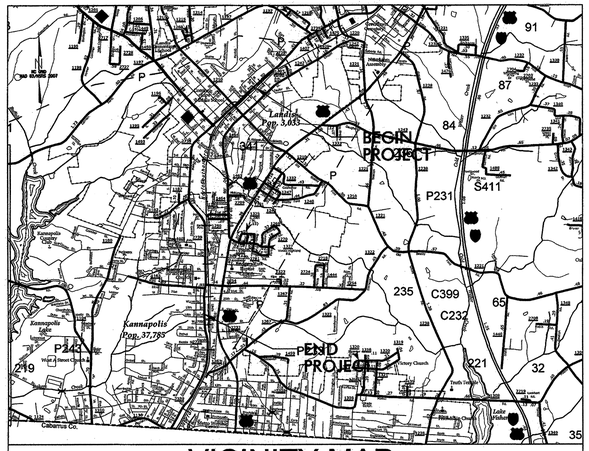
DGN 0164DEL_P10b2

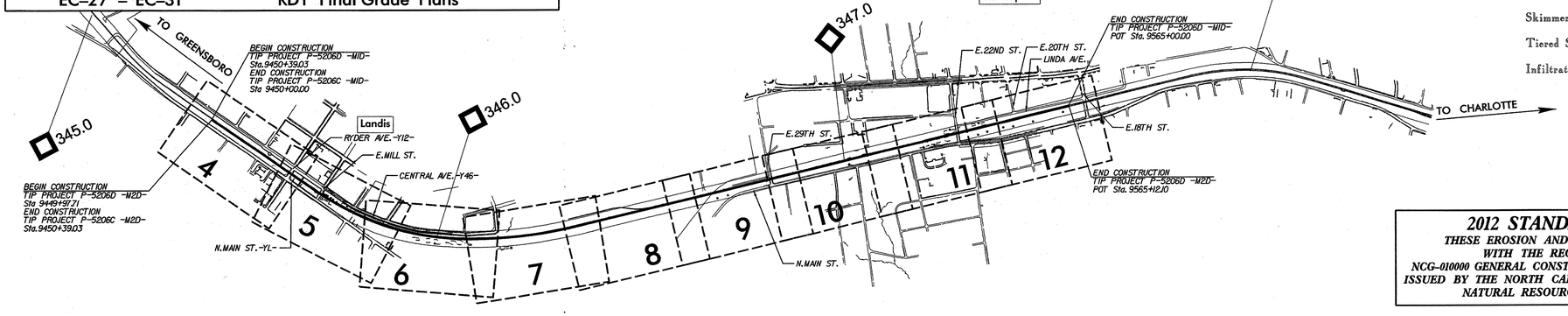
TIP PROJECT: P-5206D

CONTRACT: 52000.1.STR09TIB



VICINITY MAP

Index of Sheets	
EC–1	Title Sheet
EC–2 – EC–2C	Erosion Control Details
EC–3	Stabilization Timeframes
EC–3A	Soil Stabilization Summary
EC–3B	Ditch Detail Sheet
EC–4 – EC–12	RR Clearing and Grubbing Plans
EC–13 – EC–21	RR Final Grade Plans
EC–22 – EC–26	RDY Clearing and Grubbing Plans
EC–27 – EC–31	RDY Final Grade Plans



THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE TOWN OF LANDIS AND CITY OF KANNAPOLIS.

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

STATE OF NORTH CAROLINA
NCDOT RAIL DIVISION

ROWAN COUNTY

LOCATION: "REID" TO "NORTH KANNAPOLIS" ON THE NCRR/NS MAINLINE

TYPE OF WORK: CONSTRUCTION OF SECOND MAIN LINE TRACK AND CURVE AND SAFETY IMPROVEMENTS, DRAINAGE, PAVING, UTILITIES, AND SIGNALS

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	P-5206D	EC-1	
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION	
52000.1.STR09TIB		P.E.	

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	
	Waffle / Coir Fiber Waffle	EW CFW
	Waffle / Coir Fiber Waffle 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.

2012 STANDARD SPECIFICATIONS

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.

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

10 5 0 10 20
PROFILE (VERTICAL)

Prepared In the Office of:

SUNGATE DESIGN GROUP, P.A.
915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
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ENG FIRM LICENSE NO. C-890

JOSHUA G. DALTON
LEVEL IIIA NAME
307
LEVEL IIIA CERTIFICATION NO.

2012 STANDARD SPECIFICATIONS

LETTING DATE:
SEPTEMBER 20, 2013

RIGHT OF WAY DATE:
JULY 2012

NC DEPARTMENT OF TRANSPORTATION
RAIL DIVISION
PLANNING AND DEVELOPMENT

Roadway Standard Drawings

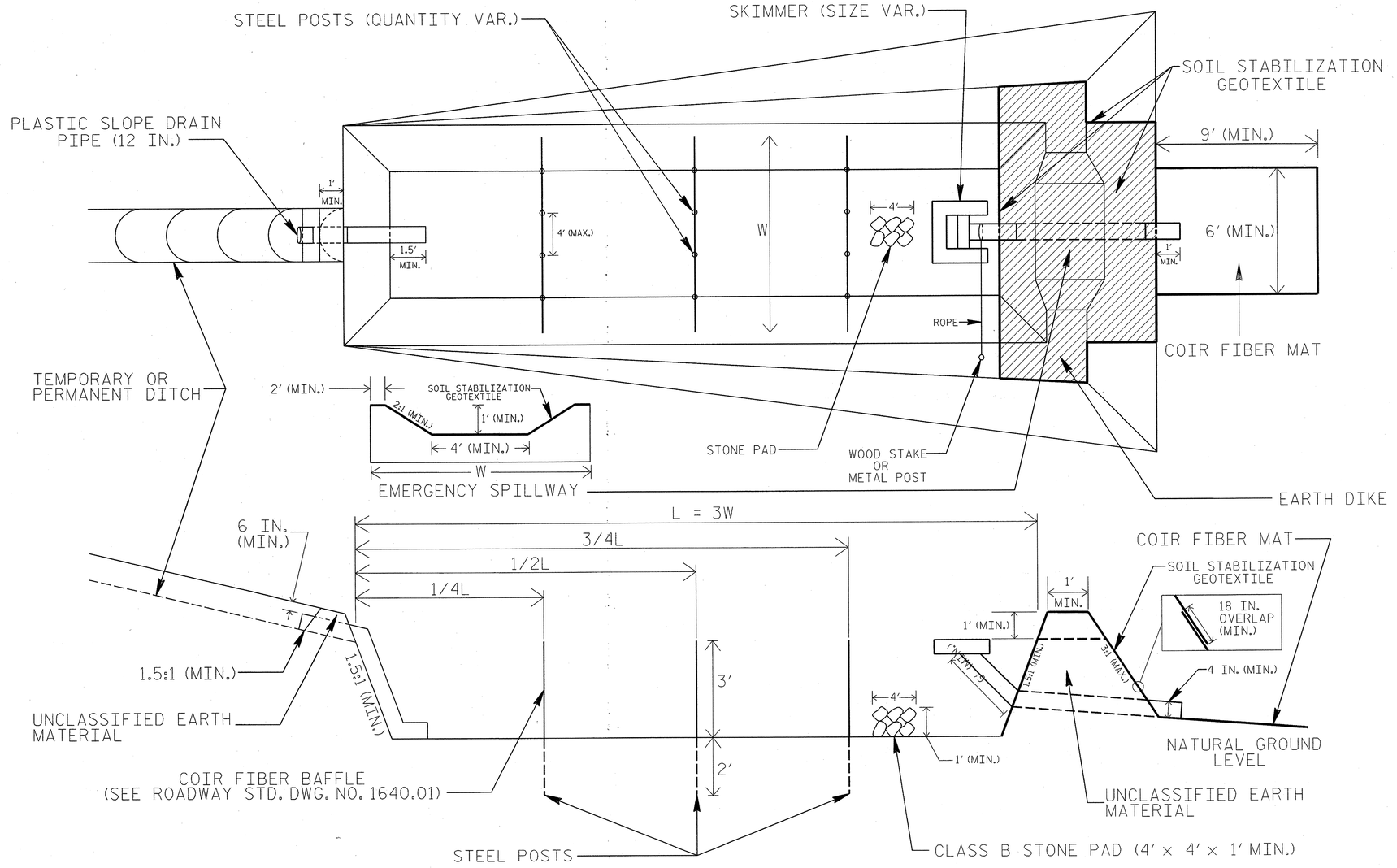
The following roadway english standards as appear in "Roadway Standard Drawings"– Roadway Design Unit – N. C. Department of Transportation – Raleigh, N. C., dated January 2012 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

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		

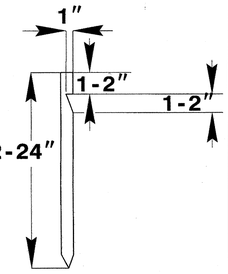
DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

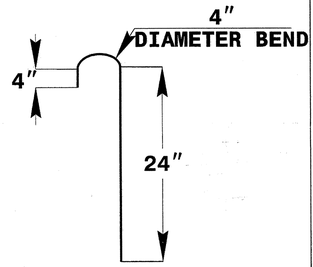
SKIMMER BASIN WITH BAFFLES DETAIL



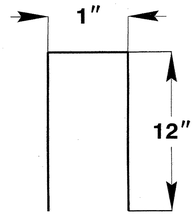
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

NOTES

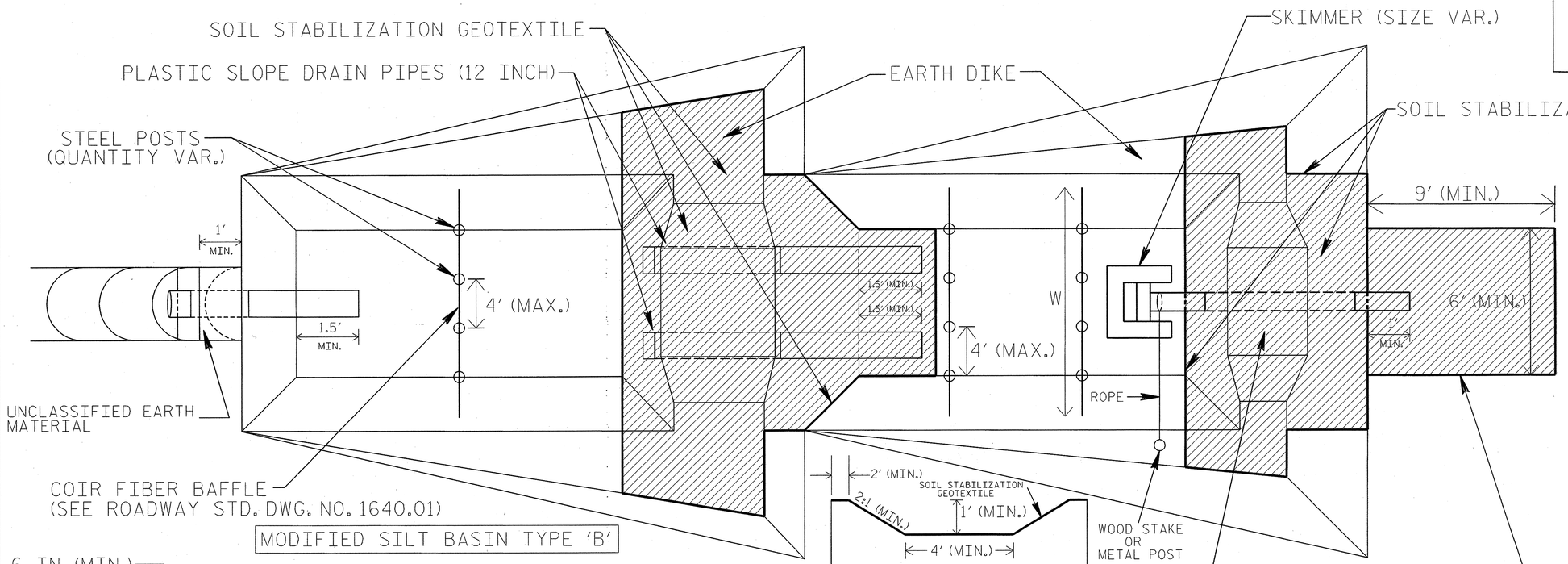
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN DEPTH OF 3 FT., THE MINIMUM BASIN WIDTH SHALL BE 9 FT.
4. DETERMINE EMERGENCY SPILLWAY LENGTH (FT.) USING Q/0.8, WHERE Q IS FLOW RATE (CFS) INTO BASIN.
5. PLASTIC SLOPE 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

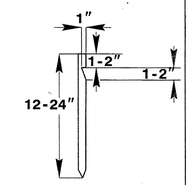
DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-2A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

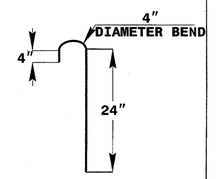
TIERED SKIMMER BASIN DETAIL



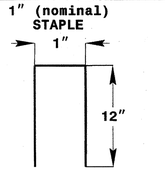
2" x 2" (nominal) WOODEN STAKE



#10 STEEL REINFORCEMENT BAR



1" (nominal) STAPLE



COIR FIBER MAT ANCHOR OPTIONS

NOTES

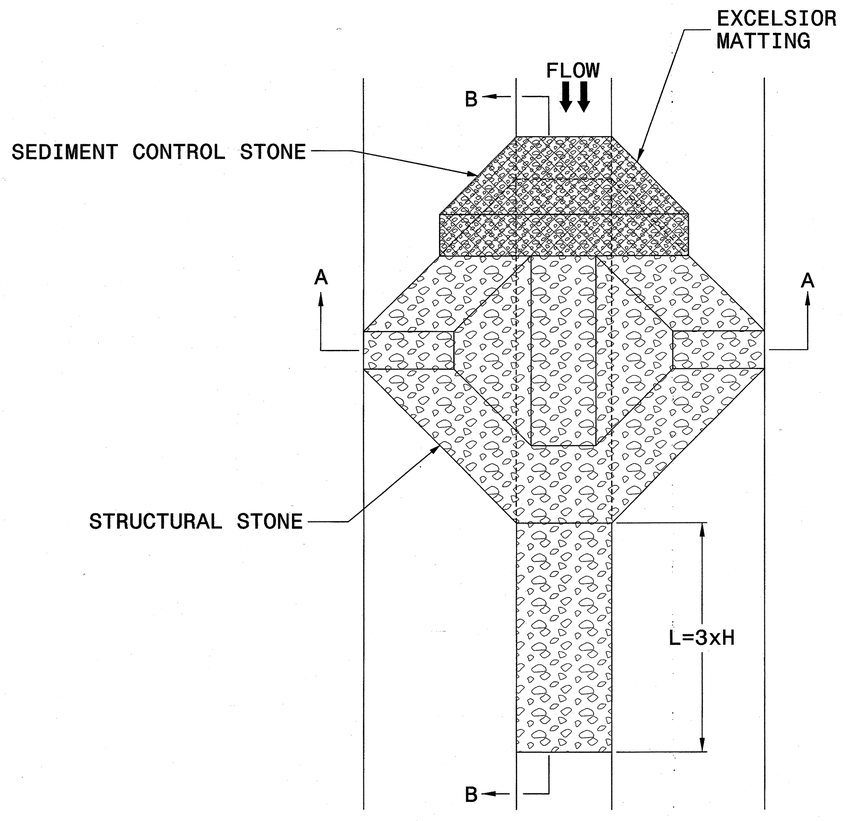
1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES OF BASINS.
2. LIMIT HEIGHT OF EARTH DIKES TO 5 FT.
3. ADDITIONAL MODIFIED SILT BASINS TYPE 'B' MAY BE NEEDED DEPENDING ON SLOPE.
4. FOR BASIN DEPTHS OF 3FT., THE MINIMUM BASIN WIDTHS SHALL BE 9 FT.
5. DETERMINE EMERGENCY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

NOT TO SCALE

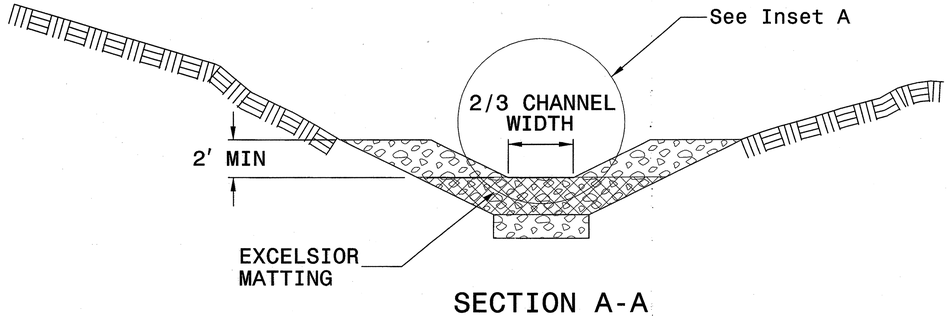
DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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



PLAN



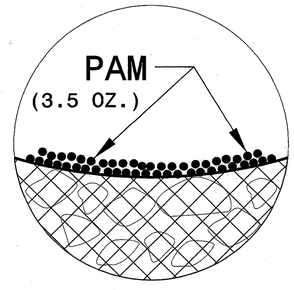
SECTION A-A

NOTES

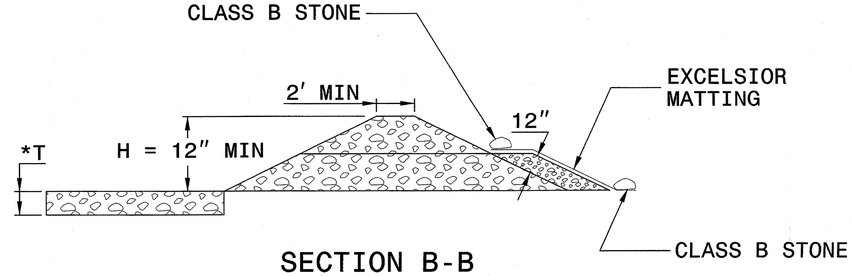
USE EXCELSIOR FOR MATTING MATERIAL AND ANCHOR MATTING SECTION AT TOP AND BOTTOM WITH CLASS B STONE.

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

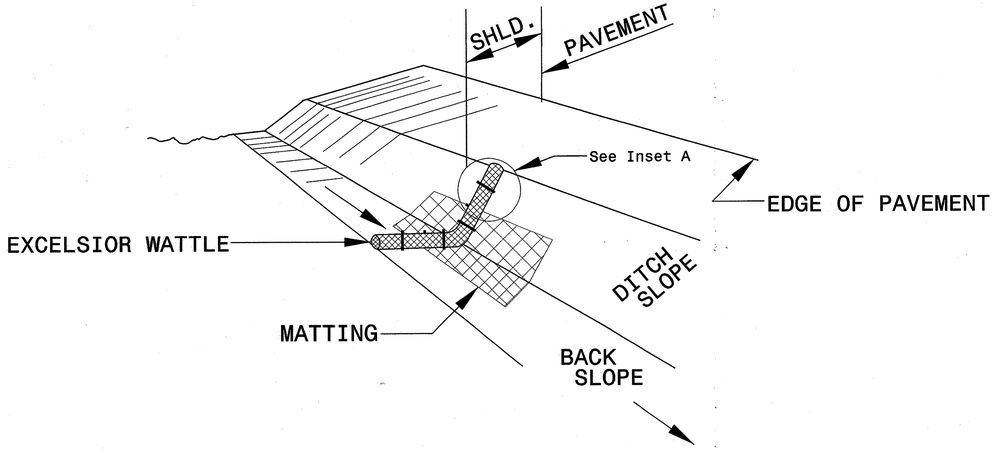
*T = 12" MIN., 18" MAX.

NOT TO SCALE

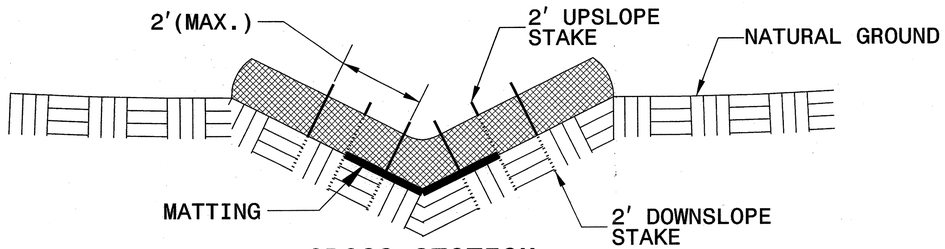
DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

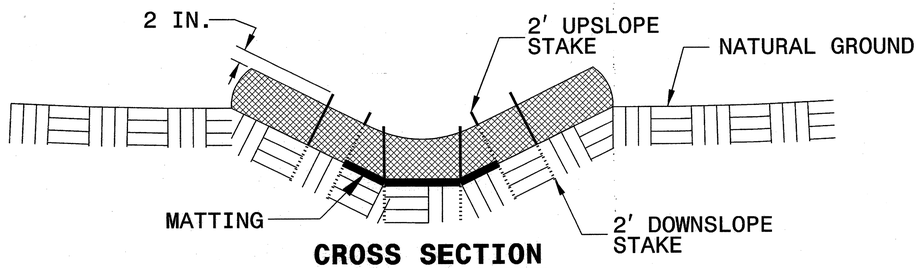
WATTLE DETAIL



ISOMETRIC VIEW



CROSS SECTION VEE DITCH



CROSS SECTION TRAPEZOIDAL DITCH

NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

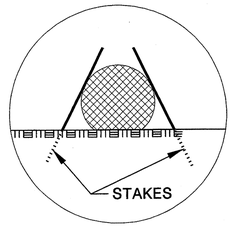
ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

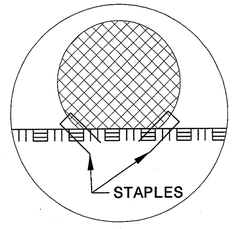
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

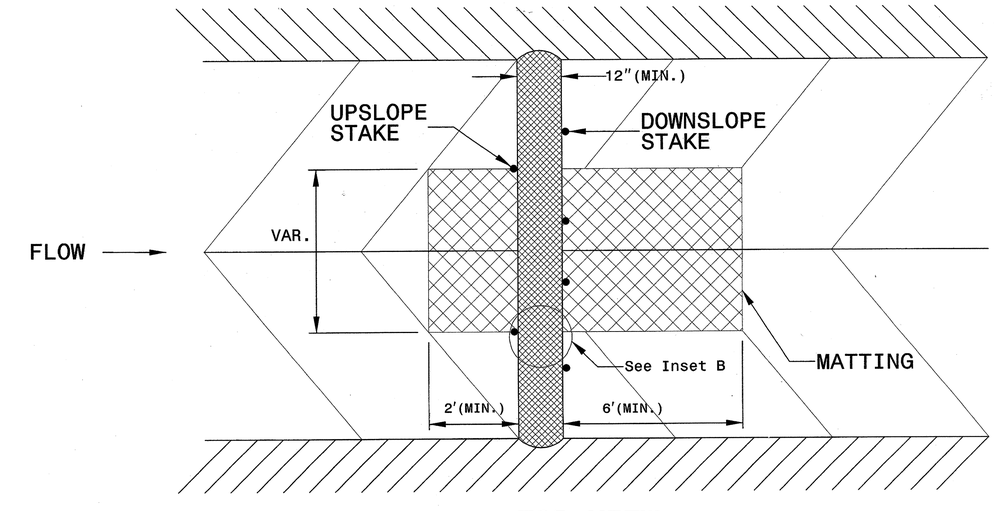
INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.



INSET A



INSET B



TOP VIEW

DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-3
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.

DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-3A
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

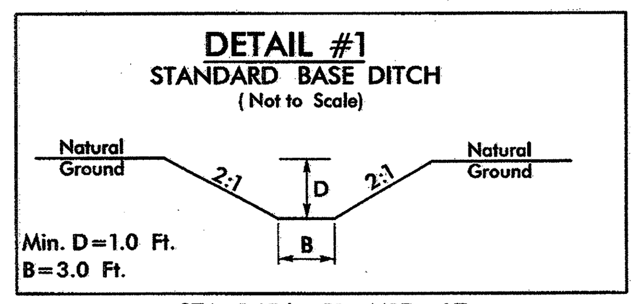
MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	–M1D–	9456+91	HEAD DITCH	LEFT	35
4	–M1D–	9456+91	TAIL DITCH	RIGHT	35
5	–M1D–	9465+00	9480+50	LEFT	2380
5	–M1D–	9468+00	9487+00	RIGHT	1845
6	–M1D–	9481+00	9488+00	LEFT	1075
7	–M1D–	9495+00	9503+50	RIGHT	1305
7	–M1D–	9491+25	HEAD DITCH	RIGHT	110
8	–M1D–	9503+50	9506+00	RIGHT	385
8	–M1D–	9508+00	HEAD DITCH	RIGHT	50
9	–M1D–	9511+50	9525+50	RIGHT	2150
10	–M1D–	9530+75	9534+50	RIGHT	580
10	–M1D–	9534+50	9544+00	RIGHT	1465
10	–M1D–	9537+00	9539+30	LEFT	355
11	–M1D–	9541+00	9550+00	LEFT	1385
			SUBTOTAL		13155
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					48640
				TOTAL	61795

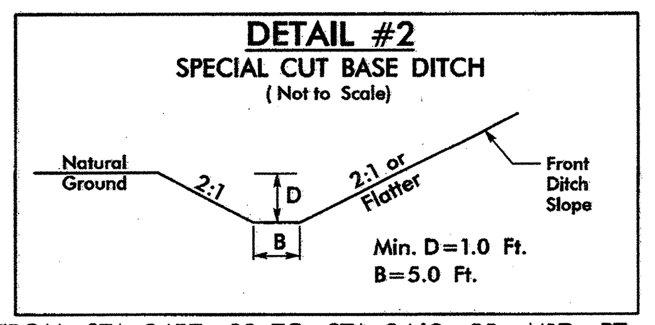
CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-3B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

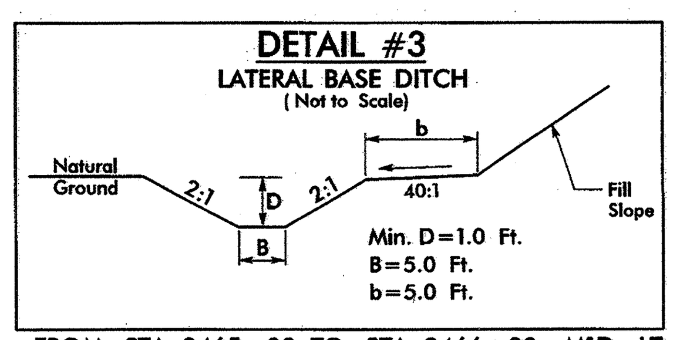
DITCH DETAIL SHEET



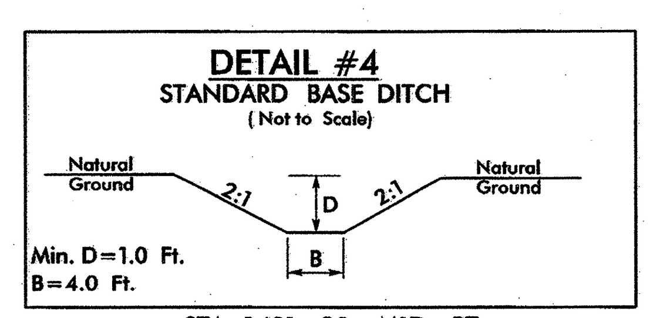
STA. 9456+91 -M1D- LT
STA. 9456+91 -M1D- RT
STA. 9508+05 -M1D- RT



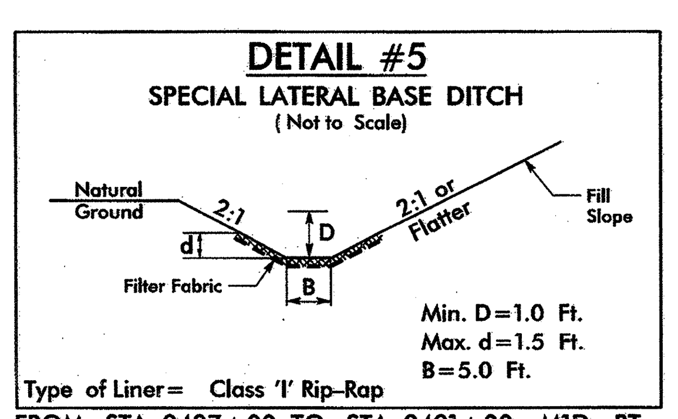
FROM STA. 9457+00 TO STA. 9462+00 -M1D- RT
FROM STA. 9495+00 TO STA. 9500+00 -M1D- RT
FROM STA. 9503+50 TO STA. 9506+00 -M1D- RT
FROM STA. 9511+50 TO STA. 9514+00 -M1D- RT
FROM STA. 9531+50 TO STA. 9537+00 -M1D- LT
FROM STA. 9532+00 TO STA. 9536+50 -M1D- RT
FROM STA. 9544+00 TO STA. 9550+00 -M1D- RT
FROM STA. 9546+50 TO STA. 9550+00 -M1D- LT
FROM STA. 9550+80 TO STA. 9551+50 -M1D- RT
FROM STA. 9551+50 TO STA. 9555+00 -M1D- LT
FROM STA. 9565+00 TO STA. 9569+00 -M1D- LT



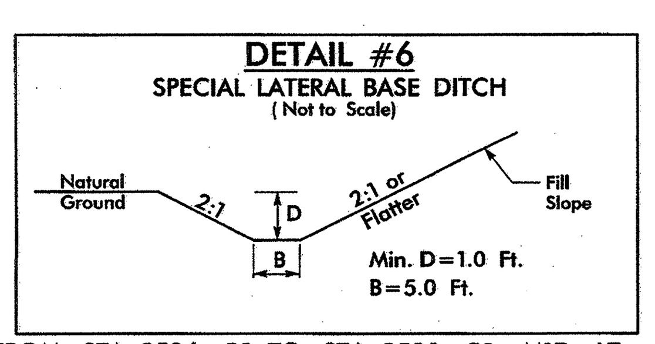
FROM STA. 9465+00 TO STA. 9466+00 -M1D- LT
FROM STA. 9485+00 TO STA. 9487+50 -M1D- LT
FROM STA. 9541+00 TO STA. 9546+50 -M1D- LT



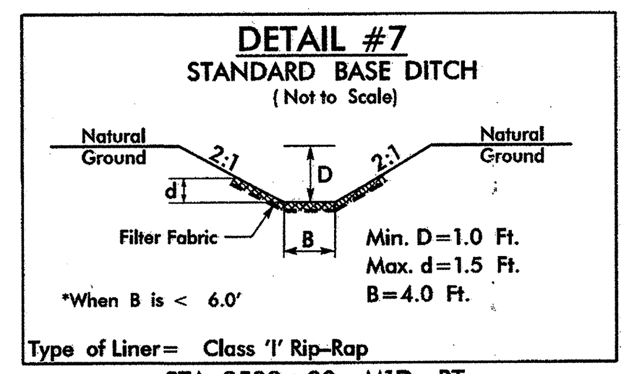
STA. 9491+20 -M1D- RT



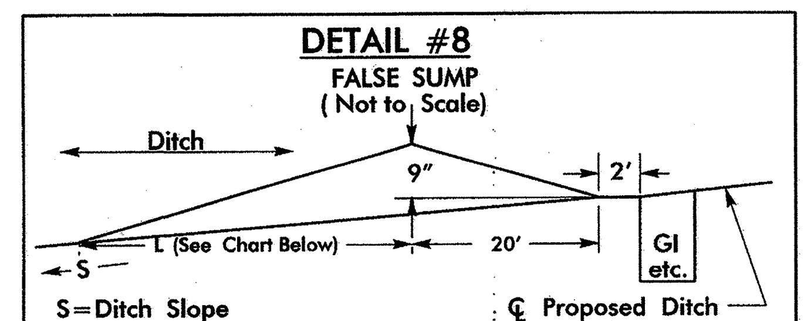
FROM STA. 9487+00 TO STA. 9491+00 -M1D- RT
FROM STA. 9491+40 TO STA. 9495+00 -M1D- RT
FROM STA. 9508+10 TO STA. 9511+50 -M1D- RT



FROM STA. 9526+50 TO STA. 9530+50 -M1D- LT
FROM STA. 9530+75 TO STA. 9532+00 -M1D- RT
FROM STA. 9536+50 TO STA. 9544+00 -M1D- RT

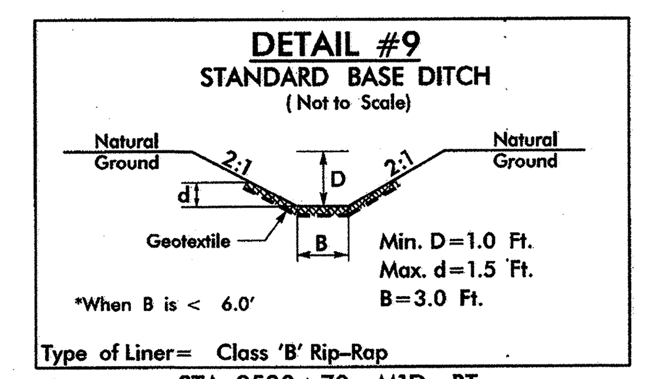


STA. 9539+00 -M1D- RT

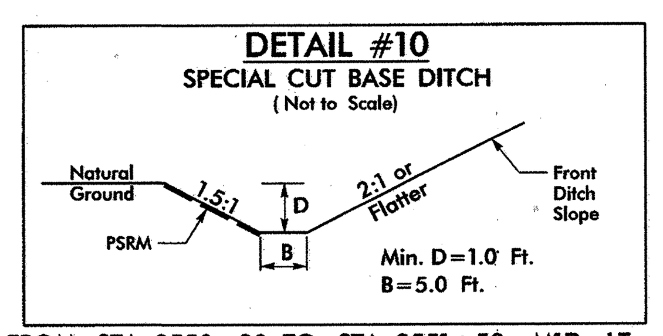


Ditch Grade	L	Ditch Grade	L
0.0% To 2.0%	20'	Over 4.0% To 6.0%	40'
Over 2.0% To 4.0%	30'	Over 6.0%	50'

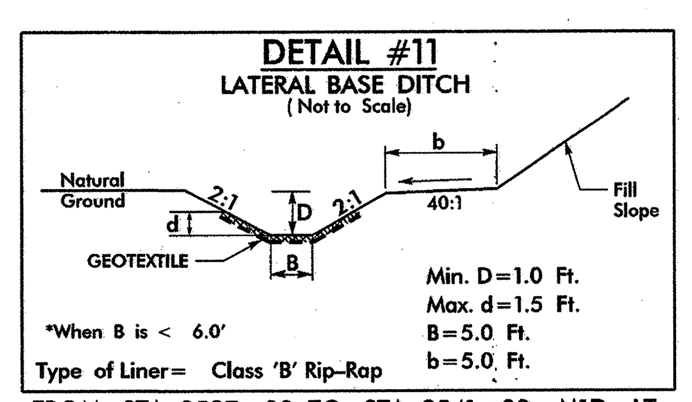
STA. 9480+75 -M1D- LT



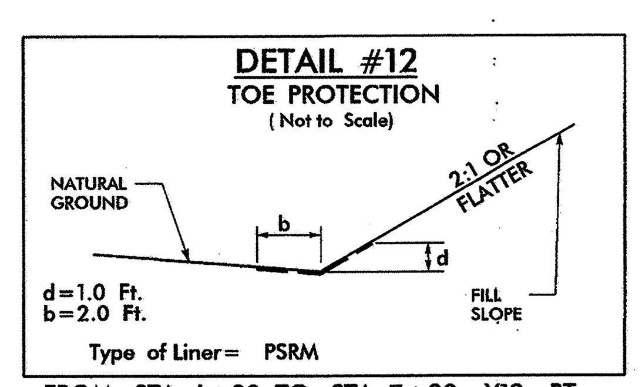
STA. 9530+70 -M1D- RT



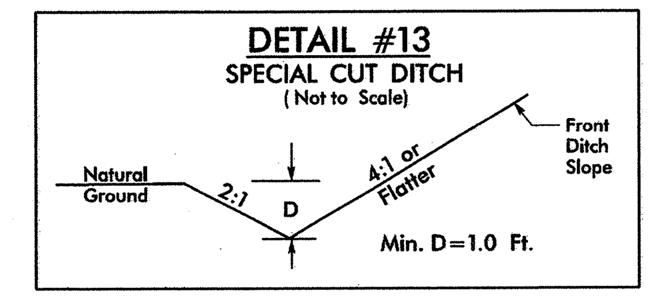
FROM STA. 9550+80 TO STA. 9551+50 -M1D- LT



FROM STA. 9537+00 TO STA. 9541+00 -M1D- LT



FROM STA. 6+30 TO STA. 7+30 -Y12- RT



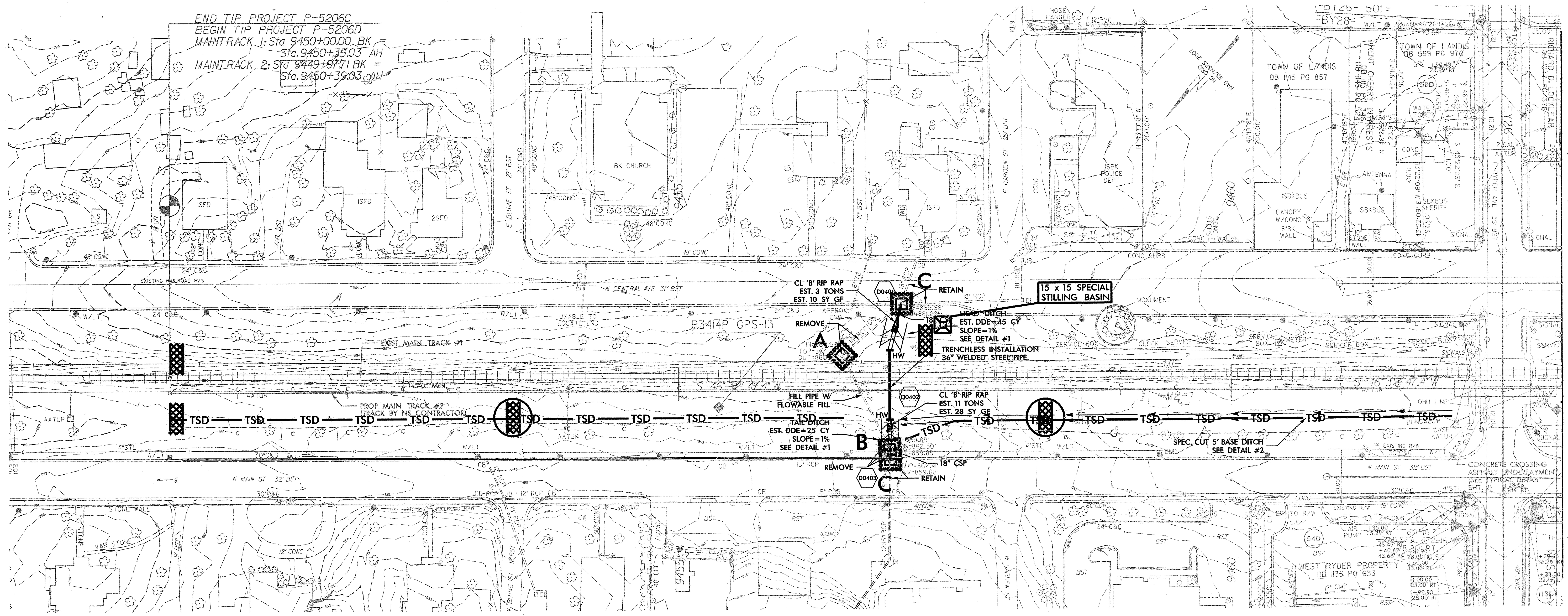
FROM STA. 12+20 TO STA. 14+00 -Y53- RT
FROM STA. 8+10 TO STA. 8+70 -Y12- RT

DCN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RR05

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-04/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

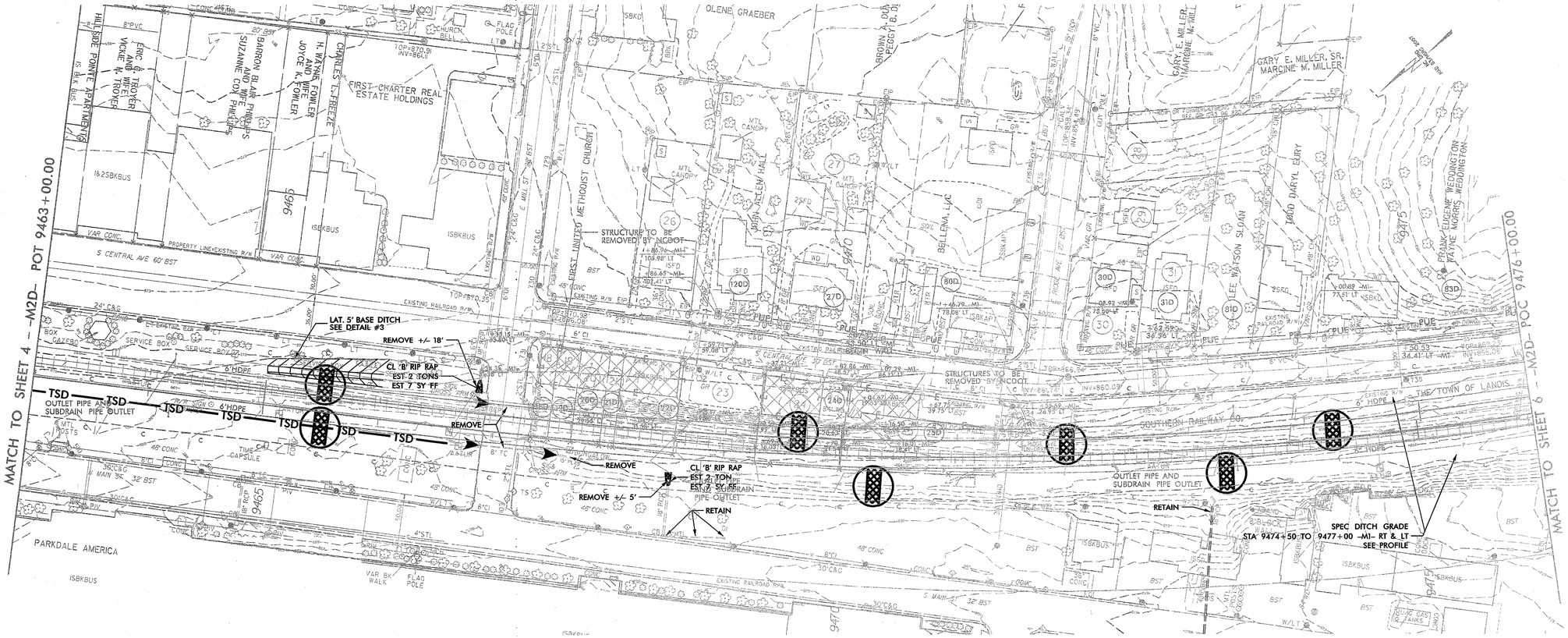


DCN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET RR05

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-05/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



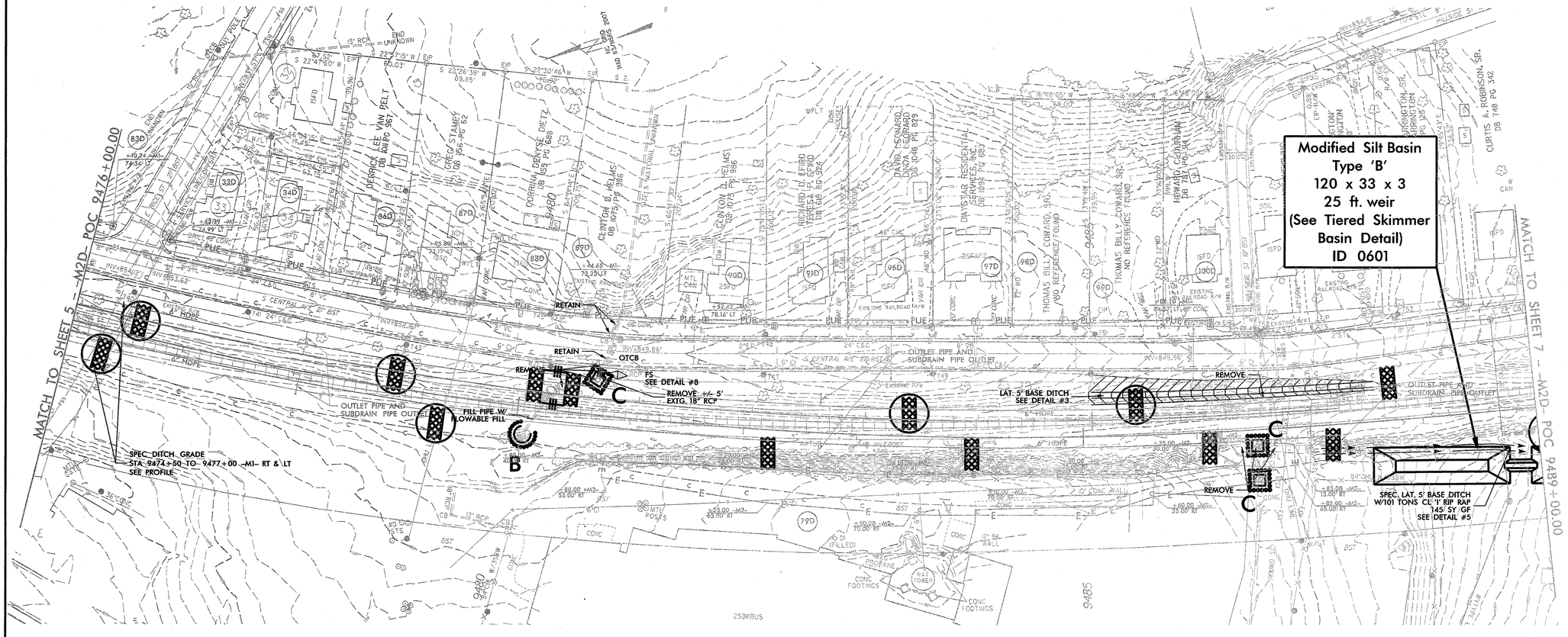
ON PARCEL 23D REMOVED DUE TO NO IMPROVEMENTS ON THE PARCEL. CLAIMS ADDED TO PARCELS 78D, 27D, 80D, 30D, 31D, 81D AND 83D FOR PUE.

DGN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET RR06

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-06/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



ADDED TO PARCELS 33D, 34D, 86D, 87D, 88D, 89D, 90D, 91D, 96D, 97D, 98D, 99D AND 100D FOR PUE.

DKN 0164DEL P10b2

EROSION CONTROL PLAN

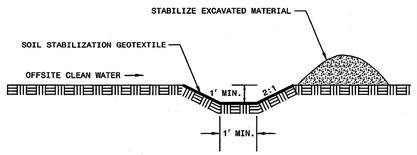
PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-07/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

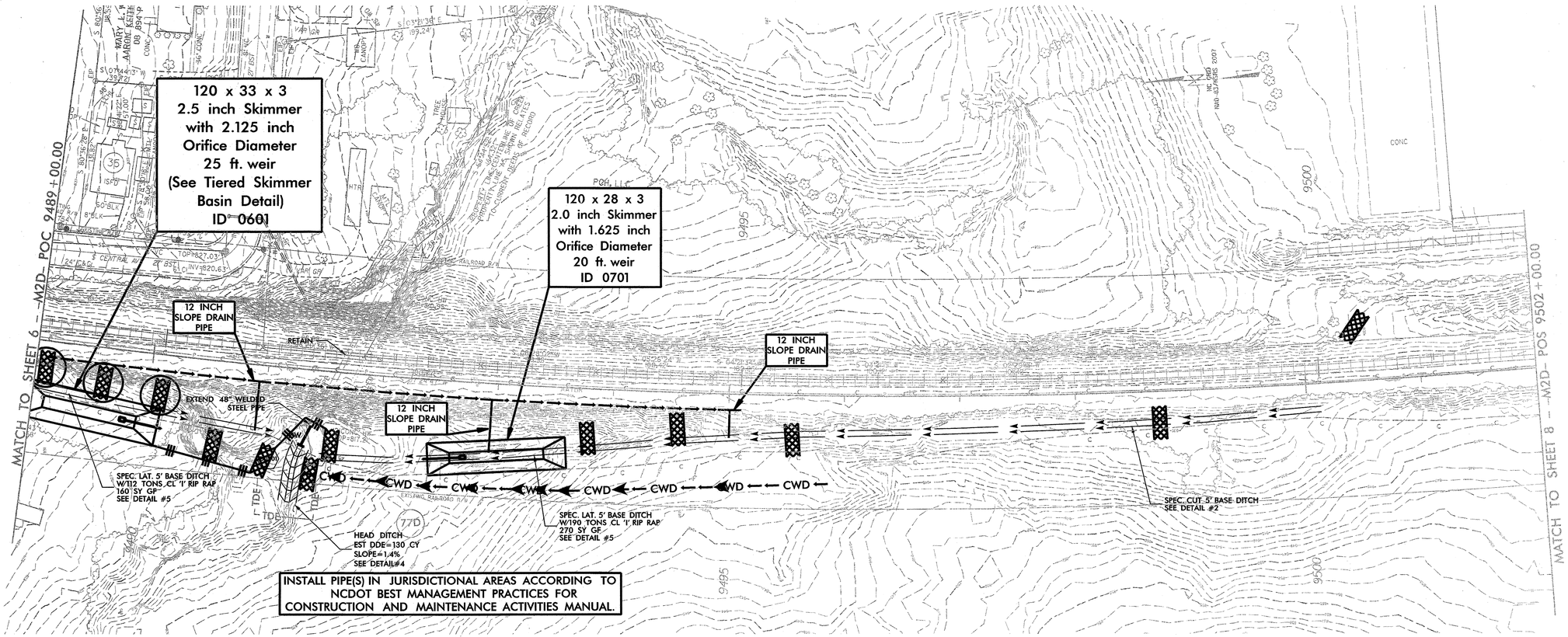
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET RR07

CLEAN WATER DIVERSION

CWD → CWD → CWD → CWD →

(Not to Scale)





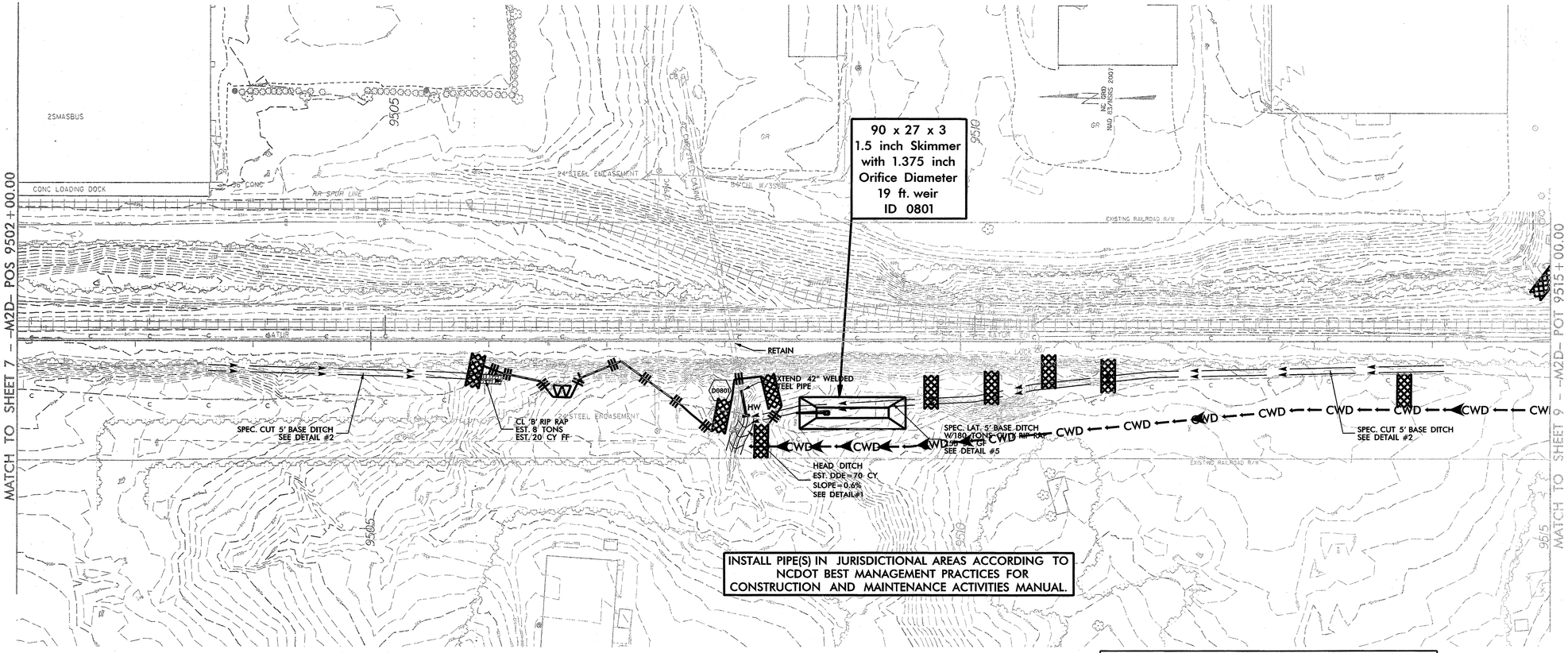
INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

DGN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RR08

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-08/CONST.08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

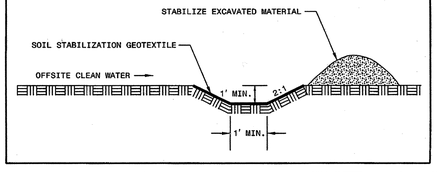


INSTALL PIPE(S) IN JURISDICTIONAL AREAS ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

CLEAN WATER DIVERSION

CWD → CWD → CWD → CWD →

(Not to Scale)

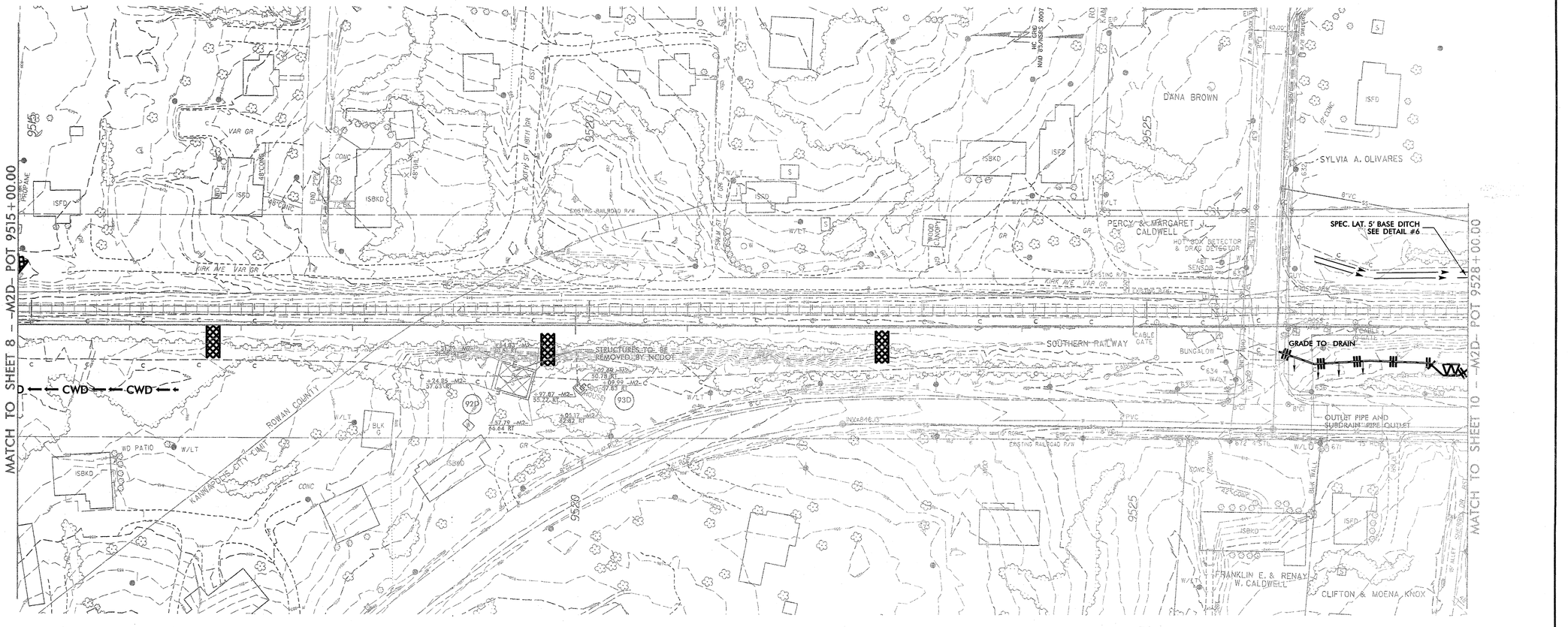


DGN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RR09

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-09/CONST.09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DGN 0164DEL P10b2

EROSION CONTROL PLAN

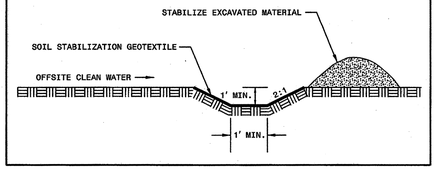
PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-10/CONST 10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

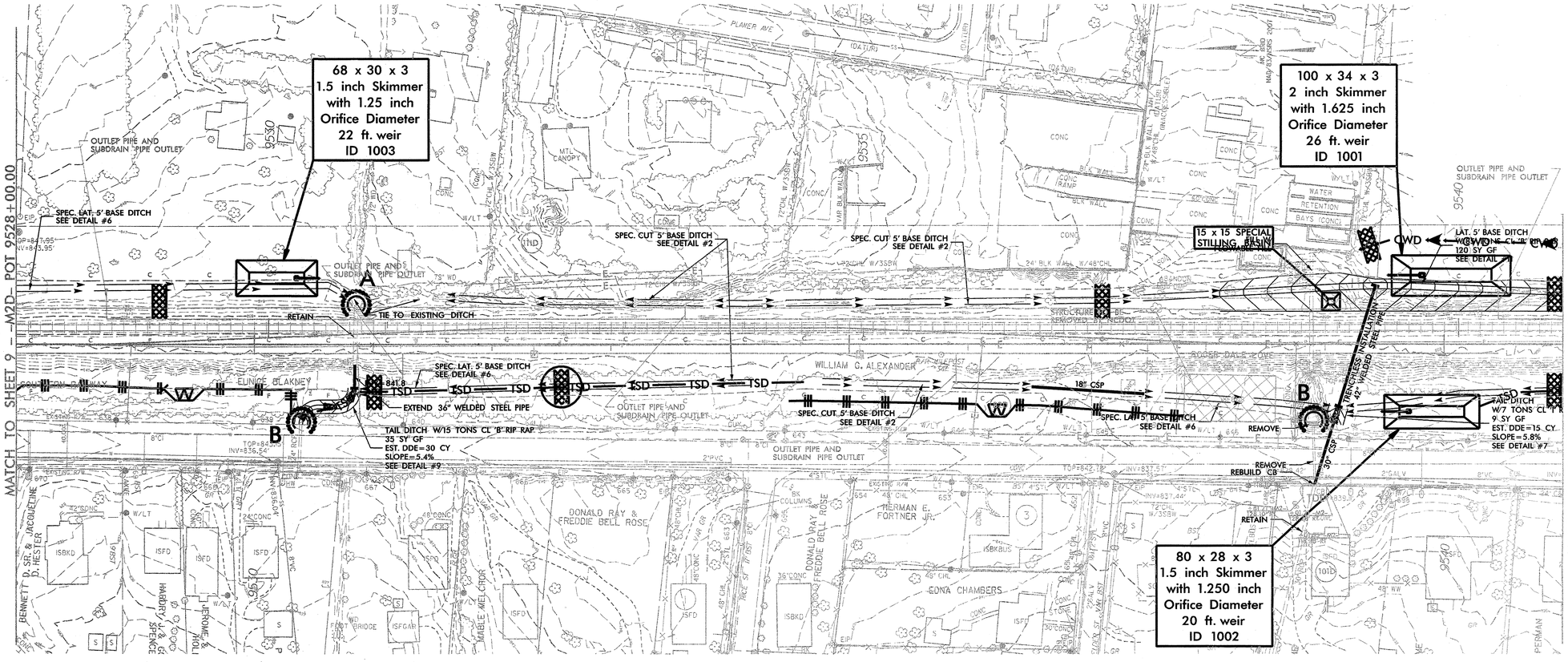
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET RR10

CLEAN WATER DIVERSION

→→ CWD →→ CWD →→ CWD →→ CWD →→

(Not to Scale)



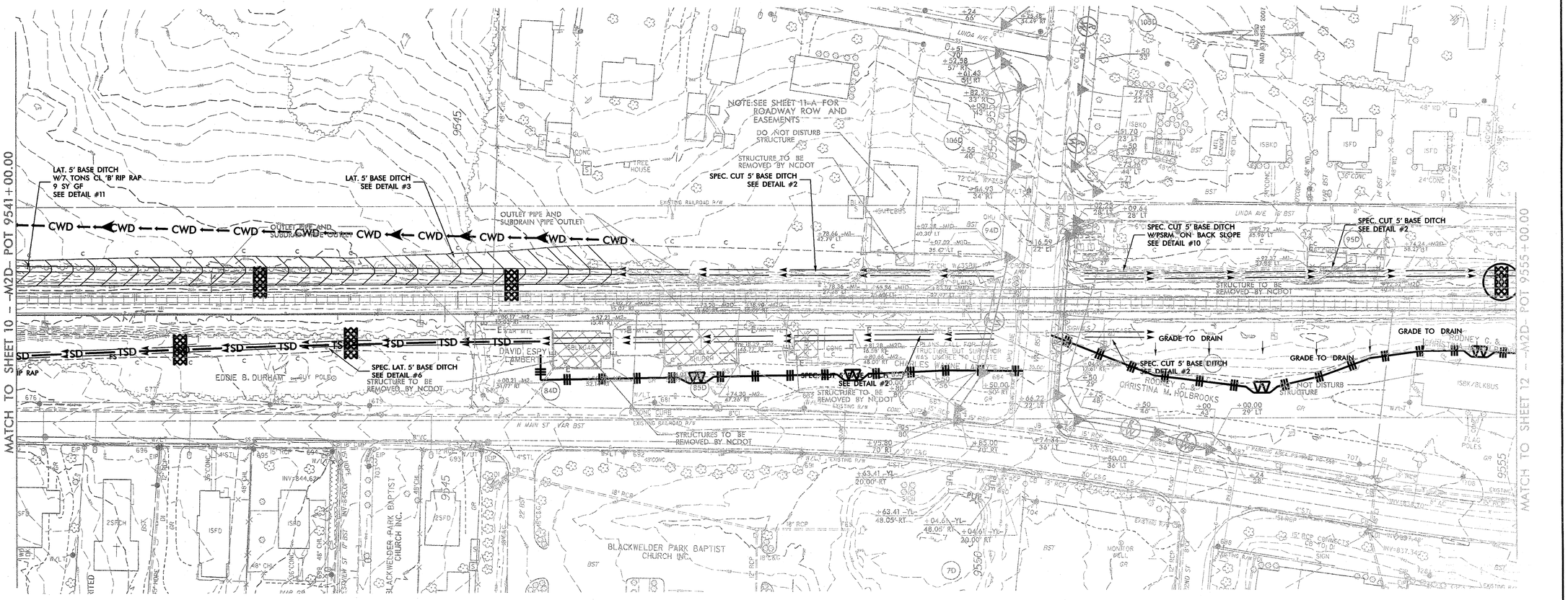


DRN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RR11

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-II/CONST.II
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

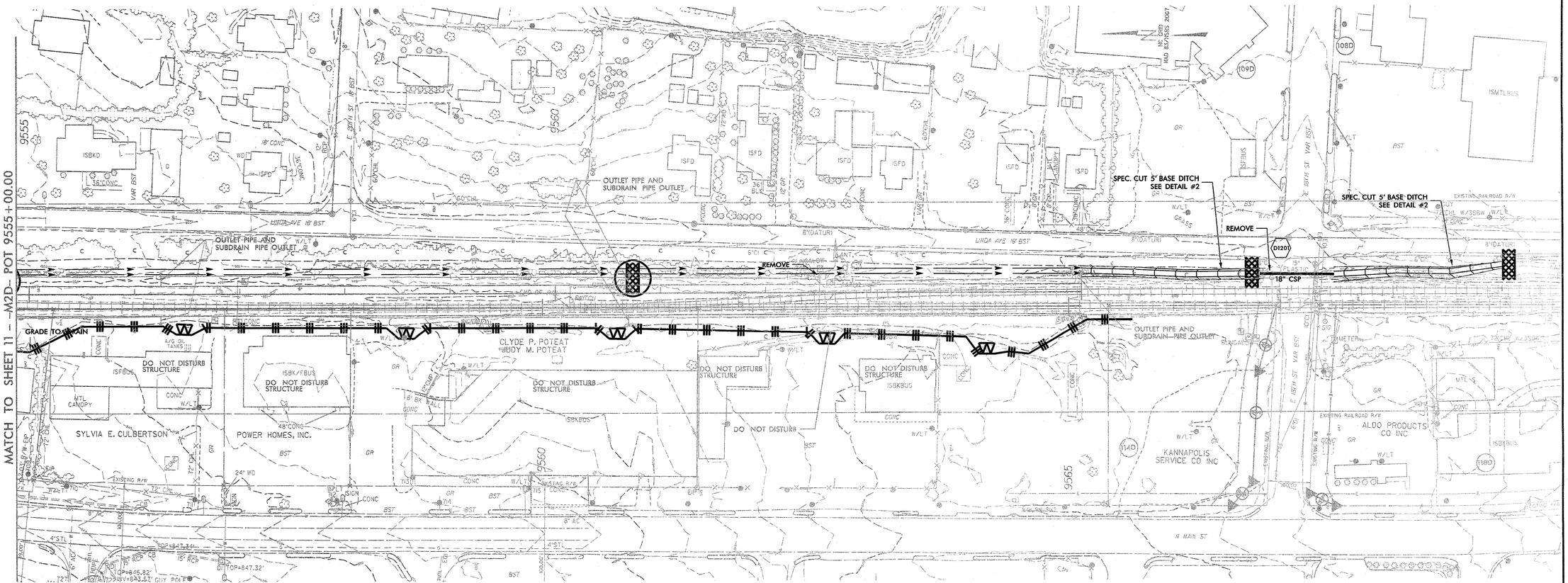


DKCN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RR12

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-12/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

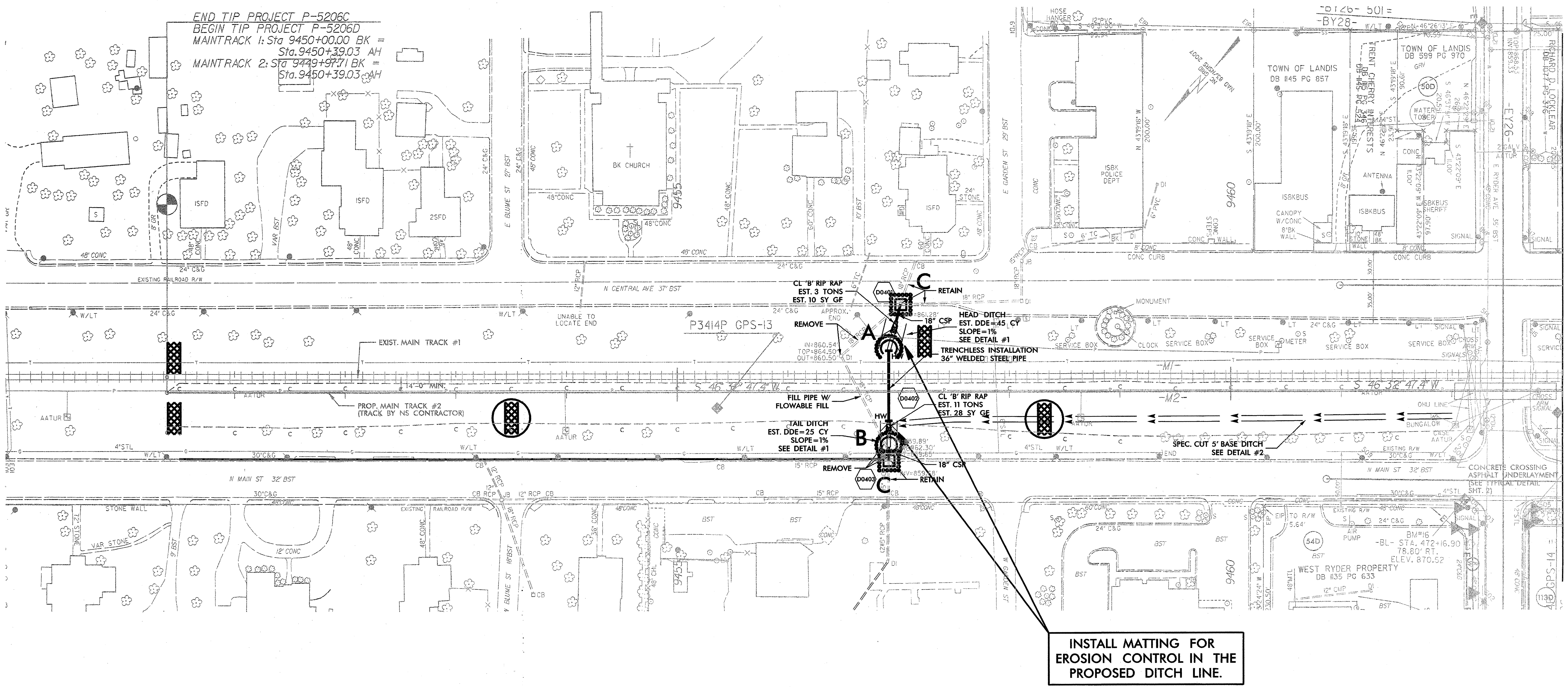


DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-13/CONST.04
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RR05



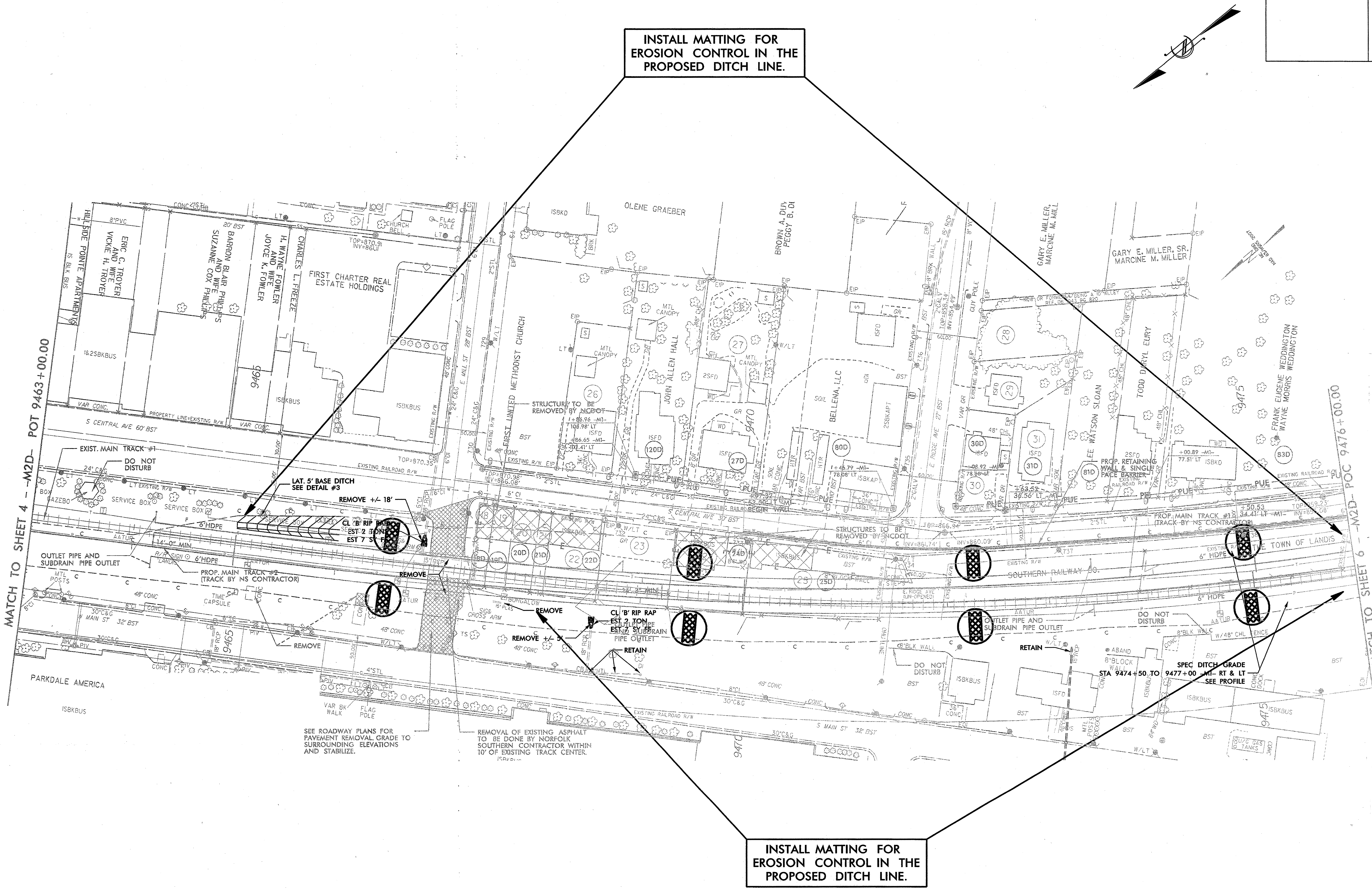
MATCH TO SHEET 5 - -M2D- POT 9463+00.00

DCN **0164DEL P10b2**

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-14/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RR05



ON PARCEL 23D REMOVED DUE TO NO IMPROVEMENTS ON THE PARCEL. CLAIMS ADDED TO PARCELS 78D, 27D, 80D, 30D, 31D, 81D AND 83D FOR PUE.

DGN 0164DEL P10b2

EROSION CONTROL PLAN

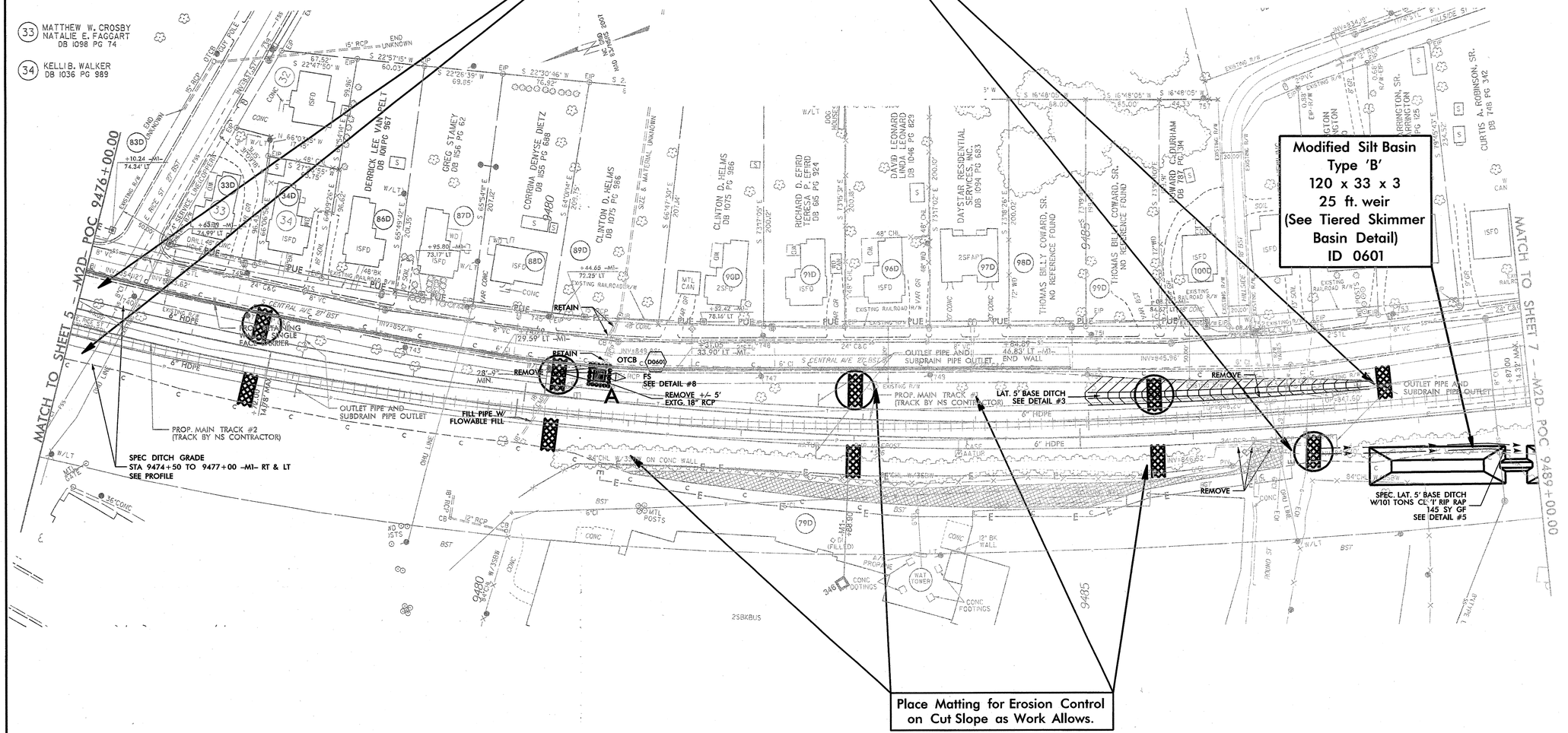
PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-15/CONST.06
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET RR06

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

Modified Silt Basin Type 'B' 120 x 33 x 3 25 ft. weir (See Tiered Skimmer Basin Detail) ID 0601

Place Matting for Erosion Control on Cut Slope as Work Allows.



DGN 0164DEL P10b2

EROSION CONTROL PLAN

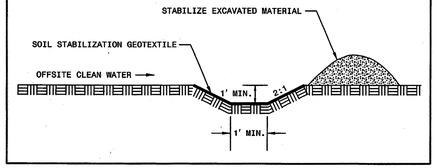
PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-16/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

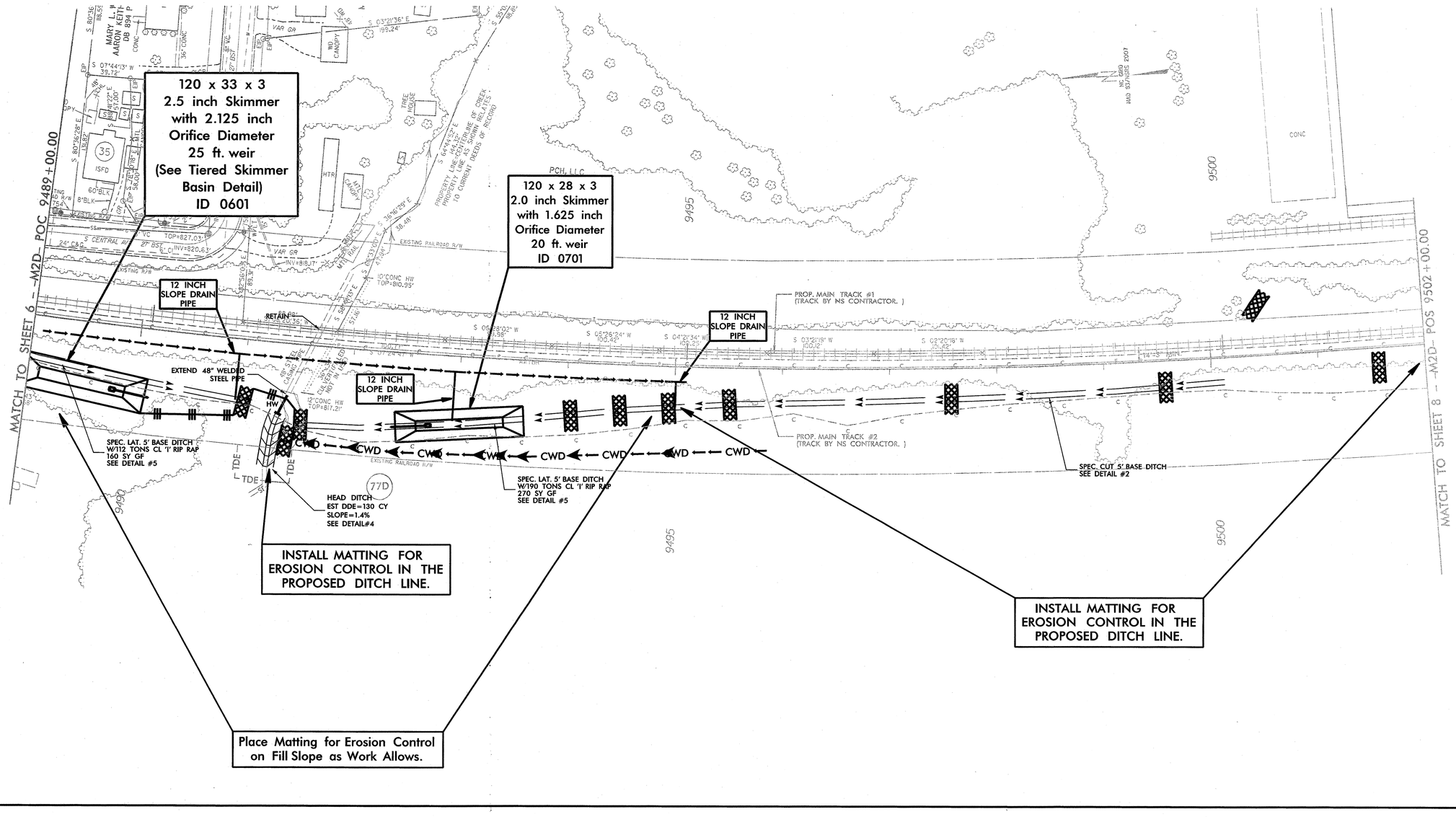
FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET RR07

CLEAN WATER DIVERSION

→→ CWD →→ CWD →→ CWD →→ CWD →→

(Not to Scale)



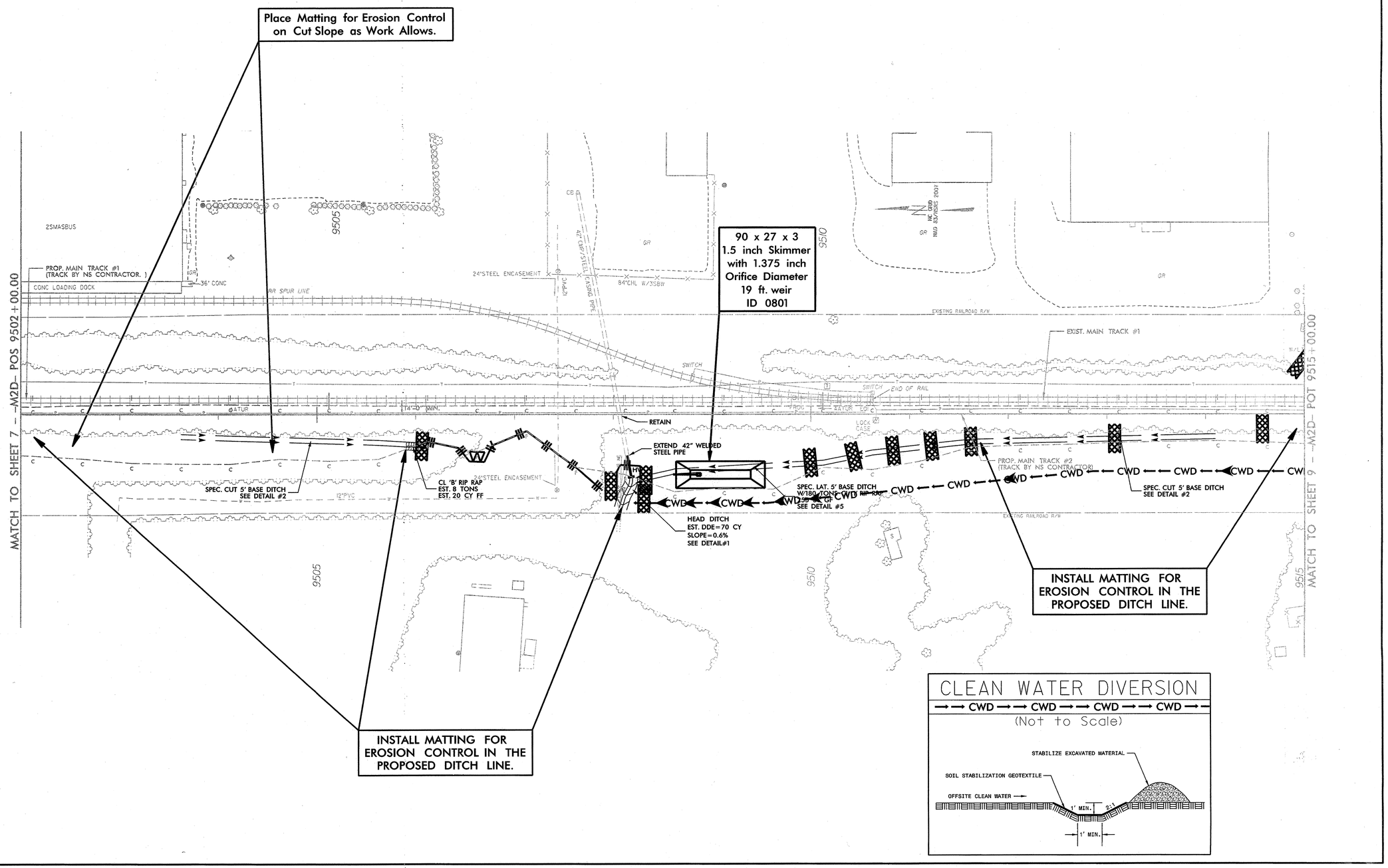


DGN 0164DEL P10b2

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-17/CONST.08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RR08



CLEAN WATER DIVERSION

CWD → CWD → CWD → CWD

(Not to Scale)

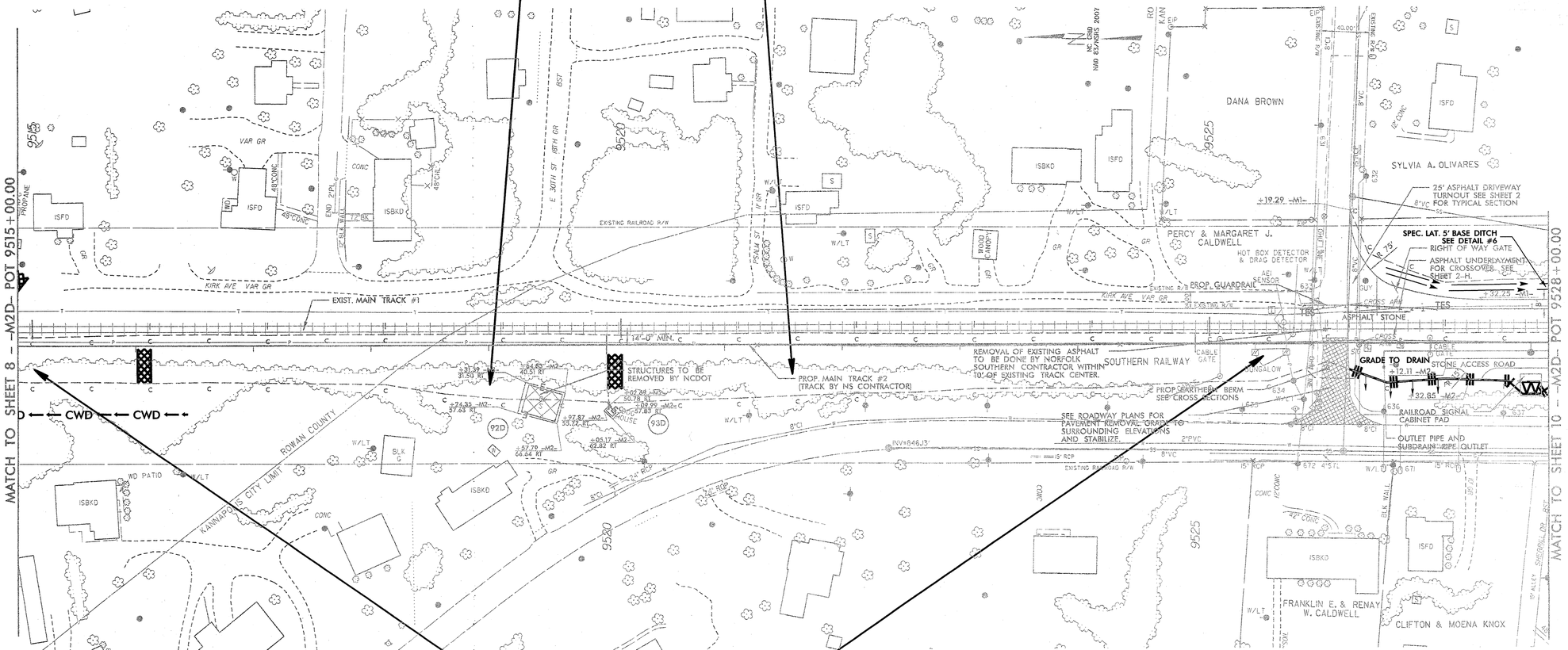
DGN 0164DEL P10b2

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-18/CONST.09
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET RR09

Place Matting for Erosion Control on Cut Slope as Work Allows.



DGN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-19/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

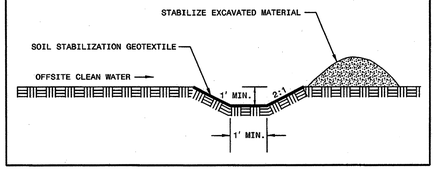
EROSION CONTROL PLAN

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET RR10

CLEAN WATER DIVERSION

→ → CWD → → CWD → → CWD → → CWD → →

(Not to Scale)



INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

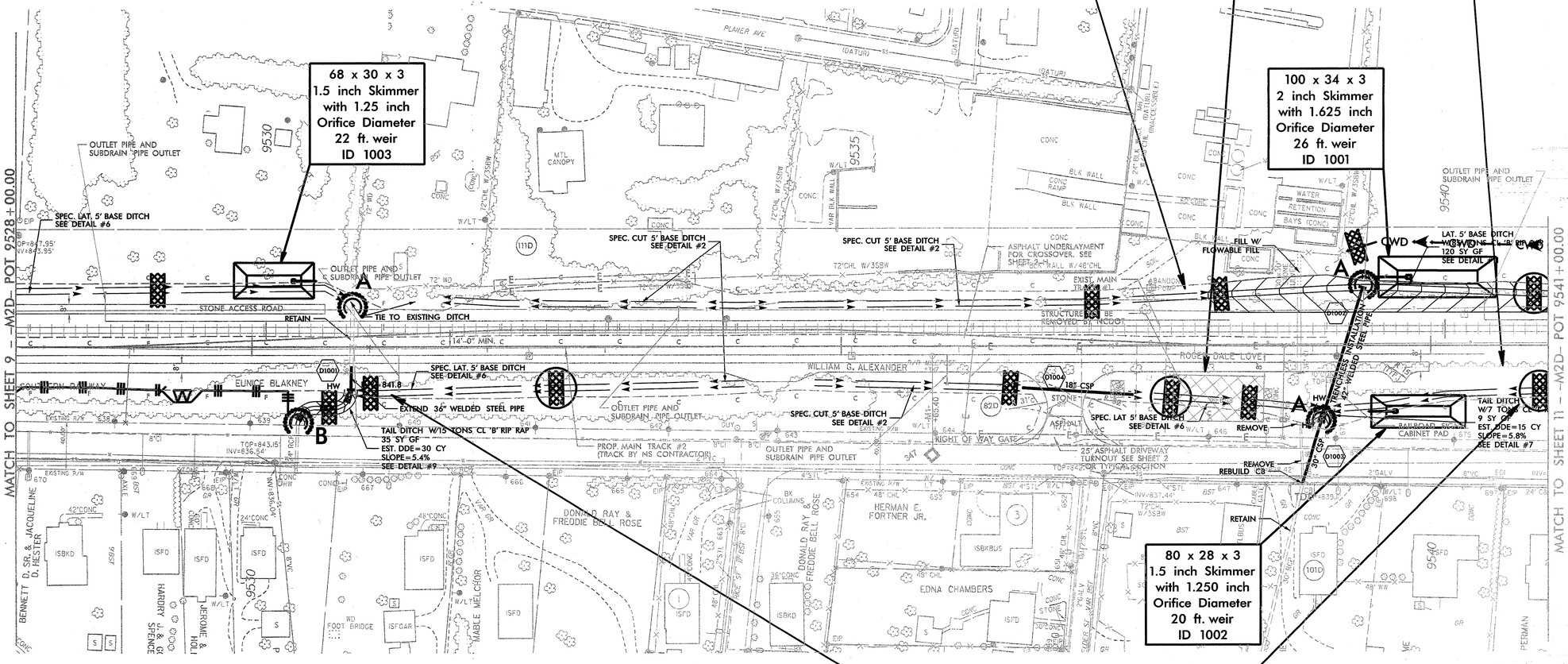
Place Matting for Erosion Control on Fill Slope as Work Allows.

68 x 30 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
22 ft. weir
ID 1003

100 x 34 x 3
2 inch Skimmer
with 1.625 inch
Orifice Diameter
26 ft. weir
ID 1001

80 x 28 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
20 ft. weir
ID 1002

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.



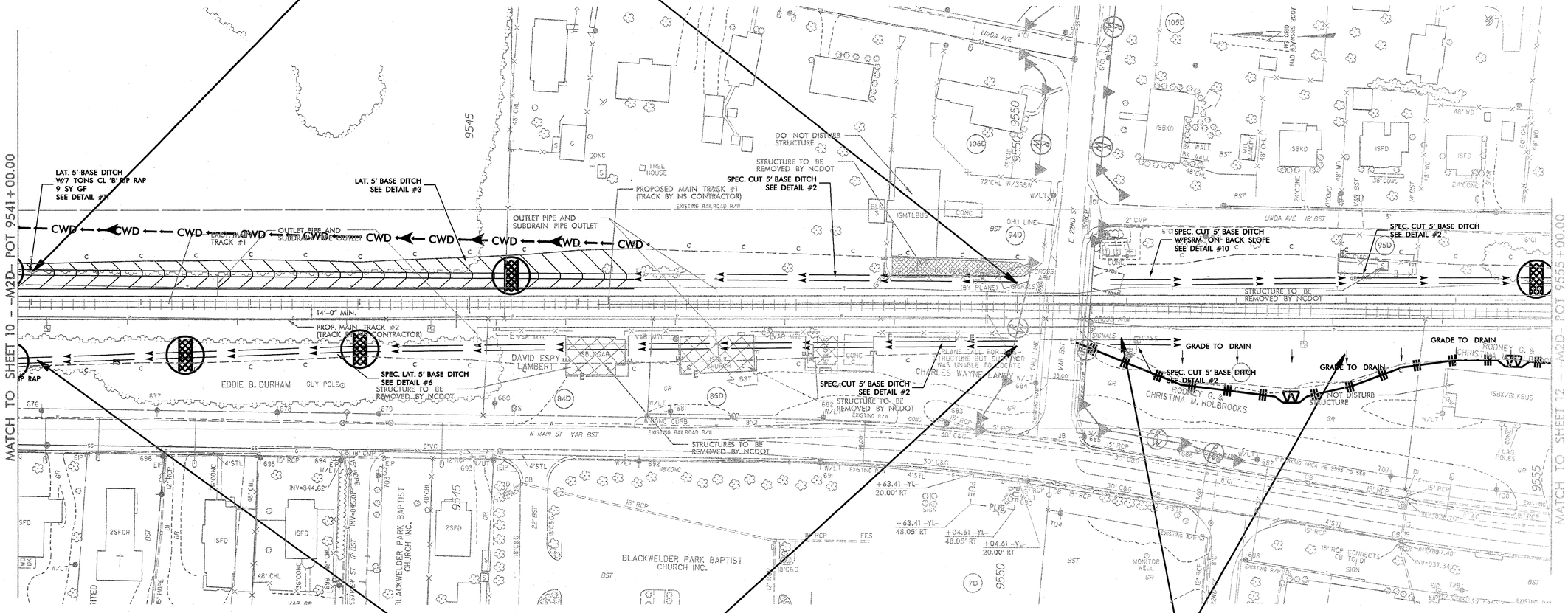
DGN 0164DEL P10b2

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-20/CONST.11
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET RR11

INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.



INSTALL MATTING FOR EROSION CONTROL IN THE PROPOSED DITCH LINE.

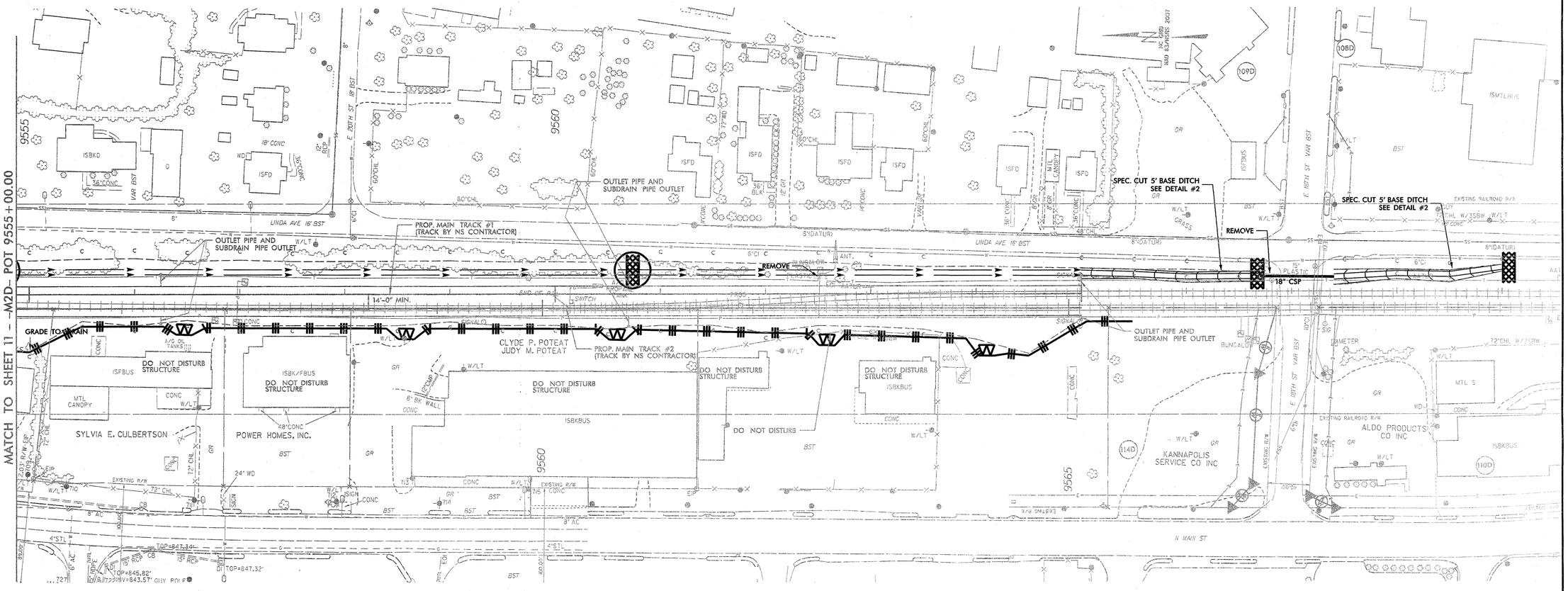
Place Matting for Erosion Control on Cut Slope as Work Allows.

DGN 0164DEL P10b2

EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RR12

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-21/CONST 12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DGN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET RDY 04

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-22/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PARCEL DATA

44D	SUSAN C. PRICE DB 1034 PG 54
45D	EUGENE QUINCY BLACK AND WIFE BETTY B. BLACK DB 0 PG 0
50D	FOUNDATION FOR THE CAROLINAS, A NORTH CAROLINA NONPROFIT CORPORATION DB 1135 PG 25
54D	WEST RYDER PROPERTY DB 1135 PG 633
64D	BROADWAY ASSOCIATES DB 630 PG 633 DB 630 PG 635
65D	FERRELL A. JAMES AND WIFE BETTY A. JAMES DB 813 PG 783
112D	DEUTSCHE BANK DB 1162 PG 718
113D	PARKDALE AMERICA DB 811 PG 211

MATCHLINE -Y46- STA. 11+00 SEE SHEET XX

-Y51- POT Sta. 9+66.91

END CONSTRUCTION -Y51- STA. 17+68.42

BEGIN CONSTRUCTION -Y46- STA. 9+68.00

-Y46- POT Sta. 9+00.00

REMOVE EXIST. MILL ST. PAVEMENT AND SIDEWALK - BETWEEN CENTRAL AVE AND MAIN ST. NORFOLK SOUTHERN TO REMOVE PAVEMENT WITHIN 10FT OF TRACK CENTERLINE.

END CONSTRUCTION -Y45- STA. 16+60.00

-Y12- STA. 12+21.38 -Y45- STA. 15+80.00

-Y12- PINC Sta. 10+91.68

-Y45- POT Sta. 16+63.07

END CONSTRUCTION -YL- STA. 18+93.73

END PAVING -YL- STA. 17+30.00 TIE TO EXISTING

BEGIN CONSTRUCTION -Y12- STA. 5+85.00

-Y12- POT Sta. 5+00.00

-YL- STA. 14+00.00 = -Y12- STA. 13+97.38

-Y12- POT Sta. 18+40.29

-Y12- STA. 7+67.49 -Y51- STA. 13+90.00

MILL AND RESURFACE

-Y45- POT Sta. 13+00.00

-Y51- ROT Sta. 11+90.00

BEGIN CONSTRUCTION -Y45- STA. 15+10.00

-YL- PT Sta. 12+10.29

BEGIN CONSTRUCTION -YL- STA. 13+20.00

END CONSTRUCTION -Y12- STA. 16+00.00

BEGIN CONSTRUCTION -Y51- STA. 12+00.00

-YL- PC Sta. 10+47.98

-YL- POT Sta. 10+06.35

NAD 83/NSRS 2007

-Y51- S. CHAPEL AVE. 2400 5300 | -Y12- E. RYDER AVE. 600 1100 | 1200 1400 | -Y12- E. RYDER AVE. | 4600 8600 | 100 200 | 200 300 | 5300 9000 | 900 1200 | -Y51- N. CHAPEL AVE. AVERAGE DAILY TRAFFIC 2010 2035

-YL- S. CENTRAL AVE. 800 1100 | -Y12- E. RYDER AVE. 550 700 | 100 100 | -Y12- E. RYDER AVE. 5300 9100 | 300 400 | 100 100 | 4700 8250 | 550 800 | -Y45- N. CENTRAL AVE. AVERAGE DAILY TRAFFIC 2010 2035

-YL- N. MAIN ST. 4700 9700 | -Y12- E. RYDER AVE. 400 700 | 700 1400 | -Y12- W. RYDER AVE. 4700 8400 | 1000 1900 | 600 1200 | 4600 9000 | 4200 9500 | -YL- N. MAIN ST. AVERAGE DAILY TRAFFIC 2010 2035

0164DEL P10b2

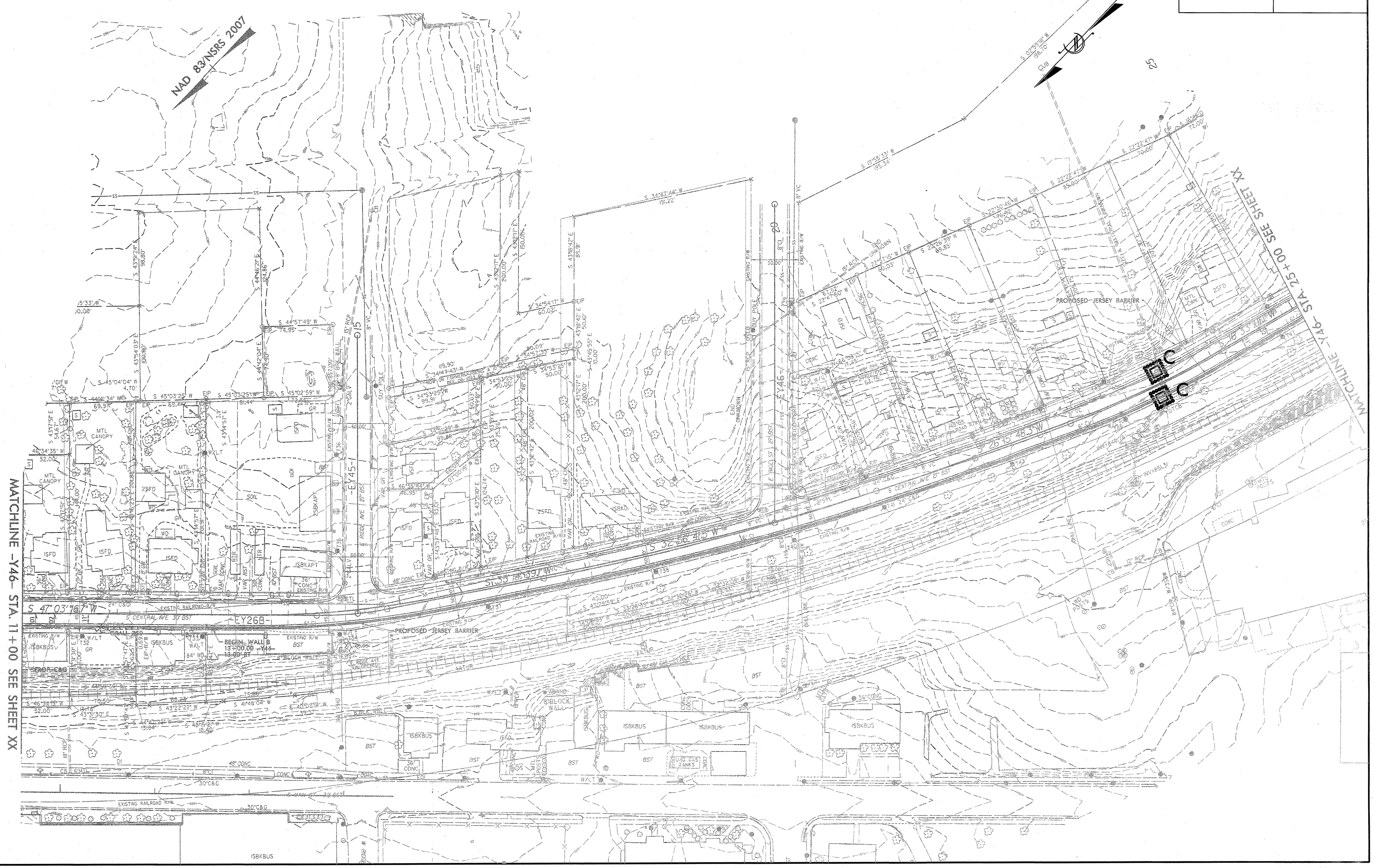
EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-23/CONST.05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 05

-Y46- CURVE DATA

PI Sta 14+43.04	PI Sta 17+26.91	PI Sta 19+75.04	PI Sta 23+24.21
△ = 11° 48′ 37.6″ (LT)	△ = 2° 17′ 57.6″ (LT)	△ = 6° 40′ 53.2″ (LT)	△ = 9° 42′ 47.2″ (LT)
D = 5° 43′ 46.5″	D = 2° 17′ 30.6″	D = 2° 17′ 30.6″	D = 6° 21′ 58.3″
L = 206.13′	L = 100.33′	L = 291.53′	L = 152.57′
T = 103.43′	T = 50.17′	T = 145.93′	T = 76.47′
R = 1,000.00′	R = 2,500.00′	R = 2,500.00′	R = 900.00′
e = 0.02	e = 0.02	e = 0.02	e = 0.02
RUNOFF = 40′	RUNOFF = 40′	RUNOFF = 40′	RUNOFF = 40′

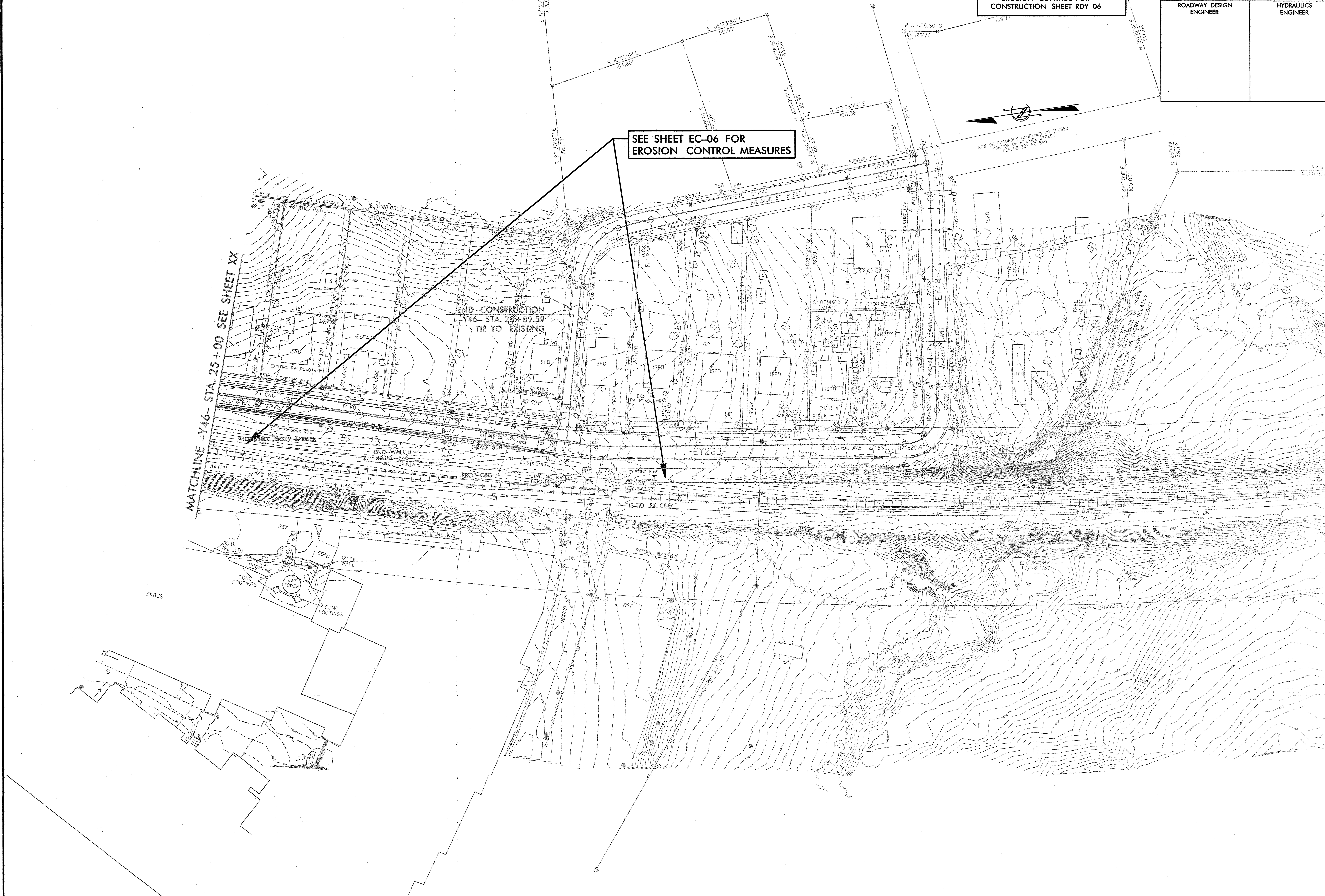


DCN 0164DEL P10b2

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-24/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 06

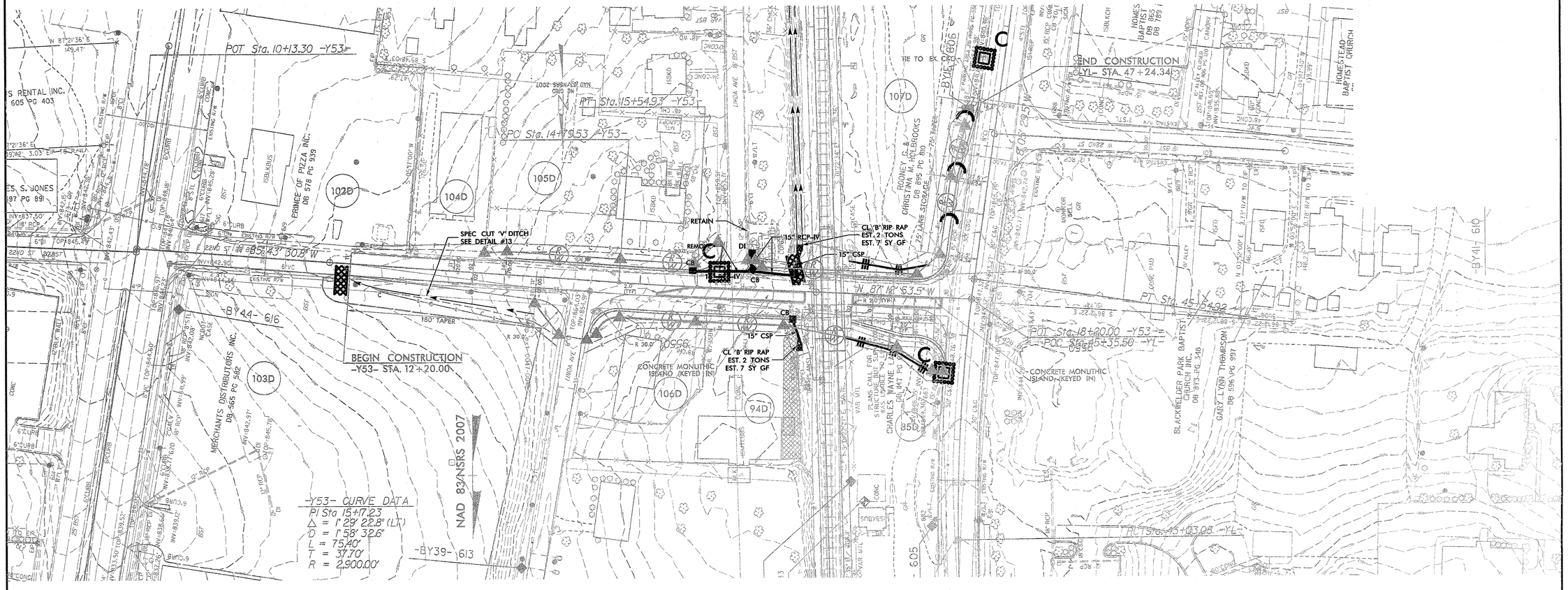


DGN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 07

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-25/CONST.07
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

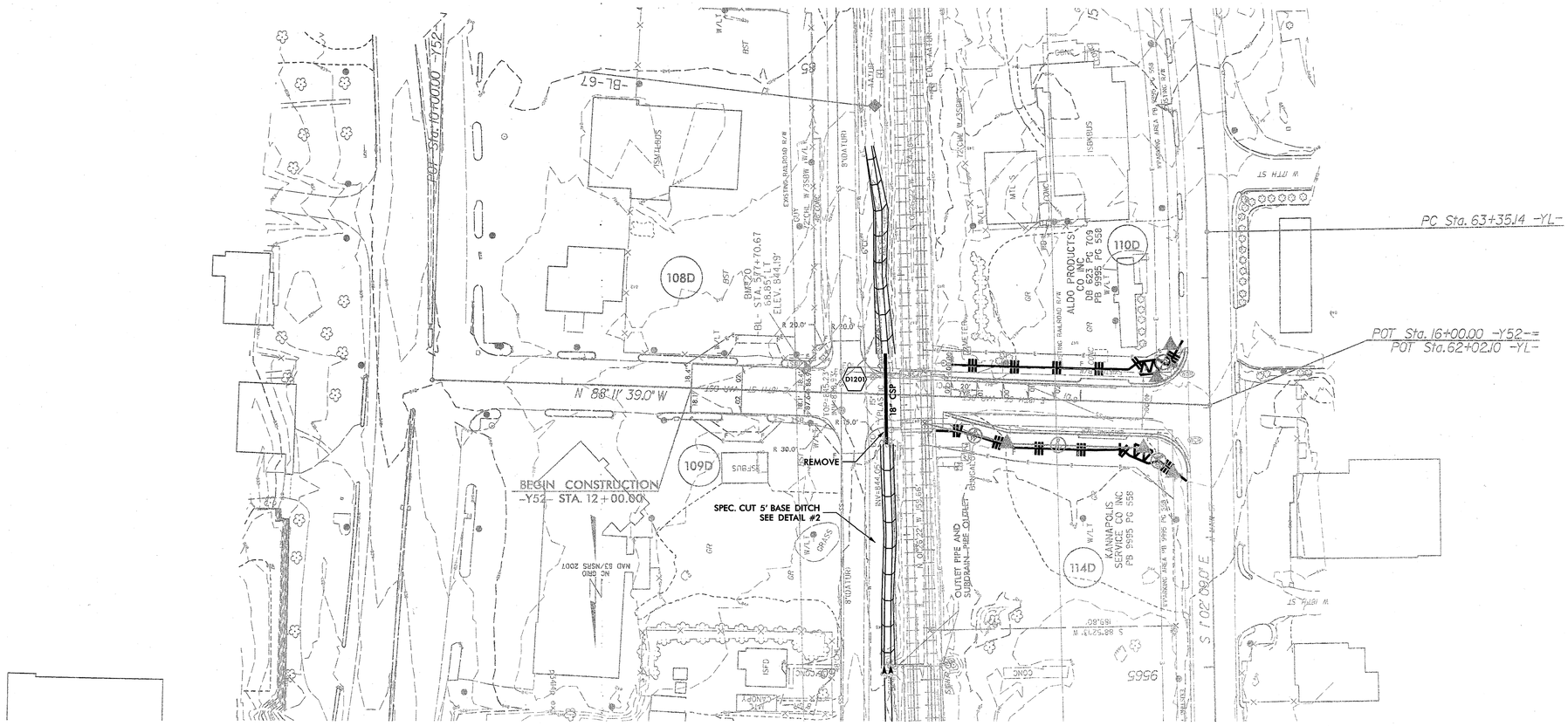


DGN 0164DEL P10b2

EROSION CONTROL PLAN

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 08

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-26/CONST.08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DCN 0164DEL P10b2

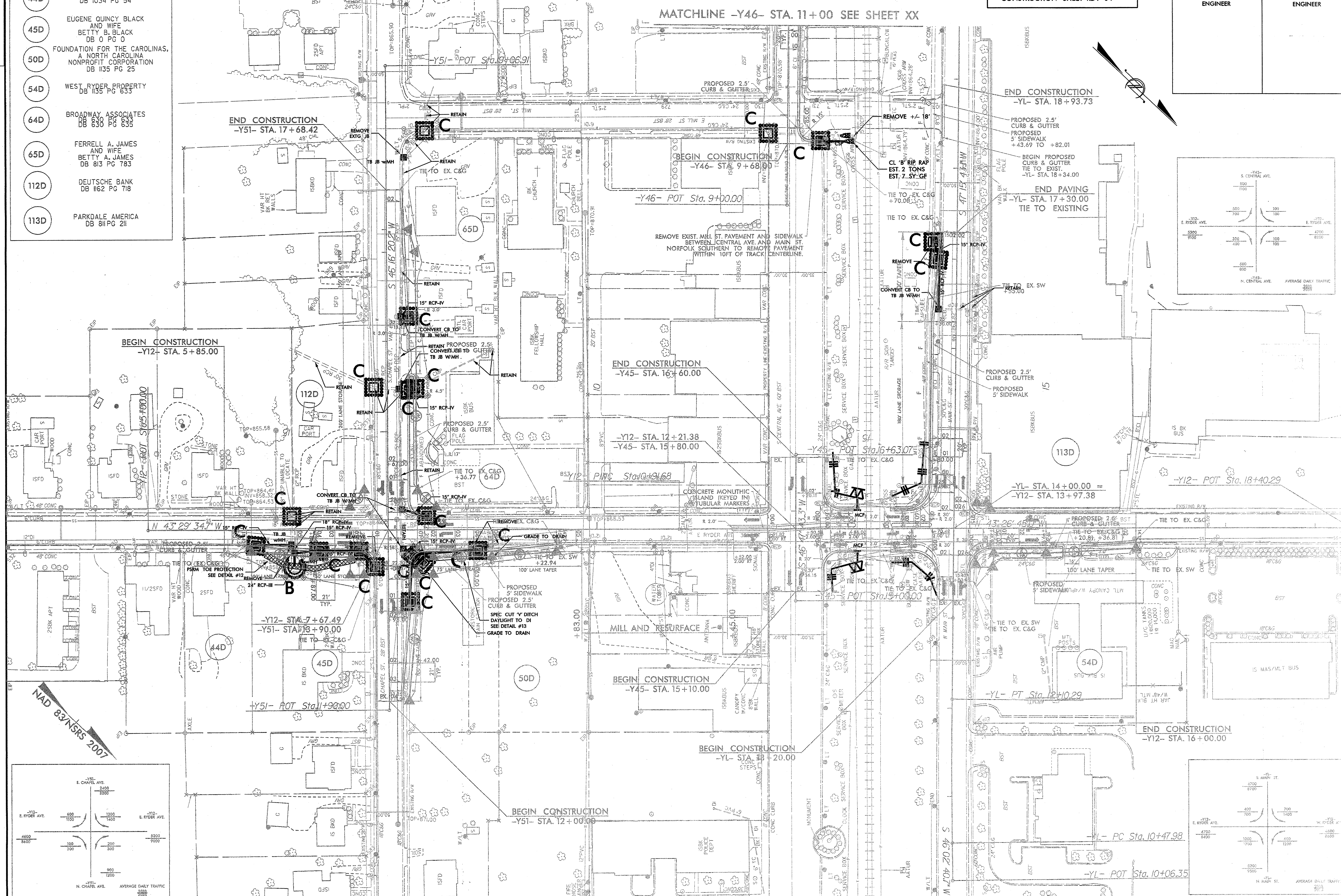
EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-27/CONST.04
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 04

PARCEL DATA

44D	SUSAN C. PRICE DB 1034 PG 54
45D	EUGENE QUINCY BLACK AND WIFE BETTY B. BLACK DB 0 PG 0
50D	FOUNDATION FOR THE CAROLINAS, A NORTH CAROLINA NONPROFIT CORPORATION DB 1135 PG 25
54D	WEST RYDER PROPERTY DB 1135 PG 633
64D	BROADWAY ASSOCIATES DB 630 PG 633 DB 630 PG 635
65D	FERRELL A. JAMES AND WIFE BETTY A. JAMES DB 813 PG 783
112D	DEUTSCHE BANK DB 1162 PG 718
113D	PARKDALE AMERICA DB 811 PG 211



0164DEL P10b2

DGN

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-28/CONST05
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 05

-Y46- CURVE DATA

PI Sta 14+43.04	PI Sta 17+26.91	PI Sta 19+75.04	PI Sta 23+24.21
Δ = 11° 48′ 37.6″ (LT)	Δ = 2° 17′ 57.6″ (LT)	Δ = 6° 40′ 53.2″ (LT)	Δ = 9° 42′ 47.2″ (LT)
D = 5° 43′ 46.5″	D = 2° 17′ 30.6″	D = 2° 17′ 30.6″	D = 6° 21′ 58.3″
L = 206.13′	L = 100.33′	L = 291.53′	L = 152.57′
T = 103.43′	T = 50.17′	T = 145.93′	T = 76.47′
R = 1,000.00′	R = 2,500.00′	R = 2,500.00′	R = 900.00′
e = 0.02	e = 0.02	e = 0.02	e = 0.02
RUNOFF = 40′	RUNOFF = 40′	RUNOFF = 40′	RUNOFF = 40′

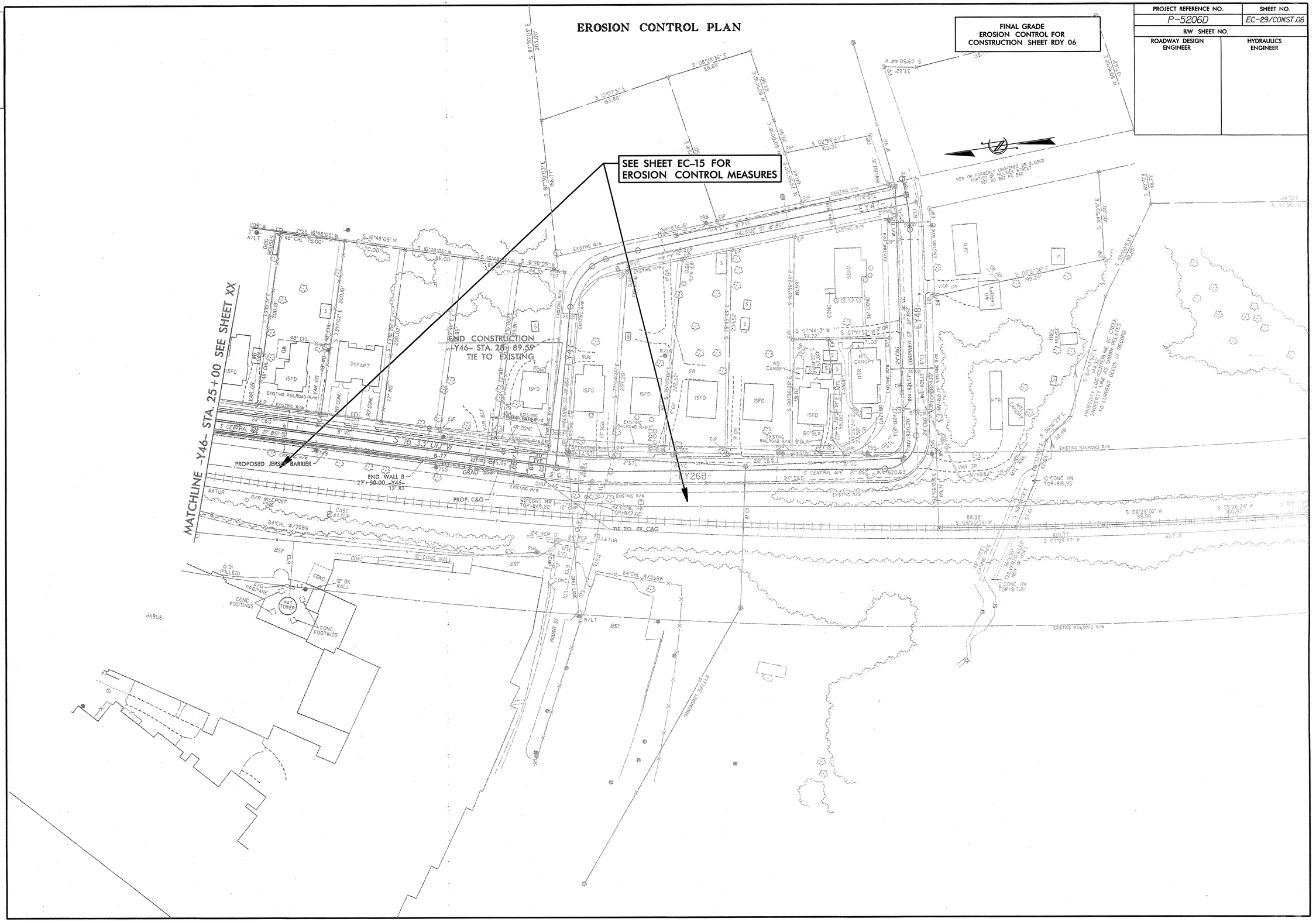
DGN 0164DEL P10b2

EROSION CONTROL PLAN

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-29/CONST.06
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

FINAL GRADE EROSION CONTROL FOR CONSTRUCTION SHEET RDY 06

SEE SHEET EC-15 FOR EROSION CONTROL MEASURES

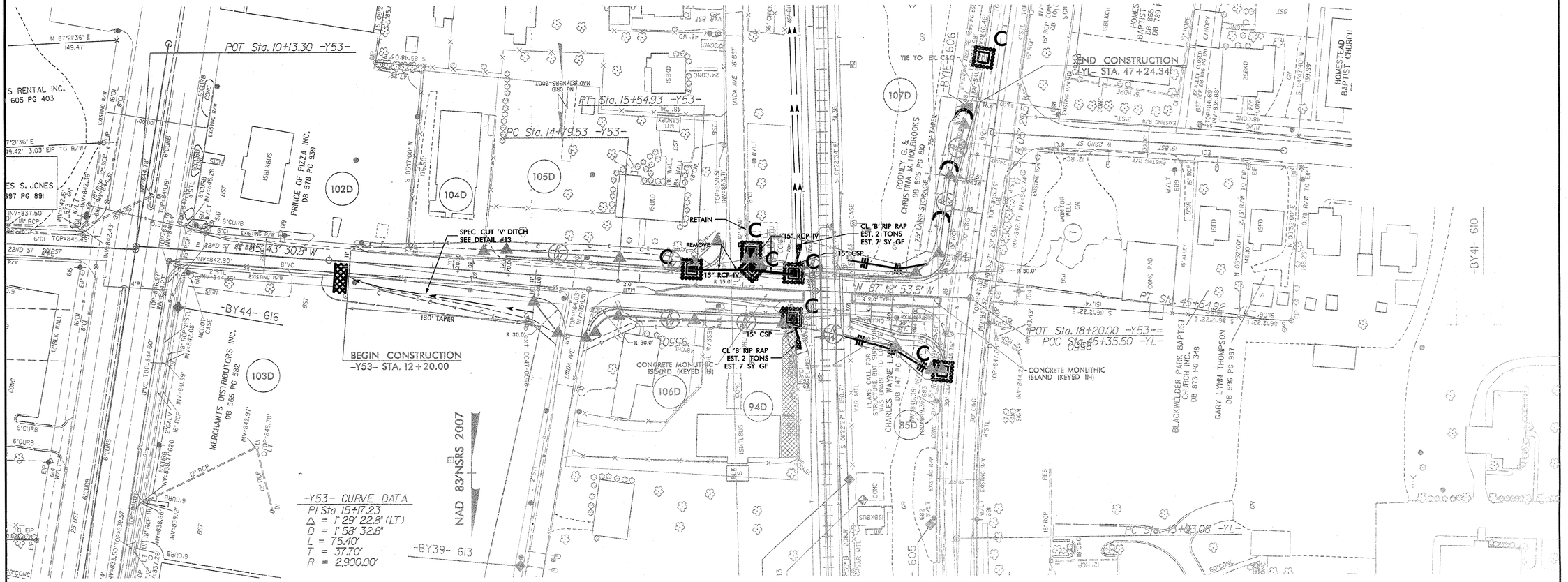


DGN 0164DEL P10b2

EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 07

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-30/CONST.07
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



DGN 0164DEL P10b2

EROSION CONTROL PLAN

FINAL GRADE
EROSION CONTROL FOR
CONSTRUCTION SHEET RDY 08

PROJECT REFERENCE NO.	SHEET NO.
P-5206D	EC-31/CONST.08
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER