

NEW AND REVISED STANDARD PLANS

M-614-1 RUMBLE STRIPS 11-30-84

# STATE DEPARTMENT OF HIGHWAYS DIVISION OF HIGHWAYS - STATE OF COLORADO

## PLAN AND PROFILE OF PROPOSED

### FEDERAL AID PROJECT NO. IR 25-3(85)

### STATE HIGHWAY NO. 25

### LARIMER COUNTY

M-606-12 GUARD RAIL, TYPE 4, CONCRETE BARRIER (9 SHEETS) 2-18-83

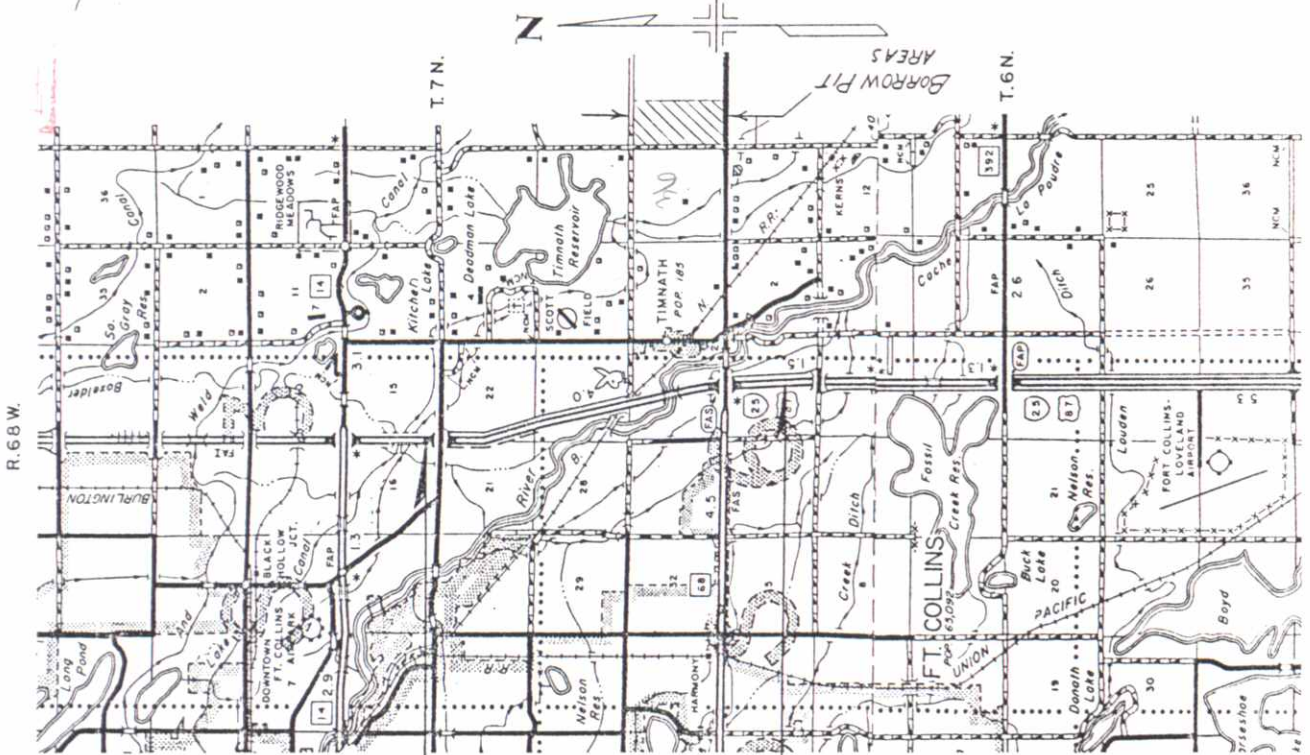
LENGTH AND DESIGN DATA

STATION	NORTHBOUND	SOUTHBOUND	REMARKS
	LIN. FT. ROADWAY	LIN. FT. ROADWAY	LTR. FT. MAJOR STR.
SITE A-N.P. 257.4 (IR 25-3(85)) (7+80) M. NOR STRUCTURE IMPROVEMENT - EQUIVALENT STA. ON IR 25-3(79)			34-85
SITE B-M.P. 257.8 (IR 25-3(85)) (7+93) M. NOR STRUCTURE IMPROVEMENT - EQUIVALENT STA. ON IR 25-3(79)	26.10		
(2718+27.85) BEGIN C-17-01 SB			
(2728+62.50) END C-17-01 SB			
(2733+97.68) END C-17-01 SB			
SITE C-BEGIN MAJOR CONSTRUCTION SITE			
2F.M.P. 300.00 BEG IR 25-3(85) NB & SB			
(2630+00) END IR 25-3(83) NB & SB			
EQUATION 2698+09.46 BACK = 2698+17.20 AHEAD	6809.46	6809.46	
(2701+20) BEG B-17-01 & B-17-02	302.80	302.80	
(2704+23.30) END B-17-01 & B-17-02	303.30	303.30	
(2732+25.32) BEG B-17-03 NB	2802.02	2802.02	
(2733+97.68) END B-17-03 NB			
(2734+61.68) END B-17-03 SB			
EQUATION 2818+13.44 BACK = 2826+46.10 AHEAD	8415.76	8415.76	
2833+75 END IR 25-3(85) NB&SB = 2833+75 END IR 25-3(36) M.P. 268.3	728.90	728.90	
SUMMARY (AVERAGE OF SB AND NB LANES)	19,058.94	501.76	19,058.94
ROADWAY (NET LENGTH)	19,058.94		3.610
MAJOR STRUCTURE	506.13		0.090
PROJECT GROSS LENGTH	19,565.07		3.706
DESIGN DATA			
MAXIMUM DEGREE OF CURVE	10		
MINIMUM GRADE	3%		
MINIMUM HORIZONTAL	> 900'		
MINIMUM VERTICAL	62.5'		
MINIMUM DESIGN SPEED	70 MPH		
2006 DESIGN TRAFFIC VOLUME ADJ	34,700		
STRUCTURES	3,817		142
PREPARED FROM IR 25-3(85)			

REVISIONS

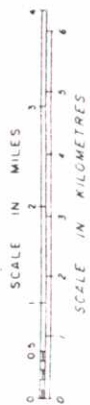
SCALES OF ORIGINAL DRAWINGS

ON PLAN, 1 IN = 100 FT  
ON PROFILE, 1 IN = 10 FT HORIZONTAL  
1 IN = 10 FT VERTICAL



2833+75 END IR 25-3(85)  
= 2833+75 ON IR 25-3(36) 267  
MP 268.3

2630+00 BEGIN IR 25-3(85)  
= 2630+00 ON IR 25-3(83)  
2630+00 ON IR 25-3(35) 258  
MP 264.50



PROJECT NO.	IR 25-3(85)
DIVISION	COLORADO
SHEET NO.	1

AS CONSTRUCTED

NO REVISIONS  REVISED  VOID

INDEX OF SHEETS

- TITLE SHEET, PROJECT LOCATION MAP, LENGTH AND DESIGN DATA
- LOCATION MAPS
- STANDARD PLANS LIST
- TYPICAL SECTION AND GENERAL NOTES
- SUMMARY OF APPROXIMATE QUANTITIES
- SUMMARY OF QUANTITIES
- STRUCTURE QUANTITIES
- TABULATION OF CONCRETE PAVING, MISCELLANEOUS CONCRETE PAVEMENT ITEMS, CURB/MEDEAN/VEGETATION, FENCING, HOT BITUMINOUS PAVEMENT SURFACING PLAN
- TABULATION OF GUARDRAIL, DELINEATOR TABULATION
- SUMMARY OF EARTHWORK QUANTITIES, TABULATION OF EMBANKMENT PROTECTORS, TABULATION FOR THE REMOVAL OF OLD EMBANKMENT PROTECTORS
- TEMPORARY LIGHTING TABULATION, DETAIL OF TEMPORARY LIGHT STANDARD, DETAILS OF GUARDRAIL AT STRUCTURES JUNCTION
- DETAIL OF GUARDRAIL REFLECTOR TAB, DETAIL OF GUARDRAIL TYPE 4 (CAST IN PLACE), DETAIL OF GUARDRAIL DRAINAGE PORT
- DETAIL OF TEMPORARY ASPHALT MEDIAN, DETAILS OF TRANSITIONS AT ENDS OF PROJECT
- DETAIL OF IMPACT ATTENUATOR (TEMPORARY)
- DETAIL OF IMPACT ATTENUATOR (PERMANENT)
- EXPANSION TERMINAL DETAILS AND QUANTITIES
- DETAILS OF CONCRETE REMOVAL AND PATCHING
- STANDARD M-620-11 FIELD OFFICE CLASS 1
- STANDARD M-412-1 CONCRETE PAVEMENT JOINTS
- STANDARD M-412-2 CONCRETE PAVEMENT-URBAN AREA
- TYPICAL SECTION AT NB & SB PORTS OF ENTRY
- PORT OF ENTRY DETAIL SHEET WITH LAYOUT REQUIREMENTS FOR SLOTTED PIPE AND NEW SCALE PIT LOCATION
- PORT OF ENTRY DETAIL WITH LIGHTING PLAN/TABULATION OF QUANTITIES
- DETAILS OF SLOTTED PIPE INLET AT PORT OF ENTRY, DETAIL FOR PLACING PIPE UNDER EXISTING CONCRETE PAVEMENT AT STATION 2650+64, DETAIL FOR PLUG STRUCTURE (PORTS OF ENTRY)
- WEIGH SCALE AND PIT DETAILS AND SCHEDULE OF ITEMS
- DETAIL OF INLET SPECIAL
- DETAIL OF INLET SPECIAL (5 FOOT), OUTLET DETAIL & CURB TYPE 2(B)
- DETAILS OF FARMER'S DITCH AND TABULATION OF QUANTITIES
- DETAILS OF BOXELDER CREEK DITCH AND TABULATION OF QUANTITIES
- STRUCTURE NO. C-17-C1 (GREGG-LOVELAND DITCH)-DETAILS INCLUDING PLAN AND PROFILE SHEET
- DETAILS FOR INSTALLING BRIDGE (A1) TYPE 39 (STRUCTURE B-17-03)
- STRUCTURE R-17-08 (SB) PONDRE RIVER
- STRUCTURE B-17-01 (NB) PONDRE RIVER
- STRUCTURES B-17-02 (NB) & B-17-03 (SB) BARR RAILROAD STRUCTURES
- DETAILS OF EHRICH PIT
- WEIGH STATION FOR PORTABLE SCALE - TEMPORARY PORT OF ENTRY SITE
- DETOUR SCHEMATIC NEAR TEMPORARY PORT OF ENTRY SITE
- PLANTING PLAN
- BANK PROTECTOR LOCATION PLAN, DETAILS, & TABULATION OF QUANTITIES
- DETOUR PLAN DETAILS & TABULATION OF QUANTITIES
- PLAN AND PROFILE SHEETS
- PERMANENT SIGNING PLANS
- CONSTRUCTION SIGNING PLANS
- AS CONSTRUCTED INFORMATION

DIVISION OF HIGHWAYS

APPROVED: *Robert L. Clauger* 3/31/87  
CHIEF ENGINEER DATE

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: \_\_\_\_\_ DATE \_\_\_\_\_  
DIVISION ADMINISTRATOR

CONTRACTOR *Esther Construction*  
Project ENGINEER *Dennis Leese*  
(Project or Resident)

PROJECT STARTED *5/26/87*  
PROJECT COMPLETED *6/10/88*

AS CONSTRUCTED PLANS APPROVED *[Signature]*  
*D. S. [Signature]* 11-29-88  
TITLE \_\_\_\_\_ DATE \_\_\_\_\_

Crealey Water Dept.  
ELCO Water District  
Western Slope Gas  
Mountain Bell

Public Service Co.  
Gas & Electric  
Poudre Valley REA

2605

18" x 44" RCCP  
Drop Inlet  
36" x 126" CMP

+70 Field appr., 20' B.W. gate

18" x 44" RCCP  
Drop Inlet  
2610

2615

Asph. rundown

PC 2618+12.5

PI. 2620+38.4

36" RCP  
36" x 73' RCCP

24" x 104' RCCP (Irrig)

24" x 108' RCCP

24" x 108' RCCP

24" x 108' RCCP

24" x 108' RCCP

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24" x 108' RCCP

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24" x 108' RCCP

24" x 108' RCCP

- Δ = 2°15'30" LI
- T = 225.9'
- D = 0°30'
- L = 451.7'
- R = 11,460'
- = 0.015 1/11

2625

Asph. rundown

2630+00 ~ BEGIN IR 25-3(85) NB & SB  
= 2630+00 End IR 25-3(83)  
= 2630+00 on I 25-3(35) 258  
MP 264.6

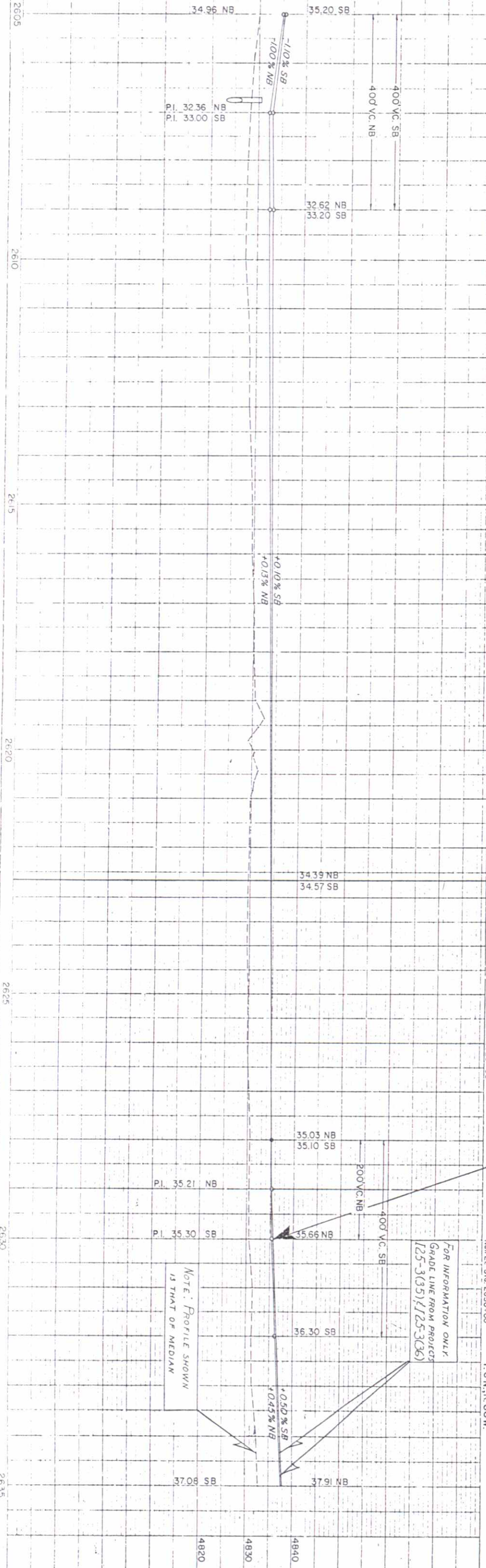
24" x 58' CMP (plugged)

2630

2635

FOR INFORMATION ONLY  
GRADE LINE FROM PROJECTS  
125-3(35) & 125-3(36)

NOTE: PROFILE SHOWN  
IS THAT OF MEDIAN



NE 4 SEC. 10  
T. 6 N., R. 68 W.

BM No. 152 4833.02  
Noil LI Sta. 2607+00

BM No. 153 4832.81  
Noil LI Sta. 2611+00

BM No. 154 4833.15  
Noil LI Sta. 2613+00

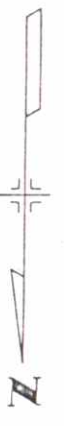
BM No. 155 4833.33  
Noil LI Sta. 2619+00

BM No. 156 4833.98  
Noil LI Sta. 2623+00

BM No. 157 4834.21  
Noil LI Sta. 2625+00

BM No. 158 4835.06  
Noil LI Sta. 2630+00

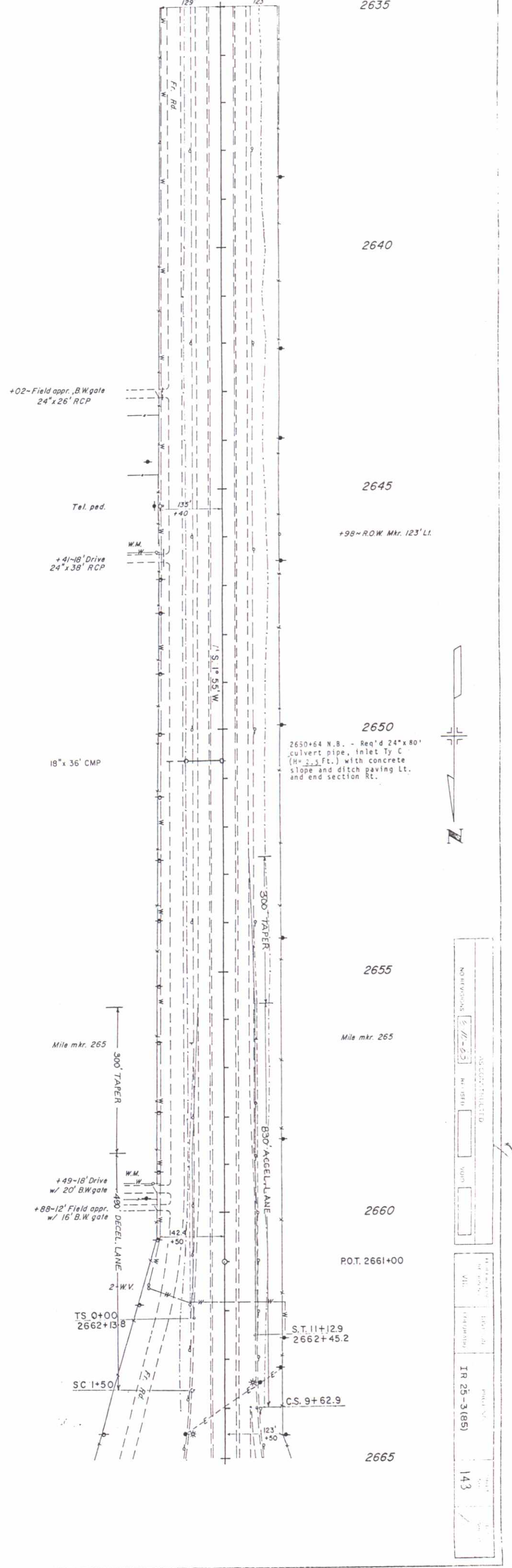
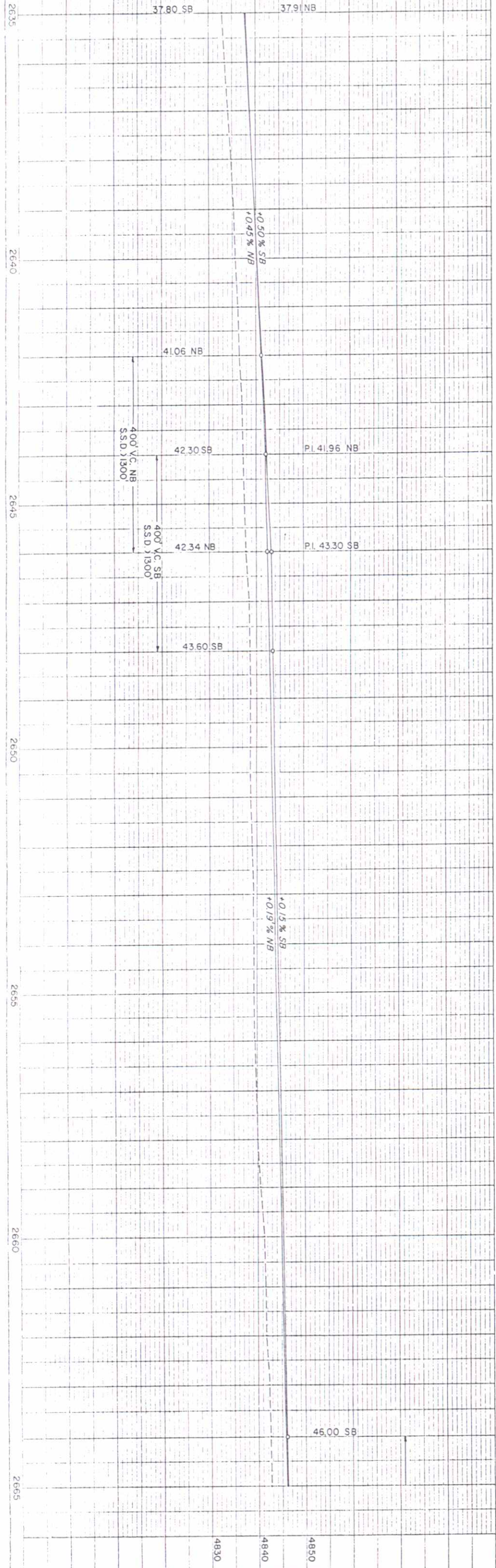
SE 4 SEC. 3  
T. 6 N., R. 68 W.



NO. REVISIONS	6-10-88	REVISED		DATE	
DATE		BY		APP'D.	

PROJECT NO.  
IR 25-3(85)

142 / 15



2635

2640

2645

2650

2655

2660

2665

+02-Field appr., B.W. gate  
24"x26' RCP

Tel. pd.

+41-18' Drive  
24"x38' RCP

18" x 36' CMP

Mile mkr. 265

+49-18' Drive  
w/ 20' B.W. gate  
+88-12' Field appr.  
w/ 16' B.W. gate

TS 0+00  
2662+13.8

SC 1+50

2630+64 N.B. - Req'd 24"x80'  
culvert pipe, inlet Ty C  
(H=2.5 Ft.) with concrete  
slope and ditch paving Lt.  
and end section Rt.

P.O.T. 2661+00

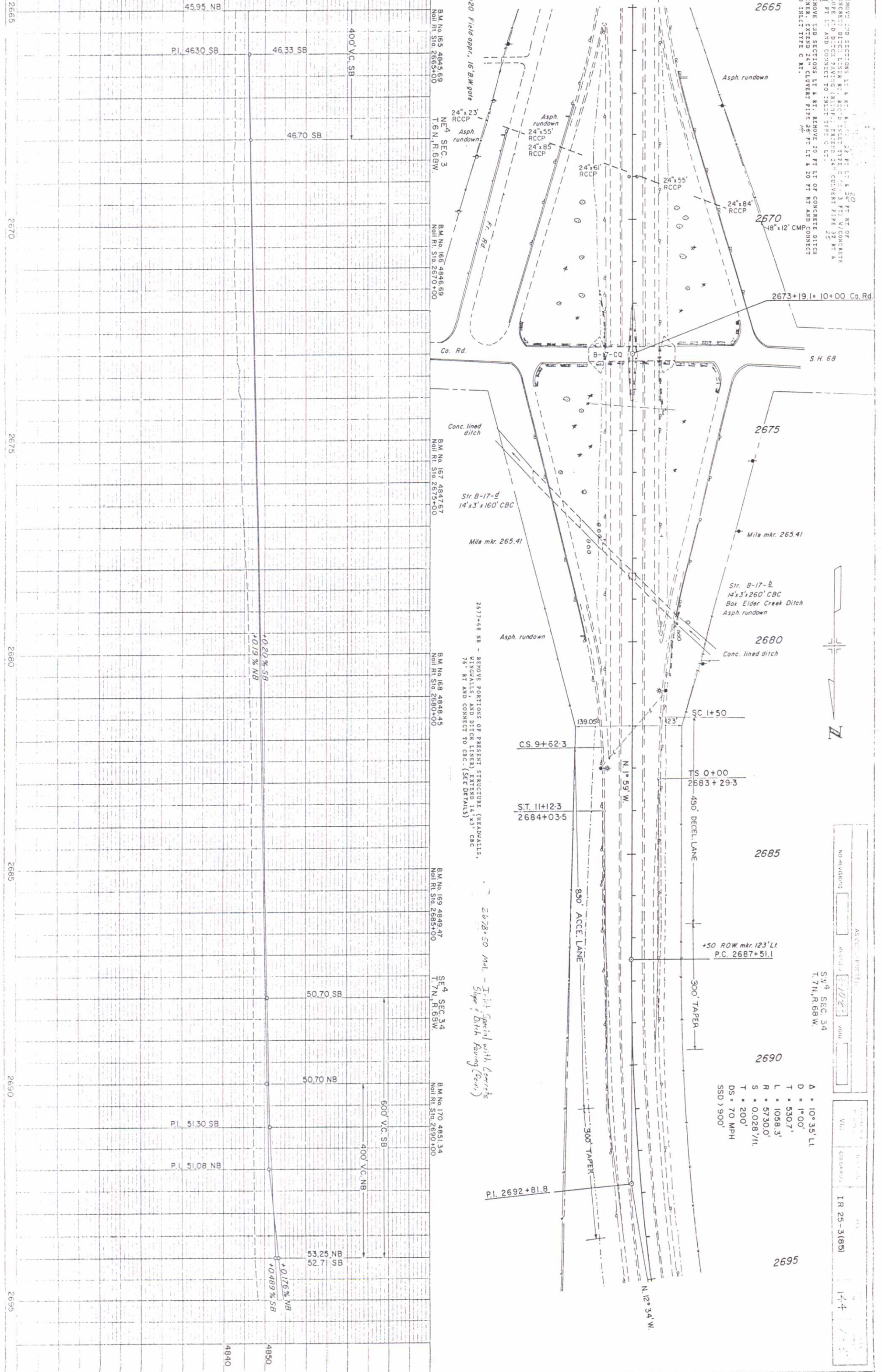
S.T. 11+29  
2662+45.2

C.S. 9+62.9



NO. REVISIONS	AS CORRECTED	DATE	BY
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20  
 18 - REMOVE END SECTIONS LT & RT. REMOVE 12 FT LT & 12 FT RT OF CONCRETE DITCH LINER. RECD. INLET TYPE C. 24" x 30" V/C CONCRETE SLOPE AND DITCH PAVING (ASPH/CONC), EXTEND 24" CURVE PIPE 25 FT LT & 25 FT RT AND CONNECT TO INLET TYPE C LT.  
 19 - REMOVE END SECTIONS LT & RT. REMOVE 20 FT LT OF CONCRETE DITCH LINER. EXTEND 24" CURVE PIPE 25 FT LT & 20 FT RT AND CONNECT TO INLET TYPE C RT.



NO. DIVISIONS	REVISION	DATE	BY
	1-10-23		
S.V. SEC. 34 T. 7N, R. 68W.			
Δ = 10° 35' Lt. D = 1° 00' T = 530.7' L = 1058.3' R = 5730.0' S = 0.0287/ft. T = 200' DS = 70 MPH SSD > 900'			
IR 25-3(85)			

2678+50 - REMOVE PORTIONS OF PRESENT STRUCTURE (HEADWALLS, WINGWALLS, AND DITCH LINER) EXTEND 14' x 3' CBC 76' RT AND CONNECT TO CBC. (SEE DETAILS)

2678+50 - 1st Special with Concrete Slope & Ditch Paving (Form)

2665 2670 2675 2680 2685 2690 2695

4595 NB  
 PI. 4630 SB  
 4633 SB  
 4670 SB  
 400' V.C. SB  
 400' V.C. NB  
 50.70 SB  
 50.70 NB  
 53.25 NB  
 52.71 SB  
 +0.176% NB  
 +0.489% SB  
 4840  
 4850

2665  
 2670  
 2675  
 2680  
 2685  
 2690  
 2695

BM No. 165 4843.69  
 Nail Rt. Sta. 2665+00  
 NE 1/4 SEC. 3  
 T. 6N, R. 68W.  
 BM No. 166 4846.69  
 Nail Rt. Sta. 2670+00  
 Co. Rd.  
 SH 68  
 BM No. 167 4847.67  
 Nail Rt. Sta. 2675+00  
 Conc. lined ditch  
 Str. B-17-d  
 14' x 3' x 160' CBC  
 Mile mkr. 265.41  
 2677+68 NB - REMOVE PORTIONS OF PRESENT STRUCTURE (HEADWALLS, WINGWALLS, AND DITCH LINER) EXTEND 14' x 3' CBC 76' RT AND CONNECT TO CBC. (SEE DETAILS)  
 BM No. 168 4848.45  
 Nail Rt. Sta. 2680+00  
 Asph. rundown  
 Str. B-17-b  
 14' x 3' x 260' CBC  
 Box Elder Creek Ditch  
 Asph. rundown  
 Mile mkr. 265.41  
 Conc. lined ditch  
 2678+50  
 2692+81.8  
 N 1° 59' W  
 S 12° 34' W  
 830' ACCE. LANE  
 490' DECEL. LANE  
 300' TAPER  
 300' TAPER  
 N 12° 34' W  
 SE 1/4 SEC. 34  
 T. 7N, R. 68W.  
 BM No. 170 4851.34  
 Nail Rt. Sta. 2690+00

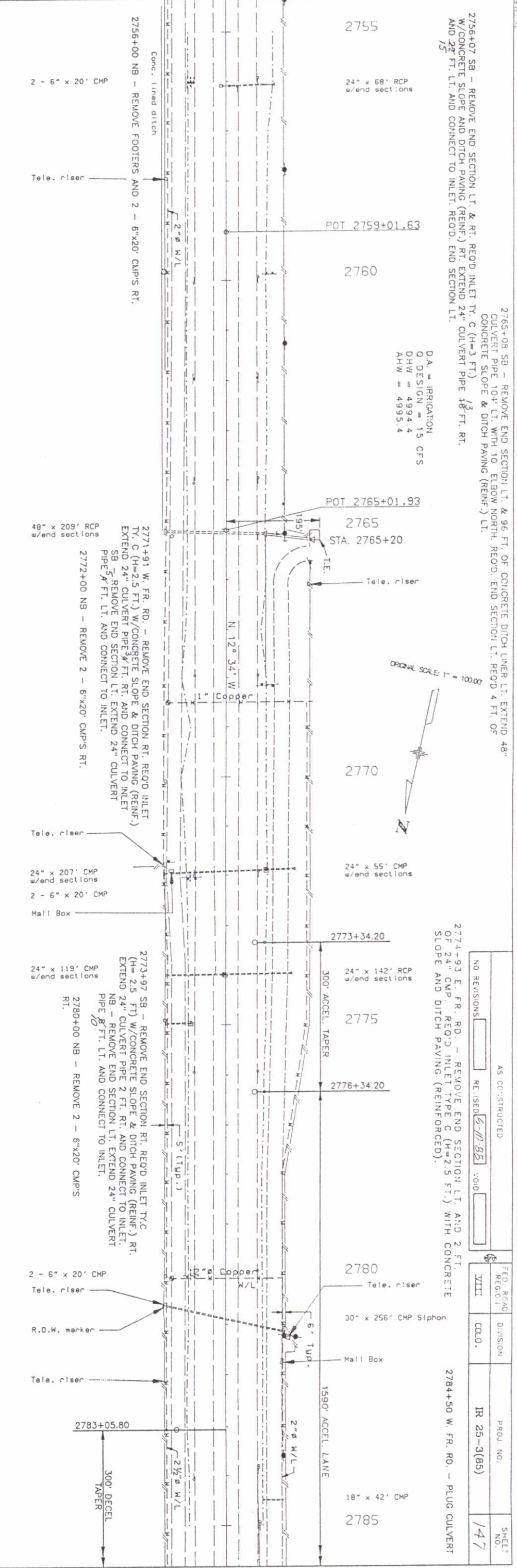
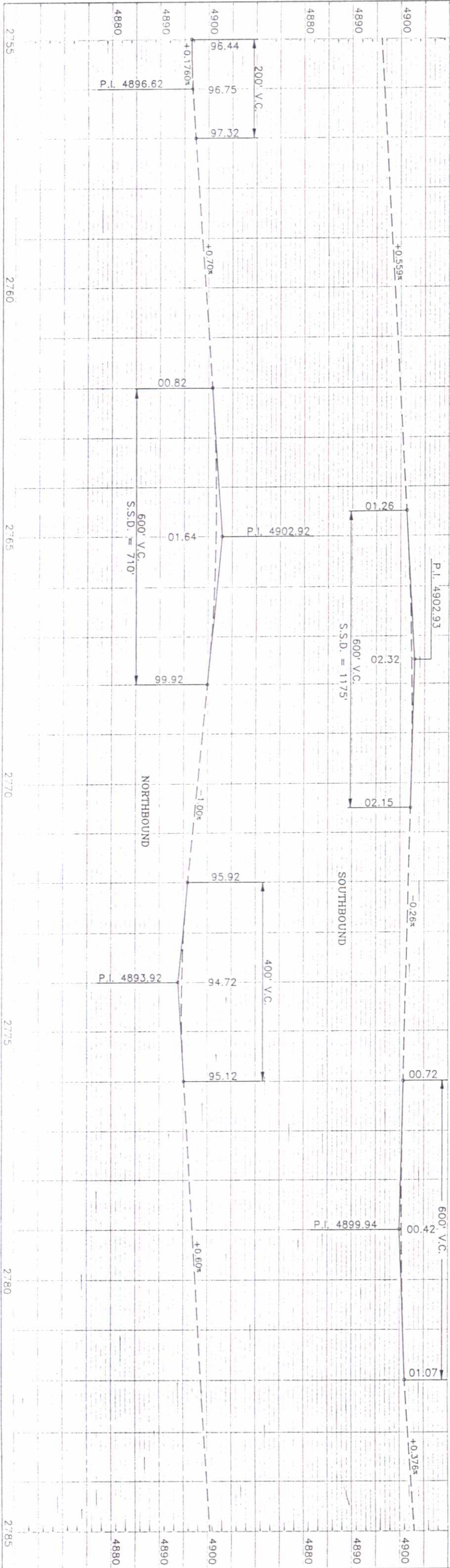




PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	ALIGNMENT CHECKED		
	J.M. S. DATED		
	STR. QUESTIONS CH.		

PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		

STATE OF CALIFORNIA  
 STATE DEPARTMENT OF HIGHWAYS  
 DIVISION OF HIGHWAYS  
 3.0.0.H. FORM 134  
 REV. NOV. 1983



2756+07 SB - REMOVE END SECTION LT. & RT. RECD. INLET TY. C (H=3 FT.)  
 W/CONCRETE SLOPE AND DITCH PAVING (REINF.). RT. EXTEND 24" CULVERT PIPE 18 FT. RT.  
 AND 27 FT. LT. AND CONNECT TO INLET. RECD. END SECTION LT.

D.A. = IRRIGATION  
 Q DESIGN = 15 CFS  
 DHW = 4994.4  
 AHW = 4995.4

2765+08 SB - REMOVE END SECTION LT. & 96 FT. OF CONCRETE DITCH LINER LT. EXTEND 48"  
 CULVERT PIPE 104' LT. WITH 10 ELBOW NORTH. RECD. END SECTION LT. RECD. 4 FT. OF  
 CONCRETE SLOPE & DITCH PAVING (REINF.) LT.

ORIGINAL SCALE: 1" = 100.00'

2774+93 E. FR. RD. - REMOVE END SECTION LT. AND 2 FT.  
 OF 24" CMP. RECD. INLET TYPE C (H=2.5 FT.) WITH CONCRETE  
 SLOPE AND DITCH PAVING (REINFORCED).

NO. REVISIONS	AS CONSTRUCTED	FED. ROAD REGION	DIVISION	PROJ. NO.	SHEET NO.
	REVISION <u>5-10-83</u>	VIII	COLO.	IR 25-3(85)	147

2784+50 W. FR. RD. - PLUG CULVERT



STATE OF COLORADO  
 DIVISION OF HIGHWAYS  
 D.O.H. FORM 134  
 REV. NOV. 1963

2826+70 SB - REMOVE ERO SECTION; RT. REQ'D INLET TO C. (H=4 FT.); W/CONCRETE SLOPE & DITCH PAVING (REF. J.) RT. EXTEND 24" CULVERT PIPE 10' FT. RT. & CONNECT TO INLET.  
 2826+77 NB - REMOVE ERO SECTION; LT. EXTEND 24" CULVERT PIPE 4 FT. LT. & CONNECT TO INLET.  
 REMOVE INLET RT. REQ'D. INLET TO C. (H=5 FT.); W/CONCRETE SLOPE AND DITCH PAVING (REF. J.) RT. EXTEND 24" CULVERT PIPE 8 FT. RT. AND CONNECT TO INLET.

CONTINUOUS ACCEL.-DECEL. SECTION

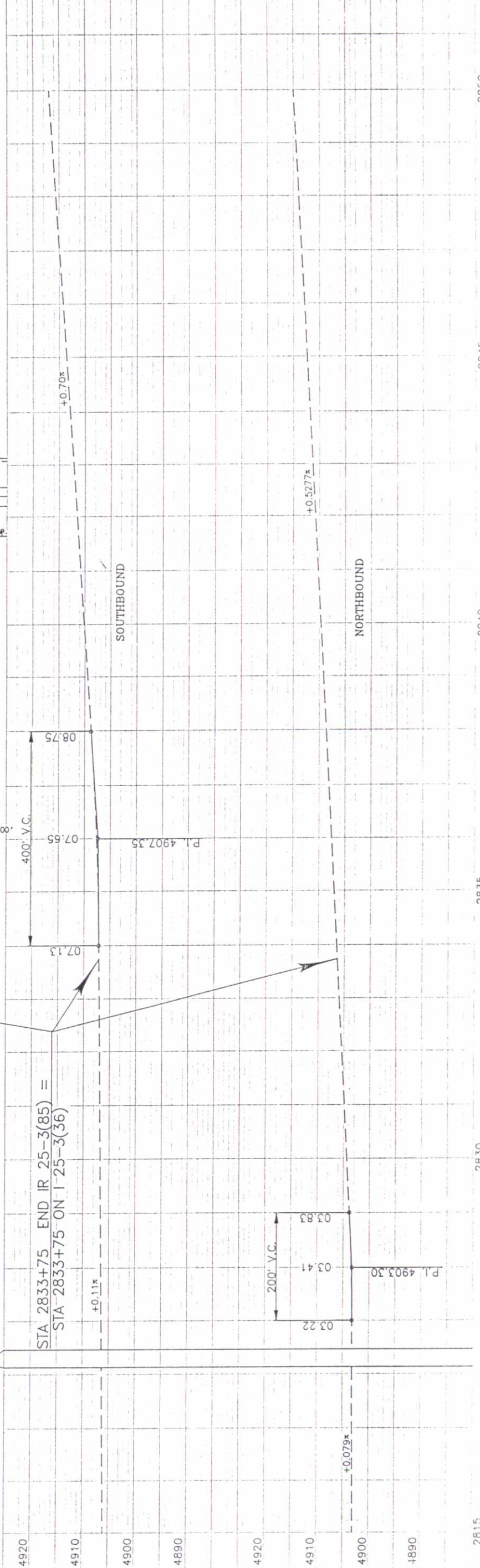
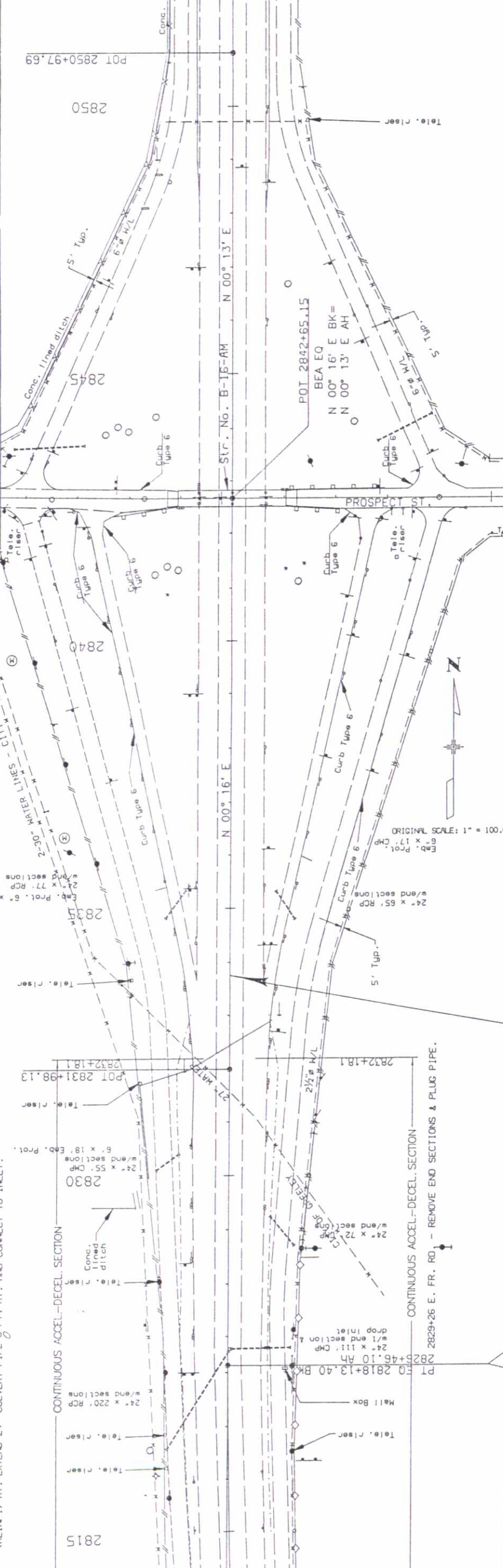
CONTINUOUS ACCEL.-DECEL. SECTION

2829+26 E. FR. RD. - REMOVE END SECTIONS & PLUG PIPE.

STA 2833+75 END IR 25-3(85) =  
 STA 2833+75 ON I 25-3(36)

FED. ROAD REGION VIII  
 DIVISION COLO.  
 PROJ. NO. IR 25-3(85)  
 SHEET NO. 1-9

AS CONSTRUCTED  
 REVISED 6-10-55  
 VOID



NO.	DATE	BY

NO.	DATE	BY

NO.	DATE	BY