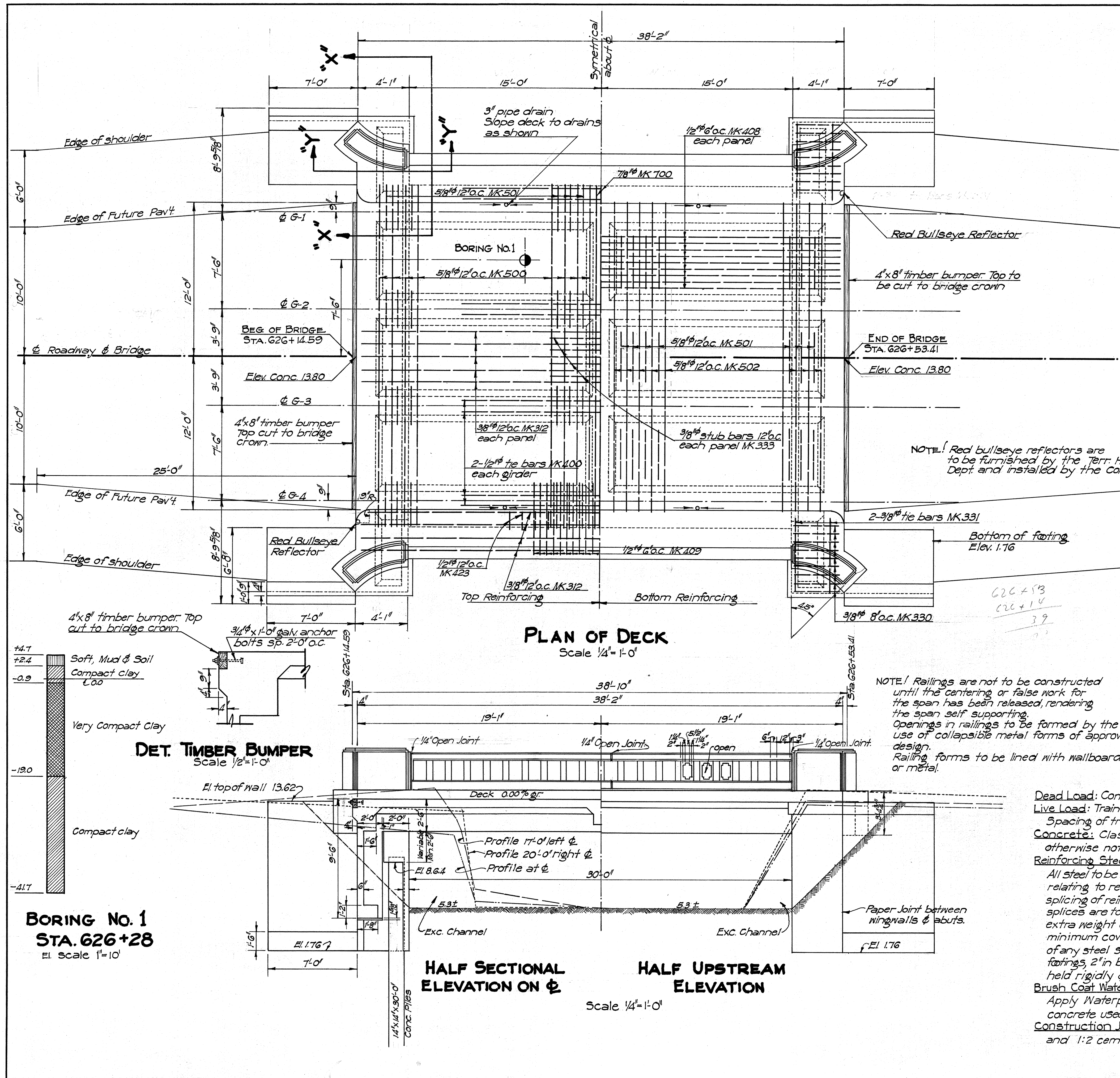


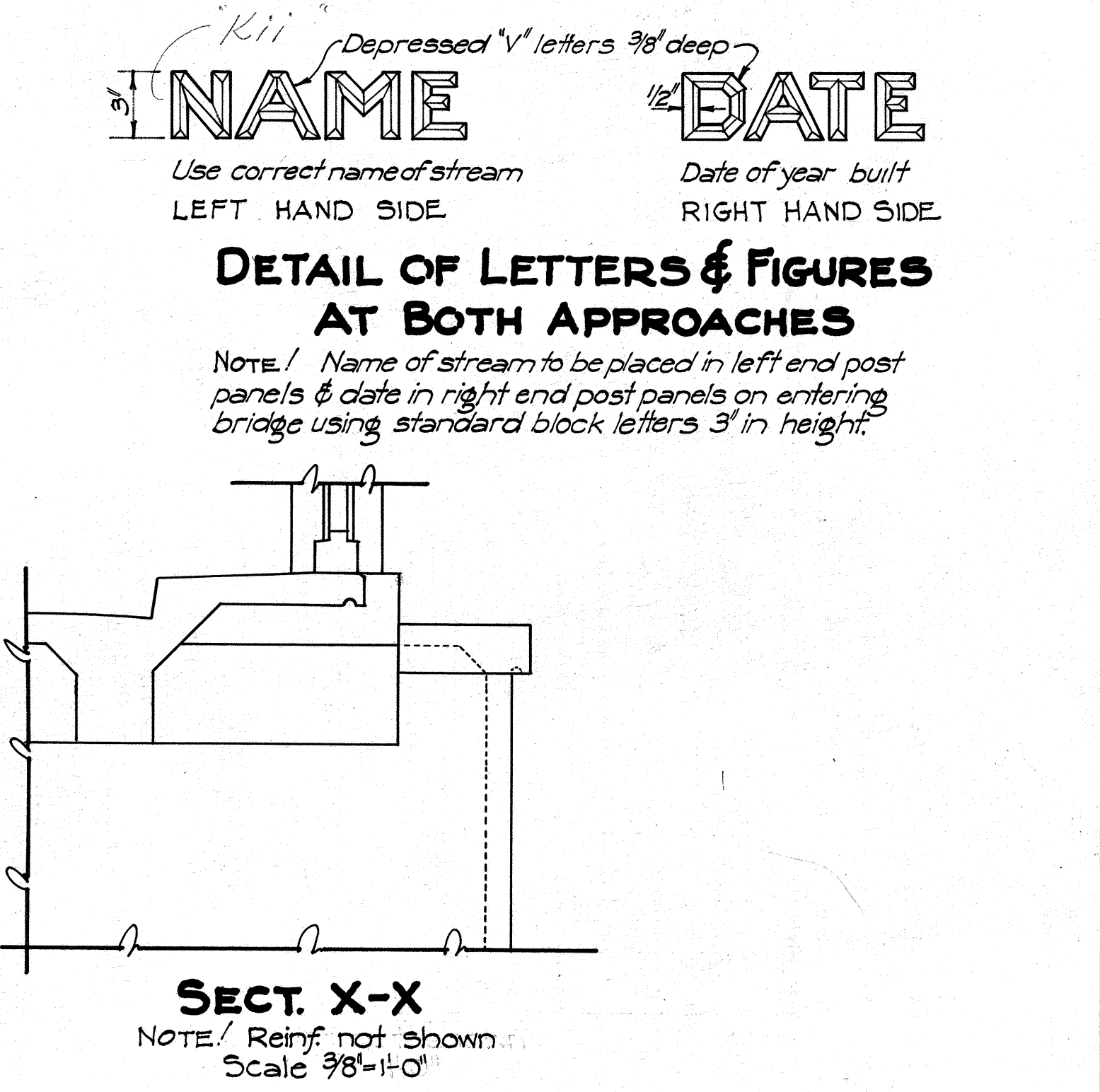
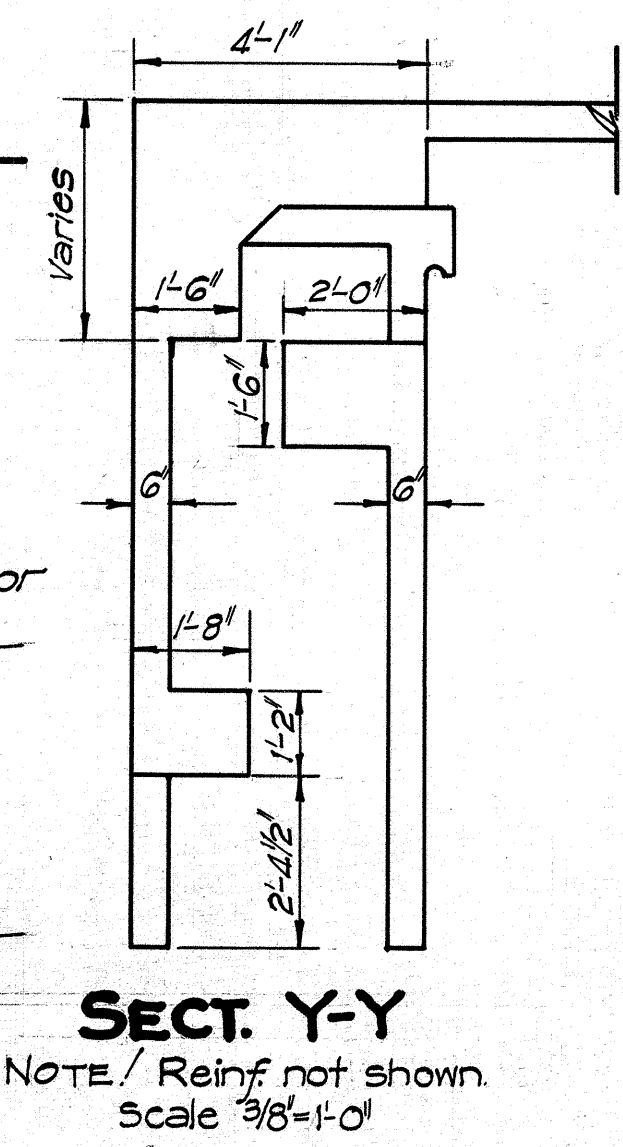
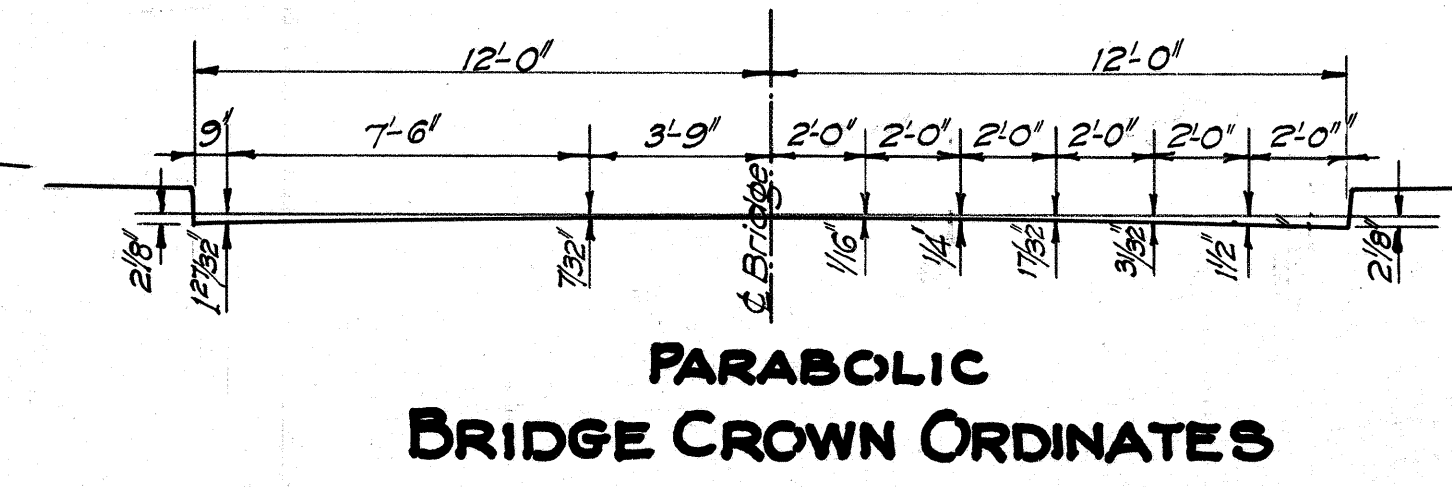
SURVEY PLOTTED BY
DESIGNED BY
CHECKED BY
DATE
1936
10/36
K. H. HARRIS
C. F. HARRIS



ESTIMATED QUANTITIES

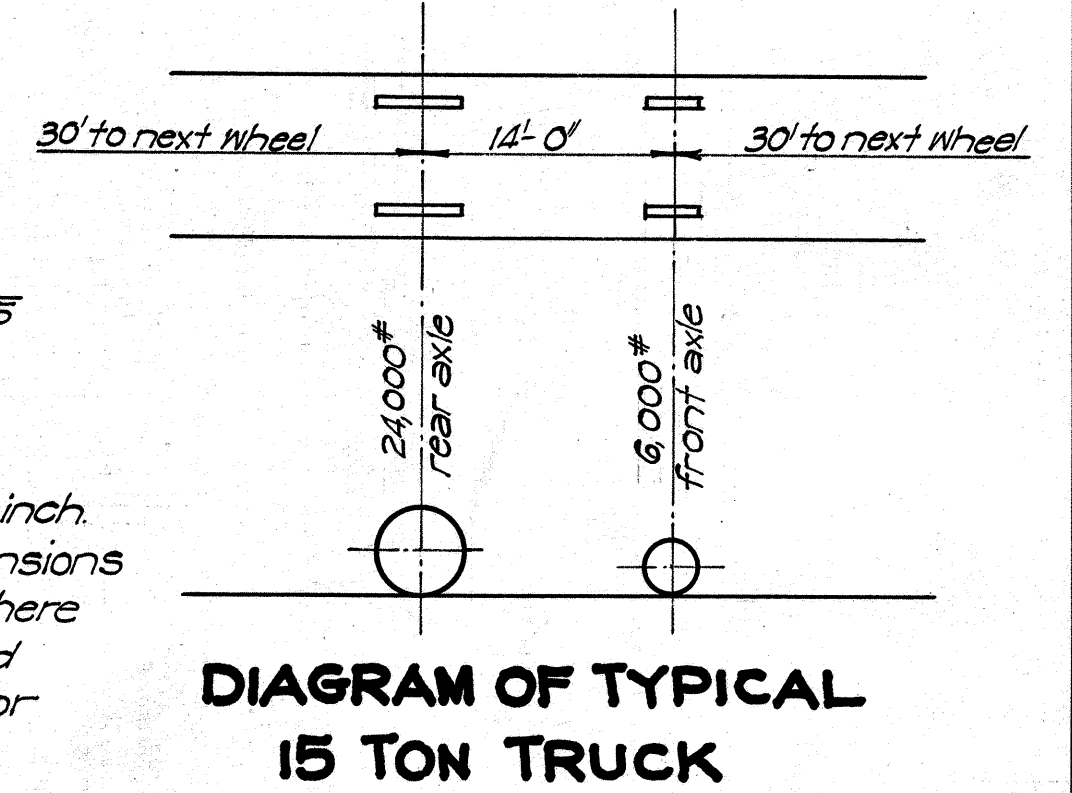
Location	Uncl. Exc. c.y.	Str. Exc. c.y.	Class 'A' Conc. c.y.	Reinf. Steel lbs.	25' Conc. Piles 14' x 14'	30' Conc. Piles 14' x 14'
Footing	70	317	10.4	1,112.0	16	
Abutment			55.2	8,908.0		14
Superstr.			56.5	15,099.0		
Railing			8.0	535.0		
TOTALS	70	317	130.1	25,654.0	16	14

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	HAW	3-E	1936	14	30

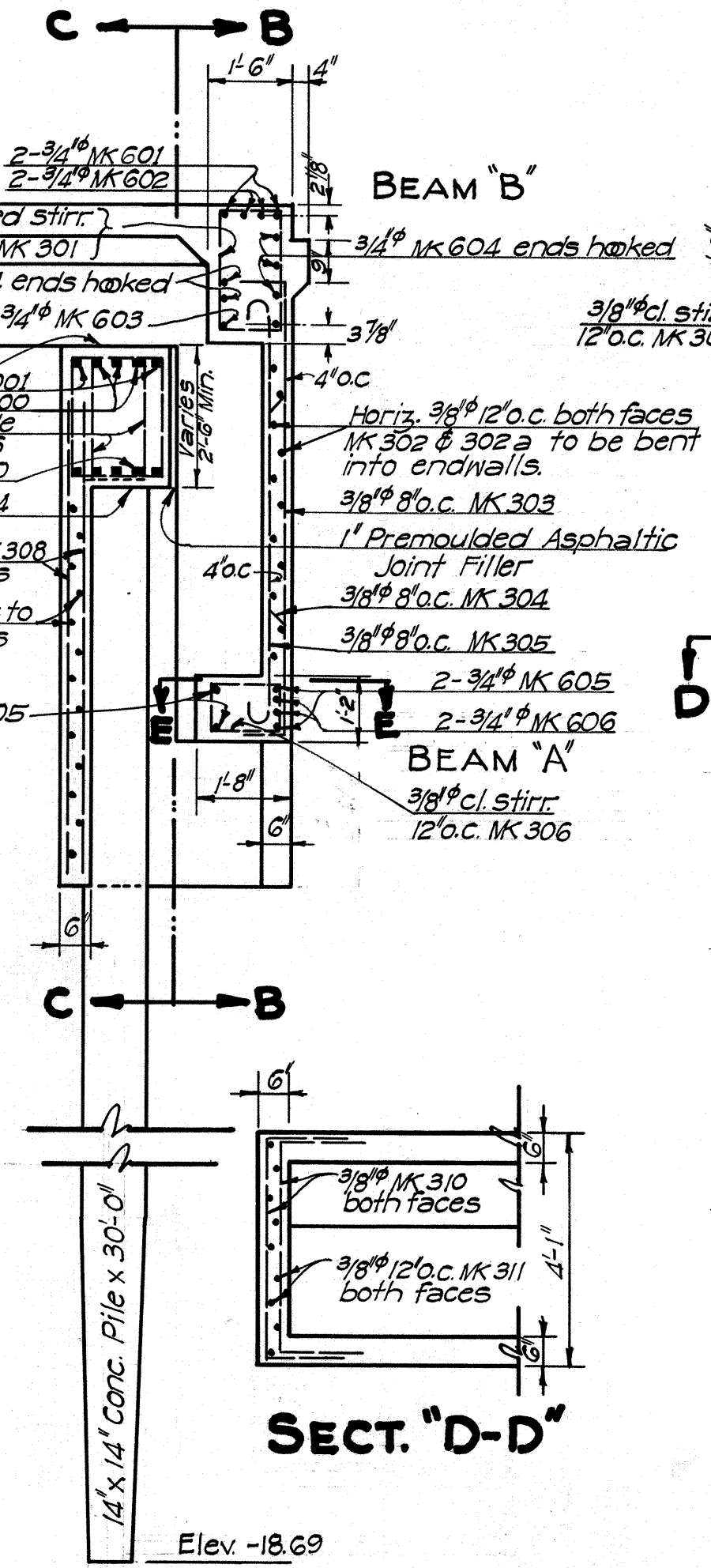
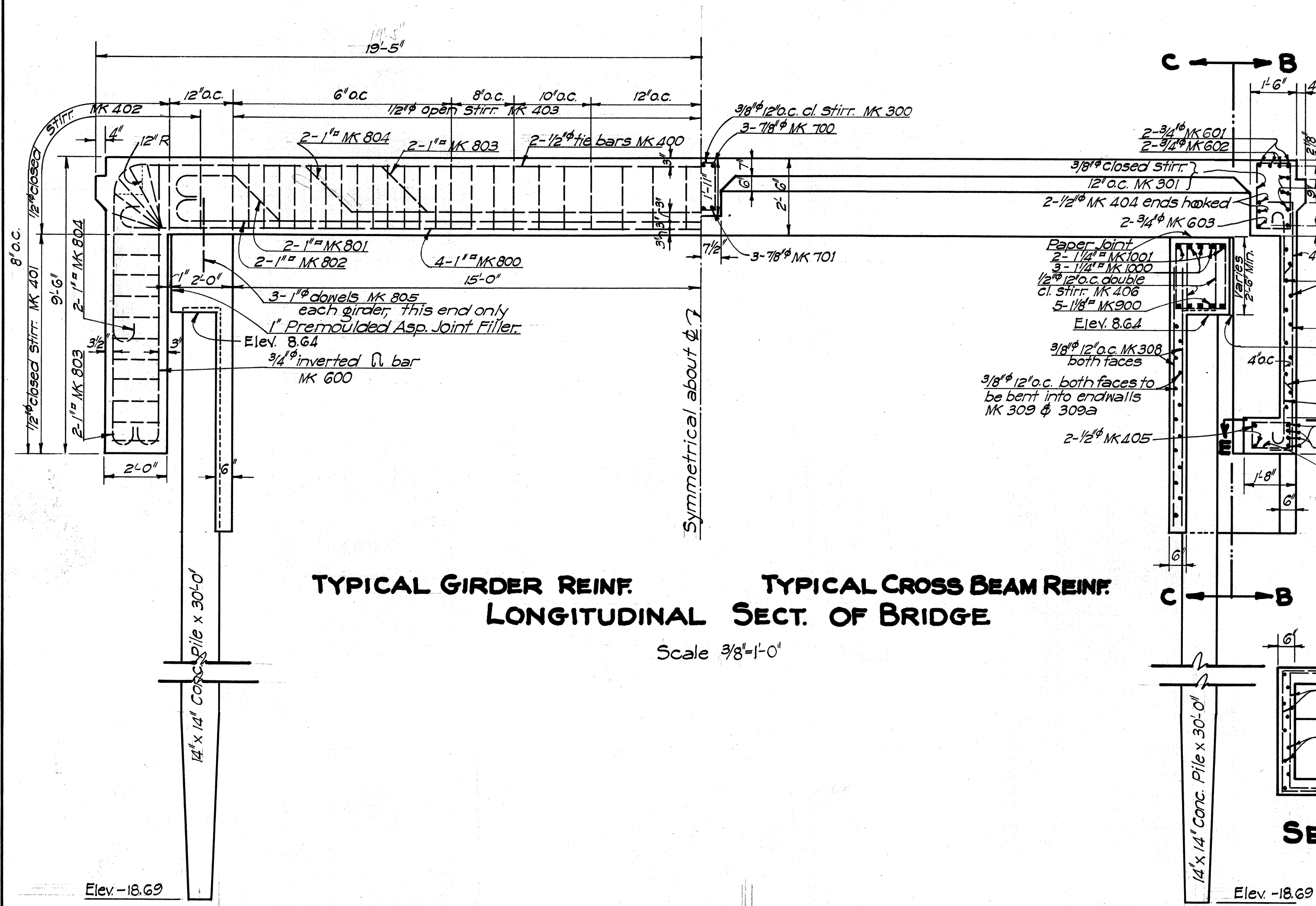


GENERAL NOTES

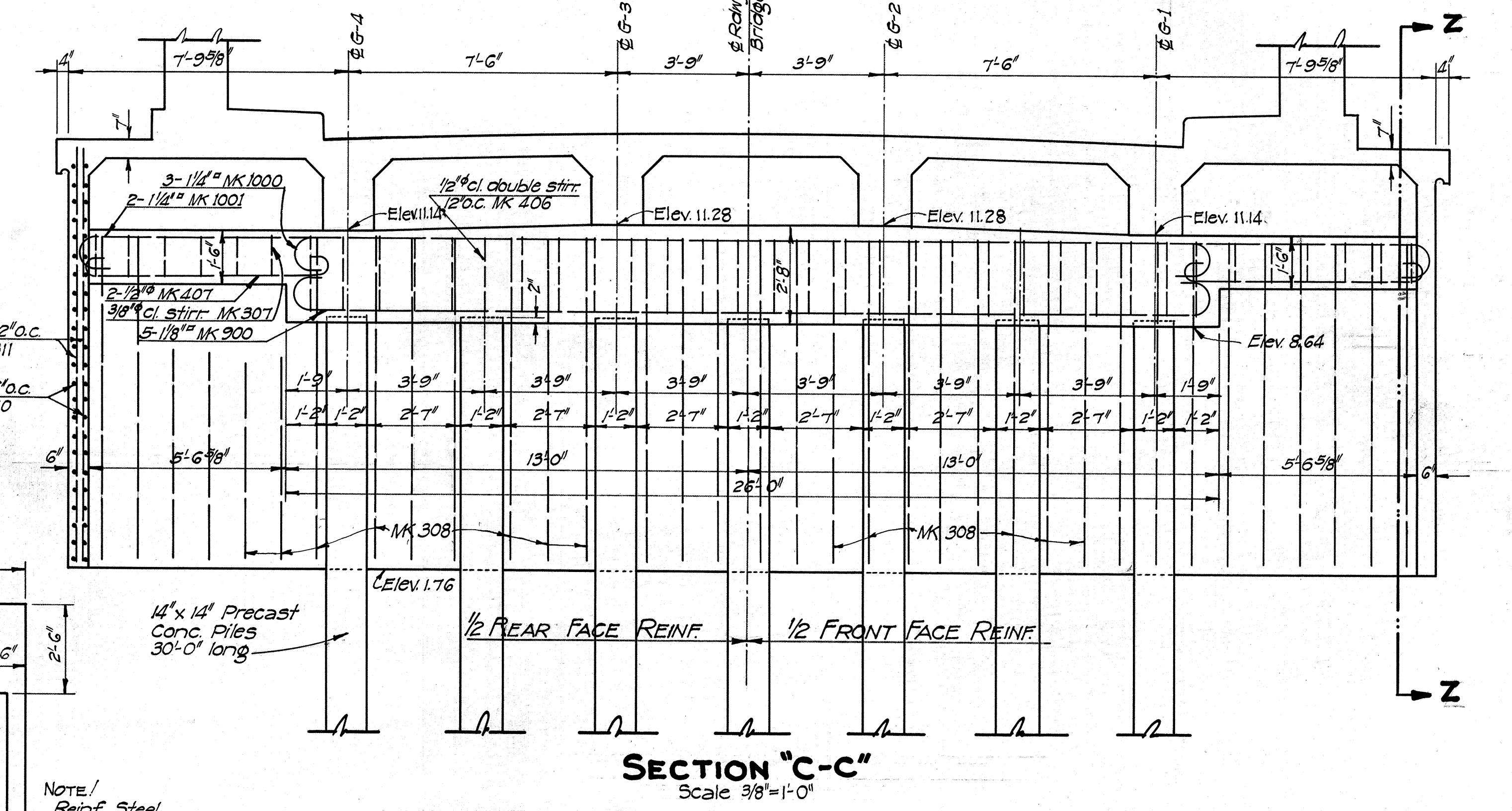
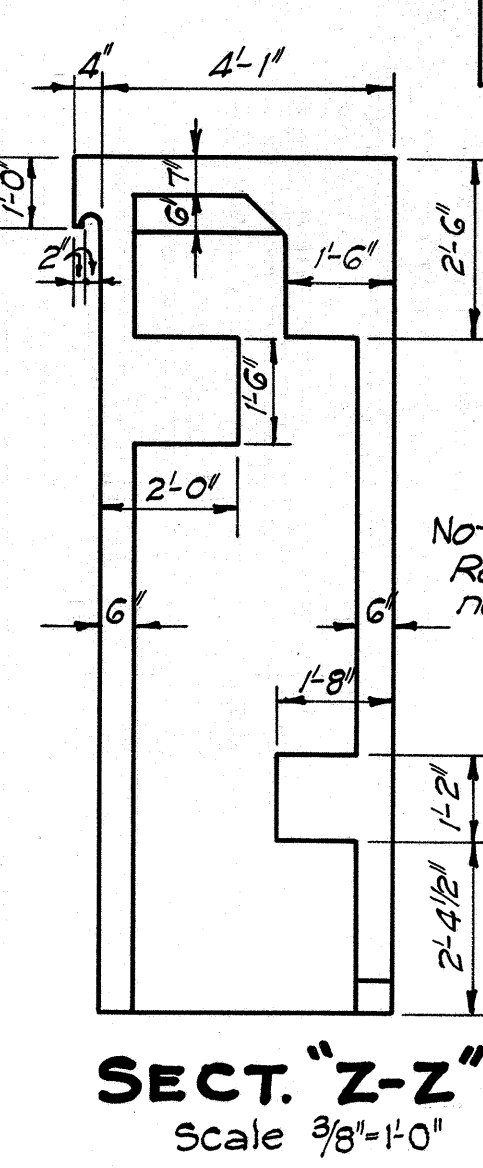
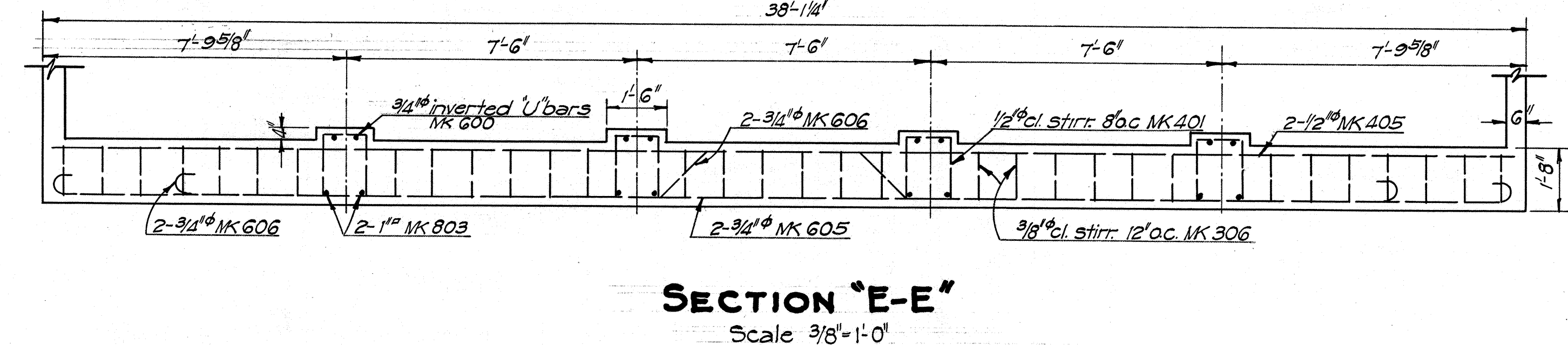
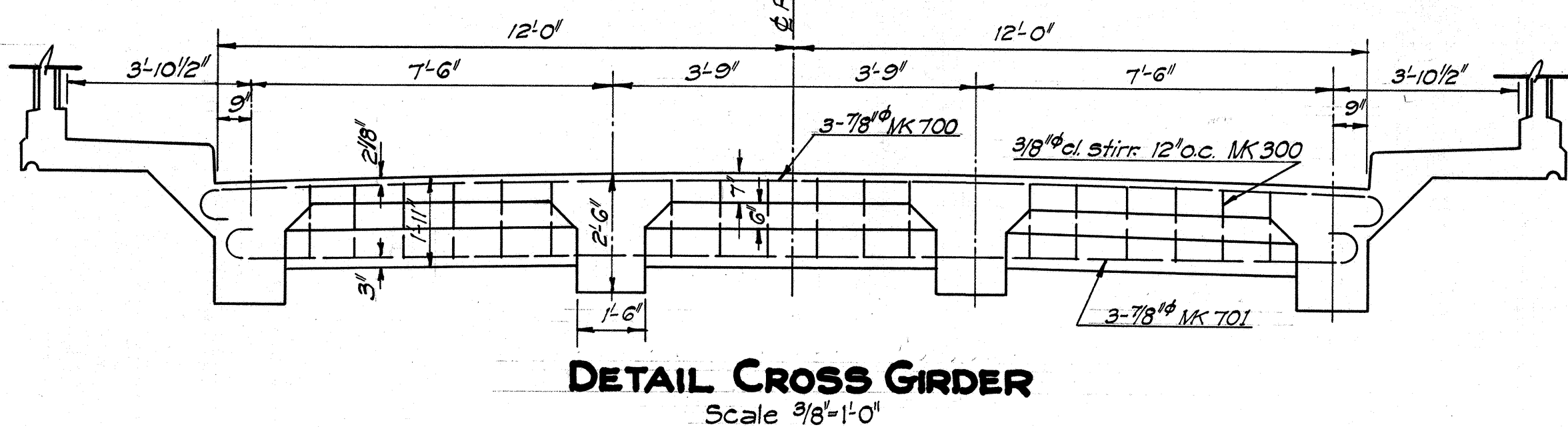
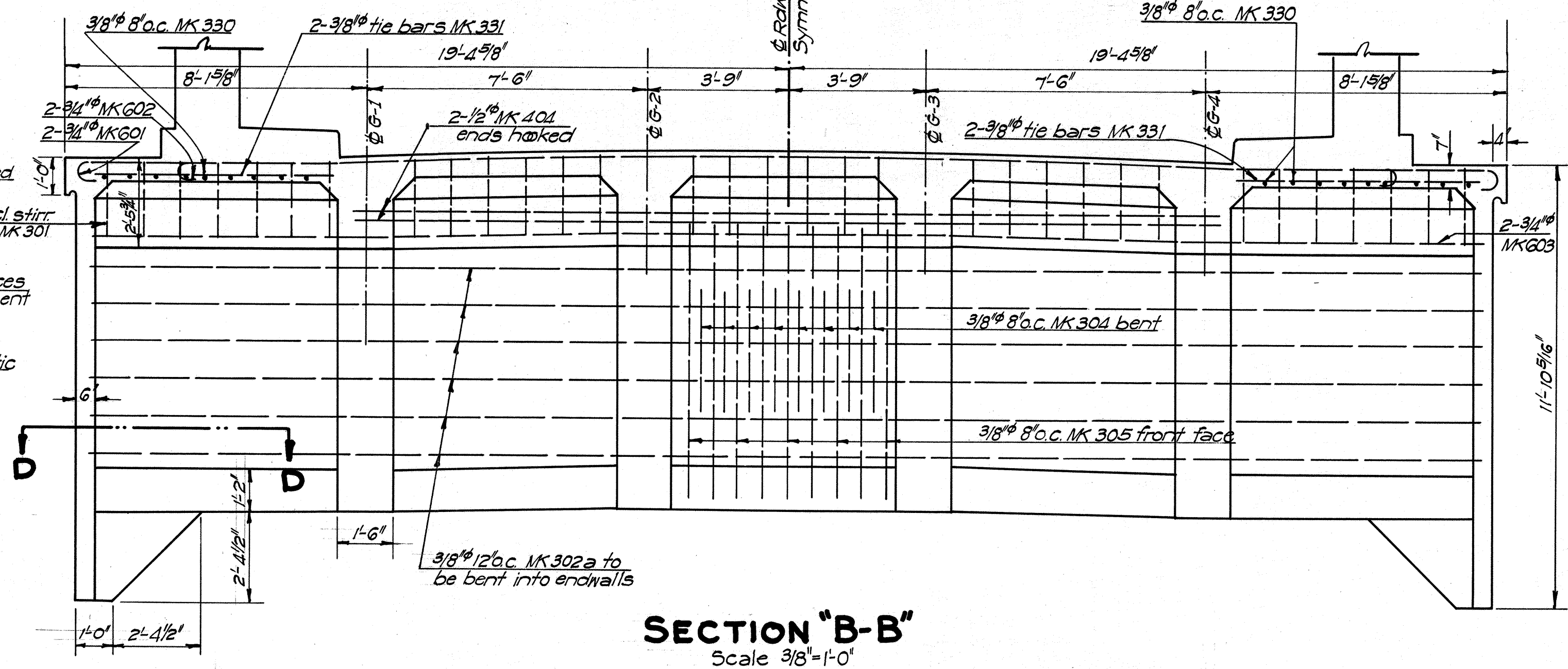
Dead Load: Concrete at 150# per cu. ft.
Live Load: Train of 15 ton trucks in two traffic lanes. Impact allowance $\frac{50}{L+125}$
Spacing of trucks as per diagram.
Concrete: Class 'A' (1:2:4) with all exposed edges chamfered $\frac{3}{4}$ " unless otherwise noted. Allowable compression 900# per sq. inch.
Reinforcing Steel: Intermediate grade, allowable tensile stress 18,000# per sq. inch.
All steel to be round or square, deformed bars of approved design. All dimensions relating to reinforcing are to centers of bars unless otherwise noted. Where splicing of reinforcing is necessary, bars are to be lapped 40 diameters and splices are to be staggered. No allowance will be made in the quantities for extra weight of steel required for splicing. Unless otherwise noted the minimum covering measured from the surface of concrete to the face of any steel shall be not less than $2\frac{1}{2}$ " in abutments and abutment footings, 2" in beams, girders and handrails and 1" in slabs. Steel to be held rigidly & accurately in place before & during placing of concrete.
Brush Coat Waterproofing: Remove all projections, cement film, dirt etc. Apply Waterproofing as specified. Waterproofing is incidental to the concrete used, and will not be paid for separately.
Construction Joints: All construction joints to have surface roughened and 1:2 cement grout applied immediately before second pour.



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
BRIDGE No. 1
STA. 626 + 14.59 TO STA. 626 + 53.41
KANEHAMEHA HIGHWAY F.A.P. 3-E



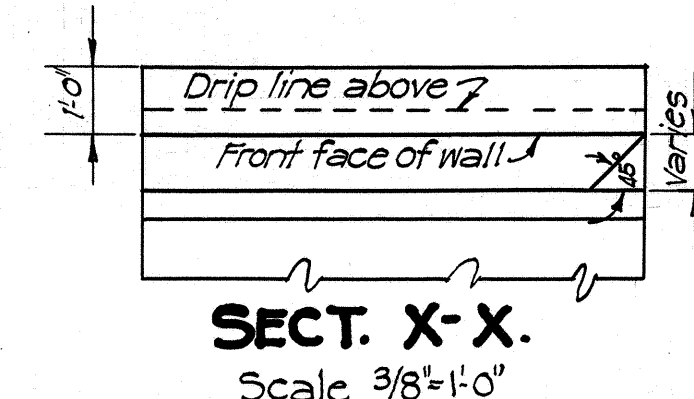
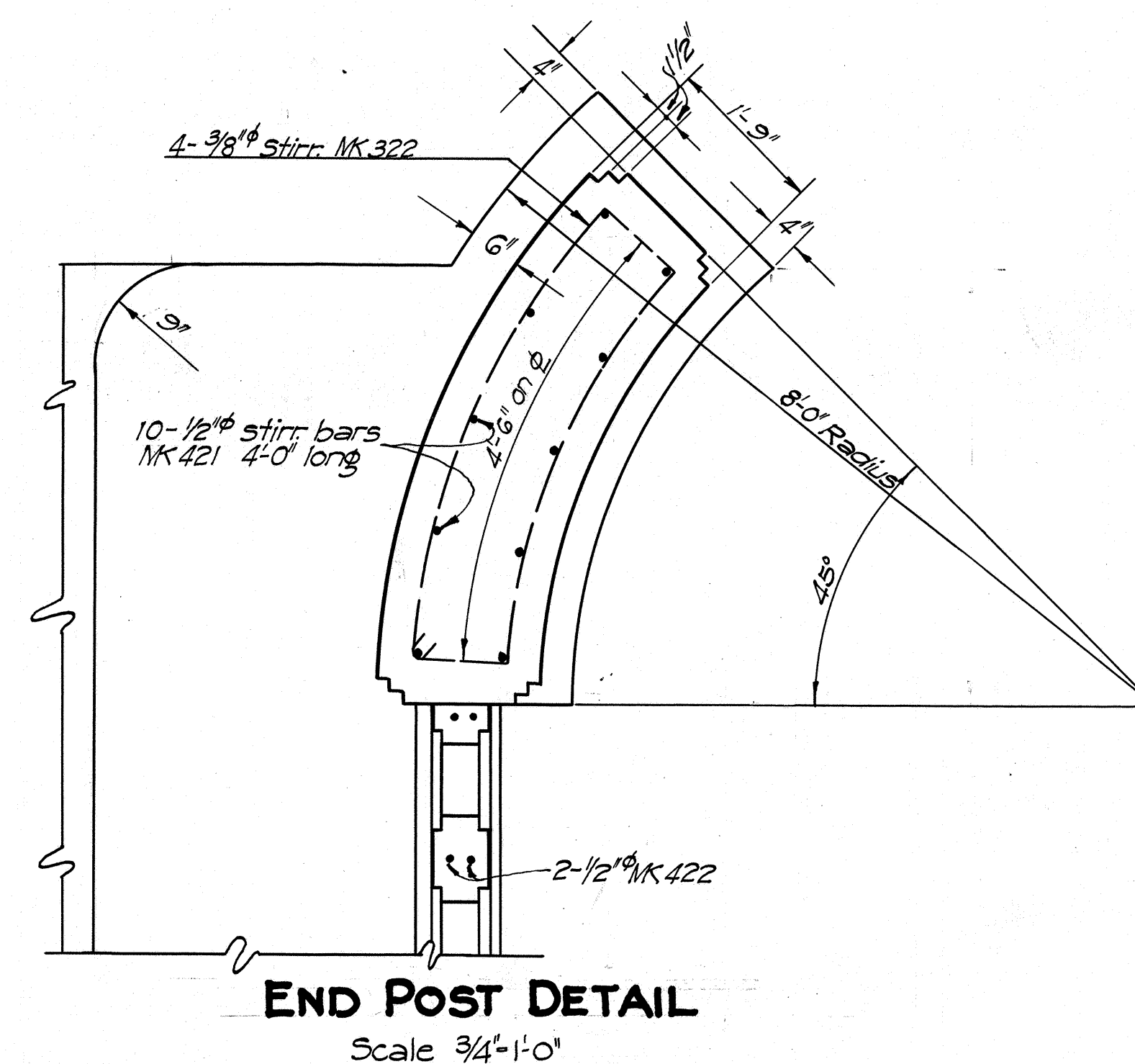
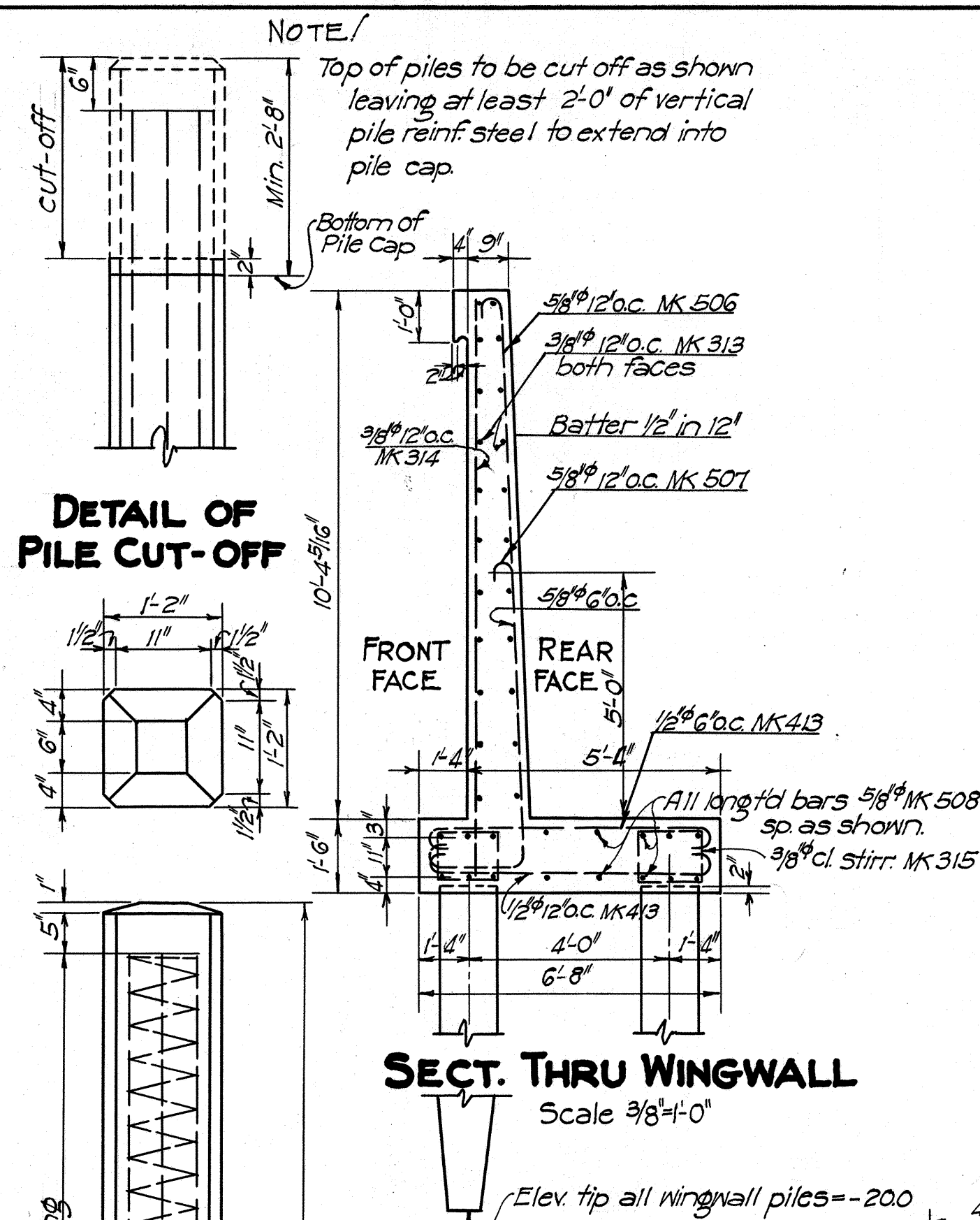
SECT. "D-D"



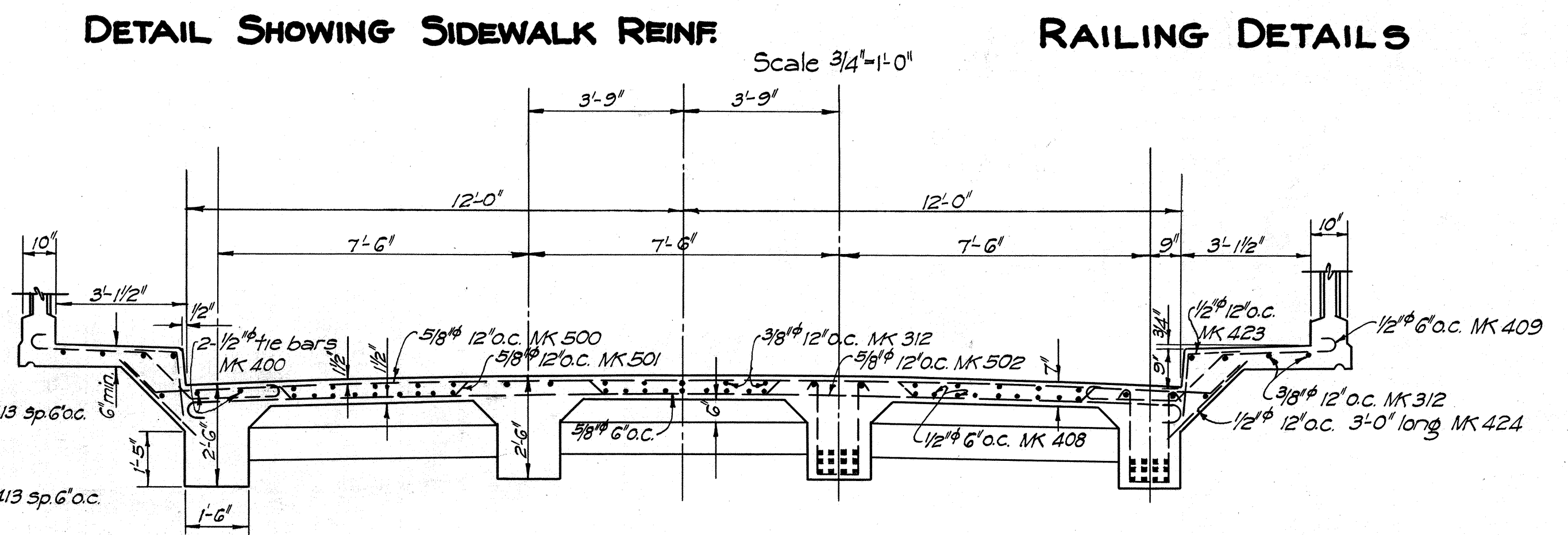
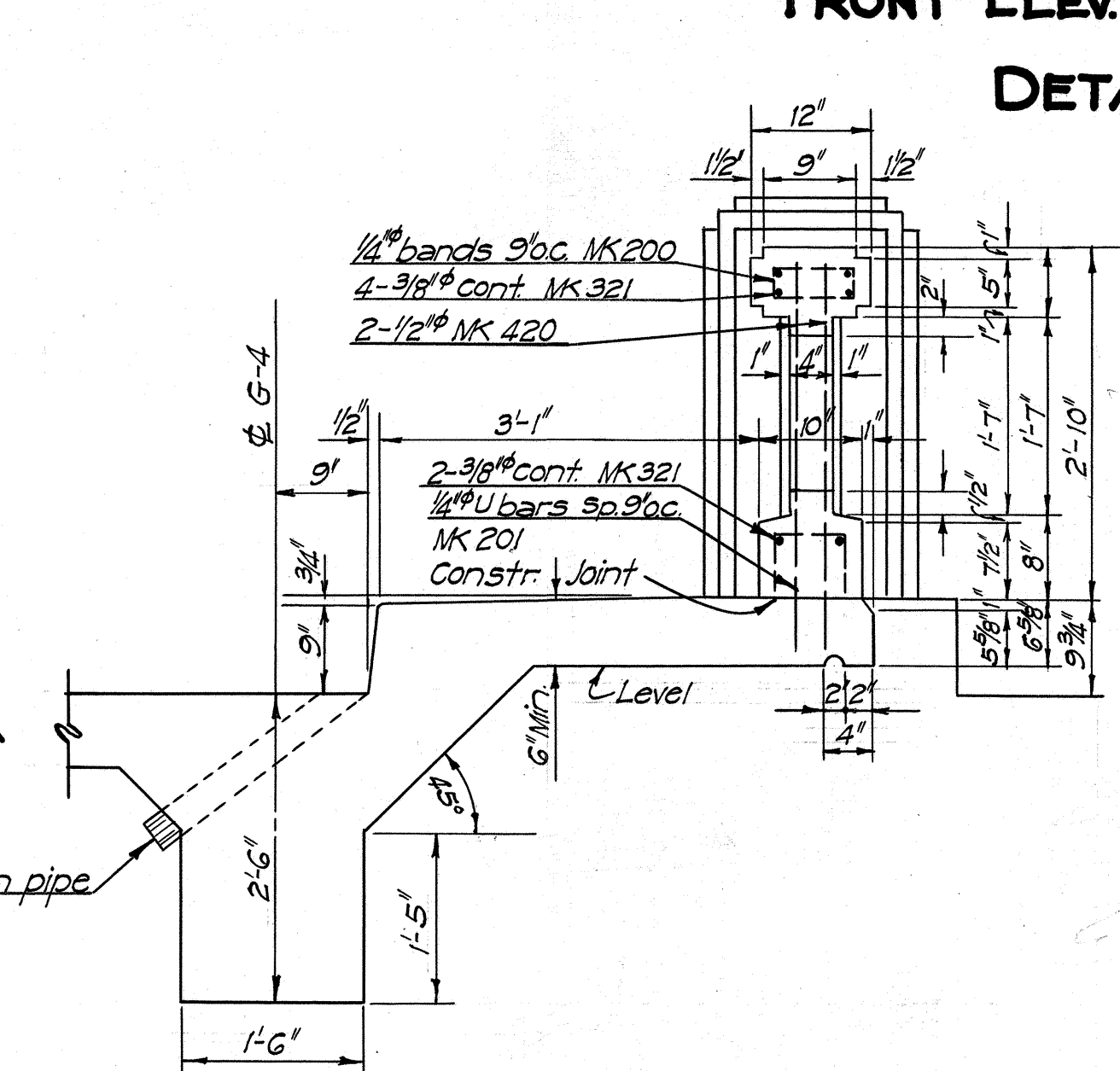
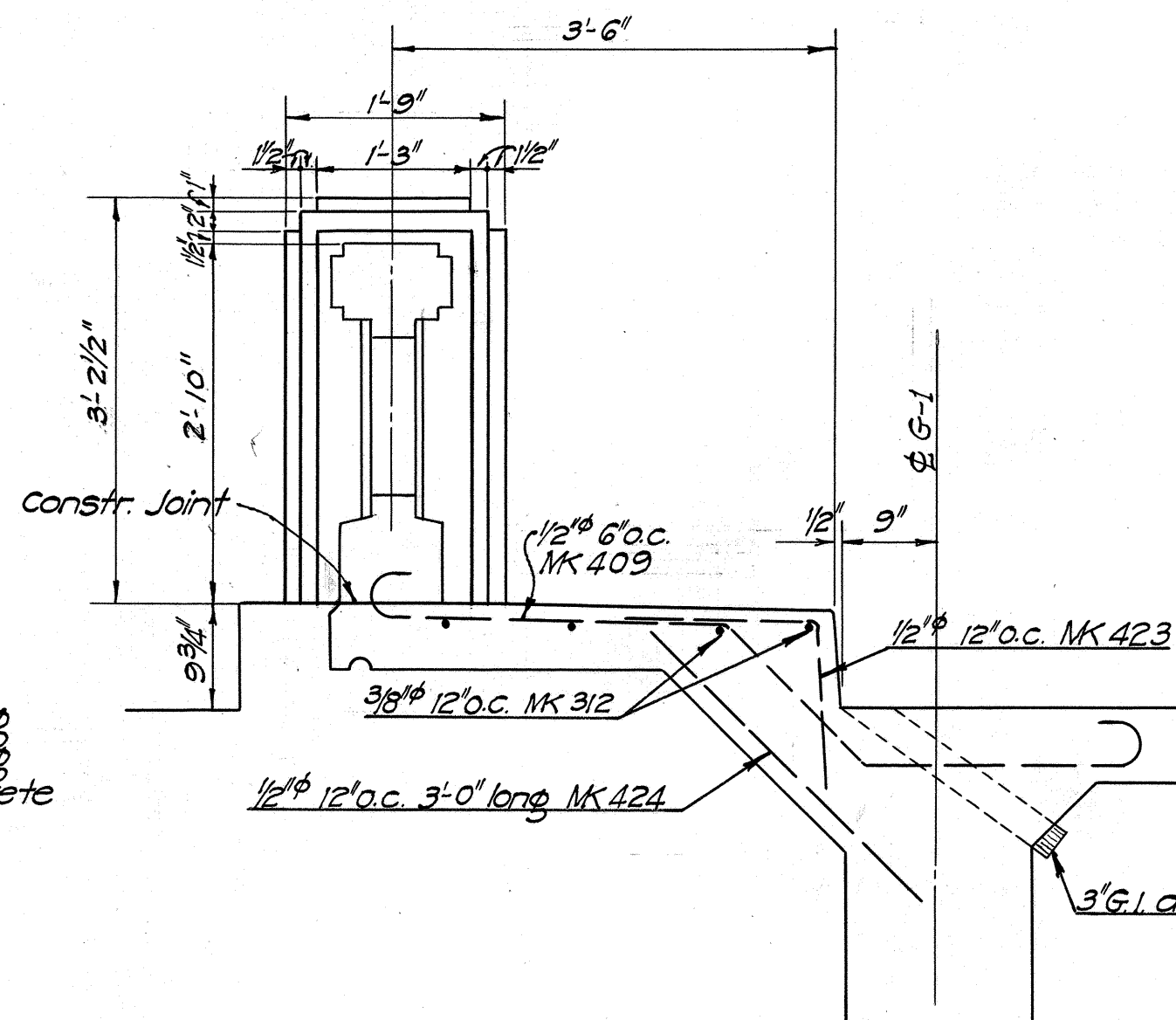
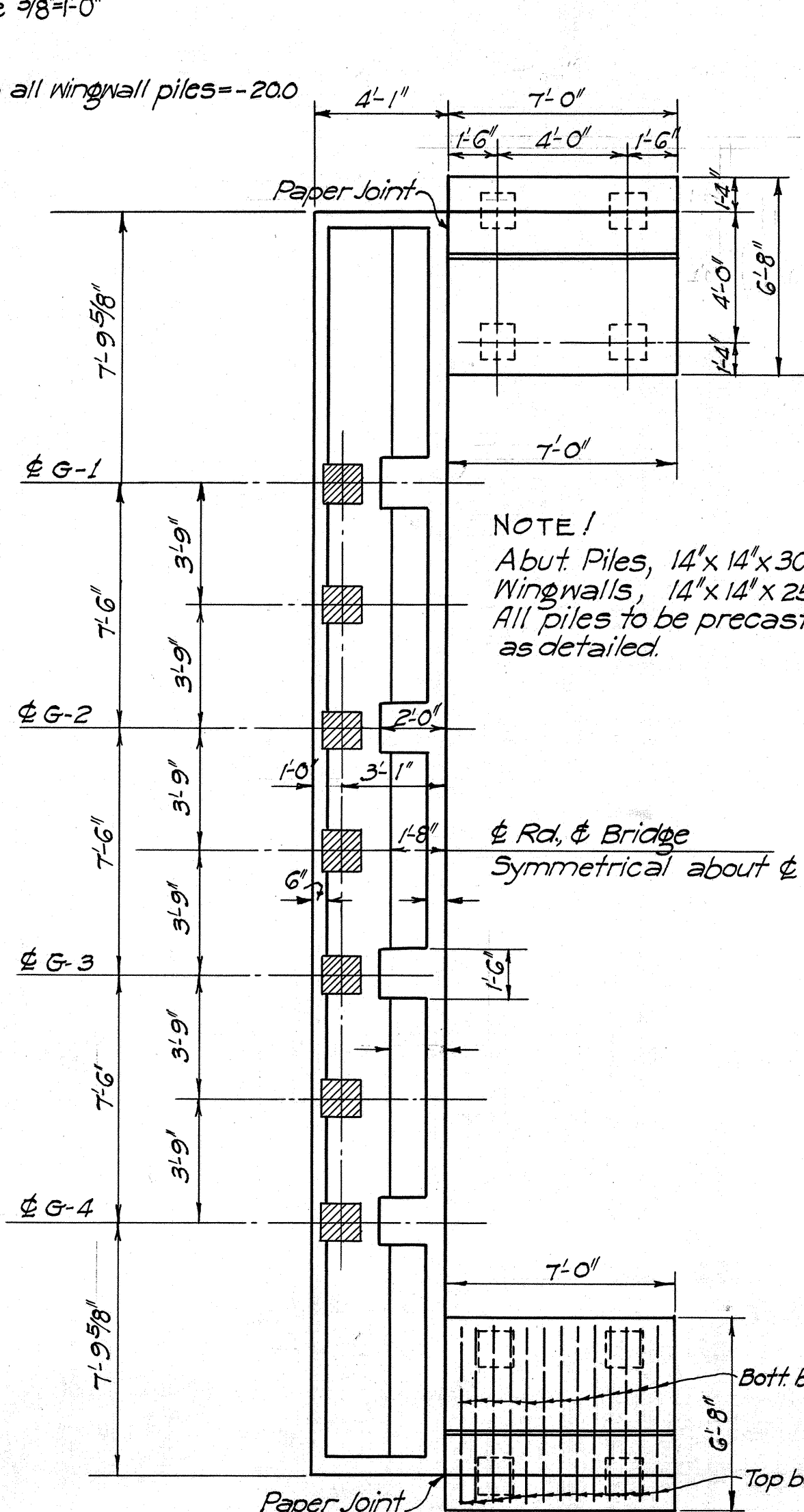
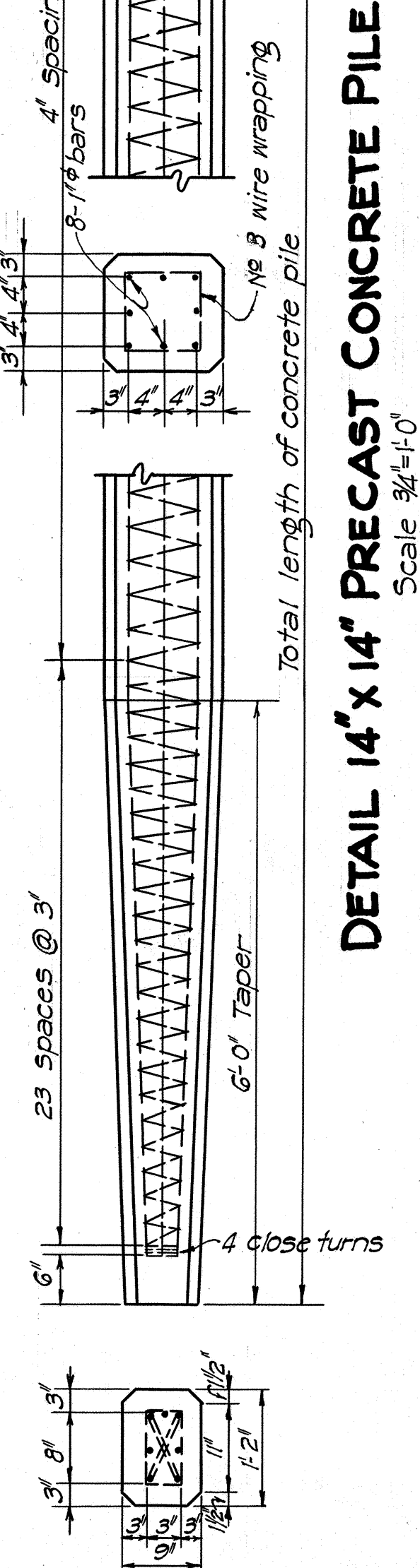
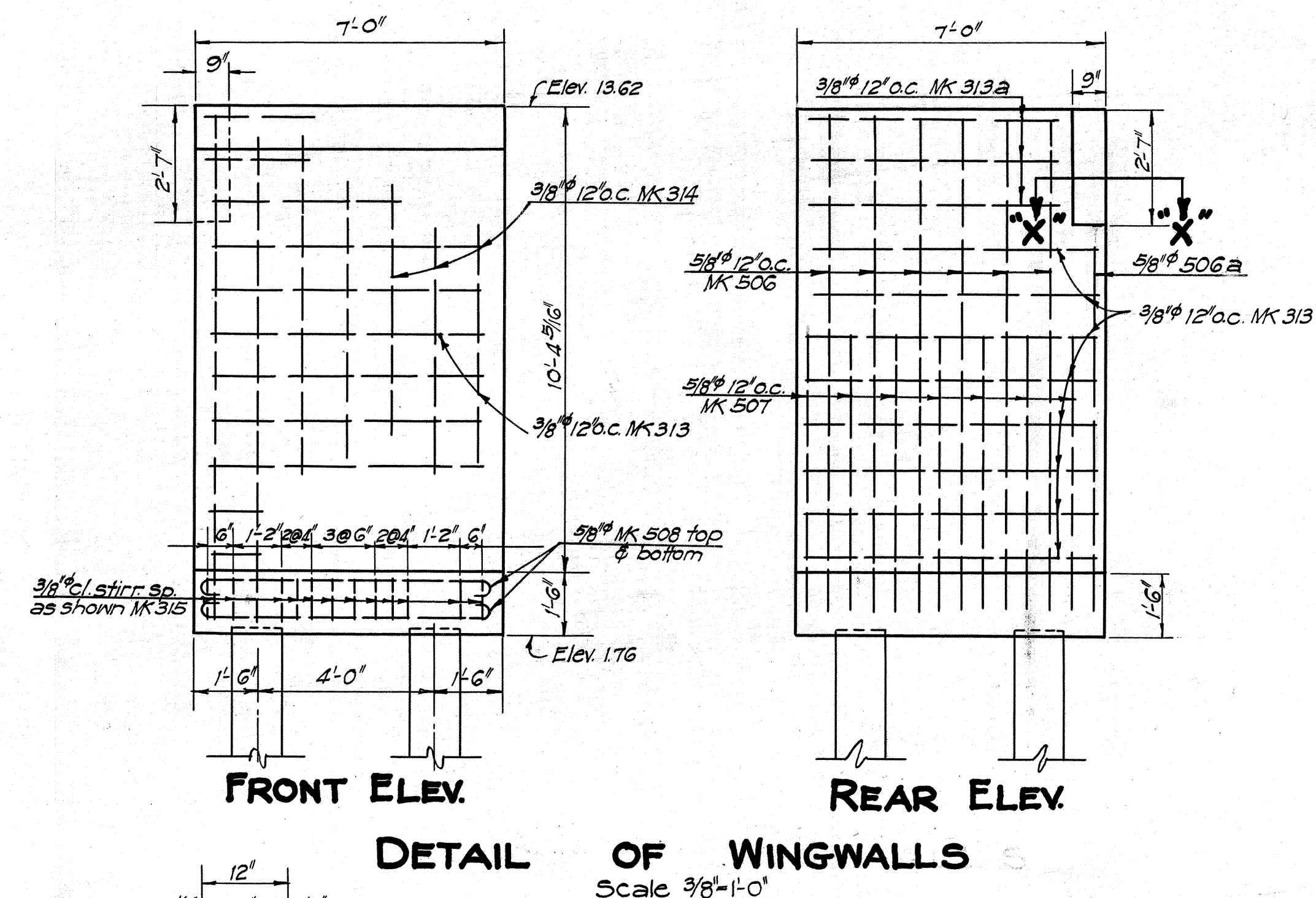
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
BRIDGE No. 1
STA. 626+14.59 TO STA. 626+53.41
KAMEHAMEHA HIGHWAY F.A.P. 3-E
Oct. 1936

ORIGINAL PLAN
DESIGNED BY
DRAWN BY
CHECKED BY
DATE
1/26
10/36
ck. C. H. H. H.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	3-E	1936	16	30



NOTE: All wingwalls and wingwall footings are to be separated from main structure walls, brackets, post, etc., by a paper joint.



TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
BRIDGE No. 1
STA. 626 + 14.59 TO STA. 626 + 53.41
KAMEHAMEHA HIGHWAY F.A.P. 3-E
Oct. 1936

MK	Description	Location	Size	Length	No of bars each unit	No of units	Total No of bars	Total Length	Wt per foot	Total Weight
500		Slab	3/8"	27'-6"	34	1	34	935.0	1.04	972.0
501		Slab	"	28'-5"	32	1	32	909.0	"	940.0
502		"	"	25'-4"	34	1	34	827.2	"	860.0
330		"	3/8"	3'-9"	9	4	36	135.0	0.38	51.0
331		"	"	6'-6"	2	4	8	52.0	"	20.0
312		"	"	37'-9"	25	1	25	943.7	"	356.0
408		"	1/2"	37'-9"	27	1	27	1019.2	0.67	683.0
409		"	"	7'-6"	75	2	150	1125.0	"	754.0
333		"	3/8"	9'-8"	4	3	12	116.0	0.38	44.0
700		Cross Beam	7/8"	26'-6"	3	1	3	79.5	2.04	162.0
701		"	"	25'-5"	3	1	3	76.2	"	155.0
300		"	3/8"	5'-6"	18	1	18	99.0	0.38	38.0
601		End Beam	3/4"	39'-3"	2	2	4	157.0	1.50	236.0
602		"	"	34'-2"	2	2	4	136.7	"	205.0
404		"	1/2"	24'-6"	2	2	4	98.0	0.67	66.0
604		"	3/4"	39'-2"	3	2	6	235.0	1.50	353.0
301		"	3/8"	7'-0"	32	2	64	448.0	0.38	170.0
603		"	3/4"	37'-6"	2	2	4	150.0	1.50	225.0
424		Slab	1/2"	3'-0"	31	2	62	186.0	0.67	125.0
605		Beam A	3/4"	39'-2"	2	2	4	156.7	1.50	235.0
606		"	3/4"	34'-0"	2	2	4	136.0	"	204.0
405		"	1/2"	37'-7"	2	2	4	150.3	0.67	101.0
306		"	3/8"	4'-9"	32	2	64	304.0	0.38	116.0
305		Curtain Wall	3/8"	8'-0"	47	2	94	752.0	0.38	286.0
303		"	3/8"	9'-6"	47	2	94	893.0	"	339.0

MK	Description	Location	Size	Length	No of bars each unit	No of units	Total No of bars	Total Length	Wt per foot	Total Weight
304		Curtain Wall	3/8"	9'-9"	42	2	84	819.0	0.38	311.0
302		"	"	40'-8"	5	2	10	406.7	"	155.0
302a		"	"	40'-4"	6	2	12	483.9	"	184.0
311		Front Wall (Ends)	"	11'-3"	9	4	36	405.0	"	154.0
310		" (")	"	6'-9"	46	4	184	1242.0	"	472.0
308		38 bars front face 32 " rear "	"	9'-0"	70	2	140	1260.0	"	479.0
309		"	"	40'-8"	7	2	14	569.0	"	216.0
309a		"	"	40'-4"	6	2	12	484.0	"	184.0
1000		Front Wall (Girder)	1 1/4"	28'-3"	3	2	6	169.5	5.31	900.0
1001		"	"	40'-3"	2	2	4	161.0	"	85.5.0
900		"	1 1/8"	28'-0"	5	2	10	280.0	4.30	1204.0
406		"	1/2"	7'-6"	52	2	104	780.0	0.67	523.0
307		"	3/8"	6'-3"	12	2	24	150.0	0.38	57.0
407		"	1/2"	7'-9"	4	2	8	62.0	0.67	42.0
423		Slab	1/2"	3'-0"	39	2	78	234.0	"	157.0
803		G-1, G-2, G-3, G-4	1"	58'-2"	2	4	8	465.3	3.40	1582.0
804		"	"	51'-8"	2	4	8	413.0	"	1404.0
801		"	"	37'-0"	2	4	8	296.0	"	1006.0
802		"	"	35'-9"	2	4	8	286.0	"	972.0
800		"	"	39'-3"	4	4	16	628.0	"	2135.0
600		"	3/4"	20'-3"	2	4	8	162.0	1.50	243.0
402		"	1/2"	6'-6"	7	8	56	364.0	0.67	244.0
401		"	"	6'-0"	11	8	88	528.0	"	354.0

MK	Description	Location	Size	Length	No of bars each unit	No of units	Total No of bars	Total Length	Wt per foot	Total Weight
400		G-1, G-2, G-3, G-4	1/2"	28'-0"	2	4	8	224.0	0.67	150.0
805		"	1"	2'-6"	3	4	12	30.0	2.67	80.0
403		"	1/2"	6'-0"	48	4	192	1152.0	0.67	773.0
413		Wingwall Footing	"	7'-2"	20	4	80	573.6	"	384.0
508		"	5/8"	7'-11"	16	4	64	506.7	1.04	527.0
315		"	3/8"	5'-0"	24	4	96	480.0	0.38	182.0
314		Wingwall	3/8"	11'-4"	7	4	28	315.0	"	120.0
313		"	"	6'-6"	19	4	76	494.0	"	188.0
313a		"	"	5'-9"	3	4	12	69.0	"	26.0
506		"	5/8"	14'-6"	6	4	24	348.0	1.04	362.0
506a		"	"	11'-0"	1	4	4	44.0	"	46.0
507		"	"	9'-6"	7	4	28	266.0	"	277.0
420		Railing	1/2"	3'-0"	42	2	84	252.0	0.67	169.0
200		"	1/4"	2'-0"	41	2	82	164.0	0.17	28.0
201		"	"	1'-9"	41	2	82	143.5	"	24.0
321		"	3/8"	30'-0"	6	2	12	360.0	0.38	137.0
421		End Post	1/2"	4'-0"	10	4	40	160.0	0.38	107.0
422		"	3/8"	11'-6"	4	4	16	184.0	"	70.0

- CONTRACTORS NOTE -

This steel schedule is subordinate to the details shown on the plans. In case of discrepancy between steel schedule and drawings, the latter shall govern. The Terr. Highway Dept does not assume any responsibility for any errors that may occur in the steel schedule. The Contractor shall check steel schedule before placing order. All stirrups dimensions are to inside of stirrups except where noted otherwise, all other dimensions are figured on ϕ of bar.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII
BRIDGE No. 1
STA. 626+14.59 TO STA 626+53.41
KAMEHAMEHA HIGHWAY F.A.P.3-E
Oct. 1936

SHEET No. 48 OF 5 SHEETS

4368.17 & 4368.18