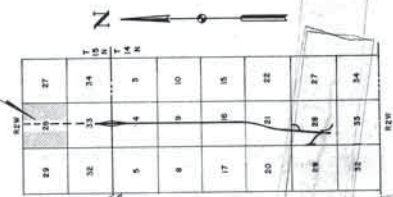


FED. ROAD DIST. NO.	STATE	FA PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	OKLA.	I-456(8)(9)		1	109

GRADE CROSSINGS _____ 0
 GRADE CROSSINGS ELIMINATED _____ 0
 BY SEPARATION OVERPASS _____ 0
 UNDERPASS _____ 0
 BY RELOCATION _____ 0
 GRADE CROSSINGS REMAINING _____ 0



Possible Source of Subbase Material
 And Suitable Soil For Soil
 Cement Stabilization

Under the rules and regulations of
 the Bureau of Public Roads, any
 changes in the design, including
 materials, which are not in
 accordance with the approved
 design, must be approved by the
 Bureau of Public Roads before
 executing any work.

DESIGN DATA

ADT - 1955 = 5095
 ADT - 1975 = 13,990
 DHV - 1975 = 1678
 D = 60 %
 T = 12 %
 V INTERSTATE = 70 MPH
 V RAMPS &
 SEC. LINE ROADS 50 MPH

GLENDENING AND LOWRIE
 CONSULTING ENGINEERS
 By *Edward J. Glendenning*
 EDWARD J. GLENDENING, Civil Eng. Reg. No. 2806

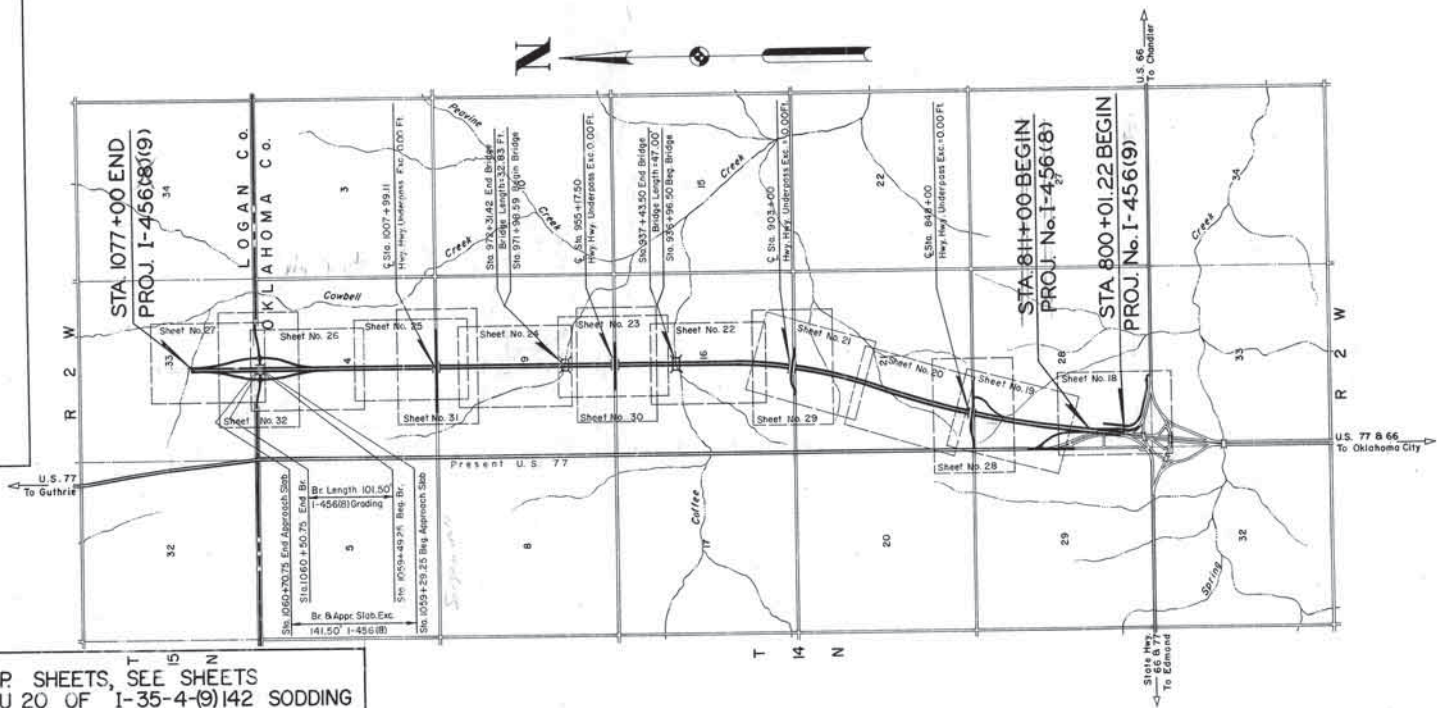
APPROVED
 THIS DAY OF
 CHIEF ENGINEER
 OKLA. DEPARTMENT OF HIGHWAYS

DEPARTMENT OF COMMERCE
 BUREAU OF PUBLIC ROADS
 APPROVED DATE
 DIVISION ENGINEER

SWO 2150(1)

STATE OF OKLAHOMA DEPARTMENT OF HIGHWAYS

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY FEDERAL AID PROJECT NO. I-456(8) FEDERAL AID PROJECT NO. I-456(9) U.S. HIGHWAY NO. 77 INTERSTATE OKLAHOMA AND LOGAN COUNTIES CONTROL SECTION 55-75&42-30



NOTE: FOR P & P SHEETS, SEE SHEETS
 NO. 6 THRU 20 OF I-35-4(9)142 SODDING
 FORMERLY NO. I-456(9) SODDING.

FAP NO. I-456(8) GRADING
 ROADWAY LENGTH 26,418.67 FT. 5.003 MI. 27,557.28 FT. 5.219 MI.
 BRIDGE LENGTH 79.83 FT. 0.015 MI. 0.00 FT. 0.000 MI.
 OVERPASS LENGTH 101.50 FT. 0.019 MI. 0.00 FT. 0.000 MI.
 PROJECT LENGTH 5.037 MI. 5.219 MI.

EQUATIONS: NONE
 EXCEPTIONS: NONE

EQUATIONS: NONE
 EXCEPTIONS: ONE OVERPASS AND
 APPROACH SLABS = 141.50 FT.

CHIEF DRAFTSMAN	LOCATING ENGR	DESIGN ENGR	BRIDGE ENGR	CONSTRUCTION ENGR	S. P. R.
C.E.B.	W.W.V.	J.B.M.	D.M.M.	J.J.S.	

INDEX OF SHEETS

- 1 TITLE SHEET
- 2-6 FUNCTIONAL PLAN & PROFILE SHEETS
- 7-12 TYPICAL SECTIONS
- 13 SUMMARY SHEET
- 14 SUMMARY OF DRAINAGE QUANTITIES
- 15 SUMMARY OF PAY QUANTITIES
- 16 STD. GCN-2-0
- 17 STD. TM-1-0 (TYPICAL MARKING FOR DETOURS)
- 18-27 PLAN AND PROFILE SHEETS
- 28 PLAN AND PROFILE OF NORTH LINE SEC. 28
- 29 PLAN AND PROFILE OF NORTH LINE SEC. 21
- 30 PLAN AND PROFILE OF NORTH LINE SEC. 16
- 31 PLAN AND PROFILE OF NORTH LINE SEC. 9
- 32 PLAN AND PROFILE OF NORTH LINE SEC. 4
- 33 RAMP GRADES IN SEC. 28, T. 14 N. R. 2 W.
- 34 RAMP GRADES IN SEC. 4, T. 14 N. R. 2 W.
- 35 RAMP GRADES IN SEC. 33, T. 15 N. R. 2 W.
- 36 JOINT LAYOUT
- 37 SPECIAL CULVERT DETAILS
- 38 STD. SU-EL-1-0 (SUPERELEVATION)
- 39 STD. SHC-4-1
- 40 STD. GR-1-4
- 41 STD. SE-1-0
- 42 STD. MD-2-1
- 43 STD. DC-1-2
- 44 STD. RWF-1-1
- 45 STD. MPA-1-1
- 46 STD. CP-2-0
- 47 STD. SMD-1-0
- 48 STD. CDI-1-2
- 49 STD. CBDI-1-3
- 50 STD. BC-52
- 51 STD. BC-62
- 52 STD. BC-654RF
- 53 STD. BC JOINTS
- 54 STD. J-8-55
- 55 STD. P-4F-2
- 56 STD. PCD-3-3
- 57 STD. PCD-5-0
- 58 STD. SGF-1
- 59 STD. BC-13
- 60 STD. BC-16
- 61 GENERAL ELEVATION PLAN & SUMMARY OF QUANTITIES STR. NO. 1 Br.
- 62 GENERAL ELEVATION PLAN & SUMMARY OF QUANTITIES STR. NO. 2 Br.
- 63 GENERAL ELEVATION PLAN & SUMMARY OF QUANTITIES STR. NO. 4 Br.
- 64 GENERAL ELEVATION PLAN & SUMMARY OF QUANTITIES STR. NO. 6 Br.
- 65 GENERAL ELEVATION PLAN & SUMMARY OF QUANTITIES STR. NO. 7 Br.
- 66 GENERAL ELEVATION PLAN & SUMMARY OF QUANTITIES STR. NO. 8 Br.
- 67 DETAILS OF PIERS FOR 30-55-55-30 CONTINUOUS CONCRETE SLAB SPAN
- 68 DETAIL OF PIERS STR. NOS. 7 Br. & 8 Br.
- 69 DETAIL OF ABUTMENTS STR. NO. 4 Br.
- 70 STD. A-CCS-170-24
- 71 STD. CCS-170-24
- 72 STD. CCS-170-24
- 73 STD. C.S. 100-238
- 74 STD. C.S. 100-238
- 75 STD. A.C.S. 100-238
- 76 STD. CSP-2
- 77 DELETED
- 78 STD. IASD-1
- 79-189 CROSS SECTIONS

SCALES

PLAN 1"=100'
 PROFILE (HOR. 1"=100'
 VER. 1"=10'
 CROSS SECTIONS 1"=10'
 LAYOUT MAP 1"=2640'

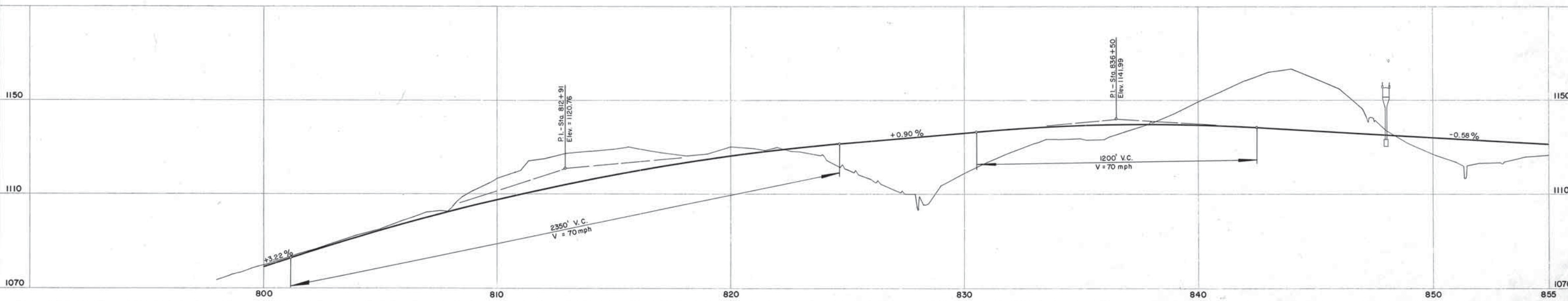
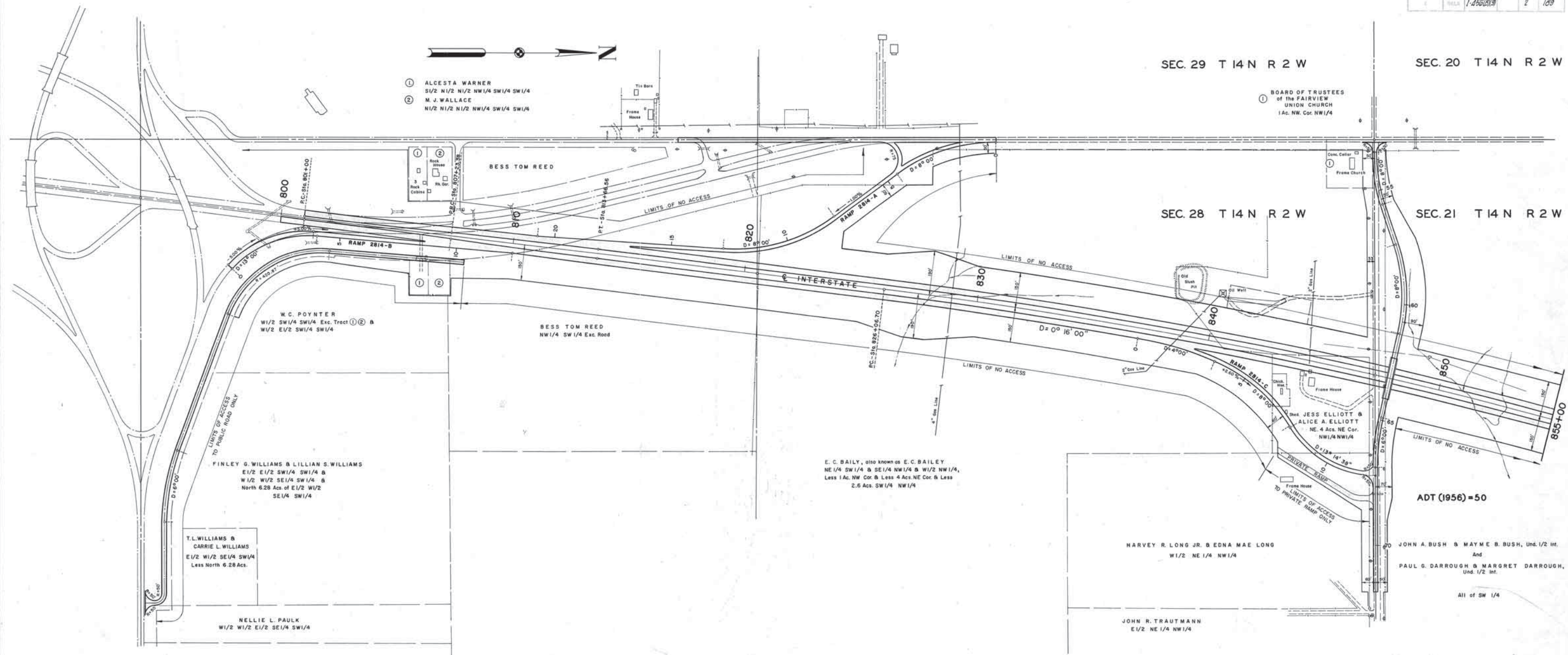
U.S.C. & G.S. LEVEL DATUM
 BEARINGS FROM OBSERVATION ON POLARIS
CONVENTIONAL SIGNS

- PROPOSED ROAD
- RAILROADS
- RANGE & TOWNSHIP LINES
- SECTION LINES
- QUARTER SECTION LINES
- FENCES
- BASE LINE
- RIGHT-OF-WAY LINES
- GROUND LINES
- GRADE LINE
- TRAVELLED ROADS
- CULVERTS & BRIDGES
- TELEPHONE & TELEGRAPH
- POWER LINES
- BUILDINGS
- UNLOADING POINTS
- OIL WELLS
- RIGHT OF WAY MARKERS

FA SPECIAL PROVISIONS GOVERN AND
 STATE STANDARD SPECIFICATIONS GOVERN APPROVED APRIL 28, 1955

FA PROJECT NO. I-456(8)(9) SHEET NO. 1
 I-35-4(8)(9)

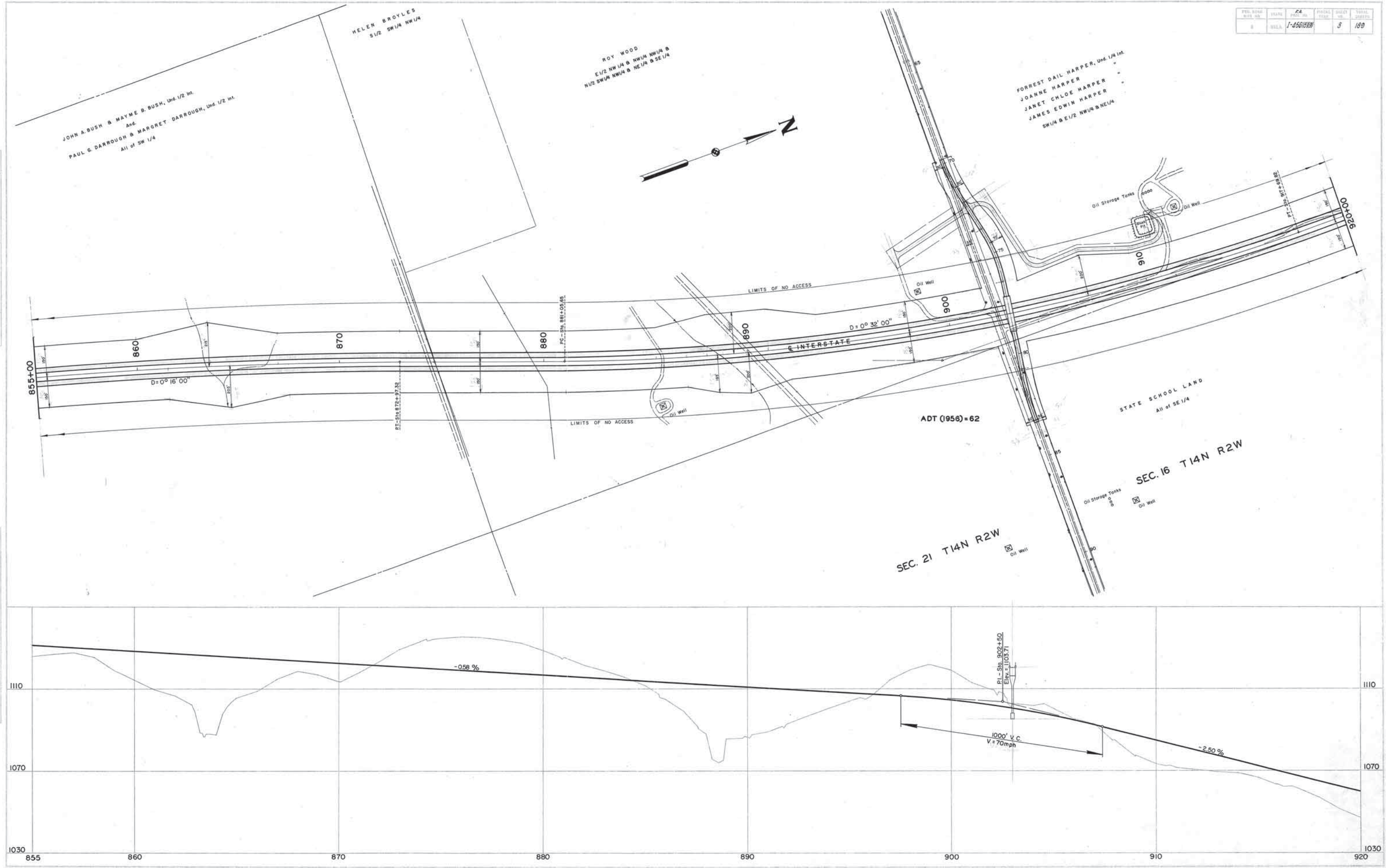
FEED	DATE	BY	CHKD	DATE	BY	CHKD	DATE	BY	CHKD
1	1-15-56	WLA		2	1-15-56	WLA			



FED. ROAD DIST. NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS
8	WLA	I-456(8)9	3	180

PLAN	DATE	BY	CHECKED
NO. 1			
NO. 2			
NO. 3			
NO. 4			
NO. 5			
NO. 6			
NO. 7			
NO. 8			
NO. 9			
NO. 10			

PROFILE	DATE	BY	CHECKED
NO. 1			
NO. 2			
NO. 3			
NO. 4			
NO. 5			
NO. 6			
NO. 7			
NO. 8			
NO. 9			
NO. 10			



FILE NO.	STATE	FE	PROJECT	SHEET	TOTAL
1-456(8X9)	GA	1-456(8X9)	1-456(8X9)	4	109

FORREST DAIL HARPER, Und. 1/4 Int.
 JOANNE HARPER *
 JANET CHLOE HARPER *
 JAMES EDWIN HARPER *
 SW 1/4 & E 1/2 NW 1/4 & NE 1/4

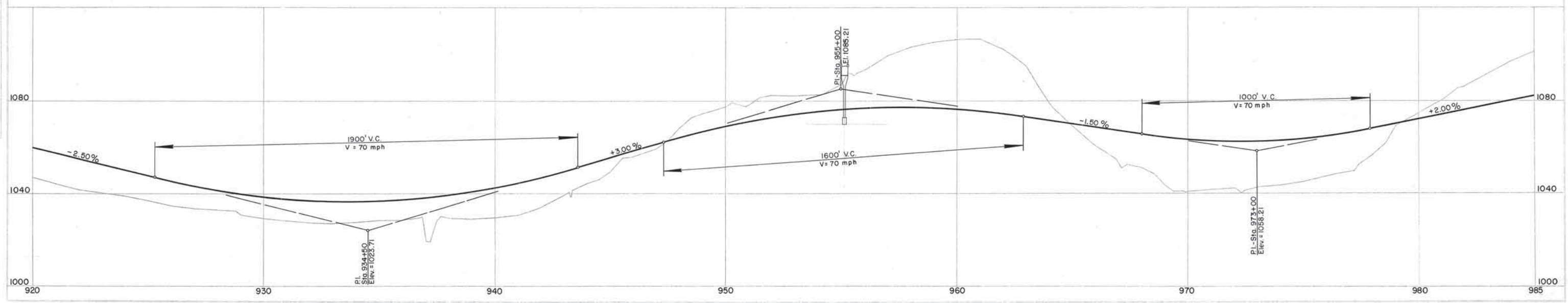
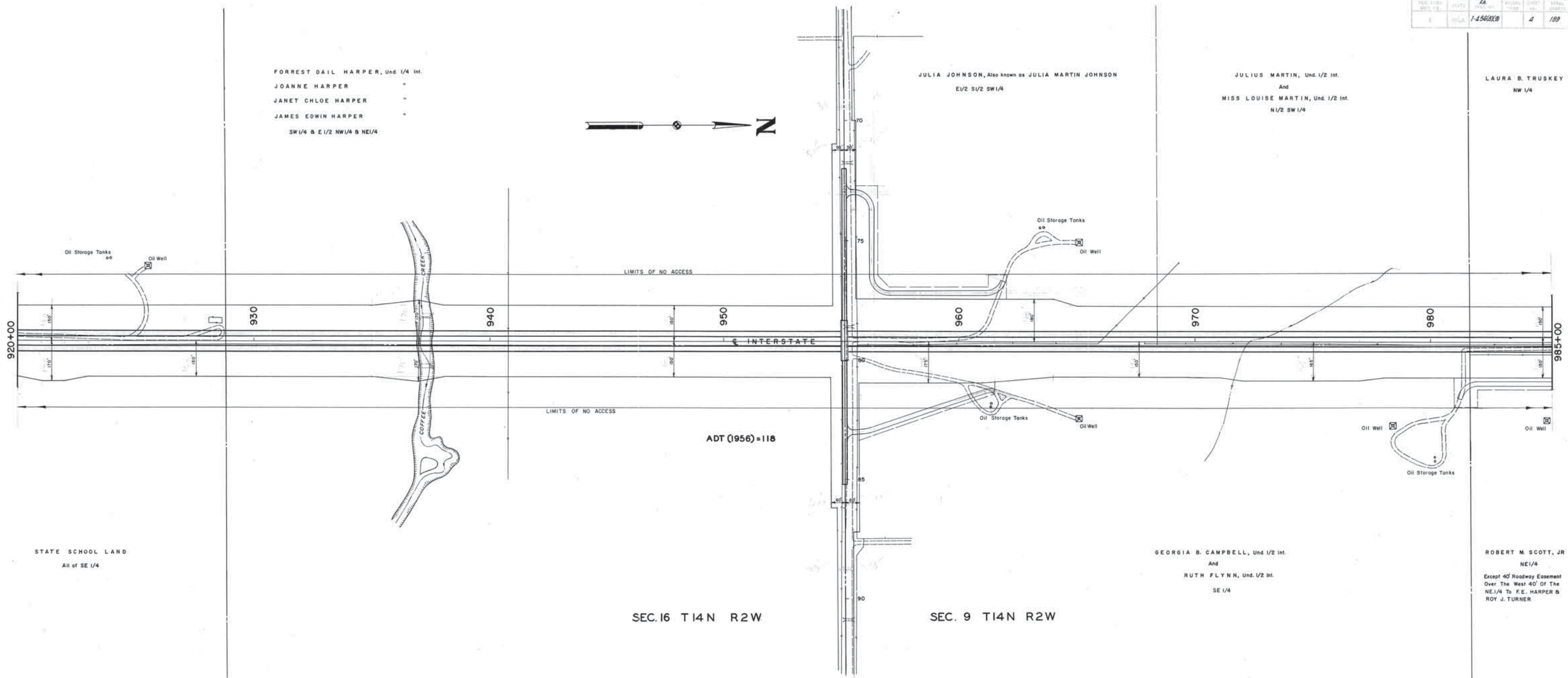
JULIA JOHNSON, Also known as JULIA MARTIN JOHNSON
 E 1/2 SW 1/4

JULIUS MARTIN, Und. 1/2 Int.
 And
 MISS LOUISE MARTIN, Und. 1/2 Int.
 NE 1/2 SW 1/4

LAURA B. TRUSKEY
 NW 1/4

GEORGIA B. CAMPBELL, Und. 1/2 Int.
 And
 RUTH FLYNN, Und. 1/2 Int.
 SE 1/4

ROBERT M. SCOTT, JR.
 NE 1/4
 Except 40' Roadway Easement
 Over The West 40' Of The
 NE 1/4 To F.E. HARPER &
 ROY J. TURNER



FILE NO.	DATE	BY	CHKD.	APP'D.	DATE
1-456(8)9	1-25-69	5			1/29

LAURA B. TRUSKEY
NW 1/4

JULIUS MARTIN
S1/2

MIRIAM L. BOUCHER, Und. 2/3 Int.
W. L. BOUCHER, Und. 1/3 Int.
Lot 3 B SE 1/4 NW 1/4

ROBERT M. SCOTT, JR.
NE 1/4
Except 40' Roadway Easement
Over The West 40' Of The
NE 1/4 To F. E. HARPER &
ROY J. TURNER

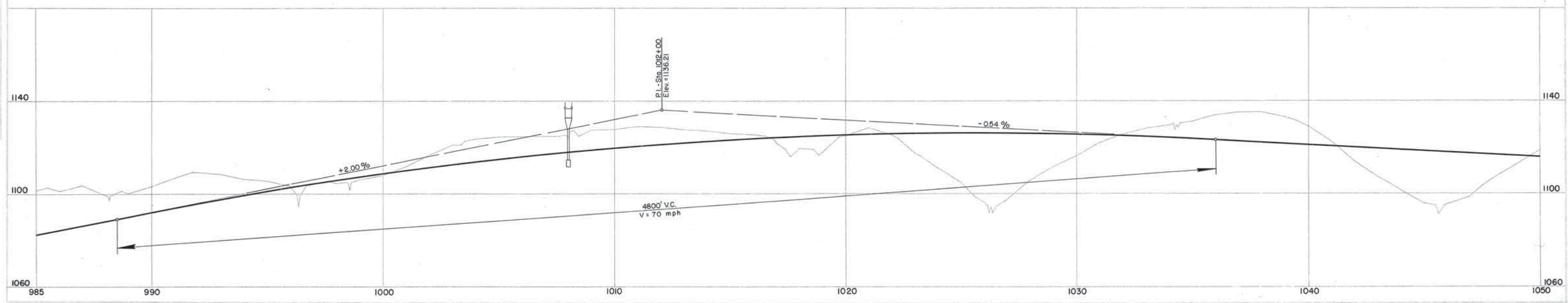
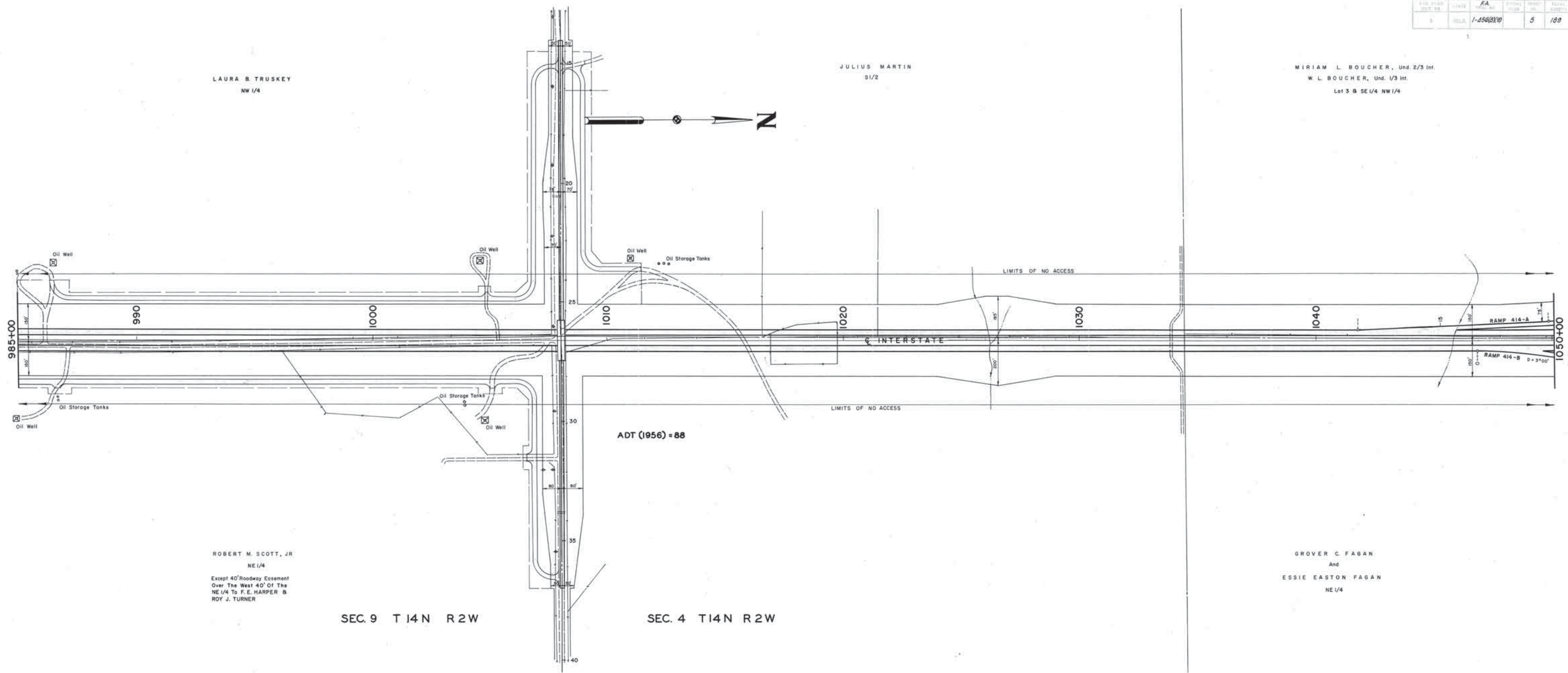
GROVER C. FAGAN
And
ESSIE EASTON FAGAN
NE 1/4

SEC. 9 T14N R2W

SEC. 4 T14N R2W

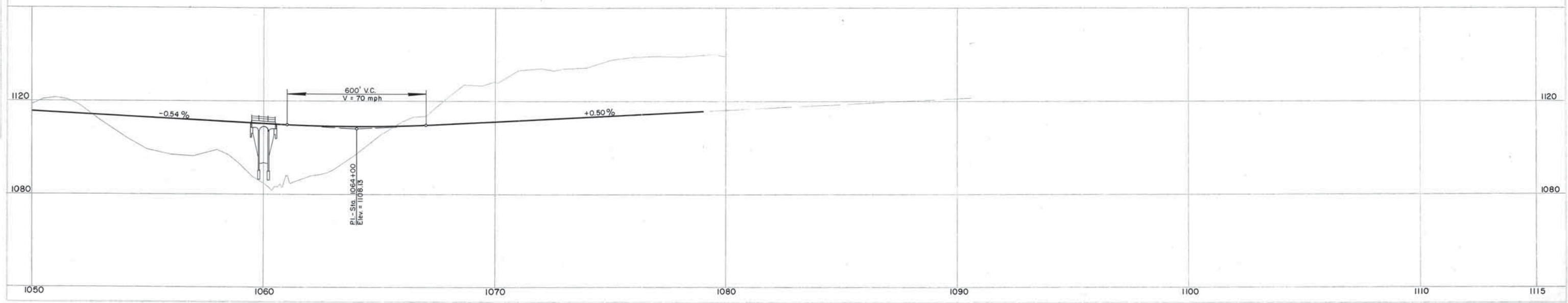
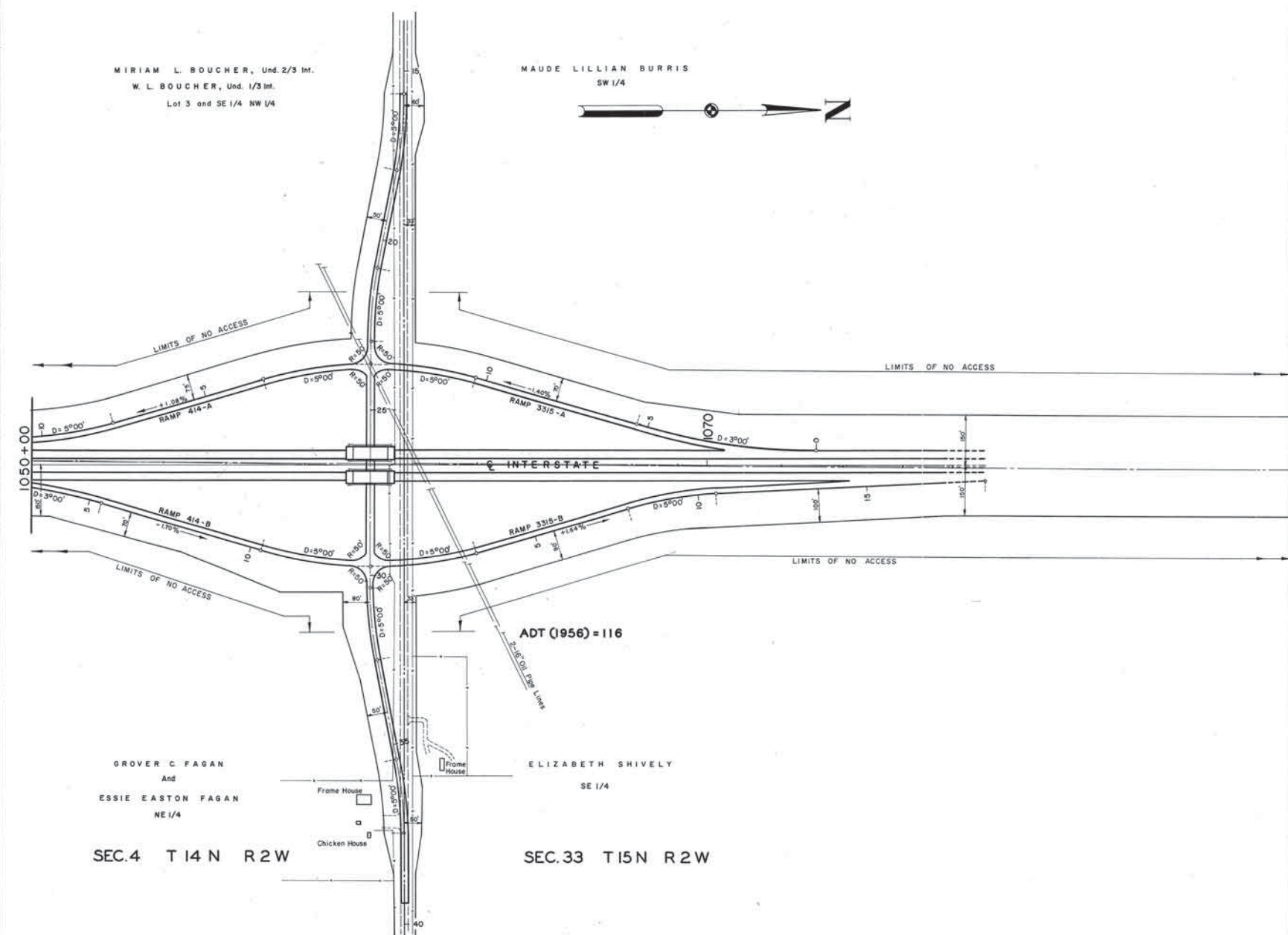
ADT (1956) = 88

LIMITS OF NO ACCESS



FILE NO.	DATE	RA	FILE NO.	DATE	RA
1-456(8)9			1-456(8)9		

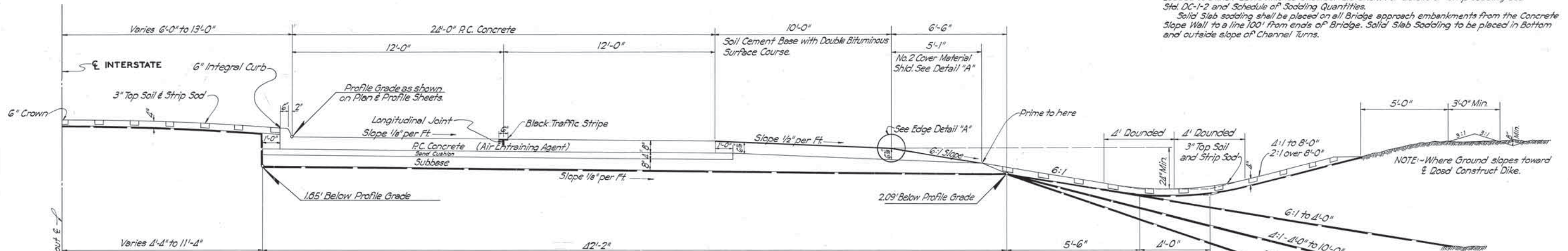
1-456(8)9



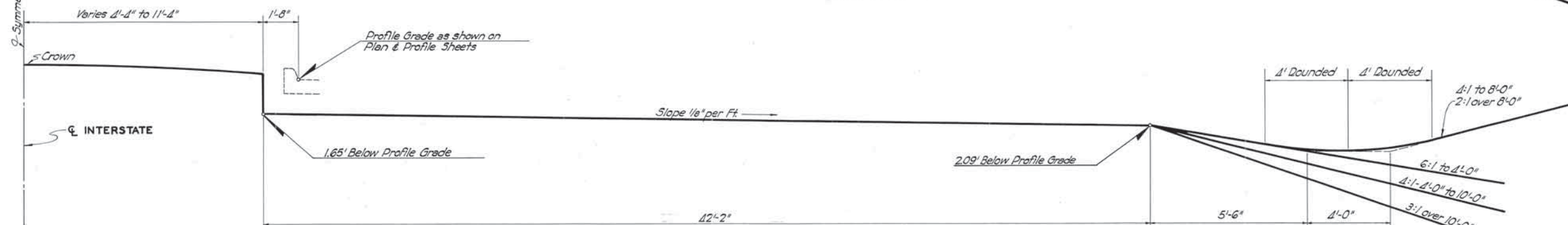
TYPICAL SECTIONS INTERSTATE

TYPICAL SECTION NOTES

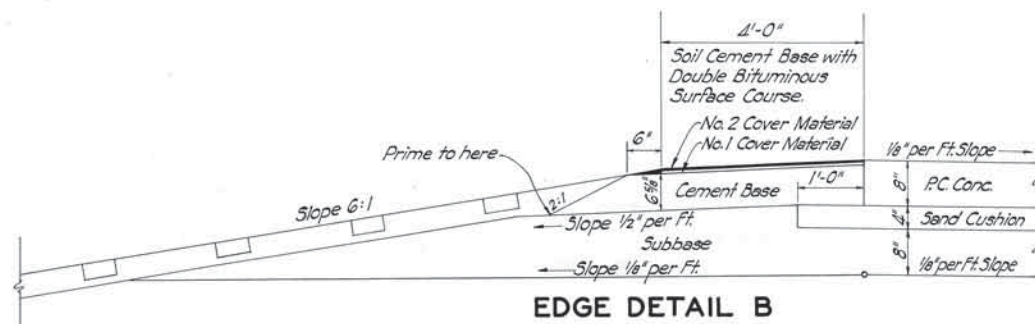
For Details of R.C. Concrete See Typical Joint Layout Sheet No.36 and Std. PCD-3-3 and Std. P-4F-2 and Std. J-8-55.
 All disturbed areas that are not Strip or Solid Slab Sod shall be Plug Soddied.
 All Top soil in Strip soddied areas to be 3" thick, placed directly.
 All Top soil in Plug soddied areas to be 4" thick, placed directly.
 All soddied areas to be fertilized.
 All ditches that have a 1.5% grade or more shall be Strip soddied. Back Slopes to be Strip soddied to a line 1' above finished Shoulder. Elevation. For details of Strip soddied see Std. DC-1-2 and Schedule of Soddied Quantities.
 Solid Slab soddied shall be placed on all Bridge approach embankments from the Concrete Slope Wall to a line 100' from ends of Bridge. Solid Slab Soddied to be placed in Bottom and outside slope of Channel Turns.



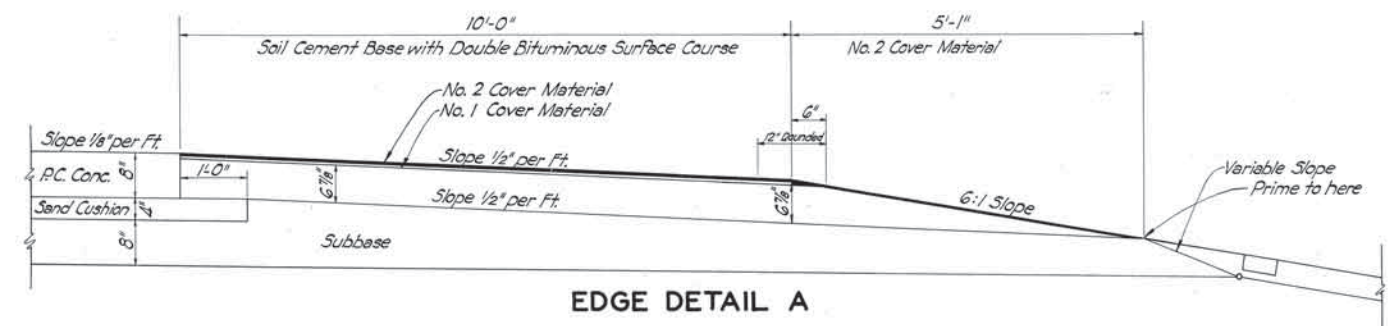
TYPICAL SURFACING SECTION OF INTERSTATE STA.800+01.22 TO STA.807+33.28
(LESS INTERSECTIONS)



TYPICAL GRADING SECTION OF INTERSTATE STA.800+01.22 TO STA.807+33.28
(LESS INTERSECTIONS)



EDGE DETAIL B



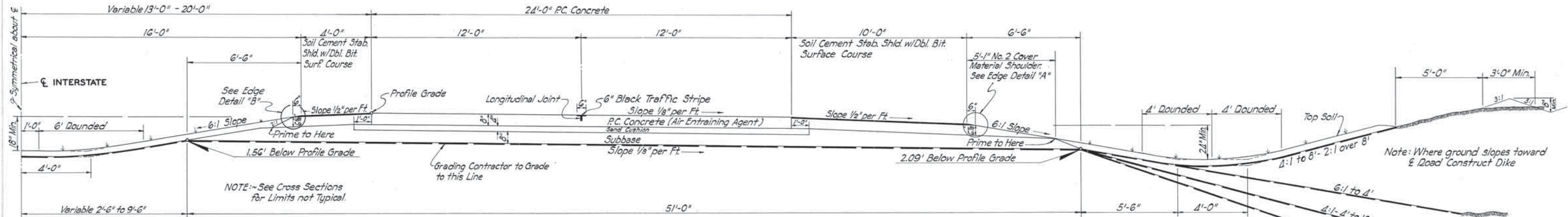
EDGE DETAIL A

I-35-4(8)
1-456(8)(9)

TYPICAL SECTIONS INTERSTATE

REV.	DATE	BY	CHKD.	APP'D.
1	1-25-68(19)			

See Sheet No. 7 for General Notes pertaining to placement of Top Soil and Sodding.

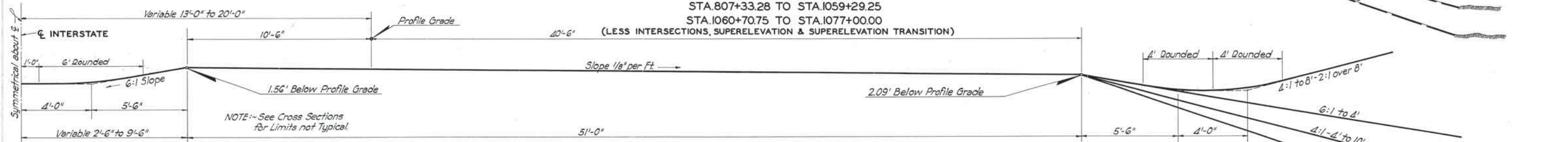


TYPICAL SURFACING SECTION

STA. 807+33.28 TO STA. 1059+29.25

STA. 1060+70.75 TO STA. 1077+00.00

(LESS INTERSECTIONS, SUPERELEVATION & SUPERELEVATION TRANSITION)

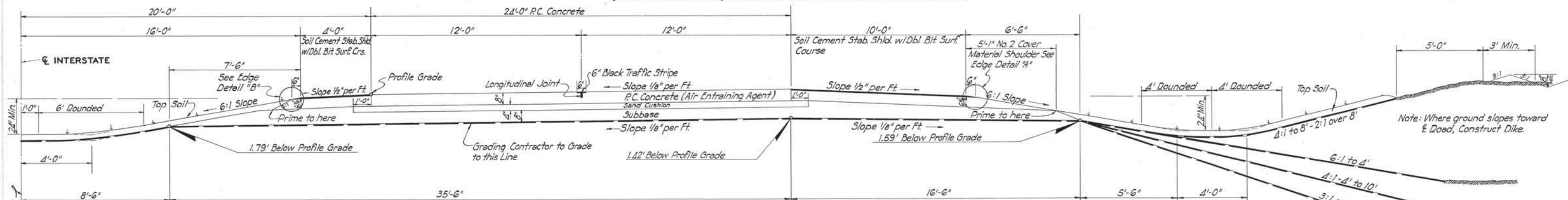


TYPICAL GRADING SECTION

STA. 807+33.28 TO STA. 1059+49.25

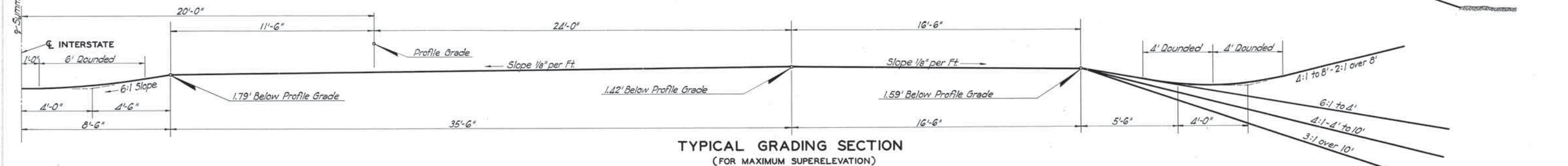
STA. 1060+50.75 TO STA. 1077+00.00

(LESS INTERSECTIONS, SUPERELEVATION & SUPERELEVATION TRANSITION)



TYPICAL SURFACING SECTION

(FOR MAXIMUM SUPERELEVATION)



TYPICAL GRADING SECTION

(FOR MAXIMUM SUPERELEVATION)

PERIOD 1967-68	1968-69	5A 1969-70	1970-71	1971-72	1972-73
9	281.6	1-456(8)(9)		9	189

See Sheet No. 7 for General Notes pertaining to placement of Top Soil and Sadding.

20'-0"

16'-0"

4'-0"

12'-0"

24'-0" P.C. Concrete

12'-0"

10'-0"

6'-0" Rounded Top Soil

8'-6"

6"

See Edge Detail 113"

Soil Cement Shld. w/ Dbl. Bit Surf. Crs.

Slope $\frac{1}{4}$ " Per Ft.

Prime to Here

Long. Joint

6" Black Traffic Stripe

P.C. Concrete (Air Entraining Agent)

Sand Cushion

Subbase

Slope $\frac{1}{4}$ " Per Ft.

Slope $\frac{1}{4}$ " Per Ft.

0.25' Below Profile Grade

Concrete Slope Wall

2:1 Slope

2.04' Below Profile Grade

1.46' Below Profile Grade

56'-0"

TYPICAL SURFACING SECTION OF INTERSTATE UNDER SECTION LINE BRIDGES

56'-0"

1.46' Below Profile Grade

0.25' Below Profile Grade

2:1 Slope

2.04' Below Profile Grade

TYPICAL GRADING SECTION OF INTERSTATE
UNDER SECTION LINE BRIDGES

TYPICAL SURFACING SECTION OF SECTION LINE ROAD UNDER INTERSTATE BRIDGE AT STA. 1060+00

2:1 Slope

21'-3"

21'-3"

2:1 Slope

1.80' Below Profile Grade

Elev. 1092.82

1.80' Below Profile Grade

Elev. 1093.36

1.80' Below Profile Grade

Slope $\frac{1}{8}$ " Per Ft

Slope $\frac{1}{8}$ " Per Ft

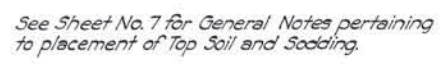
**TYPICAL GRADING SECTION OF SECTION LINE ROAD
UNDER INTERSTATE BRIDGE AT STA. 1060+00**

TYPICAL GRADING SECTION OF SECTION LINE ROAD
UNDER INTERSTATE BRIDGE AT STA.1060+00

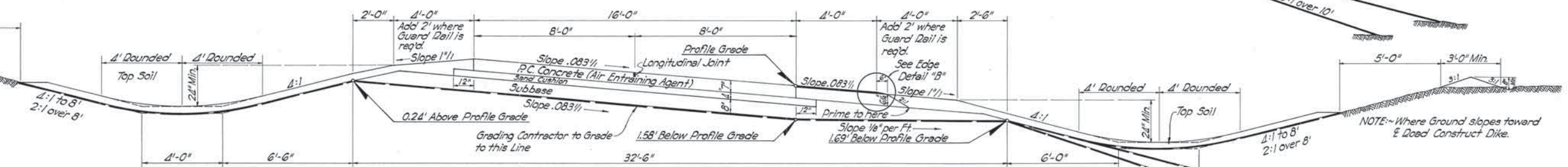
F.A. PROJECT NO. 1-456(8)(9) SHEET NO. 9

7-35-4(8)

PLA 8-12 2012-13	2011-12	F.A. 2011-12	2012-13 F.A.	2012-13 F.A.	2012-13 F.A.
8	1-25(8/9)		10	189	



TYPICAL GRADING SECTION
ON TANGENT



The diagram illustrates a typical grading section for a curve to the right. Key features include:

- Left Side:** A vertical curve with a 4:1 to 8:1 slope on the left and a 2:1 over 8:1 slope on the right. The curve is 22'-0" long, with 4'-0" and 6'-6" segments. It is 0.24' above the profile grade.
- Center:** A horizontal section with a slope of .083%. It is 10'-6" long, with a 2' segment where a guard rail is used. The elevation is 1.58' below the profile grade.
- Right Side:** A vertical curve with a 4:1 to 8:1 slope on the left and a 2:1 over 8:1 slope on the right. The curve is 10'-6" long, with 4'-0" and 6'-0" segments. It is 1.69' below the profile grade.

**TYPICAL GRADING SECTION
CURVE TO RIGHT**

[illegible]

**TYPICAL GRADING SECTION
CURVE TO LEFT**

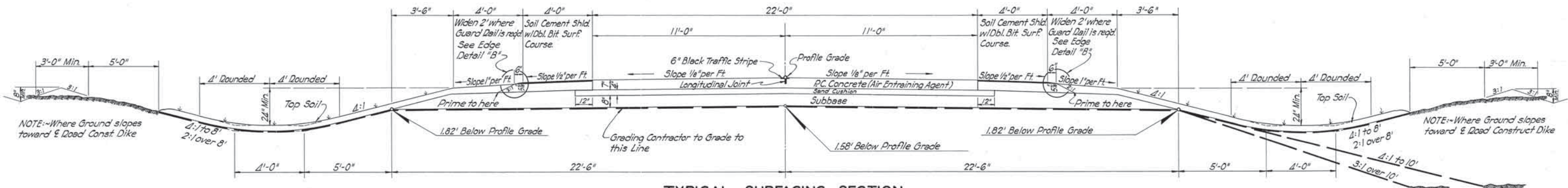
The diagram illustrates a cross-section of a road with the following dimensions and grades:

- Left Side (Shoulder):**
 - Top slope: 4:1 to 8', 2:1 over 8'
 - Bottom slope: 4:1
 - Horizontal dimensions: 4'-0" (twice), 4'-0"
 - Vertical dimension: 4'-0"
- Main Roadway:**
 - Top slope: 8'-0" (with note: "Add 2' where Guard Rail is used")
 - Bottom slope: 16'-0"
 - Vertical dimension: 2.99' Below Profile Grade
 - Grade: Slope 1/8" per Ft
- Right Side (Shoulder):**
 - Top slope: 10'-0" (with note: "Add 2' where Guard Rail is used")
 - Bottom slope: 0.75' Below Profile Grade
 - Grade: Slope .083 1/4
 - Horizontal dimensions: 4'-0" (twice), 4'-0"
 - Vertical dimension: 4'-0"
 - Bottom slope: 4:1 to 10', 3:1 over 10'

TYPICAL SECTIONS SECTION LINE ROADS

PROJECT	DATE	BY	CHKD	APP'D	SCALE
1-456(8)(9)	11				1/8"

See Sheet No. 7 For General Notes pertaining to placement of Top Soil and Sodding.



TYPICAL SURFACING SECTION

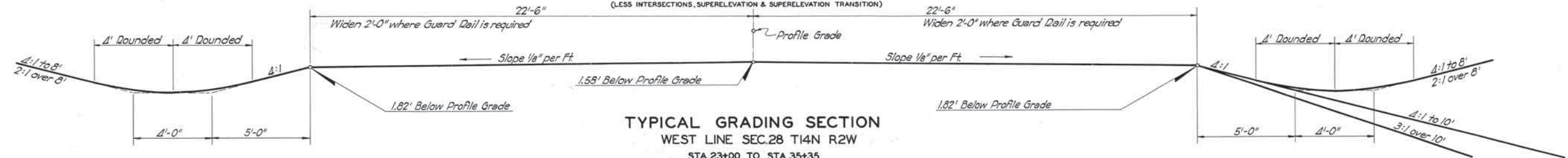
WEST LINE SEC.28 T14N R2W

STA.23+00 TO STA.35+35

NORTH LINE SEC.4 T14N R2W

STA.15+65.38 TO STA.37+64.34

(LESS INTERSECTIONS, SUPERELEVATION & SUPERELEVATION TRANSITION)



TYPICAL GRADING SECTION

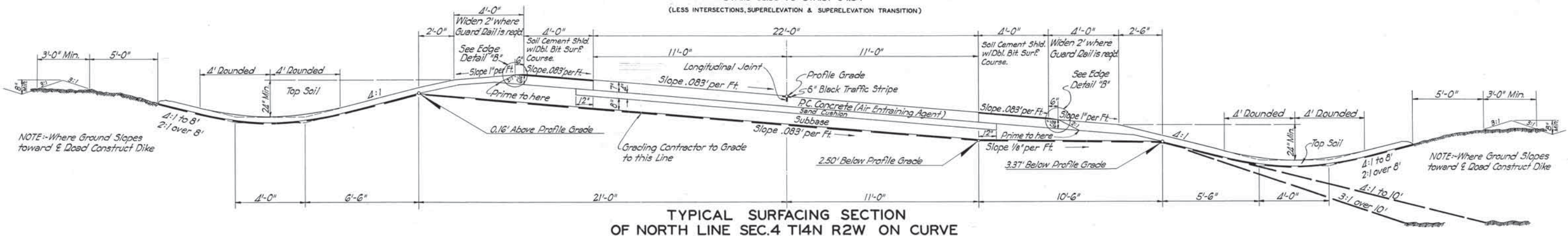
WEST LINE SEC.28 T14N R2W

STA.23+00 TO STA.35+35

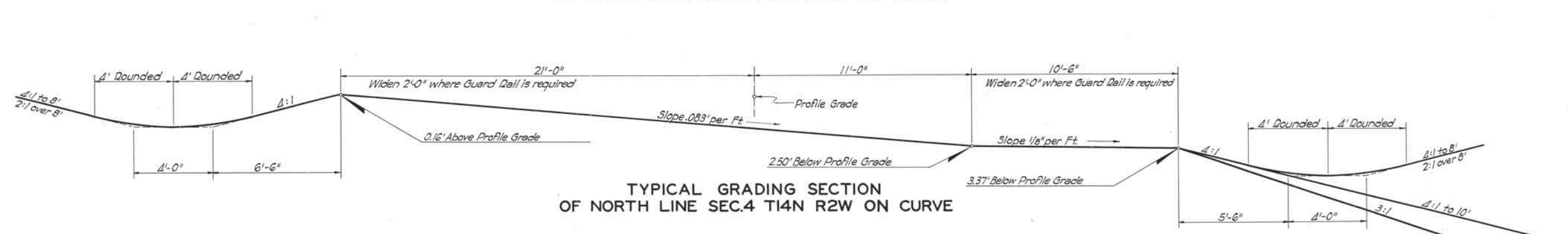
NORTH LINE SEC.4 T14N R2W

STA.15+65.38 TO STA.37+64.34

(LESS INTERSECTIONS, SUPERELEVATION & SUPERELEVATION TRANSITION)



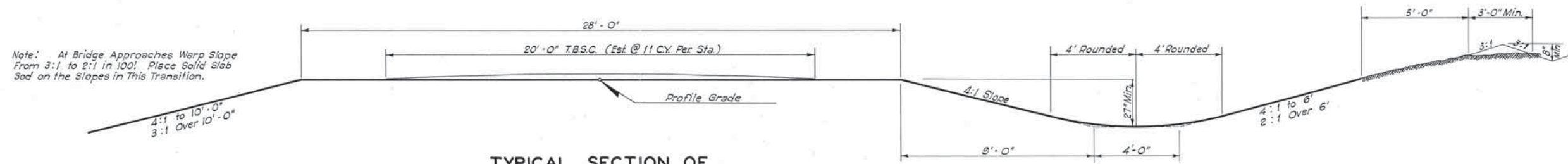
TYPICAL SURFACING SECTION OF NORTH LINE SEC.4 T14N R2W ON CURVE



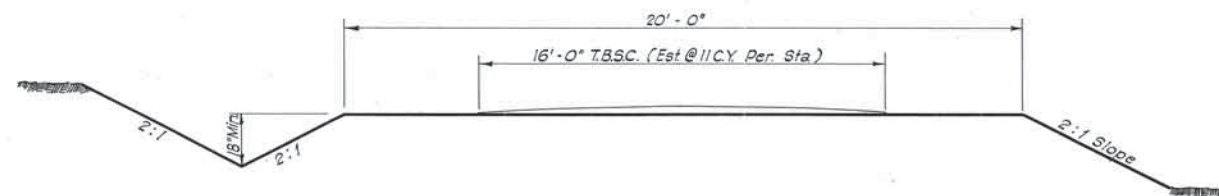
TYPICAL GRADING SECTION OF NORTH LINE SEC.4 T14N R2W ON CURVE

FED. ROAD DIST. NO.	STATE	F.A. PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
4	W.VA.	1-456(8)		12	189

TYPICAL SECTIONS



TYPICAL SECTION OF
SECTION LINE ROADS OVER INTERSTATE
AND
PUBLIC ROADS



TYPICAL SECTION OF PRIVATE ROADS

PLAN	DATE	BY	CHECKED	DATE
NO. 1				

PROFILE	DATE	BY	CHECKED	DATE
NO. 1				

SUMMARY SHEET

PER. NO.	DATE	FA	REVISION	DATE	REVISION
1	10/1/80	1-456(2)9	13	1/3	1/3

SUMMARY OF SHEET ESTIMATES

Plan & Profile Sheet No.	STATION - STATION	Embankment + 15% CU. YDS.	Class "D" Excavation CU. YDS.	Borrow CU. YDS.	Overhaul SEC. YDS.	Traffic Bound Surface Course CU. YDS. Grading Contract	Traffic Bound Surface Course CU. YDS. Surfacing Contract	Right-of-Way Fence LIN. FT.	Right-of-Way Fence Gates EACH	Right-of-Way Markers EACH	Class "C" Concrete CU. YDS.
18	Ramp 2814-A	0	14,800	0	0						
19	Ramp 2814-C	2,469	17,553	0	0						
19	Sta 811+00 to Sta 837+00	113,877	84,504	2,889	181,093			5,951	1	6	65.89
20	Sta 837+00 to Sta 864+70.74	127,024	123,847	3,077	203,077			5,718			126.22
21	Sta 864+70.74 to Sta 907+00	161,489	172,266	0	126,500			8,512	2		147.75
22	Sta 907+00 to Sta 961+97.14	220,119	221,919	0	607,000			11,064	2		143.76
24	Sta 961+97.14 to Sta 1008+27.82	158,648	220,609	12,745	154,163			8,836	2		71.88
26	Sta 1008+27.82 to Sta 1042+64.17	123,581	115,313	10,288	121,668			7,417			89.85
26	Sta 1042+64.17 to Sta 1077+00	180,549	217,843	0	296,000			7,150			
28	North Line Section 28	32,412	9,183	23,219	13,200	800.0				18	
29	North Line Section 21	16,422	5,645	0	5,000	320.0				14	
30	North Line Section 16	2,207	7,216	0	0	357.5				8	
31	North Line Section 9	82,576	1,061	0	139,000	1,182.5				17	
32	North Line Section 4	39,077	7,064	0	57,022	20.0	35.0			16	
28	Ramp 414-A	0	20,114	0	0						
26	Ramp 414-B	32,823	2,324	0	30,770						
27	Ramp 3315-A	13,420	3,716	0	1,000						
27	Ramp 3315-B	3,932	28,580	0	0						
TOTALS		1,323,625	1,271,827	51,798	1,884,493	2,130.00	35.0	54,643	7	79	645.35

SUMMARY OF SURFACING QUANTITIES

Plan & Profile Sheet No.	STATION - STATION	Cement Barrels	Suitable Soil + 40% CU. YDS.	Embankment + 15% CU. YDS.	Class "D" Excavation CU. YDS.	Overhaul SEC. YDS.	No. 1 Cover Material CU. YDS.	No. 2 Cover Material CU. YDS.	Asphalt Binder Gallons	8" P.C. Concrete Pavement S.Y.	7" P.C. Concrete Pavement S.Y.	4" Sand Cushion S.Y.	6" Black Traffic Stripes LIN. FT.	Prime Material Gallons
18	Sta 800+01.22 to Sta 811+00	390.14	889.10	349	27,037	0	43.88	55.29	33.40	6,128.77		6637.33	2,088.78	790
18	Ramp 2814-B	64.87	149.49	205	384	0	8.00	8.38	403		1737.50	1954.63		132
18	West Line Section 28	158.42	380.47	3858	3221	1874	20.77	20.24	1005		3595.83	3922.73	1511.93	347
18	Ramp 2814-A	80.29	208.08	1872	1464	818	11.42	12.34	551		2755.33	3099.84		181
19	Ramp 2814-C	65.44	150.80				8.04	7.75	368		2023.48	1788.65		134
19	Sta 811+00 to Sta 837+00	1230.88	2836.58				134.81	157.32	7110	14,308.88		15,501.24	5200.00	2398
20	Sta 837+00 to Sta 864+70.74	1258.08	2899.28				143.67	166.80	7556	14,949.97		16,195.75	5541.48	2550
21	Sta 864+70.74 to Sta 907+00	1923.82	4433.50				218.29	255.04	11,543	22,558.05		24,435.65	8458.52	3895
22	Sta 907+00 to Sta 961+97.14	2515.32	5798.82				285.04	333.28	15,048	28,318.08		31,781.16	10,994.28	5075
24	Sta 961+97.14 to Sta 1008+27.82	2031.11	4680.75				228.74	269.08	12,140	23,630.29		25,598.40	8861.36	4084
26	Sta 1008+27.82 to Sta 1042+64.17	1888.97	3841.59				188.55	230.64	9,833	19,393.87		21,008.96	7272.70	3360
26	Sta 1042+64.17 to Sta 1077+00	1510.19	3460.28				170.82	200.07	9,026	18,801.93		20,368.70	6588.66	3044
32	North Line Section 4	234.47	540.34				30.07	29.29	1,455		5297.01	5778.56	2198.88	605
34	Ramp 414-A	78.30	180.44				10.13	9.87	490		2682.75	2995.59		170
34	Ramp 414-B	70.71	162.98				8.11	7.90	392		1997.38	2247.03		151
35	Ramp 3315-A	70.71	162.98				8.11	7.90	392		1997.38	2247.03		151
35	Ramp 3315-B	78.30	180.44				10.13	9.87	490		2682.75	2995.59		170
TOTALS		13,436.00	30,963.64	6,084	32,086	2,490	1,530.58	1,771.24	81,290	149,085.84	24,504.54	188,773.72	58,728.67	27,157

SCHEDULE OF GUIDE POSTS

LOCATION	NO.	LOCATION	NO.	LOCATION	NO.
St 822+00	1	Lt 1047+53 to 1048+53	3	Lt 73+01 North Line Section 21	1
St 833+00 to 837+00	3	St 1050+33 to 1051+33	3	St 68+24 to 73+70 (North Line Section 21) On Curve	12
Lt 825+00	1	Lt 1054+95 to 1058+95	2	St 79+59 to 87+73 (North Line Section 21) On Curve	10
Lt 834+00	1	Lt 4+09 to 7+69 (Ramp 414-B) On Curve	5	St 17+20 to 23+20 (North Line Section 9)	4
St 840+25 to 841+25	3	St 0+50 to 7+15 (Ramp 414-A) On Curve	11	Lt 19+20 to 23+20 (North Line Section 9)	3
Lt 3+53 to 11+22 (Ramp 2814-C) On Curve	18	Lt 3+97 to 11+16 (Ramp 414-A) On Curve	11	St 30+00 to 34+00 (North Line Section 9)	3
St 4184 to 10+73 (Ramp 2814-C) On Curve	15	Lt 5+07 to 9+46 (Ramp 3315-A) On Curve	5	Lt 30+00 to 36+00 (North Line Section 9)	4
St 857+00	1	St 6+50 to 9+75 (Ramp 3315-A) On Curve	3	Lt 11+52 to 18+71 (North Line Section 4) On Curve	11
Lt 850+00 to 854+00	5	St 12+91 Ramp 3315-A	1	St 18+82 to 25+23 (North Line Section 4) On Curve	12
Lt 858+00 to 870+00	7	St 0+89 to 7+02 (Ramp 3315-B) On Curve	9	Lt 19+85 to 25+23 (North Line Section 4) On Curve	10
St 875+80 to 888+09 (On Curve)	9	Lt 3+85 to 10+50 (Ramp 3315-B) On Curve	11	Lt end St 28+50 North Line Section 4	2
St 884+91 to 919+30 (On Curve)	27	Lt 1088+55 to 1089+55	3	Lt 30+52 to 30+93 (North Line Section 4) On Curve	2
Lt 893+00 to 895+00	2	St 1070+83 to 1071+83	3	St 33+38 to 36+59 (North Line Section 4) On Curve	3
St 926+30 to 930+30	3	St 53+36 to 56+08 (North Line Section 28) On Curve	9	Lt 31+35 to 41+81.43 (North Line Section 4) On Curve	13
Lt 929+00 to 935+00	4	St 59+80.80 to 59+91.8 (North Line Section 28) On Curve	2		
Lt 940+50	1	Lt 55+94 to 59+29 (North Line Section 28) On Curve	9		
St 944+80	1	St 68+35 to 70+32.58 (North Line Section 28) On Curve	5		
St 1017+00 to 1019+00	2	Lt 67+34 to 70+39 (North Line Section 28) On Curve	3	TOTAL	280

SCHEDULE OF METAL PLATE GUARD RAIL

LOCATION	LIN. FT.
St 824+00 to 831+00	700
Lt 828+00 to 832+00	600
St 11+00 Forward Ramp 2814-C	150
St 851+00 to 855+00	400
St 859+00 to 870+00	1100
Lt 880+00 to 886+00	600
St 887+00 to 894+00	700
Lt 895+00 to 893+00	800
Lt 906+00 to 927+00	2100
St 921+30 to 924+30	300
St 932+30 to 942+30	1050
Lt 936+00 to 938+50	250
Lt 941+50 to 947+00	550
St 946+00 to 978+00	1200
Lt 969+15 to 979+15	1000
St 1023+20 to 1029+70	680
Lt 1024+00 to 1030+00	600
St 1043+40 to 1047+90	450
St 12+30 to 16+80 Ramp 414-A	450
St 8+55 to 13+55 Ramp 414-B	500
Lt 9+10 to 13+35 Ramp 414-B	425
St 1054+40.25 to 1059+40.25	450
St 1058+95.25 to 1059+45.25	50
Lt 1058+95.25 to 1059+45.25	50
St 106+54.75 to 1061+04.75	50
Lt 1060+54.75 to 1061+04.75	50
St 1061+10 to 1063+10	200
Lt 1061+10 to 1064+80	850
St 10+50 to 12+50 Ramp 3315-A	200
Lt 12+00 to 12+50 Ramp 3315-A	50
St 0+04.50 to 0+58 Ramp 3315-B	62.5
Lt 0+06 to 0+58 Ramp 3315-B	50
Lt 59+80.30 to 61+72.80 North Line Section 28	212.5
St 60+22.80 to 61+72.80 North Line Section 28	150
St 61+72.80 to 62+27.80 North Line Section 28	50
St 64+07.30 to 64+57.30 North Line Section 28	50
St 64+07.30 to 64+57.30 North Line Section 28	50
St 64+62.30 to 65+99.80 North Line Section 28	137.5
Lt 64+62.30 to 65+99.80 North Line Section 28	237.5
Lt 73+57.48 to 76+57.48 North Line Section 21	300
St 75+32.48 to 76+57.48 North Line Section 21	125
Lt 76+82.48 to 77+12.48 North Line Section 21	50
St 76+82.48 to 77+12.48 North Line Section 21	50
Lt 78+92.18 to 79+42.18 North Line Section 21	50
St 78+92.18 to 79+42.18 North Line Section 21	50
Lt 77+83.68 to 78+33.68 North Line Section 18	50
Lt 77+83.68 to 78+33.68 North Line Section 18	50
Lt 80+13.08 to 80+63.08 North Line Section 16	50
Lt 80+13.08 to 80+63.08 North Line Section 16	50
Lt 25+10.17 to 25+69.17 North Line Section 9	50
St 25+10.17 to 25+69.17 North Line Section 9	50
Lt 27+46.67 to 27+96.67 North Line Section 9	50
St 27+46.67 to 27+96.67 North Line Section 9	50
St 30+11 to 32+01 North Line Section 4	250
TOTAL	18,360

SCHEDULE OF SOLID SLAB AND STRIP SODDING

LOCATION	GRADING Strip Sod S.Y.	SURFACING Strip Sod S.Y.	SODDING Strip Sod S.Y.
St 100 to 12+12 Ditch Rt. (Ramp 2814-B)	830		
St 101+00 to 811+00 - Ditch Lt	670		
St 101+00 to 820+00 Median & Ditch Rt	670	870	
St 24+50 to 830+00 Ditch Lt	370		
St 28+80 Channel Rt		200	
St 48+00 Bridge Approaches			2380
St 52+00 Channel Rt		200	
St 57+00 to 870+00 Ditch Lt	870		
St 89+40 Channel Rt		100	
St 88+00 to 895+00 Ditch Rt	470		
St 89+00 Channel Rt		200	
St 908+00 Bridge Approaches			2290
St 908+00 to 930+00 Median		1800	
St 909+50 to 908+00 Ditch Lt	185		
St 909+50 to 934+00 Ditch Rt	2155		
St 921+30 to 930+00 Ditch Lt	580		
St 939+00 to 953+00 Median		935	
St 941+00 to 953+00 Ditch Rt	855		
St 947+00 to 953+00 Ditch Lt	400		
St 955+17.50 Bridge Approaches			685
St 963+00 to 968+00 Median		340	
St 963+00 to 968+50 Ditch Lt	235		
St 968+00 to 965+00 Ditch Rt	195		
St 968+00 to 972+00 Ditch Lt	270		
St 972+15 Channel Lt		450	
St 972+15 Channel Rt		900	
St 978+00 to 1000+00 Median		1800	
St 979+00 to 1000+00 Ditch Rt	1400		
St 980+00 to 985+00 Ditch Lt	1000		
St 986+38 Channel Lt		70	
St 1007+99.11 Bridge Approaches			1845
St 1017+00 Channel Lt		875	
St 1018+00 Channel Rt		225	
St 1026+40 Channel Lt		240	
St 1026+40 to 1032+00 Ditch Lt	375		
St 1045+85 Channel Lt		400	
St 1045+85 Channel Rt		100	
St 1058+00 Channel Lt		200	
St 1059+00 Channel Rt		200	
St 1060+00 Bridge Approaches			3725
St 1061+50 Channel Rt		800	
TOTAL	11,250	4,480	5,545

PRG. NO. & DATE	STATE	R.A. FROM	PRG. NO. & DATE	STATE	TOTAL SAVED
6	MA	1-25C(8/79)		12	189

Structure No.	P&P Sheet No.	Location	Description	Design	Design Sheet No.	Structural Excavation	Class "A" Concrete	Reinforcing Steel	Reinforced Concrete Pipe			Corr. Galv. Metal Pipe				Corr. Galv. Metal Pipe Arch				Cast Steel Grate	1/2" Galv. Iron Pipe Rolling	No. 8 Construction Joints & Sills	Remarks		
									Cu.Yd.	Cu.Yd.	Lb.	Lin. Ft.			Lin. Ft.				Lin. Ft.						
									18"	30"	36"	18"	24"	30"	36"	22" X 13"	29" X 18"	50" X 31"	Each	Lin.Ft.					
SURFACING																									
1	18	Sta. 783+85	Public Rd Rt	Const. 22"x13"x32" - 8" Rdy. CGMP Arch	MPA -1-1	45	3	0.84	34							34									
2	18	Sta. 787+55	Public Rd Rt	Const. 22"x13"x22" - 8" Rdy. CGMP Arch S.D. Rt	MPA -1-1	45	2	0.84	34							24									
3	18	Sta. 791+25	Public Rd Rt	Const. 22"x13"x22" - 8" Rdy. CGMP Arch	MPA -1-1	45	2	0.84	34							24									
4	18	Sta. 800+10	Public Rd Rt	Const. 50"x31"x22" - 8" Rdy. CGMP Arch	MPA -1-1	45	10	3.00	65									24							
5	18	Sta. 1+95	Ramp 2814"B"	Extend 36"x148" Long RCP -12" Rt. w/ 45° Wings	CP-21-O	46	7	2.29	132			16													
6	18	Sta. 807+50	Public Rd Rt	Const. 29"x18"x22" - 8" Rdy. CGMP Arch	MPA -1-1	45	2	1.24	42							24									
7	18	Sta. 807+70		Const. Std. Ht. Median Drain w/ 66 L.F. 18" CGMP w/ 45° Wg. Lt.	SMD-I-O & CP-21-O	45	120	1.68	210				66						1		17				
8	18	Sta. 24+53	-W. Line Sec. 28	Const. 30"x74" - 4" Rdy. RCP w/ Std. D.I. for 36" RCP Rt. & 45° Wg. Lt.	CP-21-O & CD1-1-2	46	385	3.96	308			76													
9	19	Sta. 32+70	-W. Line Sec. 28	Const. 18"x86" - 4" Rdy. RCP w/ 45° Wg.	CP-21-O	46	202	1.82	124	88															
TOTAL										733		16.51	983	88		76	16	66		82	24	24	1	17	
GRADING																									
10	18	Sta. 819+60		Const. 3'x2'x140' Rdy. RCB w/ Std. Ht. Drop Inlet Lt.	BC-5z & CD1-1-3 No.3	50-49	724	34.93	3,580												15.5	3 @ 1/4 Pts.			
11	18	Sta. 819+75		Const. Std. Ht. Median Drain w/ 14 L.F. of 18" CGMP - Stub into Str. No. 10	SMD-I-O	47	76	0.77	148				14						1						
12	19	Sta. 828+80		Const. 3'x3'x275' Rdy. RCB	BC-6z & Spec.	51-37	2,915	83.92	9,016													7 @ 1/8 Pts.			
13	19	Sta. 831+00		Const. 8'x8'x136' Rdy. RCB	BC-6z	51	155	208.11	17,901													3 @ 1/4 Pts.			
14	19	Sta. 847+50		Const. Std. Ht. Median Drain w/ 72 L.F. of 18" CGMP - Stub into 90° Wg. Lt.	SMD-I-O	47	136	0.77	148				72						1						
15	19	Sta. 848+00		Const. 24"x98'-4" Rdy. CGMP S.D. Lt. w/ 90° Wg. Bk. & 45° Fwd.	CP-21-O	46	90	3.31	54					100											
16	19	Sta. 848+00		Const. 24"x98'-4" Rdy. CGMP S.D. Rt. w/ 45° Wgs.	CP-21-O	46	90	2.24	56					100											
17	19	Sta. 11+65	-Ramp 2814"C"	Const. 3'x2'x73' Rdy. RCB	BC-6z	51	44	20.25	1,928																
18	20	Sta. 852+00		Const. 3'x3'x192' Rdy. RCB w/ Broken Back	BC-6z & Spec.	51-37	2,705	59.90	6,305													5 As Directed.			
19	20	Sta. 857+00		Const. Std. Ht. Median Drain w/ 72 L.F. of 18" CGMP & 45° Wg. Rt.	SMD-I-O & CP-21-O	47-46	152	1.68	210				72						1						
20	20	Sta. 859+40		Const. 8'x8'x125' Rdy. RCB	BC-5z	50	802	174.11	13,275													2 @ 1/8 Pts.			
21	20	Sta. 863+90		Const.																					

SUMMARY OF PAY QUANTITIES

SUMMARY OF BRIDGE PAY QUANTITIES FAP NO. 1-456(8)

ITEM NO.	ITEM	UNIT	STRUCTURE NO. 1 30'-55'-55'-30' Concrete Slab Span 24' Roadway & 2'-18" S.C.'s STA. 948+00 INTERSTATE	STRUCTURE NO. 2 30'-55'-55'-30' Concrete Slab Span 24' Roadway & 2'-18" S.C.'s STA. 953+00 INTERSTATE	STRUCTURE NO. 3 10'-17'-13'-11" x 10'-17'-13'-11" RCBS Des. BC-16 with 2 Const. Jts. STA. 937+20 INTERSTATE	STRUCTURE NO. 4 30'-55'-55'-30' Concrete Slab Span 24' Roadway & 2'-18" S.C.'s STA. 958+17.50 INTERSTATE	STRUCTURE NO. 5 3'-10'-16" x 200' RCBS Des. BC-13 and Special with 4 Const. Jts. STA. 972+15 INTERSTATE	STRUCTURE NO. 6 30'-55'-55'-30' Concrete Slab Span 24' Roadway & 2'-18" S.C.'s STA. 1007+99.11 INTERSTATE	STRUCTURE NO. 7 RT. 30'-40'-30' Concrete Slab Span 36' Roadway & 2'-18" S.C.'s STA. 1060+00 INTERSTATE	STRUCTURE NO. 8 LT. 30'-40'-30' Concrete Slab Span 36' Roadway & 2'-18" S.C.'s STA. 1060+00 INTERSTATE	ROADWAY SECTION BRIDGE CONTRACT
* 202.06 d	Class "D" Unclassified Excavation	Cu. Yd.	200	200	1800	200	585	200	200	200	
308.06 a	4" Sand Cushion	Sq. Yd.									360
414.06 c	Approach Slab	Sq. Yd.									360
501.06 a	Structural Excavation Unclassified	Cu. Yd.			3600		1500				
501.06 b	Substructure Excavation Common	Cu. Yd.	177	120		150		120	410	430	
501.06 c	Substructure Excavation Rock	Cu. Yd.	51	75		99		83			
505.06	Concrete Rails	Lin. Ft.	342.5	342.5		342.5		204.83	204.83		
509.06 a	Class "A" Concrete	Cu. Yd.	91.7	91.7	863.2	103.1	690.3	91.7	100.2	100.2	2.4
509.06 a	Class "A" Concrete Pier & Abut. Base	Cu. Yd.	43.2	43.2		53.0		43.2	45.8	45.8	
509.06 b	Class "AA" Concrete	Cu. Yd.	362.0	362.0		362.0		362.0	282.9	282.9	
511.06	Reinforcing Steel	Lb.	76,020	76,020	112,850	74,920	99,130	76,020	63,020	63,020	300
513.06 a	18" Corrugated Galvanized Metal Pipe	Lin. Ft.									217
514.06 a	Reinforced Concrete Test Piles	Each									
514.06 d	Reinforced Concrete Piling	Lin. Ft.	259	224				196	1196	1204	
611.06 h	Inlet Frame and Grate	Each									4
624.06 a	6" Black Traffic Stripe	Lin. Ft.	171.5	171.5		171.5		171.5	101.5	101.5	80
Special	4" Concrete Slope Wall	Sq. Yd.	197.2	197.3		196.6		196.8	281.3	281.3	

* Non-Participating

GENERAL CONSTRUCTION NOTES

- (A) See Standard General Construction Notes No. 2-0, Sheet No. 16
The following notes shall apply to this Project: 1, 4, 5, 8, 9, 10, 12, 13, 14, 17,
19, 22, 23, 24, 25, 27, 31, 32, 33 and 34.
- (B) See Typical Section Notes on Sheet No. 7

See Special Provisions included in the Proposal
for sequence of operations governing Bridge Boxes
(Roadway & Bridge Contractors) (Revised 8-6-56)

NOTES FOR ROADWAY PAY QUANTITIES

- ① Includes 4000 C.Y. (Gr. Contr.) & 1000 C.Y. (Surf. Contr.) for small dikes & miscellaneous earthwork, where no quantities are shown on P&P Sheets.
Includes 0.5' Subsidence in all fill areas.
- ② Paid for on 6' length regardless of variations in width.
- ③ Est. at 9.0% of the compacted volume of Soil Cement mixture.
- ④ Includes 40% for shrinkage.
- ⑤ Est. at 0.20 Gal. per Sq. Yd.
- ⑥ Est. at 0.75 Gal. per Sq. Yd. of Double Bituminous Surface & 0.45 Gal. per Sq. Yd. of Edge & 0.35 Gal. per Sq. Yd. Single Bituminous Surface
- ⑦ Est. at 1.0 Cu. Yd. per 60 Sq. Yd. Double Bituminous Surface
- ⑧ Est. at 1.0 Cu. Yd. per 70 Sq. Yd. Double Bituminous Surface & 1.0 Cu. Yd. per 64 Sq. Yd. of Edge.
- ⑨ Est. at 37 Cu. Yd. per Sta.
- ⑩ Fertilizer shall be applied at the rate of 0.152 Tons per Acre. (See Std. GCN-2-0 No. 31)
- ⑪ Est. at 30 Gal. per Sq. Yd. Bermuda Strip Sod, 10 Gal. per Sq. Yd. Bermuda Slab Sod, 15 Gal. per Sq. Yd. Bermuda Plug Sod.
- ⑫ Includes 11,250 Sq. Yd. Strip Sodding & 4460 Sq. Yds. Slab Sodding (Grading Contract), 5545 Sq. Yds. Strip Sodding (Surfacing Contract) & 11,025 Sq. Yds. Slab Sodding at Bridge ends (Sodding Contract.)
- ⑬ Includes 2% for ground measurement and Miscellaneous Construction as directed by the Resident Engineer.
- ▲ See Special Provisions for Test Rolling.

MAINTENANCE OF TRAFFIC ON PRESENT U.S. 77

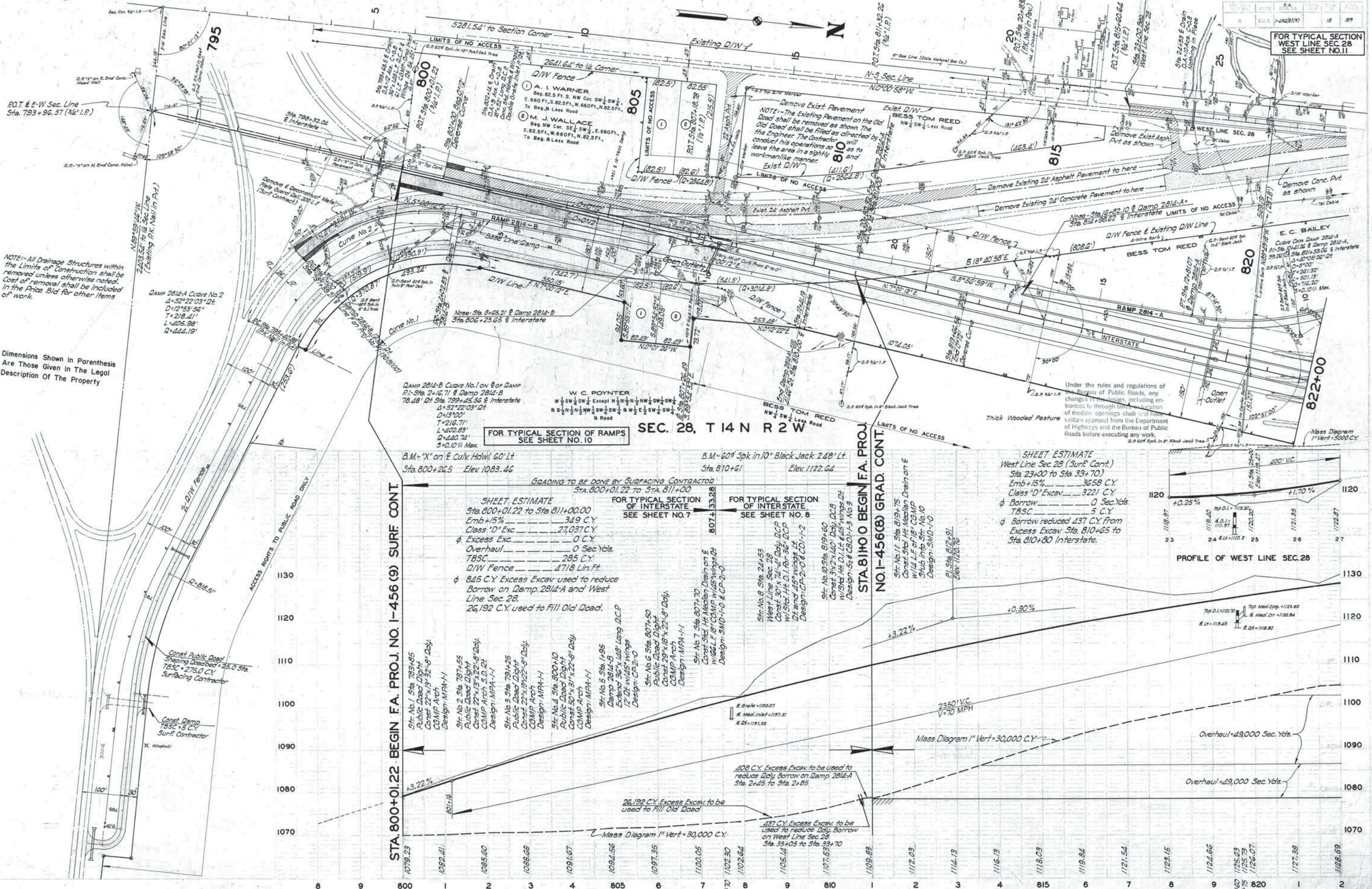
This project shall be constructed without closing Present U.S. 77 to through traffic at beginning of Project.
Construction operations shall be handled in such a manner so that through traffic is maintained at all times.
See Std. Specifications of 1954 for Maintenance of Local & Through Traffic.

SUMMARY OF ROADWAY PAY QUANTITIES

ITEM NO.	ITEM	UNIT	GRADING 1-456(8)	SURFACING 1-456(9)	SODDING 1-456(9)
202.06 d	Class "D" Unclassified Excavation	Cu. Yd.	1,327,625 ▲	33,086	
204.06	Overhaul	Sec. Yd.	1,884,493	2,490	
210.06 c	4" Top Soil (Placed Directly)	Sq. Yd.		82,500	
210.06 c	3" Top Soil (Placed Directly)	Sq. Yd.	33,750	16,635	
306.06 a	Subbase 2 Lanes-Each (8"x43'-5")	Sq. Yd.		7	
306.06 a	Subbase 2 Lanes-Each (8"x52'-1")	Sq. Yd.		268	
306.06 a	Subbase (8"x34'-6")	Sq. Yd.		92	
306.06 a	Subbase (8"x46'-10")	Sq. Yd.		37	
308.06 a	Sand Cushion (4")	Sq. Yd.		188,774	
310.06 b	Subgrade Method "B" (Interstate)	Sq. Yd.		265	
310.06 b	Subgrade Method "B" Ramps	Sq. Yd.		79	
310.06 b	Subgrade Method "B" Sec. Line Roads	Sq. Yd.		22	
312.06 a	Cement for Stabilization	Bbl.		13,436	
312.06 c	Suitable Soil for Soil Cement Base	Cu. Yd.		30,964	
312.06 d	Manipulation (10' Shldr.)	Sq. Yd.		550	
312.06 d	Manipulation (4' Shldr.)	Sq. Yd.		687	
401.06 a	Traffic Bound Surface Course, Type A	Cu. Yd.	2,130	420	
403.06 a	Prime Material (RC-2)	Gal.		28,157	
403.06 b	Asphalt Binder	Gal.		81,290	
403.06 c	No. 1 Cover Material	Cu. Yd.		1,531	
403.06 d	No. 2 Cover Material	Cu. Yd.		1,771	
414.06 a (ae)	Portland Cement Concrete Pavement (Air-Entraining Agent) (8")	Sq. Yd.		149,086	
414.06 a (ae)	Portland Cement Concrete Pavement (Air-Entraining Agent) (7")	Sq. Yd.		24,505	
501.06 a	Structural Excavation, Unclassified	Cu. Yd.	24,449	733	
509.06 a	Class "A" Concrete	Cu. Yd.	2,576	17	
509.06 d	Class "C" Concrete	Cu. Yd.	646		
511.06	Reinforcing Steel	Lb.	245,864	983	
512.06 a	18" Reinforced Concrete Culvert Pipe	Lin. Ft.		88	
512.06 a	30" Reinforced Concrete Culvert Pipe	Lin. Ft.		76	
512.06 a	36" Reinforced Concrete Culvert Pipe	Lin. Ft.		16	
513.06 a	18" Corrugated Galvanized Metal Pipe	Lin. Ft.	978	54	
513.06 a	24" Corrugated Galvanized Metal Pipe	Lin. Ft.	504		
513.06 a	30" Corrugated Galvanized Metal Pipe	Lin. Ft.	344		
513.06 a	36" Corrugated Galvanized Metal Pipe	Lin. Ft.	116		
513.06 b	22"x13" Corrugated Galvanized Metal Pipe Arch	Lin. Ft.	188	82	
513.06 b	23"x18" Corrugated Galvanized Metal Pipe Arch	Lin. Ft.	124	24	
513.06 b	50"x31" Corrugated Galvanized Metal Pipe Arch	Lin. Ft.		24	
608.06	Integral Curb (6")	Lin. Ft.		1,422	
611.06 l	Cast Steel Grate (SMD-I-0)	Each	15	1	
614.06 h	8" Pipe Underdrain (Perforated Corrugated Metal Pipe)	Lin. Ft.	2,000	2,000	
614.06 o	Pipe Underdrain Cover Material	Cu. Yd.	740	740	
620.06 a	Concrete Paving Removed	Sq. Yd.		7,929	
620.06 b	Asphalt Surfacing Removed	Sq. Yd.		9,823	
620.06 e	Brick Surfacing and Concrete Base Removed	Sq. Yd.		550	
620.06 h	Concrete Dividing Strip Removed	Sq. Yd.		112	
620.06 k	Concrete Curb Removed	Lin. Ft.		2,090	
622.06 a	Pipe Railing (1 1/2" Galvanized Iron)	Lin. Ft.	33	17	
623.06 c	Metal Plate Guard Rail	Lin. Ft.		18,350	
623.06 h	Guide Posts	Each		290	
623.06 i	Removal and Reconstruction of Guard Rail	Lin. Ft.		200	
624.06 a	Black Traffic Stripe (6")	Lin. Ft.		58,727	
625.06 a	Monuments	Each	1		
625.06 b	Right-of-Way Markers	Each	79		
626.06	Fertilizer	Ton	1	3	
Special	Water	M. Gal.	382	1,404	
Special	Bermuda Slab Sodding	Sq. Yd.	15,710	5,545	
Special	Bermuda Plug Sodding	Sq. Yd.		82,500	
Special	Shaping Roadbed	Sq. Yd.	187	29	
Special	Right-of-Way Fence	Lin. Ft.	55,736	4,813	
Special	Right-of-Way Fence Gates (14 Ft.)	Each	7		

Formerly No. 1-456(9)
Sodding, 1-35-4(9) 142
For Quantities See

Any Note to come off?



NOTE: All Drainage Structures within the Limits of Construction shall be removed unless otherwise noted. Cost of removal shall be included in the Price Bid for other items of work.

Dimensions Shown in Parenthesis Are Those Given in The Legal Description Of The Property

FOR TYPICAL SECTION WEST LINE SEC. 28 SEE SHEET NO. 11

FOR TYPICAL SECTION OF RAMPS SEE SHEET NO. 10

SEC. 28, T 14 N R 2 W

STA. 810+00 BEGIN F.A. PROJ. NO. 1-456(8) GRAD. CONT.

STA. 800+01.22 BEGIN F.A. PROJ. NO. 1-456(9) SURF. CONT.

SHEET ESTIMATE

Sta. 800+01.22 to Sta. 811+00.00	
Emb +15%	349 C.Y.
Class "D" Exc.	27,037 C.Y.
Excess Exc.	0 C.Y.
Overhaul	0 Sec. Yds.
TBSC	285 C.Y.
D/W Fence	4718 Lin. Ft.
845 C.Y. Excess Excav. used to reduce Borrow on Damp. 2814-A and West Line Sec. 28.	
26,192 C.Y. used to Fill Old Road.	

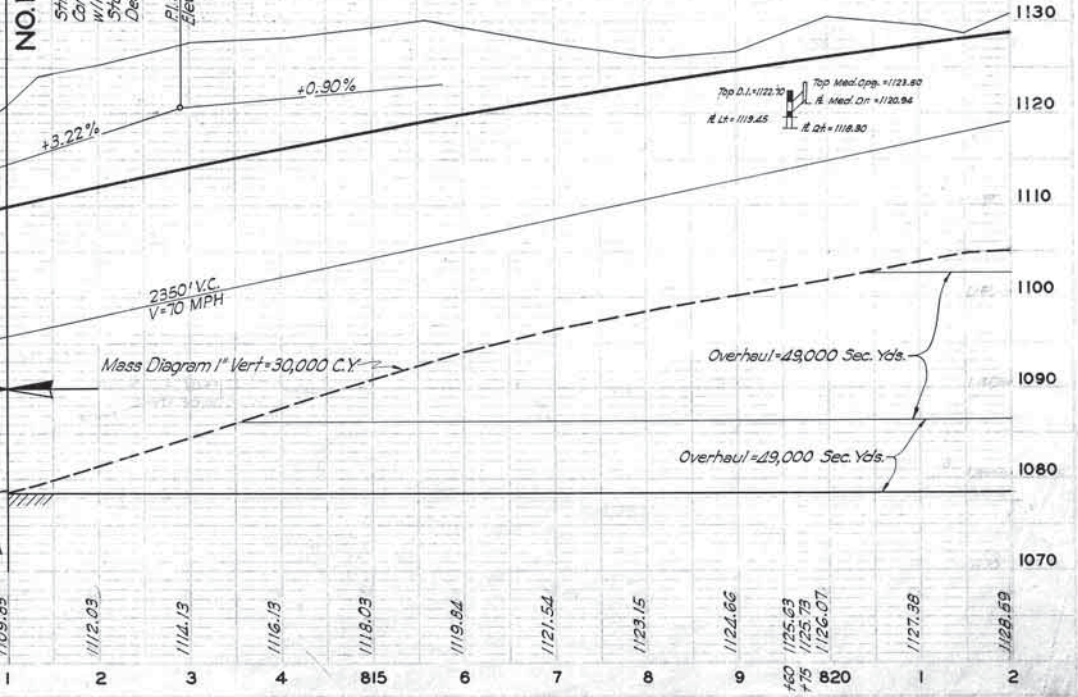
FOR TYPICAL SECTION OF INTERSTATE SEE SHEET NO. 7

FOR TYPICAL SECTION OF INTERSTATE SEE SHEET NO. 8

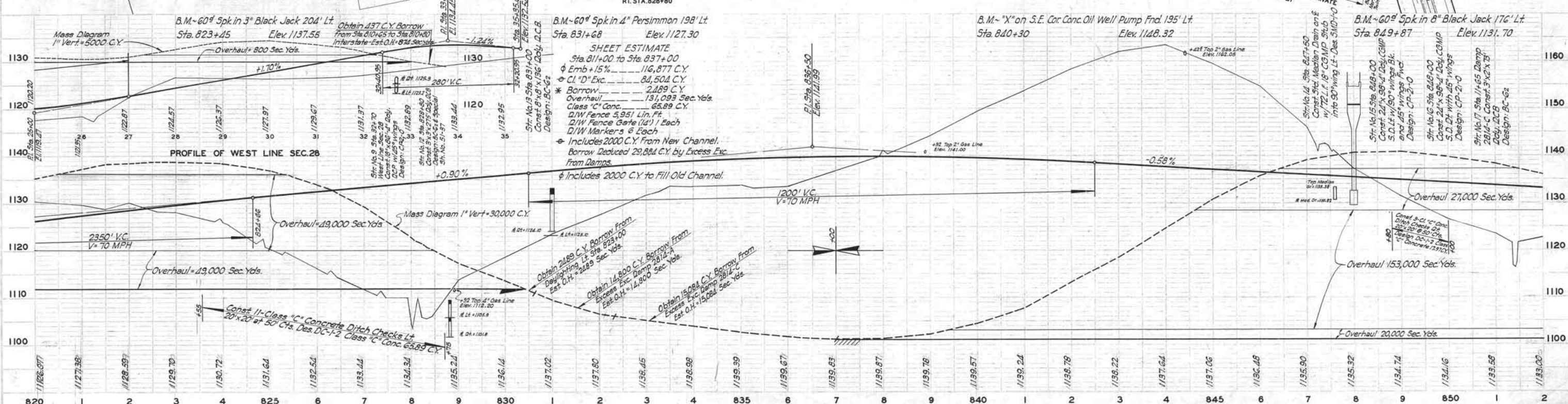
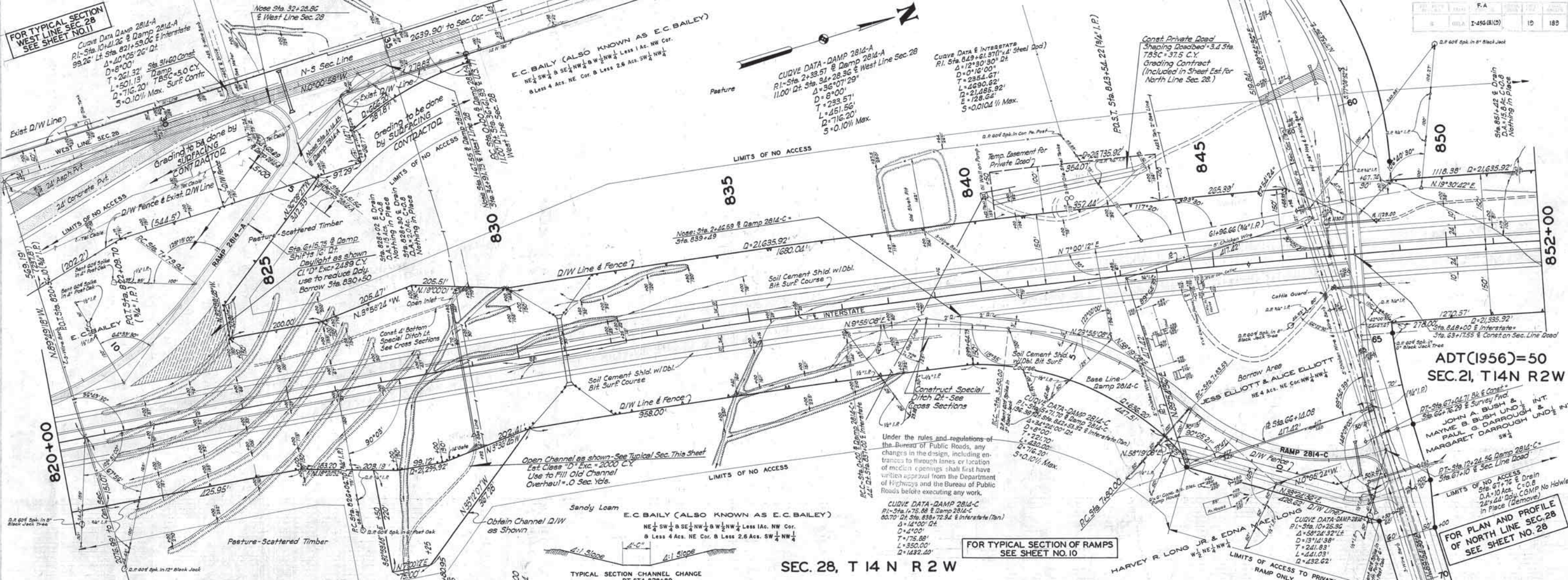
SHEET ESTIMATE

West Line Sec. 28 (Surf. Cont.)	
Sta. 23+00 to Sta. 33+70	
Emb +15%	3658 C.Y.
Class "D" Excav.	3221 C.Y.
Borrow	0 Sec. Yds.
TBSC	5 C.Y.
Borrow reduced 437 C.Y. from Excess Excav. Sta. 810+65 to Sta. 810+80 Interstate.	

PROFILE OF WEST LINE SEC. 28



FOR TYPICAL SECTION
WEST LINE SEC. 28
SEE SHEET NO. 11



PLAN	DATE
DESIGNED	1950
PLATTED	
CHECKED	
APPROVED	
BY	

PROFILE	DATE
DESIGNED	1950
PLATTED	
CHECKED	
APPROVED	
BY	

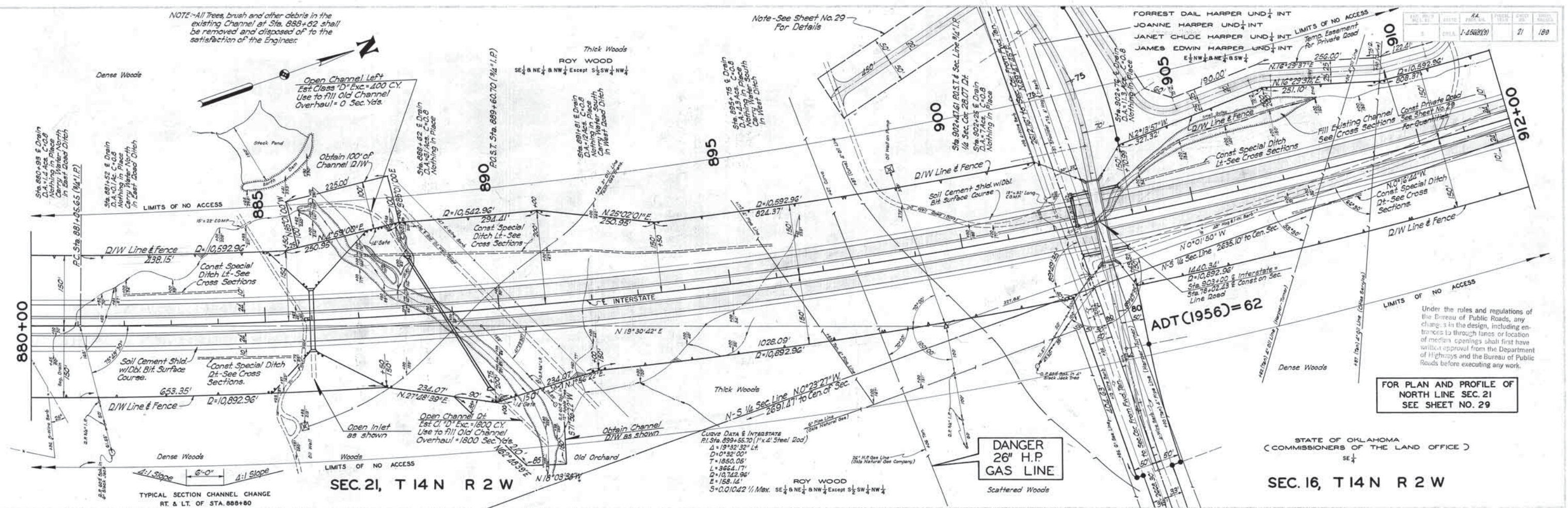
JOHN A. BUSH & MAYME B. BUSH UND 1/2 INT
PAUL G. DARROUGH & MARGARET DARROUGH UND 1/2 INT

ROY WOOD
NE 1/4 SE 1/4 NW 1/4 Except SW 1/4 NW 1/4

62	63	F.A.	64	65	TOTAL
61	60	59	58	57	56
0	00.0	1-150(8)(9)		20	189

NOTE: All Trees, brush and other debris in the existing Channel at Sta. 886+62 shall be removed and disposed of to the satisfaction of the Engineer.

Note-See Sheet No. 29 For Details

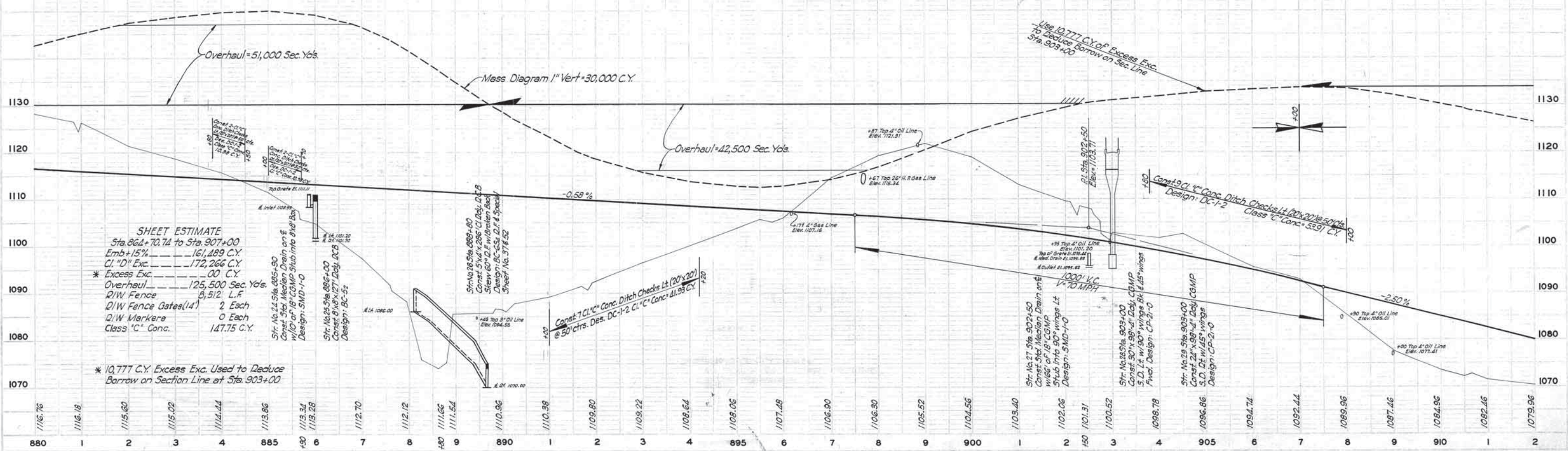


FOR PLAN AND PROFILE OF NORTH LINE SEC. 21 SEE SHEET NO. 29

STATE OF OKLAHOMA
(COMMISSIONERS OF THE LAND OFFICE)

SEC. 16, T 14 N R 2 W

B.M. - 60' Spk. in 12" Post Oak 186' Lt. Sta. 880+96 Elev. 1133.05
 B.M. - "X" Piled on West Surface casing bolt & Oil Well 224' Lt. Sta. 885+68 Elev. 1108.42
 B.M. - 1/4" Iron Pin Set in Conc. 228' Lt. Sta. 891+77 (Tang.) Elev. 1078.03
 B.M. - 60' Spk. in 6" Post Oak 167' Lt. Sta. 894+40 Elev. 1101.91
 B.M. - "X" on Conc. Apron @ S.E. Cor. of Oil Well 183' Lt. Sta. 898+90 Elev. 1124.86
 B.M. - 60' Spk. in 10" Post Oak 162' Lt. Sta. 905+69 Elev. 1090.13

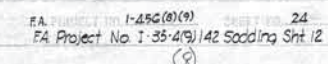


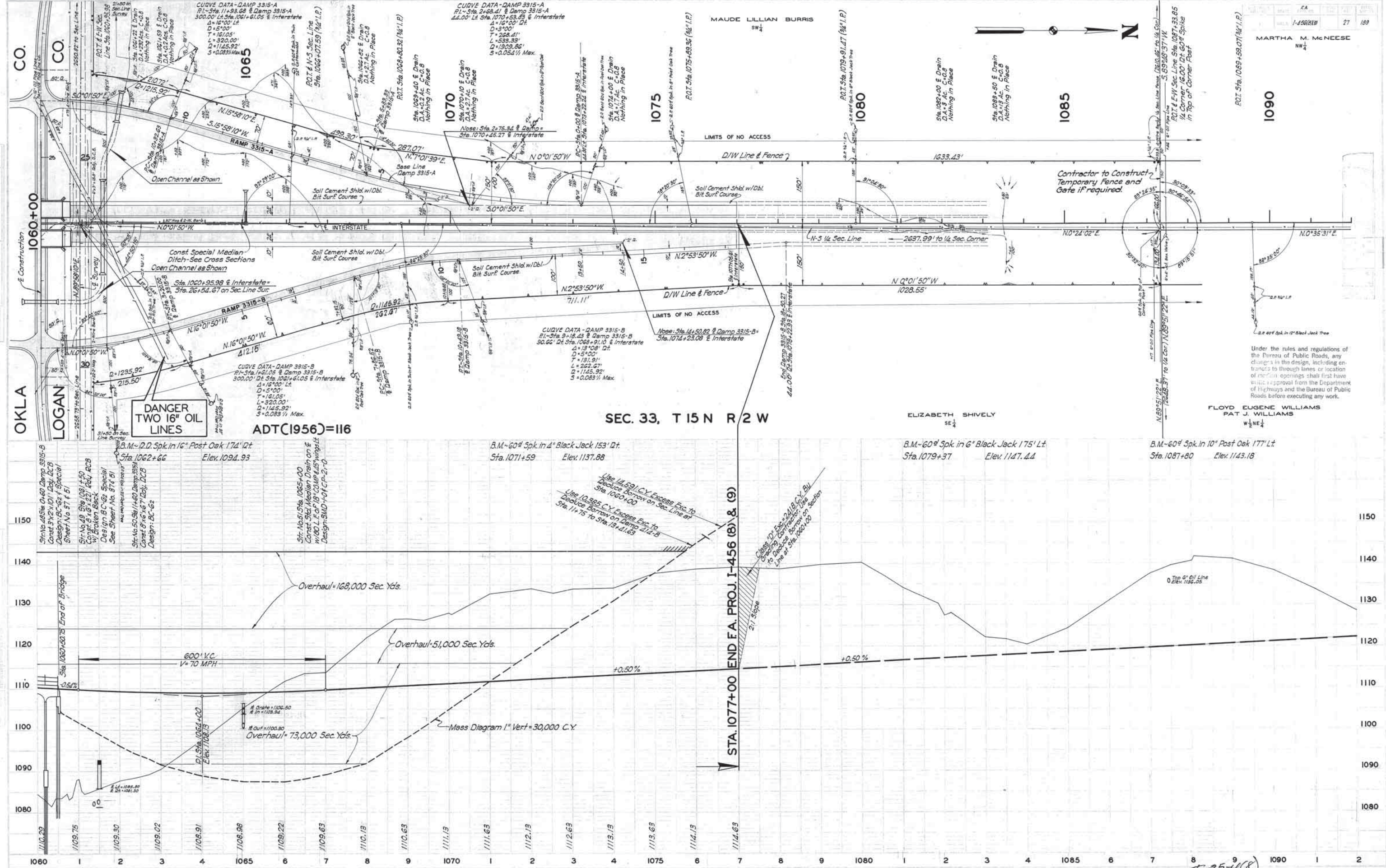
SHEET ESTIMATE
 Sta. 864+70.74 to Sta. 907+00
 Emb+15% 161,489 C.Y.
 Cl. "D" Exc. 172,266 C.Y.
 * Excess Exc. 100 C.Y.
 Overhaul 125,500 Sec. Yds.
 D/W Fence 8,512 L.F.
 D/W Fence Gates (14') 2 Each
 D/W Markers 0 Each
 Class "C" Conc. 147.75 C.Y.

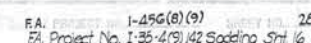
* 10,777 C.Y. Excess Exc. Used to Reduce Borrow on Section Line at Sta. 903+00



PLAN	SUBJECT	BY	DATE
SEE WORK	ALUMINUM ENCASED IN, OF VINT ENGINE		







FORREST DAIL HARPER UND 1/4 INT
JOANNE HARPER UND 1/4 INT
JANET CHLOE HARPER UND 1/4 INT
JAMES EDWIN HARPER UND 1/4 INT
E 1/4 NW 1/4 & NE 1/4 & SW 1/4

SEC. 16, T14N R2W

STATE OF OKLAHOMA
(COMMISSIONERS OF THE LAND OFFICE)
SE 1/4

PLAN AND PROFILE OF
SEC. LINE ROAD ON NORTH LINE
SEC. 21, T14N R2W

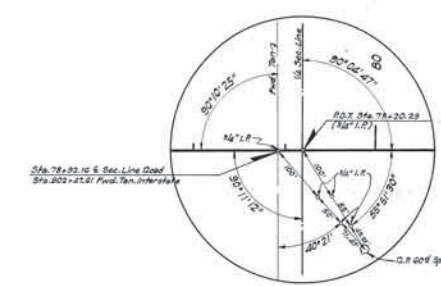
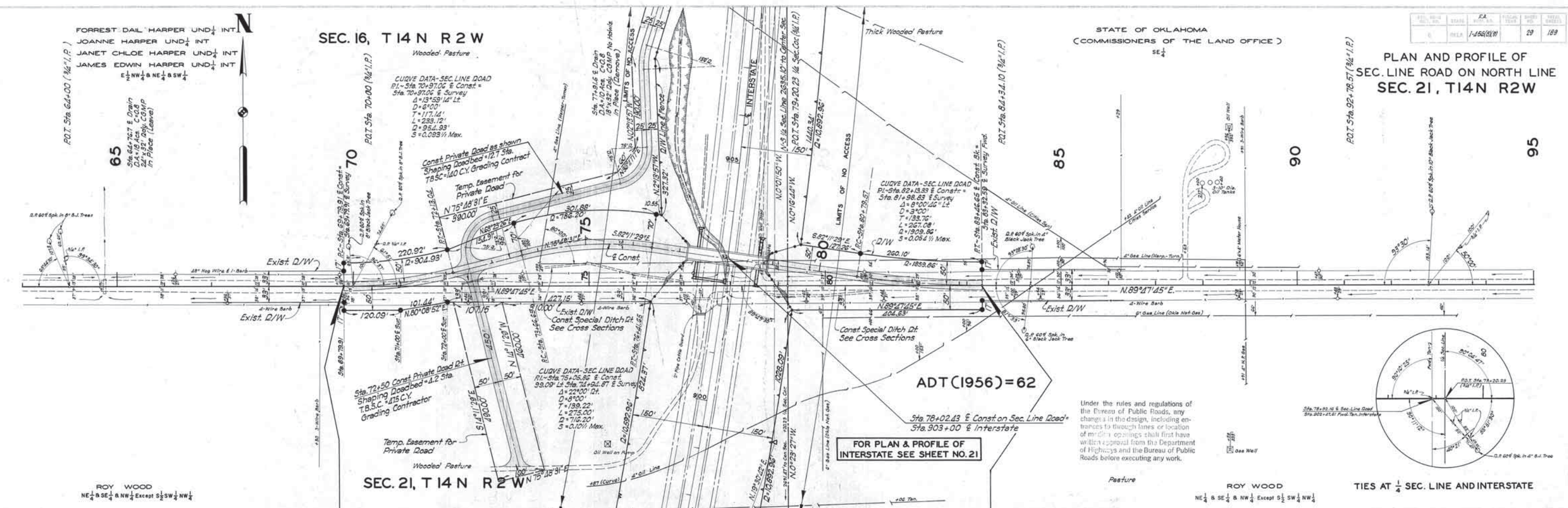
DATE	BY	SCALE	REVISION	DATE	BY
1-15-66	101	1/4" = 1'	29	199	

P.O.T. Sta. 64+00 (1/4" I.P.)
Sta. 64+70.7 E Drain
D.A. 1/2" x 1/2" x 1/2" x 1/2"
in Place (Leave)

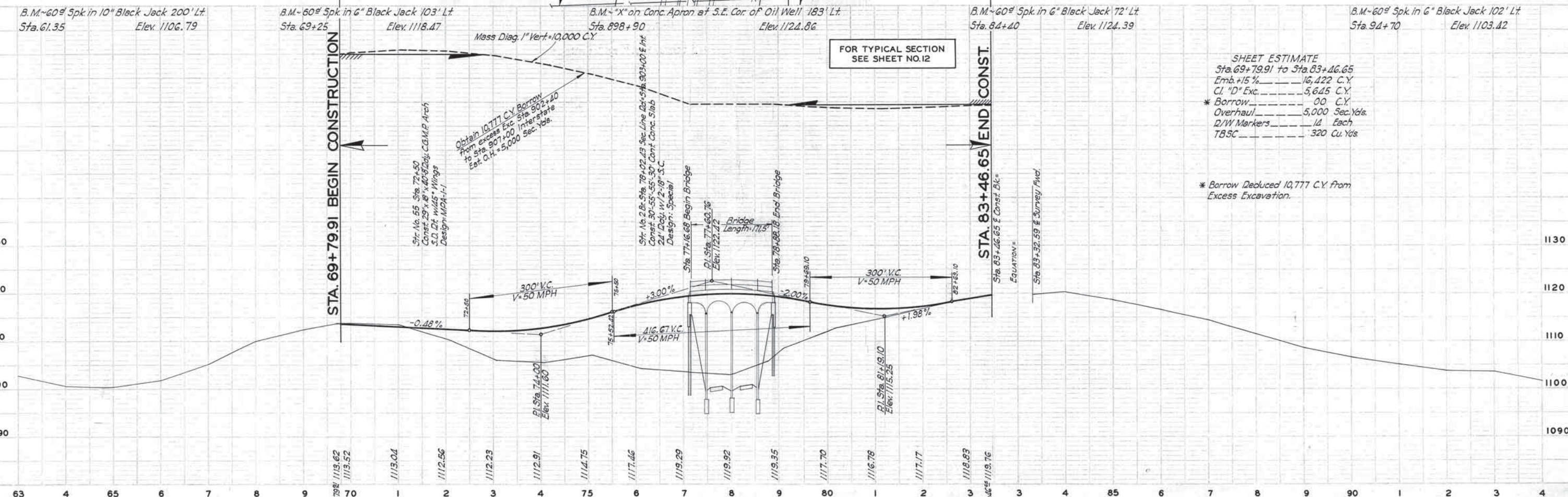
CURVE DATA-SEC. LINE ROAD
P.I. Sta. 70+97.06 & Const. =
Sta. 70+97.06 & Survey
Δ = 13°59'14" Lt
D = 610.0'
T = 171.44'
L = 233.72'
D = 954.93'
S = 0.083 1/2 Max.

CURVE DATA-SEC. LINE ROAD
P.I. Sta. 82+13.89 & Const. =
Sta. 81+98.83 & Survey
Δ = 8°00'46" Lt
D = 900.0'
T = 133.75'
L = 267.08'
D = 1909.86'
S = 0.084 1/2 Max.

P.O.T. Sta. 92+78.57 (1/4" I.P.)



Under the rules and regulations of
the Bureau of Public Roads, any
changes in the design, including
entrances to through lanes, or location
of medians, openings shall first have
written approval from the Department
of Highways and the Bureau of Public
Roads before executing any work.



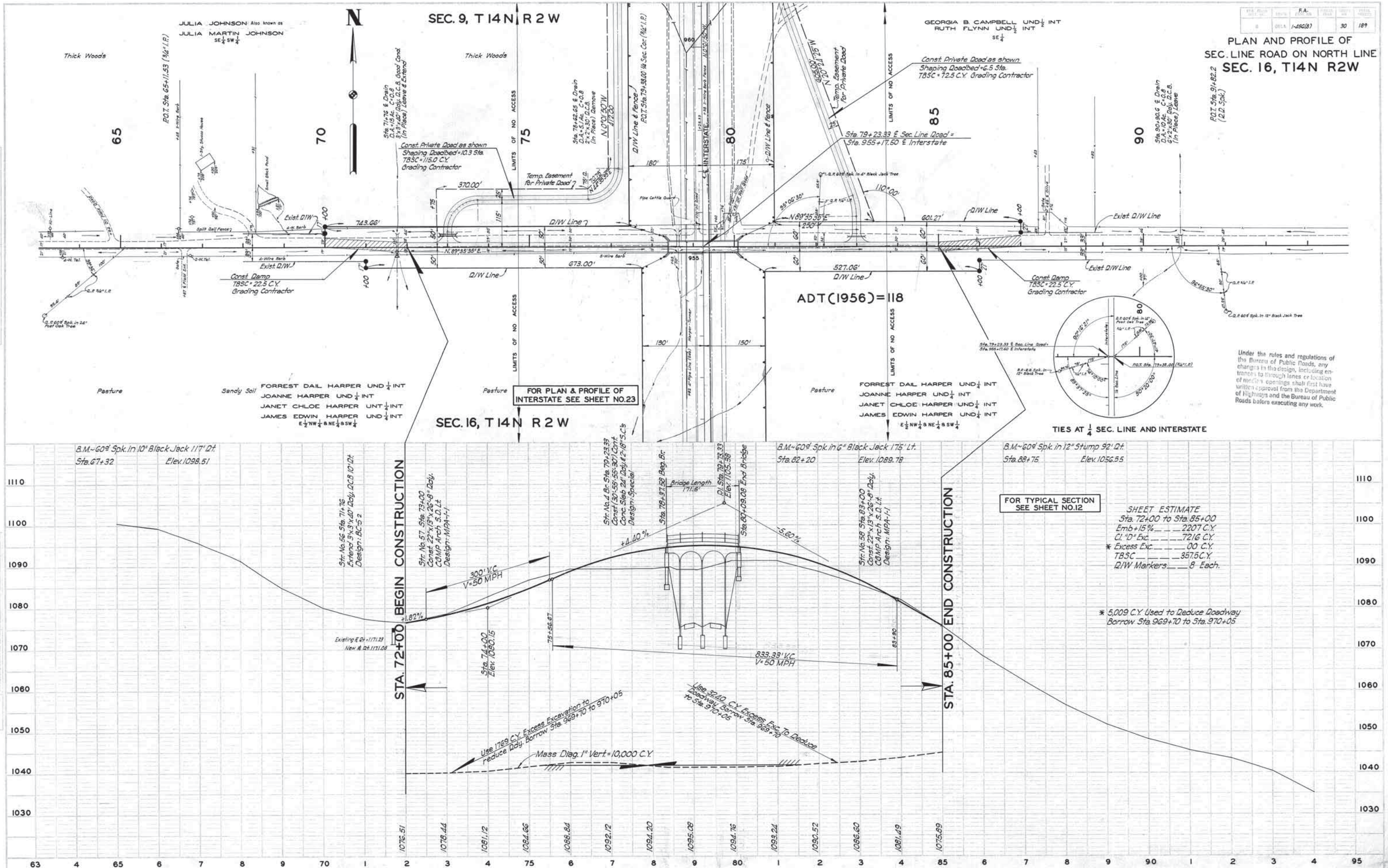
SHEET ESTIMATE

Sta. 69+79.91 to Sta. 83+46.65	
Emb. +15%	16,422 C.Y.
Cl. "D" Exc.	5,645 C.Y.
* Borrow	00 C.Y.
Overhaul	5,000 Sec. Yds.
D/W Markers	12 Each
TBSC	320 Cu. Yds.

* Borrow Deducted 10,777 C.Y. from
Excess Excavation.

DATE	7-15-57
BY	MEK
PROJECT	PLANNED ALBANY CHURCH ALL OF JULY CHURCH
PLAN	NO.

DATE	7-15-57
BY	MEK
PROJECT	PLANNED ALBANY CHURCH ALL OF JULY CHURCH
PROFILE	NO.

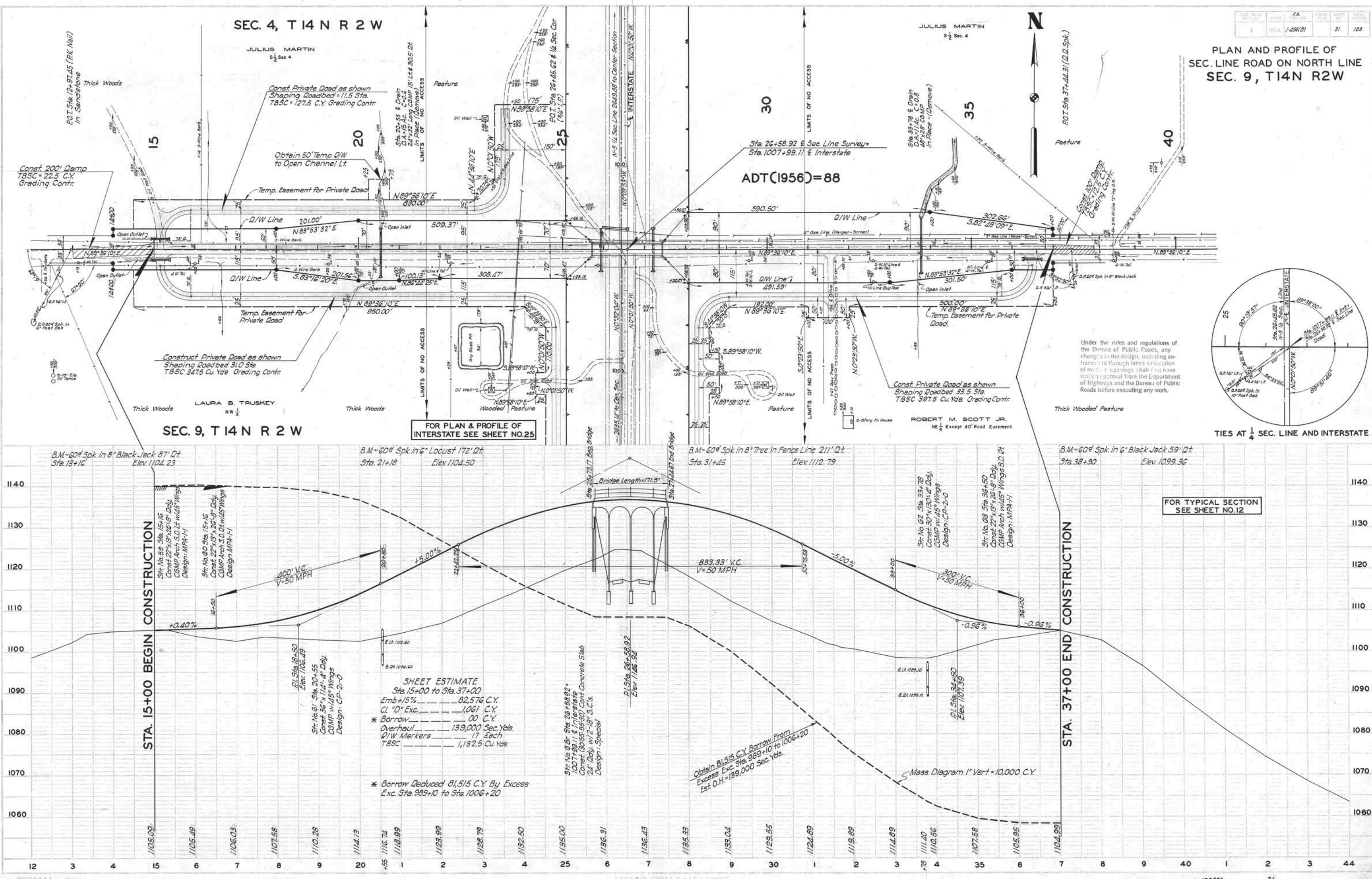


PLAN	PROFILE
CONTRACT NO. 1-456(8)	PROJECT NO. 1-35-49/142 SODDING STA 19
DATE: 10/1/58	DATE: 10/1/58
BY: J. A. WHITE	BY: J. A. WHITE
CHECKED: J. A. WHITE	CHECKED: J. A. WHITE
APPROVED: J. A. WHITE	APPROVED: J. A. WHITE

PROFILE	PLAN
CONTRACT NO. 1-456(8)	PROJECT NO. 1-35-49/142 SODDING STA 19
DATE: 10/1/58	DATE: 10/1/58
BY: J. A. WHITE	BY: J. A. WHITE
CHECKED: J. A. WHITE	CHECKED: J. A. WHITE
APPROVED: J. A. WHITE	APPROVED: J. A. WHITE

PLAN	PROFILE
CONTRACT NO. 1-456(8)	PROJECT NO. 1-35-49/142 SODDING STA 19
DATE: 10/1/58	DATE: 10/1/58
BY: J. A. WHITE	BY: J. A. WHITE
CHECKED: J. A. WHITE	CHECKED: J. A. WHITE
APPROVED: J. A. WHITE	APPROVED: J. A. WHITE

PLAN AND PROFILE OF
SEC. LINE ROAD ON NORTH LINE
SEC. 9, T14N R2W



SHEET ESTIMATE
Sta. 15+00 to Sta. 37+00

Emb +15%	82,576 C.Y.
Cl "D" Exc.	1,061 C.Y.
* Borrow	00 C.Y.
Overhaul	139,000 Sec. Yds.
R/W Markers	17 Each
T&S	1,132.5 Cu. Yds.

* Borrow Deducted 81,515 C.Y. By Excess Exc. Sta. 989+10 to Sta. 1006+20

FOR TYPICAL SECTION
SEE SHEET NO. 12

TIES AT 1/4 SEC. LINE AND INTERSTATE



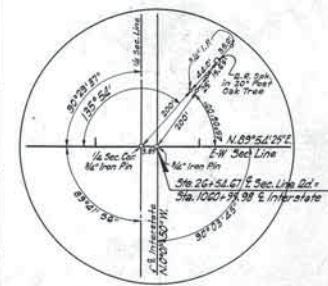
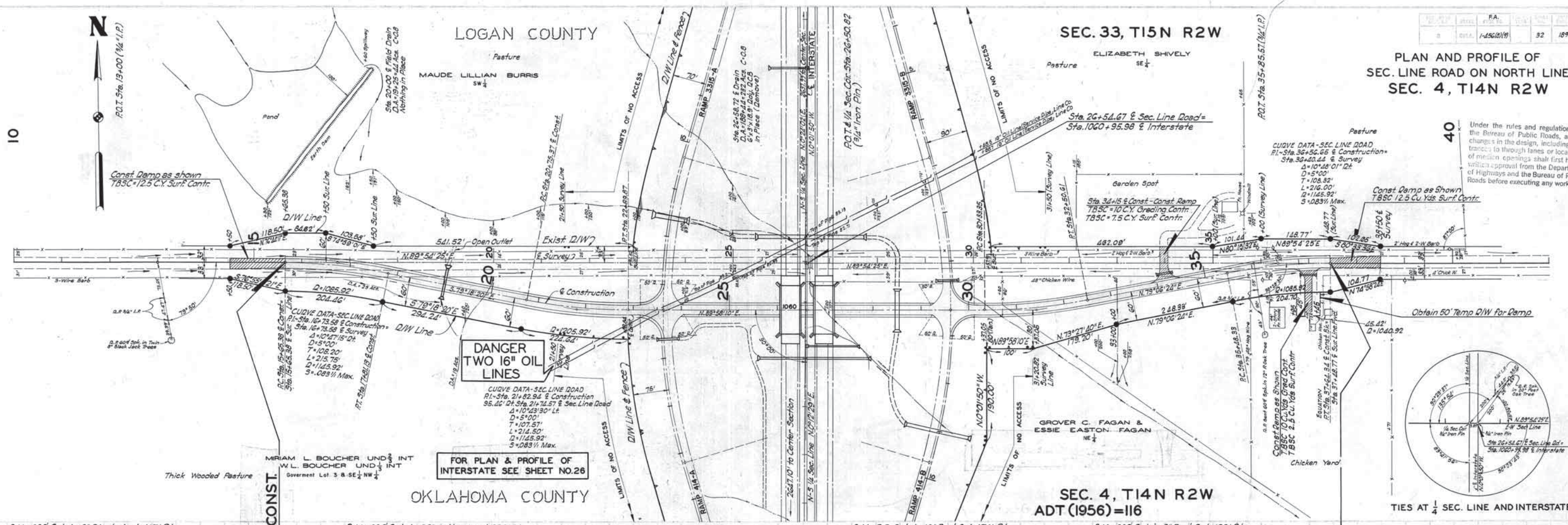
LOGAN COUNTY

SEC. 33, T15N R2W

PLAN AND PROFILE OF
SEC. LINE ROAD ON NORTH LINE
SEC. 4, T14N R2W

DATE	BY	FA.	32	189
1-15-00				

Under the rules and regulations of the Bureau of Public Roads, any changes in the design, including entrance to through lanes or location of median openings shall first have written approval from the Department of Highways and the Bureau of Public Roads before executing any work.

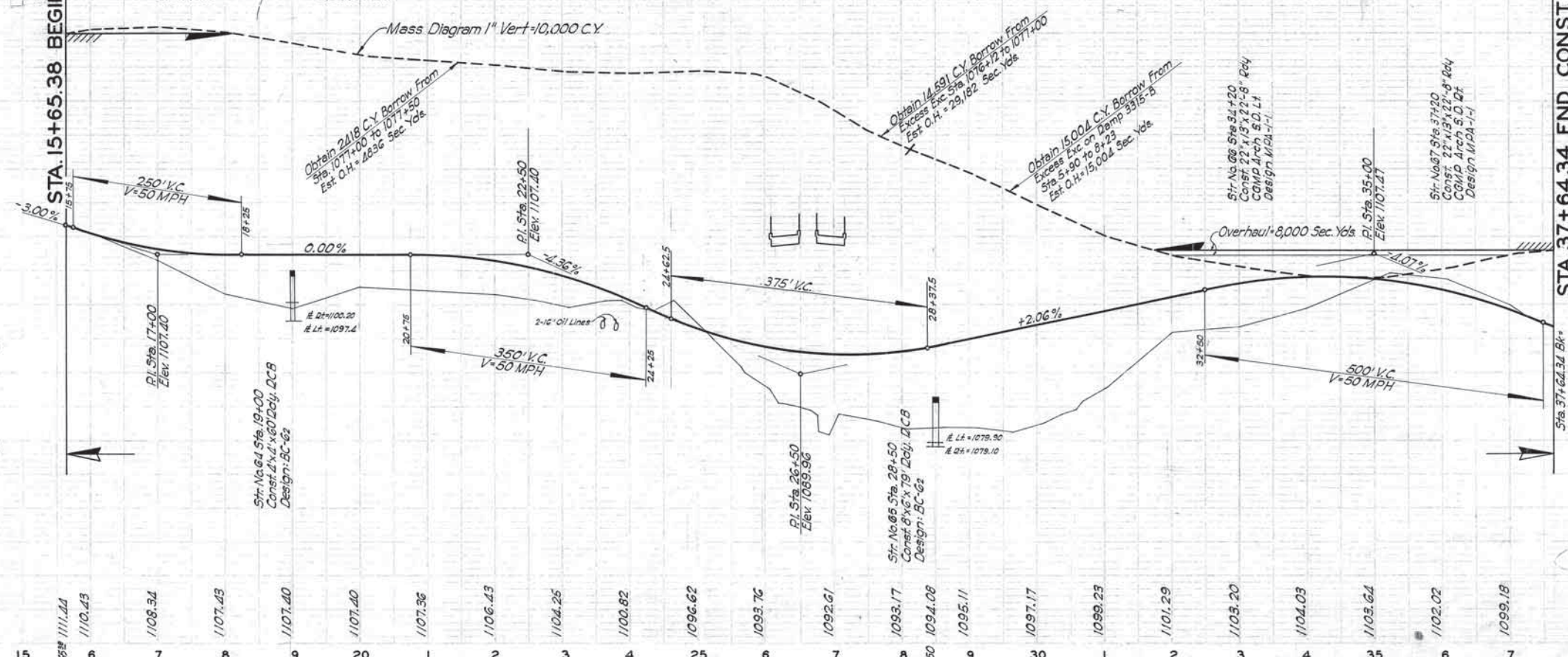


TIES AT 1/4 SEC. LINE AND INTERSTATE

SHEET ESTIMATE

Sta. 15+65.38 to Sta. 37+64.34	
Emb + 15 %	39,077 C.Y.
Cl. "D" Exc.	7,064 C.Y.
* Borrow	00 C.Y.
Overhaul	51,022 Sec. Yds.
D/W Markers	16 Each
TBSC	20 C.Y.

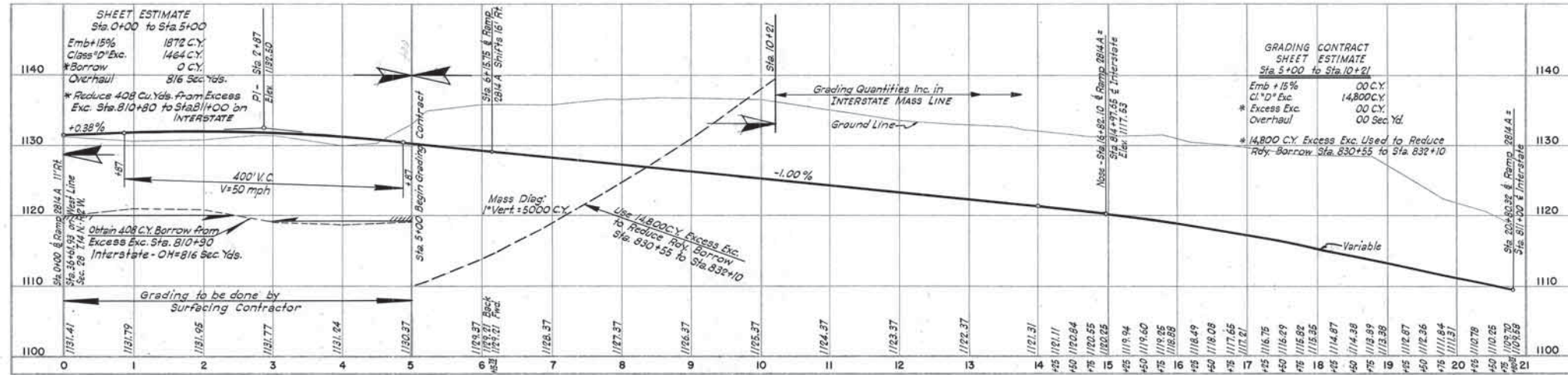
* Borrow Deducted 32,013 C.Y. From Excess Excav. on Damp 3315-B and From Sta. 1076+12 to Sta. 1077+50



FOR TYPICAL SECTION
SEE SHEET NO. 11

JM 258

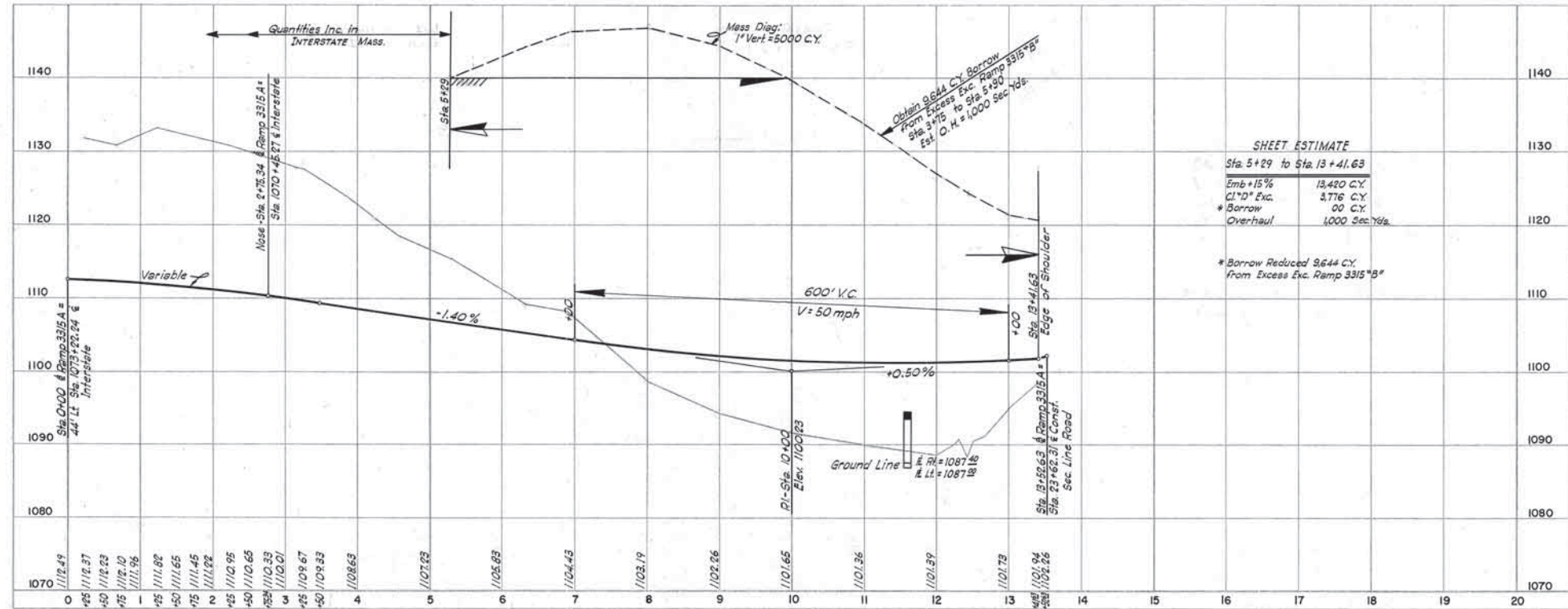
I-35-4(18)



FEED	FOUR	STATE	FA	PROJECT	SHEET	TOTAL
1	100	100	100	100	100	100

PLAN	DATE	BY	CHECKED
NO. 1	10/1/00	10/1/00	10/1/00

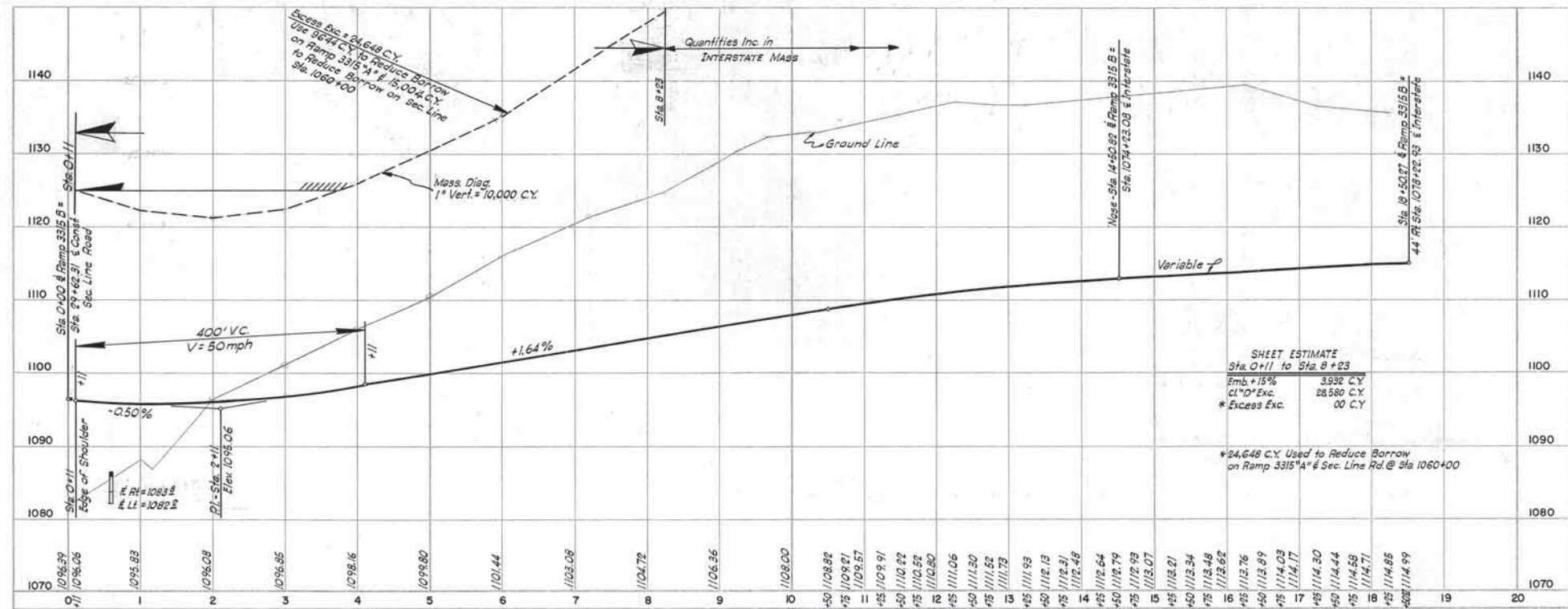
PROFILE	DATE	BY	CHECKED
NO. 1	10/1/00	10/1/00	10/1/00



SHEET ESTIMATE	
Sta. 5+29 to Sta. 13+41.63	
Emb. +15%	13,420 C.Y.
Cl. "D" Exc.	3,776 C.Y.
* Borrow	00 C.Y.
Overhaul	1,000 Sec. Yds.

* Borrow Reduced 9,644 C.Y.
From Excess Exc. Ramp 3315 "B"

RAMP 3315 A



SHEET ESTIMATE	
Sta. 0+11 to Sta. 8+23	
Emb. +15%	3,932 C.Y.
Cl. "D" Exc.	28,580 C.Y.
* Excess Exc.	00 C.Y.

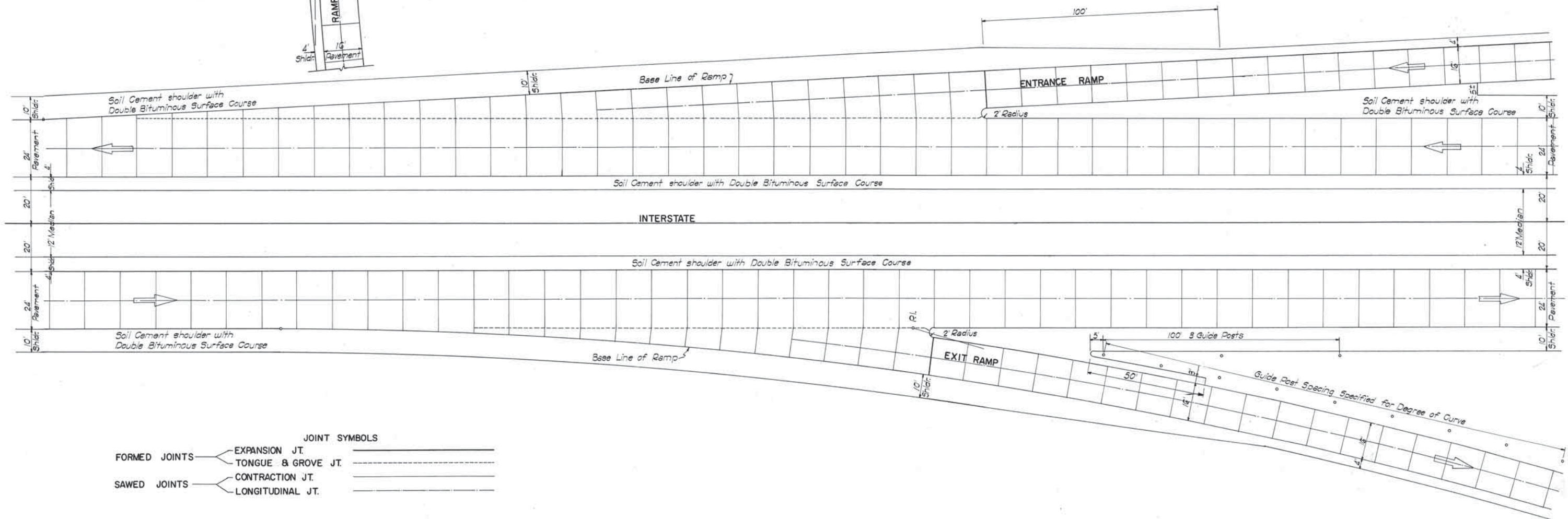
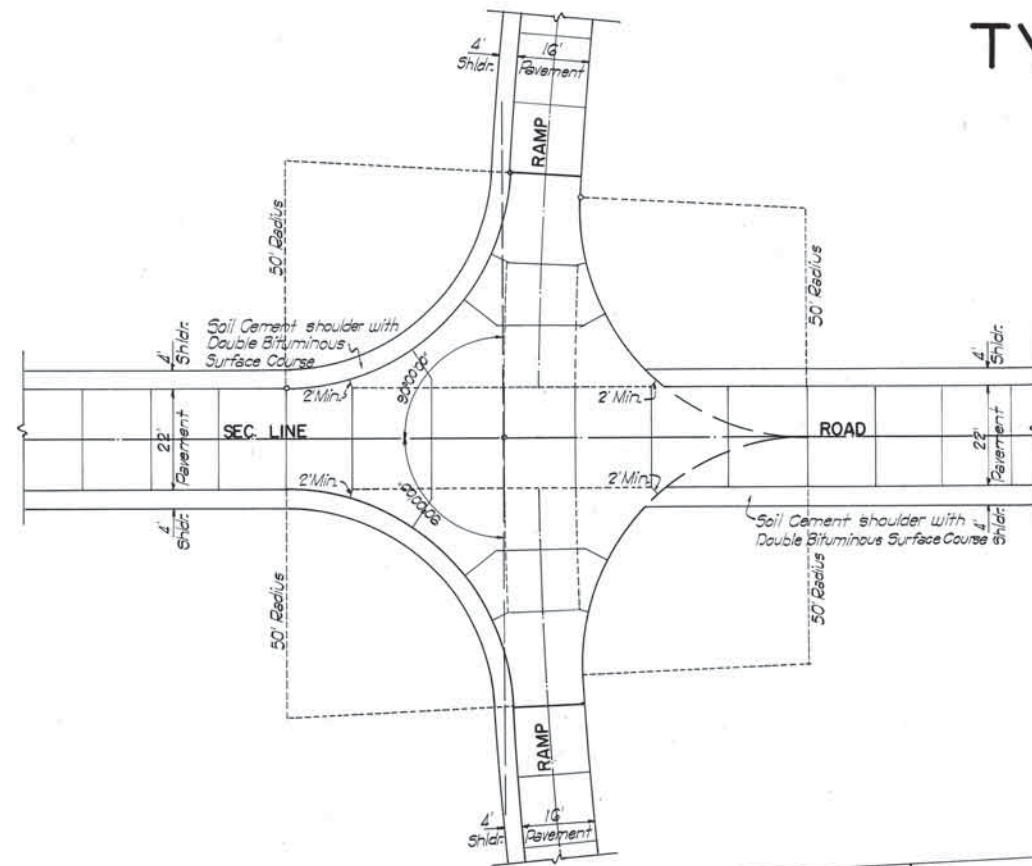
* 24,648 C.Y. Used to Reduce Borrow
on Ramp 3315 "A" & Sec. Line Rd. @ Sta. 1060+00

RAMP 3315 B

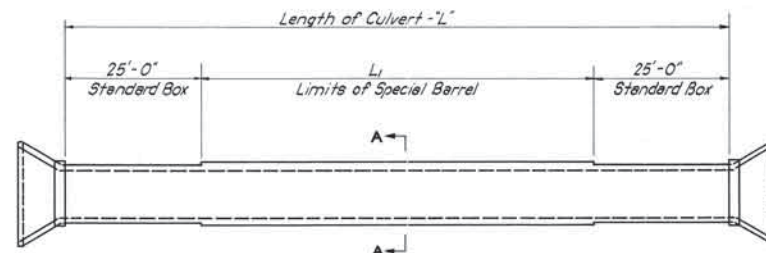
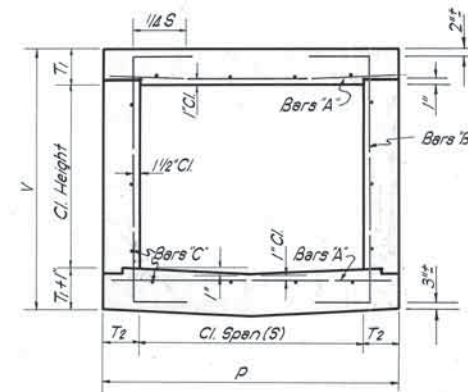
RAMP GRADES IN SEC. 33 T15N R2W

SCALE
1" = 10' Vertical
1" = 100' Horizontal

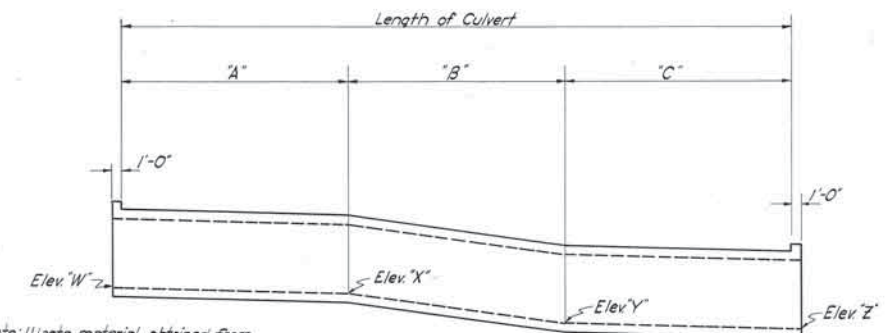
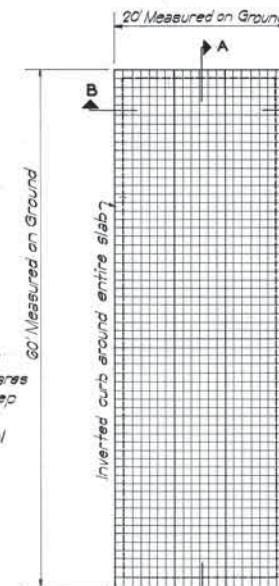
TYPICAL JOINT LAYOUT



JOINT SYMBOLS	
FORMED JOINTS	EXPANSION JT.
	TONGUE & GROVE JT.
SAWED JOINTS	CONTRACTION JT.
	LONGITUDINAL JT.



Note: Concrete to be poured integral then cut into 12" squares as shown. Cuts to be 1/2" deep and shall be made after concrete has attained initial set.

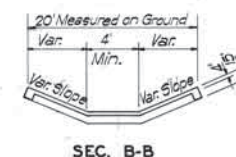
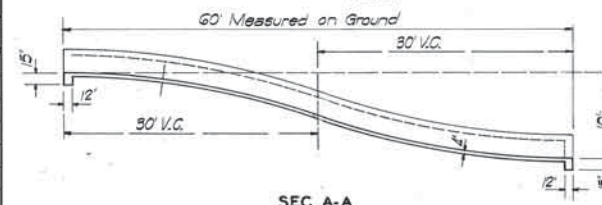


Note: Waste material obtained from Ditch Check excavation shall be placed at the upstream end of checks and if necessary shall be compacted as directed by Resident Engr. For Details not shown see Std. DC-F-2.

Note: Cost of excavation for Ditch Check to be included in Price Bid per C.Y. of CL C Conc.

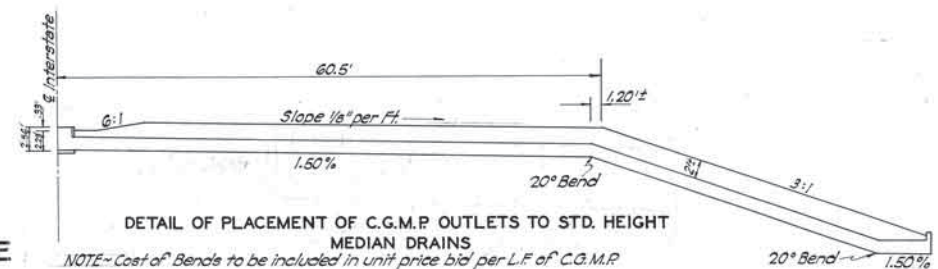
SPECIAL BARREL																			
Street No.	Location	Length "L"	L ₁	Fill	Span	Height	Dimensions					Reinforcing Steel						Quantities per lin. ft.	
							T ₁	T ₁ +1	T ₂	V	P	Bars "A"		Bars "B"		Bars "C"		Steel	Class A Conc.
												Size-Spc	Length	Size-Spc	Length	Size-Spc	No		
12	828+80	275'	225'	28'	3'	3'	6 1/2"	7 1/2"	6"	4'-2"	4'-0"	#5 @ 6"	3'-8"	#4 @ 9"	5'-3"	#4 @ 18"	10	31.66	28.4
18	852+00	192'	142'	10'	3'	3'	6 1/2"	7 1/2"	6"	4'-2"	4'-0"	#5 @ 6"	3'-8"	#4 @ 9"	5'-3"	#4 @ 18"	10	31.66	28.4
21	883+90	358'	308'	38'	5'	4'	10 1/4"	11 1/4"	7"	5'-10 1/8"	5'-2"	#7 @ 6 1/2"	5'-10"	#4 @ 9"	8'-0"	#4 @ 18"	14	68.61	60.1
23	869+40	172'	122'	13'	3'	2'	6 1/2"	7 1/2"	6"	3'-2"	4'-0"	#5 @ 6"	3'-8"	#4 @ 9"	4'-3"	#4 @ 18"	8	28.70	24.7
26	888+80	286'	236'	35'	5'	4'	10 1/4"	11 1/4"	7"	5'-10 1/8"	5'-2"	#7 @ 7"	5'-10"	#4 @ 9"	7'-11"	#4 @ 18"	14	65.28	59.2
41	1026+40	294'	244'	33'	4'	3'	8 1/4"	9 1/4"	6"	4'-6 1/4"	5'-0"	#6 @ 6"	4'-8"	#4 @ 9"	6'-2"	#4 @ 18"	12	47.72	39.7
43	1045+85	263'	213'	25'	5'	4'	9"	10"	6"	5'-7"	6'-0"	#6 @ 6"	5'-8"	#4 @ 9"	7'-8"	#4 @ 18"	14	57.88	50.0
49	1061+50	221'	171'	19'	8'	6'	12 3/4"	13 3/4"	8"	8'-2 1/2"	9'-4"	#8 @ 7"	9'-0"	#5 @ 9"	11'-10"	#4 @ 18"	22	131.77	108.0
45	1059+00	229'	179'	28'	3'	2'	6 1/2"	7 1/2"	6"	3'-2"	4'-0"	#5 @ 6"	3'-8"	#4 @ 9"	4'-3"	#4 @ 18"	8	28.70	24.7
48	Temp 3313-8 Over	101'	51'	13'	3'	2'	6 1/2"	7 1/2"	6"	3'-2"	4'-0"	#5 @ 6"	3'-8"	#4 @ 9"	4'-3"	#4 @ 18"	8	28.70	24.7
44	Temp 3313-8 Over	134'	84'	18'	5'	6'	12 1/4"	13 1/4"	8"	8'-1 1/2"	9'-4"	#8 @ 7"	9'-0"	#5 @ 9"	11'-9"	#4 @ 18"	22	131.49	103.1

* Clear Roadway Length

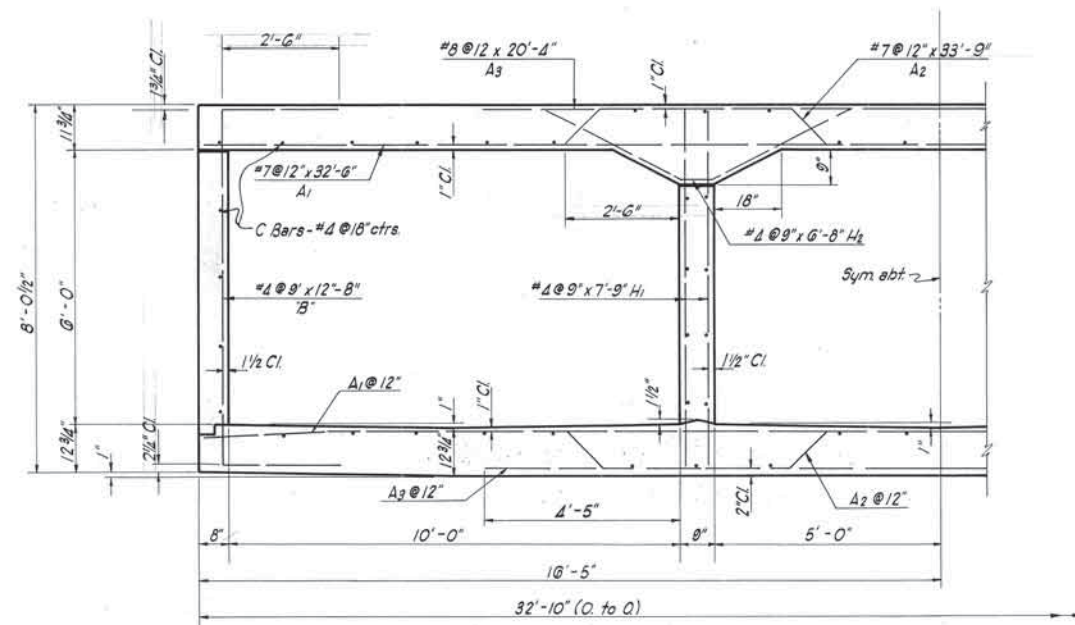


SPECIAL CLASS 'C' CONCRETE DITCH CHECK
(CLASS C CONC. 20.11 CY.)

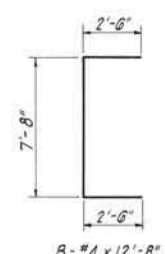
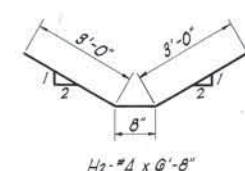
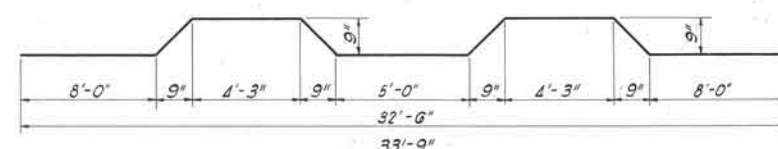
Struct No.	Location	A	B	C	W	X	Y	Z
18	852+00	38'	80'	73'	1123.00	1122.81	1110.29	1109.80
21	883+90	120'	100'	138'	1088.00	1087.30	1083.08	1081.70
23	869+40	38'	80'	54'	1115.50	1115.10	1107.54	1107.00
26	888+80	50'	50'	232'	1088.00	1088.00	1075.00	1070.00
41	1026+40	80'	174'	80'	1087.00	1084.90	1088.00	1085.80
49	1061+51	186'	10'	25'	1085.80	1085.00	1081.70	1081.30



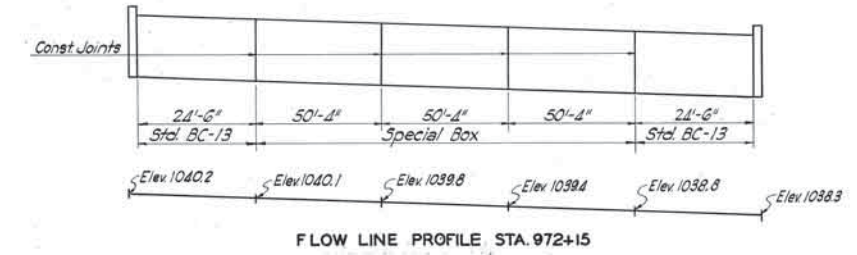
NOTE: Cost of Bends to be included in unit price bid per L.F. of C.G.M.P.



TYPICAL SECTION THRU BARREL
TRIPLE 10'x6' BOX AT STATION 972+15 INTERSTATE



Note:
Use Standard BC 13 Wing Walls, Curb and Pedestals with Special Barrel as shown.
Quantities in Barrel @ Sta 972+15:
Concrete - 3,233 Yds/ft.
Reinforcing Steel - 503.00 Yds/ft.

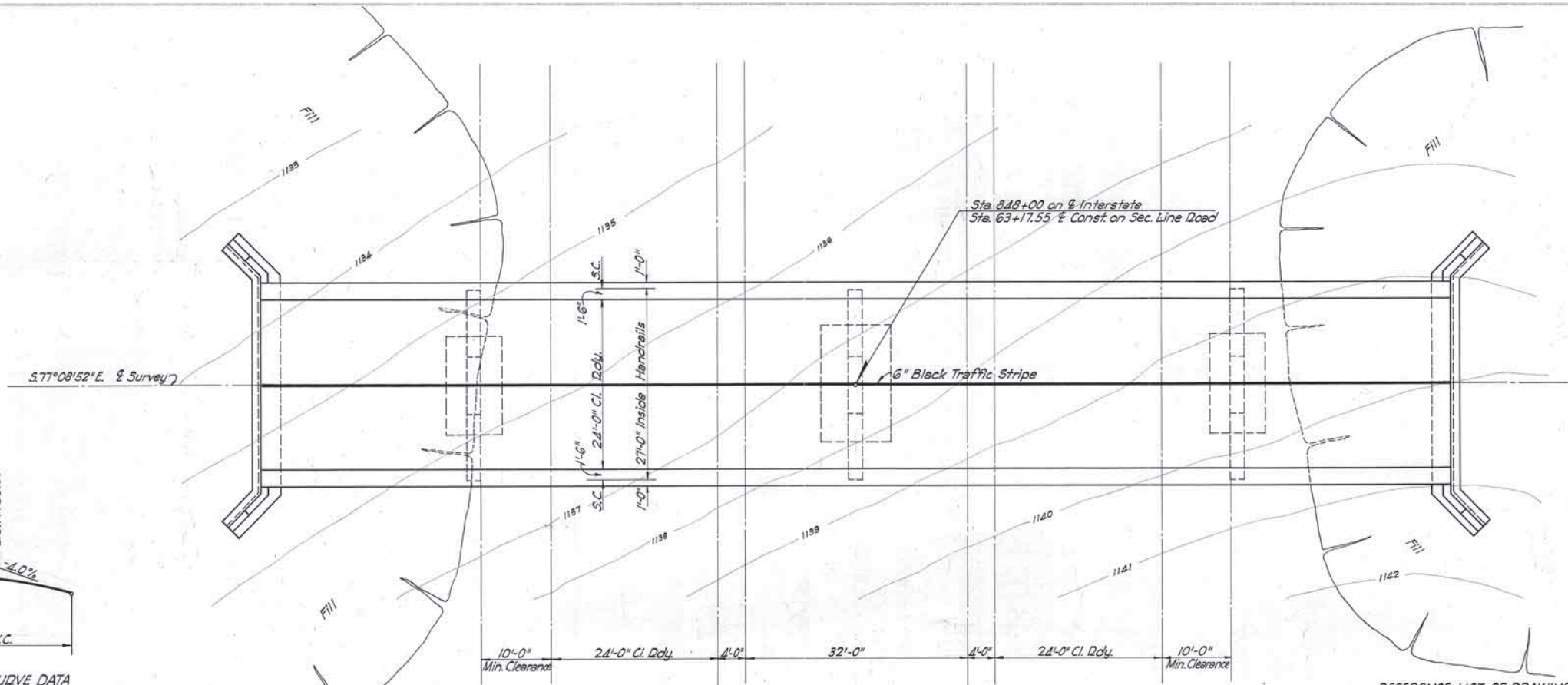


SPECIAL
CULVERT
DETAILS

Rev. 1/7/59 - Add. 1/2" Brng. Pad Note
O.M.

REV.	DATE	BY	CHKD.	APPD.	REMARKS
1	1-4-56 (8)				
2	1-4-56 (8)				

DESIGN DATA	
Concrete	1000 psi
Reinforcing Steel	18000 psi
Design Live Load	H15-53
Maximum Foundation Pressure	14.8 T/Pile
Abutments	
Piers	
Direct Load	2.88 T/10'
Max. Load	3.72 T/10'

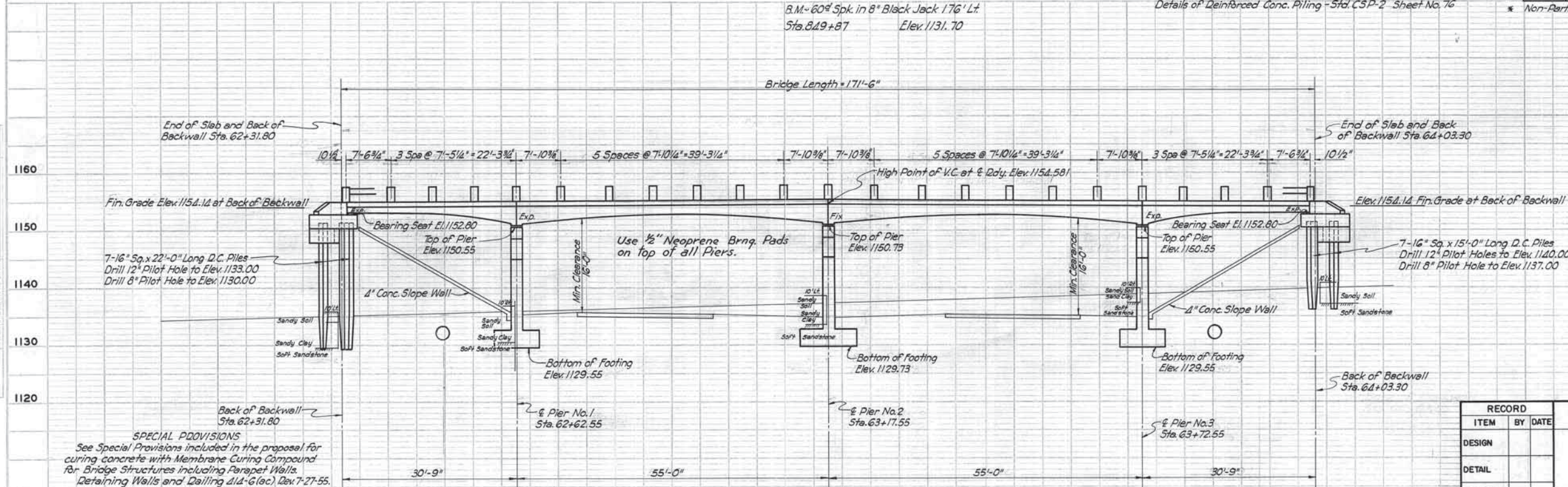


PLAN

REFERENCE LIST OF DRAWINGS
 Details of Superstructure - Std. CCS-170-24, - Sheet No. 71
 Details of Abutments & 4" Concrete Slope Wall - Std. A-CCS-170-24 - Sht. No. 70
 Details of Brngs., Handrail & Slab Dims. - Std. CCS-170-24, - Sheet No. 72
 Details of Piers - Sheet No. 67
 Details of Reinforced Conc. Piling - Std. CSP-2 - Sheet No. 76

SUMMARY OF QUANTITIES						
ITEM NO.	ITEM	UNIT	ABUT.	PIERS	SUPER STRUCT.	TOTAL
501.06b	Substructure Excav. Common	C.Y.	120	57		177
501.06c	Substructure Excav. Dock	C.Y.		51		51
505.06	Concrete Drills	L.F.			342.5	342.5
509.06a	Class "A" Concrete	C.Y.	40.4	51.3		91.7
509.06b	Class "A" Concrete Pier Base	C.Y.		43.2		43.2
509.06c	Class "AA" Concrete	C.Y.			362.0	362.0
514.06d	D.C. Piling	L.F.	259			259
511.06	Reinforcing Steel	Lbs.	5100	10,880	60,040	76,020
624.06a	6" Black Traffic Stripe	L.F.			171.5	171.5
Special	4" Concrete Slope Wall	S.Y.				197.2
202.06d	Class "D" Unclassified Excav.	C.Y.				200

GENERAL NOTES
 All Construction and Materials shall be in accordance with the Okla. Std. Specs. of 1954 and Special Provisions.
 All exposed Concrete Surfaces shall have a Carborundum Finish.
 All Reinforcing Steel bars shall conform to A.S.T.M. Specs. A-305-49.
 All Abutment piling shall be driven using leads of sufficient strength to control piles.
 Abutment piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons if at or below grade.
 All Abutment Piling shall be driven through the compacted fill. All cost of Pilot Holes shall be included in the unit price bid for D.C. Piling.
 Use Type "B" Bearings @ Piers & Abuts.



GENERAL ELEVATION
 SCALE: 1" = 10'-0" VERT. & HORIZ.

RECORD		OKLAHOMA STATE HIGHWAY COMMISSION OKLAHOMA CITY, OKLA.	
ITEM	DATE		
DESIGN			
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD			

STRUCTURE NO. 1 BR.
GENERAL ELEV., PLAN & SUMMARY OF QUANTITIES
30'-55'-55'-30' CONC. SLAB SPAN
24' RDY & 2-18" SC'S
STA. 848+00.00 ON I-456(8)
F.A. PROJECT NO. 1-456(8)



REFERENCE LIST OF DRAWINGS
Details of Superstructure - Std. CCS-170-24-Sht. No. 71
Details of Abutments & 4" Conc. Slope Wall - Std. A-CCS-170-24-Sht. No. 70
*Details of Brigs., Handrail & Slab Dims - Std. CCS-170-24-Sht. No. 72 **
Details of Piers - Sheet No. 67
Details of Reinfc. Conc. Piling - Std. CSP-2-Sheet No. 76

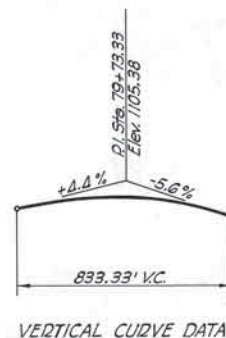
SUMMARY OF QUANTITIES						
ITEM NO.	ITEM	UNIT	ABUT.	PIERS	SUPER-STRUCT.	TOTAL
501.06b	Substructure Excav. Common	C.Y.	120			120
501.06c	Substructure Excav. Dock	C.Y.		75		75
505.06	Concrete Rails	L.F.			342.5	342.5
509.06a	Class "A" Concrete	C.Y.	40.4	51.3		91.7
509.06a	Class "A" Concrete Pier Base	C.Y.		43.2		43.2
509.06b	Class "AA" Concrete	C.Y.			362.0	362
514.06d	R.C. Piling	L.F.	224			224
511.06	Reinforcing Steel	Lbs.	5100	10,880	60,040	76,020
624.06a	6" Black Traffic Stripe	L.F.			171.5	171.5
Special	4" Concrete Slope Wall	C.Y.				197.3
202.06d	Class "D" Unclassified Excav.	S.Y.				200

GENERAL NOTES
All Construction and Materials shall be in accordance with the Okla Std. Specs. of 1954 and Special Provisions.
All exposed Concrete Surfaces shall have a Carborundum Finish.
All Reinforcing Steel bars shall conform to A.S.T.M. Specs. A-305-49.
All Abutment piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 tons if at or below grade.
All Abutment piling shall be driven through the compacted fill. All cost of Pilot Holes shall be included in the unit price bid for D.C. Piling.
Abutment Piling shall be driven using leads of sufficient strength to control piles.
Use Type 'B' Bearings @ Piers & Abuts.



RECORD			OKLAHOMA STATE HIGHWAY COMMISSION
ITEM	BY	DATE	OKLAHOMA CITY, OKLA.
DESIGN			<p align="center"> STRUCTURE NO.2 BR. GENERAL ELEV. PLAN & SUMMARY OF QUANTITIES 30'-55'-55'-30' CONC. SLAB SPAN 24' RDY & 2-18" SC'S STA. 903+00.00 ON \overline{C} INTERSTATE F.A. PROJECT NO. 1-456(8) </p>
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD:			

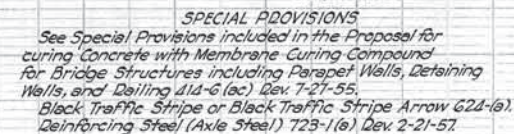
N



SUMMARY OF QUANTITIES						
ITEM NO.	ITEM	UNIT	ABUT.	PIERS	SUPER STRUCT.	TOTAL
501.06b	Substructure Excav Common	C.Y.	150			150
501.06c	Substructure Excav Dock	C.Y.	16	83		99
505.06	Concrete Rails	L.F.			342.5	342.5
509.06a	Class "A" Concrete	C.Y.	51.8	51.3		103.1
509.06b	Cl "A" Conc Pier & Abut Bases	C.Y.	9.8	43.2		53.0
509.06b	Class "AA" Concrete	C.Y.			362.0	362.0
511.06	Reinforcing Steel	Lbs.	4000	10,880	60,040	74,920
624.06A	6" Black Traffic Stripe	L.F.			171.5	171.5
Special	14" Concrete Slope Wall	S.F.			196.6	196.6
202.06d	Class "D" Unclassified Excav.	C.Y.				200

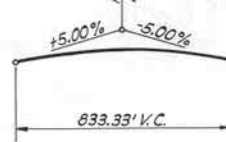
GENERAL NOTES
All Construction and Materials shall be in accordance with the Okla. Std. Spec. of 1954 and Special Provisions.
All exposed Concrete surfaces shall have a Carborundum Finish.
All Reinforcing Steel bars shall conform to A.S.T.M. Specs. A-305-49.
Use Type B Bearings @ Piers & Abuts.

REFERENCE LIST OF DRAWINGS
 Details of Superstructure Std. CCS-170-24-S4, No. 71
 Details of 4" Conc Slope Wall Std. ACS-170-24-S4, No. 70
 Details of Abutments Sheet No. 69
 Details of Piers Sheet No. 67
 Details of Handrail, Brngs. and Slab Dimensions,
 Std. CCS-170-24-S4, Sheet No. 72



RECORD			OKLAHOMA STATE HIGHWAY COMMISSION
ITEM	BY	DATE	OKLAHOMA CITY, OKLA.
DESIGN			<p align="center"> STRUCTURE NO.4 BR. GENERAL ELEV. PLAN & SUMMARY OF QUANTITIES 30'-55'-55'-30' CONC. SLAB SPAN 24' RDY & 2-18" SC'S STA. 955+17.50 ON E INTERSTATE F.A. PROJECT NO. I-456(8) </p>
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD:			

Concrete	1000 psi
Reinforcing Steel	18000 psi
Design Live Load	H15-53
Maximum Foundation Pressure	
Abutments	14.8 T/Pile
Piers	
Direct Load	2.88 T/a'
Max. Load	3.72 T/a'



VERTICAL CURVE DATA

PLAN

DEFENDENCE LIST OF DRAWINGS

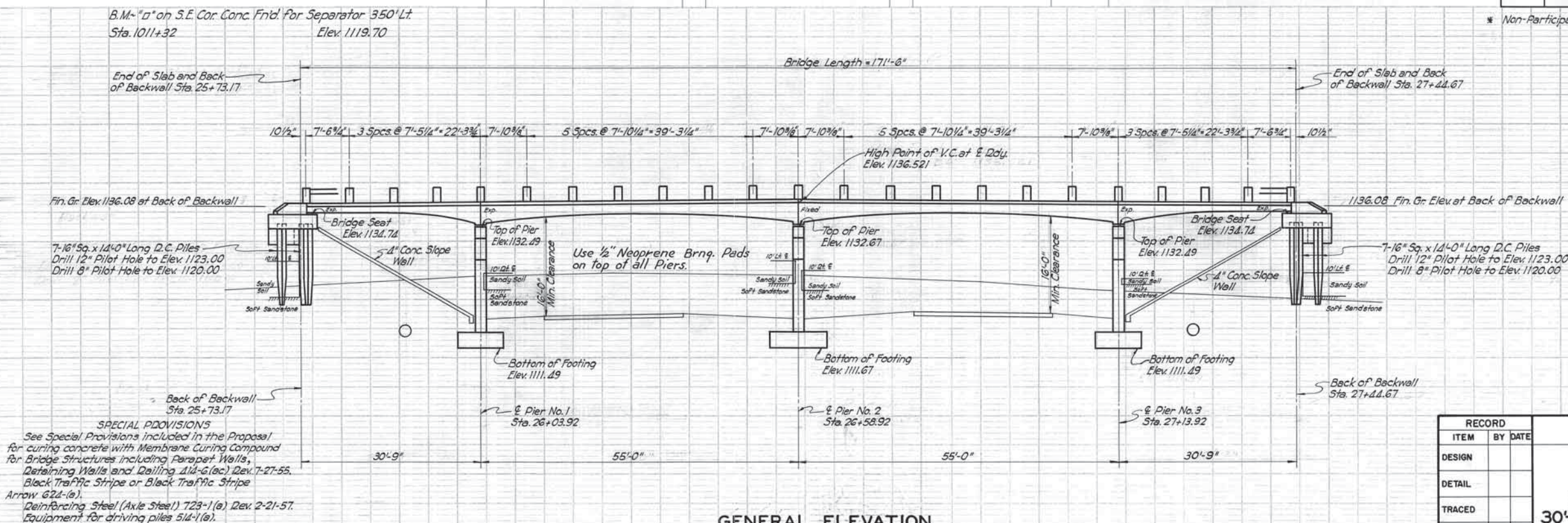
Details of Superstructure - Std. CCS-170-24 - Sheet No. 71
Details of Abutments & 4' Conc. Slope Wall - Std. A-CCS-170-24 - Sht. No. 70
Details of Brngs., Handrail & Slab Dimensions - Std. CCS-170-24 Sht. No. 72
Details of Piers - Sheet No. 67
Detail of Reinforced Concrete Piling - Std. CSP-2 - Sheet No. 76

SUMMARY OF QUANTITIES

ITEM NO.	ITEM	UNIT	ABUT.	PIERS	SUPER STRUCT.	TOTAL
501.06b	Substructure Excav. Common	C.Y.	120			120
501.06c	Substructure Excav. Rock	C.Y.		83		83
505.06	Concrete Rails	L.F.			342.5	342.5
509.06a	Class "A" Concrete	C.Y.	40.4	51.3		91.7
509.06d	Class "A" Concrete Pier Base	C.Y.		43.2		43.2
509.06b	Class "A" Concrete	C.Y.			362.0	362.0
514.06d	D.C. Piling	L.F.	196			196
511.06	Reinforcing Steel	Lbs.	5100	10,880	60,040	76,020
624.06a	6" Black Traffic Stripe	L.F.			171.5	171.5
Special	4" Concrete Slope Wall	S.Y.				196.8
* 202.06d	Class "D" Unclassified Excav.	C.Y.				200

* Non-Participating Item	GENERAL NOTE
	All Construction and Materials shall be in accordance with the Okla. Std. Specs. of 1954 and Special Provisions.
	All exposed Concrete surfaces shall have a Carborundum Finish.
	All Reinforcing Steel Bars shall conform to A.S.T.M. Specs. A-305-49
	All Abutment piling shall be driven using leads of sufficient strength to control piles.
	Abutment piling shall be driven to practical refusal if above grade or to a minimum bearing of 50 Tons if at or below grade.
	All Abutment piling shall be driven through the compacted fill. All costs of Pilot Holes shall be included in the unit price bid for D.C. Piling.
	Use Type "B" Bearings @ Piers & Abuts.

Back of Backwall



GENERAL ELEVATION

SCALE: 1"=10'-0" HORIZ. & VERT.

RECORD			OKLAHOMA STATE HIGHWAY COMMISSION
ITEM	BY	DATE	OKLAHOMA CITY, OKLA.
DESIGN			<p align="center"> STRUCTURE NO.6 BR. GENERAL ELEV. PLAN & SUMMARY OF QUANTITIES 30'-55'-55'-30' CONC. SLAB SPAN 24' RDY & 2-18" SC'S STA. 1007+99.11 ON C INTERSTATE F.A. PROJECT NO. 1-456(8) </p>
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD :			

DESIGN DATA
Concrete 1000 #/cu ft
Reinforcing Steel 18000 #/cu ft
Loading H20-S16-53 & RPM 20-4
Maximum Foundation Pressures
Abutments: 19.0 Tons/Pile
Piers: Direct Load 27.5 Tons/Pile
Max. Load 29.5 Tons/Pile



SUMMARY OF QUANTITIES							
ITEM NO.	ITEM	UNIT	ABUT.	PIERS	SUPER STRUCT.	BRIDGE	RDY. SEC.
202.06d	Class "D" Unclassified Excav.	C.Y.				200	
308.06a	4" Sand Cushion	S.Y.					180
414.06c	Approach Slab	S.Y.					180
501.06b	Substructure Excav Common	C.Y.	200	210		410	
505.06	Concrete Dells	L.F.			204.83	204.83	
509.06a	Class "A" Concrete	C.Y.	52.2	48.0		100.2	1.2
509.06b	Class "AA" Concrete-Pier Base	C.Y.		45.8		45.8	
509.06c	Class "AA" Concrete	C.Y.			282.9	282.9	
511.06	Reinforcing Steel	Lbs.	6500	9740	46780	63020	150
513.06a	18" C.G.M. Pipe	L.F.					120
514.06a	Test Pile	Ea.	1			1	
514.06d	D.C. Piling	L.F.	476	720		1196	
611.06h	Inlet Frame & Grate	Ea.					2
624.06a	6" Black Traffic Stripe	L.F.			203.0	203.0	80
Special	4" Concrete Slope Wall	S.Y.				281.3	

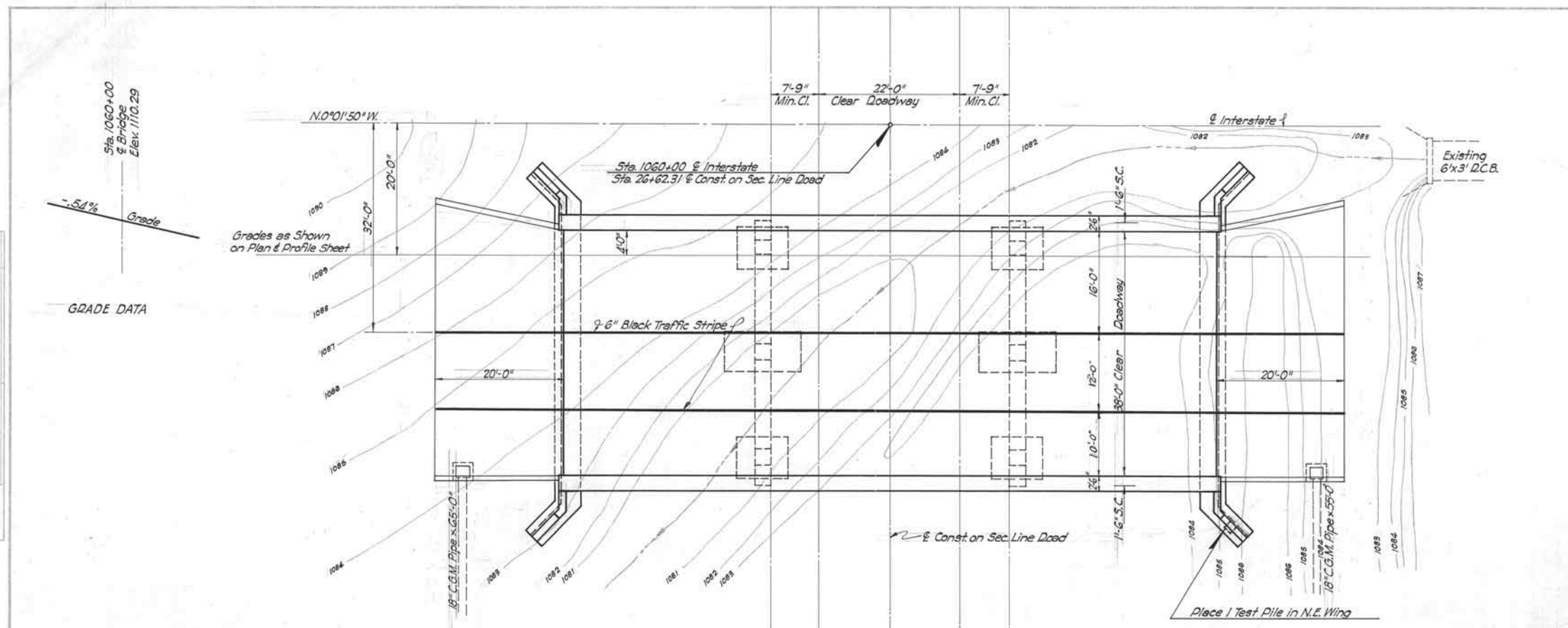
* Non-Participating Item
GENERAL NOTES
All Construction and Materials shall be in accordance with the Okla. Std. Spec. of 1954 and Special Provisions.
All reinforcing bars shall conform to the A.S.T.M. Spec. A-305-49.
All exposed concrete surfaces shall have a Carbonatum finish.
All concrete in Piers and Abutments shall be Class "A" concrete.
Deck concrete shall be Class "AA" concrete.
Test Piles will govern the length of Piles in Piers and Abutments. The Contractor may at his option cast Test Pile long enough on the Pier so that he does not have to open hole prior to the time he is ready to drive the Permanent Piles. If this is done, precautions shall be taken to prevent any friction or bearing being developed by the test pile above the level of the bottom of the Pier footing.
All Piles shall be driven through the compacted fill.
All cost of Pilot holes shall be included in the unit price bid for D.C. piling and Test Pile.
All piling shall be driven with leads of sufficient length to control the piles.
Reinforced Concrete Piles in the Abutment shall be driven to practical refusal if above grade or to a minimum of 50 Tons if at or below grade.
Reinforced Concrete Piles in the Piers shall be driven to practical refusal if above grade or to a minimum of 60 Tons if at or below grade.
12" Pilot Holes shall be drilled to natural ground at both piers and abutments.
Use Type "B" Bearings @ Piers & Abuts.

Rev. - Revised test pile note 9-12-57.
Rev. - Revised Black Traffic Stripe 11-22-57.
Rev. - Add 1/2" Brng. Pad Note 1-7-58.

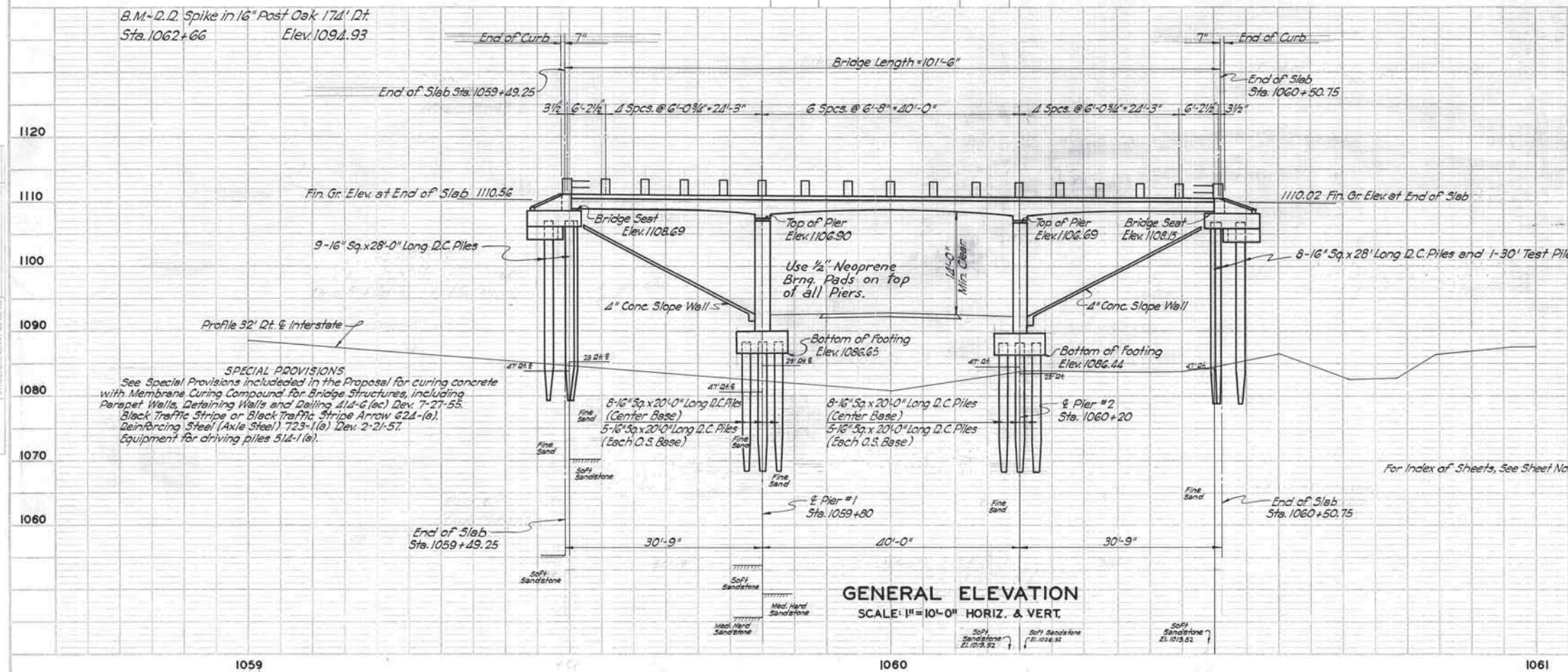
RECORD		OKLAHOMA STATE HIGHWAY COMMISSION	
ITEM	BY DATE	OKLAHOMA CITY, OKLA.	
DESIGN		STRUCTURE NO.7 BR. RT. GENERAL ELEV., PLAN & SUMMARY OF QUANTITIES 30'-40'-30' CONC. SLAB SPAN 38' RDY & 2-18" SC'S STA. 1060+00.00 ON I-456(8) F.A. PROJECT NO. I-456(8)	
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD:			

PLAN	DATE
DESIGNED	
FLUTED	
NOTE BOOK	
BY	

PROFILE	DATE
DESIGNED	
FLUTED	
NOTE BOOK	
BY	



PLAN



GENERAL ELEVATION
SCALE: 1"=10'-0" HORIZ. & VERT.

1059

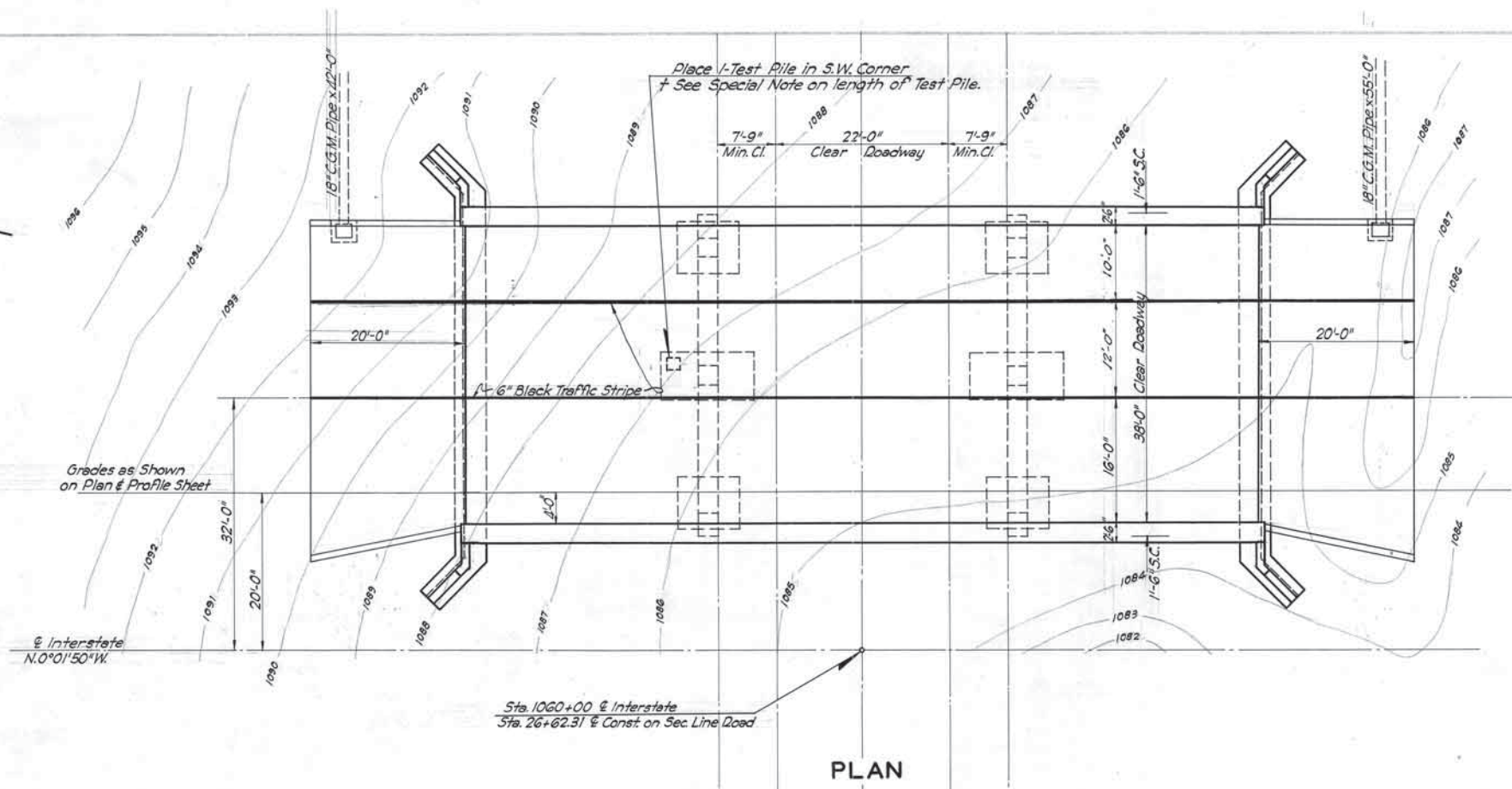
1060

1061

PROJECT NO.	DATE	REV.	BY	CHKD.	DATE
1-456(8)	10/1/57	1	GG		

DESIGN DATA

Concrete 1000 #/cu ft
 Reinforcing Steel 18000 #/cu ft
 Loading H20-S16-53 & RPM 20-4
 Maximum Foundation Pressure
 Abutments: 19.0 Tons/Pile
 Piers: Direct Load 21.5 Tons/Pile
 Max. Load 29.5 Tons/Pile



SUMMARY OF QUANTITIES							
ITEM NO.	ITEM	UNIT	ABUT.	PIERS	SUPER. STRUCT.	BRIDGE	RDY. SEC.
202.06d	Class "D" Unclassified Excav.	C.Y.				200	
308.06a	4" Sand Cushion	S.Y.					180
414.06c	Approach Slab	S.Y.					180
501.06b	Substructure Excav. Common	C.Y.	200	230		430	
505.06	Concrete Rails	L.F.			204.83	204.83	
509.06a	Class "A" Concrete	C.Y.	52.2	48.0		100.2	1.2
509.06a	Class "A" Concrete Pier Bases	C.Y.		45.8		45.8	
509.06b	Class "AA" Concrete	C.Y.			282.9	282.9	
511.06	Reinforcing Steel	Lbs.	6500	9740	46780	63020	150
513.06a	18" C.G.M. Pipe	L.F.					97
514.06a	Test Pile	Ea.		1		1	
514.06d	D.C. Piling	L.F.	504	700		1204	
611.06h	Inlet Frame & Grate	Ea.					2
624.06a	6" Black Traffic Stripe	L.F.			203.0	203.0	80
Special	4" Concrete Slope Wall	S.Y.				281.3	

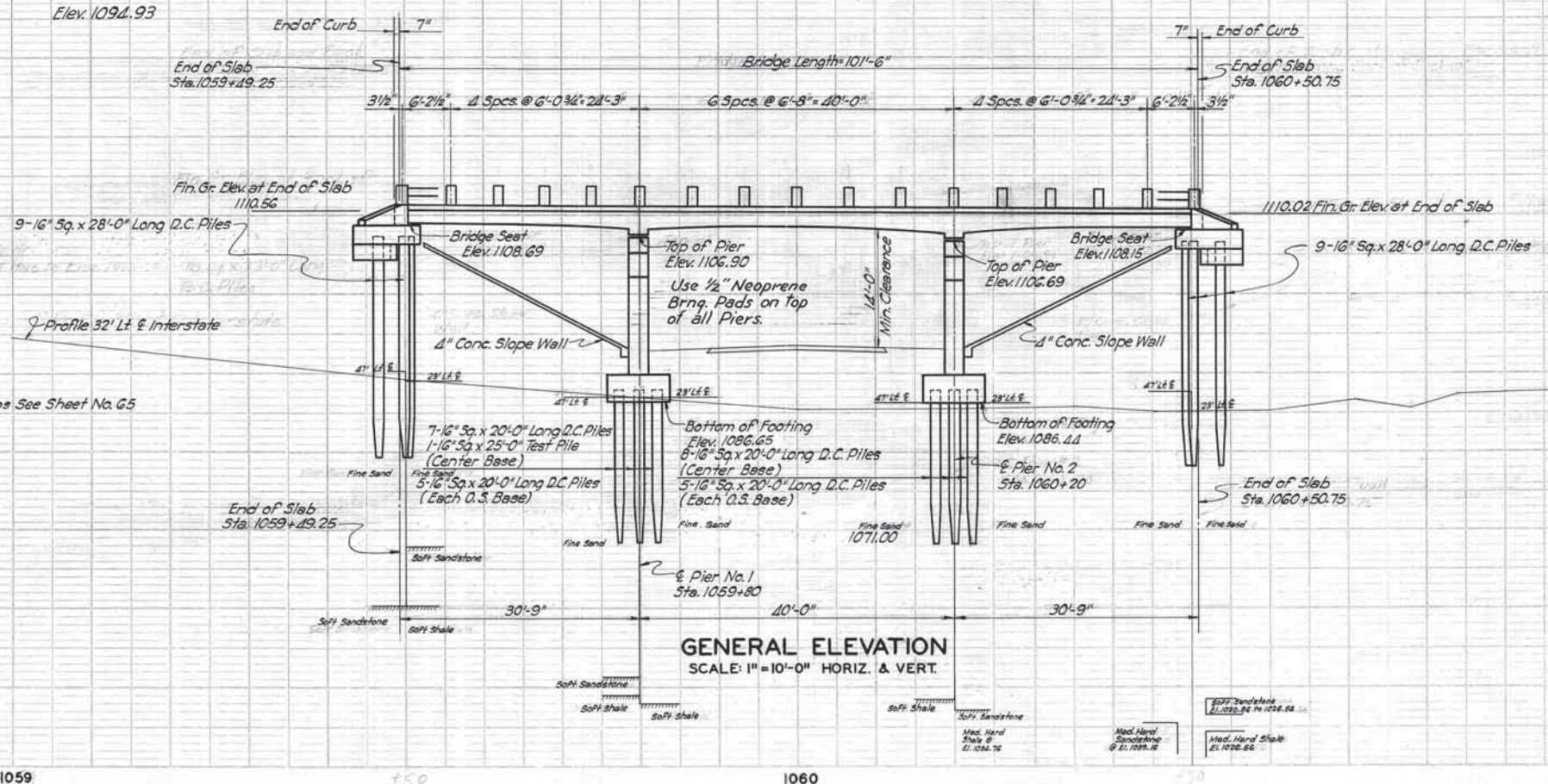
* Non-Participating

For General Notes - See Sheet No. G5
 Use Type "B" Bearings @ Piers & Abuts.

DATE	BY	CHKD.

DATE	BY	CHKD.

B.M. ~ D.D. Spike in 16" Post Oak 174' Df.
 Sta. 1062+66 Elev. 1094.93



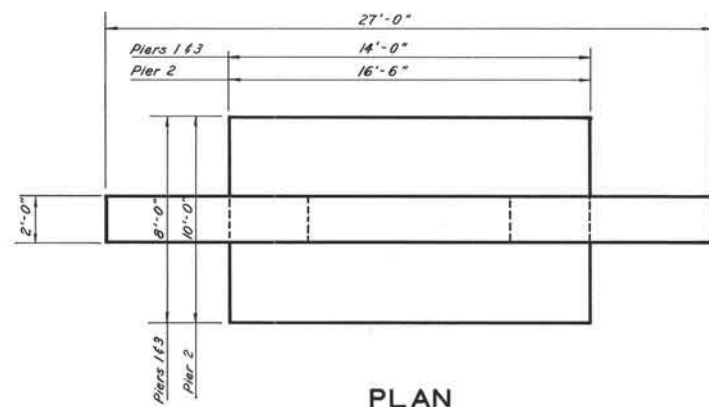
REFERENCE LIST OF DRAWINGS

General Elevation - Right Structure - Sheet No. 65
 * Details of Abutments & 4" Concrete Slope Wall - Std. A.C.S. 100-238.57 No. 75
 * Details of Superstructure - Std. C.S. 100-238.57 Sheet No. 73
 * Details of Brngs. & Slab Dims. - Std. C.S. 100-238.57 Sheet No. 74
 * Details of Piers - Sheet No. 68
 * Details of Reinforced Concrete Piling - Std. C.S.P. 2 - Sheet No. 76
 * Details of approach Slab - Std. 145D-1 - Sheet No. 78
 * Inlet Frame and Grate - Std. 53F-1 - Sheet No. 58

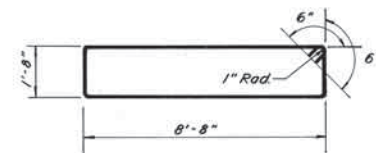
* Slope of Roadway shown on Standards is 3/4" per foot. All dimensions on the Standards which are affected shall be changed to conform to a Roadway Slope of 1/8" per foot on Structures No. 7 Bridge and No. 8 Bridge.

Rev. - Revised Black Traffic Stripe 11-22-57
 Rev. - Revised Test pile note 9-12-57
 Rev. - Add. 1/2" Brng. Pad Note 1-7-56

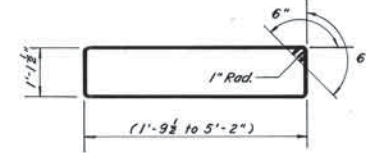
RECORD		OKLAHOMA STATE HIGHWAY COMMISSION	
ITEM	BY DATE	OKLAHOMA CITY, OKLA.	
DESIGN		STRUCTURE NO. 8 BR. LT. GENERAL ELEV. PLAN & SUMMARY OF QUANTITIES 30'-40'-30' CONC. SLAB SPAN 38' RDY & 2-18" SC'S STA. 1060+00.00 ON & INTERSTATE F.A. PROJECT NO. 1-456(8)	
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD:			



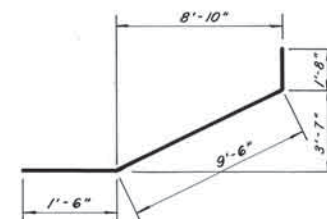
PLAN



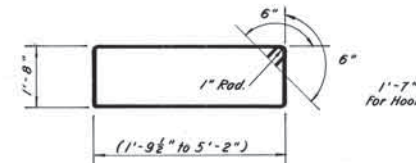
PS₁ - # 4 x 21'-8"



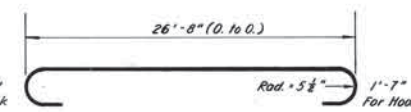
PS₃ - # 4 x 10' - 6 1/2" (Weighted Ave.)



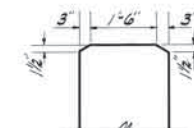
PH₂ - # 6 x 12' - 8"



PS₂ - # 4 x 11' - 7 1/2" (Weighted Ave.)
(7' - 11" to 14' - 8")



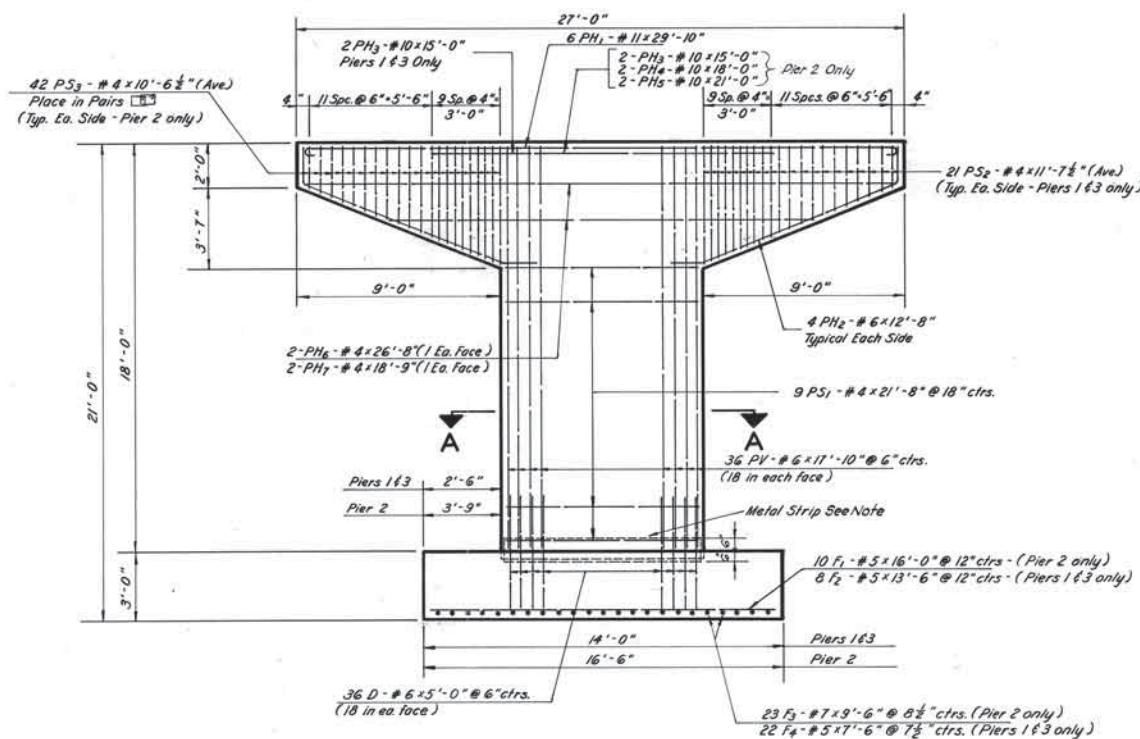
PH₁ - # 11 x 29' - 10"



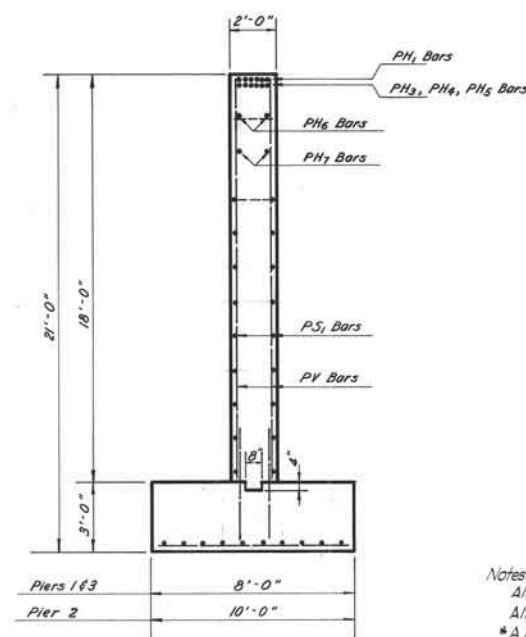
DETAIL OF CHAMFER
(Top of Pier only)

BAR LIST-PIER 1 OR 3				
MARK	NO	SIZE	FORM	LENGTH
D	36	# 6	Str.	5' - 0"
PV	36	# 6	Str.	17' - 10"
PS1	9	# 4	Bnt.	11' - 8"
PS2	42	# 4	Bnt.	11' - 7 1/2" (Ave.)
PH1	6	# 11	Bnt.	29' - 10"
PH2	8	# 6	Bnt.	12' - 8"
PH3	2	# 10	Str.	15' - 0"
PH6	2	# 4	Str.	26' - 8"
PH7	2	# 4	Str.	18' - 9"
F ₂	8	# 5	Str.	13' - 6"
F ₈	22	# 5	Str.	7' - 6"

BAR LIST-PIER 2				
MARK	NO	SIZE	FORM	LENGTH
D	36	# 6	Str.	5'-0"
PV	36	# 6	Str.	17'-10"
PSJ	9	# 4	Bnt.	21'-8"
PS3	84	# 4	Bnt.	10'-6" (Ave.)
PH1	6	# 11	Bnt.	29'-10"
PH2	8	# 6	Bnt.	12'-8"
PH3	2	# 10	Str.	15'-0"
PH4	2	# 10	Str.	18'-0"
PH5	2	# 10	Str.	21'-0"
PH6	2	# 4	Str.	26'-8"
PH7	2	# 4	Str.	18'-9"
F ₁	10	# 5	Str.	16'-0"
F ₃	23	# 7	Str.	9'-6"



ELEVATION

SECTION ON \mathbb{C}

QUANTITIES							
SECTION LINE BRIDGE OVER		RIENF. STEEL	CLASS "X" CONCRETE	CLASS "X" CONC. IN PIER	SUBSTRUCTURE EXC-ROCK	SUBSTRUCTURE EXC-COMMON	AVE. DEPTH IN ROCK
INTERSTATE	STA.	Lbs.	Cu. Yd.	BASES-Cu. Yd.	Cu. Yd.	Cu. Yd.	FT.
848+100	Pier 1	3310	17.1	12.5	4.0		.98
	Pier 2	4260	17.1	18.4	23.0	15.0	3.70
	Pier 3	3310	17.1	12.5	24.0		5.75
903+100	Pier 1	3310	17.1	12.5	23.0		5.61
	Pier 2	4260	17.1	18.4	29.0		4.73
	Pier 3	3310	17.1	12.5	23.0		5.61
955+17.50	Pier 1	3310	17.1	12.5	25.0		5.92
	Pier 2	4260	17.1	18.4	33.0		5.44
	Pier 3	3310	17.1	12.5	25.0		5.92
1007+99.11	Pier 1	3310	17.1	12.5	25.0		5.92
	Pier 2	4260	17.1	18.4	33.0		5.44
	Pier 3	3310	17.1	12.5	25.0		5.92

Notes: All Construction and Materials shall be in accordance with the Oklahoma Standard Specifications of 1954 and Special Provisions.

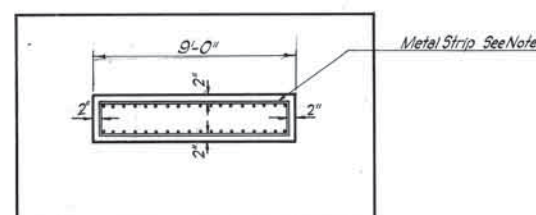
All Reinforcing Steel Bars shall conform to A.S.T.M. Specifications A 305-49

All Exposed edges shall have a 1½" Chamfer unless otherwise noted.

* A 16 gauge galvanized iron strip 2" wide shall be placed in the construction joint in each Pier Shaft as shown. Each joint in the metal strip shall be lapped 2" riveted and soldered to make it watertight. The materials shall comply with the requirements of the Oka Std Specs of 1954 and A.A.S.H.O. Specs. Concrete shall be carefully placed so as not to crush or deform this strip. All cost of the material and the placing of metal strip shall be included in the unit price bid per Cu Yd for Class "A" Concrete in Pier Bases.

All Concrete shall be poured in the dry.

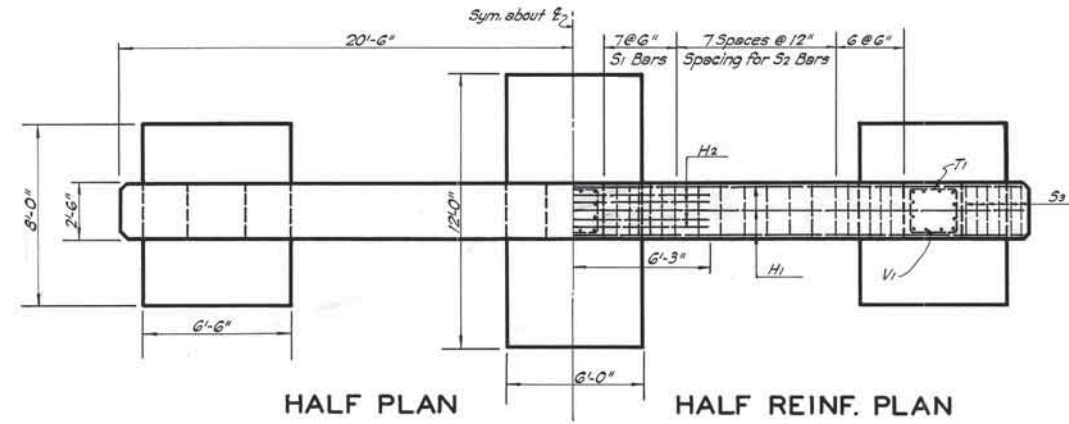
Any concrete shall be poured in the dry. Concrete in the footing of the piers shall be poured against the rock foundation. The quantity of Class "A" concrete in Pier Bases and Substructure Excavation Rock paid for under those items shall be the amount within the neat lines of the footings as shown on these plans. Any variation in the elevation of the Pier Bases shall be taken up in the shaft and any additional concrete shall be paid for as Class "A" concrete in Pier Bases. All cost of such variation shall be included in the unit price bid per cubic yard for Class "A" Concrete in Pier Base and Substructure Excavation Rock.



SECTION A-A

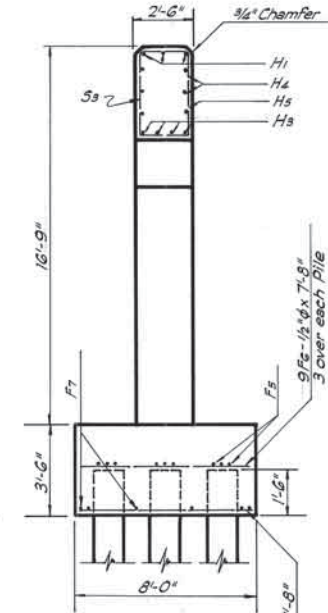
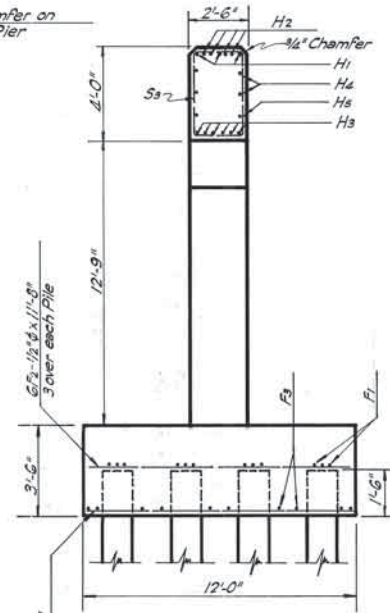
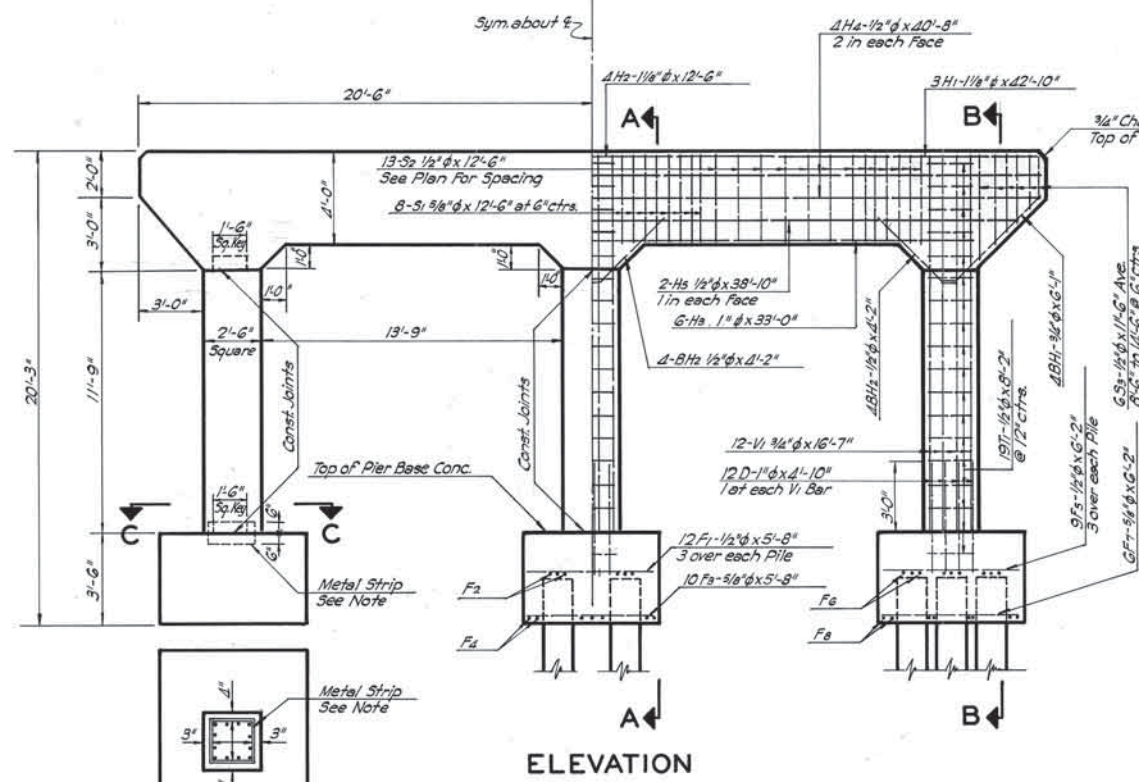
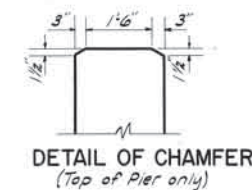
RECORD			OKLAHOMA STATE HIGHWAY COMMISSION
ITEM	BY	DATE	OKLAHOMA CITY, OKLA.
DESIGN			<p align="center"> DETAILS OF PIERS FOR 30'-55'-55'-30' CONTINUOUS CONCRETE SLAB SPAN 24' RDY & 2-18" SC'S F.A. PROJECT NO.1-456(8) </p>
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD:			

Rev. - Raised constr. ft. 9-12-57
Rev. - Added detail for Chamfer
on top of Pier - 1-7-58

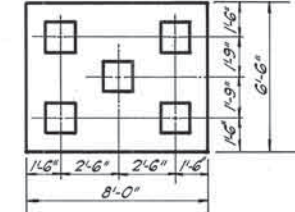
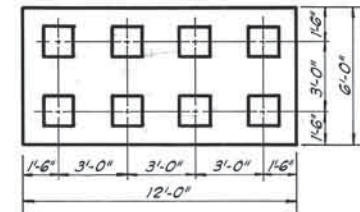
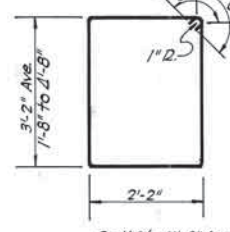
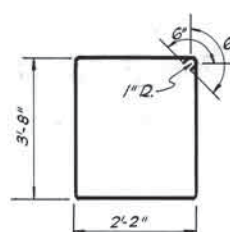
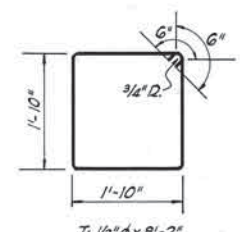
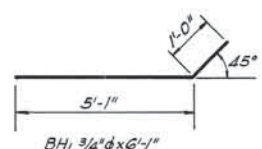
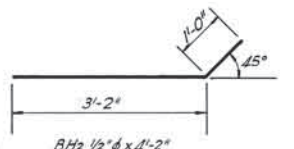
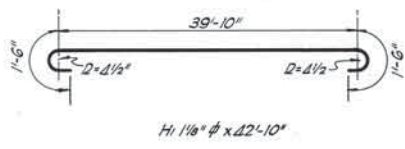


QUANTITIES					
ITEM	UNIT	PR. NO. 1 RT.	PR. NO. 2 RT.	PR. NO. 1 LT.	PR. NO. 2 LT.
Class "A" Concrete	C.Y.	24.0	24.0	24.0	24.0
Class "A" Conc. in Pier Bases	C.Y.	22.9	22.9	22.9	22.9
Reinforcing Steel	Lbs.	4870	4870	4870	4870
Substructure Excav. Common	C.Y.	105	105	115	115

BAR LIST - ONE PIER				
MARK	NO.	SIZE	FORM	LENGTH
H1	3	1 1/8" φ	Bnt	42'-10"
H2	4	1 1/8" φ	Str.	12'-6"
H3	6	1" φ	Str.	33'-0"
H4	4	1 1/2" φ	Str.	40'-8"
H5	2	1 1/2" φ	Str.	38'-10"
S1	16	5/8" φ	Bnt	12'-6"
S2	26	1/2" φ	Bnt	12'-6"
S3	12	1/2" φ	Bnt	11'-6" Ave.
T1	57	1/2" φ	Bnt	8'-2"
V1	36	3/4" φ	Str.	16'-7"
BH1	8	3/4" φ	Bnt	6'-1"
BH2	16	1/2" φ	Bnt	4'-2"
D1	36	1" φ	Str.	4'-10"
F1	12	1/2" φ	Str.	5'-8"
F2	6	1/2" φ	Str.	11'-8"
F3	10	5/8" φ	Str.	5'-8"
F4	8	1" φ	Str.	11'-8"
F5	18	1/2" φ	Str.	6'-2"
F6	18	1/2" φ	Str.	7'-8"
F7	12	5/8" φ	Str.	6'-2"
F8	16	3/4" φ	Str.	7'-8"



SECTION C-C



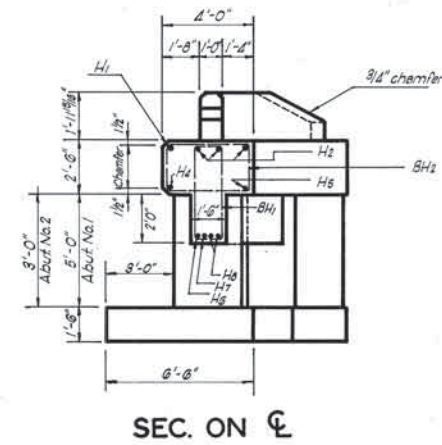
PILE SPACING DIAGRAMS

NOTES

All Construction and Materials shall be in accordance with the Oklahoma Standard Specifications of 1954 and Special Provisions.
All Reinforcing Steel bars shall conform to A.S.T.M. Specifications A 305-49.
All exposed edges shall have a 1 1/4" Chamfer unless otherwise noted.

* A 16 gauge galvanized iron strip 12" wide shall be placed in the construction joint in each Pier shaft as shown. Each joint in the Metal Strip shall be lapped 2" riveted and soldered to make it water tight. The Materials shall comply with the requirements of the Okla. Std. Specs. of 1954 and A.S.T.M. Specs. Concrete shall be carefully placed so as not to crush or deform this strip. All cost of the Material and the placing of Metal Strip shall be included in the unit price bid per Cu. Yd. for Class "A" Concrete in Pier Bases.

RECORD			OKLAHOMA STATE HIGHWAY COMMISSION	
ITEM	BY	DATE	OKLAHOMA CITY, OKLA.	
DESIGN			<p align="center">DETAIL OF PIERS FOR STR NO. 7 BRIDGE & NO. 8 BRIDGE @ STATION 1060+00 F.A. PROJECT NO. 1 456 (8)</p>	
DETAIL				
TRACED				
CHECKED				
APPROVED				
SQUAD				



QUANTITIES-EACH ABUTMENT			
ITEM	UNIT	ABUT. NO.1	ABUT. NO.2
Class 2 Concrete	C.Y.	27.2	24.8
Class 4 Concrete Abutment Base	C.Y.	4.9	4.9
Reinforcing Steel	Lbs	2,280.0	1,820.0
Substructure Excavation Common	C.Y.	80.0	70.0
Substructure Excavation Rock	C.Y.	8.2	7.4

BAR LIST ABUTMENT NO.1				
MARK	NO.	SIZE	FORM	LENGTH
PH	16	# 4	Bent	11'-8"
PV1	32	# 6	Str	8'-7"
PF1	18	# 8	Str	8'-0"
PF2	14	# 6	Str	3'-8"
PF3	16	# 6	Str	3'-0"
PF4	10	# 5	Str.	4'-0"
H1	1	# 8	Bent	34'-2"
H2	9	# 8	Str	33'-4"
H3	8	# 8	Str.	8'-0"
H4	1	# 4	Bent	34'-2"
H5	1	# 4	Str	53'-4"
H6	1	# 7	Bent	34'-2"
H7	1	# 7	Bent	33'-11"
H8	2	# 7	Str	32'-6"
H9	4	# 4	Str	8'-0"
H10	4	# 4	Str	7'-0"
BH1	23	# 4	Bent	11'-8"
BH2	16	# 4	Bent	12'-8"
BH3	4	# 4	Bent	11'-4"
W1	2	# 4	Str.	4'-1"
W2	2	# 4	Bent	8'-3"
W11	8	# 4	Str.	3'-4"
W12	8	# 4	Str.	2'-5 1/2 (4)
W13	2	# 4	Str	1'-0"

BAR LIST				
ABUTMENT NO.2				
MARK	NO.	SIZE	FORM	LENGTH
P _W	8	#4	Bent	11'-8"
P _D	32	#6	Strc	6'-7"
P _F	18	#6	Strc	8'-0"
P ₁	14	#5	Strc	9'-6"
P ₃	16	#5	Strc	3'-0"
P ₄	10	#5	Strc	4'-6"
H ₁	1	#8	Bent	34'-2"
H ₂	3	#8	Strc	33'-4"
H ₃	8	#6	Strc	8'-0"
H ₄	1	#4	Bent	34'-2"
H ₅	1	#4	Strc	33'-4"
H ₆	1	#7	Bent	34'-2"
H ₇	1	#7	Bent	33'-11"
H ₈	2	#7	Strc	32'-6"
H ₉	4	#4	Strc	8'-0"
H ₁₀	4	#4	Strc	7'-0"
BH ₁	23	#4	Bent	11'-6"
BH ₂	16	#4	Strc	12'-8"
BH ₃	4	#4	Bent	11'-4"
WH ₁	2	#4	Strc	4'-1"
WH ₂	2	#4	Bent	8'-3"
WY ₁	8	#4	Strc	3'-2"
WY ₂	8	#4	Strc	2'-5 1/2" (Ave)
WY ₃	2	#4	Strc	1'-10"

All Construction and Materials shall be in accordance with the
Oklahoma Standard Specs of 1954 and Special Provisions.
All Reinforcing Steel Bars shall conform to A.S.T.M. Specs. A-305-49
All exposed edges shall have a 3/4" Chamfer unless otherwise noted or shown.
Concrete in the footings of the abutments shall be poured against the rock foundation.
The quantity of Class A concrete in Abutment Bases and Substructure Excavation
Rock paid for under those items shall be the amount within the neat lines of the footings
as shown on these plans. Any variation in the elevation of Abutment footings shall be
taken care of in the shop and any additional concrete shall be paid for as Class A concrete
in Abutment Bases. All cost of such variation shall be included in the unit price bid per
cubic yard for Class A concrete in Abutment Base and Substructure Excavation Rock.

RECORD			OKLAHOMA STATE HIGHWAY COMMISSION
ITEM	BY	DATE	OKLAHOMA CITY, OKLA.
DESIGN			<p align="center"> STRUCTURE NO. 4 BR. DETAIL OF ABUTMENTS STA. 955+17.50 ON ∇ INTERSTATE F.A. PROJECT NO. I-456(8) </p>
DETAIL			
TRACED			
CHECKED			
APPROVED			
SQUAD:			