

Index of Sheets

(SEE SHEET 1A)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING AND DEVELOPMENT

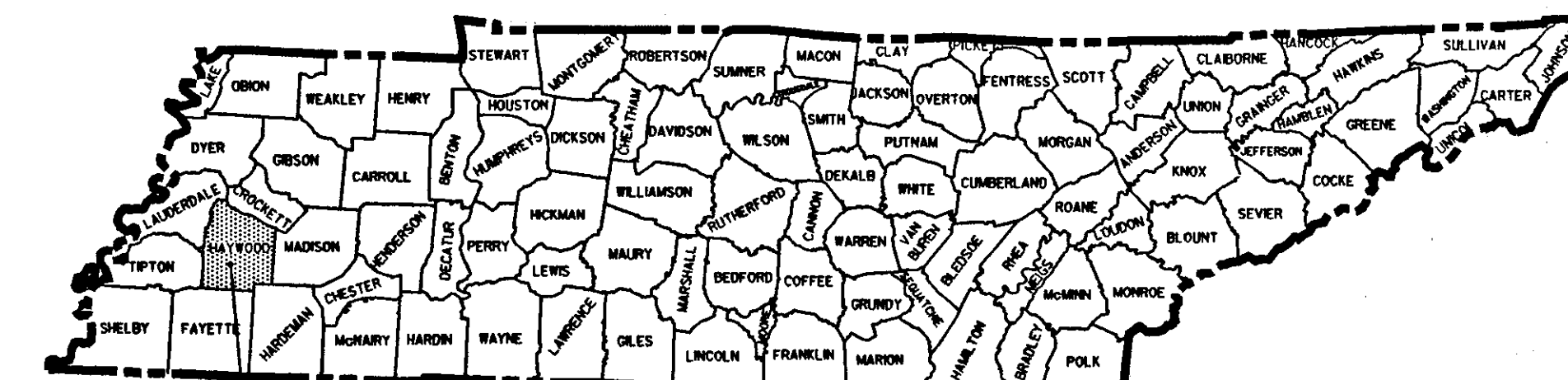
HAYWOOD COUNTY

CONSTRUCTION PLANS

GRADE, DRAIN, STORM DRAIN SYSTEM, BASE & SURFACE,
SIGNALS, SIGNS, AND PAVEMENT MARKINGSINTERSECTION IMPROVEMENT AT
U.S. 79/U.S. 70A (WASHINGTON AVE.) AND S.R. 54 (THORNTON RD.)

STATE HIGHWAY NO. 54 & 369

F.A.H.S. NO. 54 & 369



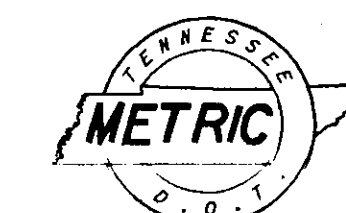
PROJECT SITE

NO EXCLUSIONS
NO EQUATIONS

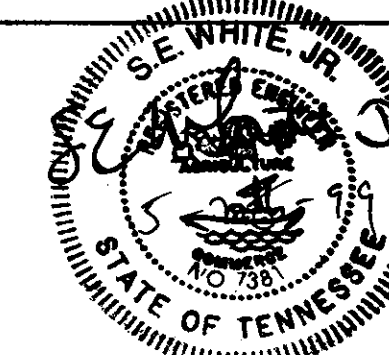
38006-3227-54

END PROJ. NO. STP-M-54(23) [CONST.]
STA. 1+374.918 U.S. 79/S.R. 369 (WASHINGTON AVE.)

38006-3227-54

BEGIN PROJ. NO. STP-M-54(23) [CONST.]
STA. 1+060.000 U.S. 79/S.R. 54 (WASHINGTON AVE.)APPROVED: *James H. Zeigler*
DESIGN DIVISION

DATE:

APPROVED: *Ann Settle Sr.*
COMMISSIONER

ENVIRONMENTAL PERMITS FOR PROJECT

NATIONWIDE SECTION 404 PERMIT: NONE REQUIRED
AQUATIC RESOURCE ALTERATION PERMIT (A.R.A.P.): NONE REQUIRED
NOTICE OF INTENT (NOI) AND NPDES PERMIT: NONE REQUIRED

SPECIAL NOTES

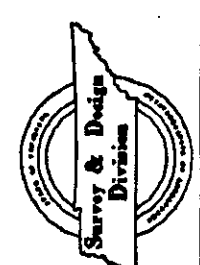
PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES
CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW
THE REASONABLE COST ANALYSIS VALUE.THIS PROJECT TO BE CONSTRUCTED UNDER THE STANDARD SPECIFICATIONS OF THE
TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 1995 AND ADDITIONAL
SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN
THE PROPOSAL CONTRACT.TDOT ROAD SP. SV. 2 JOHNNIE DANIEL, REG. 4DESIGNER BURT HUTCHINS, REG. 4 CHECKED BY MICHAEL I. RUSSELL, REG. 4P.E. NO. 38006-1225-54ROADWAY LENGTH 0.315 KILOMETERS
BRIDGE LENGTH 0.000 KILOMETERS
BOX BRIDGE LENGTH 0.000 KILOMETERS
PROJECT LENGTH 0.315 KILOMETERS

TRAFFIC DATA		
	U.S. 79/U.S. 70A (WASHINGTON AVE.)	S.R. 54 NORTH (THORNTON RD.)
ADT (1999)	7622	6026
ADT (2019)	12 236	9631
DHV (2019)	1188	
D	55-45	
T (ADT)	5 %	
T (DHV)	3 %	
V	65 km/h	50 km/h

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

7-MAY-1999 11:18
w:\design\haywood\sr-54\brnville\sr-5401.dgn
Judy 99 dett

R.O.W.
Index of Sheets

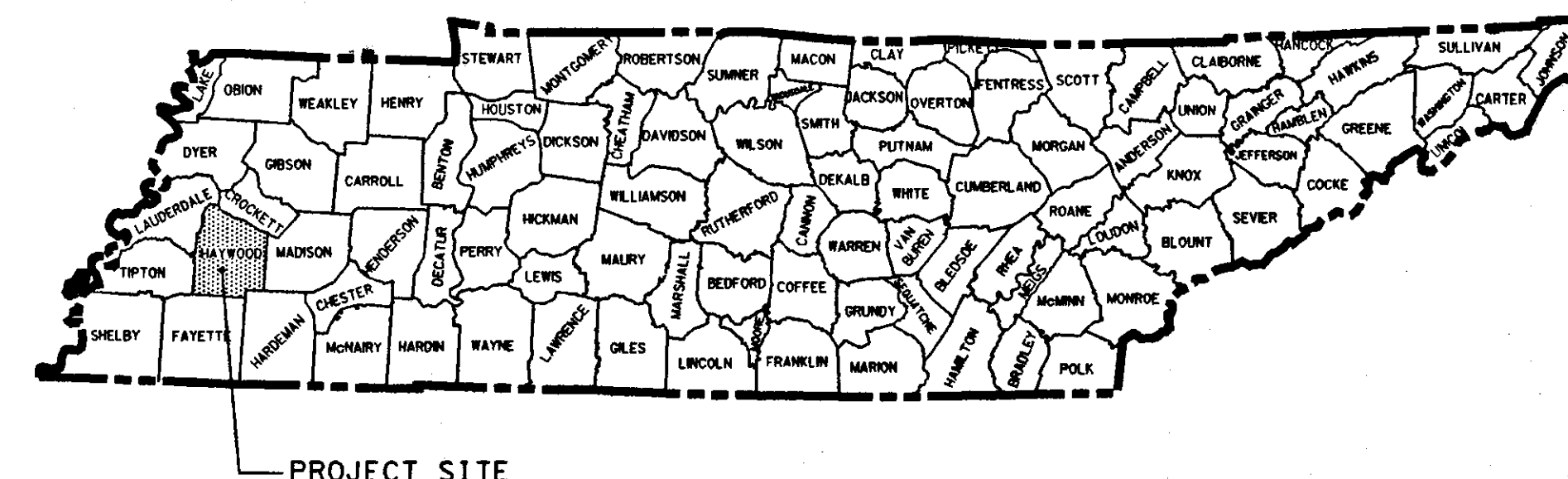
SHEET NAME	SHEET NO.
TITLE SHEET	1
TYPICAL SECTIONS	2-2C
R.O.W. ACQUISITION TABLE & PROPERTY LAYOUT	3-3A
PRESENT LAYOUTS	4-5
PROPOSED LAYOUTS	4A-5A
PROFILE (U.S. 79/U.S. 70A/WASHINGTON AVE.)	4B-5B
PROFILES (S.R. 54 AND SIDE STREETS)	6
PROFILES (PRIVATE DRIVES)	7
DRAINAGE MAP	8
CULVERT SECTIONS	9
ROADWAY CROSS SECTIONS	(8 SHEETS)

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING AND DEVELOPMENT
HAYWOOD COUNTY

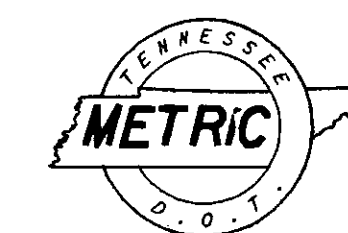
RIGHT-OF-WAY PLANS

INTERSECTION IMPROVEMENT AT
U.S. 79/U.S. 70A (WASHINGTON AVE.) AND S.R. 54 (THORNTON RD.)

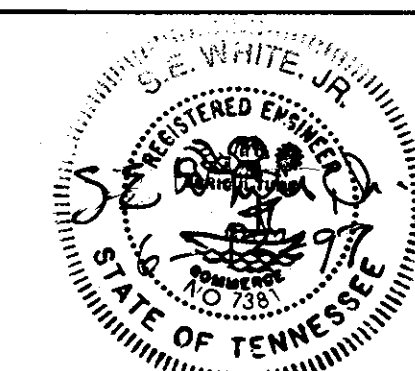
STATE HIGHWAY NO. 54 & 369 F.A.H.S. NO. 54 & 369



PROJECT SITE

NO EXCLUSIONS
NO EQUATIONSReceived 6-16-97
Design Approval March 21, 1997
Est. Gnty's Recvd E-mail 6-13-97(38006-2226-54)
END PROJ. NO. STP-M-54(23) [R.O.W.]
STA. 1+374.918 U.S. 79/S.R. 369 (WASHINGTON AVE.)(38006-2226-54)
BEGIN PROJ. NO. STP-M-54(23) [R.O.W.]
STA. 1+058.150 U.S. 79/S.R. 54 (WASHINGTON AVE.)APPROVED: *Paul R. Morrison*
DESIGN DIVISION

DATE:

APPROVED: *Ann Setts Jr*
COMMISSIONERSURVEY DATE: SEPT. 1996
SURVEY UPDATE: APRIL 1997

TRAFFIC DATA

	U.S. 79/U.S. 70A (WASHINGTON AVE.)	S.R. 54 NORTH (THORNTON RD.)
ADT (1997)	7400	5850
ADT (2017)	11 880	9350
DHV (2017)	1188	
D	55-45	
T (ADT)	5 %	
T (DHV)	3 %	
V	65 km/h	40 km/h

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED:

DIVISION ADMINISTRATOR DATE

ENVIRONMENTAL PERMITS FOR PROJECT

NATIONWIDE SECTION 404 PERMIT: NONE REQUIRED
AQUATIC RESOURCE ALTERATION PERMIT (A.R.A.P.): NONE REQUIRED
NOTICE OF INTENT (NOI) AND NPDES PERMIT: NONE REQUIRED

SPECIAL NOTES

PROPOSALS MAY BE REJECTED BY THE COMMISSIONER IF ANY OF THE UNIT PRICES
CONTAINED THEREIN ARE OBVIOUSLY UNBALANCED, EITHER EXCESSIVE OR BELOW
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TENNESSEE DEPARTMENT OF TRANSPORTATION DATED MARCH 1, 1995 AND ADDITIONAL
SPECIFICATIONS AND SPECIAL PROVISIONS CONTAINED IN THE PLANS AND IN
THE PROPOSAL CONTRACT

TDOT ROAD SP. SV. 2 JOHNNIE DANIEL, REG. 4

DESIGNER MICHAEL I. RUSSELL, REG. 4

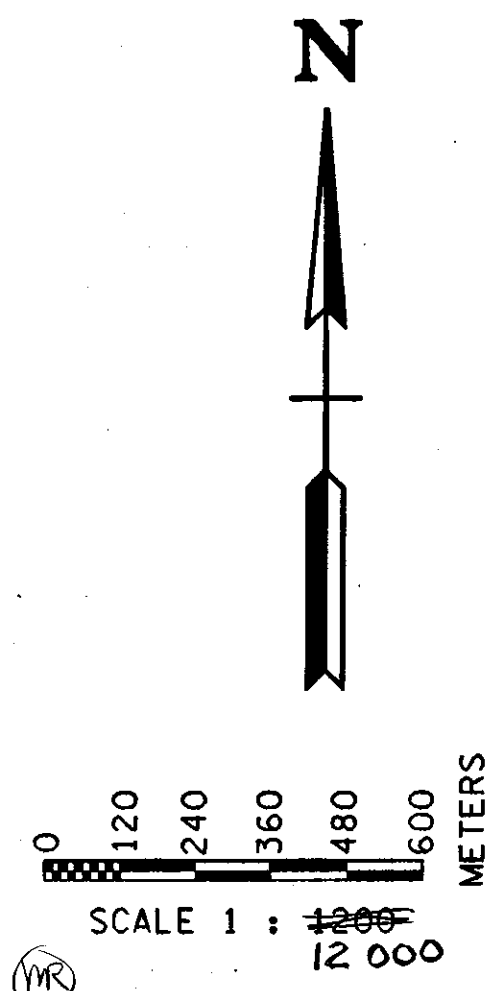
P.E. NO. 38006-1225-54

RIGHT-OF-WAY LENGTH

0.317 KILOMETER

0.197 Miles

16 Tracts



TO COVINGTON 54

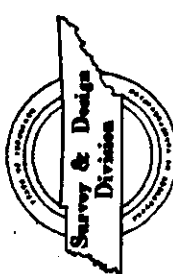
TO STANTON

TO JACKSON

TO I-40
MERCER RD.

TO SOMERVILLE

July 99 Lett

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TENNESSEE D.O.T.		DESIGN DIVISION		FILE NO. 2-30	
INDEX OF ROADWAY SHEETS					
SHEET NO. DRAWING NAME 1.....TITLE SHEET 1A.....ROADWAY INDEX AND STANDARD DRAWINGS INDEX 2.....ESTIMATED ROADWAY QUANTITIES 2A-2D.....TYPICAL SECTIONS 2E-2F.....GENERAL NOTES AND SPECIAL NOTES 2G.....TABULATED QUANTITIES 3.....RIGHT-OF-WAY ACQUISITION TABLE & ESMT. DETAILS 3A.....PROPERTY LAYOUT 4-5.....PRESENT LAYOUT 4A-5A.....PROPOSED LAYOUT 4B-5B.....PROFILE (U.S. 79/U.S. 70A/WASHINGTON AVE.) 6.....PROFILES (S.R. 54/THORNTON RD. AND SIDE STREETS) 7.....PROFILES (PRIVATE DRIVES) 8.....DRAINAGE MAP 9.....CULVERT CROSS-SECTIONS 10-10D.....EROSION & SEDIMENT CONTROL PLAN 11-11D.....TRAFFIC CONTROL PLAN 12.....SIGN SCHEDULE 12A & 12B.....SIGNAL LAYOUT AND PHASING,TIMING,DETECTOR ASSIGNMENT Δ 13-13A.....UTILITIES 14-16.....ROADWAY CROSS-SECTIONS (U.S. 79/U.S. 70A) 17-21.....ROADWAY CROSS-SECTIONS (S.R. 54 & SIDE STREETS) (Δ TO BE INSERTED BY SPECIAL DESIGN & ESTIMATE OFFICE IN NASHVILLE) DWG.NO. REV. DRAWING NAME DM-CB-38S 5-27-99 813 mm X 813 mm SQUARE CONCRETE NO. 38 CATCH BASIN DM-CB-42S 5-27-99 813 mm X 813 mm SQUARE CONCRETE NO. 42 CATCH BASIN					
DWG.NO. REV. DRAWING NAME K-15-8 STANDARD CONCRETE BOX CULVERT; SPAN 12'-0" CLEAR HEIGHTS 3' TO 12'; SKEW 90,75,60,45 DEGREES,1962 K-15-37 STANDARD CONCRETE BOX CULVERTS;SPAN 10'-0" CLEAR HT. 3',4',5',6'; SKEW 90 DEGREES,1961 K-15-139 WINGWALLS-MULTIPLE 12'-0" SPANS,CLEAR HT.3'THRU 6',SKEW 45 DEGREES,1962 M-1-49 WINGWALL STANDARD,1984 M-252-73 PRECAST BOX CULVERT DETAILS,1995 BRIDGE APPURTENANCES METRIC STDM-4-1 4-28-97 STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS - 1996 STDM-4-2 6-10-96 STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS - 1996 STDM-4-3 6-10-96 STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS - 1996 STDM-4-4 6-10-96 STANDARD PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS - 1996 STDM-9-1 6-10-96 STANDARD REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS STDM-10-1 6-10-96 MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS - 1996					

TYPE		YEAR		PROJECT NO.		SHEET NO.	
CONST.		1999		STP-M-54(23)		1A	

INDEX OF STANDARD DRAWINGS

DWG.NO.

REV.

DRAWING NAME

RPM-D-14

11-01-95

DETAILS OF CONCRETE DRIVEWAYS

RPM-H-1

11-01-95

HANDICAP RAMP

RPM-I-5

12-18-96

EXAMPLES OF STREET AND ALLEY INTERSECTIONS

RPM-NMC-10

10-26-97

NONMOUNTABLE CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS

RPM-NMC-11

11-01-95

NONMOUNTABLE CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS

RPM-R-1

5-27-96

RAMPS TO SIDE ROADS

RPM-S-7

7-29-96

DETAILS FOR STANDARD CONCRETE SIDEWALKS

ROADWAY AND PAVEMENT APPURTENANCES

TM-M-1

7-29-98

DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS

TM-M-2

11-01-95

DETAILS OF PAVEMENT MARKING FOR CONVENTIONAL ROADS

TM-M-3

11-01-95

MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS

TM-M-4

11-01-95

INTERSECTION PAVEMENT MARKINGS

TM-PBR-1

11-01-95

INTERCONNECTED PORTABLE BARRIER RAIL

TM-PBR-2

11-01-95

DETAIL FOR VERTICAL PANELS

TM-S-8

11-01-95

HIGHWAY SHIELDS USED ON STATE ROUTES AND ARROWS

TM-S-9

11-01-95

LAYOUT - GROUND MOUNTED SIGNS

TM-S-10

11-01-95

MOUNTING DETAILS - FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN

TM-S-12

10-26-96

STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS - SQUARE TUBES

TM-SG-2

11-01-95

LOOP LEAD-INS AND PULL BOXES

TM-SG-3

11-01-95

NOTES AND DETAILS OF DETECTION LOOPS

TM-SG-5

11-01-95

CONTROLLER CABINET DETAILS

TM-SG-6

11-01-95

CONTROLLER CABINET MOUNTING DETAILS

TM-SG-7

11-01-95

SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON DETAILS

TM-SG-7A

11-01-95

TYPICAL SIGNAL HEAD PLACEMENT

TM-SG-8

11-01-95

STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS

TM-SG-10

11-01-95

DETAILS AND NOTES FOR STRAIN POLES

TM-SG-11

11-01-95

MAINTENANCE OF EXISTING SIGNALS DURING HIGHWAY CONSTRUCTION

TM-SG-12

11-01-95

TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS

TM-WZ-10

ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS

TM-WZ-30

TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (60 KILOMETERS OR LESS)

| DWG.NO. REV. DRAWING NAME ECM-STR-1 11-01-95 TEMPORARY DEWATERING STRUCTURE,PAY ITEMS & GENERAL NOTES ECM-STR-3 12-18-96 TEMPORARY SILT FENCE & FILTER BARRIER ECM-STR-19 11-01-95 CATCHBASIN PROTECTION ECM-STR-31 11-01-95 TEMPORARY DIVERSION CHANNELS EROSION CONTROL AND LANDSCAPING | | | | | |

24-MAY-1999 15:12

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STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

BUREAU OF PLANNING & DEVELOPMENT

ROADWAY INDEX

AND

STANDARD

DRAWINGS INDEX

SE WHITE JR.

REGISTERED ENGINEER

NO 259

STATE OF TENNESSEE

TELEPHONE

METRIC

0.01

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
201M01	CLEARING AND GRUBBING	LUMP SUM	1
① 202M01	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LUMP SUM	1
④ 202M03	REMOVAL OF RIGID PAVEMENT, SIDEWALK, ETC.	SO. METER	30
② 202M04.50	REMOVAL OF STRUCTURES (CONC. BOX CULV.)(STA.1+191)	LUMP SUM	1
203M01	ROAD & DRAINAGE EXCAVATION (UNCLASSIFIED)	CU. METER	2312
203M03	BORROW EXCAVATION (UNCLASSIFIED)	CU. METER	151
⑮ 203M06	WATER	CU. METER	123
⑨ 204M07	BEDDING MATERIAL (PIPE) CLASS B	CU. METER	176
⑧ 204M08	FOUNDATION FILL MATERIAL	CU. METER	30
209M05	SEDIMENT REMOVAL	CU. METER	64
⑥ 209M08	TEMPORARY SILT FENCES	METER	891
303M01	MINERAL AGGREGATE, TYPE A BASE, GRADING D	TONNE	4018
⑧ 303M01.01	GRANULAR BACKFILL FOR STRUCTURES	TONNE	538
307M01.03	AGGREGATE (BPMB-HM) GRADING A-S MIX	TONNE	404
307M01.04	ASPHALT CEMENT (BPMB-HM) GRADING A-S MIX	TONNE	14
307M03.09	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING A	TONNE	408
307M03.16	BITUMINOUS PLANT MIX BASE(HOT MIX) GRADING B-M2	TONNE	2460
402M01	BITUMINOUS MATERIAL FOR PRIME COAT (PC)	TONNE	7
402M02	AGGREGATE FOR COVER MATERIAL (PC)	TONNE	20
403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC)	TONNE	2
⑤ 407M01	REMOVAL & DISPOSAL OF EXISTING SURFACE (CONC.)	SQ. METER	220
411M01.01	MINERAL AGGREGATE (ACS) GRADING D	TONNE	920
411M01.02	ASPHALT CEMENT (ACS) GRADING D	TONNE	59
411M03.10	ASPHALTIC CONCRETE SURFACES (HM) GRD E (SHLDRS)	TONNE	112
⑧ 604M01.01	CLASS A CONCRETE (ROADWAY)	CU. METER	83
604M01.02	STEEL BAR REINFORCEMENT (ROADWAY)	KILOGRAM	7695
⑨ 607M03.02	450 mm CONCRETE PIPE CULVERT (CLASS III)	METER	157
607M05.02	600 mm CONCRETE PIPE CULVERT (CLASS III)	METER	196
607M39.02	450 mm PIPE CULVERT (SIDE DRAIN)	METER	24
⑫ ⑧ 607M50.03	PRECAST CONCRETE BOX CULVERT (SIZE)	METER	29.5
611M04.01	CATCHBASINS, NO. 12, DEPTH 0.0 m TO 2.0 m	EACH	8
611M04.02	CATCHBASINS, NO. 13, DEPTH 0.0 m TO 2.0 m	EACH	1
611M04.03	CATCHBASINS, NO. 14, DEPTH 0.0 m TO 2.0 m	EACH	1
611M04.04	CATCHBASINS, NO. 42, DEPTH 0.0 m TO 2.0 m	EACH	3
⑨ 611M04.05	CATCHBASINS, NO. 43, DEPTH 0.0 m TO 2.0 m	EACH	1
611M04.06	CATCHBASINS, NO. 39, DEPTH 0.0 m TO 2.0 m	EACH	1
611M07.01	CLASS A CONCRETE (PIPE ENDWALLS)	CU. METER	14
611M07.02	STEEL BAR REINFORCEMENT (PIPE ENDWALLS)	KILOGRAM	413
611M07.03	STRUCTURAL STEEL (PIPE ENDWALLS)	KILOGRAM	310
⑫ ③ 621M01.01	TEMPORARY STRUCTURE (2 @ 900 mm CMP) (STA.1+192)	LUMP SUM	1
701M01.01	CONCRETE SIDEWALK (100 mm)	SO. METER	668
701M02	CONCRETE DRIVEWAY	SO. METER	93
701M02.01	CONCRETE DRIVEWAY (HANDICAP RAMP)	SO. METER	43
702M03	CONCRETE COMBINED CURB & GUTTER	CU. METER	260
⑦ ⑧ 709M05.07	MACHINED RIP-RAP (CLASS A-2)	TONNE	973
712M01	TRAFFIC CONTROL	LUMP SUM	1
712M02.02	INTERCONNECTED PORTABLE BARRIER RAIL	METER	600
712M04.01	FLEXIBLE DRUMS (CHANNELIZING)	EACH	72
712M05.01	WARNING LIGHTS (TYPE A)	EACH	18
712M05.03	WARNING LIGHTS (TYPE C)	EACH	24
712M06	SIGNS (CONSTRUCTION)	SO. METER	44
712M06.01	VERTICAL PANELS	SO. METER	42
712M07.03	TEMPORARY BARRICADES (TYPE III)	METER	12

ESTIMATED ROADWAY QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
713M11.01	"U" SECTION STEEL BOLTS	KILOGRAM	143
713M11.02	PERFORATED/KNOCKOUT SQUARE TUBE POST	KILOGRAM	201
713M13.02	FLAT SHEET ALUMINUM SIGNS (2.032 mm THICK)	SO. METER	9
713M13.03	FLAT SHEET ALUMINUM SIGNS (2.540 mm THICK)	SO. METER	3
⑮ ⑭ 713M15	REMOVAL OF SIGNS,POST AND FOOTINGS	LUMP SUM	1
716M02.01	PLASTIC PAVEMENT MARKING (100 mm LINE)	KILOMETER	1.64
716M02.03	PLASTIC PAVEMENT MARKING (CROSS-WALK)	METER	41
⑪ 716M02.04	PLASTIC PAVEMENT MARKING(CHANNELIZATION STRIPING)	SO. METER	23
716M02.05	PLASTIC PAVEMENT MARKING (STOP LINE)	METER	34
716M02.06	PLASTIC PAVEMENT MARKING (TURN LANE ARROW)	EACH	9
⑫ ⑪ 716M05.01	PAINTED PAVEMENT MARKING (100 mm LINE)	KILOMETER	3.28
717M01	MOBILIZATION	LUMP SUM	1
730M02.17	SIGNAL HEAD ASSEMBLY (130 WITH BACKPLATE)	EACH	6
730M02.18	SIGNAL HEAD ASSEMBLY (150 A2H WITH BLACKPLATE)	EACH	2
730M03.01	INSTALL PULL BOX	EACH	4
⑮ ⑭ 730M05.01	ELECTRICAL SERVICE CONNECTION	EACH	1
730M08.01	SIGNAL CABLE - 3 CONDUCTOR	METER	230
730M08.02	SIGNAL CABLE - 5 CONDUCTOR	METER	418
730M08.03	SIGNAL CABLE - 7 CONDUCTOR	METER	40
730M08.10	SIGNAL CABLE - 9 CONDUCTOR	METER	57
⑮ ⑫ 730M09.01	SPAN WIRE ASSEMBLY (39 238 N MIN. BRK. STRENGTH)	METER	109
730M12.01	CONDUIT 25 mm DIAMETER	METER	68
730M12.03	CONDUIT 75 mm DIAMETER	METER	10
730M13.01	VEHICLE LOOP DETECTOR	EACH	6
730M14.01	SHIELDED DETECTOR CABLE	METER	211
730M14.02	SAW SLOT	METER	296
730M14.03	LOOP WIRE	METER	638
730M16.01	FOUR PHASE ACTUATED CONTROLLER	EACH	1
⑮ ⑭ 730M23.01	STEEL STRAIN POLE (SIGNAL SUPPORT)	EACH	4
730M23.30	PEDESTAL POLE (PEDESTRIAN SIG. SYSTEM SUPPORT)	EACH	1
730M26.03	PEDESTRIAN SIGNAL HEAD, PUSHBUTTON & 300 mm SIGN	EACH	6
801M03	WATER (SEEDING & SODDING)	CU. METER	98
⑬ ⑮ 803M01	SODDING (NEW SOD)	SO. METER	2175

FOOTNOTES

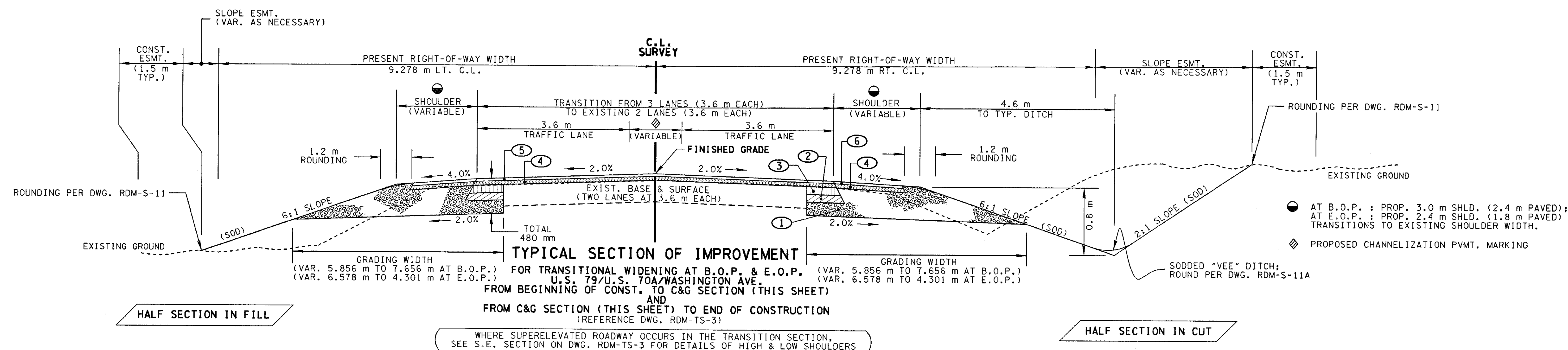
- ① FOR TWO EXISTING PIPES UNDER KLEER-VU DR. (STA. 5+100 & LT. 5+015).
- ② EXIST. 1524 mm X 914 mm CONC. BOX CULV. (STA. 1+191,U.S. 79).
- ③ QUANTITY IS BASED ON MINIMUM CALCULATED LENGTH. ACTUAL LENGTH REQUIRED WILL BE DETERMINED BASED ON FIELD CONDITIONS ENCOUNTERED. THE BIDDER IS RESPONSIBLE FOR VERIFYING ESTIMATED LENGTHS PRIOR TO SUBMITTING HIS BID. ADDITIONAL LENGTH,IF ANY,REQUIRED BY ACTUAL FIELD MEASUREMENTS WILL BE INSTALLED AT NO ADDITIONAL COST. ALL COST SHALL BE INCLUDED IN THIS BID ITEM. STRUCTURE LOCATION IS LT. STA. 1+192.00 BENEATH TEMPORARY RUN-AROUND.
- ④ FOR EXISTING C&G AT THOMAS STREET; ALSO FOR OTHER SITES AS DIRECTED BY THE ENGINEER.
- ⑤ FOR REPAIRS TO EXISTING SURFACE ON S.R. 54 AND U.S. 70 PRIOR TO RESURFACING AS DIRECTED BY THE ENGINEER.
- ⑥ TABULATED ON EROSION CONTROL PLAN (SHEET 10-10D).
- ⑦ INCLUDES 11 TONNES FOR DITCH CHECKS AS DIRECTED BY THE ENGINEER FOR SEDIMENT CONTROL.
- ⑧ FOR CONC. BOX CULVERTS TABULATED ON SHEET 2G; ALSO SEE SHEET 9 (CULVERT CROSS-SECTIONS).
- ⑨ TABULATED ON SHEET 2G.
- ⑩ TABULATED ON TRAFFIC CONTROL PLAN (SHEET 11-11D).
- ⑪ DEPICTED ON PROPOSED LAYOUT SHEETS.
- ⑫ THE PROPOSED TEMPORARY STRUCTURE (ITEM 621M01.01) IS FOR USE BENEATH THE TEMPORARY RUN-AROUND PROPOSED FOR STAGE CONSTRUCTION OF THE PROPOSED PRECAST BOX CULVERT (ITEM 607M50.03 , ENGLISH EQLV. = 12' X 4') ON U.S. 70 (WASHINGTON AVE.). SEE TRAFFIC CONTROL PLAN (SHEET 11 - 11D).
- ⑬ FOR USE AT LOCATIONS SHOWN ON THE TYPICAL SECTIONS AND/OR PROPOSED LAYOUT SHEETS. ALSO USE ON SCARIFIED AREAS NOT OTHERWISE STABILIZED.
- ⑭ REMOVE SIGN & SUPPORT, SIGN NO.12.
- ⑮ QUANTITY HAS BEEN INCREASED FOR DUST CONTROL.
- ⑯ SEE SHEET NO.12 FOR SIGN SCHEDULE.
- ⑰ THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LOCAL UTILITY TO OBTAIN THE ESTIMATE FOR ANY CHARGES BY THE UTILITY FOR PROVIDING ELECTRICAL SERVICE TO THE SIGNAL CONTROLLER. THESE CHARGES SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 730M05.01 FOR PAYMENT BY THE CONTRACTOR.
- ⑱ MIN. BREAKING STRENGTH (ENGLISH)-8820.99 LBS.
- ⑲ MOMENT CAPACITY= 241 109 N•m (177,833 FT.-LBS.), FOOTING DEPTH= 3.7 m (12'.0")
- ⑳ SIGNAL LAYOUT AND PHASING-TIMING-DETECTOR ASSIGNMENT SHOWN ON SHEETS 12A & 12B.
- ㉑ FOR TEMPORARY PAVEMENT MARKING LINES.

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	2

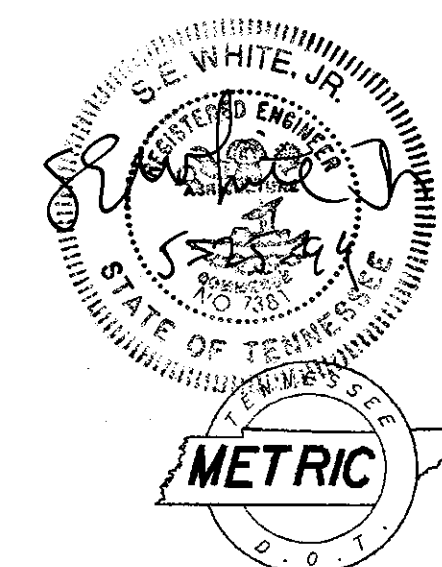


TYPICAL SECTION OF IMPROVEMENT
(S.E. IS TYPICAL THROUGHOUT C&G SECTION)
U.S. 79/U.S. 70A/WASHINGTON AVE.
STA.1+115.000 TO STA.1+337.000
(REFERENCE DWG. RDM-TS-3 & RDM-TS-6A)

TYPICAL SECTION OF IMPROVEMENT
(S.E. IS TYPICAL THROUGHOUT C&G SECTION)
U.S. 79/U.S. 70A/WASHINGTON AVE.
STA.1+115.000 TO STA.1+337.000
(REFERENCE DWG. RDM-TS-3 & RDM-TS-6A)

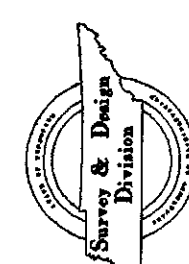


MINERAL AGGREGATE BASE @ 250 mm± THICK (APPROX. 400 mm THICK AT PAVED SHLD.)		BITUMINOUS SURFACE (ACS) FOR SHOULDERS @ 30 mm± THICK (APPROX. 66 kg/m²)	
ITEM 303M01	MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"	ITEM 403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.1 L/m²)
ITEM 402M01	BITUMINOUS MATERIAL FOR PRIME COAT (PC) (AT 1.4 TO 1.6 L/m²)	ITEM 411M03.10	ASPHALTIC CONCRETE SURFACE (HM) GRADING "E" (SHOULDERS)
ITEM 402M02	AGGREGATE FOR COVER MATERIAL (PC) (4.3 TO 6.5 kg/m²)		
BITUMINOUS BASE COURSE (BLACK BASE) @ 75 mm± THICK (APPROX. 144 kg/m²)		BITUMINOUS COURSE (BINDER) @ 70 mm± THICK (APPROX. 168 kg/m²)	
ITEM 403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.1 L/m²)	ITEM 403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.1 L/m²)
ITEM 307M01.03	AGGREGATE (BPMB-HM) GRADING "A-S" MIX	ITEM 307M03.16	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING "B-M2"
ITEM 307M01.04	ASPHALT CEMENT (BPMB-HM) GRADING "A-S" MIX		
BITUMINOUS BASE COURSE (BLACK BASE) @ 75 mm± THICK (APPROX. 183 kg/m²)		CONCRETE CURB & GUTTER (230 mm GUTTER DEPTH) (TYPE 150-775 WITH MODIFIED BOTTOM SURFACE) (re: STD. DWG. RPM-NMC-10)	
ITEM 403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.1 L/m²)	ITEM 702M03	CONCRETE COMBINED CURB AND GUTTER
ITEM 307M03.09	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING "A"		
BITUMINOUS COURSE (BINDER) @ 50 mm± THICK (APPROX 120 kg/m²)		CONCRETE CURB & GUTTER (180 mm GUTTER DEPTH) (TYPE 150-775 WITH MODIFIED BOTTOM SURFACE) (re: STD. DWG. RPM-NMC-11)	
ITEM 403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.1 L/m²)	ITEM 702M03	CONCRETE COMBINED CURB AND GUTTER
ITEM 307M03.16	BITUMINOUS PLANT MIX BASE (HOT MIX) GRADING "B-M2"		
BITUMINOUS SURFACE (ACS) @ 30 mm± THICK (APPROX 68 kg/m²)		CONCRETE SIDEWALK (100 mm THICK) (re: STD. DWG. RPM-S-7 & RPM-H-1)	
ITEM 403M01	BITUMINOUS MATERIAL FOR TACK COAT (TC) (AT 0.1 L/m²)	ITEM 701M01.01	CONCRETE SIDEWALK (100 mm)
ITEM 411M01.01	MINERAL AGGREGATE (ACS) GRADING "D"	ITEM 701M02.01	CONCRETE DRIVEWAY (HANDICAP RAMP)
ITEM 411M01.02	ASPHALT CEMENT (ACS) GRADING "D"		
		MINERAL AGGREGATE BASE @ 200 mm± THICK (APPROX. 220 mm THICK AT PAVED SHLD.)	
		ITEM 303M01	MINERAL AGGREGATE, TYPE "A" BASE, GRADING "D"
		ITEM 402M01	BITUMINOUS MATERIAL FOR PRIME COAT (PC) (AT 1.4 TO 1.6 L/m²)
		ITEM 402M02	AGGREGATE FOR COVER MATERIAL (PC) (4.3 TO 6.5 kg/m²)

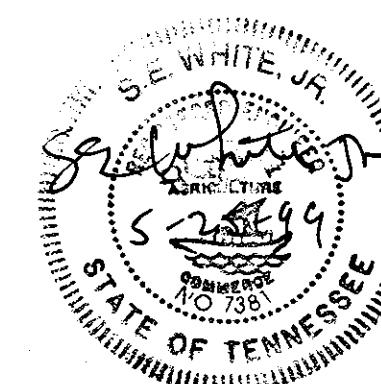
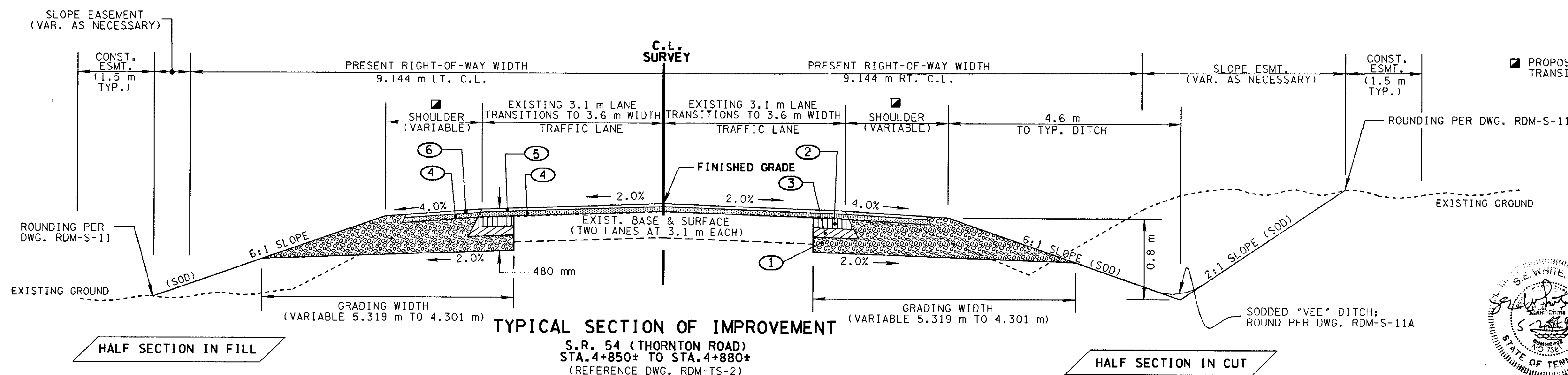
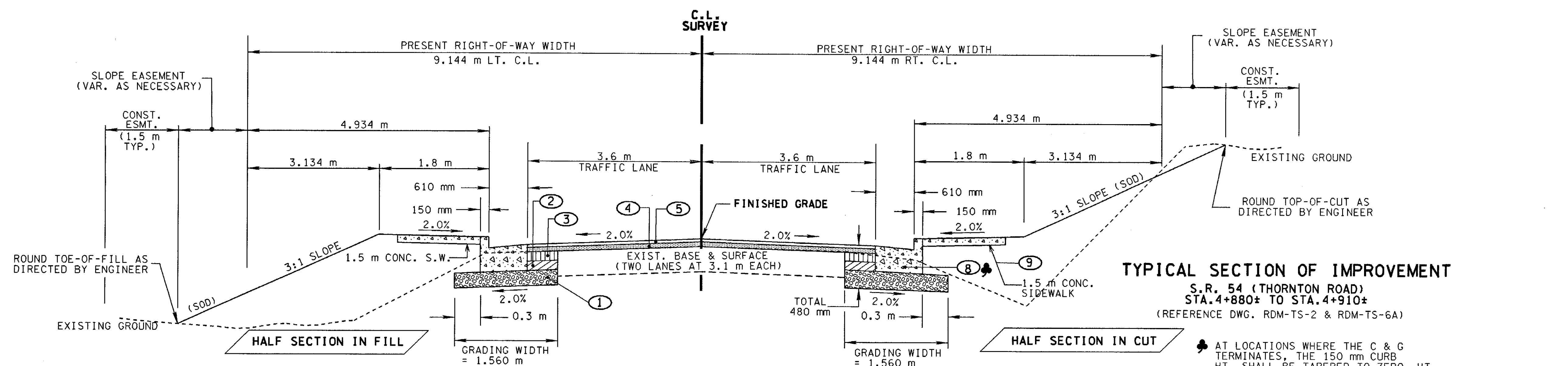
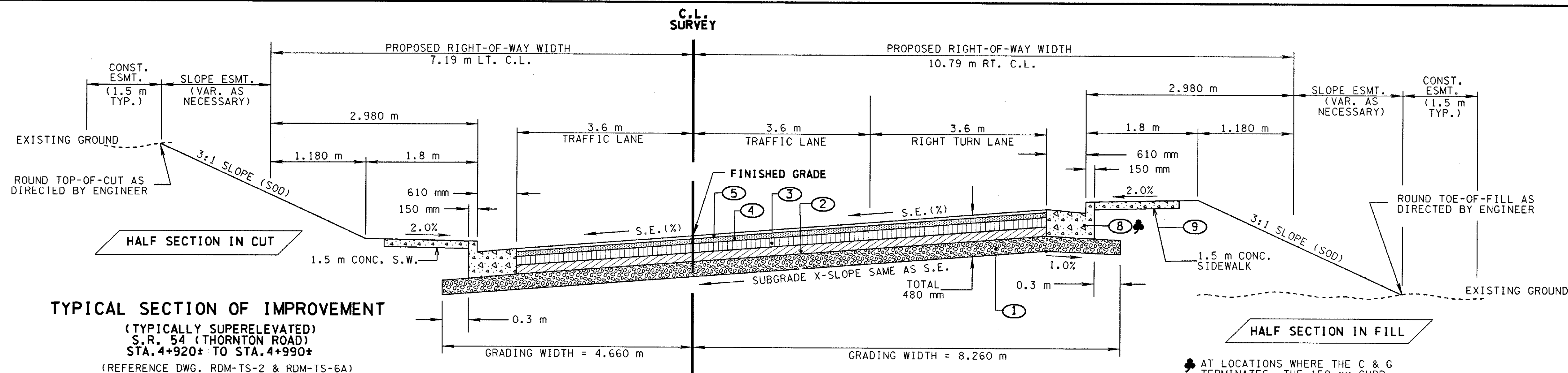


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

**TYPICAL
SECTIONS**
U.S. 79/U.S. 70A
(WASHINGTON AVE.)
NOT TO SCALE

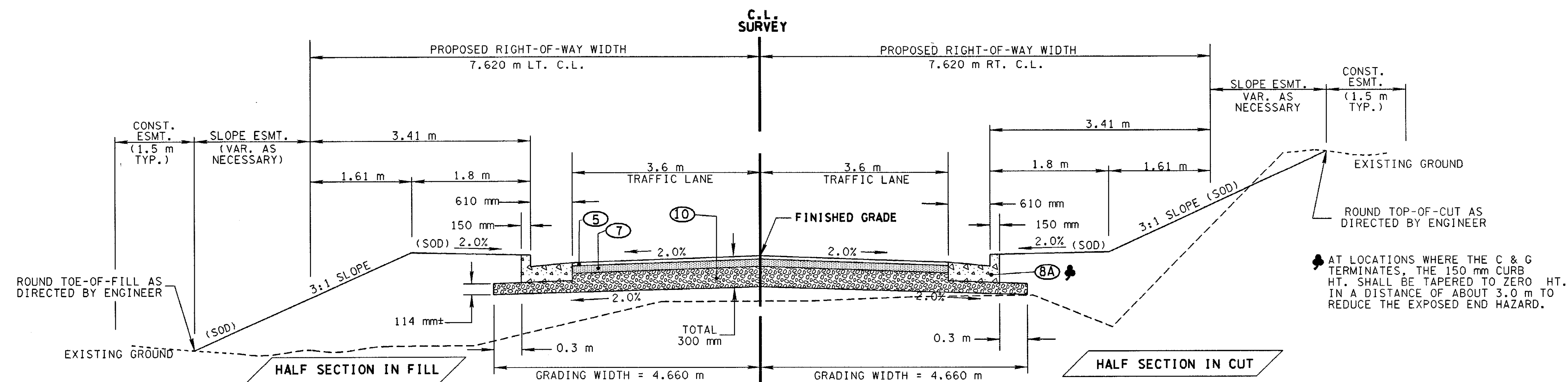


TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	2B
CONST.	1998	STP-M-54(23)	2B



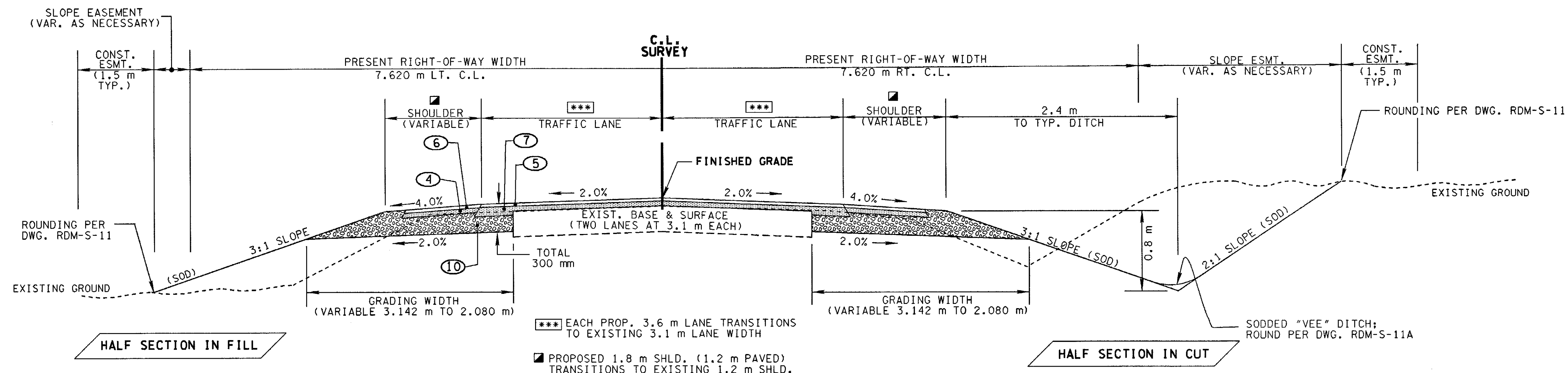
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT
TYPICAL SECTIONS
S.R. 54 (THORNTON RD)
NOT TO SCALE

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	2C
CONST.	1999	STP-M-54(23)	2C



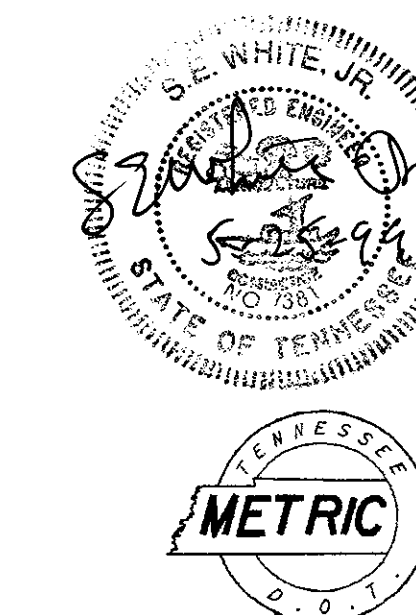
TYPICAL SECTION OF IMPROVEMENT

KLEER-VU DRIVE
STA. 5+010+ TO STA. 5+086+
(REFERENCE DWG. RDM-TS-1)



TYPICAL SECTION OF IMPROVEMENT

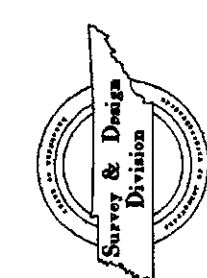
KLEER-VU DRIVE
STA. 5+086 TO STA. 5+120
(REFERENCE DWG. RDM-TS-1)



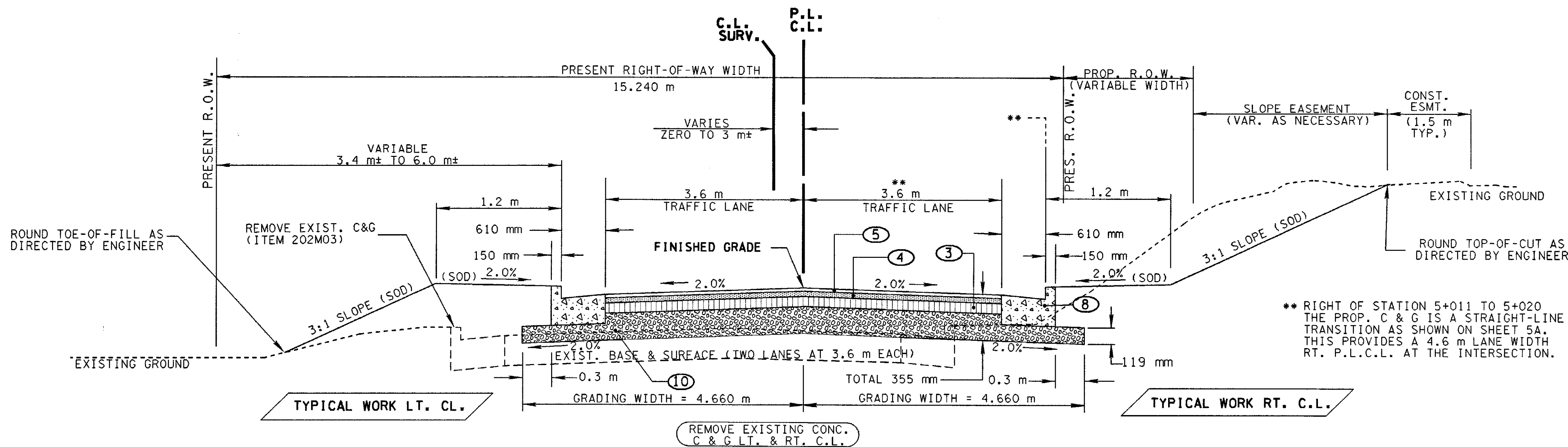
STATE OF TENNESSEE
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**TYPICAL
SECTIONS**

KLEER-VU DRIVE
NOT TO SCALE



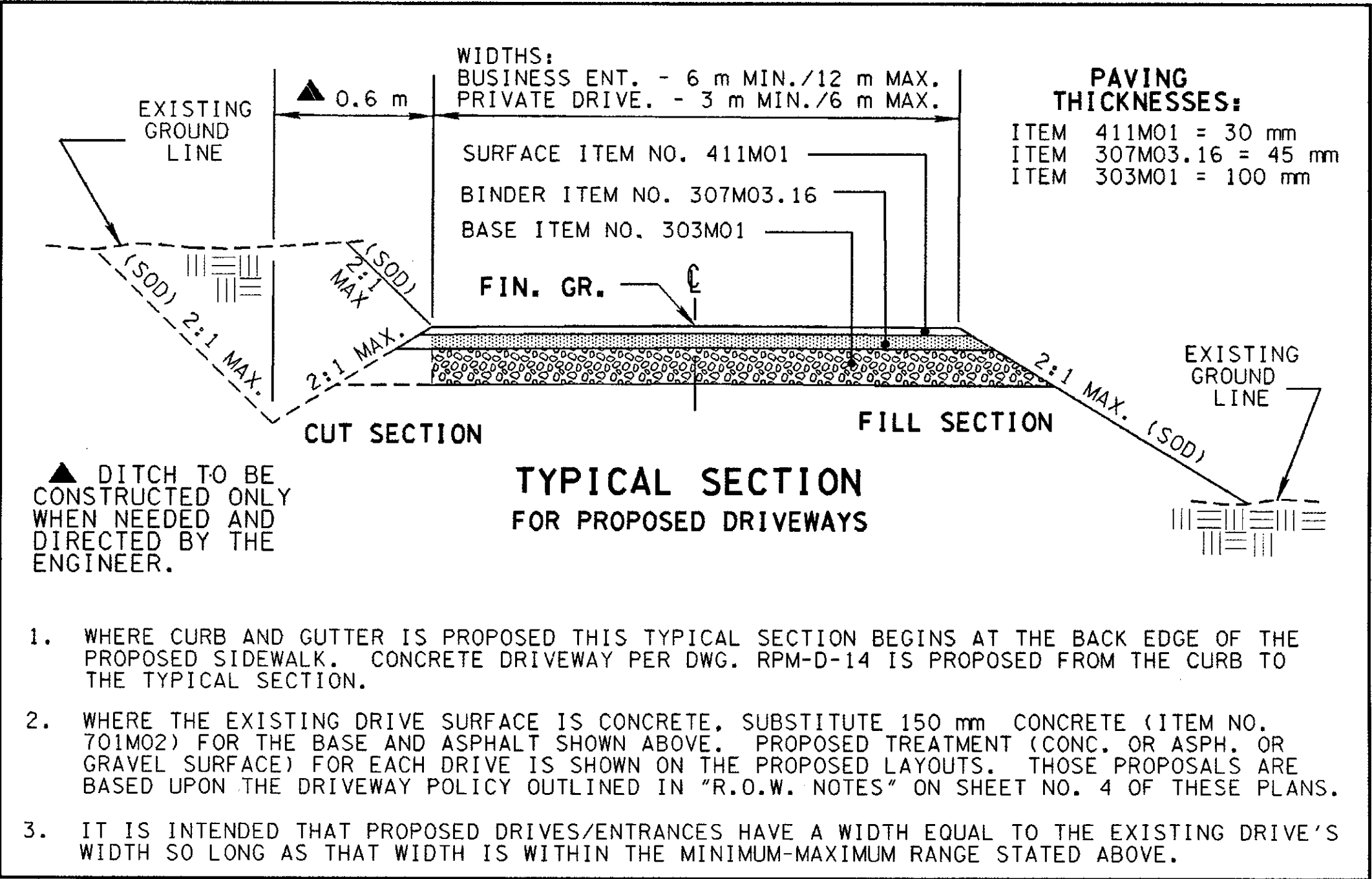
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	2D
CONST.	1999	STP-M-54(23)	2D



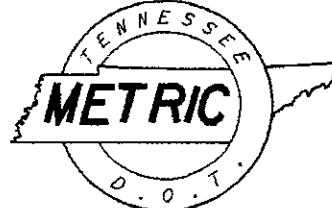
TYPICAL SECTION OF IMPROVEMENT

THOMAS STREET
 STA. 5+006+ TO STA. 5+045.035+
 (REFERENCE DWG. RDM-TS-1)

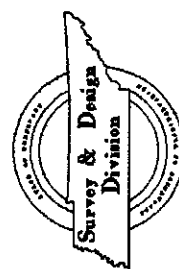
NOTE : FROM STA. 5+035+ TO LIMIT OF CON-
 STRUCTION (5+047.230), OVERLAY EXISTING
 SURFACE WITH CODE 5 PLUS CODES 4 AND
 3 AS NECESSARY/DIRECTED BY THE ENGINEER.



- WHERE CURB AND GUTTER IS PROPOSED THIS TYPICAL SECTION BEGINS AT THE BACK EDGE OF THE PROPOSED SIDEWALK. CONCRETE DRIVEWAY PER DWG. RPM-D-14 IS PROPOSED FROM THE CURB TO THE TYPICAL SECTION.
- WHERE THE EXISTING DRIVE SURFACE IS CONCRETE, SUBSTITUTE 150 mm CONCRETE (ITEM NO. 701M02) FOR THE BASE AND ASPHALT SHOWN ABOVE. PROPOSED TREATMENT (CONC. OR ASPH. OR GRAVEL SURFACE) FOR EACH DRIVE IS SHOWN ON THE PROPOSED LAYOUTS. THOSE PROPOSALS ARE BASED UPON THE DRIVEWAY POLICY OUTLINED IN "R.O.W. NOTES" ON SHEET NO. 4 OF THESE PLANS.
- IT IS INTENDED THAT PROPOSED DRIVES/ENTRANCES HAVE A WIDTH EQUAL TO THE EXISTING DRIVE'S WIDTH SO LONG AS THAT WIDTH IS WITHIN THE MINIMUM-MAXIMUM RANGE STATED ABOVE.



STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF PLANNING & DEVELOPMENT
TYPICAL SECTIONS
 THOMAS STREET AND DRIVEWAYS
 NOT TO SCALE



GENERAL NOTES

GRADING

ANY AREA THAT IS DISTURBED OUTSIDE LIMITS OF CONSTRUCTION DURING THE LIFE OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.

CERTIFICATION FOR ALL BORROW PITS MUST BE OBTAINED IN ACCORDANCE WITH SUBSECTION 107.06 OF THE STANDARD SPECIFICATIONS

THE CONTRACTOR SHALL NOT DISPOSE OF ANY MATERIAL EITHER ON OR OFF STATE-OWNED R.O.W. IN A REGULATORY FLOODWAY AS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY WITHOUT APPROVAL BY SAME. ALL MATERIAL SHALL BE DISPOSED OF IN UPLAND (NON-WETLAND) AREAS AND ABOVE ORDINARY HIGH WATER OF ANY ADJACENT WATERCOURSE. THIS DOES NOT ELIMINATE THE NEED TO OBTAIN ANY OTHER LICENSES OR PERMITS THAT MAY BE REQUIRED BY ANY OTHER FEDERAL, STATE OR LOCAL AGENCY.

SEEDING AND SODDING

SOD SHALL BE PLACED AT LOCATIONS SHOWN ON THE PLANS TO PREVENT DAMAGE TO ADJACENT FACILITIES AND PROPERTY DUE TO EROSION ON ALL NEWLY GRADED CUT AND FILL SLOPES AS WORK PROGRESSES.

DRAINAGE

THE CONTRACTOR SHALL SHAPE DITCHES TO THE SPECIFIED DESIGN. THIS WORK WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

EXCAVATION FOR PIPE CULVERTS,ENDWALLS,AND CATCH BASINS WILL NOT BE MEASURED AND PAID FOR DIRECTLY,BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

CULVERT EXCAVATION FOR CONCRETE BOX OR SLAB TYPE CULVERTS OR BRIDGES WILL NOT BE MEASURED AND PAID FOR DIRECTLY,BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS.

THE CUTTING OF INLET AND OUTLET DITCHES WHERE SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER WILL BE MEASURED AND PAID FOR AS ITEM NO. 203M01,ROAD AND DRAINAGE EXCAVATION (UNCLASSIFIED).

WHERE A CULVERT (PIPE,SLAB OR BOX) IS MOVED TO A NEW LOCATION OTHER THAN SHOWN ON THE PLANS,INCREASING OR DECREASING THE AMOUNT OF CULVERT EXCAVATION,NO INCREASE OR DECREASE IN THE AMOUNT OF PAVEMENT WILL BE MADE DUE TO SUCH CHANGE.

DURING CONSTRUCTION OF DRAINAGE STRUCTURES ALL COST ASSOCIATED WITH MAINTAINING THE FLOW OF WATER AND TRAFFIC,AT THESE STRUCTURES,DURING PHASED CONSTRUCTION OF THIS PROJECT ARE TO BE INCLUDED IN THE UNIT PRICE OF THE DRAINAGE STRUCTURES AND TRAFFIC CONTROL ITEMS.

UTILITIES

THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE PLANS ARE APPROXIMATE ONLY. EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD BY CONTACTING THE UTILITY COMPANIES INVOLVED.

UNLESS OTHERWISE NOTED, ALL UTILITY ADJUSTMENTS WILL BE PERFORMED BY THE UTILITY OR ITS REPRESENTATIVE. THE CONTRACTOR AND UTILITY OWNERS WILL BE REQUIRED TO CO-OPERATE WITH EACH OTHER IN ORDER TO EXPEDITE THE WORK REQUIRED BY THIS CONTRACT.

THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE UTILITIES, THE CONTRACTOR WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT. THE COST OF PROTECTING UTILITIES FROM DAMAGE AND FURNISHING SPECIAL EQUIPMENT WILL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION

PRIOR TO SUBMITTING HIS BID,THE CONTRACTOR WILL BE SOLEY RESPONSIBLE FOR CONTACTING OWNERS OF ALL AFFECTED UTILITIES IN ORDER TO DETERMINE THE EXTENT TO WHICH UTILITY RELOCATIONS AND/OR ADJUSTMENTS WILL HAVE UPON THE SCHEDULE OF WORK FOR THE PROJECT. WHILE SOME WORK MAY BE REQUIRED 'AROUND' UTILITY FACILITIES THAT WILL REMAIN IN PLACE,OTHER UTILITY FACILITIES MAY NEED TO BE ADJUSTED CONCURRENTLY WITH THE CONTRACTOR'S OPERATIONS. ADVANCE CLEAR CUTTING MAY BR REQUIRED BY ENGINEER AT ANY LOCATION WHERE CLEARING IS CALLED FOR IN THE SPECIFICATION AND CLEAR CUTTING IS NECESSARY FOR A UTILITY RELOCATION. ANY ADDITIONAL COST WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE CLEARING ITEM SPECIFIED IN THE PLANS.

THE CONTRACTOR SHALL NOTIFY EACH INDIVIDUAL UTILITY OWNER OF HIS PLAN OF OPERATION IN THE AREA OF THE UTILITIES. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL CONTACT THE UTILITY OWNERS AND REQUEST THEM TO PROPERLY LOCATE THEIR RESPECTIVE UTILITY ON THE GROUND. THIS NOTIFICATION SHALL BE GIVEN AT LEAST THREE (3) BUSINESS DAYS PRIOR TO COMMENCEMENT OF OPERATIONS AROUND THE UTILITY.

SOME UTILITIES CAN BE LOCATED BY CALLING THE TENNESSEE ONE CALL

FENCING

THE CONTRACTOR SHALL GIVE AFFECTED PROPERTY OWNERS TWO WEEKS NOTICE PRIOR TO CUTTING FENCES.

MISCELLANEOUS

ALL DETOUR,ACCESS SERVICE AND FRONTAGE ROADS SHALL BE CONSTRUCTED WITH A MINIMUM OF ONE (1) COURSE OF BASE MATERIAL BEFORE TRAFFIC IS INTERRUPTED ON EXISTING ROADS.

THE CONTRACTOR SHALL BE REQUIRED TO REMOVE AND RESET MAILBOXES WHERE AND AS DIRECTED BY THE ENGINEER.

NOTHING IN THE GENERAL NOTES OR SPECIAL PROVISIONS SHALL RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITIES TOWARD THE SAFETY AND CONVENIENCE OF THE GENERAL PUBLIC AND THE RESIDENTS ALONG THE PROPOSED CONSTRUCTION AREA.

ROAD CLOSURE NOTES

NO LESS THAN SEVEN (7) DAYS PRIOR TO THE CLOSURE OF THE ROAD,THE CONTRACTOR SHALL NOTIFY THE FOLLOWING INDIVIDUALS OR AGENCIES COMPLETELY DESCRIBING THE AFFECTED ROADS AND THE APPROXIMATE DURATION OF THE CONSTRUCTION; THESE PARTIES INCLUDE,BUT ARE NOT LIMITED TO: (1) LOCAL LAW ENFORCEMENT OFFICE,(2) LOCAL FIRE DEPARTMENT,(3) AMBULANCE SERVICE,(4) LOCAL SCHOOL SUPERINTENDENT,(5) UNITED STATES POSTAL SERVICE AND (6) LOCAL ROAD SUPERINTENDENT.

PAVEMENT MARKINGS

TEMPORARY PAVEMENT LINE MARKINGS ON INTERMEDIATE LAYERS OF PAVEMENT SHALL BE REFLECTIVE TAPE OR REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS BEFORE DARK HOURS. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716M05.01 PAINTED PAVEMENT MARKING (LINE) PER LINEAR km.

IF THERMOPLASTIC IS USED ON THE FINAL SURFACE, THE CONTRACTOR SHALL HAVE THE OPTION OF USING REFLECTORIZED PAINT INSTALLED TO PERMANENT STANDARDS AT THE END OF EACH DAY'S WORK AND THEN INSTALLING THE PERMANENT MARKING AFTER THE PAVING OPERATION IS COMPLETED. SHORT, UNMARKED SECTIONS SHALL NOT BE ALLOWED. THE TEMPORARY MARKINGS FOR THE FINAL SURFACE WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COSTS ARE TO BE INCLUDED IN THE PRICE BID FOR THE PERMANENT MARKINGS. THESE MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716M02.01,PLASTIC PAVEMENT MARKING (LINE),PER KILOMETER.

THE PAVEMENT MARKING ON THE DETOUR FOR CENTERLINE AND EDGELINES WILL BE INSTALLED AND MAINTAINED TO THE SAME STANDARDS AS FOR PERMANENT MARKINGS ON THE MAIN ROADWAY. THESE MARKINGS SHALL BE IN PLACE PRIOR TO ALLOWING TRAFFIC ONTO THE PAVEMENT. THESE PAVEMENT MARKINGS WILL BE MEASURED AND PAID FOR UNDER ITEM NO. 716M05.01 PAINTED PAVEMENT MARKING (LINE), LINEAR km.

BEFORE OPENING THE DETOUR TO TRAFFIC, THE TRANSITIONAL MARKINGS ON THE EXISTING ROADWAY MUST BE IN PLACE. ALL EXISTING MARKINGS IN THE AREA OF THESES TRANSITIONAL MARKINGS SHALL BE OBLITERATED TO ELIMINATE CONFLICTING MARKINGS. REMOVAL OF THE EXISTING CONFLICTING MARKINGS WILL NOT BE MEASURED AND PAID FOR DIRECTLY,BUT THE COST WILL BE INCLUDED IN ITEM NO. 712M01 TRAFFIC CONTROL,LUMP SUM.

SIGNING NOTES

AFTER THE SIGN LOCATIONS HAVE BEEN STAKED, BUT PRIOR TO ORDERING ANY MATERIAL FOR THE SUPPORTS, THERE SHALL BE A FIELD INSPECTION AND APPROVAL BY THE REGIONAL CONSTRUCTION OFFICE.

ALL SIGNS MARKED "TO BE REMOVED" ARE TO BE REMOVED BY THE CONTRACTOR AND PAID FOR UNDER ITEM 713M15 AND BECOME THE PROPERTY OF THE CONTRACTOR.

THE LENGTHS OF ALL SIGN SUPPORTS SHOWN ON THE SIGN SCHEDULE ARE APPROXIMATE AND ARE FOR ESTIMATING PURPOSES ONLY. THE CONTRACTOR SHALL VERIFY ALL SUPPORT LENGTHS AT THE SITE PRIOR TO ERECTION.

THE LETTERS, DIGITS, ARROWS, BORDERS AND ALPHABET ACCESSORIES ON ALL FLAT SHEET SIGNS SHALL BE APPLIED BY SILK SCREENING PROCESS.

SIGNALIZATION

EQUIPMENT AND INSTALLATION OF TRAFFIC SIGNALS SHALL COMPLY WITH TDOT STANDARD SPECIFICATIONS, SECTION 730.

IF RESURFACING IS INCLUDED IN THE PROJECT, SIGNAL DETECTION LOOPS SHALL BE INSTALLED BEFORE THE FINAL SURFACE IS APPLIED.

ANY SIGNAL HEADS, WHEN VISIBLE TO DRIVERS BUT NOT OPERATIONAL, SHALL BE COMPLETELY COVERED.

CONSTRUCTION WORK ZONE & TRAFFIC CONTROL NOTES

ADVANCE WARNING SIGNS SHALL NOT BE DISPLAYED MORE THAN FORTY-EIGHT (48) HOURS BEFORE PHYSICAL CONSTRUCTION BEGINS. SIGNS MAY BE ERECTED UP TO ONE WEEK BEFORE NEEDED, IF THE SIGN FACE IS FULLY COVERED.

IF THE CONTRACTOR MOVES OFF THE PROJECT, HE SHALL COVER OR REMOVE ALL UNNEEDED SIGNS AS DIRECTED BY THE ENGINEER. COSTS OF REMOVAL, COVERING, AND REINSTALLING SIGNS SHALL NOT BE MEASURED AND PAID FOR SEPARATELY, BUT ALL COSTS SHALL BE INCLUDED IN THE ORIGINAL UNIT PRICE BID FOR ITEM NO 712M06,SIGNS (CONSTRUCTION) PER SQUARE METER.

A LONG TERM BUT SPORADIC USE WARNING SIGN, SUCH AS A FLAGGER SIGN, MAY REMAIN IN PLACE WHEN NOT REQUIRED PROVIDED THE SIGN FACE IS FULLY COVERED.

TRAFFIC CONTROL DEVICES SHALL NOT BE DISPLAYED OR ERECTED UNLESS RELATED CONDITIONS ARE PRESENT NECESSITATING WARNING.

USE OF BARRICADES, PORTABLE BARRIER RAILS, VERTICAL PANELS, AND DRUMS SHALL BE LIMITED TO THE IMMEDIATE AREAS OF CONSTRUCTION WHERE A HAZARD IS PRESENT. THESE DEVICES SHALL NOT BE STORED ALONG THE ROADWAY WITHIN NINE (9) METERS OF THE EDGE OF THE TRAVELED WAY BEFORE OR AFTER USE UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES. THESE DEVICES SHALL BE REMOVED FROM THE CONSTRUCTION WORK ZONE WHEN THE ENGINEER DETERMINES THEY ARE NO LONGER NEEDED. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS NINE (9) METER SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

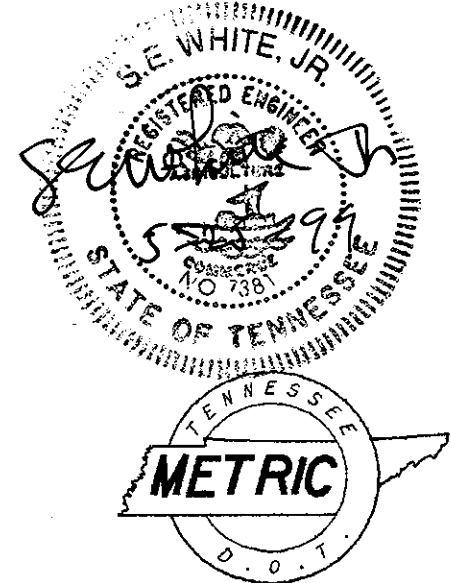
THE CONTRACTOR SHALL NOT BE PERMITTED TO PARK ANY VEHICLES OR CONSTRUCTION EQUIPMENT DURING PERIODS OF INACTIVITY, WITHIN NINE (9) METERS OF THE EDGE OF PAVEMENT WHEN THE LANE IS OPEN TO TRAFFIC. UNLESS PROTECTED BY GUARDRAIL, BRIDGE RAIL, AND/OR BARRIERS INSTALLED FOR OTHER PURPOSES, PRIVATELY OWNED VEHICLES SHALL NOT BE ALLOWED TO BE PARKED WITHIN NINE (9) METERS OF AN OPEN TRAFFIC LANE AT ANY TIME UNLESS PROTECTED AS DESCRIBED ABOVE. WHERE THERE IS INSUFFICIENT RIGHT-OF-WAY TO PROVIDE FOR THIS NINE (9) METER SETBACK, THE CONTRACTOR SHALL DETERMINE THE ALTERNATE LOCATIONS AND REQUEST THE ENGINEER'S APPROVAL TO USE THEM.

ALL DETOUR AND CONSTRUCTION SIGNING SHALL BE IN STRICT ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

ALL DETOURS SHALL BE PAVED, STRIPED, SIGNED AND THE VERTICAL PANELS ARE TO BE IN PLACE BEFORE IT IS OPENED TO TRAFFIC.

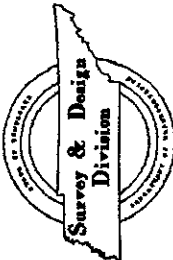
EROSION CONTROL

SEE SHEET 10 (EROSION AND SEDIMENT CONTROL PLAN)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

GENERAL NOTES
AND
SPECIAL NOTES



TENNESSEE D. O. T.

DESIGN DIVISION

FILE NO. R-30

24-MAY-1999 15:01

V:\DESIGN\3\HAYWOOD\3854\NOTE.DGN

Survey & Design Division

GENERAL NOTES

PAVEMENT EDGE DROP-OFF

TRAFFIC CONTROL NOTES

D. DIFFERENCE IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES OR TRAFFIC LANE AND SHOULDER WHERE THE TRAFFIC LANE IS BEING USED BY TRAFFIC, CAUSED BY BASE, PAVING OR RESURFACING:

DIFFERENCE IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 20 mm AND NOT EXCEEDING 50 mm:

A. WARNING SIGNS, UNEVEN PAVEMENT (W8-11) AND/OR SHOULDER DROP-OFF (W8-9A), SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 600 m WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

B. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY ADDED PAVEMENT SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

C. DIFFERENCES IN ELEVATION BETWEEN ADJACENT TRAFFIC LANES BEING UTILIZED BY TRAFFIC CAUSED BY COLD PLANING SHALL BE ELIMINATED WITHIN THREE WORKDAYS.

D. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE TRAFFIC LANE BEING UTILIZED BY TRAFFIC AND SHOULDER THE DIFFERENCE IN ELEVATION SHALL BE ELIMINATED WITHIN 7 WORKDAYS AFTER THE CONDITION IS CREATED.

DIFFERENCE IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 50 mm AND NOT EXCEEDING 150 mm. TRAFFIC IS NOT TO BE ALLOWED TO TRAVERSE THIS DIFFERENCE IN ELEVATION.

A. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 80 km/h OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 30 METERS.

2. WHERE POSTED SPEEDS ARE LESS THAN 80 km/h THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN METERS SHALL NOT EXCEED 3/8 THE POSTED SPEED IN KILOMETERS PER HOUR OR 15 METERS, WHICHEVER

B. IF THE DIFFERENCE IN ELEVATION IS ELIMINATED OR DECREASED TO 50 mm OR LESS BY THE END OF EACH DAY'S WORK, CONES MAY BE USED DURING DAYLIGHT HOURS IN LIEU OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES MENTIONED IN PARAGRAPH A, PROVIDED WARNING SIGNS ARE ERECTED. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 600 METERS WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

C. WHEN THE DIFFERENCE IN ELEVATION IS BETWEEN THE THRU TRAFFIC LANE AND THE SHOULDER AND THE ELEVATION DIFFERENCE IS LESS THAN 90 mm, THE CONTRACTOR MAY USE WARNING SIGNS AND/OR PROTECTIVE DEVICES AS APPLICABLE AND APPROVED BY THE ENGINEER. SEE PARAGRAPH A REGARDING USE OF DRUMS, BARRICADES OR OTHER APPROVED PROTECTIVE DEVICES. WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) WILL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 600 METERS WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

IN THESE SITUATIONS THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING THREE KILOMETERS IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

DIFFERENCE IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 150 mm BUT NOT EXCEEDING 450 mm, THE CONTRACTOR, WITH THE ENGINEER'S APPROVAL, MAY UTILIZE ONE OF THE FOLLOWING:

A. THE CONTRACTOR SHALL ACCOMPLISH SEPARATION BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 80 km/h OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 30 METERS.

2. WHERE POSTED SPEEDS ARE LESS THAN 80 km/h THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN METERS SHALL NOT EXCEED 3/8 THE POSTED SPEED IN KILOMETERS PER HOUR OR 15 METERS, WHICHEVER SPACING IS GREATER.

IN ORDER TO USE THIS METHOD THE CONTRACTOR MUST REDUCE THE DIFFERENCE IN ELEVATION TO 150 mm OR LESS BY THE END OF THE WORK DAY THAT THE CONDITION IS CREATED.

B. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH A, AND CONSTRUCT A STONE WEDGE WITH A 4:1 SLOPE, OR FLATTER, TO ELIMINATE THE VERTICAL OFFSET IF THE LOWER ELEVATION IS AT OR BELOW SUBGRADE AT THE END OF EACH DAY.

C. THE CONTRACTOR SHALL PROVIDE DRUMS, BARRICADES OR OTHER APPROVED SEPARATION DEVICES AS SPECIFIED IN PARAGRAPH A, AND IF THE LOWER ELEVATION IS BASE STONE OR ASPHALT PAVEMENT, PLACEMENT OF SUBSEQUENT LAYERS OF PAVEMENT MUST BEGIN THE NEXT WORK DAY AND PROGRESS CONTINUOUSLY UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED OR REDUCED TO 150 mm OR LESS.

D. THE CONTRACTOR SHALL PROVIDE SEPARATION BY PORTABLE BARRIER RAIL.

FOR PRECEDING CONDITIONS A, B, AND C, THE CONTRACTOR SHALL USE THE SHOULDER DROP-OFF WARNING SIGN (W8-9A). IT SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN THE SIGNS SHALL BE 600 METERS WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. IN THESE SITUATIONS THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1.5 KILOMETERS IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

DIFFERENCE IN ELEVATION BETWEEN ADJACENT ROADWAY ELEMENTS GREATER THAN 450 mm.

SEPARATION WILL BE PROVIDED BY USE OF PORTABLE BARRIER RAIL.

IN THIS SITUATION THE CONTRACTOR SHALL LIMIT HIS OPERATIONS TO ONE WORK ZONE NOT EXCEEDING 1.5 KILOMETERS IN LENGTH UNLESS OTHERWISE NOTED ON THE PLANS OR APPROVED BY THE ENGINEER. ONCE THE CONTRACTOR BEGINS WORK IN A WORK ZONE A CONTINUOUS OPERATION SHALL BE MAINTAINED UNTIL THE DIFFERENCE IN ELEVATION IS ELIMINATED. SIMULTANEOUS WORK ON SEPARATE ROADWAYS OF DIVIDED HIGHWAYS WILL BE CONSIDERED INDEPENDENTLY IN REGARD TO RESTRICTION OF WORK ZONE ACTIVITY.

D. DIFFERENCE IN ELEVATION IS WITHIN 9 METERS OF THE NEAREST TRAFFIC LANE BEING USED BY TRAFFIC CAUSED BY GRADING, EXCAVATION FOR UTILITIES, DRAINAGE STRUCTURES, UNDERCUTTING, ETC.

DIFFERENCE IN ELEVATION IS WITHIN 2.4 METERS OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 20 mm AND NOT EXCEEDING 50 mm:

WARNING SIGNS (UNEVEN PAVEMENT AND/OR LOW SHOULDER) SHALL BE PLACED IN ADVANCE OF AND THROUGHOUT THE EXPOSED AREA. MAXIMUM SPACING BETWEEN SIGNS SHALL BE 600 METERS WITH A MINIMUM OF 2 SIGNS PER EXPOSED AREA. WHERE UNEVEN PAVEMENT IS ENCOUNTERED, SIGNS SHALL BE PLACED ON EACH SIDE OF THE ROADWAY.

DIFFERENCE IN ELEVATION IS WITHIN 2.4 METERS OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 50 mm AND NOT EXCEEDING 150 mm:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 80 km/h OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 30 METERS.

2. WHERE POSTED SPEEDS ARE LESS THAN 80 km/h THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN METERS SHALL NOT EXCEED 3/8 THE POSTED SPEED IN KILOMETERS PER HOUR OR 15 METERS, WHICHEVER SPACING IS GREATER.

DIFFERENCE IN ELEVATION IS WITHIN 2.4 METERS OF THE NEAREST TRAFFIC LANE WITH DIFFERENCE IN ELEVATION GREATER THAN 150 mm:

A. SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 80 km/h OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 30 METERS.

2. WHERE POSTED SPEEDS ARE LESS THAN 80 km/h THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN METERS SHALL NOT EXCEED 3/8 THE POSTED SPEED IN KILOMETERS PER HOUR OR 15 METERS, WHICHEVER SPACING IS GREATER.

B. ELIMINATE VERTICAL OFFSET BY CONSTRUCTING A STONE WEDGE OR GRADING TO A 4:1 SLOPE, OR FLATTER, OR USE PORTABLE BARRIER RAIL.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE WITHIN 2.4 METERS OF A TRAFFIC LANE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

DIFFERENCE IN ELEVATION IS FARTHER THAN 2.4 METERS FROM THE NEAREST TRAFFIC LANE BUT NOT MORE THAN 9 METERS FROM THE NEAREST TRAFFIC LANE:

SEPARATION SHALL BE ACCOMPLISHED BY DRUMS, BARRICADES OR OTHER APPROVED DEVICES IN ACCORDANCE WITH THE FOLLOWING:

1. WHERE POSTED SPEEDS ARE 80 km/h OR GREATER, SPACING OF THE PROTECTIVE DEVICES SHALL NOT EXCEED 30 METERS.

2. WHERE POSTED SPEEDS ARE LESS THAN 80 km/h THE MAXIMUM SPACING OF THE PROTECTIVE DEVICES IN METERS SHALL NOT EXCEED 3/8 THE POSTED SPEED IN KILOMETERS PER HOUR OR 15 METERS, WHICHEVER SPACING IS GREATER.

THE CONTRACTOR SHALL SCHEDULE THE WORK SO AS TO MINIMIZE THE TIME TRAFFIC IS EXPOSED TO AN ELEVATION DIFFERENCE. ONCE THE CONTRACTOR BEGINS AN ACTIVITY THAT CREATES AN ELEVATION DIFFERENCE, THE ACTIVITY SHALL BE PURSUED AS A CONTINUOUS OPERATION UNTIL THE ELEVATION DIFFERENCE IS ELIMINATED.

SPECIAL NOTES

ALL EXISTING ROADS WITHIN THE RIGHT-OF-WAY AND NOT IN THE GRADED AREA THAT ARE TO BE ABANDONED SHALL BE SCARIFIED, OBLITERATED AND SEEDED. THE PAYMENT FOR SCARIFYING AND OBLITERATING WILL NOT BE MEASURED AND PAID FOR DIRECTLY, BUT THE COST WILL BE INCLUDED IN THE COST OF OTHER ITEMS. SEE SHEET NO. 11, TRAFFIC CONTROL PLAN, FOR ADDITIONAL NOTES.

ALL NEWLY GRADED EARTHERN AREAS THAT ARE NOT TO BE PAVED, STABILIZED,OR RIP-RAPPED SHALL BE SODDED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS, SECTION 803.

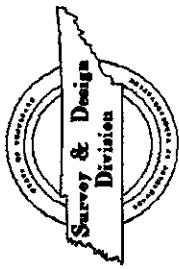
THE CONTRACTOR WILL BE REQUIRED TO MAINTAIN EGRESS AND INGRESS ON ALL PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT.

KLEER-VU DRIVE WILL BE CLOSED TEMPORARILY; SEE SHEET 11A (TRAFFIC CONTROL PLAN).

SEQUENCE OF WORK: SEE SHEET 11 (TRAFFIC CONTROL PLAN).

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

GENERAL NOTES
AND
SPECIAL NOTES



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TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO. **R-30**

TABULATION OF PROPOSED CODED ITEMS (C.B.'S, M.H.'S, and E.W.'S)

STATION	RT. OR LT. #	CODE NO.	CATCH BASIN (TYPE)								ELEVATIONS			MANHOLE (TYPE)		PIPE END TREATMENT			REMARKS		
			(TYPE)								C.B. GRATE OR M.H. RIM	OUTLET INVERT ELEV.	DEPTH	(TYPE)		TYPE E.W.	CONC. (m³)	REINF. STEEL (kg)		STRUC. STEEL (kg)	RIP- RAP (tonne)
			NO. 12	NO. 13	NO. 14	NO. 38	NO. 39	NO. 42	NO. 43												
5+057.5	RT.	1							X	103.900	102.890	1.01							C.B.= 9.588 m RT. C.L. DM-CB-42S/-42SD		
5+056	RT.	1A							X	103.900	102.700	1.00							C.B.= 9.588 m RT. C.L. DM-CB-42S/-42SD		
5+016	RT.	2	X							104.336	103.013	1.35							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
5+009	LT.	3		X						104.381	102.851	1.53							DM-CB-13S/-13B/-13P		
1+133	RT.	4	X							104.423	103.023	1.40							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
1+163	RT.	5			X					104.363	102.763	1.60							DM-CB-14S/-14B/-14P		
1+160	LT.	6	X							104.999	103.914	1.085							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
1+190	RT.	7	X							104.484	102.934	1.55							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
1+237	RT.	8	X							104.859	103.308	1.55							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
1+257.5	RT.	9							X	105.100	104.100	1.00							C.B.= 9.246 m RT. C.L. DM-CB-43SB		
1+282	RT.	10							X	105.450	103.850	1.60							C.B.= 9.073 m RT. C.L. DM-CB-42S/-42SD		
1+282	RT.	11	X							105.566	103.566	2.00							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
1+334	RT.	12	X							106.507	104.91	1.60							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
4+940	LT.	13	X							104.277	102.600	1.677							DM-CB-12P/-12B/-12RA/-12RB/-12S/-12SB/-12SD		
4+917	LT.	14						X		103.250	102.400	0.850							C.B.= 6.362 m LT. C.L. DM-CB-39S/-39RB		
5+110	RT.	E1								104.100				ST	0.80	0			E.W.= 5.080 m RT. C.L. DM-PE-4		
5+110	LT.	E2								103.400				ST	0.80	0			E.W.= 5.035 m LT. C.L. DM-PE-4		
5+044	LT.	E3								102.794				ST	1.92	0			E.W.= 7.268 m LT. C.L. DM-PE-4		
5+010.5	LT.	E4								102.751				U	0.79	60			E.W.= 10.339 m LT. C.L. DM-PE-38A/-38B		
1+162.5	RT.	E5								102.700				U	0.79	60			E.W.= 8.273 m RT. C.L. DM-PE-38A/-38B		
1+160	LT.	E6								103.857				U	0.79	60			E.W.= 9.099 m LT. C.L. DM-PE-38A/-38B		
1+185.5	RT.	E7								102.834				ST	2.46	0			E.W.= 9.578 m RT. C.L. DM-PE-4		
1+358.5	RT.	E8								106.300				SD	1.34	101	126		E.W.= 7.969 m RT. C.L. DM-SEW-60A/-60B		
4+957.5	RT.	E9								102.750				ST	1.12	0			E.W.= 13.448 m RT. C.L. DM-PE-4		
4+883.5	LT.	E10								102.200				SD	1.88	132	184		E.W.= 7.025 m LT. C.L. DM-SEW-60A/-60B		
5+016	RT.	E11								104.150				ST	0.80	0			E.W.= 7.268 m RT. C.L. DM-PE-4		
CATCH BASINS: (EACH)											MANHOLES: (EACH)		NONE		NONE		NONE		TOTALS		
DEPTH 0.0 m TO 2.0 m											DEPTH 0 m TO 2 m		NONE		NONE		NONE				
DEPTH 2.0 m TO 3.0 m											DEPTH 2 m TO 3 m		NONE		NONE		NONE				
DEPTH 3.0 m TO 4.0 m											DEPTH 3 m TO 4 m		NONE		NONE		NONE				

TABULATION OF PROPOSED STORM SEWER PIPES

FROM		TO		PIPE DIAMETER AND ESTIMATED LENGTH (METER)						PIPE GRADE (%) ±	Δ EST. BEDDING MAT'L (m³)	REMARKS
CODE	INVERT ELEV.	CODE	INVERT ELEV.	450 mm CONC.	600 mm CONC.							
E1	104.100	E2	103.400	10.5						6.67	5.586	
1A	102.900	1	102.890	1.2						0.83	0.000	
1	102.890	E3	102.794		21.0					0.45	14.007	
2	103.013	3	102.900	12.0						0.94	6.384	
3	102.851	E4	102.751	3.5						2.86	0.798	
4	103.023	5	102.863	27.5						0.58	14.630	
5	102.763	E5	102.700	2.5						2.52	0.904	
6	103.914	E6	103.857	3.0	5.5					1.90	0.798	
7	102.934	E7	102.834							1.82	1.668	
8	103.234	7	103.000	45.0						0.52	30.015	
11	103.566	8	103.334		43.0					0.54	28.681	
10	103.850	11	103.666	2.5						7.36	0.798	
9	104.100	10	103.950	22.5						0.67	0.000	
12	104.910	11	103.800		50.5					2.20	33.684	
E8	106.300	12	105.100	24.0						5.0	1.064	
E9	102.750	13	102.620	25.5						0.51	13.566	
13	102.600	14	102.450	19.0						0.79	10.108	BEDDING FOR TRAFFIC LOAD DURING TRAFFIC CONTROL
14	102.400	E10	102.200		31.0					0.65	13.340	BEDDING FOR TRAFFIC LOAD DURING TRAFFIC CONTROL
E11	104.150	2	103.013	3.0						37.90	0.000	
TOTALS											176.031	

▲ LIMIT OF BEDDING IS BACK OF SIDEWALK (OR BACK OF C&G IF THERE IS NO SIDEWALK), EXCEPT CROSS-DRAINS WILL HAVE BEDDING FOR THEIR ENTIRE LENGTH.

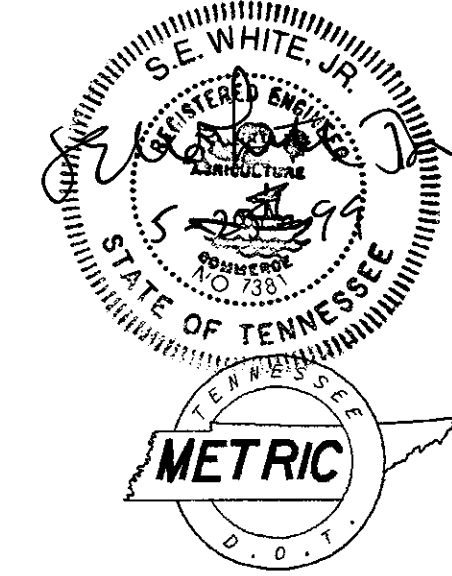
TABULATION OF PROPOSED CONCRETE BOX CULVERTS

STATION	BOX SPAN (m)	BOX HEIGHT (m)	BOX LENGTH (m)	BOX SKEW DEGREES	DRAINAGE AREA (ha)	DRAWING NUMBER	BOX CULVERT				FOUNDATION FILL MAT'L (m³) ITEM 204M08	AGGREGATE BACK FILL (TONNE) ITEM 301M01.01	MACHINED RIP-RAP (TONNE) ITEM 709M05.07	REMARKS		
							CLASS "A" CONC. (m³) ITEM 604M01.01	REINF. STEEL (kg) ITEM 604M01.02	PRECAST BOX							
									CULV. (m) ITEM 607M50.50							
STA. 1+180.000 WASHINGTON AVE.	3650 mm	1250 mm	29.5 m	45°	51.609	M-1-49, M-252-73, K-15-8, K-15-139	①	①	29.5	16.410	337.5	171	①	"PRECAST" BARREL SECTIONS		
STA. 5+034.651 C.L. KLEER-VU DR.	3000 mm	1250 mm	13.530 m	90°	46.307	K-15-37, DM-CE-1/-3, SDM-4-1/-2/-3/-4, SDM-9-1, SDM-10-1	38.8	3584.2		6.186	106.7	409	②			
STA. 5+097.462 C.L. KLEER-VU DR.	3000 mm	1250 mm	15.625 m	90°	43.318	K-15-37, DM-CE-1/-3, SDM-4-1/-2/-3/-4, SDM-9-1, SDM-10-1	43.7	4111.0		7.144	93.9	382	②			
TOTALS														538.1	962	

- ① INCLUDES 9.63 m³ POURED CONCRETE AND 901.8 kg STEEL BAR REINF. FOR THE CURBS AND WINGWALLS TO BE INCLUDED IN THE PRICE BID PER METER LENGTH OF "PRECAST" BOX.
② INCLUDES RIP-RAP FOR THE PROPOSED DITCH CHANGE BETWEEN THE TWO BOX CULVERTS.

TABULATED
QUANTITIES

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT



TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	2G

R.O.W. ACQUISITION TABLE																
TRACT NUMBER	PROPERTY OWNER	COUNTY RECORDS				AREA TO BE ACQUIRED ***			AREA REMAINING ***		EASEMENT ***			TOTAL AREA ***		
		TAX MAP NUMBER	PARCEL NUMBER	DEED BOOK	PAGE	LEFT	RIGHT	TOTAL	LEFT	RIGHT	PERMANENT DRAINAGE	SLOPE	# CONST.	LEFT	RIGHT	TOTAL
1	JAMES H. MOORE, ET. UX.	66M	5	129	16	NONE	xxxxxxx xxxxxxx	NONE	2,5090 ha (6,200 Ac.)	xxxxxxx xxxxxxx	123.3 m ² (1327 S.F.)	292.6 m ² (3150 S.F.)	174.0 m ² (1873 S.F.)	2,5090 ha (6,200 Ac.)	xxxxxxx xxxxxxx	2,5090 ha (6,200 Ac.)
2	WILLIAM R. WILHITE, ET. UX.	66M	6 6.01 6.02	144 164	379 57	xxxxxxx xxxxxxx	0.0720 ha (0.178 Ac.)	0.0720 ha (0.178 Ac.)	xxxxxxx xxxxxxx	0.4136 ha (1.022 Ac.)	30.8 m ² (332 S.F.)	101.7 m ² (1095 S.F.)	104.3 m ² (1123 S.F.)	xxxxxxx xxxxxxx	0.4856 ha (1,200 Ac.)	0.4856 ha (1,200 Ac.)
3	CLARENCE J. ESCUE	66M	1 4	125	256	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.8620 ha (2,130 Ac.)	NONE	29.9 m ² (322 S.F.)	23.7 m ² (255 S.F.)	xxxxxxx xxxxxxx	0.8620 ha (2,130 Ac.)	0.8620 ha (2,130 Ac.)
4	GERALD H. MARTIN	66M	21 25	166	147	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	6.1430 ha (15,180 Ac.)	0.0817 ha (0.202 Ac.)	3.3 m ² (36 S.F.)	76.1 m ² (819 S.F.)	xxxxxxx xxxxxxx	6.1430 ha (15,180 Ac.)	6.1430 ha (15,180 Ac.)
5	HOOPER OIL COMPANY INC.	66M	22	170	204	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.1700 ha (0.420 Ac.)	NONE	NONE	48.7 m ² (525 S.F.)	xxxxxxx xxxxxxx	0.1700 ha (0.420 Ac.)	0.1700 ha (0.420 Ac.)
6	MITCHEL D. PRINCE	66M	6.01	198	646	NONE	xxxxxxx xxxxxxx	NONE	0.1538 ha (0,380 Ac.)	xxxxxxx xxxxxxx	46.2 m ² (497 S.F.)	NONE	NONE	0.1538 ha (0,380 Ac.)	xxxxxxx xxxxxxx	0.1538 ha (0,380 Ac.)
7	MALTIMORE BOND, ET. UX.	66M	6.02	181	141						NONE	NONE	NONE	0.0971 ha (0,240 Ac.)	0.0971 ha (0,240 Ac.)	0.0971 ha (0,240 Ac.)
8	WEST TENN. POWER & LIGHT CO.	66M	7.00	78	471						NONE	NONE	NONE	37.2 m ² (400 S.F.)	37.2 m ² (400 S.F.)	37.2 m ² (400 S.F.)
9	JOE E. STEPHENS	66M	9.00	WILL BK. I	263	xxxxxxx xxxxxxx	56.9 m ² (612 S.F.)	56.9 m ² (612 S.F.)	xxxxxxx xxxxxxx	0.2452 ha (0,606 Ac.)	NONE	2.5 m ² (27 S.F.)	36.6 m ² (394 S.F.)	xxxxxxx xxxxxxx	0.2509 ha (0,620 Ac.)	0.2509 ha (0,620 Ac.)
10	JOE ELLIS STEPHENS	66M	9.01	205	666,708	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.1376 ha (0,340 Ac.)	NONE	42.6 m ² (459 S.F.)	32.2 m ² (347 S.F.)	xxxxxxx xxxxxxx	0.1376 ha (0,340 Ac.)	0.1376 ha (0,340 Ac.)
11	CITY OF BROWNSVILLE	66M	10.00 10.01	109	208	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.0971 ha (0,240 Ac.)	NONE	4.4 m ² (47 S.F.)	9.6 m ² (103 S.F.)	xxxxxxx xxxxxxx	0.0971 ha (0,240 Ac.)	0.0971 ha (0,240 Ac.)
12	ALSEY A. MANN, JR.	66	30.00	WILL BK. M	467	NONE	xxxxxxx xxxxxxx	NONE	15,5801 ha (38,500 Ac.)	xxxxxxx xxxxxxx	NONE	34.9 m ² (376 S.F.)	89.4 m ² (962 S.F.)	xxxxxxx xxxxxxx	15,5801 ha (38,500 Ac.)	15,5801 ha (38,500 Ac.)
13	GALON BAGGETT, ET. UX.	66L	11.03	207	106	0.0974 ha (0,241 Ac.)	xxxxxxx xxxxxxx	0.0974 ha (0,241 Ac.)	0.1818 ha (0,449 Ac.)	xxxxxxx xxxxxxx	NONE	88.3 m ² (951 S.F.)	291.3 m ² (3135 S.F.)	0.2792 ha (0,690 Ac.)	xxxxxxx xxxxxxx	0.2792 ha (0,690 Ac.)
14	MARK S. POWELL, ET. UX.	66M	22.01	203	533	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.2104 ha (0,520 Ac.)	NONE	NONE	53.3 m ² (574 S.F.)	xxxxxxx xxxxxxx	0.2104 ha (0,520 Ac.)	0.2104 ha (0,520 Ac.)
15	ROBERT T. HOOPER, ET. UX.	66M	11.00	WILL BK. N	430	0.4 m ² (4 S.F.)	xxxxxxx xxxxxxx	0.4 m ² (4 S.F.)	0.2145 ha (0,530 Ac.)	xxxxxxx xxxxxxx	NONE	48.1 m ² (518 S.F.)	56.1 m ² (604 S.F.)	0.2145 ha (0,530 Ac.)	xxxxxxx xxxxxxx	0.2145 ha (0,530 Ac.)
16	PETER R. MASCOLA, ET. UX.	66M	23	156	288	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.2307 ha (0,570 Ac.)	NONE	NONE	5.2 m ² (56 S.F.)	xxxxxxx xxxxxxx	0.2307 ha (0,570 Ac.)	0.2307 ha (0,570 Ac.)
17	LLOYD W. CAIN, ET. UX.	66L	11.02	198	114	NONE	xxxxxxx xxxxxxx	NONE	0.1862 ha (0,460 Ac.)	xxxxxxx xxxxxxx	NONE	3.9 m ² (42 S.F.)	6.9 m ² (74 S.F.)	0.1862 ha (0,460 Ac.)	xxxxxxx xxxxxxx	0.1862 ha (0,460 Ac.)
18	GEORGE SELLARS, ET. UX.	66M	24	WILL BK. J	66	xxxxxxx xxxxxxx	NONE	NONE	xxxxxxx xxxxxxx	0.2505 ha (0,619 Ac.)	NONE	78.8 m ² (848 S.F.)	20.6 m ² (222 S.F.)	xxxxxxx xxxxxxx	0.2505 ha (0,619 Ac.)	0.2505 ha (0,619 Ac.)
1 S	JAMES H. MOORE, ET. UX.	66M	5	129	16	NONE	xxxxxxx xxxxxxx	NONE	2,5090 ha (6,200 Ac.)	xxxxxxx xxxxxxx	NONE	NONE	168.5 m ² (1814 S.F.)	2,5090 ha (6,200 Ac.)	xxxxxxx xxxxxxx	2,5090 ha (6,200 Ac.)
6 S	MITCHELL D. PRINCE	66M	6.01	198	646	NONE	xxxxxxx xxxxxxx	NONE	0.1538 ha (0,380 Ac.)	xxxxxxx xxxxxxx	NONE	NONE	83.7 m ² (901 S.F.)	0.1538 ha (0,380 Ac.)	xxxxxxx xxxxxxx	0.1538 ha (0,380 Ac.)

TABLE FOOTNOTES

*** THE ENGLISH EQUIVALENTS OF THE METRIC AREAS ARE SHOWN IN PARENTHESES.

UNLESS OTHERWISE SHOWN OR STATED, CONSTRUCTION ESMT. LINES ARE 1.5 m OUTSIDE THE CONST. SLOPE (CUT/FILL) LINE ALONG ROADWAY. THIS 1.5 m WIDTH IS PROVIDED FOR WORK SPACE AS MIGHT BE NEEDED.

A: INCLUDES 20.7 m² (223 S.F.) LT. STA. 1+160 AND 102.6 m² (1104 S.F.) LT. STA. 1+190.

B: RIGHT OF C.L. STA. 1+370 (NEAR E.O.P.)

C: INCLUDES 10.4 m² (112 S.F.) RT. C.L. STA. 1+370 (NEAR E.O.P.) AND 65.7 m² (707 S.F.) ALONG KLEER-VU DRIVE AT R WITH TRACT 5.

D: INCLUDES 32.5 m² (350 S.F.) AT SW CORNER OF PARCEL AT P WITH TRACT 4.

E: INCLUDES 204.3 m² (2199 S.F.) OF CONST. ESMT. 3 m WIDE FOR CONSTRUCTING A TEMPORARY LANE ON THE EASTERN EDGE OF PROPOSED S.R. 54 TO MAINTAIN TRAFFIC.

F: TRACT 13 HAS A REMAINDER THAT IS DIVIDED BY THE NEW S.R. 54 ROADWAY: APPROXIMATELY 0.05 ha (0.12 Ac.) ON WEST SIDE AND 0.13 ha (0.32 Ac.) ON EAST SIDE OF NEW S.R. 54.

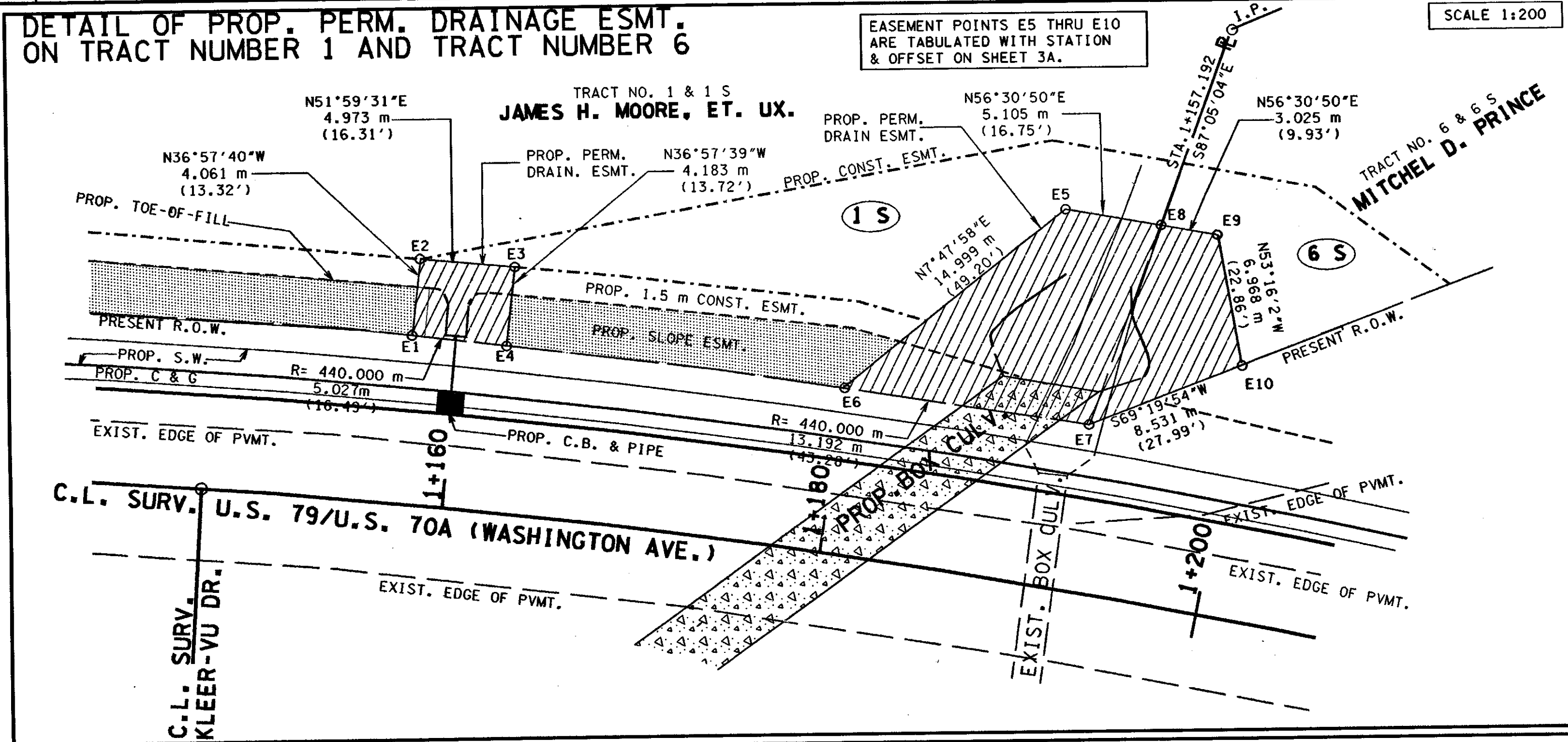
G: FOR CONST. OF TEMPORARY RUN-AROUND.

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	3
CONST.	1999	STP-M-54(23)	3

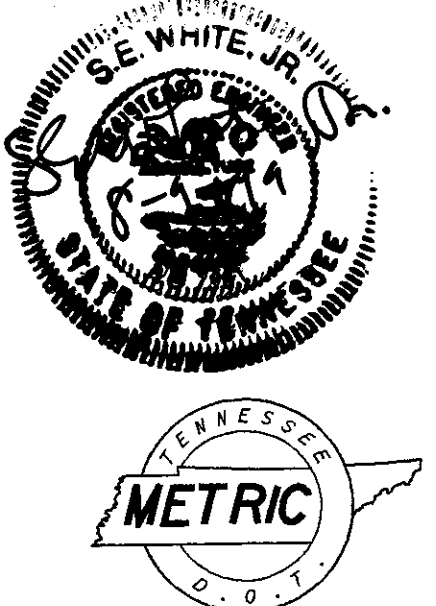
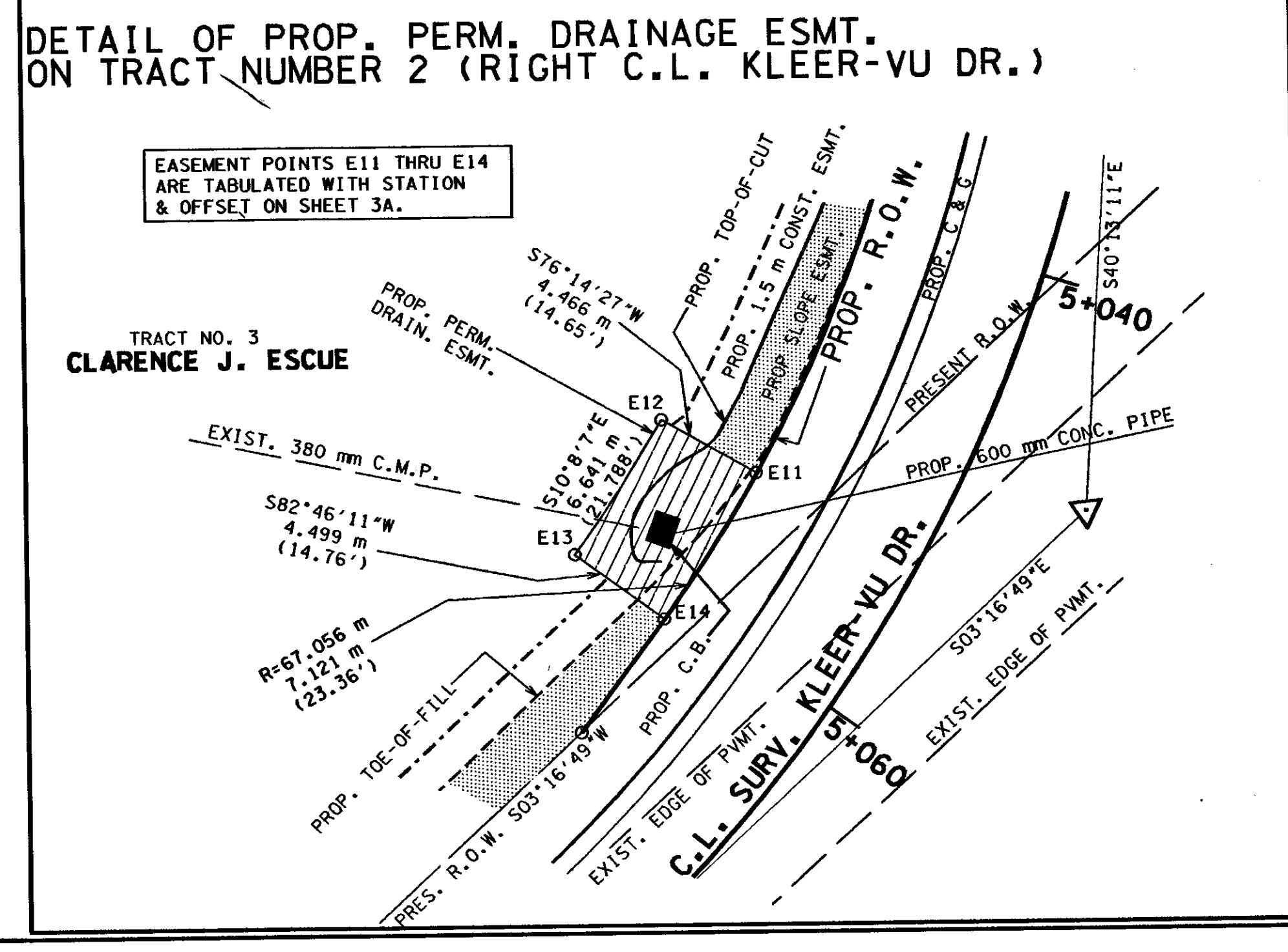
REV. 7/08/99: DELETED TR. NO. 11. ADDED CONST. ESMT. TO TR. NO'S. 1 AND 6.

REV. 8/05/99: ADDED TRACT NO'S. 1 S AND 6 S. REVISED TABLE ENTRIES FOR TRACT NO'S. 1 AND 6.

DETAIL OF PROP. PERM. DRAINAGE ESMT. ON TRACT NUMBER 1 AND TRACT NUMBER 6



DETAIL OF PROP. PERM. DRAINAGE ESMT. ON TRACT NUMBER 2 (RIGHT C.L. KLEER-VU DR.)



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

**RIGHT-OF-WAY
ACQUISITION
TABLE AND
DETAIL DRAWINGS**

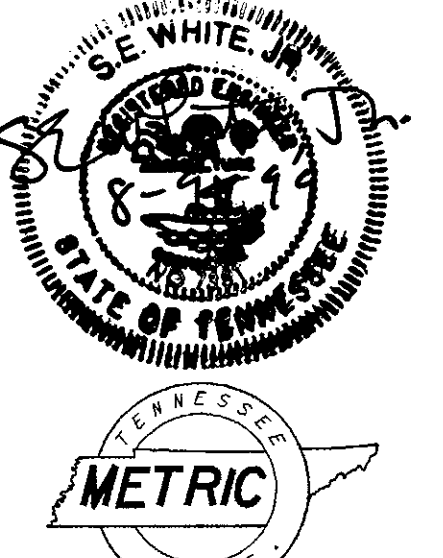
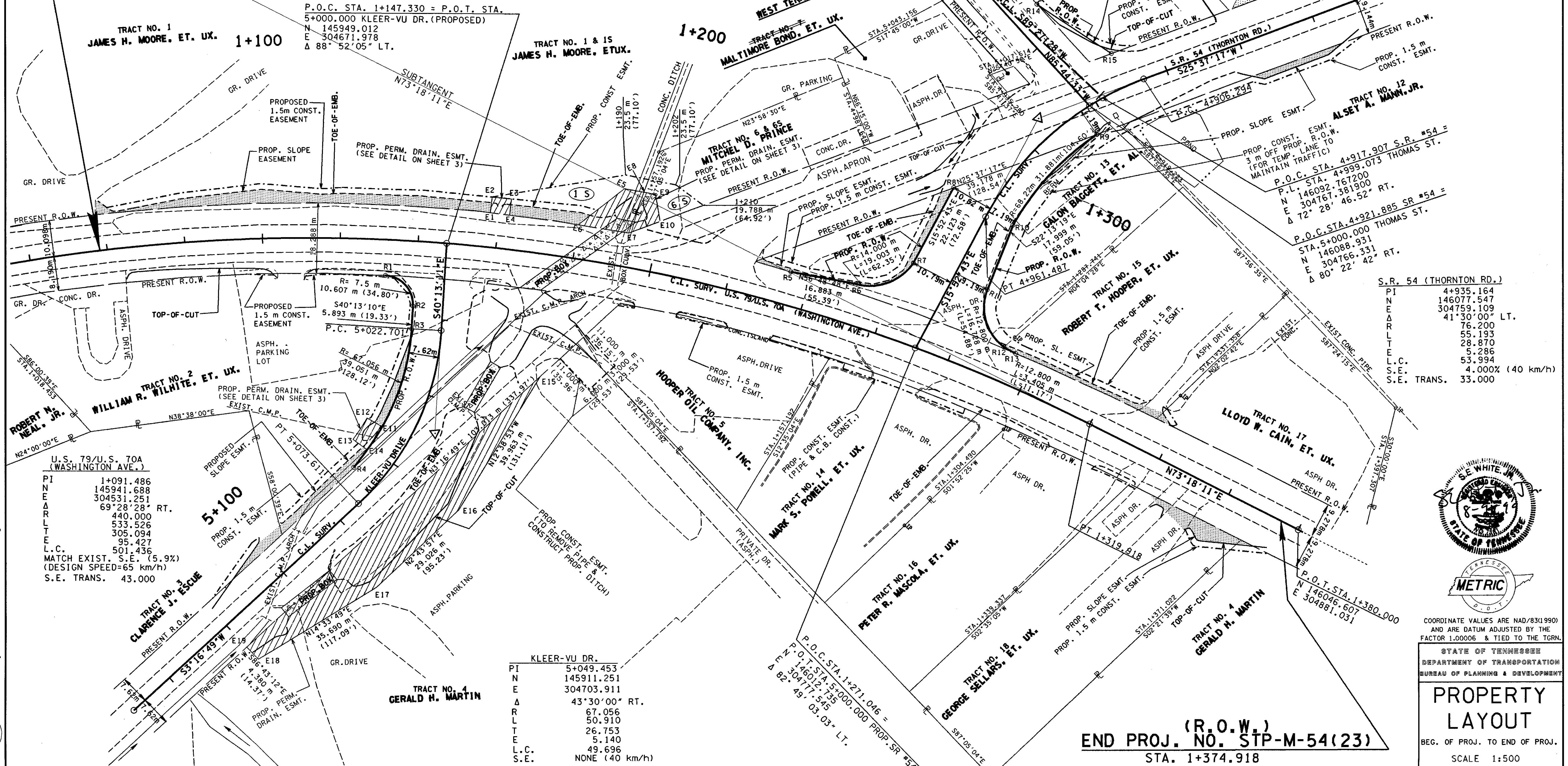
PROPOSED RIGHT-OF-WAY POINTS		
TRACT NUMBER	POINT NUMBER	STATION & OFFSET DISTANCES
2	R1	1+132.173, 9.315 m (30.56') RT. C.L. US79
	R2	5+016.808, 7.621 m (25.00') RT. C.L. STREET
	R3	5+022.701, 7.621 m (25.00') RT. C.L. STREET
	R4	5+067.354, 7.621 m (25.00') RT. C.L. STREET
	R5	1+235.000, 8.713 m (28.59') LT. C.L. US79
13	R6	1+251.500, 10.568 m (34.67') LT. C.L. US79
	R7	4+980.741, 10.790 m (35.40') RT. C.L. SR54
	R8	4+959.070, 10.820 m (35.50') RT. C.L. SR54
	R9	4+924.454, 7.188 m (23.58') LT. C.L. SR54
	R10	4+960.000, 7.188 m (23.58') LT. C.L. SR54
15	R11	4+977.981, 9.190 m (30.15') LT. C.L. SR54
	R12	1+291.801, 8.763 m (28.75') LT. C.L. US79
	R13	1+295.023, 8.431 m (27.66') LT. C.L. US79
	R14	5+028.000, 6.144 m (20.16') RT. P.L.C.L. STREET
	R15	4+911.000, 9.315 m (30.56') RT. C.L. SR54

PROPOSED PERM. DRAINAGE ESMT. POINTS		
TRACT NUMBER	POINT NUMBER	STATION & OFFSET DISTANCES
1	E1	1+157.500, 8.972 m (29.44') LT. C.L. U.S. 79
	E2	1+157.500, 12.972 m (42.56') LT. C.L. U.S. 79
	E3	1+162.500, 13.100 m (42.98') LT. C.L. U.S. 79
	E4	1+162.500, 8.891 m (29.17') LT. C.L. U.S. 79
	E5	1+190.000, 20.000 m (65.62') LT. C.L. U.S. 79
1	E6	1+180.053, 8.826 m (28.96') LT. C.L. U.S. 79
	E7	1+192.622, 8.924 m (29.28') LT. C.L. U.S. 79
	E8	1+194.860, 20.000 m (65.62') LT. C.L. U.S. 79
	E9	1+197.439, 20.000 m (65.62') LT. C.L. U.S. 79
	E10	1+199.963, 13.436 m (44.08') LT. C.L. U.S. 79
2	E11	5+053.000, 7.621 m (25.00') RT. C.L. STREET
	E12	5+053.000, 12.121 m (39.77') RT. C.L. STREET
	E13	5+061.000, 7.621 m (25.00') RT. C.L. STREET
	E14	5+061.000, 12.121 m (39.77') RT. C.L. STREET
	E15	5+030.000, 26.625 m (87.35') LT. C.L. STREET
4	E16	5+060.000, 20.500 m (67.26') LT. C.L. STREET
	E17	5+085.000, 19.000 m (62.34') LT. C.L. STREET
	E18	5+120.000, 12.000 m (39.37') LT. C.L. STREET
	E19	5+120.000, 7.571 m (24.84') LT. C.L. STREET

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	3A
CONST.	1999	STP-M-54(23)	3A

REV. 7/08/99: DELETED TR. NO. 11 AND ESMTS. ADDED CONST. ESMT. TO TR. NO'S. 1 AND 6 FOR TEMP. RUN-AROUND, RELOCATED EXIST. DR. ON TR. NO. 9.
 REV. 8/05/99: ADDED TRACT NO'S. 15 AND 6.

(R.O.W.)
 BEG. PROJ. NO. STP-M-54(23)
 STA. 1+058.150



COORDINATE VALUES ARE NAD(83)1990
 AND ARE DATUM ADJUSTED BY THE
 FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
 DEPARTMENT OF TRANSPORTATION
 BUREAU OF PLANNING & DEVELOPMENT

PROPERTY
 LAYOUT

BEG. OF PROJ. TO END OF PROJ.

SCALE 1:500

IT IS INTENDED THAT ALL BUILDINGS, AND/OR PORTIONS OF BUILDINGS THAT ARE WITHIN THE PROPOSED RIGHT-OF-WAY OR BASEMENT LINES FOR THE PROJECT, BE REMOVED THEREFROM 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. HEADQUARTERS SURVEY AND DESIGN OFFICE AND THE CIVIL ENGINEERING SURVEY AND DESIGN OFFICE, COURTESY AND DESIGN OFFICE, ARE TO BE NOTIFIED IN SUFFICIENT TIME TO PERMIT HAVING SUCH REMOVALS DESIGNATED AS A PART OF THE CONSTRUCTION CONTRACT.

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 RIGHTS-OF-WAY", STANDARD DRAWING RPM-R-1 AND OTHER ACCEPTED DESIGN AND SAFETY STANDARDS.

EACH EXISTING PAVED DRIVEWAY PER TRACT REMAINDER WILL BE REPLACED
IN KIND TO A TOUCHDOWN POINT.

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.

WHERE THE EXISTING DRIVEWAY IS UNPAVED AND THE PROPOSED DRIVEWAY IS LESS THAN 7 PERCENT IN GRADE, EACH DRIVEWAY WILL BE PAVED 1.8 METERS FROM THE EDGE OF PAVEMENT AND THE REMAINDER OF THAT DRIVEWAY REPLACED IN KIND TO A TOUCHDOWN POINT.

ANY NECESSARY PAVING OF DRIVEWAYS WILL BE DONE DURING PAVING OPERATIONS ON THE MAIN ROADWAY.

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.

ALONG THE STATE ROUTES OF THIS PROJECT WHERE CURB AND GUTTER IS NOT PROPOSED, 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.

ALONG THE STATE ROUTES OF THIS PROJECT WHERE CURB AND GUTTER IS PROPOSED, IT WILL BE THE RESPONSIBILITY OF THE OWNER TO SECURE A PERMIT FOR ANY ADDITIONAL DRIVE. 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.

ON STREETS THAT ARE NOT 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.

(R.O.W.)
BEG PROJ. NO. STP-M-54(23)
STA. 1+058.150

UTILITY OWNERS

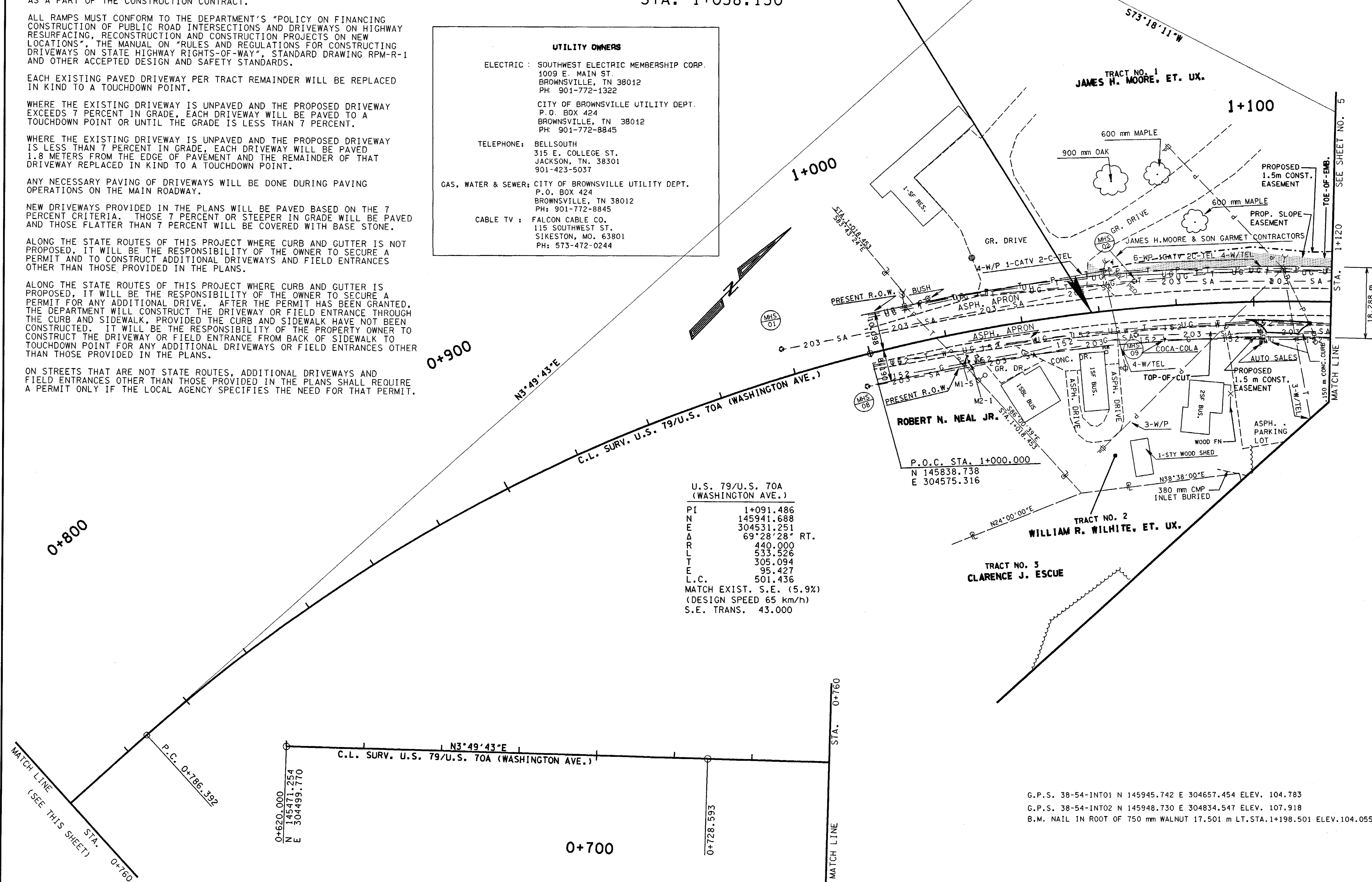
ELECTRIC : SOUTHWEST ELECTRIC MEMBERSHIP CORP.
1009 E. MAIN ST.
BROWNSVILLE, TN 38012
PH: 901-772-1322

CITY OF BROWNSVILLE UTILITY DEPT.
P.O. BOX 424
BROWNSVILLE, TN 38012
PH: 901-772-8845

TELEPHONE: BELLSOUTH
315 E. COLLEGE ST.
JACKSON, TN. 38301
901-423-5037

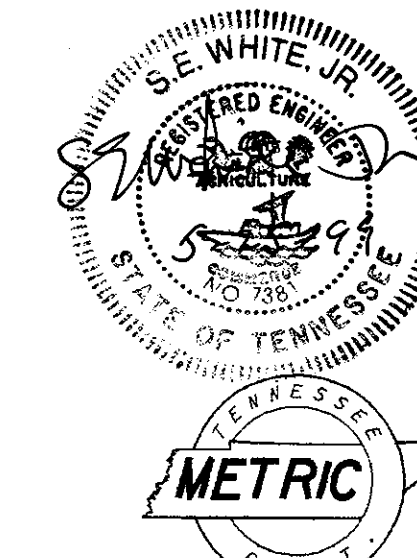
GAS, WATER & SEWER: CITY OF BROWNSVILLE UTILITY DEPT.
P.O. BOX 424
BROWNSVILLE, TN 38012
PH: 901-772-8845

CABLE TV : FALCON CABLE CO.
115 SOUTHWEST ST.
SIKESTON, MO. 63801
PH: 573-472-0244



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	

SEE SHEET 5 FOR TABLES
OF EXISTING SAN. SEWERS
AND EXISTING CATCHBASINS
& DRAINAGE CULVERTS AS
CODED ON PRESENT LAYOUTS



COORDINATE VALUES ARE NAD/83(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

**PRESENT
LAYOUT**

U.S. 79 AT S.R. 54
BEG. OF PROJ. TO STA. 1+120
SCALE 1:500

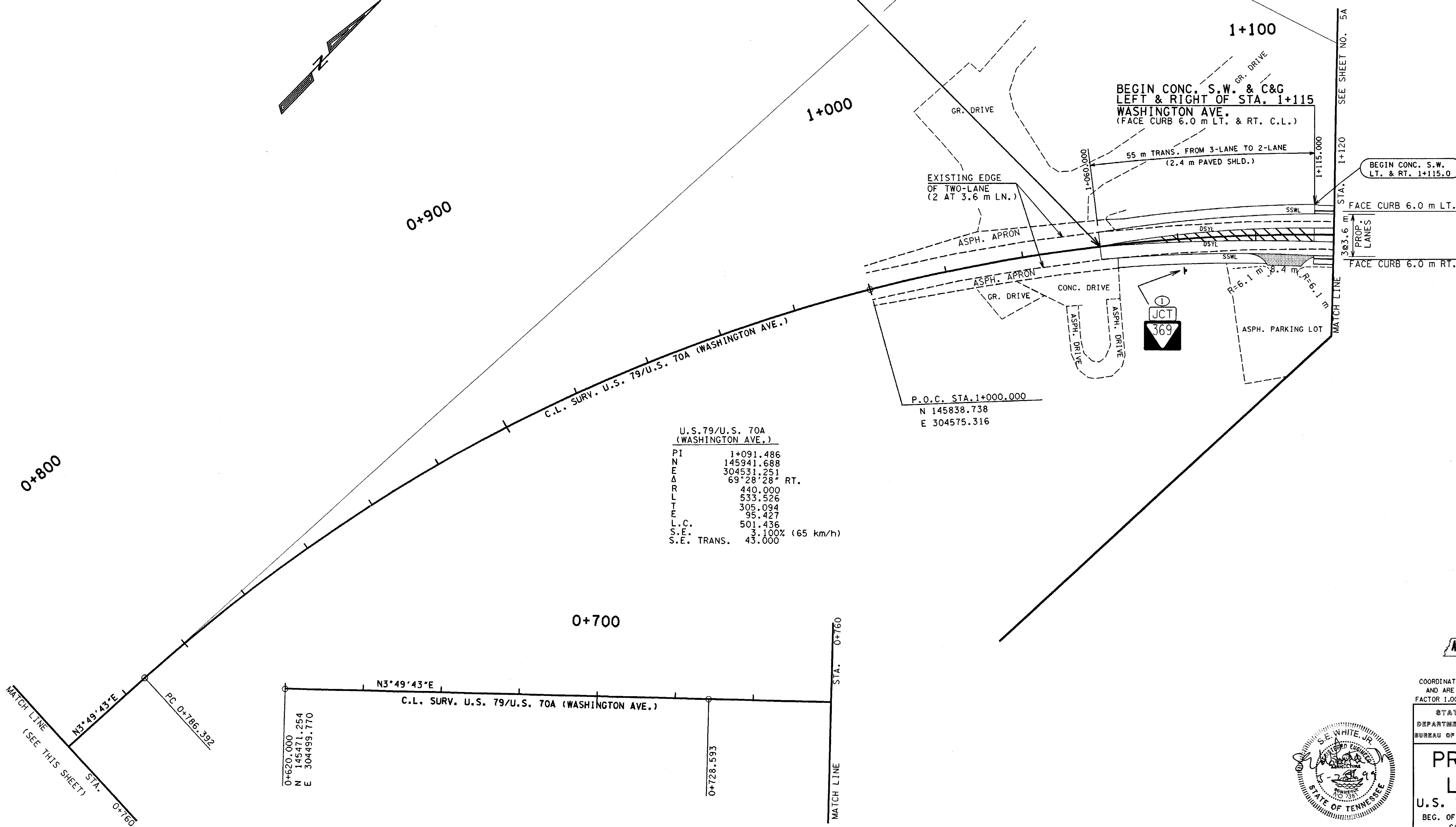
G.P.S. 38-54-INT01 N 145945.742 E 304657.454 ELEV. 104.783
G.P.S. 38-54-INT02 N 145948.730 E 304834.547 ELEV. 107.918
B.M. NAIL IN ROOT OF 750 mm WALNUT 17.501 m LT.STA.1+198.501 ELEV.104.055

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	4A
CONST.	1999	STP-M-54(23)	4A

(CONST.)

BEG. PROJ. NO. STP-M-54(23)

STA. 1+060.000



TENNESSEE

METRIC

D.O.T.

COORDINATE VALUES ARE NAD/83(1995)

AND ARE DATUM ADJUSTED BY THE

FACTOR 1.000006 & TIED TO THE TGN.

STATE OF TENNESSEE

DEPARTMENT OF TRANSPORTATION

BUREAU OF PLANNING & DEVELOPMENT

PROPOSED LAYOUT

U.S. 79 AT S.R. 54

BEG. OF PROJ. TO STA. 1+120

SCALE: 1:500

TENNESSEE D.O.T.

DESIGN DIVISION

FILE NO. R-30

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	4B
CONST.	1999	STP-M-54(23)	4B

112
111
110
109
108
107
106
105
104
103
102
101
100
99
98

112
111
110
109
108
107
106
105
104
103
102
101
100
99
98

(CONST.)
BEGIN PROJ. STP-M-54 (23)
STA. 1+060.000
EL. 105.180

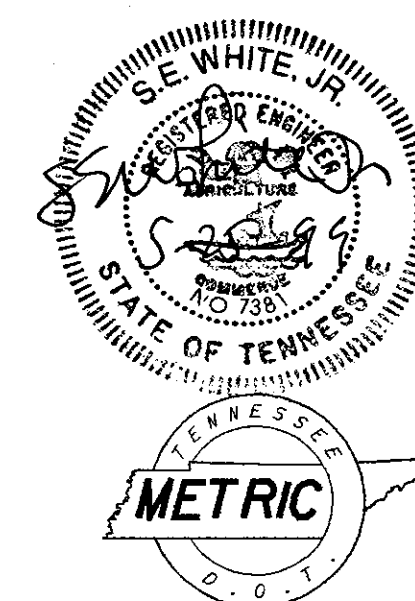
FINISHED GRADE

ALL PUBLIC UTILITY LINE
DEPTHS ARE APPROXIMATE.

NOTE: 208 mm UG SA CROSSES RD. CL. STA. 1+152.433
208 mm WATER CROSSES CL. STA. 1+198.581
51 mm UG WATER CROSSES CL. STA. 1+255.071
AT UG WATER HAS 60 P.S.I.
208 mm & 152 mm ARE CAST IRON LINES
51 mm UG WATER IS A STEEL LINE
152 mm UG GAS CROSSES CL. STA. 1+174.720
51 mm & 152 mm GAS LINES HAVE 17 P.S.I.
108 mm UG GAS HAS A 125 P.S.I.
ALL GAS LINES ARE STEEL

BM-1
NAIL IN ROOT 750 mm PECAN
SR #369 (WASHINGTON ST.)
STA. 1+198.504, 17.50 m LEFT
ELEV. = 104.055

1+000 1+020 1+040 1+060 1+080 1+100 1+120



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE

U.S. 79 / U.S. 70A
(WASHINGTON AVE.)
BEG. OF PROJ. TO STA. 1+120
SCALE 1:500 HORIZ.
1:50 VERT.

EXISTING SANITARY SEWER MANHOLES								
CODE	TOP	BOTTOM	INLET	SIZE	OUTLET	SIZE	REFER	
MHS01	106.444	104.677	104.677	.203 m	104.677	.203 m	MHS02	
MHS02	105.068	103.329	103.329	.203 m	103.329	.203 m	MHS03	
MHS03	104.622	101.678	101.678	.203 m	101.678	.254 m	MHS04	
MHS04	103.859	101.664	101.664	.254 m	101.664	.254 m	MHS05	
MHS05	103.389	101.316	101.316	.254 m	101.316	.254 m	MHS06	
MHS06	103.062	101.234	101.234	.254 m	101.234	.254 m	UNKN.	
MHS07	103.859	101.664	101.664	.254 m	101.664	.254 m	MHS06	
MHS08	105.103	102.696	102.696	.203 m	102.696	.203 m	MHS09	
MHS09	104.749	102.392	102.392	.203 m	102.392	.203 m	MHS10	
MHS10	104.749	102.392	102.392	.203 m	102.392	.203 m	MHS03	
MHS11	104.530	102.307	102.307	.203 m	102.307	.203 m	MHS12	
MHS12	104.731	102.949	102.949	.203 m	102.949	.203 m	MHS11	
MHS13	106.113	103.289	103.289	.203 m	103.289	.203 m	MHS12	
MHS14	104.843	102.222	102.222	.203 m	102.222	.203 m	MHS15	
MHS15	106.590	104.000	104.000	.203 m	104.000	.203 m	MHS16	
MHS16	108.175	104.235	104.235	.203 m	104.235	.203 m	UNKN.	
MHS17	104.323	102.098	102.098	.203 m	102.098	.203 m	MHS18	
MHS18	103.956	101.609	101.609	.203 m	102.609	.203 m	UNKN.	

NOTICE

SEE SHEET 3A (PROPERTY LAYOUT) FOR
LENGTHS, BEARINGS AND OFFSET DATA FOR
PROPERTY LINES & R.O.W./ESMT. LINES

PI	1+091.486	
N	145941.688	
E	304531.251	
Δ	69°28'28"	RT.
R	440.000	
L	533.526	
T	305.094	
E	95.427	
L.C.	501.436	
MATCH EXIST. S.E. (5.9%)		
(DESIGN SPEED=65 km/h)		
S.E. TRANS.	43.000	

NOTICE

SEE SHEET 3A (PROPERTY LAYOUT) FOR
LENGTHS, BEARINGS AND OFFSET DATA FOR
PROPERTY LINES & R.O.W./ESMT. LINES

S.R. 54 (THORNTON RD.)	
PI	4+935.164
N	146077.547
E	304759.109
Δ	41°30'00" LT.
R	76.200
L	55.193
T	28.870
E	5.286
L.C.	53.994
S.E.	4.000% (40 km/h)
S.E. TRANS.	33.000

REV. 8/05/99:ADDED TRACT NO'S. 1 S AND 6 S.

A+800

SCALE 1:500

TENNESSEE D.O.T.

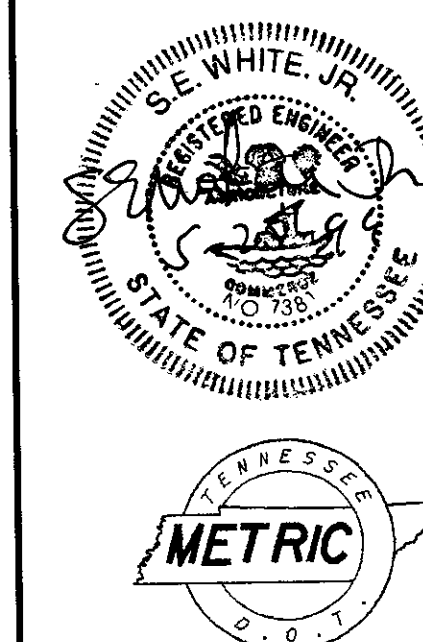
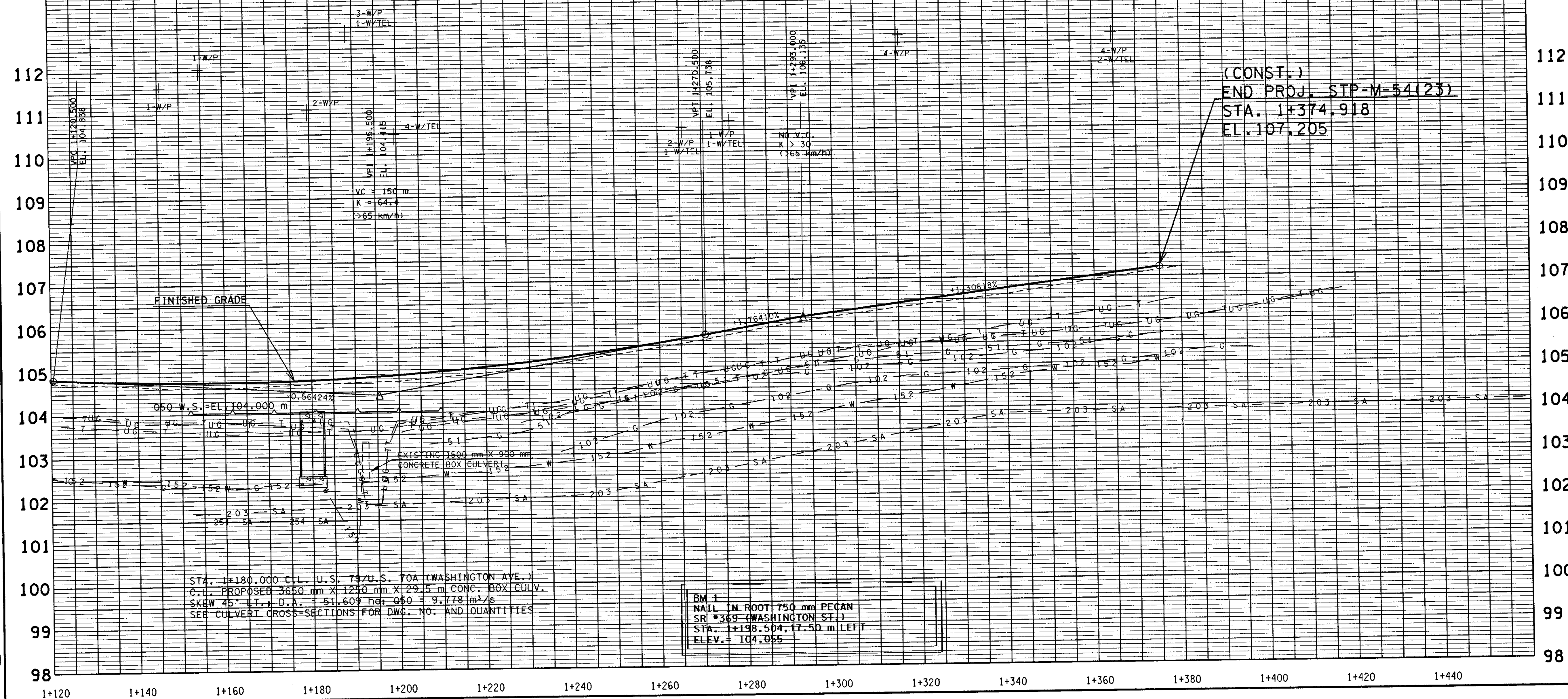
DESIGN DIVISION

FILE NO. R-30

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	58
CONST.	1999	STP-M-54(23)	58

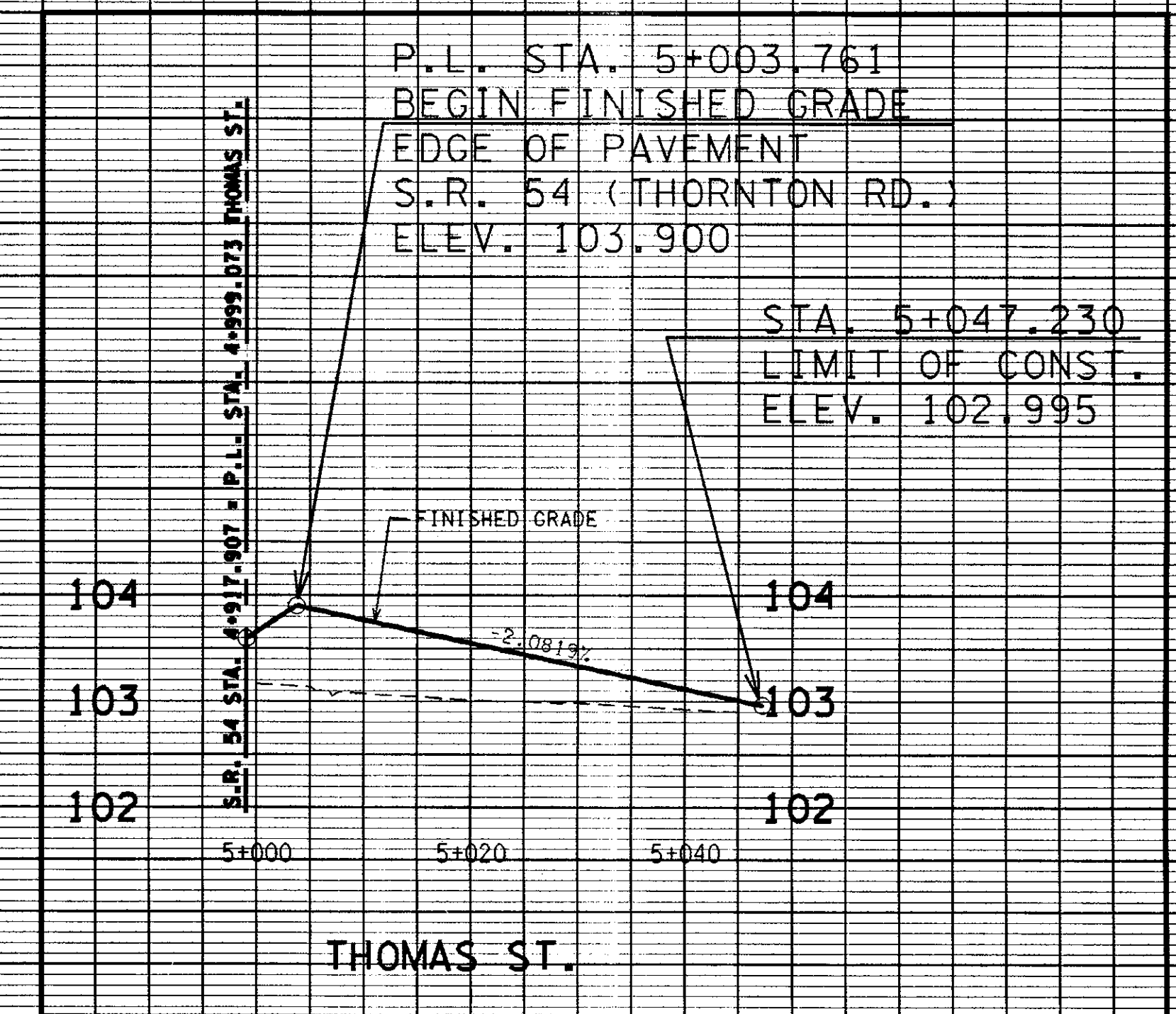
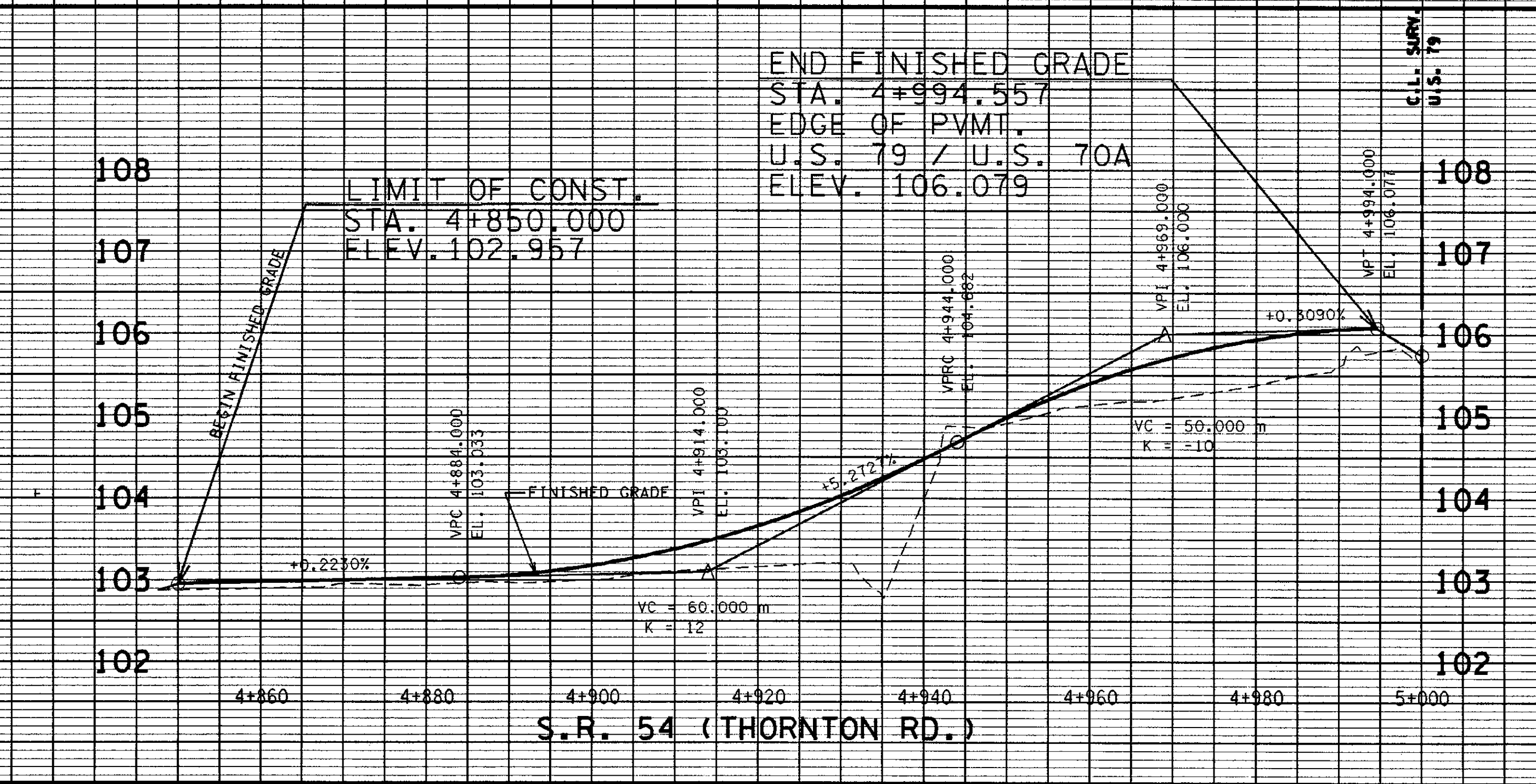
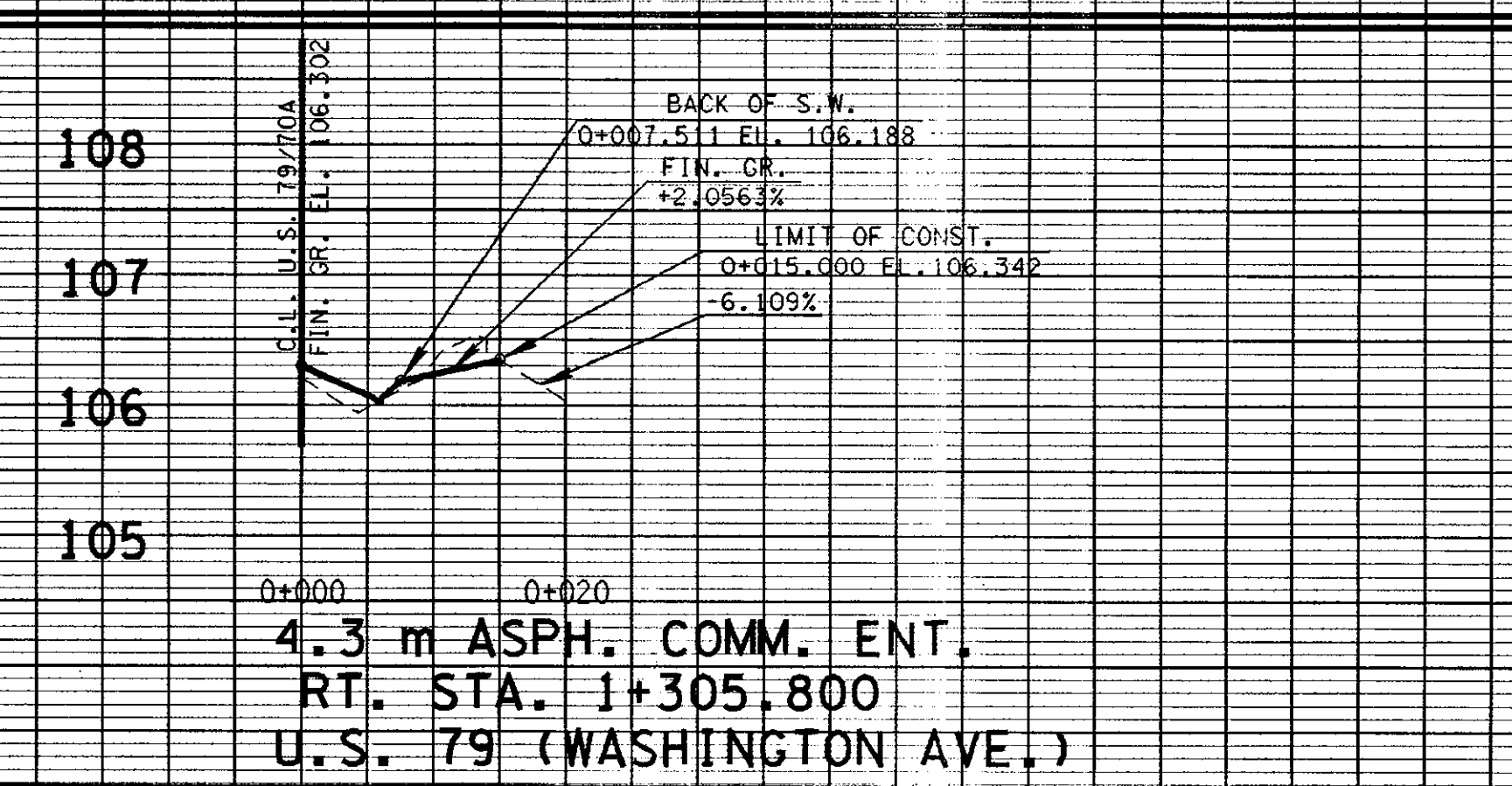
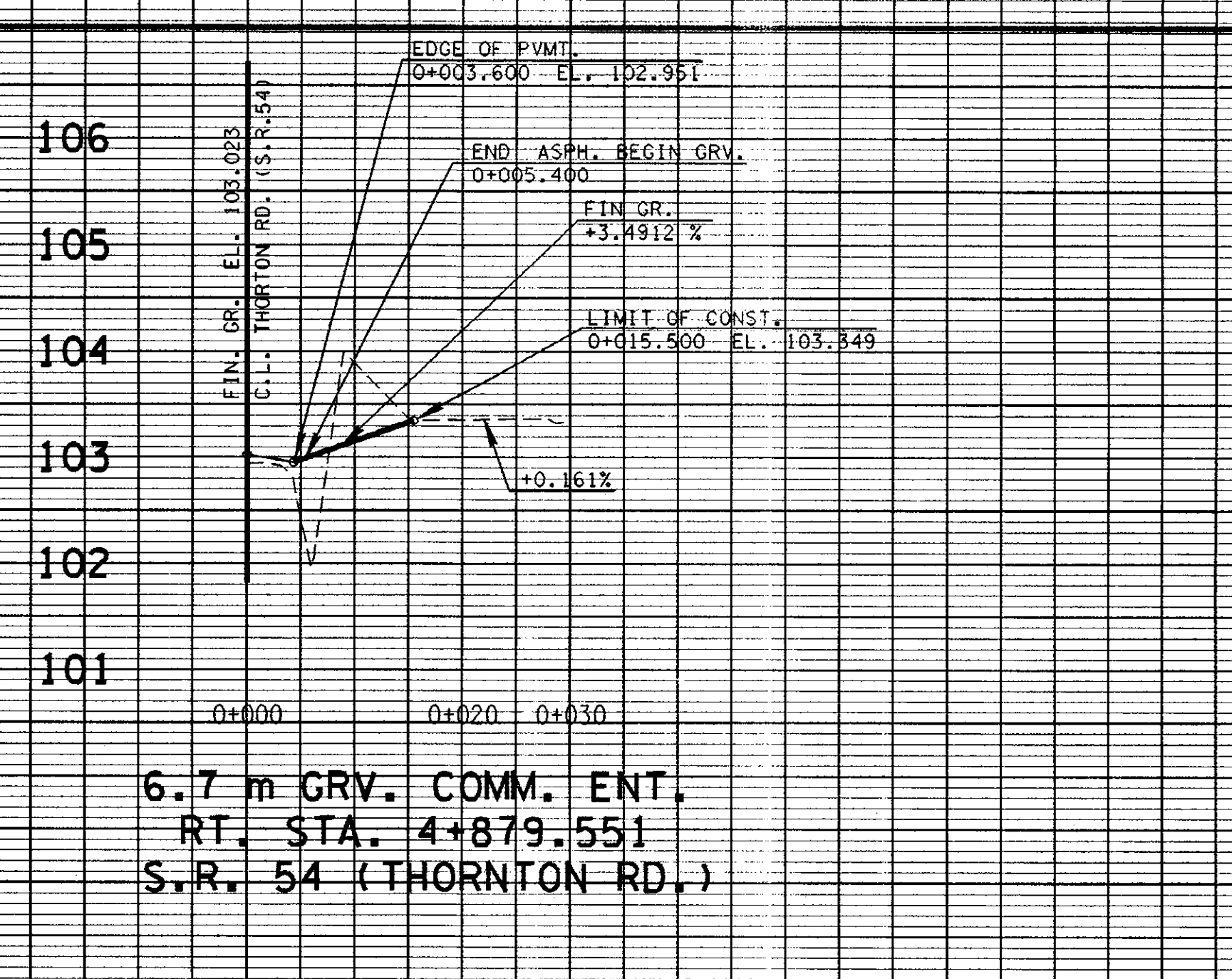
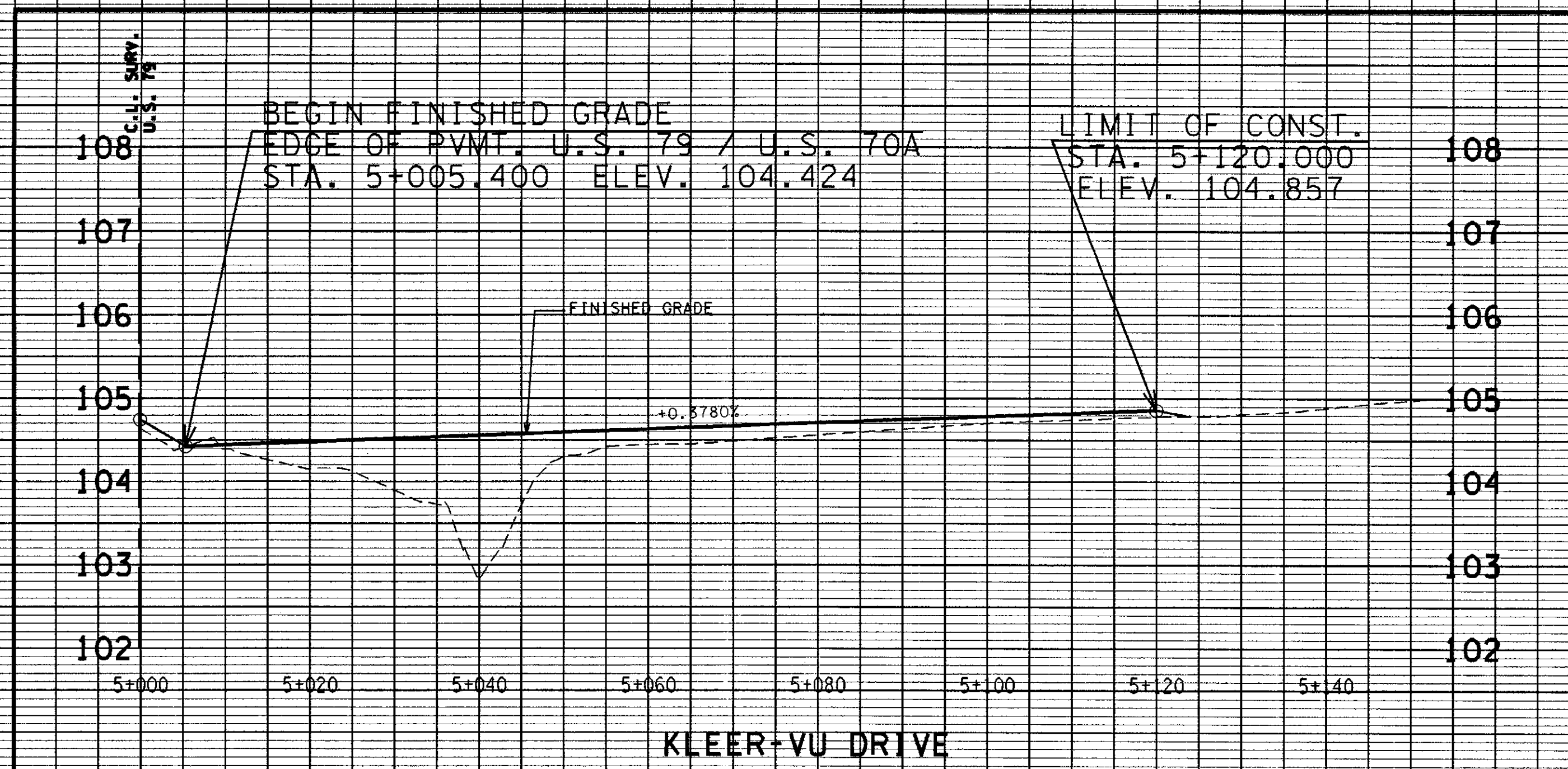
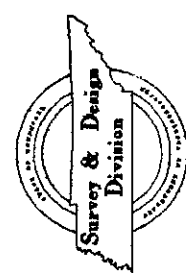
ESTIMATED EARTHWORK (ESTIMATED SHRINKAGE FACTOR = 30%)					
TYPE EARTHWORK	EARTH VOLUMES (CUBIC METERS)				
	PHASE I CONST.	PHASE II CONST.	PHASE III CONST.	PHASE IV CONST.	TOTALS
ITEM 203M01 EXC. (RD. & DRN., UNCL.)	623	420	1048	221	2312 m ³
EMBANKMENT (COMPACTED)	479	439	617	104	1639 m ³
CHANNEL EXC. (UNCL.)	NONE	NONE	NONE	NONE	NONE
ITEM 203M03 BORROW EXCAVATION (UNCL.)	0	151	0	0	151 m ³
EXCESS MATERIAL	0 ***	0 ***	246 ***	86 ***	332 m ³

■ SEE TRAFFIC CONTROL PLAN FOR DESCRIPTION OF WORK AND ITS LOCATION PER PHASE OF CONSTRUCTION.
*** TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILE
U.S. 79 / U.S. 70A
(WASHINGTON AVE.)
STA. 1+120 TO END OF PROJ.
SCALE: 1:500 HORIZ.
1:50 VERT.



TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	6
CONST.	1999	STP-M-54(23)	6

REV. 7/08/99: ADDED DRIVES RT. STA. 1+305 (U.S. 79) AND RT. STA. 4+879 (S.R. 54).



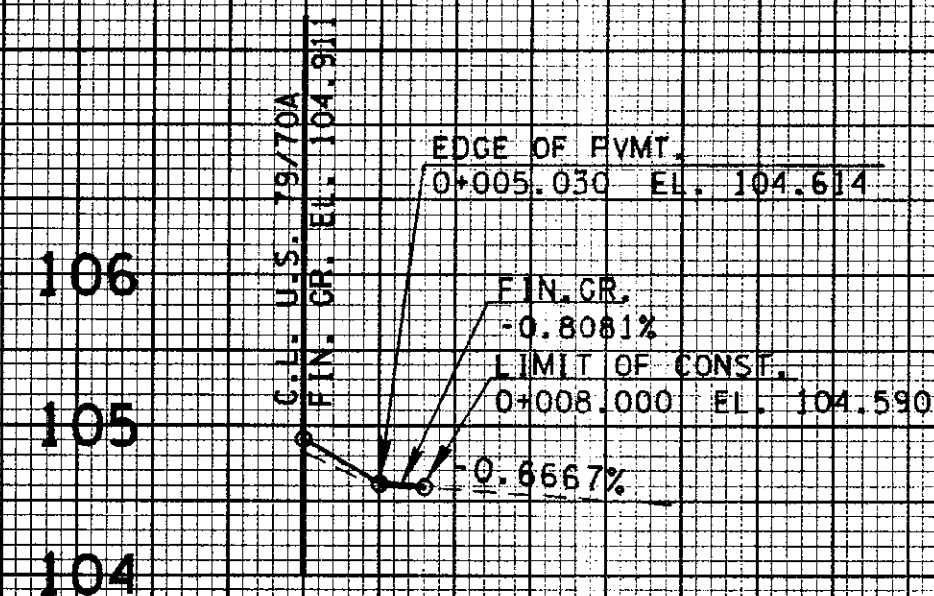
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILES
S.R. 54 (THORNTON ROAD)
KLEER-VU DRIVE &
THOMAS STREET
SCALE 1:500 HORIZ.
1:50 VERT.

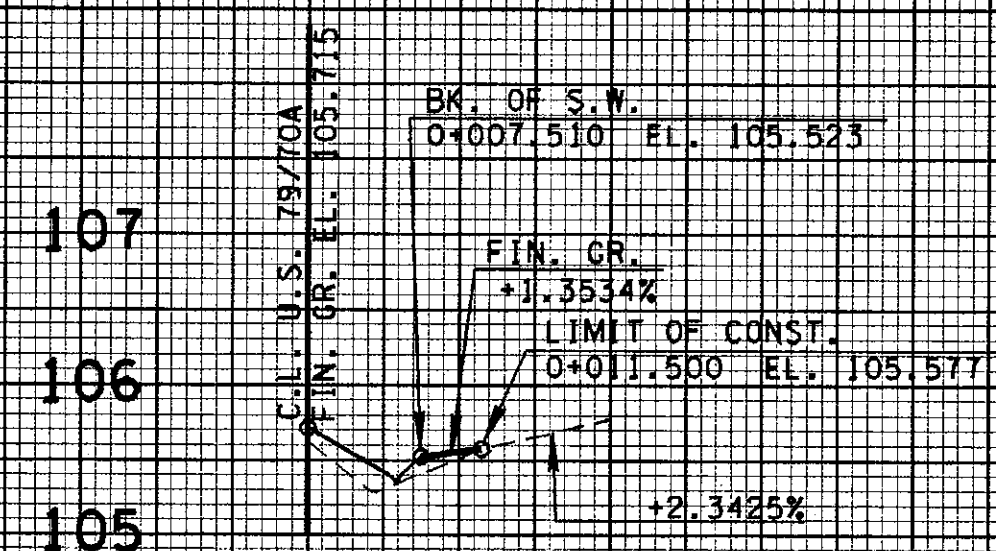
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	7
CONST.	1999	STP-M-54(23)	7

REV. 7/07/99: EXTENDED COMM. ENT. LT. STA. 5+034 KLEER-VU DR.

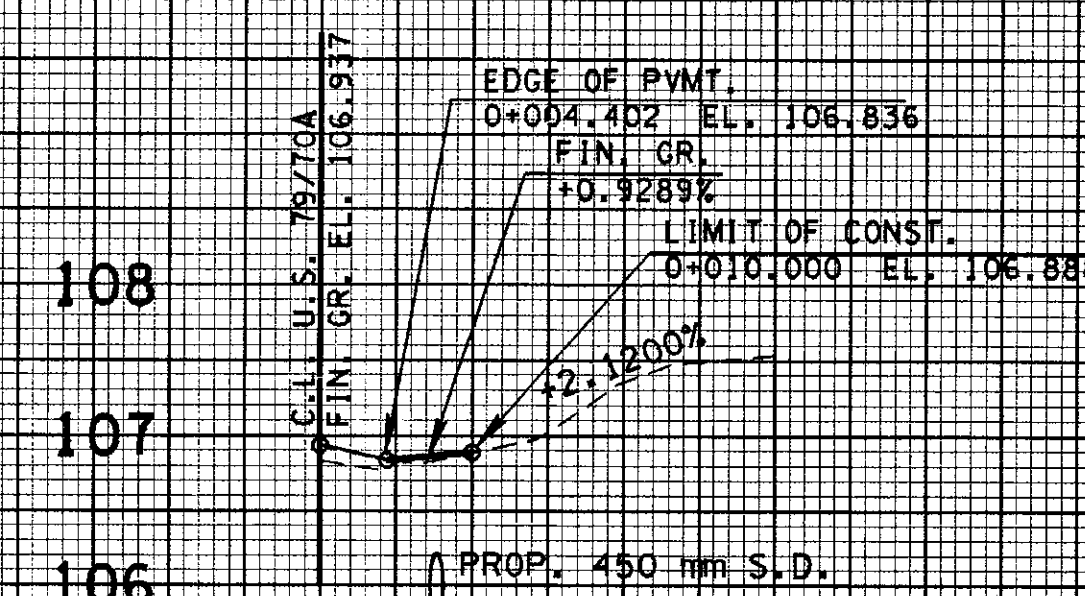
REV. 7/08/99: REPLACED THOMAS ST. DR. RT. STA. 5+032 WITH 5+042.



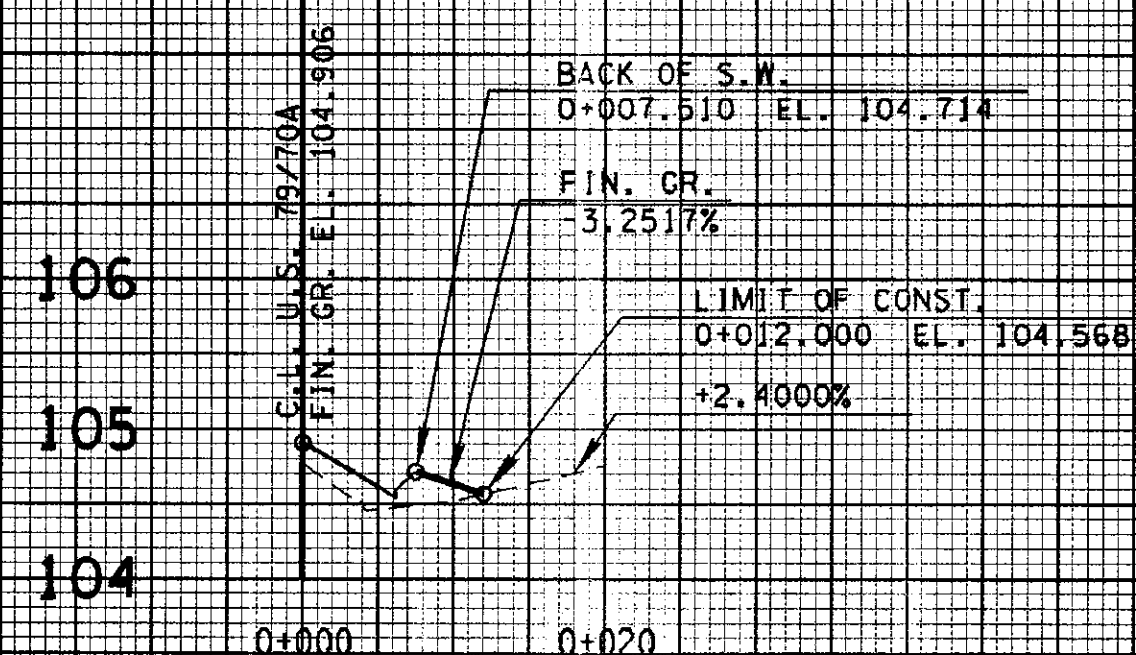
8.4 m ASPH. COMM. ENT.
RT. STA. 1+107.700



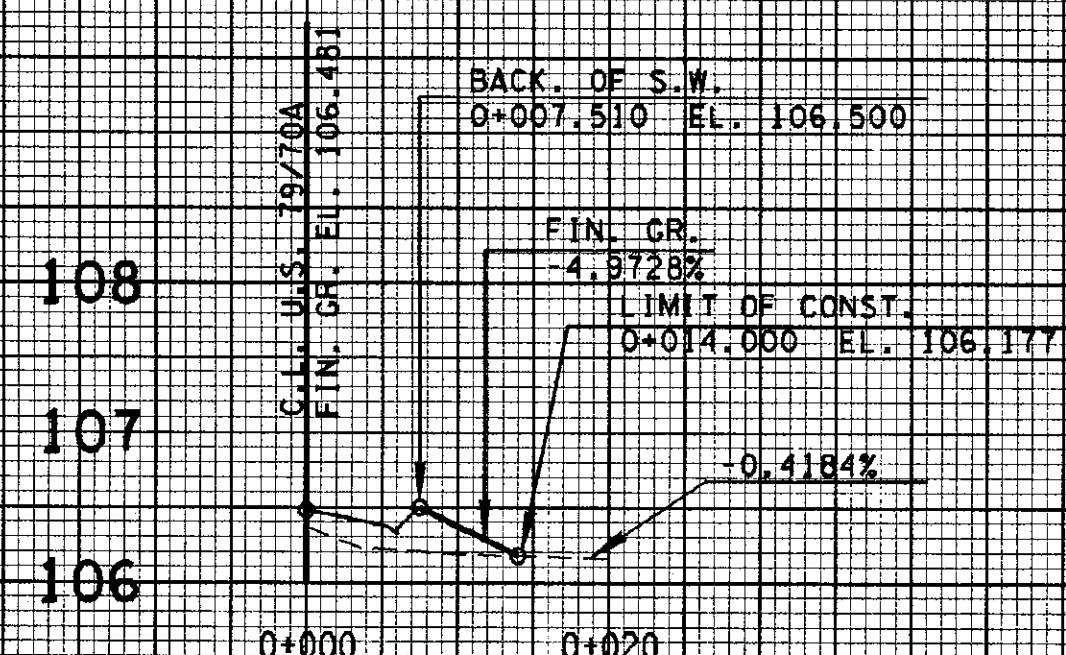
12.0 m ASPH. COMM. ENT.
RT. STA. 1+269.200



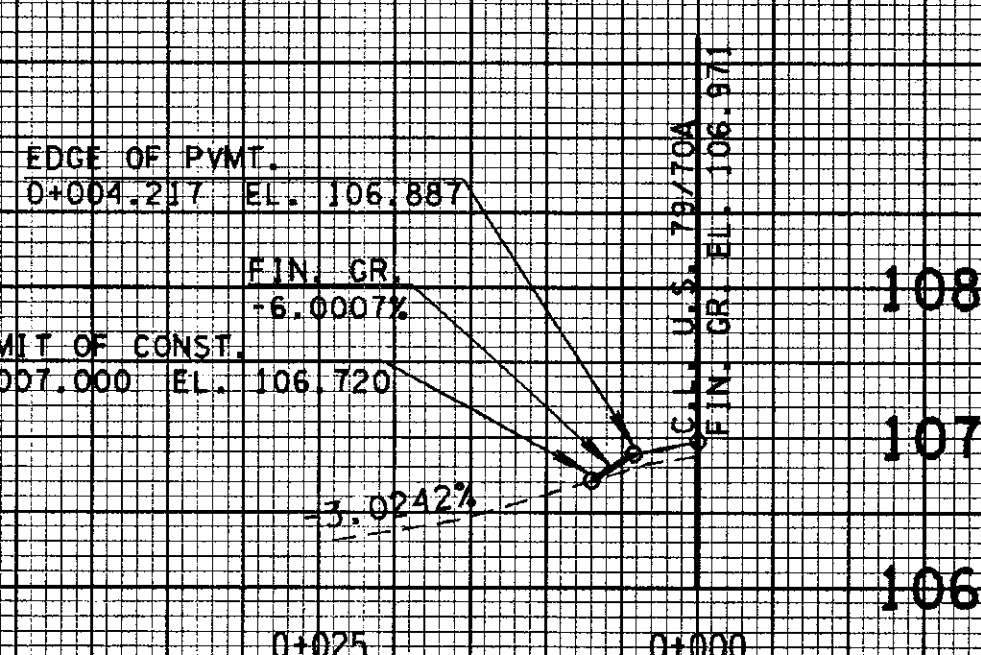
6.0 m ASPH. COMM. ENT.
RT. STA. 1+354.400



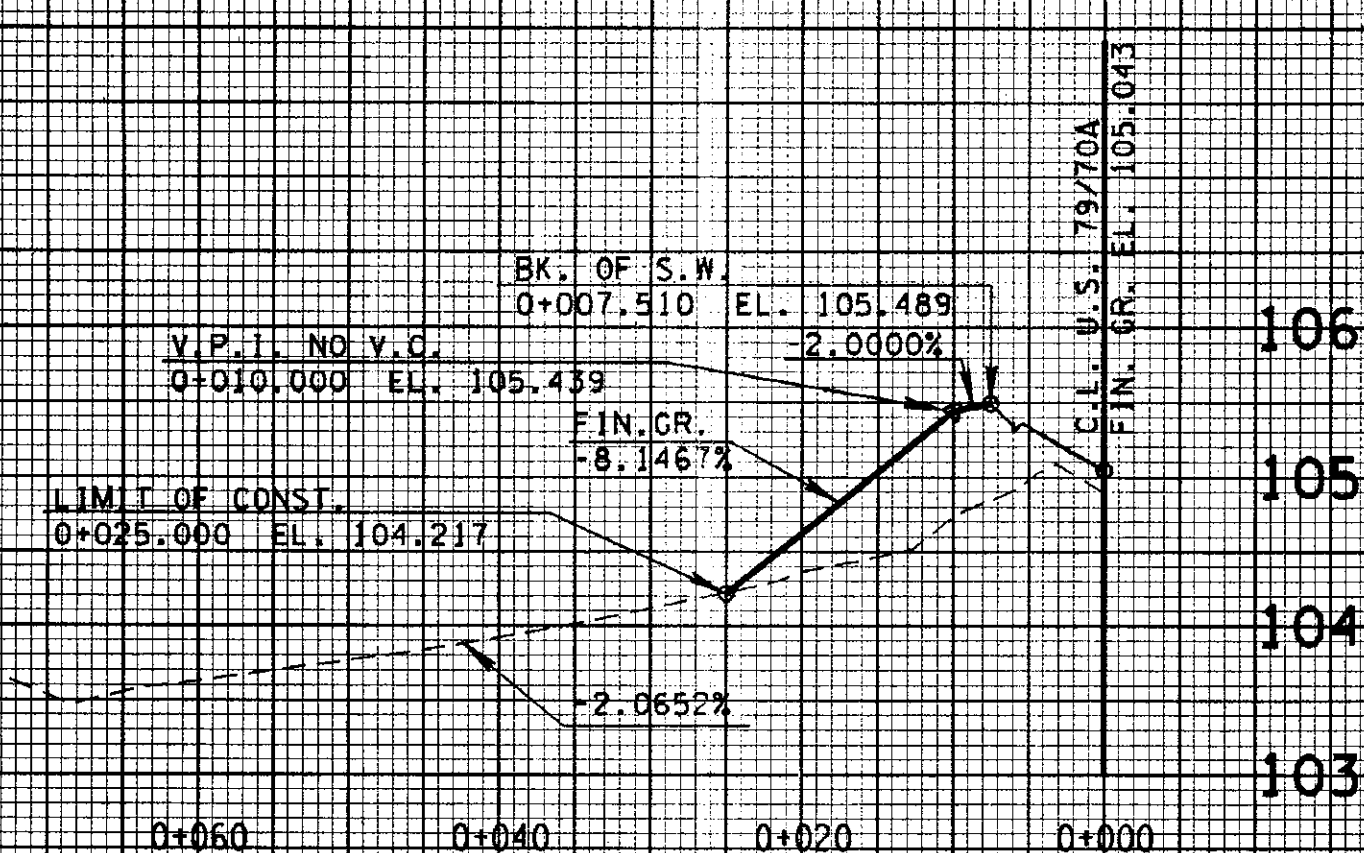
11.0 m ASPH. COMM. ENT.
RT. STA. 1+203.700



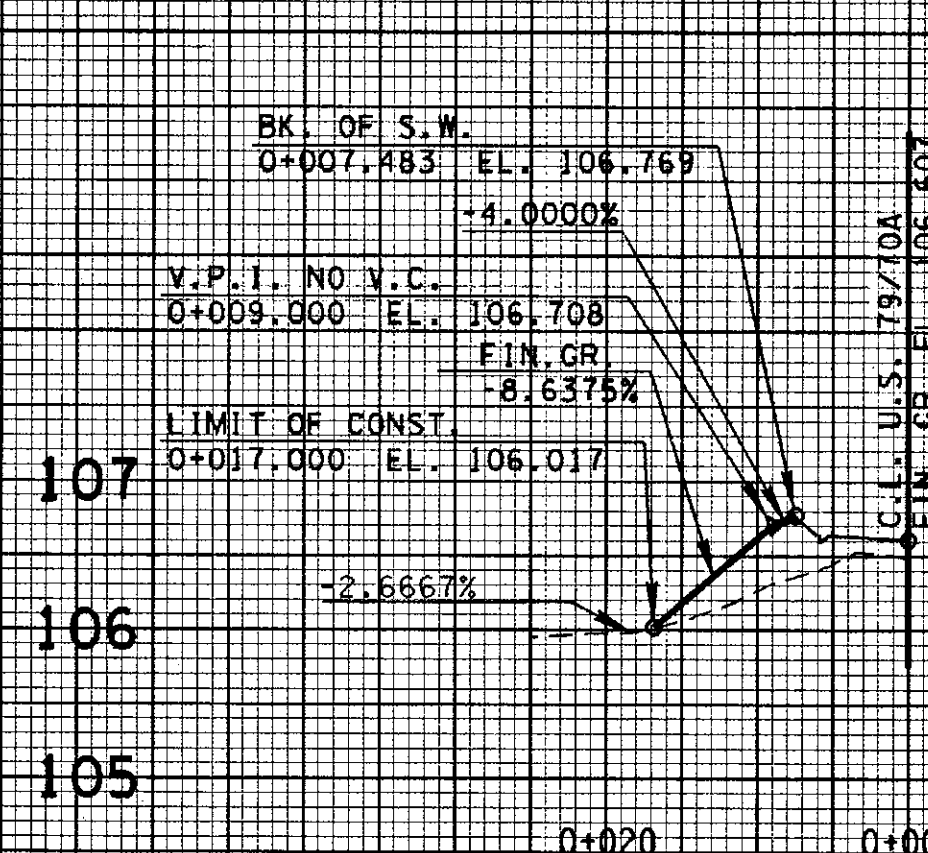
12.0 m ASPH. COMM. ENT.
RT. STA. 1+319.500



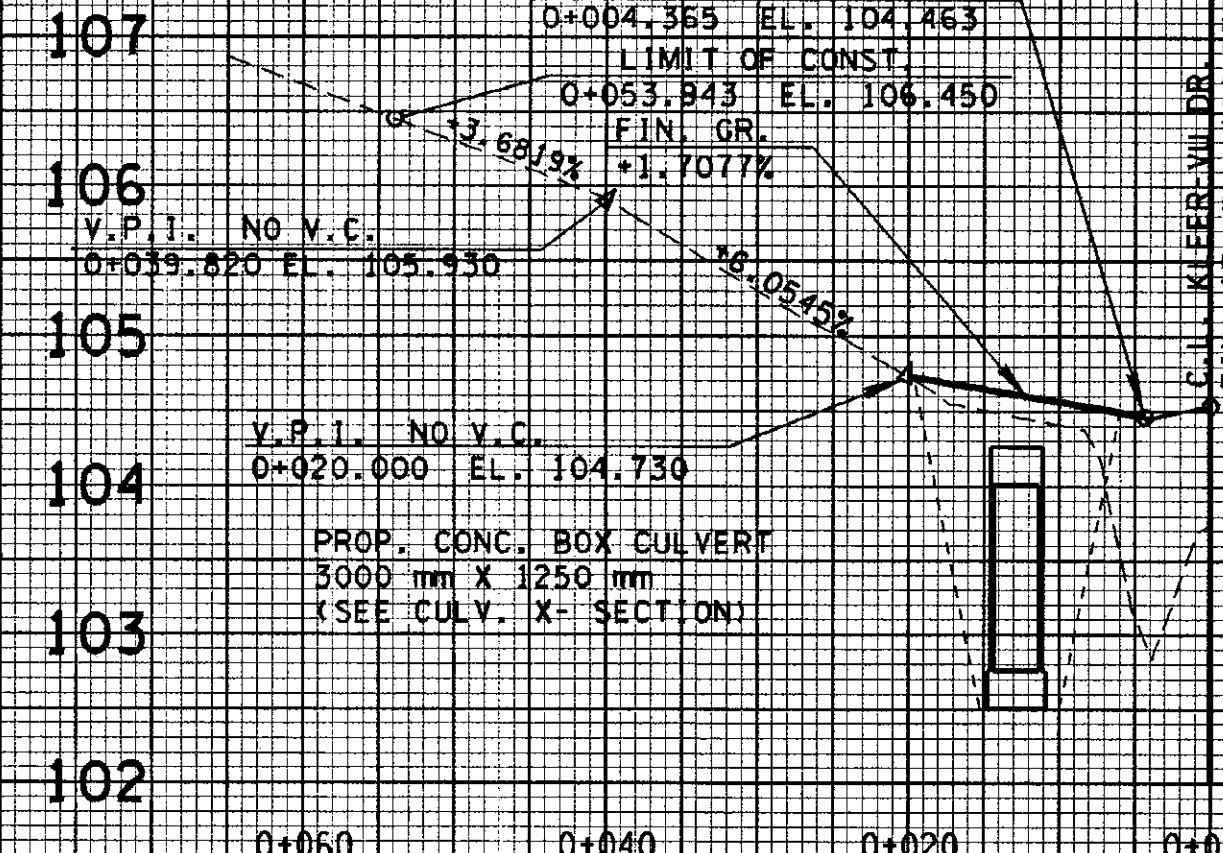
ASPH. COMM. ENT.
LT. STA. 1+357.000



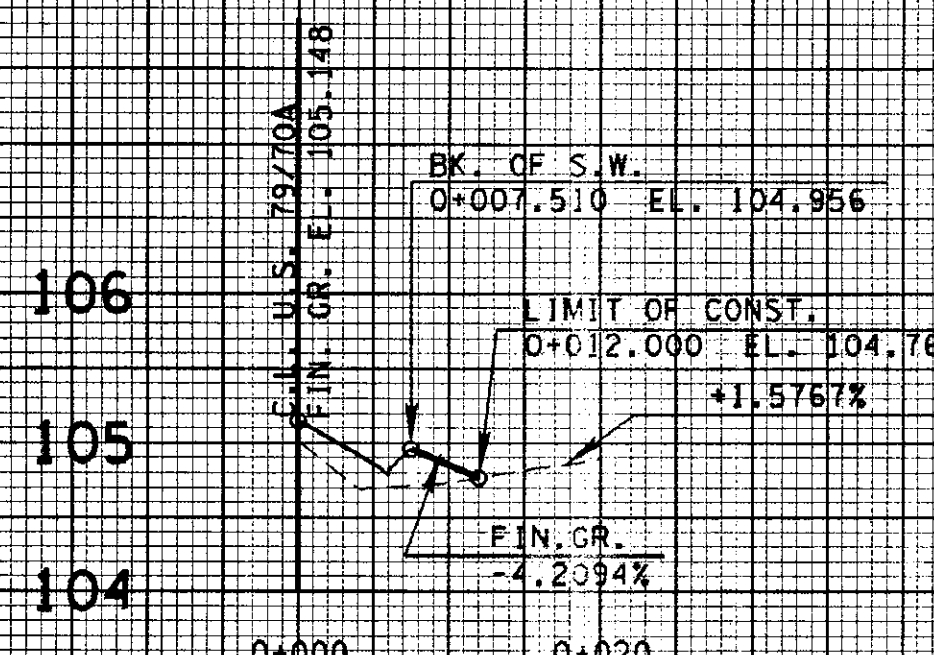
11.0 m ASPH. COMM. ENT.
LT. STA. 1+219.800



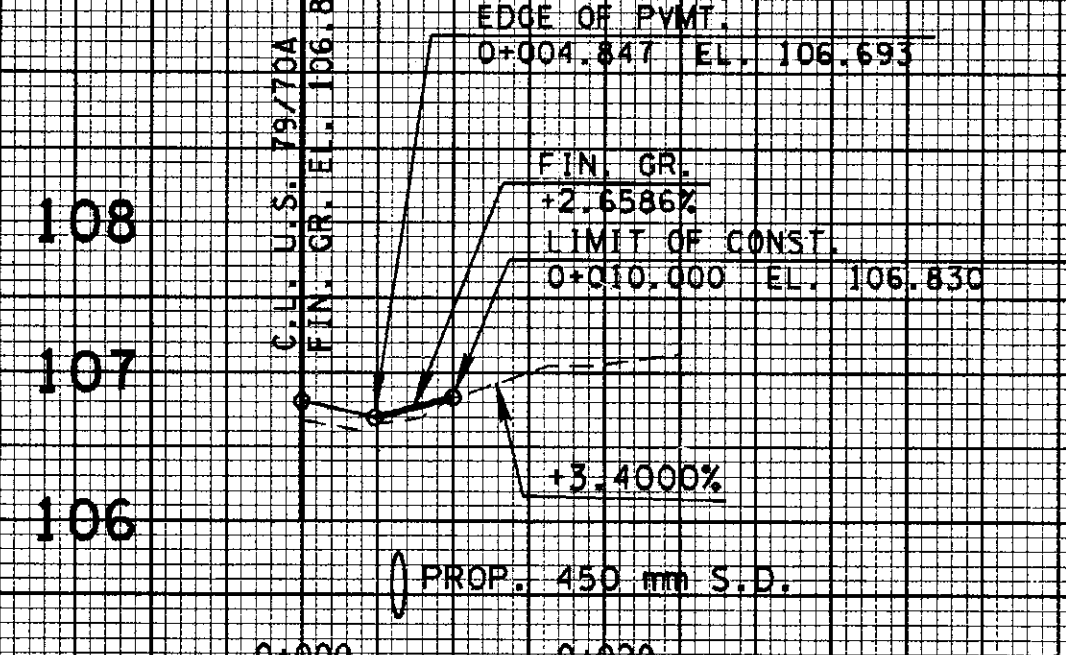
3.3 m ASPH. PVT. DR.
LT. STA. 1+329.100



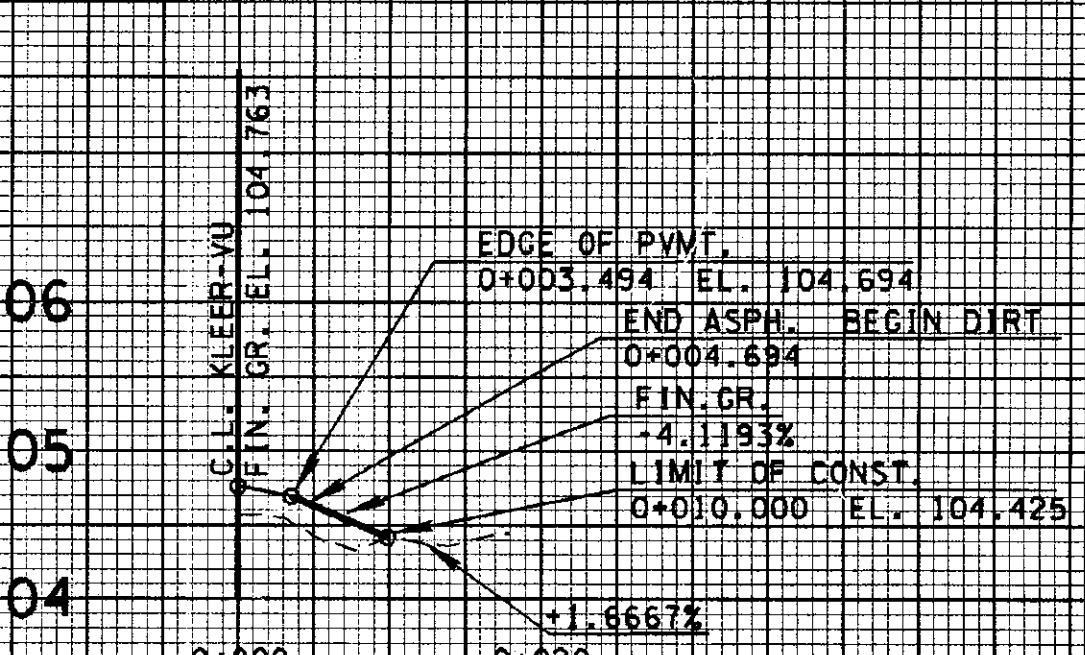
12.0 m ASPH. COMM. ENT.
LT. STA. 5+034.651



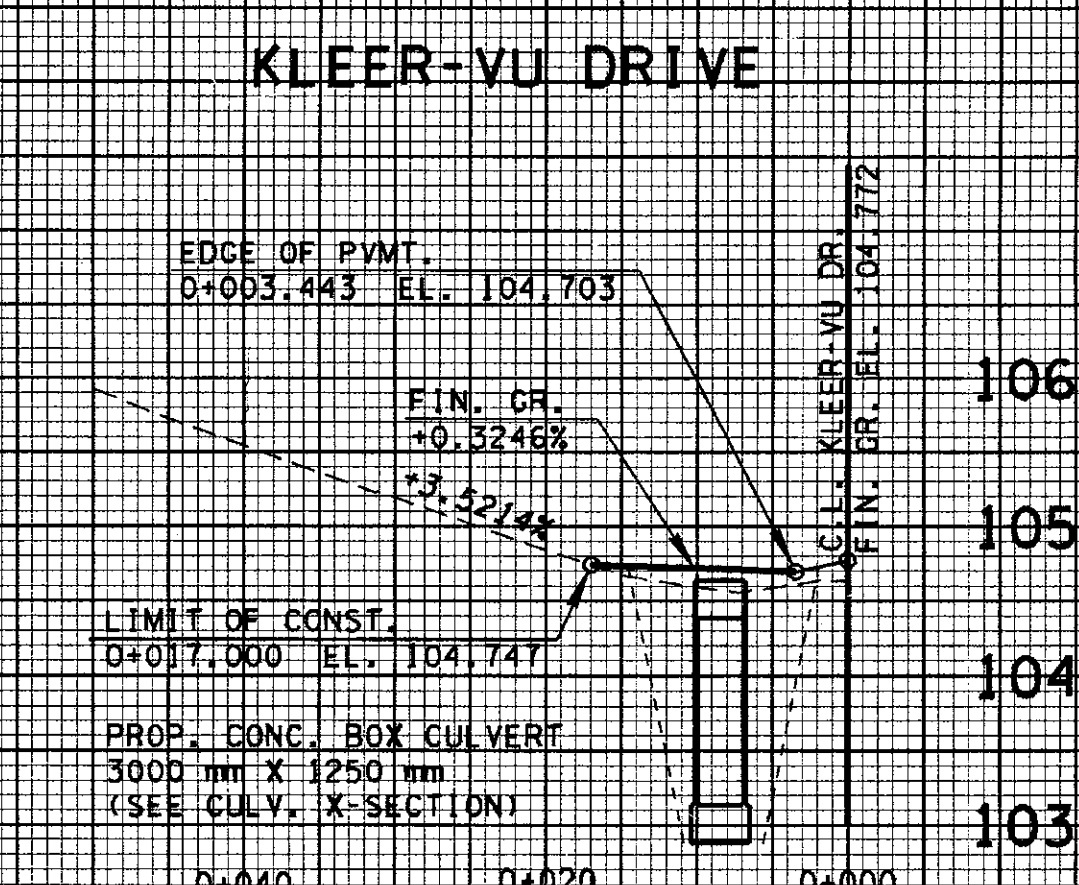
11.0 m ASPH. COMM. ENT.
RT. STA. 1+229.700



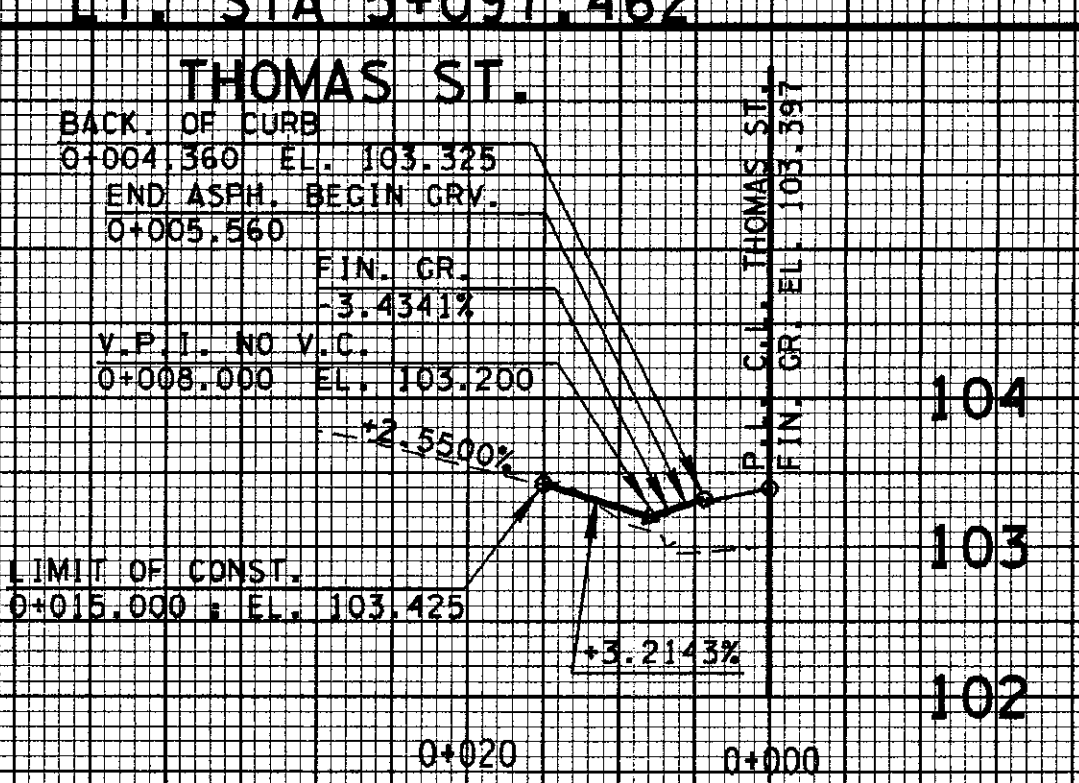
6.0 m ASPH. COMM. ENT.
RT. STA. 1+344.400



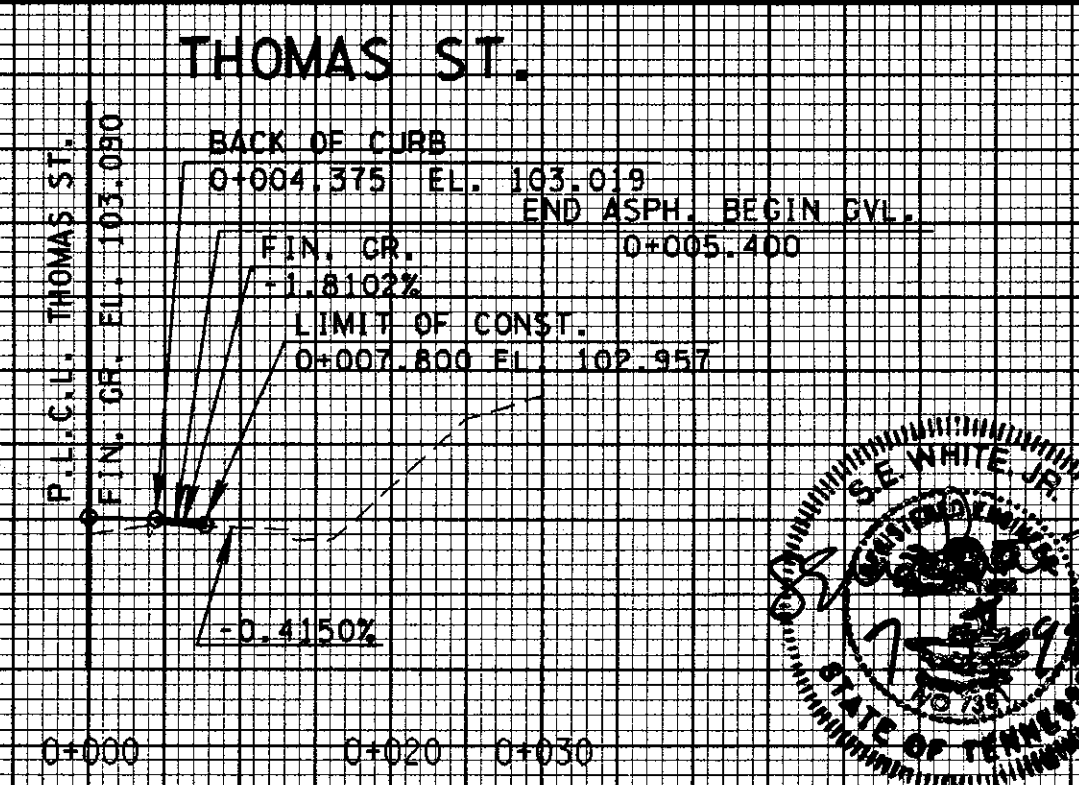
6.0 m DIRT FIELD ENT.
RT. STA. 5+095.000



12.0 m ASPH. COMM. ENT.
LT. STA. 5+097.462

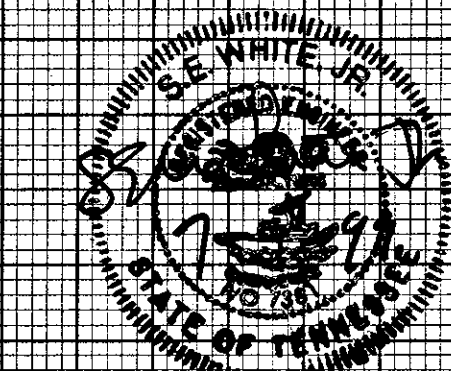


7.6 m GRV. COMM. ENT.
LT. P.L. STA. 5+027.100



7.2 m GRV. COMM. ENT.
RT. P.L. STA. 5+042.693

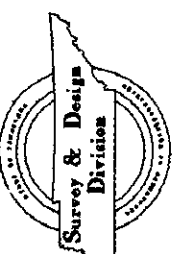
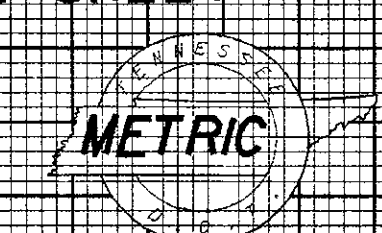
NOTE: FOR OTHER DRIVE
PROFILES SEE SHEET
NO. 6.



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PROFILES
(PRIVATE DRIVES)

SCALE 1:500 HORIZ.
1:50 VERT.

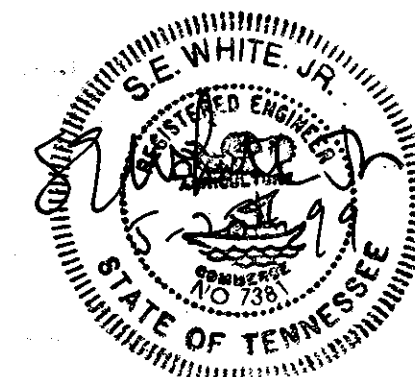
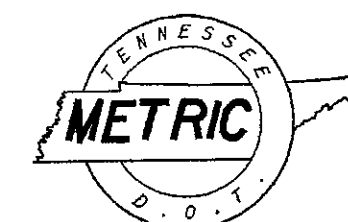
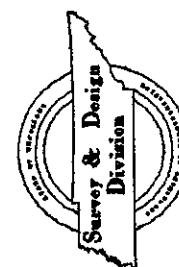
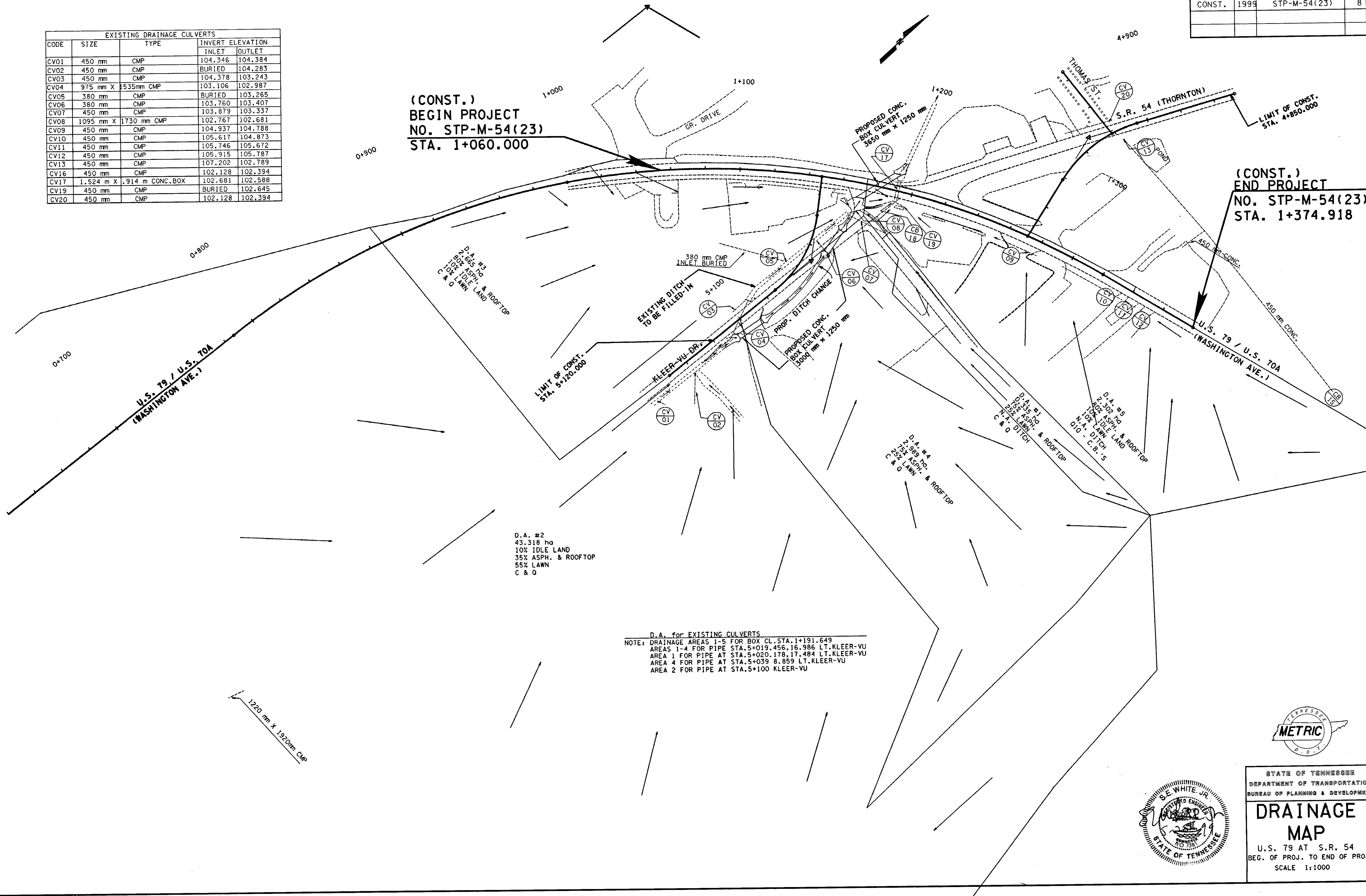


TYPE	YEAR	PROJECT NO.	SHEET NO.
R. O. W.	1997	STP-M-54(23)	8
CONST.	1999	STP-M-54(23)	8

EXISTING DRAINAGE CULVERTS				
CODE	SIZE	TYPE	INLET	OUTLET
CV01	450 mm	CMP	104.346	104.384
CV02	450 mm	CMP	BURIED	104.283
CV03	450 mm	CMP	104.378	103.243
CV04	975 mm X 1535mm	CMP	103.106	102.987
CV05	380 mm	CMP	BURIED	103.265
CV06	380 mm	CMP	103.760	103.407
CV07	450 mm	CMP	103.879	103.337
CV08	1095 mm X 1730 mm	CMP	102.767	102.681
CV09	450 mm	CMP	104.937	104.788
CV10	450 mm	CMP	105.617	104.873
CV11	450 mm	CMP	105.746	105.672
CV12	450 mm	CMP	105.915	105.787
CV13	450 mm	CMP	107.202	102.789
CV16	450 mm	CMP	102.128	102.394
CV17	1.524 m X .914 m	CONC. BOX	102.681	102.588
CV19	450 mm	CMP	BURIED	102.645
CV20	450 mm	CMP	102.128	102.394

(CONST.)
BEGIN PROJECT
NO. STP-M-54(23)
STA. 1+060.000

(CONST.)
END PROJECT
NO. STP-M-54(23)
STA. 1+374.918



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT
**DRAINAGE
MAP**
U.S. 79 AT S.R. 54
BEG. OF PROJ. TO END OF PROJ.
SCALE 1:1000

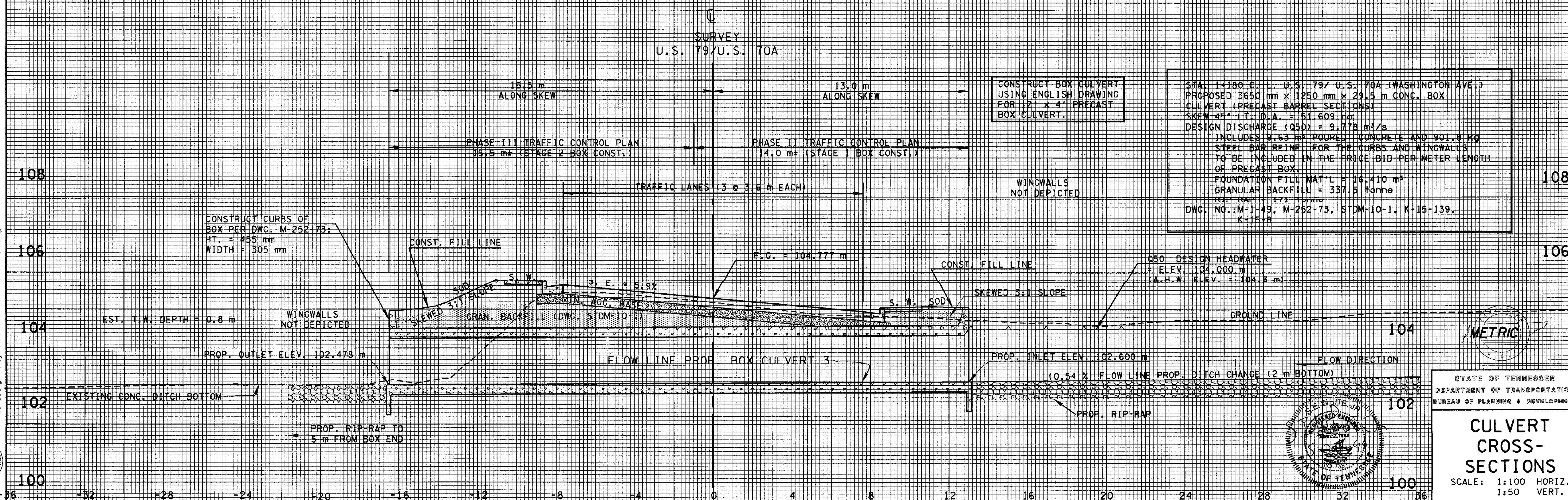
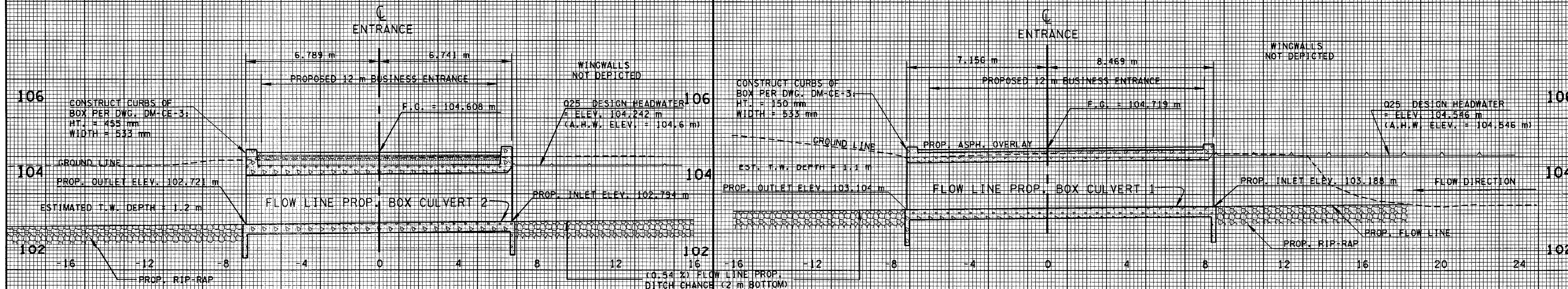
CONSTRUCT BOX CULVERT
USING ENGLISH DRAWING
FOR 10' x 4' BOX CULVERT.

LT. STA. 5+034.651 C.L. KLEER-VU DR.
PROPOSED 3000 mm x 1250 mm x 15.530 m CONC. BOX CULVERT
SKEW 90° D.A. = 46.307 m
DESIGN DISCHARGE (Q25) = 8.141 m³/s
CLASS "A" CONC. = 38.711 m³
REINF. STEEL = 3584.229 kg
FOUNDATION FILL MAT'L = 6.186 m³
GRANULAR BACKFILL = 106.7 tonne
RIP-RAP = 409 tonne
DWG. NO. K-15-37, STD-M-4-1, STD-M-4-2, STD-M-4-3, STD-M-4-4,
STD-M-9-1, STD-M-10-1, DM-CE-1, DM-CE-3

CONSTRUCT BOX CULVERT
USING ENGLISH DRAWING
FOR 10' x 4' BOX CULVERT.

LT. STA. 5+097.462 C.L. KLEER-VU DR.
PROPOSED 3000 mm x 1250 mm x 15.625 m CONC. BOX CULVERT
SKEW 90° D.A. = 43.318 m
DESIGN DISCHARGE (Q25) = 7.765 m³/s
CLASS "A" CONC. = 43.733 m³
REINF. STEEL = 4110.977 kg
FOUNDATION FILL MAT'L = 7.144 m³
GRANULAR BACKFILL = 93.9 tonne
RIP-RAP = 362 tonne
DWG. NO. K-15-37, STD-M-4-1, STD-M-4-2, STD-M-4-3, STD-M-4-4,
STD-M-9-1, STD-M-10-1, DM-CE-1, DM-CE-3

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	9
CONST.	1999	STP-M-54(23)	9



STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

CULVERT
CROSS-
SECTIONS

SCALE: 1:100 HORIZ.
1:50 VERT.

EROSION & SEDIMENT CONTROL DEVICES							
LEGEND/SYMBOL	ITEM NUMBER	ITEM DESCRIPTION	PHASE I	PHASE II	PHASE III	PHASE IV	TOTAL
* SF * SF * SF * SF * SF * SF *	209M08	TEMPORARY SILT FENCE	300	138	215	238	891 m
NONE	209M05	SEDIMENT REMOVAL	—	—	—	—	64 m³

EROSION CONTROL NOTES

TO REDUCE SEDIMENT IN RUNOFF, EROSION CONTROL STRUCTURES SHALL BE INSTALLED PROMPTLY DURING ALL CONSTRUCTION PHASES.

SEDIMENT TRAPS SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY AND/OR CONSTRUCTION LIMITS BUT OUTSIDE OF THE SLOPE STAKES.

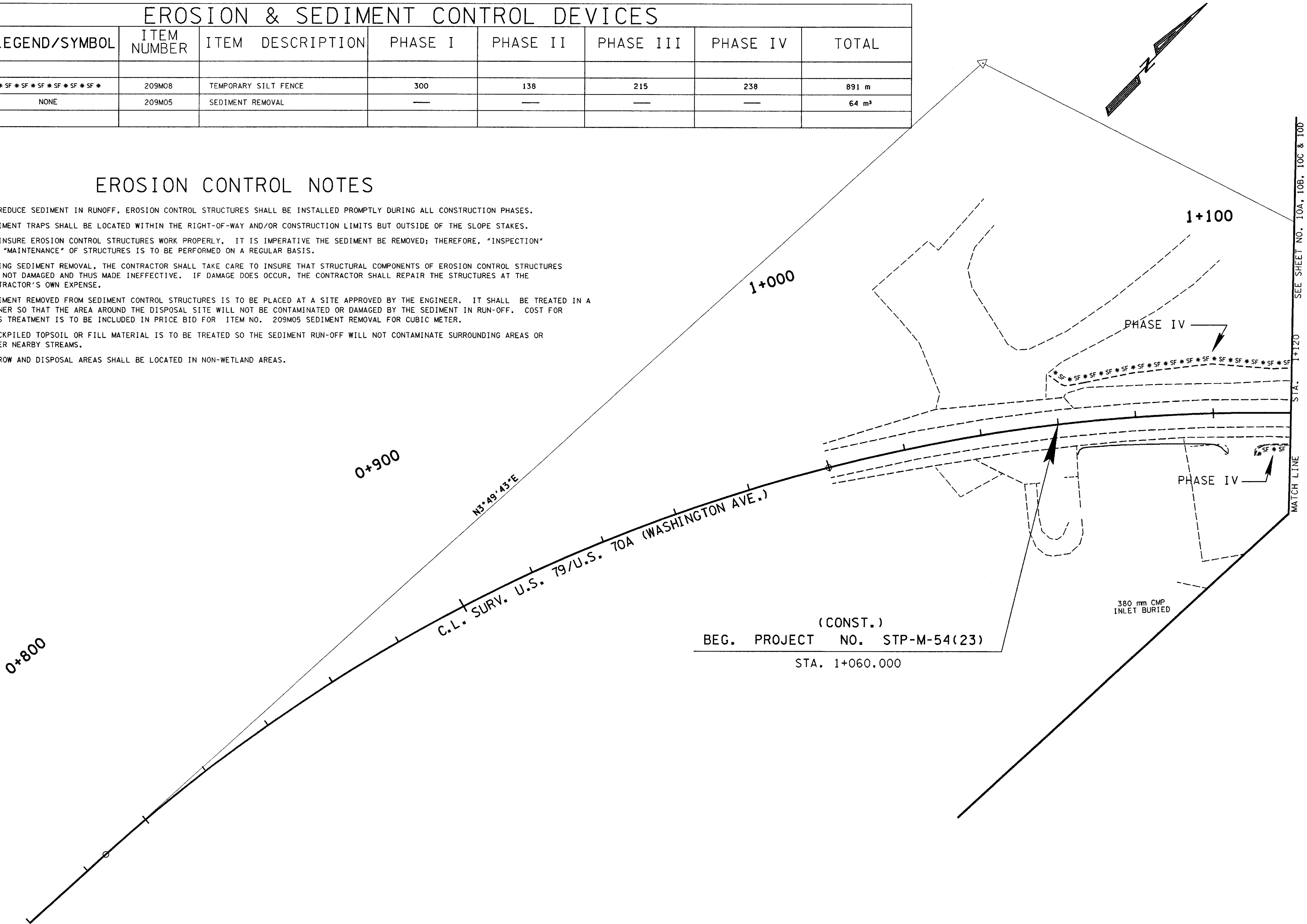
TO INSURE EROSION CONTROL STRUCTURES WORK PROPERLY, IT IS IMPERATIVE THE SEDIMENT BE REMOVED; THEREFORE, "INSPECTION" AND "MAINTENANCE" OF STRUCTURES IS TO BE PERFORMED ON A REGULAR BASIS.

DURING SEDIMENT REMOVAL, THE CONTRACTOR SHALL TAKE CARE TO INSURE THAT STRUCTURAL COMPONENTS OF EROSION CONTROL STRUCTURES ARE NOT DAMAGED AND THUS MADE INEFFECTIVE. IF DAMAGE DOES OCCUR, THE CONTRACTOR SHALL REPAIR THE STRUCTURES AT THE CONTRACTOR'S OWN EXPENSE.

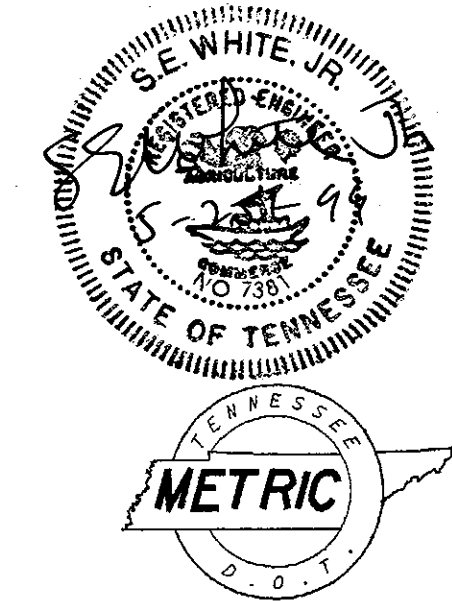
SEDIMENT REMOVED FROM SEDIMENT CONTROL STRUCTURES IS TO BE PLACED AT A SITE APPROVED BY THE ENGINEER. IT SHALL BE TREATED IN A MANNER SO THAT THE AREA AROUND THE DISPOSAL SITE WILL NOT BE CONTAMINATED OR DAMAGED BY THE SEDIMENT IN RUN-OFF. COST FOR THIS TREATMENT IS TO BE INCLUDED IN PRICE BID FOR ITEM NO. 209M05 SEDIMENT REMOVAL FOR CUBIC METER.

STOCKPILED TOPSOIL OR FILL MATERIAL IS TO BE TREATED SO THE SEDIMENT RUN-OFF WILL NOT CONTAMINATE SURROUNDING AREAS OR ENTER NEARBY STREAMS.

BORROW AND DISPOSAL AREAS SHALL BE LOCATED IN NON-WETLAND AREAS.



TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	10



COORDINATE VALUES ARE NAD/83(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.

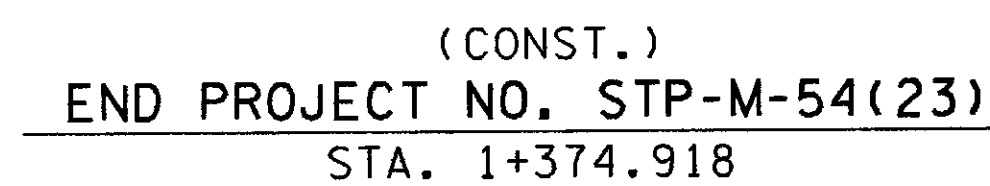
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

**EROSION &
SEDIMENT
CONTROL PLAN**

PHASE I, II, III & IV
BEG. OF PROJ. TO STA. 1+120
SCALE 1:500

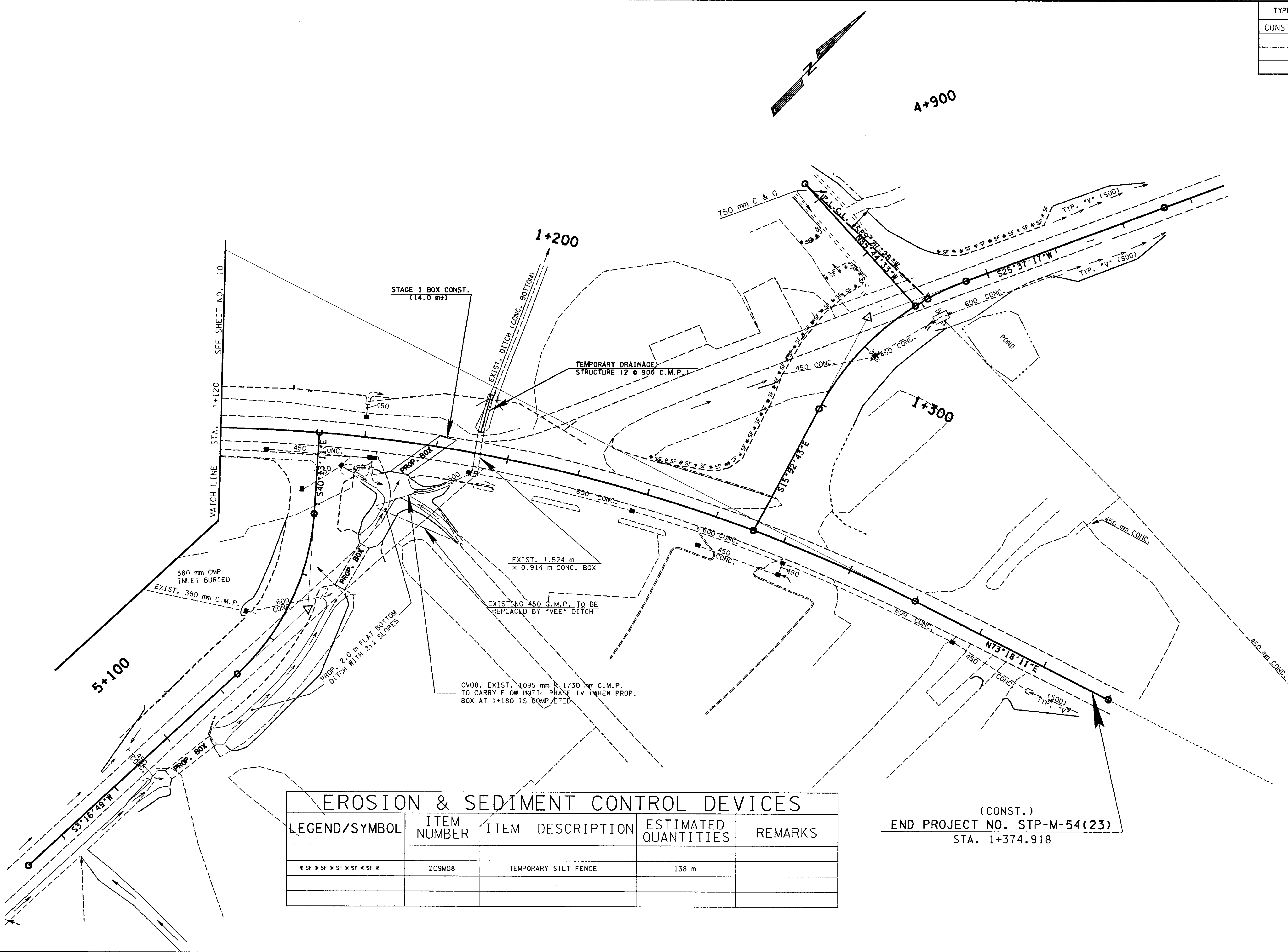
**EROSION &
SEDIMENT
CONTROL PLAN
PHASE I**

STA. 1+120 TO END OF PROJ.
SCALE 1:500



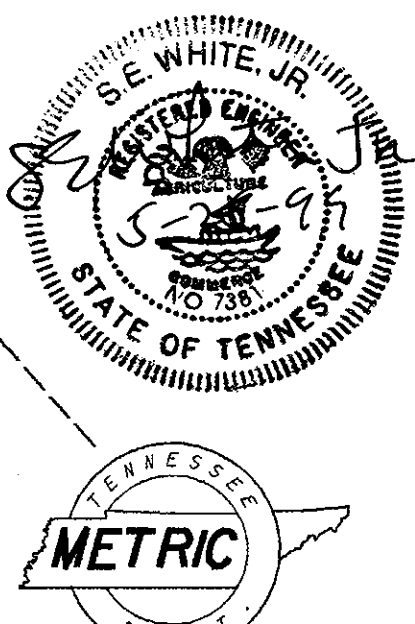
EROSION & SEDIMENT CONTROL DEVICES				
LEGEND/SYMBOL	ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITIES	REMARKS
* SF * SF * SF * SF * SF *	209M08	TEMPORARY SILT FENCE	300 m	

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	108

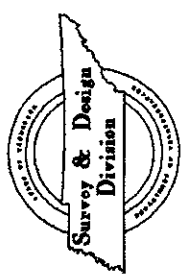


EROSION & SEDIMENT CONTROL DEVICES				
LEGEND/SYMBOL	ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITIES	REMARKS
* SF * SF * SF * SF * SF *	209M08	TEMPORARY SILT FENCE	138 m	

(CONST.)
END PROJECT NO. STP-M-54(23)
STA. 1+374.918

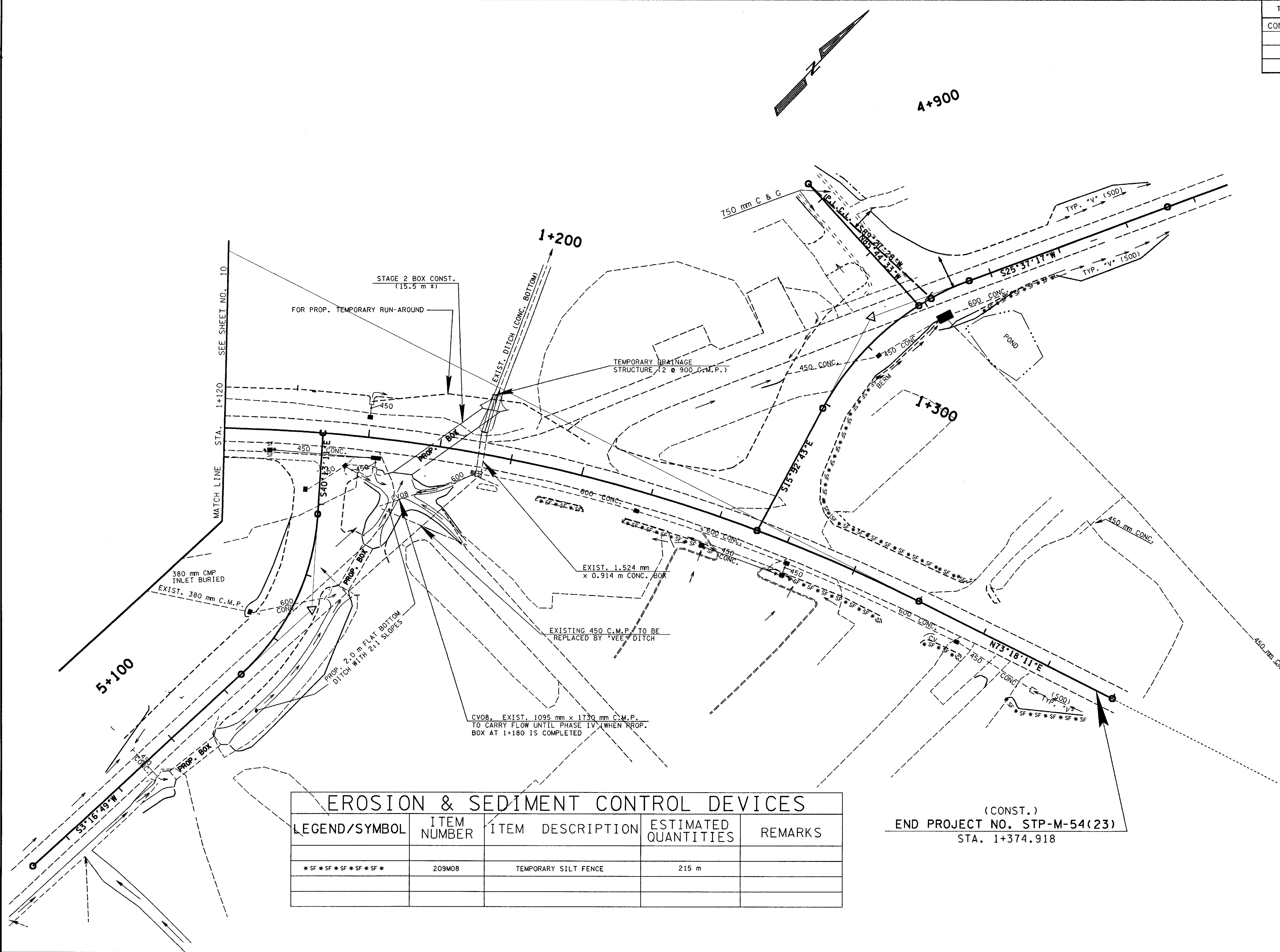


COORDINATE VALUES ARE NAD(83)(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT
EROSION & SEDIMENT CONTROL PLAN
PHASE II
STA. 1+120 TO END OF PROJ.
SCALE 1:500



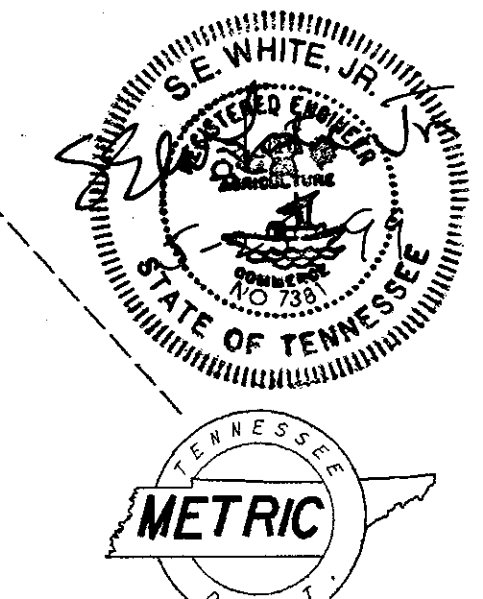
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	10C

24-MAY-1999 14:41
v:\design\haywood\sr54\brnville\sr54e10c.dgn
S. D. Brown
Survey Division



EROSION & SEDIMENT CONTROL DEVICES				
LEGEND/SYMBOL	ITEM NUMBER	ITEM DESCRIPTION	ESTIMATED QUANTITIES	REMARKS
* SF * SF * SF * SF * SF *	209M08	TEMPORARY SILT FENCE	215 m	

(CONST.)
END PROJECT NO. STP-M-54(23)
STA. 1+374.918



COORDINATE VALUES ARE NAD/83(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

**EROSION &
SEDIMENT
CONTROL PLAN
PHASE III**
STA. 1+120 TO END OF PROJ.
SCALE 1:500

FILE NO. 8-30

COORDINATE VALUES ARE NAD/83(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

**EROSION &
SEDIMENT
CONTROL PLAN
PHASE IV**

STA. 1+120 TO END OF PROJ.
SCALE 1:500

TABULATION OF TRAFFIC CONTROL DEVICES

TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	11

PHASE I CONSTRUCTION, AS RECOMMENDED HEREIN FOR THE PROJECT, CONSISTS IN GENERAL OF THE FOLLOWING:

- MAINTAIN TRAFFIC ON THE EXISTING 2 LANE, U.S. 79 AND...
- CONSTRUCT RUN-AROUND ON LEFT SIDE INCLUDING TEMPORARY DRAINAGE STRUCTURE AT NORTH END OF EXISTING BOX CULVERT @ STA. 1+192.
- CLOSE KLEER-VU DRIVE @ STA. 5+140 AND AT NORTH END OF PROPOSED BOX 2.
- ON KLEER-VU DRIVE CONSTRUCT BOX 1 AND 2 WITH PROPOSED DITCH TEMPORARY CONNECTED TO EXISTING PIPE CULVERT NO. CV08.
- CONSTRUCT KLEER-VU DRIVE EXCEPT FOR TEMPORARY CONNECTION ONLY AT U.S. 79 RADI1.
- CONSTRUCT 2 TEMPORARY LANES FOR RUN-AROUND ON EAST SIDE OF PROPOSED S.R. 54.
- CONSTRUCT ALL STORM DRAINAGE FEASIBLE DURING PHASE.

PHASE II CONSTRUCTION, AS RECOMMENDED HEREIN FOR THE PROJECT, CONSISTS IN GENERAL OF THE FOLLOWING:

- OPEN NEWLY CONSTRUCTED KLEER-VU DRIVE.
- PLACE TRAFFIC ON TEMPORARY RUN-AROUND LEFT ON U.S. 79.
- CONSTRUCT RIGHT SIDE OF PROPOSED BOX CULVERT ON U.S. 79.
- PLACE TRAFFIC ON TEMPORARY RUN-AROUND LEFT ON S.R. 54.
- CONSTRUCT RIGHT SIDE OF S.R. 54 AND BOTH SIDES OF THOMAS ST. WHILE MAINTAINING TRAFFIC ON THOMAS ST.
- CONSTRUCT CURB AND GUTTER AND SIDEWALKS AS DEPICTED.

PHASE III CONSTRUCTION, AS RECOMMENDED HEREIN FOR THE PROJECT, CONSISTS IN GENERAL OF THE FOLLOWING:

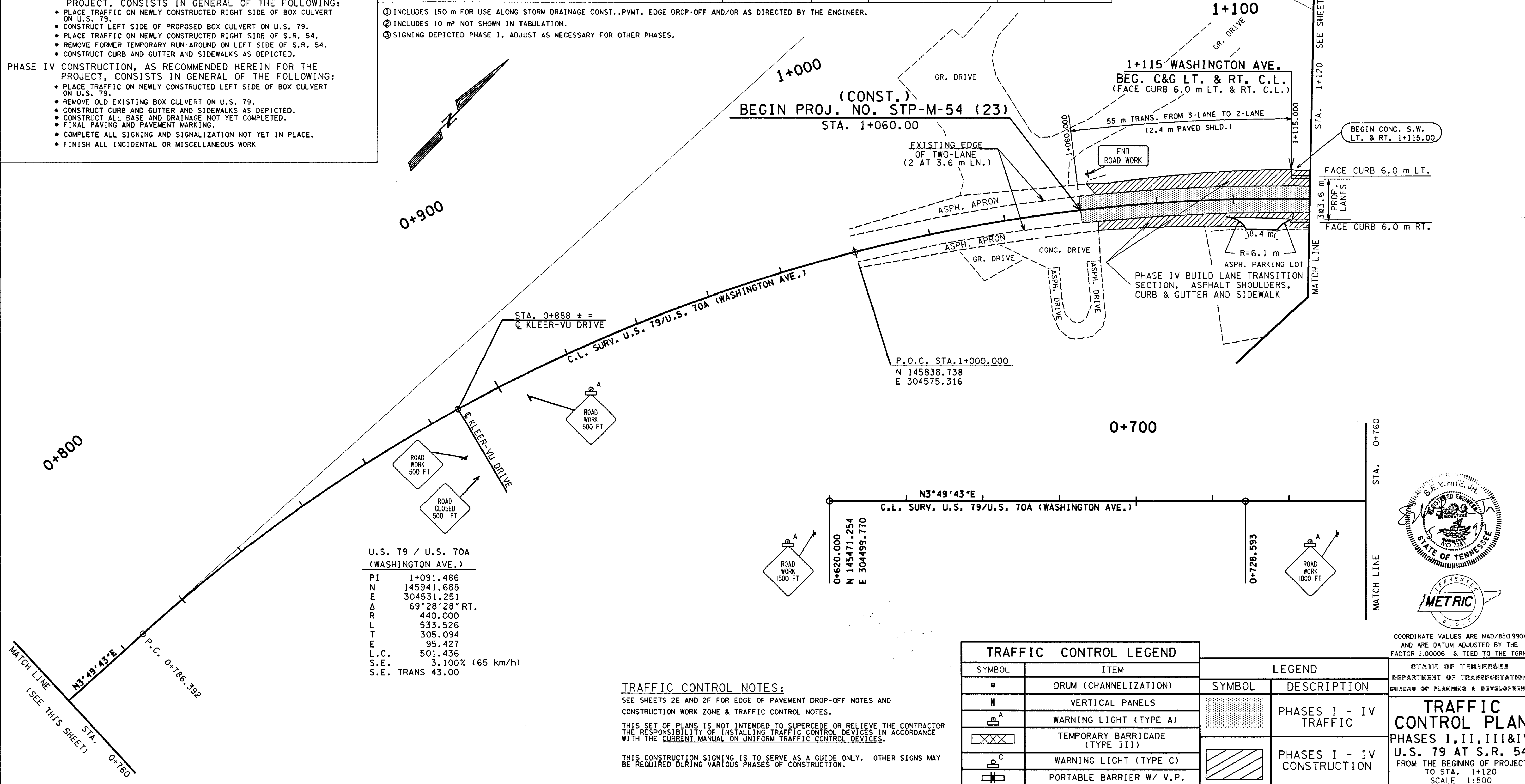
- PLACE TRAFFIC ON NEWLY CONSTRUCTED RIGHT SIDE OF BOX CULVERT ON U.S. 79.
- CONSTRUCT LEFT SIDE OF PROPOSED BOX CULVERT ON U.S. 79.
- PLACE TRAFFIC ON NEWLY CONSTRUCTED RIGHT SIDE OF S.R. 54.
- REMOVE FORMER TEMPORARY RUN-AROUND ON LEFT SIDE OF S.R. 54.
- CONSTRUCT CURB AND GUTTER AND SIDEWALKS AS DEPICTED.

PHASE IV CONSTRUCTION, AS RECOMMENDED HEREIN FOR THE PROJECT, CONSISTS IN GENERAL OF THE FOLLOWING:

- PLACE TRAFFIC ON NEWLY CONSTRUCTED LEFT SIDE OF BOX CULVERT ON U.S. 79.
- REMOVE OLD EXISTING BOX CULVERT ON U.S. 79.
- CONSTRUCT CURB AND GUTTER AND SIDEWALKS AS DEPICTED.
- CONSTRUCT ALL BASE AND DRAINAGE NOT YET COMPLETED.
- FINAL PAVING AND PAVEMENT MARKING.
- COMPLETE ALL SIGNING AND SIGNALIZATION NOT YET IN PLACE.
- FINISH ALL INCIDENTAL OR MISCELLANEOUS WORK

SIGN DESIGNATION AND MESSAGE	SIGN SIZE	NUMBER OF SIGNS	ESTIMATED QUANTITY (m²)	ITEM	DESCRIPTION	UNIT	ESTIMATED QUANTITY
W1-4AL REVERSE CURVE LT.	762 mm X 762 mm	2	1.16	712M01	TRAFFIC CONTROL	LUMP SUM	1
W1-4AR REVERSE CURVE RT.	762 mm X 762 mm	2	1.16	712M02.02	INTERCONNECTED PORTABLE BARRIER RAIL	m	600
W20-1 ROAD WORK 1500 FT.	1219 mm X 1219 mm	4	5.94	712M04.01	DRUMS (CHANNELIZATION)	EACH	72
W20-1 ROAD WORK 1000 FT.	1219 mm X 1219 mm	4	5.94	712M05.01	WARNING LIGHTS (TYPE A)	EACH	18
W8-9A SHOULDER DROP OFF	914 mm X 914 mm	8	6.68	712M05.03	WARNING LIGHTS (TYPE C)	EACH	24
R11-2 ROAD CLOSED	1219 mm X 762 mm	2	0.93	712M06.01	VERTICAL PANELS (VP-1L) (VP-1R)	m²	22.109
W20-3 ROAD CLOSED 500 FT.	1219 mm X 1219 mm	1	1.48			m²	42.218
G20-2A END ROAD WORK	1200 mm X 600 mm	5	3.60	712M06.10	SIGNS (CONSTRUCTION)	m²	43.91
W13-1 20 M.P.H.	600 mm X 600 mm	3	1.08	712M07.03	TEMPORARY BARRICADES (TYPE 111)	m	12
TOTAL			33.91				

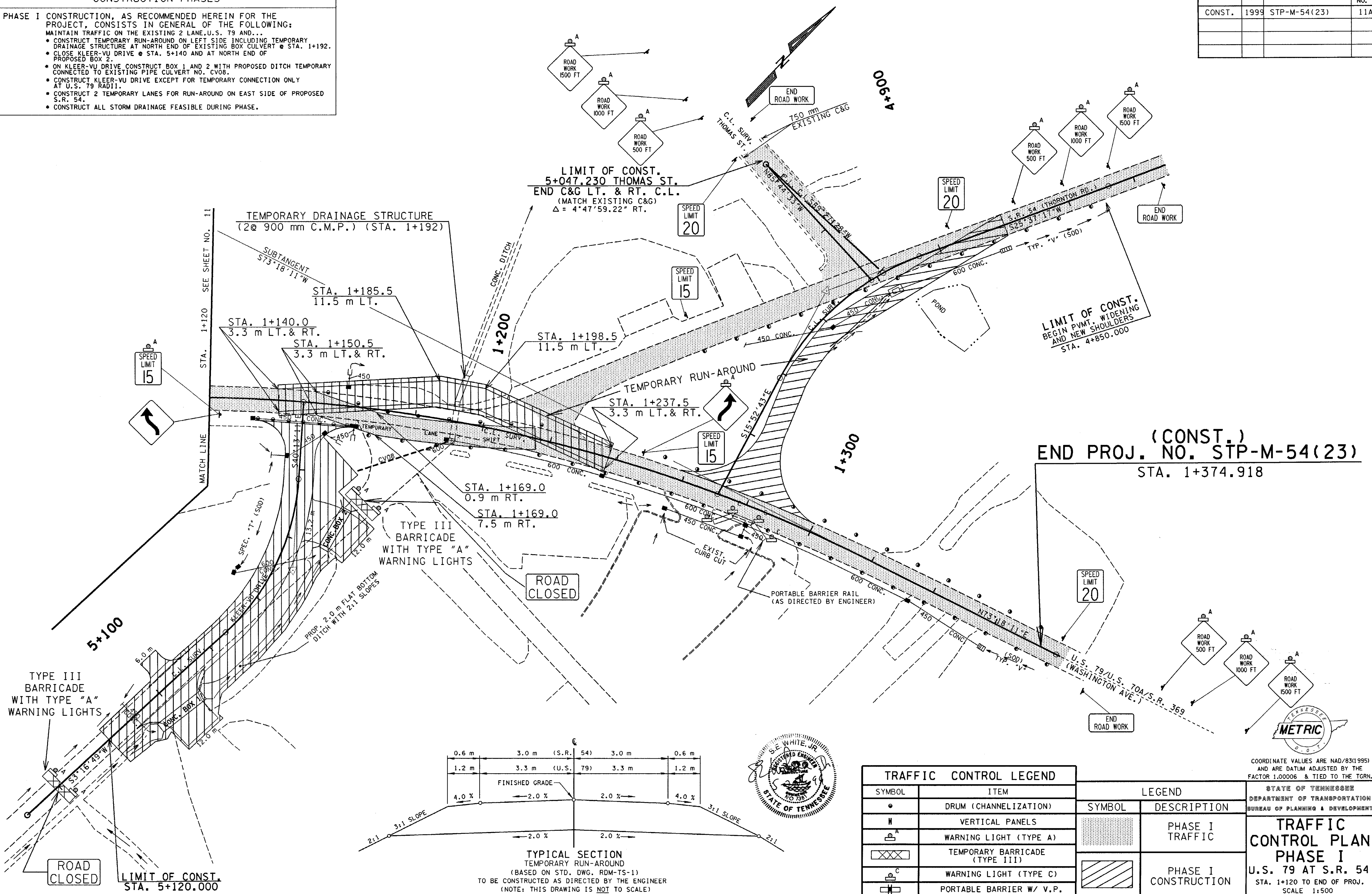
① INCLUDES 150 m FOR USE ALONG STORM DRAINAGE CONST., PVMT. EDGE DROP-OFF AND/OR AS DIRECTED BY THE ENGINEER.
② INCLUDES 10 m² NOT SHOWN IN TABULATION.
③ SIGNING DEPICTED PHASE 1, ADJUST AS NECESSARY FOR OTHER PHASES.

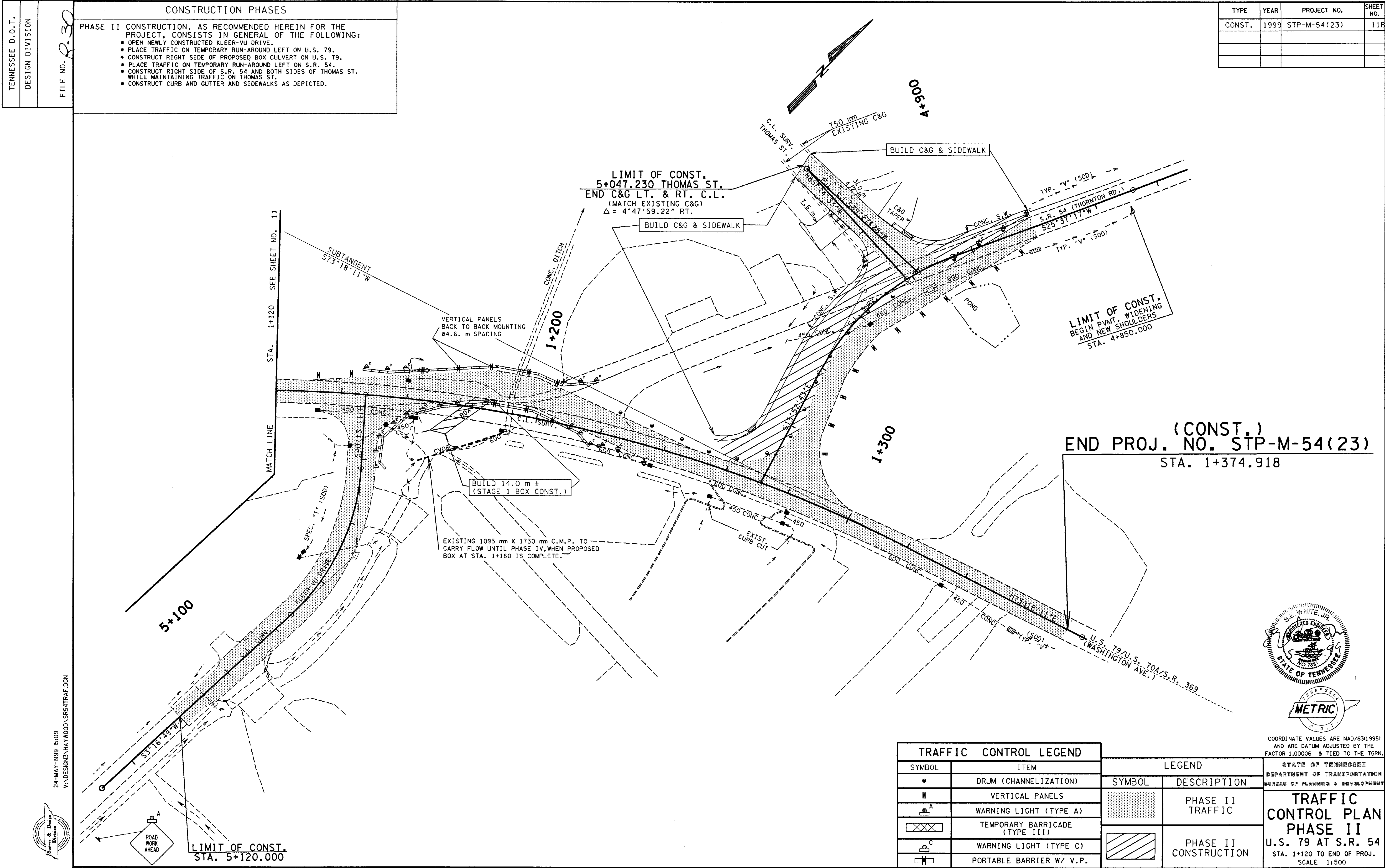


PHASE I CONSTRUCTION, AS RECOMMENDED HEREIN FOR THE PROJECT, CONSISTS IN GENERAL OF THE FOLLOWING:

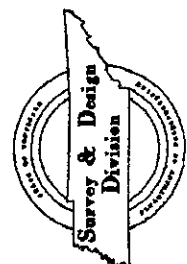
- * MAINTAIN TRAFFIC ON THE EXISTING LANE(S) SIDE AND INDICATE TEMPORARY CONSTRUCTION ZONE WITH RUN-AROUND ON EAST SIDE OF EXISTING TEMPORARY DRAINAGE STRUCTURE AT NORTH END OF EXISTING BOX CULVERT # STA. 1+192.
- * CLOSE KLEER-VU DRIVE # STA. 5+140 AND AT NORTH END OF PROPOSED BOX CULVERT.
- * ON KLEER-VU DRIVE CONSTRUCT BOX 1 AND 2 WITH PROPOSED DITCH TEMPORARILY CONNECTED TO EXISTING PIPE CULVERT NO. CV08.
- * CONSTRUCT KLEER-VU DRIVE EXCEPT FOR TEMPORARY CONNECTION ONLY AT U.S. 79 RADI.
- * CONSTRUCT 2 TEMPORARY LANES FOR RUN-AROUND ON EAST SIDE OF PROPOSED BOX CULVERT.
- * CONSTRUCT ALL STORM DRAINAGE FEASIBLE DURING PHASE.

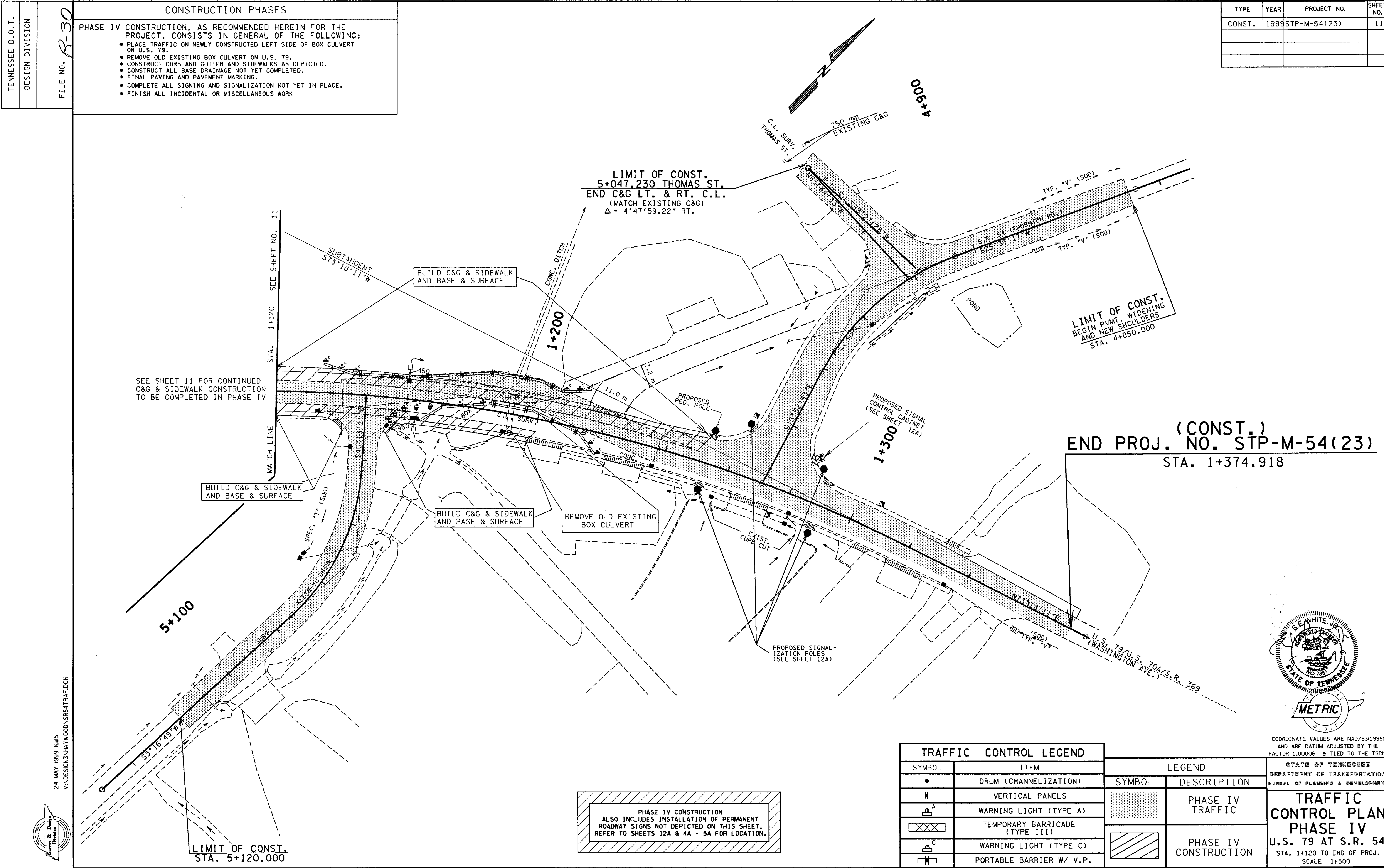
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	11A





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VADESIGN3\HAYWOOD\SR54TRAF.DGN





TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	110

PHASE IV CONSTRUCTION, AS RECOMMENDED HEREIN FOR THE PROJECT, CONSISTS IN GENERAL OF THE FOLLOWING:

- PLACE TRAFFIC ON NEWLY CONSTRUCTED LEFT SIDE OF BOX CULVERT ON U.S. 79.
- REMOVE OLD EXISTING BOX CULVERT ON U.S. 79.
- CONSTRUCT CURB AND GUTTER AND SIDEWALKS AS DEPICTED.
- CONSTRUCT ALL BASE DRAINAGE NOT YET COMPLETED.
- FINAL PAVING AND PAVEMENT MARKING.
- COMPLETE ALL SIGNING AND SIGNALIZATION NOT YET IN PLACE.
- FINISH ALL INCIDENTAL OR MISCELLANEOUS WORK

CONSTRUCTION PHASES

FILE NO. R-30

DESIGN DIVISION

TENNESSEE D.O.T.

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PHASE IV CONSTRUCTION
ALSO INCLUDES INSTALLATION OF PERMANENT
ROADWAY SIGNS NOT DEPICTED ON THIS SHEET.
REFER TO SHEETS 12A & 4A - 5A FOR LOCATION.

TRAFFIC CONTROL LEGEND	
SYMBOL	ITEM
•	DRUM (CHANNELIZATION)
M	VERTICAL PANELS
A	WARNING LIGHT (TYPE A)
XXX	TEMPORARY BARRICADE (TYPE III)
C	WARNING LIGHT (TYPE C)
W	PORTABLE BARRIER W/ V.P.

LEGEND	
SYMBOL	DESCRIPTION
[Pattern]	PHASE IV TRAFFIC
[Pattern]	PHASE IV CONSTRUCTION

COORDINATE VALUES ARE NAD/83(1995)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

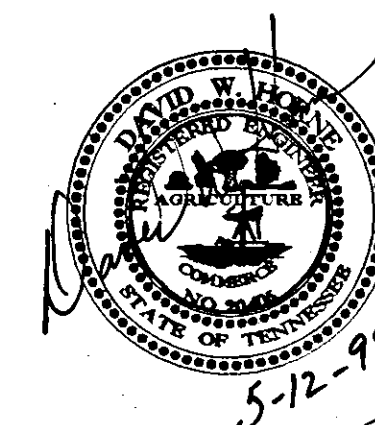
**TRAFFIC CONTROL PLAN
PHASE IV**
U.S. 79 AT S.R. 54
STA. 1+120 TO END OF PROJ.
SCALE 1:500

— SEE STD. DWG. NO. T-S-19

[illegible]

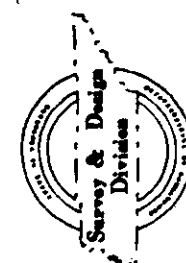
U-POST SUBSTITUTION TABLE	
BID ITEM 713M11.01	SUBSTITUTION ALLOWED
3.0 kg/m U1	3.0 kg/m R1
3.7 kg/m U3	4.5 kg/m R2*
4.5 kg/m U6	

* PAID AT A RATE OF 3.7 kg/m.

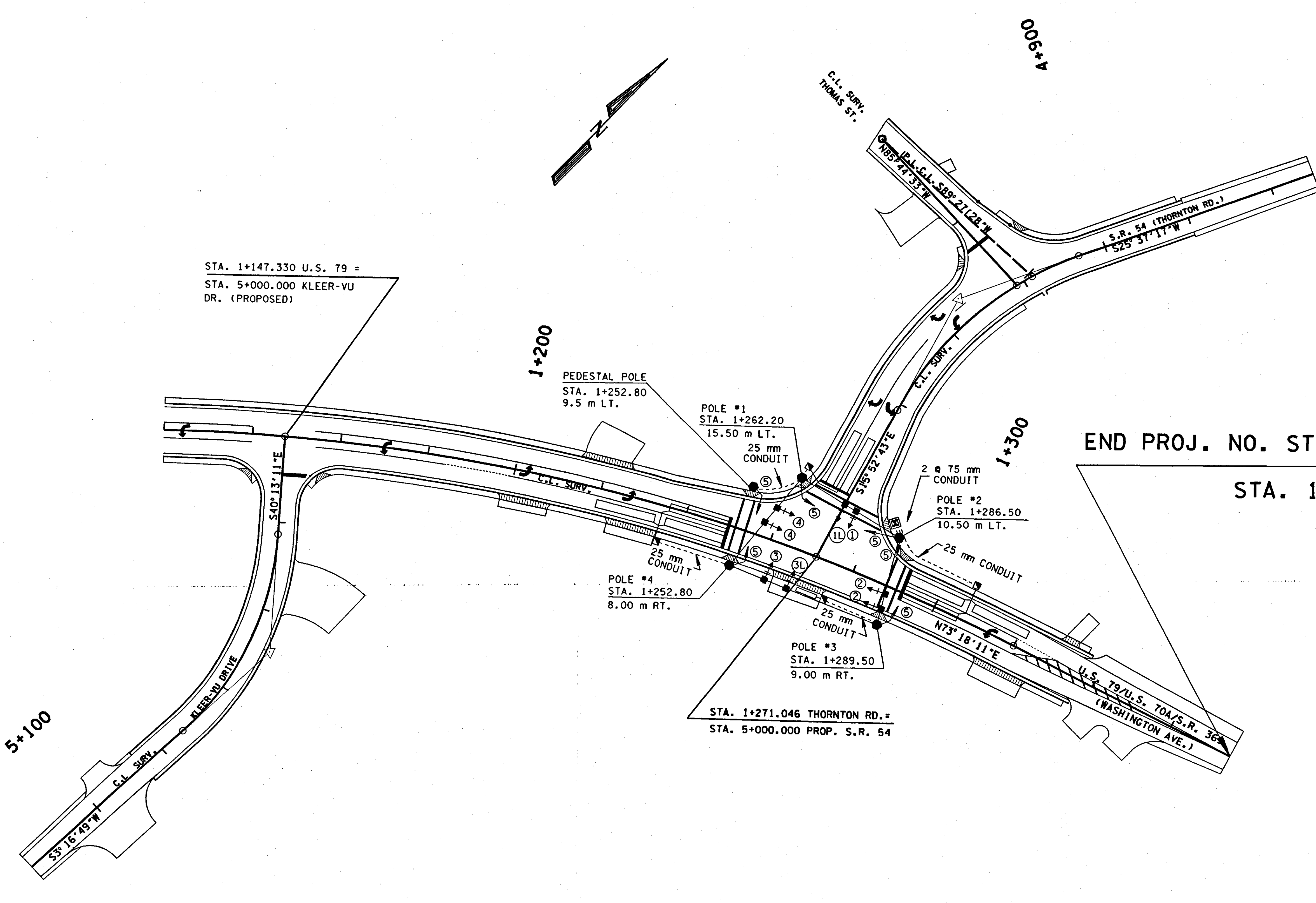


STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

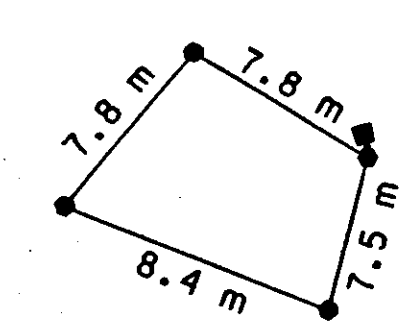
SIGN SCHEDULE



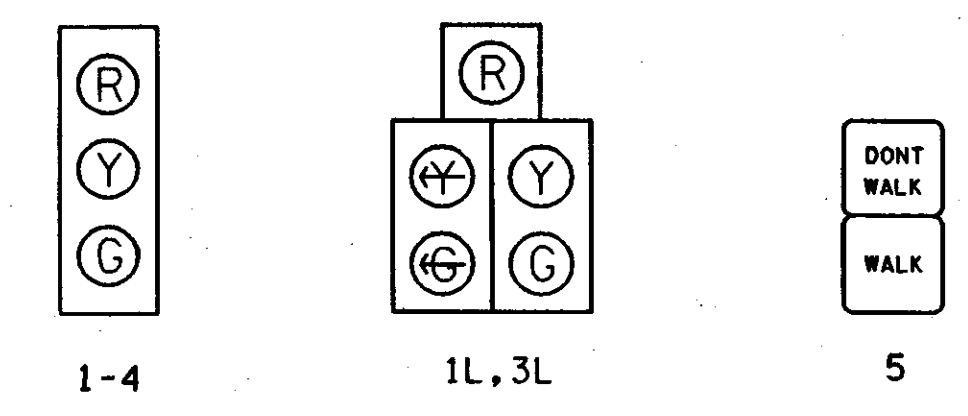
TYPE	YEAR	PROJECT NO.	SHEET NO.
CONST.	1999	STP-M-54(23)	12A



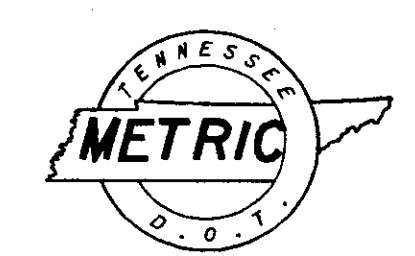
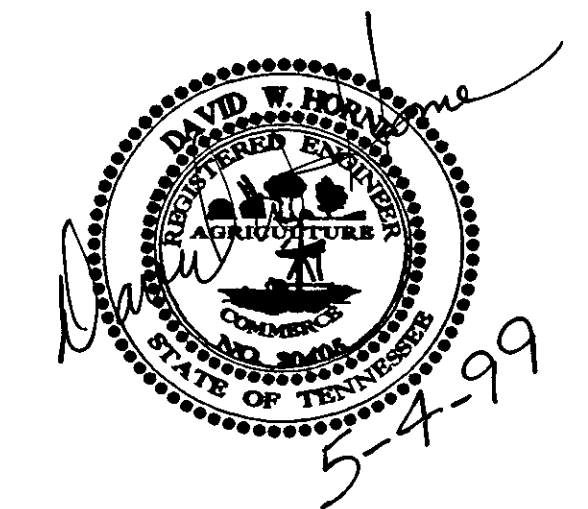
END PROJ. NO. STP-M-54(23) (CONST.)
STA. 1+374.918



ATTACHMENT HEIGHTS



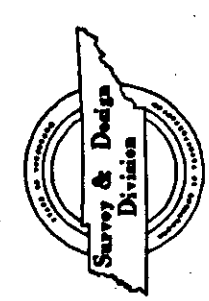
SIGNAL HEADS

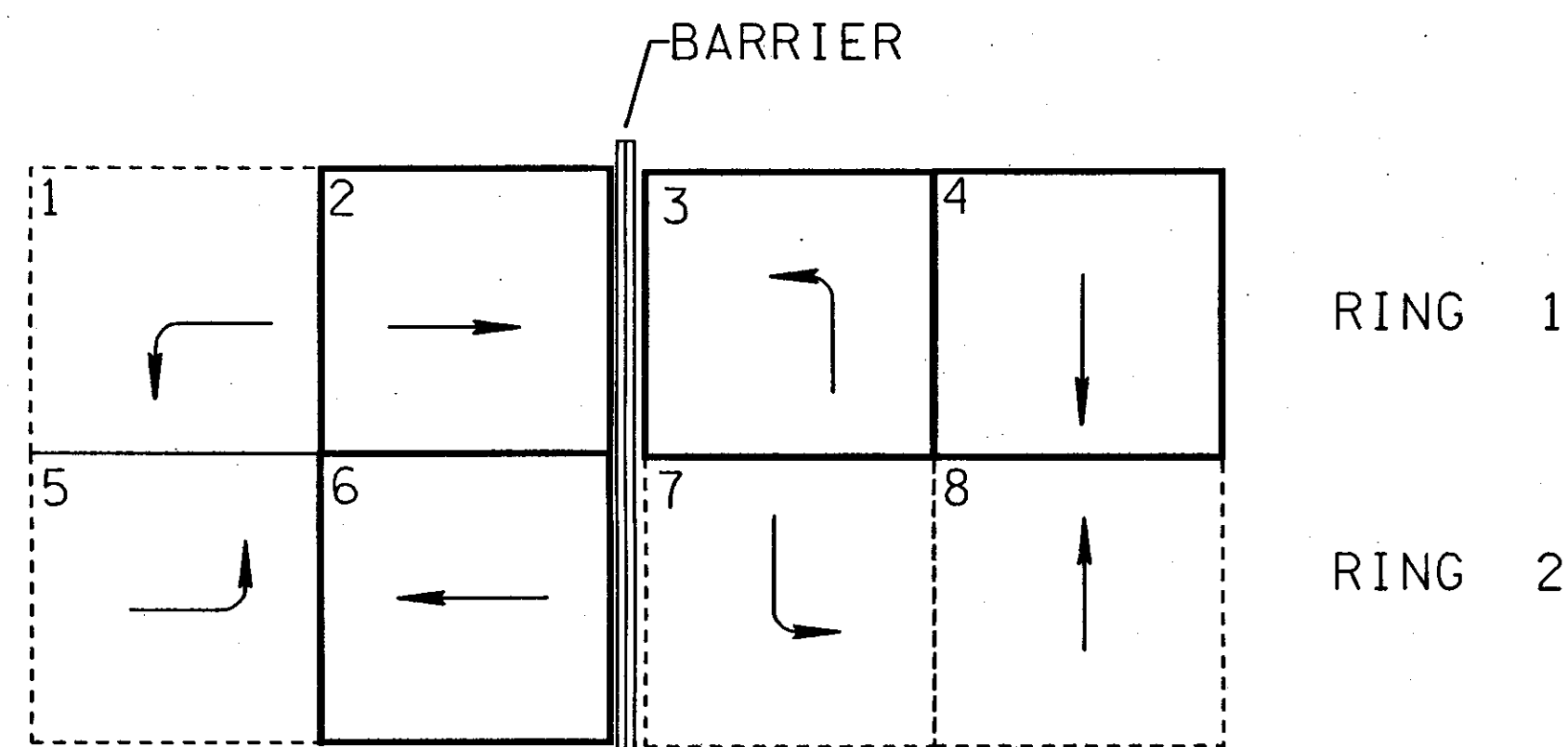


COORDINATE VALUES ARE NAD/83(1990)
AND ARE DATUM ADJUSTED BY THE
FACTOR 1.00006 & TIED TO THE TGRN.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

SIGNAL LAYOUT
INTERSECTION OF
U.S. 79 AT S.R. 54
SCALE 1:500





NEMA EIGHT PHASE DESIGNATIONS

- ☐ ACTIVE PHASE
- ☐ INACTIVE PHASE (NOT USED)

- ALL SIGNAL DISPLAYS AND CLEARANCES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

BASIC OR SEMI - ACTUATED TIMING (SECS)

PHASE	INITIAL INTERVAL	VEHICLE INTERVAL	MAX I	MAX II	CLEARANCE		PEDESTRIAN		RECALL TO	MEMORY POSITION (1)	LEFT TURN OPERATION (2)
					YELLOW	ALL RED	WALK	FLASHING DONT WALK			
2,6	6	1.0	20		4.0	2.5	7	11		NL	PERM
4	6	1.0	12		4.0	2.0	7	8		NL	PROT
3	6	1.0	10		4.0	2.5	7	11		NL	PROT

- (1) NL = NONLOCK
L = LOCK
- (2) PERM = PERMITTED
PROT = PROTECTED
P + P = PROT/PERM

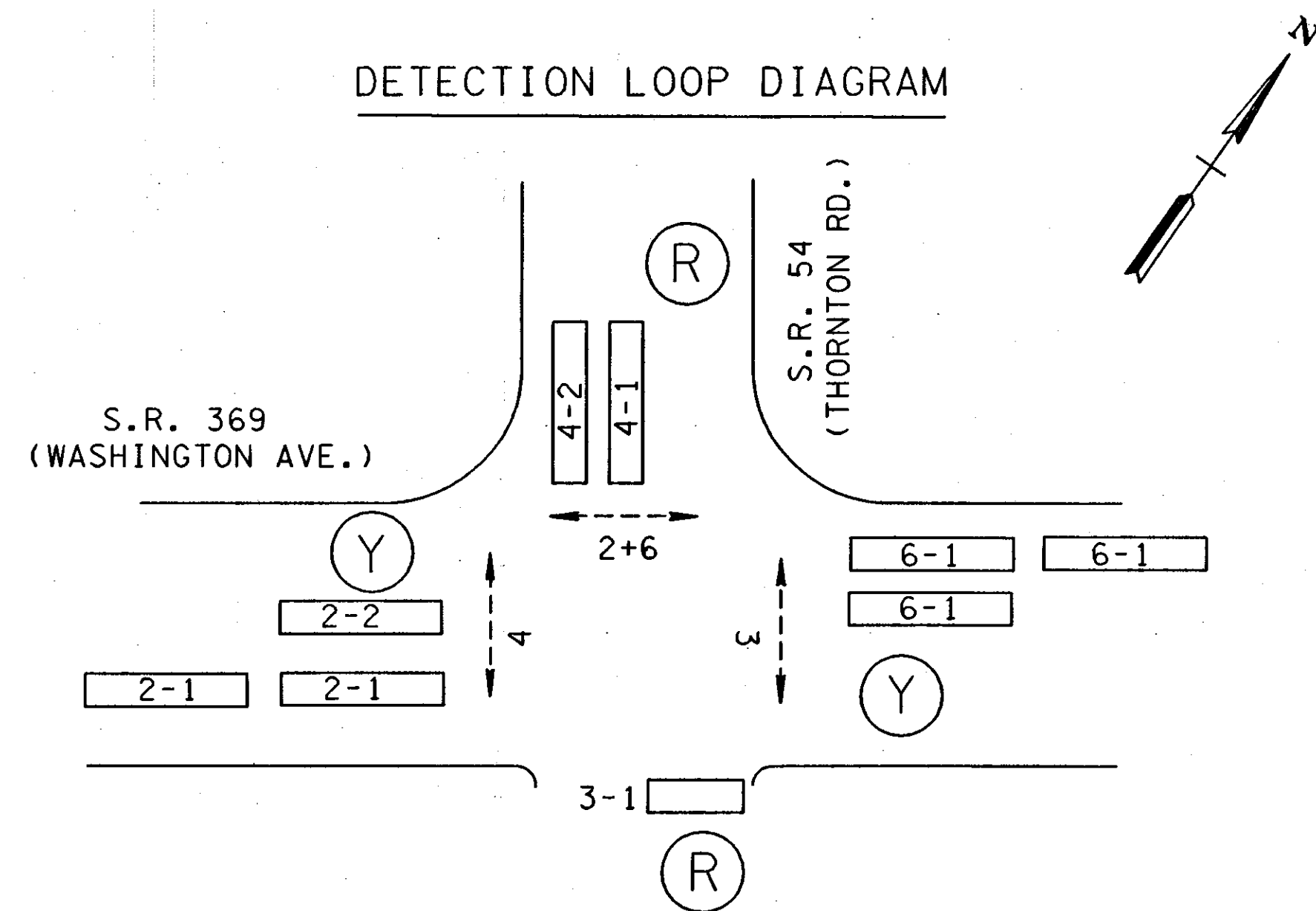
THESE TIMINGS ARE INITIAL AND MAY BE ADJUSTED BY THE CONTRACTOR BASED ON FIELD OBSERVATIONS TO PROVIDE EFFICIENT OPERATION.

LOOP AND AMP ASSIGNMENTS					
LOOP #	AMP #	LOOP LENGTH	AMP MODE	AMP. FEATURE TIMING(SEC)	ASSOC. Ø
2-1	1	2013.7 m	PRES.		2
2-2	2	13.7 m	PRES.		2
3-1	3	5 m	PRES.		3
4-1	4	13.7 m	PRES.		4
4-2	5	13.7 m	DELAY	5	4
6-1	6	3013.7 m	PRES.		6

① LOOP DIMENSIONS TO BE 1.8 m x 5 m.

- ALL LOOPS ARE 1.8 m IN WIDTH, CENTERED IN TRAFFIC LANE. 1.8 m x 1.8 m LOOPS HAVE 4 TURNS OF LOOP WIRE. ALL OTHERS HAVE 2 TURNS, UNLESS OTHERWISE NOTED.

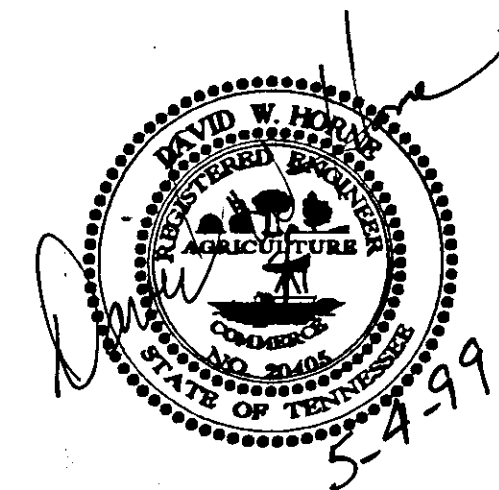
- LOOP WIRE CONNECTIONS SHALL BE WIRED TO PROVIDE THE APPROPRIATE INDUCTANCE AS REQUIRED BY STD. DWG. TM-SG-3.



PEDESTRIAN MOVEMENTS (←---→) AND ASSOCIATED PHASE

FLASHING OPERATION (Y) OR (R)

EIGHT PHASE



INTERSECTION OF
S.R. 369 (WASHINGTON AVE.) &
S.R. 54 (THORNTON AVE.)



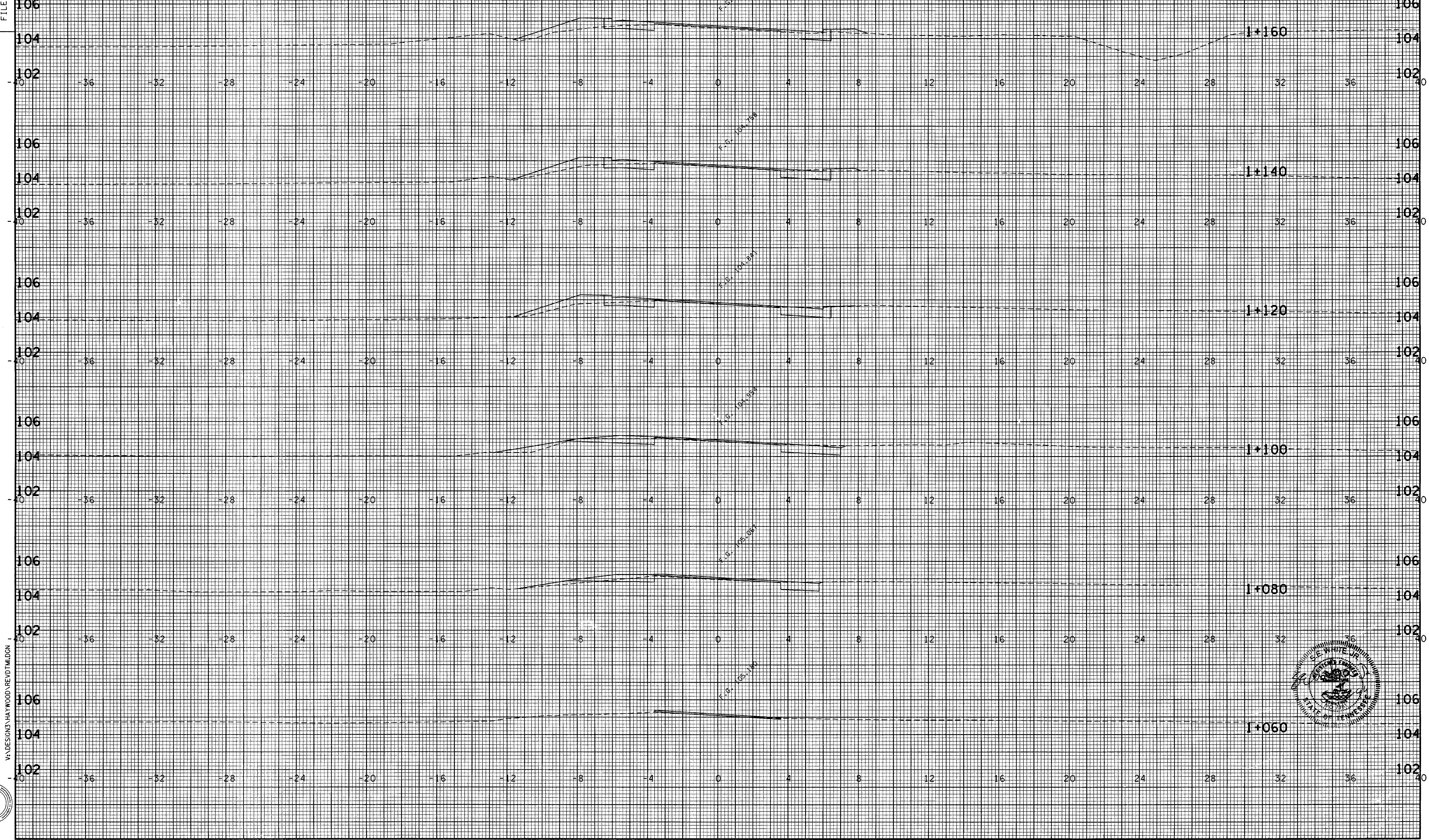
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
BUREAU OF PLANNING & DEVELOPMENT

PHASING,
TIMING,
DETECTOR
ASSIGNMENT

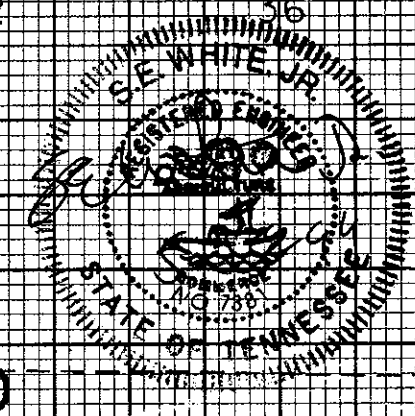
TENNESSEE D.O.T.
DESIGN DIVISION

FILE NO. **B-30**

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	14

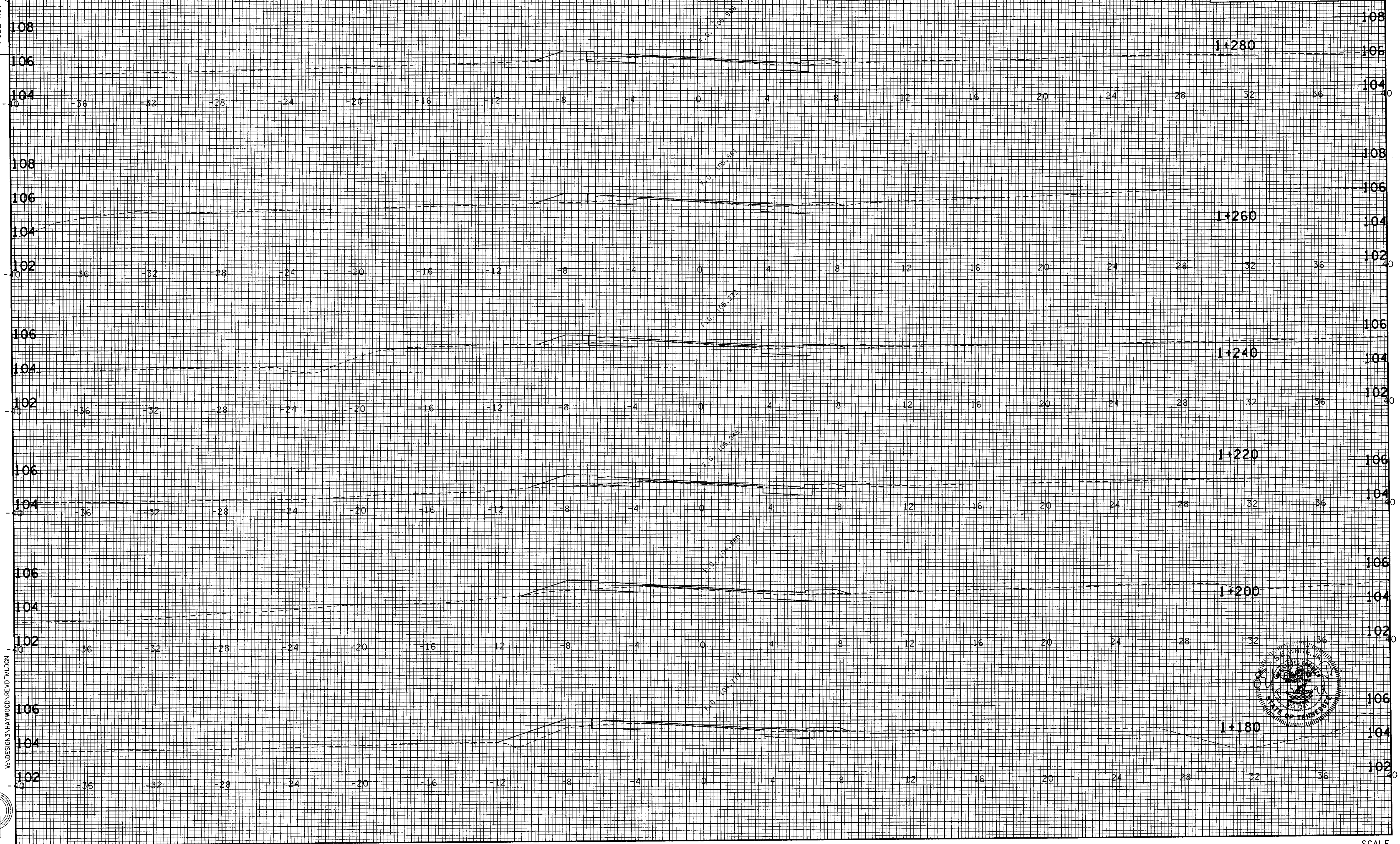


24-MAY-1999 1452
VADESIGN3 HAYWOOD REVDTM/DGN
Survey & Design Division

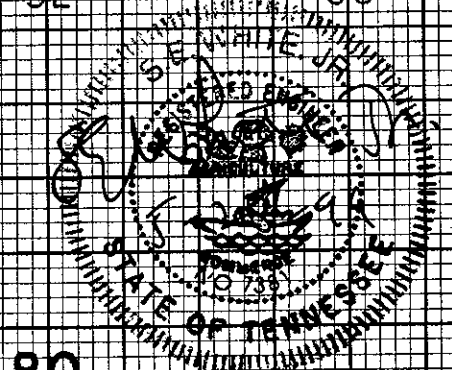


TENNESSEE D.O.T.
DESIGN DIVISION
FILE NO. R-30

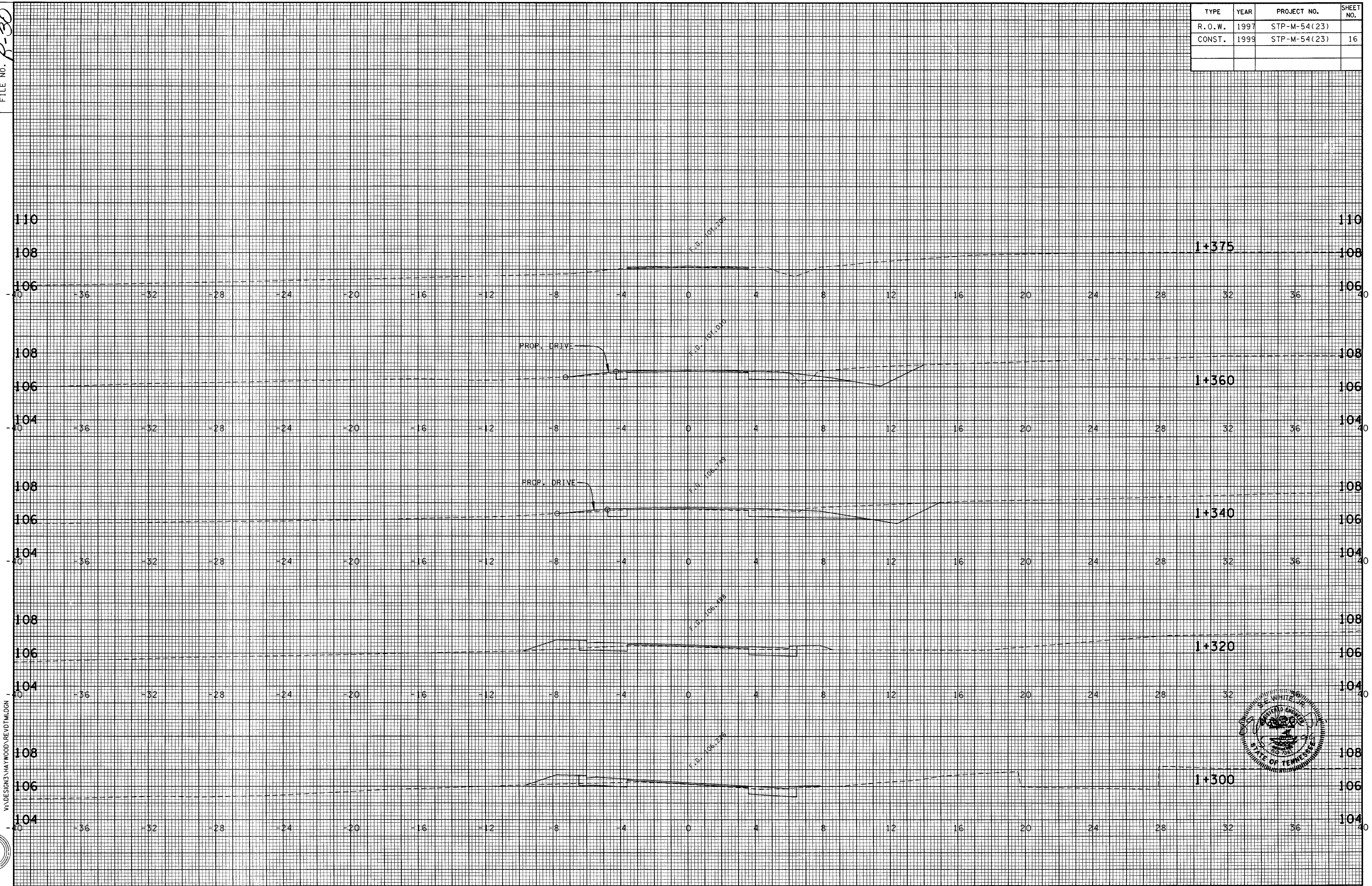
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	15



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V:\DESIGN\3\14\WOOD\REV\DTM.DGN
Bentley & Davis
Bentley



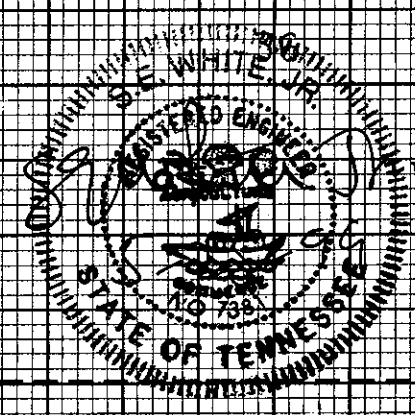
TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	16



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VA DESIGN3-HAYWOOD-REV07MIDCON

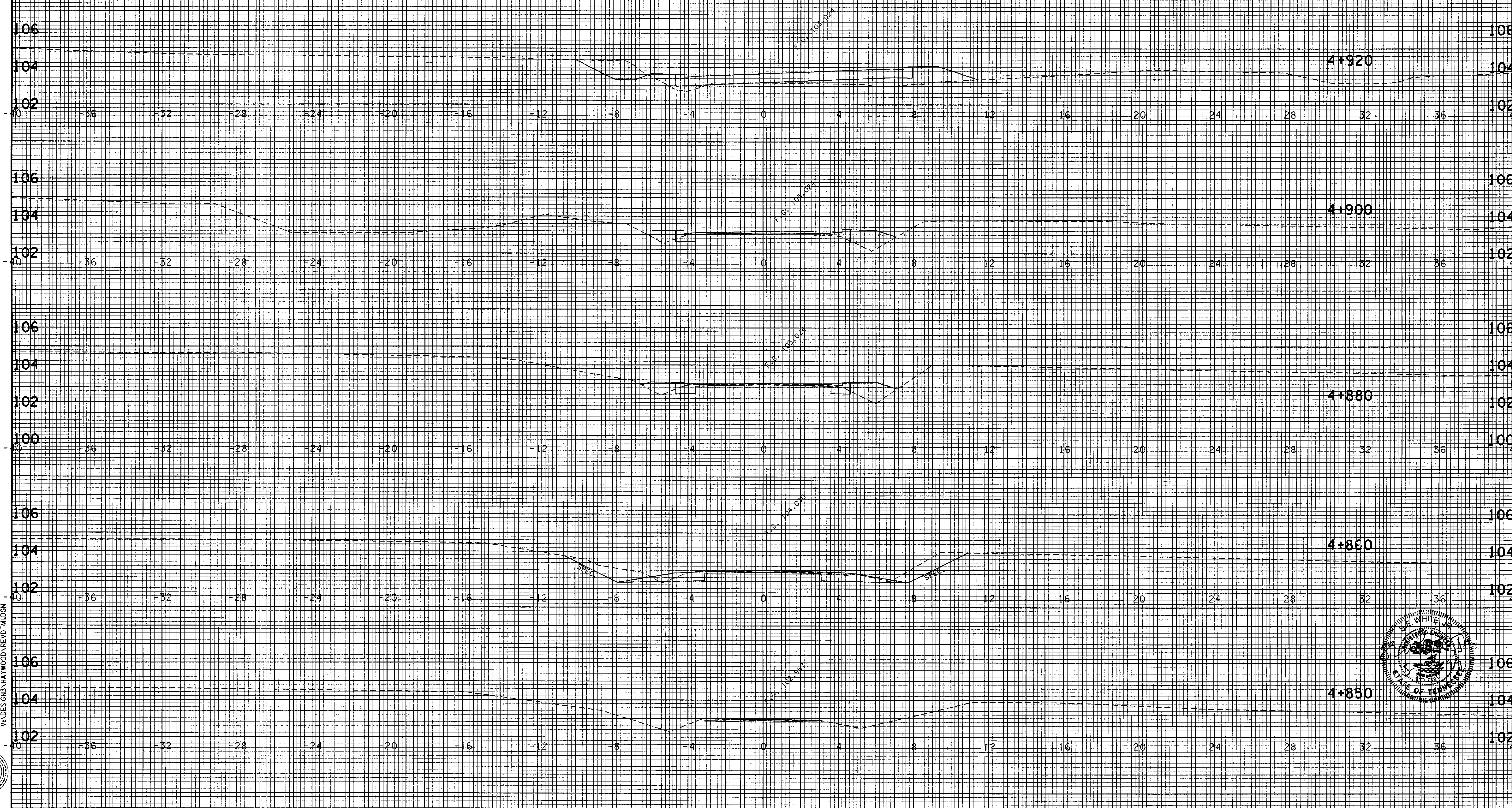
Survey & Design Division



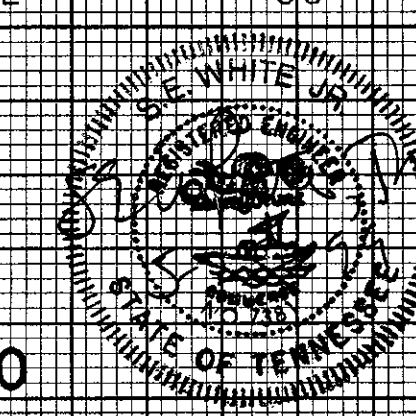
TENNESSEE D. O. T.
DESIGN DIVISION

FILE NO. R-30

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	17

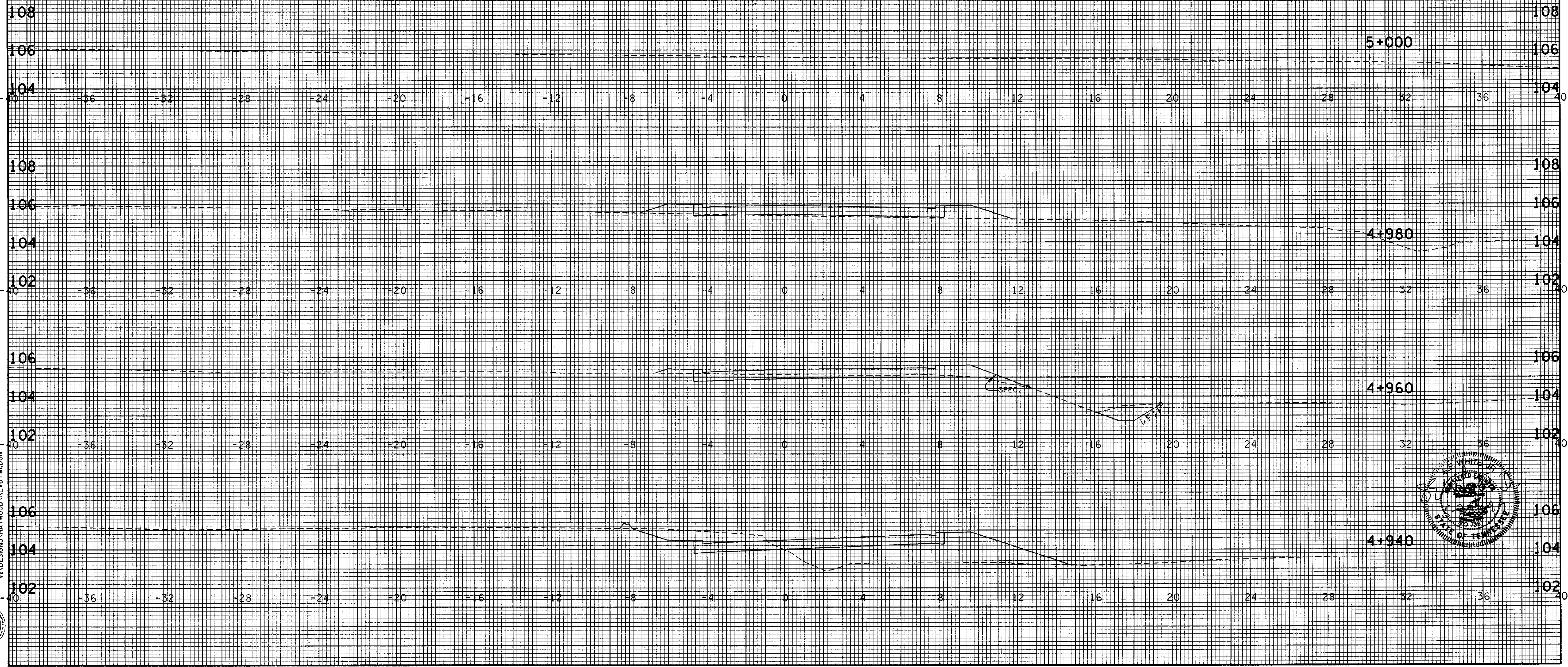


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VA DESIGN\HAYWOOD\REV\DTM\LDON
Survey & Design Division

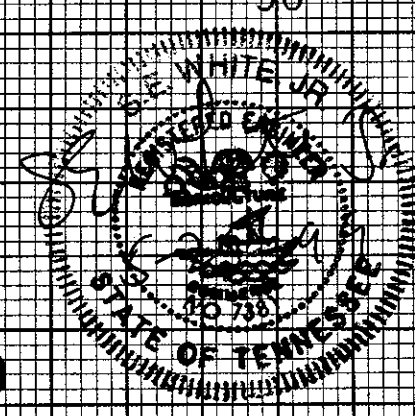


THORNTON ROAD (S.R. 54) SCALE 1:100

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	18



24-MAY-1999 15:48
VA DESIGN'S HAYWOOD REVOTM/DGN
Survey & Design Division

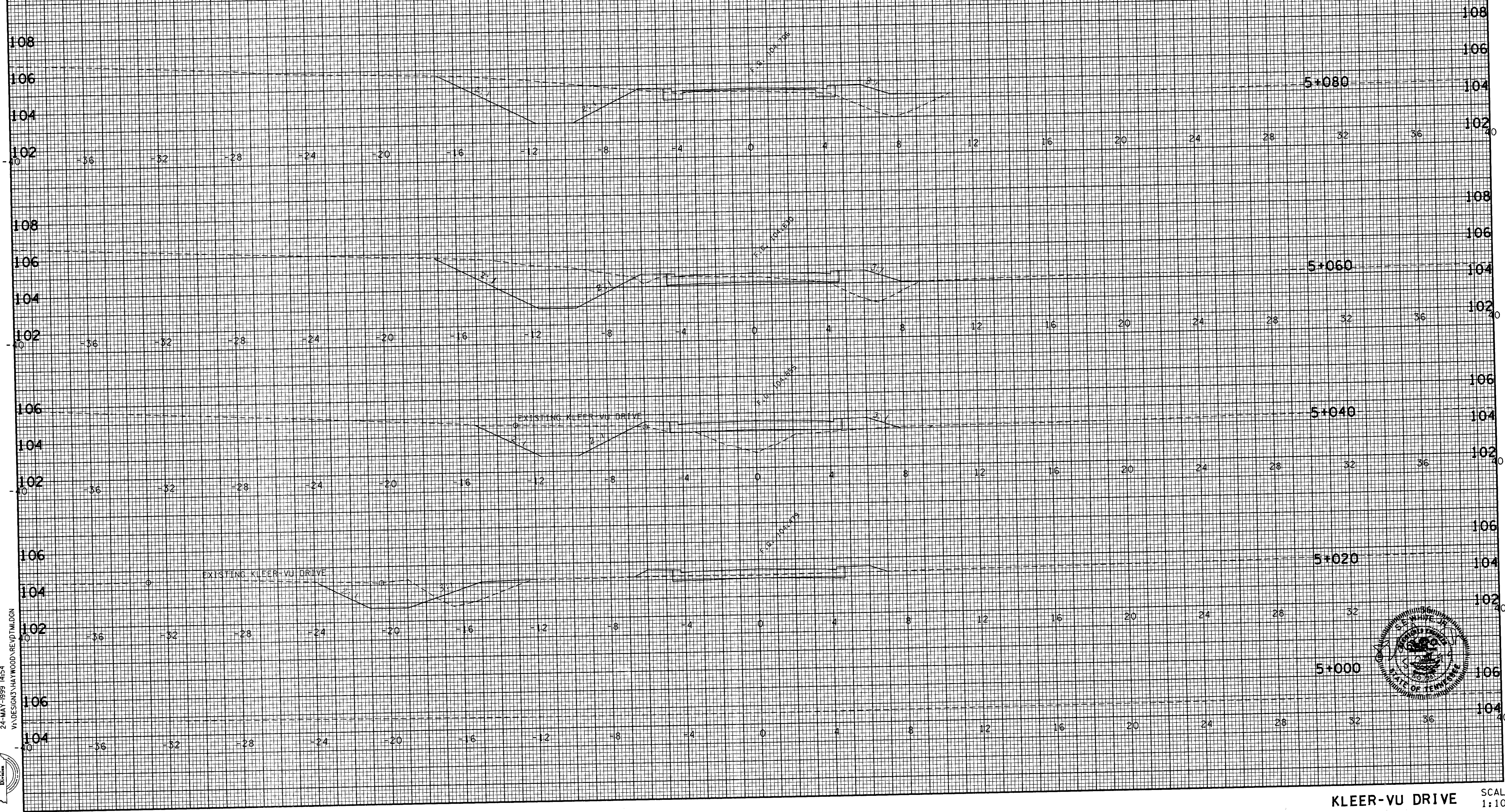


TENNESSEE D.O.T.

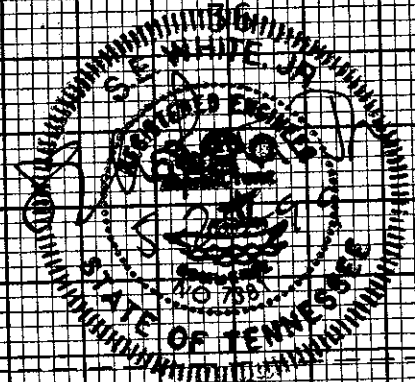
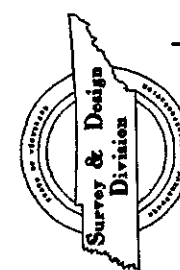
DESIGN DIVISION

FILE NO. R-30

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	19



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KLEER-VU DRIVE

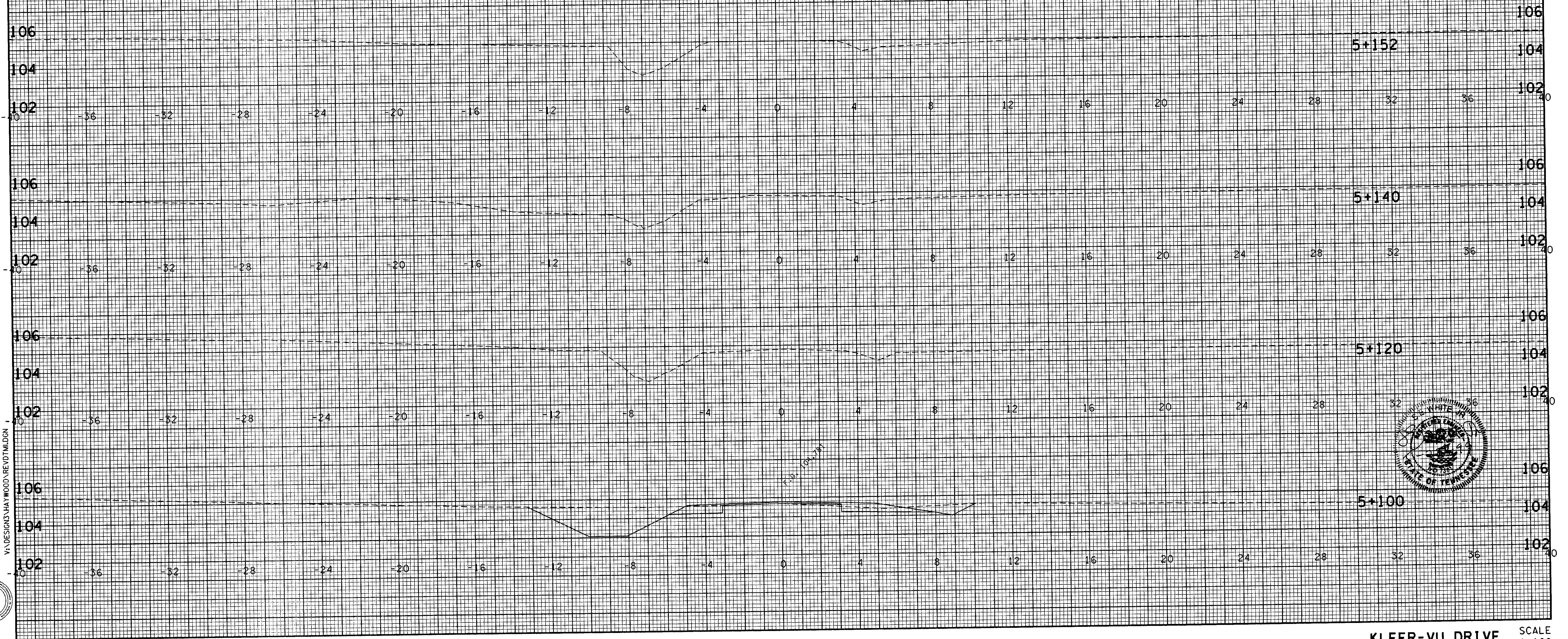
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TENNESSEE D.O.T.

DESIGN DIVISION

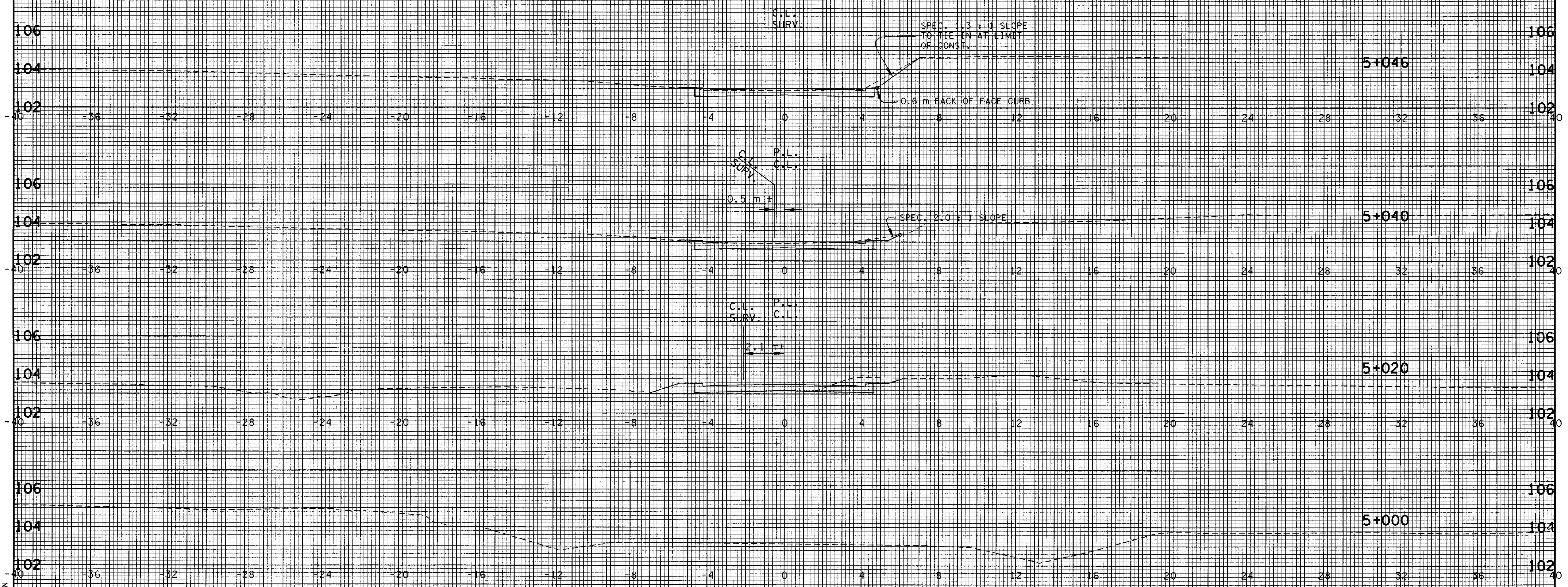
FILE NO. R-30

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	20



KLEER-VU DRIVE SCALE 1:100

TYPE	YEAR	PROJECT NO.	SHEET NO.
R.O.W.	1997	STP-M-54(23)	
CONST.	1999	STP-M-54(23)	21



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Survey & Design Division

