SEE SHEET 14

★ PROPOSED SIGNAL

7/2/99
 JAMES B. HUNT DB 509 PG 31 DB 3955 PG 97I PB 76 PG 94
 KEEN TRANSPORT INC. DB 1568 PG 24
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PROJECT REFERENCE NO. R-3825A	SHEET NO. <i>EC-17/CONST.10</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



**Modified Silt Basin
Type 'B'
32 x 22 x 3
(See Tiered Skimmer
Basin Detail)
ID 10.1C**

**32 x 22 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
14 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 10.1C**

**Modified Silt Basin
Type 'B'
38 x 23 x 3
(See Tiered Skimmer
Basin Detail)
ID 10.2C**

**38 x 23 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
15 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 10.2C**

**END TIP PROJECT R-3825A
-L- POT STA. 92+50.00**

**DRIVEWAY RADII ARE 20' UNLESS
OTHERWISE NOTED
FOR -L- PROFILE SEE SHEET 13**

REVISIONS

7/2/99

02-DEC-2011 09:05
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mehancock AT REN247768

MATCH LINE SHEET 9 -L- STA. 85+00.00

13

14

11

KEVIN MARK AMIGH
DB 1780 PG 651

ROBERT B. HUNT
DB 848 PG 330

JAMES B. HUNT
DB 509 PG 31

SPECIAL 3' BASE LATERAL
GRASSED SWALE W/PSRM
SEE DETAIL AO
PSRM EST. 310 SY

SINGLE PERMANENT
ROCK CHECK DAM
W/CL B RIP RAP
SEE DETAIL CC
EST. 2 TONS

SPECIAL 3' BASE LATERAL DITCH
W/PSRM
SEE DETAIL AV
PSRM EST. 232 SY

SPECIAL 4' BASE LATERAL DITCH
W/CL I RIP RAP
SEE DETAIL AQ
EST. 176 TONS RIP RAP
W/249 SY FILTER FABRIC

SPECIAL 4' BASE CUT DITCH
W/PSRM
SEE DETAIL AP
PSRM EST. 332 SY

4' BASE LATERAL DITCH
W/CL II RIP RAP
SEE DETAIL AU
EST. 231 TONS
RIP RAP W/244 SY
FILTER FABRIC
DDE EST. 164 CY

18" W/1 ELBOW
ROD & LUG
W/SLEEVE GASKET

BERM DITCH W/PSRM
SEE DETAIL CB
PSRM EST. 159 SY
-L- PRC Sta. 86+12.91

NOTE: RECORD SHOWS 6" PLASTIC
GAS COMPANY VERIFIED
4" PLASTIC

SPECIAL 2' BASE LATERAL DITCH
W/CL I RIP RAP
SEE DETAIL AS
EST. 153 TONS RIP RAP
W/216 SY FILTER FABRIC

2' BASE LATERAL DITCH
W/CL I RIP RAP
SEE DETAIL AT
EST. 117 TONS
RIP RAP W/165 SY
FILTER FABRIC
DDE EST. 81 CY

BM#6
-BL- STA 86+14.30
90.50' RIGHT
ELEV. 252.90'

ROBERT B. HUNT
DB 848 PG 330

NAD 83