

"M" STANDARDS

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"S" STANDARDS

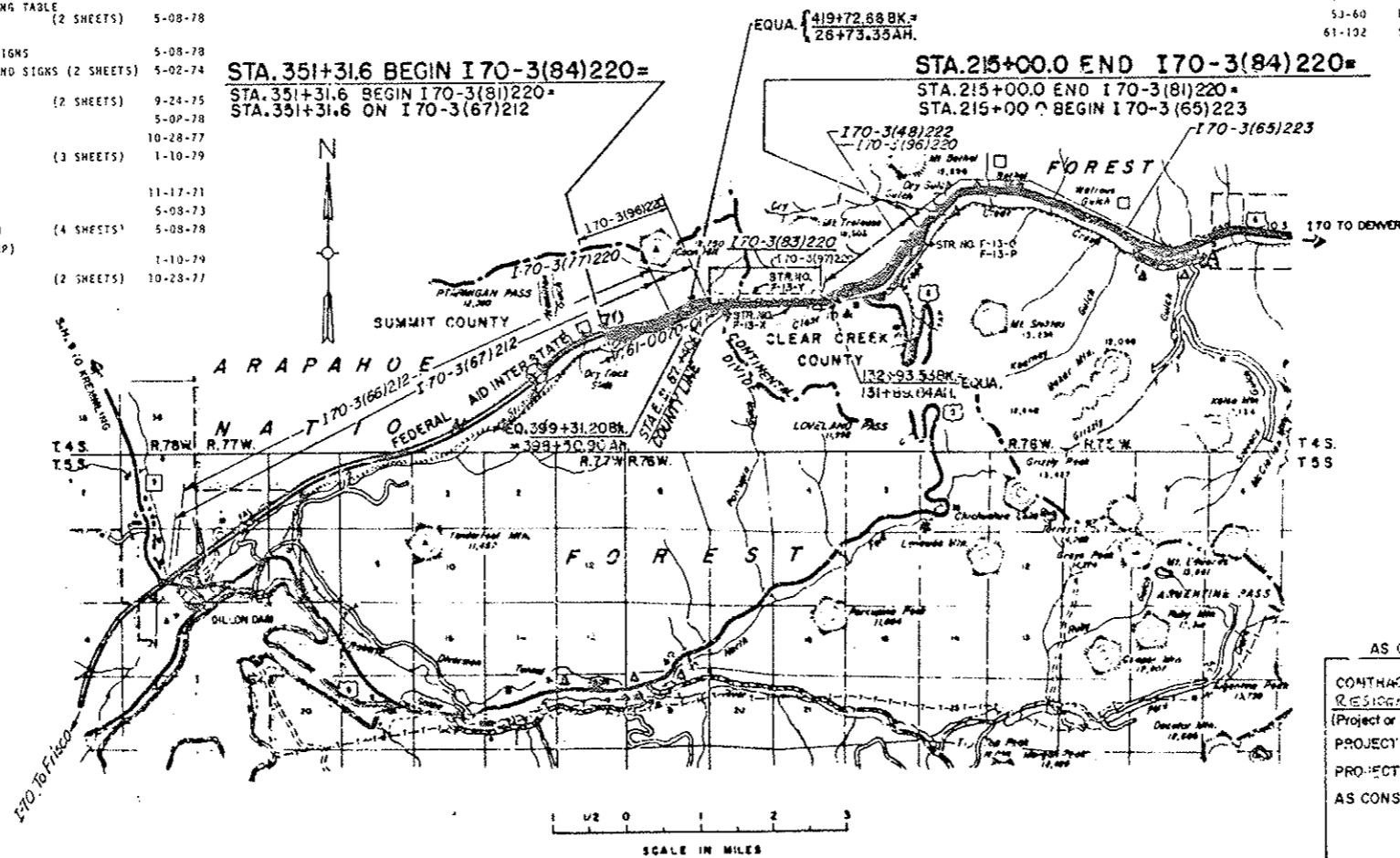
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DEPARTMENT OF HIGHWAYS STATE OF COLORADO

PLAN AND PROFILE OF PROPOSED FEDERAL AID PROJECT NO. I 70-3 (84) 220 STATE HIGHWAY NO. 70

SUMMIT AND CLEAR CREEK COUNTIES

SCALES OF ORIGINAL DRAWINGS ON PLANS AS SHOWN ON PROFILES AS SHOWN GRADE LINE ON PROFILES IS SHOWN AS GRADE OF FINISHED ROADWAYS



(R-1) Added Std., Rev. Index 5-18-79 E.B.

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	I 70-3 (84) 220	1	102

R.O.W. Acquired Under I 70-3 (14) 220 I 70-3 (16) I 70-3 (26) RE. under I 70-3 (78)

AS CONSTRUCTED

NO REVISIONS REVISED VOID

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(R-1)

APPROVED: *R. L. Chappin* 4-23-79
Asst. Chief Engineer

AS CONSTRUCTED INFORMATION

CONTRACTOR FLATIRON PAVING
RESIDENT ENGINEER JOCK CAMP
(Project or Resident)

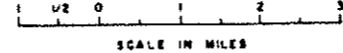
PROJECT STARTED 6-28-79
PROJECT COMPLETED 12-22-85

AS CONSTRUCTED PLANS APPROVED: Jack Camp
R. L. Chappin 4-23-79
TITLE DATE

DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

APPROVED: _____ DATE _____

DIVISION ADMINISTRATOR



EB

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	2	102
AS CONSTRUCTED				
NO REVISIONS		REVISED	VOID	

TABULATION OF LENGTH AND DESIGN DATA

STATION			ROADWAY LIN. FT.	MAJOR STRUCTURES TUNNEL LIN. FT.	BRIDGES LIN. FT.
351+31.60	BEGIN	I 70-3(84)220	4799.60		
351+31.60	BEGIN	I 70-3(81)220			
399+31.20	BK.	EQUATION	2121.76		
398+50.90	AH.				
419+72.66	BK.	EQUATION	924.47		
26+73.35	AH.				
35+97.82	BEGIN	STRUCTURE NO. F-13-X		2642.65	
62+40.47	COUNTY LINE				
125+57.28	END	STRUCTURE NO. F-13-X	736.25	6316.81	
132+93.53	BK.	EQUATION			
131+89.84	AH.		3978.44		
171+68.28	STRUCTURE NOS. F-13-O & F-13-P				
174+16.21			4053.79		277.93
215+00.00	END	I 70-3(84)220			
215+00.00	END	I 70-3(81)220			
TOTALS			16614.31	8959.46	277.93
SUMMARY			LIN. FT.	MILES	
SUMMIT COUNTY ROADWAY			7845.83	1.486	
MAJOR STRUCTURES			2642.65	0.500	
TOTAL (NET AND GROSS)			10488.48	1.986	
GIFAR CREEK COUNTY ROADWAY			8768.48	1.661	
MAJOR STRUCTURES			6594.74	1.249	
TOTAL (NET AND GROSS)			15163.22	2.910	
GRAND TOTAL (NET AND GROSS)			25651.70	4.896	
DESIGN DATA					
MAXIMUM DEGREE OF CURVE			4°00'		
MAXIMUM GRADE			7.00%		
MINIMUM SSD HORIZONTAL			375'		
MINIMUM SSD VERTICAL			490'		
MAXIMUM DESIGN SPEED			50 MPH		
DESIGN TRAFFIC VOLUME					
1994 ADT			15,500		
1994 DDHV			2,060		

GENERAL NOTES

FOR PRELIMINARY PLAN QUANTITIES OF BITUMINOUS MATERIALS AND COVER COAT MATERIALS, THE FOLLOWING RATES OF APPLICATION WERE USED:

PRIME COAT (MC-70) # .30 GALS./SQ.YD.
 TACK COAT DILUTED EMUL. ASPH. (CSS-1H) # .10 GALS./SQ.YD. (DILUTED)
 BITUMINOUS PAVEMENT # 110 LBS. PER SQ.YD./INCH
 PLANT MIXED SEAL COAT # 110 LBS. PER SQ.YD./INCH

DILUTED EMULSIFIED ASPHALT FOR TACK COAT SHALL CONSIST OF 1 PART EMULSIFIED ASPHALT AND 1 PART WATER.

RATES OF APPLICATION SHALL BE AS DETERMINED BY THE ENGINEER AT THE TIME OF APPLICATION.

THE FOLLOWING SHALL BE FURNISHED WITH EACH BITUMINOUS PAYER:

1. A SKI TYPE DEVICE AT LEAST 30 FEET IN LENGTH.

ANY LAYER OF BITUMINOUS PAVEMENT THAT IS TO HAVE A SUCCEEDING LAYER PLACED THEREON SHALL BE COMPLETED FULL WIDTH BEFORE SUCCEEDING LAYER IS PLACED.
 ALL LONGITUDINAL PAVEMENT JOINTS SHALL BE PROTECTED TO PREVENT BREAKDOWN OF PAVEMENT EDGES.

ROAD APPROACHES WHICH REQUIRE BITUMINOUS PAVEMENT SHALL BE CONSTRUCTED TO A THICKNESS EQUAL TO THAT OF THE ADJACENT ROADWAY AS FOLLOWS:

PUBLIC APPROACHES AND ENTRANCES TO BUILDINGS OR RESIDENCES SHALL BE PAVED 50 FEET OUT FROM EDGE OF SHOULDER OR TO THE RIGHT OF WAY LINE, WHICHEVER IS LESS. FIELD ENTRANCES SHALL BE PAVED 4 FEET OUT FROM EDGE OF SHOULDER.

IT IS ESTIMATED THAT 1200 HOURS OF FLAGGING AND 75 DAYS OF TRAFFIC CONTROL SUPERVISION FOR CONTROLLING TRAFFIC WILL BE REQUIRED FOR THIS PROJECT.

CONCRETE PIPE JOINT FASTENERS AS SHOWN ON M STANDARD ARE REQUIRED ON:

- ALL CONCRETE CULVERT INSTALLATIONS INCLUDING SIDE DRAINS.

FLEXIBLE CONDUITS ON THIS PROJECT WITH HELICAL CORRUGATIONS, JOINED BY DIMPLED CONNECTING BAKES, SHALL USE A SEALING COMPOUND OR GASKET WITH THE CONNECTING BAND.

IT IS ESTIMATED THAT 150 HOURS OF DOZING WITH A POWER CRAWLER TYPE TRACTOR WILL BE REQUIRED.

IT IS ESTIMATED THAT 111,400 SQ. YDS. OF RECONDITIONING WILL BE REQUIRED ON EASTBOUND LANES STA. 400+00 TO 35+, THRU THE SOUTH TUNNEL, AND STA. 132+ TO 155+00, ON BOTH LOOP ROADS, ON ALL NEW PARKING AREAS, AND ON THE S.W. RAMP TO U.S. 6.

IT IS ESTIMATED THAT STRUCTURE NO. F-13-P WILL REQUIRE 1,297 SQ. YDS. OF WATER-PROOFING (MEMBRANE).

FOR THE TUNNEL INTERIOR, THE DIVISION WILL ESTABLISH PROFILE GRADE CONTROLS WHICH WILL SERVE AS A GUIDE TO THE CONTRACTOR IN THE PLANING AND PAVING OPERATIONS.

PAYERS CAPABLE OF OPERATING FROM WIRE LINE CONTROLS SHALL BE FURNISHED BY THE CONTRACTOR FOR THIS WORK.

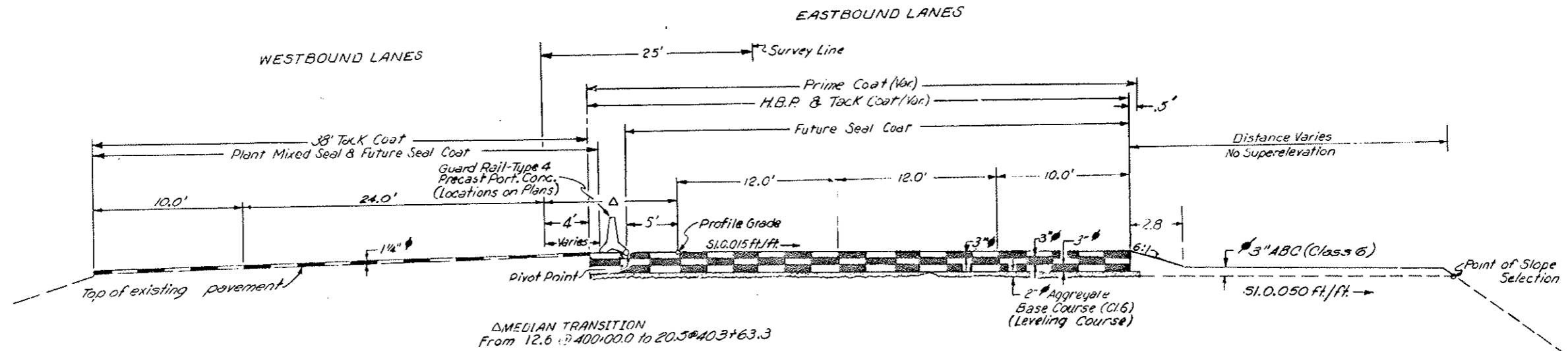
TYPICAL SECTIONS

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	3	102

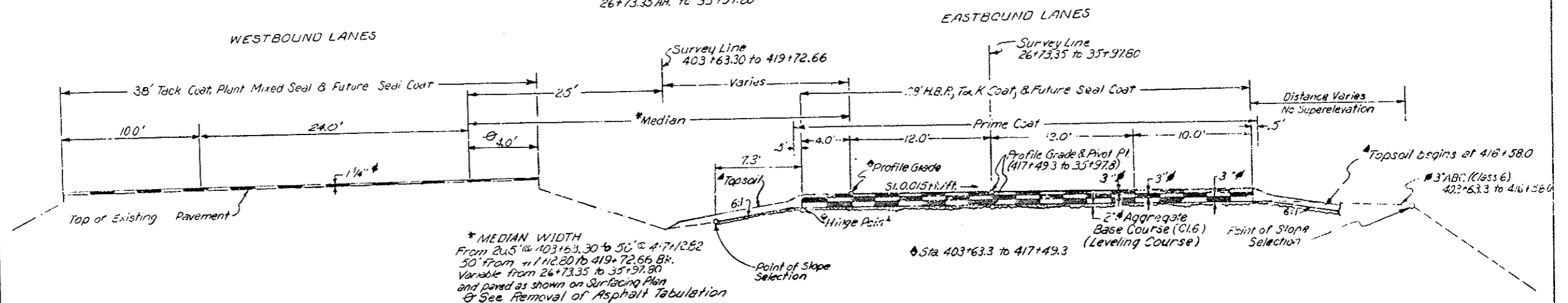
AS INSTRUMENTED

NO. REVISIONS 12-22-80

SECTION "A" 400+00.0 to 403+63.3



SECTION "B" 403+63.30 to 419+72.66 BK. = 26+73.35 AH. to 35+97.80



◆ Approximate Thickness

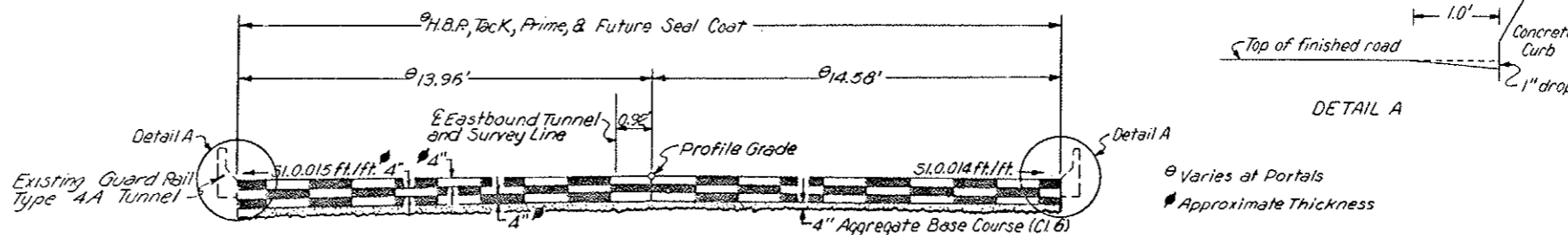
▲ For Topsoil Locations see
Topsoil Tabulation

TYPICAL SECTIONS

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	4	102
AS CONSTRUCTED				
NO REVISIONS		REVISED	VOID	

SECTION "C"

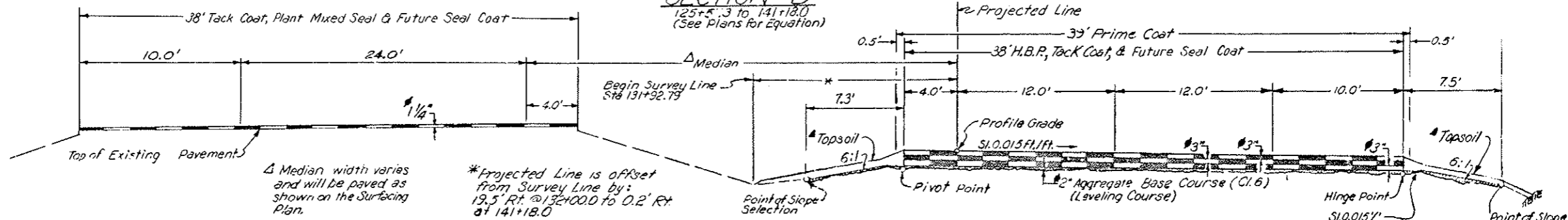
35+97.8 TO 125+57.3
 Tunnel Section
 EASTBOUND LANES



WESTBOUND LANES

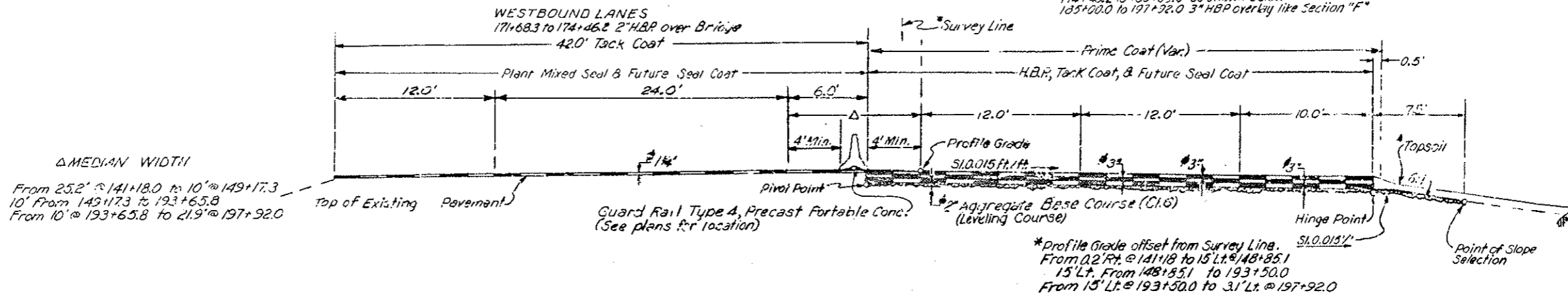
SECTION "D"

125+57.3 TO 141+18.0
 (See Plans for Equation)



SECTION "E"

141+18.0 TO 197+92.0
 (Except as Noted)

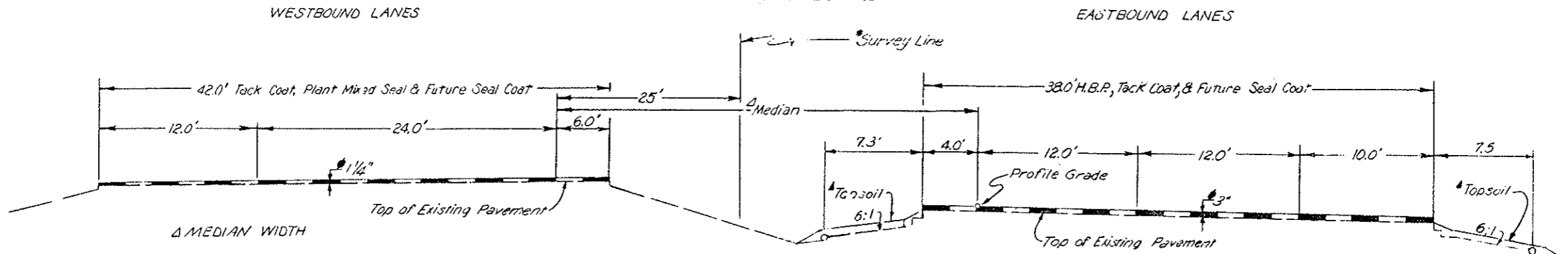


22"
11"
11"
8.5"
11"
17"
22"

TYPICAL SECTION

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	5	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 12-22-20	VOID	

SECTION "F"
 197+92.0 to 215+00.0



Δ MEDIAN WIDTH
 From 21.9' @ 197+92.0 to 50' @ 204+71.4
 50' From 204+71.4 to 215+00.0

*E.B. Profile Grade Line is offset from the Survey Line by the following:
 From 3.1' Lt. @ 197+92.0 to 25' Rt. @ 204+71.4
 25' Rt from 204+71.4 to 215+00

- ◆ Approximate Thickness
- ▲ For Topsoil Locations see Topsoil Tabulation

Material shall be placed in separate courses at the following approximate rates per 100 lin. ft. of roadway

TYPICAL SECTION	TOP LAYER TONS	MIDDLE LAYER TONS	BOTTOM LAYER TONS	BASE COURSE TONS	PLANT MIXED SEAL COAT TONS
A	74	78	78	48	29
B	70	70	70	59	29
C	70	70	70	64	
D	70	70	70	59	29
E	70	70	70	43	32
F	70				34
Ramps	54		54	40	32
Loop Roads S.H. 6	46		46	29	25

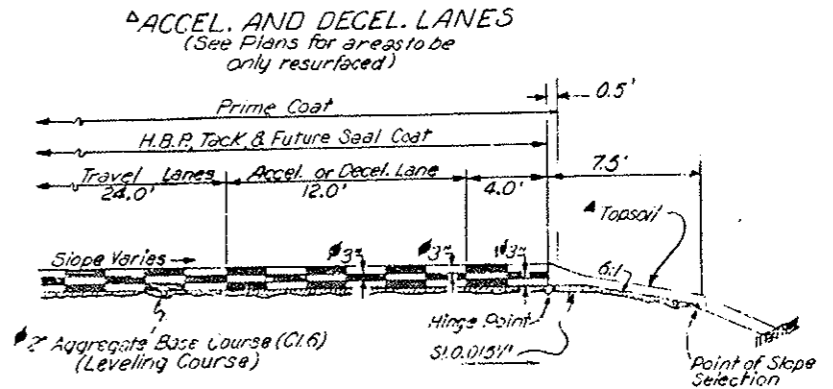
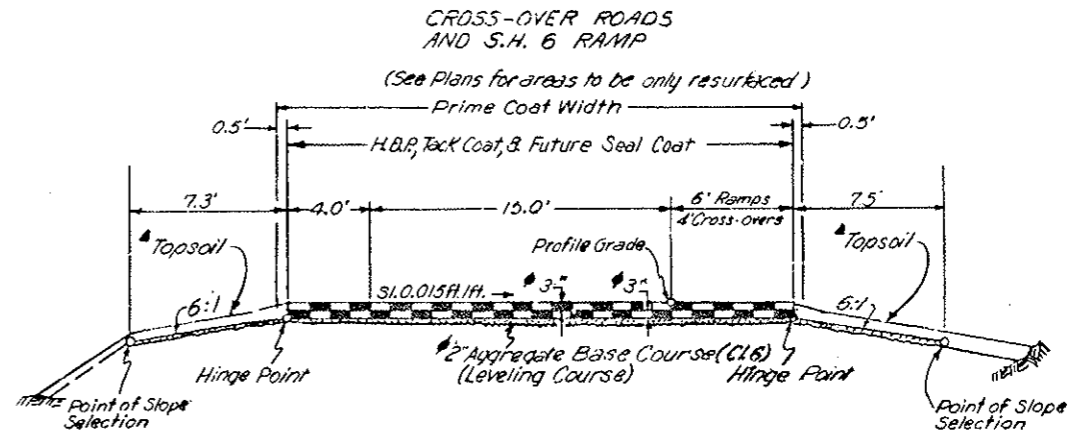
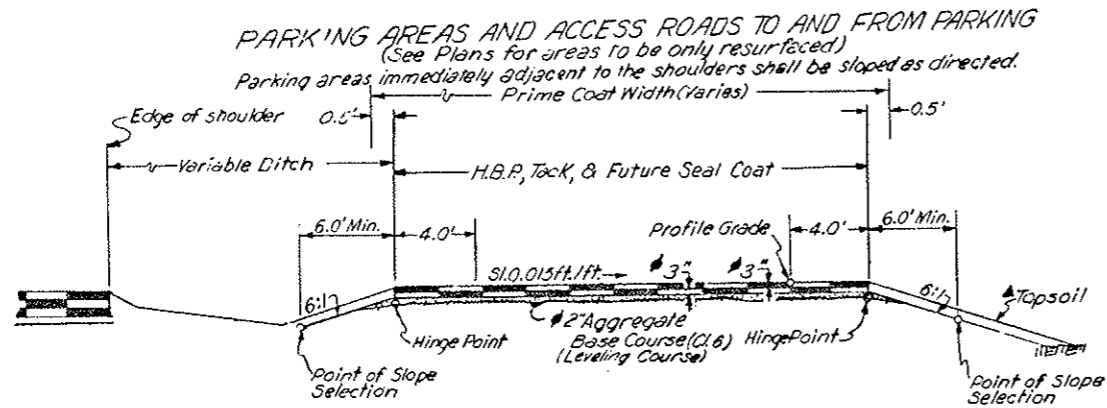
The rates shown have been determined from information available at the time of design. Rates should be adjusted during construction to obtain the required approximate thickness.

Pavement layer thickness may be changed by the Engineer during Construction.

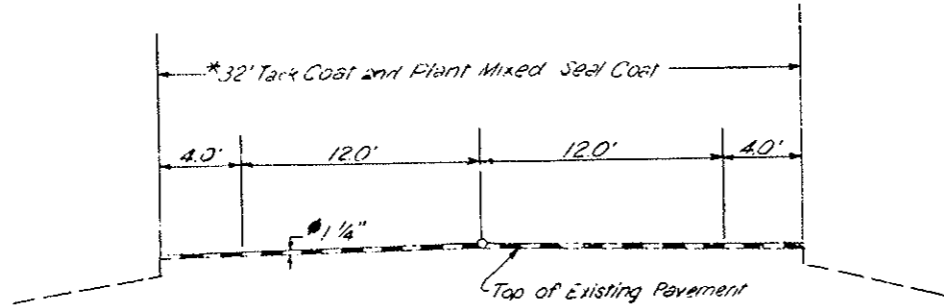
◆ 3" H.B.P. Overlay

TYPICAL SECTIONS

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	6	102
AS CONSTRUCTED				
NO REVISIONS	2	REVISED		VOID



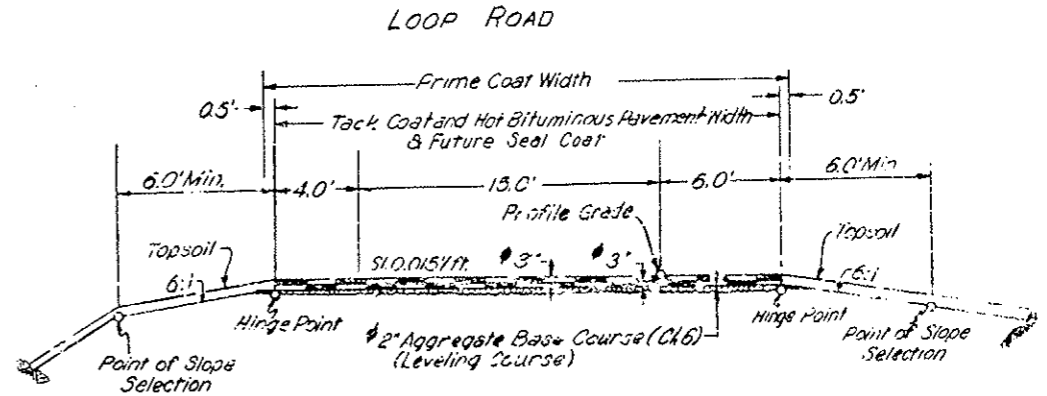
S.H. 6
 147+00.0 To 196+79.0



* Ramps between S.H. 6 and W.B. I-70 are of variable width.

• Approximate Thickness

▲ For Topsoil Locations see Topsoil Tabulation.



22
 11
 11
 9.8
 0.5"
 11"
 17"
 22"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(8+220	6A	102
AS CONSTRUCTED				
NO REVISIONS		REVISED	2-22-80	VOID

CONTRACT MODIFICATION ORDERS FINAL SUMMARY

C.M.O. NO.	DESCRIPTION OF ITEM	PROJECTED AMOUNT		FINAL AMOUNT	FUNDING
		ESTIMATE AMOUNT	ACCUM. AMOUNT		
1	FA-02, MINOR CONTRACT REVISION ORDER (0272) LINE ITEMS 1 THRU 35	\$ 50,000.00	\$ 50,000.00		
	LINE ITEM 1 - REMOVAL OF DEAD ANIMAL	\$ 75.00	\$ 75.00	\$ 75.00	NON-PARTICIPATING
	LINE ITEM 2 - EXPLORATORY EXCAVATION - (DELETED BY C.M.O. 6, * 7790)	\$ 2,500.00	\$ 2,575.00	\$ 0.00	DELETED BY C.M.O. 6
	LINE ITEM 3 - BLADING HRS.	\$ 1,100.00	\$ 3,675.00	\$ 165.00	PARTICIPATING
	LINE ITEM 4 - FOUNDATION REMOVAL	\$ 1,000.00	\$ 4,675.00	\$ 1,736.28	"
	LINE ITEM 5 - SEWER REPAIR	\$ 600.00	\$ 5,275.00	\$ 2,162.16	"
	LINE ITEM 6 - DRAGLINE HRS.	\$ 925.00	\$ 6,200.00	\$ 4,486.25	"
	LINE ITEM 7 - ADJUST MANHOLE, STA. 131 +	\$ 800.00	\$ 7,000.00	\$ 319.42	"
	LINE ITEM 8 - REMOVE ASPHALT, BRIDGE F-13-0	\$ 2,000.00	\$ 9,000.00	\$ 2,111.79	NON-PARTICIPATING
	LINE ITEM 9 - BRIDGE DECK REPAIR, F-13-0	\$ 2,000.00	\$ 11,000.00	\$ 4,570.42	"
	LINE ITEM 10 - BRIDGE JOINT REPAIR, F-13-0	\$ 1,000.00	\$ 12,000.00	\$ 756.61	PARTICIPATING
	LINE ITEM 11 - DROP INLET AT ENGINEERING FACILITY	\$ 1,000.00	\$ 13,000.00	\$ 2,339.42	"
	LINE ITEM 12 - JUNCTION BOX, LEFT STA. 130	\$ 1,500.00	\$ 14,500.00	\$ 2,984.17	"
	LINE ITEM 13 - LOWER DROP INLET, STA. 171 + (DELETED BY C.M.O. 14, * 7876)	\$ 1,400.00	\$ 15,900.00	\$ 0.00	DELETED BY C.M.O. 14
	LINE ITEM 14 - WIRING FOR TRAFFIC SIGNALS	\$ 1,500.00	\$ 17,400.00	\$ 2,659.58	PARTICIPATING
	LINE ITEM 15 - WATER VALVE MANHOLE, W. P. LOOP RD., STA. 11+ RT.	\$ 2,000.00	\$ 19,400.00	\$ 1,627.70	"
	LINE ITEM 16 - ADJUST MEDIAN INLETS (DELETED BY C.M.O. 14, * 7876)	\$ 2,000.00	\$ 21,400.00	\$ 0.00	DELETED; PLACED ON C.M.O. 14
	LINE ITEM 17 - ADJUST GAS VALVE COVERS	\$ 1,500.00	\$ 22,900.00	\$ 443.73	PARTICIPATING
	LINE ITEM 18 - RESHAPE SLOPE E. P. LOOP ROAD - (DELETED BY C.M.O. 13, * 7955)	\$ 1,000.00	\$ 23,900.00	\$ 0.00	DELETED BY C.M.O. 13
	LINE ITEM 19 - REMOVE 30' TYPE 4 BARRIER, STA. 350	\$ 500.00	\$ 24,400.00	\$ 134.90	PARTICIPATING
	LINE ITEM 20 - DELINEATORS FOR TYPE 4 BARRIERS	\$ 1,500.00	\$ 25,900.00	\$ 1,334.34	"
	LINE ITEM 21 - CREDIT FOR WOOD SIGN POSTS	-\$ 243.00	\$ 25,657.00	-\$ 85.80	"
	LINE ITEM 22 - REMOVE 4 LOAD TYPE 4 BARRIERS	\$ 1,000.00	\$ 26,657.00	\$ 3,026.38	NON-PARTICIPATING
	LINE ITEM 23 - ASPHALT REJUVENATOR	\$ 1,500.00	\$ 28,157.00	\$ 848.50	PARTICIPATING
	LINE ITEM 24 - ALUMINUM POLE BASE	\$ 150.00	\$ 28,307.00	\$ 132.26	"
	LINE ITEM 25 - SERVICE RISER 4 DISCONNECT	\$ 550.00	\$ 28,857.00	\$ 537.48	"
	LINE ITEM 26 - PARSHALL FLUME	\$ 1,000.00	\$ 29,857.00	\$ 201.61	"
	LINE ITEM 27 - ADJUST INLET GRATES 4 FRAMES	\$ 1,300.00	\$ 31,157.00	\$ 1,225.91	"
	LINE ITEM 28 - TEMPORARY SIGNING	\$ 1,500.00	\$ 32,657.00	\$ 4,264.54	"
	LINE ITEM 29 - REMOVE 18" C.S.P.	\$ 1,500.00	\$ 34,157.00	\$ 1,470.62	NON-PARTICIPATING
	LINE ITEM 30 - RESET SIGN NO. 74 (DELETED BY FORM 105; PAID UNDER BID ITEM 210)	\$ 3,500.00	\$ 37,657.00	\$ 0.00	DELETED; PAID BY BID ITEM
	LINE ITEM 31 - RESET LIGHT AT U.S. 6	\$ 2,500.00	\$ 40,157.00	\$ 0.00	DELETED; NO BILL
	LINE ITEM 32 - PATCHING ON U.S. 6	\$ 4,500.00	\$ 44,657.00	\$ 5,397.78	PARTICIPATING
	LINE ITEM 33 - LAND PLANE USE	\$ 400.00	\$ 45,057.00	\$ 390.75	"
	LINE ITEM 34 - TRANSPORTATION COSTS FOR BARRIER	\$ 120.00	\$ 45,177.00	\$ 866.91	"
	LINE ITEM 35 - FURNISHED AUTHORIZED PERSONNEL SIGNS	\$ 150.00	\$ 45,327.00	\$ 293.25	"

22"
 11"
 11"
 9"
 8.5"
 11"
 17"
 22"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	68	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 12-22-82	VOID	

CONTRACT MODIFICATION ORDERS FINAL SUMMARY

C.M.O. NO.	DESCRIPTION OF ITEM	PROJECTED AMOUNT	FINAL AMOUNT	FUNDING
2, NO. 7331	INCORPORATION OF COPPER MOUNTAIN PIT INTO PROJECT LIMITS.	NO COST TO PROJECT	\$ 0.00	
3, NO. 5000	MODIFICATION OF 401.08(a)5 METHOD B OF THE STANDARD SPECIFICATIONS.	-\$4,560.00	-\$4,560.00	
4, NO. 4961	TEMPORARY SUSPENSION OF PG. 91 OF THE SPECIAL PROVISIONS.	-\$1,107.00	-\$1,107.00	PARTICIPATING
5, NO. 7786	ELIMINATE DIRECT BURIAL CABLE & 2" ELEC. CONDUIT; SUBSTITUTE 1 1/2" ELEC. CONDUIT.	-\$75,200.00	-\$38,481.13	"
6, NO. 7790	ADDITIONAL WORK DUE TO SUBSURFACE CONDITIONS AT 18" C.M.P., STA. 124+39.4 TO 126+95.	\$7,033.23	\$7,033.23	"
7, NO. 4952	MODIFICATION OF STANDARD SPECIFICATION 410.03(d)(e); DUMPING & ROLLING PLANT MIX SEAL.	-\$1,600.00	-\$1,600.00	"
8, NO. 7791	MODIFICATION OF 46 MANHOLE RINGS	\$6,756.10	\$6,756.10	"
9, NO. 7796	CONTRACT TIME EXTENSION	NO COST TO PROJECT	\$0.00	"
10, NO. 7797	EAST PORTAL DELAY	\$9,968.53	\$9,970.00	"
11, NO. 7799	WEST PORTAL ASPHALT REMOVAL	\$27,354.07	\$27,354.07	NON-PARTICIPATING
12, NO. 7954	8" PCSP AT FROST HEAVE, STA. 215 WEST BOUND LANE	\$5,640.00	\$11,298.80	PARTICIPATING
13, NO. 7955	REPLACE MATERIAL DAMAGED BY WINTER OPERATIONS & EROSION	\$15,000.00	\$10,375.94	PARTICIPATING (PLUS \$10,364.51, NON-PARTICIPATING)
14, NO. 7876	ADJUST DROP INLETS BUILT ON PRIOR PROJECTS, I 70-3(34)220 & I 70-3(81)220	\$6,247.35	\$6,247.35	"
15, NO. 7882	PARSHALL MEASURING FLUME, 30 DAY RECORDER	\$1,293.75	\$1,293.75	"
F/A-03	ON THE JCB TRAINEE	\$3,200.00	\$1,165.60	"

27
 11
 11
 98
 85"
 11"
 17"
 22"

(R-2) Revised Quantities 5-18-79 - E.B. (R-1) Revised Quantities 5-7-79 - E.B.

SUMMARY OF APPROXIMATE QUANTITIES

AS CONSTRUCTED
NO REVISIONS REVISED VOID

FEDERAL ROAD DISTRICT NO. DIVISION PROJ. NO. SHEET NO. TOTAL SHEETS
VII COLORADO 170-3(84)220 7 102

INDEX BOOK PAGE SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		TUNNEL	BRIDGE	BRIDGE	PROJECT TOTALS	PROJECT FINAL TOTALS	DIFF.	FINAL %
				FINAL TOTALS	STR. NO. F-13-X	STR. NO. F-13-O	STR. NO. F-13-P					
1 1 305	202	Removal of Structures and Obstructions	LS	1					1	1	0	100%
1 2 305	202	Removal of Delineator	Each	25	45				25	45	+20	180%
(R-1) 1 3 305	202	Removal of Asphalt Mat	Sq. Yd.	7,727	9156				7,727	9156	+1429	118%
1 4 305	202	Removal of Pavement Marking	Sq. Ft.	3,000	10,837				3,000	10,837	+7837	361%
1 5 305	202	Removal of Light Standard	Each	17	17				17	17	0	100%
1 6 305	202	Removal of Ground Sign	Each	48	53				48	53	+5	110%
1 7 305	202	Removal of Sign Panel	Each	2					2	2	0	100%
1 8 305	202	Removal of Traffic Signal Face	Each	2					2	2	0	100%
1 9 305	202	Removal of Pedestal Pole	Each	2					2	2	0	100%
(R-1) 1 10 305	202	Removal of Fence	Lin. Ft.	1,917	20				1,917	20	-1897	1%
1 11 305	202	Removal of Guard Rail Type 3	Lin. Ft.	450	480				450	480	+30	107%
1 12 305	202	Removal of Guard Rail Type 5	Lin. Ft.	1,000					1,000	1,000	0	100%
1 13 305	202	Plug Culvert	Each	2	3				2	3	+1	150%
(R-2) 1 14 305	203	Unclassified Excavation (Haul)	Cu. Yd.	9,236	19,391				9,236	19,391	+10,155	210%
1 15 305	203	Rock Fill (Haul)	Cu. Yd.	3,840	2,611				3,840	2,611	-1,229	68%
1 16 305	203	Compaction (AASHTO T99)	Cu. Yd.	2,392	2,483				2,392	2,483	+91	104%
1 17 305	203	Dozing	Hour	150	113.75				150	113.75	-36.25	76%
(R-2) 1 18 305	206	Structure Excavation	Cu. Yd.	3,119	3,782				3,119	3,782	+663	184%
(R-2) 1 19 305	206	Structure Backfill (Class 1)	Cu. Yd.	1,070	1,377				1,070	1,377	+307	129%
1 20 305	206	Filter Material (Class B)	Cu. Yd.	361	661				361	661	+300	163%

27
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8.5
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17
22

SUMMARY OF APPROXIMATE QUANTITIES

(R-1) Revised Quantities 5-18-79 E.B.

AS CONSTRUCTED
NO REVISIONS REVISED VOID

FEDERAL ROAD DISTRICT NO. VIII COLORADO DIVISION PROJ. NO. 170-3(84)220 SHEET NO. 8 TOTAL SHEETS 102

INDEX BOOK PAGE SHEET	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		TUNNEL	TUNNEL	BRIDGE	BRIDGE	BRIDGE	PROJECT TOTALS	PROJECT FINAL TOTALS	DIFF.	FINAL %	
				FINAL	TOTALS	STR. NO. F-13-X	STR. NO. F-13-X	STR. NO. F-13-0	STR. NO. F-13-P	STR. NO. F-13-P					STR. NO. F-13-P
1 21 305	207	Topsoil	Cu.Yd.	16,527	17,590						16,527	17,590	+1013	106%	
1 22 305	209	Wetting	M Gal.	1,115	780						1,115	780	-335	70%	
1 23 305	210	Reset Light Standard	Each	8							8	8	0	100%	
1 24 305	210	Reset Ground Sign	Each	21							21	21	0	100%	
1 25 305	210	Reset Illuminated Ground Sign	Each	1							1	1	0	100%	
1 26 305	210	Reset Overheight Vehicle Detector	Each	1							1	1	0	100%	
1 27 305	210	Reset Guard Rail Type 4	Lin. Ft.	164	524						164	524	+360	317%	
1 28 305	212	Seeding (Native)	Lb.	1040	1284.0						1040	1284.0	+244.0	123%	
1 29 305	212	Fertilizer	Lb.	7,800	3084.0						7,800	3084.0	+1284.0	116%	
1 30 305	213	Mulching	Ton	52	52.17						52	52.17	+0.17	100%	
1 31 305	213	Soil Retention Blanket (Jute)	Sq.Yd.	82,215	84,451						82,215	84,451	+2,236	103%	
2 32 305	304	Aggregate Base Course (Class 6)(Haul)	Ton	12,686	14,472.40	5,734	5325.75				18,420	20,238.35	+1,818.35	110%	
2 33 305	306	Reconditioning	Sq.Yd.	111,400							111,400	111,400	0	100%	
2 34 305	403	Hot Bituminous Pavement (Grading C)(Haul & Asphalt)	Ton	41,389	38,736.70	18,816	18,933.35			45	142.0	60,350	57,857.05	+2,492.95	120%
2 35 305	410	Piant Mixed Seal (Type B)(Haul & Asphalt)	Ton	6,133	7505.78			110	109.20		6,243	7614.98	+831.78	112%	
2 37 305	411	Emulsified Asphalt (CSS-1H)	Gal.	15,996	10,413	2,841	2134	59	59		18,896	14,010	-4,886	67%	
2 39 305	411	Liquid Asphaltic Material (MC-77)	Gal.	33,936	14,244	8,524	0				42,460	14,244	-28,216	34%	
2 40 305	506	Riprap	Cu.Yd.	18							18	18	0	100%	
2 41 305	507	Concrete Slope and Ditch Paving (Reinforced)	Cu.Yd.	13.8	19						13.8	19	+5.2	135%	
2 42 305	515	Waterproofing (Membrane)	Sq.Yd.							1,297	1,297				
(R-1) 2 44 305	601	Concrete Class A (Box Culvert)	Cu.Yd.	82							82				
2 43 305	601	Concrete Class A (Miscellaneous)	Cu.Yd.	20							20				
2 45 305	601	Concrete Class A (Wall)	Cu.Yd.	35							35				
2 46 305	601	Concrete Veneer	Sq.Ft.	358	432						358	432	+74	121%	
(R-1) 2 47 305	602	Reinforcing Steel	Lb.	9,327							9,327				
2 48 305	603	72 Inch Reinforced Concrete Pipe	Lin.Ft.	15							15				
2 49 305	603	18 Inch Corrugated Steel Pipe	Lin.Ft.	506	1024						506	1024	+518	202%	
2 50 305	603	24 Inch Corrugated Steel Pipe	Lin.Ft.	570	657						570	657	+87	115%	
2 51 305	603	36 Inch Corrugated Steel Pipe	Lin.Ft.	488							488	488	0	100%	
2 52 305	603	18 Inch Steel End Section	Each	1							1	6	+5	600%	
2 53 305	603	Place 24 Inch Corrugated Steel Pipe	Lin.Ft.	260							260	137	-123	53%	

8.22
8.13"
11"
17"
22"

(R-1) Revised Quantities 5-7-79 E.B.
SUMMARY OF APPROXIMATE QUANTITIES
 FINAL

AS CONSTRUCTED

NO REVISIONS REVISED VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	9	102

INDEX	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY		TUNNEL	TUNNEL	BRIDGE	BRIDGE	PROJECT TOTALS	PROJECT FINAL TOTALS	DIFF.	FINAL %
				ROADWAY	FINAL TOTALS	STR. NO. F-13-X	STR. NO. F-13-X FINAL TOTALS	STR. NO. F-13-O	STR. NO. F-13-P				
2 54 305	604	Inlet Type C (5 Foot)	Each	5	4					5	5	0	100%
2 55 305	604	Place Inlet	Each	3	4					3	4	+1	133%
2 56 305	604	Manhole Slab Base (5 Foot)	Each	1	0					±	0	-1	0%
2 57 305	604	Manhole Box Base (10 Foot)	Each	2	2					2	2	0	100%
2 58 305	604	Manhole Box Base (15 Foot)	Each	2	2					2	2	0	100%
2 59 305	604	Inlet Grating and Frame Special	Each			113	113			113	113	0	100%
2 60 305	604	Manhole Ring and Cover	Each			46	46			46	46	0	100%
2 61 305	605	8 Inch Perforated Corrugated Steel Pipe	Lin. Ft.	1,000	1,440					1,000	1,440	+440	144%
2 62 305	606	Guard Rail Type 3 (6-3 Post Spacing)	Lin. Ft.	6,975	7,175					6,975	7,175	+200	103%
2 63 305	606	Guard Rail Type 4 Special	Lin. Ft.	10	10					10	10	0	100%
2 64 305	606	Guard Rail Type 4 (Precast-Portable)	Lin. Ft.	10,620	11,480					10,620	11,480	+860	108%
2 65 305	606	End Anchorage Type 3D	Each	6	6					6	6	0	100%
2 66 305	606	End Anchorage Type 3E	Each	6	6					6	6	0	100%
2 67 305	607	20 Foot Gate Driveway	Each	1	1					1	1	0	100%
2 68 305	612	Delineator (Type I)	Each	76	167					76	167	+91	222%
2 69 305	612	Delineator (Type II)	Each	65	82					65	82	+16	124%
2 70 305	612	Delineator (Type III)	Each	3	6					3	6	+3	200%
2 71 305	612	Steel Guard Post	Each	291	283					291	283	-8	97%
2 72 305	613	3/4 Inch Electrical Conduit	Lin. Ft.	70	175					70	175	+105	250%
(R-1) 2 73 305	613	2 Inch Electrical Conduit	Lin. Ft.	1,440	1,022					1,440	1,022	-418	71%
(R-1) 2 74 305	613	Direct-Burial Cable	Lin. Ft.	4,690	2,301					4,690	2,301	-2,389	49%
2 75 305	613	Wiring	LS	1	1					1	1	0	100%
2 76 305	613	Luminaire High Pressure Sodium (47,000 Lumen)	Each	8						8			
2 77 305	613	Luminaire High Pressure Sodium (Wall Type) (12,000 Lumen)	Each					1	1	2			
2 78 305	613	Luminaire High Pressure Sodium (40,000 Lumen)	Each	16						15			
2 79 305	613	Light Standard Steel High Mast (100 Foot)	Each	4						4			

22
 22
 11
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 38
 3.5"
 11"
 17"
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SUMMARY OF APPROXIMATE QUANTITIES

AS CONSTRUCTED
 NO REVISIONS REVISED 12-22-82 VOID

FEDERAL ROAD DISTRICT NO. VIII DIVISION COLORADO PROJ. NO. I 70-3(81)220 SHEET NO. 10 TOTAL SHEETS 102

INDEX	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY	ROADWAY FINAL TOTALS	TUNNEL STR. NO. F-13-X	BRIDGE STR. NO. F-13-O	BRIDGE STR. NO. F-13-P	PROJECT TOTALS	PROJECT FINAL TOTALS	DIFF.	FINAL %
2 80 305	613	Concrete Foundation Pad	Each	8	8				8	8	0	100%
2 81 305	613	High Mast Foundation	Each	4	4				4	4	0	100%
2 82 305	613	Lowering Device	Each	4					4			
2 83 305	613	Portable Power Unit	Each	1	1				1	1	0	100%
2 84 305	614	Flagging	Hour	1,200	5306				1,200	3,306	+2,106	276%
2 85 305	614	Traffic Control Supervision	Day	75	138.75				75	138.75	+63.75	185%
2 86 305	614	Sign Panel (Class I)	Sq. Ft.	204	201				204	201	-3	98.5%
2 87 305	614	Sign Panel (Class II)	Sq. Ft.	465	484				465	484	+19	104%
2 88 305	614	Sign Panel (Class III)	Sq. Ft.	819-824	850				819 824	850	+31	103%
2 89 305	614	Timber Sign Post 4x4 Inch	Lin. Ft.	293	280				293	280	-13	96%
2 90 305	614	Timber Sign Post 6x6 Inch	Lin. Ft.	405	405				405	405	0	100%
2 91 305	614	Steel Sign Post (U-2)	Lin. Ft.	211	211				211	211	0	100%
2 92 305	614	Steel Sign Post (1.75 x 1.75 Inch Tubing)	Lin. Ft.	100	100				100	100	0	100%
2 93 305	614	Steel Sign Post (2x2 Inch Tubing)	Lin. Ft.	106	106				106	106	0	100%
2 94 305	614	Steel Sign Post (54 x 7.7)	Lin. Ft.	24	24				24	24	0	100%
2 95 305	614	Steel Sign Post (W6 x 15.5)	Lin. Ft.	89	89				89	89	0	100%
2 96 305	614	Steel Sign Post (W8 x 17)	Lin. Ft.	34	34				34	34	0	100%
2 97 305	614	Steel Sign Post (W10 x 21)	Lin. Ft.	82	116				82	116	+34	142%
2 98 305	614	Steel Sign Post (W10 x 25)	Lin. Ft.	44	44				44	44	0	100%
2 99 305	614	Concrete Footing (Type 2)	Each	6	6				6	6	0	100%
2 100 305	614	Concrete Footing (Type 3)	Each	2	2				2	2	0	100%
2 101 305	614	Concrete Footing (Type 5)	Each	4	6				4	6	+2	150%
2 102 305	614	Concrete Footing (Type 6)	Each	2	2				2	2	0	100%
2 103 305	614	Traffic Signal Face (12-B-B)	Each	5	5				5	5	0	100%
2 104 305	614	Barricade (Type 3 M-A) (Temporary)	Each	8	8				8	8	0	100%

112
 11
 11
 118
 3.5"
 11"
 17"
 22"

(R-1) Addes Field Lab. on 5-18-79 by E.B.

SUMMARY OF APPROXIMATE QUANTITIES

AS CONSTRUCTED
NO REVISIONS REVISED (2,22,82) VOID
FEDERAL ROAD DISTRICT NO. VIII DIVISION COLORADO PROJ. NO. 170-3(84)220 SHEET NO. 11 TOTAL SHEETS 102

INDEX	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY	ROADWAY FINAL TOTALS	TUNNEL STR. NO. F-13-X	TUNNEL STR. NO. F-13-Y	BRIDGE STR. NO. F-13-O	BRIDGE STR. NO. F-13-P	PROJECT TOTALS	PROJECT FINAL TOTALS	DIFF.	FINAL %
2	105	305	614	Construction Traffic Sign (Panel Size A)	Each	19	41			19	41	+22	216%
2	106	305	614	Construction Traffic Sign (Panel Size B)	Each	45	37			45	37	-8	82%
2	107	305	614	Construction Traffic Sign (Panel Size C)	Each	12	8			12	3	-4	66%
2	108	305	614	Vertical Panel	Each	13	74			13	74	+56	411%
2	109	305	614	Advance Warning Flashing or Sequencing Arrow Panel	Each	1	1			1	1	0	100%
2	110	305	614	Traffic Cone	Each	156	200			156	200	+44	128%
2	111	305	614	Traffic Signal Pole Steel (1 Mast Arm)	Each	2	2			2	2	0	100%
2	112	305	615	18 Inch Slide Headgate Special	Each	1	1			1	1	0	100%
2	113	305	615	18x12 Inch Parshall Measuring Flume	Each	1	.9			1	.9	-.1	90%
(R-1) 2	114	305	620	Field Laboratory	Each	1	1			1	1	0	100%
			626	Mobilization	LS	0.90	0.90	0.10	0.10	1	1	0	100%
2	115	305	627	Pavement Marking Paint	Gal.	184	262			184	262	+78	142%
2	116	305	627	Thermoplastic Pavement Marking	Sq. Ft.	38,182	39,513			38,182	39,513	+1,331	103%
2	117	305	627	Preformed Plastic Pavement Marking	Sq. Ft.	5,706	4,343			5,706	4,343	-1,363	76%

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58
8.5"
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SUMMARY OF APPROXIMATE QUANTITIES

AS CONSTRUCTED
 NO REVISIONS REVISED 2-22-84 VOID

FEDERAL ROAD REGION NO. VIII DIVISION COLORADO PROJ. NO. I 70-3 (BA) 220 SHEET NO. 12 TOTAL SHEETS 102

INDEX	CONTRACT ITEM NO.	CONTRACT ITEM	UNIT	ROADWAY	ROADWAY FINAL TOTALS	TUNNEL STR. NO. F-13-X	BRIDGE STR. NO. F-13-O	BRIDGE STR. NO. F-13-P	PROJECT TOTALS	PROJECT FINAL TOTALS	DIFF.	FINAL %
<i>FINAL</i>												
<i>FORCE ACCOUNT</i>												
F-3	F/A01	Erosion Control	F.A.	1	1				1	1	0	100%
E-1	F/A02	Minor Contract Revisions	F.A.	1	1				1	1	0	100%
E16	F/A03	On-The-Job Trainee	Each	4	4				4	4	0	100%
<i>NON-FEDERAL AID</i>												
	410	Plant Mixed Seal (Type B) (Haul & Asphalt)	Ton	540	632.55				540	632.55	+92.55	117%
	411	Emulsified Asphalt (CSS-1H)	Gal.	413	275				413	275	-143	66%
	403	H.B.P. Gr C	Ton	89.55	89.55				89.55	89.55	0	100%
	202	Remove Asphalt Mat - U.S. 6	Sq. Yd.	1,839	1,839				1,839	1,839	0	100%

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FINAL QUANTITY SURFACING PLAN

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	13	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 12-22-80	VOID	

STATION TO STATION	SOURCE	THICKNESS	AGGREGATE BASE COURSE (CEMENT/HAUL)	TONS USED										PLANT MIXED SEAL (TYPE B)	
				HOT BITUMINOUS PAVEMENT (GRADING C) (HAUL & ASPHALT)											
				BOTTOM LAYER					MIDDLE LAYER		TOP LAYER				
				3"	4"	3"	4"	1 1/2"	2"	3"	4"	1 1/2"			
EASTBOUND LANES															
400+00.00 to 403+63.30		2"	189	205.0	312	307.1	312	307.1			312	307.1			
403+63.30 to 419+72.66 Bk.		2"	950	1123.4	1127	1100.43	1127	1100.43			1127	1100.43			
26+73.35 Ah. to 35+97.82		2"	545	647.7	647	576.81	647	576.81			647	576.81			
Through Tunnel															
35+97.82 to 125+57.28		4"	5,734	5825.75			6,272	6319.45					6,272	6319.45	
125+57.28 to 132+93.53 Bk.		2"	434	522.7	515	477.07	515	477.07			515	477.07			
131+89.84 Ah. to 141+18.00		2"	548	638.2	650	619.51	650	619.51			650	619.51			
141+18.00 to 171+68.28		2"	1,617	1727.25	2,227	2174.04	2,227	2174.04			2,227	2174.04			
[171+68.28 to 174+46.21] Bridge Structure No. F-13-P		2"							145	142.0					
174+46.21 to 185+00.00		2"	559	516.54	769	701.67	769	701.67			769	701.67			
185+00.00 to 197+92.00											904	806.45			
197+92.00 to 215+00.00											1,196	1036.14			
WESTBOUND LANES															
400+00.00 to 419+72.66 Bk.	UNDESIGNATED												572	664.16	
26+73.35 Ah. to 35+97.82													368	271.5	
125+57.28 to 132+93.53 Bk.													214	385.7	
131+89.84 Ah. to 141+18.00													269	299.1	
141+18.00 to 171+68.28													976	1000.75	
171+68.28 to 174+46.21													91	108.15	
[174+46.21 to 185+00.00] Bridge Structure No. F-13-O													337	344.55	
185+00.00 to 197+92.00													489	444.15	
197+92.00 to 215+00.00													547	657.4	
215+00.00 to 229+00.00															
Accel. and Decel. Lanes EB Rt. 409+ to 35+	2"	110	128.35	182	177.37			182	177.37			182	177.37		
Accel. and Decel. Lanes WB Lt. 414+ to 417+ 29+ to 33+													32	52.45	
Accel. and Decel. Lanes EB Rt. 128+ to 133+ 135+ to 152+ 204+ to 214+	2"	183	199.80	302	288.38			302	288.38			302	288.38		
Accel. and Decel. Lanes WB Lt. 127+ to 132+ 167+ to 183+	2"	90	107.43	159	154.5			159	154.5			159	154.5		
West Loop Road 2+75 to 23+00	2"	587	652.25	932	888.86							932	888.86		
East Loop Road 315+00 to 340+00	2"	725	742.50	1,150	1036.78							1,150	1036.78		
Sheet Sub-Totals			12,277	13324.38	8,972	8502.52		6,272	6319.45			145	142.0	11,572	10,345.8

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FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(BA)220	14	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 12-22-80	VOID	

FINAL QUANTITY SURFACING PLAN

STATION TO STATION	SOURCE	THICKNESS	AGGREGATE BASE COURSE (CY/HAUL)	TONS USED												PLANT MIXED SEAL (TYPE B)	
				HOT BITUMINOUS PAVEMENT (GRADING C) (HAUL & ASPHALT)				TOP LAYER									
				BOTTOM LAYER		MIDDLE LAYER		1 1/2"		2"		3"		4"			
	3"	4"		3"	4"									1 1/4"			
Pavement Widening of Portal Areas: 31+ to 35+ EB Lt. 31+ to 35+ WB Lt. & Rt.		2"	95 147.61	156 147.09			156 147.09						156 147.09				
125+ to 131+ EB Lt. & Rt. 125+ to 131+ WB Rt. 132+ to 139+ WB Lt.		2"	162 147.53	267 173.7			267 173.7						267 170.7				
Parking Area Lt. including Access Roads 417+ to 29+ Parking Area Rt. including Access Road 415+ to 30+		2"	620 295.32	1035 947.12					346 319.13				1035 947.12				
Parking Area in Median 28+ to 35+		2"	376 378.54	620 574.68									620 574.68				
Parking Area Rt. 33+ to 35+		2"	297 330.81	490 462.6									490 462.6				
Parking Area Lt. 33+ to 35+		2"	221 265.12	365 343.79									365 343.79				
Parking Area Rt. 125+ to 129+		2"	189 248.17	312 277.17									312 277.17				
Parking Area Lt. 125+ to 129+		2"	189 248.17	312 277.17					189 158.22				312 277.17				
Parking Area in Median 125+ to 133+		2"	325 402.16	536 477.79									536 477.79				
Parking Area Lt. including Access Road 133+ to 139+		2"	33 38.33	54 47.89									33 31.23				
Parking Area Rt. 132+ to 134+		2"	148 191.43	245 225.0									245 225.0				
Cross over in Median: West Portal 418+ to 30+		2"	95 114.51	157 151.58									157 151.58				
East Portal 131+ to 135+		2"	95 114.51	157 151.58									157 151.58				
Connection Between Parking Areas & West Loop Road Rt. 30+ to 33+	UNDESIGNATED	2"	197 228.75	324 302.22									324 302.22				
Connection Between Parking Areas & East Loop Road Lt. 129+ to 133+		2"	115 140.45	190 180.0					126 120.72				190 188.98	14 13.65			
S.H. 6 147+00 to 165+00														450 301.15			
S.H. 6 165+00 to 196+79														795 724.23			
EB Ent. Ramp from SH 6 569+79 to 603+39																	
EB Exit Ramp to SH 6 449+00 to 467+60		2"	539 609.05	858 332.43									858 837.43				
WB Exit & Entrance Ramps: 183+ to 184+ Lt. & 170+ Rt. 172+ to 183+ Rt. & Lt.		2"	539 609.05	858 332.43									858 837.43	348 473.725	900 448.30		
Widened Basin Pt 399+00 to 417+EB		3"	648 674.50				163 157.35						279 264.50				
Widening for Guard Rail		2"	153 177.38	279 268.5									279 268.5				
From Structure Quantities Estimated for Irregularities		2"	259 220.55						244 226.66				336 314.16	*19 25.55			
			163 175.29											1022 1510.15			
			5143 4974.04	5896 5464.56			586 484.14		1467 1366.31				6520 6041.16	459 331.40	2498 2246.18		
Sheet Sub-Totals			12,698 14,472.40				41,389 36,786.70										
Roadway Totals			5,734 5825.95				18,816 18,758.35										
Structure No. F-13-X Totals							145 172.0										

Stabilization is based on the following:

	Main Linc	Ramps	Parking Areas	Loop Roads
Serviceability Index	2.5	2.5	2.5	2.5
18" EDLA	521	58	38	38
Regional Factor	5.0	5.0	5.0	5.0 (R-1)
Subgrade R Value	50	50	50	50
WSN	3.82	2.53	2.34	2.34 (R-1)
Strength Coefficients:				
Hot Bituminous Pavement	0.44	0.44	0.44	0.44
Base Course (Leveling)	None			

Roadway Total Federal Aid	6,133 7421.23
*Roadway Total Non-Federal Aid	540 632.55
*Structure No. F-13-D Total	110 133.7

FINAL QUANTITY STRUCTURE QUANTITIES

(R-2) Revised Quantities 5-18-79 E.B.

(R-1) Revised Fencing Quantities and Note 5-7-79 E.B.

AS CONSTRUCTED
NO REVISIONS REVISED 12-22-82 VOID

FEDERAL ROAD DISTRICT NO. VIII DIVISION COLORADO PROJ. NO. I70-3(84)220 SHEET NO. 15 TOTAL SHEETS 102

INDEX	BOOK	PAGE	SHEET	LOCATION	REMOVAL OF STRUCTURE EACH	UNCLASSIFIED EXCAVATION		WETTING M GAL.	STRUCTURE EXCAVATION CUBIC YARD	STRUCTURE BACKFILL CUBIC YARD	ROCK FILL (HAUL) CU.YD.	AGGREGATE BASE COURSE CLASS 5 TON	HOT BITUMINOUS PAVEMENT TON	FILTER MATERIAL (CLASS B) CU.YD.	CONCRETE (CLASS A) CUBIC YARD	REINFORCING STEEL LB.	INLET TYPE C EACH	CULVERT PIPE				CONCRETE SLOPE AND DITCH PAVING (REINF.) CU.YD.	END SECTION EACH	MISCELLANEOUS	
						EXCAV.	EMB.											CORP. T-99	LINEAR FEET						
																			18"	24"	36"				48"
112	305			404+ to 414+		4949			232		3840													3 Inch Perforated Corrugated Steel Pipe Underdrain 1000 Lin. Ft.	
112	305			404+ to 414+ Med		3367					2611													9-Cu. Yd. Riprap	
112	305			417+22.1		44	77	77	89	33															
112	305			Sta 407 US 6 Off-ramp		34	3	3	62	65														8" Perf. C.S.P. Underdrains 440 Lin. Ft.	
112	305			26+ to 28+ 28+ to 34+				37	154	104														(R-1) Removal of Fence 20' 477 Lin. Ft.	
112	305			31+40		70	70	70	119	48														1-Manhole Slab Base (5 Foot)	
112	305			Sta 33 to 36 Med		145	145	145	213	63															
112	305			(R-1) Reel Areas 35+ E.B.		1773																			
112	305			West Loop Rd. Approaches & Driveways 6+9+, 12+, 15+					10	13		31	101												
112	305			West Portal Engr. Office 1676				37	134	81		23	74												
112	305			East Loop Rd. Approaches & Driveways 319+, 328+ East Loop Rd. 315+ East Loop Rd. 327+					347			17	57											Removal of Fence 60 Lin. Ft. Masonry Veneer 358 Sq. Ft.	
112	305			125+ WB 125+																				4 1/2 yd concrete for manhole Removal of Fence 1380 Lin. Ft.	
112	305			East Portal Area 125+ to 133+				163	45	173														1-Manhole Box Base (10 Foot)	
112	305			126+ to 131+		1232	1232	49.3	1836	422														2-Manhole Box Base (15 Foot)	
112	305			126+ to 132+		3500																		1-Parshall Measuring Flume	
112	305			131+84 N.P.K. Area, E. Portal		4115	11	11	21	15														1-Plug Culvert	
112	305			131+85					43	22														1-18 Inch Slide Headgate Special	
112	305			132+ 132+70 132+25 134+25		37	37	37	15.0	37														1-Plug Culvert	
112	305			134+		625	416	416	16.6	13		188	104											9-Cu. Yd. Riprap	
112	305			135+25		726	2	2	20	15															
112	305			140+00 138+00 138+92 170+		125			51	161														82-Cu. Yd. Concrete Class A (Box Culvert) 1-Manhole Box Base (10 Foot)	
112	305			172+ & 173+					7	0															
112	305			180+					7	1														20' Gate Driveway	
Totals						19,391	2,371	2,792	96.0	3782	1375	2611		661			5	1024	821		15	19.1	6		

(R-1) • 295 Lin. Ft. of 24" C.S.P. & 3 Inlets Type C (4+3' 0") are available at the Division's maintenance yard at the project site. There will be no cost to the project for State furnished mat'l.
 ◊ Carried to Earthwork Summary
 ▲ Angle Section Included (see Structure notes)
 △ Carried to Wetting Summary

(R-1) Revised Asphalt Mat Tabulation 5-7-79 E.B.
(R-2) Revised Quantities 5-18-79 E.B.

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	16	102
AS CONSTRUCTED				
NO REVISIONS	REVISED	VOID		
	2-22-82			

FINAL QUANTITY DELINEATOR TABULATION

Delin. Added To Top of
Type III As Per FA-02 Line Item 20
At #21.18 Ea. W/B Bracket

Station to Station	Spacing	Side	Type I		Type II		Type III	
			Each		Each		Each	
Eastbound Roadway & Westbound Roadway (Same as EBL) West Approach		Lt.	29					
348+ to 351+	4° Curve	Rt.	14					
366+ to 381+	4° Curve	Rt.	14					
385+ to 398+	1° Curve	Rt.	6					
401+ to 408+	2°30' Curve	Rt.	6					
409+ to 33+	Decel. Lane	Lt. & Rt.			22			
Engr Office Rd Park Lot Cif-Ramp 35+	Tunnel	Lt & Rt.	13				2	
East Approach								
127+ to 145+	Decel. Lane	Rt.			22			2
125+ to 145+ E. Port. W.B.L.								
446+ to 467+	Ramp	Lt. & Rt.	28 27		4			
153+ to 183+	3° Curve	Rt.	16 15		6			
166+ to 173+	Accel. Lane	Lt.						
171+ 171+25	Bridge	Rt. Lt.					1 1	
184+ to 194+ Decel Lane 7+ to 15+ U.S. 6 168+ to 172+	Decel Lane Bridge Inlet Traffic Island	Lt. Lt.	37		16			
186+	Tangent	Rt.	1					
190+ to 201+	0°45' Curve	Rt.	5					
203+ to 213+	Accel. Lane	Rt.			12			
Total			76		66		3	
			169		82		6	

WETTING TABULATION

INDEX			APPLICATION	M. GAL.
Book	Page	Sheet		
			Surfacing ~ Aggregate Base Course (Class 6)	276
			Reconditioning	743
			Compaction ~ List of Structures	96
Total for Pay Quantity				1,115

REMOVAL OF STRUCTURES AND OBSTRUCTIONS

For information only, to be paid for on a lump sum basis.

LOCATION AND DESCRIPTION
31+40~Remove 20' of 24" Riser, Rt. 34+10 WB Lane~Remove Pedestrian Overpass, Includes Stairs, Guard Rail and Foundations. 125+WB~Remove approx. 1.5 Cu. Yd. Concrete Curb
126+ to 131+ Median~Remove 2 Manholes and 2 Pipes
126+ to 132+ Rt. of E. B. Lane~Remove 5 sheet metal buildings with concrete foundations.
132+70~Remove 6' of 18" CSP from wall of Inlet, Lt.
135+ W.B. Lane~Remove Pedestrian Overpass Includes Stairs, Guard Rail and Foundation
138+00~Remove 4' of 36" Riser, Lt.
173± W.B. Lane~Remove 2 Wall Type Luminaires Under Bridge
319+ Loop Rd~Remove Air Curtain Destructor, Rt.
(R-2) 140+00~Remove headwall and portions of wings

SUMMARY OF EARTHWORK QUANTITIES (R-2)

INDEX			
Book	Page	Sheet	
			UNCLASSIFIED EXCAVATION (HAUL) CU. YD.
			Structure Quantities as Excavation 9,236
			Total For Pay Quantity 9,236
			EARTHWORK QUANTITIES BALANCE CU. YD.
			[For Information Only]
			Excavation 9,236
			Unclassified (from List of Structures) 9,236
			Structure Exc. (from List of Structures) 3,119
			Total 12,355
			EMBANKMENT NET CU. YD.
			From List of Structures 2,397
			Total 2,397
			EMBANKMENT * FACTOR (1.00) CU. YD.
			From List of Structures 2,397
			* Excess Excavation 9,958
			Total 12,355

* Excess Excav. to be disposed of as follows:
Approx. 4,949 Cu. Yd. Stockpiled 500' Lt. of Sta. 35+
Approx. 3,500 Cu. Yd. at Sta. 137± Lt. Approx. 1,509 Cu. Yd. within
Project limits as directed by the Engineer.

REMOVAL OF ASPHALT MAT

WEST PORTAL		SQ. YDS. ASPHALT REMOVAL	EAST PORTAL		SQ. YDS. ASPHALT REMOVAL
Inside edge of WB Lanes as follows:					
403+63	to	404+00	57.5	129+ to 131+, Lt. Ramp Relocation	266
404+00	to	405+00	161.1	132+, Lt. Parking Exit Relocation	133
405+00	to	406+00	168	129+, Lt. For High Mast Light Std. (See Sh. 51)	100 (R-1)
406+00	to	407+00	166.6	134+, Lt. Parking Area Repair	625 (R-1)
407+00	to	408+00	157		
408+00	to	409+00	152.8		
409+00	to	410+00	161.1		
410+00	to	411+00	159.2		
411+00	to	412+00	159.1		
412+00	to	413+00	161.6		
413+00	to	414+00	155.3		
414+00	to	415+00	174.7		
415+00	to	416+00	189.7		
416+00	to	417+00	242.8		
417+00	to	418+00	268		
418+00	to	419+00	270.8		
419+00	to	419+72.5 BK	196.2		
26+73.4 AH	to	27+00	72.4		
27+00	to	28+00	64.22		
28+00	to	29+00	50.22		
29+00	to	30+00	258.3		
30+00	to	31+00	264		
Sub Total			4,760.0		
Present Over-height Vehicle Parking Area from 31+ to 34+, Rt.			1,840		
Total			6,603	Total 1,124 (R-1)	
Project Total				7,727 (R-1)	

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(84)220	17	102
AS CONSTRUCTED				
NO REVISIONS		REVISIED	VOID	
		1222-80		

FINAL QUANTITY GUARD RAIL TABULATION

Station to Station	Location	Side	Guard Rail Type 4 (Precast Portable)		Guard Rail Type 4 Special		Guard Rail Type 3 (6-3 Post Spacing)		End Anchorage		Steel Guard Post		Remove Guard Rail		Reset Guard Rail		Connection to Bridge		
			Lin. Ft.		Lin. Ft.		Lin. Ft.		Type 3E Each	Type 3D Each	Each		Type 3 Lin. Ft.	Type 5 Lin. Ft.	Type 4 Lin. Ft.				
<u>West Approach</u>																			
351+31.60 to 399+31.20 Bk	Median		4,800	5614															
398+50.90 Ah. to 403+63.30	Median		5+2	356															
26+ to 35+	EB, WB Median	Lt. & Rt.									121								
32+ to 35+	WB Roadway	Lt. & Rt.											390						
35+	EB Roadway	Lt. & Rt.	124																
<u>West Loop Road</u>																			
12+	Rd. Approach	Rt.									2								
<u>East Approach</u>																			
125+	WB Roadway	Lt. & Rt.	124	100															
125+ to 134+	EB, WB Median	Lt. & Rt.									164	156							
125+ to 129+	WB Roadway	Lt. & Rt.											610						
131+ to 143+00.00	EB Roadway	Rt.					1300		1	1			450	480					
136+ to 138+16+13	WB Roadway	Lt.														*72	500		
141+18.00 to 141+39.00	Median		760	3034	10														
141+30.00 to 148+90.00	Median																		
148+90.00 to 149+00.00	Median																		
149+00.00 to 169+60.00	Median		2060																
169+60.00 to 170+30.00	Median						1300		1								*70		
158+50.00 to 171+50.00	EB Roadway	Rt.															1		
174+25.00 to 195+00.00	EB Roadway	Rt.					2075					1					1		
174+66.00 to 175+36.00	Median																*70		
175+36.00 to 197+76.00	Median		2240	2252													*72		
197+76.00 to 197+88.00	Median																		
<u>Ramp to S.H. 6</u>																			
449+50.00 to 459+75.00	Ramp	Rt.					1025	1225	1	1									
<u>East Loop Road</u>																			
317+50.00 to 324+50.00	E. Loop Road	Lt.					550		1	1									
326+00 to 327+50	E. Loop Road	Lt.					150		1	1									
328+50.00 to 333+25.00	E. Loop Road	Lt.					475		1	1									
319+	Rd. Approach	Rt.										2							
327+	Rd. Approach	Lt.										2							
Totals			10,520	11,480	10		6,975	7,175	6	6	291	283	450	480	1,000	164	500	2	

Δ For information only * See note on plans (See Detail)

22
11
98
8.5"
11"
17"
22"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(B4)220	18	102
AS CONSTRUCTED				
NO REVISIONS		12-22-80	REVISED	VOID

FINAL MANHOLE RING & COVER AND INLET GRATING & FRAME SPECIAL TABULATION

Station	Side	Manhole Ring & Cover		Inlet Grating & Frame (Special)	
		Each		Each	
36+44.99	Rt.	1		1	
36+71.35	Rt.			1	
37+15.00	Lt.	1		1	
38+22.10	Rt.				
39+72.85	Rt.	1		2	
39+72.85	Lt & Rt.				
41+23.60	Lt & Rt.			2	
42+66.51	Lt.	1			
42+74.35	Rt.	1			
42+74.35	Lt & Rt.			2	
44+25.10	Lt & Rt.			2	
45+75.85	Rt.	1		2	
45+75.85	Lt & Rt.				
47+26.60	Lt & Rt.			2	
48+69.51	Lt.	1			
48+77.35	Rt.	1			
48+77.35	Lt & Rt.			2	
50+28.10	Lt & Rt.			2	
51+78.85	Rt.	1			
51+78.85	Lt & Rt.			2	
53+29.60	Lt & Rt.			2	
54+72.51	Lt.	1			
54+80.35	Rt.	1			
54+80.35	Lt & Rt.			2	
56+31.10	Lt & Rt.			2	
57+81.85	Rt.	1			
57+81.85	Lt & Rt.			2	
59+31.60	Lt & Rt.			2	
60+75.51	Lt.	1			
60+83.35	Rt.	1			
60+83.35	Lt & Rt.			2	
62+34.10	Lt & Rt.			2	
63+84.85	Rt.	1			
63+84.85	Lt & Rt.			2	
65+35.60	Lt & Rt.			2	
66+78.51	Lt.	1			
66+86.35	Rt.	1			
66+86.35	Lt & Rt.			2	
68+37.10	Lt & Rt.			2	
69+87.85	Rt.	1			
69+87.85	Lt & Rt.			2	
71+38.60	Lt & Rt.			2	
72+81.51	Lt.	1			
72+89.35	Rt.	1			
72+89.35	Lt & Rt.			2	
74+40.10	Lt & Rt.			2	
75+90.85	Rt.	1			
75+90.85	Lt & Rt.			2	
77+41.60	Lt & Rt.			2	
78+84.51	Lt.	1			
78+92.35	Rt.	1			
78+92.35	Lt & Rt.			2	

Station	Side	Manhole Ring & Cover		Inlet Grating & Frame (Special)	
		Each		Each	
80+43.10	Lt & Rt.			2	
81+93.85	Rt.	1		2	
81+93.85	Lt & Rt.				
83+44.60	Lt & Rt.			2	
84+87.51	Lt.	1			
84+95.35	Rt.	1			
84+95.35	Lt & Rt.			2	
86+46.10	Lt & Rt.			2	
87+96.85	Rt.	1			
87+96.85	Lt & Rt.			2	
89+47.60	Lt & Rt.			2	
90+90.51	Lt.	1			
90+98.35	Rt.	1			
90+98.35	Lt & Rt.			2	
92+49.10	Lt & Rt.			2	
93+99.85	Rt.	1			
93+99.85	Lt & Rt.			2	
95+50.60	Lt & Rt.			2	
96+93.51	Lt.	1			
97+01.35	Rt.	1			
97+01.35	Lt & Rt.			2	
98+52.10	Lt & Rt.			2	
100+02.85	Rt.	1			
100+02.85	Lt & Rt.			2	
101+53.60	Lt & Rt.			2	
102+96.51	Lt.	1			
103+04.35	Rt.	1			
103+04.35	Lt & Rt.			2	
104+55.10	Lt & Rt.			2	
106+05.85	Rt.	1			
106+05.85	Lt & Rt.			2	
107+56.60	Lt & Rt.			2	
108+99.51	Lt.	1			
109+07.35	Rt.	1			
109+07.35	Lt & Rt.			2	
110+58.10	Lt & Rt.			2	
112+08.85	Rt.	1			
112+08.85	Lt & Rt.			2	
113+59.60	Lt & Rt.			2	
115+02.51	Lt.	1			
115+10.35	Rt.	1			
115+10.35	Lt & Rt.			2	
116+61.10	Lt & Rt.			2	
118+11.85	Rt.	1			
118+11.85	Lt & Rt.			2	
119+62.60	Lt & Rt.			2	
121+05.51	Lt.	1			
121+13.35	Rt.	1			
121+13.35	Lt.			1	
122+64.10	Lt.			1	
124+14.85	Lt.	1			
124+39.40	Lt.				
125+17.35	Rt.	1			
TOTAL		46		113	

Note: Each Inlet Grating and Frame (Special) shall include 2 Grates and 1 Frame as shown on detail. Casting pattern for Inlet grates will be furnished to the Contractor by the Division at no cost to the project. Contractor shall return the casting pattern to the Division.

22
11
11
58
8.5"
11"
17"
12"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3184) 220	19	102
AS CONSTRUCTED				
NO REVISIONS		REVISED <u>12-27-80</u>	VOID	

FINAL TABULATION OF
TOPSOIL AND SOIL RETENTION BLANKET (JUTE)

WEST APPROACH				EAST APPROACH			
LOCATION	4" TOPSOIL Cu.Yd.	JUTE Sq.Yd.	TOTAL ACRES	LOCATION	4" TOPSOIL Cu.Yd.	JUTE Sq.Yd.	TOTAL ACRES
Main Line 404+00 to 409+00 Rt. 417+00 to 417+00 Rt. Median 403+63 to 417+12 417+12 to 27+00	306 806 -449-556 -102-	12,556	2.59 -0.8 1.0 -0.2	Between WB Lanes and Ramp to Parking Area, Lt. 129+ to 131+	H6-222		0.2-0.4
Between EB Lanes and Parking Area, Rt. 416+80 to 419+72.7 409 to 416 Rt.	200-361		0.4 0.67	Between WB Lanes and Parking Area, Lt. 132+ to 139+ 140+ Lt. at C.B.C.	472-6+3 78		0.9-1.2 0.1
Between WB Lanes and Loop Rd. 28+ to 33+, Lt.	306		0.6	Median 134+00 to 141+18	212-322		0.4-0.6
Between EB Lanes and Loop Rd. 31+ to 33+	225		0.4	Loop Road 316+ to 334+, Rt. 324+ to 326+, Lt. 326+ to 332+50, Lt. 334+50+ to 335+50 Rt.	1,100-1,138 122-173 318 196	-10,000-13,134 -2,890-2,236	2.1-2.8 0.2 -0.6-0.5
Parking Area, Rt. 116+60 to 126+23.2, Rt. 116+00 to 119+00 Rt.	1,013 369	-9,211-8023	1.9-1.65 0.69	Side Slope, Rt. 130+ to 138+	-978-1100	8,899-7946	1.8-1.6
Loop Road 2+10.3 to 7+00, Rt. 11+00 to 23+00, Rt. 2+60 to 13+50, Lt. 16+40 to 21+40, Lt. 12+ to 14+, Rt. E. Side of Straight Cr. At of Loop Rd. Storage Area North of Plaza Area	367 -733-880 1,105 183 734 196	-3,333 -6,867-2,295 -10,044-2,812	0.7 -1.4-0.41 -2.1-0.58	Side Slope, Lt. 150+ to 160+	1,222	11,112-11,820	2.3-2.4
Estimated for Irregularities	1,291-543		2.4	Between EB Lanes and SH 6, Rt. 150+ to 171+	2,818-3632	20,068-15,126	5.2-3.1
Total West Approach	7,747-9076	-29,255-3,3589	12.3-13.8	Estimated for Irregularities	1,472-0		
				Total East Approach	8,830-8514	52,960 50,862	13.7-12.7

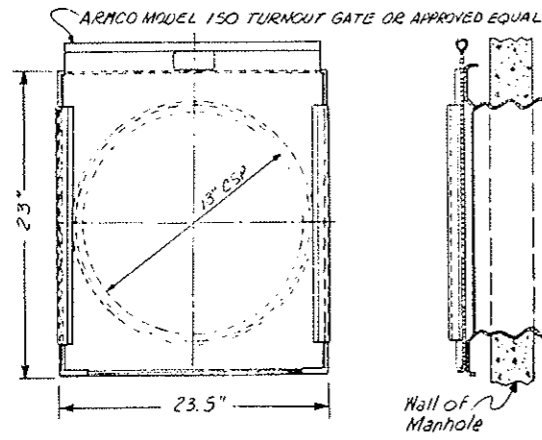
SEEDING				
COMMON NAME	BOTANICAL NAME	PERCENT PUILITY	PERCENT GERMINATION	RATE PLS./ACRE
Italian Fescue	Festuca duriuscula	950	84	14
Pubescent Wheatgrass	Agropyron trichophorum	85	79	8
Smooth Brome	Bromus inermis	934	89	8
Western Wheatgrass	Agropyron smithii	861	90	6
Aisike Clover	Trifolium hybridum	993	80	2
Timothy	Phleum	998	90	2
Total Pls./Acre Seeding Native				40
MULCHING MATERIAL	Native Hay or Straw 2 Tons/Acre			
COMMERCIAL FERTILIZER	AVAILABLE N %	AVAILABLE P %	AVAILABLE K %	TOTAL LBS./ACRE
Diammonium Phosphate 18-46-0	18	54	46	138

ESTIMATED QUANTITIES OF THE ITEMS REQUIRED		
ITEM	UNIT	TOTAL
Topsoil	Cu.Yd.	16,577-17,590
Seeding (Native)	Lb.	1,040-1284.2
Fertilizer	Lb.	7,800-3024
Mulching	Ton	52-52.11
Soil Retention Blanket (Jute)	Sq.Yd.	82,215-34,451

FINAL PLAN OF EAST PORTAL AREA DRAIN SYSTEM

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(24)220	20	102
AS CONSTRUCTED				
NO REVISIONS		REVISED	12-22-75	VOID

DETAIL OF 18" SLIDE HEADGATE SPECIAL
 (STA. 124+39.4)



Summary of East Portal Area Drain System (Quantities carried to List of Structures)

- Structure Excav (Class I) 1787
- Structure Backfill 422 Cu. Yd. 4:37
- Embankment 1234 Cu. Yd.
- Removal of Structure 4 Each
- Manhole Box Base (10 Ft) 1 Each
- Manhole Box Base (15 Ft) 2 Each
- 36 Inch CSP 488 Lin. Ft.
- 72 Inch RCP 15 Lin. Ft.
- Plug Culvert 1 Each
- * 18x12 Inch Parshall Measuring Flume 1 Each
- Concrete Class A (Wall) 7 Cu. Yd.

- Reinforcing Steel 300 lbs
- 18 Inch CSP 262-270 Lin. Ft.
- 18 Inch Slide Headgate Special 1 Each

△ Carried to Removal of Structures and Obstructions Tab.

* Cost of Class DT Concrete and Flow Measuring and recording equipment to be included in bid item for Parshall Measuring Flume. It is estimated that 4 Cu. Yds. of Class DT Concrete will be required.

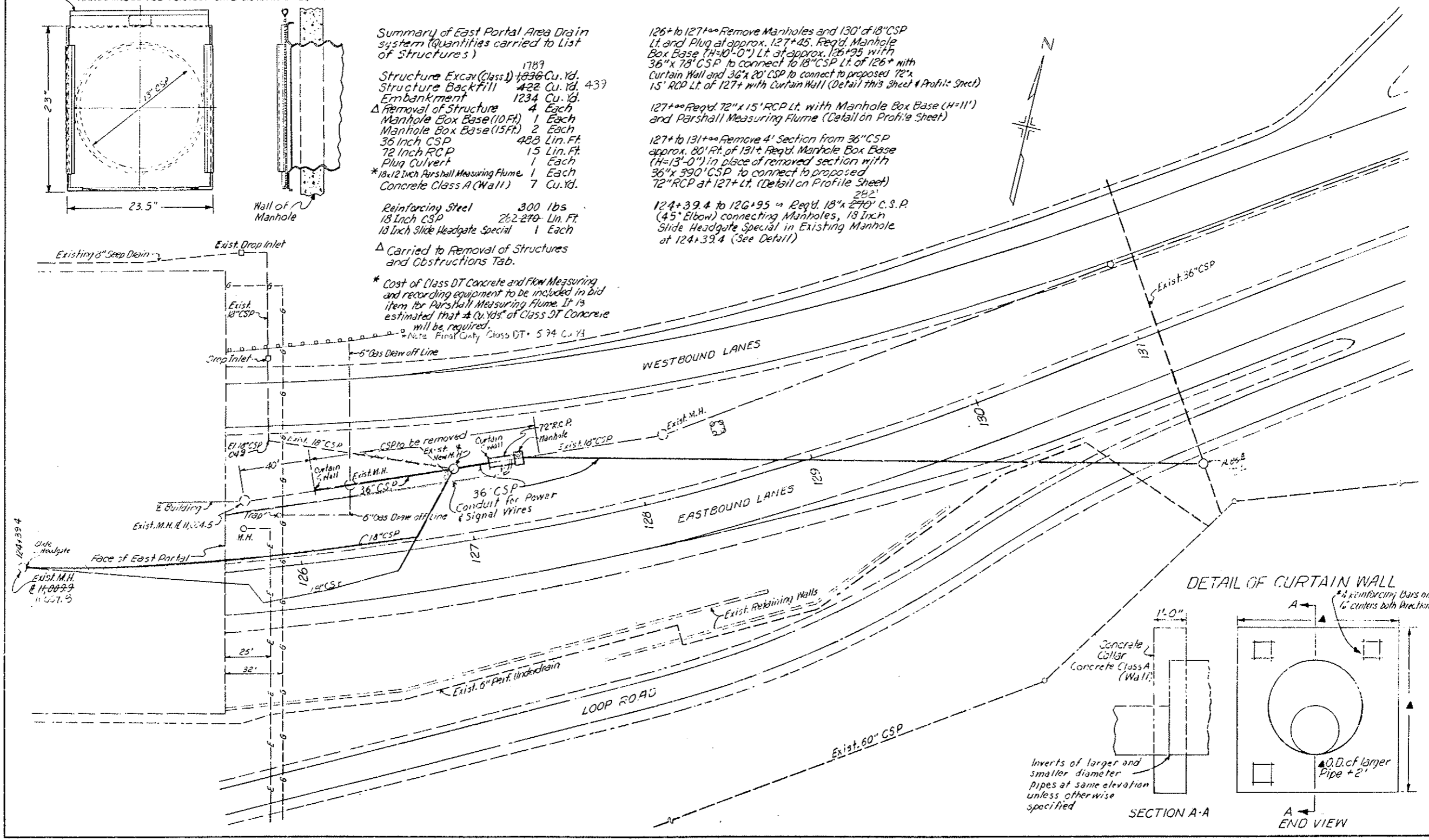
Note: Final Qty. Class DT = 5.94 Cu. Yd.

126+ to 127+ Remove Manholes and 130' of 18" CSP Lt. and Plug at approx. 127+45. Reqd. Manhole Box Base (H=10'-0") Lt. at approx. 126+95 with 36"x 78" CSP to connect to 18" CSP Lt. of 126+ with Curtain Wall and 36"x 20' CSP to connect to proposed 72"x 15' RCP Lt. of 127+ with Curtain Wall (Detail this Sheet & Profile Sheet)

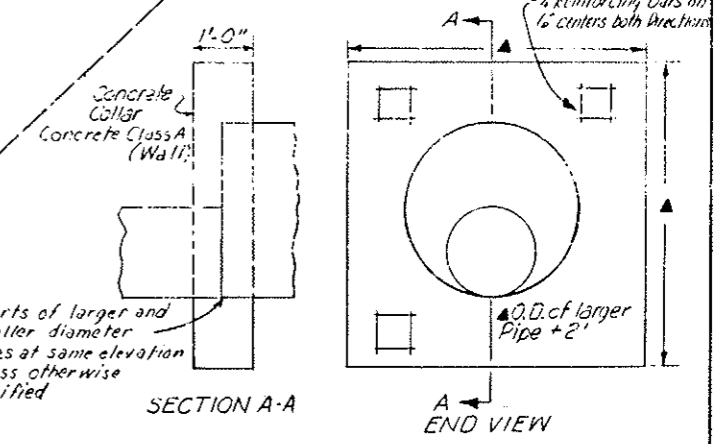
127+ Reqd. 72"x 15' RCP Lt. with Manhole Box Base (H=11") and Parshall Measuring Flume (Detail on Profile Sheet)

127+ to 131+ Remove 4' Section from 36" CSP approx. 80' Ft. of 131+ Reqd. Manhole Box Base (H=13'-0") in place of removed section with 36"x 390' CSP to connect to proposed 72" RCP at 127+ Lt. (Detail on Profile Sheet)

124+39.4 to 126+95 Reqd. 18"x 270' C.S.P. (45° Elbow) connecting Manholes, 18 Inch Slide Headgate Special in Existing Manhole at 124+39.4 (See Detail)



DETAIL OF CURTAIN WALL



Inverts of larger and smaller diameter pipes at same elevation unless otherwise specified

22"
17"
11"
5.8"
3.5"
11"
17"
22"

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID
12-22-90		

PROJECT NO.	SHEET NO.	TOTAL SHEETS
170-3(84)220	21	102

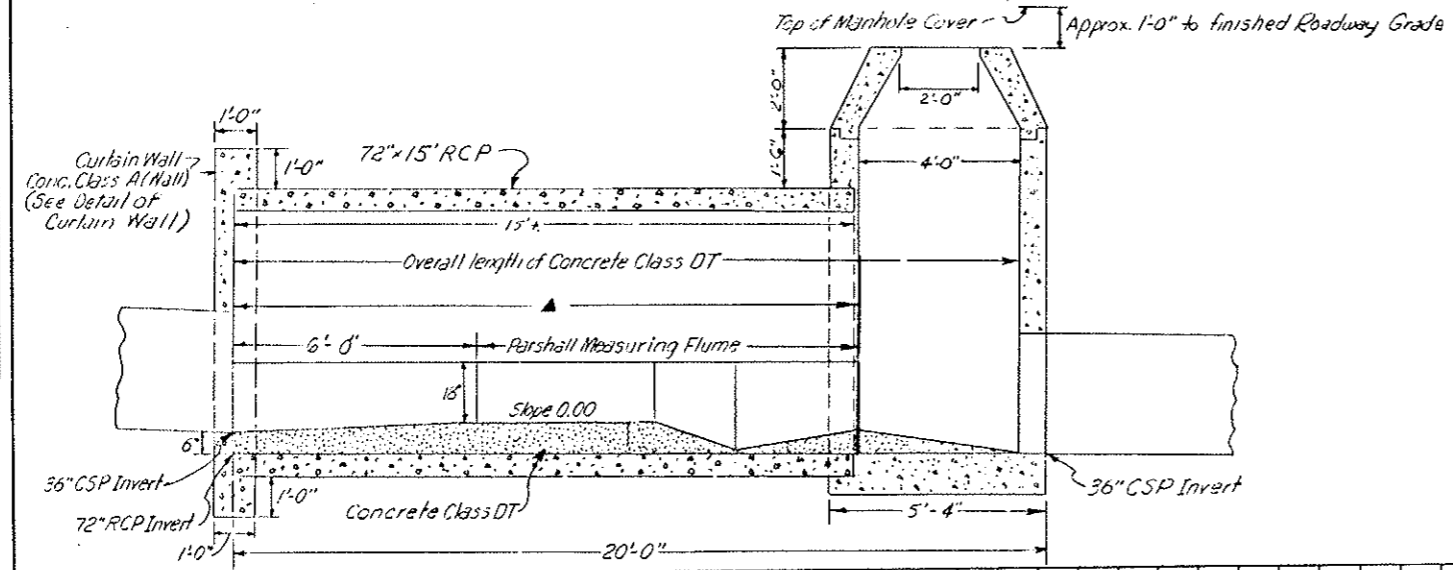
SCALE OF DETAILS 1"=2'

PROFILE AND DETAILS EAST PORTAL AREA DRAIN SYSTEM

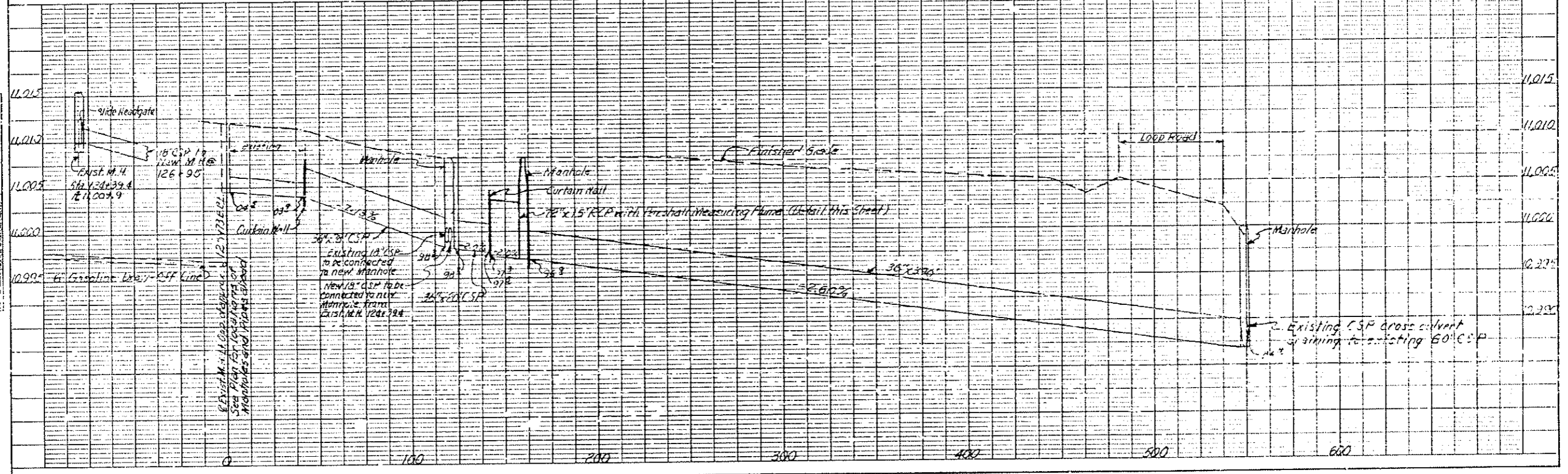
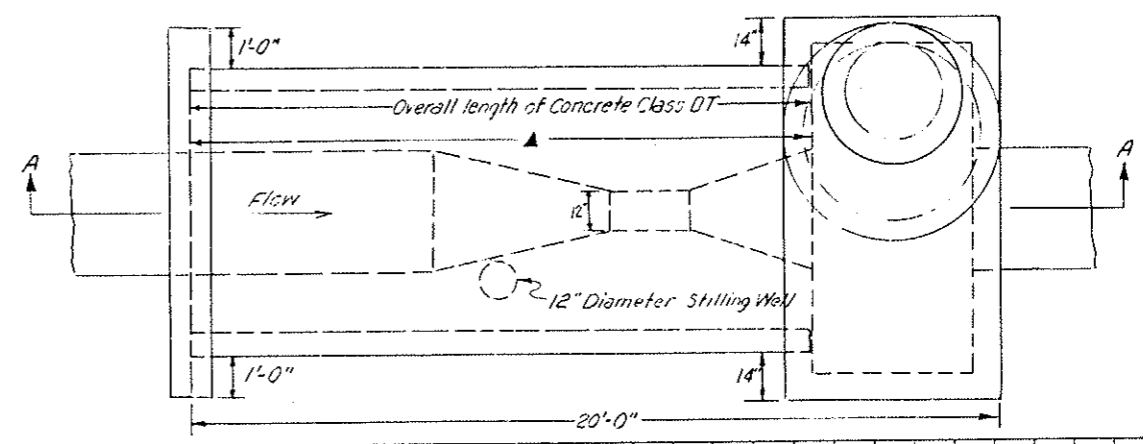
PARSHALL FLUME INSTALLATION DETAIL SECTION A-A

▲ Concrete Class DT to be same Height as Flume on both sides for this length otherwise as shown

Manhole shall be constructed per Std M-604-E, except Manhole Ring and Cover shall be Gas, Water and Steam Tight (Neehan R-1757-G or Approved Equal). Floor of Manhole shall be adjusted to provide a smooth flow path from the flume outlet to the 36" diameter pipe.



PARSHALL FLUME INSTALLATION DETAIL PLAN VIEW



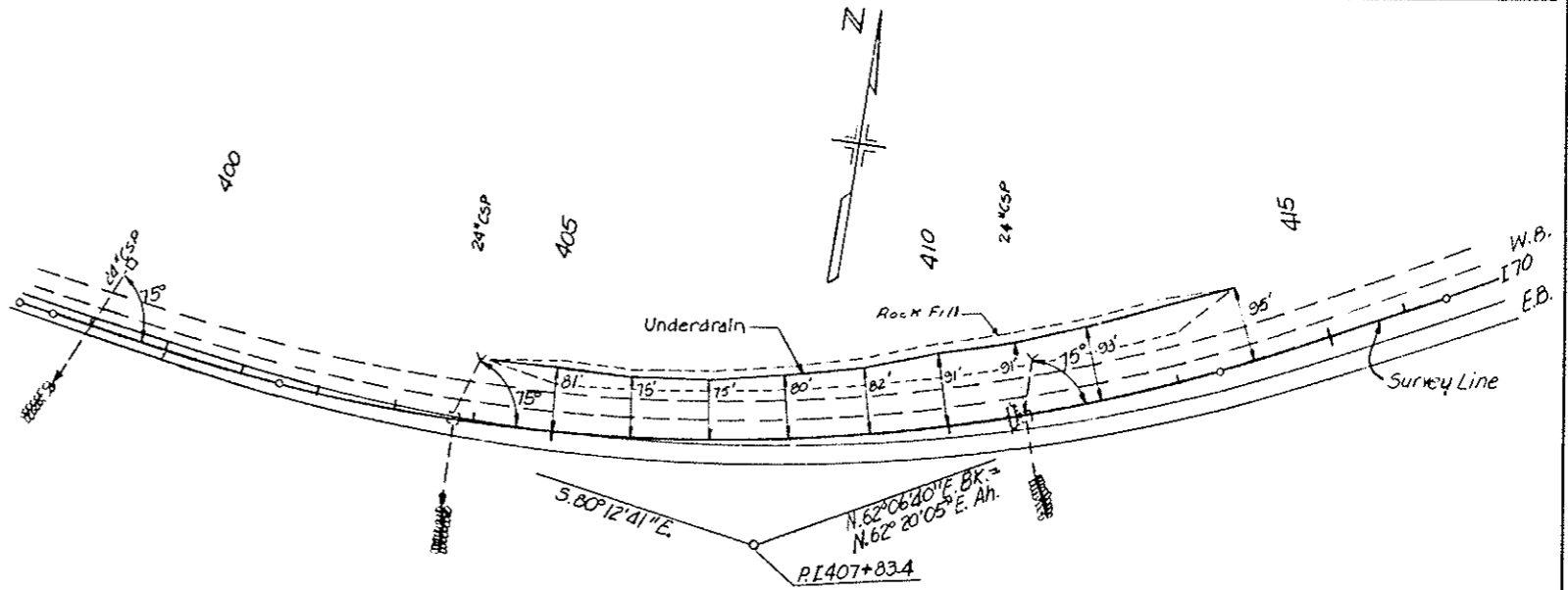
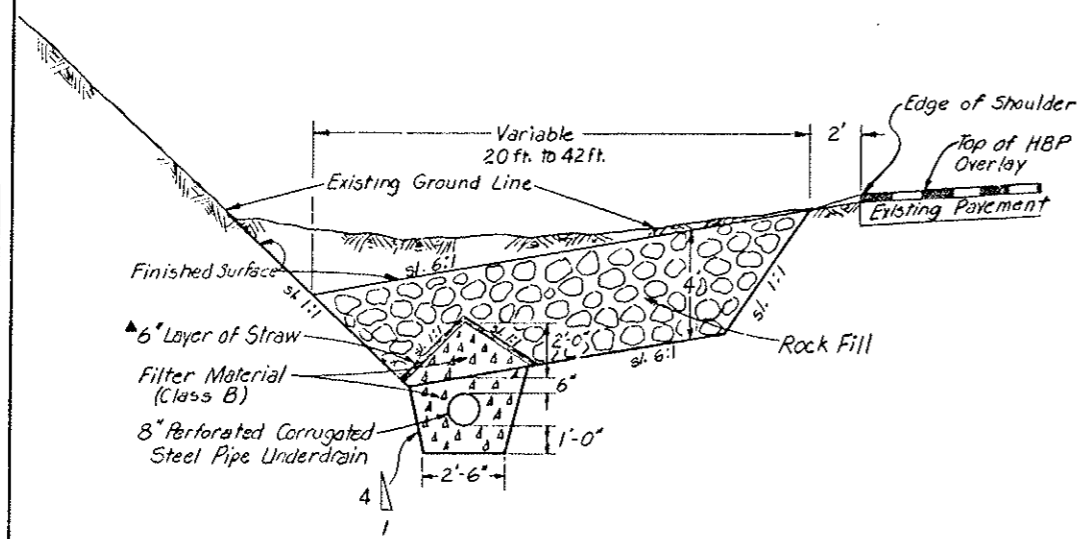
PLAN	DATE	BY	CHECKED
NOTE BOOK			

PROFILE	DATE	BY	CHECKED
NOTE BOOK			

DETAILS OF UNDERDRAIN PLACEMENT Sta. 404+ to 414+ Lt.

AS CONSTRUCTED		PROJECT NO.	PAGE NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS	REVISED 2-22-70	VOID	VIII	COLORADO	170-3(8A)220
				22	102

TYPICAL SECTION



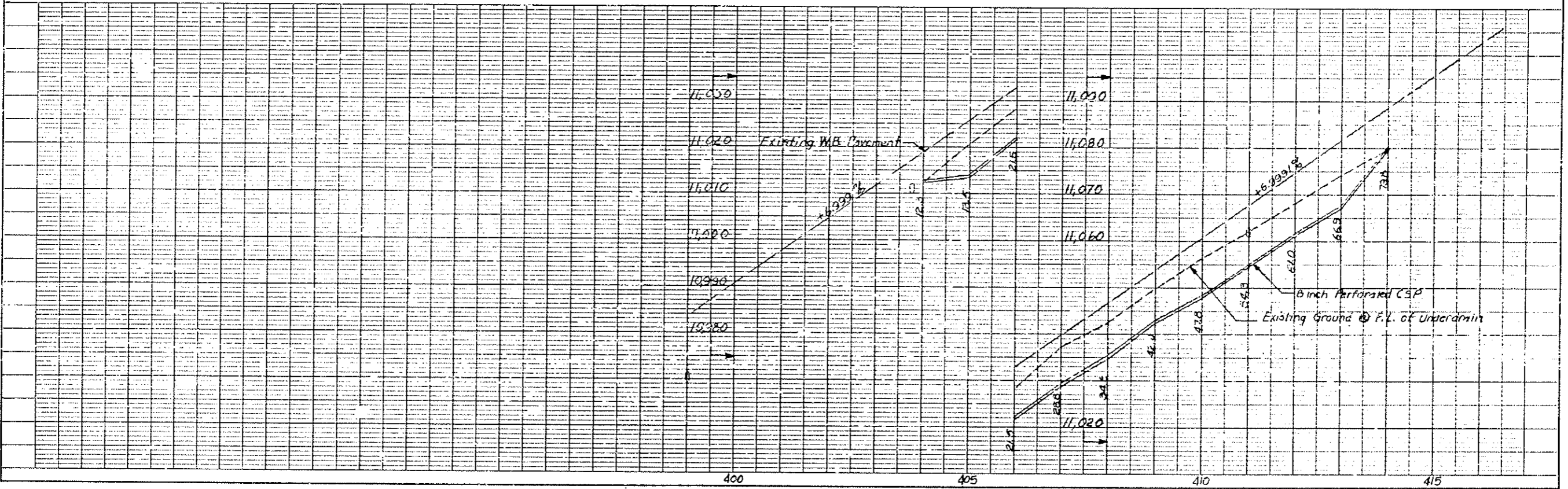
SUMMARY OF UNDERDRAIN PLACEMENT

QUANTITIES CARRIED TO LIST OF STRUCTURES

Item	Quantity	Unit
Unclassified Excavation (Haul)	3369 4949	Cu.Yd.
Rock Fill (Haul)	3840	Cu.Yd.
Structure Excavation	232	Cu.Yd.
Filter Material (Class B)	361	Cu.Yd.
8 Inch Perforated Corrugated Steel Pipe	1,000	Lin.Ft.

- Material to be disposed of at Stockpile 500 ft. left of Sta. 35+
- Material to be obtained from Stockpile 500 ft. left of Sta. 35+

▲ Cost of Straw to be included in Filter Material (Class B)



PLAN NOTE BOOK

PROFILE NOTE BOOK

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(34)220	23	102

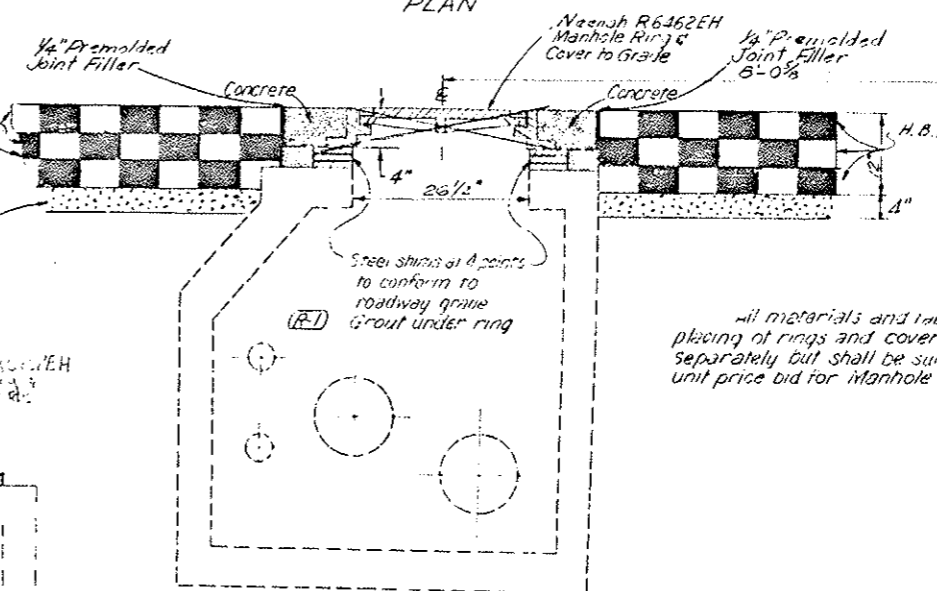
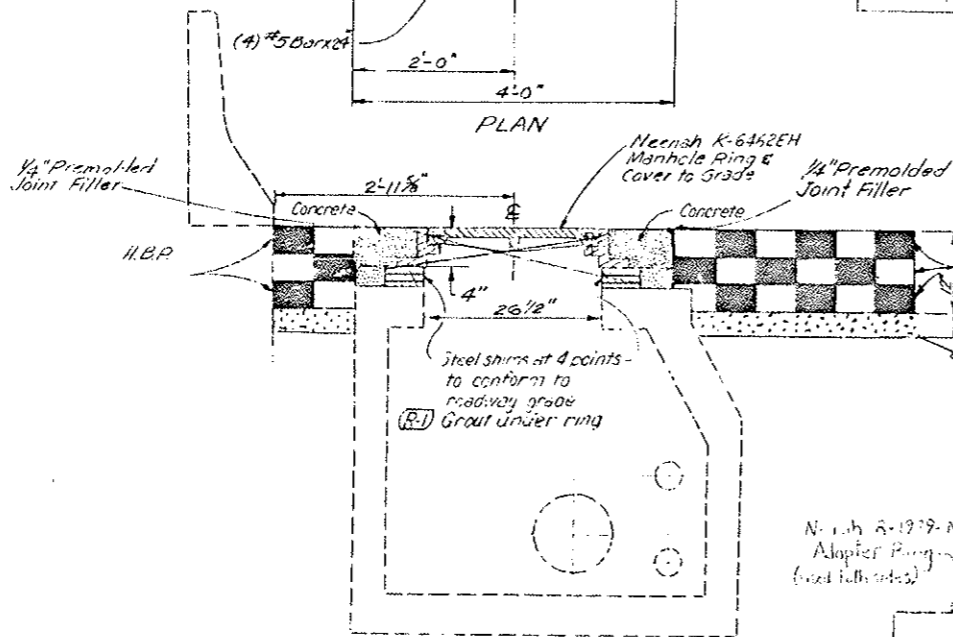
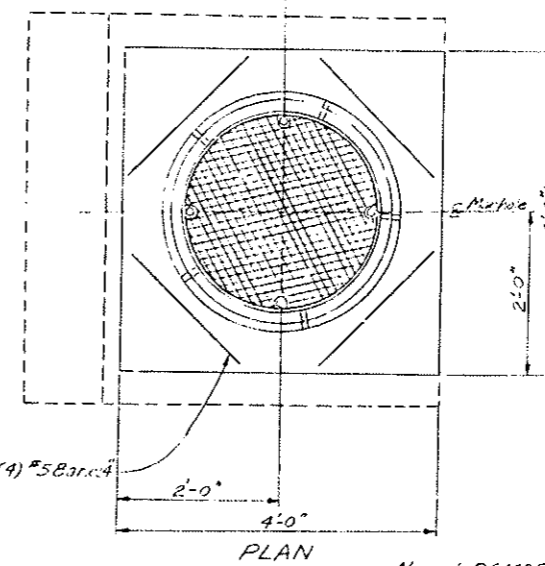
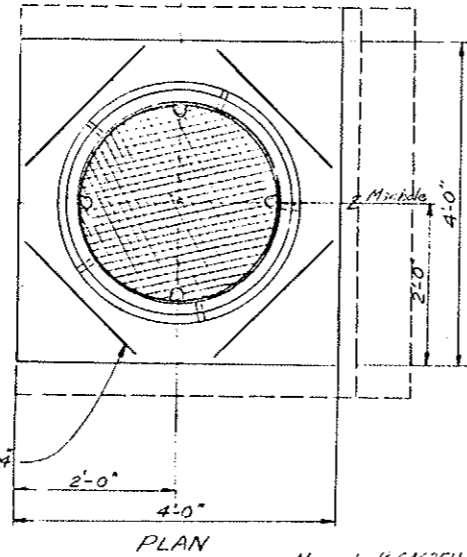
AS CONSTRUCTED
 NO REVISIONS REVISED [2-22-82] VOID
 (R-1) Added Note on 5-7-79 - E.B.

NORTH SIDE

SEGMENT No.	STATION
8	37+15.00
20	42+69.51
32	54+72.51
44	60+75.51
56	66+78.51
68	72+81.51
80	78+84.51
92	84+87.51
104	90+90.51
116	96+93.51
128	102+96.51
140	108+99.51
152	115+02.51
164	121+05.51
	124+39.40

SOUTH SIDE

SEGMENT No.	STATION	SEGMENT No.	STATION
2	36+44.99	86	81+93.85
8	39+72.85	92	84+95.35
14	42+74.35	98	87+96.85
20	48+77.35	104	90+98.35
26	51+78.85	110	93+99.85
32	54+80.35	116	97+01.35
38	57+81.85	122	100+02.85
44	60+83.35	128	103+04.35
50	63+84.85	134	106+05.85
56	66+86.35	140	109+07.35
62	69+87.85	146	112+08.85
68	72+89.35	152	115+10.35
74	75+90.35	158	118+11.85
80	78+92.35	164	121+13.35
			125+17.36



All materials and labor incidental to the placing of rings and covers will not be measured separately but shall be subsidiary to the unit price bid for manhole ring and cover.

ELEVATION
 DETAIL OF MANHOLE RING & COVER
 (NORTH SIDE)

ELEVATION
 DETAIL OF MANHOLE RING & COVER
 (SOUTH SIDE)

DIVISION OF HIGHWAYS

DETAILS OF MANHOLE RING AND COVER

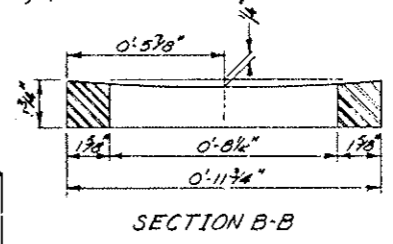
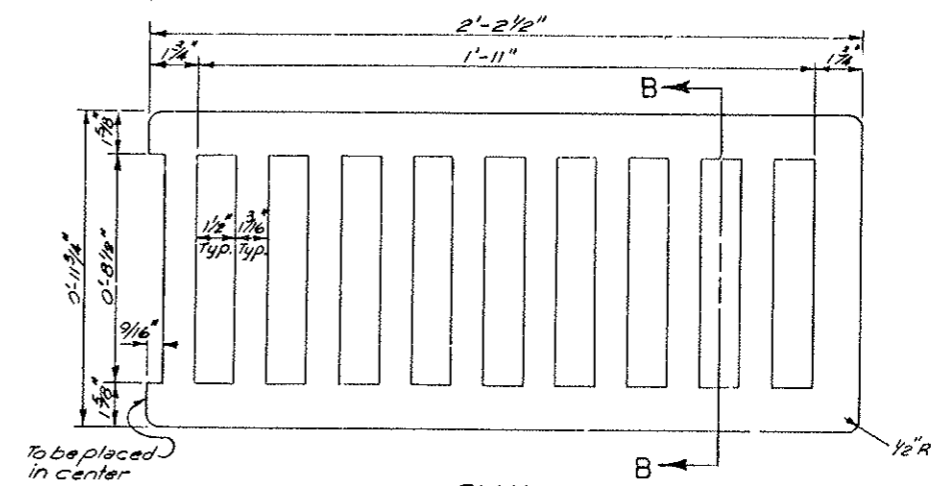
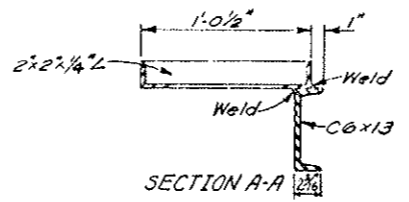
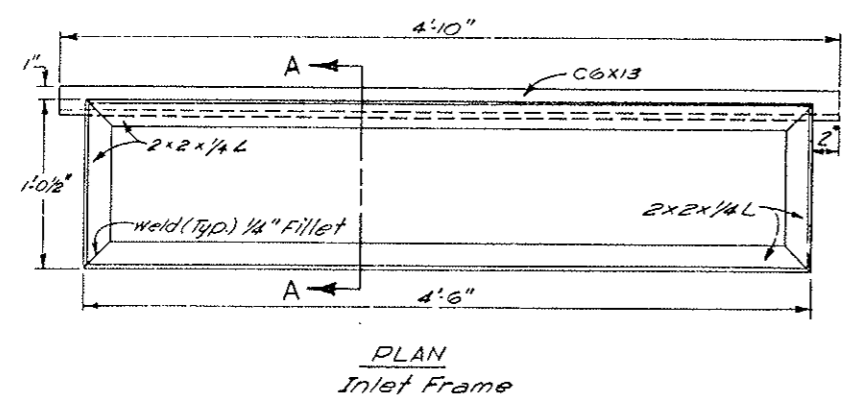
Designer	Structure
Detailer	Number
Drawing Number	of Drawings

(R-1) Added Note - 5-7-79 - E. B.
 (R-2) Added Note - 5-18-79 - E. B.

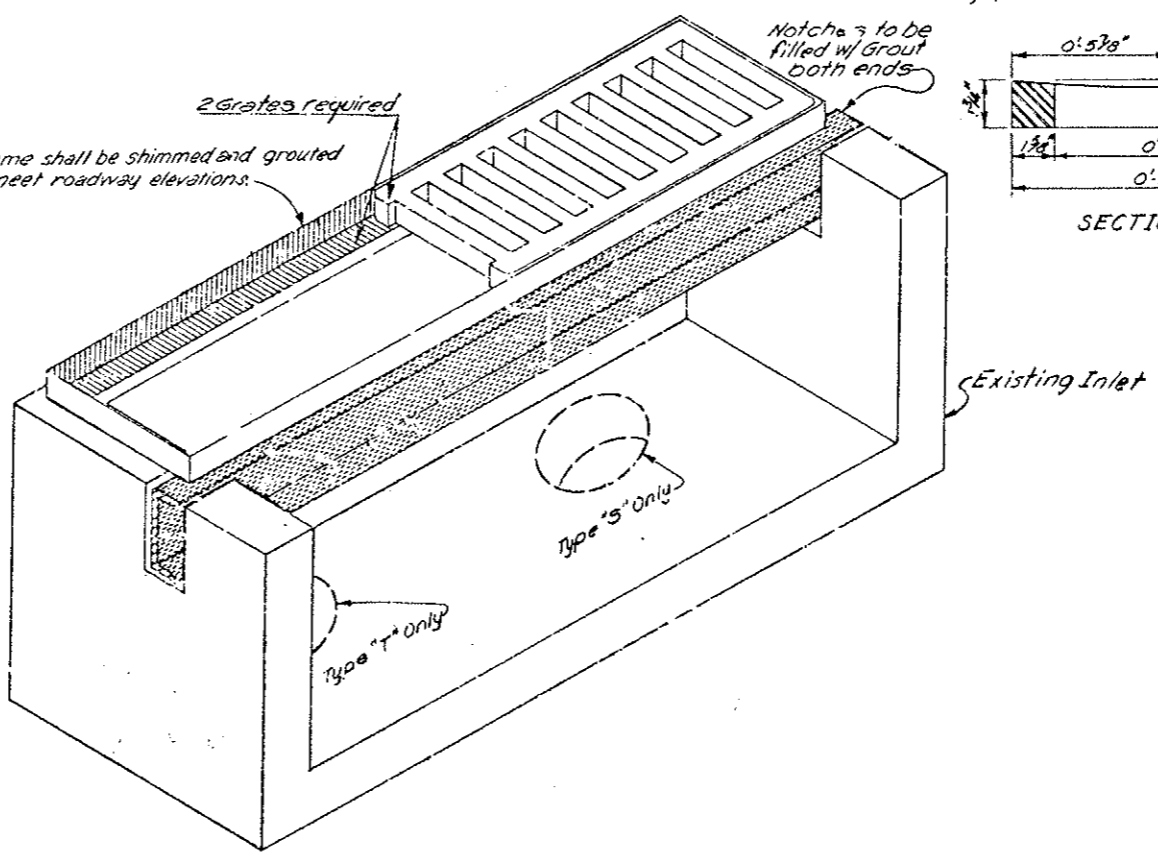
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	[70-3(BA)220	24	102

AS CONSTRUCTED

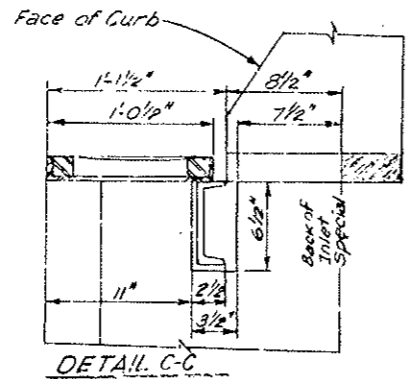
NO REVISIONS REVISI VOID



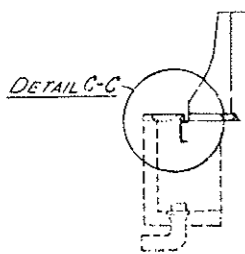
(R-1) Frame shall be shimmed and grouted to meet roadway elevations.



(R-2) Note: Steel Frame to be Galvanized



FRAME IN RELATION TO INLET

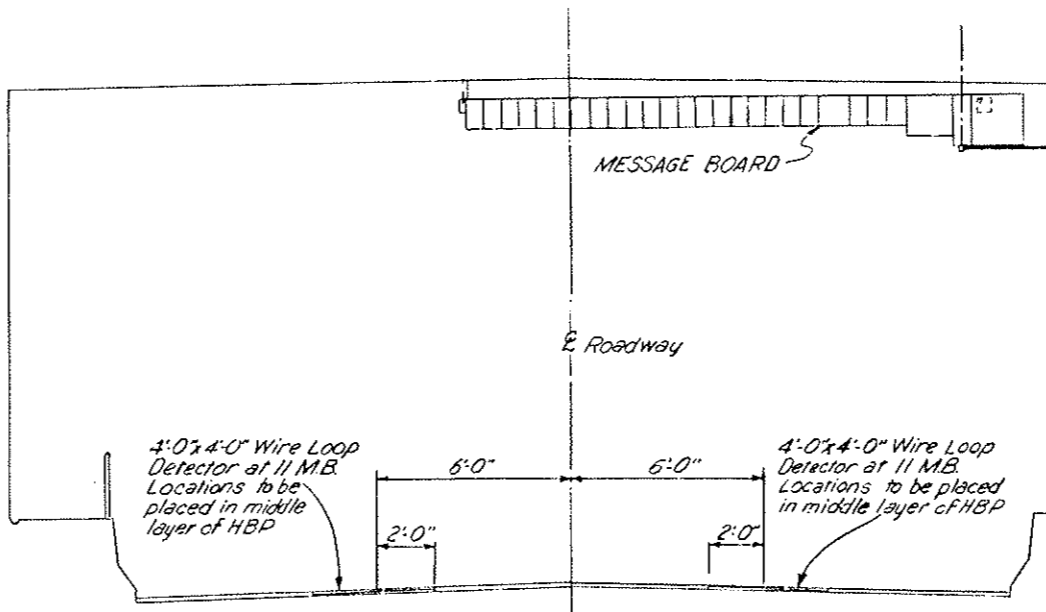
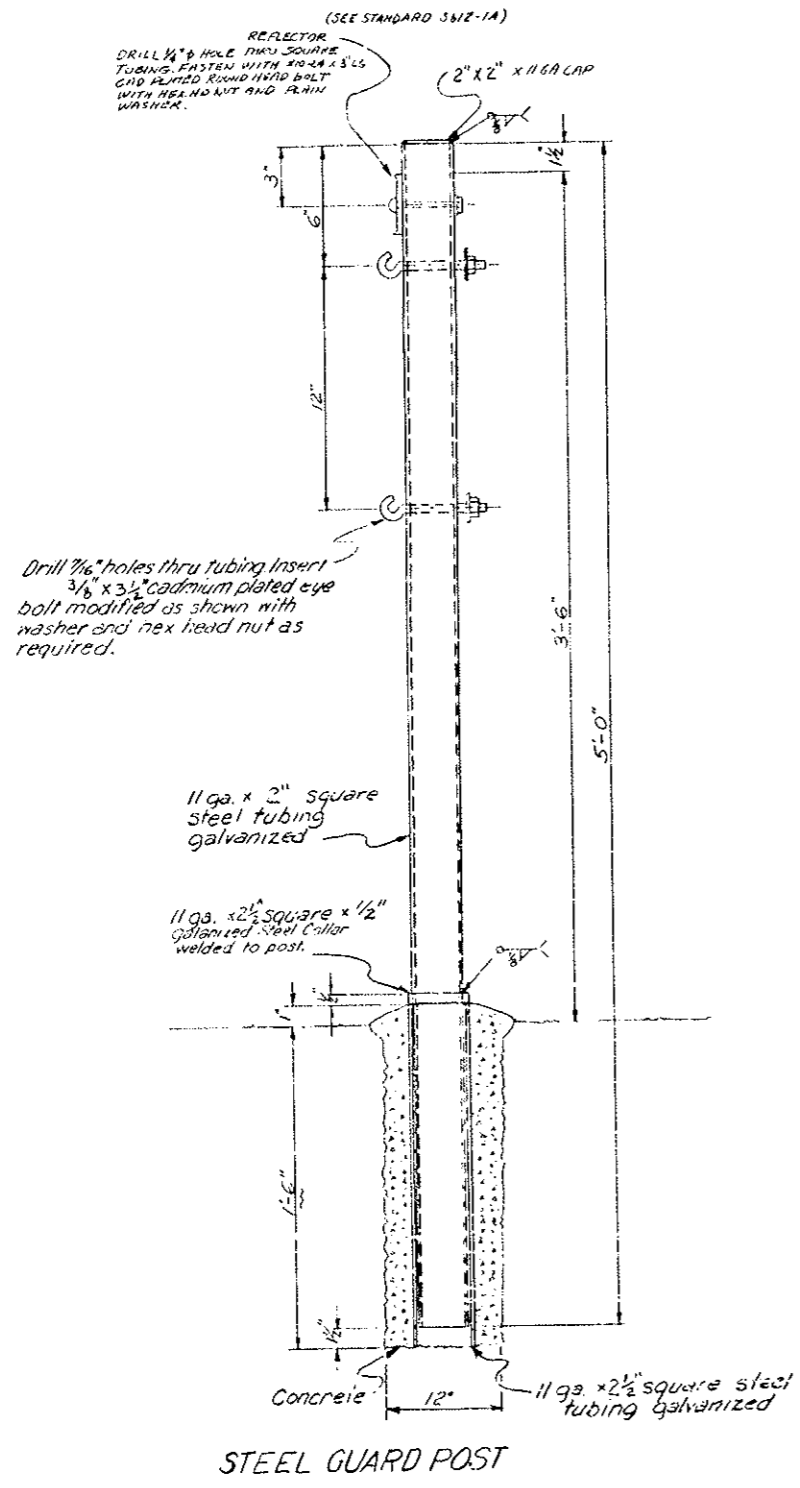


DIVISION OF HIGHWAYS

DETAILS OF INLET GRATING AND FRAME SPECIAL

Designer	Structure Numbers
Draftsman	of
Drawing Number	Drawings

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I-70-3(14)220	25	102
AS CONSTRUCTED				
NO REVISIONS		12-22-85	REVISED	VOID



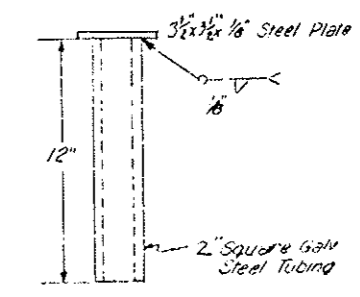
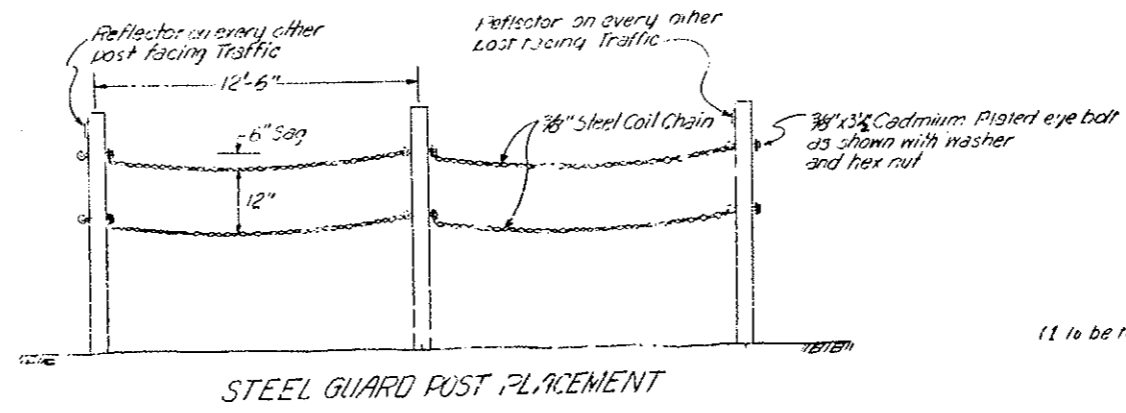
Note: Loop Detector Wire shall be placed at 11 Message Board locations as detailed above.

11 Right Lane Loop Detectors to be wired to existing amplifiers in Message Board. 11 Left Lane Loop Detectors to be wired to new amplifiers in a weatherproof enclosure with subpanel on back of message board & nipple into control logic compartment.

MESSAGE BOARD LOCATION & LOOP DETECTOR

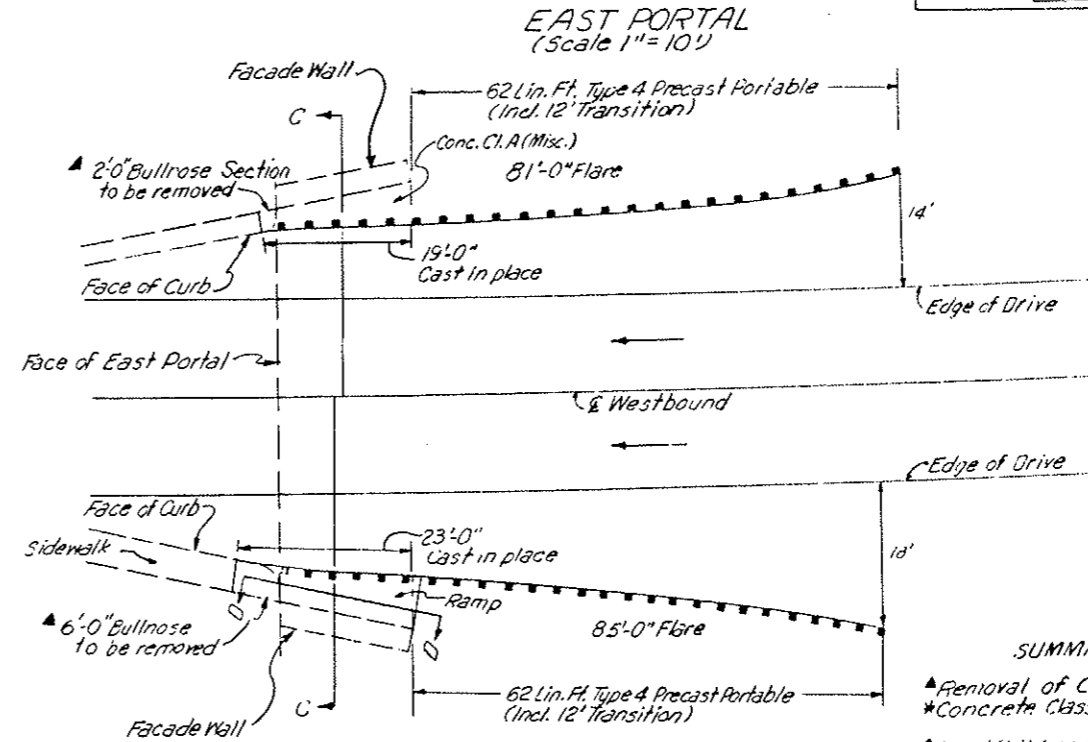
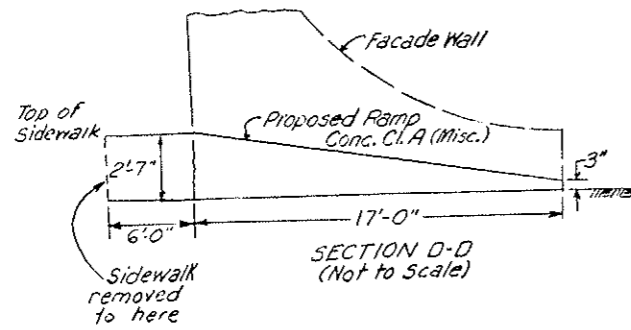
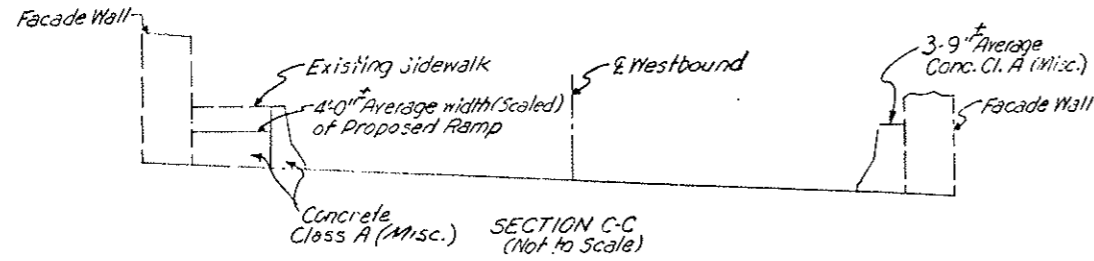
No	STATION
1	40+60.45
2	48+64.45
3	56+08.45
4	64+72.45
5	72+76.45
6	80+80.45
7	88+84.45
8	96+88.45
9	104+92.45
10	112+96.45
11	121+00.45

Note: Loop Detector Detail is shown for information only. All work to be performed by the I-70-3(14)220 Contractor.



GUARD RAIL PLACEMENT DETAILS AT PORTAL ENTRANCES

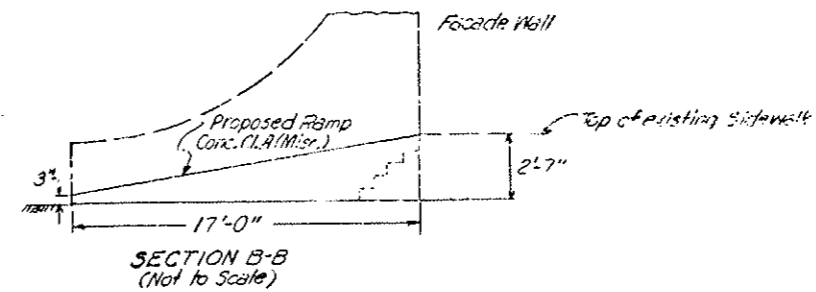
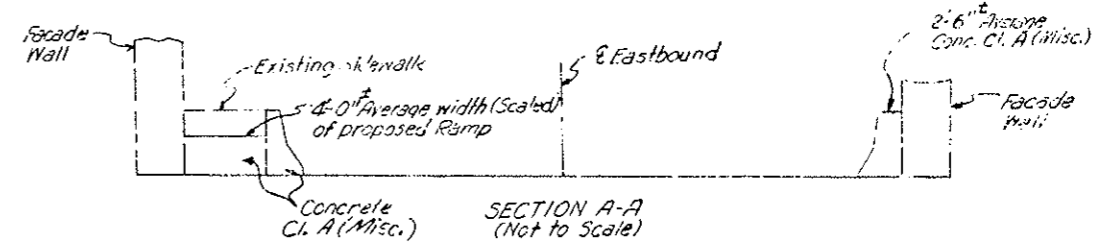
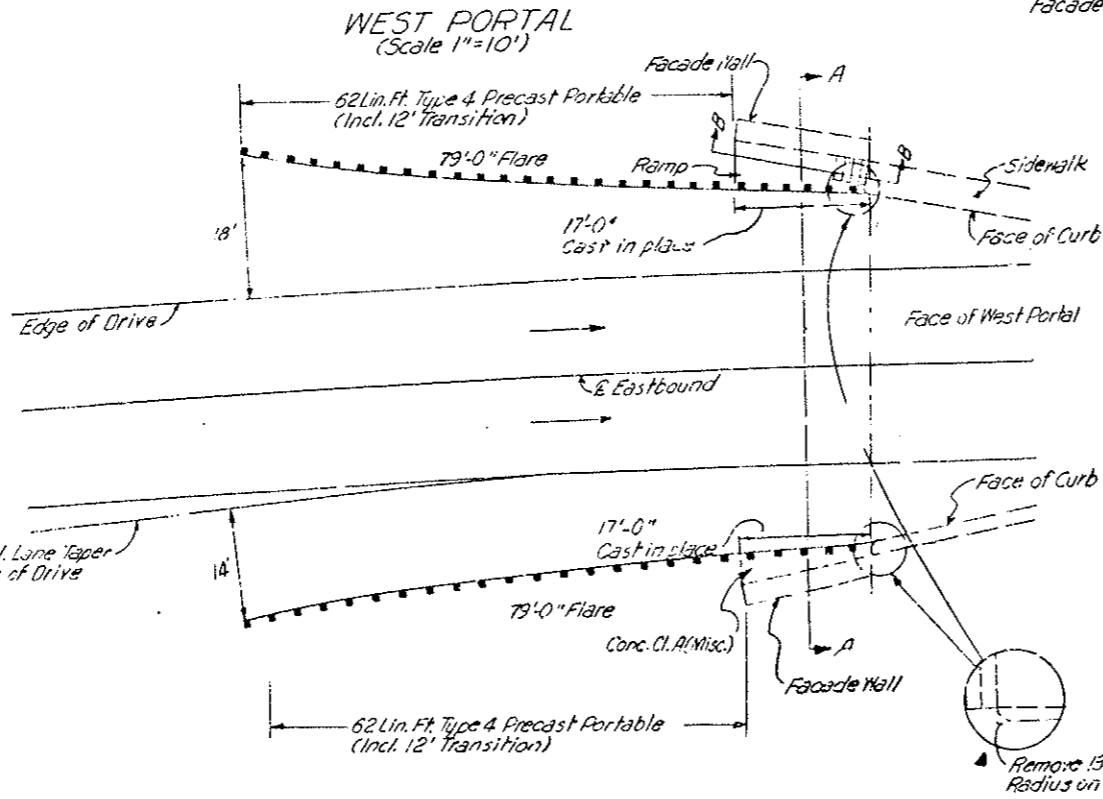
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	26	102
AS CONSTRUCTED				
NO REVISIONS		1/2-2-80	REVISED	VOID



SUMMARY OF QUANTITIES

▲ Removal of Concrete	Cu. Yd.	1.5
* Concrete Class A (Misc.)	Cu. Yd.	20
● Guard Rail Type 4 Precast Portable	Lin. Ft.	248

▲ Included in Removal of Structures and Obstructions Tab
 * Included in Structure List
 ● Included in Guard Rail Tab



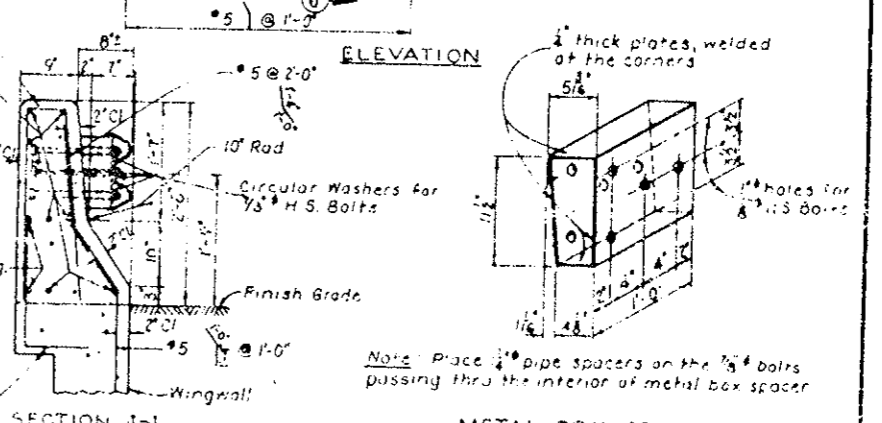
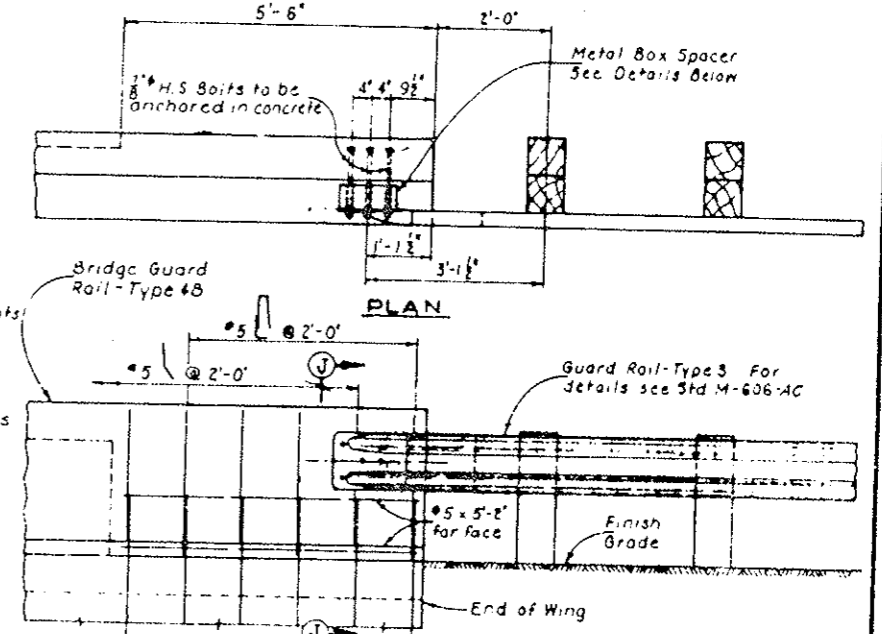
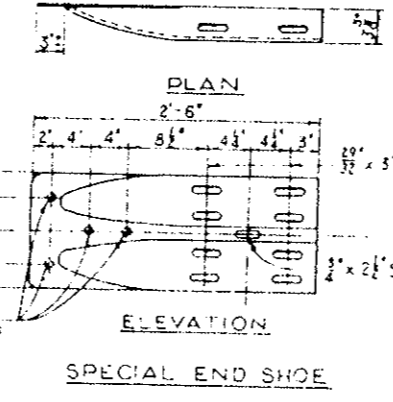
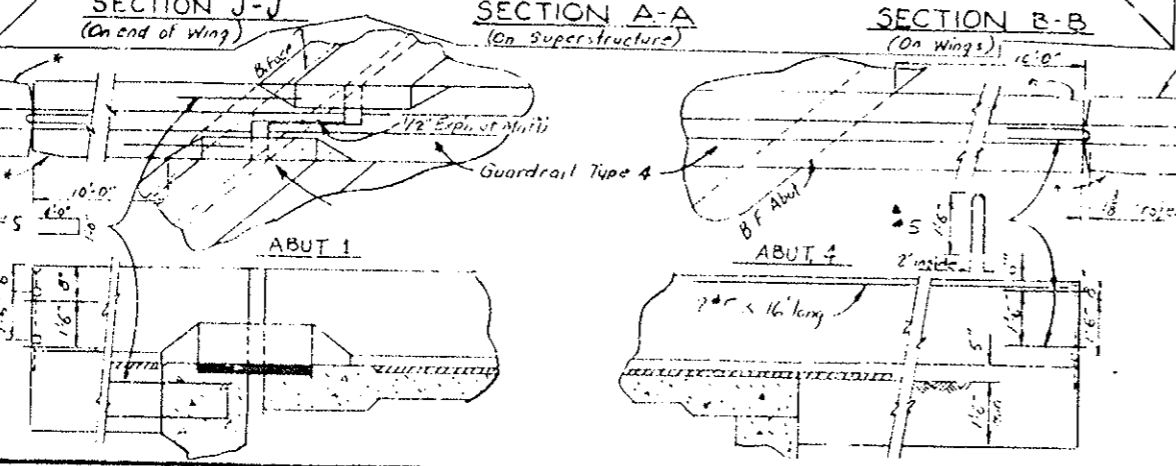
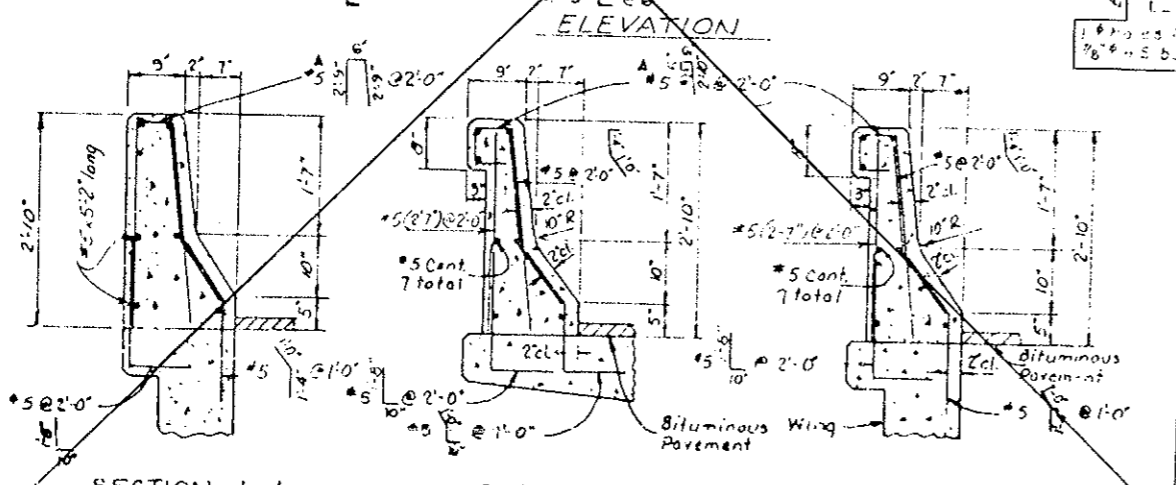
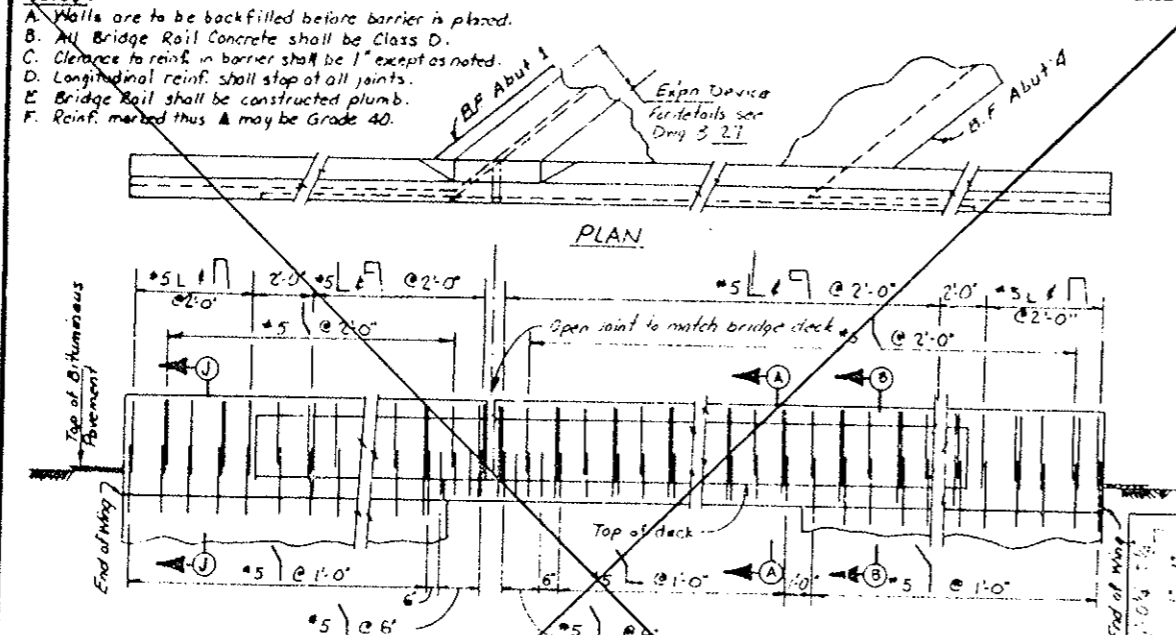
22"
11"
9.8"
8.5"
11"
17"
22"

- Notes:
 A. Walls are to be backfilled before barrier is placed.
 B. All Bridge Rail Concrete shall be Class D.
 C. Clearance to reinf. in barrier shall be 1" except as noted.
 D. Longitudinal reinf. shall stop at all joints.
 E. Bridge Rail shall be constructed plumb.
 F. Reinf. marked thus Δ may be Grade 40.

AS CONSTRUCTED
 NO REVISIONS 2-22-82 REVISED _____ VOID _____

DISTRICT	DIVISION	PULL NO.	SHEET NO.	TOTAL SHEETS
XXX	COLORADO	170-5640220	27	102

REVISIONS	



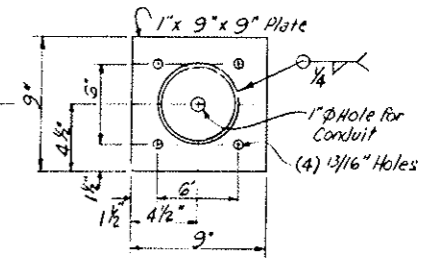
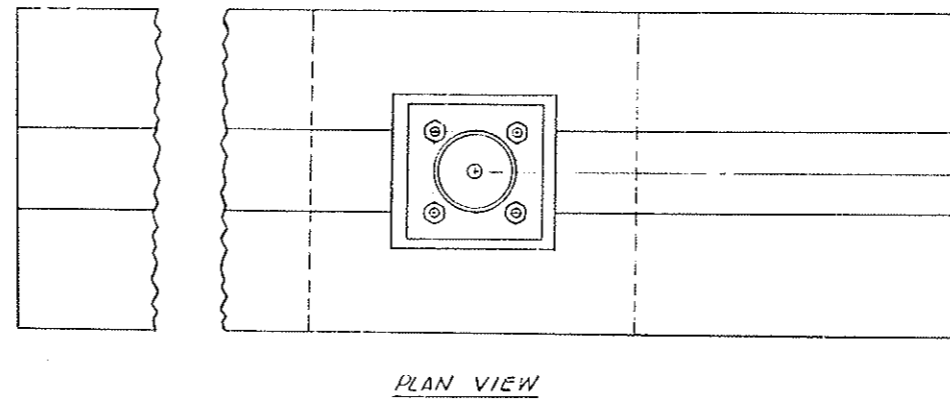
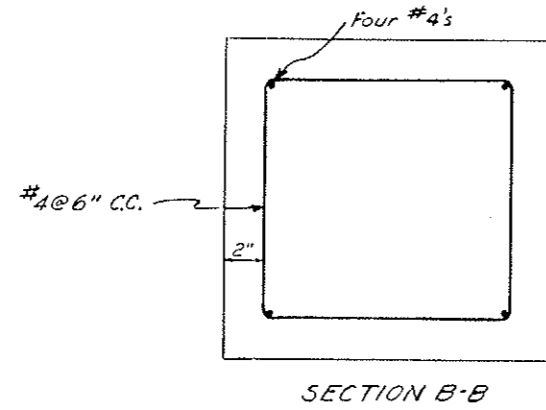
Guardrail Type 4 Cast-Portable
 see S.M. 606-5A
 for details.
 * Layer 1/2" on traffic
 approach corners to prevent
 snagging of protrude.

Note: Place 1/2" pipe spacers on the 1/2" bolts
 passing thru the interior of metal box spacer

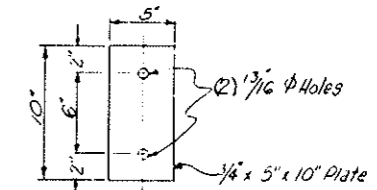
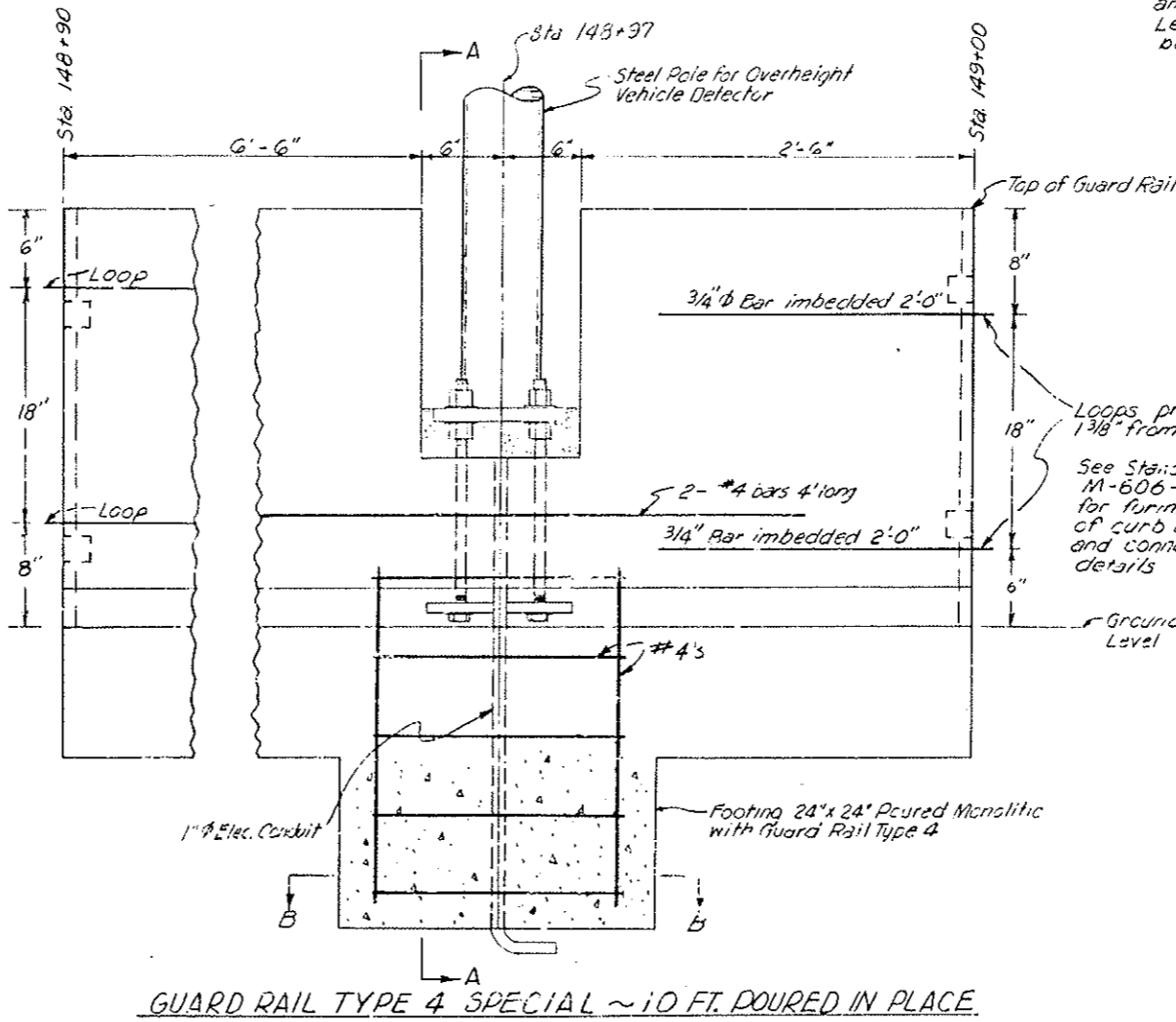
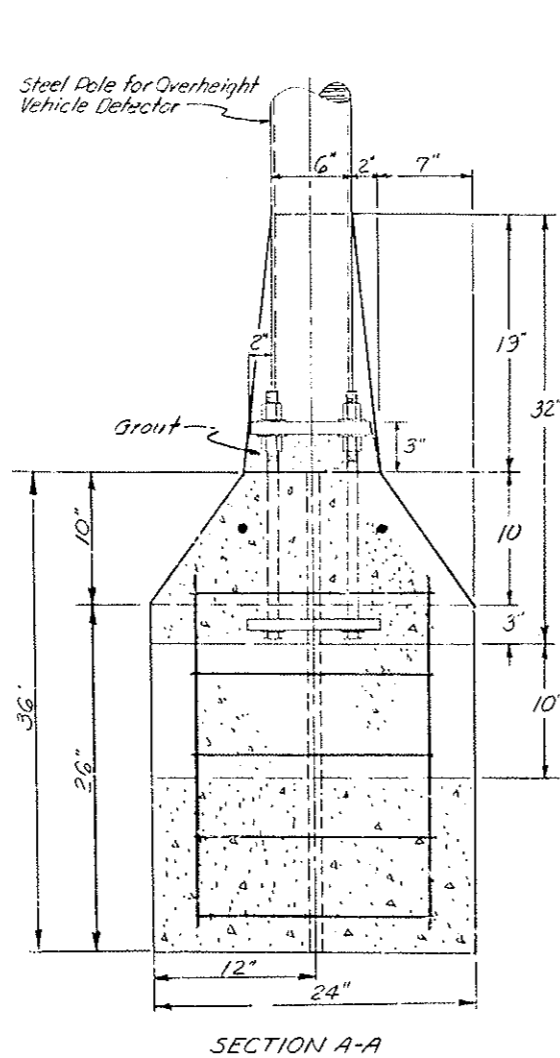
DIVISION OF HIGHWAYS
 CONNECTION DETAILS, GUARD RAIL 10
 BRIDGE RAIL TYPE 4B

Designer R. Akin	Structure F-13-P
Checker E. Einspahr	Number
Drawing Number	of
	Drawings

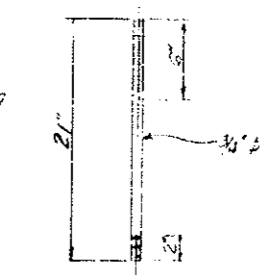
FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(8A)220	28	102
AS CONSTRUCTED				
NO REVISIONS		2-23-82	REVISED	VOID



Base Plate to be welded to bottom of overhead vehicle detector pole and paid for as part of the reset item. Leveling and Pasting bolts shall also be included in the resetting of pole.



2 Req'd. on bottom of Anchor Bolts



4 Req'd.

See Standard M-606-EA for forming of curb ends and connecting details

(R-1) Added Note 5-7-79 E.B.

AS CONSTRUCTED		
NO REVISIONS	REVISED 12-22-80	VOID

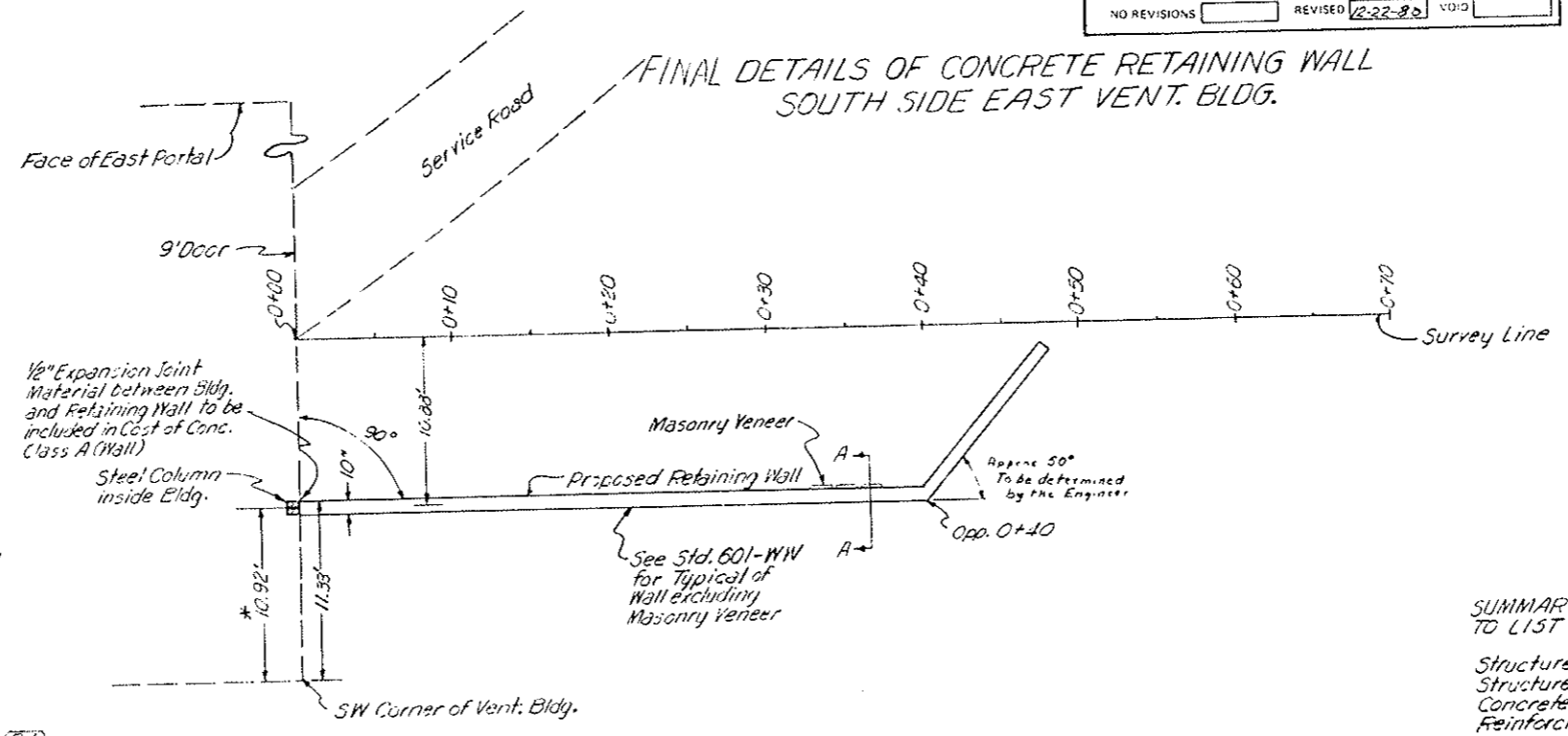
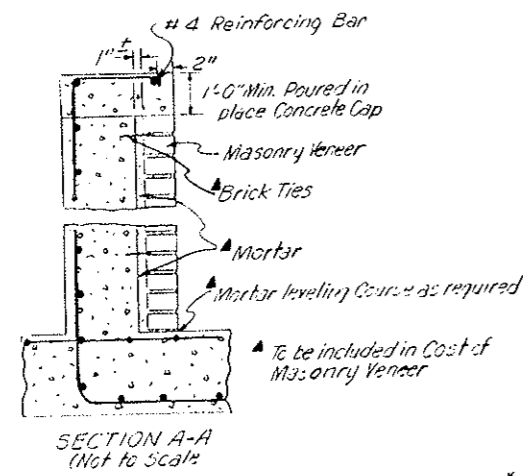
PROJECT NO.	PROJ. 16	SHEET NO.	29	TOTAL SHEETS	102
DISTRICT	VIII	COLORADO	170-3(24)220		

Scale 1"=5'



Note: Metal Ties for Masonry Veneer shall be placed such that maximum area = 4 1/2 Sq. Ft. per ft. Horizontal ladder or truss type standard weight ties shall be provided at maximum 16" spacing.

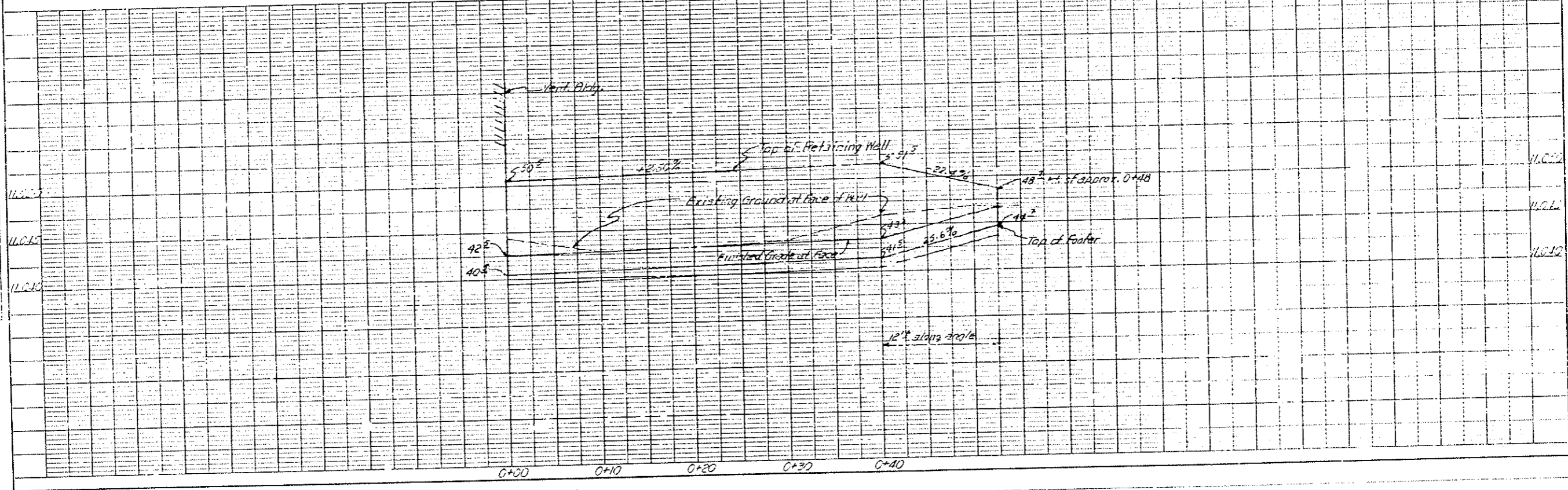
Masonry Veneer shall be constructed after Mortar leveling course and Backfilling to top of footer have been completed.



SUMMARY OF QUANTITIES CARRIED TO LIST OF STRUCTURES

Structure Excavation	81 Cu. Yds.
Structure Backfill	57 Cu. Yds.
Concrete Class A (Wall)	28 Cu. Yds.
Reinforcing Steel	2347 Lb.
Masonry Veneer	432-355 Sq. Ft.

(R-1) Grout by pumping required to fill cavity behind the Brick Veneer building wall from the foundation to the height of the retaining wall. Cost is subsidiary to the work.



PLAN

DATE	REVISION

PROFILE

DATE	REVISION

FINAL SKI AREA ACCESS C.B.C. EXTENSION

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(64)220	29A	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 12-22-80	VOID	

This sheet added 5-18-79 - E.B.

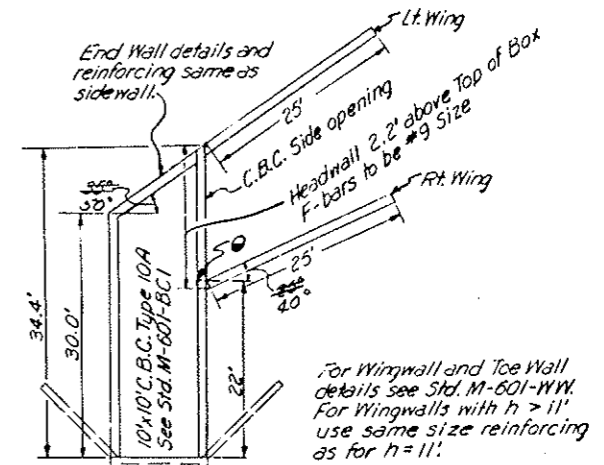
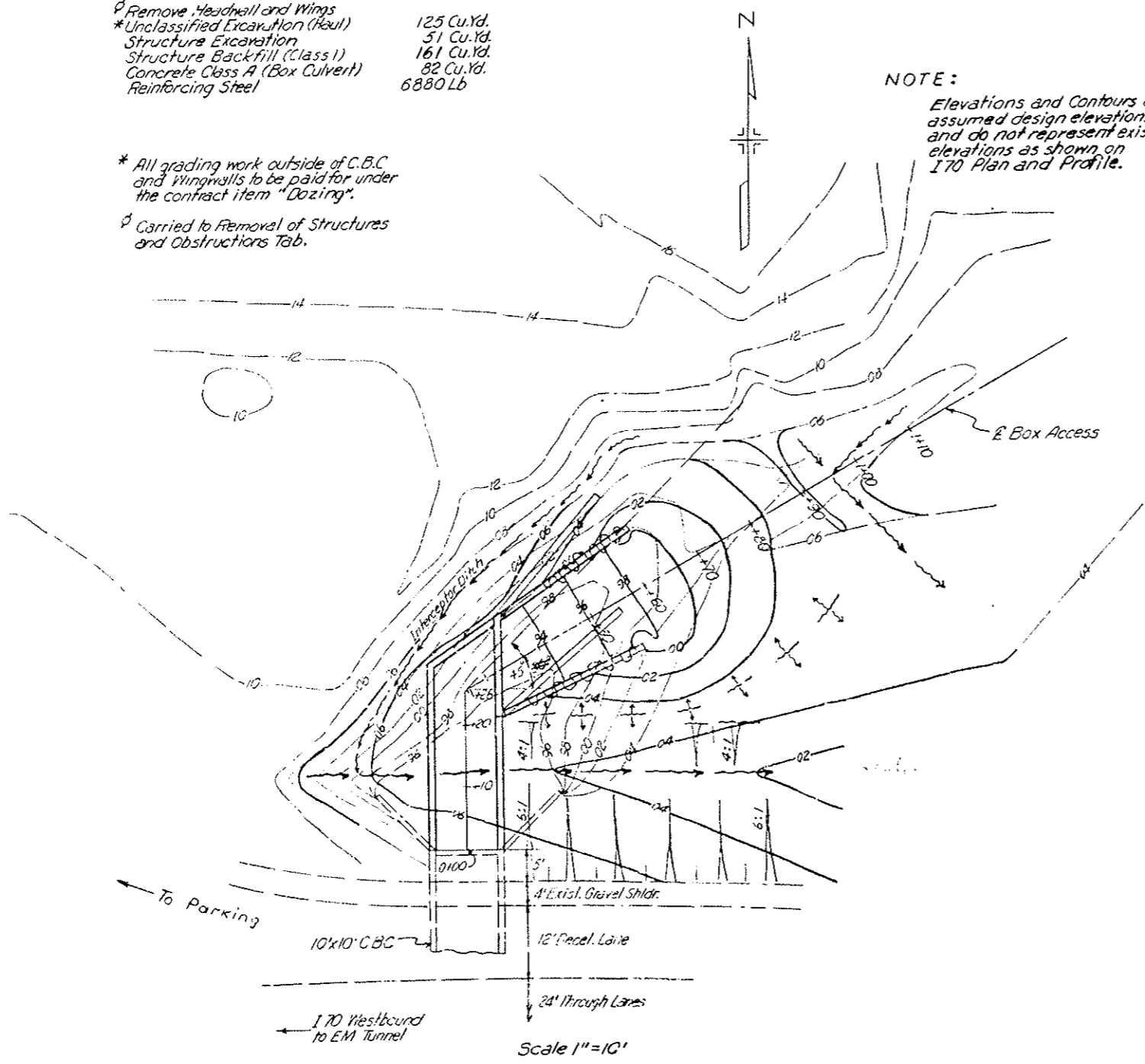
SUMMARY OF C.B.C. EXTENSION QUANTITIES

(Quantities carried to List of Structures unless noted)

Remove Headwall and Wings	125 Cu.Yd.
*Unclassified Excavation (Haul)	51 Cu.Yd.
Structure Excavation	161 Cu.Yd.
Structure Backfill (Class I)	82 Cu.Yd.
Concrete Class A (Box Culvert)	6880 Lb
Reinforcing Steel	

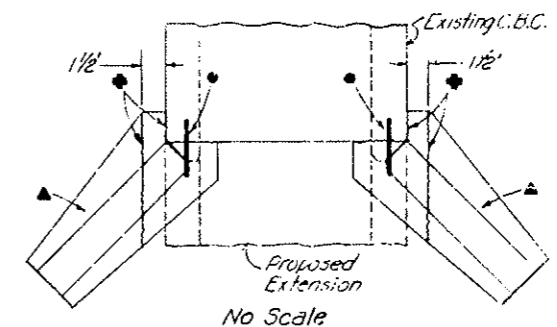
* All grading work outside of C.B.C. and Wingwalls to be paid for under the contract item "Dozing".
 † Carried to Removal of Structures and Obstructions Tab.

NOTE:
 Elevations and Contours are assumed design elevations and do not represent existing elevations as shown on I 70 Plan and Profile.



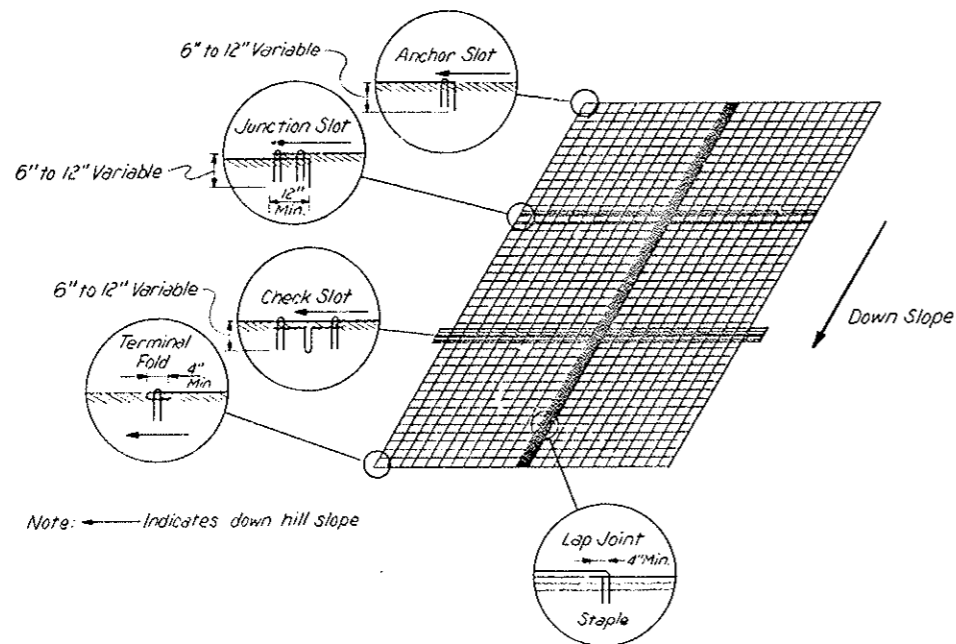
4"x4"x 7/8"x10' long galv. Steel angle with 1/2" P x 6" long stud anchors welded to the inside of the angle shall be placed at the Southeast corner opening of the Box. All costs of the above requirements will not be paid for separately but shall be included in the work.

DETAIL FOR HEADWALL AND WINGWALL REMOVAL



- ◆ Remove along these lines.
 - 2 Ft. #4 Reinforcing Bars shall be placed at every longitudinal Bar shown on the Standard.
 - ▲ Portion of Wingwall to remain in place.
- The cost of drilling holes and placing tie bars is to be included in payment for "Reinforcing Steel".

SOIL RETENTION BLANKET JOINT DETAILS



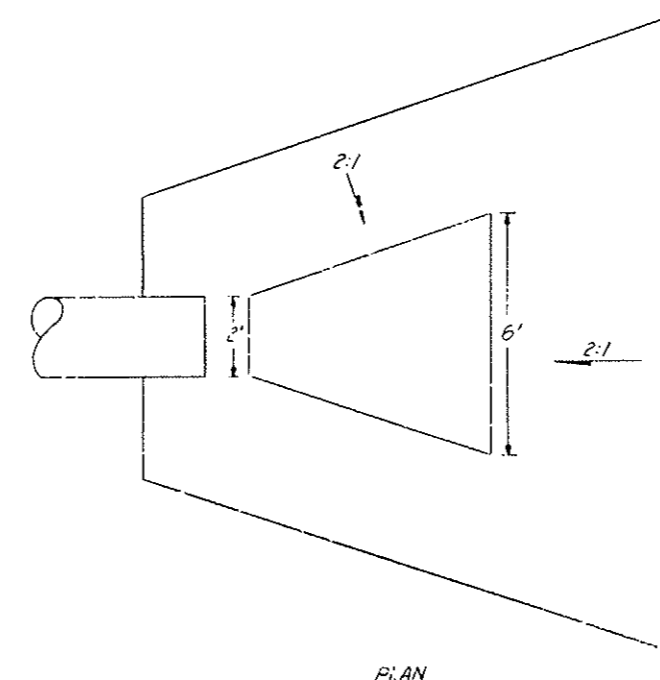
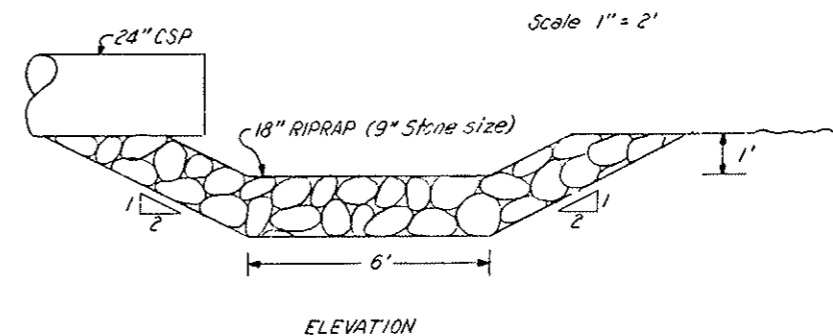
Note: ← Indicates down hill slope

Description of Joints and Slots

- Anchor Slot - Buried upper edge of Blanket
- Junction Slot - Joint between upper and lower pieces
Upper pieces overlapping buried end of lower piece.
- Check Slot - Extra piece of blanket folded lengthwise and buried perpendicular to the slope. Continuous upper piece overlaying the unfolded portion remaining above ground
- Terminal Fold - Bottom edge of blanket, folded under and stapled
- Lap Joint - Overlap joint between two rolls, running down the slope

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3184/220	30	102
AS CONSTRUCTED				
NO REVISIONS	2-22-82	REVISED		VOID

ENERGY DISSIPATOR
 Sta 417+22 Rt. & 135+25 Rt.



FINAL WEST PORTAL AREA DETAILS

GEOMETRICS

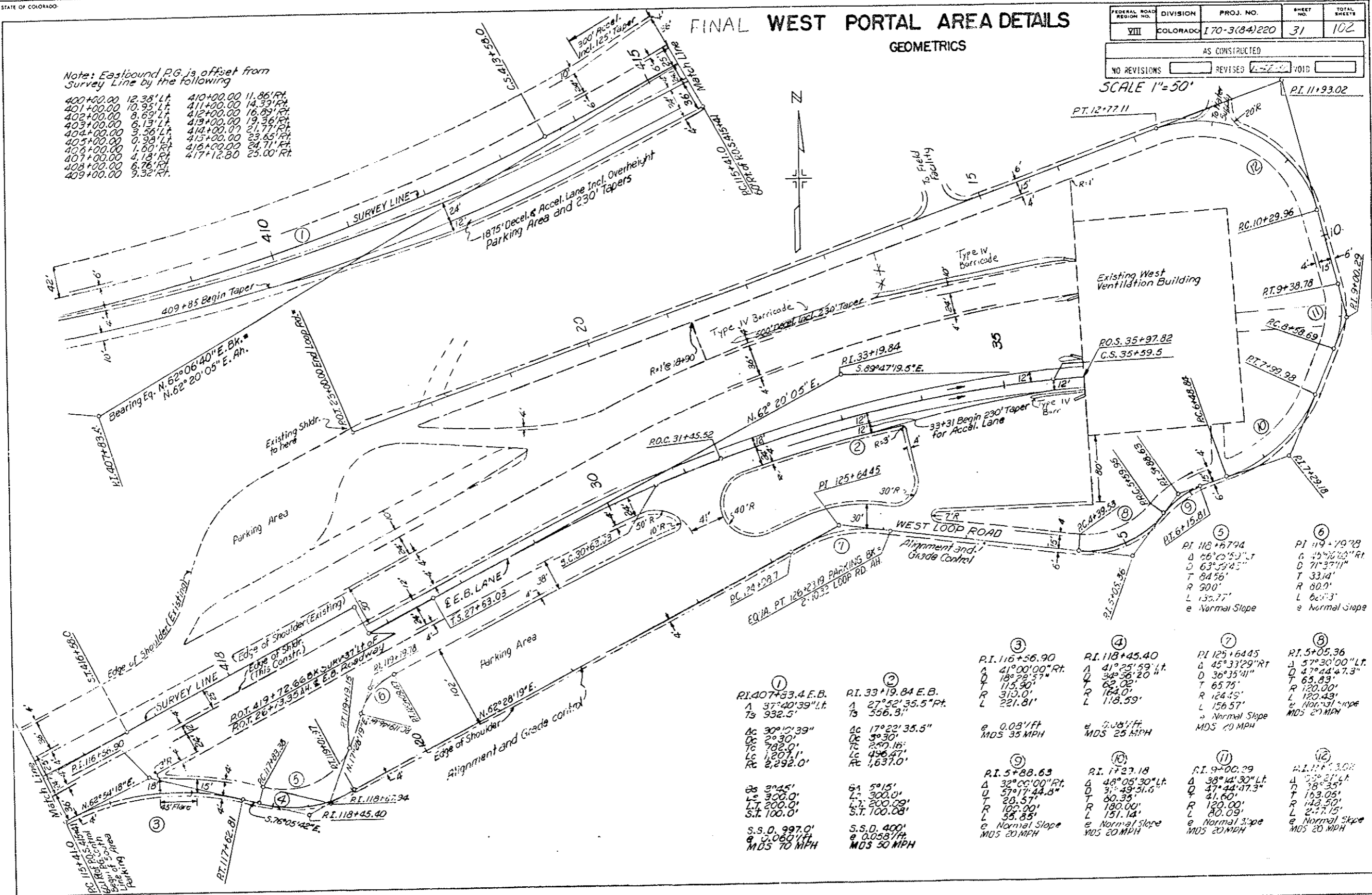
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	31	102

AS CONSTRUCTED

NO REVISIONS REVISED VOID

Note: Eastbound P.G. is offset from Survey Line by the following

400+00.00	12.38' Lt	410+00.00	11.86' Rt
401+00.00	10.95' Lt	411+00.00	14.39' Rt
402+00.00	8.69' Lt	412+00.00	16.89' Rt
403+00.00	6.13' Lt	413+00.00	19.36' Rt
404+00.00	3.56' Lt	414+00.00	21.77' Rt
405+00.00	0.98' Lt	415+00.00	23.65' Rt
406+00.00	1.60' Rt	416+00.00	24.71' Rt
407+00.00	4.18' Rt	417+12.80	25.00' Rt
408+00.00	6.76' Rt		
409+00.00	9.32' Rt		



SCALE 1" = 50'

<p>① PI. 407+33.4 E.B. Δ 37°40'39" Lt Ts 932.5' Ac 30°10'39" Oc 3°30' Tc 782.0' Lc 1,207.1' Rc 2,292.0'</p>	<p>② PI. 33+19.84 E.B. Δ 27°52'35.5" Pt. Ts 556.3' Ac 17°22'35.5" Oc 3°30' Tc 250.16' Lc 496.47' Rc 1,637.0'</p>	<p>③ PI. 116+56.90 Δ 41°00'00" Rt. Ts 187°29'57" T 115.90' R 313.0' L 221.81'</p>	<p>④ PI. 118+45.40 Δ 41°25'59" Lt. Ts 343°36'20" T 62.02' R 164.0' L 118.59'</p>	<p>⑤ PI. 125+64.45 Δ 45°33'29" Rt. Ts 47°44'47.3" T 65.89' R 120.00' L 120.43' e Normal Slope MDS 20 MPH</p>	<p>⑥ PI. 118+67.94 Δ 66°20'59" Lt. Ts 63°59'45" T 84.56' R 90.0' L 132.77' e Normal Slope</p>	<p>⑦ PI. 125+64.45 Δ 45°33'29" Rt. Ts 47°44'47.3" T 65.89' R 120.00' L 120.43' e Normal Slope MDS 20 MPH</p>	<p>⑧ PI. 5+05.36 Δ 57°30'00" Lt. Ts 47°44'47.3" T 65.89' R 120.00' L 120.43' e Normal Slope MDS 20 MPH</p>	<p>⑨ PI. 116+56.90 Δ 41°00'00" Rt. Ts 187°29'57" T 115.90' R 313.0' L 221.81'</p>	<p>⑩ PI. 1737.18 Δ 48°05'30" Lt. Ts 31°49'51.0" T 28.57' R 100.00' L 151.14' e Normal Slope MDS 20 MPH</p>	<p>⑪ PI. 9+00.29 Δ 38°14'30" Lt. Ts 38°21'11" T 41.60' R 120.00' L 80.09' e Normal Slope MDS 20 MPH</p>	<p>⑫ PI. 117+3.08 Δ 28°21'11" Ts 38°21'11" T 41.60' R 120.00' L 80.09' e Normal Slope MDS 20 MPH</p>
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22
11
9.3
8.5"
11"
17"
22"

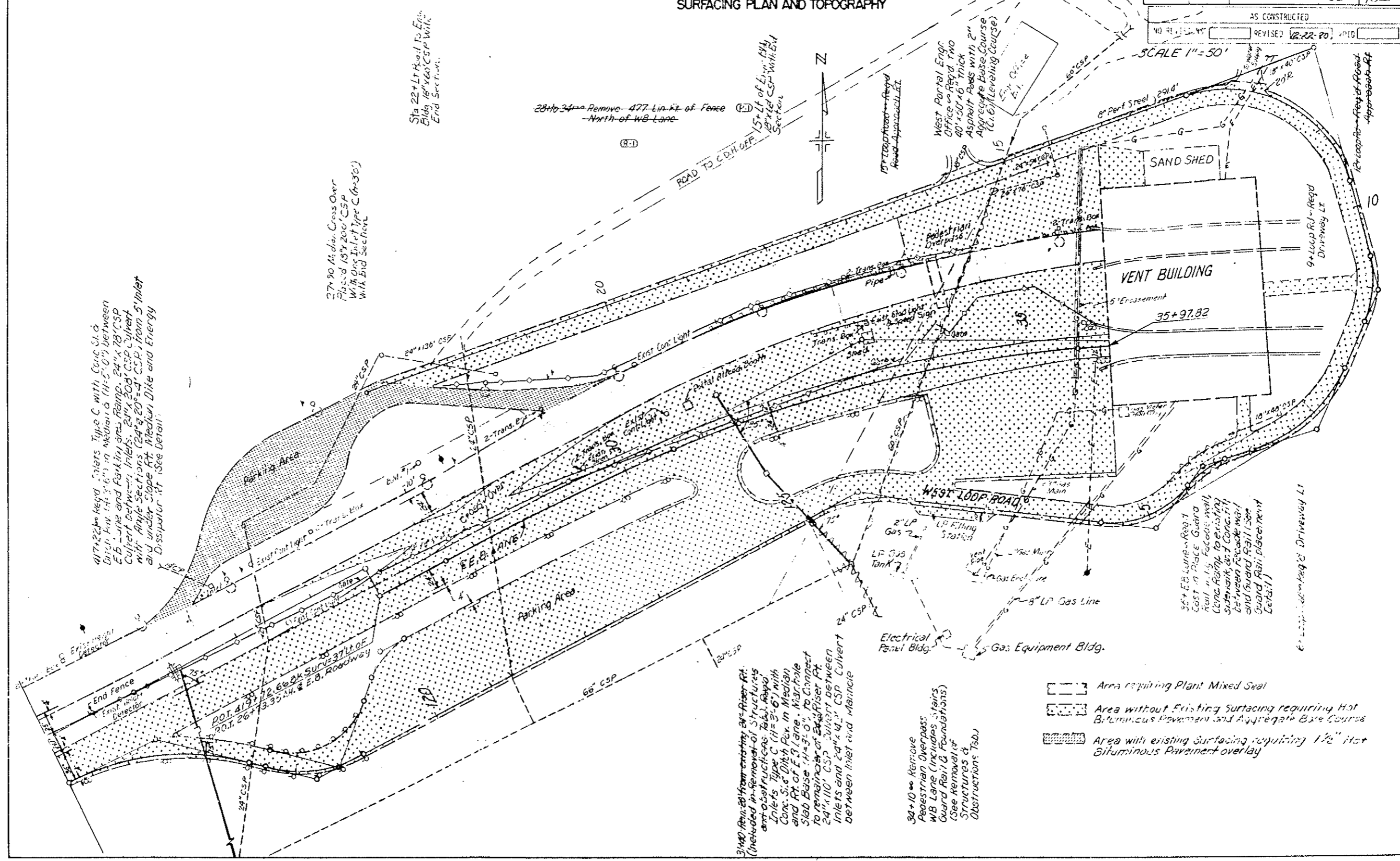
FINAL WEST PORTAL AREA DETAILS

SURFACING PLAN AND TOPOGRAPHY

(R-1) Revised Fencing Removal, Guardrail & Removed, Note 5-7-79 E.B.

PROJECT NO.	SECTION	DATE	BY	CHECKED
170-3(84)220	32	10/2		
AS CONSTRUCTED				
NO. OF SHEETS	REVISED	DATE	BY	CHECKED
	12-22-70			

SCALE 1" = 50'



22"
17"
11"
8.5"
8.5"
11"
17"
22"

417+224 Regd. Chiers Type C with Conc. Sl. & Bit. Lin. 14' 3/4" in Median & 11' 5'-0" between E.B. Lane and Parking Area Ramp. 24" x 18" CSP Culvert (between) Inlets. 24" x 20" CSP Culvert with Angle Sections. (24" x 20" CSP from 5' Inlet and under Slope RT. Median Dike and Energy Dissipator RT. (See Detail).

27+90 At dia. Cross Over Place. 18" x 20" CSP with 0.5' Int. of Type C (R-300) with End Section.

Sta 22+17 Road to Eng. Bldg. 18" x 20" CSP with End Section.

28+34 Remove 477 Lin. of Fence North of WB Lane (R-1)

3+40 Rein. 20' from existing 24" Riser RT. (Included in Removal of Structures and Obstructions: Tab. 100) Inlets Type C (11' x 3'-6") with Conc. Sl. & Ditch Pav. in Median and RT of E.G. Lane. Marchole Slab Base (11' x 3'-0") to Connect to remaining of 24" Riser RT. 24" x 110" CSP Culvert between Inlets and 24" x 14" CSP Culvert between Inlet and Manhole.

34+10 Remove Pedestrian Overpass WB Lane (Includes Stairs Guard Rail & Foundations) (See Removal of Structures & Obstructions: Tab.)

- Area requiring Plant Mixed Seal
- Area without Existing Surfacing requiring Hot Bituminous Pavement and Aggregate Base Course
- Area with existing Surfacing requiring 1/2" Hot Bituminous Pavement overlay

FINAL WEST PORTAL AREA DETAILS

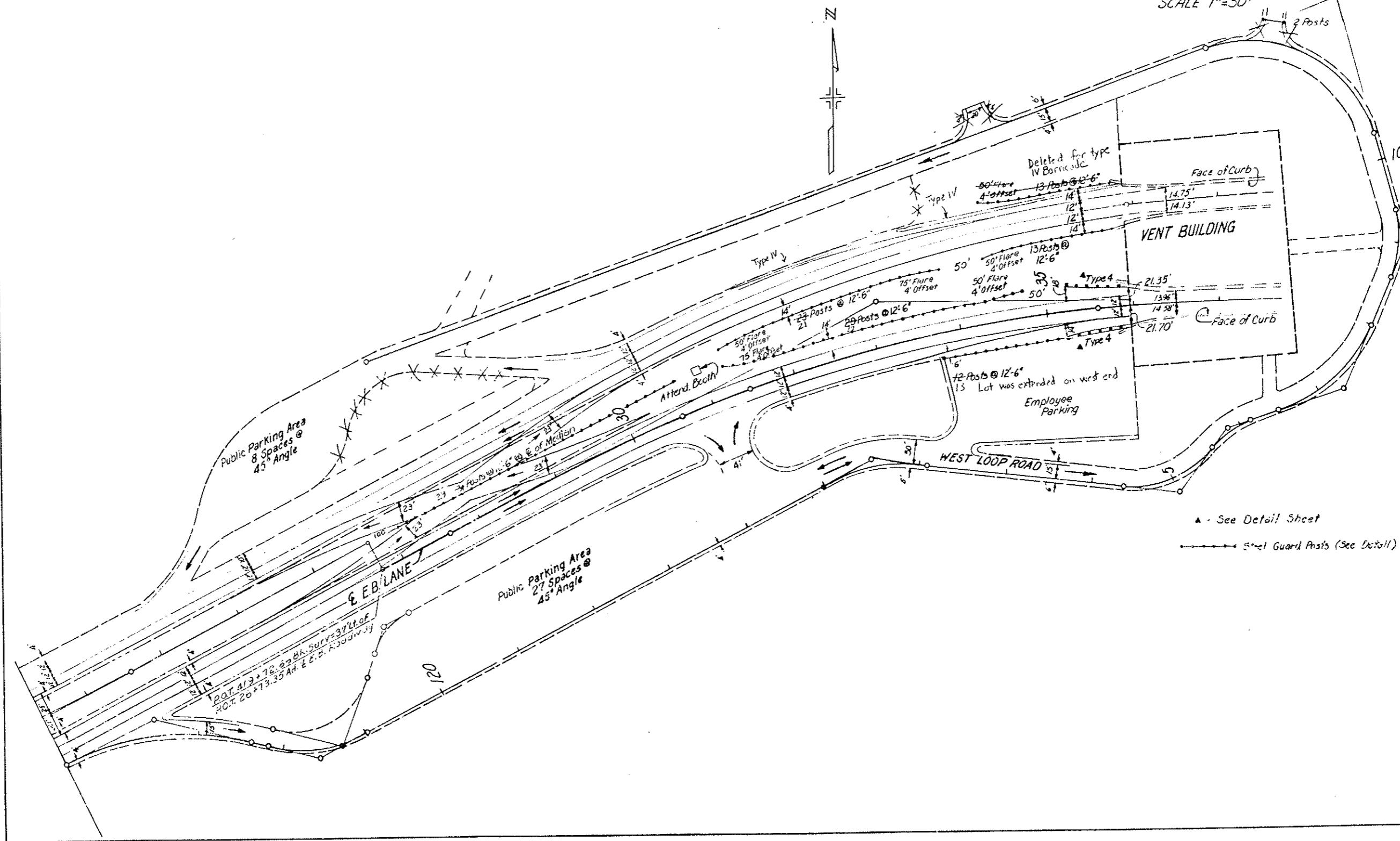
TRAFFIC CIRCULATION

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	53	102

AS CONSTRUCTED

NO REVISIONS REVISED 2-22-80 VOID

SCALE 1"=50'



▲ - See Detail Sheet
 ● - Steel Guard Posts (See Detail)

22"
17"
11"
9.8"
8.5"
11"
11"
22"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	34	102

AS CONSTRUCTED

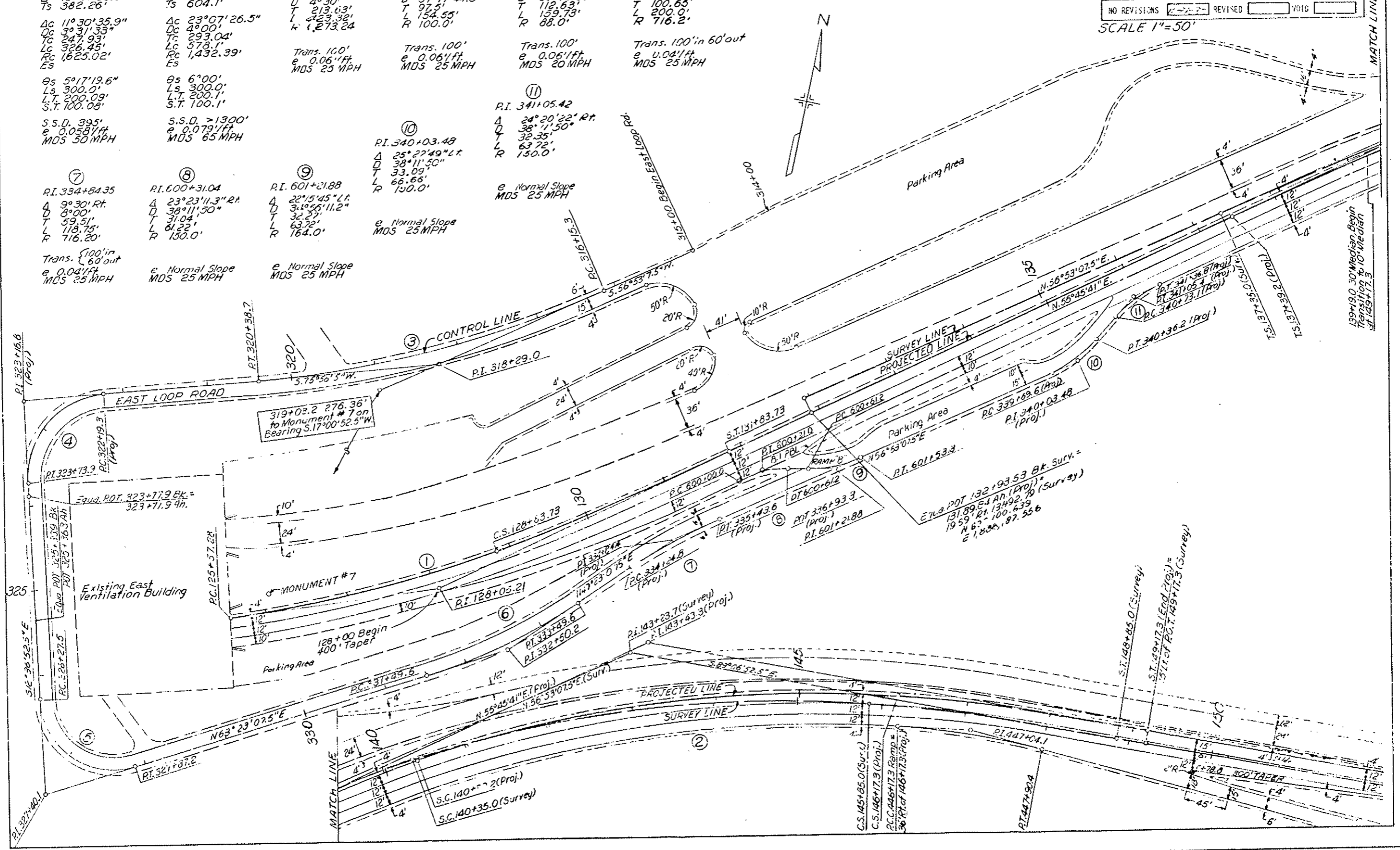
NO REVISIONS REVISED VOID

SCALE 1"=50'

FINAL EAST PORTAL AREA DETAILS

GEOMETRICS

- ① P.I. 128+05.2 (E.B.)
 Δ 16°47'55.5" Lt.
 T_s 382.26'
 Δc 11°30'35.9"
 Oc 30'31'33"
 Tc 247'93'
 Lc 326.45'
 Rc 1625.02'
 Es
 θ_s 5°17'19.6"
 Ls 300.0'
 $L.T.$ 200.09'
 $S.T.$ 100.08'
 $S.S.D.$ 395'
 e 0.0587/ft
 MDS 30 MPH
- ② P.I. 143+43.3 (E.B.)
 Δ 35°07'26.5" Rt.
 T_s 604.11'
 Δc 23°07'26.5"
 Oc 48'00"
 Tc 293.04'
 Lc 578.11'
 Rc 1,432.39'
 Es
 θ_s 6°00'
 Ls 300.0'
 $L.T.$ 200.1'
 $S.T.$ 100.1'
 $S.S.D.$ >1300'
 e 0.0791/ft
 MDS 65 MPH
- ③ P.I. 318+29.0
 Δ 19°02'57.5" Rt.
 D 2°30'
 T 213.63'
 L 423.32'
 R 1,273.24'
 $Trans.$ 100'
 e 0.061/ft
 MDS 25 MPH
- ④ P.I. 323+16.8
 Δ 88°32'57.5" Lt.
 D 57°17'44.8"
 T 97.5'
 L 154.55'
 R 100.0'
 $Trans.$ 100'
 e 0.061/ft
 MDS 25 MPH
- ⑤ P.I. 327+40.1
 Δ 104°00' Lt.
 D 65°06'32"
 T 112.63'
 L 159.73'
 R 88.0'
 $Trans.$ 100'
 e 0.061/ft
 MDS 20 MPH
- ⑥ P.I. 332+50.2
 Δ 16°00' Lt.
 D 8°00'
 T 100.65'
 L 200.0'
 R 716.2'
 $Trans.$ 100' in 60' out
 e 0.041/ft
 MDS 25 MPH
- ⑦ P.I. 334+84.35
 Δ 9°30' Rt.
 D 8°00'
 T 59.51'
 L 118.75'
 R 716.20'
 $Trans.$ 100' in 60' out
 e 0.041/ft
 MDS 25 MPH
- ⑧ P.I. 600+31.04
 Δ 23°23'11.3" Rt.
 D 38°11'50"
 T 31.04'
 L 61.22'
 R 150.0'
 e Normal Slope
 MDS 25 MPH
- ⑨ P.I. 601+21.88
 Δ 22°15'45" Lt.
 D 31°56'11.2"
 T 32.27'
 L 63.72'
 R 164.0'
 e Normal Slope
 MDS 25 MPH
- ⑩ P.I. 340+03.48
 Δ 25°27'49" Lt.
 D 38°11'50"
 T 33.09'
 L 66.66'
 R 150.0'
 e Normal Slope
 MDS 25 MPH
- ⑪ P.I. 341+05.42
 Δ 24°20'22" Rt.
 D 38°11'50"
 T 32.35'
 L 63.72'
 R 150.0'
 e Normal Slope
 MDS 25 MPH



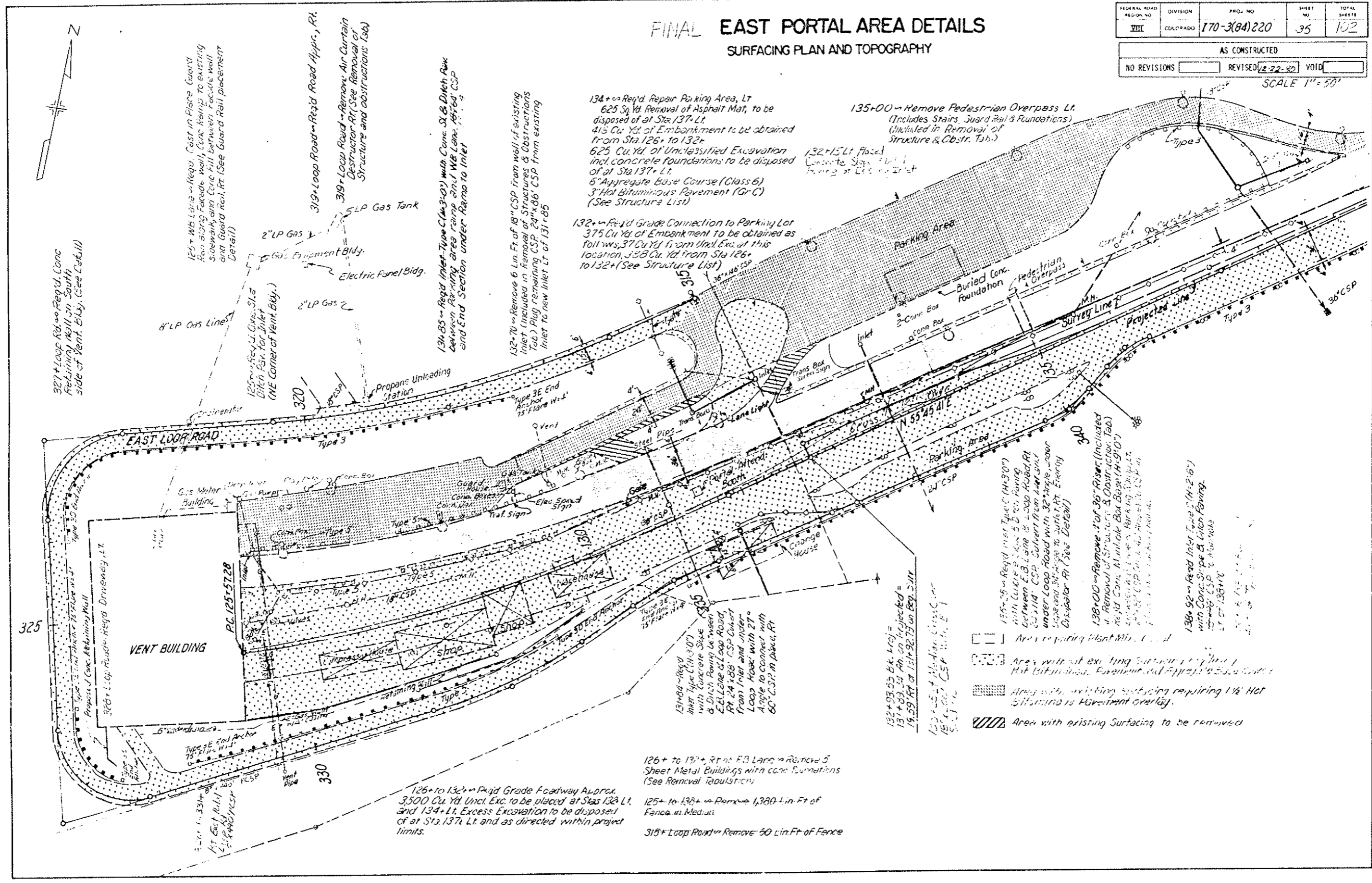
77
 11
 8.5"
 11"
 17"
 22"

FINAL EAST PORTAL AREA DETAILS

SURFACING PLAN AND TOPOGRAPHY

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	35	102
AS CONSTRUCTED				
NO REVISIONS	REVISED	VOID		
	2-22-82			

SCALE 1" = 30'



85"
11"
7"
22"

327+ Loop Rd. Req'd. Conc. Retaining Wall on South side of Vent Bldg. (See Detail)

125+ WB Lane - Reg'd. Cast in Place Guard Rail along Face of wall. Conc. filling to existing roadway and Conc. Fill between Face of wall and Guard Rail. (See Guard Rail placement Detail)

319+ Loop Road - Req'd. Road Appr., Rt.
319+ Loop Road - Remove Air Curtain Destructor Rt. (See Removal of Structure and Obstructions Tab)

134+85 - Req'd. Inlet Type C (14x3-0) with Conc. Sl. & Ditch Box between Repairing area ramp and WB Lane. Req'd. CSP and End Section under Ramp to Inlet

132+70 - Remove 6 Lin. Ft. of 18" CSP from wall of existing Inlet (Included in Removal of Structures & Obstructions Tab.) Plug remaining CSP 24"x86" CSP from existing Inlet to new Inlet Lt. of 131+85

134+00 - Repair Parking Area, Lt.
625 Sq. Yd. Removal of Asphalt Mat, to be disposed of at Sta. 137+ Lt.
415 Cu. Yd. of Embankment to be obtained from Sta. 126+ to 132+
625 Cu. Yd. of Unclassified Excavation incl. concrete foundations to be disposed of at Sta. 137+ Lt.
6" Aggregate Base Course (Class 6)
3" Hot Bituminous Pavement (Gr. C)
(See Structure List)

135+00 - Remove Pedestrian Overpass Lt. (Includes Stairs, Guard Rail & Foundations) (Included in Removal of Structure & Obstr. Tab.)

132+15 Lt. Place Concrete Slab with Fencing at End of Inlet

132+ - Req'd. Grade Connection to Parking Lot
375 Cu. Yd. of Embankment to be obtained as follows: 37 Cu. Yd. from Util. Ex. at this location, 338 Cu. Yd. from Sta. 126+ to 132+ (See Structure List)

EAST LOOP ROAD

VENT BUILDING

PC 125+57.28

126+ to 132+ - Req'd. Grade Footway Approx. 3,500 Cu. Yd. Uncl. Exc. to be placed at Sta. 132+ Lt. and 134+ Lt. Excess Excavation to be disposed of at Sta. 137+ Lt. and as directed within project limits.

126+ to 137+ - Rt. of EB Lane - Remove 5 Sheet Metal Buildings with conc. foundations (See Removal Tabulation)

125+ to 136+ - Remove 1,300 Lin. Ft. of Fence in Median

313+ Loop Road - Remove 50 Lin. Ft. of Fence

135+00 - Req'd. Inlet Type C (14x3-0) with Curbs 2' x 6" x 8" Parking between E.B. Lane & Loop Road. At 135+114' CSP Culvert from Inlet side under Loop Road with 32" triple under pipe and 36" triple to utility Rt. Every 10' (See Detail)

138+00 - Remove 10' of 36" Riser (Included in Removal of Structures & Obstructions Tab.) Req'd. Conc. Manhole Box Base (14x9'0") (See Detail) (See Detail)

136+90 - Req'd. Inlet Type C (14x3-0) with Conc. Slab & Fencing. (See Detail) (See Detail)

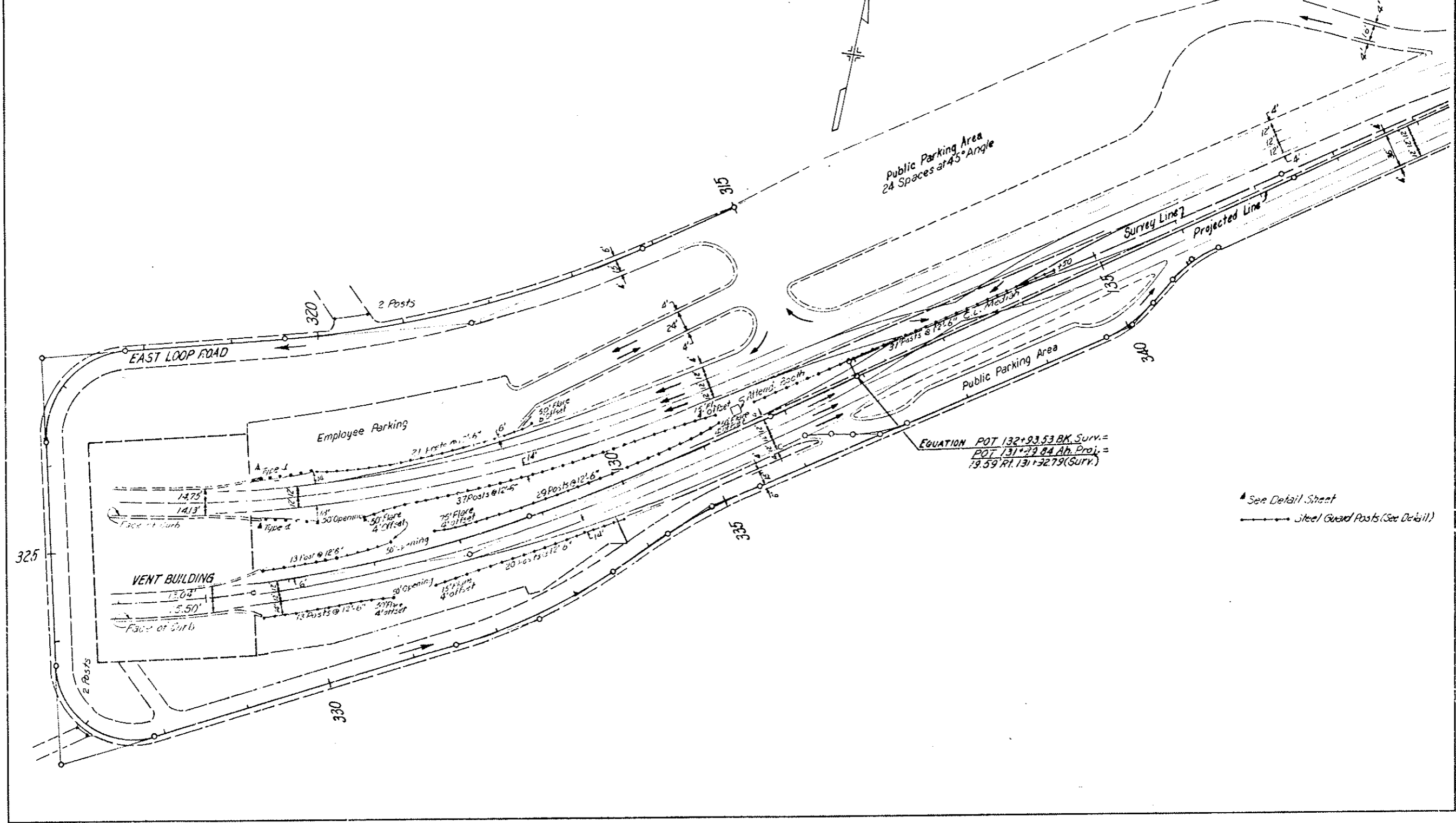
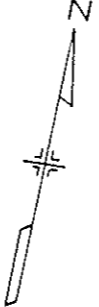
- Area requiring Plant Mix (Type 3)
- Area without existing surfacing requiring Hot Bituminous Pavement and Aggregate Base Course
- Area with existing surfacing requiring 1 1/2" Hot Bituminous Pavement overlay
- Area with existing Surfacing to be removed

FINAL EAST PORTAL AREA DETAILS

TRAFFIC CIRCULATION

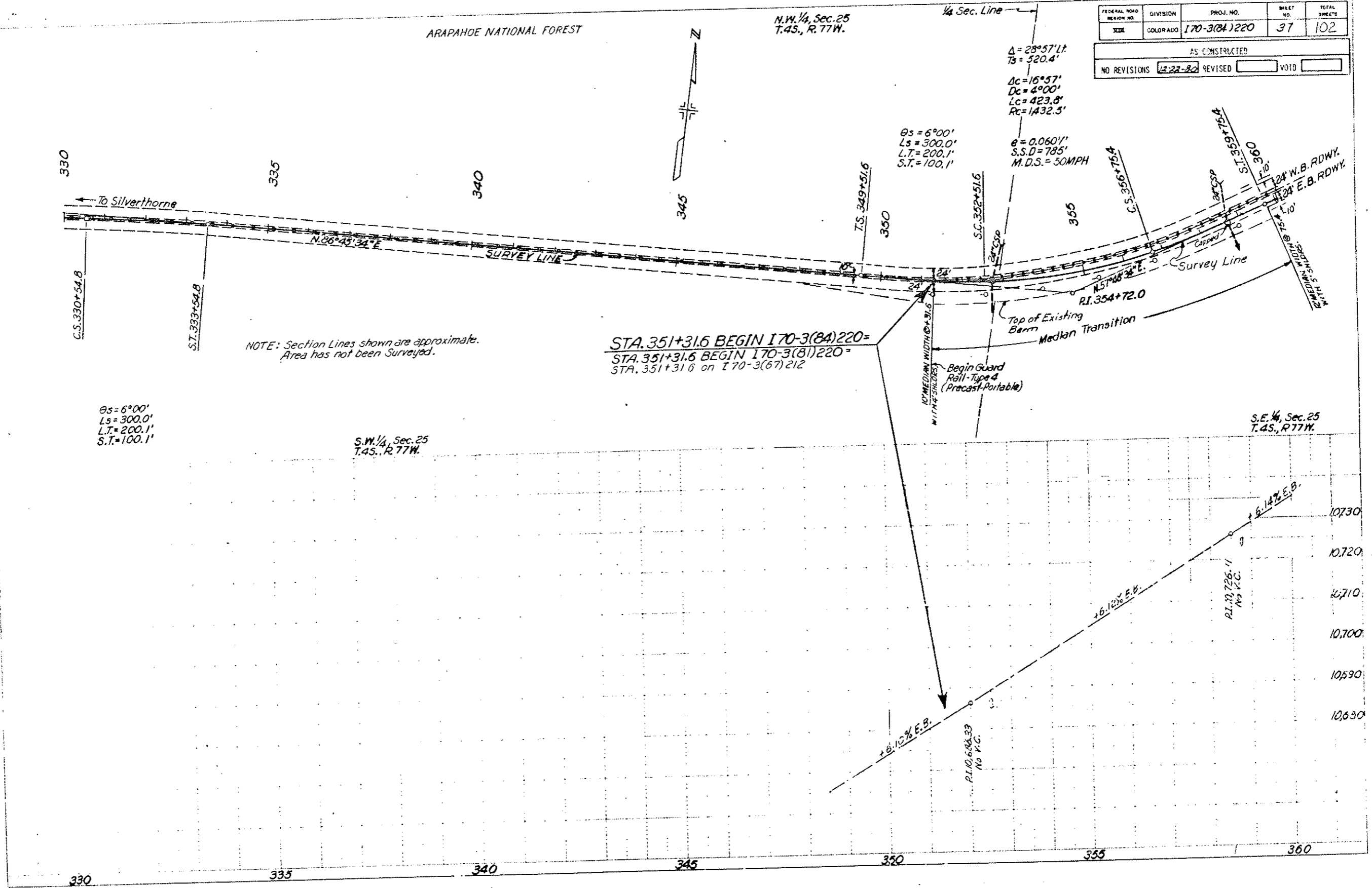
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	36	102
AS CONSTRUCTED				
NO REVISIONS		REVISED	VOID	
2-22-50				

SCALE 1"=50'



▲ See Detail Sheet
 —●— Steel Guard Posts (See Detail)

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	170-3(8A)220	37	102
AS CONSTRUCTED				
NO REVISIONS	2-22-80	REVISED		VOID



NOTE: Section Lines shown are approximate. Area has not been surveyed.

STA. 351+31.6 BEGIN 170-3(8A)220 =
 STA. 351+31.6 BEGIN 170-3(8)220 =
 STA. 351+31.6 on 170-3(67)212

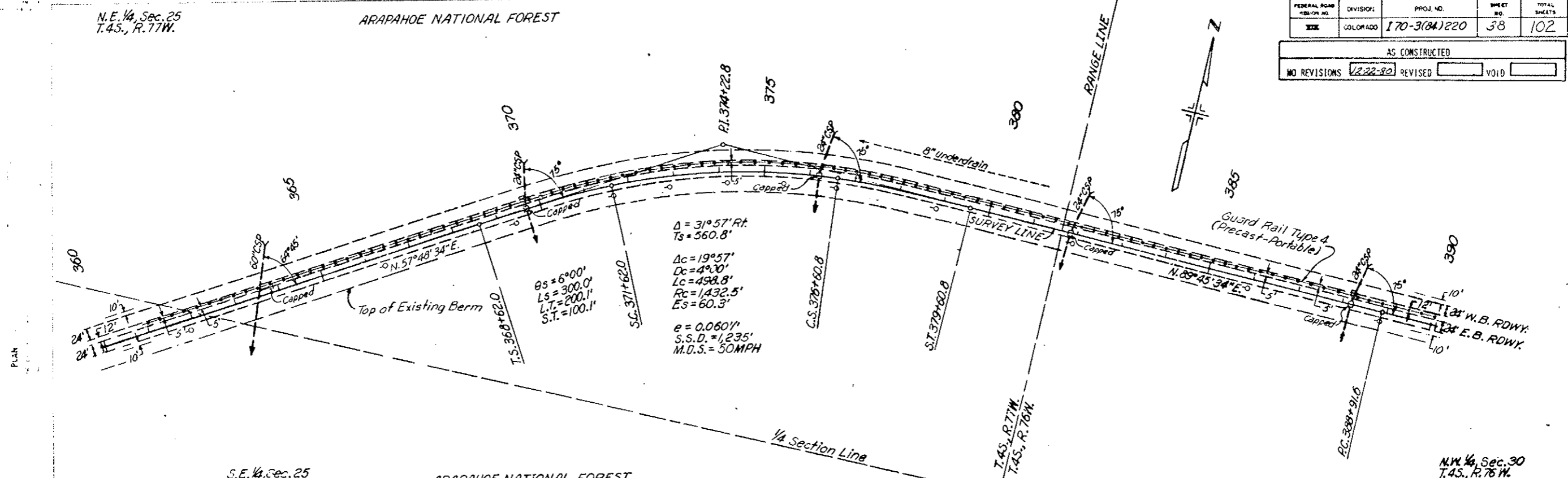
PLAN
 PROFILE
 5"
 1"
 17"
 12"

N.E. 1/4, Sec. 25
T.4S., R.77W.

ARAPAHOE NATIONAL FOREST

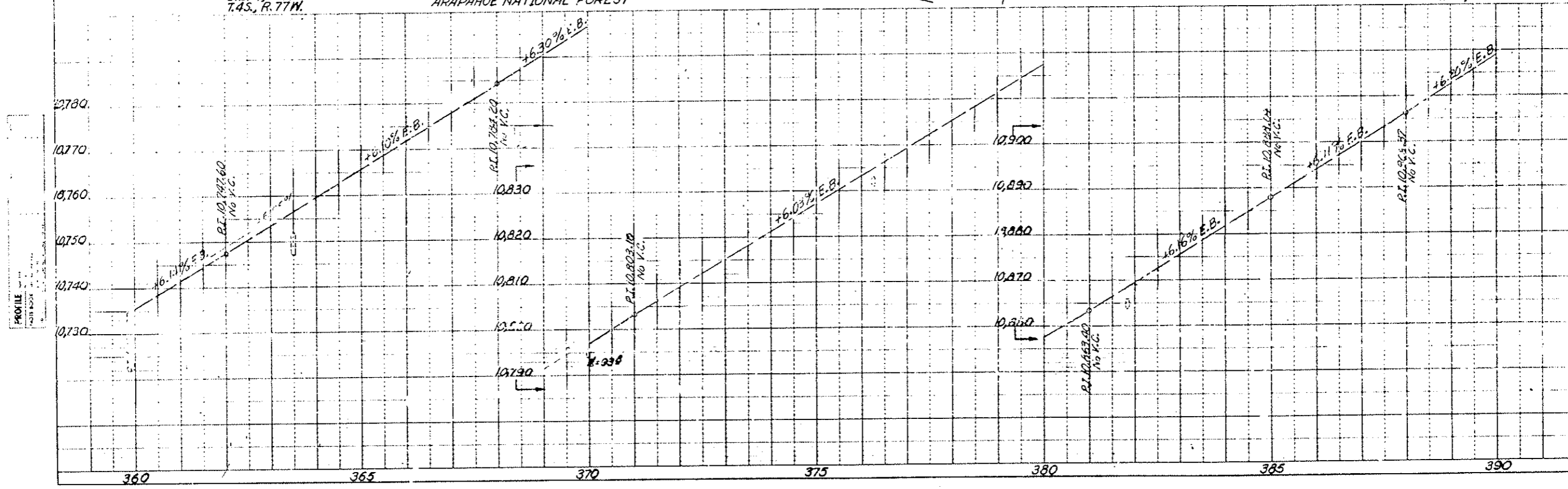
FEDERAL ROAD DISTRICT NO.	DIVISION:	PROJ. NO.	SHEET NO.	TOTAL SHEETS
111	COLORADO	170-3(84)220	38	102

AS CONSTRUCTED		
NO REVISIONS	12-22-90	REVISED
		VOID



S.E. 1/4, Sec. 25
T.4S., R.77W.

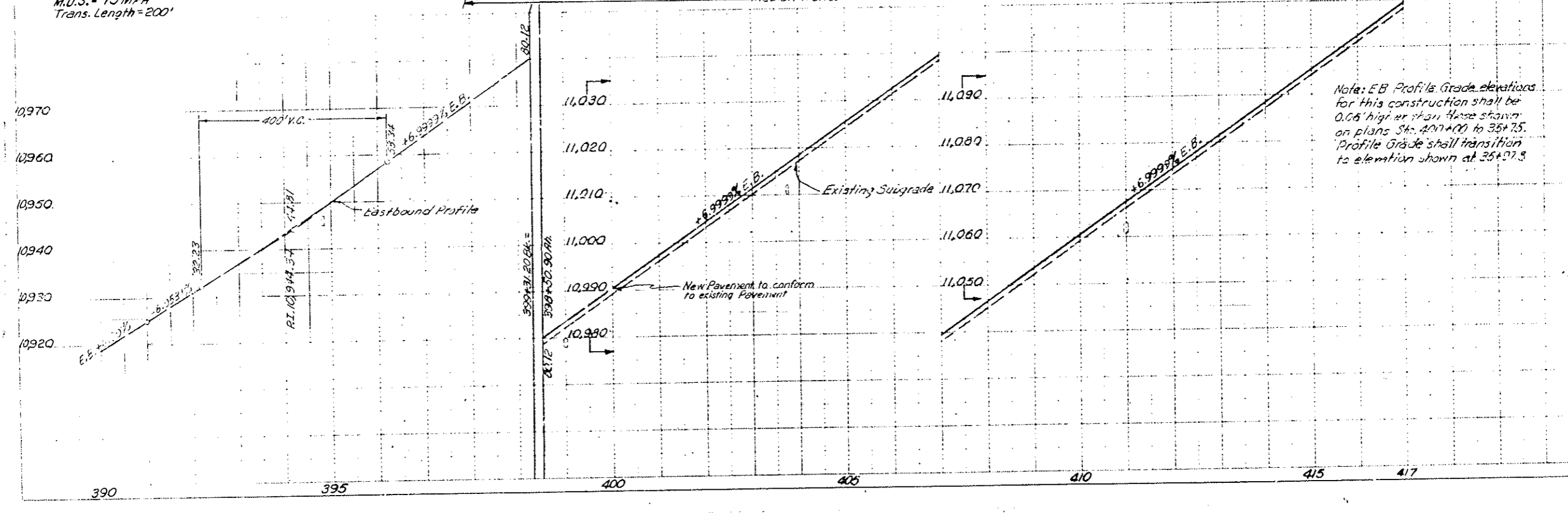
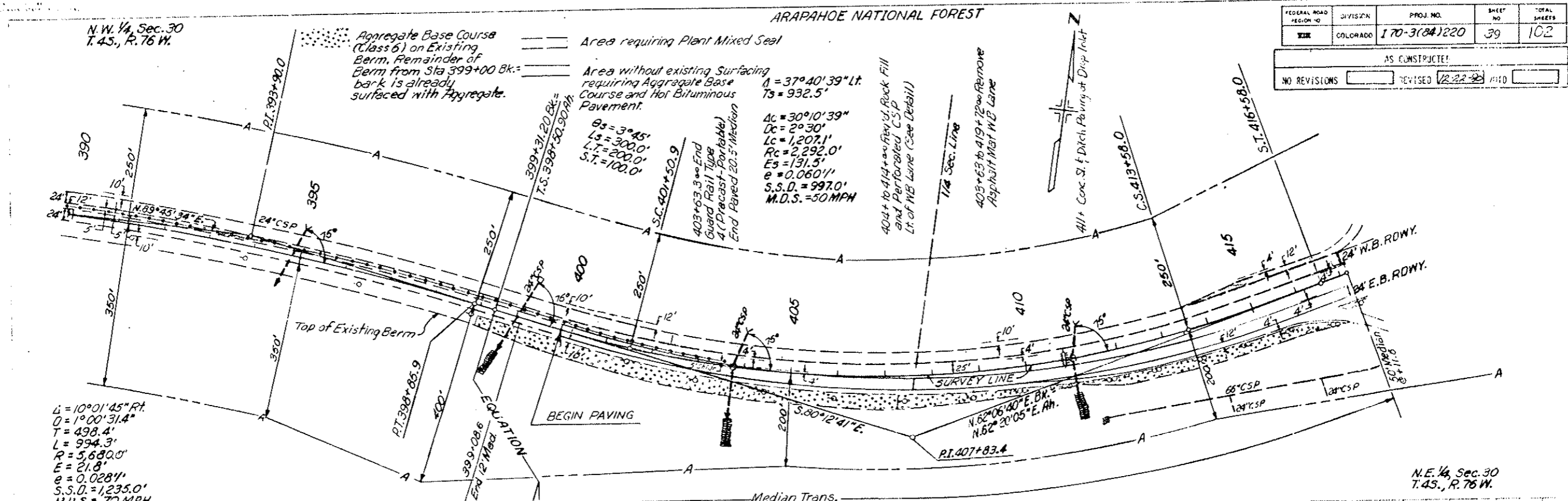
ARAPAHOE NATIONAL FOREST



FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VII	COLORADO	170-3(84)220	39	102

AS CONSTRUCTED

NO REVISIONS [] REVISED 12-22-88 []



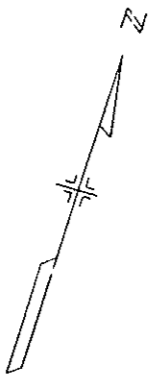
Note: E.B. Profile Grade elevations for this construction shall be 0.06' higher than those shown on plans Sta. 407+00 to 35+75. Profile Grade shall transition to elevation shown at 35+75.

8.5"

11"

17"

22"

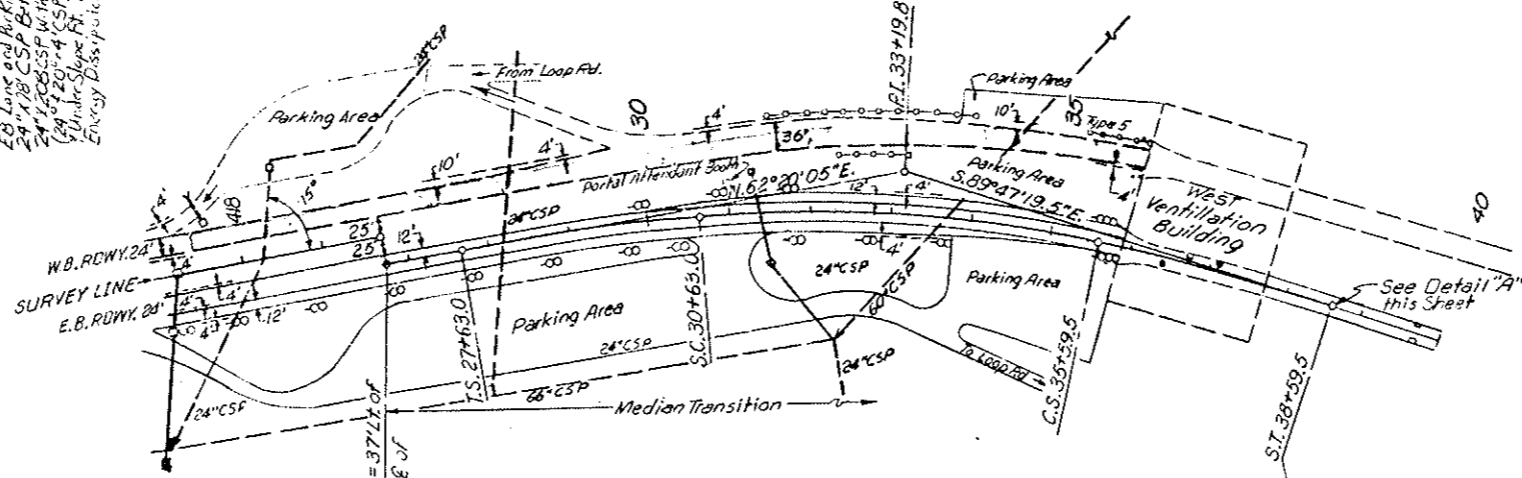


4722 Inlets Type C with Conc. Slope 1 Ditch Movement (N-36) In Station 3741.55 Between EB Lane and Parking Area Pump 29 178 CSP Between Inlets 24 120 CSP in Inlet Sections (24 of 20'-4' CSP) from 5 Inlet Under Slope At "Median Dike" Energy Dissipator At

ARAPAHOE NATIONAL FOREST

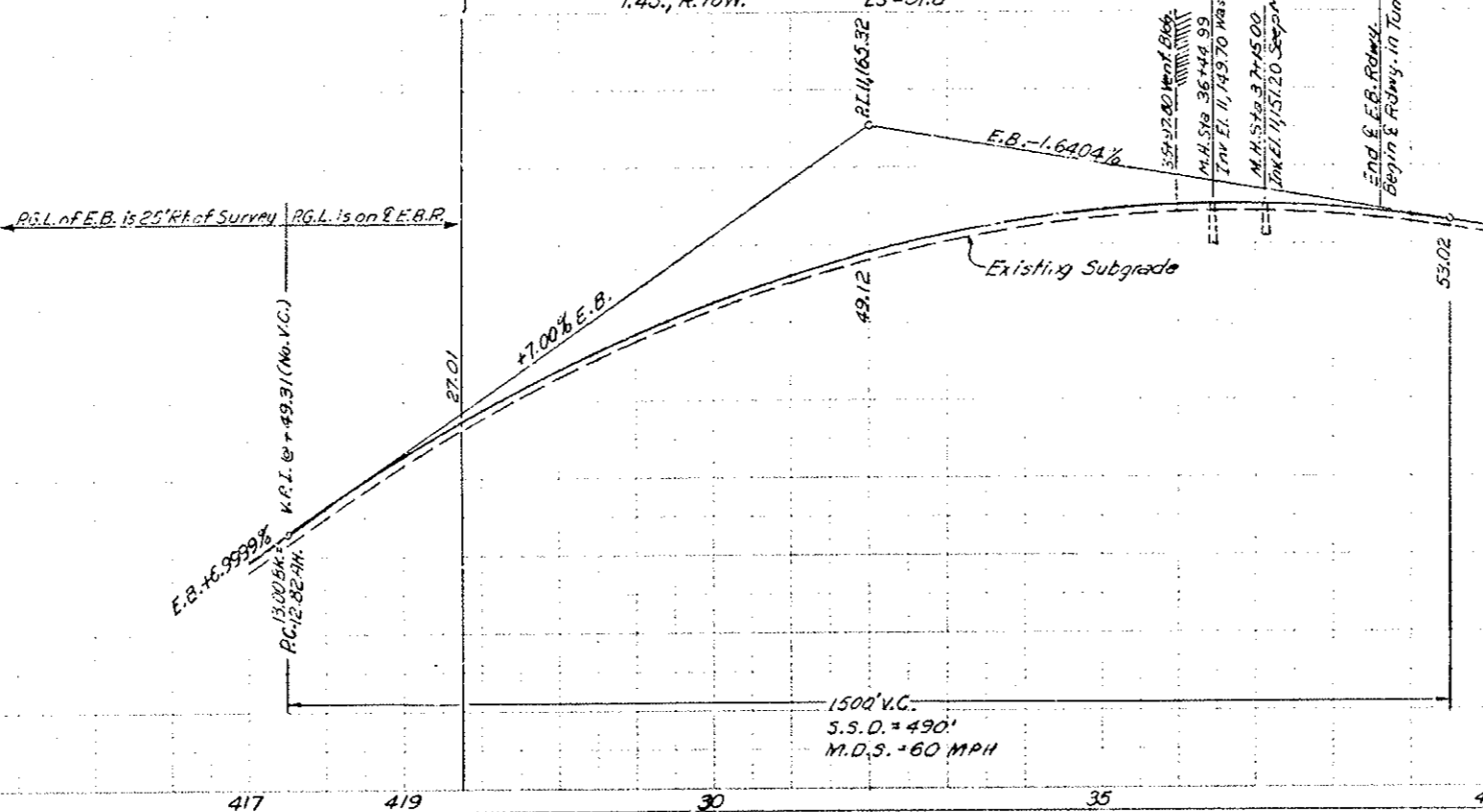
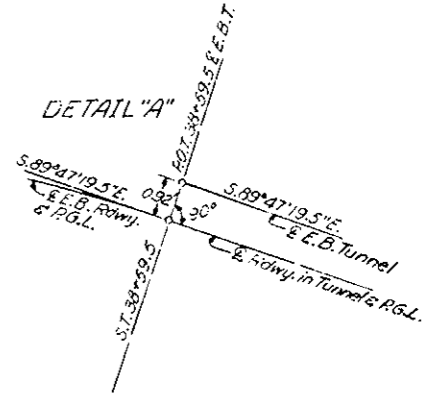
FOR ADDITIONAL INFORMATION ON SURFACING, TOPOGRAPHY, AND DRAINAGE SEE WEST PORTAL AREA DETAILS

XIII 170-3(84)220 40 102		
AS CONSTRUCTED		
NO REVISIONS	REVISED 2.22.25	VOID



$\Delta = 27^{\circ}52'35.5''Rt.$ $\Delta S = 5^{\circ}15'$
 $T_S = 556.8'$ $L_S = 300.0'$
 $\Delta C = 17^{\circ}22'35.5''$ $L.T. = 200.1'$
 $D_C = 3^{\circ}30'$ $S.T. = 100.1'$
 $L_C = 496.5'$ $e = 0.0581'$
 $T_C = 250.2'$ $S.S.D. = 400'$
 $R_C = 1,637.0'$ $M.D.S. = 50 MPH$
 $E_S = 51.8'$

N.E. 1/4, Sec. 30
T. 45, R. 76 W.



11,150
11,140
11,130
11,120
11,110

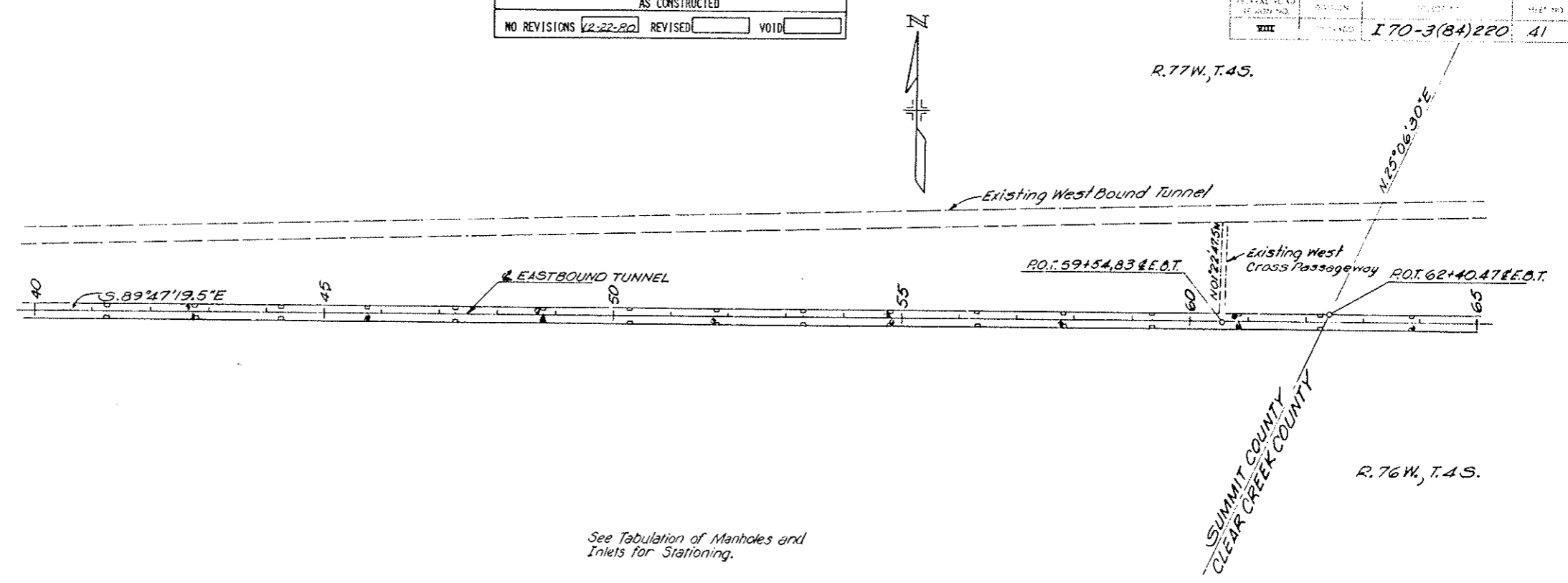
11,150
11,140
11,130
11,120

22"

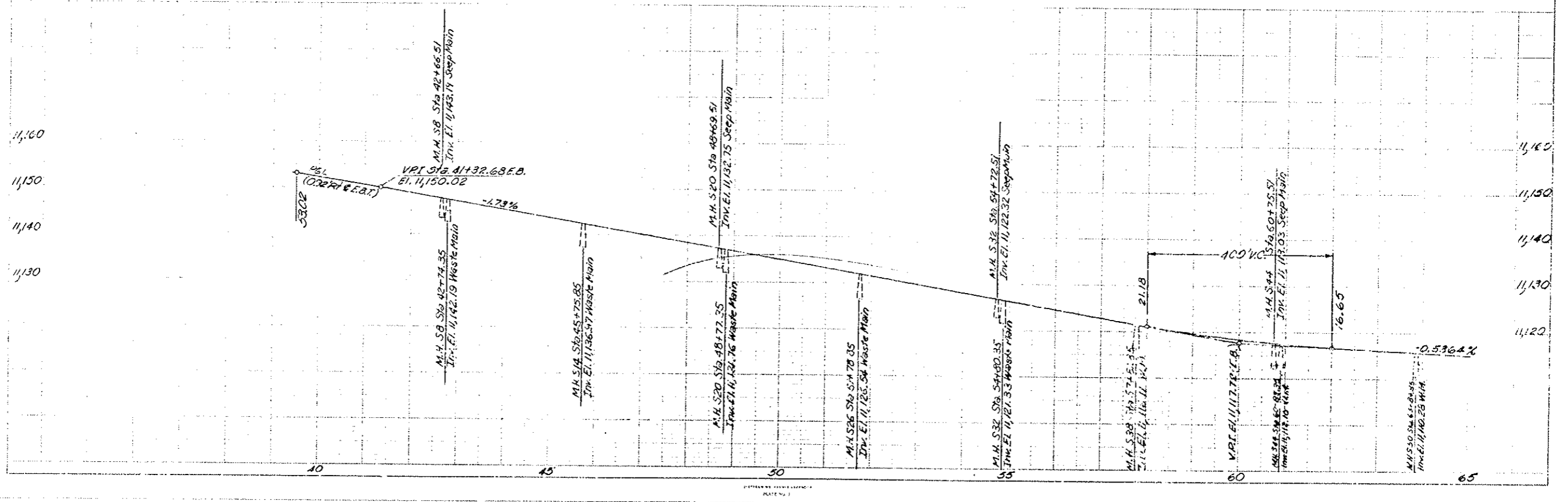
22"
17"
1"
8.5"
11"
17"
12"

AS CONSTRUCTED		
NO REVISIONS	22-22-22	REVISED
		VOID

PROJECT NO.	170-3(84)220	SHEET NO.	41
DATE			



See Tabulation of Manholes and Inlets for Stationing.

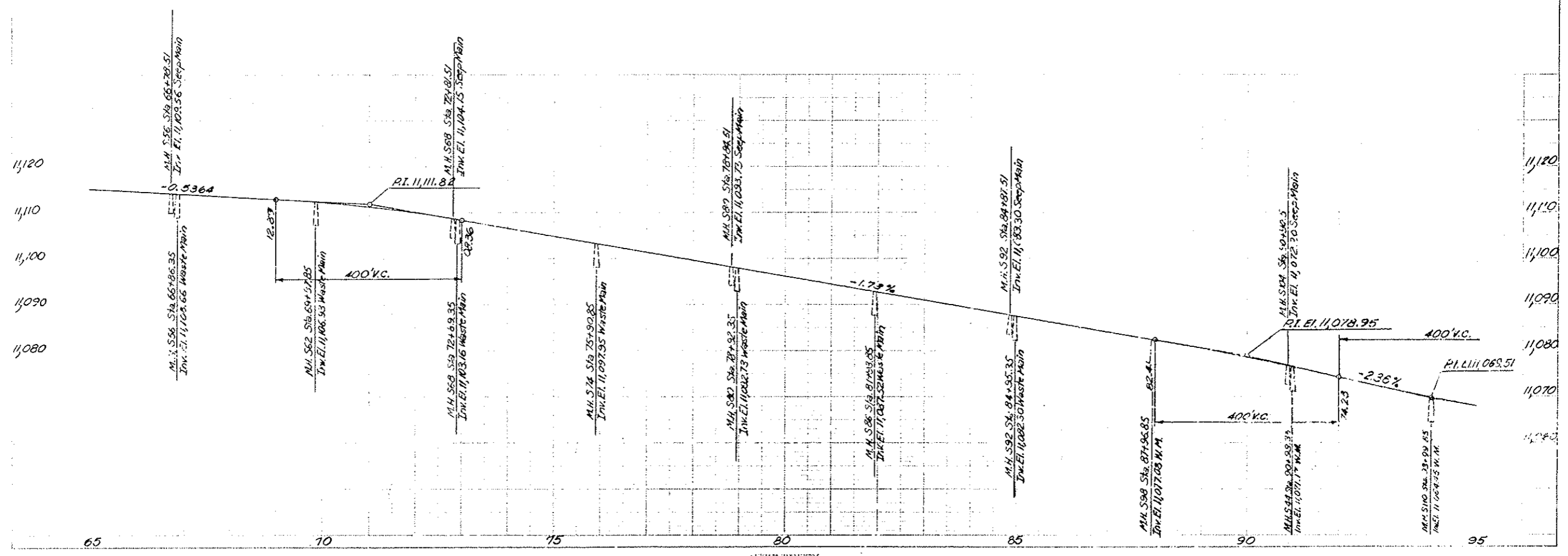
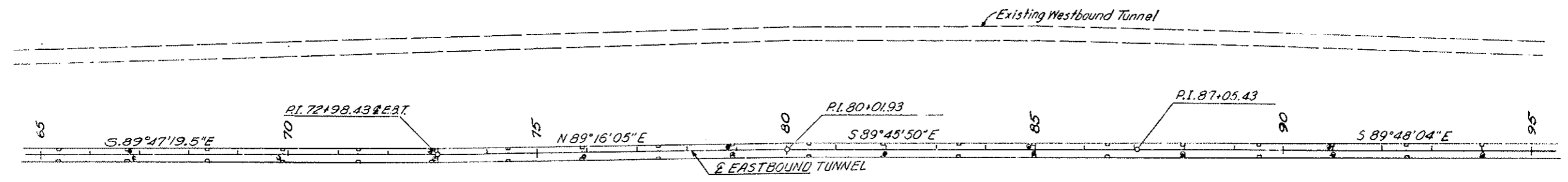


PLAN

VERTICAL CURVE DATA

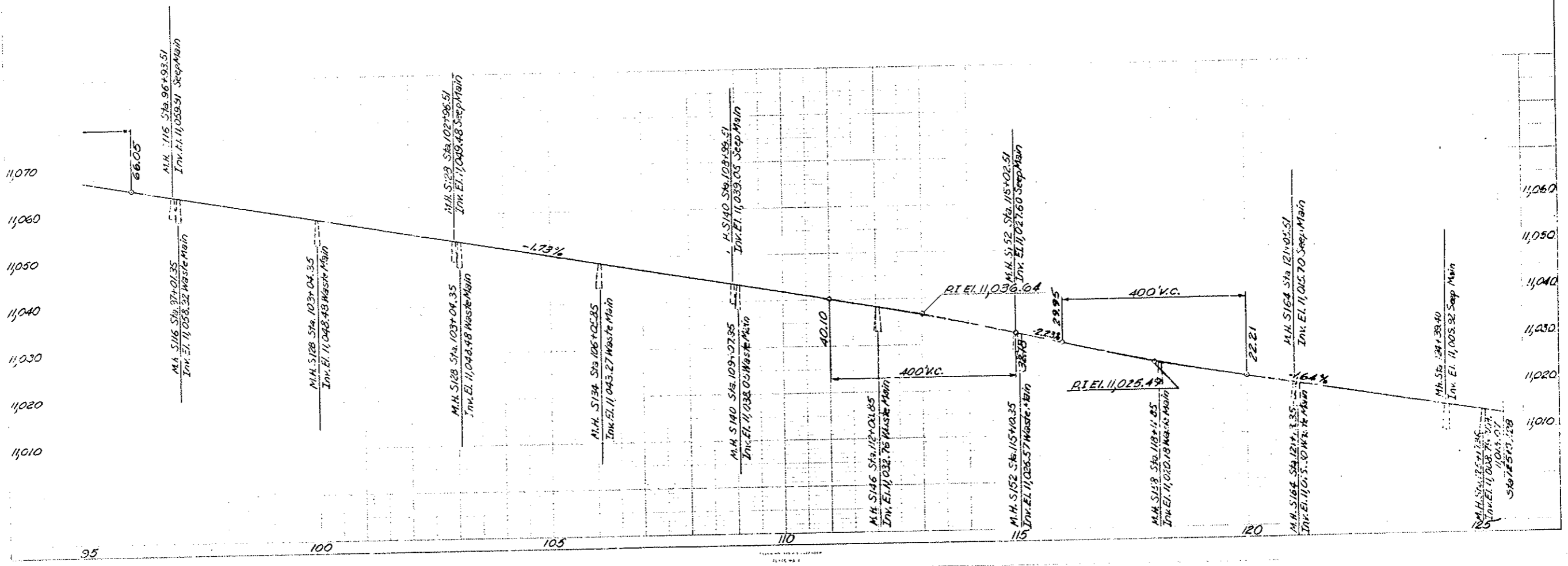
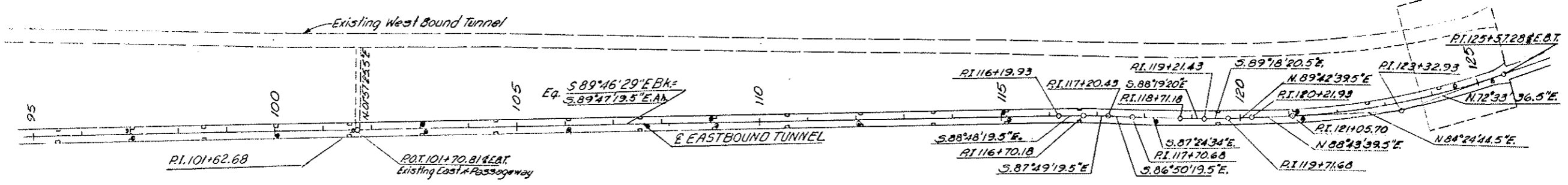
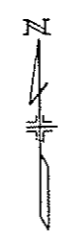
22"
17"
11"
9.5"
8.11"
11"
11"
22"

VIII 170-3(84)220 42
AS CONSTRUCTED
NO REVISIONS 12-22-80 REVISED VOID

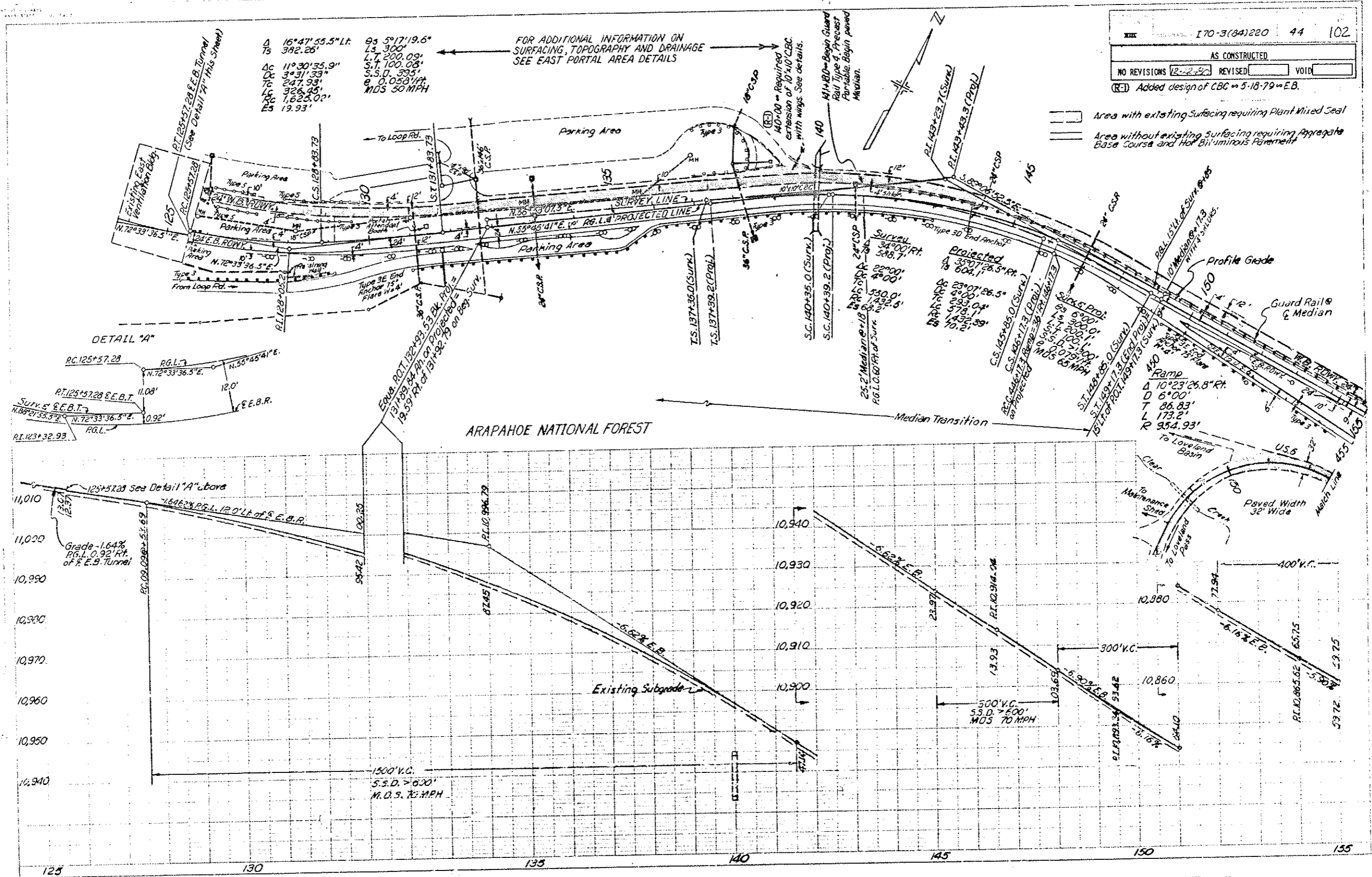


22
17
11
8.5
11.5
11
17
22

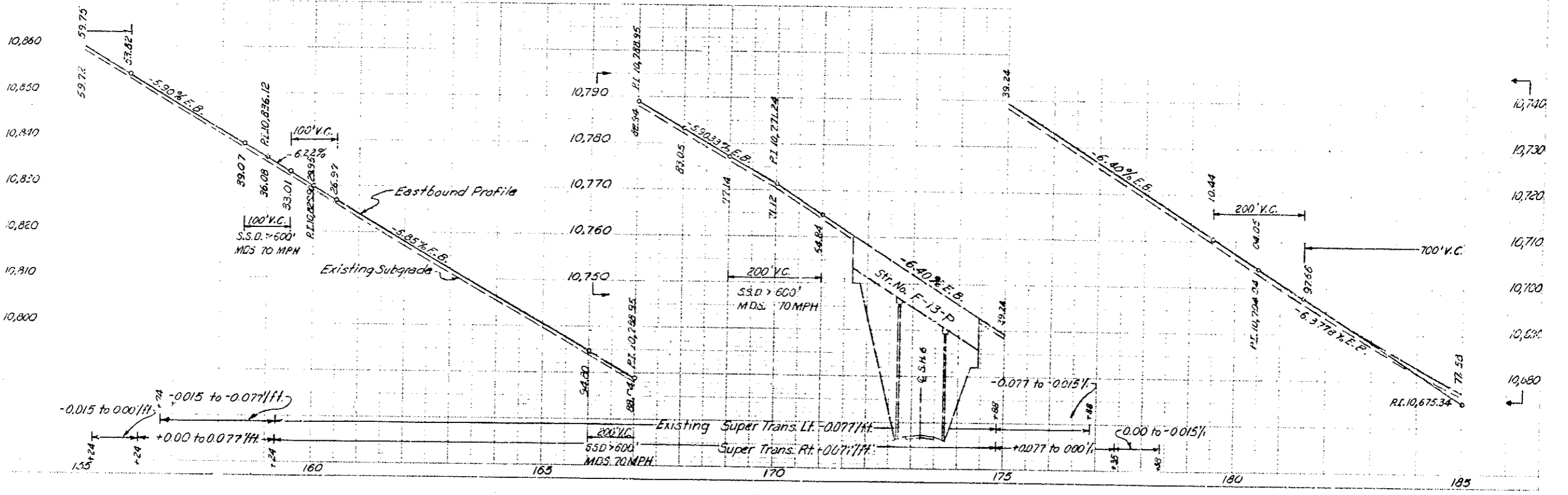
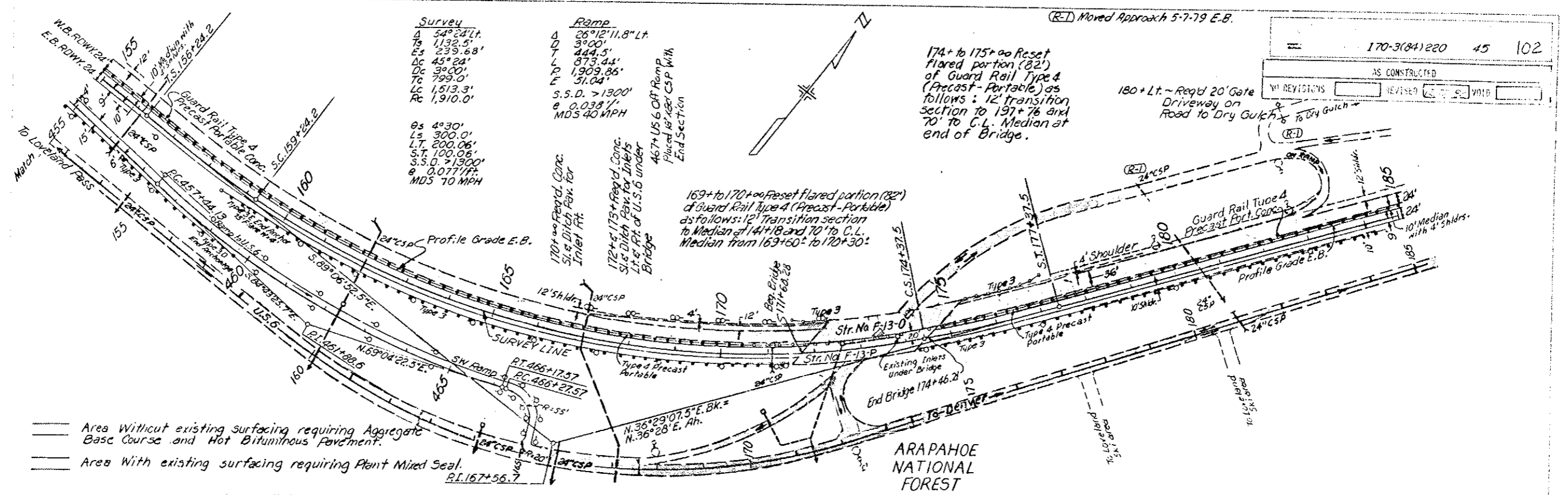
III 170-3(84)220 43
AS CONSTRUCTED
NO REVISIONS 12.22.90 REVISED VOID



22
17
11
5.8
8.5
11
17
22



22
17
11
8.5
8.5
11
17
21



22
11
11
8.5
11
17
22

Note: Transition Eastbound Lane with a curve whose P.I. is 15' ft. of Survey R.O.T. 196+39.3 curve is same as Survey P.I. 201+98.2

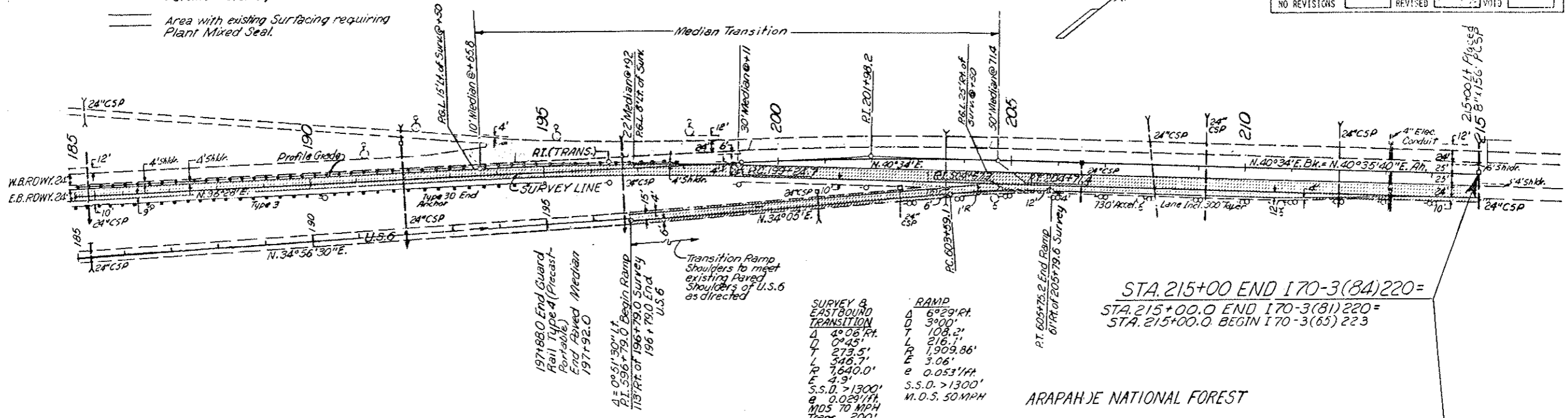
170-3(84)220 46 102

AS CONSTRUCTED

NO REVISIONS [] REVISED [] VOID []

[Hatched Box] Area with existing Surfacing requiring 3" Hot Bituminous Pavement overlay.

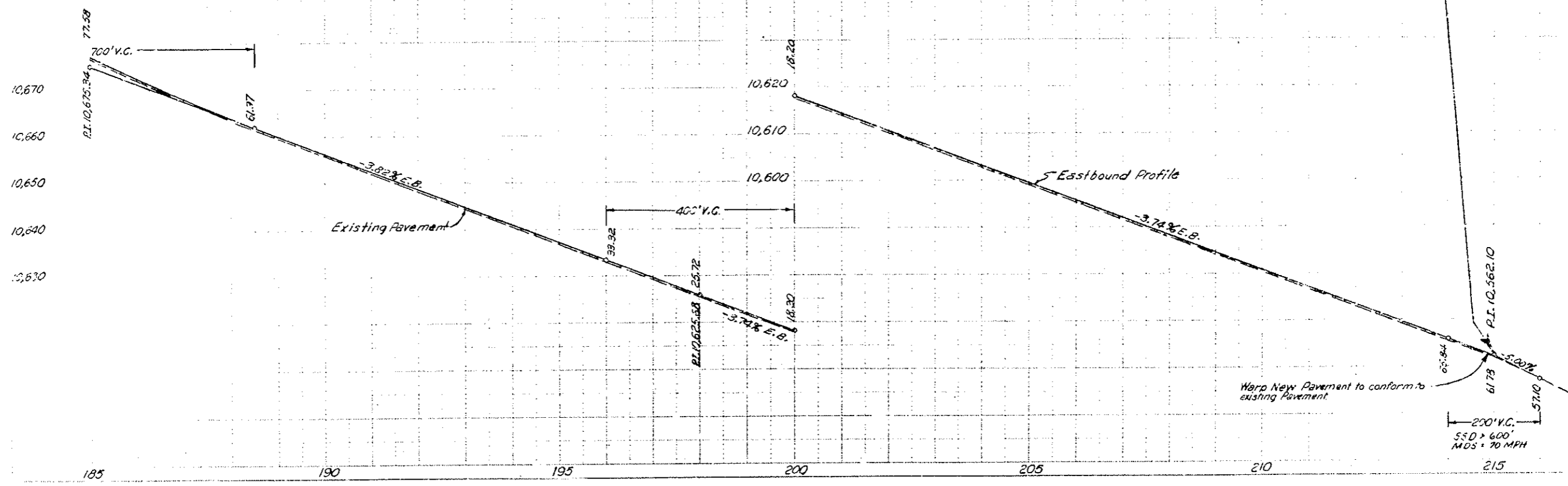
[Solid Line] Area with existing Surfacing requiring Plant Mixed Seal.



SURVEY & EASTBOUND TRANSITION		RAMP	
Δ	4° 08' RT	Δ	6° 29' RT
D	0° 45'	D	3° 00'
T	273.5'	L	108.2'
L	546.7'	T	216.1'
R	7640.0'	E	1909.86'
E	4.9'	E	3.06'
S.S.D.	> 1300'	S.S.D.	> 1300'
e	0.0291/ft	S.S.D.	> 1300'
MOS	70 MPH	M.D.S.	50 MPH
Trans.	200'		

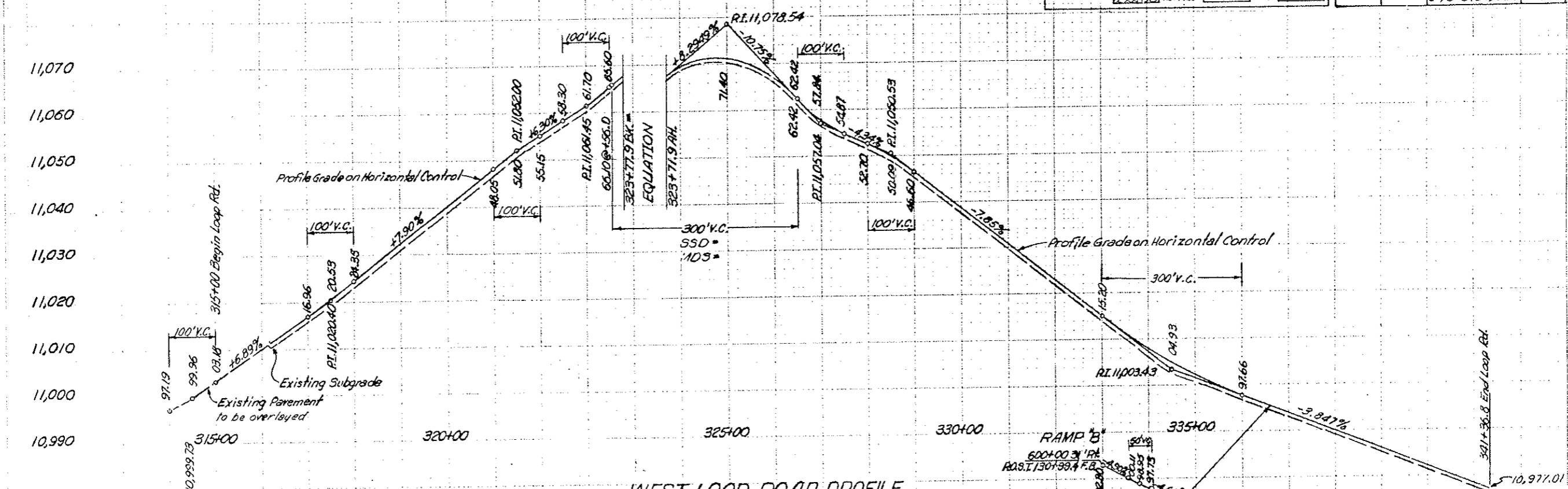
STA. 215+00 END 170-3(84)220 =
 STA. 215+00.0 END 170-3(81)220 =
 STA. 215+00.0 BEGIN 170-3(65)223

ARAPAHOE NATIONAL FOREST

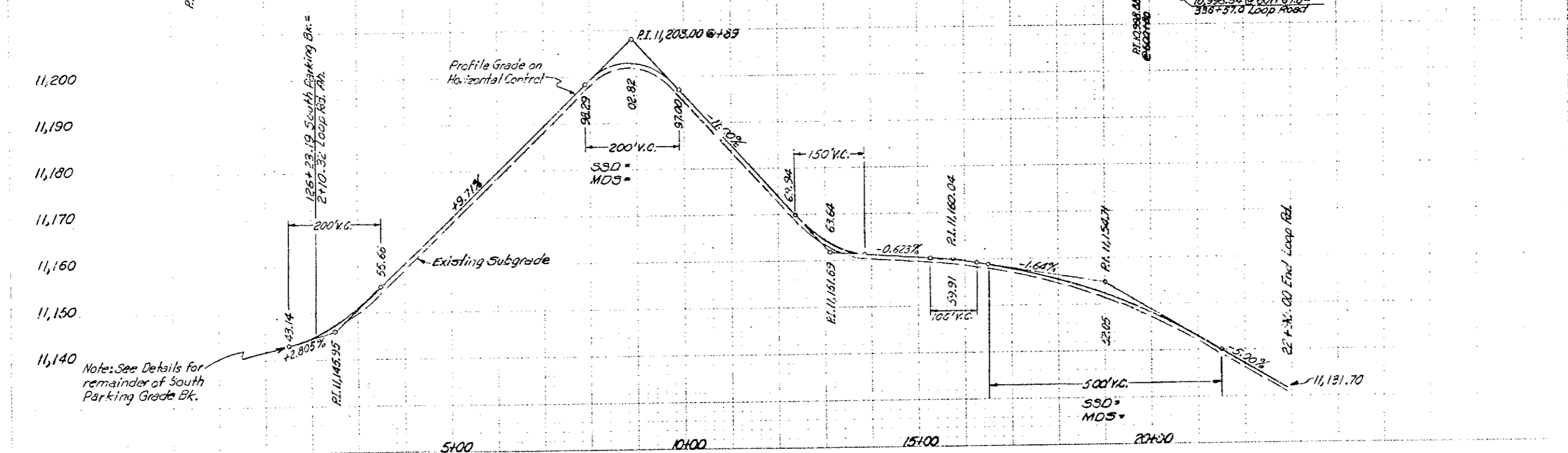


EAST LOOP ROAD PROFILE

AS CONSTRUCTED		FEDERAL ROAD DISTRICT	PROJ. NO.	SHEET NO.
NO REVISIONS	222-20	XIII	170-3(84)220	47
REVISED		COLORADO		
VOID				



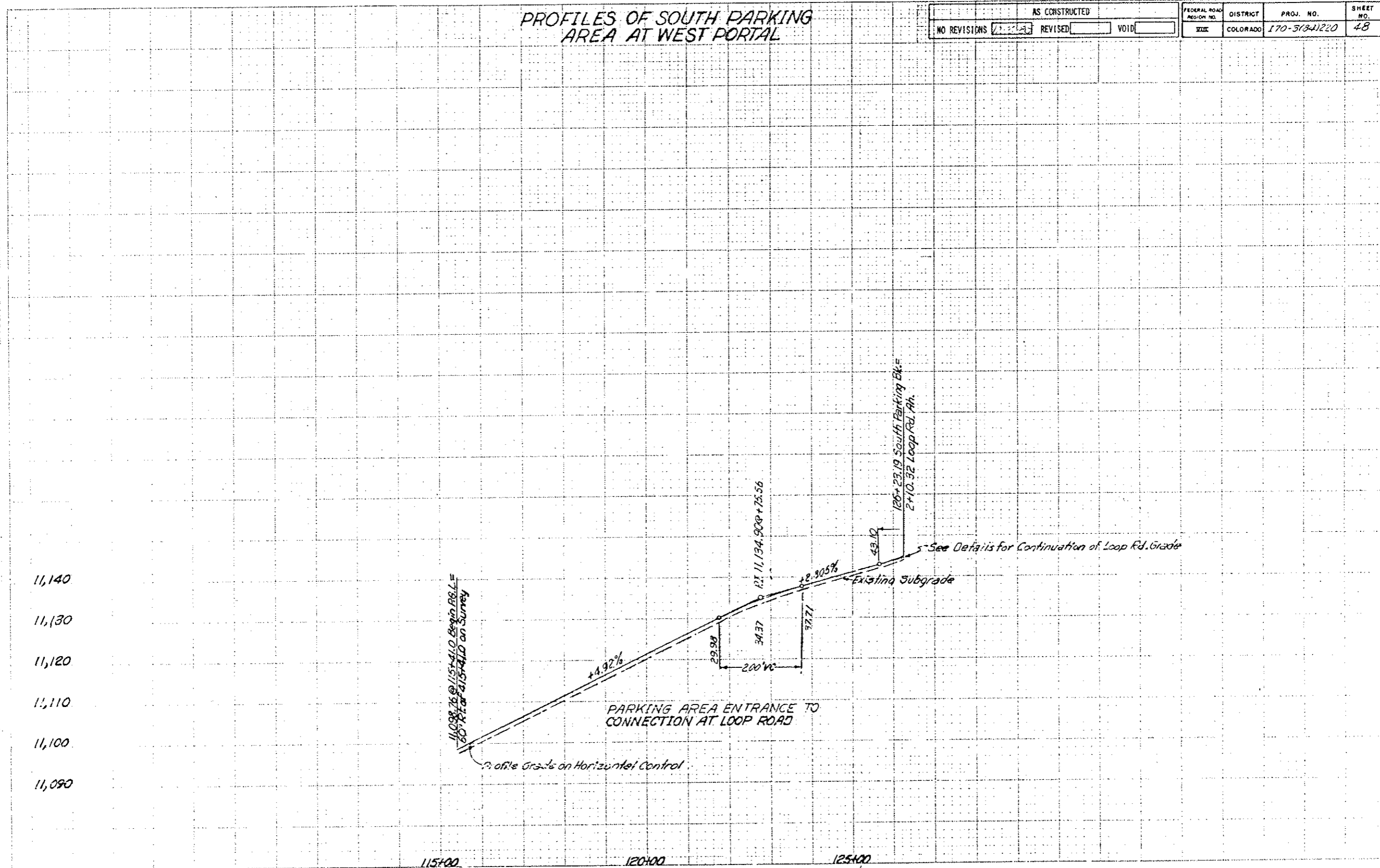
WEST LOOP ROAD PROFILE



27
11
5.8
8.5"
11"
17"
21"

PROFILES OF SOUTH PARKING AREA AT WEST PORTAL

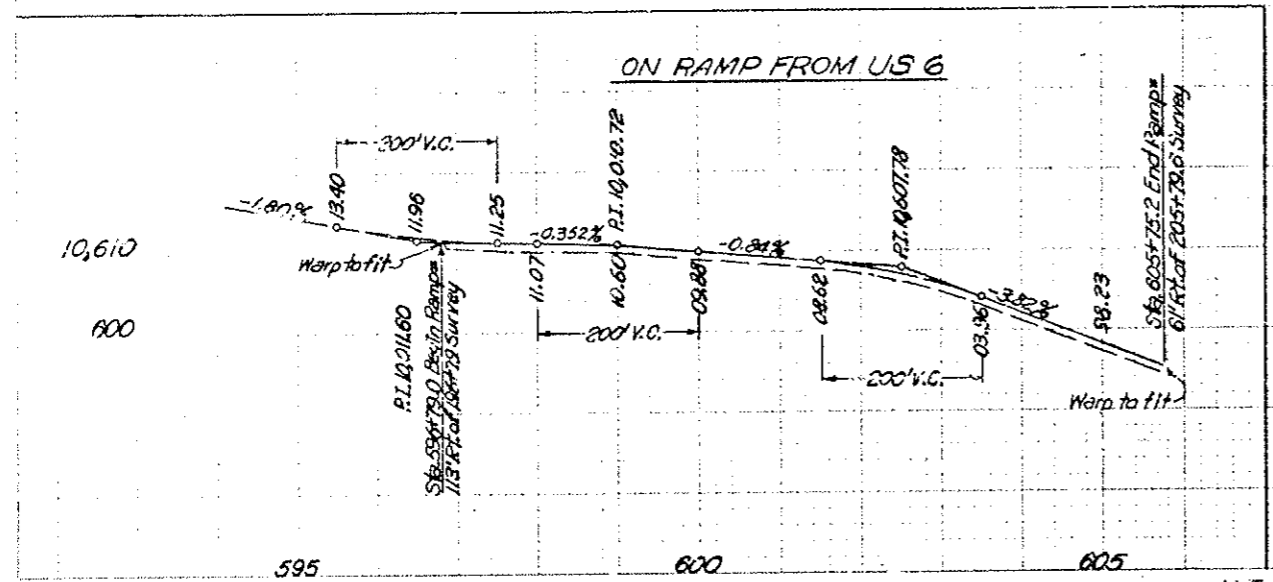
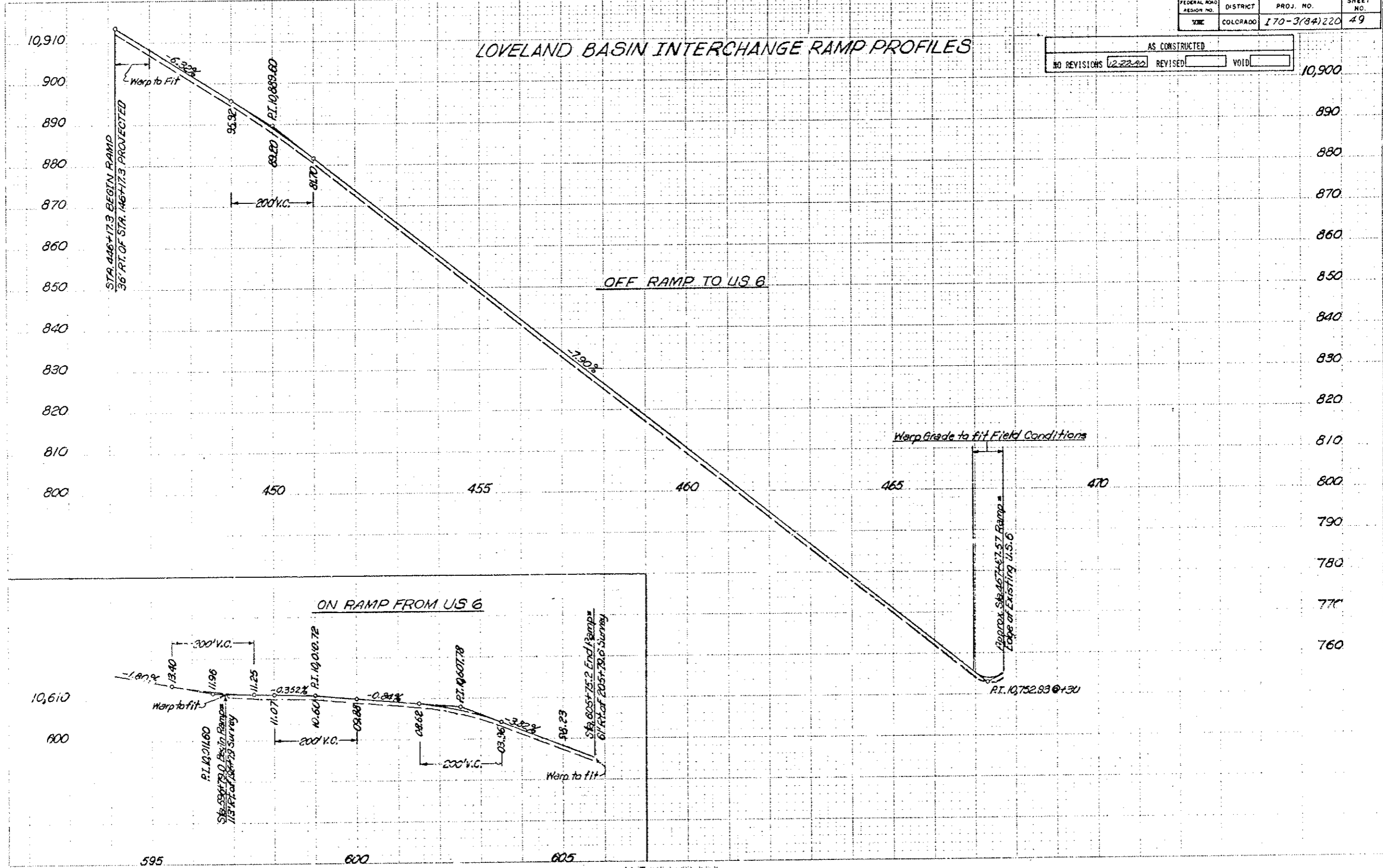
AS CONSTRUCTED		FEDERAL ROAD DISTRICT	PROJ. NO.	SHEET NO.
NO REVISIONS	REVISED	VOID	170-5(34)220	48
		III	COLORADO	



FEDERAL ROAD DESIGN NO.	DISTRICT	PROJ. NO.	SHEET NO.
302	COLORADO	170-3(84)220	49

LOVELAND BASIN INTERCHANGE RAMP PROFILES

AS CONSTRUCTED		
NO REVISIONS	2-22-82	REVISED
		VOID

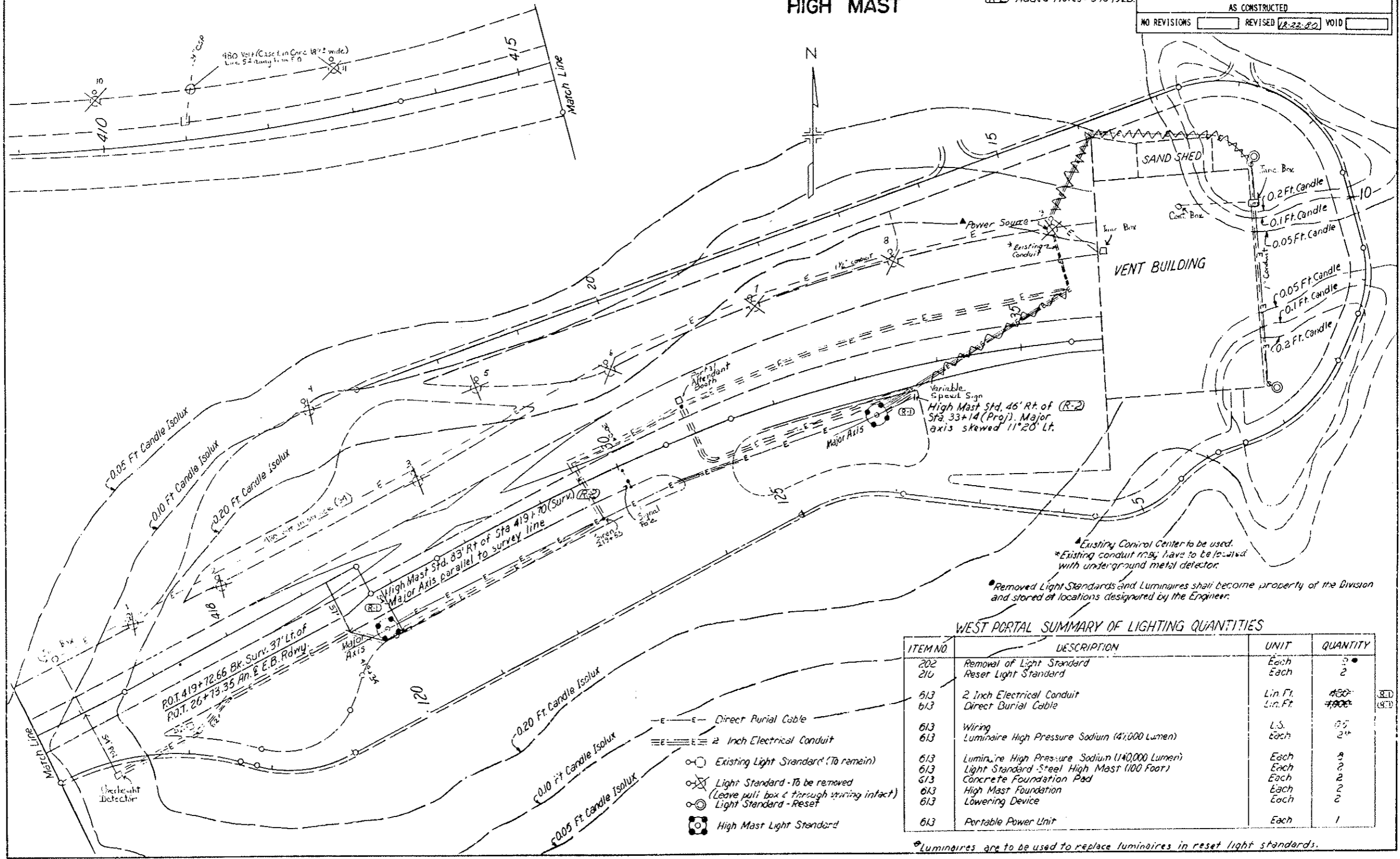


FINAL WEST PORTAL LIGHTING PLAN HIGH MAST

(R-1) Relocated High Mast Lights;
 Revised Quantities as
 5-7-79 vs EB.
 (R-2) Added Notes 5-18-79 EB.

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	50	102

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID
	12-22-82	



*Existing Control Center to be used.
 *Existing conduit runs have to be located with underground metal detector.
 *Removed Light Standards and Luminaires shall become property of the Division and stored at locations designated by the Engineer.

WEST PORTAL SUMMARY OF LIGHTING QUANTITIES

ITEM NO.	DESCRIPTION	UNIT	QUANTITY
202	Removal of Light Standard	Each	2
210	Reset Light Standard	Each	2
613	2 Inch Electrical Conduit	Lin. Ft.	450
613	Direct Burial Cable	Lin. Ft.	700
613	Wiring	L.S.	05
613	Luminaire High Pressure Sodium (41,000 Lumen)	Each	24
613	Luminaire High Pressure Sodium (14,000 Lumen)	Each	3
613	Light Standard - Steel High Mast (100 Foot)	Each	2
613	Concrete Foundation Pad	Each	2
613	High Mast Foundation	Each	2
613	Lowering Device	Each	2
613	Portable Power Unit	Each	1

*Luminaires are to be used to replace luminaires in reset light standards.

5"
 1"
 17"
 2!"

FINAL EAST PORTAL LIGHTING PLAN HIGH MAST

(R-1) Relocated High Mast Lights and Power Source; Revised Quantities Added Notes 5-7-79 vs E.B.
 (R-2) Added Notes 5-18-79 vs E.B.

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-384(220)	51	102

AS CONSTRUCTED

NO REVISIONS REVISED 12-22-80 VOID

EAST PORTAL SUMMARY OF LIGHTING QUANTITIES

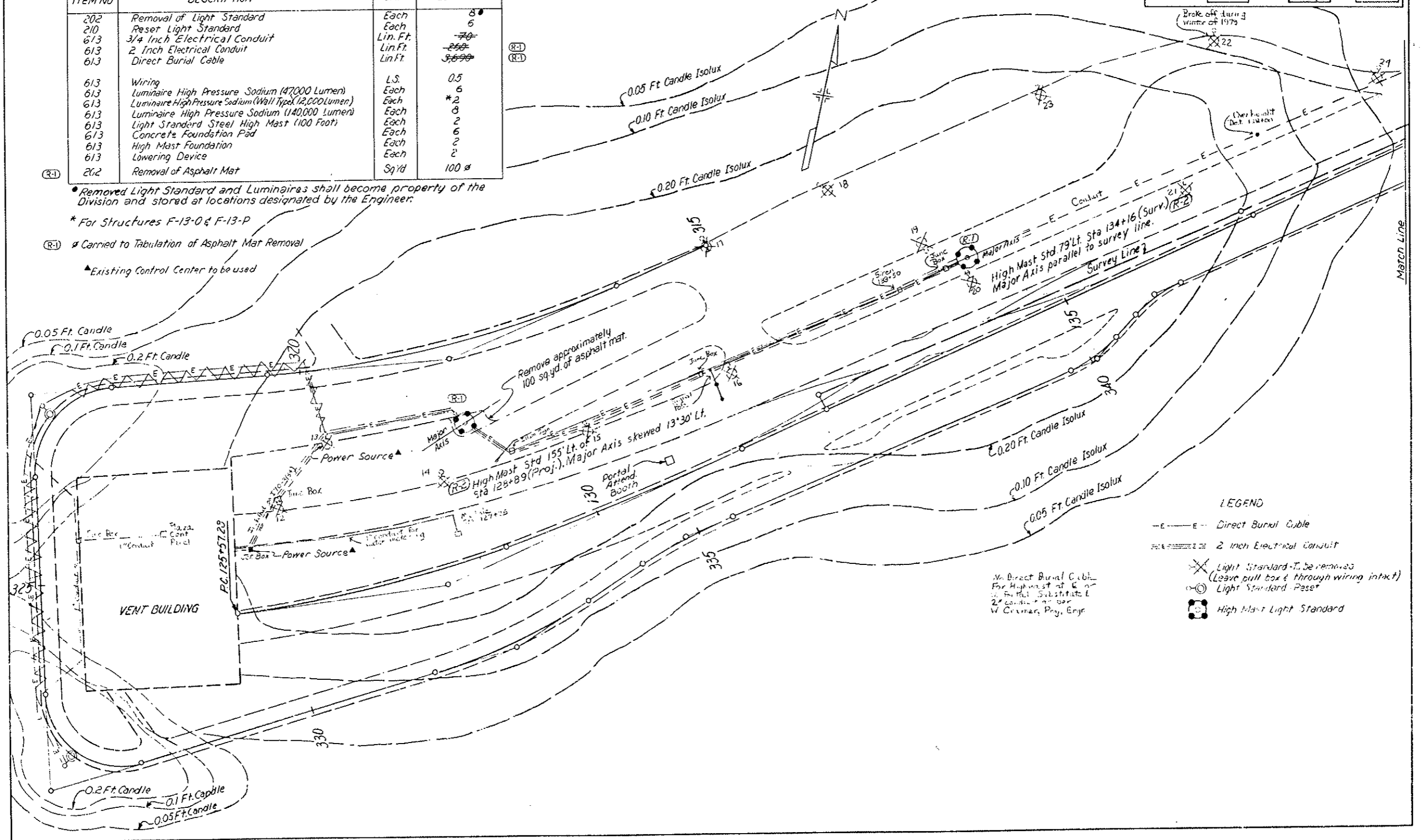
ITEM NO	DESCRIPTION	UNIT	QUANTITY
202	Removal of Light Standard	Each	8
210	Reset Light Standard	Each	5
613	3/4 Inch Electrical Conduit	Lin. Ft.	740
613	2 Inch Electrical Conduit	Lin. Ft.	258
613	Direct Burial Cable	Lin. Ft.	3,599
613	Wiring	L.S.	0.5
613	Luminaire High Pressure Sodium (47,000 Lumen)	Each	6
613	Luminaire High Pressure Sodium (Wall Type) (12,000 Lumen)	Each	*2
613	Luminaire High Pressure Sodium (140,000 Lumen)	Each	8
613	Light Standard Steel High Mast (100 Foot)	Each	2
613	Concrete Foundation Pad	Each	6
613	High Mast Foundation	Each	2
613	Lowering Device	Each	2
(R-1) 202	Removal of Asphalt Mat	SqYd	100 #

• Removed Light Standard and Luminaires shall become property of the Division and stored at locations designated by the Engineer.

* For Structures F-13-0 & F-13-P

(R-1) # Carried to Tabulation of Asphalt Mat Removal

▲ Existing Control Center to be used



LEGEND

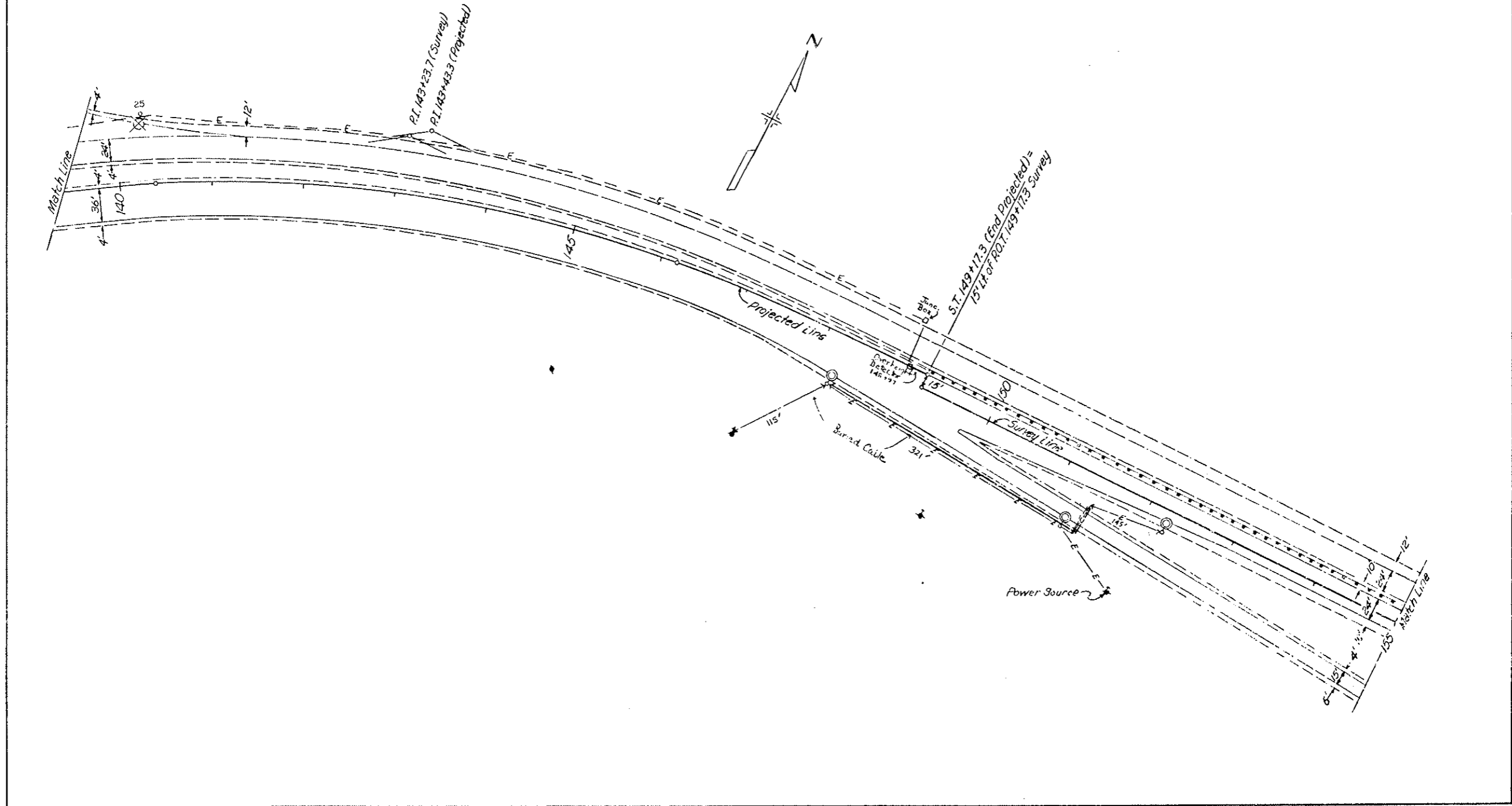
- E-E- Direct Burial Cable
- 2 Inch Electrical Conduit
- ⊗ Light Standard - To be removed (Leave pull box & through wiring intact)
- ⊙ Light Standard - Reset
- ⊠ High Mast Light Standard

▲ Direct Burial Cable For Highest of 6" or 4" Burial Substitute 2" conduit as per V. Crumar, Proj. Engr.

22
11
5'8
8.5"
11'
17'
22"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	170-3(84)220	52	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 2-22-80		VOID

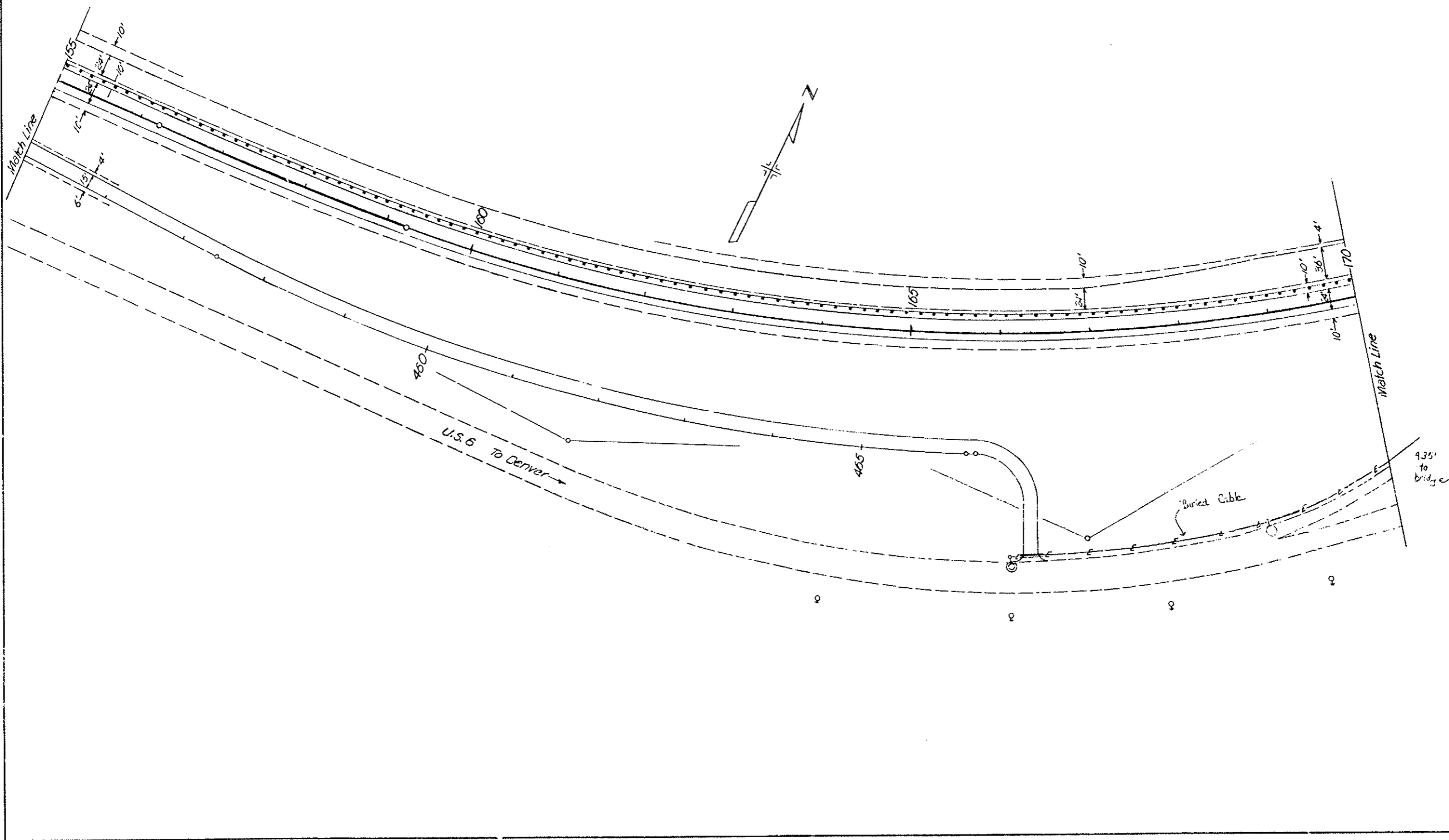
FINAL LIGHTING PLAN



7
11
11
8
3.5"
11"
17"
22"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(84)220	53	102
AS CONSTRUCTED				
NO REVISIONS		REVISED	12-22-82	VOID

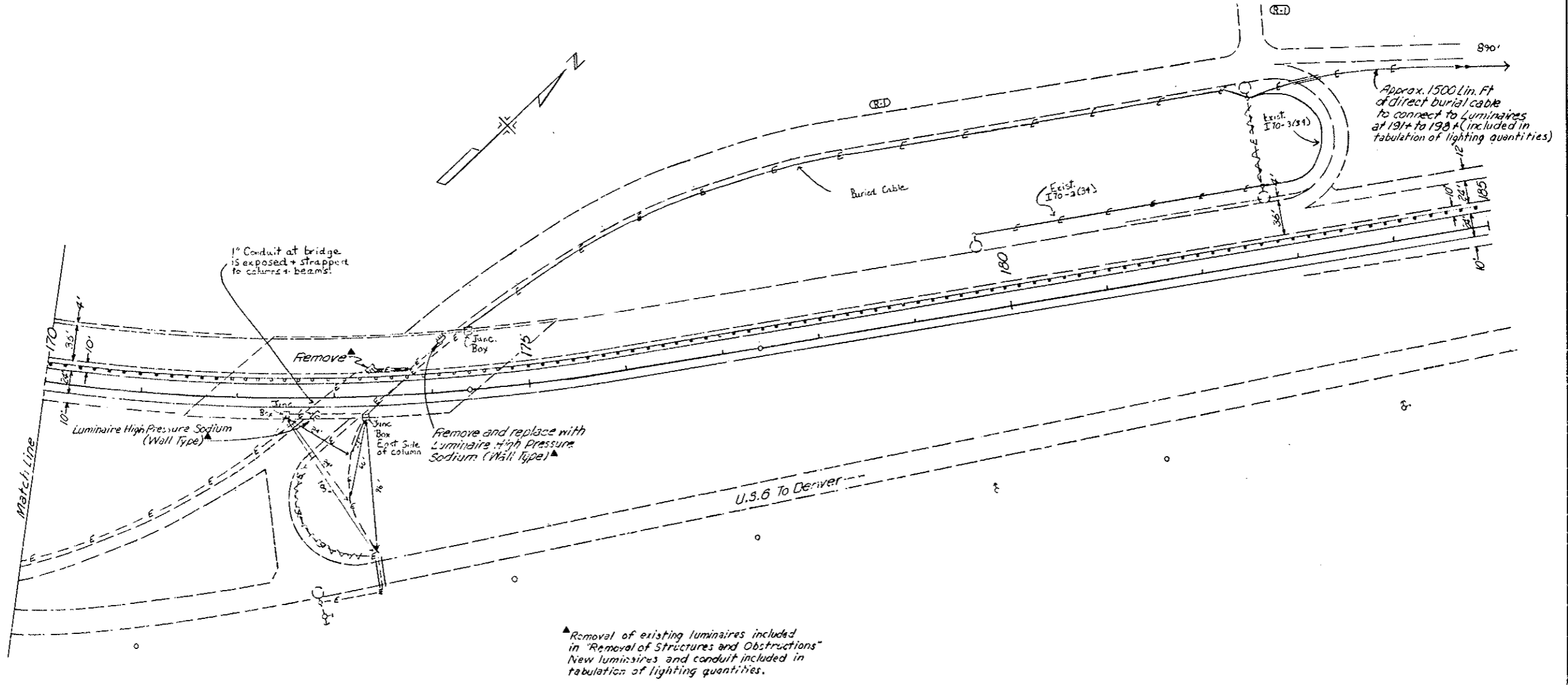
FINAL LIGHTING PLAN



3
5"
7"
12"

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VII	COLORADO	170-3(84)220	54	102
AS CONSTRUCTED				
NO REVISIONS		REVISED 2-22-82	VOID	
(R-1) Moved Approach on 5-7-79 as E.B.				

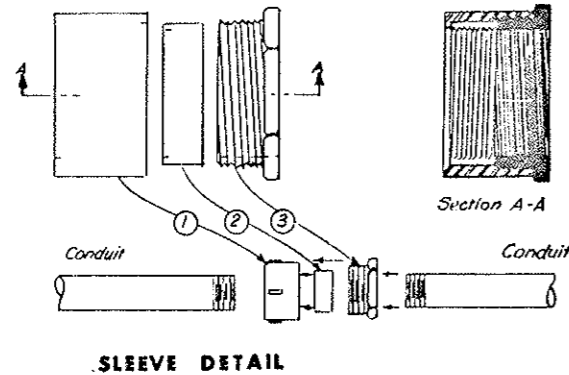
FINAL LIGHTING PLAN



▲ Removal of existing luminaires included in "Removal of Structures and Obstructions". New luminaires and conduit included in tabulation of lighting quantities.

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	55	102
AS CONSTRUCTED				
NO REVISIONS	12-22-80	REVISED		VOID

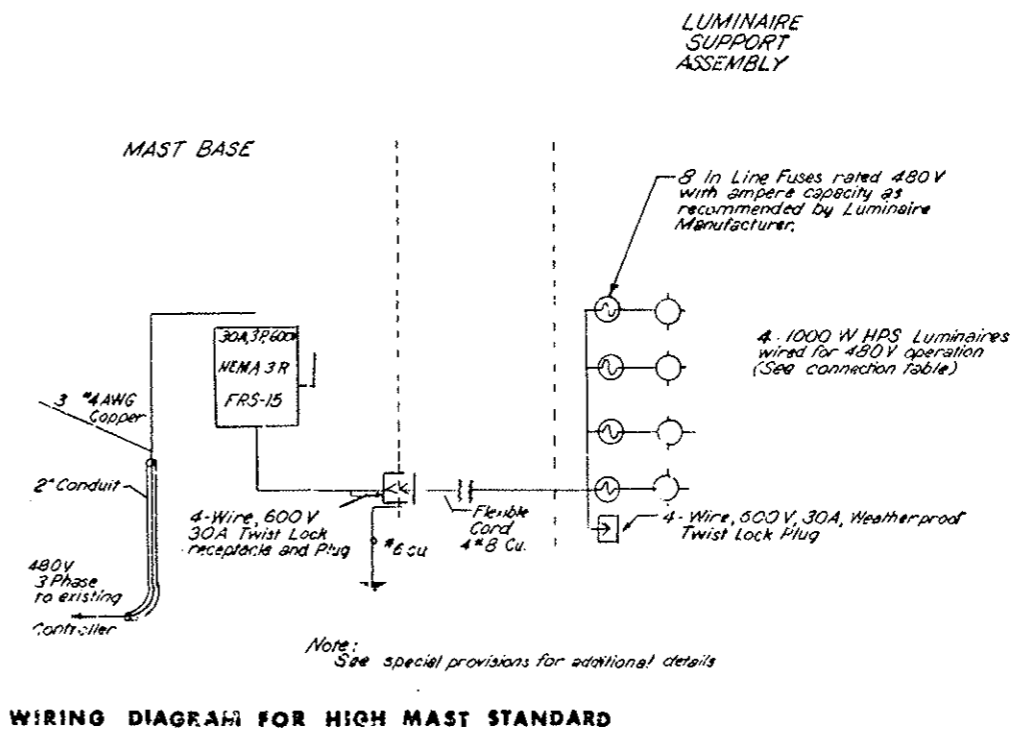
ROADWAY LIGHTING



CONNECTION OF LUMINAIRES

LOCATION OF LUMINAIRE (STA.)	SIZE (WATTS)	CONNECTED PHASES
410	400	A-B
412	400	B-C
419	1000	A-C
419	1000	A-B
419	1000	B-C
419	1000	A-C
33	1000	A-B
33	1000	B-C
33	1000	A-C
33	1000	A-B
7 (SERVICE ROAD)	400	B-C
11 (SERVICE ROAD)	400	B-C
322 (SERVICE ROAD)	400	A-B
327 (SERVICE ROAD)	400	B-C
129	1000	A-C
129	1000	A-B
129	1000	B-C
129	1000	A-C
135	1000	A-B
135	1000	B-C
135	1000	A-C
135	1000	A-B
142	400	B-C
143	400	A-C
148	400	A-B
151	400	B-C
152	400	B-C

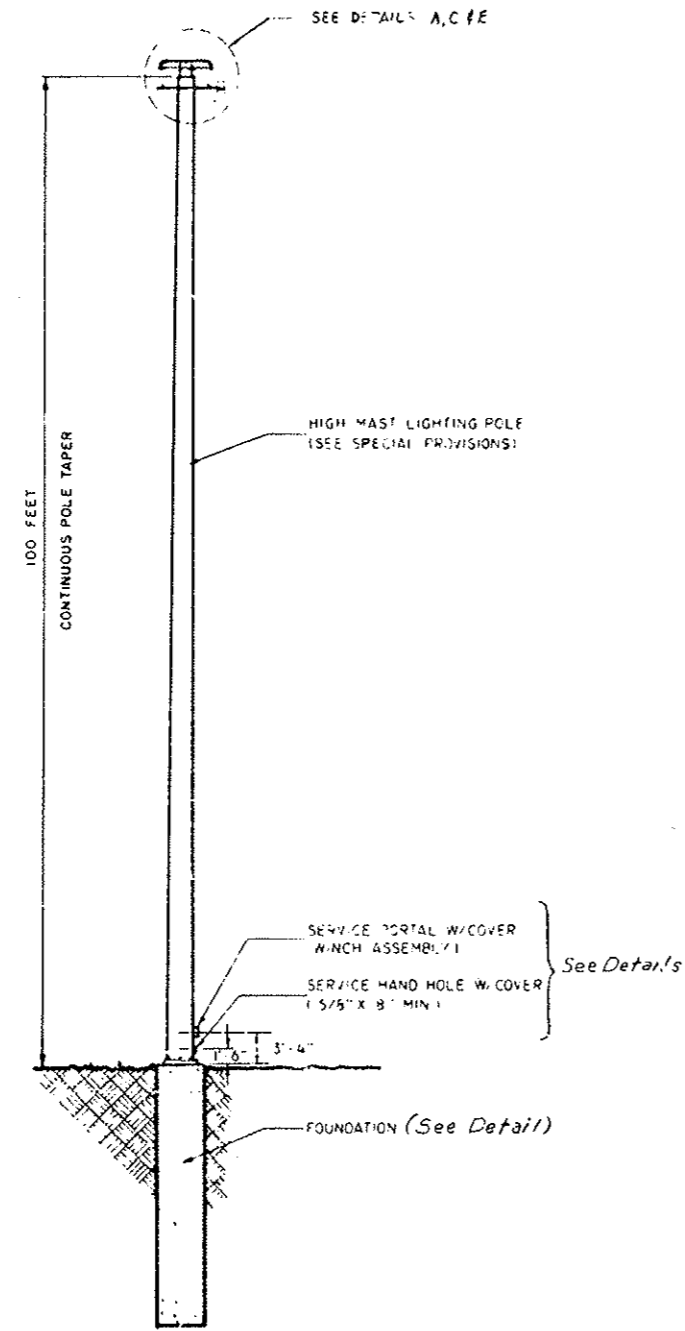
CONNECTIONS MAY BE VARIED TO CORRESPOND TO EXISTING WIRING PROVIDED
 CASE IMBALANCE DOES NOT EXCEED ONE SMALL LUMINAIRE LOAD.



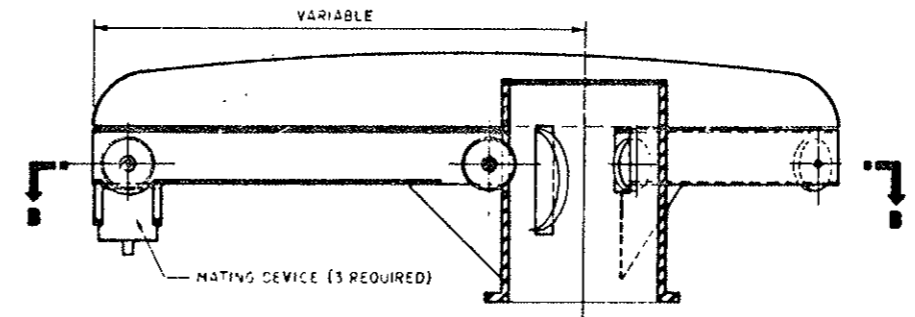
LUMINAIRE SUPPORT ASSEMBLY

ROADWAY LIGHTING

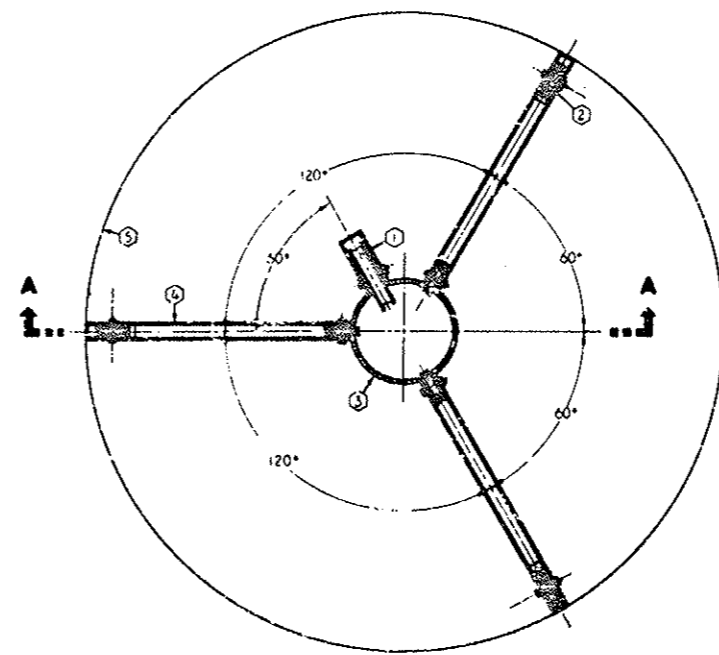
FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.
XXX	COLORADO	I 70-3(BA) 220	55
AS CONSTRUCTED			
NO REVISIONS	2-22-92	REVISED	VOID



HIGH MAST LIGHTING UNIT



**SECTION A - A
DETAIL A ELEVATION POLE TOP ASSEMBLY**



SECTION B - B

NOTES

- ① MINIMUM 8" DIA. CABLE PULLEY (FOR PORTABLE ELECTRICAL CABLE)
- ② 4" DIA. SUPPORT CABLE PULLEY (6 REQUIRED)
- ③ POLE TOP (SCHEDULE 80 PIPE)
- ④ RECTANGULAR TUBE
- ⑤ HOOD

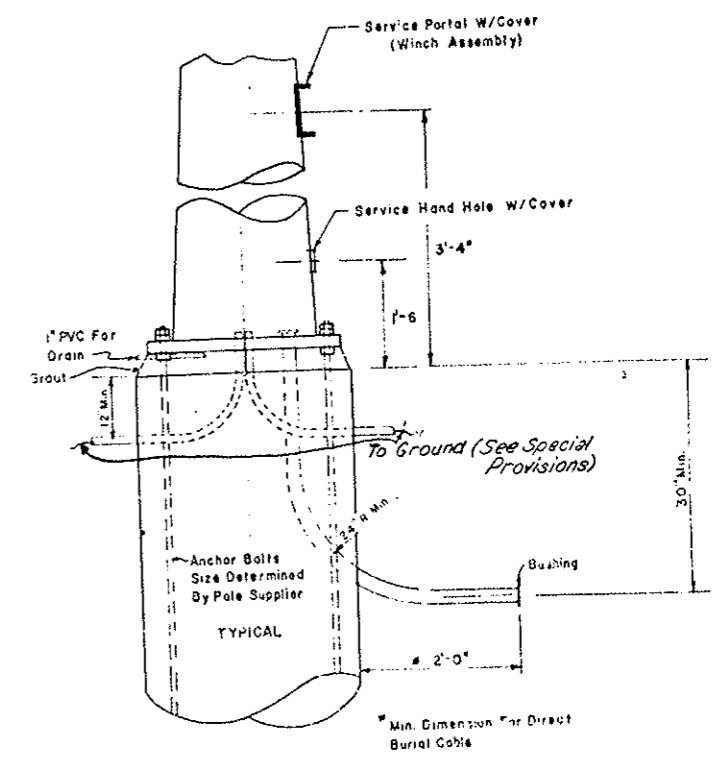
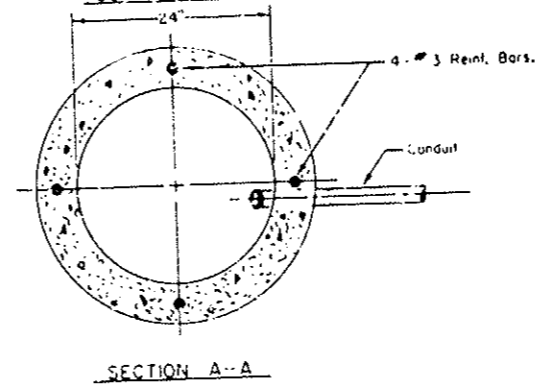
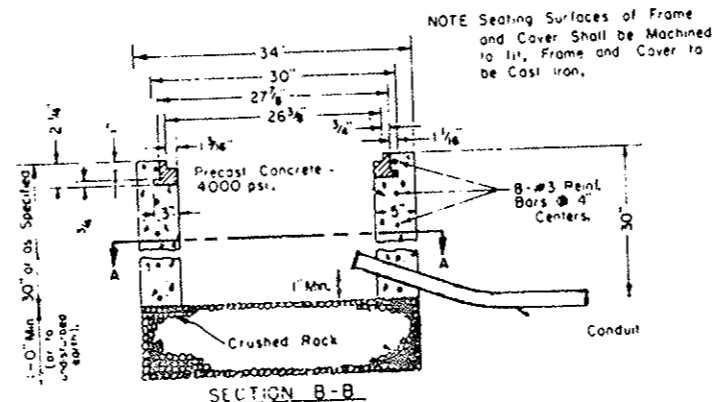
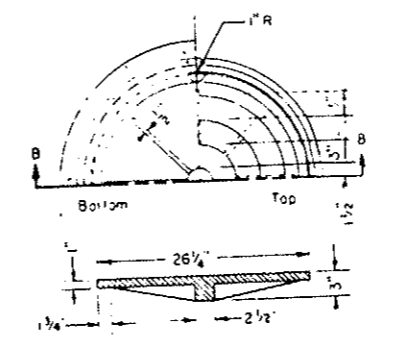
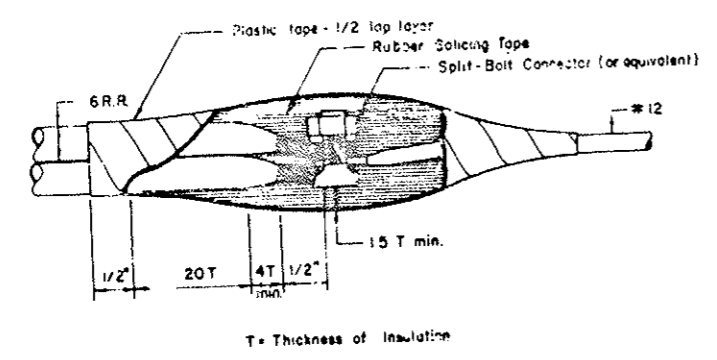
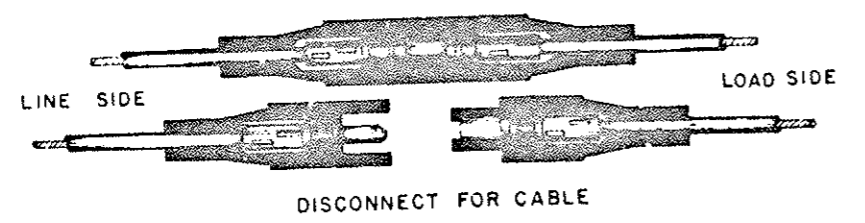
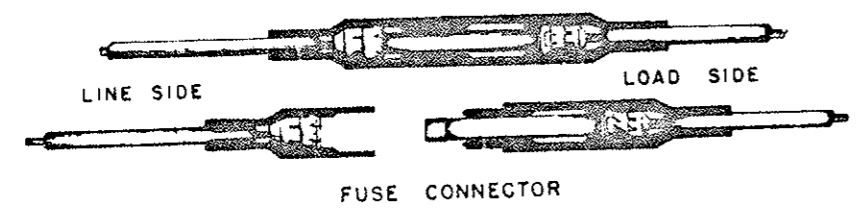
DETAILS FOR THE LOWERING SYSTEM ARE ONLY "FUNCTIONAL DRAWINGS" AND REPRESENT A TYPICAL LAYOUT
REQ'D. 1- POWER CABLE DISCONNECT AT BASE OF POLE

THE CONTRACTOR MAY SUBMIT FOR APPROVAL A LOWERING SYSTEM OF HIS OWN DESIGN PROVIDING IT MEETS THE REQUIREMENTS OF THE SPECIAL PROVISIONS.

ROADWAY LIGHTING

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.
XIII	COLO.	I 70-3(84)220	57

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID
2-22-80		



FOUNDATION NOTES

The Working Stress For Class "A" Concrete Shall Be 1200 p.s.i.

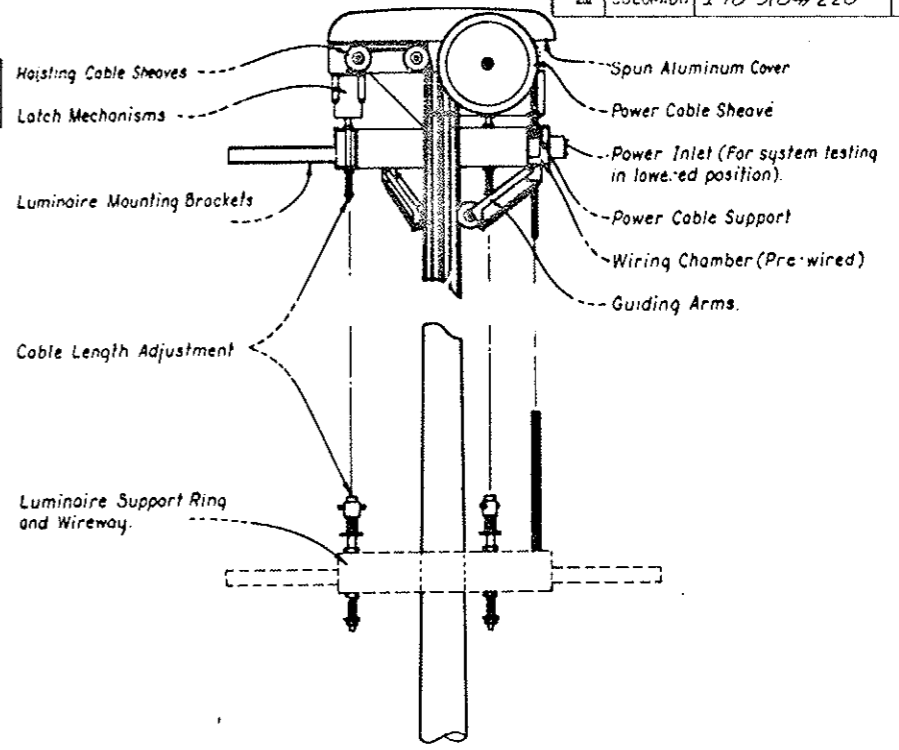
The Working Stress For Reinforcing Steel Shall Be 24,000 p.s.i.

Conduit, Ground Rods and Cable Not Shown.

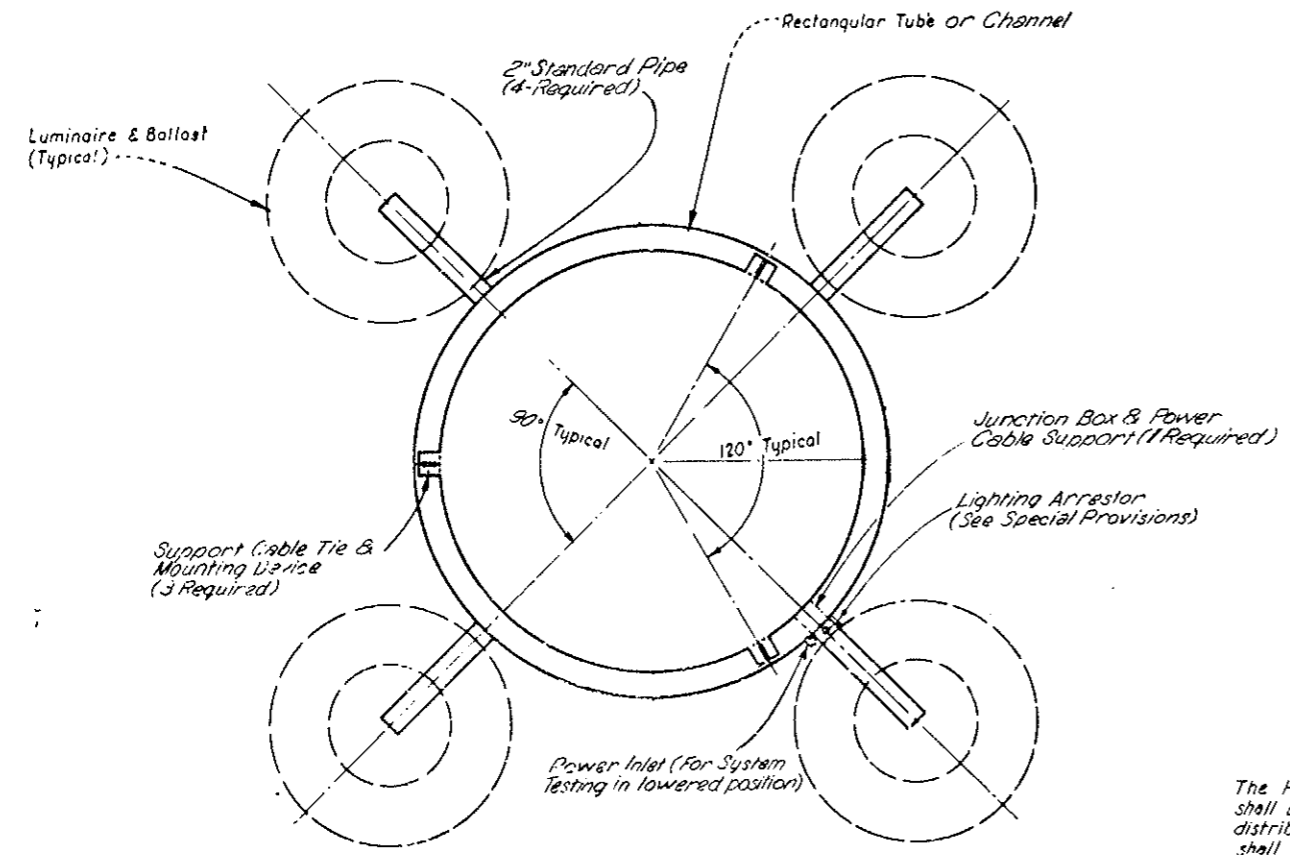
ROADWAY LIGHTING

FED. REG. NO.	DIVISION	PROJECT NO.	SHEET NO.
	COLORADO	I 70-3(84) 220	58

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID
12-22-80		



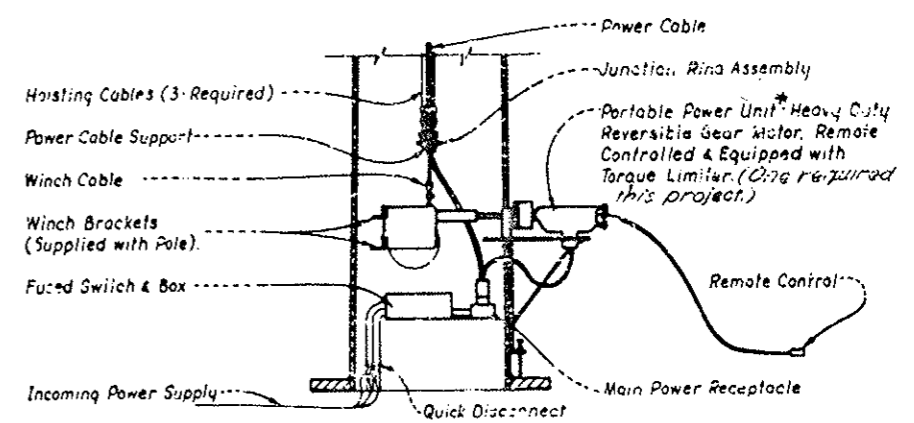
RAISING AND LOWERING DEVICE DETAIL "E"



**LUMINAIRE SUPPORT ASSEMBLY
DETAIL "C"**

NOTES

The High Mast Poles on this Project shall be equipped with 4 - Asymmetric distribution luminaires. Major axis shall be as shown on Detail of Interchange.



**POLE BASE
DETAIL "D"**

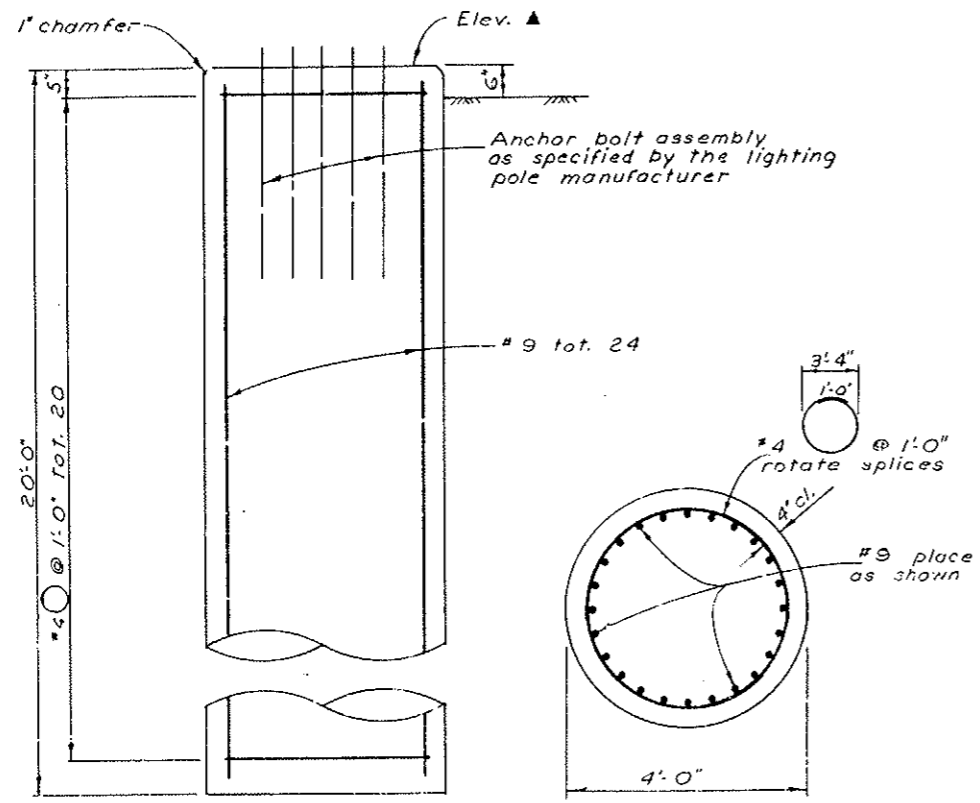
*If 480 VAC unit cannot be obtained portable voltage conversion equipment shall be supplied. Plug must fit into major power receptacle.

22"
11"
9.8"
8.5"
11"
7"
22"

AS CONSTRUCTED
NO REVISIONS 2-22-20 REVISED _____ VOID _____

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	170-3(84)	59	102

REVISIONS	



Note: Rock elevation occurs approx 8' above caisson tip at Sta. 128+51.

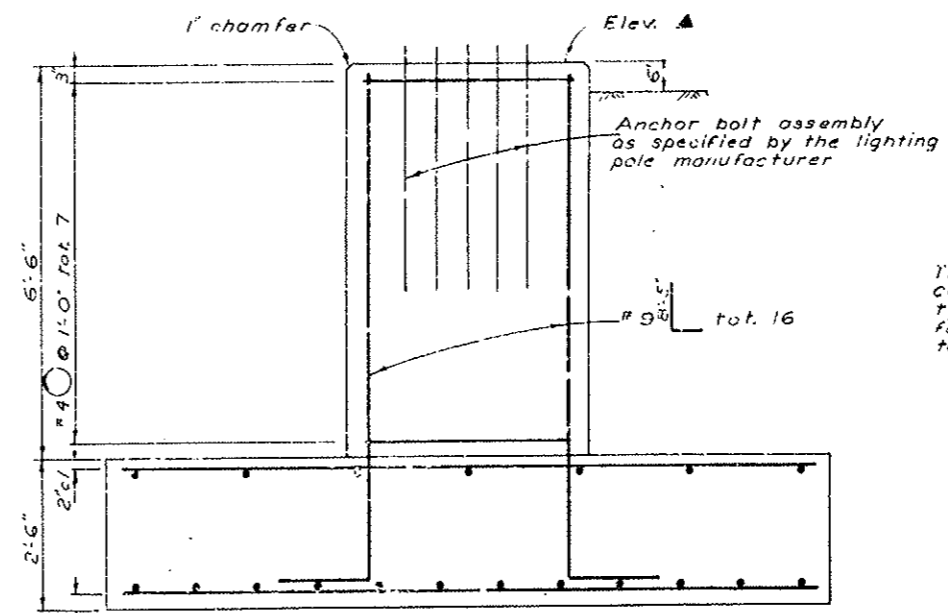
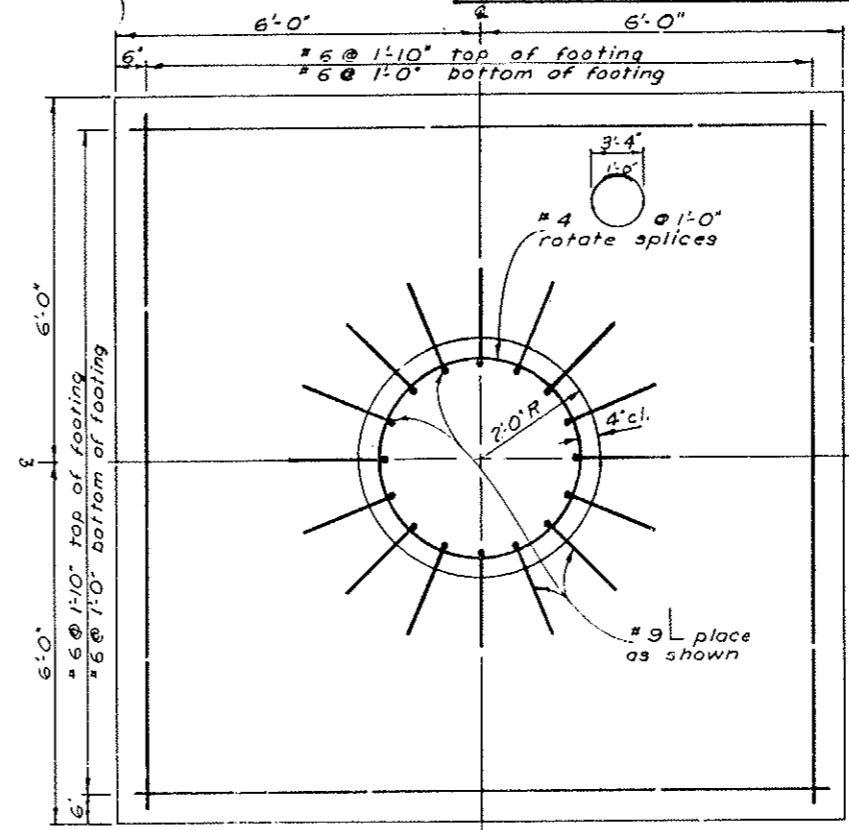
Quantities (one caisson)		
Concrete, Class A	Cu. Yd.	9.31
Reinforcing Steel	Lb.	1180

For information only

CAISSON DETAIL

Lower Sta.	Elev. ▲
25+07.44	11123
93+50	11152
128+57	11007
134+82	10984

Elevations show shall be verified at time of construction. (By field forces)



FOUNDATION WITH FOOTING DETAILS

Quantities (one foundation)		
Structure Excavation	Cu. Yd.	7.2
Structure concrete	Cu. Yd.	5.6
Concrete, Class A	Cu. Yd.	16.5
Reinforcing Steel	Lb.	1300

For information only

The Contractor will be permitted to construct either the spread footing type foundation or the caisson type foundation of each location according to the details shown here.

DIVISION OF HIGHWAYS

HIGH MAST LIGHTING FOUNDATIONS

Designer F. Lundberg Structure Numbers _____
 Dater E. Hooley Numbers _____
 Drawing Number B1 of 2 Drawings

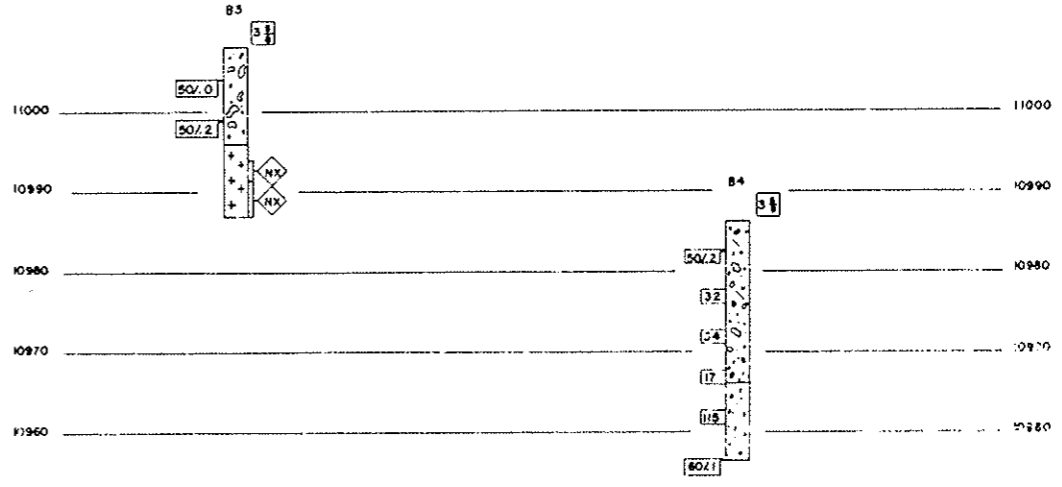
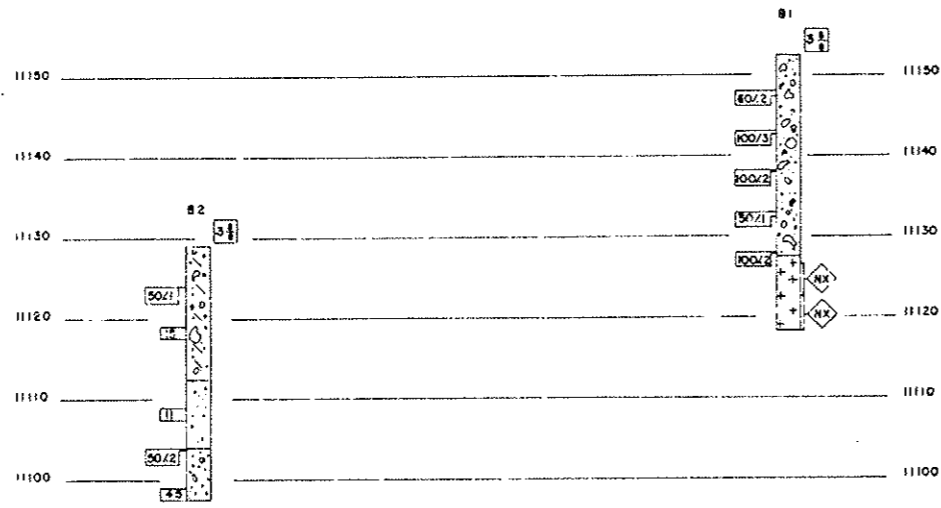
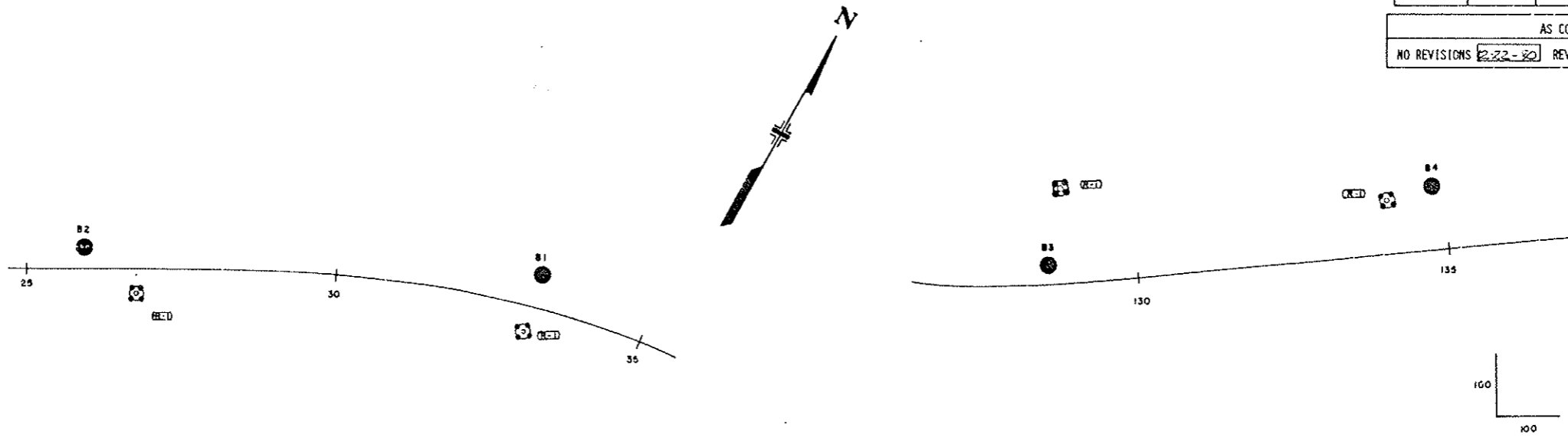
Revision Date _____ (Preliminary Stage Only)

(R-1) Added High Mast Light Std. - 5-7-79-E.B.

FED. ROAD REG. NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
	COLO.	170-3(34)	60	102

AS CONSTRUCTED

NO REVISIONS ~~2-22-80~~ REVISED _____ VOID _____



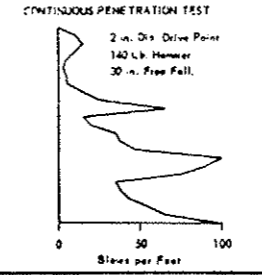
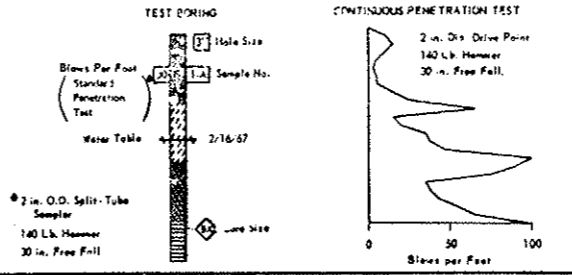
SUMMARY OF TEST RESULTS

No.	Date	Class. Region	Grading Analysis				Atterberg Limits		Unit Weight	Moisture Content	Triaxial Shear Strength						Dr. Sample
			Gravel	Sand	Silt	Clay	LL	PL			Strength	Strain	Conc.	Time	Pressure		

TYPE OF MATERIAL

- GRAVEL, COBBLES, BOULDER, SAND, SILTY
- GRAVELLY SAND
- GRANITE

LEGEND



- Location of Test during
- Location of Continuous Penetration Test
- High Mast Light Std.
- Relay Boring
- Auger Boring
- Core Boring

DIVISION OF HIGHWAYS
STATE OF COLORADO
ENGINEERING GEOLOGY

Address: EISENHOWER TUNNEL
Sta. 57+00 TO 124+00
Made by: PM
Checked by: KB
Date: APRIL 18, 1978

STRUCTURE NO. _____
D.W.G. NO. 8-2 OF 2

AS CONSTRUCTED		PROJ. ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS	REVISED 12-22-80	VOID	VIII	COLORADO	I70-3(84) 220	61
					102	

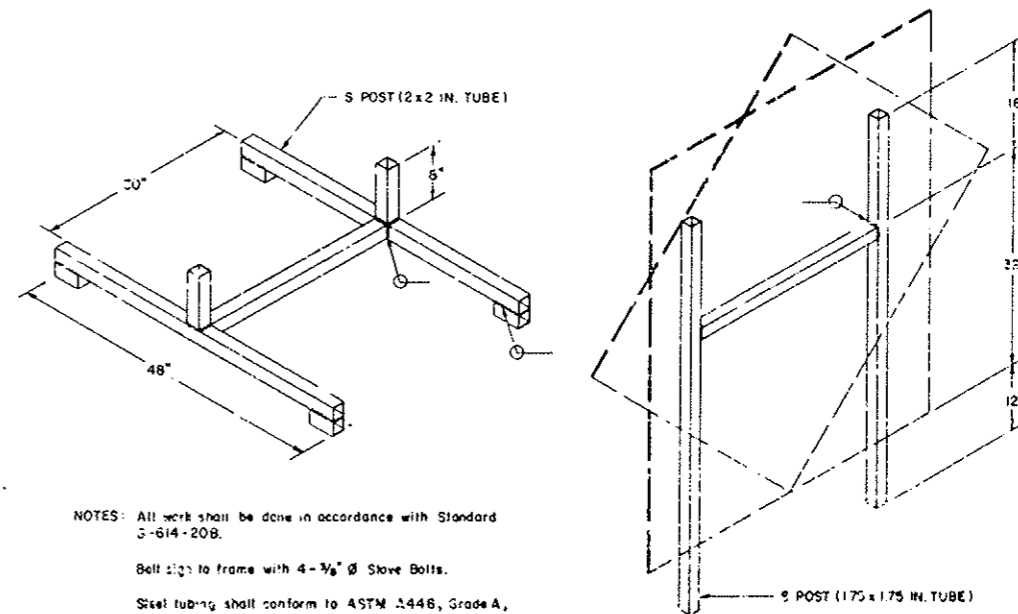
FINAL TABULATION OF SIGNING QUANTITIES

ITEM NO.	ITEM	UNIT	PROJECT TOTALS
202	REM DELINEATOR	EA.	45 23
202	REM PAVEMENT MARKING	SQ. FT.	3,000 10,837
202	REM GROUND SIGN	EA.	53 48
202	REM SIGN PANEL	EA.	2
202	REM TRAF SIG FACE	EA.	2
202	REM PEDESTAL POLE	EA.	2
210	RES GROUND SIGN	EA.	21
210	RES ILLUM GROUND SIGN	EA.	1
210	RES OVERHEIGHT VEH DET	EA.	1
613	2 IN ELEC COND	LIN. FT.	1022 700
614	SIGN PANEL (CL. I)	SQ. FT.	201 204
614	SIGN PANEL (CL. II)	SQ. FT.	484 465
614	SIGN PANEL (CL. III)	SQ. FT.	850 819
614	TIMBER SIGN POST (4 X 4)	LIN. FT.	280 233
614	TIMBER SIGN POST (6 X 6)	LIN. FT.	405
614	STEEL SIGN POST (U-2)	LIN. FT.	211
614	STEEL SIGN POST (1.75 X 1.75 IN TUBE)	LIN. FT.	100
614	STEEL SIGN POST (2 X 2 IN TUBE)	LIN. FT.	106
614	STEEL SIGN POST (S 4 X 7.7)	LIN. FT.	24
614	STEEL SIGN POST (W 6 X 15.5)	LIN. FT.	20.25 89
614	STEEL SIGN POST (W 8 X 17)	LIN. FT.	31.5 34
614	STEEL SIGN POST (W 10 X 21)	LIN. FT.	16.1 82
614	STEEL SIGN POST (W 10 X 25)	LIN. FT.	43.5 44
614	CONC FOOTING (TY 2)	EA.	6
614	CONC FOOTING (TY 3)	EA.	2
614	CONC FOOTING (TY 5)	EA.	6 4
614	CONC FOOTING (TY 6)	EA.	2
614	TRAF SIG (12-6-8)	EA.	5
614	BARRICADE (3M-A) (TEMP)	EA.	8
614	CONST TRAF SIGN (A)	EA.	41 19
614	CONST TRAF SIGN (B)	EA.	37 45
614	CONST TRAF SIGN (C)	EA.	8 12
614	VERTICAL PANEL	EA.	74 18
614	FLASHING ARROW PANEL	EA.	1
* 614	TRAFFIC CONE	EA.	200 156
614	SIG. POLE S (1)	EA.	2
627	PVMT. MKG. PAINT	GAL.	262 184
627	THERMOPLASTIC PVMT. MKG.	SQ. FT.	38,102 39,513
627	PREFORMED PLASTIC PVMT. MKG	SQ. FT.	5,706 4,343

SCHEDULE OF CONSTRUCTION TRAFFIC SIGNS

SIGN CODE OF LEGEND	DIMENSIONS	PANEL SIZE			QUANTITY REQUIRED
		A	B	C	
XW20-1	48" x 48"		X		9
XW20-7	48" x 48"		X		4
BE/PREPARED /TO/STOP	36" x 36"	X			4
XW20-5(L)	48" x 48"		X		4
IW4-2(L)	48" x 48"		X		4
XW20-5(R)	48" x 48"		X		4
IW4-2(R)	48" x 48"		X		4
SG20-1	60" x 36"		X		4
SG20-2	60" x 24"		X		6
TYPE I BARRICADE		X			15
IR2-1(40)	48" x 60"			X	4
IR2-1(30)	48" x 60"			X	4
IR2-1(55)	48" x 60"			X	4
IW6-3	48" x 48"		X		2
IW1-4(R)	48" x 48"		X		2
IW1-4(L)	48" x 48"		X		2

SIGN STAND DETAIL



* - All traffic cones shall be 28". The 40 cones shown in the "Tabulation of Signs" to be delivered to the Tunnel Maintenance Superintendent shall be new cones and shall remain the property of the Department of Highways.
16 traffic cones shown to be placed across the access openings of the East and West portal approaches shall be new cones and shall remain the property of the Department of Highways.

NOTES: All work shall be done in accordance with Standard S-614-20B.
Sign to frame with 4-3/8" Ø Stove Bolts.
Steel tubing shall conform to ASTM A448, Grade A, with 90% galvanizing.

FINAL TABULATION OF SIGNS
 (REMOVALS)

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	BACK-GROUND COLOR	REMOVE		RESET	MODIFY		NO. OF POSTS	LENGTH OF POST	POST TYPE (LIN. FT.)									CONC. FOOTING TYPE (EACH)								SIGN PANEL (SQ. FT.)										
					GROUND SIGN (EACH)	DELINEATOR (EACH)	GROUND SIGN (EACH)	TIMBER SIGN POST (EACH)	STEEL SIGN POST (EACH)			4x4 TIMBER	6x6 TIMBER	W6x12 BEAM	W8x15 BEAM	W8x17 BEAM	W10x21 BEAM	W10x25 BEAM	W12x31 BEAM	W12x40 BEAM	1	2	3	4	5	6	7	8	CLASS I	CLASS II	CLASS III								
39		128+50			1																																		
40		129+30			REMOVE	TRAFFIC SIGNAL FACE																																	
41		131+25			1																																		
42	Sta. 135+	OPR. 132+25			1																																		
43		OPR. 137+70			1																																		
44		138+25			1																																		
45		137+60			1																																		
46		142+50			1																																		
47		144+50			1																																		
48		148+25			1																																		
49		151+75			1																																		
50		144+70			1																																		
51		183+25			1																																		
52		183+75			1																																		
53	Sta. 174+	329+00 NORTH RAMP			REMOVE	SIGN PANEL	1																																
54		180+80			1																																		
55		19+50 NORTH RAMP			1																																		
56		187+45			1		3																																
57	Sta. 16+117	191+85			1																																		
58		199+00			1																																		
59		202+50			1																																		
60		206+30			1																																		
61		208+80			1																																		
62		188+50			1																																		
63		190+25					1																																
64		193+30			1																																		
65		195+05					1																																
66		196+30					1																																
67		197+50					1																																
68		206+30			1																																		
69		218+65			1																																		
70		219+40			1																																		
71		220+40			1																																		
72		225+50			1																																		
73		263+00			1																																		
74		275+90			1																																		
75		280+10			1																																		

NOTES:

- 1. SEE PLANS FOR FABRICATION DETAILS OF REGULATORY SIGNS, WARNING SIGNS, ROUTE MARKERS, AND AUXILIARY MARKERS.
- 2. PANELS FOR CLASS I SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARD S-614-20B.
- 3. PANELS FOR CLASS II SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL, SHALL HAVE BACKING ZEES, AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARDS S-614-21B AND S-614-22C.
- 4. PANELS FOR CLASS III SIGNS SHALL BE EITHER LAMINATED ALUMINUM, EXTRUDED ALUMINUM, OR SHEET ALUMINUM. SEE STANDARDS S-614-23C, S-614-24B AND S-614-25C.
- 5. CLASS III SIGNS WITH A GREEN OR BLUE BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR SHEET ALUMINUM AND SHALL HAVE A REFLECTORIZED BACKGROUND. CLASS III SIGNS WITH A BLACK BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR EXTRUDED ALUMINUM AND SHALL HAVE A PORCELAIN ENAMELED BACKGROUND.
- 6. LEGEND AND BORDER ON ALL CLASS III SIGNS SHALL BE WHITE CUTOUT ALUMINUM WITH REFLEX REFLECTORS OR APPROVED ALTERNATE.
- 7. FOR TYPICAL GROUND SIGN PLACEMENT, SEE STANDARD S-614-19B.
- 8. FOR DETAILS OF SIGN SUPPORTS FOR GROUND SIGNS SEE STANDARD S-614-26C.
- 9. FOR DETAILS OF FOOTINGS, PEDESTALS, AND SIGN ISLANDS SEE STANDARD S-614-27C.
- 10. POST LENGTHS ARE APPROXIMATE ONLY. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER.

AS CONSTRUCTED
 NO REVISIONS [] REVISED 2-22-82 VOID []

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	I 70-3(84)220	64	102

FINAL TABULATION OF SIGNS
 (REMOVALS)

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	BACK-GROUND COLOR	REMOVE		RESET GROUND SIGN (EACH)	MODIFY		NO. OF POSTS	LENGTH OF POST	POST TYPE (LIN. FT.)										CONC. FOOTING TYPE (EACH)								SIGN PANEL (SQ. FT.)						
					GROUND SIGN (EACH)	DELINEATOR (EACH)		TIMBER SIGN POST (EACH)	STEEL SIGN POST (EACH)			4x4 TIMBER	6x6 TIMBER	W6x12 BEAM	W8x13.5 BEAM	W8x17 BEAM	W10x20 BEAM	W10x21 BEAM	W10x25 BEAM	W12x31 BEAM	W12x40 BEAM	1	2	3	4	5	6	7	8	CLASS I	CLASS II	CLASS III				
76		127+10			1																															
77		13+80 RAMP			1																															
					53	45																														
	PROJECT TOTALS				48	35																														

NOTES:

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- PANELS FOR CLASS II SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL, SHALL HAVE BACKING ZEES, AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARDS S-614-21B AND S-614-22C.
- PANELS FOR CLASS III SIGNS SHALL BE EITHER LAMINATED ALUMINUM, EXTRUDED ALUMINUM, OR SHEET ALUMINUM. SEE STANDARDS S-614-24B AND S-614-25C.
- CLASS III SIGNS WITH A GREEN OR BLUE BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR SHEET ALUMINUM AND SHALL HAVE A REFLECTORIZED BACKGROUND. CLASS III SIGNS WITH A BLACK BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR EXTRUDED ALUMINUM AND SHALL HAVE A PORCELAIN ENAMELED BACKGROUND.
- LEGEND AND BORDER ON ALL CLASS II SIGNS SHALL BE WHITE OUTGUT ALUMINUM WITH REFLEX REFLECTORS OR APPROVED ALTERNATE.
- FOR TYPICAL GROUND SIGN PLACEMENT, SEE STANDARD S-614-19B.
- FOR DETAILS OF SIGN SUPPORTS FOR GROUND SIGNS SEE STANDARD S-614-26C.
- FOR DETAILS OF FOOTINGS, PEDESTALS, AND SIGN ISLANDS SEE STANDARD S-614-27C.
- POST LENGTHS ARE APPROXIMATE ONLY. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER.

FINAL TABULATION OF SIGNS

AS CONSTRUCTED
 NO REVISIONS REVISED 12-22-80 VOID

FEDERAL ROAD REGION NO. XIII DIVISION COLORADO PROJ. NO. I 70-3(84) 220 SHEET NO. 65 TOTAL SHEETS 102

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	BACK-GROUND COLOR	REMOVE GROUND SIGN (EACH)	SIGN STRUCTURE (EACH)	RESET GROUND SIGN (EACH)	MODIFY		NO. OF POSTS	LENGTH OF POST	POST TYPE (LIN. FT.)										CONC. FOOTING TYPE (EACH)						SIGN PANEL (SQ. FT.)												
								TIMBER SIGN POST (EACH)	STEEL SIGN POST (EACH)			4x4	6x6	W6x12	W6x15.5	W8x17	W8x20	W10x21	W10x25	W12x31	4x7.7	U-2	2	3	5	6	CLASS I	CLASS II	CLASS III											
100A	IR2-1(50)		4'x5'	WHITE																															20.00					
100B	IR2-1(40) PLAQUE	401+50	4'x2'-6"	WHITE		MOUNT ON CONCRETE	MEDIAN BARRIER				1	12'											12												10.00					
100C	IR2-1(55)		4'x5'	WHITE																														20.00						
101		402+50																																	20.00		<i>Reset Ground Sign Placed New Panel</i>			
102	SPECIAL	391+00	9'x6'	BLUE											28.5																					54.00				
103	MILEPOST	396+70	12"x48"	GREEN																																4.00				
104	SPECIAL	399+00	12'x9'	WHITE																																	108.00			
105A	IR2-1(50)	400+50	4'x5'	WHITE											18'-6"																					20.00				
105B	IR2-1(40) PLAQUE		4'x2'-6"	WHITE											18.5																						10.00			
106		402+30																																						
*107	IW4-2(R)	405+50	DIAMOND 48" SIDES	ORANGE																																	16.00			
*108	IW4-2(R)	406+50	DIAMOND 48" SIDES	ORANGE																																	16.00			
109	SR5-1	OPP 27+75	30"x30"	WHITE							1	14'	14																									6.25		
110	SR5-1	OPP 27+80	30"x30"	WHITE							1	14'	14																									6.25		
111	SR6-1(L)	OPP 28+30	36"x12"	BLACK							1	13'	13 DELETE																								3.00			
112	SR5-9	OPP 28+95	36"x24"	RED							1	13'-6"	13.5																									6.00		
113	SR5-9	OPP 29+10	36"x24"	RED							1	13'-6"	13.5																									6.00		
114		29+25																																						
115		409+00																																						
116	IW13-3(20)	415+45	4'x5'	YELLOW							1	18'-6"	18.5																									20.00		
117	IW3-3	417+40	DIAMOND 48" SIDES	YELLOW							1	18'-6"	18.5																									16.00		
118	SPECIAL	416+95	9'x6'	BLUE							2	20'	40																										54.00	
119	SR5-9	OPP 417+10	36"x24"	RED							1	13'-6"	13.5																									6.00		
120	SR5-9	OPP 417+30	36"x24"	RED							1	13'-6"	13.5																									6.00		
121		417+40																																						
122	SR5-1	OPP 418+50	30"x30"	WHITE							1	14'	14																										6.25	
123	SR5-1	OPP 418+50	30"x30"	WHITE							1	14'	14																										9.25	
124	IW4-1(R)	29+00	DIAMOND 48" SIDES	YELLOW							1	18'-6"	18.5																									16.00		
125		31+50																																						
126	SR7-4	13+00 LOOP ROAD	12"x18"	WHITE							1	13'-6"											13.5																1.50	
127	SPECIAL	11+90 LOOP ROAD	2'x1'-6"	WHITE				HANG ON CHAIN																															3.00	
128	SR5-1	30+40	30"x30"	WHITE							1	14'	14																										6.25	
129		OPP 30+50																																						
130		32+00																																						
131	SR7-4	4+00 LOOP ROAD	12"x18"	WHITE							1	13'-6"											13.5																	1.50
132		35+90																																						

* THESE ITEMS ARE TO BE DELIVERED TO THE TUNNEL MAINTENANCE SUPERINTENDENT. ** POSTS TO BE SET 6' INTO THE GROUND.

- NOTES:
- 1. SEE PLANS FOR FABRICATION DETAILS OF REGULATORY SIGNS, WARNING SIGNS, ROUTE MARKERS, AND AUXILIARY MARKERS.
 - 2. PANELS FOR CLASS I SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARD S-614-20B.
 - 3. PANELS FOR CLASS II SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL, SHALL HAVE BACKING ZEE'S, AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARDS S-614-21B AND S-614-22C.
 - 4. PANELS FOR CLASS III SIGNS SHALL BE EITHER LAMINATED ALUMINUM, EXTRUDED ALUMINUM, OR SHEET ALUMINUM. SEE STANDARDS S-614-23C, S-614-24B AND S-614-25C.
 - 5. CLASS III SIGNS WITH A GREEN OR BLUE BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR SHEET ALUMINUM AND SHALL HAVE A REFLECTORIZED BACKGROUND. CLASS III SIGNS WITH A BLACK BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR EXTRUDED ALUMINUM AND SHALL HAVE A PORCELAIN ENAMELED BACKGROUND.
 - 6. LEGEND AND BORDER ON ALL CLASS III SIGNS SHALL BE WHITE CUTOUT ALUMINUM WITH REFLEX REFLECTORS OR APPROVED ALTERNATE.
 - 7. FOR TYPICAL GROUND SIGN PLACEMENT, SEE STANDARD S-614-19B.
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 - 9. FOR DETAILS OF FOOTINGS, PEDESTALS, AND SIGN ISLANDS SEE STANDARD S-614-27C.
 - 10. POST LENGTHS ARE APPROXIMATE ONLY. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER.

Reset Ground Sign Placed New Panel

Delete -> 3.00

FINAL TABULATION OF SIGNS

AS CONSTRUCTED			FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS		
NO REVISIONS (2-22-90)			REVISED	VOID	III	COLORADO	I 70 - 3(84) 220	66	102

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	BACK-GROUND COLOR	REMOVE GROUND SIGN (EACH)	SIGN STRUCTURE (EACH)	RESET GROUND SIGN (EACH)	MODIFY TIMBER SIGN POST (EACH)	STEEL SIGN POST (EACH)	NO. OF POSTS	LENGTH OF POST	POST TYPE (LIN. FT.)								CONC. FOOTING TYPE (EACH)						SIGN PANEL (SQ. FT.)							
												4x4 TIMBER	6x6 TIMBER	8x8 BEAM	W6x15.5 BEAM	W8x17 BEAM	W8x20 BEAM	W10x21 BEAM	W10x25 BEAM	W12x51 BEAM	S4x7.7 POST	U-2	2	3	5	6	CLASS I	CLASS II	CLASS III				
133	SR7-4	6+00 LOOP ROAD	12"x18"	WHITE						1	13'-8"																			1.50			
134	SW8-10	7+00 LOOP ROAD	DIAMOND 30" SIDES	YELLOW						1	14'-6"	14.5																		6.25			
135	SR7-4	8+00 LOOP ROAD	12"x18"	WHITE						1	13'-8"																			1.50			
136	SR7-4	10+00 LOOP ROAD	12"x18"	WHITE						1	13'-8"																			1.50			
137	SR7-4	11+50 LOOP ROAD	12"x18"	WHITE						1	13'-6"																			1.50			
*	138	IR4-7	30+00	4'x5'	WHITE																									20.00			
*	139	IR4-1	33+50	4'x5'	WHITE																									20.00			
*	140	413+70 TO 132+00	429+95 AND 329+00																														
*	141	IR4-1	130+00	4'x5'	WHITE																									20.00			
*	142	IR4-7	132+00 AH.	4'x5'	WHITE																									20.00			
	143	SPECIAL	319+60 LOOP ROAD	2'x1'-6"	WHITE																									3.00			
	144	SPECIAL	326+75 LOOP ROAD	2'x1'-6"	WHITE																									3.00			
	145		131+50																														
	146	SR5-1	132+90	30"x30"	WHITE					1	14'	14																		6.25			
	147		OPP. 132+80							1																							
	148		132+00 AH.																														
	149		133+00							1																							
	150		134+00							1	16'-6"	16.5																					
	151		OPP. 137+00							1																							
	152		OPP. 137+00							1																							
	153	SR5-9	OPP. 138+70	36"x24"	RED					1	13'-6"	13.5																		6.00			
	154		139+00							1																							
	155	SRI-2	131+95	TRIANGLE 30" SIDES	WHITE					1	14'-6"	14.5																		3.90			
	156A	SR3-2	338+50 LOOP ROAD	24"x24"	WHITE					1	14'	14																		4.00			
	156B	SR5-1		30"x30"	WHITE																										6.25		
	157A	SPECIAL	132+83	9'x6'	BLUE					2	**20	40																		54.00			
	157B	SR5-1		30"x30"	WHITE																										6.25		
	158	IW4-1(R)	134+00	DIAMOND 48" SIDES	YELLOW					1	18'-6"	18.5																		16.00			
	159A	SPECIAL	135+00	9'x2'	GREEN					1	21'-6"							43.5										2			18.00		
	159B	SPECIAL		12'x11'	GREEN					1	22'-0"																				132.00		
	160		138+10							1																							
	161	IW3-3	138+20	DIAMOND 48" SIDES	YELLOW					1	18'-6"	18.5																			16.00		
*	162	IW4-2(L)	144+75	DIAMOND 48" SIDES	ORANGE																									16.00			
	163	IW4-2(L)	145+75	DIAMOND 48" SIDES	ORANGE																										16.00		
	164		148+97																														

* THESE ITEMS ARE TO BE DELIVERED TO THE TUNNEL MAINTENANCE SUPERINTENDENT.

** POSTS TO BE SET 6" INTO THE GROUND.

NOTES:

- SEE PLANS FOR FABRICATION DETAILS OF REGULATORY SIGNS, WARNING SIGNS, ROUTE MARKERS, AND AUXILIARY MARKERS.
- PANELS FOR CLASS I SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARD S-614-20B.
- PANELS FOR CLASS II SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL, SHALL HAVE BACKING ZEES, AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARDS S-614-21.3 AND S-614-22C.

- PANELS FOR CLASS III SIGNS SHALL BE EITHER LAMINATED ALUMINUM, EXTRUDED ALUMINUM, OR SHEET ALUMINUM. SEE STANDARDS S-614-23C, S-614-24B AND S-614-25C.
- CLASS III SIGNS WITH A GREEN OR BLUE BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR SHEET ALUMINUM AND SHALL HAVE A REFLECTORIZED BACKGROUND. CLASS III SIGNS WITH A BLACK BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR EXTRUDED ALUMINUM AND SHALL HAVE A PORCELAIN ENAMELED BACKGROUND.

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- FOR TYPICAL GROUND SIGN PLACEMENT. SEE STANDARD S-614-19B.
- FOR DETAILS OF SIGN SUPPORTS FOR GROUND SIGNS SEE STANDARD S-614-26C.
- FOR DETAILS OF FOOTINGS, PEDESTALS, AND SIGN ISLANDS SEE STANDARD S-614-27C.
- POST LENGTHS ARE APPROXIMATE ONLY. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER.

27

L

L

58

8.5

11

17

21

AS CONSTRUCTED

NO REVISIONS REVISED 2-22-80 VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	I70-3(84)220	67	102

FINAL TABULATION OF SIGNS

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	BACK-GROUND COLOR	REMOVE SIGN GROUND SIGN (EACH)	RESET SIGN GROUND SIGN (EACH)	MODIFY TIMBER SIGN POST (EACH)	STEEL SIGN POST (EACH)	NO. OF POSTS	LENGTH OF POST	POST TYPE (LIN. FT.)										CONC. FOOTING TYPE (EACH)						SIGN PANEL (SQ. FT.)			
											4x4 TIMBER	6x6 TIMBER	W4x2 BEAM	W6x5.5 BEAM	W8x17 BEAM	W8x20 BEAM	W10x21 BEAM	W10x25 BEAM	W12x31 BEAM	S4x7.7 POST	U-2	2	3	5	6	CLASS I	CLASS II	CLASS III		
165A	IR2-1(55)		4' X 5'	WHITE																								20.00		
165B	IR2-1(50)	154 + 00	4' X 5'	WHITE		MOUNT ON CONCRETE	MEDIAN BARRIER		1	12'																		20.00		
165C	IR2-1(40) PLAQUE		4' X 2'-6"	WHITE																								10.00		
166A	IR2-1(55)	155 + 00	4' X 5'	WHITE					1	18'-6"																		20.00		
166B	IR2-1(40) PLAQUE		4' X 2'-6"	WHITE																								10.00		
167A	SPECIAL	146 + 20	12' X 2'	GREEN					1	21'-0"							43.5								2				24.00	
167B	SPECIAL		15' X 9'	GREEN					1	22'-6"																			135.00	
168	IW3-2(35)	150 + 00	4' X 5'	YELLOW					1	18'-6"							18.5											20.00		
169	SPECIAL	151 + 50	10' X 5'	GREEN					2	**19'							38												43.00	
170	IR2-1(55)	155 + 00	4' X 5'	WHITE					1	18'-6"							18.5											20.00		
171	SR7-1	456+00 S.W. RAMP	12" X 18"	WHITE					1	13'-6"															13.5			1.50		
172	SR7-1	458+00 S.W. RAMP	12" X 18"	WHITE					1	13'-6"															13.5			1.50		
173	SR7-1	460+00 S.W. RAMP	12" X 18"	WHITE					1	13'-6"															13.5			1.50		
174	SR7-1	462+00 S.W. RAMP	12" X 18"	WHITE					1	13'-6"															13.5			1.50		
175	MILEPOST	162 + 10	12" X 48"	GREEN					1	11'															11			4.00		
176	SR5-9	463+00 S.W. RAMP	36" X 24"	RED					1	13'-6"	13.5																	6.00		
177	SR5-1	467+50 S.W. RAMP	30" X 30"	WHITE					1	14'	14																	6.25		
178	SR5-1	467+50 S.W. RAMP	30" X 30"	WHITE					1	14'	14																	6.25		
179	SW1-6	467+00 S.W. RAMP	48" X 24"	YELLOW					1	15'-6"	15.5																	8.00		
180		353+75 NORTH RAMP									MOUNT ON BRIDGE PIER																			
181	SPECIAL	14 F 85 NORTH RAMP	2' X 1'-6"	WHITE							HANG ON CHAIN																	3.00		
182		156+50 U.S. 6																												
183A	SW3-1a	455+50 S.W. RAMP	DIAMOND 36" SIDE	YELLOW					1	17'	17																	9.00		
183B	ESW3-1a		24" X 18"	YELLOW							17																	3.00		
184A	X#1-1(R)	463+00 S.W. RAMP	DIAMOND 36" SIDES	YELLOW					1	17'	17																	9.00		
184B	SR5-9		36" X 24"	RED																								6.00		
185	SPECIAL	165+00 U.S. 6	6' X 6'	GREEN					2	19'	30																		36.00	
186A	SR1-1		OCTAGON 30" X 30"	RED																								6.25		
186B	SR6-1 (R)	465+65 S.W. RAMP	36" X 12"	BLACK					1	15'	15																	3.00		
186C	SR6-1 (L)		36" X 12"	BLACK																								3.00		
187A	SR1-1		OCTAGON 30" X 30"	RED																								6.25		
187B	SR6-1 (R)	467+65 S.W. RAMP	36" X 12"	BLACK					1	15'	15																	3.00		
187C	SR6-1 (L)		36" X 12"	BLACK																								3.00		
188	SR7-1	175+00 FRONTAGE RD	12" X 18"	WHITE					1	13'-6"																13.5			1.50	
189	SR7-1	177+00 FRONTAGE RD	12" X 18"	WHITE					1	13'-6"																13.5			1.50	
190	SR7-1	179+00 FRONTAGE RD	12" X 18"	WHITE					1	13'-6"																13.5			1.50	
191	SR7-1	181+00 FRONTAGE RD	12" X 18"	WHITE					1	13'-6"																13.5			1.50	
192	SR1-1	181+70 FRONTAGE RD	OCTAGON 30" X 30"	RED					1	14'	14																	6.25		

** POSTS TO BE SET 6' INTO THE GROUND.

NOTES:

- SEE PLANS FOR FABRICATION DETAILS OF REGULATORY SIGNS, WARNING SIGNS, ROUTE MARKERS, AND AUXILIARY MARKERS.
- PANELS FOR CLASS I SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARD S-614-20B.
- PANELS FOR CLASS II SIGNS SHALL BE EITHER SINGLE SHEET ALUMINUM OR SINGLE SHEET STEEL, SHALL HAVE BACKING ZEEs, AND SHALL BE REFLECTORIZED AS INDICATED. SEE STANDARDS S-614-21A AND S-614-22C.

- PANELS FOR CLASS III SIGNS SHALL BE EITHER LAMINATED ALUMINUM, EXTRUDED ALUMINUM, OR SHEET ALUMINUM. SEE STANDARDS S-614-23C, S-614-24B AND S-614-25C.
- CLASS III SIGNS WITH A GREEN OR BLUE BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR SHEET ALUMINUM AND SHALL HAVE A REFLECTORIZED BACKGROUND. CLASS III SIGNS WITH A BLACK BACKGROUND SHALL BE FABRICATED FROM EITHER LAMINATED ALUMINUM OR EXTRUDED ALUMINUM AND SHALL HAVE A PORCELAIN ENAMELED BACKGROUND.

- LEGEND AND BORDER ON ALL CLASS II SIGNS SHALL BE WHITE CUTOUT ALUMINUM WITH REFLEX REFLECTORS OR APPROVED ALTERNATE.
- FOR TYPICAL GROUND SIGN PLACEMENT, SEE STANDARD S-614-19B.
- FOR DETAILS OF SIGN SUPPORTS FOR GROUND SIGNS SEE STANDARD S-614-26C.
- FOR DETAILS OF FOOTINGS, PEDESTALS, AND SIGN ISLANDS SEE STANDARD S-614-27C.
- POST LENGTHS ARE APPROXIMATE ONLY. EXACT LENGTHS TO BE DETERMINED BY THE ENGINEER.

22
17
11
8.5
8.5
11
17
22

FINAL TABULATION OF PAVEMENT MARKINGS

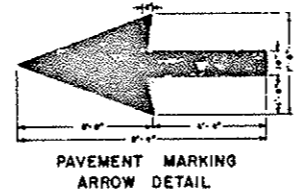
AS CONSTRUCTED
NO REVISIONS [] REVISED [1222-99] VOID []

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(84) 220	69	102

STATION	LOCATION	PLASTIC PAVEMENT MARKING LINES (Linear Feet)										
		EDGE		LANE		CENTER		CHANNELIZING		CROSSHATCH		STOP
		WHITE SOLID 4 INCH	YELLOW SOLID 4 INCH	WHITE BROKEN 5 INCH	YELLOW SOLID 5 INCH	YELLOW BROKEN 5 INCH	WHITE SOLID 10 INCH	YELLOW SOLID 10 INCH	WHITE SOLID 10 INCH	YELLOW SOLID 10 INCH	WHITE SOLID 12 INCH	
348+00 TO 399+31.20BK	MAINLINE EB & WB	10,262	10,262	10,262								
398+50.90AH TO 419+72.66BK	MAINLINE EB & WB	4,244	4,244	4,244								
261+73.33AH TO 36+00-31+15	MAINLINE EB & WB	1,809	1,809	1,809								
36+00 TO 125+58	TUNNELS EB & WB EB	17,790	17,790	17,790								
125+55 TO 132+93.53PK	MAINLINE EB & WB	1,353	1,478	1,478								
131+09.84AH TO 217+00-217+00	MAINLINE EB & WB	16,921	17,021	17,021								
▲ 413+60 TO 415+40	DECEL LANE EB			-100								
415+40 TO 416+85	DECEL LANE EB											
▲ 416+25 TO 416+95	ACCEL LANE WB			-70								
416+95 TO 417+75	ACCEL LANE WB	80										
29+35-30 TO 30+35-36	TRUCK SHOULDER EB											
30+35 TO 31+80	ISLAND EB											
▲ 31+80 TO 32+50	ACCEL EB			-70								
29+50 TO 30+30	DECEL LANE WB											
▲ 30+30 TO 31+30	DECEL LANE WB			-100								
▲ 131+40 TO 131+80	DECEL LANE EB			-40								
131+80 TO 132+85	DECEL LANE EB											
135+50 TO 136+30	ACCEL LANE EB	80										
▲ 136+30 TO 139+50	ACCEL LANE EB											
▲ 131+00 TO 131+85	ACCEL LANE WB			80								
131+85 TO 132+00-132+00	ISLAND WB											
131+85 TO 132+00-132+00	ISLAND WB											
132+00 TO 133+00	TRUCK SHOULDER WB											
139+00 TO 139+90	DECEL LANE WB											
▲ 142+50 TO 146+20	DECEL LANE EB			-370								
146+20 TO 150+20	DECEL LANE EB											
▲ 176+20 TO 182+50	ACCEL LANE WB			-630								
182+50 TO 183+50	ACCEL LANE WB	100										
183+50 TO 196+00-40	DECEL LANE WB											
202+60 TO 205+90	ACCEL LANE EB	330										
▲ 205+90 TO 208+30	ACCEL LANE EB			-200								
247+50 TO 397+31.20	MAINLINE EB	5121	5121									
248+00 TO 397+31.20	MAINLINE WB		5131									
345+30 TO 399+31.20	MAINLINE WB	5241										
26+73.33 TO 132+93.53	MAINLINE WB	10,625	10,625									
26+73.33 TO 122+73.33	MAINLINE EB		12,620									
26+73.33 TO 30+30	MAINLINE EB	357										
417+00 TO 27+30	TRUCK SHOULDER EB	527										
31+60 TO 132+00 BK	MAINLINE EB	10,240										
132+00 TO 130+25	MAINLINE EB	415										
150+00 TO 202+00	MAINLINE EB	5420										
205+00 TO 220+00	MAINLINE EB	1500										
131+89.24AH TO 212+00	MAINLINE WB		8610									
131+89.24AH TO 219+60	MAINLINE EB		8770									
131+89.24AH TO 216+00	MAINLINE WB	8220										
132+00 TO 133+00	MAINLINE WB	600										
137+00 TO 217+00	MAINLINE WB		8000									
328+50 TO 417+00	MAINLINE EB		929									
32+ TO 32+00	MAINLINE WB											
PROJECT TOTAL (LINEAR FEET)		52,769	52,649	3,474								
PROJECT TOTAL (CONVERTED TO SQ. FT.)		17,590	17,550	5,700								

▲ THERMOPLASTIC WAS SUBSTITUTED FOR PREFORMED PLASTIC AT ACCEL AND DECEL LANES, AND IS INCLUDED IN THE WHITE EDGE QUANTITIES. IT WAS ALSO USED IN THE WB. TUNNELS IN PART OF THE PORTAL AREAS.
* PREFORMED PLASTIC PVMT. MKG.

STATION	LOCATION	PAINT PAVEMENT MARKING LINES (Linear Feet)											
		EDGE		LANE		CENTER		CHANNELIZING		CROSSHATCH		PARKING	STOP
		WHITE SOLID 4 INCH	YELLOW SOLID 4 INCH	WHITE BROKEN 5 INCH	YELLOW SOLID 5 INCH	YELLOW BROKEN 5 INCH	WHITE SOLID 10 INCH	YELLOW SOLID 10 INCH	WHITE SOLID 10 INCH	YELLOW SOLID 10 INCH	WHITE SOLID 12 INCH		
416+85 TO 419+72.66BK	OUTSIDE SHOULDER EDGE EB	300											
26+73.33AH TO 31+75	OUTSIDE SHOULDER EDGE EB	500											
117+25	S. PARKING AREA												
116+80 TO 126+23.19BK	S. PARKING AREA												
119+60 TO 124+00	S. PARKING AREA												
2+10.32 TO 22+35	WEST LOOP ROAD												
OPR. 21+55	N. PARKING AREA												
21+00 TO 26+50	N. PARKING AREA												
23+50 TO 25+60	N. PARKING AREA												
131+80 TO 132+93.53BK	OUTSIDE SHOULDER EDGE WB												
131+89.24AH TO 130+00	OUTSIDE SHOULDER EDGE WB												
307+25	N. PARKING AREA												
306+60 TO 315+50	N. PARKING AREA												
310+00 TO 314+80	N. PARKING AREA												
315+50 TO 323+77.33BK	EAST LOOP ROAD												
323+71.9AH TO 336+35	EAST LOOP ROAD												
336+35	S. PARKING AREA												
336+35 TO 336+80	S. PARKING AREA												
336+80 TO 340+60	S. PARKING AREA												
450+30 TO 467+75	S.W. RAMP												
463+00	S.W. RAMP												
467+75	S.W. RAMP												
159+00 TO 196+79BK	U.S. 6 - FRONTAGE RD.												
596+79AH TO 602+50	U.S. 6 - FRONTAGE RD.												
159+00 TO 160+00	U.S. 6 - FRONTAGE RD.												
160+00 TO 171+90	U.S. 6 - FRONTAGE RD.												
165+50 TO 167+00	U.S. 6 - FRONTAGE RD.												
167+00 TO 168+50	U.S. 6 - FRONTAGE RD.												
OPR. 172+05	CONNECTION												
173+00 TO 181+00	U.S. 6 - FRONTAGE RD.												
181+50	U.S. 6 - FRONTAGE RD.												
329+00 TO 335+40BK	NORTH RAMP												
330+25	NORTH RAMP												
332+30 TO 332+60	NORTH RAMP												
333+00 TO 335+40BK	NORTH RAMP												
S+85 AH TO 25+35	NORTH RAMP												
S+85 AH TO 15+85	NORTH RAMP												
14+80	NORTH RAMP												
OPR. 16+00	NORTH RAMP HOOK												
17+50	NORTH RAMP												
PROJECT TOTALS (LINEAR FEET)		47,832	310	9970	160	415					7253	143	70

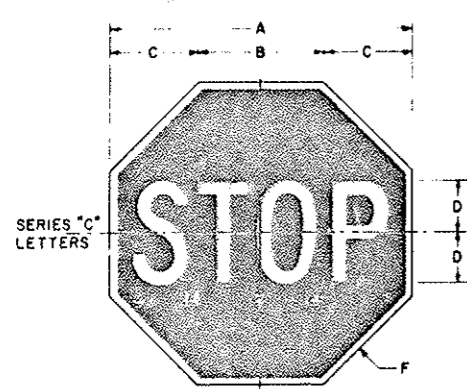


NOTE: FOR DETAILS OF PAVEMENT MARKING LINES AND LINE PLACEMENT, SEE STANDARD S-627-1A

SUMMARY OF PAVEMENT MARKING QUANTITIES			
COLOR	PAINT (GAL.)	THERMOPLASTIC (SQ. FT.)	PREFORMED PLASTIC (SQ. FT.)
YELLOW	70,27	12,217,500	
WHITE	1,575	20,672	5,700
TOTAL	71,845	12,239,172	5,700

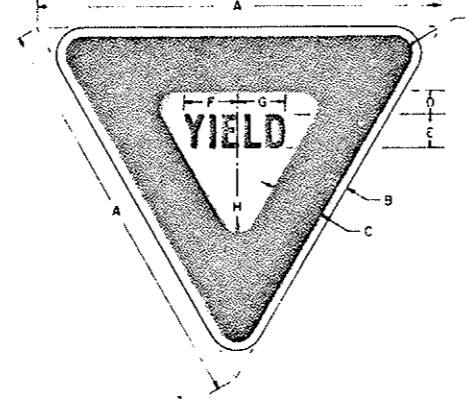
UNIFORM STANDARD REGULATORY SIGNS

FEDERAL ROAD DISTRICT	PROJ NO	SHEET NO	TOTAL SHEETS
VIII COLORADO	170-3(84)220	70	102
AS CONSTRUCTED			
NO REVISIONS <u>2-22-20</u> REVISED _____ VOID _____			



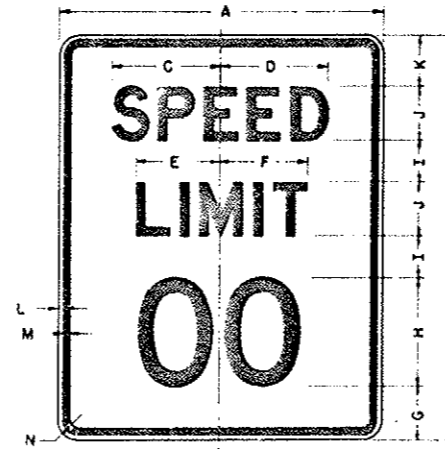
CODE	A	B	C	D	E	F
CR1-1	24"	9 1/2"	7 1/2"	4"	10 1/2"	1 1/2"
SRI-1	30"	12 1/2"	8 1/2"	5"	12 1/2"	1 1/2"
XRI-1	48"	19 1/2"	14 1/2"	8"	20 1/2"	2"

Legend and border - Reflectorized white.
Background - Reflectorized red (Reverse screened on reflective sheeting)



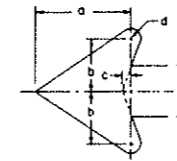
CODE	A	B	C	D	E	F	G	H	J
SRI-2	36"	15"	5"	2 3/4"	3 1/2"	4 1/2"	4 1/2"	1 1/2"	2"
XRI-2	48"	18"	6"	3 1/2"	4 1/2"	5 1/2"	5 1/2"	2"	3"
IRI-2	60"	24"	8"	5"	6 1/2"	7 1/2"	7 1/2"	2 1/2"	4"

Background - Reflectorized white.
Legend and Border - Reflectorized Red (Reverse screened on reflective sheeting)

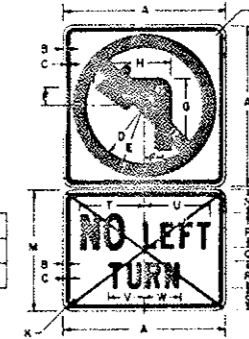


CODE	A	B	C	D	E	F	G	H	I	J	K	L	M	N
CR2-1(-)	18"	24"	7 1/2"	7 1/2"	5 1/2"	6"	2 1/2"	8"	0"	1 1/2"	4"	0"	2 1/2"	1 1/2"
SR2-1(-)	24"	30"	9 1/2"	9 1/2"	7 1/2"	7 1/2"	4"	10"	2"	4"	4"	1 1/2"	1 1/2"	1 1/2"
XR2-1(-)	36"	48"	14 1/2"	14 1/2"	10 1/2"	10 1/2"	7 1/2"	14 1/2"	4 1/2"	6"	6"	2 1/2"	2 1/2"	2"
IR2-1(-)	48"	60"	21 1/2"	21 1/2"	15 1/2"	15 1/2"	10 1/2"	21 1/2"	6 1/2"	8"	8"	3 1/2"	3 1/2"	3"

Legend and border - Screen processed black.
Background - Reflectorized white



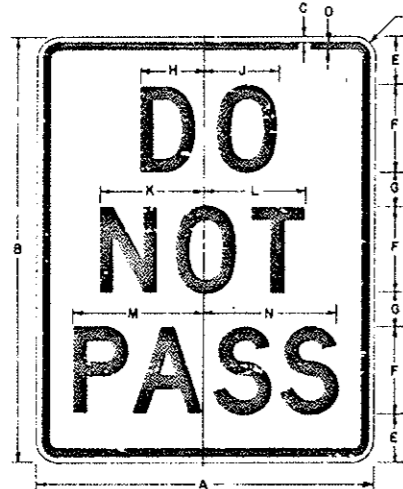
ARROW DETAILS	a	b	c	d	e
SR3-2	4 1/2"	2 1/2"	1 1/2"	1 1/2"	2 1/2"
XR3-2	7 1/2"	3 1/2"	2 1/2"	2 1/2"	3 1/2"



Background - Reflectorized white.
Circle and Diagonal - Reflectorized Red.
Legend and Border - Screen Processed Black

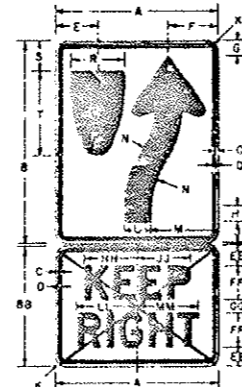
SYMBOL PANEL	A	B	C	D	E	F	G	H	J	K	L
SR3-3	24"	1 1/2"	1 1/2"	8 1/2"	10 1/2"	2 1/2"	10 1/2"	11 1/2"	2"	1 1/2"	2"
XR3-2	36"	2 1/2"	2 1/2"	12 1/2"	15 1/2"	4 1/2"	15 1/2"	17 1/2"	3"	2 1/2"	3"

WORD PANEL	M	N	P	Q	R	S	T	U	V	W
ESR3-2	18"	3 1/2"	5 1/2"	3 1/2"	3 1/2"	3 1/2"	9 1/2"	9 1/2"	5 1/2"	5 1/2"
EXR3-2	24"	4"	7 1/2"	3 1/2"	3 1/2"	3 1/2"	13 1/2"	13 1/2"	7 1/2"	7 1/2"



CODE	A	B	C	D	E	F	G	H	J	K	L	M	N	P
CR4-1	16"	24"	1 1/2"	1 1/2"	3 1/2"	4 1/2"	2 1/2"	3 1/2"	4 1/2"	4 1/2"	6 1/2"	6 1/2"	1 1/2"	1 1/2"
SR4-1	24"	30"	2 1/2"	2 1/2"	5 1/2"	6 1/2"	3 1/2"	4 1/2"	5 1/2"	5 1/2"	7 1/2"	7 1/2"	2 1/2"	2 1/2"
XR4-1	36"	48"	3 1/2"	3 1/2"	7 1/2"	8 1/2"	4 1/2"	5 1/2"	6 1/2"	6 1/2"	9 1/2"	9 1/2"	3 1/2"	3 1/2"
IR4-1	48"	60"	4 1/2"	4 1/2"	10 1/2"	11 1/2"	5 1/2"	6 1/2"	7 1/2"	7 1/2"	11 1/2"	11 1/2"	4 1/2"	4 1/2"

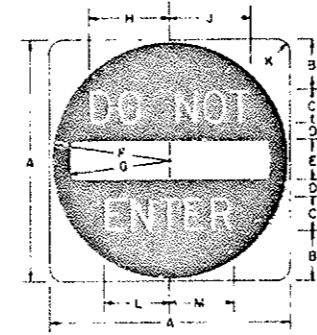
Legend - Black (Non-Ref.)
Background - White (Ref.)



CODE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T
CR1-7	18"	24"	1 1/2"	1 1/2"	4 1/2"	5 1/2"	1 1/2"	2 1/2"	1 1/2"	3 1/2"	5 1/2"	1 1/2"	2 1/2"	6 1/2"	3 1/2"	9 1/2"		
SR4-7	24"	30"	2 1/2"	2 1/2"	6 1/2"	7 1/2"	1 1/2"	2 1/2"	1 1/2"	4 1/2"	7 1/2"	2 1/2"	3 1/2"	8 1/2"	4 1/2"	12 1/2"		
XR4-7	36"	48"	3 1/2"	3 1/2"	9 1/2"	11 1/2"	2 1/2"	3 1/2"	2 1/2"	5 1/2"	10 1/2"	3 1/2"	4 1/2"	12 1/2"	6 1/2"	16 1/2"		
IR4-7	48"	60"	4 1/2"	4 1/2"	12 1/2"	14 1/2"	3 1/2"	4 1/2"	3 1/2"	6 1/2"	13 1/2"	4 1/2"	5 1/2"	16 1/2"	8 1/2"	20 1/2"		

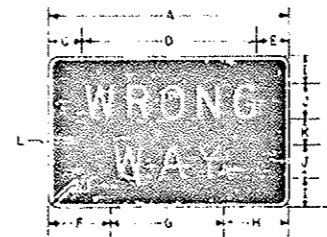
CODE	A	B	C	D	E	F	G	H	J	K	L	M	N
ECR4-7	18"	24"	1 1/2"	1 1/2"	4 1/2"	5 1/2"	1 1/2"	2 1/2"	1 1/2"	3 1/2"	5 1/2"	1 1/2"	2 1/2"
ESR4-7	24"	30"	2 1/2"	2 1/2"	6 1/2"	7 1/2"	1 1/2"	2 1/2"	1 1/2"	4 1/2"	7 1/2"	2 1/2"	3 1/2"
EXR4-7	36"	48"	3 1/2"	3 1/2"	9 1/2"	11 1/2"	2 1/2"	3 1/2"	2 1/2"	5 1/2"	10 1/2"	3 1/2"	4 1/2"
EUR4-7	48"	60"	4 1/2"	4 1/2"	12 1/2"	14 1/2"	3 1/2"	4 1/2"	3 1/2"	6 1/2"	13 1/2"	4 1/2"	5 1/2"

Legend - Black (Non-Ref.)
Background - White (Ref.)



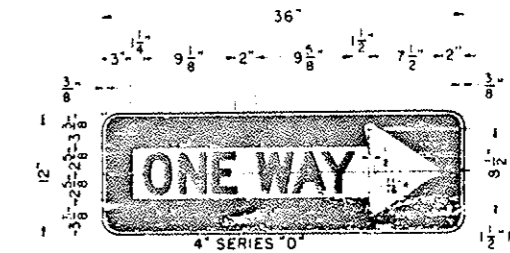
CODE	A	B	C	D	E	F	G	H	J	K	L	M
SR5-1	30"	6 1/2"	4 1/2"	2"	5 1/2"	14 1/2"	12 1/2"	9 1/2"	9 1/2"	1 1/2"	7 1/2"	7 1/2"
XR5-1	36"	7 1/2"	5 1/2"	2 1/2"	6 1/2"	17 1/2"	15 1/2"	11 1/2"	12 1/2"	2 1/2"	9 1/2"	9 1/2"
IR5-1	48"	11 1/2"	8 1/2"	3 1/2"	8 1/2"	23 1/2"	20 1/2"	14 1/2"	14 1/2"	3 1/2"	11 1/2"	11 1/2"

Background and Legend - Reflectorized white.
Circle - Reflectorized Red (Reverse screened on reflective sheeting)



CODE	A	B	C	D	E	F	G	H	J	K	L	M
SR5-9	24"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
XR5-9	36"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
IR5-9	48"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"	3 1/2"

Legend and border - Reflectorized white.
Background - Reflectorized red (Reverse screened on reflective sheeting)



SR6-1 (H or L)

Reverse Arrow Design for Left
Legend and border area - Screen processed black
Margin and arrow background - Reflectorized white

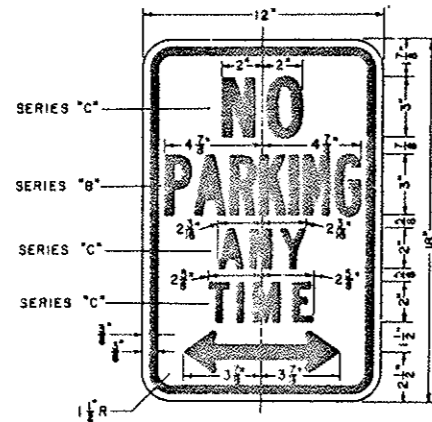
NOTES

- See applicable Standard for installation details Class I or Class II as denoted in the Tabulation of Signs
- Galvanized Sheet Steel shall be hot dip Galvanized sheets of structural quality, 0.0598" min. thick, Grade A per ASTM Spec. A446-60T, 2 oz. coating class with a light Phosphate coating on surfaces that are to receive reflective sheeting per Federal Spec. TT-C-490 for Galvanized sheets

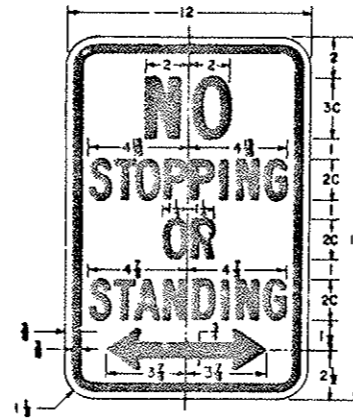
UNIFORM STANDARD REGULATORY SIGNS

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XIII	COLORADO	I70-3(84)220	77	102

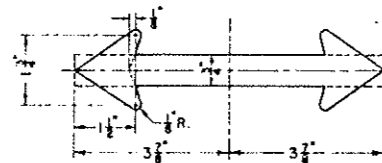
AS CONSTRUCTED		
NO REVISIONS	12-22-20	VOID



SR7-1
 Legend and border are red process paint.
 Background and margin are reflectorized white.



SR7-4
 Legend—Red (Non-Refl.)
 Background—White (Refl.)



ARROW DETAIL

NOTES

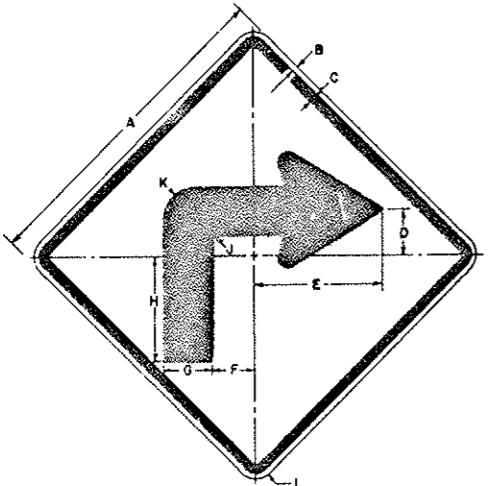
- See applicable Standard for installation details Class I or Class II as denoted in the Tabulation of Signs.
- Galvanized Sheet Steel shall be hot dip Galvanized sheet of structural quality, 0.0399" min. thick, Grade A per ASTM Spec A36-SOT, 2 oz coating class with a light Phosphate coating on surfaces that are to receive reflective sheeting per Federal Spec TT-C-490 for Galvanized sheets.

UNIFORM STANDARD WARNING SIGNS

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XXXX	COLORADO	I 70-3(84) 220	72	102

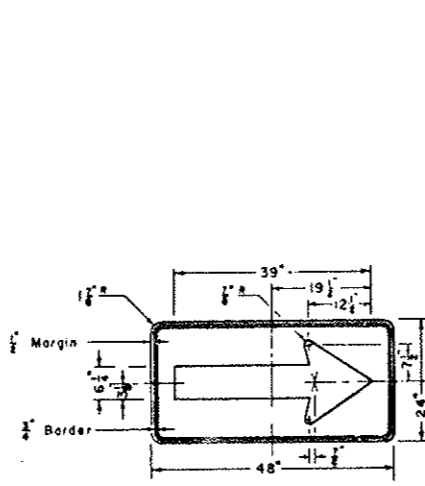
AS CONSTRUCTED

NO REVISIONS	12-22-60	REVISED		VOID
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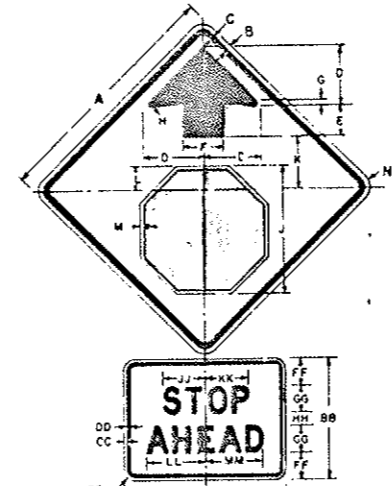


CODE	A	B	C	D	E	F	G	H	J	K	L
CW1-(R)	24	3	1/2	1/2	3 1/2	9 1/2	3	3 1/2	7 1/2	1 1/2	2 1/2
SW1-(R)	30	1	1/2	1/2	4 1/2	12	3 1/2	4 1/2	9 1/2	1	3
XW1-(R)	36	1	1/2	1/2	4 1/2	14	4 1/2	5 1/2	11 1/2	1 1/2	3 1/2
IW1-(R)	48	1	1/2	1/2	6 1/2	19 1/2	6	7	15 1/2	1 1/2	4 1/2

Legend - Black (Non-Ref)
Background - Yellow (Ref)
Reverse arrow design for left (L)

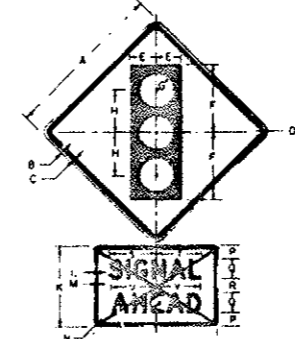


SW1-6



CODE	A	B	C	D	E	F	G	H	J	K	L	M	N
CW3-la	30	1	1/2	1/2	7 1/2	3 1/2	5	3 1/2	15 1/2	6 1/2	2 1/2	1 1/2	1 1/2
SW3-la	36	1	1/2	1/2	9 1/2	4 1/2	6	4 1/2	19 1/2	7 1/2	3 1/2	2 1/2	2 1/2
IW3-1a	48	1	1/2	1/2	12 1/2	6 1/2	8	6 1/2	25 1/2	10 1/2	4 1/2	3	3

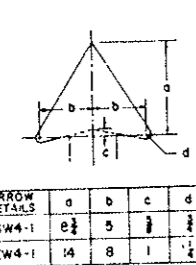
Border and Arrow - Black (non-Ref)
Symbol - White Border on Red Background (Ref)
Background - Yellow (Ref)



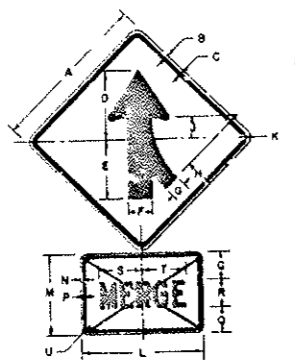
Background - ReflectORIZED Yellow
Top Circle - ReflectORIZED Red
Bottom Circle - ReflectORIZED Green
Legend and Border - Screen Processed Black

SYMBOL PANEL	A	B	C	D	E	F	G	H
SW3-3	36	1	1/2	1/2	2 1/2	5 1/2	15 1/2	4 1/2
IW3-3	48	1	1/2	1/2	3	7 1/2	20	5 1/2

WORD PANEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
ESW3-3	24	18	1	1	1	1	4	4	2	9 1/2	9 1/2	9 1/2	9 1/2	8 1/2								
EIW3-3	30	24	1	1	1	1	4	6	4	13 1/2	13 1/2	13 1/2	13 1/2	13 1/2								



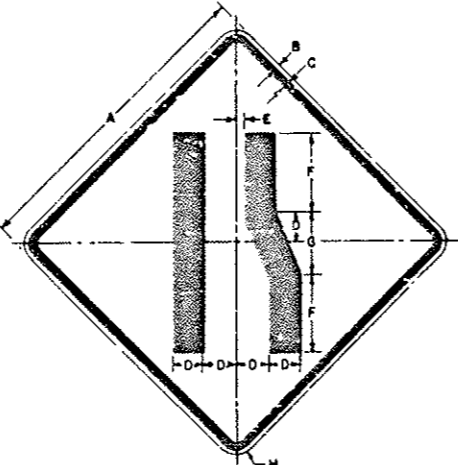
ARROW DETAILS	a	b	c	d
SW4-1	6 1/2	5	1 1/2	1 1/2
IW4-1	14	8	1 1/2	1 1/2



Reverse symbol design for left
Background - ReflectORIZED Yellow
Legend and Border - Screen Processed Black

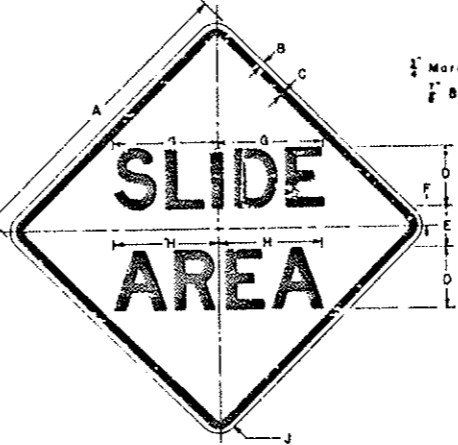
SYMBOL PANEL	A	B	C	D	E	F	G	H	J	K
SW4-1	30	1	1/2	1/2	13	11	4 1/2	3	5 1/2	4 1/2
IW4-1	48	1	1/2	1/2	20 1/2	17 1/2	7	4 1/2	8 1/2	6 1/2

WORD PANEL	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
ESW4-1	24	18	1	1	1	1	6	6	10 1/2	10 1/2	11 1/2											
EIW4-1	30	24	1	1	1	1	6	8	17 1/2	17 1/2	19 1/2											



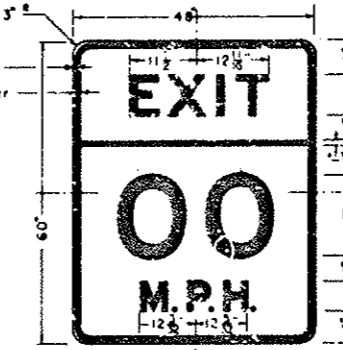
CODE	A	B	C	D	E	F	G	H
CW4-2(R)	30	1	1/2	1/2	3 1/2	1 1/2	8 1/2	6 1/2
SW4-2(R)	36	1	1/2	1/2	4 1/2	1	10	8 1/2
IW4-2(R)	48	1	1/2	1/2	5 1/2	1 1/2	13 1/2	10 1/2

Legend - Black (Non-Ref)
Background - Yellow (Ref)
Reverse symbol design for left (L)



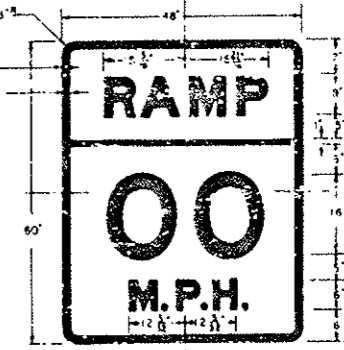
CODE	A	B	C	D	E	F	G	H	J
SW8-10	30	1	1/2	1/2	6	4	2	10 1/2	10 1/2
XW8-10	48	1	1/2	1/2	9	5	2 1/2	14 1/2	15 1/2

Legend - Black (Non-Ref)
Background - Yellow (Ref)



Stroke Width of Letters and Numerals is modified to 0.2" per inch of Letter Height.

IW13-2 (-)



Stroke Width of Letters and Numerals is modified to 0.2" per inch of Letter Height.

IW13-3 (-)

- NOTES:
- All Warning Signs shall have a Screen Processed Black Legend and Border on a ReflectORIZED Background as shown on the "Tabulation of Signs".
 - Galvanized Sheet Steel shall be hot dip Galvanized sheets of structural quality, 0.0598" min. thick, Grade A per ASTM Spec. A446-60T, 2 oz. coating class with a light Phosphate coating on surfaces that are to receive reflective sheeting per Federal Spec. TT-C-490 for Galvanized sheets.
 - See applicable Standard for installation details: Class I or Class II as denoted in the Tabulation of Signs.

AS CONSTRUCTED		
NO REVISIONS	1222-90	REVISED
		VOID

STANDARD S-614-25 C

(SHEET 1 OF 2 SHEETS)

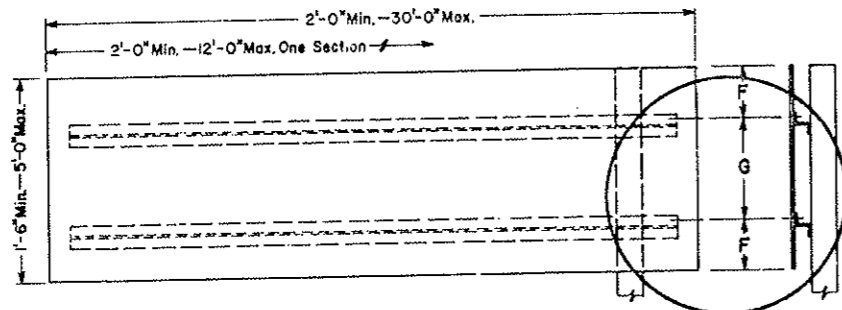
(RE) REVISED FOR THIS PROJECT

FEDERAL ROAD REGION NO.	DISTRICT	PROJ. NO.	SHEET NO.	TOTAL SHEETS
XXX	COLORADO	I 70-3(84) 220	73	102

REVISIONS		
(RE)	5-8-78	Rev Table & Approval J.O.S.

TYPICAL PANEL ELEVATIONS

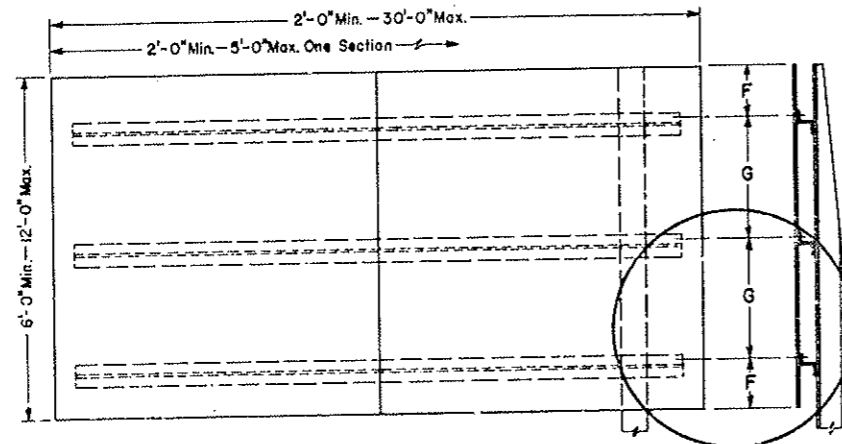
HORIZONTAL SECTIONS



SECTIONS REQUIRED
Height x 2'-0" to 12'-0" = 1 Section
Height x 12'-6" to 24'-0" = 2 Sections
Height x 24'-6" to 30'-0" = 3 Sections

SEE TYPICAL
DETAIL
ON SHEET 2

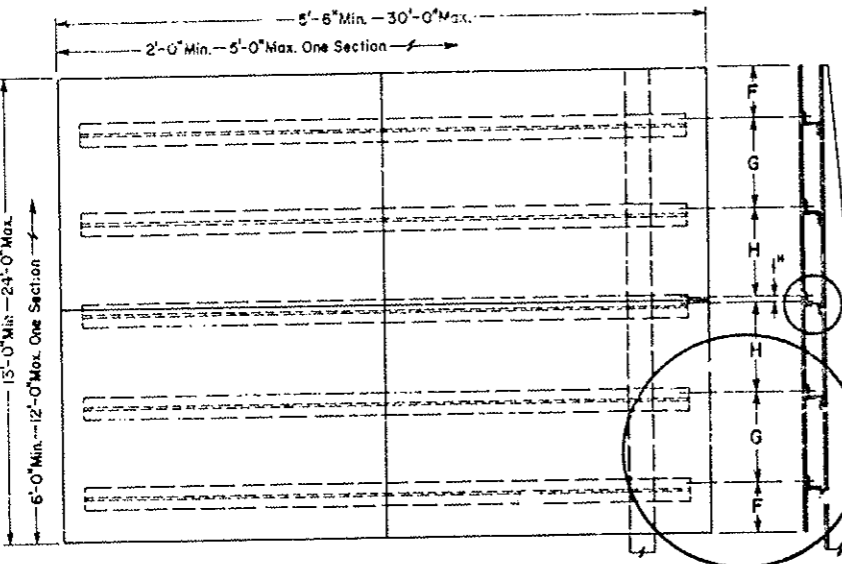
VERTICAL SECTIONS



SECTIONS REQUIRED
Height x 2'-0" to 5'-0" = 1 Section
Height x 5'-6" to 10'-0" = 2 Sections
Height x 10'-6" to 15'-0" = 3 Sections
Height x 15'-6" to 20'-0" = 4 Sections
Height x 20'-6" to 25'-0" = 5 Sections
Height x 25'-6" to 30'-0" = 6 Sections

SEE TYPICAL
DETAIL
ON SHEET 2

MULTI-VERTICAL SECTIONS



SECTIONS REQUIRED
Height x 5'-6" to 10'-0" = 4 Sections
Height x 10'-6" to 15'-0" = 6 Sections
Height x 15'-6" to 20'-0" = 8 Sections
Height x 20'-6" to 25'-0" = 10 Sections
Height x 25'-6" to 30'-0" = 12 Sections

SEE TYPICAL SEAM
CLOSURE ZEE
DETAIL ON SHEET 2

SEE TYPICAL
DETAIL
ON SHEET 2

GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS APPLICABLE TO THE PROJECT.
- SEE THE APPLICABLE STANDARDS FOR SIGN PLACEMENT, FOOTING DETAILS AND POST SPACING TABLE.
- A (No. 6) 90° COUNTERSUNK ALUMINUM LOCKBOLT FASTENER SHALL BE USED TO FASTEN THE SIGN PANEL TO THE BACKING ZEE. A HEX-HEAD BOLT WITH NUT AND WASHERS SHALL BE USED TO FASTEN THE BACKING ZEE TO A TIMBER POST OR TO A STEEL POST.
- A FLAT WASHER SHALL BE PLACED BETWEEN THE BOLT HEAD AND THE BACKING ZEE. A LOCK WASHER SHALL BE PLACED UNDER THE NUT ON A STEEL POST OR A BACKING ZEE. A C.I.G.G. WASHER SHALL BE PLACED UNDER THE BOLT HEAD ON A TIMBER POST.
- THE EXPOSED LOCKBOLT HEADS ON THE FACE OF THE SIGN PANEL SHALL BE COVERED WITH REFLECTIVE SHEETING (TO BE A PART OF THE LOCKBOLT HEAD) TO MATCH THE BACKGROUND COLOR OF THE SIGN.
- ALL EXPOSED SIGN PANEL SECTION JOINTS, EXCEPT THE MULTI-VERTICAL SECTIONS HORIZONTAL SEAM, SHALL BE COVERED ON THE BACKSIDE OF THE SIGN PANEL WITH AN ALUMINUM CLOSURE STRIP. CLOSURE STRIPS SHALL BE BONDED TO THE SIGN PANEL WITH AN EPOXY RESIN WHICH MEETS THE REQUIREMENTS SPECIFIED IN ASTM DESIGNATION - D1783, PART 9. ALL BONDED SURFACES SHALL BE CLEAN AND FREE OF ANY FOREIGN MATTER.
- SIGN PANELS SHALL BE CONSTRUCTED FROM THE LEAST NUMBER OF SECTIONS. THE SECTIONS SHALL BE AS LARGE AS POSSIBLE AND AS NEARLY EQUAL IN SIZE AS POSSIBLE, ACCORDING TO THE LIMITS SHOWN.
- FOR ADDITIONAL POST AND PANEL INFORMATION SEE THE "TABULATION OF SIGNS" INCLUDED IN THE PLANS.

SPACING TABLE FOR ALUMINUM BACKING ZEES						
SIGN NO.	PANEL SIZE	NO. OF ZEES	ZEE SIZE	OVERHANG "F"	SPACING "G"	SPACING "H"
102	9' x 6'	3	3" x 2 1/2" x 3.38	0'-10"	2'-2"	
104	12' x 9'	4	3" x 2 1/2" x 2.33	1'-3"	2'-2"	
118, 157A	9' x 6'	3	3" x 2 1/2" x 2.33	0'-10"	2'-2"	
153A	9' x 2'	2	3" x 2 1/2" x 2.33	0'-6"	1'-2"	
159B	12' x 11'	5	3" x 2 1/2" x 4.33	1'-2"	2'-2"	
167A, 194A	12' x 2'	2	3" x 2 1/2" x 3.38	0'-5"	1'-2"	
167B, 194B	15' x 9'	4	3" x 2 1/2" x 3.38	1'-3"	2'-2"	
169	10' x 5'	2	3" x 2 1/2" x 2.33	1'-3"	2'-6"	
185	6' x 6'	3	3" x 2 1/2" x 2.33	0'-10"	2'-2"	

DEPARTMENT OF HIGHWAYS
STATE OF COLORADO
DIVISION OF HIGHWAYS

**SHEET ALUMINUM
PANELS FOR
CLASS III SIGNS**

Designed By: J.J.B. Approved By: *[Signature]*
 Made By: F.J.B. Safety Traffic &
 Checked By: J.O.S. Date: May 8, 1978

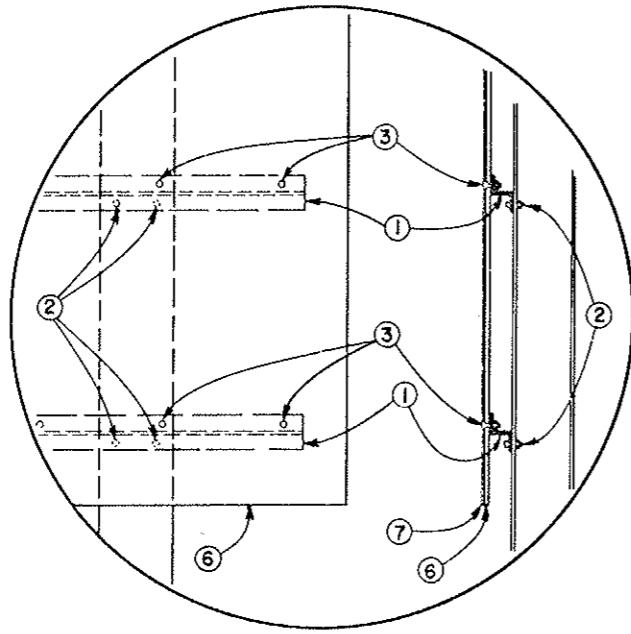
AS CONSTRUCTED		
NO REVISIONS	2-22-78	REVISED
		VOID

STANDARD S-614-25 C

(SHEET 2 OF 2 SHEETS)
REVISED FOR THIS PROJECT

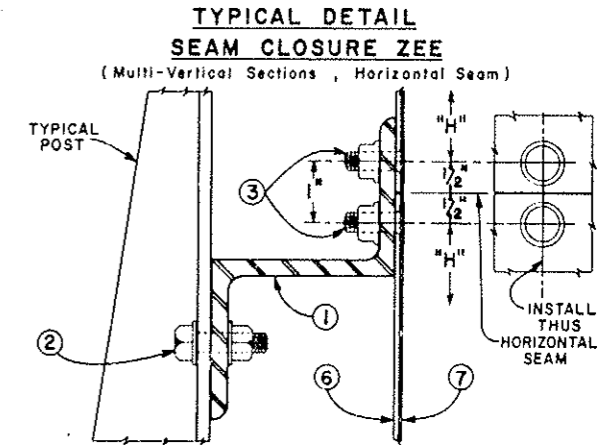
FEDERAL ROAD REGION NO.	DISTRICT	PROJ NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	74	102

REVISIONS		
(R-1)	5-8-78	Rev Exit Panel & Approval J.D.S.

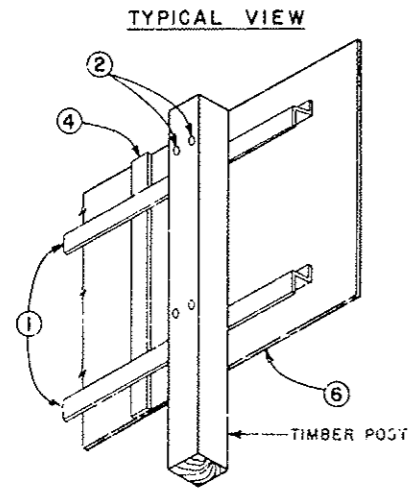


TYPICAL ELEVATION DETAIL

- ### FABRICATION NOTES
- BACKING ZEE. See "SPACING TABLE." Aluminum Alloy 6061-T6. Each zee to be provided with a $\frac{3}{16}$ " x 2" horizontal slot for each post mounting bolt. The length of each zee to be 1" less than the sign panel width.
 - $\frac{3}{8}$ " HEX-HEAD BOLT. With nut and washers: 2 per backing zee per post are required.
 - $\frac{3}{8}$ " (No. 6) 90° COUNTERSUNK ALUMINUM LOCKBOLT FASTENER.
 - 2" x 0.080" ALUMINUM CLOSURE STRIP.
 - $\frac{1}{8}$ " x $\frac{3}{8}$ " UNIVERSAL-HEAD, HOLLOW SHANK ALUMINUM RIVET.
 - SHEET ALUMINUM. 0.125" minimum thickness.
 - NON-EXPOSED LENS REFLECTIVE SHEETING. To have a dry (heat activated) adhesive backing.

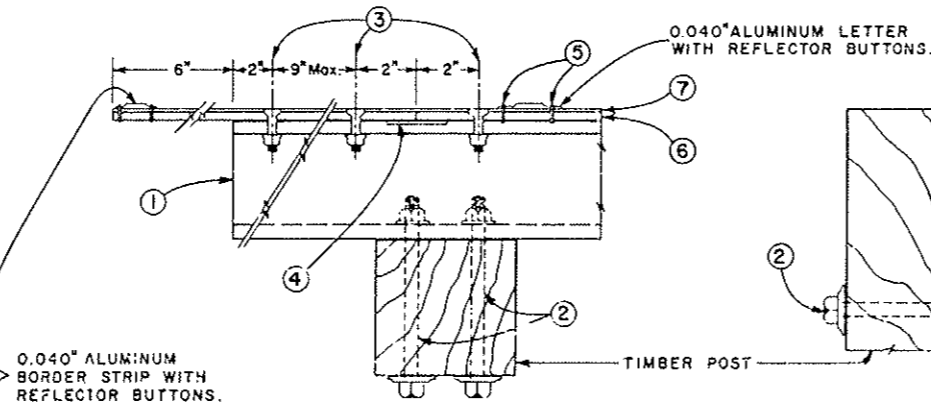


TYPICAL TIMBER POST INSTALLATION

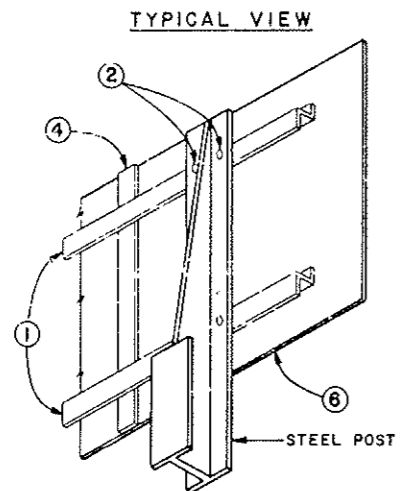


TYPICAL VIEW

PANEL FABRICATION AND MOUNTING DETAILS

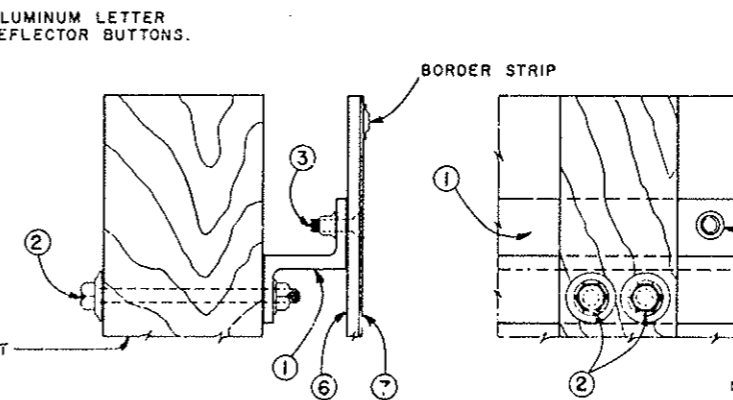
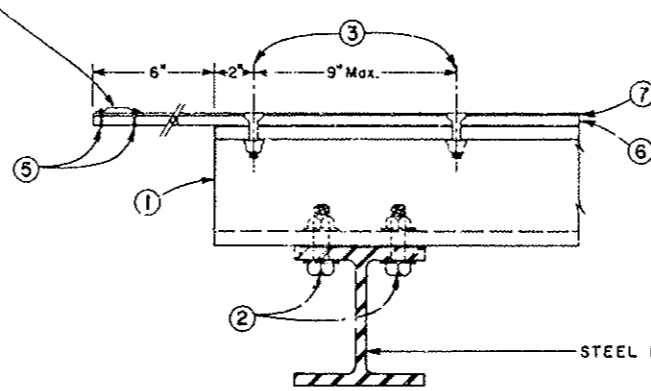


TYPICAL STEEL POST INSTALLATION



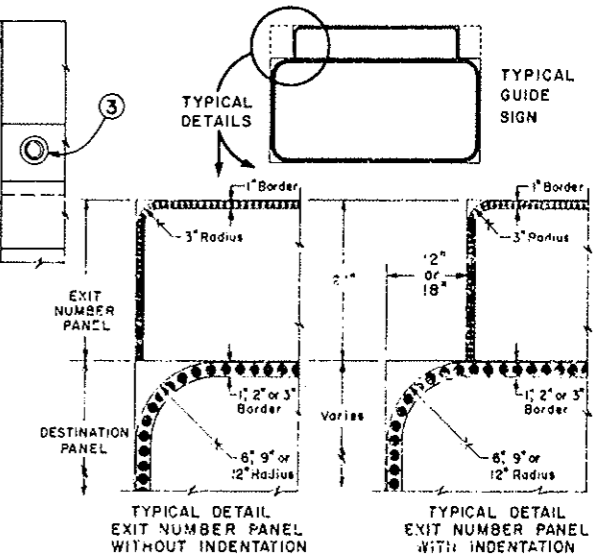
TYPICAL VIEW

PANEL FABRICATION AND MOUNTING DETAILS



BORDER STRIP

TYPICAL BORDER DETAILS EXIT NUMBER PANELS



DEPARTMENT OF HIGHWAYS
STATE OF COLORADO
DIVISION OF HIGHWAYS

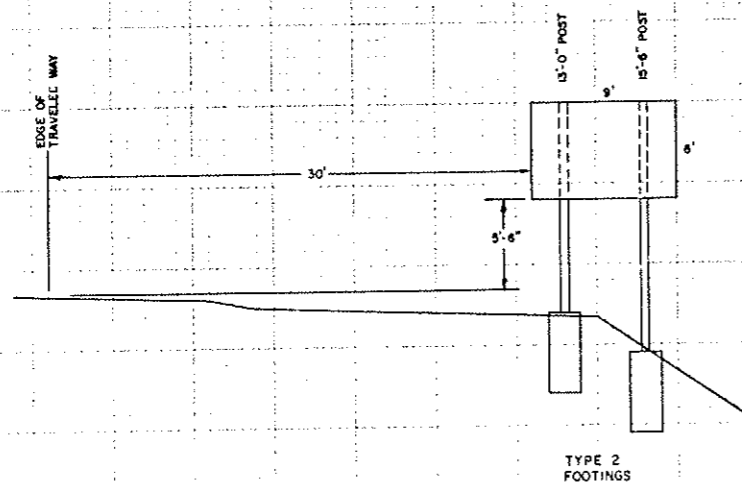
**SHEET ALUMINUM
PANELS FOR
CLASS III SIGNS**

Designed By: J.J.B.
Made By: F.J.B.
Checked By: J.D.S.

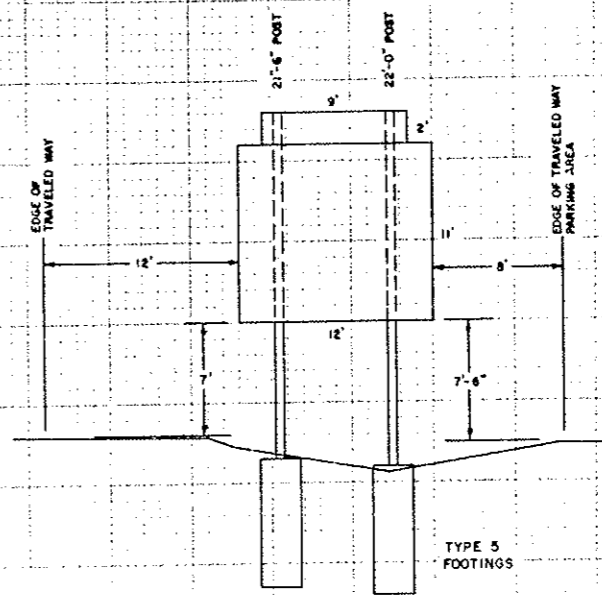
Approved By: *[Signature]*
Staff Traffic &
Safety Projects Engineer
Date: May 8, 1978

CROSS SECTIONS AT CLASS III SIGN LOCATIONS

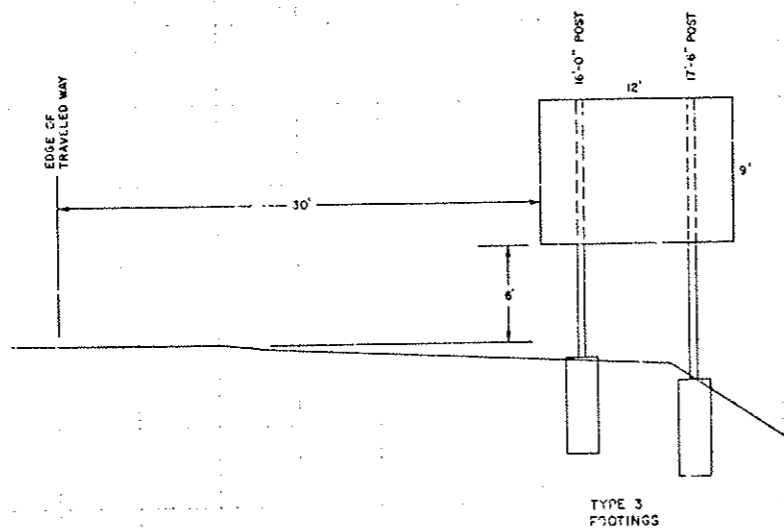
170-3 (84)220 75
 AS CONSTRUCTED
 NO REVISIONS REVISED VOID



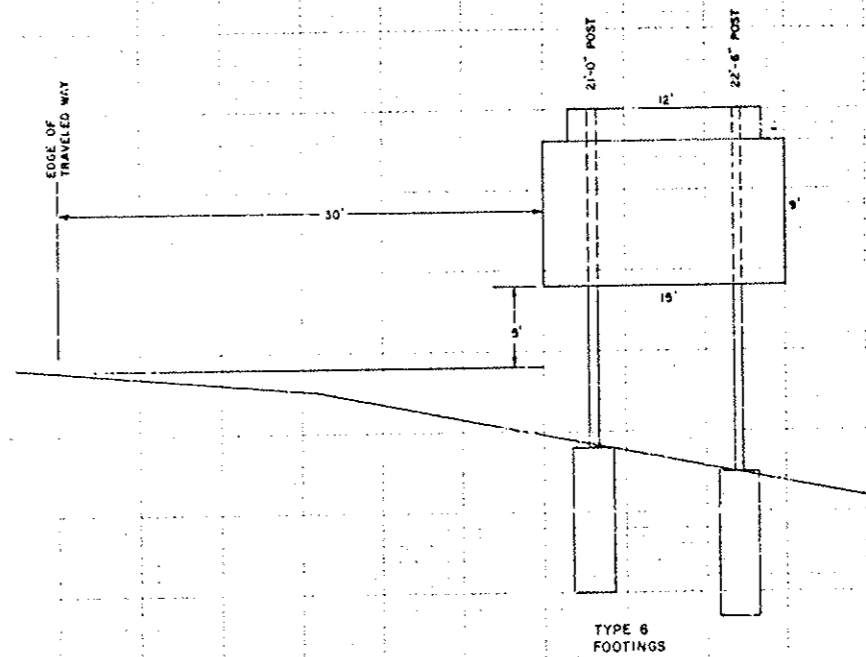
SIGN NO. 102
 STA. 391+00



SIGN NO. 159
 STA. 135+00



SIGN NO. 104
 STA. 399+00

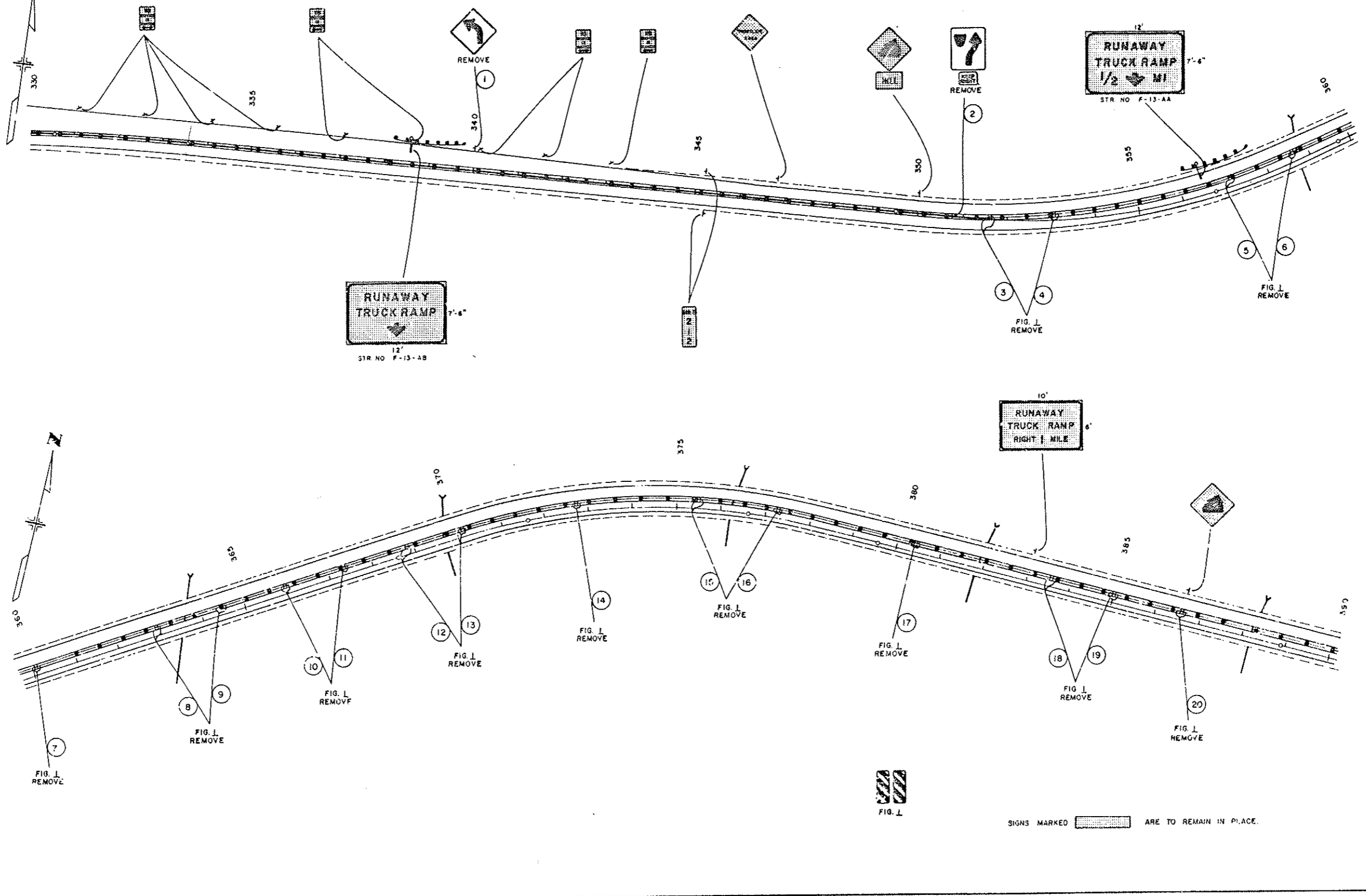


SIGN NO. 167
 STA. 146+20

EXISTING SIGNS

AS CONSTRUCTED
NO REVISIONS 2-22-80 REVISED VOID

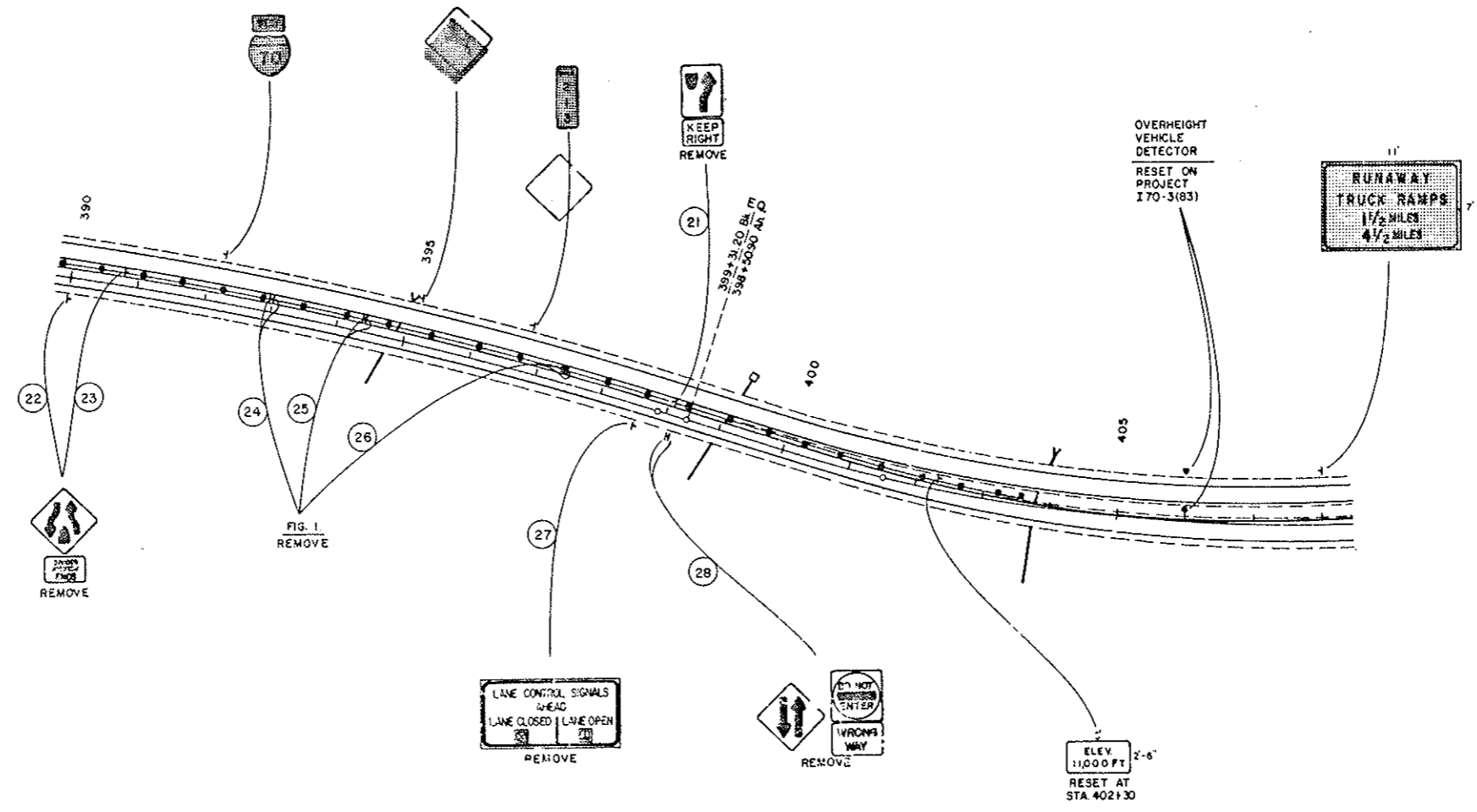
FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(84)220	77	102



22"
11"
8.5"
11.5"
11"
17"
22"

EXISTING SIGNS

AS CONSTRUCTED				
FEDERAL ROAD SIGN NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS 2-21-82	VIII	COLORADO	I 70-3(84) 220	78 102



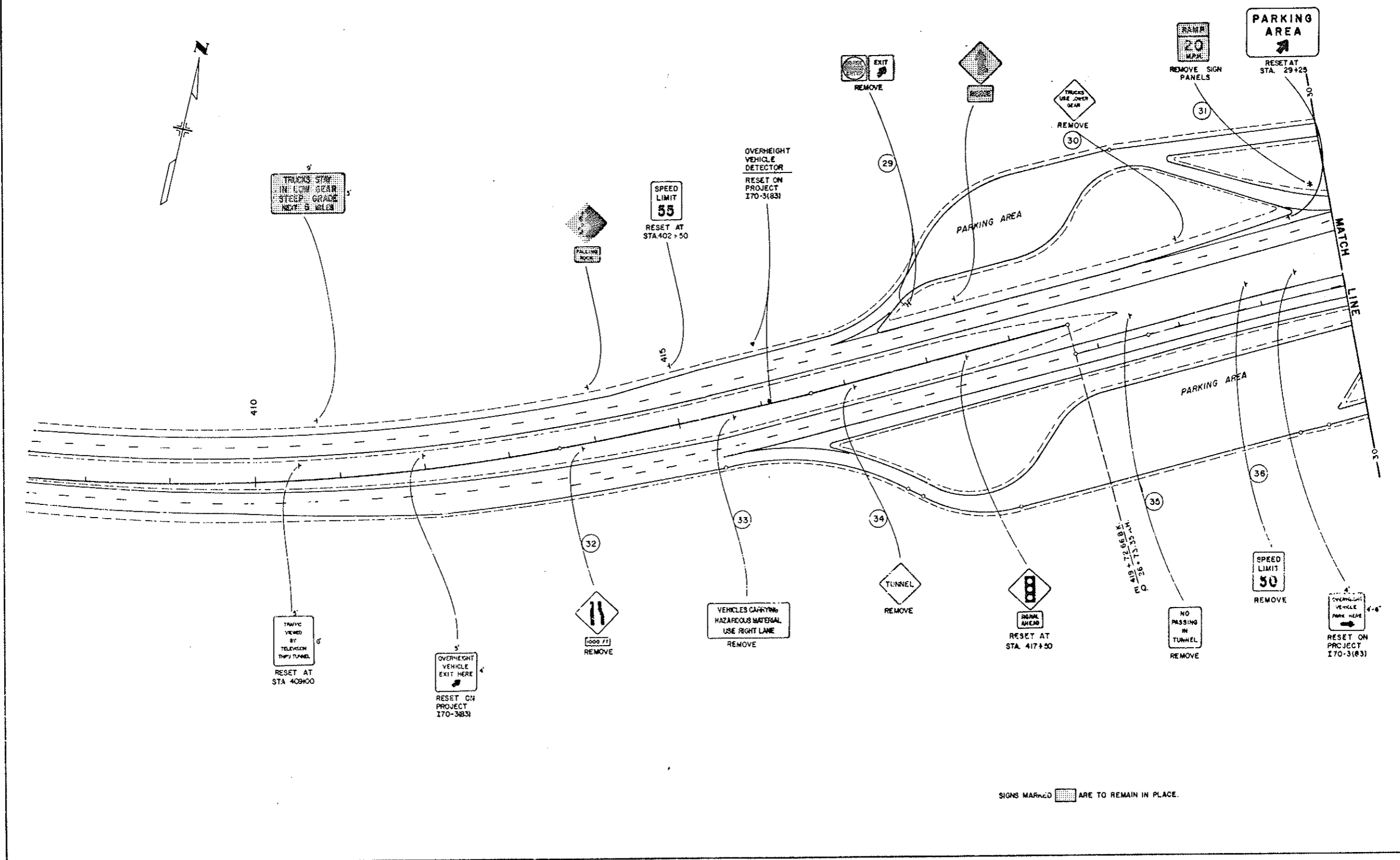
SIGNS MARKED  ARE TO REMAIN IN PLACE.

22
17
11
8.5
8.5
11
17
22

EXISTING SIGNS

AS CONSTRUCTED
 NO REVISIONS 22-22 REVISED VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	79	102



SIGNS MARKED ARE TO REMAIN IN PLACE.

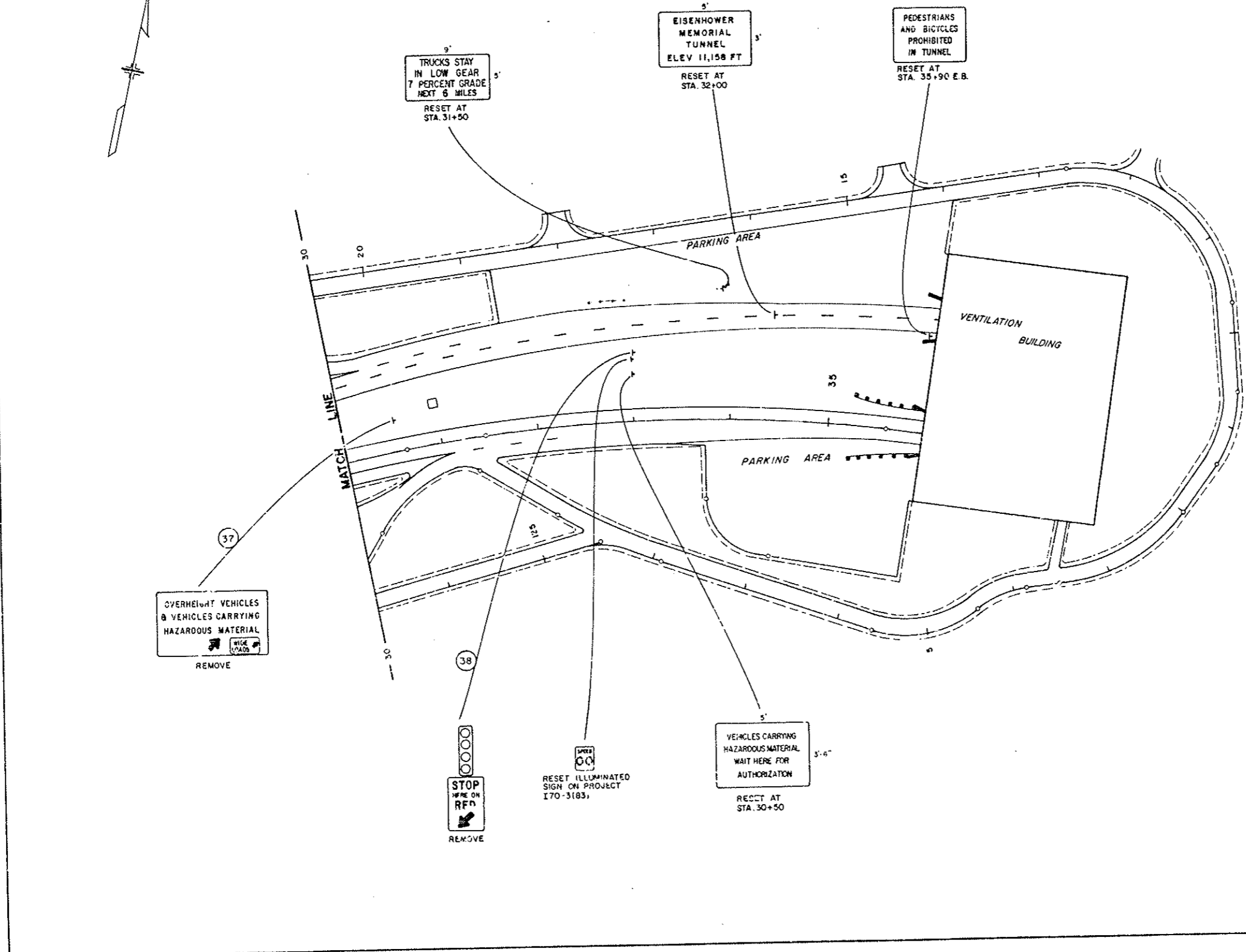
22"
17"
11"
8.5"
8.5"
11"
17"
21"

WEST PORTAL EXISTING SIGNS

AS CONSTRUCTED
NO REVISIONS 12-22-80 REVISED VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84)220	80	102

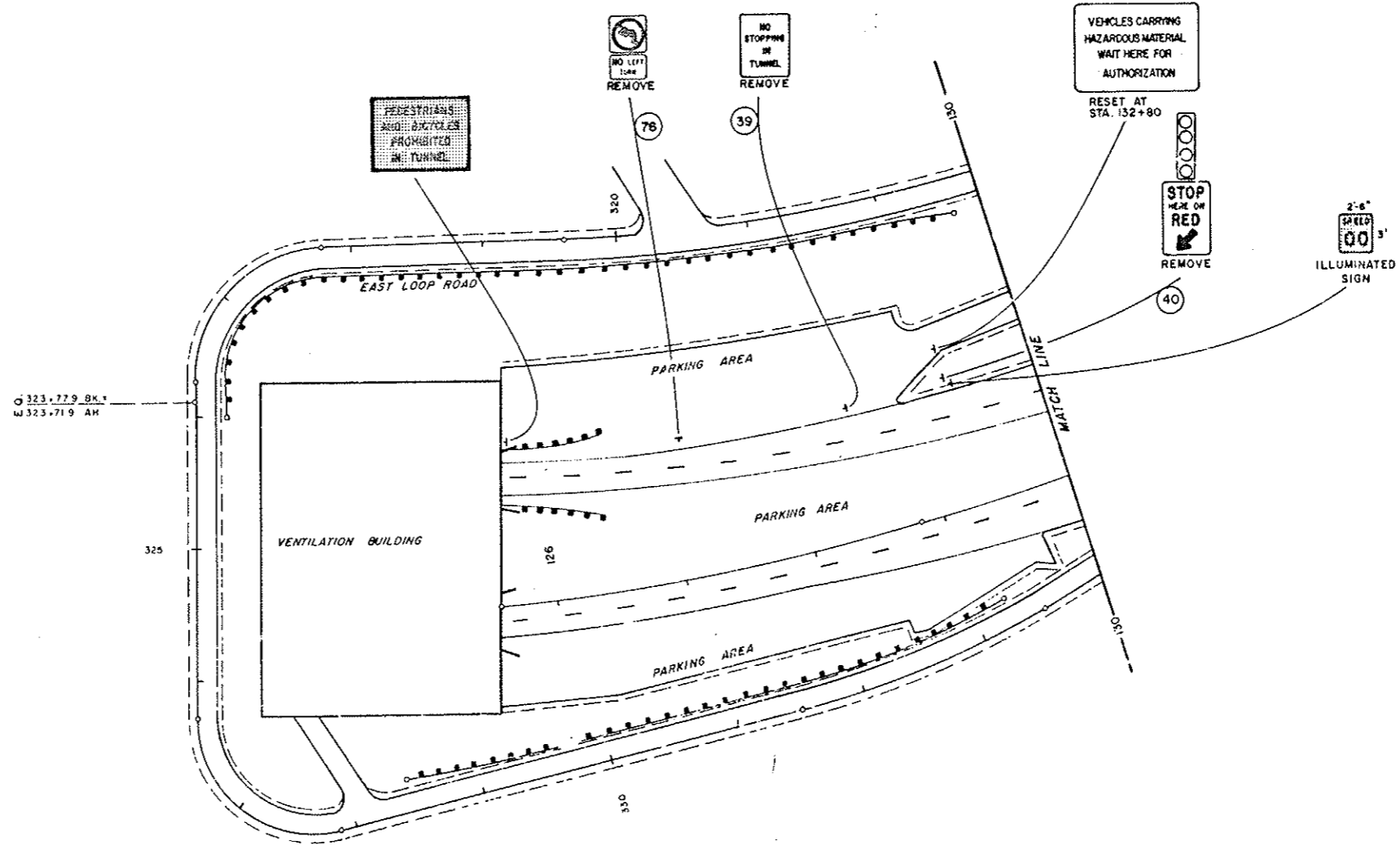
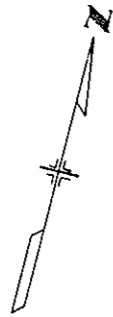
22"
17"
11"
5"
5"
11"
17"
22"



EAST PORTAL EXISTING SIGNS

AS CONSTRUCTED
NO REVISIONS 12-22-80 REVISED [] VOID []

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	81	102



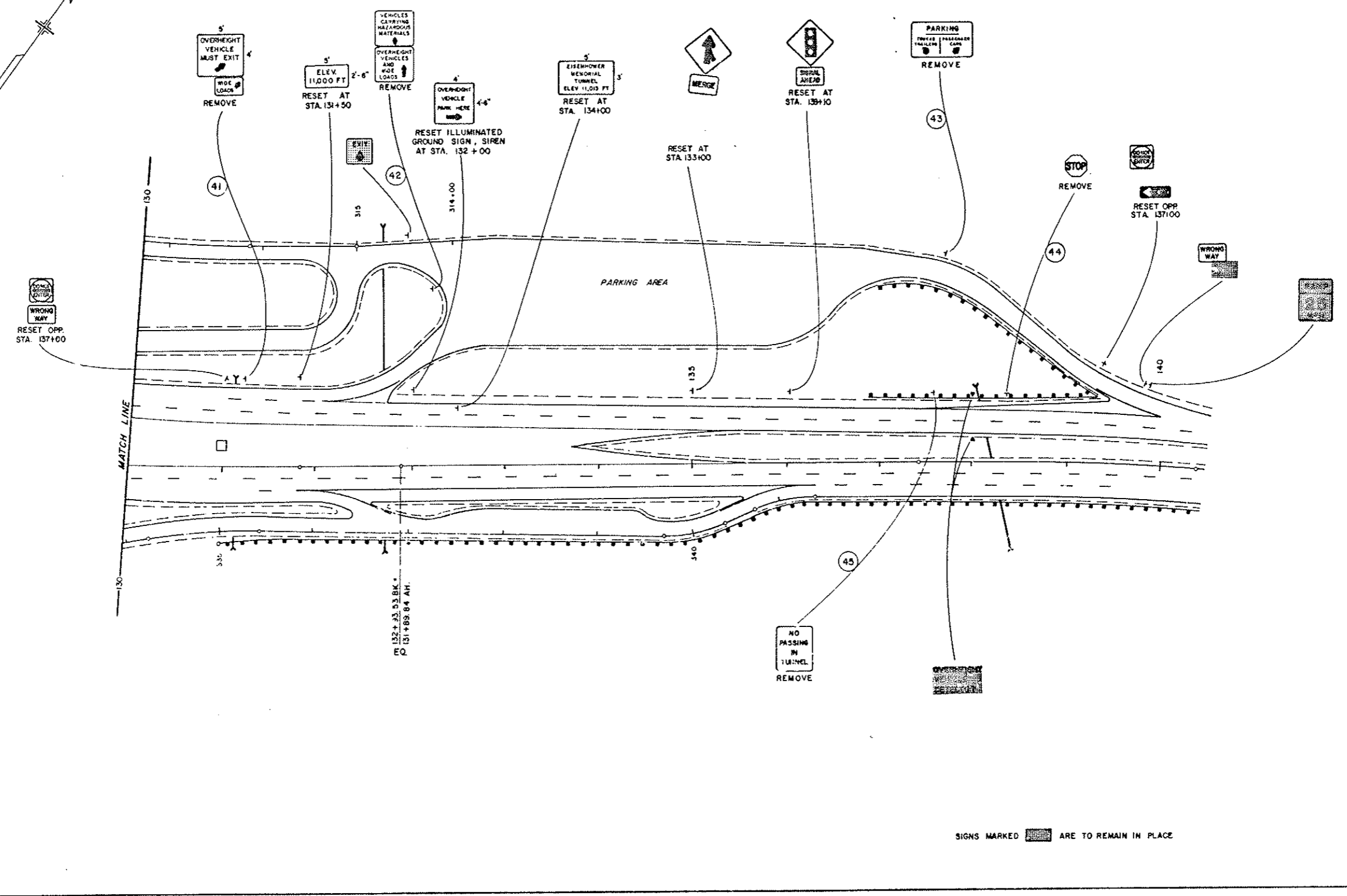
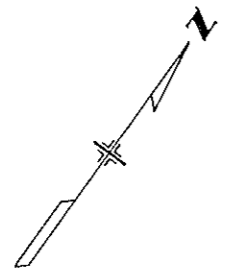
323-779 BK.1
323-719 AH

SIGNS MARKED [] ARE TO REMAIN IN PLACE

22"
17"
11"
8.5"
8.5"
11"
17"
22"

EXISTING SIGNS

AS CONSTRUCTED		FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS	22-80	REVISED	VOID	VIII	COLORADO	I 70-3(84) 220
					82	102



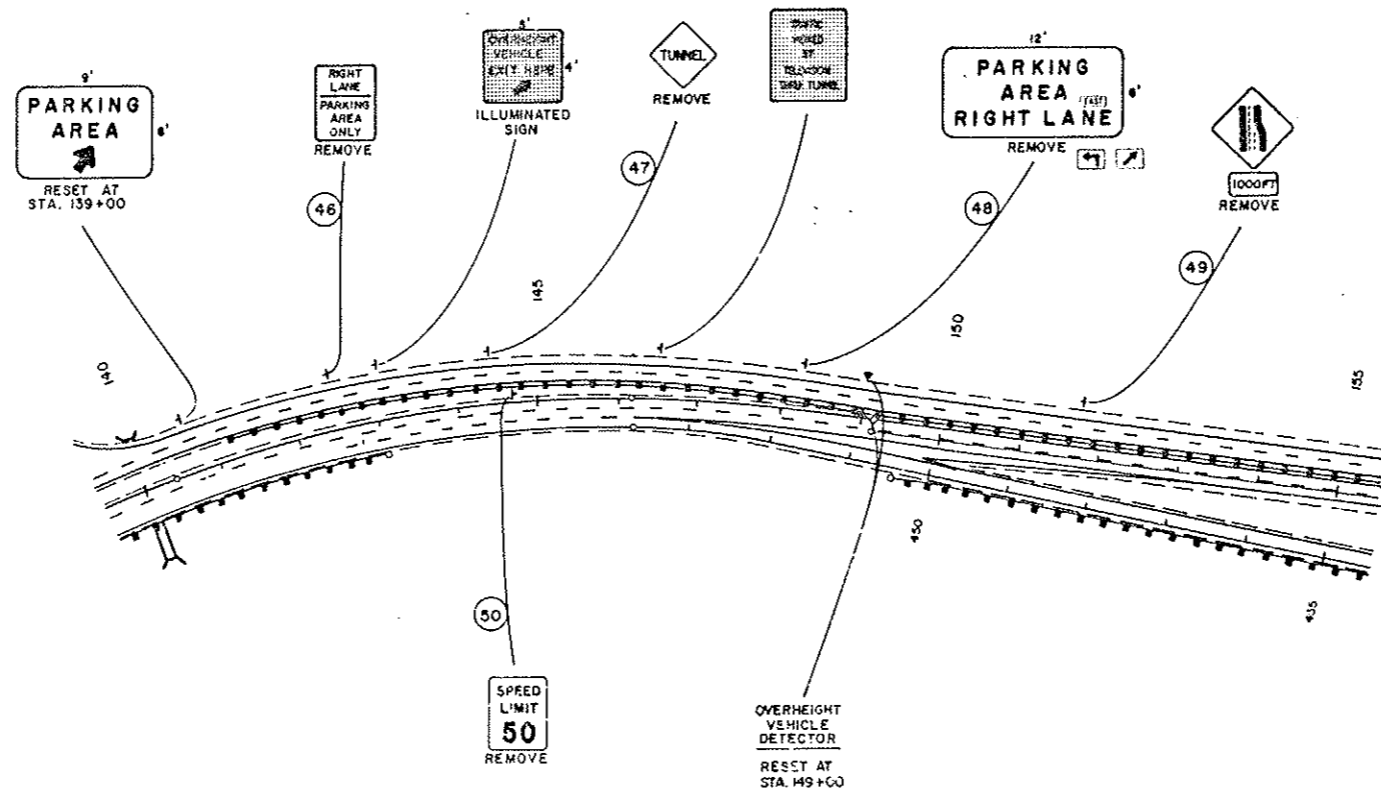
SIGNS MARKED [hatched box] ARE TO REMAIN IN PLACE

22"
17"
11"
8.5"
8.5"
11"
11"
22"

EXISTING SIGNS

AS CONSTRUCTED		
NO REVISIONS	22-89	REVISED
		VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	83	102



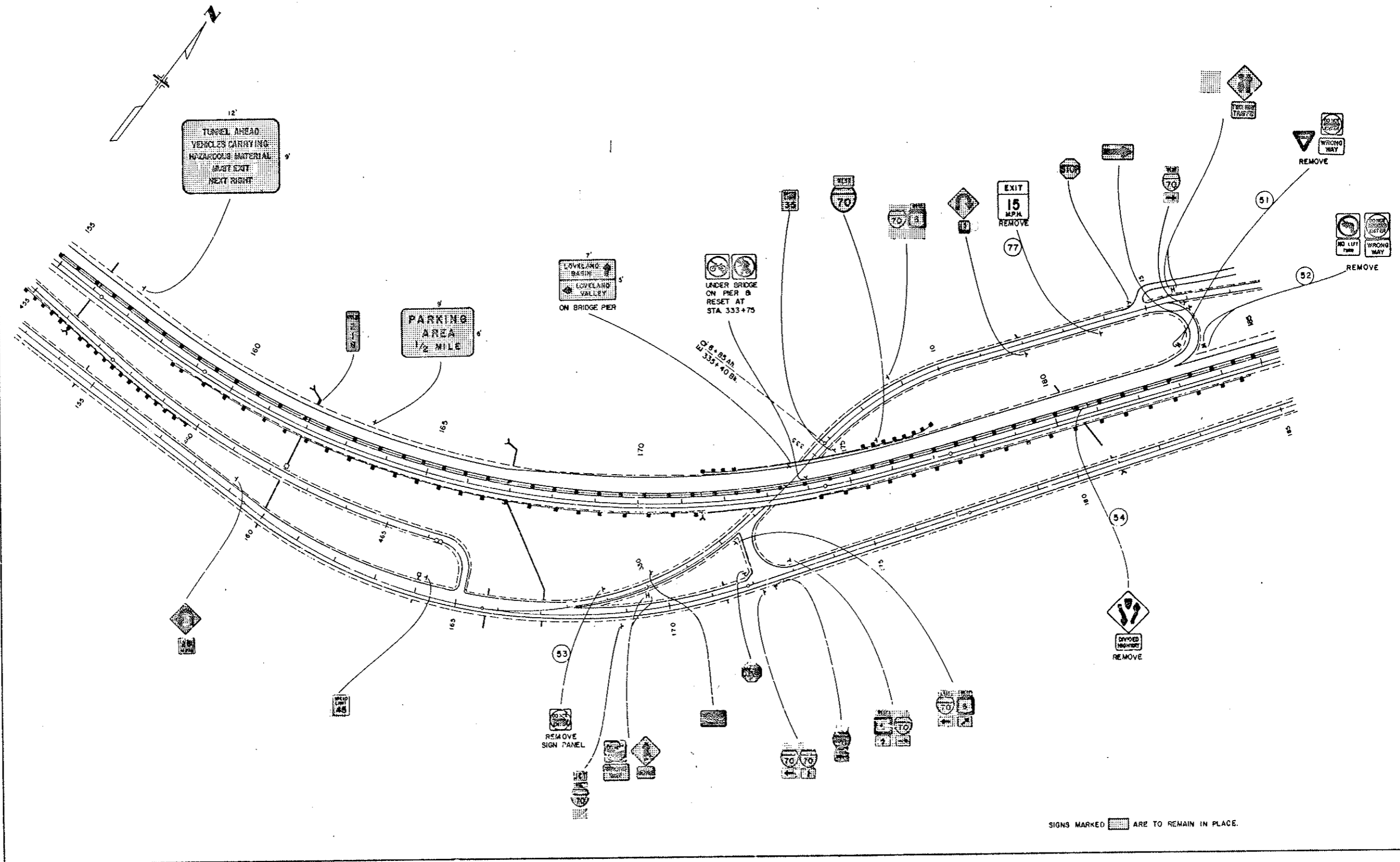
SIGNS MARKED RE TO REMAIN IN PLACE.

22
11
11
8.5
11
17
22

AS CONSTRUCTED
 NO REVISIONS 12-22-70 REVISED _____ VOID _____

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	84	102

EXISTING SIGNS



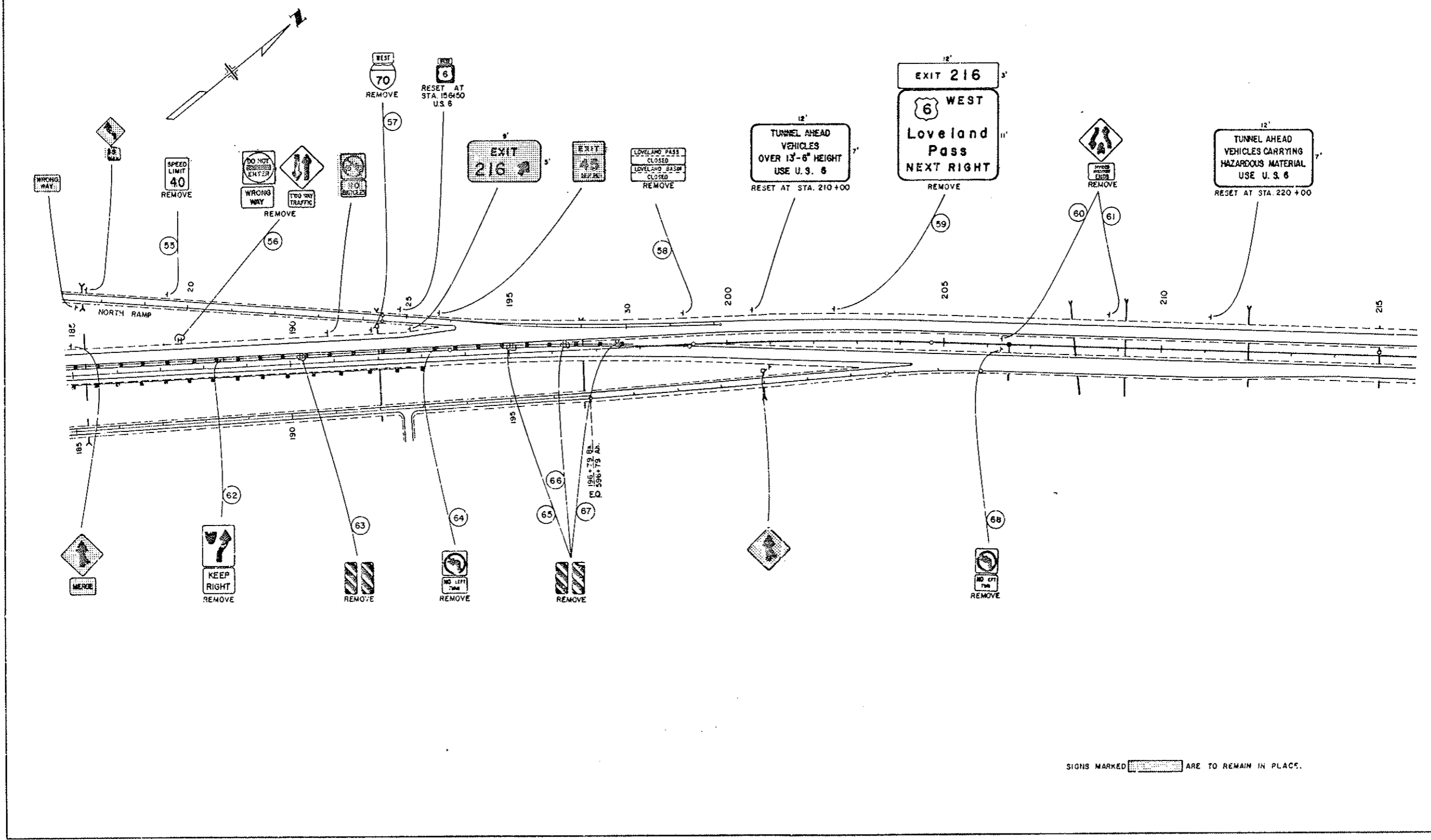
SIGNS MARKED [hatched box] ARE TO REMAIN IN PLACE.

22"
 11"
 8.5"
 17"
 12"

EXISTING SIGNS

AS CONSTRUCTED
 NO REVISIONS (2-22-80) REVISED [] VOID []

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	85	102

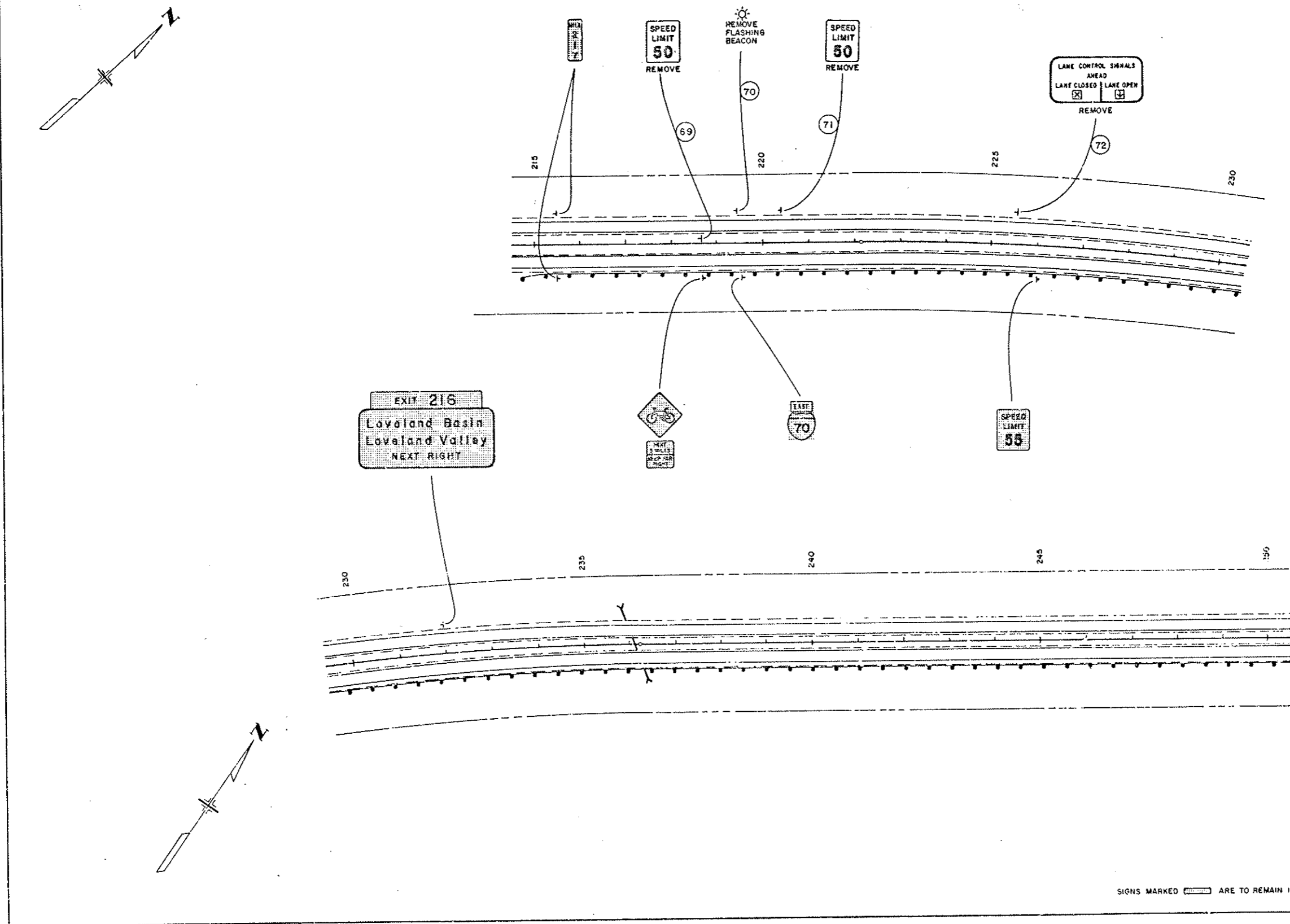


SIGNS MARKED [hatched pattern] ARE TO REMAIN IN PLACE.

22"
11"
11"
8"
3.5"
11"
17"
22"

AS CONSTRUCTED		FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS		
NO REVISIONS	2-22-80	REVISED	VOID	VIII	COLORADO	I 70-3(84) 220	86	102

EXISTING SIGNS



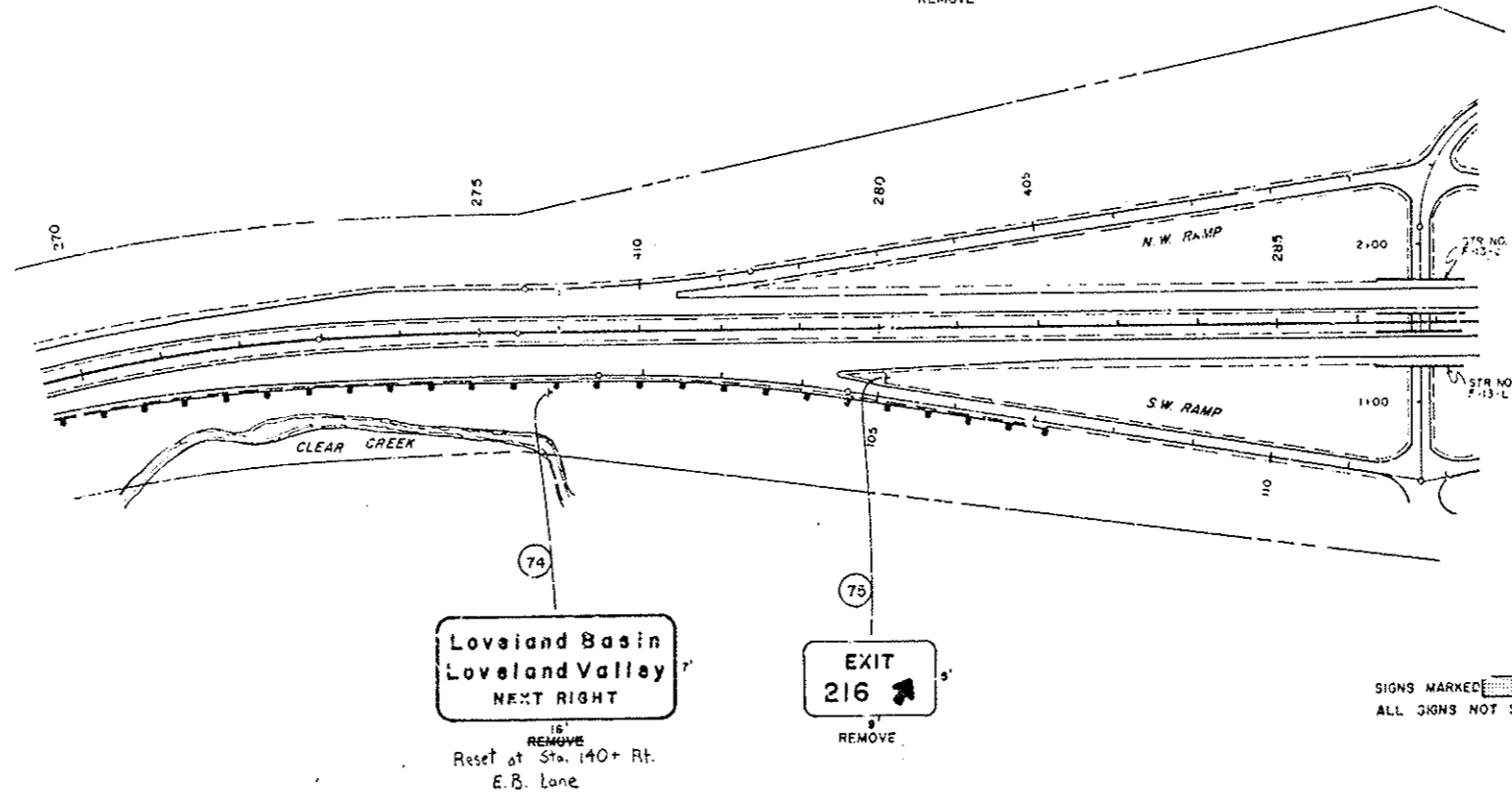
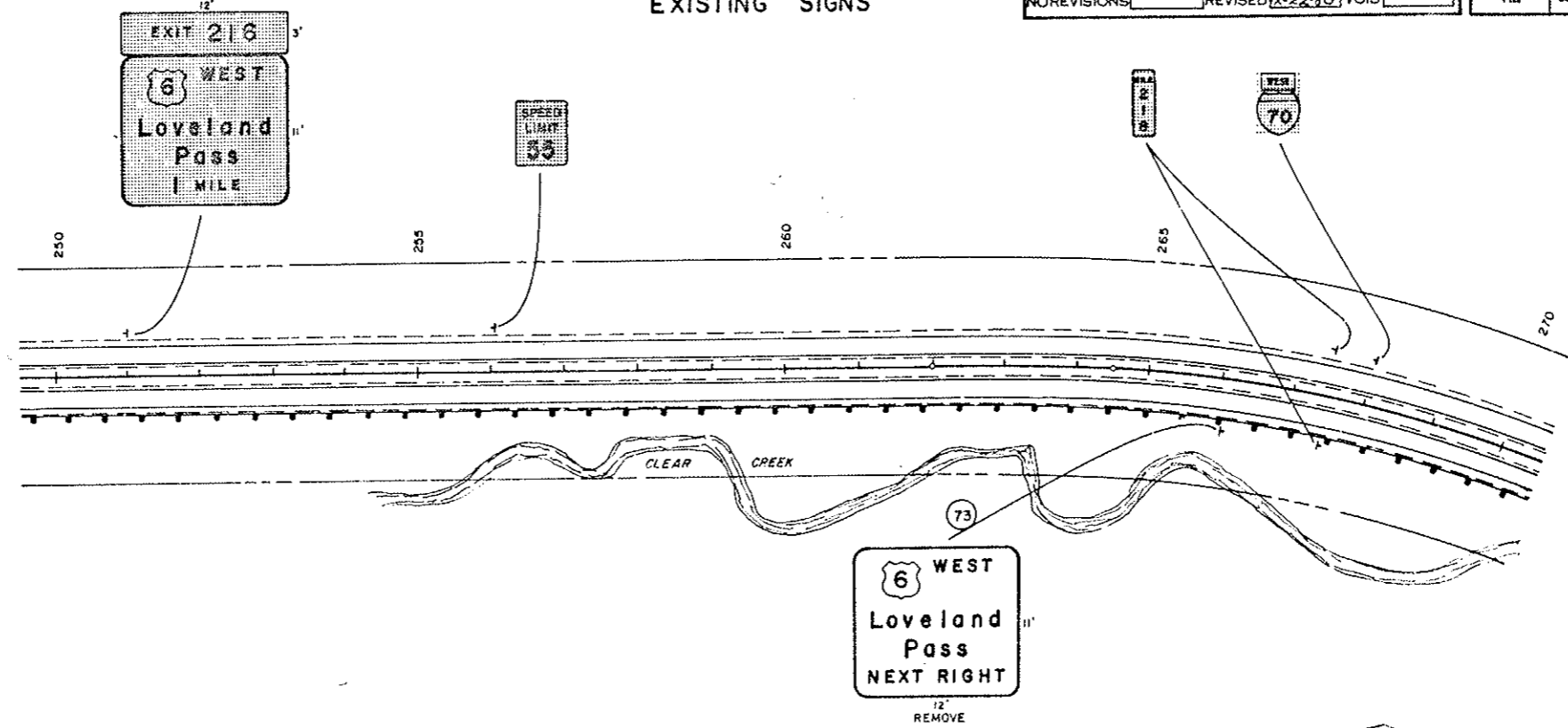
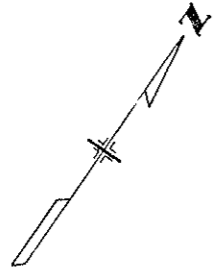
11.2
11
11
11.8
13.5"
11"
17"
22"

SIGNS MARKED [solid box] ARE TO REMAIN IN PLACE

EXISTING SIGNS

AS CONSTRUCTED
NO REVISIONS [] REVISED 2-22-70 [] VOID []

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	87	102



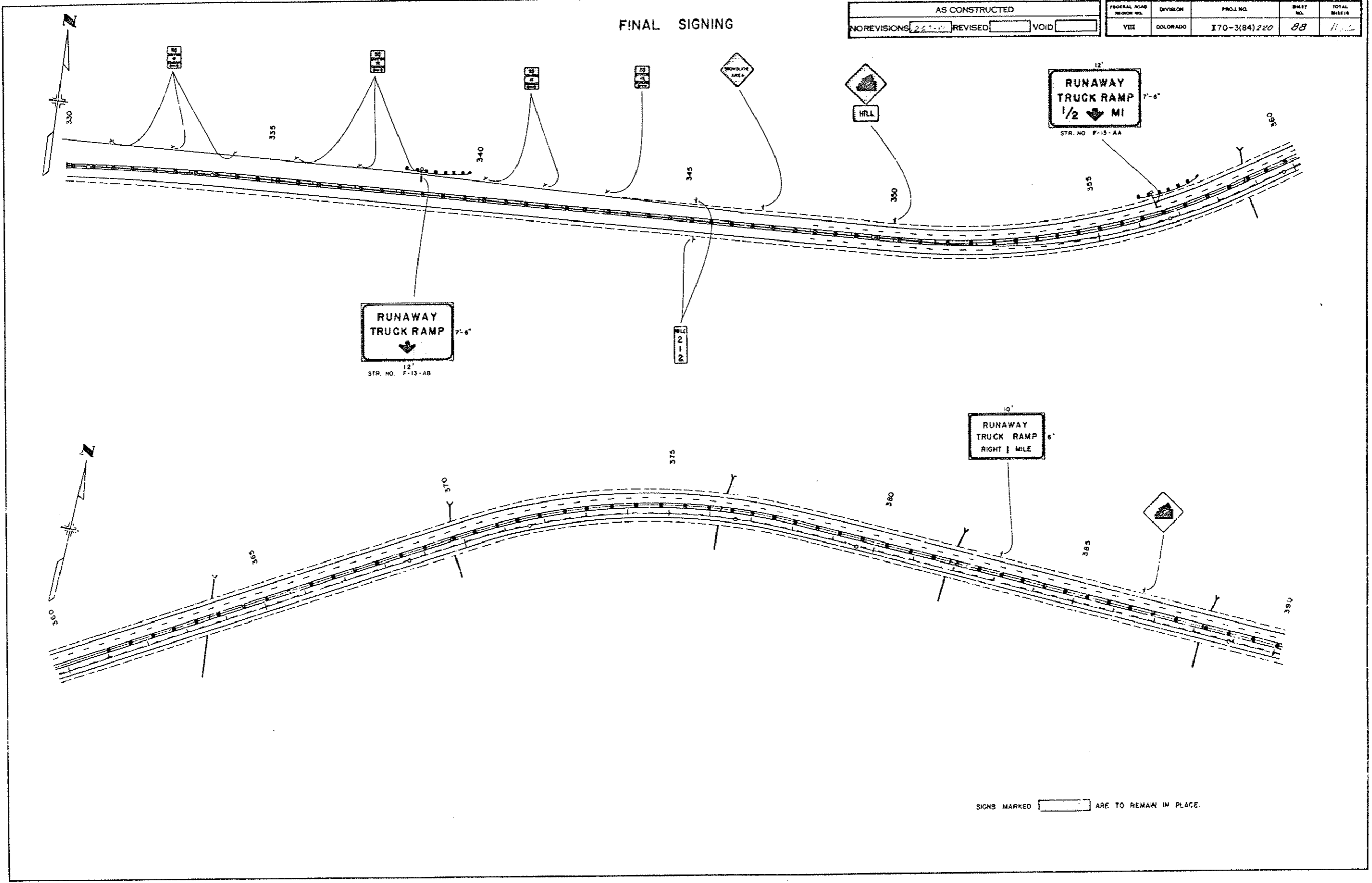
HERMAN GULCH

SIGNS MARKED [] ARE TO REMAIN IN PLACE.
ALL SIGNS NOT SHOWN ARE TO REMAIN IN PLACE.

22"
11"
11"
8.5"
11.5"
11"
17"
22"

FINAL SIGNING

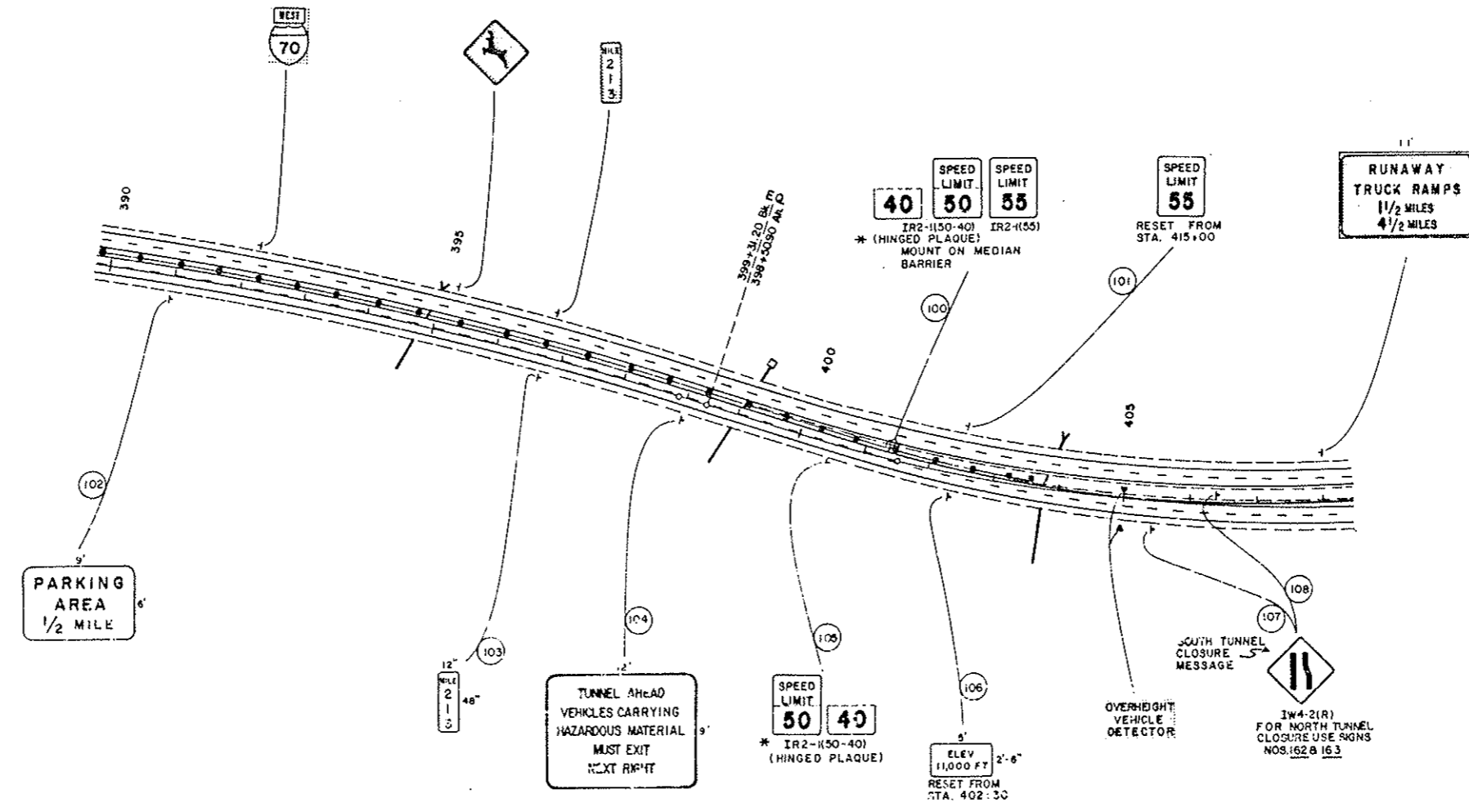
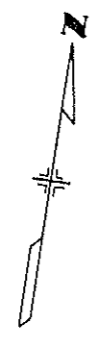
AS CONSTRUCTED		FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS	REVISED	VOID	VIII	COLORADO	I70-3(84)220	88



22
17
11
8.5
8.5
11
17
22

FINAL SIGNING

AS CONSTRUCTED		FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS	REVISED	VOID	VIII	COLORADO	I70-3(84)220	89

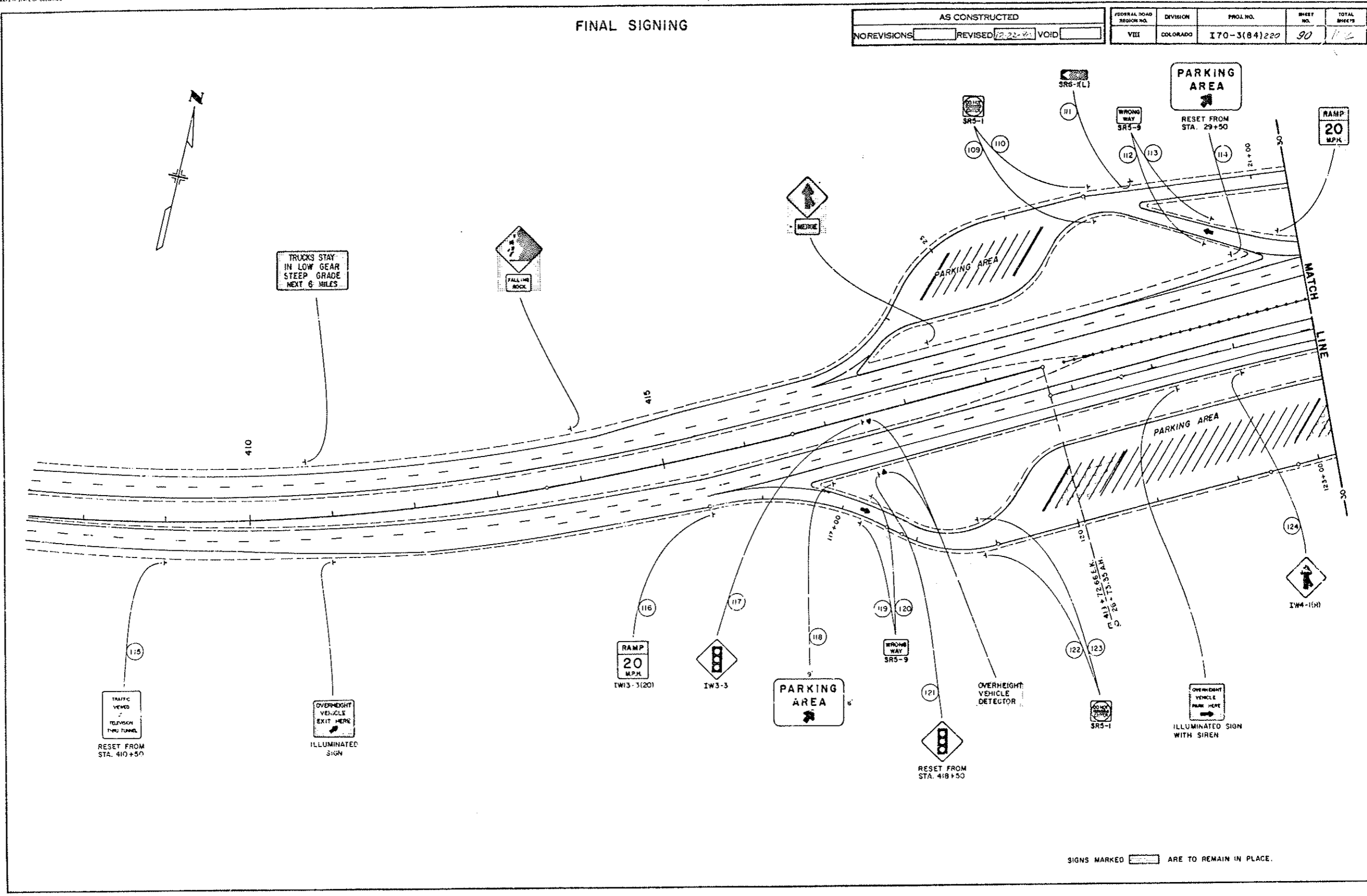


* THESE SIGNS APPL. TO BOTH NORTH AND SOUTH TUNNEL CLOSURES.
 SIGNS MARKED [] ARE TO REMAIN IN PLACE.

22
 11
 11
 8.5
 8.5
 11
 17
 22

FINAL SIGNING

AS CONSTRUCTED		FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
NO REVISIONS	REVISED 12-23-74	VOID	VIII	COLORADO	I 70-3(84)220	90



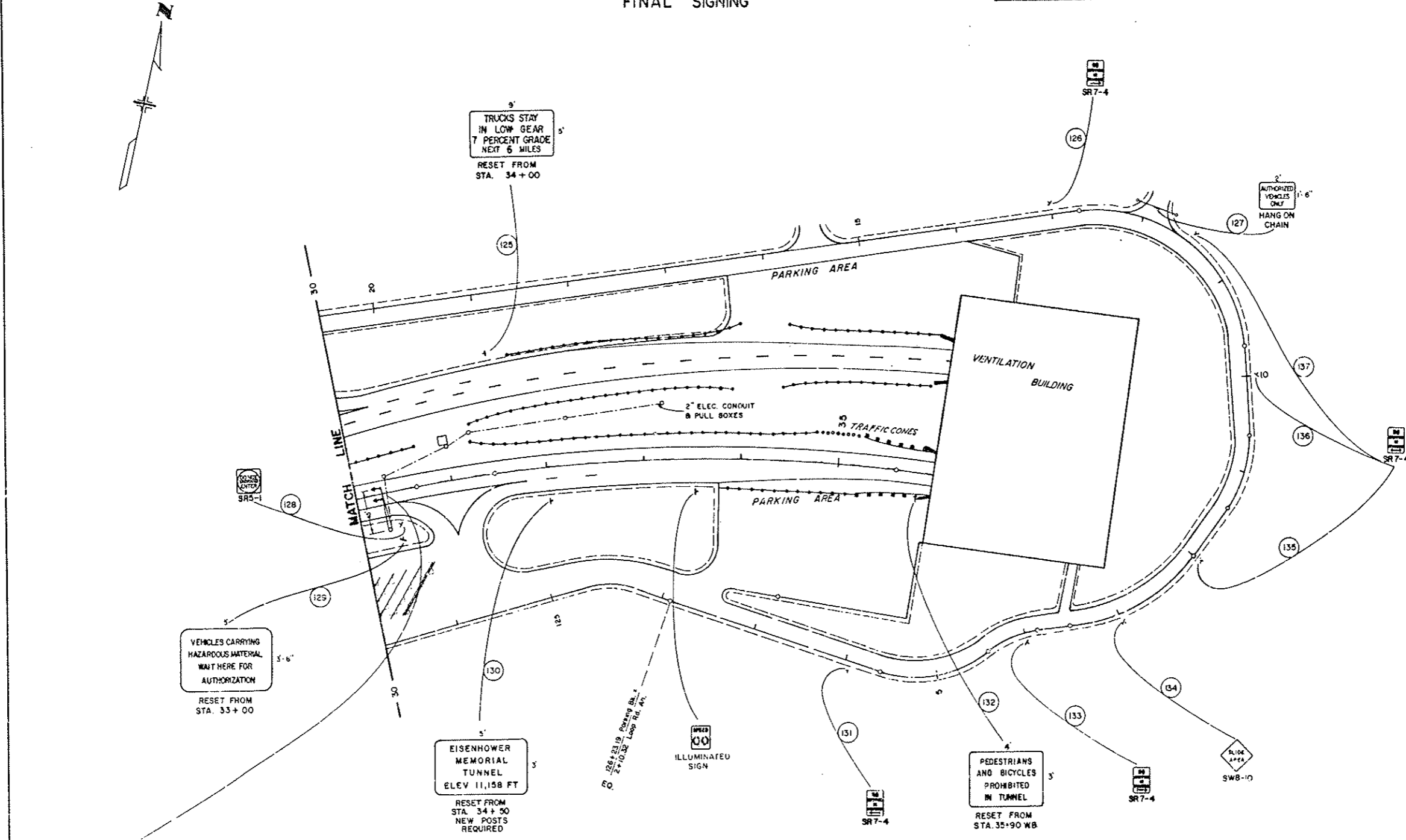
22"
 17"
 11"
 8.5"
 11"
 17"
 22"

SIGNS MARKED [hatched box] ARE TO REMAIN IN PLACE.

WEST PORTAL FINAL SIGNING

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	91	112



TRAFFIC SIGNAL MATERIALS

813	2 INCH ELECTRICAL CONDUIT	LIN. FT.	360
814	TRAFFIC SIGNAL FACE (12-3-8)	EACH	2
814	TRAFFIC SIGNAL POLE STEEL (1 MAST ARM)	EACH	1

Place 8 Traffic Cones across access opening at 6' centers for permanent control of traffic.

SIGNS MARKED ARE TO REMAIN IN PLACE.

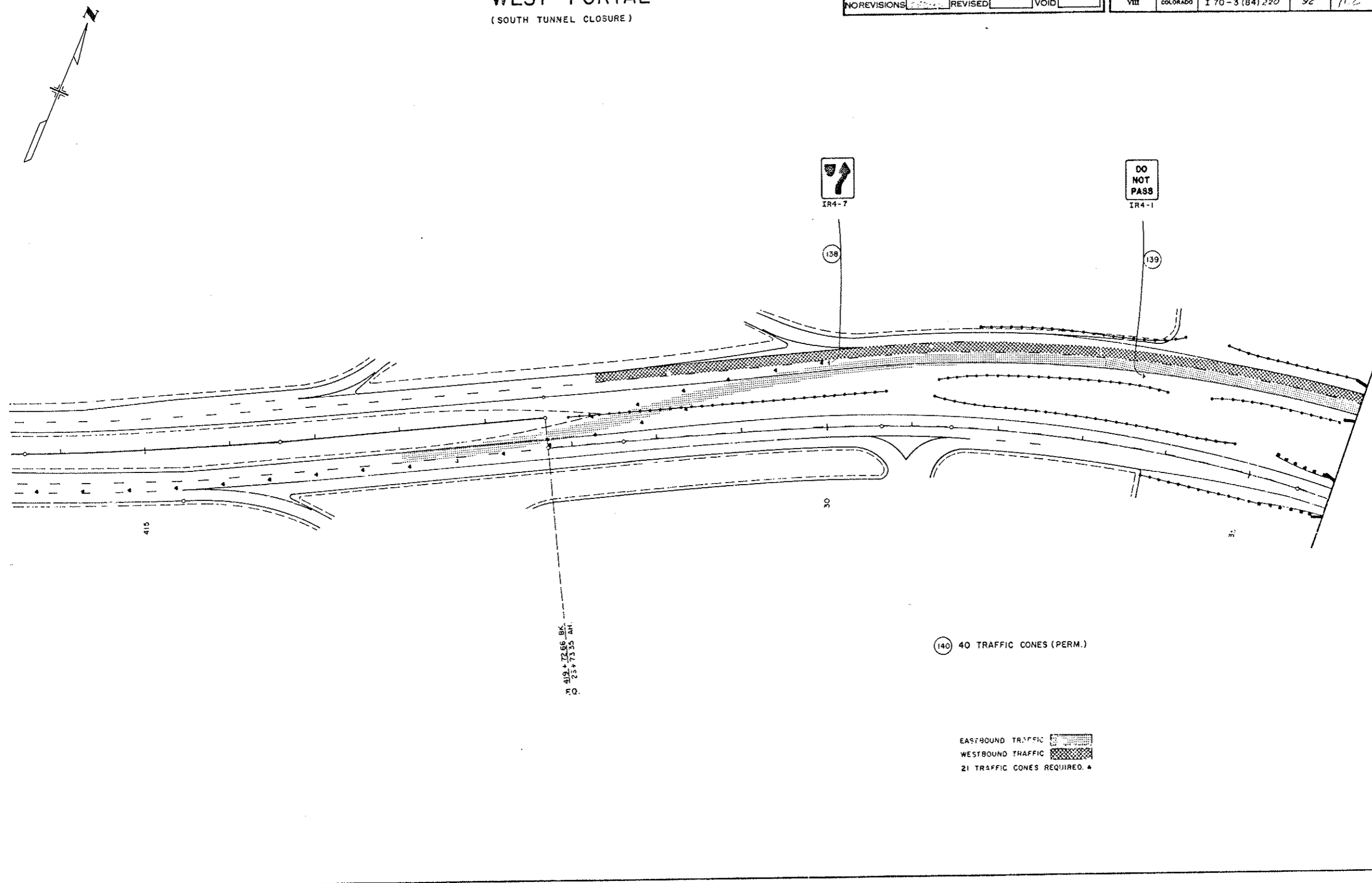
22"
 21"
 20"
 19"
 18"
 17"
 16"
 15"
 14"
 13"
 12"
 11"
 10"
 9"
 8.5"
 8"
 7"
 6"
 5"
 4"
 3"
 2"
 1"
 0"
 1"
 2"
 3"
 4"
 5"
 6"
 7"
 8"
 9"
 10"
 11"
 12"
 13"
 14"
 15"
 16"
 17"
 18"
 19"
 20"
 21"
 22"

WEST PORTAL

(SOUTH TUNNEL CLOSURE)

AS CONSTRUCTED
NO REVISIONS REVISED VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3 (84) 220	92	116

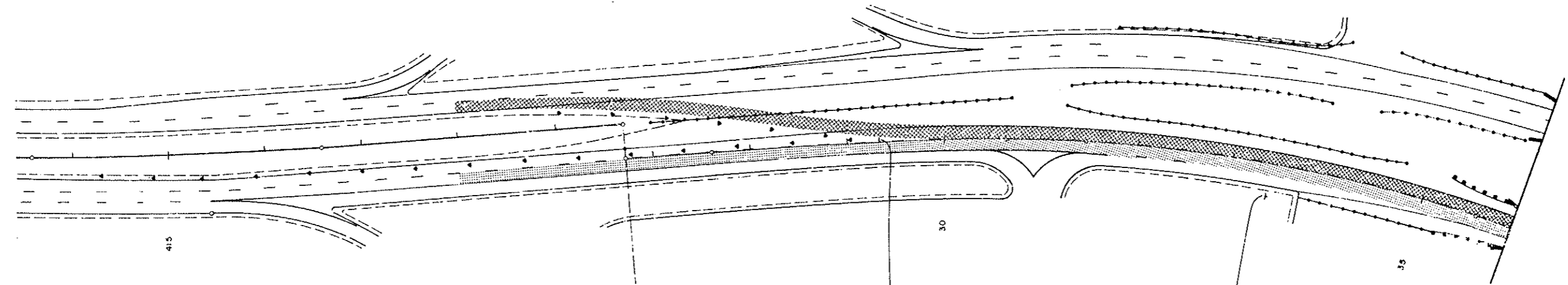
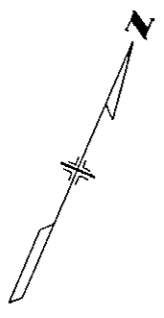


27"
27"
11"
9"
8.5"
11"
11"
22"

WEST PORTAL

(NORTH TUNNEL CLOSURE)

AS CONSTRUCTED		FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS		
NO REVISIONS	22-82	REVISED	VOID	VIII	COLORADO	I 70-3 (84) 220	93	102



CD #19 + 12.86 BK.
 CD #26 + 15.35 AM



EASTBOUND TRAFFIC
 WESTBOUND TRAFFIC
 (1) TRAFFIC CONES REQUIRED. * (FROM SOUTH TUNNEL CLOSURE)

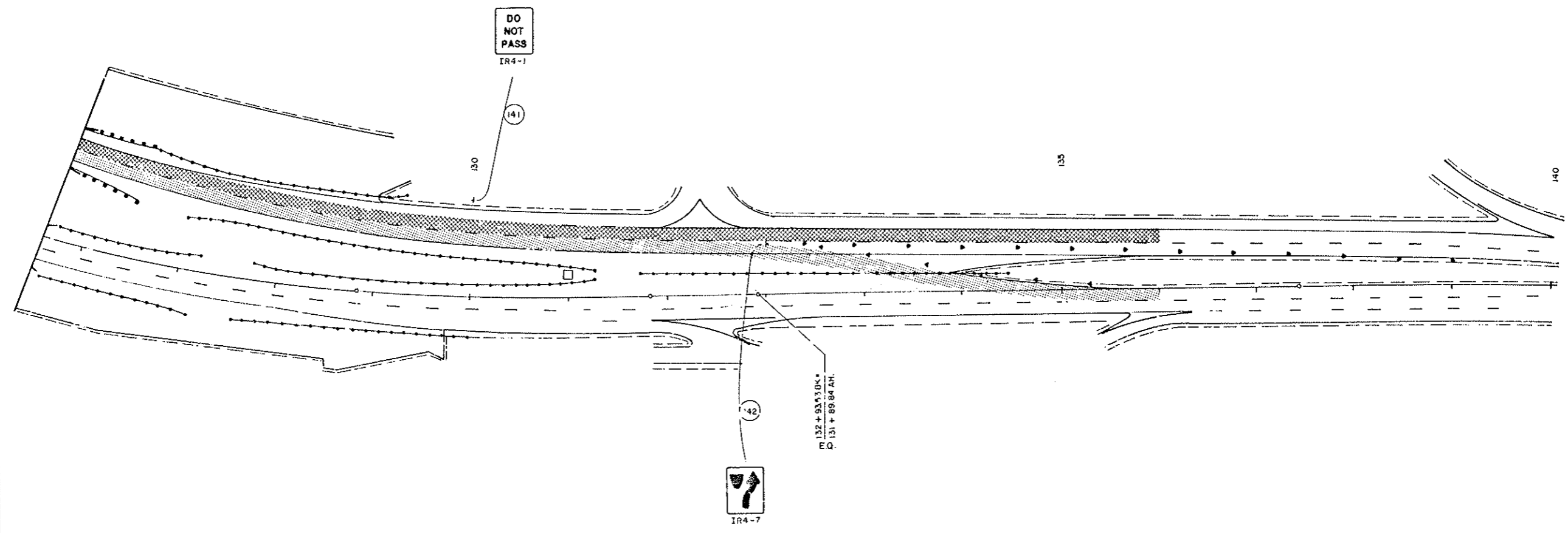
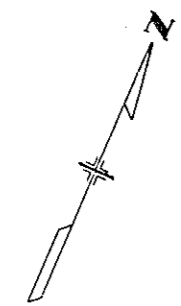
22
17
11
8.5
3.5
11
17
22



EAST PORTAL

(SOUTH TUNNEL CLOSURE)

AS CONSTRUCTED
NO REVISIONS REVISED VOID

FEDERAL ROAD NUMBER NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	94	106



EASTBOUND TRAFFIC 
WESTBOUND TRAFFIC 
19 TRAFFIC CONES REQUIRED. ▲

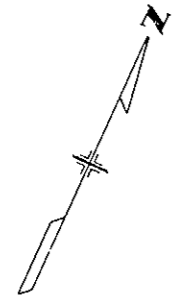
27
17
11
8
8.5
11
17
22

EAST PORTAL

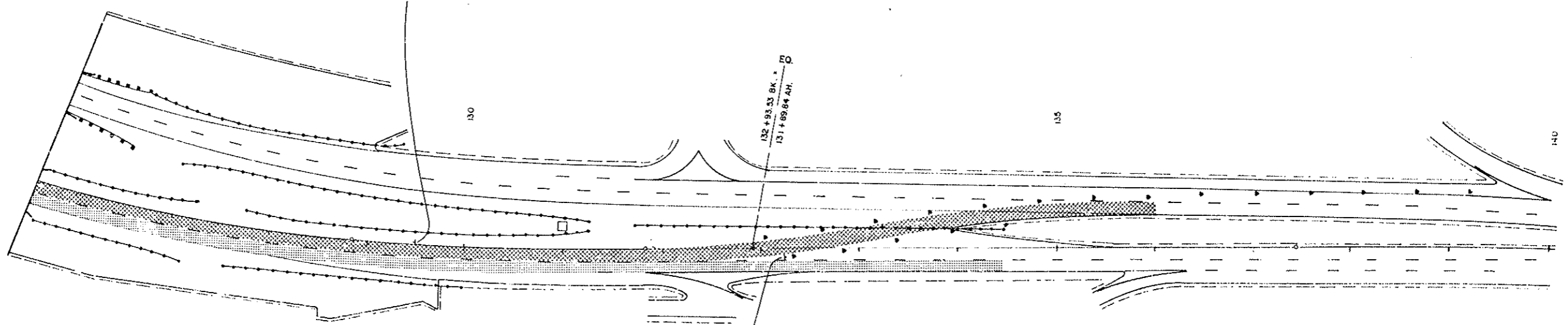
(NORTH TUNNEL CLOSURE)

AS CONSTRUCTED		
NOREVISIONS	2-22-80	REVISED
		VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	95	102



DO NOT PASS
RE-USE FROM SOUTH TUNNEL CLOSURE



7
RE-USE FROM SOUTH TUNNEL CLOSURE

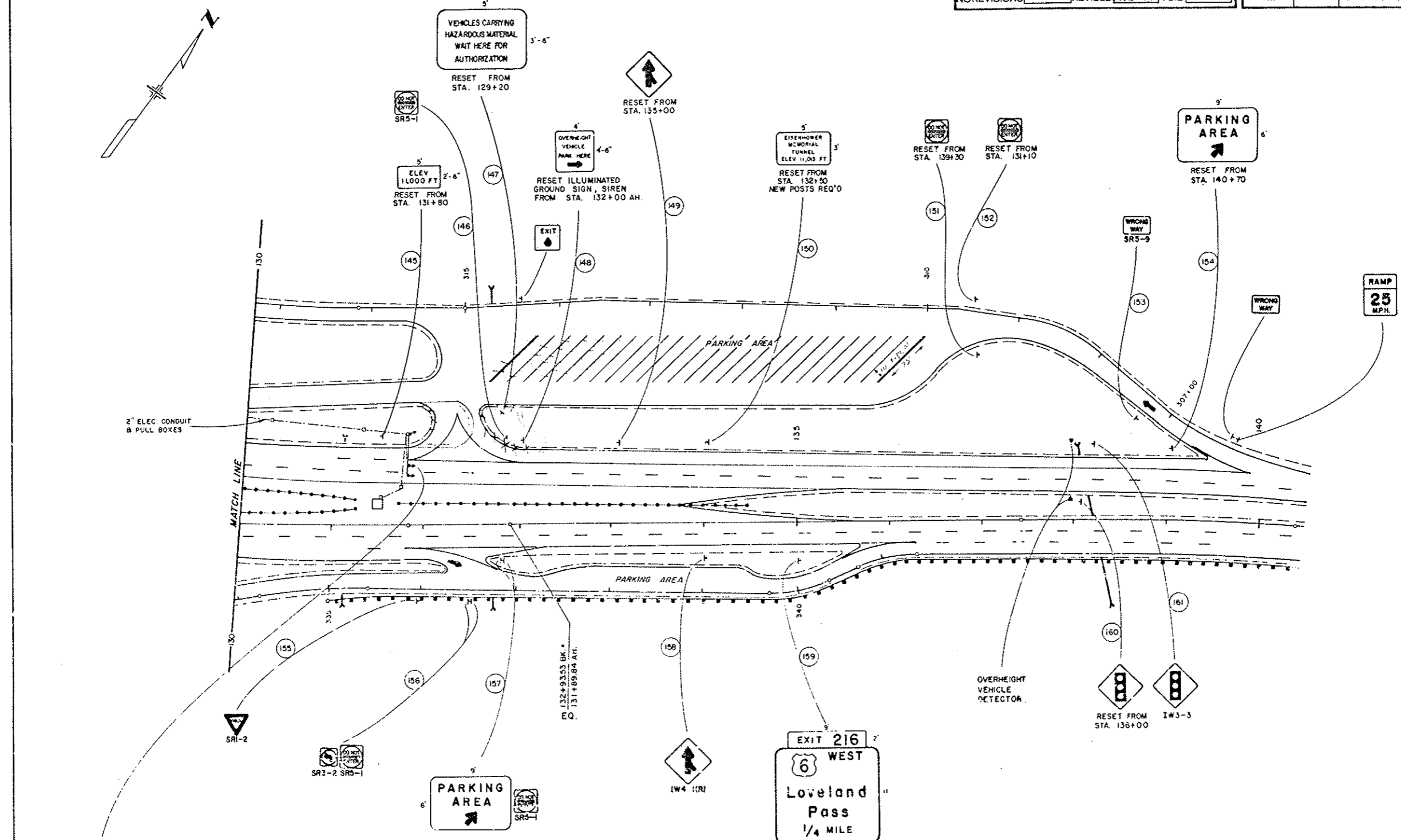
EASTBOUND TRAFFIC [diagonal hatching symbol]
WESTBOUND TRAFFIC [cross-hatching symbol]
19 TRAFFIC CONES REQUIRED. • (FROM SOUTH TUNNEL CLOSURE)

22"
7"
11"
9"
8.5"
11"
17"
10"

FINAL SIGNING

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(84) 220	97	



TRAFFIC SIGNAL MATERIALS

613	2 INCH ELECTRICAL CONDUIT	LIN. FT.	340
614	TRAFFIC SIGNAL FACE (12-8-8)	EACH	3
614	TRAFFIC SIGNAL POLE STEEL (1 MAST ARM)	EACH	1

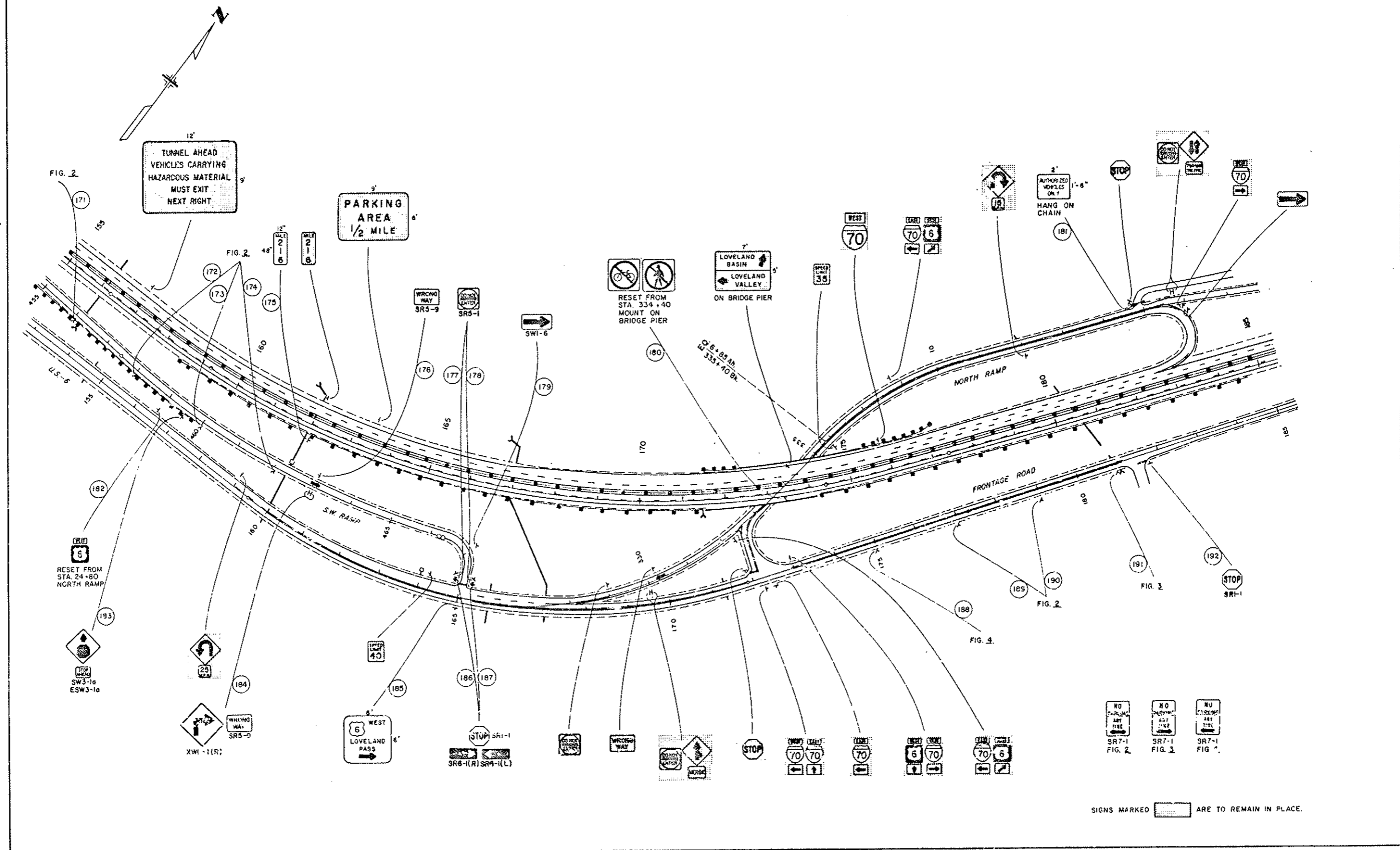
SIGNS MARKED ARE TO REMAIN IN PLACE.

7.2"
11"
9.8"
8.5"
11"
7"
12"

FINAL SIGNING

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(84) 220	99	

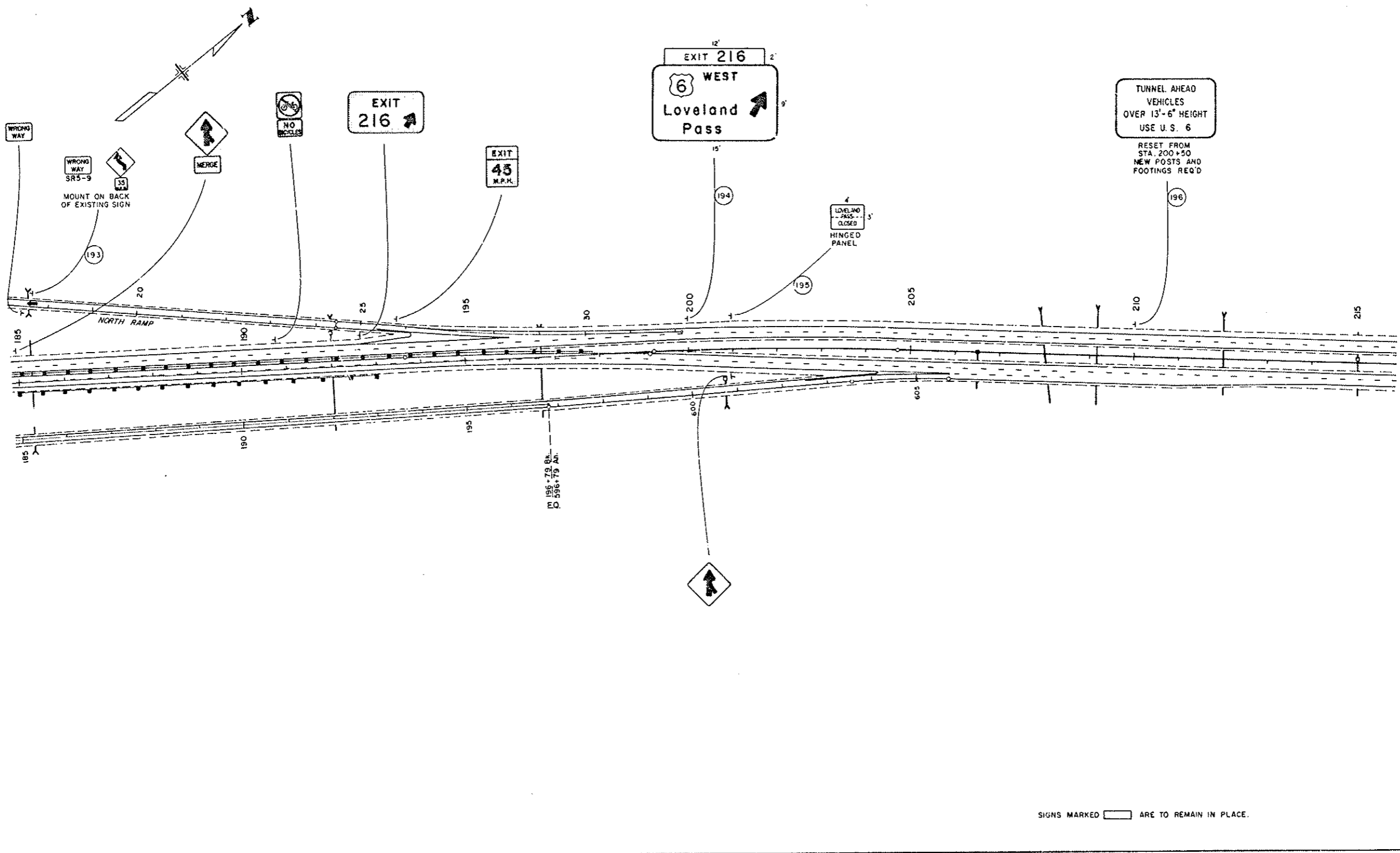


SIGNS MARKED ARE TO REMAIN IN PLACE.

22"
11"
11"
5'8"
8'5"
11"
17"
2"

FINAL SIGNING

AS CONSTRUCTED				
NO REVISIONS	225	REVISED		VOID
FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I70-3(B4) 220	100	11

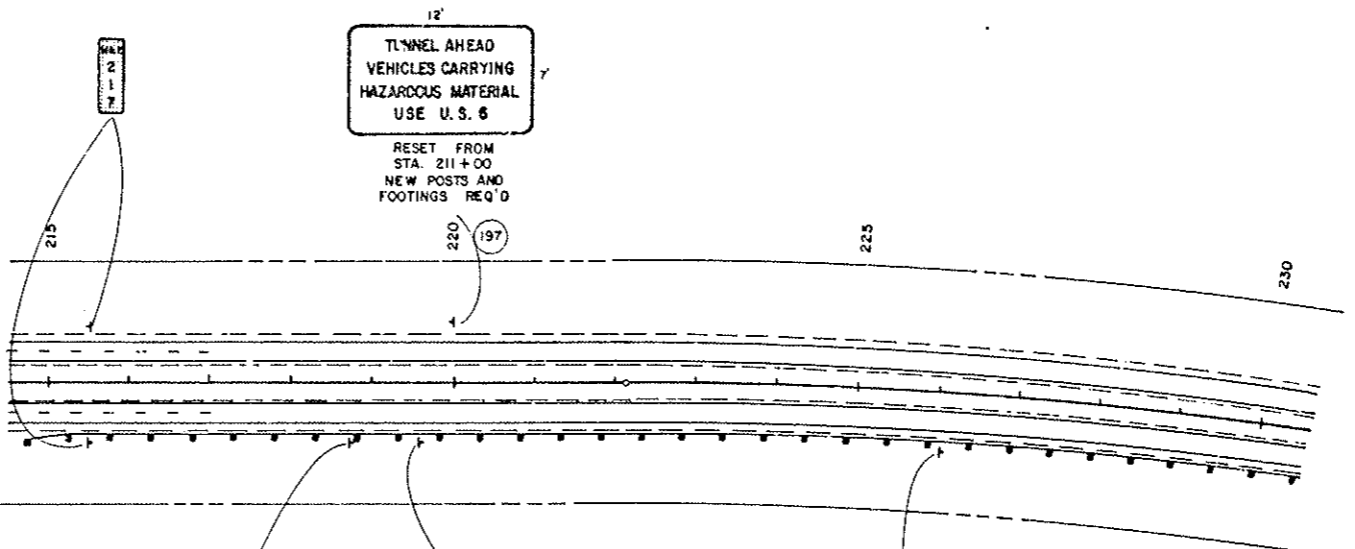
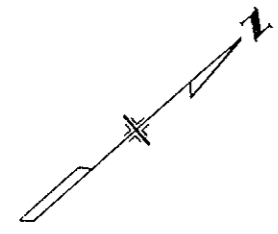


27
 11
 58
 85
 11
 7
 12

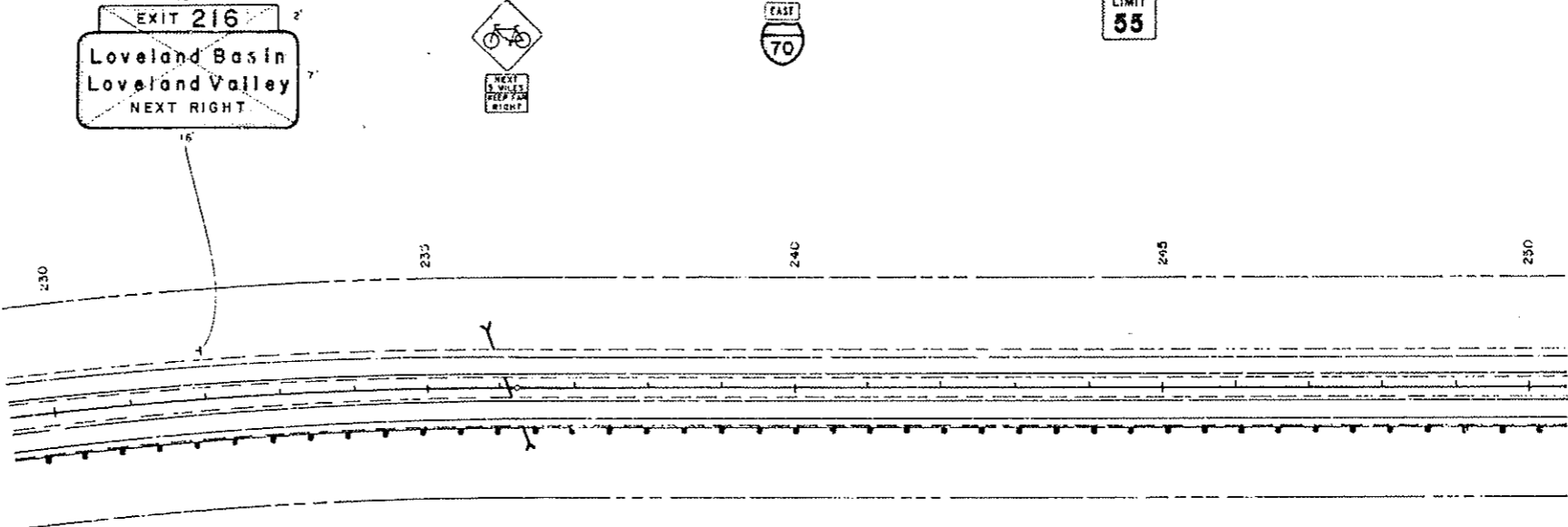
FINAL SIGNING

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

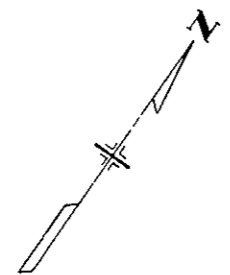
FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	101	101



Reset from Sta. 211+00



SIGNS MARKED ARE TO REMAIN IN PLACE

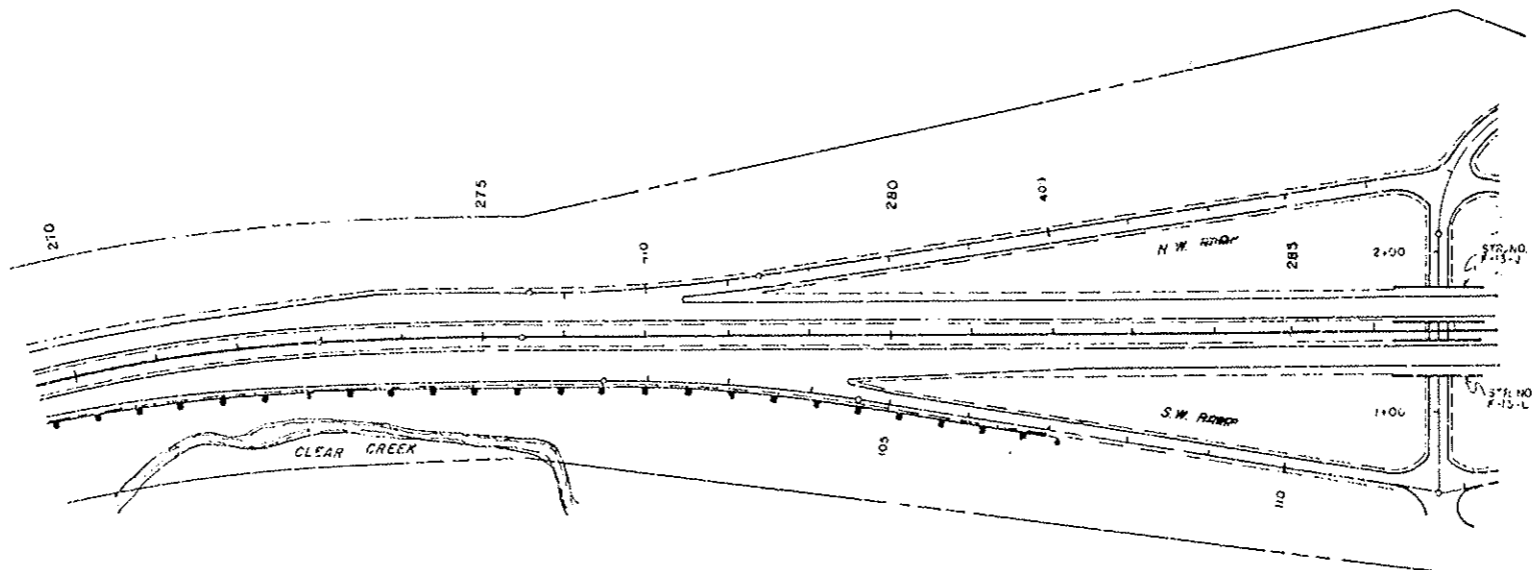
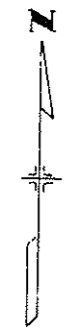
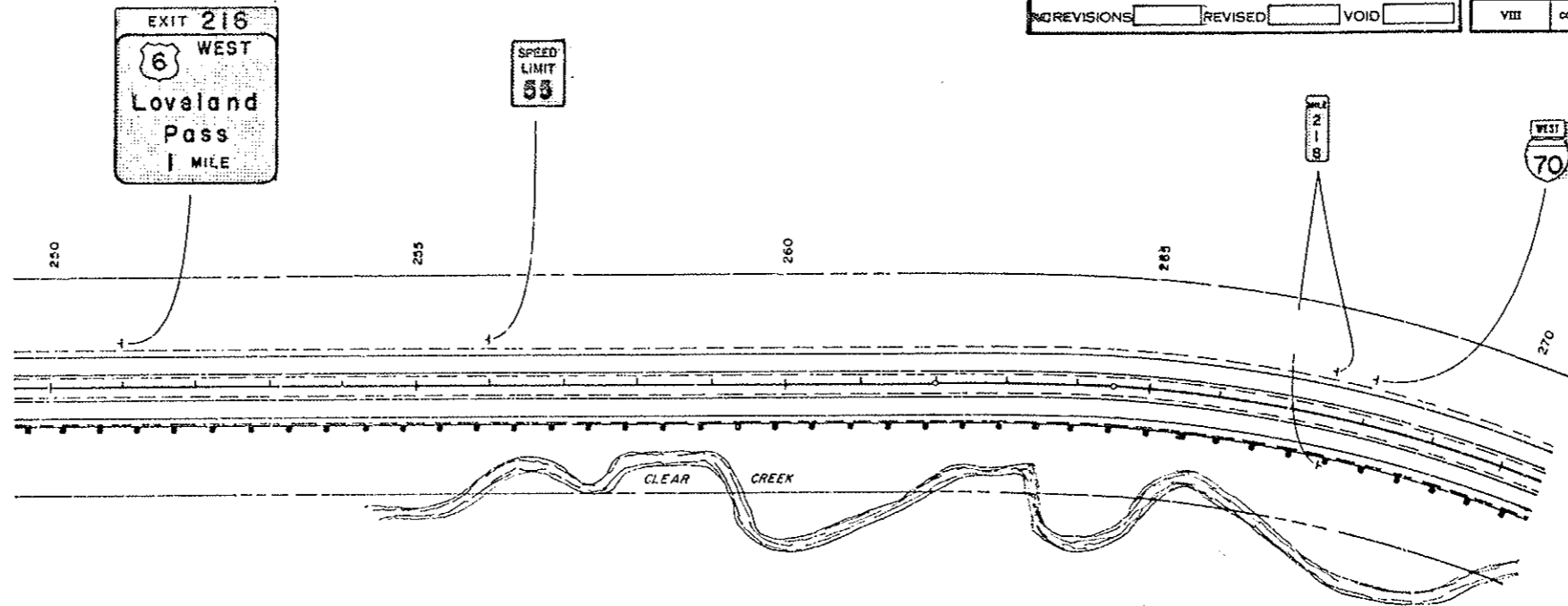
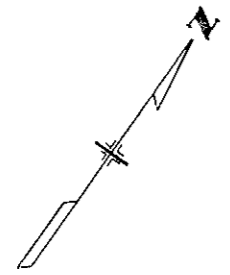


22"
17"
11"
9.5"
8.5"
11"
17"
22"

FINAL SIGNING

RECONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJECT NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	102	11



HERMAN GULCH

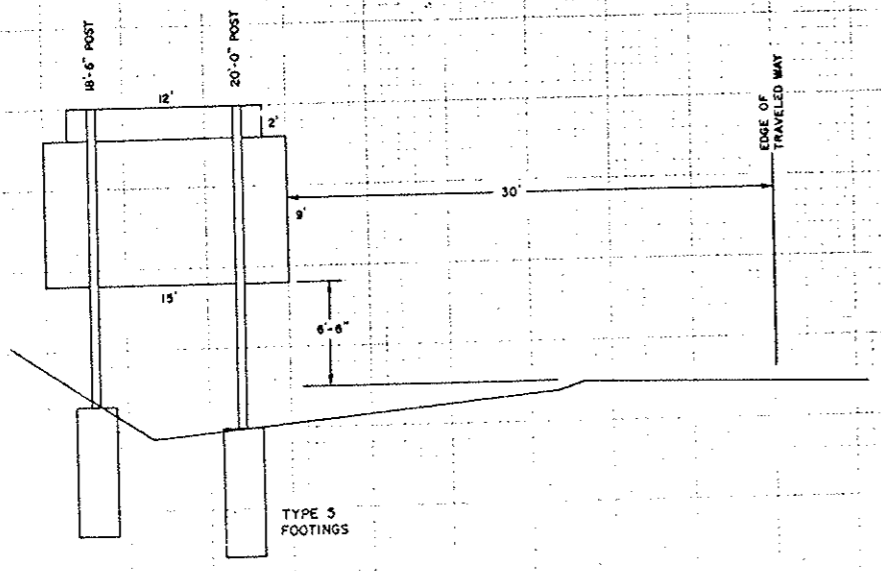
SIGNS MARKED ARE TO REMAIN IN PLACE.
 EXISTING SIGNS NOT SHOWN AT HERMAN GULCH ARE TO REMAIN IN PLACE.

22"
17"
11"
8.5"
8.5"
11"
7"
22"

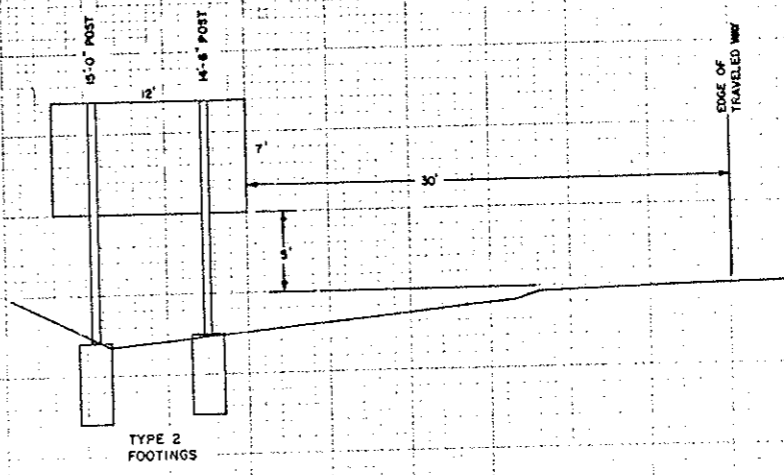
CROSS SECTIONS AT CLASS III SIGN LOCATIONS

I 70-3(84)220 76

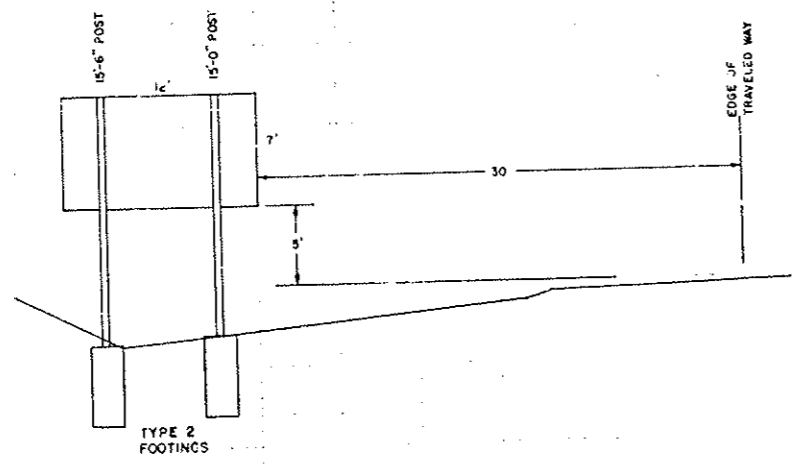
AS CONSTRUCTED		
NO REVISIONS	22-22	REVISED
		VOID



SIGN NO. 194
STA. 200+00



SIGN NO. 197
STA. 220+00



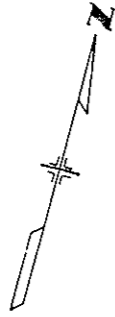
SIGN NO. 196
STA. 210+00

7
1
11
8
1.5'
11"
17"
22"

EAST PORTAL FINAL SIGNING

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	96	



Place 8 Traffic Cones across access opening at 6' centers for permanent control of traffic.

PEDESTRIANS AND BICYCLES PROHIBITED IN TUNNEL

2' AUTHORIZED VEHICLES ONLY 1'-6" HANG ON CHAIN

(143)

2" ELEC. CONDUIT & PULL BOX
 ILLUMINATED SIGN

323+77.9 BX. 1
 W 323+71.9 AM

VENTILATION BUILDING

EAST LOOP ROAD

PARKING AREA

PARKING AREA

PARKING AREA

126

MATCH LINE

325

310

(144)

2' AUTHORIZED VEHICLES ONLY 1'-6" HANG ON CHAIN

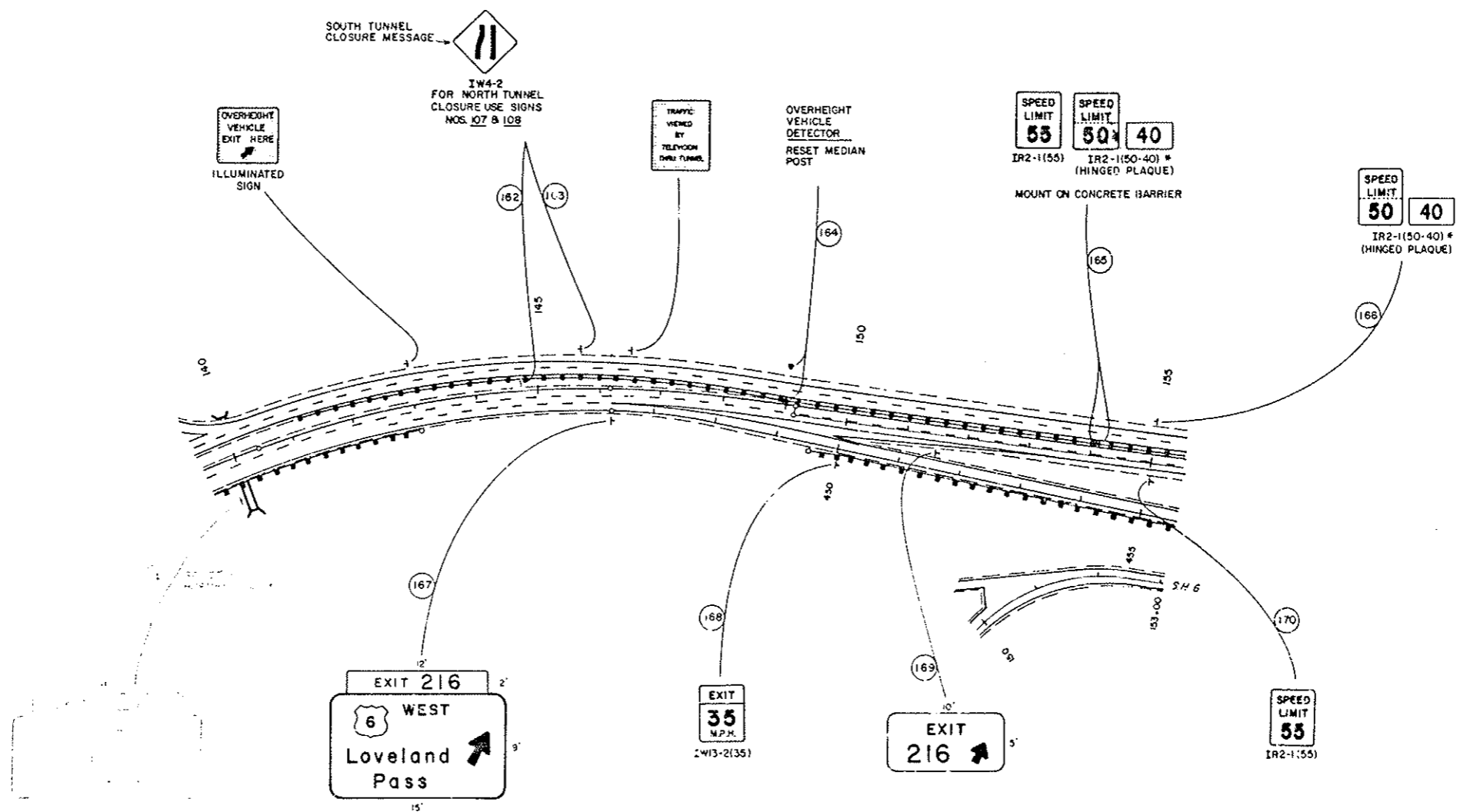
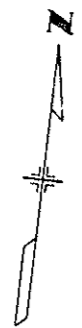
SIGNS MARKED ARE TO REMAIN IN PLACE.

22"
11"
1"
8.5"
8.5"
11"
17"
22"

FINAL SIGNING

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD DISTRICT NO.	DIVISION	PROJ. NO.	SHEET NO.	TOTAL SHEETS
VIII	COLORADO	I 70-3(84) 220	98	



SIGNS MARKED ARE TO REMAIN IN PLACE.
 * THESE SIGNS APPLY TO BOTH NORTH AND SOUTH TUNNEL CLOSURES.

22
17
11
9.3
8.5
11
17
22