DESIGN DESIGNATION

A.D.T. - 1983 = 7900
A.D.T. - 2003 = 12650
DHT - 1390
D = 60%
T = 5%
V = 60 M.P.H.

FINAL PLANS

COUNTY JASPER
ROUTE 71
PROJECT FEGC-71-3(41)

Job No. 7-U-71-21G

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED STATE HIGHWAY

FEDERAL AID PROJECT

JASPER COUNTY

FULLY LIMITED ACCESS HIGHWAY

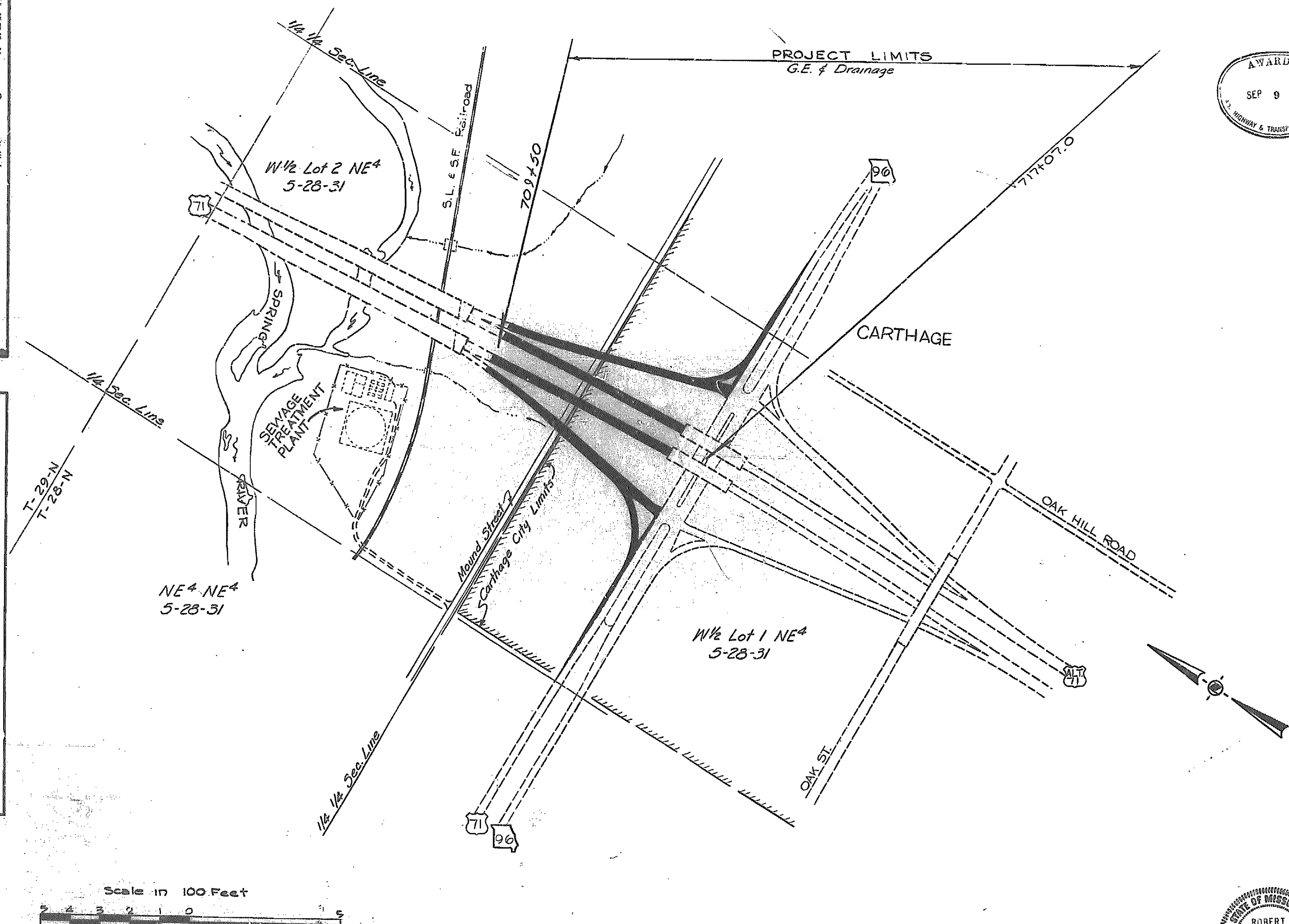
THIS SHALL BE A FULLY LIMITED ACCESS HIGHWAY BETWEEN STA 709± AND STA 717±. NO ABUTTING OWNER SHALL HAVE THE RIGHT OF DIRECT ACCESS TO SAID HIGHWAY OR ITS RIGHT-OF-WAY EXCEPT THAT ACCESS WILL BE PERMITTED TO ANY ADJACENT OUTER ROADWAY OR SERVICE ROAD TO WHICH ACCESS IS NOT SPECIFICALLY PROHIBITED BY THE SPECIAL SYMBOL DENOTING "NO RIGHT OF ACCESS" AS SHOWN ON THE PLANS. NO ACCESS WILL BE PERMITTED FROM OUTER ROADWAYS AND SERVICE ROADS TO THROUGHWAYS EXCEPT ALONG ROUTES CONSTRUCTED FOR THAT PURPOSE. OUTER ROADWAYS AND SERVICE ROADS, AS THE CASE MAY BE, ARE SO DESIGNATED ON THE PLANS.

- BEGINNING AND ENDING OF LIMITED ACCESS
- LIMITED ACCESS
- NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

CONVENTIONAL SIGNS
(USED IN PLANS)

- BUILDINGS AND STRUCTURES
- GUARD RAIL
- CONCRETE RIGHT-OF-WAY MARKER
- STEEL RIGHT-OF-WAY MARKER
- FENCE
  - CHAIN LINK
  - WOVEN WIRE
  - GATE
- UTILITIES
  - TELEPHONE
  - POWER
  - GAS
  - WATER
  - *Underground Telephone*

NOTE: DASHED OR OPEN SYMBOL INDICATES EXISTING FEATURE



AWARDED
SEP 9 1983
MO. HIGHWAY & TRANSPORTATION DEPT.

INDEX OF SHEETS

LENGTH OF PROJECT

END OF PROJECT	STA. 717+07.0	
BEGINNING OF PROJECT	STA. 709+50	
APPARENT LENGTH	757	FEET
EQUATIONS AND EXCEPTIONS	None	
TOTAL CORRECTIONS	0.0	FEET
NET LENGTH OF PROJECT	757	FEET
STATE LENGTH	.143	MILES
FEDERAL LENGTH	.143	MILES

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUBMITTED

CHIEF ENGINEER DATE

STATE OF MISSOURI
ROBERT N. HUNTER
NUMBER E-7051
REGISTERED PROFESSIONAL ENGINEER

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

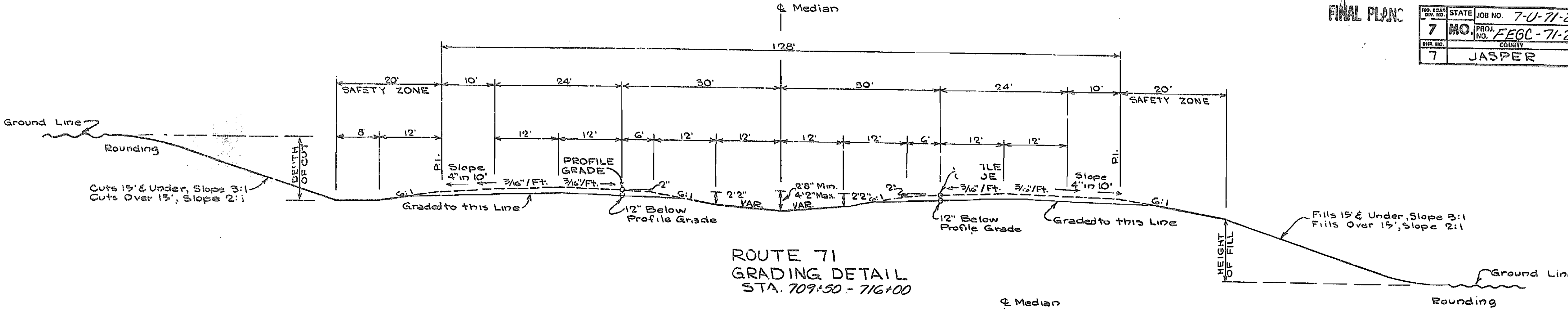
APPROVED

DIVISION ENGINEER DATE

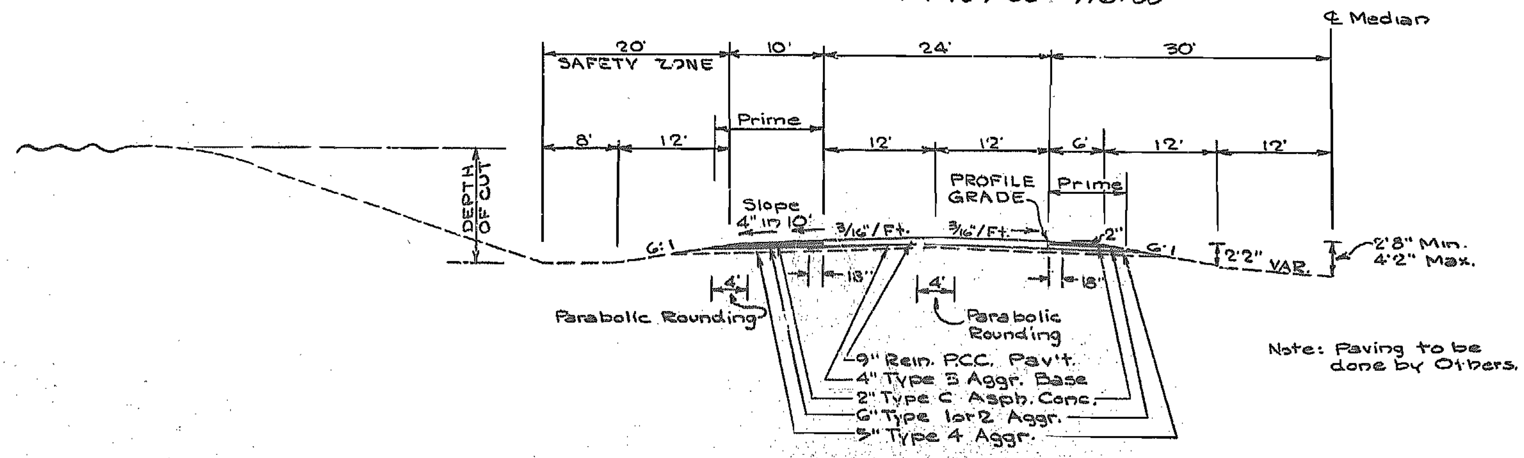
84 517

FINAL PLANS

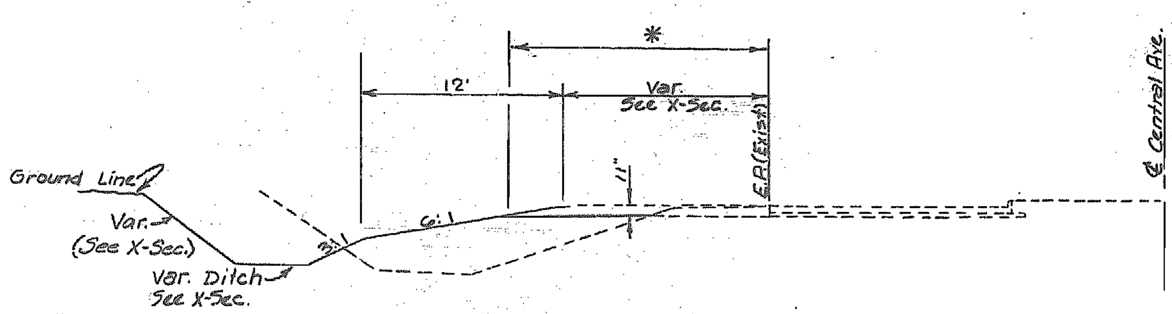
FED. ROAD DIV. NO.	STATE	JOB NO. 7-U-71-21G	SHEET NO.
7	MO.	PROJ. NO. FEGC-71-2(41)	2
DIST. NO.	COUNTY		ROUTE / SEC.
7	JASPER		71



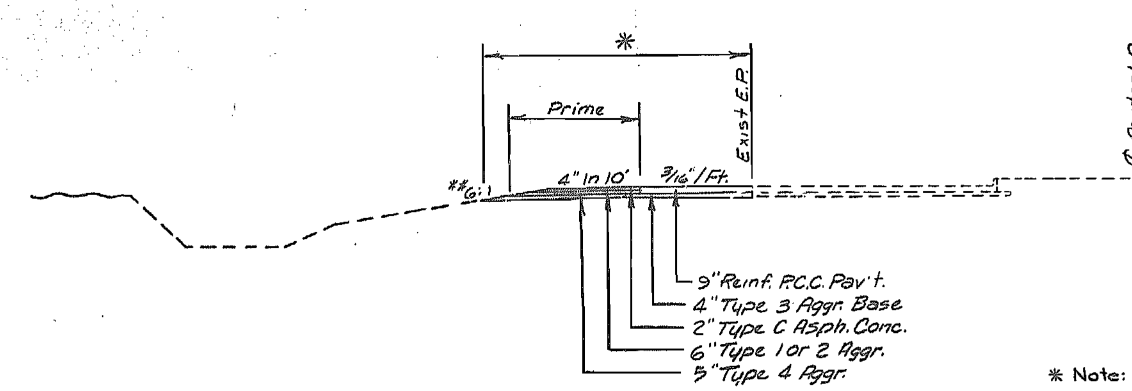
ROUTE 71
GRADING DETAIL
STA. 709+50 - 716+00



ROUTE 71
PAVING DETAIL
(By Others)



GRADING DETAIL



PAVING DETAIL

* Note: To be built by Others.

Note: These Typical Sections show Details of the Normal Widening Template for Central Ave. (Lt.). See X-Sec. for Details of Width Transitions, Special Slopes & Future Curb & Gutter at Ramp Terminals, & Spillfill for Future Bridges.

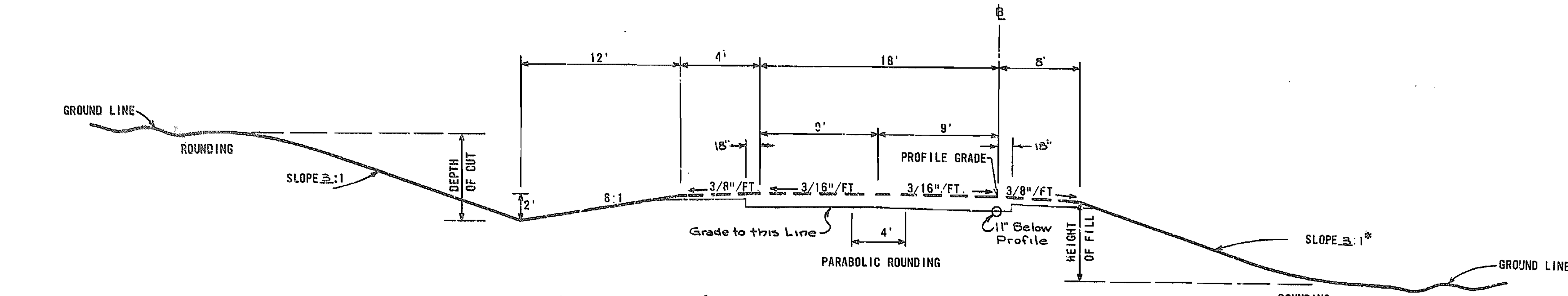
CENTRAL AVE.
Sta. 453+66 - 470+00

SHEET 1 OF 2

FINAL PLANS

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	FEG-71-2(41)	2
DIST. No.	COUNTY		
7	JASPER	71	

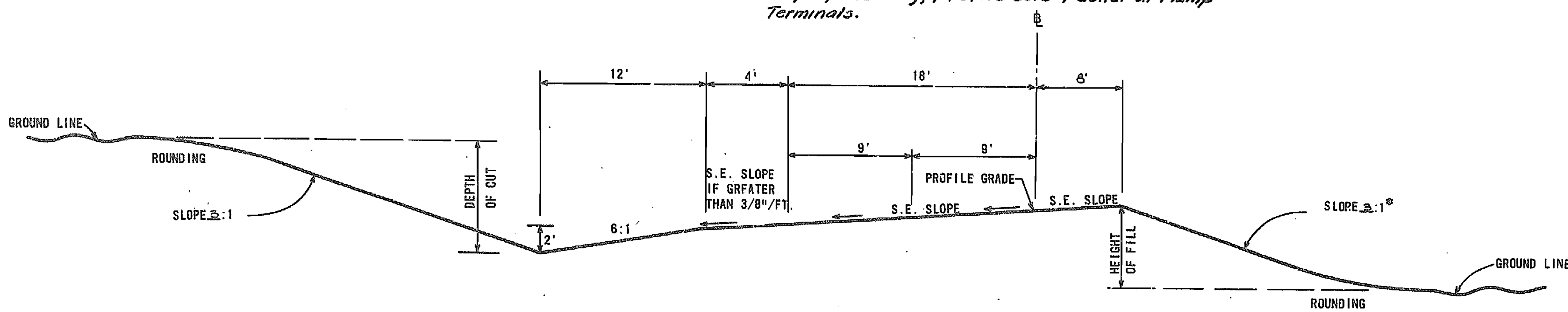
JOB NO.- 7-U-71-216



SECTION ON TANGENT

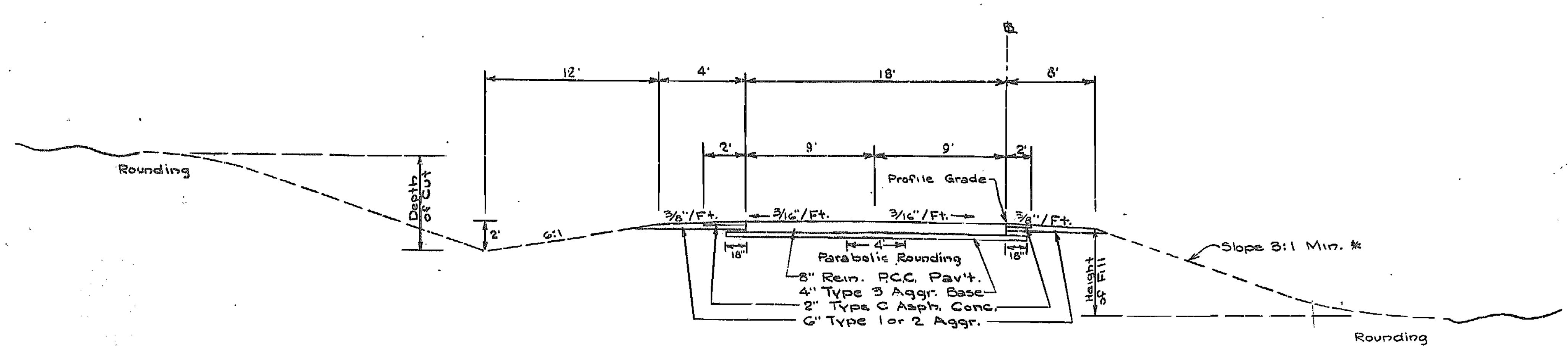
RAMP 1 - Sta. 3+38 - 10+72.5
RAMP 2 - Sta. 3+92 - 10+99.05

Note: These Typical Sections show Details for the Normal Rdbd. Template. See X-Sec. for Details of Special Slopes, Widening, & Future Curb & Gutter at Ramp Terminals.



SECTION ON SUPERELEVATED CURVE

*THE OFFSET FROM TOE OF FILL TO THE SHOULDER POINT IS A MINIMUM OF 12 FEET. THE SLOPE VARIES TO MEET THIS REQUIREMENT.



FUTURE PAVING TYPICAL SECTION
(By Others)

RAMPS 1 & 2
CENTRAL AVE. INTERCHANGE

SHEET 2 OF 2

26 FOOT ROADBED - 18 FOOT TRAVEL WAY (FOR INTERCHANGE RAMPS) A-9-1-75

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

FED ROAD DIV NO	STATE	JOB NO. 7-U-71-216		SHEET NO
7	MO.	PROJECT NO. FEGC-71-2(41)		2A
DIST NO	COUNTY		ROUTE	SEC
	JASPER		71	

ITEM	DESCRIPTION	UNIT	QUANTITY
202-20.10	REMOVAL OF IMPROVEMENTS	LUMP SUM	1
203-10.00	CLASS A EXCAVATION	CU YD	*85741
203-60.00	COMPACTING EMBANKMENT	CU YD	82,316
203-70.00	COMPACTING IN CUT	CU YD	1,393
206-30.00	CLASS 3 EXCAVATION	CU YD	134
207-10.00	LINEAR GRADING CLASS 1	STATION	1.2
601-10.00	FIELD LABORATORIES	LUMP SUM	1
609-60.00	DITCH LINER	SQ YD	237
609-70.00	ROCK LINING	CU YD	22
726-13.15	15 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	17
726-13.18	18 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	167
726-13.48	48 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	19
732-00.18	18 IN. FLARED END SECTION	EACH	4
802-20.00	TYPE 2 MULCH	ACRE	11.5
802-99.88	MULCH OVERSPRAY	ACRE	11.5
805-10.00	SEEDING	ACRE	11.5
806-30.00	NETTING TYPE III	SQ YD	0
903-50.15	TYPE IV OBJECT MARKER	EACH	6
	—CONTINGENT ITEMS—		
501.01	Class C Excavation	CU YD	194
	* INCL. 72 Cu Yd Rounding		

Mark J. Soote 5-14-85

Prepared By: [signature] Date: April 1, 1985 Checked in Dist. Office By: B.R. Lowery Date: 4-15-85 Checked in Central Office By: ______ Date: ______ Acceptance Date 3-20-85

84530

SP-2B

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

FED. ROAD DIVISION	STATE	PROJECT	SHEET NO.
5	MO.	FEGC-71-2(41)	2B
DIST. NO.		COUNTY	ROUTE
7		JASPER	71

Job No. 7-U-71-21G

REMOVAL OF IMPROVEMENTS

Sheet	Sta.	Location	Description	No.	Remarks
	712+49	160'± Rt. ℄	Conc. Drainage Struc.	1	3.6' Diam X 28' with 4'X4'X10' Ext.
			TOTAL	1	
			LUMP SUM:	1	

ROCK LINING

Sheet	Sta.	Location	Length	Width	Depth	C.Y.	Remarks
	455+00	Lt. Central	13.6	4	1	2	
	499+00	Lt. Central	20	12	2	18	
	10+10	Lt. Ramp 1	14.4	4	1	2	
			TOTAL			22	

CL. III REINFORCED CONCRETE PIPE

Sheet	Sta.	Location	Skew	Pipe 15"	Pipe 18"	Pipe 48"	Flared Ends 18"	Cl. 3 C.Y.	Remarks
	455+00	Lt. Central		17'				4	Relocate Exist. Flared End*
	499+00	Lt. Central				19'		16	" " " "
	10+10	Ramp 1			61'		2	44	
	10+50	Ramp 2			106'		2	70	
		TOTALS		17'	167'	19'	4	134	

* Relocation of Flared End Sections Included in Price Bid for Pipe.

DITCH LINER

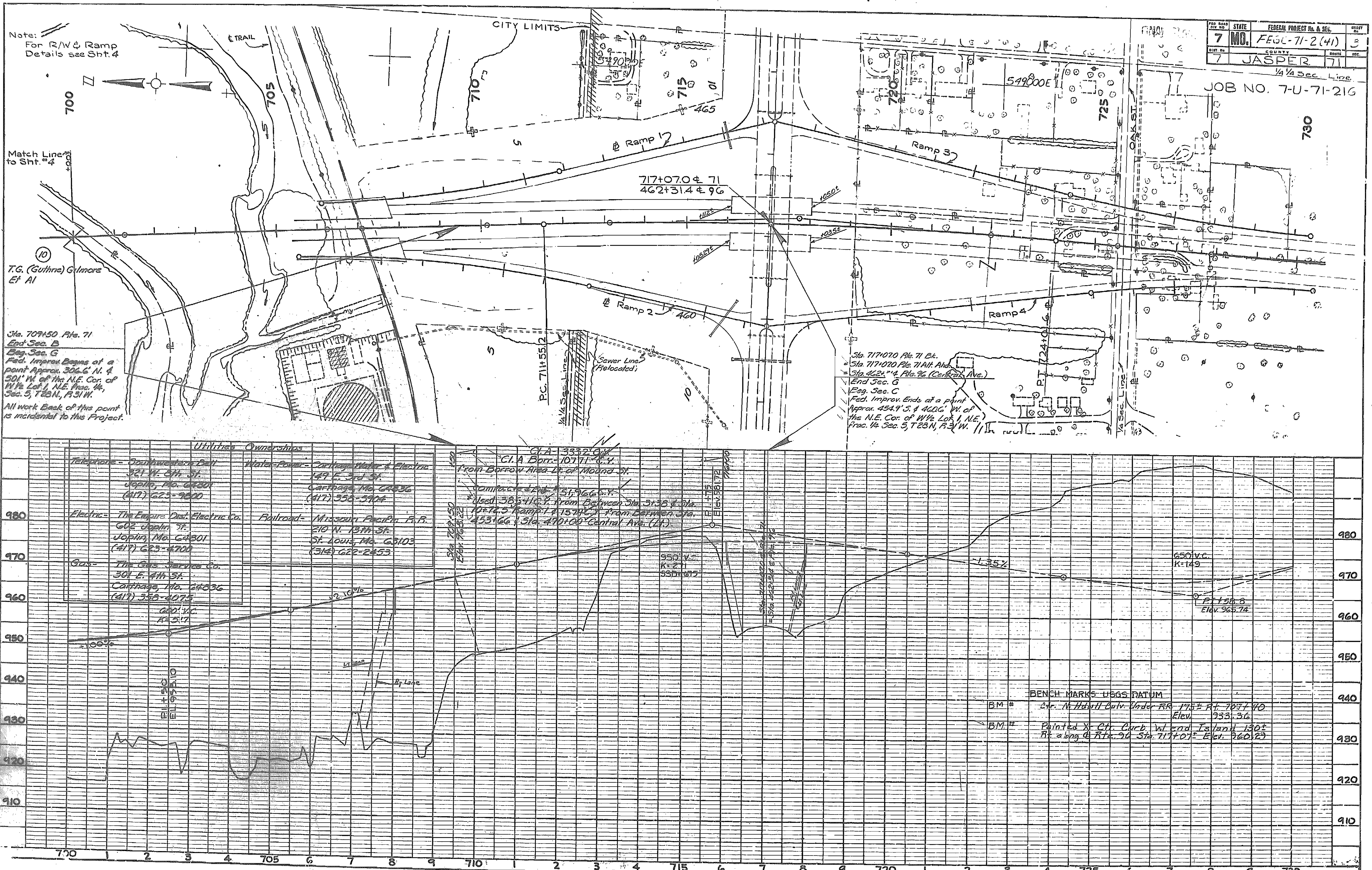
Sheet	Sta.	Sta.	Location	Type	Depth	Length	Width	S.Y.	Slopes	Remarks
	2+57±	10+56	Rt. Ramp 2	4'	1'	798.4	Var.	883	3:1, 2:1	See Bk. 6 Pg. 4 Lo Comp.
	10+56	10+70	" " "	Var. 4' to 12'	1'	14.0	Var.	21	" "	" " " " "
	10+50		Rt. Ramp 2 Outlet Ditch	4'	1'	34.0	Var.	33	2:1, 2:1	" " " " "
				TOTAL				937		

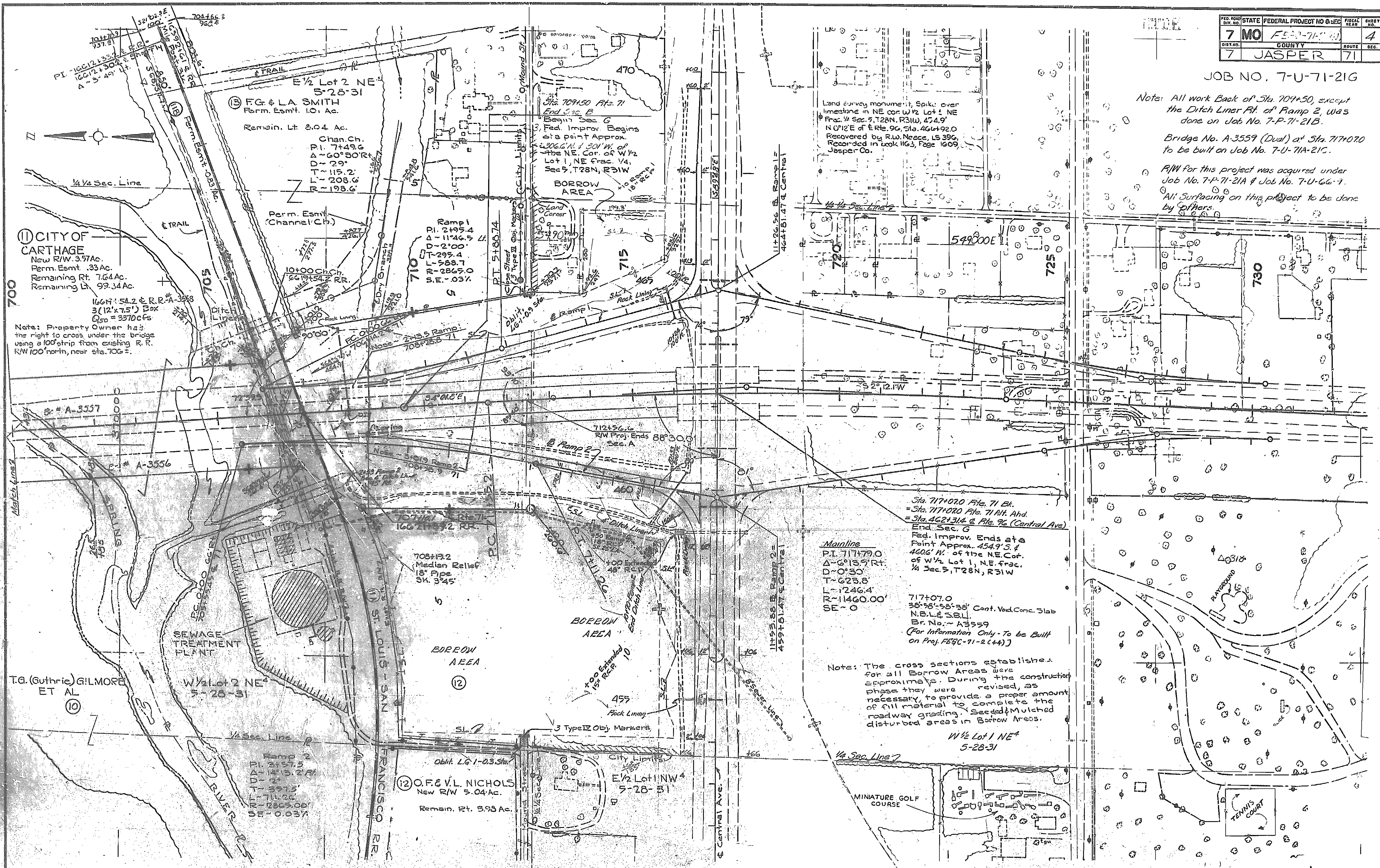
TYPE IV OBJECT MARKERS

Sheet	Sta.	Location	No.	Remarks
	712+69	804'± Rt.	3	To Close Mound St.
	712+49	250'± Lt.	3	" " " "
		TOTAL	6	

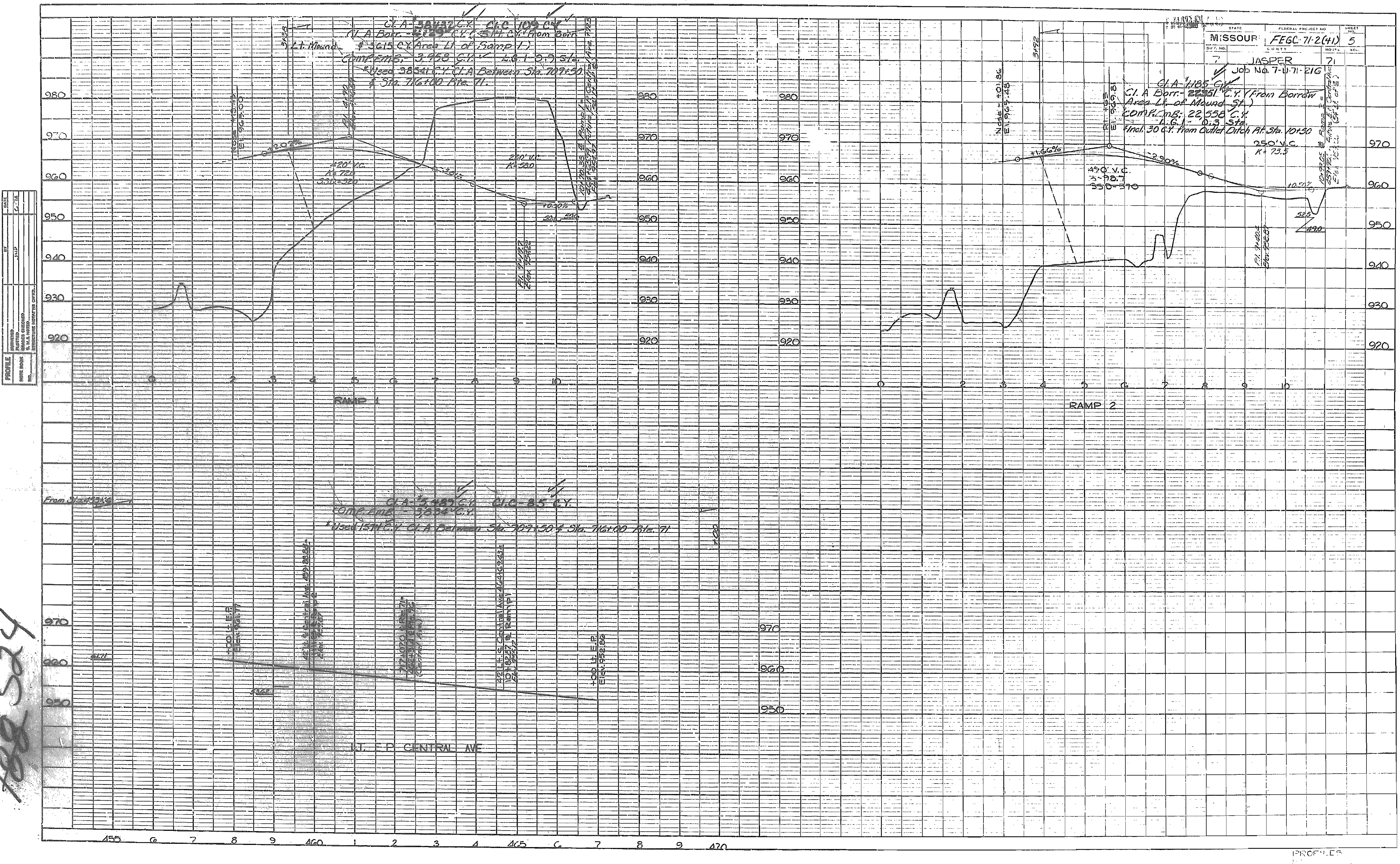
CLEARING & GRUBBING

Done under Job # 7-P-71-21B


FED. ROAD DIV. NO. 7
STATE MO.
FEDERAL PROJECT No. & SEC. FEGC-71-2(41)
SHEET No. 3
DIST. No. 7
COUNTY JASPER
ROUTE 71
JOB NO. 7-U-71-216
Note: For R/W & Ramp Details see Sht. 4
Match Line to Sht. #4
CITY LIMITS
℄ TRAIL
℄ Ramp 1
℄ Ramp 2
Ramp 3
Ramp 4
OAK ST.
549000E
¼ ¼ Sec. Line
717+07.0 ℄ 71
462+31.4 ℄ 96
T.G. (Guthrie) Gilmore Et Al
Sta. 709+50 Rte. 71
End Sec. B
Beg. Sec. G
Fed. Improv. Begins at a point Approx. 306.6' N. & 301' W. of the N.E. Cor. of W½ Lot 1, N.E. Frac. ¼, Sec. 5, T28N, R31W.
All work Back of this point is incidental to this Project.
P.C. 711+55.2
Sewer Line (Relocated)
Sta. 717+07.0 Rte. 71 Bk.
Sta. 717+07.0 Rte. 71 Alt. Ahd.
= Sta. 462+31.4 Rte. 96 (Central Ave.)
End Sec. G
Beg. Sec. C
Fed. Improv. Ends at a point Approx. 454.9' S. & 460.6' W. of the N.E. Cor. of W½ Lot 1, N.E. Frac. ¼ Sec. 5, T28N, R31W.
P.T. 724+01.6
Utilities Ownerships
Telephone - Southwestern Bell, 321 W. 6th St., Joplin, Mo. 64801, (417) 623-9800
Water-Power - Carthage Water & Electric, 149 E. 3rd St., Carthage, Mo. 64836, (417) 358-5904
Electric - The Empire Dist. Electric Co., 602 Joplin St., Joplin, Mo. 64801, (417) 623-4700
Railroad - Missouri Pacific R.R., 210 N. 13th St., St. Louis, Mo. 63103, (314) 622-2453
Gas - The Gas Service Co., 301 E. 4th St., Carthage, Mo. 64836, (417) 358-4075
Cl. A - 3332 C.Y.
Cl. A Borr. - 10771 C.Y. From Borrow Area Lt. of Mound St.
Compacted Emb. - 51,966 C.Y.
Used 38,541 C.Y. From Between Sta. 3+38 & Sta. 10+12.5 Ramp 1 & 1574 C.Y. From Between Sta. 453+66 & Sta. 470+00 Central Ave. (Lt.)
P.I. 715+75 Elev. 981.72
950' V.C. K=271
600' V.C. K=317
P.I. 701+50 EL. 951.10
+1.00%
+2.10%
-1.35%
650' V.C. K=149
P.T. 727+56.8 Elev. 965.74
BENCH MARKS USGS DATUM
BM# Ctr. N. Hdwl Culv. Under RR 175± Rt. 707+40 Elev. 933.36
BM# Painted X Ctr. Curb W. end Island 130± Rt. along ℄ Rte. 96 Sta. 717+07± Elev. 960.29
PLAN
PROFILE
SECT. G



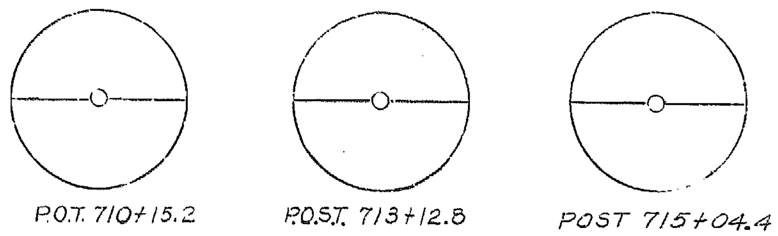
FED. ROAD DIV. NO. 7 | STATE MO | FEDERAL PROJECT NO. | SHEET NO. 4
DIST. NO. 7 | COUNTY JASPER | ROUTE 71
JOB NO. 7-U-71-21G
Note: All work Back of Sta. 709+50, except the Ditch Liner Rt. of Ramp 2, was done on Job No. 7-P-71-21B.
Bridge No. A-3559 (Dual) at Sta. 717+07.0 to be built on Job No. 7-U-71A-21C.
R/W for this project was acquired under Job No. 7-P-71-21A & Job No. 7-U-66-4.
All Surfacing on this project to be done by others.
E½ Lot 2 NE 5-28-31
13 F.G. & L.A. SMITH
Perm. Esmt. 1.01 Ac.
Remain. Lt. 8.04 Ac.
Chan. Ch.
P.I. 7+49.6
Δ~60°30' Rt.
D~29°
T~115.2'
L~208.6'
R~198.6'
¼ ¼ Sec. Line
Perm. Esmt. (Channel Ch.)
11 CITY OF CARTHAGE
New R/W 3.57 Ac.
Perm. Esmt. .33 Ac.
Remaining Rt. 7.64 Ac.
Remaining Lt. 99.34 Ac.
Note: Property Owner has the right to cross under the bridge using a 100' strip from existing R.R. R/W 100' north, near sta. 706±.
Ramp 1
P.I. 2+95.4
Δ~11°46.5' Lt.
D~2°00'
T~295.4
L~588.7
R~2865.0
S.E.~.03'/'
Sta. 709+50 Rte. 71
End Sec. B
Begin Sec. G
Fed. Improv. Begins at a point Approx. 306.6' N. & 501' W. of the N.E. Cor. of W½ Lot 1, NE frac. ¼, Sec. 5, T28N, R31W
BORROW AREA
Land survey monument, Spike over limestone in NE cor. W½ Lot 1 NE Frac. ¼ Sec. 5, T28N, R31W, 454.9' N 0°12' E of ℄ Rte. 96, Sta. 466+92.0
Recovered by R.W. Neece, LS 396, Recorded in book 1163, Page 1609 Jasper Co.
Ramp 1
Ramp 2
712+56.6 R/W Proj. Ends Sec. A
Sta. 717+07.0 Rte. 71 Bk. = Sta. 717+07.0 Rte. 71 Alt. Ahd. = Sta. 462+31.4 ℄ Rte. 96 (Central Ave)
End Sec. G
Fed. Improv. Ends at a Point Approx. 454.9' S. & 460.6' W. of the N.E. Cor. of W½ Lot 1, N.E. frac. ¼ Sec. 5, T28N, R31W
Mainline
P.I. 717+79.0
Δ~6°13.9' Rt.
D~0°30'
T~623.8
L~1246.4
R~11460.00'
SE~0
717+07.0
38'-58'-58'-38' Cont. Void Conc. Slab
N.B.L. & S.B.L.
Br. No.~A3559
(For Information Only - To be Built on Proj. FEGC-71-2 (44))
Note: The cross sections established for all Borrow Areas were approximate. During the construction phase they were revised, as necessary, to provide a proper amount of fill material to complete the roadway grading. Seeded & Mulched disturbed areas in Borrow Areas.
W½ Lot 1 NE⁴ 5-28-31
708+19.2 Median Relief 18" Pipe Sk. 3°45'
SEWAGE TREATMENT PLANT
W½ Lot 2 NE⁴ 5-28-31
T.G. (Guthrie) GILMORE ET AL 10
BORROW AREA 12
Ramp 2
P.I. 3+57.5
Δ~14°13.2' Rt.
T~357.5'
L~711.26
R~2865.00'
SE~0.03'/'
12 O.F. & V.L. NICHOLS
New R/W 5.04 Ac.
Remain. Rt. 3.98 Ac.
E½ Lot 1 NW⁴ 5-28-31
3 Type IV Obj. Markers
City Limits
¼ Sec. Line
ST. LOUIS - SAN FRANCISCO R.R.
SPRING RIVER
Central Ave.
MINIATURE GOLF COURSE
PLAYGROUND
TENNIS COURT
Match Line
700
705
710
715
720
725
730

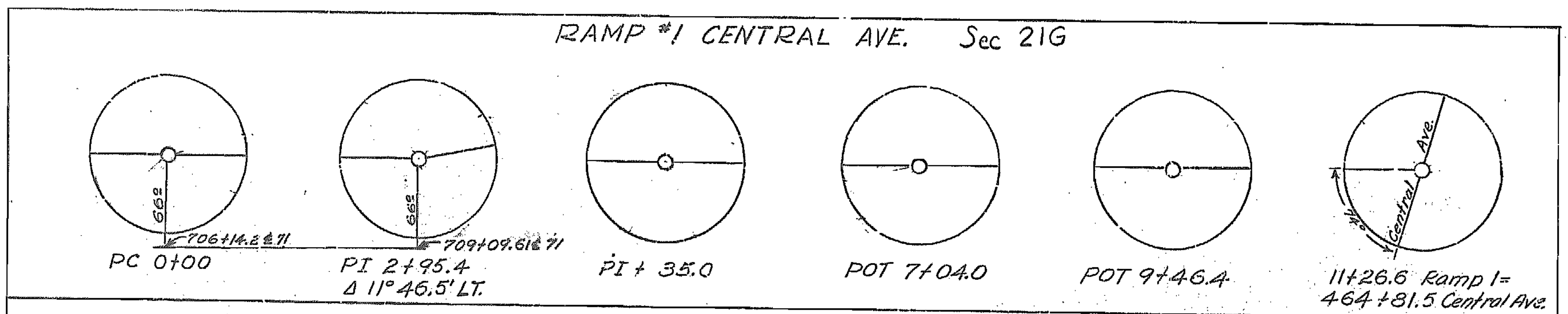


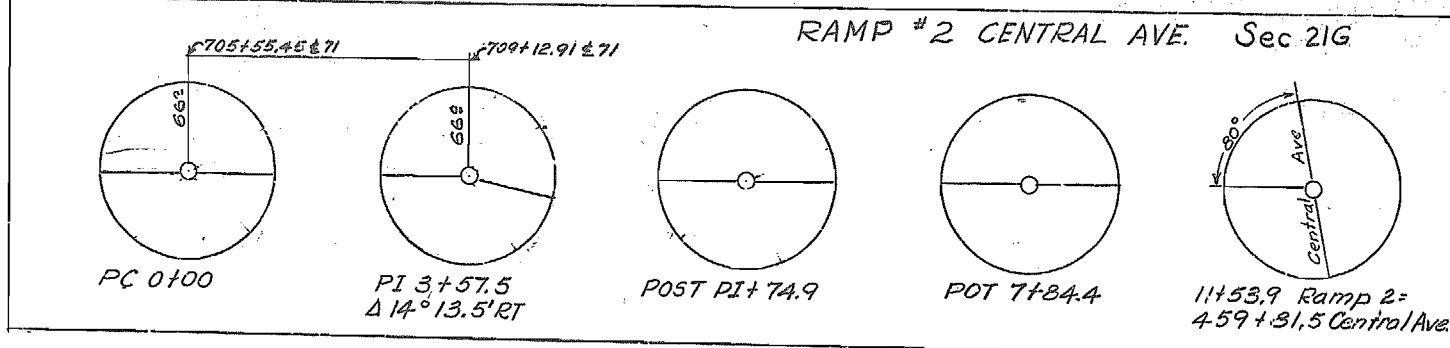
STATE
MISSOURI
FEDERAL PROJECT NO
FEGC-71-2(41)
SHEET NO.
5
DIST. NO.
7
COUNTY
JASPER
ROUTE
71
SEC.
Job No. 7-U-71-21G
Cl. A - *4185 C.Y.
Cl. A Borr. - 22351 C.Y. (From Borrow Area Lt. of Mound St.)
COMP. EMB.: 22,558 C.Y.
L.G.1 - 0.3 Sta.
*Incl. 30 C.Y. from Outlet Ditch Rt. Sta. 10+50
250' V.C.
K = 73.5
+1.66%
-2.90%
450' V.C.
+0.50%
RAMP 2
Cl. A - 3845 C.Y.
Cl. C 109 C.Y.
Cl. A Borr. - C.Y. (3514 C.Y. From Borr. & 3615 C.Y. Area Lt. of Ramp 1)
Lt. Mound
COMP. EMB. - 3,958 C.Y.
L.G.1 0.9 Sta.
*Used 3854 C.Y. Cl. A Between Sta. 709+50 & Sta. 716+00 Rte. 71.
420' V.C.
250' V.C.
K = 38.0
RAMP 1
Cl. A - *5,489 C.Y.
Cl. C - 85 C.Y.
COMP. EMB. - 3854 C.Y.
*Used 1514 C.Y. Cl. A Between Sta. 709+50 & Sta. 716+00 Rte. 71
From Sta. 453+45
LT. E.P. CENTRAL AVE
PROFILES
980
970
960
950
940
930
920
455
460
465
470

FINAL PLANS

FED ROAD DIV NO	STATE	JOB NO	SHEET NO
7	MO.	7-U-71-21G	
		PROJECT NO FEGC-71-2(41)	6
DIST NO	COUNTY	ROUTE	SEC
7	JASPER	71A	







REFERENCE POINTS

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STANDARD PLANS

FINAL PLANS

STATE	JOB NO. 7-U-71-21G	SHEET NO.
MO.	PROJECT NO. FEG[illegible](71)	19
DIST. NO.	COUNTY JASPER	ROUTE 71

SP-2
AUGUST, 1983

✓	NO.	DESCRIPTION
✓	203.00E	EXCAVATION & EMBANKMENT
	203.02C	UNDERGRADING
	203.10A	TABULATED EARTHWORK & SECTION DATA
	203.20A	SUPERELEVATION SPIRALS & WIDENING (UNDIVIDED)
✓	203.21A	SUPERELEVATION SPIRALS & WIDENING (DIVIDED)
	203.30A	ENTRANCES & APPROACHES (LESS THAN 400 ADT)
	203.31B	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - NO SAFETY ZONE)
	203.32D	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - SAFETY ZONE)
	203.35A	MAILBOX TURNOUTS
	203.40D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (NO SAFETY ZONE)
✓	203.41D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (SAFETY ZONE)
	203.60J	TYPICAL CROSS-OVERS (DIVIDED HIGHWAYS)
	204.00D	EMBANKMENT CONTROL MEASURING DEVICES
	502.00H	CONCRETE PAVEMENT APPURTENANCES
	502.10C	DOWEL SUPPORTING UNITS
	503.00H	CONCRETE APPROACH SLABS TO BRIDGES (ALSO INCLUDE 502.00)
	602.00A	RIGHT-OF-WAY & DRAIN MARKERS
	604.05A	PIPE CULVERT HEADWALLS - TYPE S
	604.10F	HEADWALL WITH ENERGY DISSIPATOR - 18"
	604.11B	HEADWALL WITH ENERGY DISSIPATOR - 24"
	604.12B	HEADWALL WITH ENERGY DISSIPATOR - 30"
	604.13B	HEADWALL WITH ENERGY DISSIPATOR - 36"
	604.14B	HEADWALL WITH ENERGY DISSIPATOR - 42"
	604.15B	HEADWALL WITH ENERGY DISSIPATOR - 48"
	604.20B	DROP INLET - TYPE B
	604.21B	DROP INLET - TYPE C
	604.22B	DROP INLET - TYPE D
	604.23B	DROP INLET - TYPE E
	604.24B	DROP INLET - TYPE EE
	604.25B	DROP INLET - TYPE F
	604.26C	DROP INLET - TYPE G
	604.27C	DROP INLET - TYPE S (3 SHEETS)
	604.28D	DROP INLET - TYPE T (ALSO INCLUDE 614.30)
	604.29C	DROP INLET - TYPE X
	604.30F	CONCRETE MANHOLES (ALSO INCLUDE 614.30)
	604.40E	PIPE COLLARS
	605.10A	CLASS A UNDERDRAINS
	606.00Q	GUARD RAIL (2 SHEETS)
	606.20G	BRIDGE ANCHOR SECTION (BRUSH CURB)(ALSO INCLUDE 606.00)
	606.21E	BRIDGE ANCHOR SECTION - CURB TYPE (ALSO INCLUDE 606.00) *
	606.22D	BRIDGE ANCHOR SECTION (SAFETY BARRIER CURB)(INCLUDE 606.00)
	606.30E	TERMINAL SECTION (ALSO INCLUDE 606.00)
	606.40A	GUARD CABLE
	607.10N	CHAIN LINK FENCE
	607.11B	CHAIN LINK FENCE FOR RETAINING WALLS
	607.20E	WOVEN WIRE FENCE (ALSO INCLUDE 607.10)

✓	NO.	DESCRIPTION
	608.00B	PAVED APPROACHES
	608.10F	CONCRETE SIDEWALK & WHEELCHAIR RAMPS
	608.20D	CONCRETE STEPS
	609.00G	CONCRETE CURB - CURB & GUTTER - GUTTER
	609.15A	PAVED DITCHES
	609.40D	DRAIN BASIN, SHLDR. PAVING & FILL SLOPE AT BR. ENDS
✓	609.60A	DITCH LINER
✓	609.70C	ROCK LINING FOR CULVERT OUTLETS
	610.20E	BRICK MANHOLES (ALSO INCLUDE 614.30)
	611.60K	CONCRETE SLOPE PROTECTION
	612.10K	BARRICADES AND FLASHER SIGNS
	614.10G	CURB INLETS, GRATES & BEARING PLATES
	614.30C	MANHOLE FRAMES & COVERS
	615.00A	OFFICE FOR ENGINEER
	616.10B	TRAFFIC CONTROL DEVICES (2 SHEETS) (ALSO INCLUDE 903.01)
	617.00Q	CONCRETE MEDIAN BARRIER (3 SHEETS)
	702.01E	16" CONCRETE PILES (APPROVED TYPES) (2 SHEETS)
	702.02B	CAST-IN-PLACE CONCRETE PILES (APPROVED TYPES)
	703.15D	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (INCL. 706.35)
	703.16C	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.20D	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (INCL. 706.35)
	703.21C	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.24D	CONCRETE BOX CULVERTS, SKEW DATA (703.15, 703.20, 703.30) (INCL. 706.35)
	703.25C	CONCRETE BOX CULVERTS SKEW DATA (703.16 & 703.21) (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.30C	CONCRETE BOX CULVERTS, 4' SPANS & LESS - ALL LOADING (INCL. 706.35)
	703.35B	CONCRETE BOX CULVERTS, CUTTING DETAILS (STRAIGHT WINGS) (INCL. 706.35)
	703.36A	CONCRETE BOX CULVERTS, CUTTING DETAILS (FLARED WINGS) (INCL. 706.35)
	703.50D	CONCRETE DOUBLE BOX STRUCTURE - SQUARE (INCL. 706.35)
	703.51C	CONCRETE DOUBLE BOX STRUCTURE - SKEWED (INCL. 706.35)
	703.52B	CONCRETE DOUBLE BOX STRUCTURE - CUT SECTIONS (INCL. 706.35)
	703.53C	DOUBLE BOX STRUCTURE TOP SLAB REINF. H15 LOADING (6 SHEETS)
	703.54C	DOUBLE BOX STRUCTURE TOP SLAB REINF. H20 OR HS20 LOADING (6 SHEETS)
	703.55A	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SQUARE (INCL. 706.35)
	703.56A	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SKEWED (INCL. 706.35)
	703.60C	CONCRETE BOX STRUCTURE - PIPE INLET
	706.30D	REINFORCING BAR SUPPORTS
	706.35D	BAR SUPPORTS FOR CONCRETE REINFORCEMENT
	712.40B	STEEL DAMS FOR BRIDGES (6" CHANNEL)
	712.41B	STEEL DAMS FOR BRIDGES (4" CHANNEL)
	725.31C	METAL CURTAIN WALL AND METAL INLETS
✓	726.30B	CULVERT INSTALLATION METHODS
	731.00N	PRECAST MANHOLES (ALSO INCLUDE 614.30)
	731.10F	PRECAST DROP INLETS (4 SHEETS) (ALSO INCLUDE 614.30 & 614.10)
✓	732.00G	FLARED END SECTION (2 SHEETS)
	806.03C	EROSION CONTROL NETTING (INSTALLATION) TYPE I
✓	806.02	STAPLE PLACEMENT FOR TYPE III NETTING

✓	NO.	DESCRIPTION
		HIGHWAY LIGHTING
	901.00K	POLES & APPURTENANCES - 30' (3 SHEETS)
	901.01P	POLES & APPURTENANCES - 45' (3 SHEETS)
	901.05A	CONTROL PANEL CABINET DETAILS (2 SHEETS) (NOTE BELOW)
	901.12A	POLE MOUNT. CONT. STA.-SECONDARY SERV.-480 V MULTI. CIR. (NOT METERED)
	901.15C	POLE MOUNT. CONT. STA.-SEC. SERV.-120, 240, & 480 V MULTI. CIR.
	901.16B	POLE MOUNT. CONT. STA.-SEC. SERV.-480 V MULTI. CIR. (METERED)
	901.18B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.
	901.19B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (NOT METERED)
	901.20B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR. (SIG. METERED)
	901.22C	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 & 480 V MULTI. CIR. (BOTH METERED)
	901.23C	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (METERED)
	901.24B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (LT'S & SIGS-BOTH METERED)
	901.25B	BASE MOUNT. CONT. STA.-SEC. SERV.120-240 V MULTI. CIR.
	NOTE:	ALSO INCLUDE 901.05 WITH 901.12 THROUGH 901.25 EXCEPT 901.18
		TRAFFIC SIGNALS
	902.00C	SIGNAL HEADS, LENSES AND MOUNTING
	902.10D	PULL BOXES, CONTROLLERS, COND. LOCATION *
	902.15	POWER SUPPLY ASSEMBLY *
	902.21A	TELEPHONE INTERCONNECT
	902.30D	CONCRETE BASES *
	902.40D	TUBULAR STEEL POST *
	902.50D	DETECTORS
	902.60D	SPAN WIRE DETAILS - STEEL POST
	902.70	SPAN WIRE DETAILS - WOOD POLE
		HIGHWAY SIGNING
	903.01C	ALPHABETS (2 SHEETS)
	903.02S	HIGHWAY SIGNING (7 SHEETS)
	903.03AD	SIGN MOUNTING DETAILS (6 SHEETS)
	903.04C	WEIGH STATION SIGNING
	903.05C	TUBULAR SPAN SUPPORT - ONE TUBE, TYPE S
	903.06C	TUBULAR SPAN SUPPORT - TWO TUBE, TYPE S
	903.07C	TUBULAR CANTILEVER SUPPORTS, TYPE C
	903.08C	TUBULAR BUTTERFLY SUPPORTS, TYPE B
	903.09C	LIGHTING SUPPORT BRACKET
	903.10S	SIGN TRUSSES - OVERHEAD ALUMINUM (8 SHEETS) (INCL. 903.03)
	903.12L	SIGN TRUSSES - BUTTERFLY & CANTILEVER - STEEL (7 SHEETS) (INCL. 903.03)
	903.60Q	SIGN TRUSSES - OVERHEAD STEEL (7 SHEETS) (INCL. 903.03)

NOTES: Plans for this project were developed using Drawings from this index.

*Revised since April, 1983

#326

DESIGN DESIGNATION

A.D.T. - 1982 = 7900
A.D.T. - 2002 = 12650
DHV - 390
D = 60%
T = 5 %
V = 60 M.P.H.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY

[redacted]
JASPER COUNTY

FINAL PLANS

COUNTY JASPER
ROUTE 71
PROJ. NO. 7-P-71-21I

JOB NO. 7·P·71·21I

AWARDED

FULLY LIMITED ACCESS HIGHWAY

THIS SHALL BE A FULLY LIMITED ACCESS HIGHWAY BETWEEN STA 554+27.6 AND STA 693+00 NO ABUTTING OWNER SHALL HAVE THE RIGHT OF DIRECT ACCESS TO SAID HIGHWAY ON ITS RIGHT-OF-WAY EXCEPT THAT ACCESS WILL BE PERMITTED TO ANY ADJACENT OUTER ROADWAY OR SERVICE ROAD TO WHICH ACCESS IS NOT SPECIFICALLY PROHIBITED BY THE SPECIAL SYMBOL DENOTING "NO RIGHT OF ACCESS" AS SHOWN ON THE PLANS. NO ACCESS WILL BE PERMITTED FROM OUTER ROADWAYS AND SERVICE ROADS TO THROUGHWAYS EXCEPT ALONG ROUTES CONSTRUCTED FOR THAT PURPOSE. OUTER ROADWAYS AND SERVICE ROADS, AS THE CASE MAY BE, ARE SO DESIGNATED ON THE PLANS.

BEGINNING AND ENDING OF LIMITED ACCESS.

LIMITED ACCESS

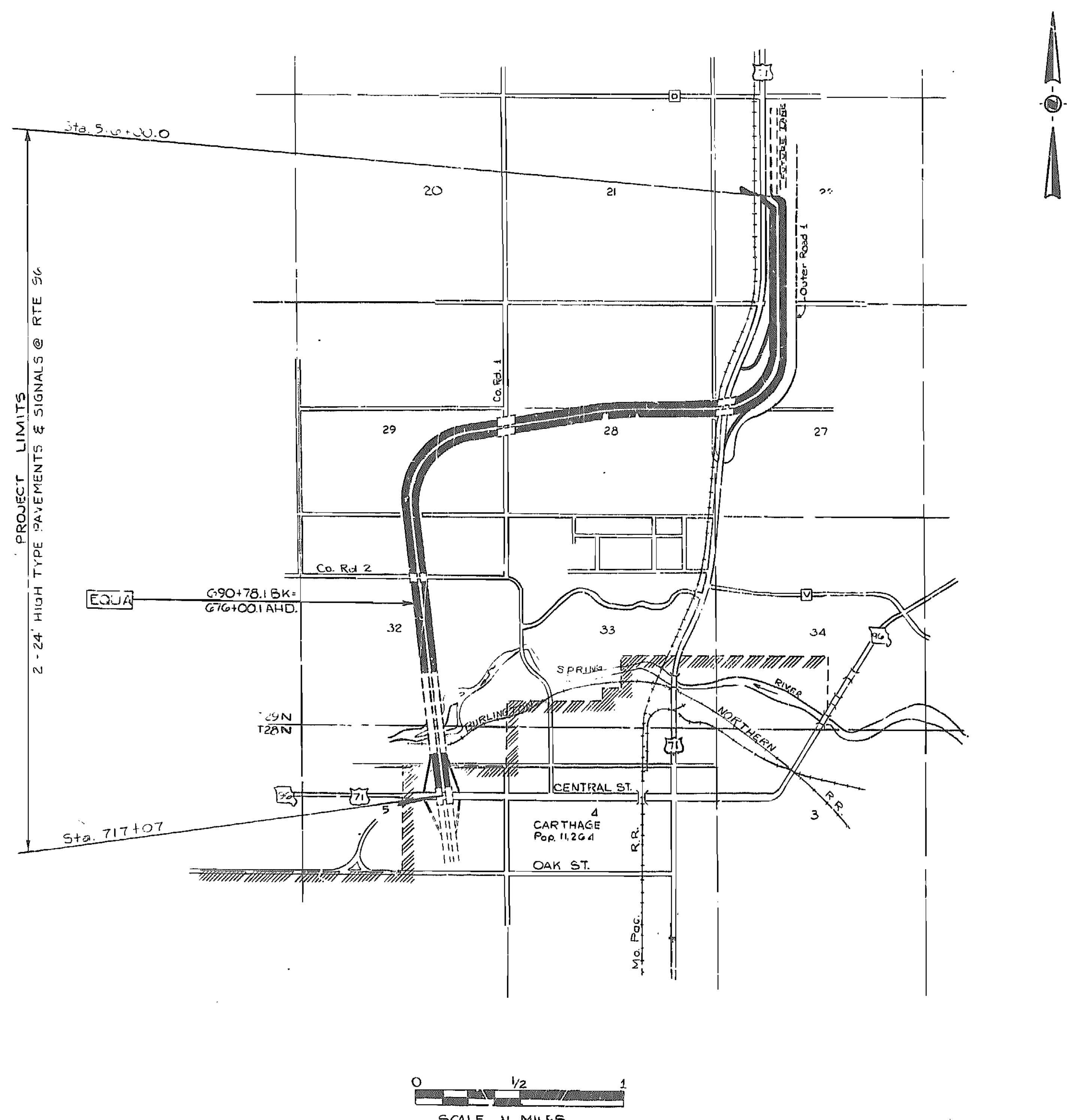
NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

CONVENTIONAL SIGNS
(USED IN PLANS)

BUILDINGS AND STRUCTURES
GUARD RAIL
CONCRETE RIGHT-OF-WAY MARKER
STEEL RIGHT-OF-WAY MARKER
FENCE
- CHAIN LINK
- WOVEN WIRE
- GATE

UTILITIES
- TELEPHONE
- POWER
- GAS
- WATER
- UNDERGROUND TEL

NOTE - DASHED OR OPEN SYMBOL INDICATES EXISTING FEATURE.



INDEX OF SHEETS

LENGTH OF PROJECT

END OF PROJECT	STA. 717+07.0	
BEGINNING OF PROJECT	STA. 516+00.0	
APPARENT LENGTH	20,107.0	FEET
EQUATIONS AND EXCEPTIONS 690+78.1 Bk. = 676+00.1 Ahd.		
TOTAL CORRECTIONS	+1,478	FEET
NET LENGTH OF PROJECT	21,585	FEET
STATE LENGTH	4.088	MILES
FEDERAL LENGTH		MILES

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUBMITTED

CHIEF ENGINEER DATE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION BUREAU OF PUBLIC ROADS

APPROVED

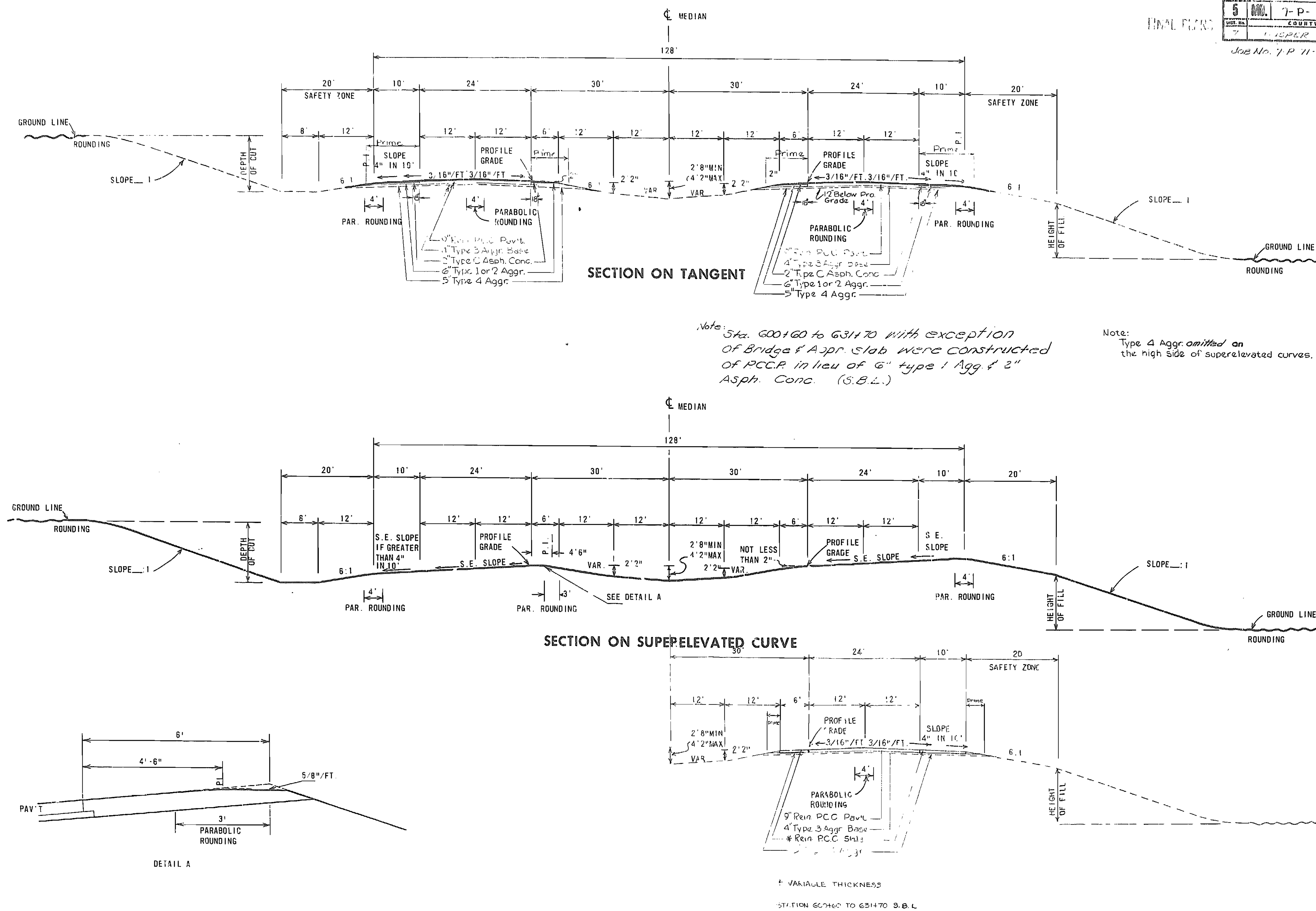
DIVISION ENGINEER DATE

3P-60(6)C

FED. ROAD DIST. No.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	I-P-71-2(I)	2
DIST. No.	COUNTY		ROUTE
7	JASPER		71

FINAL PLANS

Job No. I-P 71-2(I)



Note: Sta. 600+60 to 631+70 with exception of Bridge & Appr. Slab were constructed of P.C.C.P. in lieu of 6" type 1 Agg. & 2" Asph. Conc. (S.B.L.)

Note: Type 4 Aggr. omitted on the high side of superelevated curves.

128 FOOT ROADBED - 2-24 FOOT TRAVEL WAYS - 60 FOOT MEDIAN (WITH SAFETY ZONES) C-9-1-75

404 2

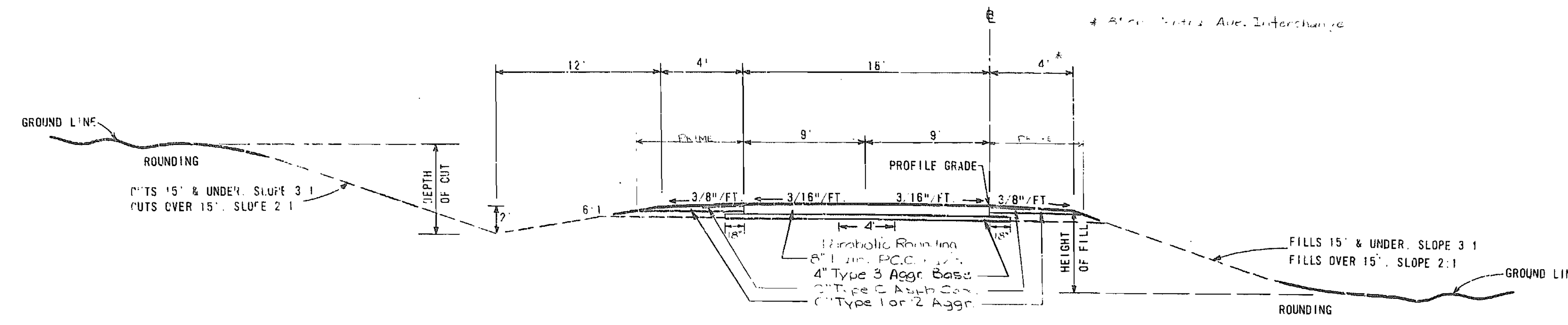
SHEET 1 OF 2

M.

FINAL PLANS

FED. ROAD DIV. NO.	STATE	FEDERAL PROJECT No. & ELC.	SHEET NO.
5	MO.	7-P-71-21I	2
DIST. NO.	COUNTY		
7	JASPER		

Job No. 7-P-71-21I

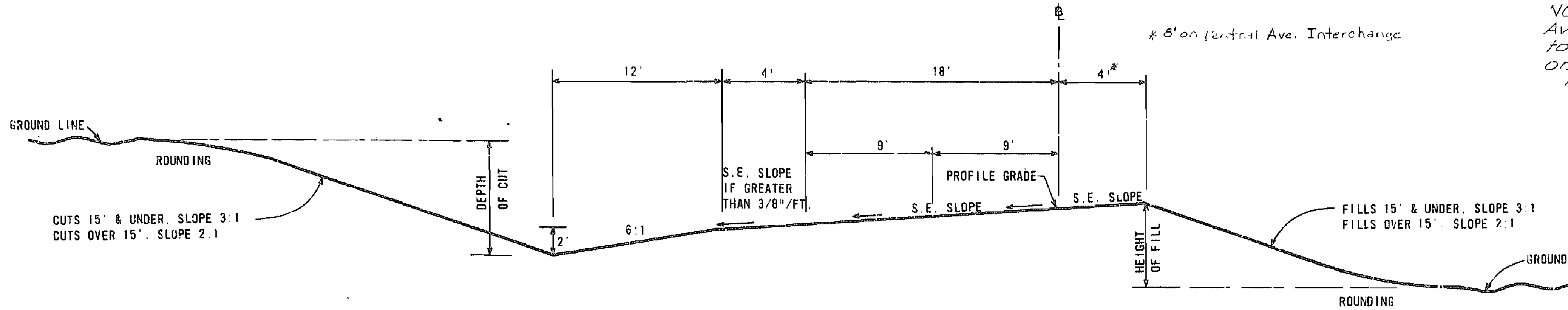


SECTION ON TANGENT

RAMP'S 1, 1A, 2 NORTH INTERCHANGE

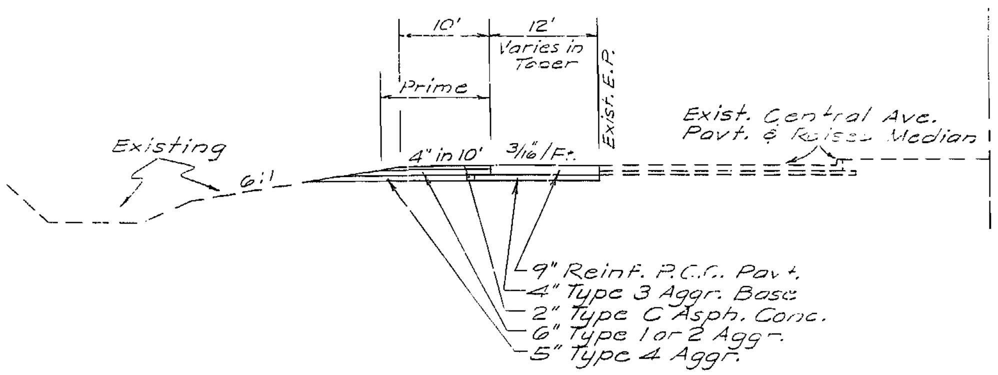
RAMP'S 1 2 CENTRAL AVE. INTERCHANGE

RAMP 4 B.L.Z. TO STA 1+40.1

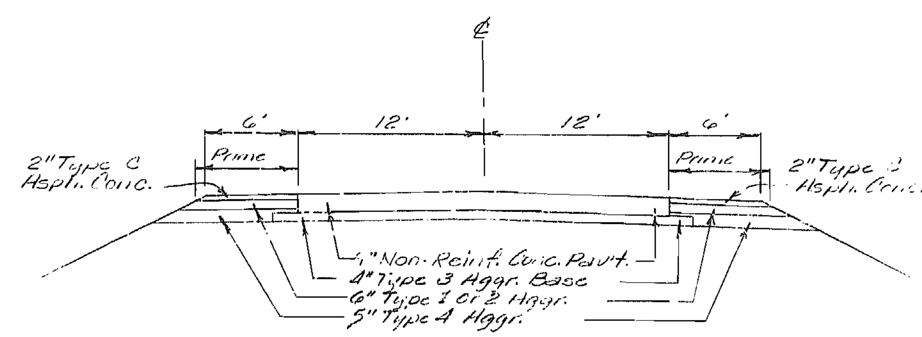


NOTE: Ramp 4 on Central Ave. Interchange built to the back of the return on this job: Sta. 1+40.1 Ramp 4

SECTION ON SUPERELEVATED CURVE

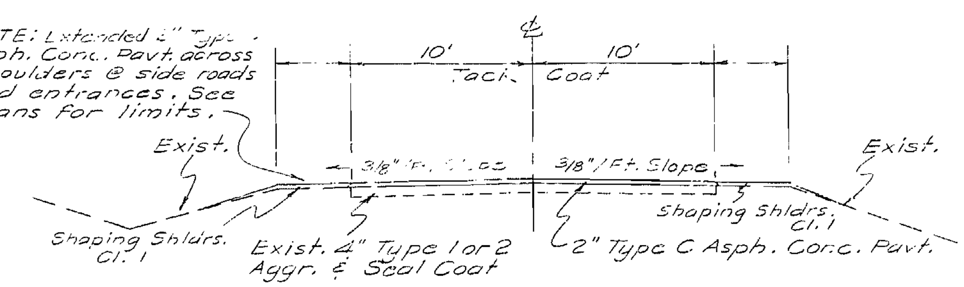


TYPICAL SECTION of WIDENING of CENTRAL AVENUE 453+66 to 470+00



TYPICAL SECTION FOR TEMPORARY CONNECTION

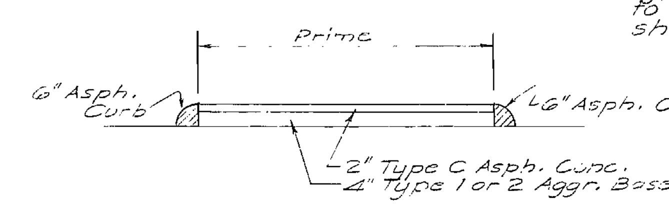
NOTE: Extended 2" Type C Asph. Conc. Pavt. across shoulders @ side roads and entrances. See plans for limits.



TYPICAL SECTION OUTER ROAD NO. 1

NOTE: At connection with Exist. Rte. 71 trench 2" Type C Asph. Conc. Pavt. to meet existing stabilized shoulder.

471+62 to 579+41.0



TYPICAL SECTION RAISED ISLAND

CENTRAL AVE. 453+66 to 470+00
RAMPS 1, 1A & 2 NORTH INTCHG.
RAMPS 1 & 2 CENTRAL AVE. INTCHG.
TEMPORARY CONNECTION
OUTER ROAD NO. 1

SHEET 2 OF 2

20 FOOT ROADBED - 18 FOOT TRAVEL WAY (FOR INTERCHANGE RAMPS)

3

M

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
SUMMARY OF QUANTITIES

FINAL PLANS

STATE	JOB NO	SHEET NO
MO.	7-P-71-21 I	2A
DIST NO	PROJECT NO 7-P-71-21 I	ROUTE
7	COUNTY JASPER	71

SHEET OF

ITEM	DESCRIPTION	UNIT	QUANTITY
202-20.10	REMOVAL OF IMPROVEMENTS	LUMP SUM	1
203-10.00	CLASS A EXCAVATION	CU YD	3,347
203-60.00	COMPACTING EMBANKMENT	CU YD	2,854
206-30.00	CLASS 3 EXCAVATION	CU YD	161
207-10.00	LINEAR GRADING CLASS 1	STATION	3
210-10.06	SUBGRADE COMPACTION (6-INCH DEPTH)	STATION	455.9
212-10.00	SUBGRADING AND SHOULDERING CLASS 1	STATION	471.3
304-00.43	TYPE 1 AGGREGATE FOR BASE (4 IN. THICK)	SQ YD	296
304-00.63	TYPE 1 AGGREGATE FOR BASE (6 IN. THICK)	SQ YD	99,753
304-03.43	TYPE 3 AGGREGATE FOR BASE (4 IN. THICK)	SQ YD	140,239
304-04.53	TYPE 4 AGGREGATE FOR BASE (5 IN. THICK)	SQ YD	109,071
403-10.11	ASPHALT CEMENT (ASPHALTIC CONCRETE) AC-20	TON	479.0
403-80.00	MINERAL AGGREGATE (ASPHALTIC CONCRETE) (TYPE C MIX)	TON	10,408
407-10.05	TACK COAT	GALLON	540
408-10.10	PRIME-LIQUID ASPHALT MC 30	GALLON	29,590
502-11.09	CONCRETE PAVEMENT (9 IN. NON-REINF)	SQ YD	2,285.3
502-12.08	CONCRETE PAVEMENT (8 IN. REINFORCED)	SQ YD	10,589.8
502-12.09	CONCRETE PAVEMENT (9 IN. REINFORCED)	SQ YD	109,740.7
503-10.00	BRIDGE APPROACH SLAB	SQ YD	2,122.9
601-10.00	FIELD LABORATORIES	LUMP SUM	1
605-10.15	8 IN. CLASS A UNPERFORATED UNDERDRAIN PIPE	LIN FT	438
606-10.10	GUARD RAIL TYPE A	LIN FT	2,175
606-10.40	GUARD RAIL TYPE D	LIN FT	75
606-22.00	BRIDGE ANCHOR SECTION (SAFETY BARRIER CURB)	EACH	20
606-30.00	TERMINAL SECTION	EACH	25
609-10.51	CURB AND GUTTER TYPE A	LIN FT	390
609-20.11	INTEGRAL CURB (6 IN. HEIGHT AND UNDER) TYPE A	LIN FT	352
609-20.21	INTEGRAL CURB (OVER 6 IN. HEIGHT) TYPE A	LIN FT	120
609-20.31	CONCRETE CURB LOW PROFILE TYPE E	LIN FT	496
609-30.10	ASPHALT CURB	LIN FT	536
609-40.10	DRAIN BASIN	EACH	14
609-60.00	DITCH LINER	SQ YD	130
612-10.30	MOVABLE BARRICADES	EACH	9
612-10.40	PERMANENT BARRICADES	EACH	2
616-10.05	CONSTRUCTION SIGNS	SQ FT	602
616-10.10	RELOCATED SIGNS	SQ FT	20
616-10.20	DRUMS	EACH	100
616-10.40	FLASHING ARROW PANEL	EACH	1

ITEM	DESCRIPTION	UNIT	QUANTITY
616-10.46	TYPE II OBJECT MARKER	EACH	24
616-10.51	WARNING LIGHT, TYPE A	EACH	24
618-10.00	MOBILIZATION	LUMP SUM	1
725-10.12	12 IN. CORRUGATED GALVANIZED METAL PIPE	LIN FT	86
726-13.24	24 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	380
802-20.00	TYPE 2 MULCH	ACRE	40.9
802-99.88	MULCH OVERSPRAY	ACRE	40.9
805-10.00	SEEDING	ACRE	40.9
806-30.00	NETTING TYPE III	SQ YD	0
903-50.15	TYPE IV OBJECT MARKER	EACH	4
	HIGHWAY LIGHTING		
901-10.52	TYPE AS-45 LIGHTING POLE, DESIGN 2	EACH	3
901-10.54	TYPE AS-45 LIGHTING POLE, DESIGN 3	EACH	2
901-10.64	TYPE AT-45 LIGHTING POLE, DESIGN 3	EACH	1
901-11.06	6 FT BRACKET ARM	EACH	1
901-11.15	15 FT BRACKET ARM	EACH	5
901-13.10	250 WATT HIGH PRESSURE SODIUM LUMINAIRE	EACH	6
901-22.24	240 VOLT POLE MOUNTED CONTROL STATION, DWG 901.24	EACH	1
901-23.30	30 FT. SERVICE POLE CLASS 4	EACH	1
901-33.00	CONDUIT, 3 IN. RIGID STEEL, IN TRENCH	LIN FT	256
901-50.20	TRENCHING TYPE II	LIN FT	1023
901-50.30	TRENCHING TYPE III	LIN FT	106
901-71.10	CABLE, 10 AWG 1 CONDUCTOR, POLE AND BRACKET	LIN FT	700
901-74.04	1 IN. CABLE-CONDUIT 2 CONDUCTORS AND 1 BARE NEUTRAL, 6 AWG	LIN FT	2,430
901-82.45	POLE FOUNDATION (45-FOOT MOUNTING HEIGHT)	EACH	1
	TRAFFIC SIGNALS		
902-05.13	SIGNAL HEAD, TYPE 3B	EACH	8
902-06.13	SIGNAL HEAD, TYPE 3MH	EACH	6
902-26.53	150 WATT 120 VOLT HIGH PRESSURE SODIUM LUMINAIRE	EACH	2
902-31.38	POST, TYPE CL. 38A	EACH	2
902-33.01	POST, TYPE B, 26E-28K	EACH	1
902-33.02	POST, TYPE B, 26E-20K	EACH	1
902-41.31	CONTROLLER ASSEMBLY HOUSING, 8 PHASE, STANDARD TIMING	EACH	1
902-49.40	DETECTOR, INDUCTION LOOP VEHICLE	EACH	18
902-51.25	CONDUIT, 1 1/4 IN., TRENCH	LIN FT	816
902-52.00	CONDUIT, 2 IN., TRENCH	LIN FT	298

ITEM	DESCRIPTION	UNIT	QUANTITY
902-53.00	CONDUIT, 3 IN., TRENCH	LIN FT	178
902-54.00	CONDUIT, 4 IN., TRENCH	LIN FT	363
902-82.04	CABLE, 4 AWG 1 CONDUCTOR, POWER	LIN FT	490
902-83.02	CABLE, 12 AWG 2 CONDUCTOR	LIN FT	8,020
902-83.07	CABLE, 12 AWG 7 CONDUCTOR	LIN FT	3,840
902-85.00	CABLE, LOOP DETECTOR, IN DUCT	LIN FT	4,500
902-88.01	PULL BOX, TYPE I	EACH	12
902-91.00	BASE, CONCRETE	CU YD	12.0
	HIGHWAY SIGNING		
903-10.10	CONCRETE FOOTINGS, EMBEDDED	CU YD	15.3
903-10.20	CONCRETE FOOTINGS, BOLT DOWN	CU YD	109.0
903-11.20	TRENCHING TYPE II	LIN FT	3,009
903-12.10	STRUCTURAL STEEL POSTS	POUND	5,640
903-12.20	PIPE POSTS	POUND	6,500
903-12.40	BREAKAWAY ASSEMBLY	EACH	80
903-23.00	CONDUIT, 3 IN. RIGID STEEL, IN TRENCH	LIN FT	50
903-42.04	1 IN. CABLE-CONDUIT 2 CONDUCTORS AND 1 BARE NEUTRAL, 6 AWG	LIN FT	850
903-42.07	1 IN. CABLE-CONDUIT 2 CONDUCTORS AND 1 BARE NEUTRAL, 8 AWG	LIN FT	2,900
903-50.01	TYPE STB24 SIGN	SQ FT	1,850
903-50.05	TYPE SHR123 SIGN	SQ FT	236
903-50.06	TYPE SHR1 SIGN	SQ FT	424
903-50.07	TYPE SHB24 SIGN	SQ FT	152
903-50.09	36 IN. STOP SIGN	EACH	1
903-50.10	DELINEATOR, SINGLE WHITE	EACH	96
903-50.14	DELINEATOR, DOUBLE WHITE	EACH	39
903-50.16	DELINEATOR, SINGLE YELLOW	EACH	45
903-61.18	120-240 VOLT POLE MOUNTED CONTROL STATION, DWG NO. 901.18	EACH	1
903-62.30	30 FT SERVICE POLE, CLASS 4	EACH	1
903-80.01	86 FT. OVERHEAD TRUSS (SIGN NO. 41)	LUMP SUM	1
903-80.02	86 FT. OVERHEAD TRUSS (SIGN NO. 45)	LUMP SUM	1
903-80.03	80 FT. OVERHEAD TRUSS (SIGN NO. 47)	LUMP SUM	1
903-80.04	70 FT OVERHEAD TRUSS (SIGN NO. 54)	LUMP SUM	1
500	CONTINGENT ITEMS		
501.01	MEDIAN RELIEF	LUMP SUM	1
501.02	EXTEND PIPE	LUMP SUM	1
501.03	18 IN. CMP	LIN. FT.	200
501.04	18 IN FES	EACH	4
501.05	DENSITY SAMPLES	EACH	1
504.01	SIGN SUPPORT BRACKET	EACH	1
504.02	TRENCHING TYPE III	LIN FT	481

Prepared By: [illegible] 1-29-86

Date Accepted: Jan. 9, 1986

Mark J. Soxter 4-28-86

District Checked By: [illegible] 2-14-86

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

Sheet 1 of 4

FED. ROAD DIVISION	STATE	PROJECT	SHEET NO
5	MO.	[illegible]	2B
DIST. NO.		COUNTY	ROUTE
7		JASPER	71

Job No. 7-P-71-21I

5

DITCH LINER

Sheet	Sta.	Loc.	Sq.Yd	Depth In Slope	Depth Bk. Slope	Slope In	Slope Back	Remarks
5	562+78	Rt. Dit. Rt. Lane	7.8			2:1		1' Above Top Of Pipe
5	563+51.6	Med.	12.4			6:1	3:1	
11	621+33	Rt. Dit. Rt. Lane	11.[illegible]			2:1	3:1	1' Above Top Of Pipe
11	621+40.4	Med. Rt.	7.8			6:1		
11	621+49.6	Med. Lt.	7.8			6:1		
11	621+57	Lt. Dit. Lt. Lane	11.2			2:1	3:1	1' Above Top Of Pipe
13	674+54.7	Med. Rt.	7.7			6:1		
13	674+54.7	Rt. Dit. Rt. Lane	7.7			2:1		1' Above Top Of Pipe
13	674+60.1	Lt. Dit. Lt. Lane	7.7			2:1		1' Above Top Of Pipe
13	674+60.1	Med. Lt.	7.8			6:1		
16	715+88.5	Lt. Dit. Lt. Lane	12.[illegible]			3:1	3:1	1' Above Top Of Pipe
16	715+88.1	Med. Lt.	7.8			6:1		
16	715+85.4	Med. Rt.	7.8			6:1		
16	715+85	Rt. Dit. Rt. Lane	11.8			3:1	3:1	1' Above Top Of Pipe
		Total	129.7					
		Use	130					

6" ASPHALT CURB

Sheet	Sta.	Sta.	Loc.	Lin. Ft.	Remarks
3	511+45	514+01.6	Rt.	260'	
3	513+30.3	516+06.3	Lt.	276'	
			Total	536	

CURB & GUTTER (TYPE A)

Sheet	Sta.	Sta.	Loc.	Lin. Ft.	Remarks
18	10+09	463+85	Ramp 1	114'	
18	463+65	1+44	Ramp 3 Rt.	0	See C.O. # 7-Final
19	10+18	460+98	Ramp 2 Lt.	165'	
19	460+73	1+05	Ramp 4 Lt.	111'	
			Total	390'	

INTEGRAL CURB (6" HEIGHT AND UNDER) TYPE A

Sheet	Sta.	Sta.	Location	L.F.	Remarks
19	0+43	0+64	Island Rt. Ramp 4	74'	Central Int.
19	10+49	11+08	Island Rt. Ramp 2	216'	" "
18	0+46	1+02	Island Lt. Ramp 3	0	See C.O. # 7-Final
18	10+70	10+86	Island ~ Ramp 1	62'	
			Total	352'	

INTEGRAL CURB (OVER 6" HEIGHT) TYPE A

Sheet	Sta.	Sta.	Location	Lin. Ft.	Remarks
19	460+62	460+87.7	℄ Median [illegible]	57'	Central Ave.
18	463+65.5	463+94.0	℄ Median 71 & 96	63'	
			Total	120'	

BITUMINOUS DRAIN BASIN

Sheet	Sta.	Sta.	Loc.	No.	Remarks
5	562+75	562+95	Rt. Of Rt. Lane	1	Skew 39°35' L.A.
5	563+48.6	563+68.6	Rt. Of Lt. Lane	1	Skew 39°39' L.A.
11	621+50	621+50	Rt. Of Rt. Lane	1	Skew 10°37' L.A.
11	621+37.4	621+57.4	Lt. Of Rt. Lane	1	Skew 10°37' L.A.
11	621+46.6	621+66.6	Rt. Of Lt. Lane	1	Skew 10°37' L.A.
11	621+54.0	621+74	Lt. Of Lt. Lane	1	Skew 10°37' L.A.
13	674+37.7	674+57.7	Lt. Of Rt. Lane	1	Sq.
13	674+37.7	674+57.7	Rt. Of Rt. Lane	1	Sq.
13	674+43.1	674+63.1	Lt. Of Lt. Lane	1	Sq.
13	674+43.1	674+63.1	Rt. Of Lt. Lane	1	Sq.
16	715+78.5	715+98.5	Lt. Of Lt. Lane	1	Sq.
16	715+78.1	715+98.1	Rt. Of Lt. Lane	1	Sq.
16	715+75.4	715+95.4	Lt. Of Rt. Lane	1	Sq.
16	715+75.0	715+95.0	Rt. Of Rt. Lane	1	Sq.
			Total	14	

CLASS A UNDERDRAIN PIPE (UNPERF.) & 12" C.M.P.

Sheet	Sta.	Loc.	Skew	(Unperf.) Length 8"	(C.M.P.) Length 12"	Cl. 3 Exc.	Remarks
5	562+78	Rt.	Sq.		76'	30	Br. Dr., Incl. 1-10°, 1-20° Bend
5	563+51.6	Lt.	Sq.		10'	1	Br. Dr. @ Med.
11	621+33	Rt.	Sq.	54'		15	Br. Dr. Incl. 1-10°, 1-20° Bend
11	621+40.4	Rt.	Sq.	6'		1	Br. Dr. @ Med.
11	621+49.6	Lt.	Sq.	6'		1	Br. Dr. @ Med.
11	621+57	Lt.	Sq.	54'		16	Br. Dr., Incl. 1-10°, 1-20° Bend
13	674+54.7	Lt.	Sq.	6'		1	Br. Dr. @ Med.
13	674+54.7	Rt.	Sq.	46'		14	Br. Dr. Incl. 1-10°, 1-20° Bend
13	674+60.1	Lt.	Sq.	50'		16	Br. Dr. Incl. 1-15° Bend
13	674+60.1	Rt.	Sq.	6'		1	Br. Dr. @ Med. 1-15° Bend
16	715+88.5	Lt.	Sq.	102'		31	Br. Dr. Incl. 1-10° Bend
16	715+85.0	Rt.	Sq.	96'		32	Br. Dr. Incl. 1-15° Bend
16	715+85.4	Lt.	Sq.	6'		1	Br. Dr. @ Med.
16	715+88.1	Rt.	Sq.	6'		1	Br. Dr. @ Med.
			Total	438	86'	161	

NETTING TYPE III

Sheet	Sta. To Sta.	Loc.	Width	Sq. Yds.	Remarks
			Total	0	

CONC. CURB LOW PROFILE TYPE E

Sheet	Sta.	Sta.	Location	L.F.	Remarks
18	9+83.5	10+94±	Lt. Ramp 1	146'	Around Return (Central Ave. Int.)
18	0+30±	1+77.5	Lt. Ramp 3	0'	See C.O. # 7
19	9+74.2	11+22±	Rt. Ramp 2	209'	" " "
19	0+41±	1+40.1	Rt. Ramp 4	141'	" " "
			Total	496'	

REMOVAL OF IMPROVEMENTS

Sheet	Sta.	Sta.	Loc.	Description	No.	Remarks
				Total	1	Lump Sum

CONTINGENT PIPE

Item	Sheet	Sta.	Loc.	18" CMP L.F.	18" FES. Each	Ext'd. Pipe Lump Sum	Med. Relief Lump Sum	Remarks
501.01	13	660+65	SBL				1	See C.O. # 1
501.02	5	13+25	Rp. 2			1		See C.O. # 5 (Extended 6')
501.03	13	669+00	℄ Med.	100				See C.O. # 5
501.03	14	681+00	℄ Med.	100				See C.O. # 5
501.04	13	669+00	℄ Med.		2			See C.O. # 5
501.04	14	681+00	℄ Med.		2			See C.O. # 5
		TOTAL		200	4	1	1	

BRIDGE APPROACH SLAB

Sheet	Sta. To	Sta.	Loc.	Skew	S.Y.
5	562+91.5	Ahd.	Rt.	L.A.	164.4
5	563+64.4	Ahd.	Lt.	L.A.	157.9
5	567+11.7	Bk.	Rt.	L.A.	134.3
5	567+59.9	Bk.	Lt.	L.A.	129.1
11	621+35	Ahd.	Rt.	L.A.	103.7
11	621+51.6	Ahd.	Lt.	L.A.	103.7
11	623+38.9	Bk.	Rt.	L.A.	103.7
11	623+55.5	Bk.	Lt.	L.A.	103.7
13	672+94.2	Ahd.	Rt.	Sq.	87.6
13	672+99.6	Ahd.	Lt.	Sq.	87.6
13	674+52.7	Bk.	Rt.	Sq.	87.6
13	674+58.1	Bk.	Lt.	Sq.	87.6
14	693+91.4	Ahd.	Lt.	R.A.	114.1
14	694+18.5	Ahd.	Rt.	R.A.	114.1
16	708+04	Bk.	Lt.	R.A.	167.7
16	708+38	Bk.	Rt.	R.A.	200.9
16	715+71.2	Ahd.	Lt.	Sq.	87.6
16	715+88.3	Ahd.	Rt.	Sq.	87.6
				Total	2122.9

CLASS III REINFORCED CONCRETE PIPE CULVERT

Sheet	Sta.	Sta.	Loc.	24" Pipe L.F.	Cl. 3 Exc.	Remarks
3	510+68	514+48	℄ Med.	380'	0	
			Total	380'		

SP-2B

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

Sheet 2 of 4

STATE	JOB NO	SHEET NO
MO.	7-I-71-21I	2B
DIST NO	PROJECT NO [illegible]	ROUTE
7	COUNTY JASPER	71

FINAL SURVEY — NOTE BOOK NO — SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED — BY — DATE

GUARDRAIL (TYPE A)

Sheet	Sta.		Loc.	Lin. Ft. Type A	Term Sec. Each	Br. Anch Sect. Each	Remarks
5	561+		Rt lane	150	2	2	Lt & Rt @ Br End
5	561+		Lt. lane	150	2	2	" " " " "
11	620+		Rt Lane	150	2	2	" " " " " "
11	623+		Lt. Lane	150	2	2	" " " " " "
13	668+		Med.	200	2		Lt & Rt Sign Truss Pier
13	671+		Rt. Lane	150	2	2	Lt & Rt @ Br. End
13	674+		Lt. Lane	150	2	2	" " " "
14	680+		Med.	200	2		Lt & Rt Sign Truss Pier
14	693+		Rt. Lane	150	2	2	Lt & Rt @ Br. End
16	707+		Lt. Lane	150	2	2	" " " "
16	708+	Lt. Of Rt. Lane		75		1	Sign Truss Pier (In Median)
16	708+28	Rt. Of Rt. Lane		50		1	Sign Truss Pier
16	714+		Rt. Lane	150	2	2	Lt & Rt @ Br. End
16	457+	Rte. 96	Median	200	2		Sign Truss Pier
16	457+	Rte. 96		100	1		Rt. Of Rt. Lane (Sign Truss Pier)
		Total		2175	25	20	

2" TYPE C ASPH. CONC. SHLDRS. AT S RDS. & P.E.'S

Sheet	Sta.	Sta.	Location & Type	Asph. Cem. *Tons	Minrl. Aggr. *Tons	Remarks
3	495+19	495+81	P.E. Lt O.R. #1			Rad. Pt. To Rad. Pt.
3	497+69	498+31	" " " " "			" " " " "
3	510+69	511+31	" " " " "			" " " " "
4	527+69	528+31	" " " " "			" " " " "
5	533+63	534+81	S. Rd. Lt. O.R. #1			Rad Pt. To Rd. Pt.
5	560+81	561+99	S. Rd Lt O.R. #1			Rad. Pt. To Rd. Pt.
6	577+29	578+21	2 P.E.'S Lt O.R. #1			Rad. Pt. To Rd. Pt. - 2 P.E.'S
			Total	*Incl'd. in Book Totals		

GUARDRAIL (TYPE D)

Sheet	Sta.	Loc.	Lin. Ft.	Remarks
4	533+	Rt.	37.5	On Exist. Rte. 71
16	712+	Lt.	37.5	Mound St. C.O. #2
		Total	75.0	

TYPE IV OBJECT MARKERS

Sheet	Sta.	Loc.	Markers Ea.	Remarks
4	533+	175'	3	On Exist. Rte. 71
16	712+	Lt.	1	Mound St. C.O. #2
		Total	4	

SUMMARY OF QUANTITIES

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-21I	2B
DIST. NO.	PROJECT NO. 7-P-71-21I	ROUTE
7	COUNTY JASPER	71

Sheet 3 of 4

SIGN	SIZE (INS)	AREA (SQ FT)	QUANTITY	TOTAL AREA (SQ FT)	QUANTITY RELOCATED	TOTAL RELOCATED AREA (SQ FT)	DESCRIPTION
WARNING SIGNS							
W01-1Lb	48x48	16.0					TURN (SYMBOL LEFT ARROW)
W01-1Rb	48x48	16.0					TURN (SYMBOL RIGHT ARROW)
W01-2Lb	48x48	16.0					CURVE (SYMBOL LEFT ARROW)
W01-2Rb	48x48	16.0					CURVE (SYMBOL RIGHT ARROW)
W01-3Lb	48x48	16.0					REVERSE TURN (SYMBOL LEFT ARROW)
W01-3Rb	48x48	16.0					REVERSE TURN (SYMBOL RIGHT ARROW)
W01-4Lb	48x48	16.0					REVERSE CURVE (SYMBOL LEFT ARROW)
W01-4Rb	48x48	16.0					REVERSE CURVE (SYMBOL RIGHT ARROW)
W01-6	48x24	8.0					HORIZONTAL ARROW (SYMBOL)
W01-6a	72x36	18.0					HORIZONTAL ARROW (SYMBOL)
W01-7	48x24	8.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-7a	72x36	18.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W01-8	18x24	3.0					CHEVRON (SYMBOL)
W03-1b	48x48	16.0					STOP AHEAD
W03-2b	48x48	16.0					YIELD AHEAD
W03-3b	48x48	16.0					SIGNAL AHEAD (SYMBOL)
W03-3x	24x18	3.0					SIGNAL AHEAD (PLAQUE)
W03-4b	48x48	16.0					BE PREPARED TO STOP
W04-1Lb	48x48	16.0					MERGE (SYMBOL FROM LEFT)
W04-1Rb	48x48	16.0					MERGE (SYMBOL FROM RIGHT)
W04-1x	24x18	3.0					MERGE (PLAQUE)
W05-1a	48x48	16.0					ROAD NARROWS
W05-3a	48x48	16.0					ONE LANE BRIDGE
W06-1b	48x48	16.0					DIVIDED HIGHWAY
W06-2b	48x48	16.0					DIVIDED HIGHWAY ENDS
W06-3c	48x48	16.0					TWO WAY TRAFFIC
W08-1b	48x48	16.0					BUMP
W08-2b	48x48	16.0					DIP
W08-3	48x48	16.0					PAVEMENT ENDS
W08-4b	48x48	16.0					SOFT SHOULDER
W08-5b	48x48	16.0					SLIPPERY WHEN WET (SYMBOL)
W08-5x	24x18	3.0					SLIPPERY WHEN WET (PLAQUE)
W08-6b	48x48	16.0					TRUCK CROSSING
W08-6c	48x48	16.0					TRUCK ENTRANCE (Includes 1000FT./1500FT. plate W025-1a)
W08-7b	48x48	16.0					LOOSE GRAVEL
W08-9a	48x48	16.0					LOW SHOULDER
W09-1R	48x48	16.0					RIGHT LANE ENDS (Includes LEFT/CENTER plate W025-3c)
W09-2Ra	48x48	16.0					LANE ENDS MERGE RIGHT (Includes LEFT plate W025-3b)
W10-1a	42 Dia	9.6					RAILROAD CROSSING
W012-1	24x24	4.0					DOUBLE DOWN ARROW (SYMBOL)
W012-2a	48x48	16.0					LOW CLEARANCE (SYMBOL)
W012-2x	24x18	3.0					LOW CLEARANCE (PLAQUE)
W012-3a&b	144x24	24.0					OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W013-1a	24x24	4.0					ADVISORY SPEED (PLAQUE)
W020-1	48x48	16.0	2	32.0			ROAD CONSTRUCTION AHEAD (Incl. RAMP/BRIDGE plate W025-6)
W020-2	48x48	16.0					DETOUR AHEAD (Includes 500 FT./1000 FT. plate W025-1b)
W020-3	48x48	16.0					ROAD CLOSED AHEAD (Incl. 500 FT./1000 FT. plate W025-1c)
W020-4a	48x48	16.0					ONE LANE ROAD AHEAD (Incl. 1000 FT./1500 FT. plate W025-1a)
W020-5	48x48	16.0	2	32.0			RIGHT LANE CLOSED AHEAD (Incl. LEFT/CENTER plate W025-3d)
W020-6a	48x48	16.0	2	32.0			RIGHT LANE CLOSED (Incl. LEFT/CENTER plate W025-3c)
W020-7a	48x48	16.0	1	16.0			FLAGMAN AHEAD (Includes 500 FT./1000 FT. plate W025-1b)
W020-9c	48x48	16.0	8	128.0			OPEN TRENCH
W021-2a	48x48	16.0					FRESH OIL
W021-5b	48x48	16.0	1	16.0			SHOULDER WORK AHEAD
W021-7	36x36	9.0					SAND BLASTING
W025-5	30x12	2.5					1/2 MILE/1 MILE (PLAQUE)
REGULATORY SIGNS							
R1-1b	48x48	13.25					STOP
R1-2a	48x48x48	6.93					YIELD
R1-2x	36x36	9.0					TO ONCOMING TRAFFIC (PLAQUE)
R1-3	20x9	1.25					4-WAY (PLAQUE)
R1-5	20x9	1.25					3-WAY (PLAQUE)
R2-1b	36x48	12.0	4	48.0			SPEED LIMIT 35
R2-5	36x48	12.0	4	48.0			REDUCED SPEED AHEAD
R3-1b	36x48	12.0					NO RIGHT TURN
R3-2b	36x48	12.0					NO LEFT TURN
R3-3a	36x36	9.0					NO TURNS
R3-4b	36x48	12.0					NO U-TURN
R3-7L	30x30	6.25					LEFT LANE MUST TURN LEFT
R3-7R	30x30	6.25					RIGHT LANE MUST TURN RIGHT
R4-1b	36x48	12.0	4	48.0			DO NOT PASS
R4-2b	36x48	12.0					PASS WITH CARE
R4-7Lb	36x48	12.0					KEEP LEFT (HORIZONTAL ARROW)
R4-7Rb	36x48	12.0					KEEP RIGHT (HORIZONTAL ARROW)
R4-17La	36x36	9.0					KEEP LEFT
R4-17Ra	36x36	9.0					KEEP RIGHT
R5-1	30x30	6.25					DO NOT ENTER
R5-1a	36x24	5.0					WRONG WAY
R6-1La	48x18	6.0	1	6.0			ONE WAY ARROW (LEFT)
R6-1Ra	48x18	6.0	1	6.0			ONE WAY ARROW (RIGHT)
R6-2La	24x30	5.0					ONE WAY (LEFT)
R6-2Ra	24x30	5.0					ONE WAY (RIGHT)
R11-2	48x30	10.0	2	20.0	2	20.0	ROAD CLOSED
R11-3	60x30	12.5					ROAD CLOSED ____ MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60x30	12.5					ROAD CLOSED TO THRU TRAFFIC
GUIDE SIGNS							
G020-1	60x36	15.0					ROAD CONSTRUCTION NEXT ____ MILES
G020-2	60x24	10.0	2	20.0			END CONSTRUCTION
M04-8a	30x15	3.13					DETOUR (PLAQUE)
M04-9L	48x36	12.0					DETOUR (LEFT ARROW)
M04-9R	48x36	12.0					DETOUR (RIGHT ARROW)
M04-10L	48x18	6.0					DETOUR (ARROW LEFT)
M04-10R	48x18	6.0					DETOUR (ARROW RIGHT)
M04-11	24x18	3.0					DETOUR ENDS
M5-1L	21x15	2.19					ADVANCE LEFT TURN ARROW
M5-1R	21x15	2.19					ADVANCE RIGHT TURN ARROW
	6'x5'4"	20.0	4	80.0			HAUL ROAD - PAVING PLANT (Special Sign)
616-10.05 CONSTRUCTION SIGNS TOTAL				602.0			
616-10.10 RELOCATED SIGNS TOTAL						20.0	

ITEM NUMBER	SIZE	TOTAL QUANTITY	DESCRIPTION
616-10.20	36x18	100	DRUM
616-10.35	8x24		TYPE I BARRICADE (One Rail)
616-10.36	8x24		TYPE II BARRICADE (Two Rails)
616-10.40	36x72	1	FLASHING ARROW PANEL
616-10.45	18x18		TYPE I OBJECT MARKER
616-10.46	6x12	24	TYPE II OBJECT MARKER
616-10.47	8x24		TYPE III OBJECT MARKER
616-10.50	8x8		FLASHING ELECTRIC LIGHT
616-10.51	----	24	WARNING LIGHT TYPE A
616-10.52	----		WARNING LIGHT TYPE B
616-10.53	----		WARNING LIGHT TYPE C
616-10.60	----		RAISED PAVEMENT MARKER
612-10.30	72x144	2	MOVABLE BARRICADE (Three Rails)

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MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

Sheet 4 of 4

FED. ROAD DIVISION	STATE	PROJECT	SHEET NO.
5	MO.	7-P-71-3(II)	28
DIST. NO.		COUNTY	ROUTE
7		JASPER	71

JOB NO. 7-P-71-3II

Poles, Arms, Luminaires, and Pole and Bracket Cable

240V

Sheet No.	Pole No.	Road	Sta.	Loc.	45' M.H. Lighting Pole AT Each	45' M.H. Lighting Pole AS Each	Bracket Arm 6' Each	Bracket Arm 15' Each	250W High Pressure Sodium Luminaire Each	[illegible]	3-10 AWG 1-Conductor Pole & Bracket Cable Lin. Ft.	Circuit No.	Design No.	Remarks
21	1	Ramp [illegible]	[illegible]	22' Lt.	1		1		1	1	102'	1	3	
21	[illegible]	Rte. 96	[illegible]	76' Lt.		1		1	1		120'	1	3	
21	3	Rte. 96	[illegible]+13	74' Lt.		1		1	1		120'	1	3	
20	4	Rte. 96	460+[illegible]	72' Rt.		1		1	1		120'	3	2	Source of Electric Power for Overhead Sign Truss (54) at 458+00 Rte. 96, 6-250W MV Luminaires
20	5	Rte. 96	459+0[illegible]	72' Rt.		1		1	1		120'	3	2	
20	[illegible]	Ramp 2	[illegible]	35' Lt.		1		1	1		120'	2	2	Source of Electric Power for Overhead Sign Truss (47) at 708+70 Rte. 71, 4-250W MV Luminaires
TOTAL					1	5	1	5	6	1	702'			
										USE	700'			

3" Rigid Steel Conduit, In Trench

Sheet No.	Conduit No.	Road	Sta.	Loc.	Lin. Ft.	Circuit No.	Remarks
21	1	Ramp 3	[illegible]	℄	70'	2 & 3	
21	2	Rte. 96	465+05	44' Rt.	49'	1	U.I.P. Exist. 3"x88' R.S. Cond. No. 8
21	3	Rte. 96	465+05	44' Lt.	23'	1	U.I.P. Exist. 3"x88' R.S. Cond. No. 8
21	4	Ramp 1	10+38	℄	40'	1	
20	5	Ramp 4	5+85	℄	43'	3	
20	6	Ramp 2	10+01	℄	31'	2	
20	7	Rte. 96	461+00	℄	—	2	Exist. 3"x88' R.S. Cond.
	8	Rte. 96	465+05	℄	—	1	Exist. 3"x88' R.S. Cond.
TOTAL					256'		

TRENCHING

Sheet No.	Circuit No.	Pole To Pole	Type II Lin. Ft.	Type III Lin. Ft.	Remarks
20 & 21	1, 2 & 3	83'		83'	Service Pole To Shldr.
21	1	528'	172'	23'	
20 & 21	2	880'	648'		
20 & 21	3	812'	203'		
	TOTAL		1023'	106'	

1" Cable-Conduit 2 Conductor & 1 Bare Neutral, 6 AWG

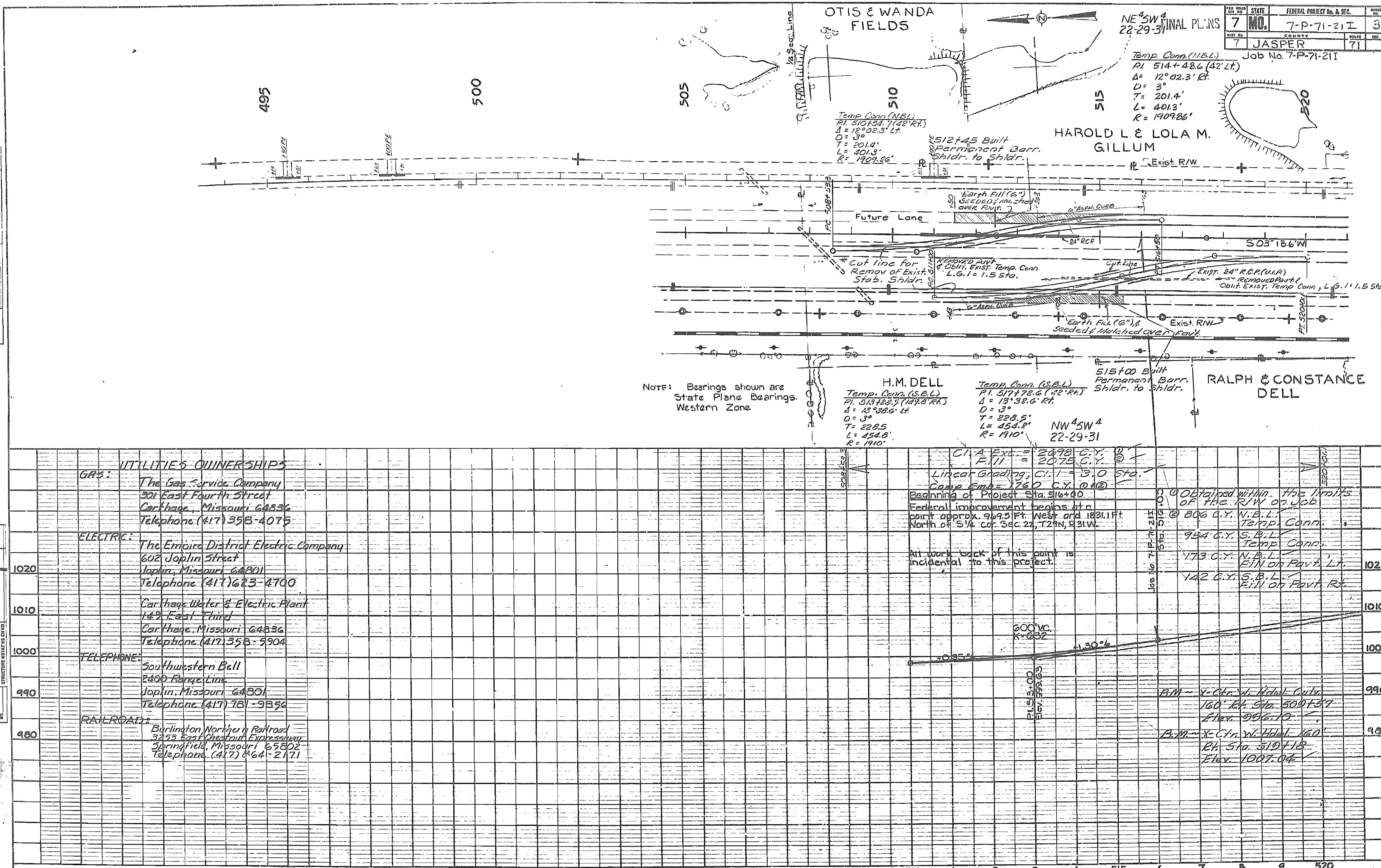
Sheet No.	Circuit No.	Pole To Pole	Lin. Ft.
21	1	528'	594'
20 & 21	2	880'	949'
20 & 21	3	812'	883'
TOTAL			2426'
		USE	2430'

SERVICE POLE & CONTROLL STATION

Sheet No.	Road	Sta.	Loc.	30' Pole Cl. 4 Each	Pole Mounted Controll Sta. 901.24, 240V. Each	Remarks
21	Rte. 96	465+39	197' Rt.	1	1	Modify 901.24 for 2-conduits to signal controller and one meter for lighting and signals

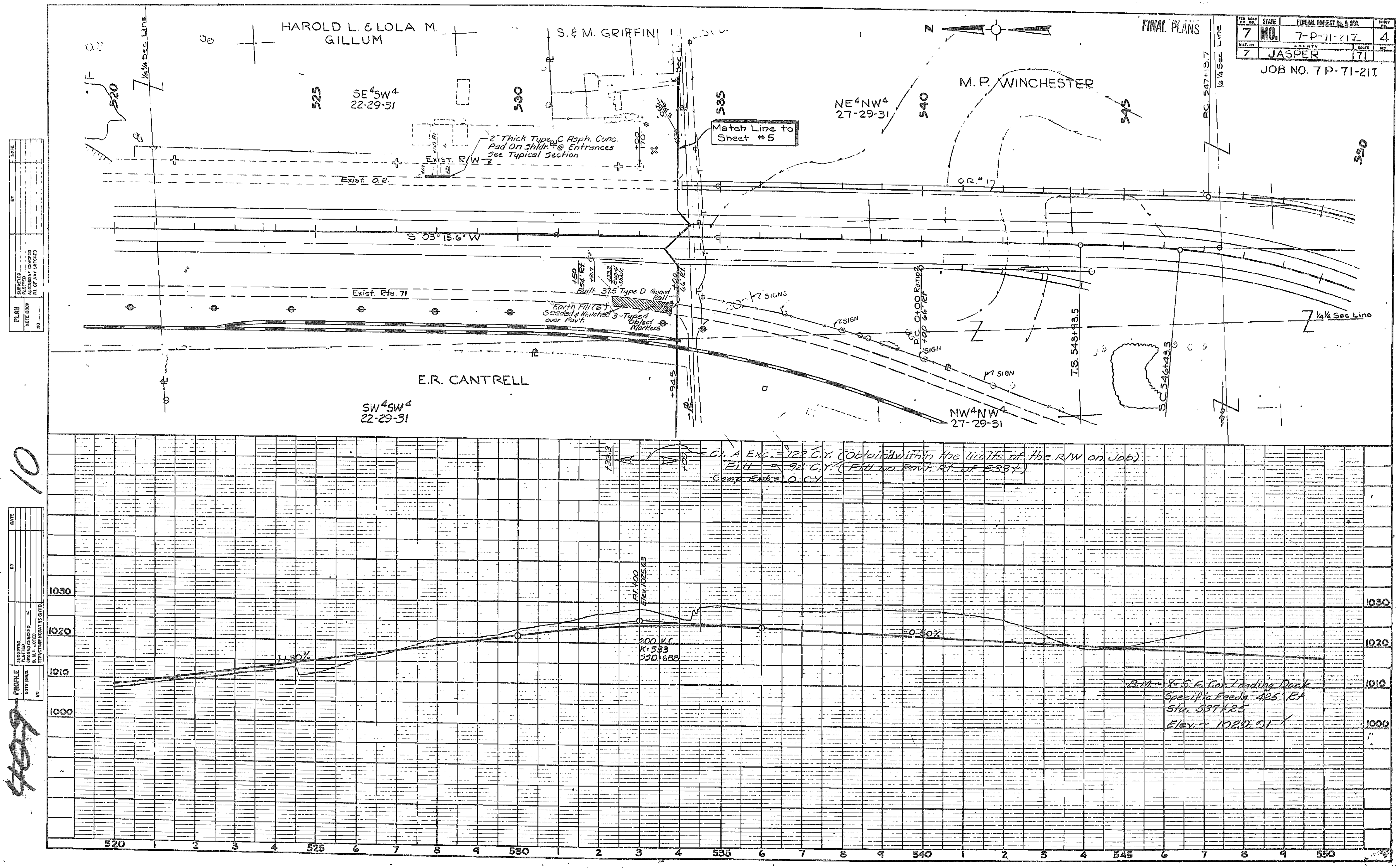
8

[illegible]

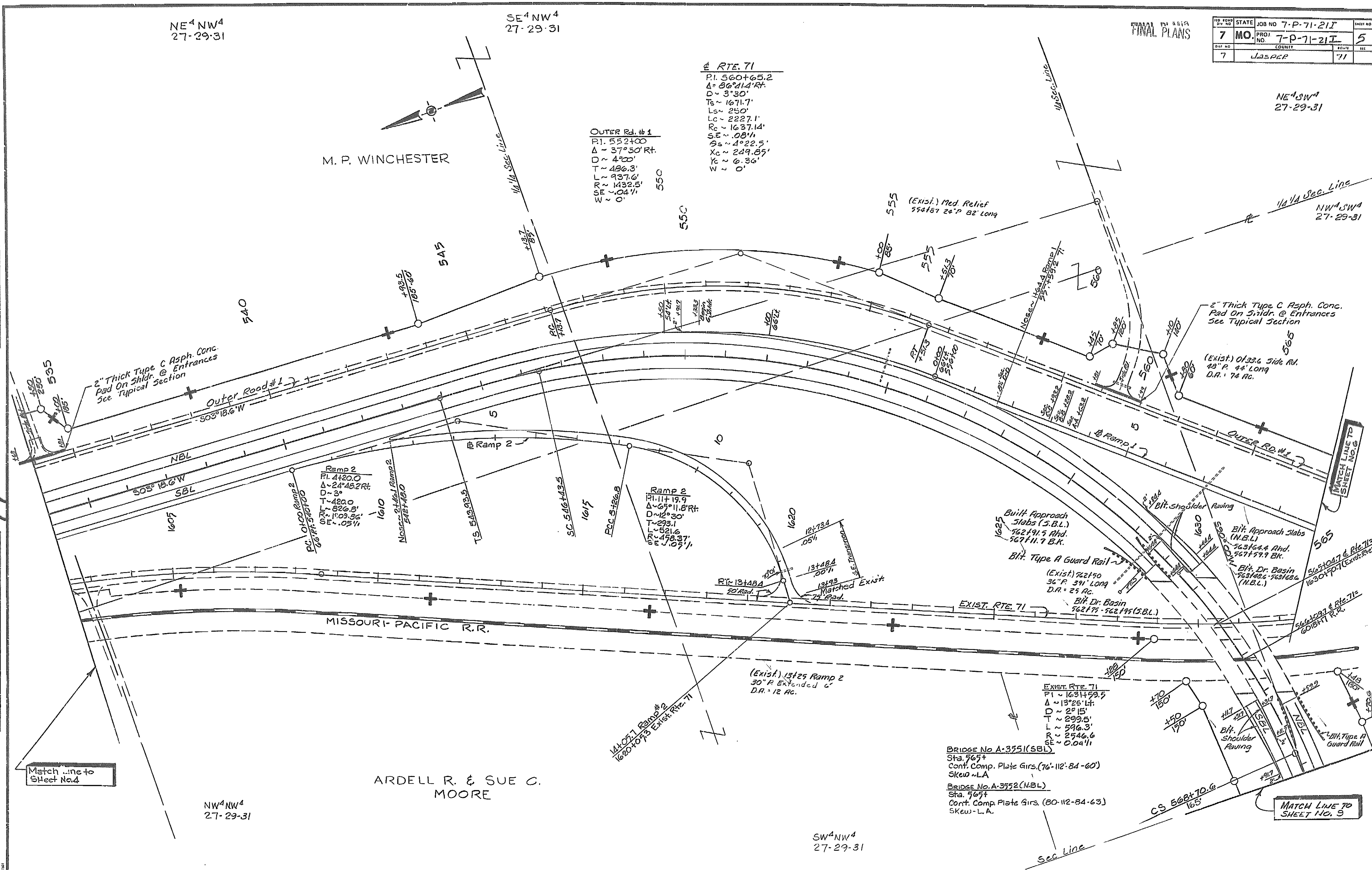


7 MO. 7-P-71-21I 3
7 JASPER 71
FINAL PLANS
Job No. 7-P-71-21I
NE 1/4 SW 1/4 22-29-31
OTIS & WANDA FIELDS
HAROLD L. & LOLA M. GILLUM
H.M. DELL
RALPH & CONSTANCE DELL
NW 1/4 SW 1/4 22-29-31
495
500
505
510
515
520
Temp. Conn. (N.B.L.)
P.I. 514+48.6 (42' Lt.)
Δ = 12°02.3' Rt.
D = 3°
T = 201.4'
L = 401.3'
R = 1909.86'
Temp. Conn. (N.B.L.)
P.I. 510+54.7 (42' Rt.)
Δ = 12°02.3' Lt.
D = 3°
T = 201.4'
L = 401.3'
R = 1909.86'
512+45 Built Permanent Barr. Shldr. to Shldr.
Exist. R/W
Earth Fill (6") Seeded & Mulched over Pavt.
Future Lane
6" Asph. Curb
24" RCP
S 03° 18.6' W
Cut line for Remov of Exist. Stab. Shldr.
Removed Pavt. & Oblit. Exist. Temp. Conn. L.G.I = 1.5 Sta.
Cut Line
Exist. 24" R.C.P. (U.I.P.)
Removed Pavt. & Oblit. Exist. Temp. Conn. L.G.I = 1.5 Sta.
Earth Fill (6") & Seeded & Mulched over Pavt.
Exist. R/W
515+00 Built Permanent Barr. Shldr. to Shldr.
Note: Bearings shown are State Plane Bearings. Western Zone
Temp. Conn. (S.B.L.)
P.I. 513+22.5 (149.8' Rt.)
Δ = 13°38.6' Lt.
D = 3°
T = 228.5
L = 454.8'
R = 1910'
Temp. Conn. (S.B.L.)
P.I. 517+72.6 (42' Rt.)
Δ = 13°38.6' Rt.
D = 3°
T = 228.5'
L = 454.8'
R = 1910'
UTILITIES OWNERSHIPS
GAS:
The Gas Service Company
301 East Fourth Street
Carthage, Missouri 64836
Telephone (417) 358-4075
ELECTRIC:
The Empire District Electric Company
602 Joplin Street
Joplin, Missouri 64801
Telephone (417) 623-4700
Carthage Water & Electric Plant
149 East Third
Carthage, Missouri 64836
Telephone (417) 358-5904
TELEPHONE:
Southwestern Bell
2400 Range Line
Joplin, Missouri 64801
Telephone (417) 781-9850
RAILROAD:
Burlington Northern Railroad
3253 East Chestnut Expressway
Springfield, Missouri 65802
Telephone (417) 864-2171
Cl. A Exc. = 2698 C.Y. ①
Fill = 2075 C.Y. ②
Linear Grading, Cl. 1 = 3.0 Sta.
Comp. Emb. = 1760 C.Y. ①+②
Beginning of Project Sta. 516+00
Federal improvement begins at a point approx. 969.5 Ft. West and 1831.1 Ft. North of S 1/4 Cor. Sec. 22, T29N, R31W.
All work back of this point is incidental to this project.
① Obtained within the limits of the R/W on Job.
② 806 C.Y. N.B.L. Temp. Conn.
954 C.Y. S.B.L. Temp. Conn.
173 C.Y. N.B.L. Fill on Pavt. Lt.
142 C.Y. S.B.L. Fill on Pavt. Rt.
Job No. 7-P-71-21I Sta. 516+00
600' V.C. K = 632
+0.35%
+1.30%
P.I. 513+00 Elev. 999.63
BM - X-Ctr. W. Hdwl. Culv. 160' Rt. Sta. 509+57 Elev. 996.10
BM - X-Ctr. W. Hdwl. 160' Rt. Sta. 519+18 Elev. 1007.04
1020
1010
1000
990
980
495 6 7 8 9 500 1 2 3 4 505 6 7 8 9 510 1 2 3 4 515 6 7 8 9 520
PLAN
PROFILE

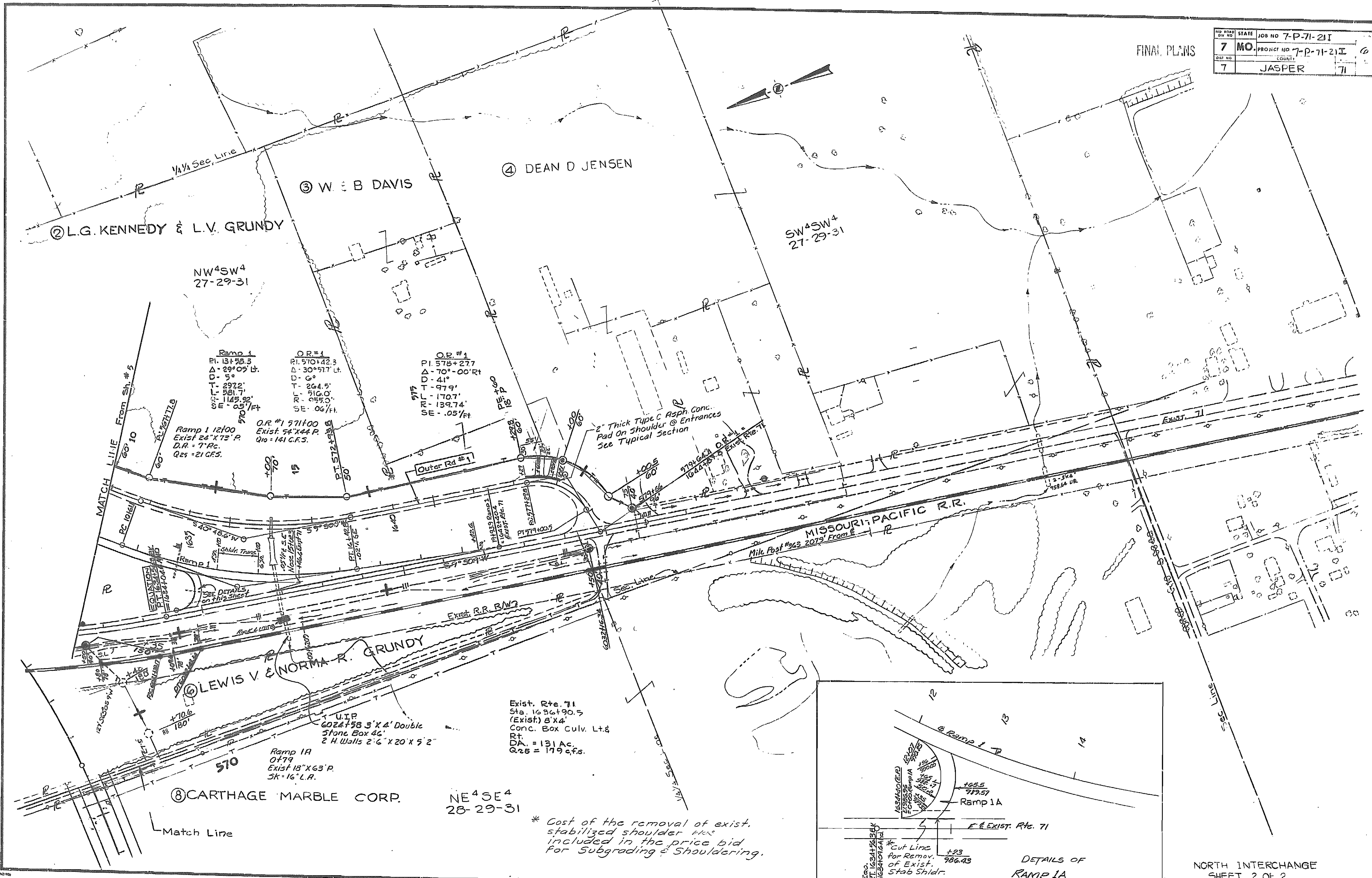
FINAL PLANS



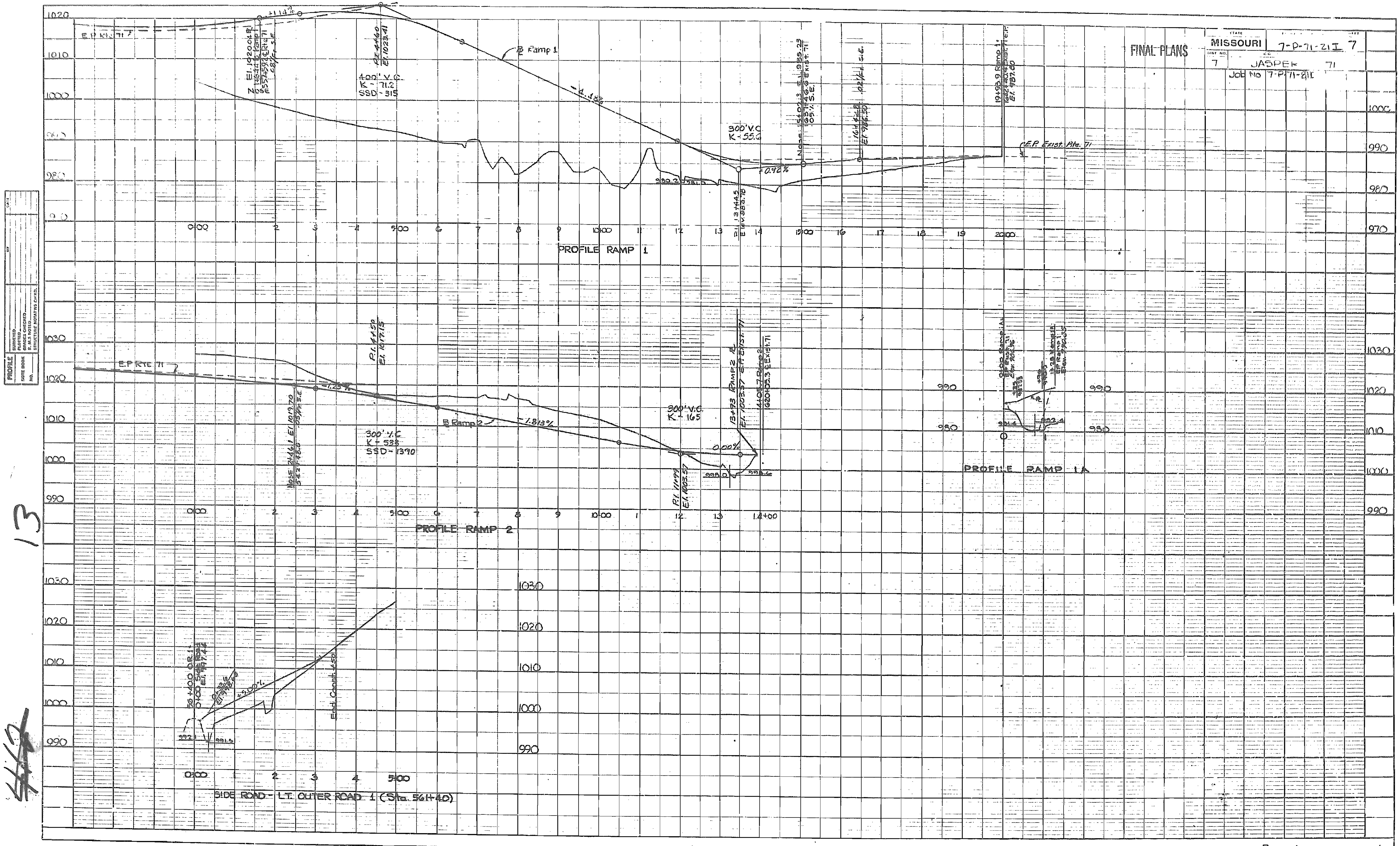
SECT.


FINAL PLANS
7 MO. JOB NO 7-P-71-21I
PROJ NO. 7-P-71-21I
5
7 JASPER 71
NE4 NW4 27-29-31
SE4 NW4 27-29-31
NE4 SW4 27-29-31
NW4 SW4 27-29-31
NW4 NW4 27-29-31
SW4 NW4 27-29-31
M. P. WINCHESTER
ARDELL R. & SUE C. MOORE
¢ RTE. 71
P.I. 560+65.2
Δ ~ 86°11.4' Rt.
D ~ 3°30'
Ts ~ 1671.7'
Ls ~ 250'
Lc ~ 2227.1'
Rc ~ 1637.14'
S.E. ~ .08'/1
Θs ~ 4°22.5'
Xc ~ 249.85'
Yc ~ 6.36'
W ~ 0'
OUTER Rd. #1
P.I. 552+00
Δ ~ 37°50' Rt.
D ~ 4°00'
T ~ 486.3'
L ~ 937.6'
R ~ 1432.5'
SE ~ .04'/1
W ~ 0'
Ramp 2
P.I. 4+20.0
Δ ~ 24°48.2' Rt.
D ~ 3°
T ~ 420.0
L ~ 826.8'
R ~ 1909.86'
SE ~ .05'/1
Ramp 2
P.I. 11+19.9
Δ ~ 65°11.8' Rt.
D ~ 12°30'
T ~ 293.1
L ~ 521.6
R ~ 458.37'
SE ~ .05'/1
EXIST. RTE. 71
P.I. ~ 1631+59.5
Δ ~ 13°25' Lt.
D ~ 2°15'
T ~ 299.5'
L ~ 596.3'
R ~ 2546.6
SE ~ 0.04'/1
BRIDGE No A-3551 (SBL)
Sta. 565+
Cont. Comp. Plate Girs. (76'-112'-84-60')
Skew ~ LA
BRIDGE No. A-3552 (NBL)
Sta. 565+
Cont. Comp. Plate Girs. (80-112-84-63)
Skew - L.A.
2" Thick Type C Asph. Conc. Pad On Shldr. @ Entrances See Typical Section
(Exist.) Med. Relief 554+57 24" P. 82' Long
(Exist.) 0133.6 Side Rd. 48" P. 44' Long D.A. ~ 74 Ac.
Built Approach Slabs (S.B.L.) 562+91.5 Ahd. 567+11.7 B.K.
Blt. Approach Slabs (N.B.L.) 563+64.4 Ahd. 567+79.9 BK.
Blt. Type A Guard Rail
Blt. Shoulder Paving
(Exist.) 562+50 36" P. 391' Long D.A. ~ 25 Ac.
Blt. Dr. Basin 562+75 - 562+95 (S.B.L.)
Blt. Dr. Basin 563+48.6 - 563+68.6 (N.B.L.)
(Exist.) 13+25 Ramp 2 30" P. Extended 6' D.A. ~ 12 Ac.
14+05.7 Ramp #2 / 1620+09.3 Exist. Rte. 71
P.T. ~ 13+48.4
Matched Exist.
Outer Road #1
S03°18.6'W
NBL
SBL
¢ Ramp 1
¢ Ramp 2
OUTER RD. #1
EXIST. RTE. 71
MISSOURI - PACIFIC R.R.
1/4 1/4 Sec. Line
Sec. Line
Match Line to Sheet No. 4
MATCH LINE TO SHEET No. 6
MATCH LINE TO SHEET No. 9
CS 568+70.6
565+04.7 ¢ Rte. 71 = 1630+70.1 (Exist. Rte. 71)
566+59.7 ¢ Rte. 71 = 6018+11 R.R.
P.C. 0+00 Ramp 2 = 541+40.00
Nose ~ 2+46 Ramp 2 = 542+48.0
TS 543+93.5
SC 546+43.5
P.C.C. 3+26.8
Nose ~ 1+64 Ramp 1 = 557+59.2 Rt.
535
540
545
550
555
560
565
1605
1610
1615
1620
1625
1630

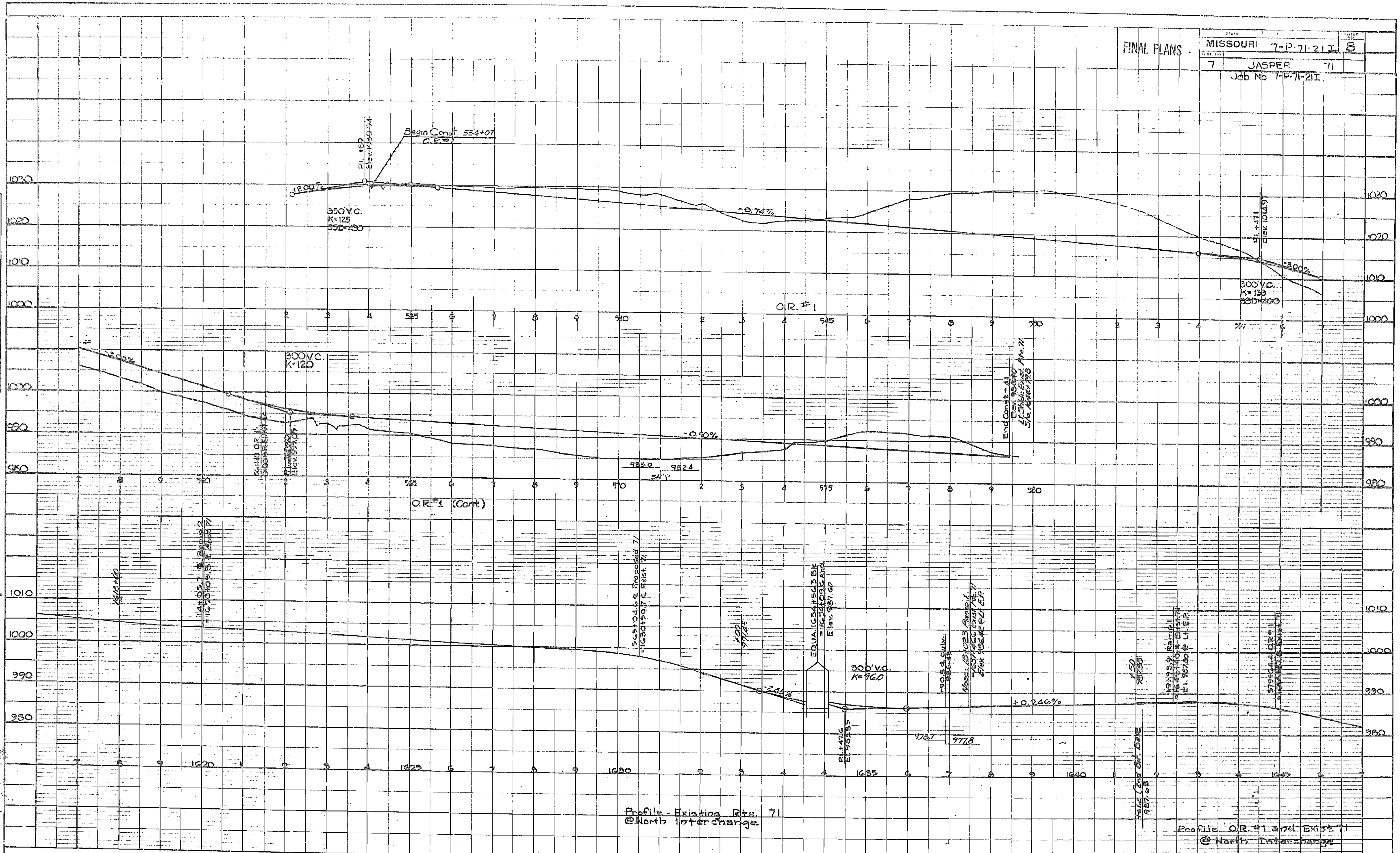
12

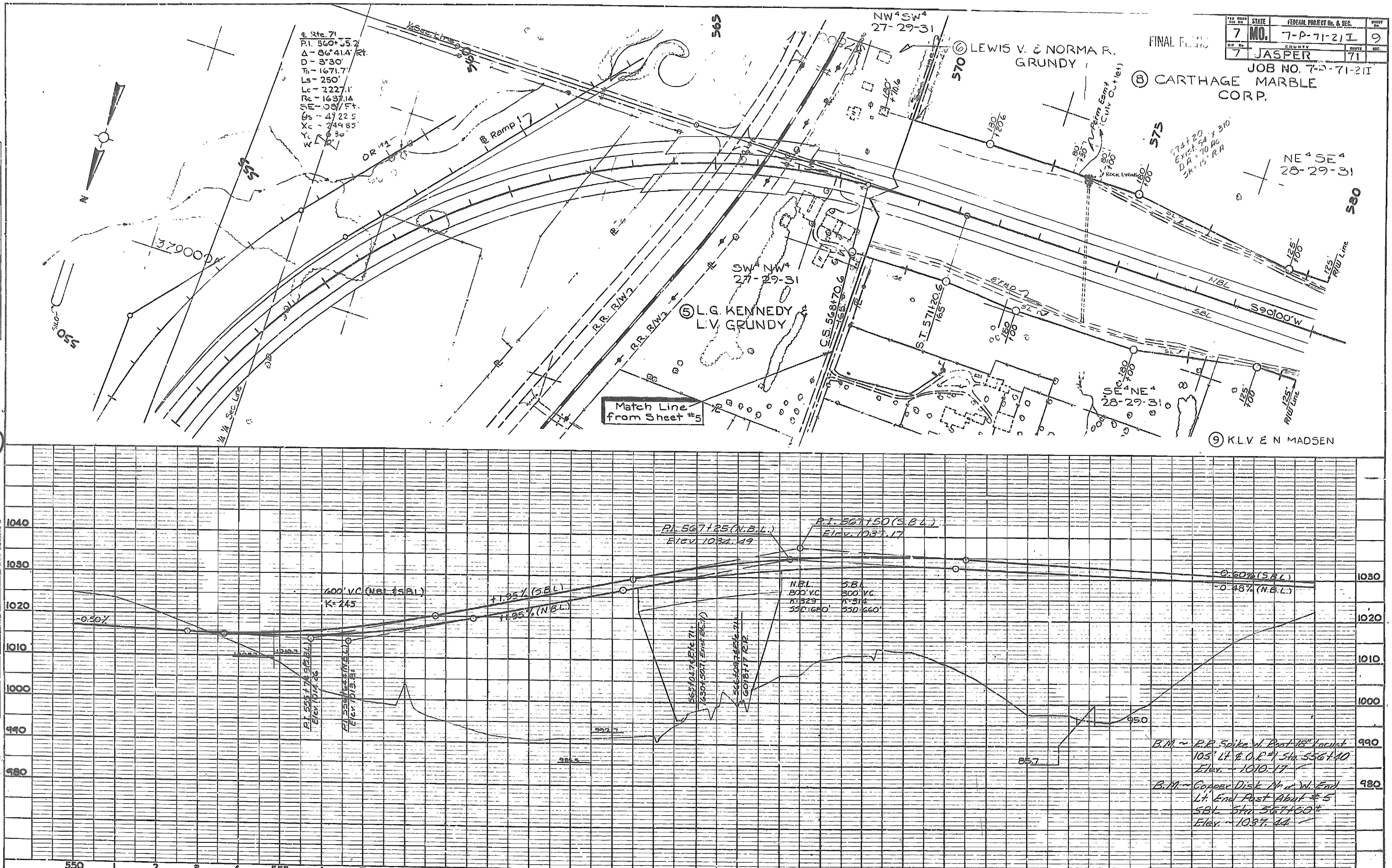


STATE MO.
JOB NO 7-P-71-21I
PROJECT NO 7-P-71-21I
DIST NO 7
COUNTY JASPER
71
FINAL PLANS
② L.G. KENNEDY & L.V. GRUNDY
③ W. E B DAVIS
④ DEAN D JENSEN
NW4SW4 27-29-31
SW4SW4 27-29-31
1/4 1/4 Sec. Line
Ramp 1 PI. 13+58.3 Δ - 29°05' Lt. D - 5° T - 297.2' L - 581.7' R - 1145.92' SE - .05'/Ft
O.R.#1 PI. 570+42.3 Δ - 30°57.7' Lt. D - 6° T - 264.5' L - 516.0' R - 955.0' SE - .06'/Ft.
O.R.#1 PI. 578+27.7 Δ - 70°-00' Rt D - 41° T - 97.9' L - 170.7' R - 139.74' SE - .05'/Ft
Ramp 1 12+00 Exist 24"X73' P. D.A. = 7 Ac. Q25 = 21 C.F.S.
O.R. #1 571+00 Exist. 54"X44' P. Q10 = 141 C.F.S.
PT. 572+93.8
Outer Rd #1
2" Thick Type C Asph. Conc. Pad On Shoulder @ Entrances See Typical Section
Exist. Rte. 71
MISSOURI PACIFIC R.R.
Mile Post #363 2079' From
MATCH LINE From Sh. #5
Ramp 1
EQUATION
See Details on this Sheet
Exist. R.R. R/W
Sec. Line
⑥ LEWIS V. & NORMA R. GRUNDY
U.I.P. 6024+58 3'X4' Double Stone Box 46' 2 H. Walls 2'6"X20'X5'2"
Exist. Rte. 71 Sta. 1696+90.5 (Exist.) 8'X4' Conc. Box Culv. Lt. & Rt. DA. = 131 Ac. Q25 = 179 c.f.s.
Ramp 1A 0+79 Exist 18"X63' P. SK - 16' L.A.
570
⑧ CARTHAGE MARBLE CORP.
NE4SE4 28-29-31
Match Line
* Cost of the removal of exist. stabilized shoulder was included in the price bid for Subgrading & Shouldering.
Ramp 1
Ramp 1A
Exist. Rte. 71
* Cut Line for Remov. of Exist. Stab Shldr.
DETAILS OF RAMP 1A
NORTH INTERCHANGE SHEET 2 OF 2



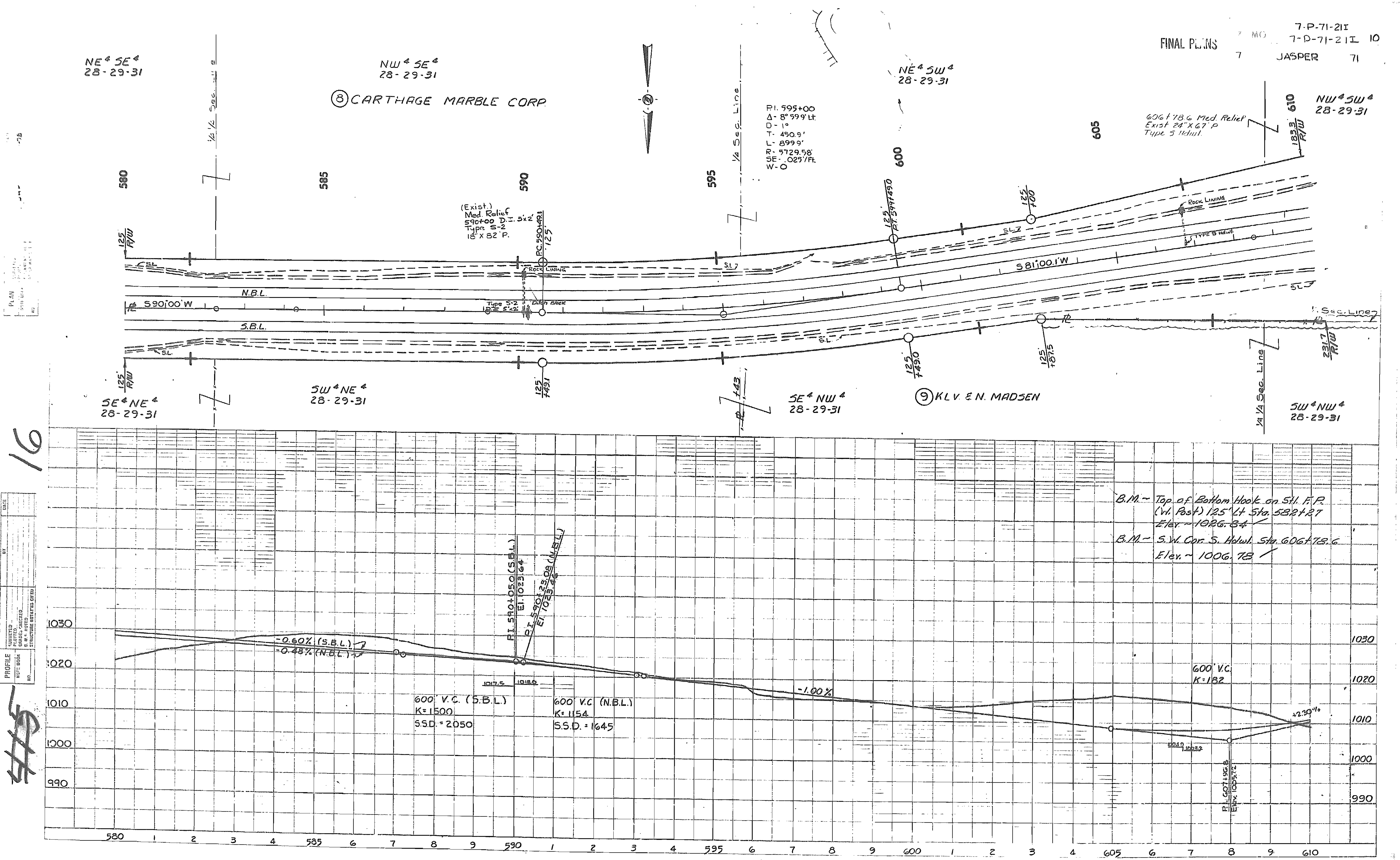
PROFILES Ramp 1
Ramp 1A
Ramp 2
Side Road, Lt. Outer Road 1

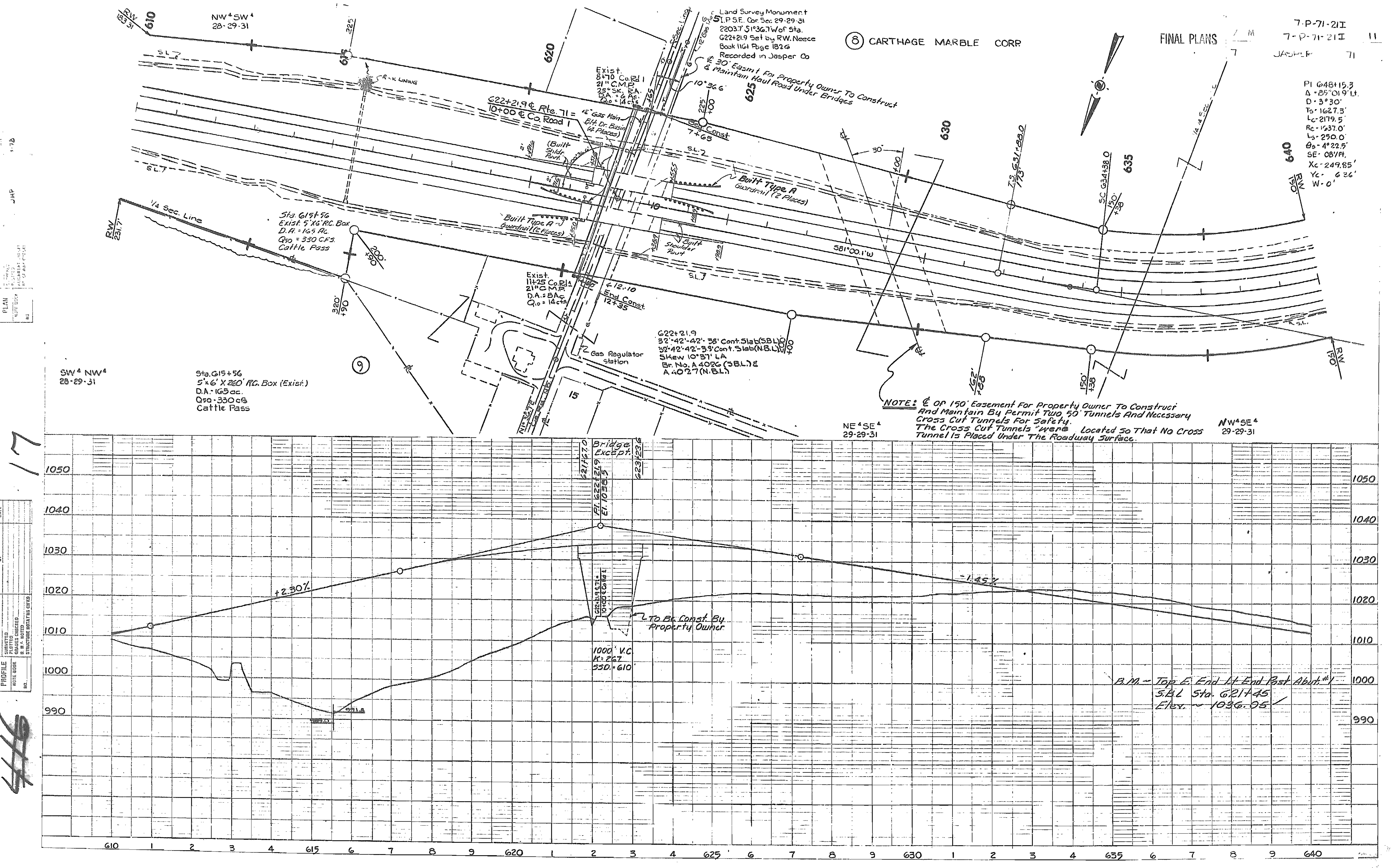

FINAL PLANS
MISSOURI 7-P-71-21I 8
7 JASPER 71
Job No 7-P-71-21I
Begin Const. 534+07
O.R.#1
P.I. +82
Elev. 1030.94
350'V.C.
K=125
SSD=430
-0.74%
P.I. +471
Elev. 1014.9
-3.00%
300'V.C.
K=133
SSD=460
O.R. #1
300 V.C.
K=120
-3.00%
-0.50%
End Const. +81
983.0
982.4
O.R.#1 (Cont.)
300'V.C.
K=96.0
+0.246%
978.7
977.8
Profile - Existing Rte. 71
@North Interchange
Profile O.R.#1 and Exist. 71
@ North Interchange



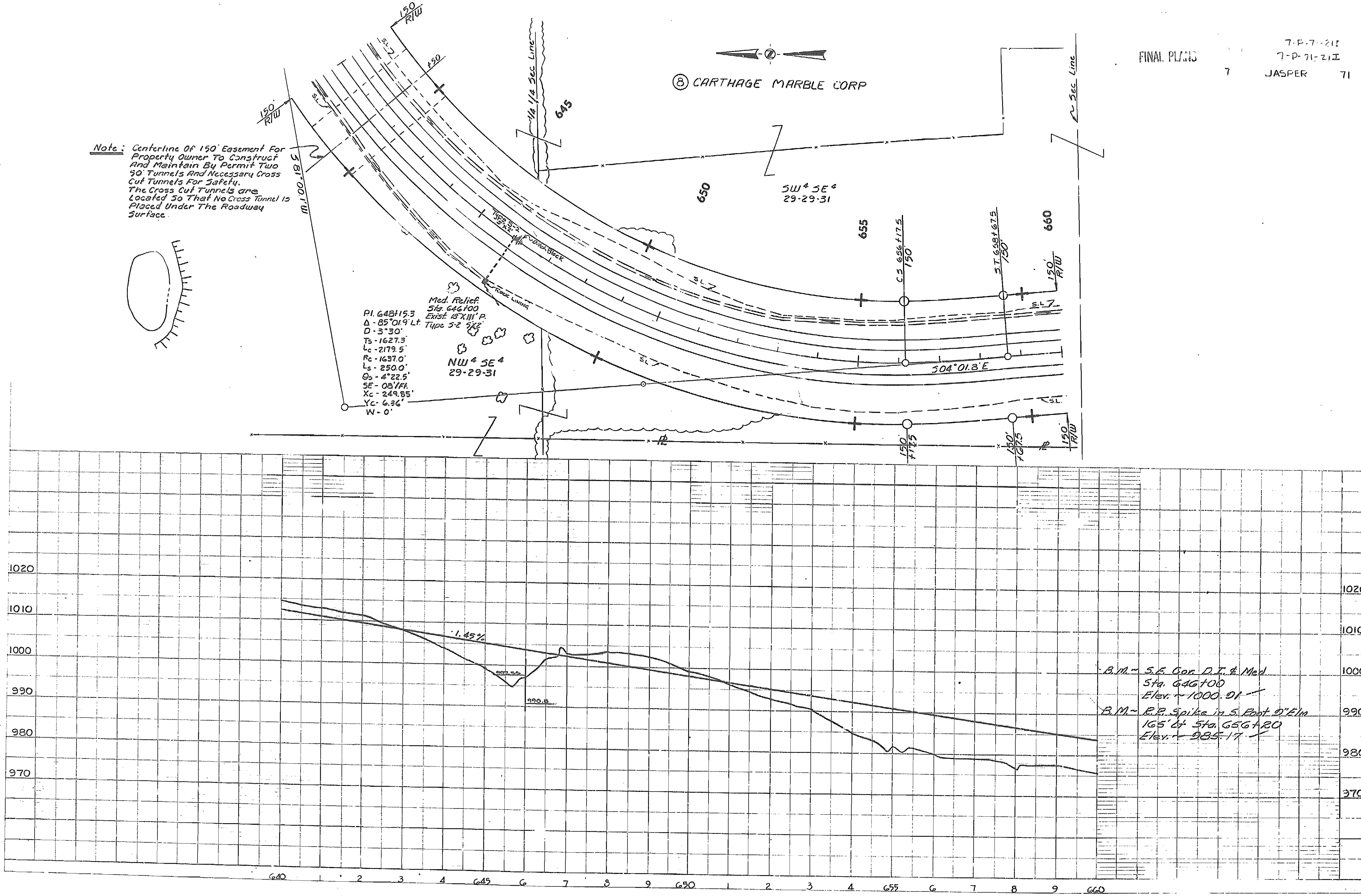
FINAL PLANS
7
MO.
7-P-71-21 I
9
7
JASPER
71
JOB NO. 7-P-71-21I
⑥ LEWIS V. & NORMA R. GRUNDY
⑧ CARTHAGE MARBLE CORP.
⑤ L.G. KENNEDY L.V. GRUNDY
⑨ K.L.V. & N MADSEN
NW4 SW4 27-29-31
SW4 NW4 27-29-31
NE4 SE4 28-29-31
SE4 NE4 28-29-31
℄ Rte. 71
P.I. 560+35.2
Δ ~ 86°41.4' Rt.
D ~ 3°30'
Ls ~ 250'
Lc ~ 2227.1'
SE ~ .08'/Ft.
Ramp
R.R. R/W
Match Line from Sheet #5
C.S. 568+70.6
S.T. 571+20.6
NBL
SBL
S90°00'W
R/W Line
1/2 Sec. Line
PLAN
PROFILE
P.I. 567+25 (N.B.L.)
Elev. 1034.49
P.I. 567+50 (S.B.L.)
Elev. 1037.17
600' V.C. (N.B.L. & S.B.L.)
K= 245
+1.95% (S.B.L.)
+1.95% (N.B.L.)
-0.50%
-0.60% (S.B.L.)
-0.48% (N.B.L.)
N.B.L. 800' V.C.
S.B.L. 800' V.C.
P.I. 555+74.98 (S.B.L.) Elev. 1014.26
P.I. 556+44 (N.B.L.) Elev. 1013.81
B.M. ~ R.R. Spike in Post 18" Locust 105' Lt. ℄ O.R. #1 Sta. 556+40 Elev. ~ 1010.17
B.M. ~ Copper Disk Near W. End Lt. End Post Abut. #5 SBL Sta. 567+60± Elev. ~ 1037.44
1040
1030
1020
1010
1000
990
980
550
555
560
565
570
575
580
SECT. A

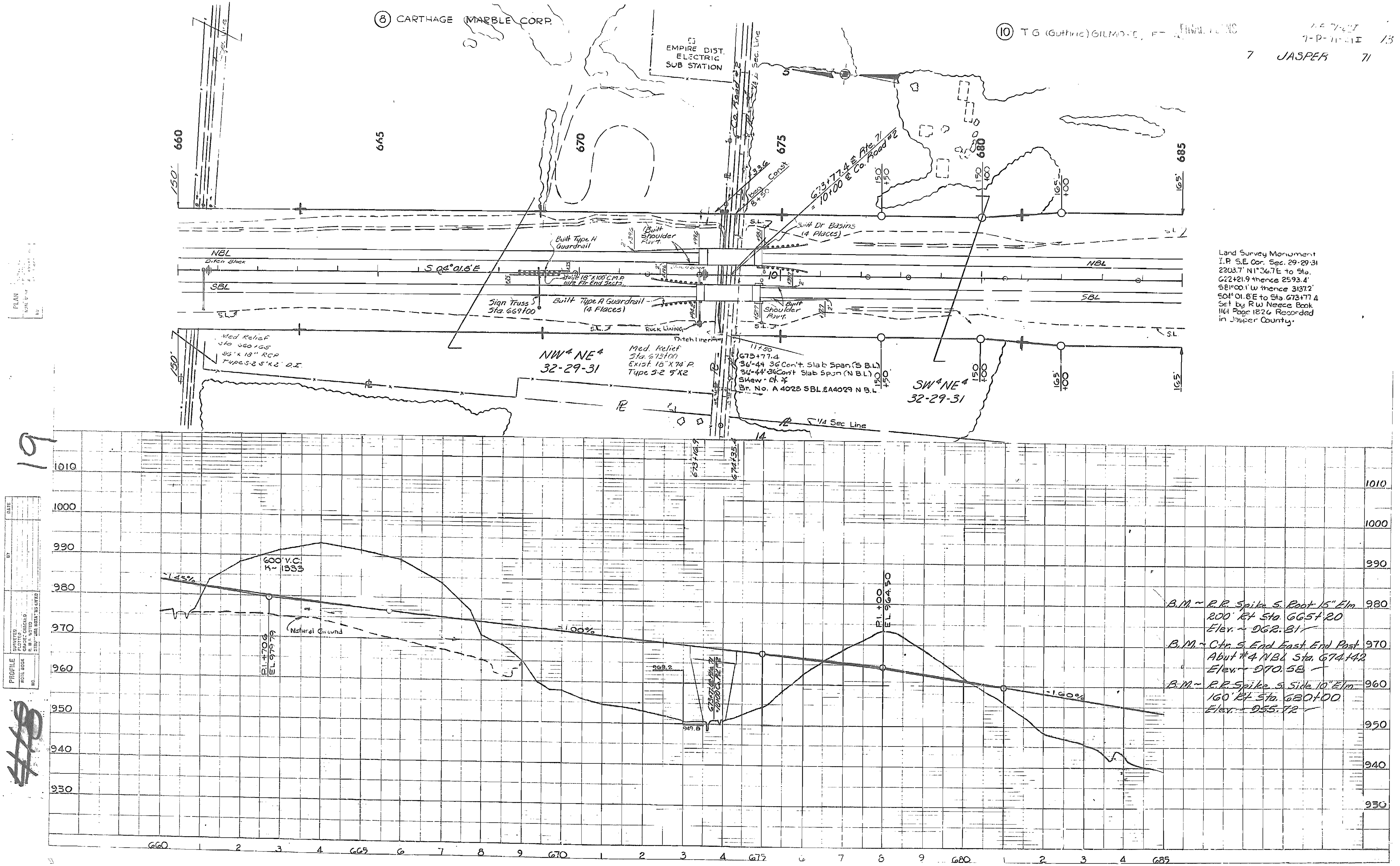
FINAL PLANS 7-P-71-21I 7-P-71-21I 10
7 JASPER 71




FINAL PLANS
7-P-71-21I
7-P-71-21I
JASPER
71
⑧ CARTHAGE MARBLE CORP
Land Survey Monument
I.P.S.E. Cor. Sec. 29-29-31
2203.7' S1°36.1'W of Sta.
622+21.9 Set by R.W. Neece
Book 1161 Page 1826
Recorded in Jasper Co
30' Easmt For Property Owner To Construct & Maintain Haul Road Under Bridges
NW¼ SW¼
28-29-31
PI 648+15.3
Δ - 85°01.9' Lt.
D - 3°30'
Ts - 1627.3'
Lc - 2179.5'
Rc - 1637.0'
Ls - 250.0'
θs - 4°22.5'
SE - .08'/Ft.
Xc - 249.85'
Yc - 6.36'
W - 0'
Exist.
8+70 Co. Rd. 1
21" C.M.P.
25° SK. RA.
D.A. = 6 Ac.
Q10 = 14 cfs
622+21.9 ℄ Rte. 71 =
10+00 ℄ Co. Road 1
12" Gas Main
Blt. Dr. Basin (4 Places)
(Built Shldr. Pavt.)
Const 7+65
Built Type A Guardrail (2 Places)
T.S. 631+88.0
SC 634+38.0
S81°00.1'W
Sta. 615+56
Exist. 5' X 6' R.C. Box
D.A. = 165 Ac.
Q50 = 330 CFS.
Cattle Pass
1/4 Sec. Line
Built Type A Guardrail (2 Places)
Built Shoulder Pavt.
Exist.
11+25 Co. Rd. 1
21" C.M.P.
D.A. = 8 Ac.
Q10 = 14 cfs
End Const. 12+35
622+21.9
32'-42'-42'-38' Cont. Slab (S.B.L.)
32'-42'-42'-39' Cont. Slab (N.B.L.)
Skew 10°37' LA
Br. No. A 4026 (S.B.L.) &
A 4027 (N.B.L.)
Gas Regulator Station
SW¼ NW¼
28-29-31
Sta. 615+56
5' x 6' X 260' R.C. Box (Exist.)
D.A. - 165 ac.
Q50 - 330 cfs
Cattle Pass
⑨
NOTE: ℄ of 150' Easement For Property Owner To Construct And Maintain By Permit Two 50' Tunnels And Necessary Cross Cut Tunnels For Safety. The Cross Cut Tunnels were Located So That No Cross Tunnel Is Placed Under The Roadway Surface.
NE¼ SE¼
29-29-31
NW¼ SE¼
29-29-31
17
Bridge Except.
621+67.0
PI. 622+21.9
El. 1038.5
623+23.6
+2.30%
-1.45%
To Be Const. By Property Owner
1000' V.C.
K = 267
SSD = 610'
B.M. ~ Top E. End Lt. End Post Abut. #1
S.B.L. Sta. 621+45
Elev. ~ 1036.05
1050
1040
1030
1020
1010
1000
990
610 1 2 3 4 615 6 7 8 9 620 1 2 3 4 625 6 7 8 9 630 1 2 3 4 635 6 7 8 9 640
PROFILE
PLAN

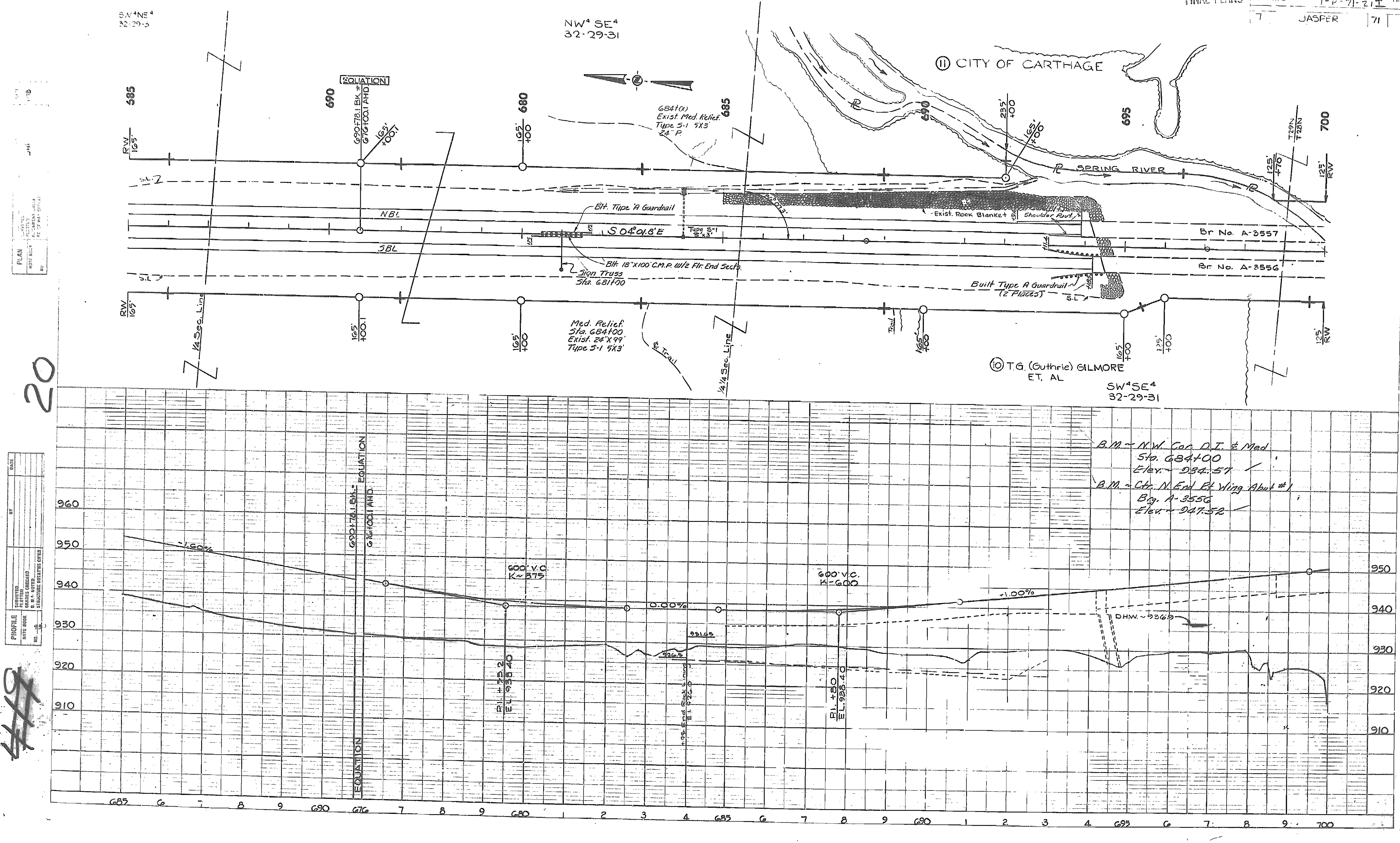
FINAL PLANS 7-P-71-21I 12
7 JASPER 71

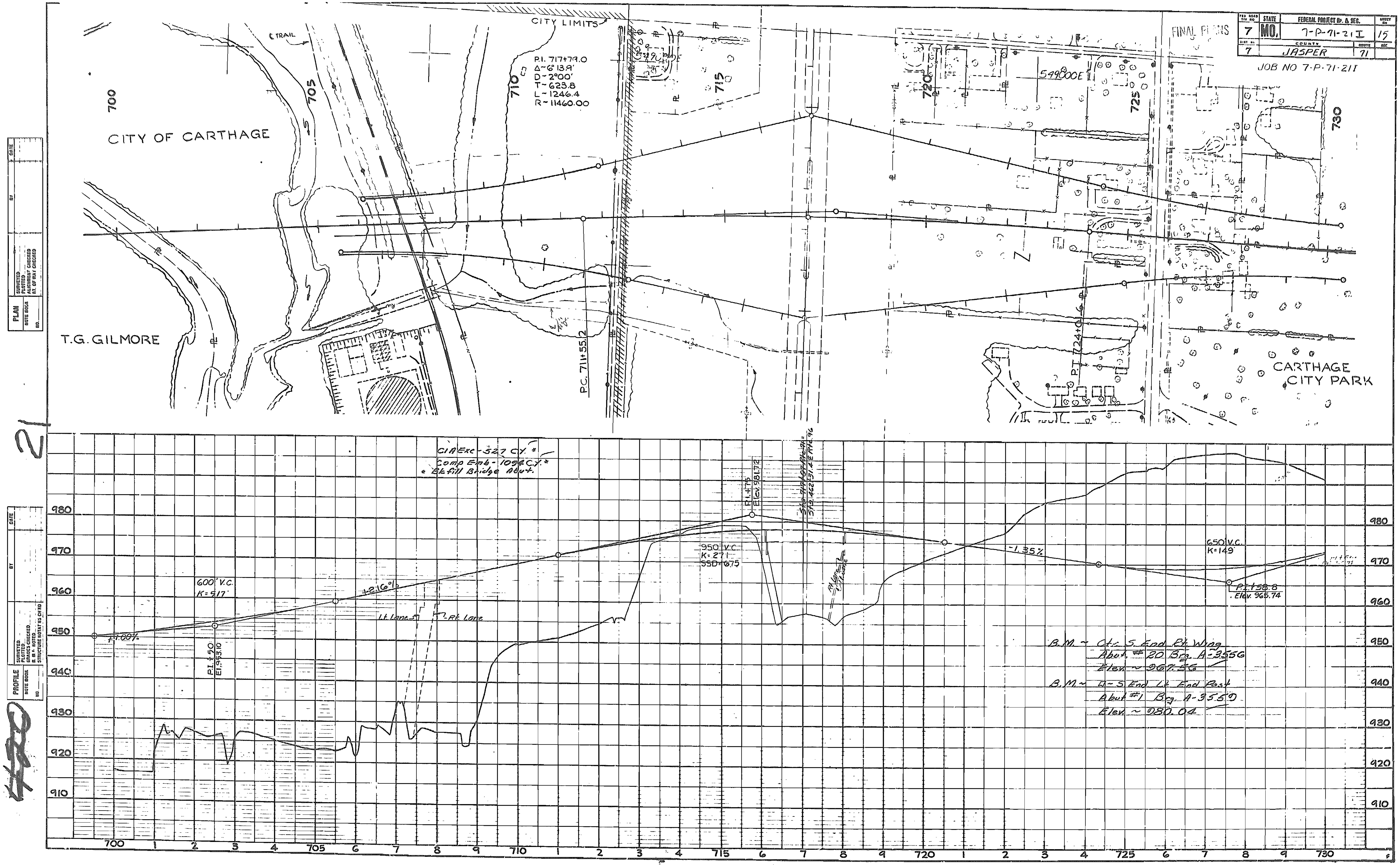


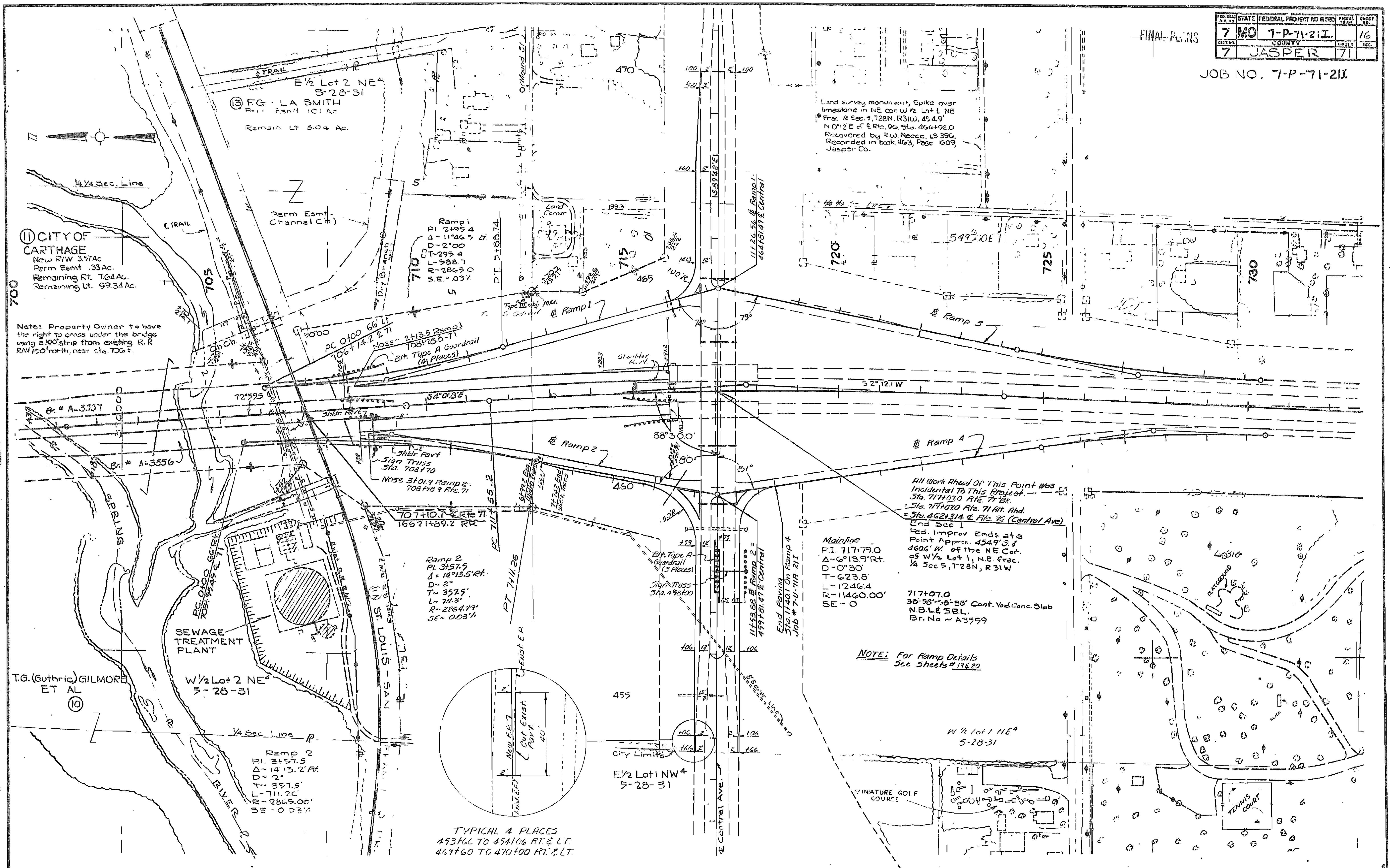


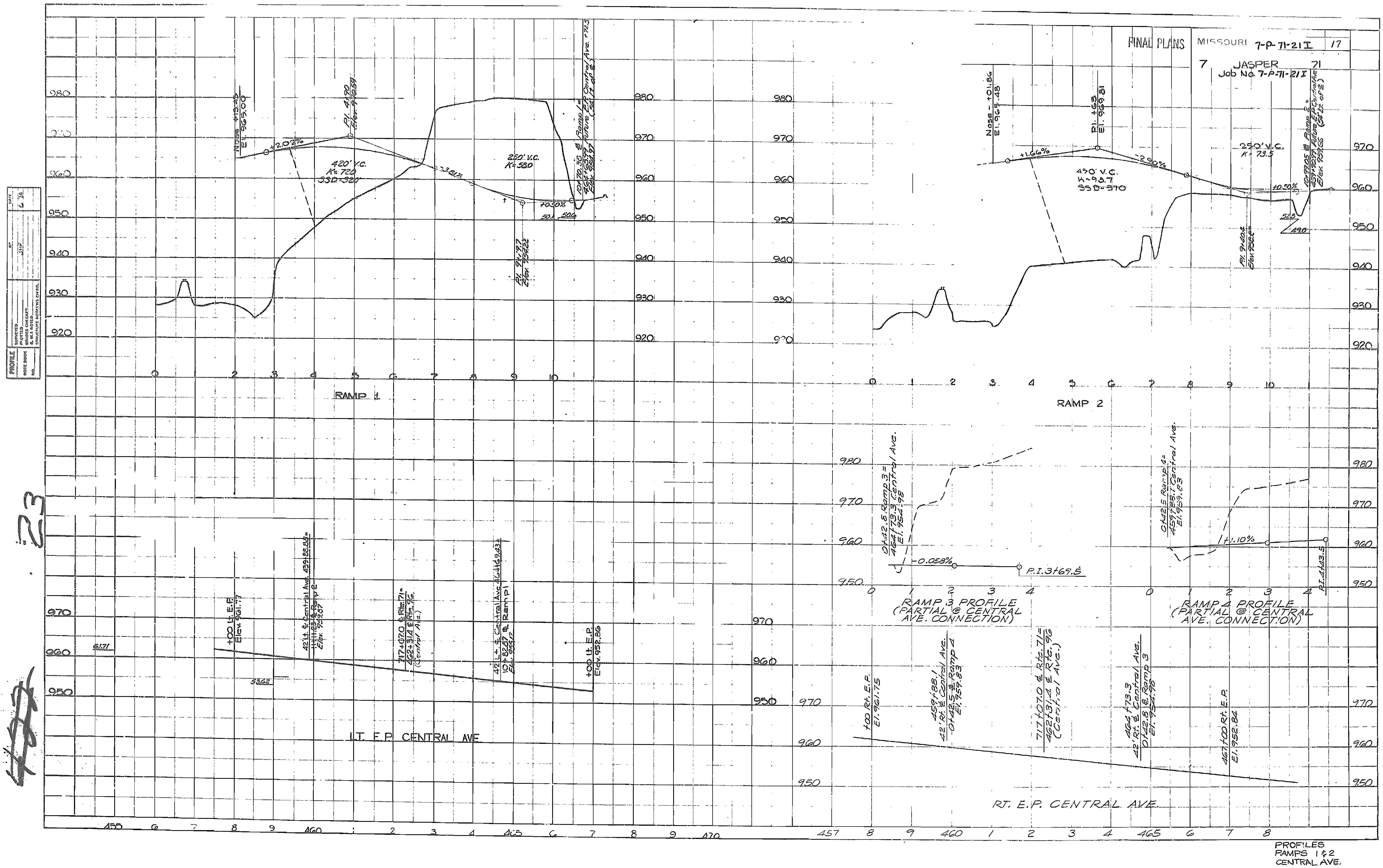
(8) CARTHAGE MARBLE CORP.
(10) T G (Guthrie) GILMORE
7 JASPER 71
EMPIRE DIST. ELECTRIC SUB STATION
Co. Road #2
Sec. Line
660
665
670
675
680
685
673+77.4 ℄ Rte. 71 = 10+00 ℄ Co. Road #2
Beg. Const 8+50
Built Dr Basins (4 Places)
Built Type H Guardrail
Built Shoulder Pavt.
NBL
SBL
Ditch Block
S 04°01.8'E
Built 18"x100' C.M.P. with Flr End Sects.
Sign Truss Sta. 669+00
Built Type A Guardrail (4 Places)
Rock Lining
Ditch Lining
Med. Relief Sta. 660+65 88'x18" RCP Type S-2 5'x2' D.I.
NW¼ NE¼ 32-29-31
Med. Relief Sta. 673+00 Exist. 18"x74' P. Type S-2 5'x2
673+77.4
36'-44'-36' Con't. Slab Span (S.B.L.)
36'-44'-36' Con't Slab Span (N.B.L.)
Skew
Br. No. A 4028 SBL & A4029 N.B.L.
SW¼ NE¼ 32-29-31
¼ Sec Line
Land Survey Monument I.P. S.E Cor. Sec. 29-29-31 2203.7' N1°36.7E to Sta. 622+21.9 thence 2593.4' S81°00.1'W thence 3137.2' S01°01.8'E to Sta. 673+77.4 Set by R W Neece Book 1161 Page 1826 Recorded in Jasper County.
PLAN
PROFILE
600' V.C. K~1333
P.I. +70.6 EL. 979.79
Natural Ground
-1.00%
-1.60%
968.2
949.8
673+77.4 ℄ Rte. 71 10+00 ℄ Co. Rd. #2
P.I. +00 EL. 964.50
B.M.~ R.R. Spike S. Root 15" Elm 200' Rt Sta. 665+20 Elev.~ 962.81
B.M.~ Ctr. S. End East End Post Abut #4 NBL Sta. 674+42 Elev.~ 970.58
B.M.~ R.R. Spike S. Side 10" Elm 160' Rt Sta. 680+00 Elev.~ 955.72
1010
1000
990
980
970
960
950
940
930
660 1 2 3 4 665 6 7 8 9 670 1 2 3 4 675 6 7 8 9 680 1 2 3 4 685
19

FINAL PLANS | 7 | MO | 7-P-71-21I | JASPER | 71



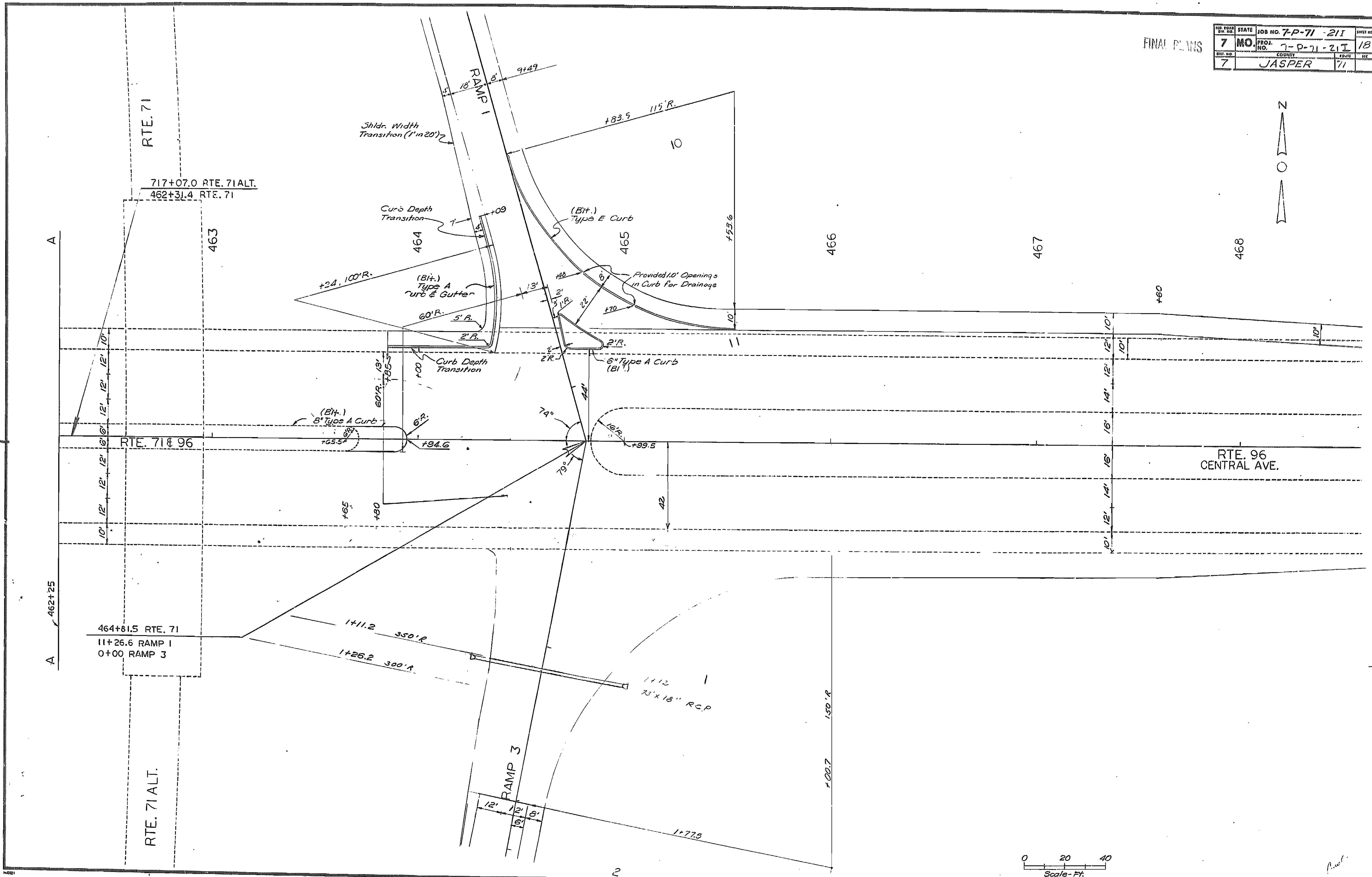

FINAL PLANS
FED ROAD DIV NO 7
STATE MO.
FEDERAL PROJECT No. & SEC. 7-P-71-21 I
SHEET No 15
DIST No 7
COUNTY JASPER
ROUTE 71
JOB NO 7-P-71-21I
CITY LIMITS
℄ TRAIL
P.I. 717+79.0
Δ~6°13.9'
D~2°00'
T~623.8
L~1246.4
R~11460.00
CITY OF CARTHAGE
T.G. GILMORE
P.C. 711+55.2
P.T. 724+01.6
CARTHAGE CITY PARK
PLAN
PROFILE
C1A Exc - 527 C.Y. *
Comp Emb - 1094 C.Y. *
* Ek fill Bridge Abut.
P.I. 4+75
Elev. 981.72
950' V.C.
K= 271
SSD= 675
600' V.C.
K= 517
+2.16%
+1.00%
P.I. +50
El. 953.10
Lt. Lane
Rt. Lane
-1.35%
650' V.C.
K= 149'
P.I. +38.8
Elev. 965.74
B.M. ~ Ctr. S. End Rt. Wing
Abut. #20 Brg. A-3556
Elev. ~ 967.56
B.M. ~ Ctr. S. End Lt. End Post
Abut. #1 Brg. A-3559
Elev. ~ 980.04
700
705
710
715
720
725
730
21


FINAL PLANS
7 MO 7-P-71-21I 16
7 JASPER 71
JOB NO. 7-P-71-21I
E½ Lot 2 NE¼ 5-28-31
(13) F.G. LA SMITH
Remain Lt 3.04 Ac.
Land survey monument, Spike over limestone in NE cor. W½ Lot 1 NE Frac. ¼ Sec. 5, T28N, R31W, 454.9' N 0°12'E of ℄ Rte. 96, Sta. 466+92.0 Recovered by R.W. Neece, LS 396, Recorded in book 1163, Page 1609, Jasper Co.
¼ ¼ Sec. Line
Perm Esmt Channel Ch
(11) CITY OF CARTHAGE
New R/W 3.57 Ac
Perm Esmt .33 Ac.
Remaining Rt. 7.64 Ac.
Remaining Lt. 99.34 Ac.
Ramp 1
PI 2+95.4
Δ~11°46.5' Lt.
D~2°00
T~295.4
L~588.7
R~2865.0
S.E.~.03%
Dry Branch
Land Corner
Type IV Obj. Mkr.
℄ Ramp 1
℄ Ramp 2
℄ Ramp 3
℄ Ramp 4
Note: Property Owner to have the right to cross under the bridge using a 100' strip from existing R.R. R/W 100' north, near sta. 706±.
PC 0+00 66' Lt. 706+14.2 ℄ 71
Nose~2+13.5 Ramp 1 708+28.6~71
Blt. Type A Guardrail (4 Places)
Shoulder Pavt.
S 2°12.1'W
S 4°01.8'E
Br. # A-3557
Br. # A-3556
Shldr. Pavt.
Sign Truss Sta. 708+70
Nose 3+01.9 Ramp 2 = 708+98.9 Rte. 71
707+10.1 ℄ Rte 71
1667+89.2 RR
PC 711+55.2
PT 711+26
88°30.0'
All Work Ahead Of This Point Was Incidental To This Project.
Sta. 717+02.0 Rte. 71 Bk.
Sta. 717+02.0 Rte. 71 Alt. Ahd.
= Sta. 462+31.4 ℄ Rte. 96 (Central Ave)
End Sec I
Fed. Improv Ends at a Point Approx. 454.9' S. & 460.6' W. of the NE Cor. of W½ Lot 1, N.E. Frac. ¼ Sec 5, T28N, R31W
Mainline
P.I. 717+79.0
Δ~6°13.9' Rt.
D~0°30'
T~623.8
L~1246.4
R~11460.00'
SE~0
717+07.0
38'-58'-58'-38' Cont. Void Conc. Slab N.B.L. & S.B.L.
Br. No ~ A3559
NOTE: For Ramp Details See Sheets #19 & 20
Ramp 2
P.I. 3+57.5
Δ~14°13.5' Rt.
D~2°
T~357.5'
L~711.3'
R~2864.79'
SE~0.03%
Blt. Type A Guardrail (3 Places)
Sign Truss Sta. 4+98.00
End Paving Sta. 1+40.1 On Ramp 4 Job # 7-U-71A-21
SEWAGE TREATMENT PLANT
SPRING RIVER
ST. LOUIS - SAN
T.G. (Guthrie) GILMORE ET AL (10)
W½ Lot 2 NE¼ 5-28-31
¼ Sec. Line
Ramp 2
P.I. 3+57.5
Δ~14°13.2' Rt.
D~2°
T~357.5'
L~711.26'
R~2865.00'
SE~0.03%
Cut Exist. Pavt.
TYPICAL 4 PLACES
453+66 TO 454+06 RT. & LT.
469+60 TO 470+00 RT. & LT.
City Limits
E½ Lot 1 NW¼ 5-28-31
Central Ave.
W½ Lot 1 NE¼ 5-28-31
MINIATURE GOLF COURSE
PLAYGROUND
TENNIS COURT
700 705 710 715 720 725 730
455 460 465 470
22


FINAL PLANS
MISSOURI 7-P-71-21I 17
7 JASPER 71
Job No. 7-P-71-21I
RAMP 1
420' V.C.
K= 720
SSD=320
250' V.C.
K= 580
+2.02%
-3.81%
+0.50%
P.I. 4+90
Elev. 970.54
P.I. 9+37
Elev. 954.22
RAMP 2
430' V.C.
K=93.7
SSD=370
250' V.C.
K= 73.5
+1.66%
-2.90%
+0.50%
Nose - +01.86
El. 965.48
P.I. +63
El. 969.81
P.I. 9+04
RAMP 3 PROFILE
(PARTIAL @ CENTRAL AVE. CONNECTION)
-0.058%
P.I. 3+69.5
RAMP 4 PROFILE
(PARTIAL @ CENTRAL AVE. CONNECTION)
+1.10%
P.I. 4+03.5
LT. E.P. CENTRAL AVE
RT. E.P. CENTRAL AVE.
+00 Lt. E.P.
Elev. 961.77
+00 Lt. E.P.
Elev. 952.86
+00 Rt. E.P.
El. 961.75
467+00 Rt. E.P.
El. 952.84
717+07.0 ℄ Rte. 71 =
462+31.4 ℄ Rte. 96
(Central Ave.)
PROFILES
RAMPS 1 & 2
CENTRAL AVE.

FINAL PLANS

FED. ROAD DIV. NO.	STATE	JOB NO. 7-P-71-21I	SHEET NO.
7	MO.	PROJ. NO. 7-P-71-21I	18
DIST. NO.	COUNTY		ROUTE
7	JASPER		71



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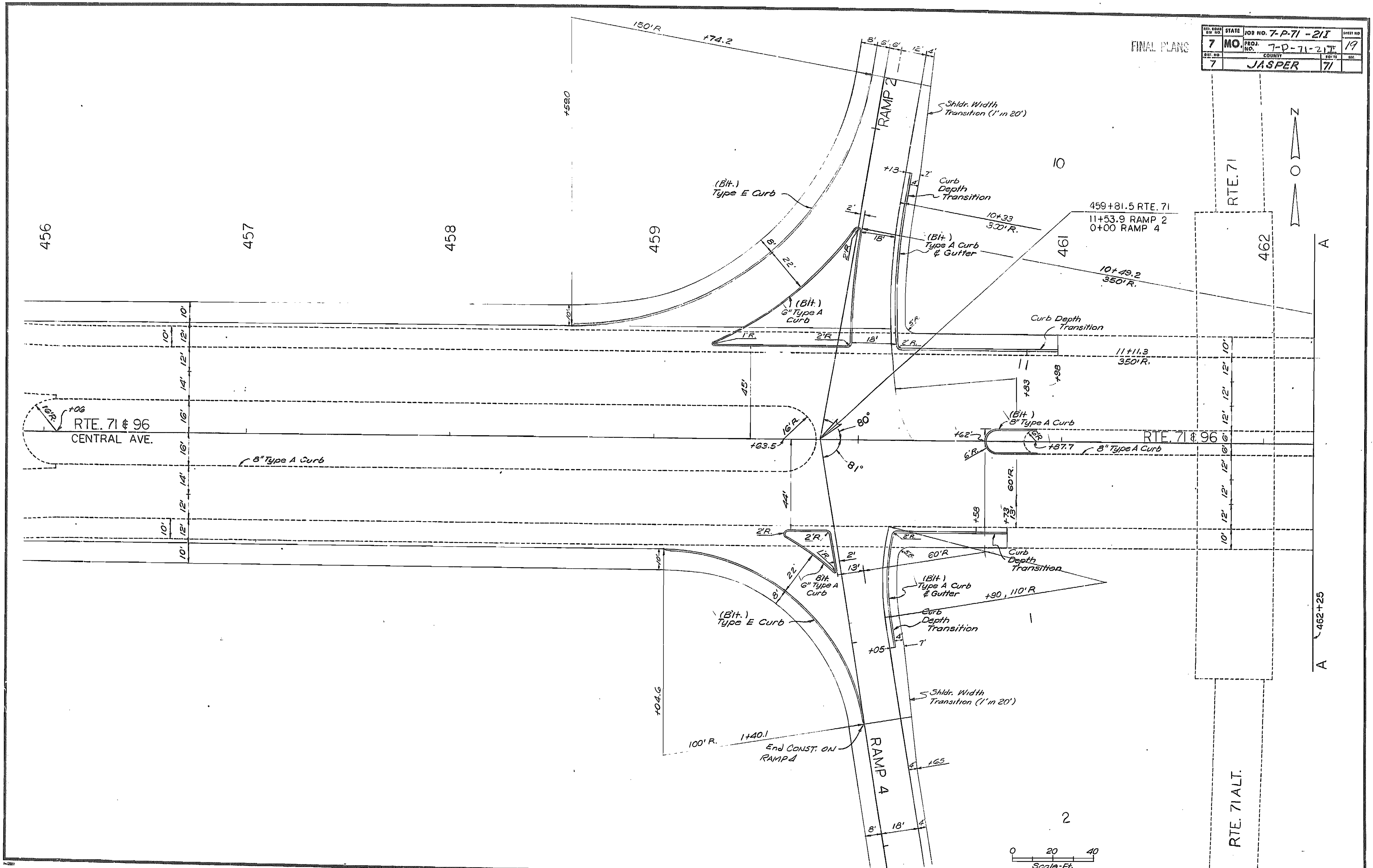
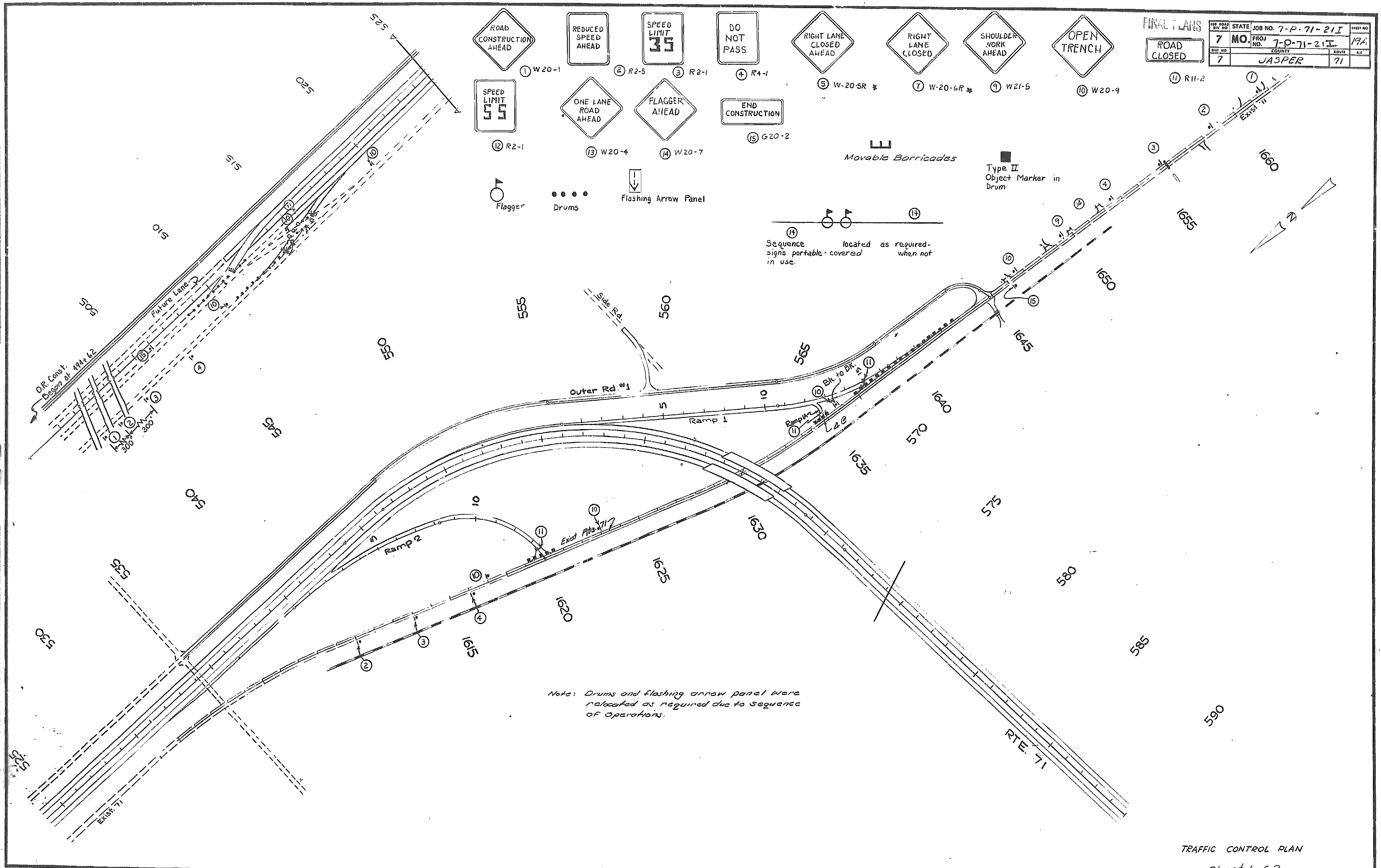
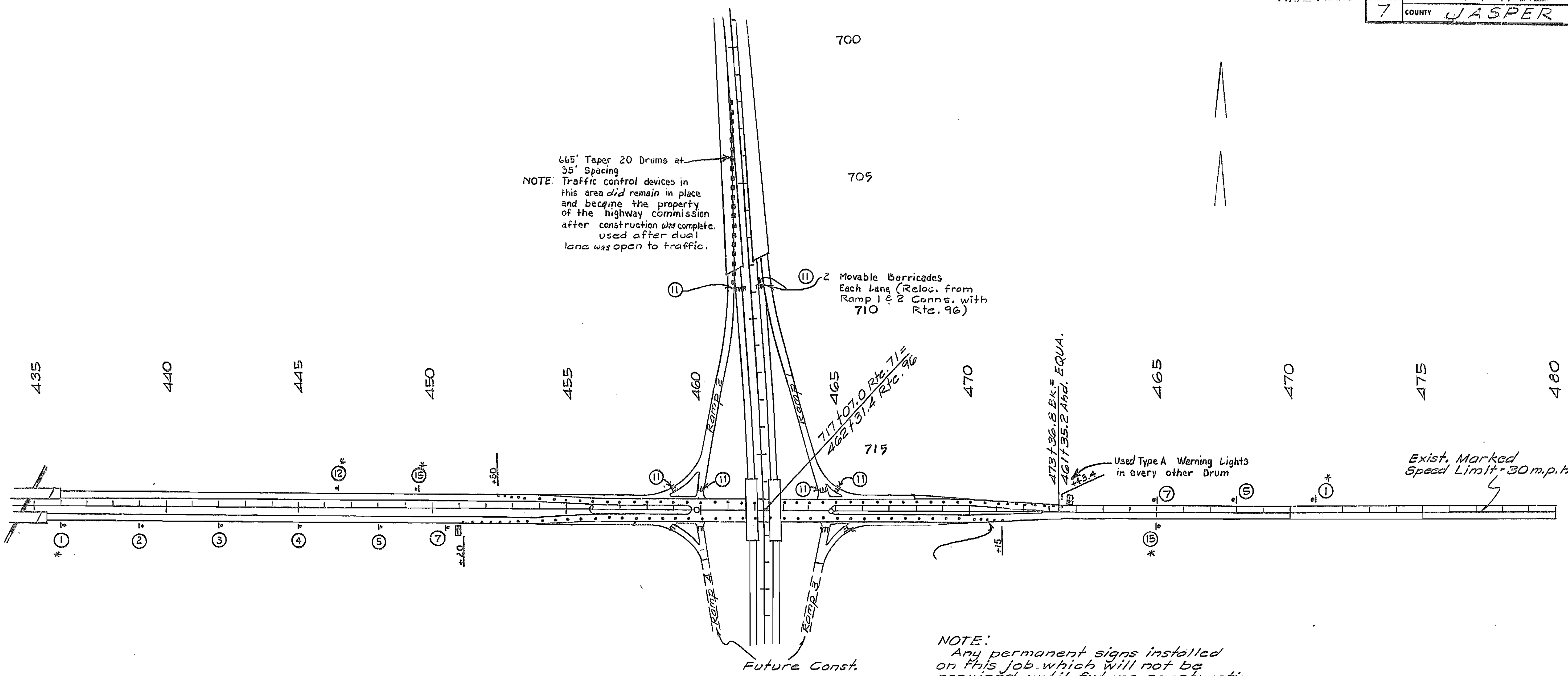

FINAL PLANS
FED. ROAD DIV. NO. 7
STATE MO.
JOB NO. 7-P-71-21I
PROJ. NO. 7-P-71-21J
SHEET NO. 19
DIST. NO. 7
COUNTY JASPER
ROUTE 71
RAMP 2
RAMP 4
RTE. 71
RTE. 71 ALT.
RTE. 71 & 96
CENTRAL AVE.
456
457
458
459
461
462
10
11
1
2
150' R.
+74.2
+59.0
Shldr. Width Transition (1' in 20')
Curb Depth Transition
(Bit.) Type E Curb
(Bit.) Type A Curb & Gutter
(Bit.) 6" Type A Curb
(Bit.) 8" Type A Curb
8" Type A Curb
459+81.5 RTE. 71
11+53.9 RAMP 2
0+00 RAMP 4
10+33 300' R.
10+49.2 350' R.
11+11.3 350' R.
+13
+06
+63.5
+62
+87.7
+83
+98
+58
+73
+90, 110' R
+05
+65
+04.6
60' R.
100' R.
1+40.1
End CONST. ON RAMP 4
80°
81°
A
462+25
A
Scale-Ft.
0
20
40
CC 1 OF 4



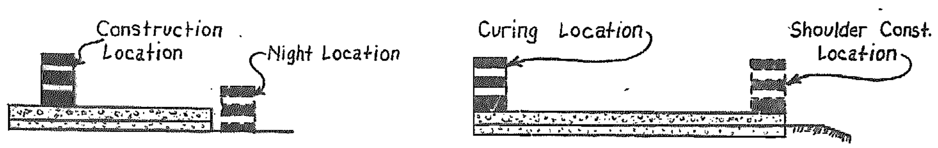
FINAL PLANS
FED ROAD DIV NO 7 | STATE MO. | JOB NO. 7-P-71-21I | PROJ NO. 7-P-71-21I | SHEET NO 19A
DIST NO 7 | COUNTY JASPER | ROUTE 71
ROAD CONSTRUCTION AHEAD
① W20-1
REDUCED SPEED AHEAD
② R2-5
SPEED LIMIT 35
③ R2-1
DO NOT PASS
④ R4-1
RIGHT LANE CLOSED AHEAD
⑤ W-20-5R
RIGHT LANE CLOSED
⑦ W-20-6R
SHOULDER WORK AHEAD
⑨ W21-5
OPEN TRENCH
⑩ W20-9
ROAD CLOSED
⑪ R11-2
SPEED LIMIT 55
⑫ R2-1
ONE LANE ROAD AHEAD
⑬ W20-4
FLAGGER AHEAD
⑭ W20-7
END CONSTRUCTION
⑮ G20-2
Movable Barricades
Type II Object Marker in Drum
Flagger
Drums
Flashing Arrow Panel
Sequence signs portable - covered when not in use.
located as required-
O.R. Const. Began at 494+62
Future Lane
Outer Rd. #1
Side Rd.
Ramp 1
Ramp 2
Bk. to Bk.
Exist. Rte. 71
Exist. 71
RTE. 71
300
Note: Drums and flashing arrow panel were relocated as required due to sequence of operations.
TRAFFIC CONTROL PLAN
Sheet 1 of 2
26

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-21I	19B
DIST. NO.	PROJECT NO. 7-P-71-21I	ROUTE
7	COUNTY JASPER	71



NOTE:
Any permanent signs installed on this job which will not be required until future construction is complete was covered.

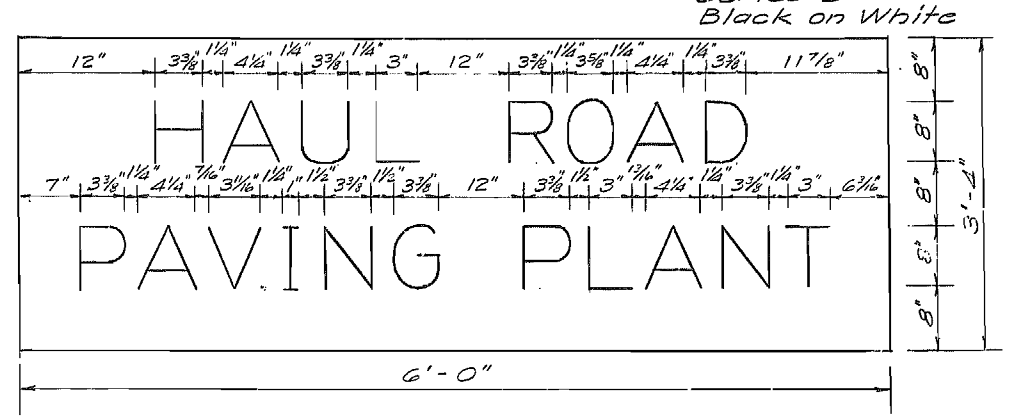


TYPICAL DRUM LOCATION

* Paid for on project FEGC-71-2(44)

Note: Drums & flashing arrow panel were relocated as required due to Sequence of operations.

Std. 903.01
Series B
Black on White



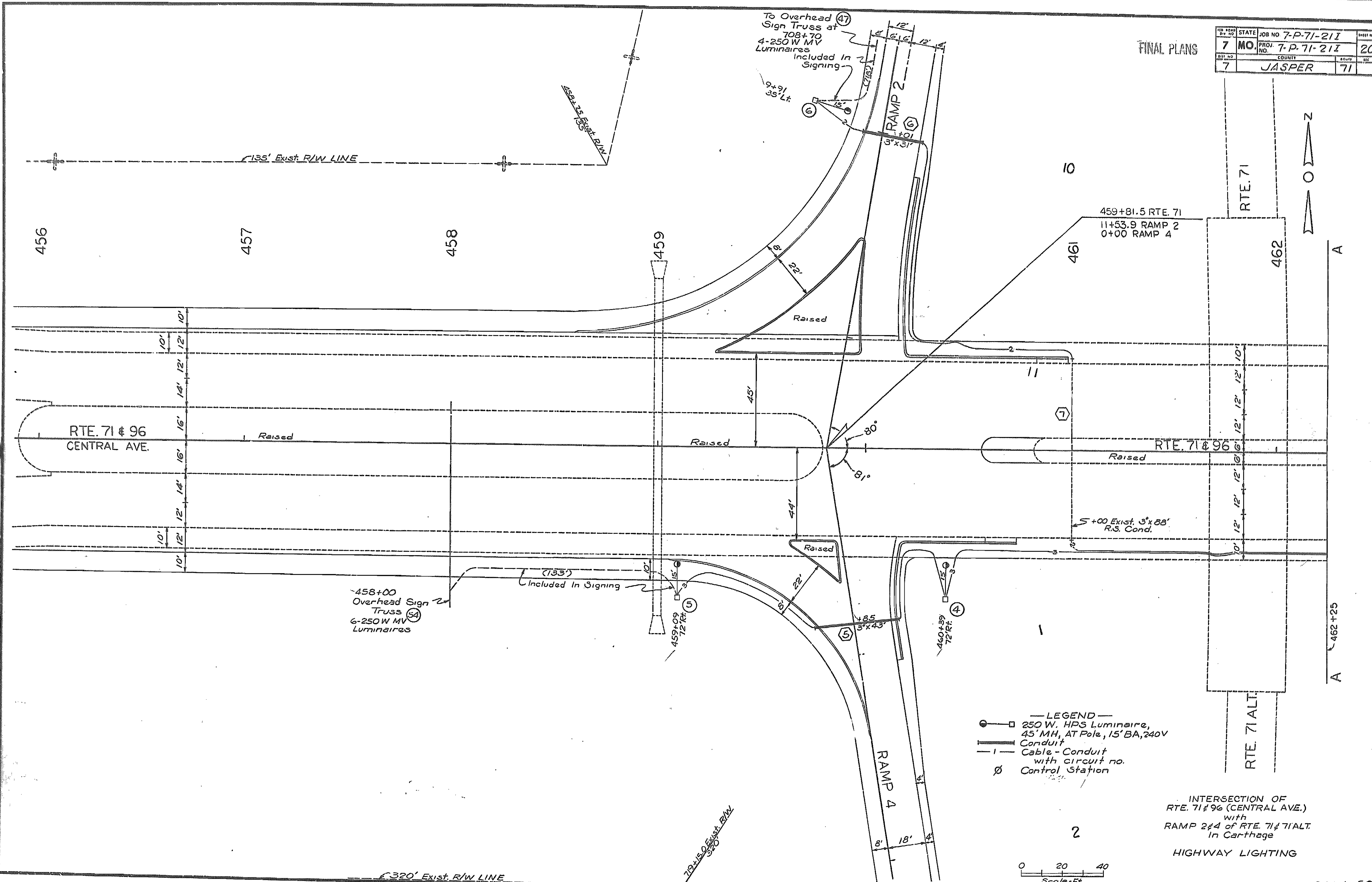
LAYOUT for SPECIAL HAUL ROAD SIGNS
Not to Scale

TRAFFIC CONTROL PLAN

27

FED ROAD DIV NO	STATE	JOB NO 7-P-71-21I	SHEET NO
7	MO.	PROJ. NO. 7-P-71-21I	20
DIST NO	COUNTY		ROUTE
7	JASPER		71

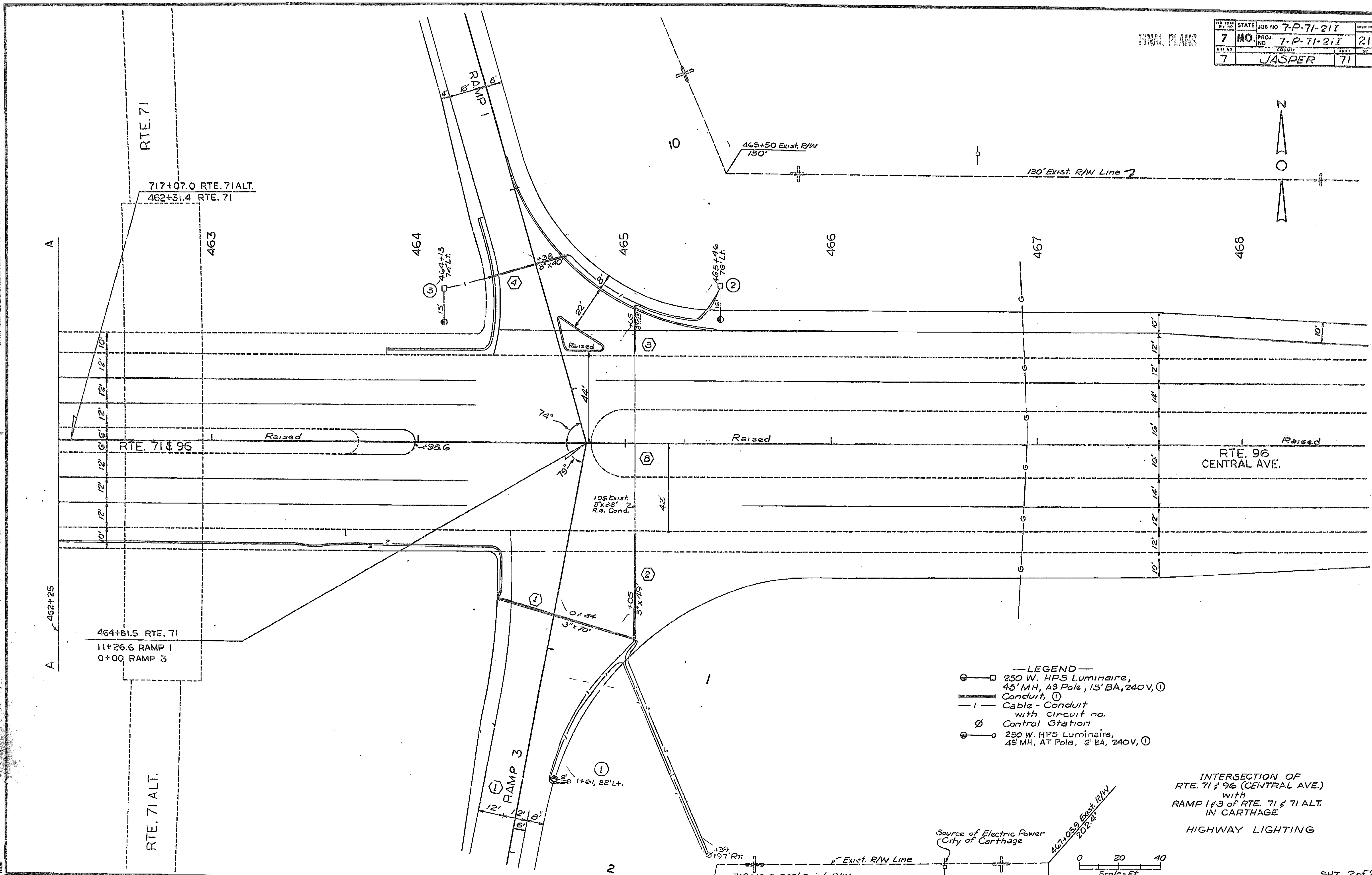
FINAL PLANS



INTERSECTION OF RTE. 71 & 96 (CENTRAL AVE.) with RAMP 2 & 4 of RTE. 71 & 71 ALT. In Carthage

HIGHWAY LIGHTING

SHT. 1 of 2


FINAL PLANS
7 | STATE MO. | JOB NO 7-P-71-21I | PROJ. NO 7-P-71-21I | SHEET NO 21
DIST NO 7 | COUNTY JASPER | ROUTE 71
RTE. 71
RAMP 1
717+07.0 RTE. 71 ALT.
462+31.4 RTE. 71
463
464
465
466
467
468
465+50 Exist. R/W
130'
130' Exist. R/W Line
464+13 74' Lt.
465+46 76' Lt.
+38 3"x40'
Raised
+05 3"x28'
74°
79°
44'
Raised
RTE. 71 & 96
+98.6
RTE. 96
CENTRAL AVE.
+05 Exist. 3"x28' R.S. Cond.
42'
462+25
464+81.5 RTE. 71
11+26.6 RAMP 1
0+00 RAMP 3
0+64 3"x70'
+05 3"x49'
1+61, 22' Lt.
RAMP 3
RTE. 71 ALT.
+39 197' Rt.
Exist. R/W Line
719+13.6, 309' Exist. R/W
Source of Electric Power City of Carthage
467+05.9 Exist. R/W 202.4'
—LEGEND—
250 W. HPS Luminaire, 45' MH, AS Pole, 15' BA, 240 V, 1
Conduit, 1
Cable - Conduit with circuit no.
Control Station
250 W. HPS Luminaire, 45' MH, AT Pole, 6' BA, 240 V, 1
INTERSECTION OF RTE. 71 & 96 (CENTRAL AVE.) with RAMP 1 & 3 of RTE. 71 & 71 ALT. IN CARTHAGE
HIGHWAY LIGHTING
0 20 40
Scale - Ft.
SHT. 2 of 2

29

TRAFFIC SIGNAL SYMBOLS

FINAL PLANS

JOB NO.	7-P-71-21 I	SHEET NO.
PROJECT NO.	7-P-71-21 I	22
DIST. NO. 7	COUNTY JASPER	71

OPTICALLY LIMITING SIGNAL HEAD

CONVENTIONAL SIGNAL HEAD

OPTICALLY LIMITING AND CONVENTIONAL SIGNAL HEAD

SIGNAL HEAD WITH BACKPLATE

SIGNAL HEAD-PEDESTRIAN

POST MOUNTED SIGNAL HEAD WITH SIGN

STOP LINE

LANE USE

TYPE A BASE

TYPE B BASE

TYPE C BASE

EXISTING POST BASE

WOOD POLE WITH DOWN GUY

CONTROLLER

EXISTING CONTROLLER

PULL BOX, TYPE 1

PULL BOX, TYPE 2

SERVICE POLE AND POWER SUPPLY

EXISTING PULL BOX

SPAN WIRE WITH SIGNAL HEAD

LUMINAIRE (WHEN SPECIFIED)

MAST ARM WITH SIGNAL HEADS

MAST ARM WITH OVERHEAD SIGN

INDUCTION LOOP DETECTOR

PUSH BUTTON DETECTOR

CAPPED CONDUIT

CONDUIT IN TRENCH

CONDUIT PUSHED

EXISTING CONDUIT

STEEL CONDUIT ON BRIDGE

CONDUIT IN MEDIAN

3" SIZE OF CONDUIT

3—2c #12 NUMBER & SIZE OF CABLE

7 SIGNAL FACE NUMBER

7 POST NUMBER

7 DETECTOR NUMBER

7 PULL BOX NUMBER

R RED LENS (CIRCULAR)

FR FLASHING RED (CIRCULAR)

Y YELLOW LENS (CIRCULAR)

FY FLASHING YELLOW (CIRCULAR)

YL YELLOW LEFT ARROW LENS

YRt YELLOW RIGHT ARROW LENS

G GREEN LENS (CIRCULAR)

S GREEN STRAIGHT ARROW LENS

L GREEN LEFT ARROW LENS

Rt GREEN RIGHT ARROW LENS

DL DOWN LIGHT

R 12 INCH LENS

G TUNNEL VISOR

Y TUNNEL VISOR WITH EXTERNAL LOUVER

W WALK INDICATION

DW DON'T WALK INDICATION

FDW FLASHING DON'T WALK INDICATION

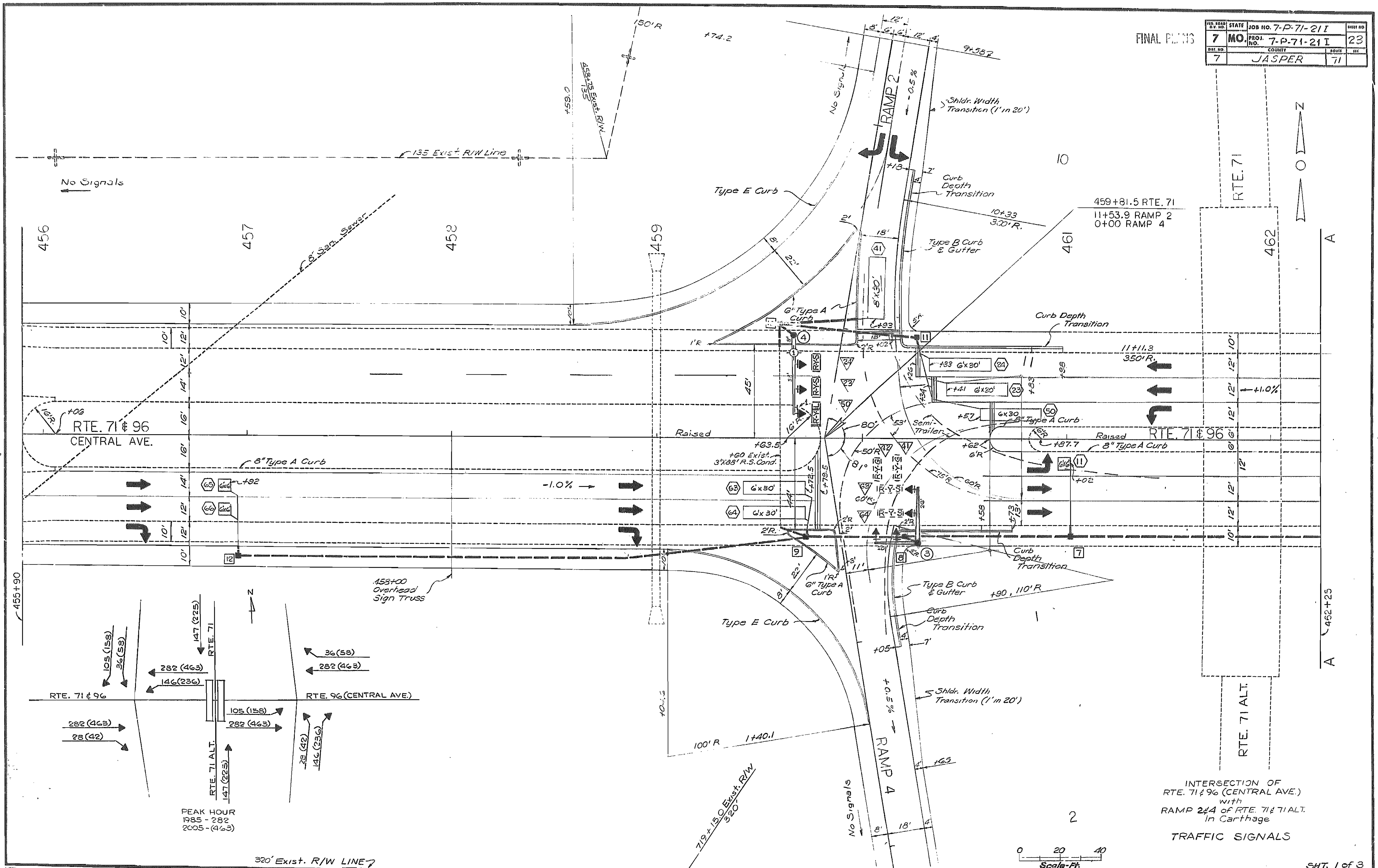
COMMISSION FURNISHED SIGNS

SIGN NUMBER		
1	R10-10L – LEFT TURN SIGNAL (24 x 30)	
2	R10-10R – RIGHT TURN SIGNAL (24 x 30)	
3	R3-5L – LEFT ARROW (SYMBOL)-ONLY (30 x 36)	
4	R3-5R – RIGHT ARROW (SYMBOL)-ONLY (30 x36)	
5	R3-5S – STRAIGHT ARROW (SYMBOL)-ONLY (30 x 36)	
6	R3-6L – LEFT ARROW-STRAIGHT ARROW (SYMBOL) (30 x36)	
7	R3-6R – RIGHT ARROW-STRAIGHT ARROW (SYMBOL) (30 x36)	
8	R3-2 – NO LEFT TURN (SYMBOL) (24 x 24)	WHEN USED SPECIFY BOTH SIGNS
9	R3-2x – NO LEFT TURN (PLAQUE) (24 x 18)	
10	R3-1 – NO RIGHT TURN (SYMBOL) (24 x 24)	WHEN USED SPECIFY BOTH SIGNS
11	R3-1x – NO RIGHT TURN (PLAQUE) (24 x 18)	
12	R3-3a – NO TURNS (24 x 24)	

REV. JUNE 1, 1982

30

#29


FINAL PLANS
FED. ROAD DIV. NO. 7
STATE MO.
JOB NO. 7-P-71-21I
PROJ. NO. 7-P-71-21I
SHEET NO. 23
DIST. NO. 7
COUNTY JASPER
ROUTE 71
INTERSECTION OF
RTE. 71 & 96 (CENTRAL AVE.)
with
RAMP 2 & 4 of RTE. 71 & 71 ALT.
In Carthage
TRAFFIC SIGNALS
SHT. 1 of 3
RTE. 71 & 96
CENTRAL AVE.
RAMP 2
RAMP 4
RTE. 71
RTE. 71 ALT.
No Signals
135 Exist. R/W Line
8" San. Sewer
Type E Curb
Type B Curb & Gutter
Curb Depth Transition
Shldr. Width Transition (1' in 20')
8" Type A Curb
6" Type A Curb
459+81.5 RTE. 71
11+53.9 RAMP 2
0+00 RAMP 4
458+00 Overhead Sign Truss
+60 Exist. 3'x88' R.S. Cond.
Semi-Trailer
Raised
320' Exist. R/W LINE
719+15.0 Exist. R/W 320'
455+90
462+25
PEAK HOUR
1985 - 282
2005 - (463)
RTE. 96 (CENTRAL AVE.)
147 (225)
105 (158)
36 (58)
282 (463)
146 (236)
28 (42)
Scale-Ft.
0 20 40

JOB NO	7-P-71-211
PROJECT NO	7-P-71-21 I
SHEET NO	23B
COUNTY	JASPER
ROUTE	71

TRAFFIC SIGNALS

Sheet 1 of 2

FINAL PLANS

CONTROLLER AND AUXILIARY EQUIPMENT

APPROACH	STATION	OFFSET	CONTROLLER ASSEMBLY HOUSING	PHASE MODULE S	D	P	SP	DP	PRE-TIMED M-N	M-1	M-M	SEMI TYPE 1	TYPE 2	ON-OFF SWITCH I	II	COORDINATION UNIT MASTER	LOCAL	TIME BASE	TONE UNIT TRANS-MITTER	RECEIVER	REMARKS
Rte. 96	463+83	56'Rt.	1	8																	See Special Provision

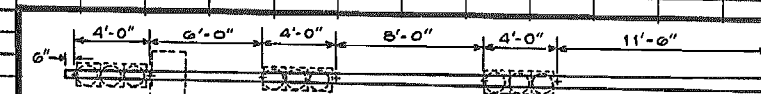
POWER SUPPLY

APPROACH	STATION	OFFSET	POWER SUPPLY ASSEMBLY DRAWING 902.15	DRAWING	MAIN BREAKER	CONT-ROLLER BREAKER	LIGHTING BREAKER	SERVICE POLE CONTRACT FURNISH	UTILITY COMPANY
Rte. 96	465+39	197'Rt.	Type LL		70 Amps	40 Amps	15 Amps	Cl. LL Ft.	

LL Included in the highway lighting items in this project.

POST / DETECTOR

POST NUMBER	PULL BOX NUMBER	DETECTOR NUMBER	APPROACH	STATION	OFFSET	BASES A 8	BASES A 10	CUBIC YARDS OF CONCRETE	MAGNETIC INDUCTION LOOP	CALL UNIT	TYPE CL ARM LENGTH A	SIGNAL SPACING B	C	D	SIGN SPACING B	TYPE B ARM LENGTH E	K	LEFT ARM E SIGNAL F	G	RIGHT ARM K SIGNAL L	M	INCLUDED ANGLE	LUMINAIRE BRACKET ARM 8	COMMISSION FURNISHED SIGNS CODE SIGN NUMBER FROM LEGEND SHEET SP-36
			CONTROLLER (AS REQ'D)					1.42																
1			Rte. 96	464+93	499'Rt.		1	2.94			38	13'-6"	12'-0"	12'-0"	33'									1
2			Rte. 96	464+27	499'Lt.	1		2.35								26	28	13'-6"	12'-0"	15'-6"	12'-0"	90°	1	1
3			Rte. 96	460+27	499'Rt.	1		2.35								26	20	13'-6"	12'-0"	7'-6"	12'-0"	90°	1	1
4			Rte. 96	459+67	499'Lt.		1	2.94			38	13'-6"	12'-0"	12'-0"	33'									
		24	Rte. 96	460+48	36'Lt.				1															
		23	Rte. 96	460+56	24'Lt.				1															
		50	Rte. 96	460+72	12'Lt.				1															
		51	Rte. 96	463+44	12'Lt.				1	1														
		22	Rte. 96	465+05.5	36'Lt.				1															
		21	Rte. 96	465+05.5	24'Lt.				1															
		26	Rte. 96	467+31	36'Lt.				1	1														
		25	Rte. 96	467+31	24'Lt.				1	1														
		10	Rte. 96	463+83	12'Rt.				1															
		61	Rte. 96	464+03	24'Rt.				1															
		62	Rte. 96	464+11	36'Rt.				1															
		11	Rte. 96	460+99	12'Rt.				1	1														
		63	Rte. 96	459+57.5	24'Rt.				1															
		64	Rte. 96	459+57.5	36'Rt.				1															
		65	Rte. 96	456+89	24'Rt.				1	1														
		66	Rte. 96	456+89	36'Rt.				1	1														
		41	Ramp 2	10+78	13'Lt.				1															
		81	Ramp 3	0+72	13.5'Rt.				1															
TOTAL								12.00	18	6	2					1	1							



POSTS 1 & 4 Signal Spacing

SIGNAL HEADS

POST NUMBER	FACE NUMBER	LUMINAIRE 150W SODIUM	12" LENS CONVENTIONAL R	Y	G	S	L	VISORS 12" LENS TUN. 12	BACKPLATES LENSES 3	BRACKET TYPE II	BRACKET TYPE 12	ONE-FACE SECTIONS 3- MH	3- B
1	10		1	1			1	3	1		1	1	
1	61		1	1		1		3	1		1	1	
1	62		1	1		1		3	1		1	1	
1	2	1											
2	22		1	1		1		3	1	1			1
2	21		1	1		1		3	1	1			1
2	31		1	1	1			3	1	1			1
2	82		1	1	1			3	1	1			1
3	41		1	1	1			3	1	1			1
3	42		1	1	1			3	1	1			1
3	63		1	1		1		3	1	✓			1
3	64		1	1		1		3	1	✓			1
4	24		1	1		1		3	1		1	1	
4	23		1	1		1		3	1		1	1	
4	50		1	1			1*	3	1		1	1	
4	1	1											
TOTAL		2										6	8

*Wired to burn Solid Red.

SEE BRACKET DETAIL - SHT. 24

SEE BRACKET DETAIL - SHT. 24

TOTAL: OPTICALLY LIMITED / CONVENTIONAL / COMBINATION O.L.& CONV.

*ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE

12 Horizontal Mast Arm Mounting

PULL BOXES

PULL BOX NUMBER	APPROACH	STATION	OFFSET	PULL BOX TYPE I	TYPE II	REMARKS
1	Rte. 96	463+50	48'Rt.	1		
2	Rte. 96	464+37	48'Rt.	1		
3	Rte. 96	463+50	47'Lt.	1		
4	Rte. 96	464+20	47'Lt.	1		
5	Rte. 96	464+82	47'Lt.	1		
6	Rte. 96	467+25	58'Lt.	1		
7	Rte. 96	461+02	47'Rt.	1		
8	Rte. 96	460+20	47'Rt.	1		
9	Rte. 96	459+73	47'Rt.	1		
10	Rte. 96	459+60	55'Lt.	1		
11	Rte. 96	460+27	49'Lt.	1		
12	Rte. 96	456+95	58'Rt.	1		
TOTAL				12		

LEGEND
B-MAST ARM MOUNT
C-SPANWIRE MOUNT
T-TOP MOUNT
S-SIDE MOUNT, MH-Horizontal Mast Arm Mount

SP-37A

REV JUN 1, 83

JOB NO. 7-P-71-21 I		SHEET NO.
PROJECT NO. 7-P-71-21 I		23B
DIST. NO.	COUNTY	ROUTE	SEC
	JASPER	71	

Sheet 2 of 2

TRAFFIC SIGNALS

FINAL P[illegible]

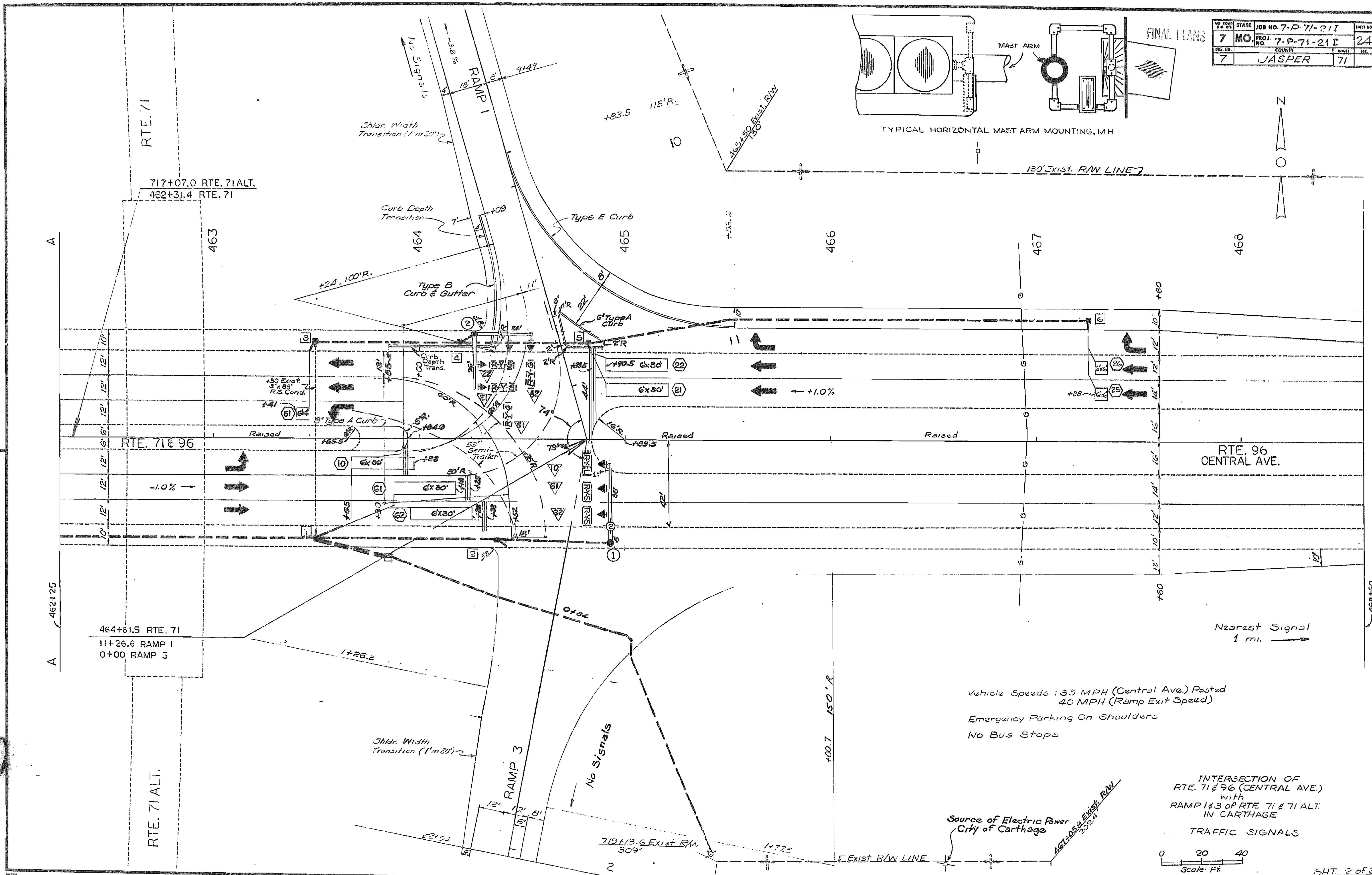
CONDUIT

FROM	TO	CTR TO CTR DISTANCE	TRENCH 1¼	TRENCH 1½	TRENCH 2	TRENCH 2½	TRENCH 3	TRENCH 3½	TRENCH 4	MEDIAN 1¼	MEDIAN	MEDIAN	PUSHED 2	PUSHED 2½	PUSHED 3	PUSHED 3½	PUSHED 4	ON BRIDGE	ON BRIDGE	REMARKS
⌀	⊠	211	219																	
⊠	1	35					37		37											
1	2	87			85															
2	⟨81⟩	7	6'																	
2	(1)	55			57															
1	3	95					5'													U.I.P. Exist. 3"x88' R.S. Cond.
3	⟨51⟩	6	[illegible]																	
3	4	70					68'													
4	(2)	8			10'															
4	5	62			60'															
5	⟨22⟩	3	2'																	
5	6	214	212'																	
6	⟨26⟩	4	3'																	
1	⟨62⟩	14	13'																	
1	7	248							246'											
7	⟨11⟩	5	4'																	
7	8	82							80'											
8	(3)	8			10'															
8	9	48					46'													
9	10	112					22'													U.I.P. Exist. 3"x88' R.S. Cond.
10	(4)	9			11'															
10	⟨41⟩	38	37'																	
10	11	67			65'															
11	⟨24⟩	5	4																	
9	⟨64⟩	4	3'																	
9	12	277	275'																	
12	⟨66⟩	4	3'																	
TOTALS			816'		298'		178'		368'											

CABLE

FROM	TO	CTR TO CTR DISTANCE	POWER 1c #3	POWER 1c #4	CONTROL 2c #12	CONTROL 3c #12	CONTROL 5c #12	CONTROL 7c #12	CONTROL 12c #12	CONTROL	DETECTOR 1c #14	DETECTOR	REMARKS
⌀	⊠	211'		492'									
⊠	(1)	177'			227'			494'					
⊠	(2)	208						558'					
⊠	(3)	373						880'					
⊠	(4)	534'			607'			1911'					
⊠	1	35'			138'								
⊠	2	122'			139'								
⊠	3	130'			147'								
⊠	5	262'			582'								
⊠	6	506'			1082'								
⊠	7	288'			300'								
⊠	9	413'			884'								
⊠	10	525'			560'								
⊠	11	592'			1899'								
⊠	12	690'			1450'								LOOP SIZE
1	⟨10⟩	44'									364'		6'x30'
1	⟨61⟩	46'									368'		6'x30'
1	⟨62⟩	49'									374'		6'x30'
2	⟨81⟩	15'											8'x30' [illegible]
3	⟨51⟩	33'									150'		6'x6
5	⟨21⟩	22'									320'		6'x30'
5	⟨22⟩	12'									300'		6'x30'
6	⟨25⟩	34'									152'		6'x6'
6	⟨26⟩	21'									126'		6'x6'
7	⟨11⟩	32'									148'		6'x6'
9	⟨63⟩	23'									322'		6'x30'
9	⟨64⟩	10'									296'		6'x30'
10	⟨41⟩	43'									370'		8'x30'
11	⟨50⟩	54'									384'		6'x30'
11	⟨23⟩	30'									336'		6'x30'
11	⟨24⟩	13'									302'		6'x30'
12	⟨65⟩	33'									150'		6'x6'
12	⟨66⟩	21'									126'		6'x6'
TOTALS			USE	492' USE 490'	8015' 8020'	USE	USE	3843' 3840'		USE	[illegible] [illegible]		

33



FINAL PLANS
FED. ROAD DIV. NO. 7
STATE MO.
JOB NO. 7-P-71-21I
PROJ. NO. 7-P-71-21I
SHEET NO. 24
DIST. NO. 7
COUNTY JASPER
ROUTE 71
MAST ARM
TYPICAL HORIZONTAL MAST ARM MOUNTING, M.H.
N
130' Exist. R/W LINE
465+50 Exist. R/W 130'
115' R.
+83.5
RAMP 1
No Signals
-2.8%
9+49
Shldr. Width Transition (1' in 20')
RTE. 71
717+07.0 RTE. 71 ALT.
462+31.4 RTE. 71
463
464
465
466
467
468
Curb Depth Transition
Type E Curb
+24, 100' R.
Type B Curb & Gutter
6" Type A Curb
Curb Depth Trans.
+50 Exist. 3"x88' R.S. Cond.
6" Type A Curb
60' R.
53' Semi-Trailer
50' R.
Raised
RTE. 71 & 96
RTE. 96
CENTRAL AVE.
-1.0%
+1.0%
6'x30'
6x30'
6x6
+60
462+25
468+60
464+81.5 RTE. 71
11+26.6 RAMP 1
0+00 RAMP 3
1+26.6
0+84
150' R.
+00.7
Nearest Signal 1 mi.
Vehicle Speeds: 35 MPH (Central Ave.) Posted
40 MPH (Ramp Exit Speed)
Emergency Parking On Shoulders
No Bus Stops
INTERSECTION OF
RTE. 71 & 96 (CENTRAL AVE.)
with
RAMP 1 & 3 of RTE. 71 & 71 ALT.
IN CARTHAGE
TRAFFIC SIGNALS
Shldr. Width Transition (1' in 20')
RAMP 3
No Signals
RTE. 71 ALT.
719+13.6 Exist. R/W 309'
1+77.5
Exist. R/W LINE
Source of Electric Power
City of Carthage
467+05.3 Exist. R/W 202.4
0 20 40
Scale- Ft.
SHT. 2 of 3

34

FINAL PLANS

JOB NO. 7-P-71-21I		SHEET NO.
PROJECT NO. 7-P-71-21I		25
DIST. NO. 7	COUNTY JASPER	ROUTE 71

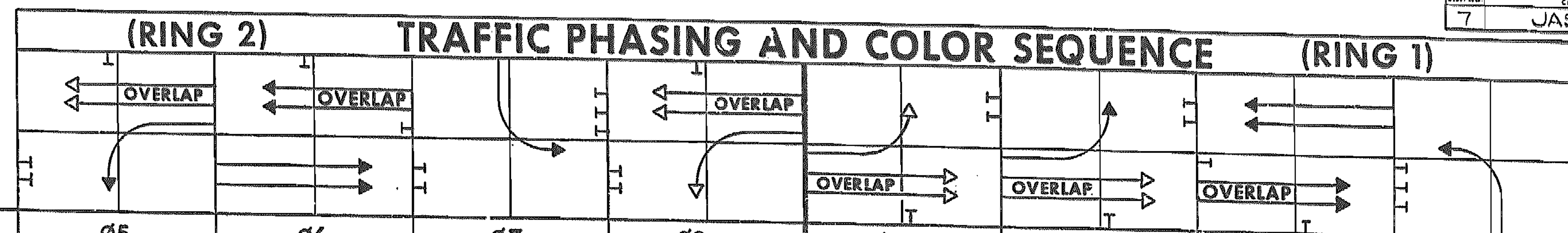
LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICAL STOPPED

FDW - FLASHING DON'T WALK
R/W - RIGHT OF WAY INTERVAL
DW - DON'T WALK
YRt - YELLOW RIGHT ARROW
RT. - GREEN RIGHT ARROW
W - WALK
LY - YL - YELLOW LEFT ARROW
L - GREEN LEFT ARROW
S - GREEN STRAIGHT AHEAD ARROW
G - CIRCULAR GREEN
Y - CIRCULAR YELLOW
R - CIRCULAR RED
Ø - TRAFFIC PHASE
AO - ALL OTHERS
FR - FLASHING RED
FY - FLASHING YELLOW

TRAFFIC PHASING AND COLOR SEQUENCE

(RING 2) (RING 1)



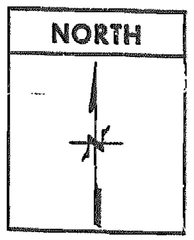
Ring 2

CONT. NO 1 APPROACH	FACE NO	Ø5 R/W	Ø5 CLEAR TO 6	Ø5 CLEAR TO 7	Ø6 R/W	Ø6 CLEAR TO 5	Ø6 CLEAR TO 7	Ø7 R/W	Ø7 CLEAR TO 5	Ø7 CLEAR TO 6	Ø7 CLEAR TO 8	Ø8
West BOUND		L	Y	Y	R	R	R	R	R	R	R	PHASE 7 GREEN REST SHALL CALL PHASE 8.
Rte. 96		S	S	Y	S	S	Y	R	R	R	R	
Central Ave.		S	S	Y	S	S	Y	R	R	R	R	
East BOUND		R	R	R	S-	Y	Y	R	R	R	R	
Rte. 96		R-	R	R	S-	Y	Y	R	R	R	R	
Central Ave.												
South BOUND		R	R	R	R	R	R	G	Y	Y	Y	
Ramp 2		R	R	R	R	R	R	G	Y	Y	Y	

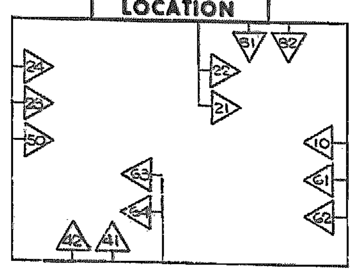
Ring 1

Ø4	Ø1 R/W	Ø1 CLEAR TO 2	Ø1 CLEAR TO 3	Ø2 R/W	Ø2 CLEAR TO 1	Ø2 CLEAR TO 3	Ø3 R/W	Ø3 CLEAR TO 1	Ø3 CLEAR TO 2	Ø3 CLEAR TO 4	FACE NO	CONT. NO APPROACH
PHASE 3 GREEN REST SHALL CALL PHASE 4.	L	Y	Y	R	R	R	R	R	R	R		East BOUND
	S	S	Y	S	S	Y	R	R	R	R		Rte. 96
	S	S	Y	S	S	Y	R	R	R	R		Central Ave.
	R	R	R	S	Y	Y	R	R	R	R		West BOUND
	R	R	R	S-	Y	Y	R	R	R	R		Rte. 96
												Central Ave.
	R	R	R	R	R	R	G	Y	Y	Y		North BOUND
	R	R	R	R	R	R	G	Y	Y	Y		Ramp 3

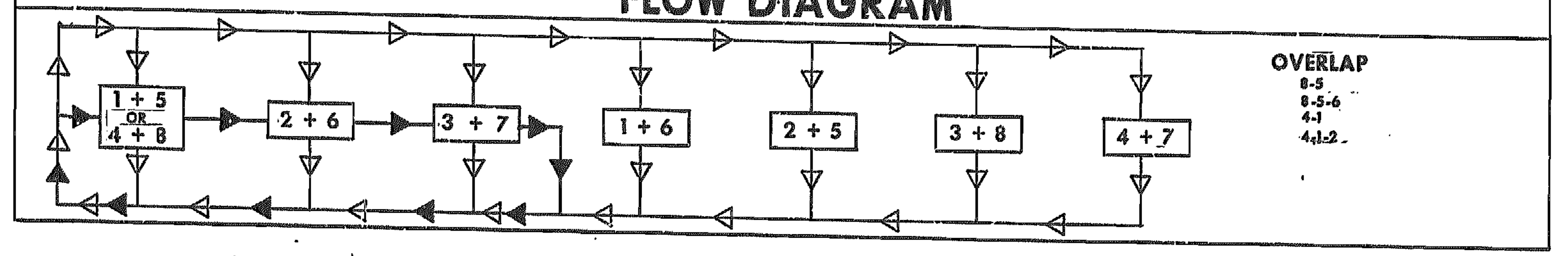
NORTH



SIGNAL FACE LOCATION



FLOW DIAGRAM



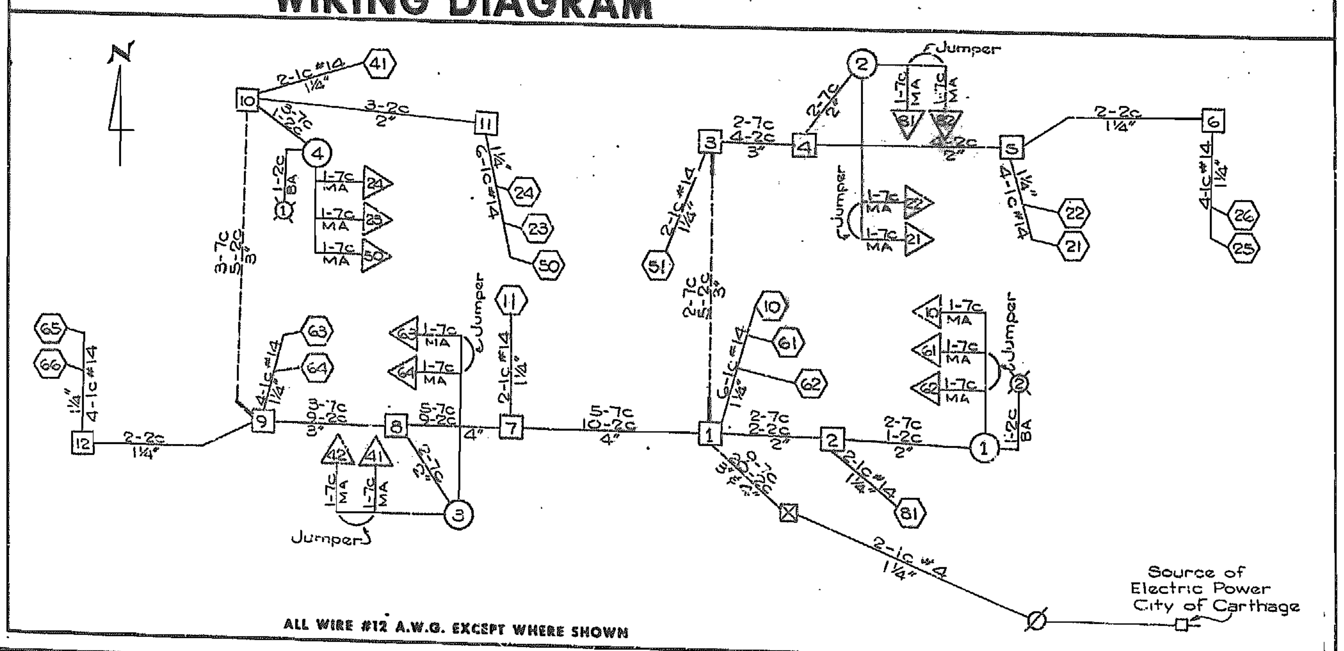
DENOTES SEQUENCE THAT PREVAILS IF CONSTANT DEMAND EXISTS ON ALL PHASES, AND COMBINED PHASES HAVE EQUAL TIME SETTINGS.

DENOTES SECONDARY SEQUENCE PER RIGHT OF WAY DEMAND.

NOTE:

1. CONTROLLER SHALL BE 8 PHASE QUAD, DUAL ENTRY, NEMA.
2. PHASES 4 AND 8 ARE TIMING MODULES AND DO NOT HAVE DIRECT OUTPUTS OR DETECTOR INPUTS.
3. A 3 INPUT 1 OUTPUT "AND" GATE CIRCUIT SHALL BE FURNISHED EXTERNAL TO THE 8 PHASE CONTROLLER ON STATUS BIT TERMINALS A AND B AND PHASE GREEN ON SIGNAL PHASES 3 AND 7. WHEN ALL 3 INPUTS ARE ACTIVE A PULSE SHALL OCCUR ON THE OUTPUT AND PLACE A CALL FOR SIGNAL PHASE 4 IF THE OUTPUT IS FROM THE "AND" GATE ON SIGNAL PHASE 3 AND A CALL SHALL BE PLACED FOR SIGNAL PHASE 8 IF THE OUTPUT IS FROM THE "AND" GATE ON SIGNAL PHASE 7.
4. PHASES 2, 3, 6, AND 7 HAVE LOAD MODULES. THE REMAINING 4 LOAD MODULES SHALL BE USED FOR OVERLAP OUTPUTS FOR PHASES 1, 2, AND 4 AND PHASES 5, 6, AND 8.
5. CONTROLLER RING 1 SHALL CONTAIN PHASES 1, 2, 3, AND 4 WITH A BARRIER BETWEEN PHASES 2 AND 3. RING 2 SHALL CONTAIN PHASES 5, 6, 7, AND 8 WITH A BARRIER BETWEEN PHASES 6 AND 7.
6. Detector 11 calls and extends phase 1. Detector 51 calls and extends phase 5. (SEE SPECIAL PROVISION)

WIRING DIAGRAM



ALL WIRE #12 A.W.G. EXCEPT WHERE SHOWN

FLASHING OPERATIONS	
EAST & WEST APPROACHES	FY
OFF RAMPS 2 & 3	FR

CONTROLLER TYPE	8Ø

TRAFFIC SIGNAL CONTROL OPERATION

ROUTE 71
INTERSECTION OF
ROUTE 96
WITH
In Carthage

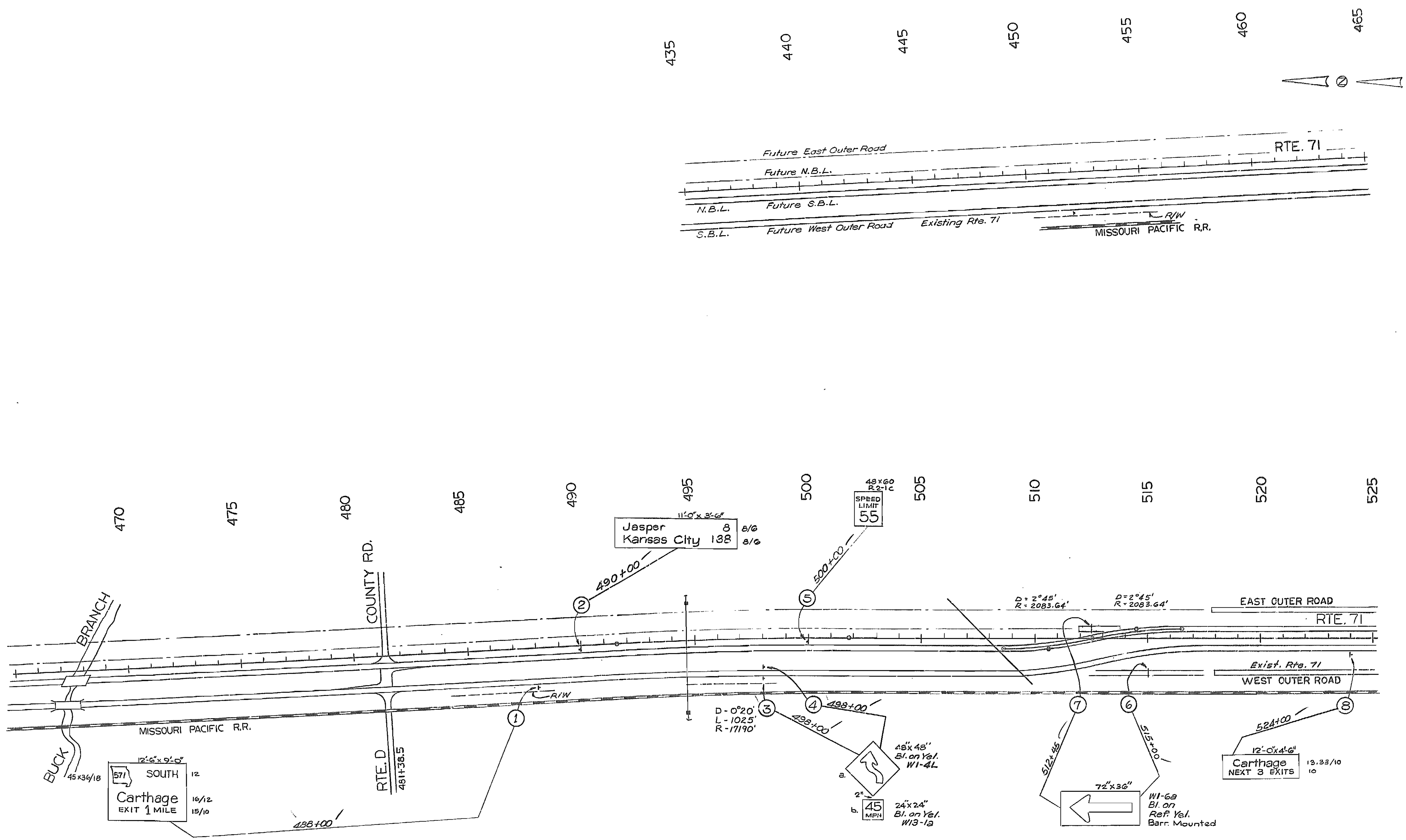
SP-38I

35

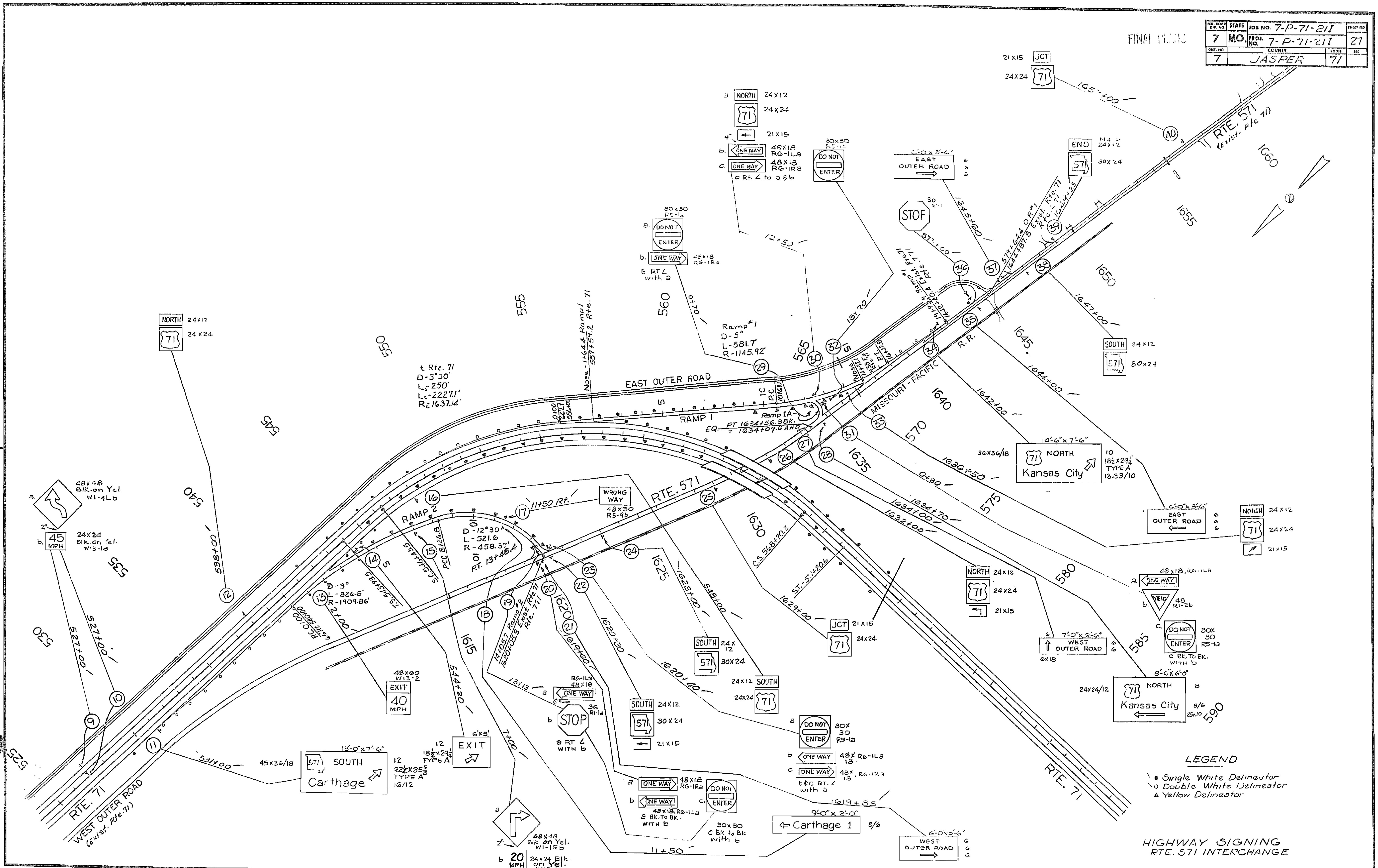
#34

FED. ROAD DIV. NO.	STATE	JOB NO. 7-P-71-211	SHEET NO.
7	MO.	PROJ. NO. 7-P-71-211	26
DIST. NO.		COUNTY	ROUTE
7		JASPER	71

FINAL PLANS

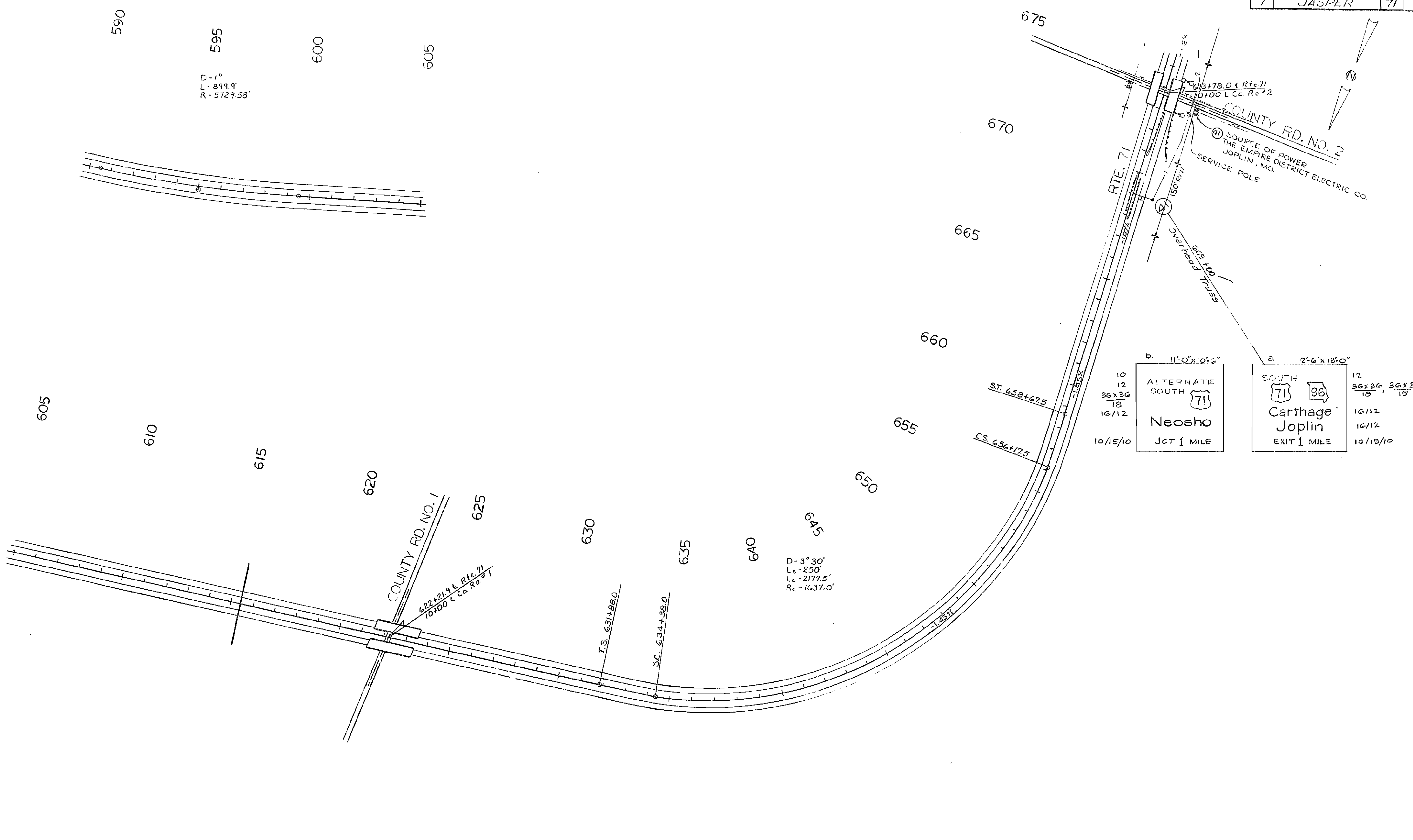


HIGHWAY SIGNING

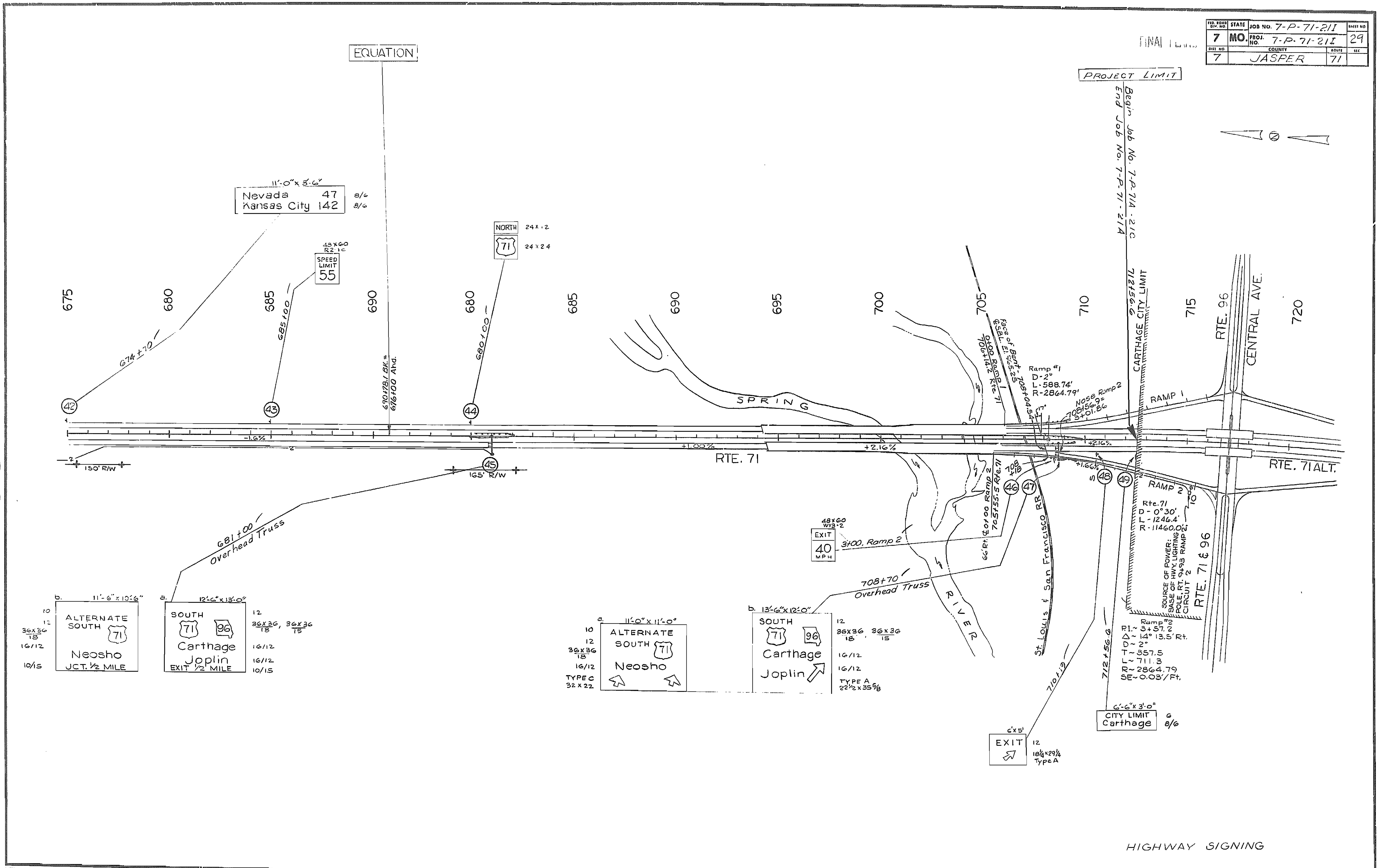


FED. ROAD DIV. NO. 7
STATE MO.
JOB NO. 7-P-71-21I
PROJ. NO. 7-P-71-21I
SHEET NO 27
DIST NO 7
COUNTY JASPER
ROUTE 71
FINAL PLANS
RTE. 571 (Exist. Rte 71)
RTE. 571
RTE. 71
EAST OUTER ROAD
WEST OUTER ROAD (Exist. Rte. 71)
RAMP 1
RAMP 2
MISSOURI - PACIFIC R.R.
Ramp #1 D-5° L-581.7' R-1145.92'
℄ Rte. 71 D-3°30' Ls-250' Lc-2227.1' Rc 1637.14'
D-12°30' L-521.6 R-458.37' P.T. 13+48.4
D-3° L-826.8' R-1909.86'
Ramp 1A PT 1634+56.38Bk. EQ. = 1634+09.6 Ahd.
NORTH 71 Kansas City
571 SOUTH Carthage
Carthage 1
EAST OUTER ROAD
WEST OUTER ROAD
DO NOT ENTER
ONE WAY
WRONG WAY
STOP
YIELD
EXIT
EXIT 40 MPH
45 MPH
20 MPH
JCT 71
END 571
LEGEND
● Single White Delineator
○ Double White Delineator
▲ Yellow Delineator
HIGHWAY SIGNING
RTE. 571 INTERCHANGE

FED. ROAD DIV. NO.	STATE	JOB NO. 7-P-71-21I		SHEET NO.
7	MO.	PROJ. NO. 7-P-71-21I		28
DIST. NO.	COUNTY		ROUTE	SEC
7	JASPER		71	



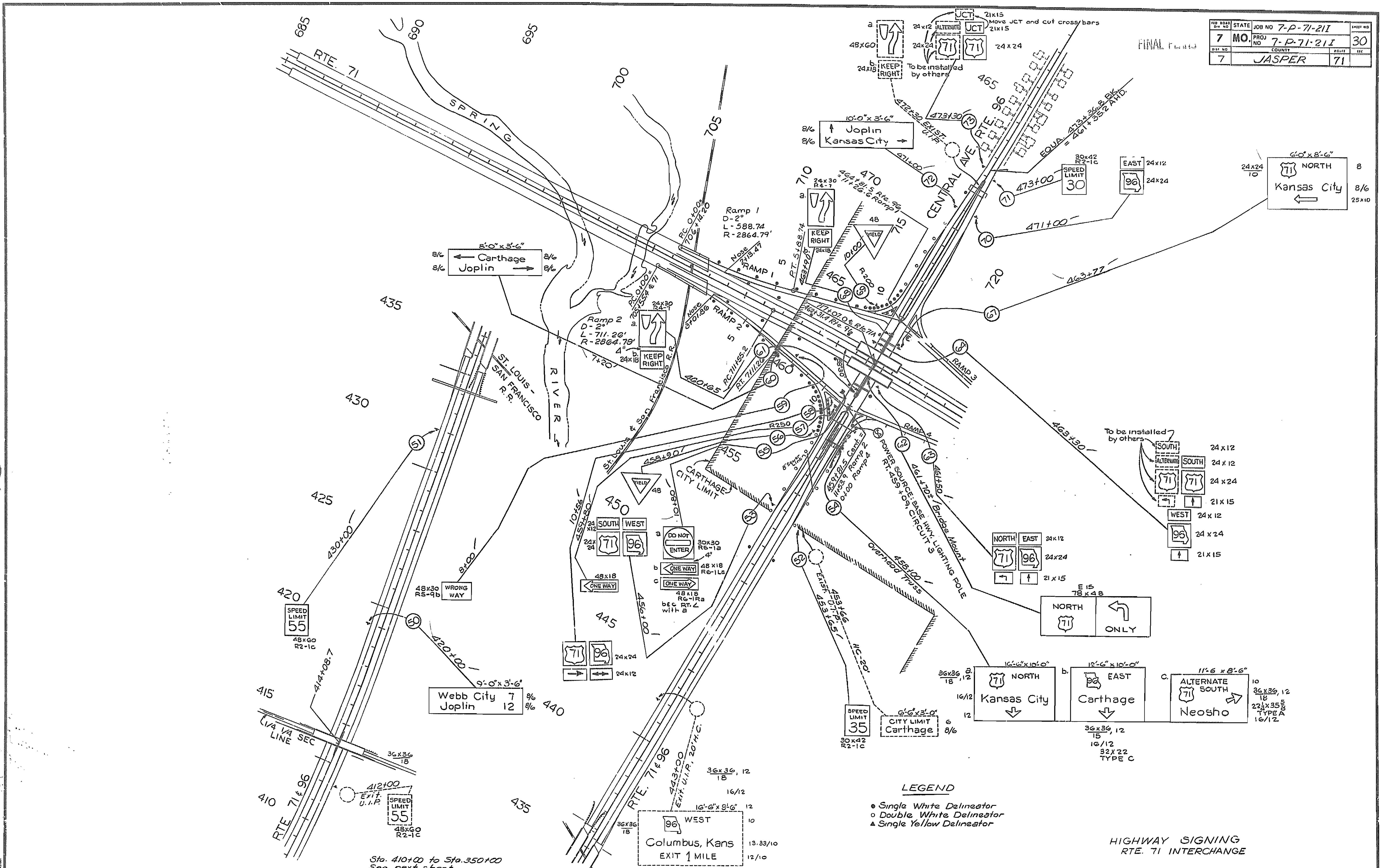
HIGHWAY SIGNING

FED. ROAD DIV. NO. 7
STATE MO.
JOB NO. 7-P-71-21I
PROJ. NO. 7-P-71-21I
SHEET NO. 29
DIST. NO. 7
COUNTY JASPER
ROUTE 71
FINAL PLANS
EQUATION
PROJECT LIMIT
Begin Job No. 7-P-71A-21C
End Job No. 7-P-71-21A
11'-0" x 3'-6"
Nevada 47
Kansas City 142
8/6
8/6
48x60 R2-1c
SPEED LIMIT 55
NORTH 24x12
71 24x24
674+70
685+00
690+78.1 BK = 676+00 Ahd.
680+00
RTE. 71
-1.6%
+1.00%
+2.16%
+1.66%
150' R/W
165' R/W
SPRING RIVER
St. Louis & San Francisco RR
Face of Bent 708+04.5 ±
EBL El. 945.25
706+14.2 Rte. 71
0+00 Ramp 1
Ramp #1
D-2°
L-588.74'
R-2864.79'
Nose Ramp 2
708+56.9 = 3+01.86
708+18
0+00 Ramp 2
705+55.5 Rte. 71
66' Rt.
712+56.6
CARTHAGE CITY LIMIT
RAMP 1
RAMP 2
RTE. 96
CENTRAL AVE.
RTE. 71 ALT.
RTE. 71 & 96
Rte. 71
D - 0°30'
L - 1246.4'
R - 11460.0'
SOURCE OF POWER: BASE OF HWY. LIGHTING POLE, RT. 9+93 RAMP 2, CIRCUIT 2
Ramp #2
P.I. ~ 3+57.2
Δ ~ 14° 13.5' Rt.
D ~ 2°
T ~ 357.5
L ~ 711.3
R ~ 2864.79
SE ~ 0.03'/Ft.
681+00 Overhead Truss
708+70 Overhead Truss
48x60 W13-2
EXIT 40 MPH
3+00, Ramp 2
710+19
712+56.6
b. 11'-6" x 10'-6"
ALTERNATE SOUTH 71
Neosho
JCT. 1/2 MILE
36x36 18
16/12
10/15
a. 12'-6" x 13'-0"
SOUTH 71 96
Carthage
Joplin
EXIT 1/2 MILE
36x36 18, 36x36 15
16/12
16/12
10/15
a. 11'-0" x 11'-0"
ALTERNATE SOUTH 71
Neosho
36x36 18
16/12
TYPE C 32x22
b. 13'-6" x 12'-0"
SOUTH 71 96
Carthage
Joplin
36x36 18, 36x36 15
16/12
16/12
TYPE A 22 1/2 x 35 5/8
6'x5'
EXIT
18 3/4 x 29 1/4 Type A
6'-6" x 3'-0"
CITY LIMIT Carthage
6
8/6
675
680
685
690
695
700
705
710
715
720
HIGHWAY SIGNING

39

FED. ROAD DIV. NO.	STATE	JOB NO. 7-P-71-21I	SHEET NO.
7	MO.	PROJ. NO. 7-P-71-21I	30
DIST. NO.		COUNTY	ROUTE
7		JASPER	71

FINAL PLANS



LEGEND

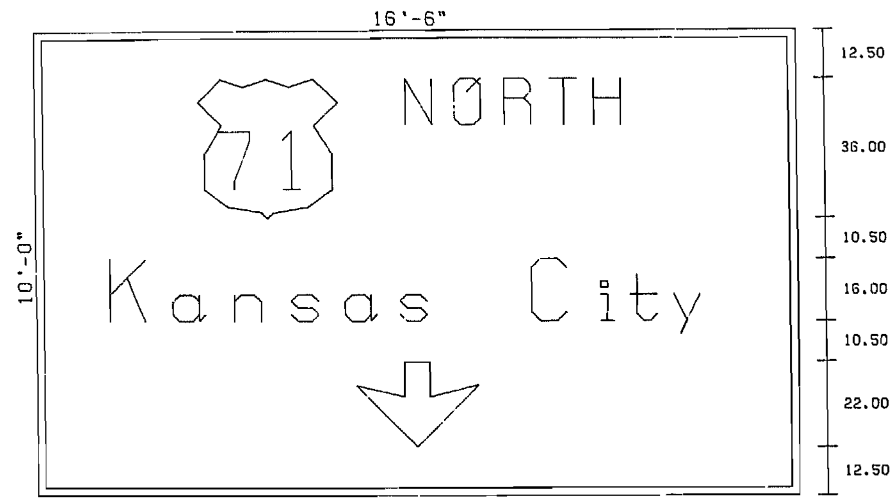
- ● Single White Delineator
- ○ Double White Delineator
- ▲ Single Yellow Delineator

Sta. 410+00 to Sta. 350+00
See next sheet

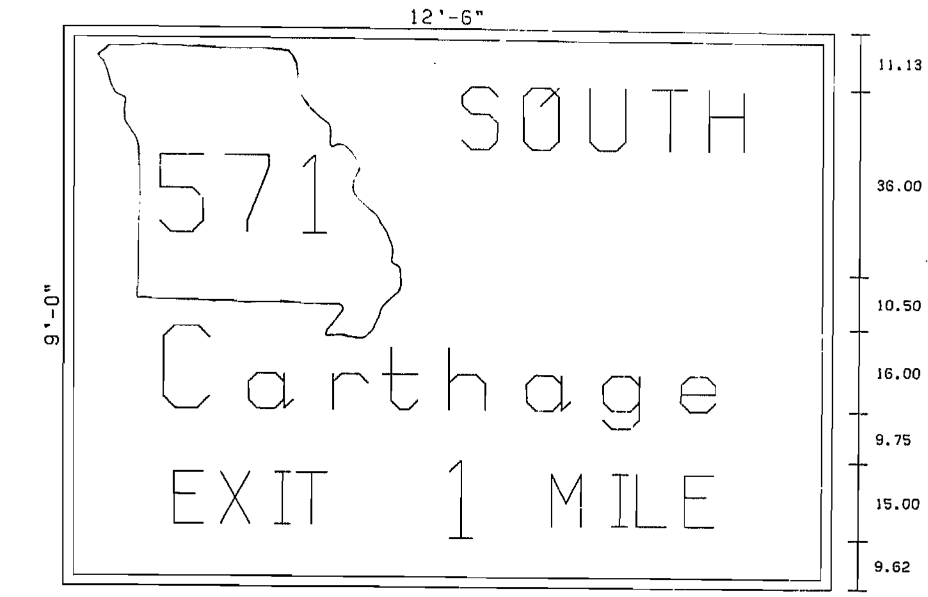
HIGHWAY SIGNING
RTE. 71 INTERCHANGE

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-211	31
DIST. NO.	PROJECT NO. 7-P-71-21I	ROUTE
7	COUNTY JASPER	71



JASPER 71 54A
1"=24"



JASPER 71 1
1"=18"

```
SIGN NUMBER   54A     HEIGHT = 10 FT.  0 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71             LENGTH = 16 FT.  6 IN.  . SPACING.
STATION  459+00         AREA = 165.0 SQ. FT.  .         .
COUNTY  JASPER               RADIUS = 12 IN.  .  12.50 .        020000000000000000000000000 (PROGRAM SUPPLIED)
PROJECT  7-P-71-21C          BORDER =  2 IN.  .  36.00 . . LINE 1 . 12  271 NORTH
DESCRIPTION  GREEN/WHITE OVERHEAD  STB24      .  10.50 .                 3
                                              .  16.00 . . LINE 2 . 16  K      C
                                              .  10.50 .                 ANSAS  ITY
                                              .  22.00 . . LINE 3 . 12  5
                                              .  12.50 .                1
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  42.71                 .  19.36              .  83.00                 .
.  36.00  SHIELD US71    .  16.25  K     16 UC .  32.00  ARROW  D       .
.  18.00                 .  16.26  A     12 LC .  83.00                 .
.  12.65  N       12 UC  .  14.75  N     12 LC .                        .
.  13.03  O       12 UC  .  13.63  S     12 LC .                        .
.  12.04  R       12 UC  .  14.63  A     12 LC .                        .
.  11.29  T       12 UC  .  10.13  S     12 LC .                        .
.   9.57  H       12 UC  .  24.00              .                        .
.  42.71                 .  18.00  C     16 UC .                        .
.                        .   7.50  I     12 LC .                        .
.                        .  11.25  T     12 LC .                        .
.                        .  12.88  Y     12 LC .                        .
.                        .  19.36              .                        .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
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```
SIGN NUMBER      1     HEIGHT =  9 FT.  0 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 12 FT.  6 IN.  . SPACING.
STATION  488+00          AREA = 112.5 SQ. FT.  .         .
COUNTY  JASPER                RADIUS = 12 IN.  .  11.13 .        020000000000000000000000000 (PROGRAM SUPPLIED)
PROJECT  7-P-71-21A           BORDER =  2 IN.  .  36.00 . . LINE 1 . 12  2571 SOUTH
DESCRIPTION  GREEN/WHITE GRND MOUNT  STB24     .  10.50 .                4
                                               .  16.00 . . LINE 2 . 16  C
                                               .   9.75 .                 ARTHAGE
                                               .  15.00 . . LINE 3 . 10  EXIT 915 1 910 MILE
                                               .   9.62 .                     1     1
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  14.52                  .  19.24              .  21.36                .
.  45.00  SHIELD US571    .  17.00  C     16 UC .   9.45  E     10 UC   .
.  18.00                  .  16.26  A     12 LC .  10.70  X     10 UC   .
.  12.04  S       12 UC   .   9.75  R     12 LC .   4.07  I     10 UC   .
.  13.03  O       12 UC   .  13.00  T     12 LC .   7.38  T     10 UC   .
.  12.04  U       12 UC   .  15.13  H     12 LC .  22.50                .
.  11.29  T       12 UC   .  15.01  A     12 LC .   4.97  1     15 NO   .
.   9.57  H       12 UC   .  15.13  G     12 LC .  15.00                .
.  14.51                  .  10.25  E     12 LC .  11.82  M     10 UC   .
.                         .  19.23              .   4.57  I     10 UC   .
.                         .                     .   9.45  L     10 UC   .
.                         .                     .   7.38  E     10 UC   .
.                         .                     .  21.35                .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

71

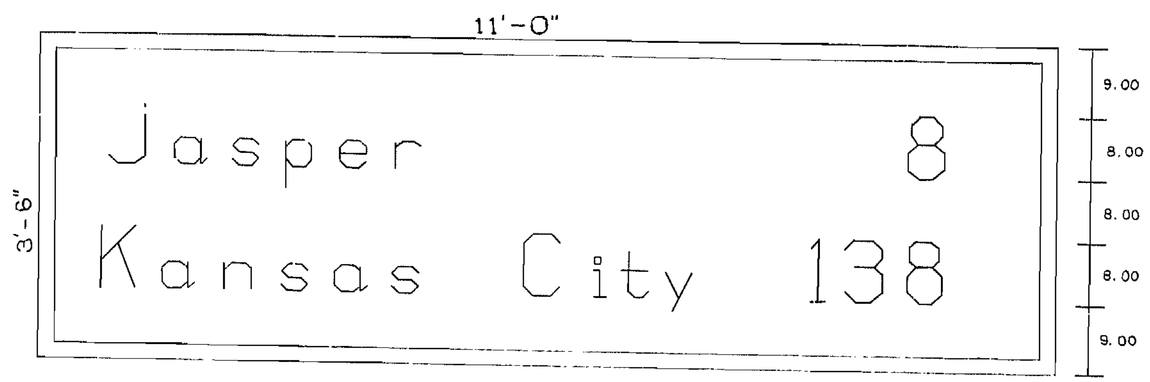
FINAL PLANS

STATE	JOB NO. 7-P-71-21I	SHEET NO.
MO.	PROJECT NO. 7-P-71-21I	32
DIST. NO.	COUNTY JASPER	ROUTE
7		71

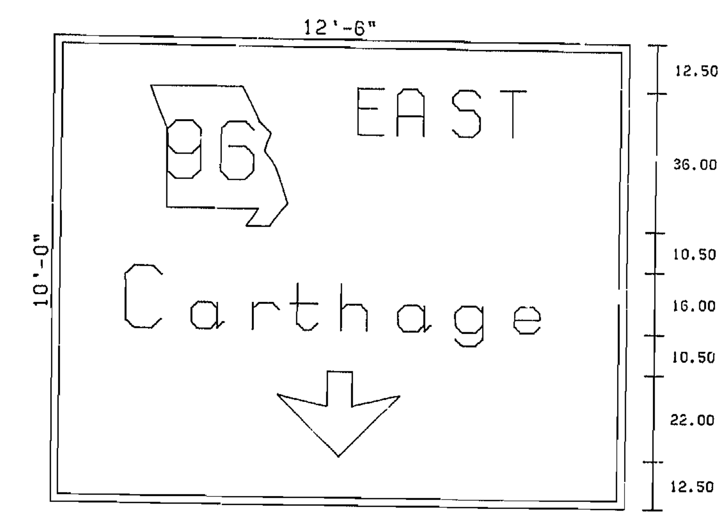
FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

42

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE



JASPER 71 2
1"=12"



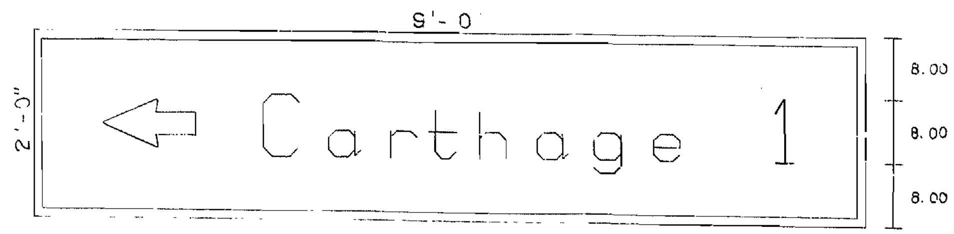
JASPER 71 54B
1"=24"

```
SIGN NUMBER      2       HEIGHT =  3 FT.  6 IN.  .VERTICAL.        DISTRICT 7
ROUTE  71                LENGTH = 11 FT.  0 IN.  . SPACING.
STATION  490+00            AREA =  38.5 SQ. FT.  .        .
COUNTY  JASPER                  RADIUS =  6 IN.  .   9.00 .        0200008000800080000000000000
PROJECT  7-P-71-21A             BORDER =  1 IN.  .   8.00 . . LINE 1 . 08  J        9 8
DESCRIPTION  GREEN/WHITE GRND MOUNT  STB24       .   8.00 .                 ASPER 2
                                                 .   8.00 . . LINE 2 . 08  K      C    9 138
                                                 .   9.00 .                ANSAS  ITY 2
. . . . . . . . . . . . . . . . . . . . . . . . .
.   9.00                .   9.00                .
.   8.69  J      8 UC   .   8.12  K       6 UC  .
.   7.38  A      6 LC   .   8.20  A       6 LC  .
.   7.57  S      6 LC   .   7.38  N       6 LC  .
.   6.88  P      6 LC   .   6.88  S       6 LC  .
.   7.63  E      6 LC   .   7.38  A       6 LC  .
.   3.88  R      6 LC   .   5.13  S       6 LC  .
.  65.59                .  12.00                .
.   6.38  8      8 NO   .   9.01  C       8 UC  .
.   9.00                .   3.75  I       6 LC  .
.                       .   5.63  T       6 LC  .
.                       .   6.50  Y       6 LC  .
.                       .  14.93                .
.                       .   4.68  1       8 NO  .
.                       .   8.03  3       8 NO  .
.                       .   6.38  8       8 NO  .
.                       .   9.00                .
. . . . . . . . . . . . . . . . . . . . . . . . .
```

```
SIGN NUMBER   54B     HEIGHT = 10 FT.  0 IN.  .VERTICAL.       DISTRICT 7
ROUTE  71             LENGTH = 12 FT.  6 IN.  . SPACING.
STATION  458+00         AREA = 125.0 SQ. FT.  .        .
COUNTY  JASPER               RADIUS = 12 IN.  .  12.50 .      0200000000000000000000000000 (PROGRAM SUPPLIED)
PROJECT  7-P-71-21C          BORDER =  2 IN.  .  36.00 . . LINE 1 . 12  396 EAST
DESCRIPTION  GREEN/WHITE OVERHEAD  STB24      .  10.50 .                3
                                              .  16.00 . . LINE 2 . 16  C
                                              .  10.50 .                 ARTHAGE
                                              .  22.00 . . LINE 3 . 12  5
                                              .  12.50 .                1
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  25.10                .  19.24                 .  9.00                 .
.  36.00  SHIELD MO96   .  17.00  C       16 UC  .  32.00  ARROW  D      .
.  18.00                .  16.26  A       12 LC  .  59.00                .
.  10.47  E     12 UC   .   9.75  R       12 LC  .                       .
.  14.47  A     12 UC   .  13.00  T       12 LC  .                       .
.  12.04  S     12 UC   .  15.13  H       12 LC  .                       .
.   8.82  T     12 UC   .  15.01  A       12 LC  .                       .
.  25.10                .  15.13  G       12 LC  .                       .
.                       .  10.25  E       12 LC  .                       .
.                       .  19.23                 .                       .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

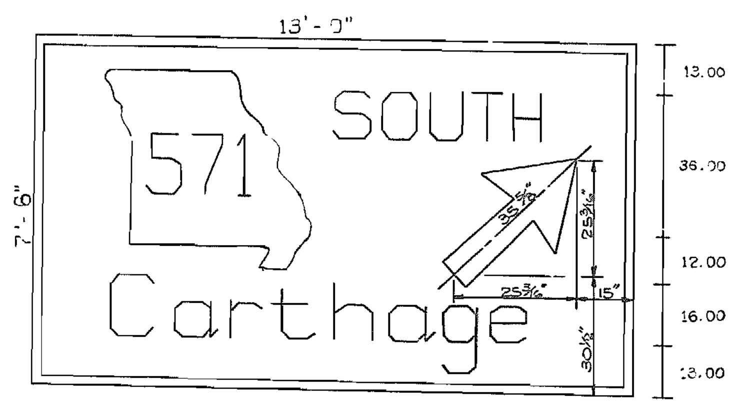
FINAL PLANS

STATE	JOB NO. 7-P-71-211	SHEET NO.
MO.	PROJECT NO. 7-P-71-21I	33
DIST. NO. 7	COUNTY JASPER	ROUTE 71



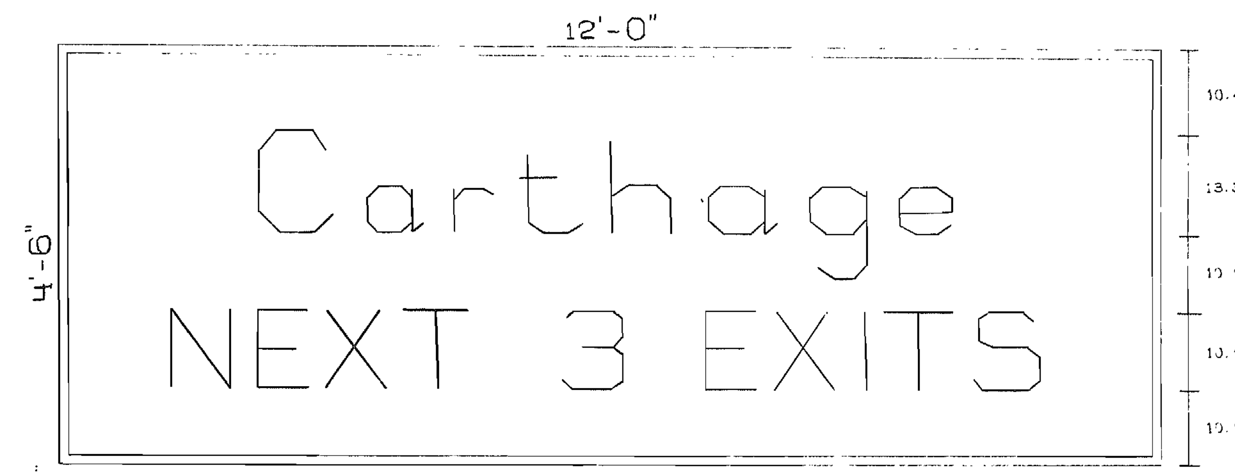
JASPER 71 18
1"=12"

```
SIGN NUMBER     18     HEIGHT =  2 FT.  0 IN.  .VERTICAL.        DISTRICT 7
ROUTE  71              LENGTH =  9 FT.  0 IN.  . SPACING.
STATION  11+50           AREA =  18.0 SQ. FT.  .         .
COUNTY  JASPER              RADIUS =  6 IN.    .   8.00 .        02000000000000000000000000000 (PROGRAM SUPPLIED)
PROJECT  7-P-71-21A         BORDER =  1 IN.    .   8.00 . . LINE 1 . 08  6180 98 C        911 1
DESCRIPTION  GREEN/WHITE GRND MOUNT  STB24     .   3.00 .                 1    3  ARTHAGE 3
. . . . . . . . . . . . .
.   9.22                .
.  12.00  ARROW    180  .
.   8.00                .
.   8.51  C        8 UC .
.   8.20  A        6 LC .
.   4.88  R        6 LC .
.   6.50  T        6 LC .
.   7.57  H        6 LC .
.   7.57  A        6 LC .
.   7.57  G        6 LC .
.   5.13  E        6 LC .
.  11.00                .
.   2.63  1        8 NO .
.   9.22                .
. . . . . . . . . . . . .
```



JASPER 71 11
1"=24"

```
SIGN NUMBER     11     HEIGHT =  7 FT.  6 IN.  .VERTICAL.        DISTRICT 7
ROUTE  I? 71           LENGTH = 13 FT.  0 IN.  . SPACING.
STATION  531+00          AREA =  97.5 SQ. FT.  .         .
COUNTY  JASPER              RADIUS = 12 IN.    .  13.00 .        020001100120011000000000000000
PROJECT  7-P-71-21A         BORDER =  2 IN.    .  36.00 . . LINE 1 . 12  916 2571 912 SOUTH 921
DESCRIPTION  GREEN/WHITE GRND MOUNT  STB24     .  12.00 .                 3    4    3         3
                                               .  16.00 . . LINE 2 . 16  916 C
                                               .  13.00 .                 3    ARTHAGE
. . . . . . . . . . . . . . . . . . . . . . . . . .
.  18.02                 .  13.00                 .
.  45.00  SHIELD US571   .  17.00  C        16 UC .
.  12.00                 .  16.26  A        12 LC .
.  12.04  S        12 UC .   9.75  R        12 LC .
.  13.03  O        12 UC .  13.00  T        12 LC .
.  12.04  U        12 UC .  15.13  H        12 LC .
.  11.29  T        12 UC .  15.01  A        12 LC .
.   9.57  H        12 UC .  15.13  G        12 LC .
.  23.01                 .  10.25  E        12 LC .
.                        .  26.47                 .
. . . . . . . . . . . . . . . . . . . . . . . . . .
```



JASPER 71 8
1"=12"

```
SIGN NUMBER      8     HEIGHT =  4 FT.  6 IN.  .VERTICAL.        DISTRICT 7
ROUTE  71              LENGTH = 12 FT.  0 IN.  . SPACING.
STATION  524+00          AREA =  54.0 SQ. FT.  .         .
COUNTY  JASPER              RADIUS =  6 IN.    .  10.67 .        020000966100009000000000000
PROJECT  7-P-71-21A         BORDER =  1 IN.    .  13.33 . . LINE 1 . 13  C
DESCRIPTION  GREEN/WHITE GRND MOUNT  SHB24     .  10.00 .                    ARTHAGE
                                               .  10.00 . . LINE 2 . 10  NEXT 3 EXITS
                                               .  10.00 .
. . . . . . . . . . . . . . . . . . . . . . . . .
.  24.92                 .  13.49                 .
.  14.13  C        13 UC .  10.57  N        10 UC .
.  13.51  A        10 LC .   9.45  E        10 UC .
.   8.13  R        10 LC .  10.01  X        10 UC .
.  12.51  T        10 LC .   7.38  T        10 UC .
.  12.50  H        10 LC .  15.00                 .
.  12.38  A        10 LC .   7.94  3        10 NO .
.  12.50  G        10 LC .  15.00                 .
.   8.50  E        10 LC .   9.45  E        10 UC .
.  24.92                 .  10.70  X        10 UC .
.                        .   4.07  I        10 UC .
.                        .   9.45  T        10 UC .
.                        .   8.00  S        10 UC .
.                        .  13.49                 .
. . . . . . . . . . . . . . . . . . . . . . . . .
```

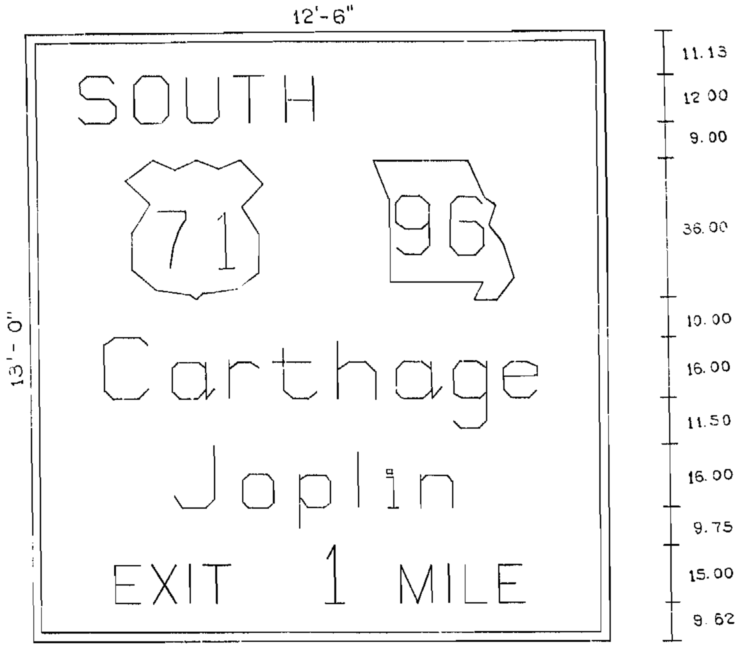
FINAL SURVEY		
NOTE BOOK	SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED	BY / DATE
NO.		

43

ORIGINAL SURVEY		
NOTE BOOK	SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED	BY / DATE

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-211	34
DIST. NO.	PROJECT NO. 7-P-71-21I	ROUTE
7	COUNTY JASPER	71



JASPER 71 41A
1" = 24"

```
SIGN NUMBER    41A     HEIGHT = 13 FT.  0 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 12 FT.  6 IN.  . SPACING.
STATION  674+00          AREA = 162.5 SQ. FT.  .        .
COUNTY  JASPER                RADIUS = 12 IN.  .  11.13 .          020000000000010001150000000000
PROJECT  7-P-71-21A           BORDER =  2 IN.  .  12.00 . . LINE 1 . 12  912 SOUTH
DESCRIPTION  GREEN/WHITE OVERHEAD  STR24       .   9.00 .                3
                                               .  36.00 . . LINE 2 . 12  923 271 928 396
                                               .  10.00 .                3   3   3   3
                                               .  16.00 . . LINE 3 . 16  C
                                               .  11.50 .                 ARTHAGE
                                               .  16.00 . . LINE 4 . 16  J
                                               .   9.75 .                 OPLIN
                                               .  15.00 . . LINE 5 . 10  EXIT 915 1 910 MILE
                                               .   9.62 .                        1     1
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
. 14.00              . 25.00             . 19.24              . 36.74              . 21.36              .
. 12.04  S    12 UC  . 36.00  SHIELD US71 . 17.00  C    16 UC  . 17.51  J    16 UC  .  9.45  E    10 UC  .
. 13.03  O    12 UC  . 28.00             . 16.26  A    12 LC  . 15.38  O    12 LC  . 10.70  X    10 UC  .
. 12.04  U    12 UC  . 36.00  SHIELD MO96 .  9.75  R    12 LC  . 15.13  P    12 LC  .  4.07  I    10 UC  .
. 11.29  T    12 UC  . 25.00             . 13.00  T    12 LC  .  9.13  L    12 LC  .  7.38  T    10 UC  .
.  9.57  H    12 UC  .                   . 15.13  H    12 LC  .  9.13  I    12 LC  . 22.50              .
. 78.03              .                   . 15.01  A    12 LC  . 10.25  N    12 LC  .  4.97  1    15 NO  .
.                    .                   . 15.13  G    12 LC  . 36.73              . 15.00              .
.                    .                   . 10.25  E    12 LC  .                    . 11.82  M    10 UC  .
.                    .                   . 19.23              .                    .  4.57  I    10 UC  .
.                    .                   .                    .                    .  9.45  L    10 UC  .
.                    .                   .                    .                    .  7.38  E    10 UC  .
.                    .                   .                    .                    . 21.35              .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
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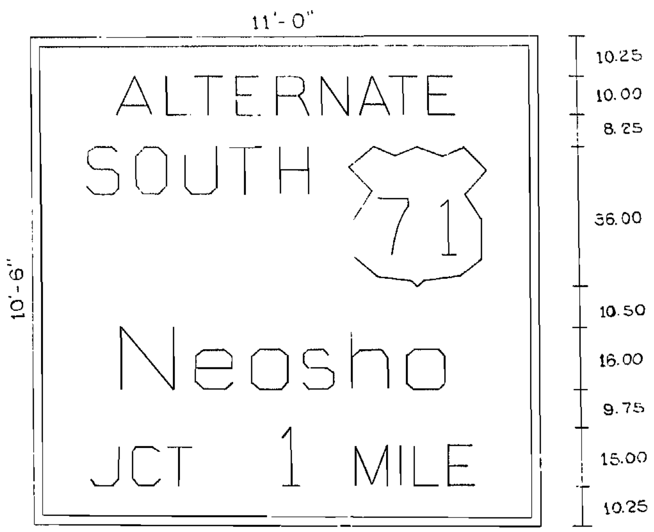
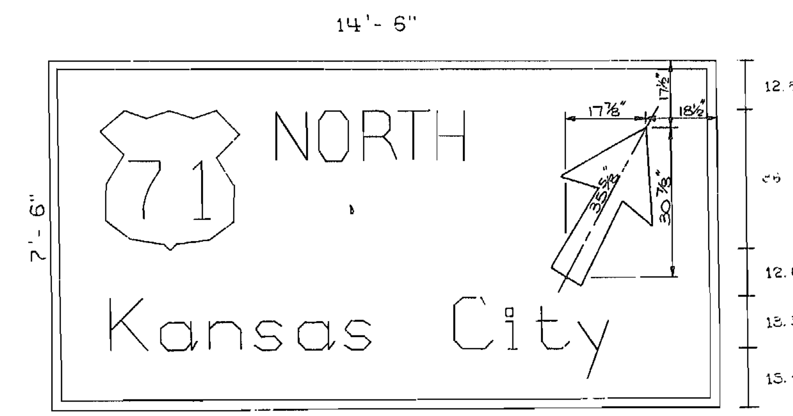


JASPER 71 41B
1" = 24"

```
SIGN NUMBER   41B     HEIGHT = 10 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71             LENGTH = 11 FT.  0 IN.  . SPACING.
STATION  674+00         AREA = 115.5 SQ. FT.  .        .
COUNTY  JASPER               RADIUS = 12 IN.  .  10.25 .      020000000000000000000000000000 (PROGRAM SUPPLIED)
PROJECT  7-P-71-21A          BORDER =  2 IN.  .  10.00 . . LINE 1 . 10  ALTERNATE
DESCRIPTION  GREEN/WHITE OVERHEAD  STR24      .   8.25 .
                                              .  36.00 . . LINE 2 . 12  SOUTH 910 271
                                              .  10.50 .                      3   3
                                              .  16.00 . . LINE 3 . 16  N
                                              .   9.75 .                 EOSHO
                                              .  15.00 . . LINE 4 . 10  JCT 915 1 910 MILE
                                              .  10.25 .                      1     1
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
. 22.40              . 14.02              . 22.74              . 14.74              .
. 12.07  A    10 UC  . 12.04  S    12 UC  . 18.25  N    16 UC  . 10.14  J    10 UC  .
.  8.07  L    10 UC  . 13.03  O    12 UC  . 14.00  E    12 LC  .  9.32  C    10 UC  .
.  9.45  T    10 UC  . 12.04  U    12 UC  . 13.63  O    12 LC  .  7.38  T    10 UC  .
.  9.45  E    10 UC  . 11.29  T    12 UC  . 15.01  S    12 LC  . 22.50              .
. 10.57  R    10 UC  .  9.57  H    12 UC  . 15.13  H    12 LC  .  4.97  1    15 NO  .
. 10.07  N    10 UC  . 10.00              . 10.50  O    12 LC  . 15.00              .
. 10.69  A    10 UC  . 36.00  SHIELD US71 . 22.74              . 11.82  M    10 UC  .
.  9.45  T    10 UC  . 14.01              .                    .  4.57  I    10 UC  .
.  7.38  E    10 UC  .                    .                    .  9.45  L    10 UC  .
. 22.40              .                    .                    .  7.38  E    10 UC  .
.                    .                    .                    . 14.73              .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

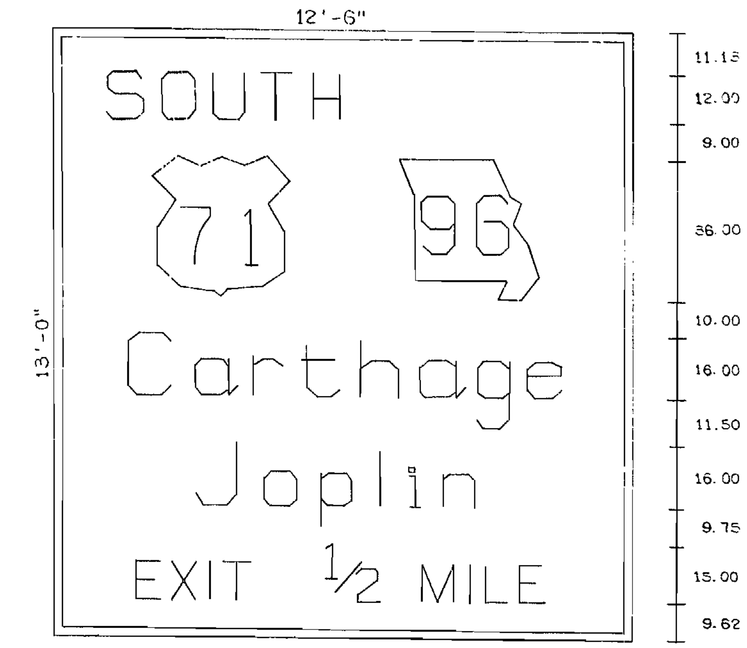


JASPER 71 34
1" = 24"

```
SIGN NUMBER    34     HEIGHT =  7 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71             LENGTH = 14 FT.  6 IN.  . SPACING.
STATION  1642+00        AREA = 108.8 SQ. FT.  .        .
COUNTY  JASPER               RADIUS = 12 IN.  .  12.84 .        020000800120011000000000000000
PROJECT  7-P-71-21A          BORDER =  2 IN.  .  36.00 . . LINE 1 . 10  911 271 910 NORTH 964
DESCRIPTION  GREEN/WHITE GRND MOUNT  STR24    .  12.00 .                3   3   3           3
                                              .  13.33 . . LINE 2 . 13  911 K       C
                                              .  15.83 .                3    ANSAS   ITY
. . . . . . . . . . . . . . . . . . . . . . . . . . .
. 13.01              . 13.00              .
. 36.00  SHIELD US71 . 13.63  K    13 UC  .
. 10.00              . 13.51  A    10 LC  .
. 10.57  N    10 UC  . 12.25  N    10 LC  .
. 10.89  O    10 UC  . 11.33  S    10 LC  .
. 10.07  R    10 UC  . 12.13  A    10 LC  .
.  9.45  T    10 UC  .  8.50  S    10 LC  .
.  8.00  H    10 UC  . 20.00              .
. 66.01              . 15.01  C    13 UC  .
.                    .  6.25  I    10 LC  .
.                    . 11.13  T    10 LC  .
.                    . 10.75  Y    10 LC  .
.                    . 26.51              .
. . . . . . . . . . . . . . . . . . . . . . . . . . .
```

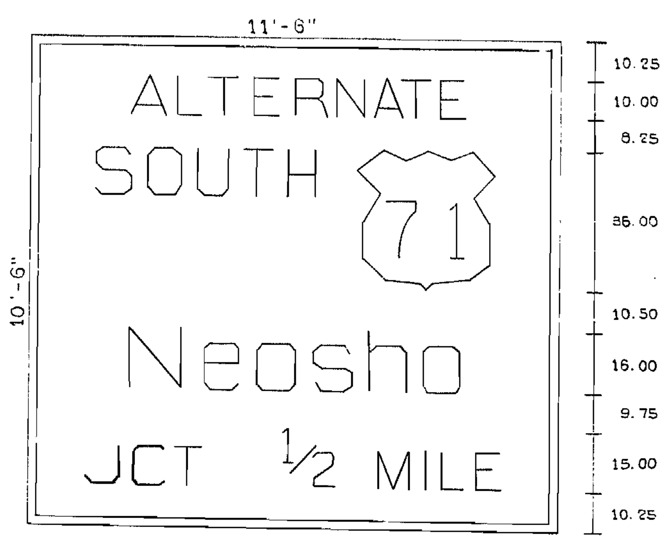
FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-211	35
DIST. NO.	PROJECT NO.	ROUTE
7	7-P-71-21I	71
	COUNTY JASPER	



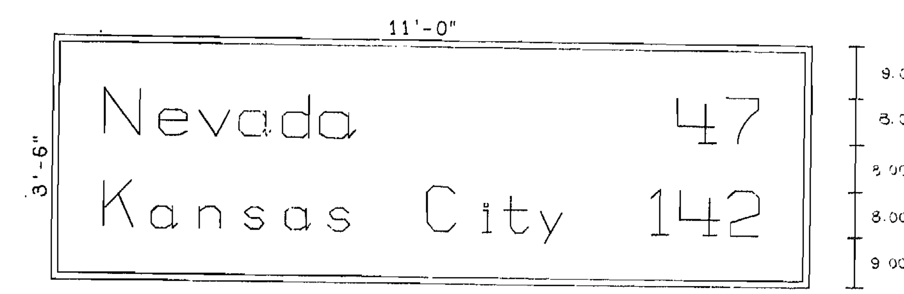
JASPER 71 45A
1"=24"

```
SIGN NUMBER   45A      HEIGHT = 13 FT.  0 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 12 FT.  6 IN.  . SPACING.
STATION  681+00          AREA = 162.5 SQ. FT.  .        .
COUNTY  JASPER               RADIUS = 12 IN.   .  11.13 .        02000000000001000115000000000
PROJECT  7-P-71-21A          BORDER =  2 IN.   .  12.00 . . LINE 1 . 12  912 SOUTH
DESCRIPTION  GREEN/WHITE OVERHEAD  STB24        .   9.00 .                 3
                                               .  36.00 . . LINE 2 . 12  923 271 928 396
                                               .  10.00 .                 3   3   3   3
                                               .  16.00 . . LINE 3 . 16  C
                                               .  11.50 .                  ARTHAGE
                                               .  16.00 . . LINE 4 . 16  J
                                               .   9.75 .                  OPLIN
                                               .  15.00 . . LINE 5 . 10  EXIT (1/2) MILE
                                               .   9.62 .
. 14.03                . 25.00              . 19.24               . 36.74               . 17.59
. 12.04  S      12 UC  . 36.00  SHIELD US71 . 17.00  C      16 UC . 17.51  J      16 UC .  9.45  E      10 UC .
. 13.03  O      12 UC  . 28.00              . 16.26  A      12 LC . 15.38  O      12 LC . 10.70  X      10 UC .
. 12.04  U      12 UC  . 36.00  SHIELD MO96 .  9.75  R      12 LC . 15.13  P      12 LC .  4.07  I      10 UC .
. 11.29  T      12 UC  . 25.00              . 13.00  T      12 LC .  9.13  L      12 LC .  7.38  T      10 UC .
.  9.57  H      12 UC  .                    . 15.13  H      12 LC .  9.13  I      12 LC . 15.00
. 78.03                .                    . 15.01  A      12 LC . 10.25  N      12 LC . 20.00  FRACT   1/ 2 .
.                      .                    . 15.13  G      12 LC . 36.73               . 15.00
.                      .                    . 10.25  E      12 LC .                     . 11.82  M      10 UC .
.                      .                    . 19.23               .                     .  4.57  I      10 UC .
.                      .                    .                     .                     .  9.45  L      10 UC .
.                      .                    .                     .                     .  7.38  E      10 UC .
.                      .                    .                     .                     . 17.59
```



JASPER 71 45B
1"=24"

```
SIGN NUMBER   45B      HEIGHT = 10 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 11 FT.  6 IN.  . SPACING.
STATION  681+00          AREA = 120.8 SQ. FT.  .        .
COUNTY  JASPER               RADIUS = 12 IN.   .  10.25 .        020000000000000000000000000 (PROGRAM SUPPLIED)
PROJECT  7-P-71-21A          BORDER =  2 IN.   .  10.00 . . LINE 1 . 10  ALTERNATE
DESCRIPTION  GREEN/WHITE OVERHEAD  STB24        .   8.25 .
                                               .  36.00 . . LINE 2 . 12  SOUTH 910 271
                                               .  10.50 .                       3   3
                                               .  16.00 . . LINE 3 . 16  N
                                               .   9.75 .                  EOSHO
                                               .  15.00 . . LINE 4 . 10  JCT (1/2) MILE
                                               .  10.25 .
. 25.40                . 17.02                . 25.74               . 13.97
. 12.07  A      10 UC  . 12.04  S      12 UC  . 18.25  N      16 UC . 10.14  J      10 UC .
.  8.07  L      10 UC  . 13.03  O      12 UC  . 14.00  E      12 LC .  9.32  C      10 UC .
.  9.45  T      10 UC  . 12.04  U      12 UC  . 13.63  O      12 LC .  7.38  T      10 UC .
.  9.45  E      10 UC  . 11.29  T      12 UC  . 15.01  S      12 LC . 15.00
. 10.57  R      10 UC  .  9.57  H      12 UC  . 15.13  H      12 LC . 20.00  FRACT   1/ 2 .
. 10.07  N      10 UC  . 10.00                . 10.50  O      12 LC . 15.00
. 10.69  A      10 UC  . 36.00  SHIELD US71   . 25.74               . 11.82  M      10 UC .
.  9.45  T      10 UC  . 17.01                .                     .  4.57  I      10 UC .
.  7.39  E      10 UC  .                      .                     .  9.45  L      10 UC .
. 25.40                .                      .                     .  7.38  E      10 UC .
.                      .                      .                     . 13.97
```



JASPER 71 42
1"=16"

```
SIGN NUMBER   42       HEIGHT =  3 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 11 FT.  0 IN.  . SPACING.
STATION  672+90          AREA =  38.5 SQ. FT.  .        .
COUNTY  JASPER               RADIUS =  6 IN.   .   9.00 .        0200008000800080000000000000
PROJECT  7-P-71-21A          BORDER =  1 IN.   .   8.00 . . LINE 1 . 08  N          9 47
DESCRIPTION  GREEN/WHITE GRND MOUNT  STB47      .   8.00 .                 EVADA 2
                                               .   8.00 . . LINE 2 . 08  K    C     9 142
                                               .   9.00 .                 ANSAS  ITY 2
.  9.00                .  9.00
.  9.13  N       8 UC  .  8.12  K       8 UC .
.  6.82  E       6 LC  .  8.20  A       6 LC .
.  7.57  V       6 LC  .  7.38  N       6 LC .
.  7.57  A       6 LC  .  6.88  S       6 LC .
.  7.57  D       6 LC  .  7.38  A       6 LC .
.  5.13  A       6 LC  .  5.13  S       6 LC .
. 55.90                . 12.00
.  7.93  4       8 NU  .  9.01  C       8 UC .
.  6.38  7       8 NU  .  3.75  I       6 LC .
.  9.00                .  5.63  T       6 LC .
.                      .  6.50  Y       6 LC .
.                      . 14.33
.                      .  4.28  1       8 NU .
.                      .  9.03  4       8 NU .
.                      .  6.38  2       8 NU .
.                      .  9.00
```

FINAL SURVEY			
NOTE BOOK	SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED	BY	DATE
NO.			

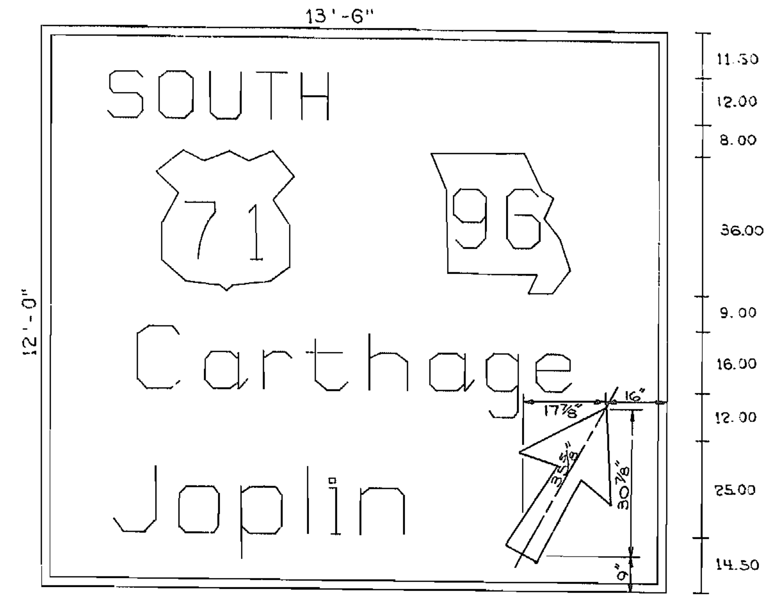
45

ORIGINAL SURVEY			
NOTE BOOK	SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED	BY	DATE
NO.			

#44

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-211	36
DIST. 7	PROJECT NO. 7-P-71-21I	ROUTE 71
	COUNTY JASPER	



JASPER 71 47B
1"=24"

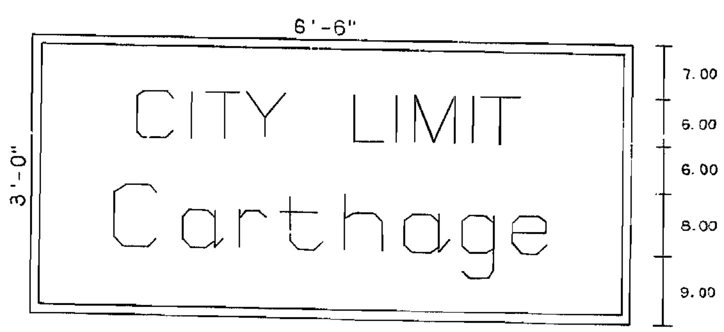
SIGN NUMBER 47B
ROUTE 71
STATION 708+70
COUNTY JASPER
PROJECT 7-P-71-21A
DESCRIPTION GREEN/WHITE OVERHEAD STB24

HEIGHT = 12 FT. 0 IN.
LENGTH = 13 FT. 6 IN.
AREA = 162.0 SQ. FT.
RADIUS = 12 IN.
BORDER = 2 IN.

DISTRICT 7

VERTICAL SPACING		
		02000000008000900000000000000
11.50		
12.00	LINE 1 . 12	914 SOUTH
8.00		3
36.00	LINE 2 . 12	925 271 936 396
9.00		3 3 3 3
16.00	LINE 3 . 16	C
12.00		ARTHAGE
25.00	LINE 4 . 16	J 645
14.50		OPLIN 6

16.00			27.00		25.24			18.24		
12.04	S	12 UC	36.00	SHIELD US71	17.00	C	16 UC	17.51	J	16 UC
13.03	O	12 UC	36.00		16.26	A	12 LC	15.38	O	12 LC
12.04	U	12 UC	36.00	SHIELD MO96	9.75	R	12 LC	15.13	P	12 LC
11.29	T	12 UC	27.00		13.00	T	12 LC	9.13	L	12 LC
9.57	H	12 UC			15.13	H	12 LC	9.13	I	12 LC
88.03					15.01	A	12 LC	10.25	N	12 LC
					15.13	G	12 LC	24.00		
					10.25	E	12 LC	25.00	ARROW	45
					25.23			18.23		



JASPER 71 49
1"=12"

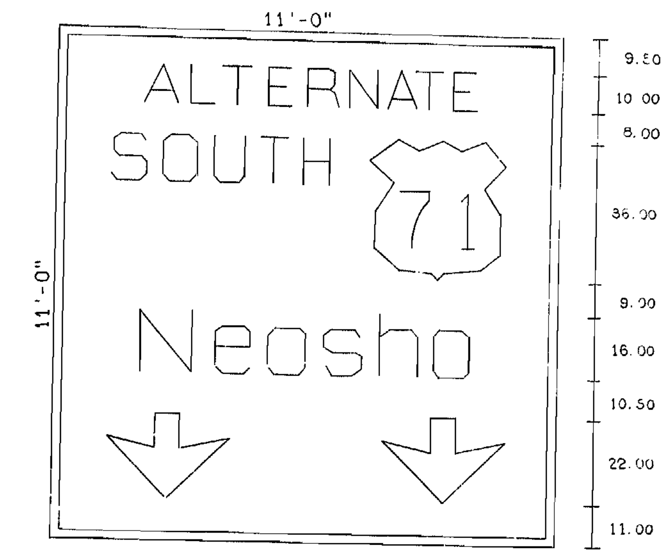
SIGN NUMBER 49
ROUTE 71
STATION 712+57
COUNTY JASPER
PROJECT 7-P-71-21A
DESCRIPTION GREEN/WHITE GRND SHB24

HEIGHT = 3 FT. 0 IN.
LENGTH = 6 FT. 6 IN.
AREA = 19.5 SQ. FT.
RADIUS = 6 IN.
BORDER = 1 IN.

DISTRICT 7

VERTICAL SPACING		
		0200006C?06000800?C0000000000
7.00		
6.00	LINE 1 . 06	CIT. LIMIT
6.00		
8.00	LINE 2 . 08	C
9.00		ARTHAGE

13.95			11.04		
6.02	C	6 UC	8.51	C	8 UC
2.27	I	6 UC	8.20	A	6 LC
4.82	T	6 UC	4.88	R	6 LC
6.00	Y	6 UC	6.50	T	6 LC
9.00			7.57	H	6 LC
5.65	L	6 UC	7.57	A	6 LC
2.58	I	6 UC	7.57	G	6 LC
7.08	M	6 UC	5.13	E	6 LC
2.27	I	6 UC	11.03		
4.41	T	6 UC			
13.95					



JASPER 71 47A
1"=24"

SIGN NUMBER 47A
ROUTE 71
STATION 708+70
COUNTY JASPER
PROJECT 7-P-71-21A
DESCRIPTION GREEN/WHITE OVERHEAD STB24

HEIGHT = 11 FT. 0 IN.
LENGTH = 11 FT. 0 IN.
AREA = 121.0 SQ. FT.
RADIUS = 12 IN.
BORDER = 2 IN.

DISTRICT 7

VERTICAL SPACING		
		02000000008000900000000000000
9.50		
10.00	LINE 1 . 10	ALTERNATE
8.00		
36.00	LINE 2 . 12	SOUTH 910 271
9.00		3 3
16.00	LINE 3 . 16	N
10.50		EOSHO
22.00	LINE 4 . 12	5 9 5
11.00		1 2 1

22.40			14.02			22.74			14.00		
12.07	A	10 UC	12.04	S	12 UC	18.25	N	16 UC	32.00	ARROW	D
8.07	L	10 UC	13.03	O	12 UC	14.00	E	12 LC	40.00		
9.45	T	10 UC	12.04	U	12 UC	13.63	O	12 LC	32.00	ARROW	D
9.45	E	10 UC	11.29	T	12 UC	15.01	S	12 LC	14.00		
10.57	R	10 UC	9.57	H	12 UC	15.13	H	12 LC			
10.07	N	10 UC	10.00			10.50	O	12 LC			
10.69	A	10 UC	36.00	SHIELD US71		22.74					
9.45	T	10 UC	14.01								
7.38	E	10 UC									
22.40											

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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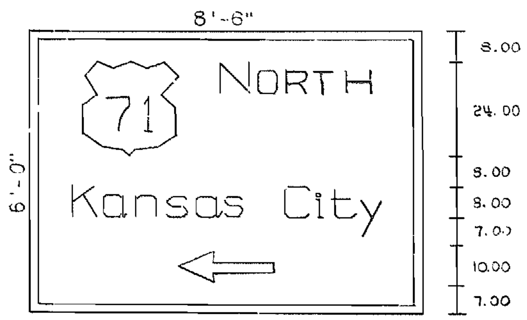
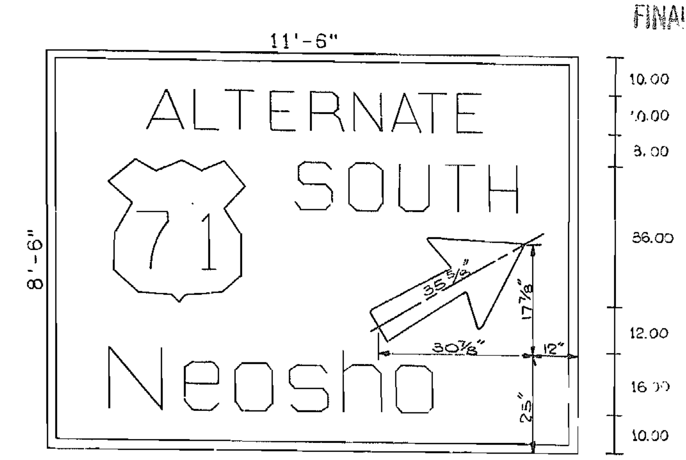
FINAL PLANS

STATE	JOB NO. 7-P-71-21I	SHEET NO.
MO.	PROJECT NO. 7-P-71-21I	37
DIST. NO. 7	COUNTY JASPER	ROUTE 71



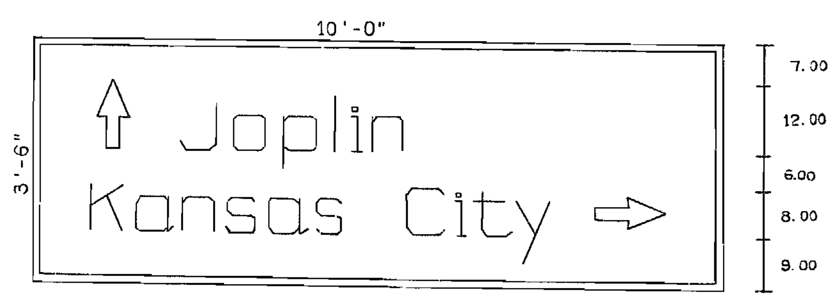
JASPER 71 67,28
1"=24"

```
SIGN NUMBER     67,28  HEIGHT =  6 FT.  0 IN.  .VERTICAL.          DISTRICT
ROUTE  71              LENGTH =  8 FT.  6 IN.  . SPACING.
STATION  463+77,1634+70  AREA =  51.0 SQ. FT.  .         .
COUNTY  JASPER               RADIUS =  9 IN.  .   8.00 .          02000060008000700050000000000
PROJECT  7-P-71-21C          BORDER =  2 IN.  .  24.00 . . LINE 1 . 08   271 NORTH
DESCRIPTION  GREEN/WHITE GRND MOUNT  ST824    .   8.00 .                1
                                              .   8.00 . . LINE 2 . 08   K        C
                                              .   7.00 .                  ANSAS   ITY
                                              .  10.00 . . LINE 3 . 08   7180
                                              .   7.00 .                2
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  13.48                 .  11.01                .  38.50                  .
.  24.00  SHIELD US71    .   8.12  K      8 UC   .  25.00  ARRLK  E 180    .
.  12.00                 .   8.20  A      6 LC   .  38.50                  .
.   8.43  N       8 UC   .   7.38  N      6 LC   .                         .
.   8.68  O       8 UC   .   6.88  S      6 LC   .                         .
.   8.03  R       8 UC   .   7.38  A      6 LC   .                         .
.   7.53  T       8 UC   .   5.13  S      6 LC   .                         .
.   6.38  H       8 UC   .  12.00                .                         .
.  13.47                 .   9.01  C      8 UC   .                         .
.                        .   3.75  I      6 LC   .                         .
.                        .   5.63  T      6 LC   .                         .
.                        .   6.50  Y      6 LC   .                         .
.                        .  11.01                .                         .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```



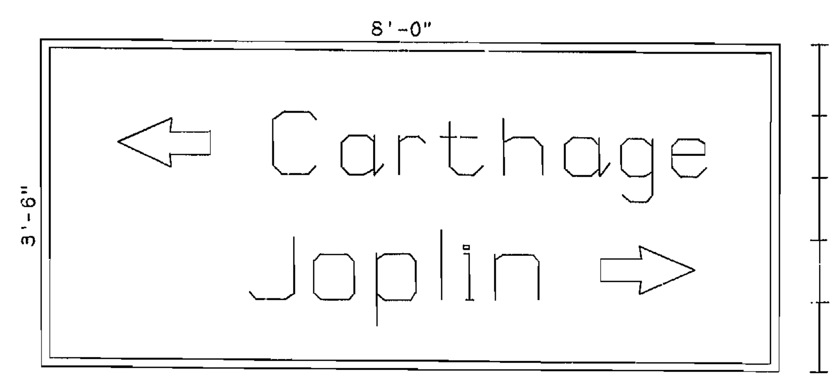
JASPER 71 54C
1"=24"

```
SIGN NUMBER    54C     HEIGHT =  8 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 11 FT.  6 IN.  . SPACING.
STATION  458+00          AREA =  97.8 SQ. FT.  .         .
COUNTY  JASPER              RADIUS = 12 IN.  .  10.00 .        02000080008001200080000000000
PROJECT  7-P-71-21A         BORDER =  2 IN.  .  10.00 . . LINE 1 . 10  924 ALTERNATE
DESCRIPTION  GREEN/WHITE OVERHEAD  ST824     .   8.00 .                3
                                             .  36.00 . . LINE 2 . 12  914 271 912 SOUTH
                                             .  12.00 .                3   3   3
                                             .  16.00 . . LINE 3 . 16  914 N
                                             .  10.00 .                3     EOSHO
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  26.00                 .  16.00                  .  16.00                 .
.  12.07  A     10 UC    .  36.00  SHIELD US71     .  18.25  N     16 UC    .
.   8.07  L     10 UC    .  12.00                  .  14.00  E     12 LC    .
.   9.45  T     10 UC    .  12.04  S      12 UC    .  13.63  O     12 LC    .
.   9.45  E     10 UC    .  13.03  O      12 UC    .  15.01  S     12 LC    .
.  10.57  R     10 UC    .  12.04  U      12 UC    .  15.13  H     12 LC    .
.  10.07  N     10 UC    .  11.29  T      12 UC    .  10.50  O     12 LC    .
.  10.69  A     10 UC    .   9.57  H      12 UC    .  35.48                 .
.   9.45  T     10 UC    .  16.03                  .                        .
.   7.38  E     10 UC    .                         .                        .
.  24.80                 .                         .                        .
. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .
```



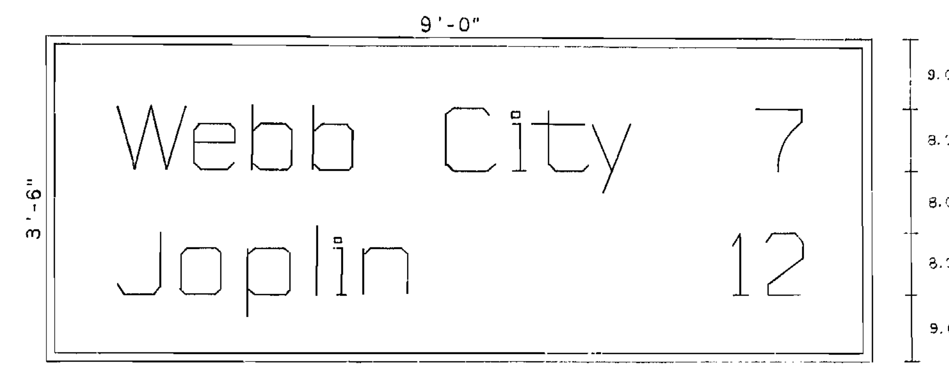
JASPER 71 72
1"=18"

```
SIGN NUMBER     72     HEIGHT =  3 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH = 10 FT.  0 IN.  . SPACING.
STATION  471+00          AREA =  35.0 SQ. FT.  .         .
COUNTY  JASPER               RADIUS =  6 IN.  .   7.00 .        02000060006000800000000000000
PROJECT  7-P-71-21C          BORDER =  1 IN.  .  12.00 . . LINE 1 . 08   99 690 98 J
DESCRIPTION  GREEN/WHITE GRND MOUNT  ST824    .   6.00 .                 3  1   3   OPLIN
                                              .   8.00 . . LINE 2 . 08   99 K       C     98 60
                                              .   9.00 .                 3   ANSAS  ITY 3  1
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  10.00                 .  10.00                .
.   8.00  ARROW     90   .   8.12  K      8 UC   .
.   8.00                 .   8.20  A      6 LC   .
.   8.69  J       8 UC   .   7.38  N      6 LC   .
.   7.69  O       6 LC   .   6.88  S      6 LC   .
.   7.57  P       6 LC   .   7.38  A      6 LC   .
.   4.57  L       6 LC   .   5.13  S      6 LC   .
.   4.57  I       6 LC   .  12.00                .
.   5.13  N       6 LC   .   9.01  C      8 UC   .
.  55.78                 .   3.75  I      6 LC   .
.                        .   5.63  T      6 LC   .
.                        .   6.50  Y      6 LC   .
.                        .   8.00                .
.                        .  12.00  ARROW      0  .
.                        .  10.02                .
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
```



JASPER 71 60
1"=12"

```
SIGN NUMBER     60     HEIGHT =  3 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH =  8 FT.  0 IN.  . SPACING.
STATION  7+20            AREA =  28.0 SQ. FT.  .         .
COUNTY  JASPER               RADIUS =  6 IN.  .   9.00 .        02000080008000800000000000000
PROJECT  7-P-71-21A          BORDER =  1 IN.  .   8.00 . . LINE 1 . 08   6180 96 C
DESCRIPTION  GREEN/WHITE GRND MOUNT  ST824    .   8.00 .                    1    3   ARTHAGE
                                              .   8.00 . . LINE 2 . 08   J         98 60 910
                                              .   9.00 .                    OPLIN 3  1  3
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
.  10.04                 .  26.78                .
.  12.00  ARROW    180   .   8.69  J      9 UC   .
.   8.00                 .   7.69  O      6 LC   .
.   8.51  C       8 UC   .   7.57  P      6 LC   .
.   8.20  A       6 LC   .   4.57  L      6 LC   .
.   4.88  R       6 LC   .   4.57  I      6 LC   .
.   6.50  T       6 LC   .   5.13  N      6 LC   .
.   7.57  H       6 LC   .   8.00                .
.   7.57  A       6 LC   .  12.00  ARROW      0  .
.   7.57  G       6 LC   .  11.00                .
.   5.13  E       6 LC   .                       .
.  10.03                 .                       .
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
```



JASPER 71 50
1"=12"

```
SIGN NUMBER     50     HEIGHT =  3 FT.  6 IN.  .VERTICAL.          DISTRICT 7
ROUTE  71              LENGTH =  9 FT.  0 IN.  . SPACING.
STATION  420+00          AREA =  31.5 SQ. FT.  .         .
COUNTY  JASPER               RADIUS =  6 IN.  .   9.00 .        02000080008000800000000000000
PROJECT  7-P-71-21C          BORDER =  1 IN.  .   8.00 . . LINE 1 . 08   W     C     9 7
DESCRIPTION  GREEN/WHITE GRND MOUNT  ST824    .   8.00 .                    EBB  ITY 2
                                              .   8.00 . . LINE 2 . 08   J          9 12
                                              .   9.00 .                    OPLIN 2
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
.   9.00                 .   9.00                .
.  10.26  W       8 UC   .   8.69  J      8 UC   .
.   7.63  E       6 LC   .   7.69  O      6 LC   .
.   7.57  B       6 LC   .   7.57  P      6 LC   .
.   5.13  B       6 LC   .   4.57  L      6 LC   .
.  12.00                 .   4.57  I      6 LC   .
.   9.01  C       8 UC   .   5.13  N      6 LC   .
.   3.75  I       6 LC   .  40.72                .
.   5.63  T       6 LC   .   4.68  1      8 NO   .
.   6.50  Y       6 LC   .   6.38  2      8 NU   .
.  16.14                 .   9.00                .
.   6.38  7       8 NU   .                       .
.   9.00                 .                       .
. . . . . . . . . . . . . . . . . . . . . . . . . . . .
```

NO.	DATE	BY	
FINAL SURVEY	NOTE BOOK	SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED	
ORIGINAL SURVEY	NOTE BOOK	SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED	

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SPECIAL SIGN DETAIL SHEET

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-P-71-211	38
DIST. NO.	PROJECT NO. 7-P-71-21I	ROUTE
7	COUNTY JASPER	71

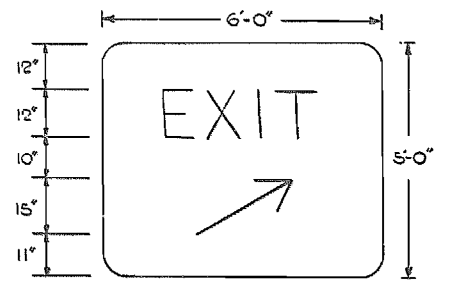
SIGN NO. 14, 48

STATION 544+00±, 710+12
QUANTITY REQ'D 2
OVERALL SIZE WIDTH 6.0 FT. HEIGHT 5.0 FT.
BORDER WIDTH 1⅛ IN. RADII 6 IN.

BACKGROUND TYPE BAKED
COLOR GREEN
LEGEND COPY TYPE L2 or L4
COLOR WHITE
BORDER TYPE L2 or L4
ROUTE
MARKER TYPE
PANEL TYPE SHEET
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE



SPACE 12

LINE	COPY SIZE							
LINE 1	12" UC	COPY	X	E	X	I	T	X
		SPACE	16^{3}	11^{3}	13^{2}	6^{3}	8^{3}	16^{3}

SPACE 10

LINE	COPY SIZE				
LINE 2	15"	COPY	X	↗	X
		SPACE	23^{6}	26^{3}	21^{4}

SPACE 11

LINE 3 COPY SIZE COPY SPACE

SPACE

LINE 4 COPY SIZE COPY SPACE

SPACE

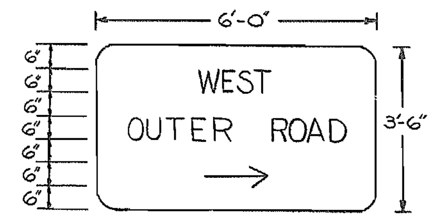
SIGN NO. 21

STATION 1619+85
QUANTITY REQ'D 1
OVERALL SIZE WIDTH 6.0 FT. HEIGHT 3.5 FT.
BORDER WIDTH 7/8 IN. RADII 5 IN. MARGIN 3/4 IN.

BACKGROUND TYPE REFLECT
COLOR GREEN
LEGEND COPY TYPE L1,2,3
COLOR WHITE
BORDER TYPE L1,2,3
ROUTE
MARKER TYPE
PANEL TYPE SHEET
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE



SPACE 6

LINE	COPY SIZE							
LINE 1	6" D	COPY	X	W	E	S	T	X
		SPACE	26^{0}	6^{3}	4^{5}	5^{1}	3^{4}	26^{0}

SPACE 6

LINE	COPY SIZE														
LINE 2	6" D	COPY	X	O	U	T	E	R	X	R	O	A	D	X
		SPACE	8^{6}	5^{4}	5^{1}	4^{5}	4^{5}	4^{0}	9^{0}	5^{1}	5^{3}	6^{1}	4^{0}	8^{6}

SPACE 6

LINE	COPY SIZE				
LINE 3	6"	COPY	X	→	X
		SPACE	26^{0}	20^{0}	26^{0}

SPACE 6

LINE 4 COPY SIZE COPY SPACE

SPACE

SIGN NO.

STATION
QUANTITY REQ'D
OVERALL SIZE WIDTH FT. HEIGHT FT.
BORDER WIDTH IN. RADII IN.

BACKGROUND TYPE
COLOR
LEGEND COPY TYPE
COLOR
BORDER TYPE
ROUTE
MARKER TYPE
PANEL TYPE
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE

SPACE
LINE 1 COPY SIZE COPY SPACE
SPACE
LINE 2 COPY SIZE COPY SPACE
SPACE
LINE 3 COPY SIZE COPY SPACE
SPACE
LINE 4 COPY SIZE COPY SPACE
SPACE

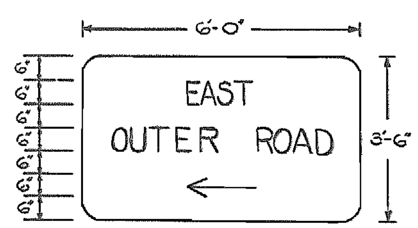
SIGN NO. 35

STATION 1644+00
QUANTITY REQ'D 1
OVERALL SIZE WIDTH 6.0 FT. HEIGHT 3.5 FT.
BORDER WIDTH 7/8 IN. RADII 5 IN. MARGIN 3/4 IN.

BACKGROUND TYPE REFLECT
COLOR GREEN
LEGEND COPY TYPE L-1,2,3
COLOR WHITE
BORDER TYPE L-1,2,3
ROUTE
MARKER TYPE
PANEL TYPE
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE



SPACE 6

LINE	COPY SIZE							
LINE 1	6" D	COPY	X	E	A	S	T	X
		SPACE	26^{3}	4^{3}	6^{1}	5^{1}	3^{4}	26^{3}

SPACE 6

LINE	COPY SIZE														
LINE 2	6" D	COPY	X	O	U	T	E	R	X	R	O	A	D	X
		SPACE	8^{6}	5^{4}	5^{1}	4^{5}	4^{5}	4^{0}	9^{0}	5^{1}	5^{3}	6^{1}	4^{0}	8^{6}

SPACE 6

LINE	COPY SIZE				
LINE 3	6"	COPY	X	←	X
		SPACE	26^{0}	20^{0}	26^{0}

SPACE 6

LINE 4 COPY SIZE COPY SPACE

SPACE

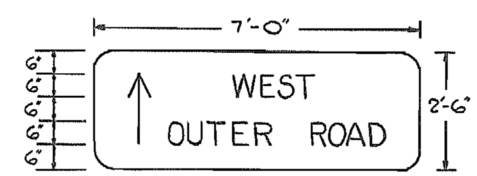
SIGN NO. 27

STATION 1634+00
QUANTITY REQ'D 1
OVERALL SIZE WIDTH 7.0 FT. HEIGHT 2.5 FT.
BORDER WIDTH 7/8 IN. RADII 5 IN. MARGIN 3/4 IN.

BACKGROUND TYPE REFLECT
COLOR GREEN
LEGEND COPY TYPE L-1,2,3
COLOR WHITE
BORDER TYPE L-1,2,3
ROUTE
MARKER TYPE
PANEL TYPE SHEET
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE



SPACE 6

LINE	COPY SIZE							
LINE 1	6" D	COPY	X	W	E	S	T	X
		SPACE	37^{6}	6^{3}	4^{5}	5^{1}	3^{4}	26^{0}

SPACE 6

LINE	COPY SIZE																
LINE 2	6" D	COPY	X	↑	X	O	U	T	E	R	X	R	O	A	D	X
		SPACE	8^{6}	6^{0}	6^{3}	5^{4}	5^{3}	4^{5}	4^{3}	4^{0}	9^{0}	5^{1}	5^{3}	6^{1}	4^{0}	8^{6}

SPACE 6 Arrow 6x18

LINE 3 COPY SIZE COPY SPACE

SPACE

LINE 4 COPY SIZE COPY SPACE

SPACE

SIGN NO.

STATION
QUANTITY REQ'D
OVERALL SIZE WIDTH FT. HEIGHT FT.
BORDER WIDTH IN. RADII IN.

BACKGROUND TYPE
COLOR
LEGEND COPY TYPE
COLOR
BORDER TYPE
ROUTE
MARKER TYPE
PANEL TYPE
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE

SPACE
LINE 1 COPY SIZE COPY SPACE
SPACE
LINE 2 COPY SIZE COPY SPACE
SPACE
LINE 3 COPY SIZE COPY SPACE
SPACE
LINE 4 COPY SIZE COPY SPACE
SPACE

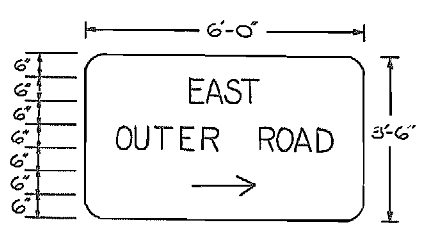
SIGN NO. 37

STATION 1645+60
QUANTITY REQ'D 1
OVERALL SIZE WIDTH 6.0 FT. HEIGHT 3.5 FT.
BORDER WIDTH 7/8 IN. RADII 5 IN. MARGIN 3/4 IN.

BACKGROUND TYPE REFLECT
COLOR GREEN
LEGEND COPY TYPE L-1,2,3
COLOR WHITE
BORDER TYPE L1,2,3
ROUTE
MARKER TYPE
PANEL TYPE
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE



SPACE 6

LINE	COPY SIZE							
LINE 1	6" D	COPY	X	E	A	S	T	X
		SPACE	26^{3}	4^{3}	6^{1}	5^{1}	3^{4}	26^{3}

SPACE 6

LINE	COPY SIZE														
LINE 2	6" D	COPY	X	O	U	T	E	R	X	R	O	A	D	X
		SPACE	8^{6}	5^{4}	5^{1}	4^{5}	4^{5}	4^{0}	9^{0}	5^{1}	5^{3}	6^{1}	4^{0}	8^{6}

SPACE 6

LINE	COPY SIZE				
LINE 3	6" D	COPY	X	→	X
		SPACE	26^{0}	20^{0}	26^{0}

SPACE 6

LINE 4 COPY SIZE COPY SPACE

SPACE

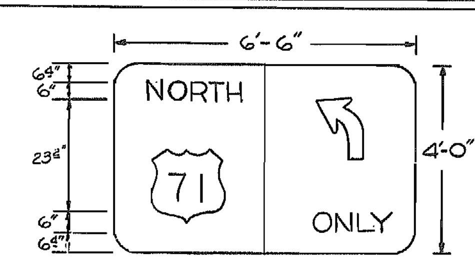
SIGN NO. 62

STATION 461+70 ±
QUANTITY REQ'D 1
OVERALL SIZE WIDTH 6.5 FT. HEIGHT 4.0 FT.
BORDER WIDTH 1⅛ IN. RADII 6 IN.

BACKGROUND TYPE SHEET
COLOR GREEN BAKED ENAMEL
LEGEND COPY TYPE L2 or L4
COLOR WHITE
BORDER TYPE L2 or L4
ROUTE
MARKER TYPE
PANEL TYPE
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.
(MHTD EIS)
Br. No. A3559 S.B.L.

SCALE



SPACE 6.4 VER. SPACE RT. 6.4 COPY SIZE RT.

LINE	COPY SIZE															
LINE 1	6" UC	COPY	X	N	O	R	T	H	X	BORDER	X	↰	X		20.0	ARROW SEE DETAIL A
		SPACE	3^{9}	7^{1}	7^{1}	6^{4}	6^{4}	5^{0}	2^{7}	1	10^{3}	16^{2}	11^{3}			

SPACE 5.2 32.0

LINE	COPY SIZE														
LINE 2	24" US SHIELD	COPY	X	71	X	BORDER	X	O	N	L	Y	X		6.0	UC
		SPACE	7^{8}	24^{0}	6^{7}	1^{1}	5^{7}	7^{1}	7^{8}	5^{0}	6^{1}	6^{7}			

SPACE 6.4 26.0 VER. SPACE RT. 6.4

LINE 3 COPY SIZE COPY SPACE

SPACE

LINE 4 COPY SIZE COPY SPACE

SPACE Note: Locate center of sign over center of Left Turn Lane

BRIDGE MOUNTED SIGNS SHEET 2 of 6

SIGN NO.

STATION
QUANTITY REQ'D
OVERALL SIZE WIDTH FT. HEIGHT FT.
BORDER WIDTH IN. RADII IN.

BACKGROUND TYPE
COLOR
LEGEND COPY TYPE
COLOR
BORDER TYPE
ROUTE
MARKER TYPE
PANEL TYPE
POST SIZE

WIDTH-HORIZONTAL SPACING - INCHES & TENTHS END DIMENSIONS INCLUDE BORDER WIDTH & MARGIN. OTHER DIMENSIONS ARE WIDTH OF CHARACTER PLUS SPACE TO FOLLOWING CHARACTER EXCEPT LAST CHARACTER OF EACH WORD WHICH IS WIDTH OF CHARACTER ONLY.

SCALE

SPACE
LINE 1 COPY SIZE COPY SPACE
SPACE
LINE 2 COPY SIZE COPY SPACE
SPACE
LINE 3 COPY SIZE COPY SPACE
SPACE
LINE 4 COPY SIZE COPY SPACE
SPACE

48

#47

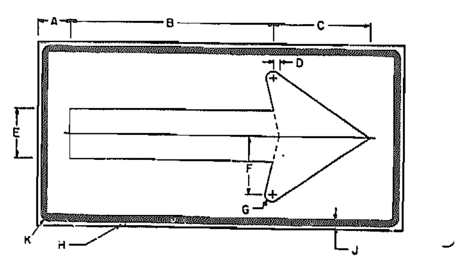
FINAL P...

STATE MO.	JOB NO. 7-P-71-21I	SHEET NO. 39
DIST. NO. 7	PROJECT NO. 7-P-71-21I	ROUTE 71
	COUNTY JASPER	

FINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

ORIGINAL SURVEY	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

49

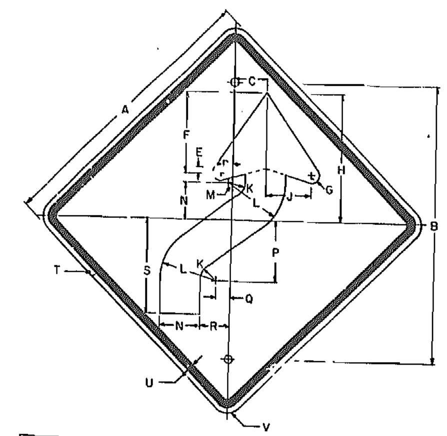


SIGN	A	B	C	D	E	F	G	H	J	K
W1-6a 72 x 36	7 1/2	39	18 3/4	1 5/16	9 3/8	11 1/4	1 5/16	5/8	7/8	2

ARROW

W1-6(6a) Black Symbol and Border
Yellow Reflective Background
W21-6b Black Symbol
Orange Reflective Background

SIGN NUMBER 6 7



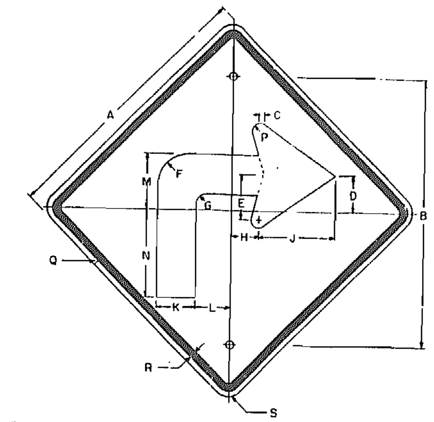
SIGN	A	B	C	D	E	F	G	H	J	K
W1-4Rb	48	50	5 7/8	5/8	1 1/16	14 3/16	1 3/8	22 1/2	8	3

L	M	N	P	Q	R	S	T	U	V
10	5/8	7	10 1/2	2 1/4	5 1/4	16 1/2	3/4	1 1/4	3

REVERSE CURVE (W1-4R SHOWN) (REVERSE FOR W1-4L)

Black Symbol and Border
Yellow Reflective Background

3a 4a 9a 10a



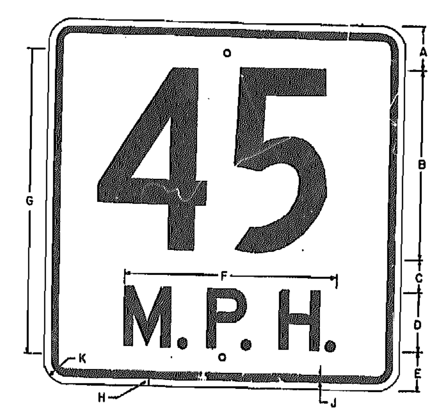
SIGN	A	B	C	D	E	F	G	H	J	K	L	M
W1-1Rb	48	50	1 3/8	6 1/2	6	4 7/8	1 5/8	5	14 3/16	7	6	10

N	P	Q	R	S
15 1/2	1 3/8	3/4	1 1/4	3

TURN (W1-1R SHOWN) (REVERSE FOR W1-1L)

Black Symbol and Border
Yellow Reflective Background

15a

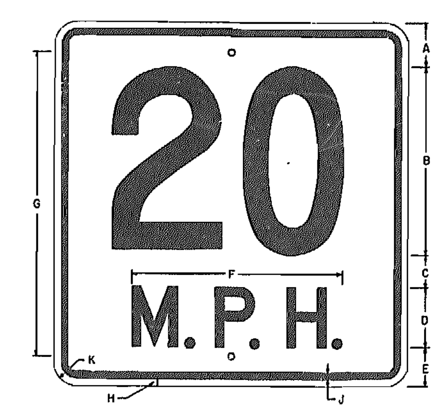


SIGN	A	B	C	D	E	F	G	H	J	K
W13-1a 24 x 24	3 1/4	12C	2	4D	2 3/4	14 3/4	20	3/8	5/8	1 1/2

ADVISORY SPEED PLATE

Black Legend and Border
Yellow Reflective Background

3b 4b 9b 10b



SIGN	A	B	C	D	E	F	G	H	J	K
W13-1a 24 x 24	3 1/4	12C	2	4D	2 3/4	14 3/4	20	3/8	5/8	1 1/2

ADVISORY SPEED PLATE

Black Legend and Border
Yellow Reflective Background

15b

#48

SP-29
REV. AUG. 1, 1981

FINAL

FED. ROAD DIV. NO.	STATE	JOB NO.	SHEET NO.
7	MO.	7-P-71-211	40
		PROJ NO. 7-P-71-211	
DIST. NO.		COUNTY	ROUTE
7		JASPER	71

SIGNS					PIPE POST *TOTAL INCLUDES STUB LENGTH WHEN APPLICABLE						STRUCTURAL STEEL POSTS *TOTAL INCLUDES STUB LENGTH WHEN APPLICABLE							3 INCH ZEE ASSEMBLY			BASE PLATE	ASSEMBLY CROSS-BARS 2" X 3/8" BARS @ 2.55 LBS/LIN. FT.				BRKAWY ASM.	TOTAL STRUCT STL. POST	TOTAL PIPE POST	CONC. FTG'S EMBD	CONC. FTG'S BOLT DOWN	BRKAWY ASM. MULTI DIR'L	HORZ CLEAR IF NOT STD
SIGN NO.	STATION	SIGN DT'L SHT NO.	LOCATION	SIGN SIZE	PIPE SIZE IN.	POST NO. 1 LIN. FT.	POST NO. 2 LIN. FT.	TOTAL* LIN. FT.	LBS PER FT.	TOTAL LBS	POST DES. NO.	POST NO. 1 LIN. FT.	POST NO. 2 LIN. FT.	POST NO. 3 LIN. FT.	TOTAL* LIN. FT.	LBS PER FT.	TOTAL LBS.	NO. EACH	POST SPACE	TOTAL LBS.	LBS.	NO. EACH	LG. IN.	TOTAL LIN. FT.	TOTAL LBS.	ITEM NO. 903-12.40 EACH	ITEM NO. 903-12.10 POUNDS	ITEM NO. 903-12.20 POUNDS	ITEM NO. 903-10.10 CU. YDS.	ITEM NO. 903-10.20 CU. YDS.	ITEM NO. 903-12.40 EACH	
1	458+00	31	Rt. Rte. 71	12'-6"x9'-0"							2	20'-8"	21'-8"		[illegible]	15.5	656.1									2	656		0.93			
2	490+00	32	" "	11'-0"x3'-6"							1	14'-6"	15'-2"		29.67	8.5	252.2									2	252		0.27			
3a	498+00	31	" " "	48"x48"	4"	21'-4"		21.33	10.79	230.2												1	58"	4.83	12.3	1	12	230	0.36			
3b	498+00	39	" " "	24"x24"																												
4a	498+00	39	" " "	48"x48"	4"	21'-8"		21.67	10.79	233.8												1	58"	4.83	12.3	1	12	234	0.36			
4b	498+00	39	" " "	24"x24"																												
5	500+00	Std.	" " "	48"x60"	2½"	15'-2"	15'-8"	30.83	5.79	178.5																2		178	0.20			
6	515+00	31	Barricade Mounted	72"x36"																												
7	512+45	39	" "	72"x36"																												
8	524+00	33	Rt. Rte.	12'-0"x4'-6"							1	17'-0"	17'-0"		34.0	8.5	289.0										289		0.27			
9a	527+00	39	Lt. Rte. 71	48"x48"	4"	20'-6"		20.5	10.79	221.2												1	58"	4.83	12.3	1	12	221	0.36			
9b	527+00	39	" " "	24"x24"																												
10a	527+00	39	" " "	48"x48"	4"	20'-4"		20.33	10.79	219.4												1	58"	4.83	12.3	1	12	219	0.36			
10b	527+00	39	" " "	24"x24"																												
11	531+00	33	Rt. Rte. 71	13'-0"x7'-6"							2	18'-4"	18'-10"		37.17	15.5	576.1										576		0.93			
12	538+00	Std.	Lt. Rte. 71	Assembly	2½"	13'-8"		13.67	5.79	79.1																1		79	0.10			
13	2+00	Std.	Rt. Ramp 2	48"x60"	2½"	15'-4"	15'-10"	31.17	5.79	180.5																2		180	0.20			
14	544+20	38	Rt. Rte. 71	72"x60"							1	15'-9"	16'-3"		32.0	8.5	272.0									2	272		0.27			
15a	7+00	39	Rt. Ramp 2	48"x48"	4"	21'-8"		21.67	10.79	233.8												1	58"	4.83	12.3	1	12	234	0.36			
15b	7+00	39	" " "	24"x24"																												
16	548+00	Std.	Rt. Rte. 71	Assembly	2½"	13'-10"		13.83	5.79	80.1																1		80	0.10			
17	11+50	Std.	Lt. Ramp 2	48"x30"	2½"	12'-10"	13'-4"	26.17	5.79	151.5																2		158	0.20			
18	11+50	33	Rt. Ramp 2	9'-0"x2'-0"							1	13'-0"	13'-9"		26.75	8.5	227.4									2	227		0.27			
19a	13+13	Std.	" " "	48"x18"	2½"	16'-8"		16.67	5.79	96.5												2	45"	7.5	19.1	1	19	96	0.10			
19b	13+13	Std.	" " "	36" STOP																												
19c	13+13	Std.	" " "	30"x30"																												
20a	1619+60	Std.	Rt. W. Outer Rd. (Exist. 71)	48"x18"	2½"	12'-1"		12.08	5.79	69.9												2	45"	7.5	19.1		19	70	0.10		1	
20b	1619+60	Std.	" " " " " "	48"x18"																		2	45"	7.5	19.1		19					
21	1619+85	38	" " " " " "	6'-0"x3'-6"	2½"	13'-10"	13'-10"	27.67	5.79	160.2																		160	0.20		2	
22	1620+30	Std.	" " " " " "	Assembly	2½"	15'-4"		15.33	5.79	88.8																		89	0.10		1	
23a	1620+40	Std.	Lt. W. Outer Rd. (Exist. 71)	30"x30"	2½"	14'-8"		14.67	5.79	84.9																		85	0.10		1	
23b	1620+40	Std.	" " " " " "	48"x18"																		2	45"	7.5	19.1		19					
23c	1620+40	Std.	" " " " " "	48"x18"																		2	45"	7.5	19.1		19					
24	1623+00	Std.	Rt. W. Outer Rd. (Exist. 71)	Assembly	2½"	13'-8"		13.67	5.79	79.1																		79	0.10		1	
25	1629+00	Std.	" " " " " "	Assembly	2½"	13'-10"		13.83	5.79	80.1																		80	0.10		1	
26	1632+00	Std.	" " " " " "	Assembly	2½"	15'-1"		15.08	5.79	87.3																		87	0.10		1	
27	1634+00	38	Lt. W. Outer Rd. (Exist. 71)	7'-0"x2'-6"	2½"	13'-0"	13'-6"	26.5	5.79	153.4																		153	0.20		2	
28	1634+70	37	Rt. W. Outer Rd. (Exist. 71)	8'-6"x6'-0"							1	16'-6"	17'-4"		33.83	8.5	287.6									2	288		0.27			
29a	0+70	Std.	Lt. Ramp 1A	30"x30"	2½"	15'-6"		15.5	5.79	89.7																		90	0.10		1	
29b	0+70	Std.	" " "	48"x18"																												
30a	12+50	Std.	Lt. Ramp 1	Assembly	4"	22'-8"		22.67	10.79	244.6																		245	0.36		1	
30b	12+50	Std.	" " "	48"x18"																		2	45"	7.5	19.1		19					
30c	12+50	Std.	" " "	48"x18"																		2	45"	7.5	19.1		19					
31a	0+80	Std.	Rt. Ramp 1A	48"x18"	4"	17'-8"		17.67	10.79	190.7												2	45"	7.5	19.1		19	191	0.36		1	
31b	0+80	Std.	" " "	48" YIELD																		1	46"	3.83	9.8		10					
31c	0+80	Std.	" " "	30"x30"																												
32	13+20	Std.	Rt. Ramp 1	30"x30"	2½"	14'-1"		14.08	5.79	81.5																		82	0.10		1	
33	1636+50	Std.	Lt. W. Outer Rd. (Exist. 71)	Assembly	2½"	15'-1"		15.08	5.79	87.3																		87	0.10		1	
34	1642+00	34	" " " " " "	14'-6"x7'-6"							2	19'-0"	20'-5"		39.42	15.5	611.0									2	611		0.93			
35	1644+00	38	Rt. W. Outer Rd. (Exist. 71)	6'-0"x3'-6"	2½"	13'-10"	14'-4"	28.17	5.79	163.1																		163	0.20		2	
36	579+00	Std.	Rt. E. Outer Rd.	30" STOP	2½"	13'-8"		13.67	5.79	79.1																		79	0.10		1	
37	1645+60	38	Lt. W. Outer Rd. (Exist. 71)	6'-0"x3'-6"	2½"	13'-2"	13'-5"	26.58	5.79	153.9																		154	0.20		2	
38	1647+00	Std.	Rt. W. Outer Rd. (Exist. 71)	Assembly	2½"	13'-8"		13.67	5.79	79.1																		79	0.10		1	
39	1649+25	Std.	Lt. W. Outer Rd. (Exist. 71)	Assembly	2½"	14'-4"		14.33	5.79	83.0																		83	0.10		1	
40	1657+00	Std.	" " " " " "	Assembly	2½"	14'-2"		14.17	5.79	82.0																		82	0.10		1	
41a	669+00	34	Truss Mounted	12'-6"x13'-0"																										26.70		
41b	669+00	34	" "	11'-0"x10'-6"																												
42	674+70	35	Lt. Rte. 71	11'-0"x3'-6"							1	13'-10"	14'-6"		28.33	8.5	240.8										241		0.27			
43	685+00	Std.	" " "	48"x60"	2½"	15'-4"	15'-7"	30.92	5.79	179.0																2		179	0.20			
44	680+00	Std.	" " "	Assembly	2½"	13'-8"		13.67	5.79	79.1																1		79	0.10			
45a	681+00	35	Truss Mounted	12'-6"x13'-0"																										26.65		
45b	681+00	35	" "	11'-6"x10'-6"																												
46	3+00	Std.	Rt. Ramp 2	48"x60"	2½"	15'-8"	15'-11"	31.58	5.79	182.8																2		183	0.20			
47a	708+70	36	Truss Mounted	11'-0"x11'-0"																										28.59		
47b	708+70	36	" "	13'-6"x12'-0"																												
48	710+19	38	Rt. Rte. 71	72"x60"							1	15'-6"	16'-0"		31.5	8.5	267.8									2	268		0.27			
49	712+56.6	36	" " "	6'-6"x3'-0"	2½"	18'-6"	18'-6"	37.0	5.79	214.2																		214	0.29			
50	420+00	37	Lt. Central Ave.	9'-0"x3'-6"							1	14'-4"	15'-6"		29.83	8.5	253.6										254		0.27			
51	430+00	Std.	" " "	48"x60"	2½"	15'-8"	16'-2"	31.83	5.79	184.3																2		184	0.20			
52	453+65	Std.	Rt. Central Ave.	30"x42"	2½"	13'-10"		13.83	5.79	80.1																1		80	0.10			
53	456+00	Std.	Lt. Central Ave.	Assembly	3"	14'-10"		14.83	7.58	112.4												4	50"	16.67	42.5	1	43	112	0.13			
54a	458+00	31	Truss Mounted	16'-6"x10'-0"																										27.06		

DELINEATORS, MILEPOSTS, CONDUIT, CONDUCTOR CABLE, TRENCHING & BACKFILLING, CONTROL STATION, PULL BOXES AND OTHER REQUIRED ITEMS.

DELINEATORS

Location	SINGLE WHITE (Each)	DOUBLE WHITE (Each)	SINGLE YELLOW (Each)
Rte 571 INTERCHANGE			
Rte 71	19	0	22
Ramp 1	20	13	6
Ramp 2	5	10	11
Central Ave INTERCHANGE			
Rte 71	8	0	0
Ramp 1	19	5	2
Ramp 2	20	6	4
*Ramp 3	0	0	0
Ramp 4	1	5	0
Rte 96	4	0	0
Totals	96	39	45

*Not built on this project

50

SP-29 8-1-81

ORIGINAL SURVEY / NOTE BOOK / SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED / BY / DATE

FINAL SURVEY / NOTE BOOK / SURVEYED / PLOTTED / TEMPLATE / AREAS / AREAS CHECKED / BY / DATE

SP-29
REV. AUG. 1, 1981

FINAL

FED. ROAD DIV. NO.	STATE	JOB NO 7-P-71-21 I	SHEET NO.
7	MO.	PROJ NO 7-P-71-21 I	41
DIST. NO.	COUNTY	ROUTE	SEC
7	JASPER	71	

SIGNS / PIPE POST (*TOTAL INCLUDES STUB LENGTH WHEN APPLICABLE)

SIGN NO.	STATION	SIGN DT'L SHT NO.	LOCATION	SIGN SIZE	PIPE SIZE IN.	POST NO. 1 LIN. FT.	POST NO. 2 LIN. FT.	TOTAL* LIN. FT.	LBS PER FT.	TOTAL LBS.
54b	458+00	32	Truss Mounted	2'-6"x10'-0"						
54c	458+00	37	"	11'-6"x8'-6"						
55a	10+80	Std	Lt. Ramp 2	30"x30"	2½"	16'-1"		16.08	5.79	93.1
55b	10+80	Std		48"x18"						
55c	10+80	Std		48"x18"						
56	458+20	Std.	Lt. Central Ave.	48" YIELD	4"	16'-1"		16.08	10.79	173.5
57	459+80	Std	"	48"x18"	2½"	10'-8"		10.67	5.79	61.8
58	10+56±	Std.	Rt. Ramp 2	Assembly	3"	13'-6"		13.5	7.58	102.3
59	8+00	Std.	Lt. Ramp 2	48"x30"	2½"	12'-10"	13'-4"	26.17	5.79	151.5
60	7+20	37	Rt. Ramp 2	8'-0"x3'-6"						
61a	460+65	Std.	℄ Med. Central Ave.	24"x30"	2½"	13'-5"		13.42	5.79	77.7
61b	460+65	Std.	" " " "	24"x18"						
62	461+70±	38	Bridge Mount	6'-5"x4'-0"						
63	461+50	Std.	Rt. Central Ave.	Assembly	4"	16'-2"		16.17	10.79	174.5
64	463+30	Std.	Lt. Central Ave.	Assembly						
65a	464+30	Std.	Rt. Central Ave.	30"x30"	2½"	15'-0"		15.0	5.79	86.9*
65b	464+30	Std.	" " "	48"x18"						
65c	464+30	Std.	" " "	48"x18"						
67	463+77	37	" " "	8'-6"x6'-0"						
68a	463+90	Std.	℄ Med. Central Ave.	24"x30"	2½"	13'-8"		13.67	5.79	79.1
68b	463+90	Std.	" " " "	24"x18"						
69	10+00	Std.	Lt. Ramp 1	48" YIELD	4"	16'-2"		16.17	10.79	174.5
70	471+00	Std.	Rt. Central Ave.	Assembly	2½"	14'-10"		14.83	5.79	85.2
71	473+00	Std.	" " "	30"x42"	2½"	14'-1"		14.08	5.79	81.5
72	471+00	37	Lt. Central Ave.	10'-0"x3'-6"						
73	473+30	Std.	" " "	Assembly	4"	16'-1"		16.08	10.79	173.5

STRUCTURAL STEEL POSTS (*TOTAL INCLUDES STUB LENGTH WHEN APPLICABLE) / 3 INCH ZEE ASSEMBLY / BASE PLATE

SIGN NO.	POST DES. NO.	POST NO. 1 LIN. FT.	POST NO. 2 LIN. FT.	POST NO. 3 LIN. FT.	TOTAL* LIN. FT.	LBS PER FT.	TOTAL LBS.	ZEE NO. EACH	ZEE POST SPACE	ZEE TOTAL LBS.	BASE PLATE LBS.
60	1	15'-3"	16'-9"		32.0	8.5	272.0				
64	2	20'-0"			20.0	15.5	310.0				
67	1	16'-6"	17'-3"		33.75	8.5	286.9				
72	1	15'-4"	17-4"		32.67	8.5	277.7				

* Omitted - see C.O. No. 7

ASSEMBLY CROSS-BARS (2" X 3/8" BARS @ 2.55 LBS/LIN. FT.) AND ITEMS

SIGN NO.	NO. EACH	LG. IN.	TOTAL LIN. FT.	TOTAL LBS.	BRKAWY ASM. ITEM NO. 903-12.40 EACH	TOTAL STRUCT STL. POST ITEM NO. 903-12.10 POUNDS	TOTAL PIPE POST ITEM NO. 903-12.20 POUNDS	CONC. FTG'S EMBD ITEM NO. 903-10.10 CU. YDS.	CONC. FTG'S BOLT DOWN ITEM NO. 903-10.20 CU. YDS.	BRKAWY ASM. MULTI DIR'L ITEM NO. 903-12.40 EACH	HORZ CLEAR IF NOT STD
55a							93	0.10		1	
55b	2	45	7.5	19.1		19					
55c	2	45	7.5	19.1		19					
56	1	46	3.83	9.8	1	10	174	0.36			
57	2	45	7.5	19.1	1	19	62	0.10			
58	4	50	16.7	42.6	1	43	102	0.13			
59					2		152	0.20			
60					2	272		0.27			
61a							78	0.10		1	
63	6	50	25	63.8	1	64	174	0.36			
64	6	50	25	63.8	1	374		0.46			
65a	See	Change Order	No. 7				0	.00		0	
65b	See	Change Order	No. 7			0					
65c	See	Change Order	No. 7			0					
67					2	287		0.27			
68a							79	0.10		1	
69	1	46	3.85	9.8	1	10	174	0.36			
70					1		86	0.10			
71					1		82	0.10			
72					2	278		0.27			
73	4	50	16.7	42.6	1	43	174	0.36			
TOTALS					54	5637	6502	15.33	109.00	26	
(USE)					(54)	(5640)	(6500)	(15.3)	(109.0)	(26)	

DELINEATORS, MILEPOSTS, CONDUIT, CONDUCTOR CABLE, TRENCHING & BACKFILLING. CONTROL STATION, PULL BOXES AND OTHER REQUIRED ITEMS.

120-240 Volt Pole Mounted Control Sta. Dwg. No. 901.18 & 30 Ft. Service Pole, Cl. 4

Sht.	Rte.	Sta.	Loc.	Pole Ea.	Control Sta. Ea.
	71	673+20	103' Rt.	1	1
TOTAL				1	1

Conduit, Rigid Steel, In Trench

Sht.	Rte	Sta.	Loc.	3" Lin. Ft.
	71	673+78	140' Rt.	50'
TOTAL				50'

Trenching Type [illegible]

Sht	Rte	Sta.	Sta.	Loc.	Lin. Ft.	Remarks
	71	680+00	[illegible]	Rt.	338'	Contingent Item 504.02
	71	[illegible]	676+02	Rt.	60'	Change Order No. 3
	71	[illegible]	675+19	Rt.	83'	
			Total		481'	

Trenching Type II & 1 In. Cable-Conductor and 1 Bare Neutral

Sht.	Rte.	Sta.	Sta.	Loc.	Trenching Lin. Ft.	8AWG Cable Cond. Lin. Ft.	6AWG Cable Cond. Lin. Ft.	Remarks
	71	673+20	669+00	Rt.	421	474'		Ø to Truss (41)
	71	673+20	681+00	Rt.	1506	2424'		Ø to Truss (45)
	71-96 Ramp 2	9+93	708+70	℄	670'		718'	Light Pole to Truss (47)
	96	458+00	459+09	Rt.	112'		133'	Light Pole to Truss (54)
				TOTAL	9	2898'	851'	
				(USE)		(2900)	(850)	

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FINAL PLANS

FED. ROAD DIV. NO.	STATE	JOB NO.	SHEET NO.
7	MO.	7-P-71-211 / PROJ. NO. 7-P-71-21I	42
DIST. NO. 7	COUNTY: JASPER	ROUTE: 71	

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	SHR1 NORTH 24"x12"	SHR1 [71] 24"x24"	SHR1 SOUTH 24"x12"	SHR1 [571] 30"x24"	SHR1 ↓ 21"x15"	SHR1 ↰ 21"x15"	SHR1 ↖ 21"x15"	SHR1 JCT 21"x15"	SHR1 END 24"x12"	SHR1 EAST 24"x12"	SHR1 WEST 24"x12"	S. 1 [96] 24"x24"	SHR1 ↑ 21"x15"	SHR1 ↕ 21"x15"
12	538+00	Lt. Rte. 71	1	1												
16	548+00	Rt. Rte. 71		1	1											
22	1620+30	Rt. W. Outer Rd.			1	1	1									
24	1623+00	" " " "			1	1										
25	1629+00	" " " "		1						1						
26	1632+00	" " " "	1	1				1								
30a	12+50	Lt. Ramp 1	1	1			1									
33	1636+50	Lt. W. Outer Rd.	1	1					1							
38	1647+00	Rt. W. Outer Rd.			1	1										
39	1649+25	Lt. W. Outer Rd.				1					1					
40	1657+00	" " " "		1						1						
44	680+00	Lt. Rte. 71	1	1												
53	456+00	Lt. Central Ave.		1	1								1	1		
58	10+56	Rt. Ramp 2		1			1							1		1
63	461+50	Rt. Central Ave.	1	1				1				1		1	1	
64	463+30	Lt. Central Ave.		1	1								1	1	2	
70	471+00	Rt. Central Ave.										1		1		
73	473+30	Lt. Central Ave.		1						1						
		TOTAL	6	13	6	4	3	2	1	3	1	2	2	5	3	1

SIGN SUMMARY

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE	STB24 ITEM NO. 903-50.01	STR24 ITEM NO. 903-50.02	STR1 ITEM NO. 903-50.03	SHR24 ITEM NO. 903-50.04	SHR123 ITEM NO. 903-50.05	SHR1 ITEM NO. 903-50.06	SHB24 ITEM NO. 903-50.07	36" STOP EACH
1-[571] SOUTH CARTHAGE EXIT 1 MILE	31	1	12'-6"x9'-0"	112.5							
2-JASPER 8 KANSAS CITY 138	32	1	11'-0"x3'-6"	38.5							
3a-	39	1	48"x48"						16.0		
3b-45 MPH	39	1	24"x24"						4.0		
4a-	39	1	48"x48"						16.0		
4b-45 MPH	39	1	24"x24"						4.0		
5-SPEED LIMIT 55	Std.	1	48"x60"						20.0		
6,7-⇦	39	2	72"x36"						36.0		
8-CARTHAGE NEXT 3 EXITS	33	1	12'-0"x4'-6"	54.0							
9a,10a-	39	2	48"x48"						32.0		
9b,10b-45 MPH	39	2	24"x24"						8.0		
11-[571] SOUTH CARTHAGE ⇗	33	1	13'-0"x7'-6"	97.5							
13-EXIT 40 MPH	Std.	1	48"x60"						20.0		
14-EXIT ⇗	38	1	72"x60"							30.0	
15a-⮣	39	1	48"x48"						16.0		
15b-20 MPH	39	1	24"x24"						4.0		
17-WRONG WAY	Std.	1	48"x30"					10.0			
18-⇦ CARTHAGE 1	33	1	9'-0"x2'-0"							18.0	
19a-ONE WAY ⇦	Std.	1	48"x18"					6.0			
19b-STOP	Std.	1	36"								1
19c-DO NOT ENTER	Std.	1	30"x30"					6.3			
20a-ONE WAY ⇨	Std.	1	48"x18"					6.0			
20b-ONE WAY ⇦	Std.	1	48"x18"					6.0			
21-WEST OUTER ROAD ⇨	38	1	6'-0"x3'-6"					21.0			
23a-DO NOT ENTER	Std.	1	30"x30"					6.3			
23b-ONE WAY ⇦	Std.	1	48"x18"					6.0			
23c-ONE WAY ⇨	Std.	1	48"x18"					6.0			
27-↑ WEST OUTER ROAD	38	1	7'-0"x2'-6"					17.5			
28-[71] NORTH KANSAS CITY ⇦	37	1	8'-6"x6'-0"	51.0							
29a-DO NOT ENTER	Std.	1	30"x30"					6.3			
29b-ONE WAY ⇦	Std.	1	48"x18"					6.0			
30b-ONE WAY ⇦	Std.	1	48"x18"					6.0			
30c-ONE WAY ⇨	Std.	1	48"x18"					6.0			
31a-ONE WAY ⇦	Std.	1	48"x18"					6.0			
31b-YIELD	Std.	1	48"					6.9			
31c-DO NOT ENTER	Std.	1	30"x30"					6.3			
32-DO NOT ENTER	Std.	1	30"x30"					6.3			
34-[71] NORTH KANSAS CITY ⇗	34	1	14'-6"x7'-6"	108.8							
35-EAST OUTER ROAD ⇦	38	1	6'-0"x3'-6"					21.0			
36-STOP	Std.	1	30"					5.2			
37-EAST OUTER ROAD ⇨	38	1	6'-0"x3'-6"					21.0			
41a-SOUTH [71] [96] CARTHAGE JOPLIN EXIT 1 MILE	34	1	12'-6"x13'-0"	162.5							
41b-ALTERNATE SOUTH [71] NEOSHO JCT 1 MILE	34	1	11'-0"x10'-6"	115.5							
42-NEVADA 47 KANSAS CITY 142	35	1	11'-0"x3'-6"	38.5							
43-SPEED LIMIT 55	Std.	1	48"x60"						20.0		
45a-SOUTH [71] [96] CARTHAGE JOPLIN EXIT ½ MILE	35	1	12'-6"x13'-0"	162.5							
45b-ALTERNATE SOUTH [71] NEOSHO JCT ½ MILE	35	1	11'-6"x10'-6"	120.8							
46-EXIT 40 MPH	Std.	1	48"x60"						20.0		
47a-ALTERNATE SOUTH [71] NEOSHO ▽ ▽	36	1	11'-0"x11'-0"	121.0							
47b-SOUTH [71] [96] CARTHAGE JOPLIN ⇗	36	1	13'-6"x12'-0"	162.0							
48-EXIT ⇗	38	1	72"x60"							30.0	
49-CITY LIMIT CARTHAGE	36	1	6'-6"x3'-0"							19.5	
50-WEBB CITY 7 JOPLIN 12	37	1	9'-0"x3'-6"	31.5							
51-SPEED LIMIT 55	Std.	1	48"x60"						20.0		
52-SPEED LIMIT 35	Std.	1	30"x42"						8.75		
54a-[71] NORTH KANSAS CITY ▽	31	1	16'-6"x10'-0"	165.0							
54b-[96] EAST CARTHAGE ▽	32	1	12'-6"x10'-0"	125.0							
54c-ALTERNATE SOUTH [71] NEOSHO ⇗	37	1	11'-6"x8'-6"	97.8							
55a-DO NOT ENTER	Std.	1	30"x30"					6.3			
55b-ONE WAY ⇦	Std.	1	48"x18"					6.0			
55c-ONE WAY ⇨	Std.	1	48"x18"					6.0			
56-YIELD	Std.	1	48"					6.9			
57-ONE WAY ⇦	Std.	1	48"x18"					6.0			
59-WRONG WAY	Std.	1	48"x30"					10.0			
60-← CARTHAGE JOPLIN →	37	1	8'-0"x3'-6"							28.0	
61a-	Std.	1	24"x30"						5.0		
61b-KEEP RIGHT	Std.	1	24"x18"						3.0		
62-NORTH [71] ↰	38	1	6'-6"x4'-0"							26.0	
			TOTAL								

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FINAL PLANS

FED. ROAD DIV. NO.	STATE	JOB NO. / PROJ. NO.	SHEET NO.
7	MO.	JOB NO. 7-P-71-211 / PROJ. NO. 7-P-71-211	43
DIST. NO. 7	COUNTY: JASPER		ROUTE 71

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	TYPE / SIGN DESCRIPTION, SIZES & NUMBER OF EACH

SIGN SUMMARY

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE	STB24 ITEM NO. 903-50.01	STR24 ITEM NO. 903-50.02	STR1 ITEM NO. 903-50.03	SHR24 ITEM NO. 903-50.04	SHR123 ITEM NO. 903-50.05	SHR1 ITEM NO. 903-50.06	SHB24 ITEM NO. 903-50.07	36" STOP EACH
65a - DO NOT ENTER	Std.	1	30"x30"					0			
65b - ONE WAY ⇨	Std.	1	48"x18"					0			
65c - ONE WAY ⇦	Std.	1	48"x18"					0			
67 - 71 NORTH KANSAS CITY ⇦	37	1	8'-6"x6'-0"	51.0							
68a -	Std.	1	24"x30"						5.0		
68b - KEEP RIGHT	Std.	1	24"x18"						3.0		
69 - YIELD	Std.	1	48"					6.9			
71 - SPEED LIMIT 35	Std.	1	30"x42"						8.8		
72 - ↑ JOPLIN KANSAS CITY →	37	1	10'-0"x3'-6"	35.0							
NORTH	Std.	6	24"x12"						12.0		
71	"	13	24"x24"						52.0		
SOUTH	"	6	24"x12"						12.0		
571	"	4	30"x24"						20.0		
←	"	3	21"x15"						6.56		
↰	"	2	21"x15"						4.38		
↗	"	1	21"x15"						2.19		
JCT	"	3	21"x15"						6.56		
END	"	1	24"x12"						2.0		
EAST	"	2	24"x12"						4.0		
WEST	"	2	24"x12"						4.0		
96	"	5	24"x24"						20.0		
↑	"	3	21"x15"						6.56		
↔	"	1	21"x15"						2.19		
			TOTAL	1850.4				236.2	423.22	151.5	1
			USE	1850				236	424	152	1

FINAL SURVEY NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

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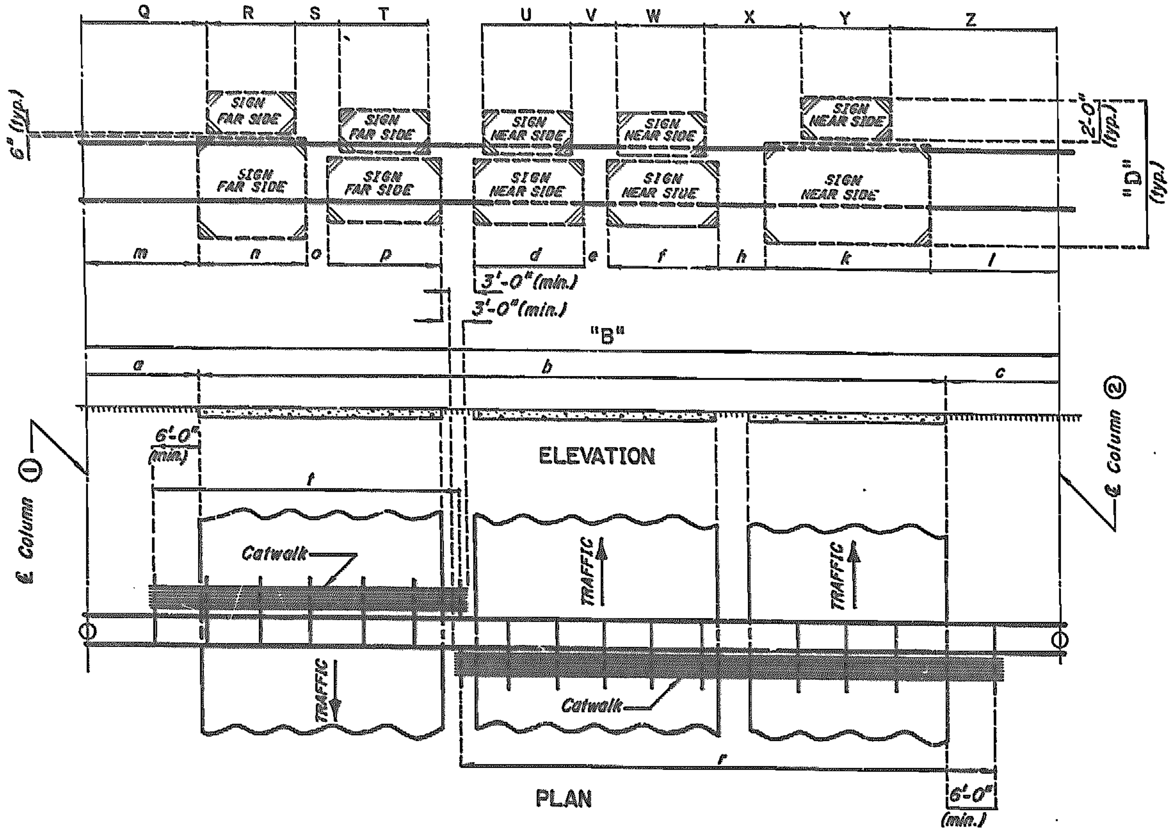
FINAL PLANS

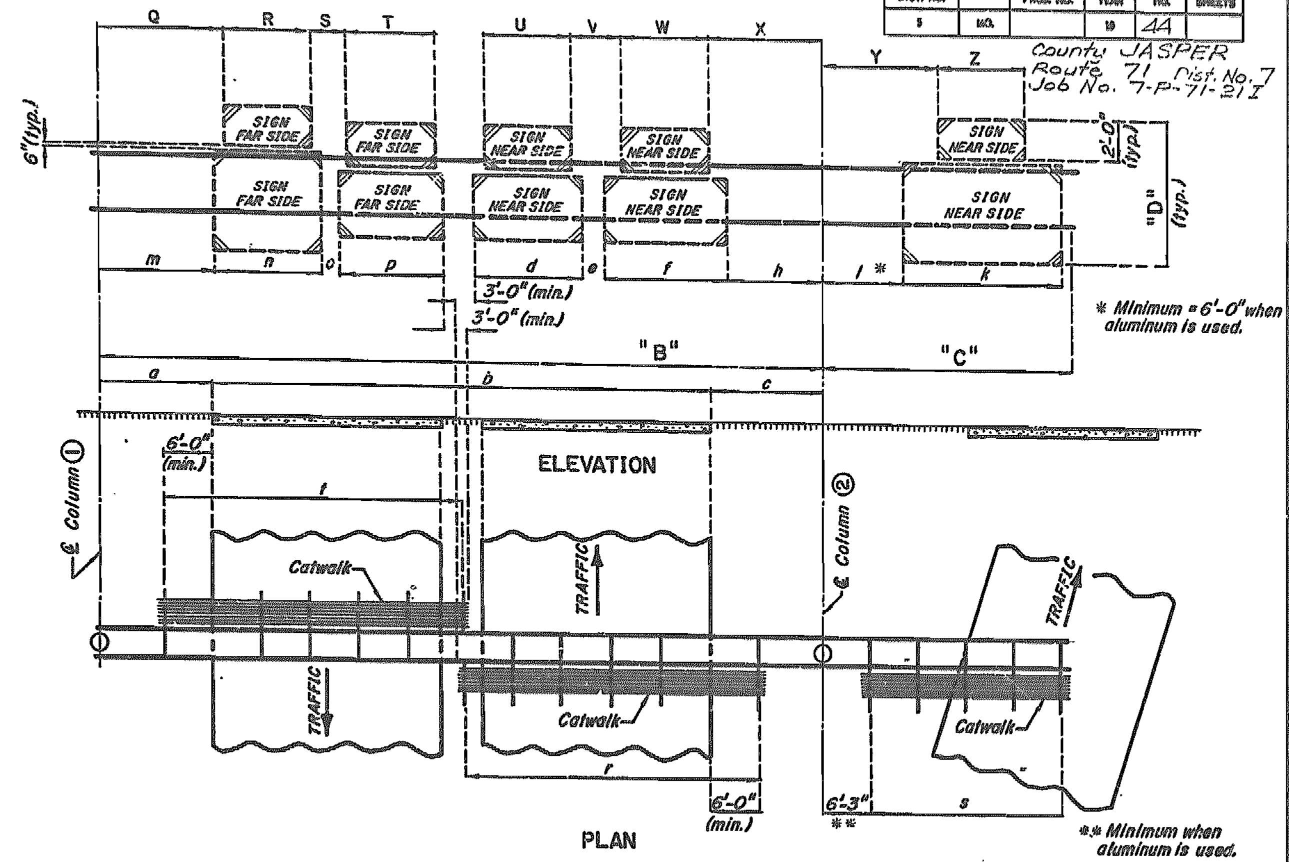
MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	MO.		19	44	

County JASPER
Route 71 Dist. No. 7
Job No. 7-P-71-21I



DIMENSIONS
TYPE 'B' SIGN BRIDGE



DIMENSIONS
TYPE 'BC' SIGN BRIDGE

Note: Above minimums are recommended dimensions.

SIGN BRIDGE DIMENSIONS

Sign No.	Station Number	Truss Description					Roadway Description			"D"	Sign Spacing															Catwalk ***			Column Data					Lighting Data					Sign No.
					Chord						Near Side									Far Side						Near Side		F. Side	Column ①		Column ②		Footing & Pedestal C.Y. Class B	Power		Photo Electric Switch	Mercury Luminaires	Light Support Extensions	
		Type	"B"	"C"	Alum.	Steel	a	b	c		d	Ht.	e	f	Ht.	h	k	Ht.	l	m	n	Ht.	o	p	Ht.	r	s	t	H	Type	H	Type		Col. No.	Voltage				
41	669+00 Rte.71	B	86'-0"	—	[illegible]	[illegible]	30'-0"	24'-0"	32'-0"	13'-6"				11'-0"	10'-6"	2'-0"	12'-6"	13'-0"	30'-6"	—	—	—	—	—	—	36'-0"	—	—	21'-2"	II	24'-3"	II	26.7	2	240	240V	3-250W	No.	41
45	681+00 Rte.71	B	86'-0"	—	[illegible]	[illegible]	30'-0"	24'-0"	32'-0"	13'-6"				11'-6"	10'-6"	2'-0"	12'-6"	13'-0"	30'-6"	—	—	—	—	—	—	36'-0"	—	—	21'-2"	II	24'-3"	II	26.7	2	240	240V	3-250W	No.	45
47	708+70 Rte.71	B	80'-0"	—	4½"x¼"	4"x4"x¼"	12'-6"	53'-3"	14'-2"	13'-6"				11'-0"	11'-0"	9'-6"	13'-6"	12'-0"	27'-0"	—	—	—	—	—	—	65'-6"	—	—	21'-5"	II	22'-4"	II	28.6	2	240	240V	4-250W	No.	47
54	458+00 Rte.96	B	70'-0"	—	4½"x¼"	4"x4"x¼"	16'-0"	38'-0"	16'-0"	13'-6"	16'-6"	10'-0"	2'-0"	12'-6"	10'-0"	2'-0"	11'-6"	8'-6"	13'-6"	—	—	—	—	—	—	51'-0"	—	—	19'-4"	II	22'-0"	II	27.0	2	240	240V	6-250W	No.	54
																																TOTAL=	109.0						

SIGN BRIDGE DIMENSIONS

Sign No.	Station Number	Truss Description					Roadway Description			"D"	Sign Spacing										
					Chord						Near Side						Far Side				
		Type	"B"	"C"	Alum.	Steel	a	b	c		U	V	W	X	Y	Z	Q	R	S	T	

CHART FOR PLACING MERCURY LUMINAIRES

COMINATION OR TOTAL SIGN HEIGHT			€ LUMINAIRE TO VERTICAL SIGN SUPPORT
13'-0"	&	UNDER	4'-6 ⅝"
13'-1"	TO	14'-0"	6'-0 ½"
14'-1"	TO	15'-0"	6'-9 ½"
15'-1"	TO	16'-0"	7'-6 ½"
16'-1"	&	OVER	8'-3 ½"

*** Catwalk lengths given are the minimum lengths necessary to reach 3'-0" past all signs and 6'-0" past roadway slab. Lengths may need to be increased because end catwalk supports must be placed at a truss vertical or at a column.

GENERAL NOTES:
DESIGN SPECIFICATIONS: A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS - 1975.
BASIC ASSUMPTIONS: WIND VELOCITY 70 MI./HR., WIND PRESSURE ON SIGN AREA = 27 LBS./SQ. FT., ICE LOAD = 3 LBS./SQ. FT.
STRUCTURAL ALUMINUM STRESS 10,000 LBS./SQ. IN.
STRUCTURAL STEEL STRESS 20,000 LBS./SQ. IN. (A.S.T.M.-A36)
REINFORCING STEEL STRESS 20,000 LBS./SQ. IN.
CONCRETE CLASS "B" STRESS 1,200 LBS./SQ. IN.
FOOTING SOIL PRESSURE 2,750 LBS./SQ. FT.
ALLOWABLE UNIT STRESSES DUE TO WIND LOAD OR WIND LOAD IN COMBINATION WITH OTHER FORCES ARE INCREASED 40%.
MINIMUM CLEARANCE: VERTICAL ROADWAY CLEARANCE 17'-6".
REINFORCEMENT: EMBEDMENT IS 2" CLEAR TO MAIN REINFORCEMENT, EXCEPT AS NOTED.
TRUSS SHALL BE ALL-WELDED CONSTRUCTION. ALL WELDING TO BE CONTINUOUS UNLESS OTHERWISE SHOWN.
QUALIFICATION OF WELDING OPERATORS WILL BE REQUIRED.
STRUCTURAL STEEL WELDING AND WELDER QUALIFICATION SHALL BE PERFORMED IN ACCORDANCE WITH A.W.S. SPECIFICATIONS FOR BRIDGES AS AMENDED BY THE MO. HIGHWAY AND TRANSPORTATION COMMISSION STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS ON STRUCTURAL STEEL CONSTRUCTION. ALUMINUM WELDING AND WELDER QUALIFICATION SHALL BE PERFORMED IN ACCORDANCE WITH PART B, SEC. 9, A.S.M.E.
ALL ALUMINUM FILLET WELDS SHALL BE 3/16" UNLESS OTHERWISE SHOWN.
PAINT: ALL STRUCTURAL STEEL SHALL BE CLEANED AND PAINTED WITH SYSTEM A OR B IN ACCORDANCE WITH STANDARD SPECIFICATIONS 712.12 AND 903.3.4. CONTACT SURFACES OR BOLTED FIELD CONNECTIONS SHALL RECEIVE ONE COAT OF PRIMER AND SURFACES INACCESSIBLE AFTER ERECTION SHALL RECEIVE TWO COATS OF PRIMER. COLOR OF THE FINAL FIELD COAT FOR SYSTEM B SHALL BE ALUMINUM. PAYMENT FOR CLEANING AND PAINTING WILL BE INCLUDED IN CONTRACT UNIT PRICE FOR ITEMS PAINTED. ALL THE STRUCTURAL STEEL MAY BE GALVANIZED IN LIEU OF PAINTING. PORTIONS OF THE STEEL MAY BE GALVANIZED WITH THE APPROVAL OF THE ENGINEER.
PERMITS MUST BE OBTAINED FOR ALL TRUCK LOADS OVER LEGAL LENGTH.
ELECTRICAL: SEE STANDARD PLANS 903.09.

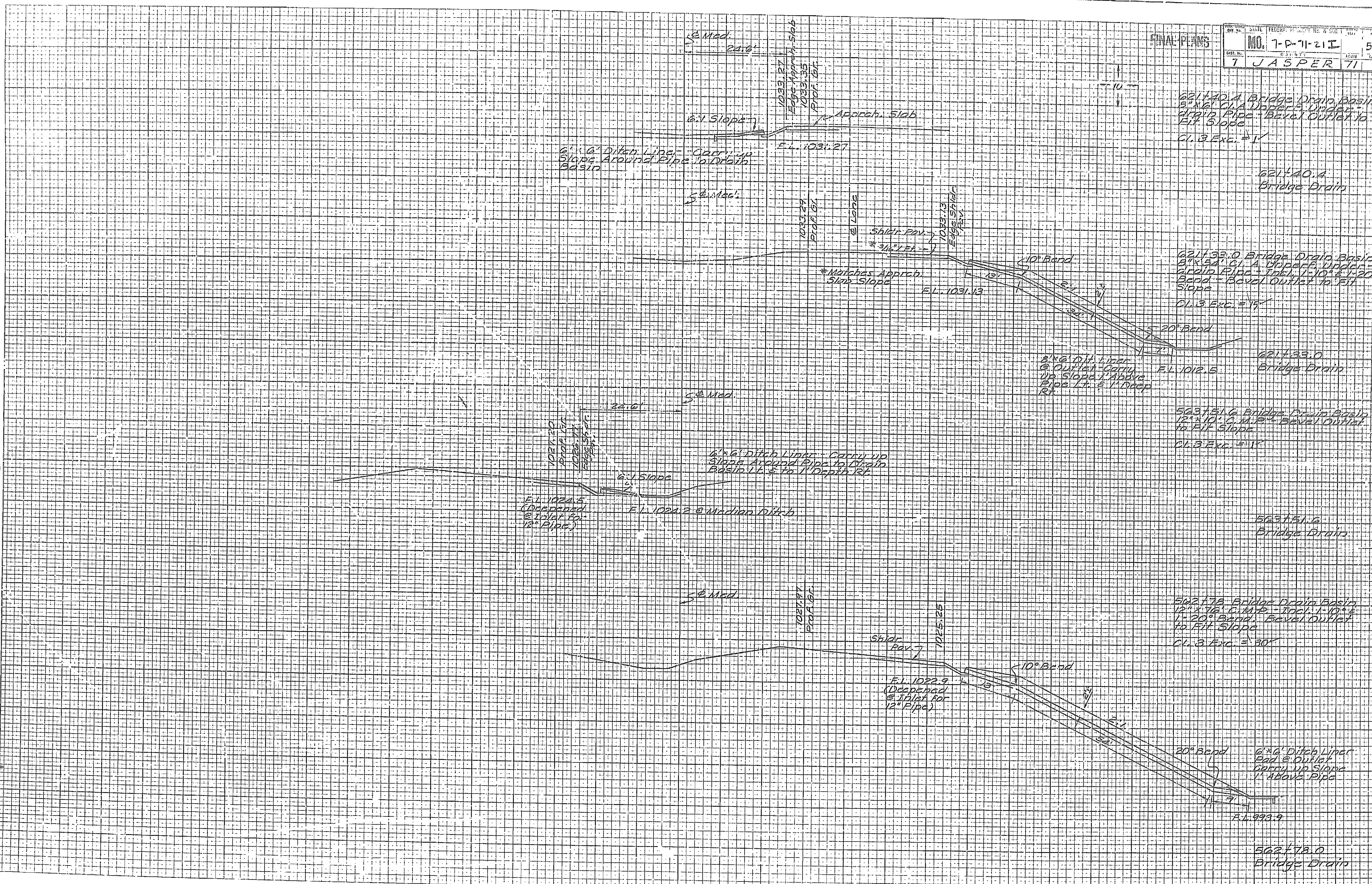
OVERHEAD SIGN TRUSSES
STRUCTURAL STEEL OR ALUMINUM

DATA SHEET
(SEE STANDARD 903.10 OR 903.60)

OCTOBER 1982

FINAL PLANS

DIV. No.	STATE	FEDERAL PROJECT No. & SEC.		SHEET No.
	MO.	7-P-71-21I		55
DIST. No.	COUNTY		ROUTE	
7	JASPER		71	



ORIGINAL SURVEY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | NOTE BOOK No. | BY | DATE

FINAL SURVEY | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED | NOTE BOOK No. | BY | DATE

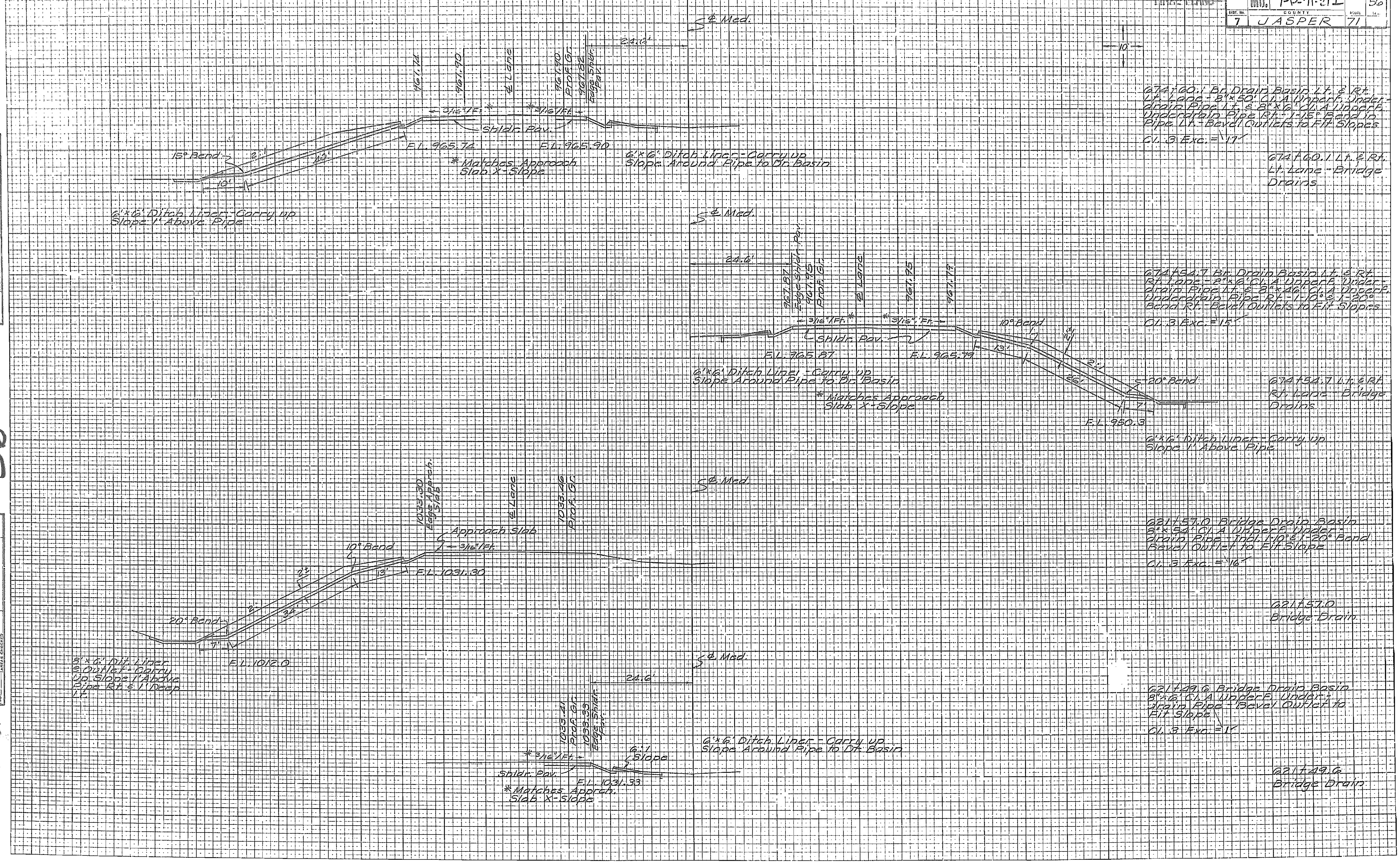
55

467

FINAL PLANS

STATE	FEDERAL PROJECT NO.	SHEET NO.
MO.	7-P-71-21 I	56

DIST. NO.	COUNTY	ROUTE
7	JASPER	71



56

57

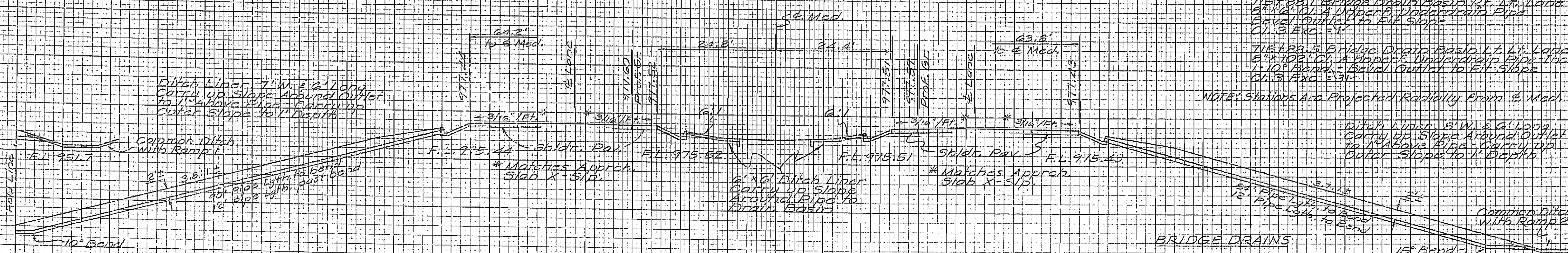
7/5+85.0 Bridge Drain Basin Rt. Rt. Lane
5"x96' Cl. A Unperf. Underdrain Pipe - Incl.
1-15° Bend - Bevel Outlet to Fit Slope
Cl. 3 Exc. = 32

7/5+85.4 Bridge Drain Basin Lt. Rt. Lane
8"x6' Cl. A Unperf. Underdrain Pipe
Bevel Outlet to Fit Slope
Cl. 3 Exc. 1

7/5+88.1 Bridge Drain Basin Rt. Lt. Lane
5"x6' Cl. A Unperf. Underdrain Pipe
Bevel Outlet to Fit Slope
Cl. 3 Exc. = 1

7/5+88.5 Bridge Drain Basin Lt. Lt. Lane
5"x102' Cl. A Unperf. Underdrain Pipe - Incl.
1-10° Bend - Bevel Outlet to Fit Slope
Cl. 3 Exc. = 31

NOTE: Stations Are Projected Radially From ℄ Med.



BRIDGE DRAINS

7/5+85.0 Rt. Rt. Lane
7/5+85.4 Lt. Rt. Lane
7/5+88.1 Rt. Lt. Lane
7/5+88.5 Lt. Lt. Lane

F.L. 952.8

NOTE: Stations Are Projected Radially from ℄ Med.

FINAL PLANS

STATE	JOB NO. 7-P-71-21 I	SHEET NO.
MO.	PROJECT NO. 7-P-71-21 I	58
DIST. NO.	COUNTY	ROUTE
7	JASPER	71

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
STANDARD PLANS

SP-2
OCTOBER, 1984

✓	NO.	DESCRIPTION	
✓	203.00E	EXCAVATION & EMBANKMENT	
	203.02C	UNDERGRADING	
	203.10A	TABULATED EARTHWORK & SECTION DATA	
✓	203.20A	SUPERELEVATION SPIRALS & WIDENING (UNDIVIDED)	
✓	203.21A	SUPERELEVATION SPIRALS & WIDENING (DIVIDED)	
✓	203.30A	ENTRANCES & APPROACHES (LESS THAN 400 ADT)	
	203.31B	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - NO SAFETY ZONE)	
✓	203.32D	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - SAFETY ZONE)	
	203.35A	MAILBOX TURNOUTS	
	203.40D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (NO SAFETY ZONE)	
✓	203.41D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (SAFETY ZONE)	
	203.50J	TYPICAL CROSS-OVERS (DIVIDED HIGHWAYS)	
	204.00D	EMBANKMENT CONTROL MEASURING DEVICES	
✓	502.00J	CONCRETE PAVEMENT APPURTENANCES	
✓	502.10C	DOWEL SUPPORTING UNITS	*
✓	503.00H	CONCRETE APPROACH SLABS TO BRIDGES (ALSO INCLUDE 502.00)	
	602.00A	RIGHT-OF-WAY & DRAIN MARKERS	
	604.05A	PIPE CULVERT HEADWALLS - TYPE S	
	604.10B	HEADWALL-WITH ENERGY DISSIPATOR - 18"	
	604.11B	HEADWALL-WITH ENERGY DISSIPATOR - 24"	
	604.12B	HEADWALL-WITH ENERGY DISSIPATOR - 30"	
	604.13B	HEADWALL-WITH ENERGY DISSIPATOR - 36"	
	604.14B	HEADWALL-WITH ENERGY DISSIPATOR - 42"	
	604.15B	HEADWALL-WITH ENERGY DISSIPATOR - 48"	
	604.20B	DROP INLET - TYPE B	
	604.21B	DROP INLET - TYPE C	
	604.22B	DROP INLET - TYPE D	
	604.23B	DROP INLET - TYPE E	
	604.24B	DROP INLET - TYPE EE	
	604.25B	DROP INLET - TYPE F	
	604.26C	DROP INLET - TYPE G	
	604.27C	DROP INLET - TYPE S (3 SHEETS)	
	604.28D	DROP INLET - TYPE T (ALSO INCLUDE 614.30)	
	604.29C	DROP INLET - TYPE X	
	604.30F	CONCRETE MANHOLES (ALSO INCLUDE 614.30)	
	604.40E	PIPE COLLARS	
	605.10A	CLASS A UNDERDRAINS	
✓	606.00S	GUARD RAIL (2 SHEETS)	
	606.20G	BRIDGE ANCHOR SECTION - BRUSH CURB (ALSO INCLUDE 606.00)	*
	606.21E	BRIDGE ANCHOR SECTION - CURB TYPE (ALSO INCLUDE 606.00)	*
✓	606.22D	BRIDGE ANCHOR SECTION - SAFETY BARRIER CURB (INCLUDE 606.00)	
✓	606.30E	TERMINAL SECTION (ALSO INCLUDE 606.00)	
	606.40A	GUARD CABLE	
	607.10P	CHAIN LINK FENCE	*
	607.11B	CHAIN LINK FENCE FOR RETAINING WALLS	
	607.20E	WOVEN WIRE FENCE (ALSO INCLUDE 607.10)	

✓	NO.	DESCRIPTION	
	608.00C	PAVED APPROACHES	*
	608.10F	CONCRETE SIDEWALK & WHEELCHAIR RAMPS	
	608.20B	CONCRETE STEPS	
✓	609.00G	CONCRETE CURB - CURB & GUTTER - GUTTER	
	609.15A	PAVED DITCHES	
✓	609.40D	DRAIN BASIN, SHLDR. PAVING & FILL SLOPE AT BR. ENDS	
✓	609.60A	DITCH LINER	
	609.70C	ROCK LINING FOR CULVERT OUTLETS	
	610.20E	BRICK MANHOLES (ALSO INCLUDE 614.30)	
	611.60K	CONCRETE SLOPE PROTECTION	
✓	612.10K	BARRICADES AND FLASHER SIGNS	
	614.10K	CURB INLETS, GRATES & BEARING PLATES	*
	614.30C	MANHOLE FRAMES & COVERS	
	615.00A	OFFICE FOR ENGINEER	
✓	616.10C	TRAFFIC CONTROL DEVICES (2 SHEETS) (ALSO INCLUDE 903.01)	*
	617.00S	CONCRETE MEDIAN BARRIER (3 SHEETS)	*
	702.01E	16" CONCRETE PILES (APPROVED TYPES) (2 SHEETS)	
	702.02B	CAST-IN-PLACE CONCRETE PILES (APPROVED TYPES)	
	703.15D	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (INCL. 706.35)	
	703.16C	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)	
	703.20D	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (INCL. 706.35)	
	703.21C	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)	
	703.24D	CONCRETE BOX CULVERTS, SKEW DATA (703.15, 703.20, 703.30) (INCL. 706.35)	
	703.25C	CONCRETE BOX CULVERTS, SKEW DATA (703.16 & 703.21)(3 SHEETS)(FLARED WINGS) (INCL. 706.35)	
	703.30C	CONCRETE BOX CULVERTS, 4' SPANS & LESS - ALL LOADING (INCL. 706.35)	
	703.35B	CONCRETE BOX CULVERTS, CUTTING DETAILS (STRAIGHT WINGS) (INCL. 706.35)	
	703.36A	CONCRETE BOX CULVERTS, CUTTING DETAILS (FLARED WINGS) (INCL. 706.35)	
	703.50E	CONCRETE DOUBLE BOX STRUCTURE - SQUARE (INCL. 706.35)	*
	703.51D	CONCRETE DOUBLE BOX STRUCTURE - SKEWED (INCL. 706.35)	*
	703.52B	CONCRETE DOUBLE BOX STRUCTURE - CUT SECTIONS (INCL. 706.35)	
	703.53C	DOUBLE BOX STRUCTURE REINFORCEMENT - H15 LOADING (6 SHEETS)	
	703.54C	DOUBLE BOX STRUCTURE REINFORCEMENT - H20 OR HS20 LOADING (6 SHEETS)	
	703.55B	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SQUARE (INCL. 706.35)	*
	703.56B	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SKEWED (INCL. 706.35)	*
	703.60C	CONCRETE BOX STRUCTURE - PIPE INLET	
	706.30D	REINFORCING BAR SUPPORTS	
	706.35D	BAR SUPPORTS FOR CONCRETE REINFORCEMENT	
	712.40B	STEEL DAMS FOR BRIDGES (6" CHANNEL)	
	712.41B	STEEL DAMS FOR BRIDGES (4" CHANNEL)	
	725.31C	METAL CURTAIN WALL AND METAL INLETS	
✓	726.30C	CULVERT INSTALLATION METHODS	*
	731.00N	PRECAST MANHOLES (ALSO INCLUDE 614.30)	
	731.10P	PRECAST DROP INLETS (4 SHEETS) (ALSO INCLUDE 614.30 & 614.10)	
	732.00K	FLARED END SECTION (2 SHEETS)	*
	806.00C	EROSION CONTROL NETTING (INSTALLATION) TYPE I	
✓	806.02	STAPLE PLACEMENT FOR TYPE III NETTING	

✓	NO.	DESCRIPTION	
		HIGHWAY LIGHTING	
	901.00L	POLES & APPURTENANCES - 30' (3 SHEETS)	
✓	901.01O	POLES & APPURTENANCES - 45' (3 SHEETS)	*
✓	901.05A	CONTROL PANEL CABINET DETAILS (2 SHEETS) (NOTE BELOW)	*
	901.12A	POLE MOUNT. CONT. STA.-SECONDARY SERV.-480 V MULTI. CIR. (NOT METERED)	
	901.15C	POLE MOUNT. CONT. STA.-SEC. SERV.-120, 240, & 480 V MULTI. CIR.	
	901.16B	POLE MOUNT. CONT. STA.-SEC. SERV.-480 V MULTI. CIR. (METERED)	
	901.18B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.	
	901.19B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (NOT METERED)	
	901.20B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR. (SIG. METERED)	
	901.22C	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 & 480 V MULTI. CIR. (BOTH METERED)	
	901.23C	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (METERED)	
✓	901.24R	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (LT'S & SIGS-BOTH METERED)	
	901.25B	BASE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.	
		NOTE: ALSO INCLUDE 901.05 WITH 901.12 THROUGH 901.25 EXCEPT 901.18	
		TRAFFIC SIGNALS	
✓	902.00D	SIGNAL HEADS, LENSES AND MOUNTING	
✓	902.10E	PULL BOXES, CONTROLLERS, COND. LOCATION	*
✓	902.15A	POWER SUPPLY ASSEMBLY	*
	902.21B	TELEPHONE INTERCONNECT	*
✓	902.30E	CONCRETE BASES	*
✓	902.40F	TUBULAR STEEL POST	*
✓	902.50E	DETECTORS	*
	902.60E	SPAN WIRE DETAILS - STEEL POST	*
	902.70A	SPAN WIRE DETAILS - WOOD POLE	*
		HIGHWAY SIGNING	
✓	903.01C	ALPHABETS (2 SHEETS)	
✓	903.02T	HIGHWAY SIGNING (7 SHEETS)	*
✓	903.03AF	SIGN MOUNTING DETAILS (6 SHEETS)	*
	903.04D	WEIGH STATION SIGNING	*
	903.05C	TUBULAR SPAN SUPPORT - ONE TUBE, TYPE S	
	903.06C	TUBULAR SPAN SUPPORT - TWO TUBE, TYPE S	
	903.07C	TUBULAR CANTILEVER SUPPORTS, TYPE C	
	903.08C	TUBULAR BUTTERFLY SUPPORTS, TYPE B	
✓	903.09C	LIGHTING SUPPORT BRACKET	
✓	903.10S	SIGN TRUSSES - OVERHEAD ALUMINUM (8 SHEETS) (INCL. 903.03)	
	903.12L	SIGN TRUSSES - BUTTERFLY & CANTILEVER - STEEL (7 SHEETS) (INCL. 903.03)	
✓	903.60Q	SIGN TRUSSES - OVERHEAD STEEL (7 SHEETS) (INCL. 903.03)	

NOTES: Plans for this project were developed using Drawings from this index.

*Revised since April, 1983.

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DESIGN DESIGNATION

A.D.T. · 1981 = 9,000
A.D.T. 2001 = 14,400
D.H.V. 1,580
D/D 60/40
T = 9 %
V = 60 M.P.H.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED STATE HIGHWAY

FEDERAL AID PROJECT

JASPER COUNTY

COUNTY JASPER
ROUTE 71A T
PROJECT FEGC-71-2(44)
JOB NO 7-U — 71A-21C

FINAL PLANS

FULLY LIMITED ACCESS HIGHWAY

THIS SHALL BE A FULLY LIMITED ACCESS HIGHWAY BETWEEN STA 712+50.6 AND STA 752+19.7 NO ABUTTING OWNER SHALL HAVE THE RIGHT OF DIRECT ACCESS TO SAID HIGHWAY OR ITS RIGHT-OF-WAY EXCEPT THAT ACCESS WILL BE PERMITTED TO ANY ADJACENT OUTER ROADWAY OR SERVICE ROAD TO WHICH ACCESS IS NOT SPECIFICALLY PROHIBITED BY THE SPECIAL SYMBOL DENOTING "NO RIGHT OF ACCESS" AS SHOWN ON THE PLANS. NO ACCESS WILL BE PERMITTED FROM OUTER ROADWAYS AND SERVICE ROADS TO THROUGHWAYS EXCEPT ALONG ROUTES CONSTRUCTED FOR THAT PURPOSE. OUTER ROADWAYS AND SERVICE ROADS, AS THE CASE MAY BE, ARE SO DESIGNATED ON THE PLANS.

BEGINNING AND ENDING OF LIMITED ACCESS

LIMITED ACCESS

NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

CONVENTIONAL SIGNS
(USED IN PLANS)

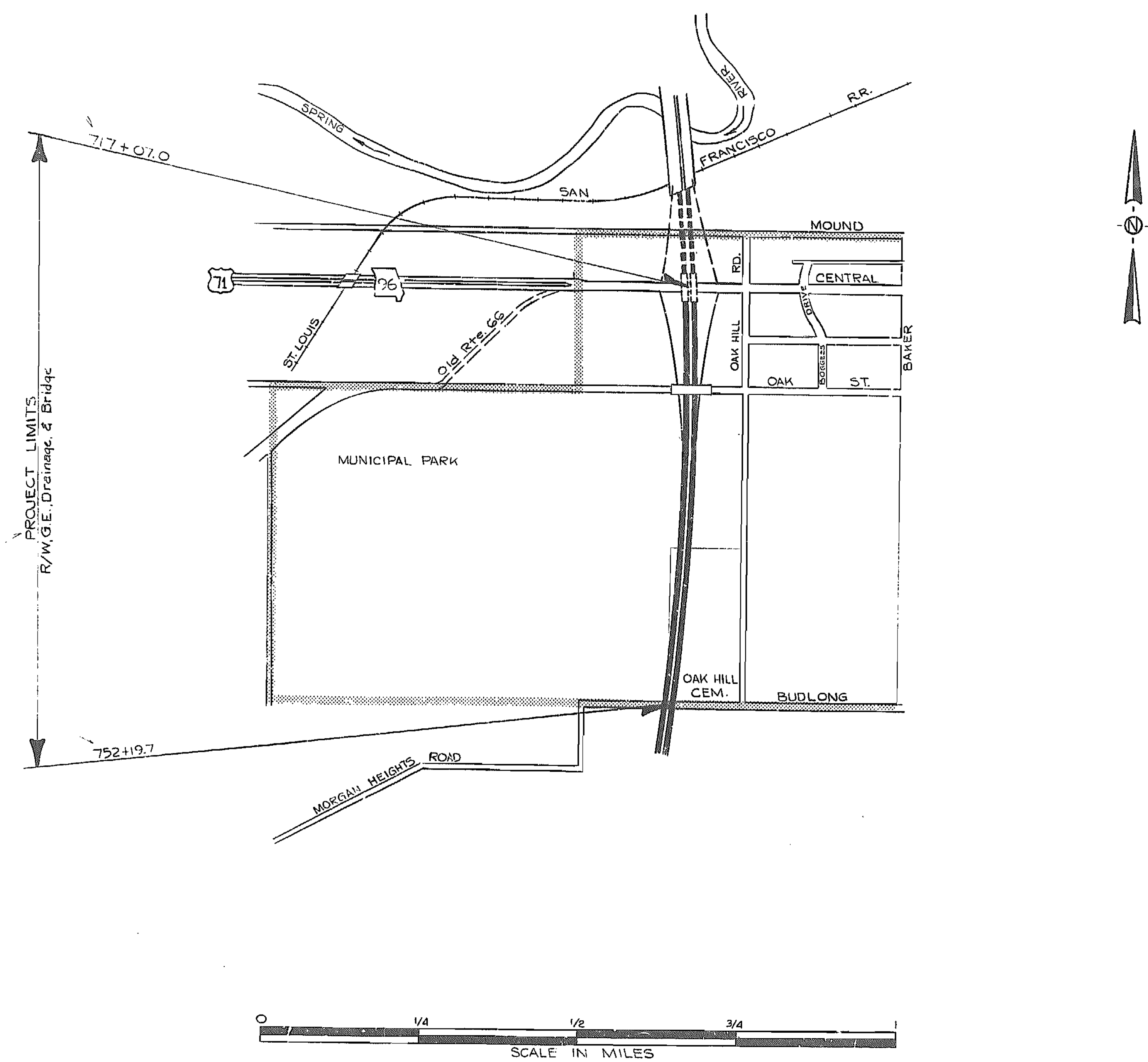
BUILDINGS AND STRUCTURES
GUARD RAIL
CONCRETE RIGHT-OF-WAY MARKER
STEEL RIGHT-OF-WAY MARKER
FENCE
- CHAIN LINK
- WOVEN WIRE
- GATE

UTILITIES
- TELEPHONE
- POWER
- GAS
- WATER

CITY LIMITS

NOTE: DASHED OR OPEN SYMBOL INDICATES EXISTING FEATURE

AWARDED
DEC 30 1983
HIGHWAY & TRANSPORTATION DEPT.



INDEX OF SHEETS

LENGTH OF PROJECT

END OF PROJECT	STA. 752 + 19.7	
BEGINNING OF PROJECT	STA. 717 + 07.0	
APPARENT LENGTH	3512.7	FEET
EQUATIONS AND EXCEPTIONS	None	
TOTAL CORRECTIONS	None	FEET
NET LENGTH OF PROJECT	3512.7	FEET
STATE LENGTH	0.665	MILES
FEDERAL LENGTH	0.665	MILES

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUBMITTED

CHIEF ENGINEER DATE

STATE OF MISSOURI
ROBERT N. HUNTER
NUMBER

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION

APPROVED

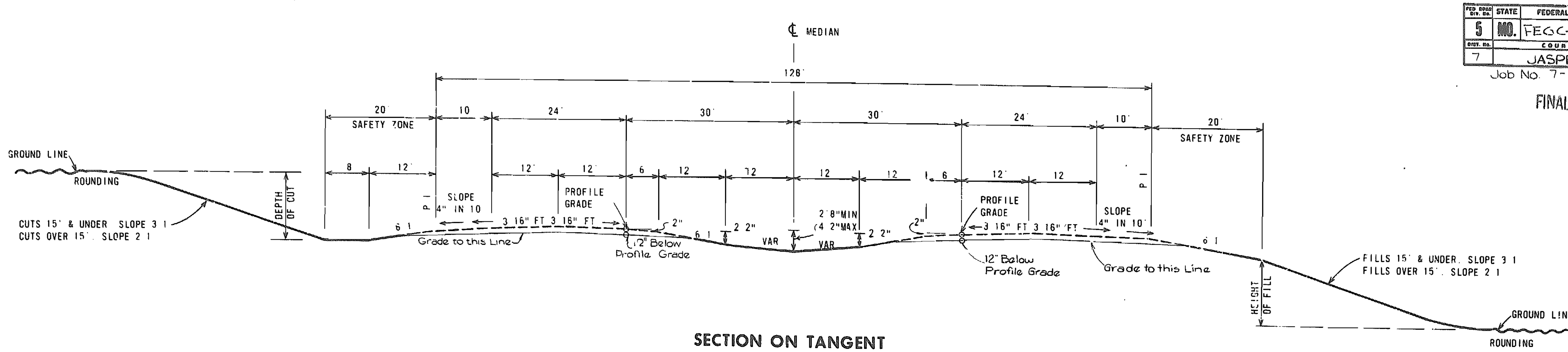
DIVISION ENGINEER DATE

Ref 35

FED. ROAD DIV. No.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	FEGC-71-2(44)	2
DIST. No.	COUNTY		ROUTE
7	JASPER		71A

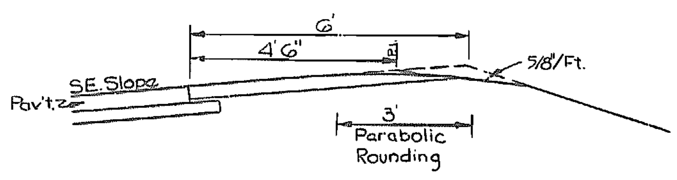
Job No. 7-U-71A-21C

FINAL PLANS

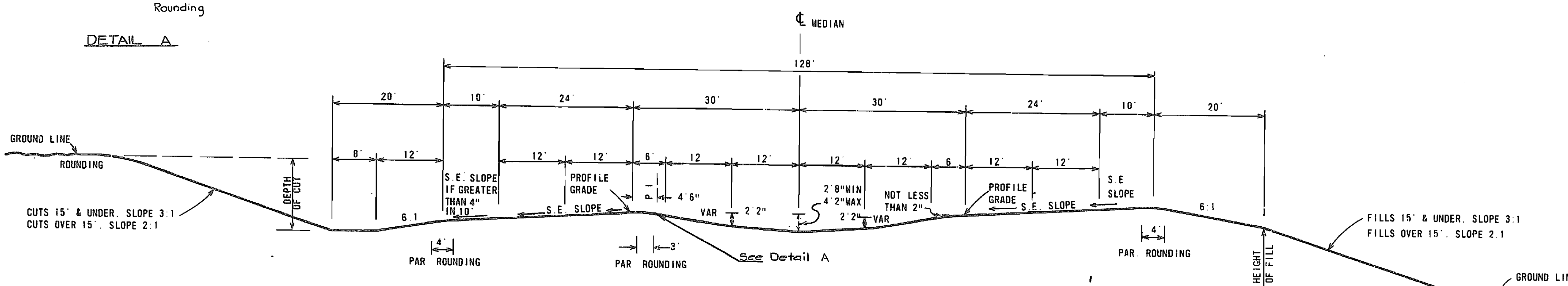


SECTION ON TANGENT

STA. 718+05 TO 752+19.7

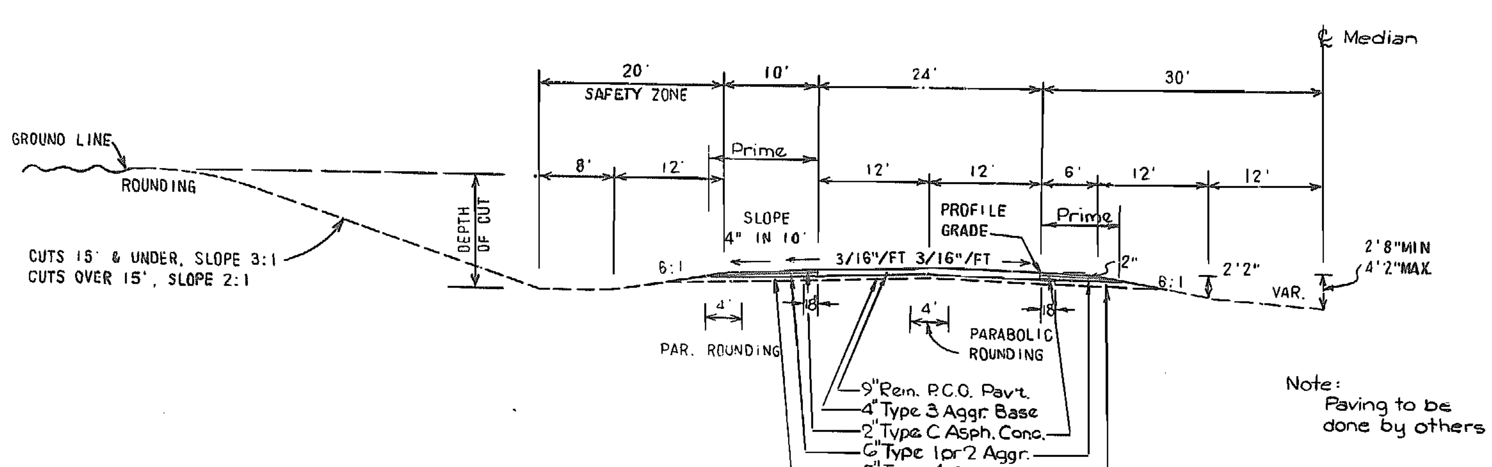


DETAIL A

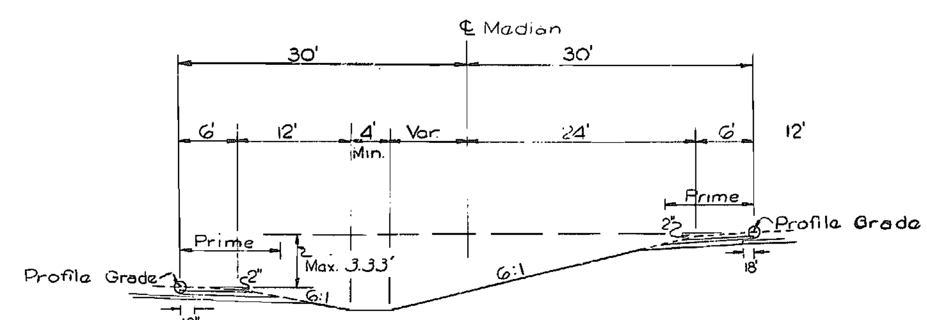


SECTION ON SUPERELEVATED CURVE

PAVING DETAIL



Note:
Paving to be done by others



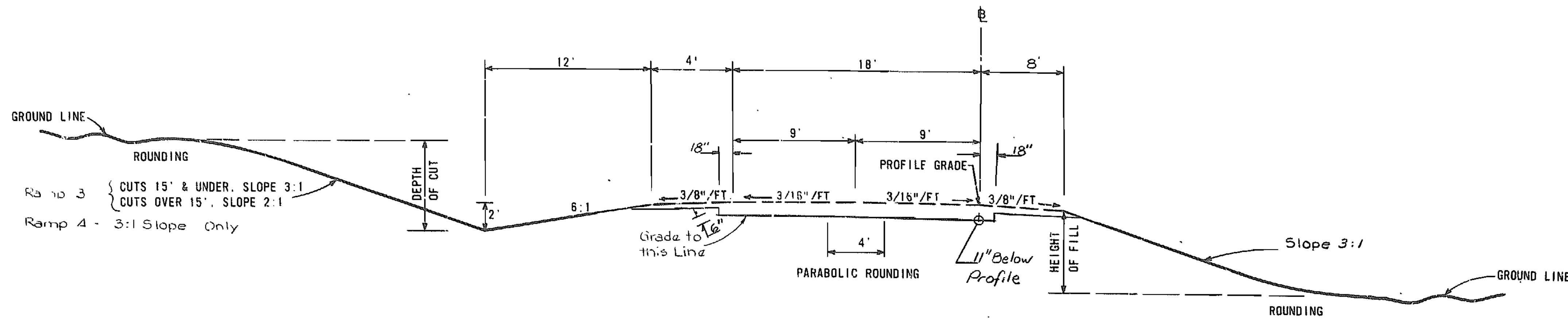
Difference in Elevation
Median Template
(Does Not Apply to this Project.)

128 FOOT ROADBED - 2-24 FOOT TRAVEL WAYS - 60 FOOT MEDIAN (WITH SAFETY ZONES)

FED. ROAD DIV. No.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	FEGC-71-2(44)	2
DIST. No.		COUNTY	ROUTE
7		JASPER	71A

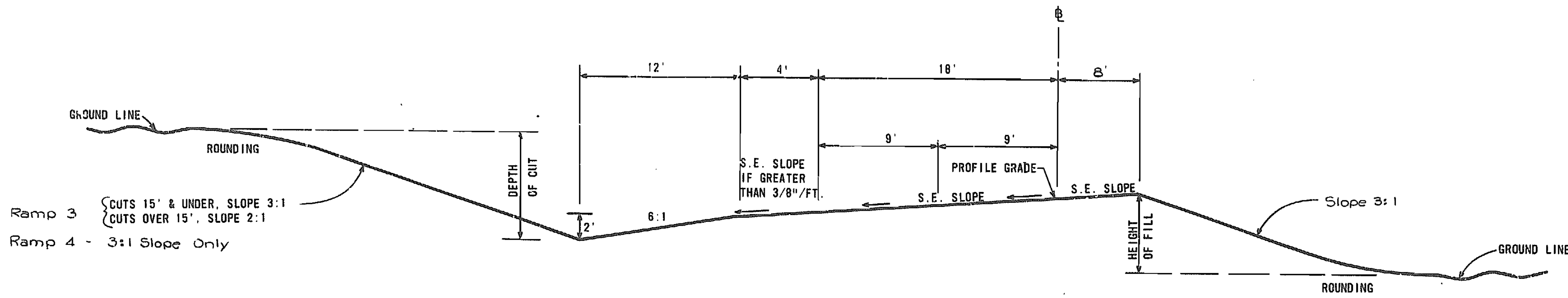
Job No. 7 U-71A-21C

FINAL PLANS



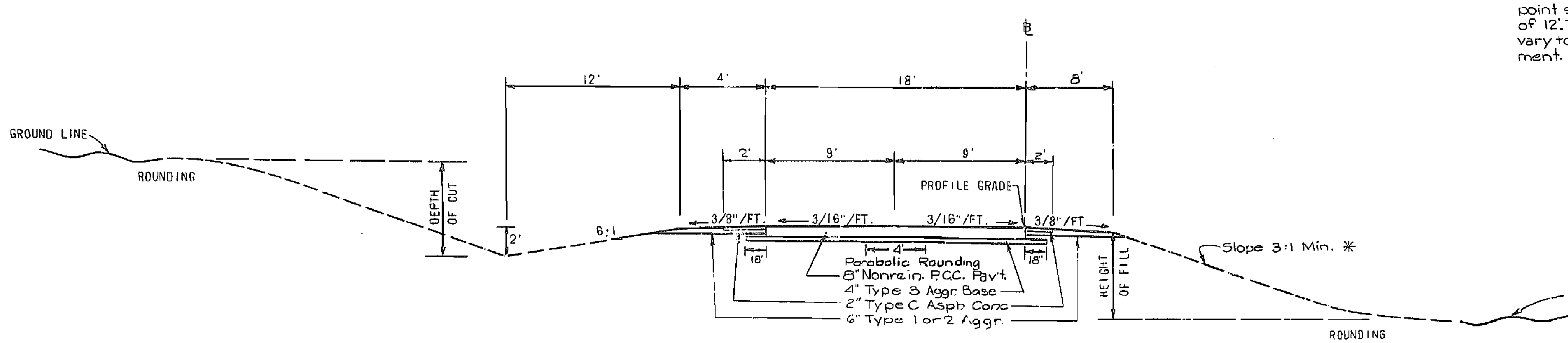
SECTION ON TANGENT

RAMP #3 STA. 0+42.8 TO 9+91.8
RAMP #4 STA. 0+42.5 TO 11+34.0



SECTION ON SUPERELEVATED CURVE

* The offset from toe of fill to the shoulder point shall be a min. of 12'. The slope will vary to meet this requirement.



FUTURE PAVING TYPICAL SECTION

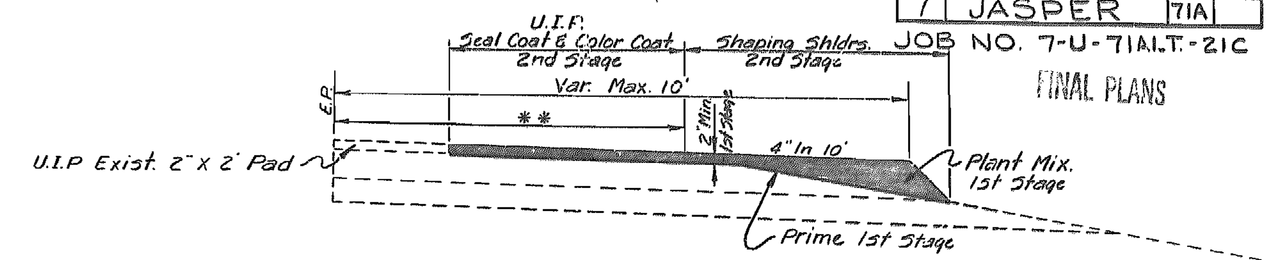
26 FOOT ROADBED - 18 FOOT TRAVEL WAY (FOR INTERCHANGE RAMPS)

RAMPS 3 & 4
CENTRAL STREET INTERCHANGE

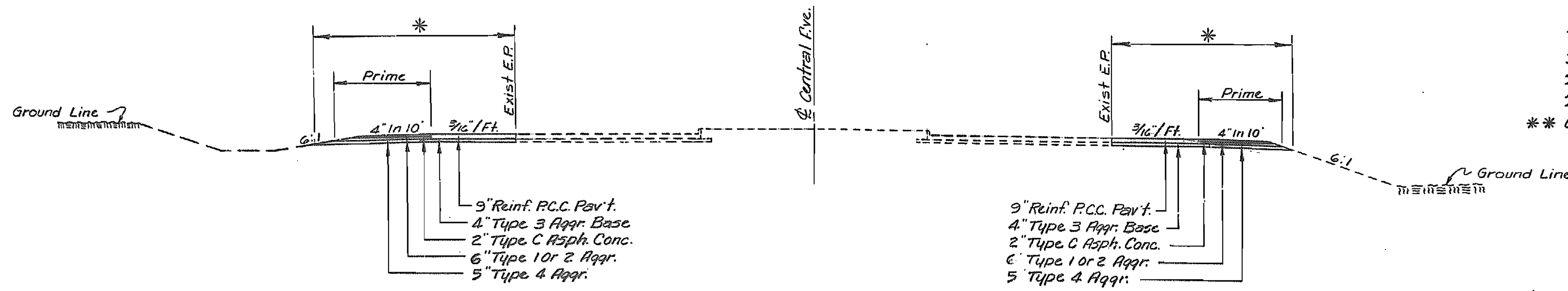
FED. ROAD DIV. NO.	STATE	JOB NO.		SHEET NO.
7	MO.	PROJECT NO. FEGC-71-Z (44)		2
DIST. NO.		COUNTY	ROUTE	SEC.
7		JASPER	71A	

JOB NO. 7-U-71ALT.-21C

FINAL PLANS



— PAVING DETAIL —



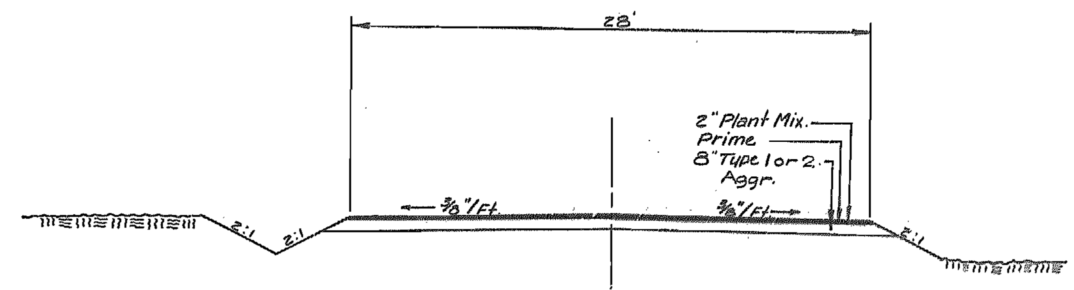
Sta. 453+66 To Sta. 459+20 &
Sta. 465+80 To Sta. 470+00

Temp. Left Turn Lane (Central Ave.)
Sta. 453+21 To 453+32 (Var. 0' To 10')
Sta. 453+32 To 455+00 (10' Shldr.)
Sta. 455+00 To 455+50 (Taper 10' To 6')
** Exist. Inside Shldr. West Bound Lane

NOTE:
Excavation For Plant Mix On Exist. Shldrs. Was Incl. In Cost Of Plant Mix.

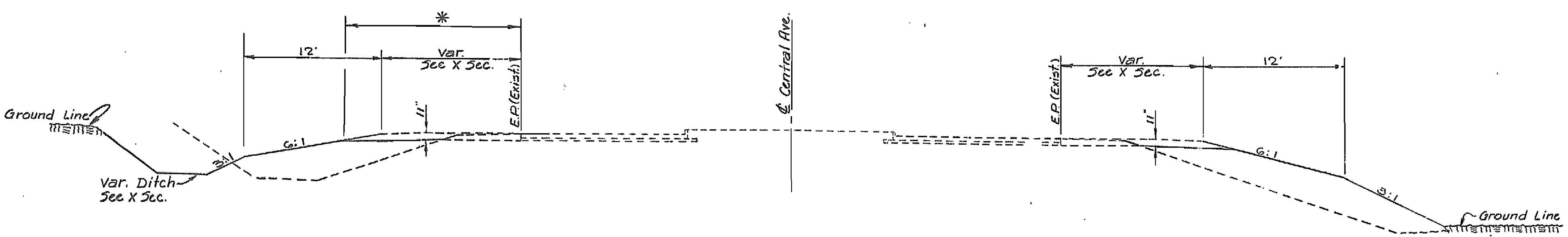
NOTE:
2nd Stage Used 2" Asph. In Place Seal Coated & Color Coated all Shldrs That Were Used For Temp. Conn.

* Note:
To Be Built By Others



Temp. Conn. Rt. Sta. 453+00 On Central Ave.
Sta. 0+00 To 0+60 & 0+84 To 4+50

— GRADING DETAIL —



Sta. 453+66 To Sta. 459+20 &
Sta. 465+80 To Sta. 470+00

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Central Ave. &
Temp. Conn. Rt. Of Central

Sheet 3 of 3.

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

FINAL PLANS

STATE	JOB NO	SHEET NO
MO.	7-U-71A-21C	2A
DIST NO	PROJECT NO FEGC-71-2 (44)	ROUTE
7	COUNTY JASPER	71 ALT.

SUMMARY OF QUANTITIES
(REVISED)

SHEET 1 OF 1

ITEM	DESCRIPTION	UNIT	QUANTITY
201-10.00	CLEARING	ACRE	18.3
201-20.00	GRUBBING	ACRE	17.5
202-20.10	REMOVAL OF IMPROVEMENTS	LUMP SUM	1.0
203-10.00	CLASS A EXCAVATION (1)	CU YD	355,932
203-20.00	CLASS C EXCAVATION	CU YD	179,404
203-60.00	COMPACTING EMBANKMENT	CU YD	26,128
203-70.00	COMPACTING IN CUT	CU YD	6,446
205-10.00	OVERHAUL (STATION)	STA YD	36,723,303
206-30.00	CLASS 3 EXCAVATION	CU YD	228
207-10.00	LINEAR GRADING CLASS 1	STATION	3.6
213-10.00	SHAPING SHOULDERS CLASS I	MILE	.14
304-00.83	TYPE 1 AGGREGATE FOR BASE (8 IN. THICK)	SQ YD	1423
304-03.43	TYPE 3 AGGREGATE FOR BASE (4 IN. THICK)	SQ YD	300
309-11.08	CONCRETE BASE (8 IN. NON-REINFORCED)	SQ YD	169.3
390-90.00	TEMPORARY SURFACING	CU YD	0
401-10.11	ASPHALT CEMENT (BITUMINOUS PAVEMENT) AC-20	TON	16.0
401-20.10	MINERAL AGGREGATE (BITUMINOUS PAVEMENT) GRADE C	TON	305
408-10.10	PRIME-LIQUID ASPHALT MC 30	GALLON	650
409-10.05	BITUMINOUS MATERIAL (SEAL COAT)	GALLON	0
409-20.22	COVER AGGREGATE GRADE 2	TON	0
503-10.00	BRIDGE APPROACH SLAB	SQ YD	160.0
601-10.00	FIELD LABORATORIES	LUMP SUM	1
606-10.10	GUARD RAIL TYPE A	LIN FT	375
606-30.00	TERMINAL SECTION	EACH	4
607-10.12	CHAIN-LINK FENCE (60 IN. TYPE A)	LIN FT	6,532
608-60.04	CONCRETE SIDEWALK, 4 IN.	SQ YD	30.1
609-60.00	DITCH LINER	SQ YD	302
611-60.10	CONCRETE SLOPE PROTECTION	SQ YD	1585.7
612-10.30	MOVABLE BARRICADES	EACH	6
614-10.10	GRATES AND BEARING PLATES	POUND	550
616-10.05	CONSTRUCTION SIGNS	SQ FT	766
616-10.20	DRUMS	EACH	34
616-10.40	FLASHING ARROW PANEL	EACH	1
616-10.47	TYPE III OBJECT MARKER	EACH	34
616-10.50	FLASHING ELECTRIC LIGHT	EACH	4
621-04.21	TEMPORARY PAVEMENT STRIPING, 4 IN., SOLID YELLOW	100 FT	26
621-99.05	TEMPORARY PAVT. STRIPING 24 IN., SOLID YELLOW	100 FT.	1
725-02.18	12 IN. PIPE CULVERT GROUP II	LIN FT	96

ITEM	DESCRIPTION	UNIT	QUANTITY
726-13.18	18 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	151
726-13.24	24 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	240
726-13.48	48 IN. CLASS III REINFORCED CONCRETE PIPE CULVERT	LIN FT	11
731-10.53	PRECAST CONCRETE DROP INLET 5 FT X 3 FT	FT	4
732-00.18	18 IN. FLARED END SECTION	EACH	4
732-00.24	24 IN. FLARED END SECTION	EACH	2
802-20.00	TYPE 2 MULCH	ACRE	18.1
802-99.88	MULCH OVERSPRAY	ACRE	18.1
805-10.00	SEEDING	ACRE	18.1
806-30.00	NETTING TYPE III	SQ YD	0
903-50.15	TYPE IV OBJECT MARKER	EACH	14
	BRIDGE DWG. NO. A-3559 STA.716+08.29SBL 716+11.20NBL		
206-10.00	CLASS 1 EXCAVATION	CU YD	283
702-10.10	STRUCTURAL STEEL PILES (10 IN.)	LIN FT	3657
702-70.00	PILE POINT REINFORCEMENT	EACH	92
703-20.03	CLASS B CONCRETE (SUBSTR)	CU YD	190.7
703-40.30	CLASS B-1 CONCRETE (BARRIER CURBS)	CU YD	69.4
703-42.05	CLASS B-2 CONCRETE (SUPSTR VOIDED SLABS)	CU YD	1,078.2
706-10.60	REINFORCING STEEL (BRIDGES)	POUND	101,830
710-10.00	REINFORCING STEEL (EPOXY COATED)	POUND	110,260
	BRIDGE DWG. NO. A-3561 AT STA. 725+73		
206-10.00	CLASS 1 EXCAVATION	CU YD	159.0
607-10.66	(72 IN.) PEDESTRIAN FENCE (STRUCTURES)	LIN FT	371
702-10.10	STRUCTURAL STEEL PILES (10 IN.)	LIN FT	169
702-70.00	PILE POINT REINFORCEMENT	EACH	8
703-20.03	CLASS B CONCRETE (SUBSTR)	CU YD	191.0
703-40.20	CLASS B-1 CONCRETE (SUPSTR.)	CU YD	122.4
703-42.04	CLASS B-2 CONCRETE (SUPSTR ON STEEL)	CU YD	0
703-82.45	PREFORMED COMPRESSION EXPANSION JOINT SEAL (4.5 IN.)	LIN FT	72
706-10.60	REINFORCING STEEL (BRIDGES)	POUND	30,990
707-10.00	CONDUIT SYSTEM ON STRUCTURE	LUMP SUM	1
710-10.00	REINFORCING STEEL (EPOXY COATED)	POUND	18,780
712-10.20	FABRICATED STRUCTURAL CARBON STEEL (PLT GIR)	POUND	269,460
712-11.21	FABRICATED STRUCTURAL LOW ALLOY STEEL (PLATE GIRDERS) A-572	POUND	70,690
712-36.10	SLAB DRAINS	EACH	20
712-40.02	PAINTING (SYSTEM B) ALUMINUM	TON	169.3

ITEM	DESCRIPTION	UNIT	QUANTITY
	CONTINGENT ITEMS		
501.01	Reconstruct Backslope	Dollar	79808.33
501.02	Bridge Anchor Section	Each	1
501.03	Asphalt Cement (Bit. Base) AC-20	Ton	1.2
501.04	Mineral Aggregate (Bit. Base)	Ton	29
501.05	Pavement Stripe Removal	100 Ft.	2
503.01	P/C Panel Slab on Stl. Girders	Sq. Yd.	1476
503.02	Fabricated Sign Support Bracket	Dollar	8893.00
503.03	Class I Excavation +25%	Cu. Yd.	27.5
503.04	Drilling Test Holes	Lin. Ft.	56
503.05	Crevice Concrete	Cu. Yd.	10.5
	FOOTNOTES		
(1)	INCL. 323 C.Y. ROUNDING		

Mark J. Sartor 8-8-86

PREPARED BY Danny L. Whiteside DATE: 6-2-86

PROJECT ACCEPTED DATE: April 10, 1986

DISTRICT CHECKED BY: [illegible] DATE: 6-16-86

JASPER 71 ALT. FEGC-71-2(44)

Rev. 11/22/83 (JDL)

SP-2B

MISSOURI STATE HIGHWAY COMMISSION

SUMMARY OF QUANTITIES

Sheet 1 of 2

FED. ROAD DIVISION	STATE	PROJECT	SHEET NO.
5	MO.	FEGC-71-2(44)	2B
DIST. NO.	COUNTY		ROUTE
7	JASPER · FINAL PLANS		71A

JOB NO. 7-U-71A-21C

REMOVAL OF IMPROVEMENTS

TOTAL: LUMP SUM

CLEARING & GRUBBING

SHEET	CLEAR UNITS	GRUB. UNITS
3	556	534
5	1039	992
Sub Total	1595	1526
TOTAL	78.3 Ac.	17.5 Ac.

BRIDGE APPROACH SLABS

SHEET	STA.	STA.	LOC.	SKEW	CONC. SQ. YD.	REMARKS
3	8+23±	8+43±	Oak St.	Sq.	80.0	Excavation Incl. In Bid Item
3	11+83±	12+03±	Oak St.	Sq.	80.0	Excavation Incl. In Bid Item
			TOTAL:		160.0	

GUARD RAIL TYPE A

SHEET	STA.	STA.	LOC.	TERMINAL SECT.	LIN. FT.	BRDG. ANCH. SECT.	REMARKS
3	724+85.5	726+35.5	6' Rt.	1	150'		MEDIAN
3	725+10.5	726+60.5	6' Lt.	1	150'		MEDIAN
3	11+98±	12+73±	Lt.	1	75	1	OAK STREET
3	7+98±	8+23±	Lt.	1			OAK STREET
			TOTAL	4	375'	1	

TYPE IV OBJECT MARKERS

SHEET	STA.	LOC.	NO.	REMARKS
5	752+00±	Lt. ℄	5	Budlong St. @ R/W Line
5	752+40±	Rt. ℄	5	Budlong St. @ R/W Line
3	2+40±	℄	4	Temp. Conn. Rt. 453+00 Rte. 71 & 96 (On R/W Line) (2nd Stage)
		TOTAL:	14	

PIPE CULVERT GROUP II

SHEET	STA.	LOC.	SKEW	18"	Cl. 3 Exc. C.Y.	REMARKS
3	0+30	℄		46'	0	Temp. Conn. Central Ave.
3	1+14	℄		50'	0	Temp. Conn. Central Ave.
		TOTAL		96'		

CLASS III REINFORCED CONCRETE PIPE CULVERTS

SHEET	STA.	LOC.	SKEW	18"	24"	48"	FLARED END SEC. 18"	FLARED END SEC. 24"	Cl. III Exc. C.Y.	REMARKS
3	459+00	Rt. ℄				11'			7	Relay Exist. Flared End Sect.
3	1+12	Ramp 3		73'			2		36	
3	1+00	Ramp 4		68'			2		23	
3	724+98	Lt. ℄			115'			1	118	71' Lt. ℄ Rt. 10° Ahd.
3	724+99.5	Lt. ℄			125'			1	44	
3	12+21	Lt. Oak		10'						Under Sidewalk In Present Ditch
		TOTALS		151	240'	11	4	2	228	

CONCRETE SIDEWALKS

SHEET	STA.	STA.	LOC.	WIDTH	4" Thick Sq. Yds.	REMARKS
3	8+00	8+27±	Lt. ℄ Oak St.	4' To 4.4'	12.76	
3	11+89.5	12+38.8	Lt. ℄ Oak St.	3.8' To 4.4'	17.37	
			TOTAL		30.13	
			Use		30.1	

DITCH LINER

SHEET	STA.	STA.	LOC.	TYPE	DEPTH	LENGTH	WIDTH	S.Y.	SLOPES	REMARKS
3	11+22	12+10	Lt. Oak St.	2'	.5'	94'	4.25'	44.3	2:1-2:1	Ramp & Dit. To Culv. Flowline
3	1+00	1+68	Rt.	8' To 4'	1'	74'	Var.	117.8	6:1-3:1	Ramp 4
3	458+86	459+05	Rt.	8'	1'	76'	8'	125.8	3:1-3:1	Central Ave.
3	8+46.7	8+70.7	℄ Oak St.		.5'	24'	Var.	13.8	Under Oak St. Bridge	
							Total	301.7		
							Use	302		

CHAIN LINK FENCE (60" TYPE A)

SHEET	STA.	STA.	LOC.	LIN. Ft.	REMARKS
3	719+13.6	725+33.5	Lt. ℄	640'	
3	719+15.0	725+54.7	Rt. ℄	640'	
3	725+95	731+00	Lt. ℄	508'	
3	726+17	731+00	Rt. ℄	485'	
5	731+00	751+72	Lt.	2102'	
5	731+00	739+00.3	Rt.	798'	
5	738+97.7	739+00.3	Rt.	45	
5	738+77.7	752+18	Rt.	1314	
		TOTAL		6532'	

4" CONCRETE SLOPE PROTECTION

Sheet	Sta.	Loc.	Size	Conc. Sq. Yd.	Remarks
3	716+31	℄ Med.		643.1	N. End Bridge
3	717+28	℄ Med.		641.3	S. End Bridge
3	11+67	Oak St.		300.8	W. End Bridge
		Total		1585.7	Sq. Yds.

PRECAST CONCRETE DROP INLET

SHEET	STA.	LOC.	TYPE	SIZE FT.	"D"	PIPE Opening In.	5X3 Lin. Ft.	GR. & Brg. Plates Lbs.	Cl. 3 Exc.	REMARKS
3	724+98	5.5' Lt.	S-2	5X3	3.5'	(2) 24"	4	550	*	*Incl. In 24" R.C.P.
						TOTALS	4	550		

TEMPORARY PAVEMENT STRIPING

SHEET	LOCATION	4" Yel.	24" Yel.	Remarks
8	See Sht. 8	276'		℄ Oak St.
8	See Sht. 8	80'	41'	65' N. Of Oak St. (Gore Area)
8	See Sht. 8	2208'		Beg. 70' South ℄ Rte. 96 (Sta. 1+00) Temp. Conn. To 12' N. Of ℄ Oak St.
	TOTAL	2564'	41'	

Totals: 4" Solid Yellow Striping - 26 (100 L.F.)
24" Solid Yellow Striping - 1 (100 L.F.)

SP-28S REV APR 1 1983

SUMMARY OF QUANTITIES

Sheet 2 of 2

STATE	JOB NO. 7-U-71A-21C	SHEET NO.
MO.	PROJECT NO. FEG(-71-2(44)	2B
DIST. NO.		ROUTE
7	COUNTY JASPER	71A

FINAL PLANS

WARNING SIGNS

SIGN	SIZE (INCHES)	AREA (SQ. FT.)	QUANTITY	TOTAL AREA (SQ. FT.)	QUANTITY RELOCATED	TOTAL RELOCATED AREA (SQ. FT.)	SIGN LEGEND
W1-1L	48x48	16.0					TURN (SYMBOL LEFT ARROW)
W1-1R	48x48	16.0					TURN (SYMBOL RIGHT ARROW)
W1-2L	48x48	16.0					CURVE (SYMBOL LEFT ARROW)
W1-2R	48x48	16.0					CURVE (SYMBOL RIGHT ARROW)
W1-3L	48x48	16.0					REVERSE TURN (SYMBOL LEFT ARROW)
W1-3R	48x48	16.0					REVERSE TURN (SYMBOL RIGHT ARROW)
W1-4L	48x48	16.0					REVERSE CURVE (SYMBOL LEFT ARROW)
W1-4R	48x48	16.0					REVERSE CURVE (SYMBOL RIGHT ARROW)
W1-6	48x24	8.0					HORIZONTAL ARROW (SYMBOL)
W1-6a	72x36	18.0					HORIZONTAL ARROW (SYMBOL)
W1-7	48x24	8.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W1-7a	72x36	18.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
W1-8	18x24	3.0					CHEVRON (SYMBOL)
W3-1	48x48	16.0	1	16.0			STOP AHEAD
W3-2	48x48	16.0					YIELD AHEAD
W3-3	48x48	16.0					SIGNAL AHEAD (SYMBOL)
W3-3X	24x18	3.0					SIGNAL AHEAD (PLAQUE)
W3-4	48x48	16.0					BE PREPARED TO STOP
W5-1	48x48	16.0					ROAD NARROWS
W5-3	48x48	16.0					ONE LANE BRIDGE
W6-1	48x48	16.0					DIVIDED HIGHWAY
W6-2	48x48	16.0					DIVIDED HIGHWAY ENDS
W6-3	48x48	16.0					TWO WAY TRAFFIC
W8-1	48x48	16.0					BUMP
W8-2	48x48	16.0					DIP
W8-3	48x48	16.0					PAVEMENT ENDS
W8-4	48x48	16.0					SOFT SHOULDER
W8-5	48x48	16.0					SLIPPERY WHEN WET (SYMBOL)
W8-5X	24x18	3.0					SLIPPERY WHEN WET (PLAQUE)
W8-6	48x48	16.0					TRUCK CROSSING
W8-7	48x48	16.0					LOOSE GRAVEL
W8-9	48x48	16.0					LOW SHOULDER
W9-1	48x48	16.0					RIGHT LANE ENDS (Includes LEFT/CENTER plate)
W9-2	48x48	16.0					LANE ENDS MERGE RIGHT (Includes LEFT plate)
W10-1	42 Diameter	9.6					RAILROAD CROSSING
W12-1	24x24	4.0					DOUBLE DOWN ARROW (SYMBOL)
W12-2	48x48	16.0	7	112.0			LOW CLEARANCE (SYMBOL)
W12-2X	24x18	3.0	7	21.0			LOW CLEARANCE (PLAQUE)
W12-3	144x24	24.0	2	48.0			OVERHEAD LOW CLEARANCE (FEET AND INCHES)
W13-1	24x24	4.0					ADVISORY SPEED PLAQUE
W20-1	48x48	16.0	7	112.0			ROAD CONSTRUCTION AHEAD (Includes RAMP/BRIDGE plate)
W20-2	48x48	16.0	1	16.0			DETOUR AHEAD (Includes 500 FT./1000 FT. plate)
W20-3	48x48	16.0					ROAD CLOSED AHEAD (Includes 500 FT./1000 FT. plate)
W20-4	48x48	16.0					ONE LANE ROAD AHEAD
W20-5	48x48	16.0	1	16.0			RIGHT LANE CLOSED AHEAD (Includes LEFT/CENTER plate)
W20-6	48x48	16.0	1	16.0			RIGHT LANE CLOSED (Includes LEFT/CENTER plate)
W20-7	48x48	16.0	2	32.0			FLAGMAN AHEAD (Includes 500 FT./1000 FT. plate)
W20-9	48x48	16.0					OPEN TRENCH
W21-2	48x48	16.0					FRESH OIL
W21-5	48x48	16.0					SHOULDER WORK AHEAD
W21-7	36x36	9.0					SAND BLASTING
W25-1	24x6	1.0					1000 FT.-1500 FT. (BACK TO BACK DISTANCE PLAQUE)
W25-2	24x6	1.0					200 FT.-500 FT. (BACK TO BACK DISTANCE PLAQUE)
W25-2a	24x6	1.0	3	3.0			1/2 MILE-1 MILE (BACK TO BACK DISTANCE PLAQUE)

REGULATORY SIGNS

SIGN	SIZE (INCHES)	AREA (SQ. FT.)	QUANTITY	TOTAL AREA (SQ. FT.)	QUANTITY RELOCATED	TOTAL RELOCATED AREA (SQ. FT.)	SIGN LEGEND
R1-1	48x48	13.25	4	53.0			STOP
R1-2	48x48x48	6.93					YIELD
R1-2x	36x36	9.0					TO ONCOMING TRAFFIC (PLAQUE)
R1-3	20x9	1.25					4-WAY (PLAQUE)
R1-5	20x9	1.25					3-WAY (PLAQUE)
R2-1	36x48	12.0	5	60.0			SPEED LIMIT —— 3@ 40, 2@ 20
R2-5	36x48	12.0					REDUCED SPEED AHEAD
R3-1	36x48	12.0					NO RIGHT TURN
R3-2	36x48	12.0					NO LEFT TURN
R3-3	36x36	9.0					NO TURN
R3-4	36x48	12.0					NO U-TURN
R3-7R	30x30	6.25					RIGHT LANE MUST TURN RIGHT
R3-7L	30x30	6.25					LEFT LANE MUST TURN LEFT
R4-1	36x48	12.0					DO NOT PASS
R4-2	36x48	12.0					PASS WITH CARE
R4-7	36x48	12.0					KEEP RIGHT (HORIZONTAL ARROW)
R4-8	36x48	12.0					KEEP LEFT (HORIZONTAL ARROW)
R4-17	36x36	9.0					KEEP RIGHT
R4-18	36x36	9.0					KEEP LEFT
R5-1	30x30	6.25	2	12.5			DO NOT ENTER
R5-1a	30x24	5.0	2	10.0			WRONG WAY
R6-1L	48x18	6.0	2	12.0			ONE WAY ARROW (LEFT)
R6-1R	48x18	6.0	1	6.0			ONE WAY ARROW (RIGHT)
R6-2L	24x30	5.0					ONE WAY (LEFT)
R6-2R	24x30	5.0					ONE WAY (RIGHT)
R11-2	48x30	10.0					ROAD CLOSED
R11-3	60x30	12.5					ROAD CLOSED —— MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60x30	12.5	3	37.5			ROAD CLOSED TO THRU TRAFFIC
							SPECIAL SIGNS *
S1-1	36"x12"	3.0	7	21.0			OAK ST.
S1-2	60"x30"	12.5	1	12.5			← TO CITY PARK OAK ST. WEST →
S1-3	60"x42"	17.5	2	35.0			ROAD CLOSED 8:00 A.M. TO 4:30 P.M.

GUIDE SIGNS

SIGN	SIZE (INCHES)	AREA (SQ. FT.)	QUANTITY	TOTAL AREA (SQ. FT.)	QUANTITY RELOCATED	TOTAL RELOCATED AREA (SQ. FT.)	SIGN LEGEND
G20-1	60x36	15.0					ROAD CONSTRUCTION NEXT —— MILES
G20-2	60x24	10.0	2	20.0			END CONSTRUCTION
M4-8	30x15	3.13	2	6.26			DETOUR (PLAQUE)
M4-9R	48x36	12.0	3	36.0			DETOUR (RIGHT ARROW)
M4-9L	48x36	12.0	4	48.0			DETOUR (LEFT ARROW)
M4-10R	48x18	6.0					DETOUR (ARROW RIGHT)
M4-10L	48x18	6.0					DETOUR (ARROW LEFT)
M4-11	24x18	3.0					DETOUR ENDS
M5-1R	21x15	2.19					ADVANCE RIGHT TURN ARROW
M5-1L	21x15	2.19	2	4.38			ADVANCE LEFT TURN ARROW

616-10.05 CONSTRUCTION SIGNS TOTAL (SQ. FT.)	766	
616-10.10 RELOCATED SIGNS TOTAL (SQ. FT.)		0

ITEM NUMBER	SIZE (INCHES)	TOTAL QUANTITY	DESCRIPTION
616-10.20	36x18	34	DRUM
616-10.35	One Rail 8x24		TYPE I BARRICADE
616-10.36	Two Rails 8x24		TYPE II BARRICADE
616-10.40	36x72	1	FLASHING ARROW PANEL
616-10.45	18x18		TYPE I OBJECT MARKER
616-10.46	6x12		TYPE II OBJECT MARKER
616-10.47	8x24	34	TYPE III OBJECT MARKER
616-10.50	8x8	4	FLASHING ELECTRIC LIGHT
616-10.51	-		WARNING LIGHT TYPE A
616-10.52	-		WARNING LIGHT TYPE B
616-10.53	-		WARNING LIGHT TYPE C
616-10.60	-		RAISED PAVEMENT MARKER
612-10.30	Three Rails 72x144	6	MOVABLE BARRICADE

All Signs, Plates, and Plaques shall be faced with Type 1 Reflective Sheeting in Accordance with Sec 1042.

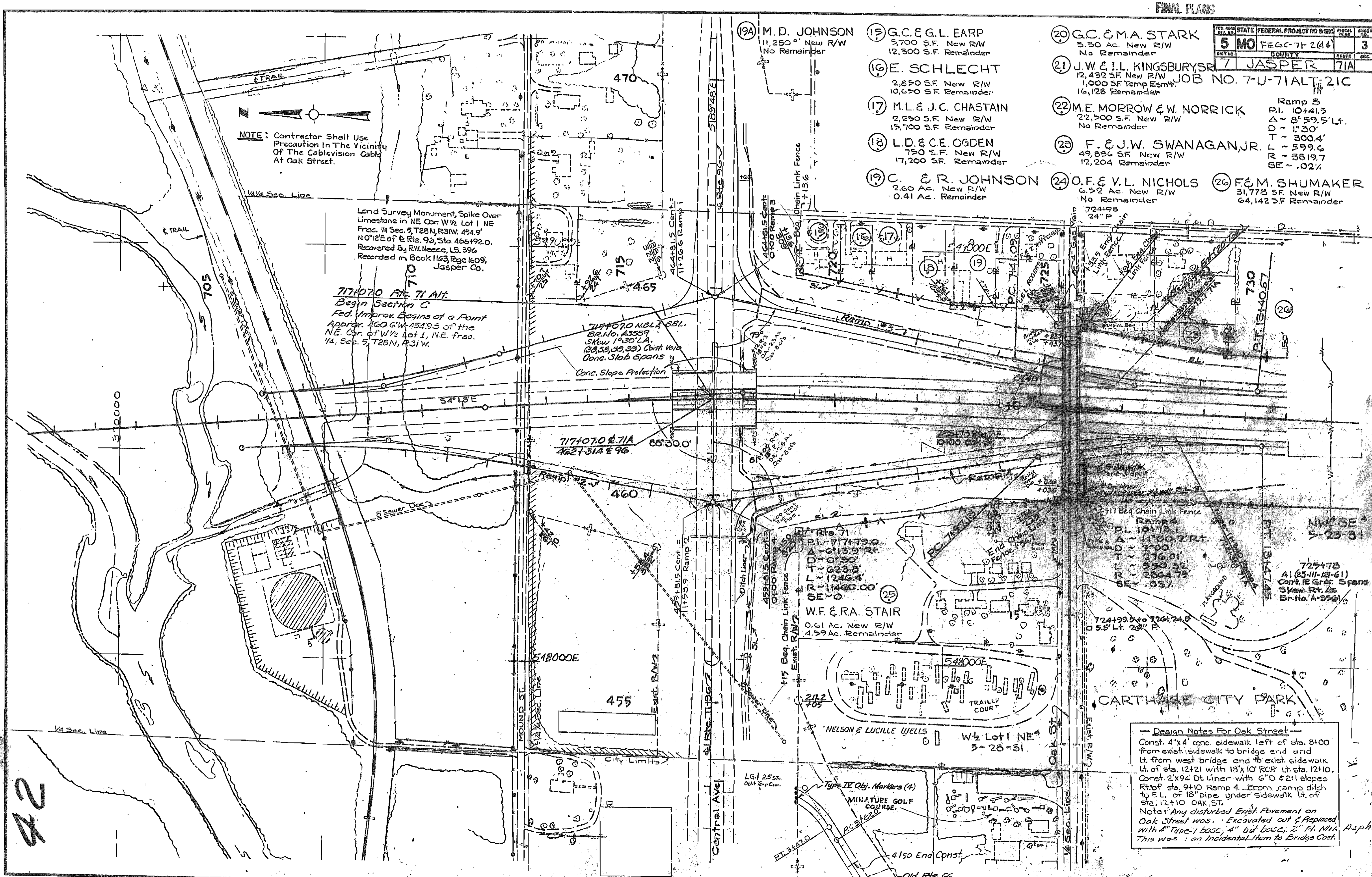
Sign Dimensions Shown are Minimum. No Additional Payment if Contractor Uses Larger Signs.

No additional area or payment will be made for PLATES which are to be included with certain signs.

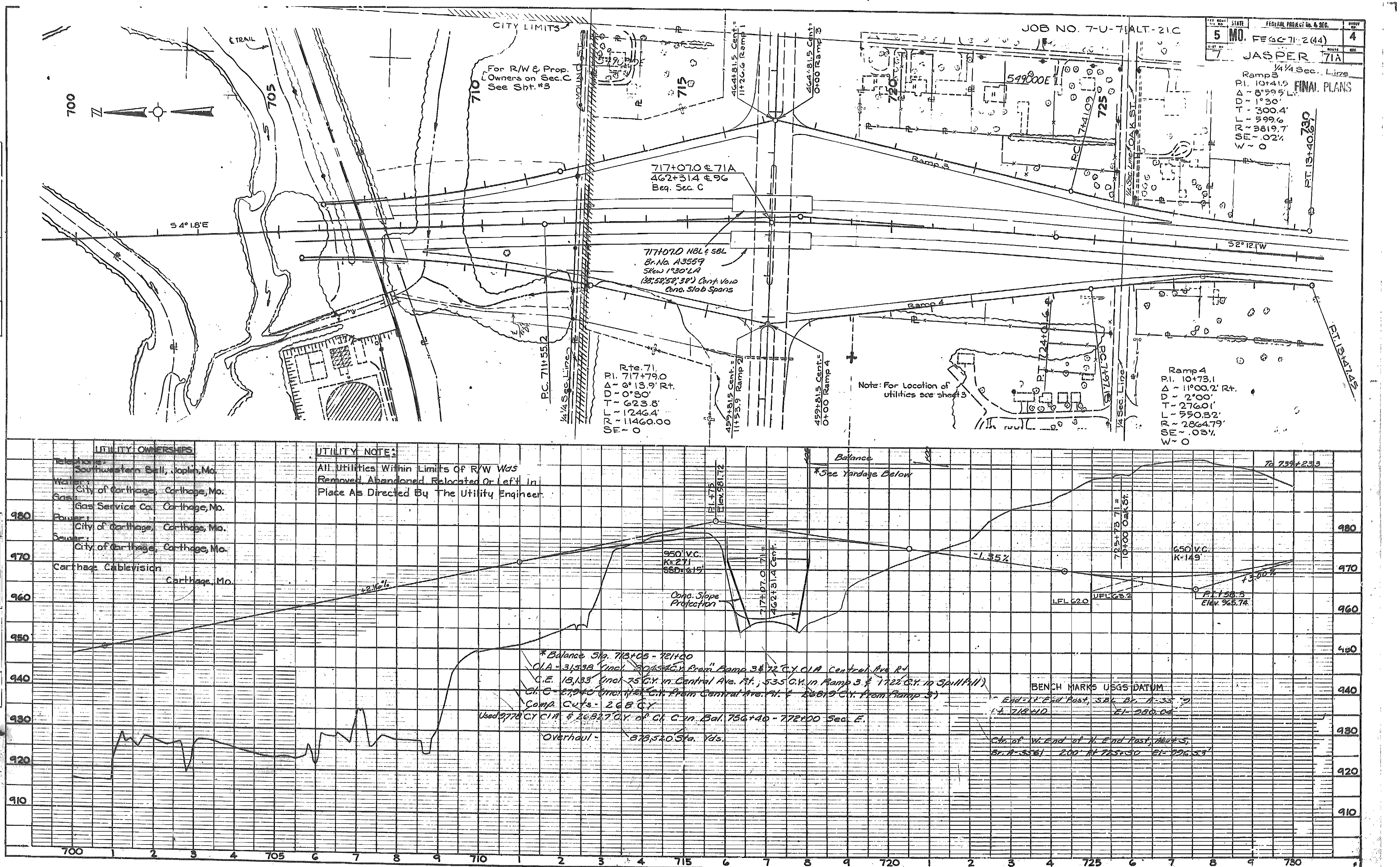
ALL PLAQUES shall have a black border. PLATES do not have a border.

* See Sheet No. 9 For DETAILS

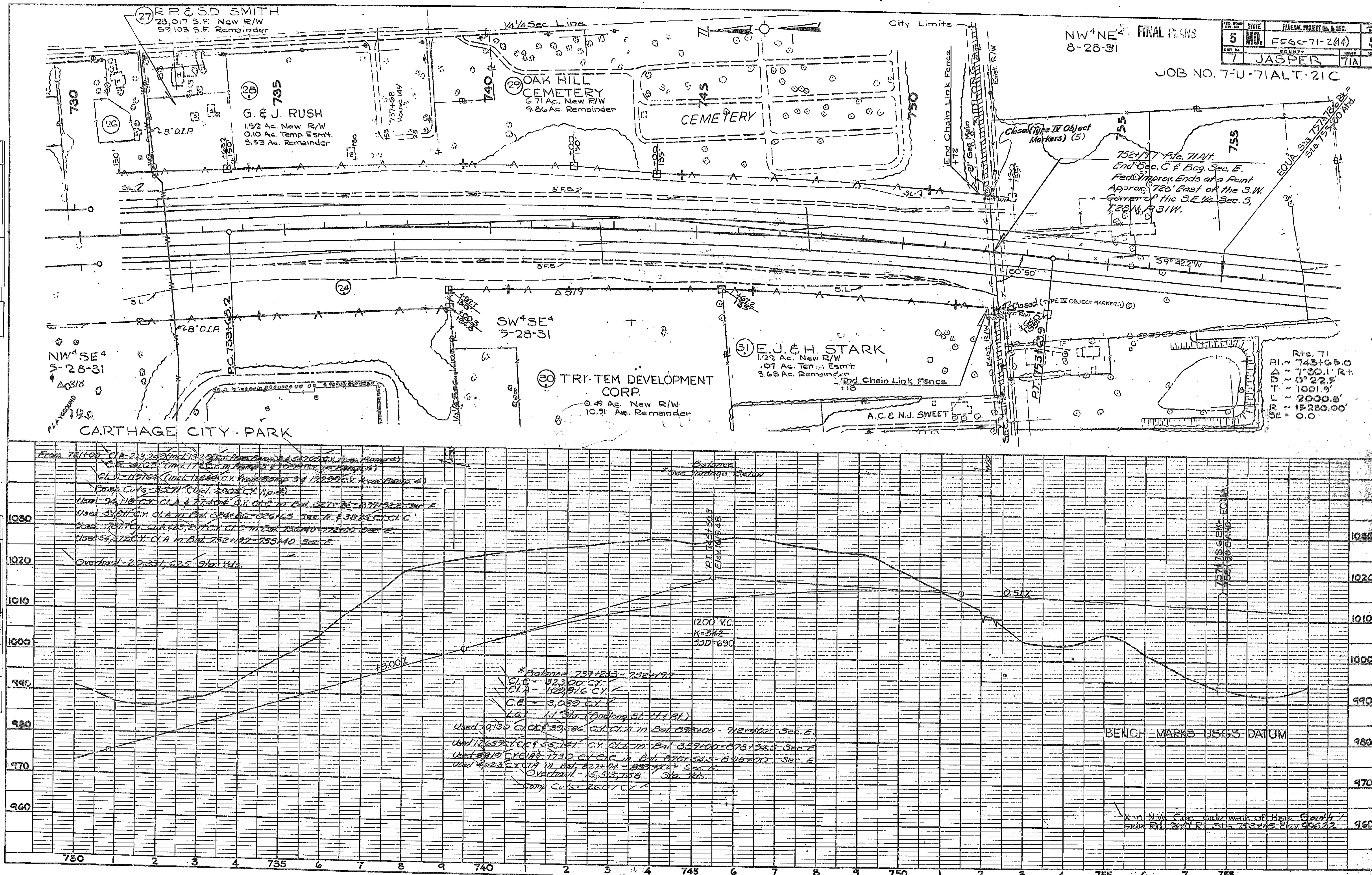
FINAL PLANS

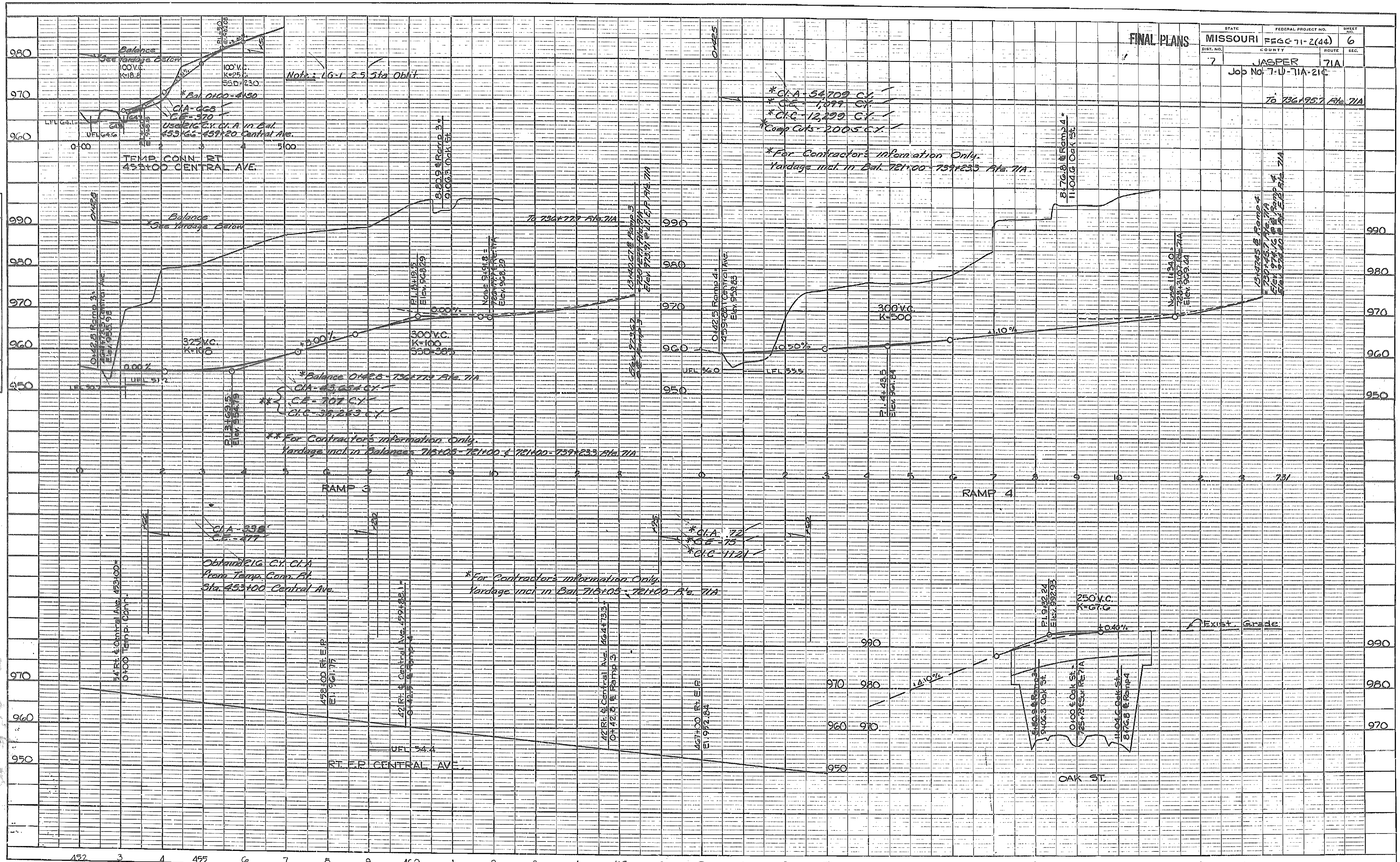


42



JOB NO. 7-U-71ALT-21C
5 MO. FEG-71-2(44) 4
7 JASPER 71A
FINAL PLANS
CITY LIMITS
For R/W & Prop. Owners on Sec. C See Sht. #3
717+07.0 ℄ 71A
462+31.4 ℄ 96
Beg. Sec. C
S 4° 1.8' E
S 2° 12.1' W
717+07.0 NBL & SBL
Br. No. A3559
Skew 1°30' LA
(38', 58', 58', 38') Cont. Void Conc. Slab Spans
Ramp 3
Ramp 4
Ramp 3
P.I. 10+41.5
Δ ~ 8°59.5' Lt.
D ~ 1°30'
T ~ 300.4'
L ~ 599.6
R ~ 3819.7'
SE ~ .02'/'
W ~ 0
Rte. 71
P.I. 717+79.0
Δ ~ 6° 13.9' Rt.
D ~ 0°30'
T ~ 623.8'
L ~ 1246.4'
R ~ 11460.00
SE ~ 0
Ramp 4
P.I. 10+73.1
Δ ~ 11°00.2' Rt.
D ~ 2°00'
T ~ 276.01'
L ~ 550.32'
R ~ 2864.79'
SE ~ .03'/'
W ~ 0
Note: For Location of utilities see sheet 3
P.C. 711+55.2
P.T. 724+04.6
P.T. 13+40.67
P.T. 13+47.45
UTILITY OWNERSHIPS
Telephone: Southwestern Bell, Joplin, Mo.
Water: City of Carthage, Carthage, Mo.
Gas: Gas Service Co. Carthage, Mo.
Power: City of Carthage, Carthage, Mo.
Sewer: City of Carthage, Carthage, Mo.
Carthage Cablevision Carthage, Mo.
UTILITY NOTE:
All Utilities Within Limits Of R/W Was Removed, Abandoned, Relocated Or Left In Place As Directed By The Utility Engineer.
Balance
*See Yardage Below
To 739+23.3
P.I. 715+75 Elev. 981.72
950' V.C. K=271 SSD=615'
+2.16%
-1.35%
+3.00%
650' V.C. K=149'
P.I. 728+3 Elev. 965.74
LFL 62.0
UFL 68.2
Conc. Slope Protection
717+07.0 71 = 462+31.4 Cent.
725+73 71 = 10+00 Oak St.
*Balance Sta. 713+05 - 721+00
C1A - 31,538 (incl. 30,454 C.Y. from Ramp 3 & 72 C.Y. C1A Central Ave Rt.
C.E. 18,133 (incl. 75 C.Y. in Central Ave. Rt.; 535 C.Y. in Ramp 3 & 1722 C.Y. in Spill Fill)
Cl. C - 27,540 (incl. 161 C.Y. from Central Ave. Rt. & 26819 C.Y. from Ramp 3)
Comp. Cuts - 268 C.Y.
Used 2,778 C.Y. C1A & 26,827 C.Y. of Cl. C in Bal. 756+40 - 772+00 Sec. E.
Overhaul - 873,520 Sta. Yds.
BENCH MARKS USGS DATUM
Ctr. of W. End of W. End Post, About S, Br. A-3561 200' Rt 725+30 El - 996.53'

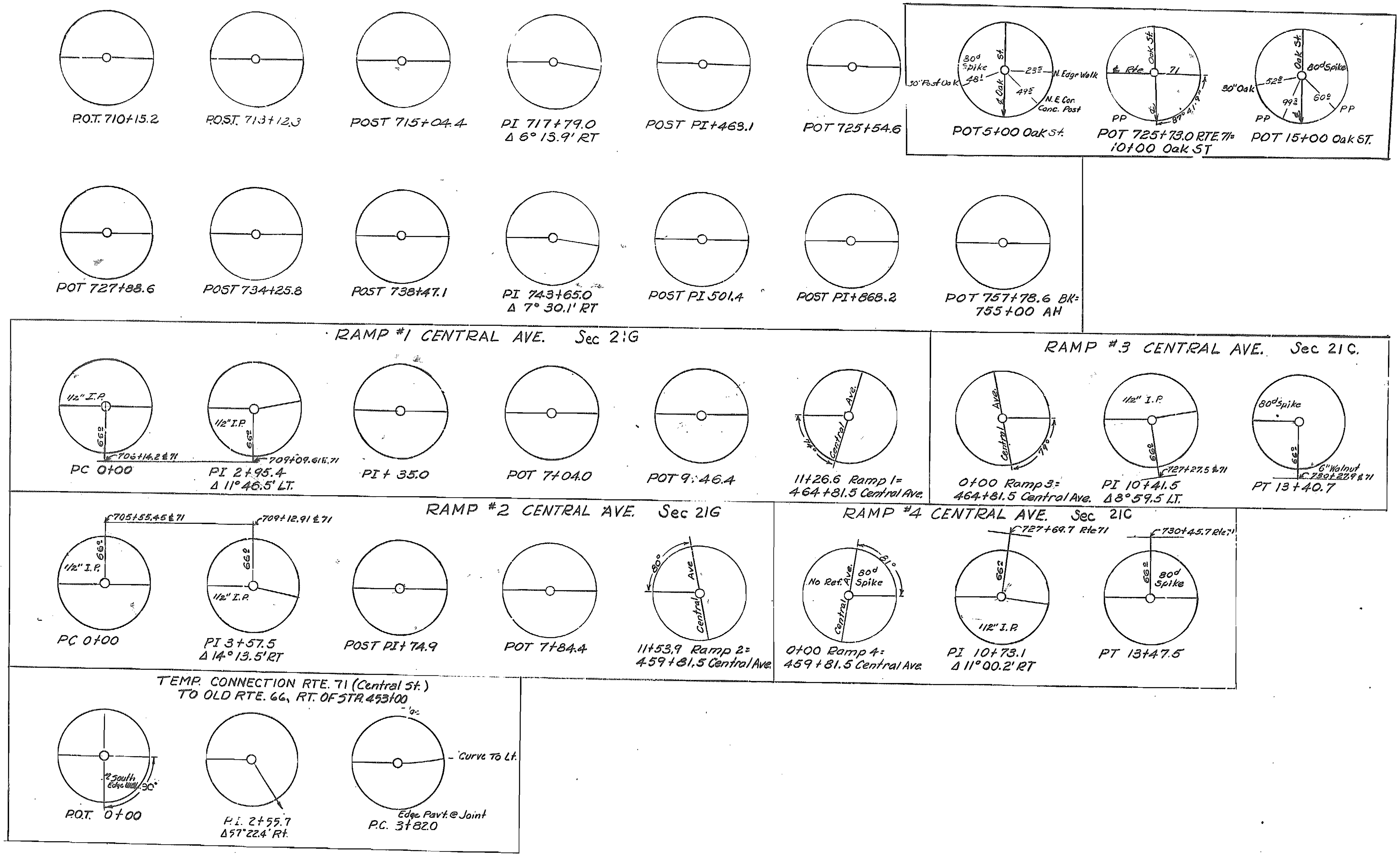

FINAL PLANS
FED. ROAD DIV. NO. 5 STATE MO. FEDERAL PROJECT No. & SEC. FEGC-71-2(44) SHEET No. 5
DIST. No. 7 COUNTY JASPER ROUTE 71A
JOB NO. 7-U-71ALT-21C
NW⁴NE⁴ 8-28-31
City Limits
(27) R.P. & S.D. SMITH
28,017 S.F. New R/W
59,103 S.F. Remainder
1/4 1/4 Sec. Line
(28) G. & J. RUSH
1.52 Ac. New R/W
0.10 Ac. Temp. Esmt.
3.53 Ac. Remainder
(29) OAK HILL CEMETERY
6.71 Ac. New R/W
9.86 Ac. Remainder
CEMETERY
End Chain Link Fence
Closed (Type IV Object Markers) (5)
752+19.7 Rte. 71 Alt.
End Sec. C & Beg. Sec. E.
Fed. Improv. Ends at a Point Approx. 725' East of the S.W. Corner of the S.E. 1/4 Sec. 5, T.28N, R.31W.
EQUA. Sta. 757+78.6 Bk = Sta. 755+00 Ahd.
59° 42.2' W
80° 50'
Closed (TYPE IV OBJECT MARKERS) (5)
NW⁴SE⁴ 5-28-31
SW⁴SE⁴ 5-28-31
P.C. 733+63.2
P.T. 753+63.9
(30) TRI-TEM DEVELOPMENT CORP.
0.49 Ac. New R/W
10.91 Ac. Remainder
(51) E.J. & H. STARK
1.22 Ac. New R/W
.07 Ac. Temp. Esmt.
3.68 Ac. Remainder
End Chain Link Fence
A.C. & N.J. SWEET
CARTHAGE CITY PARK
PLAYGROUND
Rte. 71
P.I. ~ 743+65.0
Δ ~ 7°30.1' Rt.
D ~ 0°22.5'
T ~ 1001.9'
L ~ 2000.8'
R ~ 15280.00'
SE ~ 0.0
From 721+00 Cl.A-213,249 (Incl. 13200 C.Y. from Ramp 3 & 54709 C.Y. from Ramp 4)
C.E. 41,097 (Incl. 172 C.Y. in Ramp 3 & 1099 C.Y. in Ramp 4)
Cl. C-119764 (Incl. 11444 C.Y. from Ramp 3 & 12292 C.Y. from Ramp 4)
Comp. Cuts - 3571 (Incl. 2005 C.Y. Rp. 4)
Used 24,115 C.Y. Cl.A & 77,404 C.Y. Cl.C in Bal. 827+94 - 839+22 Sec. E
Used 51,811 C.Y. Cl.A in Bal. 824+86 - 826+63 Sec. E & 3825 C.Y. Cl.C
Used 7821 C.Y. Cl.A & 25,201 C.Y. Cl.C in Bal. 756+40 - 772+00 Sec. E.
Used 54,372 C.Y. Cl.A in Bal. 752+19.7 - 755+40 Sec. E.
Overhaul - 22,331,625 Sta. Yds.
Balance
*See Yardage Below
P.T. 745+50.5
Elev. 1019.43
1200' V.C.
K=342
SSD=690
+3.00%
-0.51%
757+78.6 BK = EQUA. 755+00 AHD.
*Balance 739+23.3 - 752+19.7
Cl.C - 32,300 C.Y.
Cl.A - 109,816 C.Y.
C.E. - 3,039 C.Y.
L.G.I. - 1.1 Sta. (Budlong St. Lt. & Rt.)
Used 10,130 C.Y. Cl.C & 39,586 C.Y. Cl.A in Bal. 898+00 - 912+40.2 Sec. E.
Used 12657 C.Y. Cl.C & 55,141 C.Y. Cl.A in Bal. 839+00 - 878+54.5 Sec. E
Used 6819 C.Y. Cl.A & 1730 C.Y. Cl.C in Bal. 878+54.5 - 898+00 Sec. E
Used 4,623 C.Y. Cl.A in Bal. 827+94 - 839+00 Sec. E.
Overhaul - 15,513,158 Sta. Yds.
Comp. Cuts - 2607 C.Y.
BENCH MARKS USGS DATUM
X in N.W. Cor. sidewalk of Hsg. South side Rd. 260' Rt. Sta. 753+15 Elev. 996.22
1030
1020
1010
1000
990
980
970
960
730 1 2 3 4 735 6 7 8 9 740 1 2 3 4 745 6 7 8 9 750 1 2 3 4 755 6 7 755
PLAN
PROFILE



FINAL PLANS
STATE MISSOURI
FEDERAL PROJECT NO. FFGC-71-2(44)
SHEET NO. 6
DIST. NO. 7
COUNTY JASPER
ROUTE 71A
Job No. 7-U-71A-21C
TEMP. CONN. RT.
453+00 CENTRAL AVE.
Balance
*See Yardage Below
100' V.C.
K=18.8
100' V.C.
K=25
*Bal. 0+00-4+50
Cl.A-668
C.E.-370
Used 216 C.Y. Cl. A in Bal.
453+66-459+20 Central Ave.
Note: LG-1 2.5 Sta. Oblit.
*Cl.A - 54,709 C.Y.
*C.E. - 1,099 C.Y.
*Cl.C - 12,299 C.Y.
*Comp. Cuts - 2005 C.Y.
*For Contractor's information Only.
Yardage incl. in Bal. 721+00-739+23.3 Rte. 71A.
To 736+95.7 Rte. 71A
To 736+77.9 Rte. 71A
325' V.C.
K=108
0.00%
+3.00%
300' V.C.
K=100
2.00%
*Balance 0+42.8 - 736+77.9 Rte. 71A
**Cl.A - 43,654 C.Y.
C.E. - 707 C.Y.
Cl.C - 38,263 C.Y.
**For Contractor's information Only.
Yardage incl. in Balances 718+05-721+00 & 721+00-739+23.3 Rte. 71A
RAMP 3
300' V.C.
K=500
+0.50%
+1.10%
RAMP 4
*Cl.A - 72
*C.E. - 75
*Cl.C - 1121
Cl.A - 338
C.E. - 277
Obtained 216 C.Y. Cl. A
From Temp. Conn. Rt.
Sta. 453+00 Central Ave.
*For Contractor's information Only.
Yardage incl. in Bal. 718+05-721+00 Rte. 71A
250' V.C.
K=67.6
+0.40%
+4.10%
Exist. Grade
RT. E.P. CENTRAL AVE.
OAK ST.
PROFILES
RAMPS 3 & 4
CENTRAL AVE. & OAK ST.

FED. ROAD DIV. NO.	STATE	JOB NO. 7-U-71-21C	SHEET NO.
7	MO.	PROJECT NO. FEGC-71-2(44)	7
DIST. NO.	COUNTY	ROUTE	SEC.
7	JASPER	71A	

FINAL PLANS

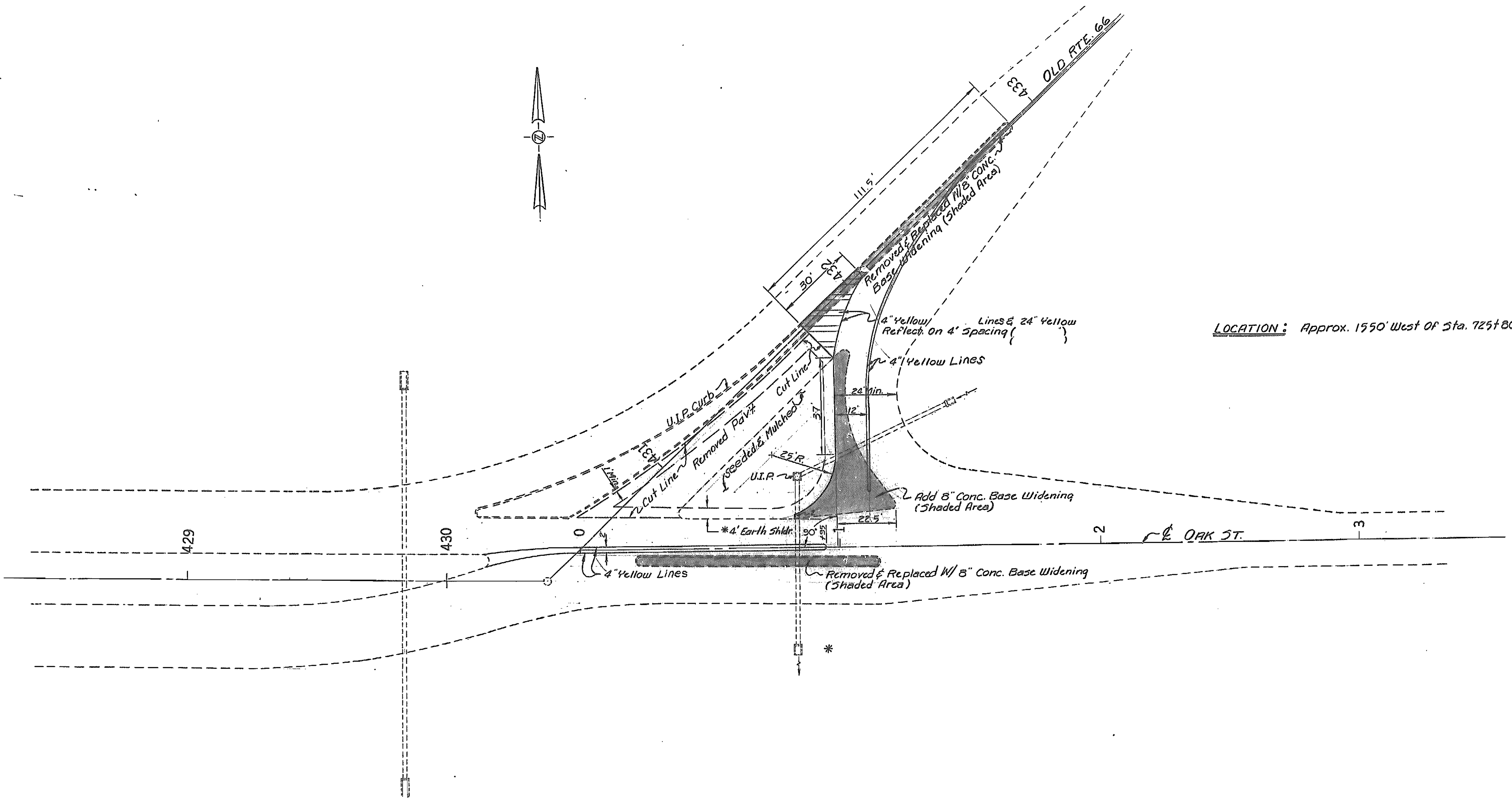


REFERENCE POINTS

FED. ROAD DIV. NO.	STATE	JOB NO.	SHEET NO.
7	MO.	PROJ. NO. FEGC-71-2(44)	8
DIST. NO.	COUNTY		ROUTE
7	JASPER		71A

JOB NO. 7-U-71 ALT.-21C

FINAL PLANS



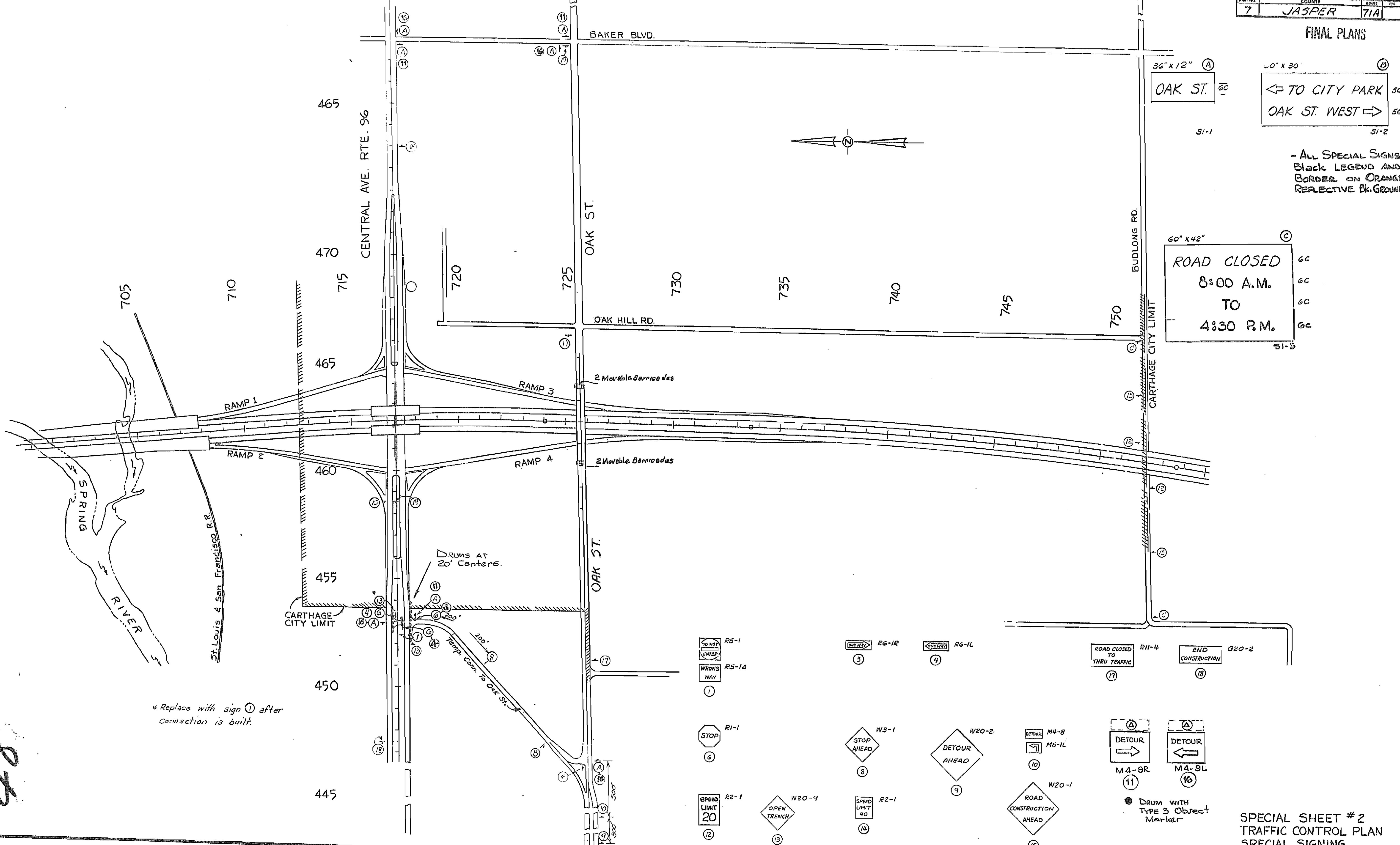
LOCATION: Approx. 1550' West Of Sta. 725+80 ℄ 71 Alternate

0 20 40
Scale - Ft.

SPECIAL SHEET # 1
OAK STREET TRAFFIC CONTROL PLAN

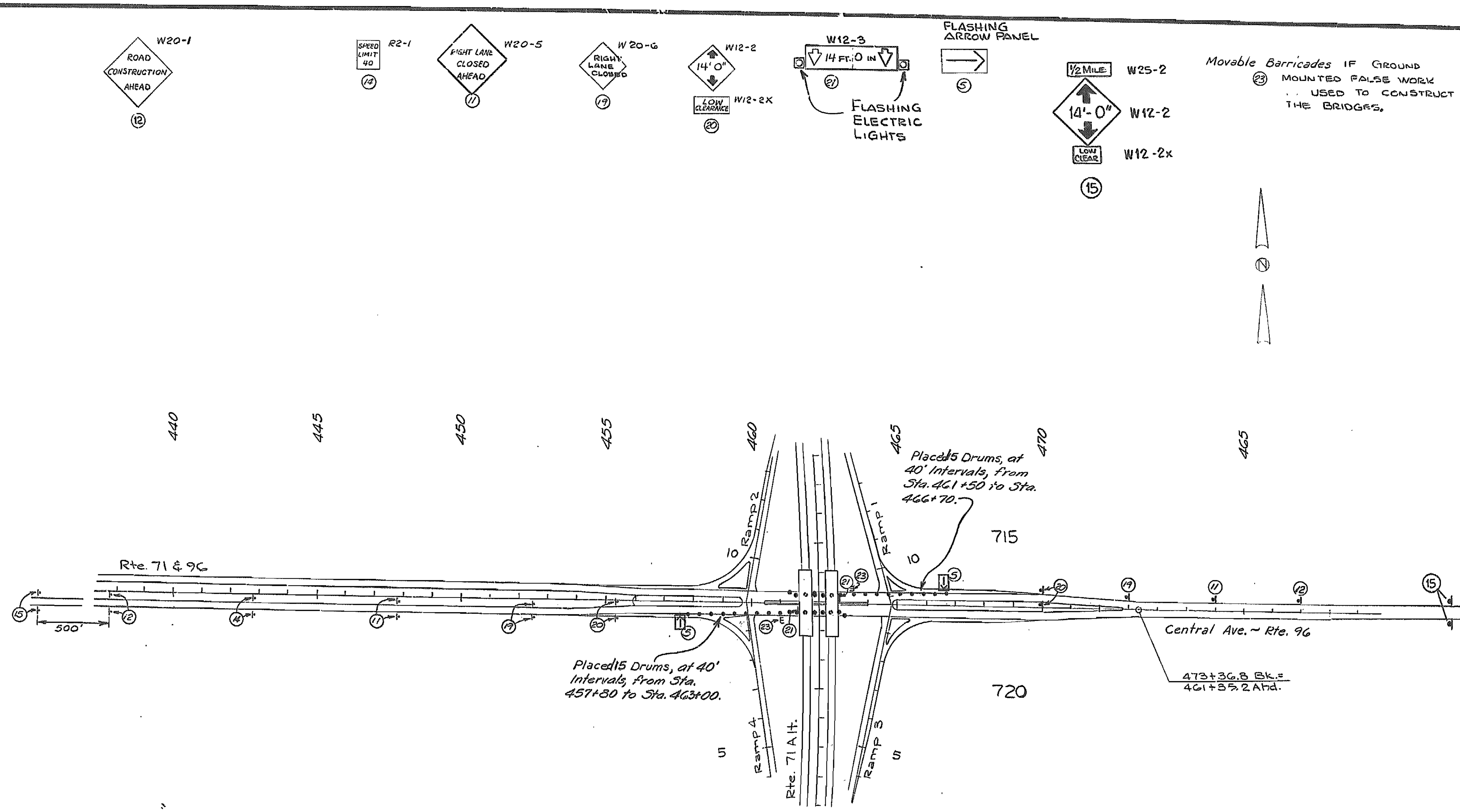
FED. ROAD DIV. NO.	STATE	JOB NO. 7-U-71A-21C	SHEET NO.
7	MO.	PROJ. NO. FEGC-71-2(44)	9
DIST. NO.	COUNTY		ROUTE
7	JASPER		71A

FINAL PLANS



SPECIAL SHEET #2
TRAFFIC CONTROL PLAN
SPECIAL SIGNING

FED. ROAD DIV. NO.	STATE	JOB NO 7-U-71A-21C	SHEET NO.
7	MO.	PROJ. NO. FEGC-71-2(44)	10
DIST. NO.	COUNTY	ROUTE	SEC.
7	JASPER	71A	



Note:
Relocated Drums When Constructing Piers In Median To Close Left Turn Lane (459+ To 464+)

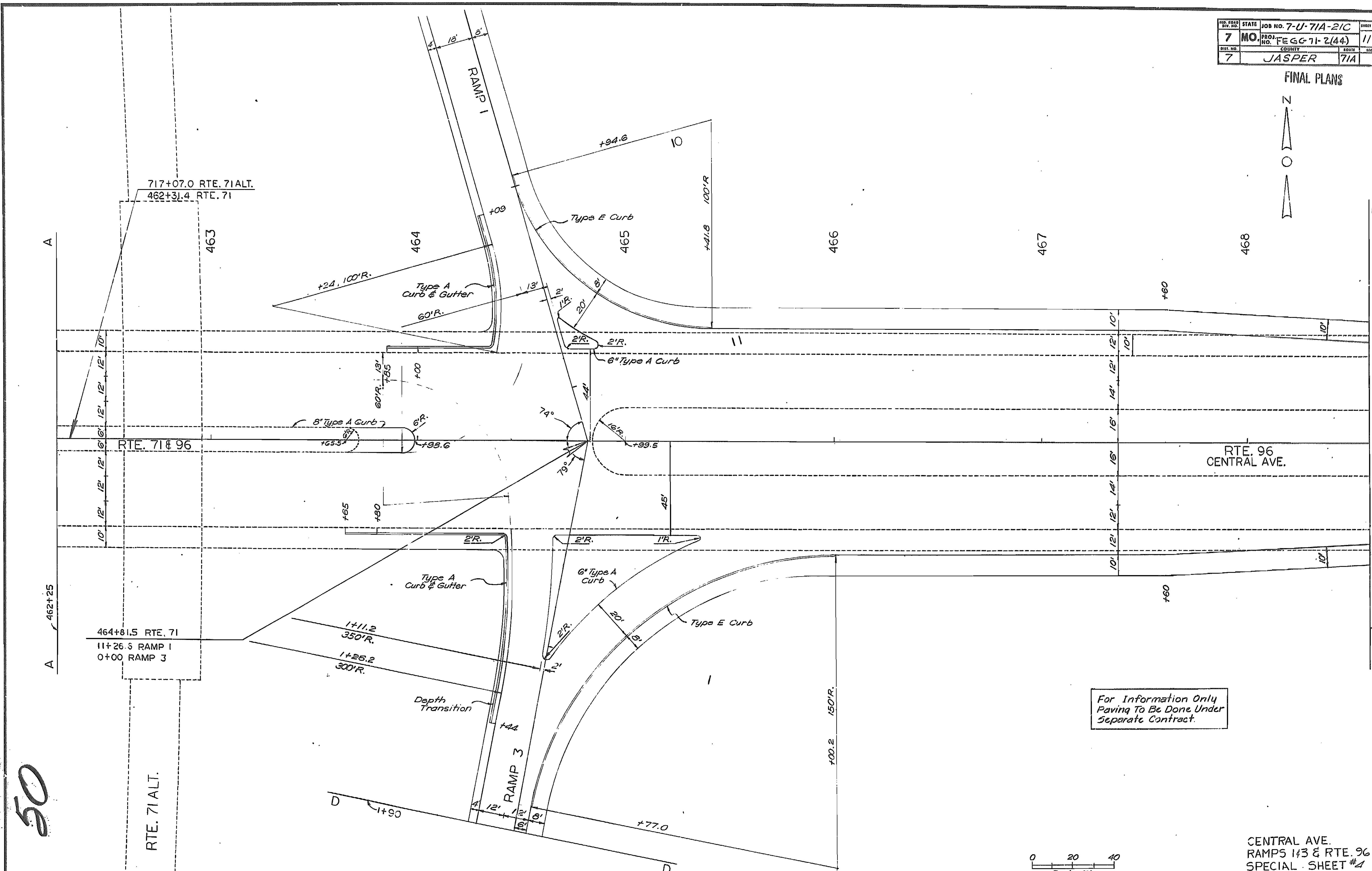
Each Drum did have a type 3 Object marker.

TRAFFIC CONTROL PLAN
SPECIAL SHEET #3

FED. ROAD DIV. NO.	STATE	JOB NO. 7-U-71A-21C	SHEET NO.
7	MO.	PROJ. NO. FEGG 71-2(44)	11

DIST. NO.	COUNTY	ROUTE	SEC.
7	JASPER	71A	

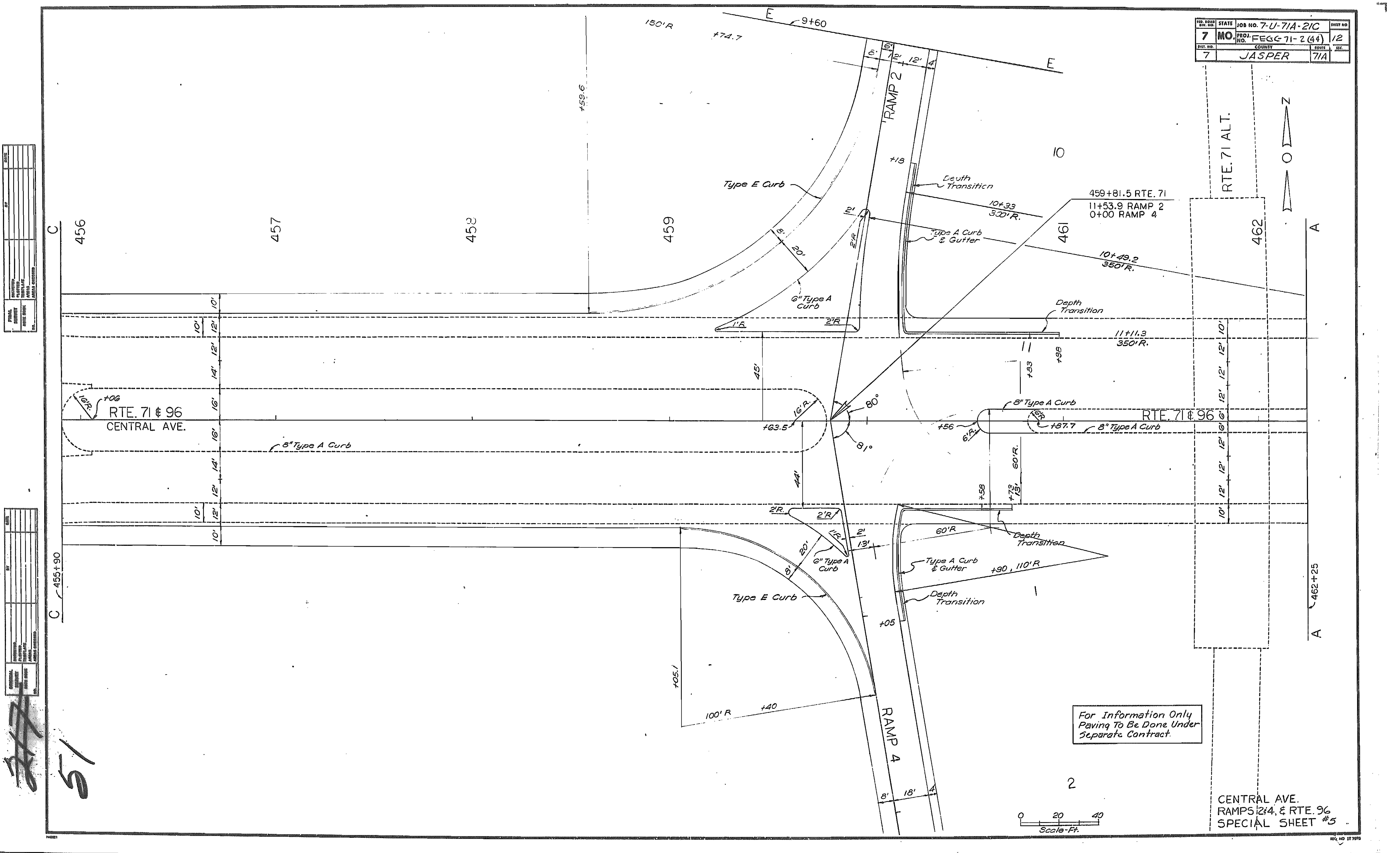
FINAL PLANS



0 20 40
Scale-Ft.

CENTRAL AVE.
RAMPS 1 & 3 & RTE. 96
SPECIAL SHEET #4

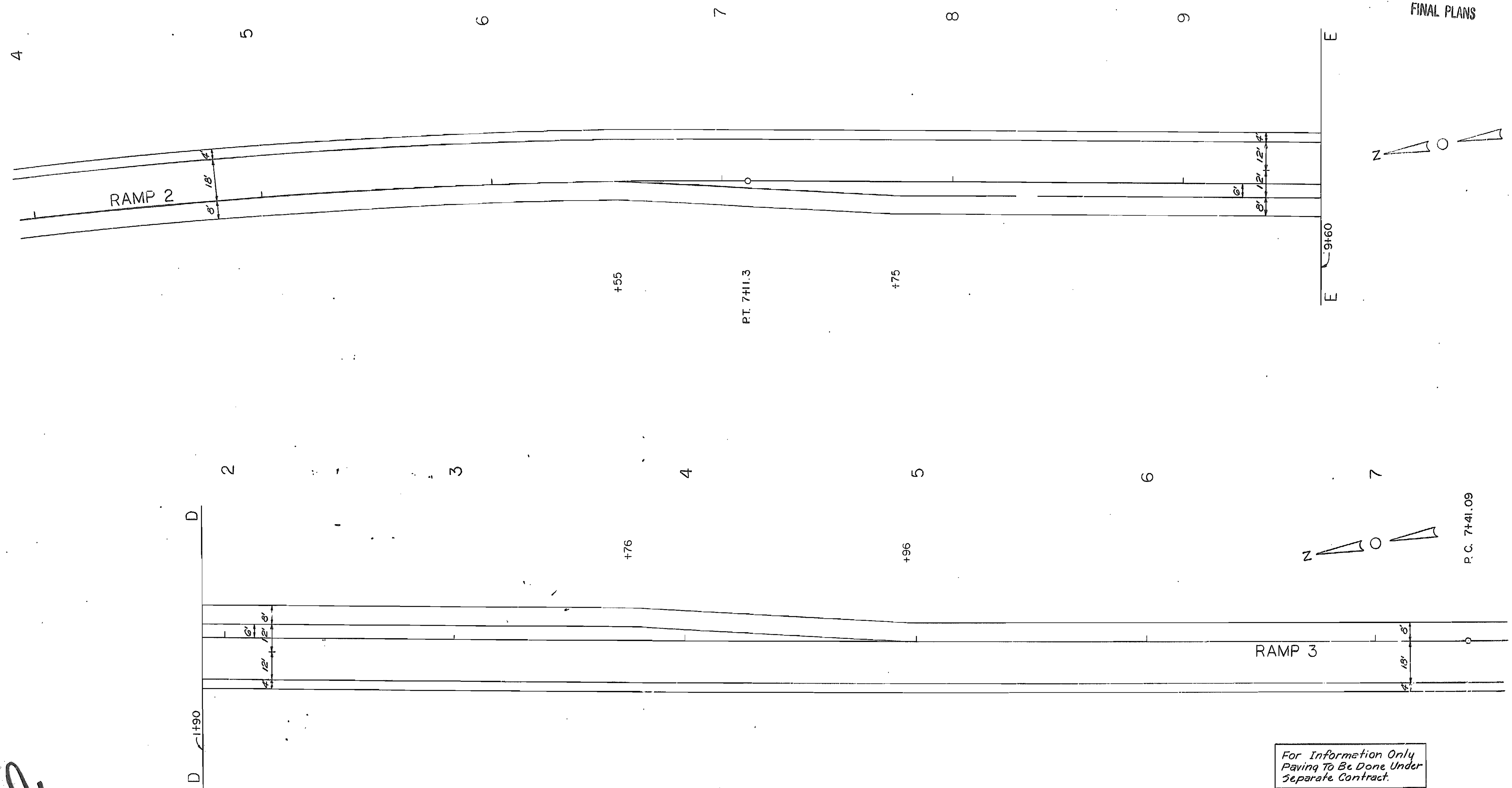
50



FED. ROAD DIV. NO. 7 | STATE MO. | JOB NO. 7-U-71A-21C | PROJ. NO. FEGC 71-2(44) | SHEET NO. 12
DIST. NO. 7 | COUNTY JASPER | ROUTE 71A
RAMP 2
RAMP 4
RTE. 71 ALT.
RTE. 71 & 96 CENTRAL AVE.
RTE. 71 & 96
459+81.5 RTE. 71
11+53.9 RAMP 2
0+00 RAMP 4
Type E Curb
Type A Curb & Gutter
6" Type A Curb
8" Type A Curb
Depth Transition
10+33 300'R.
10+49.2 350'R.
11+11.3 350'R.
+90, 110'R
100'R +40
For Information Only Paving To Be Done Under Separate Contract.
CENTRAL AVE.
RAMPS 2 & 4, & RTE. 96
SPECIAL SHEET #5
Scale-Ft.

FED. ROAD DIV. NO.	STATE	JOB NO. 7-U-71A-21C	SHEET NO.
7	MO.	PROJECT NO. FEG-71-2(4)	13
DIST. NO.	COUNTY	ROUTE	SEC.
7	JASPER	71A	

FINAL PLANS



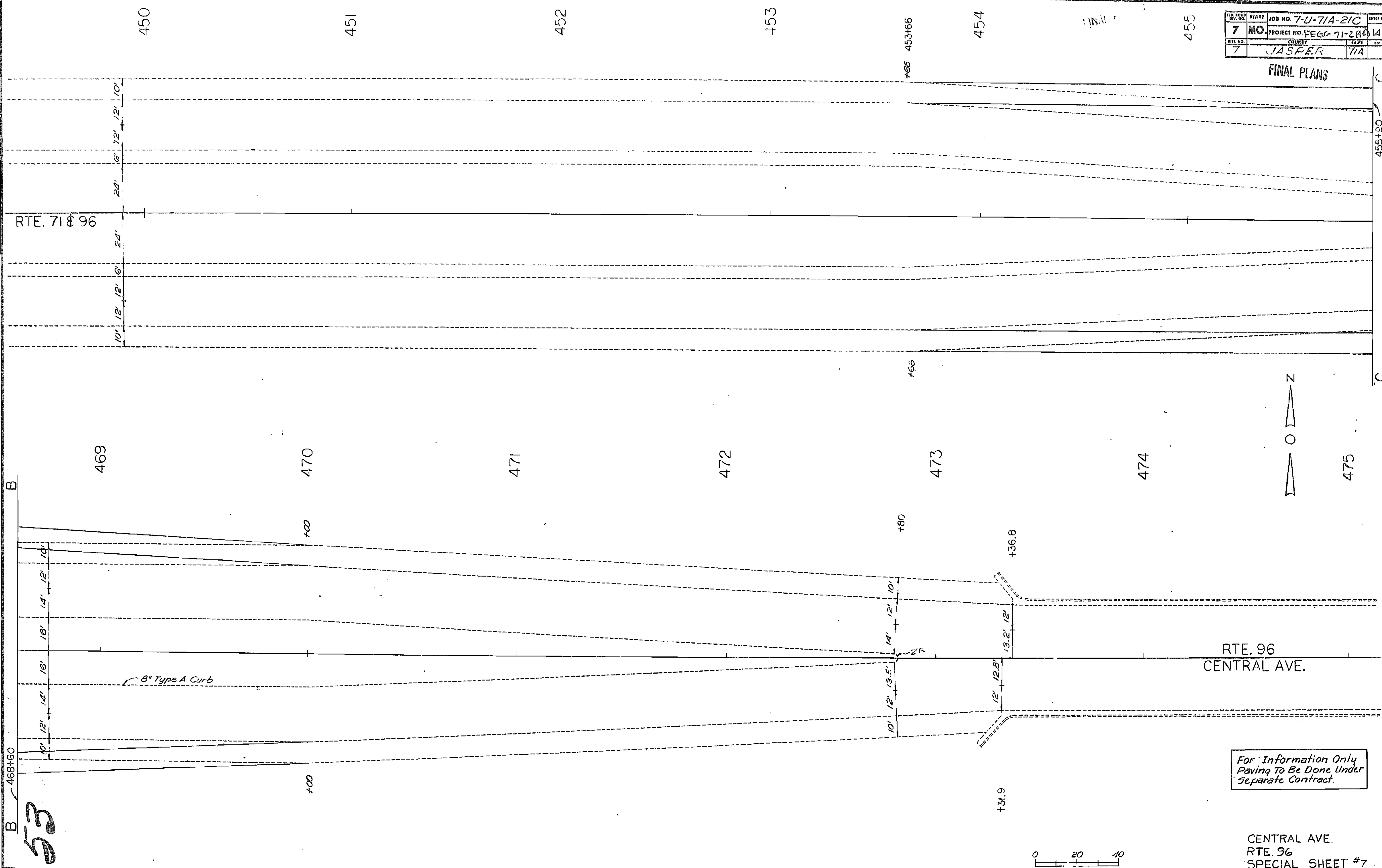
For Information Only
Paving To Be Done Under
Separate Contract.

0 20 40
Scale-Ft.

CENTRAL AVE.
RAMPS 2 & 3
SPECIAL SHEET #6

FED. ROAD DIV. NO.	STATE	JOB NO. 7-U-71A-21C		SHEET NO.
7	MO.	PROJECT NO. FEGG-71-2(44)		14
DIST. NO.	COUNTY		ROUTE	SEC
7	JASPER		71A	

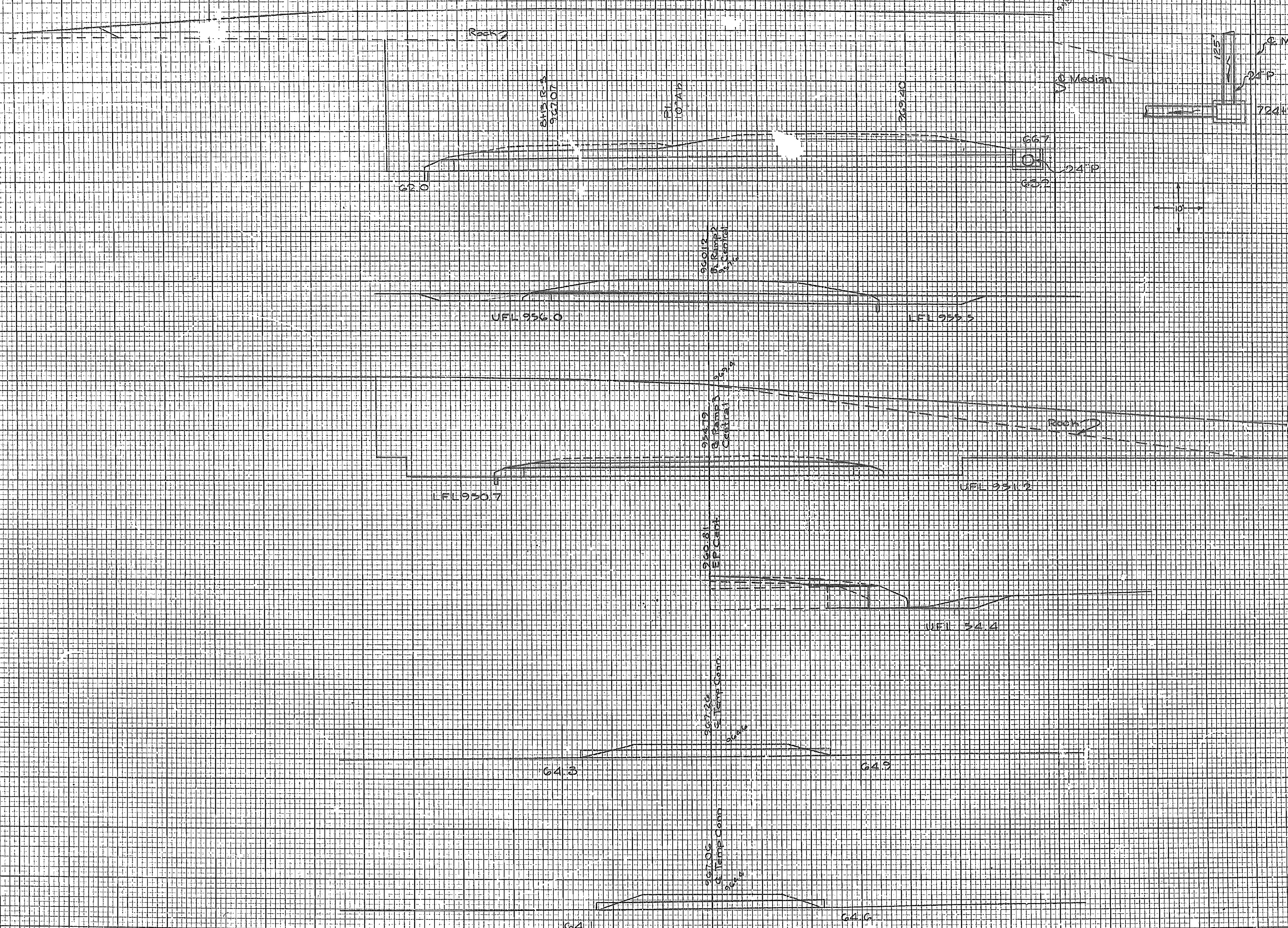
FINAL PLANS



CENTRAL AVE.
RTE. 96
SPECIAL SHEET #7

DIV. No.	STATE	FEDERAL PROJECT No. & Sec.	YEAR	SHEET No.
	MO.	FEG-71-2(44)		15
DIST. No.		COUNTY	ROUTE	SEC.
7		JASPER	71A	

JOB NO. 7-U-71A-21C



724+99.5 to 726+24.5; 55' Lt.
24"X125' Median Pier Drain
1-24" Flared End Section
Cl. 3 = 44 C.Y.

724+98 55' Lt. Type S-2 Precast
D.I. 5'X3'
Median Relief on Grade D=3.5'
24"X115' Cl. III RCP
1-24" Flared End Section Lt.
Cl. B = 118 C.Y.

1+00 Ramp 4 Central Ave.
18"X68' Cl. III RCP
2 Flared End Sections
Cl. 3 = 23 C.Y.

1+12 Ramp 3 Central Ave.
18"X73' Cl. III RCP
2 Flared End Sections
Cl. 3 = 36 C.Y.

459+00 Central Ave.
48"X11' Cl. III RCP Extention
Relay Flared End Sec.
Cl. 3 = 7 C.Y.
The cost to Relay Flared End Sec. to be included in cost of RCP Extention

1+4 Temp. Conn. Central Ave.
18"X50' Pipe Culv. Group II

0+30 Temp. Conn. Central Ave.
18"X46' Pipe Culv. Group II

CULVERT SECTIONS

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
NOTE BOOK No. / AREAS CHECKED		

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STANDARD PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-U-71A-21C	48
	PROJECT NO. FEGC-71-2(44)	ROUTE
DIST. NO. 7	COUNTY JASPER	71A

SP-2
SEPTEMBER 1983

✓	NO.	DESCRIPTION
✓	203.00E	EXCAVATION & EMBANKMENT
	203.02C	UNDERGRADING
✓	203.10A	TABULATED EARTHWORK & SECTION DATA
✓	203.20A	SUPERELEVATION SPIRALS & WIDENING (UNDIVIDED)
✓	203.21A	SUPERELEVATION SPIRALS & WIDENING (DIVIDED)
	203.30A	ENTRANCES & APPROACHES (LESS THAN 400 ADT)
	203.31B	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - NO SAFETY ZONE)
	203.32D	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - SAFETY ZONE)
	203.35A	MAILBOX TURNOUTS
	203.40D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (NO SAFETY ZONE)
✓	203.41D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (SAFETY ZONE)
	203.50J	TYPICAL CROSS-OVERS (DIVIDED HIGHWAYS)
	204.00D	EMBANKMENT CONTROL MEASURING DEVICES
	502.00H	CONCRETE PAVEMENT APPUR'ENANCES
✓	502.10C	DOWEL SUPPORTING UNITS
✓	503.00H	CONCRETE APPROACH SLABS TO BRIDGES (ALSO INCLUDE 502.00)
✓	602.00A	RIGHT-OF-WAY & DRAIN MARKERS
	604.05A	PIPE CULVERT HEADWALLS - TYPE S
	604.10B	HEADWALL-WITH ENERGY DISSIPATOR - 18"
	604.11B	HEADWALL-WITH ENERGY DISSIPATOR - 24"
	604.12B	HEADWALL-WITH ENERGY DISSIPATOR - 30"
	604.13B	HEADWALL-WITH ENERGY DISSIPATOR - 36"
	604.14B	HEADWALL-WITH ENERGY DISSIPATOR - 42"
	604.15B	HEADWALL-WITH ENERGY DISSIPATOR - 48"
	604.20B	DROP INLET - TYPE B
	604.21B	DROP INLET - TYPE C
	604.22B	DROP INLET - TYPE D
	604.23B	DROP INLET - TYPE E
	604.24B	DROP INLET - TYPE EE
	604.25B	DROP INLET - TYPE F
	604.26C	DROP INLET - TYPE G
✓	604.27C	DROP INLET - TYPE S (3 SHEETS)
	604.28D	DROP INLET - TYPE T (ALSO INCLUDE 614.30)
	604.29C	DROP INLET - TYPE X
	604.30F	CONCRETE MANHOLES (ALSO INCLUDE 614.30)
	604.40E	PIPE COLLARS
	605.10A	CLASS A UNDERDRAINS
✓	604 30R	GUARD RAIL (2 SHEETS) *
	606.20G	BRIDGE ANCHOR SECTION-BRUSH CURB (ALSO INCLUDE 606.00)
	606.21E	BRIDGE ANCHOR SECTION - CURB TYPE (ALSO INCLUDE 606.00) *
✓	606.22D	BRIDGE ANCHOR SECTION - SAFETY BARRIER CURB (INCLUDE 606.00)
✓	606.30E	TERMINAL SECTION (ALSO INCLUDE 606.00)
	606.40A	GUARD CABLE
✓	607.10N	CHAIN LINK FENCE
	607.11B	CHAIN LINK FENCE FOR RETAINING WALLS
	607.20E	WOVEN WIRE FENCE (ALSO INCLUDE 607.10)

✓	NO.	DESCRIPTION
	608.00B	PAVED APPROACHES
✓	608.10F	CONCRETE SIDEWALK & WHEELCHAIR RAMPS
	608.20B	CONCRETE STEPS
	609.00G	CONCRETE CURB - CURB & GUTTER - GUTTER
	609.15A	PAVED DITCHES
✓	609.40D	DRAIN BASIN, SHLDR. PAVING & FILL SLOPE AT BR. ENDS
✓	609.60A	DITCH LINER
✓	609.70C	ROCK LINING FOR CULVERT OUTLETS
	610.20E	BRICK MANHOLES (ALSO INCLUDE 614.30)
✓	611.60K	CONCRETE SLOPE PROTECTION
✓	612.10K	BARRICADES AND FLASHER SIGNS
✓	614.10H	CURB INLETS, GRATES & BEARING PLATES *
✓	614.30C	MANHOLE FRAMES & COVERS
	615.00A	OFFICE FOR ENGINEER
✓	616.10B	TRAFFIC CONTROL DEVICES (2 SHEETS) (ALSO INCLUDE 903.01)
	617.00Q	CONCRETE MEDIAN BARRIER (3 SHEETS)
	702.01E	16" CONCRETE PILES (APPROVED TYPES) (2 SHEETS)
	702.02B	CAST-IN-PLACE CONCRETE PILES (APPROVED TYPES)
	703.15D	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (INCL. 706.35)
	703.16C	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.20D	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (INCL. 706.35)
	703.21C	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.24D	CONCRETE BOX CULVERTS, SKEW DATA (703.15, 703.20, 703.30) (INCL. 706.35)
	703.25C	CONCRETE BOX CULVERTS, SKEW DATA (703.16 & 703.21) (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.30C	CONCRETE BOX CULVERTS, 4' SPANS & LESS - ALL LOADING (INCL. 706.35)
	703.35B	CONCRETE BOX CULVERTS, CUTTING DETAILS (STRAIGHT WINGS) (INCL. 706.35)
	703.36A	CONCRETE BOX CULVERTS, CUTTING DETAILS (FLARED WINGS) (INCL. 706.35)
	703.50D	CONCRETE DOUBLE BOX STRUCTURE - SQUARE (INCL. 706.35)
	703.51C	CONCRETE DOUBLE BOX STRUCTURE - SKEWED (INCL. 706.35)
	703.52B	CONCRETE DOUBLE BOX STRUCTURE - CUT SECTIONS (INCL. 706.35)
	703.53C	DOUBLE BOX STRUCTURE REINFORCEMENT - H15 LOADING (6 SHEETS)
	703.54C	DOUBLE BOX STRUCTURE REINFORCEMENT - H20 OR HS20 LOADING (6 SHEETS)
	703.55A	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SQUARE (INCL. 706.35)
	703.56A	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SKEWED (INCL. 706.35)
	703.60C	CONCRETE BOX STRUCTURE - PIPE INLET
	706.30D	REINFORCING BAR SUPPORTS
✓	706.35D	BAR SUPPORTS FOR CONCRETE REINFORCEMENT
	712.40B	STEEL DAMS FOR BRIDGES (6" CHANNEL)
	712.41B	STEEL DAMS FOR BRIDGES (4" CHANNEL)
	725.31C	METAL CURTAIN WALL AND METAL INLETS
✓	726.30B	CULVERT INSTALLATION METHODS
	731.00N	PRECAST MANHOLES (ALSO INCLUDE 614.30)
✓	731.10F	PRECAST DROP INLETS (4 SHEETS) (ALSO INCLUDE 614.30 & 614.10)
✓	732.00G	FLARED END SECTION (2 SHEETS)
	806.00C	EROSION CONTROL NETTING (INSTALLATION) TYPE I
✓	806.02	STAPLE PLACEMENT FOR TYPE III NETTING

✓	NO.	DESCRIPTION FINAL PLANS
		HIGHWAY LIGHTING
	901.00L	POLES & APPURTENANCES - 30' (3 SHEETS) *
	901.01Q	POLES & APPURTENANCES - 45' (3 SHEETS) *
	901.05A	CONTROL PANEL CABINET DETAILS (2 SHEETS) (NOTE BELOW)
	901.12A	POLE MOUNT. CONT. STA.-SECONDARY SERV.-480 V MULTI. CIR. (NOT METERED)
	901.15C	POLE MOUNT. CONT. STA.-SEC. SERV.-120, 240, & 480 V MULTI. CIR.
	901.16B	POLE MOUNT. CONT. STA.-SEC. SERV.-480 V MULTI. CIR. (METERED)
	901.18B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.
	901.19B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (NOT METERED)
	901.20B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR. (SIG. METERED)
	901.22C	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 & 480 V MULTI. CIR. (BOTH METERED)
	901.23C	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (METERED)
	901.24B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (LT'S & SIGS-BOTH METERED)
	901.25B	BASE MOUNT CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.
		NOTE: ALSO INCLUDE 901.05 WITH 901.12 THROUGH 901.25 EXCEPT 901.18
		TRAFFIC SIGNALS
	902.00C	SIGNAL HEADS, LENSES AND MOUNTING
	902.10D	PULL BOXES, CONTROLLERS, COND. LOCATION *
	902.15	POWER SUPPLY ASSEMBLY *
	902.21A	TELEPHONE INTERCONNECT
	902.30D	CONCRETE BASES *
	902.40D	TUBULAR STEEL POST *
	902.50D	DETECTORS
	902.60D	SPAN WIRE DETAILS - STEEL POST
	902.70	SPAN WIRE DETAILS - WOOD POLE
		HIGHWAY SIGNING
✓	903.01C	ALPHABETS (2 SHEETS)
	903.02S	HIGHWAY SIGNING (7 SHEETS)
	903.03AD	SIGN MOUNTING DETAILS (6 SHEETS)
	903.04C	WEIGH STATION SIGNING
	903.05C	TUBULAR SPAN SUPPORT - ONE TUBE, TYPE S
	903.06C	TUBULAR SPAN SUPPORT - TWO TUBE, TYPE S
	903.07C	TUBULAR CANTILEVER SUPPORTS, TYPE C
	903.08C	TUBULAR BUTTERFLY SUPPORTS, TYPE B
	903.09C	LIGHTING SUPPORT BRACKET
	903.10S	SIGN TRUSSES - OVERHEAD ALUMINUM (8 SHEETS) (INCL. 903.03)
	903.12L	SIGN TRUSSES - BUTTERFLY & CANTILEVER - STEEL (7 SHEETS) (INCL. 903.03)
	903.60Q	SIGN TRUSSES - OVERHEAD STEEL (7 SHEETS) (INCL. 903.03)

NOTES: Plans for this project were developed using Drawings from this index.

* Revised since April, 1983

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SP-1

MISSOURI STATE HIGHWAY COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY

COUNTY JASPER
ROUTE 71 ALT.
PROJECT 7-U-71A-21D
JOB NO 7-U-71A-21D
FINAL PLANS

DESIGN DESIGNATION

A.D.T. - 1981 = 5760
A.D.T. - 2001 = 9500
D.H.V. 1380
D/D 60/40
T = 5 %
V = 60 M.P.H.

FULLY LIMITED ACCESS HIGHWAY

THIS SHALL BE A FULLY LIMITED ACCESS HIGHWAY BETWEEN STA [illegible] AND STA 752+19.7 NO ABUTTING OWNER SHALL HAVE THE RIGHT OF DIRECT ACCESS TO SAID HIGHWAY OR ITS RIGHT-OF-WAY EXCEPT THAT ACCESS WILL BE PERMITTED TO ANY ADJACENT OUTER ROADWAY OR SERVICE ROAD TO WHICH ACCESS IS NOT SPECIFICALLY PROHIBITED BY THE SPECIAL SYMBOL DENOTING "NO RIGHT OF ACCESS" AS SHOWN ON THE PLANS. NO ACCESS WILL BE PERMITTED FROM OUTER ROADWAYS AND SERVICE ROADS TO THROUGHWAYS EXCEPT ALONG ROUTES CONSTRUCTED FOR THAT PURPOSE. OUTER ROADWAYS AND SERVICE ROADS, AS THE CASE MAY BE, ARE SO DESIGNATED ON THE PLANS.

BEGINNING AND ENDING OF LIMITED ACCESS
LIMITED ACCESS
NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

CONVENTIONAL SIGNS
(USED IN PLANS)

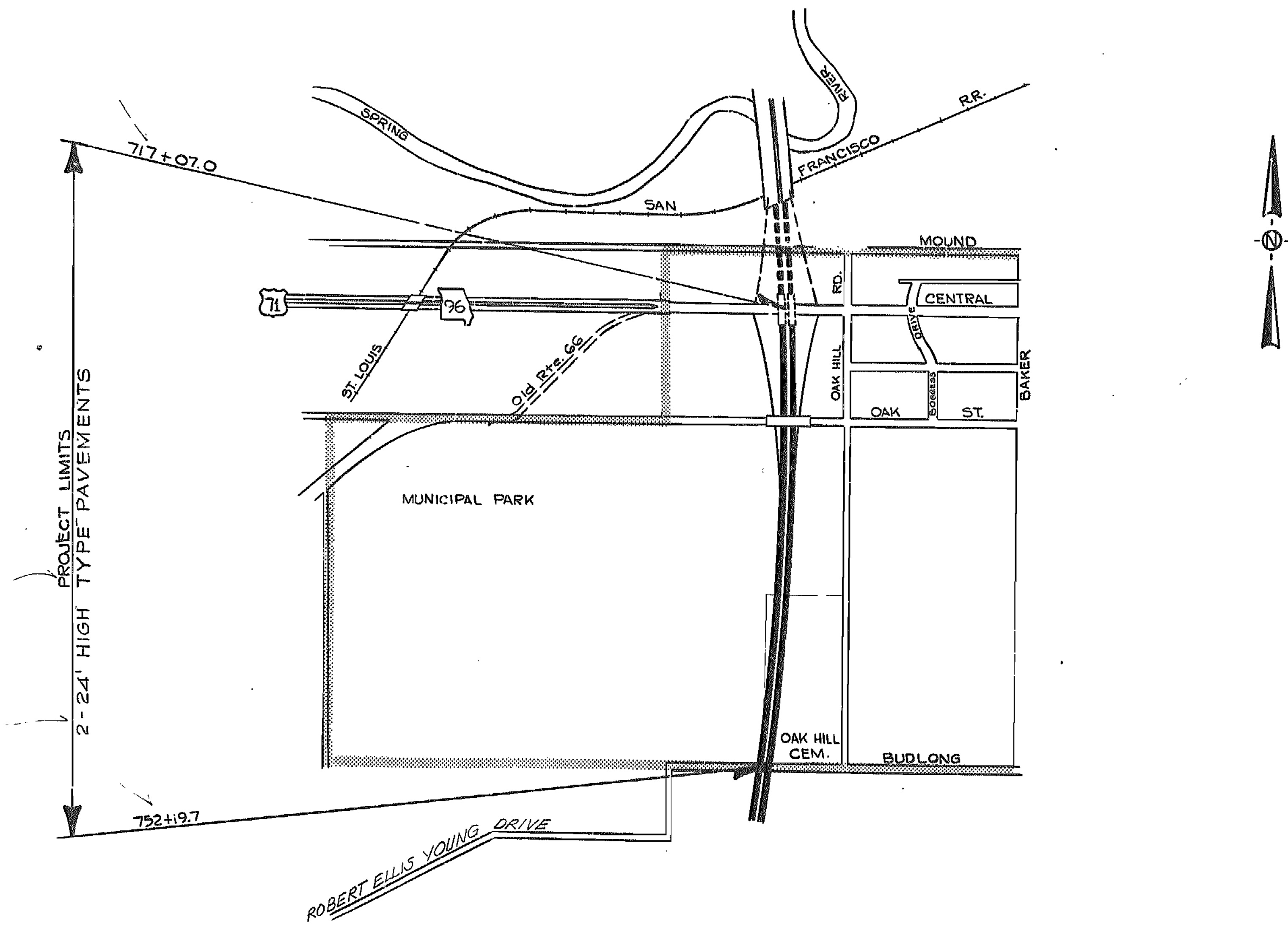
BUILDINGS AND STRUCTURES
GUARD RAIL
CONCRETE RIGHT-OF-WAY MARKER
STEEL RIGHT-OF-WAY MARKER
FENCE
- CHAIN LINK
- WOVEN WIRE
- GATE

UTILITIES
- TELEPHONE
- POWER
- GAS
- WATER

CITY LIMITS

NOTE: DASHED OR OPEN SYMBOL INDICATES EXISTING FEATURE

34 293



0 1/4 1/2 3/4 1
SCALE IN MILES

AWARDED
SEP 6 1985
MO. HIGHWAY & TRANSPORTATION DEPT.

INDEX OF SHEETS

LENGTH OF PROJECT

END OF PROJECT	STA. 752 +19.7	
BEGINNING OF PROJECT	STA. 717 +07.0	
APPARENT LENGTH	3512.7	FEET
EQUATIONS AND EXCEPTIONS	None	
TOTAL CORRECTIONS	None	FEET
NET LENGTH OF PROJECT	3512.7	FEET
STATE LENGTH	0.67	MILES
FEDERAL LENGTH	[illegible]	MILES

MISSOURI STATE HIGHWAY COMMISSION

SUBMITTED

CHIEF ENGINEER DATE

STATE OF MISSOURI
ROBERT N. HUNTER
NUMBER E-7031
REGISTERED PROFESSIONAL ENGINEER

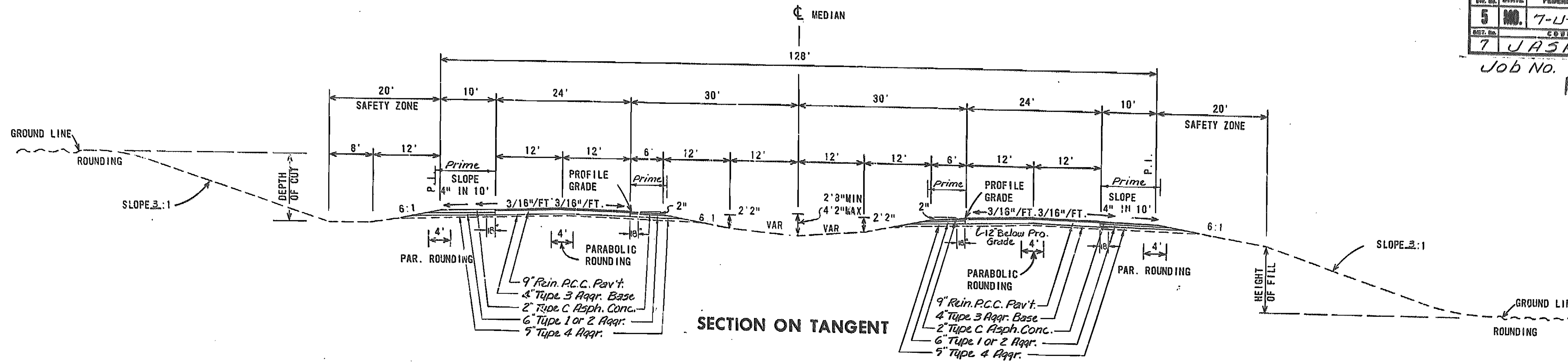
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED

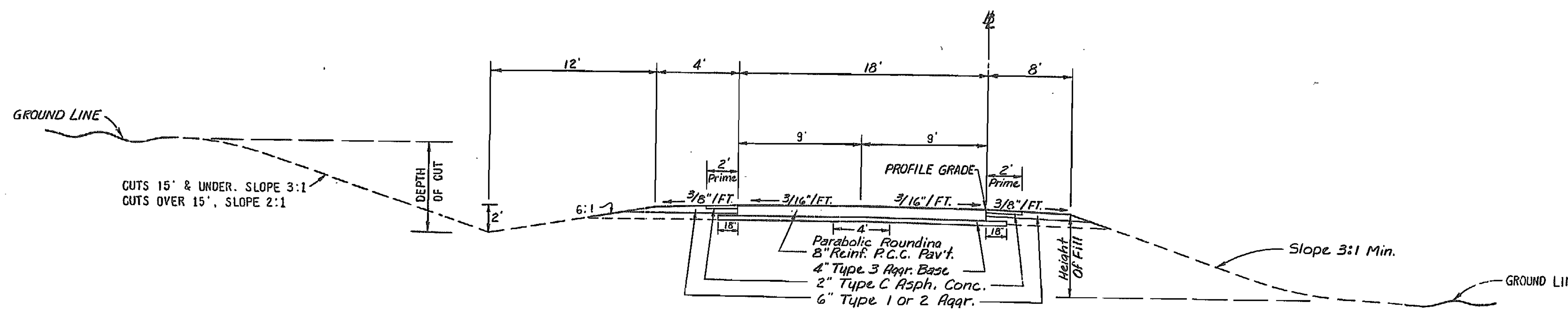
DIVISION ENGINEER DATE

FED. ROAD DIV. No.	STATE	FEDERAL PROJECT No. & SEC.	SHEET No.
5	MO.	7-U-71A-21D	2
DIST. No.	COUNTY		ROUTE
7	JASPER		71A

Job No. 7-U-71A-21D
FINAL PLANS

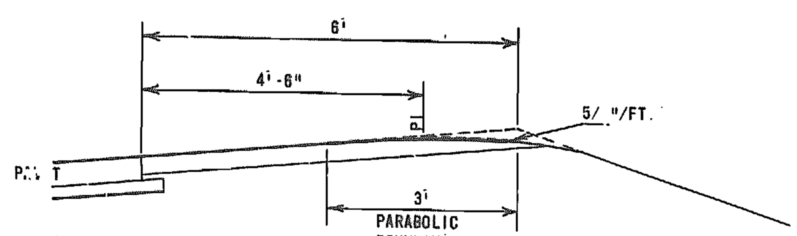


SECTION ON TANGENT



SECTION ON TANGENT

RAMPS 3 & 4
CENTRAL STREET INTERCHANGE



DETAIL A

INSIDE RAMP SHLDR., HIGH SIDE SUPER

Note:
Type 4 Aggr. Omitted On The High Side Of Superelevated Curves.

SP-60(6)D
128 FOOT ROADBED - 2-24 FOOT TRAVEL WAYS - 60 FOOT MEDIAN (WITH SAFETY ZONES) D-7-1-80

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION
SUMMARY OF QUANTITIES

FINAL PLANS

SHEET 1 OF 1

STATE	JOB NO.	SHEET NO.
MO.	7-U-71A-21D	2A
DIST. NO.	PROJECT NO. 7-U-71A-21D	ROUTE
7	COUNTY JASPER	71 Alt.

ITEM	DESCRIPTION	UNIT	QUANTITY
210-10.06	SUBGRADE COMPACTION (6-INCH DEPTH)	STATION	94.0
212-10.00	SUBGRADING AND SHOULDERING CLASS 1	STATION	94.0
304-00.63	TYPE 1 AGGREGATE FOR BASE (6 IN. THICK)	SQ YD	19,985
304-03.43	TYPE 3 AGGREGATE FOR BASE (4 IN. THICK)	SQ YD	27,528
304-04.53	TYPE 4 AGGREGATE FOR BASE (5 IN. THICK)	SQ YD	22,181
403-10.11	ASPHALT CEMENT (ASPHALTIC CONCRETE) 60-70	TON	75.2
403-80.00	MINERAL AGGREGATE (ASPHALTIC CONCRETE) (TYPE C MIX)	TON	1,595
408-10.10	PRIME-LIQUID ASPHALT MC 30	GALLON	6,420
502-12.08	CONCRETE PAVEMENT (8 IN. REINFORCED)	SQ YD	3,805.4
502-12.09	CONCRETE PAVEMENT (9 IN. REINFORCED)	SQ YD	20,711.6
503-10.00	BRIDGE APPROACH SLAB	SQ YD	175.2
601-10.00	FIELD LABORATORIES	LUMP SUM	1
605-10.15	8 IN. CLASS A UNPERFORATED UNDERDRAIN PIPE	LIN FT	108
606-10.10	GUARD RAIL TYPE A	LIN FT	150
606-22.00	BRIDGE ANCHOR SECTION (SAFETY BARRIER CURB)	EACH	2
606-30.00	TERMINAL SECTION	EACH	2
609-40.10	DRAIN BASIN	EACH	4
609-60.00	DITCH LINER	SQ YD	55
802-20.00	TYPE 2 MULCH	ACRE	5.4
802-99.88	MULCH OVERSPRAY	ACRE	5.4
805-10.00	SEEDING	ACRE	5.4
	HIGHWAY SIGNING		
903-10.10	CONCRETE FOOTINGS, EMBEDDED	CU YD	11.1
903-11.20	TRENCHING TYPE II	LIN FT	50
903-12.10	STRUCTURAL STEEL POSTS	POUND	4,350
903-12.20	PIPE POSTS	POUND	1,980
903-12.40	BREAKAWAY ASSEMBLY	EACH	20
903-40.08	CABLE, 8AWG 1 CONDUCTOR	LIN FT	600
903-42.07	1 IN. CABLE-CONDUIT 2 CONDUCTORS AND 1 BARE NEUTRAL, 8 AWG	LIN FT	70
903-50.01	TYPE STB24 SIGN	SQ FT	668
903-50.04	TYPE SHR24 SIGN	SQ FT	26
903-50.05	TYPE SHR123 SIGN	SQ FT	52
903-50.06	TYPE SHR1 SIGN	SQ FT	79
903-50.07	TYPE SHB24 SIGN	SQ FT	99
903-50.10	DELINEATOR, SINGLE WHITE	EACH	54
903-50.14	DELINEATOR, DOUBLE WHITE	EACH	20
903-50.16	DELINEATOR, SINGLE YELLOW	EACH	6
903-61.18	120-240 VOLT POLE MOUNTED CONTROL STATION, DWG NO. 901.18	EACH	1
903-62.30	30 FT SERVICE POLE, CLASS 4	EACH	1
	CONTINGENT ITEMS		
501.01	CLASS A EXCAVATION	CU. YD.	205
501.02	CLASS 3 EXCAVATION	EACH	1
501.03	TYPE 1 AGGREGATE FOR BASE 4 IN.	SQ. YD.	173
501.04	TYPE 3 AGGREGATE FOR BASE 4 IN.	SQ. YD.	1329
501.05	CONCRETE PAVEMENT (8 IN. REINF.)	SQ. YD.	745.8
501.06	CONCRETE PAVEMENT (9 IN. REINF.)	SQ. YD.	376.9
501.07	INTEGRAL CURB (6 IN. AND UNDER) TYPE A	LIN. FT.	217
501.08	CURB AND GUTTER TYPE A	LIN. FT.	172
501.09	CONSTRUCTION SIGNS	SQ. FT.	434
501.10	DRUMS	EACH	38
501.11	FLASHING ARROW PANEL	EACH	1
501.12	TYPE II OBJECT MARKER	EACH	26

Mark J. Sooter 12-29-86

Prepared By [signature] Date Sept 3, 1986

Project Accepted Date July 31, 1986

District Checked By [signature] Date Sept. 25, 1986

7-U-71A-21D 71ALT. JASPER

SP-2B

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

SUMMARY OF QUANTITIES

FINAL PLANS

STATE	JOB NO.	SHEET NO.
MO.	7-U-71A-21D	2B
DIST. NO.	PROJECT NO.	ROUTE
7	7-U-71A-21D	71A
	COUNTY: JASPER	

INTEGRAL CURB (6" HEIGHT AND UNDER) TYPE A

Sheet	Sta.	Sta.	Location	L.F.	Remarks
4B	0+46	1+02	Island Lt. Ramp 3	217	Field Meas.
			TOTAL	217	

CURB AND GUTTER TYPE A

Sheet	Sta.	Sta.	Location	L.F.	Remarks
4B	463+65	1+44	Ramp 3 Rt.	172	Field Meas.
			TOTAL	172	

BRIDGE APPROACH SLABS

Sheet	Sta.	Sta.	Loc.	Skew	Conc. S.Y.
3	718+03.5	718+23.5	Rt.	59.	87.6
3	718+05.0	718+25.0	Lt.	59.	87.6
				Total	175.2

GUARD RAIL TYPE A

Sheet	Sta.	Sta.	Loc.	Type A Lin. Ft.	Term. Sect. Each	Br. Anch. Sect. Each	Remarks
3	718+	719+	Lt.	75'	1	1	
3	718+	719+	Lt.	75'	1	1	
			Totals	150'	2	2	

DRAIN BASINS

Sheet	Sta.	Loc.	Drain Basin Ea.	Cl. 3 Exc. Lump Sum	8" Cl. A Unperf. Undrn. Pipe Ft.	Remarks
3	718+26.4	Rt.	1		6	Lt. Rt. Lane
3	718+26.8	Rt.	1		50	Rt. Rt. Lane
3	718+27.7	Lt.	1		46	Lt. Lt. Lane
3	718+28.1	Lt.	1		6	Rt. Lt. Lane
		Totals	4	1*	108	

*Cl. 3 Exc. ~ Cont. Item 501.02, Lump-Sum by C.O. #1

DITCH LINER

Sheet	Sta.	Loc.	Length	Width	S.Y.	Remarks
3	718+26.4	Rt.	6'	12'	7.8	@ Outlet Of 8" Pipe See Sheet #14
3	718+26.8	Rt.	3.1	93	31.8	See Sheet #14
3	718+27.7	Lt.	6'	12'	7.8	" " " "
3	718+28.1	Lt.	6'	12'	7.8	" " " "
				Total	55.2	
				Use	55	

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

34 / 96

SP-28S REV OCT 1, 86

STATE	JOB NO.	SHEET NO.
MO.	7-U-71A-21D	2B
DIST. NO.	PROJECT NO. 7-U-71A-21D	ROUTE
7	COUNTY JASPER	71 Alt.

SUMMARY OF QUANTITIES

Sheet 2 of 2

FINAL PLANS

SIGN	SIZE (INS)	AREA (SQ FT)	QTY	TOTAL AREA (SQ FT)	QTY. RELOC.	TOTAL RELOC. AREA (SQ FT)	DESCRIPTION
WARNING SIGNS							
WO1-1Lb	48x48	16.0					TURN (SYMBOL LEFT ARROW)
WO1-1Rb	48x48	16.0					TURN (SYMBOL RIGHT ARROW)
WO1-2Lb	48x48	16.0					CURVE (SYMBOL LEFT ARROW)
WO1-2Rb	48x48	16.0					CURVE (SYMBOL RIGHT ARROW)
WO1-3Lb	48x48	16.0					REVERSE TURN (SYMBOL LEFT ARROW)
WO1-3Rb	48x48	16.0					REVERSE TURN (SYMBOL RIGHT ARROW)
WO1-4Lb	48x48	16.0					REVERSE CURVE (SYMBOL LEFT ARROW)
WO1-4Rb	48x48	16.0					REVERSE CURVE (SYMBOL RIGHT ARROW)
WO1-6	48x24	8.0					HORIZONTAL ARROW (SYMBOL)
WO1-6a	72x36	18.0					HORIZONTAL ARROW (SYMBOL)
WO1-7	48x24	8.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
WO1-7a	72x36	18.0					DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
WO1-8	18x24	3.0					CHEVRON (SYMBOL)
WO3-1b	48x48	16.0					STOP AHEAD
WO3-2b	48x48	16.0					YIELD AHEAD
WO3-3b	48x48	16.0					SIGNAL AHEAD (SYMBOL)
WO3-4b	48x48	16.0	2	32.0			BE PREPARED TO STOP
WO4-1Lb	48x48	16.0					MERGE (SYMBOL FROM LEFT)
WO4-1Rb	48x48	16.0					MERGE (SYMBOL FROM RIGHT)
WO5-1a	48x48	16.0					ROAD NARROWS
WO5-3a	48x48	16.0					ONE LANE BRIDGE
WO6-1b	48x48	16.0					DIVIDED HIGHWAY
WO6-2b	48x48	16.0					DIVIDED HIGHWAY ENDS
WO6-3b	48x48	16.0					TWO WAY TRAFFIC (SYMBOL)
WO6-3x	24x17	3.75					TWO WAY TRAFFIC (PLAQUE)
WO8-1b	48x48	16.0					BUMP
WO8-2b	48x48	16.0					DIP
WO8-3	48x48	16.0					PAVEMENT ENDS
WO8-4b	48x48	16.0					SOFT SHOULDER
WO8-5b	48x48	16.0					SLIPPERY WHEN WET (SYMBOL)
WO8-6b	48x48	16.0					TRUCK CROSSING
WO8-6c	48x48	16.0					TRUCK ENT. (Includes 1000 FT./1500 FT. plate W025-1a)
WO8-7a	36x36	9.0					LOOSE GRAVEL
WO8-9a	48x48	16.0					LOW SHOULDER
WO9-1R	48x48	16.0					RIGHT LANE ENDS (Includes LEFT/CENTER plate WO25-3c)
WO9-2Ra	48x48	16.0					LANE ENDS MERGE RIGHT (Includes LEFT plate WO25-3b)
W10-1a	42 Dia.	9.6					RAILROAD CROSSING
WO12-1	24x24	4.0					DOUBLE DOWN ARROW (SYMBOL)
WO12-2a	48x48	16.0					LOW CLEARANCE (SYMBOL)
WO12-2x	24x18	3.0					LOW CLEARANCE (PLAQUE)
WO12-3a,b	144x24	24.0					OVERHEAD LOW CLEARANCE (FEET AND INCHES)
WO13-1a	24x24	4.0					ADVISORY SPEED (PLAQUE)
WO20-1	48x48	16.0	8	128.0			ROAD CONST. AHEAD (Incl. RAMP/BRIDGE plate WO25-6)
WO20-2	48x48	16.0					DETOUR AHEAD (Includes 500 FT./1000 FT. plate WO25-1b)
WO20-3	48x48	16.0					RD. CLOSED AHEAD (Incl. 500 FT./1000 FT. plate WO25-1c)
WO20-4a	48x48	16.0					ONE LN. RD. AHD (Incl. 1000 FT./1500 FT. plate WO25-1a)
WO20-5	48x48	16.0	4	64.0			RT. LN. CLOSED AHEAD (Incl. LEFT/CENTER plate WO25-3d)
WO20-6a	48x48	16.0	4	64.0			RIGHT LANE CLOSED (Incl. LEFT/CENTER plate WO25-3c)
WO20-7a	48x48	16.0	4	64.0			FLAGMAN AHEAD (Incl. 500 FT./1000 FT. plate WO25-1b)
WO20-9c	48x48	16.0	2	32.0			OPEN TRENCH
WO21-2a	48x48	16.0					FRESH OIL
WO21-5b	48x48	16.0					SHOULDER WORK AHEAD
WO21-7	36x36	9.0					SAND BLASTING
WO22-1	48x48	16.0					BLASTING ZONE 1000 FT.
WO22-2	42x36	10.5					TURN OFF 2-WAY RADIO
WO22-3	42x36	10.5					END BLASTING ZONE
WO25-1a	26x9						1000 FT./1500 FT. Plate
WO25-1b	38x9						500 FT./1000 FT. Plate
WO25-1c	34x9						500 FT./1000 FT. Plate
WO25-3b	30x9						LEFT Plate
WO25-3c	33x9						LEFT/CENTER Plate
WO25-3d	22x9						LEFT/CENTER Plate
WO25-5	30x12	2.5					1/2 MILE/1 MILE (PLAQUE)
WO25-6	28x9						RAMP/BRIDGE Plate

SIGN	SIZE (INS)	AREA (SQ FT)	QTY	TOTAL AREA (SQ FT)	QTY. RELOC.	TOTAL RELOC. AREA (SQ FT)	DESCRIPTION
REGULATORY SIGNS							
R1-1b	48x48	13.25					STOP
R1-2a	48x48x48	6.93					YIELD
R1-2x	36x36	9.0					TO ONCOMING TRAFFIC (PLAQUE)
R1-3	20x9	1.25					4-WAY (PLAQUE)
R1-5	20x9	1.25					3-WAY (PLAQUE)
R2-1b	36x48	12.0					SPEED LIMIT XX
R2-5	36x48	12.0					REDUCED SPEED AHEAD
R3-1b	36x48	12.0					NO RIGHT TURN
R3-2b	36x48	12.0					NO LEFT TURN
R3-3a	36x36	9.0					NO TURNS
R3-4b	36x48	12.0					NO U-TURN
R3-7L	30x30	6.25					LEFT LANE MUST TURN LEFT
R3-7R	30x30	6.25					RIGHT LANE MUST TURN RIGHT
R4-1b	36x48	12.0					DO NOT PASS
R4-2b	36x48	12.0					PASS WITH CARE
R4-7Lb	36x48	12.0					KEEP LEFT (HORIZONTAL ARROW)
R4-7Rb	36x48	12.0					KEEP RIGHT (HORIZONTAL ARROW)
R4-17L	36x36	9.0					KEEP LEFT
R4-17R	36x36	9.0					KEEP RIGHT
R5-1	30x30	6.25					DO NOT ENTER
R5-1a	36x24	5.0					WRONG WAY
R6-1La	48x18	6.0					ONE WAY ARROW (LEFT)
R6-1Ra	48x18	6.0					ONE WAY ARROW (RIGHT)
R6-2La	24x30	5.0					ONE WAY (LEFT)
R6-2Ra	24x30	5.0					ONE WAY (RIGHT)
R11-2	48x30	10.0					ROAD CLOSED
R11-3	60x30	12.5					ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60x30	12.5					ROAD CLOSED TO THRU TRAFFIC
GUIDE SIGNS							
GO20-1	60x36	15.0					ROAD CONSTRUCTION NEXT XX MILES
GO20-2	60x24	10.0	5	50.0			END CONSTRUCTION
MO4-8a	30x15	3.13					DETOUR (PLAQUE)
MO4-9L	48x36	12.0					DETOUR (LEFT ARROW)
MO4-9R	48x36	12.0					DETOUR (RIGHT ARROW)
MO4-10L	48x18	6.0					DETOUR (ARROW LEFT)
MO4-10R	48x18	6.0					DETOUR (ARROW RIGHT)
MO4-11	24x18	3.0					DETOUR ENDS
M5-1L	21x15	2.19					ADVANCE LEFT TURN ARROW
M5-1R	21x15	2.19					ADVANCE RIGHT TURN ARROW
MISCELLANEOUS SIGNS							

616-10.05 CONSTRUCTION SIGNS TOTAL	434.0	
616-10.10 RELOCATED SIGNS TOTAL		

ITEM NO.	SIZE	TOTAL QTY.	DESCRIPTION
616-10.20	36x18	38	DRUM
616-10.35	8x24		TYPE I BARRICADE (One Rails)
616-10.36	8x24		TYPE II BARRICADE (Two Rails)
616-10.40	36x72	1	FLASHING ARROW PANEL
616-10.45	18X18		TYPE I OBJECT MARKER
616-10.46	6x12	26	TYPE II OBJECT MARKER
616-10.47	8x24		TYPE III OBJECT MARKER
616-10.50	8x8		FLASHING ELECTRIC LIGHT
616-10.51	---		WARNING LIGHT TYPE A
616-10.52	---		WARNING LIGHT TYPE B
616-10.53	---		WARNING LIGHT TYPE C
616-10.60	---		RAISED PAVEMENT MARKER
612-10.30	72x144		MOVABLE BARRICADE (Three Rails)

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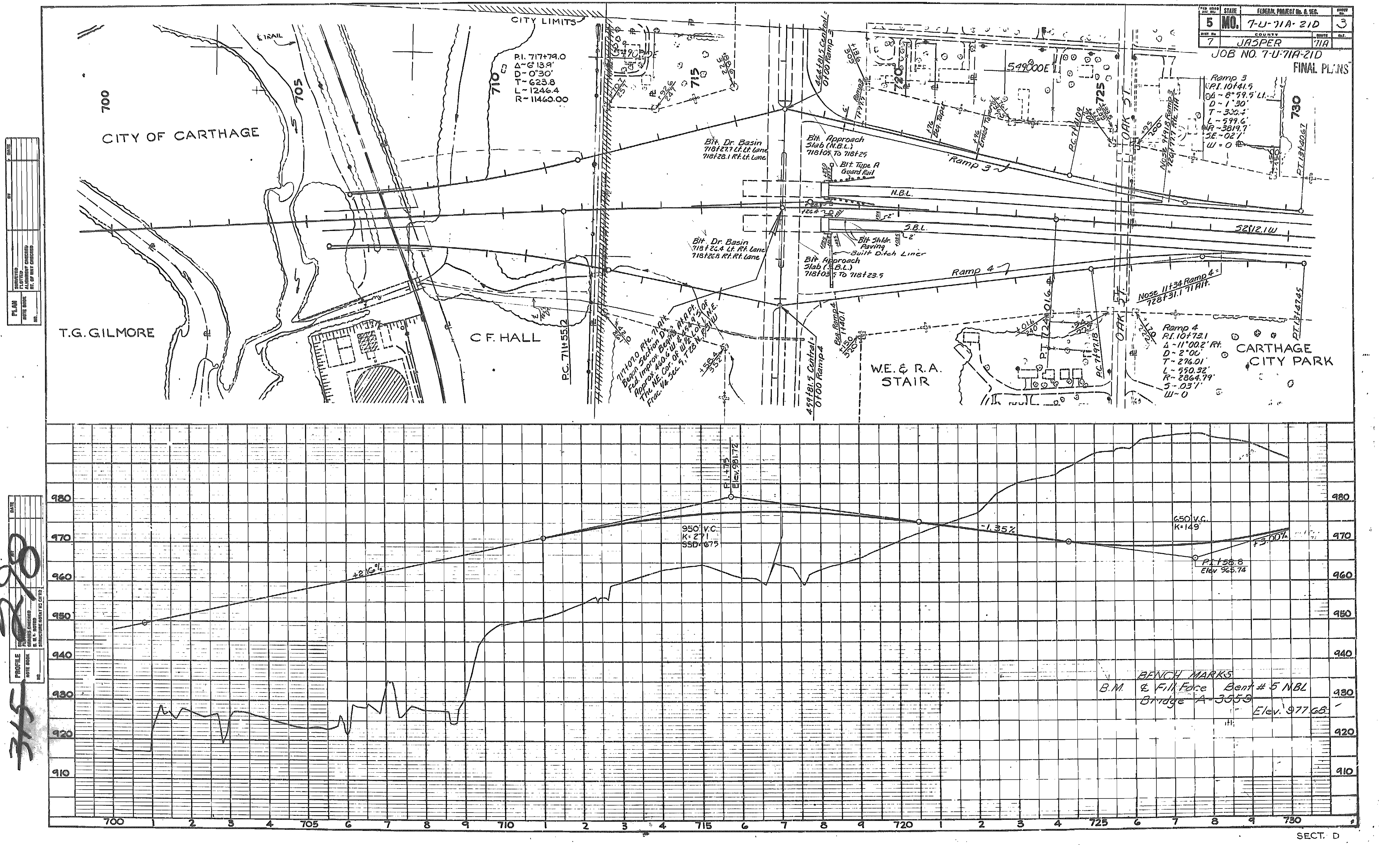
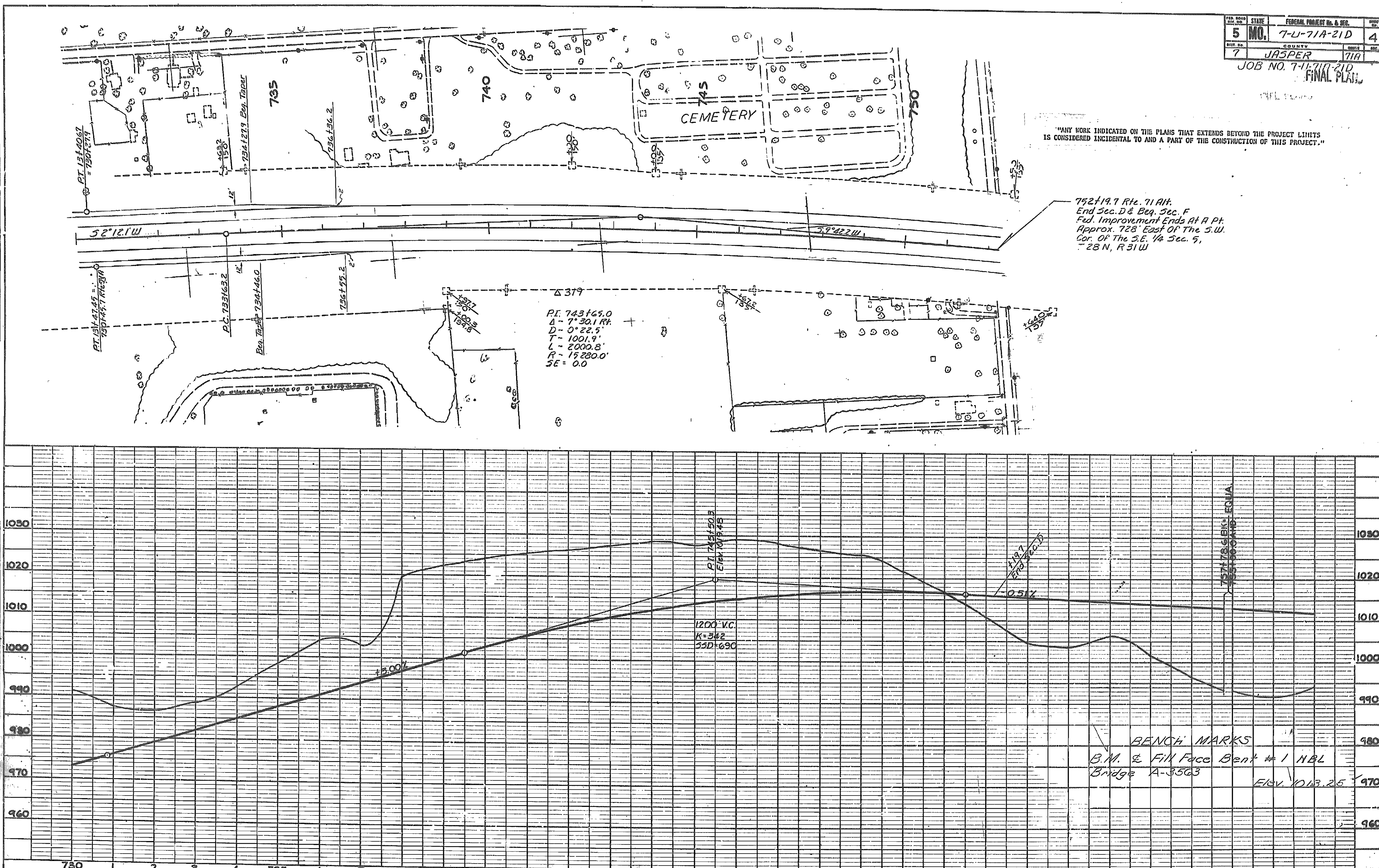


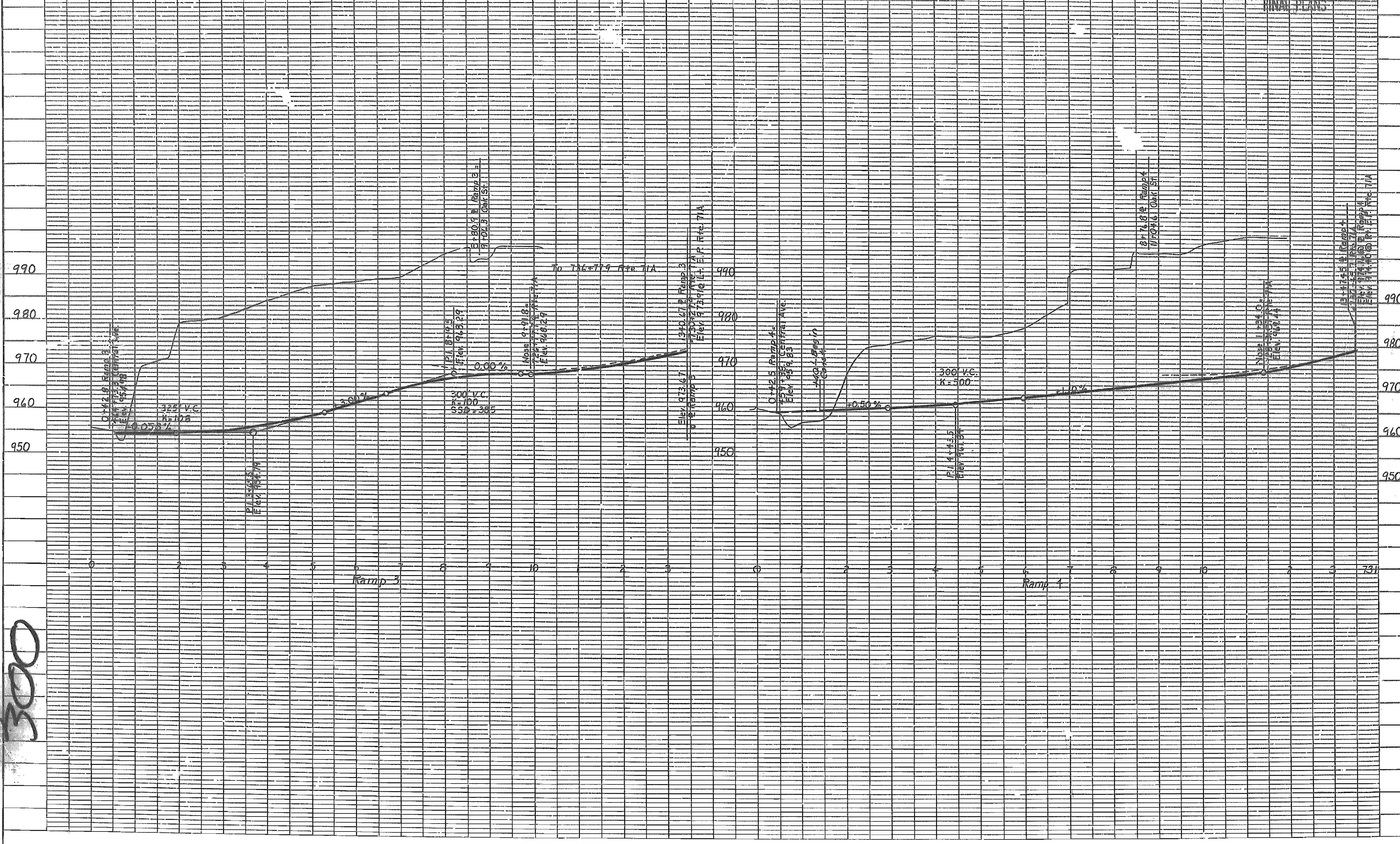
5
MO.
7-U-71A-21D
3
7
JASPER
71A
JOB NO. 7-U-71A-21D
FINAL PLANS
CITY LIMITS
CITY OF CARTHAGE
P.I. 717+79.0
Δ~6°13.9'
D~0°30'
T~623.8
L~1246.4
R~11460.00
549000E
Ramp 3
P.I. 10+41.5
Δ~8°59.5' Lt.
D~1°30'
T~300.4'
L~599.6'
R~3819.7'
SE~.02'/'
W~0
Blt. Dr. Basin
718+27.7 Lt. Lt. Lane
718+28.1 Rt. Lt. Lane
Blt. Approach
Slab (N.B.L.)
718+07 To 718+25
Blt. Type A
Guard Rail
N.B.L.
S.B.L.
52812.1W
Blt. Dr. Basin
718+26.4 Lt. Rt. Lane
718+26.8 Rt. Rt. Lane
Blt. Shldr.
Paving
Built Ditch Liner
Blt. Approach
Slab (S.B.L.)
718+03.5 To 718+23.5
Ramp 4
Nose 11+34 Ramp 4 =
728+31.1 71 Alt.
OAK ST.
T.G. GILMORE
C.F. HALL
P.C. 711+55.2
W.E. & R.A.
STAIR
Ramp 4
P.I. 10+72.1
Δ~11°00.2' Rt.
D~2°00'
T~276.01'
L~550.32'
R~2864.79'
S~.03'/'
W~0
CARTHAGE
CITY PARK
P.T. 13+47.45
P.T. 13+20.67
P.I. +75
Elev. 981.72
950' V.C.
K=271
SSD=675
+2.10%
-1.35%
650' V.C.
K=149
+3.00%
P.I. +58.8
Elev. 965.74
BENCH MARKS
B.M. ℄ Fill Face Bent # 5 NBL
Bridge A-3553
Elev. 977.68
SECT. D


FED. ROAD DIV. NO. 5
STATE MO.
FEDERAL PROJECT No. & SEC. 7-U-71A-21D
SHEET No. 4
DIST. No. 7
COUNTY JASPER
ROUTE 71A
JOB NO. 7-U-71A-21D
FINAL PLAN
"ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT."
735
740
745
750
CEMETERY
P.T. 131+40.67 = 730+27.9
734+27.9 Beg. Taper
736+36.2
S 2°12.1' W
S 9°42.2' W
P.T. 131+47.45 = 730+45.1 Rt.
P.C. 731+63.2
Beg. Taper 734+46.0
736+55.2
Δ 319
P.I. 743+65.0
Δ ~ 7°30.1' Rt.
D ~ 0°22.5'
T ~ 1001.9'
L ~ 2000.8'
R ~ 15280.0'
SE = 0.0
752+19.7 Rte. 71 Alt.
End Sec. D & Beg. Sec. F
Fed. Improvement Ends At A Pt. Approx. 728' East Of The S.W. Cor. Of The S.E. 1/4 Sec. 5, T 28 N, R 31 W
PLAN
PROFILE
P.I. 745+50.3
Elev. 1019.48
1200' V.C.
K=342
SSD 690
+3.00%
-0.51%
+19.7 End Sec. D
757+78.6 BK. EQUA
BENCH MARKS
B.M. ℄ Fill Face Bent # 1 NBL
Bridge A-3563
Elev. 1013.25
SECT. D

STATE	JOB NO.	SHEET NO.
MO.	7-U-71A-21D	4A
DIST. NO.	PROJECT NO. 7-U-71A-21D	ROUTE
7	COUNTY JASPER	71A

FINAL PLANS

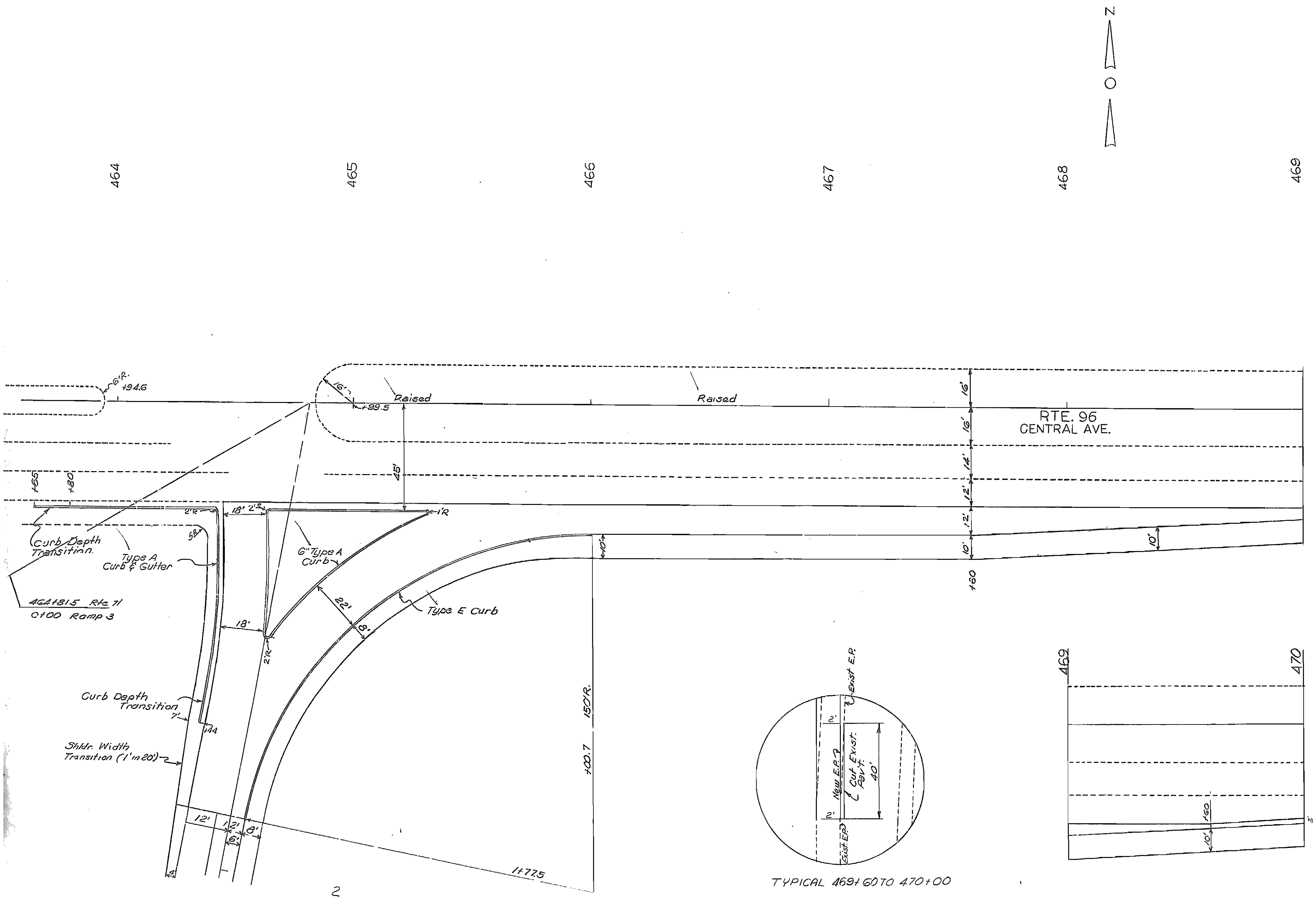
PROFILE



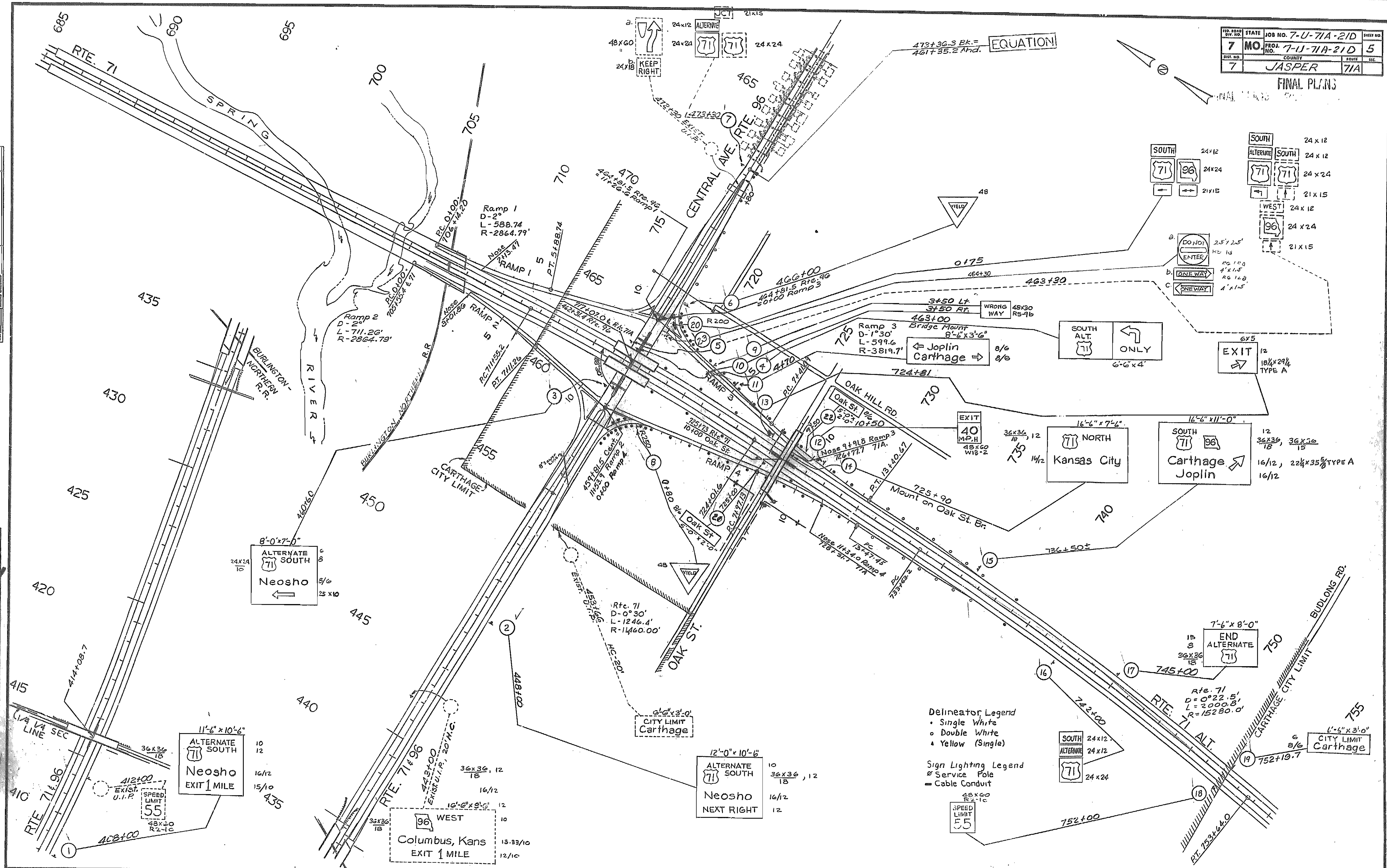
3/7
300

STATE	JOB NO.	SHEET NO.
MO.	7-U-71A-21D	4B
DIST. NO.	PROJECT NO. 7-U-71A-21D	ROUTE
7	COUNTY 7 JASPER	71A

FINAL PLANS



SPECIAL SHEET NO. 1



FED. ROAD DIV. NO. 7
STATE MO.
JOB NO. 7-U-71A-21D
PROJ. NO. 7-U-71A-21D
SHEET NO. 5
DIST. NO. 7
COUNTY JASPER
ROUTE 71A
FINAL PLANS
RTE. 71
SPRING RIVER
BURLINGTON NORTHERN R.R.
CENTRAL AVE. RTE. 96
OAK ST.
OAK HILL RD.
BUDLONG RD.
RTE. 71 ALT.
RTE. 71 & 96
CARTHAGE CITY LIMIT
1/4 1/4 LINE SEC.
EQUATION
473+36.3 Bk.= 461+35.2 Ahd.
Ramp 1
D-2°
L-588.74
R-2864.79'
Ramp 2
D-2°
L-711.26'
R-2864.79'
Ramp 3
D-1°30'
L-599.6
R-3819.7'
Rte. 71
D-0°30'
L-1246.4'
R-11460.00'
Rte. 71
D=0°22.5'
L=2000.8'
R=15280.0'
ALTERNATE 71 SOUTH
Neosho
EXIT 1 MILE
ALTERNATE 71 SOUTH
Neosho
NEXT RIGHT
96 WEST
Columbus, Kans
EXIT 1 MILE
71 NORTH
Kansas City
SOUTH 71 96
Carthage
Joplin
SOUTH ALT. 71
ONLY
Joplin
Carthage
EXIT
EXIT 40 M.P.H.
WRONG WAY
DO NOT ENTER
ONE WAY
YIELD
KEEP RIGHT
SPEED LIMIT 55
END ALTERNATE 71
CITY LIMIT Carthage
Delineator Legend
• Single White
∘ Double White
▴ Yellow (Single)
Sign Lighting Legend
Ø Service Pole
▬ Cable Conduit

SP-29
REV. AUG. 1, 1981

FED. ROAD DIV. NO.	STATE	JOB NO.	SHEET NO.
7	MO.	7-U-71A-21D	
		PROJ. NO. 7-U-71A-21D	10
DIST. NO.		COUNTY	ROUTE
7		JASPER	71A

FINAL PLANS

SIGNS: SIGN NO.	STATION	SIGN DT'L SHT NO.	LOCATION	SIGN SIZE	PIPE POST (*TOTAL INCLUDES STUB LENGTH WHEN APPLICABLE): PIPE SIZE (IN.)	POST NO. 1 (LIN. FT.)	POST NO. 2 (LIN. FT.)	TOTAL* (LIN. FT.)	LBS PER FT.	TOTAL (LBS.)	STRUCTURAL STEEL POSTS (*TOTAL INCLUDES STUB LENGTH WHEN APPLICABLE): POST DES. NO.	POST NO. 1 (LIN. FT.)	POST NO. 2 (LIN. FT.)	POST NO. 3 (LIN. FT.)	TOTAL* (LIN. FT.)	LBS PER FT.	TOTAL (LBS.)	3 INCH ZEE ASSEMBLY: NO. EACH	POST SPACE	TOTAL (LBS.)	BASE PLATE (LBS.)	ASSEMBLY CROSS-BARS 2" X 3/8" BARS @ 2.55 LBS/LIN. FT.: NO. EACH	LG. (IN.)	TOTAL (LIN. FT.)	TOTAL (LBS.)	BRKAWY ASM. ITEM NO. 903-12.40 (EACH)	TOTAL STRUCT STL. POST ITEM NO. 903-12.10 (POUNDS)	TOTAL PIPE POST ITEM NO. 903-12.20 (POUNDS)	CONC. FTG'S EMBD. ITEM NO. 903-10.10 (CU. YDS.)	CONC. FTG'S BOLT DOWN ITEM NO. 903-10.20 (CU. YDS.)	BRKAWY ASM. MULTI DIR'L ITEM NO. 903-12.40 (EACH)	HORZ CLEAR IF NOT STD
1	408+00	6	Rt. Central Ave., Rte. 71	11'-6" x 10'-6"							3	21'-3"	21'-9"		43.0	17.0	731.0									2	731		1.42			
2	448+00	7	Rt. Central Ave., Rte. 71	12'-0" x 10'-6"							3	21'-9"	22'-3"		44.0	17.0	748.0									2	748		1.42			
3	460+60	8	Lt. Central Ave., Rte. 96	8'-0" x 7'-0"							2	20'-6"	22'-9"		43.25	15.5	670.4									2	670		0.93			
5	463+30	Std.	Lt. Central Ave., Rte. 96	ASSEM	UIP																	1	49	4.08	10.4		10					
6	464+00	Std.	Rt. Central Ave., Rte. 96	48" YIELD	4"	16'-0"		16.0	10.79	172.6												1	46	3.83	9.8	1	10	173	0.36			
8	0+80	Std.	Rt. Ramp 4	48" YIELD	4"	16'-0"		16.0	10.79	172.6												1	46	3.83	9.8	1	10	173	0.36			
9	3+50	Std.	Lt. Ramp 3	48" x 30"	2½"	12'-9"	13'-3"	26.0	5.79	150.5																		151	0.20		2	
10	3+50	Std.	Rt. Ramp 3	48" x 30"	2½"	12'-9"	13'-3"	26.0	5.79	150.5																		151	0.20		2	12
11	4+20	8	Lt. Ramp 3	8'-6" x 3'-6"	4"	15'-6"	15'-6"	31.0	10.79	334.5																2		335	0.72			
12	10+50	Std.	Lt. Ramp 3	48" x 60"	2½"	15'-3"	15'-9"	31.0	5.79	179.5																2		180	0.20			
13	724+81	Std.	Lt. Rte. 71A	6'-0" x 5'-0"							1	15'-6"	16'-0"		31.5	8.5	267.8									2	268		0.27			
15	736+50±	6	Lt. Rte. 71A	16'-6" x 11'-0"							4	22'-9"	23'-3"		46.0	21.0	966.0									2	966		2.62			
16	742+00	Std.	Rt. Rte. 71A	ASSEM.	2½"	15.0		15.0	5.79	86.9																1		87	0.10			
17	745+00	7	Lt. Rte. 71A	7'-6" x 8'-0"							2	19'-3"	16'-9"		36.0	15.5	558.0										558		0.93			20
18	752+00	Std.	Rt. Rte. 71A	48" x 60"	2½"	15'-3"	15'-9"	31.0	5.79	179.5																2		180	0.20			
19	752+19.7	8	Lt. Rte. 71A	6'-6" x 3'-0"							1	16'-0"	17'-3"		33.25	8.5	282.6										283		0.27			20
20	0+75	Std.	Lt. Ramp 3	ASSEM.	4"	14'-0"		14.0	10.79	151.1												4	50	16.67	42.5	1	43	151	0.36			
4 *#	* 463+00	9	Lt. Central Ave, Rte 96	6'-6" x 4'-0"	Bridge Mount																	1	52	4.33	11.0		11					
14 *#	* 725+90	7	Lt. Rte. 71A	16'-6" x 7'-6"	Bridge Mount																											
7	473+30	STD	Lt. Central Ave, Rte 96	Assem							UIP																					
21	725+00	9	Rt. Rte. 71A	5'-0" x 2'-0"	2½"	13'-9"	14'-3"	28.0	5.79	162.1																2		162	0.20			
22	[illegible]	9	Lt. Ramp 3	5'-0" x 2'-0"	2½"	13'-9"	14'-3"	28.0	5.79	162.1																2		162	0.20			
* 23a	464+30	Std	Rt Central Ave Rte 96	30" x 30"	2½"	15'-0"		15'-0"	5.79	86.9																		87	.10		1	
* 23b	464+30	Std	" " " "	48" x 18"																		2	45	7.5	19.1		19					
* 23c	464+30	Std	" " " " "	48" x 18"																		2	45	7.5	19.1		19					
																				Totals -						24	4346	1992	11.06		5	
																				Use -						24	4350	1990	11.1		5	

* Transferred from project 7-U-71-21 I.

\# *Mounted signs on existing bridge sign brackets, payment for this work included in the price bid for signs.

Sht.	Rte.	Loc.	
		200' Rt.	726+50
5	71A	to 42' Lt.	725+90
Total			
Use			

DELINEATORS, MILEPOSTS, CONDUIT, CONDUCTOR CABLE, TRENCHING & BACKFILLING, CONTROL STATION, PULL BOXES AND OTHER REQUIRED ITEMS:

DELINEATORS

Sht	Loc.	Single White Ea.	Double White Ea.	Single Yellow Ea.
	71A, Ramps 3 & 4			
5	71 & 96 Interchange	54	20	6
Total		54	20	6

120-240 Volt Pole Mounted Control Sta.
Dwg. No. 901.18 & 30' Service Pole, Cl.4

Sht	Rte.	Sta.	Loc.	Pole, Ea.	Control Sta., Ea.
5	71A	726+50	200' Rt.	1	1
Total				1	1

Cable, 8 AWG 1 Conductor
Trenching Type II, & 1 In. Cable-Conduit
2 Conductors and 1 Bare Neutral, 8 AWG

Trenching Lin. Ft.	Cable-Conduit Lin. Ft.	Cable Lin. Ft.	Remarks
			ø to Bridge Mount sign No. 14
50	70	690	
50	70	690	
50	70	690	

303

SP-30
REV. AUG. 1, 196[illegible]

FED. ROAD DIV. NO.	STATE	JOB NO.	SHEET NO.
7	MO.	7-U-71A-21D	11
		PROJ. NO. 7-U-71A-21D	

DIST. NO.	COUNTY	ROUTE	SEC.
7	JASPER	71A	

FINAL PLANS

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	SHR1 NORTH 24"x12"	SHR1 SOUTH 24"x12"	SHR1 ALT. 24"x12"	SHR1 (71) 24"x24"	SHR1 (571) 24"x24"	SHR1 (IH) 24"x24"	SHR1 (JCT) 21"x15"	SHR1 ↑ 21"x15"	SHR1 ┐ 21"x15"	SHR1 ┌ 21"x15"	SHR1 → 21"x15"	SHR1 ↔ 21"x15"	SHR1 END 24"x12"	SHR1 (96) 24"x24"
5	463+30	Lt. Central Ave.		1	1	1					1					
7	473+30	Lt. Central Ave.			1	1										
16	742+00	Rt. Rte. 71A		1	1	1										
20	0+75	Lt. Ramp 3		1		1							1	1		1
	Total			3	3	4					1		1	1		1

SIGN SUMMARY

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE	STB24 ITEM NO. 903-50.01	STR24 ITEM NO. 903-50.02	STR1 ITEM NO. 903-50.03	SHR24 ITEM NO. 903-50.04	SHR123 ITEM NO. 903-50.05	SHR1 ITEM NO. 903-50.06	SHB24 ITEM NO. 903-50.07	36" STOP EACH
1-(71) ALT. SOUTH NEOSHO EXIT 1 MILE	6	1	11'-6"x10'-6"	120.8							
2-(71) ALT. SOUTH NEOSHO NEXT RIGHT	7	1	12'-0"x10'-6"	126.0							
3-(71) ALT. SOUTH NEOSHO ⇐	8	1	8'-0"x7'-0"	56.0							
4-SOUTH ALT. (71) ONLY	9	1	6'-6"x4'-0"				*26.0				
6,8-YIELD	Std.	2	48" Triangle					13.8			
9,10-WRONG WAY	Std.	2	48"x30"					20.0			
11-⇐ JOPLIN CARTHAGE ⇒	8	1	8'-6"x3'-6"							29.8	
12-EXIT 40 MPH	Std.	1	48"x60"						20.0		
13-EXIT	Std.	1	6'-0"x5'-0"							30.0	
14-(71) NORTH KANSAS CITY	7	1	16'-6"x7'-6"	123.8							
15-SOUTH (71) (96) CARTHAGE JOPLIN	6	1	16'-6"x11'-0"	181.5							
17-END ALT. (71)	7	1	7'-6"x8'-0"	60.0							
18-SPEED LIMIT 55	Std.	1	48"x60"						20.0		
19-CITY LIMIT CARTHAGE	8	1	6'-6"x3'-0"							19.5	
SOUTH	Std.	3	24"x12"						6.0		
ALTERNATE	Std.	3	24"x12"						6.0		
(71)	Std.	4	24"x24"						16.0		
┐	Std.	1	21"x15"						2.2		
→	Std.	1	21"x15"						2.2		
↔	Std.	1	21"x15"						2.2		
(96)	Std.	1	24"x24"						4.0		
21 OAK St.	9	1	5'-0"x2'-0"							10	
22 OAK St.	9	1	5'-0"x2'-0"							10	
* 23a-DO NOT ENTER	Std.	1	30"x30"					6.3			
* 23b-ONE WAY ⇒	Std.	1	48"x18"					6.0			
* 23c-ONE WAY ⇐	Std.	1	48"x18"					6.0			
			Total	668.10			26.0	52.1	78.60	99.30	
			Use	668.0			26.0	52.0	79.0	99.0	

* Transferred from project 7-P-71-21T.

* Type 2 Reflective Sheeting will be required.

30
30

MISSOURI HIGHWAY AND TRANSPORTATION COMMISSION

STANDARD PLANS

SP-2

FEBRUARY, 1985

FINAL PLANS

STATE	JOB NO. 7-U-71A-21D	SHEET NO.
MO.	PROJECT NO. 7-U-71A-21D	15
DIST. NO. 7	COUNTY JASPER	ROUTE 71AH.

✓	NO.	DESCRIPTION
	203.00E	EXCAVATION & EMBANKMENT
	203.02C	UNDERGRADING
	203.10A	TABULATED EARTHWORK & SECTION DATA
✓	203.20A	SUPERELEVATION SPIRALS & WIDENING (UNDIVIDED)
✓	203.21A	SUPERELEVATION SPIRALS & WIDENING (DIVIDED)
	203.30A	ENTRANCES & APPROACHES (LESS THAN 400 ADT)
✓	203.31B	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - NO SAFETY ZONE)
	203.32D	ENTRANCES & APPROACHES (GREATER THAN 400 ADT - SAFETY ZONE)
	203.35A	MAILBOX TURNOUTS
	203.40D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (NO SAFETY ZONE)
✓	203.41D	TYPICAL DETAILS-RAMPS FOR INTERCHANGES (SAFETY ZONE)
✓	203.50J	TYPICAL CROSS-OVERS (DIVIDED-HIGHWAYS)
	204.00D	EMBANKMENT CONTROL MEASURING DEVICES
✓	502.00K	CONCRETE PAVEMENT APPURTENANCES *
✓	502.10D	DOWEL SUPPORTING UNITS *
✓	503.00H	CONCRETE APPROACH SLABS TO BRIDGES (ALSO INCLUDE 502.00)
	602.00A	RIGHT-OF-WAY & DRAIN MARKERS
	604.05A	PIPE CULVERT HEADWALLS - TYPE S
	604.10B	HEADWALL-WITH ENERGY DISSIPATOR - 18"
	604.11B	HEADWALL-WITH ENERGY DISSIPATOR - 24"
	604.12B	HEADWALL-WITH ENERGY DISSIPATOR - 30"
	604.13B	HEADWALL-WITH ENERGY DISSIPATOR - 36"
	604.14B	HEADWALL-WITH ENERGY DISSIPATOR - 42"
	604.15B	HEADWALL-WITH ENERGY DISSIPATOR - 48"
	604.20B	DROP INLET - TYPE B
	604.21B	DROP INLET - TYPE C
	604.22B	DROP INLET - TYPE D
	604.23B	DROP INLET - TYPE E
	604.24B	DROP INLET - TYPE EE
	604.25B	DROP INLET - TYPE F
	604.26C	DROP INLET - TYPE G
	604.27C	DROP INLET - TYPE S (3 SHEETS)
	604.28D	DROP INLET - TYPE Y (ALSO INCLUDE 614.30)
	604.29C	DROP INLET - TYPE X
	604.30F	CONCRETE MANHOLES (ALSO INCLUDE 614.30)
	604.40B	PIPE COLLARS
	605.10A	CLASS A UNDERDRAINS
✓	606.00S	GUARD RAIL (2 SHEETS) *
	606.20G	BRIDGE ANCHOR SECTION (BRUSH CURB) (ALSO INCLUDE 606.00)
	606.21E	BRIDGE ANCHOR SECTION - CURB TYPE (ALSO INCLUDE 606.00) *
✓	606.22D	BRIDGE ANCHOR SECTION (SAFETY BARRIER CURB) (INCLUDE 606.00)
✓	606.30E	TERMINAL SECTION (ALSO INCLUDE 606.00)
	606.40A	GUARD CABLE
	607.10P	CHAIN LINK FENCE *
	607.11B	CHAIN LINK FENCE FOR RETAINING WALLS
	607.20E	WOVEN WIRE FENCE (ALSO INCLUDE 607.10)

✓	NO.	DESCRIPTION
	608.00C	PAVED APPROACHES *
	608.10G	CONCRETE SIDEWALK & WHEELCHAIR RAMPS *
	608.20B	CONCRETE STEPS
✓	609.00G	CONCRETE CURB - CURB & GUTTER - GUTTER
	609.15A	PAVED DITCHES
✓	609.40D	DRAIN BASIN, SHLDR. PAVING & FILL SLOPE AT BR. ENDS
✓	609.60A	DITCH LINER
	609.70C	ROCK LINING FOR CULVERT OUTLETS
	610.20E	BRICK MANHOLES (ALSO INCLUDE 614.30)
	611.60L	CONCRETE SLOPE PROTECTION *
	612.10K	BARRICADES AND FLASHER SIGNS
	614.10K	CURB INLETS, GRATES & BEARING PLATES *
	614.30C	MANHOLE FRAMES & COVERS
	615.00A	OFFICE FOR ENGINEER
✓	616.10C	TRAFFIC CONTROL DEVICES (2 SHEETS) (ALSO INCLUDE 903.01) *
	617.00S	CONCRETE MEDIAN BARRIER (3 SHEETS) *
	702.01E	16" CONCRETE PILES (APPROVED TYPES) (2 SHEETS)
	702.02B	CAST-IN-PLACE CONCRETE PILES (APPROVED TYPES)
	703.15D	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (INCL. 706.35)
	703.16C	CONCRETE BOX CULVERTS, H15 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.20D	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (INCL. 706.35)
	703.21C	CONCRETE BOX CULVERTS, HS20 LOADING (3 SHEETS) (FLARED WINGS) (INCL. 706.35)
	703.24D	CONCRETE BOX CULVERTS, SKEW DATA (703.15, 703.20, 703.30) (INCL. 706.35)
	703.25C	CONCRETE BOX CULVERTS, SKEW DATA (703.16 & 703.21)(3 SHEETS)(FLARED WINGS) (INCL. 706.35)
	703.30C	CONCRETE BOX CULVERTS, 4' SPANS & LESS - ALL LOADING (INCL. 706.35)
	703.35B	CONCRETE BOX CULVERTS, CUTTING DETAILS (STRAIGHT WINGS) (INCL. 706.35)
	703.36A	CONCRETE BOX CULVERTS, CUTTING DETAILS (FLARED WINGS) (INCL. 706.35)
	703.50E	CONCRETE DOUBLE BOX STRUCTURE - SQUARE (INCL. 706.35) *
	703.51D	CONCRETE DOUBLE BOX STRUCTURE - SKEWED (INCL. 706.35) *
	703.52B	CONCRETE DOUBLE BOX STRUCTURE - CUT SECTIONS (INCL. 706.35)
	703.53C	DOUBLE BOX STRUCTURE REINFORCEMENT - H15 LOADING (6 SHEETS)
	703.54C	DOUBLE BOX STRUCTURE REINFORCEMENT - H20 OR HS20 LOADING (6 SHEETS)
	703.55B	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SQUARE (INCL. 706.35) *
	703.56B	CONCRETE DOUBLE BOX STRUCTURE (FLARED WINGS) SKEWED (INCL. 706.35) *
	703.60C	CONCRETE BOX STRUCTURE - PIPE INLET
	703.70	CONCRETE TRIPLE BOX STRUCTURE - SQUARE (2 SHEETS) (INCL. 706.35) *
	703.71	CONCRETE TRIPLE BOX STRUCTURE - SKEWED (2 SHEETS) (INCL. 706.35) *
	703.72	CONCRETE TRIPLE BOX STRUCTURE - (FLARED WINGS) (SQUARE) (2 SHEETS) (INCL. 706.35) *
	703.73	CONCRETE TRIPLE BOX STRUCTURE - (FLARED WINGS) (SKEWED) (2 SHEETS) (INCL. 706.35) *
	703.74	CONCRETE TRIPLE BOX STRUCTURE - CUT SECTIONS (INCL. 706.35) *
	703.75	CONCRETE TRIPLE BOX STRUCTURE REINFORCEMENT - H15 LOADING (5 SHEETS) *
	703.76	CONCRETE TRIPLE BOX STRUCTURE REINFORCEMENT - H20 OR HS20 LOADING (5 SHEETS) *
	706.30E	REINFORCING BAR SUPPORTS *
	706.35E	BAR SUPPORTS FOR CONCRETE REINFORCEMENT *
	712.40C	STEEL DAMS FOR BRIDGES (6" CHANNEL) *
	712.41C	STEEL DAMS FOR BRIDGES (4" CHANNEL) *
	725.31C	METAL CURTAIN WALL AND METAL INLETS
✓	726.30C	CULVERT INSTALLATION METHODS *
	731.00N	PRECAST MANHOLES (ALSO INCLUDE 614.30)
	731.10F	PRECAST DROP INLETS (4 SHEETS) (ALSO INCLUDE 614.30 & 614.10)
	732.00K	FLARED END SECTION (2 SHEETS) *
	806.00C	EROSION CONTROL NETTING (INSTALLATION) TYPE I
	806.02	STAPLE PLACEMENT FOR TYPE III NETTING

✓	NO.	DESCRIPTION
		HIGHWAY LIGHTING
	901.00L	POLES & APPURTENANCES - 30' (3 SHEETS) *
✓	901.01Q	POLES & APPURTENANCES - 45' (3 SHEETS) *
	901.05A	CONTROL PANEL CABINET DETAILS (2 SHEETS) (NOTE BELOW)
	901.12A	POLE MOUNT. CONT. STA.-SECONDARY SERV.-480 V MULTI. CIR. (NOT METERED)
	901.15C	POLE MOUNT. CONT. STA.-SEC. SERV.-120, 240, & 480 V MULTI. CIR.
	901.16B	POLE MOUNT. CONT. STA.-SEC. SERV.-480 V MULTI. CIR. (METERED)
✓	901.18B	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.
	901.19B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (NOT METERED)
	901.20B	POLE MOUNT CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR. (SIG. METERED)
	901.22C	POLE MOUNT. CONT. STA.-SEC. SERV.-120/240 & 480 V MULTI. CIR. (BOTH METERED)
	901.23C	POLE MOUNT. CONT. STA.-SEC. SERV -240 V MULTI. CIR. (METERED)
	901.24B	POLE MOUNT. CONT. STA.-SEC. SERV.-240 V MULTI. CIR. (LT'S & SIGS-BOTH METERED)
	901.25B	BASE MOUNT. CONT. STA.-SEC. SERV.-120/240 V MULTI. CIR.
		NOTE: ALSO INCLUDE 901.05 WITH 901.12 THROUGH 901.25 EXCEPT 901.18
		TRAFFIC SIGNALS
✓	902.00D	SIGNAL HEADS, LENSES AND MOUNTING *
✓	902.10E	PULL BOXES, CONTROLLERS, COND. LOCATION *
✓	902.15A	POWER SUPPLY ASSEMBLY *
	902.21B	TELEPHONE INTERCONNECT *
	902.30E	CONCRETE BASES *
	902.40F	TUBULAR STEEL POST *
	902.50E	DETECTORS *
	902.60E	SPAN WIRE DETAILS - STEEL POST *
	902.70A	SPAN WIRE DETAILS - WOOD POLE *
		HIGHWAY SIGNING
✓	903.01C	ALPHABETS (2 SHEETS)
✓	903.02T	HIGHWAY SIGNING (7 SHEETS) *
✓	903.03AF	SIGN MOUNTING DETAILS (6 SHEETS) *
	903.04D	WEIGH STATION SIGNING *
	903.05C	TUBULAR SPAN SUPPORT - ONE TUBE, TYPE S
	903.06C	TUBULAR SPAN SUPPORT - TWO TUBE, TYPE S
	903.07C	TUBULAR CANTILEVER SUPPORTS, TYPE C
	903.08C	TUBULAR BUTTERFLY SUPPORTS, TYPE B
✓	903.09C	LIGHTING SUPPORT BRACKET
	903.10S	SIGN TRUSSES - OVERHEAD ALUMINUM (8 SHEETS) (INCL. 903.03)
	903.12L	SIGN TRUSSES - BUTTERFLY & CANTILEVER - STEEL (7 SHEETS) (INCL. 903.03)
	903.60O	SIGN TRUSSES - OVERHEAD STEEL (7 SHEETS) (INCL. 903.03)

NOTES: Plans for this project were developed using Drawings from this index.

* Revised since April, 1983