09/08/99

TIP PROJECT: R-2719A

See Sheet 1-A For Index of Sheets
See Sheet 1-B For Standard Symbology Sheet

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

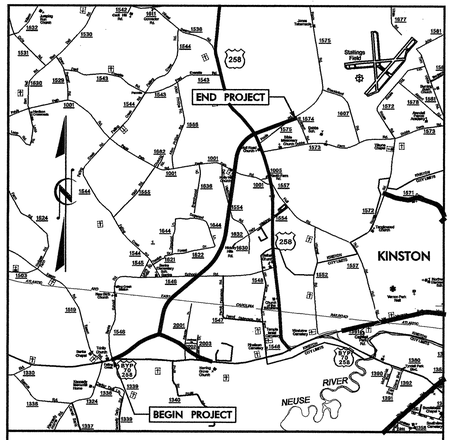
LENOIR COUNTY

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2719A	1	

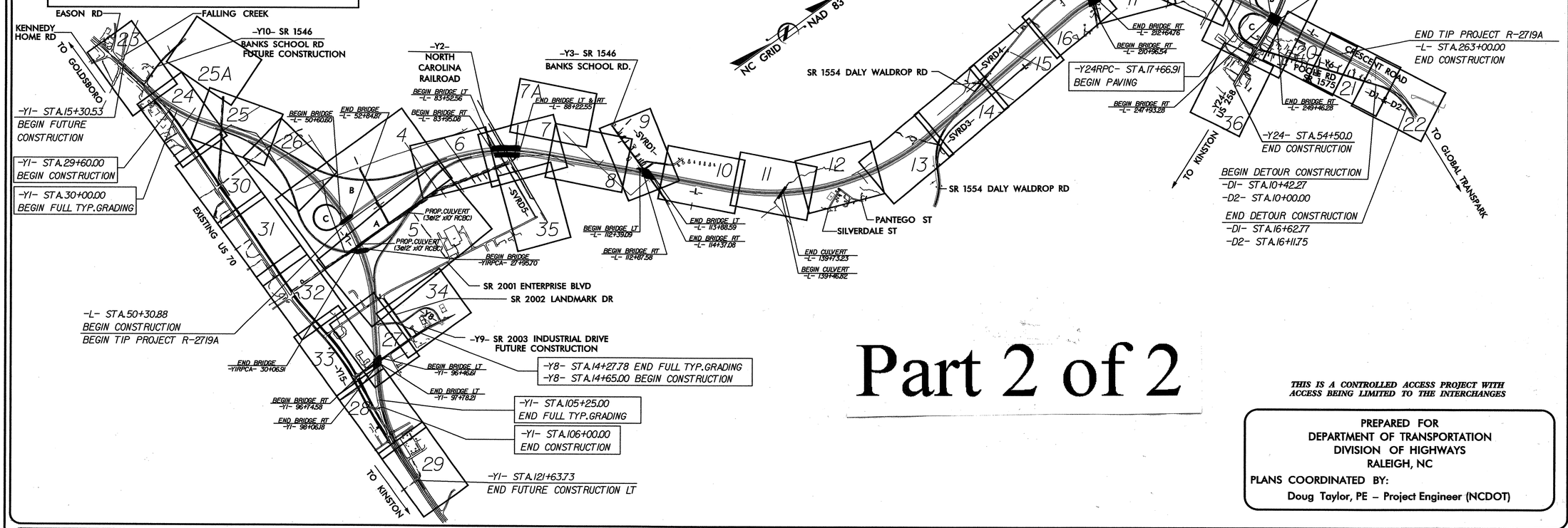
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION
34501.1.1	STP-0224(3)	PE
34501.2.4	STP-0224(8)	ROW, Util.
34501.3.STI	STM-0224(13)	Const.

LOCATION: CRESCENT RD
IN KINSTON FROM US 70 TO US 258

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNALS, STRUCTURES



VICINITY MAP



Part 2 of 2

THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO THE INTERCHANGES

PREPARED FOR
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, NC
PLANS COORDINATED BY:
Doug Taylor, PE – Project Engineer (NCDOT)

GRAPHIC SCALES

50 25 0 50 100
PLANS

50 25 0 50 100
PROFILE (HORIZONTAL)

5 2.5 0 5 10
PROFILE (VERTICAL)

DESIGN DATA

ADT 2008	=	27,490
ADT 2030	=	49,000
DHV	=	10 %
D	=	55 %
T	=	14 % *
V	=	70 MPH
* TTST 10%		DUAL 4%
FUNCTIONAL CLASSIFICATION		FREEWAY

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT R-2719A = 3.803 MI
LENGTH STRUCTURE TIP PROJECT R-2719A = 0.225 MI
TOTAL LENGTH OF TIP PROJECT R-2719A = 4.028 MI

NOTE: SOUTHBOUND LANES (-L- LT) WERE USED FOR PROJECT LENGTH CALCULATIONS

Prepared for the Division of Highways in the Office of:
URS CORPORATION – NORTH CAROLINA
1600 Perimeter Park Dr., Morrisville, North Carolina 27560
Telephone (919) 461-1100 Fax (919) 461-1415

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: AUGUST 31, 2005
LETTING DATE: June 16, 2009

MICHAEL LINDGREN, P.E.
PROJECT ENGINEER

JEFFREY A. KOONTZ, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 021162 ENGINEER W. HERBERT TURNER, JR.
SIGNATURE: W. Herbert Turner P.E. 3-16-09

ROADWAY DESIGN ENGINEER
NORTH CAROLINA PROFESSIONAL SEAL 025513 ENGINEER MICHAEL D. LINDGREN
SIGNATURE: P.E. 3-16-09

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
P.E.
STATE HIGHWAY DESIGN ENGINEER

CONTRACT: C201965

100% PLANS
MARCH 16, 2009

TIP PROJECT: R-2719A

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-2719A	EC-1	

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

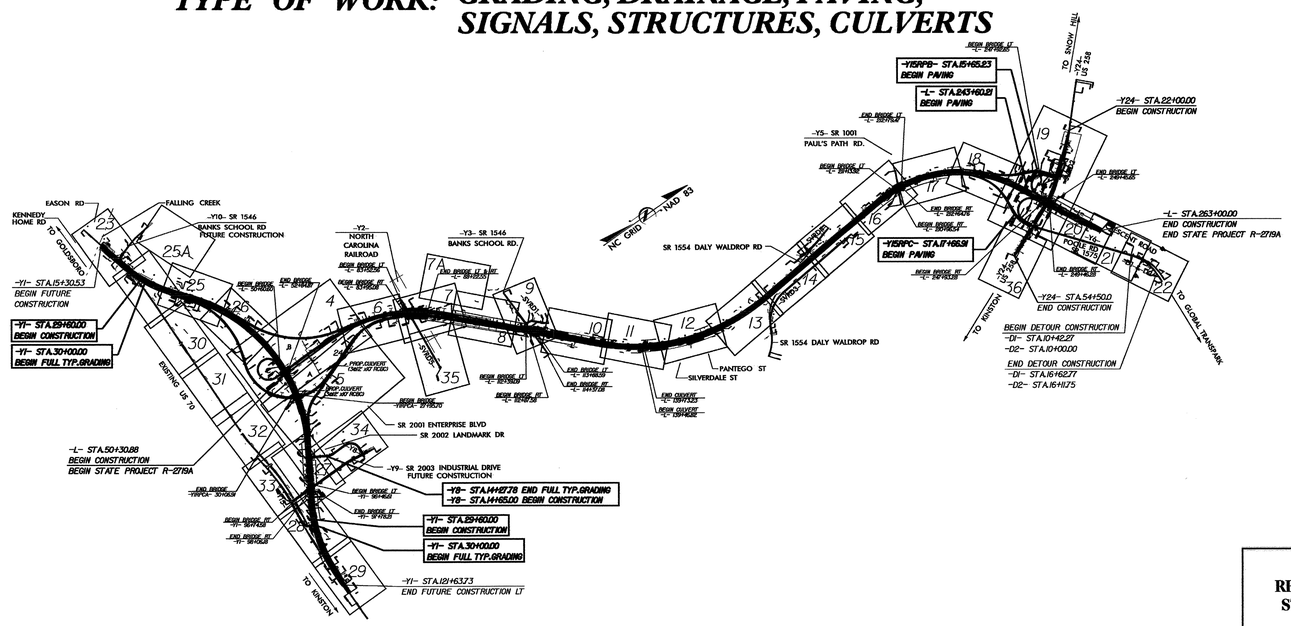
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

LENOIR COUNTY

LOCATION: ***CRESCENT RD***
IN KINSTON FROM US 70 TO US 258

TYPE OF WORK: ***GRADING, DRAINAGE, PAVING,***
SIGNALS, STRUCTURES, CULVERTS



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	
1630.01	Riser Basin	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
	Wattle	
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.

REFER TO GRADING AND STRUCTURES PLANS FOR ROADWAY DESIGN.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT

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

Prepared In the Office of:

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

2006 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 July 18, 2006 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01	Temporary Silt Fence	1630.06	Special Stilling Basin
1606.01	Special Sediment Control Fence	1632.02	Rock Inlet Sediment Trap Type B
1607.01	Gravel Construction Entrance	1632.03	Rock Inlet Sediment Trap Type C
1622.01	Temporary Berms and Slope Drains	1633.01	Temporary Rock Silt Check Type A
1630.03	Temporary Silt Ditch	1634.01	Temporary Rock Sediment Dam Type A
1630.04	Stilling Basin	1634.02	Temporary Rock Sediment Dam Type B
1630.05	Temporary Diversion	1635.02	Rock Pipe Inlet Sediment Trap Type B

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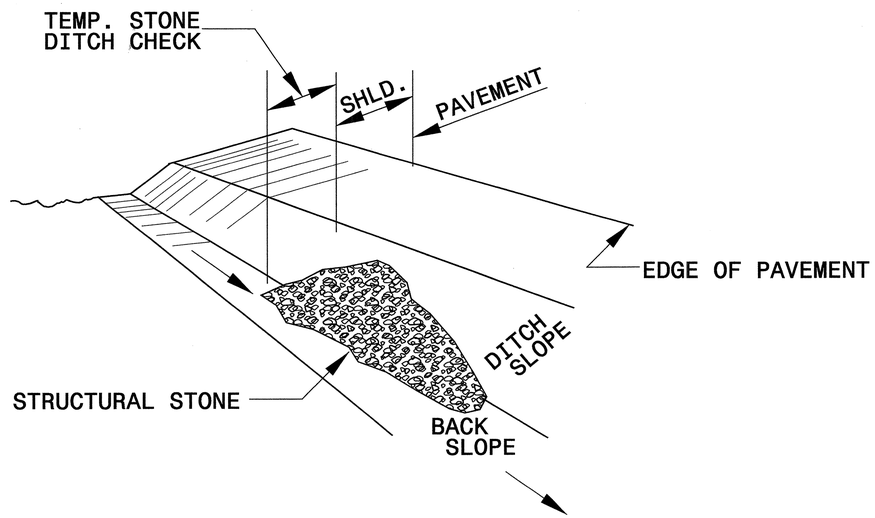
mmental\design\r-2719a_ec_tsh_revisions\r-2719a_ec_tsh_revision.dgn
mbusman AT REV 0225.02

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL

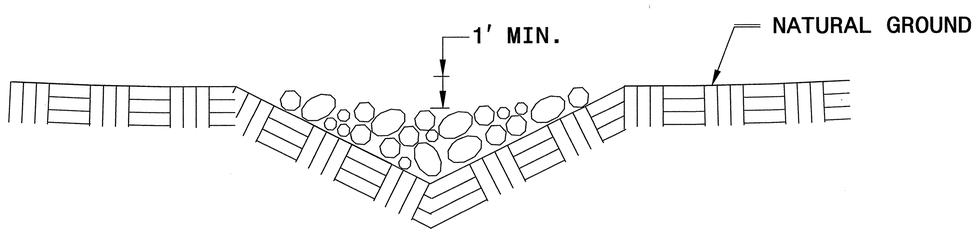


ISOMETRIC VIEW

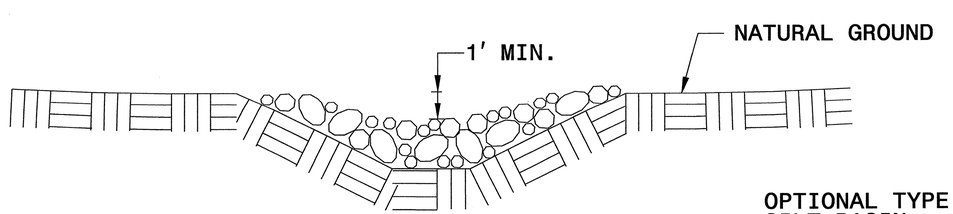
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

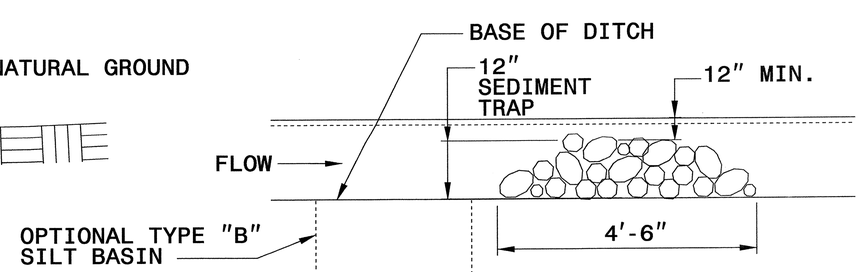
THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION VEE DITCH



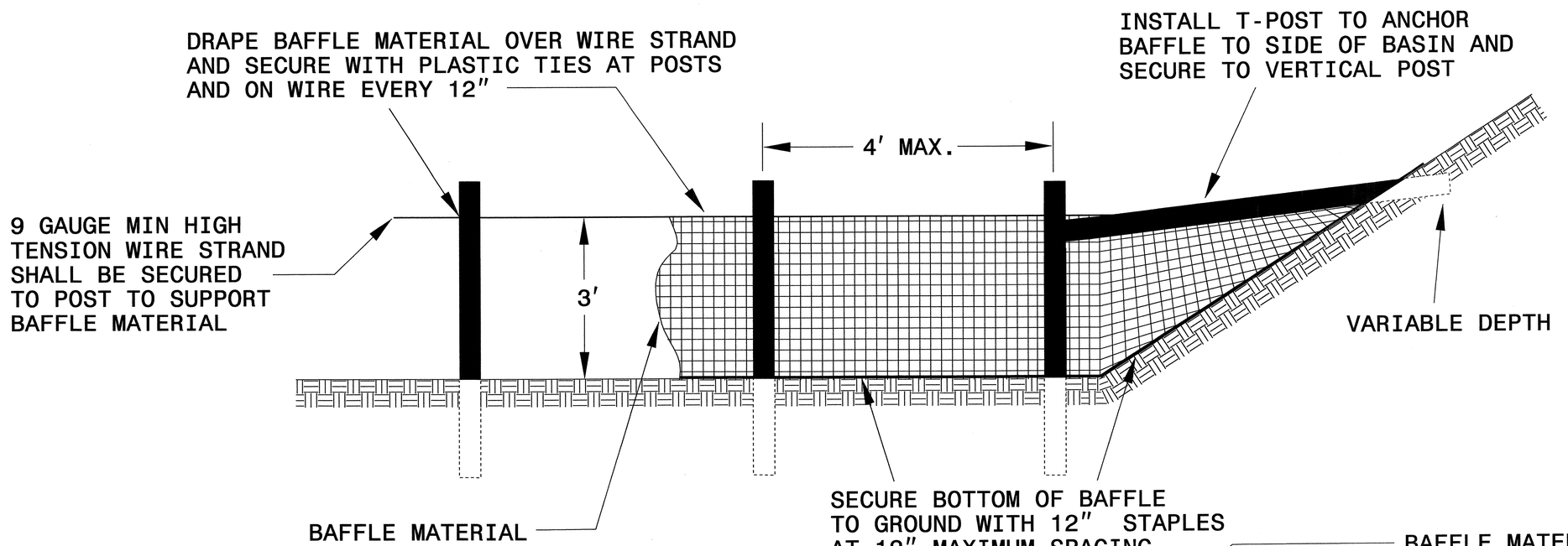
CROSS SECTION TRAPEZOIDAL DITCH

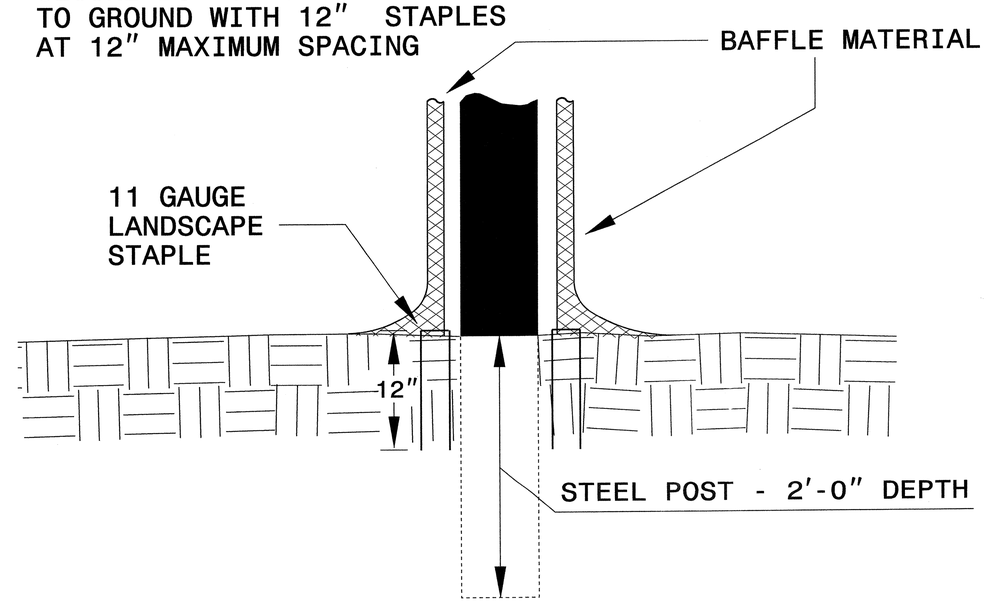


ELEVATION VIEW

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2A
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

COIR FIBER BAFFLE DETAIL



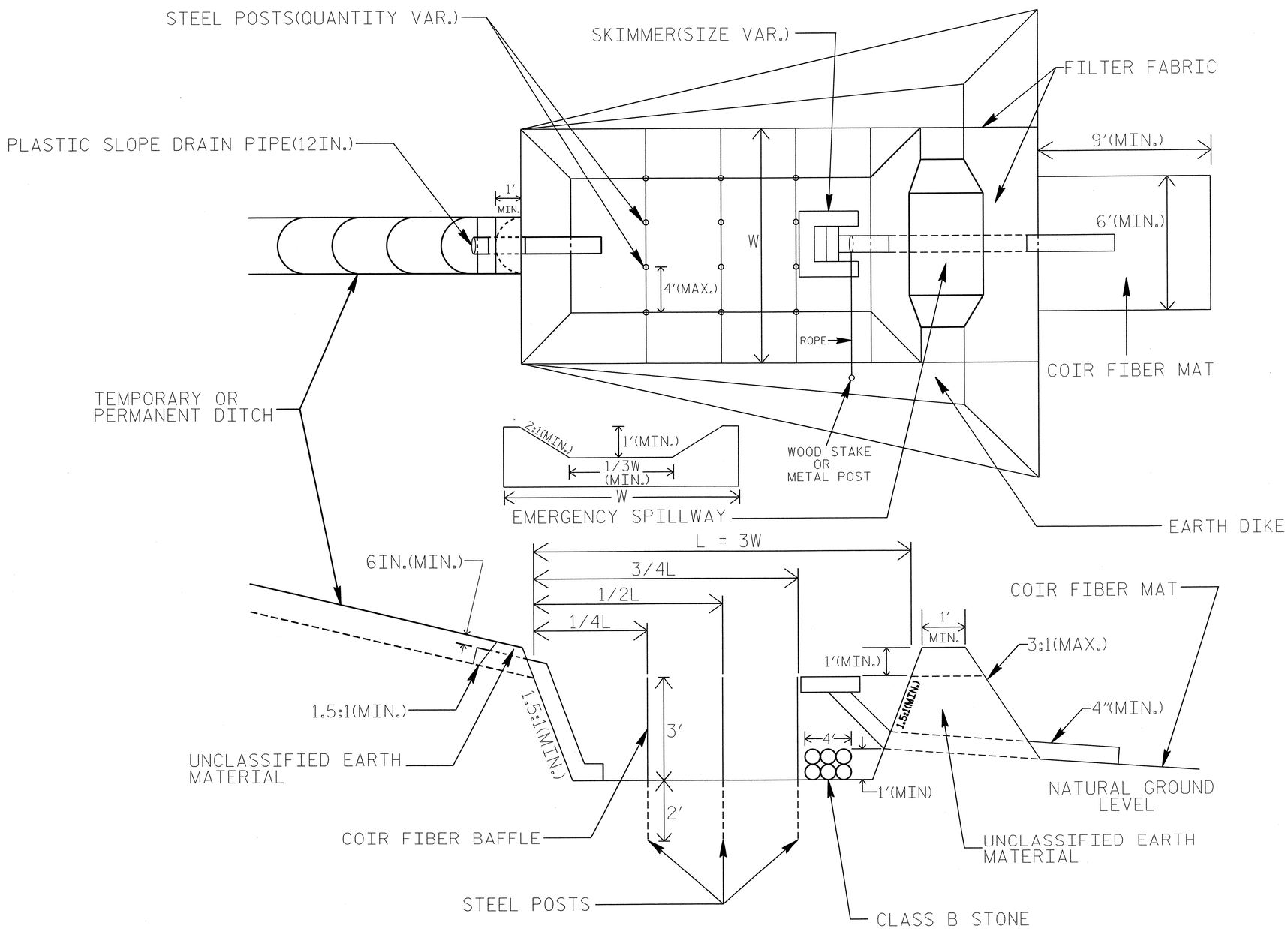


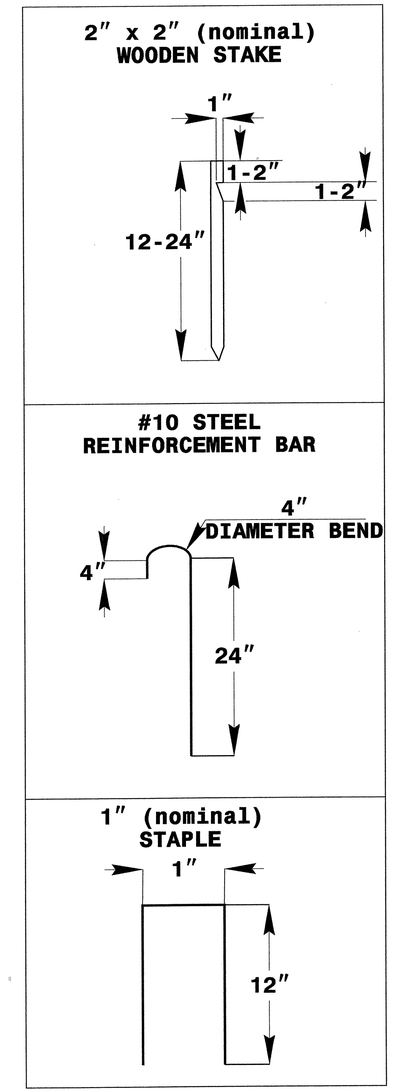
BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12″ LANDSCAPE STAPLES

NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF ¼ THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS AND DAMS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2B
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SKIMMER BASIN WITH BAFFLES DETAIL





COIR FIBER MAT ANCHOR OPTIONS

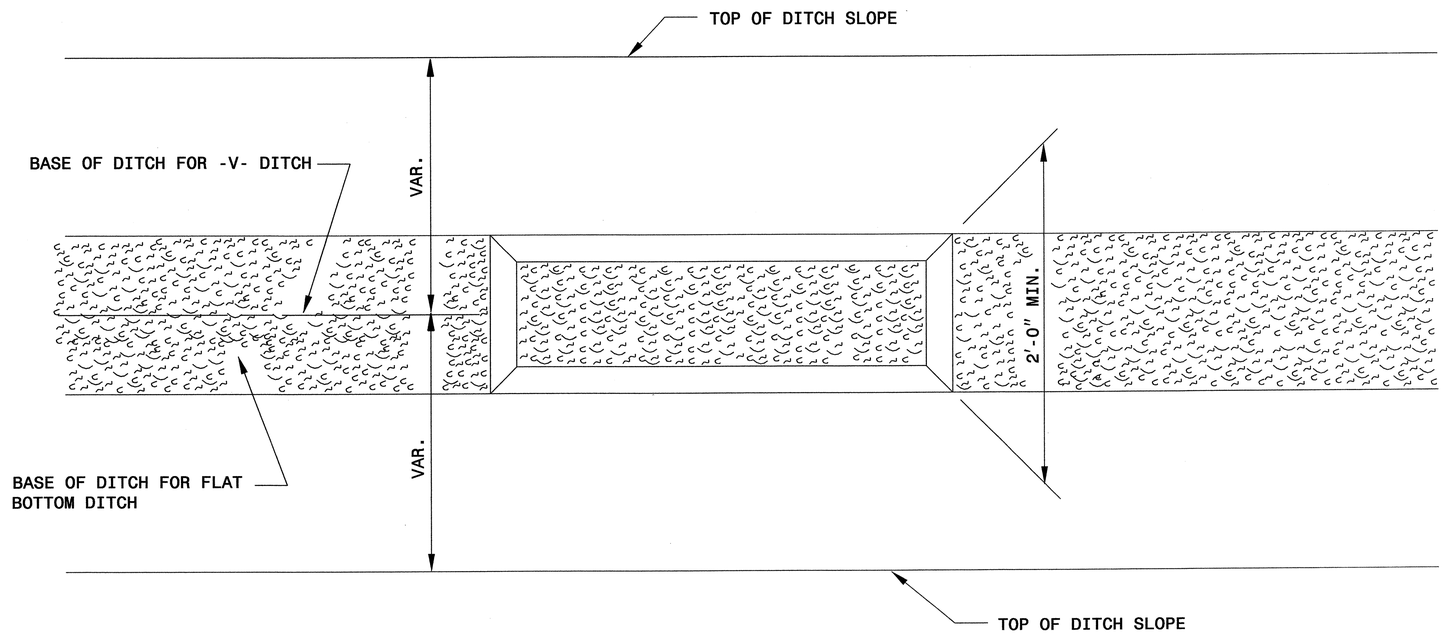
NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR SIDESLOPES.
2. LIMIT EARTH DIKE HEIGHT TO 5 FT.
3. FOR BASIN WIDTHS OF LESS THAN 12 FT., THE MINIMUM WEIR LENGTH OF EMERGENCY SPILLWAY SHALL BE 4 FT.

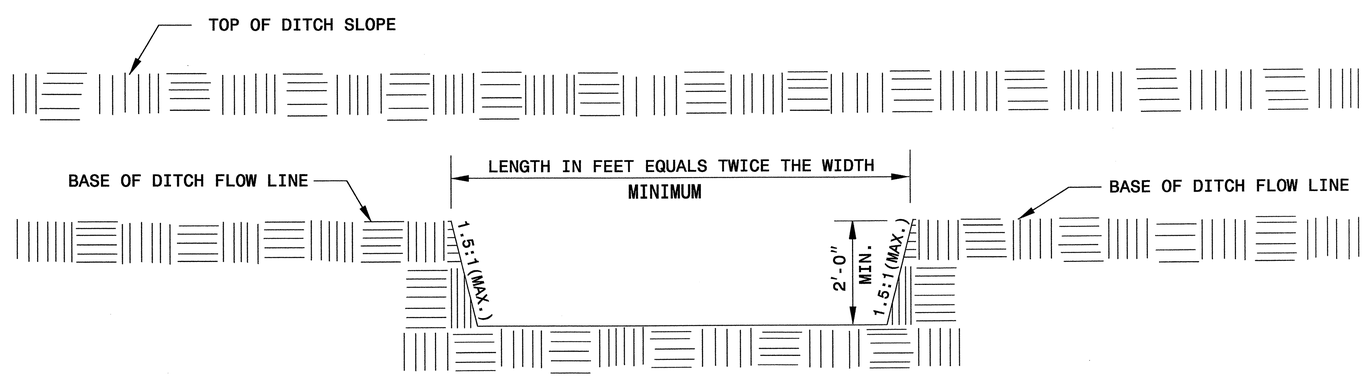
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2C
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SILT BASIN 'B' DETAIL



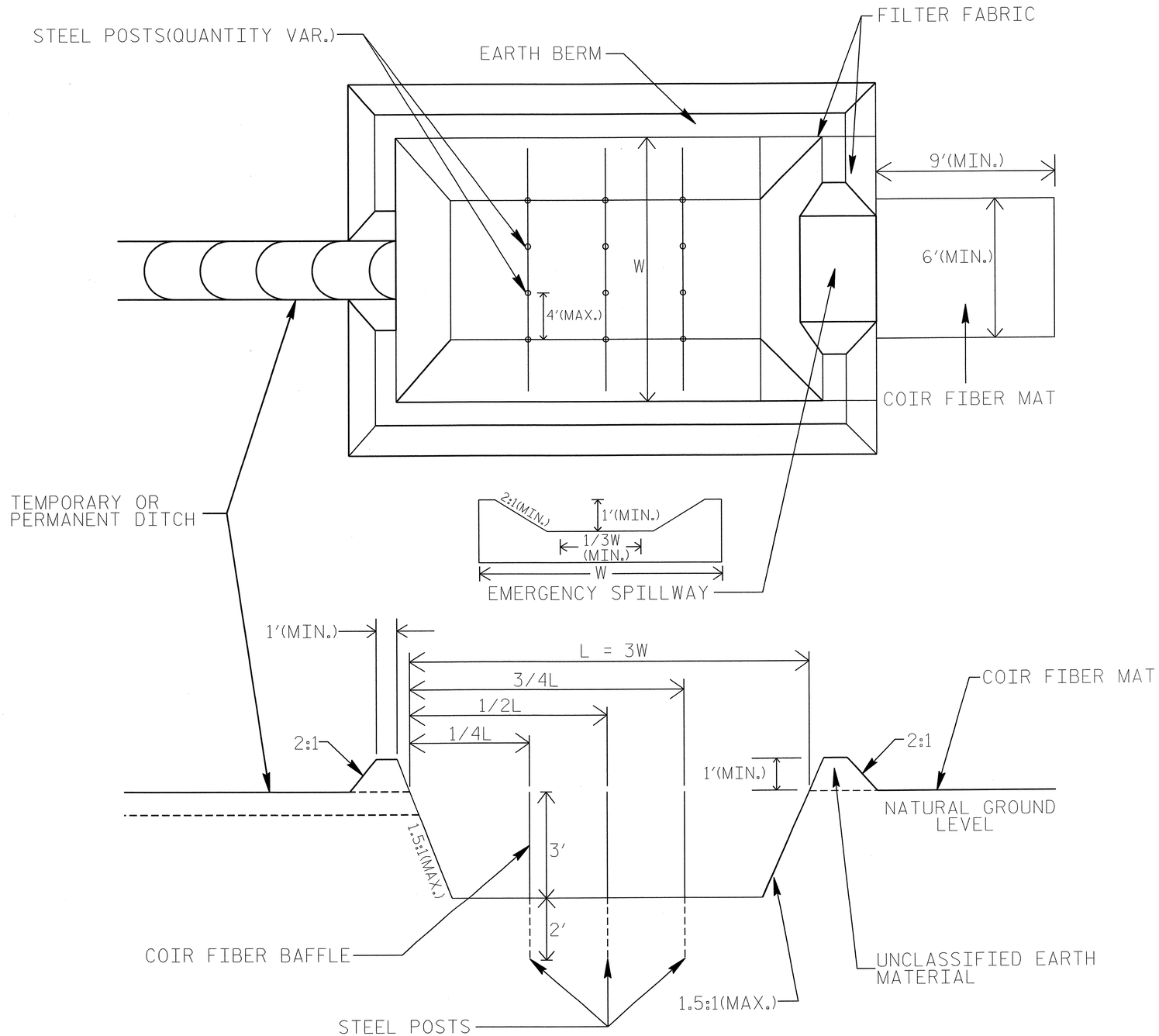
PLAN

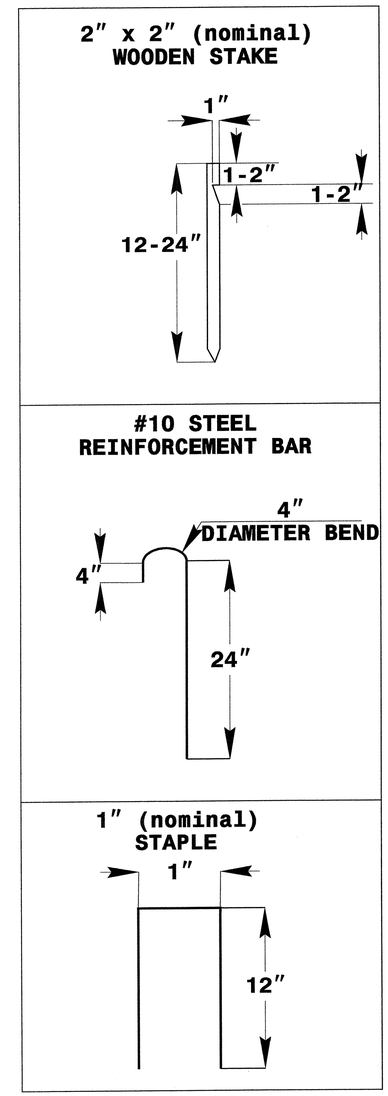


ELEVATION

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2D
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

INFILTRATION BASIN WITH BAFFLES DETAIL



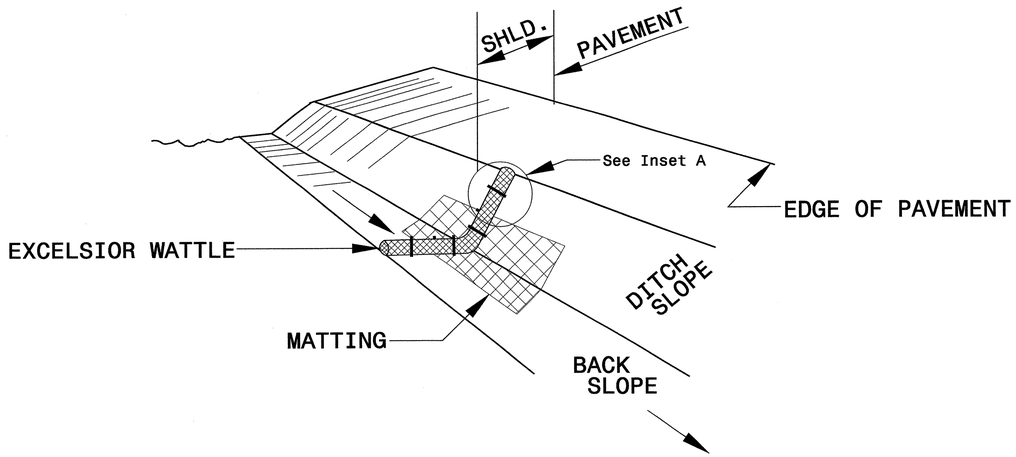


COIR FIBER MAT ANCHOR OPTIONS

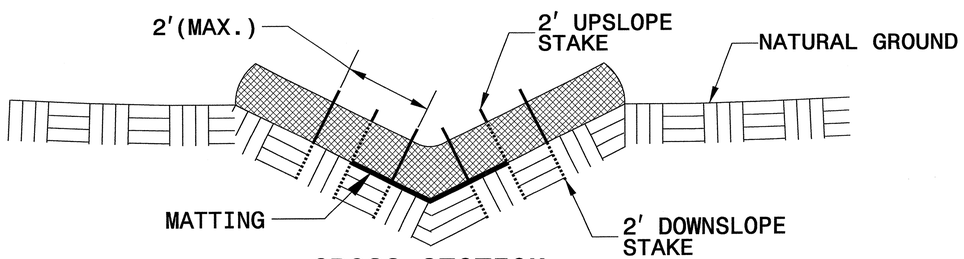
NOTES:
1. DO NOT EXCAVATE BELOW WATER TABLE.
2. LIMIT EARTH BERM HEIGHT TO 3 FT.
3. AVOID COMPACTING BOTTOM OF BASIN.

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2E
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

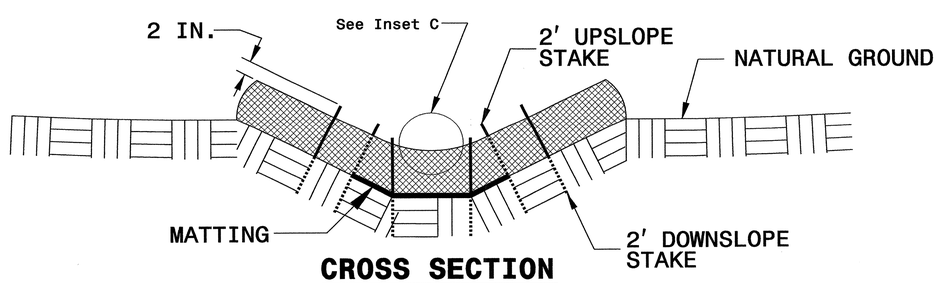
WATTLE WITH POLYACRYLAMIDE DETAIL



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. CROSS SECTION.

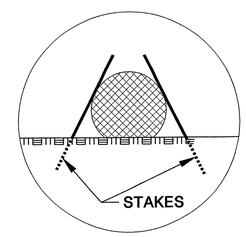
INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.

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

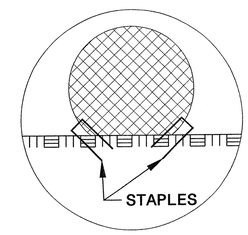
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

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

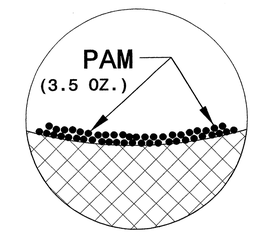
INITIALLY APPLY 3.5 OUNCES OF ANIONIC OR NEUTRALLY CHARGED POLYACRYLAMIDE (PAM) OVER WATTLE WHERE WATER WILL FLOW AND AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.25 IN.



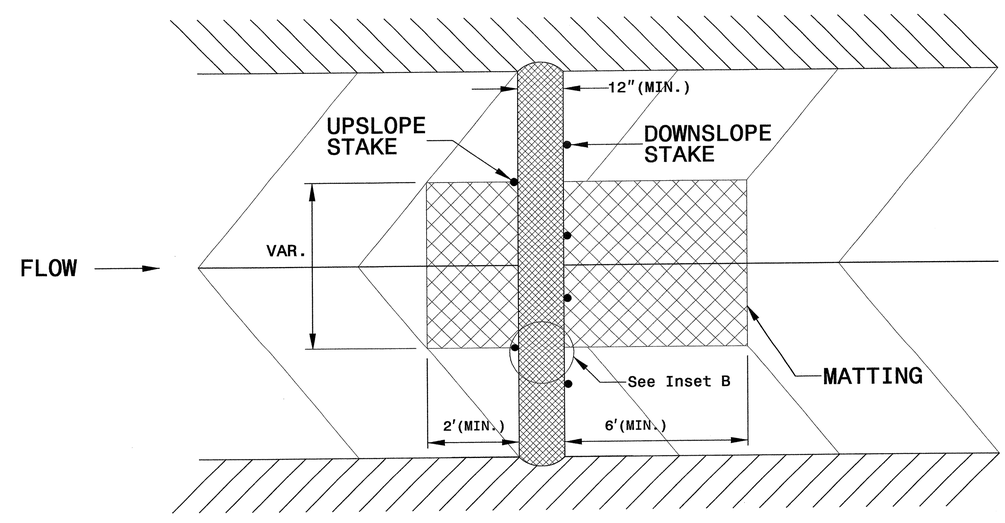
INSET A



INSET B



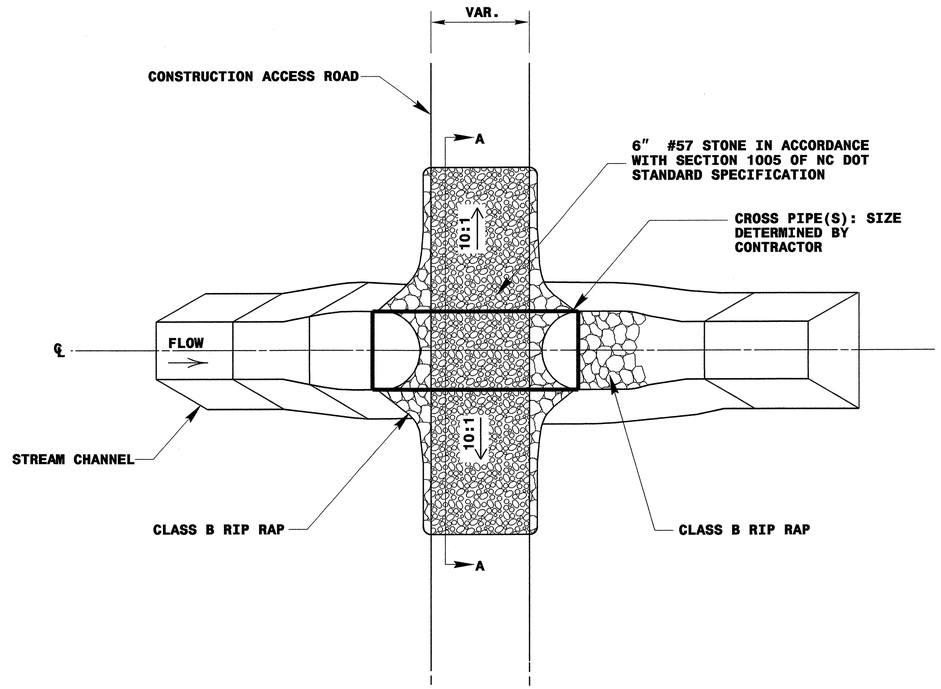
INSET C



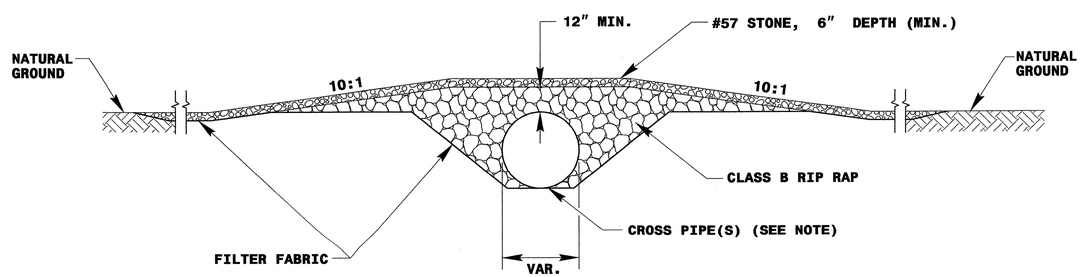
TOP VIEW

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-2F
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY STREAM CROSSING



PLAN VIEW



SECTION A-A

NOT TO SCALE

NOTE: PIPE(S) FOR TEMPORARY STREAM CROSSING SHALL BE DESIGNED TO PASS THE PEAK OR BANKFULL FLOW, WHICHEVER IS LESS, FROM A 2-YEAR PEAK STORM, WITHOUT OVER TOPPING.

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	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	-Y1-	60+10	63+30	RT	630
4	-Y1LPC-	10+87	14+34	RT	1290
5	-Y1RPCA-	30+70	32+70	RT	835
9	-SVRD1-	10+20	12+50	LT	370
9	-SVRD1-	10+20	12+50	RT	185
11	-L-	141+65	144+00	RT	165
11	-L-	138+77	141+21	RT	280
12	-L-	153+46	155+50	LT	660
13	-SVRD3-	15+50	21+60	RT	980
13	-SVRD3-	15+50	21+60	LT	980
14	-SVRD3-	23+00	28+00	LT	805
15	-L-	190+00	199+50	LT	3815
16	-L-	203+00	204+60	RT	115
17	-L-	218+00	222+50	RT	1040
17	-L-	220+50	222+70	RT	250
17	-L-	222+70	226+00	RT	1210
18	-L-	233+50	235+50	RT	700
18	-L-	235+50	237+10	RT	705
18	-L-	222+70	228+00	RT	1340
18	-Y24RPC-	2+80	8+00	RT	350
19	-Y24RPB-	8+50	9+50	RT	280
24	-Y1-	31+00	31+50	LT	55
25	-Y1-	46+50	47+50	LT	70
26	-Y1-	47+50	48+90	LT	295
28	-Y1-	105+00	110+50	LT	1680
28	-Y1-	110+50	112+40	LT	460
34	-Y8-	14+85	15+30	RT	40
				SUBTOTAL	19548
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					28000
				TOTAL	47548
				SAY	48000

PERMANENT SOIL REINFORCEMENT MAT

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
21	-Y6-	33+00	33+50	LT	85
				SUBTOTAL	85
		ADDITIONAL PSRM TO BE INSTALLED			555
				TOTAL	640
				SAY	650

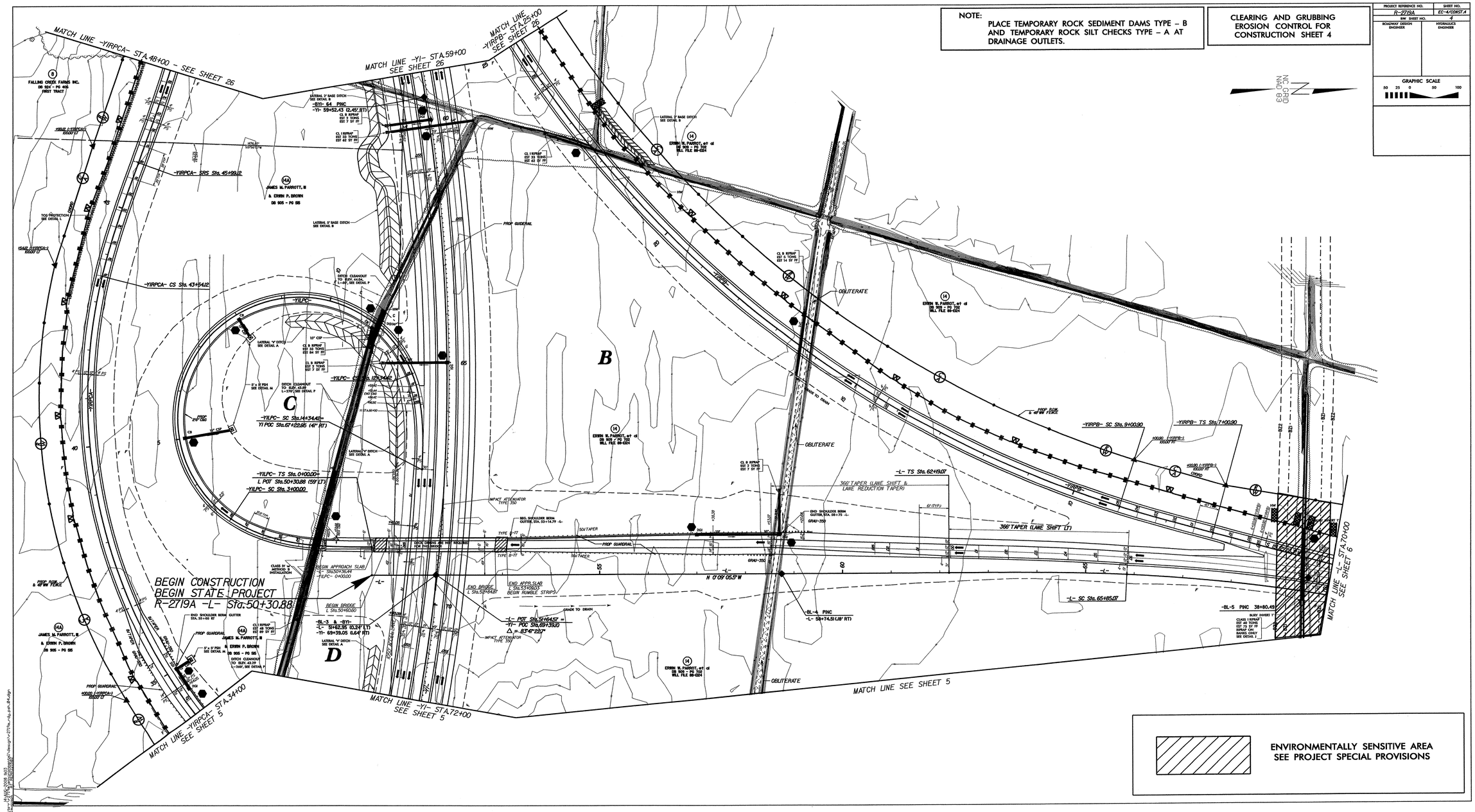
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-4/CONST.4
R/W SHEET NO.	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100

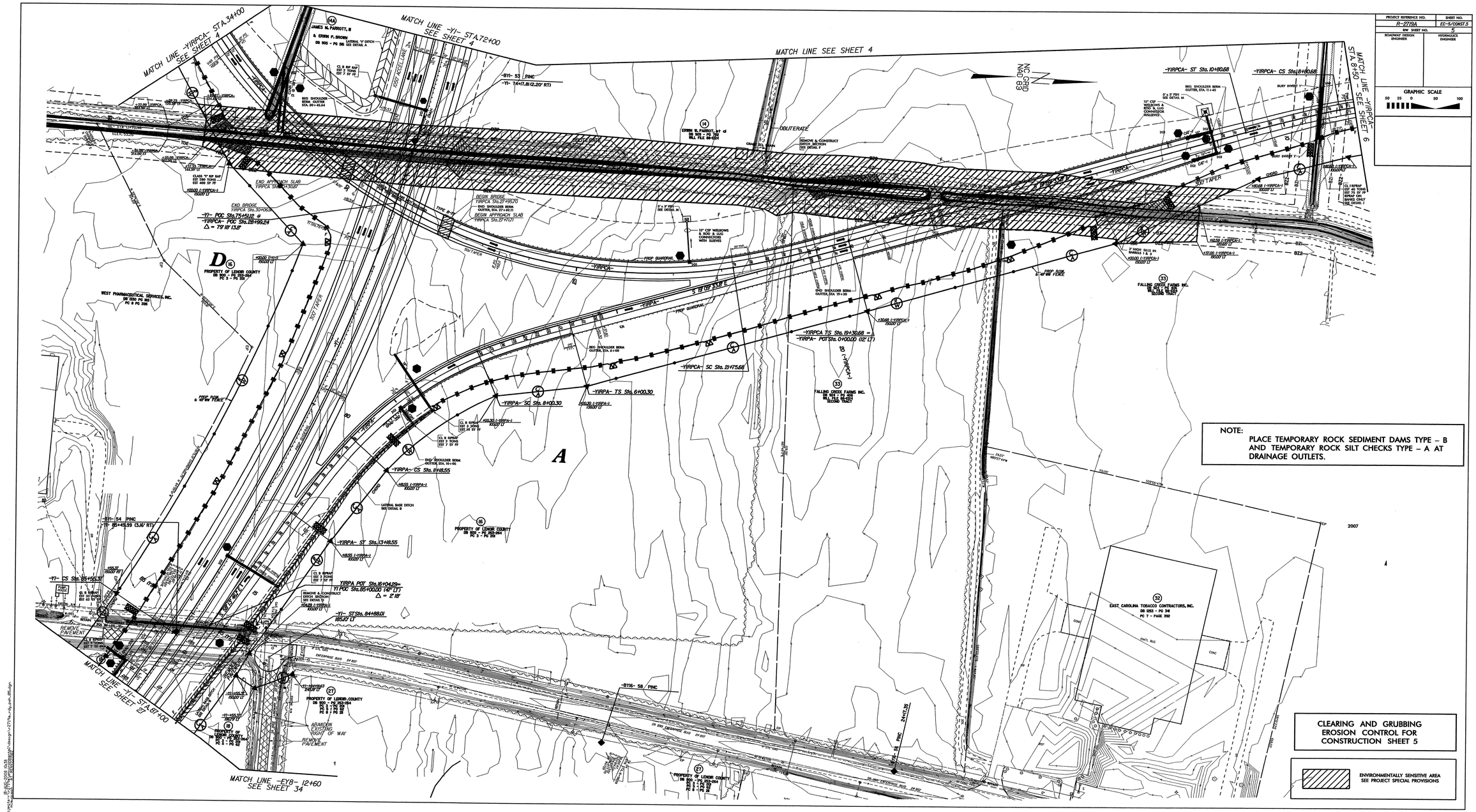
NC GRID NAD 83



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-5/CONST.5
SW SHEET NO.	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100



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

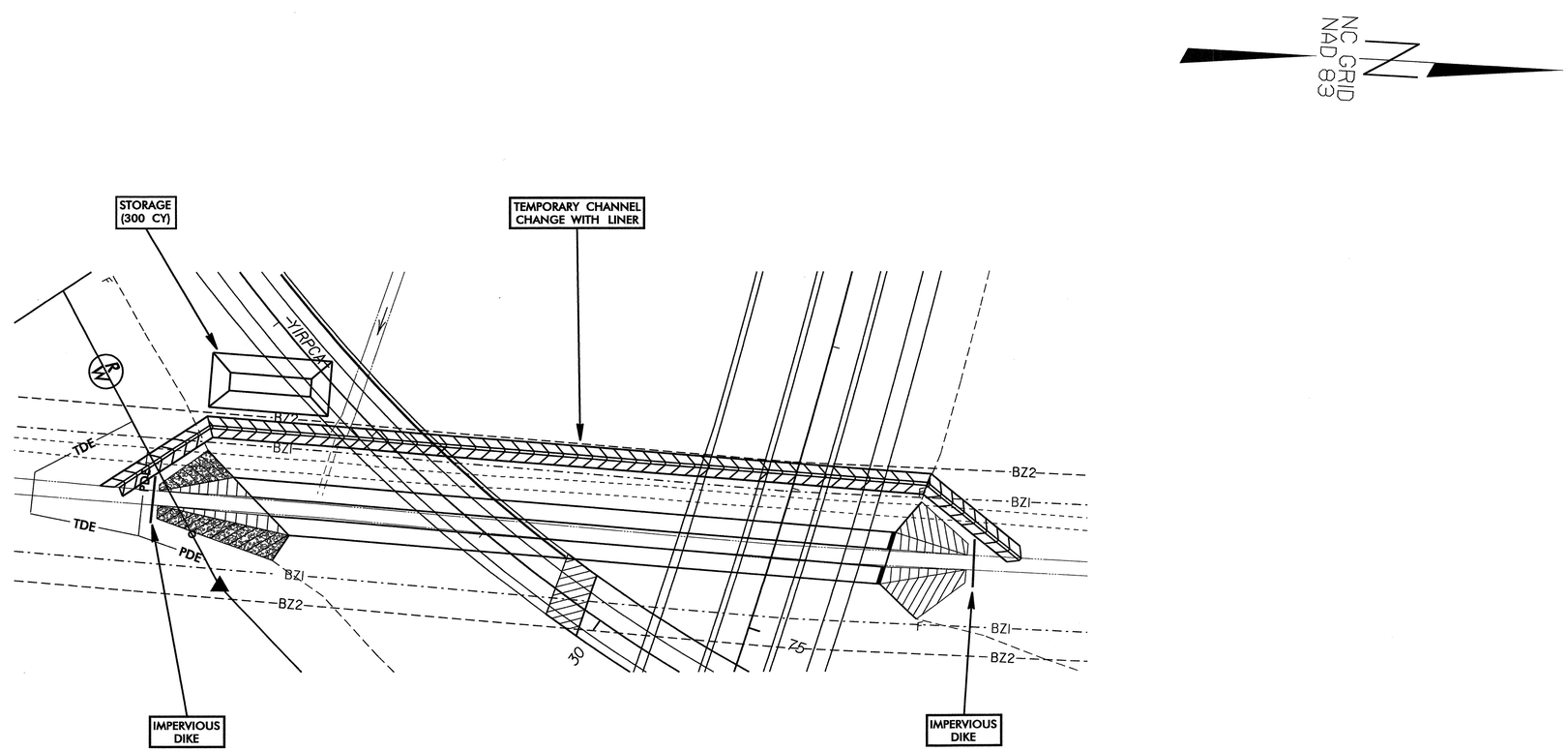
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-6/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 74+43 –Y1–

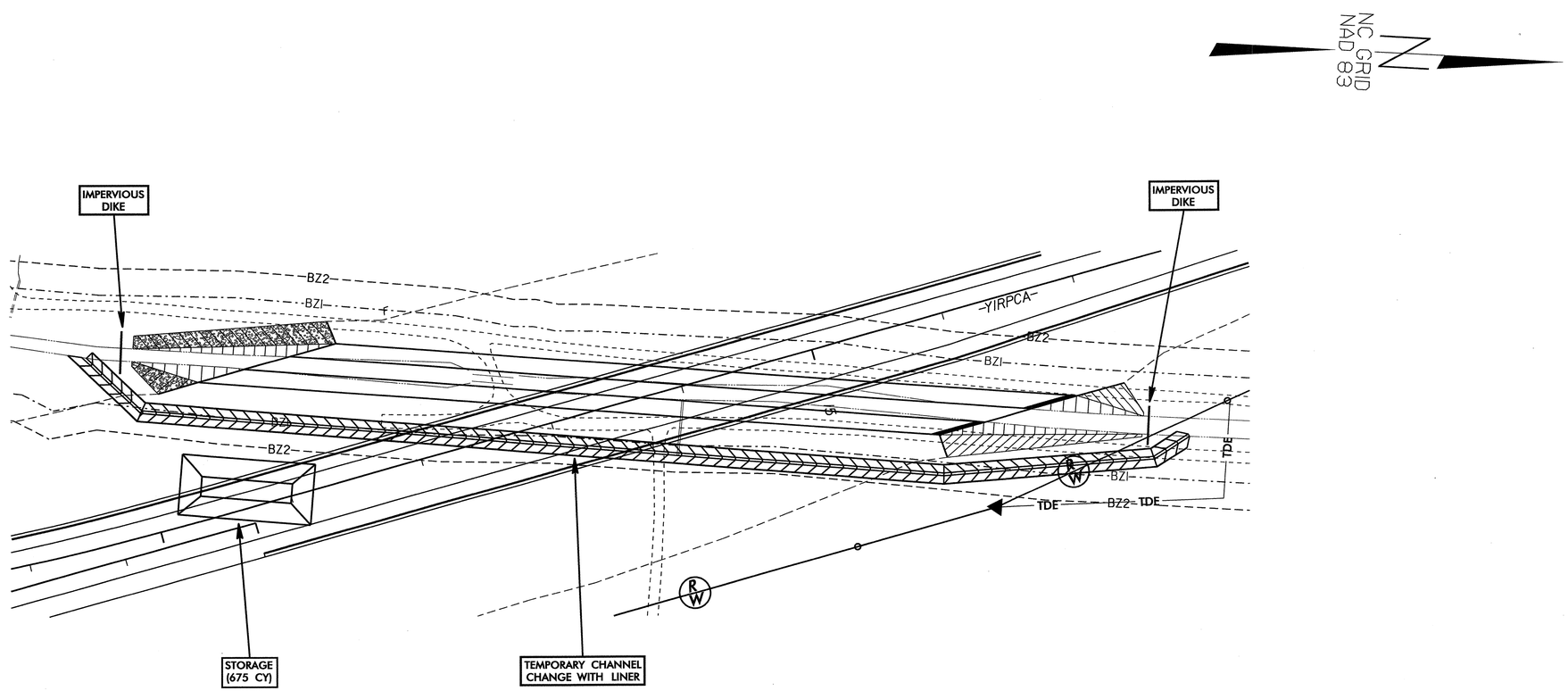
1. CONSTRUCT STILLING BASIN (300 CY).
2. CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (2 FT. BASE, 3 FT. DEEP, 2:1 SIDE SLOPES).
3. CONSTRUCT IMPERVIOUS DIKES, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGE.
4. CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE, DIVERTING FLOW THROUGH PROPOSED CULVERT.
6. REMOVE STILLING BASIN, AND COMPLETE ROADWAY.



PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-7/CONST.5
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 16+14 –Y1RPCA–

1. CONSTRUCT STILLING BASIN (675 CY).
2. CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (2 FT. BASE, 3 FT. DEEP, 2:1 SIDE SLOPES).
3. CONSTRUCT IMPERVIOUS DIKES, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGE.
4. CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE, DIVERTING FLOW THROUGH PROPOSED CULVERT.
6. REMOVE STILLING BASIN, AND COMPLETE ROADWAY.



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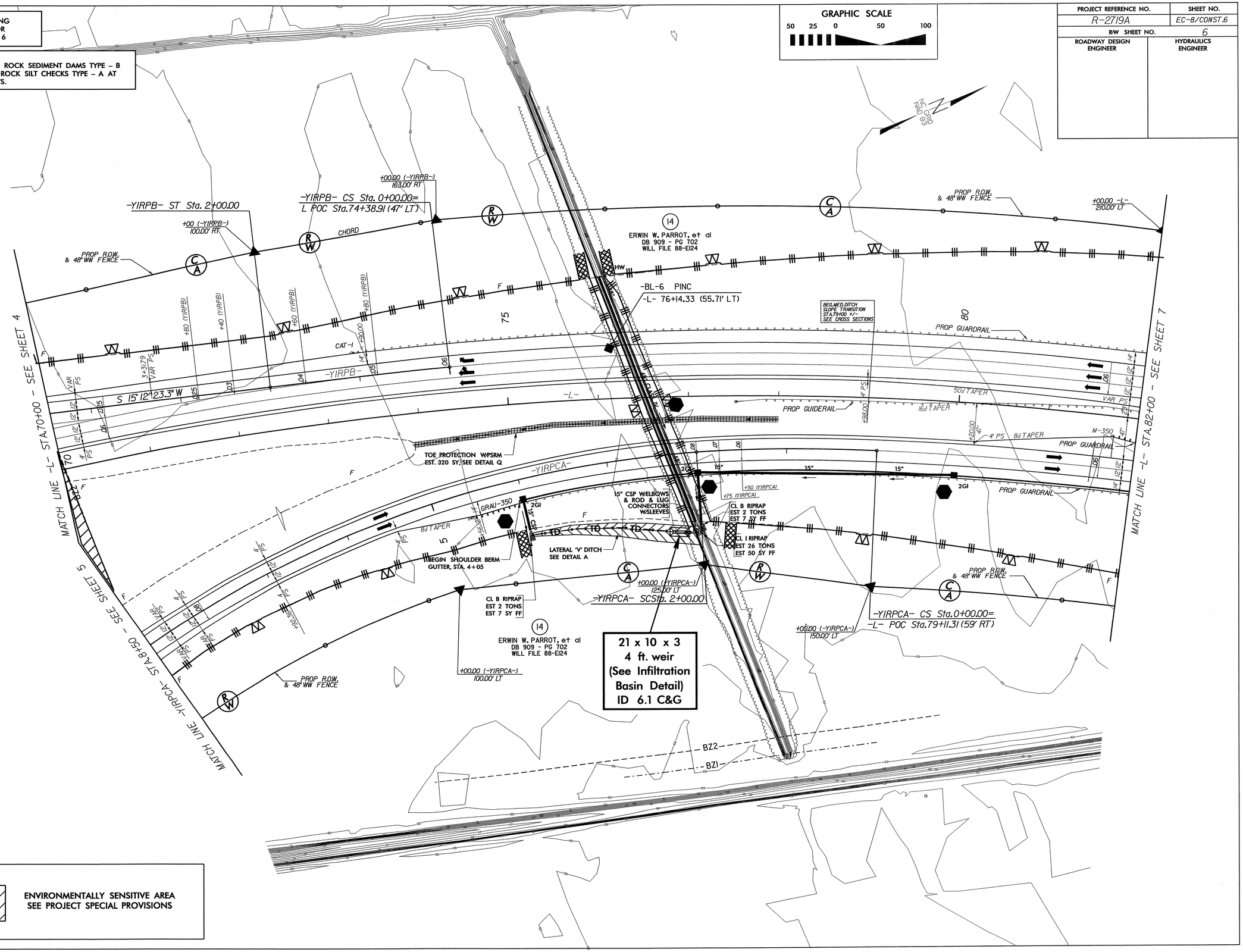
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 6

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

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-8/CONST.6
R/W SHEET NO.	6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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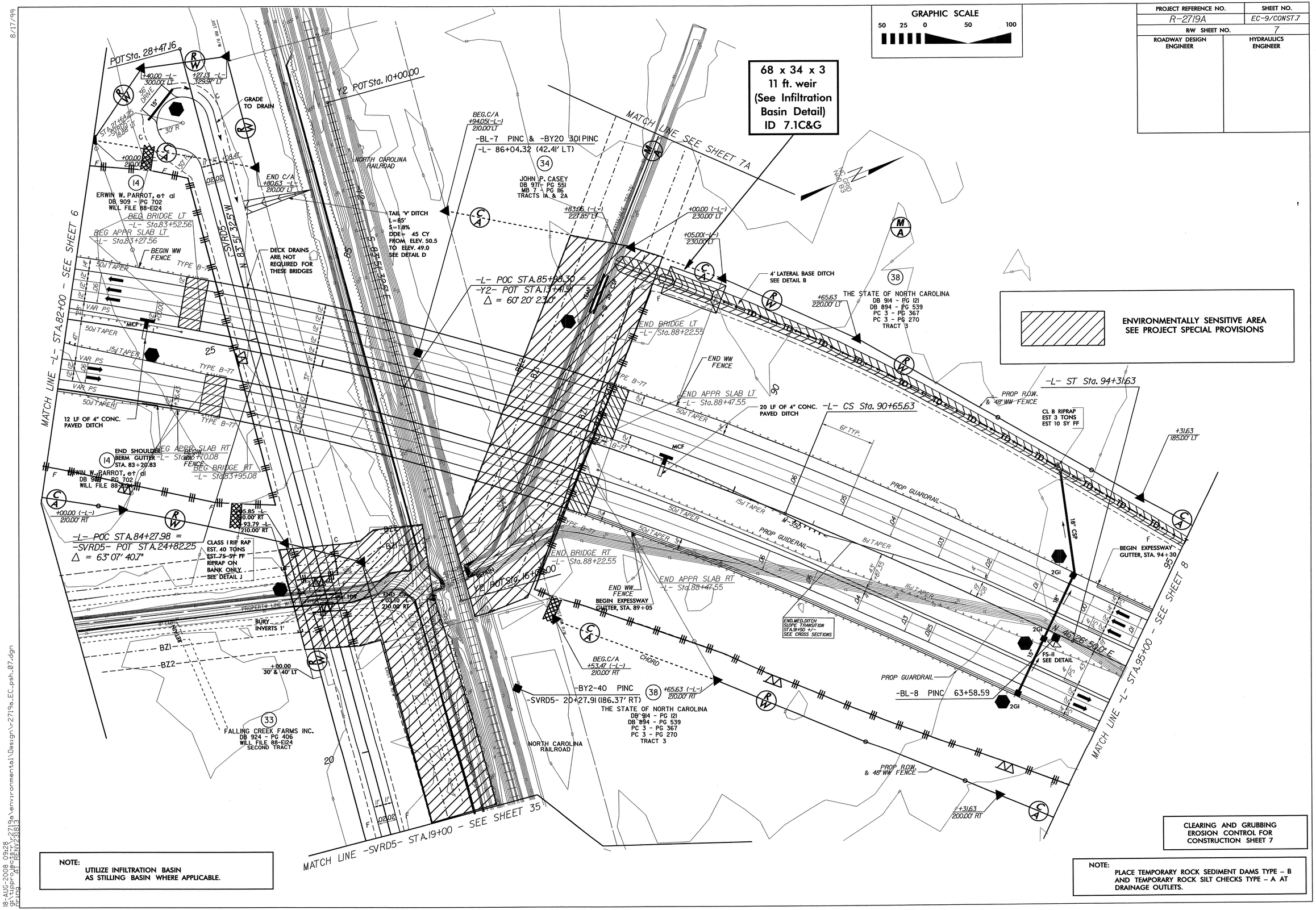
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-9/CONST.7
R/W SHEET NO.	7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



NOTE:
UTILIZE INFILTRATION BASIN AS STILLING BASIN WHERE APPLICABLE.

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.

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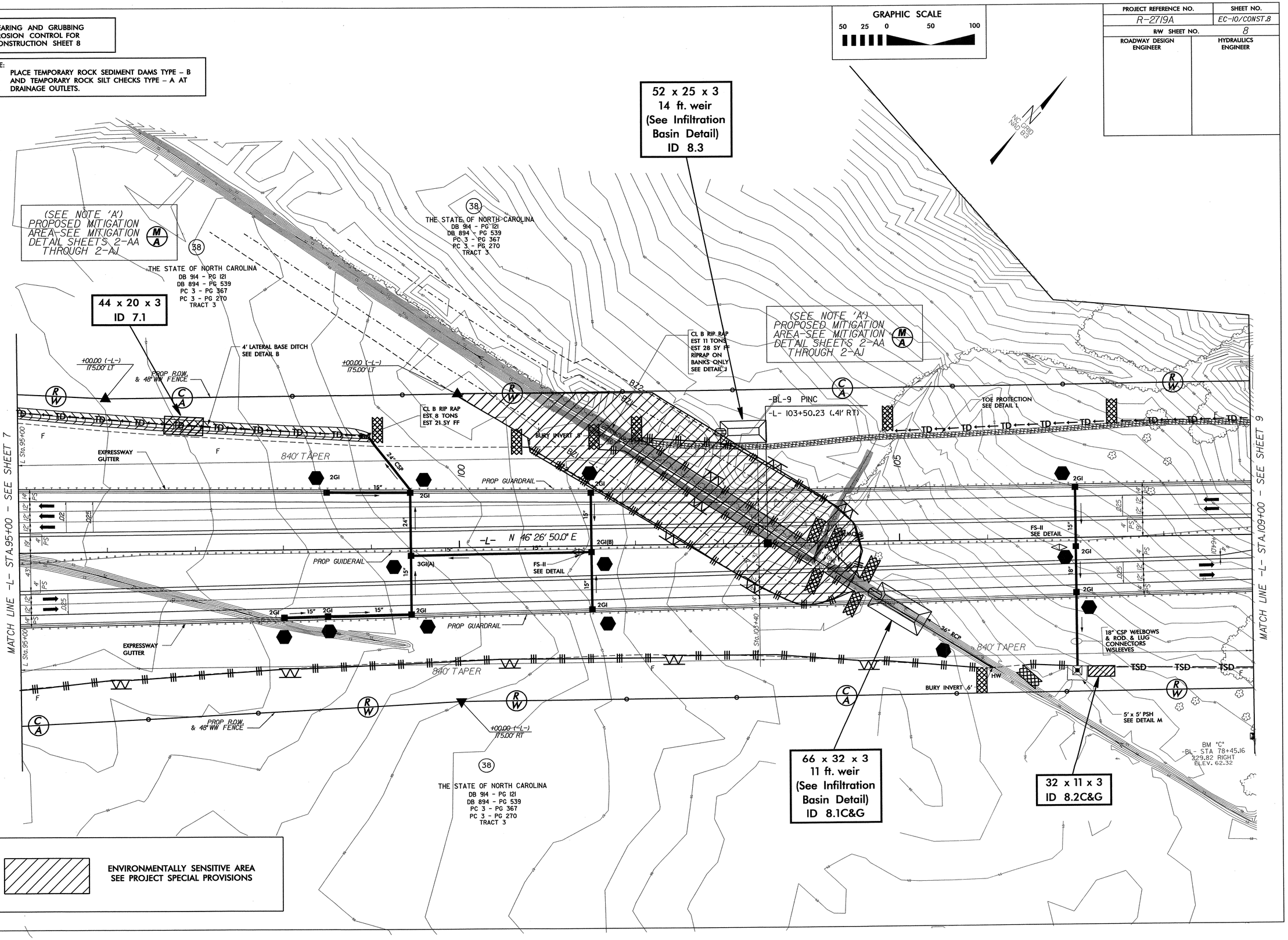
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-10/CONST.8
R/W SHEET NO.	8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.



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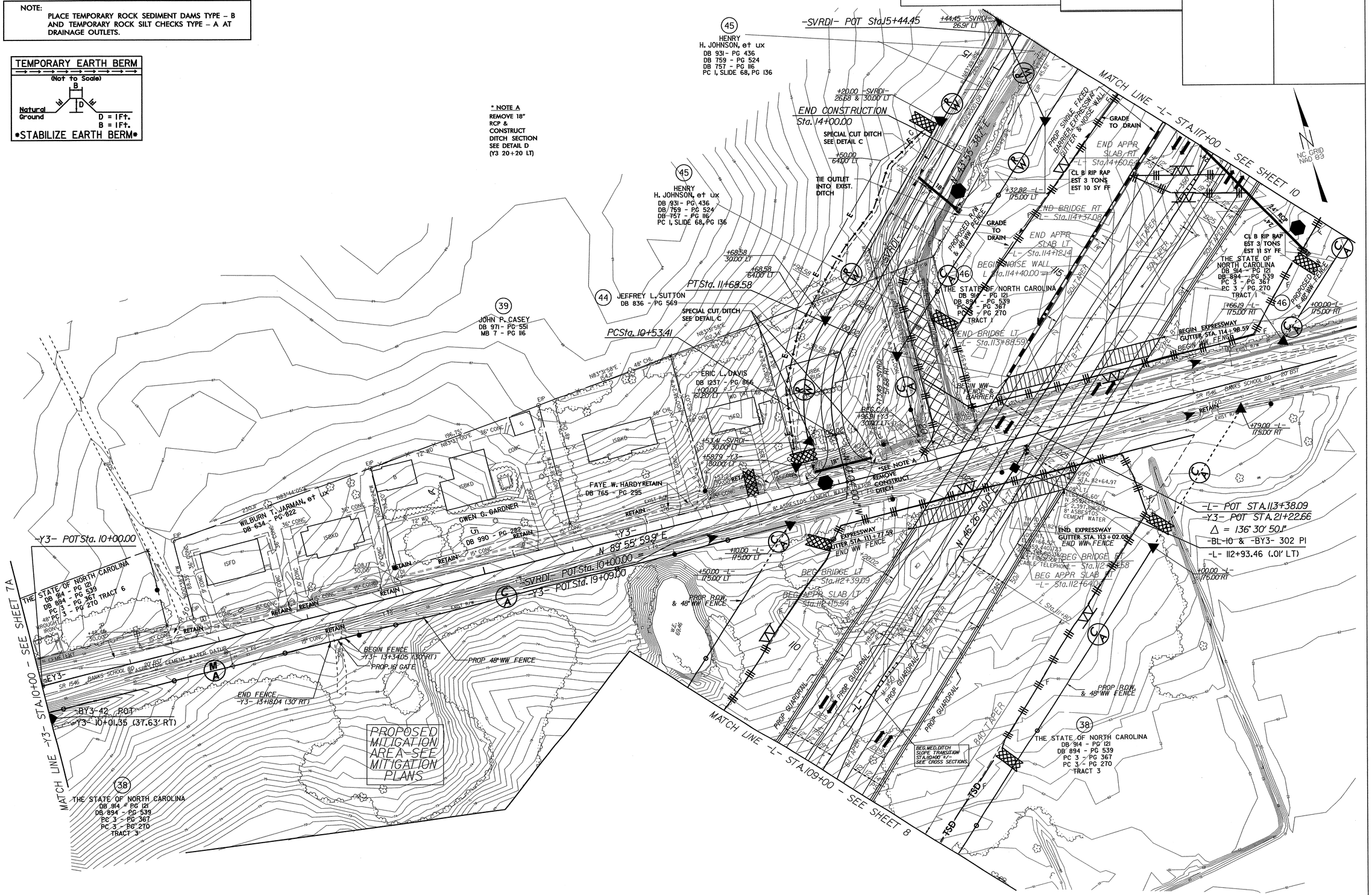
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

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

TEMPORARY EARTH BERM
(Not to Scale)
B
D
Natural Ground
D = 1Ft.
B = 1Ft.
STABILIZE EARTH BERM

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-11/CONST.9
R/W SHEET NO.	9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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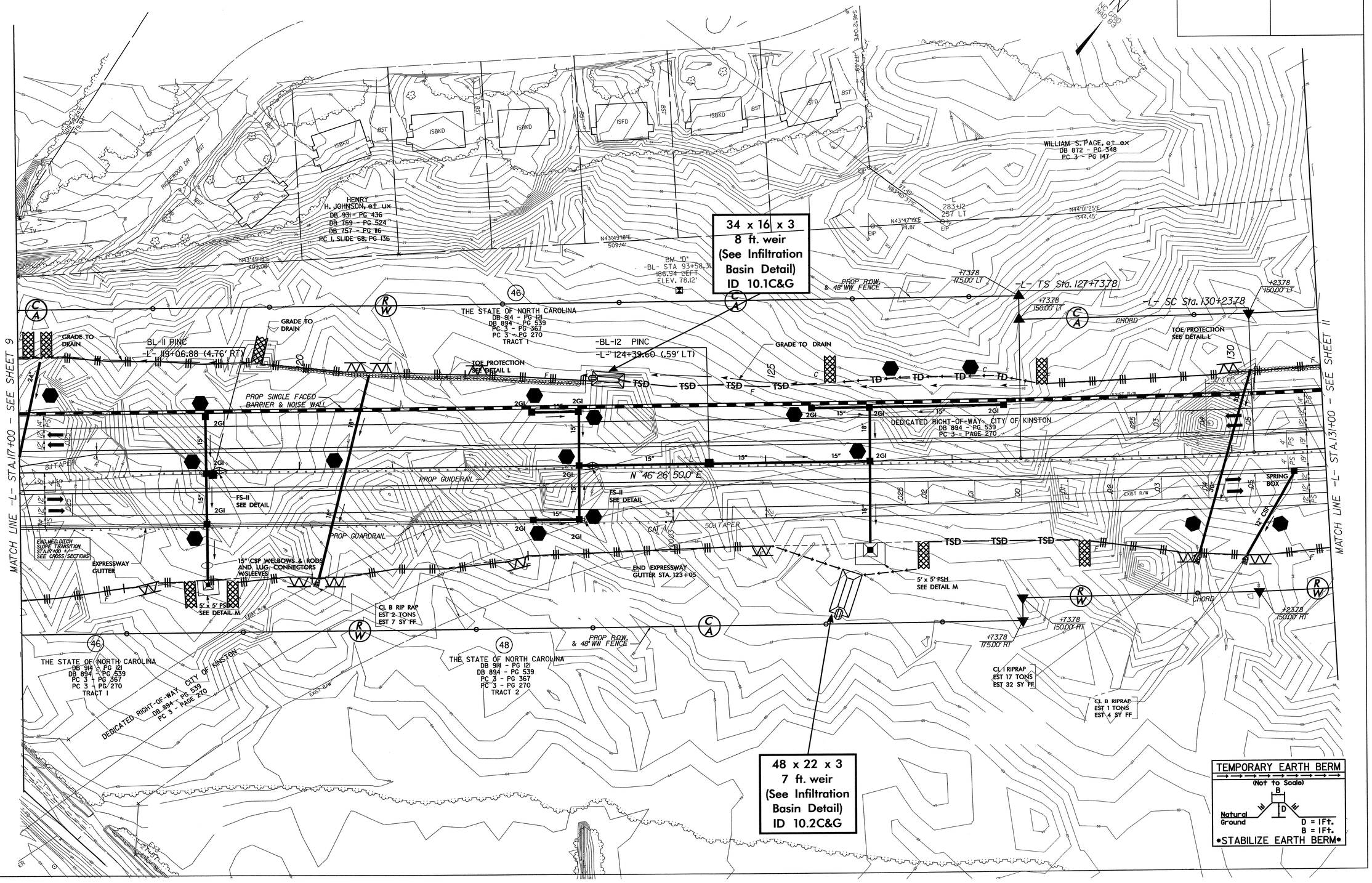
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-12/CONST 10
R/W SHEET NO.	10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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.

GRAPHIC SCALE
50 25 0 50 100



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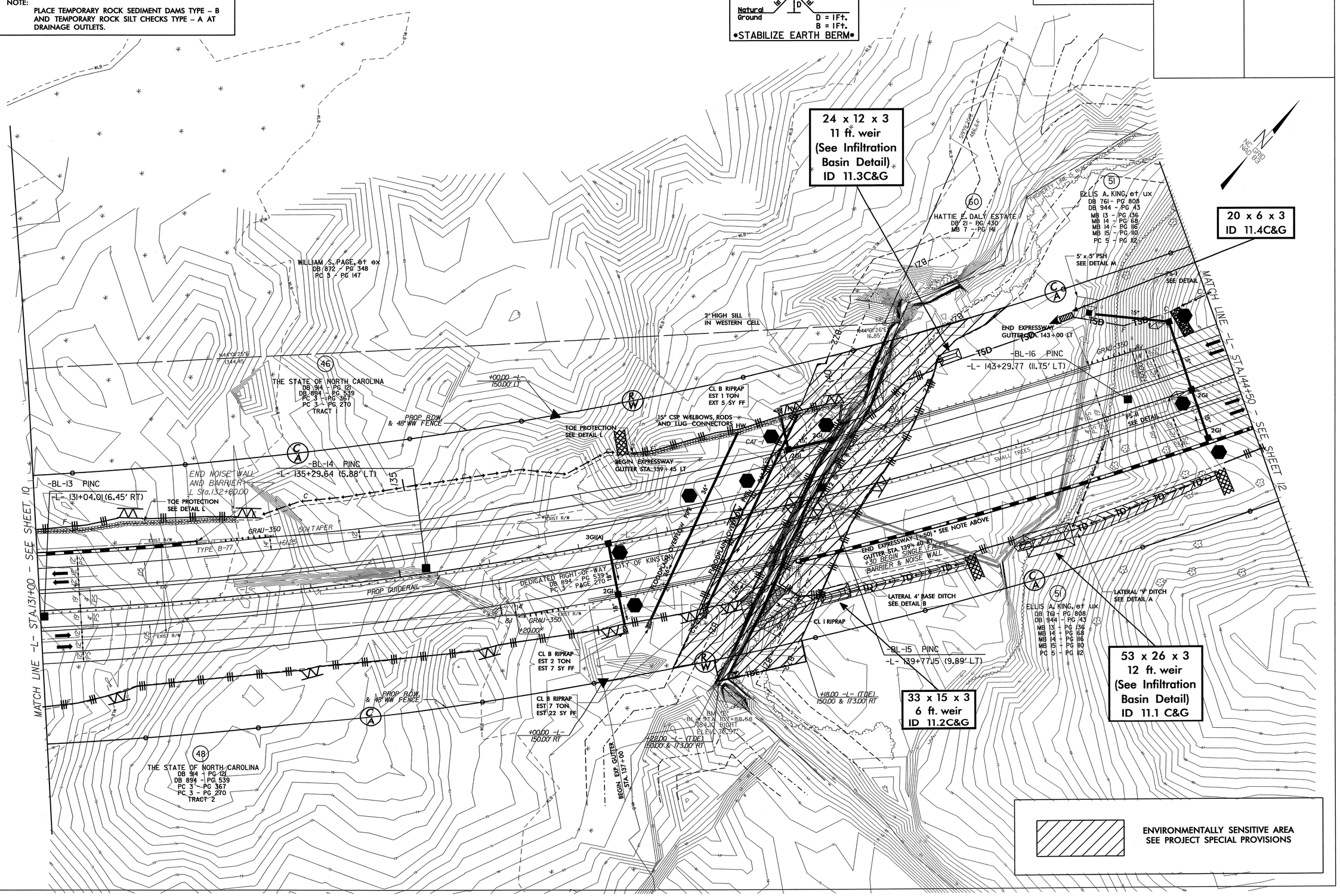
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

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

TEMPORARY EARTH BERM
(Not to Scale)
Natural Ground
D = 1Ft.
B = 1Ft.
STABILIZE EARTH BERM

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-13/CONST.11
R/W SHEET NO.	11
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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Spring
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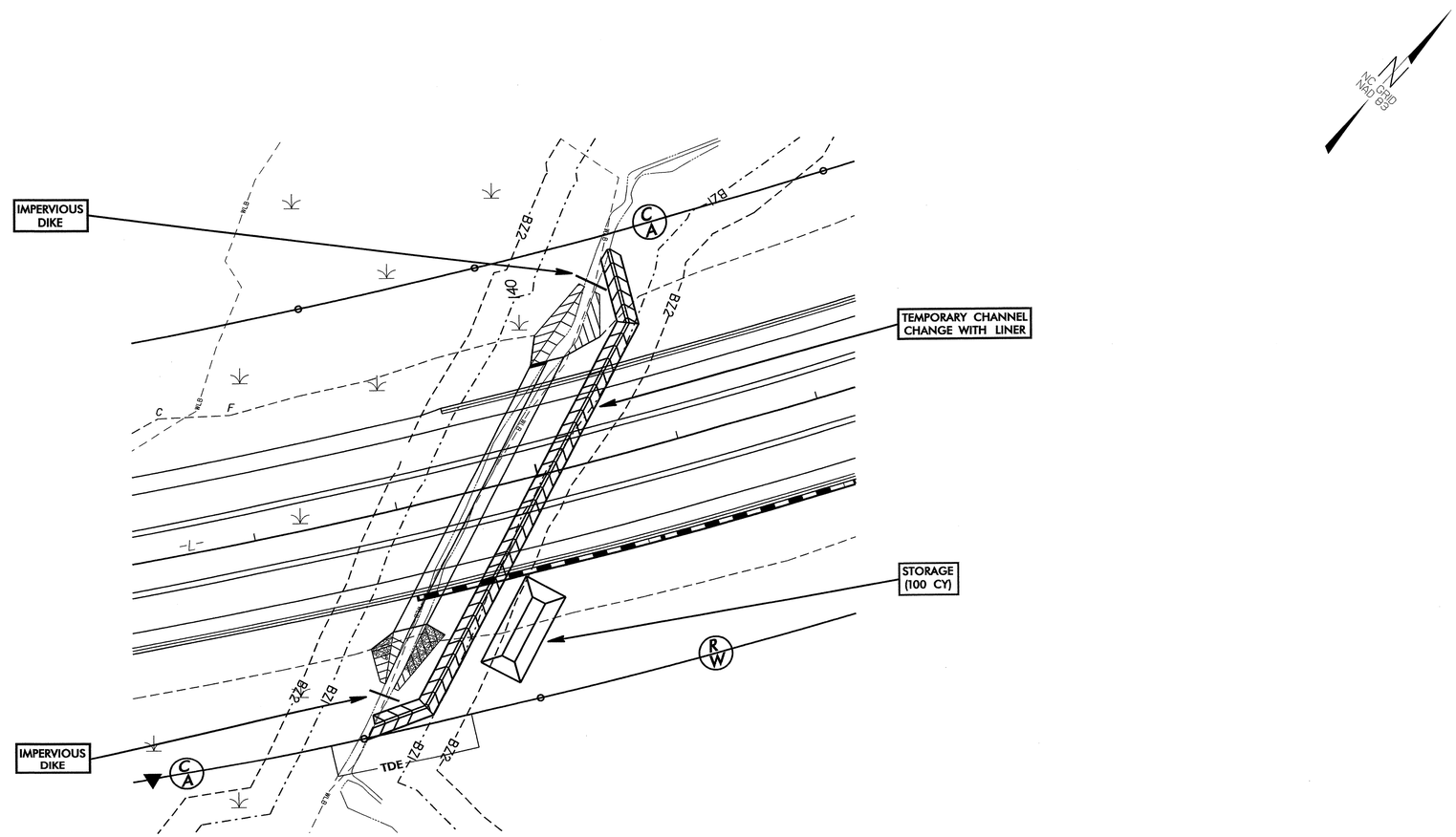
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-14/CONSTJI
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 139 + 60 –L–

1. CONSTRUCT STILLING BASIN (100 CY).
2. CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (2 FT. BASE, 3 FT. DEEP, 2:1 SIDE SLOPES).
3. CONSTRUCT IMPERVIOUS DIKES, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGE.
4. CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE, DIVERTING FLOW THROUGH PROPOSED CULVERT.
6. REMOVE STILLING BASIN, AND COMPLETE ROADWAY.



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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 12

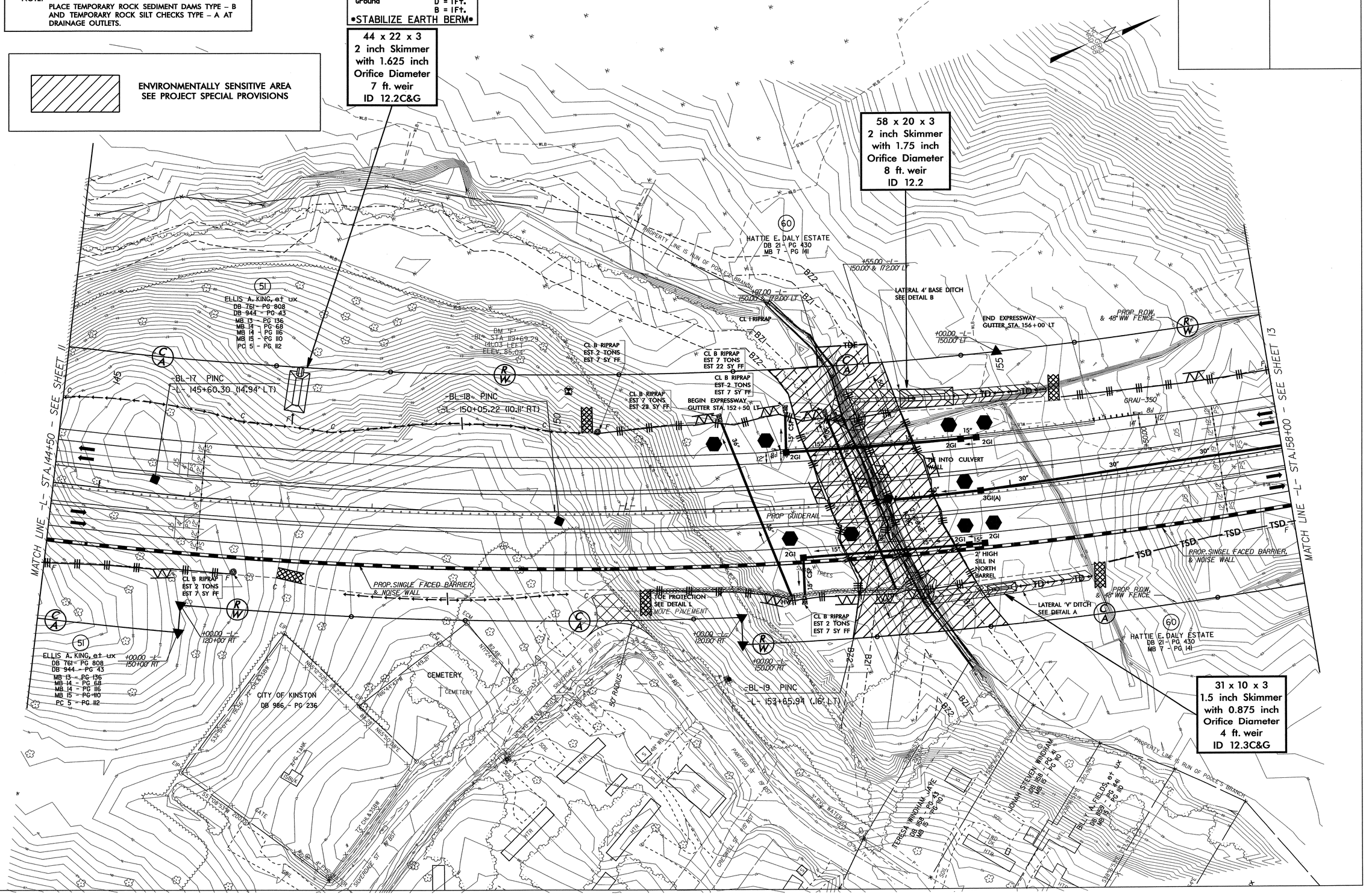
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

TEMPORARY EARTH BERM
(Not to Scale)
Natural Ground
D = 1Ft.
B = 1Ft.
STABILIZE EARTH BERM

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-15/CONST12
R/W SHEET NO.	12
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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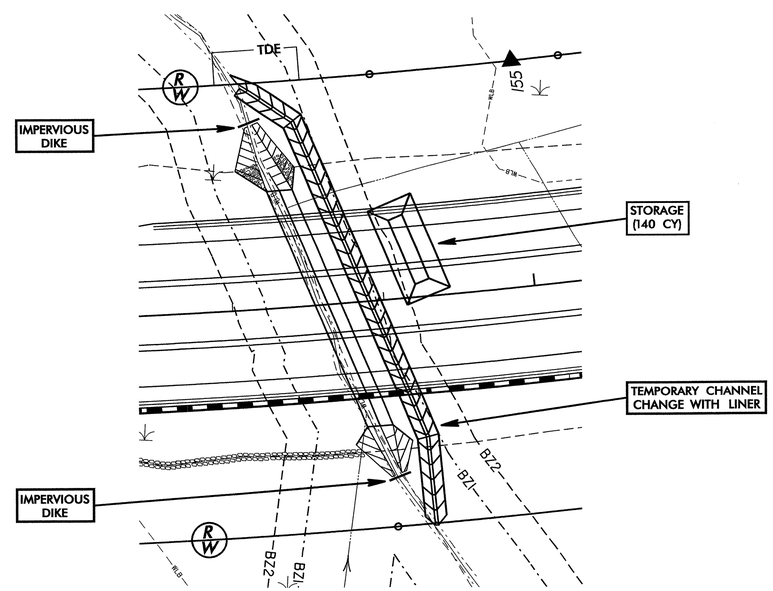
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-16/CONST.12
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

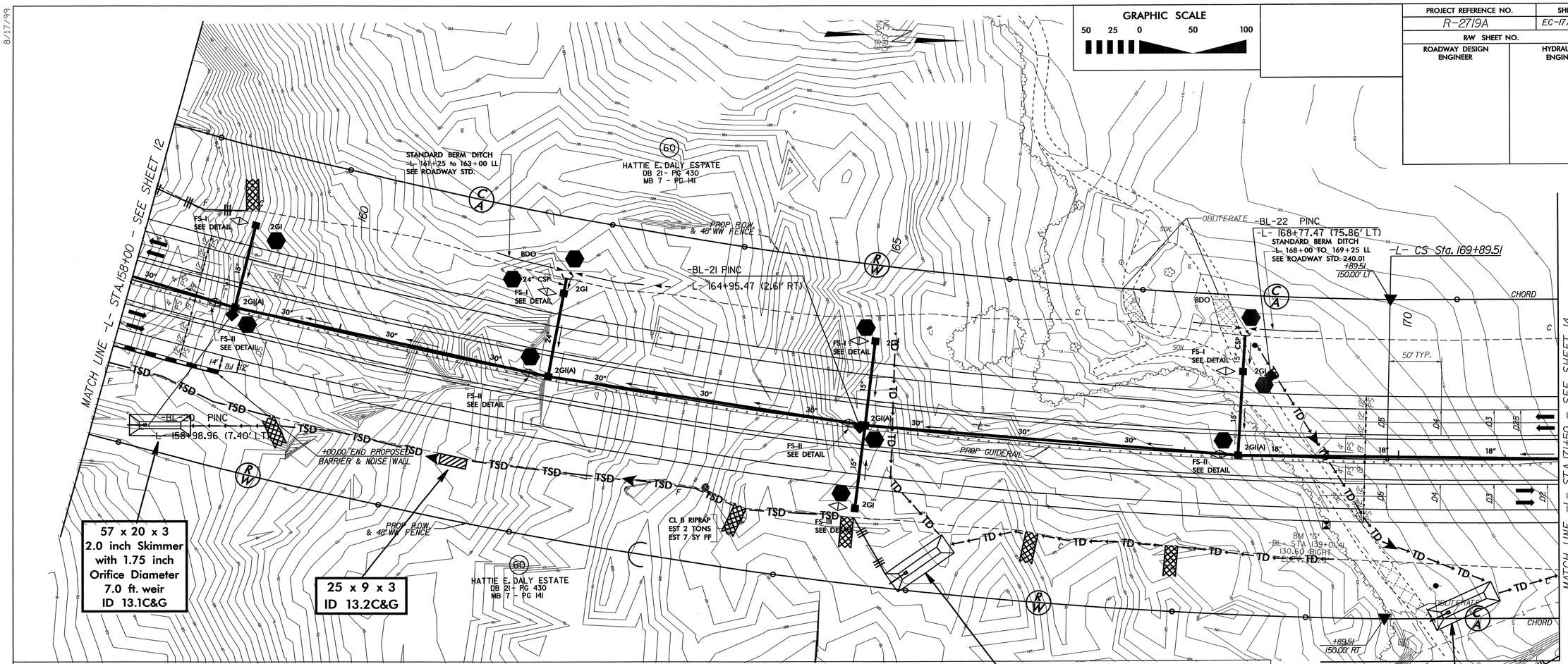
CULVERT CONSTRUCTION SEQUENCE STA. 153 + 62 –L–

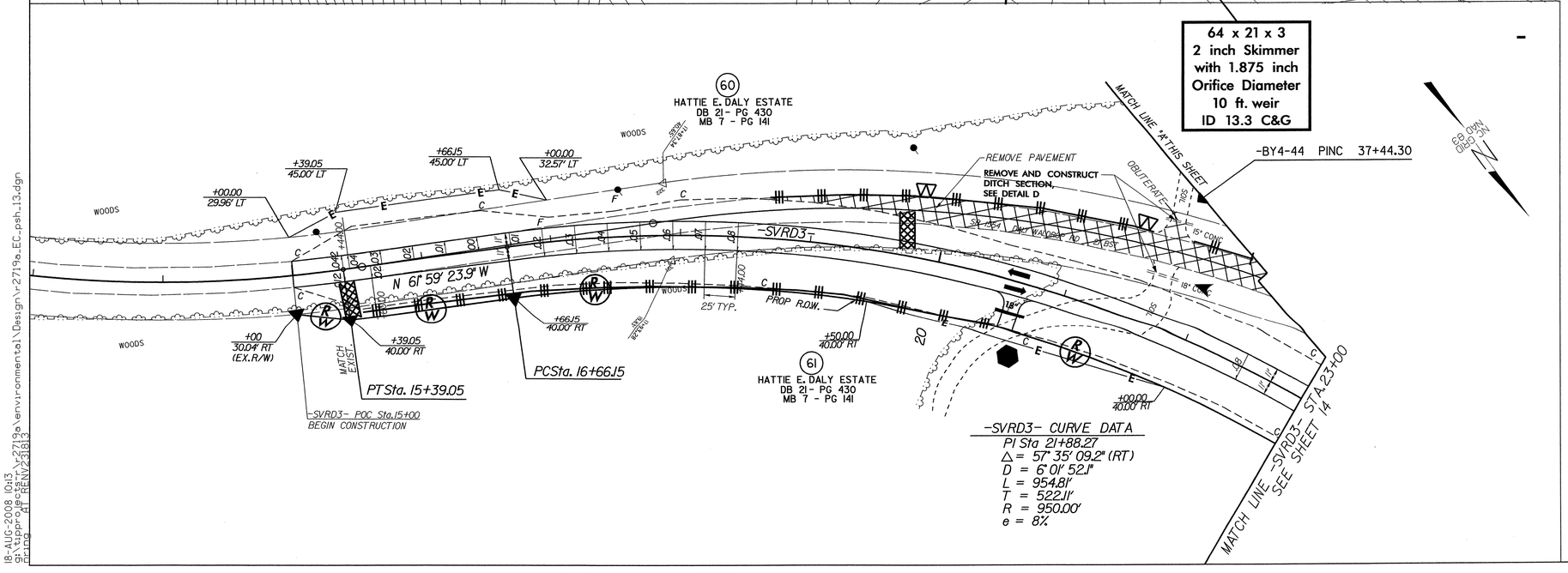
1. CONSTRUCT STILLING BASIN (140 CY).
2. CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (2 FT. BASE, 3 FT. DEEP, 2:1 SIDE SLOPES).
3. CONSTRUCT IMPERVIOUS DIKES, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGE.
4. CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE, DIVERTING FLOW THROUGH PROPOSED CULVERT.
6. REMOVE STILLING BASIN, AND COMPLETE ROADWAY.



PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-17/CONST.13
R/W SHEET NO.	13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100





TEMPORARY EARTH BERM
(Not to Scale)
Natural Ground
D = 1Ft.
B = 1Ft.
STABILIZE EARTH BERM

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.

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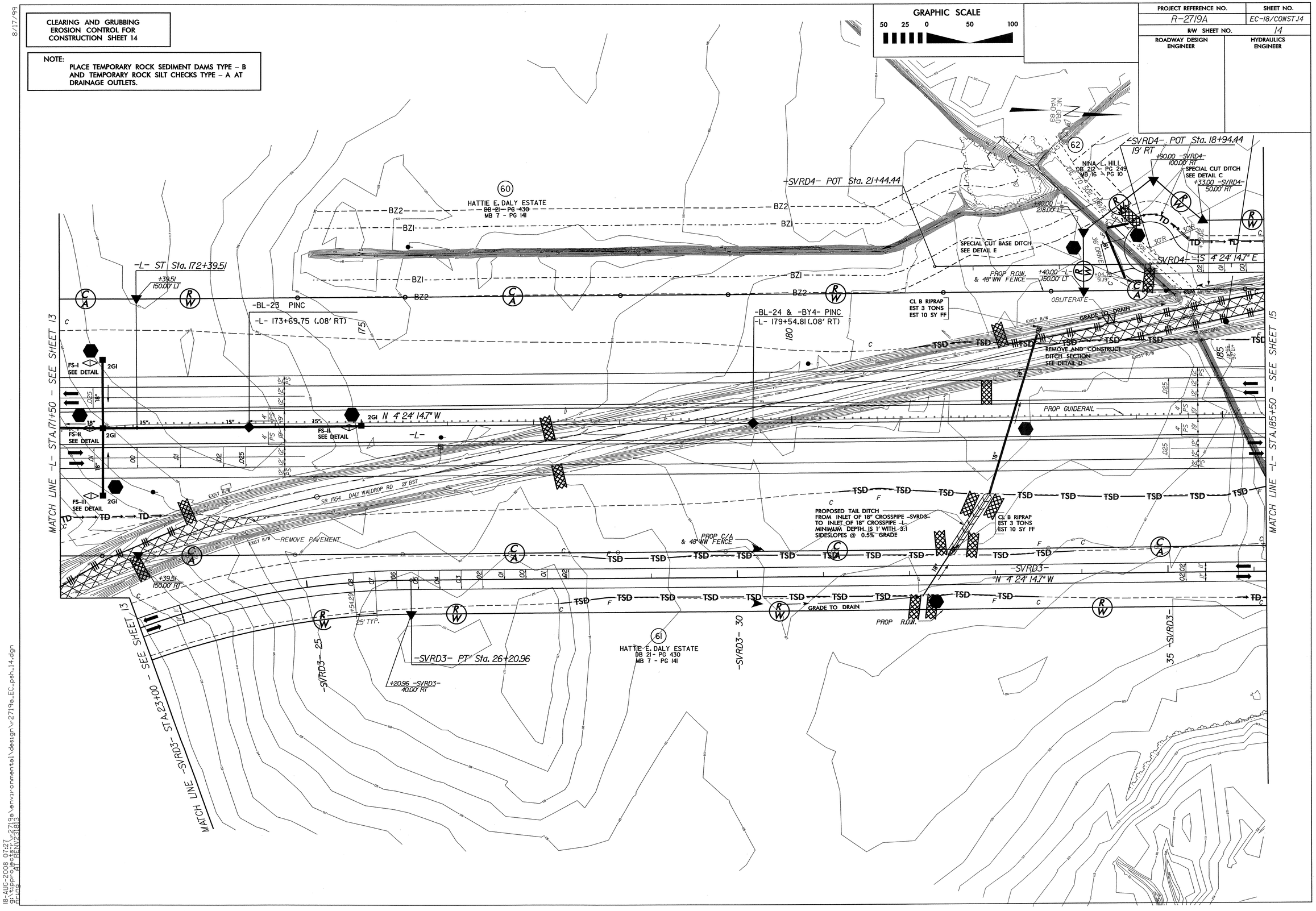
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 14

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

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-18/CONST.14
R/W SHEET NO.	14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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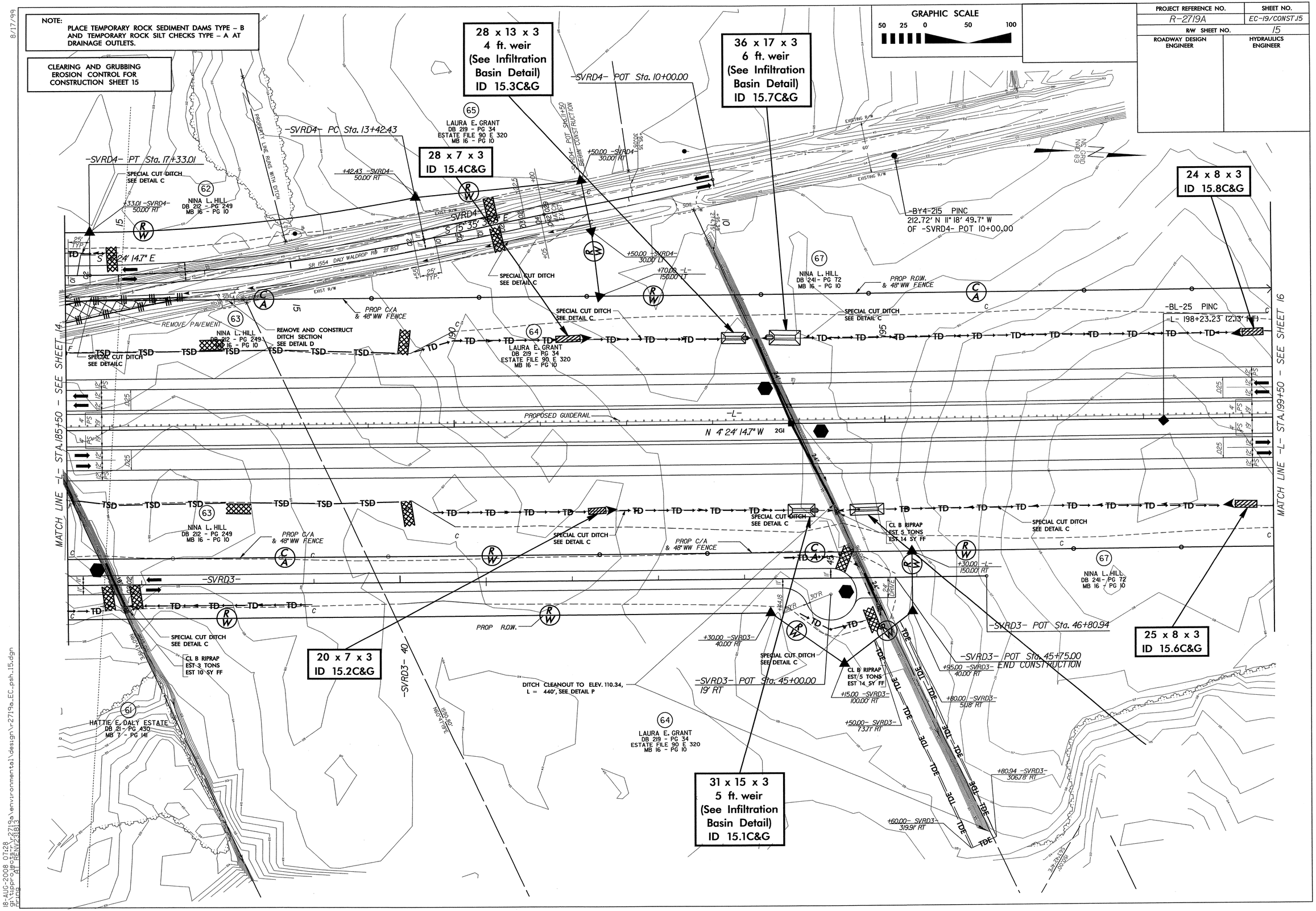
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-19/CONST.15
R/W SHEET NO.	15
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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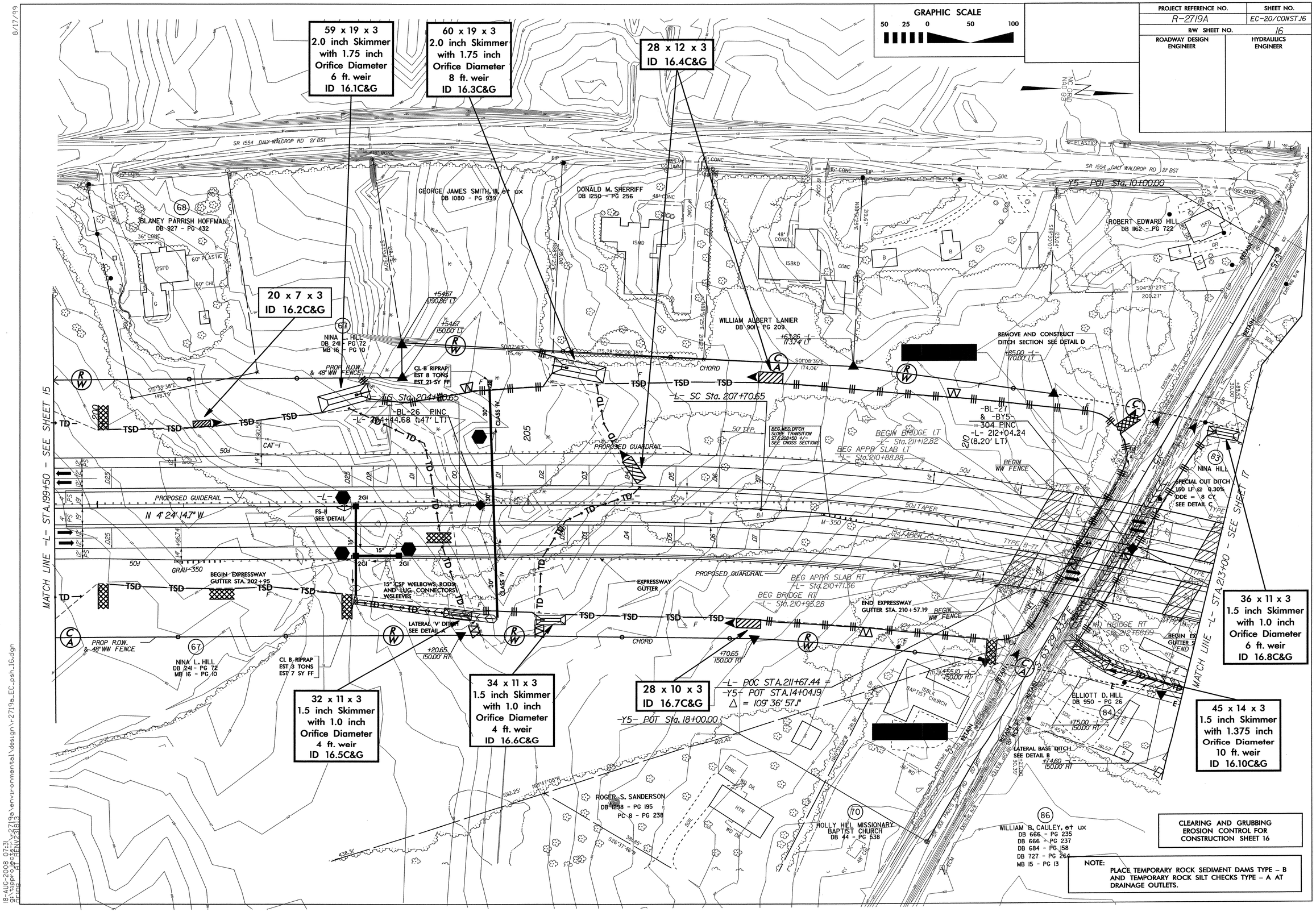
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-20/CONST.16
R/W SHEET NO.	16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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

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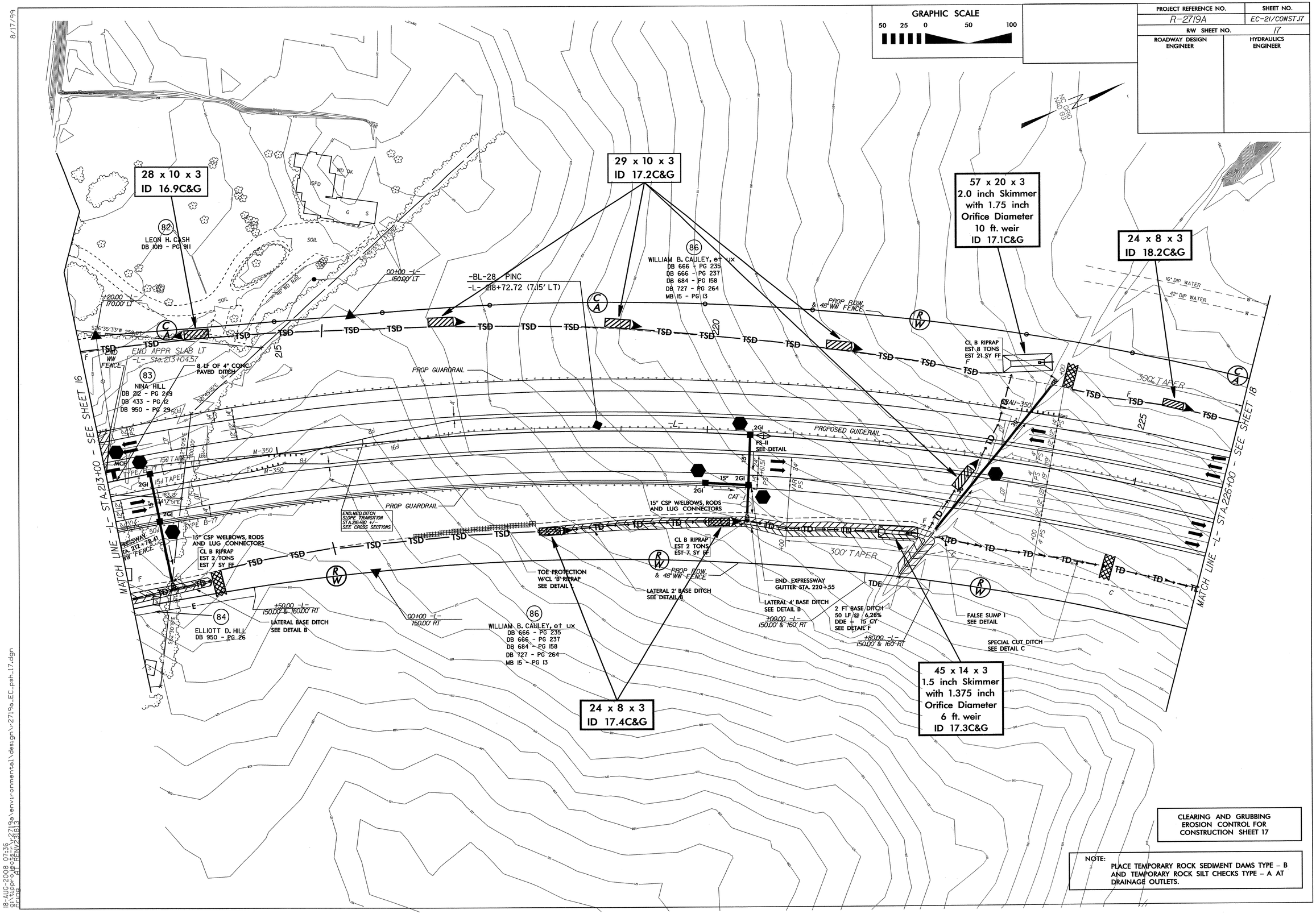
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-21/CONST.17
R/W SHEET NO.	17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 17

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

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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-22/CONST.18
RW SHEET NO.	18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 18

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

GRAPHIC SCALE
50 25 0 50 100

44 x 15 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
6 ft. weir
ID 18.1C&G

24 x 8 x 3
ID 18.6C&G

30 x 10 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 18.5C&G

40 x 15 x 3
1.5 inch Skimmer
with 1.0 inch
Orifice Diameter
8 ft. weir
ID 18.6F

24 x 8 x 3
ID 18.2C&G

42 x 13 x 3
1.5 inch Skimmer
with 1.25 inch
Orifice Diameter
10 ft. weir
ID 18.3C&G

48 x 16 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
12 ft. weir
ID 18.4C&G

38 x 12 x 3
1.5 inch Skimmer
with 1.125 inch
Orifice Diameter
4 ft. weir
ID 18.7C&G

63 x 30 x 3
ID 18.5F

DITCH CLEANOUT TO ELEV. 96.9
L=380', SEE DETAIL P

DITCH CLEANOUT
FROM ELEV. 100.25
TO ELEV. 96.9
S = 1.3%, L = 290'
SEE DETAIL P

TAIL 6 FT BASE DITCH
280 LF @ 0.0%
EST DDE = 300 CY
TO ELEV. 96.9
SEE DETAIL F

TAIL 4 FT BASE DITCH
75' @ 0.96%
DDE = 70 CY
TO ELEV. 96.9
SEE DETAIL F

TAIL 2' BASE DITCH
130 LF @ 0.18%
DDE = 75 CY
SEE DETAIL F

TAIL 2' BASE
80 LF @ 0.95%
DDE = 120 CY
SEE DETAIL F

LATERAL 4 FT BASE DITCH
SEE DETAIL B
(STA. 233+50 TO 235+50 LT)

LATERAL 2 FT BASE DITCH
SEE DETAIL B

LATERAL 'V' DITCH
SEE DETAIL A

SPECIAL LATERAL 'V' DITCH
SEE DETAIL G

SPECIAL CUT DITCH
SEE DETAIL C

HEAD 2' BASE DITCH w/CL B RIPRAP
50 LF @ 9.6%
DDE = 20 CY
SEE DETAIL R

HEAD 5' BASE DITCH
50 LF @ 8.2%
DDE = 20 CY
SEE DETAIL F

HEAD 7' BASE DITCH
50 LF @ 4.4%
DDE = 30 CY
SEE DETAIL F

FALSE SUMP III
SEE DETAIL

CL B RIPRAP
EST 3 TONS
EST 10 SY FF

CL B RIPRAP
EST 15 TONS
EST 37 SY FF

RIPRAP @
EMBANKMENT
EST 10 TONS
SEE DETAIL K

RIPRAP @
EMBANKMENT
EST 20 TONS
SEE DETAIL K

CL B RIPRAP
EST 8 TONS
EST 21 SY FF

CL B RIPRAP
EST 8 TONS
EST 21 SY FF

FILL ABANDONED
CHANNEL 25 CY

WILLIAM H. ROUSE, et ux
DB 1069 - PG 543
PC 3 - PG 260

WILLIAM B. CAULEY, et ux
DB 666 - PG 235
DB 666 - PG 237
DB 684 - PG 158
DB 727 - PG 264
MB 15 - PG 13

-BL-30 PINC
-L- 232+75.69 (5.36' LT)

-BL-29 PINC
-L- 226+80.74 (11.13' LT)

-BL-31 PINC
-L- 238+88.42 (.35' LT)

BM "1"
-BL- STA 198+33.91
288.08 RIGHT
ELEV. 106.62

-Y24RPB- ST Sta. 2+10.00

-Y24RPB- SC Sta. 6+75.71

-Y24RPB- TS Sta. 4+35.71

-Y24RPB- CS Sta. 0+00.00 =
-L- POC Sta. 230+06.15 (47' LT)

-Y24RPC- SC Sta. 2+00.00

-Y24RPC- CS Sta. 0+00.00 =
-L- POC Sta. 227+08.60 (47' RT)

-Y24RPC- CS Sta. 11+74.10

-L- CS Sta. 238+85.22

N 25° 54' 42.7" E

PROPOSED GUIDERAIL

PROP. R.O.W.
& 48" WW FENCE

300' TAPER

MATCH LINE -L- STA. 226+00 - SEE SHEET 17

MATCH LINE -L- STA. 239+50 - SEE SHEET 19

MATCH LINE -Y24RPC- STA. 11+86.64 SEE SHEET 19

MATCH LINE -Y24RPB- ST SHEET 19

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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-23/CONST.19
R/W SHEET NO.	19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 19

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

GRAPHIC SCALE
50 25 0 50 100

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DESIGNED BY: MICROSTATION
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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-24/CONST.20
R/W SHEET NO.	20
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
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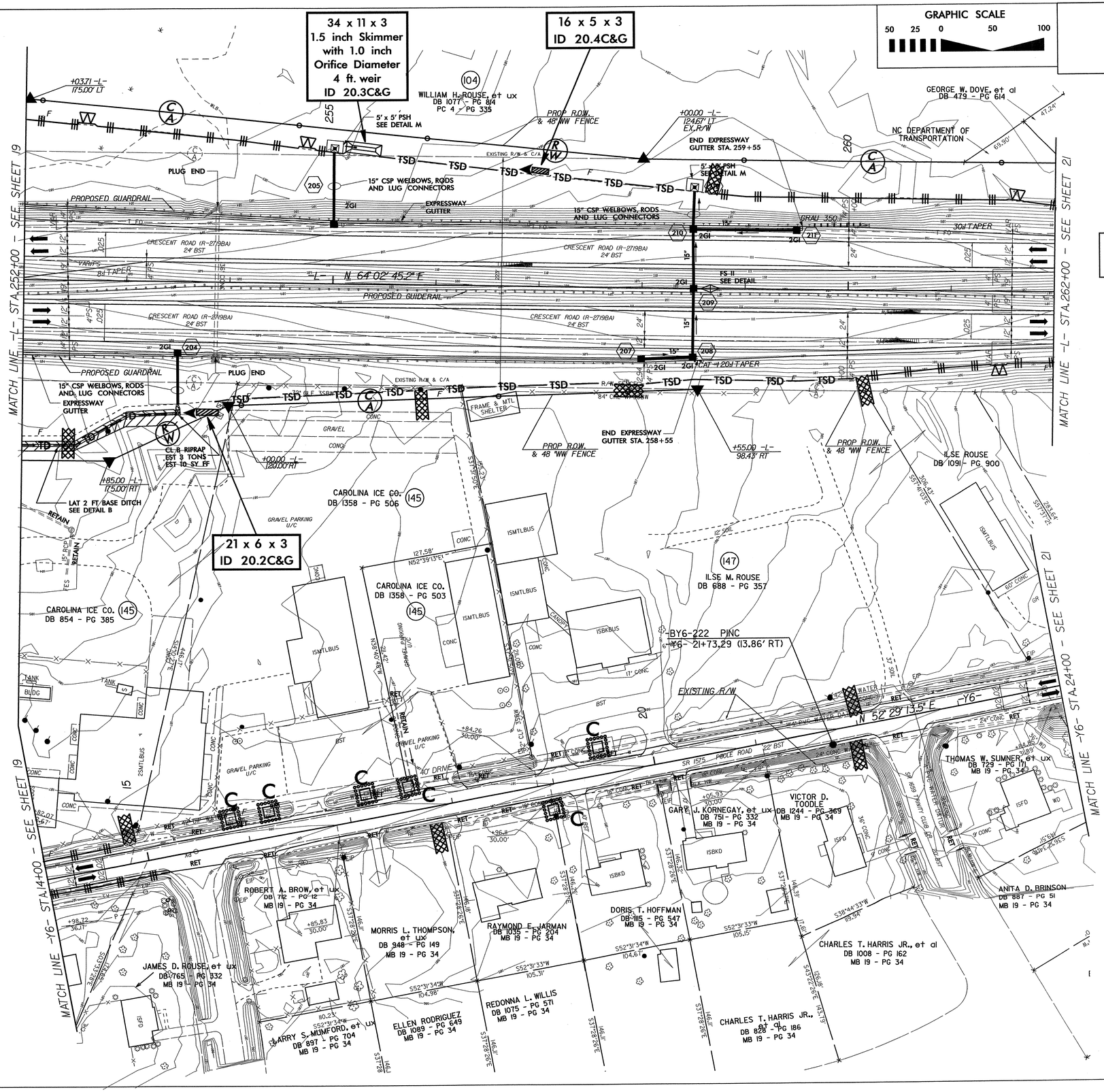

NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 20

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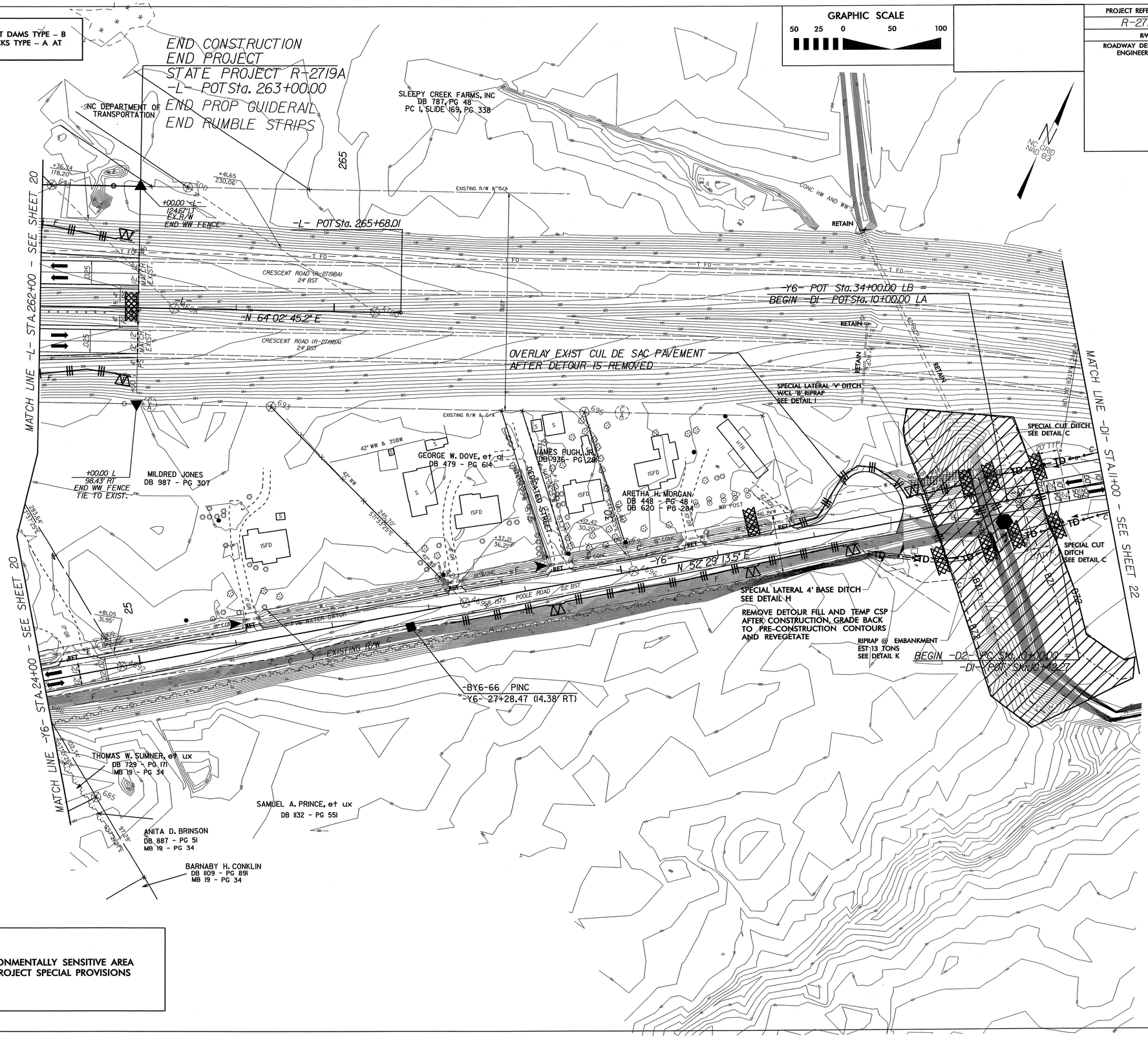
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING
EROSION CONTROL FOR CONSTRUCTION SHEET 21

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-25/CONST.21
R/W SHEET NO.	21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

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GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-26/CONST.22
R/W SHEET NO.	22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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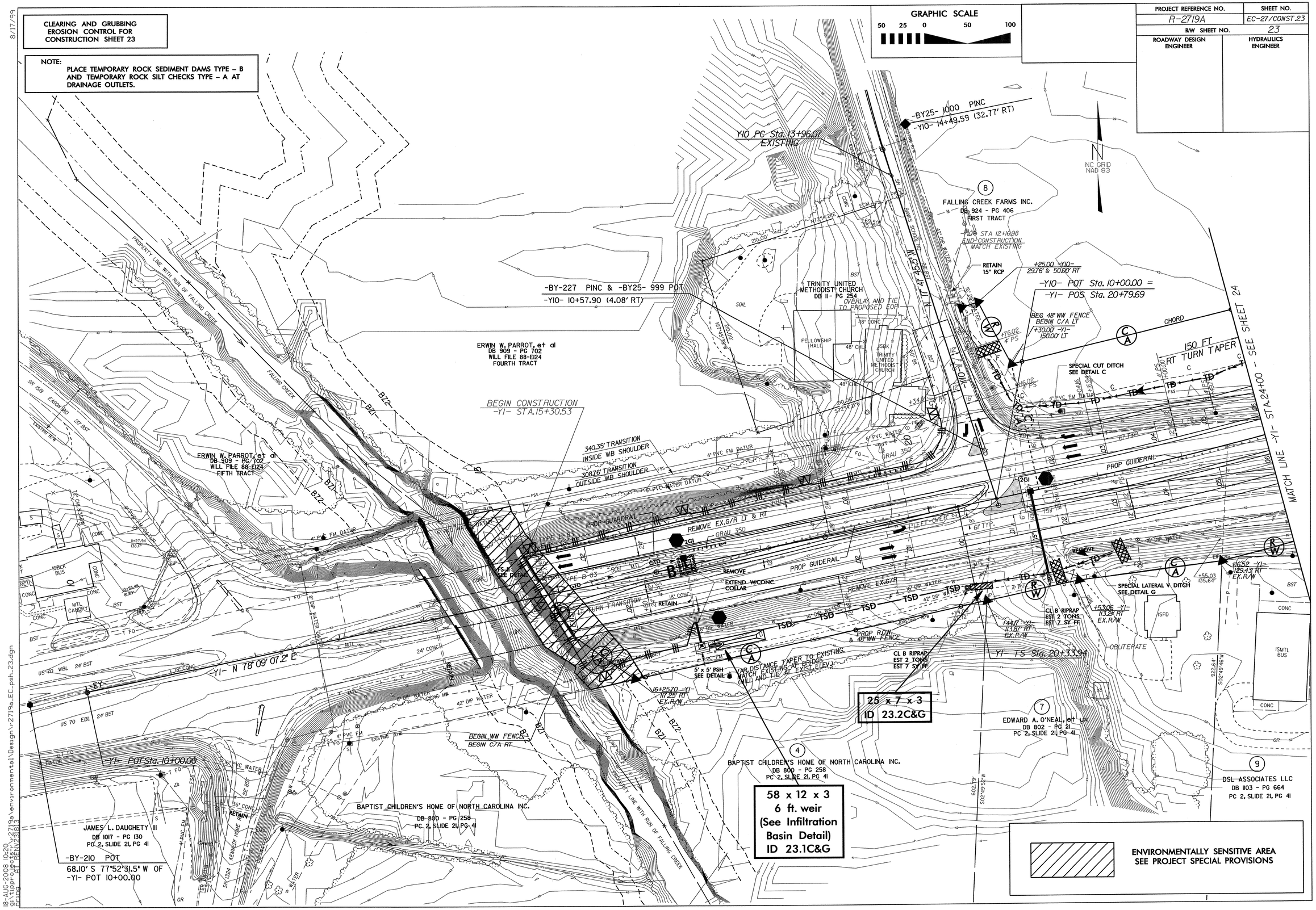
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-27/CONST.23
R/W SHEET NO.	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 23

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



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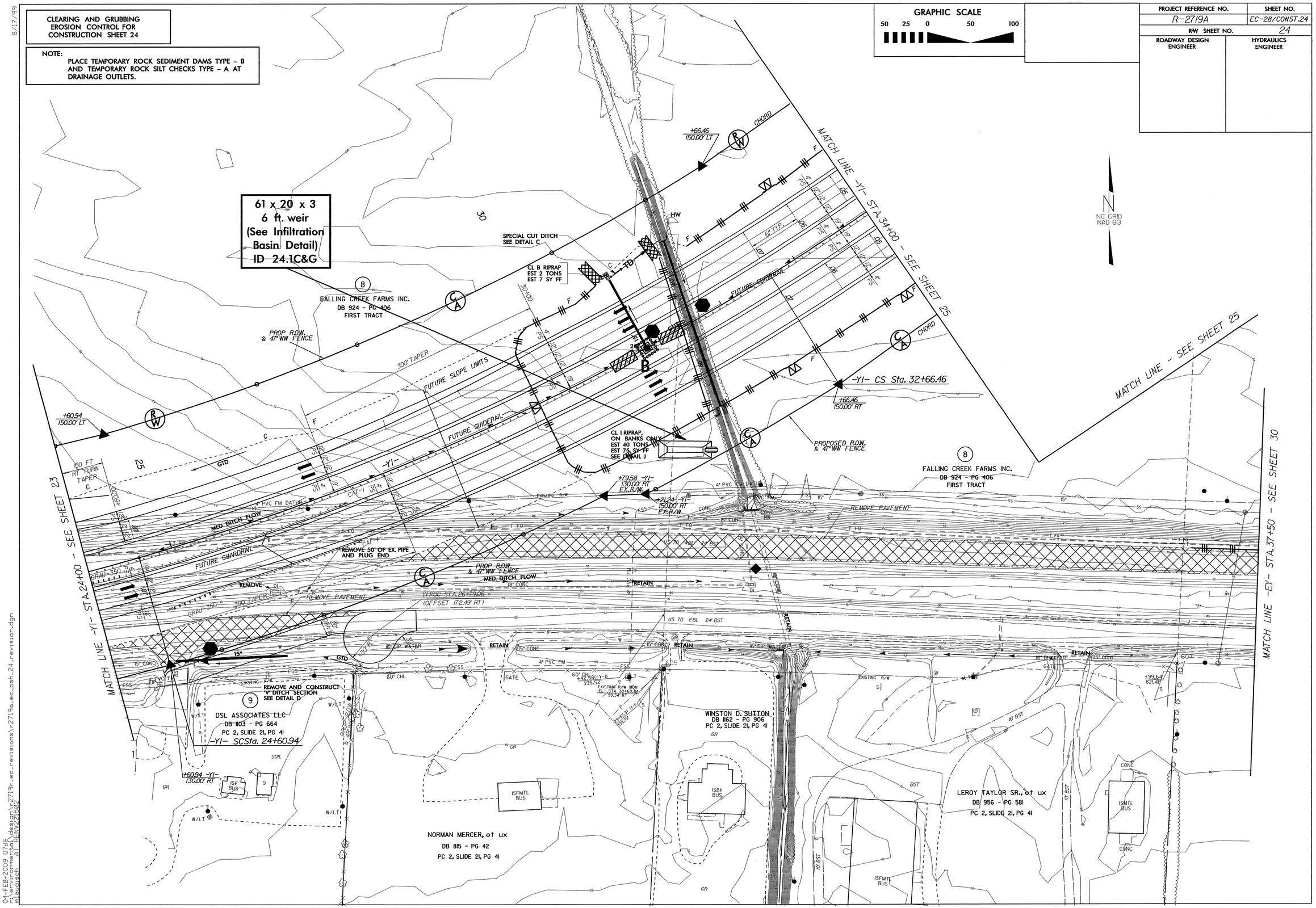
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 24

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

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-28/CONST.24
R/W SHEET NO.	24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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mlaqisch AT RENV21602

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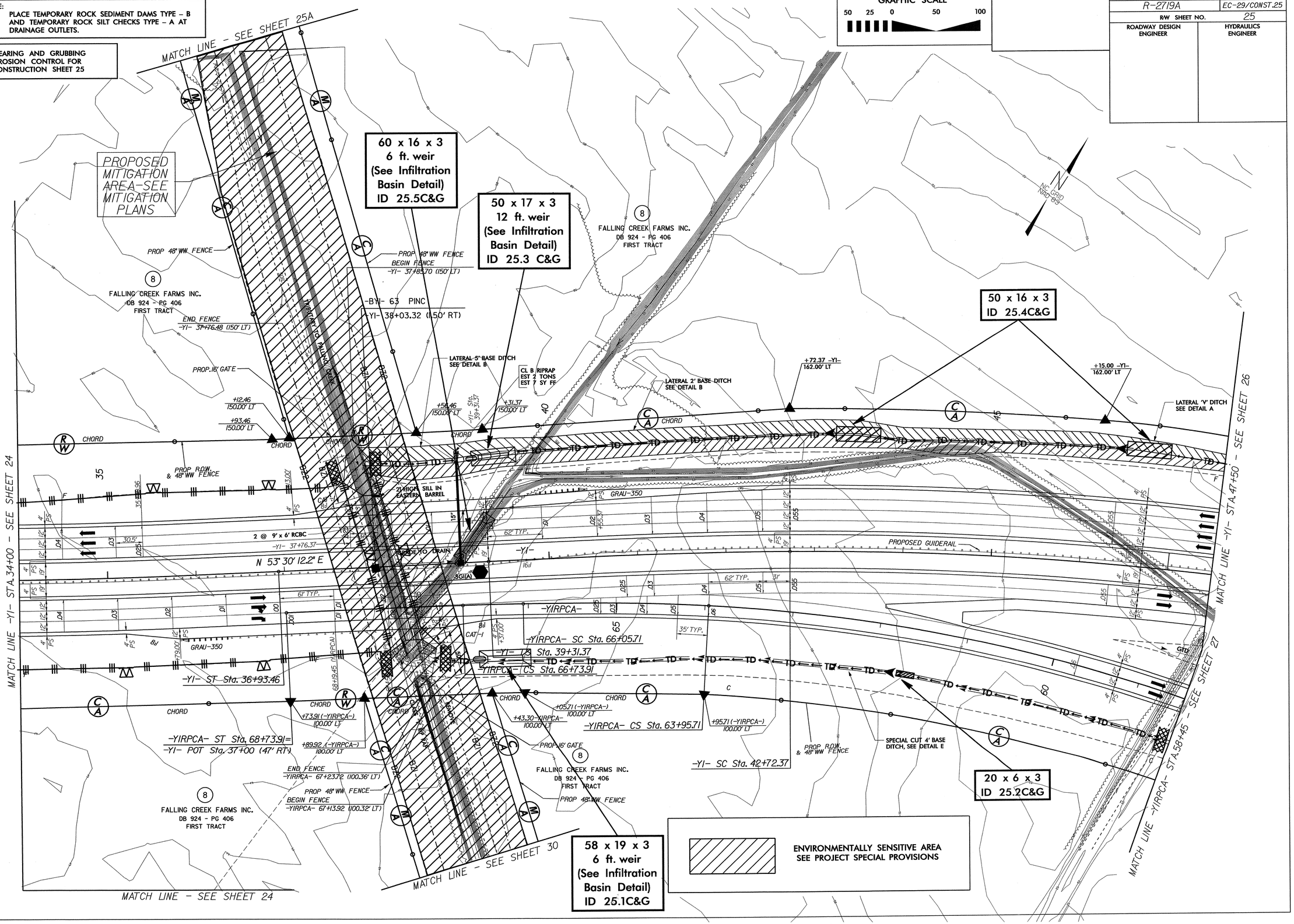
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-29/CONST.25
R/W SHEET NO.	25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100

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 25



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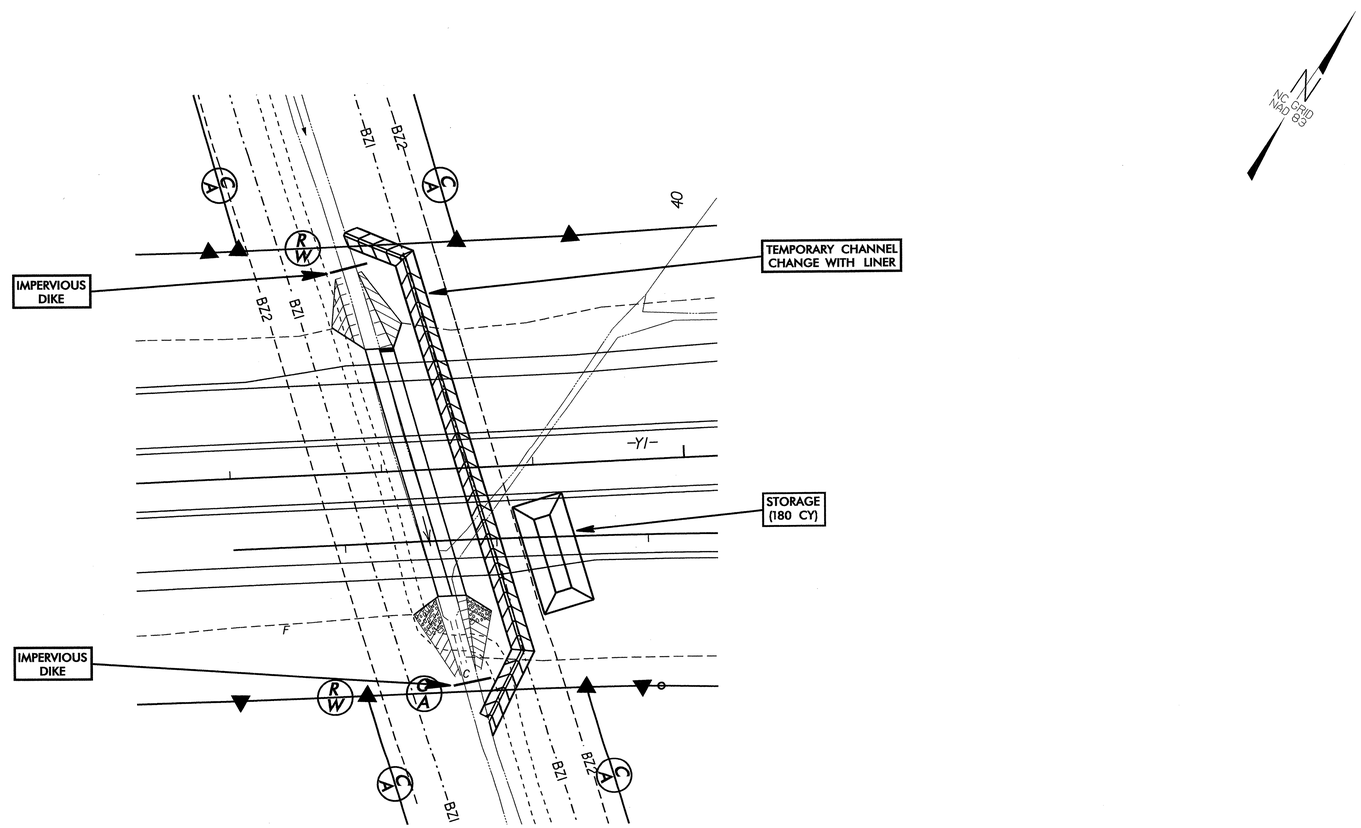
ring AT RENV23813

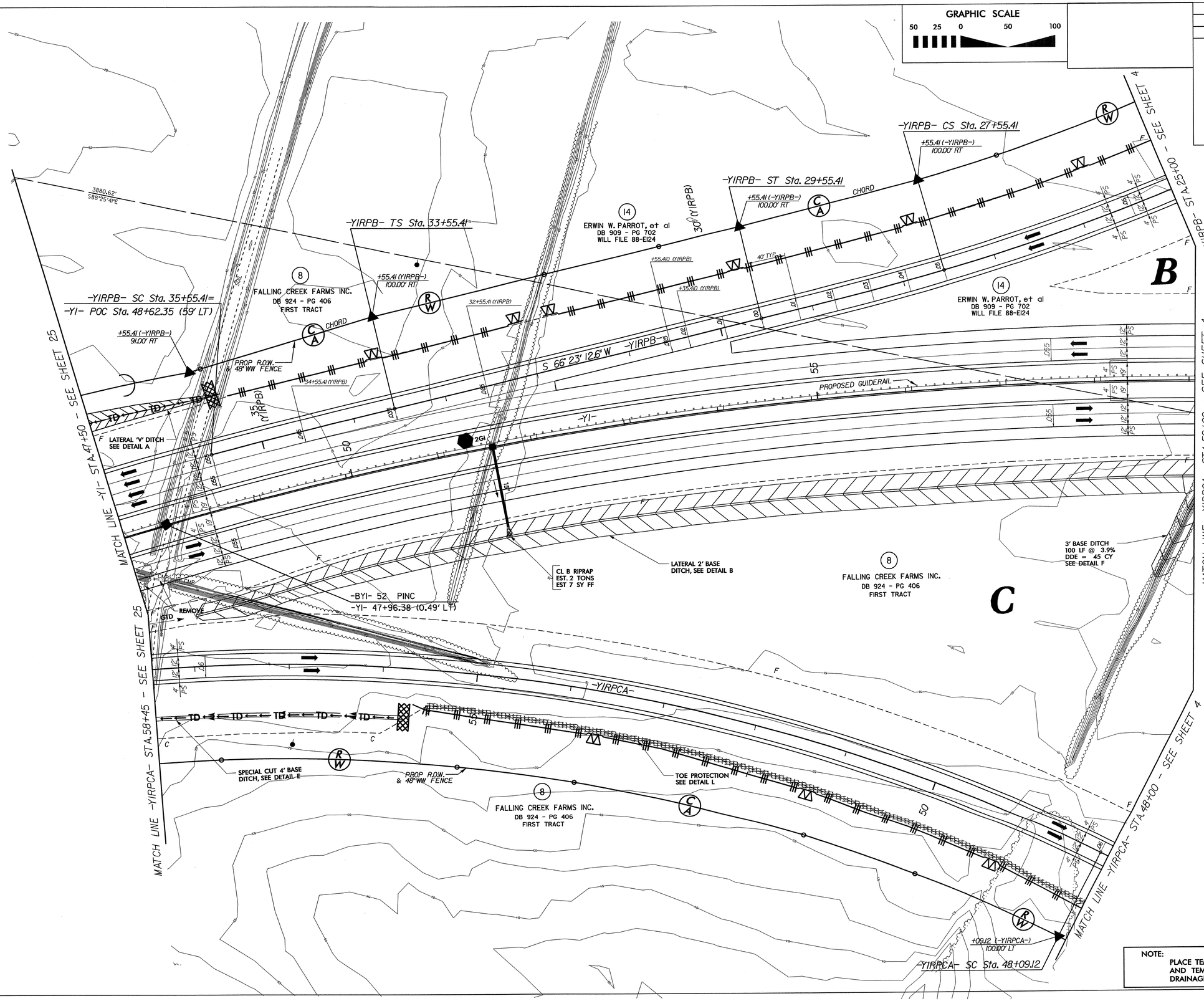
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-30/CONST.25
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 38+22 -Y1-

1. CONSTRUCT STILLING BASIN (180 CY).
2. CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (2 FT. BASE, 3 FT. DEEP, 2:1 SIDE SLOPES).
3. CONSTRUCT IMPERVIOUS DIKES, DIVERTING FLOW THROUGH TEMPORARY CHANNEL CHANGE.
4. CONSTRUCT PROPOSED CULVERT AND INLET/OUTLET CHANNEL IMPROVEMENTS.
5. REMOVE IMPERVIOUS DIKES AND TEMPORARY CHANNEL CHANGE, DIVERTING FLOW THROUGH PROPOSED CULVERT.
6. REMOVE STILLING BASIN, AND COMPLETE ROADWAY.



PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-31/CONST.26
R/W SHEET NO.	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 26

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

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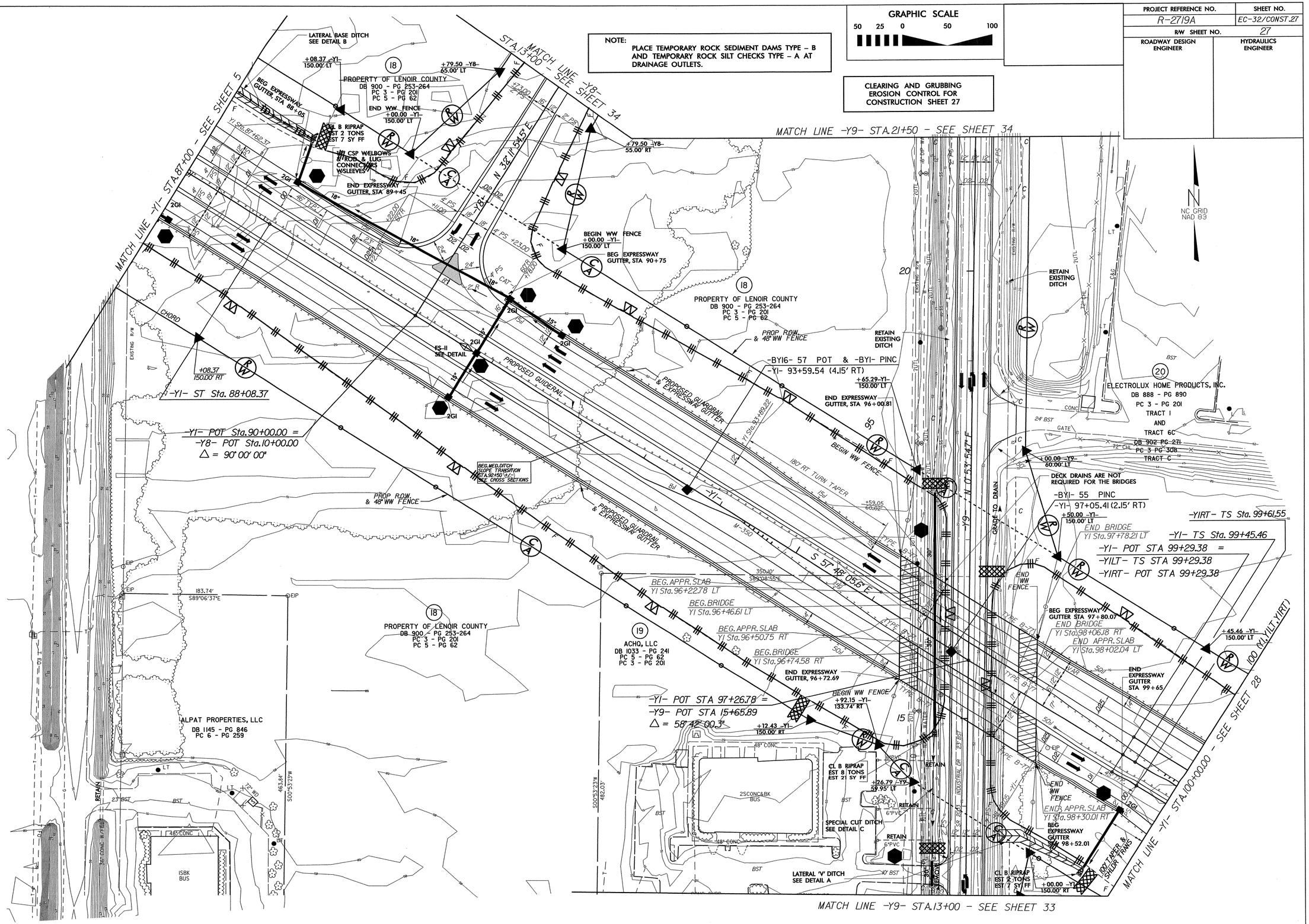
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-32/CONST.27
R/W SHEET NO.	27
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE

50 25 0 50 100

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 27



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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-33/CONST.28
R/W SHEET NO.	28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 28

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

INSTALL DRIVEWAY PIPE DURING CLEARING & GRUBBING PHASE

GRAPHIC SCALE
50 25 0 50 100

46 x 21 x 3
ID 29.2C&G

MATCH LINE -Y1- STA.100+00.00 - SEE SHEET 27

MATCH LINE -Y1- STA.114+00- SEE SHEET 29

MATCH LINE -Y15- STA.24+30 - SEE SHEET 33

-Y1LT- SC Sta. 101+99.38

+15.46 -Y1- 150.00' LT

ELECTROLUX HOME PRODUCTS, INC.
DB 888 - PG 890
PC 3 - PG 201
TRACT 1
AND
TRACT 6C
DB 902 PG 271
PC 3 PG 308
TRACT C

END MED. DITCH SLOPE TRANSITION STA.101+00 +/- SEE CROSS SECTIONS

S 57° 48' 05.6" E

100' TAPER & SHLDR TRANS

15" CSP W/ ELBOWS & ROD & LUG CONNECTORS W/SLEEVES

FUTURE GUARDRAIL

FUTURE GUARDRAIL & EXPRESSWAY GUTTER

-Y1- SC Sta. 102+15.46

ELECTROLUX HOME PRODUCTS, INC. SEE DEED INFO ABOVE

PROP R.O.W.& 48" WW FENCE

-Y1RT -SC Sta. 102+31.55

2' TAIL BASE DITCH SEE SHEET 33 FOR DITCH INFORMATION

+15.46 -Y1- 150.00' RT

REMOVE PAVEMENT

EXISTING R/W

+26.20 -Y1- 150.00' RT

+00.00 -Y1- 125.50' RT END WW FENCE & C/A RT

-Y1RT- POC STA 106+03.82=
-Y15- POT STA 31+50.03
△ = 89° 43' 33.5"

MONOLITHIC CONC ISLAND

-Y15- POT Sta. 30+79.01

CL B RIPRAP
EST 2 TONS
EST 7 SY FF

END EXPRESSWAY GUTTER, STA 105+05

FS-11 SEE DETAIL

-Y1- POC STA 106+00.00=
-Y15- POT STA 31+75.53
△ = 89° 59' 59.6"

SPECIAL CUT DITCH SEE DETAIL C

PROP R.O.W.& 47" WW FENCE

+00.00 -Y1- 150.00' LT END WW FENCE &C/A LT

SPECIAL CUT 2' BASE DITCH SEE DETAIL E

SPECIAL CUT 2' BASE DITCH W/4:1 FRONT DITCH SLOPE SEE DETAIL E

WALTER POOLE REALTY, INC.
DB 860 - PG 107
PC 9 - PG 375

+80.00 -Y1- 122.00' LT

CL B RIPRAP
EST 11 TONS
EST 28 SY FF

MONOLITHIC CONC ISLAND

GRADE TO DRAIN

REMOVE 30" OF PVC

REMOVE PAVEMENT

US TO EBL 24' BST

US TO WBL 24' BST

S 82° 11' 38.7" E

-Y15-

MARK IN TOP OF PIPE

16" DIP WATER

-Y15- PC Sta. 28+18.51

CL B RIPRAP
EST 11 TONS
EST 28 SY FF

APPROX. LOCATION OF UNDERGROUND JUNCTION BOX

OBLITERATE

48" PLASTIC RAIL

TAIL 2' BASE DITCH
L = 350', S = 0.3%
DDE = 430 CY
SEE DETAIL F

TCC VANDERBUILT LLC
DB 1135 - PG 794
PC 6 - PG 230

ISF BUS

REBECCA V. L. HODGES
C/O C. GRAY JOHNSEY
DB 933 - PG 149

350' LANE DROP

THE HERRING FAMILY, LLC
DB 1202 - PG 592
MB 3 - PG 68

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mlaugisch
AT REN\221502

GRAPHIC SCALE

50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-34/CONST.29
R/W SHEET NO.	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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mbaugisch AT RENV22\602

GRAPHIC SCALE

50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-35/CONST.30
R/W SHEET NO.	30
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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mlaugsch AT RENV22502

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GRAPHIC SCALE

50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-36/CONST.31
R/W SHEET NO.	31
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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GRAPHIC SCALE

50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-37/CONST.32
R/W SHEET NO.	32
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-38/CONST.33
R/W SHEET NO.	33
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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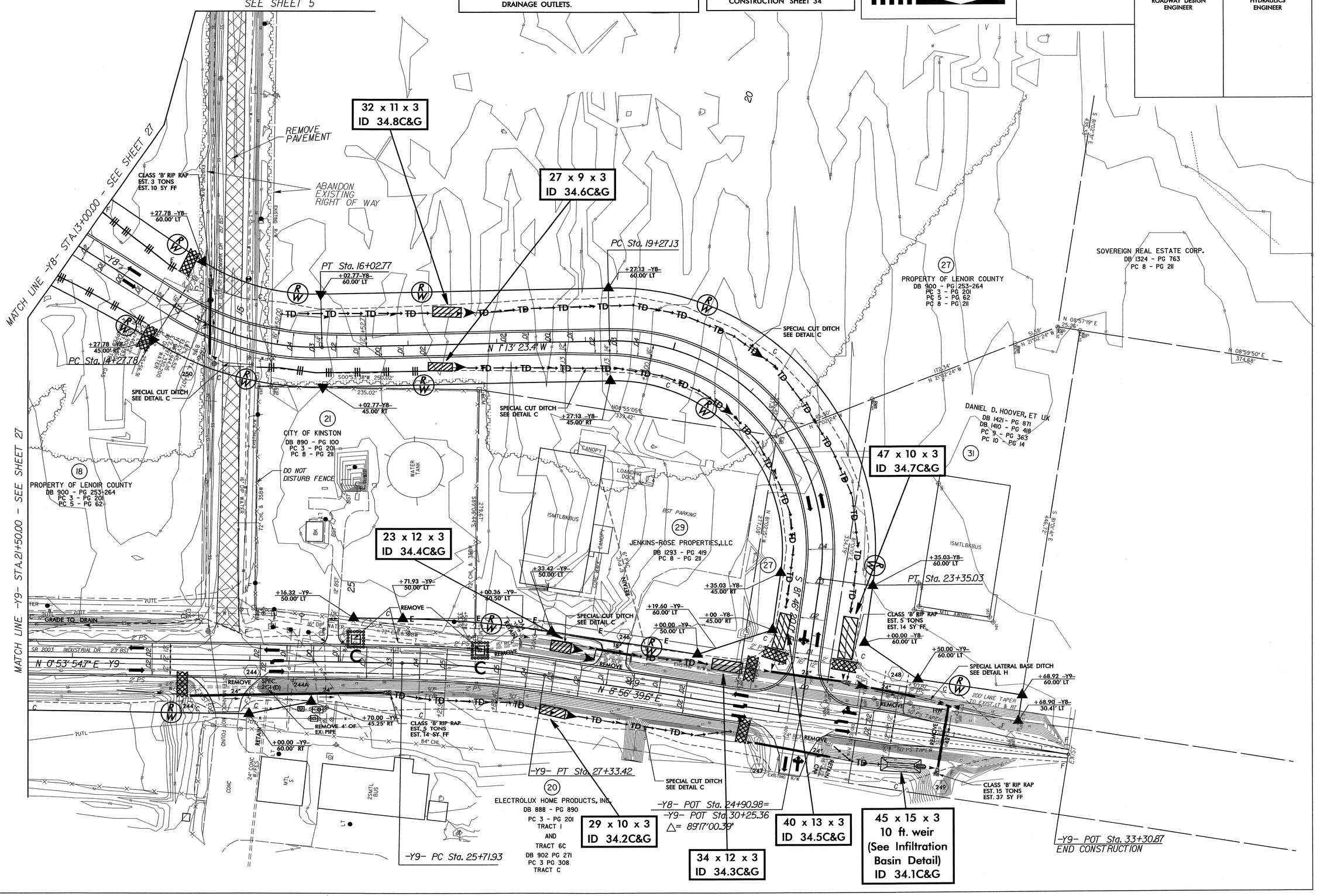
mdugan AT RENV221502

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-39/CONST.34
R/W SHEET NO.	34
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 34

GRAPHIC SCALE
50 25 0 50 100



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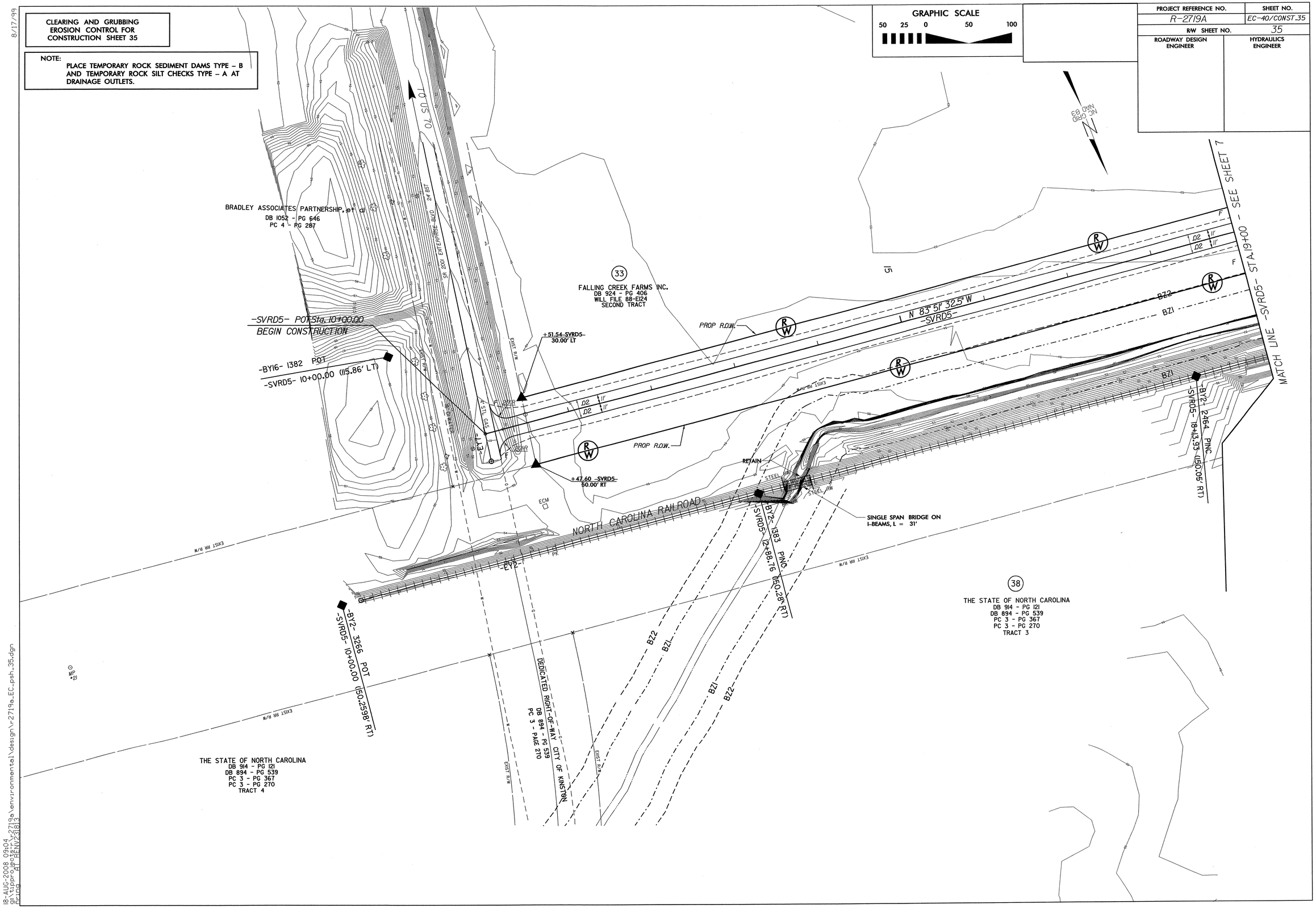
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 35

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

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-40/CONST.35
R/W SHEET NO.	35
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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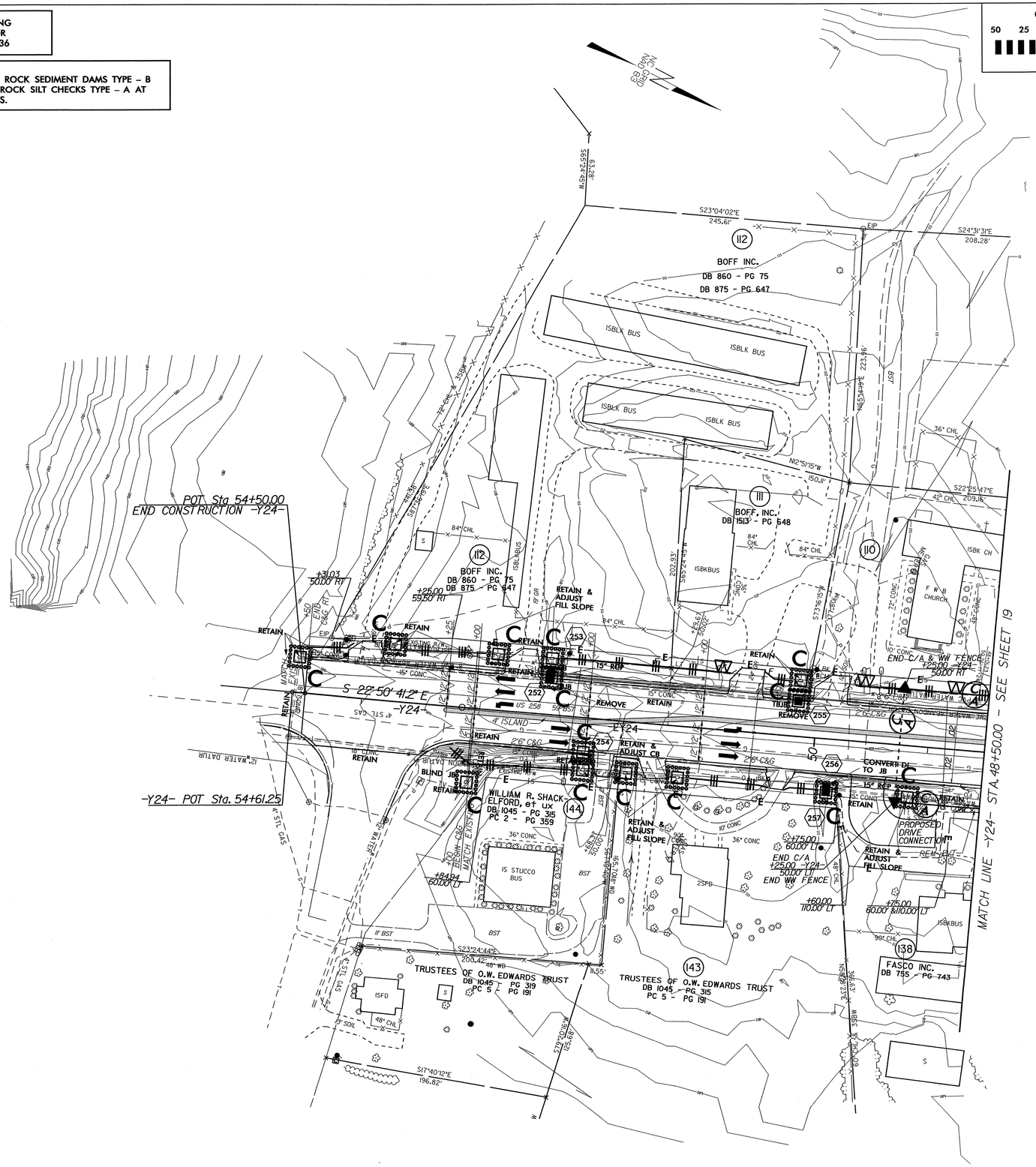
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 36

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

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-41/CONST.36
R/W SHEET NO.	36
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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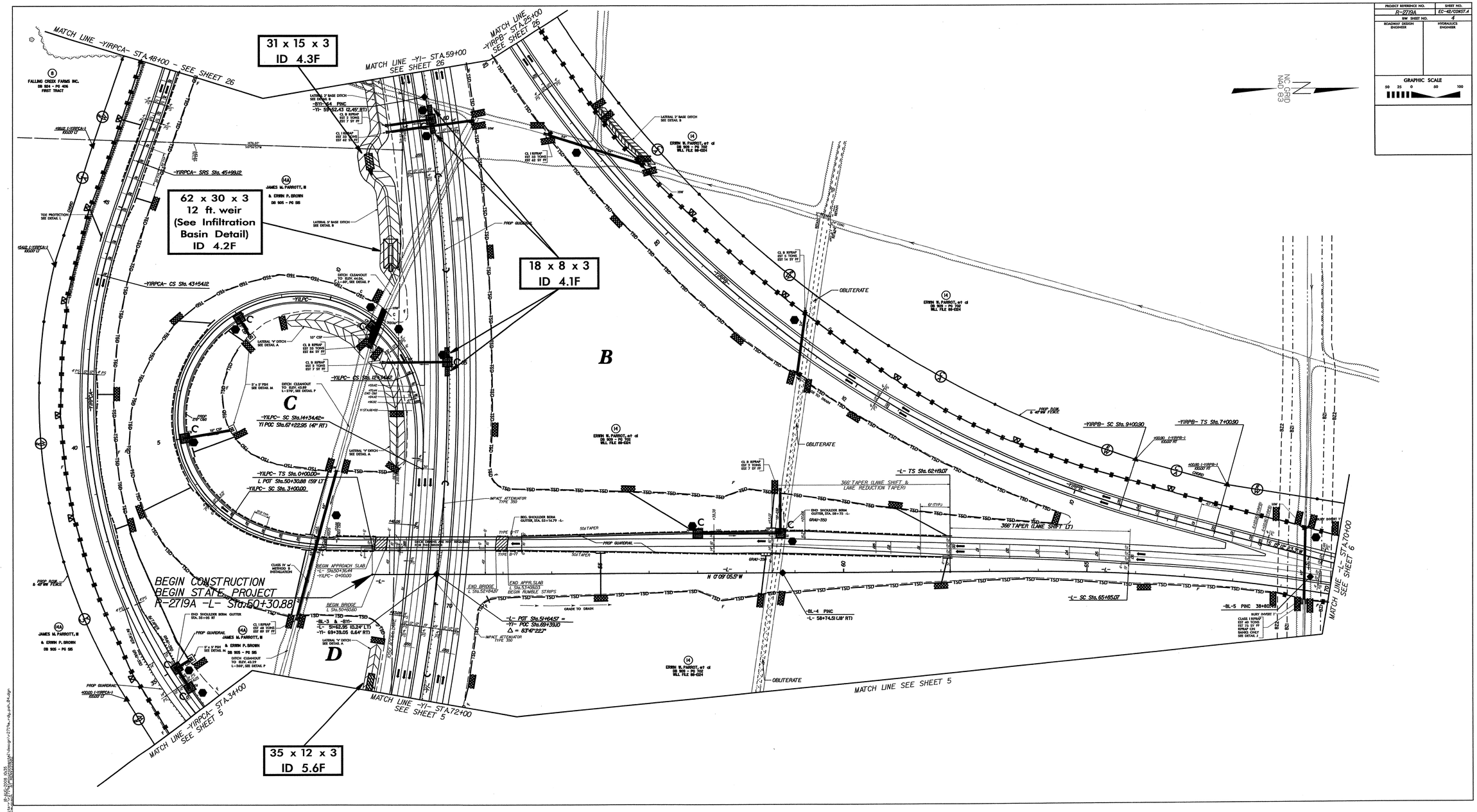
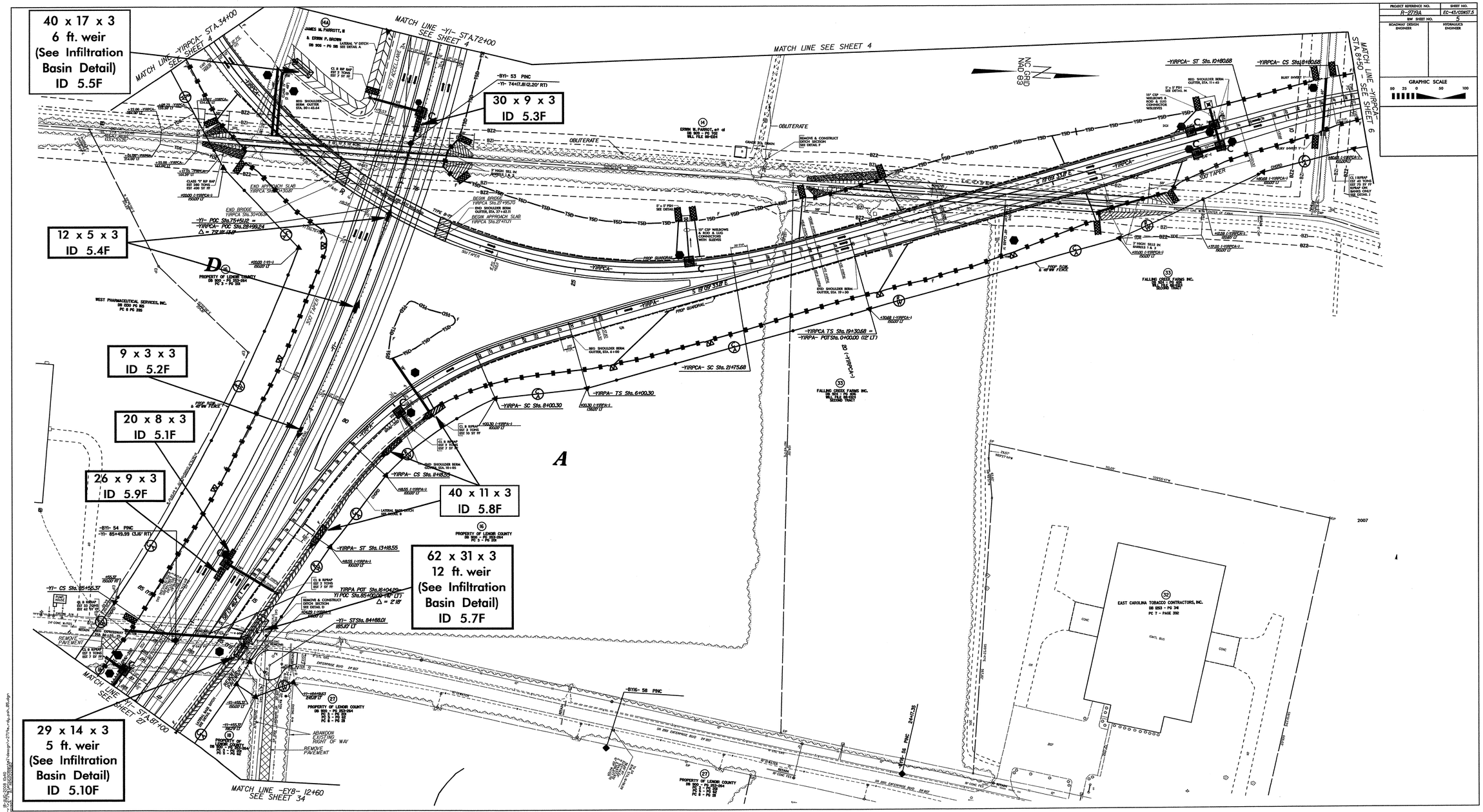
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-42/CONST.4
R/W SHEET NO.	4
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100





PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-43/CONST.5
R/W SHEET NO.	5
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-44/CONST.6
R/W SHEET NO.	6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

TEMPORARY EARTH BERM

(Not to Scale)

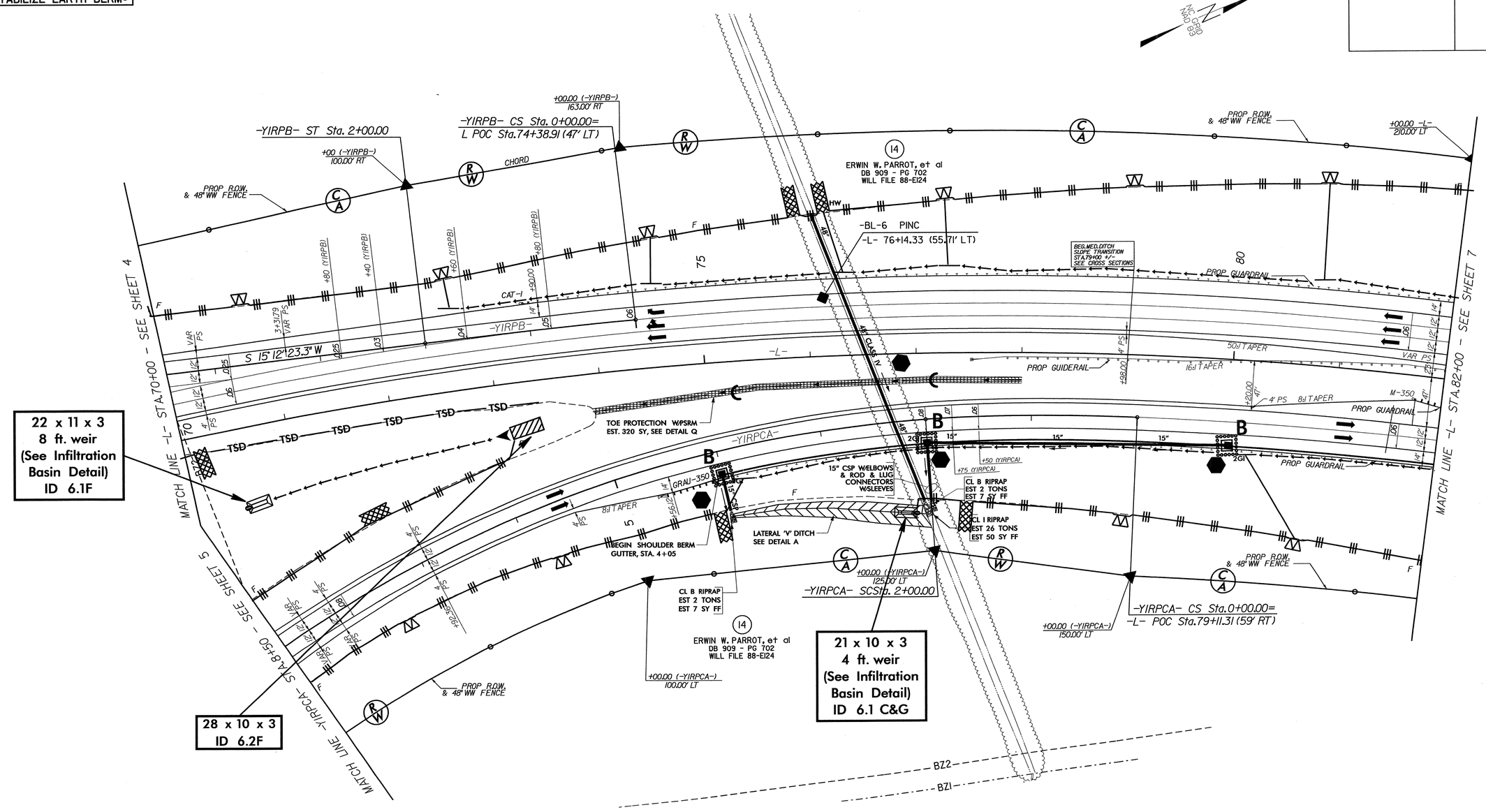
Natural Ground — B — 1H — D — 1H

D = 1Ft.
B = 1Ft.

STABILIZE EARTH BERM

GRAPHIC SCALE

50 25 0 50 100



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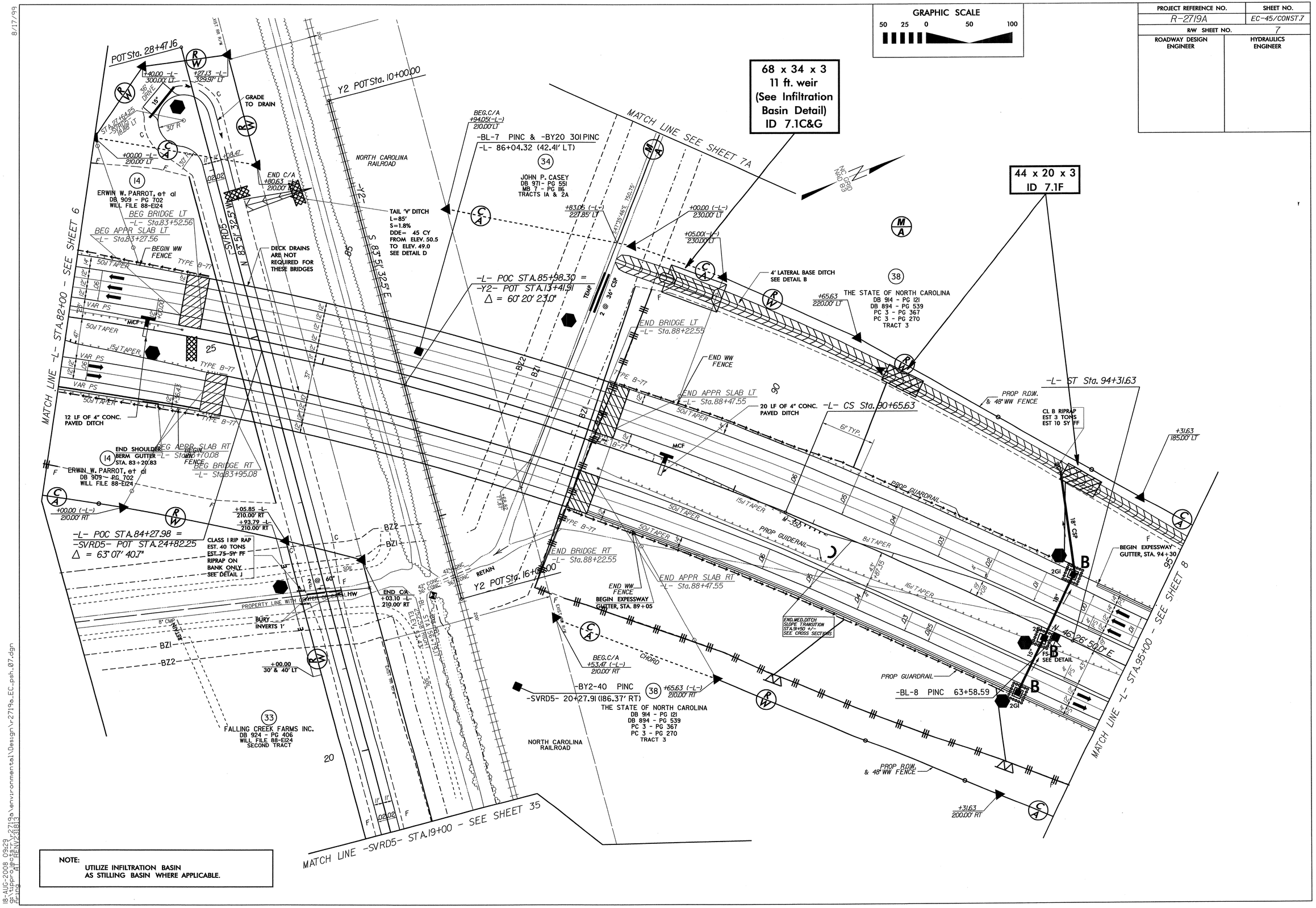
mring AT TEMV23B13

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-45/CONST.7
R/W SHEET NO.	7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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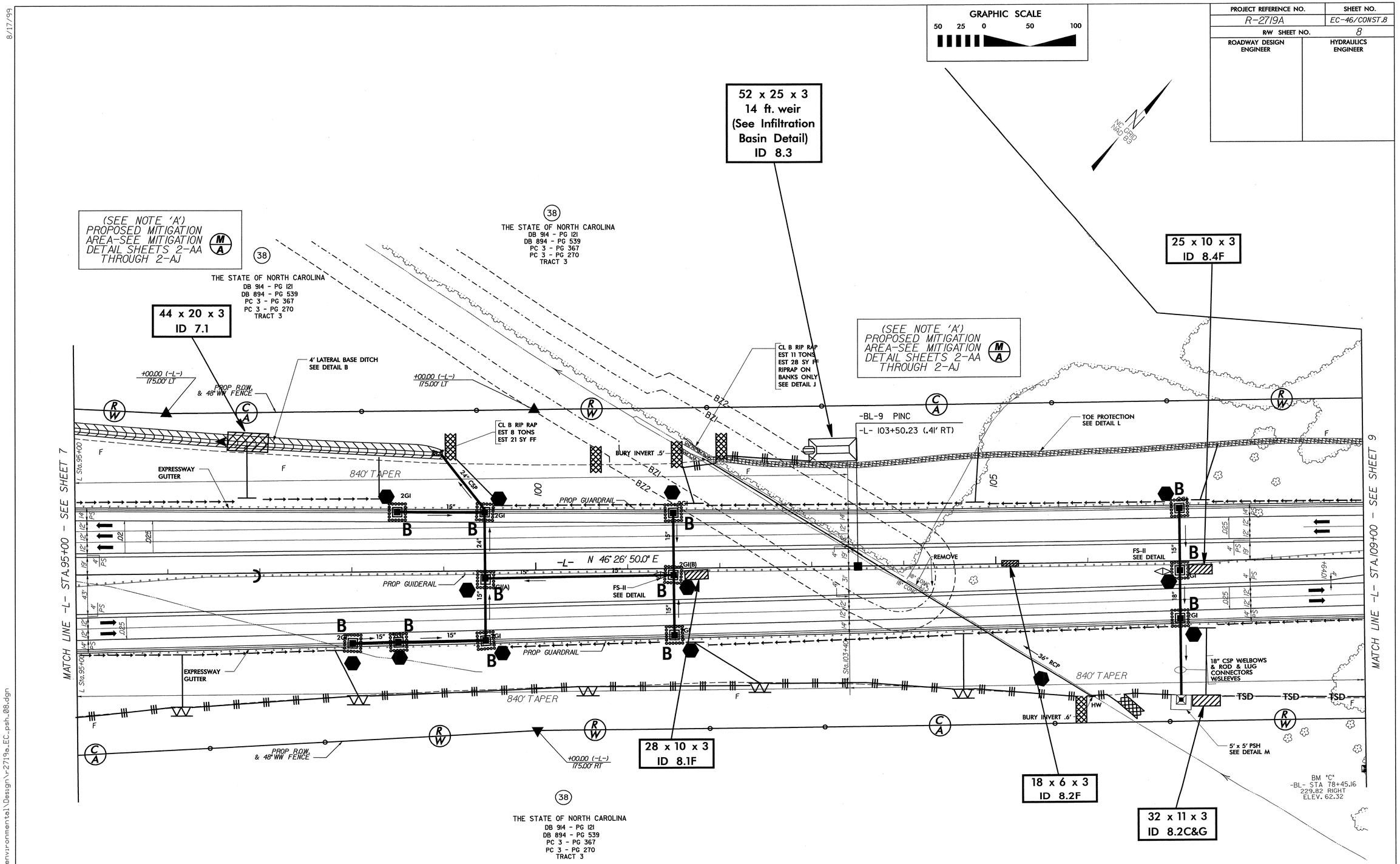
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-46/CONST.8
R/W SHEET NO.	8
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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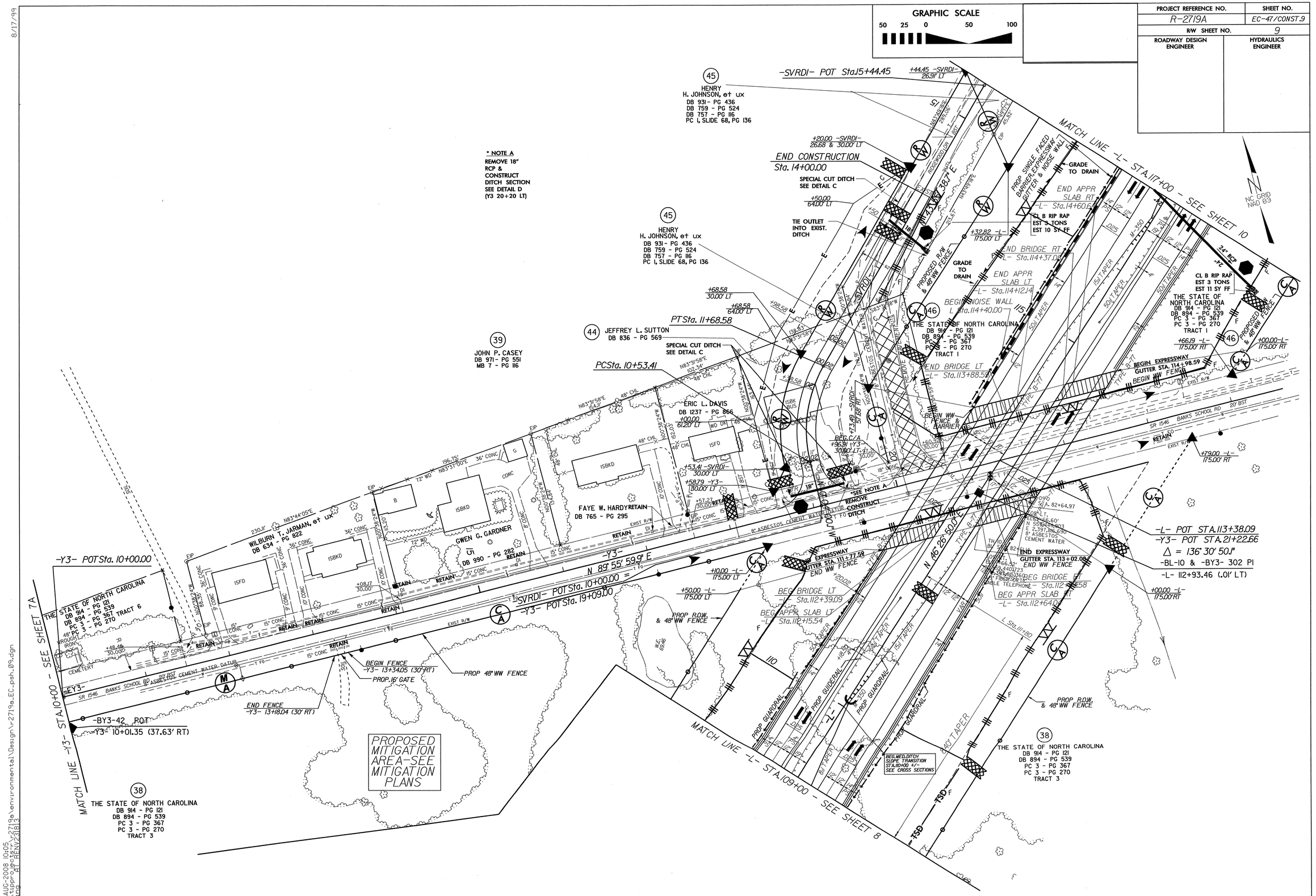
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-47/CONST.9
R/W SHEET NO.	9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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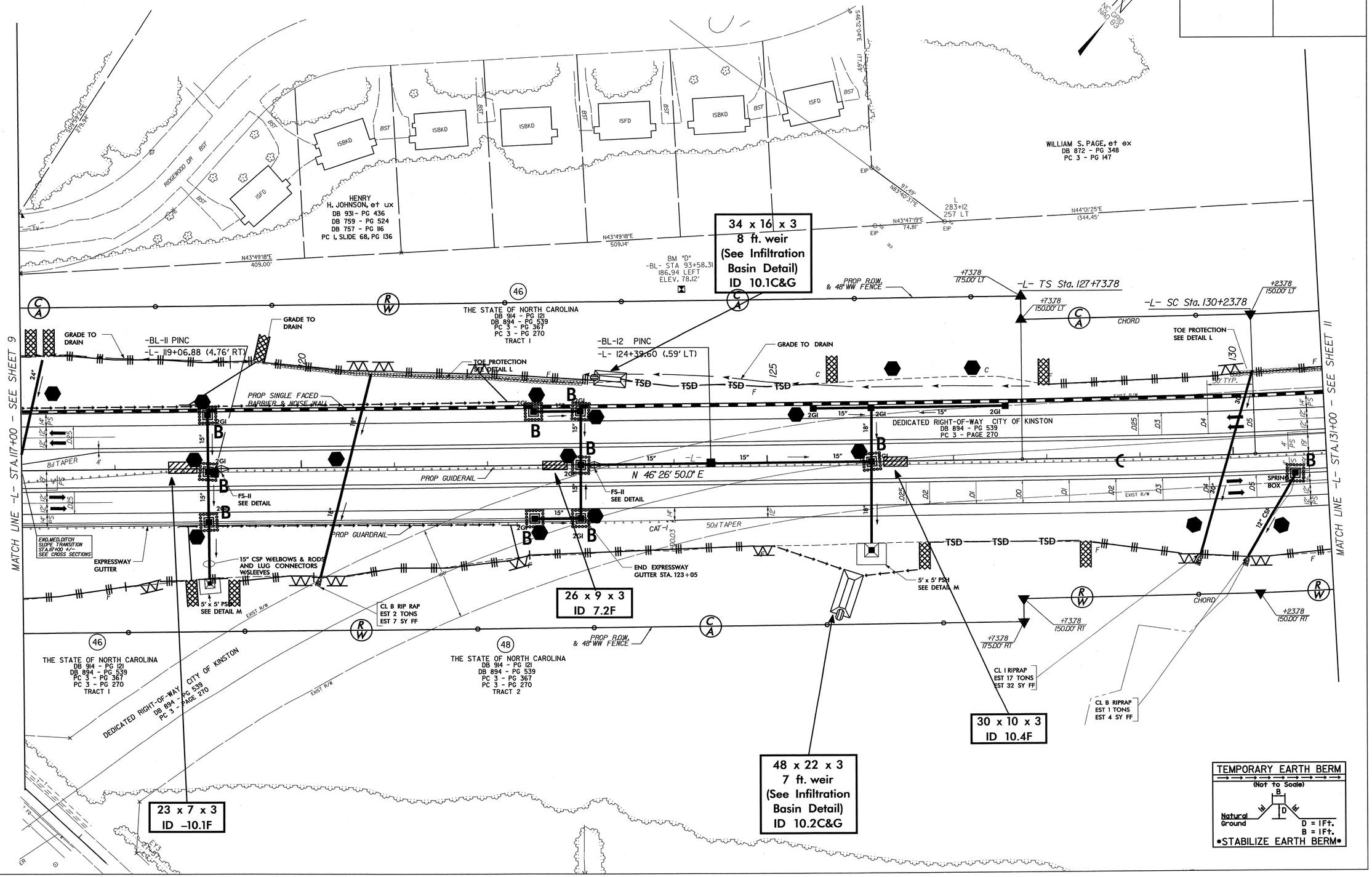
Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-48/CONST.10
R/W SHEET NO.	10
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



TEMPORARY EARTH BERM
(Not to Scale)
Natural Ground
D = 1Ft.
B = 1Ft.
STABILIZE EARTH BERM

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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-49/CONST.11
R/W SHEET NO.	11
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100

Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

24 x 12 x 3
11 ft. weir
(See Infiltration Basin Detail)
ID 11.3C&G

25 x 8 x 3
ID 11.2F

22 x 10 x 3
ID 11.1F

20 x 6 x 3
ID 11.4C&G

27 x 8 x 3
ID 11.3F

33 x 15 x 3
6 ft. weir
ID 11.2C&G

53 x 26 x 3
12 ft. weir
(See Infiltration Basin Detail)
ID 11.1 C&G

WILLIAM S. PAGE, et ux
DB 872 - PG 348
PC 3 - PG 147

THE STATE OF NORTH CAROLINA
DB 914 - PG 121
DB 894 - PG 539
PC 3 - PG 367
PC 3 - PG 270
TRACT 1

THE STATE OF NORTH CAROLINA
DB 914 - PG 121
DB 894 - PG 539
PC 3 - PG 367
PC 3 - PG 270
TRACT 2

HATTIE E. DALY ESTATE
DB 21 - PG 430
MB 7 - PG 141

ELLIS A. KING, et ux
DB 761 - PG 808
DB 944 - PG 43
MB 13 - PG 136
MB 14 - PG 68
MB 14 - PG 116
MB 15 - PG 110
PC 5 - PG 112

CITY OF KINSTON
DEDICATED RIGHT-OF-WAY
DB 894 - PG 539
PC 3 - PAGE 270

MATCH LINE -L- STA.131+00 - SEE SHEET 10

MATCH LINE -L- STA.144+50 - SEE SHEET 12

-BL-13 PINC
-L- 131+04.01 (6.45' RT)

-BL-14 PINC
-L- 135+29.64 (5.88' LT)

-BL-16 PINC
-L- 143+29.77 (11.75' LT)

-BL-15 PINC
-L- 139+77.15 (9.89' LT)

N44°01'25"E
1344.45'

N44°01'26"E
16.85'

BEGIN EXPRESSWAY GUTTER STA. 139+45 LT

END EXPRESSWAY GUTTER STA. 143+00 LT

END EXPRESSWAY (+50)* SEE NOTE ABOVE
GUTTER STA. 139+40 RT
+30 BEGIN SINGLE FACED BARRIER & NOISE WALL

END NOISE WALL AND BARRIER L Sta.132+60.00

TOE PROTECTION SEE DETAIL L

2' HIGH SILL IN WESTERN CELL

CL B RIPRAP
EST 1 TON
EXT 5 SY FF

15" CSP WELBOWS, RODS AND LUG CONNECTORS HW

FLOODPLAIN OVERFLOW PIPE

CL B RIPRAP
EST 2 TON
EST 7 SY FF

CL B RIPRAP
EST 7 TON
EST 22 SY FF

CL I RIPRAP

LATERAL 4' BASE DITCH SEE DETAIL B

LATERAL 'V' DITCH SEE DETAIL A

5' x 5' PSH SEE DETAIL M

FS-I SEE DETAIL

FS-II SEE DETAIL

PROP R.O.W. & 48" WW FENCE

PROP GUIDERAIL

SMALL TREES

BM "E"
-BL-14 STA 107+88.58
184.10' RIGHT
ELEV. 12.57'

+00.00 -L- 150.00' LT

+00.00 -L- 150.00' RT

+22.00 -L- (TDE) 150.00' & 173.00' RT

+18.00 -L- (TDE) 150.00' & 173.00' RT

BEGIN EXP. GUTTER STA. 137+00

NC GRID NAD 83

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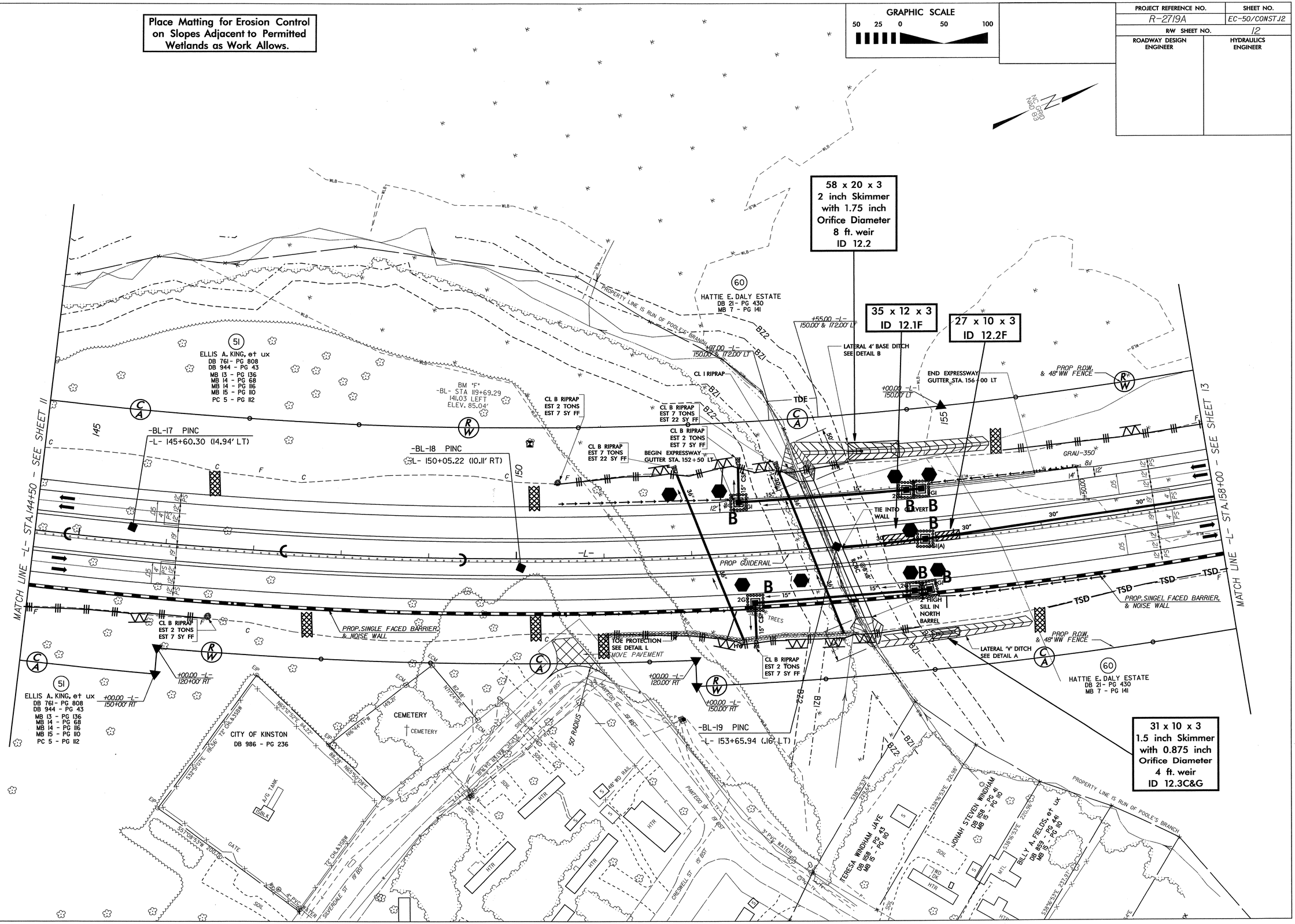
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-50/CONST J2
R/W SHEET NO.	12
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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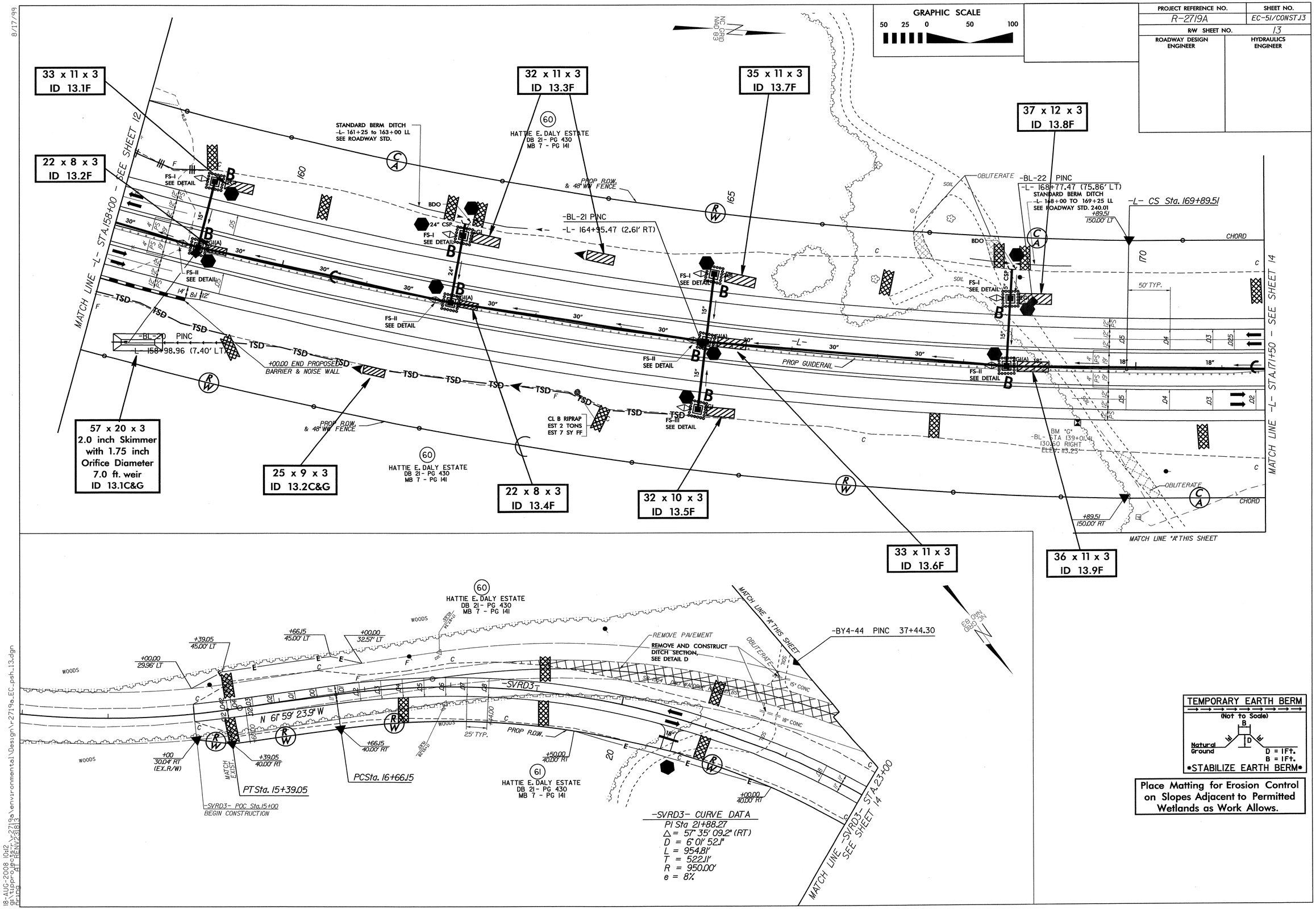
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-5I/CONST.13
R/W SHEET NO.	13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



8/17/99

18-AUG-2008 10:12
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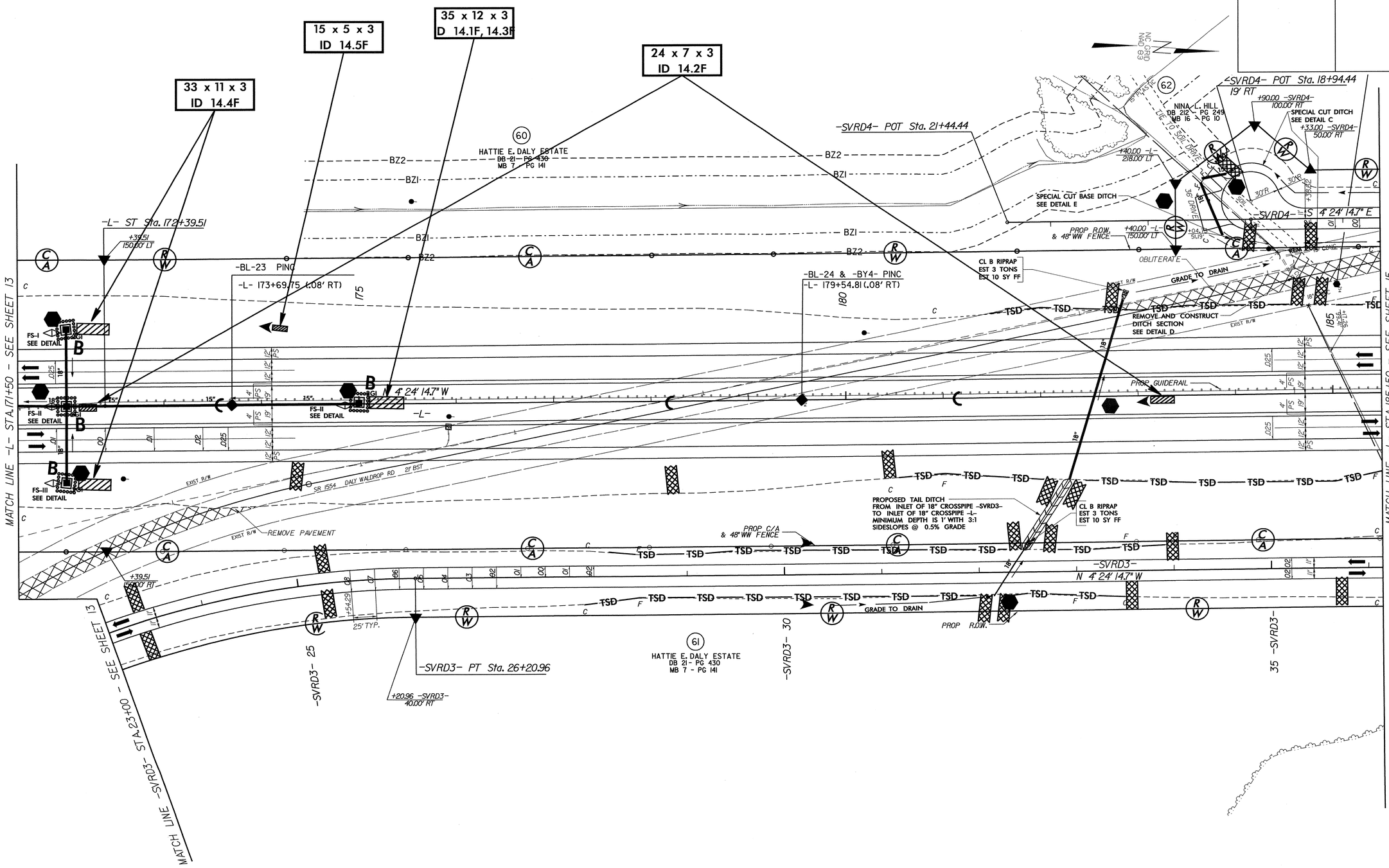
Fring AT REF(r2319)3

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-52/CONST.14
R/W SHEET NO.	14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



8/17/99

18-AUG-2008 10:15
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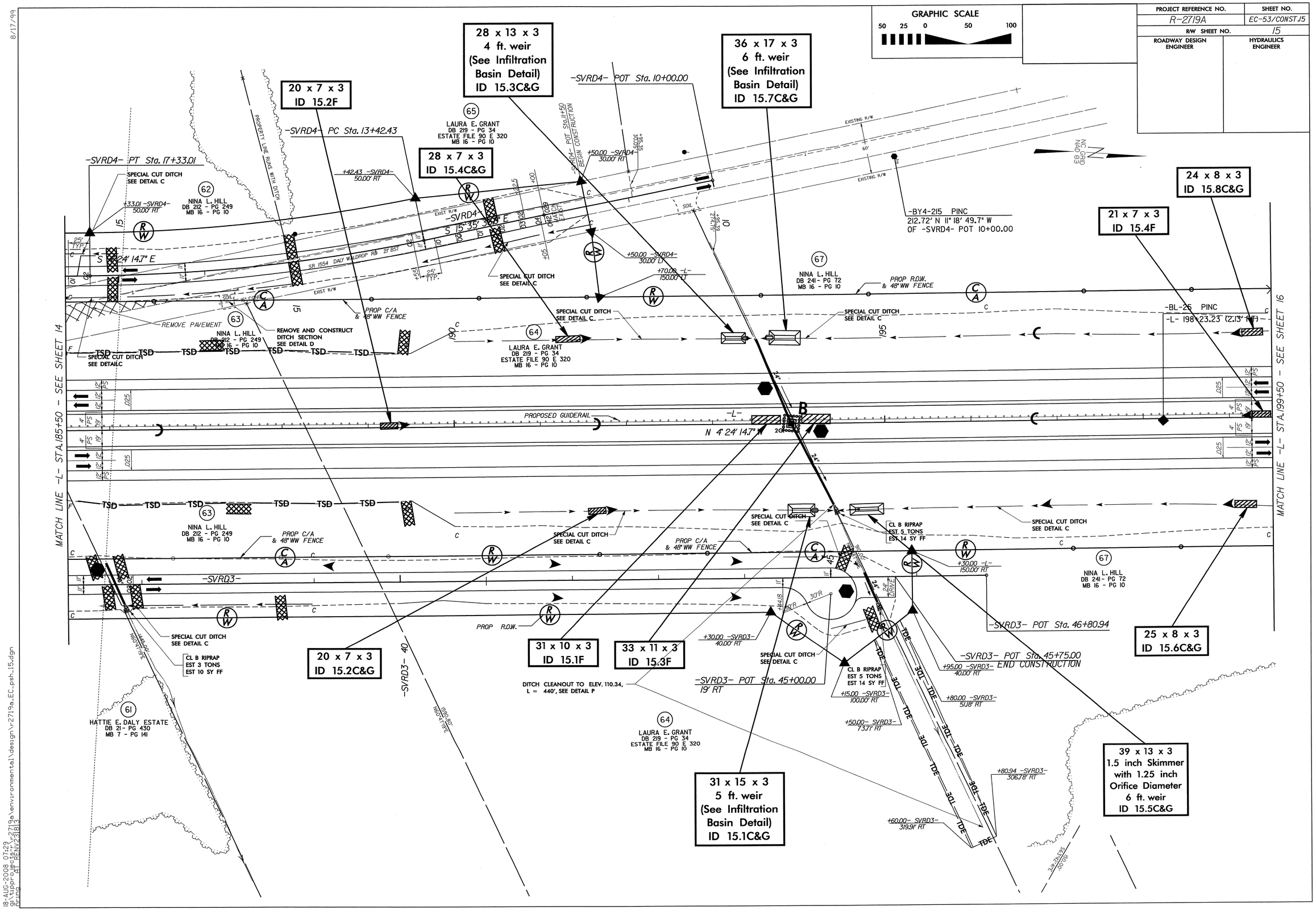
pmg AT TENTZ&BIG

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-53/CONST.15
R/W SHEET NO.	15
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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18-AUG-2008 07:29
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Spring RT REN\26813

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-54/CONST.J6
R/W SHEET NO.	16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
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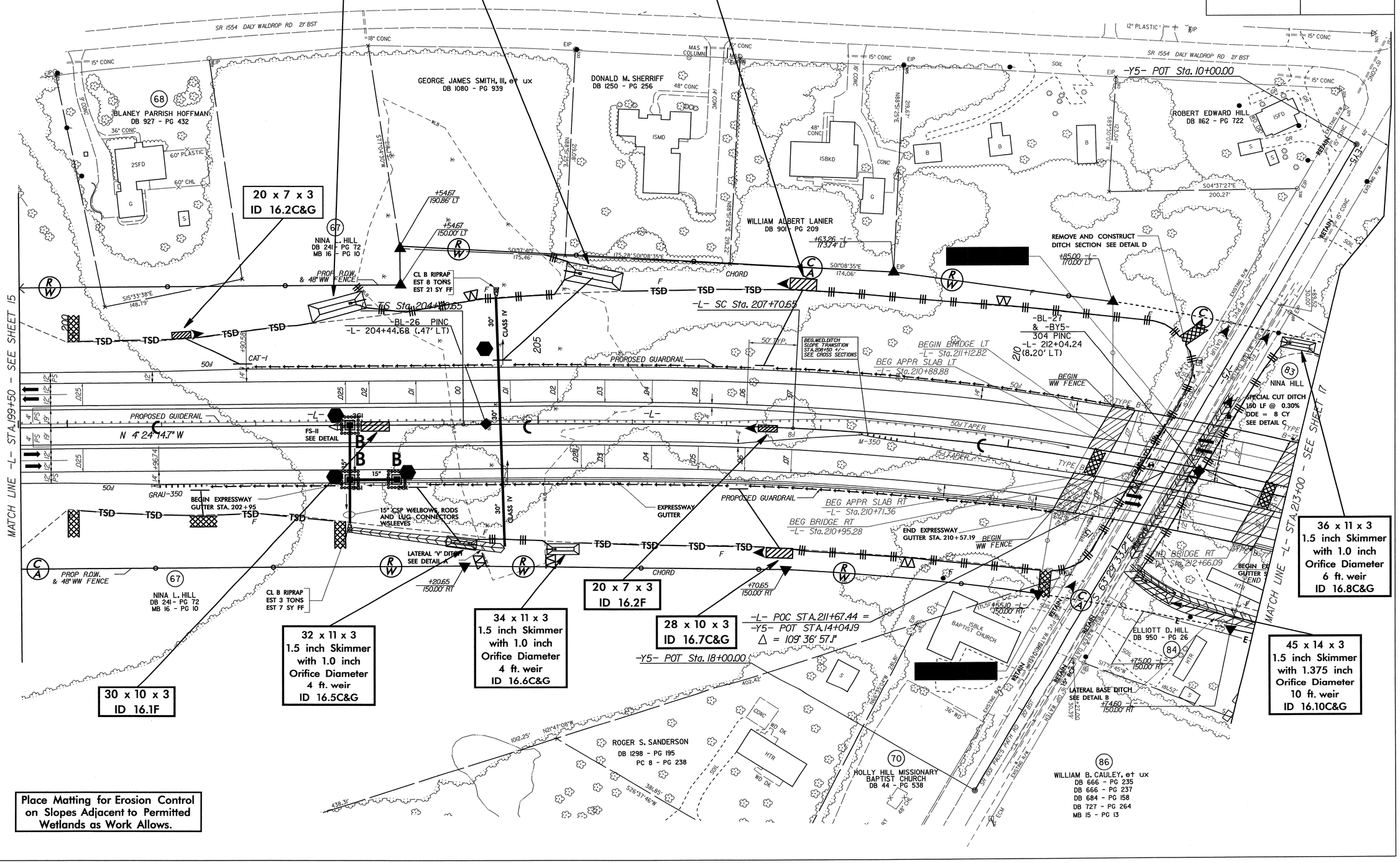
NC GRID NAD 83



Place Matting for Erosion Control on Slopes Adjacent to Permitted Wetlands as Work Allows.

8/17/99

18-AUG-2008 07:32
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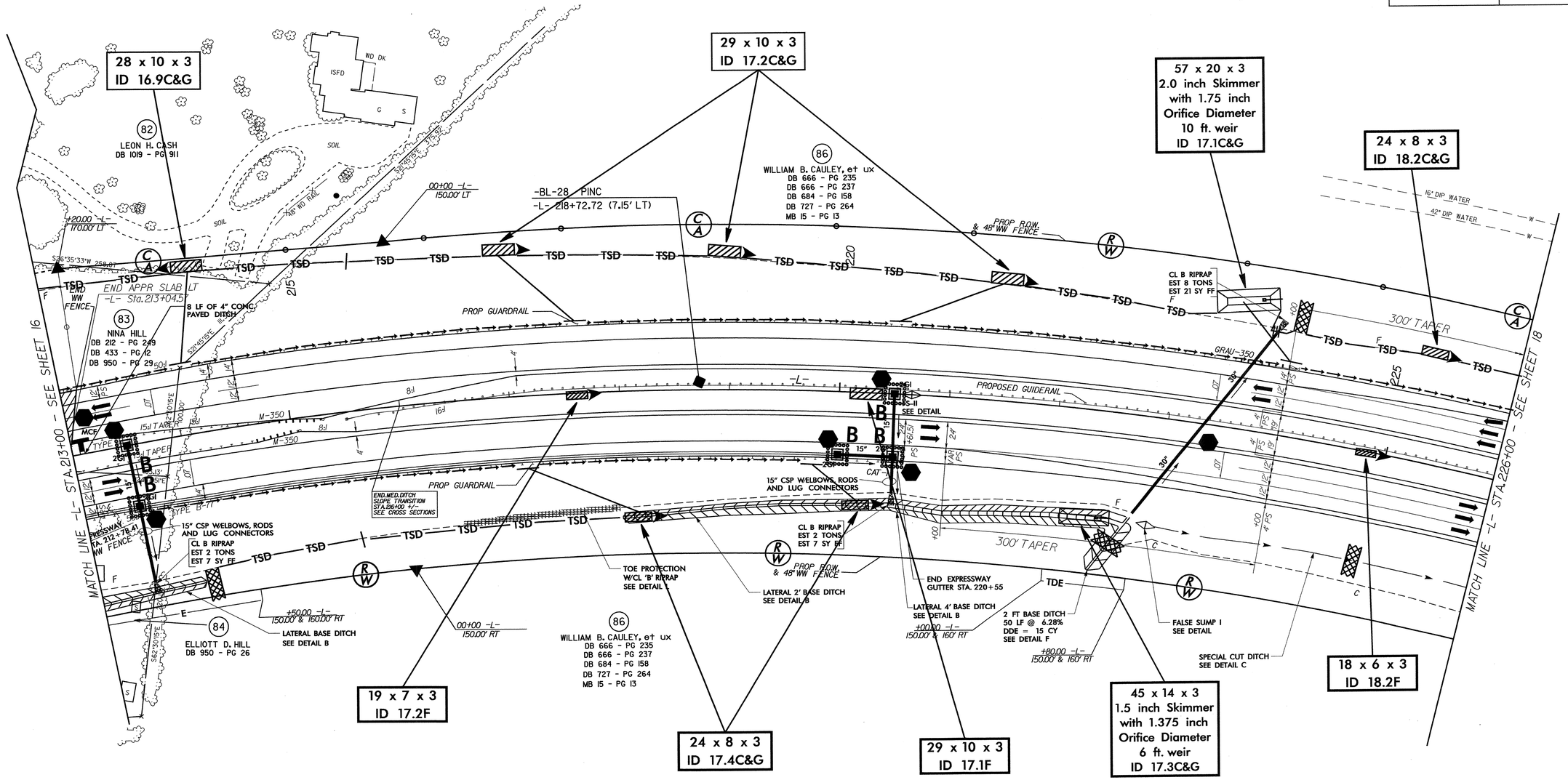
Spring at Henry Smith

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-55/CONST.J7
R/W SHEET NO.	17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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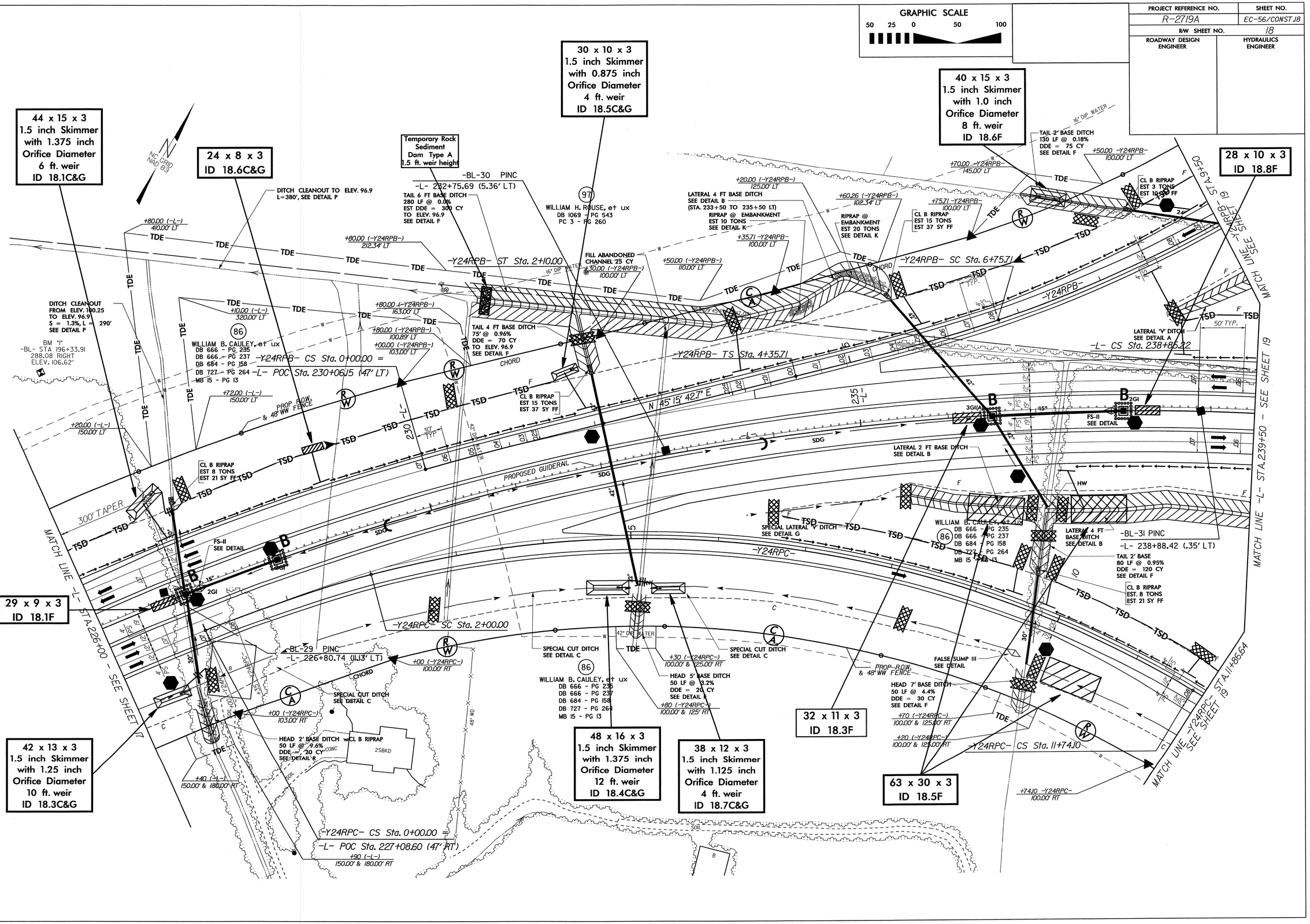
mring AT TENV23183

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-56/CONST.18
R/W SHEET NO.	18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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18-AUG-2008 13:03
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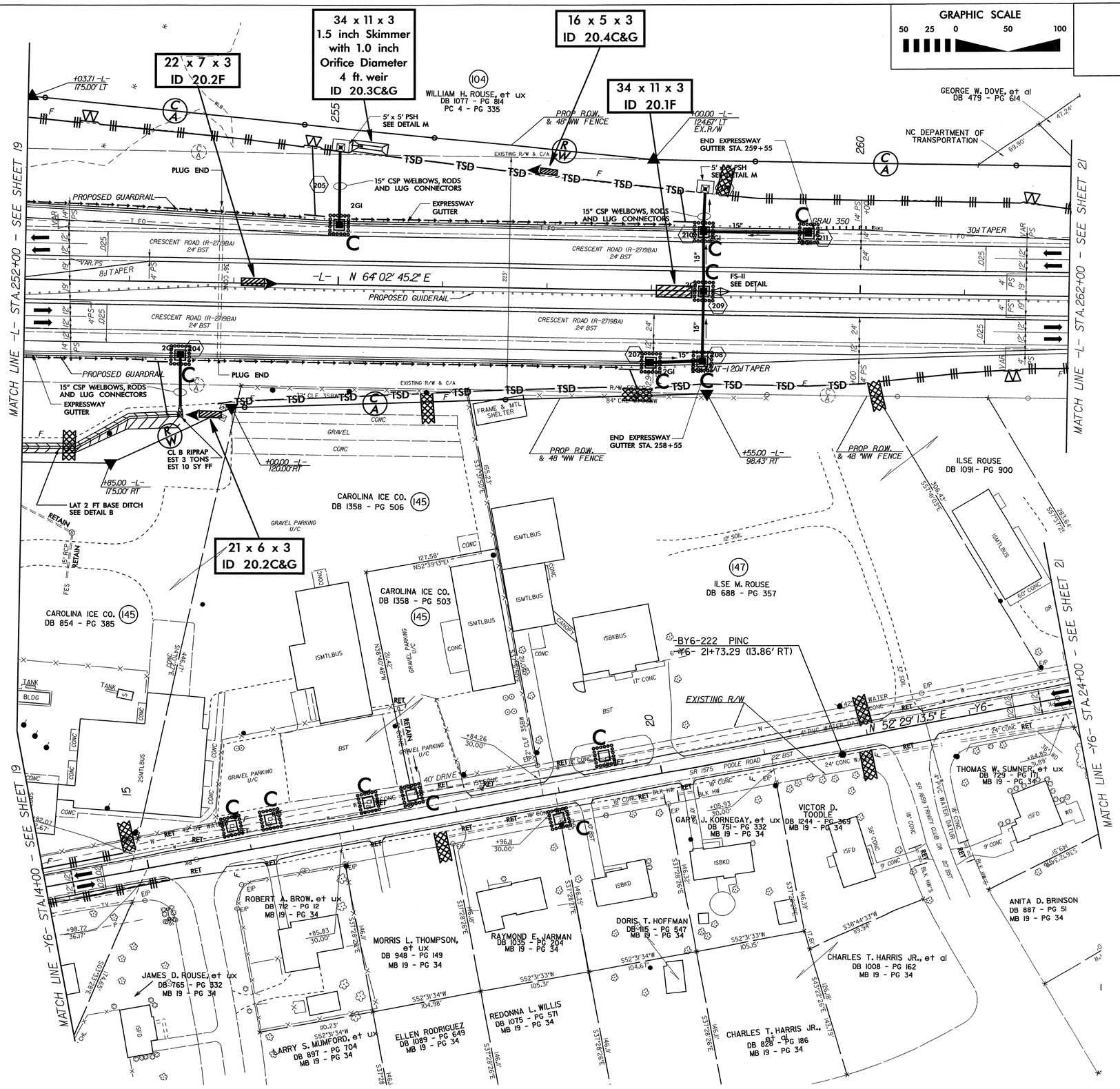
prong
RT DENV2.8.13

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-57/CONST.19
S/W SHEET NO. 19	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-58/CONST.20
R/W SHEET NO.	20
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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Pring

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-59/CONST.21
R/W SHEET NO.	21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE
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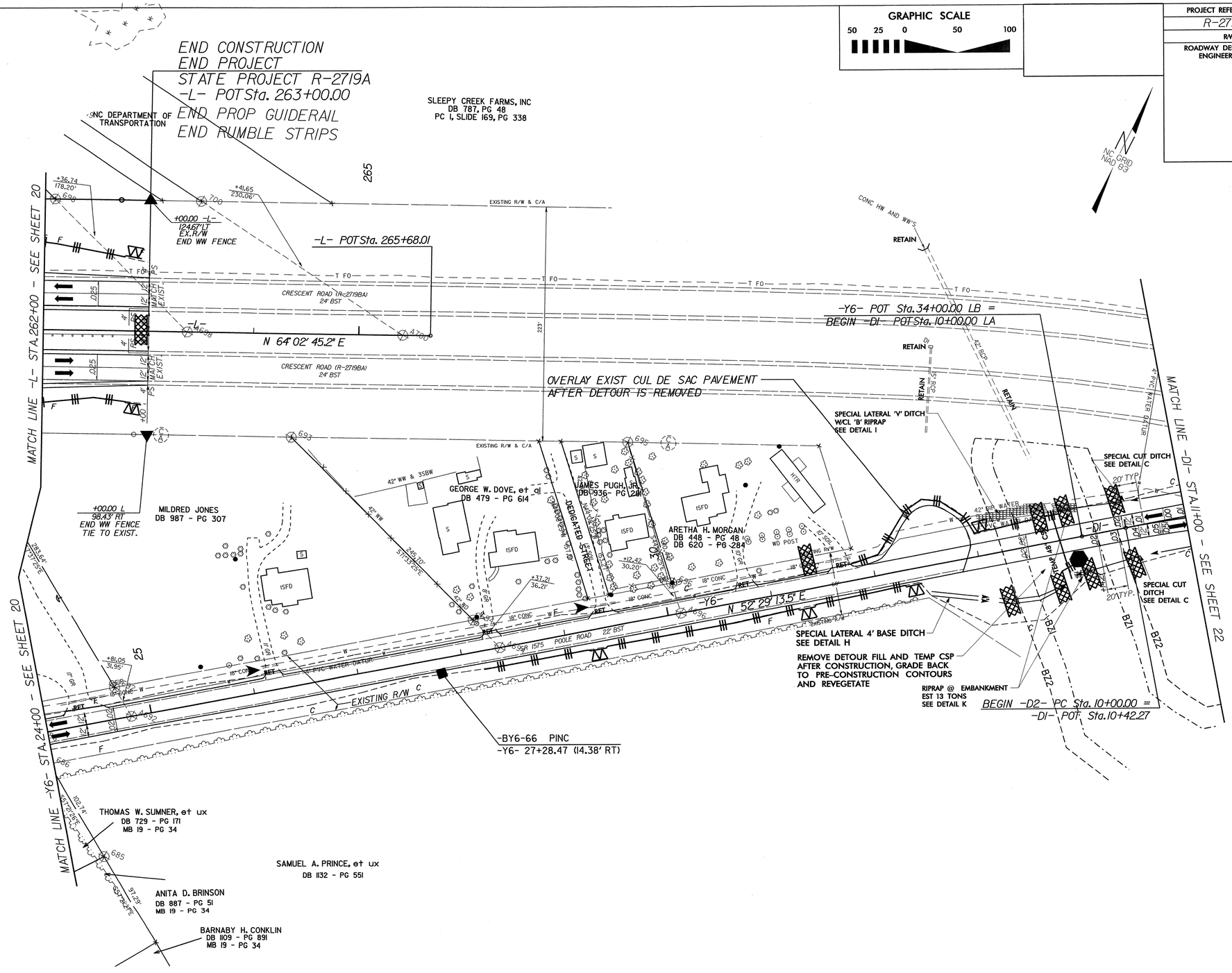

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ring 41 (R-2613)

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GRAPHIC SCALE
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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-60/CONST.22
R/W SHEET NO.	22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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03-FEB-2009 15:12
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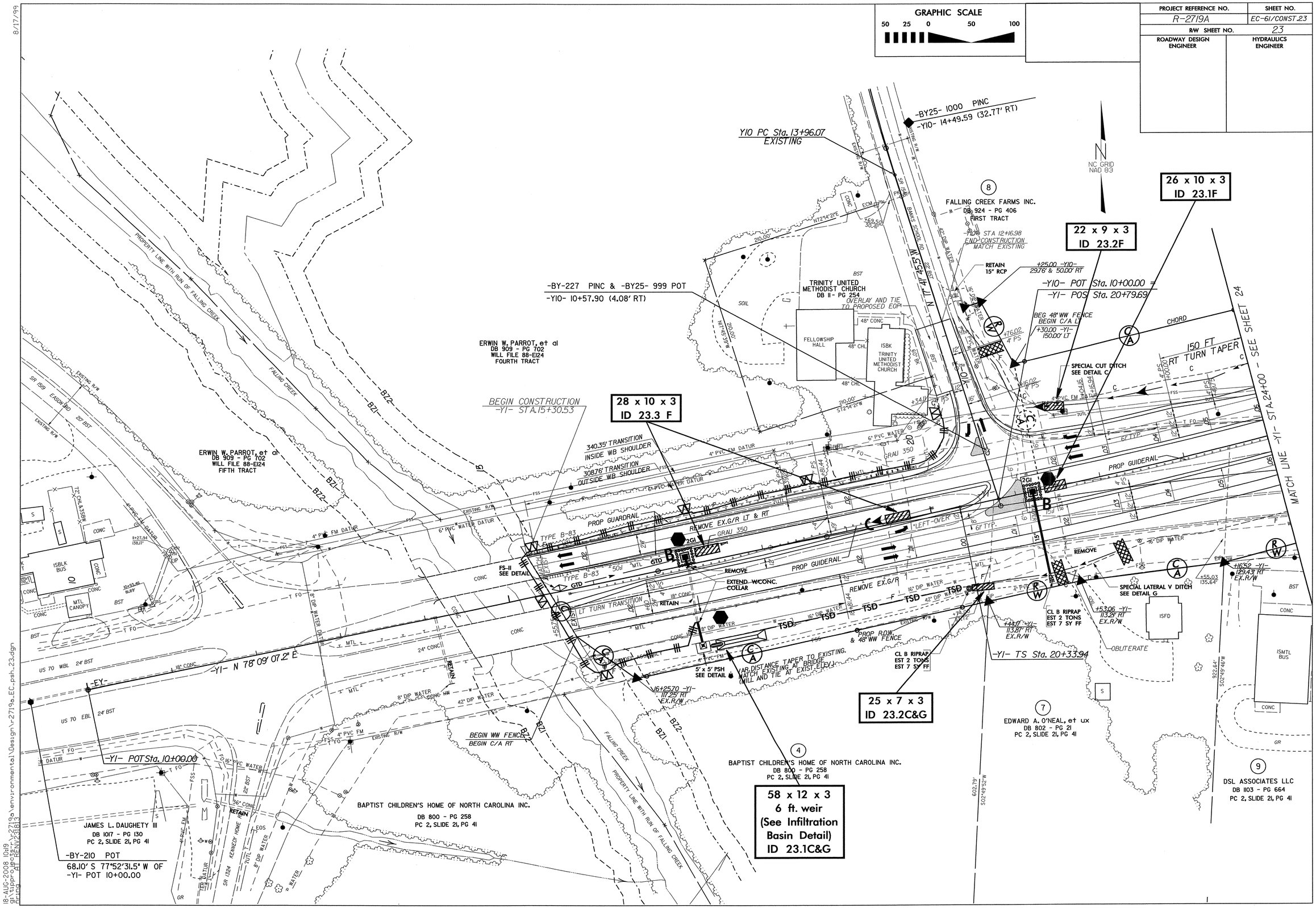
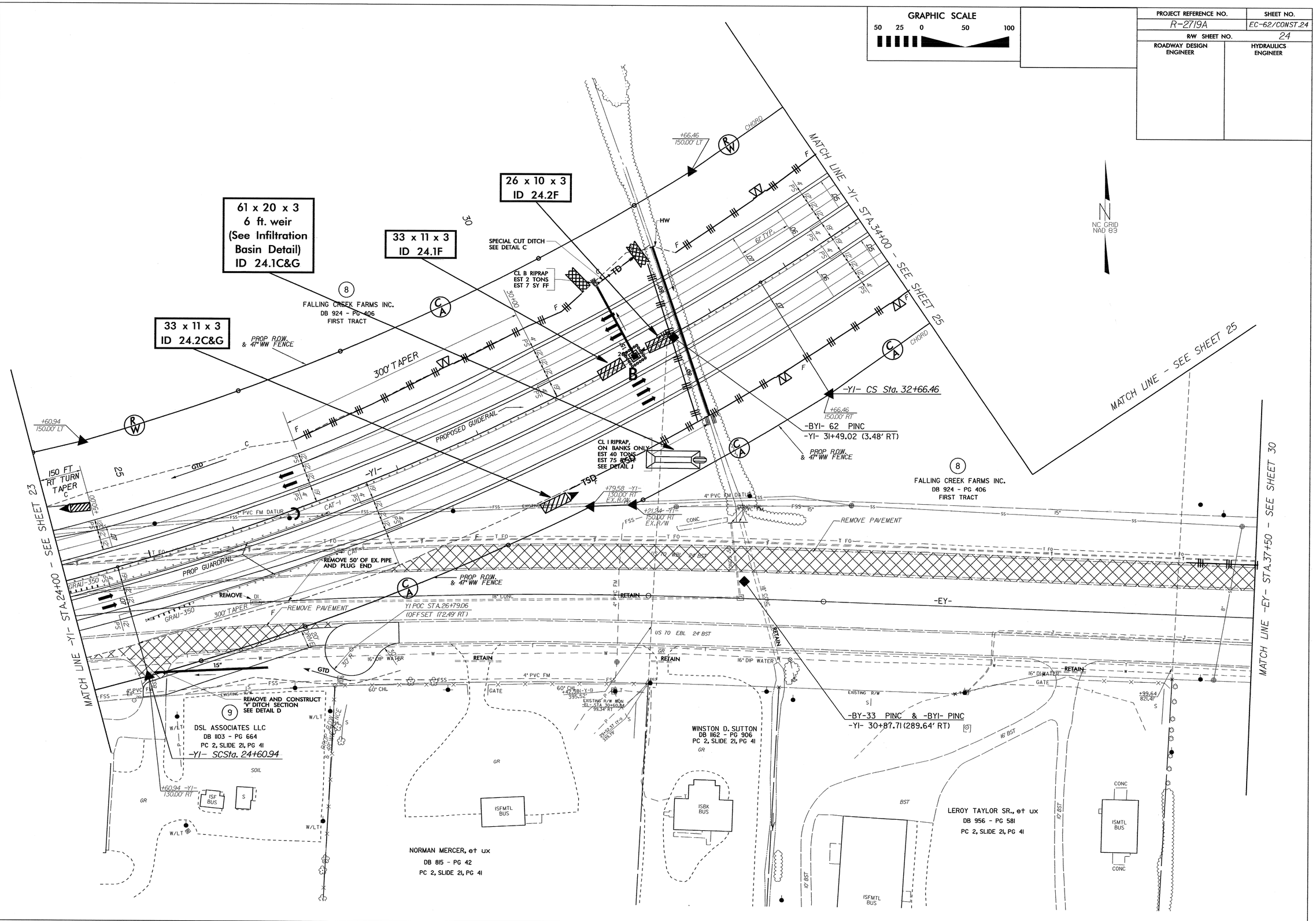
mlaugisch AT PENV22150Z

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-61/CONST.23
R/W SHEET NO.	23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-62/CONST.24
R/W SHEET NO.	24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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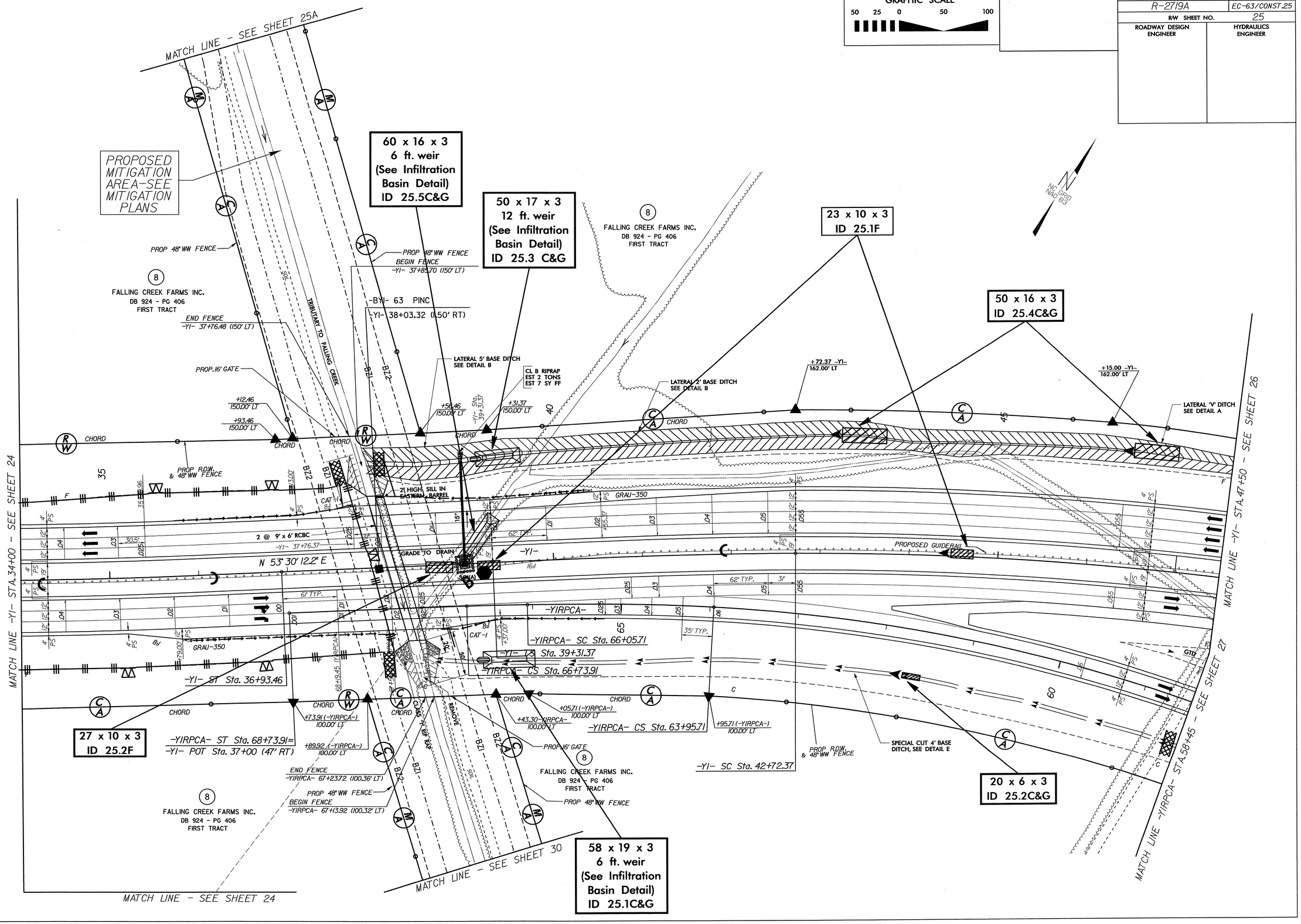
mlaqisch AT REN\221502

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-63/CONST.25
R/W SHEET NO.	25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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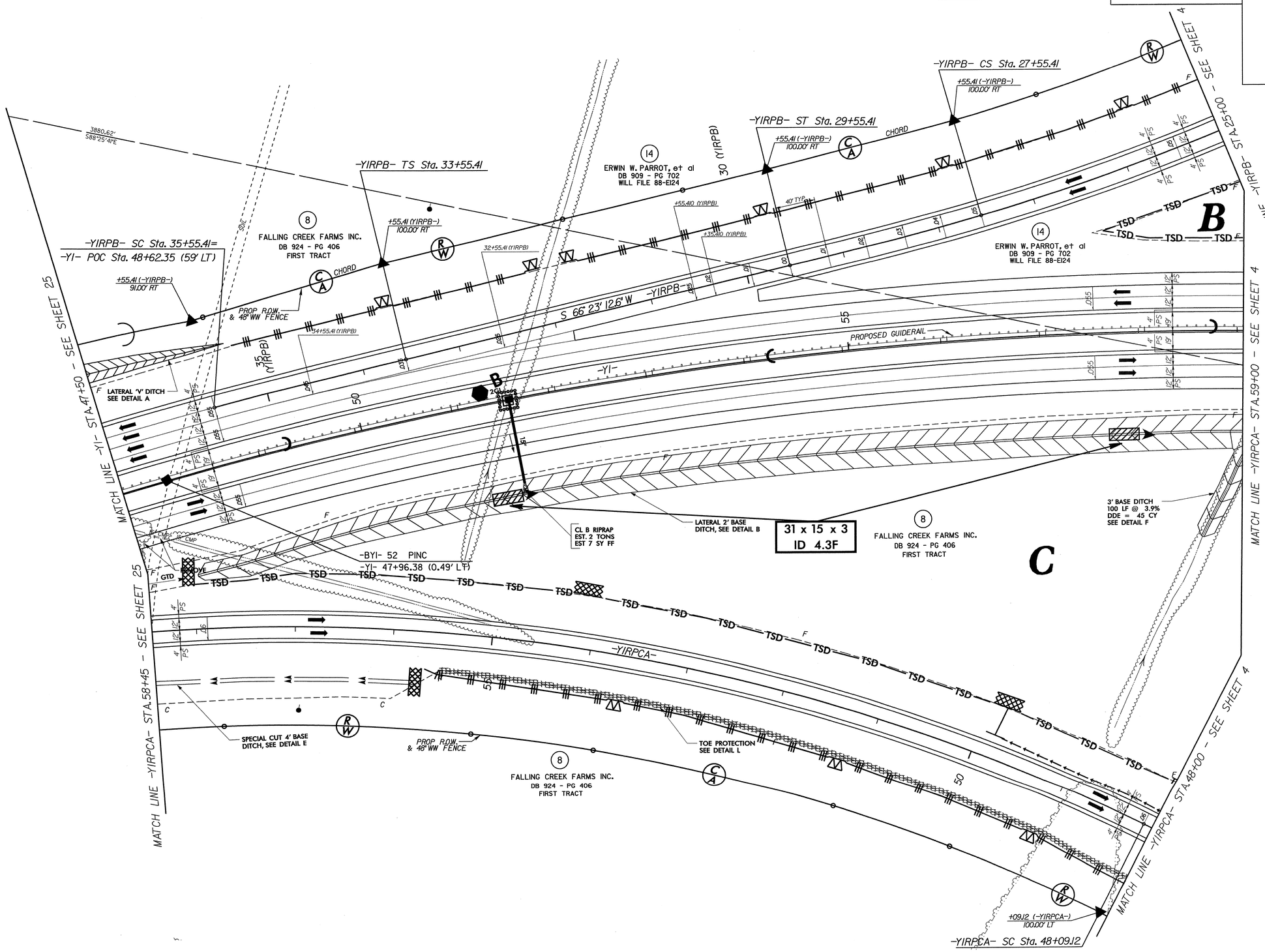
pmng

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-64/CONST.26
R/W SHEET NO.	26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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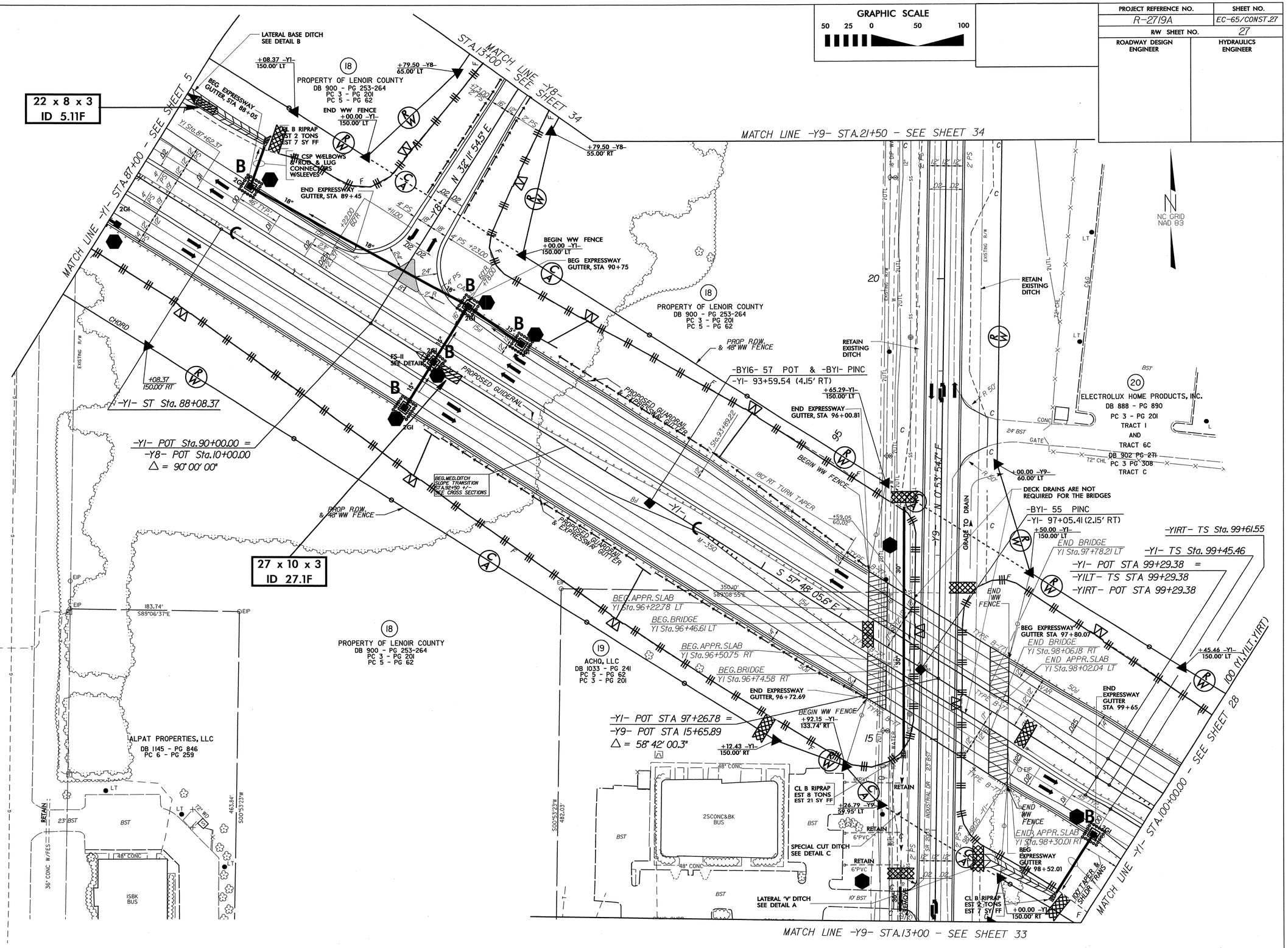
mrong AT REV:2.8.3

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-65/CONST.27
R/W SHEET NO.	27
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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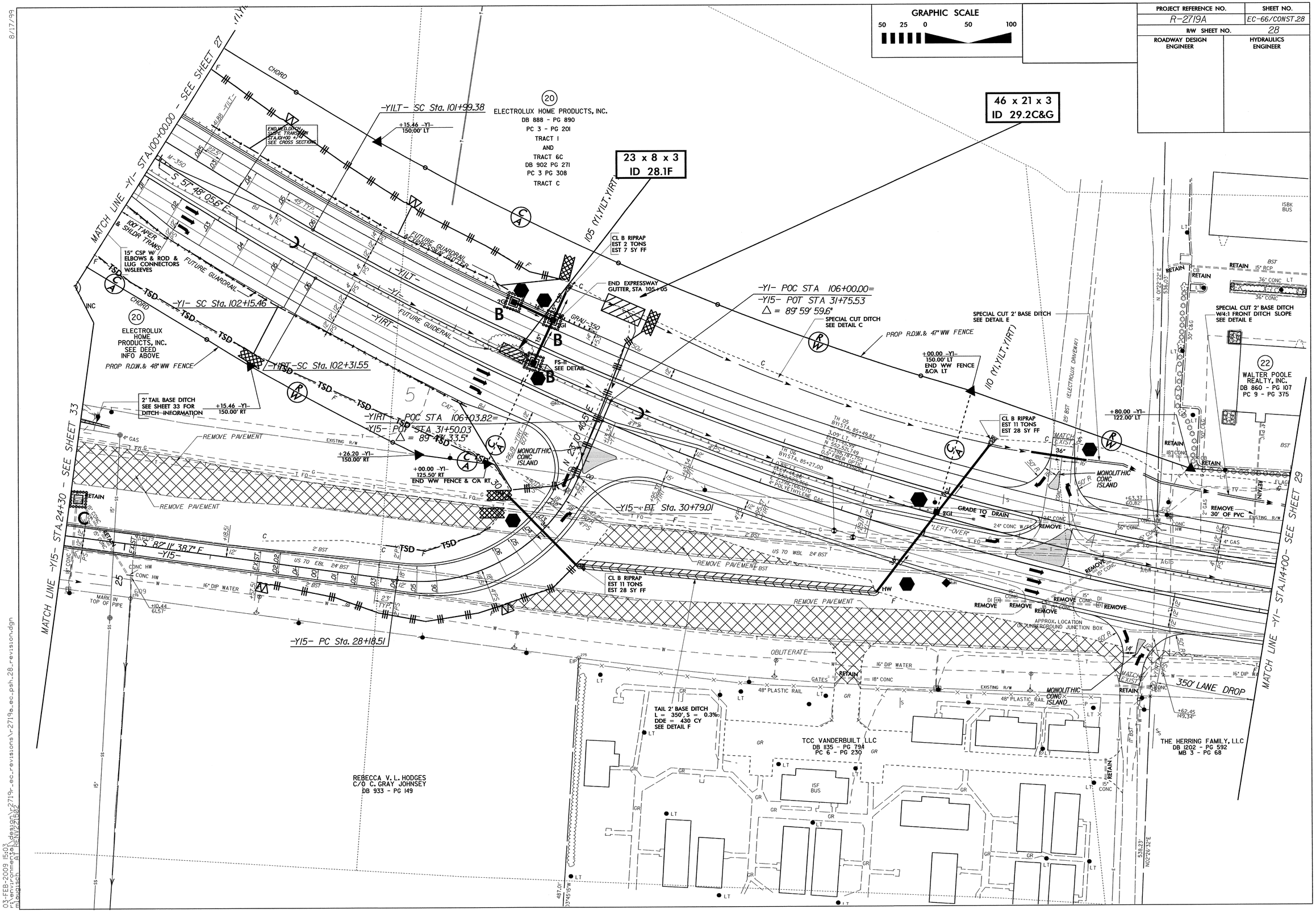
string 41 REV:08/13

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-66/CONST.28
RW SHEET NO.	28
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



GRAPHIC SCALE

50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-67/CONST.29
R/W SHEET NO.	29
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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mlaqisch AT RENV22L02

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GRAPHIC SCALE

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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-68/CONST.30
R/W SHEET NO.	30
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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mlaugsch AT TENV22502

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GRAPHIC SCALE

50 25 0 50 100

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-69/CONST.31
R/W SHEET NO.	31
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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NC GRID
NAD 83

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nagason
All REF(s):

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GRAPHIC SCALE
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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-70/CONST.32
R/W SHEET NO.	32
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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mbugrison

GRAPHIC SCALE
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PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-71/CONST.33
R/W SHEET NO.	33
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

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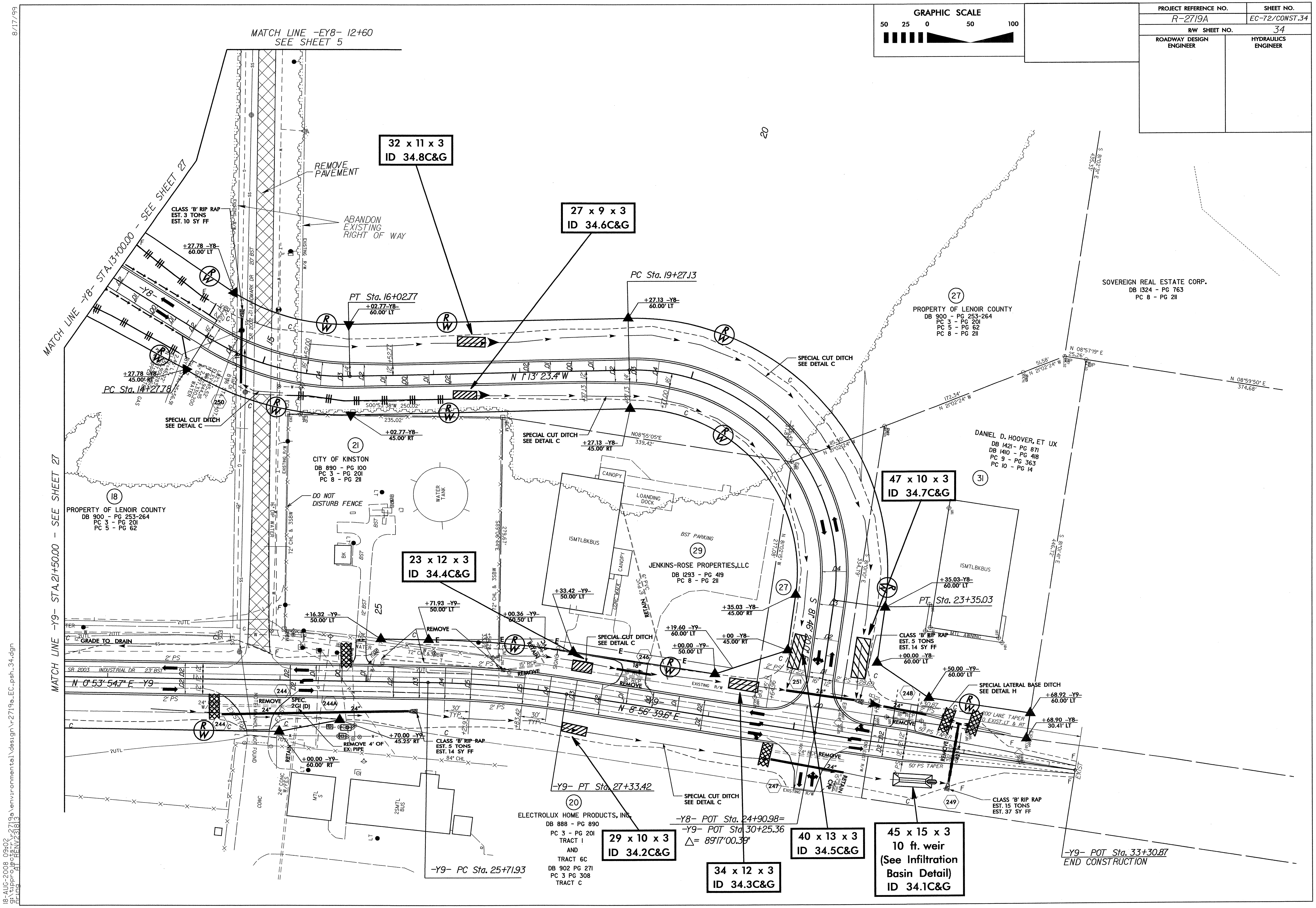
mlaugisch AT REN\22502



PROJECT REFERENCE NO. R-2719A
SHEET NO. EC-72/CONST.34
R/W SHEET NO. 34
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER
GRAPHIC SCALE
50 25 0 50 100
MATCH LINE -EY8- 12+60 SEE SHEET 5
MATCH LINE -Y8- STA.13+00.00 - SEE SHEET 27
MATCH LINE -Y9- STA.21+50.00 - SEE SHEET 27
32 x 11 x 3
ID 34.8C&G
27 x 9 x 3
ID 34.6C&G
47 x 10 x 3
ID 34.7C&G
23 x 12 x 3
ID 34.4C&G
29 x 10 x 3
ID 34.2C&G
34 x 12 x 3
ID 34.3C&G
40 x 13 x 3
ID 34.5C&G
45 x 15 x 3
10 ft. weir
(See Infiltration Basin Detail)
ID 34.1C&G
REMOVE PAVEMENT
ABANDON EXISTING RIGHT OF WAY
CLASS 'B' RIP RAP EST. 3 TONS EST. 10 SY FF
CLASS 'B' RIP RAP EST. 5 TONS EST. 14 SY FF
CLASS 'B' RIP RAP EST. 15 TONS EST. 37 SY FF
PT Sta. 16+02.77
PC Sta. 19+27.13
PC Sta. 14+27.78
PT Sta. 23+35.03
N 1°13' 23.4" W
N 0°53' 54.7" E -Y9
N 8°56' 39.6" E
SPECIAL CUT DITCH SEE DETAIL C
SPECIAL LATERAL BASE DITCH SEE DETAIL H
PROPERTY OF LENOIR COUNTY DB 900 - PG 253-264 PC 3 - PG 201 PC 5 - PG 62 PC 8 - PG 211
SOVEREIGN REAL ESTATE CORP. DB 1324 - PG 763 PC 8 - PG 211
CITY OF KINSTON DB 890 - PG 100 PC 3 - PG 201 PC 8 - PG 211
PROPERTY OF LENOIR COUNTY DB 900 - PG 253-264 PC 3 - PG 201 PC 5 - PG 62
DANIEL D. HOOVER, ET UX DB 1421 - PG 871 DB 1410 - PG 418 PC 9 - PG 363 PC 10 - PG 14
JENKINS-ROSE PROPERTIES,LLC DB 1293 - PG 419 PC 8 - PG 211
ELECTROLUX HOME PRODUCTS, INC. DB 888 - PG 890 PC 3 - PG 201 TRACT I AND TRACT 6C DB 902 PG 271 PC 3 PG 308 TRACT C
DO NOT DISTURB FENCE
WATER TANK
GRADE TO DRAIN
SR 2003 INDUSTRIAL DR 23' BST
-Y9- PC Sta. 25+71.93
-Y9- PT Sta. 27+33.42
-Y8- POT Sta. 24+90.98= -Y9- POT Sta 30+25.36 △= 89°17'00.39"
-Y9- POT Sta. 33+30.87 END CONSTRUCTION
200' LANE TAPER TO EXIST. LT & RT
REMOVE 4' OF EX. PIPE
8/17/99
18-AUG-2008 09:02
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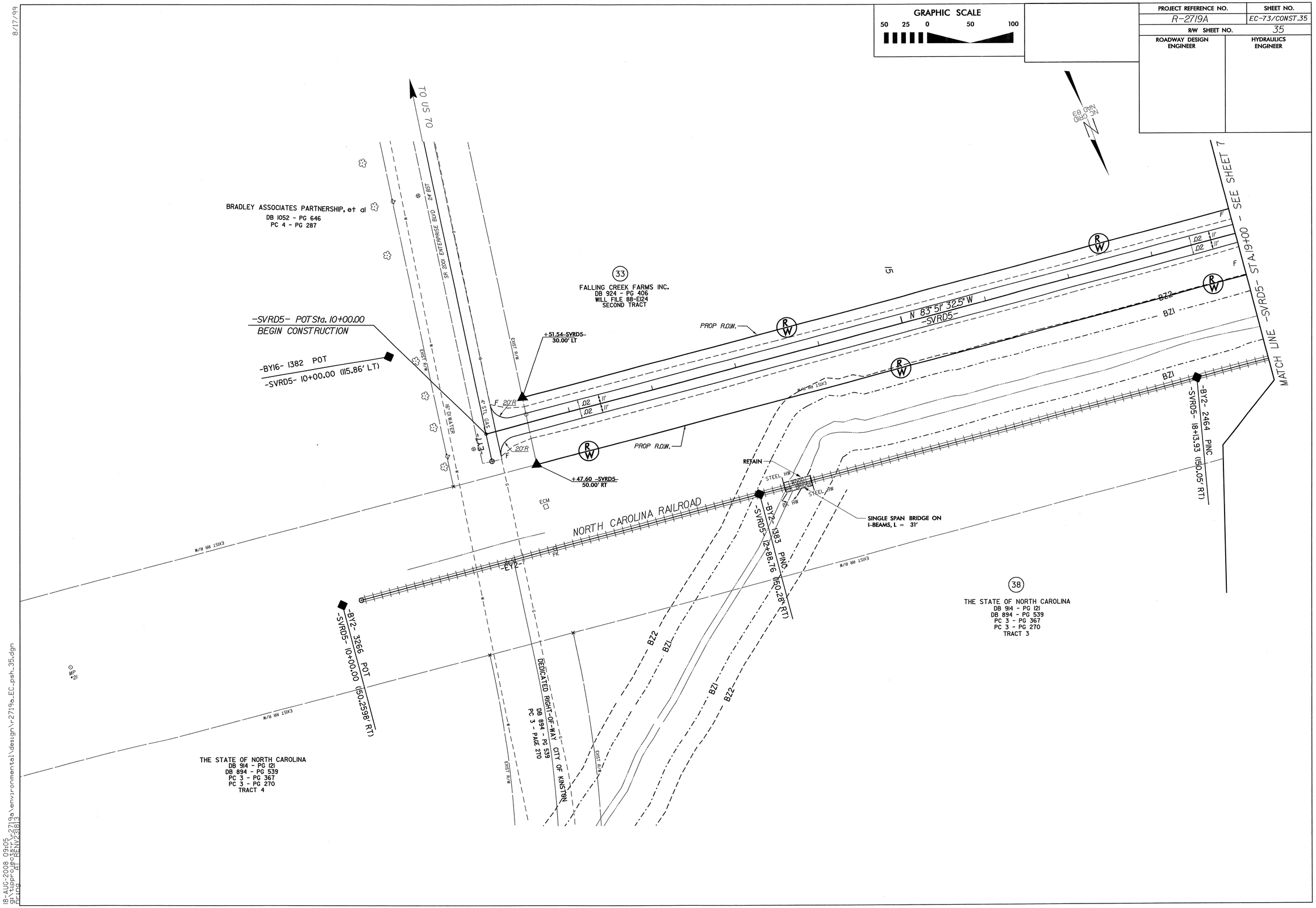
PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-73/CONST.35
R/W SHEET NO.	35
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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mring AT TENV2813

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-74/CONST.36
R/W SHEET NO.	36
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

GRAPHIC SCALE

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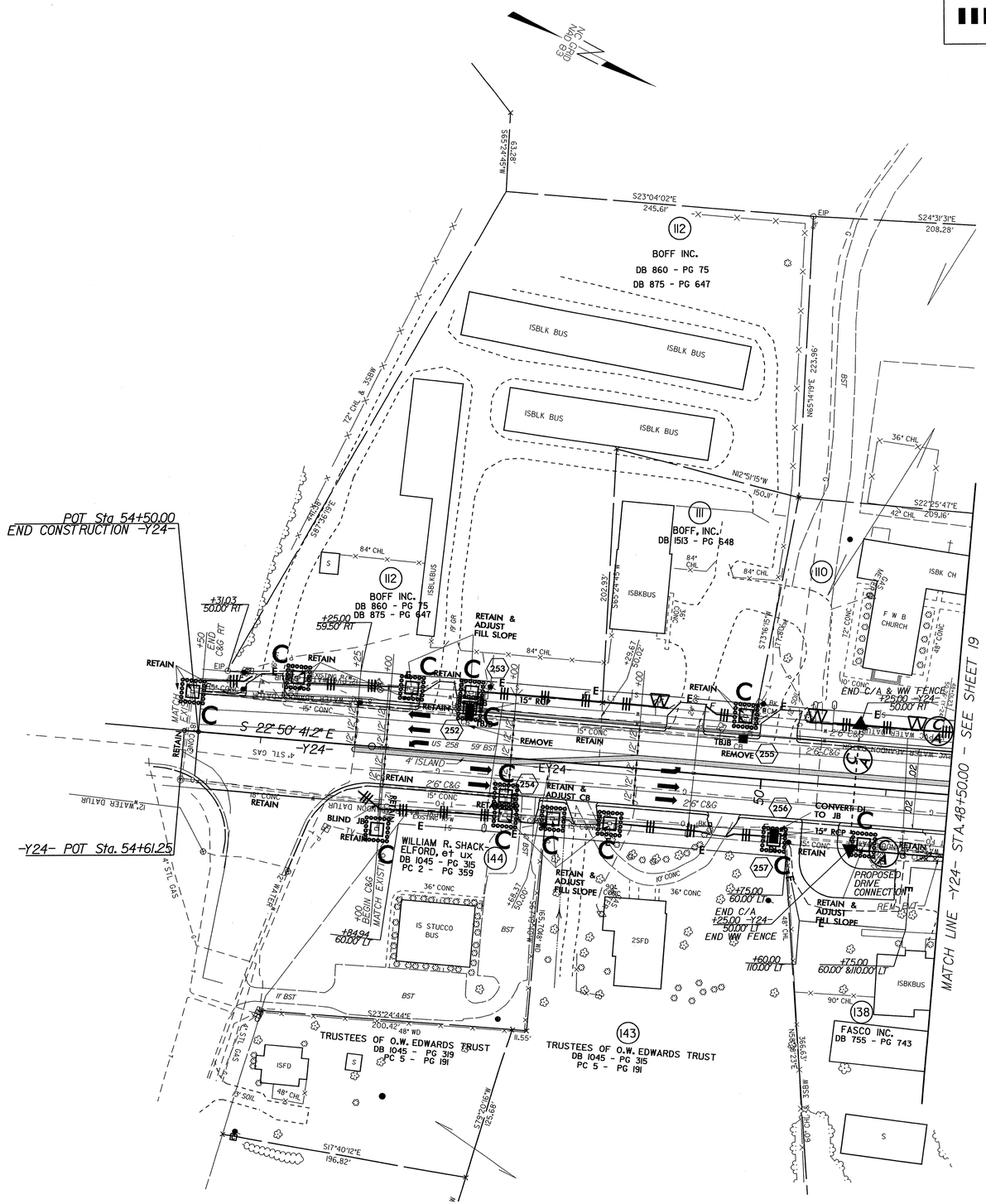

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ering AT REN\23613

EC FOR OSM

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-75/OSM-04

PROJECT ENGINEER

PROJECT ENGINEER

GRAPHIC SCALE
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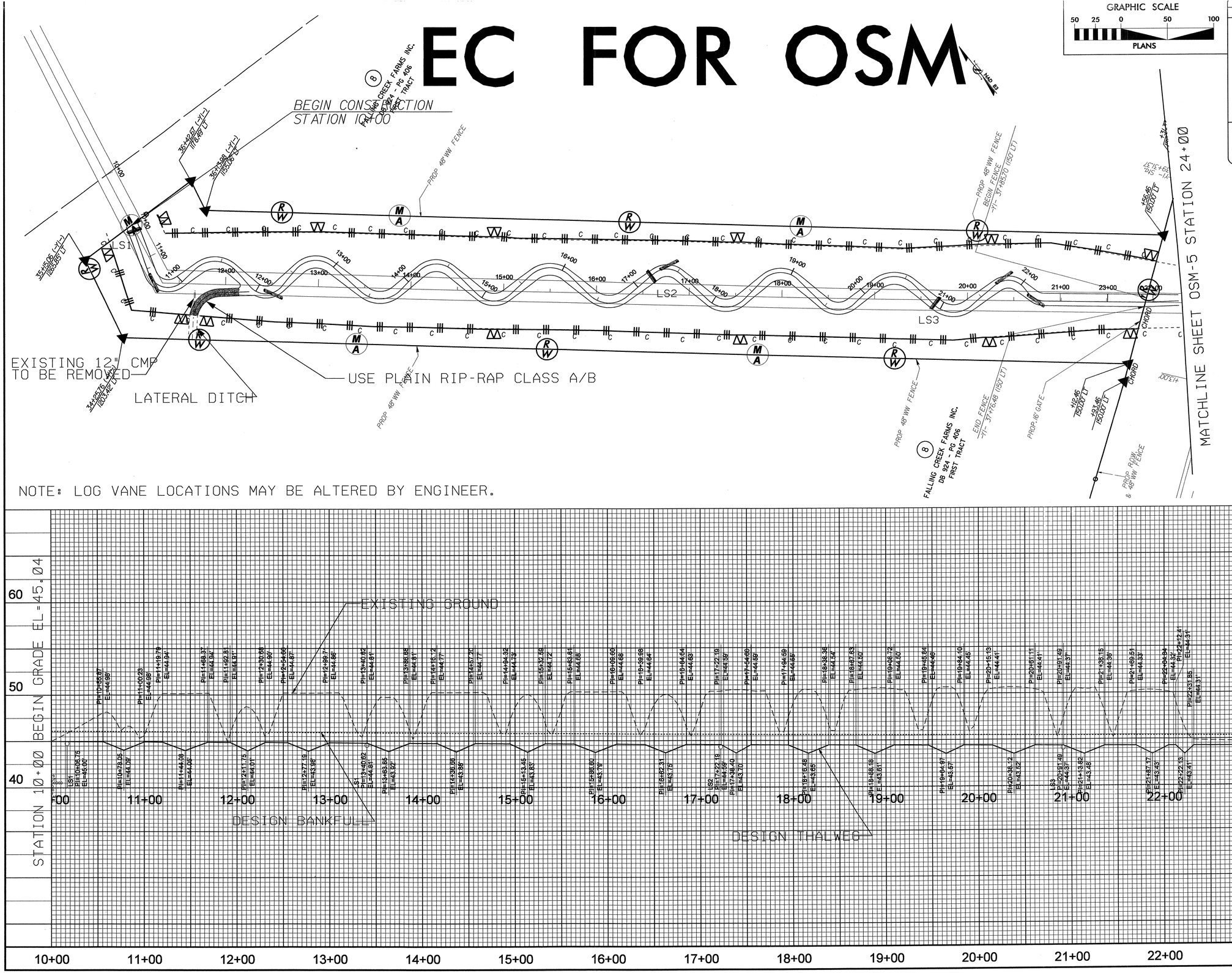
PLANS



NOTE: LOG VANE LOCATIONS MAY BE ALTERED BY ENGINEER.

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
R-2719A	EC-76/OSM-05

PROJECT ENGINEER

PROJECT ENGINEER

GRAPHIC SCALE
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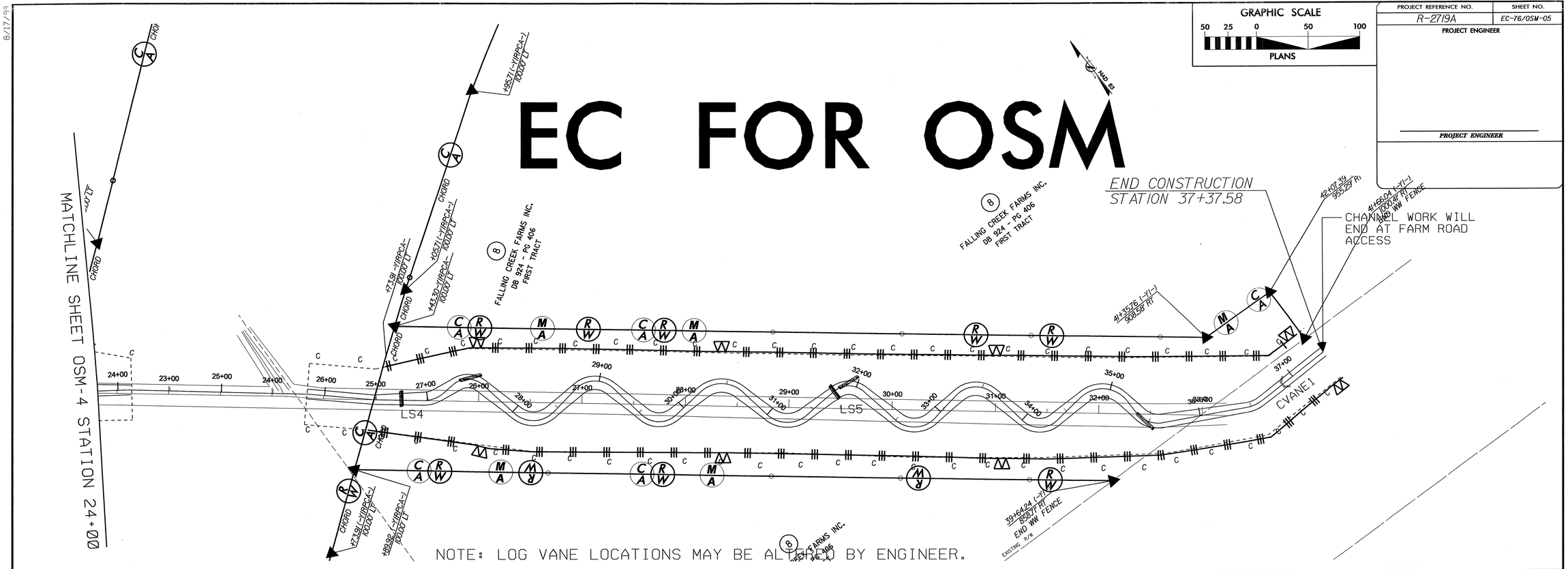
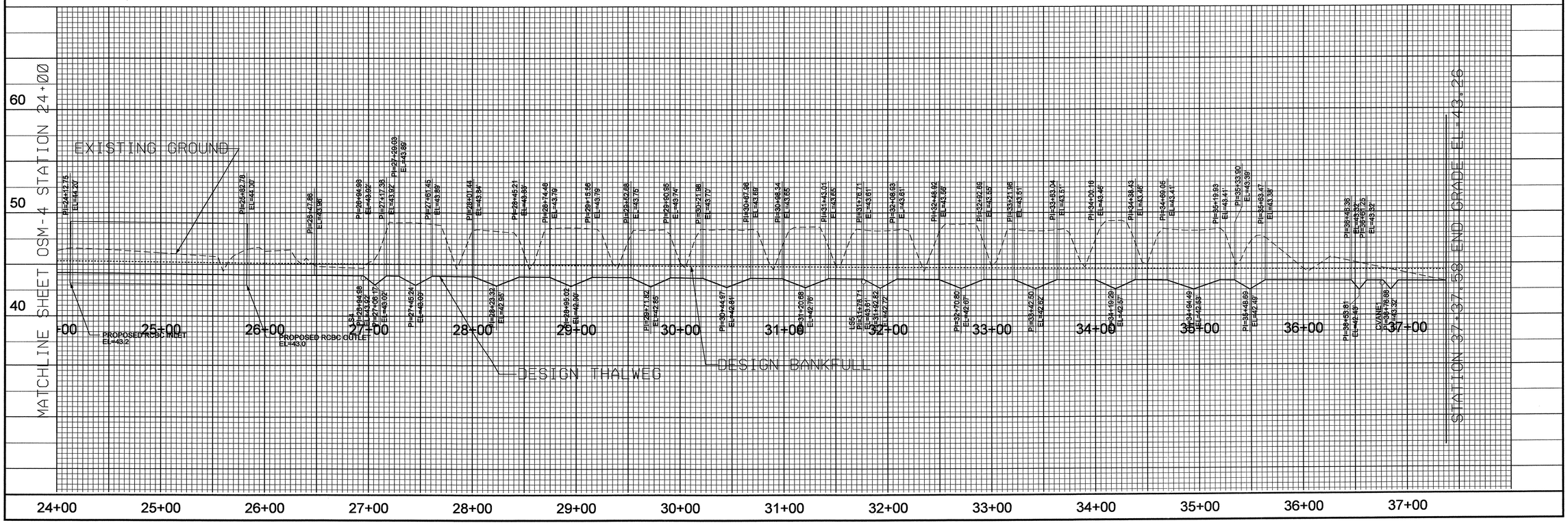
PLANS

EC FOR OSM