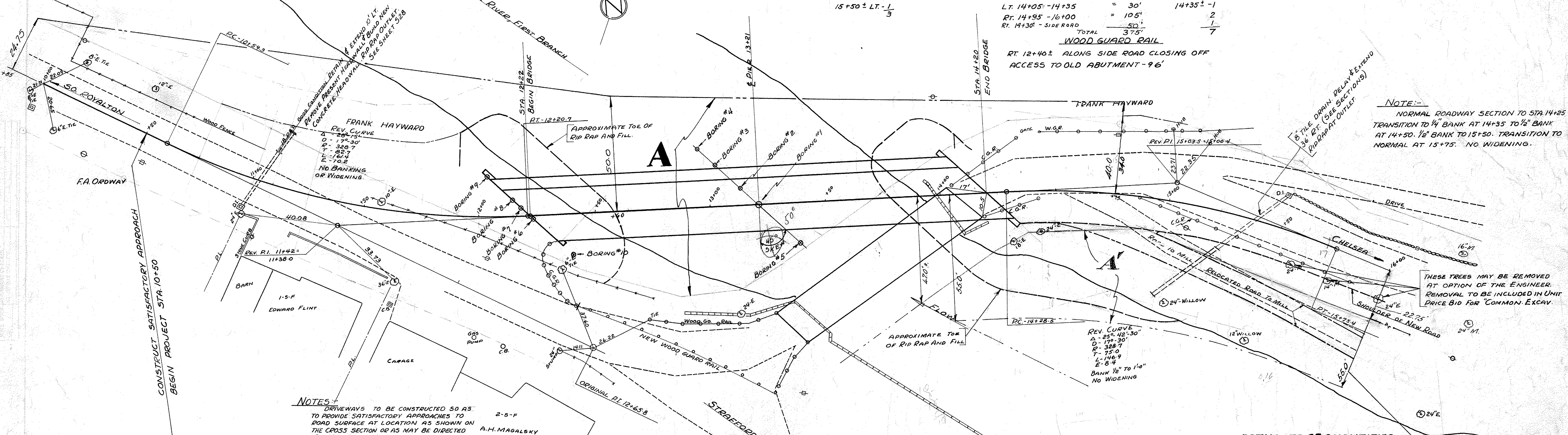


PARCEL	INSTRUMENT	DATE	GRANTOR	GRANTEE	DEOR - D	TUNBRIDGE	REMARKS
A	Q.C.D.	5-12-38	FRANK H. MABEL M. HAYWARD	ST. OFVT.	BOOK 27	PAGE 211	DATE 5-12-38
A'	Q.C.D.	1-25-39	HUGH WILLIAMS		BOOK 27	PAGE 219	DATE 2-9-39

GUIDE POSTS		CABLE GUARD RAIL		ANCHORS	
11+12 ±	LT. -1	LT. 10+50 -12+05 ±	= 155'	10+50 -1	
15+00 ±	RT. -1	RT. END OF BRIDGE - SIDEROAD	= 35'	SIDE ROAD -1	
15+50 ±	LT. -1	LT. 14+05 -14+35	= 30'	14+35 ± -1	
		RT. 14+95 -16+100	= 105'		2
		RT. 14+38 - SIDEROAD	= 50'		1
		TOTAL	375'		7



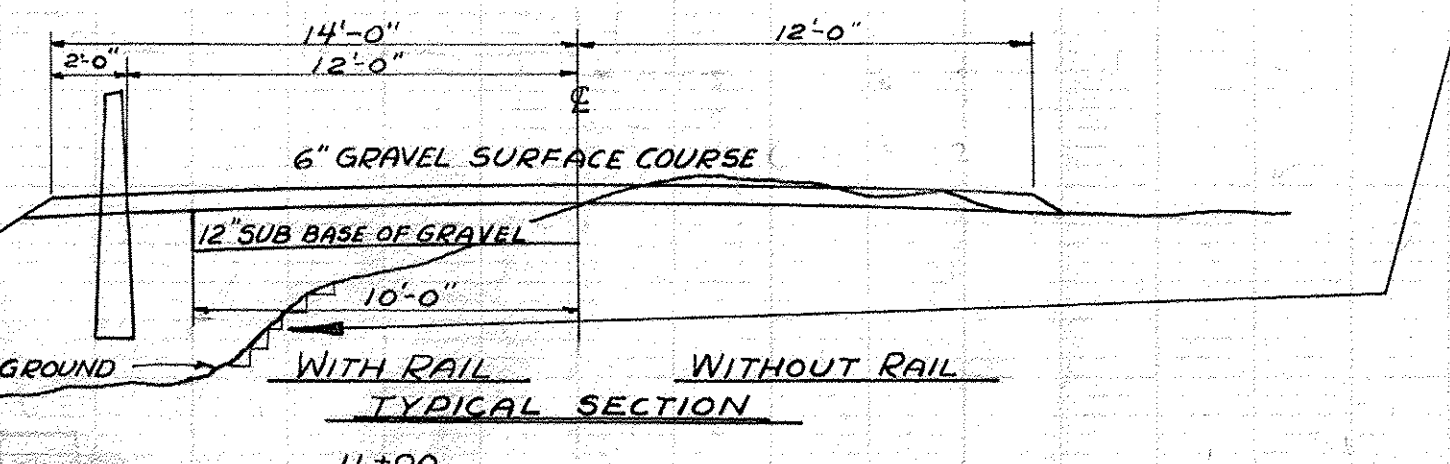
NOTE:-
NORMAL ROADWAY SECTION TO STA. 14+25
TRANSITION TO 1/4" BANK AT 14+35 TO 1/2" BANK
AT 14+50. 1/2" BANK TO 15+50. TRANSITION TO
NORMAL AT 15+75. NO WIDENING.

THESE TREES MAY BE REMOVED
AT OPTION OF THE ENGINEER.
REMOVAL TO BE INCLUDED IN UNIT
PRICE BID FOR COMMON EXCAV.

NOTES:-
DRIVEWAYS TO BE CONSTRUCTED SO AS
TO PROVIDE SATISFACTORY APPROACHES TO
ROAD SURFACE AT LOCATION AS SHOWN ON
THE CROSS SECTION OR AS MAY BE DIRECTED
BY THE ENGINEER.
A MINIMUM THICKNESS OF 12" SUB-BASE
OF GRAVEL SHALL BE USED UNDER ROAD SURFACE THRU
ROCK CUTS. THIS SUB-BASE TO BE EXTENDED 30 FT. BEYOND
END OF THE ROCK CUT.
THE ATTENTION OF THE ENGINEER IS CALLED TO SOIL
REMOVAL.
WHEN EMBANKMENTS ARE TO BE MADE ON A HILLSIDE, THE
SLOPE OF THE ORIGINAL GROUND ON WHICH THE EMBANKMENTS
ARE TO BE MADE, SHALL BE PLOWED DEEPLY OR CUT INTO
STEPS BEFORE FILLING IS COMMENCED. ITEM 10,
PARAGRAPH 10.6.

BORING DATA

#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel
Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel
Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel	Gravel



LIST OF SHEETS

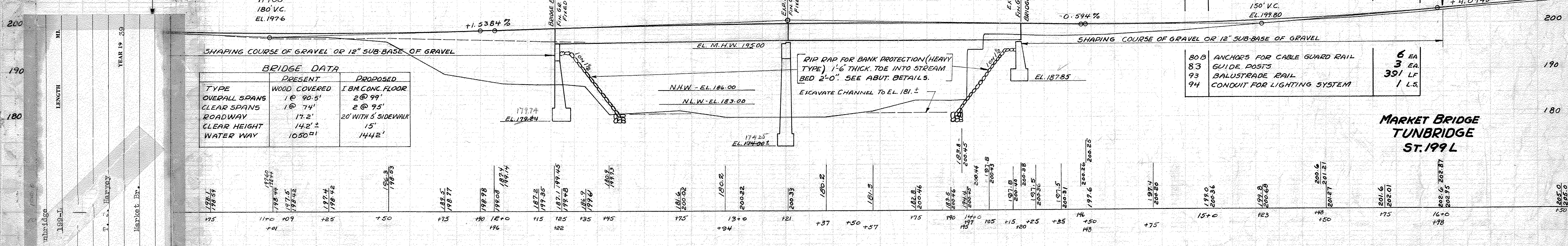
- 1 PLAN AND PROFILE
- 2 DETAILS ABUT #1
- 3 " " ABUT #2
- 4 " " ABUT #2
- 5 SUPERSTRUCTURE DETAILS
- 6 RAILING & DRAINAGE DETAILS
- 7 58 11 - BARRICADES, LIGHTS, SIGNS
- 8 58 20 - DETAILS A-C-E-H-K-L AND GEN. NOTES
- 9 58 21 - DETAIL 5 113 MODIFIED
- 10 528 - CONCRETE HEADWALL
- 11 530 - CABLE GUARD RAIL & WOOD GUARD RAIL
- 12-17 SECTIONS

ESTIMATE OF QUANTITIES

NO.	ITEM	QUANTITY
10	ROCK EXCAVATION	10 CY
10-11	COMMON EXCAVATION INC. BORROW	2590 CY
12	TRENCH EXCAVATION OF EARTH	14 CY
15	CHANNEL EXCAVATION	261 CY
16	STRUCTURE EXCAVATION	276 CY
18	MAINTENANCE OF TRAFFIC	1 L.S.
19C	SUB-BASE OF GRAVEL	302 CY
22	GRAVEL SURFACE COURSE	232 CY
29	DOUBLE TACK COAT OF REFINED TAR	770 GAL
31	CONCRETE CLASS "A"	311 CY
41C	" " " C	60 CY
42	REINFORCING STEEL	43720 LBS
43B	STEEL SUPERSTRUCTURE (36'x64')	1 L.S.
49C	REINFORCED CONCRETE PIPE (18")	10 LF
53-B	VITRIFIED CLAY PIPE (8")	36 LF
54	RELAYING PIPE CULVERTS	40 LF
56	TEMPORARY BRIDGE	1 L.S.
57	REMOVAL OF PRESENT SUPERSTRUCTURE	1 L.S.
68	RIP-RAP FOR BANK PROTECTION (HEAVY TYPE)	400 CY
78	WOOD GUARD RAIL	96 LF
80A	CABLE GUARD RAIL	375 LF
	15+23	
	150' V.C.	
	EL. 199.80	
80B	ANCHORS FOR CABLE GUARD RAIL	6 EA
83	GUIDE POSTS	3 EA
93	BALUSTRADE RAIL	391 LF
94	CONDUIT FOR LIGHTING SYSTEM	1 L.S.

APPROVED: June 6, 1938
O. A. Harding
DISTRICT HIGHWAY COMMISSIONER
CORRECT: A. W. Siskop
BRIDGE ENGINEER
APPROVED: H. E. Langford
COMMISSIONER OF HIGHWAYS

BRIDGE DATA		
TYPE	PRESENT	PROPOSED
OVERALL SPANS	WOOD COVERED	1 BM CONC. FLOOR
CLEAR SPANS	1 @ 90.5'	2 @ 99'
ROADWAY	1 @ 74'	2 @ 95'
CLEAR HEIGHT	14.2' ±	15'
WATER WAY	1050 ±'	1442'



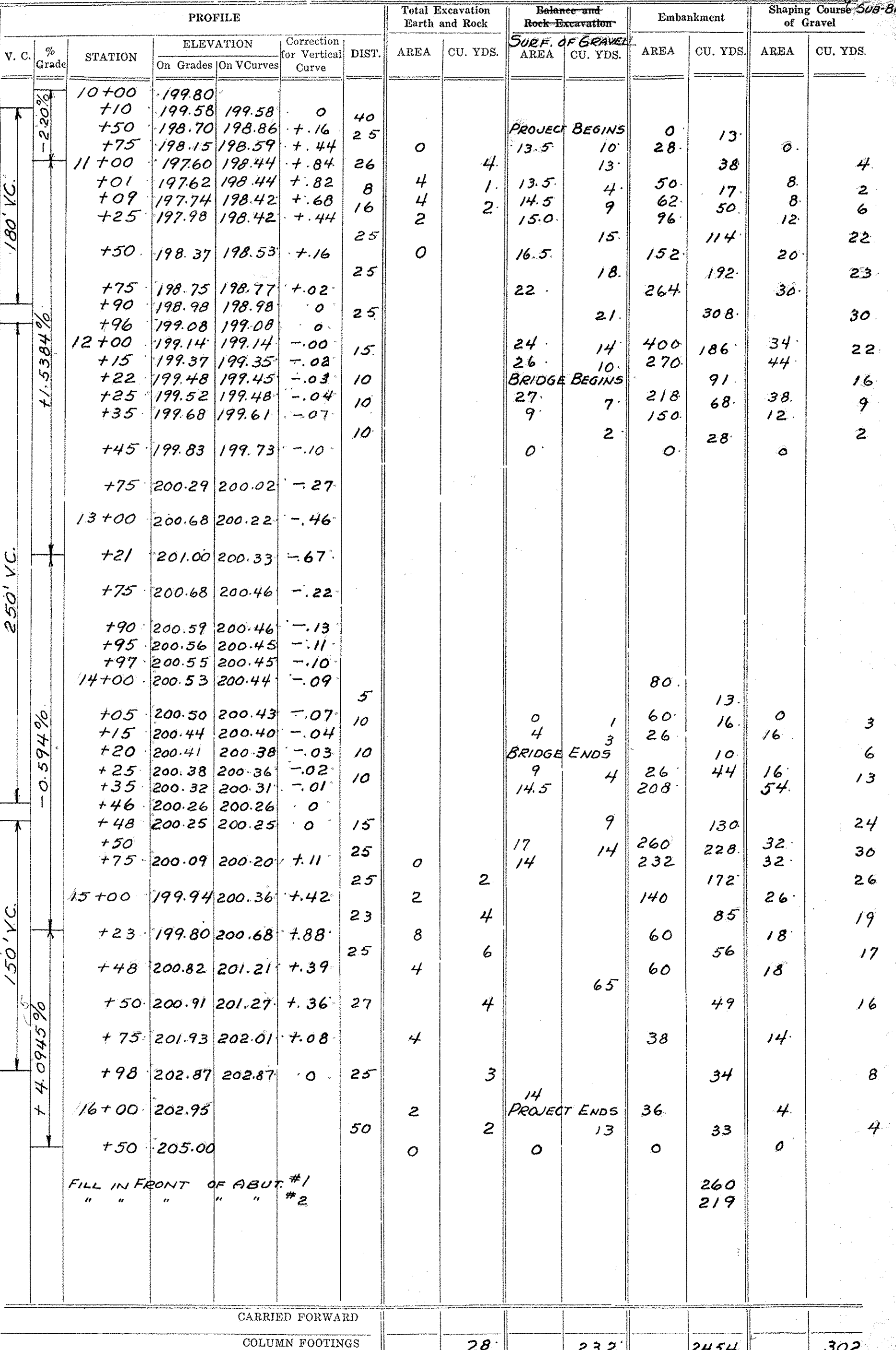
**MARKET BRIDGE
TUNBRIDGE
ST. 199 L**

State of Vermont Department of Highways
 TUNBRIDGE (MARKET BRIDGE) R.A.P. No. 57.199L
 FORM ENG. 1A EARTHWORK SHEET NO. 193

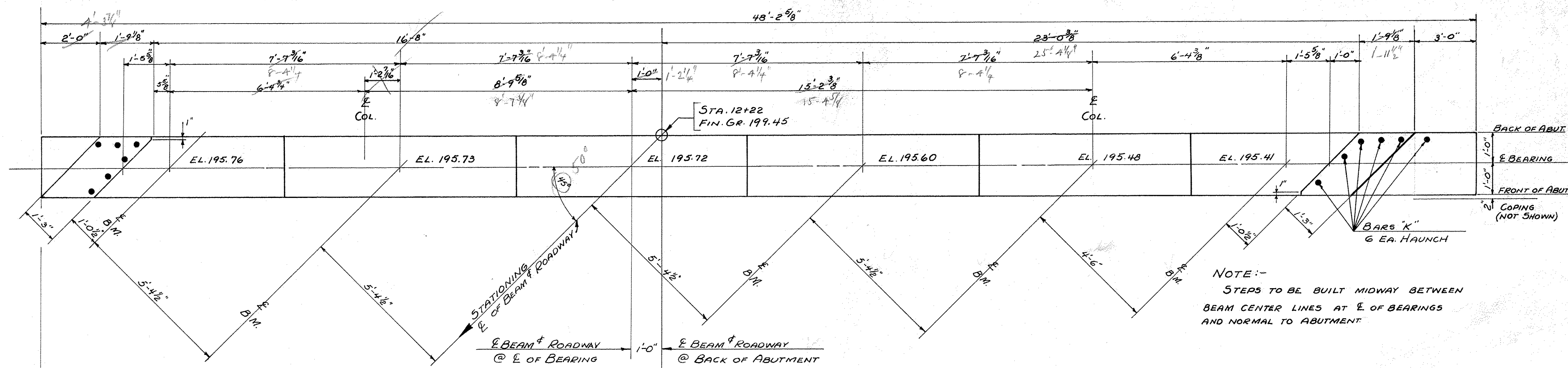
REVISIONS	PROFILE						Total Excavation Earth and Rock		Balance and Rock Excavation		Embankment		Shaping Course of Gravel	
	V. C.	% Grade	STATION	ELEVATION On VCurves	On Grades	Correction for Vertical Curve	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.
By														
VOLUMES	Computed by		Checked by											
GRADES	Computed by		Checked by											
CARRIED FORWARD														
COLUMN FOOTINGS														

REVISIONS	PROFILE						Total Excavation Earth and Rock		Balance and Rock Excavation		Embankment		Shaping Course of Gravel		Sub-Base
	V. C.	% Grade	STATION	ELEVATION On VCurves	On Grades	Correction for Vertical Curve	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	AREA	CU. YDS.	
By															
VOLUMES	Computed by		Checked by												
GRADES	Computed by		Checked by												
CARRIED FORWARD															
COLUMN FOOTINGS															

TOTAL FILL 2454
 +10% 246
 2700
 - COMM. EXCAV. 28
 2672
 - 40% STRUCT. EXCAV. 110
 NET BORROW 2562
 + COMM. EXCAV. 28
 COMM. EXCAV. INC. BORROW 2590



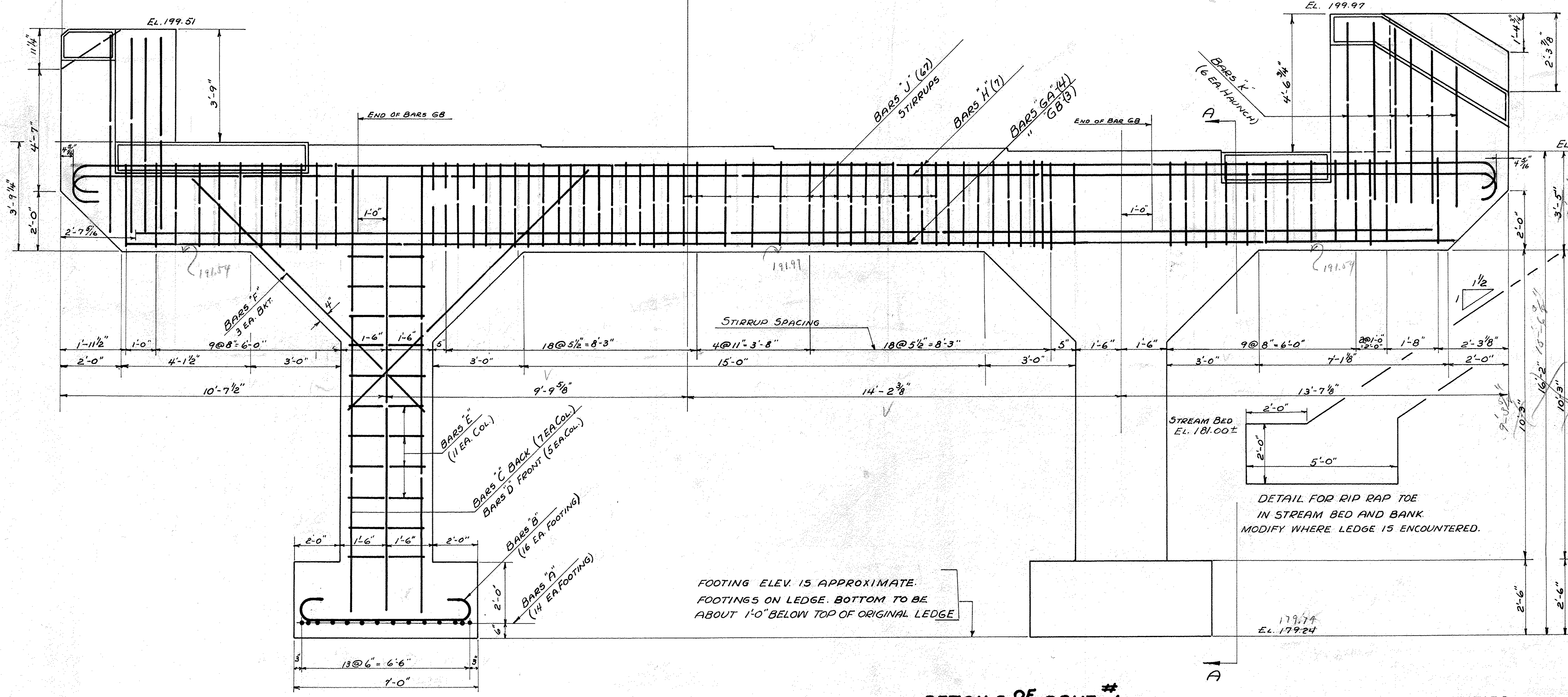
28 232 2454 302



PLAN OF BRIDGE SEATS

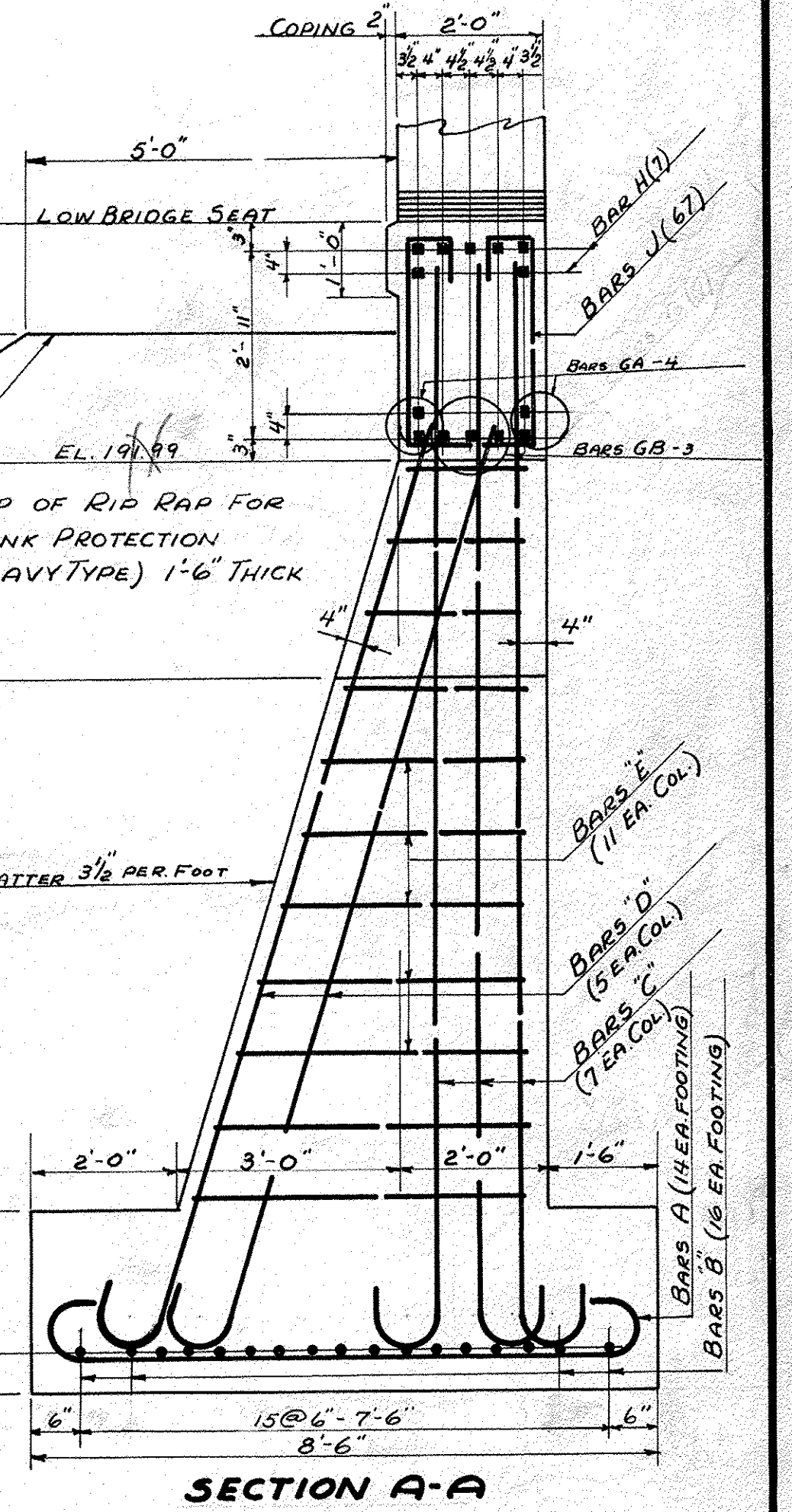
REINFORCING STEEL				
BAR	SIZE	REQ'D	TL.	DETAIL
A	7/8"	28	10'-1"	
B	"	32	8'-7"	
C	1 1/4"	14	16'-7"	
D	"	10	14'-9"	
E	1/4"	22	264 LF FOR 22 BARS	MIN. LGTH 9'-0" MAX. LGTH 15'-0" (AVG. LGTH) CUT AND BEND TO FIT IN FIELD.
F	1"	12	11'-0"	STRAIGHT
GA	1 1/8"	4	43'-0"	"
GB	1 1/8"	3	26'-0"	"
J	3/8"	67	9'-10"	
K	1"	12	7'-0"	STRAIGHT
H	1 1/4"	7	50'-2"	

NOTE:-
STEPS TO BE BUILT MIDWAY BETWEEN BEAM CENTER LINES AT E. OF BEARINGS AND NORMAL TO ABUTMENT.



FRONT ELEVATION

DETAILS OF ABUT #1
MARKET BRIDGE
TUNBRIDGE
SCALE 1/2"=1'-0"



SECTION A-A

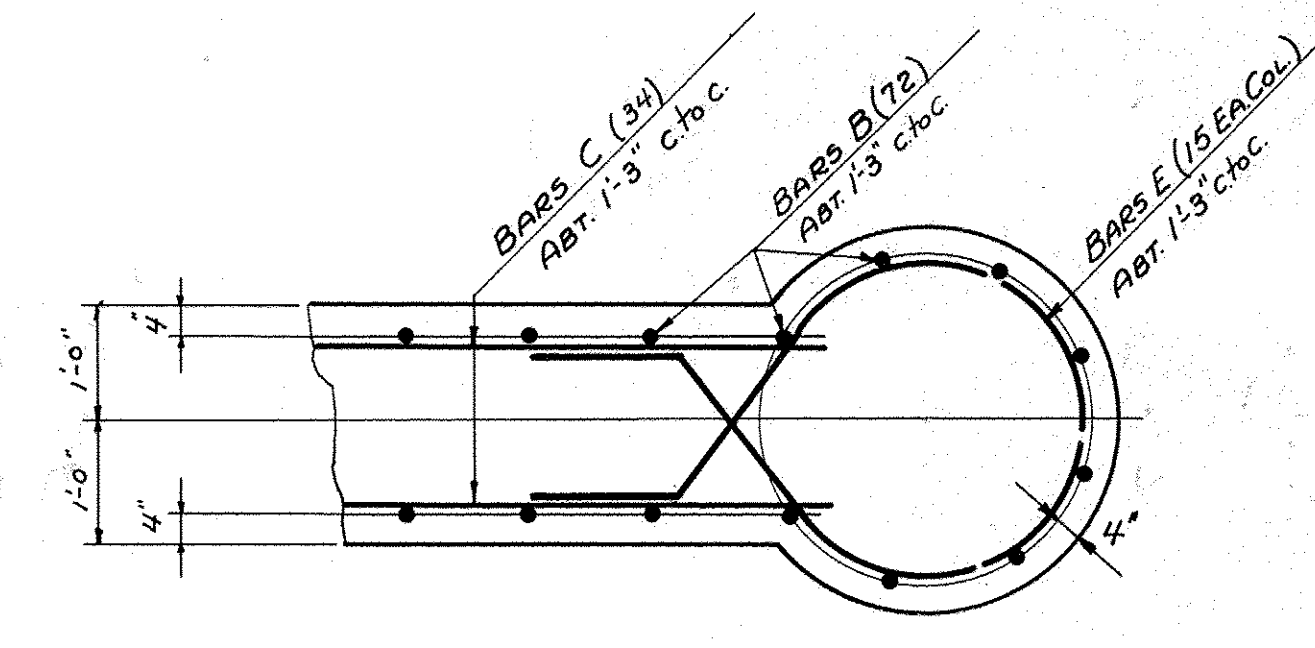
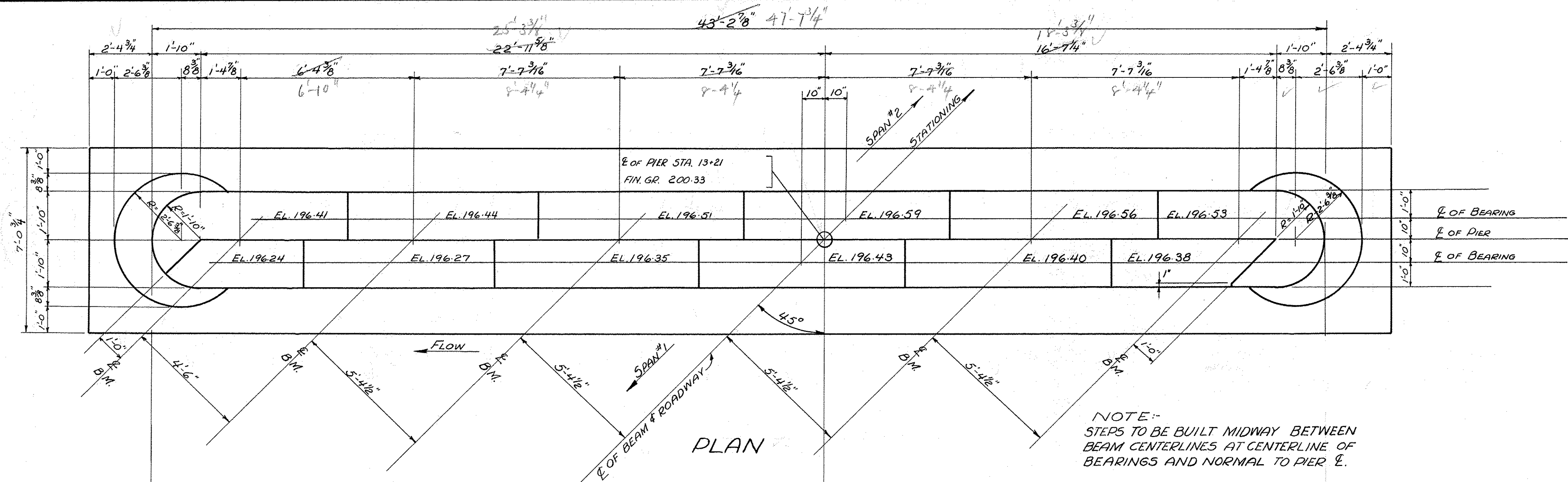
ESTIMATED QUANTITIES

CHANNEL EXCAV.	51	CY.
STRUCTURE EXCAV.	48	CY.
CONCRETE CLASS A	36	CY.
REINFORCING STEEL	7407	#
RIP RAP FOR BANK (HEAVY TYPE)	136	CY.

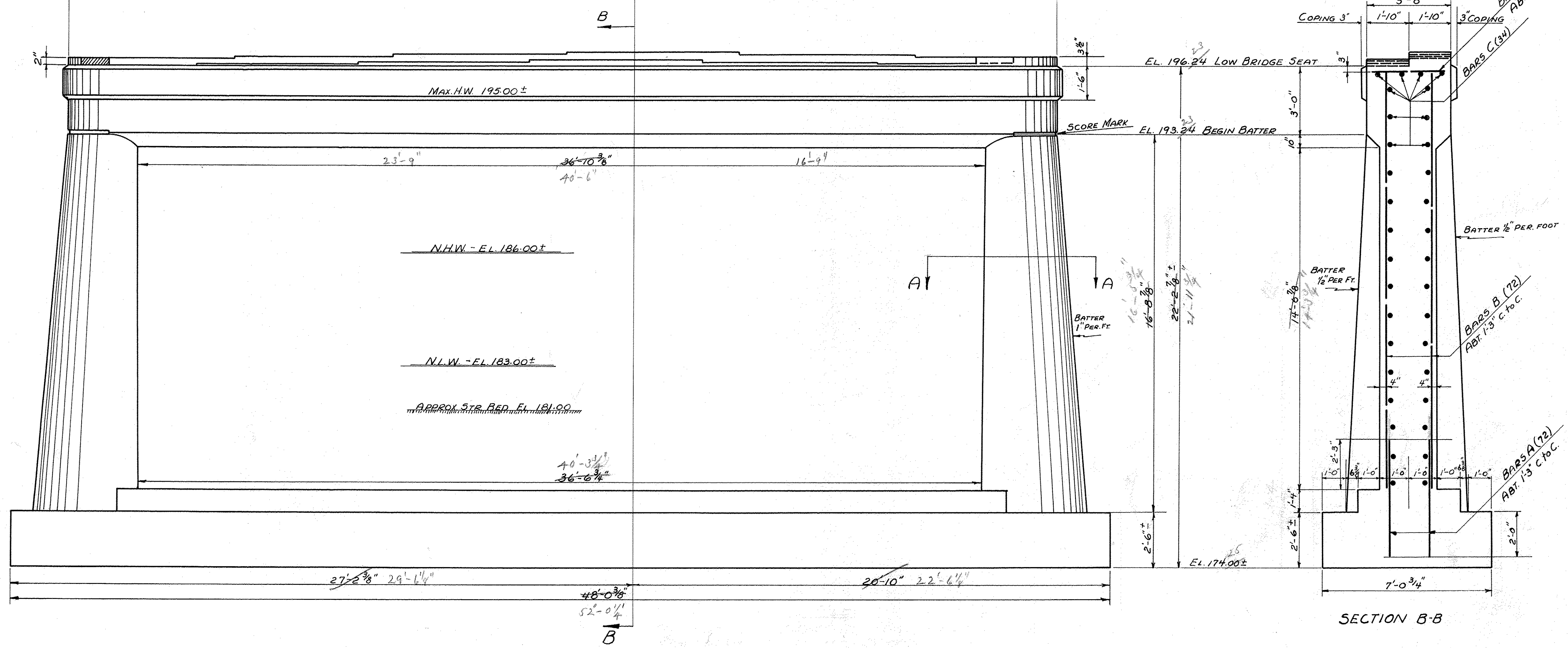
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Drawn by H.E.S.
Traced by H.W.S.
Checked by C.H.K.
Series 37, No. 199L, Filed
Sheet 2 of Sheets

FOOTING ELEV. IS APPROXIMATE.
FOOTINGS ON LEDGE. BOTTOM TO BE ABOUT 1'-0" BELOW TOP OF ORIGINAL LEDGE

DETAIL FOR RIP RAP TOE IN STREAM BED AND BANK. MODIFY WHERE LEDGE IS ENCOUNTERED.



TYPICAL SECTION A-A
SCALE: 1/2" = 1'-0"



FRONT ELEVATION

REINFORCING STEEL			
BAR SIZE	REQD.	TL	DETAIL
A	5/8"	72	5'-7" STRAIGHT
B	"	72	18'-2" "
C	1/2"	34	40'-0" "
D	5/8"	16	3'-3" "
E	3/8"	30	18'-0" BEND IN FIELD

SECTION B-B

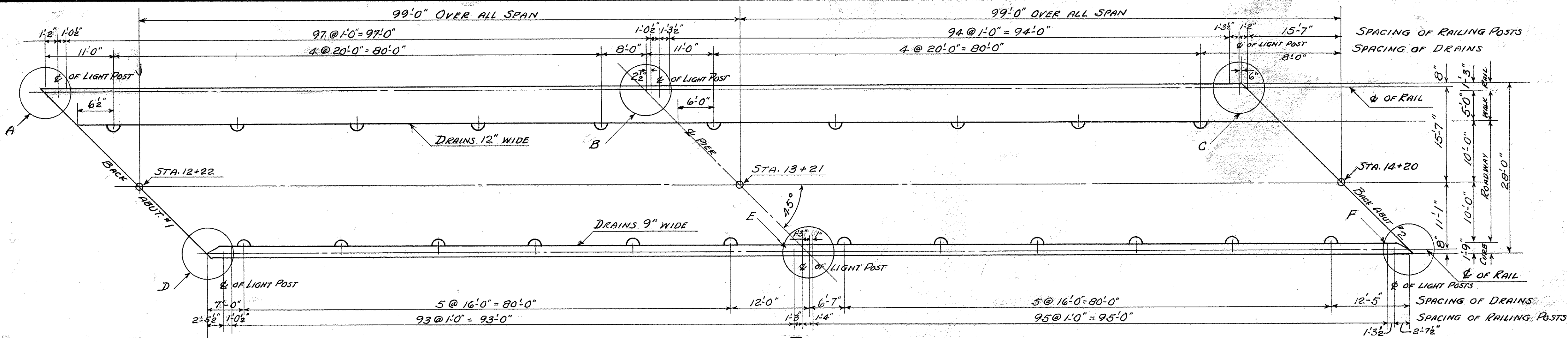
PIER DETAILS
MARKET BRIDGE
TUNBRIDGE
SCALE: 3/8" = 1'-0" EXCEPT AS NOTED

NOTES:-
BOTTOM OF FOOTINGS TO BE ON LEDGE, WHICH SHALL BE LEVELLED AT LEAST 6" BELOW ORIGINAL LEDGE SURFACE.
FOOTINGS MAY BE STEPPED IF AND AS DIRECTED BY THE ENGINEER.
FOOTINGS TO BE AT LEAST 2'-0" IN ANY CASE.

ESTIMATED QUANTITIES

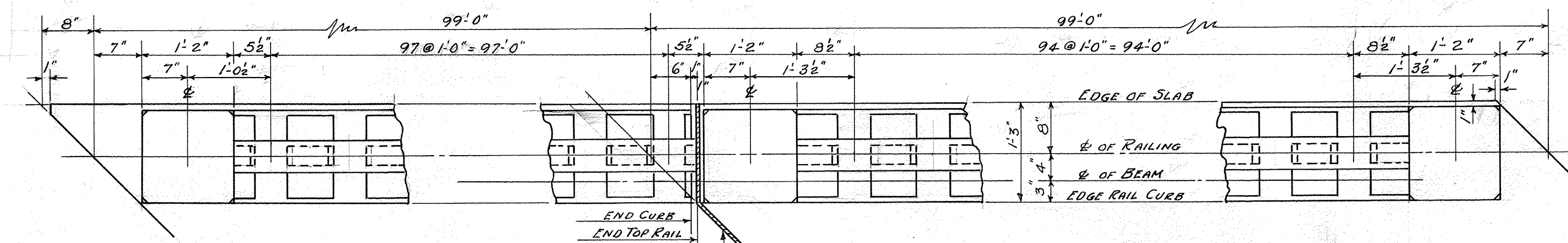
STRUCTURE EXCAV.	116 CY
CONCRETE CLASS "A"	120 CY
REINFORCING STEEL	2948 LBS.

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PLAN
SHOWING LAYOUT OF RAILING AND DRAINS
SCALE 1" = 10'-0"

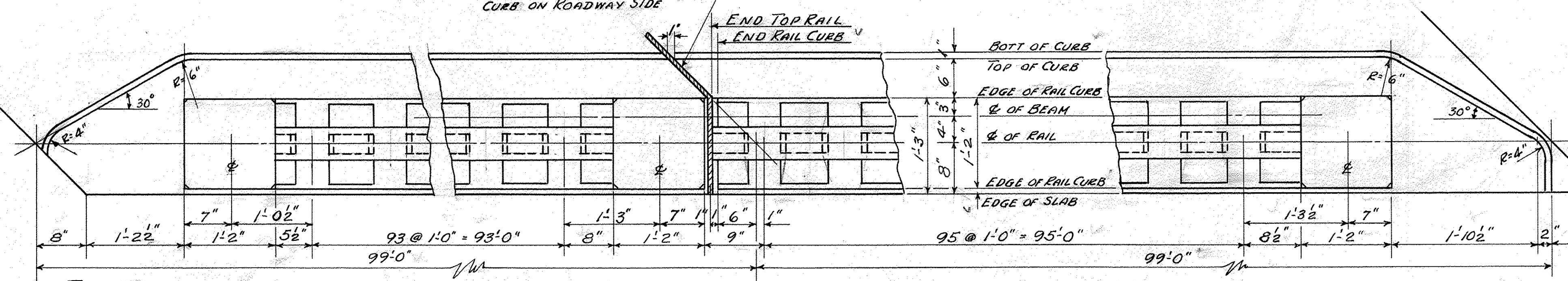
REINFORCING STEEL				
BAR SIZE	REQD.	T.L.	DETAIL	
R1 5"φ	8	200	5'-0"	
R2 5"φ	32	263		STRAIGHT
R3 3"φ	4	384	6'-3"	
R4 3"φ	4	24	4'-6"	
R5 3"φ	4	20	19'-8"	STRAIGHT-CUT TO FIT AS NECESSARY



PLAN DETAIL AT A

PLAN DETAIL AT B

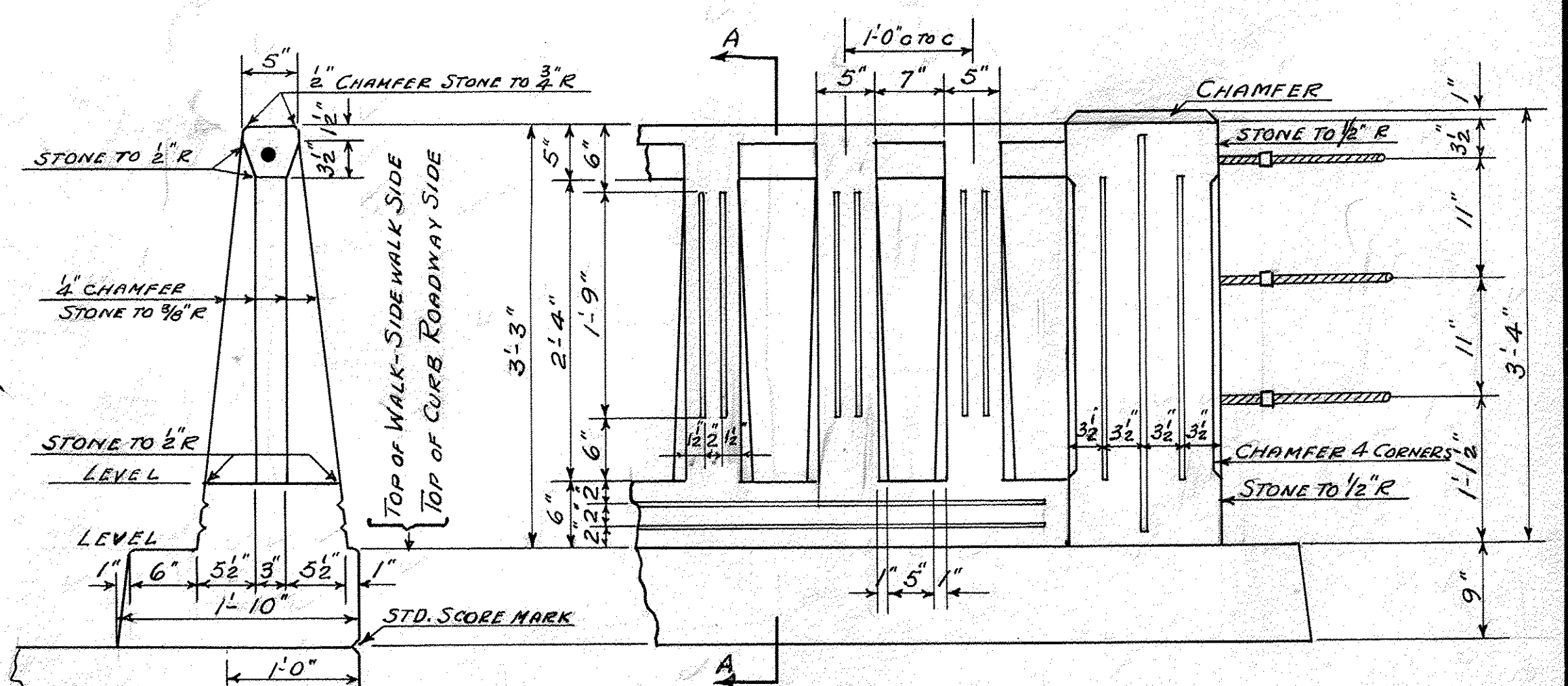
PLAN DETAIL AT C



PLAN DETAIL AT D

PLAN DETAIL AT E

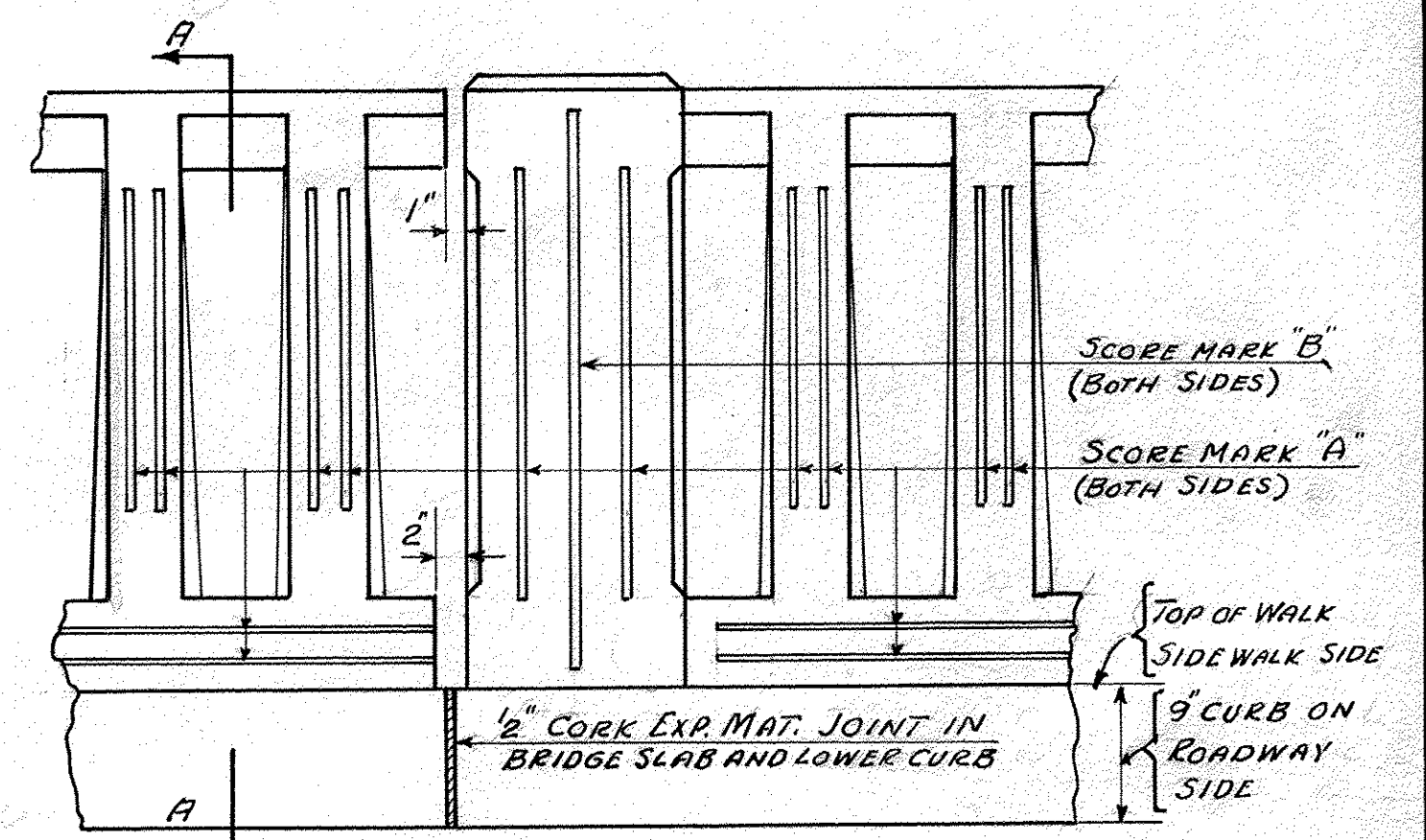
PLAN DETAIL AT F



SECTION A-A

INSIDE ELEVATION AT END POSTS
TYPICAL FOR POINTS A-C-D-F
SCORE MARKS AS SHOWN BELOW

DETAIL OF SCORE MARKS



INSIDE ELEVATION OVER PIER
DETAIL AT E SHOWN SIMILAR AT B
FOR DIMENSIONS NOT GIVEN SEE PLAN DETAILS AND ELEVATION ABOVE.

RAILING AND DRAINAGE DETAILS
MARKET BRIDGE
TUNBRIDGE
SCALE 1" = 1'-0" EXCEPT NOTED.

NOTES:-

PAYMENT FOR BALUSTRADE RAIL SHALL INCLUDE:- CABLE FASTENERS AT END POSTS; CONCRETE CLASS A' A' FOR LIGHT POSTS, BALUSTERS, AND TOP RAIL; CONCRETE CLASS A' FOR RAIL CURB; RAIL STEEL (BARS R3-R4-R5); AND ALL LABOR AND OTHER MATERIALS INCIDENTAL TO THE INSTALLATION OF SAME.

QUANTITIES FOR CURB CONCRETE AND REINFORCING SHALL BE PAID FOR AT THE UNIT PRICE BID FOR CONCRETE CLASS A' AND REINFORCING STEEL.

DRAINS TO BE INSTALLED AS INDICATED.

WEIGHT OF RAIL AND POSTS (WITHOUT CURB) ABT. 187' LBS. ABT. 200' LBS.

WEIGHT OF CURB

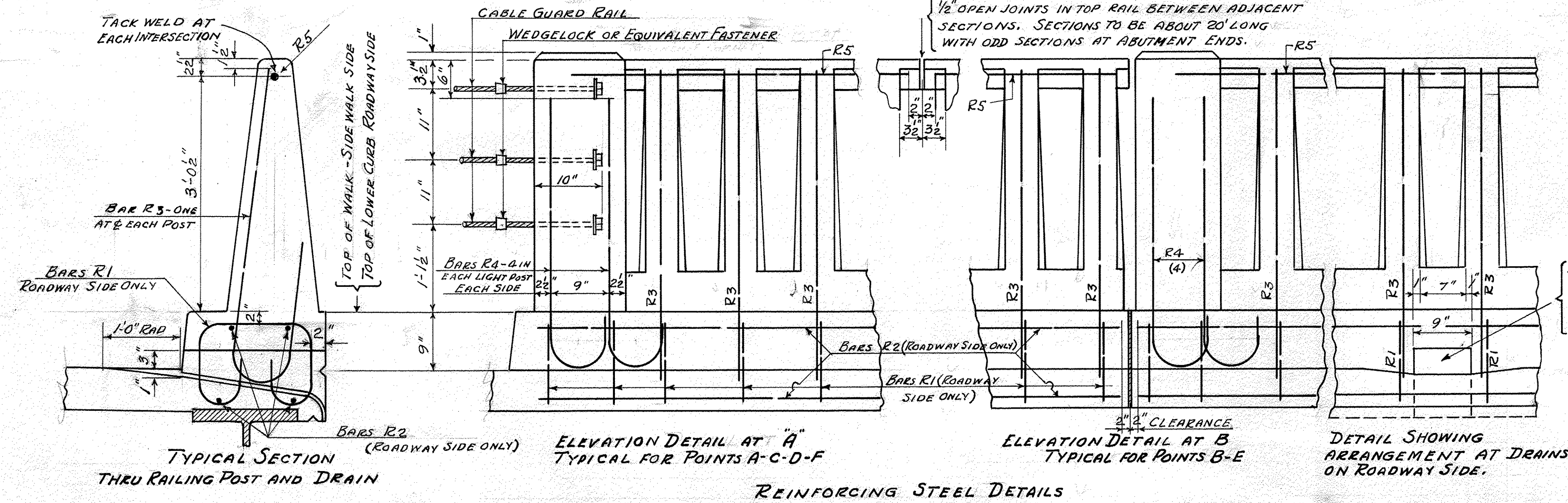
DRAINS ON ROADWAY SIDE 9" WIDE. DRAINS ON SIDEWALK SIDE TO BE INSTALLED AT EDGE OF ROADWAY UNDER SIDEWALK SLAB, EACH 10' WIDE

ALL DRAINS SIMILAR TO STD. DETAIL A' ON SHEET SB 20

ESTIMATED QUANTITIES

BALUSTRADE RAIL	391	L.F.
CONCRETE CLASS A' (FOR LOWER CURB)	9.6	C.Y.
REINF. STEEL	"	"

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Drawn by H.E.S.
Checked by D.W.P.
Checked by C.H.R.
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Sheet 6 of 17 Sheets



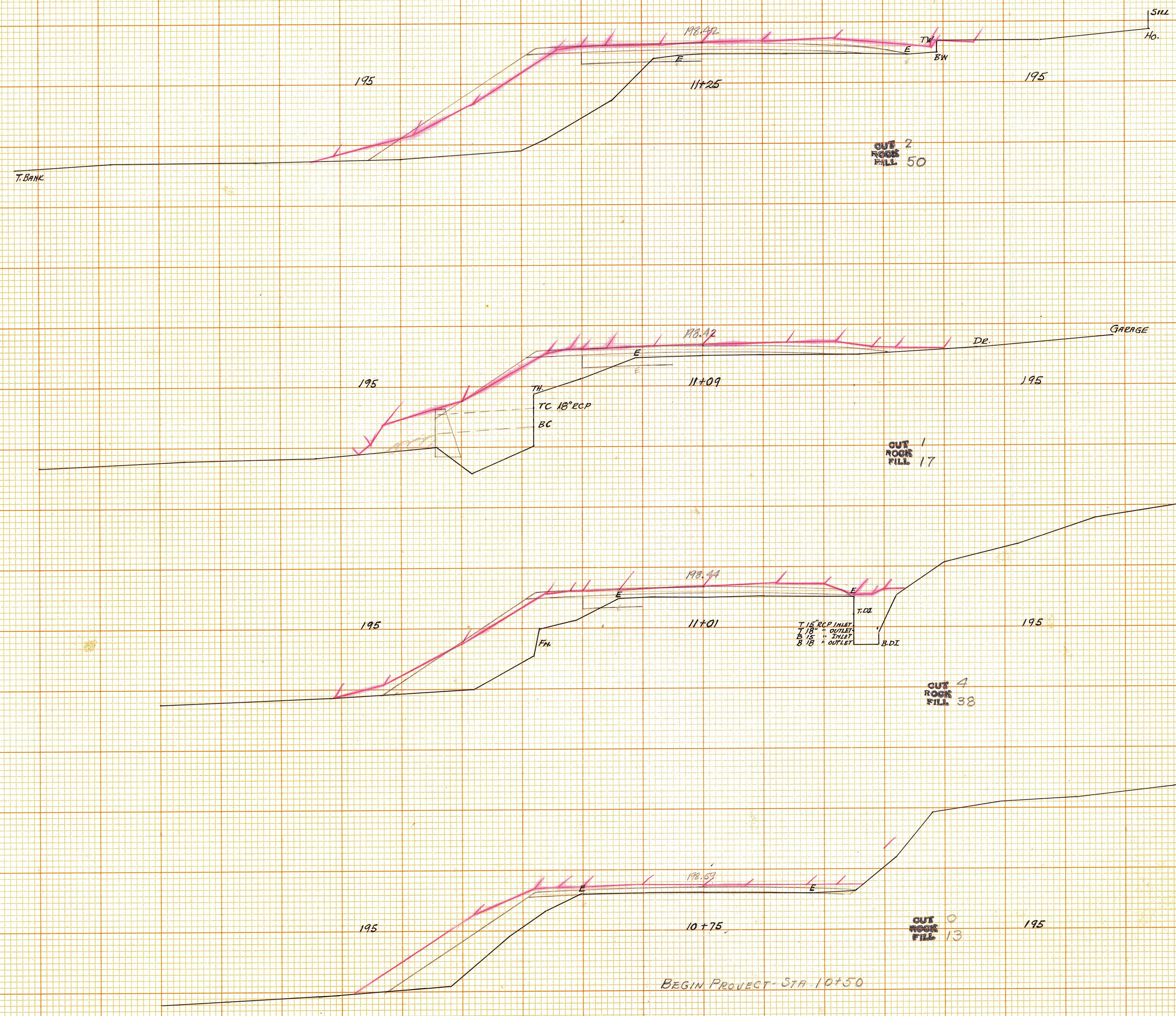
TYPICAL SECTION THRU RAILING POST AND DRAIN

ELEVATION DETAIL AT A
TYPICAL FOR POINTS A-C-D-F

ELEVATION DETAIL AT B
TYPICAL FOR POINTS B-E

DETAIL SHOWING ARRANGEMENT AT DRAINS ON ROADWAY SIDE.

REINFORCING STEEL DETAILS



MARKET BRIDGE
 TUNBRIDGE
 ST. 199L
 SHEET No. 12 OF 17

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK



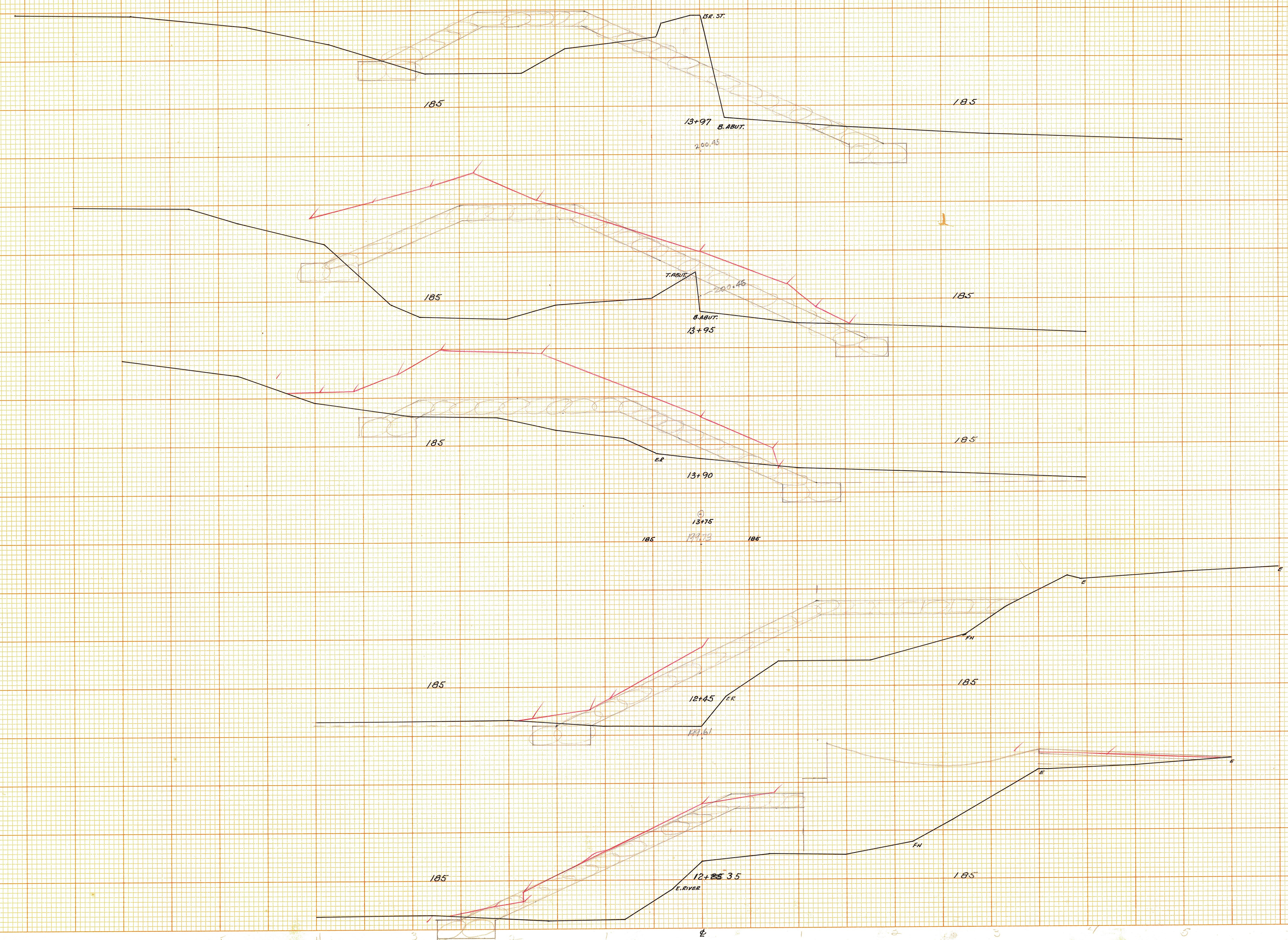
MARKET BRIDGE
TUNBRIDGE
ST. 199-L
SHEET No. 13 of 17

KEUFFEL & ESSER CO.
NEW YORK

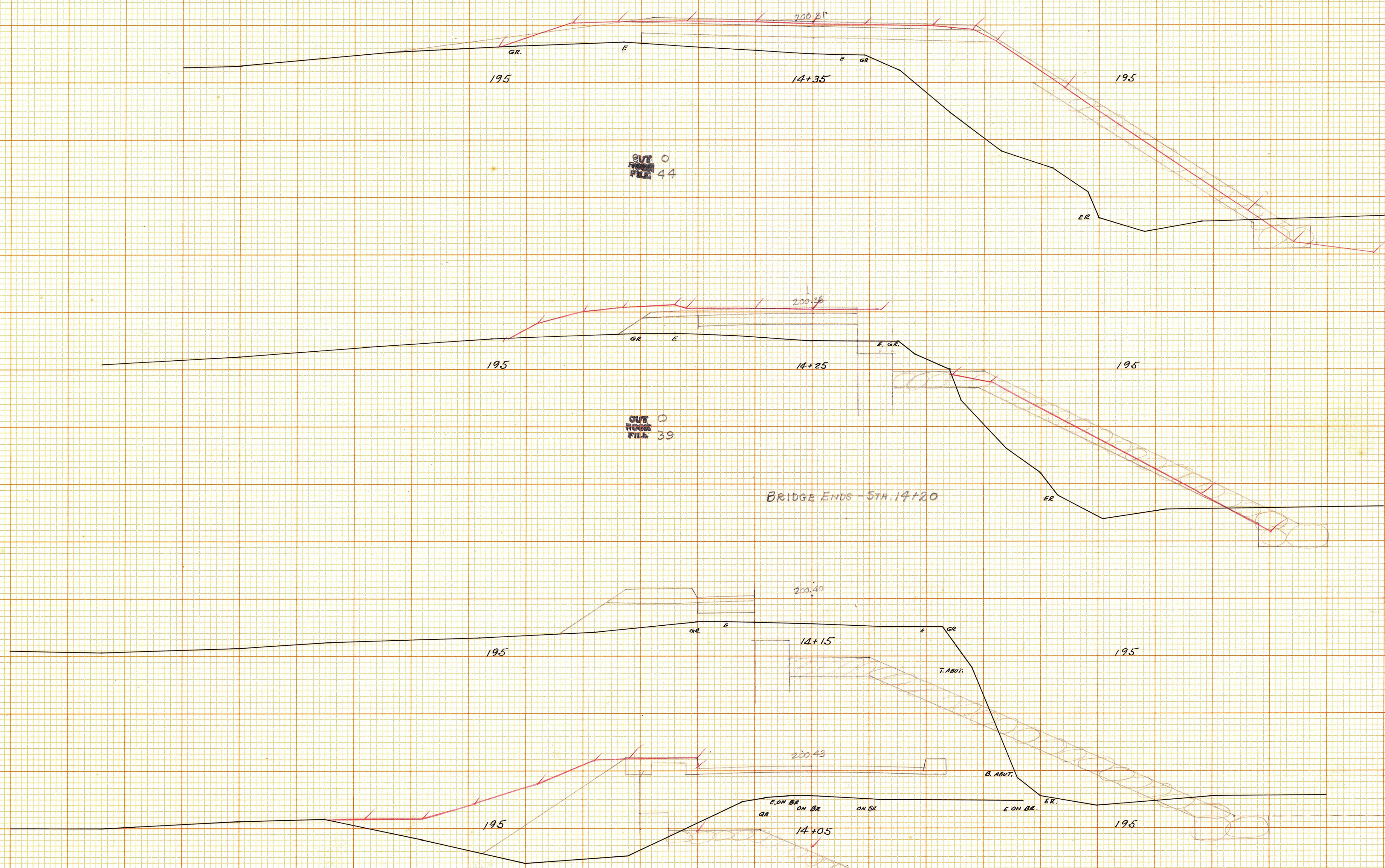
THREE STANDARD MARK
100% PURE
CROSS SECTION 10 X 10
MADE IN U.S.A.

KEUFFEL & ESSER CO.
NEW YORK

THREE STANDARD MARK
100% PURE
CROSS SECTION 10 X 10
MADE IN U.S.A.



MARKET BRIDGE
TUNBRIDGE
ST. 199-L
SHEET 14 OF 17



MARKET BRIDGE
TUNBRIDGE
ST. 199-L
SHEET 15 OF 17

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
MADE IN U.S.A.
KEUFFEL & ESSER CO.
NEW YORK

TRADE STANDARD MARK
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KEUFFEL & ESSER CO.
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NEW YORK



215	10	215
		18420
215		215
		18400
210		210
		17700
205		205
		16900
205		205
		16900

CONSTRUCT SATISFACTORY APPROACH

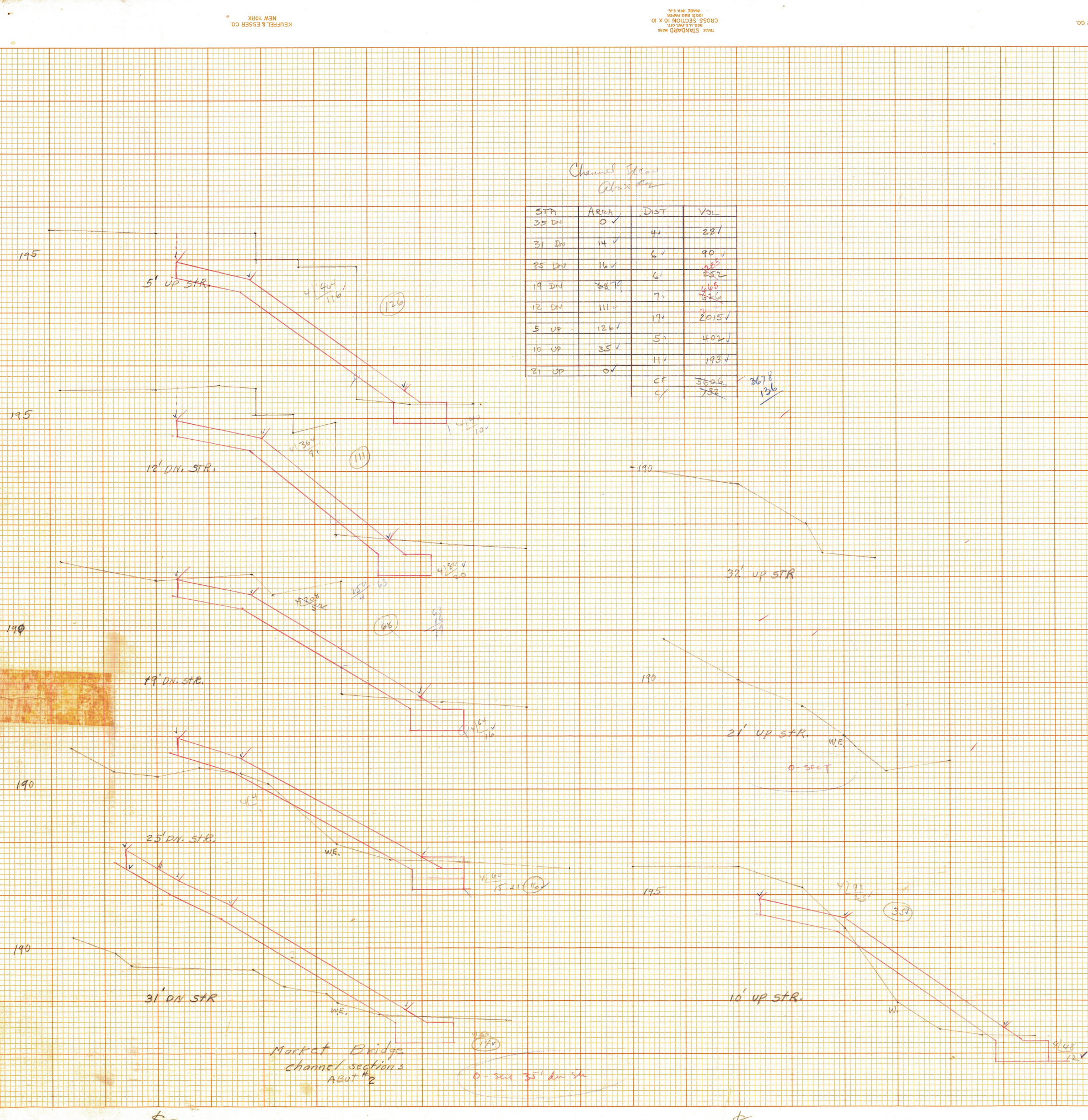
CONSTRUCT SATISFACTORY
SIDEROAD APPROACH

CUT
ROCK
FILE
3
34

CUT
ROCK
FILE
4
49

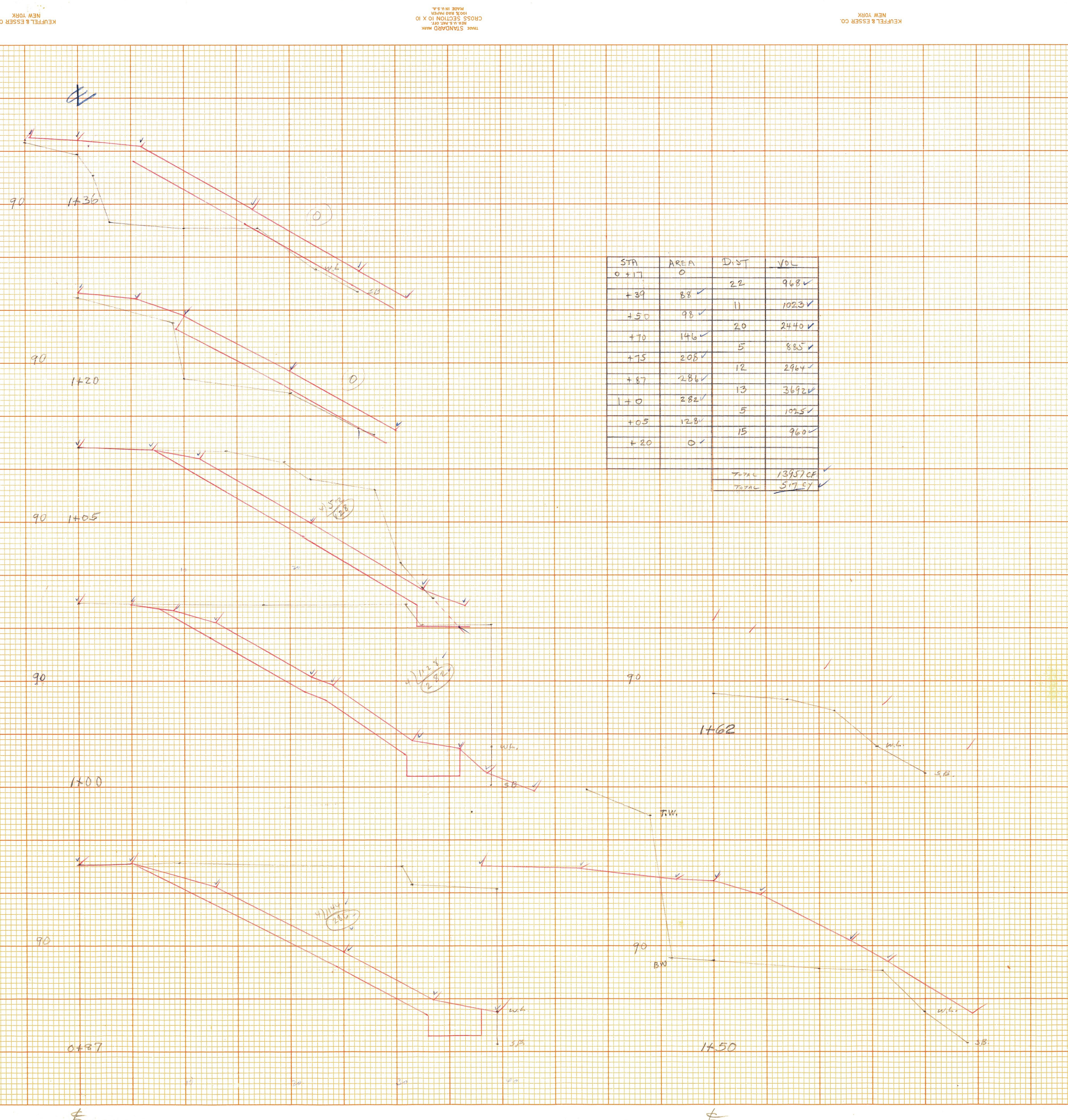
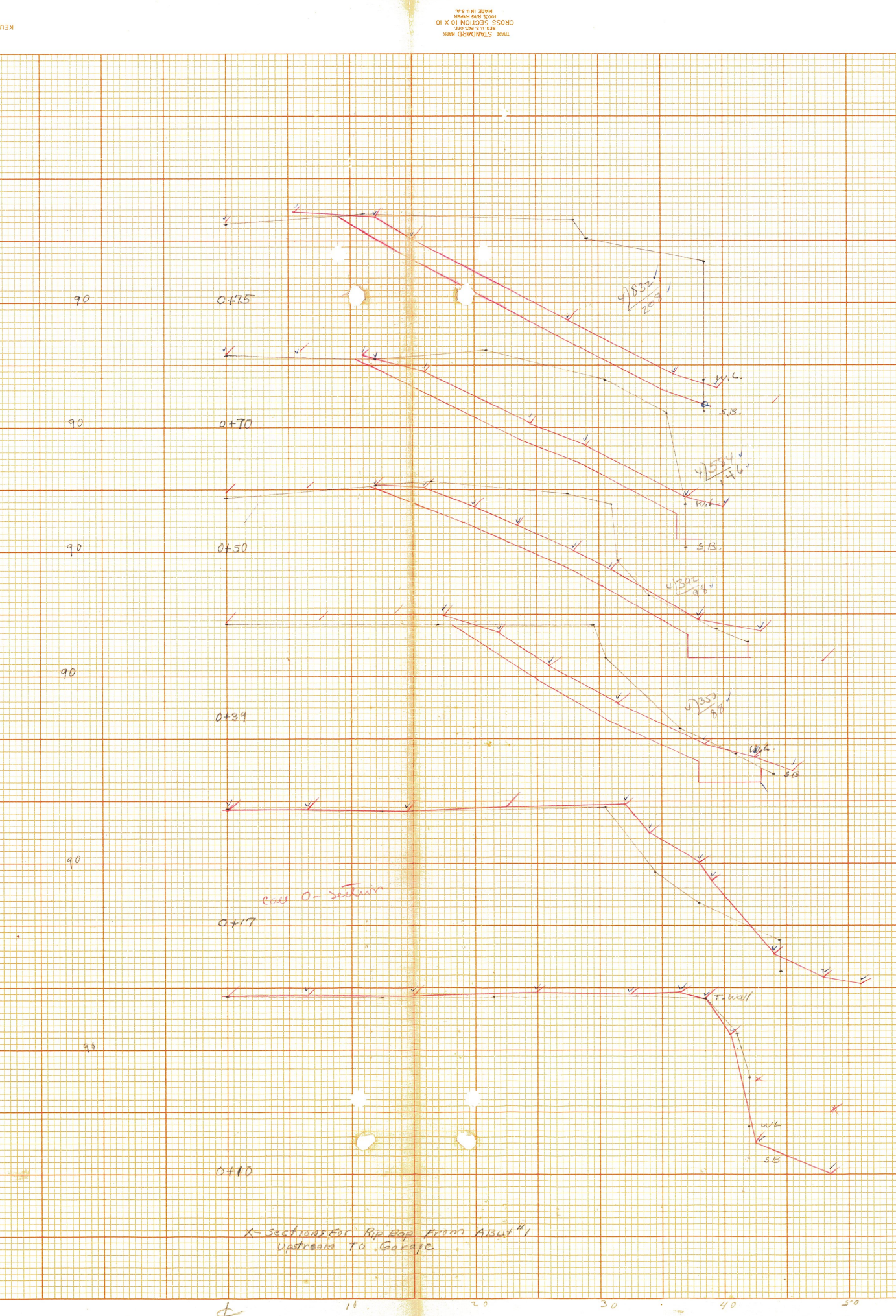
CUT
ROCK
FILE
6
56

8" TILE
RELAY AND EXTEND ET.



Channel Section

Sta	Area	Dist	Vol
15.00	0.7	0	0.00
15.25	1.4	25	0.04
15.50	2.1	50	0.10
15.75	2.8	75	0.21
16.00	3.5	100	0.35
16.25	4.2	125	0.53
16.50	4.9	150	0.73
16.75	5.6	175	0.98
17.00	6.3	200	1.26
17.25	7.0	225	1.58
17.50	7.7	250	1.92
17.75	8.4	275	2.29
18.00	9.1	300	2.70

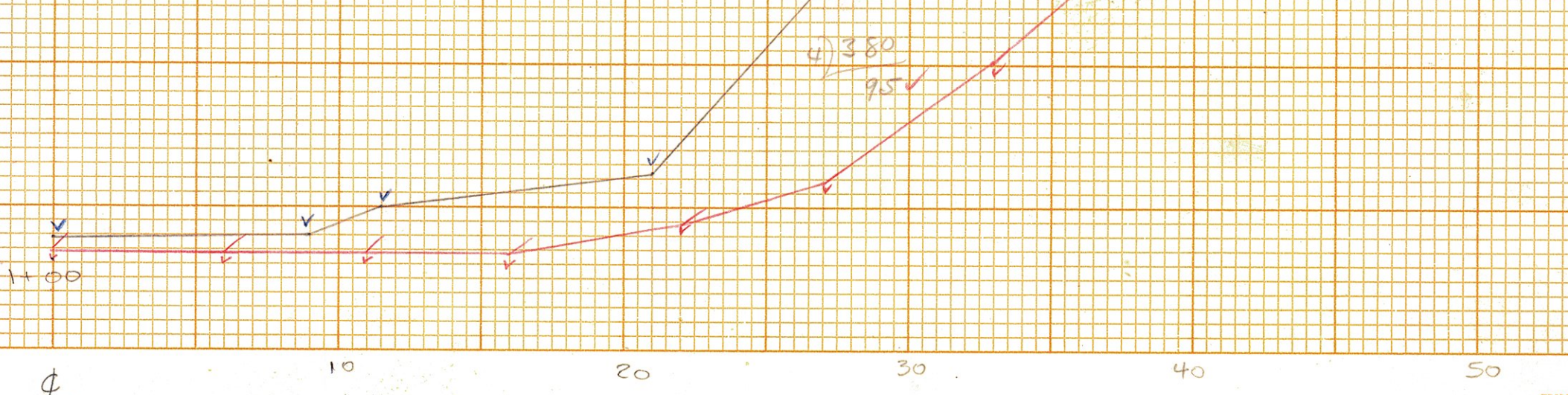
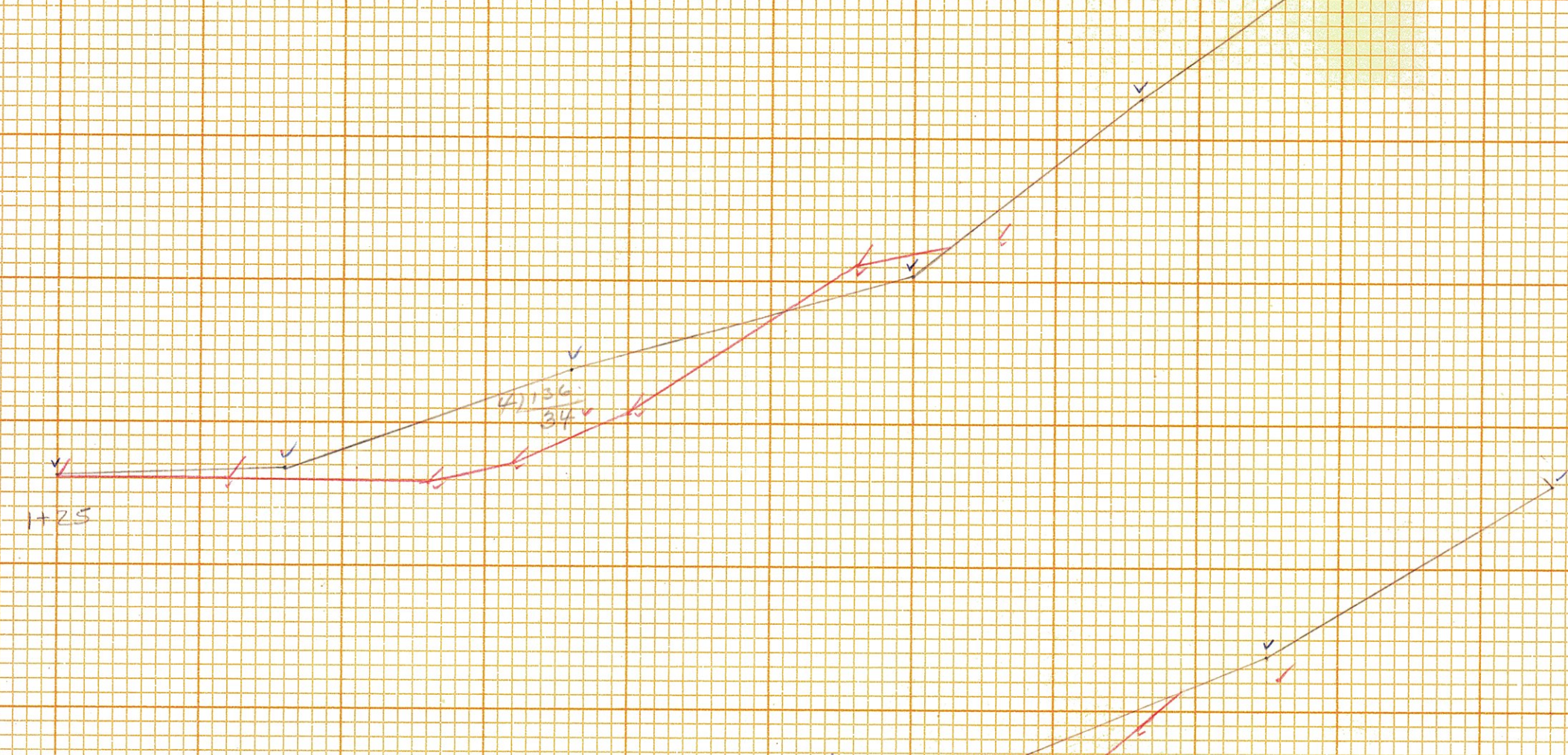
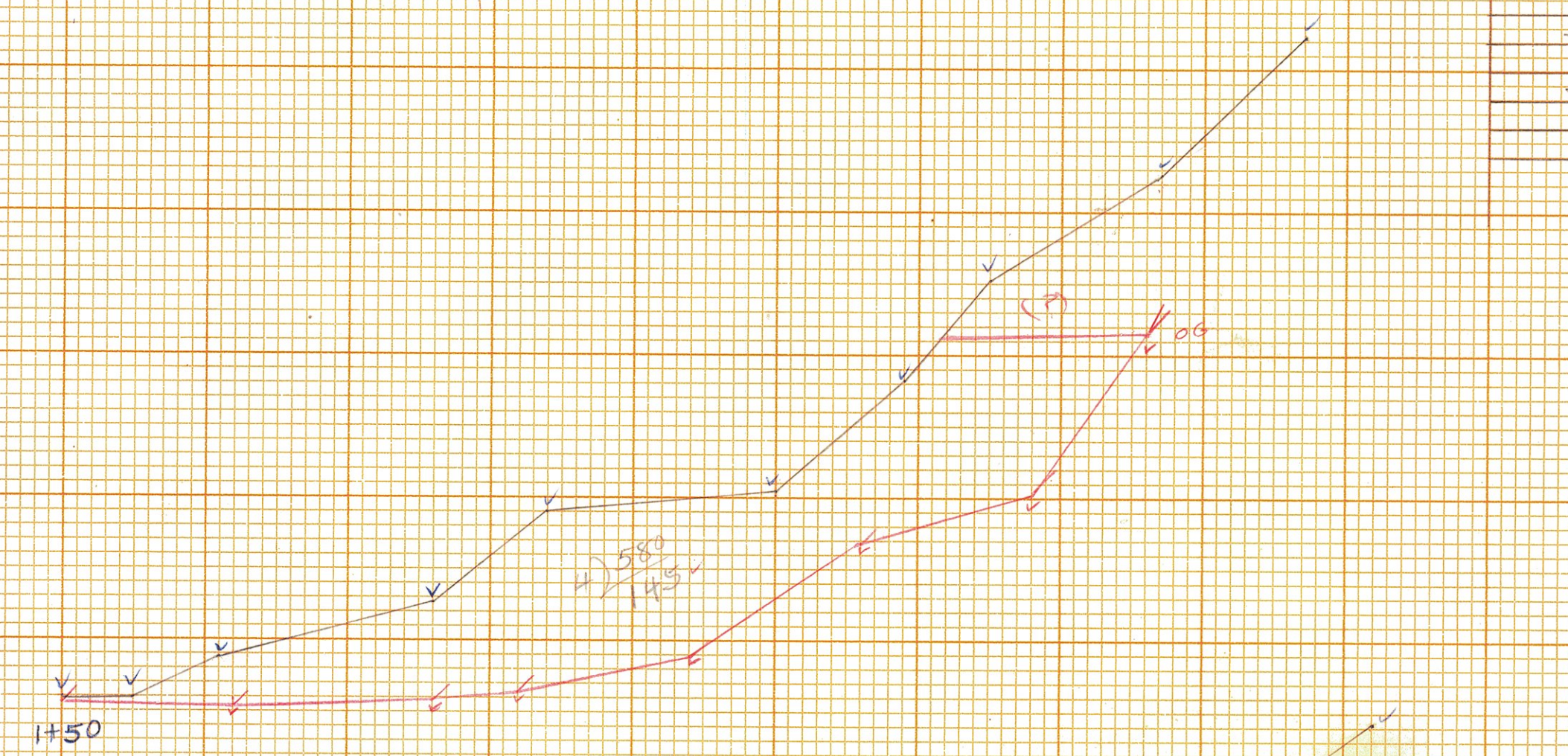
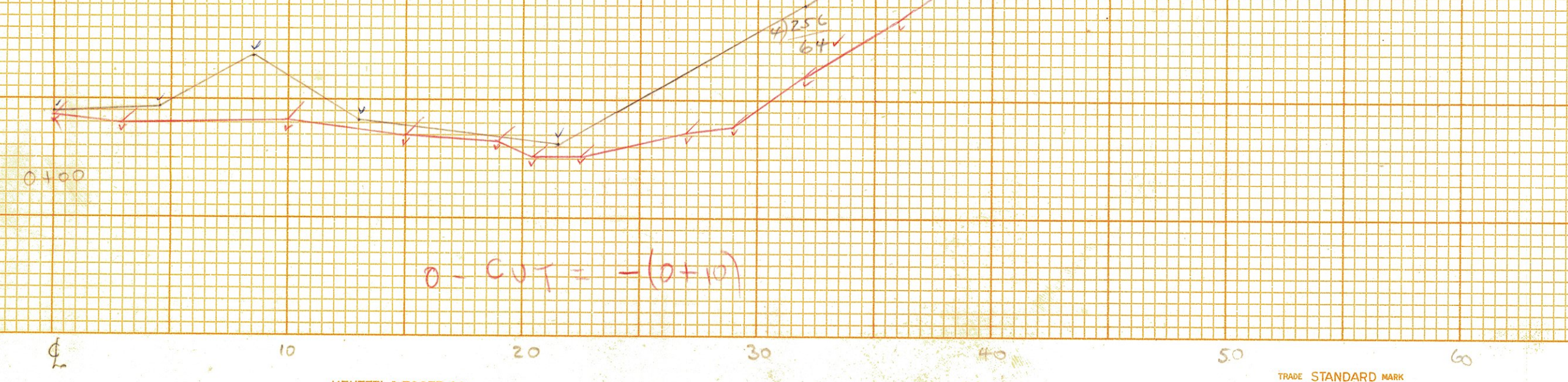
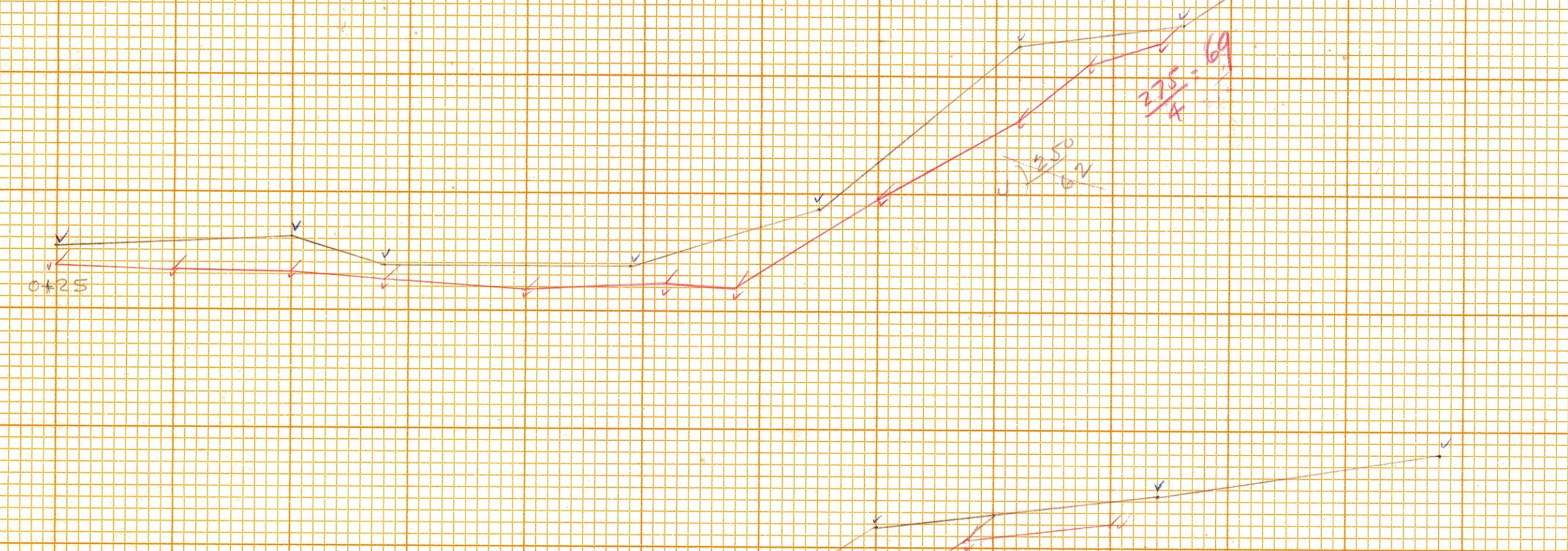
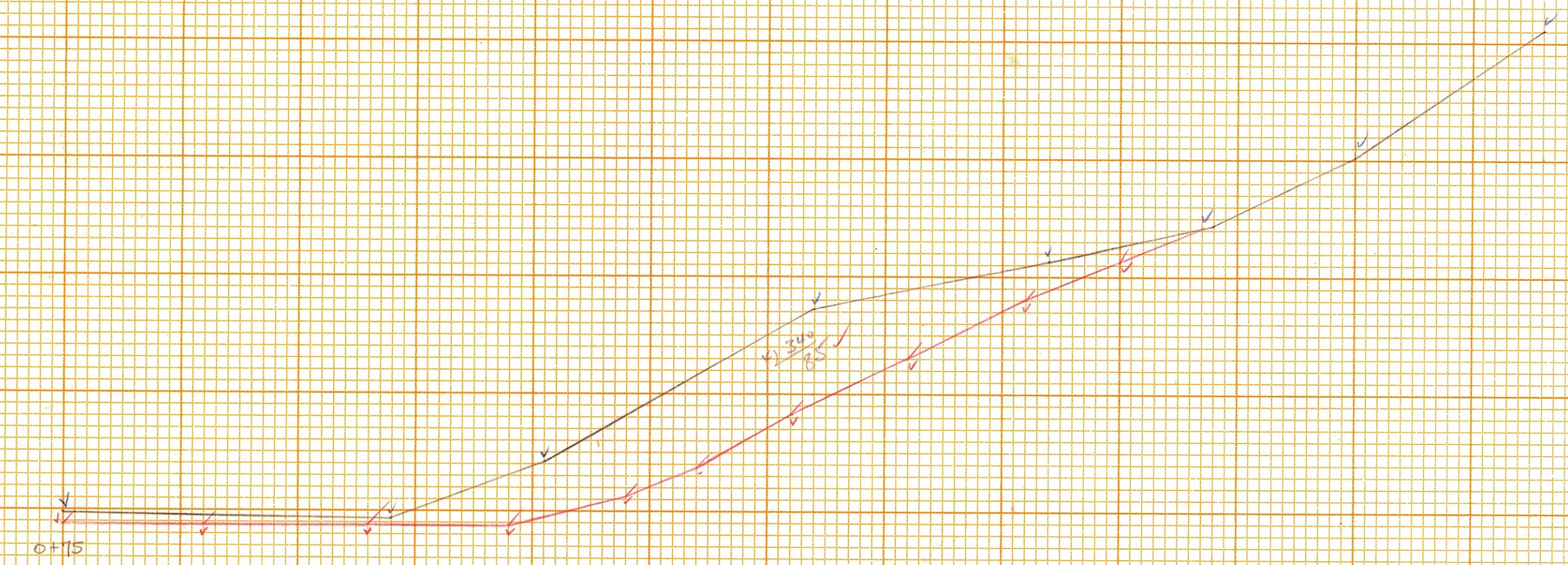


Sta	Area	Dist	Vol
27.00	0.7	0	0.00
27.25	1.4	25	0.04
27.50	2.1	50	0.10
27.75	2.8	75	0.21
28.00	3.5	100	0.35
28.25	4.2	125	0.53
28.50	4.9	150	0.73
28.75	5.6	175	0.98
29.00	6.3	200	1.26
29.25	7.0	225	1.58
29.50	7.7	250	1.92
29.75	8.4	275	2.29
30.00	9.1	300	2.70

Hayward Berrow Pt.

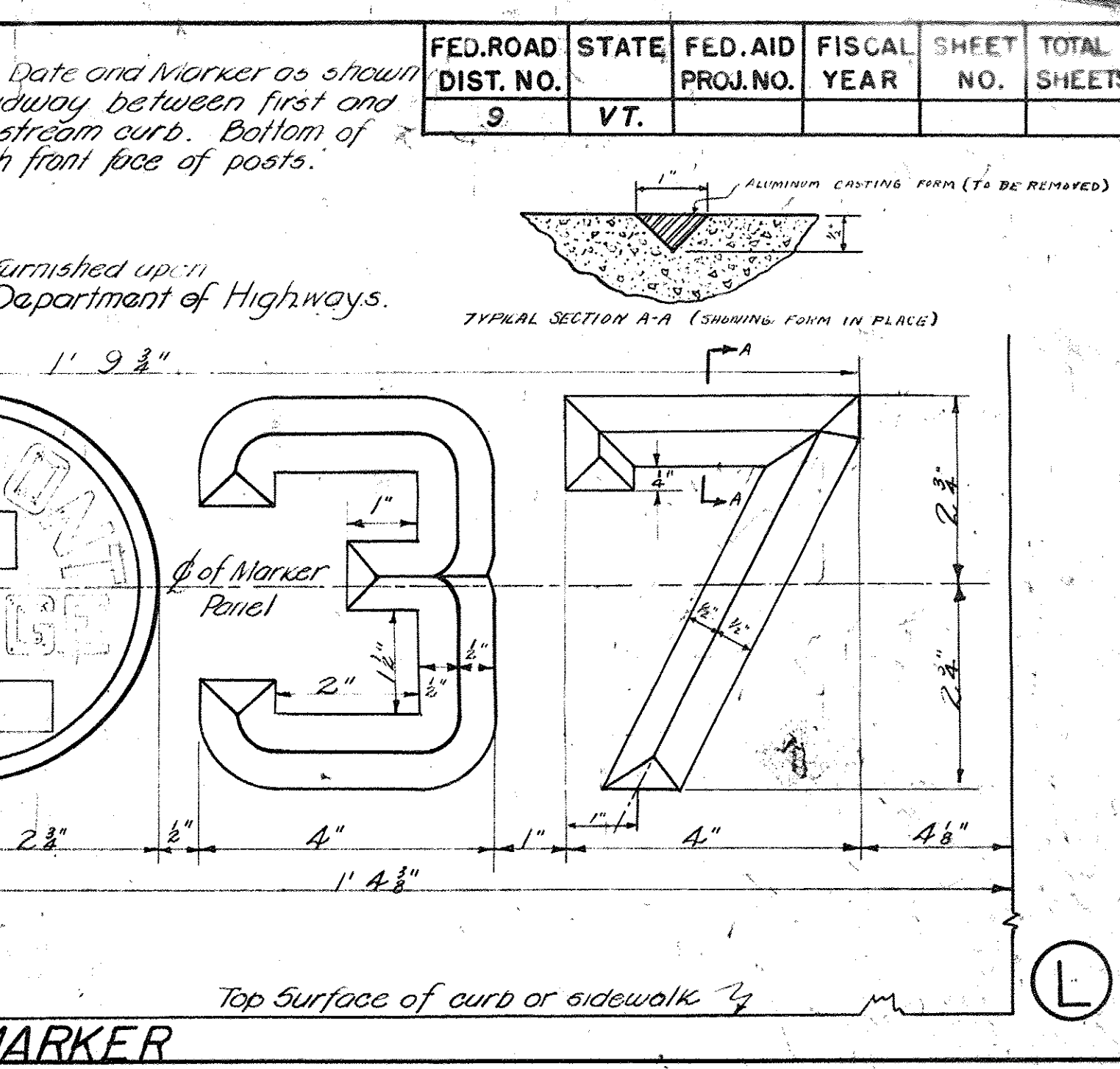
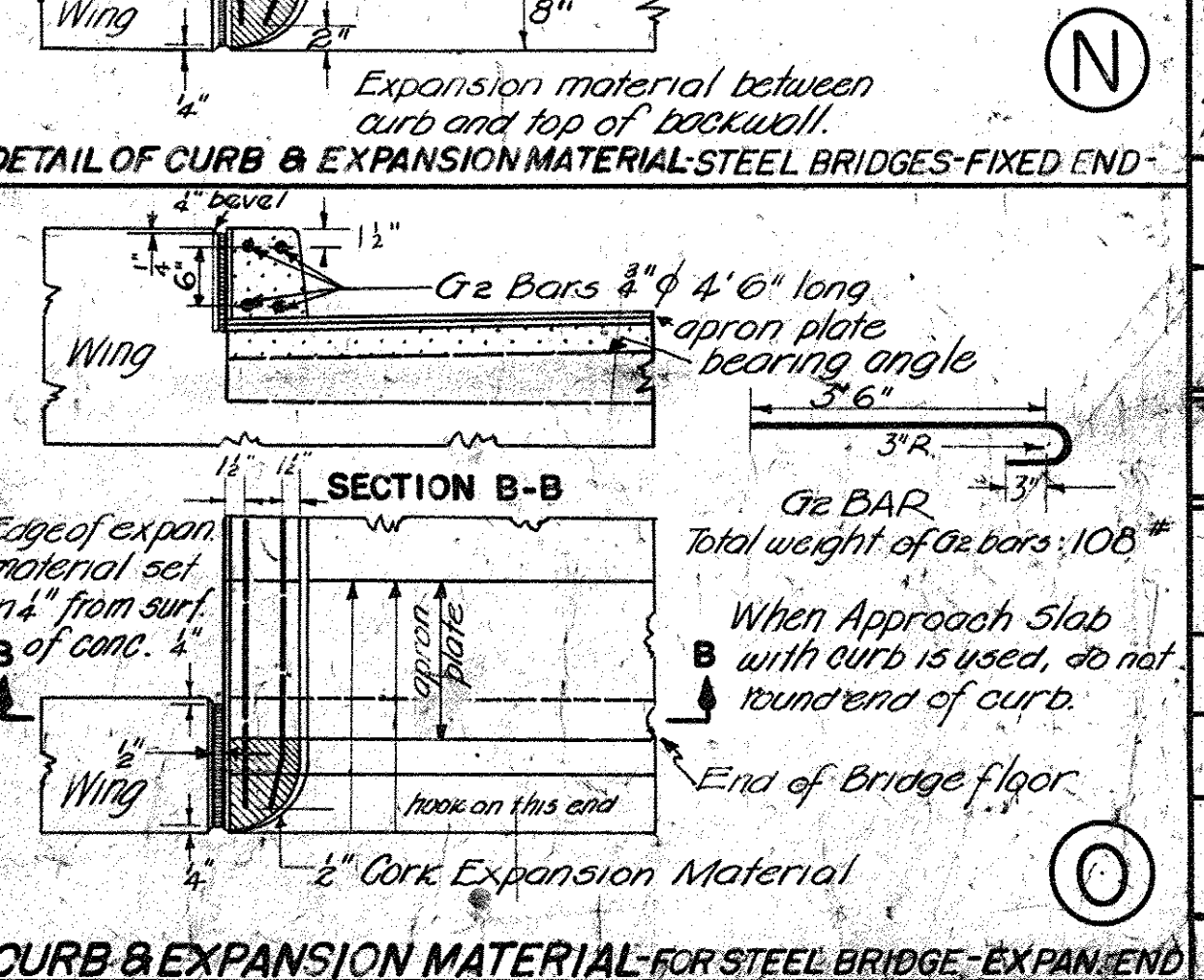
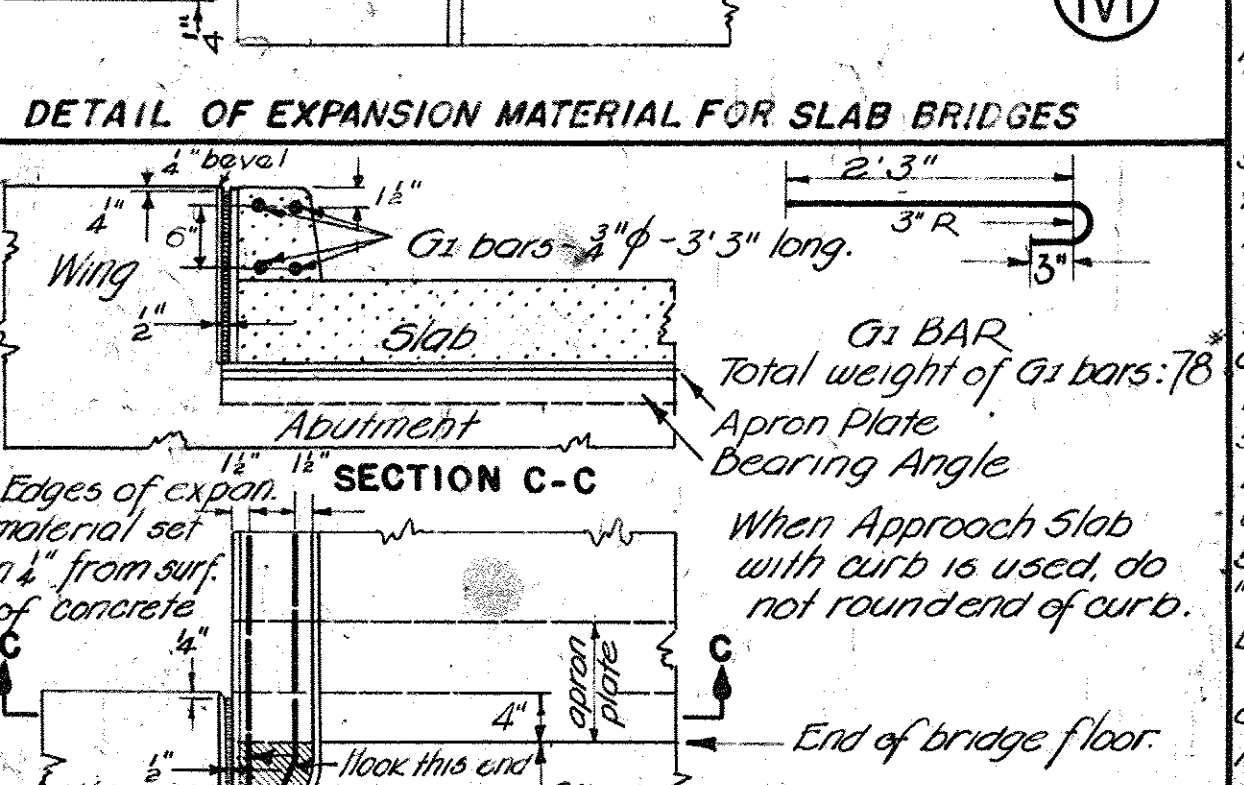
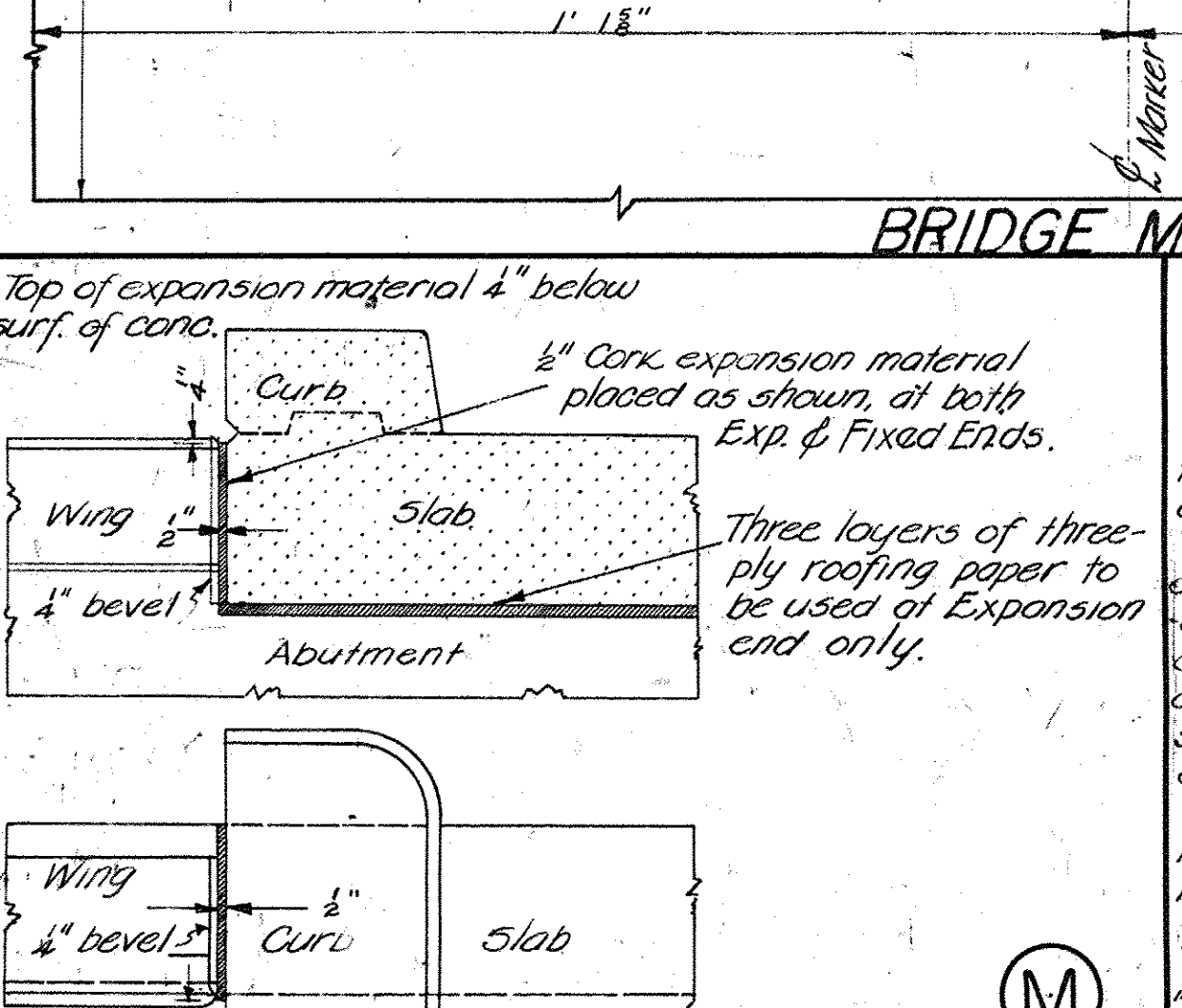
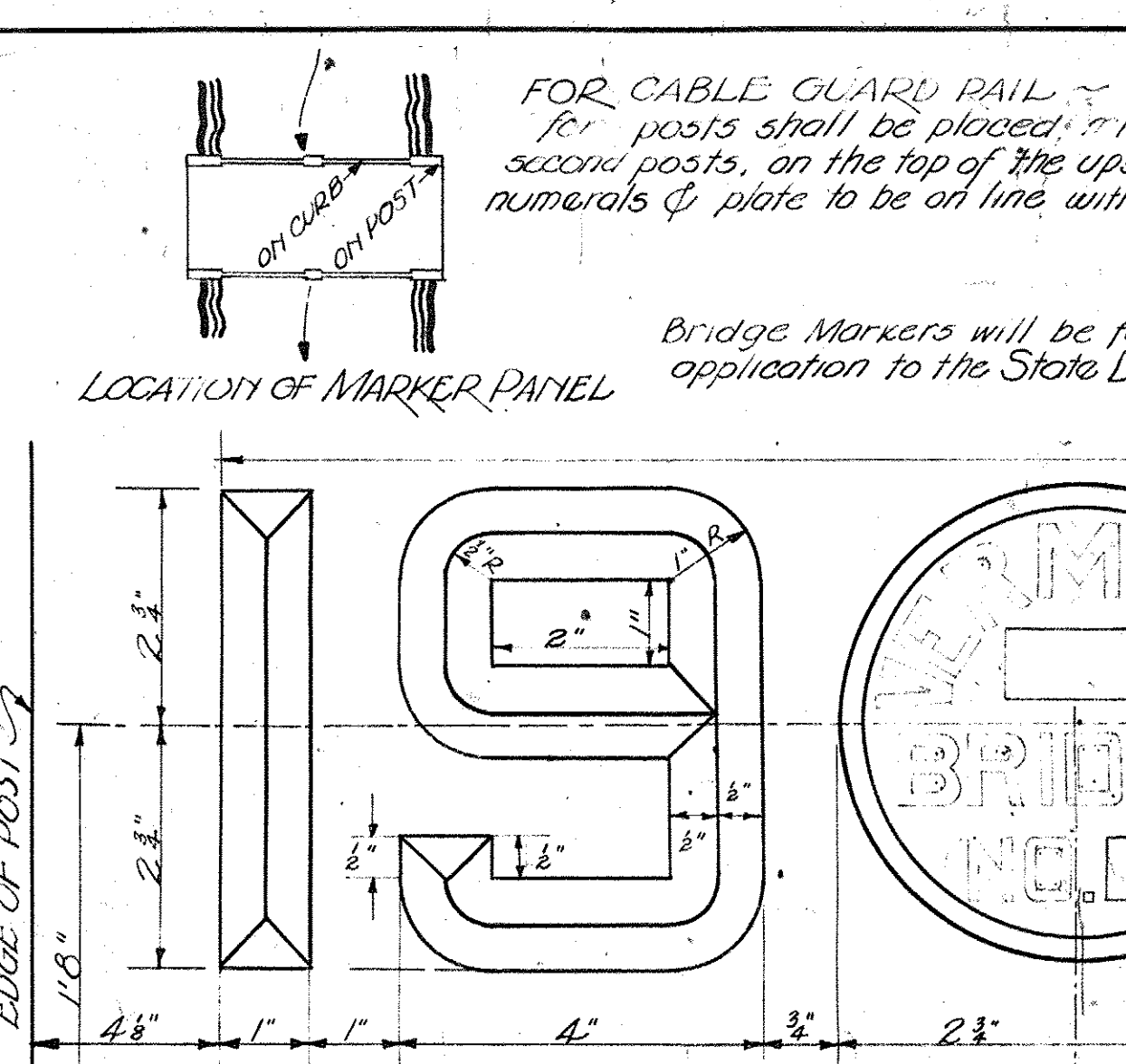
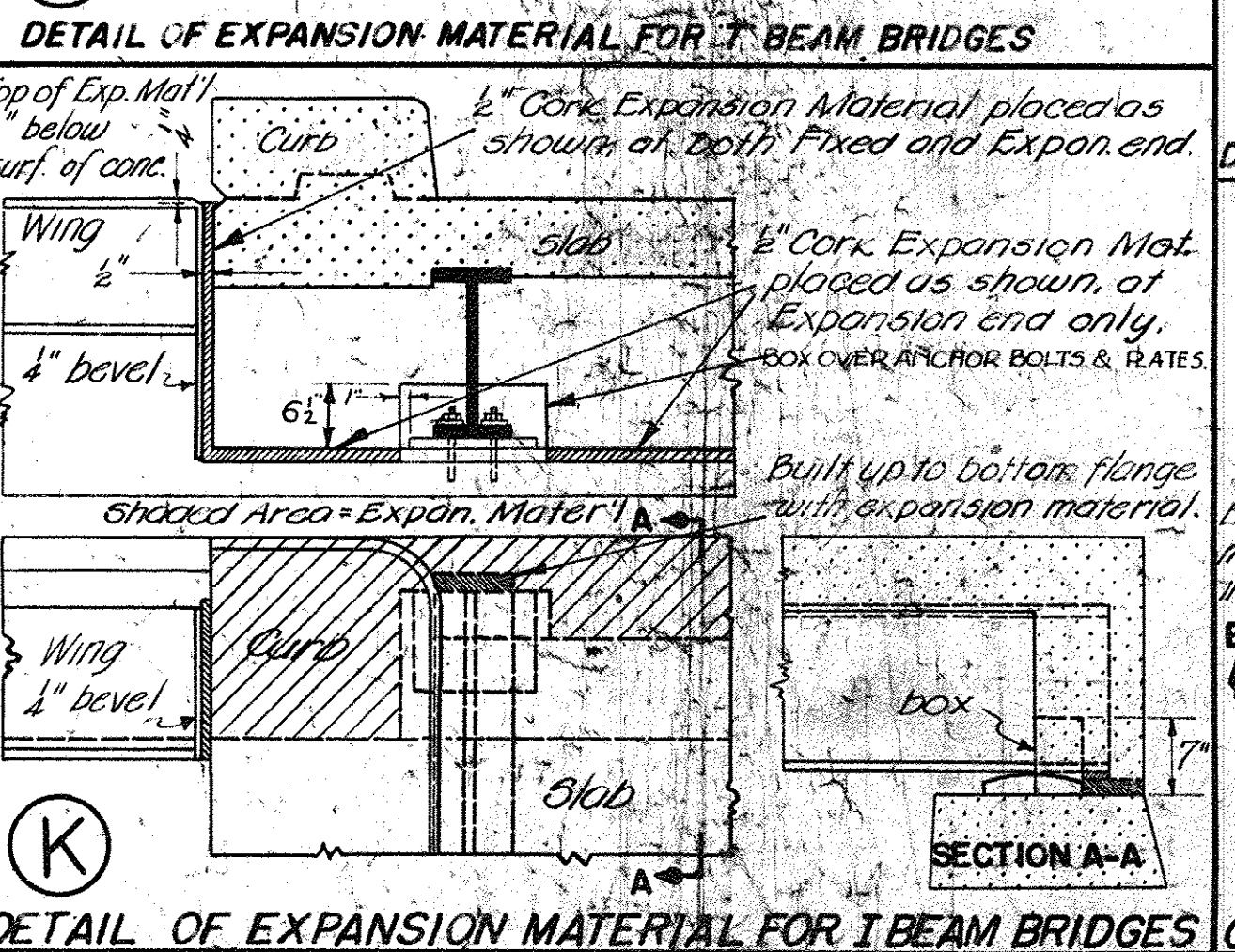
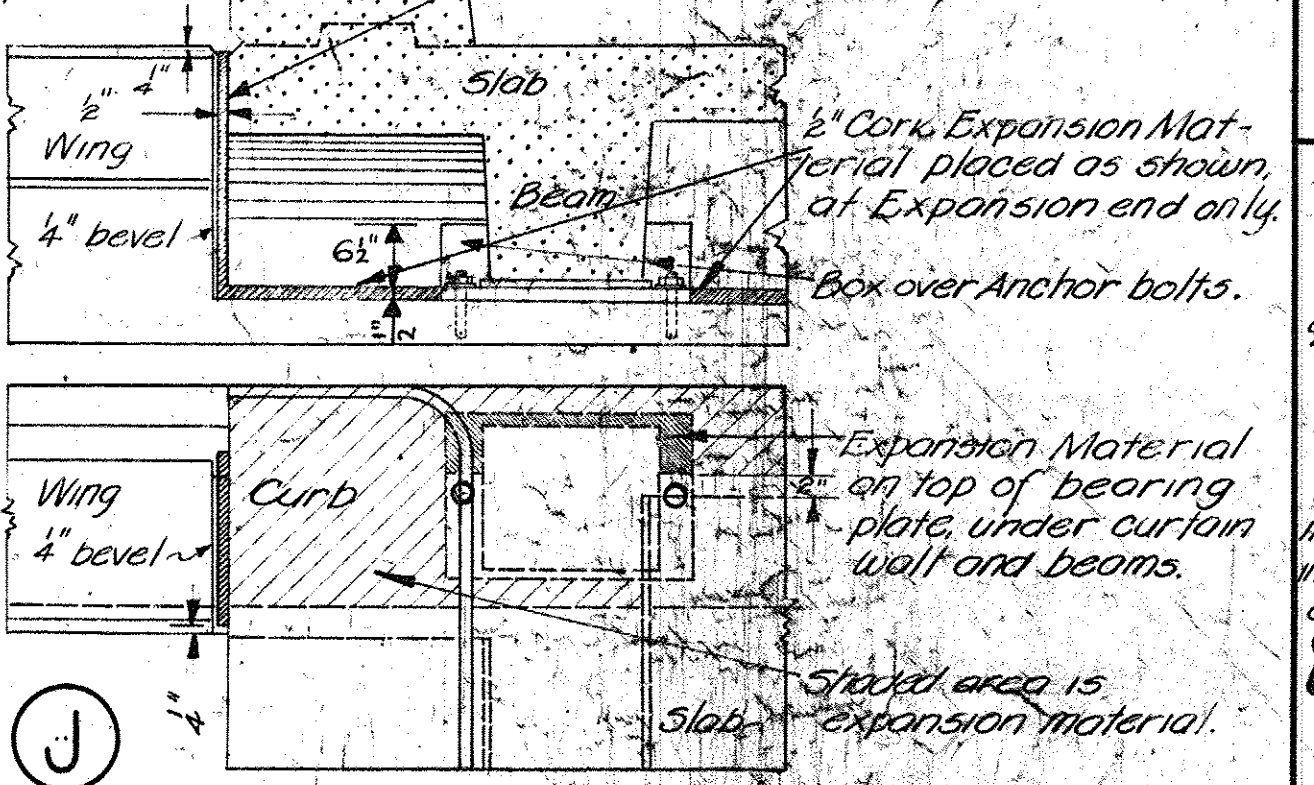
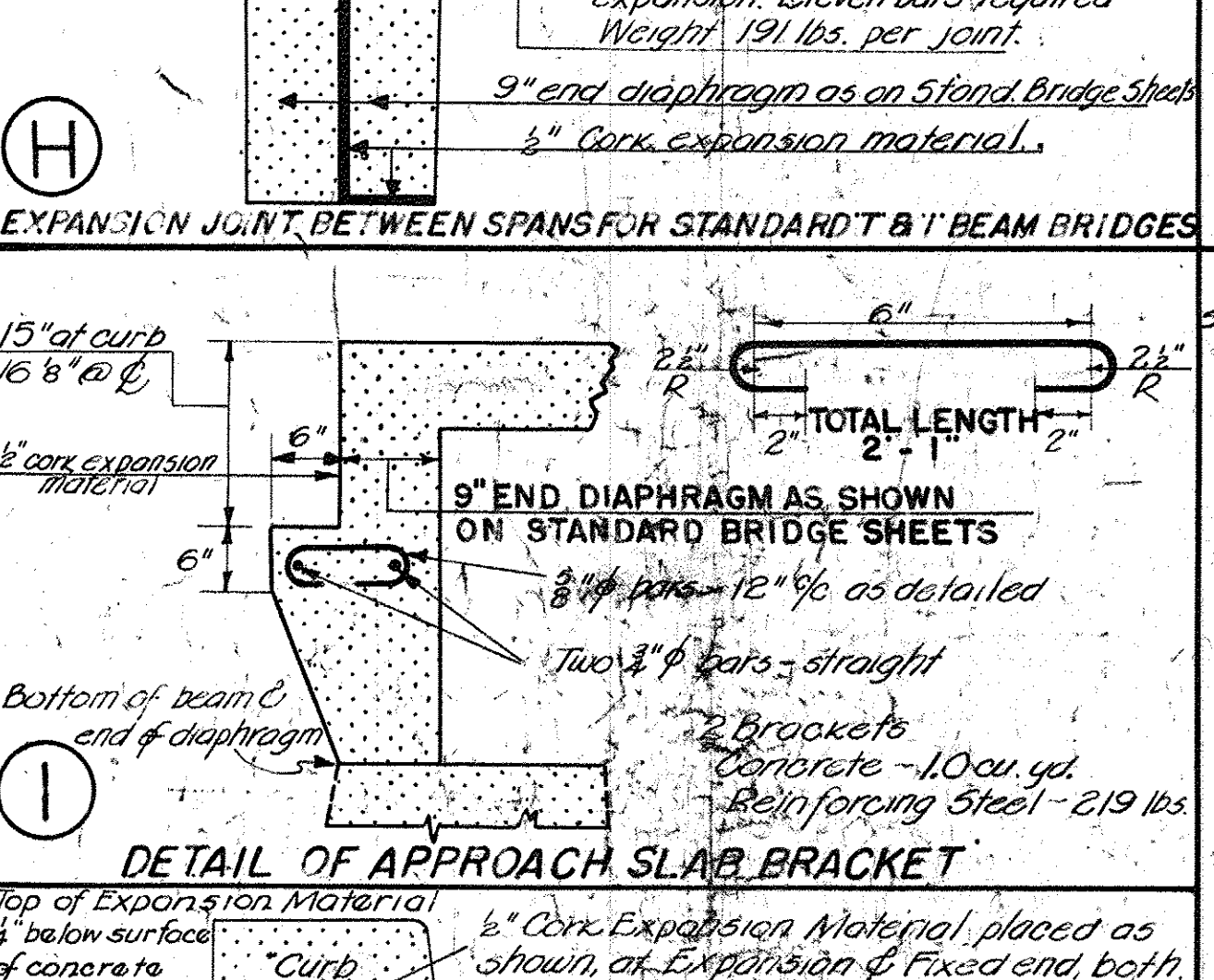
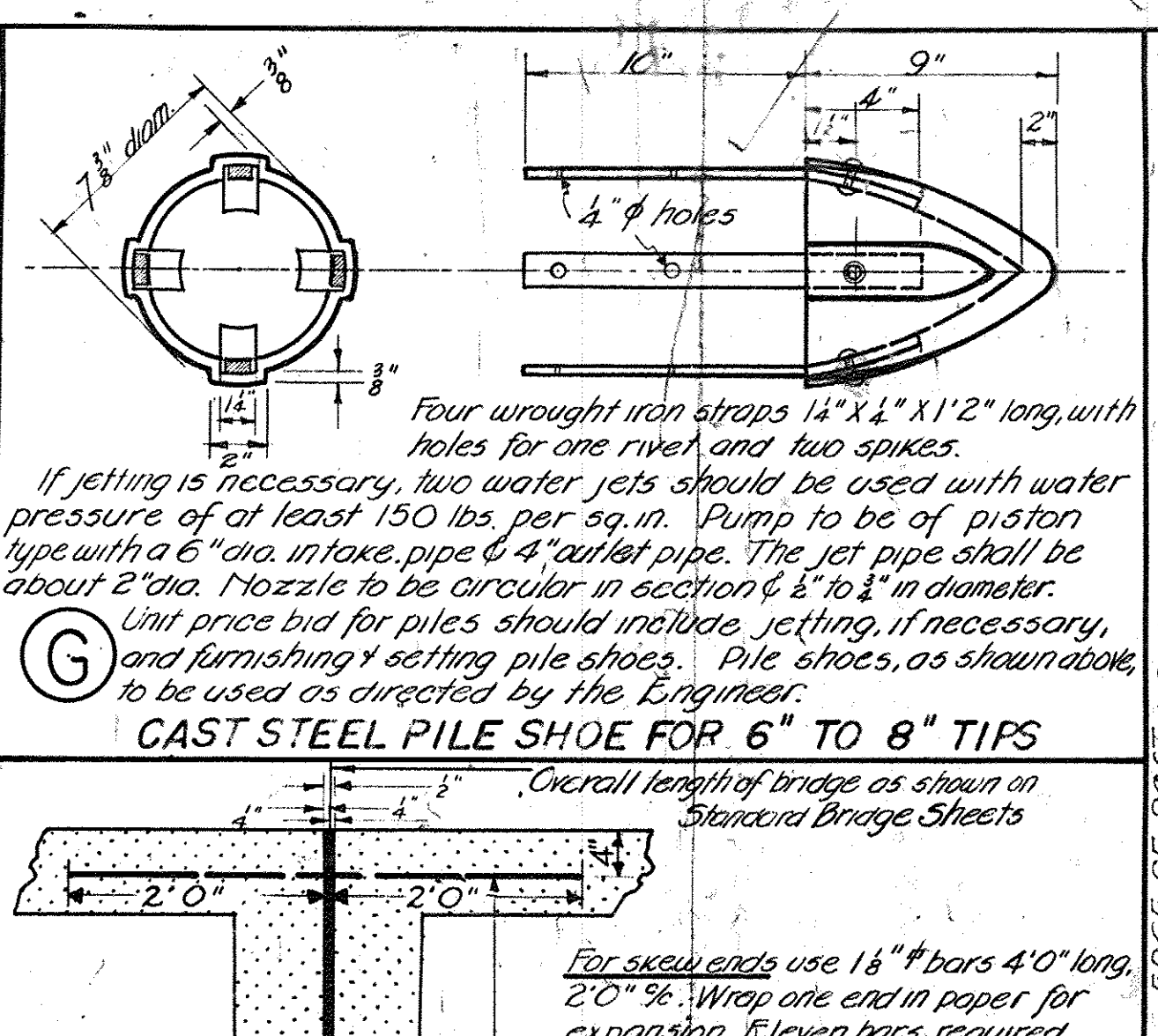
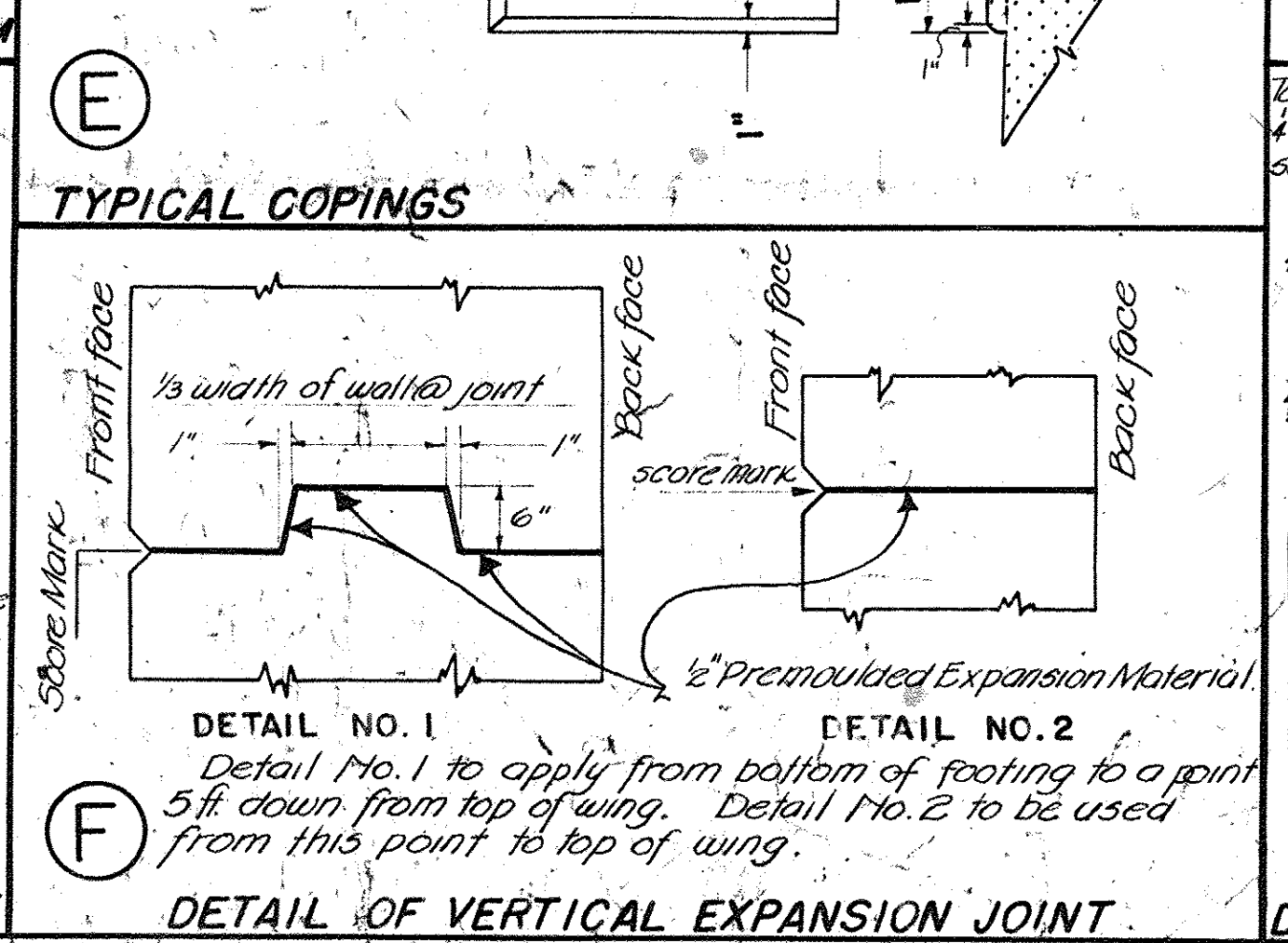
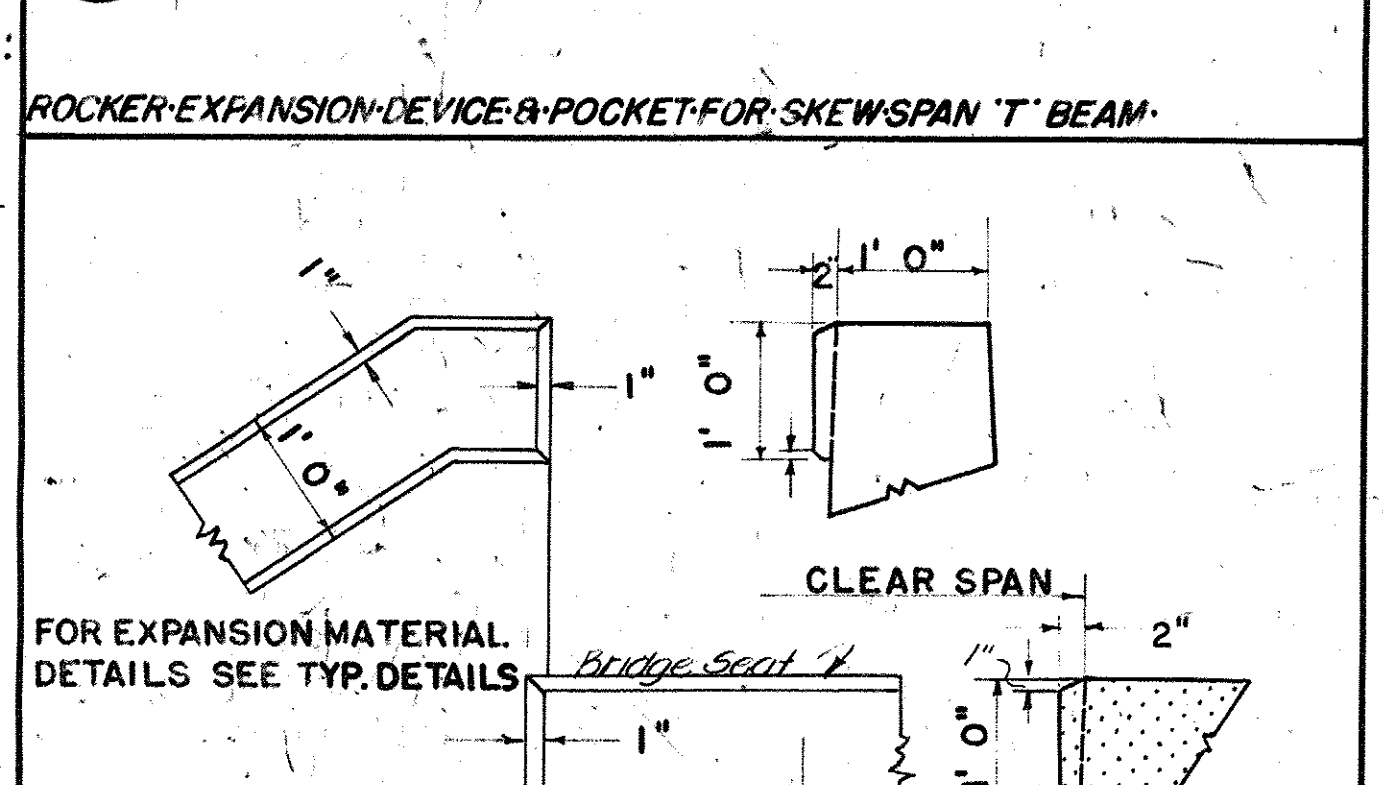
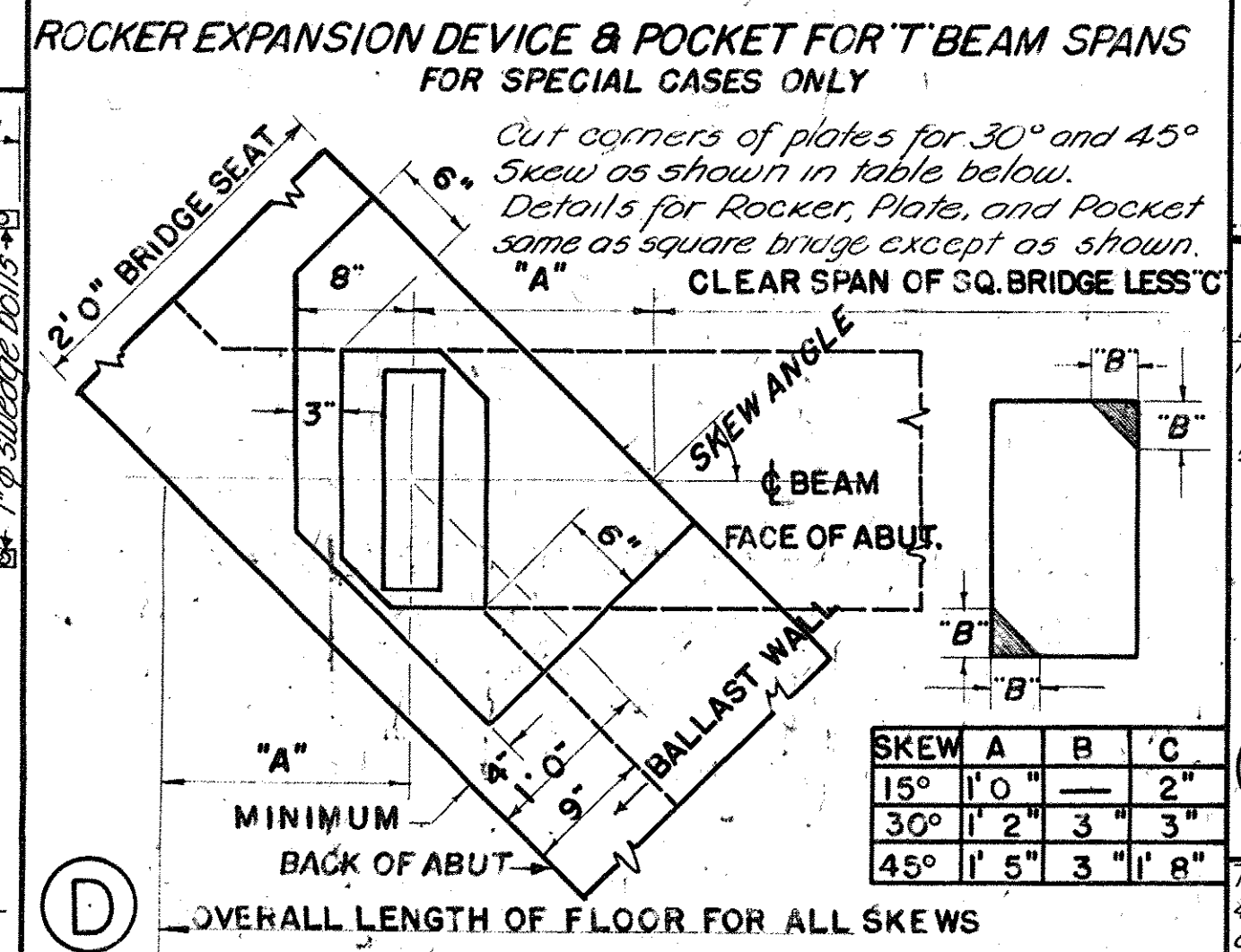
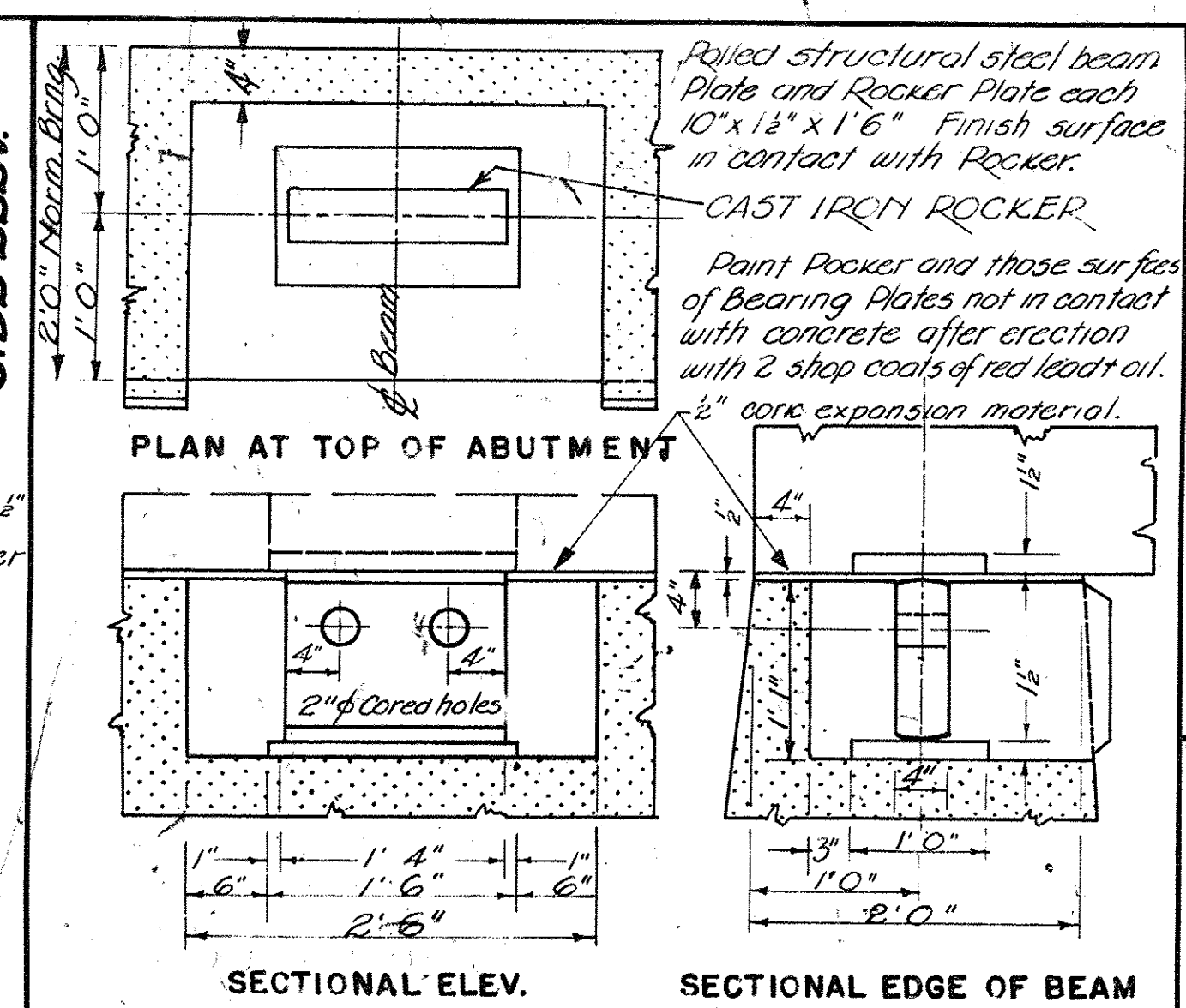
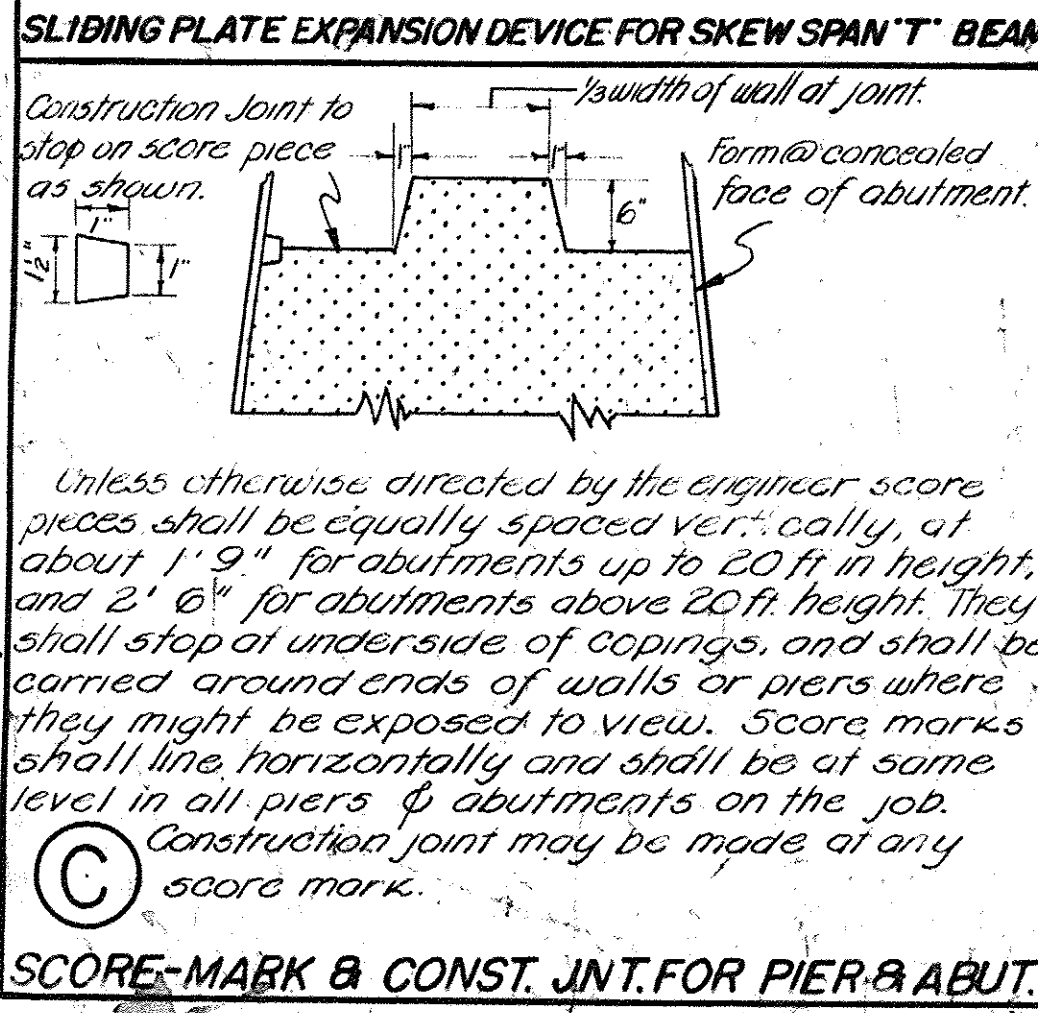
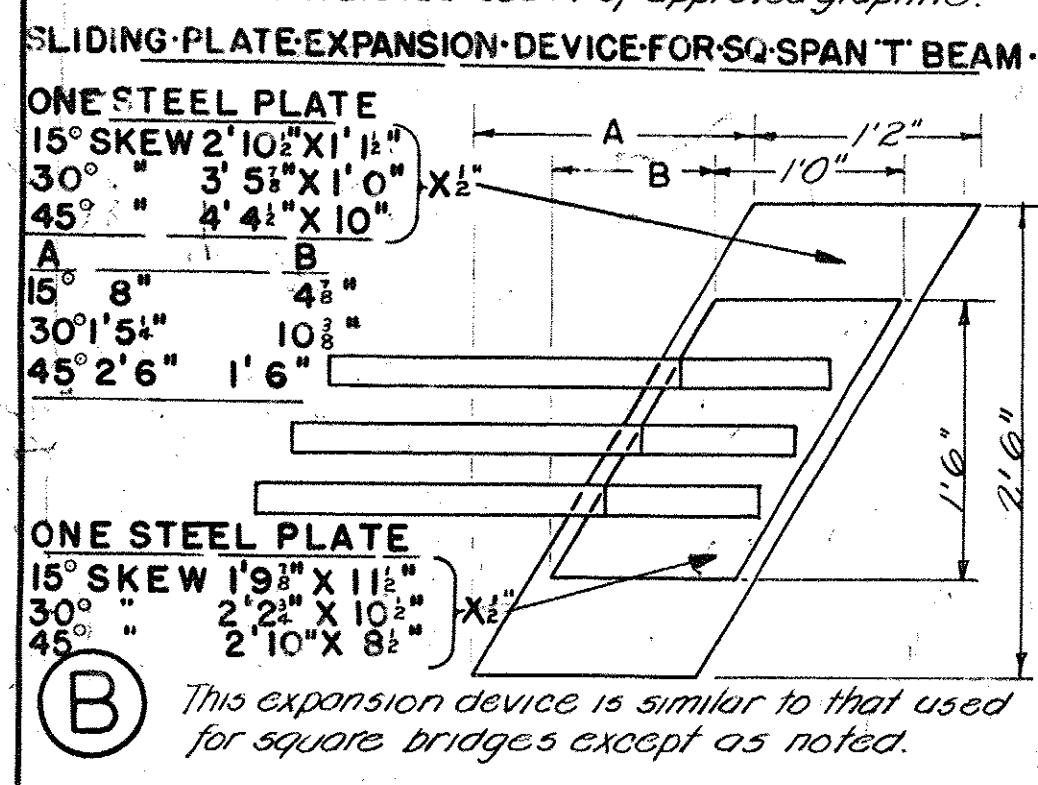
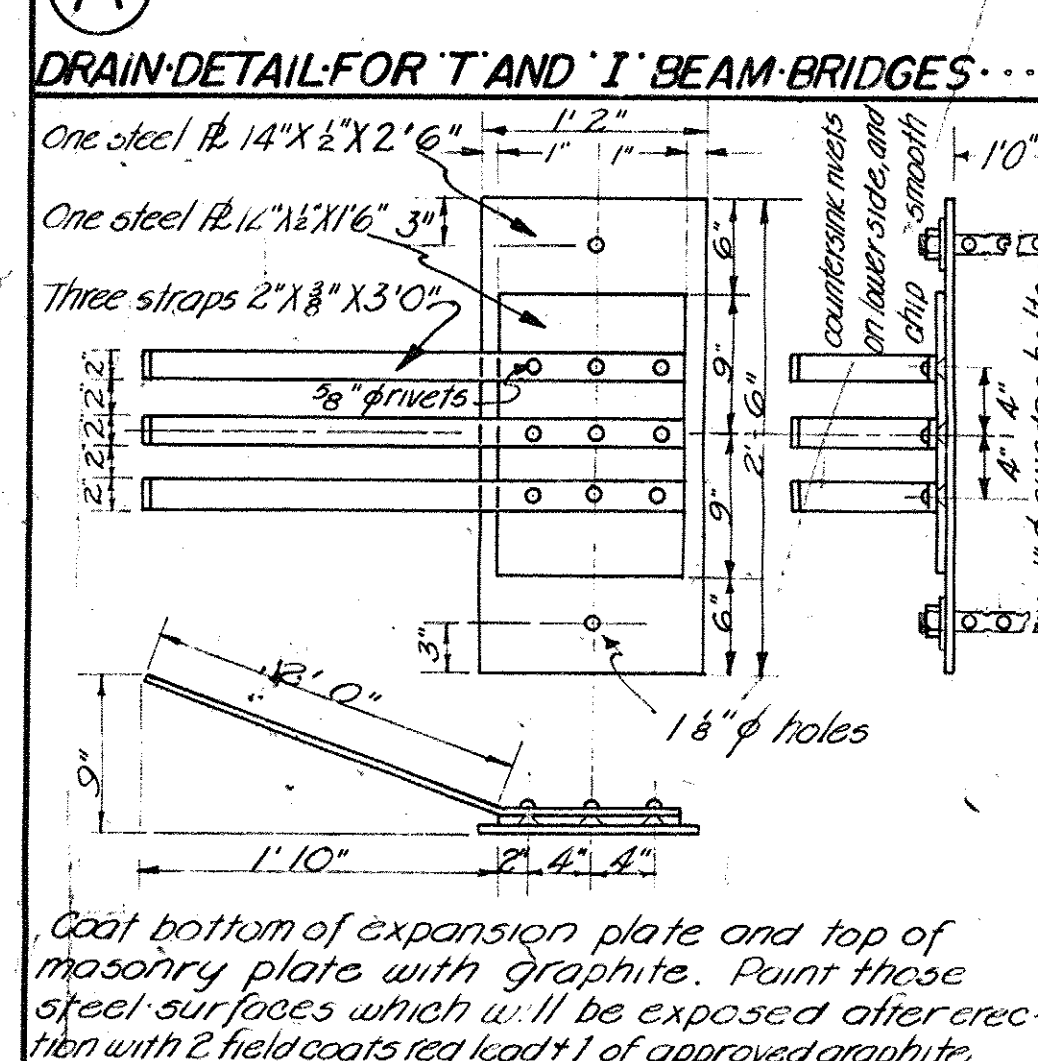
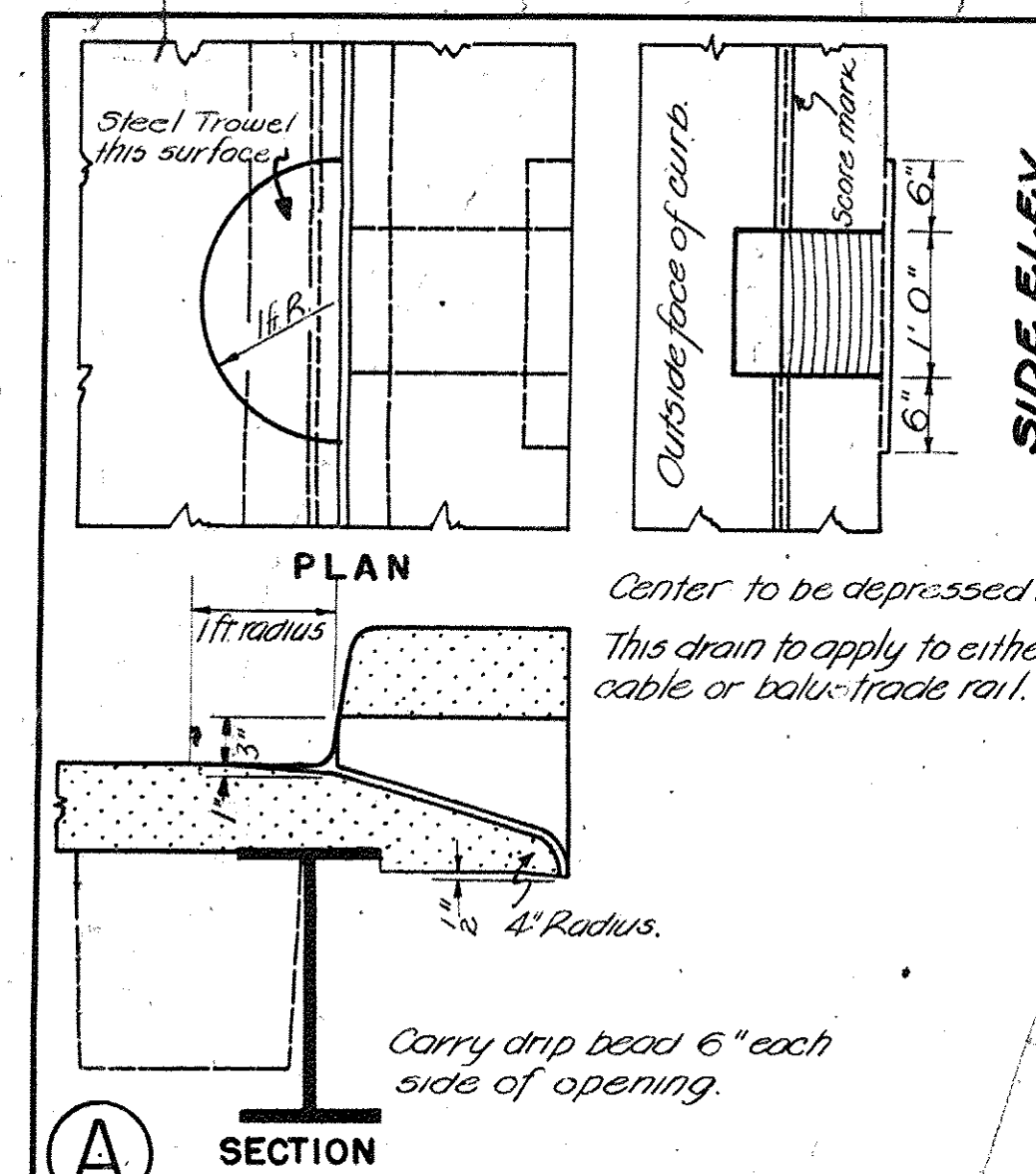
STA	Area	Dist	Vol
0+00	64	10	320
+25	82.69	25	1454.5
+50	87	25	1675
+75	85	25	2150
+100	95	25	2250
+125	54	25	1613
+150	145	25	2238
+175	0	25	1813
TOTAL			13820
CY			512

O-CUT = 1+75



TENBRIDGE STATE 194L
MARKET BRIDGE
Hayward Berrow Pt.

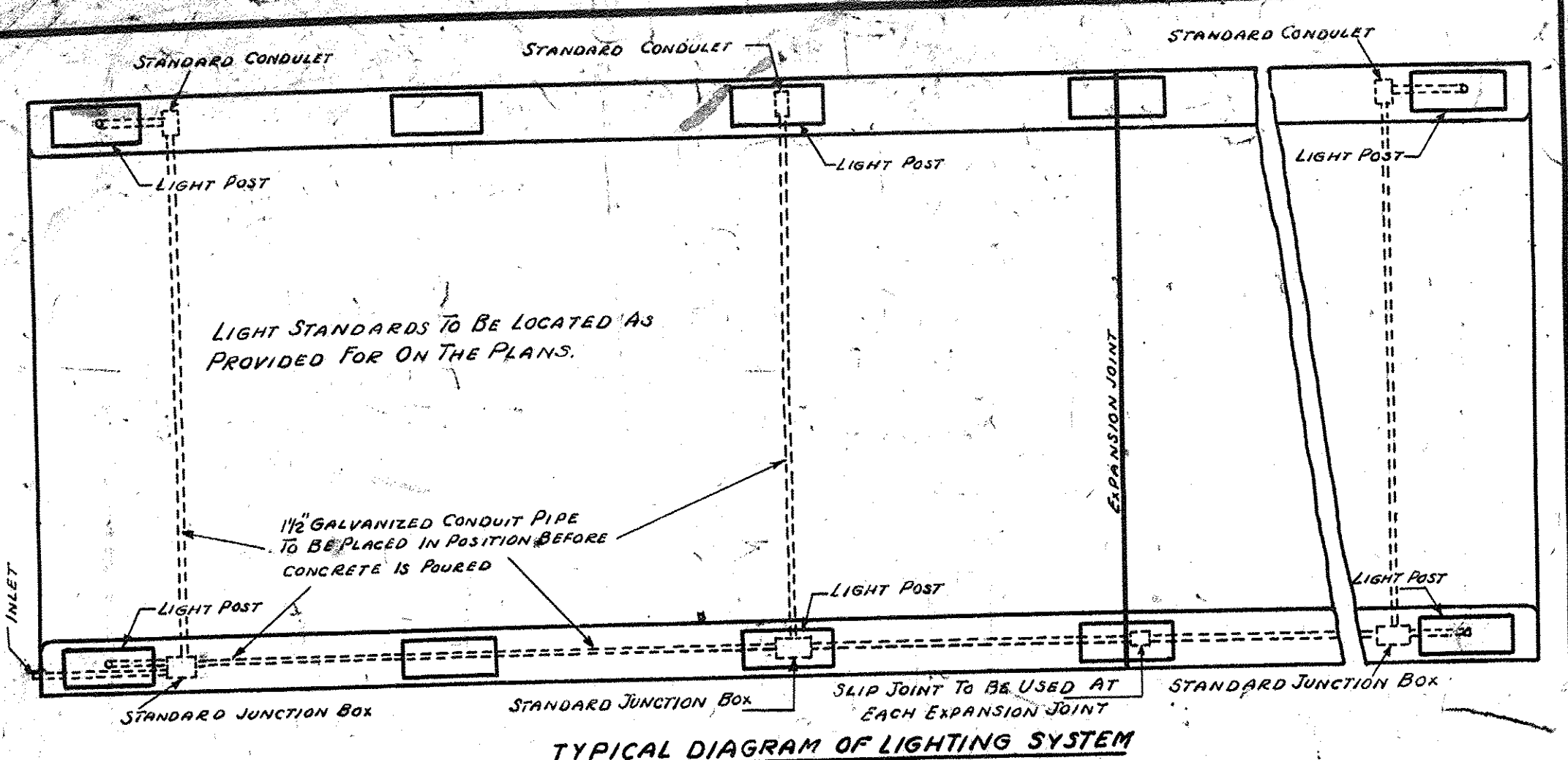
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
9	VT.				



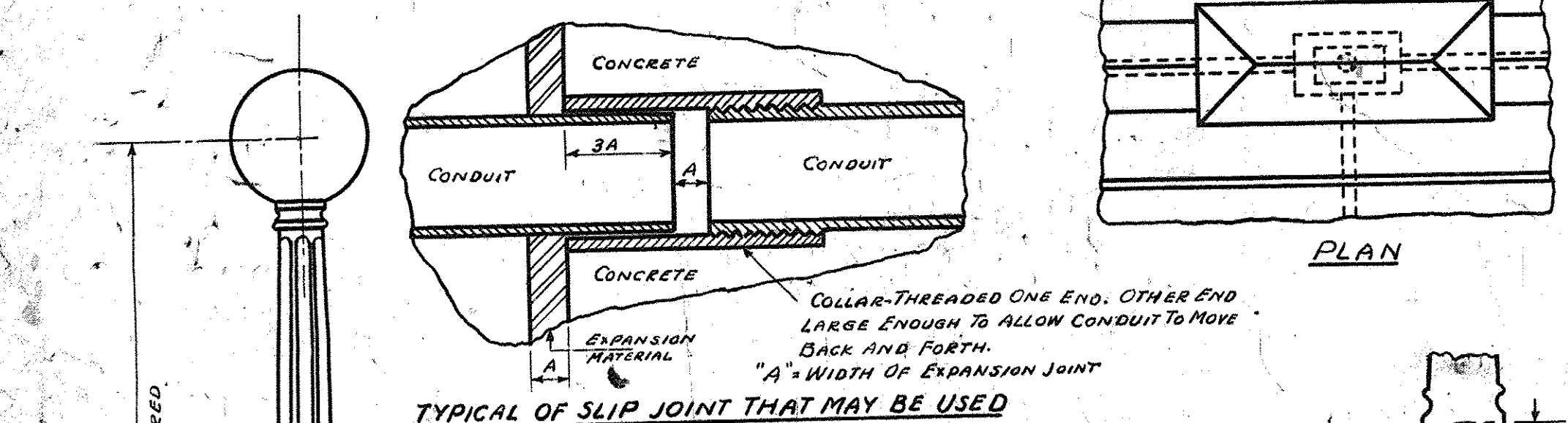
GENERAL NOTES

The following notes shall govern the structures and details to which they apply. All work and material shall conform to the Standard Road and Bridge Specifications of the Vermont Department of Highways. Any suitable structure excavation used by the Contractor for any purpose other than Backfill or Approach fill shall be replaced by an equivalent quantity of Borrow by the Contractor at his expense unless some 15 ordered wasted by the Engineer. Piles shall be provided where suitable foundation can not be obtained within a reasonable depth. They shall be spaced not closer than 2' 6" % excepting as noted on plans or as directed by the Engineer. Where necessary, use detail G above. Foundations on ledge should be sloped toward the back of the footing about 1" per foot. Footings shown on plans for other conditions may be revised at the direction of the Engineer. All concrete for piers and gravity abutments shall be "Concrete Class C" unless otherwise directed or noted. All concrete for reinforced abutments shall be "Concrete Class B" unless otherwise noted or directed. All concrete for T beam, I beam, and Slab bridges, and for curbs and rails shall be "Concrete Class A", and shall be paid for at the unit price bid for "Concrete Class A". All reinforcing steel for bridges and abutments shall be deformed bars, excepting as noted, and they shall conform to the standard specifications for new billet steel concrete reinforcement bars, Structural or Intermediate grade, of the American Society for Testing Materials, Serial designation A15-33. 4" weep holes shall be provided in main abutment and wings. They shall be spaced symmetrically about 1/2 of abutment at maximum spacing of 10 ft. % They shall be pitched 1" per foot - upward from front to back; the lower end of the weep hole shall be 2' 6" above the footing. The cost of work and material for weep holes shall be included in the unit price bid for concrete. The expansion material between superstructure and substructure at expansion and at fixed end shall be included and paid for in price bid for "Concrete Class A". All work and material for expansion devices to be included in and paid for as the unit price bid for "Reinforcing Steel" for T beam Bridge. All exposed edges shall be chamfered, those chamfers of chamfer to be 1". Where pipes (existing or required) pass through abutments they shall be of materials and in locations directed by the Engineer. Cost of work & materials for such work to be included in and paid for at unit price for Abutment concrete. Where pipes are carried by superstructure they shall be supported as directed by the Engineer. The cost of all work and materials shall be paid for at the unit price bid for Superstructure Reinforcing Steel.

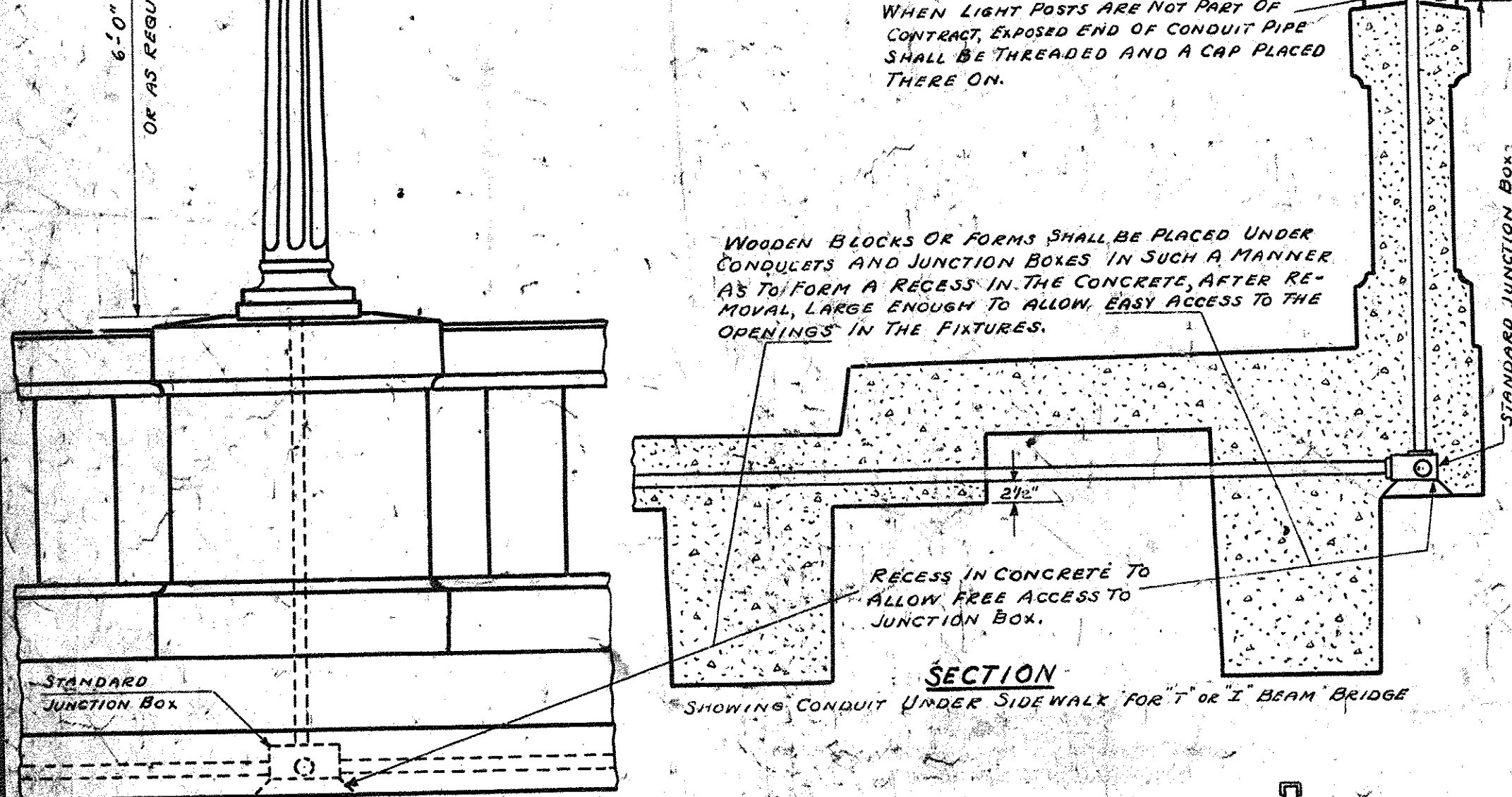
STATE OF VERMONT
DEPARTMENT OF HIGHWAYS
TYPICAL DETAILS
CORRECT *A.D. Bishop* BRIDGE ENGINEER
DESIGNED DRAWN D.W.P. 1934
RETRACED R.E.G. OCT. 1936 CHECKED W.G.B. JAN. 1937
SERIES SB NO. 20 SHEET OF SHEETS



TYPICAL DIAGRAM OF LIGHTING SYSTEM



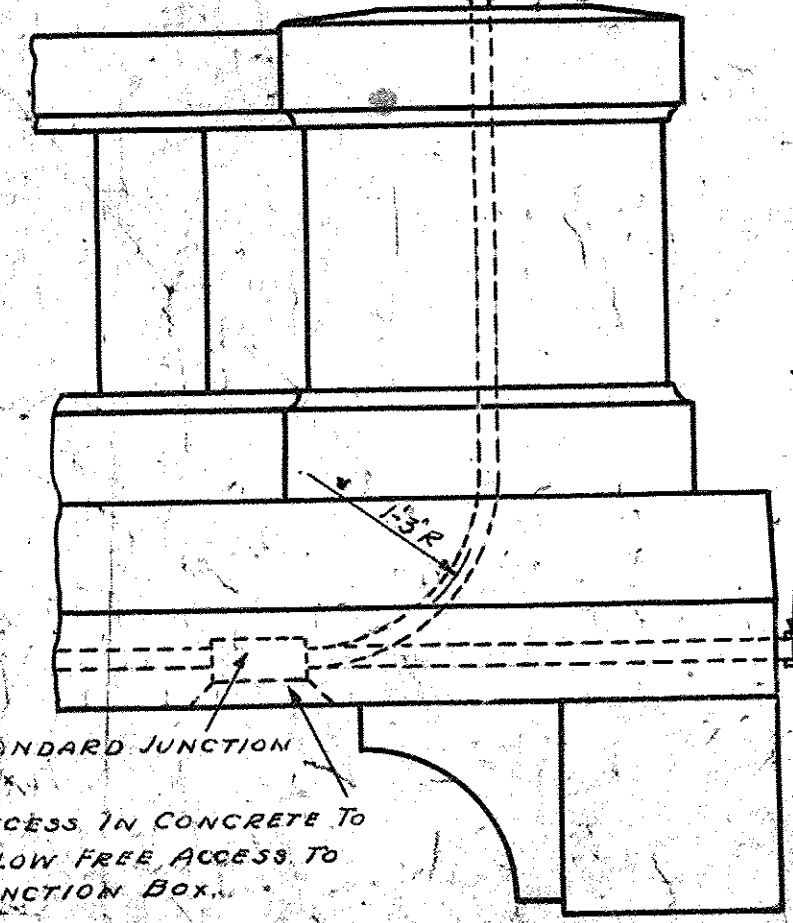
TYPICAL OF SLIP JOINT THAT MAY BE USED



ELEVATION INTERMEDIATE LIGHT POST

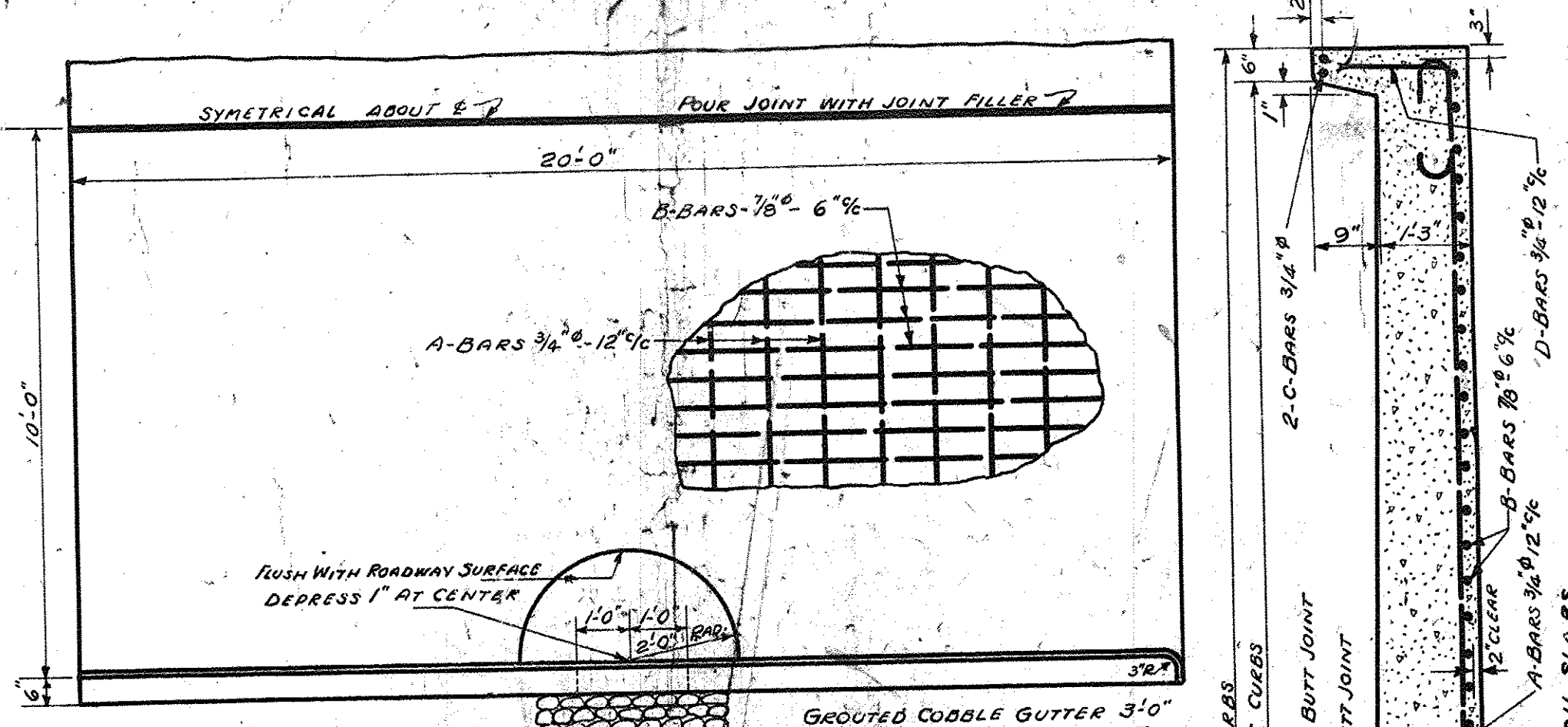
SPECIFICATIONS

COMPANY FURNISHING LIGHT STANDARDS SHALL PROVIDE ANCHOR BOLT PLANS. IF DIRECTED ANCHOR BOLTS FOR LIGHT STANDARDS SHALL BE PLACED IN POST FORMS BEFORE CONCRETE IS PLACED.
 ALL WORK AND MATERIALS ENTERED INTO THE LIGHTING SYSTEM INSTALLATION SHALL BE STANDARD WORK AND MATERIALS, REQUIRED FOR THIS CLASS OF WORK, AND SHALL BE PERFORMED IN SUCH A MANNER AS TO CONFORM TO THE CODE OF THE NATIONAL BOARD OF FIRE UNDERWRITERS.
 WHEN INSTALLATION OF LIGHTS IS NOT PART OF CONTRACT, COMPANY BID FOR CONDUIT FOR LIGHTING SYSTEM, SHALL COVER THE COST OF LABOR AND MATERIALS FOR THE INSTALLATION OF THE COMPLETE CONDUIT SYSTEM, BUT NOT TO INCLUDE WIRING OR LAMP POST.

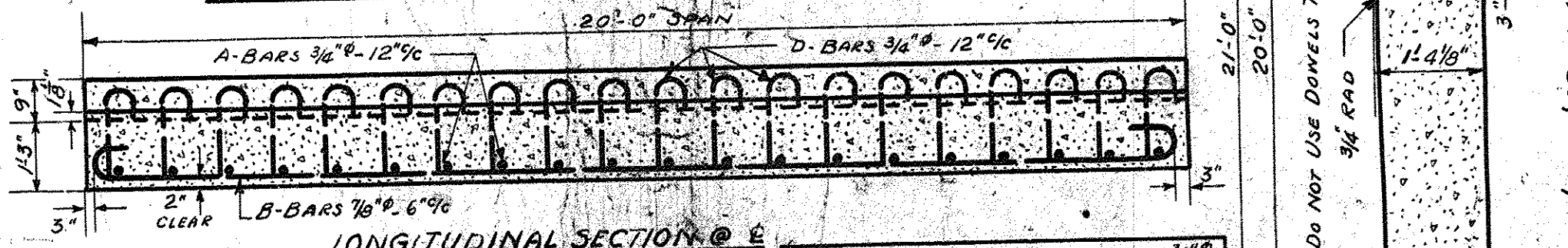


END LIGHT POST-SHOWING INLET

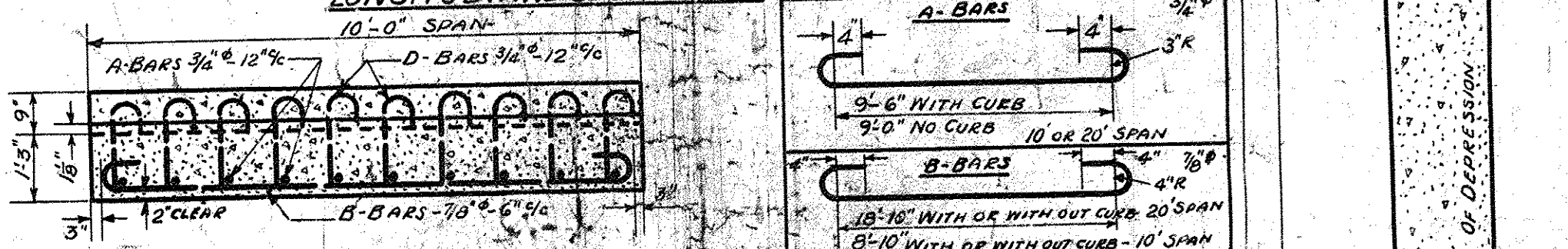
STANDARD DETAIL S-113



HALF PLAN - 20' APPROACH SLAB WITH CURBS



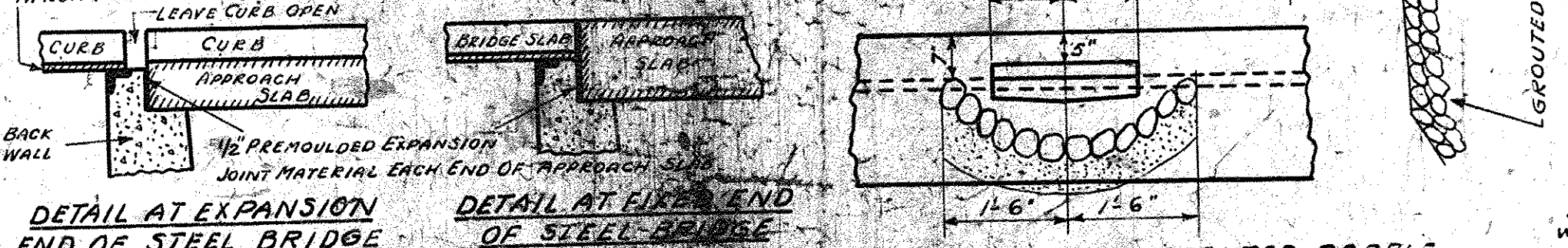
LONGITUDINAL SECTION @ E



LONGITUDINAL SECTION @ B

10' SPAN		20' SPAN		10' SPAN		20' SPAN	
A-BAR	B-BAR	C-BAR	D-BAR	A-BAR	B-BAR	C-BAR	D-BAR
WITH CURB	NO CURB	WITH CURB	NO CURB	WITH CURB	NO CURB	WITH CURB	NO CURB
SIZE	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
REQ'D	20	20	40	40	40	40	40

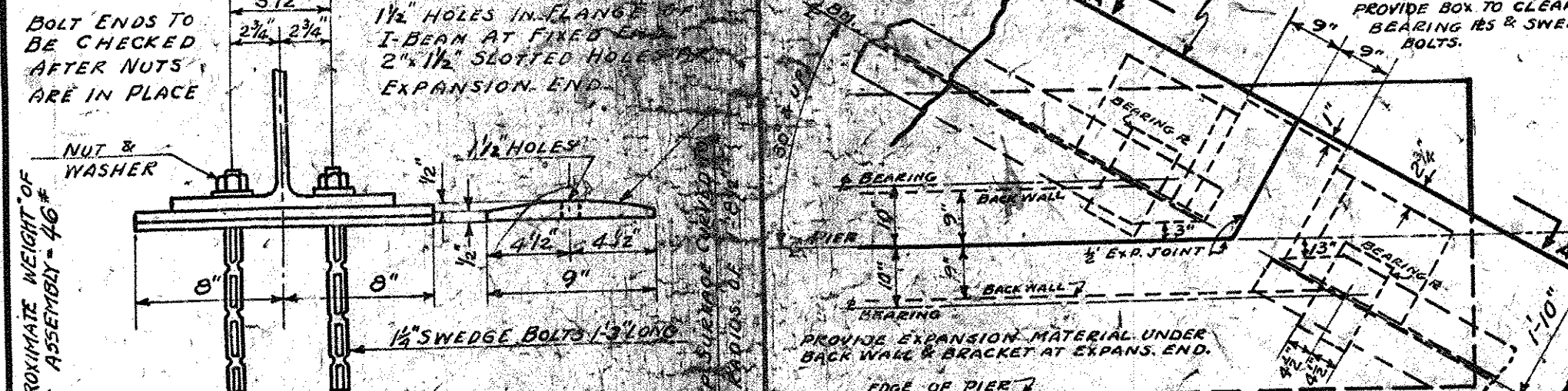
REINFORCING STEEL DETAILS



DETAIL AT EXPANSION END OF STEEL BRIDGE

WITH CURB		WITH CURB	
10' SPAN	20' SPAN	10' SPAN	20' SPAN
CONCRETE	9.6 C.Y.	19.2 C.Y.	10.4 C.Y.
REIN. STEEL	292 LBS.	584 LBS.	296 LBS.

ESTIMATED QUANTITIES FOR ONE SLAB

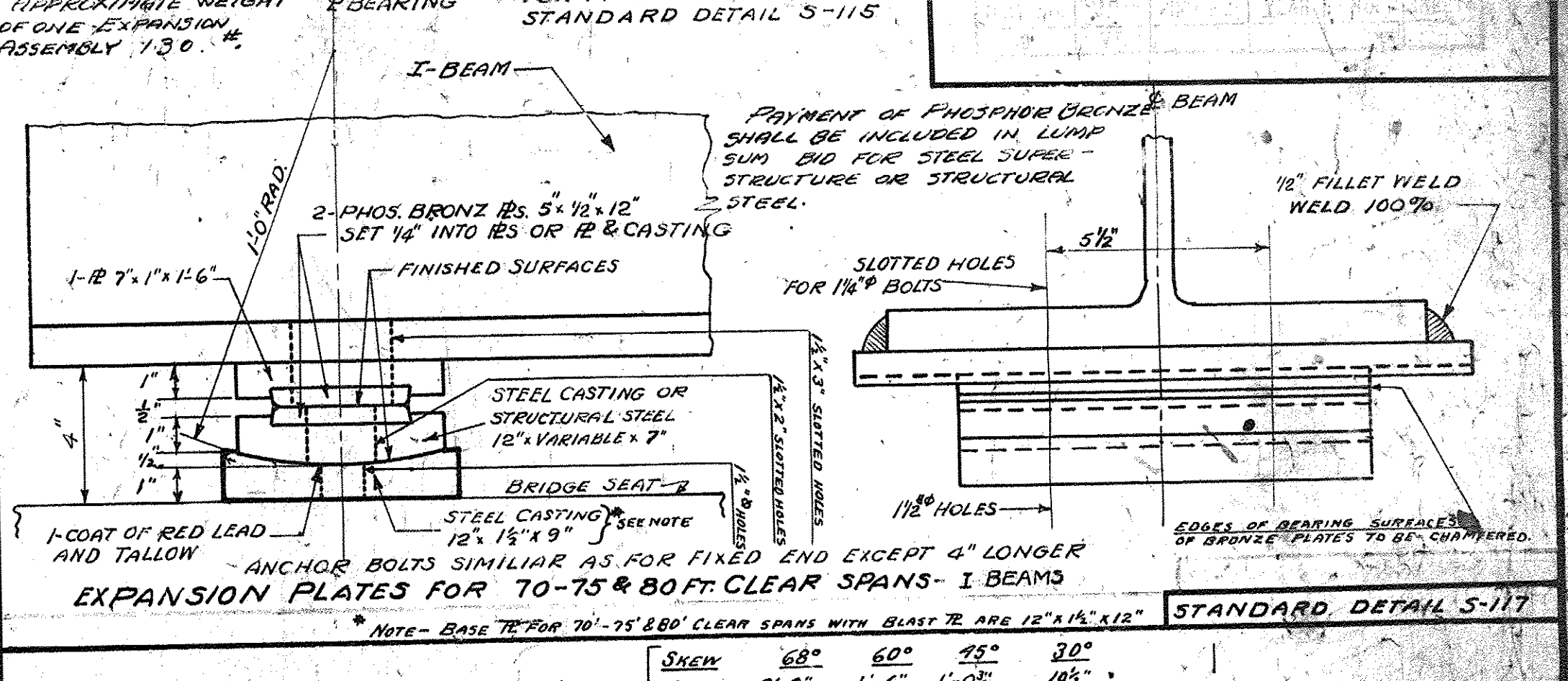


DETAIL OF BEARING PLATE FOR BOTH ENDS ALL SPANS 25 TO 65' INCLUSIVE FOR FIXED ENDS ONLY SPANS 70 TO 80' INCLUSIVE

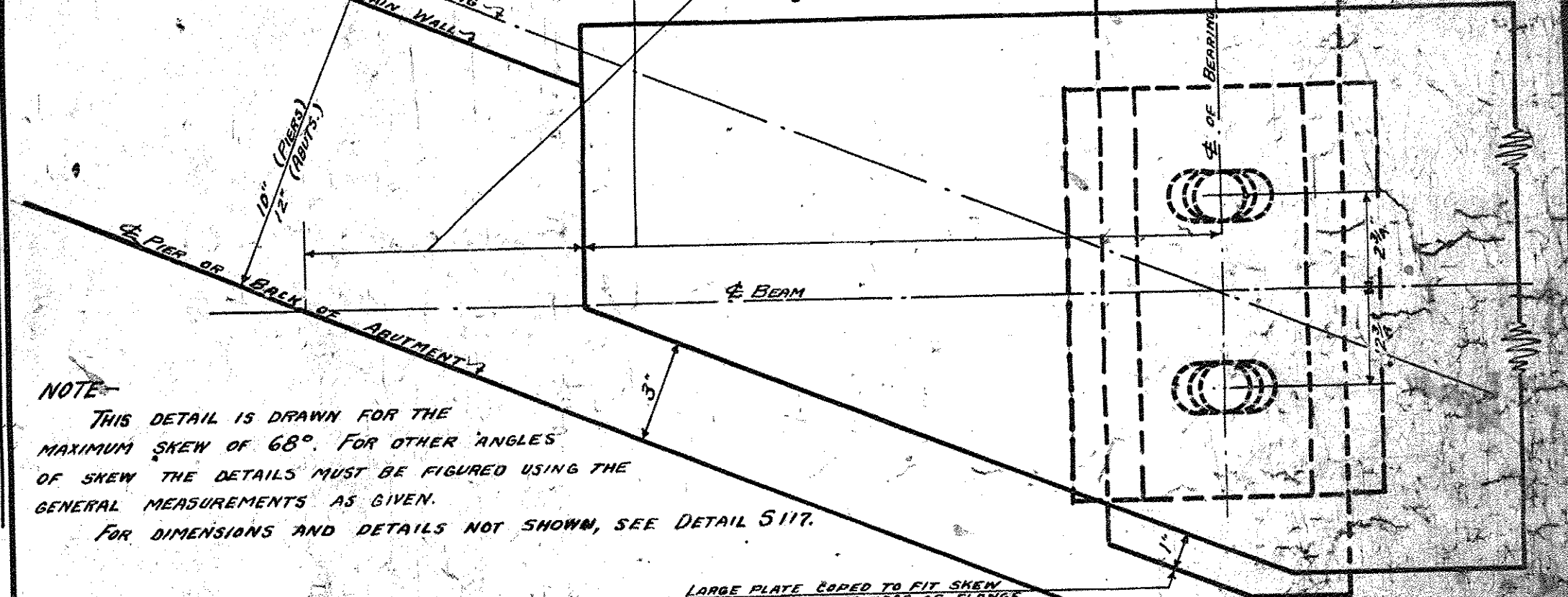
STANDARD DETAIL S-115



STANDARD DETAIL S-116



EXPANSION PLATES FOR 70-75 & 80 FT. CLEAR SPANS - I BEAMS



EXPANSION PLATE DETAIL FOR SKEW END BRIDGES OF 70-75-80' SPANS

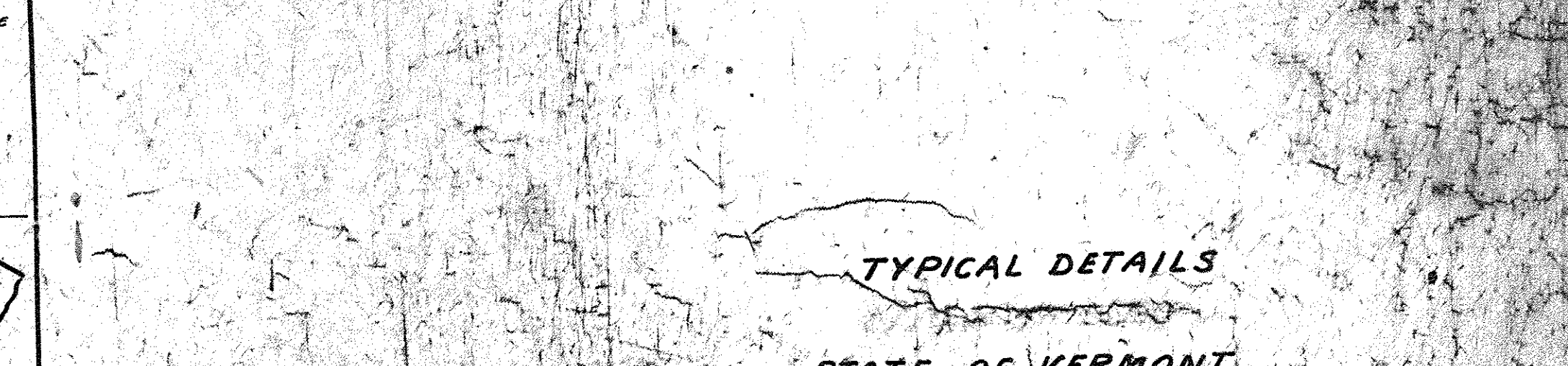
STANDARD DETAIL S-117



APPROACH SLAB RAMP

QUANTITIES (ONE RAMP) ONE C.C. OF 1/5 CUB. YDS. (FURNISH SAME AS SLAB) REIN. STEEL 31 LBS.

STANDARD DETAIL S-114



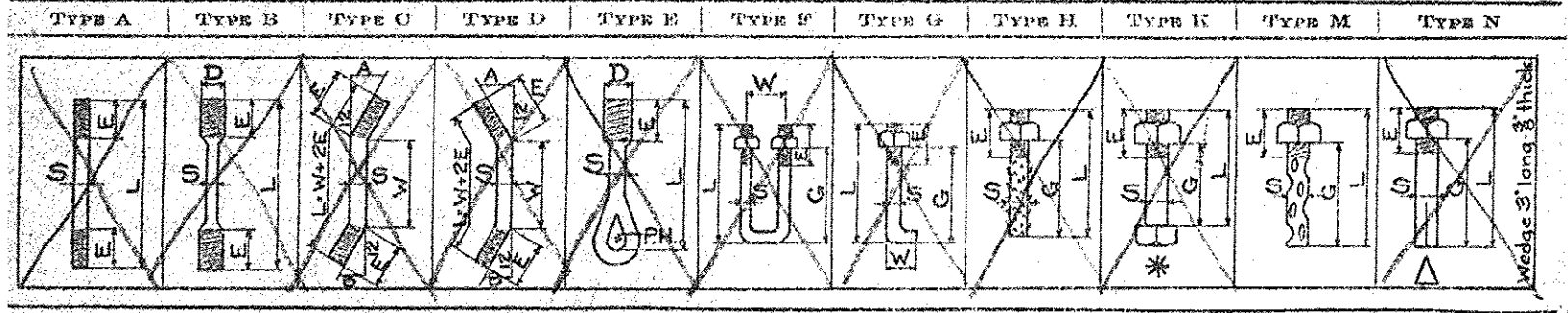
STANDARD DETAIL S-118

REVISIONS		CORRECTED	
STANDARD DETAIL S-118 ADDED	5-17	5-17	5-17
5-17	10-14-55	10-14-55	10-14-55
5-17	12-13-55	12-13-55	12-13-55
5-17	12-13-55	12-13-55	12-13-55
5-17	12-13-55	12-13-55	12-13-55

STANDARD DETAIL S-119

STATE OF VERMONT
 DEPARTMENT OF HIGHWAYS
 CORRECTED BY: A.D. Bishop
 BRIDGE ENGINEER

Surveyed by	5/10/33
Designed by	5/10/33
Drawn by	5/10/33
Checked by	5/10/33
Scale	1" = 10'
Sheet	21



LINE NO.	QTY.	NO. OF RODS	MARK	SIZE	LENGTH	DETAIL INFORMATION										NUTS	MILL ORDER		ITEM			
						DRILL	SCREW	FIN. DIA.	FIN. THICK.	FIN. WID.	FIN. HGT.	FIN. DIA.	FIN. THICK.	FIN. WID.	FIN. HGT.		FIN. DIA.	FIN. THICK.		FIN. WID.	FIN. HGT.	WT. EACH
1																						
2	24	AB1	M 1/4	16	3 1/2	R									24	Hex						SF9460
3	24	AB2	M 1/4	19	3 1/2	R									24	Hex						↓
4																						
5																						
6	48	EW21	Std Bev Wash	2 1/2 x 3/8 (Av Th)	2 1/2	1 5/8	Hole															Res
7																						
8																						
9																						
10																						
11																						
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SHEET NO. 28
 DATE 6-27-38
 REVISION
 JOB MARKET BRIDGE
 LOCATION TUNBRIDGE, VT.
 CUSTOMER THOMAS J. HARVEY & SON
 ARCHITECT STATE OF VT.
 THIS SHEET COVERS COMPLETE REIN.
 MATERIAL SHOWN ON CUST. DRAWING NO. L7017

BETHLEHEM STEEL COMPANY
 BOSTON OFFICE

JOB NO. 32327
 CONT. NO. 4

REDUCTIONS:
 1" for bars 4" to 8"
 1" for bars 1" and over
 Square bend. 1" for bars 4" to 8"
 2" for bars 1" and over

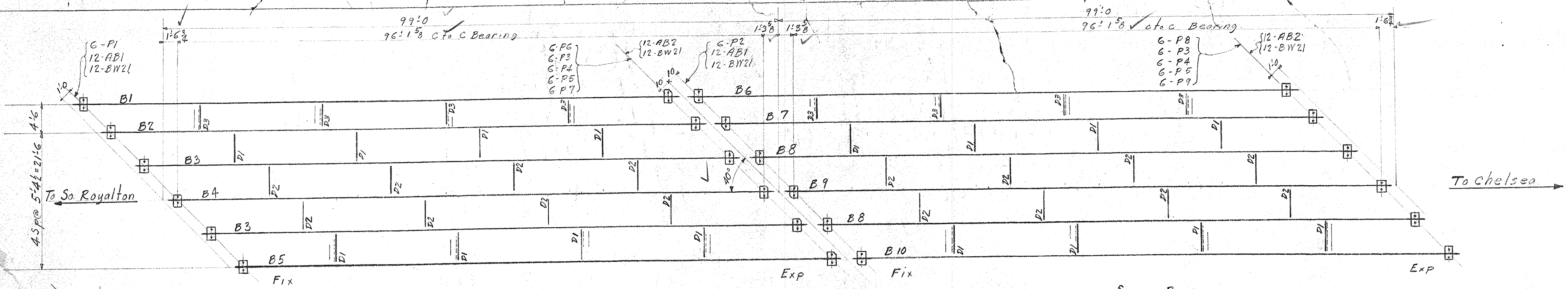
TYPE II TYPE III TYPE IV TYPE V TYPE VI TYPE VII
 TYPE VIII TYPE IX TYPE X TYPE XI TYPE XII TYPE XIII TYPE XIV TYPE XV TYPE XVI TYPE XVII

TYPE 11-13-14 2" for 4" to 8" bars 4" for bars 1" and over
 TYPE 15-17 3" for 4" bars, 4" for 8" to 8" bars, 5" for bars 1" and over
 TYPE 12 3" for 4" bars, 4" for 8" to 8" bars
 TYPE 16 2" for 4" bars, 3" for 8" to 8" bars

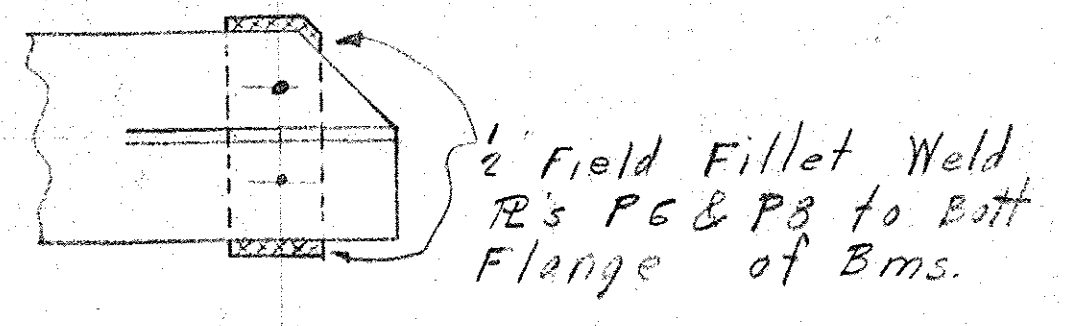
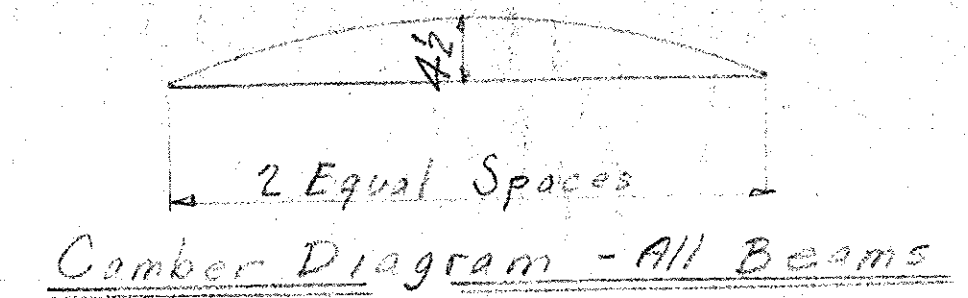
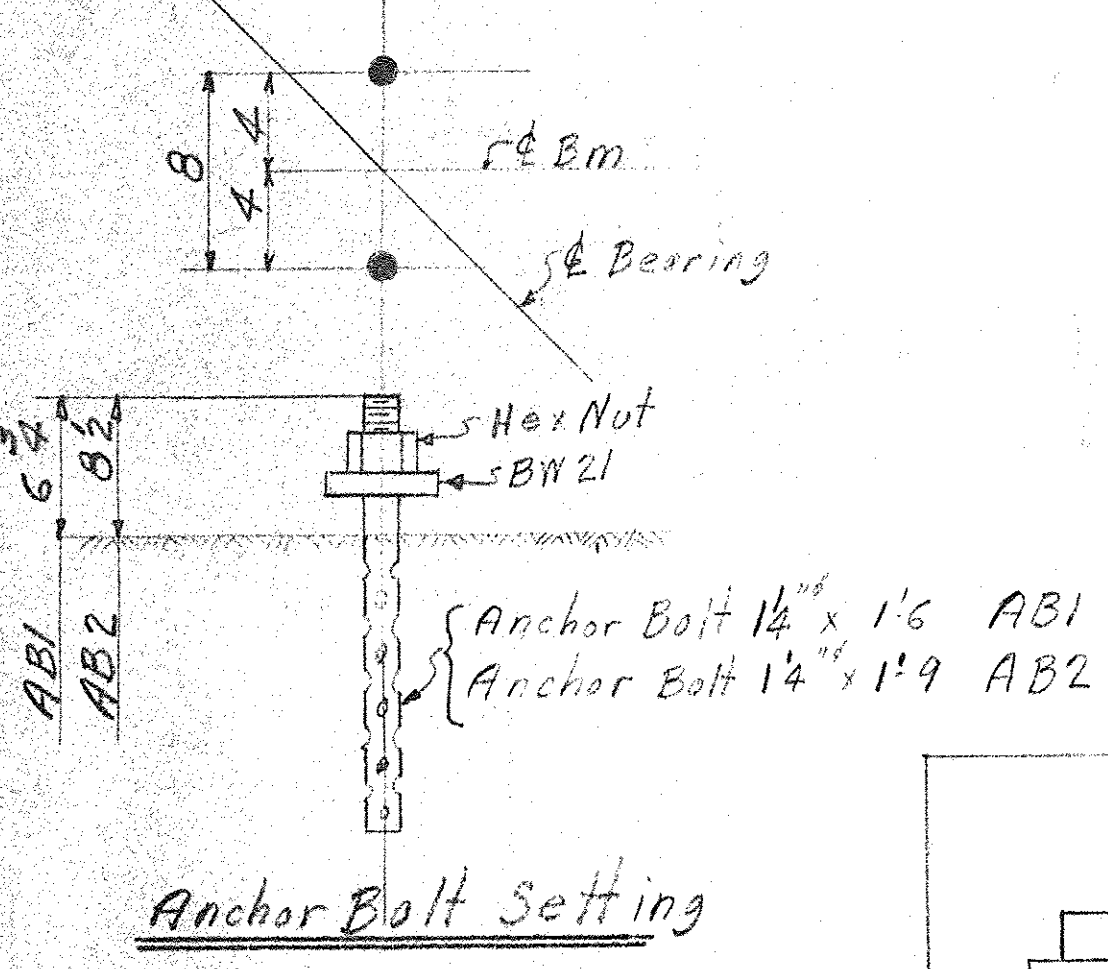
All dimensions are out to out. Dimensions omitted are zero.

LOCATION	REINFORCING STEEL							BENDING DIMENSIONS														
	NUMBER OF MEMBERS	PER MEMBER	TOTAL NO. REIN.	SIZE	LENGTH	MARK	SPACING	TYPE	A	B	C	D	E	F	G	J	M	H	K	N	L	
ABUT #2																						
FOOTING BARS	2	14	28	7/8"	10-1	A		B	4	1 1/2	7-3	1 1/2	4								7	8-0
" "	2	16	32	7/8"	8-7	B		B	4	1 1/2	5-9	1 1/2	4								7	6-6
COL VERT BACK	2	7	14	1 1/4"	16-7	C		B	4	5	1-4	14-13									9	15-3 1/2
" " FRONT	2	5	10	1 1/4"	14-9	D		B	4	5	1-4	13-0									9	13-5 1/2
COL HOOPS	2	1	2	1/4"	15-0	E1		S														
" "	2	1	2	1/4"	14-5	E2		S														
" "	2	1	2	1/4"	13-10	E3		S														
" "	2	1	2	1/4"	13-3	E4		S														
" "	2	1	2	1/4"	12-7	E5		S														
" "	2	1	2	1/4"	12-0	E6		S														
" "	2	1	2	1/4"	11-5	E7		S														
" "	2	1	2	1/4"	10-10	E8		S														
" "	2	1	2	1/4"	10-2	E9		S														
" "	2	1	2	1/4"	9-7	E10		S														
" "	2	1	2	1/4"	9-0	E11		S														
BKT BARS	2	2	4	1"	11-0	F		S														
BKT BOT	1	4	4	1 1/2"	43-0	GA		S														
" "	1	3	3	1 1/2"	26-0	GB		S														
" STIRRUPS	1	67	67	9/8"	9-10	J		B	18	9	6	3 1/2	1-7	3 1/2	6	9						
HAUNCH VERT	2	6	12	1"	7-0	K		S														
BKT TOP	1	7	7	1 1/4"	50-2	H		4	4	5 1/2	1-4	4-7	1-4	5 1/2							9	47-6
PIER REIN.																						
FOOTING DOWELS	1	72	72	9/8"	5-7	A		S														
VERT EX FACE	2	36	72	9/8"	18-2	B		S														
HOR. " "	2	17	34	1/2"	40-0	C		S														
HOR TOP OF PIER	1	16	16	9/8"	8-3	D		S														
COL HOR.	2	15	30	3/8"	18-0	E		S														
ABUT #2																						
VERT IN HAUNCH	2	6	12	1"	6-0			S														

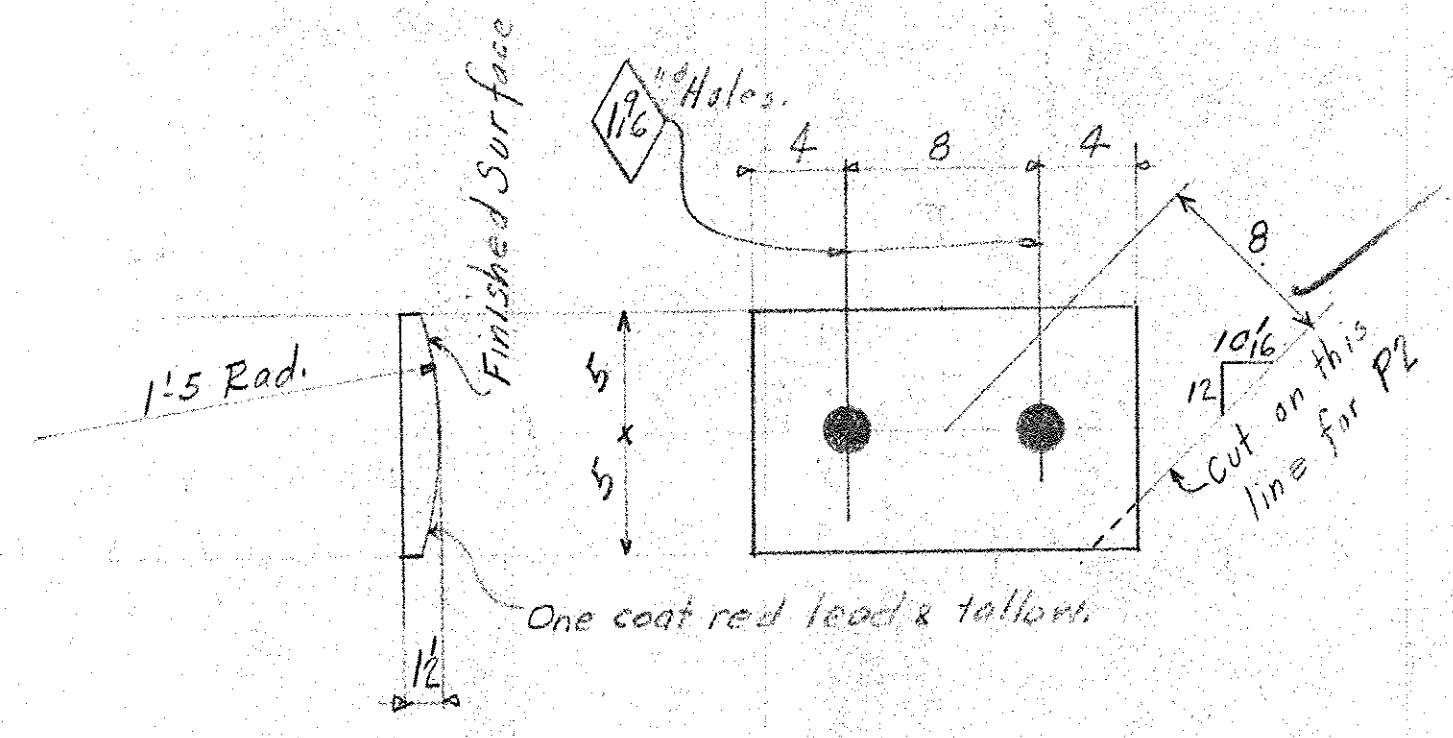
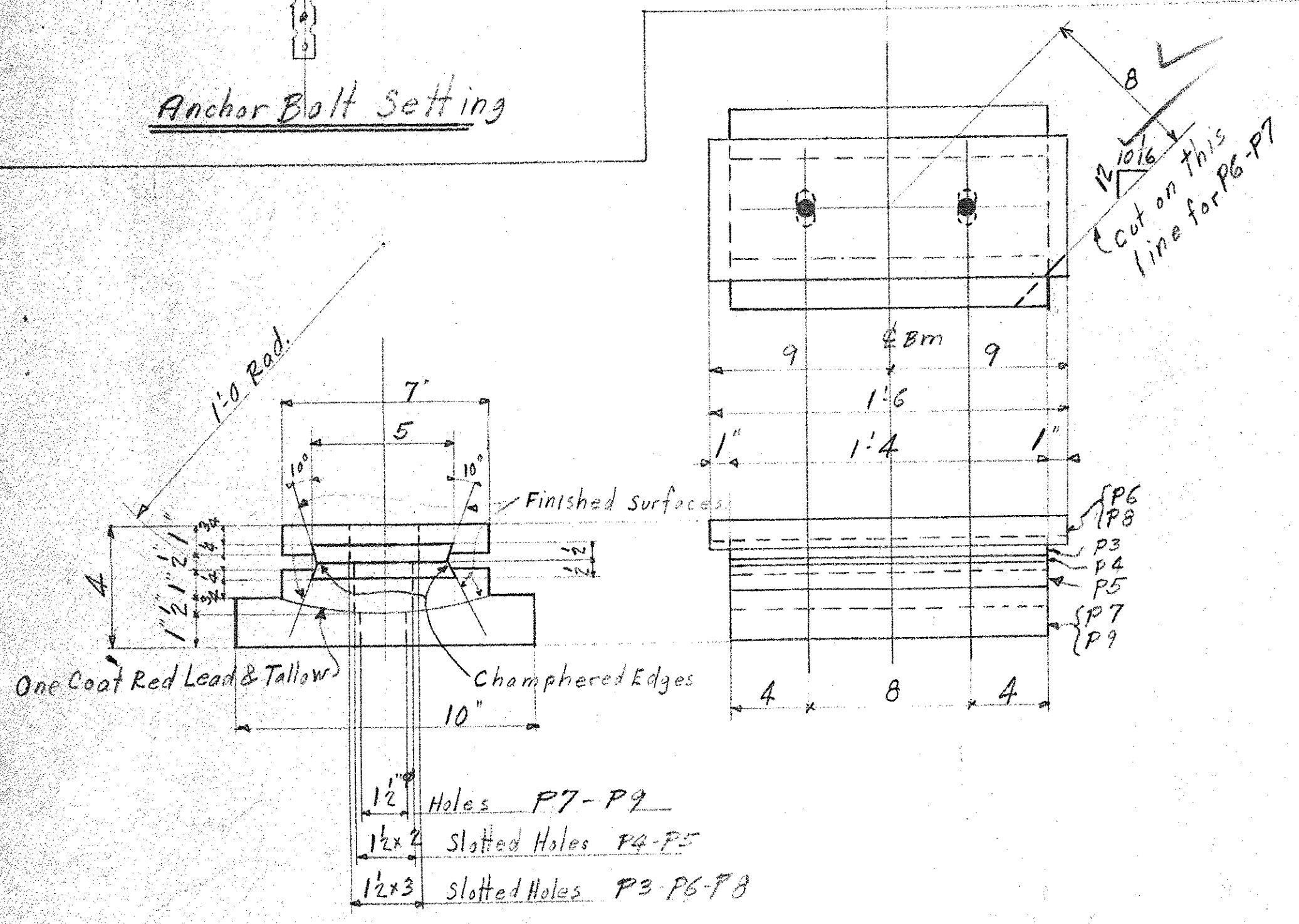
C. H. A.



General Notes
 Anchor Bolts furnished by BSCO and set by others
 Erection by others
 Diaphragms to be 100% Field Welded by others.
 Plates PG & PB to be Field Welded to beams by others. (see sketch)
 Finished surfaces to be coated with graphite by others.



REQUIRED LIST				
Span	Reid	Mark	Description	
A	B	G	P1	Fixed Bearing
G	G	G	P2	Fixed Bearing
G	G	12	P3	Expansion Bearing
G	G	12	P4	
G	G	12	P5	
G	G	G	PG	
G	G	G	P7	
G	G	G	P8	
G	G	G	P9	



Fixed Bearing
 P1 - R 10x12x1-4 (P15) (10)
 P2 - R 10x12x1-4 (P15) (10) } Steelton SF9434

Assembled Expansion Bearings

- Rs 7x1x1-6 (Grooved) (14) PG
 - Rs 7x1x1-6 (Grooved) (14) PB
 - Phos. Bronze R 5x1/2x1-4 (14) P3
 - Phos. Bronze R 5x1/2x1-4 (14) P4
 - ASTM Spec B22-35T Class B
 - Rs 7x1/2x1-4 (Curved & Grooved) P15 (10) P5
 - Rs 10x12x1-4 (Dished) P7 (14) P15
 - Rs 10x12x1-4 (Dished) P9 (14) P15
- Plates PG & PB shall be field welded to Bms: B1 to B10. Plates P3 & P4 shall have a sliding fit in Plates PG-P8 & P5. The entire expansion bearing shall be shop assembled and match marked.
 Rs: P3, P4, P5-P8 & P7 (Boxed for Ship.)
 Rs: P3, P4, P5-P8 & P9 (Boxed for Ship.)

Changes OK JGG 7.20-38

- RIVETS -
- OPEN HOLES As Noted
- REAM -
- MILLING As Noted
- PAINT One Coat.

TEMP. _____	SUPT. _____	LAYOUT _____	FITTER _____	SHOP INSP. _____	PG. WK. _____	B. SMITH _____	MCH. _____	ERECT. _____	O. INSP. _____
Market Bridge, Tunbridge, VT.									
Cust - T.J. Harvey & Son - Adams, Mass.									
BETHLEHEM STEEL COMPANY									
FABRICATED STEEL CONSTRUCTION									
BETHLEHEM DRAWING ROOM					WORKS				
IN CHARGE DICKERL					MADE BY E.P.P. 7/1/38				
CHECKED BY _____					TRACED BY _____				
REVISED _____					LAST ASSEM. MK. _____				
CONTRACT CP3251-1									
SHOP CONTACT SURFACES									
SHOP No. _____									
Steelton SF9434									

