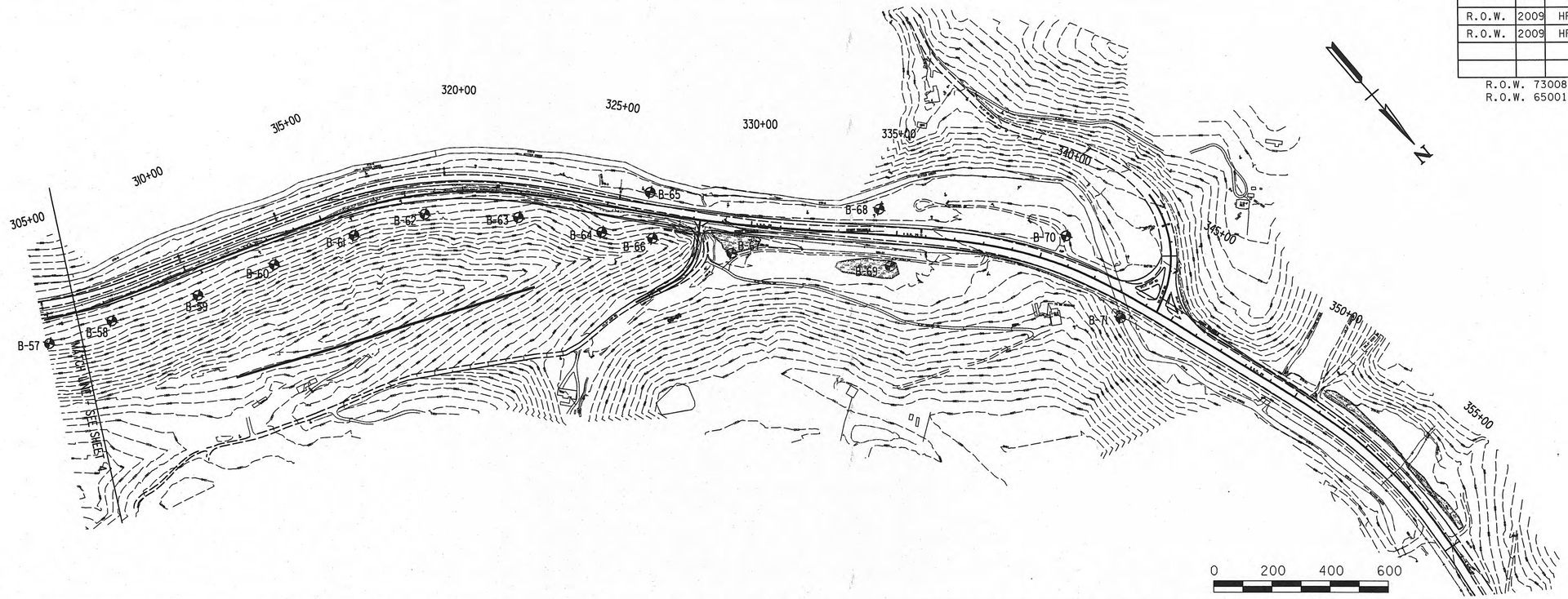
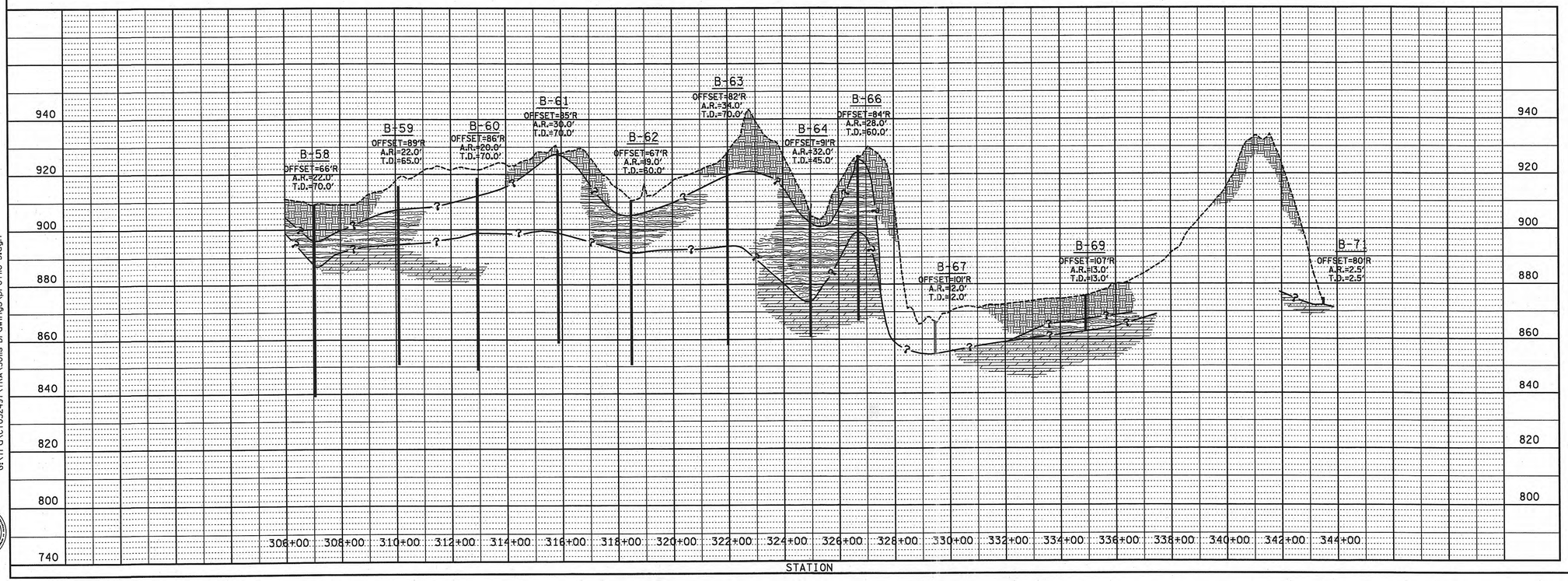
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	157
R.O.W.	2009	HPP-NH-29(35)	

R.O.W. 73008-2238-14
R.O.W. 65001-2257-14





LEGEND

- OVERBURDEN
- PARTIALLY WEATHERED ROCK
- BEDROCK
- B-12 - BORING NO.
- OFFSET - DISTANCE FROM CENTERLINE
- A.R. - AUGER REFUSAL
- T.D. - TERMINATION DEPTH

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SOILS PROFILE

STA.306+00 TO STA.344+00

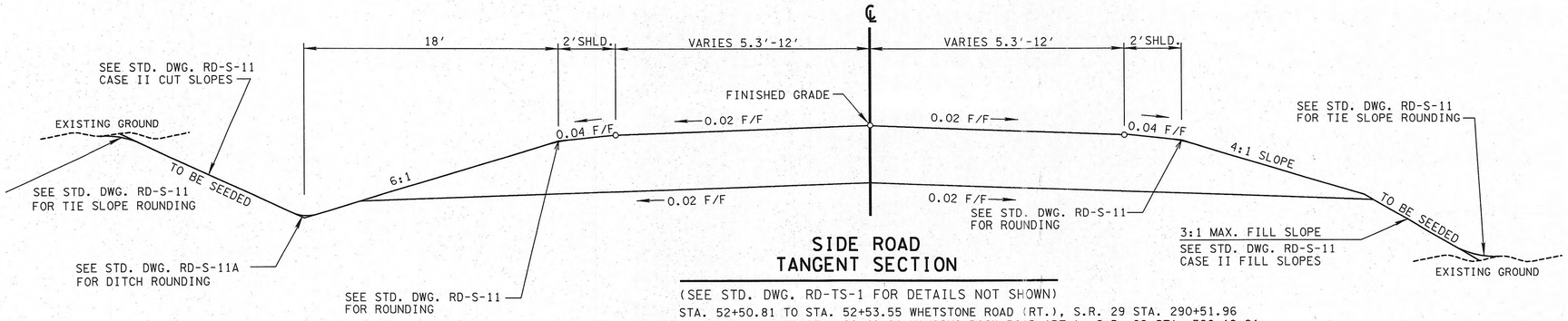
SHEET 5 OF 5

Sverdrup & Parcel Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2L
R.O.W.	2009	HPP-NH-29(35)	

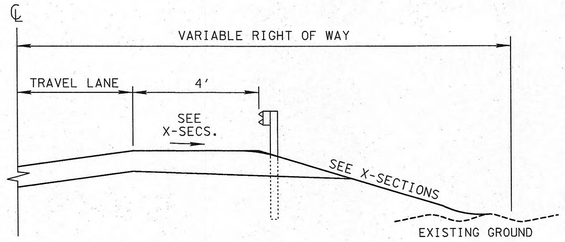


SIDE ROAD TANGENT SECTION

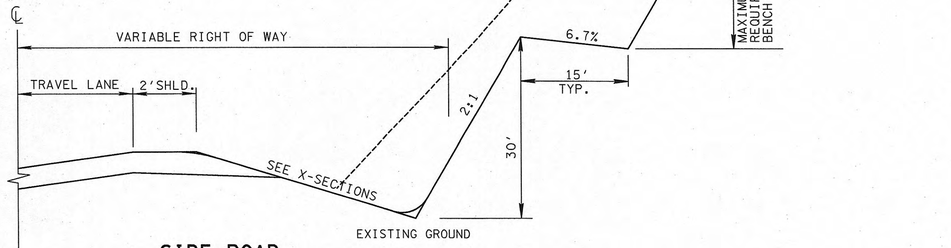
(SEE STD. DWG. RD-TS-1 FOR DETAILS NOT SHOWN)

STA. 52+50.81 TO STA. 52+53.55 WHETSTONE ROAD (RT.), S.R. 29 STA. 290+51.96
STA. 60+32.96 TO STA. 60+40.00 HANGING ROCK ROAD (RT.), S.R. 29 STA. 328+19.91

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.



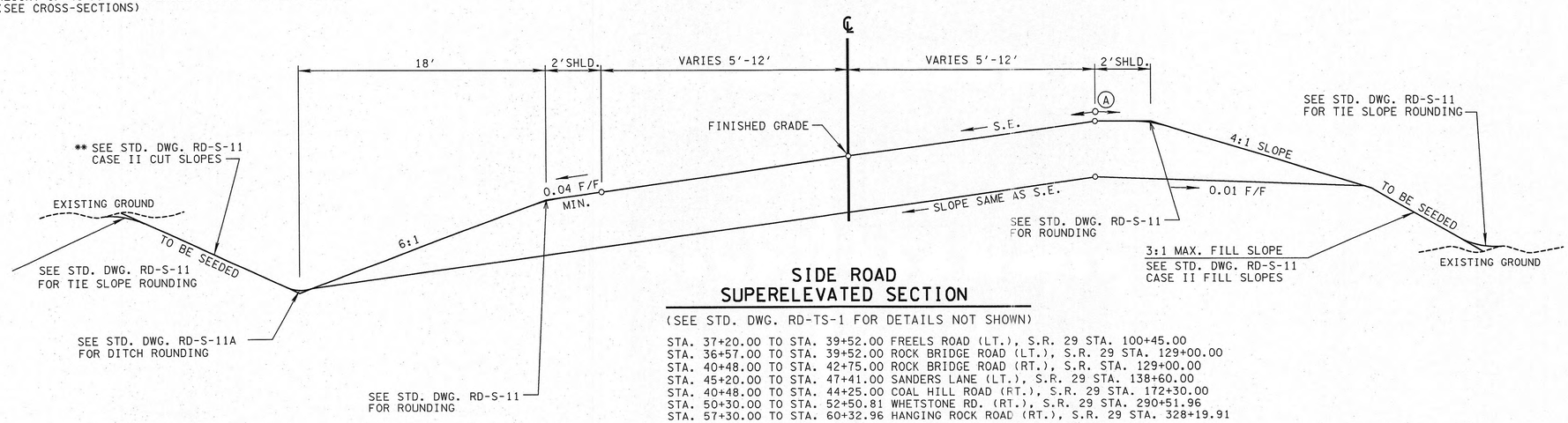
TYPICLE SIDE ROAD GUARDRAIL PLACEMENT



SIDE ROAD BENCHING

COAL HILL RD. STA. 40+48 TO STA. 42+00 (RT.)
WHETSTONE RD. STA. 52+00 TO STA. 52+50 (LT.)
SR-328 STA. 80+50 TO STA. 81+50 (LT.)

** A 15-FOOT WIDE BENCH IS REQUIRED EVERY 30 VERTICAL FEET OF A 2:1 CUT SLOPE. A BENCH IS NOT REQUIRED IF THE EXTENSION OF THE 2:1 CUT SLOPE AN ADDITIONAL 10 VERTICAL FEET OR LESS (FOR A TOTAL MAXIMUM VERTICAL HEIGHT OF 40 FEET) INTERSECTS THE EXISTING SLOPE. (SEE CROSS-SECTIONS)



SIDE ROAD SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-1 FOR DETAILS NOT SHOWN)

STA. 37+20.00 TO STA. 39+52.00 FREELS ROAD (LT.), S.R. 29 STA. 100+45.00
STA. 36+57.00 TO STA. 39+52.00 ROCK BRIDGE ROAD (LT.), S.R. 29 STA. 129+00.00
STA. 40+48.00 TO STA. 42+75.00 ROCK BRIDGE ROAD (RT.), S.R. STA. 129+00.00
STA. 45+20.00 TO STA. 47+41.00 SANDERS LANE (LT.), S.R. 29 STA. 138+60.00
STA. 40+48.00 TO STA. 44+25.00 COAL HILL ROAD (RT.), S.R. 29 STA. 172+30.00
STA. 50+30.00 TO STA. 52+50.81 WHETSTONE RD. (RT.), S.R. 29 STA. 290+51.96
STA. 57+30.00 TO STA. 60+32.96 HANGING ROCK ROAD (RT.), S.R. 29 STA. 328+19.91

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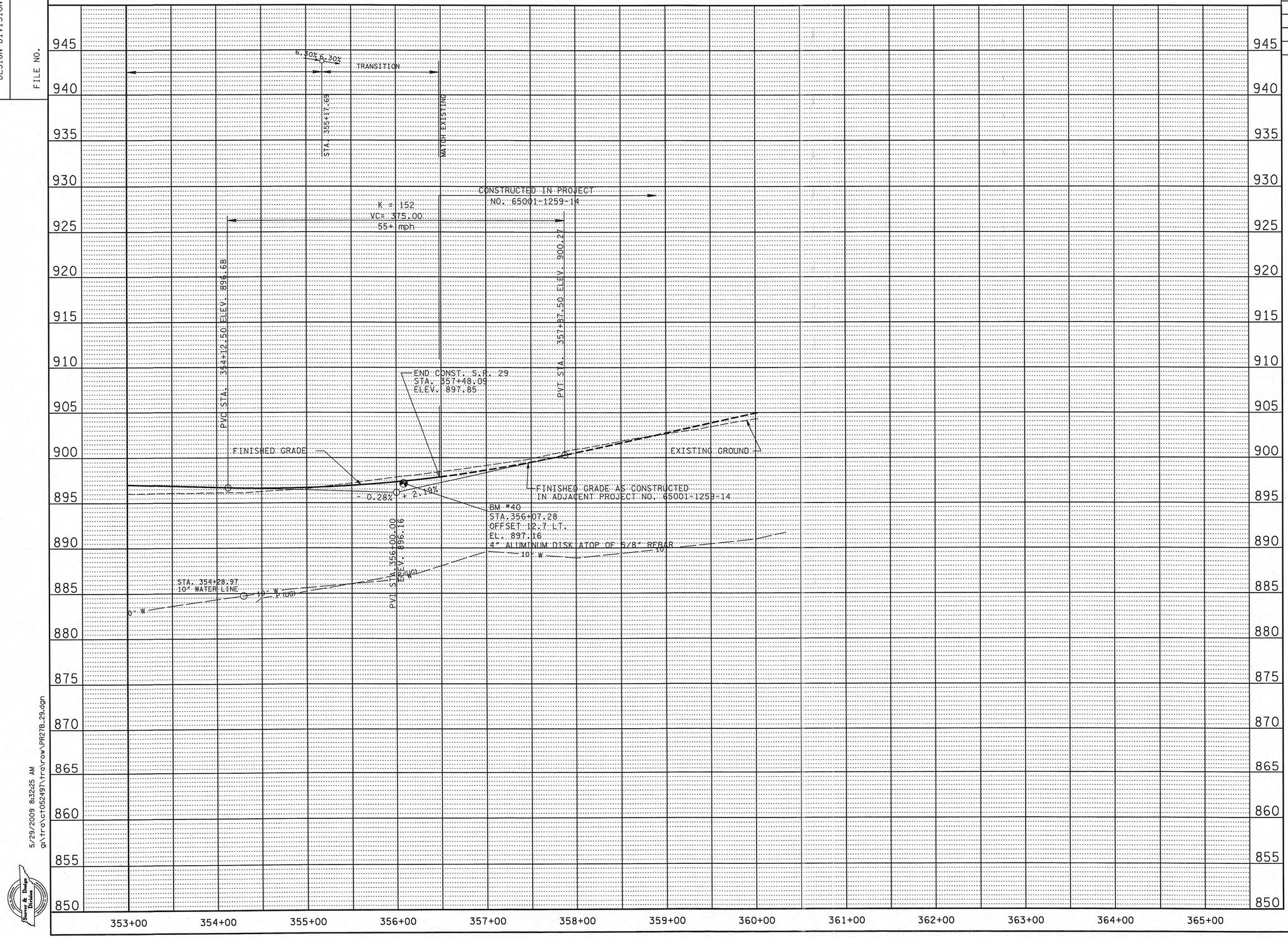
Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	27B
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

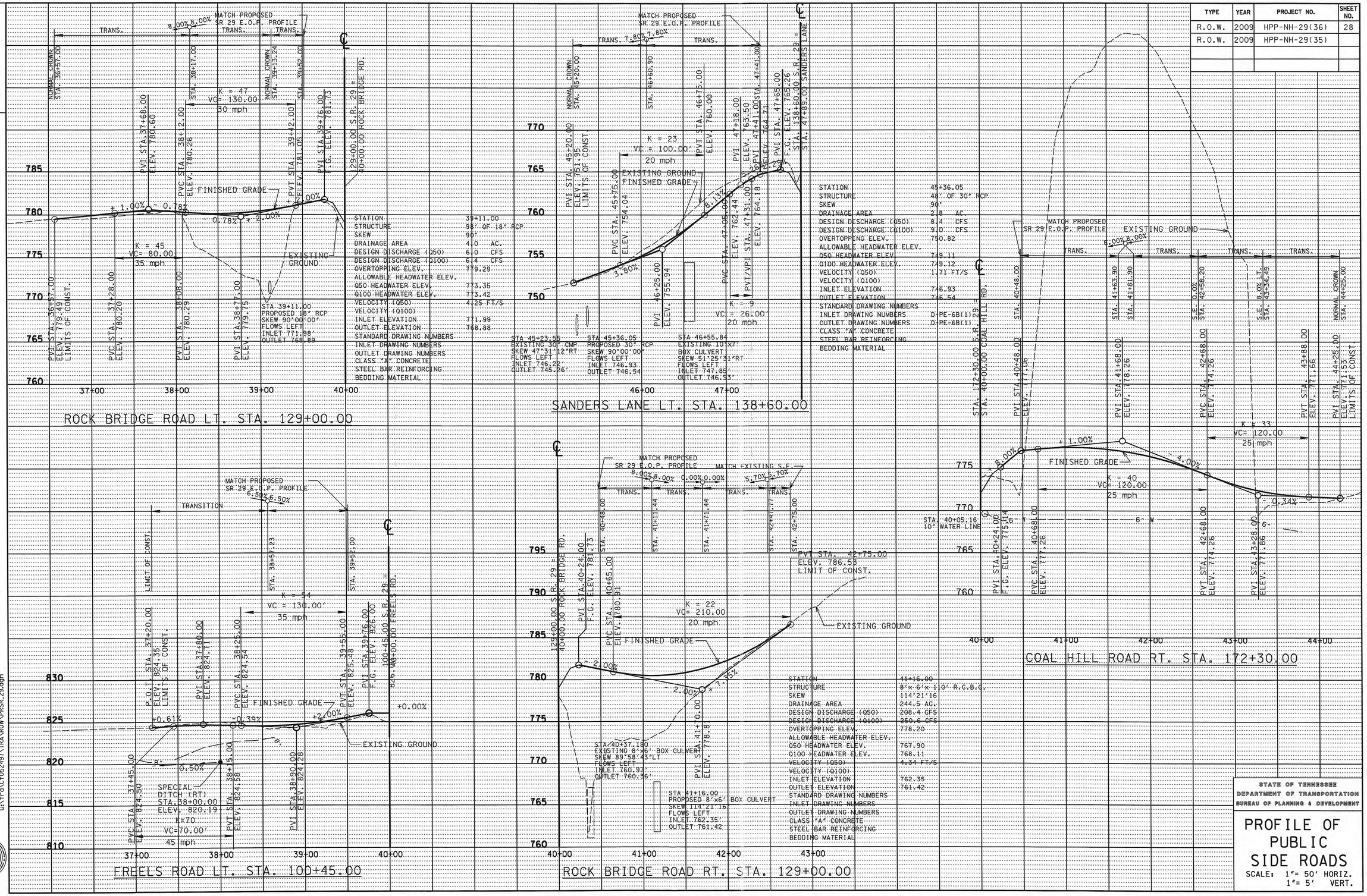
PROFILE

STA. 353+00 TO STA. 360+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	28
R.O.W.	2009	HPP-NH-29(35)	



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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	29
R.O.W.	2009	HPP-NH-29(35)	

WHETSTONE ROAD RT. STA. 290+61.54

MATCH PROPOSED SR 29 E.O.P. PROFILE
NORMAL CROWN
TRANS.
6.70% 6.70%
STA. 50+30.00
STA. 50+82.54
STA. 51+09.35
STA. 51+55.00
STA. 56+53.55
STA. 56+81.47
K = 16
VC = 110.00'
20 MPH
FINISHED GRADE
EXISTING GROUND
PVC STA. 50+45.00
ELEV. 836.60
PVT STA. 51+55.00
ELEV. 836.47
VPI 51+00.00
EL 834.50
3.85%
3.12%
STA. 52+17.1
10" WATER LINE
STA 50+95.68
PROPOSED 36" RCP
SKEW 90°00"00"
FLOWS RIGHT
INLET 828.81
OUTLET 827.69
STA. 50+00.00 WHETSTONE ROAD
P.O.C. ELEV. 837.47
STA. 290+45.96 S.R. 29 = STA. 50+00.00 WHETSTONE ROAD

STATION	50+95.68
STRUCTURE	45" OF 36" RCP
SKEW	90°
DRAINAGE AREA	9.6 AC.
DESIGN DISCHARGE (Q50)	29.2 CFS
DESIGN DISCHARGE (Q100)	32.6 CFS
OVERTOPPING ELEV.	832.23
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	831.47
Q100 HEADWATER ELEV.	831.65
VELOCITY (Q50)	6.19 FT/S
VELOCITY (Q100)	
INLET ELEVATION	828.81
OUTLE ELEVATION	827.69
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-6B(1)
OUTLE DRAWING NUMBERS	D-PE-6B(11
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

HANGING ROCK ROAD RT. STA. 328+25.93

MATCH PROPOSED SR 29 E.O.P. PROFILE
NORMAL CROWN
TRANS.
7.30% 7.30% 7.30%
STA. 57+30.00
STA. 58+35.00
STA. 58+67.00
STA. 60+32.56
STA. 60+40.00
STA. 328+19.91 S.R. 29 = STA. 57+00.00 HANGING ROCK ROAD
P.O.C. ELEV. 880.18
PVI STA. 57+30.00
ELEV. 880.81
2.10%
1.28%
1.28%
3.16%
K = 27
VC = 130.00'
25 MPH
FINISHED GRADE
EXISTING GROUND
PVC STA. 59+01.00
ELEV. 878.62
PVT STA. 60+01.00
ELEV. 880.68
PVI STA. 60+40.00
ELEV. 880.37
LIMITS OF CONST
STA. 57+17.77
10" WATER LINE
VPI 59+66.00
EL 877.90
STA 59+75.00
PROPOSED 24" RCP
SKEW 90°00"00"
FLOWS LEFT
INLET 875.44
OUTLET 875.18
STA 60+14.54
EXISTING 18" CMP
SKEW 4°28"16"RT
FLOWS LEFT
INLET 879.51
OUTLET 876.54

STATION	59+75.00
STRUCTURE	46' OF 24" RCP
SKEW	90°
DRAINAGE AREA	5.2 AC.
DESIGN DISCHARGE (Q50)	15.8 CFS
DESIGN DISCHARGE (Q100)	17.3 CFS
OVERTOPPING ELEV.	879.03
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	877.86
Q100 HEADWATER ELEV.	877.98
VELOCITY (Q50)	5.09 FT/S
VELOCITY (Q100)	
INLET ELEVATION	875.44
OUTLET ELEVATION	875.18
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-4
OUTLET DRAWING NUMBERS	D-PE-4
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

TEDDER LANE

NORMAL CROWN
TRANS.
8.0% 8.0%
STA. 1+50.00
STA. 1+70.10
STA. 3+50.70
STA. 3+72.56
STA. 5+52.56
STA. 5+72.57
STA. 7+52.57
STA. 9+32.57
STA. 9+45.00
K = 15
VC = 150.00'
40 mph
VPC 1+65.00
EL 840.67
VPI 2+40.00
EL 842.55
VPT 3+15.00
EL 842.85
+2.50%
+0.40%
K = 32
VC = 100.00'
30 mph
VPC 4+80.00
EL 843.51
VPI 5+30.00
EL 843.711
VPT 5+80.00
EL 842.35
+0.40%
-0.75%
K = 60
VC = 100.00'
40 mph
VPC 6+50.00
EL 840.41
VPI 7+50.00
EL 838.49
VPT 8+20.00
EL 837.72
-0.75%
-1.10%
-1.10%
-1.28%
-3.28%
-3.28%
VPC 7+00.00
EL 838.27
VPI 7+00.00
EL 839.03
VPI 8+10.00
EL 835.93
835.57
VPC 9+15.00
EL 834.32
VPI 9+30.00
EL 833.78
VPT 9+45.00
EL 832.81
K = 40
VC = 100.00'
35 mph
K = 10
VC = 30.00'
20 mph
BEGIN CONST. TEDDER LANE
STA 1+50.00
EL 840.30
END CONST. TEDDER LANE
STA 9+45.00
EL 832.81

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PUBLIC SIDE ROADS

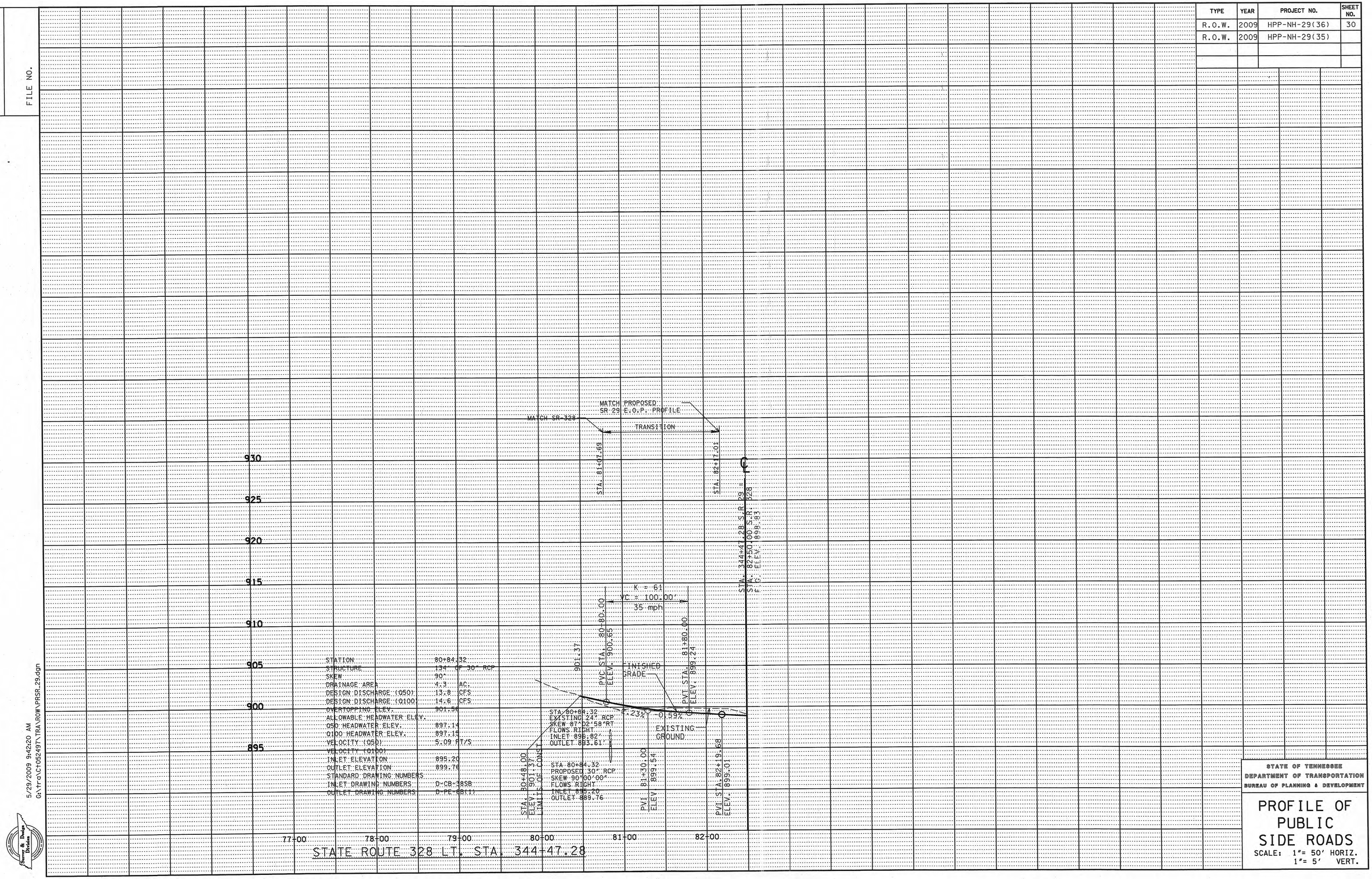
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Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	30
R.O.W.	2009	HPP-NH-29(35)	



STATION	80+84.32
STRUCTURE	134' OF 30" RCP
SKEW	90°
DRAINAGE AREA	4.3 AC.
DESIGN DISCHARGE (Q50)	13.8 CFS
DESIGN DISCHARGE (Q100)	14.6 CFS
OVERTOPPING ELEV.	901.56
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	897.14
Q100 HEADWATER ELEV.	897.15
VELOCITY (Q50)	5.09 FT/S
VELOCITY (Q100)	
INLET ELEVATION	895.20
OUTLET ELEVATION	899.76
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-CB-38SB
OUTLET DRAWING NUMBERS	D-PE-68(1)

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Survey & Design Division

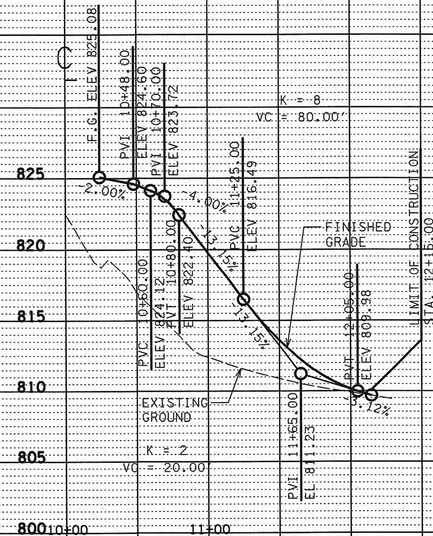
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PUBLIC SIDE ROADS

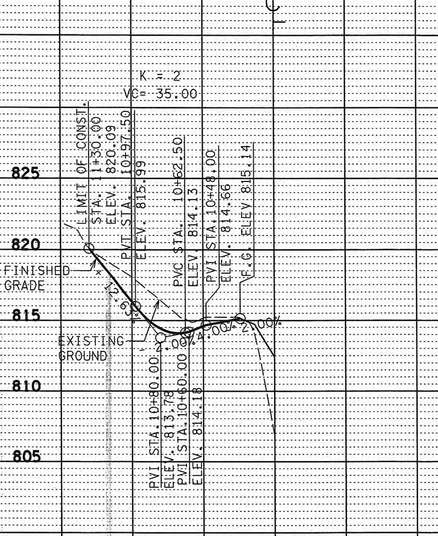
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

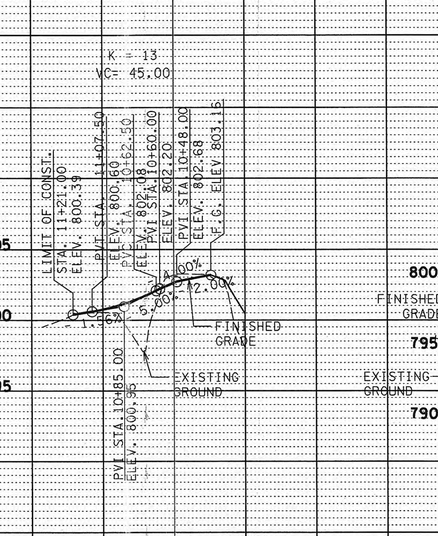
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	31
R.O.W.	2009	HPP-NH-29(35)	



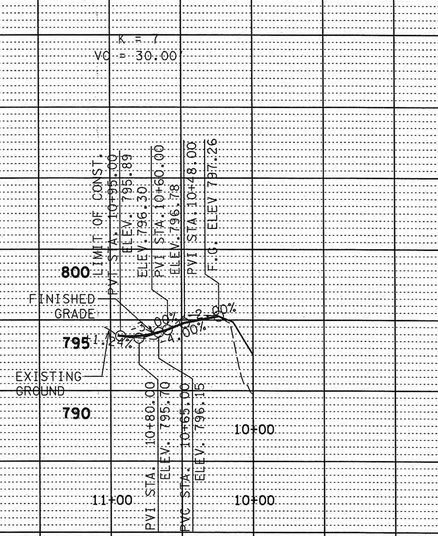
STA. 105+03.16 (RT.) 10' FIELD ENTRANCE



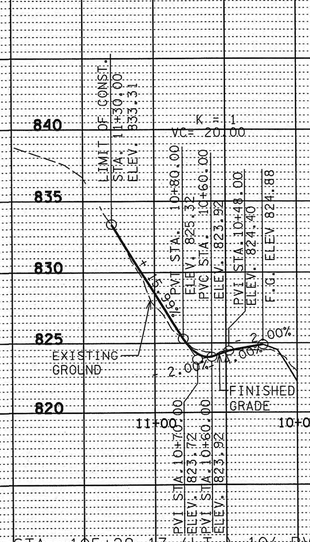
STA. 110+32.49 (LT.) 10' PVT. DRIVE



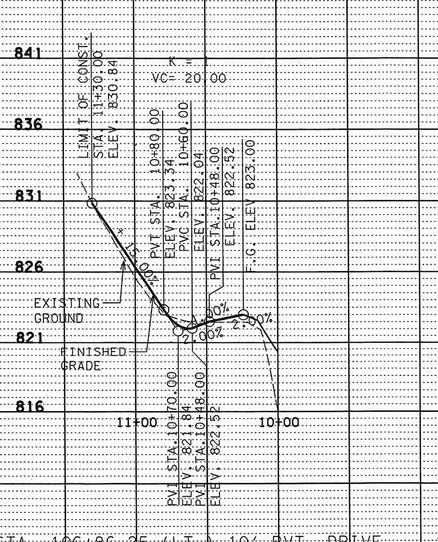
STA. 114+67.90 (LT.) 10' PVT. DRIVE



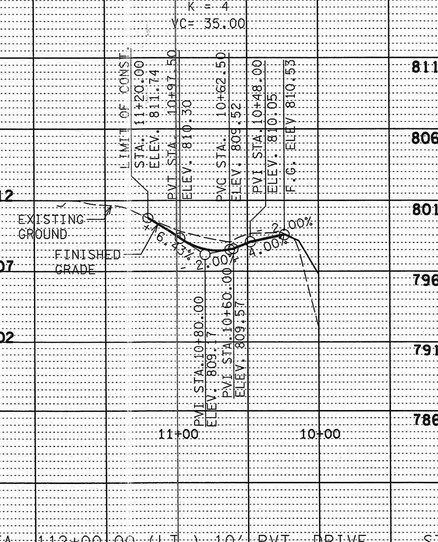
STA. 116+06.23 (LT.) 40' BUS. ENT.



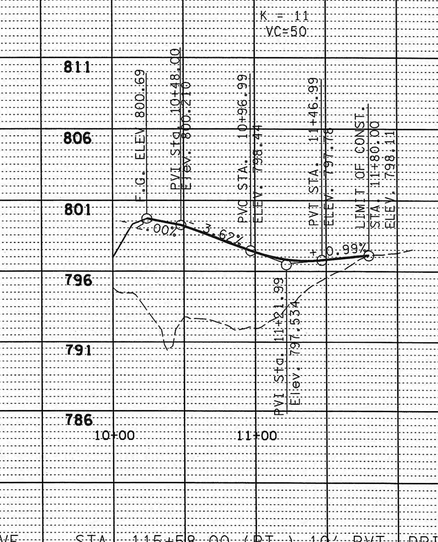
STA. 105+29.17 (LT.) 10' PVT. DRIVE



STA. 106+86.25 (LT.) 10' PVT. DRIVE



STA. 112+00.00 (LT.) 10' PVT. DRIVE



STA. 115+58.00 (RT.) 10' PVT. DRIVE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
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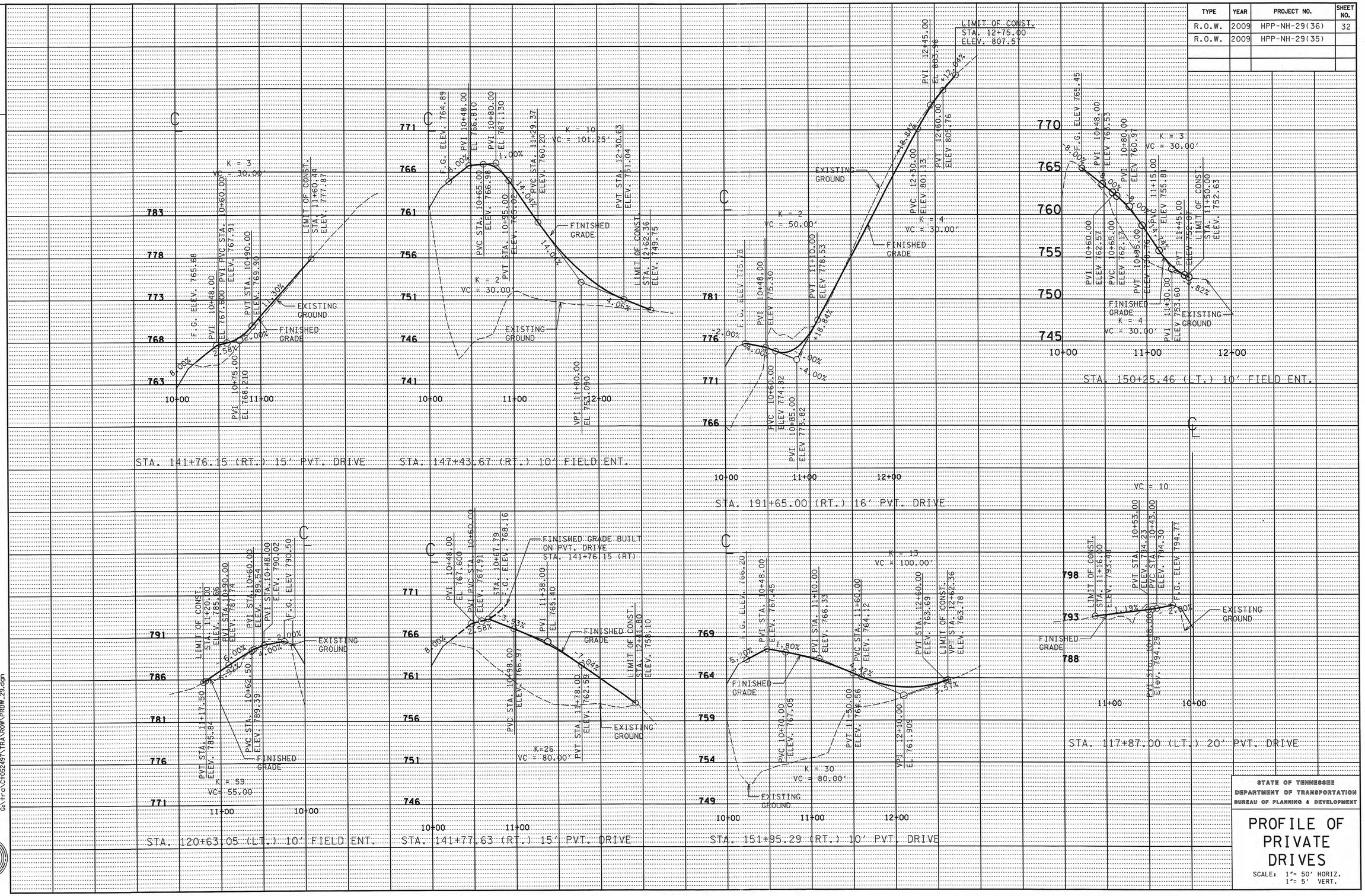
PROFILE OF PRIVATE DRIVES

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	32
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

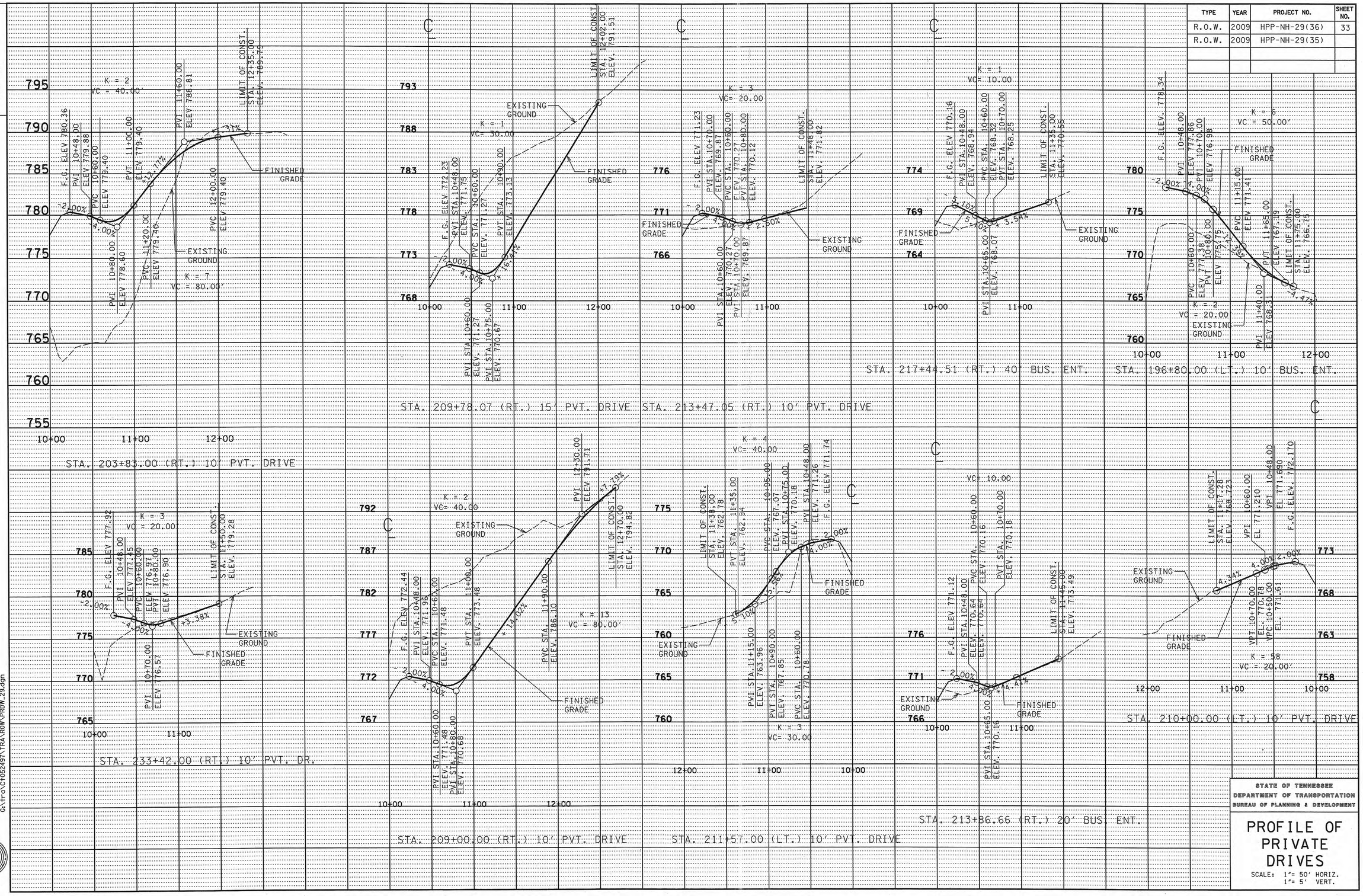
PROFILE OF PRIVATE DRIVES

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	33
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PRIVATE DRIVES

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

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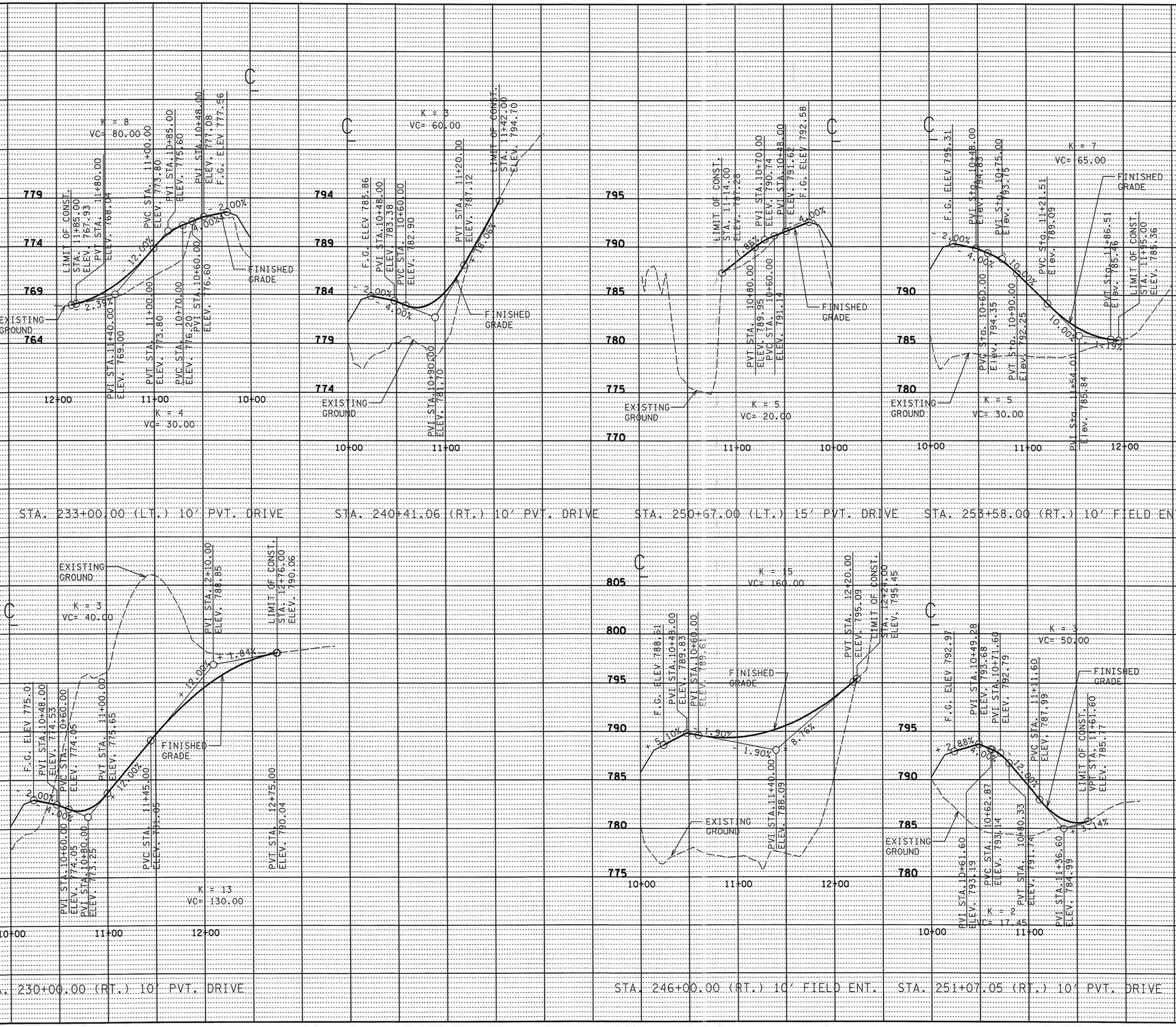
TENNESSEE D.O.T.

DESIGN DIVISION

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FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	34
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PRIVATE DRIVES

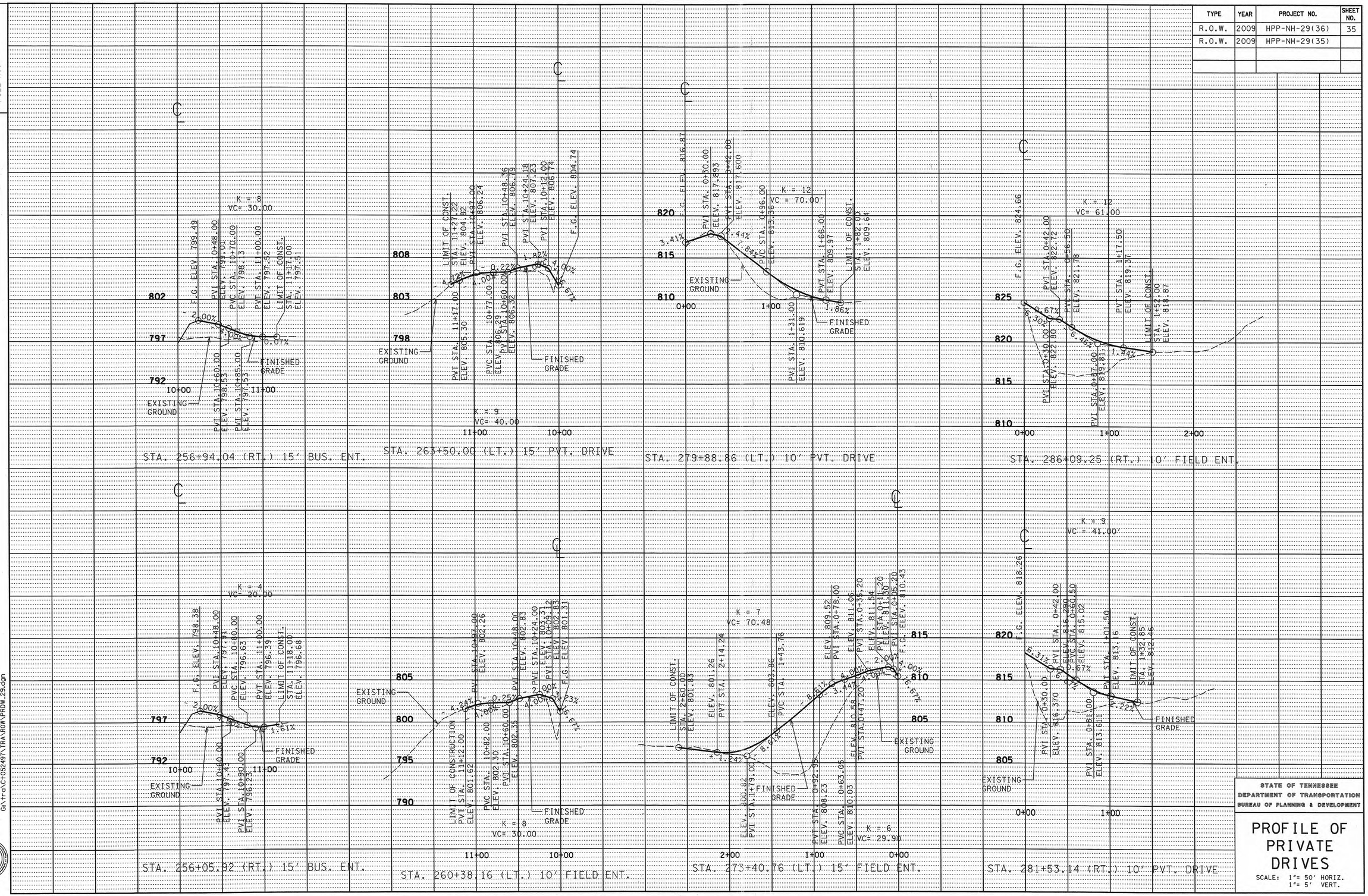
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	35
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PRIVATE DRIVES

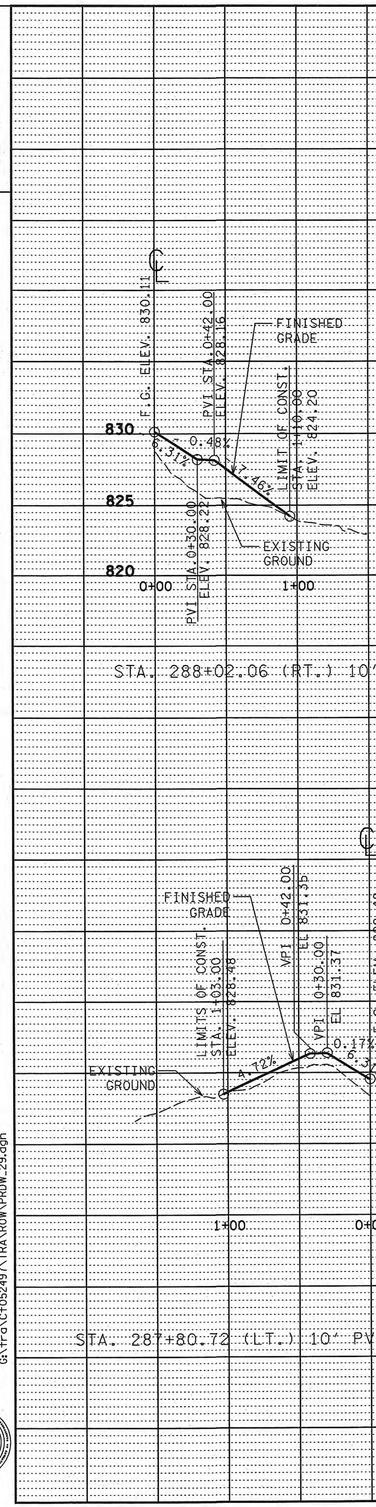
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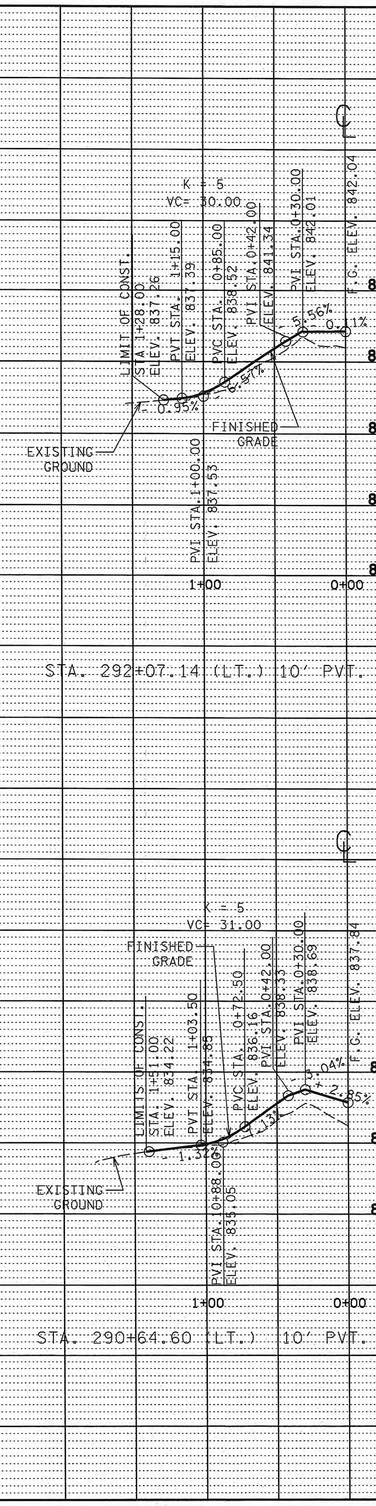
Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

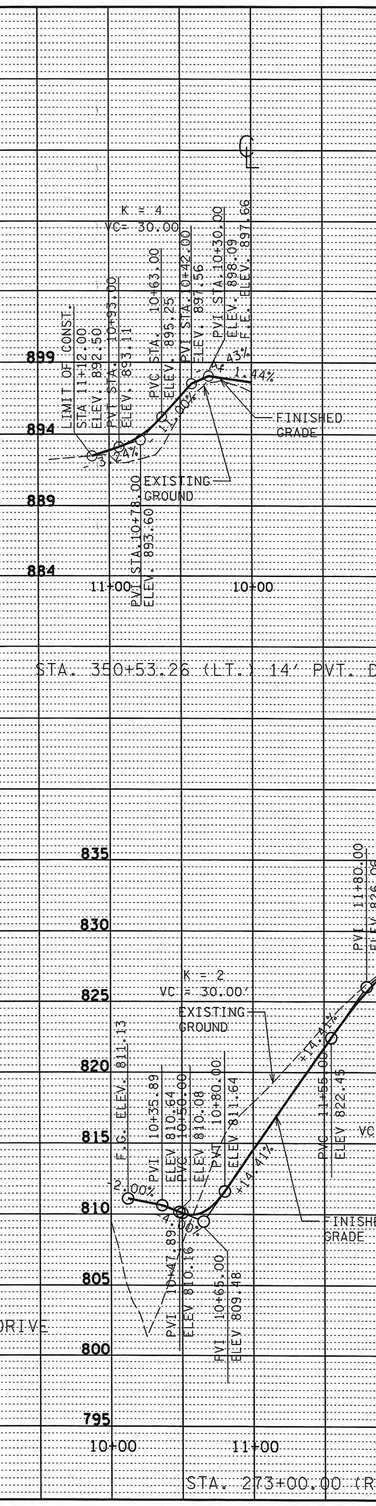
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	36
R.O.W.	2009	HPP-NH-29(35)	



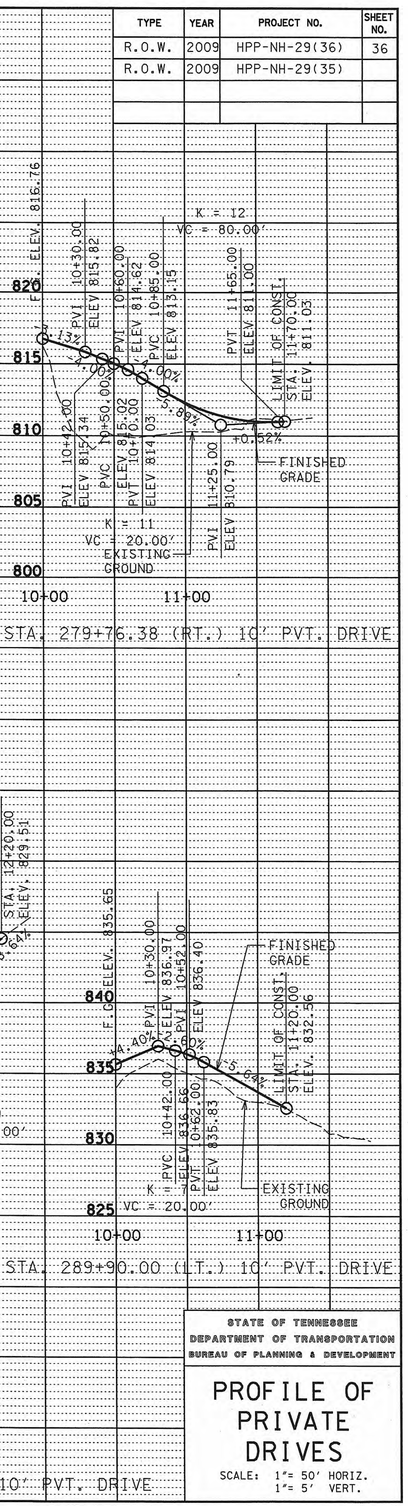
STA. 288+02.06 (RT.) 10' PVT. DRIVE



STA. 292+07.14 (LT.) 10' PVT. DRIVE



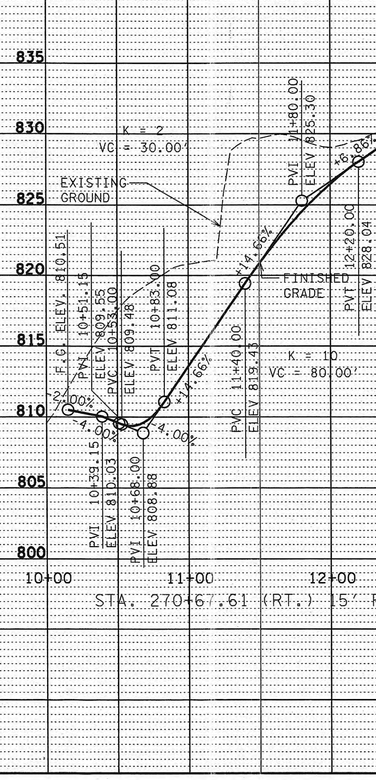
STA. 350+53.26 (LT.) 14' PVT. DRIVE



STA. 279+76.38 (RT.) 10' PVT. DRIVE

STA. 287+80.72 (LT.) 10' PVT. DRIVE

STA. 290+64.60 (LT.) 10' PVT. DRIVE



STA. 270+67.61 (RT.) 15' PVT. DRIVE

STA. 273+00.00 (RT.) 10' PVT. DRIVE

STA. 289+90.00 (LT.) 10' PVT. DRIVE

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Survey & Design Division

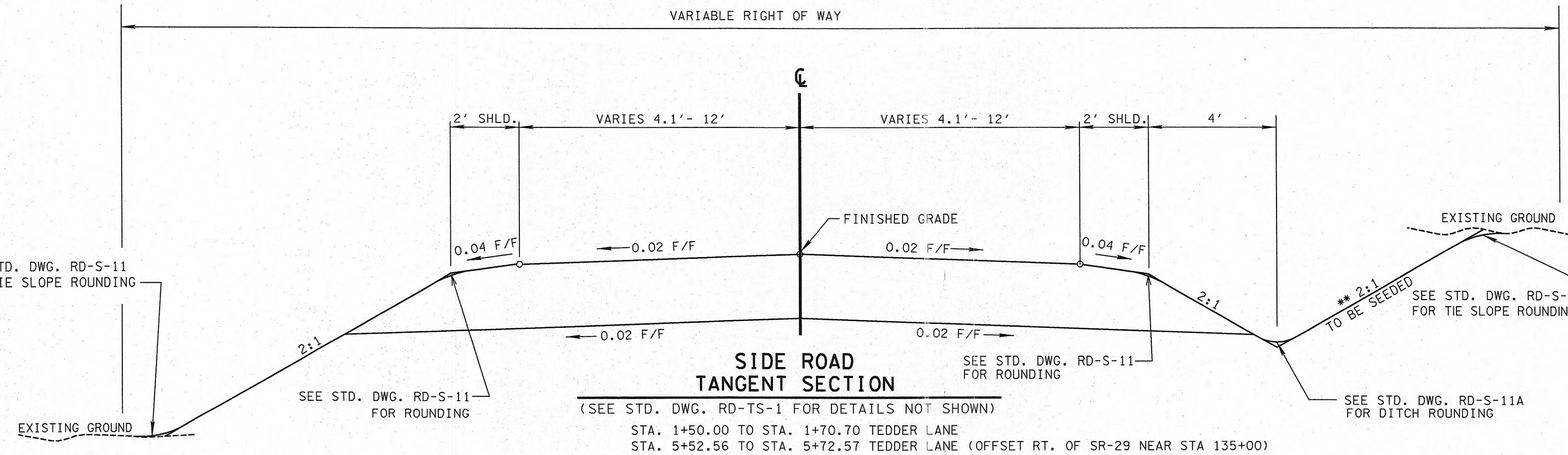
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PRIVATE DRIVES

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

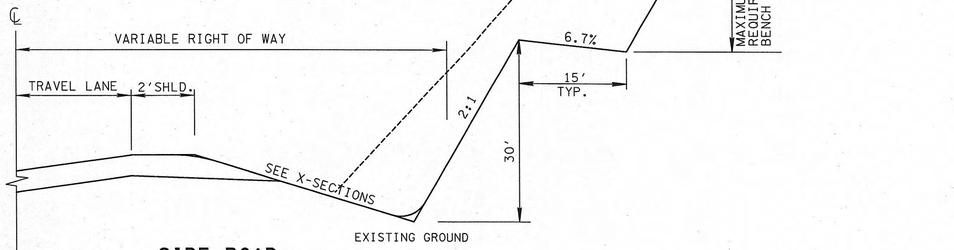
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2M
R.O.W.	2009	HPP-NH-29(35)	



SIDE ROAD TANGENT SECTION

(SEE STD. DWG. RD-TS-1 FOR DETAILS NOT SHOWN)

STA. 1+50.00 TO STA. 1+70.70 TEDDER LANE
STA. 5+52.56 TO STA. 5+72.57 TEDDER LANE (OFFSET RT. OF SR-29 NEAR STA 135+00)
STA. 9+32.57 TO STA. 9+80.00 TEDDER LANE

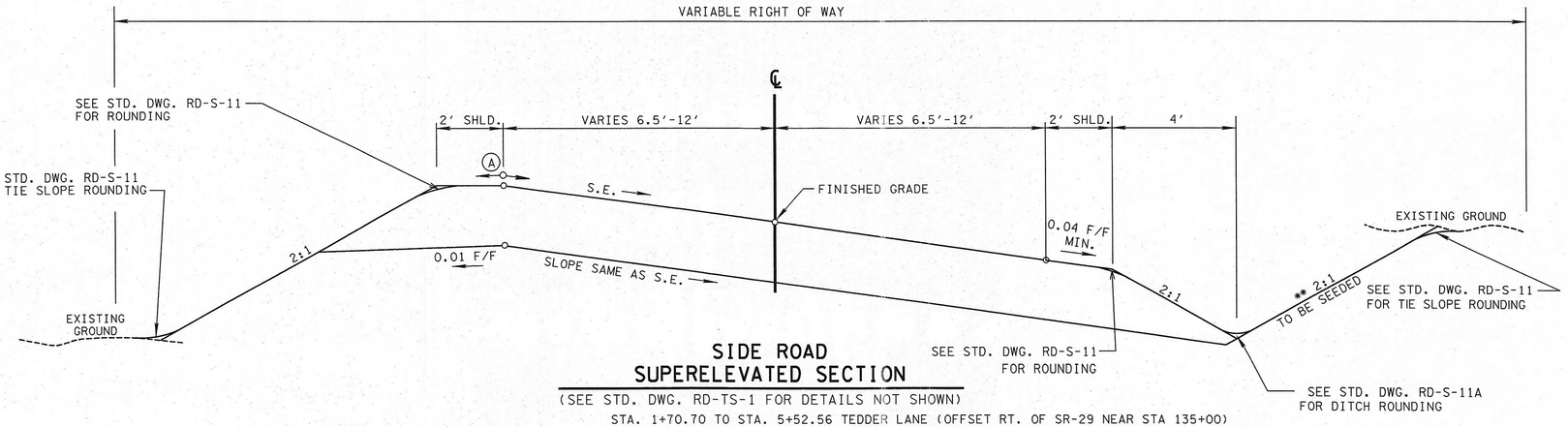


SIDE ROAD BENCHING

TEDDER LANE STA. 4+00 TO STA. 6+00 (RT.)

** A 15-FOOT WIDE BENCH IS REQUIRED EVERY 30 VERTICAL FEET OF A 2:1 CUT SLOPE. A BENCH IS NOT REQUIRED IF THE EXTENSION OF THE 2:1 CUT SLOPE AN ADDITIONAL 10 VERTICAL FEET OR LESS (FOR A TOTAL MAXIMUM VERTICAL HEIGHT OF 40 FEET) INTERSECTS THE EXISTING SLOPE. (SEE CROSS-SECTIONS)

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.



SIDE ROAD SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-1 FOR DETAILS NOT SHOWN)

STA. 1+70.70 TO STA. 5+52.56 TEDDER LANE (OFFSET RT. OF SR-29 NEAR STA 135+00)
STA. 5+72.57 TO STA. 9+32.57 TEDDER LANE

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

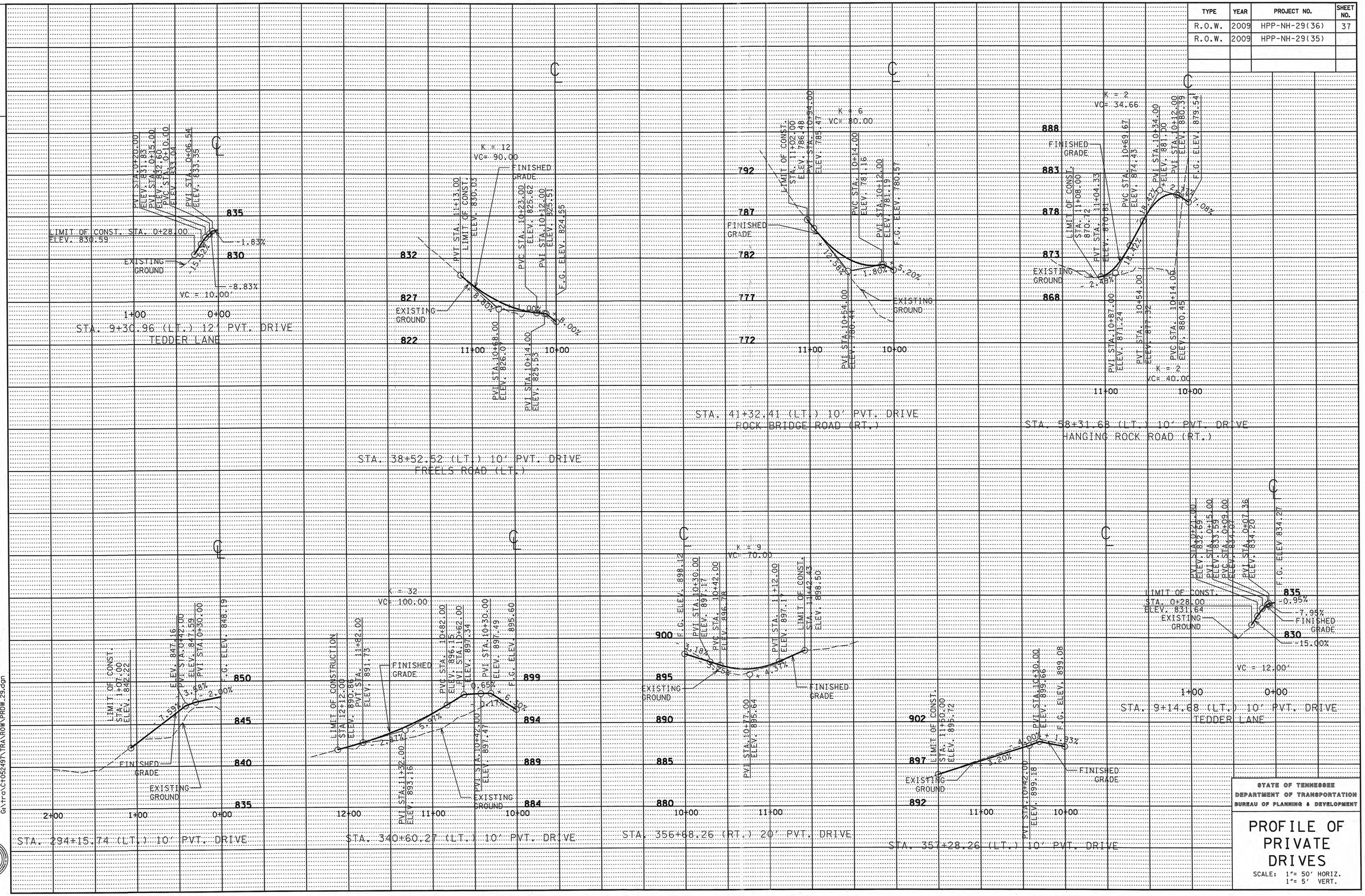
TYPICAL SECTIONS

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	37
R.O.W.	2009	HPP-NH-29(35)	



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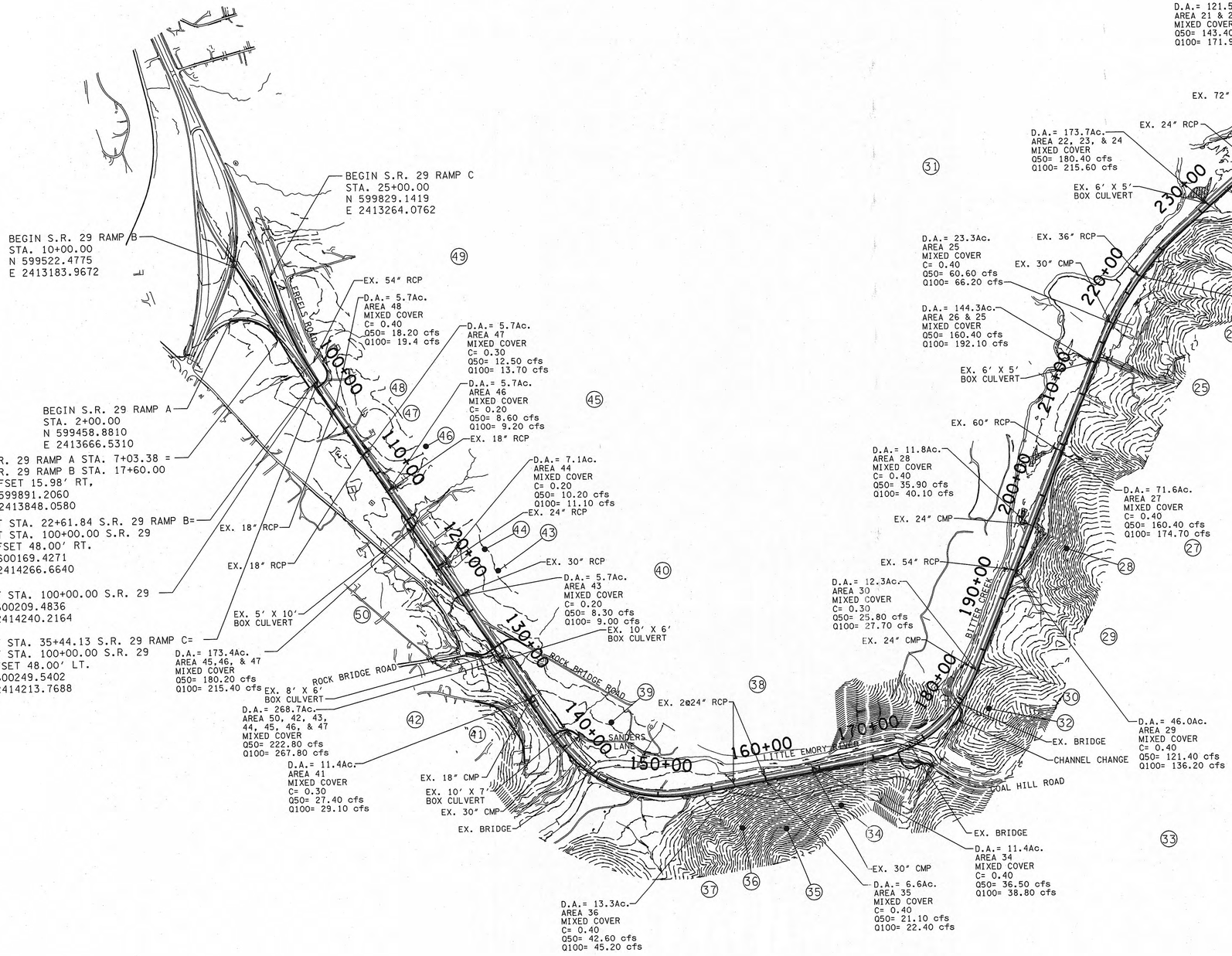
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE OF PRIVATE DRIVES

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	38
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

DRAINAGE MAP

STA. 10+00 TO STA. 250+00

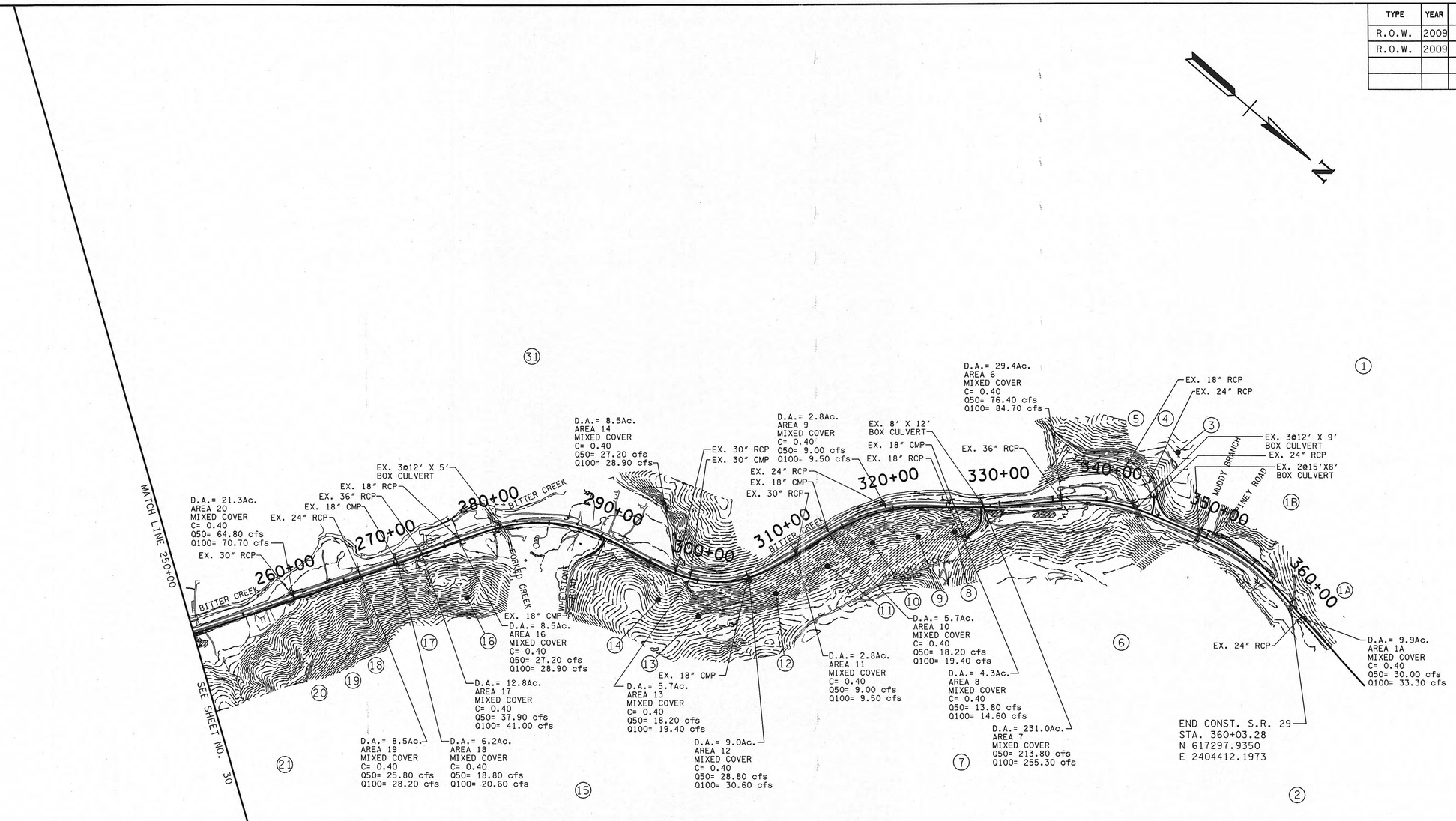
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Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	39
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

DRAINAGE MAP

STA. 250+00 TO STA. 360+00

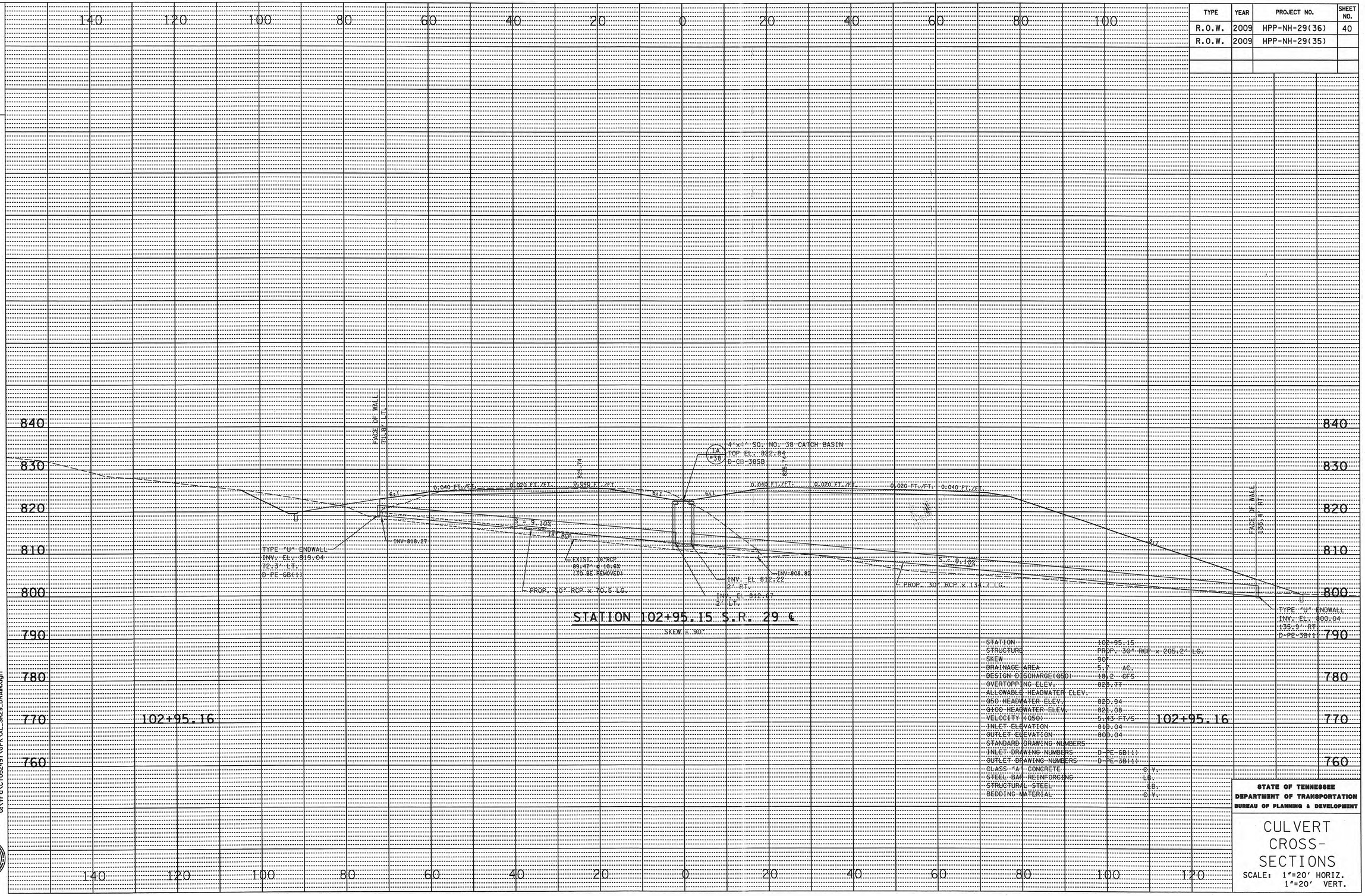
SCALE: 1"=500'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	40
R.O.W.	2009	HPP-NH-29(35)	



STATION 102+95.15 S.R. 29 ℄

SKEW E 90°

STATION	102+95.15	
STRUCTURE	PROP. 30" RCP x 205.2' LG.	
SKEW	90°	
DRAINAGE AREA	5.7	AC.
DESIGN DISCHARGE(Q50)	19.2	CFS
OVERTOPPING ELEV.	828.77	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	820.94	
Q100 HEADWATER ELEV.	821.08	
VELOCITY (Q50)	5.43	FT/S
INLET ELEVATION	818.04	
OUTLET ELEVATION	809.04	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-6B(1)	
OUTLET DRAWING NUMBERS	D-PE-3B(1)	
CLASS "AA" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTURAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

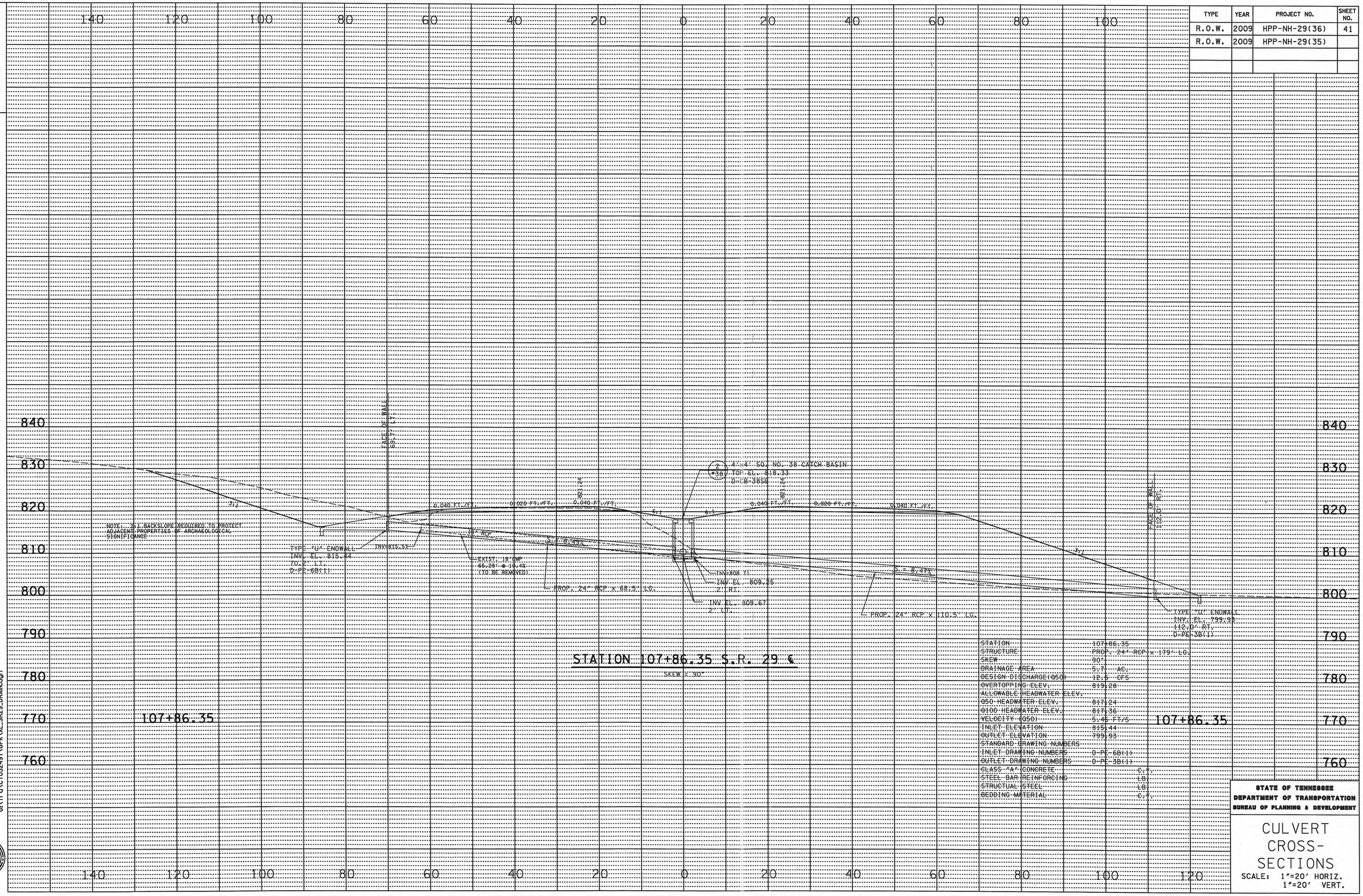
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1"=20' VERT.

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	41
R.O.W.	2009	HPP-NH-29(35)	



STATION 107+86.35 S.R. 29 ℄

SKEW F. 90°

STATION	107+86.35
STRUCTURE	PROP. 24" RCP x 179' LG.
SKEW	90°
DRAINAGE AREA	5.7 AC.
DESIGN DISCHARGE(Q50)	12.6 CFS
OVERTOPPING ELEV.	819.28
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	817.24
Q100 HEADWATER ELEV.	817.36
VELOCITY (Q50)	5.45 FT/S
INLET ELEVATION	815.44
OUTLET ELEVATION	799.93
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-6B(1)
OUTLET DRAWING NUMBERS	D-PE-3B(1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

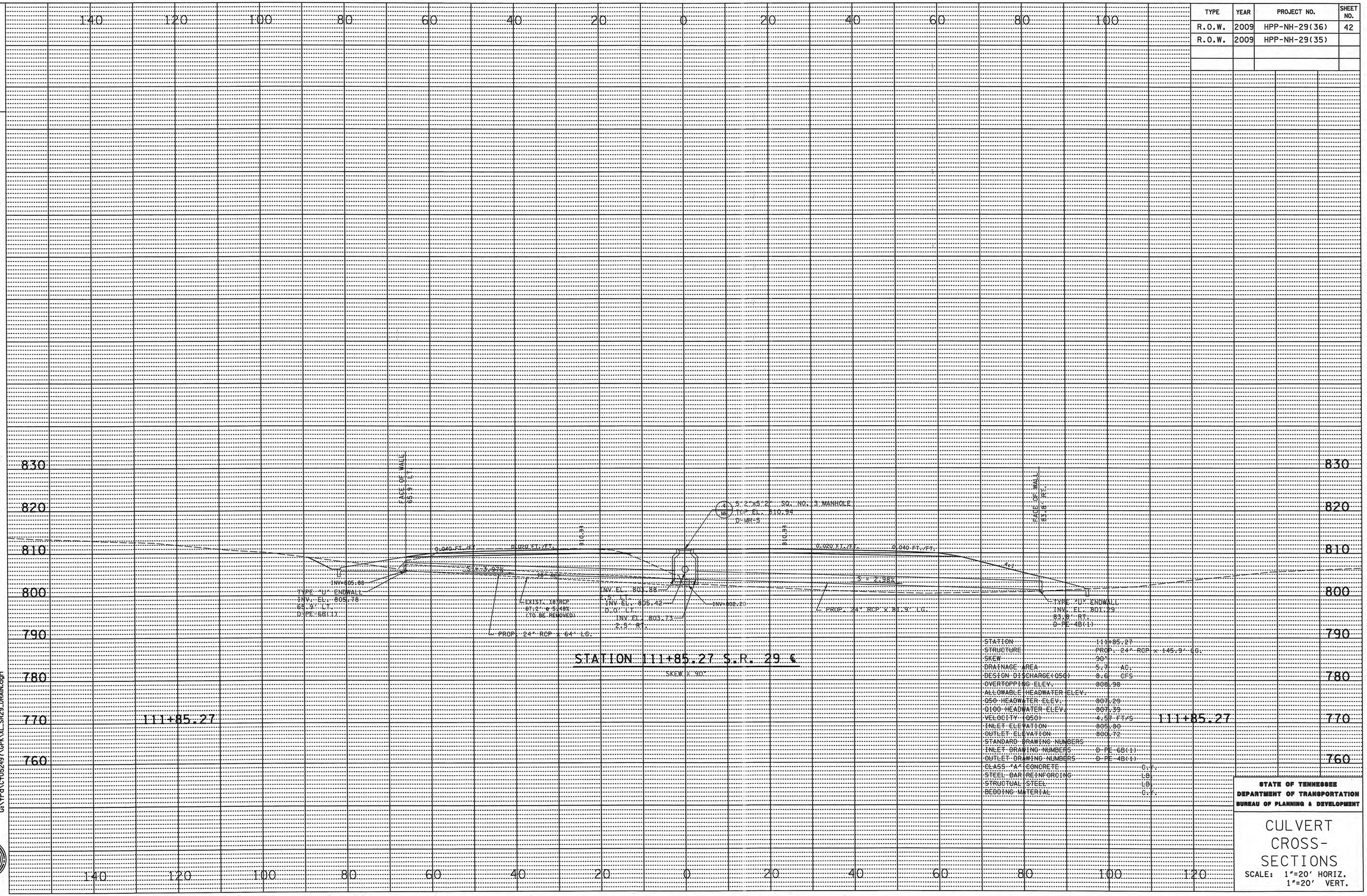
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1"=20' VERT.

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	42
R.O.W.	2009	HPP-NH-29(35)	



STATION 111+85.27 S.R. 29 ℄

SKEW F 90°

STATION	111+85.27
STRUCTURE	PROP. 24" RCP x 145.9' LG.
SKEW	90°
DRAINAGE AREA	5.7 AC.
DESIGN DISCHARGE(Q50)	8.6 CFS
OVERTOPPING ELEV.	808.98
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	807.29
Q100 HEADWATER ELEV.	807.39
VELOCITY (Q50)	4.57 FT/S
INLET ELEVATION	805.80
OUTLET ELEVATION	800.72
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-6B(1)
OUTLET DRAWING NUMBERS	D-PE-4B(1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

111+85.27

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

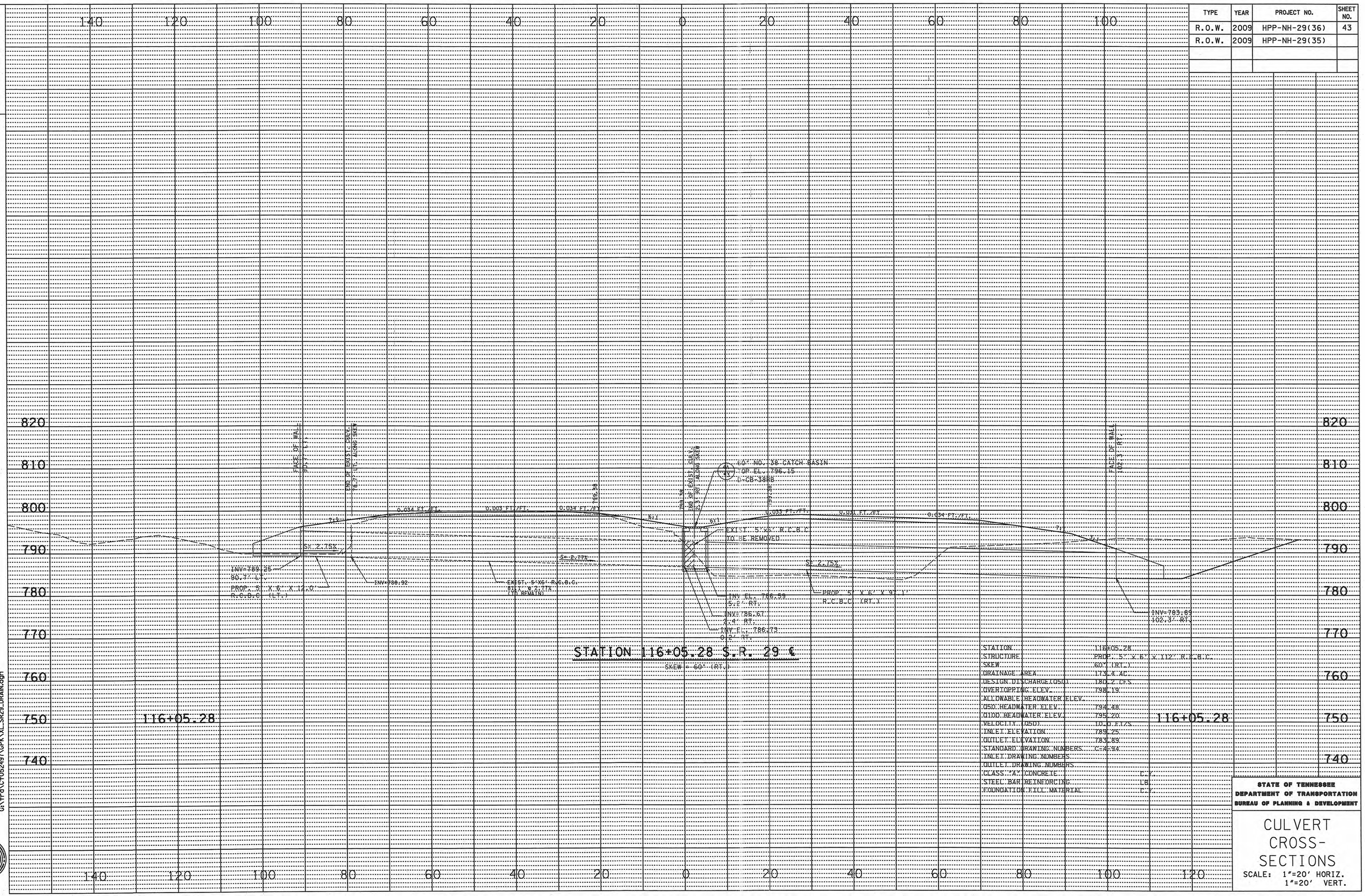
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1"=20' VERT.

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	43
R.O.W.	2009	HPP-NH-29(35)	



STATION		116+05.28
STRUCTURE		PROP. 5' X 6' X 112' R.C.B.C.
SKEW		60° (RT.)
DRAINAGE AREA		173.4 AC.
DESIGN DISCHARGE(Q50)		180.2 CFS
OVERTOPPING ELEV.		798.19
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.		794.88
Q100 HEADWATER ELEV.		795.20
VELOCITY (Q50)		10.0 FT/S
INLET ELEVATION		789.25
OUTLET ELEVATION		783.89
STANDARD DRAWING NUMBERS		C-4-94
INLET DRAWING NUMBERS		
OUTLET DRAWING NUMBERS		
CLASS 'AY' CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
FOUNDATION FILL MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

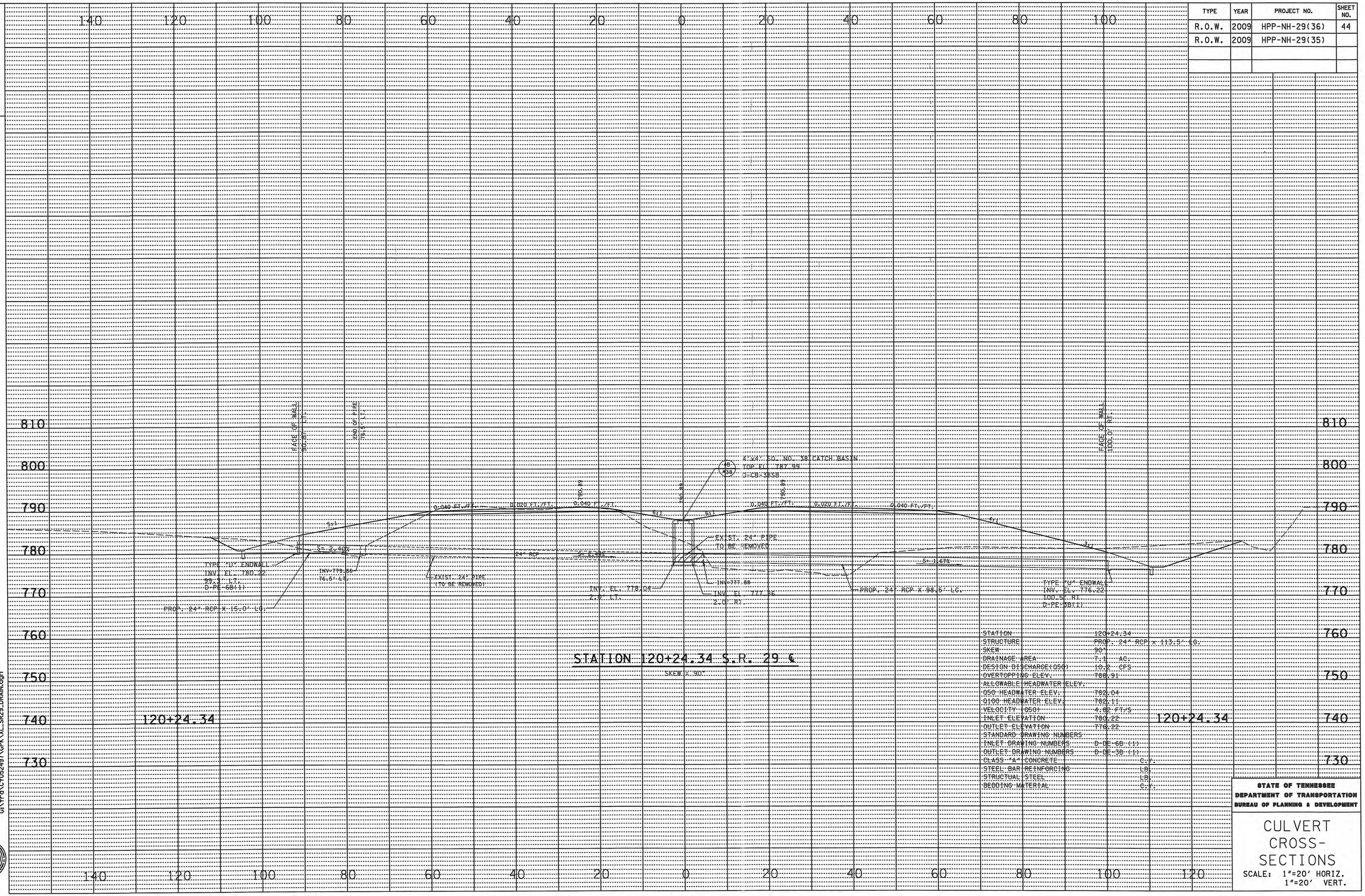
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SCALE: 1"=20' HORIZ.
1"=20' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	44
R.O.W.	2009	HPP-NH-29(35)	



STATION 120+24.34 S.R. 29 ℄

SKEW = 90°

STATION	120+24.34
STRUCTURE	PROP. 24" RCP x 113.5' LG.
SKEW	90°
DRAINAGE AREA	7.1 AC.
DESIGN DISCHARGE(Q50)	10.2 CFS
OVERTOPPING ELEV.	788.91
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	782.04
Q100 HEADWATER ELEV.	782.11
VELOCITY (Q50)	4.82 FT/S
INLET ELEVATION	780.22
OUTLET ELEVATION	776.22
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-6B (1)
OUTLET DRAWING NUMBERS	D-PE-5B (1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

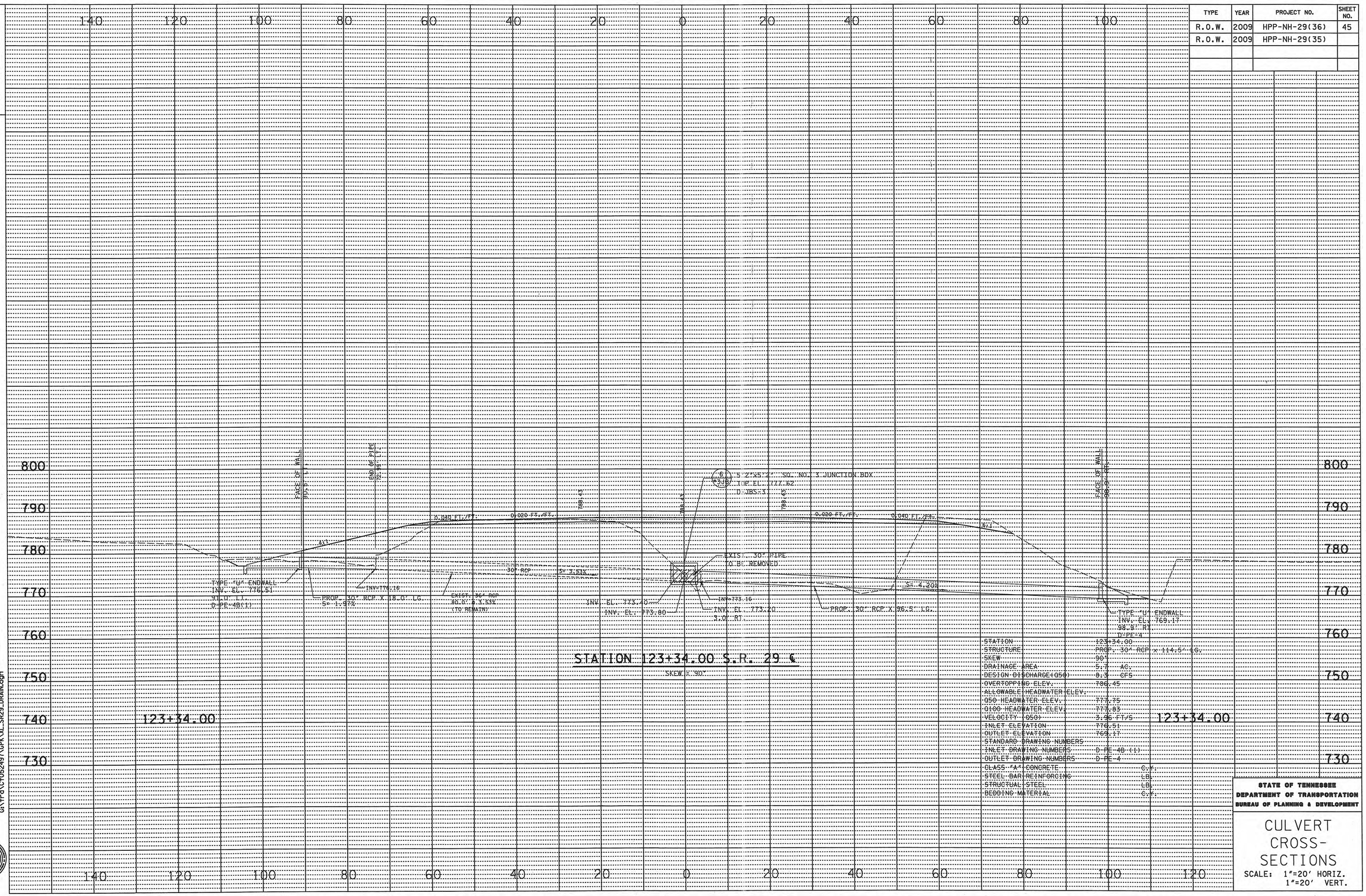
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Bureau of Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	45
R.O.W.	2009	HPP-NH-29(35)	



STATION	123+34.00	
STRUCTURE	PROP. 30" RCP x 114.5' LG.	
SKEW	90°	
DRAINAGE AREA	5.7	AC.
DESIGN DISCHARGE(Q50)	9.3	CFS
OVERTOPPING ELEV.	780.45	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	777.75	
Q100 HEADWATER ELEV.	777.83	
VELOCITY (Q50)	3.96	FT/S
INLET ELEVATION	776.51	
OUTLET ELEVATION	769.17	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-4B (1)	
OUTLET DRAWING NUMBERS	D-PE-4	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTUAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

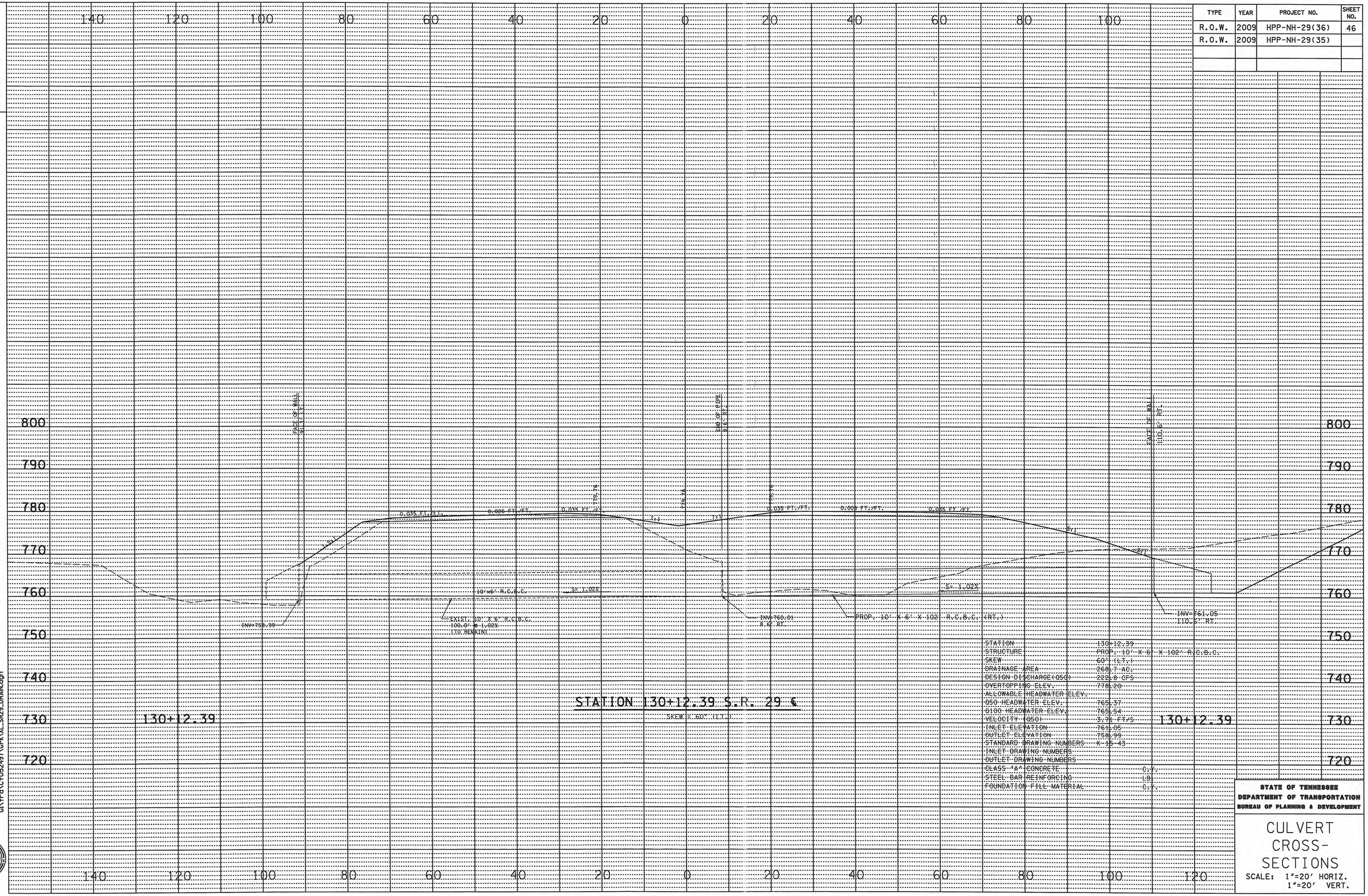
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Bureau of Planning & Development Services

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	46
R.O.W.	2009	HPP-NH-29(35)	



STATION	130+12.39	
STRUCTURE	PROP. 10' X 6' X 102' R.C.B.C.	
SKEW	60° (LT.)	
DRAINAGE AREA	266.7 AC.	
DESIGN DISCHARGE(Q50)	222.8 CFS	
OVERTOPPING ELEV.	776.20	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	765.37	
Q100 HEADWATER ELEV.	765.54	
VELOCITY (Q50)	3.71 FT/S	
INLET ELEVATION	761.05	
OUTLET ELEVATION	758.99	
STANDARD DRAWING NUMBERS	K-15-43	
INLET DRAWING NUMBERS		
OUTLET DRAWING NUMBERS		
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
FOUNDATION FILL MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

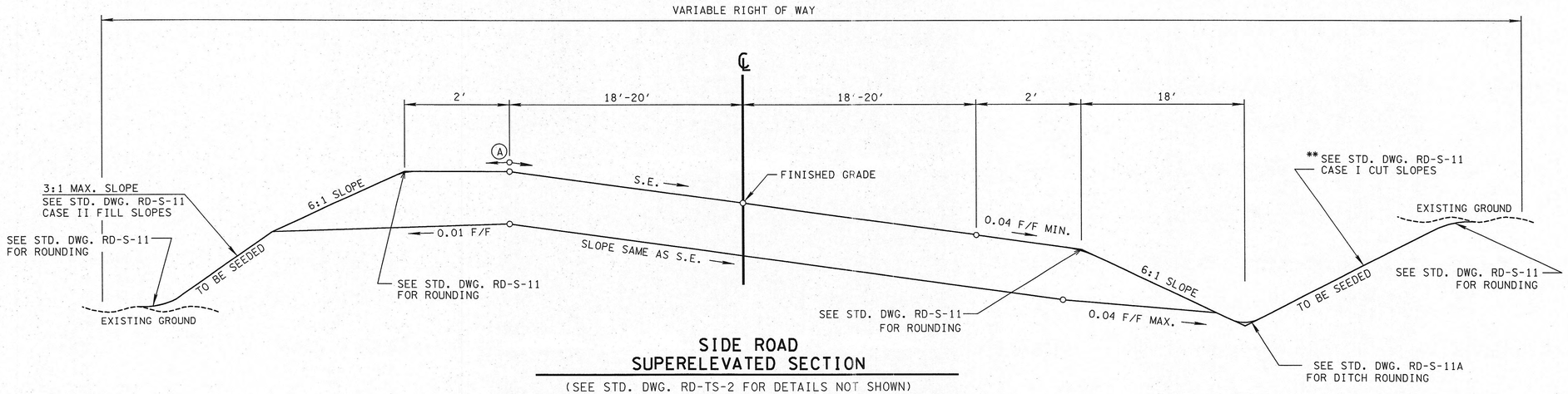
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1"=20' VERT.

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2N
R.O.W.	2009	HPP-NH-29(35)	

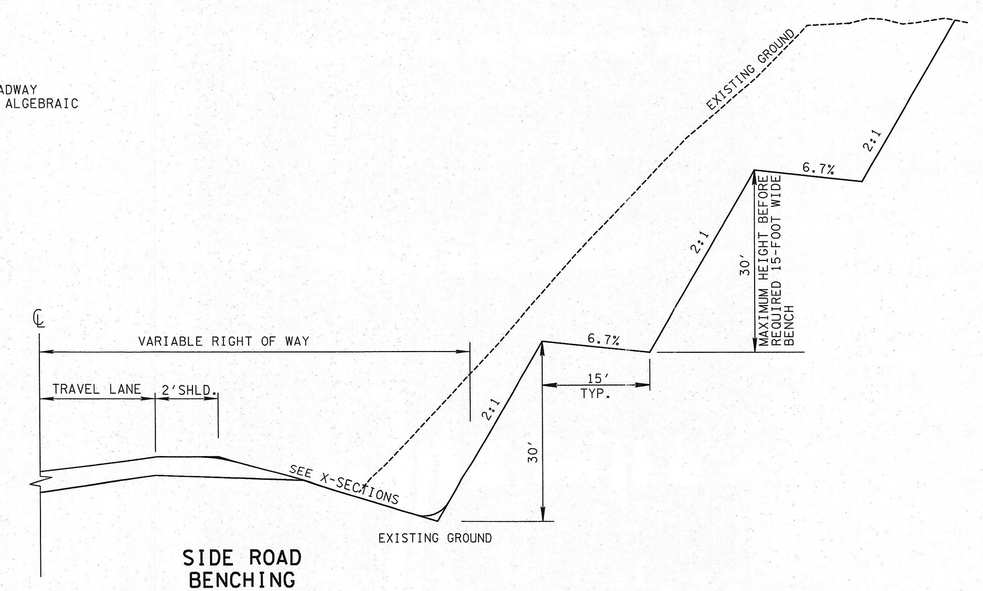


SIDE ROAD
SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-2 FOR DETAILS NOT SHOWN)

STA. 80+48.00 TO STA. 82+17.01 STATE ROUTE 328 (LT.), S.R. 29 STA. 344+41.26

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.



SIDE ROAD
BENCHING

SR-328 STA. 80+48.00 TO STA. 82+17.01 (LT.)

** A 15-FOOT WIDE BENCH IS REQUIRED EVERY 30 VERTICAL FEET OF A 2:1 CUT SLOPE. A BENCH IS NOT REQUIRED IF THE EXTENSION OF THE 2:1 CUT SLOPE AN ADDITIONAL 10 VERTICAL FEET OR LESS (FOR A TOTAL MAXIMUM VERTICAL HEIGHT OF 40 FEET) INTERSECTS THE EXISTING SLOPE. (SEE CROSS-SECTIONS)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

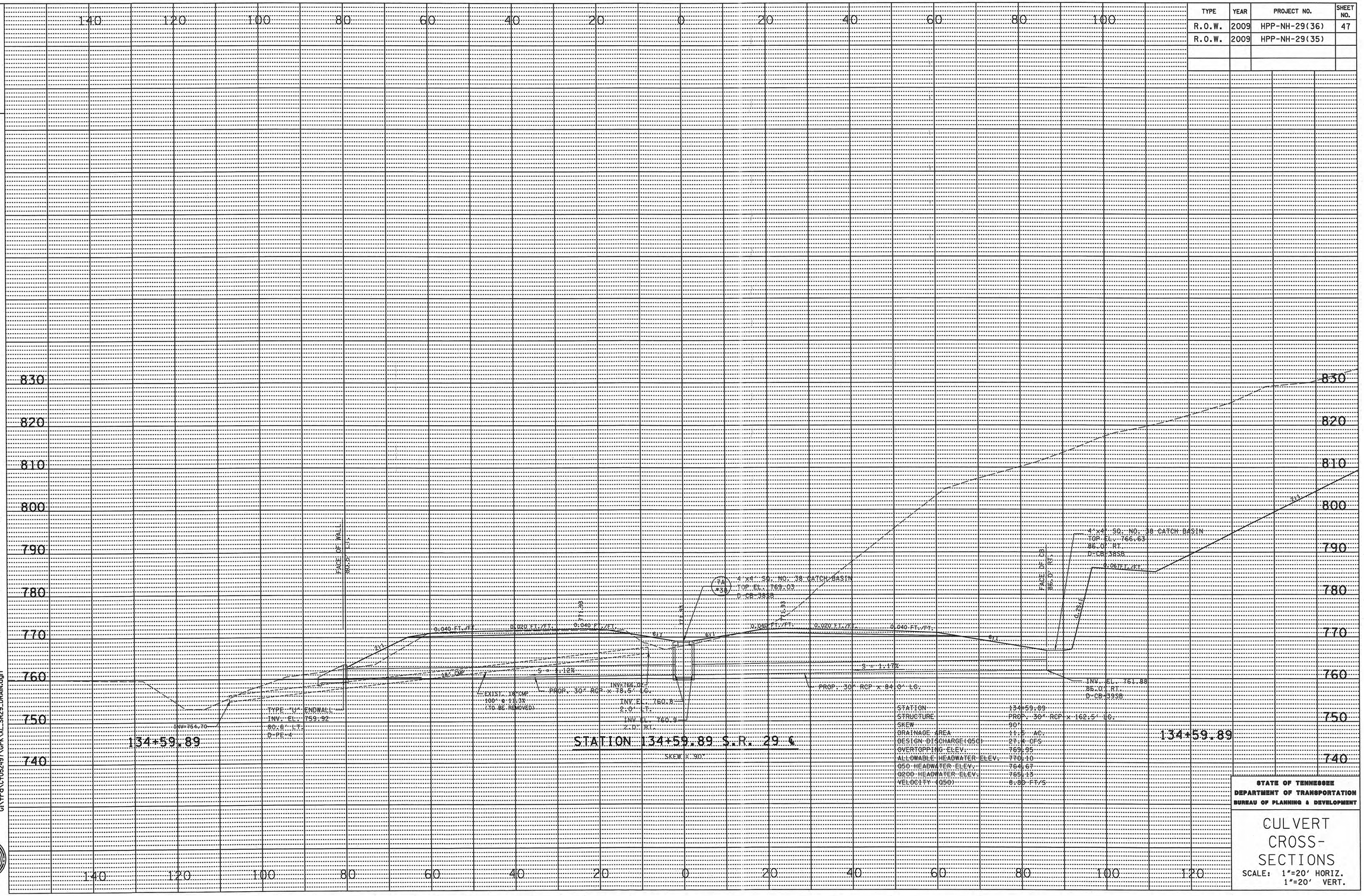
TYPICAL SECTIONS

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	47
R.O.W.	2009	HPP-NH-29(35)	



STATION	134+59.89
STRUCTURE	PROP. 30" RCP x 162.5' LG.
SKEW	90°
DRAINAGE AREA	11.5 AC.
DESIGN DISCHARGE(Q50)	27.4 CFS
OVERTOPPING ELEV.	769.95
ALLOWABLE HEADWATER ELEV.	770.10
Q50 HEADWATER ELEV.	764.67
Q200 HEADWATER ELEV.	765.13
VELOCITY (Q50)	8.80 FT/S

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

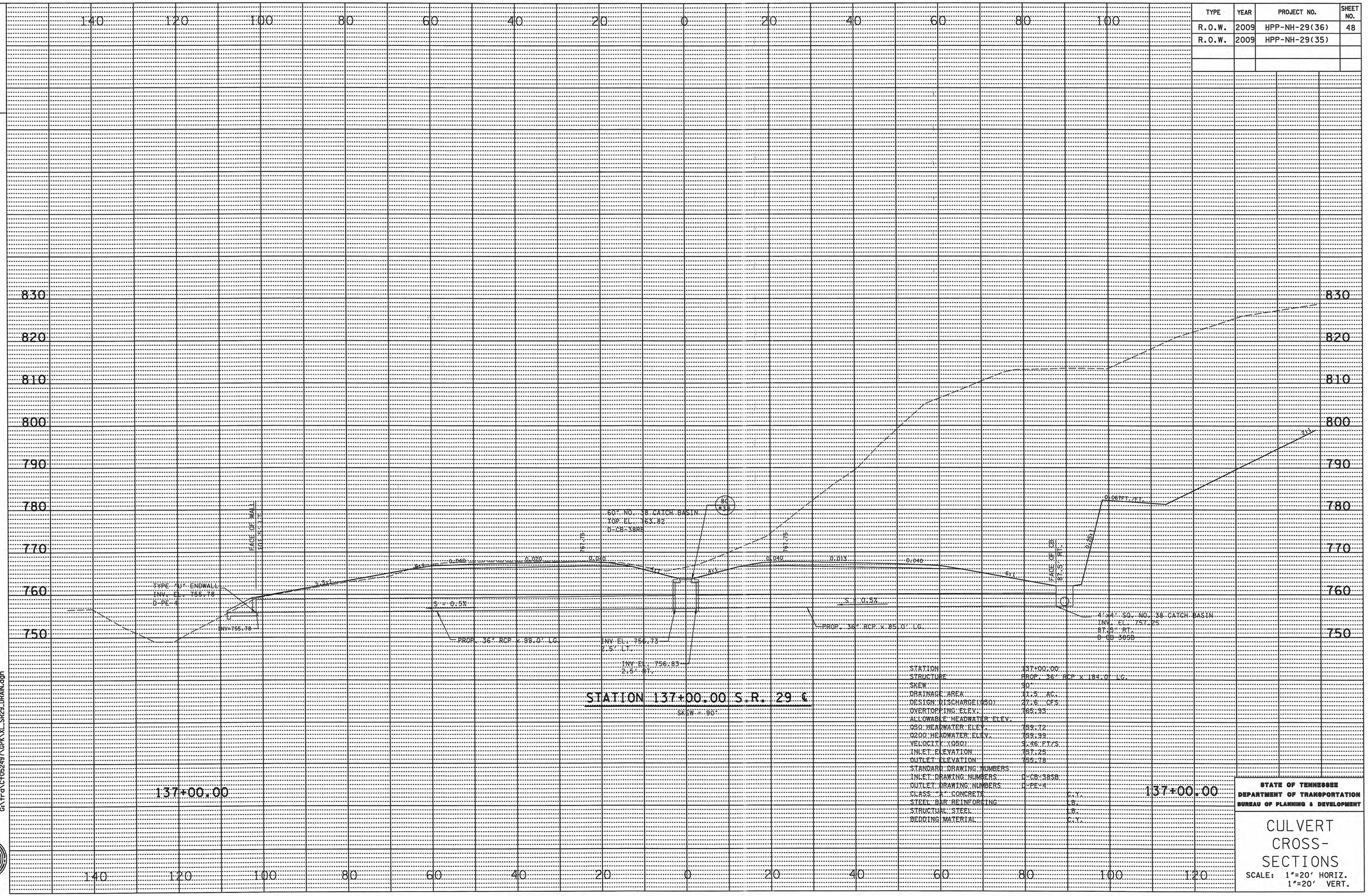
CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	48
R.O.W.	2009	HPP-NH-29(35)	



STATION 137+00.00 S.R. 29 ℄

SKEW = 90°

137+00.00

STATION	137+00.00
STRUCTURE	PROP. 36" RCP x 184.0' LG.
SKEW	90°
DRAINAGE AREA	11.5 AC.
DESIGN DISCHARGE(Q50)	27.6 CFS
OVERTOPPING ELEV.	765.93
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	759.72
Q200 HEADWATER ELEV.	759.99
VELOCITY (Q50)	5.46 FT/S
INLET ELEVATION	757.25
OUTLET ELEVATION	755.78
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-CB-38SB
OUTLET DRAWING NUMBERS	D-PE-4
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTURAL STEEL	LB.
BEDDING MATERIAL	C.Y.

137+00.00

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

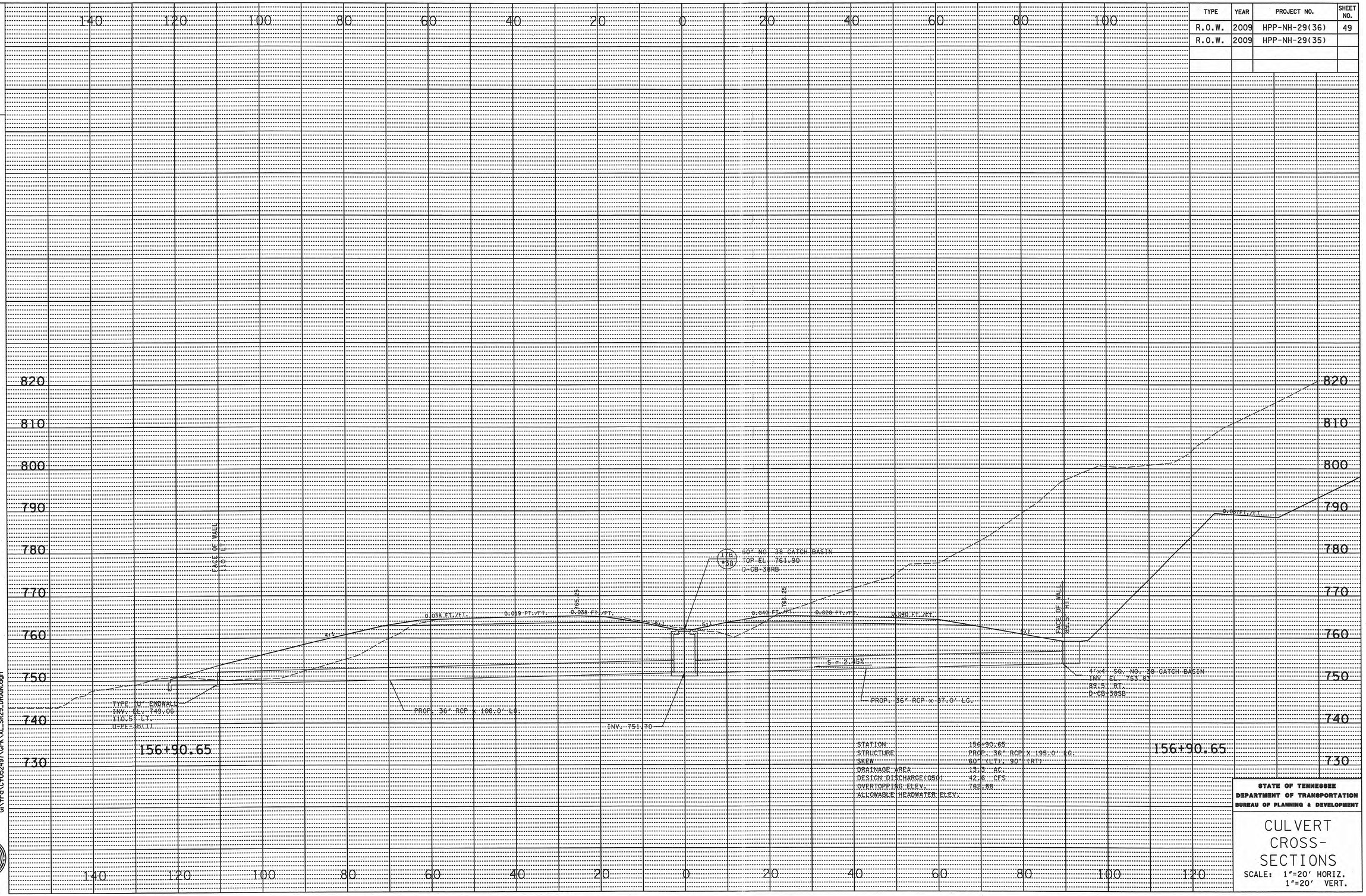
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	49
R.O.W.	2009	HPP-NH-29(35)	



STATION	156+90.65
STRUCTURE	PROP. 36" RCP X 195.0' LG.
SKEW	60° (LT).. 90° (RT)
DRAINAGE AREA	13.5 AC.
DESIGN DISCHARGE(Q50)	42.6 CFS
OVERTOPPING ELEV.	762.88
ALLOWABLE HEADWATER ELEV.	

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

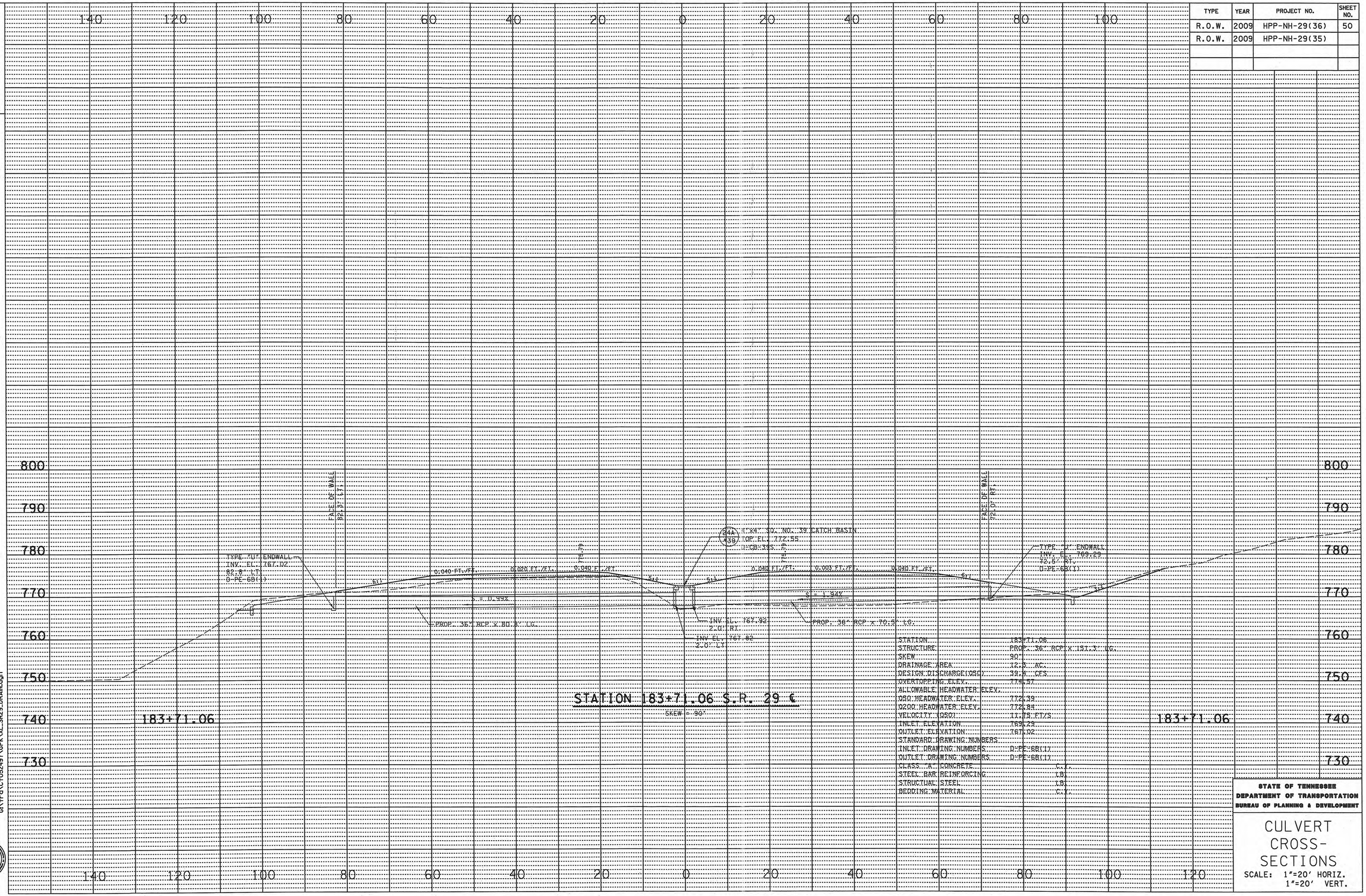
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SCALE: 1"=20' HORIZ.
1"=20' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	50
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

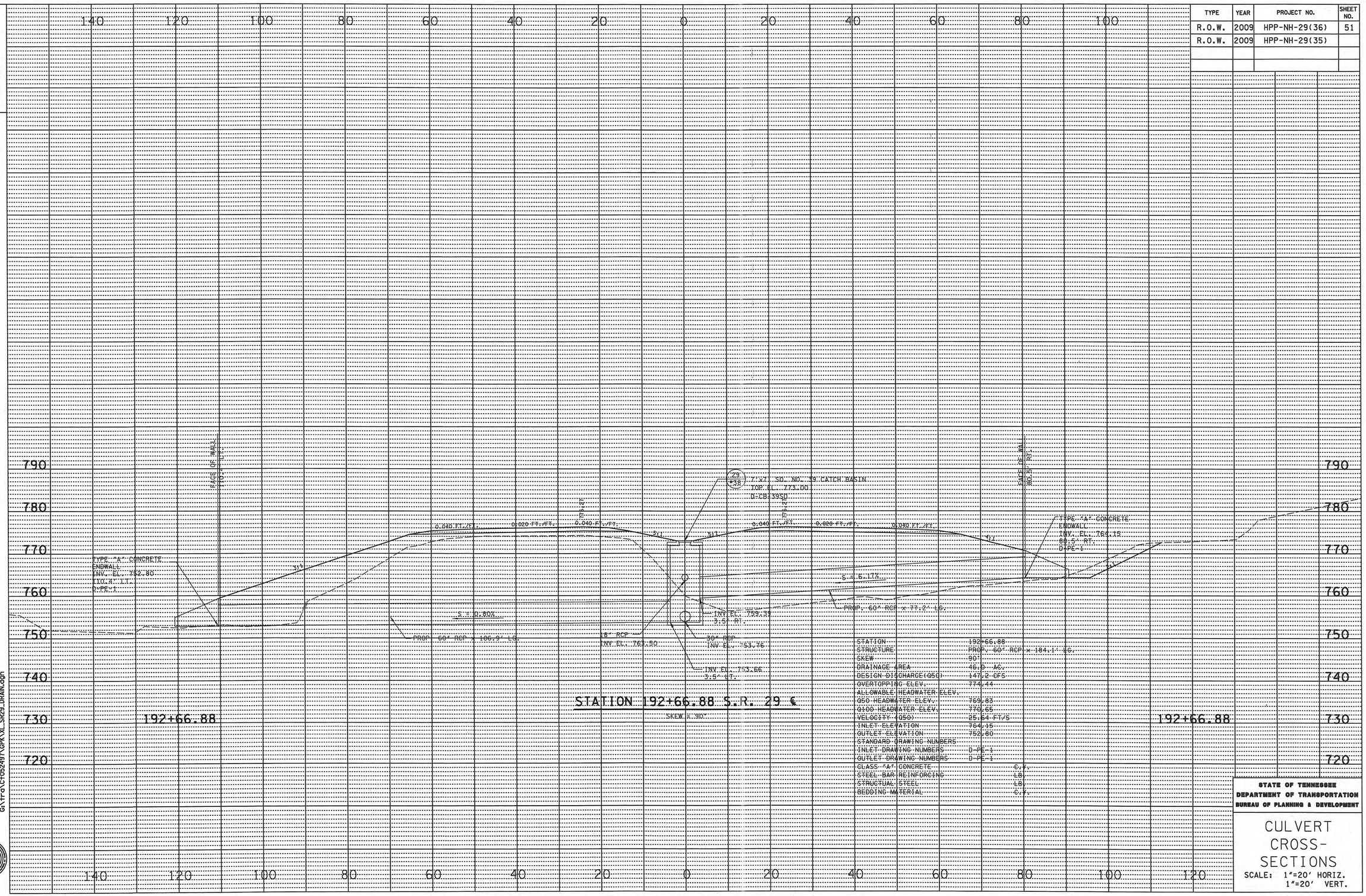
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Roadway & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	51
R.O.W.	2009	HPP-NH-29(35)	



STATION	192+66.88	
STRUCTURE	PROP. 60" RCP x 184.1' LG.	
SKEW	90°	
DRAINAGE AREA	46.9 AC.	
DESIGN DISCHARGE (Q50)	147.2 CFS	
OVERTOPPING ELEV.	774.44	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	769.83	
Q100 HEADWATER ELEV.	770.65	
VELOCITY (Q50)	25.64 FT/S	
INLET ELEVATION	764.15	
OUTLET ELEVATION	752.80	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-1	
OUTLET DRAWING NUMBERS	D-PE-1	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTUAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

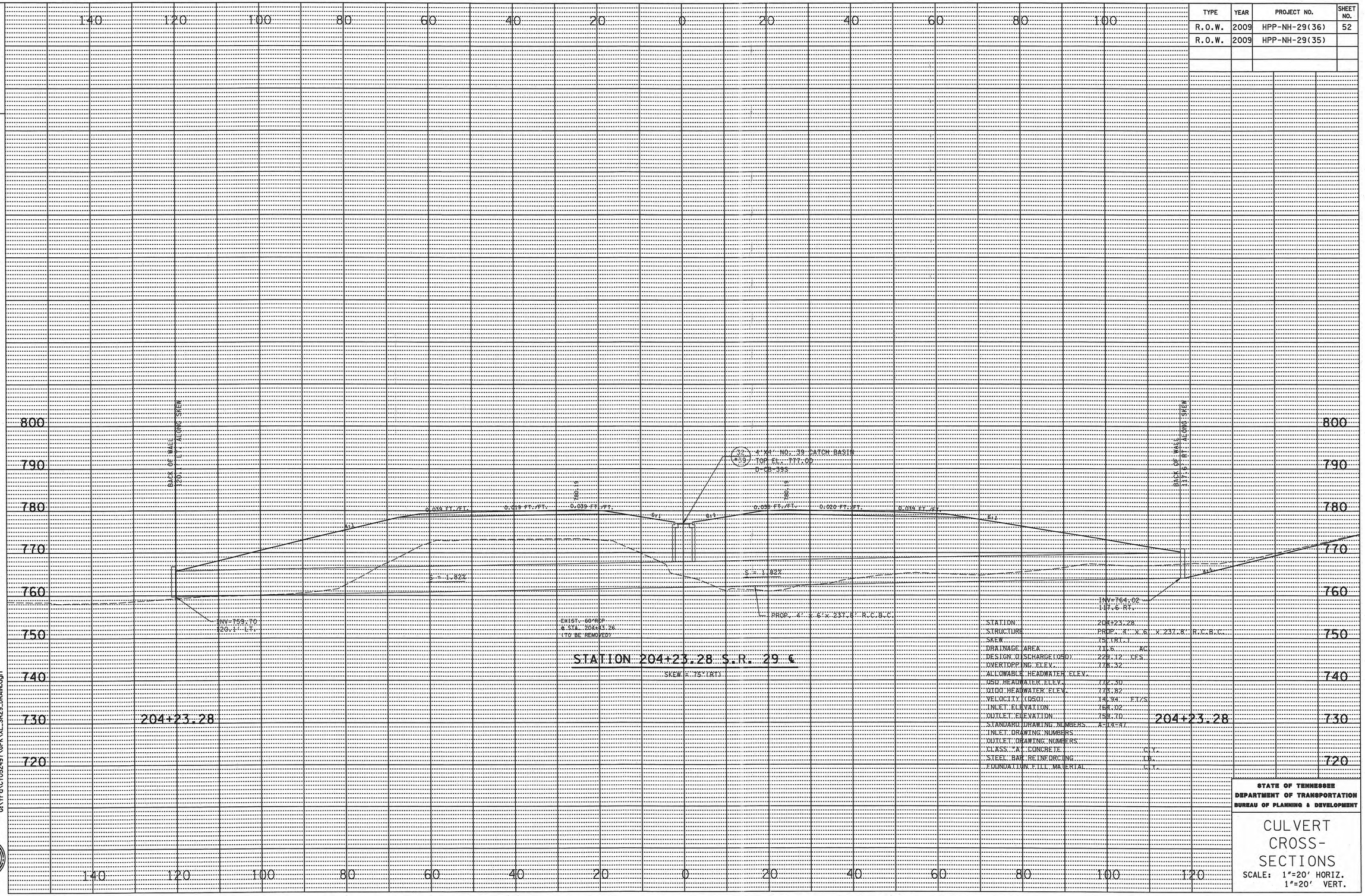
CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	52
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

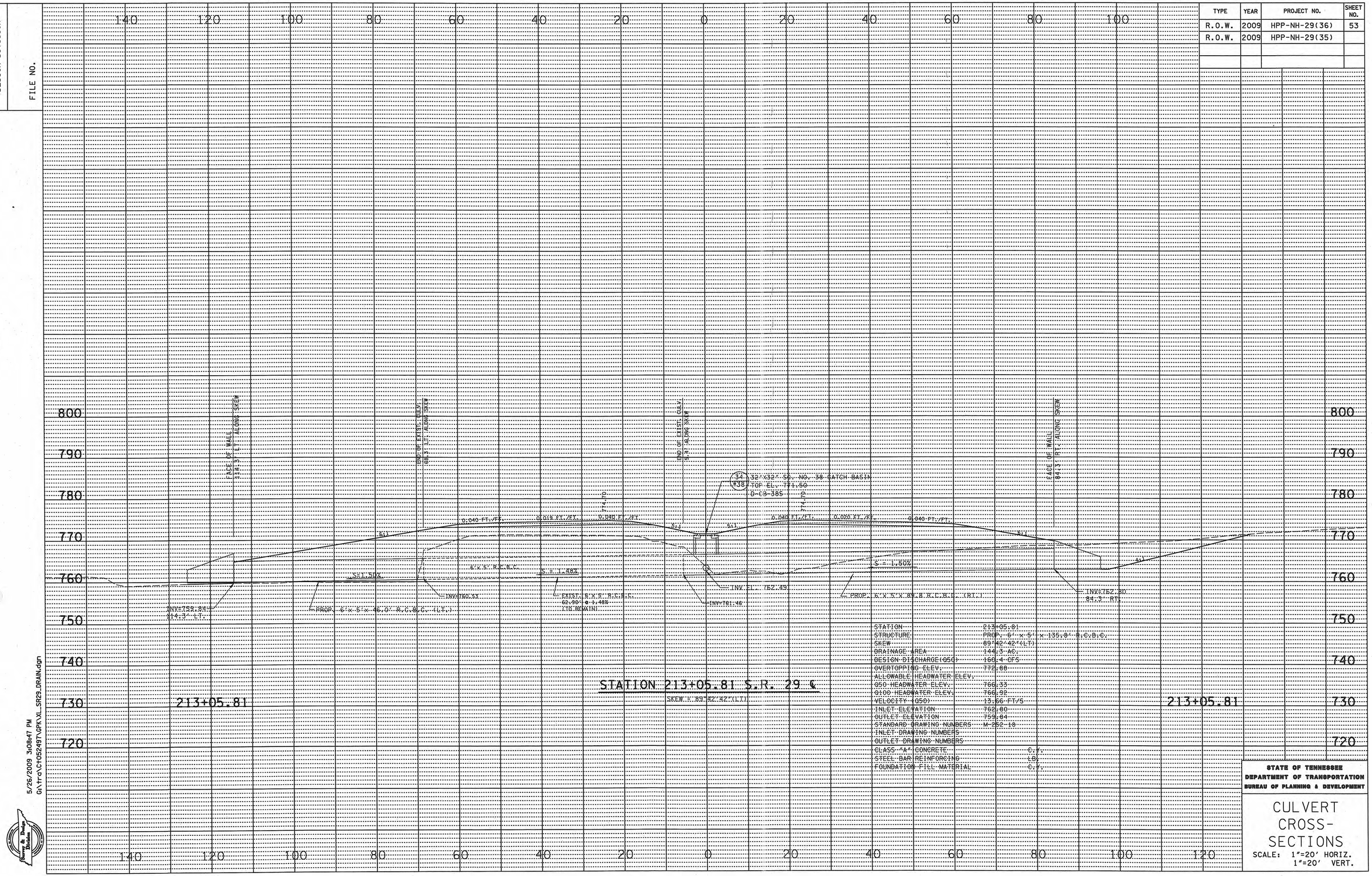
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Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	53
R.O.W.	2009	HPP-NH-29(35)	



STATION 213+05.81 S.R. 29 ℄
SKEW: S 89°42'42"(LT)

STATION	213+05.81	
STRUCTURE	PROP. 6'-x- 5'-x-135.9'- R.C.B.C.	
SKEW	89°42'42"(LT)	
DRAINAGE AREA	144.3 AC.	
DESIGN DISCHARGE(Q50)	168.4 CFS	
OVERTOPPING ELEV.	772.88	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	766.33	
Q100 HEADWATER ELEV.	766.92	
VELOCITY (Q50)	13.66 FT/S	
INLET ELEVATION	762.80	
OUTLET ELEVATION	759.84	
STANDARD DRAWING NUMBERS	M-252-10	
INLET DRAWING NUMBERS		
OUTLET DRAWING NUMBERS		
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
FOUNDATION FILL MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

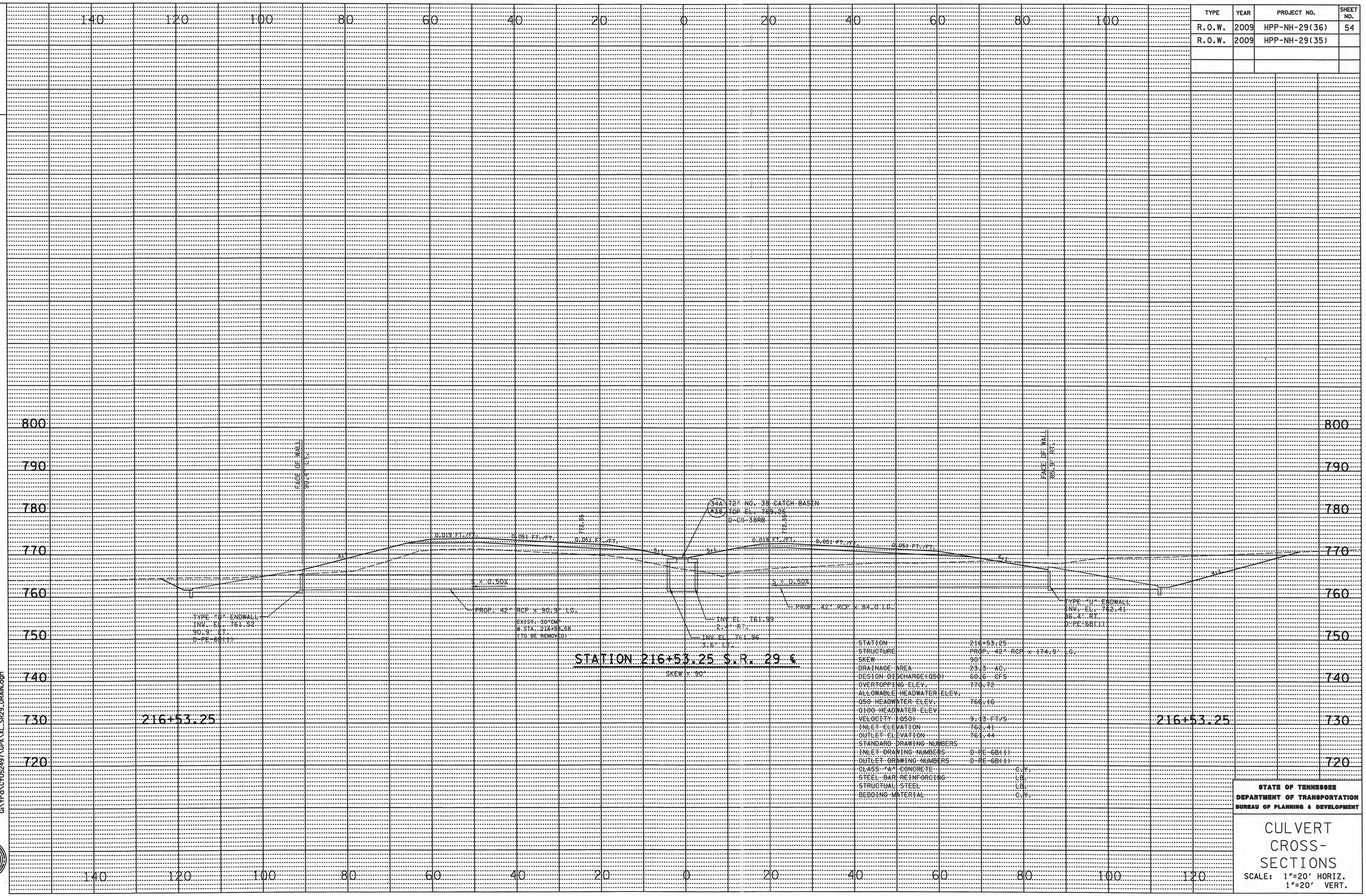
SCALE: 1"=20' HORIZ.
1"=20' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	54
R.O.W.	2009	HPP-NH-29(35)	



STATION	216+53.25
STRUCTURE	PROP. 42" RCP x 174.9' LG.
SKEW	90°
DRAINAGE AREA	23.3 AC.
DESIGN DISCHARGE(Q50)	60.6 CFS
OVERTOPPING ELEV.	770.72
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	766.16
Q100 HEADWATER ELEV.	
VELOCITY (Q50)	9.13 FT/S
INLET ELEVATION	762.41
OUTLET ELEVATION	761.44
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-6B(1)
OUTLET DRAWING NUMBERS	D-PE-6B(1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

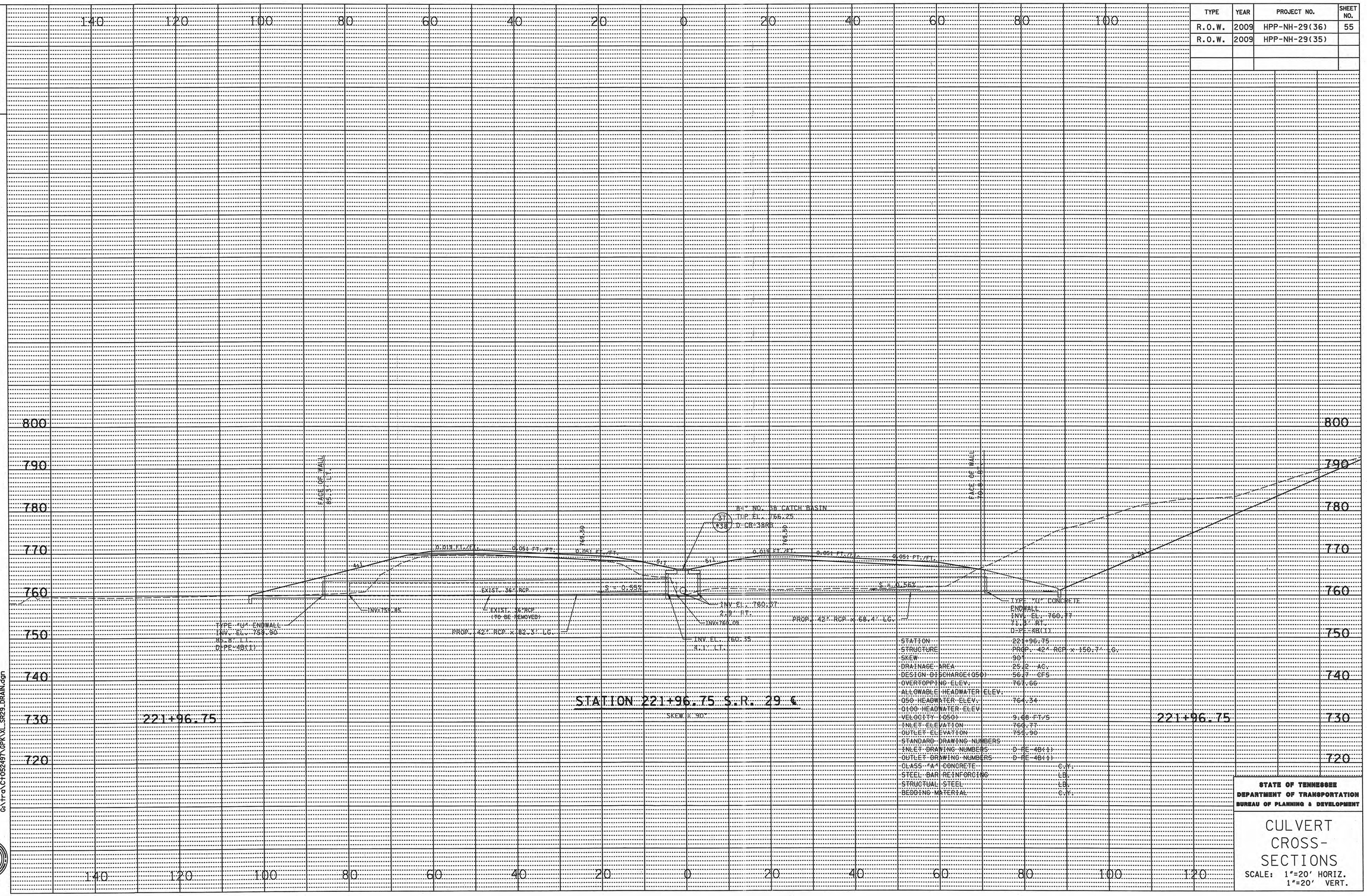
CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	55
R.O.W.	2009	HPP-NH-29(35)	



STATION 221+96.75 S.R. 29 ℄
SKEW F 90°

STATION		221+96.75
STRUCTURE		PROP. 42" RCP x 150.7' LG.
SKEW		90°
DRAINAGE AREA		25.2 AC.
DESIGN DISCHARGE(Q50)		56.7 CFS
OVERTOPPING ELEV.		767.66
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.		764.34
Q100 HEADWATER ELEV.		
VELOCITY (Q50)		9.68 FT/S
INLET ELEVATION		760.77
OUTLET ELEVATION		758.90
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS		D-PE-4B(1)
OUTLET DRAWING NUMBERS		D-PE-4B(1)
CLASS "AA" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTUAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

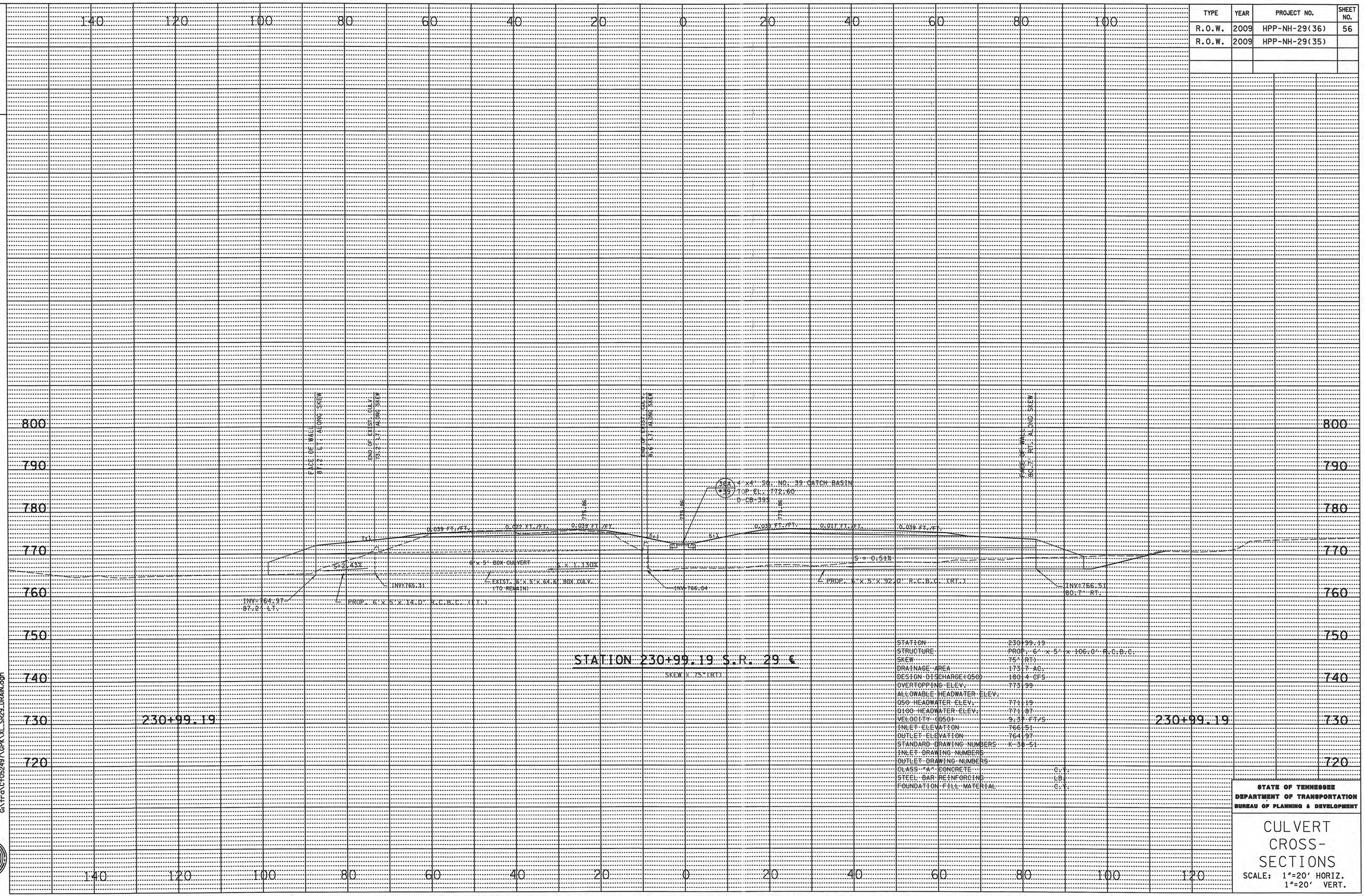
SCALE: 1"=20' HORIZ.
1"=20' VERT.

Bureau of Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	56
R.O.W.	2009	HPP-NH-29(35)	



STATION 230+99.19 S.R. 29 ℄

SKEW = 75° (RT.)

STATION	230+99.19	
STRUCTURE	PROP. 6'x 5'x 106.0' R.C.B.C.	
SKEW	75° (RT)	
DRAINAGE AREA	173.7 AC.	
DESIGN DISCHARGE(Q50)	180.4 CFS	
OVERTOPPING ELEV.	773.99	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	771.19	
Q100 HEADWATER ELEV.	771.87	
VELOCITY (Q50)	9.37 FT/S	
INLET ELEVATION	766.51	
OUTLET ELEVATION	764.97	
STANDARD DRAWING NUMBERS	K-30-51	
INLET DRAWING NUMBERS		
OUTLET DRAWING NUMBERS		
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
FOUNDATION FILL MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

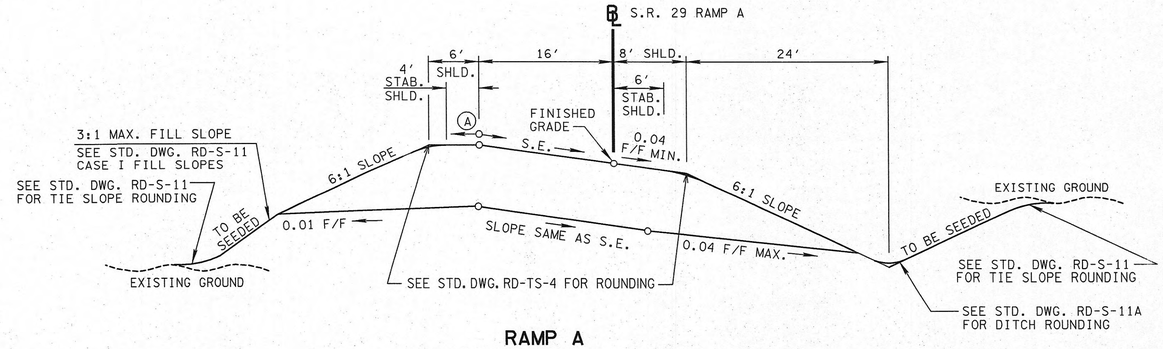
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Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

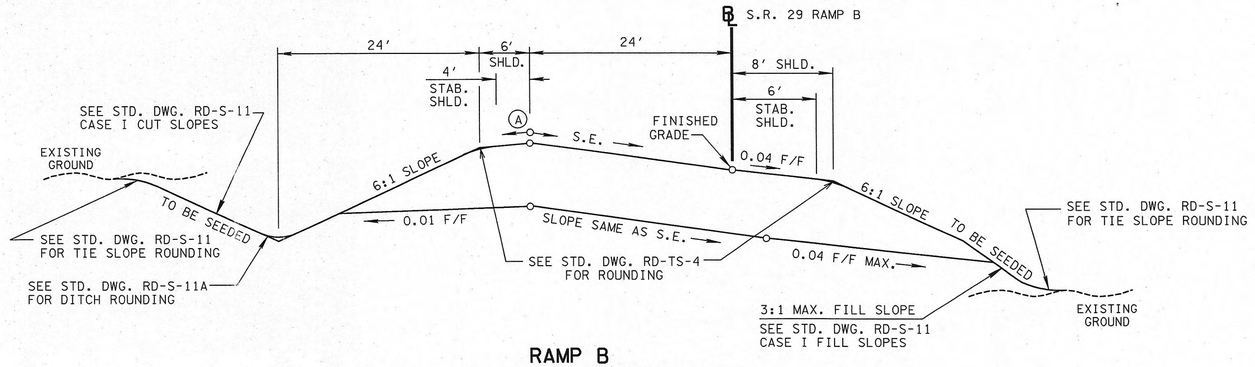
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2P
R.O.W.	2009	HPP-NH-29(35)	



RAMP A
SUPERELEVATED SECTION
(SEE STD. DWG. RD-TS-4 FOR DETAILS NOT SHOWN)

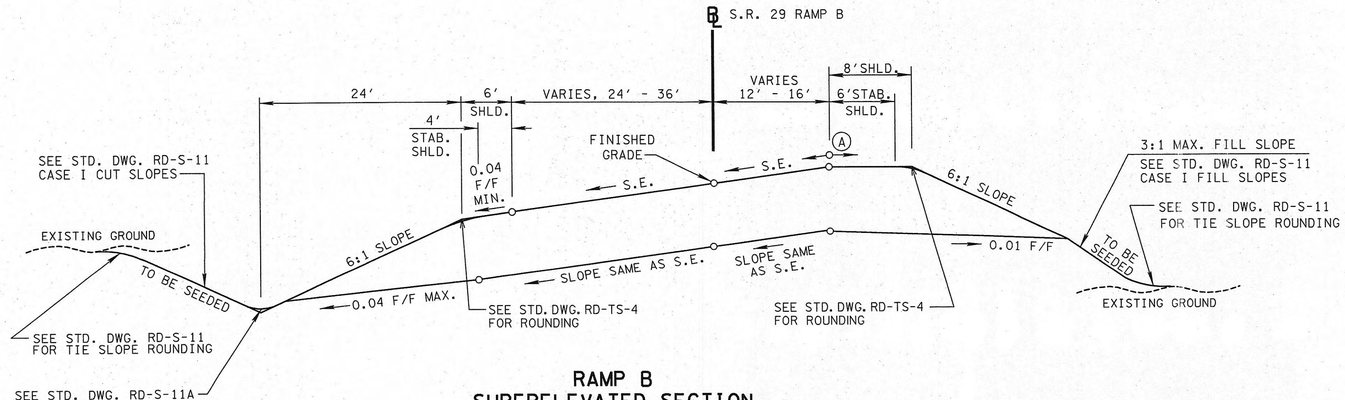
S.R. 29 RAMP A STA. 2+00.00 TO STA. 7+03.38

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.



RAMP B
SUPERELEVATED SECTION
(SEE STD. DWG. RD-TS-4 FOR DETAILS NOT SHOWN)

S.R. 29 RAMP B STA.10+00.00 TO STA. 17+60.00



RAMP B
SUPERELEVATED SECTION
(SEE STD. DWG. RD-TS-4 FOR DETAILS NOT SHOWN)

S.R. 29 RAMP B STA.17+60.00 TO STA. 22+61.84

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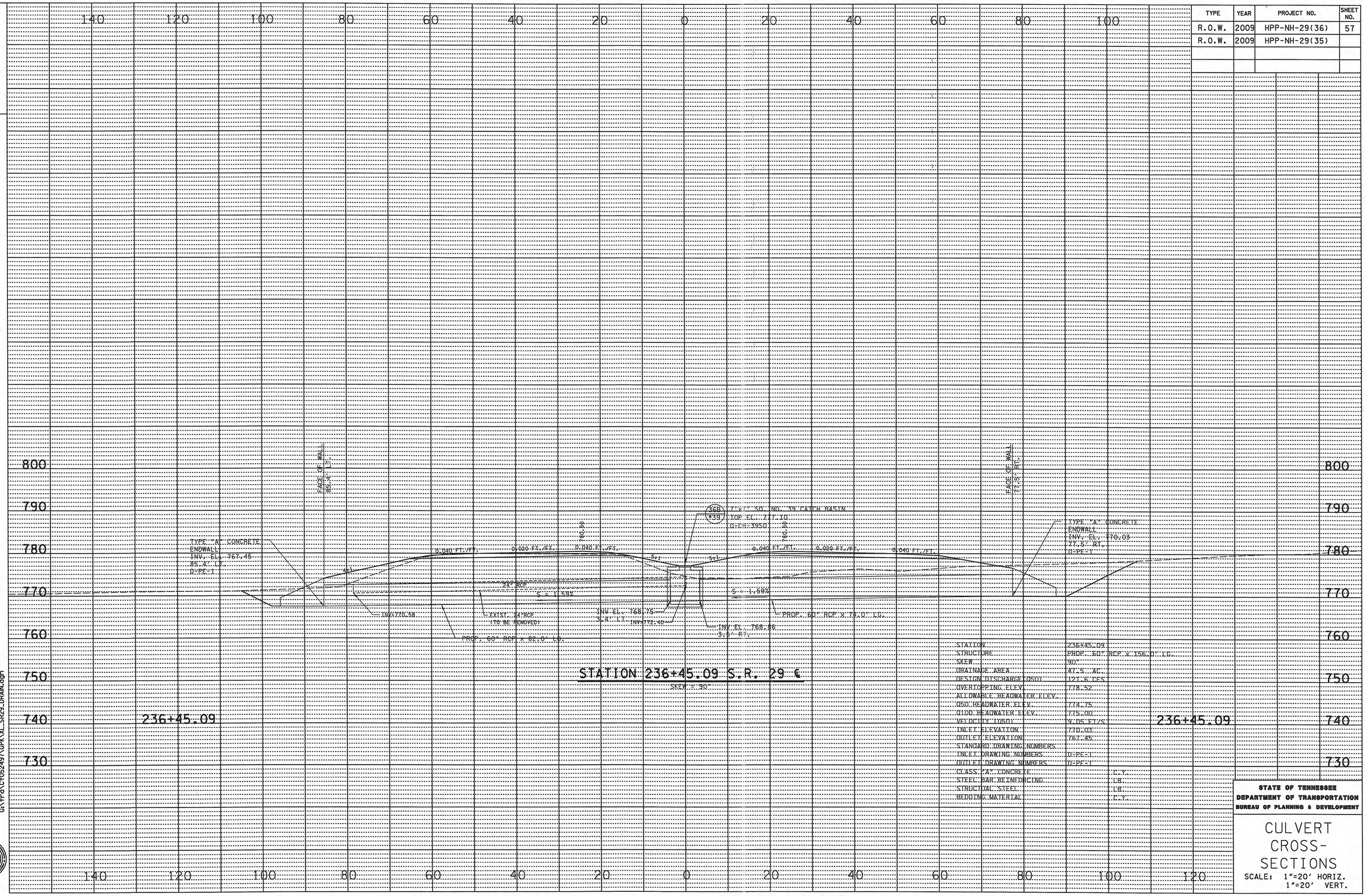
Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

TENNESSEE D.O.T.
DESIGN DIVISION
-
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	57
R.O.W.	2009	HPP-NH-29(35)	



STATION 236+45.09 S.R. 29 ℄

SKEW = 90°

STATION	236+45.09	
STRUCTURE	PROP. 60" RCP x 156.0' LG.	
SKEW	90°	
DRAINAGE AREA	87.5 AC.	
DESIGN DISCHARGE(Q50)	121.6 CFS	
OVERTOPPING ELEV.	778.52	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	774.75	
Q100 HEADWATER ELEV.	775.00	
VELOCITY (Q50)	9.05 FT/S	
INLET ELEVATION	770.03	
OUTLET ELEVATION	767.45	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-1	
OUTLET DRAWING NUMBERS	D-PE-1	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTURAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

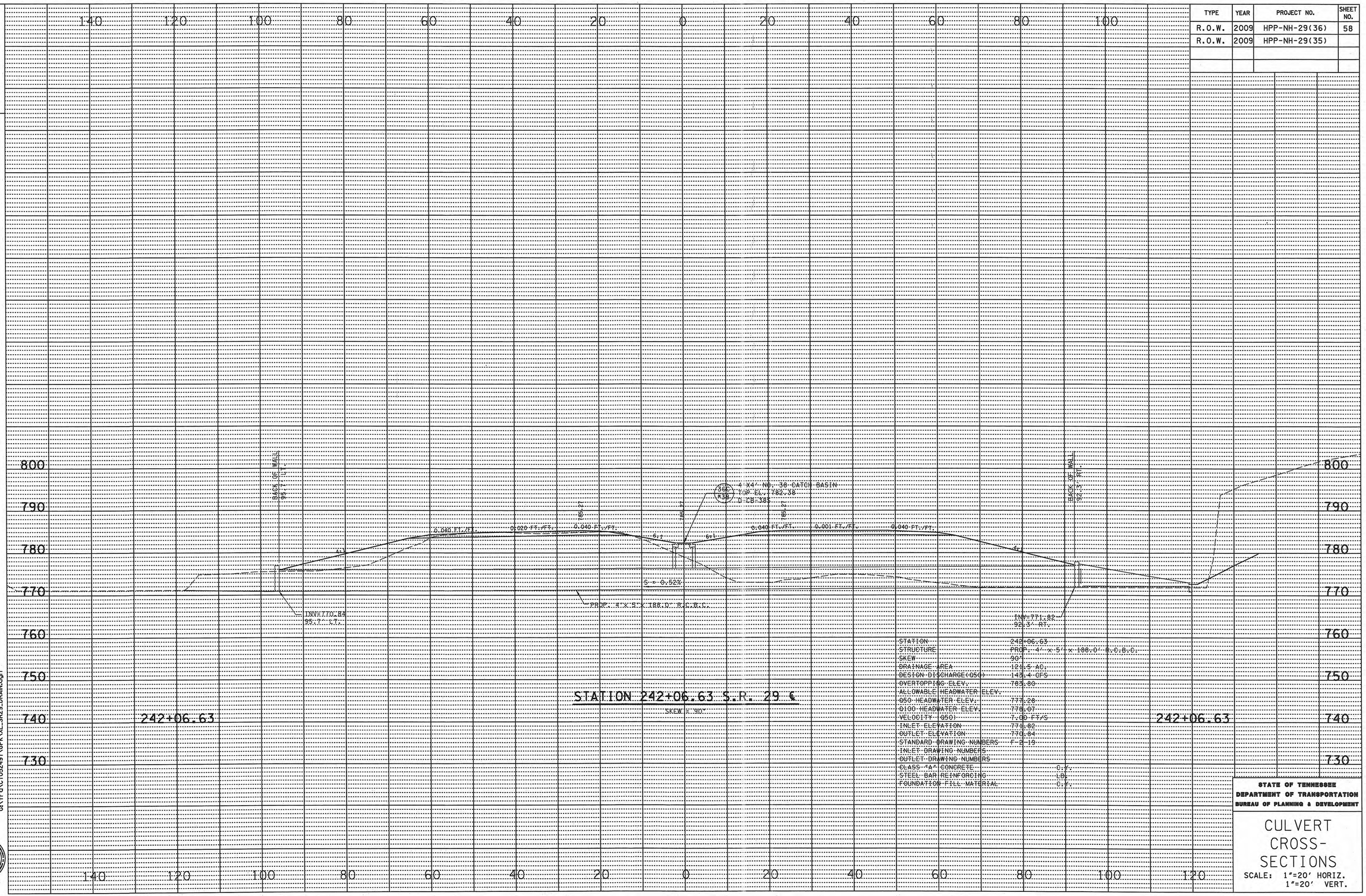
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1"=20' VERT.

Structures & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	58
R.O.W.	2009	HPP-NH-29(35)	



STATION	242+06.63
STRUCTURE	PROP. 4' x 5' x 188.0' R.C.B.C.
SKEW	90°
DRAINAGE AREA	124.5 AC.
DESIGN DISCHARGE(Q50)	143.4 CFS
OVERTOPPING ELEV.	783.80
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	777.28
Q100 HEADWATER ELEV.	778.07
VELOCITY (Q50)	7.00 FT/S
INLET ELEVATION	771.82
OUTLET ELEVATION	770.84
STANDARD DRAWING NUMBERS	F-8-19
INLET DRAWING NUMBERS	
OUTLET DRAWING NUMBERS	
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
FOUNDATION FILL MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

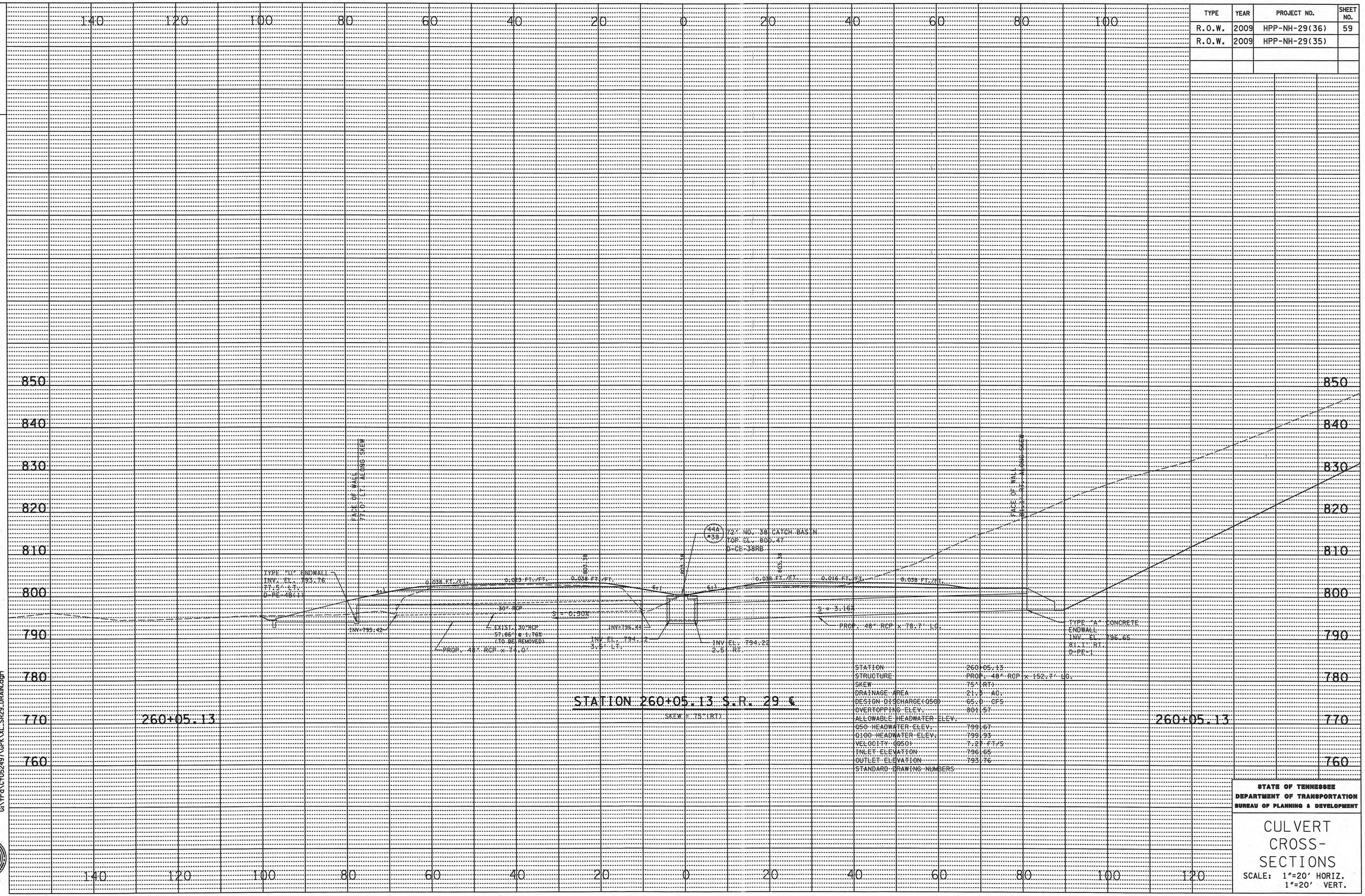
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1"=20' VERT.

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	59
R.O.W.	2009	HPP-NH-29(35)	



STATION	260+05.13
STRUCTURE	PROP. 48" RCP x 152.7' LG.
SKEW	75° RT.
DRAINAGE AREA	21.3 AC.
DESIGN DISCHARGE(Q50)	65.0 CFS
OVERTOPPING ELEV.	801.57
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	799.67
Q100 HEADWATER ELEV.	799.93
VELOCITY (Q50)	7.27 FT/S
INLET ELEVATION	796.65
OUTLET ELEVATION	793.76
STANDARD DRAWING NUMBERS	

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Surveys & Design Division

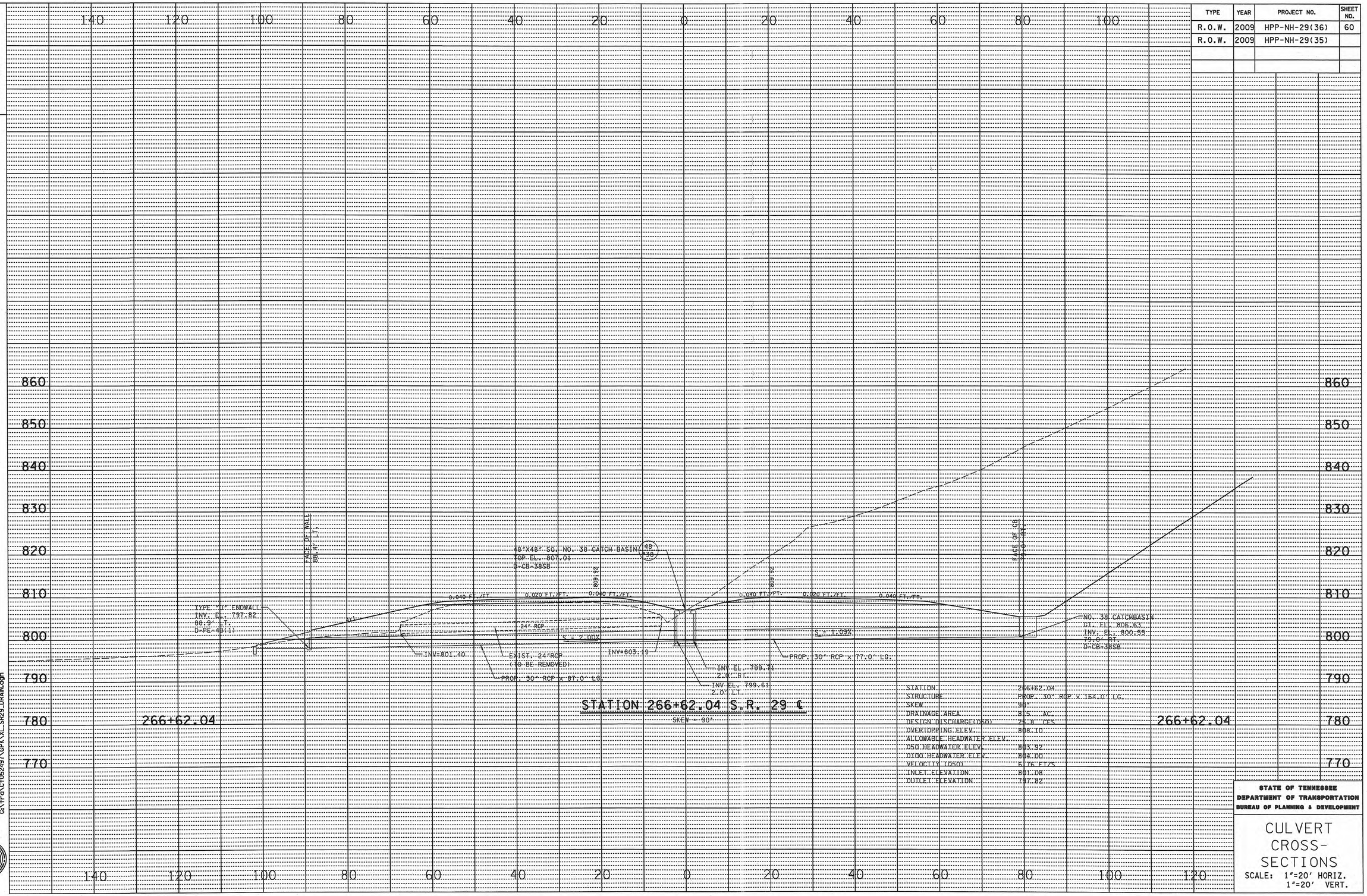
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	60
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

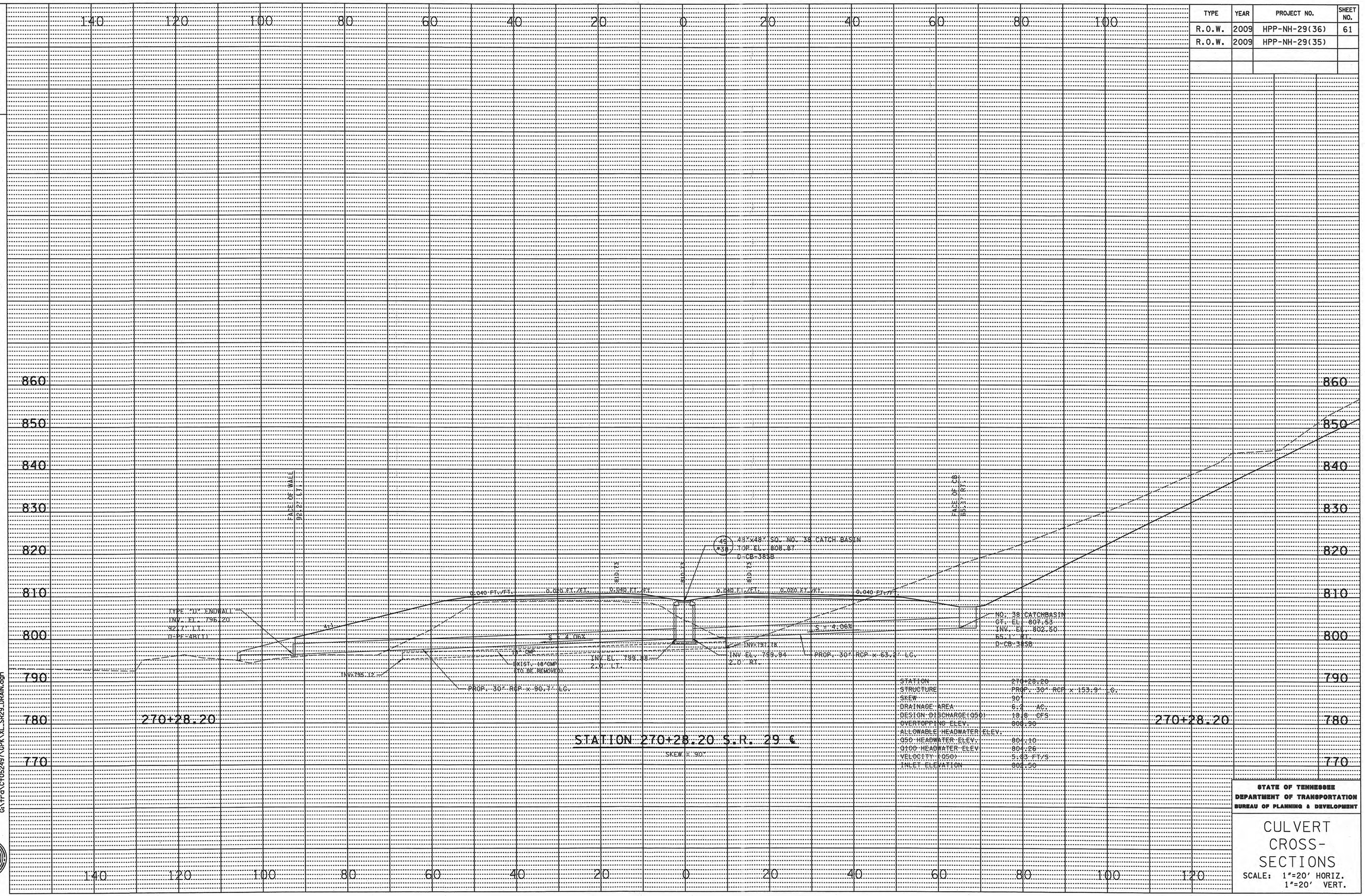
CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	61
R.O.W.	2009	HPP-NH-29(35)	



STATION 270+28.20 S.R. 29 ℄

SKEW = 90°

STATION	270+28.20
STRUCTURE	PROP. 30" RCP x 153.9' LG.
SKEW	90°
DRAINAGE AREA	6.2 AC.
DESIGN DISCHARGE(Q50)	18.8 CFS
OVERTOPPING ELEV.	808.90
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	804.10
Q100 HEADWATER ELEV	804.26
VELOCITY (Q50)	5.83 FT/S
INLET ELEVATION	802.50

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Surveys & Design Division

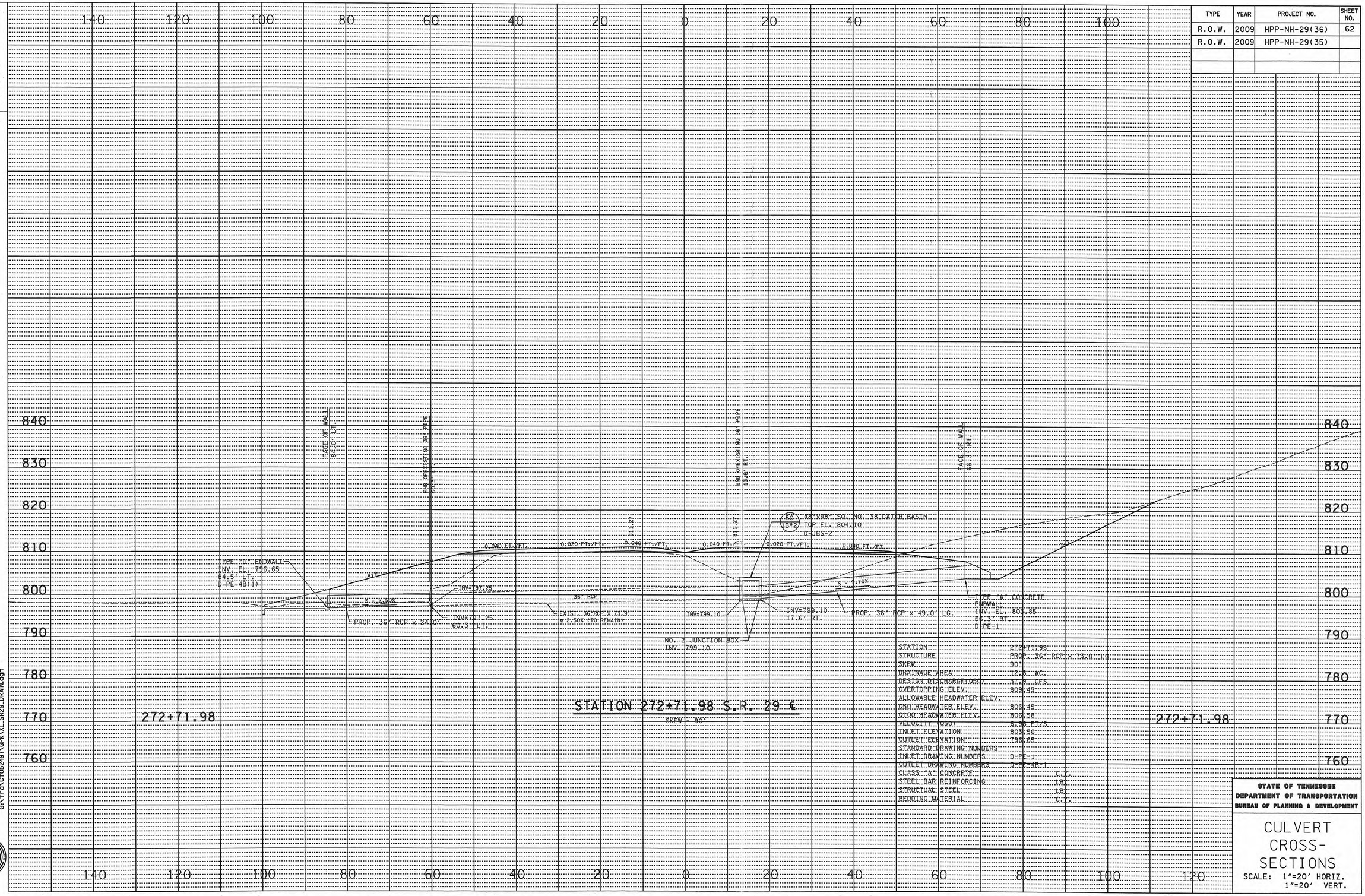
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	62
R.O.W.	2009	HPP-NH-29(35)	



STATION 272+71.98 S.R. 29 ℄
SKEW 90°

STATION	272+71.98
STRUCTURE	PROP. 36" RCP x 73.0' LG
SKEW	90°
DRAINAGE AREA	12.6 AC.
DESIGN DISCHARGE Q50	37.9 CFS
OVERTOPPING ELEV.	809.45
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	806.45
Q100 HEADWATER ELEV.	806.58
VELOCITY Q50	6.36 FT/S
INLET ELEVATION	803.58
OUTLET ELEVATION	796.85
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-1
OUTLET DRAWING NUMBERS	D-PE-48-1
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTURAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

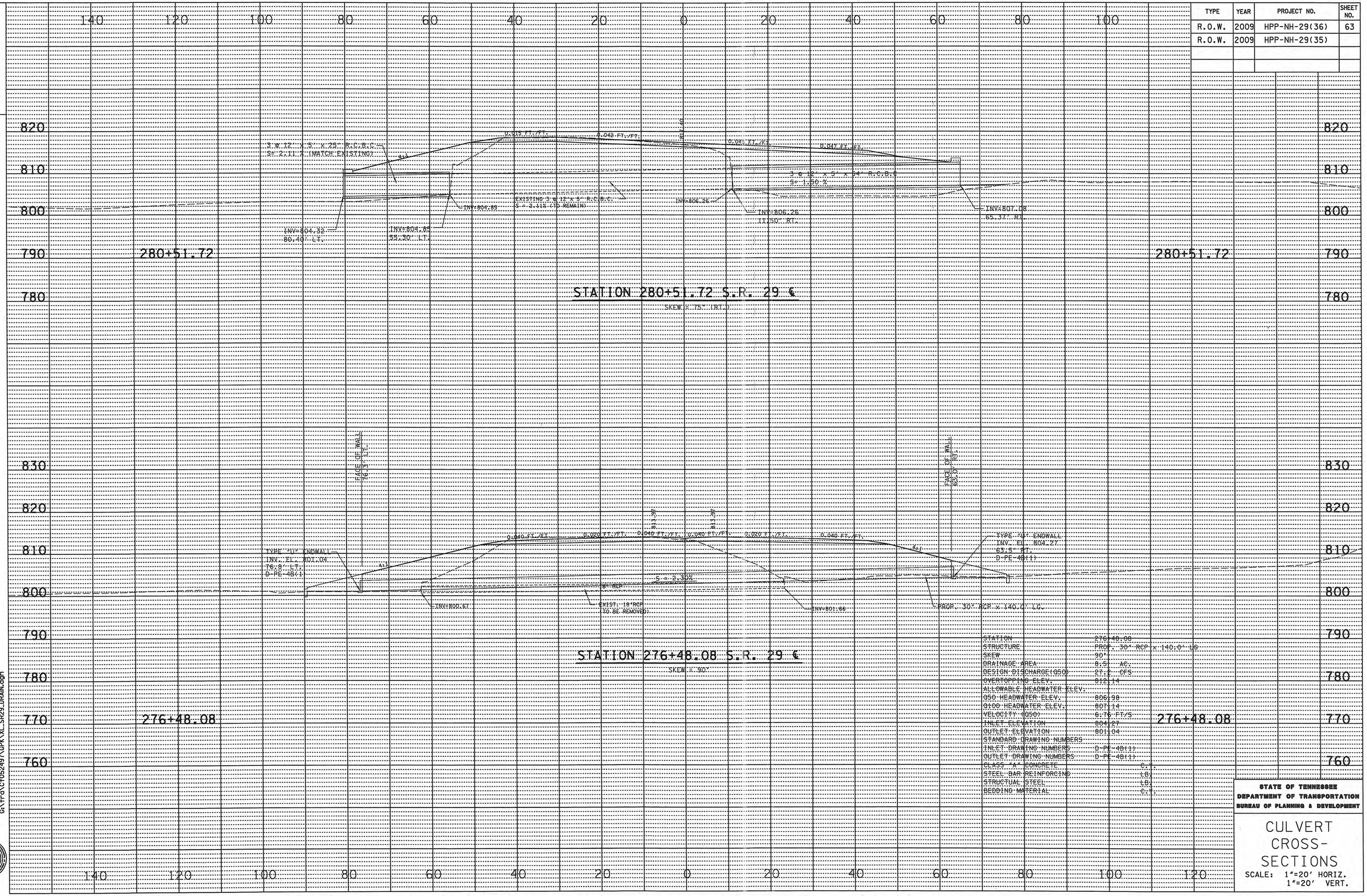
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Bowers & Dodds Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	63
R.O.W.	2009	HPP-NH-29(35)	



STATION	276+48.08
STRUCTURE	PROP. 30" RCP x 140.0' LG
SKEW	90°
DRAINAGE AREA	8.5 AC.
DESIGN DISCHARGE(Q50)	27.2 CFS
OVERTOPPING ELEV.	812.14
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	806.98
Q100 HEADWATER ELEV.	807.14
VELOCITY (Q50)	6.76 FT/S
INLET ELEVATION	804.27
OUTLET ELEVATION	801.04
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-4B(1)
OUTLET DRAWING NUMBERS	D-PE-4B(1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

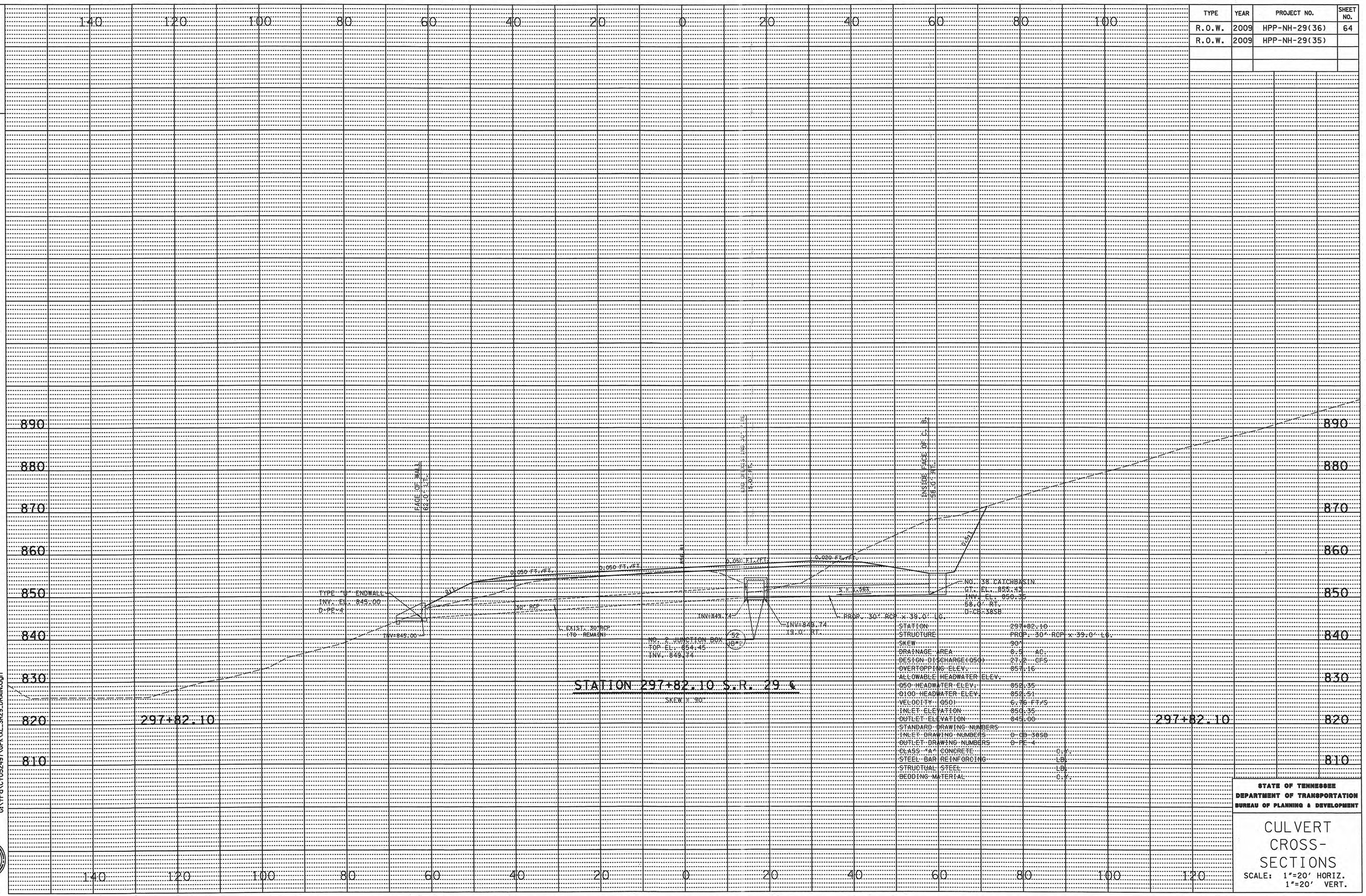
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	64
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Division

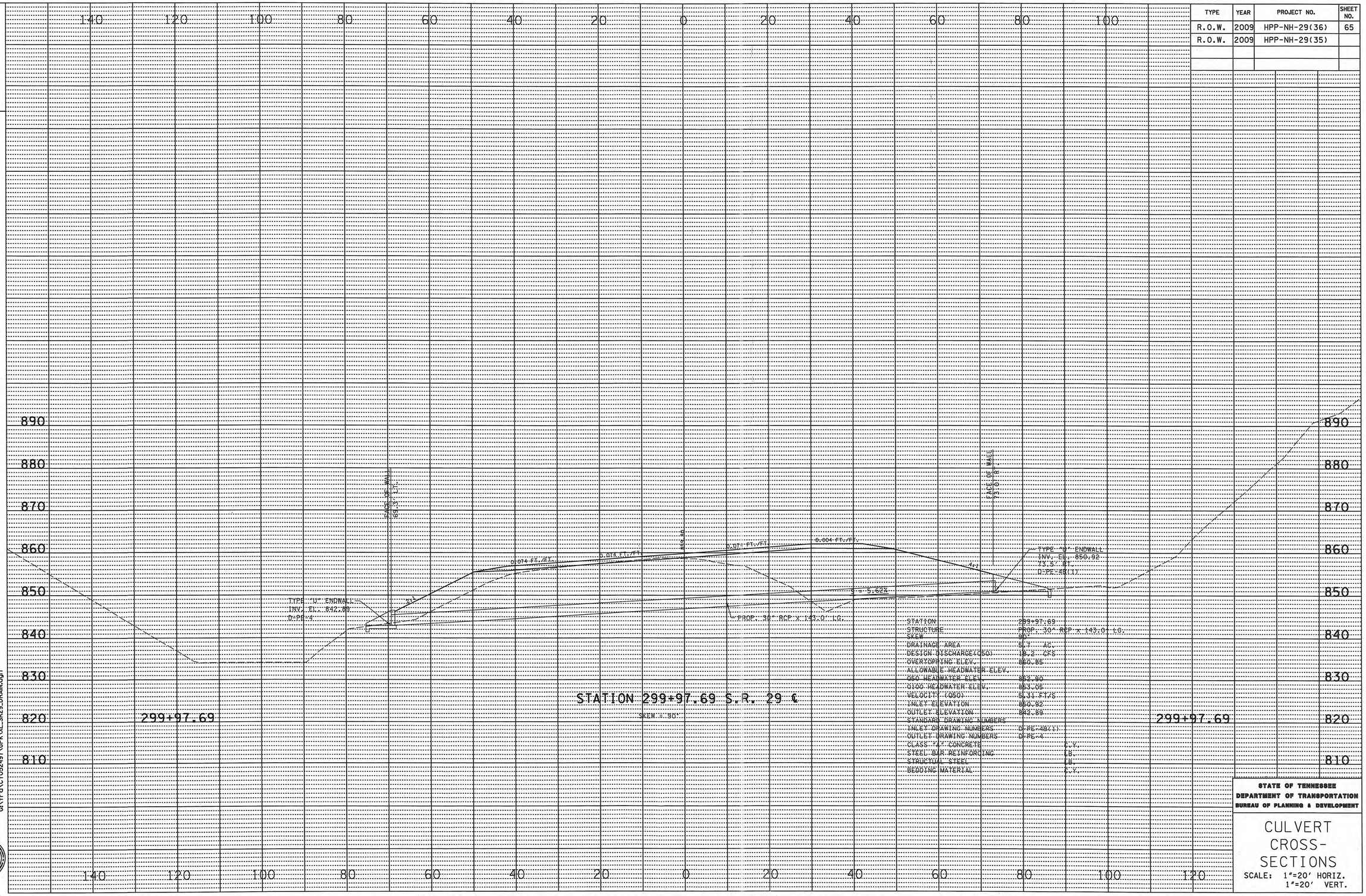
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	65
R.O.W.	2009	HPP-NH-29(35)	



STATION	299+97.69
STRUCTURE	PROP. 30" RCP x 143.0' LG.
SKEW	90°
DRAINAGE AREA	5.7 AC.
DESIGN DISCHARGE(Q50)	18.2 CFS
OVERTOPPING ELEV.	860.85
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	852.90
Q100 HEADWATER ELEV.	853.05
VELOCITY (Q50)	5.31 FT/S
INLET ELEVATION	850.92
OUTLET ELEVATION	842.89
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-4(1)
OUTLET DRAWING NUMBERS	D-PE-4
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTURAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

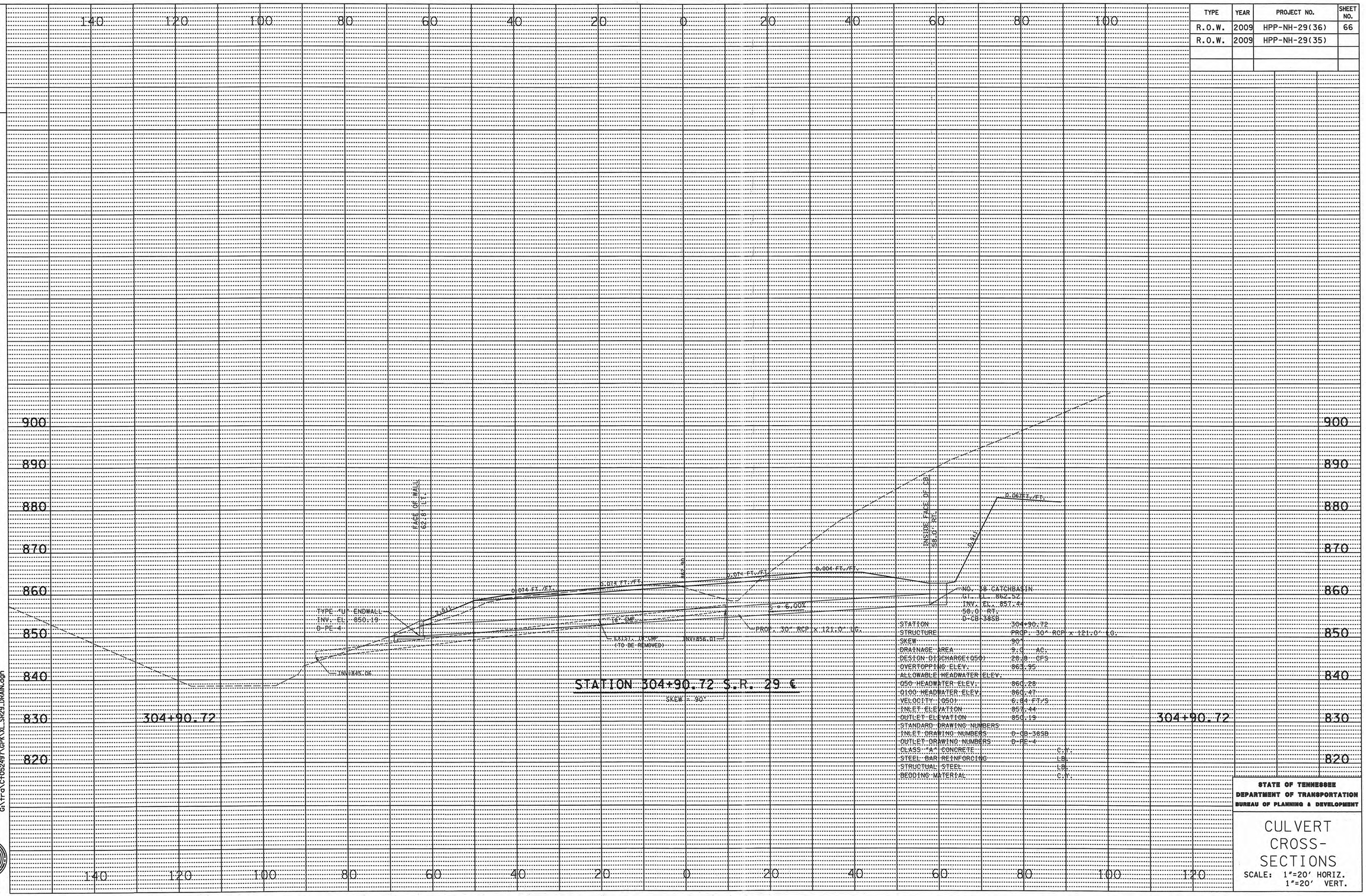
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Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
,
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	66
R.O.W.	2009	HPP-NH-29(35)	



STATION 304+90.72 S.R. 29 ℄
SKEW - 90°

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

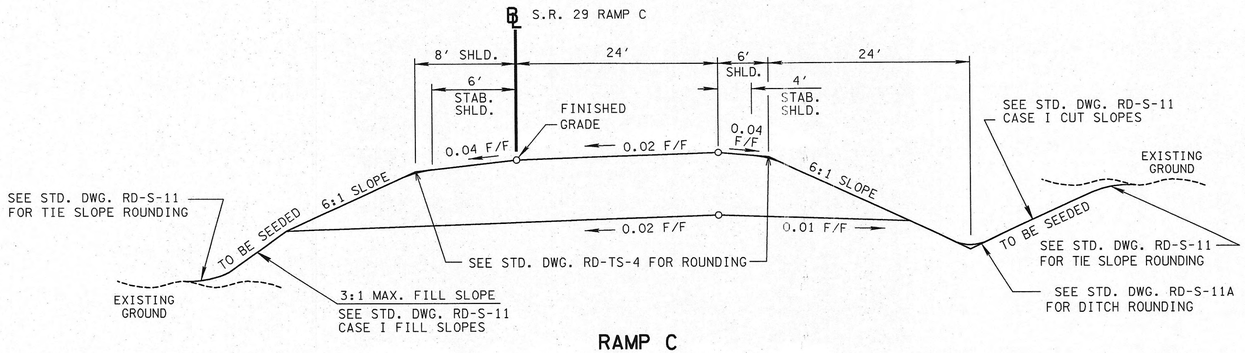
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

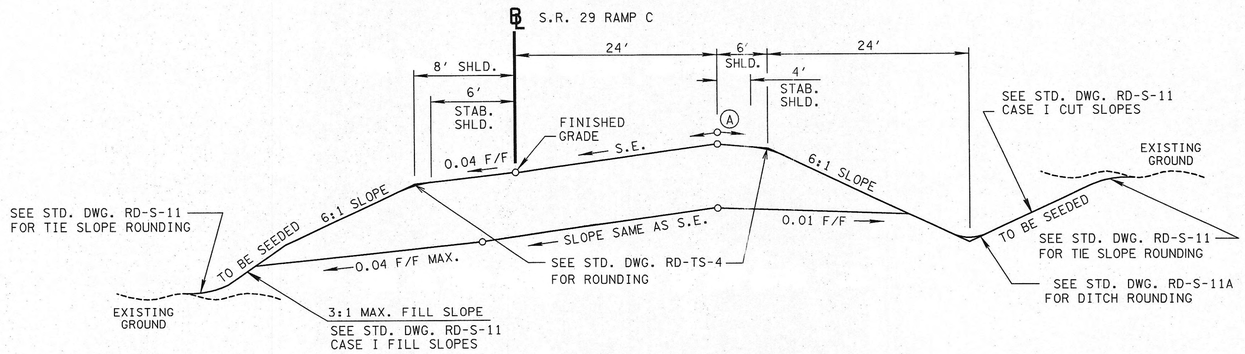
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	20
R.O.W.	2009	HPP-NH-29(35)	



RAMP C
TANGENT SECTION

(SEE STD. DWG. RD-TS-4 FOR DETAILS NOT SHOWN)

S.R. 29 RAMP C STA. 25+00.00 TO STA. 27+10.04
S.R. 29 RAMP C STA. 35+29.10 TO STA. 35+44.13



RAMP C
SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-4 FOR DETAILS NOT SHOWN)

S.R. 29 RAMP C STA. 27+10.04 TO STA. 35+29.10

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.

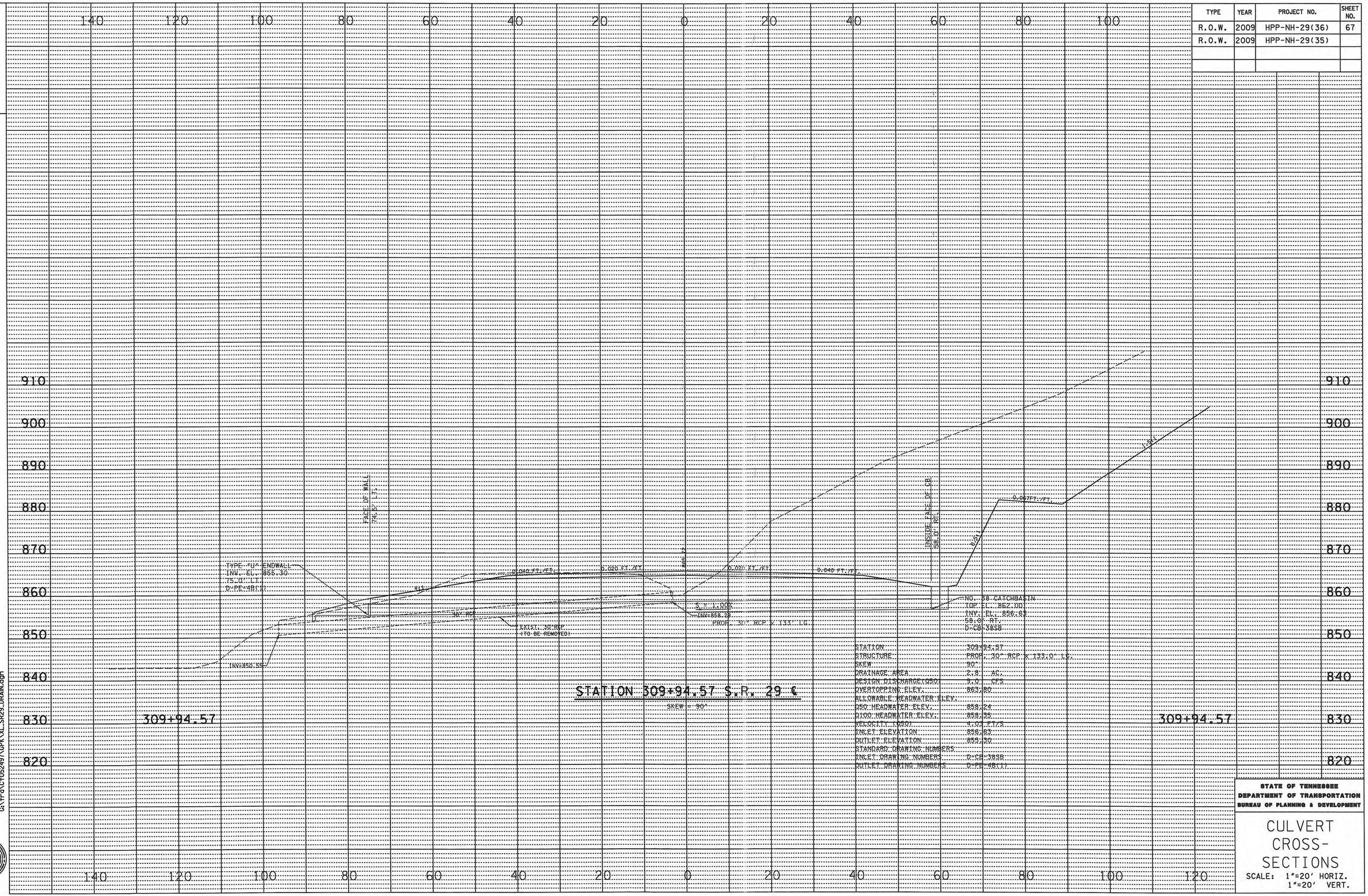
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

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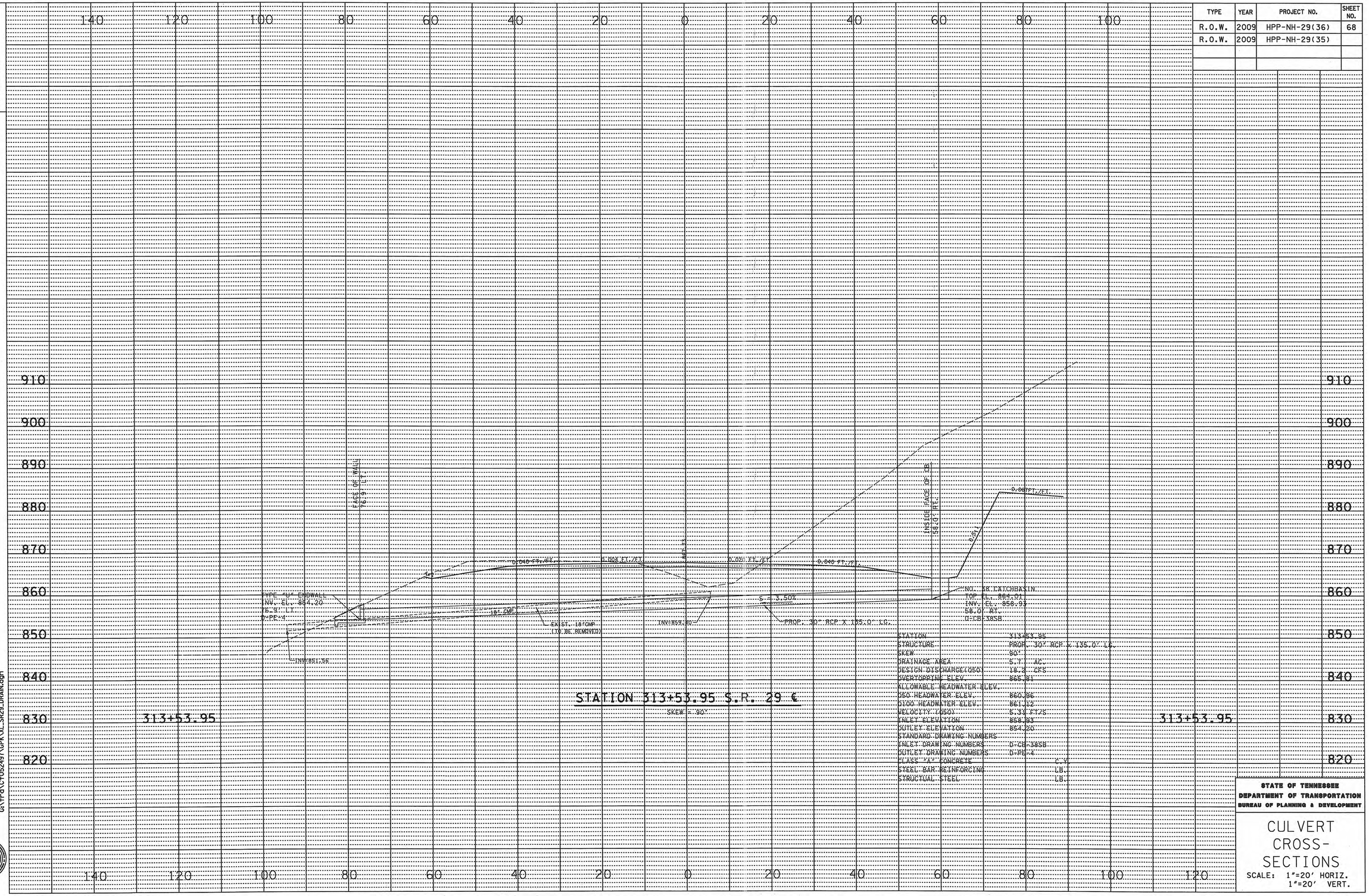
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	67
R.O.W.	2009	HPP-NH-29(35)	


140
120
100
80
60
40
20
0
20
40
60
80
100
910
900
890
880
870
860
850
840
830
820
309+94.57
FACE OF WALL
74.5' LT.
TYPE "U" ENDWALL
INV. EL. 855.30
75.0' LT.
D-PE-4B(1)
INV=850.55
0.040 FT./FT.
0.020 FT./FT.
866.42
4H:1V
4V:1H
4V:1H
4V:1H

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	68
R.O.W.	2009	HPP-NH-29(35)	



STATION 313+53.95 S.R. 29 ℄
SKEW = 90°

STATION	313+53.95
STRUCTURE	PROP. 30" RCP X 135.0' LG.
SKEW	90°
DRAINAGE AREA	5.7 AC.
DESIGN DISCHARGE(Q50)	18.2 CFS
OVERTOPPING ELEV.	865.81
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	860.86
Q100 HEADWATER ELEV.	861.12
VELOCITY (Q50)	5.31 FT/S
INLET ELEVATION	856.93
OUTLET ELEVATION	854.20
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-CB-38SB
OUTLET DRAWING NUMBERS	D-PE-4
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

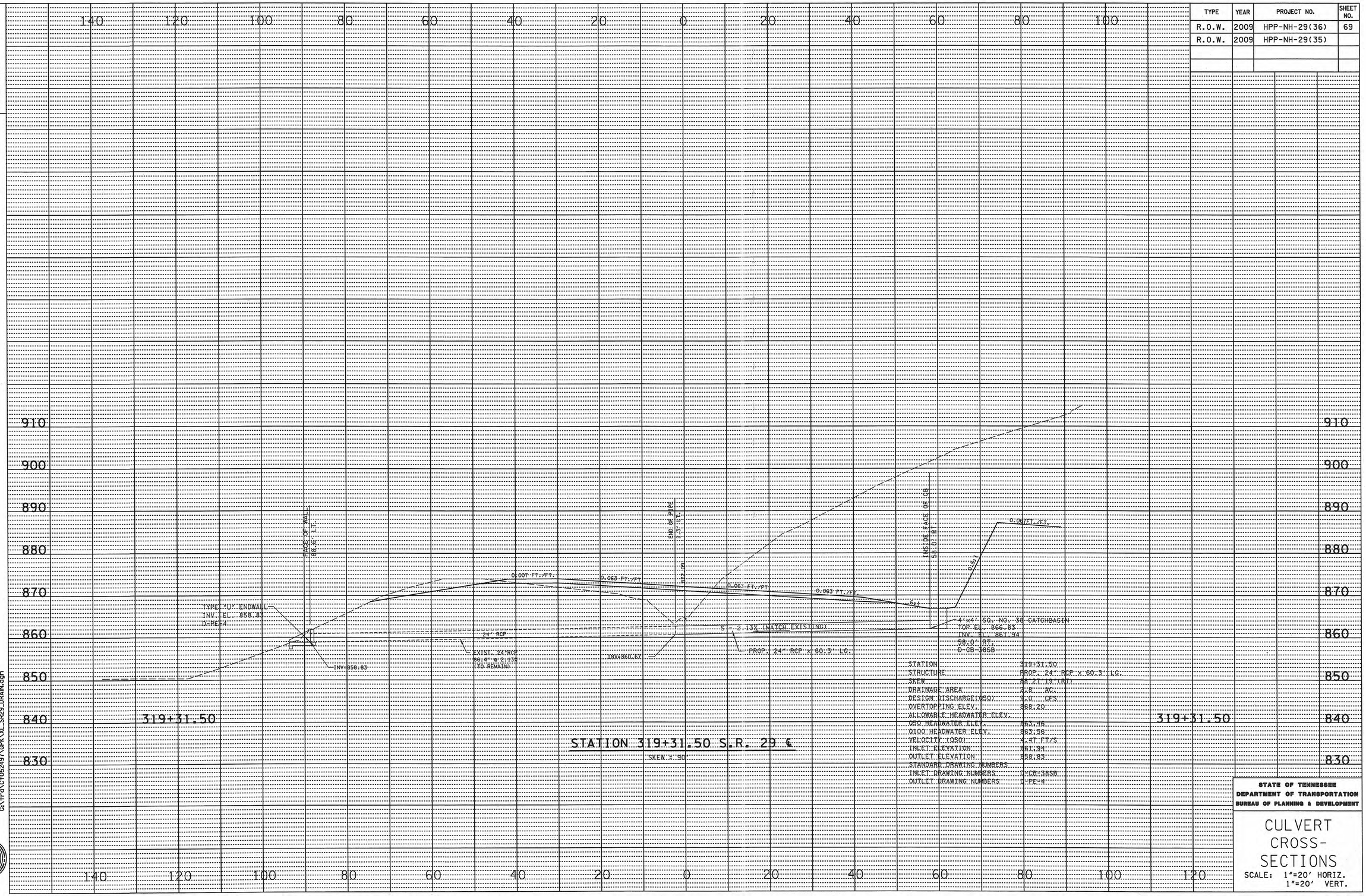
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	69
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

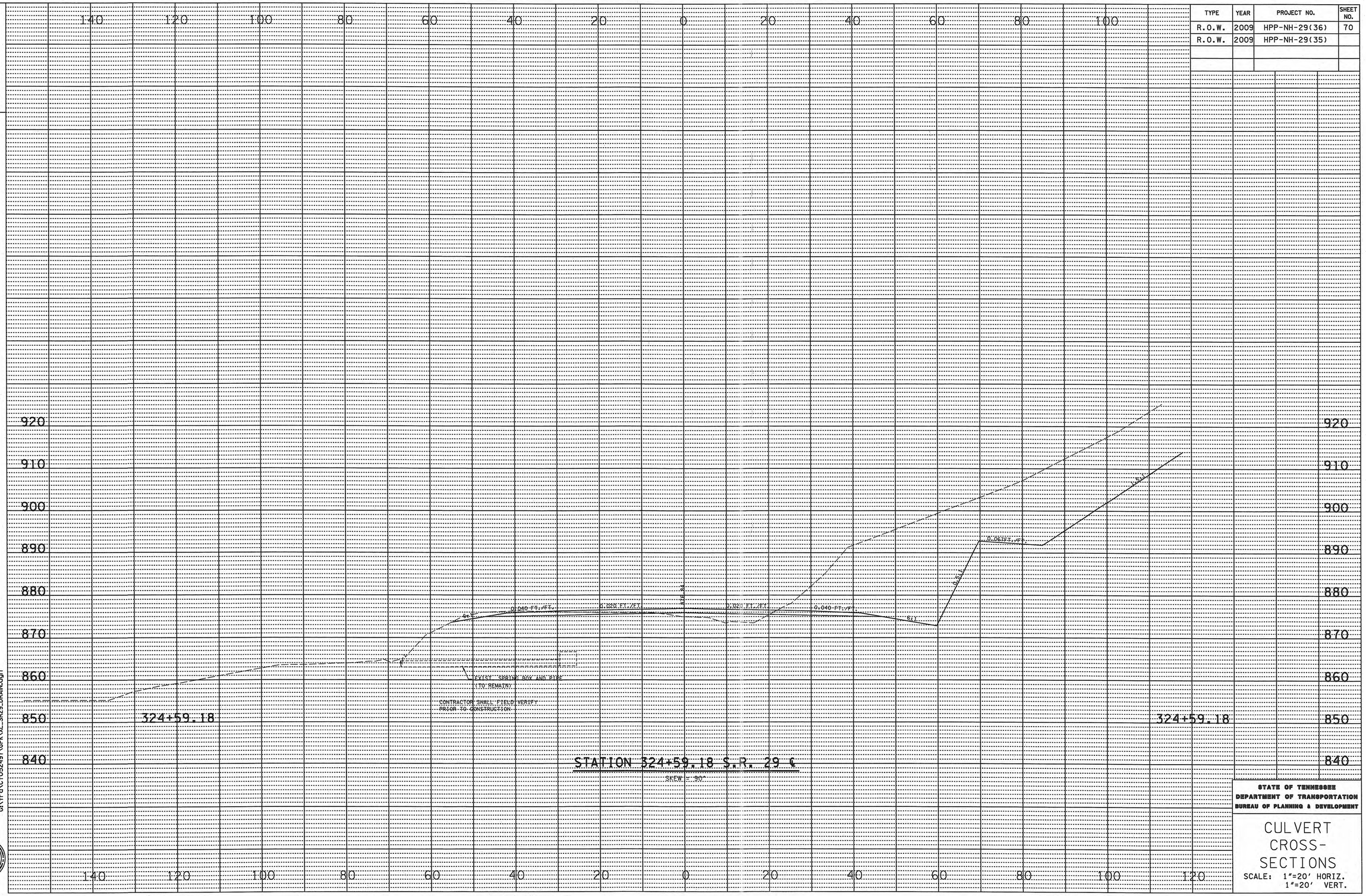
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	70
R.O.W.	2009	HPP-NH-29(35)	



STATION 324+59.18 S.R. 29 ℄
SKEW = 90°

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

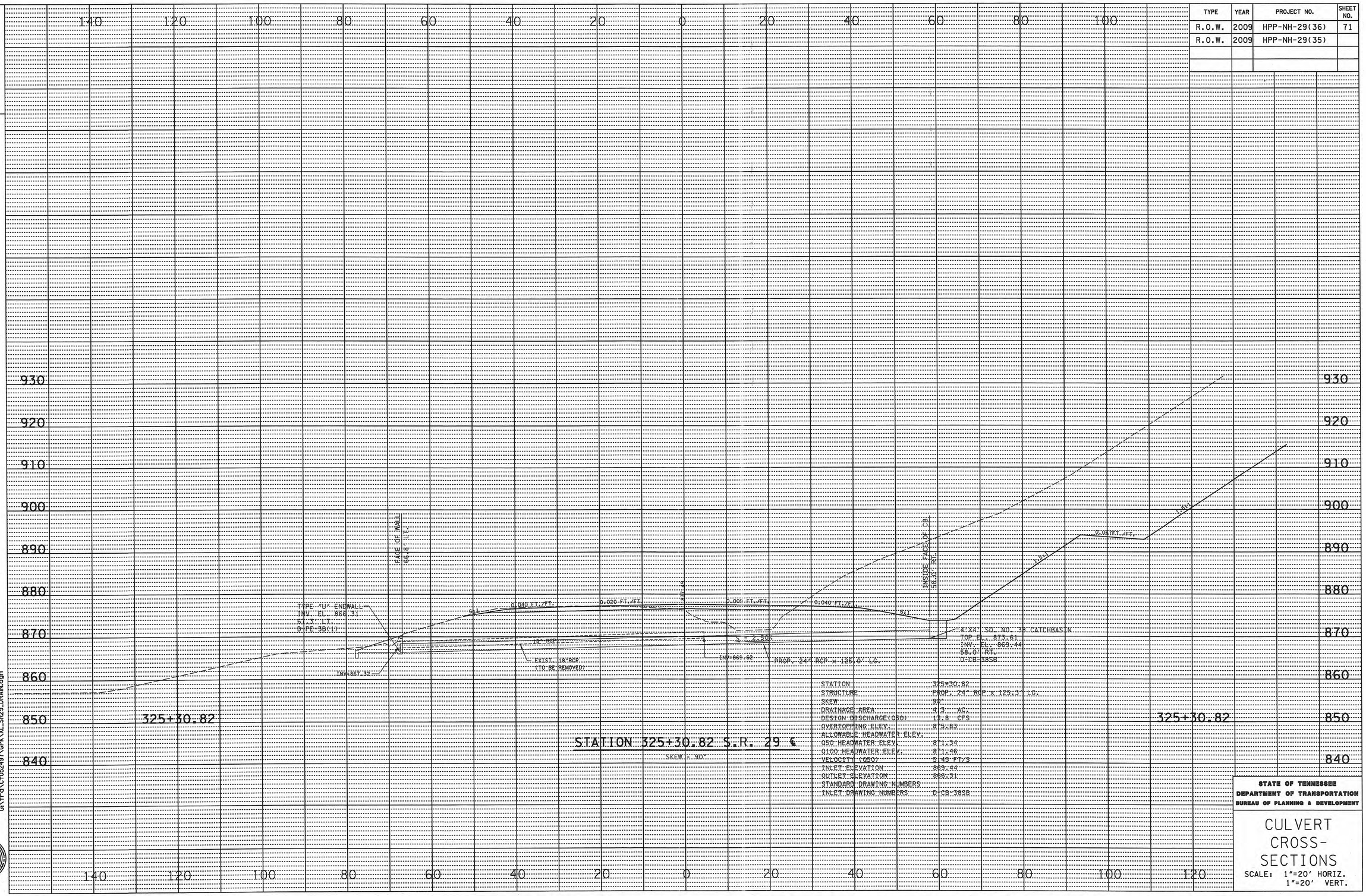
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	71
R.O.W.	2009	HPP-NH-29(35)	



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

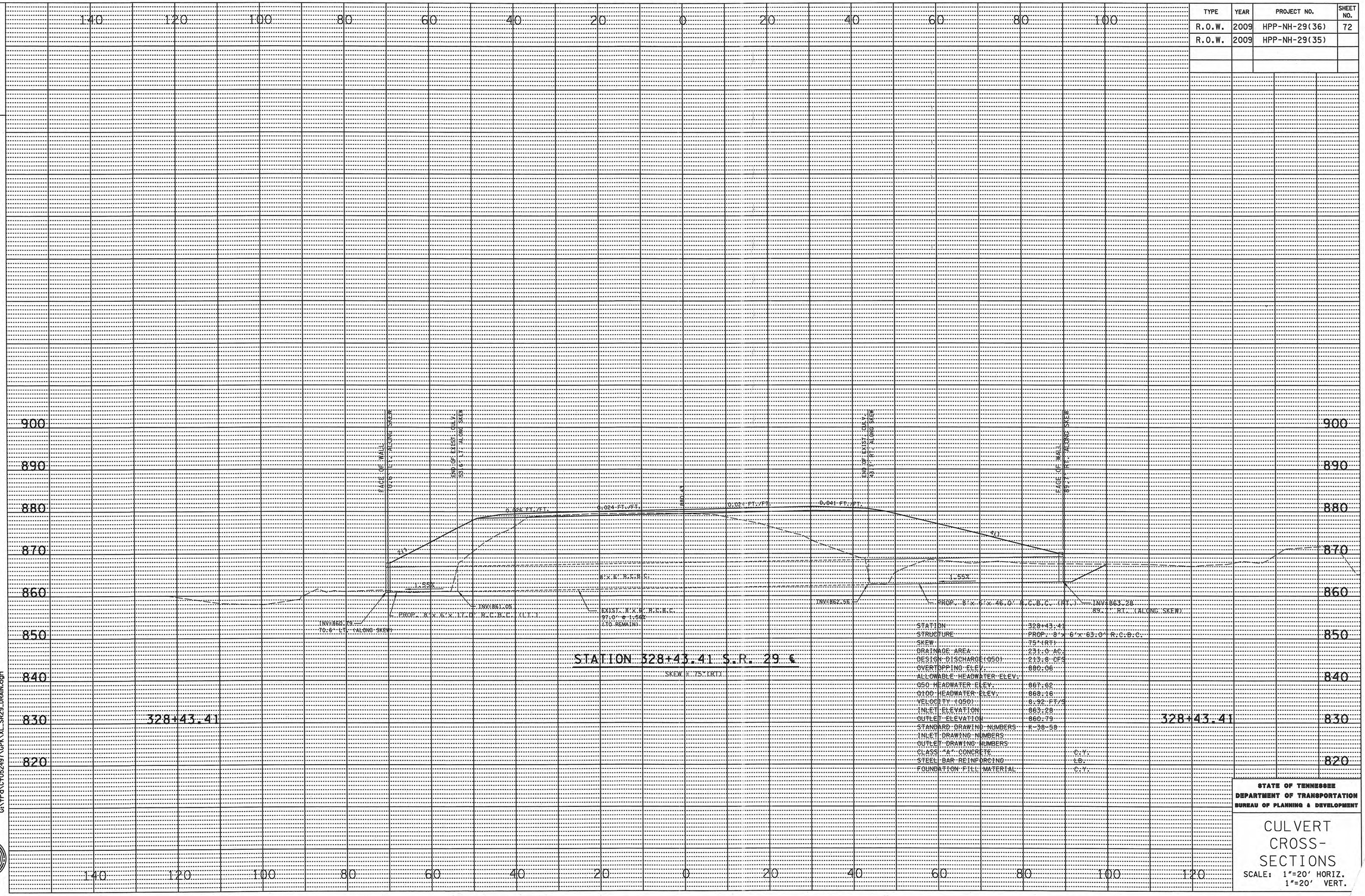
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	72
R.O.W.	2009	HPP-NH-29(35)	



STATION 328+43.41 S.R. 29 ℄
SKEW = 75°(RT)

STATION	328+43.41	
STRUCTURE	PROP. 8'x6'x63.0' R.C.B.C.	
SKEW	75°(RT)	
DRAINAGE AREA	231.0 AC.	
DESIGN DISCHARGE(Q50)	213.8 CFS	
OVERTOPPING ELEV.	880.06	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	867.62	
Q100 HEADWATER ELEV.	868.16	
VELOCITY (Q50)	8.92 FT/S	
INLET ELEVATION	863.28	
OUTLET ELEVATION	860.79	
STANDARD DRAWING NUMBERS	K-30.50	
INLET DRAWING NUMBERS		
OUTLET DRAWING NUMBERS		
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
FOUNDATION FILL MATERIAL		C.Y.

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Bureau of Planning & Development

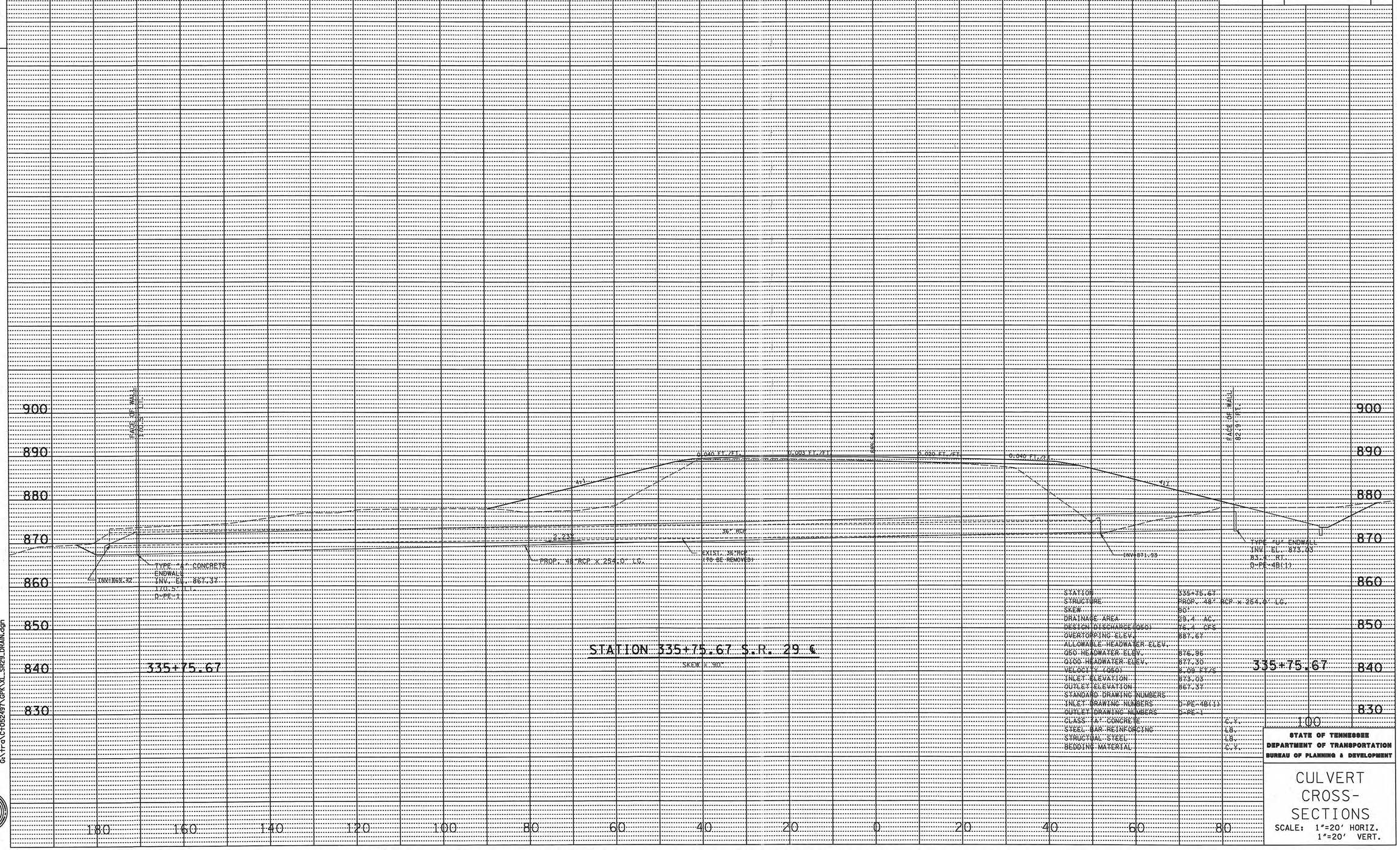
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	73
R.O.W.	2009	HPP-NH-29(35)	



STATION	335+75.67	
STRUCTURE	PROP. 48" RCP x 254.0' LG.	
SKEW	90°	
DRAINAGE AREA	29.4 AC.	
DESIGN DISCHARGE (Q50)	76.4 CFS	
OVERTOPPING ELEV.	887.67	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	876.86	
Q100 HEADWATER ELEV.	877.30	
VELOCITY (Q50)	9.09 FT/S	
INLET ELEVATION	873.03	
OUTLET ELEVATION	867.37	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-4B(1)	
OUTLET DRAWING NUMBERS	D-PE-1	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTURAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

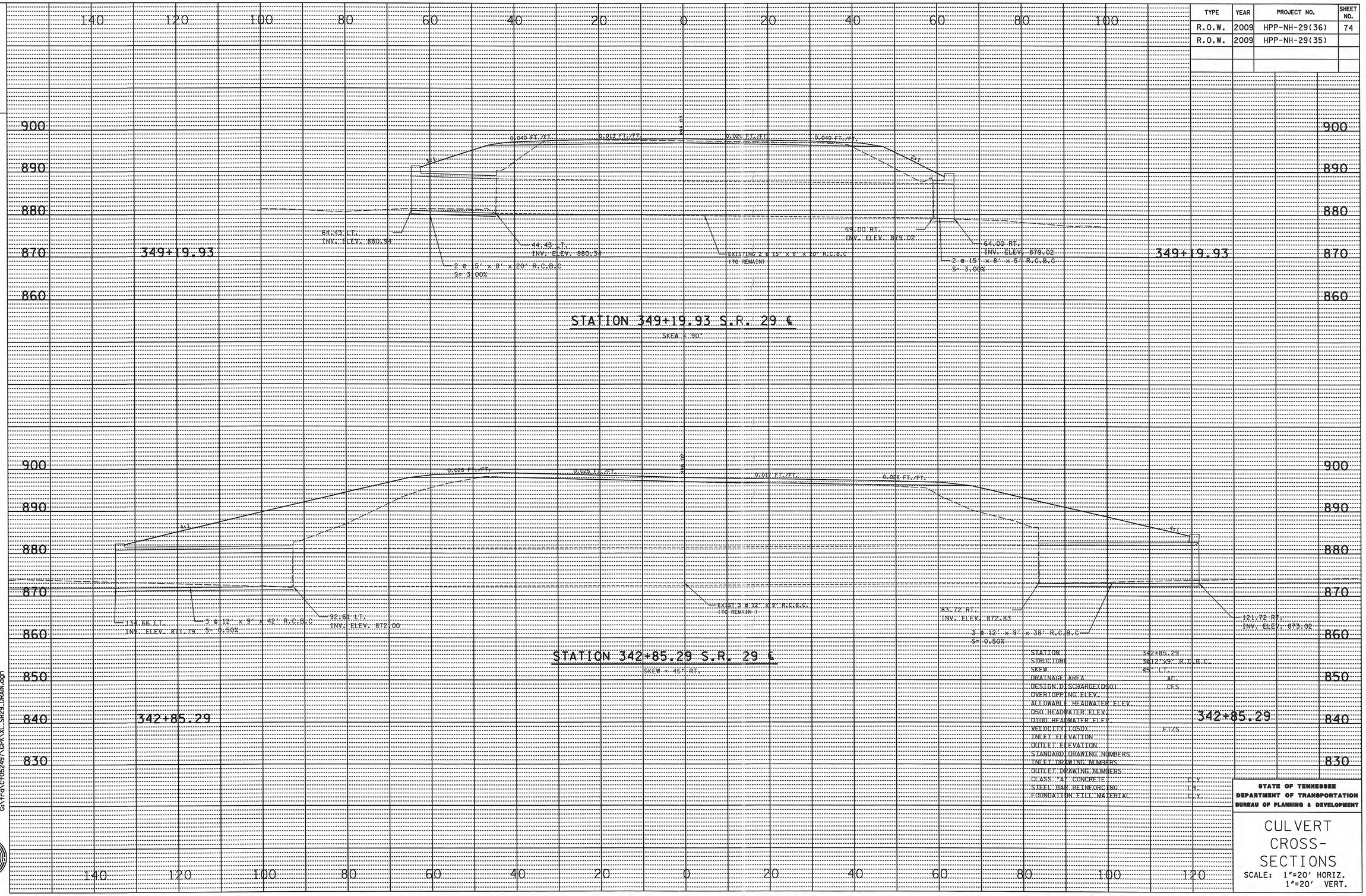
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	74
R.O.W.	2009	HPP-NH-29(35)	



STATION	342+85.29
STRUCTURE	3@12'x9' R.C.B.C.
SKEW	45° LT.
DRAINAGE AREA	AC.
DESIGN DISCHARGE (Q50)	CFS.
OVERTOPPING ELEV.	
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	
Q100 HEADWATER ELEV.	
VELOCITY (Q50)	FT/S
INLET ELEVATION	
OUTLET ELEVATION	
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	
OUTLET DRAWING NUMBERS	
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
FOUNDATION FILL MATERIAL	C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

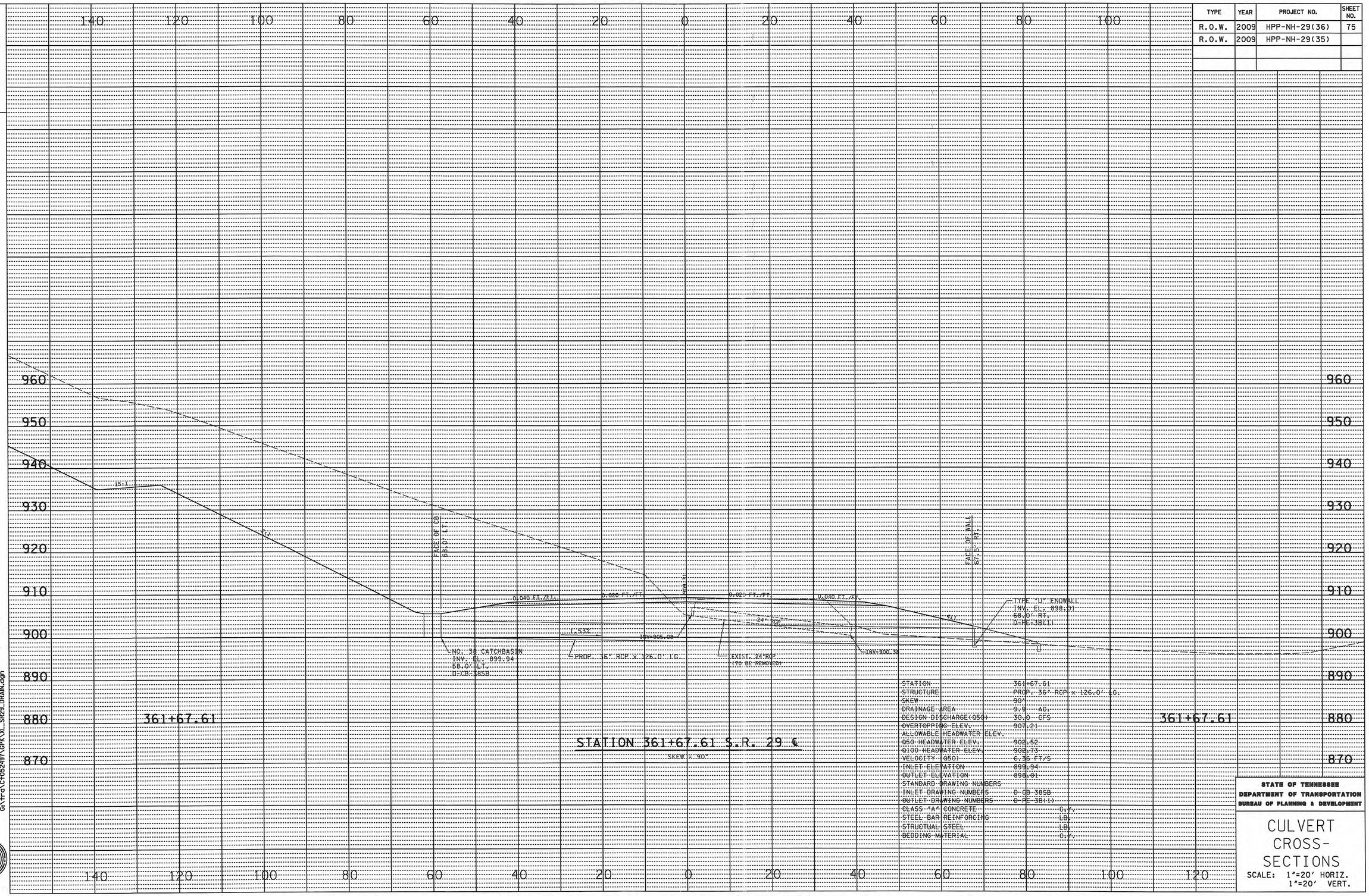
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Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	75
R.O.W.	2009	HPP-NH-29(35)	



STATION 361+67.61 S.R. 29 ℄

SKEW E. 90°

STATION	361+67.61
STRUCTURE	PROP. 36" RCP x 126.0' LG.
SKEW	90°
DRAINAGE AREA	9.9 AC.
DESIGN DISCHARGE(Q50)	30.0 CFS
OVERTOPPING ELEV.	907.21
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	902.52
Q100 HEADWATER ELEV.	903.73
VELOCITY (Q50)	6.36 FT/S
INLET ELEVATION	899.94
OUTLET ELEVATION	898.01
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	0-CB-38SB
OUTLET DRAWING NUMBERS	0-PE-3B(1)
CLASS 'A' CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
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BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

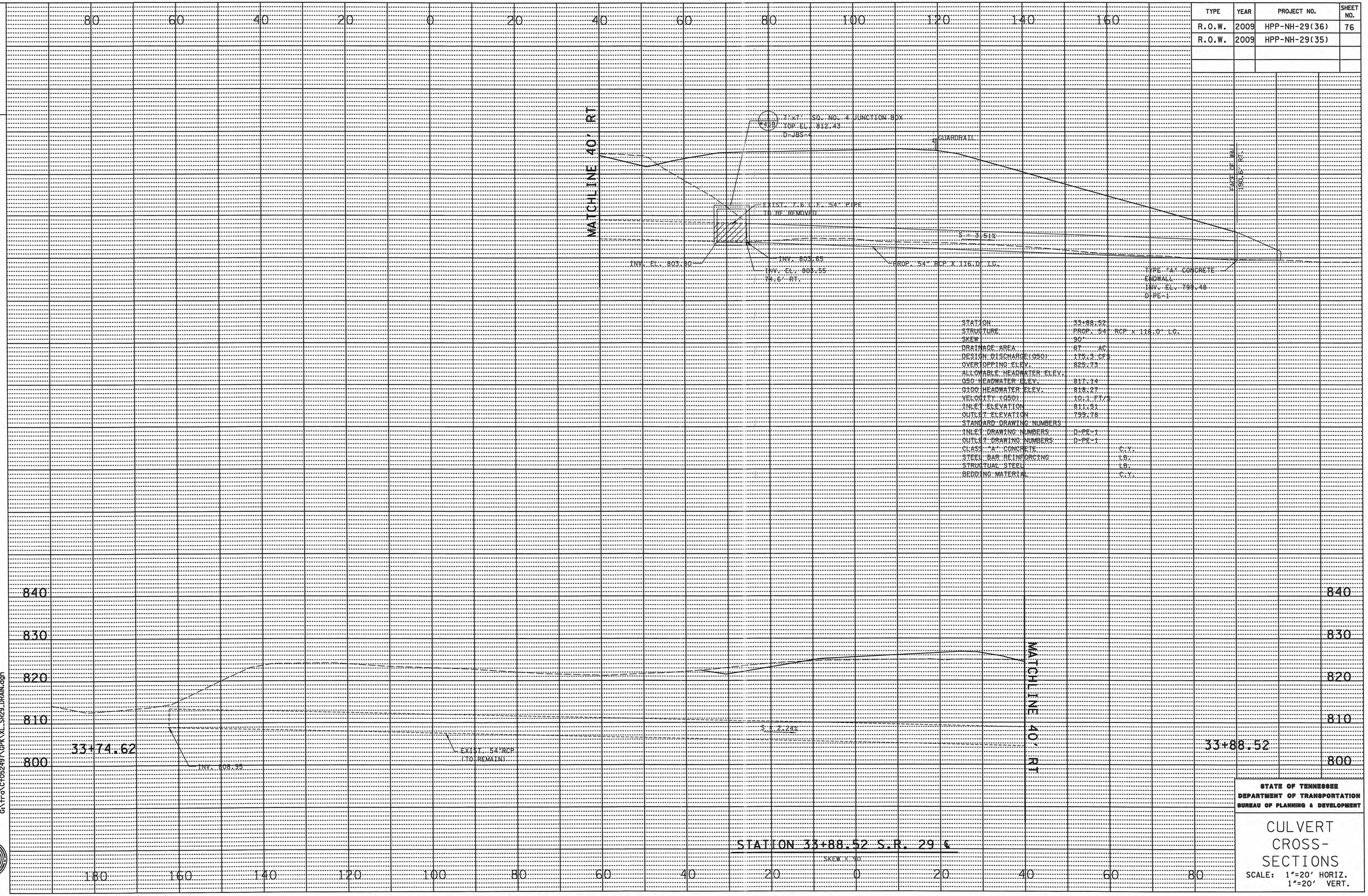
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Bridge & Roadway Systems

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	76
R.O.W.	2009	HPP-NH-29(35)	



STATION	33+88.52
STRUCTURE	PROP. 54" RCP x 116.0' LG.
SKEW	90°
DRAINAGE AREA	87 AC.
DESIGN DISCHARGE(Q50)	175.3 CFS
OVERTOPPING ELEV.	825.73
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	817.14
Q100 HEADWATER ELEV.	818.27
VELOCITY (Q50)	10.1 FT/S
INLET ELEVATION	811.51
OUTLET ELEVATION	799.78
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-1
OUTLET DRAWING NUMBERS	D-PE-1
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATION 33+88.52 S.R. 29 ℄
SKEW = 90°

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

SCALE: 1"=20' HORIZ.
1"=20' VERT.

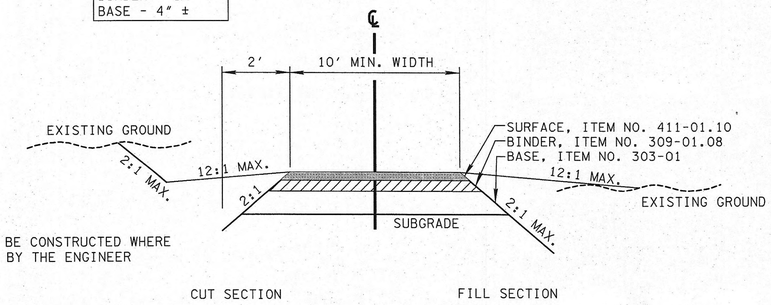
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2R
R.O.W.	2009	HPP-NH-29(35)	

BUSINESS

SURFACE - 1¼" ±
BINDER - 1¾" ±
BASE - 4" ±

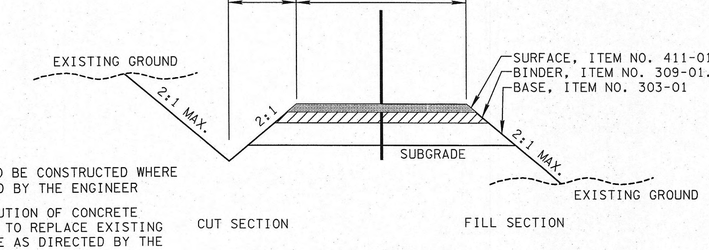


NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

CUT SECTION FILL SECTION

TYPICAL SECTION
PRIVATE DRIVE TO BUSINESS

SURFACE - 1½" ±
BINDER - NONE
BASE - 4" ±

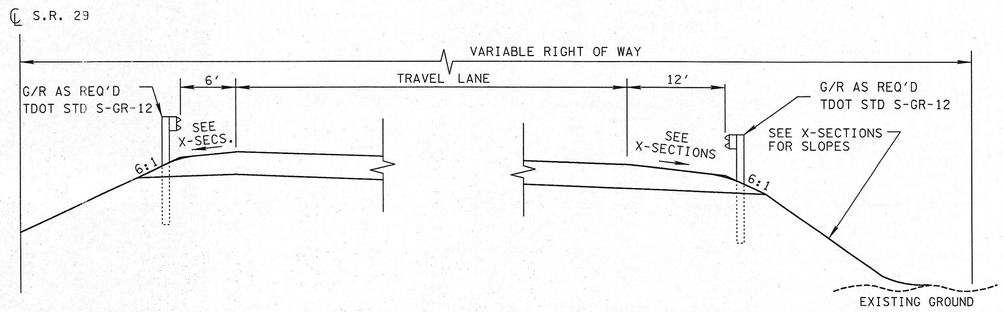


NOTE: DITCH TO BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER

SUBSTITUTION OF CONCRETE ALLOWED TO REPLACE EXISTING CONCRETE AS DIRECTED BY THE ENGINEER

CUT SECTION FILL SECTION

TYPICAL SECTION
PRIVATE DRIVE TO
FIELD OR RESIDENTIAL PROPERTY



TYPICAL GUARDRAIL LOCATION
SEE TDOT STANDARD FOR
INSTALLATION DETAILS

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

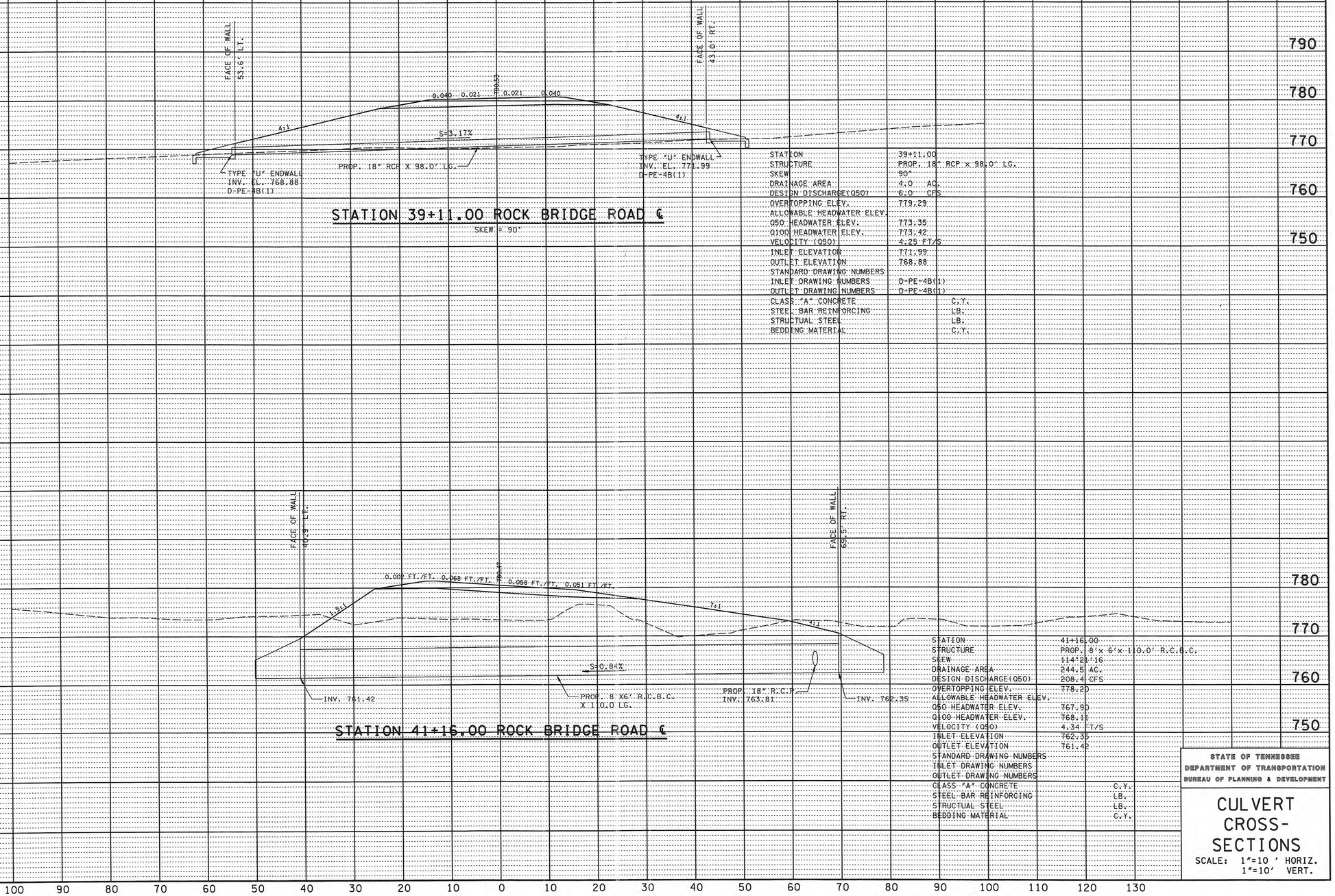
TYPICAL SECTIONS

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	77
R.O.W.	2009	HPP-NH-29(35)	



STATION 39+11.00 ROCK BRIDGE ROAD ℄

SKEW = 90°

STATION	39+11.00
STRUCTURE	PROP. 18" RCP x 98.0' LG.
SKEW	90°
DRAINAGE AREA	4.0 AC.
DESIGN DISCHARGE(Q50)	6.0 CFS
OVERTOPPING ELEV.	779.29
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	773.35
Q100 HEADWATER ELEV.	773.42
VELOCITY (Q50)	4.25 FT/S
INLET ELEVATION	771.99
OUTLET ELEVATION	768.88
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-4B(1)
OUTLET DRAWING NUMBERS	D-PE-4B(1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATION 41+16.00 ROCK BRIDGE ROAD ℄

STATION	41+16.00
STRUCTURE	PROP. 8'x 6'x 110.0' R.C.B.C.
SKEW	114°28'16"
DRAINAGE AREA	244.5 AC.
DESIGN DISCHARGE(Q50)	208.4 CFS
OVERTOPPING ELEV.	778.20
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	767.90
Q100 HEADWATER ELEV.	768.11
VELOCITY (Q50)	4.34 FT/S
INLET ELEVATION	762.35
OUTLET ELEVATION	761.42
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	
OUTLET DRAWING NUMBERS	
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT CROSS-SECTIONS

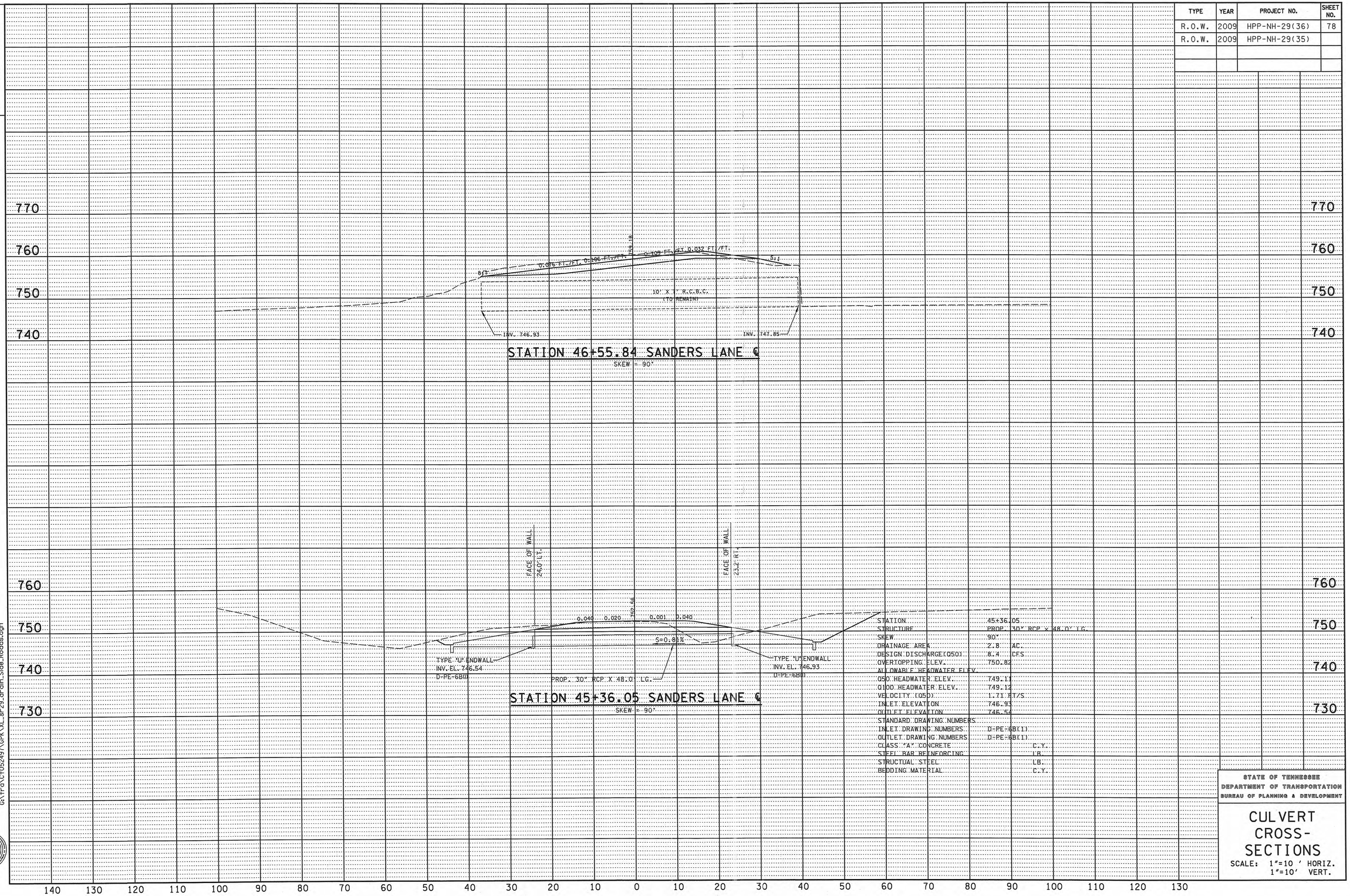
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	78
R.O.W.	2009	HPP-NH-29(35)	



STATION	45+36.05	
STRUCTURE	PROP. 30" RCP X 48.0' LG.	
SKEW	90°	
DRAINAGE AREA	2.8	AC.
DESIGN DISCHARGE(Q50)	8.4	CFS
OVERTOPPING ELEV.	750.82	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	749.11	
Q100 HEADWATER ELEV.	749.12	
VELOCITY (Q50)	1.71	FT/S
INLET ELEVATION	746.93	
OUTLET ELEVATION	746.54	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-6B(1)	
OUTLET DRAWING NUMBERS	D-PE-6B(1)	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTUAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
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CULVERT CROSS-SECTIONS

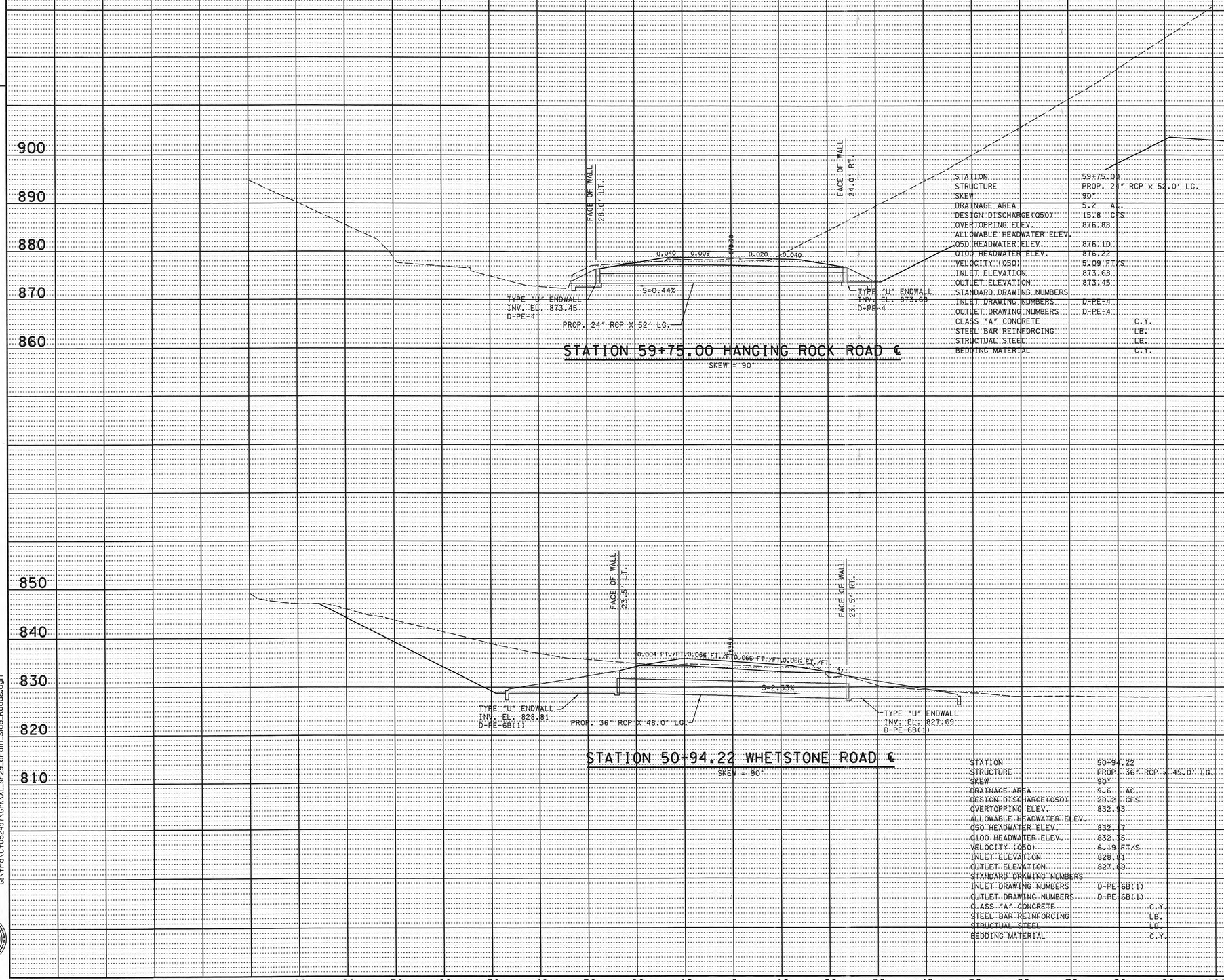
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	79
R.O.W.	2009	HPP-NH-29(35)	



STATION	59+75.00	
STRUCTURE	PROP. 24" RCP X 52.0' LG.	
SKEW	90°	
DRAINAGE AREA	5.2	AC.
DESIGN DISCHARGE(Q50)	15.8	CFS
OVERTOPPING ELEV.	876.88	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	876.10	
Q100 HEADWATER ELEV.	876.22	
VELOCITY (Q50)	5.09	FT/S
INLET ELEVATION	873.68	
OUTLET ELEVATION	873.45	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-4	
OUTLET DRAWING NUMBERS	D-PE-4	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTUAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATION	50+94.22	
STRUCTURE	PROP. 36" RCP x 45.0' LG.	
SKEW	90°	
DRAINAGE AREA	9.6	AC.
DESIGN DISCHARGE(Q50)	29.2	CFS
OVERTOPPING ELEV.	832.93	
ALLOWABLE HEADWATER ELEV.		
Q50 HEADWATER ELEV.	832.7	
Q100 HEADWATER ELEV.	832.36	
VELOCITY (Q50)	6.19	FT/S
INLET ELEVATION	828.81	
OUTLET ELEVATION	827.69	
STANDARD DRAWING NUMBERS		
INLET DRAWING NUMBERS	D-PE-6B(1)	
OUTLET DRAWING NUMBERS	D-PE-6B(1)	
CLASS "A" CONCRETE		C.Y.
STEEL BAR REINFORCING		LB.
STRUCTUAL STEEL		LB.
BEDDING MATERIAL		C.Y.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
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CULVERT CROSS-SECTIONS

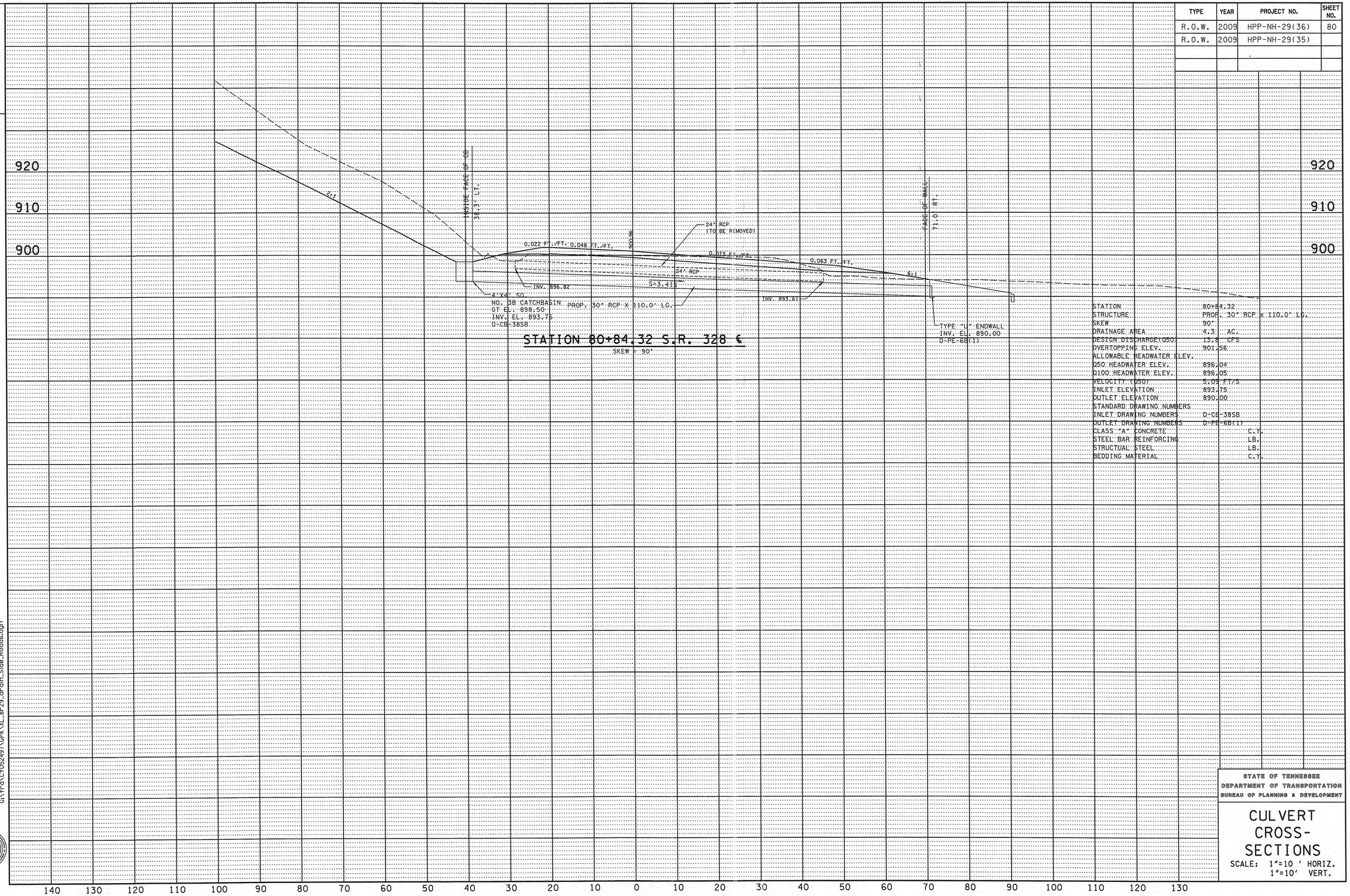
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	80
R.O.W.	2009	HPP-NH-29(35)	



STATION	80+84.32
STRUCTURE	PROP. 30" RCP X 110.0" LG.
SKEW	90°
DRAINAGE AREA	4.3 AC.
DESIGN DISCHARGE(Q50)	13.8 CFS
OVERTOPPING ELEV.	901.56
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	896.04
Q100 HEADWATER ELEV.	896.05
VELOCITY (Q50)	5.09 FT/S
INLET ELEVATION	893.75
OUTLET ELEVATION	890.00
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-CB-38SB
OUTLET DRAWING NUMBERS	D-PE-65(1)
CLASS "A" CONCRETE	C.Y.
STEEL BAR REINFORCING	LB.
STRUCTUAL STEEL	LB.
BEDDING MATERIAL	C.Y.

STATE OF TENNESSEE
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CULVERT CROSS-SECTIONS

SCALE: 1"=10 ' HORIZ.
1"=10' VERT.

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TENNESSEE D.O.T.	DESIGN DIVISION	FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	81
R.O.W.	2009	HPP-NH-29(35)	

EROSION PREVENTION AND SEDIMENT CONTROL NOTES

DISTURBED AREA

(1) PRE-CONSTRUCTION VEGETATIVE GROUND COVER SHALL NOT BE DESTROYED, REMOVED OR DISTURBED (I.E. CLEARING AND GRUBBING INITIATED) MORE THAN 10 CALENDAR DAYS PRIOR TO GRADING OR EARTH MOVING ACTIVITIES UNLESS THE AREA IS SEEDED AND/OR MULCHED OR OTHER TEMPORARY COVER IS INSTALLED.

(2) CLEARING, GRUBBING, AND OTHER DISTURBANCE TO RIPARIAN VEGETATION SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR SLOPE CONSTRUCTION AND EQUIPMENT OPERATIONS. UNNECESSARY VEGETATION REMOVAL IS PROHIBITED.

(3) ALL DISTURBED AREAS SHALL BE PROPERLY STABILIZED AS SOON AS PRACTICABLE. PRIORITY SHALL BE GIVEN TO FINISHING OPERATIONS AND PERMANENT EROSION PREVENTION AND SEDIMENT CONTROL MEASURES OVER TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ON ALL PROJECTS.

(4) CONSTRUCTION SHALL BE SEQUENCED TO MINIMIZE THE EXPOSURE TIME OF GRADED OR DENUDED SOIL AREAS AND SHALL BE PHASED FOR PROJECTS THAT HAVE OVER 50 ACRES OF SOIL DISTURBANCE. NO MORE THAN 50 ACRES OF ACTIVE SOIL DISTURBANCE IS ALLOWED AT ANY TIME DURING THE CONSTRUCTION PROJECT, UNLESS APPROVED IN WRITING BY THE ENVIRONMENTAL DIVISION.

SEDIMENT CONTROL

(5) EPSC MEASURES SHALL BE INSTALLED CONCURRENTLY WITH CLEARING OPERATIONS, SHALL BE FUNCTIONAL PRIOR TO ANY EARTH MOVING OPERATIONS, AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.

(6) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT THE OFF-SITE MIGRATION OR DEPOSIT OF SEDIMENT ON ROADWAYS USED BY THE GENERAL PUBLIC. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFF-SITE ACCUMULATIONS OF SEDIMENT THAT HAVE NOT REACHED A STREAM MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFF-SITE IMPACTS (E.G., FUGITIVE SEDIMENT THAT HAS ESCAPED THE CONSTRUCTION SITE AND HAS COLLECTED IN A STREET MUST BE REMOVED SO THAT IT IS NOT SUBSEQUENTLY WASHED INTO STORM SEWERS AND STREAMS BY THE NEXT RAIN AND/OR SO THAT IT DOES NOT POSE A SAFETY HAZARD TO USERS OF PUBLIC STREETS). ARRANGEMENTS CONCERNING REMOVAL OF SEDIMENT ON ADJOINING PROPERTY MUST BE SETTLED WITH THE ADJOINING PROPERTY OWNER BEFORE REMOVAL OF SEDIMENT.

(7) WATER PUMPED FROM WORK AREAS AND EXCAVATION MUST BE HELD IN SETTLING BASINS OR TREATED BY FILTRATION PRIOR TO ITS DISCHARGE INTO SURFACE WATERS. WATER MUST BE HELD IN SETTLING BASINS UNTIL AT LEAST AS CLEAR AS THE RECEIVING WATERS. SETTLING BASINS SHALL NOT BE LOCATED CLOSER THAN 20 FEET FROM THE TOP BANK OF A STREAM. SETTLING BASINS AND SEDIMENT TRAPS SHALL BE PROPERLY DESIGNED ACCORDING TO THE SIZE OF THE DRAINAGE AREAS OR VOLUME OF WATER TO BE TREATED. TREATED WATER MUST BE DISCHARGED THROUGH A PIPE OR WELL-VEGETATED OR LINED CHANNEL, SO THAT THE DISCHARGE DOES NOT CAUSE EROSION OR SEDIMENT TRANSPORT.

(8) CHECK DAMS SHALL BE USED WHERE RUNOFF IS CONCENTRATED. CLEAN ROCK, BRUSH, GABION, OR SANDBAG CHECK DAMS SHALL BE PROPERLY CONSTRUCTED TO REDUCE VELOCITY AND CONTROL EROSION.

(9) FOR AN OUTFALL IN A DRAINAGE AREA OF 10 ACRES OR MORE, A TEMPORARY (OR PERMANENT) SEDIMENT BASIN OR EQUIVALENT CONTROL MEASURES THAT PROVIDES STORAGE FOR A CALCULATED VOLUME OF RUNOFF FROM A MINIMUM 2-YEAR/ 24-HOUR STORM EVENT, SHALL BE PROVIDED UNTIL FINAL STABILIZATION OF THE SITE. THE ENVIRONMENTAL AND DESIGN DIVISIONS MAY BE CONTACTED TO REVIEW AND CONCUR WITH ANY REVISION OF THE SWPPP BEFORE DISTURBANCE OF THE OUTFALL PROCEEDS.

(10) IF PERMANENT OR TEMPORARY VEGETATION IS TO BE USED AS AN EPSC MEASURE, THEN THE TIMING OF PLANTING OF VEGETATION SHALL BE SHOWN IN THE SWPPP. DELAYING PLANTING OF COVER VEGETATION UNTIL WINTER MONTHS OR DRY MONTHS SHOULD BE AVOIDED, IF POSSIBLE.

(11) OFFSITE VEHICLE TRACKING OF SEDIMENTS AND THE GENERATION OF DUST SHALL BE MINIMIZED. A STABILIZED CONSTRUCTION ACCESS (A POINT OF ENTRANCE/EXIT TO THE CONSTRUCTION PROJECT) SHALL BE PROVIDED, AS NEEDED, TO REDUCE THE TRACKING OF MUD AND DIRT ONTO PUBLIC ROADS BY CONSTRUCTION VEHICLES.

(12) TEMPORARY EPSC MEASURES MAY BE REMOVED AT THE BEGINNING OF THE WORKDAY, BUT MUST BE REPLACED AT THE END OF THE WORKDAY.

STREAM/WETLAND

(13) SOIL MATERIALS MUST BE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. EPSC MEASURES TO PROTECT WATER QUALITY MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD. APPROPRIATE EPSC MEASURES MUST BE INSTALLED ALONG THE BASE OF ALL FILLS AND CUTS, ON THE DOWNHILL SIDE OF STOCKPILED SOIL, AND ALONG STREAM BANKS IN CLEARED AREAS TO PREVENT SEDIMENT MIGRATION INTO STREAMS IN ACCORDANCE WITH TDOT STANDARDS. THEY MUST BE INSTALLED ON THE CONTOUR, ENTRENCHED AND STAKED, AND EXTEND THE WIDTH OF THE AREA TO BE CLEARED.

(14) NEW CHANNEL CONSTRUCTION SHALL BE COMPLETED IN THE DRY AND STABILIZED FOR AT LEAST 72 HOURS PRIOR TO DIVERTING WATER FROM THE EXISTING AND/OR TEMPORARY CHANNEL.

(15) INSTREAM EPSC DEVICES ARE NOT APPROVED, UNLESS SPECIFIED IN WRITING BY THE ENVIRONMENTAL DIVISION.

(16) THE OPERATION OF EQUIPMENT IN WATERS OF THE STATE/U.S., INCLUDING WETLANDS, SHALL BE ONLY AS SHOWN ON THE PROJECT PLANS AND/OR AS SO SPECIFIED IN THE ARAP/401, SECTION 404 PERMIT(S) AND/OR TVA26(A), IF APPLICABLE. ANY ADDITIONAL PERMITS REQUIRED BY THE CONTRACTOR'S METHOD OF OPERATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN, AFTER RECEIVING THE APPROVAL OF TDOT ENVIRONMENTAL DIVISION.

(17) THE WIDTH OF THE FILL ASSOCIATED WITH TEMPORARY CROSSINGS SHALL BE LIMITED TO THE MINIMUM NECESSARY FOR THE ACTUAL CROSSING.

(18) ANY WORK WITHIN THE STREAM CHANNEL AREA (E.G., FOR PIER FOOTING, RIP-RAP PLACEMENT, MULTI-BARREL CULVERT/BRIDGE CONSTRUCTION, ETC.) SHALL BE SEPARATED FROM FLOWING WATER OR EXPECTED FLOW PATH AND PERFORMED DURING LOW FLOW CONDITIONS. ALL ITEMS USED WITHIN THE STREAM CHANNEL AREA FOR DIVERSION OF FLOW (OR EXPECTED FLOW), UNLESS SPECIFIED IN THE PLANS, SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN THE COST OF OTHER ITEMS. THIS NOTE EXCLUDES ANY ITEMS SPECIFIED IN THE PLANS FOR THE TEMPORARY DIVERSION CHANNELS, EC-STR-31 AND TEMPORARY DIVERSION CULVERTS, EC-STR-32 FOR SINGLE BARREL CULVERT CONSTRUCTION.

(19) STREAM BEDS SHALL NOT BE USED AS TRANSPORTATION ROUTES FOR CONSTRUCTION EQUIPMENT. TEMPORARY CROSSINGS MUST BE LIMITED TO ONE POINT PER STREAM AND EPSC MEASURES MUST BE USED WHERE THE STREAM BANKS ARE DISTURBED. WHERE THE STREAMBED IS NOT COMPOSED OF BEDROCK, A PAD OF CLEAN ROCK MUST BE USED AT THE CROSSING POINT AND CULVERTED TO PREVENT THE IMPOUNDMENT OF WATER FLOW. CLEAN ROCK IS ROCK OF VARIOUS TYPE AND SIZE, DEPENDING UPON APPLICATION, WHICH CONTAINS NO FINES, SOILS, OR OTHER WASTES OR CONTAMINANTS. OTHER MATERIALS USED FOR ALL TEMPORARY FILLS MUST BE COMPLETELY REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED AND THE AFFECTED AREAS RETURNED TO THEIR PREEXISTING ELEVATION. ALL TEMPORARY CROSSINGS MUST BE CONSTRUCTED IN ACCORDANCE WITH STD. DWG. NO. EC-STR-25 UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ALTERNATIVELY, PLACING A TEMPORARY BRIDGE (BAILEY BRIDGE OR EQUIVALENT, TIMBERS, ETC.) FROM TOP OF BANK TO TOP OF BANK OR THE APPROPRIATE USE OF BARGES AT THE CROSSING TO AVOID DISTURBANCE OF THE STREAMBED IS AN ACCEPTABLE OPTION.

(20) HEAVY EQUIPMENT WORKING IN WETLANDS MUST BE PLACED ON MATS, OR OTHER MEASURES MUST BE TAKEN TO MINIMIZE SOIL DISTURBANCE UNLESS SPECIFICALLY ADDRESSED IN THE EPSC PLANS. ANY MATS AND OTHER MEASURES USED FOR HEAVY EQUIPMENT MUST BE REMOVED IN THEIR ENTIRETY AFTER THE WORK IS COMPLETED.

(21) WETLANDS SHALL NOT BE USED AS EQUIPMENT STORAGE, STAGING, OR TRANSPORTATION AREAS, UNLESS PROVIDED FOR IN THE PLANS.

SPECIES

(22) NO ACTIVITY MAY SUBSTANTIALLY DISRUPT THE MOVEMENT OF THOSE SPECIES OF AQUATIC LIFE INDIGENOUS TO THE WATER BODY, INCLUDING THOSE SPECIES THAT NORMALLY MIGRATE THROUGH THE AREA. THE SWPPP SHALL BE MODIFIED TO INCLUDE EPSC MEASURES TO PREVENT NEGATIVE IMPACTS TO LEGALLY PROTECTED STATE OR FEDERAL FAUNA OR FLORA OR AS INDICATED IN THE ECOLOGICAL STUDIES OR ON THE PERMIT(S).

INSPECTION, MAINTENANCE, REPAIR

(23) INSPECTION, REPAIR, AND MAINTENANCE OF EPSC MEASURES/STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM SEDIMENT CONTROL STRUCTURES WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY FIFTY PERCENT (50%). DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO ENSURE THAT STRUCTURAL COMPONENTS OF EPSC MEASURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

(24) SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES SHALL BE PLACED AND BE TREATED IN A MANNER SO THAT THE SEDIMENT IS CONTAINED WITHIN THE PROJECT LIMITS AND DOES NOT MIGRATE INTO WATERS OF THE STATE/U.S. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209-05 SEDIMENT REMOVAL, C.Y

(25) THE CONTRACTOR SHALL INSTALL A RAIN GAUGE EVERY LINEAR MILE AT ALL SITES WHERE CLEARING, GRUBBING, EXCAVATION, GRADING CUTTING OR FILLING IS BEING ACTIVELY PERFORMED, OR EXPOSED SOIL HAS NOT YET BEEN PERMANENTLY STABILIZED. IF THE PROJECT LENGTH IS LESS THAN ONE LINEAR MILE, ONE RAIN GAUGE SHALL BE INSTALLED AT THE CENTER OF THE PROJECT OR AS INDICATED BY THE TDOT EPSC INSPECTOR. THE CONTRACTOR SHALL ENSURE THAT EACH GAUGE IS MAINTAINED IN GOOD WORKING CONDITION. TDOT AND/OR THE CONTRACTOR SHALL RECORD DAILY PRECIPITATION AND FORECASTED PERCENTAGE OF PRECIPITATION IN DETAILED RECORDS OF RAINFALL EVENTS INCLUDING DATES, AMOUNTS OF RAINFALL PER GAUGE, THE ESTIMATED DURATION (OR STARTING AND ENDING TIMES), AND FORECASTED PERCENTAGE OF PRECIPITATION FOR THE PROJECT. THIS INFORMATION SHALL BE PROVIDED TO THE ENGINEER ON A MONTHLY BASIS. THE COST FOR THE RAIN GAUGES IS TO BE INCLUDED IN THE UNIT BID PRICES FOR OTHER ITEMS. RAIN GAUGES SHALL BE AS SPECIFIED IN THE APPROVED TDOT RAINFALL MONITORING PLAN.

(26) INSPECTION OF EPSC MEASURES SHALL BE DONE BEFORE ANTICIPATED STORM EVENTS (OR SERIES OF STORM EVENTS SUCH AS INTERMITTENT SHOWERS OVER ONE OR MORE DAYS), DURING, OR WITHIN TWENTY-FOUR (24) HOURS AFTER THE END OF A STORM EVENT OF 0.5 INCH OR GREATER, AND AT LEAST TWICE PER CALENDAR WEEK AT LEAST 72 HOURS APART. A CALENDAR WEEK IS DEFINED AS SUNDAY THROUGH SATURDAY. AN ANTICIPATED STORM EVENT IS DEFINED AS A 50% OR GREATER CHANCE OF RAINFALL ACCORDING TO A DOCUMENTED LOCAL OR NATIONAL SOURCE (I.E., NOAA, WEATHER.COM, LOCAL NEWSPAPER).

(27) OUTFALL POINTS SHALL BE INSPECTED TO ASCERTAIN WHETHER EPSC (EPSC) MEASURES ARE EFFECTIVE IN PREVENTING SIGNIFICANT IMPACTS TO SURROUNDING WATERS. WHERE DISCHARGE LOCATIONS ARE INACCESSIBLE, NEARBY DOWNSTREAM LOCATIONS SHALL BE INSPECTED. LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE SHALL BE INSPECTED FOR EVIDENCE OF OFF-SITE ROADWAY SEDIMENT TRACKING.

(28) UPON CONCLUSION OF THE INSPECTIONS, EPSC MEASURES FOUND TO BE INEFFECTIVE SHALL BE REPAIRED, REPLACED, OR MODIFIED BEFORE THE NEXT RAIN EVENT, IF POSSIBLE, BUT IN NO CASE MORE THAN 24 HOURS AFTER THE INSPECTION OR WHEN THE CONDITION IS IDENTIFIED. IF THE REPAIR, REPLACEMENT OR MODIFICATION IS NOT PRACTICAL WITHIN THE TIMEFRAME, WRITTEN DOCUMENTATION MUST BE PROVIDED IN THE FIELD BOOK AND AN ESTIMATED REPAIR, REPLACEMENT OR MODIFICATION SCHEDULE SHALL BE DOCUMENTED WITHIN 24 HOURS AFTER IDENTIFICATION.

MATERIALS

(29) WASTE AND BORROW AREAS SHALL BE LOCATED IN NON-WETLAND AREAS AND ABOVE THE 100-YEAR, FEDERAL EMERGENCY MANAGEMENT AGENCY FLOODPLAIN. BORROW AND WASTE DISPOSAL AREAS SHALL NOT AFFECT ANY WATERS OF THE STATE/U.S. UNLESS THESE AREAS ARE SPECIFICALLY COVERED BY AN ARAP, 404, OR NPDES PERMIT, OBTAINED SOLELY BY THE CONTRACTOR.

SWPPP, PERMITS, PLANS, RECORDS

(30) THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR AND OBTAIN ANY NECESSARY ENVIRONMENTAL PERMITS OR APPROVALS, INCLUDING BUT NOT LIMITED TO TDEC ARAP/401, USACE SECTION 404, TVA SECTION 26A, AND TDEC NPDES PERMITS, FROM FEDERAL, STATE AND/OR LOCAL AGENCIES REGARDING THE OPERATION OF ANY PROJECT-DEDICATED ASPHALT AND/OR CONCRETE PLANTS

STATE OF TENNESSEE
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EPSC NOTES

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TENNESSEE D.O.T.	DESIGN DIVISION	FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	81A
R.O.W.	2009	HPP-NH-29(35)	

(1) ANY DISAGREEMENT BETWEEN THE PROJECT PLANS, THE PROJECT AS CONSTRUCTED, AND THE PERMIT(S) ISSUED FOR THE PROJECT, SHALL BE BROUGHT TO THE ATTENTION OF THE TDOT PROJECT ENGINEER. THE ENVIRONMENTAL DIVISION, DESIGN DIVISION, AND HEADQUARTERS CONSTRUCTION OFFICE SHALL BE CONTACTED IN THESE INSTANCES AND DECIDE WHICH HAS PRECEDENCE AND WHETHER PERMIT OR PLANS REVISIONS ARE NEEDED. IN GENERAL, PERMIT CONDITIONS WILL PREVAIL.

(2) THE FOLLOWING INFORMATION SHALL BE MAINTAINED ON OR NEAR THE SITE: DATES THAT MAJOR GRADING ACTIVITIES OCCUR, DATES WHERE CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE, DATES WHEN STABILIZATION MEASURES ARE INITIATED, EPSC INSPECTION RECORDS AND PRECIPITATION RECORDS.

(3) ALL WATER QUALITY AND STORM WATER PERMITS, INCLUDING THE LOCATION OF THE SWPPP, SHALL BE POSTED NEAR THE MAIN ENTRANCE OF THE CONSTRUCTION SITE ACCESSIBLE TO THE PUBLIC. IF POSTING THIS INFORMATION NEAR A MAIN ENTRANCE IS INFEASIBLE, THE INFORMATION SHALL BE PLACED IN A PUBLICLY ACCESSIBLE LOCATION NEAR WHERE THE CONSTRUCTION IS ACTIVELY UNDERWAY AND MOVED AS NECESSARY. THIS LOCATION SHALL BE POSTED AT THE CONSTRUCTION SITE.

(4) IF A CHANGE IN PROJECT SCOPE OCCURS DURING CONSTRUCTION, INCLUDING VALUE ENGINEERING, THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED TO DETERMINE WHETHER PERMIT REVISIONS ARE NEEDED. THE DESIGN DIVISION SHALL BE CONTACTED TO DETERMINE IF ANY PLAN REVISIONS ARE NEEDED.

(5) THE SWPPP SHALL BE UPDATED BY CONSTRUCTION WHENEVER EPSC INSPECTIONS INDICATE EPSC MEASURES ARE NOT PROVING INEFFECTIVE IN ELIMINATING OR SIGNIFICANTLY MINIMIZING POLLUTANT SOURCES OR IS OTHERWISE NOT ACHIEVING THE GENERAL OBJECTIVES OF CONTROLLING POLLUTANTS IN STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY. THE ENVIRONMENTAL DIVISION SHALL BE CONTACTED WHEN MAJOR DESIGN REVISIONS ARE REQUESTED BY CONSTRUCTION. THE ENVIRONMENTAL DIVISION MAY BE CONTACTED FOR GUIDANCE ON SPECIFIC SWPPP NEEDS.

(6) PROJECT INSPECTORS AND SUPERVISORS (INCLUDING TDOT STAFF, CONSULTANTS AND CONTRACTOR STAFF) RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF EPSC PLANS SHALL SUCCESSFULLY COMPLETE THE TDEC "LEVEL I - FUNDAMENTALS OF EROSION PREVENTION AND SEDIMENT CONTROL FOR CONSTRUCTION SITES" COURSE OR EQUIVALENT COURSE. A COPY OF CERTIFICATION RECORDS FOR THIS COURSE SHALL BE KEPT ON SITE AND AVAILABLE UPON REQUEST.

LITTER, DEBRIS, WASTE, PETROLEUM

(7) THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN A PROACTIVE METHOD TO PREVENT LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION WASTES FROM ENTERING WATERS OF THE STATE/U.S.

(8) THE CONTRACTOR SHALL TAKE APPROPRIATE STEPS TO ENSURE THAT PETROLEUM PRODUCTS OR OTHER CHEMICAL POLLUTANTS ARE PREVENTED FROM ENTERING WATERS OF THE STATE/U.S. ALL EQUIPMENT REFUELING, SERVICING, AND STAGING AREAS SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS, RULES, REGULATIONS, AND ORDINANCES, INCLUDING THOSE OF THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA). APPROPRIATE CONTAINMENT MEASURES FOR THESE AREAS SHALL BE USED. ALL SPILLS MUST BE REPORTED TO THE APPROPRIATE AGENCY, AND MEASURES SHALL BE TAKEN IMMEDIATELY TO PREVENT THE POLLUTION OF WATERS OF THE STATE/U.S., INCLUDING GROUNDWATER, SHOULD A SPILL OCCUR.

SPECIAL NOTES

EROSION PREVENTION AND SEDIMENT CONTROL SPECIAL NOTES

NPDES

(1) NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR'S PLAN FOR THE STAGING OF THEIR OPERATIONS, INCLUDING THE PLAN FOR STAGING OF TEMPORARY AND PERMANENT EPSC MEASURES, HAS BEEN ACCEPTED BY THE ENGINEER. THE CONTRACTOR'S EPSC PLAN SHALL INCORPORATE AND SUPPLEMENT, AS ACCEPTABLE, THE BASIC EPSC DEVICES ON THE EPSC PLAN CONTAINED IN THE APPROVED SWPPP.

(2) THE EPSC MEASURES AND/OR PLAN SHALL BE MODIFIED AS NECESSARY SO THAT THEY ARE EFFECTIVE AT ALL TIMES THROUGHOUT THE COURSE OF THE PROJECT.

(3) THE ACCEPTED EPSC PLAN SHALL REQUIRE THAT EPSC MEASURES BE IN PLACE BEFORE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OCCURS, EXCEPT AS SUCH WORK MAY BE NECESSARY TO INSTALL EPSC MEASURES, INCLUDING WITHOUT LIMITATION AS FOLLOWS:

A. INITIAL CLEARING AND GRUBBING SHALL BE LIMITED TO THAT NECESSARY FOR THE INSTALLATION OF APPLICABLE EPSC MEASURES IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

B. NO OTHER CLEARING AND GRUBBING OPERATIONS SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

C. NO CULVERT OR BRIDGE CONSTRUCTION SHALL BE STARTED BEFORE APPLICABLE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

D. NO GRADING, EXCAVATION, CUTTING, FILLING, OR OTHER EARTHWORK SHALL BE STARTED BEFORE EPSC MEASURES ARE IN PLACE IN ACCORDANCE WITH THE ACCEPTED EPSC PLAN INCORPORATED INTO THE SWPPP.

(4) PERMANENT EPSC MEASURES SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OF ANY SEQUENCE OR PHASE. TEMPORARY OR PERMANENT STABILIZATION SHALL BE INITIATED WITHIN 15 CALENDAR DAYS AFTER FINAL GRADING OR WHEN CONSTRUCTION ACTIVITIES ON A PORTION OF THE SITE ARE TEMPORARILY CEASED AND EARTH DISTURBING ACTIVITIES WILL NOT RESUME UNTIL AFTER 15 CALENDAR DAYS. PERMANENT STABILIZATION WITH PERENNIAL VEGETATION OR OTHER PERMANENTLY STABLE NON-ERODING SURFACE SHALL REPLACE ANY TEMPORARY MEASURES AS SOON AS PRACTICABLE. UNPACKED GRAVEL CONTAINING FINES (SILT AND CLAY SIZED PARTICLES) OR CRUSHER RUNS WILL NOT BE CONSIDERED A NON-ERODIBLE SURFACE.

EXCAVATION- CLEARING

(5) EXCEPT AS OTHERWISE SPECIFIED, THERE ARE NO KNOWN SPECIAL ENVIRONMENTAL FACTORS PRESENT ON THIS PROJECT THAT INDICATE A NEED FOR SEASONAL LIMITATIONS ON THE CLEARING, GRUBBING, EXCAVATION, GRADING, CUTTING OR FILLING OPERATIONS OR ON THE TOTAL AREA OF EXPOSED SOIL.

UTILITY RELOCATION

(6) RAIN WATER WHICH COLLECTS IN THE UTILITY TRENCH SHALL BE PUMPED INTO A TEMPORARY DEWATERING STRUCTURE OR SEDIMENT FILTER BAG AND MAINTAINED.

(7) SILT FENCE SHALL BE INSTALLED ON THE DOWNSTREAM SIDE OF STOCKPILED SOIL. TRENCHING ACROSS WET WEATHER CONVEYANCES SHALL BE DONE DURING NO FLOW CONDITIONS AND STABILIZED BY THE END OF THE WORK DAY.

(8) UTILITY CROSSINGS FOR PERENNIAL STREAMS SHALL BE CONSTRUCTED IN ACCORDANCE WITH TDOT STANDARDS AND NO WORK SHALL BE CONDUCTED IN FLOWING WATERS. TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO UTILITIES IN THIS PROJECT IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC). THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTION PREVENTION PLANS (SWPPP).

(9) IT IS THE RESPONSIBILITY OF THE STATE UTILITY CONTRACTOR INSTALLER TO PROTECT FROM EROSION EXPOSED EARTH RESULTING FROM THEIR OPERATIONS AND TO PROVIDE FOR CONTAINMENT OF SEDIMENT THAT MAY RESULT FROM THEIR WORK. PRIOR TO BEGINNING WORK, ADEQUATE MEASURES MUST BE IN PLACE TO TRAP ANY SEDIMENT THAT MAY TRAVEL OFF-SITE IN THE EVENT OF RAIN. DURING THE PROGRESSION OF THEIR WORK, EXPOSED EARTH AREAS SHALL BE STABILIZED AS SOON AS POSSIBLE TO PREVENT EROSION. AT NO TIME SHALL EXPOSED EARTH RESULTING FROM THEIR OPERATIONS HAVE UNPROTECTED ACCESS TO FLOWING OFF-SITE AND ENTERING WATERS OF THE STATE/U.S.

(10) FOR THE INSTALLATION OF BURIED UTILITIES (PIPES AND CABLES), TRENCHES SHALL BE BACKFILLED DAILY AS CONSTRUCTION PROCEEDS. BACKFILLED TRENCHES SHALL BE SEEDED AND MULCHED OR SODDED DAILY IF POSSIBLE, BUT NO LATER THAN SEVEN DAYS AFTER BEING BACKFILLED. ANY TEMPORARY SPOIL OF EXCAVATED EARTH SHALL BE LOCATED WITHIN TDOT EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES OR RECEIVE SEPARATE EPSC MEASURES. IF TRENCHES ARE NOT BACKFILLED OVERNIGHT, APPROPRIATE EPSC MEASURES WILL BE INSTALLED BY THE STATE UTILITY CONTRACTOR UNTIL SUCH TIME AS THE TRENCH IS BACKFILLED.

(11) IN REGARD TO EROSION PREVENTION AND SEDIMENT CONTROL (EPSC), TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION (TDEC) REGULATIONS APPLY TO THE STATE UTILITY CONTRACTORS IN THIS PROJECT, THEREFORE, THE STATE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE STORM WATER POLLUTIONS PREVENTION PLANS (SWPPP). THE STATE CONTRACTOR IS RESPONSIBLE FOR EPSC MEASURES RELATED TO UTILITY CONSTRUCTION INCLUDED IN THE STATE CONTRACT WORK.

(12) TRENCHES FORMED FOR THE INSTALLATION OF BURIED UTILITIES MAY CAUSE STORM WATER RUNOFF TO CONCENTRATE AT THE TRENCH LINE. ADDITIONAL EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES MAY BE REQUIRED TO BE INSTALLED AS APPROVED BY THE TDOT PROJECT ENGINEER.

(13) FOR THE INSTALLATION OF UNDERGROUND UTILITIES OUTSIDE OF THE TDOT RIGHT-OF-WAY, TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SHALL BE INSTALLED PRIOR TO CLEARING (TRENCHING AND ASSOCIATED BLASTING) IN THOSE AREAS NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA. THESE EPSC MEASURES SHALL REMAIN UNTIL THE BACKFILLED TRENCH IS STABILIZED WITH FINAL VEGETATIVE COVER.

(14) THE UTILITY CONTRACTOR SHALL RESTORE ALL AFFECTED WET WEATHER CONVEYANCES TO THE EXISTING TOPOGRAPHIC CONDITIONS (AS APPROVED BY THE TDOT PROJECT ENGINEER).

(15) THE UTILITY CONTRACTOR WILL PROVIDE APPROPRIATE EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) MEASURES TO REPLACE IN-PLACE EPSC MEASURES REMOVED TO FACILITATE THE INSTALLATION OF UTILITIES. REPLACEMENT OF EPSC MEASURES WILL BE COORDINATED WITH THE TDOT PROJECT ENGINEER BEFORE COMMENCING WORK.

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EPSC NOTES

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	81B
R.O.W.	2009	HPP-NH-29(35)	

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
SF SF SF	TEMPORARY SILT FENCE	EC-STR-3
SFB SFB SFB	TEMPORARY SILT FENCE WITH BACKING	EC-STR-3D
>	ENHANCED SILT FENCE CHECK (V-DITCH)	EC-STR-4A
△	TEMPORARY ROCK CHECK DAM IN V-DITCH	EC-STR-6
	TEMPORARY SEDIMENT TRAP WITH TEMPORARY SILT SCREEN CHECK DAM	EC-STR-7
SOCK SOCK SOCK	FILTER SOCK	EC-STR-8
	BRUSH BARRIER	ESC-STR-9
	TEMPORARY ROCK SILT SCREEN AT PIPE INLETS	EC-STR-11
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
RIP RAP SILT FENCE	ROCK AND EARTH SEDIMENT EMBANKMENT	EC-STR-13
	SEDIMENT BASIN	EC-STR-15 EC-STR-17
B	CATCH BASIN PROTECTION (TYPE B)	EC-STR-19
	TEMPORARY BERM	EC-STR-27
CE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY DIVERSION CHANNEL	ESC-STR-31
TUBE TUBE TUBE	SEDIMENT TUBE	EC-STR-37

PHASE 1 EROSION CONTROL SHOULD BE USED FOR CLEARING AND GRUBBING

10+00
15+00
20+00
30+00
35+00
100+00
5+00
100+50

BEGIN S.R. 29 RAMP C
STA. 25+00.00
N 599829.1419
E 2413264.0762

BEGIN S.R. 29 RAMP B
STA. 10+00.00
N 599522.4775
E 2413183.9672

BEGIN S.R. 29 RAMP A
STA. 2+00.00
N 599458.8810
E 2413666.5310

LIMIT OF CONST.
FREELS ROAD
STA. 36+29.00
N 600248.8742
E 2413974.3264

PROPOSED R.O.W.
S.R. 29 RAMP A STA. 7+03.38=
S.R. 29 RAMP B STA. 17+60.00
OFFSET 15.98' RT,
N 599981.2060
E 2413848.0580

POT STA. 35+44.13 S.R. 29 RAMP C=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' LT)
N 600249.5402
E 2414213.7688

POT STA. 22+61.84 S.R. 29 RAMP B=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' RT.
N 600169.4271
E 2414266.6640

POT STA. 100+45.00 S.R. 29
POT STA. 40+00.00 FREELS ROAD
N 600234.2782
E 2414277.7694

STA. 272+71.72
NO. 2 JUNCTION BOX

MOBILE HOME

S.R.29 RAMP C
S.R.29 RAMP B
S.R.29 RAMP A
PRESENT R.O.W.
MATCH LINE STA. 100+50
SEE SHEET NO. 305

N 72° 40' 00" E
N 59° 14' 17" E
N 56° 33' 54" E
N 56° 42' 47" E
N 61° 42' 35" E
S 33° 26' 06" E

FILL
CUT

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 10+00 TO STA. 100+50

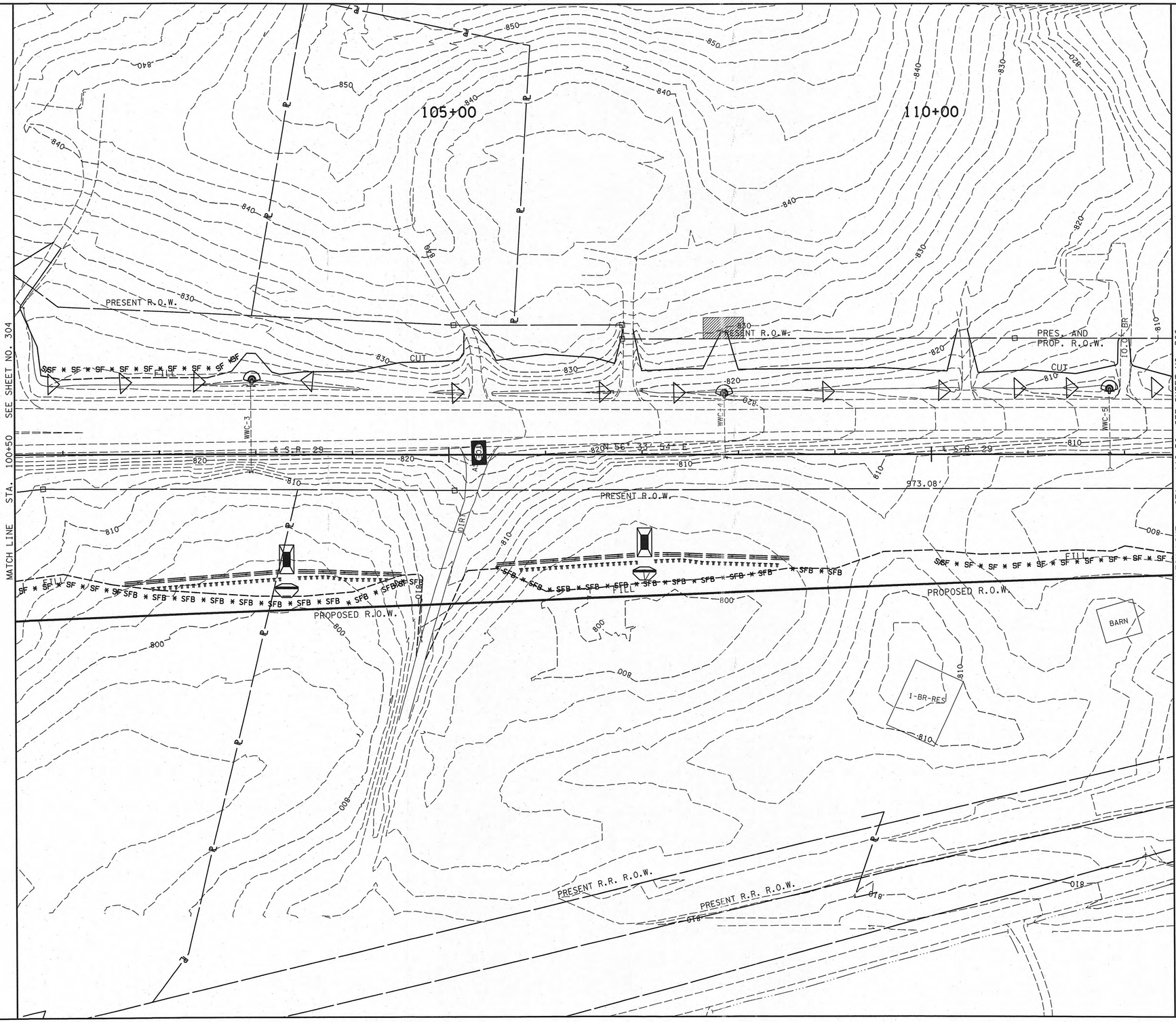
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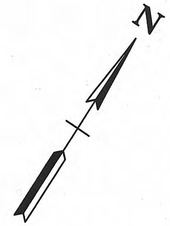
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	82
R.O.W.	2009	HPP-NH-29(35)	





COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 100+50 TO STA. 112+50

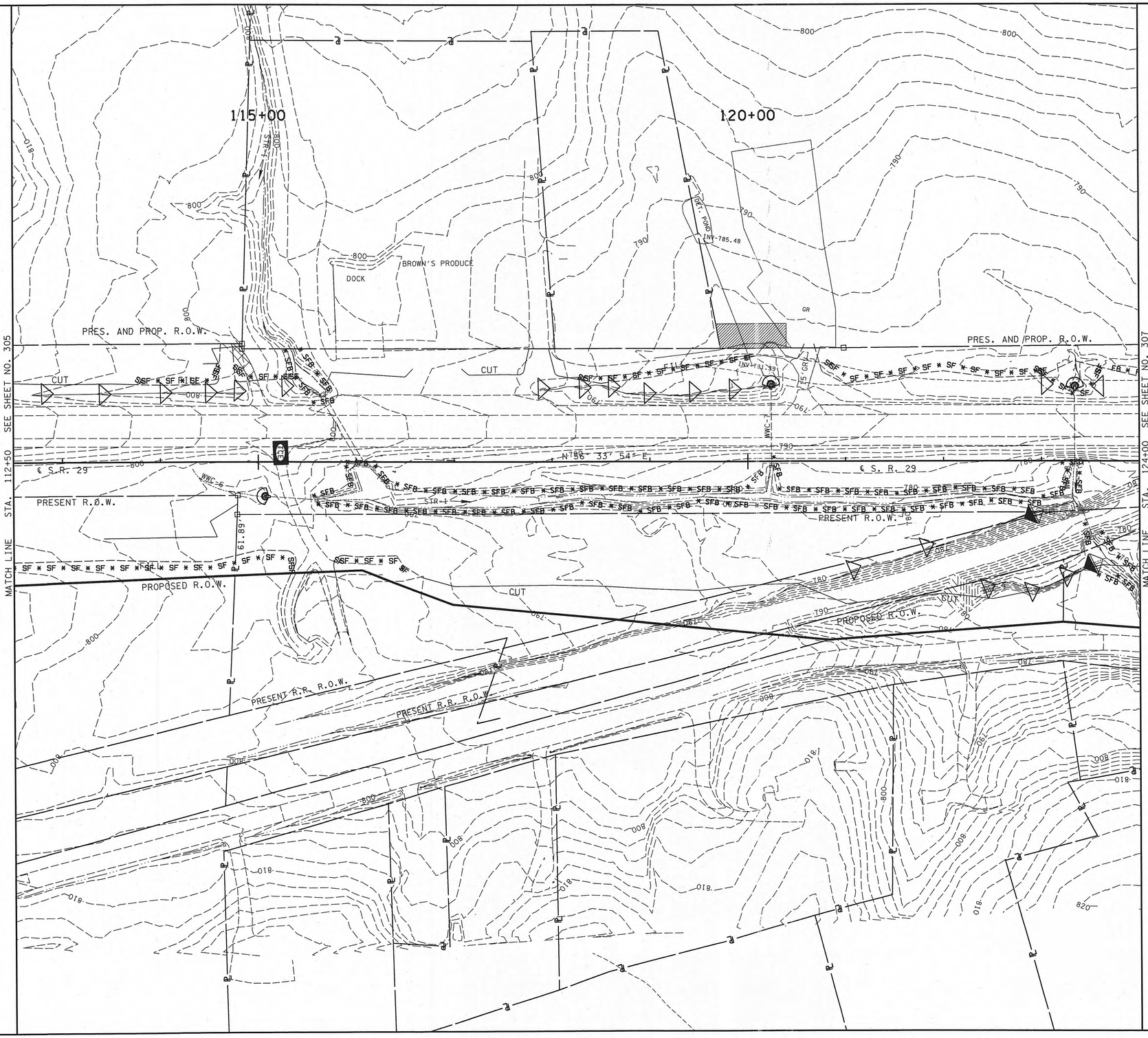
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	83
R.O.W.	2009	HPP-NH-29(35)	


115+00
120+00
BROWN'S PRODUCE
DOCK
DIGEST. POND
INV-785.48
GR
PRES. AND PROP. R.O.W.
PRES. AND PROP. R.O.W.
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℄ S.R. 29
℄ S.R. 29
N 86° 33' 54" E
PRESENT R.O.W.
PRESENT R.O.W.
PROPOSED R.O.W.
PROPOSED R.O.W.
PRESENT R.R. R.O.W.
PRESENT R.R. R.O.W.
MATCH LINE STA. 112+50 SEE SHEET NO. 305
MATCH LINE STA. 124+00 SEE SHEET NO. 307
161.89'
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	84
R.O.W.	2009	HPP-NH-29(35)	

125+00

130+00

135+00

POT STA. 129+00.00 S.R. 29 =
POT STA. 40+00.00 ROCK BRIDGE ROAD
N 601807.3574
E 2416660.2989

SCARIFY, TOPSOIL, AND SEED

PROPOSED R.O.W.

PRES. AND PROP. R.O.W.

PRESENT R.O.W.

PROPOSED R.O.W. CUT

FILL

CUT

℄ S.R. 29

N 56°33'54" E

S 33°26'06" E 855.64'

S 11°05'22" W

N 12°05'26" E

MATCH LINE STA. 124+00 SEE SHEET NO. 306

MATCH LINE STA. 136+00 SEE SHEET NO. 308

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 124+00 TO STA. 136+00

SCALE: 1"= 50'

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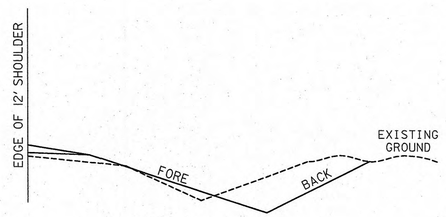
Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2S
R.O.W.	2009	HPP-NH-29(35)	

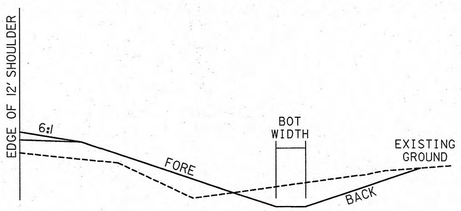
MAINLINE SPECIAL DITCHES

DETAIL NO. 1



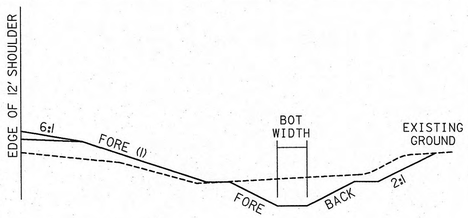
PROPOSED "V" BOTTOM DITCH

DETAIL NO. 2



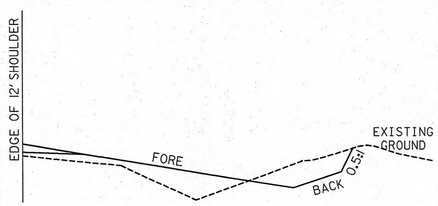
PROPOSED FLAT BOTTOM DITCH

DETAIL NO. 3



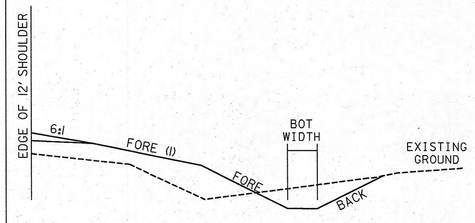
PROPOSED FLAT BOTTOM DITCH

DETAIL NO. 4



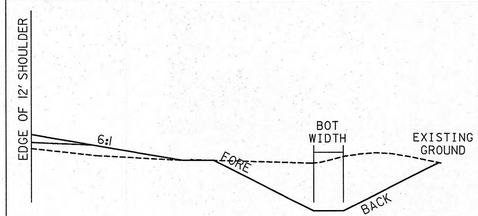
PROPOSED "V" BOTTOM DITCH

DETAIL NO. 5



PROPOSED FLAT BOTTOM DITCH

DETAIL NO. 6



PROPOSED FLAT BOTTOM DITCH

SPECIAL DITCH

ROAD	STATION FROM	STATION TO	SIDE	SLOPE FORE(1) (H/V)	SLOPE FORE (H/V)	SLOPE BOT WIDTH	SLOPE BACK (H/V)	DETAIL NUMBER	TYPE
SR-29	117+00	119+75	RT	6:1	2:1	4	2:1	6	
SR-29	119+75	123+66	RT	4:1	2:1	4	2:1	6	
SR-29	125+60	128+10	RT	3:1	2:1	4	2:1	6	
SR-29	134+50	138+50	RT		6:1	0	0.25:1	1	
SR-29	138+50	142+00	RT		6:1	0	0.5:1-2:1	1	
SR-29	147+50	151+00	RT		4:1	0	4:1	1	
SR-29	153+00	157+75	RT		6:1	0	2:1	1	
SR-29	157+75	172+00	RT		6:1	0	0.5:1-0.75:1	1	
SR-29	170+00	171+00	LT	6:1	3:1	0	3:1	1	
SR-29	175+50	178+50	LT		6:1	0	2:1	1	
SR-29	179+50	184+00	RT		6:1	0	2:1	1	
SR-29	190+00	191+25	RT		6:1	0	3:1	4	
SR-29	191+25	192+75	RT		6:1	0	2:1	1	
SR-29	192+75	199+25	RT	6:1	2:1	4	2:1	3	
SR-29	199+25	203+00	RT		6:1	0	2:1	1	
SR-29	205+50	209+50	RT		4:1	0	2:1	1	
SR-29	209+50	213+50	RT	4:1	2:1	4	2:1	3	
SR-29	215+00	221+25	RT		6:1	0	4:1	1	
SR-29	221+25	225+00	RT		6:1	0	2:1	1	
SR-29	230+50	232+50	RT		6:1	0	3:1	1	
SR-29	231+00	236+50	LT	5:1	2:1	4	2:1	5	
SR-29	235+50	238+00	RT		6:1	0	3:1	1	
SR-29	247+50	249+00	RT		4:1	24	4:1	2	
SR-29	272+00	273+50	RT		6:1	0	2:1	1	
SR-29	279+50	282+00	RT		4:1	0	4:1	1	
SR-29	329+00	330+50	RT		4:1	0	4:1	1	
SR-29	335+00	338+50	RT		4:1	0	4:1	1	
RAMP B	11+00	17+50	LT		4:1	0	3:1	1	
RAMP B	17+50	22+62	LT		5:1-3:1	0	5:1	1	
RAMP C	25+00	25+75	LT		4:1	0	2:1-3:1	1	
RAMP C	29+50	31+00	RT		6:1	0	4:1-3:1	1	

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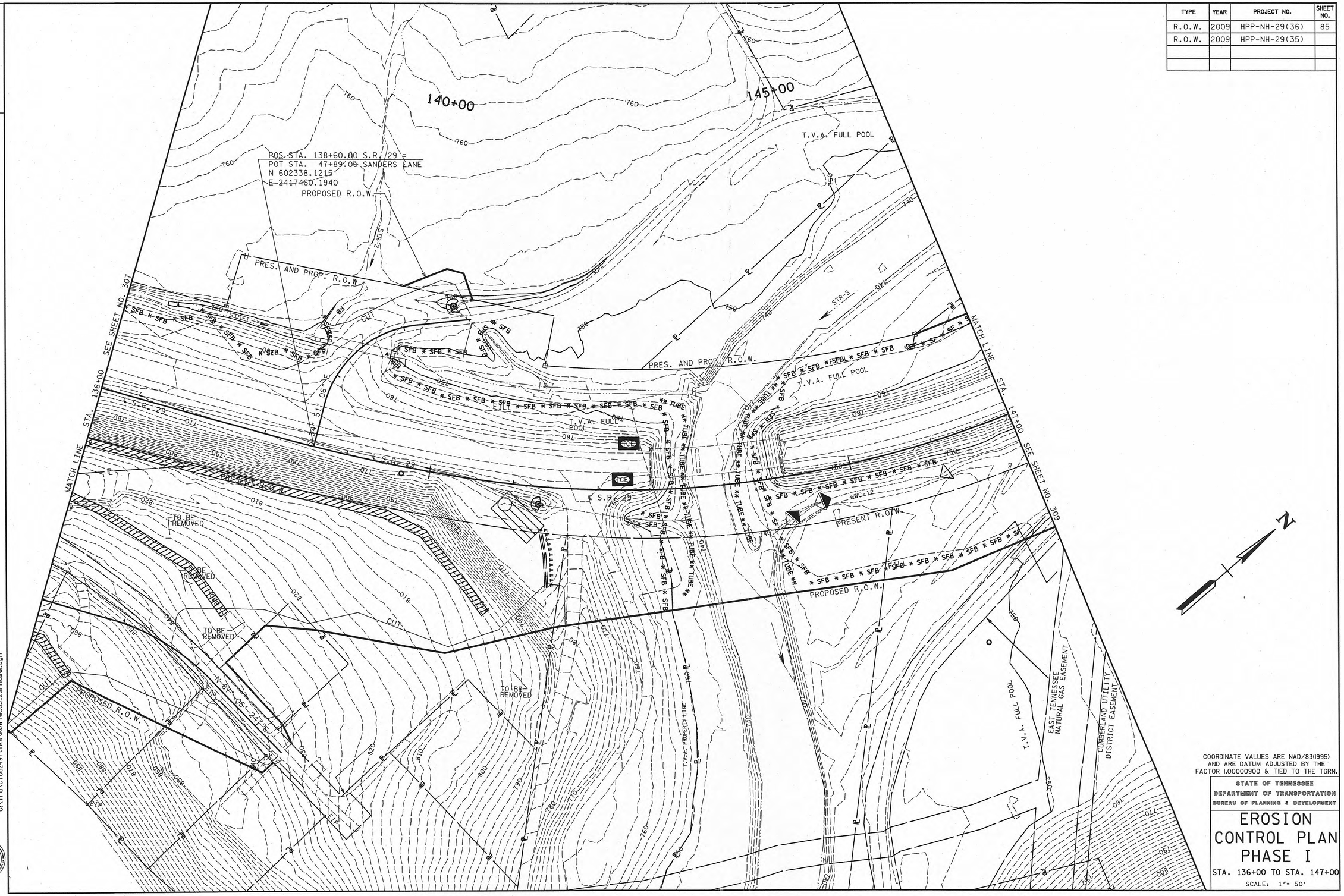
Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	85
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 136+00 TO STA. 147+00

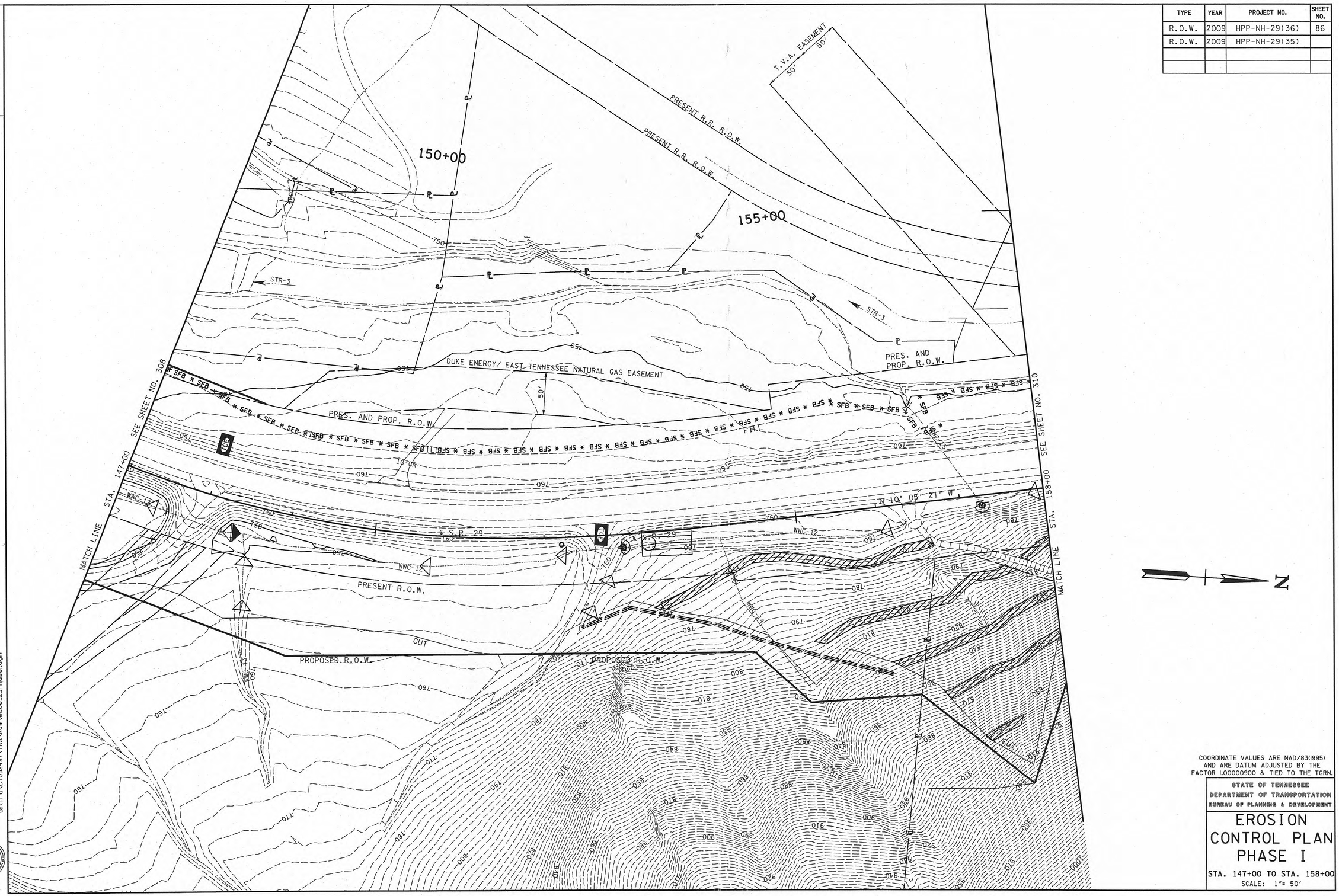
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	86
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 147+00 TO STA. 158+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	87
R.O.W.	2009	HPP-NH-29(35)	

160+00

165+00

PRESENT R.R. R.O.W.

PRESENT R.R. R.O.W.

PRESENT R.R. R.O.W.

50'

100'

T.V.A. EASEMENT

T.V.A. EASEMENT

PRES. AND PROP. R.O.W.

PRES. AND PROP. R.O.W.

T.V.A. FUEL POOL

STR-3

STR-3

STR-3

FILL

SEE SHEET NO. 309

STA. 158+00

MATCH LINE

WWC-1

STR-4

N 10° 05' 21" W

WWC-16

T.V.A. EASEMENT

PRESENT R.O.W.

T.V.A. EASEMENT

EAST TENNESSEE NATURAL GAS EASEMENT

CUT

50'

DUKE ENERGY / EAST TENNESSEE NATURAL GAS EASEMENT

T.V.A. EASEMENT

EAST TENNESSEE NATURAL GAS EASEMENT

DUKE ENERGY / EAST TENNESSEE NATURAL GAS EASEMENT

PROPOSED R.O.W.

CUT

PROPOSED R.O.W.

END R.O.W. PROJECT
NO. 78008-2238-14
STA. 162+35.01 S.R. 29

T.V.A. EASEMENT

BEGIN R.O.W. PROJECT
NO. 65001-2257-14
STA. 162+35.01 S.R. 29

T.V.A. EASEMENT

MATCH LINE

SEE SHEET NO. 310

SEE SHEET NO. 311

STA. 170+00

MATCH LINE

N

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Survey & Design Division

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

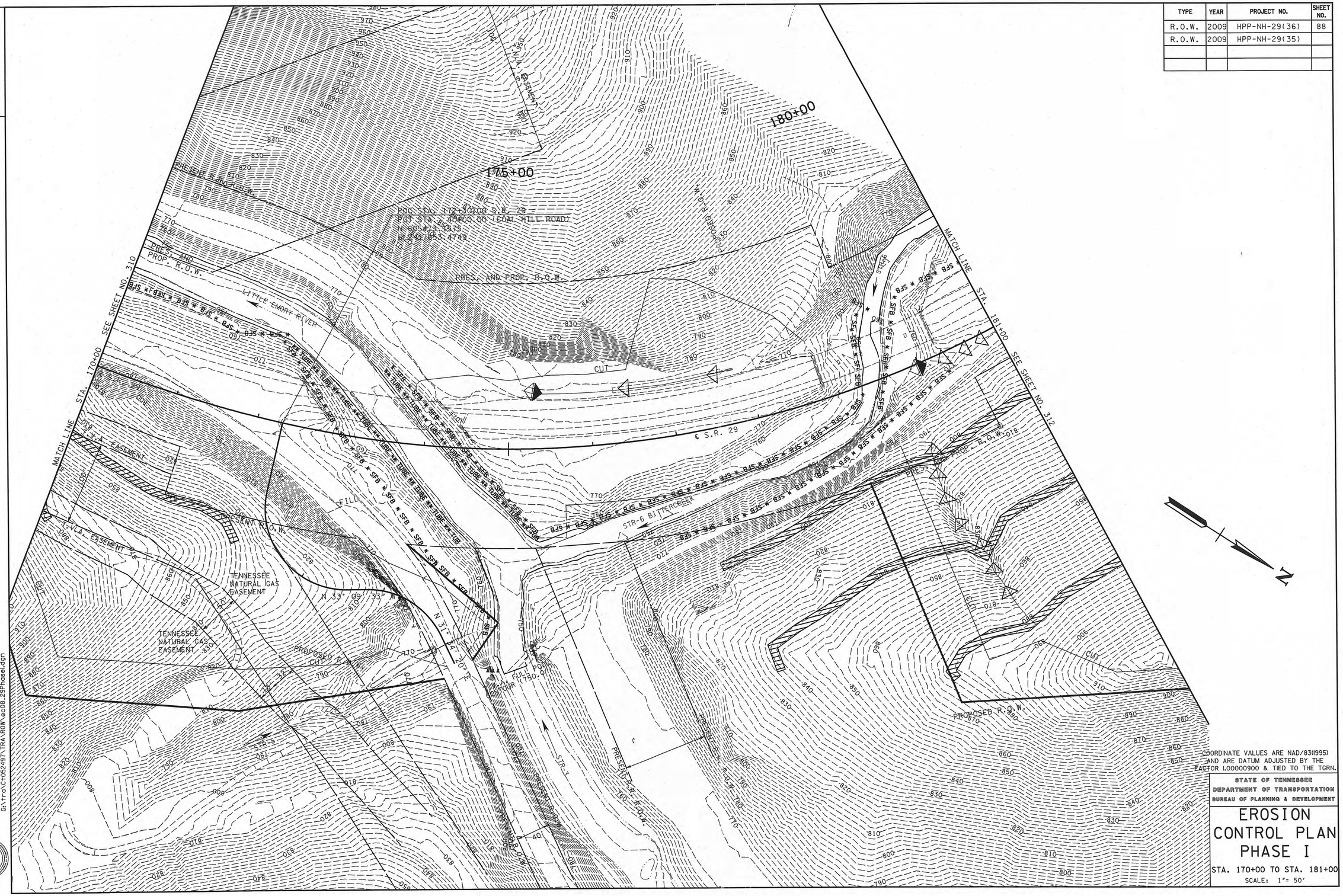
EROSION CONTROL PLAN PHASE I

STA. 158+00 TO STA. 170+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	88
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 170+00 TO STA. 181+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	89
R.O.W.	2009	HPP-NH-29(35)	

185+00

190+00

PRES. AND PROP. R.O.W.

STR-6

BITTER CREEK

STR-6

FILL

SEE SHEET NO. 311

SEE SHEET NO. 313

MATCH LINE STA. 181+00

MATCH LINE STA. 193+00

C.S.R. 29

N 67° 58' 22" W 767.

C.S.R. 29

PRESENT R.O.W.

CUT

PROPOSED R.O.W.

PROPOSED R.O.W.

PROPOSED R.O.W.

OIL/WELL

CUT

EAST TENNESSEE NATURAL GAS EASEMENT

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 181+00 TO STA. 193+00

SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	90
R.O.W.	2009	HPP-NH-29(35)	

195+00

200+00

BITTER CREEK

STR-6

STR-5

STR-8

EAST TENNESSEE/DUKE ENERGY NATURAL GAS EASEMENT

OIL WELL

OIL WELL TANK

PRES. AND PROP. R.O.W.

WTL-1

WTL-2

WTL-3

FILL

18'GR

C.S.R. 29

N 67° 58' 22" W

PRESENT R.O.W.

PROPOSED R.O.W.

PROPOSED E.O.W.

BM 732
1549 W 2104

MATCH LINE STA. 193+00 SEE SHEET NO. 312

MATCH LINE STA. 205+00 SEE SHEET NO. 314

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 193+00 TO STA. 205+00

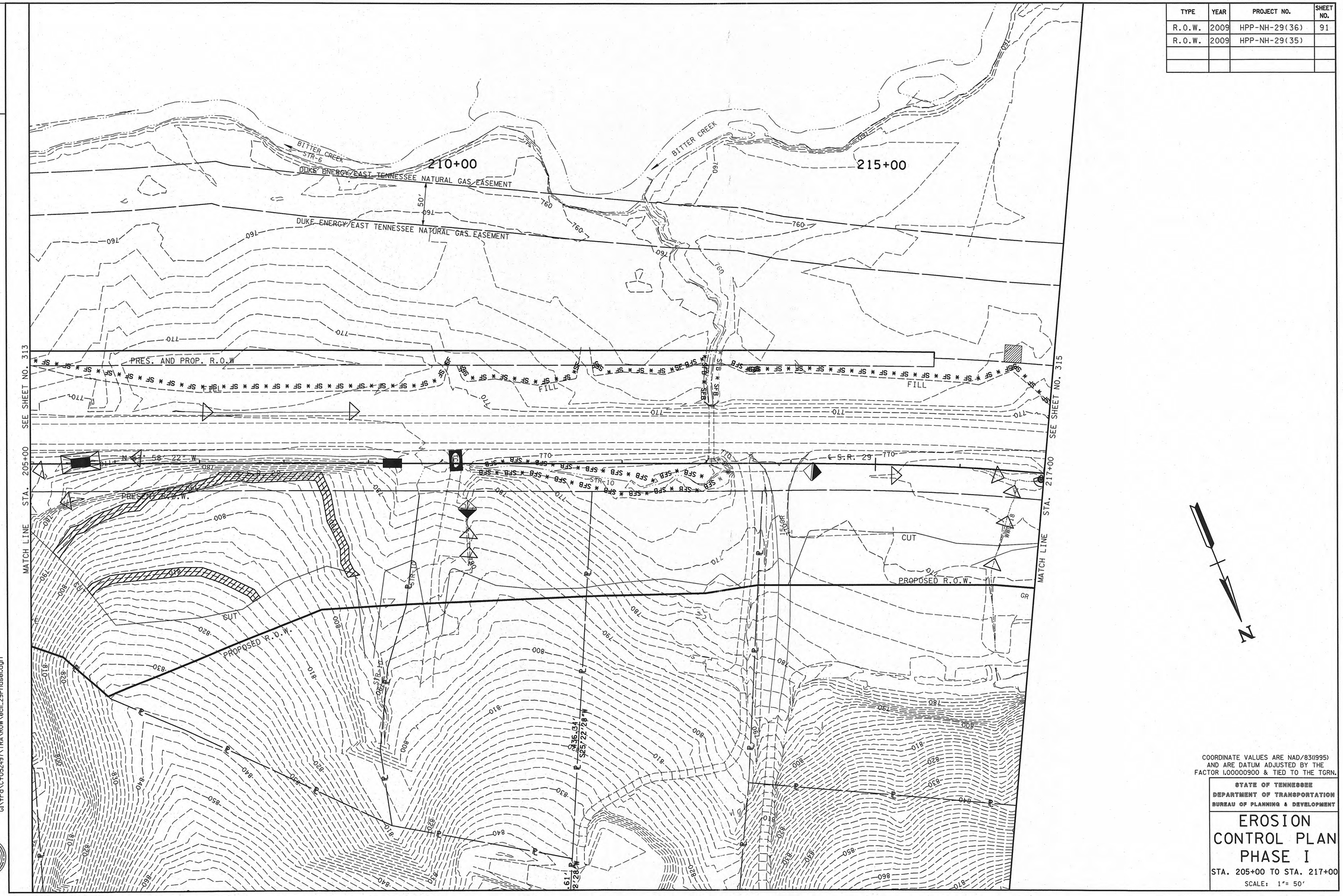
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	91
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Division

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

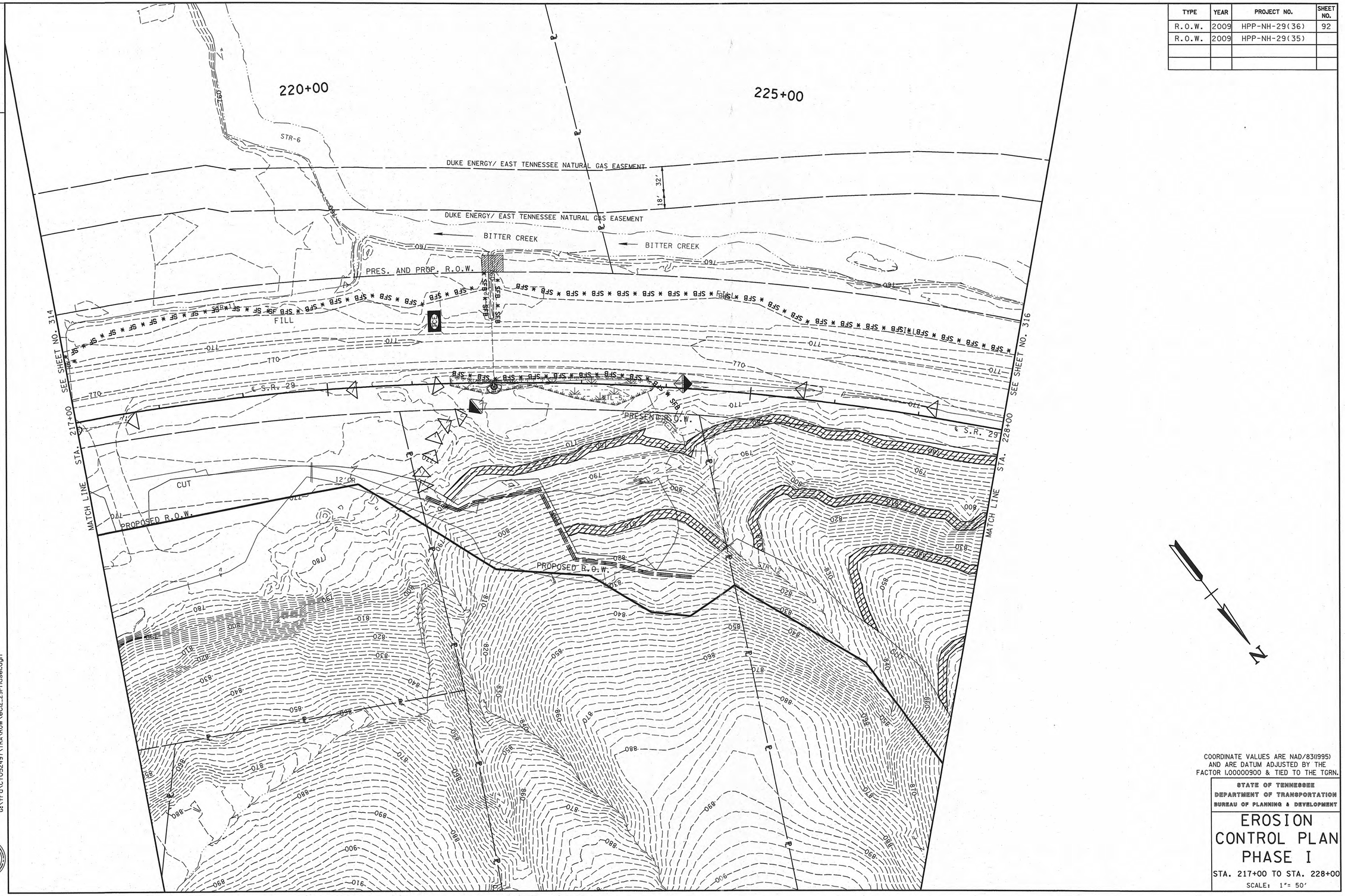
EROSION CONTROL PLAN PHASE I

STA. 205+00 TO STA. 217+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	92
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 217+00 TO STA. 228+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	93
R.O.W.	2009	HPP-NH-29(35)	

230+00

235+00

DUKE ENERGY/EAST TENNESSEE GAS EASEMENT

DUKE ENERGY/EAST TENNESSEE GAS EASEMENT

BITTER CREEK

STR-6

STR-3

WTL-6

WTL-7

PRES. AND PROP. R.O.W.

SFB * SFB * SFB *

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	94
R.O.W.	2009	HPP-NH-29(35)	

DUKE ENERGY/ EAST TENNESSEE NATURAL GAS EASEMENT
DUKE ENERGY/ EAST TENNESSEE NATURAL GAS EASEMENT
245+00
250+00
BITTER CREEK
BITTER CREEK
PRES. AND PROP. R.O.W.
STR-6
SEE SHEET NO. 316
SEE SHEET NO. 318
STA. 240+00
STA. 252+00
MATCH LINE
MATCH LINE
N 42° 02' 22" W
℄ S.R. 29
WNC-20
WNC-21
PRESENT R.O.W.
WTL-9
FILL
PROPOSED R.O.W.
PROPOSED R.O.W.
STR-14
N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 240+00 TO STA. 252+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3
R.O.W.	2009	HPP-NH-29(35)	

UTILITIES

GAS:
Citizens Gas Utility
P.O. Box 320
Helenwood, Tennessee 37755
Phone: (423) 569-8289
Attn: Freddie Bishop

Duke Energy/East Tennessee Natural Gas
5400 Westheimer Court, Suite 7D61
Houston, Texas 77056-5310
Phone: (713) 627-6024
Attn: Jerry L. Smith

TELEPHONE:
Bell South
9733 Parkside Drive
Knoxville, Tennessee 37922
Phone: (865) 694-3625
Attn: Don Whetham

U.S. Sprint
3065 Cumberland Circle
MS: GAATLD0202
Atlanta, Georgia 30339
Phone: (404) 649-2340
Attn: McCoy Ingles

ELECTRIC:
Harriman Utility Board
P.O. Box 434
Harriman, Tennessee 37748
Phone: (865) 882-3242 ext.234
Attn: Ken Mayfield

Tennessee Valley Authourity
4125 Greenway Drive
Knoxville, Tennessee 37918
Phone: (865) 673-2202
Attn: Carter Gibson

Plateau Electric
P.O. Box 4669
Oneida, Tennessee 37841-46
Phone: (423) 569-8591
Attn: Joel McCart

Cable:
Comcast
P.O. Box 1169
Harriman, Tennessee 37748
Phone: (865) 882-1669
Attn: Roger Rule

Comcast Rapid LLP
5720 Asheville Highway
Knoxville, Tennessee 37924
Phone: (865) 862-5060
Attn: Ansil Suffridge

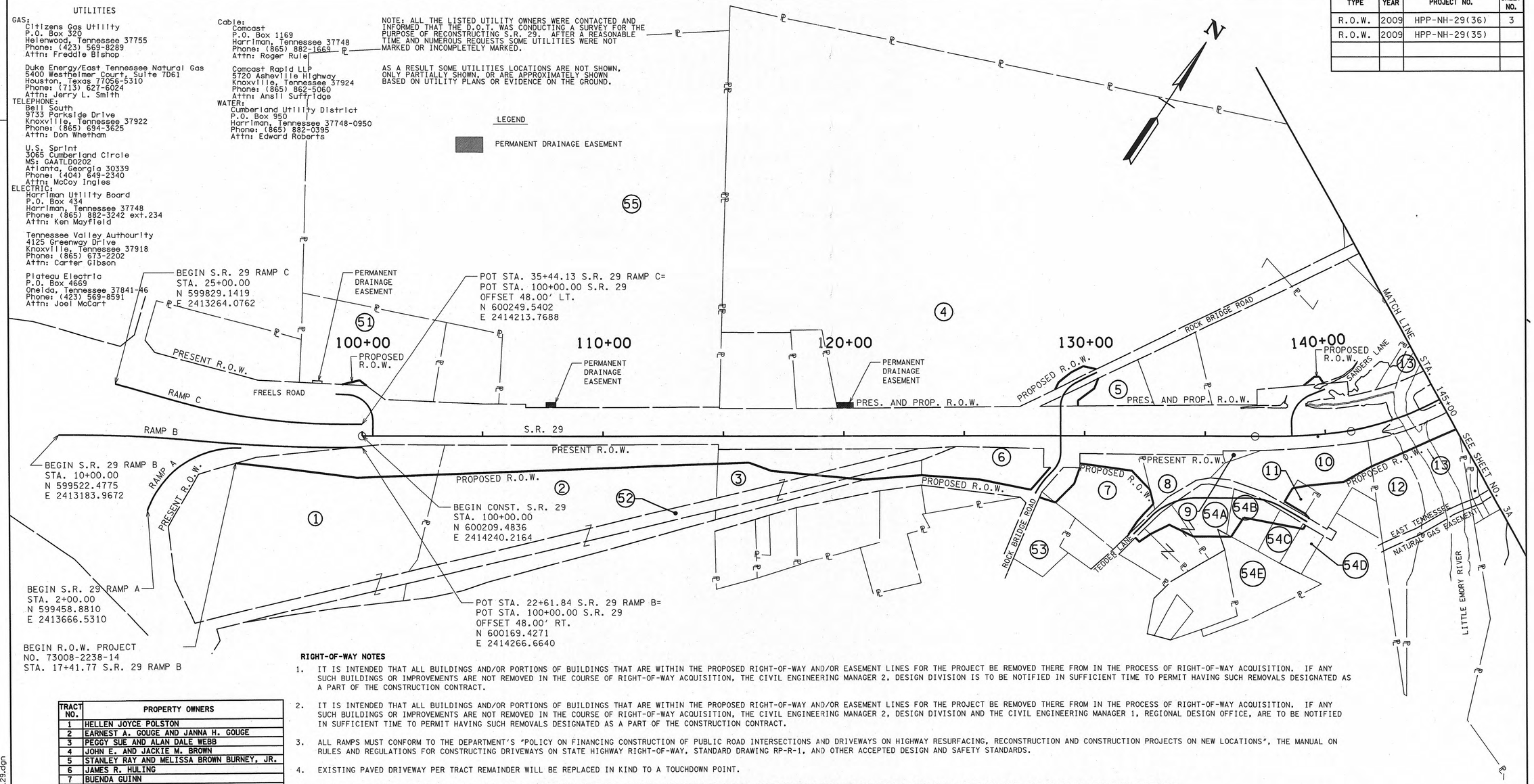
WATER:
Cumberland Utility District
P.O. Box 950
Harriman, Tennessee 37748-0950
Phone: (865) 882-0395
Attn: Edward Roberts

NOTE: ALL THE LISTED UTILITY OWNERS WERE CONTACTED AND INFORMED THAT THE D.O.T. WAS CONDUCTING A SURVEY FOR THE PURPOSE OF RECONSTRUCTING S.R. 29. AFTER A REASONABLE TIME AND NUMEROUS REQUESTS SOME UTILITIES WERE NOT MARKED OR INCOMPLETELY MARKED.

AS A RESULT SOME UTILITIES LOCATIONS ARE NOT SHOWN, ONLY PARTIALLY SHOWN, OR ARE APPROXIMATELY SHOWN BASED ON UTILITY PLANS OR EVIDENCE ON THE GROUND.

LEGEND

PERMANENT DRAINAGE EASEMENT



TRACT NO.	PROPERTY OWNERS
1	HELLEN JOYCE POLSTON
2	EARNEST A. GOUGE AND JANNA H. GOUGE
3	PEGGY SUE AND ALAN DALE WEBB
4	JOHN E. AND JACKIE M. BROWN
5	STANLEY RAY AND MELISSA BROWN BURNEY, JR.
6	JAMES R. HULING
7	BUENDA GUINN
8	HENERY E. BELL AND EVELYN M. BELL
9	ROY E. AND NANNIE G. GILMORE
10	ROY E. AND NANNIE G. GILMORE
11	LINDA G. PARKS
12	HAROLD E. AND JEAN MURRY
13	UNITED STATES OF AMERICA
51	LAWERENCE AND JUDY GRIFFITH
52	SOUTHERN RAIL ROAD ROW
53	JAMES RICHARD AND PATRICIA WARD
54A	JAMES C. AND JUDY S. COLEY
54B	DOUGLAS WAYNE MOORE
54C	RITA JOYCE BARNES AND PETER TIMAR
54D	NANNIE G. GILMORE
54E	SANDRA L. AND JOHN STOUT, JR.
55	MARY COFER POLSTON

RIGHT-OF-WAY NOTES

1. IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, DESIGN DIVISION IS TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.
2. IT IS INTENDED THAT ALL BUILDINGS AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY AND/OR EASEMENT LINES FOR THE PROJECT BE REMOVED THERE FROM IN THE PROCESS OF RIGHT-OF-WAY ACQUISITION. IF ANY SUCH BUILDINGS OR IMPROVEMENTS ARE NOT REMOVED IN THE COURSE OF RIGHT-OF-WAY ACQUISITION, THE CIVIL ENGINEERING MANAGER 2, DESIGN DIVISION AND THE CIVIL ENGINEERING MANAGER 1, REGIONAL DESIGN OFFICE, ARE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.
3. ALL RAMPS MUST CONFORM TO THE DEPARTMENT'S "POLICY ON FINANCING CONSTRUCTION OF PUBLIC ROAD INTERSECTIONS AND DRIVEWAYS ON HIGHWAY RESURFACING, RECONSTRUCTION AND CONSTRUCTION PROJECTS ON NEW LOCATIONS", THE MANUAL ON RULES AND REGULATIONS FOR CONSTRUCTING DRIVEWAYS ON STATE HIGHWAY RIGHT-OF-WAY, STANDARD DRAWING RP-R-1, AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.
4. EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED IN KIND TO A TOUCHDOWN POINT.
5. WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY EXCEEDS 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED TO A TOUCHDOWN POINT OR UNTIL THE GRADE IS LESS THAN 7 PERCENT.
6. WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED A SHOULDER WIDTH FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.
7. ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.
8. TRACT REMAINDERS NOT HAVING AN EXISTING DRIVEWAY WILL BE PROVIDED ONE 50-FOOT OPENING IN THE ACCESS CONTROL FENCE AND A DRIVEWAY WILL BE CONSTRUCTED UNLESS ACCESS IS PROVIDED FROM AN INTERSECTING ROAD OR BASED ON PHYSICAL CONDITIONS AND/OR CONFLICTS WITH OTHER DESIGN CONSIDERATIONS WHICH PREVENT AN ACCESS OPENING. PAVING OF THESE NEW DRIVEWAYS WILL BE IN ACCORDANCE TO THE 7 PERCENT CRITERIA PREVIOUSLY MENTIONED FOR EXISTING DRIVEWAYS.
9. NEW DRIVEWAYS PROVIDED IN THE PLANS WILL BE PAVED BASED ON THE 7 PERCENT CRITERIA. THOSE 7 PERCENT OR STEEPER IN GRADE WILL BE PAVED AND THOSE FLATTER THAN 7 PERCENT WILL BE COVERED WITH BASE STONE.
10. ON PROJECTS WITHOUT CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT AND TO CONSTRUCT ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.
11. ON PROJECTS WITH CURB AND GUTTER THAT ARE ON STATE ROUTES, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT. AFTER THE PERMIT HAS BEEN GRANTED, THE DEPARTMENT WILL CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE THROUGH THE CURB AND SIDEWALK, PROVIDED THE CURB AND SIDEWALK HAVE NOT BEEN CONSTRUCTED. IT WILL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO CONSTRUCT THE DRIVEWAY OR FIELD ENTRANCE FROM BACK OF SIDEWALK TO TOUCHDOWN POINT FOR ANY ADDITIONAL DRIVEWAYS OR FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS.
12. ON NON-STATE ROUTES, ADDITIONAL DRIVEWAYS AND FIELD ENTRANCES OTHER THAN THOSE PROVIDED IN THE PLANS SHALL REQUIRE A PERMIT ONLY IF THE LOCAL AGENCY SPECIFIES THE NEED FOR THAT PERMIT.
13. EASEMENT REQUIRED FOR THE RAILROAD CROSSING IS TO BE OBTAINED BY THE UTILITIES ENGINEER BY PROVISIONS CONTAINED IN THE CROSSING AGREEMENT NEGOTIATED WITH THE RAILROAD.

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPERTY MAP

STA. 10+00 TO STA. 145+00

SCALE: 1"=200'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	95
R.O.W.	2009	HPP-NH-29(35)	

255+00

260+00

MATCH LINE STA. 252+00 SEE SHEET NO. 317

MATCH LINE STA. 264+00 SEE SHEET NO. 319

PRES. AND PROP. R.O.W.

PRESENT R.O.W.

PROPOSED R.O.W.

CUT

FILL

EL-807.95

N 60° 03' 30" W

BITTER CREEK

STR-6

STR-15

U.S.R. 29

WTL-T1

WTL-T0

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 252+00 TO STA. 264+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	96
R.O.W.	2009	HPP-NH-29(35)	

265+00 270+00 275+00

BITTER CREEK

PRES. AND PROP. R.O.W.

PRESENT R.O.W.

PROPOSED R.O.W.

℄ S.R. 29

STR-6 STR-16 STR-25

WWC-22 WWC-23 WWC-24 WWC-25

CUT FILL

SHED M-SHED

JOSEPH ARMES (31)

SEE SHEET NO. 318 MATCH LINE STA. 264+00

SEE SHEET NO. 320 MATCH LINE STA. 275+00

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 264+00 TO STA. 276+00

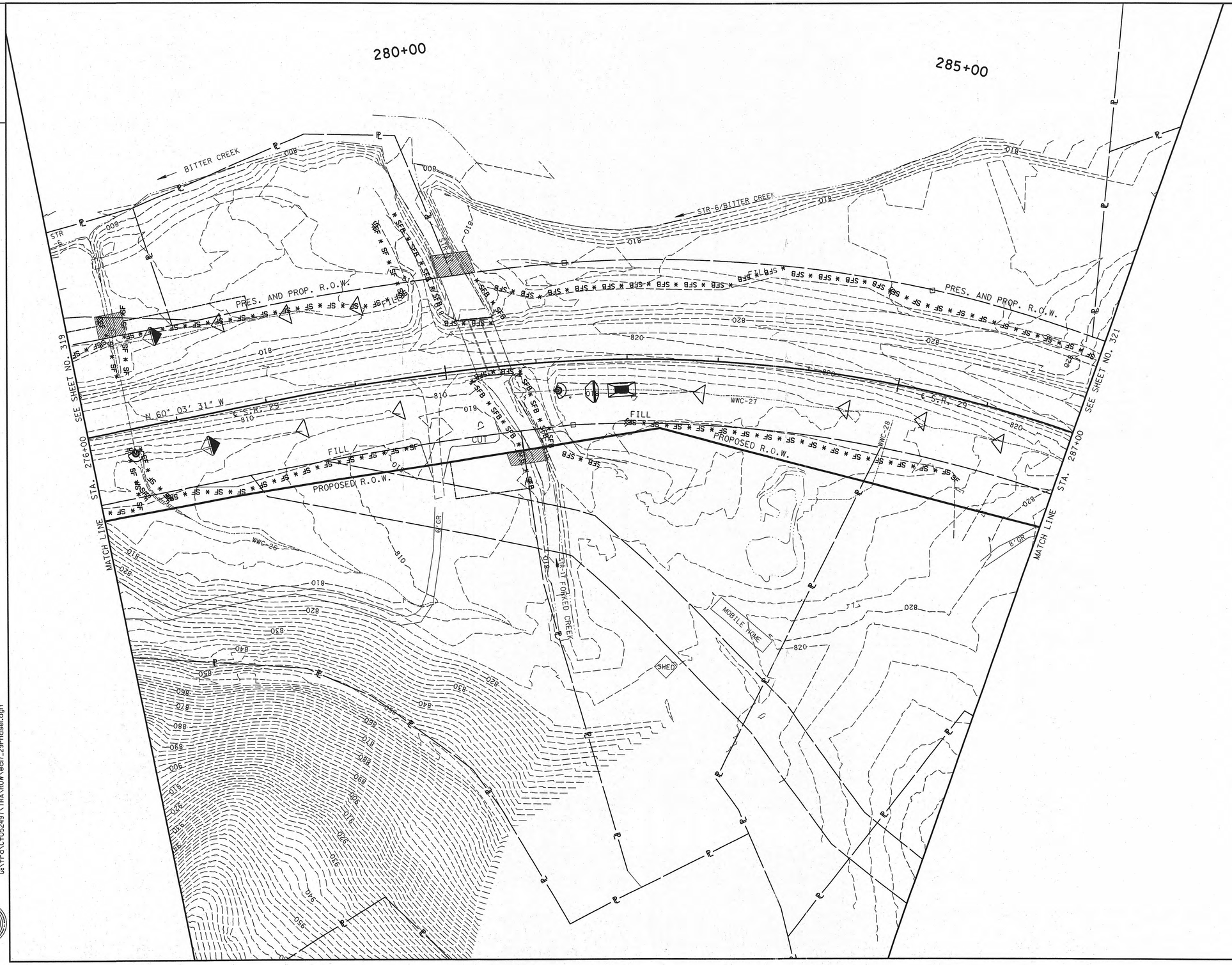
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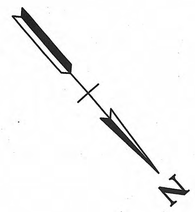
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	97
R.O.W.	2009	HPP-NH-29(35)	





COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 276+00 TO STA. 287+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	98
R.O.W.	2009	HPP-NH-29(35)	

290+00

295+00

POS STA. 290+51.96 S.R. 29 =
POT STA. 50+00.00 WHETSTONE ROAD
N 612052.6872
E 2408162.2162

BITTER CREEK

PRES. AND PROP. R.O.W.

SCARIFY TOPSOIL, CUT AND SEED

MATCH LINE STA. 287+00 SEE SHEET NO. 320

MATCH LINE STA. 298+00 SEE SHEET NO. 322

50+00

N 13° 16' 43" W

N 74° 22' 57" E

℄ S.R. 29

WWC-27

WWC-28

WWC-29

PRESENT R.O.W.

PROPOSED R.O.W.

CUT

SHED

18' 32"

5' 40" 0"

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 287+00 TO STA. 298+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	99
R.O.W.	2009	HPP-NH-29(35)	

300+00
305+00
MATCH LINE STA. 298+00 SEE SHEET NO. 321
MATCH LINE STA. 309+00 SEE SHEET NO. 323
PRES. AND PROP. R.O.W.
BITTER CREEK STR-6
STR-6
FILL
CUT
℄ S.R. 29
PRESENT R.O.W.
PROPOSED R.O.W.
N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 298+00 TO STA. 309+00

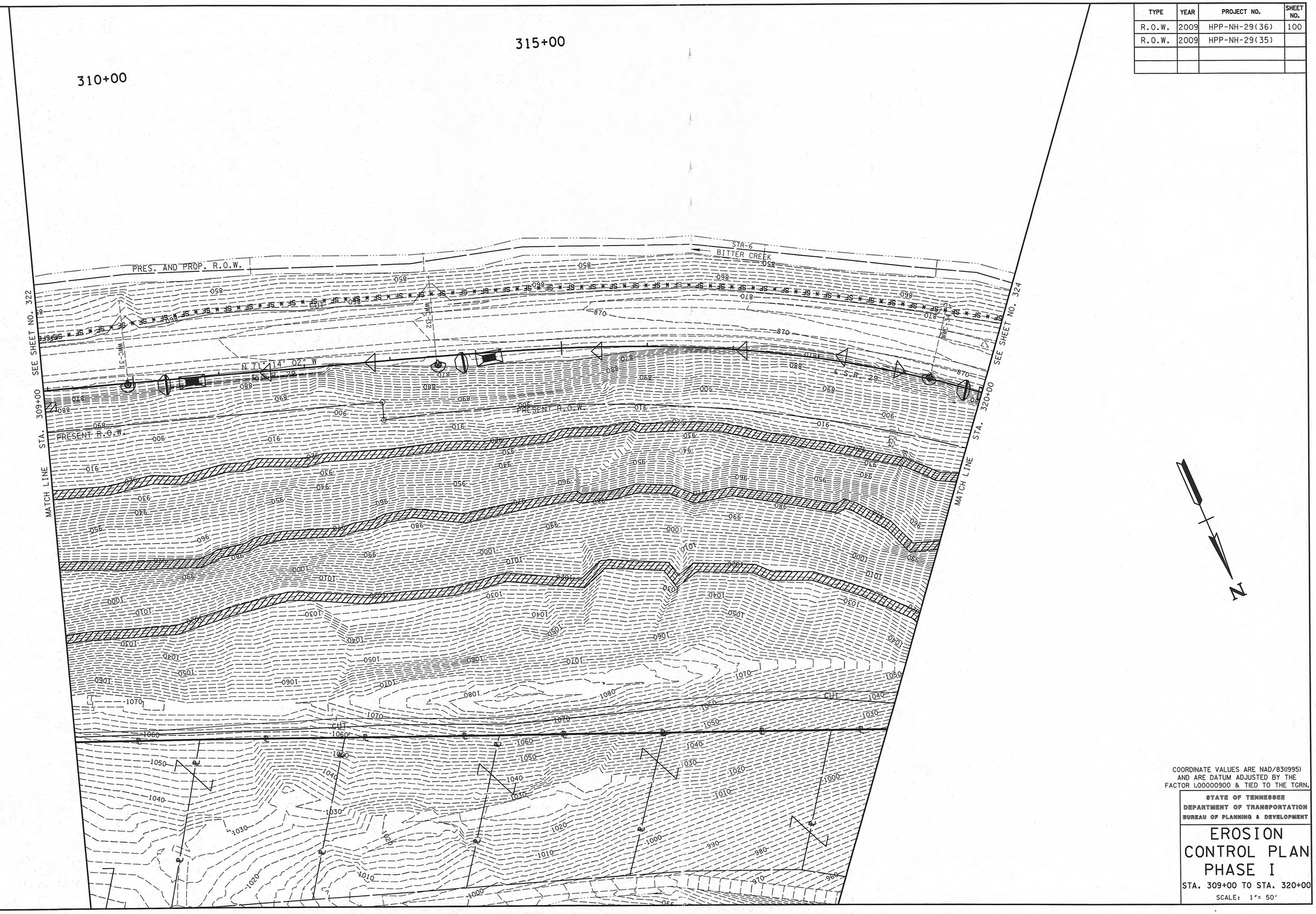
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	100
R.O.W.	2009	HPP-NH-29(35)	



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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

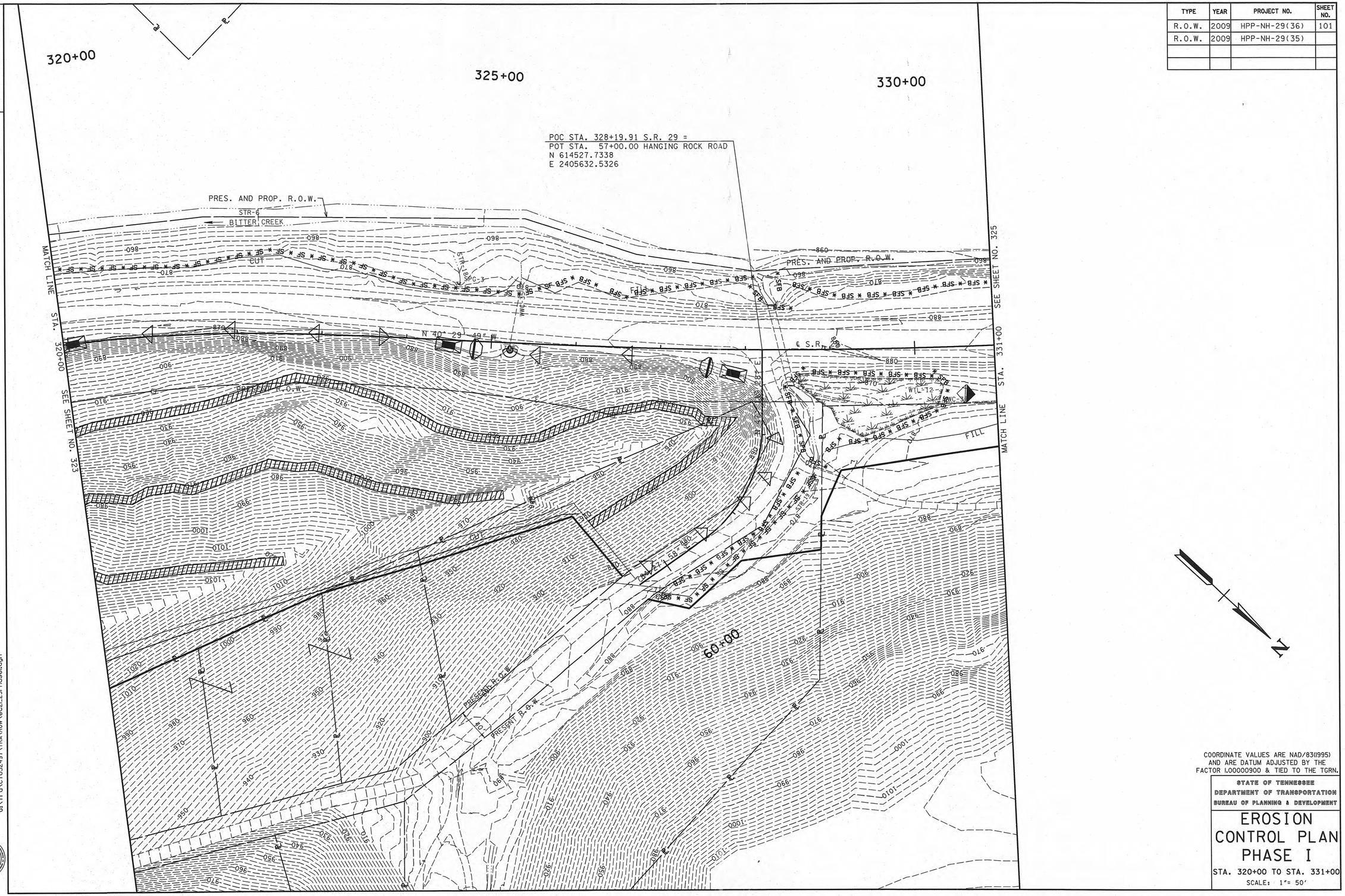
EROSION CONTROL PLAN PHASE I

STA. 309+00 TO STA. 320+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	101
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 320+00 TO STA. 331+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	102
R.O.W.	2009	HPP-NH-29(35)	

335+00

340+00

PRES. AND PROP. R.O.W.

BITTER CREEK

STR-6

WWC-37

WWC-37

WTL-13

FILL

CUT

CUT

PRESENT R.O.W.

PROPOSED R.O.W.

N 46° 05' 28" W

℄ S.R. 29

MATCH LINE STA. 331+00 SEE SHEET NO. 324

MATCH LINE STA. 342+00 SEE SHEET NO. 326

N

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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 331+00 TO STA. 342+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	103
R.O.W.	2009	HPP-NH-29(35)	

345+00
350+00
CUT
CUT
PRES. AND PROP. R.O.W.
PRESENT R.O.W.
PROPOSED R.O.W.
PRESENT R.O.W.
PROPOSED R.O.W.
STR-20 MUDDY BRANCH
STR-21
STR-6
BITTER CREEK
WWC-38
WWC-38
WWC-54
FILL
FILL
℄ S.R. 29
℄ S.R. 29
N 62° 50' 58" E
ROS STA. 344+41.25 S.R. 29
N 619444.8927
E 2404638.4367
MATCH LINE STA. 342+00 SEE SHEET NO. 325
MATCH LINE STA. 353+00 SEE SHEET NO. 327
N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 342+00 TO STA. 353+00

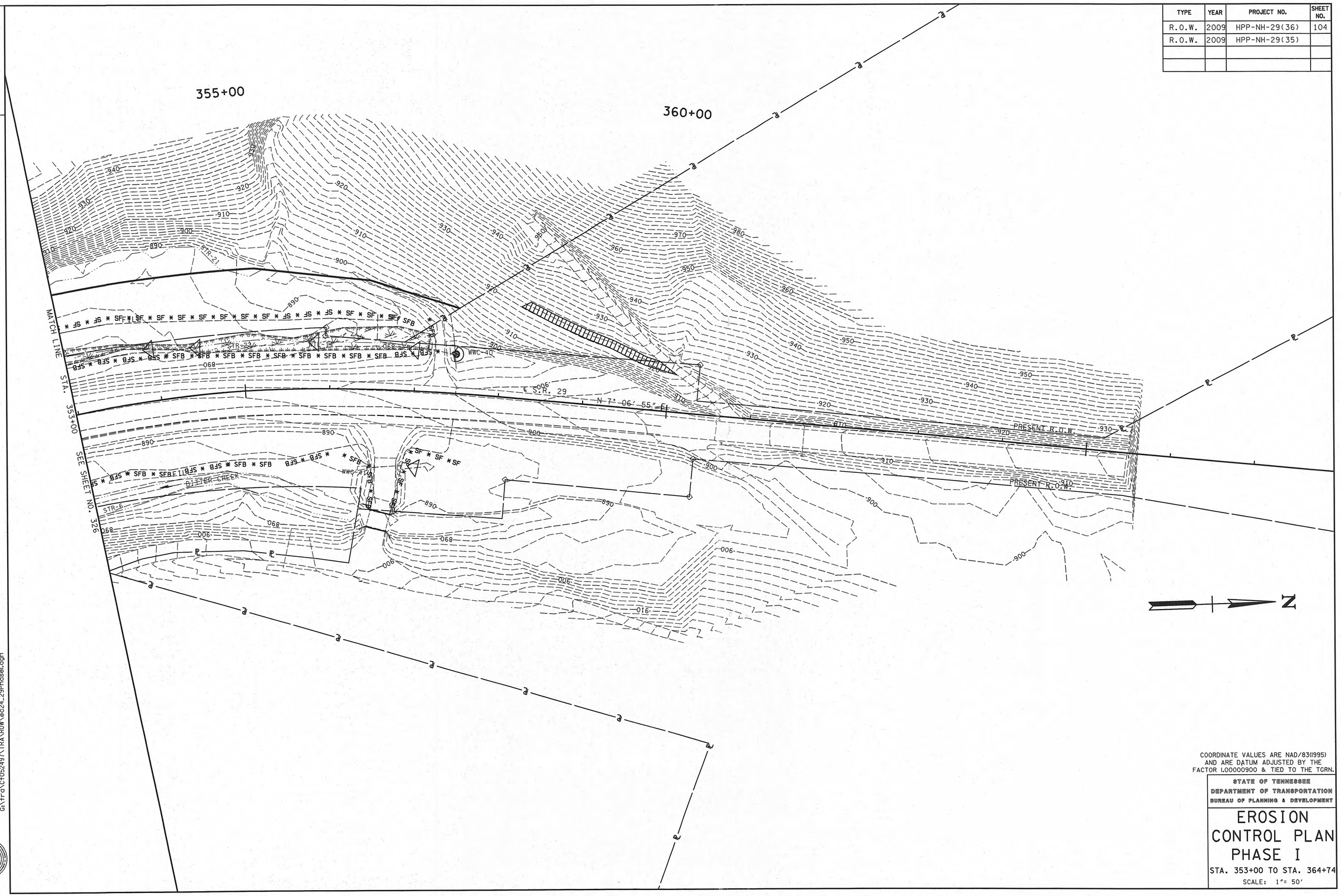
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	104
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I

STA. 353+00 TO STA. 364+74

SCALE: 1"= 50'

Survey & Design Division

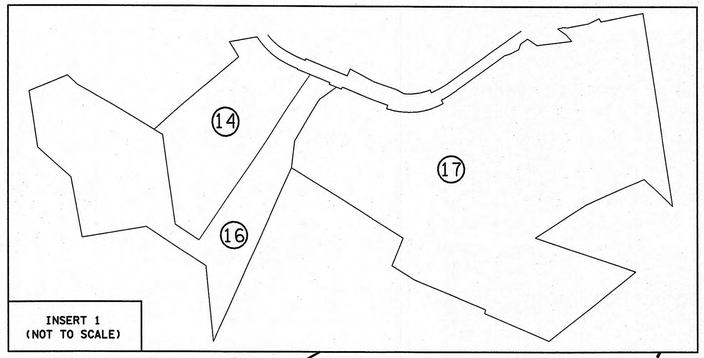
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

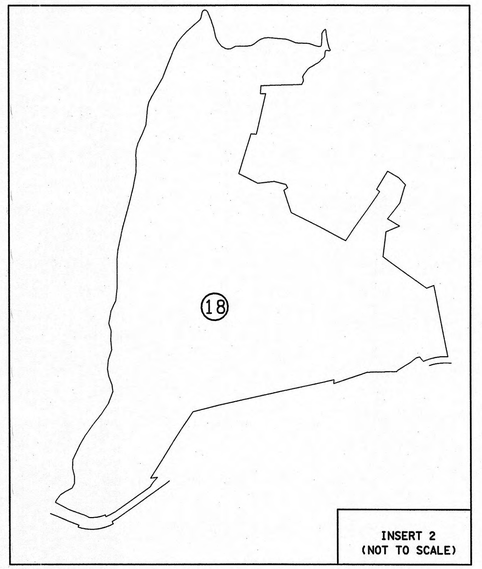
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3A
R.O.W.	2009	HPP-NH-29(35)	

LEGEND

PERMANENT DRAINAGE EASEMENT



INSERT 1
(NOT TO SCALE)



INSERT 2
(NOT TO SCALE)

N

MATCH LINE
STA. 145+00
SEE SHEET NO. 3
PROPOSED R.O.W.
LITTLE EMORY RIVER
150+00
END R.O.W. PROJECT NO. 73008-2238-14 STA. 162+71.46 S.R. 29
T.V.A. EASEMENT
160+00
BEGIN R.O.W. PROJECT NO. 65001-2257-14 STA. 162+71.46 S.R. 29
EAST TENNESSEE NATURAL GAS EASEMENT
CUMBERLAND UTILITY DISTRICT EASEMENT
PRES. AND PROP. R.O.W.
PRESENT R.O.W.
PROPOSED R.O.W.
170+00
180+00
T.V.A. EASEMENT
BITTER CREEK
ROANE COUNTY
MORGAN COUNTY
R.R. R.O.W.
COAL HILL ROAD
190+00
MATCH LINE
STA. 200+00
SEE SHEET NO. 3B
S.R. 29
DUKE ENERGY/ EAST TENNESSEE NATURAL GAS EASEMENT

TRACT NO.	PROPERTY OWNERS
13	UNITED STATES OF AMERICA
14	CHARLES NELSON WHICKER
16	JACKIE SUE MCCLEMORE
17	WINTER'S GAP COAL AND LAND COMPANY
18	CNX GAS CO. LLC
19	GARY HALLCOX

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPERTY MAP

STA. 145+00 TO STA. 200+00

SCALE: 1"=200'

Survey & Design Division

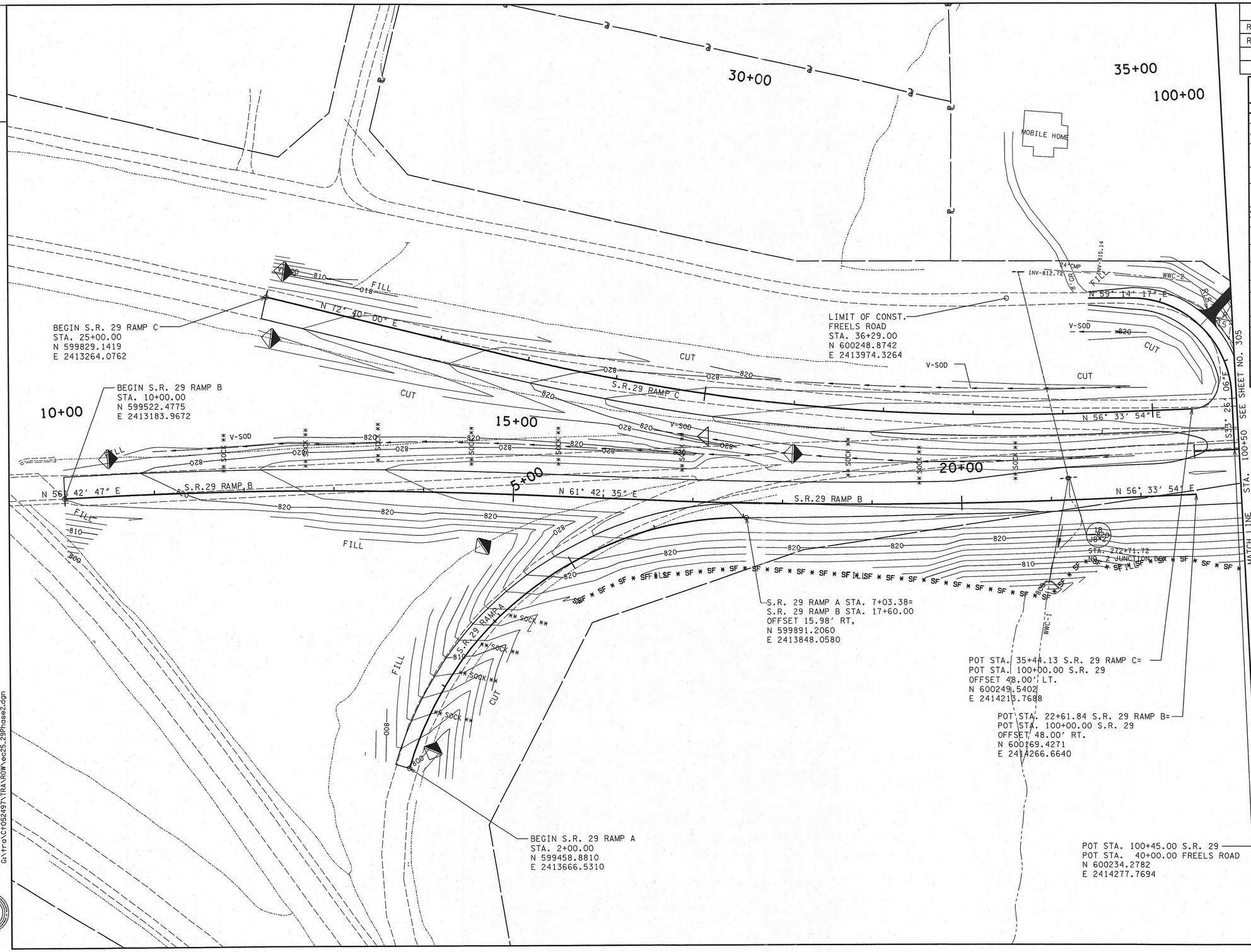
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	105
R.O.W.	2009	HPP-NH-29(35)	

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
⊛SF⊛SF⊛SF⊛	TEMPORARY SILT FENCE	EC-STR-3
⊛SFB⊛SFB⊛SFB⊛	TEMPORARY SILT FENCE WITH BACKING	EC-STR-3D
>	ENHANCED SILT FENCE CHECK (V-DITCH)	EC-STR-4A
△	TEMPORARY ROCK CHECK DAM IN V-DITCH	EC-STR-6
	TEMPORARY SEDIMENT TRAP WITH TEMPORARY SILT SCREEN CHECK DAM	EC-STR-7
⊛⊛SOCK⊛⊛SOCK⊛⊛	FILTER SOCK	EC-STR-8
▨	BRUSH BARRIER	ESC-STR-9
	TEMPORARY ROCK SILT SCREEN AT PIPE INLETS	EC-STR-11
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
RR SS	ROCK AND EARTH SEDIMENT EMBANKMENT	EC-STR-13
	SEDIMENT BASIN	EC-STR-15 EC-STR-17
B	CATCH BASIN PROTECTION (TYPE B)	EC-STR-19
⊛⊛⊛⊛⊛⊛⊛⊛⊛	TEMPORARY BERM	EC-STR-27
CE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY DIVERSION CHANNEL	ESC-STR-31
⊛⊛TUBE⊛⊛TUBE⊛⊛	SEDIMENT TUBE	EC-STR-37



PHASE 1 EROSION CONTROL SHOULD BE USED FOR CLEARING AND GRUBBING

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 10+00 TO STA. 100+50

SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	106
R.O.W.	2009	HPP-NH-29(35)	

105+00

110+00

MATCH LINE STA. 100+50 SEE SHEET NO. 304

MATCH LINE STA. 112+50 SEE SHEET NO. 306

FILL

CUT

CUT

℄ S.R. 29

℄ S.R. 29

N 56° 33' 54" E

WWC-3

WWC-4

WWC-5

10.0' BR

45SF

DIRT

BARN

1-BR-RES

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 100+50 TO STA. 112+50

SCALE: 1"= 50'

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Survey & Design Bureau

TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	107
R.O.W.	2009	HPP-NH-29(35)	

115+00

120+00

MATCH LINE STA. 112+50 SEE SHEET NO. 305

MATCH LINE STA. 124+00 SEE SHEET NO. 307

CUT

FILL

CUT

FILL

℄ S.R. 29

℄ S.R. 29

N 56° 33' 54" E

611.89'

STR-1

STR-1

WWC-6

WWC-7

WWC-8

WWC-9

SFB

SF

SCK

800

790

780

COORDINATE VALUES ARE NAD/83(1995)
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FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 112+50 TO STA. 124+00
SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	108
R.O.W.	2009	HPP-NH-29(35)	

125+00

130+00

135+00

POT STA. 129+00.00 S.R. 29 =
POT STA. 40+00.00 ROCK BRIDGE ROAD
N 601807.3574
E 2416660.2989

SCARIFY, TOPSOIL, AND SEED

CUT

FILL

STR-1

SPG-1

SOCK

SFB

℄ S. R. 29

N 56° 33' 54" E

S 33° 26' 06" E

S 30° 51' 18" W

S 17° 05' 22" W

N 56°33'54"E

SEE SHEET NO. 306

SEE SHEET NO. 308

STA. 124+00

STA. 136+00

MATCH LINE

MATCH LINE

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 124+00 TO STA. 136+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	109
R.O.W.	2009	HPP-NH-29(35)	

140+00

145+00

POS STA. 138+60.00 S.R. 29 =
POT STA. 47+89.06 SANDERS LANE
N 602338.1215
E 2417460.1940

STR-2

STR-1

STR-3

CUT

FILL

TO BE REMOVED

MATCH LINE
STA. 136+00
SEE SHEET NO. 307

MATCH LINE
STA. 147+00
SEE SHEET NO. 309

℄ S.R. 29

WWC-12

SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB

EIP

N 82° 08' 51" E 134.06'

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Survey & Design Division

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 136+00 TO STA. 147+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	110
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 147+00 TO STA. 158+00

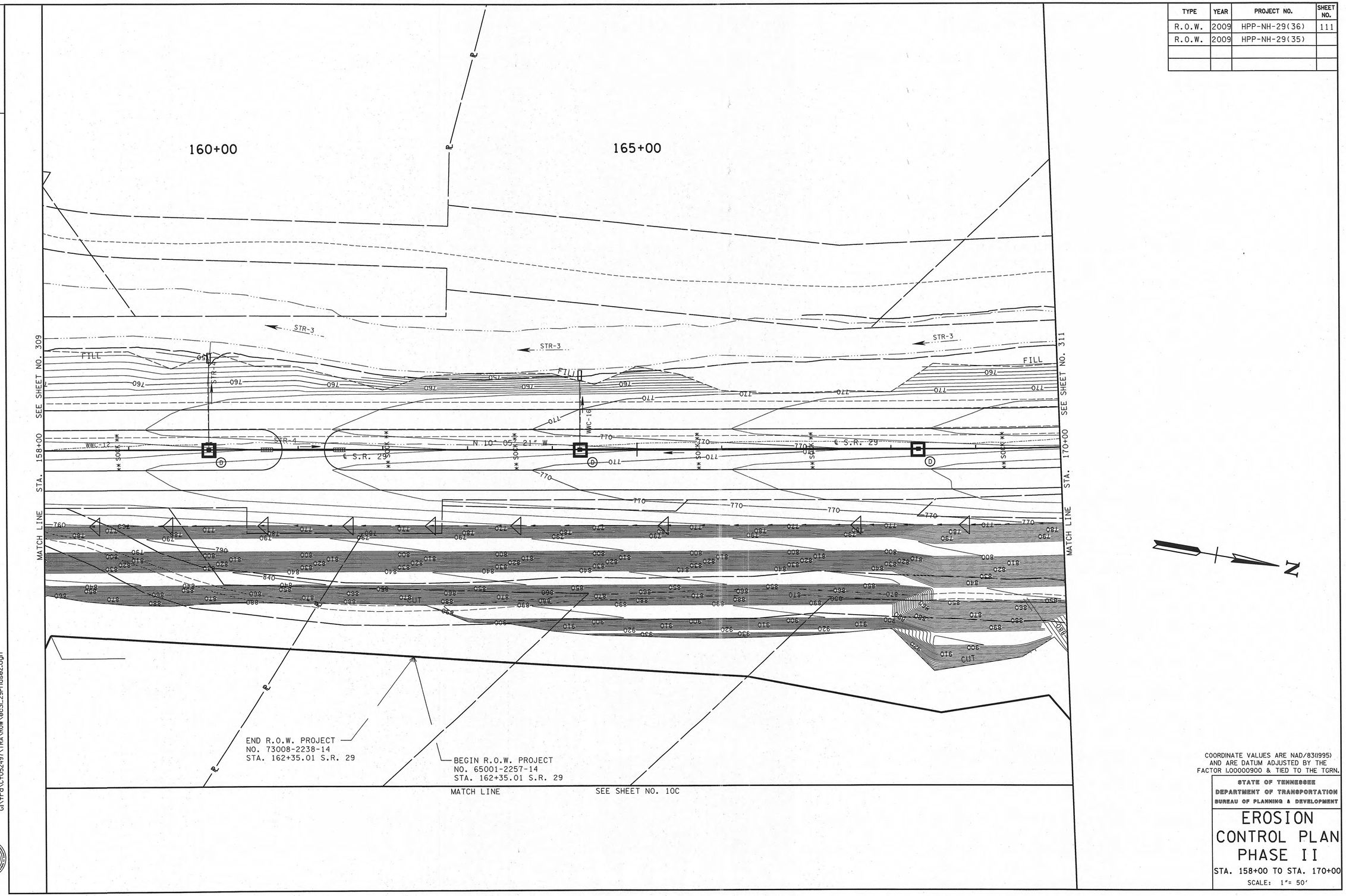
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	111
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Division

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 158+00 TO STA. 170+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	112
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 170+00 TO STA. 181+00

SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	113
R.O.W.	2009	HPP-NH-29(35)	

185+00

190+00

STR-6

BITTER CREEK

STR-6

FILL

FILL

FILL

SEE SHEET NO. 311

STA. 181+00

MATCH LINE

SEE SHEET NO. 313

STA. 193+00

MATCH LINE

℄ S.R. 29

N 67° 58' 22" W

℄ S.R. 29

CUT

CUT

CUT

STR-7

STR-7

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COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 181+00 TO STA. 193+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	114
R.O.W.	2009	HPP-NH-29(35)	

195+00

200+00

STR-6

BITTER CREEK

STR-9

STR-6

WTL-4

OIL WELL

OIL WELL-TANK

WTL-3

FILL

18'GR

FILL

FILL

SEE SHEET NO. 312

MATCH LINE STA. 193+00

SEE SHEET NO. 314

MATCH LINE STA. 205+00

℄ S.R. 29

N 7° 58' 22" W

℄ S.R. 29

STR-8

WTL-2

SPG-1

WTL-2

FILL

FILL

CUT

CUT

SFB * SFB * SFB

SFB * SFB * SFB

WTL-1

57.32'
S49°42'01

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 193+00 TO STA. 205+00

SCALE: 1"= 50'

Survey & Design Division

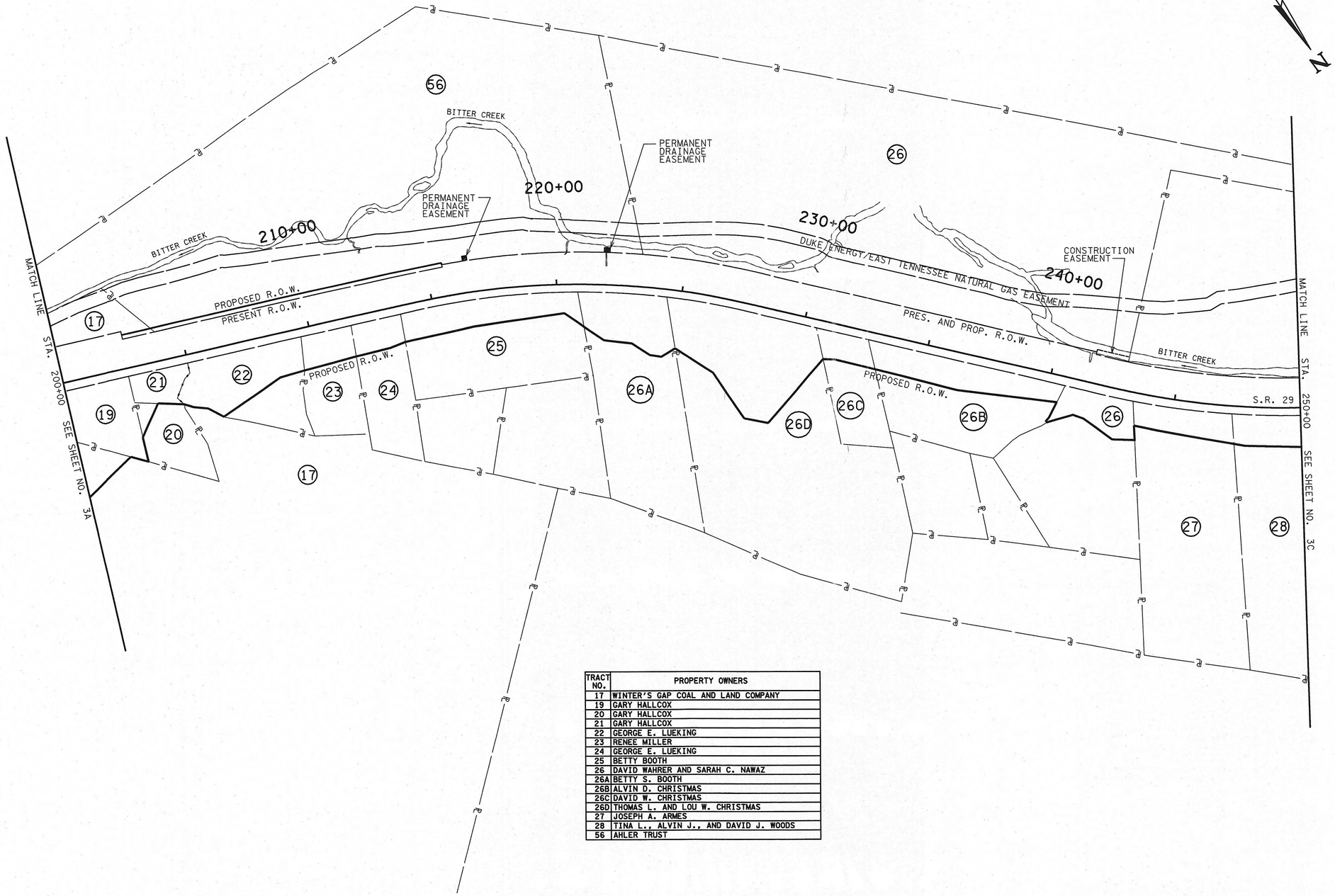
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3B
R.O.W.	2009	HPP-NH-29(35)	

LEGEND

PERMANENT DRAINAGE EASEMENT



TRACT NO.	PROPERTY OWNERS
17	WINTER'S GAP COAL AND LAND COMPANY
19	GARY HALLCOX
20	GARY HALLCOX
21	GARY HALLCOX
22	GEORGE E. LUEKING
23	RENEE MILLER
24	GEORGE E. LUEKING
25	BETTY BOOTH
26	DAVID WAHRER AND SARAH C. NAWAZ
26A	BETTY S. BOOTH
26B	ALVIN D. CHRISTMAS
26C	DAVID W. CHRISTMAS
26D	THOMAS L. AND LOU W. CHRISTMAS
27	JOSEPH A. ARMES
28	TINA L., ALVIN J., AND DAVID J. WOODS
56	AHLER TRUST

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPERTY MAP

STA. 200+00 TO STA. 250+00

SCALE: 1"=200'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	115
R.O.W.	2009	HPP-NH-29(35)	

210+00

215+00

BITTER CREEK
STR-6

BITTER CREEK

SEE SHEET NO. 313

SEE SHEET NO. 315

MATCH LINE STA. 205+00

MATCH LINE STA. 217+00

N 67° 58' 22" W

℄ S.R. 29

STR-10

STR-10

436.34'
S25°22'28"W

61'
2'28"W

FILL

CUT

GR

SFB

SFB

SFB

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	116
R.O.W.	2009	HPP-NH-29(35)	

220+00

225+00

STR-6

BITTER CREEK

STR-11

STR-12

FILL

SEE SHEET NO. 314

SEE SHEET NO. 316

STA. 217+00

STA. 228+00

MATCH LINE

℄ S.R. 29

STR-5

SOIL

ROCK

CUT

12'GR

770

780

790

800

810

820

830

840

850

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 217+00 TO STA. 228+00

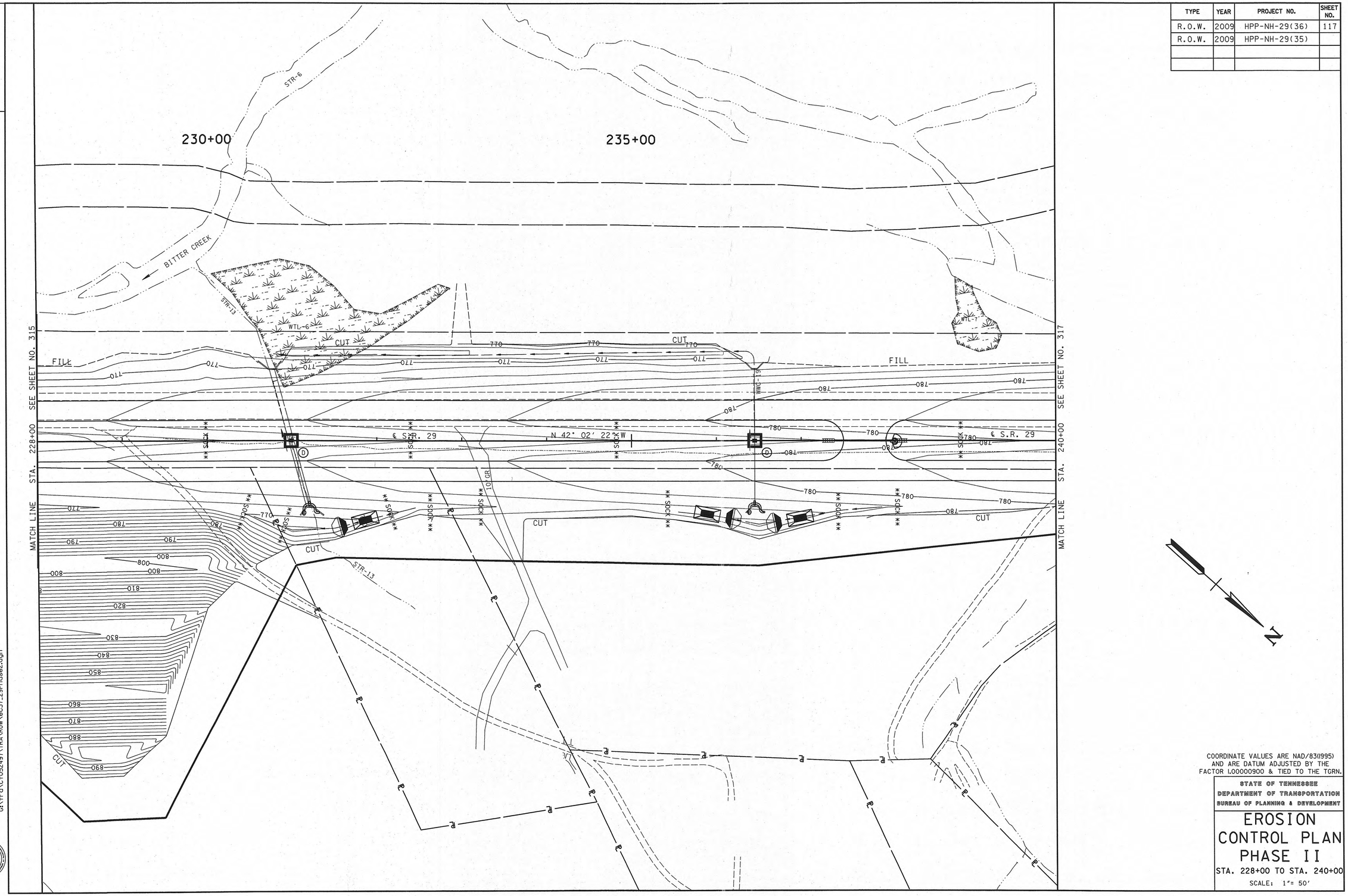
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	117
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 228+00 TO STA. 240+00

SCALE: 1"= 50'

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Surrey & Dodge Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	118
R.O.W.	2009	HPP-NH-29(35)	


245+00
250+00
SEE SHEET NO. 316
SEE SHEET NO. 318
STA. 240+00
STA. 252+00
MATCH LINE
MATCH LINE
N 42° 02' 22" W
BITTER CREEK
STR-6
STR-14
STR-14
WWC-20
WWC-21
FILL
FILL
FILL
FILL
SFB
SFB
SFB

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	119
R.O.W.	2009	HPP-NH-29(35)	

255+00

260+00

MATCH LINE STA. 252+00 SEE SHEET NO. 317

MATCH LINE STA. 264+00 SEE SHEET NO. 319

BITTER CREEK

STR-6

STR-15

WWC-21

WTL-10

WTL-11

EL-807.95

N 80° 03' 21" W

℄ S.R. 29

FILL

CUT

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COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

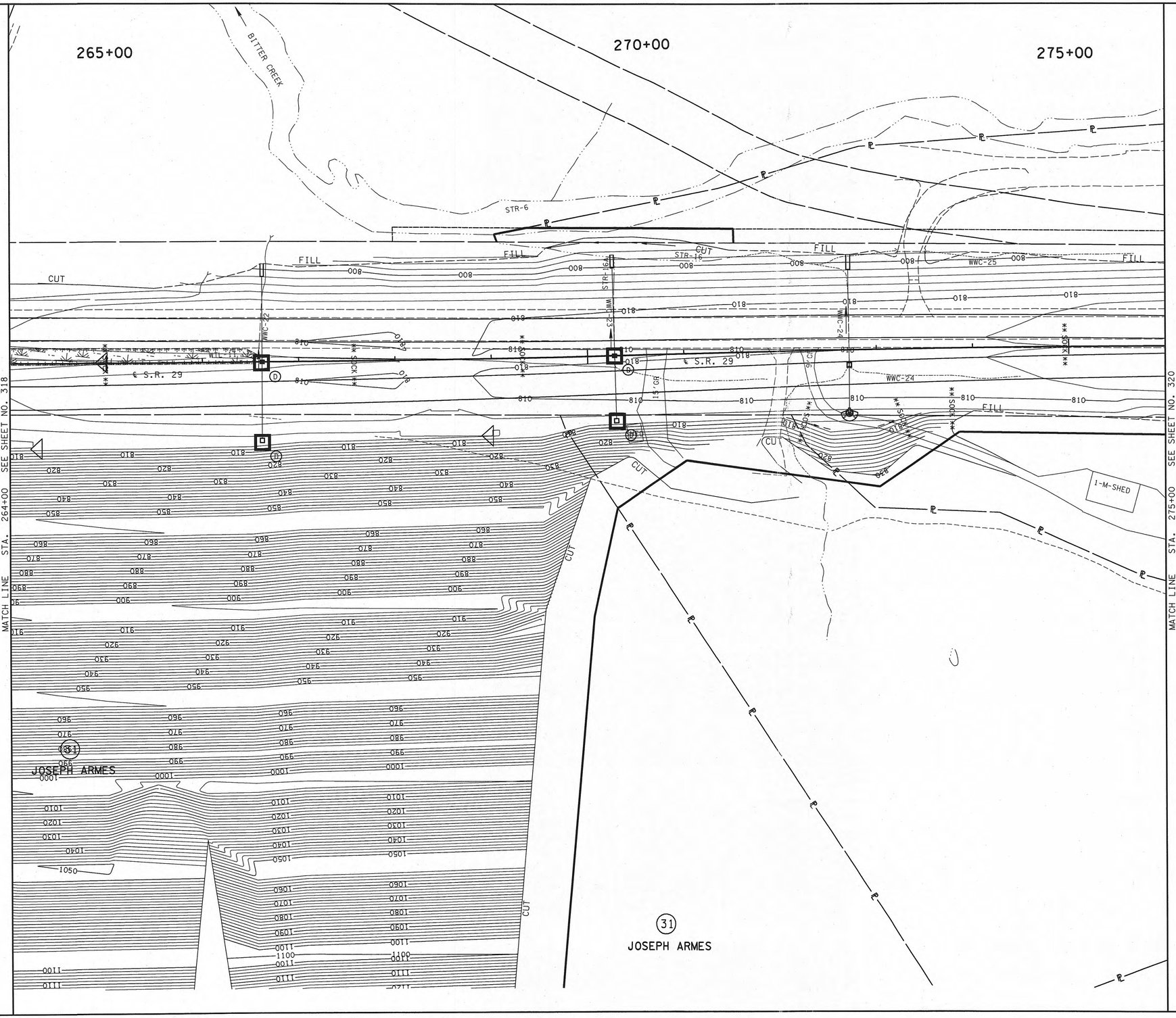
EROSION CONTROL PLAN PHASE II

STA. 252+00 TO STA. 264+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	120
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
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EROSION CONTROL PLAN PHASE II

STA. 264+00 TO STA. 276+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	121
R.O.W.	2009	HPP-NH-29(35)	

280+00

285+00

BITTER CREEK

STR-6/BITTER CREEK

STR-6

STR-1

FILL

810

820

N 60° 03' 31" W

℄ S.R. 29

WWC-27

WWC-26

WWC-28

6' GR

8' GR

STR-1T FORKED CREEK

MOBILE HOME

SHED

SEE SHEET NO. 319

SEE SHEET NO. 321

MATCH LINE STA. 276+00

MATCH LINE STA. 287+00

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 276+00 TO STA. 287+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	122
R.O.W.	2009	HPP-NH-29(35)	

290+00

295+00

POS STA. 290+51.96 S.R. 29 =
POT STA. 50+00.00 WHETSTONE ROAD
N 612052.6872
E 2408162.2162

BITTER CREEK
STR-6

SCARIFY, TOPSOIL, CUT AND SEED *

FILL

CUT

50+00

N 13° 16' 43" W

℄ S.R. 29

WWC-27

WWC-28

N 74° 22' 53" E

SHED

MATCH LINE STA. 287+00
SEE SHEET NO. 320

MATCH LINE STA. 298+00
SEE SHEET NO. 322

SAME * AS * CUT * ON * E

COORDINATE VALUES ARE NAD/83(1995)
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 287+00 TO STA. 298+00

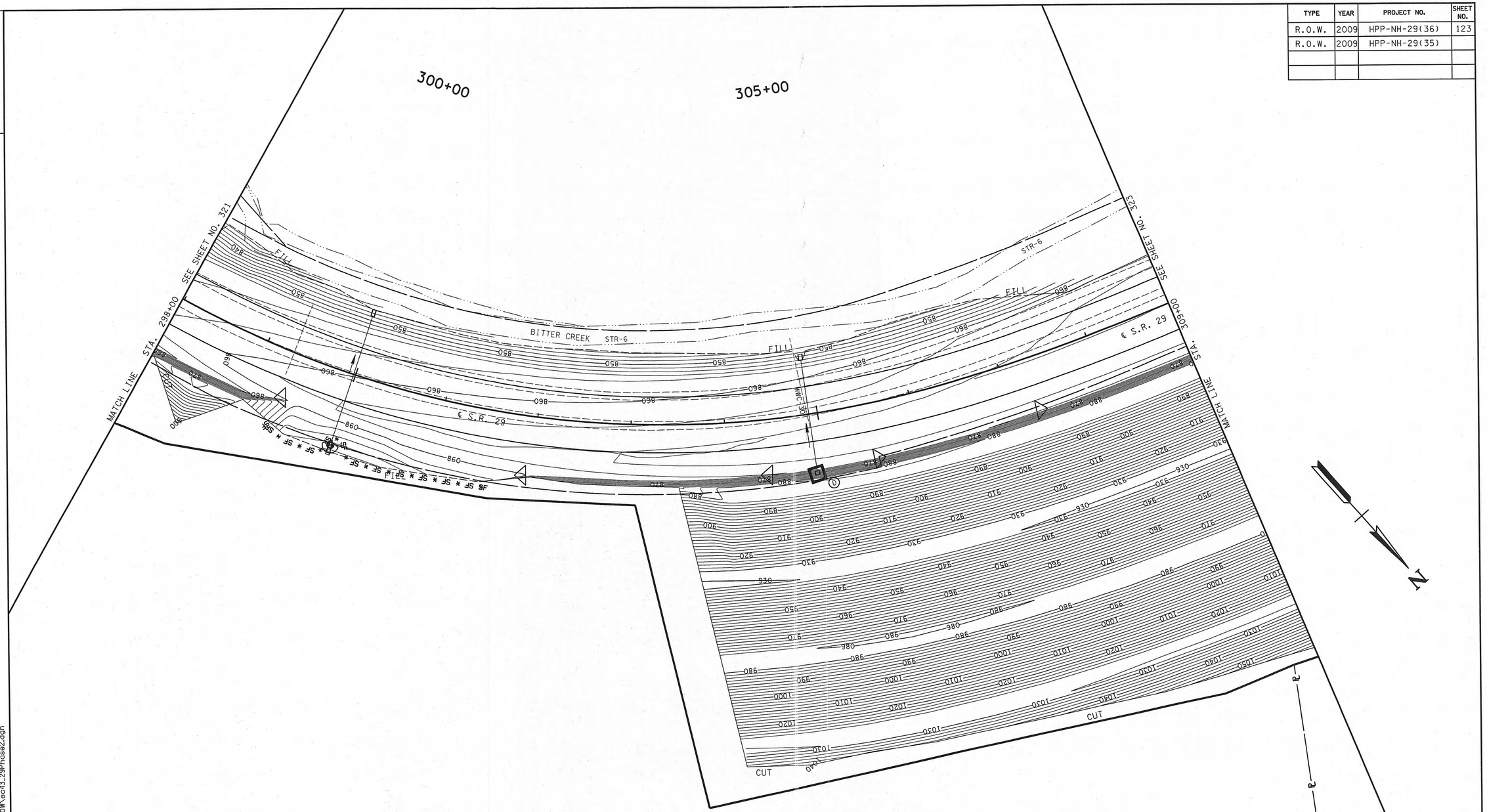
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	123
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 298+00 TO STA. 309+00

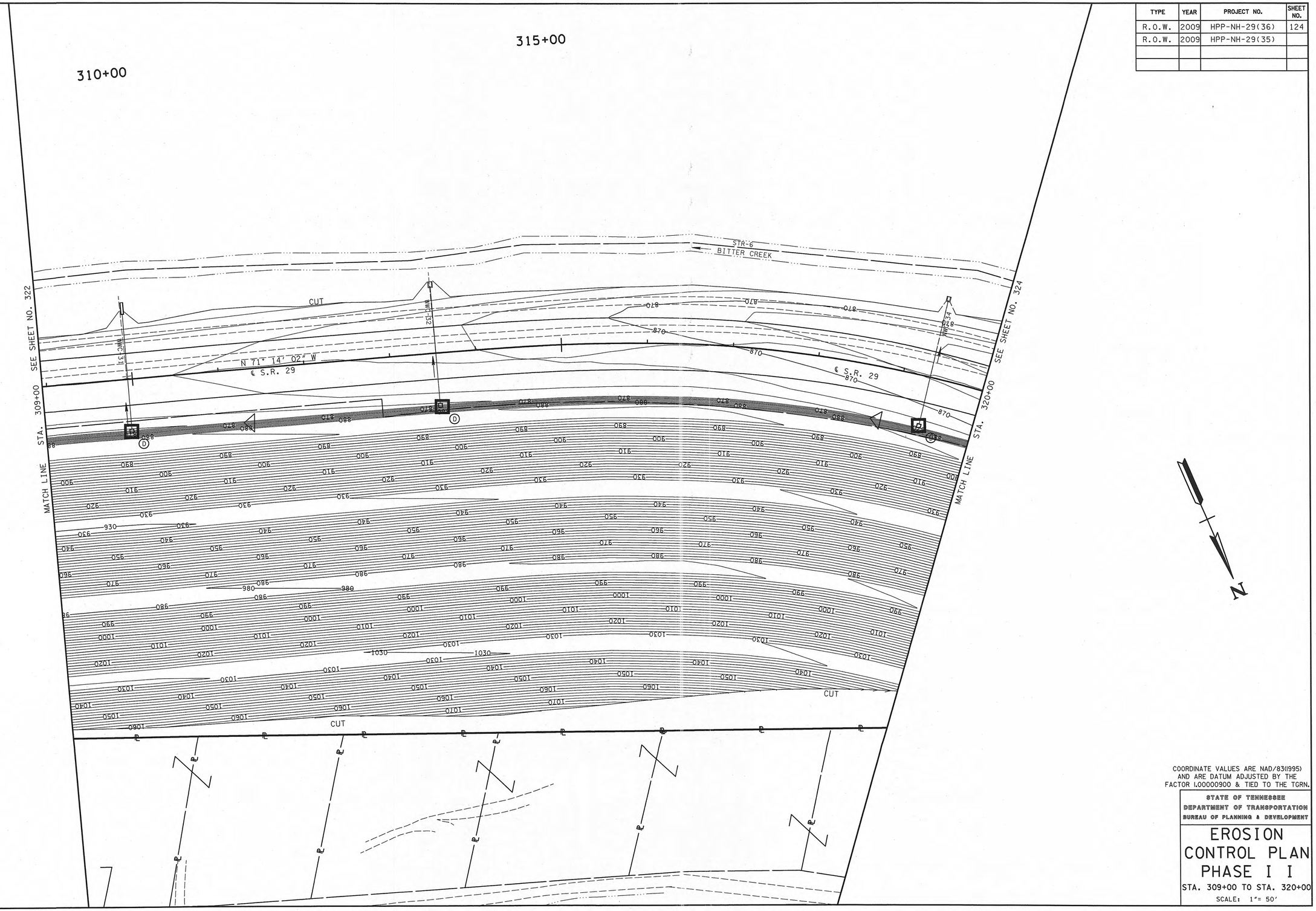
SCALE: 1"= 50'

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Survey & Design Bureau

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	124
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE I I

STA. 309+00 TO STA. 320+00

SCALE: 1"= 50'

TENNESSEE D.O.T. | DESIGN DIVISION | FILE NO.

Index Of Sheets

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2C-2S	TYPICAL SECTIONS
3, 3A-3F.....	PROPERTY MAP & ACQUISITION TABLES
3G-3J	REFERENCE POINTS
4-27	PRESENT LAYOUT
4A-27A.....	PROPOSED LAYOUT
4B-4D	PROPOSED PROFILES - RAMPS
5B-27B.....	PROPOSED PROFILES - MAINLINE
19C	ADDITIONAL PRESENT LAYOUT
28-30	PROFILES - PUBLIC SIDE ROADS
31-37	PROFILES FOR PRIVATE DRIVES
38-39	DRAINAGE MAP
40-80	CULVERT SECTIONS
81, 81A.....	EROSION PREVENTION AND SEDIMENT CONTROL NOTES
81B, 82-152.....	EROSION PREVENTION AND SEDIMENT CONTROL PLANS
153-157	SOILS SHEETS
200-427	ROADWAY CROSS SECTIONS
428-465.....	SIDE ROAD CROSS SECTIONS

SHEETS 2I, 20, 3F, 3I, 10C, 157-200 OMITTED

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF ENGINEERING

ROANE / MORGAN COUNTIES

STATE ROUTE 29 (US-27)

FROM STATE ROUTE 61 NEAR HARRIMAN TO NORTH OF STATE ROUTE 328

RIGHT-OF-WAY

STATE HIGHWAY NO. 29 F.A.H.S. NO. 29

TENN.	YEAR	SHEET NO.
	2009	1
ROANE COUNTY FED. AID PROJ. NO.	HPP-NH-29(36)	
ROANE COUNTY STATE PROJ. NO.	73008-2238-14	
MORGAN COUNTY FED. AID PROJ. NO.	HPP-NH-29(35)	
MORGAN COUNTY STATE PROJ. NO.	65001-2257-14	

07-09-2009: REVISED PE NUMBERS UNDER SPECIAL NOTES

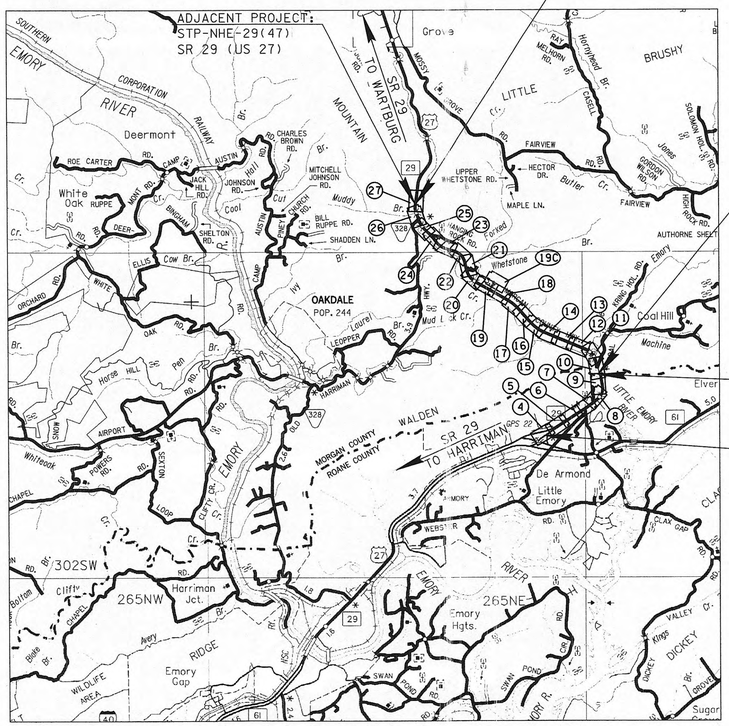


ROANE COUNTY PROJECT NO. 73008-2238-14
MORGAN COUNTY PROJECT NO. 65001-2257-14

END R.O.W. FEDERAL PROJECT
NO. HPP-NH-29(35)
STATE PROJECT NO. 65001-2257-14
STA. 357+48.09 S.R. 29

EQUATION	
DESCRIPTION	NET EFFECT ON ENUMERATION
STA. 22+61.84 BK. = STA. 100+00.00 AH.	-7738.16
STA. 155+20.64 BK. = STA. 155+25.45 AH.	-4.81
TOTAL	-7742.97

BEGIN R.O.W. FEDERAL PROJECT
NO. HPP-NH-29(35)
STATE PROJECT NO. 65001-2257-14
STA. 162+71.46 S.R. 29

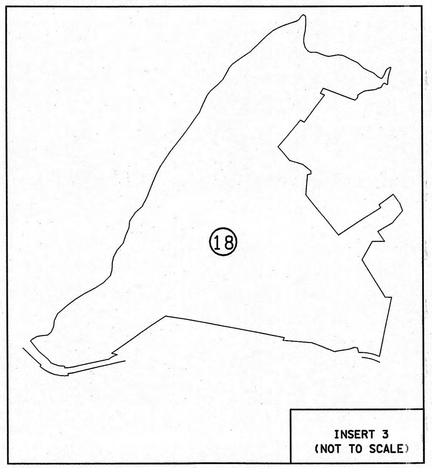

ADJACENT PROJECT:
STP-NHE-29(47)
SR 29 (US 27)
TO WARTBURG
SR 29
TO HARRIMAN
OAKDALE
POP. 244
Deermont
Harriman Jct.
Emory Gap
Emory Hgts.
De Armond
Little Emory
Coal Hill
Elver
Oliver Springs
Brushy
Grove
Cool Springs
White Oak
Whetstone
Machine
Laurel
Muddy
Cut
Cool
Cow Br.
Mud Lick Cr.
Horse Hill
Pen
Cliffy
Bluff
Wildlife Area
Swan Pond
Sugar
Dickey
Valley
Ridge
Mountain
Emory River
Little Emory
Morgan County
Roane County
302SW
265NW
265NE
Fairview
Maple Ln.
Hector Dr.
Upper Whetstone Rd.
Shadden Ln.
Authorne Shelt
Gordon Wilson Rd.
Johnson Rd.
Mitchell Johnson Rd.
Charles Brown Rd.
Bill Ruppe Rd.
Roe Carter
Camp Austin
Austin Hill
Jack Hill
Mont Rd.
Deer
Shelton
Ellis
White Oak
Orchard
Oak
Whitlock
Chapel
Gospel
Avery
Baile
Airport
Powers
Sexton
Loop
Swan
Ivy
Laurel
Leopper
Harriman
Walden
Solomon Hollow
Jones
Hollow
Fairview
Cabell
Ray Mellon
Hollywood Br.
Marsh
Grove
Emory
Whetstone
Coal Hill
Machine
Elver
Oliver Springs
Brushy
Cool Springs
Authorne Shelt
Fork Wick
Emory
Southern
Corporation
Railway
Br.
Cr.
Rd.
Ln.
Dr.
Hwy.
Pk.
Ave.
Ct.
Loop
Trail
Gap
Ridge
Pond
Area
Hgts.
Jct.
Springs
Grove
Hollow
Valley
Creek
Fork
Wick
Mill
Cabell
Jones
Solomon
Hollywood
Ray Mellon

TENNESSEE D.O.T.
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FILE NO.

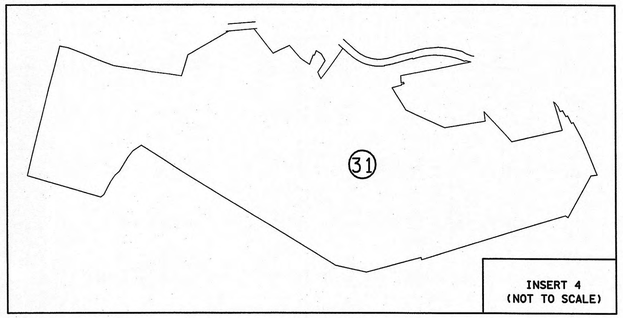
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3C
R.O.W.	2009	HPP-NH-29(35)	

LEGEND

PERMANENT DRAINAGE EASEMENT



TRACT NO.	PROPERTY OWNERS
18	CNX GAS CO. LLC.
28	TINA L., ALVIN J., AND DAVID J. WOODS
29	DON E. WHITUS
30	OWEN C. HARRIS AND WIFE, CLARA M. HARRIS
31	JOSEPH A. ARMES
32	LANDON KEITH BASS
33	RAYMOND W. AND ANNIE T. CURTIS
33A	DONALD G. JONES
34	MICHAEL YEARY
35	PAUL W. AND LESLIE YEARY
36	STEPHANIE YEARY PINKERTON
37	WILLIAM R. AND WANDA D. TURNER
38	STEVEN BRUCE LANE AND MARSHA CAROL LANE
43	HOUSTON AND LIANNE HULING
49	DONALD G. JONES
58	DONALD G. JONES



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPERTY MAP

STA. 250+00 TO STA. 310+00

SCALE: 1"=200'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	125
R.O.W.	2009	HPP-NH-29(35)	

320+00

325+00

330+00

POC STA. 328+19.91 S.R. 29 =
POT STA. 57+00.00 HANGING ROCK ROAD
N 614527.7338
E 2405632.5326

STR-6
BITTER CREEK

CUT

STR-18
SPG-3

WWC-35

FILL

N 40° 29' 49" W

℄ S.R. 29

N 47° 11' 28" E

WTL-12

WWC-36

STR-19

N 76° 27' 58" E

MATCH LINE STA. 320+00
SEE SHEET NO. 323

SEE SHEET NO. 325
MATCH LINE STA. 331+00

60+00

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 320+00 TO STA. 331+00

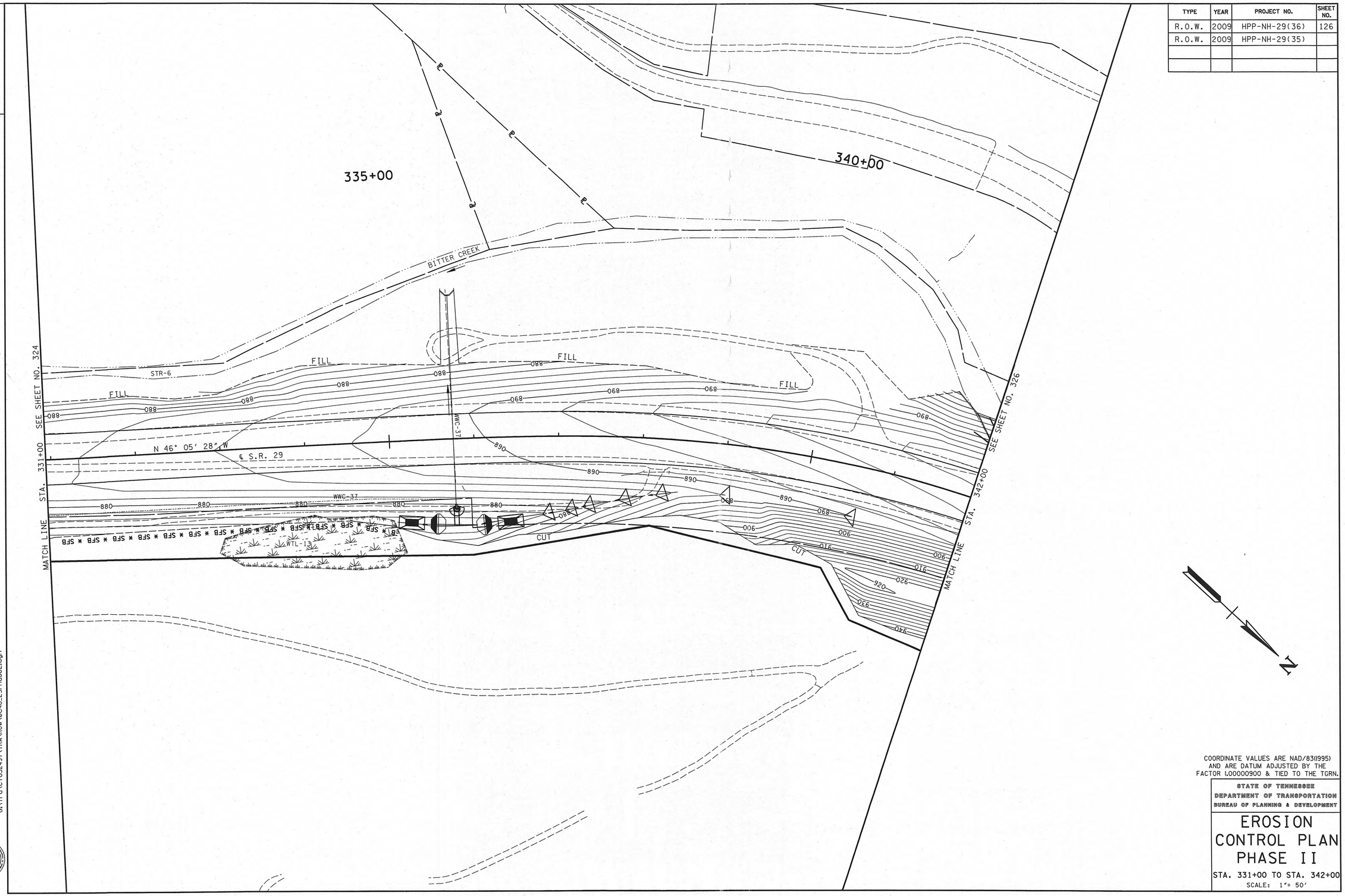
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	126
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE II

STA. 331+00 TO STA. 342+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	127
R.O.W.	2009	HPP-NH-29(35)	

345+00

350+00

CUT

STR-20 MUDDY BRANCH

WWC-38

WWC-39

POS STA. 344+81.25 S.R. 29 =
POT STA. 82+50.00 S.R. 328
N 615782.2880
E 2404638.4357

N 62° 50' 58" E

FILL

STR-21

STR-22

WTL-14

℄ S.R. 29

SEE SHEET NO. 325

SEE SHEET NO. 327

342+00 MATCH LINE STA.

353+00 MATCH LINE STA.

SFB * SFB * SFB *

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	128
R.O.W.	2009	HPP-NH-29(35)	

355+00

360+00

STR-21

FILL

068

STR-23

WWC-40

℄ S.R. 29 N 7° 06' 55" E

MATCH LINE STA. 353+00

SEE SHEET NO. 326

890

SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB

BITTER CREEK

WWC-41

STR-6

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
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EROSION CONTROL PLAN PHASE II

STA. 353+00 TO STA. 364+74

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	129
R.O.W.	2009	HPP-NH-29(35)	

EROSION PREVENTION AND SEDIMENT CONTROL LEGEND

SYMBOL	ITEM	STD. DWG.
SF SF SF	TEMPORARY SILT FENCE	EC-STR-3
SFB SFB SFB	TEMPORARY SILT FENCE WITH BACKING	EC-STR-3D
>	ENHANCED SILT FENCE CHECK (V-DITCH)	EC-STR-4A
△	TEMPORARY ROCK CHECK DAM IN V-DITCH	EC-STR-6
	TEMPORARY SEDIMENT TRAP WITH TEMPORARY SILT SCREEN CHECK DAM	EC-STR-7
SOCK SOCK SOCK	FILTER SOCK	EC-STR-8
	BRUSH BARRIER	ESC-STR-9
	TEMPORARY ROCK SILT SCREEN AT PIPE INLETS	EC-STR-11
	CULVERT PROTECTION (TYPE 2)	EC-STR-11A
EE EE	ROCK AND EARTH SEDIMENT EMBANKMENT	EC-STR-13
	SEDIMENT BASIN	EC-STR-15 EC-STR-17
B	CATCH BASIN PROTECTION (TYPE B)	EC-STR-19
	TEMPORARY BERM	EC-STR-27
TCE	TEMPORARY CONSTRUCTION EXIT	EC-STR-25
	TEMPORARY DIVERSION CHANNEL	ESC-STR-31
TUBE TUBE TUBE	SEDIMENT TUBE	EC-STR-37

30+00
35+00
100+00
10+00
15+00
5+00
20+00

MOBILE HOME

BEGIN S.R. 29 RAMP C
STA. 25+00.00
N 599829.1419
E 2413264.0762

BEGIN S.R. 29 RAMP B
STA. 10+00.00
N 599522.4775
E 2413183.9672

LIMIT OF CONST.
FREELS ROAD
STA. 36+29.00
N 600248.8742
E 2413974.3264

24" CMP
INV-815.14
INV-812.72
18" CPP
FILL
WWC-2
N 59° 14' 17" E
V-SOD
820
CUT
N 56° 33' 54" E
533.26'
SEE SHEET NO. 305
STA. 100+50

N 72° 40' 00" E
N 56° 42' 47" E
N 61° 42' 35" E
S.R.29 RAMP C
S.R.29 RAMP B
S.R.29 RAMP A
FILL
CUT
V-SOD
820
810
800

18" CPP
JB #2
STA. 272+71.72
NO. 2 JUNCTION BOX
WWC-1
MATCH LINE
STA.

S.R. 29 RAMP A STA. 7+03.38=
S.R. 29 RAMP B STA. 17+60.00
OFFSET 15.98' RT,
N 599891.2060
E 2413848.0580

POT STA. 35+44.13 S.R. 29 RAMP C=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' LT.
N 600249.5402
E 2414213.7688

POT STA. 22+61.84 S.R. 29 RAMP B=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' RT.
N 600169.4271
E 2414266.6640

BEGIN S.R. 29 RAMP A
STA. 2+00.00
N 599458.8810
E 2413666.5310

POT STA. 100+45.00 S.R. 29
POT STA. 40+00.00 FREELS ROAD
N 600234.2782
E 2414277.7694

PHASE 1 EROSION CONTROL SHOULD BE USED FOR CLEARING AND GRUBBING

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 10+00 TO STA. 100+50

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	130
R.O.W.	2009	HPP-NH-29(35)	

105+00

110+00

MATCH LINE STA. 100+50 SEE SHEET NO. 304

MATCH LINE STA. 112+50 SEE SHEET NO. 306

CUT

FILL

SF * SF * SF * SF * SF * SF * SF * SF * SF

WWC-3

WWC-4

WWC-5

10.0' BR

℄ S.R. 29

N 56° 33' 54" E

ASPHALT DRIVE

BARN

1-BR-RES

820 810 830

5/29/2009 10:48:13 AM
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Sherry & Dodge Surveying Division

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

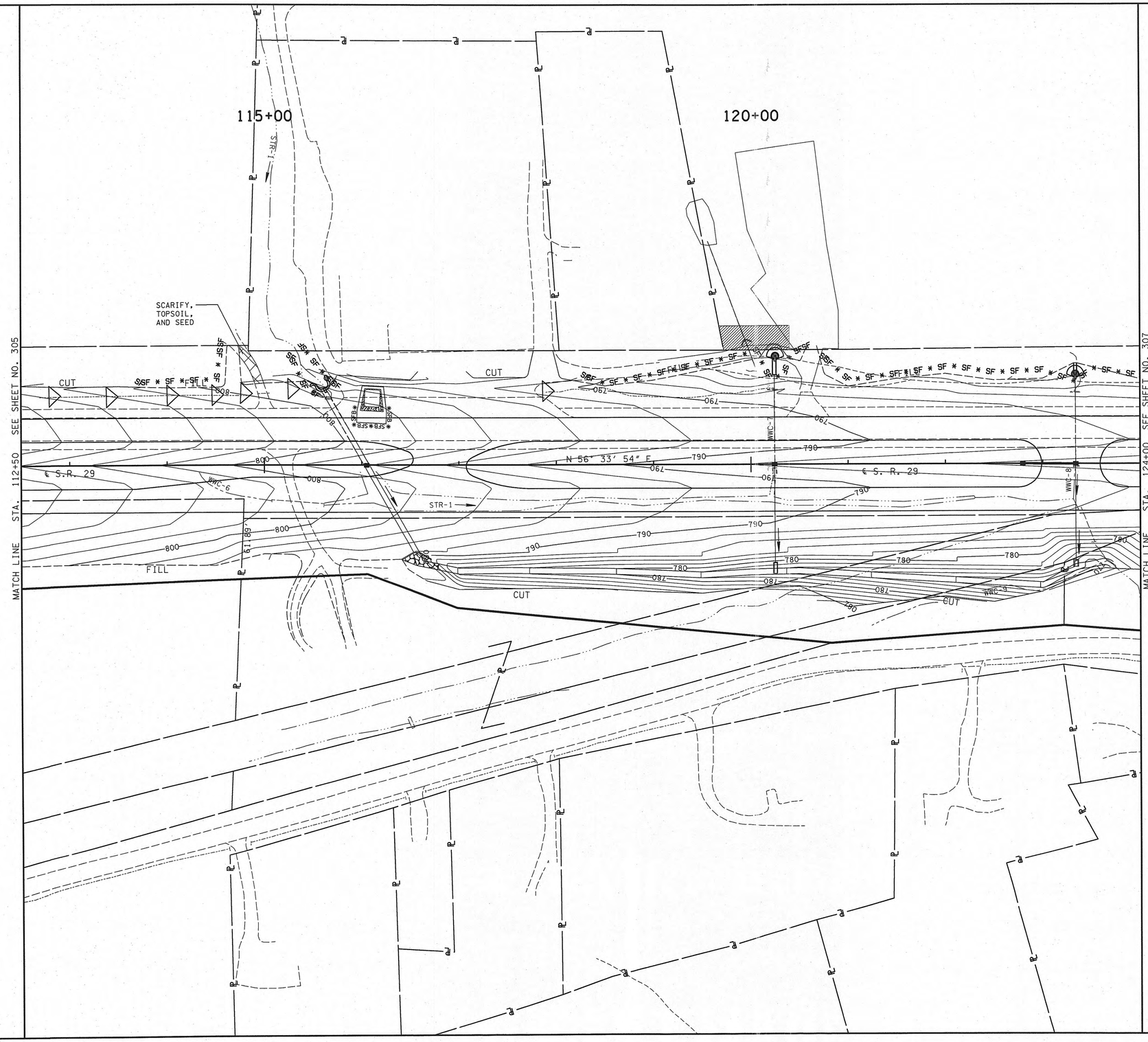
EROSION CONTROL PLAN PHASE III

STA. 100+50 TO STA. 112+50

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	131
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 112+50 TO STA. 124+00
SCALE: 1"= 50'

Survey & Design Division

5/29/2009 10:18:14 AM
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	132
R.O.W.	2009	HPP-NH-29(35)	

125+00

130+00

135+00

POT STA. 129+00.00 S.R. 29 =
POT STA. 40+00.00 ROCK BRIDGE ROAD
N 601807.3574
E 2416660.2989

SCARIFY, TOPSOIL, AND SEED

MATCH LINE STA. 124+00 SEE SHEET NO. 306

MATCH LINE STA. 136+00 SEE SHEET NO. 308

S 30° 51' 18" W

S 33° 26' 06" E

S 11° 05' 22" W

N 56° 33' 54" E

℄ S.R. 29

CUT

FILL

STR-1

SPG-1

WWC-10

WWC-11

V-SOD

RES

EIP

EXP

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 124+00 TO STA. 136+00

SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	133
R.O.W.	2009	HPP-NH-29(35)	

140+00

145+00

POS STA. 138+60.00 S.R. 29 =
POT STA. 47+89.06 SANDERS LANE
N 602338.1215
E 2417460.1940

STR-2

STR-3

CUT

FILL

SEE SHEET NO. 307

MATCH LINE STA. 136+00

MATCH LINE STA. 147+00

SEE SHEET NO. 309

℄ S.R. 29

TO BE REMOVED

N 87° 08' 24" E
214.16'

EIP

WWL-12

5/29/2009 10:18:17 AM
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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

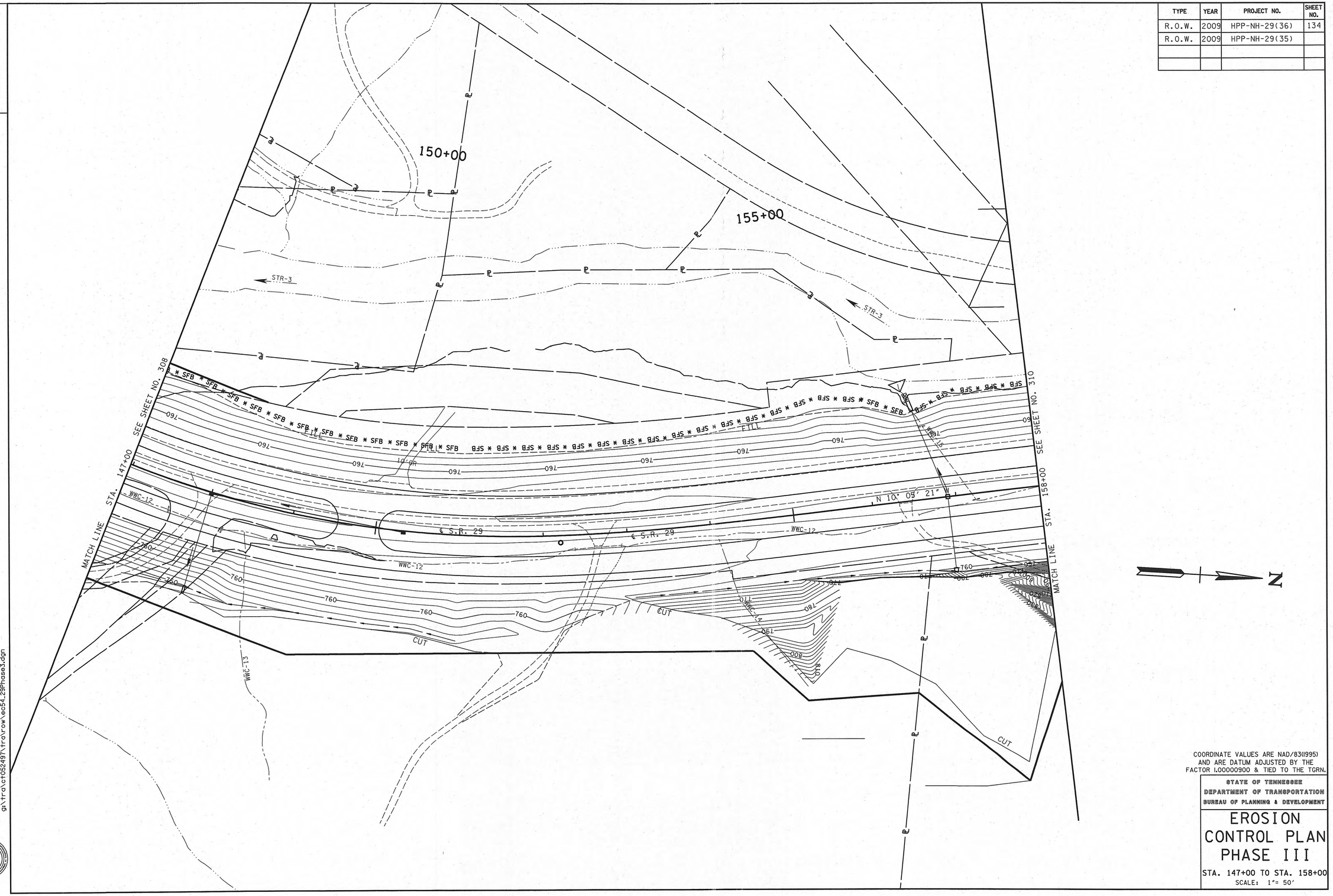
EROSION CONTROL PLAN PHASE III

STA. 136+00 TO STA. 147+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	134
R.O.W.	2009	HPP-NH-29(35)	

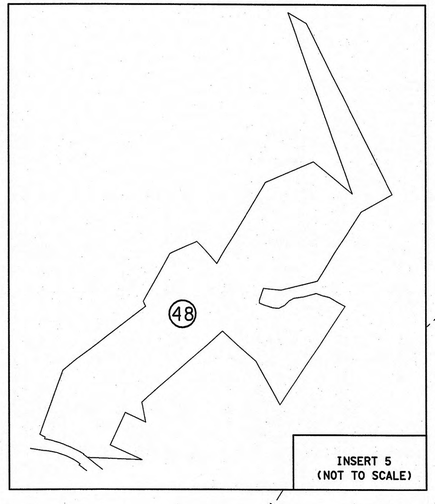

150+00
155+00
STR-3
STR-3
SEE SHEET NO. 308
MATCH LINE STA. 147+00
SEE SHEET NO. 310
MATCH LINE STA. 158+00
SFB * SFB * SFB *

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3D
R.O.W.	2009	HPP-NH-29(35)	

LEGEND

PERMANENT DRAINAGE EASEMENT



TRACT NO.	PROPERTY OWNERS
31	JOSEPH A. ARMES
41	PEGGY WALLS
42	RICHARD AND PATRICIA CLAYTON
43	HOUSTON AND LIANNE HULING
44	PEGGY WALLS
45	JUDY SAFFALL TANNER(¼), DANNY HONEYCUTT(¼), AND MICKEY HONEYCUTT(¼)
46	DAVID TECUMSEH LEE
47	REBA FAIRCHILD MADEN
48	GEORGE EDWARDS, III AND JOHN TALIAFERRO
59	NICK AND JUDY TANNER

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPERTY MAP

STA. 310+00 TO STA. 360+00

SCALE: 1"=200'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	135
R.O.W.	2009	HPP-NH-29(35)	

160+00

165+00

STA. 158+00

STA. 170+00

SEE SHEET NO. 309

SEE SHEET NO. 311

MATCH LINE

MATCH LINE

STR-3

STR-4

WWC-12

WWC-16

FILL

CUT

N. 10° 05' 21" W

℄ S.R. 29

℄ S.R. 29

END R.O.W. PROJECT
NO. 73008-2238-14
STA. 162+35.01 S.R. 29

BEGIN R.O.W. PROJECT
NO. 65001-2257-14
STA. 162+35.01 S.R. 29

MATCH LINE

SEE SHEET NO. 10C

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 158+00 TO STA. 170+00

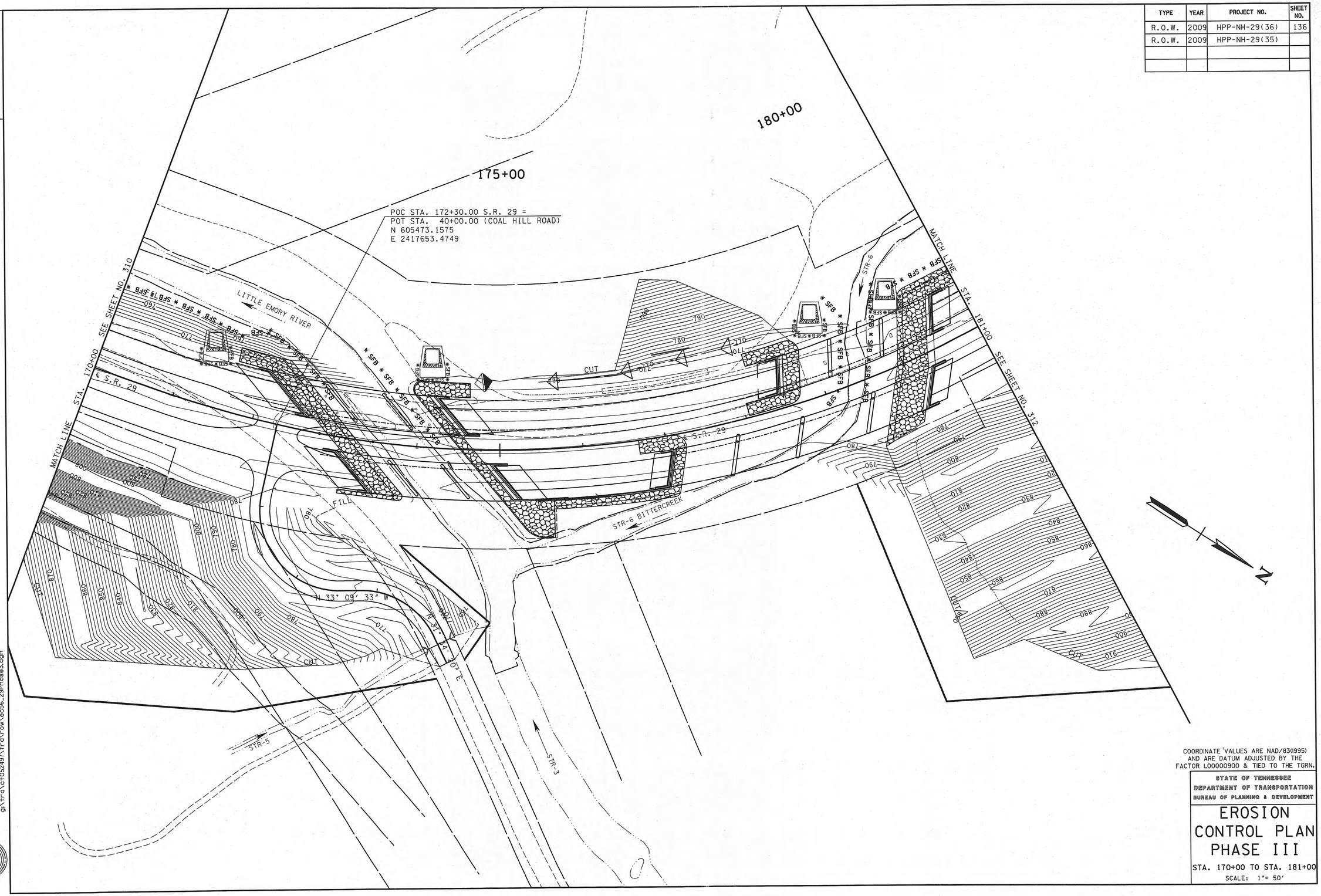
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	136
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 170+00 TO STA. 181+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	137
R.O.W.	2009	HPP-NH-29(35)	

185+00

190+00

STR-6

BITTER CREEK

STR-6

SEE SHEET NO. 311

SEE SHEET NO. 313

STA. 181+00

STA. 193+00

MATCH LINE

MATCH LINE

℄ S.R. 29

N 67° 58' 22" W

℄ S.R. 29

FILL

CUT

CUT

STR-7

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 181+00 TO STA. 193+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	138
R.O.W.	2009	HPP-NH-29(35)	

195+00

200+00

STR-6

BITTER CREEK

STR-9

STR-6

OIL WELL

OIL WELL-TANK

WTL-3

WTL-4

FILL

18'GR

770

780

790

800

810

820

830

840

850

860

870

880

890

900

910

920

SEE SHEET NO. 312

STA. 193+00

MATCH LINE

℄ S.R. 29

N 67° 58' 22" W

STR-8

WTL-2

SPG-2

SPG-1

CUT

℄ S.R. 29

STR-10

SIDE

57.32'

S49°42'01

STA. 205+00

MATCH LINE

SEE SHEET NO. 314

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 193+00 TO STA. 205+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	139
R.O.W.	2009	HPP-NH-29(35)	

BITTER CREEK
STR-6
210+00
BITTER CREEK
215+00
SEE SHEET NO. 313
STA. 205+00
MATCH LINE
SEE SHEET NO. 315
STA. 217+00
MATCH LINE
N 67° 58' 22" W
℄ S.R. 29
STR-10
℄ S.R. 29
TO BE REMOVED
CUT
TO BE REMOVED
CUT
TO BE REMOVED
STR-10
STR-10
436.34'
S25°22'28"W
61'
2°28"W
5' DR
MHC-18
GR
FILL
FILL
SFB
770
780
790
800
810
820

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 205+00 TO STA. 217+00

SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	140
R.O.W.	2009	HPP-NH-29(35)	

220+00

225+00

STR-6

BITTER CREEK

STR-11

FILL

SFB

SEE SHEET NO. 314

SEE SHEET NO. 316

STA. 217+00

STA. 228+00

MATCH LINE

MATCL LINE

℄ S.R. 29

WTL-5

STR-12

CUT

12'GR

770

780

790

800

810

820

830

840

850

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 217+00 TO STA. 228+00

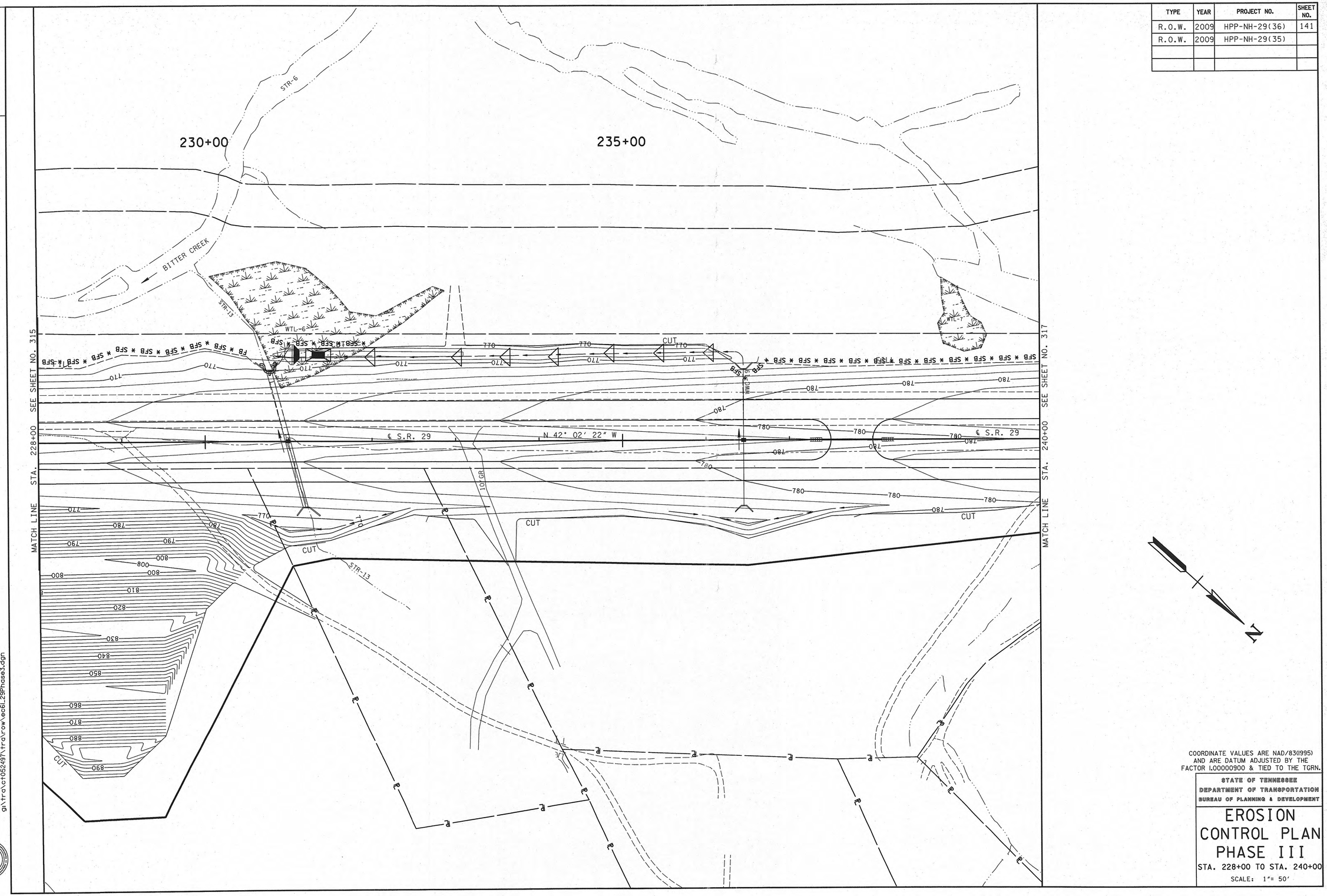
SCALE: 1"= 50'

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Barry & Dolan Surveying & Mapping

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	141
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 228+00 TO STA. 240+00

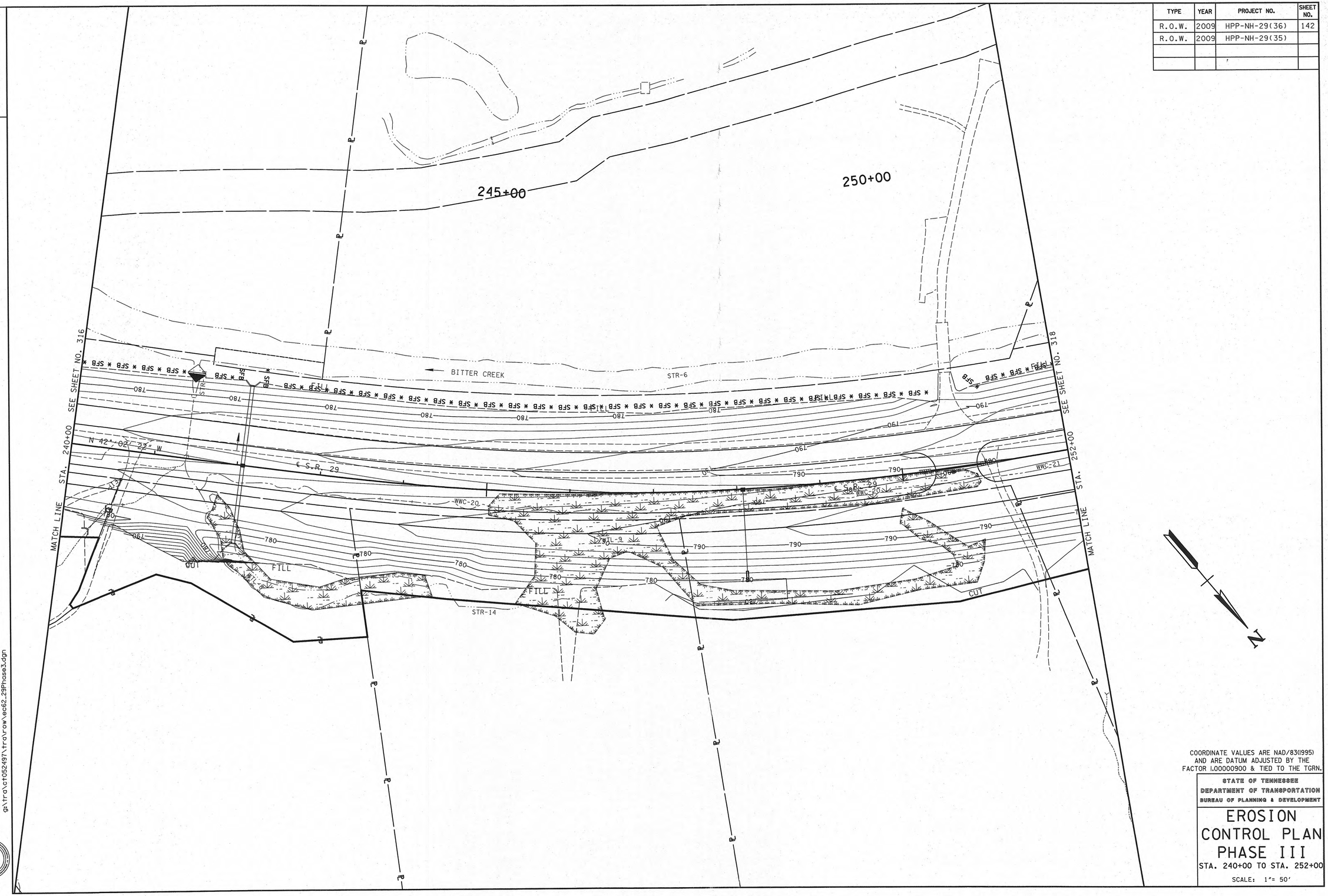
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	142
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 240+00 TO STA. 252+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	143
R.O.W.	2009	HPP-NH-29(35)	

255+00

260+00

BITTER CREEK

STR-6

STR-15

WWC-27

℄ S.R. 29

N 60° 03' 31" W

WTL-10

WTL-11

EL-807.95

CUT

FILL

TO BE REMOVED

MATCH LINE STA. 252+00 SEE SHEET NO. 317

MATCH LINE STA. 264+00 SEE SHEET NO. 319

N

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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 252+00 TO STA. 264+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	144
R.O.W.	2009	HPP-NH-29(35)	

265+00

270+00

275+00

BITTER CREEK

STR-6

STR-16

STR-23

WWC-22

WWC-23

WWC-24

WWC-25

CUT

FILL

SFB

SHED

1-M-SHED

15" CMP

O/B

W/L

℄ S.R. 29

MATCH LINE STA. 264+00 SEE SHEET NO. 318

MATCH LINE STA. 275+00 SEE SHEET NO. 320

(31)

JOSEPH ARMES

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 264+00 TO STA. 276+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3E
R.O.W.	2009	HPP-NH-29(35)	

R.O.W. ACQUISITION TABLE

TRACT NO.	PROPERTY OWNERS	COUNTY RECORDS				TOTAL AREA ACRES			AREA TO BE ACQUIRED ACRES			AREA REMAINING ACRES		EASEMENT (SQUARE FEET)		
		TAX MAP NO.	PARCEL NO.	DEED DOCUMENT BK.	DEED DOCUMENT PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERM. DRAINAGE	SLOPE	CONST.
1	HELLEN JOYCE POLSTON	11	64.01	WB4	142-143		14.577	14.577	0.000	1.875	1.875	0.000	12.702			
2	EARNEST A. GOUGE and JANA H. GOUGE	11	64	1073	955		11.857	11.857	0.000	2.715	2.715	0.000	9.142			
3	PEGGY SUE AND ALAN DALE WEBB	11	59	T18	657		2.633	2.633	0.000	1.526	1.526	0.000	1.107			
4	JOHN E. AND JACKIE M. BROWN	11	54	K18	616-617	68.985		68.985	0.142	0.000	0.142	68.843	0.000	1740.46		
5	STANLEY RAY AND MELISSA B. BURNEY, JR.	11	54.01	L20	765	1.042		1.042	0.207	0.000	0.207	0.835	0.000			
6	JAMES R. HULING	11	55	G22	270		1.563	1.563	0.000	1.563	1.563	0.000	0.000			
7	BUENDA GUINN	12	5	W20	644		2.683	2.683	0.000	0.720	0.720	0.000	1.963			
8	HENRY E. BELL AND EVELYN M. BELL	12	5.01	1257	518		1.024	1.024	0.000	1.024	1.024	0.000	0.000			
9	ROY E. AND NANNIE G. GILMORE	12I	14	R15	257-258		0.092	0.092	0.000	0.092	0.092	0.000	0.000			
10	ROY E. AND NANNIE G. GILMORE	12I	13	L14, Z12	244-245, 340		2.846	2.846	0.000	2.129	2.129	0.000	0.717			
11	LINDA G. PARKS	12I	13.01	A17	750		0.264	0.264	0.000	0.043	0.043	0.000	0.221			
12	HAROLD E. AND JEAN MURRY	12	3	B9	430		2.632	2.632	0.000	0.281	0.281	0.000	2.351			
13	UNITED STATES OF AMERICA	12	59	U5	447		2.364	2.364	0.000	0.475	0.475	0.000	1.889			
14	*CHARLES NELSON WHICKER	12	1	S21	711	2.406	102.896	105.302	0.042	2.668	2.710	2.364	100.228			
~~15~~								~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~			
16	JACKIE SUE MCCLEMORE	12	60	Z19	78		173.126	173.126	0.000	1.960	1.960	0.000	171.166			
17	WINTER'S GAP COAL AND LAND COMPANY	149	47	T4	315	2.137	491.000	493.137	0.091	15.736	15.827	2.046	475.264			
18	CNX GAS CO. LLC.	149	25	96	791	2394.000	0.292	2394.292	0.000	0.292	0.292	2394.000	0.000	622.9		1718.05
19	GARY HALLCOX	149	50.02	M7	112		1.922	1.922	0.000	1.922	1.922	0.000	0.000			
20	GARY HALLCOX	149	50.03	R6	11		1.445	1.445	0.000	0.146	0.146	0.000	1.299			
21	GARY HALLCOX	149	50.01	M7	114		0.635	0.635	0.000	0.635	0.635	0.000	0.000			
22	GEORGE E. LUEKING	149	50	S8	663		3.082	3.082	0.000	2.025	2.025	0.000	1.057			
23	RENEE MILLER	149	49.01	RB41	141		2.105	2.105	0.000	0.609	0.609	0.000	1.496			
24	GEORGE E. LUEKING	149	48.01	S8	663		2.531	2.531	0.000	0.554	0.554	0.000	1.977			
25	BETTY BOOTH	149	49	Y7	346		5.802	5.802	0.000	1.705	1.705	0.000	4.097			
26	DAVID WAHRER AND SARAH C. NAWAZ	149	22.04	82	725	43.067	0.983	44.050	0.000	0.983	0.983	43.067	0.000			2682.18
26A	BETTY S. BOOTH	149	22.02	C9	378		7.009	7.009	0.000	1.630	1.630	0.000	5.379			
26B	ALVIN D. CHRISTMAS	149	22.03	79	185		4.995	4.995	0.000	1.794	1.794	0.000	3.201			
26C	DAVID CHRISTMAS	149	22.05	88	512		2.047	2.047	0.000	0.532	0.532	0.000	1.515			
26D	THOMAS L. AND LOU W. CHRISTMAS	149	22	P8	590		16.493	16.493	0.000	4.149	4.149	0.000	12.344			
27	JOSEPH A. ARMES	149	21.01	G9	531		9.340	9.340	0.000	0.943	0.943	0.000	8.397			
28	TINA L., ALVIN J., AND DAVID J. WOODS	149	21.02	B9	485		10.693	10.693	0.000	1.165	1.165	0.000	9.528			
29	DON E. WHITUS	149	23	H6	202		6.004	6.004	0.000	1.917	1.917	0.000	4.087			
30	OWEN C. HARRIS AND WIFE, CLARA M. HARRIS	149	23.01	MISC 37	653		0.958	0.958	0.000	0.310	0.310	0.000	0.648			
31	JOSEPH A. ARMES	149 140	25.01 29	G9	531		1120.785	1120.785	0.000	34.110	34.110	0.000	1086.675			
32	LANDON KEITH BASS	149	16	Y8	915-916		9.842	9.842	0.000	0.360	0.360	0.000	9.482			
33	RAYMOND W. AND ANNIE T. CURTIS	149	17	I6	15		4.236	4.236	0.000	0.508	0.508	0.000	3.728	258.15		3118.01
33A	DONALD G. JONES	149	17.02	E9	473		2.702	2.702	0.000	0.196	0.196	0.000	2.506	341.86		
34	MICHEAL YEARY	149	13	RB69	606		2.477	2.477	0.000	0.251	0.251	0.000	2.226			
35	PAUL W. AND LESLIE YEARY	149	12	Q5	396		0.976	0.976	0.000	0.227	0.227	0.000	0.749			
~~36~~	~~STEPHANIE YEARY PINKERTON~~	~~149~~	~~18~~	~~RB71~~	~~123~~		~~1.906~~	~~1.906~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~1.906~~			
37	WILLIAM R. AND WANDA D. TURNER	149	11	Z7	142		1.474	1.474	0.000	0.525	0.525	0.000	0.949			
38	STEVEN BRUCE LANE AND MARSHA CAROL	149	11.05	G7	130		5.678	5.678	0.000	2.189	2.189	0.000	3.489			
~~39~~	~~BERNICE T. COUCH~~	~~140~~	~~11.02~~	~~V6~~	~~590~~		~~3.478~~	~~3.478~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~3.478~~			
~~40~~	~~PER O. LOGETH~~	~~140~~	~~16~~	~~R8~~	~~219-225~~		~~097.000~~	~~097.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~097.000~~			
41	PEGGY WALLS	140-O	1	Z7	626-627		1.379	1.379	0.000	0.689	0.689	0.000	0.690			
42	RICHARD AND PATRICIA CLAYTON	140-O	2-7	S8	376		4.362	4.362	0.000	0.023	0.023	0.000	4.339			
~~43~~	~~HOUSTON AND LIANNE HULING~~	~~140-O~~	~~8-10~~	~~G7~~	~~107~~		~~2.266~~	~~2.266~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~2.266~~			
44	PEGGY WALLS	140-O	17-18	Z7	626-627		5.941	5.941	0.000	0.272	0.272	0.000	5.669			
45	JUDY SAFFALL TANNER(1/2), DANNY HONEYCUTT(1/4), AND MICKEY HONEYCUTT(1/4)	140	26	X8 Z8	707, 557	0.444	66.921	67.365	0.000	1.519	1.519	0.444	65.402			
46	DAVID TECUMSEH LEE	140	25.02	U6	654	3.428		3.428	0.055	0.000	0.055	3.373	0.000			
47	REBA FAIRCHILD MADEN	140	25	A7	712	38.263		38.263	0.495	0.000	0.495	37.768	0.000			
48	GEORGE EDWARDS, III AND JOHN TALIAFERRO	139	10	RB26	885	387.000		387.000	1.604	0.000	1.604	385.396	0.000			
49	DONALD G. JONES	149	16.01	T7	789	1.580		1.580	0.083	0.000	0.083	1.497	0.000	750		7988.06
~~50~~	~~LARRY WILL~~	~~140~~	~~10.02~~	~~??~~	~~???~~	~~7.700~~		~~7.700~~	~~0.000~~	~~0.000~~	~~0.000~~	~~7.700~~	~~0.000~~			
51	LAWERENCE AND JUDY GRIFFITH	11	52.03	1026	317	4.667		4.667	0.023	0.000	0.023	4.644	0.000			374.31
52	SOUTHERN RAIL ROAD ROW	??	??	??	??		3.471	3.471	0.000	0.531	0.531	0.000	2.940			
53	JAMES RICHARD AND PATRICIA WARD	12	6.01	B16	272		1.040	1.040	0.000	0.021	0.021	0.000	1.019			
~~54~~	~~RHONDA LEE~~	~~12I-A~~	~~5~~	~~Y17~~	~~361~~		~~1.815~~	~~1.815~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~1.815~~			
54A	JAMES C. AND JUDY S. COLEY	12I-A	6,6.01,7	R20	470		2.539	2.539	0.000	1.213	1.213	0.000	1.326			
54B	DOUGLAS WAYNE MOORE	12I-A	9	L20	604		0.805	0.805	0.000	0.493	0.493	0.000	0.312			
54C	RITA JOYCE BARNES AND PETER TIMAR	12I-A	11.01	T18	7		0.473	0.473	0.000	0.108	0.108	0.000	0.365			
54D	NANNIE G. GILMORE	12I-A	11	C12	130		0.431	0.431	0.000	0.006	0.006	0.000	0.425			
54E	SANDRA L. AND JOHN STOUT, JR.	12I-A	12.02	Q21	108		1.775	1.775	0.000	0.016	0.016	0.000	1.759			
55	MARY COFER POLSTON	11	52	Y19	261	53.496		53.496	0.000	0.000	0.000	53.496	0.000	919.25		
56	AHLER TRUST	149	51	E8	567	41.613		41.613	0.458	0.000	0.458	41.155	0.000	902.53		
~~57~~																
58	DONALD G. JONES	149	15	8	53	1.130		1.130	0.000	0.000	0.000	1.130	0.000	380.35		1278.65
~~59~~	~~NICK AND JUDY TANNER~~	~~140~~	~~16.46~~	~~D9~~	~~175~~		~~4.370~~	~~4.370~~	~~0.000~~	~~0.000~~	~~0.000~~	~~0.000~~	~~4.370~~			

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Survey & Data Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

RIGHT-OF-WAY ACQUISITION TABLE

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	145
R.O.W.	2009	HPP-NH-29(35)	

280+00

285+00

BITTER CREEK

STR-6/BITTER CREEK

STR-6

WWC-26

SEE SHEET NO. 319

MATCH LINE STA. 276+00

N 60° 03' 31" W

℄ S.R. 29

FILL

CUT

WWC-27

WWC-28

TO BE REMOVED

6' GR.

8' GR.

SILT FORKED CREEK

MOBILE HOME

SHED

SEE SHEET NO. 321

MATCH LINE STA. 287+00

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 276+00 TO STA. 287+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	146
R.O.W.	2009	HPP-NH-29(35)	

290+00

295+00

POS STA. 290+51.96 S.R. 29 =
POT STA. 50+00.00 WHETSTONE ROAD
N 612052.6872
E 2408162.2162

BITTER CREEK
STR.6

SCARIFY, TOPSOIL & SEED AND SHEET

SFB * SFB

50+00

N 13° 16' 43" W

℄ S.R. 29

WWC-27

WWC-28

N 74° 22' E

MATCH LINE
STA. 287+00
SEE SHEET NO. 320

SEE SHEET NO. 322
STA. 298+00
MATCH LINE

CUT
FILL
OUT

SHEET

S.S.B. 40' OUT E

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COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TCRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

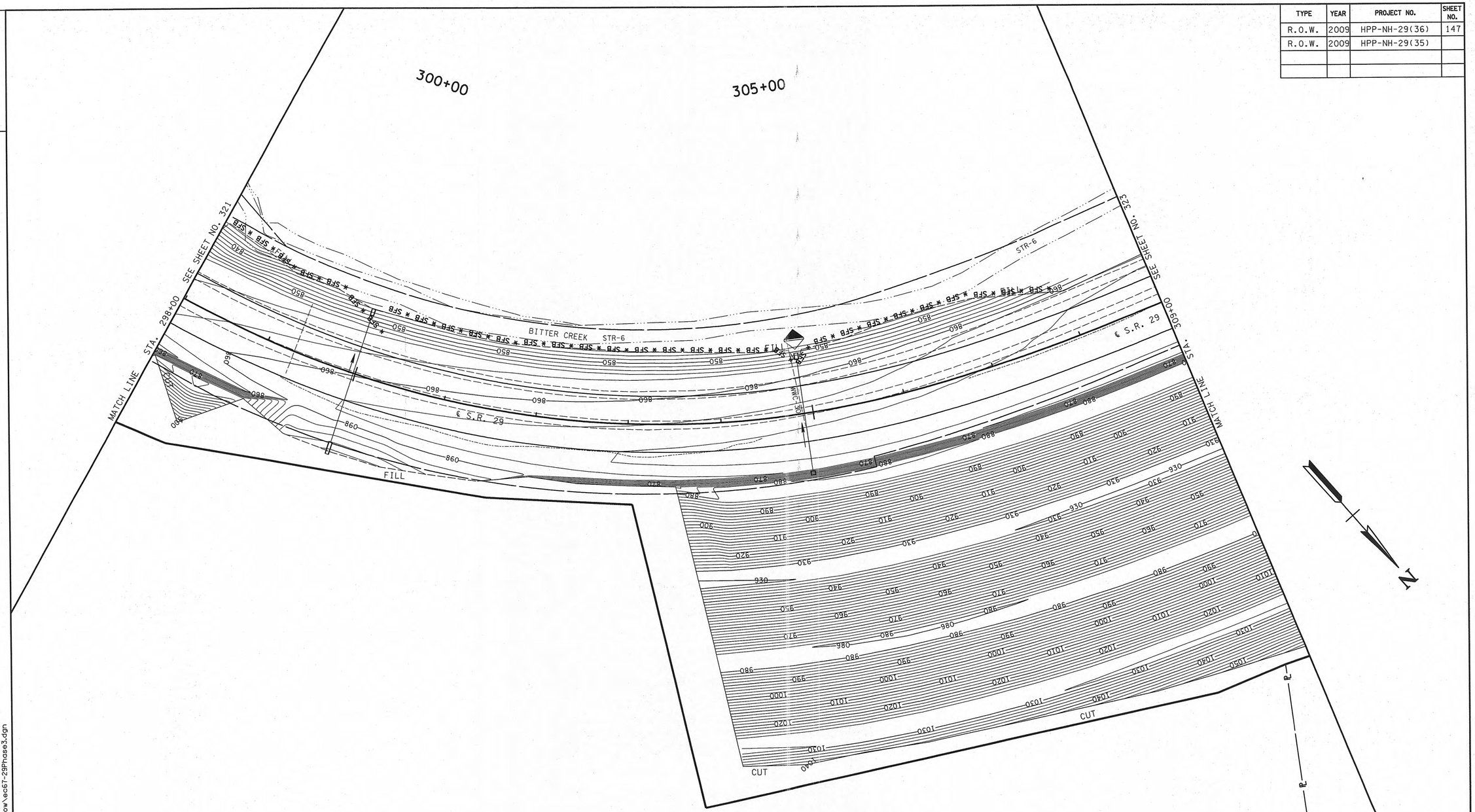
EROSION CONTROL PLAN PHASE III

STA. 287+00 TO STA. 298+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	147
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 298+00 TO STA. 309+00

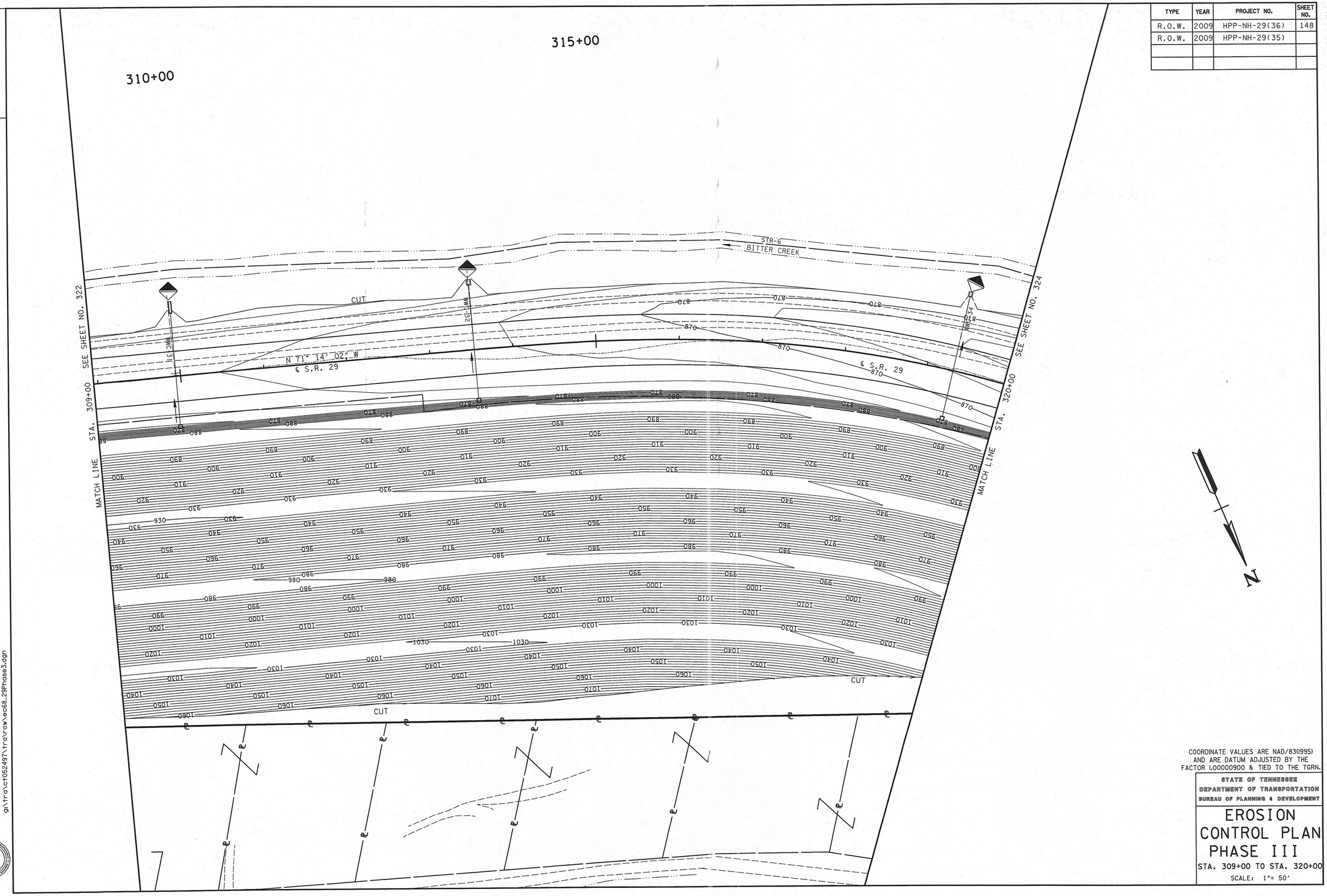
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	148
R.O.W.	2009	HPP-NH-29(35)	



COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 309+00 TO STA. 320+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	149
R.O.W.	2009	HPP-NH-29(35)	

320+00

325+00

330+00

POC STA. 328+19.91 S.R. 29 =
POT STA. 57+00.00 HANGING ROCK ROAD
N 614527.7338
E 2405632.5326

STR-6
BITTER CREEK

CUT

FILL

STR-18
SPG-3

WWC-35

N 40° 29' 49" W

℄ S.R. 29

N 47° 11' 28" E

WWC-36

WTL-12

STR-19

N 76° 22' 58" E

CUT

MATCH LINE STA. 320+00
SEE SHEET NO. 323

MATCH LINE STA. 331+00
SEE SHEET NO. 325

60+00

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 320+00 TO STA. 331+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	150
R.O.W.	2009	HPP-NH-29(35)	

335+00

340+00

BITTER CREEK

STR-6

WWC-37

WWC-37

WTL-13

FILL

CUT

CUT

N 46° 05' 28" W

℄ S.R. 29

SEE SHEET NO. 324

MATCH LINE STA. 331+00

SEE SHEET NO. 326

MATCH LINE STA. 342+00

880 890 900 910 920 930 940

SFB

N

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COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 331+00 TO STA. 342+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	151
R.O.W.	2009	HPP-NH-29(35)	

345+00

350+00

CUT

FILL

WWC-38

WWC-39

WWC-40

STR-20 MUDDY BRANCH

STR-21

STR-22

STR-6

BITTER CREEK

WTL-1A

SFB * SFB * SFB

POS STA. 344+41.025 S.R. 29 =
POT STA. 82+50.00 S.R. 328
N 615782.2880
E 2404638.4357

N 62° 50' 58" E

℄ S.R. 29

℄ S.R. 29

MATCH LINE STA. 342+00 SEE SHEET NO. 325

MATCH LINE STA. 353+00 SEE SHEET NO. 327

890 900 910 920 930 940 950 960 970

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 342+00 TO STA. 353+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	152
R.O.W.	2009	HPP-NH-29(35)	

355+00

360+00

STR-21

MATCH LINE STA. 353+00
SEE SHEET NO. 326

SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB * SFB

068 068 068

STR-23

WWC-40

℄ S.R. 29 N 7° 06' 55" E

890 890 890

FILL

BITTER CREEK

WWC-41

STR-6

Z

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

EROSION CONTROL PLAN PHASE III

STA. 353+00 TO STA. 364+74

SCALE: 1"= 50'

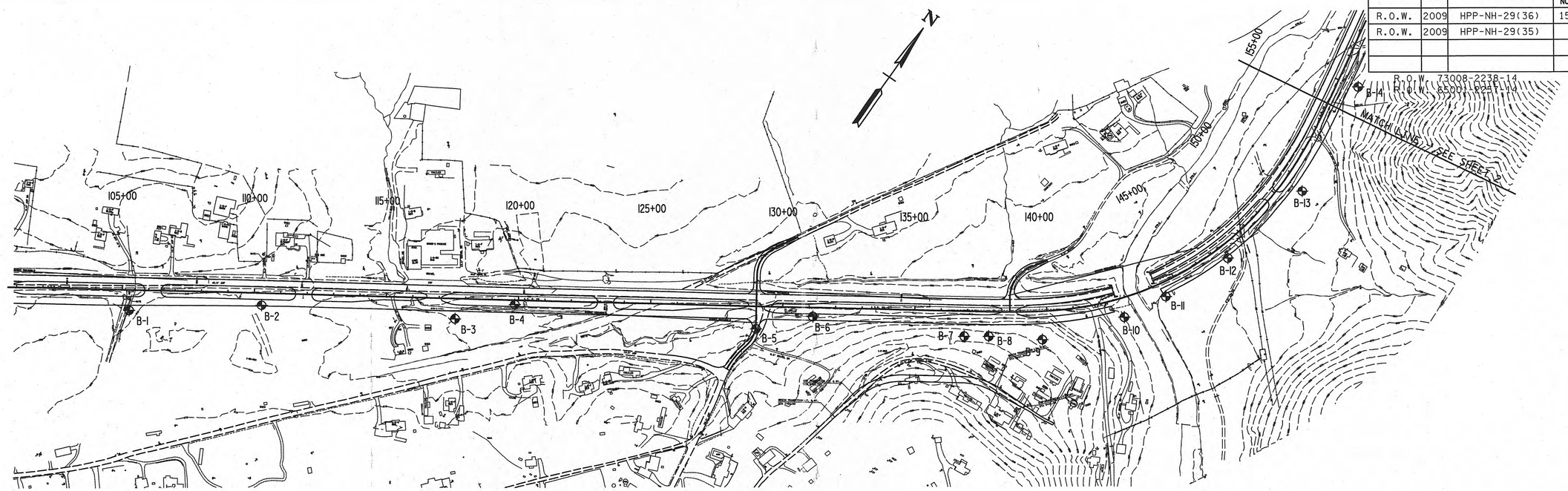
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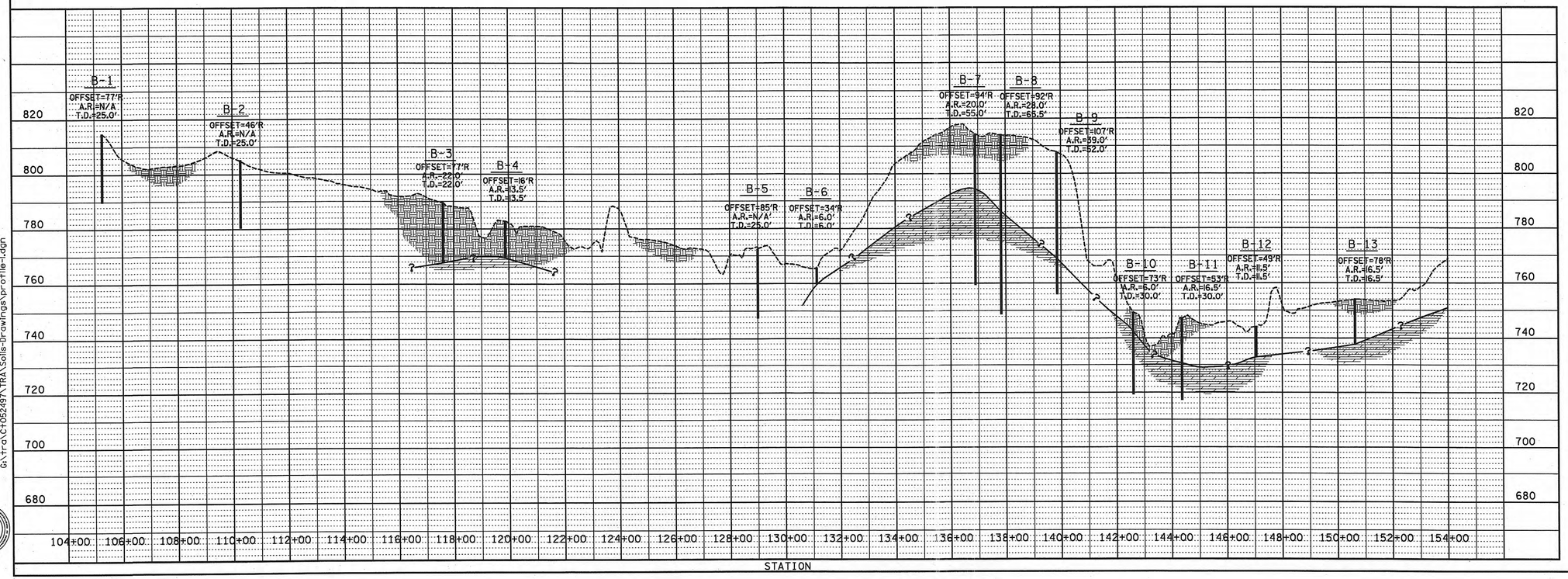
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	153
R.O.W.	2009	HPP-NH-29(35)	

R.O.W. 73008-2238-14
R.O.W. 65001-6221-14





LEGEND

- OVERBURDEN
- PARTIALLY WEATHERED ROCK
- BEDROCK
- B-12 - BORING NO.
- OFFSET - DISTANCE FROM CENTERLINE
- A.R. - AUGER REFUSAL
- T.D. - TERMINATION DEPTH

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SOILS PROFILE

STA. 105+00 TO STA. 154+00

SHEET 1 OF 5

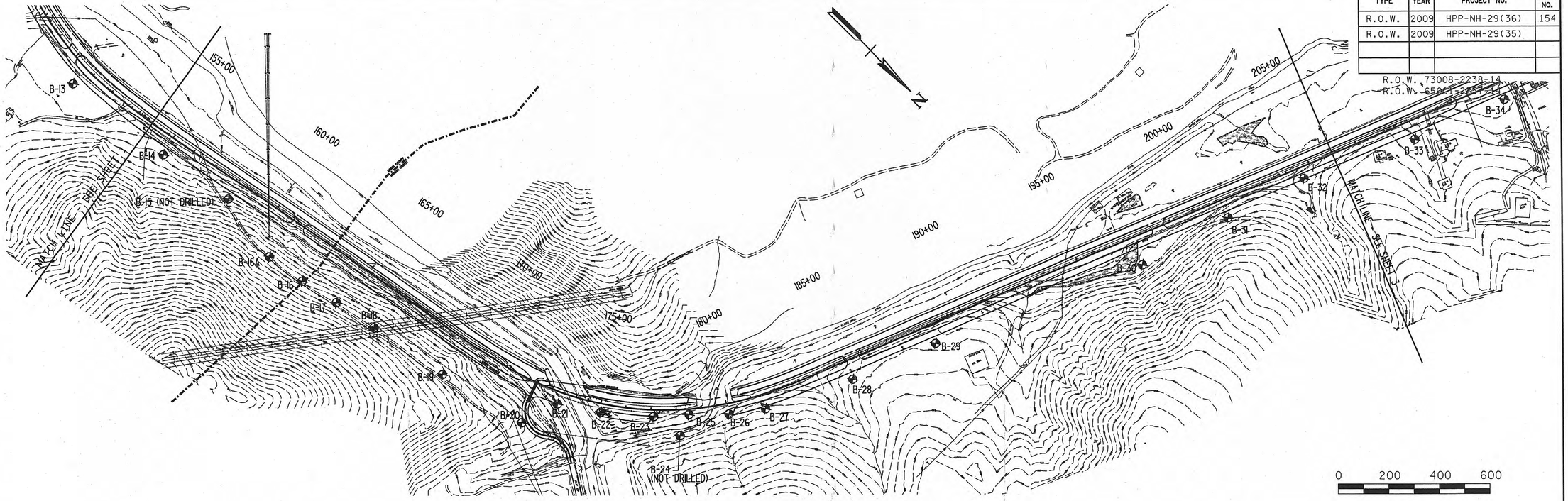
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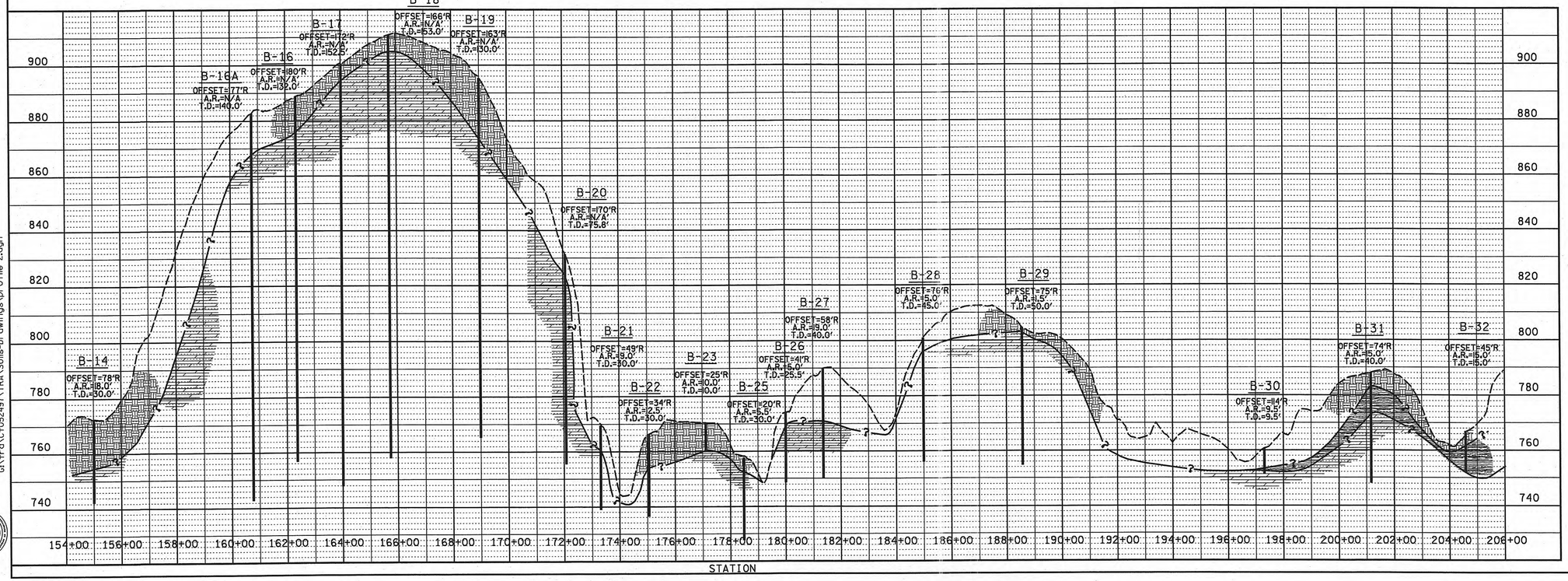
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	154
R.O.W.	2009	HPP-NH-29(35)	

R.O.W. 73008-2238-14
R.O.W. 65001-2307-14





LEGEND

- OVERBURDEN
- PARTIALLY WEATHERED ROCK
- BEDROCK
- B-12 - BORING NO.
- OFFSET - DISTANCE FROM CENTERLINE
- A.R. - AUGER REFUSAL
- T.D. - TERMINATION DEPTH

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SOILS PROFILE

STA.154+00 TO STA.206+00

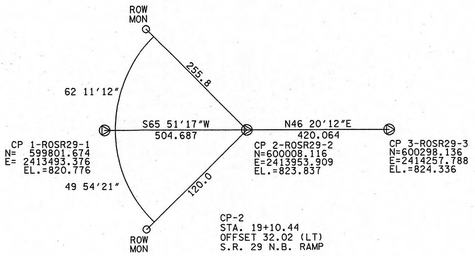
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Survey & Design Division

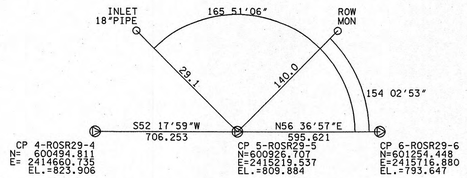
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TENNESSEE D.O.T.
DESIGN DIVISION
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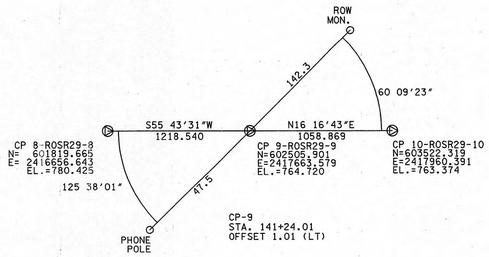
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R.O.W.	2009	HPP-NH-29(36)	3G
R.O.W.	2009	HPP-NH-29(35)	



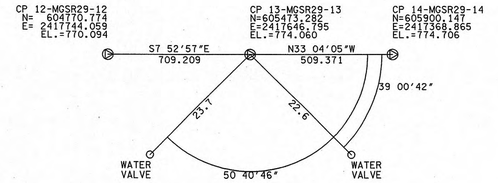
CP-2
STA. 19+10.44
OFFSET 32.02 (LT)
S.R. 29 N.B. RAMP



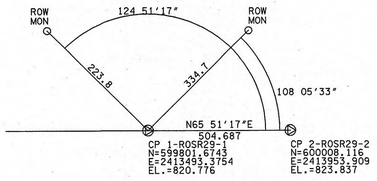
CP-5
STA. 112+12.44
OFFSET 58.93 (LT)



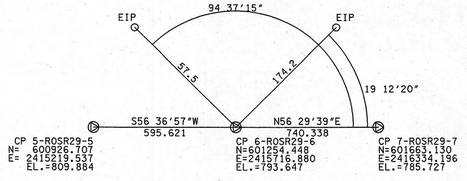
CP-9
STA. 141+24.01
OFFSET 1.01 (LT)



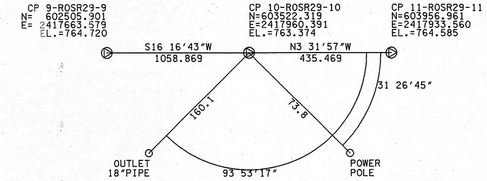
CP-13
STA. 172+32.41
OFFSET 6.23 (LT)



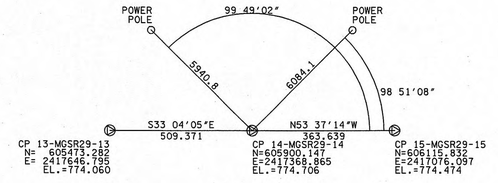
CP-1
STA. 14+07.23
OFFSET 75.76 (LT)
S.R. 29 N.B. RAMP



CP-6
STA. 118+08.06
OFFSET 58.41 (LT)



CP-10
STA. 152+45.46
OFFSET 56.67 (LT)



CP-14
STA. 177+49.73
OFFSET 12.72 (LT)

CP-3
STA. 100+63.51
OFFSET 64.30 (LT)

CP-7
STA. 125+48.40
OFFSET 59.32 (LT)

CP-11
STA. 156+86.98
OFFSET 13.21 (LT)

CP-15
STA. 181+18.80
OFFSET 14.25 (LT)

CP-4
STA. 105+08.14
OFFSET 6.41 (LT)

CP-8
STA. 129+03.73
OFFSET 12.29 (LT)

CP-12
STA. 165+21.40
OFFSET 57.22 (LT)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

REFERENCE POINTS

N.T.S.

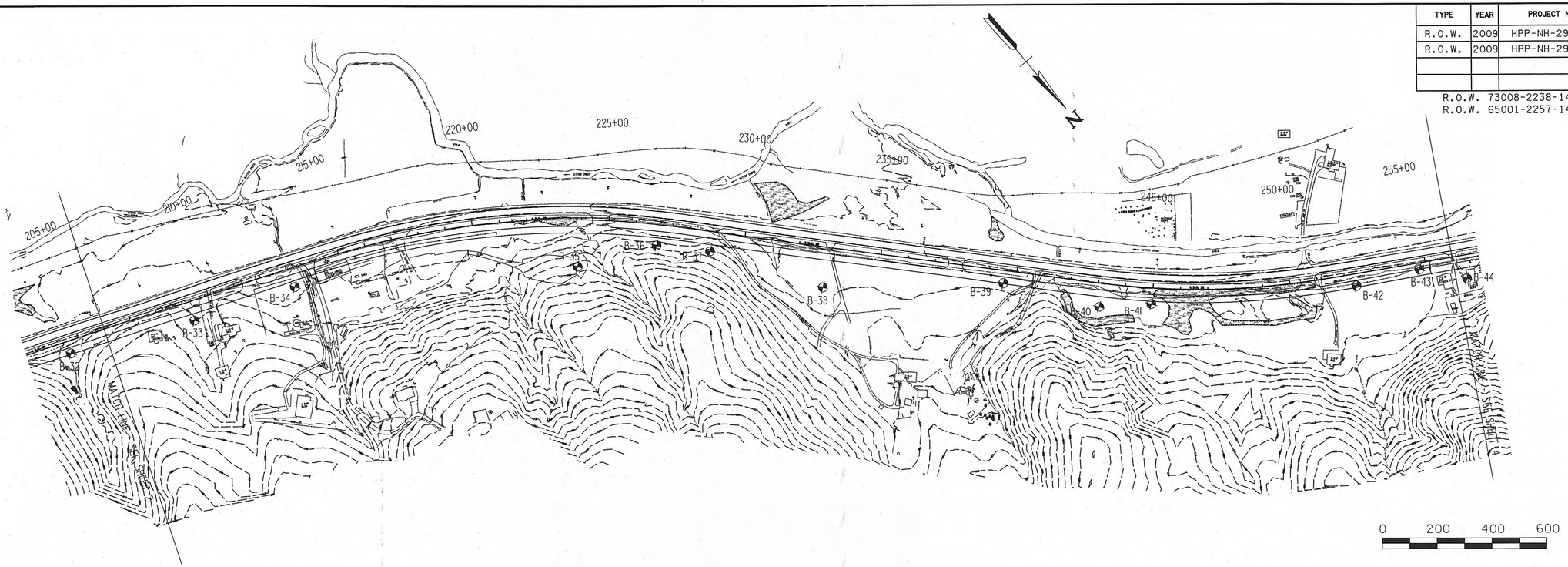
Survey & Design Division

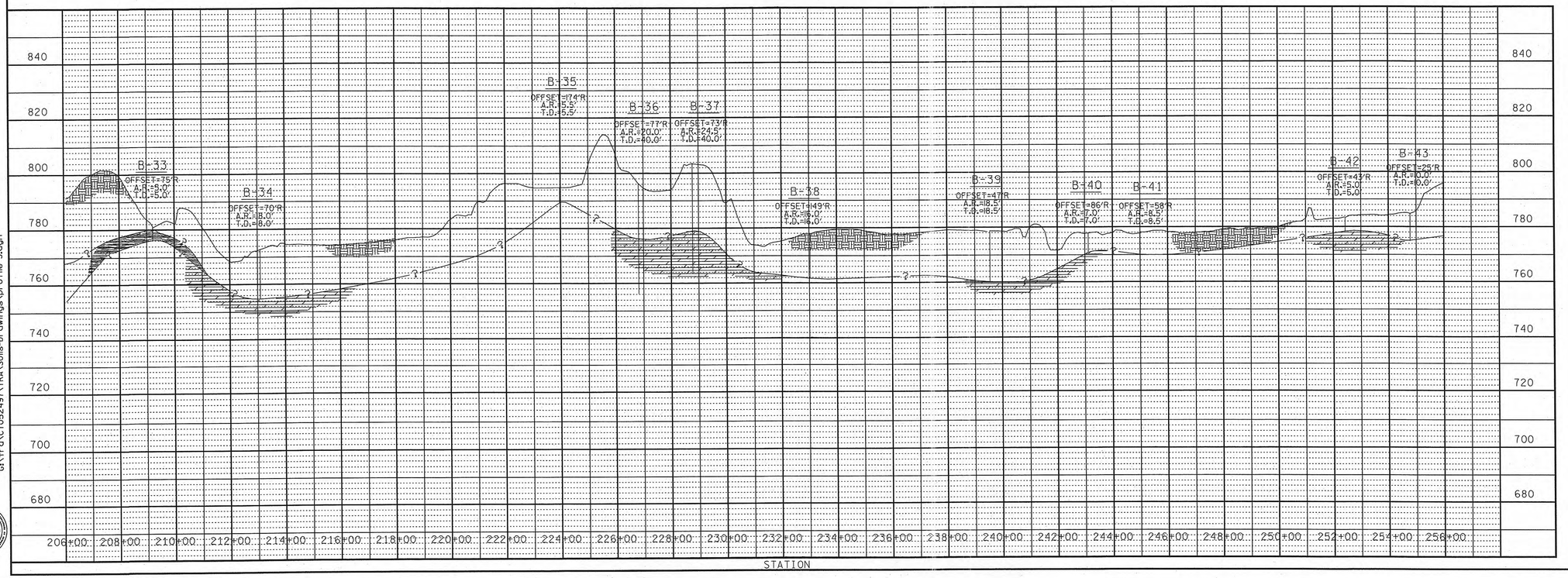
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	155
R.O.W.	2009	HPP-NH-29(35)	

R.O.W. 73008-2238-14
R.O.W. 65001-2257-14





LEGEND

- OVERBURDEN
- PARTIALLY WEATHERED ROCK
- BEDROCK
- B-12 - BORING NO.
- OFFSET - DISTANCE FROM CENTERLINE
- A.R. - AUGER REFUSAL
- T.D. - TERMINATION DEPTH

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SOILS PROFILE

STA.206+00 TO STA.256+00

SHEET 3 OF 5

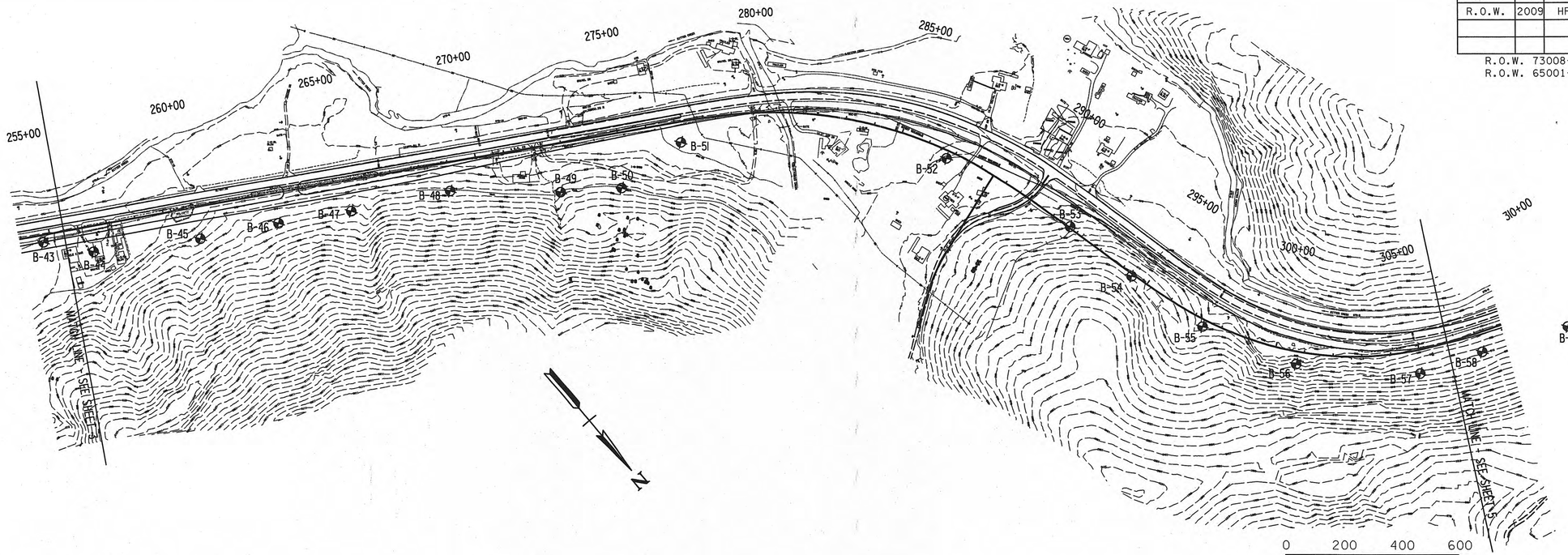
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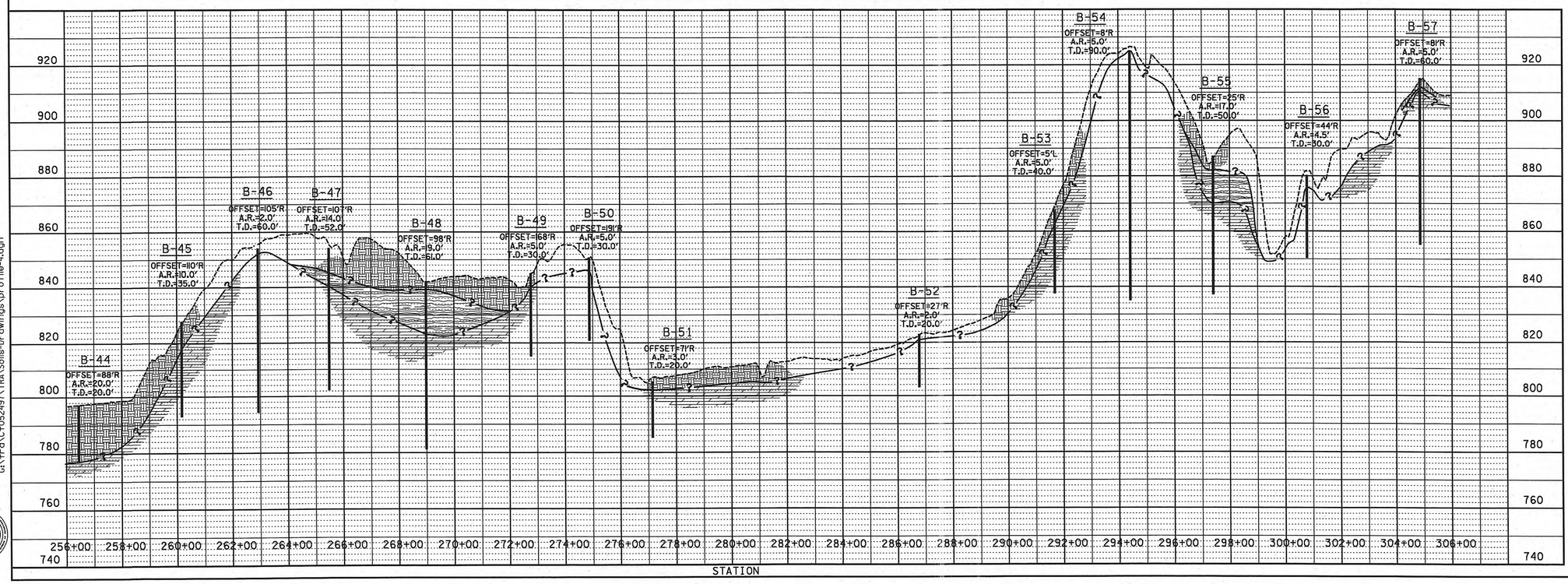
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	156
R.O.W.	2009	HPP-NH-29(35)	

R.O.W. 73008-2238-14
R.O.W. 65001-2257-14





LEGEND

- OVERBURDEN
- PARTIALLY WEATHERED ROCK
- BEDROCK
- B-12 - BORING NO.
- OFFSET - DISTANCE FROM CENTERLINE
- A.R. - AUGER REFUSAL
- T.D. - TERMINATION DEPTH

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SOILS PROFILE

STA.256+00 TO STA.306+00

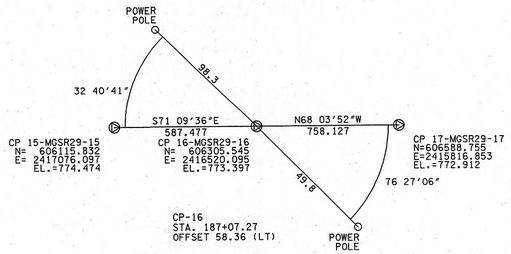
SHEET 4 OF 5

Survey & Design Division

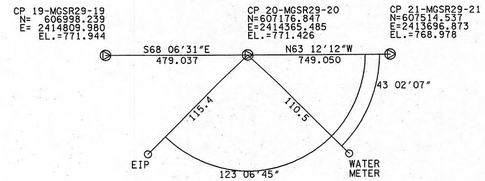
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

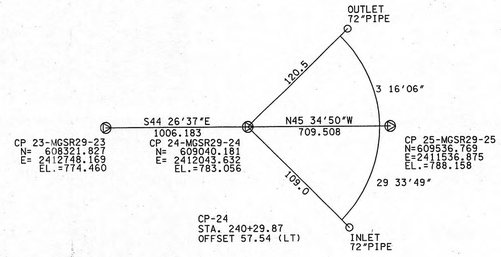
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R.O.W.	2009	HPP-NH-29(36)	3H
R.O.W.	2009	HPP-NH-29(35)	



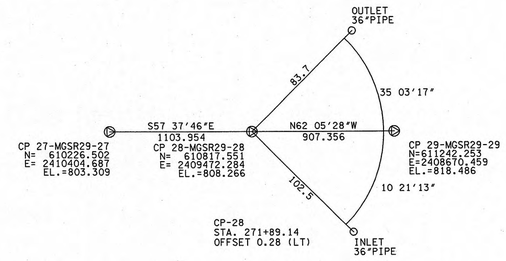
CP-16
STA. 187+07.27
OFFSET 58.36 (LT)



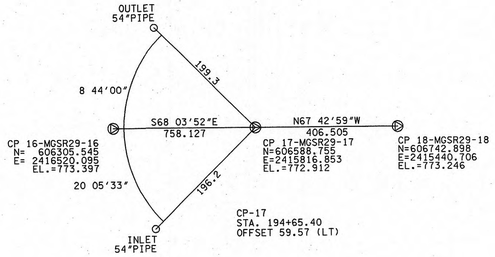
CP-20
STA. 210+31.39
OFFSET 58.74 (LT)



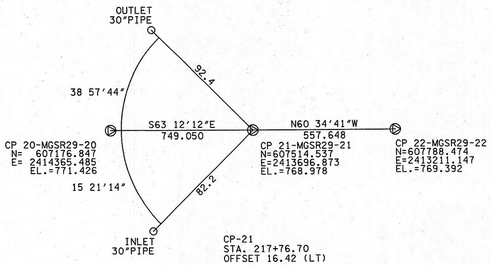
CP-24
STA. 240+29.87
OFFSET 57.54 (LT)



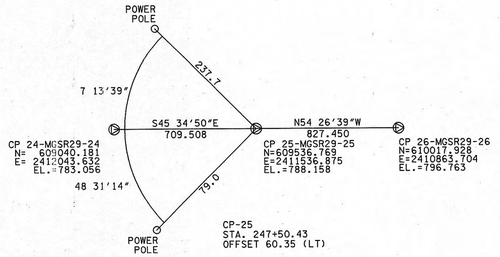
CP-28
STA. 271+89.14
OFFSET 0.28 (LT)



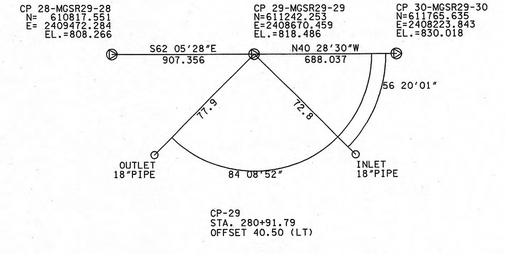
CP-17
STA. 194+65.40
OFFSET 59.57 (LT)



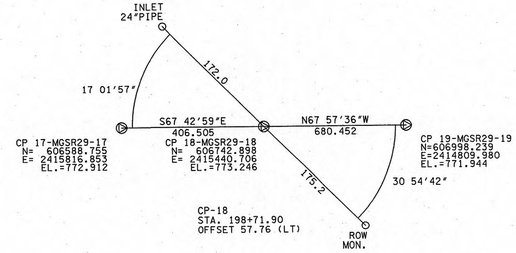
CP-21
STA. 217+76.70
OFFSET 16.42 (LT)



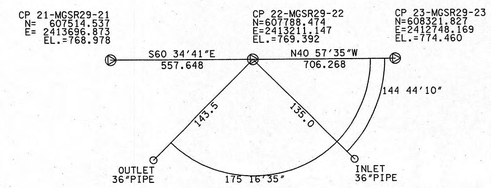
CP-25
STA. 247+50.43
OFFSET 60.35 (LT)



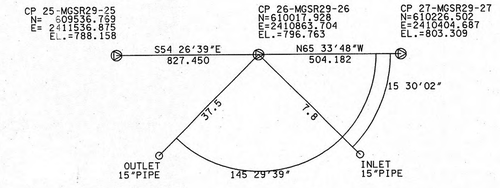
CP-29
STA. 280+91.79
OFFSET 40.50 (LT)



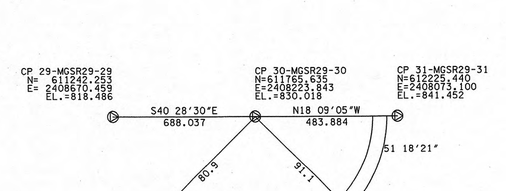
CP-18
STA. 198+71.90
OFFSET 57.76 (LT)



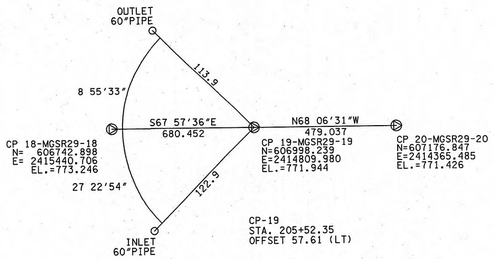
CP-22
STA. 223+25.91
OFFSET 61.54 (LT)



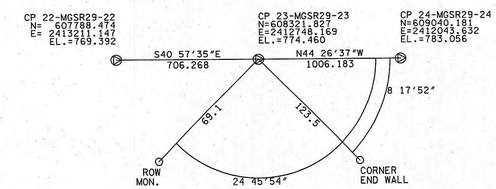
CP-26
STA. 255+84.19
OFFSET 10.54 (LT)



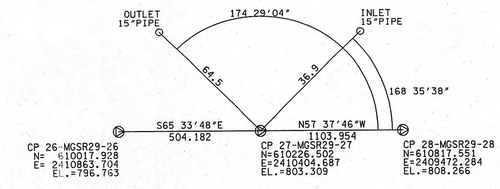
CP-30
STA. 287+65.93
OFFSET 45.83 (LT)



CP-19
STA. 205+52.35
OFFSET 57.61 (LT)



CP-23
STA. 230+24.57
OFFSET 15.33 (LT)



CP-27
STA. 260+85.97
OFFSET 58.87 (LT)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

REFERENCE POINTS

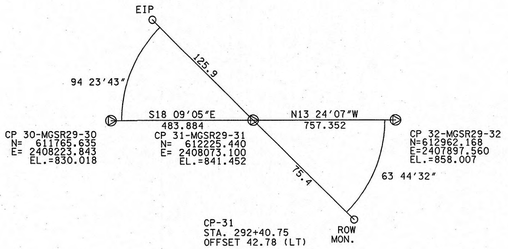
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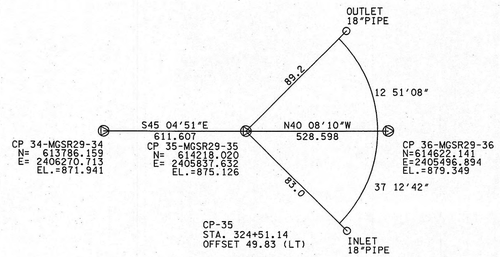
Barry & Dolan Surveyors

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

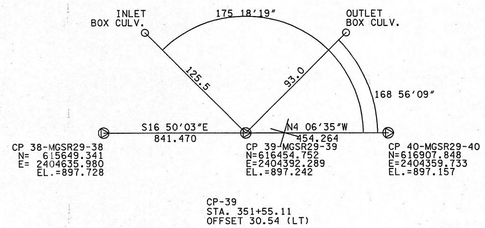
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	3J
R.O.W.	2009	HPP-NH-29(35)	



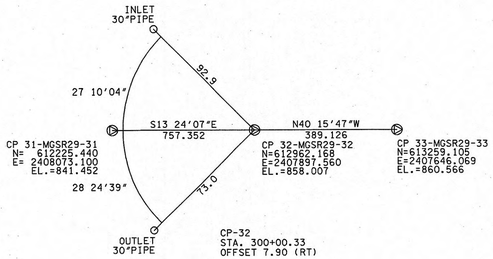
CP-31
STA. 292+40.75
OFFSET 42.78 (LT)



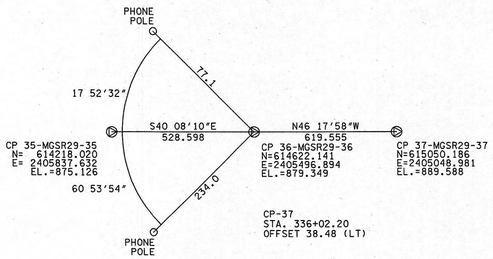
CP-35
STA. 324+51.14
OFFSET 49.83 (LT)



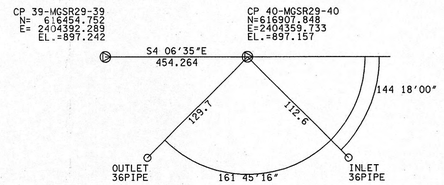
CP-39
STA. 351+55.11
OFFSET 30.54 (LT)



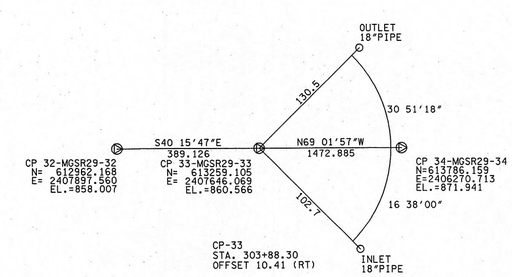
CP-32
STA. 300+00.33
OFFSET 7.90 (RT)



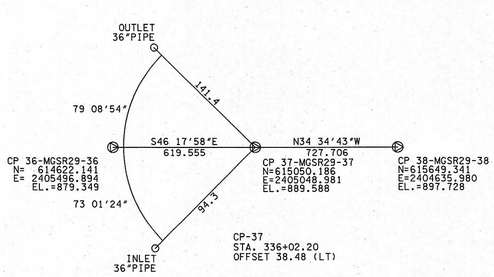
CP-37
STA. 336+02.20
OFFSET 38.48 (LT)



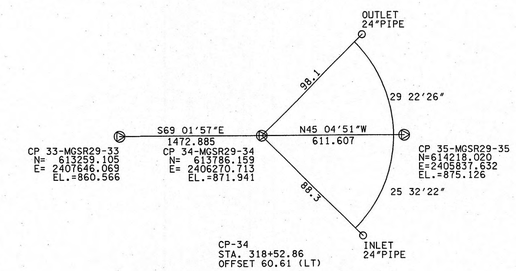
CP-40
STA. 356+04.53
OFFSET 12.72 (LT)



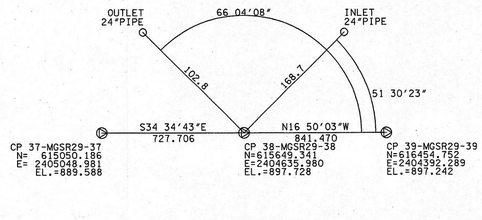
CP-33
STA. 303+88.30
OFFSET 10.41 (RT)



CP-37
STA. 336+02.20
OFFSET 38.48 (LT)



CP-34
STA. 318+52.86
OFFSET 60.61 (LT)



CP-38
STA. 343+18.07
OFFSET 47.43 (LT)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

REFERENCE POINTS

N.T.S.

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	4
R.O.W.	2009	HPP-NH-29(35)	

MARY COFER POLSTON

1-S-B RES

375.00' N72°28'59"E

75.00' N18°20'19"E

W 8" W

INV=819.78

9.5' ASP DR

170.97' N17°10'04"W

64.55' S71°39' LINE 813.62 S.R. 29 RAMP A

PRESENT R.O.W.

444.28' N72°05'26"E

413.59' N71°48'38"E

30+00

FREELS ROAD (LT.)
PI 38+74.45
N 600,374.4157
E 2,414,185.2428
Δ 87°19'37"RT
D 52°00'00"
R 110.18
T 105.16
Lc 167.94
SE 0.080 FT/FT
DES. SPEED 20 MPH

51 LAWERENCE AND JUDY GRIFFITH

35+00

100+00

PASTURE

MOBILE HOME

1-S-B RES

36+22.00 51.00' LT

36+22.00 41.64' LT

178.99 N30°20'36"W

WWC-2

36+62.00 41.56' LT

36+62.00 50.92' LT CONST. FSM'T.

171.23' N59°20'47"E

280.00' N59°20'47"E

INV=808.95

INV=812.72

24" CMP

37+99.79 67.88' LT

75.86' N 44° 11' 17" E

37+44.68 41.41' LT

38+21.57 60.01' LT

GRASS

35.25 194.98' N 38°34'34" E

INV=824.19

N 59° 14' 17" E

13.0' ASP

FREELS ROAD

LIMIT OF CONST. FREELS ROAD
STA. 37+20.00
N 600295.4164
E 2414052.5198

V-SOD

CUT

PC 37+68.29

PT 39+37.23

N 56° 33' 54" E

PI 34+12.44

BOT 100+00.00

TST 35+29.10

SEE SHEET NO. 5

STA. 100+50

MATCH LINE

BEGIN S.R. 29 RAMP C
STA. 25+00.00
N 599829.1419
E 2413264.0762

N 12° 40' 00" E

TS 27+10.04

SC 28+85.04

PI 28+26.71

S.R.29 RAMP C

V-SOD

FILL

GRASS

CUT

BEGIN S.R. 29 RAMP B
STA. 10+00.00
N 599522.4775
E 2413183.9672

10+00

15+00

20+00

5+00

CP 1-ROSR29-1

PC 16+51.98

PI 31+20.39

CP 2-ROSR29-2

N 56° 42' 47" E

S.R.29 RAMP B

PI 12+86.00

N 61° 42' 35" E

PI 19+09.40

N50° 44' 46"E

PI 4+94.04

PT 15+35.68

PC 10+36.00

S.R. 29 RAMP B
PI 12+86.00
N 599,679.4430
E 2,413,423.0425
Δ 4°59'48"RT
D 1°00'00"
R 5,729.58
T 250.00
Lc 499.68
SE 0.029 FT/FT
DES. SPEED 60 MPH

GRASS

PRESENT R.O.W.

INV. EL. OUT 799.78

60" RCP

INV=893.65

322.99'

22+17.13 0.00 (RT)

18+23.73 50.72 (RT)

88.32'

249.50' N40°13'06"E

PROPOSED R.O.W.

508.82' S63°30'56"W

PROPOSED R.O.W.

S.R. 29 RAMP A STA. 7+03.38=
S.R. 29 RAMP B STA. 17+60.00
OFFSET 15.98' RT,
N 599891.2060
E 2413848.0580

PT 7+03.38

BEGIN R.O.W. PROJECT
NO. HPP-NH-29(36)
STA. 17+41.77 S.R. 29 RAMP B
OFFSET 81.19' RT.

STA. 22+41.23 (RAMP B)
126.81' RT
POT STA. 35+44.13 S.R. 29 RAMP C=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' LT.
N 600249.5402
E 2414213.7688

EQUATION
POT STA. 22+61.84 S.R. 29 RAMP B=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' RT.
N 600169.4271
E 2414266.6640

333.78' N 54° 19' 11" E

BEGIN CONST. S.R. 29
STA. 100+00.00
N 600209.4836
E 2414240.2164

POT STA. 100+45.00 S.R. 29
POT STA. 40+00.00 FREELS ROAD
N 600234.2782
E 2414277.7694

S.R. 29 RAMP A
PI 4+94.04
N 599,743.7477
E 2,413,593.6685
Δ 74°14'54"RT
D 1°00'00"
R 388.45
T 294.04
Lc 503.38
SE 0.072 FT/FT
DES. SPEED 30 MPH

S.R. 29 RAMP B
PI 19+09.40
N 599,975.0453
E 2,413,972.2602
Δ 5°08'41"LT
D 1°00'00"
R 5,729.58
T 257.41
Lc 514.48
SE 0.029 FT/FT
DES. SPEED 60 MPH

S.R. 29 RAMP C
PI 31+20.39
N 600,024.6191
E 2,413,852.7657
Δs 16°06'06"LT
Θs 2°11'15"LT
Δc 11°43'36"LT
D 2°30'00"
R 2,291.83
Lc 469.06
Ts 411.74
Ls 175.00
LT 116.68
ST 58.34
Es 23.37
X 174.97
Y 2.23
k 87.50
p 0.56
SE 0.061 FT/FT
DES. SPEED 60 MPH

BEGIN S.R. 29 RAMP A
STA. 2+00.00
N 599458.8810
E 2413666.5310

PC 2+00.00

24.0' ASP

252.84' N03°19'11"W

PT 7+03.38

S.R.29 RAMP A

PRESENT R.O.W.

221.63' S12°15'

1
HELLEN JOYCE POLSTON

PASTURE

GRASS

FILL

CUT

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Survey & Design Division

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 10+00 TO STA. 100+50

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	4A
R.O.W.	2009	HPP-NH-29(35)	

977 [759] | 359 [345] | 359 [357] — 2047 [1502]
S.R. 29 (U.S. 27) — 809 [669]
1070 [743] | 450 [300] | 450 [300] | 450 [312]
620 [443] | 0 [12] | 618 [414] | 0 [12]
620 [455] | S.R. 61 | 618 [426]
1238 [881]
2029 DHV PM [AM]

30+00 35+00 100+00

FREELS ROAD (LT.)
PI 38+74.45
N 600,374.4157
E 2,414,185.2428
Δ 87°19'37"RT
D 52°00'00"
R 110.18
T 105.16
Lc 167.94
SE 0.080 FT/FT
DES. SPEED 20 MPH

BEGIN TAPER (RT. & LT.) STA. 37+20.22
END TAPER (RT. & LT.) STA. 37+69.29
WWC-1
WWC-2
PI 38+74.45
N 59° 14' 17" E
FREELS ROAD
R15
12'
V-SOD
LIMIT OF CONST. FREELS ROAD
STA. 37+20.00
N 600295.4164
E 2414052.5198
54" RCP (TO REMAIN)
CS 33+54.10
PC 37+69.29
ST 35+29.10
POT 100+00.00
30'R
PT 39+37.23
S33° 26' 06"E
SEE SHEET NO. 5A
STA. 100+50

BEGIN S.R. 29 RAMP C
STA. 25+00.00
N 599829.1419
E 2413264.0762
V-SOD
24'
N 72° 40' 00" E
TS 27+10.04
SC 28+85.04
PI 28+26.71
S.R.29 RAMP C
PI 31+20.39
N 56° 33' 54"E
PI 34+12.44

BEGIN S.R. 29 RAMP B
STA. 10+00.00
N 599522.4775
E 2413183.9672
10+00 15+00 20+00
V-SOD
PC 16+51.98
8'R
150'R
30.00'
12'
PT 21+66.46
N 56° 33' 54" E
N 56° 42' 47" E
S.R.29 RAMP B
PI 12+86.00
24'
5+00
N 61° 42' 35" E
PI 4+94.04
PT 15+35.68
PC 10+36.00
16'
12' 24'
TYPE 38
PI 19+09.40
60" RCP
1B JB*2
STA. 272+71.72 NO. 2 JUNCTION BOX
INV. EL. OUT 799.78
MATCH LINE

S.R. 29 RAMP B
PI 12+86.00
N 599,679.4430
E 2,413,423.0425
Δ 4°59'48"RT
D 1°00'00"
R 5,729.58
T 250.00
Lc 499.68
SE 0.029 FT/FT
DES. SPEED 60 MPH

S.R. 29 RAMP A
PI 4+94.04
N 599,743.7477
E 2,413,593.6685
Δ 74°14'54"RT
D 14°45'00"
R 388.45
T 294.04
Lc 503.38
SE 0.072 FT/FT
DES. SPEED 30 MPH

S.R. 29 RAMP B
PI 19+09.40
N 599,975.0453
E 2,413,972.2602
Δ 5°08'41"LT
D 1°00'00"
R 5,729.58
T 257.41
Lc 514.48
SE 0.029 FT/FT
DES. SPEED 60 MPH

S.R. 29 RAMP C
PI 31+20.39
N 600,024.6191
E 2,413,852.7657
Δs 16°06'06"LT
θs 2°11'15"LT
Δc 11°43'36"LT
D 2°30'00"
R 2,291.83
Lc 469.06
Ts 411.74
Ls 175.00
LT 116.68
ST 58.34
Es 23.37
X 174.97
Y 2.23
k 87.50
p 0.56
SE 0.061 FT/FT
DES. SPEED 60 MPH

S.R. 29 RAMP A STA. 7+03.38=
S.R. 29 RAMP B STA. 17+60.00
OFFSET 15.98' RT,
N 599891.2060
E 2413848.0580

PT 7+03.38 BEG. PAV. TAPER (RT.)
END PAV. TAPER (RT.) STA. 19+60.00
BEGIN TAPER (LT.) STA. 19+91.49
END TAPER (LT.) STA. 21+11.49
WWC-1

POT STA. 35+44.13 S.R. 29 RAMP C=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' LT.
N 600249.5402
E 2414213.7688

EQUATION
POT STA. 22+61.84 S.R. 29 RAMP B=
POT STA. 100+00.00 S.R. 29
OFFSET 48.00' RT.
N 600169.4271
E 2414266.6640

BEGIN CONST. S.R. 29
STA. 100+00.00
N 600209.4836
E 2414240.2164

POT STA. 100+45.00 S.R. 29
POT STA. 40+00.00 FREELS ROAD
N 600234.2782
E 2414277.7694

BEGIN S.R. 29 RAMP A
STA. 2+00.00
N 599458.8810
E 2413666.5310
PC 2+00.00

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 10+00 TO STA. 100+50

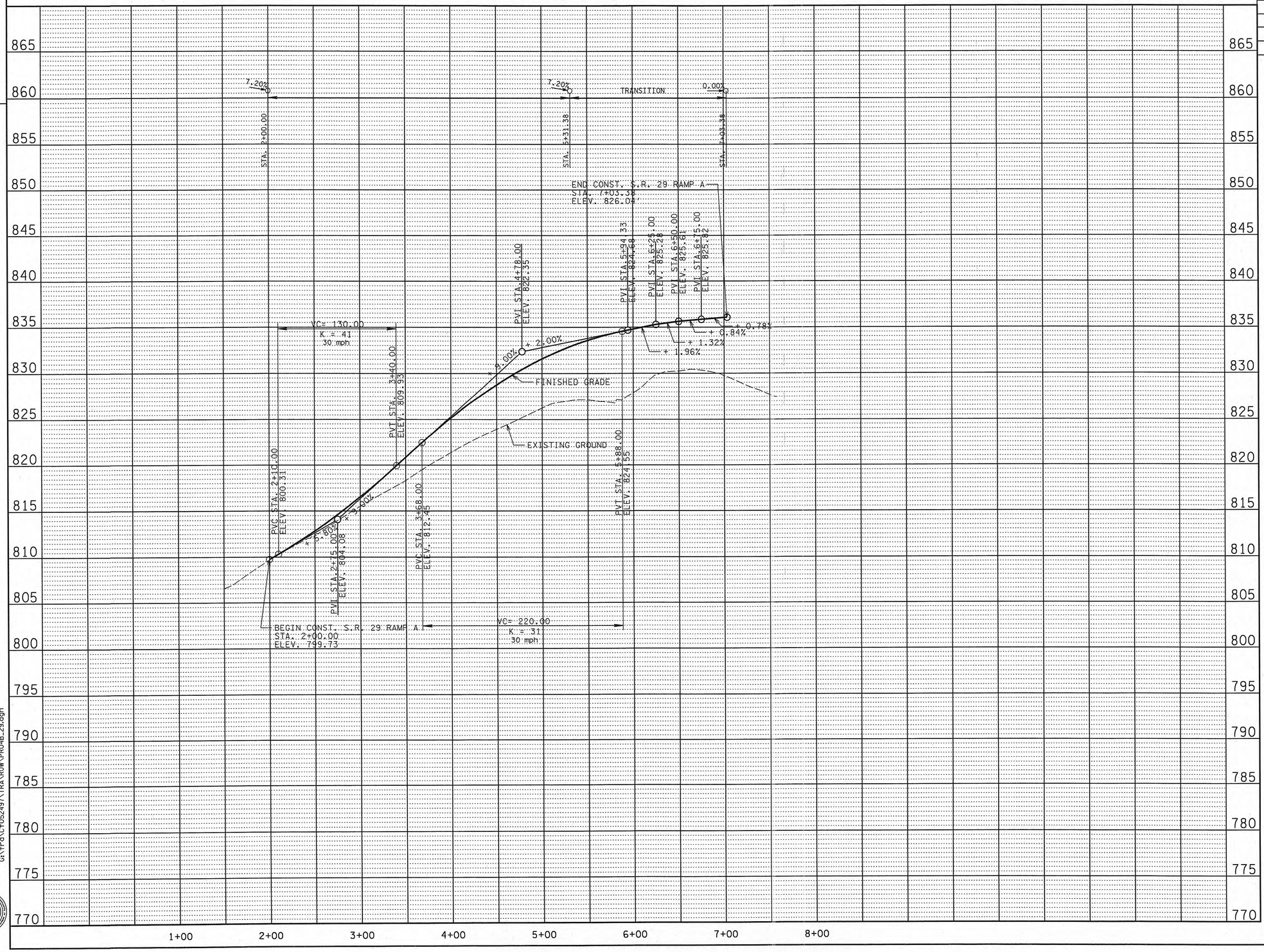
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	4B
R.O.W.	2009	HPP-NH-29(35)	



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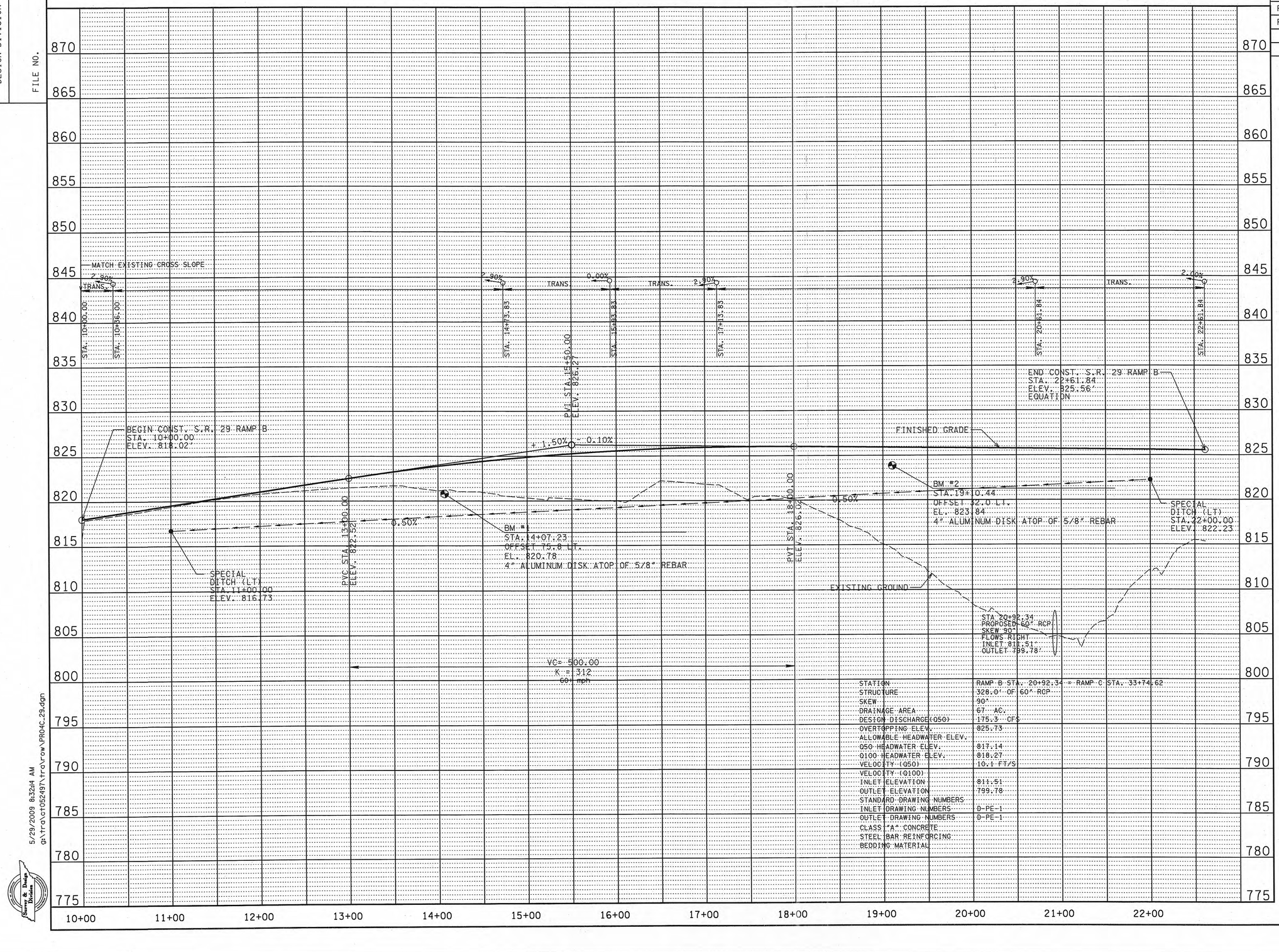
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

S.R. 29 RAMP A
STA. 2+00.00 TO STA. 7+03.38
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	4C
R.O.W.	2009	HPP-NH-29(35)	



STATION	RAMP B STA. 20+92.34 = RAMP C STA. 33+74.62
STRUCTURE	328.0' OF 60" RCP
SKEW	90°
DRAINAGE AREA	67 AC.
DESIGN DISCHARGE(Q50)	175.3 CFS
OVERTOPPING ELEV.	825.73
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	817.14
Q100 HEADWATER ELEV.	818.27
VELOCITY (Q50)	10.1 FT/S
VELOCITY (Q100)	
INLET ELEVATION	811.51
OUTLET ELEVATION	799.78
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-1
OUTLET DRAWING NUMBERS	D-PE-1
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

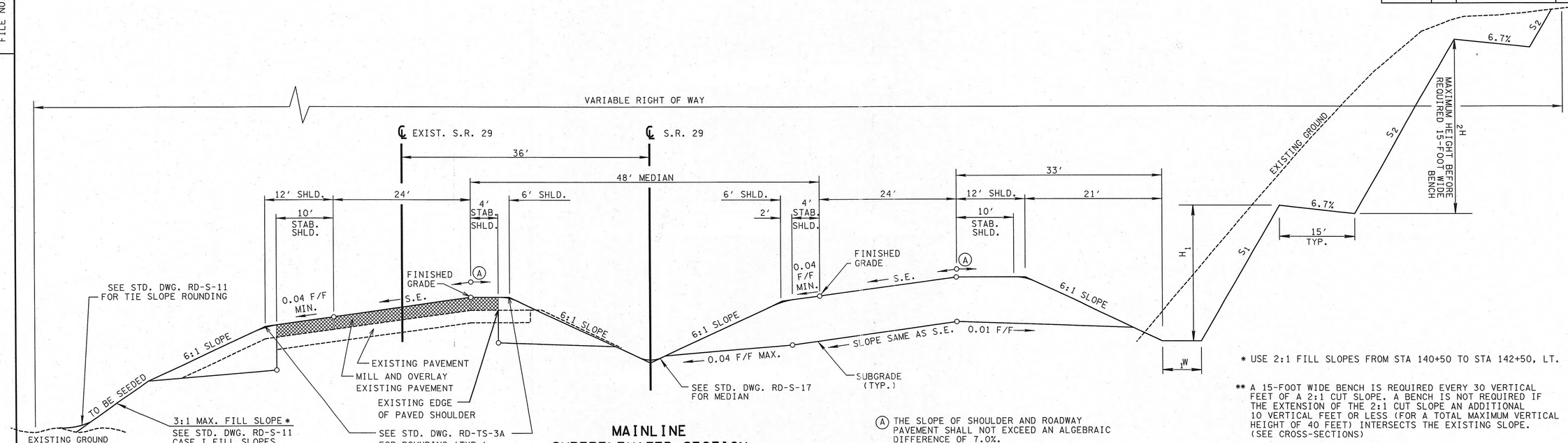
S.R. 29 RAMP B

STA. 10+00 TO STA. 22+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2D
R.O.W.	2009	HPP-NH-29(35)	



MAINLINE SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

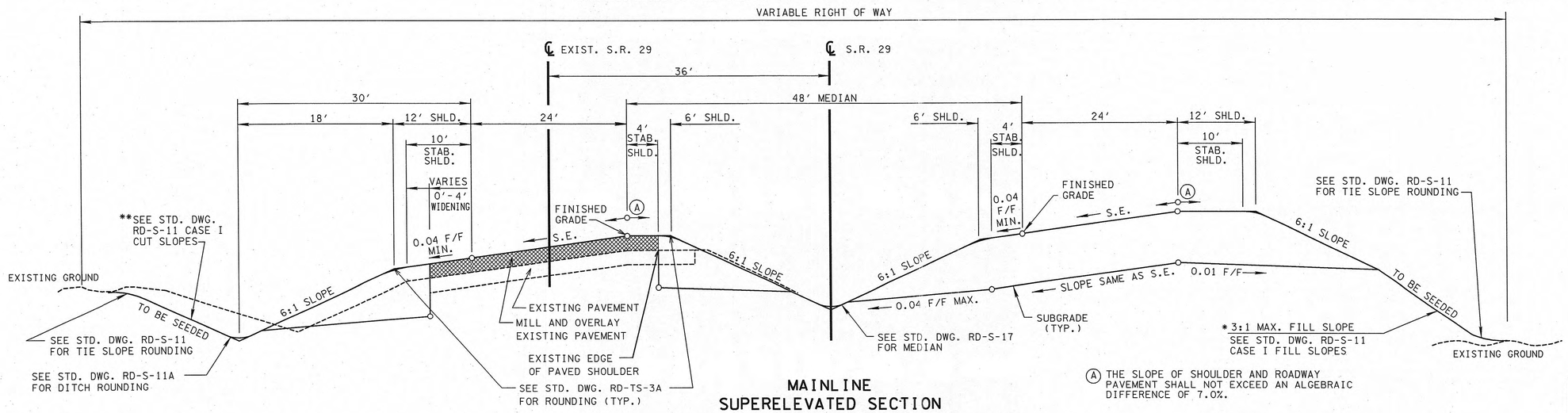
STA. 136+67.40 TO STA. 140+50
STA. 168+22.32 TO STA. 172+50

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.

* USE 2:1 FILL SLOPES FROM STA 140+50 TO STA 142+50, LT.

** A 15-FOOT WIDE BENCH IS REQUIRED EVERY 30 VERTICAL FEET OF A 2:1 CUT SLOPE. A BENCH IS NOT REQUIRED IF THE EXTENSION OF THE 2:1 CUT SLOPE AN ADDITIONAL 10 VERTICAL FEET OR LESS (FOR A TOTAL MAXIMUM VERTICAL HEIGHT OF 40 FEET) INTERSECTS THE EXISTING SLOPE. (SEE CROSS-SECTIONS)

MAINLINE LOCATION	H_1	S_1	H_2	S_2	W_1
STA. 136+67.40 TO STA. 138+50, RT.	20′	0.25:1	30′	2:1	0′
STA. 168+22.32 TO STA. 172+50, RT.	30′	0.75:1	50′	0.75:1	0′



MAINLINE SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 140+50 TO STA. 142+51.50 (BEGIN BRIDGE)
(END BRIDGE) STA. 144+37.50 TO STA. 155+20.64
STA. 172+50 TO STA. 173+09.57 (BEGIN BRIDGE)
(END BRIDGE) STA. 180+29.01 TO STA. 184+40.92
STA. 213+00.59 TO STA. 228+97.26
STA. 241+17.75 TO STA. 253+18.72

Ⓐ THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

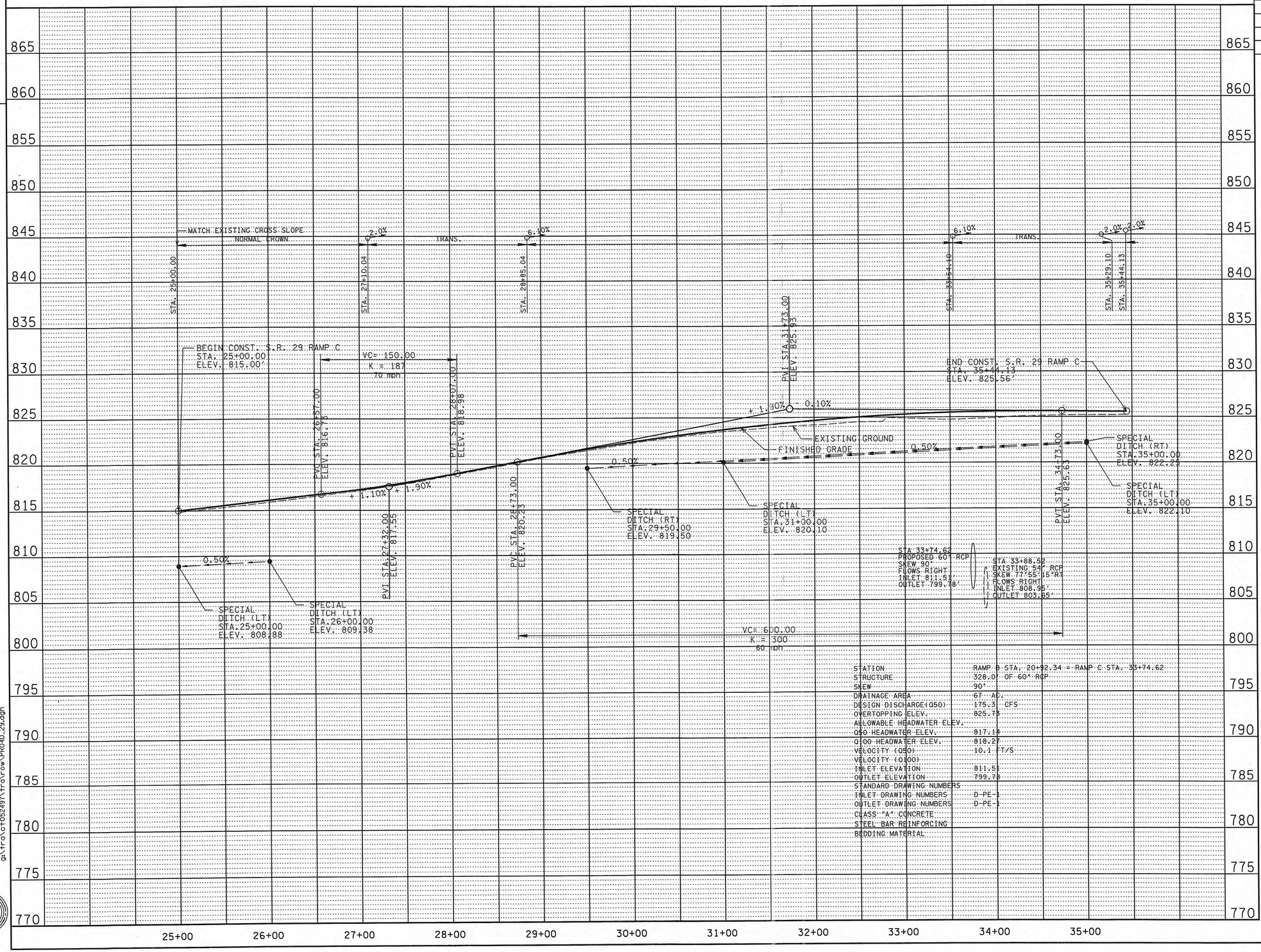
TYPICAL SECTIONS

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	4D
R.O.W.	2009	HPP-NH-29(35)	



STATION	RAMP 9 STA. 20+92.34 = RAMP C STA. 33+74.62
STRUCTURE	328.0' OF 60" RCP
SKEW	90°
DRAINAGE AREA	67 AC.
DESIGN DISCHARGE(Q50)	175.3 CFS
OVERTOPPING ELEV.	825.75
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	817.14
Q100 HEADWATER ELEV.	818.27
VELOCITY (Q50)	10.1 FT/S
VELOCITY (Q100)	
INLET ELEVATION	811.51
OUTLET ELEVATION	799.78
STANDARD DRAWING NUMBERS	
INLET DRAWING NUMBERS	D-PE-1
OUTLET DRAWING NUMBERS	D-PE-1
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

S.R. 29 RAMP C

STA. 25+00 TO STA. 35+44.13

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	5
R.O.W.	2009	HPP-NH-29(35)	

PASTURE
(51)
LAWERENCE AND JUDY GRIFFITH
HELEN POLSTON BROOKS
105+00
(55)
MARY COFER POLSTON
110+00
PASTURE
NOTE: 2:1 BACKSLOPE REQUIRED TO PROTECT ADJACENT PROPERTIES OF ARCHAEOLOGICAL SIGNIFICANCE STA. 104+00 TO STA 110+50 (LT)
1-S-F GAR
1-S-F BLDG
1-S-F RES
SHED
1-S-F BARN
1-S-B RES
1-S-F BN
1-S-F W/BSMT RES
BBQ PIT
8.0' ASP DR
10.0' ASP DR
238.11' N68°13'26"E
333.69' N23°44'57"W
290.61' N29°57'33"W
94.98' S84°24'16"E
100+95.37 153.17 (LT)
102+96.02 143.76 (LT)
105+05.29 134.50 (LT)
105+67.74 134.50 (LT)
106+79.92 134.50 (LT)
106+79.78 119.82 (LT)
110+86.65 120.29 (LT)
STA.107+63.96 142.00' LT
STA.108+05.58 142.05' LT
STA.108+05.61 119.97' LT
STA.107+63.98 119.92' LT
PERMANENT DRAINAGE EASEMENT
200.87' N59°15'02"E
209.48' N59°05'56"E
112.18' N56°33'52"E
62.45' N56°33'52"E
41.69' S32°54'12"E
22.08 N33°30'58"W
41.63' N56°29'55"E
22.08 S33°30'05"E
406.87' N56°39'55"E
INV=824.18
INV=818.27
INV=818.98
INV=818.21
INV=815.51
INV=811.81
INV=811.68
INV=805.88
INV. EL. IN 819.04
INV. EL. IN 815.44
INV. EL. OUT 805.78
PRESENT R.O.W.
PROP. R.O.W.
GRASS
CUT
FILL
GATE
DOG H
CP 3-ROSR29-3
CP 4-ROSR29-4
CP 5-R
18" CMP
18" RCP
24" RCP
WMC-3
WMC-4
WMC-5
℄ S.R. 29
N 56° 33' 54" E
40.0' ASP
SEE SHEET NO. 4
SEE SHEET NO. 6
STA. 100+50
STA. 112+50
MATCH LINE
100+79.36 35.36 (RT)
263.77' N56°45'28"E
162.65' N56°45'28"E
105+05.78 36.79 (RT)
103+43.13 36.24 (RT)
103+12.92 161.73' RT
INV=808.82
INV=808.71
30" RCP
129.08'
492.96' N19°53'55"W
333.78' S 54° 19' 11" W
PROPOSED R.O.W.
INV. EL. OUT 800.04
INV. EL. OUT 799.93
1163.37' S 54° 19' 11" W
973.08' N56°25'13"E
INV. EL. OUT 801.29
BARRO PIT
63.00' N03°36'05"E
1315.00' S43°06'05"W
1321.31' N43°14'04"E
978.22' S41°18'26"W
PRESENT R.R. R.O.W.
1-BR-RES
BARN
SHED
(1) HELLEN JOYCE POLSTON
(2) EARNEST A. GOUGE & JANA H. GOUGE
E 2414500 N 600750
E 2414250 N 600500
E 2414750 N 600750
E 2415000 N 601000
E 2414500 N 600500
E 2414750 N 600500
E 2414500 N 600250
E 2414750 N 600250
E 2414500 N 600000
E 2414750 N 600000
E 2415250 N 600500
E 2414750 N 601250

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 100+50 TO STA. 112+50

SCALE: 1"= 50'

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Survey & Design Bureau

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	5A
R.O.W.	2009	HPP-NH-29(35)	

105+00

110+00

NOTE: 2:1 BACKSLOPE REQUIRED TO PROTECT ADJACENT PROPERTIES OF ARCHAEOLOGICAL SIGNIFICANCE STA. 104+00 TO STA 110+50 (LT)

STA. 38+52.52
10.0' PVI. DR.

LIMIT OF CONST.
STA. 11+13.00

STA. 105+29.17
10.0' PVI. DR.

LIMIT OF CONST.
STA. 11+30.00

STA. 106+86.25
10.0' PVT. DR.

LIMIT OF CONST.
STA. 11+30.00

LIMIT OF CONST.
STA. 11+30.00

STA. 110+32.49
10.0' PVT. DR.

LIMIT OF CONST.
STA. 11+20.00

STA. 112+00.00
10.0' PVT. DR.

STA. 112+17.00

INV. EL.
OUT 805.78

STA. 111+57.00

STA. 100+50

SEE SHEET NO. 4A

MATCH LINE

30'R.

SIGHT TRIANGLE

INV. EL.
IN 819.04

STA. 105+40.18
MEDIAN DRAIN
INV. EL. 817.63
GR. EL. 821.88

1
#38

R 45'

R 15'

R 15'

R 15'

R 15'

INV. EL.
IN 815.44

STA. 107+86.35
MEDIAN DRAIN
GR. EL. 818.33
INV. EL. IN 809.67
OUT 809.25

2
#38

R 15'

R 15'

18" RCP
(TO BE REMOVED)

18" RCP
(TO BE REMOVED)

18" RCP
(TO BE REMOVED)

24'R.

24'R.

24'R.

24'R.

18" RCP

18" RCP

℄ S.R. 29

N 56° 33' 54" E

℄ S.R. 29

10'R.

150'R.

24.52'

24'

24'

24'

24'

24'

24'

24'

24'

36'

TYPE
INLINE

TYPE
INLINE

60:1 TAPER

STA. 102+95.15
MEDIAN DRAIN
GR. EL. 822.84
INV. EL. IN 812.67
OUT 812.22

1A
#38

30" RCP

INV. EL.
OUT 800.04

R 15'

R 50'

R 15'

TYPE 13

STA. 105+86.00

STA. 106+46.00

24" RCP

INV. EL.
OUT 799.93

TYPE 13

INV. EL. 808.67

3
EW

STA 111+85.27
MANHOLE
GR. EL. 810.94
INV.ELE.
IN 803.88
IN 805.42
OUT 803.73

4
MH

24" RCP

INV. EL.
OUT 801.29

BEG. TAPER (RT.)
STA. 104+08.16

STA. 105+03.16
10.0' FIELD ENT.

LIMIT OF CONST.
STA. 12+15.00

END TAPER (RT.)
STA. 111+28.16

STA. 112+50

SEE SHEET NO. 6A

MATCH LINE

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 100+50 TO STA. 112+50

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	5B
R.O.W.	2009	HPP-NH-29(35)	

NORMAL CROWN

EXC. (UNCL.) COMMON 2926397 C.Y. (INCL. 99,778 C.Y. TOP SOIL FROM EXC. AREAS & 42,762 C.Y. FROM EMBANKMENT AREA; 112,167 C.Y. FROM SIDEROADS AND RAMPS; 2,428 C.Y. FROM PRIVATE DRIVES)

EMB. 492705 C.Y. (INCLUDES 30,431 C.Y. SIDEROADS & RAMPS; 7,696 C.Y. FROM PRIVATE DRIVES; 99,778 C.Y TO REPLACE STRIPPED TOPSOIL)

SHR. 15 %
SW. 15 %

STA 104+03.65
LOW WIRE ELEV= 846.01'
2 - POWER

STA 104+97.85
LOW WIRE ELEV= 844.73'
4 - POWER
1 - CATV

STA 105+27.58
LOW WIRE ELEV= 844.10'
1 - TELEPHONE

STA 104+63.75
LOW WIRE ELEV= 840.96'
4 - POWER
1 - TELEPHONE
1 - CATV

STA. 100+45.00 S.R. 29
STA. 40+06.00 FREELS ROAD
ELEV. 828.00

BM #3
STA.100+63.51
OFFSET 63.4 LT.
EL. 824.34
4" ALUMINUM DISK ATOP OF 5/8" REBAR

BM #4
STA.105+08.14
OFFSET 6.4 LT.
EL. 823.51
4" ALUMINUM DISK ATOP OF ¾" REBAR

PVC STA. 106+60.00
ELEV 825.36

FINISHED GRADE

0.10%

2.75%

BM #5
STA.112+12.44
OFFSET 58.9 LT.
EL. 809.88
4" ALUMINUM DISK ATOP OF 5/8" REBAR

BEGIN CONST. S.R. 29
STA. 100+00.00
ELEV. 826.04

EXISTING GROUND

STA. 105+49.81
8" WATER LINE

EX. 18" RCP

EX. 18" RCP

EX. 18" RCP

PVC STA. 103+60.00 ELEV. 825.68

PVT STA. 109+60.00 ELEV. 817.3

STA 102+95.15
205.2' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (2)
DWG. NO. D-PE-6B(1) (LT), D-PE-3B(1) (RT)
D.A. = 5.7 AC.
Q50 = 18.2 CFS
Q100=19.4 CFS
WS EL. (50) = 820.94
WS EL. (100)=821.08
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

STA 107+86.35
179.0' - 24" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (2)
DWG. NO. D-PE-6B(1) (LT), D-PE-3B(1) (RT)
D.A. = 5.7 AC.
Q50 = 12.5 CFS
Q100=13.7 CFS
WS EL. (50) = 817.24
WS EL. (100)=817.36
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

VC= 600.00
K = 226
60 mph

STA 111+85.27
145.9' - 24" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (2)
DWG. NO. D-PE-6B(1) (LT), D-PE-4B(1) (RT)
D.A. = 5.1 AC.
Q50 = 8.6 CFS
Q100=9.2 CFS
WS EL. (50) = 807.28
WS EL. (100)=807.39
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

865 860 855 850 845 840 835 830 825 820 815 810 805 800 795 790 785 780 775 770

100+00 101+00 102+00 103+00 104+00 105+00 106+00 107+00 108+00 109+00 110+00 111+00 112+00

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 100+00 TO STA. 112+50

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	6
R.O.W.	2009	HPP-NH-29(35)	

MARY COFER POLSTON
PASTURE
115+00
1-S-B RES
JOHN E. AND JACKIE M. BROWN
BETTY PROPES
120+00
PERMANENT DRAINAGE EASEMENT
JOHN E. AND JACKIE M. BROWN
PASTURE
EXTEND EXIST. 30" RCP 18' LT.
287.91' N56°40'20"E
129.77' N56°24'20"E
N 601750
E 2415500
E 2415750
E 2416000
N 601500
N 601250
114+84.05 120.94 (LT)
114+83.77 115.67 (LT)
311.42' N31°43'18"W
316.70' N37°26'00"W
331.78' N44°13'22"W
72.00 N 56° 29' 09" E
STA. 120+39.70 140.99' LT
25.00 S 33° 26' 19" E
STA. 120+39.70 115.99' LT
120+98.50 116.07' (LT)
STA. 119+67.70 140.89' LT
25.44 N 44° 13' 21" W
119+72.46 115.90 (LT)
118+03.35 115.75 (LT)
169.11'
126.04'
127.34
PRES. AND PROP. R.O.W.
EXTEND EXIST. BOX CULV. 12' LT.
DOCK
BROWN'S PRODUCTS
1-S-F RES
1-S-BK BUS
CONC SLAB
GRAVEL DR
15.5' GRAVEL DR
19.0' GRAVEL DR
10.0' GRAVEL DR
SCARIFY, TOPSOIL, AND SEED
SHED
397.40'
PRES. AND PROP. R.O.W.
N56°28'19"E
319.58'
N56°32'58"E
N56°30'54"E
N56°28'14"E
R 5.28
S30°24'50"E
CUT
FILL
GRAVEL
ASP
INV. EL. IN 789.29
INV=797.54
INV=796.33
INV=788.92
INV=781.39
INV. EL. IN 780.22
INV=778.66
INV. EL. IN 776.51
INV=776.16
24" CMP
CP 6-NOSR29-6
WWC-7
24" RCP
30" RCP
18" RCP
SEE SHEET NO. 5
SEE SHEET NO. 7
STA. 112+50
STA. 124+00
MATCH LINE
N 601280
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	6A
R.O.W.	2009	HPP-NH-29(35)	

115+00

120+00

LIMIT OF CONST.
STA. 11+21.00

STA. 114+67.90
10.0' PVT. DR.

EXTEND EXIST.
BOX CULV.
12' LT.

STA. 116+06.23
40.0' BUS. ENT.

LIMIT OF CONST.
STA. 11+15.68

STA. 116+53.00

STA. 117+07.52

STA. 117+87.00
20.0' PVT. ENT.

LIMIT OF CONST.
STA. 11+16.00

STA 119+94.63
OFFSET 125.84'
HEADWALL
INV. EL. 782.25

4C
EW

24" RCP
(TO REMAIN)
REMOVE 29 L.F.
OF EXIST. 24" RCP

STA. 120+63.05
10.0' FIELD ENT.

LIMIT OF CONST.
STA. 11+20.00

EXTEND EXIST.
30" RCP
18' LT.

INV. IN EL. 773.80

6
#3JB

INV. EL.
IN 776.51

INV. EL.
IN 789.25

INV. EL.
IN 780.22

STA. 120+24.34
MEDIAN DRAIN
GR. EL. 787.99
INV. EL. IN 778.06
OUT 777.86

4B
#38

STA 128+25.00
MEDIAN DRAIN
GR. EL. 785.60
INV. EL. 780.60

5
#38

STA. 122+99.00

SEE SHEET NO. 5A

SEE SHEET NO. 7A

STA. 112+50

STA. 124+00

R 15'
R 25'
24'R.
8'R.
10'R.
150'R.

5'X6' BOX CULVERT
(TO BE REMAIN)

24" RCP
(TO REMAIN)

30" RCP
(TO REMAIN)

18" RCP

℄ S.R. 29

℄ S. R. 29

N 56° 33' 54" E.

WWC-6
WWC-7
WWC-8
WWC-9

36'
12'
24'

30.00'24.52'

STR-1

SIGHT TRIANGLE

5'x6' CONC
BOX CULVERT

INV. EL.
OUT 783.89

4' FLAT BOTTOM
CHANNEL
STR-1 CHANNEL
RELOCATION

INV. EL.
OUT 776.22

TYPE 38

TYPE 2

24" RCP

30" RCP

STA. 123+59.00

INV. EL.
OUT 769.17

4A
#38

STA. 116+05.28
MEDIAN DRAIN
GR. EL. 796.15
INV. EL. IN 786.73
OUT 786.59

BEGIN TAPER (RT.)
STA. 113+67.66

END TAPER (RT.)
STA. 114+87.66

STA. 115+58.00
10.0' PVT. DR.

LIMIT OF CONST.
STA. 1+05.00

LIMIT OF CONST.
STA. 11+80.00

MATCH LINE

MATCH LINE

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 112+50 TO STA. 124+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	6B
R.O.W.	2009	HPP-NH-29(35)	

840 835 830 825 820 815 810 805 800 795 790 785 780 775 770 765 760 755 750 745

112+00 113+00 114+00 115+00 116+00 117+00 118+00 119+00 120+00 121+00 122+00 123+00 124+00

NORMAL CROWN

VC= 450.00
K = 225
60 mph

STA 114+82.67
LOW WIRE ELEV= 816.78'
2 - POWER

PVC STA. 116+50.00 ELEV. 798.04

PVT STA. 121+05.00 ELEV. 790.14

FINISHED GRADE

EXISTING GROUND

SPECIAL
DITCH (LT)
STA 116+00.00
ELEV. 793.32

0.50%

SPECIAL
DITCH (LT)
STA.116+50.00
ELEV. 793.09

EX. 5'x 6' BOX CULVERT

T-SOD (RT)
STA.117+00.00
ELEV. 783.68

BM #6
STA.118+08.06
OFFSET 58.4 LT.
EL. 793.65
4" ALUMINUM DISK ATOP OF 5/8" REBAR

2.75%

0.75%

PVT STA. 118+80.00
ELEV. 791.85

STREAM 1 CHANNEL RELOCATION
2.25%

EX. 24" RCP

STA 122+79.65
PROPOSED 18" RCP
TOP OF GRATE 785.60'
OUTLET 780.60
NO. 38 CATCH BASIN

EX. 30" RCP

T-SOD (RT)
STA.123+65.66
ELEV. 768.44

STATION	116+05.28
STRUCTURE	5' x 6' x 112' R.C.B.C.
SKEW	60° (RT.)
DRAINAGE AREA	173.4 AC.
DESIGN DISCHARGE(Q50)	180.2 CFS
DESIGN DISCHARGE (Q100)	215.4 CFS
OVERTOPPING ELEV.	798.19
ALLOWABLE HEADWATER ELEV.	795.69
Q50 HEADWATER ELEV.	794.48
Q100 HEADWATER ELEV.	795.20
VELOCITY (Q50)	10.01 FT/S
VELOCITY (Q100)	10.77 FT/S
INLET ELEVATION	785.25
OUTLET ELEVATION	783.89
STANDARD DRAWING NUMBERS	C-4-94
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

STA 120+24.34
113.5' - 24" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLS (2)
DWG. NO. D-PE-6B(17) (LT), D-PE-3B(17) (RT)
D.A. = 1.1 AC.
Q50 = 10.2 CFS
Q100=11.1 CFS
WS EL. (50) = 780.22
WS EL. (100)=776.22
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

STA 123+34.00
117.5' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLS (2)
DWG. NO. D-PE-4B(1) (LT), D-PE-4 (RT)
D.A. = 5.7 AC.
Q50 = 8.3 CFS
Q100=9.0 CFS
WS EL. (50) = 777.75
WS EL. (100)=769.17
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 112+50 TO STA. 124+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	7
R.O.W.	2009	HPP-NH-29(35)	

ROCK BRIDGE ROAD (LT.)
PI 38+24.96
N 601,966.3199
E 2,416,555.3430
Δ 64°17'24"LT
D 50°00'00"
R 114.59
T 72.01
Lc 128.58
SE 0.080 FT/FT
DES. SPEED 20 MPH

ROCK BRIDGE ROAD (RT.)
PI 41+13.82
N 601,712.3739
E 2,416,723.0123
Δ 44°31'28"RT
D 50°00'00"
R 114.59
T 46.91
Lc 89.05
SE 0.080 FT/FT
DES. SPEED 20 MPH

ROCK BRIDGE ROAD (RT.)
PI 42+48.70
N 601,575.3286
E 2,416,696.1513
Δ 24°20'24"LT
D 20°00'00"
R 286.48
T 61.78
Lc 121.70
SE 0.057 FT/FT
DES. SPEED 20 MPH

TEDDER LANE
PI 3+67.01
N 601,842.8109
E 2,417,183.7549
Δ 44°24'28"RT
D 22°00'00"
R 260.44
T 106.30
Lc 201.85
SE 0.080 FT/FT
DES. SPEED 30 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 124+00 TO STA. 136+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	7A
R.O.W.	2009	HPP-NH-29(35)	

125+00

130+00

135+00

ROCK BRIDGE ROAD (LT.)
PI 38+24.96
N 601,966.3199
E 2,416,555.3430
Δ 64 °17'24"LT
D 50°00'00"
R 114.59
T 72.01
Lc 128.58
SE 0.080 FT/FT
DES. SPEED 20 MPH

BEGIN TAPER (LT.) STA. 37+31.70

END TAPER (RT.) STA. 36+37.00

LIMIT OF CONST.
ROCK BRIDGE ROAD
STA. 36+57.00
N 602110.5049
E 2416641.4823

ROCK BRIDGE ROAD

6.06'

13.64'

POT STA. 129+00.00 S.R. 29 =
POT STA. 40+00.00 ROCK BRIDGE ROAD
N 601807.3574
E 2416660.2989

STA. 39+11.00
98' @ 18" RCP
SKEW 90°

S 30° 54' 18" W

PI 38+24.96

37+52.95

TYPE 21

ROCK BRIDGE ROAD

PT 38+81.53

TYPE 13

TYPE INLINE
INV. EL.
OUT 768.88

30'R.

TYPE INLINE
INV. EL.
IN 771.99

TYPE 2

INV. EL.
OUT 758.99

STR-1

BEG. TAPER (LT.)
STA. 130+95.00

END. TAPER (LT.)
STA. 132+15.00

INV. EL.
OUT 759.92

STA 128+25.00
MEDIAN DRAIN
GR. EL. 779.54
INV. EL. 775.29

7
#38

TYPE 13

TYPE 2

SIGHT TRIANGLE

29.65'

10'x6' BOX CULVERT
(TO REMAIN)

8'R.

150'R.

℄ S. R. 29

N 56° 33' 54" E

℄ S.R. 29

18" RCP
(TO BE REMOVED)

WWC-11

30" RCP

SEE SHEET NO. 8A

STA. 136+00

MATCH LINE

SEE SHEET NO. 6A

STA. 124+00

TYPE INLINE

SIGHT TRIANGLE

4' FLAT BOTTOM
CHANNEL

TYPE 2

PC 40+66.91

PT 41+52.19

30'R.

TYPE 13

INV. EL.
IN 762.35

STR-1

STR-1 CHANNEL
RELOCATION

INV. EL. 763.81

8
BOX

BEG. TAPER (RT.)
STA. 123+85.00

END TAPER (RT.)
STA. 127+05.00

WWC-10

SPG-1

10'x6' CONC
BOX CULVERT

EXTEND EXIST. BOX CULV.
102' RT.

STA. 134+59.89
MEDIAN DRAIN
GR. EL. 769.03
INV. EL. IN 760.90
OUT 760.80

7A
#38

GR. EL. 766.63
INV. EL. 761.88

BENCH FLOW LINE

V-SOD

BEG. TAPER (RT.)
STA. 135+50.00

INV. EL.
IN 761.05

INV. EL.
OUT 761.42

R 15'

R 25'

LIMIT OF CONST.
STA. 11+02.00

STA. 41+32.41
10.0' PVT. DR.

BENCH FLOW LINE

TYPE 2

N 56°33'54"E

PT 4+62.56

12'

OLD COALFIELD ROAD

PT 42+48.70

ROCK BRIDGE ROAD

PC 41+86.92

8'x6' CONC
BOX CULVERT

END TRANSITION LT. & RT.
STA 2+60.70

TYPE 13

PC 2+60.70

N 12° 00' 26" E

PT STA. 42+75.00

BEGIN TRANSITION LT. & RT.
STA 1+50.00

6.5'

LIMIT OF CONST.
ROCK BRIDGE ROAD
STA. 42+75.00
N 601548.2937
E 2416704.5419

ROCK BRIDGE ROAD (RT.)
PI 41+13.82
N 601,712.3739
E 2,416,723.0123
Δ 44 °31'28"RT
D 50°00'00"
R 114.59
T 46.91
Lc 89.05
SE 0.080 FT/FT
DES. SPEED 20 MPH

ROCK BRIDGE ROAD (RT.)
PI 42+48.70
N 601,575.3286
E 2,416,696.1513
Δ 24 °20'24"LT
D 20°00'00"
R 286.48
T 61.78
Lc 121.70
SE 0.057 FT/FT
DES. SPEED 20 MPH

BEGIN CONST.
TEDDER LANE
STA. 1+50.00
N 601630.4721
E 2417138.0550

TEDDER LANE

TEDDER LANE
PI 3+67.01
N 601,842.8109
E 2,417,183.7549
Δ 44 °24'28"RT
D 22°00'00"
R 260.44
T 106.30
Lc 201.85
SE 0.080 FT/FT
DES. SPEED 30 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 124+00 TO STA. 136+00

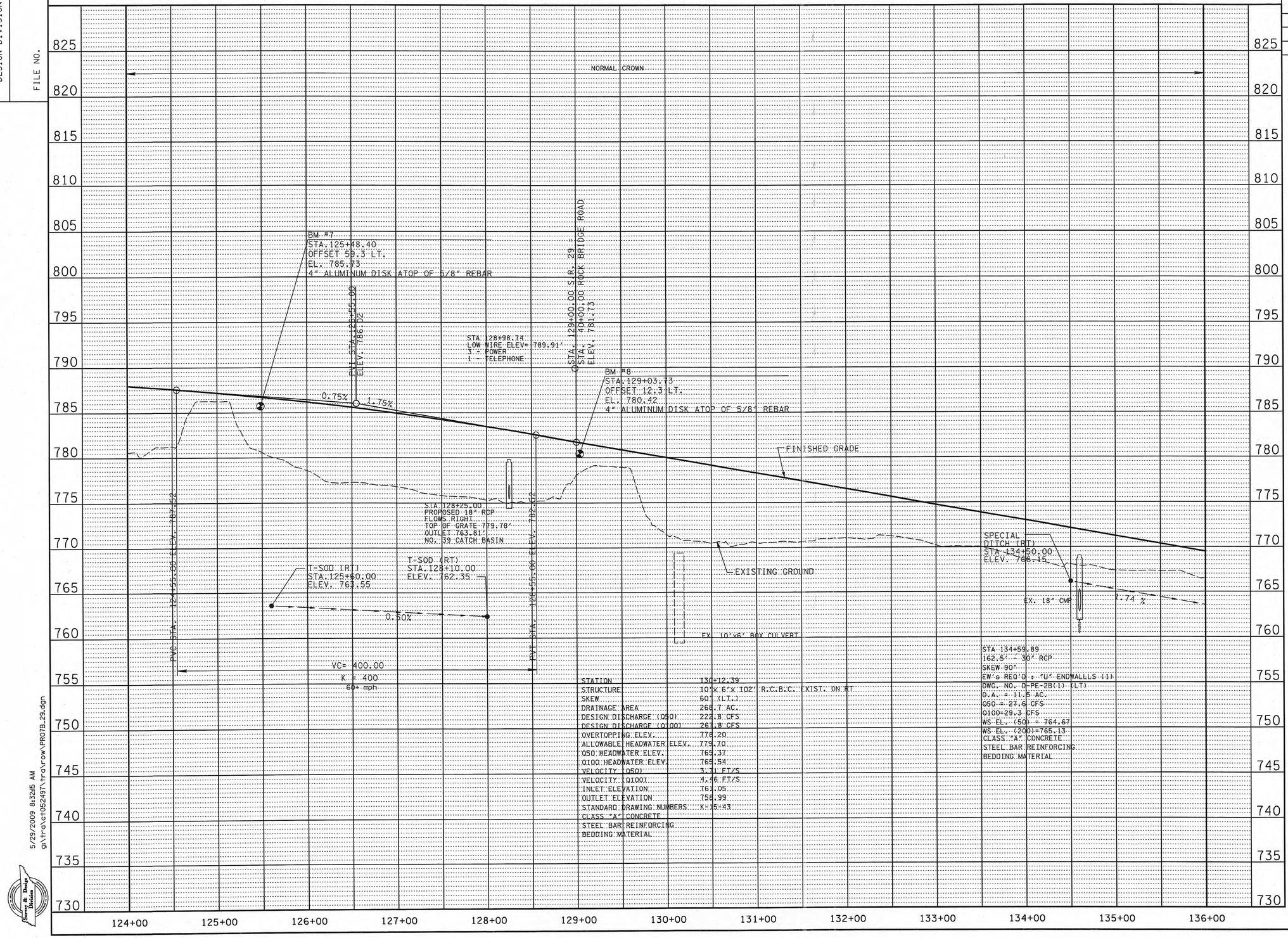
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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	7B
R.O.W.	2009	HPP-NH-29(35)	



STATION	130+12.39
STRUCTURE	10'x 6'x 102' R.C.B.C. EXIST. ON RT
SKEW	60° (LT.)
DRAINAGE AREA	268.7 AC.
DESIGN DISCHARGE (Q50)	222.8 CFS
DESIGN DISCHARGE (Q100)	267.8 CFS
OVERTOPPING ELEV.	776.20
ALLOWABLE HEADWATER ELEV.	779.70
Q50 HEADWATER ELEV.	765.37
Q100 HEADWATER ELEV.	765.54
VELOCITY (Q50)	3.71 FT/S
VELOCITY (Q100)	4.46 FT/S
INLET ELEVATION	761.05
OUTLET ELEVATION	756.99
STANDARD DRAWING NUMBERS	K-15-43
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

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Sverdrup & Parker Nashville

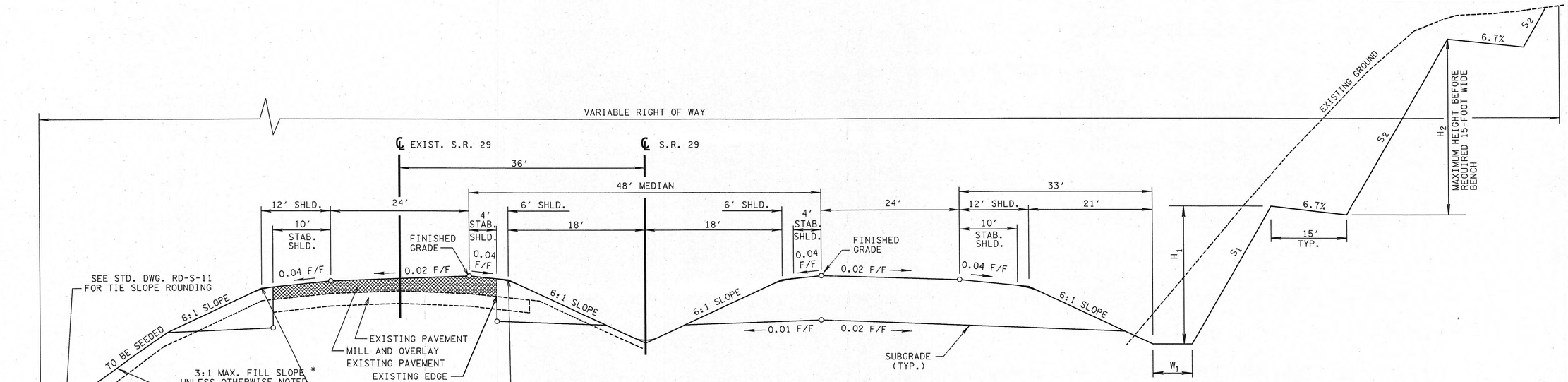
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 124+00 TO STA. 136+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2E
R.O.W.	2009	HPP-NH-29(35)	



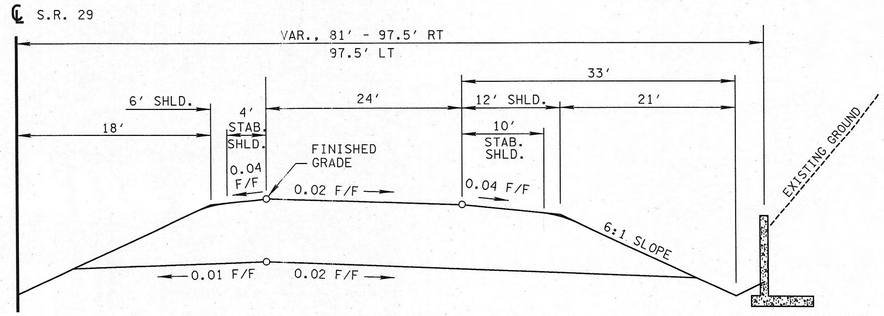
MAINLINE TANGENT SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 132+50 TO STA. 136+67.40
STA. 155+50 TO STA. 168+22.32
STA. 260+00 TO STA. 269+50

MAINLINE LOCATION	H_1	S_1	H_2	S_2	W_1
STA. 134+50 TO STA. 138+50, RT.	20′	0.25:1	30′	2:1	0′
STA. 157+50 TO STA. 168+00, RT.	30′	0.5:1	50′	0.5:1	0′
STA. 168+00 TO STA. 168+22.32, RT.	30′	0.75:1	50′	0.75:1	0′
STA. 261+00 TO STA. 269+50, RT.	50′	1.5:1	50′	1.5:1	6′

*USE 2:1 FILL SLOPE FROM STA. 132+50 TO STA. 134+75, LT.
USE 2:1 TO 1:1 FILL SLOPES FROM STA. 161+50 TO STA. 173+09.57, LT.



MAINLINE TANGENT SECTION

(RETAINING WALL LEFT AND RIGHT)
STA. 155+50 TO STA.157+50 (RT)
STA. 177+00 TO STA. 177+50 (LT)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

Survey & Design Division

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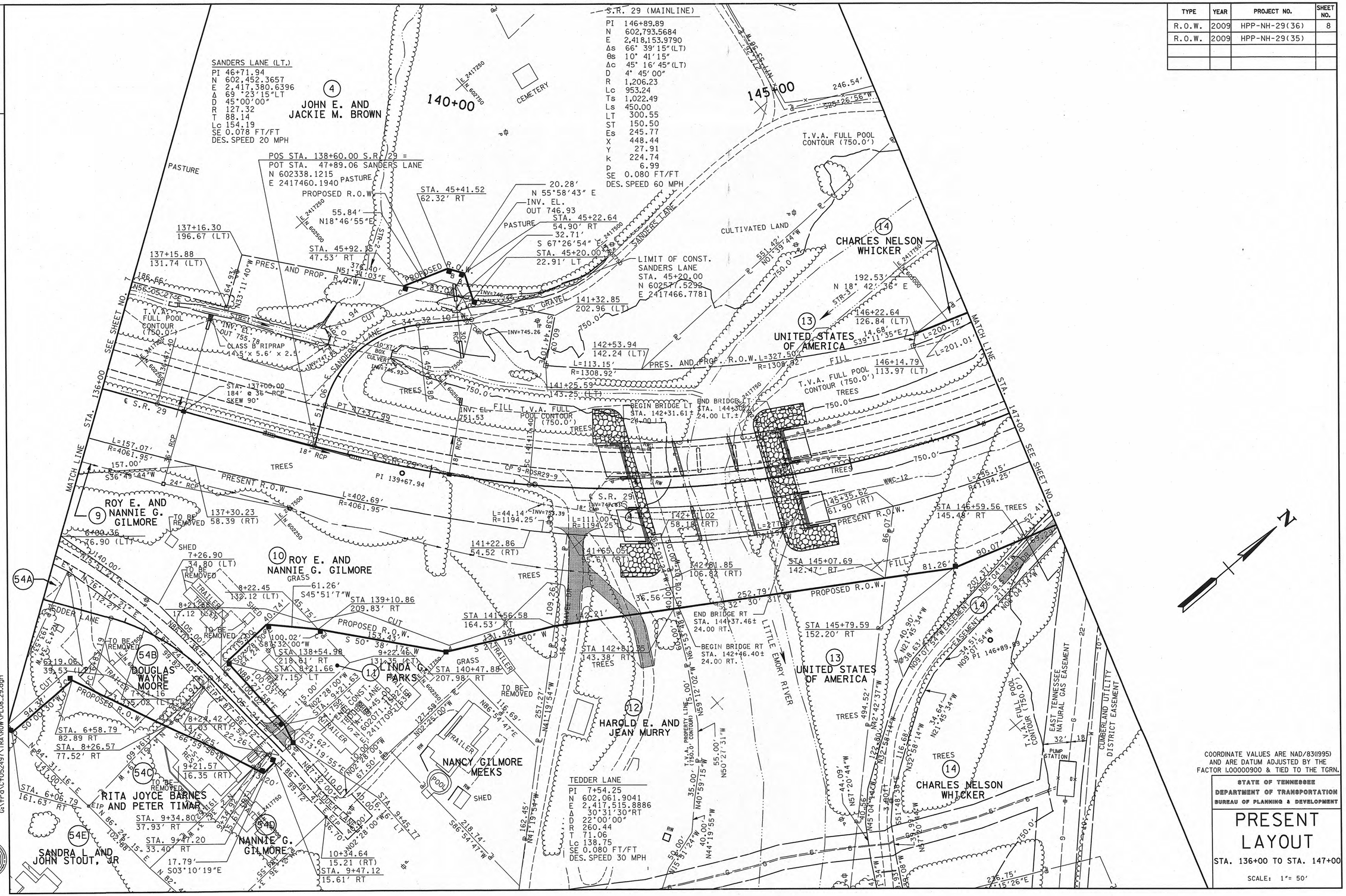
TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	8
R.O.W.	2009	HPP-NH-29(35)	

S.R. 29 (MAINLINE)
PI 146+89.89
N 602,793.5684
E 2,418,153.9790
Δs 66° 39' 15"(LT)
θs 10° 41' 15"
Δc 45° 16' 45"(LT)
D 4° 45' 00"
R 1,206.23
Lc 953.24
Ts 1,022.49
Ls 450.00
LT 300.55
ST 150.50
Es 245.77
X 448.44
Y 27.91
k 224.74
p 6.99
SE 0.080 FT/FT
DES. SPEED 60 MPH

SANDERS LANE (LT.)
PI 46+71.94
N 602,452.3657
E 2,417,380.6396
Δ 69°23'15"LT
D 45°00'00"
R 127.32
T 88.14
Lc 154.19
SE 0.078 FT/FT
DES. SPEED 20 MPH

TEDDER LANE
PI 7+54.25
N 602,061.9041
E 2,417,515.8886
Δ 30°31'30"RT
D 22°00'00"
R 260.44
T 71.06
Lc 138.75
SE 0.080 FT/FT
DES. SPEED 30 MPH



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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 136+00 TO STA. 147+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	8A
R.O.W.	2009	HPP-NH-29(35)	

SANDERS LANE (LT.)
PI 46+71.94
N 602,452.3657
E 2,417,380.6396
Δ 69°23'15"LT
D 45°00'00"
R 127.32
T 88.14
Lc 154.19
SE 0.078 FT/FT
DES. SPEED 20 MPH

S.R. 29 (MAINLINE)
PI 146+89.89
N 602,793.5684
E 2,418,153.9790
Δs 66° 39'15"(LT)
θs 10° 41'15"
Δc 45° 16'45"(LT)
D 4° 45'00"
R 1,206.23
Lc 953.24
Ts 1,022.49
Ls 450.00
LT 300.55
ST 150.50
Es 245.77
X 448.44
Y 27.91
k 224.74
P 6.99
SE 0.080 FT/FT
DES. SPEED 60 MPH

POS STA. 138+60.00 S.R. 29 =
POT STA. 47+89.06 SANDERS LANE
N 602338.1215
E 2417460.1940

140+00

145+00

SEE SHEET NO. 7A

MATCH LINE STA. 136+00

MATCH LINE STA. 147+00

SEE SHEET NO. 9A

STR-2

STR-3

10'×7' BOX CULVERT (TO REMAIN)

INV. EL. IN 747.85

INV. EL. OUT 746.93

BEGIN TAPER (RT. & LT.) STA. 45+83.80

END TAPER (RT. & LT.) STA. 45+20.00

SANDERS LANE

LIMIT OF CONST.
SANDERS LANE
STA. 45+20.00
N 602577.5292
E 2417466.7781

GR. EL. 763.82

8C #38

INV. EL. OUT 755.78

CLASS B RIPRAP 14.5'x 5.6' x 2.5'

PI 46+71.94

12'

54.89'

S 34° 32' 10" W

TYPE 13

30" CMP (TO BE REMOVED)

30' R.

E SANDERS LANE

PC 45+83.80

INV. EL. IN 746.54

9C EW

INV. EL. OUT 746.93

SHOP CURVE

TYPE INLINE

TYPE 2

INV. EL. 751.53

PI 47+37.99

23.97'

EXISTING BRIDGE (TO BE REMOVED)

REMOVE EXISTING GUARDRAIL

SIGHT TRIANGLE

BEGIN BRIDGE LT STA. 142+31.61± 24.00 LT.

END BRIDGE LT STA. 144+30.71 24.00 LT.±

REMOVE EXISTING GUARDRAIL

TYPE 2

TYPE 38

STA. 137+00.00
184' @ 36" RCP
SKEW 90°

℄ S.R. 29

150' R.

8' R.

10' R.

36" RCP

18" RCP

STA. 137+00.00
MEDIAN DRAIN
INV. EL.
IN 756.83
OUT 756.73

INV. EL. 763.00 9A EW

INV. EL. 762.50 9B EW

24" RCP

29.54'

PI 139+67.94

TYPE 38

SC 141+77.40

24'

℄ S.R. 29

TYPE 2

NYYC-12

BENCH FLOW LINE

END TAPER STA. 136+70.00

GR. EL. 762.80
INV. EL. 758.48

8A #38

STA. 140+22.36
MEDIAN DRAIN
OFFSET 25' RT.
GR. EL. 761.96
INV. EL. OUT 756.96

9 #38

GR. EL. 762.00
INV. EL. IN 757.35
OUT 757.25

8B #38

TYPE 2

BEGIN TRANSITION LT. & RT.
STA 8+21.94

BENCH FLOW LINE

R 20'

SHOP CURVE

R 35'

TYPE INLINE
TYPE 13

50' R

END BRIDGE RT
STA. 144+37.46±
24.00 RT.

BEGIN BRIDGE RT
STA. 142+06.40±
24.00 RT.

LITTLE EMORY RIVER

TYPE 2

LIMIT OF CONST.
STA. 12+62.36

STA. 147+43.67
10.0' FIELD ENT.

PI 146+89.89

TEDDER LANE

PC 6+83.19

PT 8+21.94

3'

12'

N 87° 08' 24" E

TYPE 21

R 10'

STA. 9+14.68
28.0' PVT. DR.

STA. 9+30.96
28.0' PVT. DR.

END CONST.
TEDDER LANE
STA. 9+45.00
N 602071.7532
E 2417709.7639

R 10'

4'

END TRANSITION LT. & RT.
STA 9+45.00

TEDDER LANE

LIMIT OF CONST.
STA. 11+60.44

STA. 141+76.15
15.0' PVT. DR.

LIMIT OF CONST.
STA. 12+41.80

STA. 141+77.63
15.0' PVT. DR.

TEDDER LANE
PI 7+54.25
N 602,061.9041
E 2,417,515.8886
Δ 30°31'30"RT
D 22°00'00"
R 260.44
T 71.06
Lc 138.75
SE 0.080 FT/FT
DES. SPEED 30 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

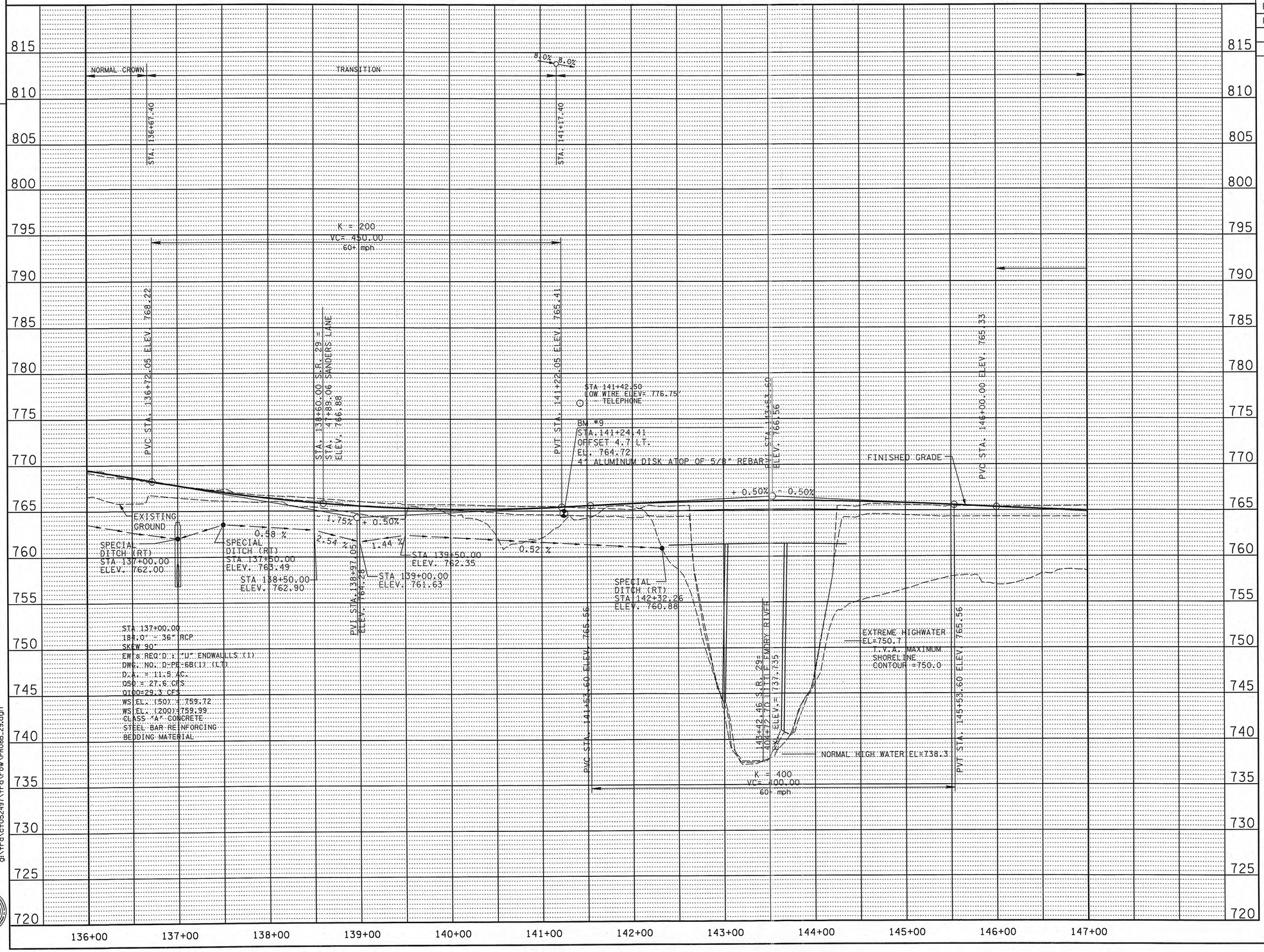
STA. 136+00 TO STA. 147+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	8B
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

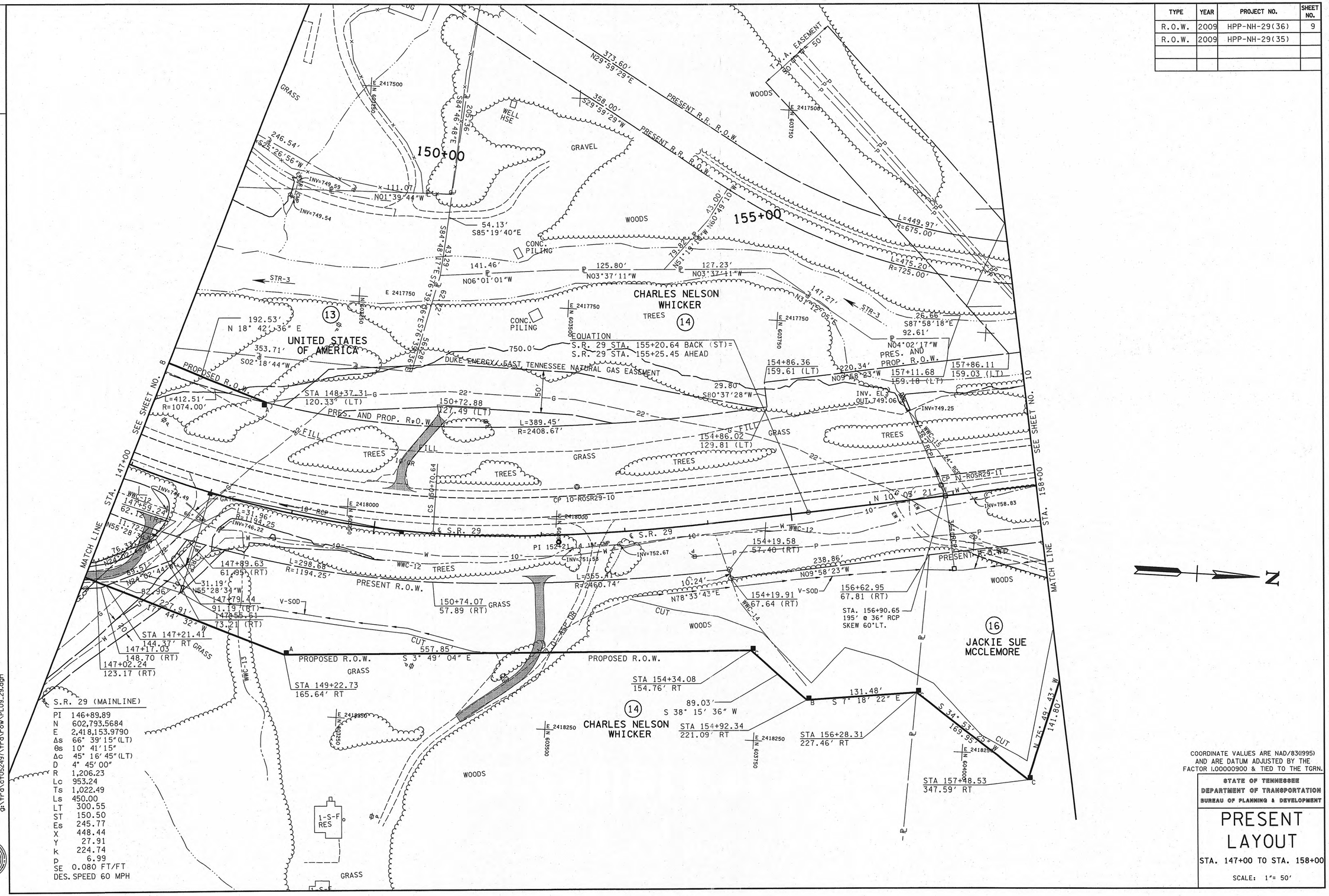
PROFILE

STA. 136+00 TO STA. 147+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	9
R.O.W.	2009	HPP-NH-29(35)	



S.R. 29 (MAINLINE)

PI	146+89.89
N	602,793.5684
E	2,418,153.9790
Δs	66° 39' 15"(LT)
θs	10° 41' 15"
Δc	45° 16' 45"(LT)
D	4° 45' 00"
R	1,206.23
Lc	953.24
Ts	1,022.49
Ls	450.00
LT	300.55
ST	150.50
Es	245.77
X	448.44
Y	27.91
k	224.74
p	6.99
SE	0.080 FT/FT
DES. SPEED	60 MPH

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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 147+00 TO STA. 158+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	9A
R.O.W.	2009	HPP-NH-29(35)	

150+00

155+00

STR-3 LITTLE EMORY RIVER

STR-3

SEE SHEET NO. 8A

SEE SHEET NO. 10A

MATCH LINE STA. 147+00

MATCH LINE STA. 158+00

EQUATION
S.R. 29 STA. 155+20.64 BACK (ST)=
S.R. 29 STA. 155+25.45 AHEAD

STA. 148+00.00
MEDIAN DRAIN
OFFSET 1.62' RT.
GR. EL. 762.62
INV. EL. 758.00
INV. EL. OUT 756.47

TYPE 2

12 #38

66" CMP
(TO BE REMOVED)

TYPE 38

TYPE INLINE

WWC-12

R 15'

R 45'

TYPE 13

18" RCP

24'R.

18" RCP

WWC-12

14 EW
INV. EL. 750.68

V-SOD

WWC-13

STA. 149+58.00

STA. 150+08.00

LIMIT OF CONST.
STA. 11+50.00

STA. 150+33.00
MEDIAN DRAIN
OFFSET 0.82' RT.
GR. EL. 762.63
INV. EL. 758.80

15 #38

R 40'

R 15'

R 15'

STA. 150+25.46
10.0' PVT. DR.

CS 150+70.64

℄ S.R. 29

24'R.

PI 152+21.14

℄ S.R. 29

18" CMP
(TO BE REMOVED)

WWC-12

R 15'

R 15'

R 70'

STA. 151+95.29
10.0' PVT. DR.

LIMIT OF CONST.
STA. 12+62.36

GR. EL. 761.90
INV. EL. IN 751.70

17B #38

INV. EL.
OUT 749.06

WWC-15

24" CMP
(TO BE REMOVED)

24'

24'

24'

24'

(TO BE REMOVED)

N 10° 05' 21" W

36" RCP

V-SOD

V-SOD

WWC-14

BENCH FLOW LINE

BEGIN RETAINING WALL
STA. 155+50.00, 81.00 RT.
TOP ELEV. 779.94'

STA. 156+90.65
195' ø 36" RCP
SKEW 60°LT.

RETAINING WALL

GR. EL. 759.12
INV. EL. IN 753.72

END RETAINING WALL
STA. 157+50.00, 97.50 RT.
TOP ELEV. 805.61'

N

S.R. 29 (MAINLINE)

PI	146+89.89
N	602,793.5684
E	2,418,153.9790
Δs	66° 39' 15" (LT)
θs	10° 41' 15"
Δc	45° 16' 45" (LT)
D	4° 45' 00"
R	1,206.23
Lc	953.24
Ts	1,022.49
Ls	450.00
LT	300.55
ST	150.50
Es	245.77
X	448.44
Y	27.91
K	224.74
P	6.99
SE	0.080 FT/FT
DES. SPEED	60 MPH

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 147+00 TO STA. 158+00

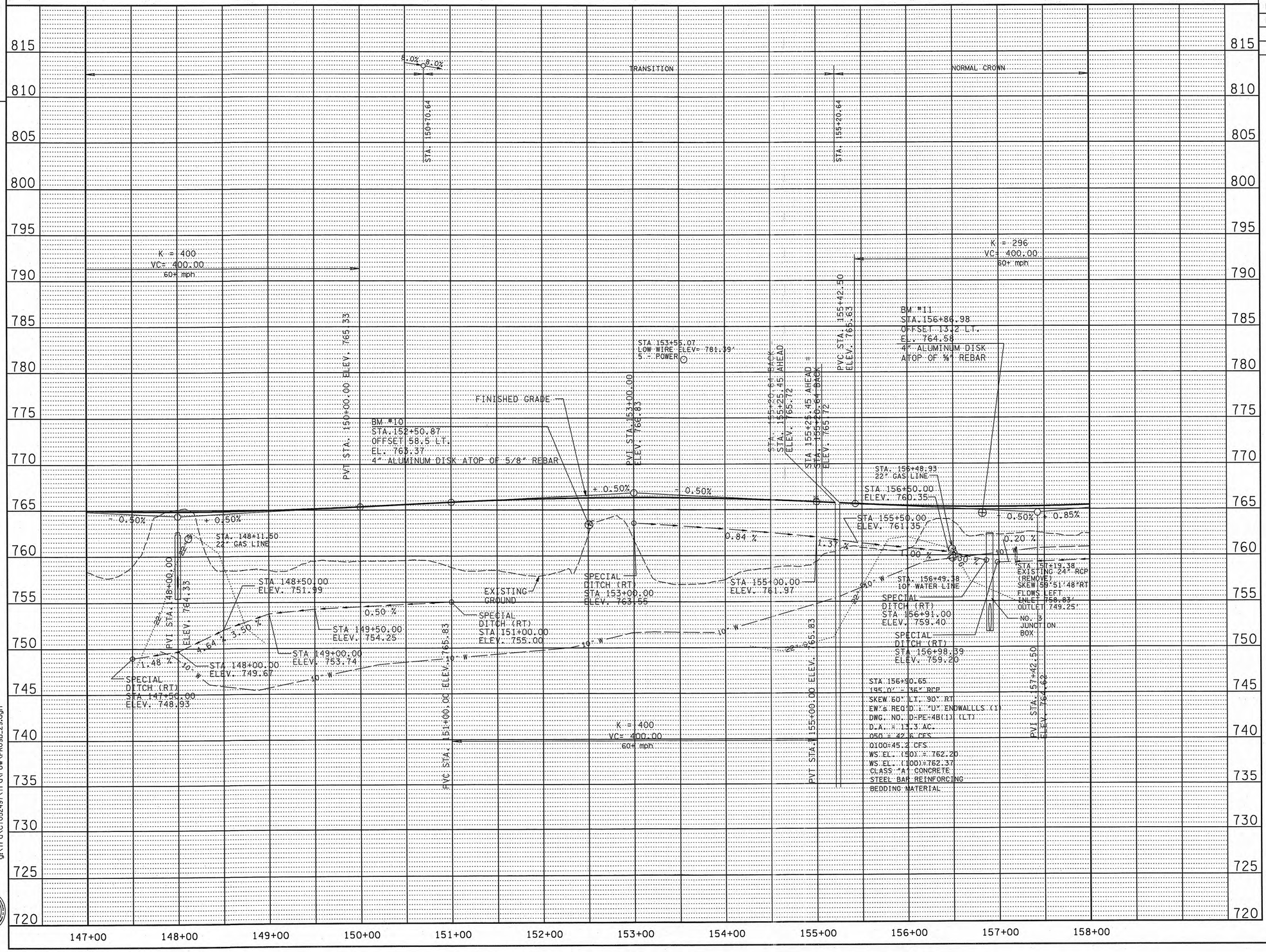
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Sara R. Duke
Surveyor Technician

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	9B
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

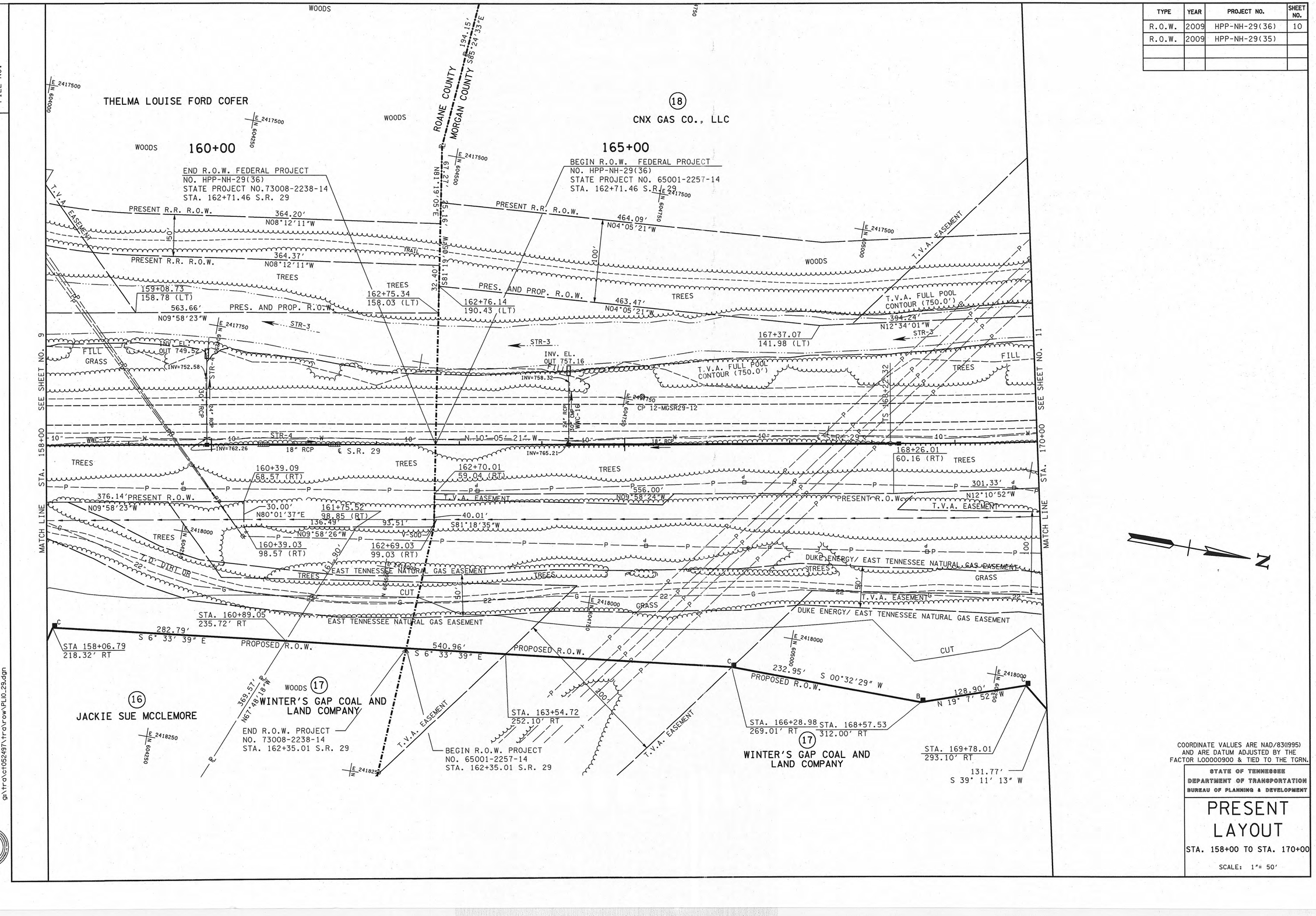
PROFILE

STA. 147+00 TO STA. 158+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	10
R.O.W.	2009	HPP-NH-29(35)	



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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 158+00 TO STA. 170+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

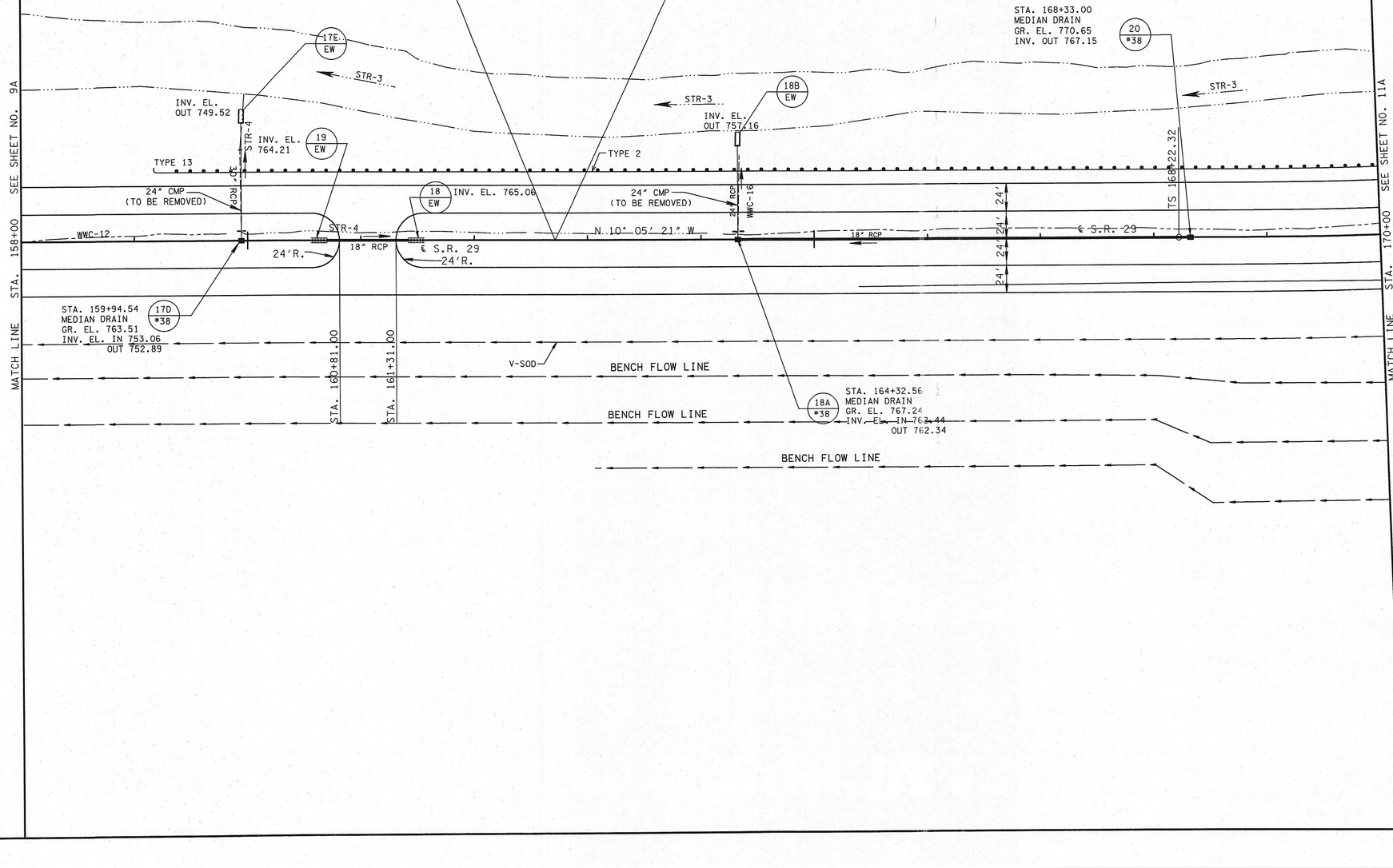
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	10A
R.O.W.	2009	HPP-NH-29(35)	

160+00

END R.O.W. FEDERAL PROJECT
NO. HPP-NH-29(36)
STATE PROJECT NO.73008-2238-14
STA. 162+71.46 S.R. 29

165+00

BEGIN R.O.W. FEDERAL PROJECT
NO. HPP-NH-29(36)
STATE PROJECT NO. 65001-2257-14
STA. 162+71.46 S.R. 29



COORDINATE VALUES ARE NAD/83(1995)
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FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 158+00 TO STA. 170+00

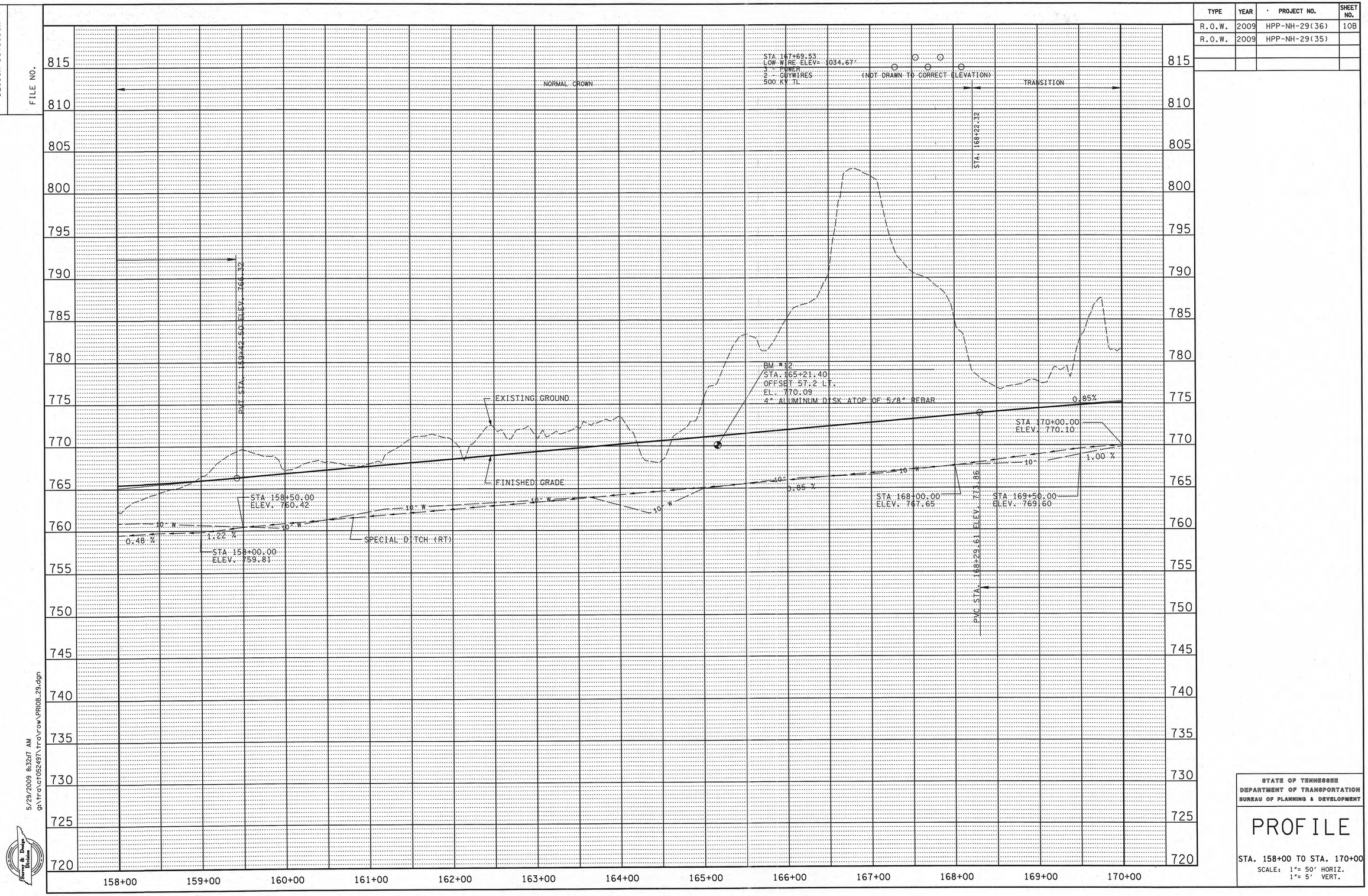
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	10B
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

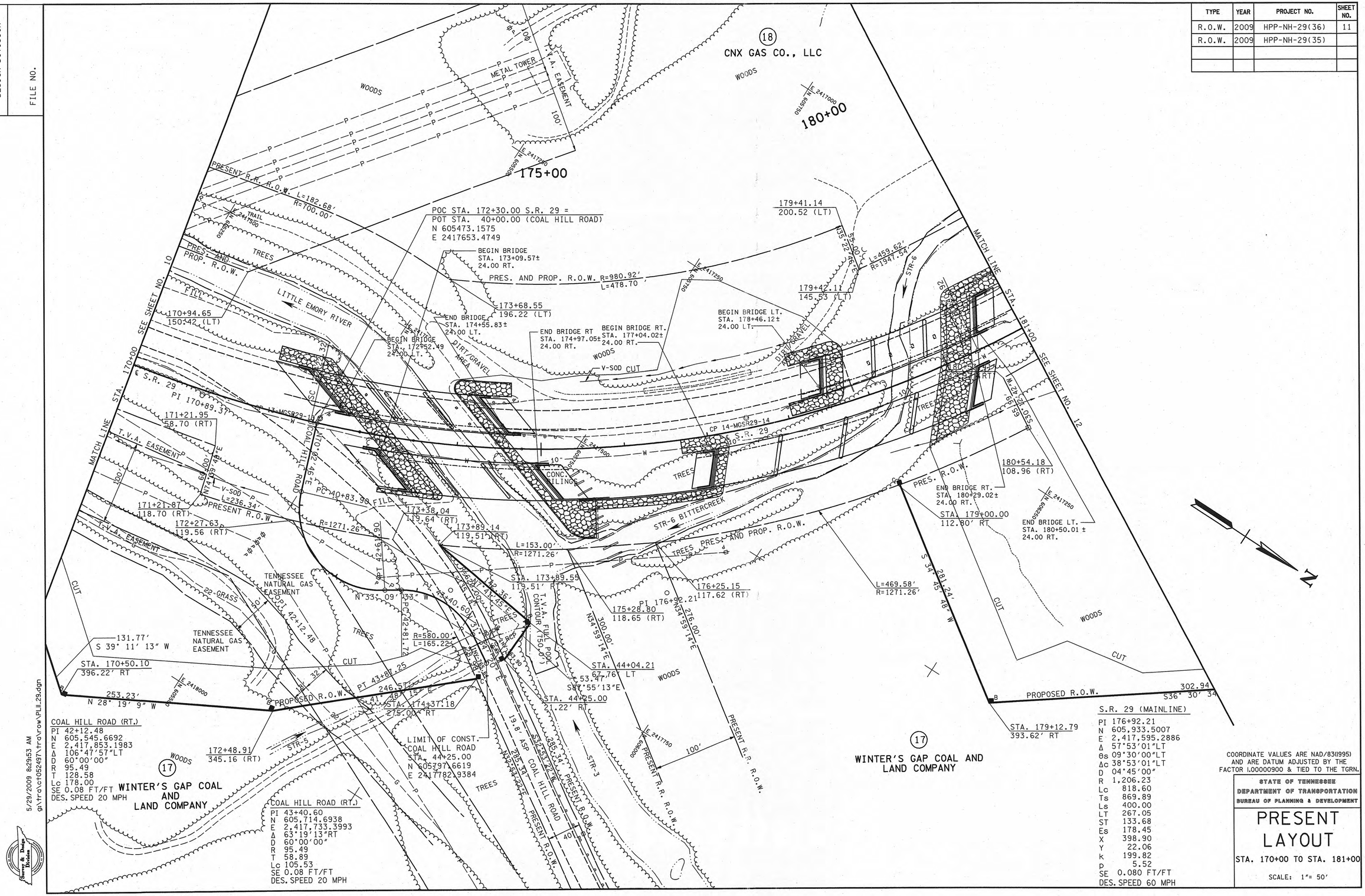
PROFILE

STA. 158+00 TO STA. 170+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	11
R.O.W.	2009	HPP-NH-29(35)	



COAL HILL ROAD (RT.)
PI 42+12.48
N 605,545.6692
E 2,417,853.1983
Δ 106°47'57"LT
D 60°00'00"
R 95.49
T 128.58
Lc 178.00
SE 0.08 FT/FT
DES. SPEED 20 MPH

COAL HILL ROAD (RT.)
PI 43+40.60
N 605,714.6938
E 2,417,733.3993
Δ 63°19'13"RT
D 60°00'00"
R 95.49
T 58.89
Lc 105.53
SE 0.08 FT/FT
DES. SPEED 20 MPH

S.R. 29 (MAINLINE)
PI 176+92.21
N 605,933.5007
E 2,417,595.2886
Δ 57°53'01"LT
Θs 09°30'00"LT
Δc 38°53'01"LT
D 04°45'00"
R 1,206.23
Lc 818.60
Ts 869.89
Ls 400.00
LT 267.05
ST 133.68
Es 178.45
X 398.90
Y 22.06
K 199.82
P 5.52
SE 0.080 FT/FT
DES. SPEED 60 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 170+00 TO STA. 181+00

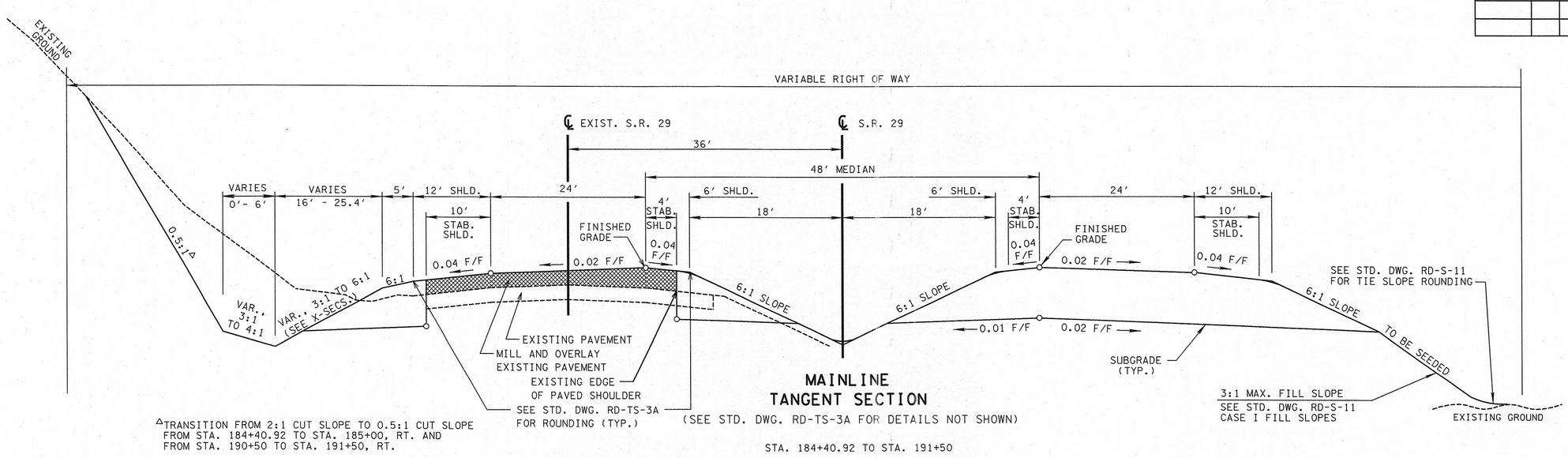
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

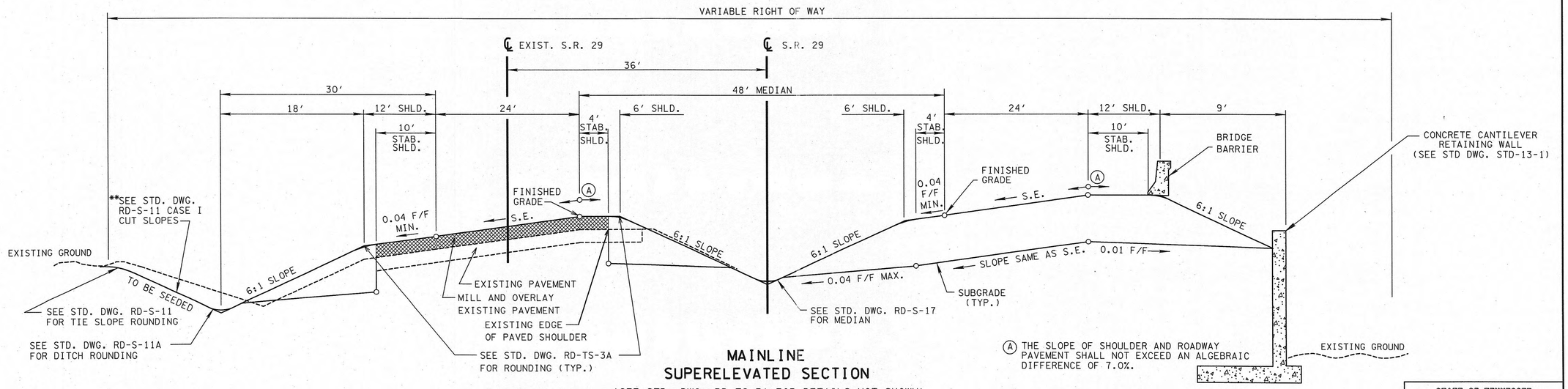
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2F
R.O.W.	2009	HPP-NH-29(35)	



MAINLINE
TANGENT SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 184+40.92 TO STA. 191+50



MAINLINE
SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

(END BRIDGE) STA. 174+97.05 TO STA. 177+04.02 (BEGIN BRIDGE)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

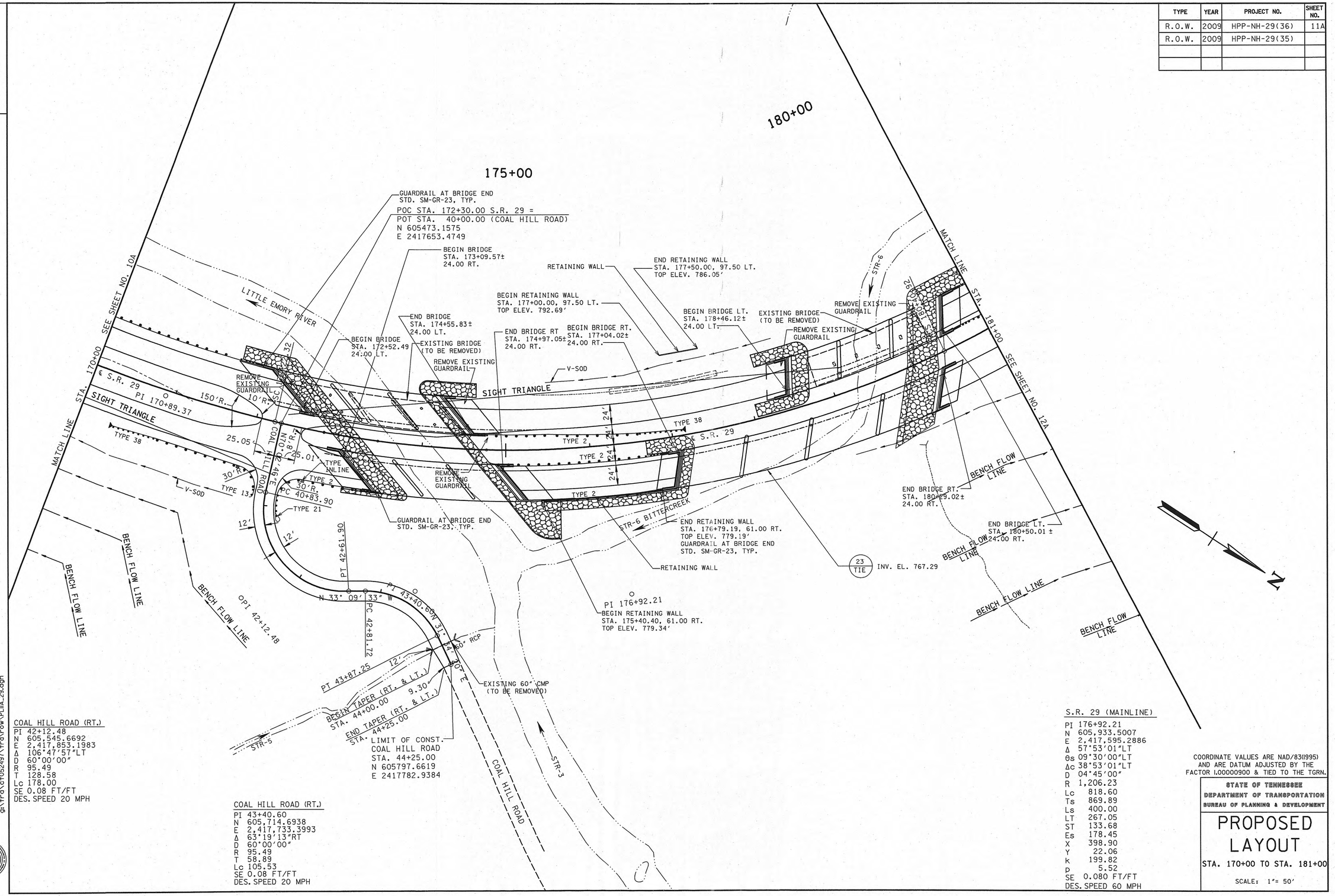
TYPICAL SECTIONS

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	11A
R.O.W.	2009	HPP-NH-29(35)	



COAL HILL ROAD (RT.)
PI 42+12.48
N 605,545.6692
E 2,417,853.1983
Δ 106°47'57"LT
D 60°00'00"
R 95.49
T 128.58
Lc 178.00
SE 0.08 FT/FT
DES. SPEED 20 MPH

COAL HILL ROAD (RT.)
PI 43+40.60
N 605,714.6938
E 2,417,733.3993
Δ 63°19'13"RT
D 60°00'00"
R 95.49
T 58.89
Lc 105.53
SE 0.08 FT/FT
DES. SPEED 20 MPH

LIMIT OF CONST.
COAL HILL ROAD
STA. 44+25.00
N 605797.6619
E 2417782.9384

S.R. 29 (MAINLINE)
PI 176+92.21
N 605,933.5007
E 2,417,595.2886
Δ 57°53'01"LT
θs 09°30'00"LT
Δc 38°53'01"LT
D 04°45'00"
R 1,206.23
Lc 818.60
Ts 869.89
Ls 400.00
LT 267.05
ST 133.68
Es 178.45
X 398.90
Y 22.06
k 199.82
p 5.52
SE 0.080 FT/FT
DES. SPEED 60 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 170+00 TO STA. 181+00

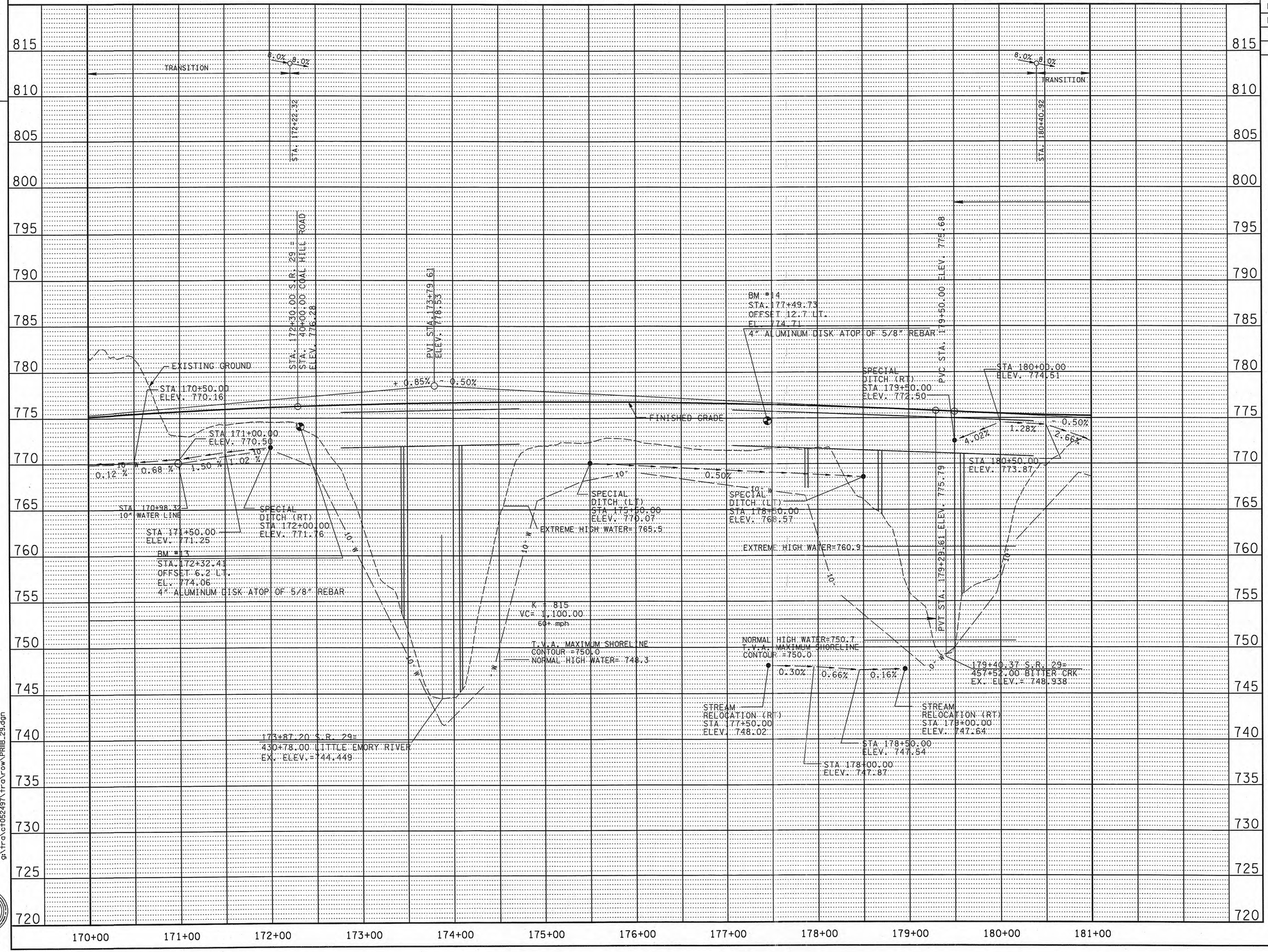
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Survey & Design Section

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	11B
R.O.W.	2009	HPP-NH-29(35)	



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Survey & Design Bureau

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 170+00 TO STA. 181+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	12
R.O.W.	2009	HPP-NH-29(35)	

185+00
190+00
WOODS
WOODS
WOODS
WOODS
(18) CNX GAS CO., LLC
(17) WINTER'S GAP COAL AND LAND COMPANY
T.V.A. FULL POOL CONTOUR (750.0')
PRES. AND PROP. R.O.W.
PRESENT R.O.W.
PROPOSED R.O.W.
BITTER CREEK
STR-6
INV=752.28
L=459.62'
R=1947.54'
STA. 183+71.06
151.3' @ 36" RCP
SKEW 90°
184+38.32
149.46 (LT)
INV. EL. OUT 767.02
1066.47' N67°55'55"W
INV. EL. OUT 752.80
INV=753.03
FILL
GRASS
CP 16-MGSR29-16
CP 15-MGSR29-15
PI 181+74.60
L=391.71'
R=2824.54'
N 67° 58' 22" W
967.31'
N68°16'17"W
S.R. 29
TREES
INV=759.45
INV=771.12
INV=754.57
DIRT DR
INV=770.43
INV. EL. IN 764.15
INV-771.27
168.49'
S87°44'26"E
143.56'
S 50° 20' 48.50" E
STA. 192+36.82
193.47' RT
CHAIN LINK
OIL WELL
STA. 191+00.00
150.00' RT
TRAIL
EAST TENNESSEE NATURAL GAS EASEMENT
184+38.66
40.54 (RT)
INV. EL. IN 769.29
V-SOD
CUT
688.25'
S 67° 5' 46" E
82.86'
N76° 6' 44"E
STA. 184+11.96
139.48' RT
142.52'
N48° 55' 21"E
STA. 183+46.47
188.38' RT
200.92'
N 65° 37' 52" E
STA. 182+87.99
316.55' RT
76.88'
N88° 16' 39"W
STA. 181+75.72
468.40' RT
STA. 181+22.03
501.37' RT
MATCH LINE STA. 181+00
SEE SHEET NO. 11
MATCH LINE STA. 193+00
SEE SHEET NO. 13
36" RCP
60" RCP
54" RCP (REMOVE)
24" CMP (REMOVE)
15" CMP
INV=769.9218' RCP
25 SOD
22'
G
W
N

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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 181+00 TO STA. 193+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	12A
R.O.W.	2009	HPP-NH-29(35)	

185+00

190+00

25 EW INV. EL. 766.97

STA. 183+71.06
151.3' @ 36" RCP
SKEW 90°

STA. 190+00.00
MEDIAN DRAIN
GR. EL. 772.19
INV. EL. IN 763.72
OUT 763.64

27 #38

24" CMP
(TO BE REMOVED)

STR-6

BITTER CREEK

STR-6

24" CMP
(TO BE REMOVED)

INV. EL.
OUT 752.80

INV. EL.
OUT 767.02

SEE SHEET NO. 11A

STA. 181+00

MATCH LINE

TYPE 38

18" RCP

TYPE 2

TYPE 38

PI 181+74.60

℄ S.R. 29
24'R.

36" RCP

ST 184+40.92

24'R.

N 67° 58' 22" W

℄ S.R. 29

24'

24'

24'

18" RCP

60" RCP

SEE SHEET NO. 13A

STA. 193+00

MATCH LINE

24 #38 STA. 181+50.00
MEDIAN DRAIN
OFFSET .64' RT.
GR. EL. 771.97
INV. EL. 768.01

V-SOD

INV. EL.
IN 769.29

LT-3WC

STA. 185+09.00

STA. 185+59.00

TYPE 38

TYPE 2

TYPE IN-LINE
V-SOD

R-15

TYPE 13

TYPE
IN-LINE

R-15

TYPE 13

INV. EL.
IN 764.15

STR-7

24" CMP
(TO BE REMOVED)

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

24A #39 STA. 183+71.06
MEDIAN DRAIN
GR. EL. 772.55
INV. EL. IN 767.92
OUT 767.82

STA. 192+66.88
MEDIAN DRAIN
GR. EL. 773.00
INV. EL. IN 759.39
OUT 753.66

29 #39

STA. 191+65.00
16.0' PVT DRIVE

LIMIT OF CONST.
STA. 12+75.00

N

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Survey & Design Division

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 181+00 TO STA. 193+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	12B
R.O.W.	2009	HPP-NH-29(35)	

TRANSITION
NORMAL CROWN
STA. 184+40.99
K = 400
VC= 400.00
60= mph
STA 181+68.19
LOW WIRE ELEV= 795.51'
1 - TELEPHONE
BM #15
STA.181+18.80
OFFSET 14.3 LT.
EL. 774.47
4" ALUMINUM DISK ATOP OF 5/8" REBAR
PVI STA. 183+50.00 ELEV. 775.68
EXISTING GROUND
PVI STA. 186+00.00 ELEV. 776.93
BM #16
STA.187+97.27
OFFSET 58.4 LT.
EL. 773.40
4" ALUMINUM DISK ATOP OF 5/8" REBAR
K = 399
VC= 400.00
60= mph
PVI STA. 192+00.00 ELEV. 775.94
STA 181+00.00
ELEV. 772.54
STA 183+00.00
ELEV. 769.30
+ 0.50%
- 0.50%
FINISHED GRADE
STA 181+50.00
ELEV. 771.50
1.04%
0.43%
2.14%
0.37%
5.61%
10" W
STA. 183+67.89
10" WATER LINE
SPECIAL
DITCH (RT)
STA 184+00.00
ELEV. 772.21
PVI STA. 181+50.00
ELEV. 774.68
STA 182+50.00
ELEV. 771.17
STA 183+25.00
ELEV. 768.34
PVC STA. 184+00.00 ELEV. 775.93
PRVC STA. 188+00.00 ELEV. 774.93
K = 400
VC= 400.00
60= mph
STA 181+71.06
151.3' - 36" RCP
SKEW 90°
EW's REQ'D. : "U" ENDWALLLS (2)
DWG. NO. D-PE-6B(1) (LT & RT)
D.A. = 12.3 AC.
Q50 = 39.4 CFS
Q100=41.8 CFS
WS EL. (50) = 772.39
WS EL. (100)=772.84
SPECIAL
DITCH (RT)
STA 190+00.00
ELEV. 767.20
PVI STA. 190+00.00
ELEV. 774.93
0.40 %
STA. 191+37.54
10" WATER LINE
SPECIAL
DITCH (RT)
STA 192+50.00
ELEV. 766.00
STA 192+66.88
184.1' - 60" RCP
SKEW 90°
EW's REQ'D. : "U" ENDWALLLS (2)
DWG. NO. D-PE-3B(1) (LT), D-PE-4B(1) (RT)
D.A. = 46.0 AC.
Q50 = 147.2 CFS
Q100=156.4 CFS
WS EL. (50) = 769.83
WS EL. (100)=770.65
EX. 54" RCP
(REMOVE)

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 181+00 TO STA. 193+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	13
R.O.W.	2009	HPP-NH-29(35)	

WOODS
195+00
200+00
(18) CNX GAS CO., LLC
WOODS
STA. 198+10.00
173.48 LT
STA. 198+85.00
173.43 LT
192.39'
S38°07'49"E
BITTER CREEK
430.27'
S80°12'02"E
STR-6
STR-9
22"
G
EAST TENNESSEE/DUKE ENERGY NATURAL GAS EASEMENT
GRASS
WINTER'S GAP COAL AND LAND COMPANY
(56) AHLER TRUST
(17)
195+04.79
148.70 (LT)
64.62'
S68°57'54"E
82.51'
N88°11'54"W
N81°26'23"W
25.00'
N22°04'05"E
69.36'
104.60'
N78°48'30"W
CHAIN LINK
148.48 LT
OIL WELL
OIL WELL TANK
75.00'
N67°55'55"W
B PROP.
RAIL W.
163.41'
S 22° 04' 05" W
25.00'
191.90' RT
TREES
STA. 198+85.00
N67°55'55"W
PRES. AND PROP. R.O.W
202+68.20
148.16 (LT)
TREES
STA. 202+68.17
133.99 LT
117.39'
S 67° 59' 16" E
130.53'
N67°59'16"W
31.07'
N22°04'12"E
16.91'
STA. 203+85.56
134.02 LT
INV. EL.
OUT 759.70
PROP. R.O.W.
INV. EL. P/I
OUT 758.60
IN 758.60
WTL-3
GRASS
FILL
18'GR
24" RCP
CMP
TREES
202+68.18
117.08 LT
203+98.70
117.12 (LT)
GRASS
INV=758.68
CP 17-MGSR29-17
CP 18-MGSR29-18
4'x 6' CONC BOX CULV.
30" RCP
℄ S.R. 29
N 67° 58' 22" W
INV=759.74
INV=756.39
351.22'
N68°16'17"W
148.51'
116.53'
N68°16'17"W
235.66'
N67°49'01"W
PRESENT R.O.W. N68°01'22"W
41.69'
S21°58'42"W
240.35'
204+98.24
74.40 (RT)
204+98.24
32.71 (RT)
29.90'
S76°27'17"W
52.05'
S57°09'13"W
INV. EL.
IN 764.08
30.06'
S55°22'56"W
57.32'
S49°42'01"E
194+05.95
35.49 (RT)
194+92.01
68.49 (RT)
STR-8
WTL-2
SPG-2
110.81'
S07°30'28"E
197+57.17
33.66 (RT)
TREES
196+66.20
97.12 (RT)
V-SOD
FILL
200+22.20
32.28 (RT)
202+57.86
32.92 (RT)
204+73.92
91.79 (RT)
204+27.45
159.47 (RT)
(21) GARY HALLCOX
92.80'
S13°13'34"E
104.73'
197.52'
S53°03'19"E
106.54'
S21°44'41"W
142.09'
199+05.67
32.89 (RT)
202+58.38
139.46 (RT)
199+71.32
224.46 (RT)
GARY HALLCOX
(19)
PROPOSED R.O.W.
PROPOSED R.O.W.
138.82'
S 65° 44' 42" E
178.31'
S 51° 40' 50" E
148.39'
S 79° 24' 29" E
68.69'
S 82° 25' 06" W
202.51'
S03°06'45"W
364.71'
S 14° 37' 08" W
STA. 193+95.38
136.48' RT
STA. 195+34.09
141.88' RT
STA. 197+05.24
191.90' RT
STA. 198+50.68
162.48 RT
STA. 199+10.40
128.54 RT
WINTER'S GAP COAL AND LAND COMPANY
(17)
168.49'
S 87° 44' 26" E
WOODS
WOODS
WOODS
WOODS
CUT
PROPOSED R.O.W.
278.53'
N 80° 39' 08" E
STA. 197+57.43
490.21 RT
STA. 201+95.23
345.19 RT
STA. 202+59.57
379.88 RT
236.08'
R 327.48'
S39°38'24"E
240.42'
S21°44'41"W
147.94'
N 58° 59' 42" E
98.33'
R 73.09'
289.71'
R 339.15'54"E
STA. 202+59.08
281.55' RT
STA. 204+49.25
190.31' RT
16.27'
S26°43'26"W
39.32'
S38°18'21"E
STA. 204+83.41
209.79' RT
STA. 203+48.05
163.35' RT
(20) GARY HALLCOX
165.92'
S 49° 42' 01" E
SEE SHEET NO. 12
SEE SHEET NO. 14
STA. 193+00
STA. 205+00
MATCH LINE
MATCH LINE
N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 193+00 TO STA. 205+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	13A
R.O.W.	2009	HPP-NH-29(35)	

195+00

200+00

STR-6

BITTER CREEK

STR-9

STA. 197+07.74
MEDIAN DRAIN
GR. EL. 775.21
INV. EL. 757.64
28
#38

LIMIT OF CONST.
STA. 11+75.00

STA. 196+80.00
10.0' FIELD ENT.

INV. EL.
OUT 758.60
50' RCP
26

EW

WTL-3

STA. 198+98.00
MEDIAN DRAIN
GR.EL. 776.21
INV. EL. 767.31
30
#38

60" CMP
(TO BE REMOVED)

STA. 204+23.28
MEDIAN DRAIN
GR. EL. 777.00
INV. EL. 761.89
32
#38

WTL-4

INV. EL.
OUT 759.70

R 15

24' RCP

STA. 198+23.00

STA. 198+73.00

TYPE 13

TYPE 2

4'x 6' CONC
BOX CULV.

24" CMP
(TO BE REMOVED)

24'

30" RCP

℄ S.R. 29

18" RCP

N 67° 58' 22" W
24'R.

24'R.

STR-8

WTL-2

TYPE 2

SPG-2

STR-8

TYPE 13

WTL-2

STR-8 RELOCATION

V-SOD

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW
LINE

INV. EL.
IN 764.02

STR-5

LIMIT OF CONST.
STA. 12+35.00

STA. 203+83.00
10.0' PVT. DR.

MATCH LINE STA. 193+00 SEE SHEET NO. 12A

MATCH LINE STA. 205+00 SEE SHEET NO. 14A

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 193+00 TO STA. 205+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	13B
R.O.W.	2009	HPP-NH-29(35)	

NORMAL CROWN

BM #18
STA.198+71.90
OFFSET 57.8 LT.
EL. 773.25
4" ALUMINUM DISK ATOP OF 5/8" REBAR

BM #17
STA.194+65.40
OFFSET 59.6 LT.
EL. 772.91
4" ALUMINUM DISK ATOP OF 5/8" REBAR

FINISHED GRADE

STA 198+50.00
ELEV. 775.20

STA 198+00.00
ELEV. 771.50

0.50 %

7.40 %

STA 201+00.00
ELEV. 776.46

+ 0.50% = 0.62%

PVC STA. 200+53.00
ELEV. 780.23

PVT STA. 202+55.00
ELEV. 781.23

K = 356
VC = 400.00
60+ mph

0.16 %

STA 202+50.00
ELEV. 776.71

PVT STA. 204+55.00
ELEV. 779.99

SPECIAL
DITCH (RT)
STA 194+00.00
ELEV. 769.70

STA. 194+45.47
22" GAS LINE

EXISTING GROUND

SPECIAL
DITCH (RT)
STA 203+00.00
ELEV. 765.65

EX. 60" RCP

STATION	204+23.28
STRUCTURE	4'-X 6'-X 237.8' R.C.B.C.
SKEW	75°(RT)
DRAINAGE AREA	71.6 AC.
DESIGN DISCHARGE (Q50)	229.12 CFS
DESIGN DISCHARGE (Q100)	243.44 CFS
OVERTOPPING ELEV.	778.32
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	778.30
Q100 HEADWATER ELEV.	778.82
VELOCITY (Q50)	14.94 FT/S
VELOCITY (Q100)	11.0 FT/S
INLET ELEVATION	764.02
OUTLET ELEVATION	759.70
STANDARD DRAWING NUMBERS	A-14-47
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

815 810 805 800 795 790 785 780 775 770 765 760 755 750 745 740 735 730 725 720

193+00 194+00 195+00 196+00 197+00 198+00 199+00 200+00 201+00 202+00 203+00 204+00 205+00

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 193+00 TO STA. 205+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	14
R.O.W.	2009	HPP-NH-29(35)	

210+00
215+00
WOODS
TREES
GRASS
BITTER CREEK
STR-6
DUKE ENERGY/EAST TENNESSEE NATURAL GAS EASEMENT
50'
22"-G
56
AHLER TRUST
PROPOSED R.O.W. 980.02'
PRESENT R.O.W. S 67° 59' 17" E 966.89
GRASS N67°59'16"W
FILL
EXTEND EXIST. CULV. 46.0' LT.
INV. EL. OUT 759.84
INV=760.53
CP 19-MGSR29-19
CP 20-MGSR29-20
STA. 216+63.09
128.89' LT
20.00
N 26° 20' 41" E
PERMANENT DRAINAGE EASEMENT
TRAIL
STA. 216+63.12
148.87' LT
20.00
N 63° 22' 36" W
STA. 216+44.11
149.06' LT
20.25
S 26° 20' 41" W
STA. 216+43.96
128.80' LT
STA. 213+65.26
134.33' LT
213+65.27
117.43 (LT)
6.91'
S 24°03' 58" W
STA. 215+64.61
135.43' LT
204.49'
S 67° 15' 51" E
203.89'
N67°15'51"W
215+64.65
128.52 (LT)
10.00'
S24°04'06"W
215+64.70
118.52 (LT)
INV. EL. OUT 761.52
SEE SHEET NO. 13
SEE SHEET NO. 15
MATCH LINE STA. 205+00
MATCH LINE STA. 217+00
© S.R. 29
209+60.55
32.31 (RT)
462.35'
PRESENT R.O.W. N68°01'22"W
N 67° 58' 22" W 40'
18" RCP
INV=761.40
GATE
293.82'
N67°45'18"W
STR-10 201.56'
N68°06'07"W
211+64.37
33.08 (RT)
INV. EL. IN 762.80
4' FLAT BOTTOM RW CHANNEL
STR-10 CHANNEL RELOCATION
EXTEND CULV. 89.8' RT.
INV=762.00
90° CMP
PI 219+00.62
SIGN
INV=762.48
INV=763.29
INV=761.08
CB
INV=765.94
1-S-FR
BUS
BITTER CREEK
THRIFT STORE
TO BE REMOVED
CUT
SHED
INV. EL. IN 762.41
213+66.01
280.75'
32.57' (RT)
PROPOSED R.O.W.
STORAGE
STA. 216+50.73
136.49' RT
360.96'
S 63° 36' 13" E
362.87'
S63°07'52"E
STA. 213+60.58
144.32' RT
S 67° 57' 15" E
GRAVEL
TRAILER
1-S-FR
DECK
POOL
INV=765.10
1-S-M
SHED
BETTY BOOTH
24
GEORGE E. LUEKING
25
1-S-F
RES
(RUINS)
WELL
HSE
V-SOD
TO BE REMOVED
STA. 209+43.77
166.98' RT
GEORGE E. LUEKING
57.32'
S49°42'01"E
STA. 205+37.85
227.76' RT
272.71'
S 89° 35' 54" E
PROPOSED R.O.W.
70.02'
74.19'
S26°50'51"E
94.19'
S44°28'55"E
STA. 205+90.59
273.81 RT
270.85'
S42°59'46"E
156.43'
S18°11'16"W
99.85'
S71°36'30"E
STA. 208+44.11
173.31' RT
1-S-B
RES
213.53'
S 70° 29' 51" E
STA. 211+57.09
157.57' RT
CARPORT
1-S-B
GAR
STR-10 135.71'
S29°07'54"W
STR-10 138.58'
74.48'
S39°10'40"W
98.23'
S27°20'18"W
90.58'
S13°55'26"W
141.42' S69° 27' 36"E
PROPOSED R.O.W.
STA. 212+98.46
153.90' RT
62.55'
S 76° 44' 39" E
436.34'
S25°22'28"W
217.01'
S57°17'45"E
STA. 217+00.59
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STA. 2+00.59
STA. 1+00.59
STA. 0+00.59
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 205+00 TO STA. 217+00

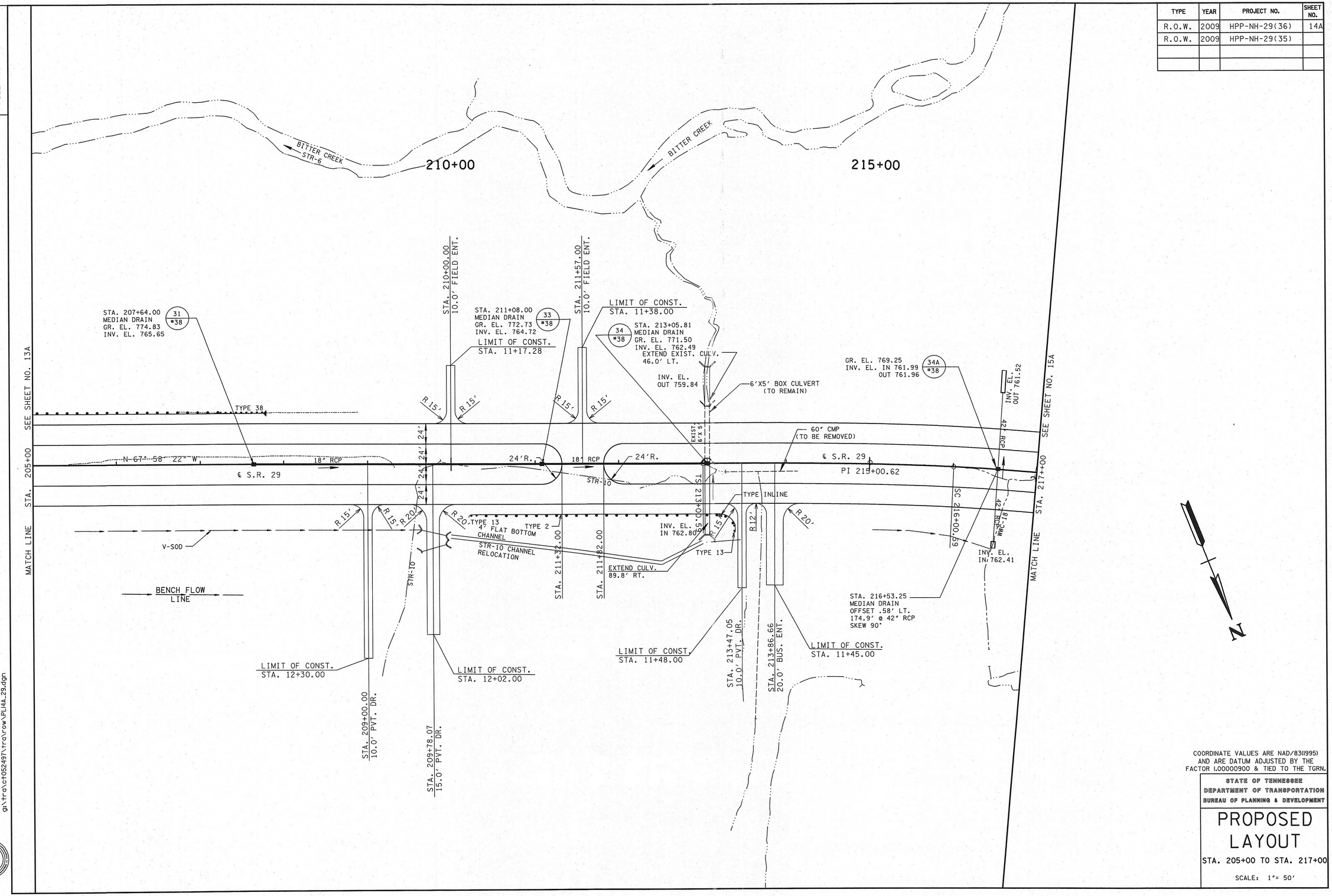
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	14A
R.O.W.	2009	HPP-NH-29(35)	



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DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

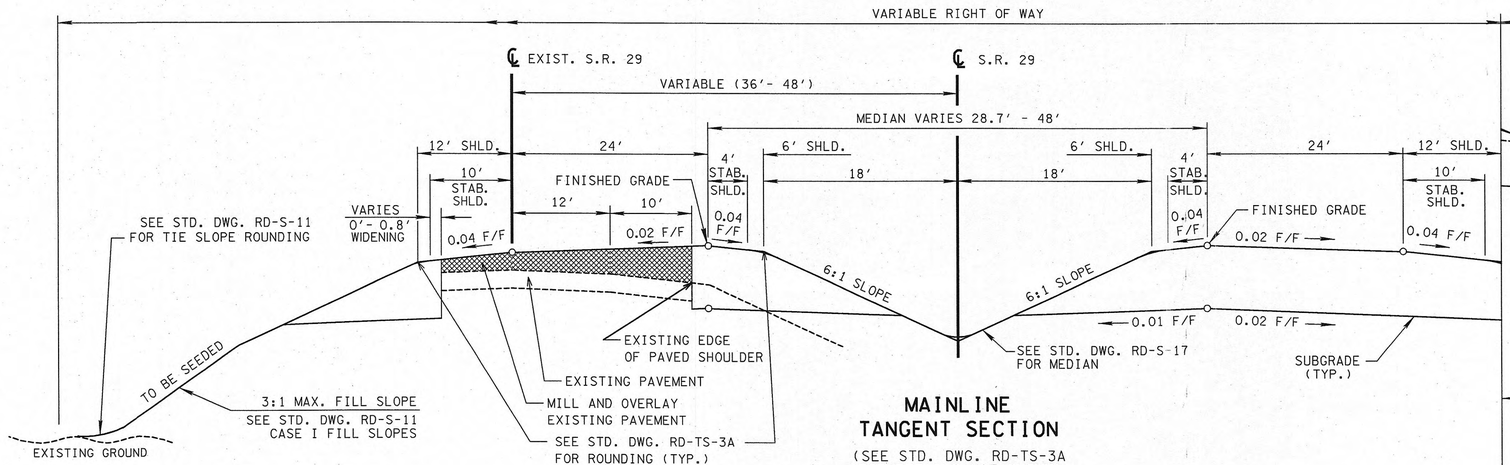
PROPOSED LAYOUT

STA. 205+00 TO STA. 217+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

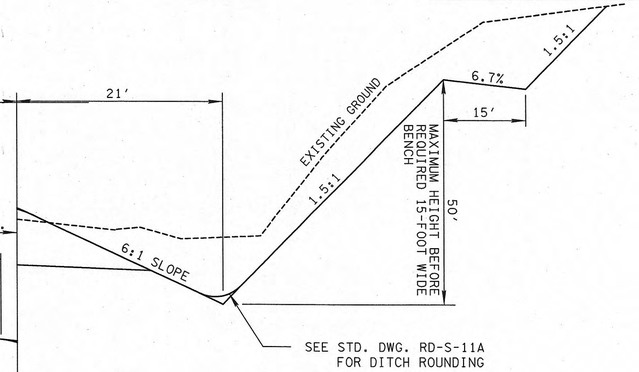
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2G
R.O.W.	2009	HPP-NH-29(35)	



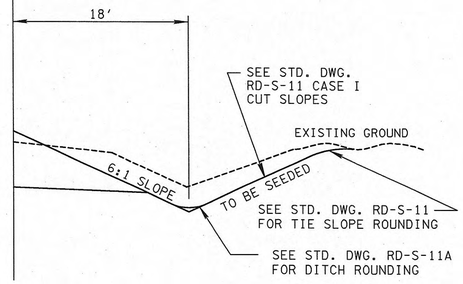
MAINLINE TANGENT SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

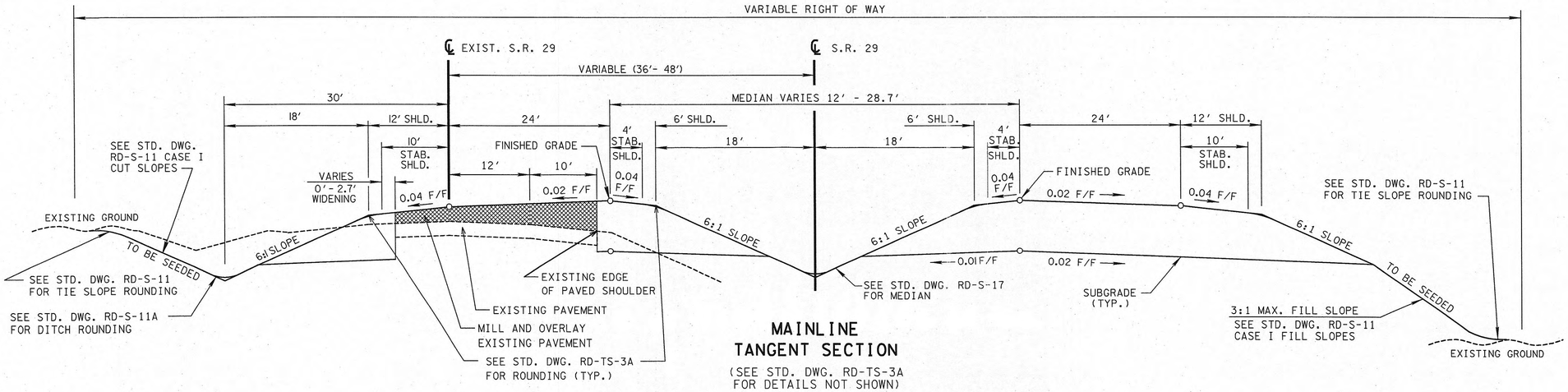
STA. 269+50 TO STA. 271+00



CUT SECTION FOR RIGHT SIDE OF ROADWAY



CUT SECTION FOR LEFT SIDE OF ROADWAY



MAINLINE TANGENT SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 271+00 TO STA. 277+28.54

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	14B
R.O.W.	2009	HPP-NH-29(35)	

NORMAL CROWN
TRANSITION
5.10%
5.18%
STA. 213+00.59
STA. 216+00.59

STA 209+95.94
LOW WIRE ELEV= 792.85'
2 - POWER
1 - TELEPHONE

STA 213+48.55
LOW WIRE ELEV= 788.39'
4 - POWER
1 - TELEPHONE

BM #19
STA.205+52.35
OFFSET 57.6 LT.
EL. 771.94
4" ALUMINUM DISK ATOP OF 5/8" REBAR

BM #20
STA.210+31.39
OFFSET 58.7 LT.
EL. 771.43
4" ALUMINUM DISK ATOP OF 5/8" REBAR

FINISHED GRADE
EXISTING GROUND
0.62 %
0.62%

SPECIAL
DITCH (RT)
STA.205+50.00
ELEV. 775.44

STA 209+00.00
ELEV. 773.26

SPECIAL
DITCH (RT)
STA.215+00.00
ELEV. 769.33

STA 215+50.00
ELEV. 768.75

STA 216+50.00
ELEV. 761.99

STA. 205+30.38
10" WATER LINE

STA. 211+92.31
10" WATER LINE

2.61 %
11.14 %
1.76 %
2.58 %
0.64 %
1.58 %

SPECIAL
DITCH (RT)
STA.213+50.00
ELEV. 768.37

STA 213+00.00
ELEV. 762.80

EX. 6'x5' BOX CULVERT

STA 216+00.00
ELEV. 767.31

EX. 30" CMP

STATION	213+05.81
STRUCTURE	6'x 5'x 135.8' R.C.B.C.
SKEW	89°42'42"(LT)
DRAINAGE AREA	144.3 AC.
DESIGN DISCHARGE (Q50)	160.4 CFS
DESIGN DISCHARGE (Q100)	192.1 CFS
OVERTOPPING ELEV.	772.88
ALLOWABLE HEADWATER ELEV.	
Q50 HEADWATER ELEV.	766.33
Q100 HEADWATER ELEV.	766.92
VELOCITY (Q50)	13.66 FT/S
VELOCITY (Q100)	14.25 FT/S
INLET ELEVATION	762.80
OUTLET ELEVATION	759.84
STANDARD DRAWING NUMBERS	M-252-18
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

STA 216+53.25
174.9' - 42" RCP
SKEW 90°
EW'S REQ'D : "U" ENDWALLS (2)
DWG. NO. D-PE-4B(1) (LT), D-PE-6B(1) (RT)
D.A. = 23.3 AC
Q50 = 60.6 CFS
Q100=66.2 CFS
WS EL. (50) = 776.16
WS EL. (100)=
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

815 810 805 800 795 790 785 780 775 770 765 760 755 750 745 740 735 730 725 720

205+00 206+00 207+00 208+00 209+00 210+00 211+00 212+00 213+00 214+00 215+00 216+00 217+00

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 205+00 TO STA. 217+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	15
R.O.W.	2009	HPP-NH-29(35)	

WOODS
TREES
220+00
225+00
(26) DAVID WAHRER AND SARAH C. NAWAZ
STR-6
GRASS
DUKE ENERGY/ EAST TENNESSEE NATURAL GAS EASEMENT
PERMANENT DRAINAGE EASEMENT
25.00' N 53° 12' 29" W
32'
18'
22" G
STA. 221+84.90
150.52' LT
STA. 222+08.66
150.58' LT
20.00'
S37°01'13"W
N37°01'13"E
BITTER CREEK
AHLER TRUST
(56)
L=802.67'
R=2986.99'
PRES. AND PROP. R.O.W.
STA. 221+84.80
GRASS 130.52' LT
STA. 222+08.66
130.59' LT
INV. EL. OUT 759.90
223+32.62
130.93 (LT)
L=531.20'
R=2986.99'
STR-11
FILL
STR-12
INV=759.85
PI 221+10.51
GRASS
FILL
CP 22-MGSR29-22
INV=762.37
SEE SHEET NO. 14
SEE SHEET NO. 16
℄ S.R. 29
CP 21-MGSR29-21
18" RCP
INV=760.09
INV=762.23
INV=767.01
PI 226+97.28
N44°27'8"W
393.12'
R=2893.86'
L=354.05'
220+83.50
31.39 (RT)
224+41.43
30.66 (RT)
PRESENT R.O.W.
STR-12 CHANNEL RELOCATION
INV. EL. IN 760.77
(26D) THOMAS LOUIS AND LOU WATSON CHRISTMAS
INV=763.50
INV=764.38
L=710.69'
R=2893.86'
INV=768.90, INV=768.86
INV=768.98
INV=769.51
12"CIP X 2
12'GR
V-SOD
WOODS
CUT
PROPOSED R.O.W.
360.98'
S 63° 38' 13" E
94.37'
S20°55'59"E
STA. 221+09.52
168.70' RT
110.65'
S 48° 38' 12" E
STA. 225+02.63
227.79' RT
STA. 220+27.86
115.00' RT
GRASS
TANK
STA. 223+15.92
227.31' RT
STA. 223+98.07
266.95' RT
STA. 221+96.06
221.08' RT
84.88'
S 22° 0' 21" E
46.22'
S 46° 58' 33" E
STA. 224+49.03
268.19' RT
63.47'
S86°59'22"E
STA. 226+83.10
298.43' RT
179.57'
S 22° 0' 21" E
℄ PROP. R.O.W.
S 0° 33' 21" W
219.11'
N 25° 56' 36" E
945.95'
(25) BETTY BOOTH
347.69'
S62°59'13"E
(26A) BETTY S BOOTH
N.62°20'25"E
490.98'
MATCH LINE STA. 217+00
MATCH LINE STA. 228+00

S.R. 29 (MAINLINE)

PI	221+10.51
N	607,636.0259
E	2,413,387.1655
Δs	25°56'00"RT
θs	03°00'00"RT
Δc	19°56'00"RT
D	02°00'00"
R	2,864.79
Lc	996.67
Ts	809.92
Ls	300.00
LT	200.03
ST	100.03
Es	76.30
X	299.92
Y	5.23
k	149.99
P	1.31
SE	0.051 FT/FT
DES. SPEED	60 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 217+00 TO STA. 228+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	15A
R.O.W.	2009	HPP-NH-29(35)	

220+00

225+00

STR-6

BITTER CREEK

STR-11

STA. 219+25.00
MEDIAN DRAIN
OFFSET .58' LT.
GR. EL. 767.65
INV. EL. 763.80
35 #38

36" CMP
(TO BE REMOVED)

PI 221+10.51

INV. EL.
OUT 759.90

STR-12

42" RCP

30" CMP
(TO BE REMOVED)

24" CMP
(TO BE REMOVED)

24'

℄ S.R. 29

18" RCP

24'R.

18" RCP

WL 5

18" CMP
(TO BE REMOVED)

SEE SHEET NO. 14A

SEE SHEET NO. 16A

STA. 217+00

STA. 228+00

PI 226+97.28 ℄ S.R. 29

INV. EL.
IN 760.77

STR-12 CHANNEL
RELOCATION

V-SOD

37 #38
STA. 221+96.75
MEDIAN DRAIN
OFFSET .58' LT.
GR. EL. 766.25
INV. EL. IN 760.37
OUT 760.35

STA. 224+41.00

STA. 224+91.00

CS 225+97.28

TYPE 38

36 #38
STA. 225+15.00
MEDIAN DRAIN
OFFSET .58' LT.
GR. EL. 767.68
INV. EL. 764.73

2-12" CIP
(TO BE REMOVED)

MATCH LINE

R25'

R25'

LIMIT OF CONST.
STA. 11+35.00

STA. 217+44.51
40.0' BUS. ENT.

BENCH FLOW LINE

STR-12

BENCH FLOW LINE

MATCH LINE

N

S.R. 29 (MAINLINE)

PI	221+10.51
N	607,636.0259
E	2,413,387.1655
Δs	25°56'00"RT
θs	03°00'00"RT
Δc	19°56'00"RT
D	02°00'00"
R	2,864.79
Lc	996.67
Ts	809.92
Ls	300.00
LT	200.03
ST	100.03
Es	76.30
X	299.92
Y	5.23
k	149.99
p	1.31
SE	0.051 FT/FT
DES. SPEED 60 MPH	

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 217+00 TO STA. 228+00

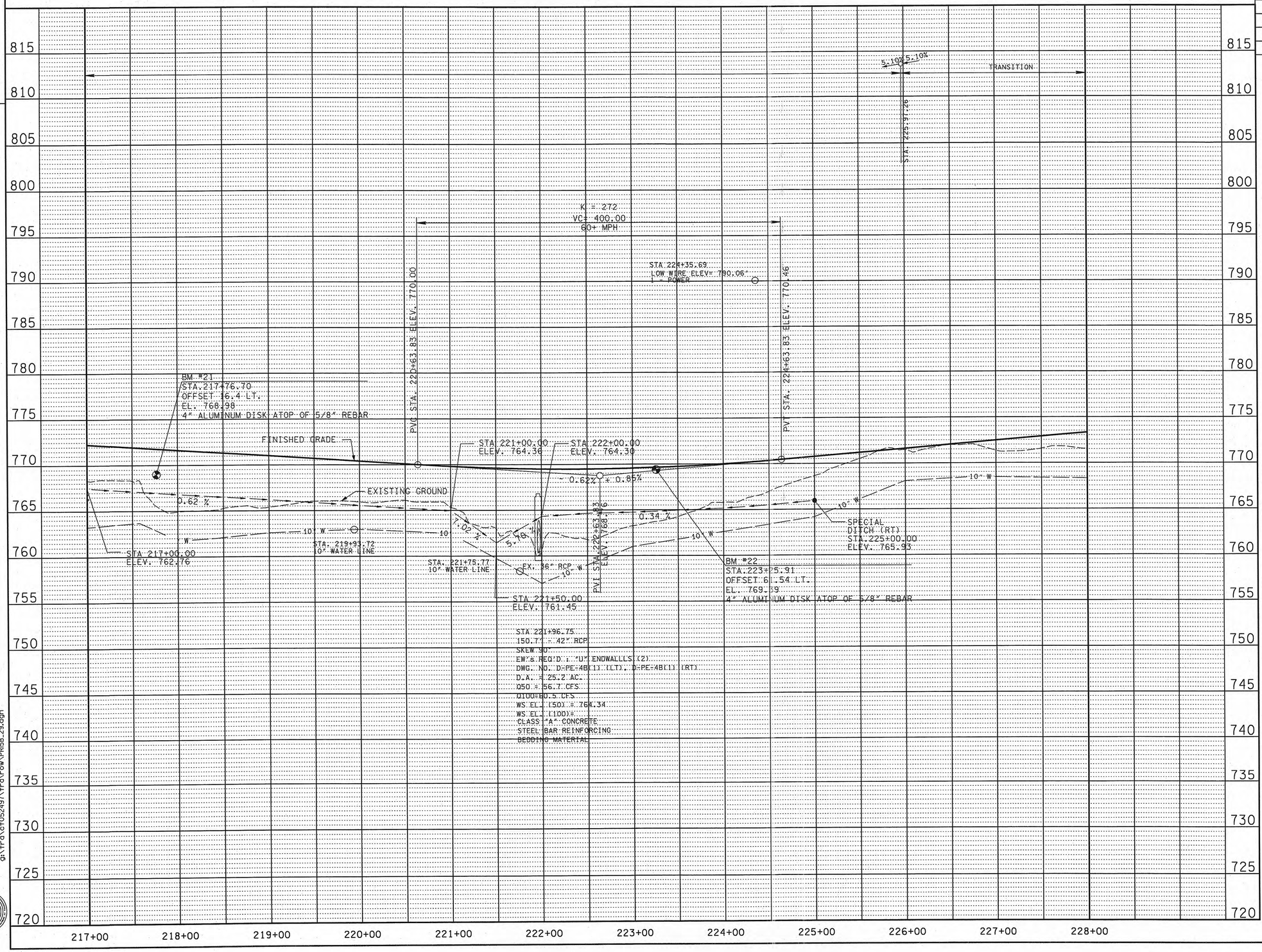
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	15B
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 217+00 TO STA. 228+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	16
R.O.W.	2009	HPP-NH-29(35)	

WOODS
STR-6
BITTER CREEK
230+00
235+00
DUKE ENERGY/EAST TENNESSEE GAS EASEMENT
22" G
GRASS
TREES
26D
THOMAS L. AND LOU W. CHRISTMAS
EXTEND EXIST. CULV. 14' ON LEFT
STR-13
WTL-6
228+44.99
129.32 (LT)
INV. EL. OUT 764.97
CUT
T-SOD
FILL
INV=765.31
6' X 5' RCBC
1311.77'
N41°51'30"W
PRES. AND PROP. R.O.W.
V-SOD
INV. EL. OUT 767.45
INV=770.58
EXIST. 24" RCP TO BE REMOVED
60" RCP
WTL-7
SEE SHEET NO. 15
SEE SHEET NO. 17
STA. 228+00
STA. 240+00
MATCH LINE
CP 23-MGSR29-23
INV=766.04
℄ S.R. 29
N 42° 02' 22" W
18" RCP
INV=770.42
INV=772.49
N 42° 1' 27" W
212.58'
N42°1'27"W
88.10'
N 41° 51' 30" W
122.95'
N 41° 51' 30" W
77.42'
724.94'
228+38.00
31.51 (RT)
228+97.26
232+61.69
32.02 (RT)
231+38.74
31.64 (RT)
233+39.11
32.27 (RT)
PRESENT R.O.W.
INV. EL. IN 766.51
INV. EL. IN 770.03
230+50.64
31.61 (RT)
EXTEND EXIST. CULV. 92' ON RIGHT
163.76'
334.76
PROPOSED R.O.W.
398.83'
S48°07'40"E
S 40° 55' 28" E
STA. 233+15.39
141.82 RT
STA. 231+51.66
138.63 RT
373.06'
N 21° 54' 0" E
48.01'
S 52°54'15" E
STA. 236+50.09
148.33 RT
THOMAS LOUIS AND LOU WATSON CHRISTMAS
PROPOSED R.O.W.
STA. 231+04.51
147.68' RT
INV-780.01
15" RCP
INV-780.60
26B
ALVIN D CHRISTMAS
B.O. GRAVEL DR
B.O. DIRT DR
N 23° 34' 0" E
472.40'
N 20° 47' 0" E
369.03'
N 39° 42' 0" W
330.25'
N 43° 19' 0" W
95.47'
N 89° 14' 0" W
339.18'
N 82° 32' 0" W
106.94'
N 77° 37' 0" W
36.47'
S - ASPHALT
N78°26'0"W
55.16'
GRASS
335.43'
S 75° 33' 52" W
WOODS
CUT
S0° 53' 21" W
219.11'
96.78'
S 44° 9' 59" E
STA. 228+51.83
448.50 RT
STA. 229+49.09
444.93 RT
26C
DAVID CHRISTMAS
N 50° 41' 0" W
210.00'
1-S-F RES
SHED
TRAILER
WELL
TREES

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 228+00 TO STA. 240+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	16A
R.O.W.	2009	HPP-NH-29(35)	

230+00

235+00

BITTER CREEK

STR-6

BITTER CREEK

STA. 233+00.00
10.0' FIELD ENT.

LIMIT OF CONST.
STA. 11+85.00

EXTEND EXIST. CULV.
14' ON LEFT

STR-13

WTL-6

WTL-7

6'X5' BOX
(TO REMAIN)

INV. EL.
OUT 764.97

STA. 230+99.19
MEDIAN DRAIN
OFFSET .34' LT.
GR. EL. 772.60

36A
#38

T-SOD

TYPE 13
TRANS.
V-SOD TO
T-SOD

R 15'

TYPE INLINE

TYPE 38

V-SOD

INV. EL.
OUT 767.45

38
EW

INV. EL. 778.78

TYPE 13

TYPE INLINE

24" CMP
(TO BE REMOVED)

24" CMP
(TO BE REMOVED)

60" RCP

WMC-19

24'R.

18" RCP

24'R.

℄ S.R. 29

N 42° 02' 22" W

℄ S.R. 29

24'

24'

24'

24'

STA. 228+00

SEE SHEET NO. 15A

TYPE INLINE

TYPE INLINE

TYPE 2

TYPE 13

INV. EL.
IN 766.51

STA. 228+97.26

TYPE 2

TYPE 13

R 15'

R 15'

R 15'

R 15'

R 50'

R 75'

V-SOD

V-SOD

EXTEND EXIST. CULV.
92' ON RIGHT

STR-13

BENCH FLOW LINE

LIMIT OF CONST.
STA. 12+76.00

STA. 230+00.00
10.0' PVT. DP

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW
LINE

MATCH LINE

60" RCP

39
EW

INV. EL. 777.94

INV. EL.
IN 770.03

V-SOD

V-SOD

STA. 237+50.00

STA. 238+00.00

STA. 236+45.09
MEDIAN DRAIN
GR. EL. 777.10

36B
#39

LIMIT OF CONST.
STA. 11+50.00

STA. 233+42.00
10.0' PVT. DP.

STA. 240+00

SEE SHEET NO. 17A

MATCH LINE

N

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 228+00 TO STA. 240+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	16B
R.O.W.	2009	HPP-NH-29(35)	

TRANSITION
SUPERELEVATION
NORMAL CROWN
BM #23
STA.230+24.57
OFFSET 15.3 LT.
EL. 774.46
4" ALUMINUM DISK ATOP OF 5/8" REBAR
FINISHED GRADE
EXISTING GROUND
0.85%
SPECIAL DITCH (RT)
STA.230+50.00
ELEV. 769.81
STA. 228+96.20
10" WATER LINE
10" W
7" W
5.00%
STA 231+16.20
ELEV. 766.49
5.00%
10" W
SPECIAL DITCH (RT)
STA.232+50.00
ELEV. 773.18
0.40%
STA 234+00.00
ELEV. 774.28
1.00 %
2.38 %
0" W
10" W
SPECIAL DITCH (RT)
STA.235+50.00
ELEV. 774.78
STA 236+50.00
ELEV. 773.09
EX. 24" RCP
5.62 %
2.14 %
STA 237+50.00
ELEV. 776.71
10" W
SPECIAL DITCH (RT)
STA.238+00.00
ELEV. 777.78
STA 239+76.66
LOW WIRE ELEV= 795.30
1 - TELEPHONE
STA 239+54.30
LOW WIRE ELEV= 794.88
2 - POWER
EX. 6' x 5' BOX CULVERT
SPECIAL DITCH (LT)
STA.231+00.09
ELEV. 765.10
SPECIAL DITCH (LT)
STA.236+50.00
ELEV. 767.30

STATION	230+99.19
STRUCTURE	6'x 5'x 106' R.C.B.C.
SKEW	75°(RT)
DRAINAGE AREA	173.7 AC.
DESIGN DISCHARGE (Q50)	180.4 CFS
DESIGN DISCHARGE (Q100)	215.6
OVERTOPPING ELEV.	773.99
ALLOWABLE HEADWATER ELEV.	775.49
Q50 HEADWATER ELEV.	771.19
Q100 HEADWATER ELEV.	771.87
VELOCITY (Q50)	9.37 FT/S
VELOCITY (Q100)	10.0 FT/S
INLET ELEVATION	766.51
OUTLET ELEVATION	764.97
STANDARD DRAWING NUMBERS	X-38-51
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

STA 236+45.09
156.0' - 60" RCP
SKEW 90°
EW's REQ'D : 'U' ENDWALLS (2)
DWG. NO. D-PE-4B(1) (LT), D-PE-3B(1) (RT)
D.A. = 47.5 AC.
Q50 = 121.6 CFS
Q100=133.0 CFS
WS EL. (50) = 774.75
WS EL. (100)=775.00
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

815 810 805 800 795 790 785 780 775 770 765 760 755 750 745 740 735 730 725 720

228+00 229+00 230+00 231+00 232+00 233+00 234+00 235+00 236+00 237+00 238+00 239+00 240+00

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 228+00 TO STA. 240+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	17
R.O.W.	2009	HPP-NH-29(35)	

WOODS
784.13'
S47°26'03"W
1-S-F BARN
WELL HSE
GRASS
DUKE ENERGY/ EAST TENNESSEE NATURAL GAS EASEMENT
245+00
250+00
RONALD W. AND CATHERINE G. HOWARD
CONC SLAB
TREES
TRAILER
GRASS
WOODS
(26)
DAVID WARNER AND SARAH C. NAWAZ
CHICKEN COOPS
STA. 241+56.71
135.14' LT
241+56.63
115.14 (LT)
CONST. ESM'T
241+56.67
125.14 (LT)
STA. 242+89.60
133.70' LT
242+89.60
113.70 (LT)
R=2854.91'
L=130.96'
INV. EL. OUT 770.84
BITTER CREEK
PRES. AND PROP. R.O.W.
STR-6
R=2854.91'
L=827.36'
251+55.23
128.82 (LT)
10.5' ASP DR
11.24'
S60°25'28"W
251+49.55
119.04 LT
FILL
TREES
10.00'
N48°06'27"E
CP 24-MGSR29-24
INV=771.33
14'x 5' CONC BOX CULV.
241+17.75
TS
INV=771.67
72" CMP
244+17.75
SC
CP 25-MGSR29-25
250+18.76
ST
SEE SHEET NO. 16
SEE SHEET NO. 18
STA. 240+00
STA. 252+00
N 42°02'22" W
INV=774.14
INV=773.29
240+64.05
34.56 (RT)
241 CMP
S.R. 29
PI 243+17.78
INV=774.21
INV=776.58
WWC-20
15" CMP
18" RCP
INV=779.32
PI 251+18.74
INV=778.84
315" CMP
WWC-21
20.10'
N17°09'48"E
N41°51'30"W
72.86'
INV=776.81
241+56.99
34.86 (RT)
N61°38'0"E
139.60'
STA. 240+46.66
106.03' RT
INV. EL. IN 771.82
STA. 240+30.89
170.88' RT
CUT
S48°38'30"W
66.74'
R=3109.82'
L=183.98'
98.02'
N32°32'52"E
243+39.08
35.26 (RT)
WOODS
R=3109.82'
L=395.43'
PRESENT R.O.W.
PI 247+22.18
247+30.09
31.42 (RT)
R=3109.82'
L=399.84'
251+25.87
31.13 (RT)
251+30.82
51.21 (RT)
GATE
98.84'
MATCH LINE
STA. 244+58.73
132.17' RT
FILL
STA. 247+45.27
149.38' RT
300.98'
S45°27'03"E
44.49'
PROPOSED R.O.W.
274.05'
S 54°18'04" E
CUT
111.35'
S 63°58'37" E
N11°20'0"W
107.35'
N35°25'0"W
140.92'
N19°48'0"W
C43.49'
N72°54'0"E
20.10'
N3°17'0"E
6.01'
STA. 243+61.61
130.45' RT
101.34'
S43°56'06"E
STR-14
STA. 240+26.64
193.38' RT
STA. 241+63.28
145.89' RT
B
N53°25'49"W
88.86'
STA. 241+20.26
140.86' RT
STA. 242+90.43
200.24' RT
STA. 243+73.98
185.05' RT
STA. 247+87.24
154.46' RT
STA. 250+47.26
157.94' RT
STA. 251+53.95
147.19' RT
N86°41'0"W
26.40'
STA. 240+22.41
189.11' RT
FLAT BOTTOM DITCH
9.0' GRAVEL DR
S11°10'25"W
88.84'
1-S-F RES
(28)
TINA L., ALVIN J., AND DAVID J. WOODS
(27)
JOSEPH A. ARMES
S32°32'52"W
473.39'
(26B)
DAVID WAHRER AND SARAH C. NAWAZ

S.R. 29 (MAINLINE)
PI 247+22.18
N 609,592.8864
E 2,411,622.7661
Δs 18°01'09"LT
θs 03°00'00"LT
Δc 12°01'09"LT
D 02°00'00"
R 2,864.79
Lc 600.97
Ts 604.43
Ls 300.00
LT 200.03
ST 100.03
Es 37.11
X 299.92
Y 5.23
k 149.99
P 1.31
SE 0.051 FT/FT
DES. SPEED 60 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 240+00 TO STA. 252+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	17A
R.O.W.	2009	HPP-NH-29(35)	

250+00

SEE SHEET NO. 16A

SEE SHEET NO. 18A

STA. 240+00

STA. 252+00

MATCH LINE

MATCH LINE

BITTER CREEK

STR-6

INV. EL. OUT 770.84

72" CMP (TO BE REMOVED)

N 42°02' 22" W

TS 241+17.75

STR-14

4'x 5' CONC BOX CULV.

SC 244+17.75

℄ S.R. 29

PI 243+17.78

24" CMP (TO BE REMOVED)

18" CMP (TO BE REMOVED)

15" CMP (TO BE REMOVED)

36C #38 STA. 242+06.63 MEDIAN DRAIN GR. EL. 782.38

INV. EL. IN 771.82

WWC-20

WTL-8

STR-14

WTL-9

PI 247+22.18

WWC-20

℄ S.R. 29

24' R.

24' R.

24' R.

24' R.

R 15'

R 15'

R 15'

R 15'

R 20'

R 20'

R 20'

LIMIT OF CONST. STA. 11+52.00

STA. 240+41.06 10.0' PVT. DR.

LIMIT OF CONST. STA. 12+24.00

STA. 246+00.00 10.0' FIELD ENT.

INV. EL. 780.63 41 EW

GR. EL. 787.50 INV. EL. 783.25 40 #38

INV. EL. 789.02 43 EW

STA. 248+07.14 MEDIAN DRAIN OFFSET .58' RT. INV. EL. 783.25

23' FLAT BOTTOM DITCH

LIMIT OF CONST. STA. 11+14.00

STA. 250+67.00 15.0' PVT. DR.

CS 250+18.72

18" RCP

42 EW INV. EL. 789.43

18" RCP

PI 251+18.74 WWC-21

STA. 250+40.00

STA. 250+00.00

LIMIT OF CONST. STA. 11+61.60

STA. 251+51.25 10.0' PVT. DR.

S.R. 29 (MAINLINE)

PI 247+22.18
N 609,592.8864
E 2,411,622.7661
Δs 18°01'09"LT
θs 03°00'00"LT
Δc 12°01'09"LT
D 02°00'00"
R 2,864.79
Lc 600.97
Ts 604.43
Ls 300.00
LT 200.03
ST 100.03
Es 37.11
X 299.92
Y 5.23
k 149.99
p 1.31
SE 0.051 FT/FT
DES. SPEED 60 MPH

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 240+00 TO STA. 252+00

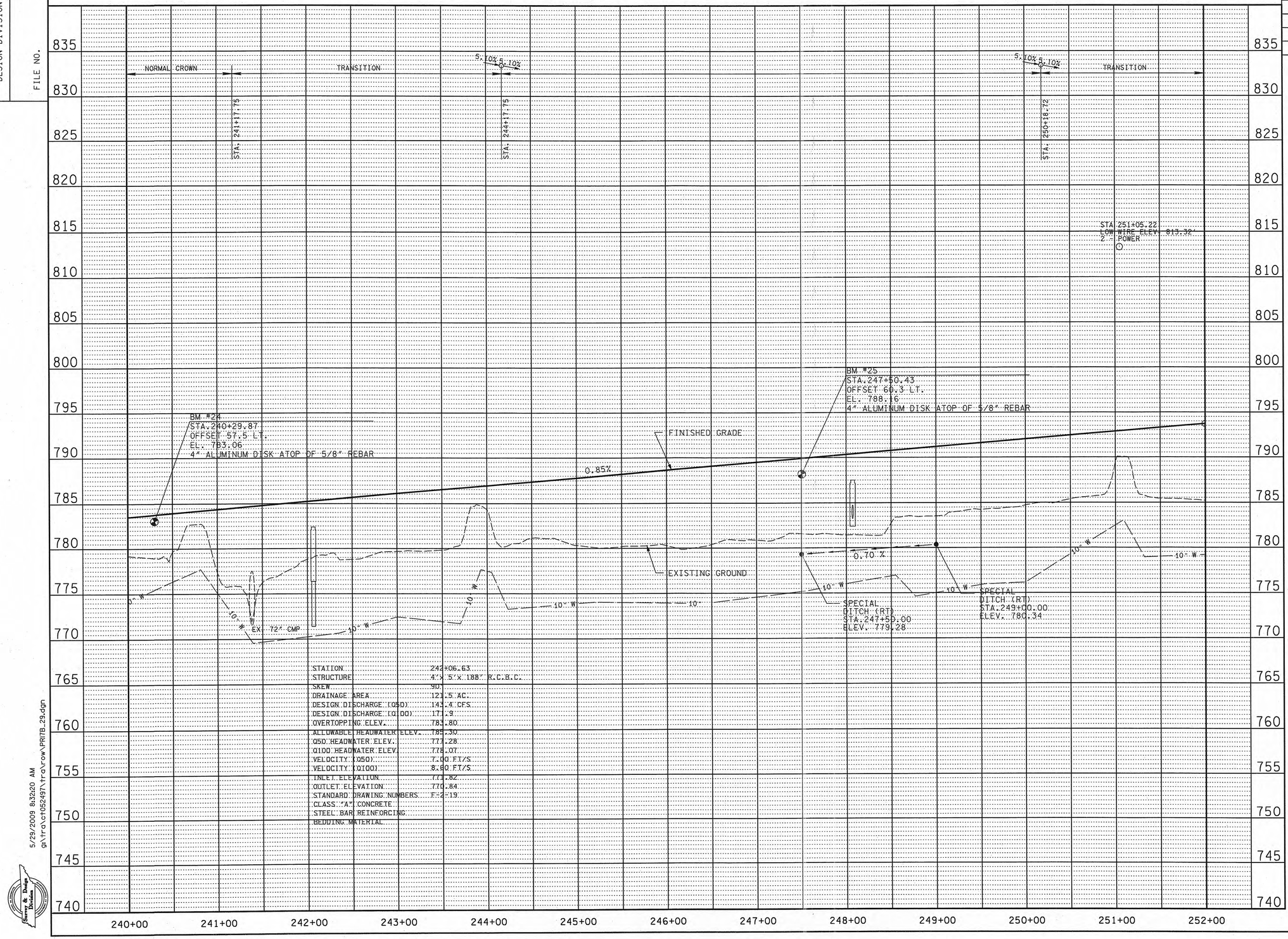
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	17B
R.O.W.	2009	HPP-NH-29(35)	



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Sverdrup & Parcel
Sverdrup Parcel

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

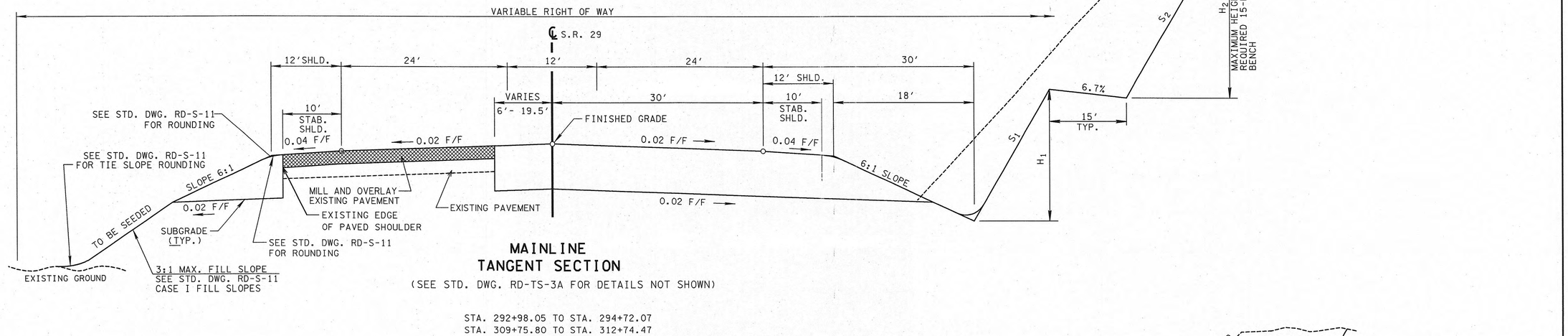
PROFILE

STA. 240+00 TO STA. 252+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2H
R.O.W.	2009	HPP-NH-29(35)	



MAINLINE TANGENT SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

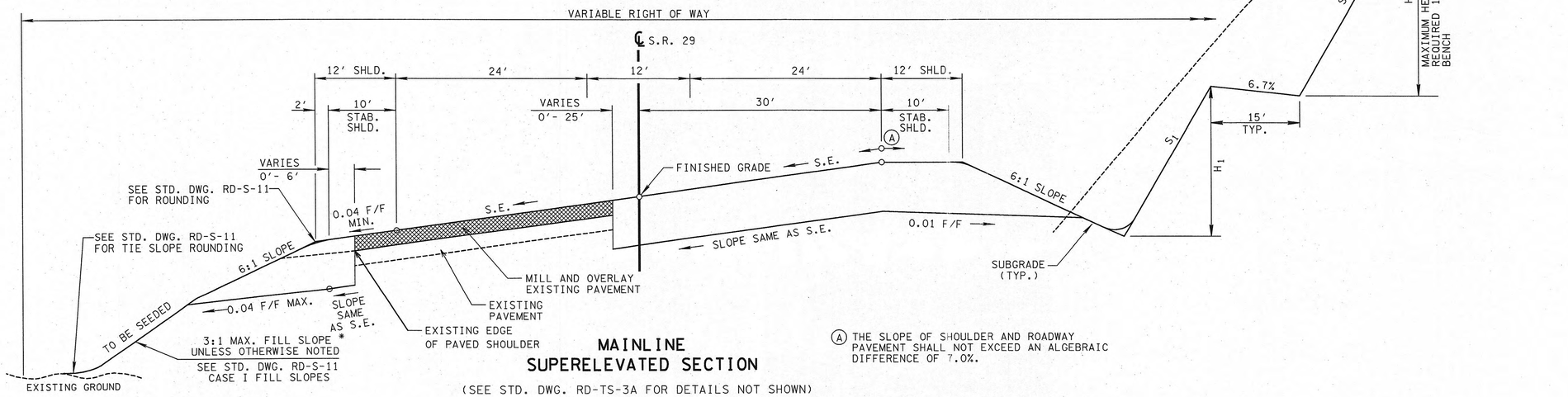
STA. 292+98.05 TO STA. 294+72.07
STA. 309+75.80 TO STA. 312+74.47
STA. 324+42.89 TO STA. 324+56.73

*USE 2:1 FILL SLOPE FROM:
STA. 326+25 TO STA. 328+00, LT.

USE 2:1 TO 1.65:1 FILL SLOPES FROM:
STA. 298+00 TO STA. 307+00, LT.

USE 4:1 TO 6:1 FILL SLOPES FROM:
STA. 299+50 TO STA. 301+50, RT.

MAINLINE LOCATION	H_1	S_1	H_2	S_2
STA. 292+00 TO STA. 299+50, RT.	20'	0.5:1	50'	1.5:1
STA. 301+50 TO STA. 320+00, RT.	20'	0.5:1	50'	1.5:1
STA. 320+50 TO STA. 328+00, RT.	20'	1.5:1	50'	1.5:1



MAINLINE SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 277+28.54 TO STA. 292+98.05
STA. 294+72.07 TO STA. 309+75.80
STA. 312+74.47 TO STA. 324+42.89
STA. 324+56.73 TO STA. 328+00.00

(A) THE SLOPE OF SHOULDER AND ROADWAY PAVEMENT SHALL NOT EXCEED AN ALGEBRAIC DIFFERENCE OF 7.0%.

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	18
R.O.W.	2009	HPP-NH-29(35)	

255+00
260+00
WILLIAM A. NEWCOMB
WOODS
BITTER CREEK
STR-6
STR-15
N59°53'34"W
1173.52'
FILL
CUT
GRASS
ST 263+18.72
PRES. AND PROP. R.O.W.
INV. EL. OUT 793.76
263+30.75
126.25 (LT)
263+48.97
126.26 (LT)
18.23'
N60°04'51"W
GATE
1-S-BL BLDG
173.76'
S38°25'12"W
96.98'
S27°34'48"W
15" CMP
INV=799.99
INV=795.42
INV=798.85
CP 27-MGSR29-27
CP-SOI195
EL-807.95
18" CMP
INV=804.13
INV=803.77
30" RCP
CP 26-MGSR29-26
INV=792.77
15" CMP
INV=794.12
INV=795.65
INV=796.17
N 60° 03' 31" W
INV=796.44
WTL-10
WTL-11
WWC-21
℄ S.R. 29
10" W
18" RCP
403.97'
N59°53'05"W
255+33.75
51.13 (RT)
1-S-B BUS
CIRCLE C BAR
15.0' GRAVEL
14.0' GRAVEL
TRAILER
257+43.87
51.77(RT)
STA. 258+34.52
103.72' RT
STA. 258+94.79
148.04' RT
518.07'
N59°56'34"W
INV. EL. IN 796.65
48" RCP
262+61.94
52.82 (RT)
PRESENT R.O.W.
262+47.28
91.42 (RT)
R 41.29'
S50°45'05"W
210.13'
N59°53'05"W
210.10'
88.98'
1-S-B BLDG
1-S-F BLDG
STA. 257+45.71
109.26' RT
385.14'
S 63° 37' 36" E
PROPOSED R.O.W.
STA. 255+36.02
122.34' RT
GRAVEL TO BE REMOVED
SHED
74.81'
S 23° 44' 04" E
202.44'
S28°06'50"W
195.09'
S28°06'36"W
OWEN C. HARRIS AND WIFE,
CLARA M. HARRIS
210.01'
S61°53'24"E
348.57'
R
N7° 58' 58" E
97.59'
STA. 259+31.28
238.54' RT
N 15° 54' 23" E
121.26'
PROP. R.O.W.
261.45'
S 58° 27' 10" E
PROPOSED R.O.W.
STA. 262+22.72
363.34' RT
S5° 7' 23" W
68.27'
STA. 262+51.37
425.30' RT
N 20° 1' 56" E
622.47'
PROPOSED R.O.W.
1105.66'
N85°01'32"W
29
DON E. WHITUS
28
31
JOSEPH A. ARMES
30
MATCH LINE STA. 252+00 SEE SHEET NO. 17
MATCH LINE STA. 264+00 SEE SHEET NO. 19
MATCH LINE SEE SHEET NO. 19C

COORDINATE VALUES ARE NAD/83(1995)
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 252+00 TO STA. 264+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	18A
R.O.W.	2009	HPP-NH-29(35)	

255+00

260+00

MATCH LINE STA. 252+00 SEE SHEET NO. 17A

MATCH LINE STA. 264+00 SEE SHEET NO. 19A

BITTER CREEK

STR-6

STR-15

ST 253+18.72

44 #38
STA. 254+07.17
MEDIAN DRAIN
GR. EL. 793.00
INV. EL. 788.75

TYPE 13

TYPE 2

TYPE 38

15" CMP (TO BE REMOVED)

15" CMP (TO BE REMOVED)

30" CMP (TO BE REMOVED)

24'

24'

24'

24'

N 60° 03' 31" W

WWC-21

℄ S.R. 29

18" RCP

WTL-10

WTL-11

24 R.

24 R.

18" RCP

℄ S.R. 29

48" RCP

INV. EL. IN 796.65

INV. EL. OUT 793.76

STA. 260+38.16
10.0' FIELD ENT.

LIMIT OF CONST.
STA. 11+12.00

LIMIT OF CONST.
STA. 11+27.22

STA. 263+50.00
15.0' PVT. DR.

R 15'

R 15'

R 25'

R 20'

R 15'

R 15'

R 20'

R 20'

R 20'

R 20'

44A #38
STA. 260+05.13
MEDIAN DRAIN
OFFSET .54' LT.
GR. EL. 800.47
INV. EL. IN 794.22
OUT 794.12

INV. EL. 804.13 47 EW

STA. 263+25.00

STA. 263+75.00

BENCH FLOW LINE

INV. EL. 804.72 46 EW

INV.EL. 784.12 45 EW

STA. 256+05.92
15.0' BUS. ENT.

STA. 256+94.04
15.0' BUS. ENT.

LIMIT OF CONST.
STA. 11+95.00

LIMIT OF CONST.
STA. 11+18.00

LIMIT OF CONST.
STA. 11+17.00

STA. 253+58.00
10.0' FIELD ENT.

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

N

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COORDINATE VALUES ARE NAD/83(1995)
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FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 252+00 TO STA. 264+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	18B
R.O.W.	2009	HPP-NH-29(35)	

TRANSITION
NORMAL CROWN
STA. 253+18.72
VC= 200.00
K = 500
60+ mph
PVC STA. 252+00.00 ELEV. 793.71
PVT STA. 254+00.00 ELEV. 795.81
PVI STA 253+00.00 ELEV. 794.56
0.85%
1.25%
STA 256+68.72
LOW WIRE ELEV= 813.66'
2 - POWER
2 - TELEPHONE
BM.#26
STA.255+84.19
OFFSET 10.5 LT.
EL. 796.76
4" ALUMINUM DISK ATOP OF 5/8" REBAR
FINISHED GRADE
BM.#2
STA.260+86.05
OFFSET 58.9 LT.
EL. 803.31
4" ALUMINUM DISK ATOP OF 5/8" REBAR
STA 259+58.35
10" WATER LINE
EX. 30" RCP
EXISTING GROUND
10" W
STA260+05.13
152.7' - 18" RCP
SKEW 75° RT
EW'S REQ'D : "U" ENDWALLS (1), TY "A" (1)
DWG. NO.
D.A. = 21.3 AC.
Q50 = 64.8 CFS
Q100=70.7 CFS
WS EL. (50)= 799.67
WS EL. (100)=800.08
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL
PVC STA. 263+45.00 ELEV. 807.36

845 840 835 830 825 820 815 810 805 800 795 790 785 780 775 770 765 760 755 750

252+00 253+00 254+00 255+00 256+00 257+00 258+00 259+00 260+00 261+00 262+00 263+00 264+00

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 252+00 TO STA. 264+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	19
R.O.W.	2009	HPP-NH-29(35)	

265+00 270+00 275+00

WOODS

BITTER CREEK

(18) CNX GAS CO. LLC.

57.75' N59°46'56"W WOODS

268+50.86 122.72 (LT)

8.60' S09°49'04"W

STA. 268+00.00 138.56' LT

269+06.10 129.46 (LT)

STA. 269+39.83 135.52' LT

GRASS

237.42' N71°31'56"W

STA. 268+00.00

PRES. AND PROP. R.O.W.

INV. EL. 123.56' LT OUT 797.82

CONST. ESM'T.

499.64' N60°04'51"W

34.08'

214.90' S59°46'56"E

809.00' N59°46'56"W

CONST. ESM'T.

INV. EL. OUT 796.65

CONST. ESM'T.

PRES. AND PROP. R.O.W.

V-SOD

CUT

FILL

269+08.91 121.32 (LT)

INV. EL. OUT 796.20

STR-16A

STR-16

WWC-24

INV=796.80 P

INV=797.25

INV=796.90

WWC-25

GATE

EXTEND EXIST. CULV. 24' ON LT.

STA. 271+55.00 114.01' LT

15.81' S28°31'40"W

N76°34'56"W 152.60'

BITTER CREEK

417.35' N64°20'56"W

DONALD G. JONES (49)

FILL GRAVEL DR

SHED

STA. 271+52.00 129.01' LT

PC 264+36.11

INV=801.40

24" RCP WWC-22

WWC-23

48" RCP

PRC 270+78.29

36" RCP WWC-21

INV=801.34

INV=806.33

INV=803.19

INV=795.12

INV=797.78

INV=799.10

WWC-20

PI 267+57.22

PI 273+98.43

℄ S.R. 29

℄ S.R. 29

GATE

TREES N60°02'18"W

INV. EL. IN 803.86

709.22' N59°58'39"W

PRESENT R.O.W.

269+69.81 60.05 (RT)

14.92' N09°01'54"E

269+74.80 74.11 (RT)

240.00' 30" RCP

INV. EL. IN 802.50

INV. EL. IN 800.55

SHED

MOBILE HOME

168.52' S 52°12'23" E

99.40'

CUT

TRAIL

87.34'

14.56'

PROPOSED R.O.W.

34.10'

97.07' S17°09'00"E

EXTEND EXIST. CULV. 49' ON RT.

℄ PROPOSED R.O.W.

362.90' S 59°18'01" E

534.20' N59°38'10"W

FILL

STA. 273+84.79 87.48' RT

100.32' N85°18'23"E

58.48'

S02°55'36"W 34.32'

TREES

V-SOD

WOODS

1-M-SHED (33) RAYMOND W. AND ANNIE T. CURTIS

S57°42'00"E 129.56'

S36°00'00"E 155.19'

TRAIL

STA. 273+00.89 143.13' RT

STA. 272+66.99 137.83' RT

STA. 270+99.73 110.90' RT

STA. 270+26.80 158.65' RT

272+09.81 66.23 (RT)

272+24.77 97.14 (RT)

115.47' S 42°16'42" W

STA. 269+99.55 270.80' RT

754.57' S09°12'02"E

WOODS

PROPOSED R.O.W.

466.70' S 34°59'27" W

CUT

(31) JOSEPH ARMES

(31) JOSEPH ARMES

(32) LANDON KEITH BASS

S.R. 29 (MAINLINE)
PI 267+57.22
N 610612.538
E 2409852.495
Δ 01°36'20"LT
D 00°15'00"
R 22918.31
T 321.11
Lc 642.18
SE NC
DES. SPEED 60 MPH
TRANS. LENGTH 0 FT.

S.R. 29 (MAINLINE)
PI 273+99.43
N 610917.377
E 2409287.196
Δ 01°36'20"RT
D 00°15'00"
R 22920.78
T 321.14
Lc 642.25
SE NC
DES. SPEED 60 MPH
TRANS. LENGTH 0 FT.

MATCH LINE STA. 264+00 SEE SHEET NO. 18

MATCH LINE STA. 275+00 SEE SHEET NO. 20

MATCH LINE SEE SHEET NO. 19C

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 264+00 TO STA. 276+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	19A
R.O.W.	2009	HPP-NH-29(35)	

265+00 270+00 275+00

BITTER CREEK

STR-6

STR-16 RELOCATION

EXTEND EXIST. CULV. 24' ON LT.

LIMIT OF CONST. STA. 2+60.00

STA. 273+40.76 15.0' PVT. DR.

INV. EL. OUT 797.82

INV. EL. OUT 796.20

INV. EL. OUT 796.65

V-SOD

STR-16

WWC-24

WWC-25

22870.31 R

22958.28 R

36" CMP (TO BE REMOVED)

24" CMP (TO BE REMOVED)

18" CMP (TO BE REMOVED)

WWC-22

WWC-23

WWC-24

PC 264+36.11

PRC 270+78.29

PI 273+99.43

℄ S.R. 29

PI 267+57.22

18" CMP (TO BE REMOVED)

WTL-1

22966.31 R

22872.78 R

30" RCP

INV. EL. IN 800.55

INV. EL. IN 802.50

INV. EL. IN 803.85

STA. 266+62.04 MEDIAN DRAIN GR. EL. 807.01 INV. EL. IN 799.71 OUT 799.61

48 #38

STA. 270+28.20 MEDIAN DRAIN GR. EL. 808.87 INV. EL. IN 799.94 OUT 799.88

49 #38

R 15'

R 50'

STA. 270+67.61 15.0' PVT. DR.

LIMIT OF CONST. STA. 12+50.00

EXTEND EXIST. CULV. 49' ON RT.

LIMIT OF CONST. STA. 12+20.00

750'

STA. 273+00.00 10.0' PVT. DR.

49A JB#2 STA. 272+71.72 NO. 2 JUNCTION BOX

MATCH LINE STA. 264+00 SEE SHEET NO. 18A

MATCH LINE STA. 276+00 SEE SHEET NO. 20A

BEGIN TAPER (RT. & LT.) STA. 264+36.14

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

S.R. 29 (MAINLINE)
PI 267+57.22
N 610612.538
E 2409852.495
Δ 01 °36'20"LT
D 00 °15'00"
R 22918.31
T 321.11
Lc 642.18
SE NC
DES. SPEED 60 MPH
TRANS. LENGTH 0 FT.

S.R. 29 (MAINLINE)
PI 273+99.43
N 610917.377
E 2409287.196
Δ 01 °36'20"RT
D 00 °15'00"
R 22920.78
T 321.14
Lc 642.25
SE NC
DES. SPEED 60 MPH
TRANS. LENGTH 0 FT.

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 264+00 TO STA. 276+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	19B
R.O.W.	2009	HPP-NH-29(35)	

NORMAL CROWN

VC= 200.00
K = 317
60+ mph

BM #28
STA.271+89.01
OFFSET 12.1 LT.
EL. 808.27
4" ALUMINUM DISK ATOP OF 5/8" REBAR

PVI STA. 265+00.00
ELEV. 809.56

PVC STA. 272+50.00 ELEV. 811.21

PVT STA. 274+50.00 ELEV. 812.28

FINISHED GRADE

1.25% 0.22% 0.22% 0.85%

EXISTING GROUND

EX. 24" RCP

STA 266+62.04
164.0' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (1)
DWG. NO. D-PE-4B(1) (LT)
D.A. = 8.5 AC.
Q50 = 25.8 CFS
Q100=28.2 CFS
WS EL. (50) = 803.92
WS EL. (100)=804.00
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

PVT STA. 266+75.00 ELEV. 809.55

VC= 350.00
K = 340
60+ mph

STA. 269+77.34
10" WATER LINE

EX. 18" CMP

1.00%

STA.270+00.00
ELEV. 793.47

STA 270+28.20
153.9' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (1)
DWG. NO. D-PE-4B(1) (LT)
D.A. = 6.2 AC.
Q50 = 18.8 CFS
Q100=20.6 CFS
WS EL. (50) = 804.10
WS EL. (100)=804.26
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

SPECIAL DITCH (RT)
STA.272+00.00
ELEV. 807.11

SPECIAL DITCH (LT)
STA.271+00.00
ELEV. 794.47

5.00%

5.00%

EX. 36" RCP

PVT STA. 273+50.00
ELEV. 811.43

SPECIAL DITCH (RT)
STA.273+50.00
ELEV. 807.51

STA.272+71.00
ELEV. 803.56

STA 272+71.98
73.0' - 36" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (2)
DWG. NO. D-PE-4B(1) (LT), D-PE-6B(1) (RT)
D.A. = 12.8 AC.
Q50 = 37.9 CFS
Q100=41.0 CFS
WS EL. (50) = 808.14
WS EL. (100)=808.27
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

EX

10" W

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

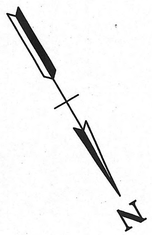
PROFILE

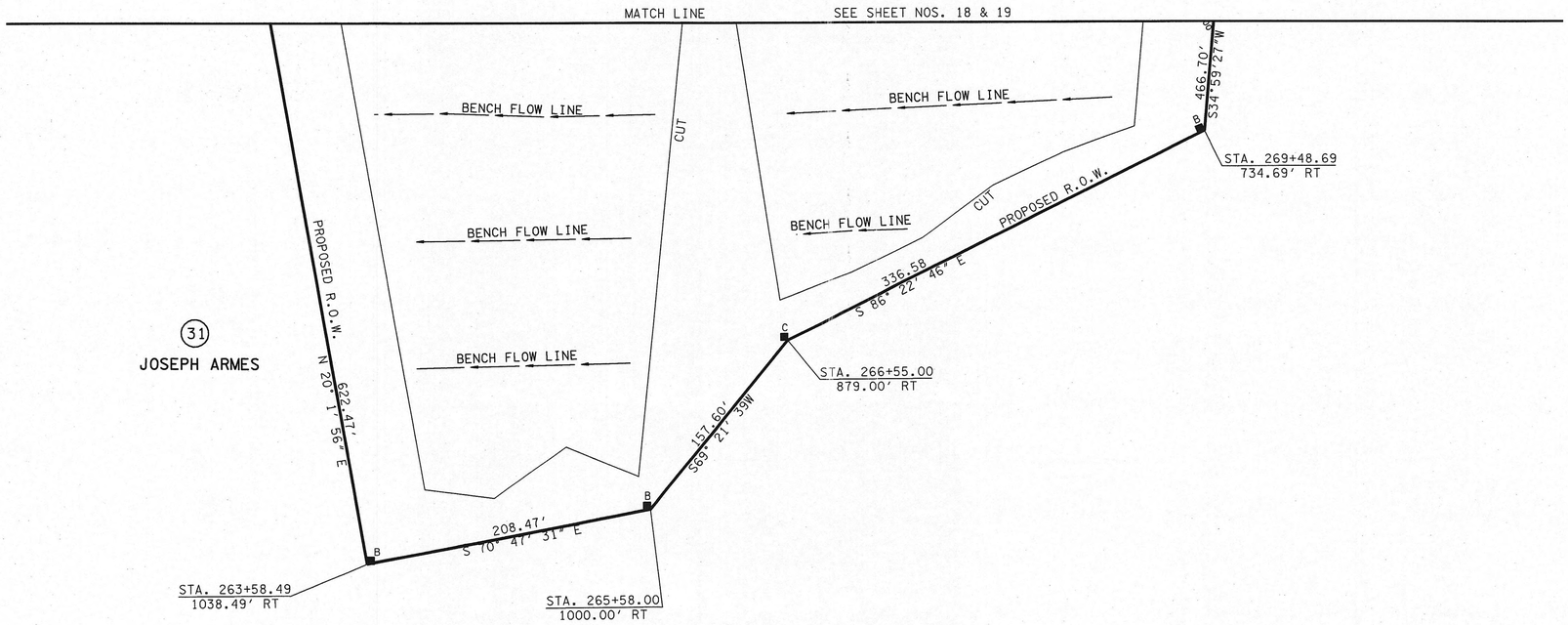
STA. 264+00 TO STA. 276+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	19C
R.O.W.	2009	HPP-NH-29(35)	





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COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 264+00 TO STA. 276+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	20
R.O.W.	2009	HPP-NH-29(35)	

280+00
285+00
WOODS
STA. 276+34.08
105.01' LT
25.00
S 30° 24' 32" W
30.00
N 59° 40' 04" W
STA. 276+64.20
129.71' LT
25.00
N 30° 24' 28" E
BITTER CREEK
N72° 11' 07" W
205.09'
STA. 276+34.38
130.01' LT
PERMANENT DRAINAGE EASEMENT
STA. 276+63.94
104.71' LT
STR-6
DONALD G. JONES
58
1-S-M BLDG
134.88'
N22° 14' 17" W
49
30.50'
N59° 50' 29" W
CONST. ESM'T.
PRES. AND PROP. R.O.W.
L=282.43'
R=3656.43'
GRASS
FILL
277+15.55
104.28 (LT)
INV. EL.
OUT 801.04
INV=800.67
SEE SHEET NO. 19
STA. 276+00
STA. 280+00.10
128.68' LT
100.00'
N48° 04' 07" W
SHED
TRAILER
1-S-BL BLDG
N47° 55' 53" E
190.61'
25.00'
S 20° 08' 19" W
STA. 279+99.59
119.48' LT
GRAVEL DR
1-S-BL BLDG
STA. 280+05.65
104.38' LT
STA. 279+99.59
104.48' LT
PERMANENT DRAINAGE EASEMENT
41.02'
N 57° 05' 06" W
STA. 280+38.58
129.58' LT
25.00'
N 20° 08' 19" E
STA. 280+44.54
105.40' LT
EXTEND EXIST. CULV. 25' ON LEFT
280+20.68
104.52 (LT)
281+37.30
107.89 (LT)
18
CNX GAS CO., LLC
STR-6/BITTER CREEK
285+15.05
109.70 (LT)
WOODS
286+84.94
108.08 (LT)
GRASS
204.53'
S46° 44' 30" W
138.15'
N68° 16' 57" W
L=113.97'
R=1397.06'
DOG PEN
INV. EL.
OUT 804.32
PI 285+45.98
PRES. AND PROP. R.O.W.
TRAILER
FILL
SEE SHEET NO. 21
STA. 287+00
MATCH LINE
PI 279+95.48
INV=804.85
ASP
INV=807.26
INV=807.96
10"
18" CMP
STA. 282+37.22
76.69' RT
W
WWC-27
10"
© S.R. 29
V-SOD
INV=806.26
INV. EL.
IN 807.08
R=3921.57'
L=380.64'
CUT
469.71'
S57° 52' 00" E
FILL
L=339.42'
R=1390.15'
S-M BLDG
STA. 281+00.44
93.47' RT
281+36.91
71.21 (RT)
15.00
N 20° 08' 19" E
ASP DR
S-S-F
STA. 280+78.33
109.75' RT
RES
STA. 280+79.87
137.04' RT
TANK
TO BE REMOVED
S 34° 06' 57" E
41.50'
WWC-28
284+94.21
71.80 (RT)
R=1390.15'
L=276.68'
STA. 284+82.38
111.79' RT
273.97'
S34° 06' 57" E
WOODS
INV=801.66
PROPOSED R.O.W.
EXTEND EXIST. CULV. 54' ON LEFT
STA. 279+91.06
98.69' RT
GRASS
CONST. ESM'T.
STA. 279+92.01
139.30' RT
362.90'
S 59° 18' 01" E
INV. EL.
IN 804.27
277+45.53
75.84 (RT)
STA. 277+48.98
94.73' RT
WWC-26
EXTEND EXIST. CULV. 54' ON RIGHT
STA. 280+57.13
96.28' RT
PERMANENT DRAINAGE EASEMENT
40.89
S 57° 51' 59" E
15.00
S 20° 08' 19" W
223.38'
S45° 00' 00" E
77.01'
S25° 51' 00" E
STA. 280+61.33
110.75' RT
STA. 281+05.08
107.83' RT
WOODS
SHED
EAST TENNESSEE / DUKE ENERGY NATURAL GAS EASEMENT
N 25° 13' 07" E
328.30'
137.35'
S27° 31' 00" E
TRAIL
52.74'
N05° 29' 00" E
S10° 43' 00" W
105.24'
S10° 58' 00" W
43.69'
41.93'
N05° 38' 15" E
28.34'
S18° 18' 34" W
316.68'
S18° 18' 12" W
407.46'
S67° 48' 25" W
MOBILE HOME
SHED
N18° 21' 01" W
24.07'
22'
G
50'
MATCH LINE
33A
DONALD G. JONES
34
MICHAEL YEARY
33
RAYMOND W. AND ANNIE T. CURTIS
32
LANDON KEITH BASS
36

S.R. 29 (MAINLINE)
PI 285+49.98
N 611,491.6546
E 2,408,290.1643
Δs 46° 46' 48" (RT)
Θs 8° 00' 00"
Δc 30° 46' 48" (RT)
D 4° 00' 00"
R 1,432.39
Lc 769.50
Ts 821.44
Ls 400.00
LT 266.94
ST 133.58
Es 133.32
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 276+00 TO STA. 287+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	20A
R.O.W.	2009	HPP-NH-29(35)	

280+00

285+00

BITTER CREEK

STA. 279+88.86
10.0' PVT. DR.

LIMIT OF CONST.
STA. 1+82.00

EXTEND EXIST. CULV.
25' ON LEFT

STR-6/BITTER CREEK

STR-6

STR-17

WWC-26

INV. EL.
OUT 804.32

TYPE 13

TYPE INLINE

TYPE 2

TYPE 38

R 15'

PI 285+45.98

3@12'x5'
BOX CULVERT
(TO REMAIN)

INV. EL.
OUT 801.04

18" CMP
(TO BE REMOVED)

PI 279+95.48

30'

MATCH LINE
STA. 276+00
SEE SHEET NO. 19A

N 60° 03' 24" W

℄ S.R. 29

TS 277+28.54

TYPE INLINE

V-SOD

INV. EL.
IN 807.08

SC 281+28.54

R 15'

WWC-27

STA. 281+53.14
10.0' PVT. DR.

LIMIT OF CONST.
STA. 1+32.85

WWC-28

SIGHT TRIANGLE

R 15'

SEE SHEET NO. 21A
STA. 287+00
MATCH LINE

50' ROP

LT 266.94

RT 266.94

END TAPER LRT. & LT.
STA. 277+20.53

INV. EL.
IN 804.27

WWC-26

EXTEND EXIST. CULV.
54' ON LEFT

STA. 279+76.38
10.0' PVT. DR.

LIMIT OF CONST.
STA. 11+70.00

STR-1 FORKED CREEK

EXTEND EXIST. CULV.
54' ON RIGHT

LIMIT OF CONST.
STA. 1+52.00

STA. 286+09.25
10.0' FIELD ENT.

S.R. 29 (MAINLINE)

PI 285+49.98
N 611,491.6546
E 2,408,290.1643
Δs 46° 46' 48" (RT)
θs 8° 00' 00"
Δc 30° 46' 48" (RT)
D 4° 00' 00"
R 1,432.39
Lc 769.50
Ts 821.44
Ls 400.00
LT 266.94
ST 133.58
Es 133.32
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 276+00 TO STA. 287+00

SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	20B
R.O.W.	2009	HPP-NH-29(35)	

NORMAL CROWN
TRANSITION
STA. 277+28.54
STA. 281+28.54
-6.30%
-6.30%
K = 196
VC= 410.00
60+ mph
PVC STA. 282+95.00 ELEV. 819.47
PVT STA. 287+05.00 ELEV. 827.25
+ 0.85%
+ 2.95%
PVI STA. 285+00.00 ELEV. 821.21
BM.#29
STA.280+89.30
OFFSET 59.3 LT.
EL. 818.49
4" ALUMINUM DISK ATOP OF 5/8" REBAR
FORKED CREEK
EX. ELEV.= 804.638
280+57.87 S.R. 29
482+92.00
FINISHED GRADE
STA.281+50.00
ELEV. 811.05
EXTREME HIGHWATER=814.5
SPECIAL
DITCH (RT)
STA.279+00.00
ELEV. 810.23
1.26%
SPECIAL
DITCH (RT)
STA.282+00.00
ELEV. 811.69
≠5.00%
2.00%
STA. 277+73.51
22" GAS LINE
EXISTING GROUND
10" W
NORNAL HIGHWATER=806.0
EXIST. 36'2" X 5'
CONC BOX BRIDGE
STA 280+54.87
EXTEND EXIST.
3 @ 12' X 5' CONC.
BOX BRIDGE
25° LEFT
47° RIGHT
STA.280+00.00
ELEV. 807.03
18" RCP
STA 276+48.08
140.0' - 30" RCP
SKEW 90°
EW's REQ'D.: 4 'C' ENDWALLS (2)
DWG. NO. D-PE-4B(1) (LT), D-PE-4B(1) (RT)
D.A. = 8.5 AC.
Q50 = 27.2 CFS
Q100=28.9 CFS
WS E. (50) = 808.38
WS E. (100)=808.54
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

865 860 855 850 845 840 835 830 825 820 815 810 805 800 795 790 785 780 775 770

276+00 277+00 278+00 279+00 280+00 281+00 282+00 283+00 284+00 285+00 286+00 287+00

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Surrey & Dodge Inc.

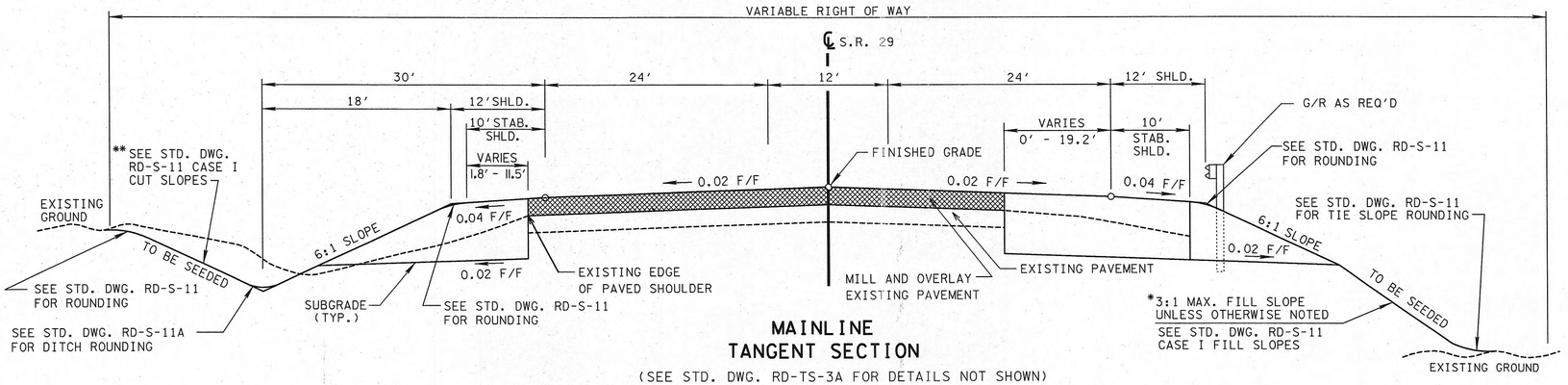
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 276+00 TO STA. 287+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2J
R.O.W.	2009	HPP-NH-29(35)	



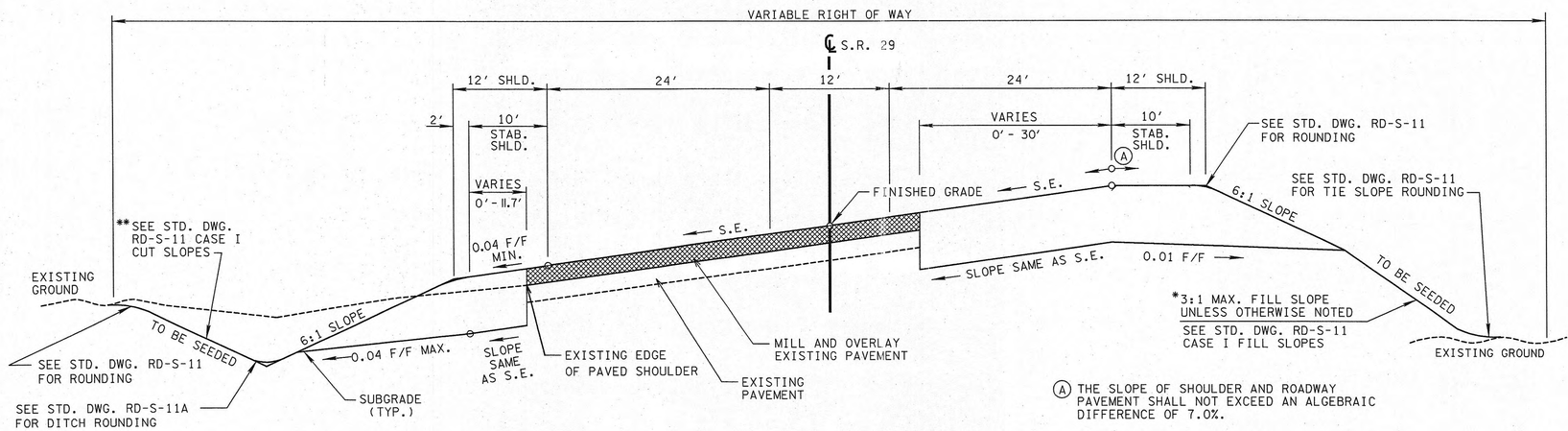
MAINLINE
TANGENT SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 332+80.14 TO STA. 334+63.83
STA. 345+64.50 TO STA. 348+88.20

** A 15-FOOT WIDE BENCH IS REQUIRED EVERY 30 VERTICAL FEET OF A 2:1 CUT SLOPE. A BENCH IS NOT REQUIRED IF THE EXTENSION OF THE 2:1 CUT SLOPE AN ADDITIONAL 10 VERTICAL FEET OR LESS (FOR A TOTAL MAXIMUM VERTICAL HEIGHT OF 40 FEET) INTERSECTS THE EXISTING SLOPE. (SEE CROSS-SECTIONS)

*USE 2:1 FILL SLOPE FROM:
STA. 328+00 TO STA. 330+25, LT.
STA. 332+29.15 TO STA. 333+25, LT.
STA. 345+75 TO STA. 348+75, RT.



MAINLINE
SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 328+00.00 TO STA. 332+80.14
STA. 334+63.83 TO STA. 345+64.50

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	21
R.O.W.	2009	HPP-NH-29(35)	

290+00
295+00
50+00
PAUL W. AND LESLIE YEARY
EDDY AND CORDELIA T. YEARY
JUDITH C. LEE
ANDREW V. AND ETHEL YEARY
POS STA. 290+51.96 S.R. 29 =
POT STA. 50+00.00 WHETSTONE ROAD
N 612052.6872
E 2408162.2162
PRES. AND PROP. R.O.W.
SEE SHEET NO. 22
SEE SHEET NO. 20
MATCH LINE STA. 287+00
MATCH LINE STA. 298+00
STEVEN BRUCE LANE AND MARSHA CAROL LANE
WILLIAM R. AND WANDA D. TURNER
STEPHANIE YEARY PINKERTON
JOSEPH A. ARMES
WHETSTONE ROAD (RT.)
PI 51+11.94
N 612,082.8230
E 2,408,270.0229
A 37°57'02"RT
D 28°00'00"
R 204.63
T 70.36
Lc 135.54
SE 0.067 FT/FT
DES. SPEED 20 MPH
COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT
PRESENT LAYOUT
STA. 287+00 TO STA. 298+00
SCALE: 1"= 50'
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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	21A
R.O.W.	2009	HPP-NH-29(35)	

290+00

295+00

BITTER CREEK

STR-6

POS STA. 290+51.96 S.R. 29 =
POT STA. 50+00.00 WHETSTONE ROAD
N 612052.6872
E 2408162.2162

STA. 294+15.74
10.0' FIELD ENT.

STA. 290+64.60
10.0' PVT. DR.

STA. 292+07.14
10.0' PVT. DR.

STA. 287+90.72
10.0' PVT. DR.

LIMIT OF CONST.
STA. 289+90.00 STA. 1+51.00
10.0' PVT. DR.

LIMIT OF CONST.
STA. 1+28.00

LIMIT OF CONST.
STA. 1+07.00

LIMIT OF CONST.
STA. 11+20.00

LIMIT OF CONST.
STA. 1+03.00

R 15'

INV. EL.
OUT 845.00

TYPE 38

SEE SHEET NO. 22A

18" CMP
(TO BE REMOVED)

PI 290+31.63

57" LT

50+00

30'

N 13° 16' 43" W

TS 294+72.07

30" CMP
(TO REMAIN)

WWC-29

PI 297+12.01

℄ S.R. 29

WWC-27

PC 50+41.58

94.22'

SIGHT TRIANGLE

STA. 50+94.22
45.0' @ 36" RCP
SKEW 90°

292+98.05

INV. EL.
IN 828.81

INV. EL.
OUT827.69

STA. 297+82.10
NO. 2 JUNCTION BOX

52
JB#2

30" RCP

INV. EL.
IN 850.35

STA. 298+00

MATCH LINE

MATCH LINE
STA. 287+00

SEE SHEET NO. 20A

BEGIN TAPER STA. 52+13.55
9.0' LT. & RT.

END TAPER STA. 52+53.55
MATCH EXIST. LT. & RT.

PT 51+71.10

PI 51+11.94

WHETSTONE ROAD

S 67° 40' 01" E

STA. 288+02.06
10.0' PVT. DR.

LIMIT OF CONST.
STA. 1+10.00

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

LIMIT OF CONST.
WHETSTONE ROAD
STA. 52+53.55
N 612027.0451
E 2408405.8009

WHETSTONE ROAD (RT.)
PI 51+11.94
N 612,082.8230
E 2,408,270.0229
Δ 37 °57'02"RT
D 28°00'00"
R 204.63
T 70.36
Lc 135.54
SE 0.067 FT/FT
DES. SPEED 20 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 287+00 TO STA. 298+00

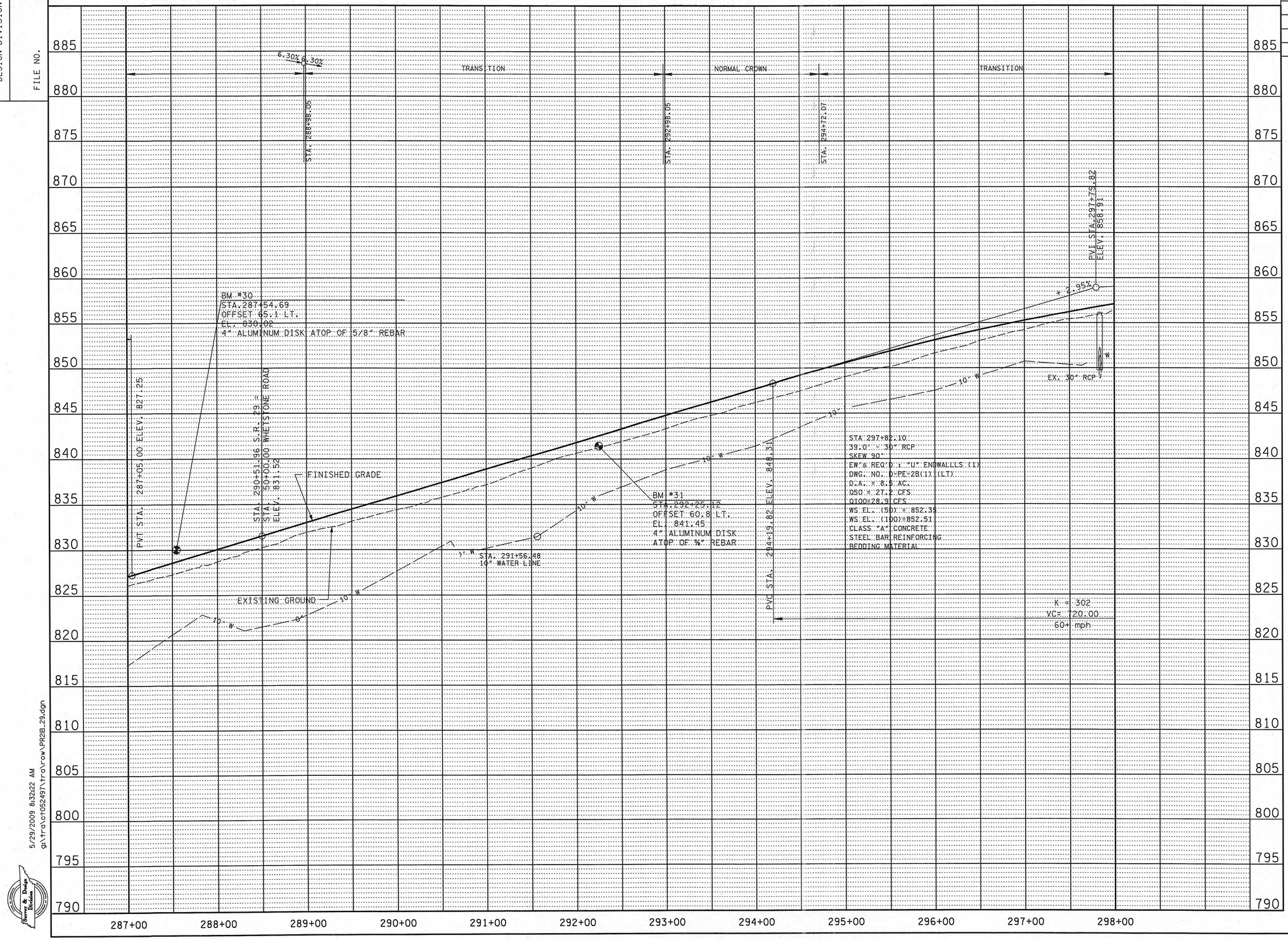
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	21B
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 287+00 TO STA. 298+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	22
R.O.W.	2009	HPP-NH-29(35)	

AHLER TRUST

300+00

305+00

WOODS

MATCH LINE STA. 298+00 SEE SHEET NO. 21

298+75.23
99.37 (LT)

N00°47'10"E 102.41'

FILL

INV. EL. OUT 842.89

299+22.01

INV=842.44

SC 299+22.01

30" RCP

10"

INV=845.63

CUT

GRASS

202.31'
S25°24'59"E

A

349.34'
S 38° 39' 28" E

PROPOSED R.O.W.

STA. 298+48.84
146.31' RT

INV. EL. IN 850.92

WOODS

301+32.51
77.35 (RT)

A

158.93'
S 45° 32' 30" E

PROPOSED R.O.W.

STA. 301+60.46
94.58' RT

STA. 303+06.60
86.92' RT

PI 302+78.11

S.R. 29 (MAINLINE)

PI 302+78.11
N 613,245.0001
E 2,407,876.3824
Δs 57° 57' 19" (LT)
θs 12° 22' 30"
Δc 33° 12' 19" (LT)
D 5° 30' 00"
R 1,041.74
Lc 603.73
Ts 806.04
Ls 450.00
LT 300.74
ST 150.67
Es 158.32
X 447.91
Y 32.29
k 224.65
p 8.09
SE 0.074 FT/FT
DES. SPEED 50 MPH

WOODS

31

JOSEPH A. ARMES

S 28° 3' 45" W 333.84'

PROPOSED R.O.W.

WOODS

CUT

PROPOSED R.O.W.

STA. 303+69.11
411.79' RT

WOODS

PRES. AND PROP. R.O.W.

R=866.25'
L=608.56'

BITTER CREEK STR-6

INV=845.06

FILL

INV. EL. OUT 850.19

305+48.36
107.55 (LT)

SC 305+25.80

18" RCP

INV=856.01

30" RCP

GRASS

R=1074.37'
L=731.98'

PRESENT R.O.W.

INV. EL. IN 857.44

305+54.66
58.64 (RT)

307+92.30
118.82 (LT)

L=226.24'
R=1985.07'

STR-6

FILL

PI 306+78.47

L=312.64'
R=1988.67'

308+57.65
50.00 (RT)

305+54.89
70.05 (RT)

11.41'
S28°20'20"W

287.25'
N72°45'38"W

MATCH LINE STA. 309+00 SEE SHEET NO. 23

WOODS

C

A

566.52'
N 60° 57' 26" W

STA. 308+01.18
410.40' RT

79.21'
N 71° 05' 30" W

STA. 308+71.78
408.92' RT

172.35'
N67°01'49"W

199.65'
S33°27'11"W

43

N

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 298+00 TO STA. 309+00

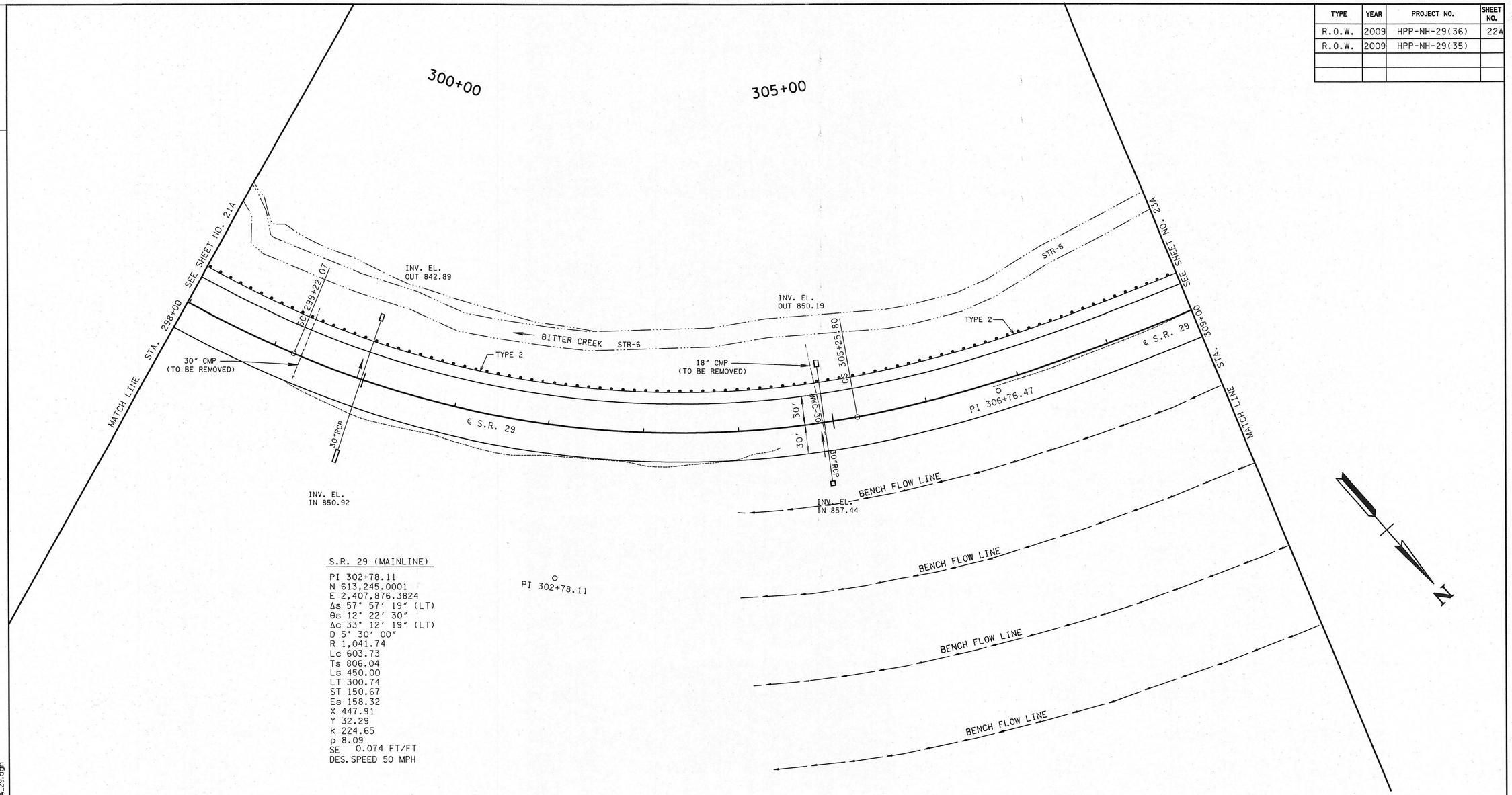
SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	22A
R.O.W.	2009	HPP-NH-29(35)	



S.R. 29 (MAINLINE)

PI 302+78.11
N 613,245.0001
E 2,407,876.3824
Δs 57° 57′ 19″ (LT)
θs 12° 22′ 30″
Δc 33° 12′ 19″ (LT)
D 5° 30′ 00″
R 1,041.74
Lc 603.73
Ts 806.04
Ls 450.00
LT 300.74
ST 150.67
Es 158.32
X 447.91
Y 32.29
k 224.65
p 8.09
SE 0.074 FT/FT
DES. SPEED 50 MPH

PI 302+78.11

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Survey & Design Review

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 298+00 TO STA. 309+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	22B
R.O.W.	2009	HPP-NH-29(35)	

905 900 895 890 885 880 875 870 865 860 855 850 845 840 835 830 825 820 815 810

TRANSITION
1.40% T.40%
STA. 299+22.07
1.40% T.40%
STA. 305+25.80
TRANSITION

BM #32
STA.299+91.47
OFFSET 15.4 LT.
EL. 858.01
4" ALUMINUM DISK ATOP OF 5/8" REBAR

BM #33
STA.303+87.83
OFFSET 12.6 LT.
EL. 860.57
4" ALUMINUM DISK ATOP OF 5/8" REBAR

+ 0.56%

STA. 298+63.82
10" WATER LINE

EXISTING GROUND

STA. 304+08.19
10" WATER LINE
10" W
EX. 18" CMP
10" W
10" W
10" W
10" W
EX. 30" CMP
10" W

STA 299+97.69
143.0' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (2)
DWG. NO. D-PE-2B(1) (LT), D-PE-4B(1) (RT)
D.A. = 5.7 AC.
Q50 = 18.2 CFS
Q100=19.4 CFS
WS EL. (50) = 851.02
WS EL. (100)=851.17
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

STA 304+90.72
121.0' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (1)
DWG. NO. D-PE-2B(1) (LT)
D.A. = 9.0 AC.
Q50 = 20.9 CFS
Q100=30.6 CFS
WS EL. (50) = 860.20
WS EL. (100)=860.47
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

PVT STA. 301+39.82 ELEV. 860.93

298+00 299+00 300+00 301+00 302+00 303+00 304+00 305+00 306+00 307+00 308+00 309+00

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Surv. & Desgn. Unit

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 298+00 TO STA. 309+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	23
R.O.W.	2009	HPP-NH-29(35)	

310+00

315+00

AHLER TRUST

WOODS

310+03.77
126.47 (LT)

313+32.84
109.65 (LT)

314+62.01
119.54 (LT)

316+47.28
119.06 (LT)

318+86.23
123.21 (LT)

319+54.64
133.82 (LT)

PRES. AND PROP. R.O.W.

207.25'
N12°45'38"W

329.83'
N68°18'07"W

132.74'

196.00'
N67°00'30"W

INV. EL. N74°40'38"W
OUT 854.20

24" RCP(FIELD LOCATED BY ECOLOGIST)

STA-6 BITTER CREEK

258.81'
N60°27'19"W

75.29'
N61°29'31"W

INV=850.55
INV. EL.
OUT 855.30

INV=851.56

INV=858.83
INV. EL.
OUT 858.83

SEE SHEET NO. 22

SEE SHEET NO. 24

ST 309+75.80

24" RCP
WMC-31

CUT

18" CMP
WMC-32

24" RCP
WMC-33

PI 318+69.31

24" RCP
WMC-34

PI 315+41.41

N 71°14'02" W

℄ S.R. 29

INV=858.29

INV=859.40

INV=860.67

STA. 309+00

30" RCP

429.81'
N71°27'25"W

312+86.72
47.73 (RT)

TS 312+74.47

SC 316+74.47

EXTEND EXIST. CULV.
60.3' ø 24" RCP (RT)

PRESENT R.O.W.

PRESENT R.O.W.

INV. EL.
IN 856.63

INV. EL.
IN 858.93

21.42'
N19°15'47"E

INV. EL.
IN 861.94

24" RCP

L=1325.86'
R=1743.21'

312+86.54
69.15 (RT)

MATCH LINE

MATCH LINE

STA. 320+00

WOODS

WOODS

S.R. 29 (MAINLINE)

PI 318+69.31
N 613,791.7584
E 2,406,267.1809
Δs 30° 44' 12" (RT)
θs 8° 00' 00"
Δc 14° 44' 12" (RT)
D 4° 00' 00"
R 1,432.39
Ts 594.85
Lc 368.42
Ls 400.00
LT 266.94
ST 133.58
Es 57.94
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

N

(31)

JOSEPH A. ARMES

310+38.94
421.12 (RT)

312+07.28
433.49 (RT)

313+92.10
446.24 (RT)

316+27.16
450.64 (RT)

319+05.10
425.21 (RT)

CUT

CUT

172.35'
N67°01'49"W

PROPOSED
R.O.W.

168.79'
N67°01'49"W

179.92'
N67°01'49"W

191.73'
N67°01'49"W

195.20'
N67°01'49"W

PROPOSED
R.O.W.

179.93'
N67°01'49"W

(43)

HOUSTON AND
LIANNE HULING

(42)

RICHARD AND
PATRICIA CLAYTON

199.34'
S33°40'34"W

193.48'
S35°18'48"W

183.23'
S36°09'15"W

172.53'
S37°21'05"W

168.20'
S35°42'35"W

N57°27'49"W
2.30'

38.76'

63.05'

191.00'
N70°24'49"W

N66°54'49"W

179.80'
N70°24'49"W

105.00'

50.66'

114.00'

133.56'

31.50'

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 309+00 TO STA. 320+00

SCALE: 1"= 50'

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Survey & Design Section

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	23A
R.O.W.	2009	HPP-NH-29(35)	

310+00

315+00

SEE SHEET NO. 22

SEE SHEET NO. 24A

MATCH LINE STA. 309+00

MATCH LINE STA. 320+00

BITTER CREEK

STR-6
BITTER CREEK

INV. EL.
OUT 854.20

24" RCP(FIELD LOCATED BY ECOLOGIST)

18"CMP
(TO BE REMOVED)

24" RCP
(TO REMAIN)

INV. EL.
OUT 858.83

INV. EL.
OUT 855.30

30" RCP
(TO BE REMOVED)

TYPE 2

ST 309+75.80

WMC-31

WMC-32

WMC-33

WMC-34

PI 318+69.31

PI 315+41.41

N 71° 14' 02" W
℄ S.R. 29

30'

30'

℄ S.R. 29

TS 312+74.47

30"RCP

SC 316+74.47

EXTEND EXIST. CULV.
60.3' ø 24 " RCP (RT)

INV. EL.
IN 861.94

24"RCP

BENCH FLOW LINE

INV. EL.
IN 858.93

INV. EL.
IN 856.63

BENCH FLOW LINE

BENCH FLOW LINE

BENCH FLOW LINE

S.R. 29 (MAINLINE)

PI 318+69.31
N 613,791.7584
E 2,406,267.1809
Δs 30° 44' 12" (RT)
θs 8° 00' 00"
Δc 14° 44' 12" (RT)
D 4° 00' 00"
R 1,432.39
Ts 594.85
Lc 368.42
Ls 400.00
L' 266.94
ST 133.58
Es 57.94
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 309+00 TO STA. 320+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	23B
R.O.W.	2009	HPP-NH-29(35)	

TRANSITION
NORMAL CROWN
TRANSITION
STA. 309+75.80
STA. 312+74.47
STA. 316+74.47
6.30%
6.30%
K = 587
VC= 200.00
60± mph
PVC STA. 315+00.00 ELEV. 868.55
PVT STA. 317+00.00 ELEV. 870.01
PVI STA. 316+00.00 ELEV. 869.11
BM #34
STA.318+58.49
OFFSET 70.5 LT.
EL. 871.94
4" ALUMINUM DISK
ATOP OF ¾" REBAR
FINISHED GRADE
EXISTING GROUND
+ 0.56%
+ 0.90%
10' W
EX. 30" RCP
EX. 18" CMP
EX. 24" RCP

STA 309+94.57
133.0' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (1)
DWG. NO. D-PE-4B(1) (LT)
D.A. = 2.8 AC.
Q50 = 9.0 CFS
Q100=9.5 CFS
WS EL. (50) = 856.46
WS EL. (100)=856.67
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

STA 313+53.95
135.0' - 30" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (1)
DWG. NO. D-PE-2B(1) (LT)
D.A. = 5.7 AC.
Q50 = 18.2 CFS
Q100=19.4 CFS
WS EL. (50) = 860.29
WS EL. (100)=860.45
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

STA 319+31.50
60.3' - 24" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (1)
DWG. NO. D-PE-2B(1) (LT)
D.A. = 2.8 AC.
Q50 = 9.0 CFS
Q100=9.5 CFS
WS EL. (50) = 863.46
WS EL. (100)=863.56
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

915 910 905 900 895 890 885 880 875 870 865 860 855 850 845 840 835 830 825 820

309+00 310+00 311+00 312+00 313+00 314+00 315+00 316+00 317+00 318+00 319+00 320+00

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 309+00 TO STA. 320+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	24
R.O.W.	2009	HPP-NH-29(35)	

320+00

325+00

330+00

AHLER TRUST

POC STA. 328+19.91 S.R. 29 =
POT STA. 57+00.00 HANGING ROCK ROAD
N 614527.7338
E 2405632.5326

328+09.60
93.46 (LT)
WOODS

EXTEND EXIST. CULV. 17' LT.

321+62.86
139.86 (LT)
PRES. AND PROP. R.O.W.
STR-6
BITTER CREEK
226.28'
N49°32'44"W
380.49'
N42°48'34"W

325+33.61
148.50 (LT)

326+68.52
110.95 (LT)
138.40'
N24°59'09"W

STA. 324+59.18
EXISTING SPRING
BOX AND CULVERT
TO REMAIN

STR-18
SPG-3
INV. EL.
OUT 866.31
INV=867.32

CUT
FILL

PC 325+88.71

139.66'
N34°48'32"W

PRES. AND PROP. R.O.W.
493.77'
N46°08'29"W

INV=861.05
INV. EL.
OUT 860.79

328+50.91
61.33 (RT)
GRASS

MATCH LINE STA. 320+00
SEE SHEET NO. 23

SEE SHEET NO. 25
MATCH LINE STA. 331+00

N42°44'30"W
43.31'

℄ S.R. 29
40.00'
N42°44'30"W
61.74 (RT)

328+68.66
328+90.49

INV=862.58

5.00'
WTL-12
N47°43'19"E
N44°12'16"W 318.04'
WWC-36

328+96.40
66.74 (RT)
V-SOD

INV. EL.
IN 863.28
130.02'
40.00'
N14°05'59.76"E
189.66'
PROPOSED
R.O.W.
R 51°46'02"E

INV=866.03
57+97.87
57.04 (LT)

STA. 329+11.11
143.25' RT

58.67'
S70°41'06"W
EXTEND EXIST. CULV. 8.0" GRAVEL DR
46' ON RT.

STA. 328+87.67
196.73' RT

58+91.12
38.18 (LT)
95.18'
N50°51'42"W

39.60'

STA. 327+96.41
249.30' RT

STA. 328+56.87
236.32' RT

S47°43'19"W
323.78'

INV. EL.
873.45
5' FLAT BOTTOM
CHANNEL

STA. 59+75.00
52.0' @ 24" RCP
SKEW 90°

INV=876.54
50.27'
N30°19'20"W

STA. 327+38.38
306.96' RT

STA. 326+91.57
297.00' RT

60+00

STA. 326+62.30
270.84' RT

STA. 326+03.33
202.26' RT
INV=879.51

PC 57+90.70
58+00.67
11.54 (LT)

58+85.78
2.80 (RT)

PT 59+45.96

87.50'
HANGING ROCK ROAD
N71°25'49"W
87.00'
N75°25'49"W
154.87'

INV=865.47

S14°41'11"W
87.50'

PRESENT R.O.W.

320+97.03
64.06 (RT)

CS 320+42.89

ST 324+42.89

INV=869.62
24"RCP

327+00.54
62.33 (RT)

328+08.06
61.21 (RT)

CAVE ENTRANCE
108.65'
N42°44'30"W

58.33'
N59°30'54"W

326+45.80
80.52 (RT)

N 47°46'38"E
130.00'

STA. 60+41.54
18"CMP
TO BE REMOVED

432.96'
N67°01'50"W

WOODS

INV. EL.
873.68
60+34.92
21.34 (RT)

(31)
JOSEPH A. ARMES

324+22.91
250.38 (RT)

N67°01'49"W
124.27'

PROPOSED CUT
R.O.W.
S 60°26'57"E
188.31'

R 21.58'
S 59°24'04"E

16.67'

92.05'
N13°09'56"W

88.51'

321+38.58
370.38 (RT)

PROPOSED
R.O.W. N67°01'49"W
179.93'
N67°01'49"W

STA. 323+06.89
305.20' RT

STA. 324+26.78
266.50' RT

WOODS

(42)
RICHARD AND
PATRICIA
CLAYTON

(41)
PEGGY WALLS

206.91'
S36°05'32"W

227.07'
S41°16'33"W

199.27'
S39°22'41"W

PRESENT R.O.W.
282.00'
14.0' ASP RD
PRESENT R.O.W.
279.20'
N83°26'49"W
SW-18

(44)
PEGGY WALLS

LIMIT OF CONST.
HANGING ROCK ROAD
STA. 60+40.00
N 614610.8660
E 2405935.1850

88.00'
N83°26'49"W
65.10'
N57°27'49"W
103.58'
N80°34'54"W

HANGING ROCK ROAD
147.00'
N57°27'49"W
157.96'
N57°27'49"W
163.00'
N57°27'49"W
175.00'
N57°27'49"W

330.20'
S89°13'58"W

(45)
JUDY SAFFALL TANNER(½),
DANNY HONEYCUTT(¼),
AND MICKEY HONEYCUTT(¼)

S.R. 29 (MAINLINE)
PI 328+68.66
N 614,567.8753
E 2,405,604.3847
Δ 5° 35' 39" (LT)
D 1° 00' 00"
R 5,729.58
T 279.93
Lc 559.41
SE 0.021 FT/FT
DES. SPEED 50 MPH
TRANS. LENGTH 264 FT.

HANGING ROCK ROAD (RT.)
PI 58+74.73
N 614,646.4699
E 2,405,760.7163
Δ 54°20'34"RT
D 35°00'00"
R 163.70
T 84.03
Lc 155.27
SE 0.073 FT/FT
DES. SPEED 20 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 320+00 TO STA. 331+00

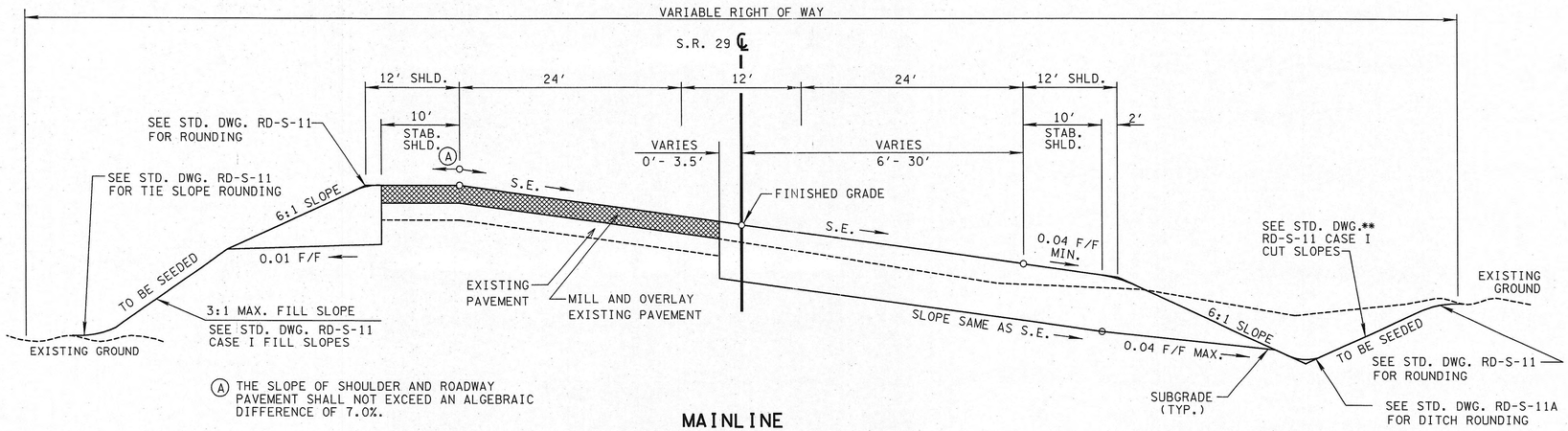
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Surrey & Dohm

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	2K
R.O.W.	2009	HPP-NH-29(35)	



MAINLINE
SUPERELEVATED SECTION

(SEE STD. DWG. RD-TS-3A FOR DETAILS NOT SHOWN)

STA. 348+88.20 TO STA. 357+48.09

** A 15-FOOT WIDE BENCH IS REQUIRED EVERY 30 VERTICAL FEET OF A 2:1 CUT SLOPE. A BENCH IS NOT REQUIRED IF THE EXTENSION OF THE 2:1 CUT SLOPE AN ADDITIONAL 10 VERTICAL FEET OR LESS (FOR A TOTAL MAXIMUM VERTICAL HEIGHT OF 40 FEET) INTERSECTS THE EXISTING SLOPE. (SEE CROSS-SECTIONS)

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

TYPICAL SECTIONS

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	24A
R.O.W.	2009	HPP-NH-29(35)	

320+00

325+00

330+00

POC STA. 328+19.91 S.R. 29 =
POT STA. 57+00.00 HANGING ROCK ROAD
N 614527.7338
E 2405632.5326

EXTEND EXIST.
CULV. 17' LT.

STR-6
BITTER CREEK

STA. 324+59.18
EXISTING SPRING
BOX AND CULVERT
TO REMAIN

STR-18
SPG-3

INV. EL.
OUT 866.31

WWC-35

PC 325+88.73

TYPE 38

TYPE 2

INV. EL.
OUT 860.79

TYPE 13
18" RCP
(TO BE REMOVED)

8'X12' BOX CULVERT
(TO REMAIN)

℄ S.R. 29

PI 321+76.47

N 40° 29' 49" W

30'

30'

PI 328+68.66

SIGHT TRIANGLE

SIGHT TRIANGLE

WTL-12

WWC-36

V-SOD

INV. EL.
IN 863.28

CS 320+42.89

ST 324+42.89

24"RCP

INV. EL.
IN 869.44

BENCH FLOW LINE

PC 57+90.70

N 47° 11' 28" E

12'

R 15'

MATCH LINE STA. 320+00

SEE SHEET NO. 23A

MATCH LINE STA. 331+00

SEE SHEET NO. 25A

LIMIT OF CONST.
STA. 11+08.00

STA. 58+31.68
10.0' PVI OR.

EXTEND EXIST. CULV.
46' ON RT.

BENCH FLOW LINE

BENCH FLOW LINE

PT 59+45.96

INV. EL.
873.68

BEGIN TAPER STA. 60+00.00
MATCH EXISTING

END TAPER STA. 60+40.00
12' LT. & RT.

HANGING ROCK ROAD

PI 58+74.73

R 15'

STR-18

12'

58" E

27'

18" RCP
(TO REMAIN)

STA. 59+75.00
52.0' @ 24" RCP
SKEW 90°

INV. EL.
873.45
5' FLAT BOTTOM
CHANNEL

60+00

STR-18

LIMIT OF CONST.
HANGING ROCK ROAD
STA. 60+40.00
N 614610.8660
E 2405935.1850

HANGING ROCK ROAD

S.R. 29 (MAINLINE)
PI 328+68.66
N 614,567.8753
E 2,405,604.3847
Δ 5° 35' 39" (LT)
D 1° 00' 00"
R 5,729.58
T 279.93
Lc 559.41
SE 0.021 FT/FT
DES. SPEED 50 MPH
TRANS. LENGTH 264 FT.

HANGING ROCK ROAD (RT.)
PI 58+74.73
N 614,646.4699
E 2,405,760.7163
Δ 54 °20'34"RT
D 35°00'00"
R 163.70
T 84.03
Lc 155.27
SE 0.073 FT/FT
DES. SPEED 20 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 320+00 TO STA. 331+00

SCALE: 1"= 50'

Survey & Design Services

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	24B
R.O.W.	2009	HPP-NH-29(35)	

925 920 915 910 905 900 895 890 885 880 875 870 865 860 855 850 845 840 835 830

6.30% 6.30%
TRANSITION
NORMAL CROWN
TRANSITION
2.10% 2.10%
2.10% 2.10%
TRANSITION
STA. 320+42.89
STA. 324+42.89
STA. 324+56.73
STA. 327+20.73
STA. 330+16.14

K = 572
VC = 200.00
60+ mph

PVC STA. 327+20.00 ELEV. 879.19
PVI STA. 328+20.00 ELEV. 880.09
PVT STA. 329+20.00 ELEV. 881.34

STA 328+95.25
LOW WIRE ELEV= 898.24'
2 - POWER
1 - TELEPHONE

STA 328+19.21 = S.R. 29 =
STA 57+00.00 HANGING ROCK ROAD
ELEV. 880.18

BM #35
STA.324+53.92
OFFSET 49.8 LT.
EL. 875.13
4" ALUMINUM DISK ATOP OF 5/8" REBAR

FINISHED GRADE
EXISTING GROUND
STA. 324+12.50
10" WATER LINE
EX. 18" RCP
10" W

STA 325+30.82
125.3' - 24" RCP
SKEW 90°
EW'S REQ'D : "U" ENDWALLS (1)
DWG. NO. D-PE-26(1) (LT)
D.A. = 4.3 AC.
Q50 = 13.8 CFS
Q100=14.6 CFS
WS EL. (Q50) = 871.53
WS EL. (Q100)=871.81
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

EX. 8' X 6' BOX CULVERT

PVI STA 328+20.00
ELEV. 880.09

5.19 %

SPECIAL
DITCH (RT)
STA.330+50.00
ELEV. 869.69

BM #36
STA.329+85.05
OFFSET 33.1 LT.
EL. 879.35
4" ALUMINUM DISK
ATOP OF ¾" REBAR

SPECIAL
DITCH (RT)
STA.329+00.00
ELEV. 854.90

STATION	328+43.41
STRUCTURE	8' X 6' X 63' R.C.B.C.
SKEW	75 (RT)
DRAINAGE AREA	231 AC.
DESIGN DISCHARGE (Q50)	213.8 CFS
DESIGN DISCHARGE (Q100)	255.3 CFS
OVERTOPPING ELEV.	880.06
ALLOWABLE HEADWATER ELEV.	880.58
Q50 HEADWATER ELEV.	867.62
Q100 HEADWATER ELEV	868.16
VELOCITY (Q50)	8.92 FT/S
VELOCITY (Q100)	9.66 FT/S
INLET ELEVATION	863.28
OUTLET ELEVATION	860.79
STANDARD DRAWING NUMBERS	K-38-58
CLASS "A" CONCRETE	
STEEL BAR REINFORCING	
BEDDING MATERIAL	

320+00 321+00 322+00 323+00 324+00 325+00 326+00 327+00 328+00 329+00 330+00 331+00

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 320+00 TO STA. 331+00
SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	25
R.O.W.	2009	HPP-NH-29(35)	

WOODS
RUIN
46
DAVID TECUMSEH LEE
335+00
WOODS
45
AHLER TRUST
334+47.57
162.04 (LT)
336+25.51
222.21 (LT)
337+60.36
246.80 (LT)
339+30.04
259.97 (LT)
340+27.04
262.45 (LT)
340+00
TREES
BRUSH
INV=920.93
INV=917.09
8.0' GRAVEL DR
400.00'
S33°24'34"W
200.00'
N31°58'36"W
155.35'
S61°03'23"W
17.00'
N24°10'18"W
18" RCP
325.40'
R=500.42'E
263.00'
S26°39'32"W
N33°16'03"W
80.18'
N06°08'54"W
24.0' SR-328
N12°41'33"W
70.48'
N31°23'41"W
82.84'
N08°13'54"W
N11°02'18"W
64.62'
N53°52'22"W
22.04'
82.24'
90.57'
N41°39'06"W
149.58'
N52°50'19"W
107.14'
N43°15'00"W
73.06'
N45°43'17"W
45.17'
N16°48'29"W
N43°43'56"W
40.28'
N02°22'04"W
55.74'
N55°21'32"W
39.00'
192.24' BITTER CREEK
N63°55'36"W
INV=869.42
PRES. AND PROP. R.O.W.
INV. EL. OUT 867.37
339+90.38
274.52 (LT)
340+60.43
242.78 (LT)
340+91.22
224.33 (LT)
341+26.75
186.16 (LT)
333+09.09
103.73 (LT)
150.25'
N68°55'29"W
PRES. AND PROP. R.O.W. STR-6
FILL
GRASS
8.0' GRAVEL DR
EXTEND EXIST. CULV. 42' LT.
PI 340+22.35
341+42.81
151.51 (LT)
SEE SHEET NO. 24
SEE SHEET NO. 26
STA. 331+00
STA. 342+00
PT 331+48.14
N 46° 05' 28" W
℄ S.R. 29
PI 337+30.77
36" CMP
WWC-37
48" RCP
INV=886.68
INV=886.17
INV=871.93
10"
TS 333+62.83
387.80'
N46°04'04"W
8.0' DIRT DR
L=118.90'
R=500'
WTL-13
498.35'
S 43° 55' 14" E
WWC-36
INV. EL. IN 873.03
210.23' CUT
S 52° 25' 15" E
PROPOSED R.O.W.
L=535.15'
R=1507.49'
208.04'
S 29° 18' 21" E
R.O.W.
PROPOSED CUT
L=326.64'
PRESENT R.O.W.
341+63.93
101.05 (RT)
TREES
341+64.50
MATCH LINE
STA. 338+12.24
103.45' RT
STA. 330+95.09
119.72' RT
332+05.34
71.34 (RT)
335+94.20
70.86 (RT)
35.00'
N44°31'12"E
335+94.34
105.86 (RT)
STA. 335+94.01
137.71' RT
STA. 340+37.02
126.52' RT
70.63'
S18° 51' 21"W
TO BE REMOVED
1-STORY BRICK RES.
TANK
102.11'
S19°47'08"E
STA. 340+88.93
179.82' RT
GRASS
WOODS
8.0' GRAVEL DR
45
JUDY SAFFALL TANNER(½),
DANNY HONEYCUTT(¼),
AND MICKEY HONEYCUTT(¼)

S.R. 29 (MAINLINE)

PI 340+22.35
N 615,368.2894
E 2,404,772.8910
Δs 28° 01' 36" (RT)
θs 8° 00' 00"
Δc 12° 01' 36" (RT)
D 4° 00' 00"
R 1,432.39
Lc 300.67
Ts 558.52
Ls 400.00
LT 266.94
ST 133.58
Es 48.73
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

COORDINATE VALUES ARE NAD/83(1995) AND ARE DATUM ADJUSTED BY THE FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 331+00 TO STA. 342+00

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	25A
R.O.W.	2009	HPP-NH-29(35)	

335+00

340+00

BITTER CREEK

INV. EL.
OUT 867.37

STA. 340+60.27
10.0' PVT. DR.

EXTEND EXIST.
CULV. 42' LT.

LIMIT OF CONST.
STA. 12+12.00

36" RCP
(TO BE REMOVED)

STR-6

TYPE 38

TYPE 2

R 45'

PI 340+22.35
R 15'

TYPE R 15'

TYPE 38

TYPE 2

HT 331+48.14

30'

WWC-37

N 46° 05' 28" W SIGHT TRIANGLE

℄ S.R. 29

PI 337+30.77

30'

30'

SEE SHEET NO. 24A

STA. 331+00

MATCH LINE

TS 334+63.83

48" RCP

18" CMP
(TO BE REMOVED)

SC 338+63.83

WWC-37

V-SOD

WTL-13

INV. EL.
IN 873.03

WWC-36

TYPE 38

TYPE 2

CS 341+64.50

BENCH FLOW LINE

MATCH LINE

STA. 342+00

SEE SHEET NO. 26A

N

S.R. 29 (MAINLINE)

PI 340+22.35
N 615,368.2894
E 2,404,772.8910
Δs 28° 01' 36" (RT)
θs 8° 00' 00"
Δc 12° 01' 36" (RT)
D 4° 00' 00"
R 1,432.39
Lc 300.67
Ts 558.52
Ls 400.00
LT 266.94
ST 133.58
Es 48.73
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

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Sumner & Dodge Surveying

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 331+00 TO STA. 342+00

SCALE: 1"= 50'

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	25B
R.O.W.	2009	HPP-NH-29(35)	

TRANSITION
NORMAL CROWN
TRANSITION
TRANSITION
STA. 332+80.14
STA. 334+63.83
STA. 338+63.83
STA. 341+64.50
6.30%
6.30%
STA 338+37.81
LOW WIRE ELEV= 910.40'
POWER
BM #37
STA.336+04.94
OFFSET 38.5 LT.
EL. 889.59
4" ALUMINUM DISK ATOP OF 5/8" REBAR
FINISHED GRADE
EXISTING GROUND
SPECIAL
DITCH (RT)
STA.335+00.00
ELEV. 874.66
SPECIAL
DITCH (RT)
STA.338+50.00
ELEV. 886.45
10" W
10" W
10" W
10" W
10" W
2.00%
5.00%
6.00%
4.00%
STA.337+50.00
ELEV. 881.45
STA.337+00.00
ELEV. 878.45
STA.336+50.00
ELEV. 876.45
EX. 36" RCP
STA.335+82.94
ELEV. 873.09
PVC STA. 341+25.00 ELEV. 896.40
STA 335+75.67
254.0' - 48" RCP
SKEW 90°
EW's REQ'D : "U" ENDWALLLS (2)
DWG. NO. D-PE-2B(1) (LT), D-PE-4B(1) (RT)
D.A. = 29.4 AC.
Q50 = 76.4 CFS
Q100=84.7 CFS
WS EL. (50) = 877.73
WS EL. (100)=878.07
CLASS "A" CONCRETE
STEEL BAR REINFORCING
BEDDING MATERIAL

935 930 925 920 915 910 905 900 895 890 885 880 875 870 865 860 855 850 845 840

331+00 332+00 333+00 334+00 335+00 336+00 337+00 338+00 339+00 340+00 341+00 342+00

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Survey & Design Division

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 331+00 TO STA. 342+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	26
R.O.W.	2009	HPP-NH-29(35)	

47
REBA FAIRCHILD MADEN

WELL HSE
1-S-F RES
TANK
TREES
CUT
290.00'
N13°37'15"W
78+68.39
201.95 (LT)
P.I. 79+93.54
250.01'
400.00'
N32°18'54"E
345+00
S.R 328 (LT.)
PI 79+93.54
N 615,611.3428
E 2,404,305.1179
Δ 84°01'17"RT
D 16°15'00"
R 352.59
T 317.59
Lc 517.05
SE 0.074 FT/FT
DES. SPEED 30 MPH
STA. 80+29.00
242.93' LT
80.77'
S57°41'06"E
124.52'
N 32°56'01" E
STA. 346+45.85
251.10' LT
98.25'
N18°15'04" W
CUT
STA. 347+44.10
251.42' LT
131.79'
N 28°19'30" E
STA. 348+35.00
156.00' LT
348+40.73
115.74 (LT)
WOODS
350+00
48
GEORGE EDWARDS, III AND
JOHN TALIAFERRO
12.0' DIRT RD
20.0' DIRT RD
STR-20 MUDDY BRANCH
WOODS
LIMITS OF CONST.
STATE ROUTE 328
STA. 80+48.00
N 615665.7932
E 2404475.7126
PRESENT R.O.W.
L=374.47'
R=717.00'
INV=889.25
24" RCP
WWC-38
249.67'
STA. 80+20.40
33.45' RT
38.88'
N 51° 40' 34" W
STA. 80+17.31
73.25' RT
DAVID
TECUMSEH
LEE
46
PROPOSED
R.O.W.
39.63'
EXTEND EXIST.
CULV. 52' LT.
N 51° 2' 08" W
93.23'
PRES. AND
PROP. R.O.W.
N19°42'10"W
STA. 80+66.92
81.99' RT
INV. EL.
IN 894.10
INV. EL.
OUT 871.79
INV. EL.
OUT 872.00
INV=882.61
INV=886.92
S.R. 328
30" RCP
24" RCP
CUT
WWC-39
343+76.84
137.12 (LT)
PRES. AND PROP. R.O.W.
135.25'
N02°52'48"W
346+00.91
180.83 (LT)
347+31.44
145.40 (LT)
106.77'
113.24'
N02°52'48"W
29.94'
N71°45'51"E
348+40.82
85.80 (LT)
POS STA. 344+41.25 S.R. 29 =
POT STA. 82+50.00 S.R. 328
N 615782.2823
E 2404638.4357
EXTEND EXIST.
CULV. 20' LT.
PRESENT R.O.W.
FILL
INV=881.06
STR-21
INV. EL.
IN 880.34
R= 1577.39
S 5°28'28" E
Lc.=252.72
STA. 352+88.20
145.00' LT
473.62' PROPOSED R.O.W.
N 14° 18' 40" W
V-SOD
FILL
STR-21
WTL-14
L=78.76'
R=240.50'
STR-22
10'x4' BOX CULVERT
INV=881.27
SEE SHEET NO. 27
24.0' ASP RDWY
30.0' ASP RD
ASP RD
N 63° 50' 58" E
38.0'
PI 81+93.00
SEE SHEET NO. 25
STA. 342+00
MATCH LINE
N 18° 03' 51" W
℄ S.R. 29
PI 342+98.08
PI 351+55.14
STA. 353+00
MATCH LINE
STA. 342+42.30
107.58' RT
INV. EL.
IN 872.83
INV. EL.
IN 873.02
343+94.19
97.75' RT
344+72.30
140.42 (RT)
345+36.86
166.98 (RT)
345+64.50
348+88.20
10" W
FILL
L=126.75'
R=2608.06'
199.10'
PROPOSED R.O.W.
S14°33'41"E
64.56'
89.26'
89.72'
INV. EL.
OUT 879.02
BITTER CREEK
STR-6
N 22° 9' 36" W
217.89'
PRES. AND PROP. R.O.W.
348+40.91
133.50 (RT)
EXTEND EXIST.
CULV. 5' RT.
346+23.57
149.07 (RT)
N 29° 45' 12" W
88.44'
N 73° 44' 11" E
64.68'
N87°54'58"E
346.17'
342+98.57
100.00 (RT)
STA. 342+05.12
192.24' RT
102.11'
S 19°47'08" E
EXTEND EXIST.
CULV. 38' RT.
S.R. 29
WOODS END R.O.W. RT.
STA.. 344+49.54
128.59 RT
59
NICK AND JUDY TANNER
JUDY SAFFALL TANNER(½),
DANNY HONEYCUTT(¼),
AND MICKEY HONEYCUTT(¼)
45
WOODS
N 25° 28' 8" E
469.06'
45
WOODS
ELP

N

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00000900 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 342+00 TO STA. 353+00

SCALE: 1"= 50'

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Survey & Design Division

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	26A
R.O.W.	2009	HPP-NH-29(35)	

S.R 328 (LT.)
PI 79+93.54
N 615,611.3428
E 2,404,305.1179
Δ 84°01'17"RT
D 16°15'00"
R 352.59
T 317.59
Lc 517.05
SE 0.074 FT/FT
DES. SPEED 30 MPH

345+00

350+00

24" RCP (TO REMAIN)

PI 79+93.54

LIMITS OF CONST.
STATE ROUTE 328
STA. 80+48.00
N 615665.7932
E 2404475.7126

WWC-3B

24" RCP (TO BE REMOVED)

INV. EL. OUT 893.75

30" RCP

BENCH FLOW LINE

BENCH FLOW LINE

EXTEND EXIST. CULV. 42' LT.

TYPE INLINE INV. EL. IN 894.10
TYPE 21

INV. EL. OUT 891.79

SHOP CURVE INV. EL. OUT 892.00

WWC-3B

125'R.

23'

18'

3'R.

21'

22'R.

POS STA. 344+41.25 S.R. 29 =
POT STA. 82+50.00 S.R. 328
N 615782.2823
E 2404638.4357

SIGHT TRIANGLE

PT 81+93.00

5'R.

3'R.

3'R.

36'

36'

36'

36'

95.50'

TYPE 2

PT 342+98.08

℄ S.R. 29
12'x9' BOX CULVERT
(TO REMAIN)

N 18° 03' 51" W

30'

30'

TS 345+64.50

INV. EL. IN 872.83

INV. EL. IN 873.02

TYPE 2

EXTEND EXIST. CULV. 38' RT.

STR-6

BITTER CREEK

STR-6

STR-20 MUDDY BRANCH

EXTEND EXIST. CULV. 20' LT.

TYPE 38

INV. EL. IN 880.54

2029 DHV
PM
[AM]

S.R. 328

59 [81]
81 [59]
22 [54]
37 [47]
34 [22]
47 [37]
140 [140]
426 [302]
404 [268]
404 [268]
451 [305]
728 [728]
S.R. 29 (U.S. 27)
756 [756]
302 [426]
268 [404]
305 [451]

STA. 350+53.26
14.0' PVT. DR.

LIMIT OF CONST.
STA. 11+12.00

TYPE 13

V-SOD

WTL-14

STR-21

STR-21

R 15'

STR-22

TYPE 2

TYPE 38

℄ S.R. 29

PI 351+55.14

2@15'X8'' BOX CULVERT
(TO REMAIN)

INV. EL. OUT 879.02

TYPE 38

SC 352+88.20

EXTEND EXIST. CULV. 5' RT.

STR-6

MATCH LINE STA. 342+00

SEE SHEET NO. 25

MATCH LINE STA. 353+00

SEE SHEET NO. 27

N

COORDINATE VALUES ARE NAD/83(1995)
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 342+00 TO STA. 353+00

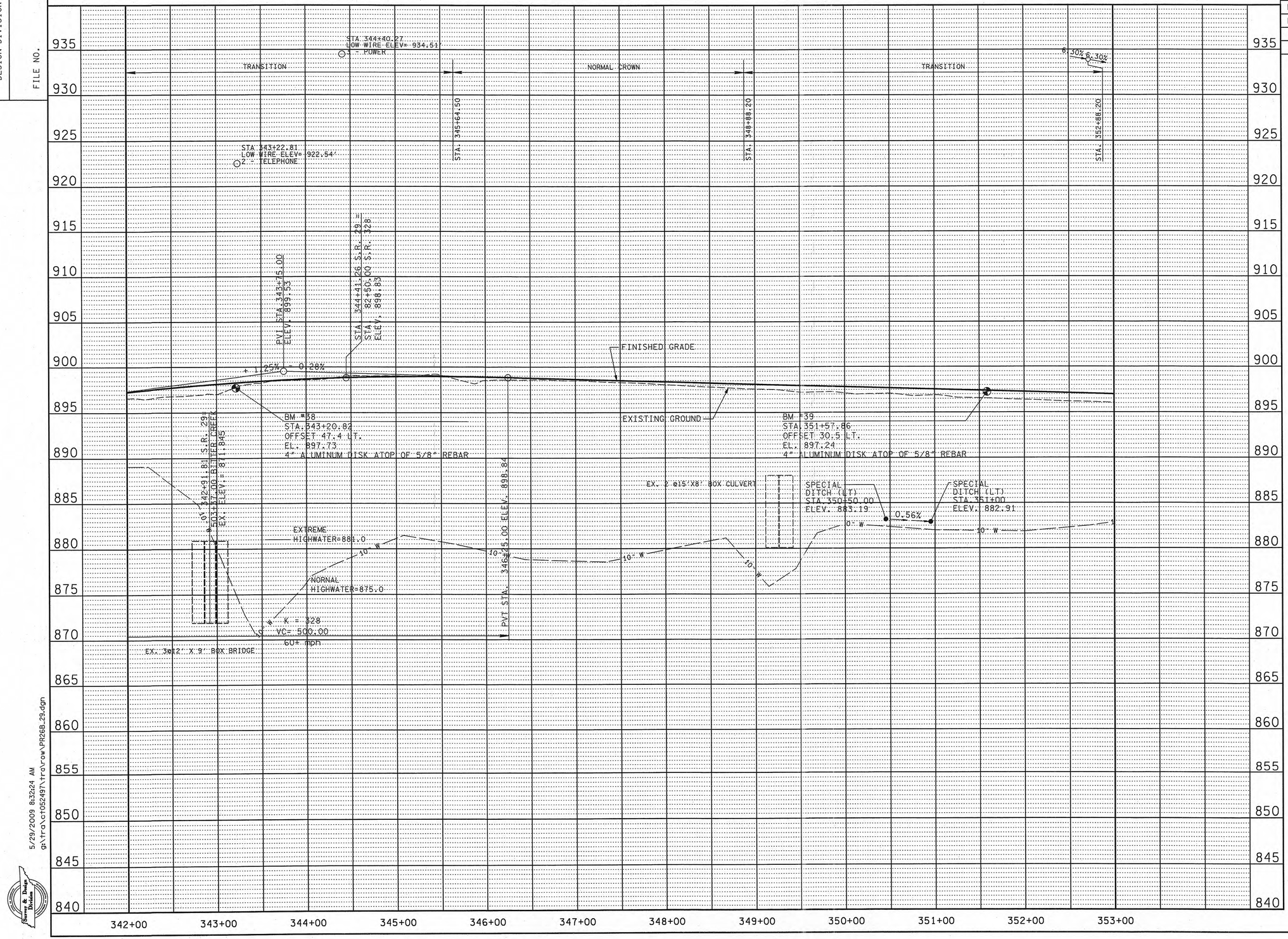
SCALE: 1"= 50'

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	26B
R.O.W.	2009	HPP-NH-29(35)	



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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

STA. 342+00 TO STA. 353+00

SCALE: 1"= 50' HORIZ.
1"= 5' VERT.

TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	27
R.O.W.	2009	HPP-NH-29(35)	

WOODS

355+00

360+00

WOODS

(48)
GEORGE EDWARDS, III AND
JOHN TALIAFERRO

WOODS

STA. 355+17.69
145.00' LT

STA. 356+46.00
130.00' LT

S.R. 29
END R.O.W. PROJECT
NO. 65001-2257-14
STA.. 357+48.09
101.52 (LT)

467.93'
S 29° 16' 15" E
(TOTAL 1177.83')

R= 1577.39'
S 5°28'28" E
Lc.=252.72

STR-21

139.46'
S 07° 34' 01" W

110.41'
S 19° 34' 45" W

355+96.03
73.38 (LT)

PROPOSED R.O.W.

STA. 357+48.09
101.52' LT

BEGIN PROJECT NO. STP-NHE-29(47) CONST.
STA. 357+48.09 S.R. 29
N 617050.5241
E 2404382.7436

10.01'
S82°37'01"E

FILL

PRESENT R.O.W.

76.80'

STR-22

WTL

355+95.11
63.41 (LT)

356+86.39
58.17 (LT)

INV=890.08
INV=890.78

WWC-40

445.91'
N06°26'23"E

INV=920.34

INV=918.67

42.89'
S83°27'42"E

PI 354+09.02

℄ S.R. 29

PI 356+51.27

℄ S.R. 29

N 7° 06' 55" E

MATCH LINE STA. 353+00

SEE SHEET NO. 26

485.09'
N07°10'41"E

INV=905.08

PRESENT R.O.W.

N 7° 06' 55" E

(23' ASP.)
3' ASP. SHLD

511.11'
N06°53'36"E

PRESENT R.O.W.

S25°55'48"E
425.89'

10" W

CS 355+17.69

INV=888.70

35" CMP

INV=889.68

358+15.38
97.07 (RT)

WWC-41

N 78° 19' 19" W
25.24'

ST 359+17.69

ST 359+20.45 AHEAD

BACK

360+36.10
52.78 (RT)

219.50'
N07°18'35"E

45.33'
N82°28'20"W

FILL

BITTER CREEK

R=1312.39'
L=757.73'

(59)

STR-6

356+39.18
116.48 (RT)

INV=890.51

171.68'
N05°52'27"E

358+15.51
143.64 (RT)

46.57'
N83°33'37"W

356+35.20
141.45 (RT)

INV=896.65

END CONST. S.R. 29
STA. 357+48.09
N 617050.5241
E 2404382.7436

360+35.77
98.12 (RT)

10' GRAVEL DRIVE

SHED

MOBILE HOME (REMOVED)

365+47.20
50.80 (RT)

(31)
JOSEPH A. ARMES

S18°00'35"W
911.09'

(45)
JUDY SAFFALL TANNER (1/2),
DANNY HONEYCUTT (1/4),
AND MICKEY HONEYCUTT (1/4)

WOODS

WOODS

S.R. 29 (MAINLINE)

PI 354+09.02
N 616,702.1747
E 2,404,337.8298
Δs 25° 10' 46" (RT)
θs 8° 00' 00"
Δc 9° 10' 46" (RT)
D 4° 00' 00"
R 1,432.39
Lc 229.49
Ts 520.82
Ls 400.00
LT 266.94
ST 133.58
Es 40.06
X 399.22
Y 18.59
k 199.87
P 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

N

COORDINATE VALUES ARE NAD/83(1995)
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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PRESENT LAYOUT

STA. 353+00 TO STA. 364+74

SCALE: 1"= 50'

Survey & Design Division

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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	2009	HPP-NH-29(36)	27A
R.O.W.	2009	HPP-NH-29(35)	

355+00

360+00

LIMIT OF CONST.
STA. 11+50.00

STA. 357+28.26
10.0' PVT. DR.

STR-21

BEGIN PROJECT NO. STP-NHE-29(47) CONST.
STA. 357+48.09 S.R. 29
N 617050.5241
E 2404382.7436

R 20'
R 15'
R 15'
WWC-40

STR-22

WTL-EX

PI 354+09.02

℄ S.R. 29

30.0'

PI 356+51.27

℄ S.R. 29

N 7° 06' 55" E

S.R. 29

N 7° 06' 55" E

R 25'

R 25'

36" CMP
(TO REMAIN)

WWC-41

CS 355+17.69

ST 359+17.69 BACK
ST 359+20.43 AHEAD

CONSTRUCTED IN PROJECT
NO. 65001-1259-14
SR 29 (US 27)

MATCH LINE
STA. 353+00

SEE SHEET NO. 26

BITTER CREEK

STR-6

END CONST. S.R. 29
STA. 357+48.09
N 617050.5241
E 2404382.7436

LIMIT OF CONST.
STA. 11+42.43

STA. 356+68.26
20.0' PVT. DR.

N

S.R. 29 (MAINLINE)

PI 354+09.02
N 616,702.1747
E 2,404,337.8298
Δs 25° 10' 46" (RT)
θs 8° 00' 00"
Δc 9° 10' 46" (RT)
D 4° 00' 00"
R 1,432.39
Lc 229.49
Ts 520.82
Ls 400.00
LT 266.94
ST 133.58
Es 40.06
X 399.22
Y 18.59
k 199.87
p 4.65
SE 0.063 FT/FT
DES. SPEED 50 MPH

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STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

STA. 353+00 TO STA. 360+00

SCALE: 1"= 50'