

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED STATE PROJECT NO. 600-D STATE HIGHWAY NO. 92 DELTA & MONTROSE COUNTIES

INDEX OF SHEETS

- SHEET NO. 1- TITLE SHEET
 " " 2- TYPICAL SECTION
 " " 3- LIST OF STRUCTURES; SPEC. STRUCT. DETAILS
 " " 4- DETAILS FOR BRIDGE, STA. 159+
 " " 5- DETAILS FOR BRIDGE, " 175+
 " " 6- REINFORCED CONC. CULV. PIPE M-112-A
 " " 7- STD. HOWALLS FOR C.M.P. CULVTS M-102-E
 " " 8- " SIPHON, CORR. GALV. IRON M-123-A
 " " 9- " WIRE CABLE GUARD FENCE M-20-A
 " " 10- " WIRE FENCE; TRTD WD POSTS M-24-F
 " " 11- " SUPERELEVATION & WIDENING SHEET M-1-A
 " " 12- TYPICAL SIDE APPROACH ROADS; SIGNS M-2-B
 " " 13-15- PLAN & PROFILE SHEETS
 " " 16-17- CROSS SECTIONS *See final Const. & Sect.*

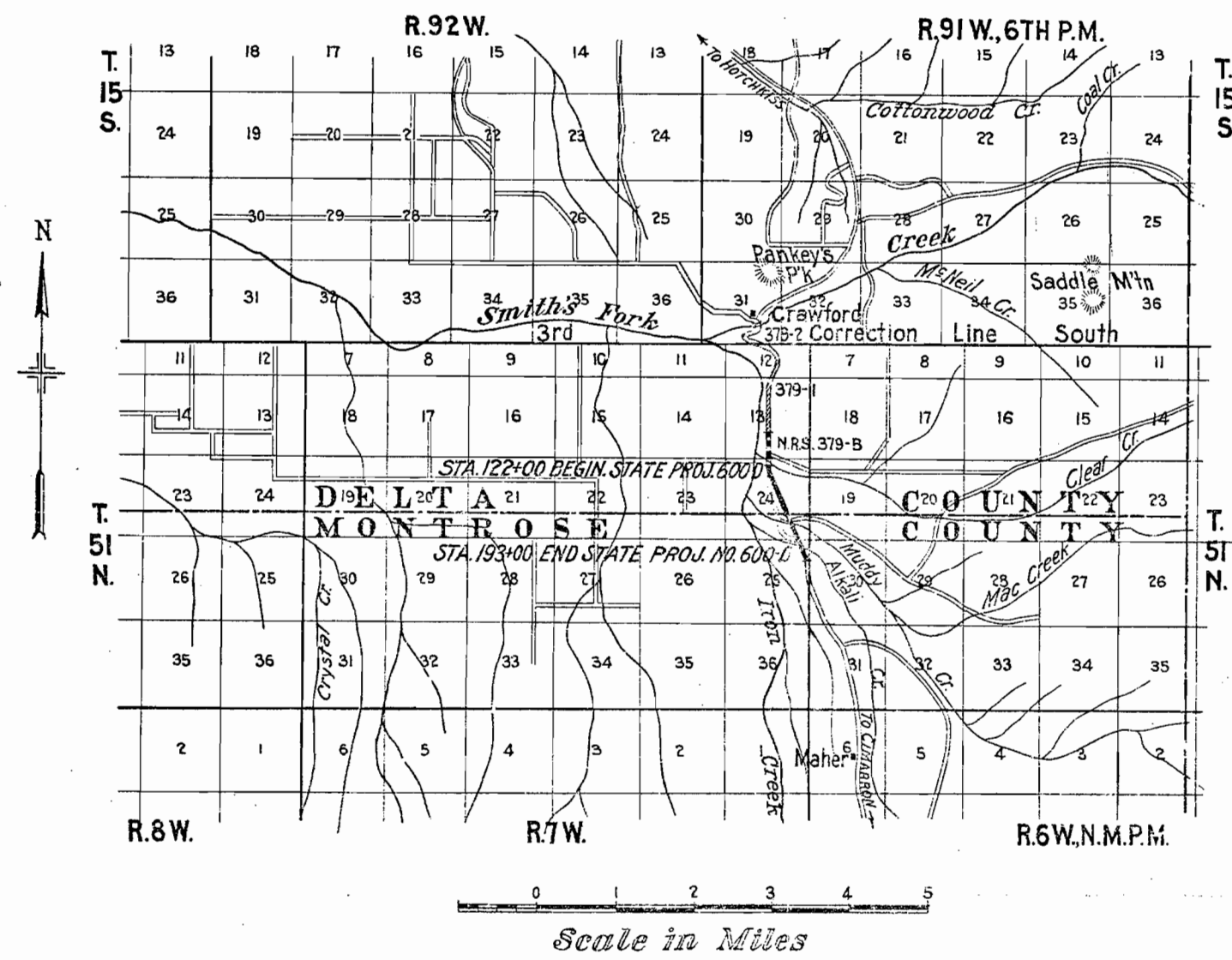
SCALES OF ORIGINAL TRACINGS

ON PLAN, 1 IN. = 100 FT.
 ON PROFILE 1 IN. = 100 FT. HORIZONTAL
 1 IN. = 10 FT. VERTICAL
 GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
 GROSS LENGTH OF PROJECT } 7,100 FT. = 1.344 MI.
 NET LENGTH OF PROJECT }

CONVENTIONAL SIGNS

- CENTER LINE OF SURVEY
 RIGHT OF WAY LINES
 COUNTY LINES
 TOWNSHIP LINES
 SECTION LINES
 ONE QUARTER SECTION LINE
 BARBED WIRE FENCE
 WIRE CABLE GUARD FENCE
 POLE LINES

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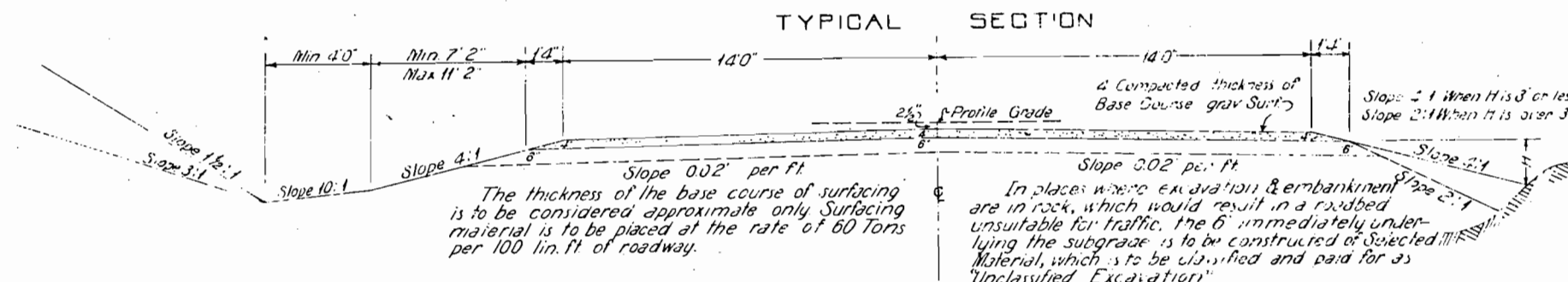


It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department.
 J. J. Vendemoer, Division Engineer, located at Grand Junction
 A. H. Batten, Resident " " " "

RECOMMENDED FOR APPROVAL 6/12/36
J. J. Vendemoer
 APPROVED
Chas. D. Vail
 STATE ENGINEER

FED. ROAD DIST. NO.	STATE	STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	800-D	2	

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES



The intersection of cut slopes with the existing ground shall be rounded in earth cuts, beginning 5 ft. outside the slope stake and extending 5 ft. down the cut slope. Where the cut slope is less than 5 ft., reduce each of the above widths of slope treatment to the actual slope distance. Quantities involved in slope treatment shall not be included in Unclass'd Exca.

GENERAL NOTES

This Project is to be constructed in conformity with the standard specifications of the Colorado State Highway Department, adopted August 1, 1935. All quantities on preliminary plans are to be considered approximate only.

All roadway excavation required to construct the project is to be obtained as indicated on the plans. Quantities involved beyond the limits of ditch as shown on the Typical Section, either noted on profile as "borrow" or on Tabulation of Structures as "Excavation" and "Embankment" are to be classified and paid for as "Unclassified Excavation".

These quantities are to be staked as part of the original excavation at locations indicated on the plans. Slope stakes, beyond the limits of the Typical Section as shown, are subject to change by the Engineer to fit embankment requirements actually encountered in construction.

All poles encroaching on the construction are to be moved by owners.

Except as noted on the plans, overhaul will be paid for as measured along center line of proj.

The entire project is to be cleared for the full width of the right-of-way, and the cost thereof is to be included in the lump sum price for Clearing and Grubbing the entire Project.

All pipe cross culverts are to be provided with one headwall on the inlet end unless otherwise noted.

At all places on the project where the new work lies along the present traveled road, the Contractor shall at his own expense, prosecute construction in such a manner that traffic may readily pass over the road. Also, the Contractor shall at his own expense, construct and maintain in safe condition all temporary approaches to and crossings of intersecting roads.

All side approach roads to the project shall be gravel surfaced with a 4" thickness of "Gravel or Crushed Rock Surfacing" extending approximately 30 feet from edge of highway. Estimated tonnage of surfacing material required in this operation is shown in "List of Structures".

It is estimated that Gravel Surfacing for this Proj. will be obtained from a pit in Smith Forks Creek, approximately 1200 feet upstream from Sta 16+00.

1/2 CUT

STATION	SIDE	8 WIRE	DRWAY	Co.
132+00	R-L	2		DELTA Co.
145+00	R-L	2		DELTA Co.
155+85	R-L	2		DELTA Co.
162+00	R	1		DELTA Co.
164+00	L	1		DELTA Co.
166+75	R-L		2	DELTA Co.
172+45	R-L		2	DELTA Co.
187+00	R-L		2	DELTA Co.
191+00	L	1		DELTA Co.
Total		9	6	

R.O.W. MARKERS

STATION	SIDE	No.	Co.
142+94	R	1	DELTA Co.
143+35	L	1	DELTA Co.
152+89	R	1	DELTA Co.
153+34	L	1	MONROSE Co.
171+58	L	1	MONROSE Co.
171+84	R	1	MONROSE Co.
189+60	L	1	MONROSE Co.
191+20	R	1	MONROSE Co.
193+00	R-L	2	MONROSE Co.
TOTAL		10	

1/2 FILL

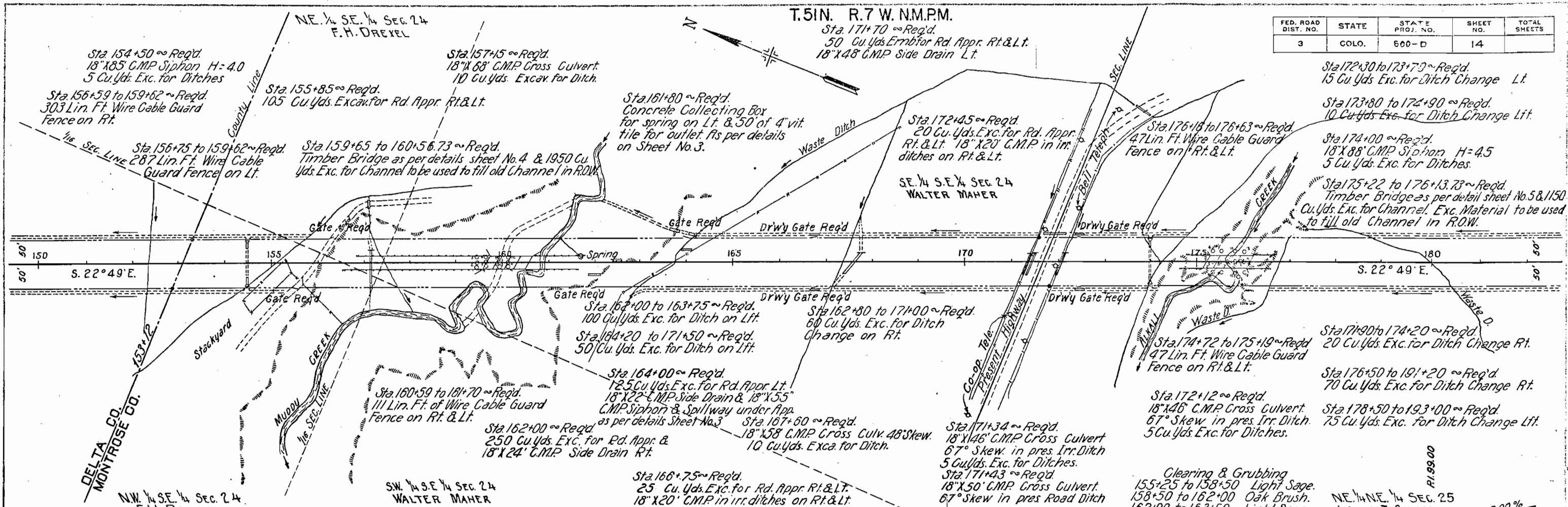
FENCING REQUIREMENTS

STATIONS	SIDE	REMOVE FENCE	BUILD 8 W FENCE	BUILD COM FENCE	Co.
122+00-126+00	+	478	1990		DELTA Co.
122+00-131+93	R-L		2375		DELTA Co.
132+07-144+93	R-L				DELTA Co.
143+15	+	110	1513		DELTA Co.
145+07-153+12	R-L				DELTA Co.
153+12-155+78	R-L		532		DELTA Co.
154+70-155+80	+	200	800		DELTA Co.
155+82-159+85	R-L		170		DELTA Co.
160+57-161+93	R		370		DELTA Co.
160+57-163+93	L		75		DELTA Co.
162+07-162+80	R			390	DELTA Co.
162+80-166+68	R				DELTA Co.
162+80-164+75	+	190	55		DELTA Co.
164+07-164+50	L			210	DELTA Co.
164+60-166+68	L			440	DELTA Co.
166+82-171+20	R			480	DELTA Co.
166+82-171+60	L			55	DELTA Co.
171+85-172+38	R				DELTA Co.
171+55	+	110			DELTA Co.
172+05	+	110			DELTA Co.
172+25-172+38	L			15	DELTA Co.
172+52-175+22	L-R			600	DELTA Co.
175+00	L				DELTA Co.
178+14-186+93	L-R			2220	DELTA Co.
187+07-189+60	R			255	DELTA Co.
187+07-191+15	L			410	DELTA Co.
188+60-191+15	+	360			DELTA Co.
189+60-190+93	+		135		DELTA Co.
190+35-192+75	+	250			DELTA Co.
191+7-193+00	L		195		DELTA Co.
TOTALS		1943	8410	5975	

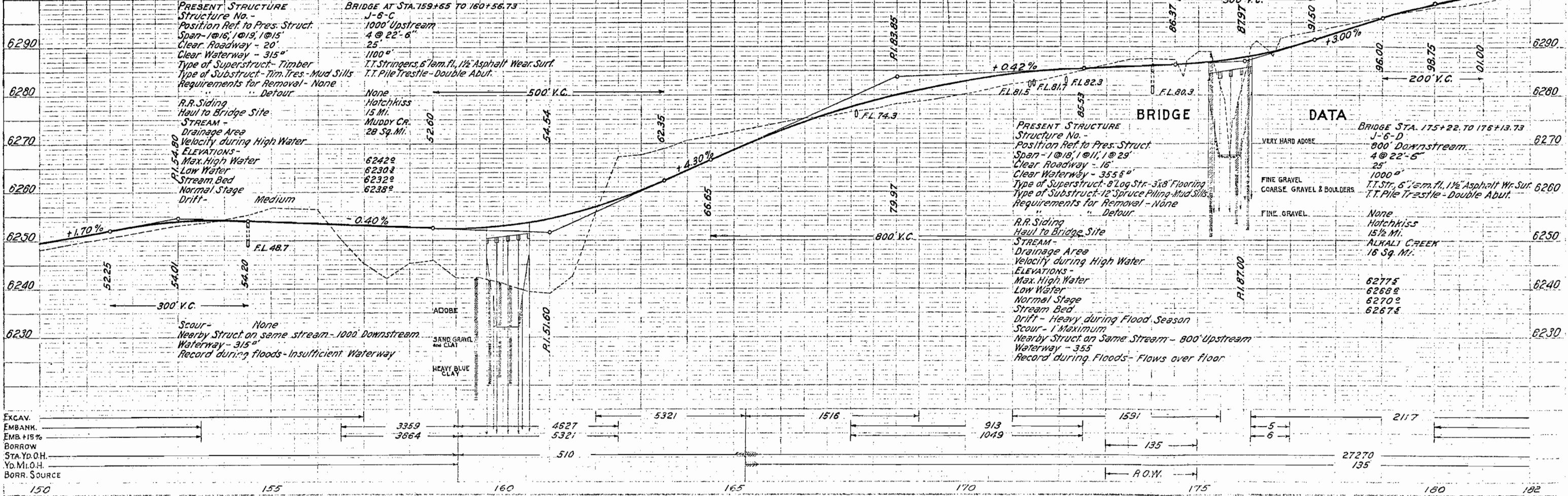
SUMMARY OF APPROXIMATE QUANTITIES

No.	ITEM	UNIT	ROADWAY DELTA Co.	MONROSE Co.	BRIDGE STA. 159+	BRIDGE STA. 175+	TOTALS
10-a	Clearing & Grubbing	Lump Sum					
12-a	Removing Fence	Lin. feet	600	1400			2000
13-c	Unclassified Excavation	Cu. yds.	7300	14200	1950	1150	24600
13-d	Cut Slope Treatment	sq. ft.	1	0.7			1.7
14-a	Dry Rock Excav. (Struct.)	Cu. yds.	20	50			70
14-b	Comm. " "	" "	140	400	300	300	1140
14-c	Wet Rock " "	" "	10	10			20
14-d	Comm. " "	" "	20	50	20	60	150
11-b	Remove 1 Structure	Lump Sum					
18-a	Sta. Yd. Overhaul	Sta. Yd.	5800	46500			52300
18-b	1/2 Mile Overhaul	1/2 Mi.		100			100
26-a	Gravel or Crushed Rock Surf.	Ton	1920	2580			4500
42-a	Untreated Bridge Timber	M. ft. lin.			1.9	1.8	3.7
42-b	Treated Bridge Timber	" "			44.0	41.4	85.4
43	Asphalt Plank Wearing Surface	Sq. Ft.			2252	2252	4504
46-a	Class "A" Concrete	Cu. yd.	4	12			16
46-b	Class "B" " "	" "	4	9			13
47	Reinforcing Steel	Lb.	255	640			895
53-b	18" Corr. Metal Culv. Pipe	Lin. Ft.	226	558			784
53-c	24" " "	" "	52	76			128
54-a	4 Vit. Clay Pipe	" "		50			50
55-b	18" Corr. Metal Siphon Pipe	" "	91	243			334
60-a	Treated Timber Piling	" "			3084	2416	5480
60-b	Piling Cutoff, Treated	" "			10	10	20
60-c	Metal Pile Shoes	Each			88	76	164
65	Dry Rubble Slope Paving (18" Thick)	Sq. Yd.			330	190	520
74	Wire Cable Guard Fence	Lin. Ft.		1000			1000
76-a	Barbed Wire Fence (Treated Posts)	" "	6100	2350			8450
76-b	Comb. " "	" "		5100			5100
76-c	Barbed Wire Gates	Each	4	5			9
76-d	Driveway Gates	" "		6			6
81-a	Project Marker	" "		1			1
81-b	Right of Way Markers	" "	3	7			10
85-b	Trash Guards for 18" Siphon	" "	2	4			6
89-b	Drain Pipes (Wood Floor) (3" X 2'-4")	" "			8	8	16
ALTERNATE BIDS TO BE RECEIVED FOR REINFORCED CONCRETE PIPE							
As an alternate for Items 53-b and 53-c, the following Items providing for Reinforced Concrete Pipe shall be bid upon.							
51-b	18" Reinforced Concrete Pipe	Lin. Ft.	226	558			784
51-c	24" " "	" "	52	76			128

PLAN	SECTION	DETAIL	DATE
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
65	66	67	68
69	70	71	72
73	74	75	76
77	78	79	80
81	82	83	84
85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100



BRIDGE DATA

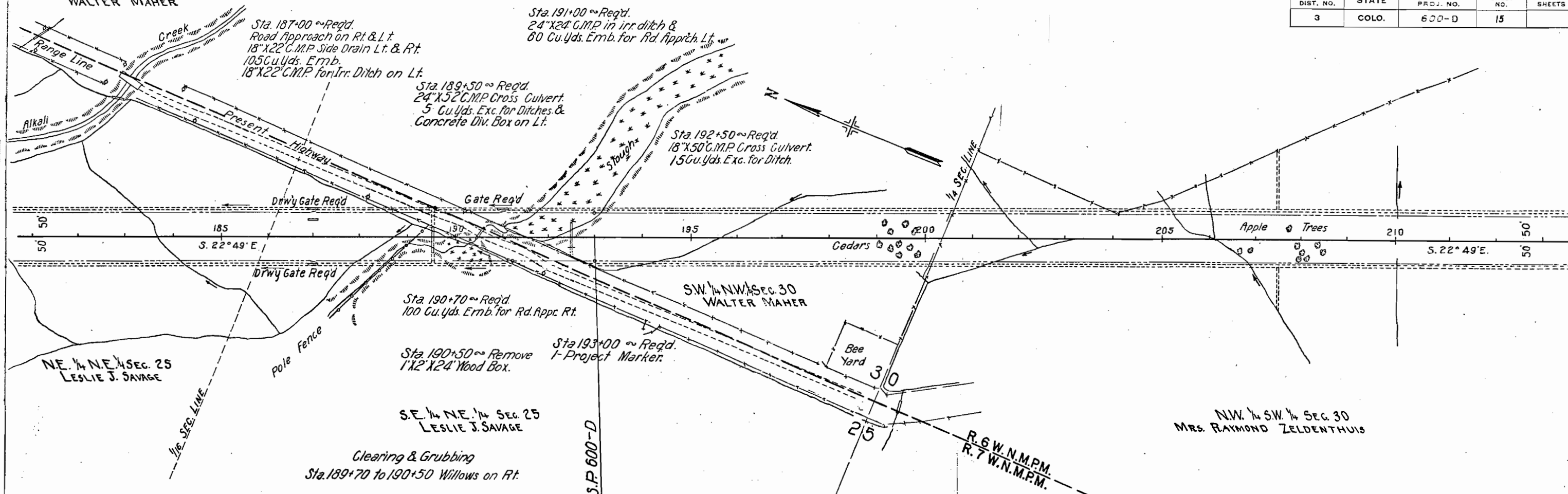


NW 1/4 NW 1/4 SEC. 30
WALTER MAHER

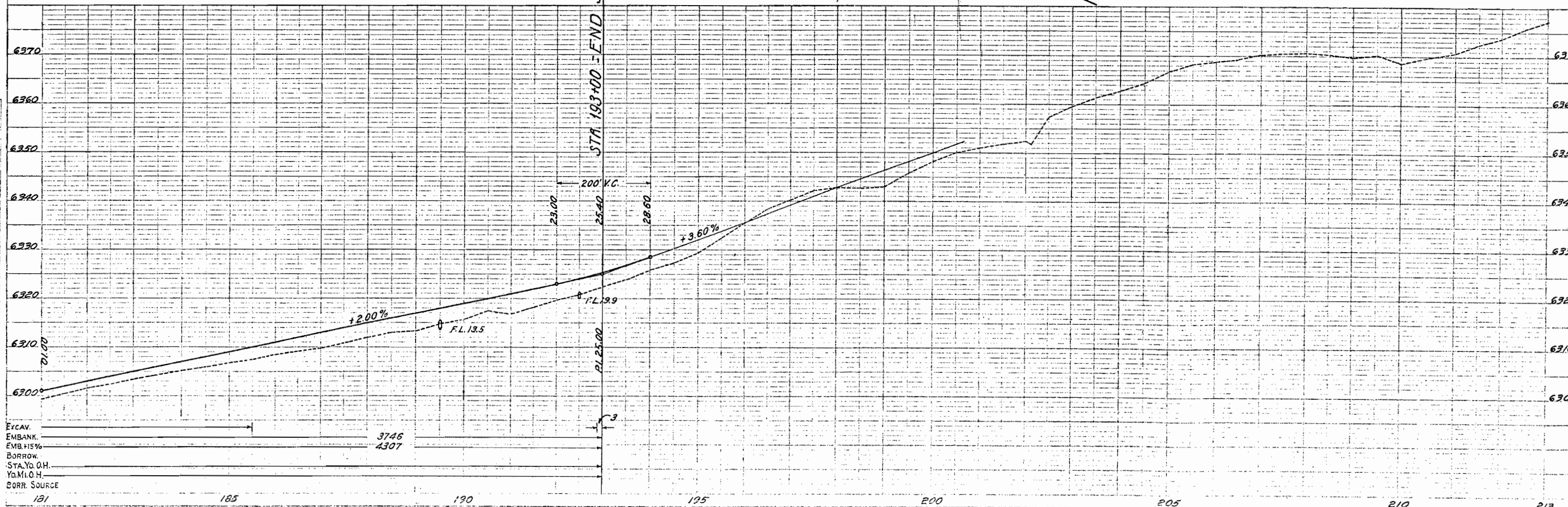
T. 51N. R. 6W. N.M.P.M.

FED. ROAD DIST. NO.	STATE	STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	600-D	15	

PLAN
NOTES
1. ALL DISTANCES ARE IN FEET.
2. ALL ANGLES ARE IN DEGREES.
3. ALL CURVES ARE TO BE RADIUS.
4. ALL GRADES ARE TO BE PERCENT.
5. ALL ELEVATIONS ARE IN FEET.
6. ALL SLOPES ARE TO BE PERCENT.
7. ALL VERTICAL CURVES ARE TO BE PARABOLIC.
8. ALL VERTICAL CURVES ARE TO BE 100 FEET LONG.
9. ALL VERTICAL CURVES ARE TO BE 100 FEET LONG.
10. ALL VERTICAL CURVES ARE TO BE 100 FEET LONG.



PROFILE
NOTES
1. ALL DISTANCES ARE IN FEET.
2. ALL ANGLES ARE IN DEGREES.
3. ALL CURVES ARE TO BE RADIUS.
4. ALL GRADES ARE TO BE PERCENT.
5. ALL ELEVATIONS ARE IN FEET.
6. ALL SLOPES ARE TO BE PERCENT.
7. ALL VERTICAL CURVES ARE TO BE PARABOLIC.
8. ALL VERTICAL CURVES ARE TO BE 100 FEET LONG.
9. ALL VERTICAL CURVES ARE TO BE 100 FEET LONG.
10. ALL VERTICAL CURVES ARE TO BE 100 FEET LONG.



GATES

STATION	SIDE	No
132+15	R-L	2
143+62	R-L	2
155+65	R	1
156+40	L	1
162+00	R	1
164+00	L	1
167+56	R-L	2
172+65	R-L	2
187+57	R-L	2
191+07	L	1
TOTAL		15

FENCING REQUIREMENTS

STATION	SIDE	REMOVE FENCE	BUILD COMB FENCE
122+00-125+47	+	3500	
122+00-132+08	R-L		2,022.1
125+97	+	1300	
132+22-143+55	R-L		2,278.0
143+15	+	108.0	
143+69-153+12	R-L		1,186.0
153+12-155+58	R		246.0
153+12-156+33	L		321.0
155+15-155+75	R	570	
155+72-159+40	R		377.0
156+47-159+64.5	L		327.0
160+575-161+80	R		123.0
160+82-163+93	L		323.0
162+20-167+49	R		535.0
162+58-164+52	+	1990	
164+07-167+49	L		348.0
167+63-171+21	R		364.0
167+63-171+59	L		402.0
171+35	+	108.0	
171+84-172+58	R		80.0
172+05	+	108.0	
172+25-172+58	L		39.0
172+72-174+52	R		180.0
172+72-175+76	L		304.0
176+114-187+50	R		1,155.0
176+302-187+50	L		1,136.0
187+64-191+00	L		348.0
187+64-191+25	R		367.0
188+30-191+25	+	2560	
189+16	+	114.0	
190+33-192+68	+	25.0	
191+14-193+00	L		186.0
192+68-193+00	R		32.0
TOTALS		16860	13,384.1

ROW MARKERS

STATION	SIDE	No
142+96.2	R	1
143+37.6	L	1
152+30.4	R	1
157+26	L	1
171+72.6	R-L	2
190+76.0	R-L	2
193+00.0	R-L	2
TOTAL		10

SUMMARY OF FINAL QUANTITIES

No.	ITEM	UNIT	ROADWAY	BRIDGE STA.	BRIDGE STA.	TOTALS
			DELTA CO.	159+	173+	
10-a	Clearing and Grubbing	Lump Sum	\$131.50	\$168.50		\$300.00
11-a	Remove Structure	"		\$20.00		\$20.00
11-b	Remove and Replace 1.5m Dia. Box	"		\$5.00		\$5.00
12-a	Removing Fence	Lin Ft	588	1,098		1,686
13-c	Unclassified Excavation	Cu Yd	7079.1	1236.03	2532.3	23,345.1
13-d	Cut Slope Treatment	Mi	1.07	0.501		1.571
14-f	Dry Common Excavation (Struct)	Cu Yd	36.4	344.4	278.1	1348.7
14-d	Wet " " "	"	2.0	4.2	97.0	152.8
18-a	Sta. Ya. Overhaul	Sta Yd	29,695.4	34,285.6		63,981.0
18-b	Ya. Mi. Overhaul	Ya. Mi.	136	652.4		666.0
26-a	Gravel Surfacing	Ton	1911.2	2,455.4		4,366.6
42-a	Unretained Bridge Timber	Mfr BM			1824	3616
42-b	Treated Bridge Timber	"			43914	85,248
43	Asphalt Plank Wearing Surface	Sq Ft			2,252	4,504
46-a	Class 'A' Concrete	Cu Yd		11.05		11.05
46-b	" " "	"	385	935		1320
47	Reinforcing Steel	Lb		638		638
53-a	16" Corr. Metal Culv. Pipe	Lin. Ft.	206	740		946
53-c	24" " " "	"	52	76		128
54-a	4" bit Clay Pipe	"		50		50
55-b	18" Corr. Metal Siphon Pipe	"		243		243
60-a	Treated Timber Piling	"			29790	4,969.5
60-c	Piling Cutoff-Treated	"			850	510.5
60-e	Metal Pile Shoes	Each			88	164
65	Dry Rubble Slope Paving (18" Thick)	Sq. Yd.			315.8	522.8
74	Wire Cable Guard Fence	Lin. Ft.		1,000		1,000
76-a	Comb Wire Fence	"	6,186.1	7,198.0		13,384.1
76-b	Driveway Curb	Each	4	11		15
81-a	Project Marker	"		1		1
81-b	Right of Way Markers	"	3	7		10
85-b	Tush Guards	"		4		4
89-a	Drain Pipe (4" Dia) (3' x 2' 4")	"			8	16