

STATE HIGHWAY DEPARTMENT OF OHIO

BUREAU OF CONSTRUCTION

SEC. C-1 & C-2 FREMONT - BOWLING GREEN ROAD

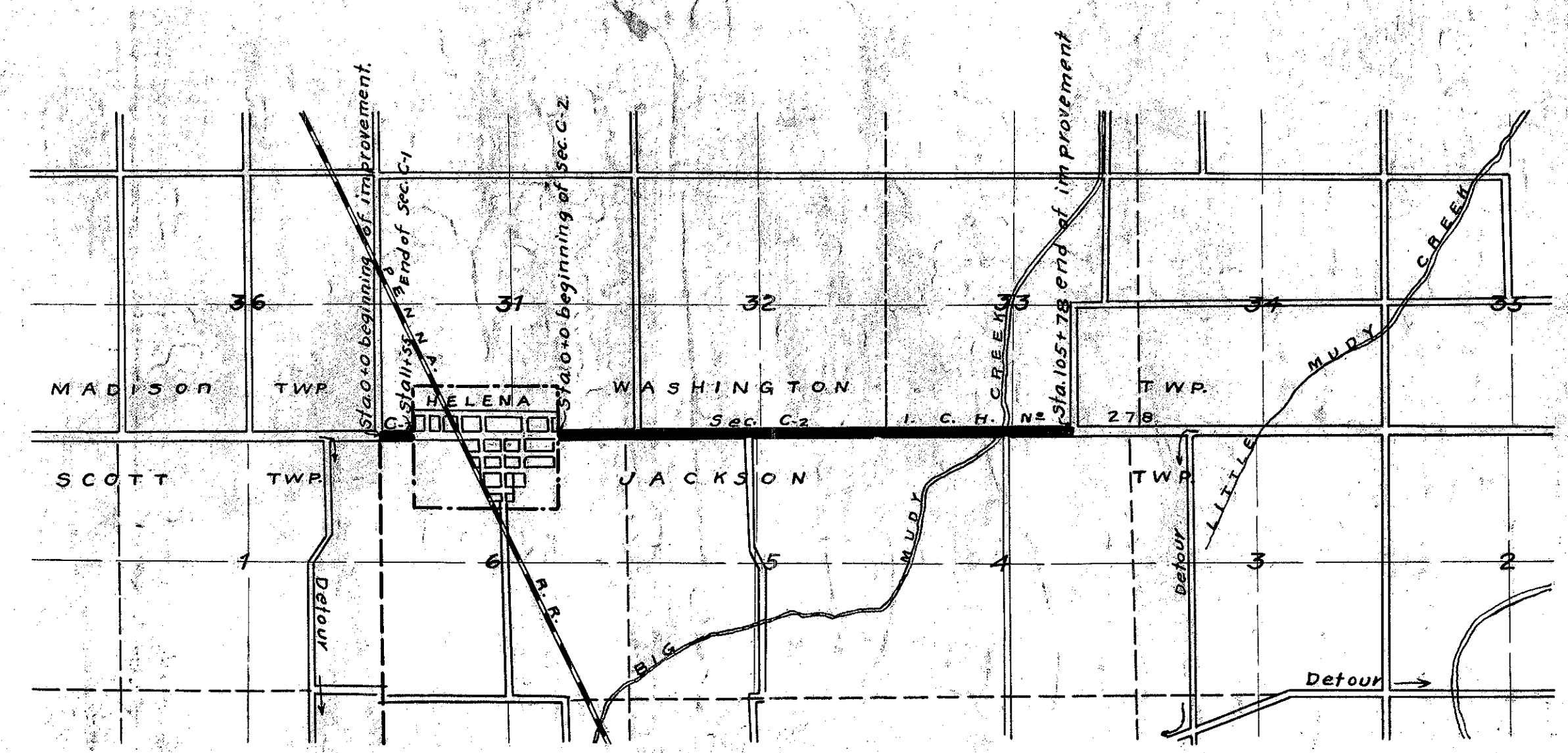
I.C.H. NO. 278 PET. NO. ^{3786 C1}_{3830 C2}

SANDUSKY COUNTY

WASHINGTON & JACKSON TOWNSHIPS. MARCH 1920

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6	" " " " 30+00 " 60+00
7	" " " " 60+00 " 90+00
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16	Bridge, Culvert & Private Drive Structures Summary



NOTE - 1919 Specifications of the State Highway Department of Ohio will govern.

- CONVENTIONAL SIGNS
- Township line
 - Section line
 - Property line not fenced
 - Center line
 - City or Village line
 - Wire fence
 - Telephone
 - Steam Railroad
 - Electric line

SCALES
Plan 1" = 100'
Profile (Vertical) 1" = 10'
Profile (Horizontal) 1" = 100'
Cross Sections 1" = 5'

LOCATION PLAN
SCALE 2" = 1 MI.
PORTION TO BE IMPROVED

Approved L. H. Wildmar
Date 6/8/20 County Surveyor

We the Commissioners of Sandusky County hereby approve these plans and certify that the right of way is available for the construction of the above highway.

Signed J. L. Clarke
W. J. Retaman
R. H. Rogers

Date 6/8/20 County Commissioners

I hereby approve these plans and declare that the making of this improvement will require the closing of the highway to traffic and that detour will be indicated as shown on plan.

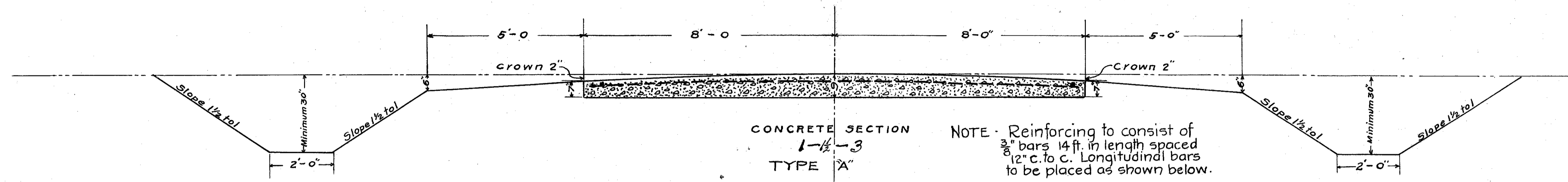
Approved Edna Hilly
Date 6/5/20 Division Engineer

Approved T. D. Finck
Date 6/10/20 Chief Highway Engineer

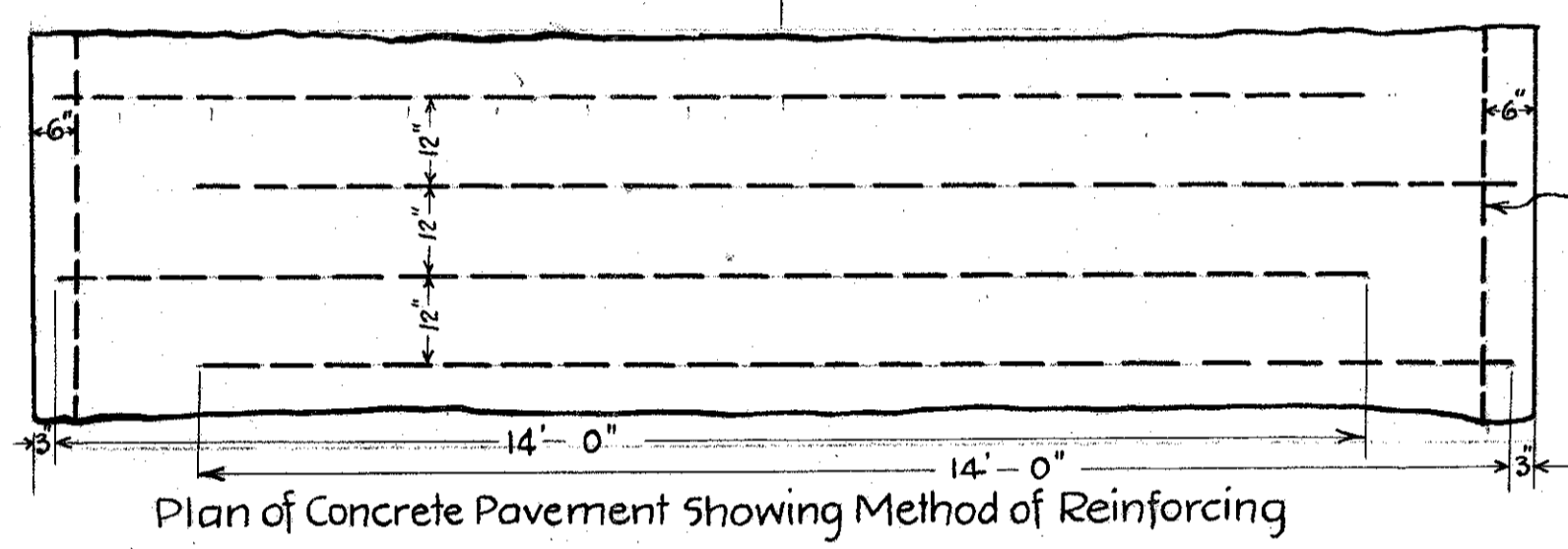
Approved A. R. Taylor
Date 6/8/20 State Highway Commissioner



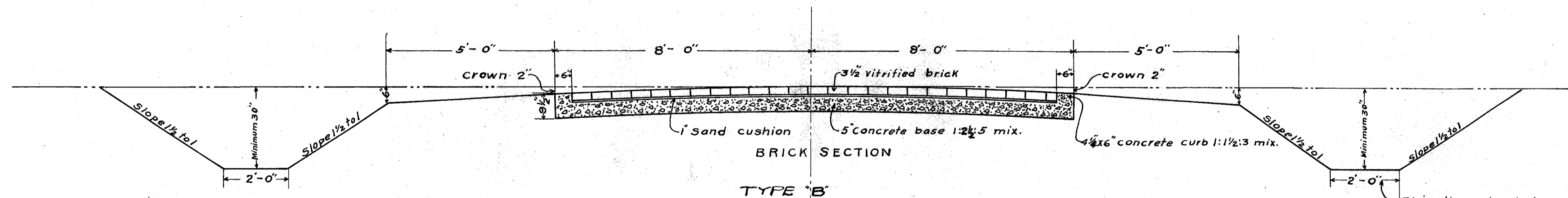
TYPICAL CROSS SECTIONS



NOTE - Reinforcing to consist of $\frac{3}{8}$ " bars 14 ft. in length spaced 12" c. to c. Longitudinal bars to be placed as shown below.



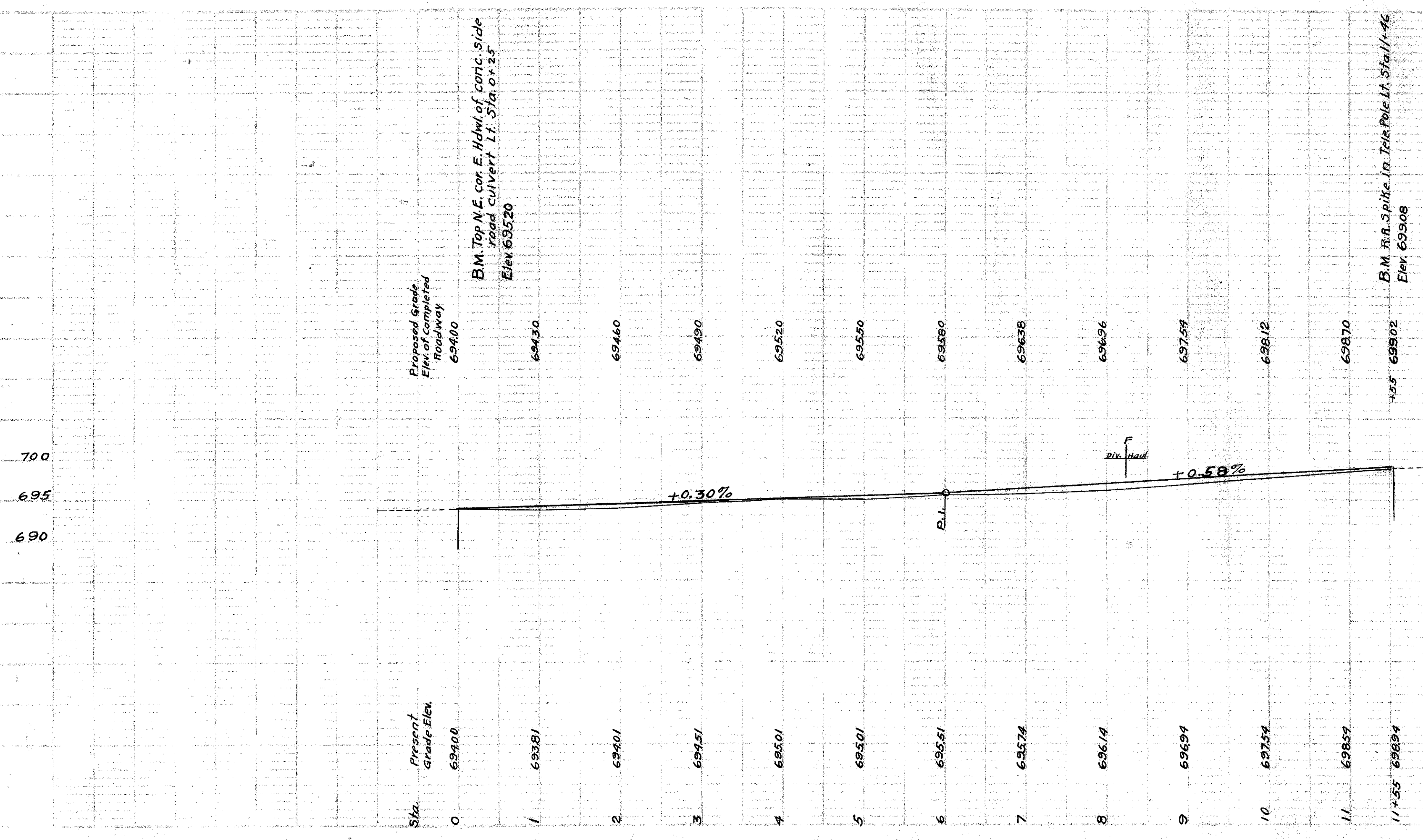
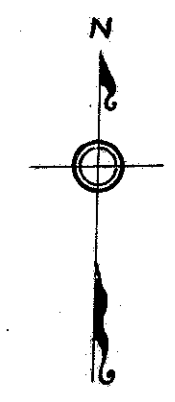
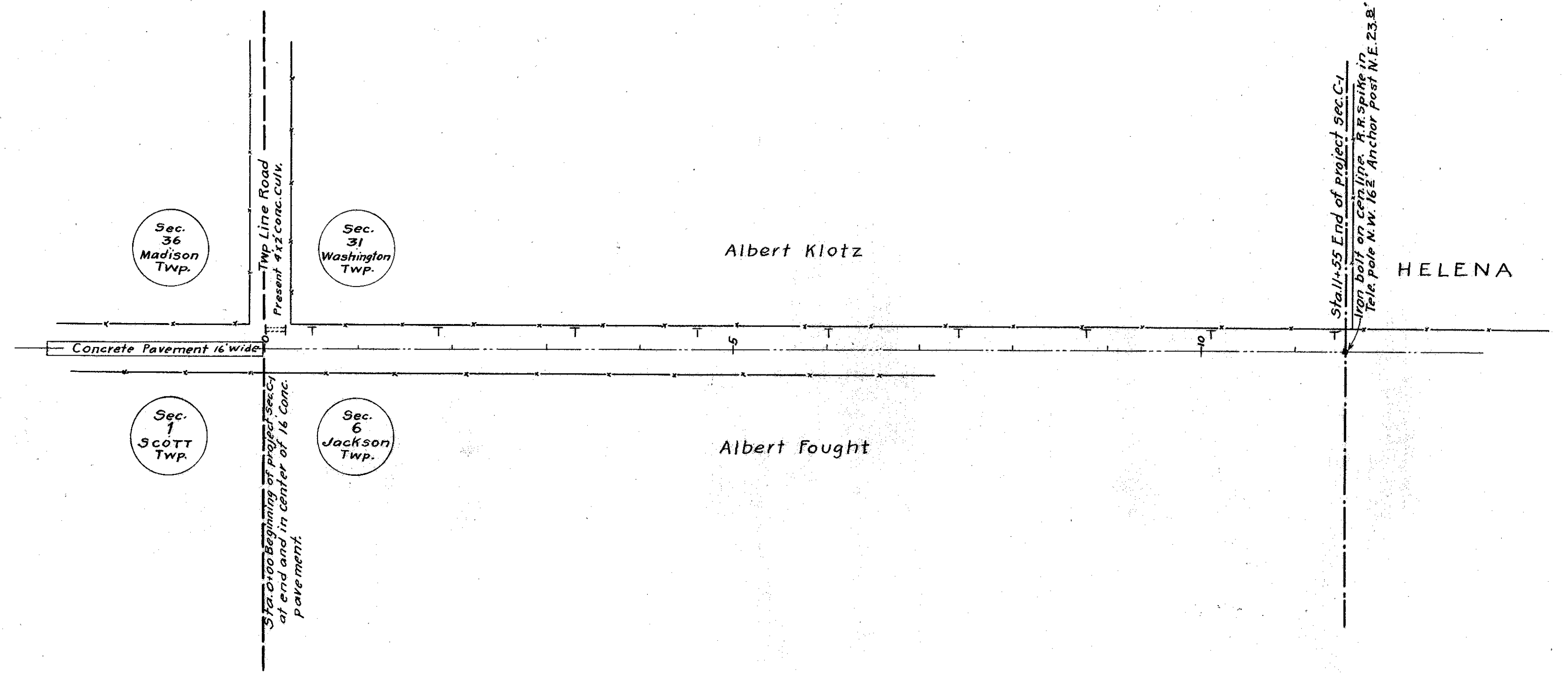
Plan of Concrete Pavement Showing Method of Reinforcing



This dimension to be a minimum of 3' between Sta. 50+00 and 87+50 in ditch on Right. Grade of flow line same as present ditch shown on Cross sections.

H. Seiger
3-5-1920
3-6-1924

H. Seiger
3-5-1920
3-6-1924



Proposed grade compared to present
694.00

B.M. Top N.E. cor. E. Hd. of conc. side road culvert Lt. Sta. 0+35
Elev. 695.20

694.30

694.60

694.90

695.20

695.50

695.80

696.38

696.96

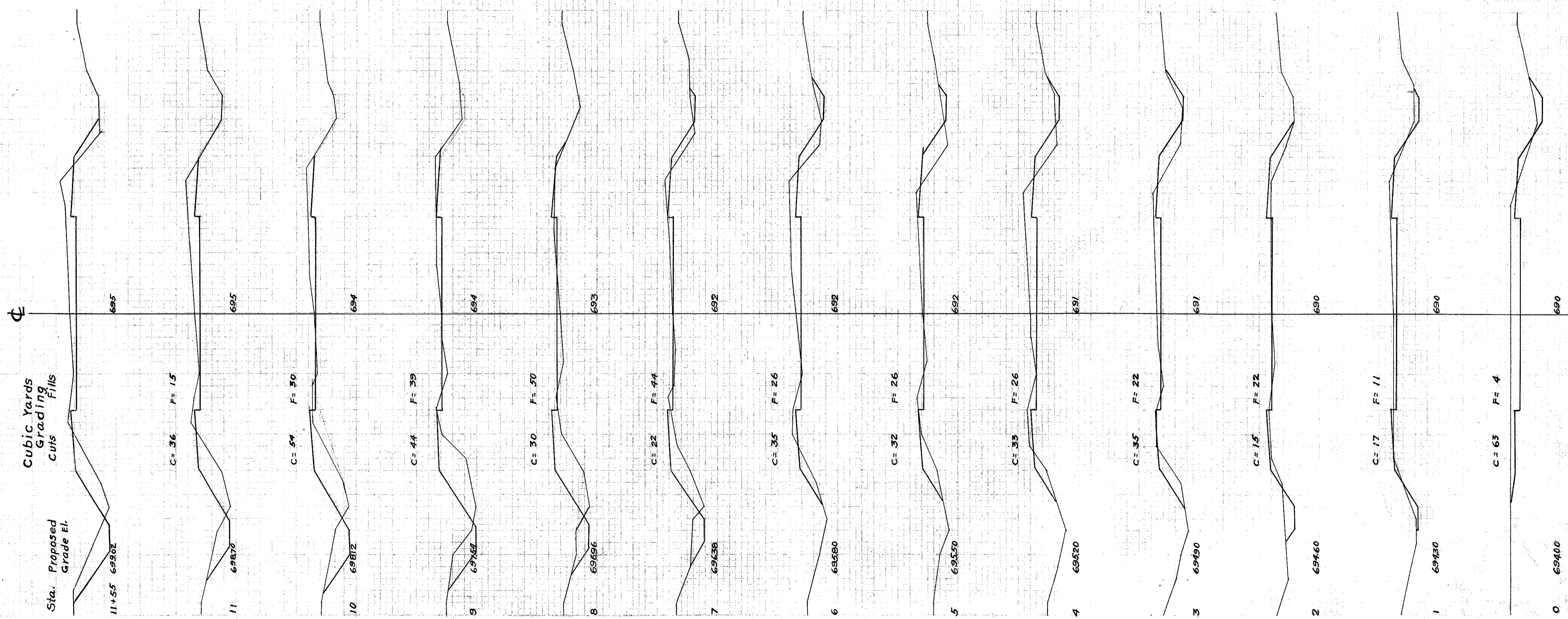
697.54

698.12

698.70

+3.5' B.M. R.R. Spike in Tola Pole Lt. Sta. 11+46
Elev. 693.08

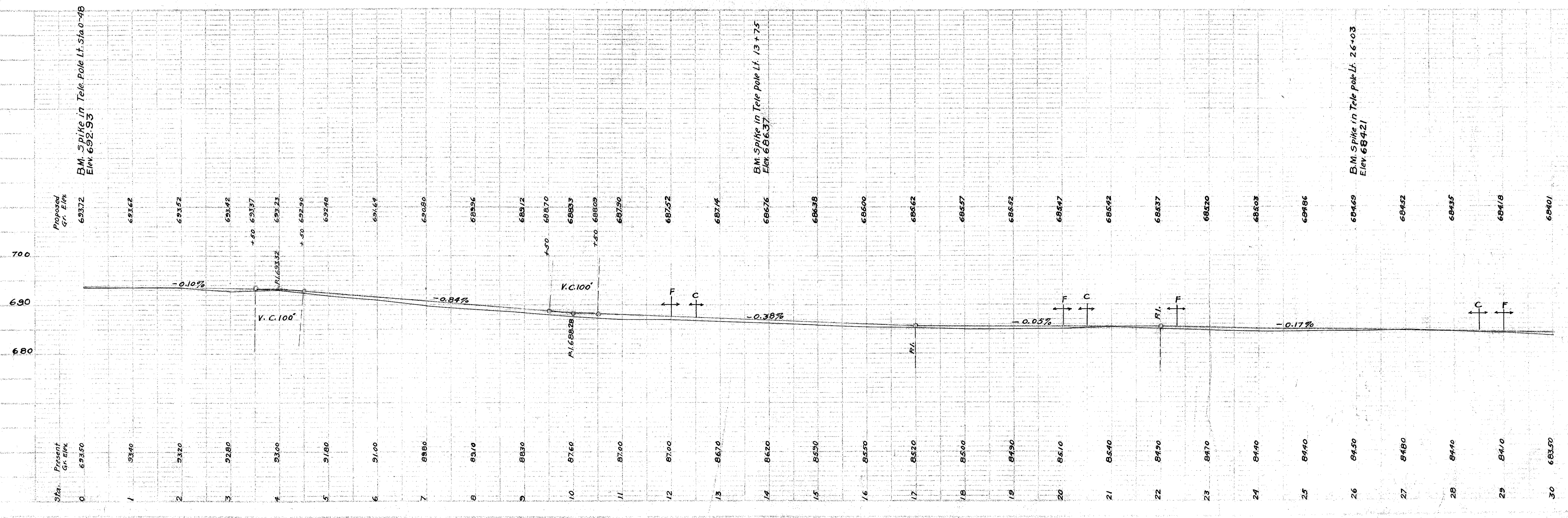
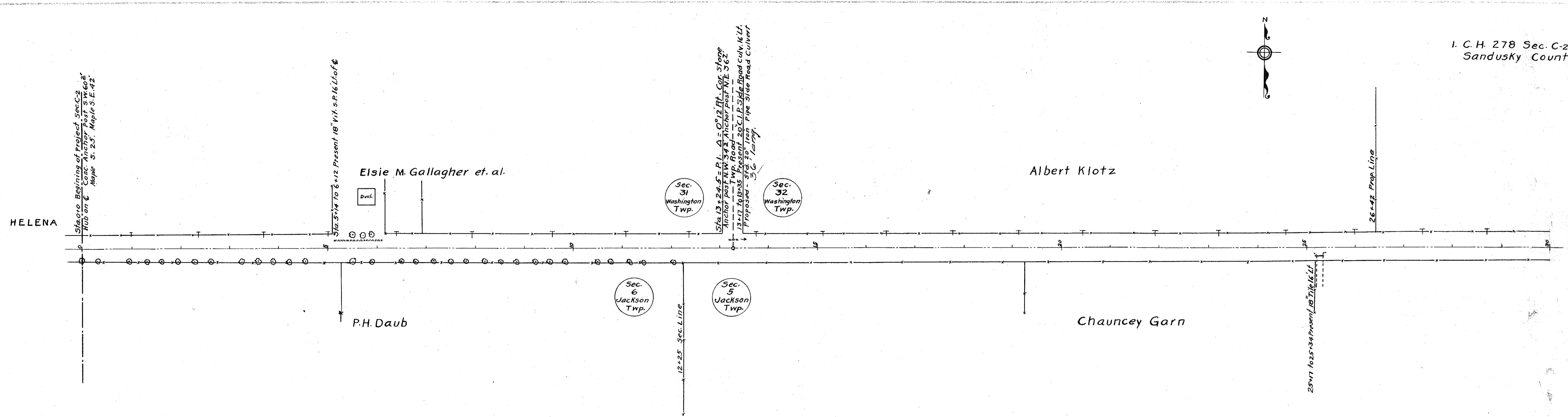
H. Geiger 3-5-22
36 5-6-22





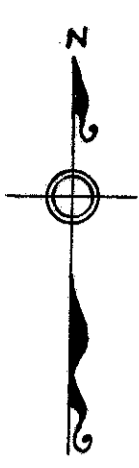
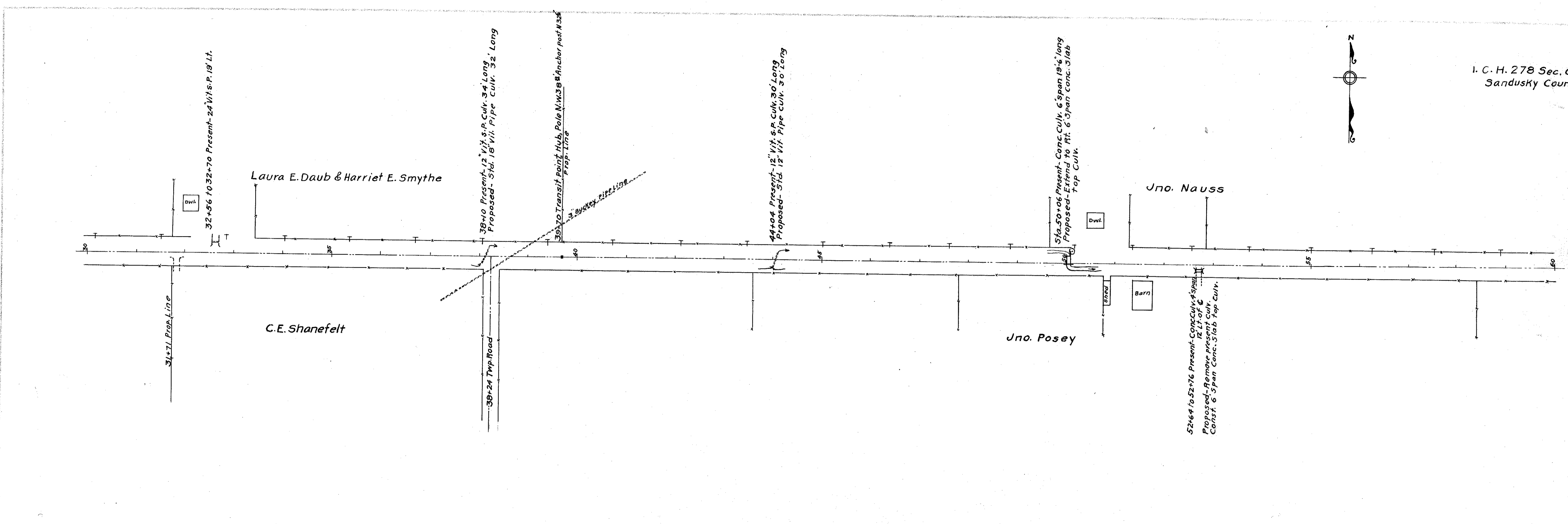
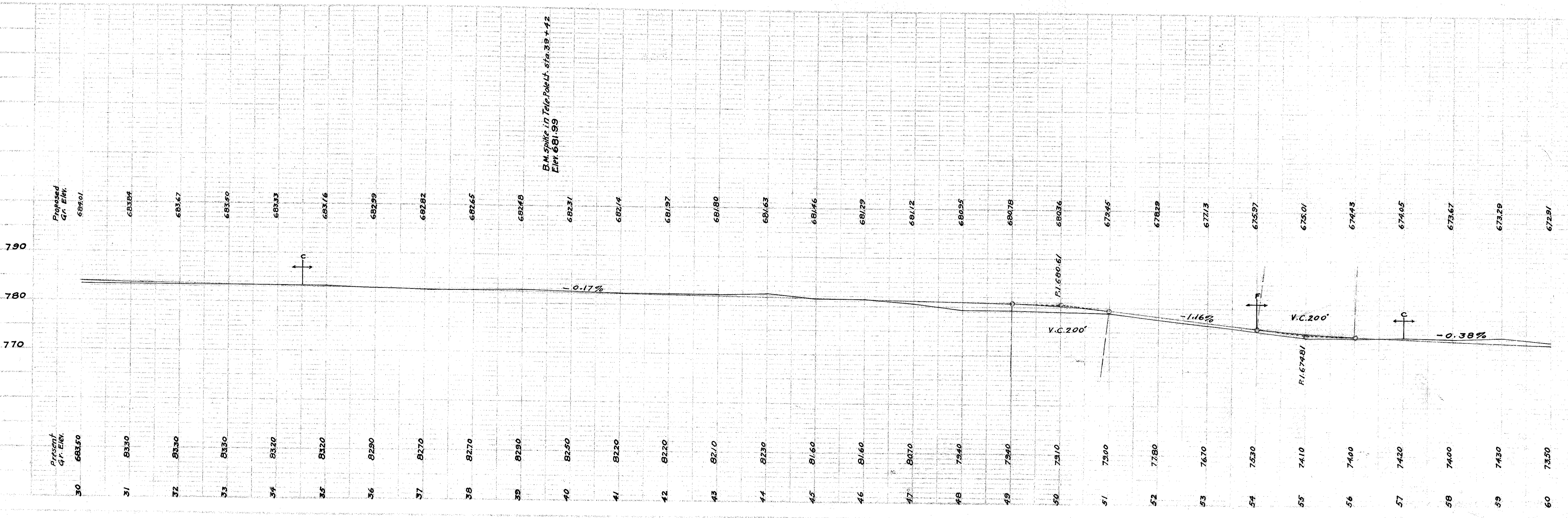
3-15-30
3-15-30
H.G.
H.G.
3-15-30
3-15-30

3-15-30
3-15-30
H.G.
H.G.
3-15-30
3-15-30



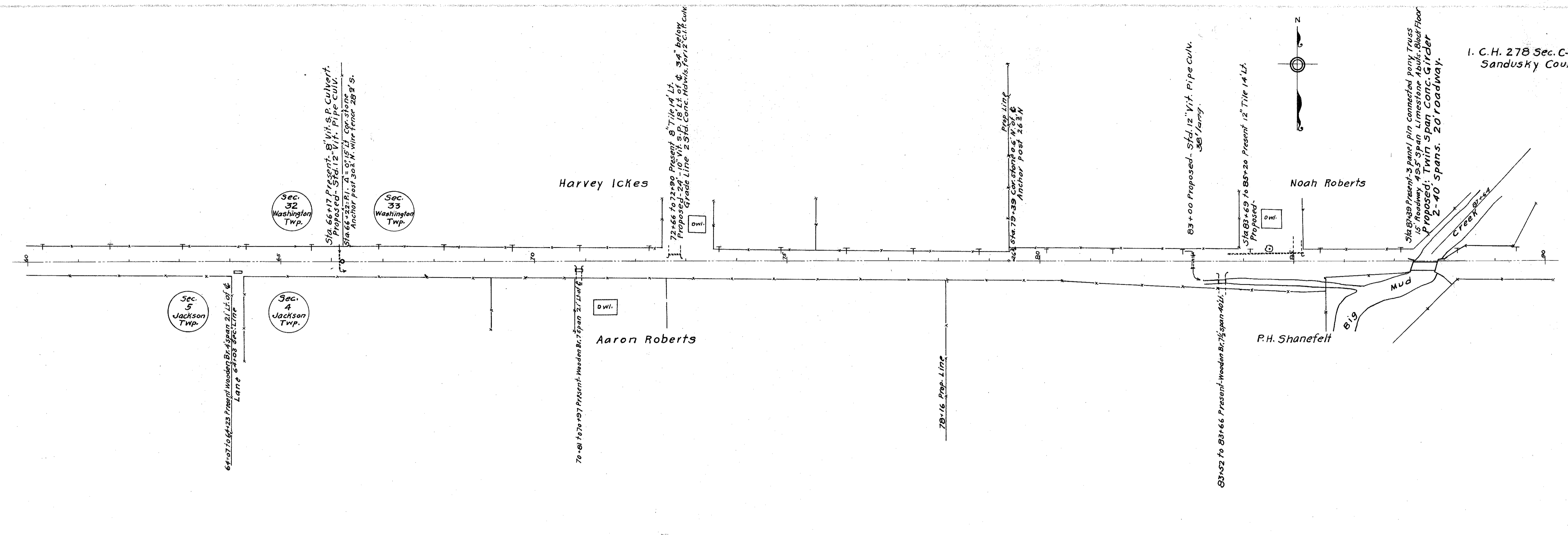
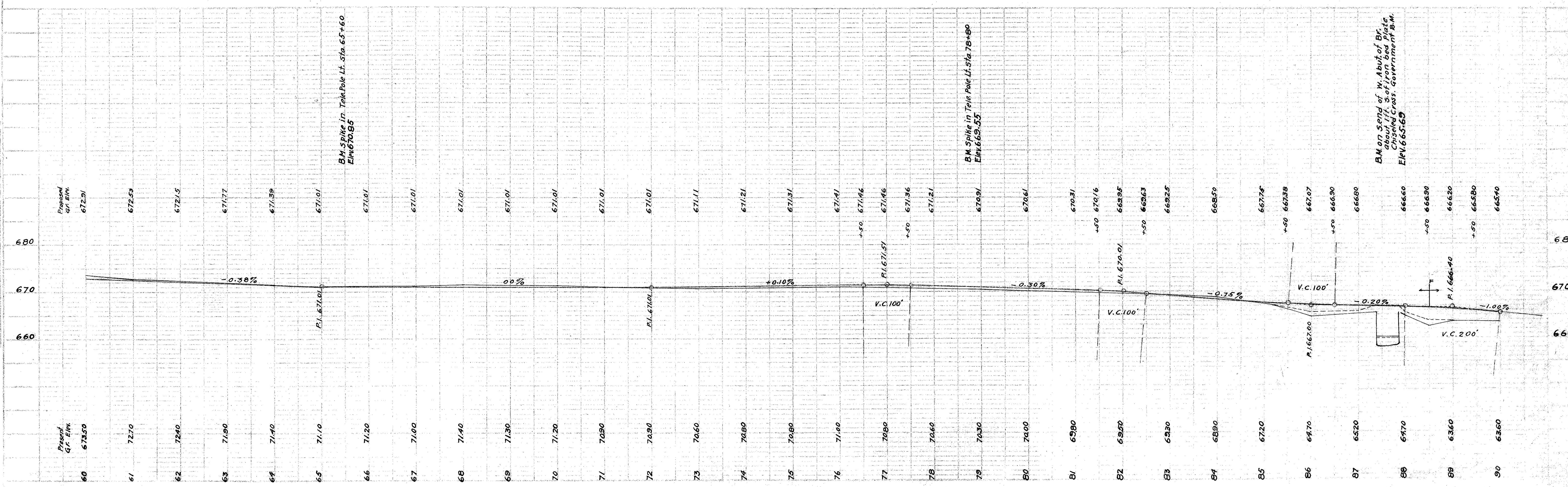
3-16-20	H.S. Hig.	3-16-20
3-18-20	H.S. Hig.	3-18-20

3-16-20	H.S. Hig.	3-16-20
3-18-20	H.S. Hig.	3-18-20



H.G.
 H.G.
 3-27-20
 3-28-20

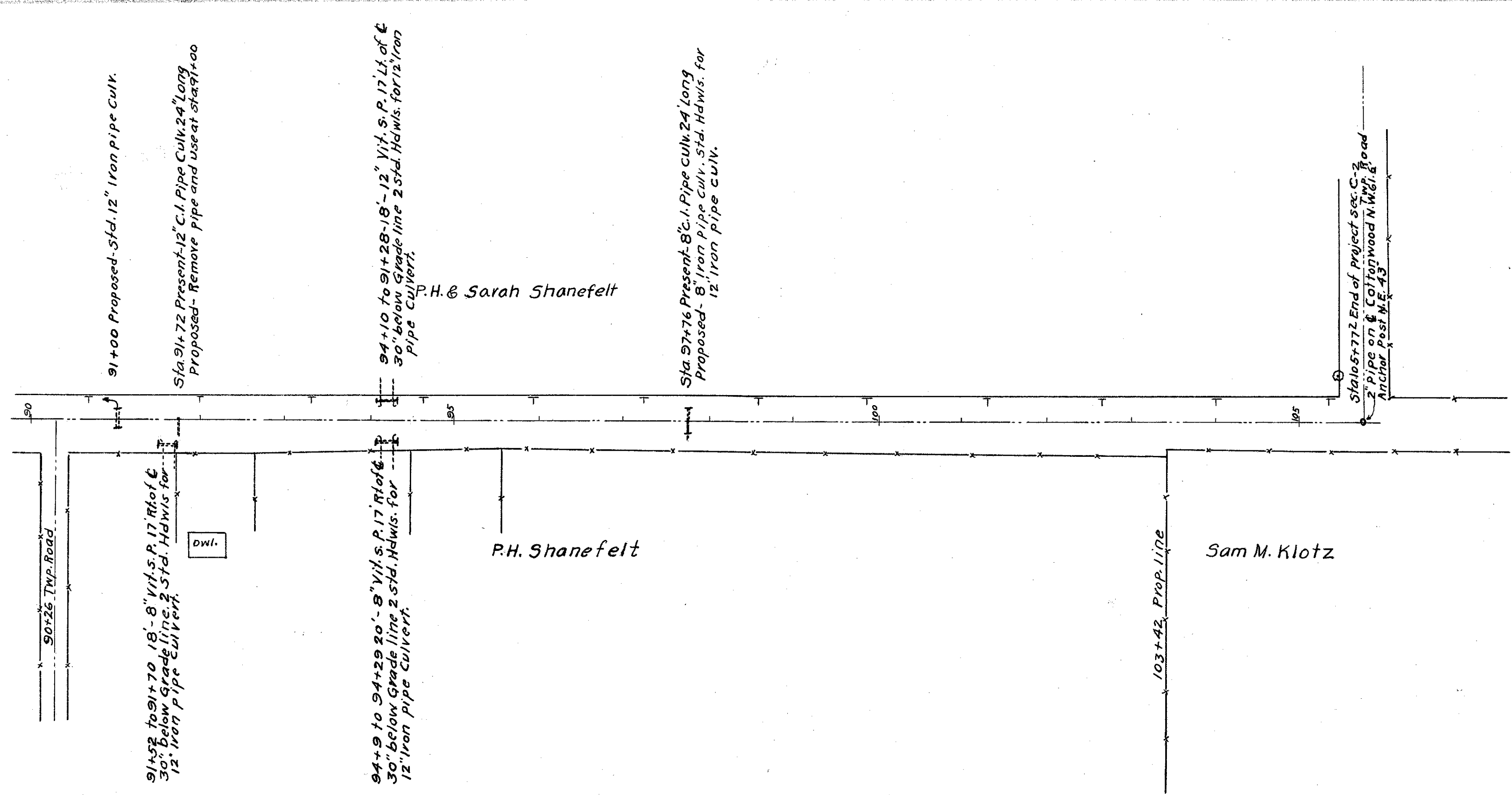
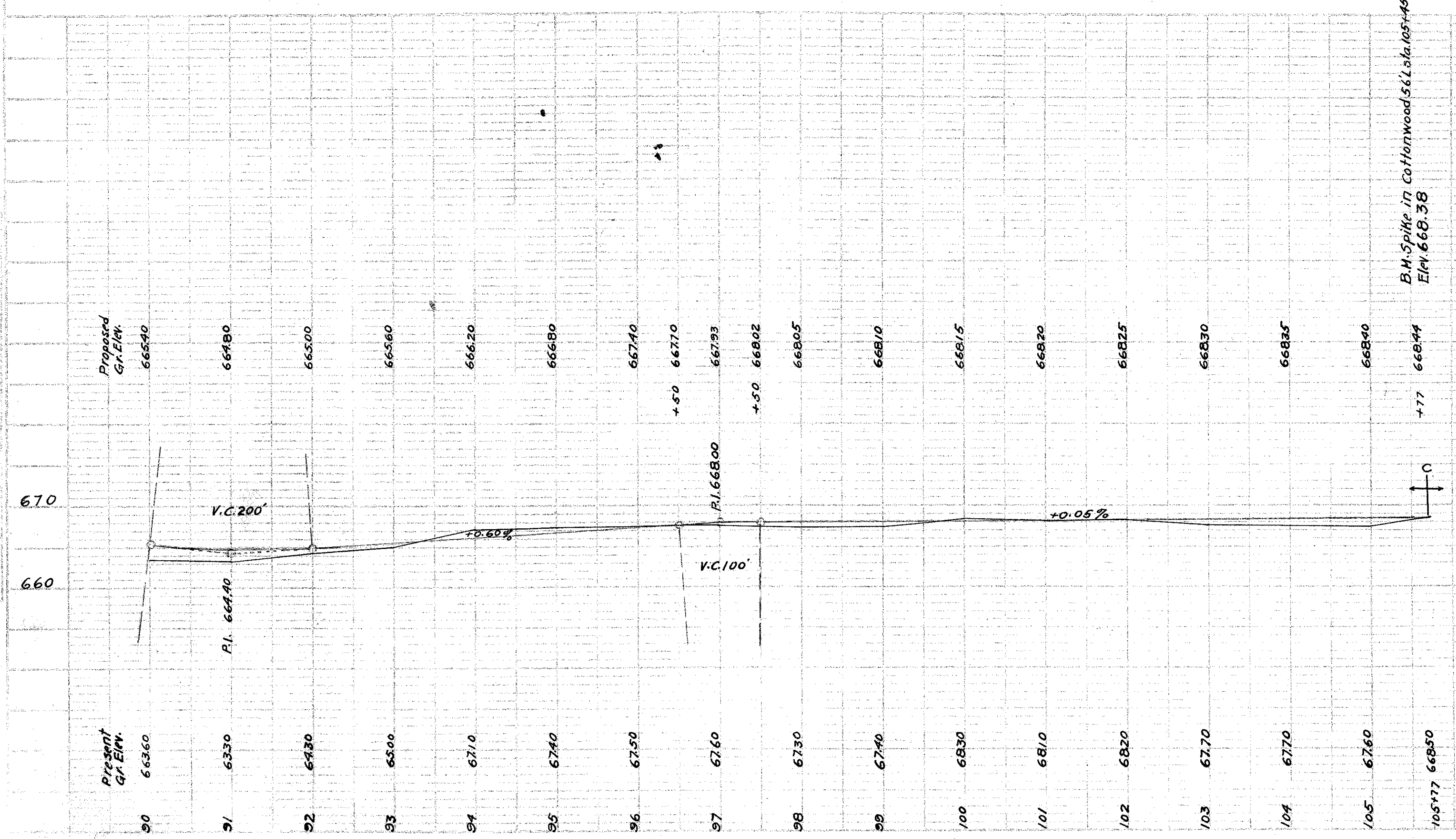
H.G.
 H.G.
 3-27-20
 3-28-20



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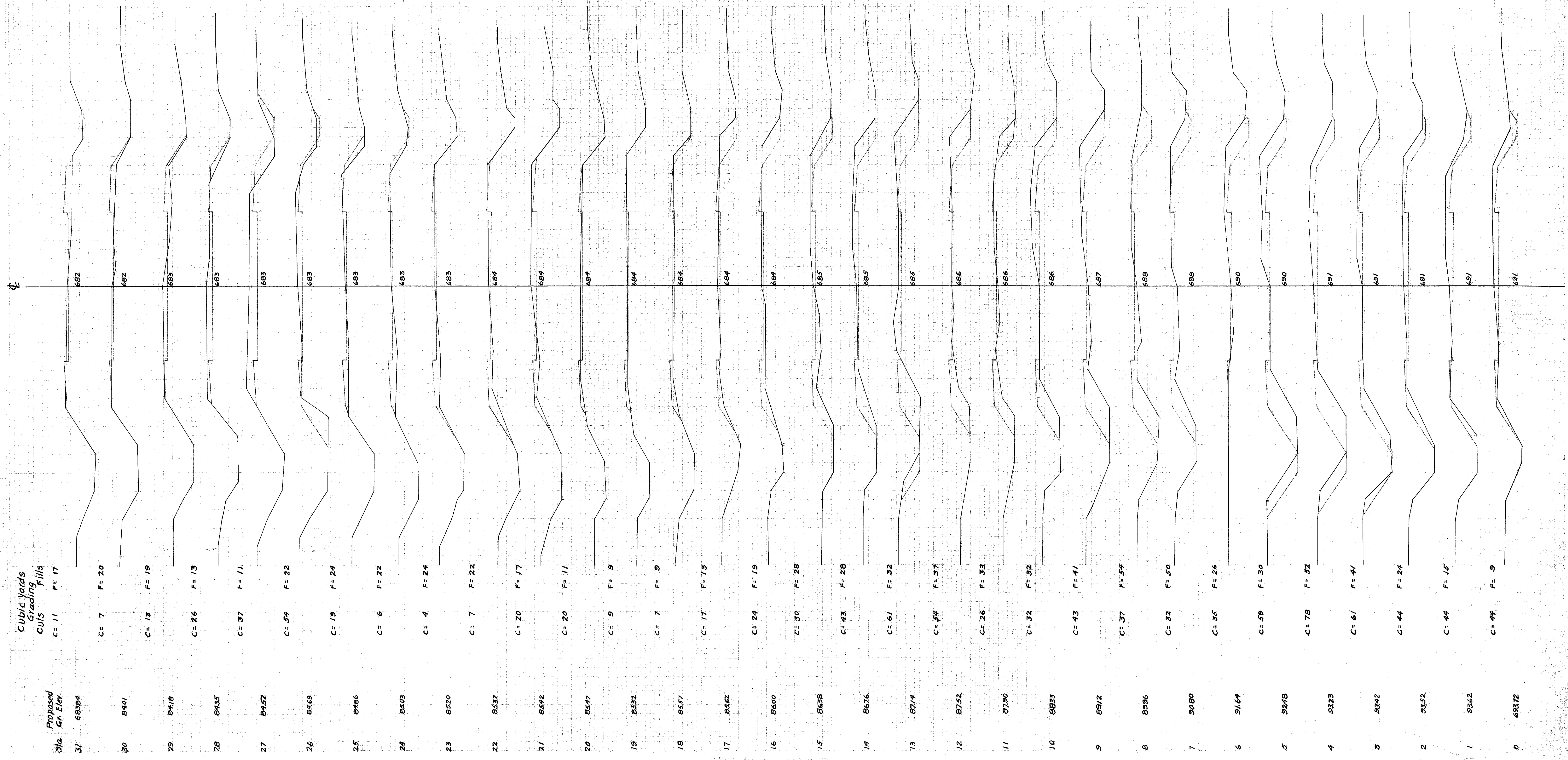
H.C. 716
 3-23-26
 3-27-26
 H.C. 716
 3-23-26
 3-27-26

H.C. 716
 3-23-26
 3-27-26



I.C.H. 27B Sec. C-2
 Sandusky County

H.S.
H.C.
H.G.
H.G.
3-18-30
3-20-20
3-29-78
3-29-78

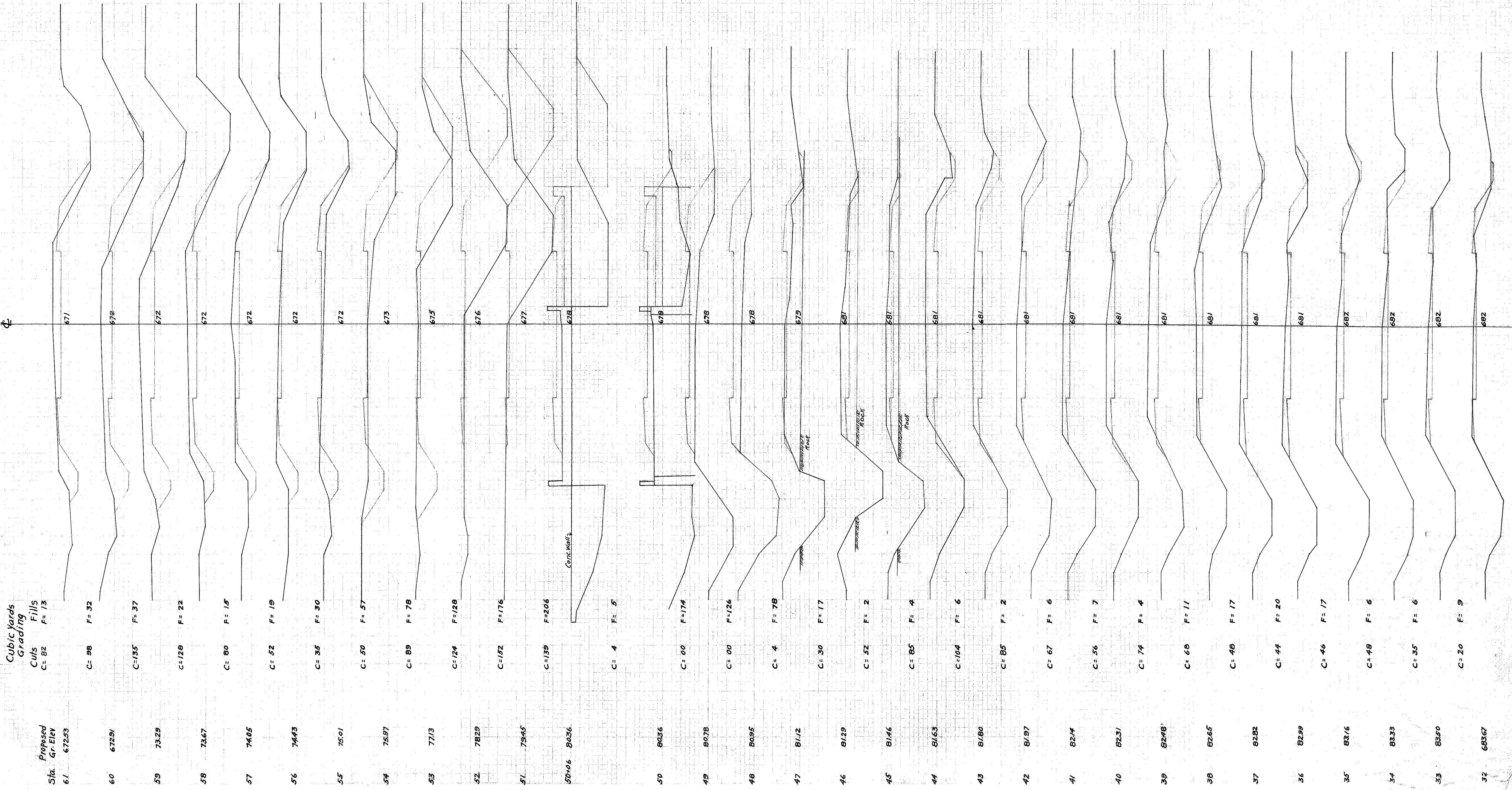


Cubic yards
Cuts
Grading
Fills

Sta. Gr. Elev.

E

H.G.
H.G.
H.G.
3-18-20
3-22-20
3-30-20
3-30-20



Cubic Yards
Grading

Proposed
Sta. Gr. Elev.

Cont. Wall

Proposed Road

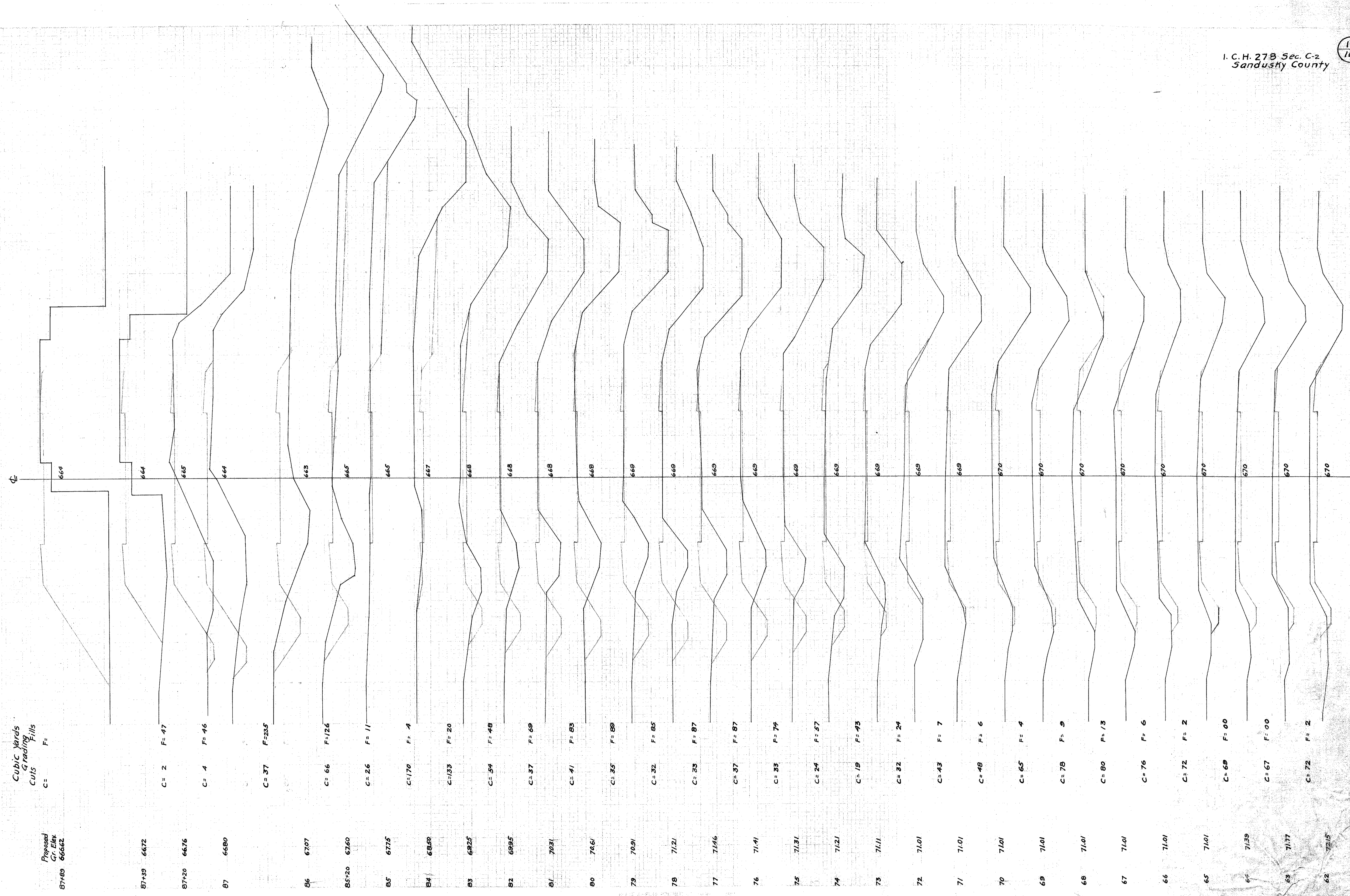
Proposed Foot

Proposed Foot

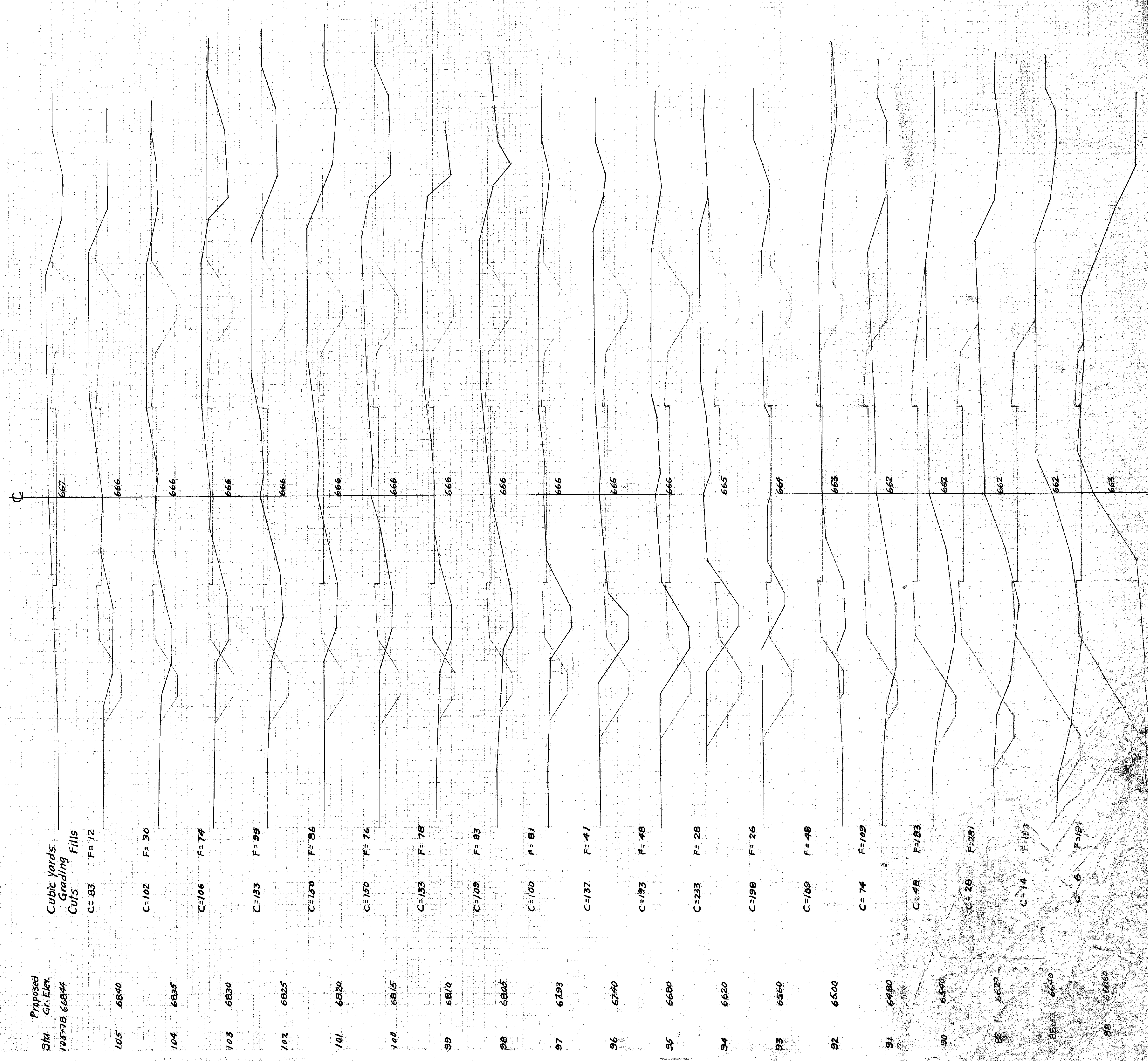
H.G.
H.G.
H.G.
H.G.
3-18-20
3-22-20
3-31-20
3-31-20

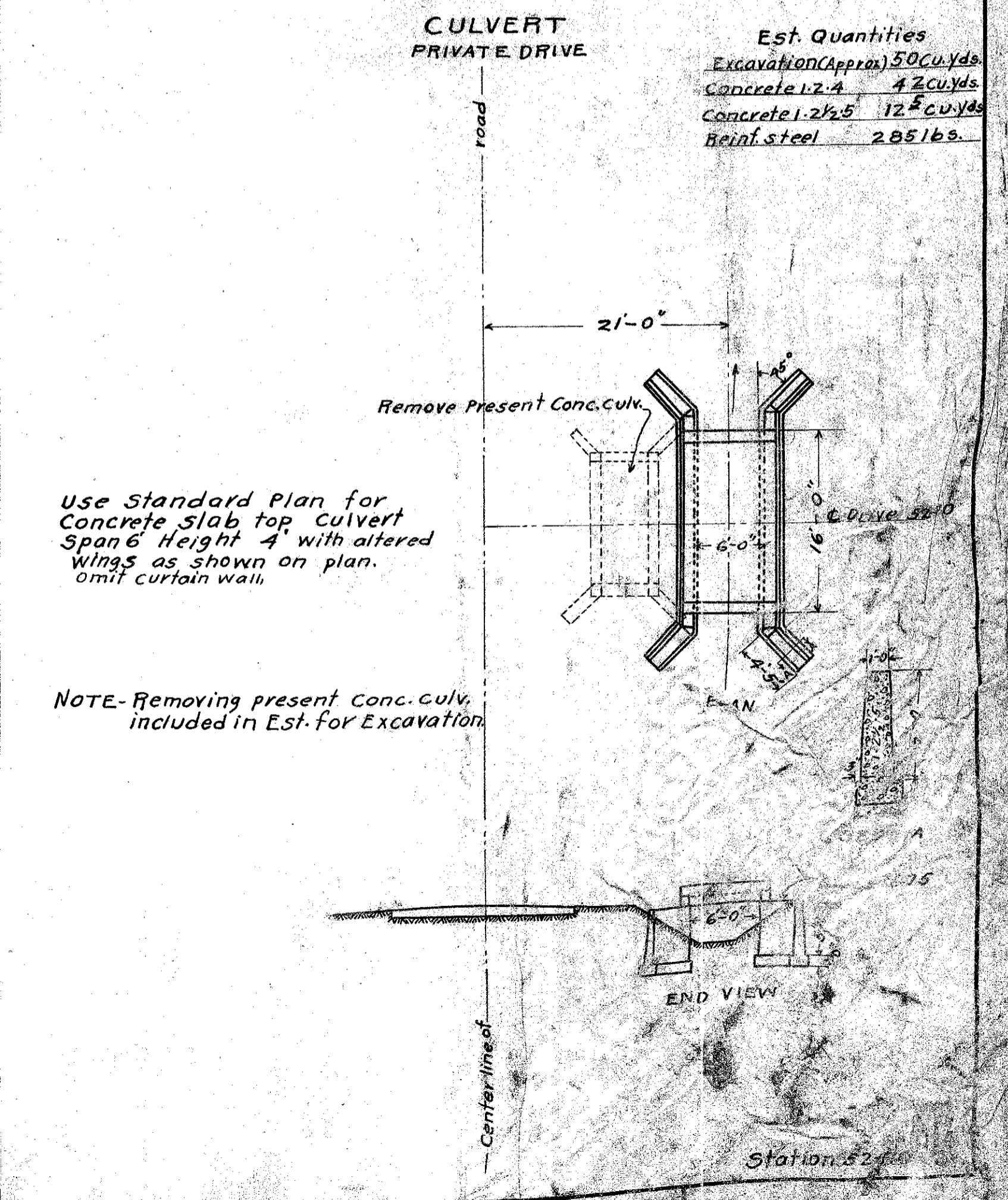
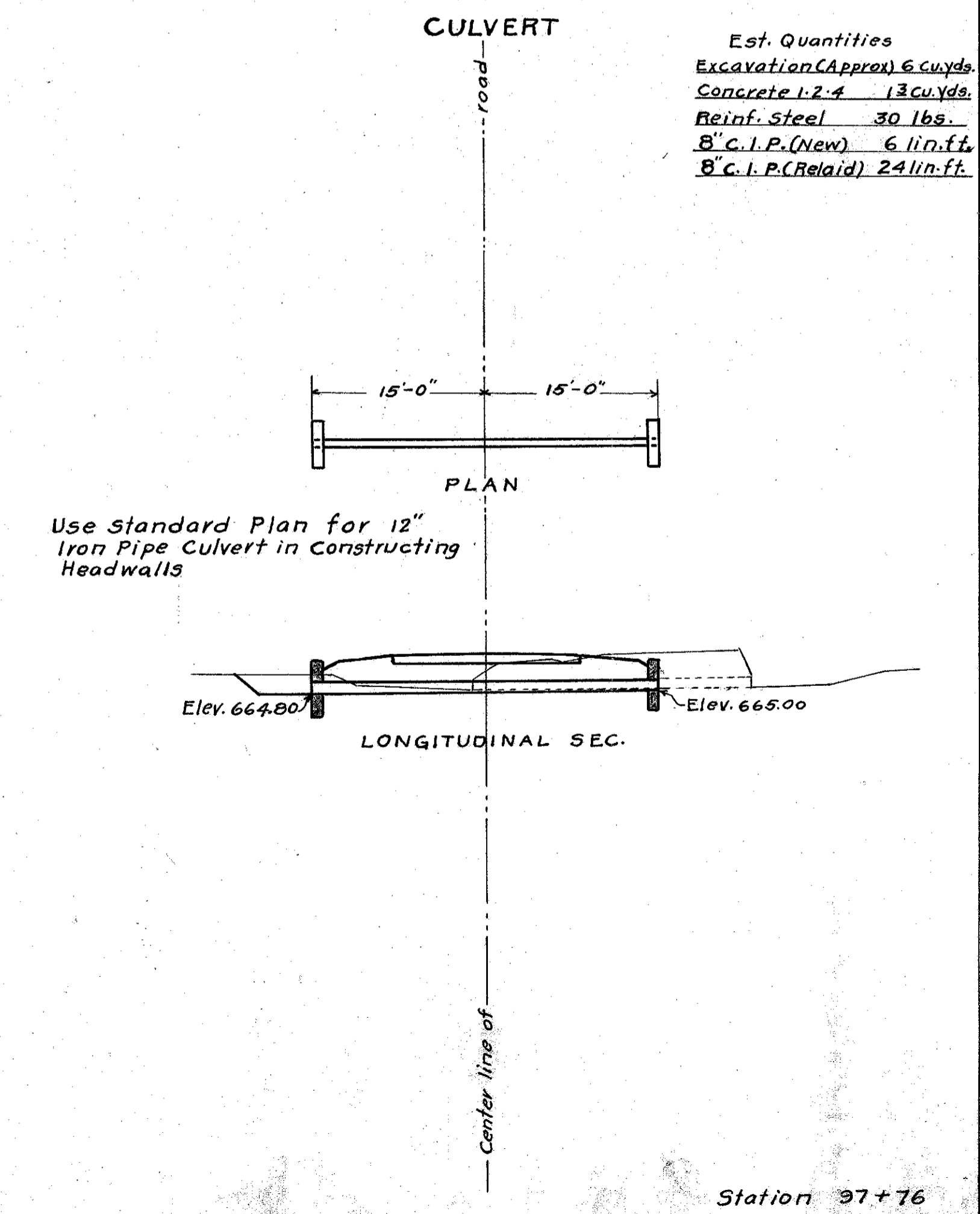
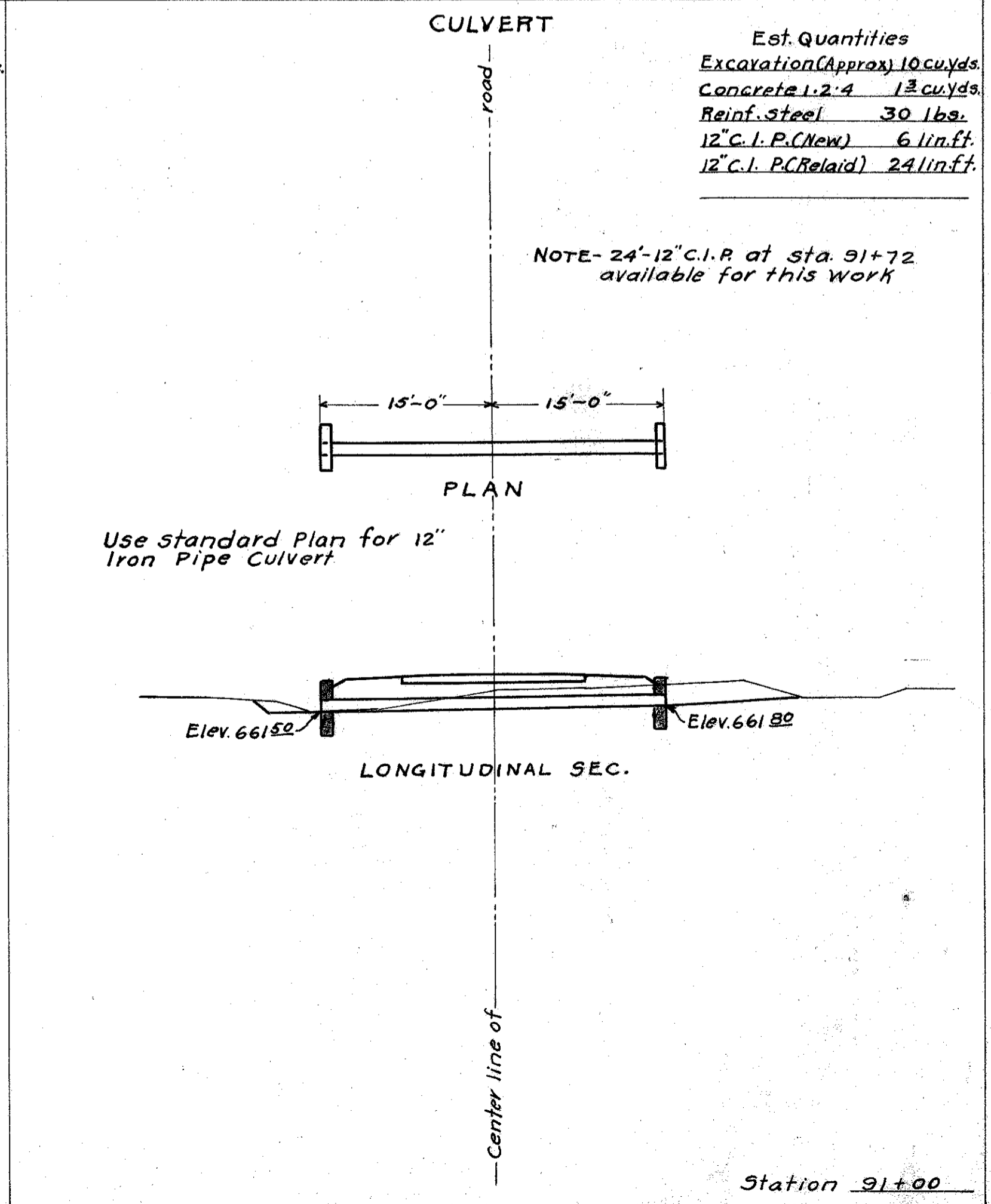
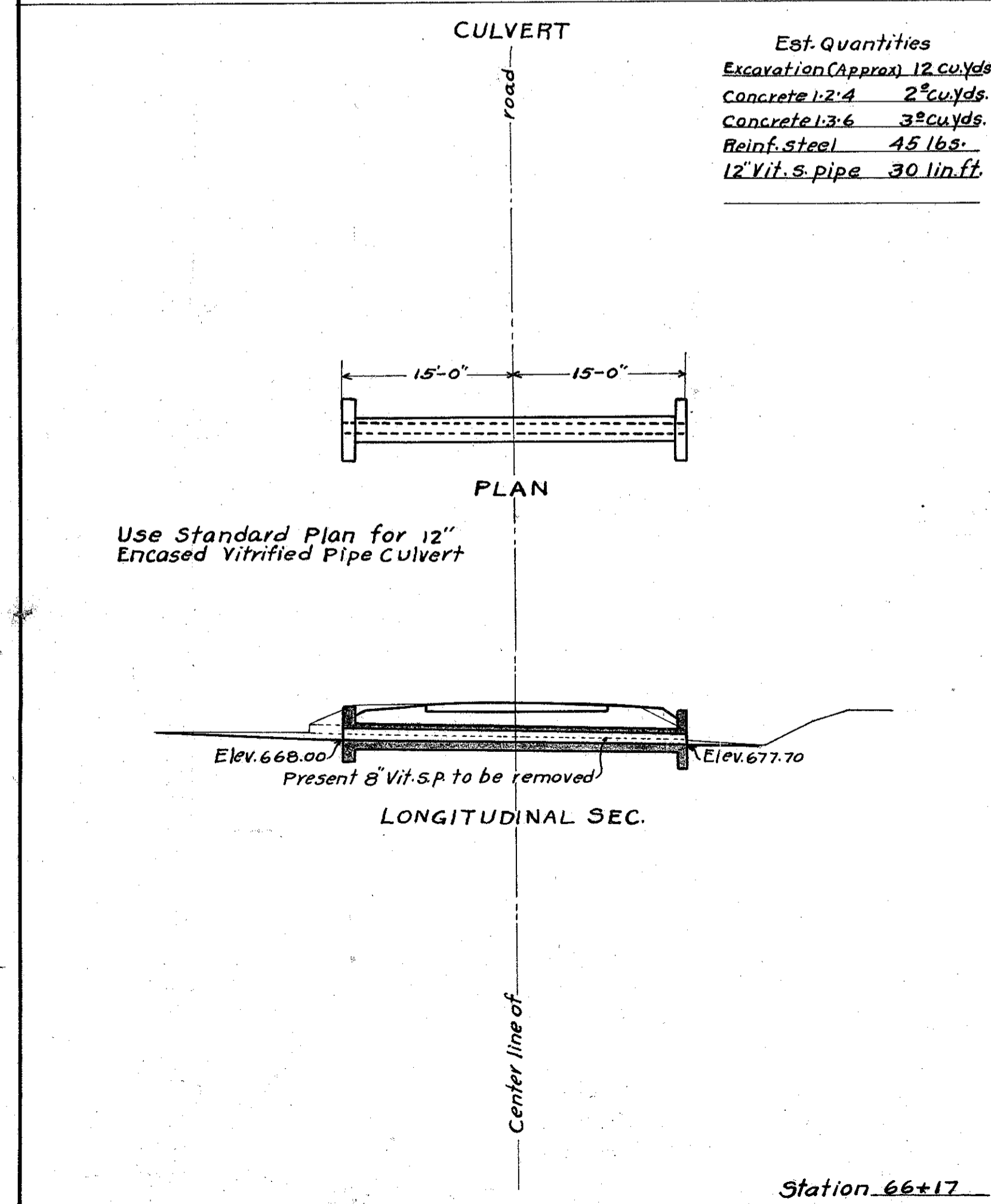
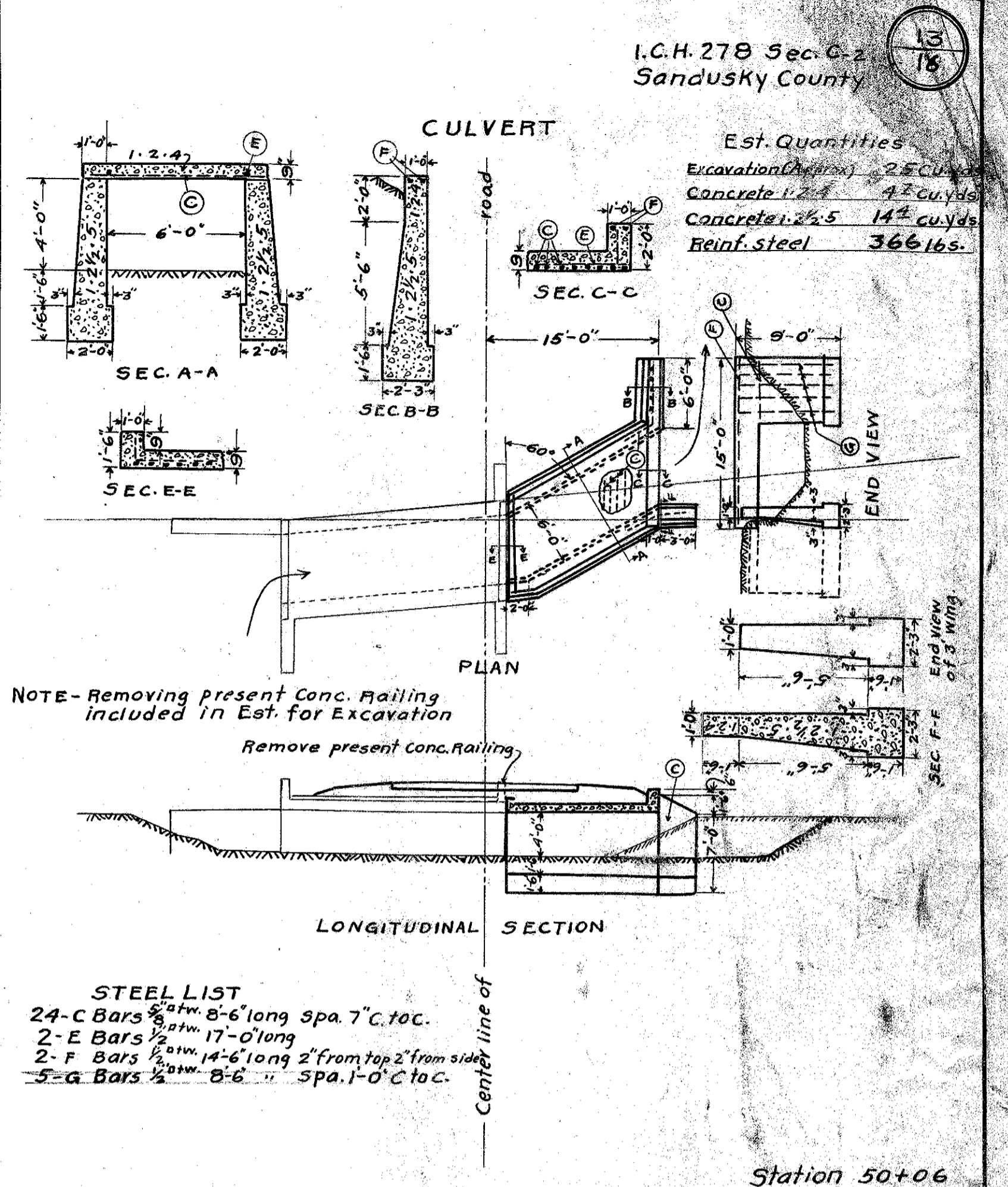
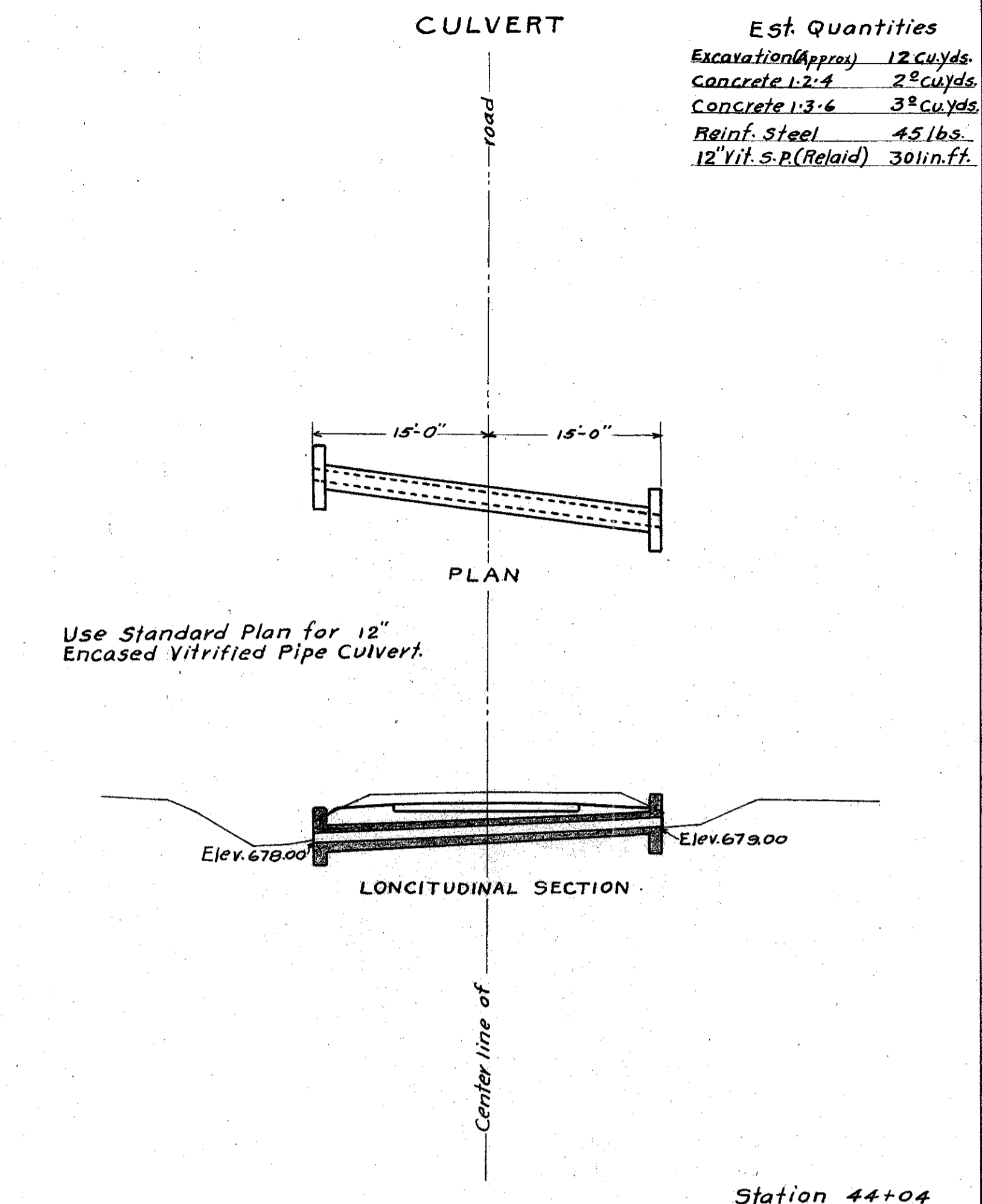
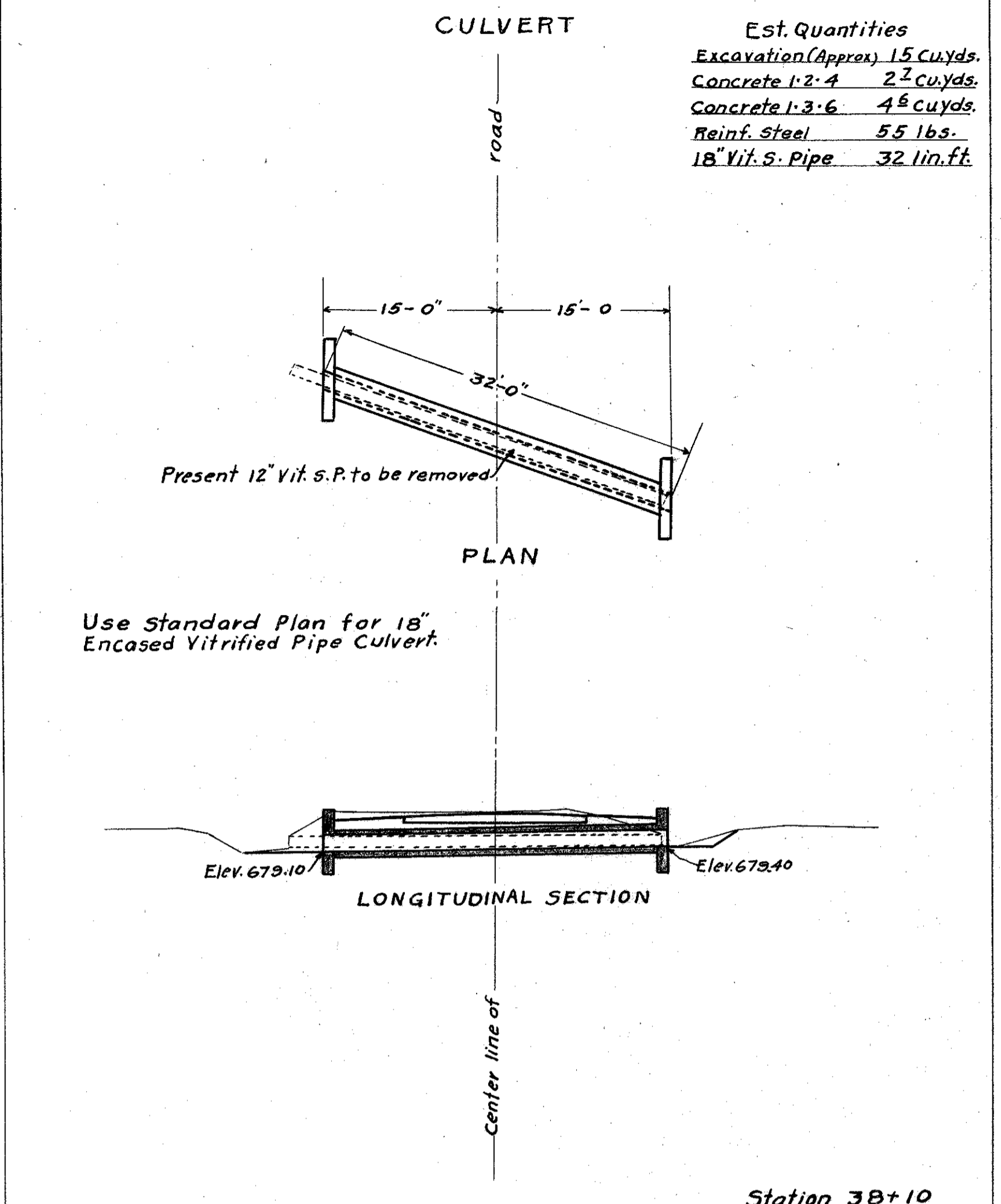
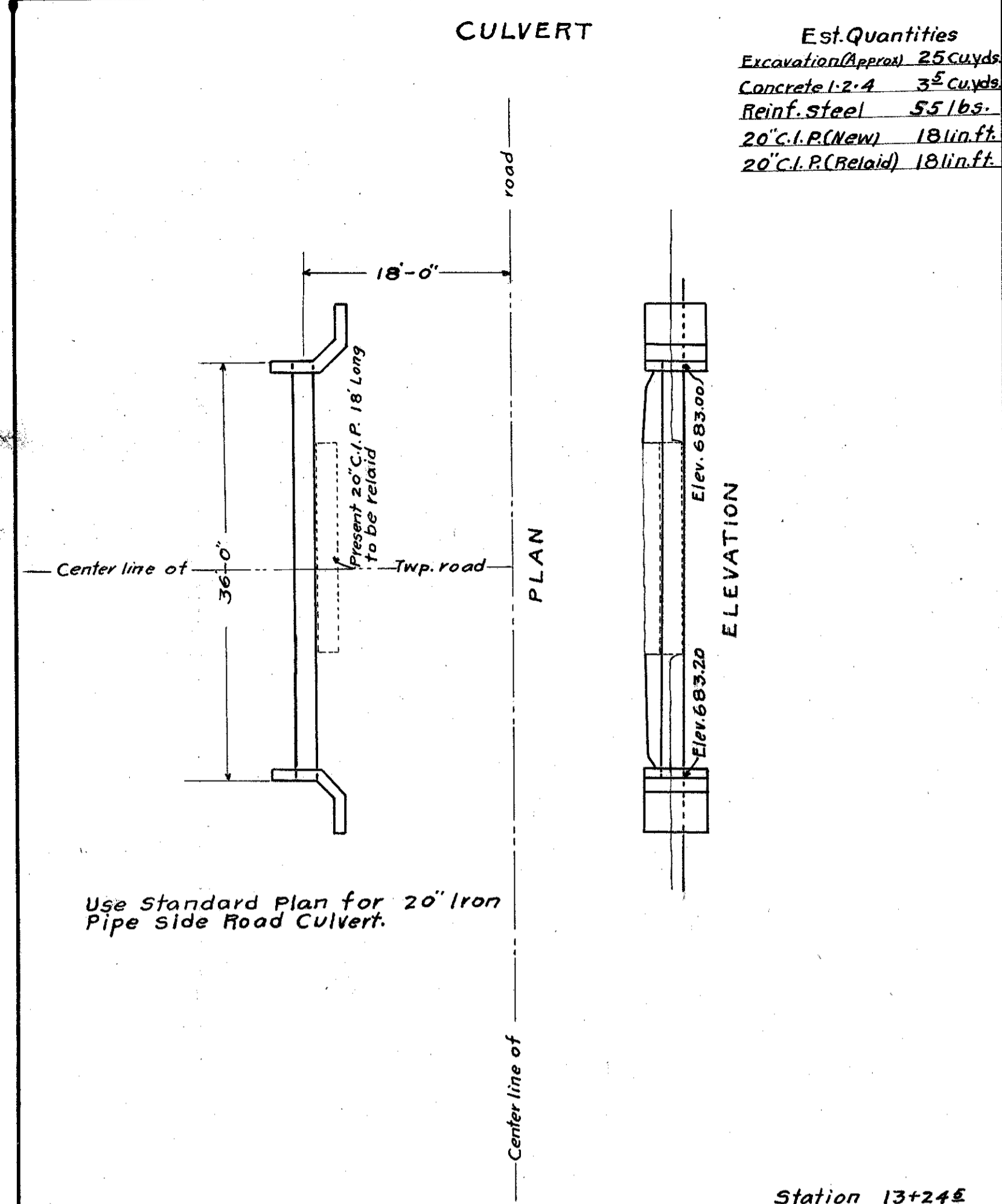
Cubic Yards
Grading
Fills
Cuts

Proposed
Gr. Elev
87+89 66662



H. C.
 H. G.
 H. S.
 H. B.
 3-22-20
 3-27-20
 4-1-20

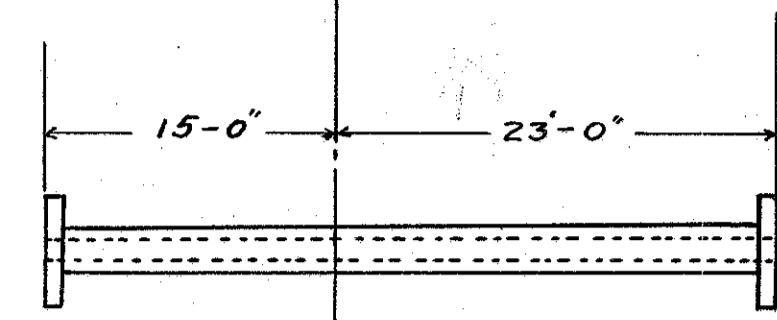




CULVERT

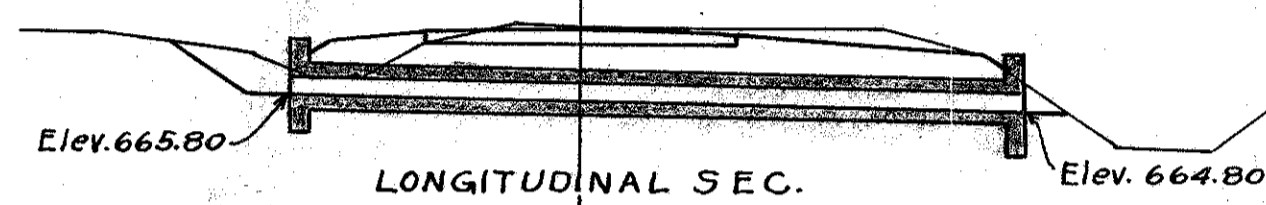
Est. Quantities

Excavation (Approx)	20 cu.yds.
Concrete 1:2:4	2 ^{sq} cu.yds.
Concrete 1:3:6	3 ^{sq} cu.yds.
Reinf. steel	45 lbs.
12" Vit. s. Pipe	38 lin.ft.



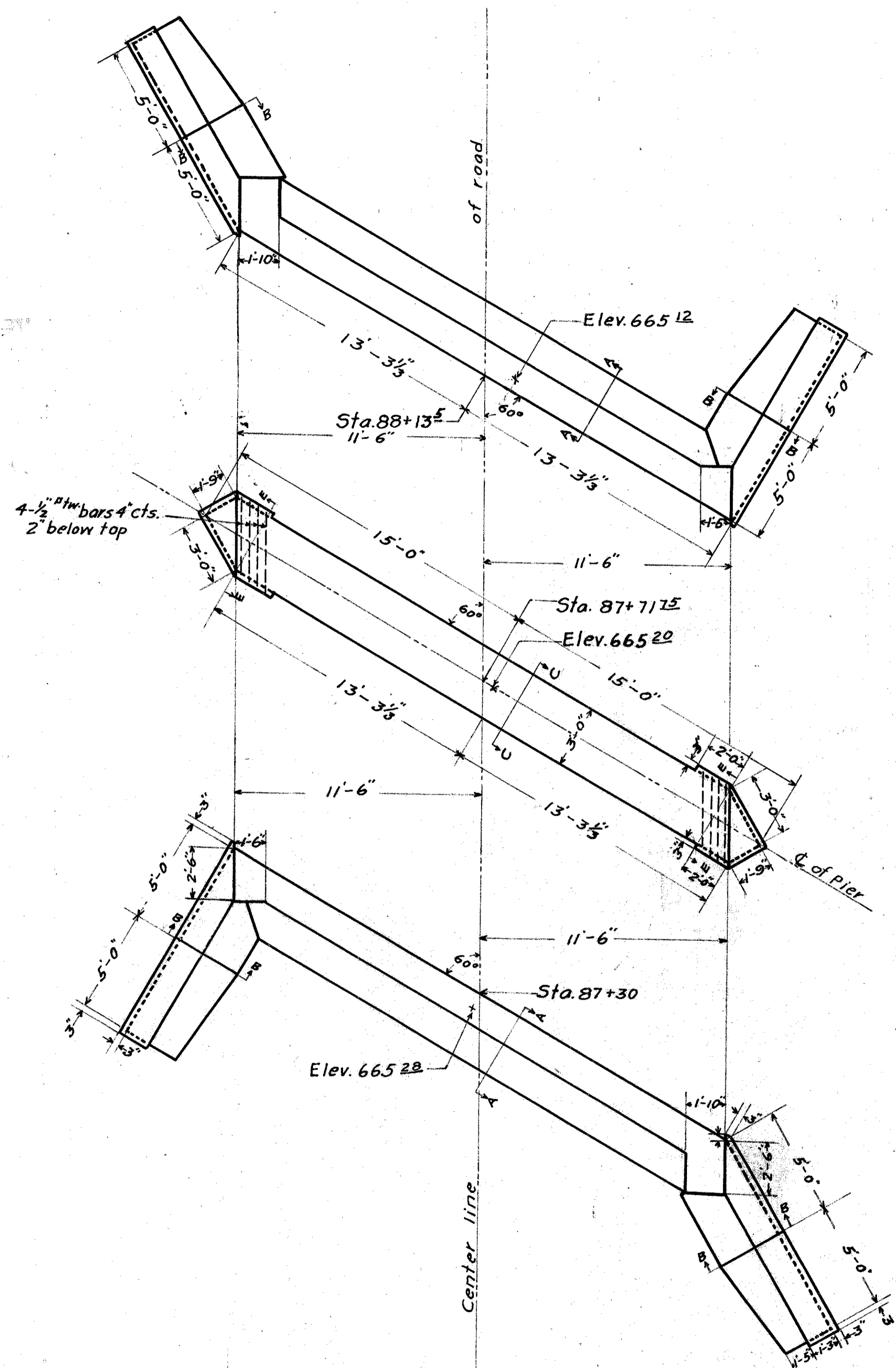
PLAN

Use Standard Plan for 12" Encased Vitrified Pipe Culvert.



LONGITUDINAL SEC.

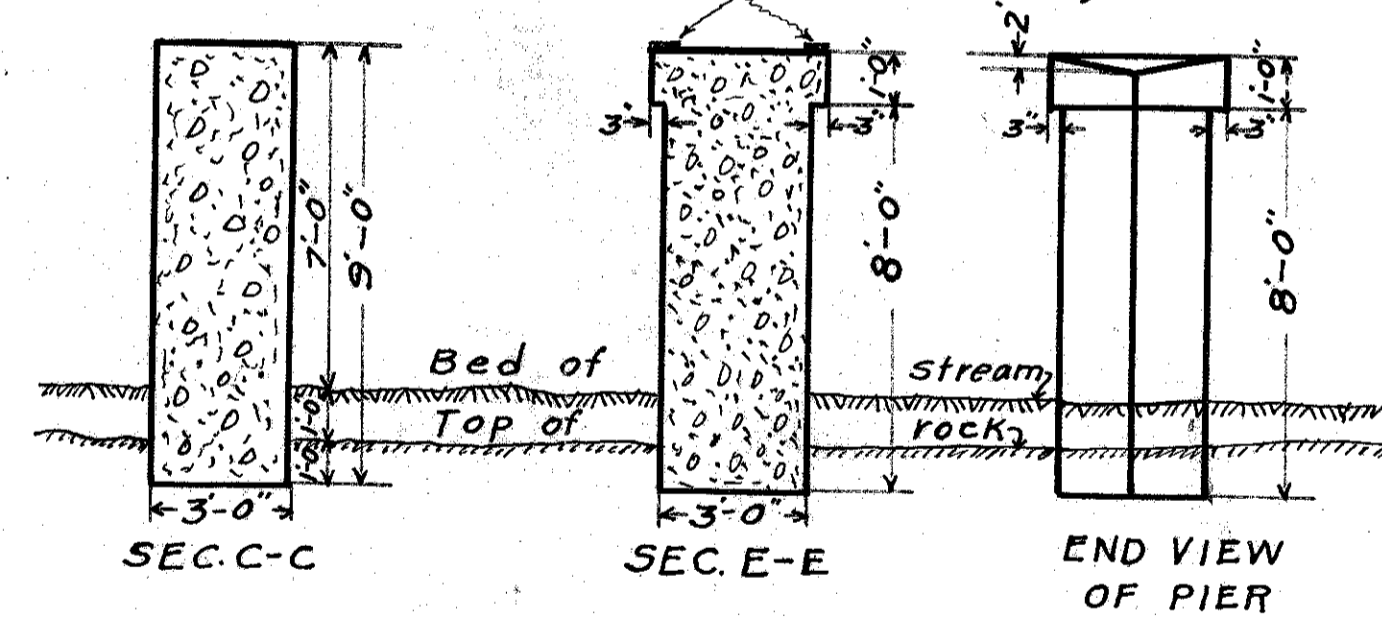
Station 83+00



Note: Remove present abutments and excavate all earth included between new abutments and right of way lines to the depth of present bed of stream.

STEEL LIST

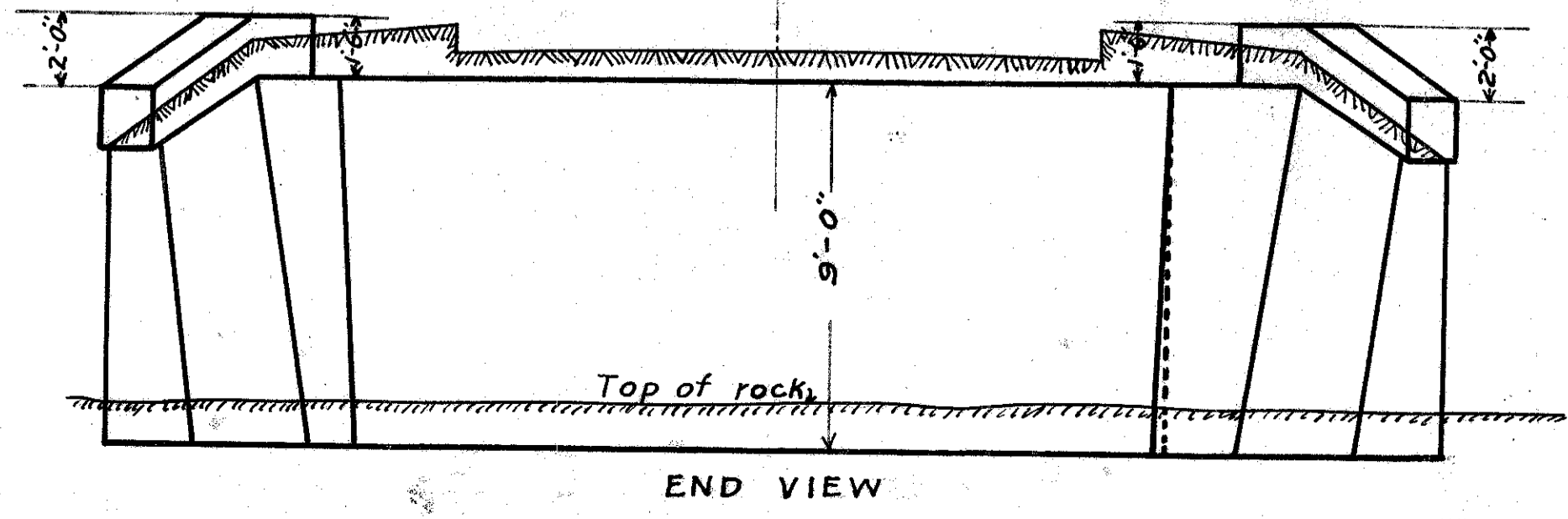
8-1/2" #11 bars 3'-10" long spa 4" cts. at ends of pier 2" below top.



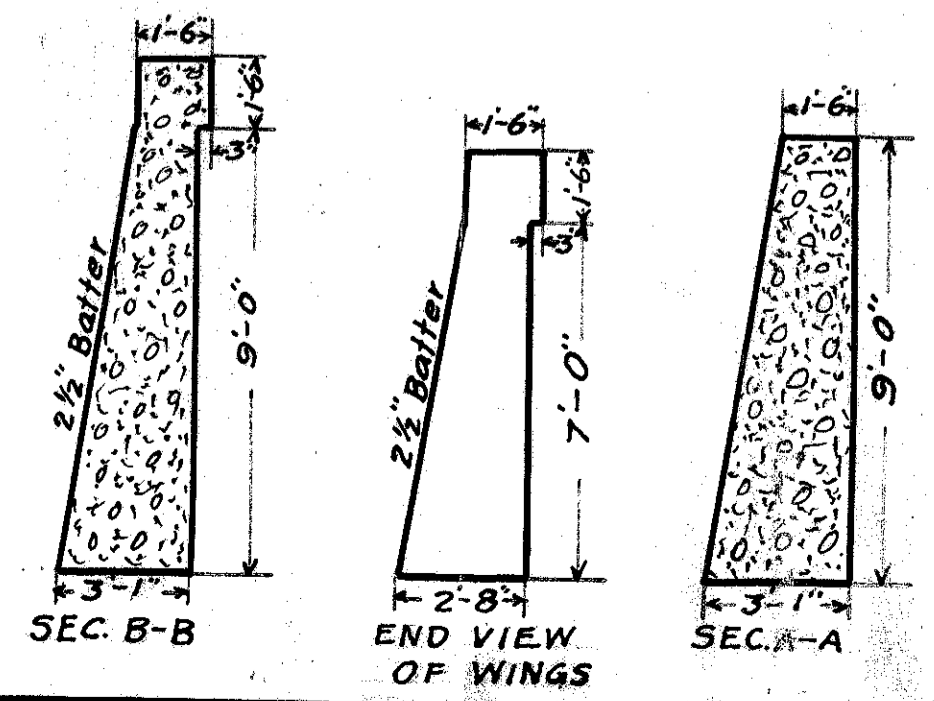
EST. QUANTITIES

Excavation (Approx)	560 cu.yds.
Concrete 1:2 1/2:5	109 cu.yds.
Reinf. Steel	26 lbs.
Remove present steel structure	

Note: Est. for excavation includes earth and rock.



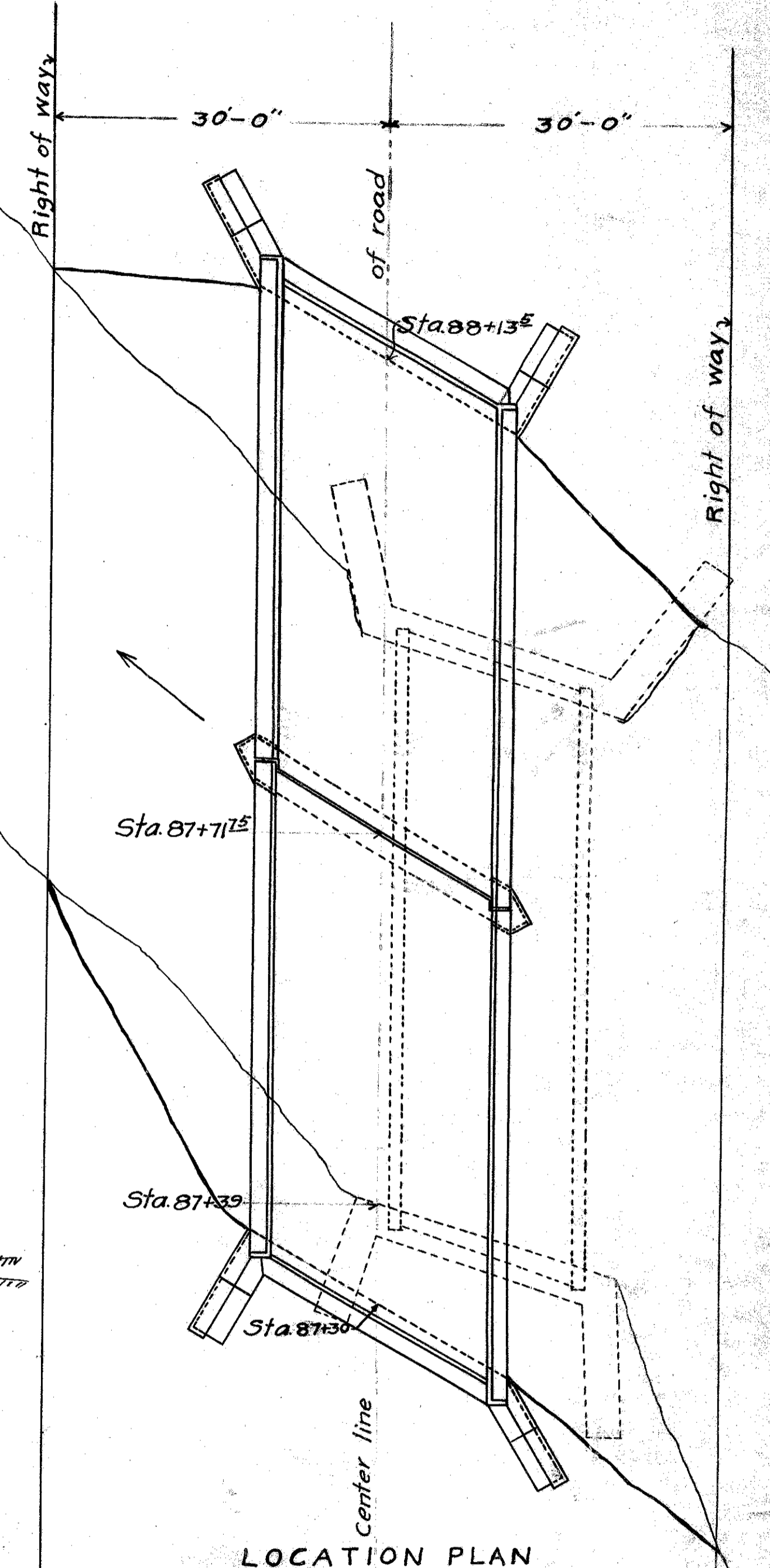
END VIEW



SEC. B-B

END VIEW OF WINGS

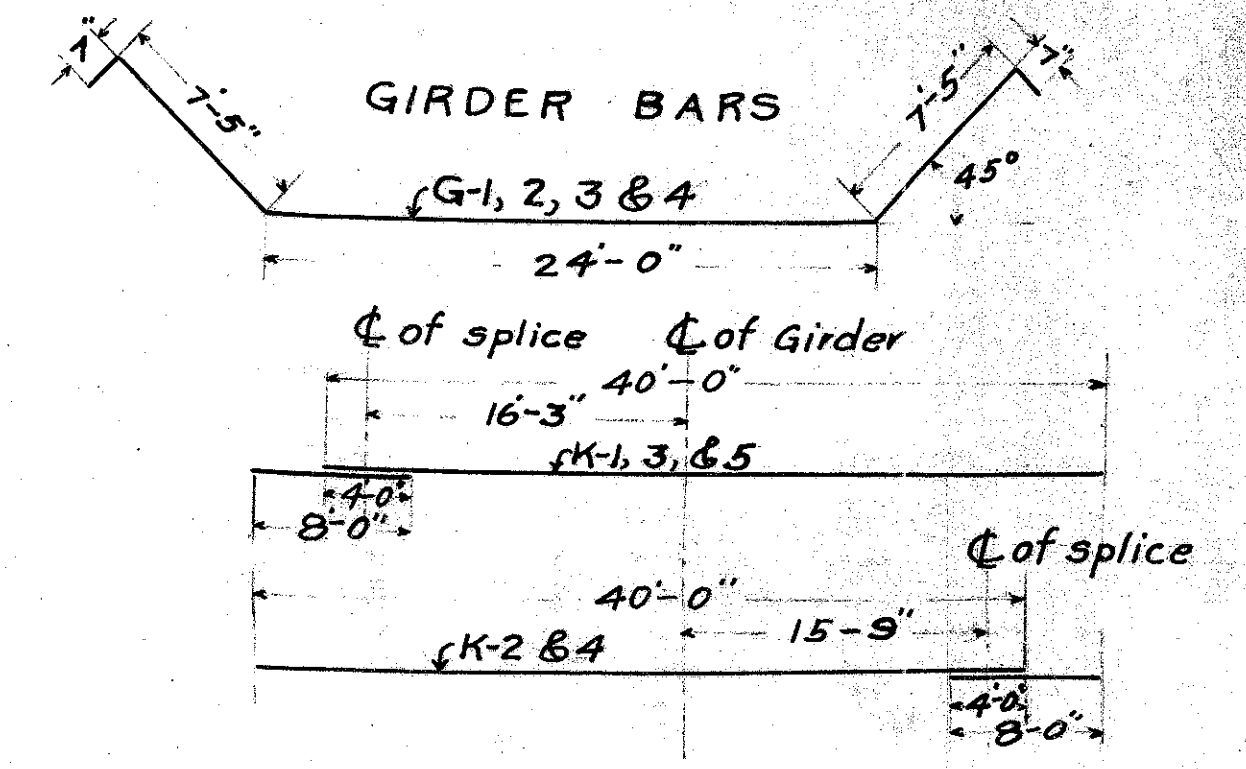
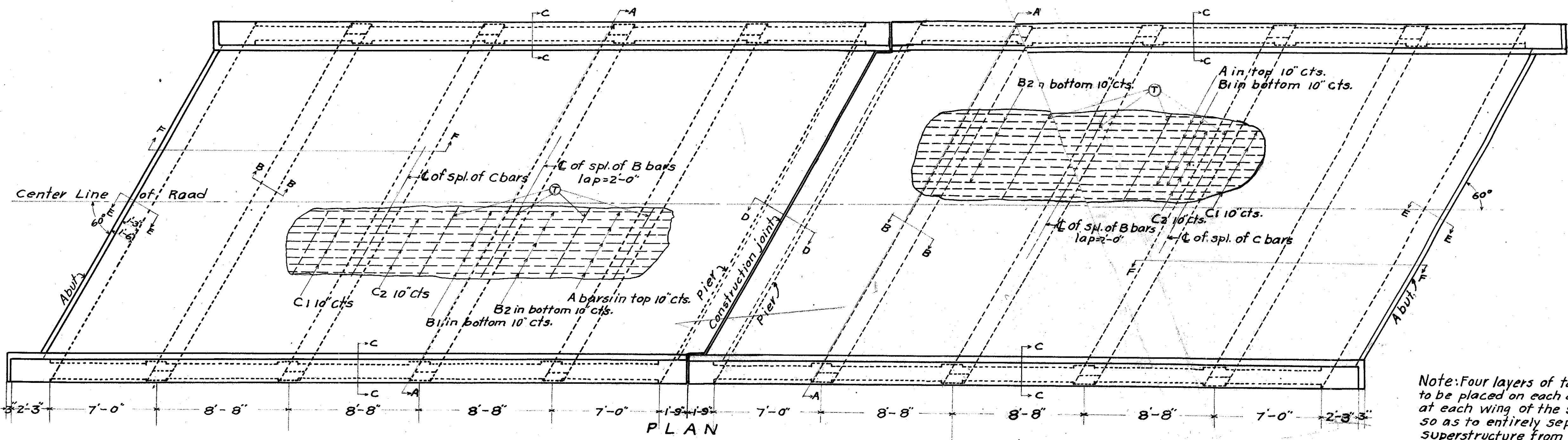
SEC. A-A



LOCATION PLAN

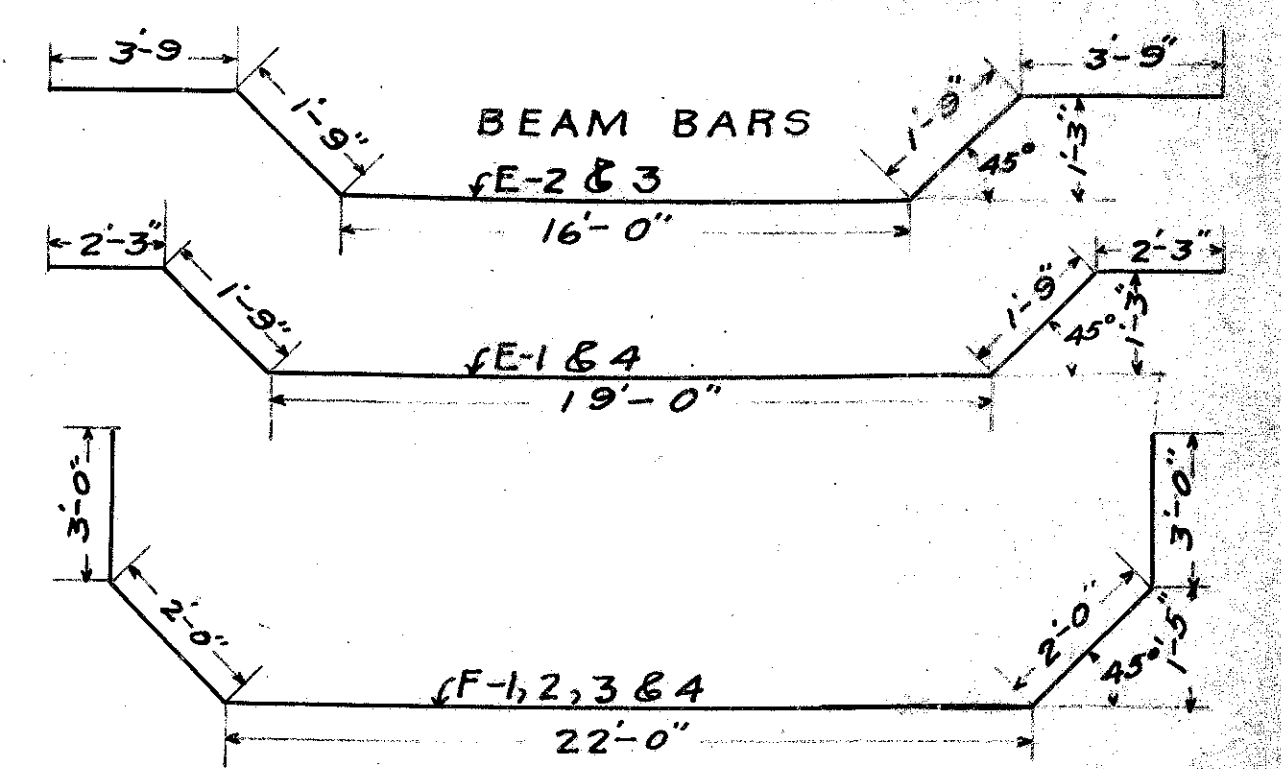
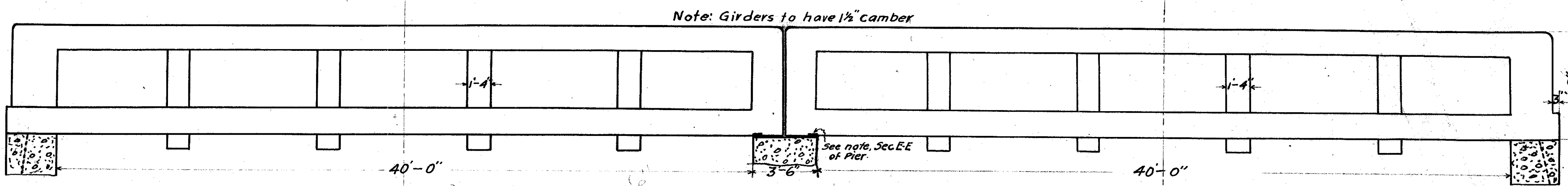
PLAN OF ABUTMENTS OF PIER AT BIG MUD CREEK Sta. 87

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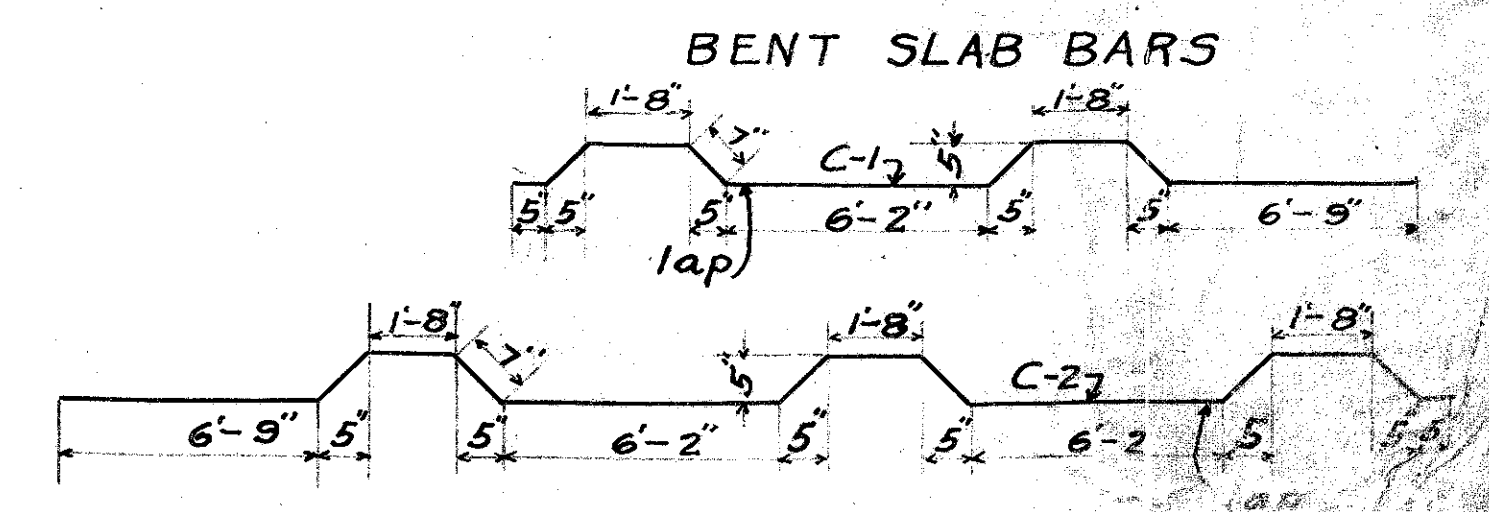
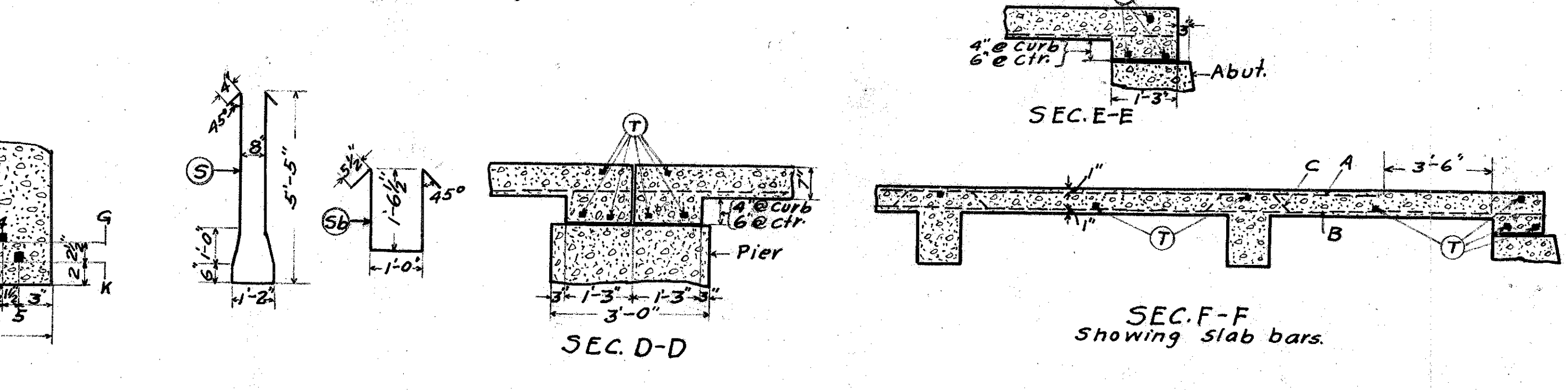
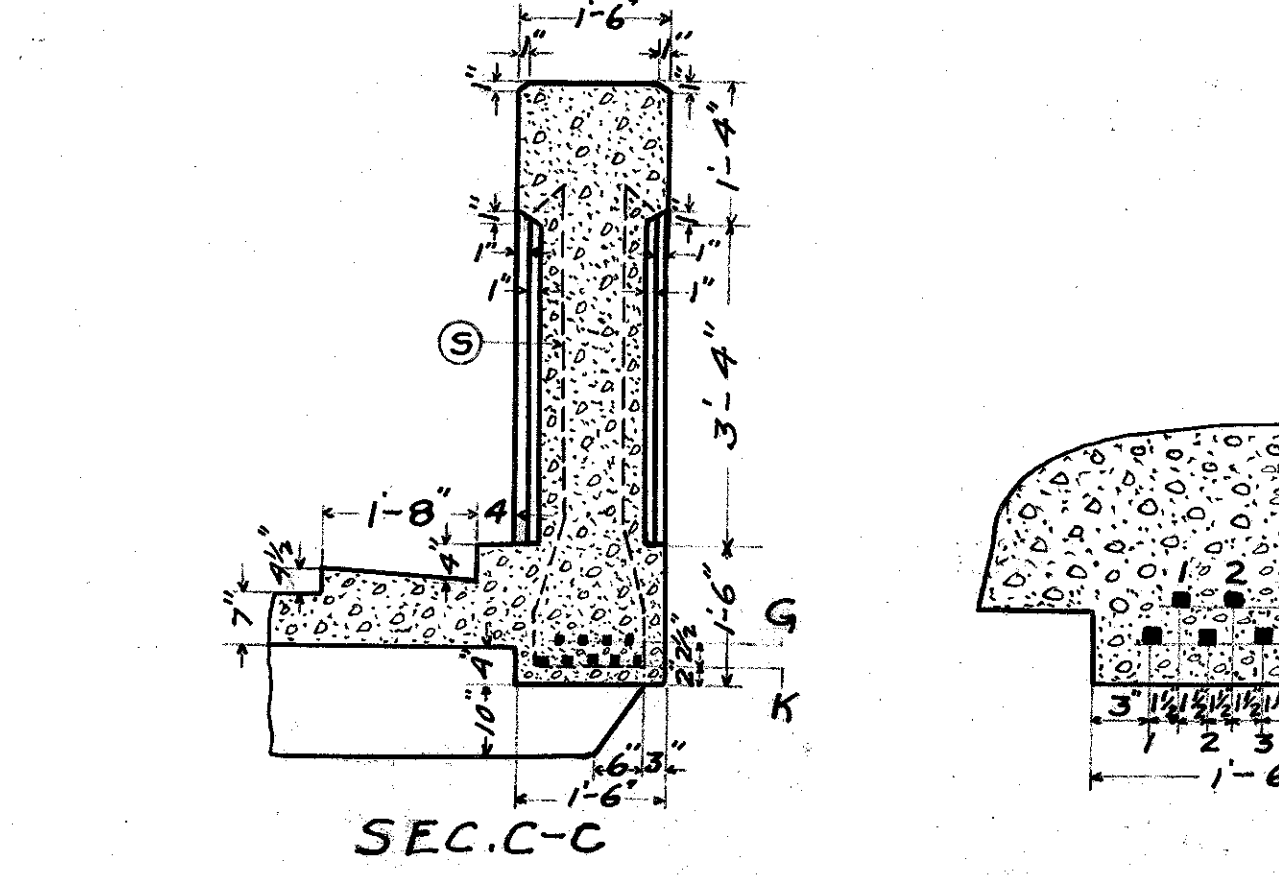
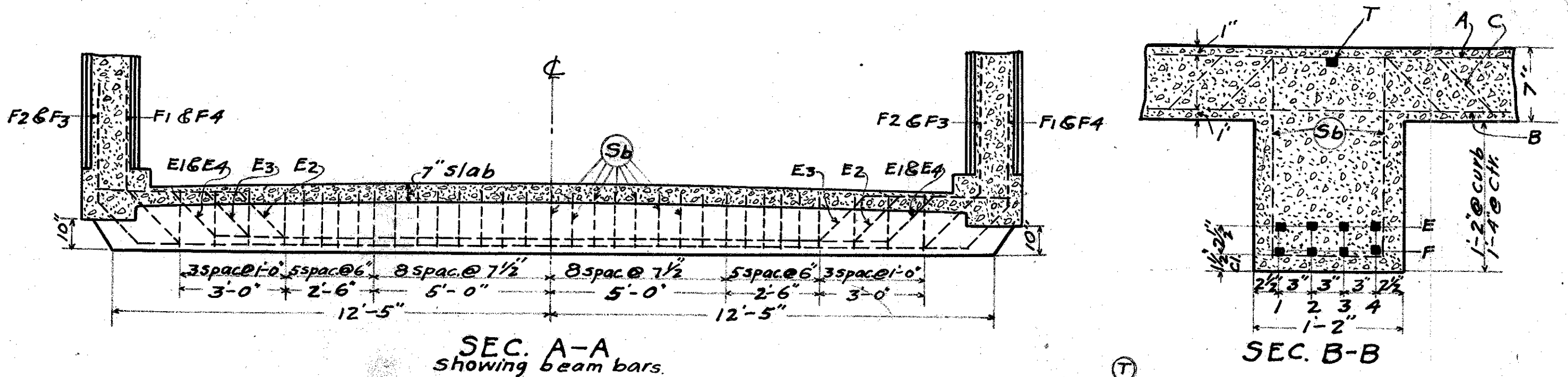
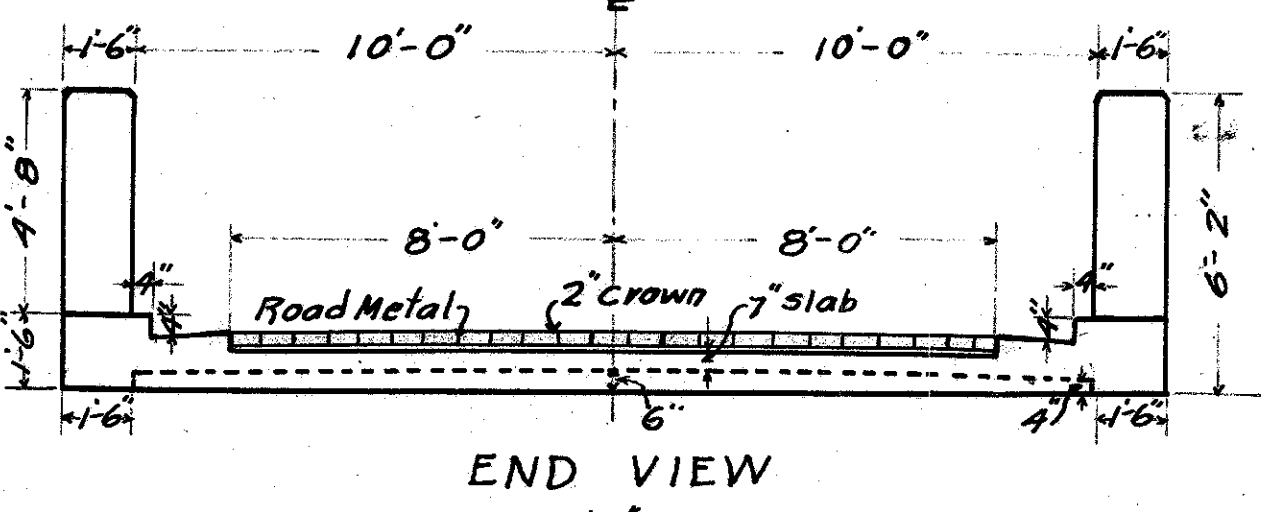
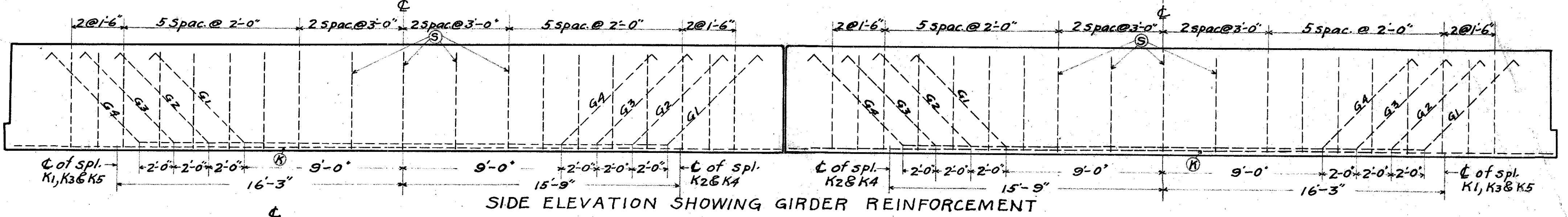
GIRDER BARS		
mark no.	size	Total Length
G-1	4 1/8"	40'-0"
G-2	4 "	40'-0"
G-3	4 "	40'-0"
G-4	4 "	40'-0"
K-1	4 "	40'-0"
K-2	4 "	40'-0"
K-3	4 "	40'-0"
K-4	4 "	40'-0"
K-5	4 "	40'-0"
S	7/8"	12'-8"

Note: Four layers of tarred paper are to be placed on each abutment and at each wing of the substructure so as to entirely separate the superstructure from the substructure.



FLOOR BEAM BARS		
mark no.	size	Total Length
E-1	8 1/8"	27'-0"
E-2	8 "	27'-0"
E-3	8 "	27'-0"
E-4	8 "	27'-0"
F-1	8 "	32'-0"
F-2	8 "	32'-0"
F-3	8 "	32'-0"
F-4	8 "	32'-0"
Sb	264 3/8"	5'-0"

ESTIMATE QUANTITIES
1-2.4 concrete 108 cu.yds.
Reinf. Steel 20310 lbs.



SLAB BARS		
mark no.	size	Total Length
A	48 1/2"	33'-0"
B-1	48 "	25'-6"
B-2	48 "	17'-0"
C-1	46 "	19'-0"
C-2	46 "	28'-0"
T	30 "	25'-0"

TWIN SPAN CONCRETE GIRDER
at
BIG MUD CREEK
Sta. 87+

BRIDGE & CULVERT SUMMARY

STATION	TYPE	SIZE	Excavation Cu.Yds.	Concrete				Reinforcing Steel Lbs.	Cast Iron Pipe						Miscellaneous	Remarks				
				1-2-4	1-2½-5	1-3-6	8"		12"		20"		18"							
				Cu.Yds.	Cu.Yds.	Cu.Yds.			New Lin.Ft.	Relaid Lin.Ft.	New Lin.Ft.	Relaid Lin.Ft.	New Lin.Ft.	Relaid Lin.Ft.			New Lin.Ft.	Relaid Lin.Ft.		
13+24½	C.I.P. Culv.	20"	25	34			55					18	18				Use Std. Plan for 20" Iron Pipe Culvert.			
38+10	Vit. S.P. Culv.	18"	15	22		44	55										32	Use Std. Plan for 18" Encased Vitrified Pipe Culvert.		
44+04	Vit. S.P. Culv.	12"	12	22		32	45											30	Use Std. Plan for 12" Encased Vitrified Pipe Culvert.	
50+06	Conc. Culv.	6' x 5'	25	42	142		366												Remove S. Railing of present Conc. Culv.	
66+17	Vit. S.P. Culv.	12"	12	22		32	45												30	Use Std. Plan for 12" Encased Vitrified Pipe Culvert.
83+00	Vit. S.P. Culv.	12"	20	22		32	45												38	Use Std. Plan for 12" Encased Vitrified Pipe Culvert.
87+00	Twin span Conc. Girder	2-40 spans	560	1082	1092		20336													Remove present structure
91+00	C.I.P. Culv.	12"	10	12			30			6	24									Remove 12" C.I.P. at 91+72 and use in this work.
97+76	C.I.P. Culv.	8"	6	12			30		6	24										Use Std. Plan for 12" Iron Pipe Culvert in Const. Hdwls.
Totals			685	1282	1234	142	21007	6	24	6	24	18	18	68	30	32				

PRIVATE DRIVE STRUCTURES SUMMARY

STATION	TYPE	SIZE	Distance Rt. or Lt. of C.	Depth of flow line below Gr. Line	Excavation Cu.Yds.	Concrete			Reinforcing Steel Lbs.	Vit. S. Pipe			Miscellaneous	Remarks
						1-2-4	1-2½-5	1-3-6		8"	10"	12"		
					Cu.Yds.	Cu.Yds.	Cu.Yds.		Lin.Ft.	Lin.Ft.	Lin.Ft.			
52+70	Conc. Culv.	6' x 4'	21' Rt.		502	42	122		285					Remove present conc. culv.
72+66 to 72+90	Vit. S.P.	10"	18' Lt.	34"	22	12		30		24				Use Std. Plan for 6' x 4' Conc. Slab Top Culv. with altered wings as shown on plan.
91+52 to 91+70	Vit. S.P.	8"	17' Rt.	30"	22	12		30		18				Build 2 Conc. Hdwls. Use Std. Plan for 12" Iron Pipe Culvert Hdwls.
94+09 to 94+29	Vit. S.P.	8"	17' Rt.	30"	22	12		30		20				Build 2 Conc. Hdwls. Use Std. Plan for 12" Iron Pipe Culvert Hdwls.
94+10 to 94+28	Vit. S.P.	12"	17' Lt.	30"	22	12		30			18			Build 2 Conc. Hdwls. Use Std. Plan for 12" Iron Pipe Culvert Hdwls.
Totals					582	94	122		405	38	24	18		