

### INDEX TO SHEETS

SECTION 104-A

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1	Standard Cross Section 1250.
2	Special Rock Section for Future Gutter, Type "B".
3	Schedule of Culverts for Future Gutter.
4	Special Cross Sections for Location of Borrow Pits.
5	Plan and Profile Sta. 2+72 to Sta. 15+00.
6	" " " " 15+00 " " 45+00.
7	" " " " 45+00 " " 75+00.
8	" " " " 75+00 " " 105+00.
9	" " " " 105+00 " " 135+00.
10	" " " " 135+00 " " 165+00.
11	" " " " 165+00 " " (165+00)A.
12	" " " " (165+00)A " " 195+00.
13	" " " " 195+00 " " 225+00.
14	" " " " 225+00 " " 255+00.
15	" " " " 255+00 " " 285+00.
16	" " " " 285+00 " " 300+56.
17-60	Inclusive Cross Sections.
61	Standard Culvert Design No. 828-1; 828-2; 1204-3
62	Special Culvert Design Sta. 14+90
63	" " " " 16+34; 20+75; 24+58; 38+00.
64	" " " " 82+02; 94+23; 117+21; 125+09
65	" " " " 138+36; 146+82; 150+30; 154+07
66	" " " " 172+30; -
67	" " " " 173+95; 184+52; 174+09; 190+10
68	" " " " 195+73; 202+24; 233+28; 237+75
69	" " " " 253+10; 259+20; 266+50; 266+50
69	" " " " 293+69; 299+20.
69	Standard No. 935.
70	" " " " 1162.

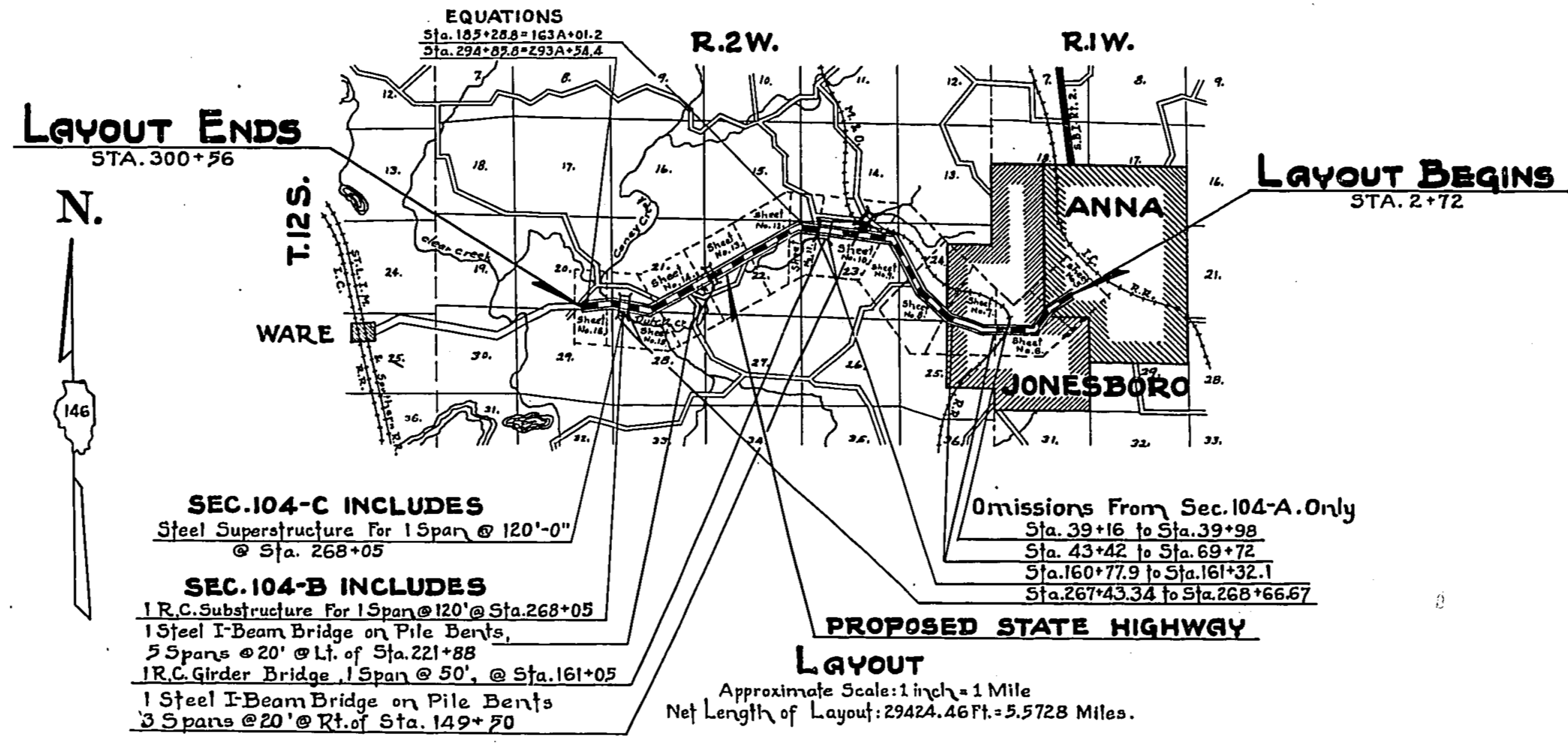
SECTIONS 104 B & C

1	Title Page.
10	Plan and Profile Sta. 135+00 to Sta. 165+00
14	" " " " 225+00 " " 255+00
15	" " " " 255+00 " " 285+00
71	Special Bridge Design Sta. 268+05 Sheets 1 of 2.
72	" " " " 268+05 " " 2 " 2.
73	" " " " 221+88 " " 1 " 1.
74	" " " " 161+05 " " 1 " 3.
75	" " " " 161+05 " " 2 " 3.
76	" " " " 161+05 " " 3 " 3.
76	Standard No. 1177.
76A	Special Bridge Design Sta. 149+50 " " 1 " 1

## ROUTE 146, SEC'S. 104-A-B&C, UNION CO.

### FEDERAL AID PROJECT 161

FROM A POINT NEAR THE CENTER OF THE S.E. ¼ OF SECTION 19, T. 12 S., R. 1 W. OF 3<sup>RD</sup> P.M.  
TO A POINT NEAR THE S.W. CORNER OF THE S.E. ¼ OF SECTION 20, T. 12 S., R. 2 W. OF THE 3<sup>RD</sup> P.M.



**SEC. 104-C INCLUDES**  
Steel Superstructure for 1 Span @ 120'-0"  
@ Sta. 268+05

**SEC. 104-B INCLUDES**  
I.R.C. Substructure for 1 Span @ 120' @ Sta. 268+05  
1 Steel I-Beam Bridge on Pile Bents,  
5 Spans @ 20' @ Lt. of Sta. 221+88  
I.R.C. Girder Bridge, 1 Span @ 50', @ Sta. 161+05  
1 Steel I-Beam Bridge on Pile Bents  
3 Spans @ 20' @ Rt. of Sta. 149+50

**Omissions From Sec. 104-A Only**  
Sta. 39+16 to Sta. 39+96  
Sta. 43+42 to Sta. 69+72  
Sta. 160+77.9 to Sta. 161+32.1  
Sta. 267+43.34 to Sta. 268+66.67

**PROPOSED STATE HIGHWAY LAYOUT**  
Approximate Scale: 1 inch = 1 Mile  
Net Length of Layout: 23424.46 Ft. = 5.5728 Miles.

146 B-104-A  
B&C Union 7-1-16

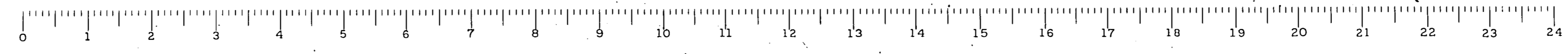
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS  
DIVISION OF HIGHWAYS

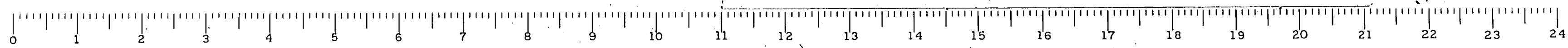
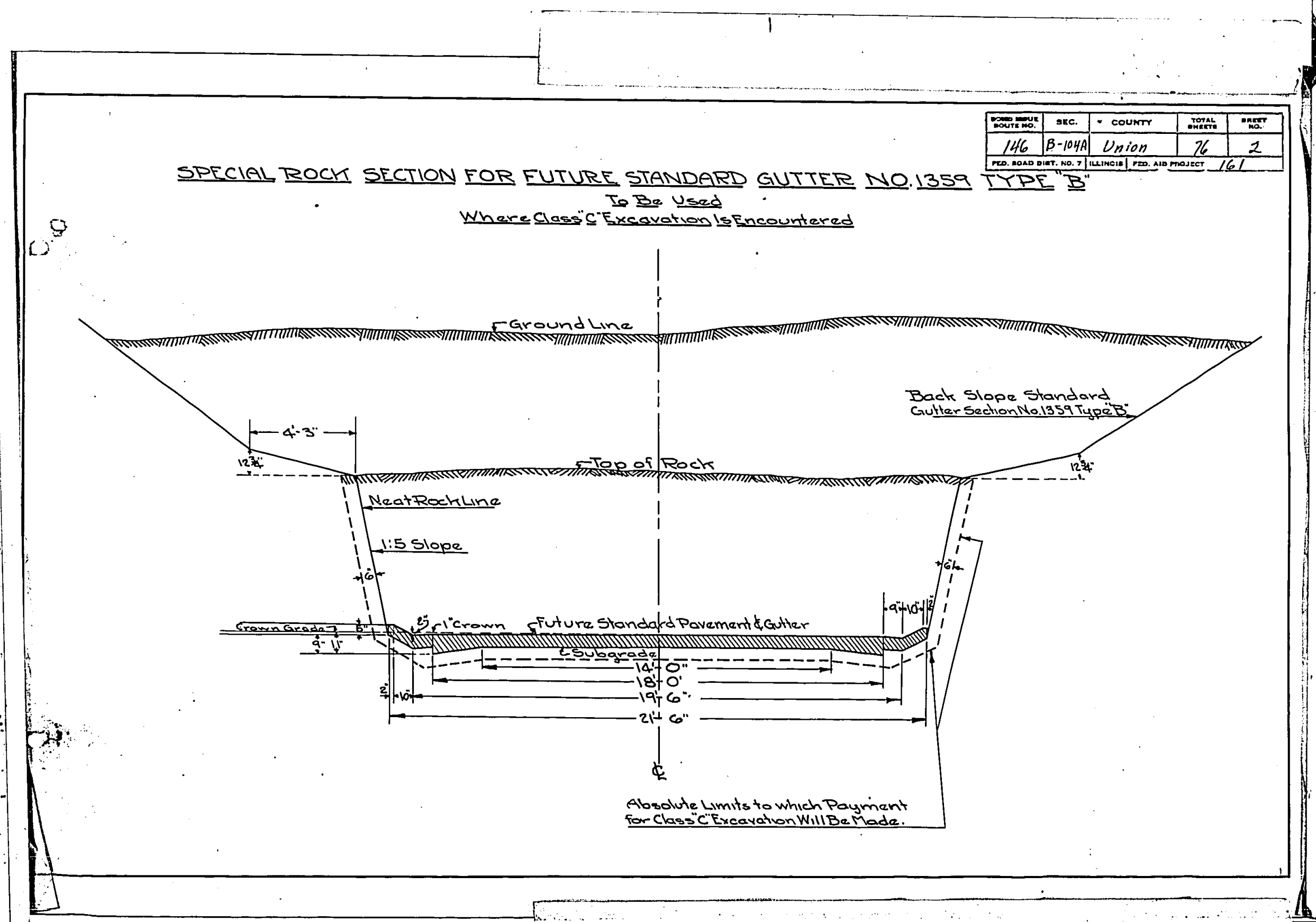
May 22, 1931  
Q. A. Somerville

May 22, 1931  
R. J. Smith

May 22, 1931  
H. J. McClelland

UNION 104 A-B-C 161





-SCHEDULE OF CULVERTS-

STA	TYPE	SIZE	SKEN	CONC. CULVERTS	STEEL LBS.
14+98	A.R.	18" Tile x 80'-11/4"	40°RH.	10.5	220
16+34	A.R.	18" " x 56'-0"		7.9	220
20+75	A.R.	3' x 2' x 49'-0"		14.2	1500
22+47	P.E.R.	12" Tile x 16'-0"		1.5	
24+58	A.R.	2' x 2' x 46'-0"		11.6	1100
35+00	S.R.L.	18" Tile x 24'-0"		4.2	220
38+00	S.R.R.	24" " x 50'-0"		7.5	120" Vit. Sewer Pipe
81+70	RT	# 335 - 8"		0.8	
82+02	A.R.	8' x 6' x 70'-2"	21°RH.	93.5	10340
94+23	A.R.	2' x 2' x 39'-6"		9.4	1030
117+51	A.R.	Double 10' x 7' x 34'-0"		84.9	10910
124+58	S.R.L.	18" Tile - 24'-0"		4.9	230
125+00	P.E.L.	18" " - 16'-0"		2.2	
125+09	A.R.	8' x 4' x 39'-3"	30°RH.	36.6	4800
126+00	P.E.L.	24" Tile - 16'-0"		2.8	
136+08	P.E.L.	18" " - 16'-0"		2.2	
138+36	A.R.	5' x 3' x 64'-4 1/4"	45°LH.	38.7	4590
146+82	P.E.L.	18" Tile - 16'-0"		2.2	
146+82	P.E.R.	6' x 3' x 16'-0"		10.0	1150
150+30	RT	Special Weir Design		3.6	
154+07	A.R.	3' x 3' x 104'-7 1/2"	55°LH.	34.9	4750
161+05	A.R.	Special Bridge (Sec. 104-B)			
172+30	A.R.	Special Culvert (Designed in Sp. 14)			
173+95	A.R.	10' x 5' x 51'-0"		69.1	8060
177+50	S.R.R.	18" Tile - 24'-0"		4.9	230
184+52	A.R.	10' x 5' x 34'-0"		53.1	5400
174+08	A.R.	10' x 6' x 35'-2 1/2"	15°RH.	48.6	6180
189+44	P.E.R.	18" Tile - 16'-0"		2.2	
190+08	P.E.R.	15" Tile - 16'-0"		1.9	
190+10	A.R.	3' x 2' x 48'-1"	45°RH.	15.4	1660
195+73	A.R.	8' x 3 1/2' x 34'-0"		24.1	3360
202+24	A.R.	3' x 2' x 39'-3 1/4"	30°RH.	14.6	1330
221+88	P.E.L.	Special Bridge (Sec. 104-B)			
227+00	P.E.R.	18" Tile - 30'-0"		3.6	
233+28	A.R.	6' x 6' x 75'-6 1/4"	47°RH.	65.4	6730
236+50	P.E.L.	15" Tile - 16'-0"		1.9	
236+50	P.E.R.	15" Tile - 16'-0"		1.9	
237+75	A.R.	4' x 3' x 65'-9"	45°RH.	26.3	3030
247+50	S.R.L.	24" Tile - 24'-0"		6.6	280
253+10	A.R.	8' x 7' x 34'-0"		50.7	5170
259+20	A.R.	8' x 7' x 34'-0"		51.6	4520
266+50	P.E.L.	3' x 3' x 32'-0"		13.4	1200
266+50	P.E.R.	4' x 4' x 24'-6"		15.6	1340
268+05	A.R.	Special Bridge (Sec. 104-B + C)			
293+50	P.E.L.	24" Tile - 16'-0"		2.8	
293+50	P.E.R.	24" " - 16'-0"		2.8	
293+69	A.R.	7' x 5' x 42'-6"		23.0	2310
299+20	A.R.	6' x 5' x 57'-5 1/4"	45°RH.	30.1	3700
Section Totals.					913.7 95560

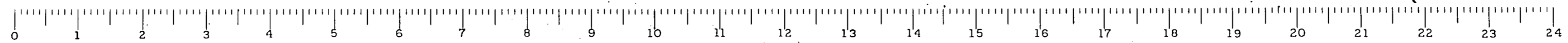
120" Vit. Sewer Pipe.

-SCHEDULE OF FUTURE GUTTER-

TYPE	LOCATION	STA. to	STA.	LIN. FT.	OUTLETS
B	Left	2+72	23+00		
"	"	25+00	39+16		
"	"	39+08	43+42		
"	"	69+72	71+75		
"	"	75+75	81+75		
"	"	89+50	100+25		
"	"	138+25	138+36		
"	"	140+30	146+00		

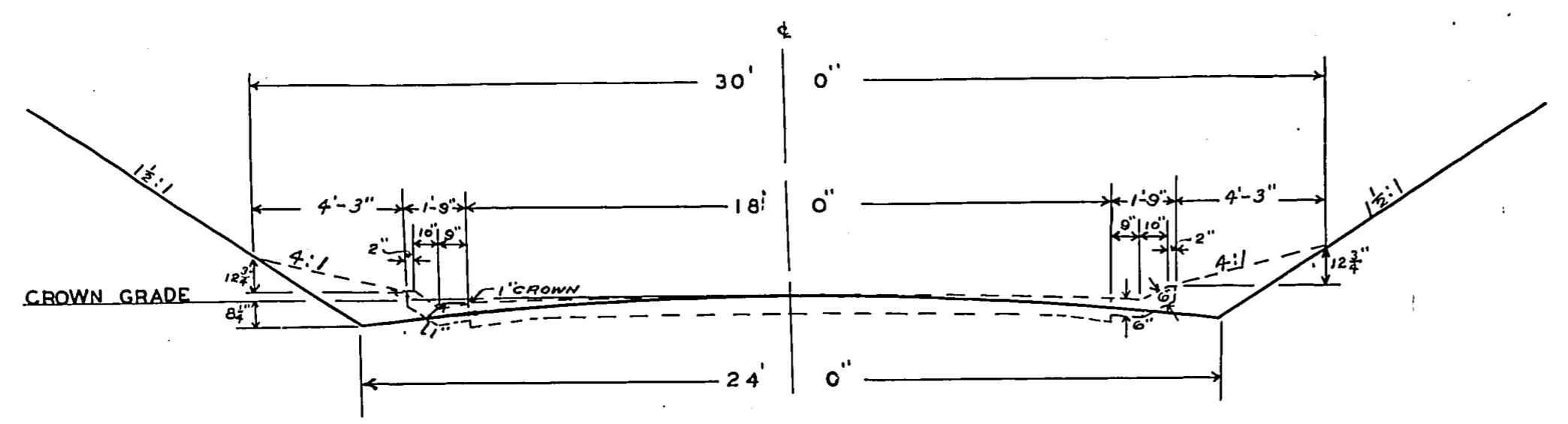
SCHEDULE OF FUTURE GUTTER (ROCK SECTION)

TYPE	LOCATION	STA. to	STA.	LIN. FT.	OUTLETS
B	Left	129+75	135+75		
"	"	138+36	140+30		
"	"	154+80	157+50		



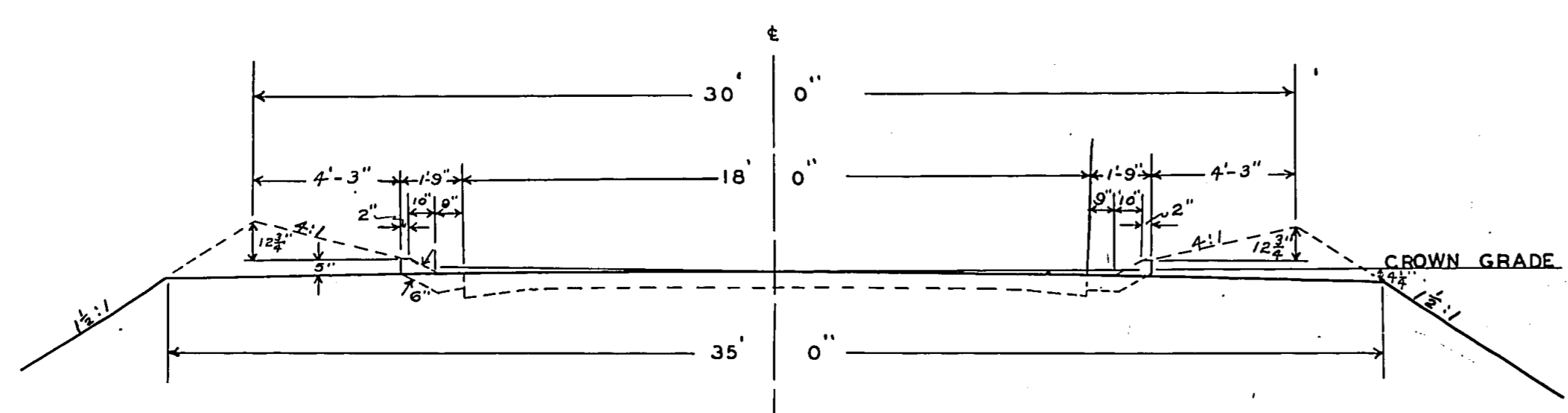


SPECIAL SECTION FOR FUTURE GUTTER NO 1359 TYPE 'B'  
TO BE USED  
WHERE NOTED ON PLANS

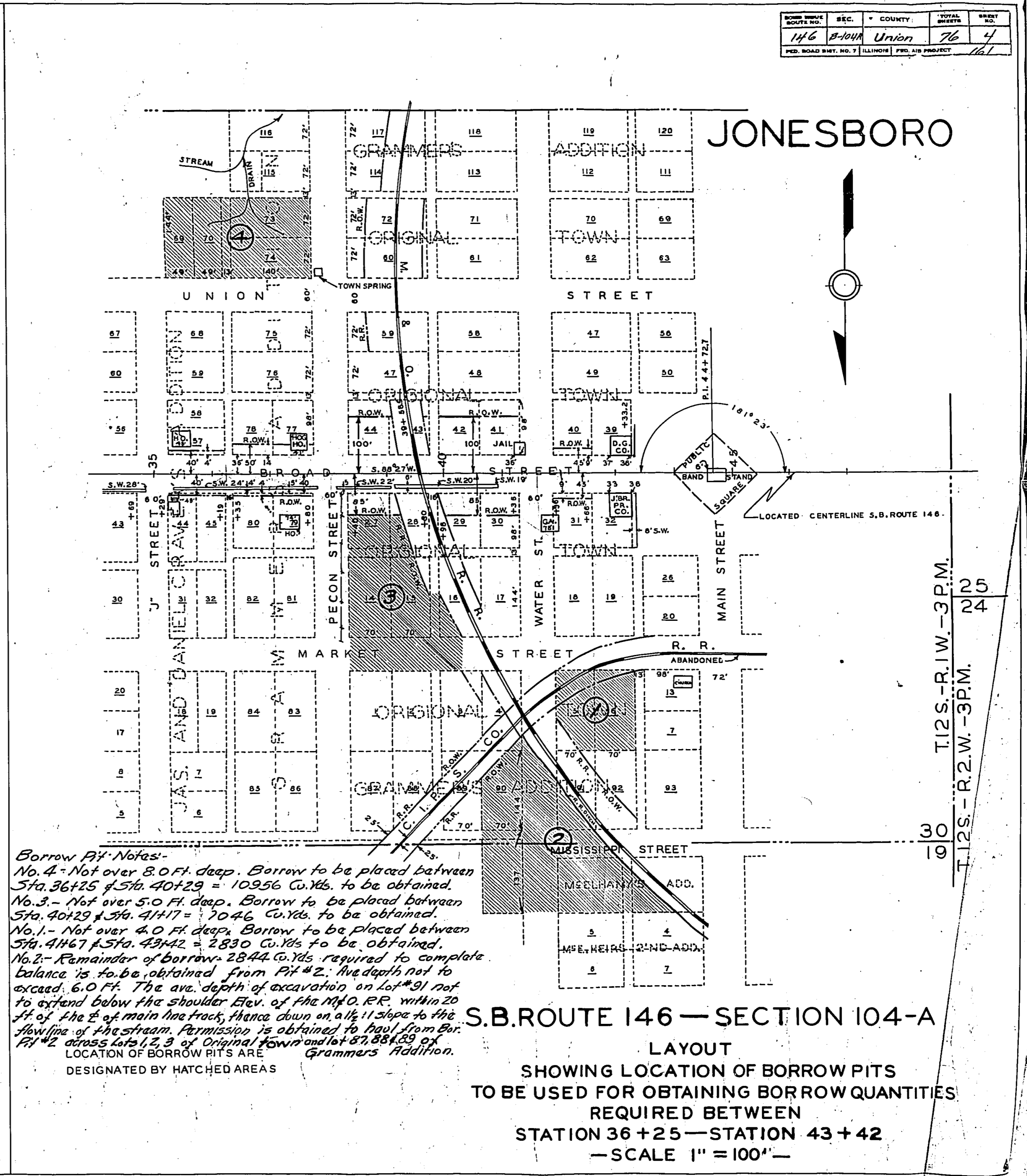


EARTH GUTTER SECTION IN CUT

NOTES: DOTTED LINES INDICATE ULTIMATE PAVEMENT CROSS-SECTION  
SOLID LINES INDICATE CROSS-SECTION TO WHICH EARTH ROADWAY IS  
TO BE GRADED



EARTH GUTTER SECTION ON FILL



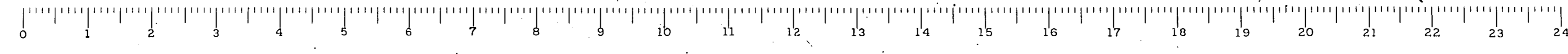
**Borrow Pit Notes-**  
No. 4 - Not over 8.0 Ft. deep. Borrow to be placed between Sta. 36+25 & Sta. 40+29 = 10256 Cu.Yds. to be obtained.  
No. 3 - Not over 5.0 Ft. deep. Borrow to be placed between Sta. 40+29 & Sta. 41+17 = 7046 Cu.Yds. to be obtained.  
No. 1 - Not over 4.0 Ft. deep. Borrow to be placed between Sta. 41+67 & Sta. 43+42 = 2830 Cu.Yds. to be obtained.  
No. 2 - Remainder of borrow 2844 Cu.Yds. required to complete balance is to be obtained from Pit #2. The depth of excavation on lot #31 not to exceed 6.0 Ft. The ave. depth of excavation on lot #31 not to exceed 2.0 Ft. of the E. of main line track, thence down on a 1:1 slope to the flowline of the stream. Permission is obtained to haul from Bor. Pit #2 across lots 1 & 2 of Original Town and lot 2 of Grammers Addition.  
LOCATION OF BORROW PITS ARE DESIGNATED BY HATCHED AREAS

**S.B.ROUTE 146 - SECTION 104-A**  
**LAYOUT**  
SHOWING LOCATION OF BORROW PITS  
TO BE USED FOR OBTAINING BORROW QUANTITIES  
REQUIRED BETWEEN  
STATION 36 + 25 - STATION 43 + 42  
- SCALE 1" = 100" -

BOOK SHEET NO.	SEC.	COUNTY	APPROVAL	SHEET NO.
146 B-104A	Union	76	4	4
FED. ROAD BMT. NO. 7   ILLINOIS   FED. AID PROJECT   141				

JONESBORO

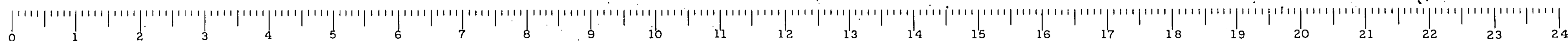
T. 12S. - R. 1W. - 3P.M.  
T. 12S. - R. 2W. - 3P.M.

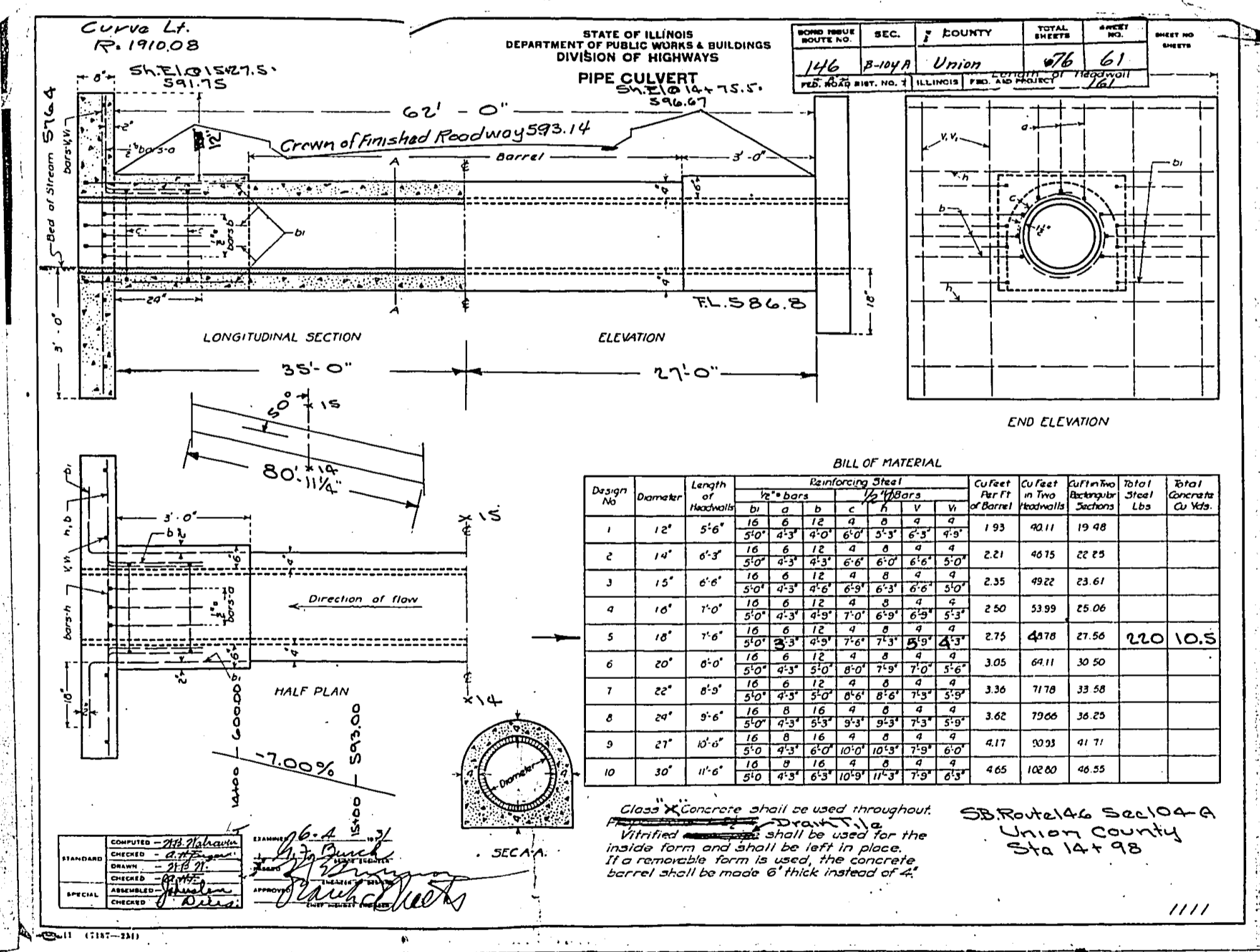




FOR  
SHEET(S) 5 THRU 60

SEE  
SBI ROUTE 146  
SECTION 104  
UNION COUNTY



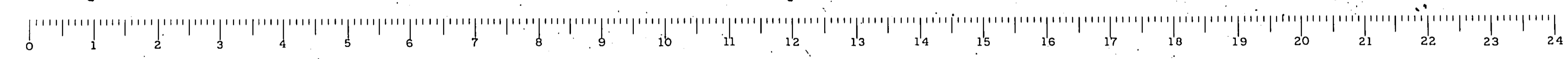


BILL OF MATERIAL

Design No.	Diameter	Length of Section	Reinforcing Steel						Culvert Per Ft. of Barrel	Cu Feet in Two Footwalls	Suff. in Two Rectangular Sections	Steel Lbs.	Shot Concrete Cu. Yds.
			12" bars	14" bars	16" bars	18" bars	20" bars	24" bars					
1	12"	3'6"	10	6	12	4	0	0	1.93	42.17	19.48		
2	14"	6'3"	20	12	24	8	0	0	2.21	46.75	22.25		
3	15"	6'6"	18	12	24	8	0	0	2.35	49.22	23.61		
4	16"	7'0"	18	12	24	8	0	0	2.50	53.59	25.06		
5	18"	7'6"	18	12	24	8	0	0	2.75	48.78	21.50	120	10.5
6	20"	8'0"	18	12	24	8	0	0	3.05	66.11	30.50		
7	22"	8'3"	18	12	24	8	0	0	3.30	71.78	33.58		
8	24"	8'6"	18	12	24	8	0	0	3.62	79.00	36.25		
9	27"	10'0"	18	12	24	8	0	0	4.17	102.51	41.71		
10	30"	11'6"	20	12	24	8	0	0	4.65	102.00	46.55		

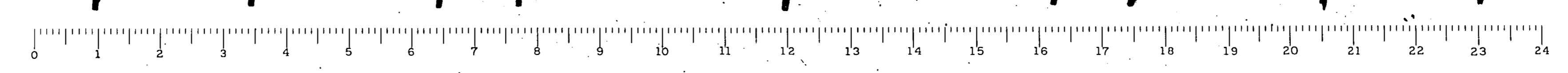
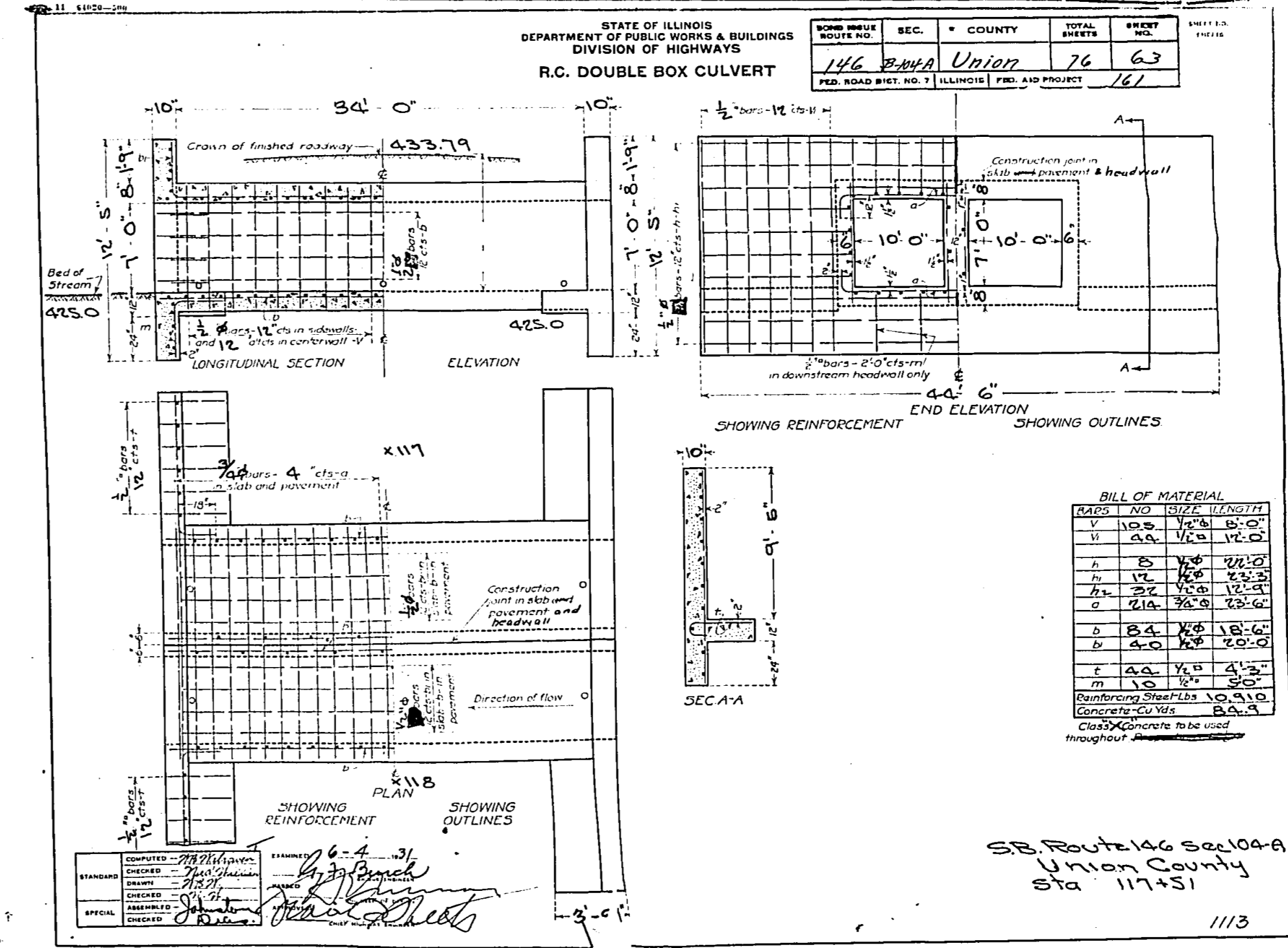
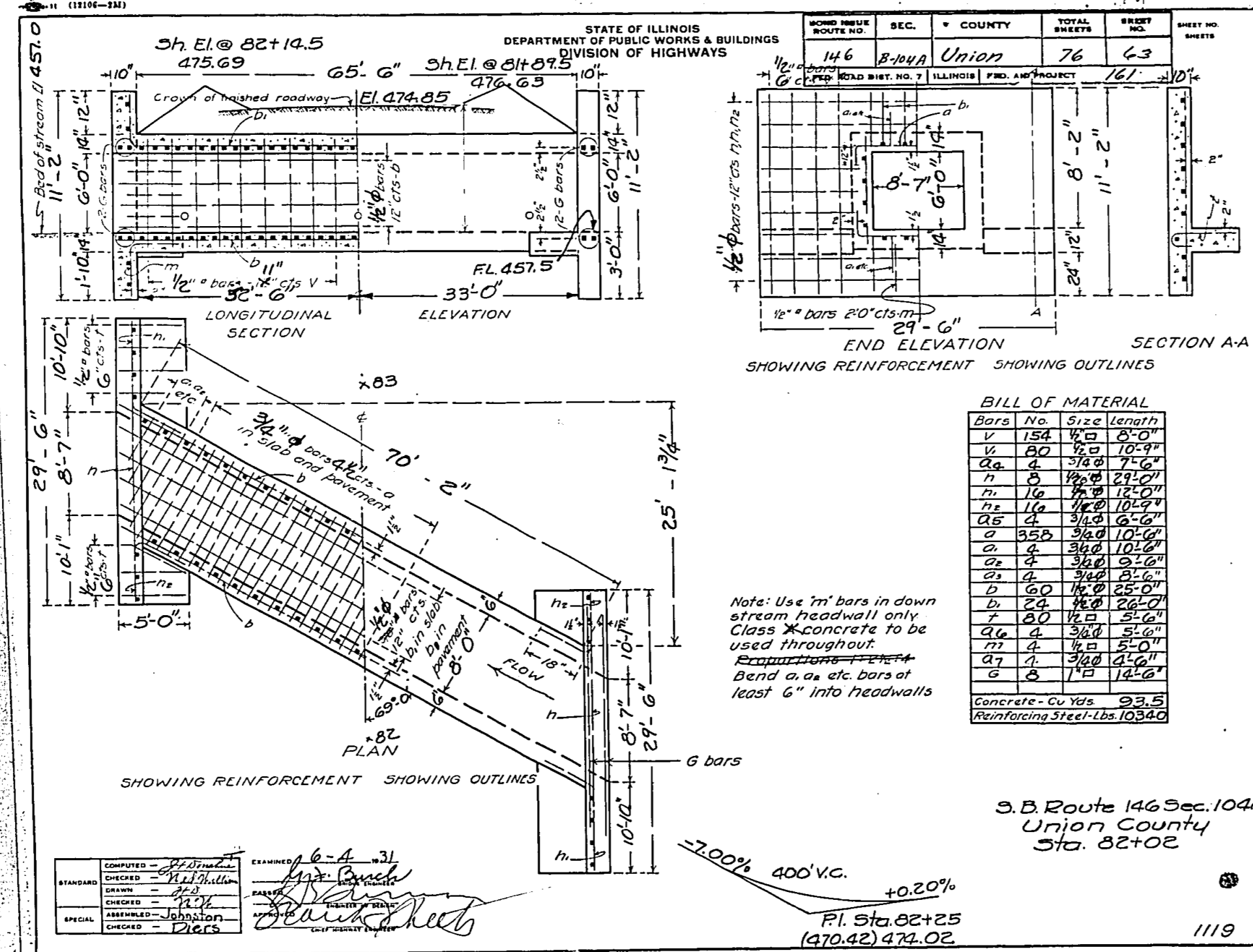
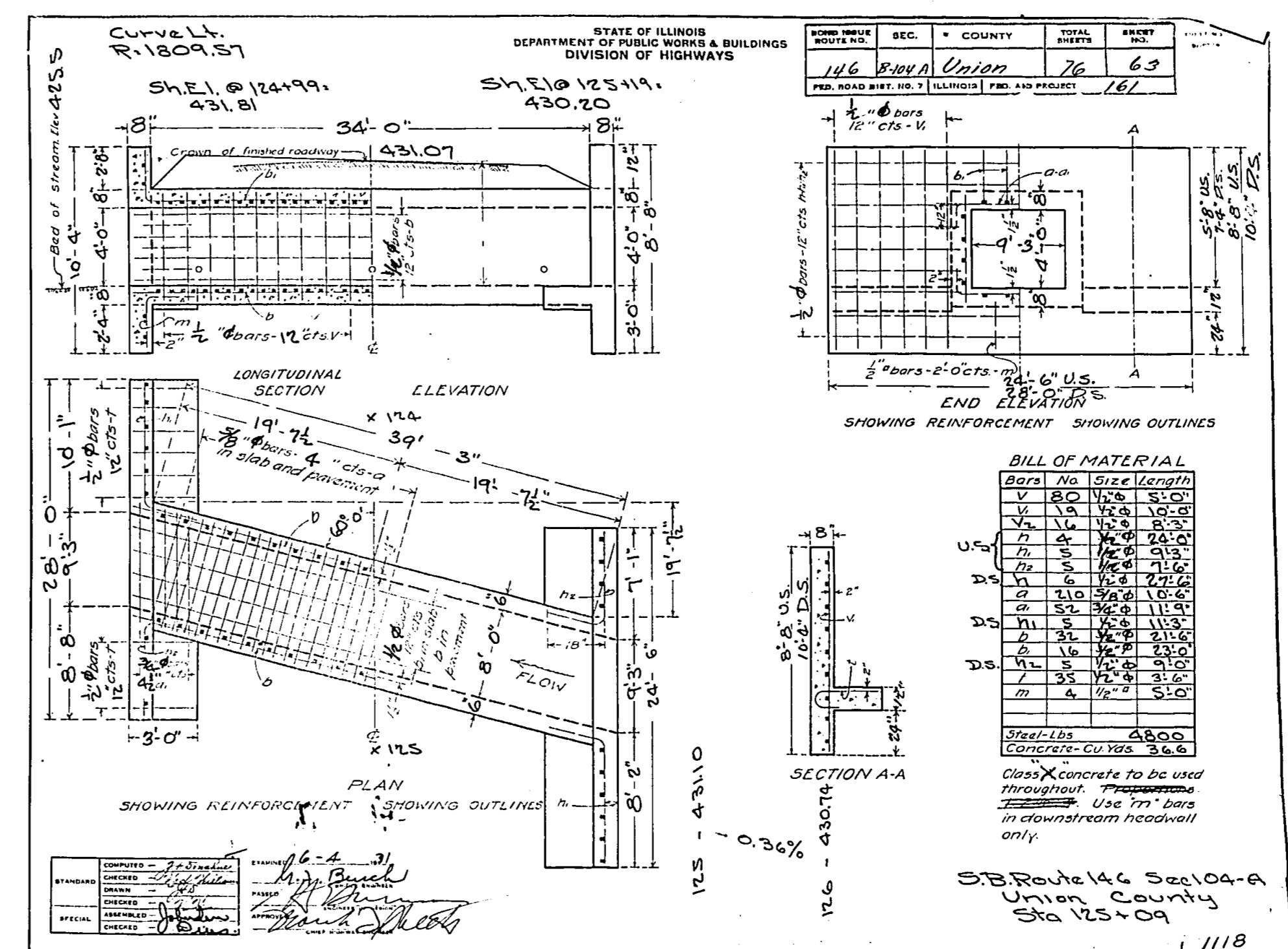
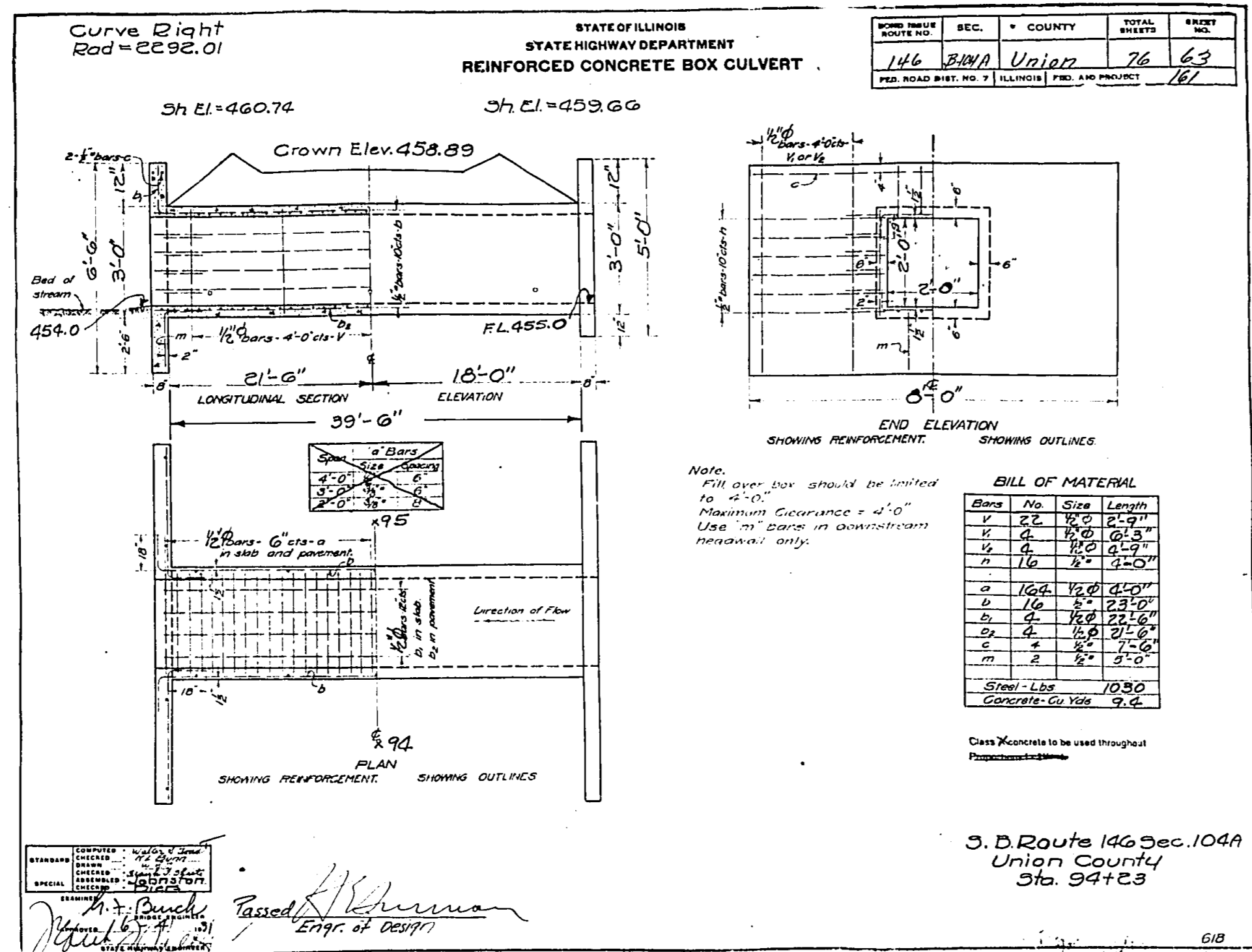
Class X Concrete shall be used throughout.  
Vitrified pipe shall be used for the inside form and shall be left in place.  
If a transverse form is used, the concrete barrel shall be made 6" thick instead of 4".

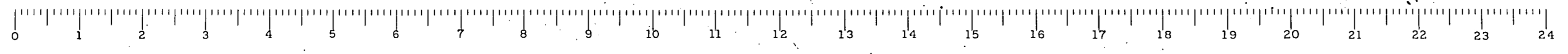
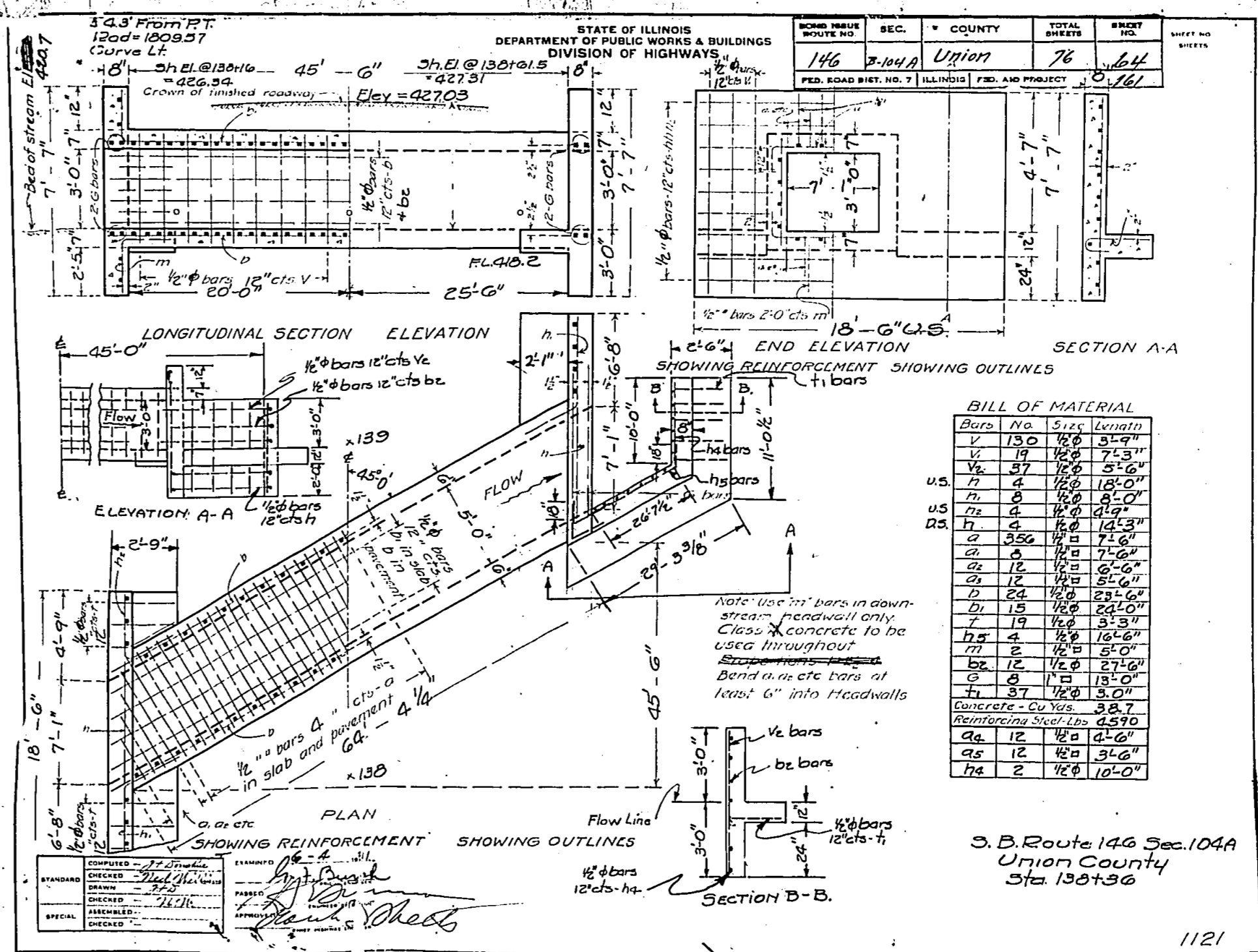
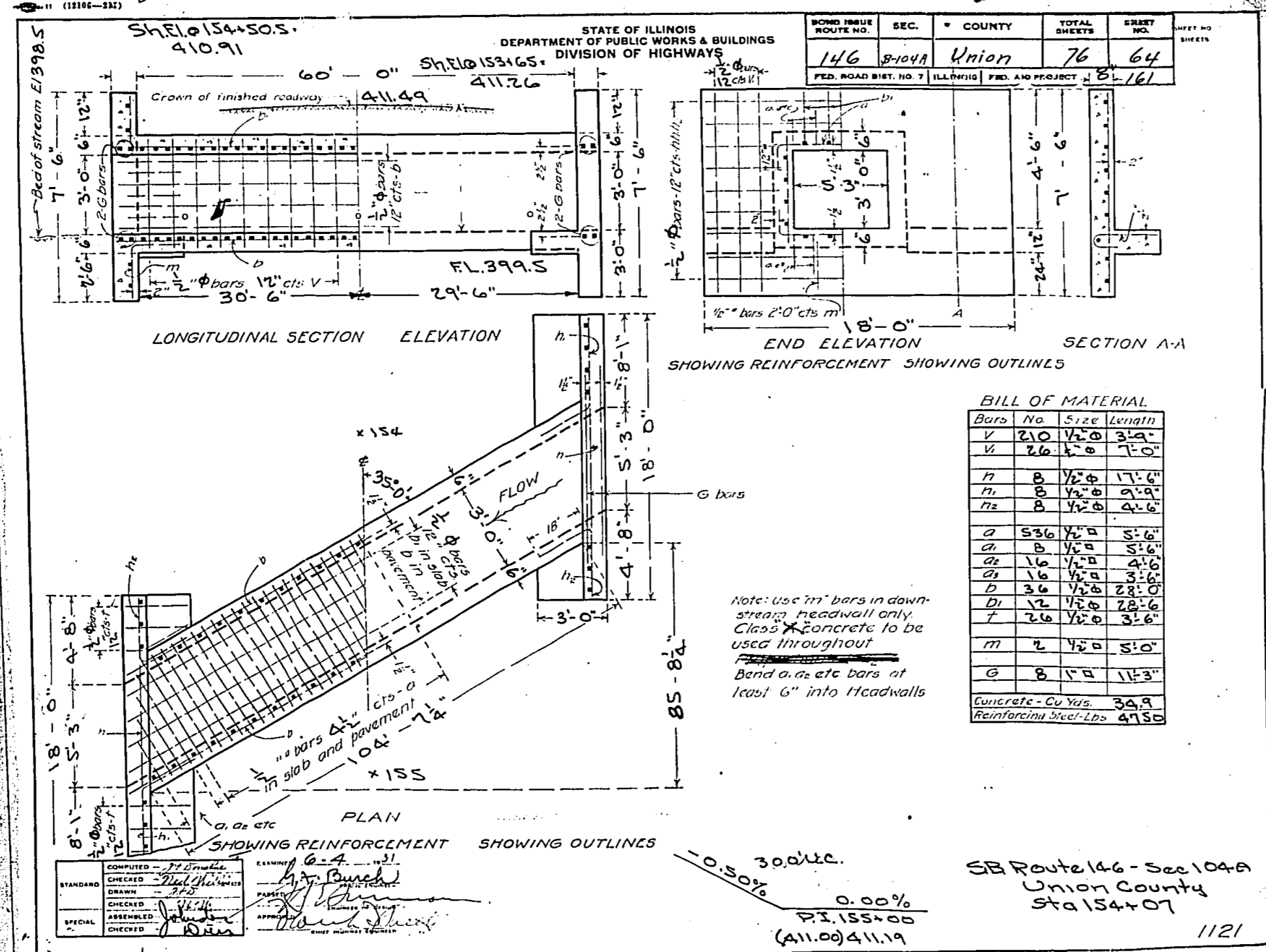
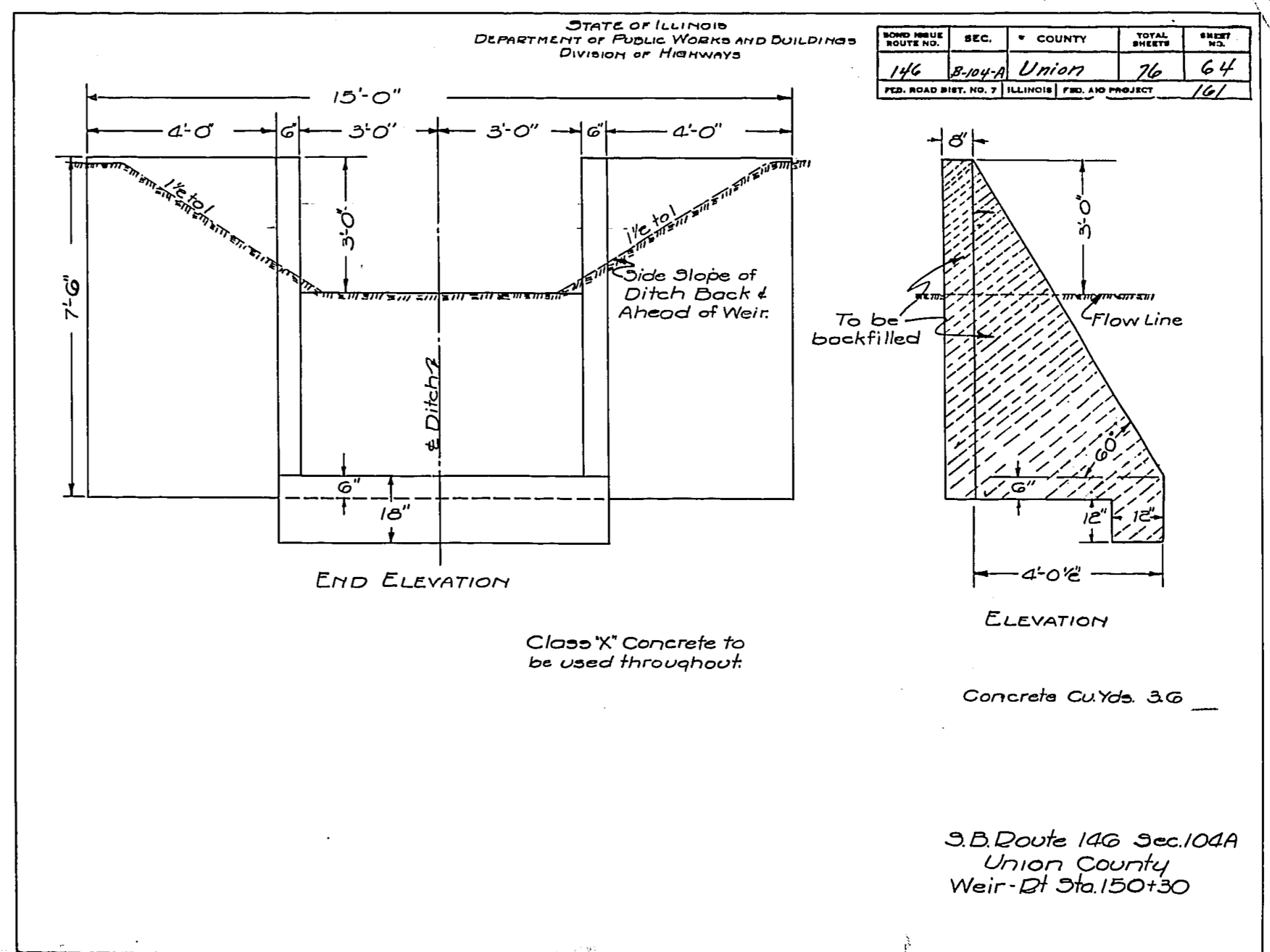
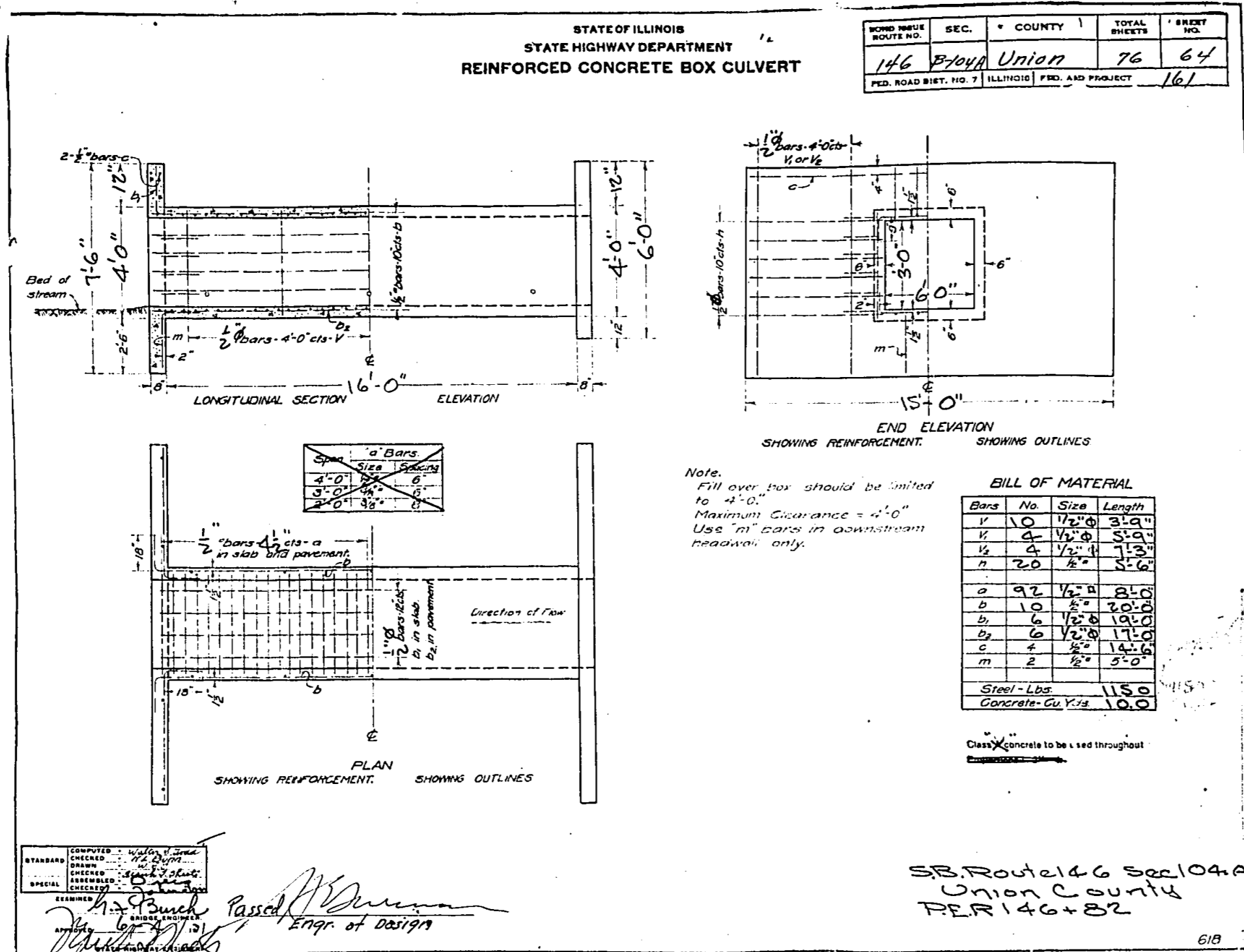
SB Route 146 Sec 104-A  
Union County  
Sta 1A+98





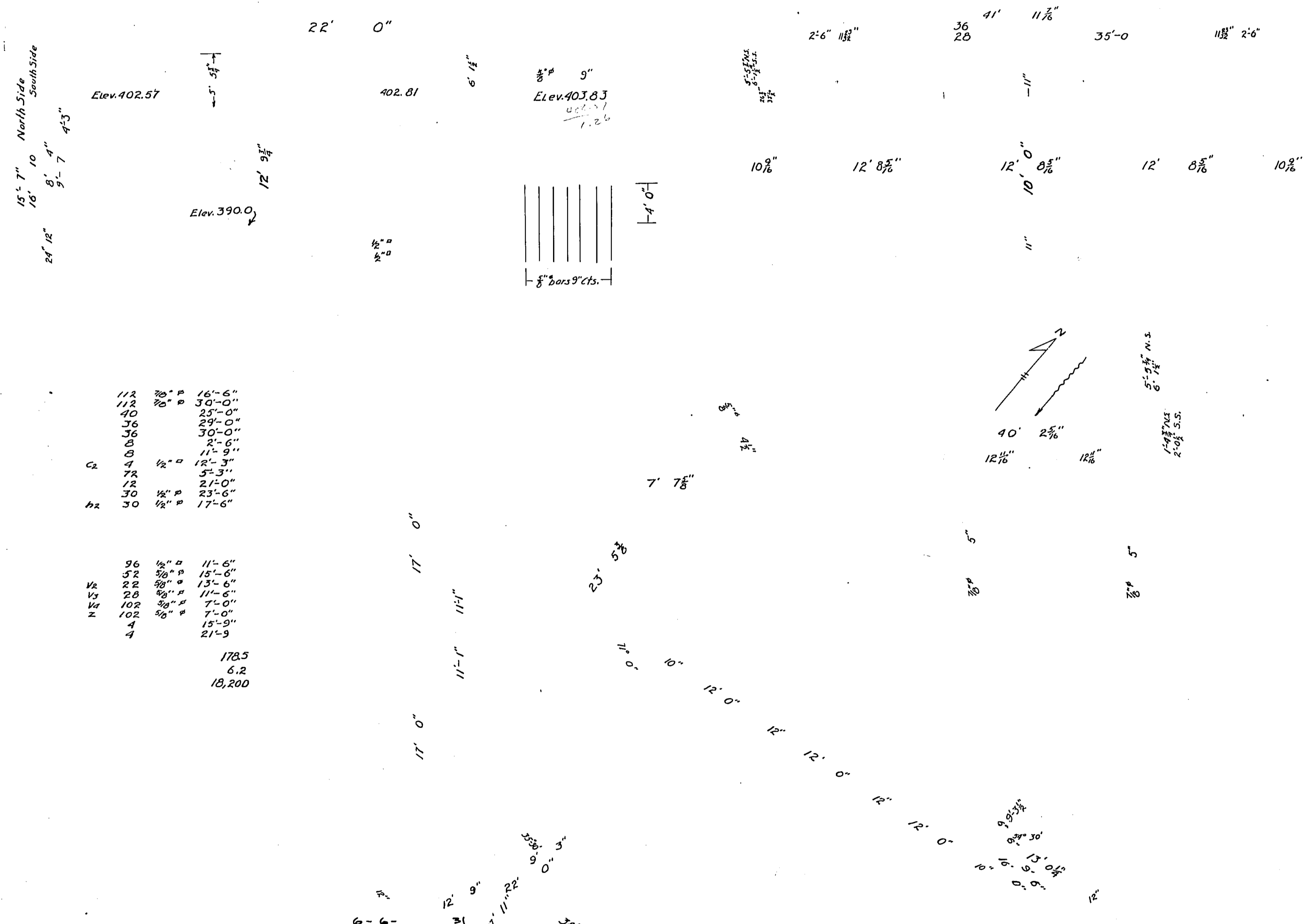






B.M. S+W in 30" Elm 125 Rt. Sta. 174+00  
 Elev. 400.07  
 Existing Structure To Remain in Place

ROAD NAME	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	B-104A	Union	76	65
FED. ROAD DIST. NO. 7 ILLINOIS			FED. AID PROJECT 161	



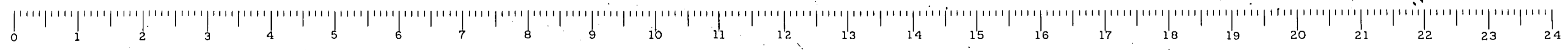
112	30" #	16'-6"
112	30" #	30'-0"
40		25'-0"
36		29'-0"
36		30'-0"
8		2'-6"
8		11'-9"
C2	4	12'-3"
	72	5'-3"
	12	21'-0"
	30	23'-6"
	30	17'-6"

36	1/2" #	11'-6"
32	3/8" #	15'-6"
22	3/8" #	13'-6"
V2	28	3/8" #
V2	102	3/8" #
Z	4	15'-9"
	4	21'-9"

178.5  
 6.2  
 18,200

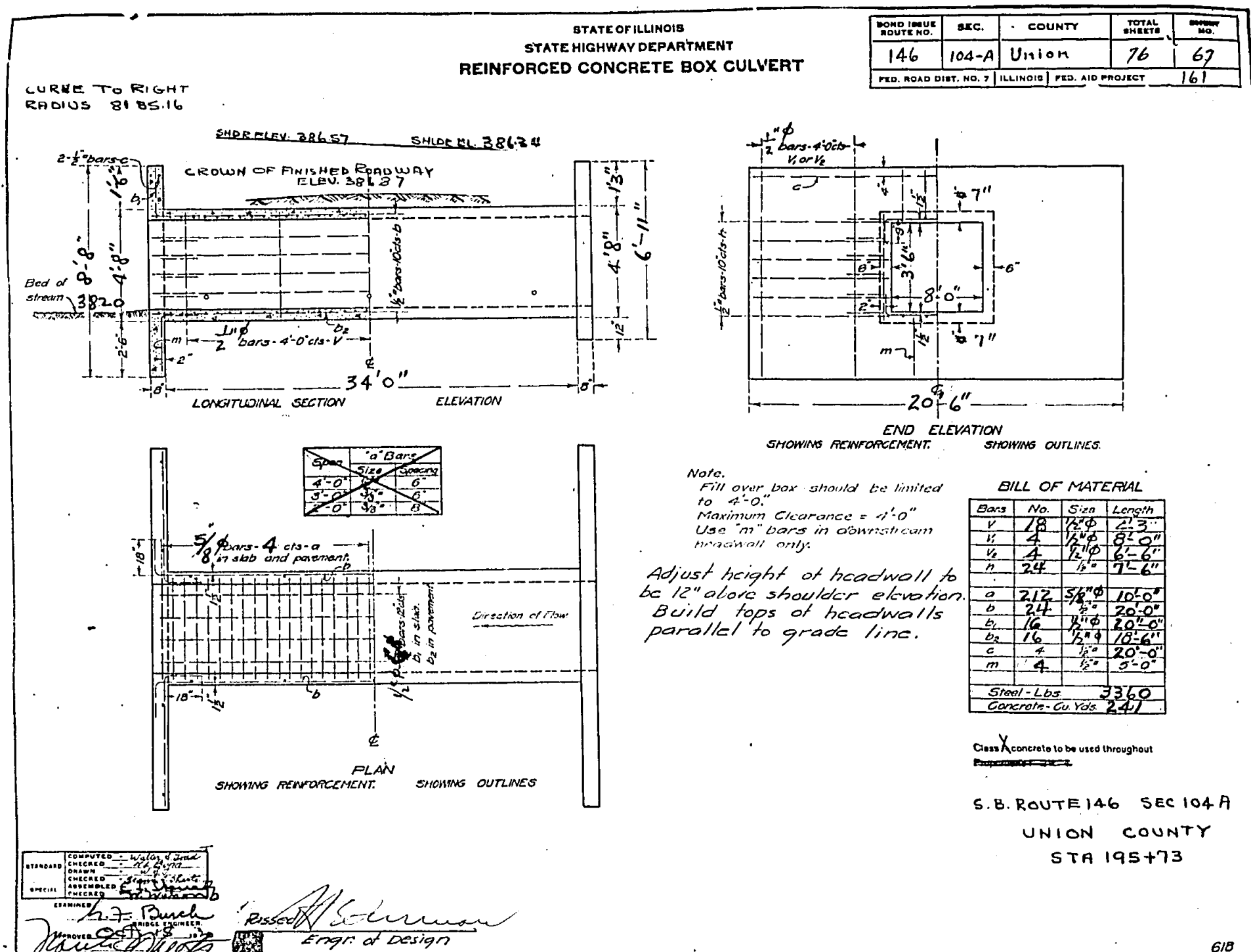
6-6-  
 H.F. Burch  
 H.E. Sumner  
 Frank T. Slets  
 Paul Morrison  
 E.K. Slet Co.

S.B.I.R.T. 146 SECTION 104 A BY  
 UNION COUNTY  
 STATION 172+30

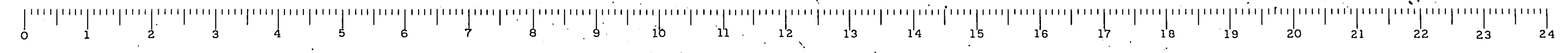
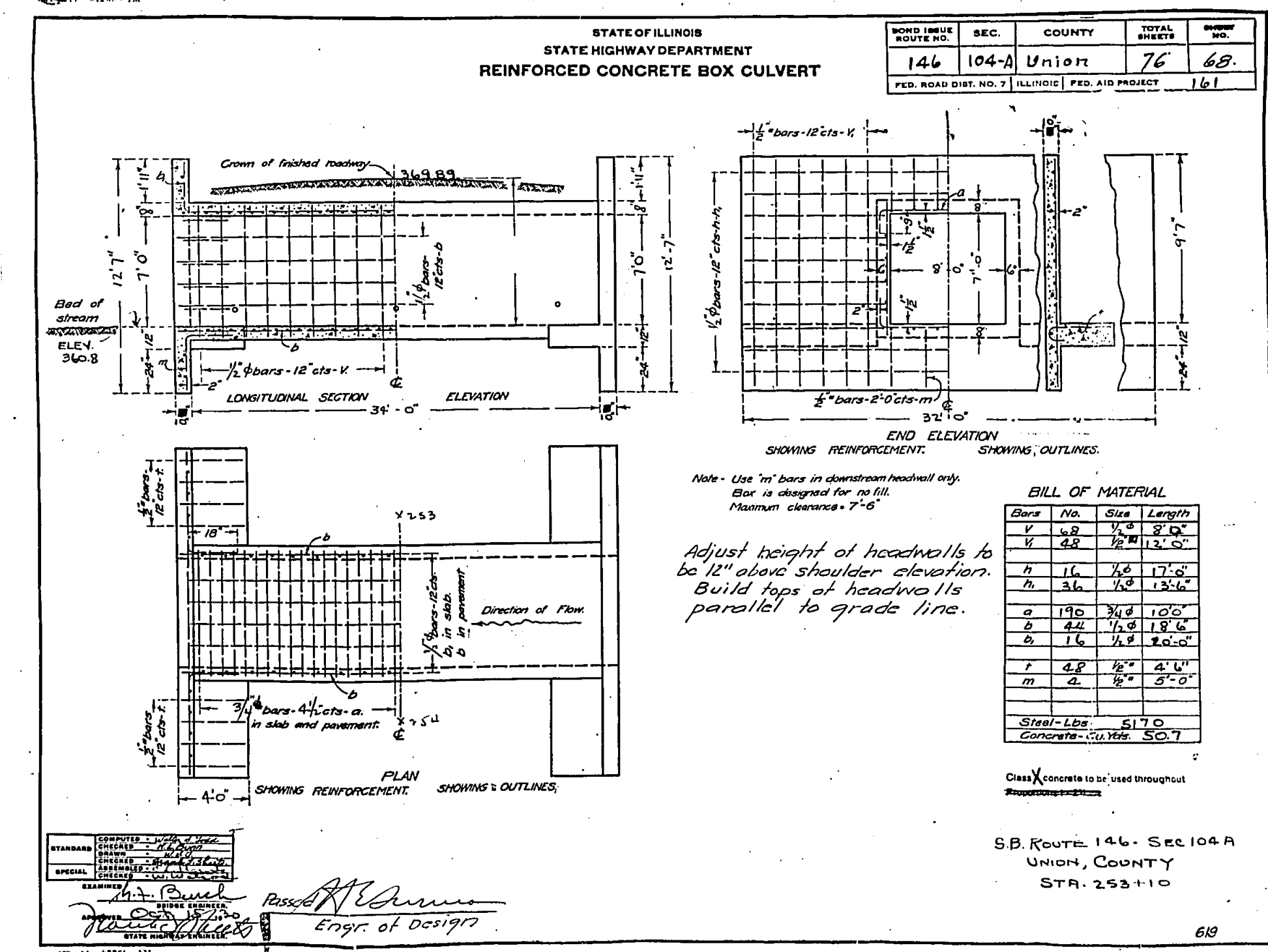
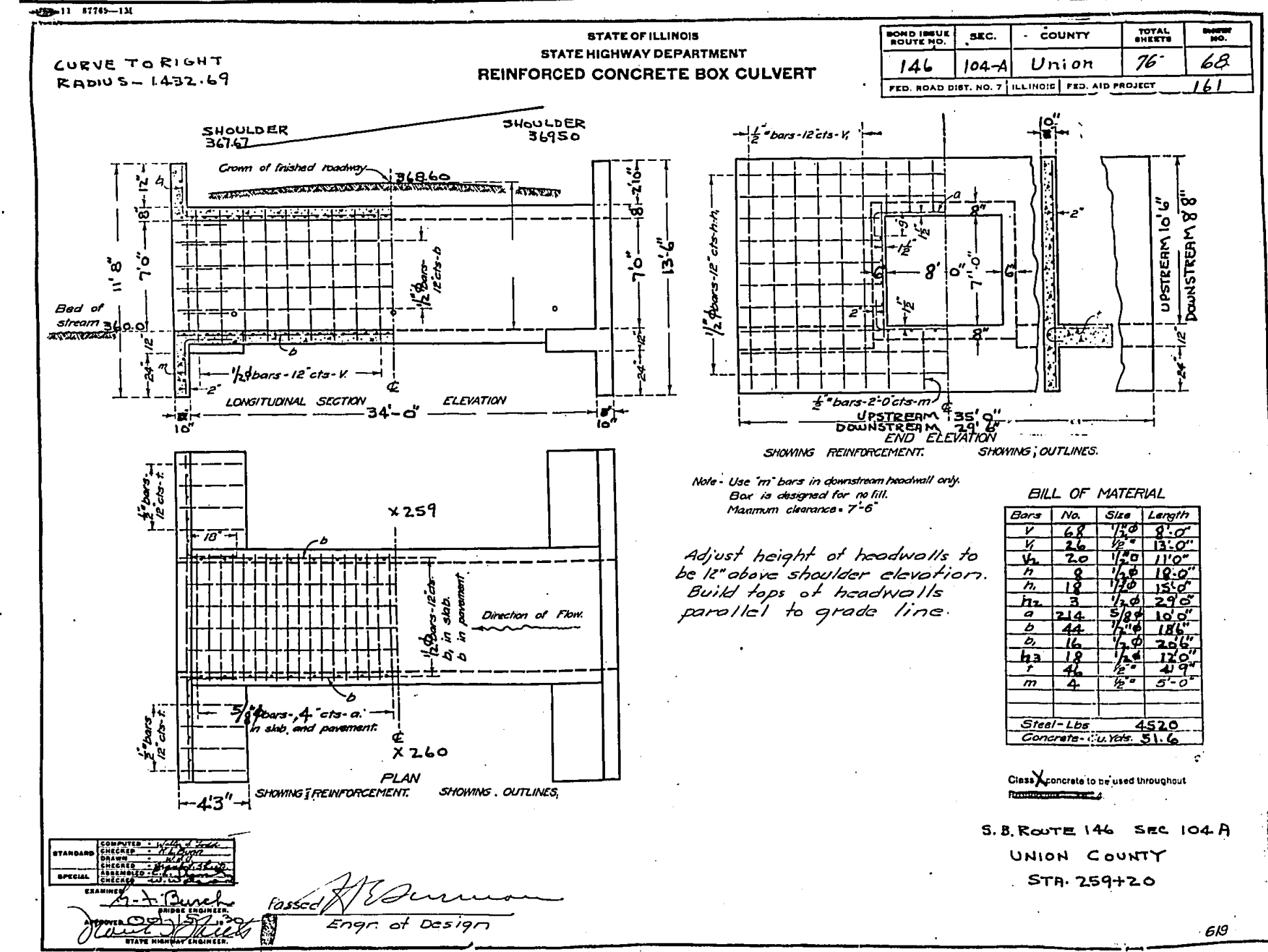
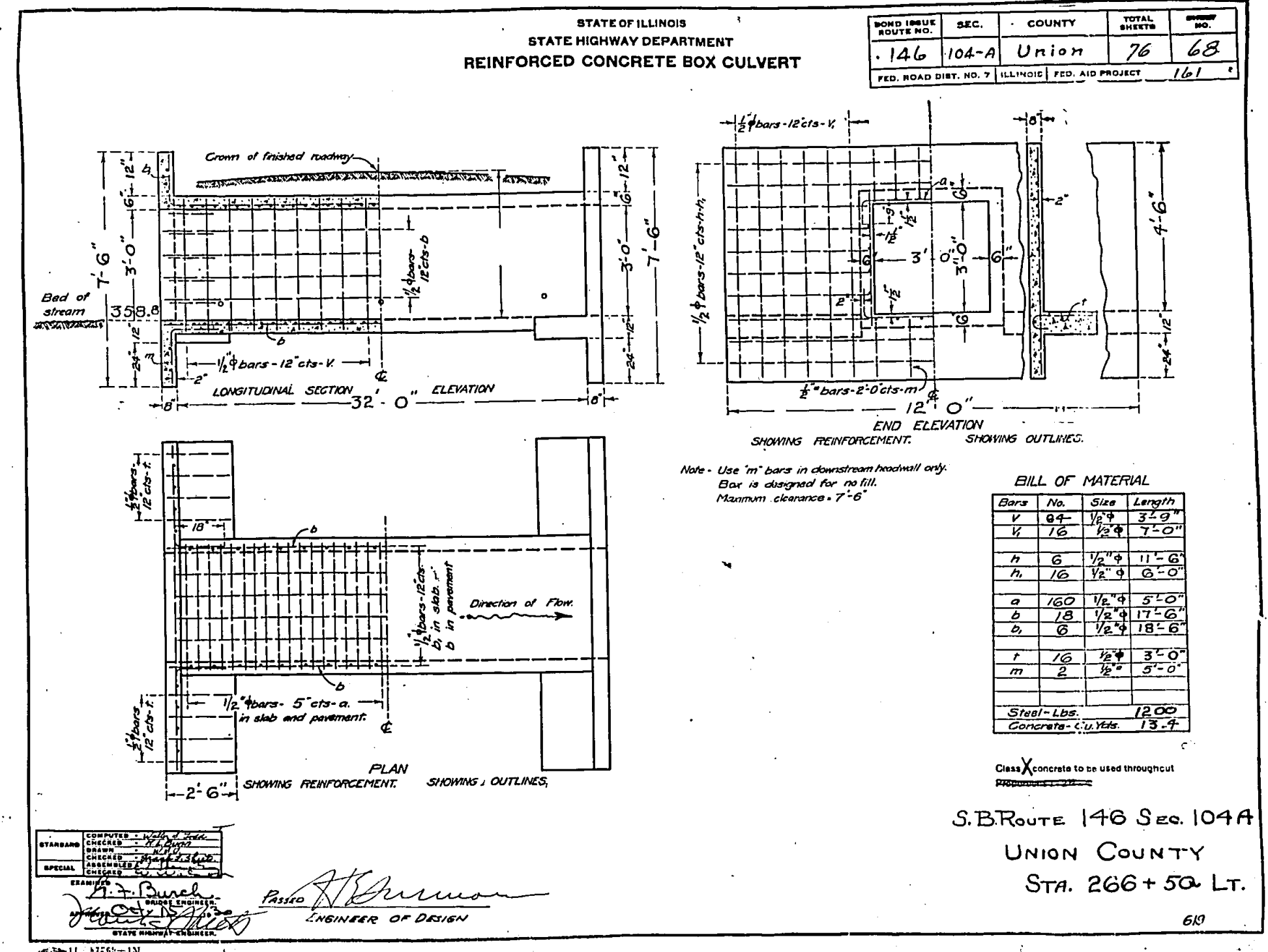
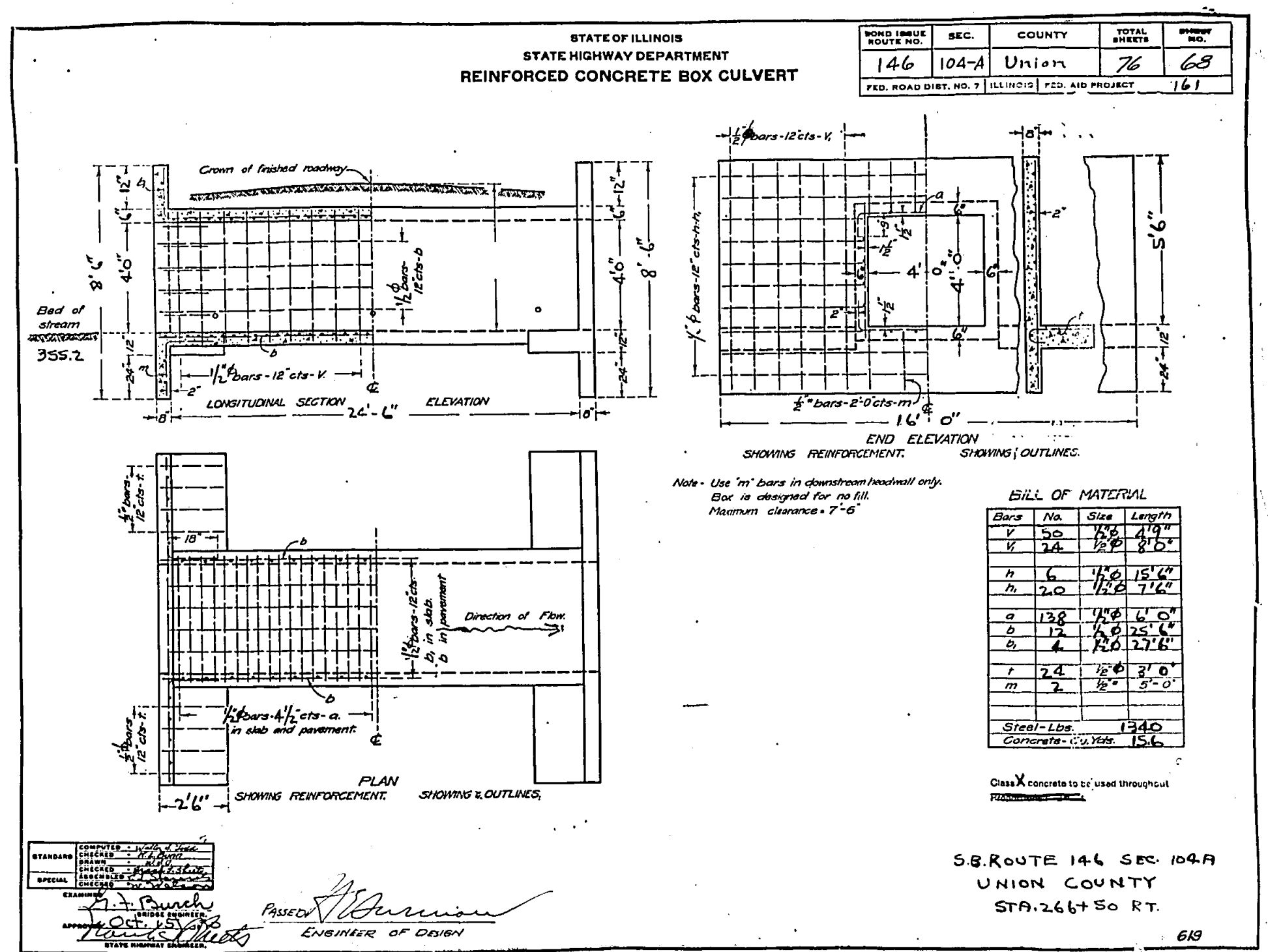








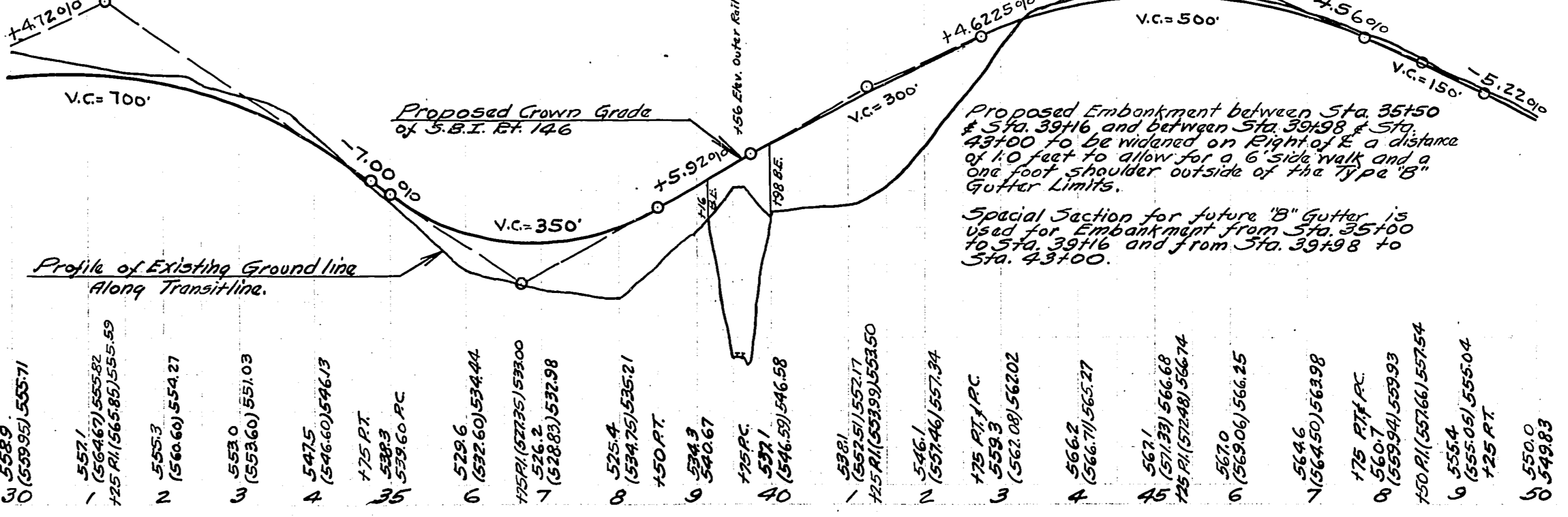
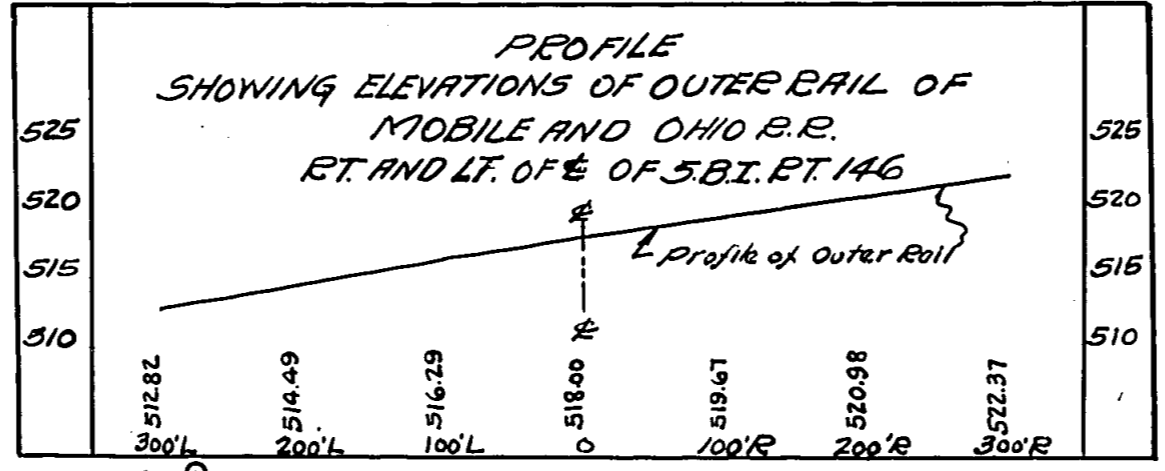
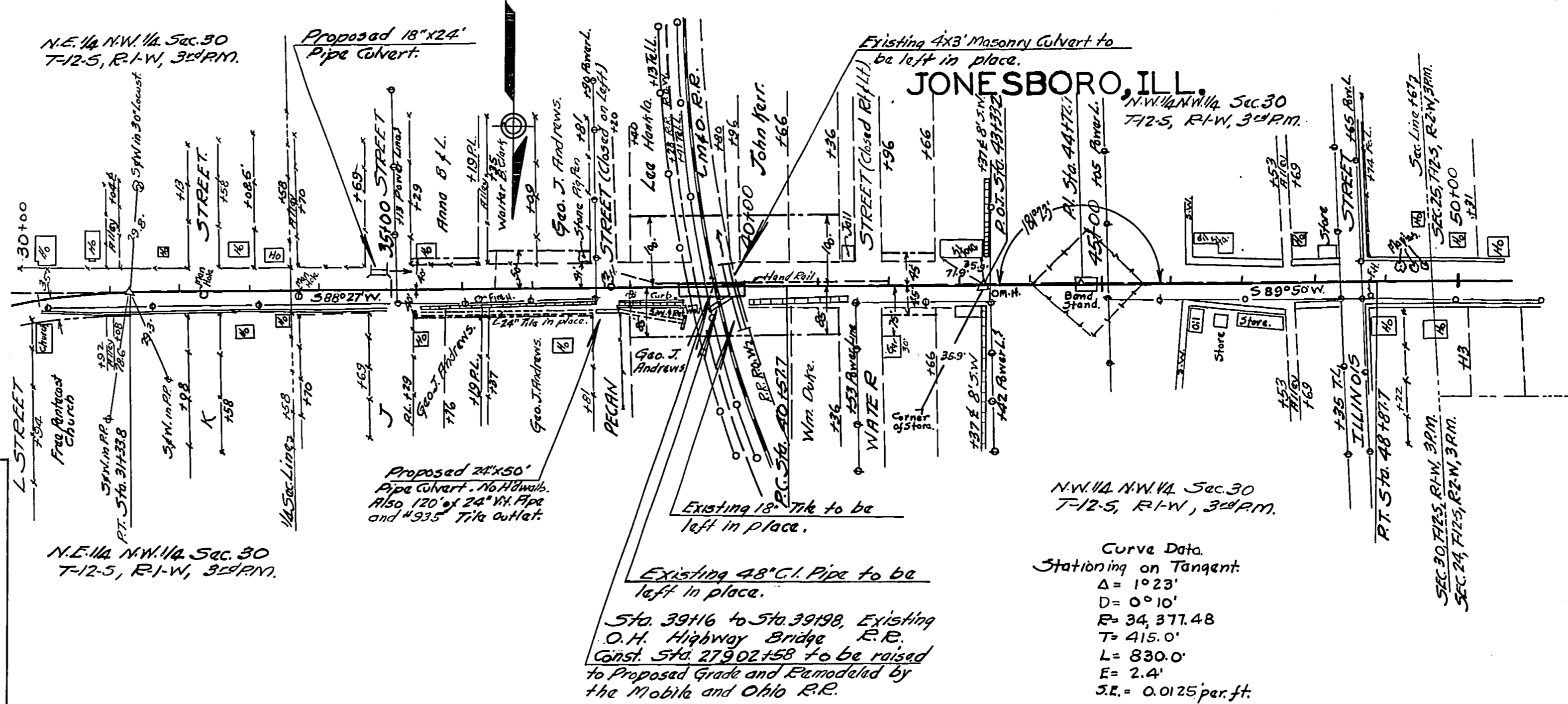
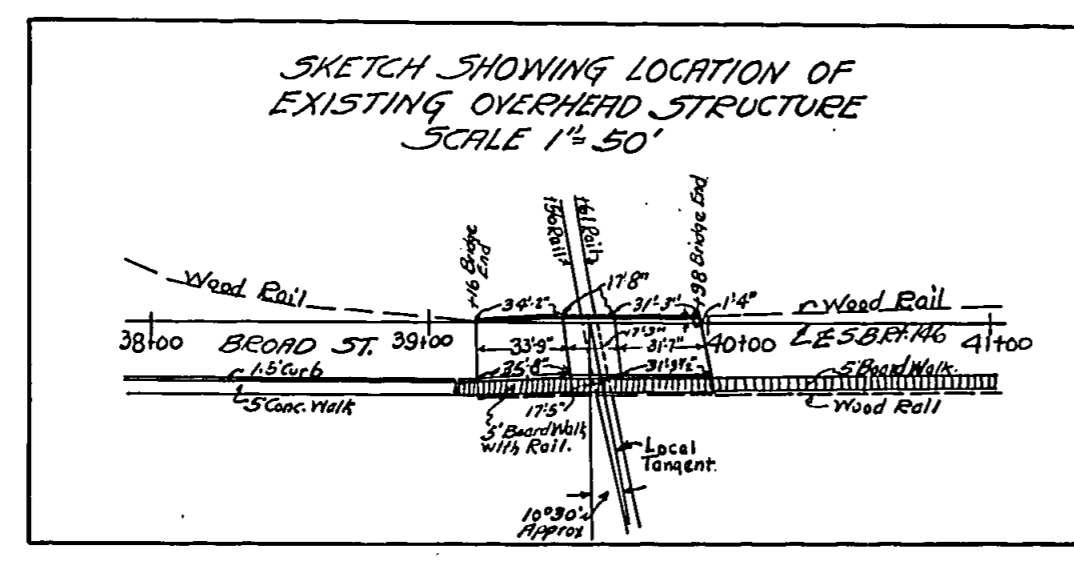




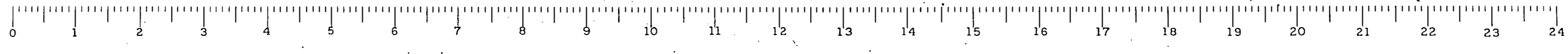




S.B.I. ET. 146 SEC 104-A  
 F.A. #161  
 PLAN AND PROFILE  
 SHOWING PROPOSED O.H. CROSSING  
 OF S.B.I. ET. 146 WITH  
 MOBILE AND OHIO R.R.  
 AT  
 JONESBORO, UNION COUNTY, ILLINOIS  
 Submitted May 27, 1931 J.A. Somerville  
 District Engineer. I.C.  
 Passed May 28, 1931 J.A. Somerville  
 Engineer of Design  
 Approved May 28, 1931 J.A. Somerville  
 Chief Highway Engineer.



30	528.9	(559.35)/555.71
1	527.1	(564.67)/555.32
2	525.3	(560.60)/554.27
3	523.0	(553.60)/551.03
4	521.5	(546.60)/546.13
5	520.6	(540.60)/544.44
6	520.0	(534.60)/539.00
7	519.8	(528.60)/532.98
8	519.4	(522.60)/526.21
9	519.3	(516.60)/516.67
10	519.2	(510.60)/506.58
11	519.1	(504.60)/500.00
12	519.0	(498.60)/492.98
13	518.9	(492.60)/485.44
14	518.8	(486.60)/476.90
15	518.7	(480.60)/467.36
16	518.6	(474.60)/456.82
17	518.5	(468.60)/445.28
18	518.4	(462.60)/432.74
19	518.3	(456.60)/419.20
20	518.2	(450.60)/404.66
21	518.1	(444.60)/389.12
22	518.0	(438.60)/372.58
23	517.9	(432.60)/355.04
24	517.8	(426.60)/337.50



PLAN AND PROFILE  
OF  
S.B.I. ROUTE 146 SECTION 104-A  
SHOWING PROPOSED RELOCATION OF GREEN CREEK  
BETWEEN STATIONS 149+00 AND 163+00  
WEST OF JONESBORO, ILLINOIS, UNION COUNTY

SCALES  
PROFILE { Hor. 1"=100'  
Vert. 1"=10'  
PLAN - 1"=100'

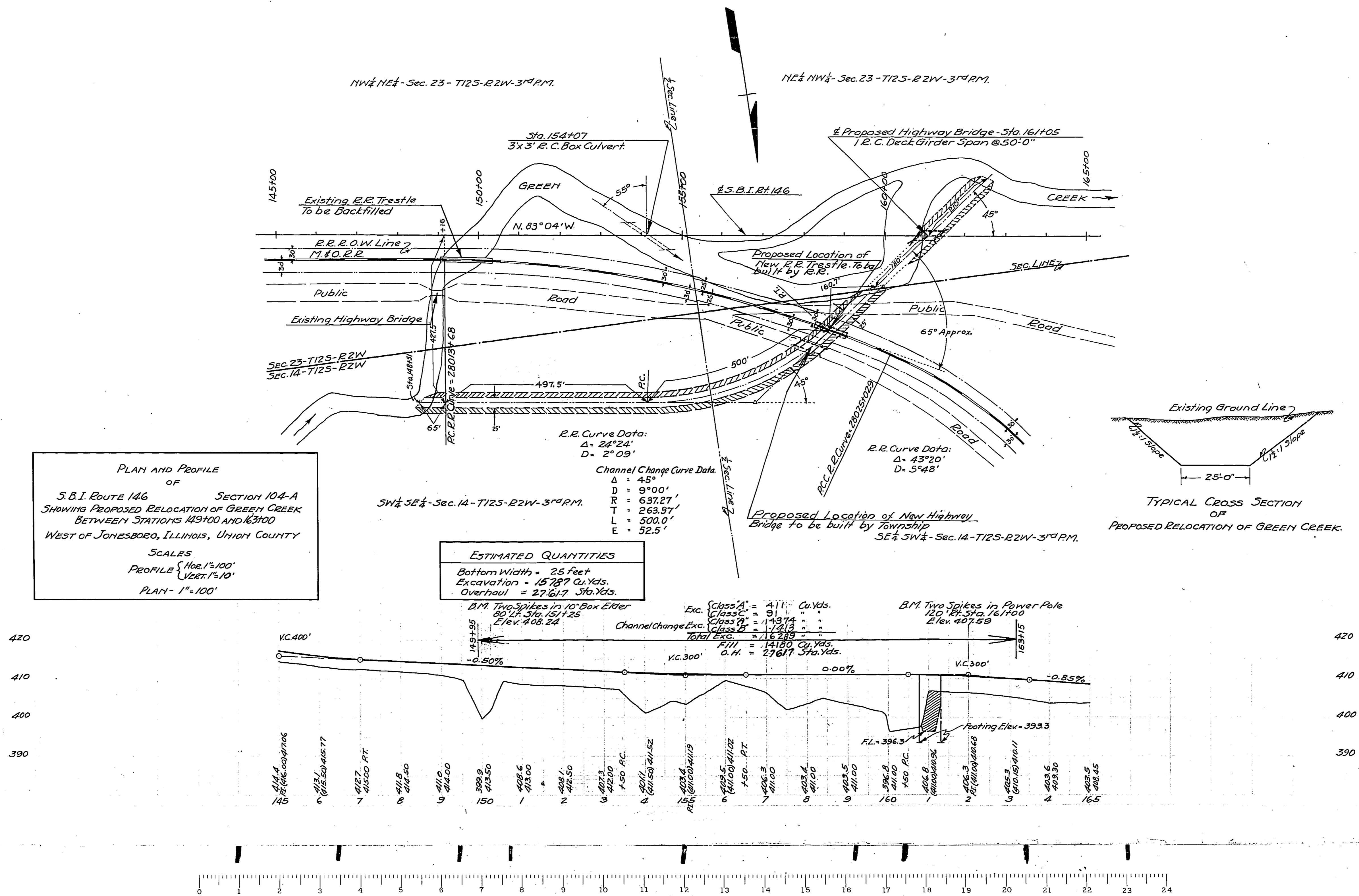
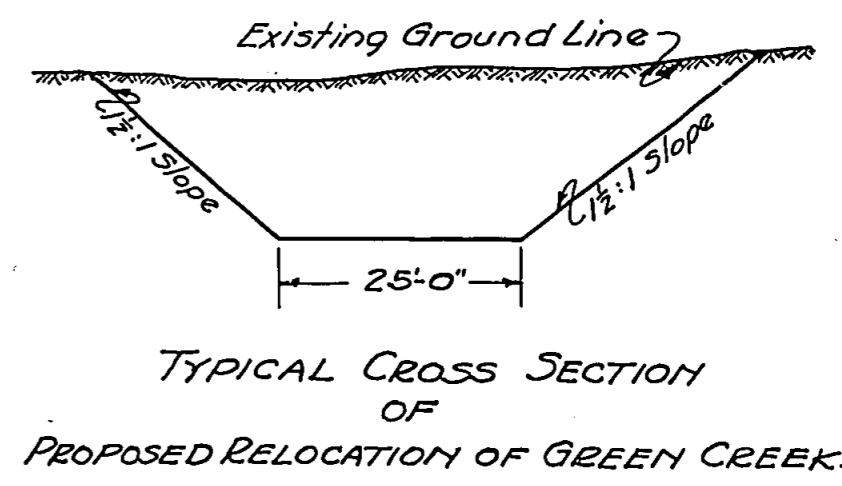
SW 1/4 SE 1/4 - Sec. 14 - T12S - R2W - 3rd RM.

ESTIMATED QUANTITIES  
Bottom Width = 25 feet  
Excavation = 15,787 Cu.Yds.  
Overhaul = 27,617 Sta.Yds.

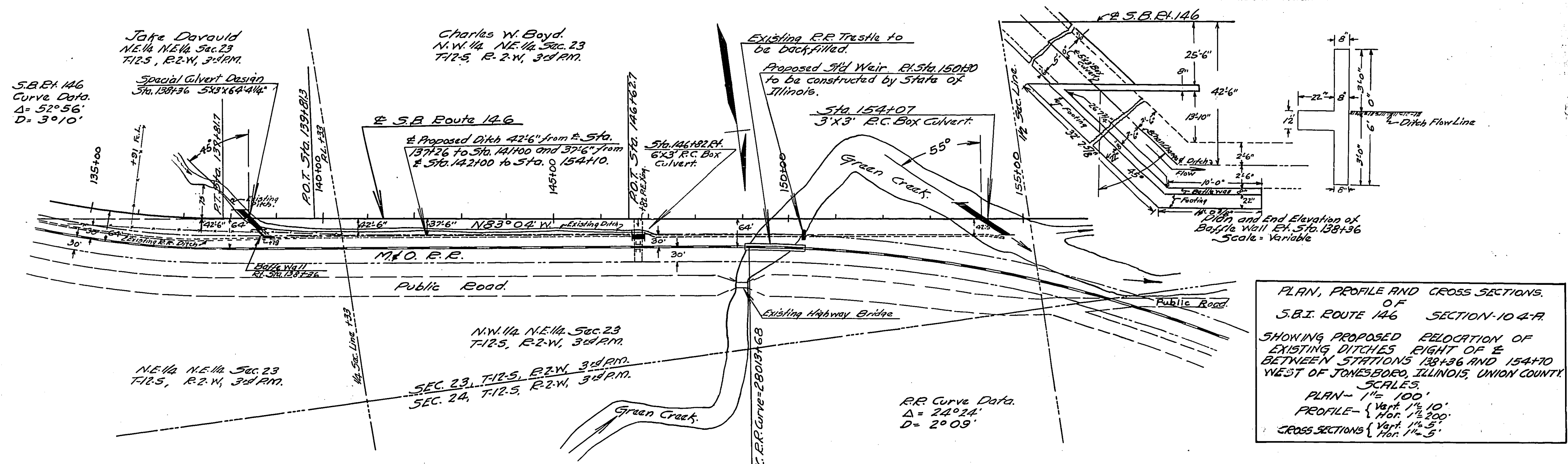
R.R. Curve Data:  
Δ = 24°24'  
D = 2°09'

Channel Change Curve Data:  
Δ = 45°  
D = 9°00'  
R = 637.27'  
T = 263.97'  
L = 500.0'  
E = 52.5'

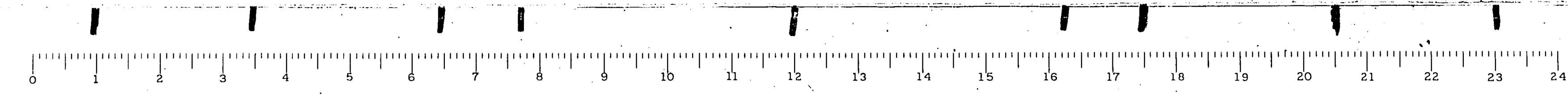
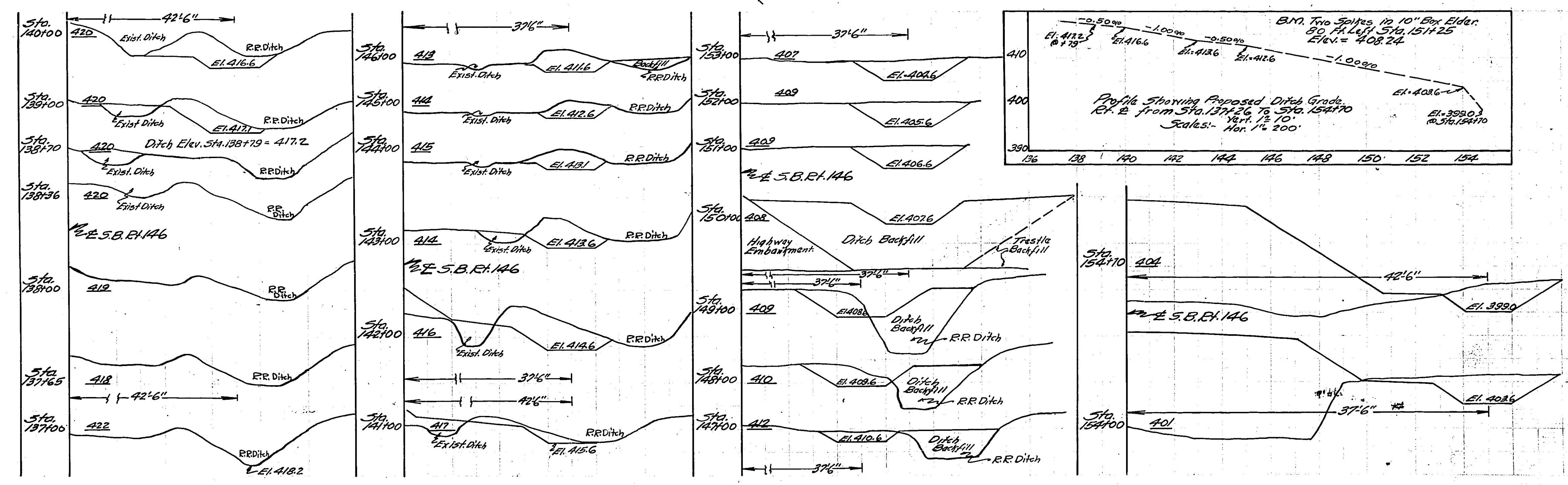
Proposed Location of New Highway Bridge To be built by Township  
SE 1/4 SW 1/4 - Sec. 14 - T12S - R2W - 3rd RM.







PLAN, PROFILE AND CROSS SECTIONS  
 OF  
 S.B. ROUTE 146 SECTION 10 4-A  
 SHOWING PROPOSED REALLOCATION OF  
 EXISTING DITCHES EIGHT OF E  
 BETWEEN STATIONS 138+36 AND 154+70  
 WEST OF JONESBORO, ILLINOIS, UNION COUNTY.  
 SCALES  
 PLAN - 1" = 100'  
 PROFILE - 1" = 10' Vert. 1" = 200' Hor.  
 CROSS SECTIONS - 1" = 5' Vert. 1" = 5' Hor.





No existing structure.

ROAD DIST. NO. 7	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	104-C	Union	76	73
ILLINOIS			FED. AID PROJECT	
			161	

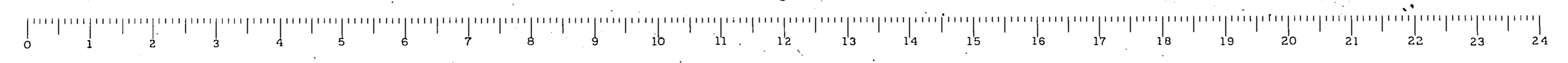
2

H.L. Ekin  
F.R. [unclear]

Oct. 30. 30  
A.F. [unclear]  
H.E. [unclear]  
Frank T. [unclear]

DUTCH CREEK  
S.B.I. ROUTE 146 SEC. 104.C.  
UNION COUNTY  
I.A. 268405

11437

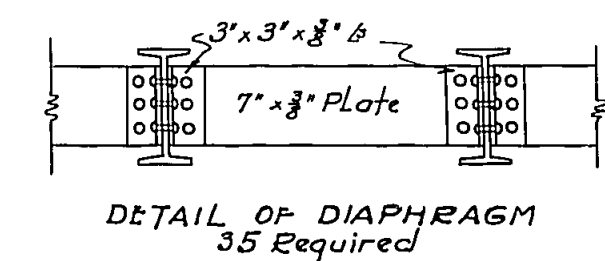
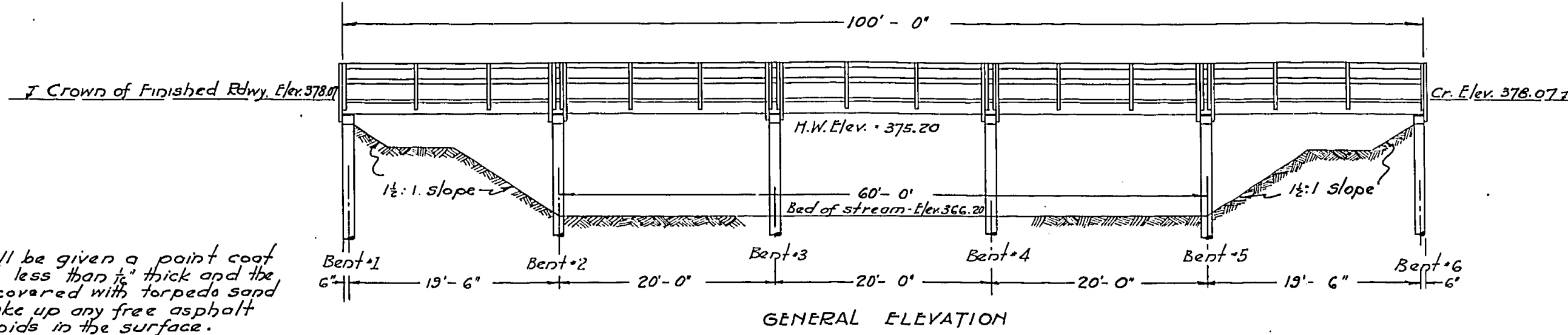




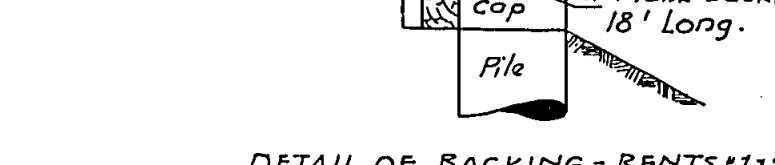
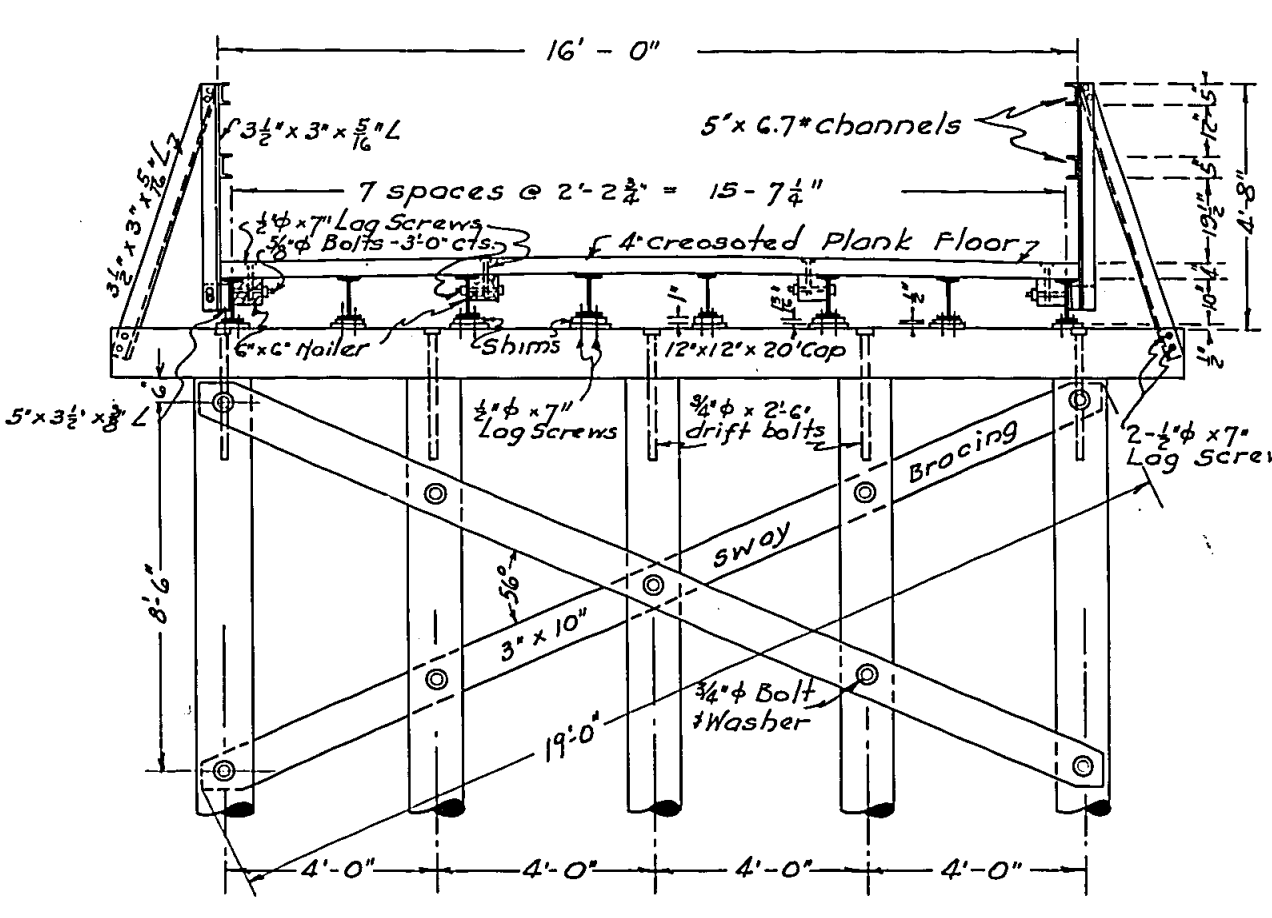
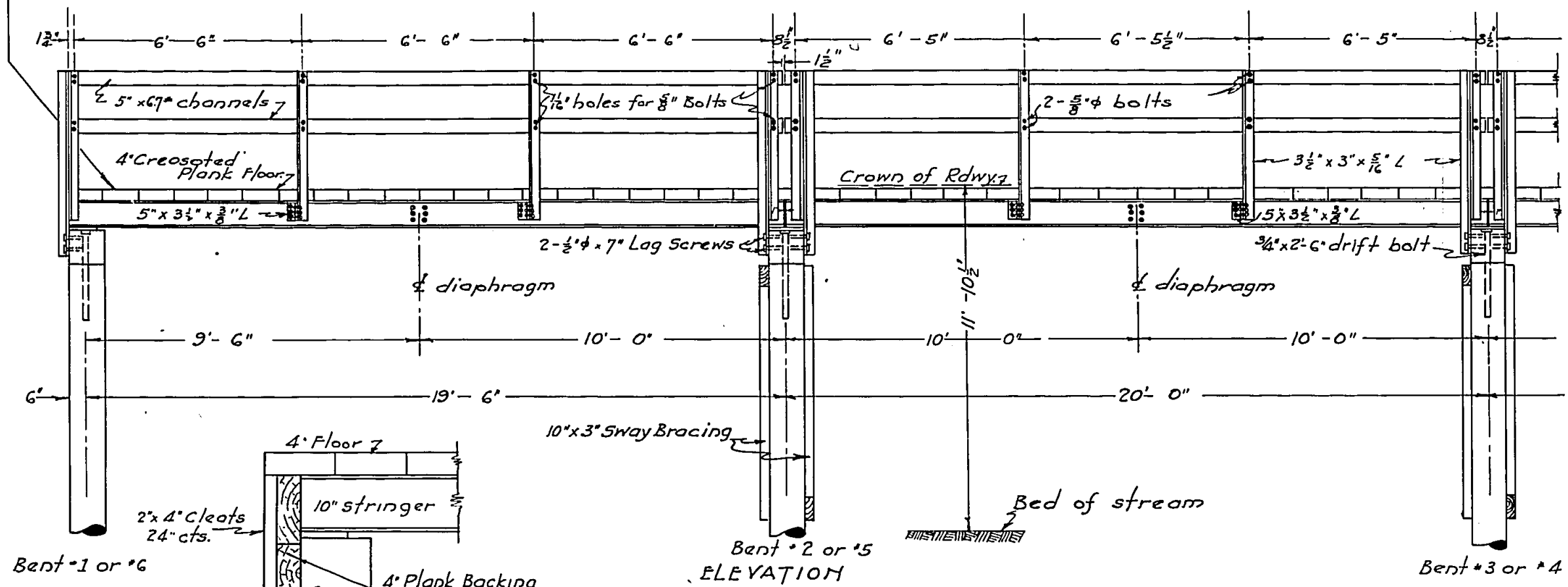
No Existing Structure.  
 B.M. S. 1 W. in root of 18" wild cherry tree  
 70' left sta. 209+00; Elev. 379.30

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
 DIVISION OF HIGHWAYS

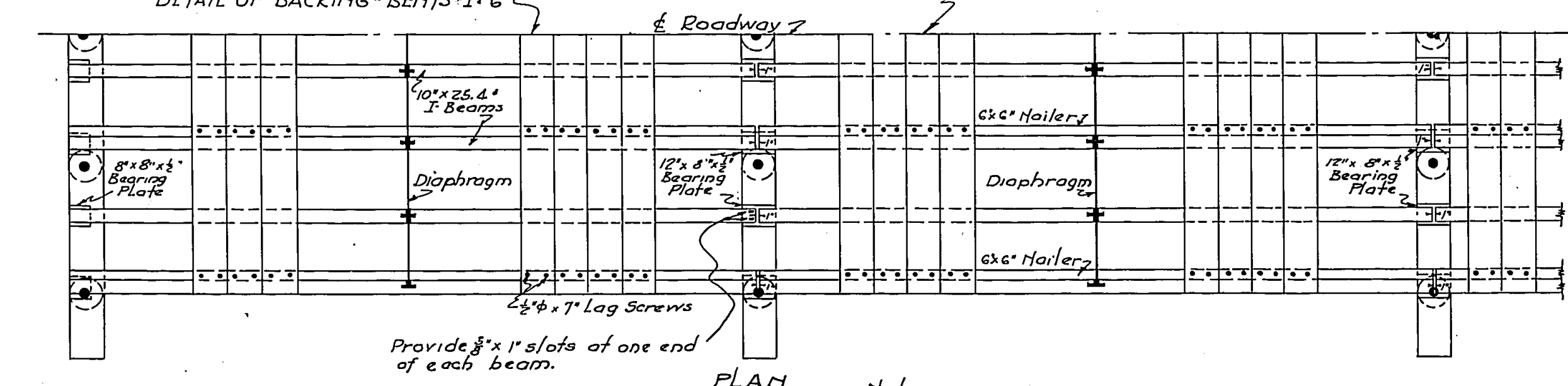
ROAD DISTRICT NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	104-B	Union	76	73
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	161	



The floor shall be given a paint coat of asphalt not less than 1/2" thick and the entire surface covered with torpedo sand sufficient to take up any free asphalt and to fill the voids in the surface.



Note: Each plank to be fastened to each pailer with 2" x 4" x 7" Lag Screws. Heads of Lag Screws to be countersunk flush with surface.



NOTES  
 All cuts, holes and abrasions made in lumber after treatment shall receive two heavy brush coats of hot creosote oil.  
 Piling to be creosoted, and to have 12" butt 8" rig.  
 Piles shall be driven to 10 ton capacity, and a minimum penetration of 15 feet. Est. 25' long.  
 Everts 3/4" holes to except as noted.  
 All field connections to be bolted.  
 All washers - nuts - spikes - Lag screws etc. to be of galvanized wrought iron.  
 Structural steel to be painted one shop coat and two field coats.

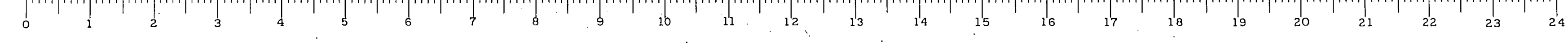
BILL OF MATERIAL

Structural Steel - lbs.	28530*
10 Ton-Creosoted Piles - Lin. Ft.	1750
4" Creos. Plank Floor - Sq. Yds.	177.8
Creosoted Lumber - M.B.M.	3.33

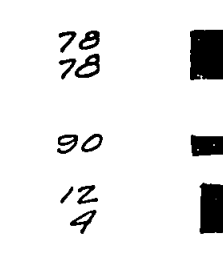
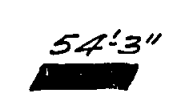
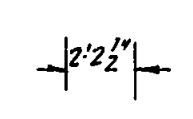
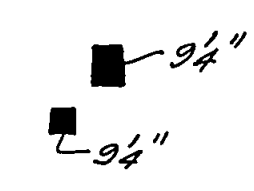
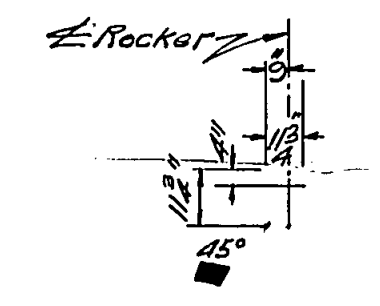
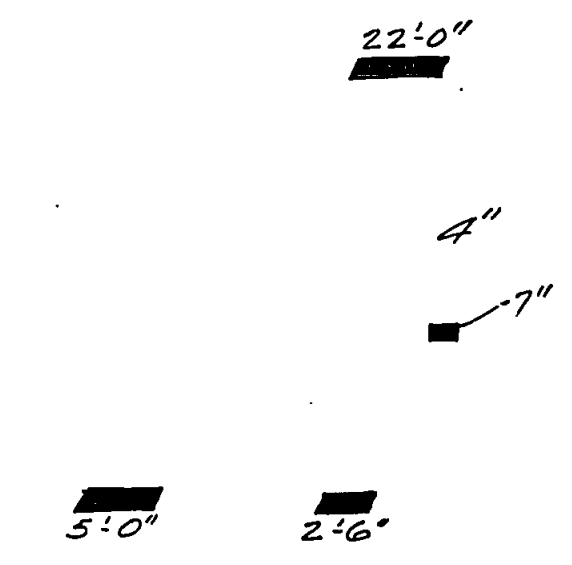
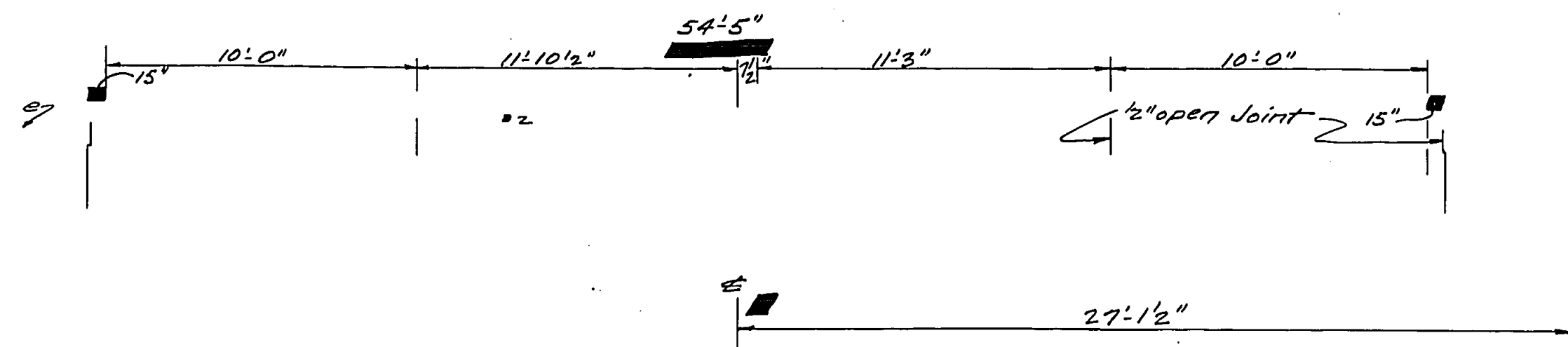
COMPUTED	- H.J. Beckner, Jr.	EXAMINED	10/30/30
CHECKED	- M. Humphrey	APPROVED	- H.E. Summers
DRAWN	- H.J.B.	ENGINEER OF DESIGN	
CHECKED	- M. Humphrey	APPROVED	- H.E. Summers
SPECIAL	ASSEMBLED	CHIEF HIGHWAY ENGINEER	
	CHECKED		

Note:  
 Floor and Hangers to be creosoted Yellow Pine or Douglas Fir - Select grade 5-4-S.  
 Other lumber to be creosoted Yellow Pine or Douglas Fir - select grade - full sawn rough.

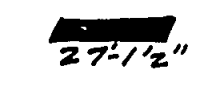
S.B.T. ROUTE 146 - Sec. 104 B  
 UNION COUNTY  
 Sta. 221+88 Left.



ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	B-84-B	Union	76	74
FED. ROAD DIST. NO. 2			ILLINOIS	7th. AID PROJECT
			161	3

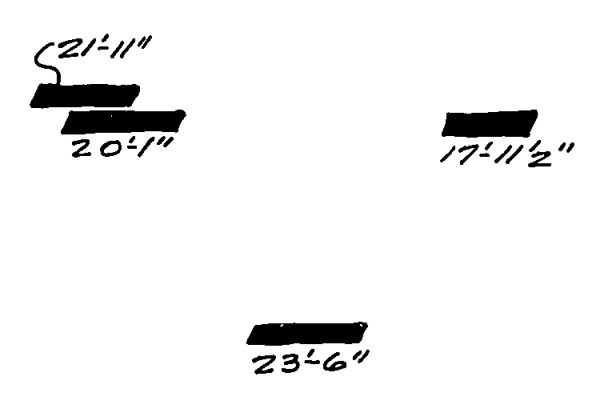


LENGTH
84'-0"
84'-0"
27'-6"
28'-6"
4'-0"
4'-0"
7'-0"
12'-0"
33'-6"
36'-0"
52'-0"
47'-3"
23'-0"
8'-6"
8'-2"
72'-5"
10,800
1220
270



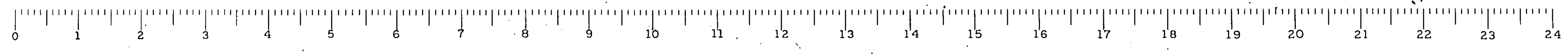
June 4 31  
 D. F. Burch  
 R. J. Dunning  
 David Sheets

William J. Mott  
 Harold B. H. Lewis



S.B. 1. PT. 146 SEC. 104 B  
 UNION CO.  
 STA. 161+05

1345

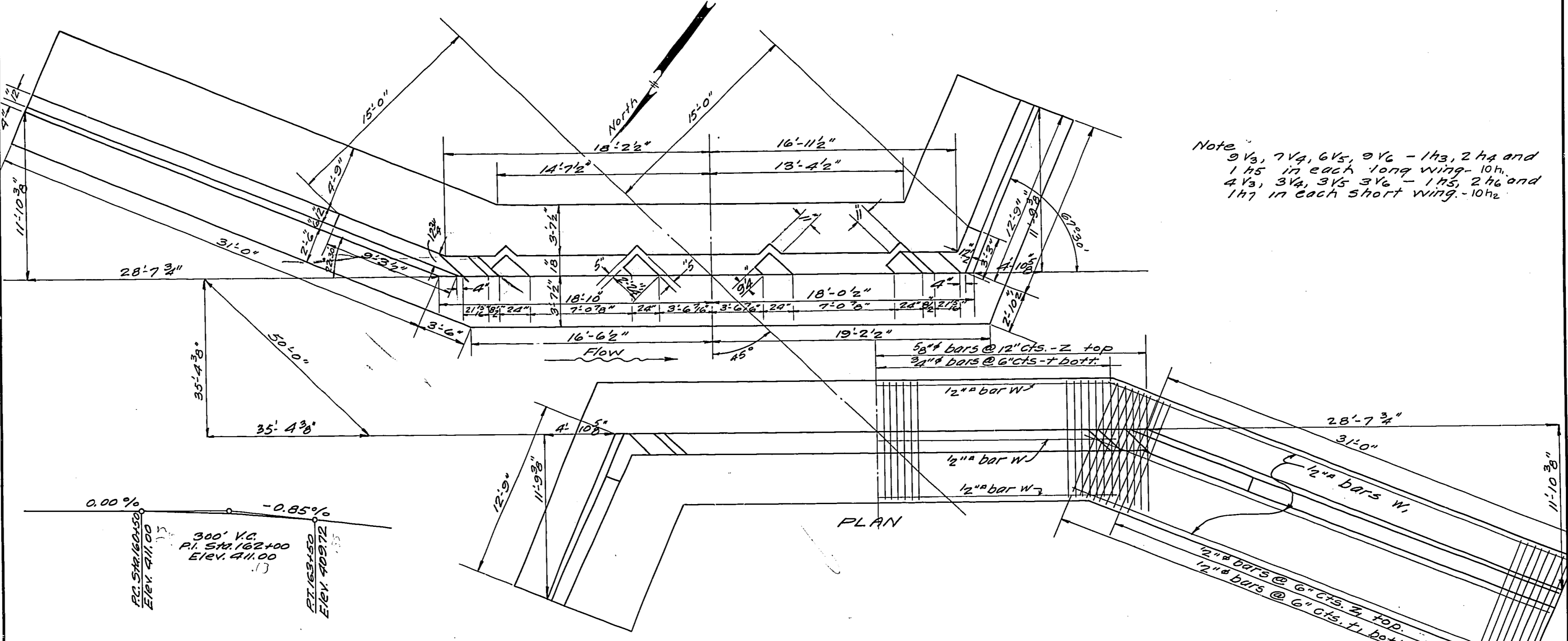


B.M. - Two spikes in power pole.  
120' RT STA. 161+00 Elev. 407.53  
No Existing Structure.

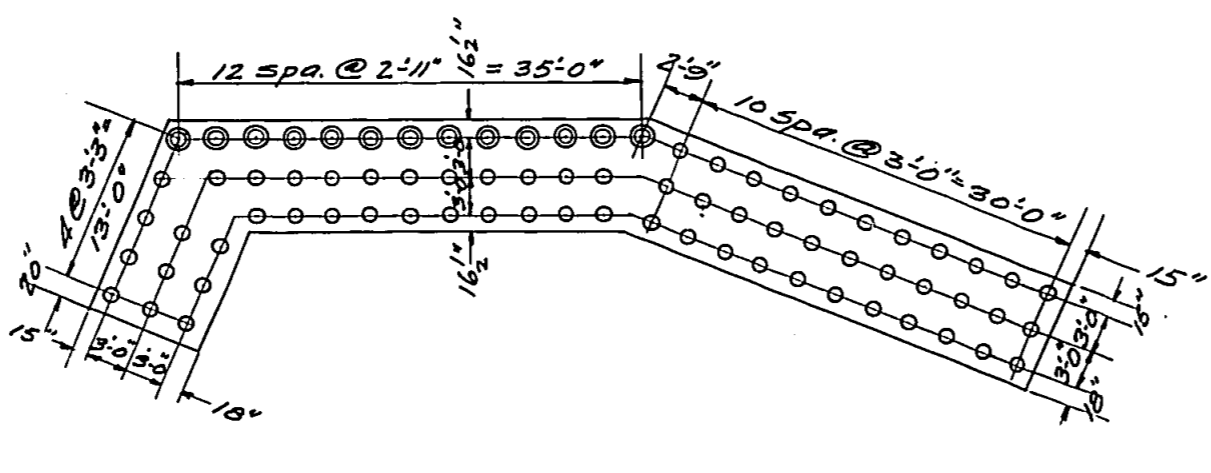
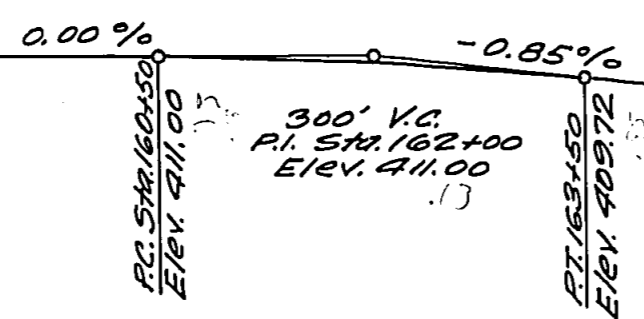
STATE OF ILLINOIS  
DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
DIVISION OF HIGHWAYS

ROAD DIST. NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	R-14B	Union	76	75
PROJ. ROAD DIST. NO. 7 ILLINOIS				161

SHEET NO. 2.  
3 SHEETS



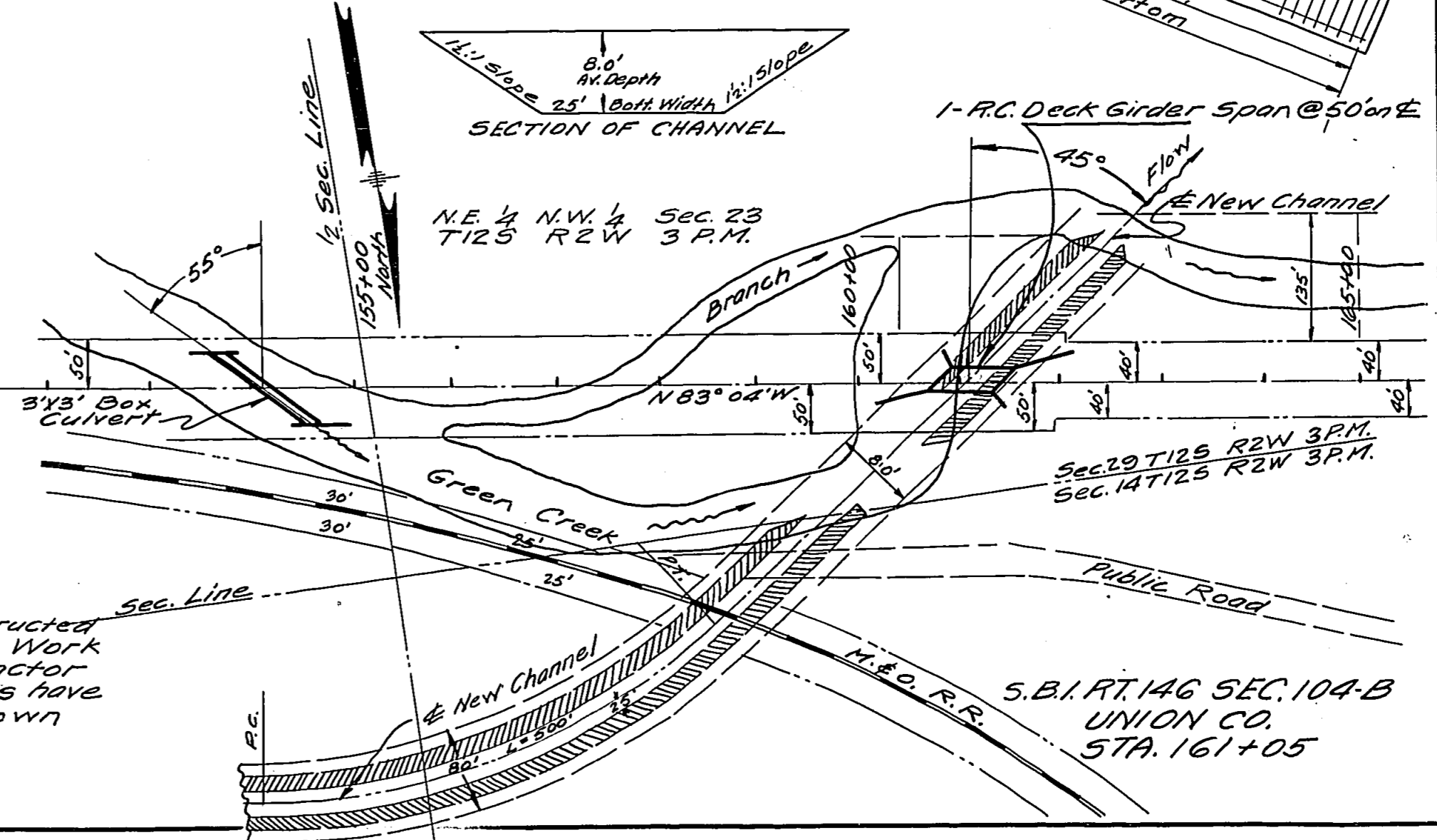
Note:  
0 Y<sub>6</sub>, 7 Y<sub>6</sub>, 6 Y<sub>6</sub>, 0 Y<sub>6</sub> - 1 h<sub>3</sub>, 2 h<sub>4</sub> and  
1 h<sub>5</sub> in each long wing - 10 h<sub>6</sub>  
4 Y<sub>6</sub>, 3 Y<sub>6</sub>, 3 Y<sub>6</sub>, 3 Y<sub>6</sub> - 1 h<sub>3</sub>, 2 h<sub>4</sub> and  
1 h<sub>7</sub> in each short wing - 10 h<sub>6</sub>



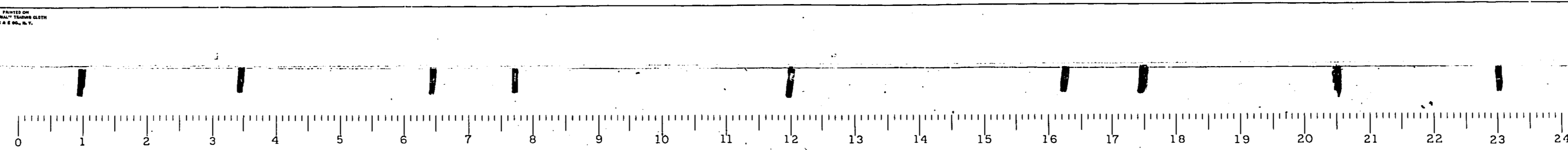
12 Ton unbr. piling  
Estm. length 20ft. 26 required.  
10 Ton unbr. piling  
Estm. length 20ft. 128 required.

STANDARD	COMPUTED	EXAMINED
CHECKED	M. J. H. [Signature]	June 4 1931
DRAWN	M. J. H. [Signature]	M. J. B. [Signature]
CHECKED	M. J. H. [Signature]	BRIDGE ENGINEER
ASSEMBLED	M. J. H. [Signature]	APPROVED
CHECKED	M. J. H. [Signature]	CHIEF HIGHWAY ENGINEER

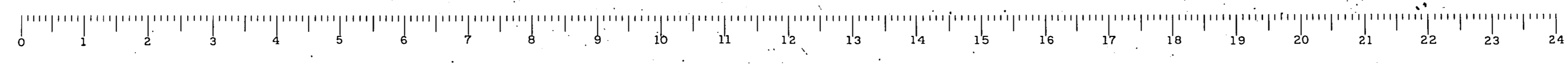
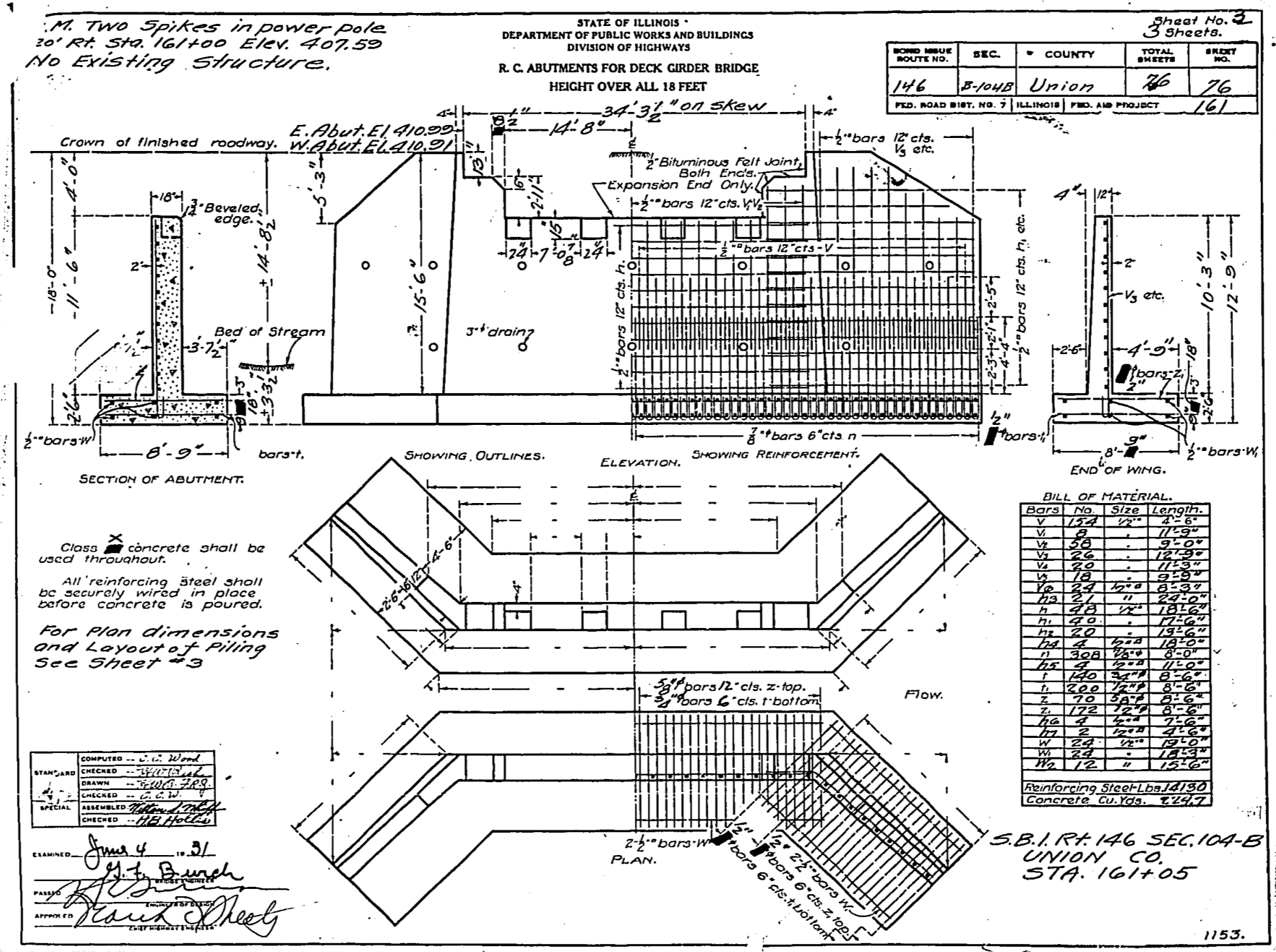
Note: New channel to be constructed as shown by hatched areas. Work is to be done by the Contractor for section 104-A. Quantities have been computed and are shown on the Road Plans.



S.B.I. RT. 146 SEC. 104-B  
UNION CO.  
STA. 161+05



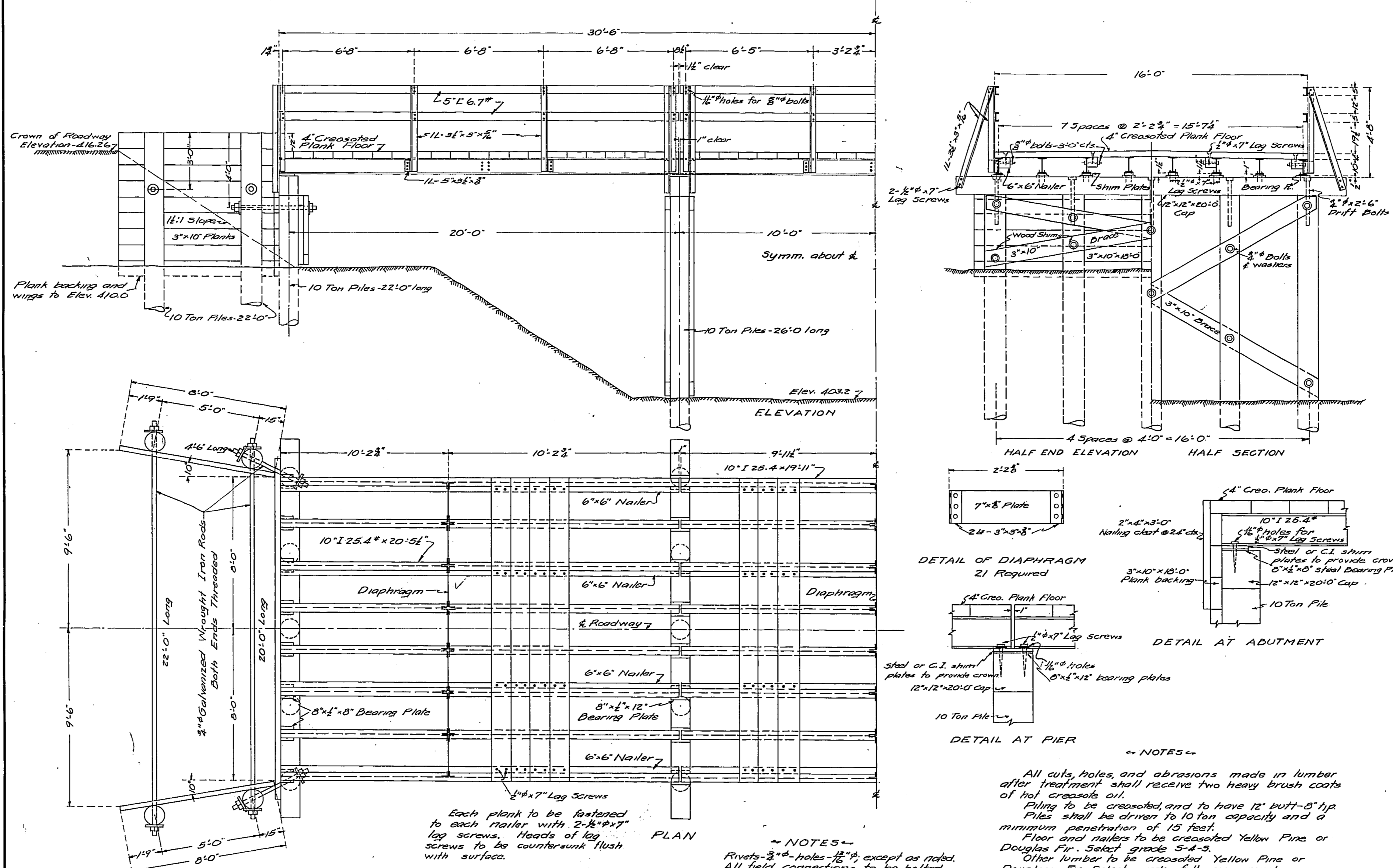




No existing structure.  
 B.M. - Two spikes in 10" Box Elder 80 Ft. Left  
 Sta. 151+25 on S.B.I. Rt. 146 - Elev. 412.74.

STATE OF ILLINOIS  
 DEPARTMENT OF PUBLIC WORKS & BUILDINGS  
 DIVISION OF HIGHWAYS

ROAD DISTRICT NO.	SEC.	COUNTY	TOWNSHIP	RANGE	SHEET NO. / SHEETS
146	B-104-B	UNION	76	76-A	1/1
P.L. ROAD DIST. NO. 7					PLAN. AND PROJECT 147



COMPUTED	- S. Barnovitz	EXAMINED	- 8-3-1931
CHECKED	- J.P. Zah	DESIGNED	- [Signature]
DRAWN	- S. Barnovitz	PASSED	- [Signature]
CHECKED	- [Signature]	ENGINEER OF DESIGN	- [Signature]
ASSEMBLED	- [Signature]	APPROVED	- [Signature]
CHECKED	- [Signature]	CHIEF HIGHWAY ENGINEER	- [Signature]

**BILL OF MATERIAL**

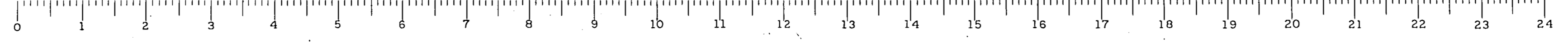
Structural Steel - Lbs.	16,910
10 Ton Creosoted Piles - Ft.	656
4" Creos. Plank Flooring - sq. yds.	107.3
Creosoted Lumber - M.D.M. Ft.	2.84
Rods, Bolts, Nuts, Leg Screws, etc. - Lbs.	770

**NOTES**

Rivets - 2" dia. - holes 1/8" except as noted.  
 All field connections to be bolted.  
 All washers, bolts, nuts, spikes, leg screws, etc. to be of galvanized wrought iron.  
 Structural steel to be painted one shop coat and two field coats. See specs.

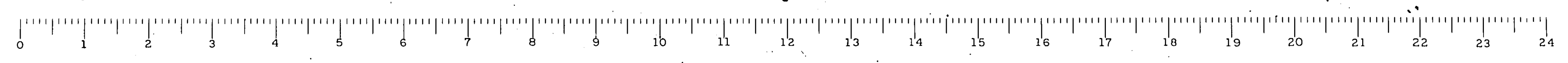
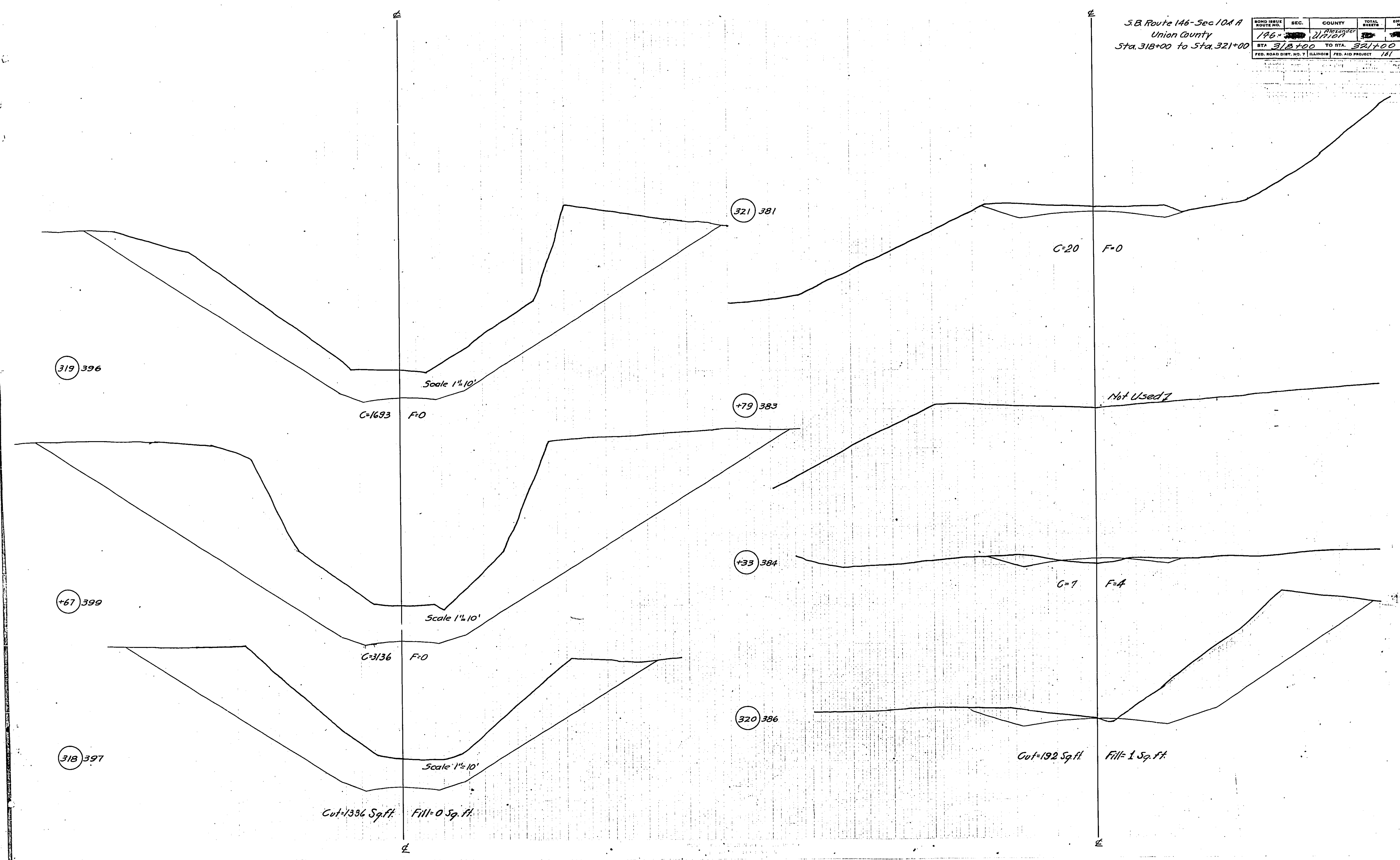
All cuts, holes, and abrasions made in lumber after treatment shall receive two heavy brush coats of hot creosote oil.  
 Piling to be creosoted and to have 12" butt-8" tip. Piles shall be driven to 10 ton capacity and a minimum penetration of 15 feet.  
 Floor and railings to be creosoted Yellow Pine or Douglas Fir. Select grade 5-A-3.  
 Other lumber to be creosoted Yellow Pine or Douglas Fir. Select grade - full sawn rough.  
 The floor shall be given a paint coat of asphalt not less than 1/2" thick, and the entire surface covered with torpedo sand sufficient to take up any free asphalt and to fill the voids in the surface.

S.B.I. ROUTE 146 SECTION 104-B  
 UNION COUNTY  
 STATION 149+50 R.L.



S.B. Route 146 - Sec 10A A  
 Union County  
 Sta. 318+00 to Sta. 321+00

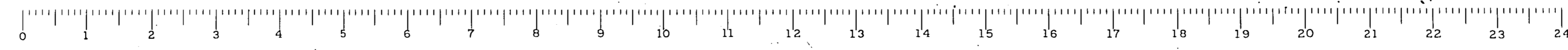
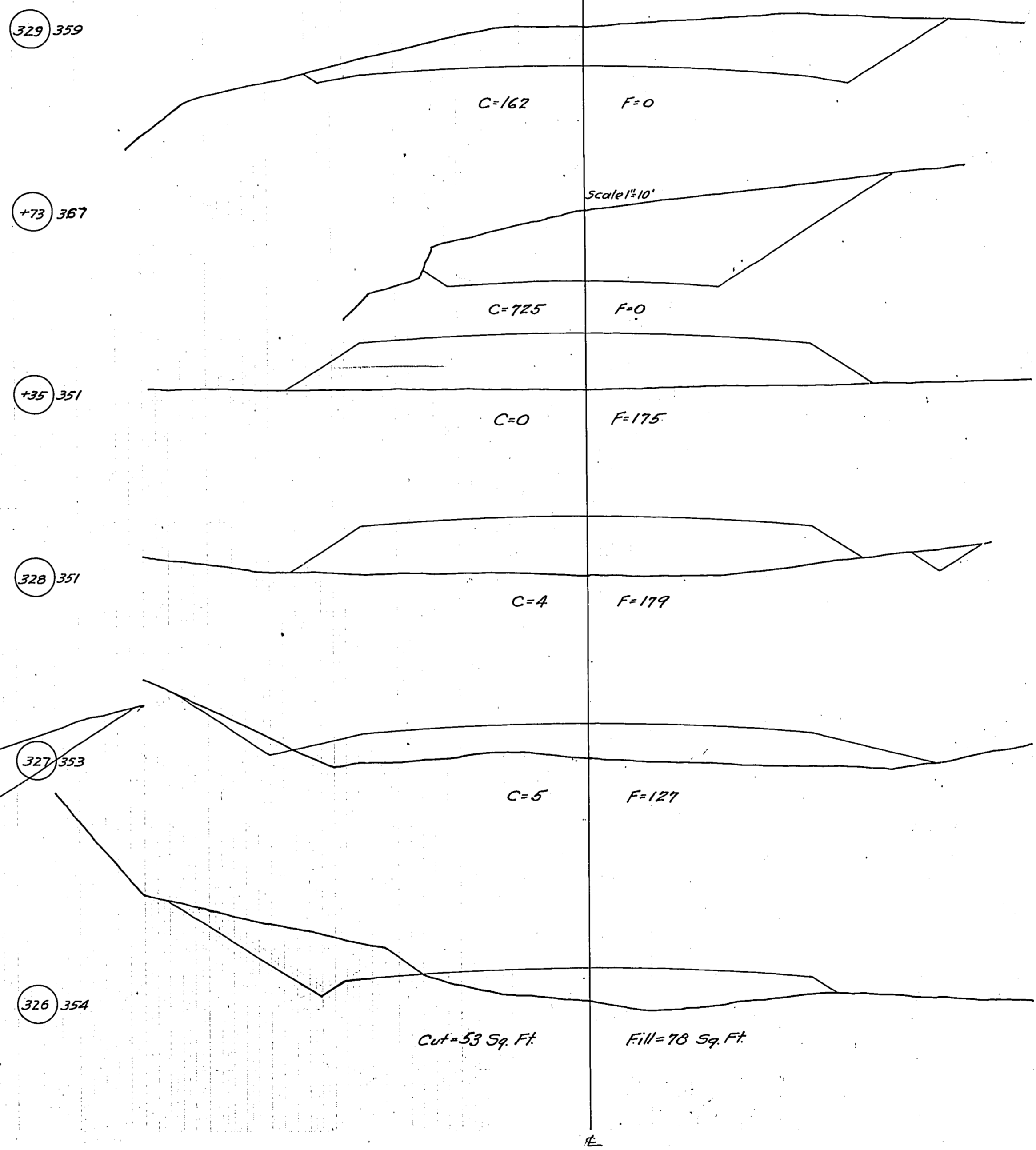
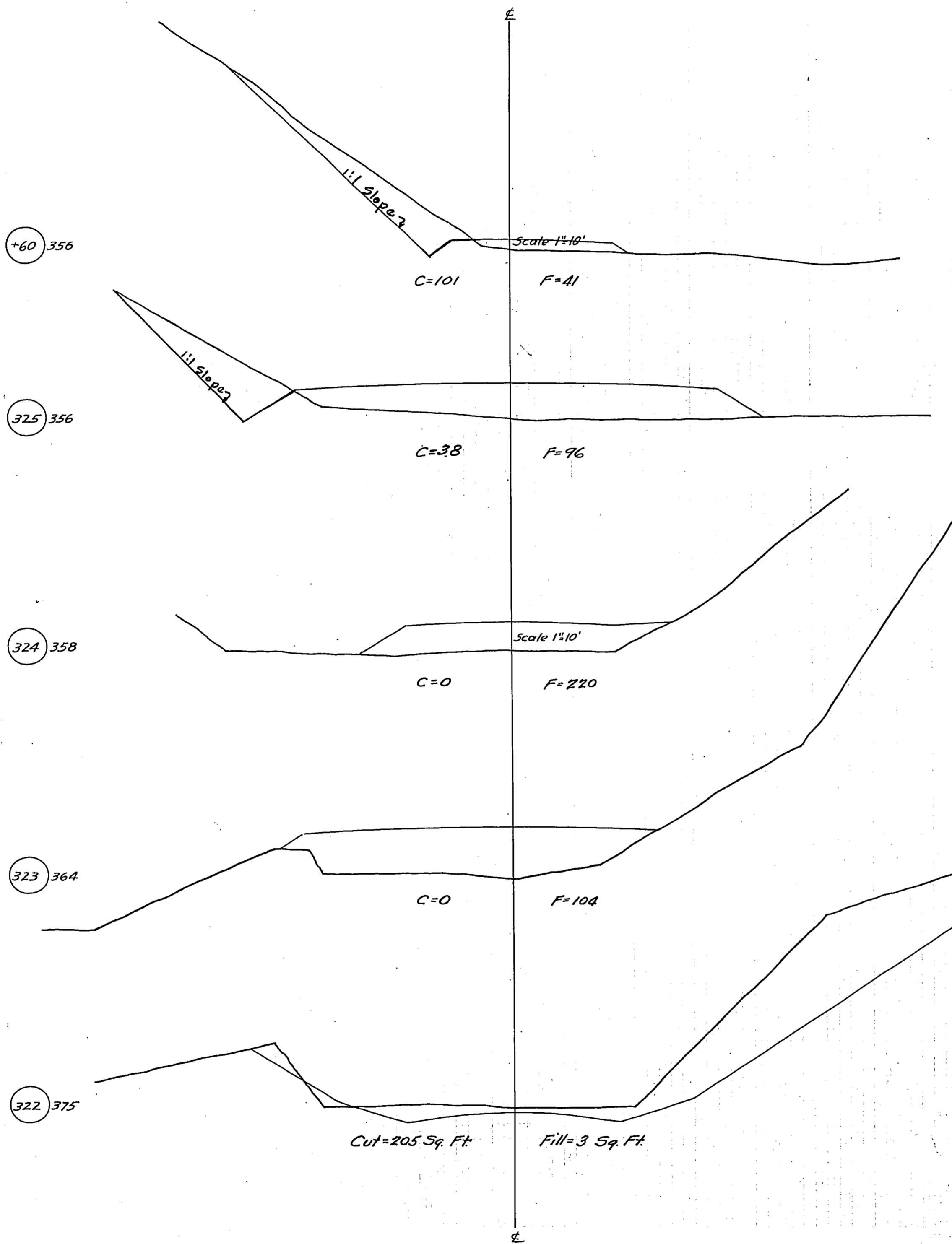
ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	10A	Union	32	18
STA. 318+00		TO STA. 321+00		
FED. ROAD DIST. NO. 7		FED. AID PROJECT		181





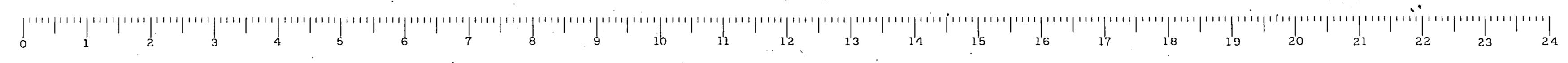
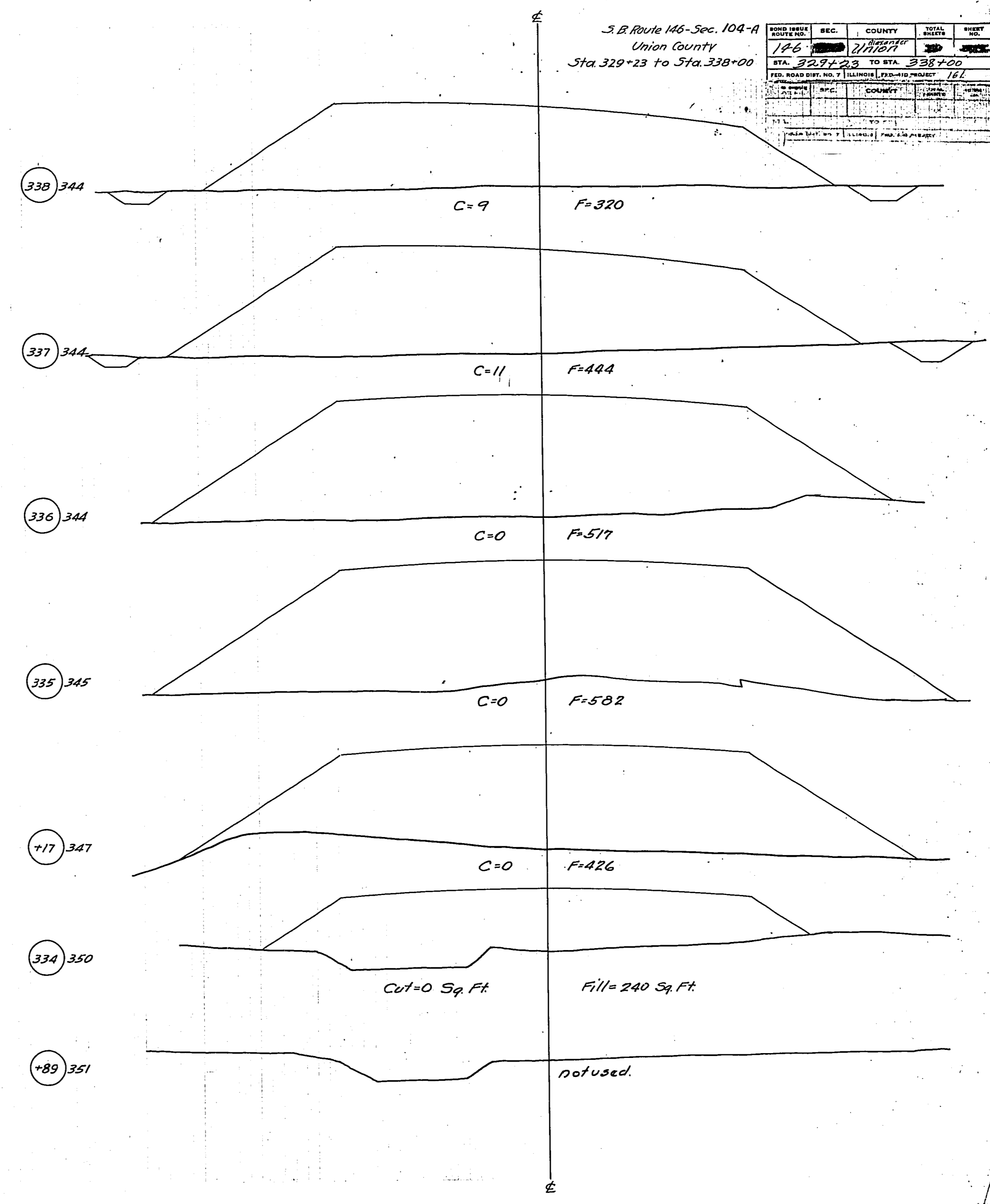
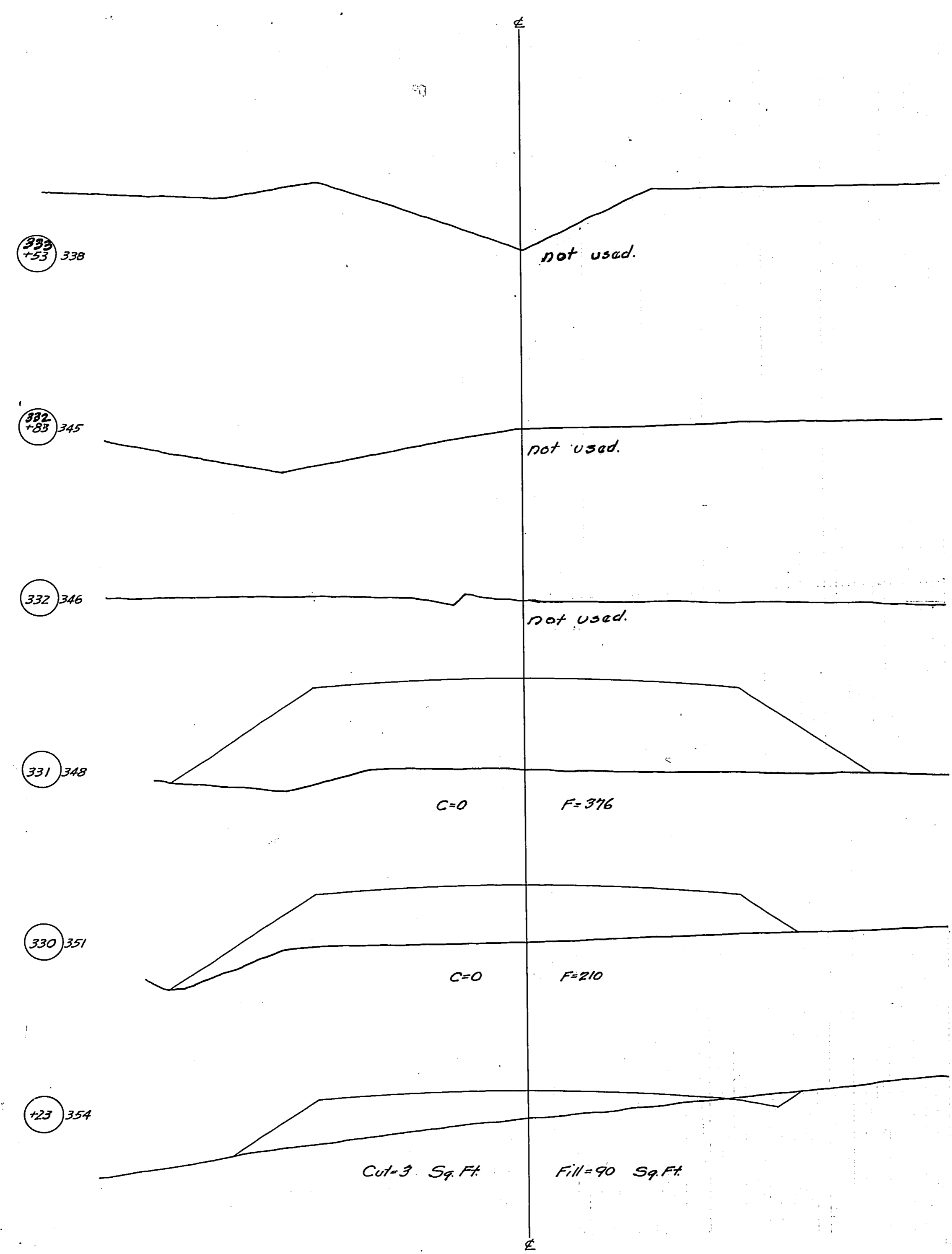
S.B. Route 146-Sec. 104  
 Union County  
 Sta. 322+00 to Sta. 329+00

ROUTE NO.	REC.	COUNTY	TOTAL SHEETS	SHEET NO.
146	218/807	Union	4	3
STA. 322+00	TO STA. 329+00			
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT	161	



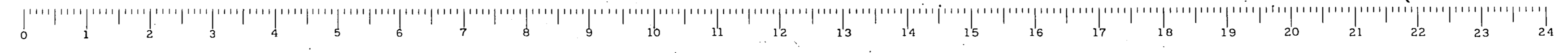
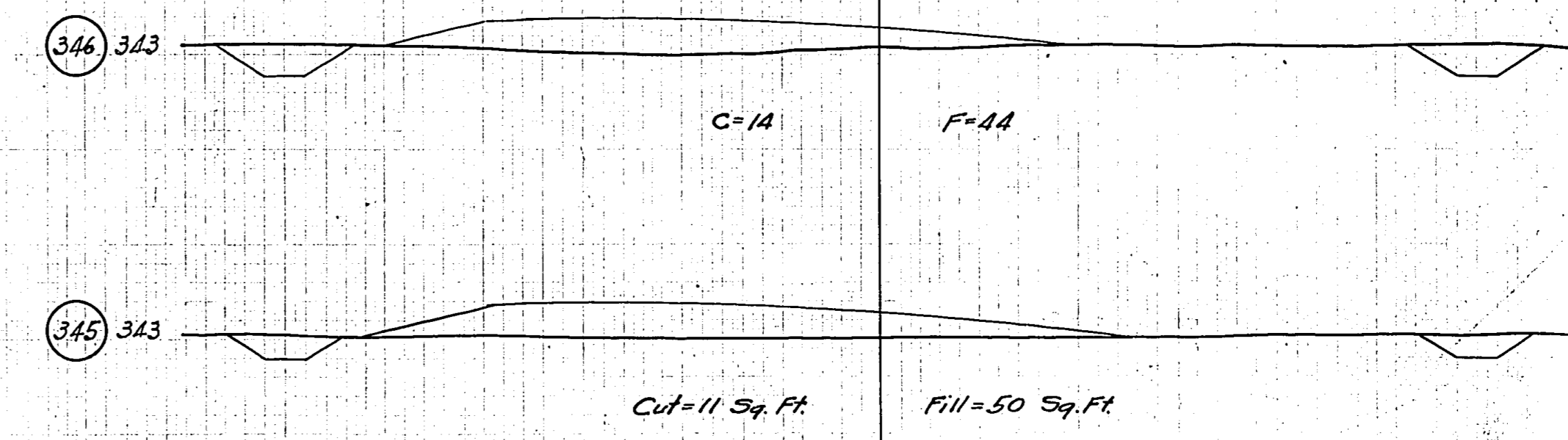
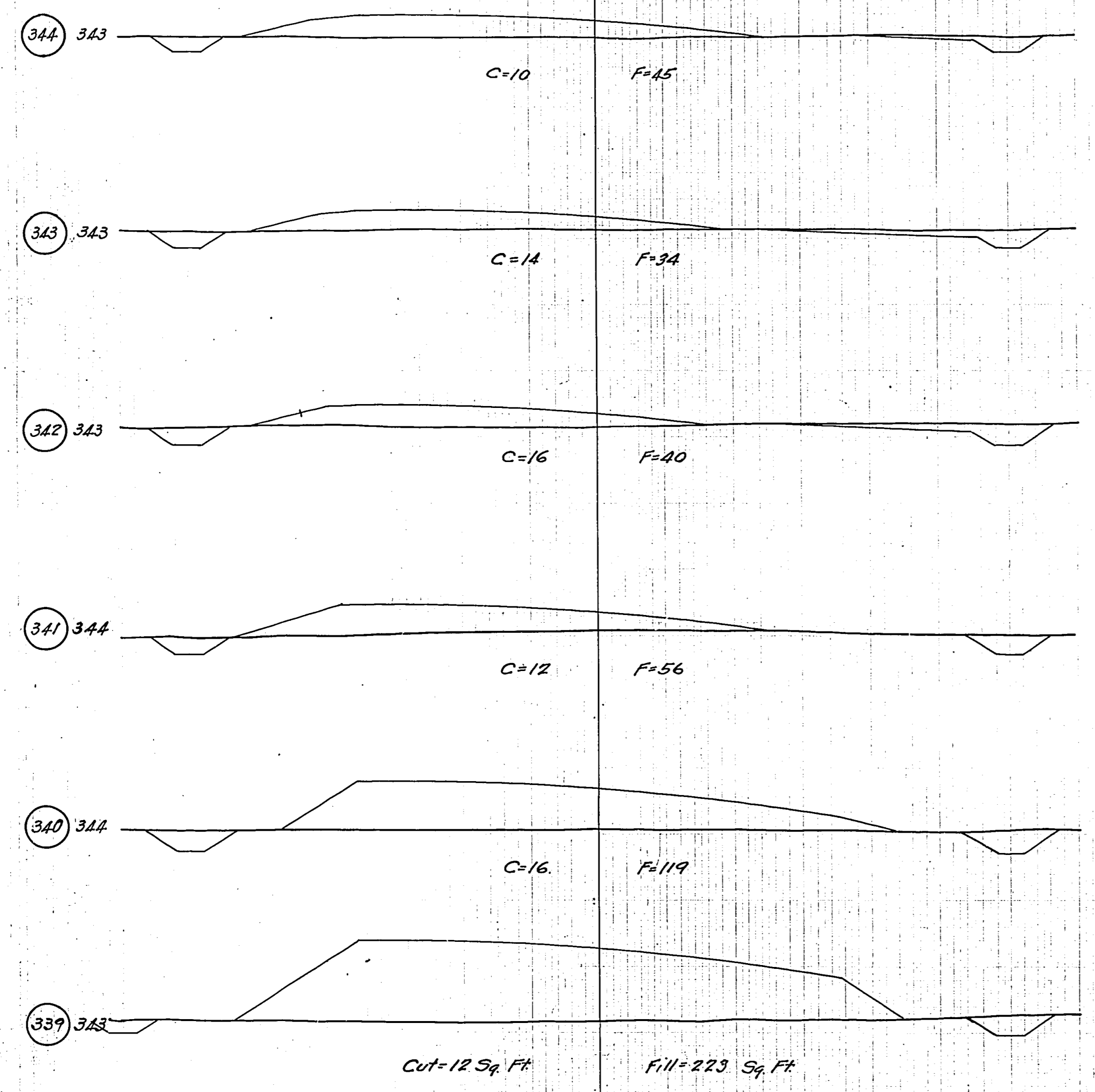
S. B. Route 146 - Sec. 104-A  
 Union County  
 Sta. 329+23 to Sta. 338+00

ROAD DIST. NO.	REG.	COUNTY	TOTAL SHEETS	SHEET NO.
146	1	Union	10	10
STA. 329+23				TO STA. 338+00
FILE NO.				101



S.B. Route 146 Sec. 104-A  
 Union Co  
 Sta. 339+00 to 346+00

ROAD DIST. NO.	SEC.	COUNTY
146	104A	Union
STA. 339+00	TO STA.	
339+00	346+00	
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID
		161





S.B.I. Rt. 146, Union County, Sec. 104-A.  
 F.A. Project #161  
 Sta. 38100 to Sta. 42100 incl.  
 Scale { Vert. 1" = 10'  
 Hor. 1" = 10'

