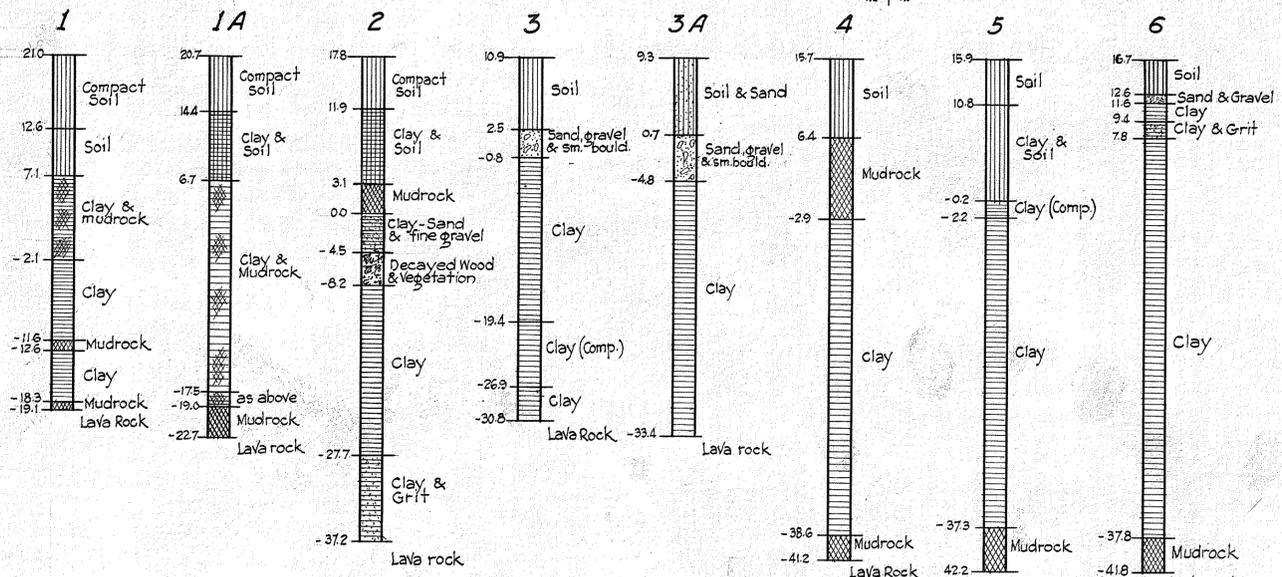


BRIDGE QUANTITIES				
Item	Structure Exc.	Class "A" Concrete	Reinforcing Steel	Conc. Piles
Footings	503.0 c.y.		11,294 lbs.	34 - 55 1/2"
Piers & Abuts.	0.0 "	182.95 "	35,050 "	55-45 "
Superstructure		244.00 "	63,617 "	
Railing		26.29 "	2,332 "	
TOTALS	503.0 c.y.	551.07 "	112,295 "	

GENERAL NOTES

Dead Load : Concrete at 150# per cu. ft.
 Live Load : Train of 15 ton trucks in two traffic lanes, with 30% allowance for impact. Spacing of truck as per diagram.
 Concrete : Class "A" (1:2:4 mix) with all exposed edges chamfered 3/4" unless otherwise noted. Allowable compression 650# per sq. inch.
 Reinforcing Steel : Allowable tensile stress 16,000# per sq. inch. All steel to be round or square deformed bars of approved design, square twisted bars not to be considered deformed. All dimensions relating to reinforcement are to centers of bars unless otherwise noted. Where splicing of reinforcement is necessary, bars are to be lapped 40 diameters and splices are to be staggered. Regarding splicing of main longitudinal bars see below. No allowance will be made in the quantities for extra weight of steel required for splices. Unless otherwise noted the minimum covering measured from the surface of concrete to the face of any steel shall be not less than 2 1/2" in abutments and abutment footings; 2" in beams, girders and handrails and 1 1/4" in slabs. Steel to be held rigidly and accurately in place before and during placing of concrete.
 Splices : Splices are permitted in main bars exceeding trade lengths at points indicated by Engineer, to be electric arc welded using wedge cutbacks and 1/8" collars. Splices to test at least full strength.



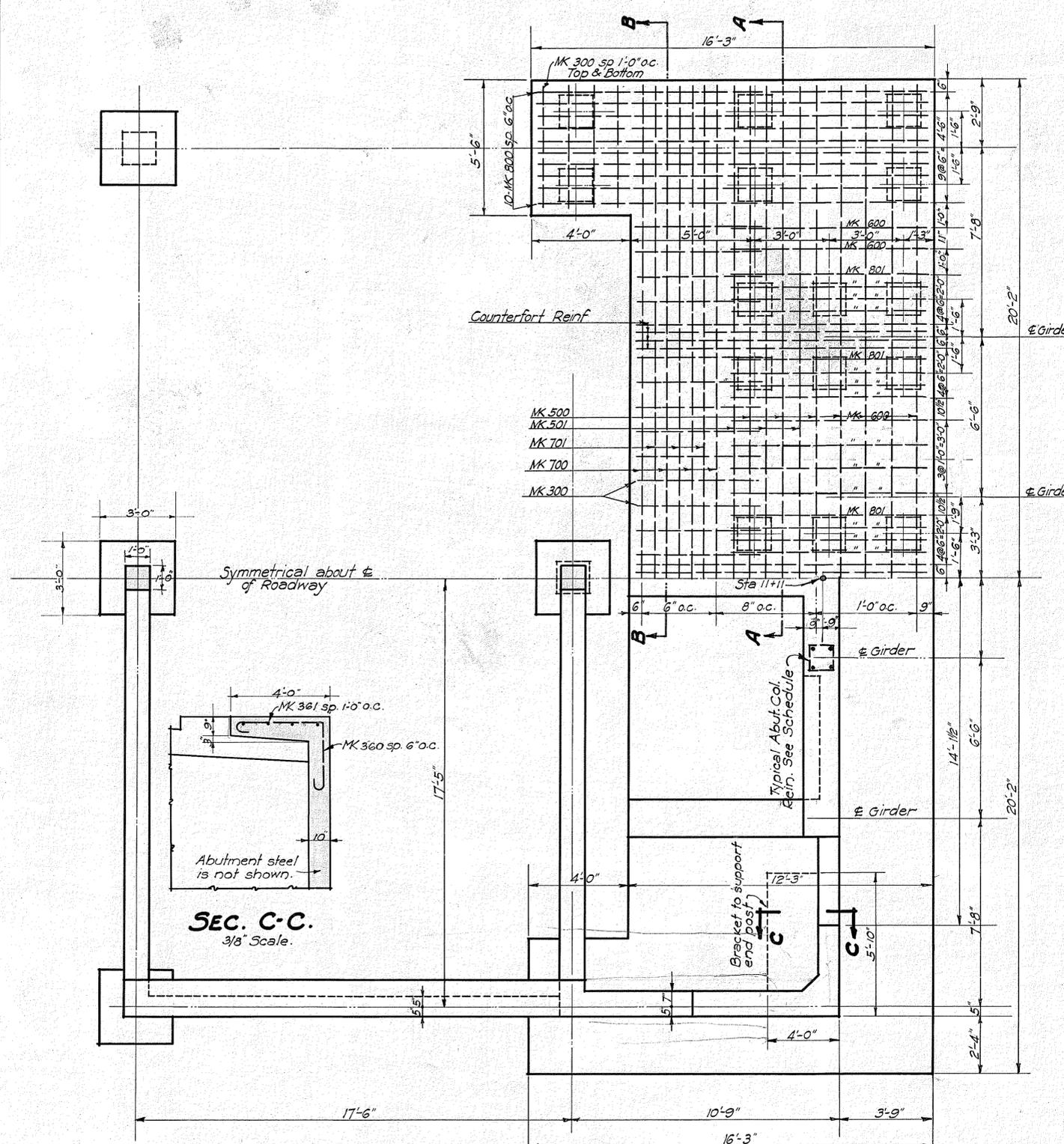
WASH BORING DATA
Scale 1"=10'

DATE: Oct 1/33
 DESIGNED BY: W.E.S.
 DRAWN BY: C.E.V.
 CHECKED BY: W.E.S.
 APPROVED BY: W.E.S.

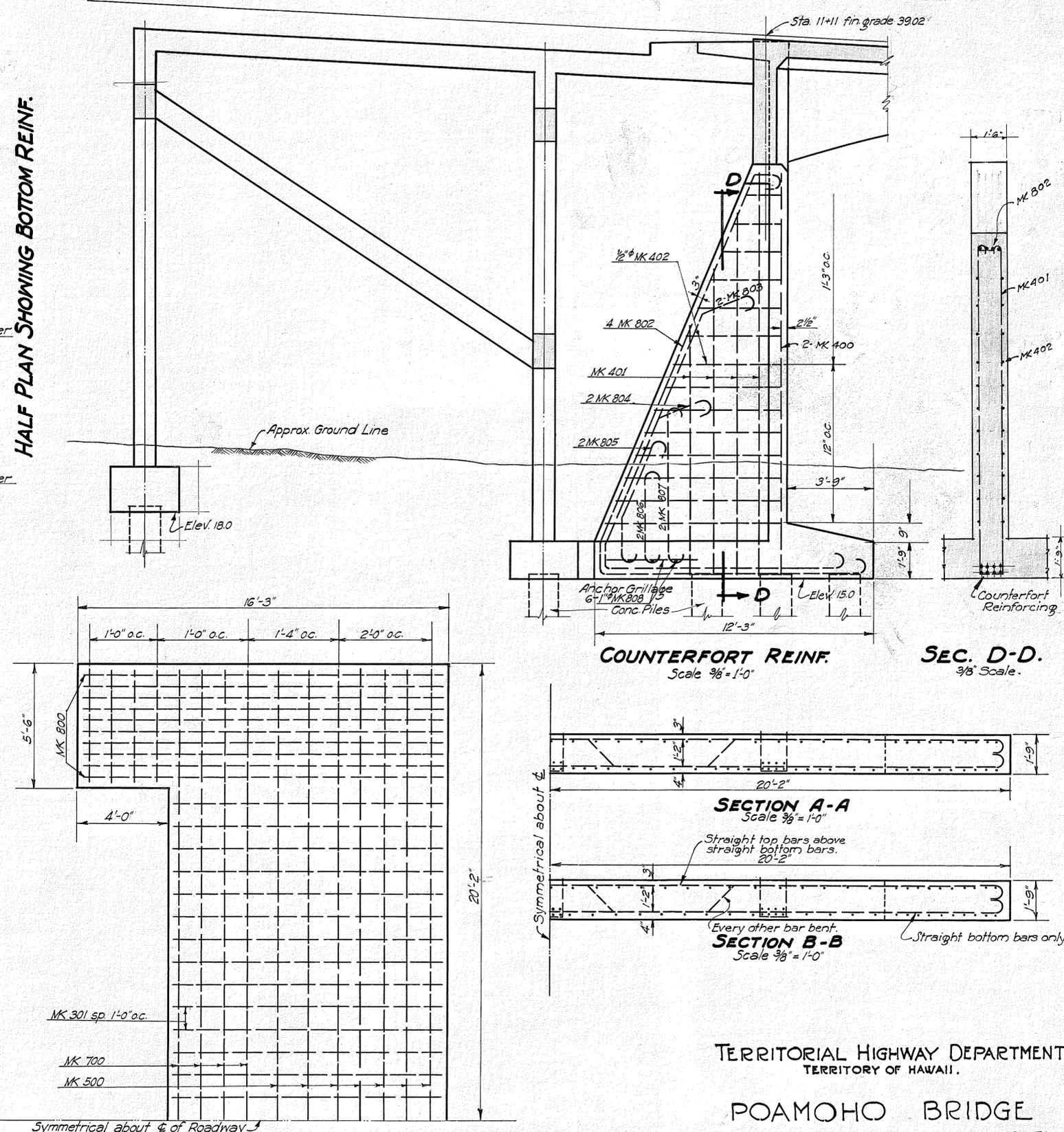
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

POAMOHU BRIDGE
 NO. 2 STA. 11+11 TO STA. 12+71
 KAMEHAMEHA HIGHWAY N.R.H. NO. 7-E
 NOV. 1933. SHEET NO. 1 OF 10 SHEETS.

4305.7



HALF PLAN SHOWING BOTTOM REINF.



SEC. C-C
Scale $\frac{3}{8}'' = 1'-0''$

SECTION A-A
Scale $\frac{3}{8}'' = 1'-0''$

SECTION B-B
Scale $\frac{3}{8}'' = 1'-0''$

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII.

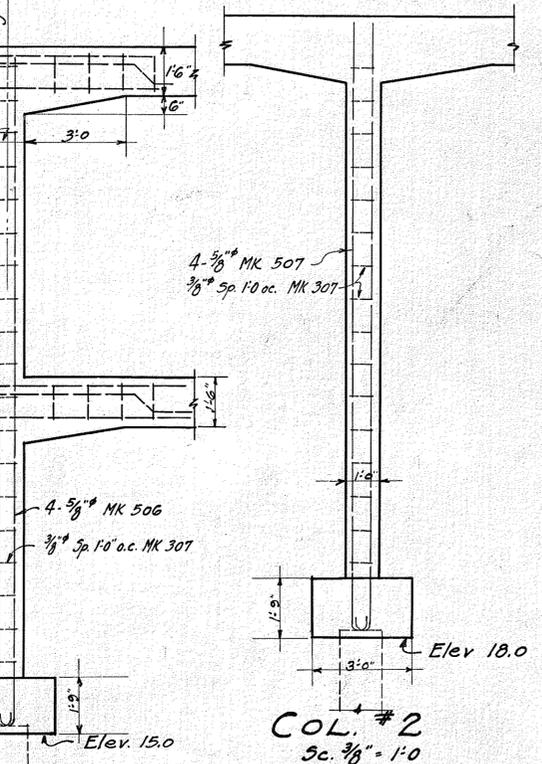
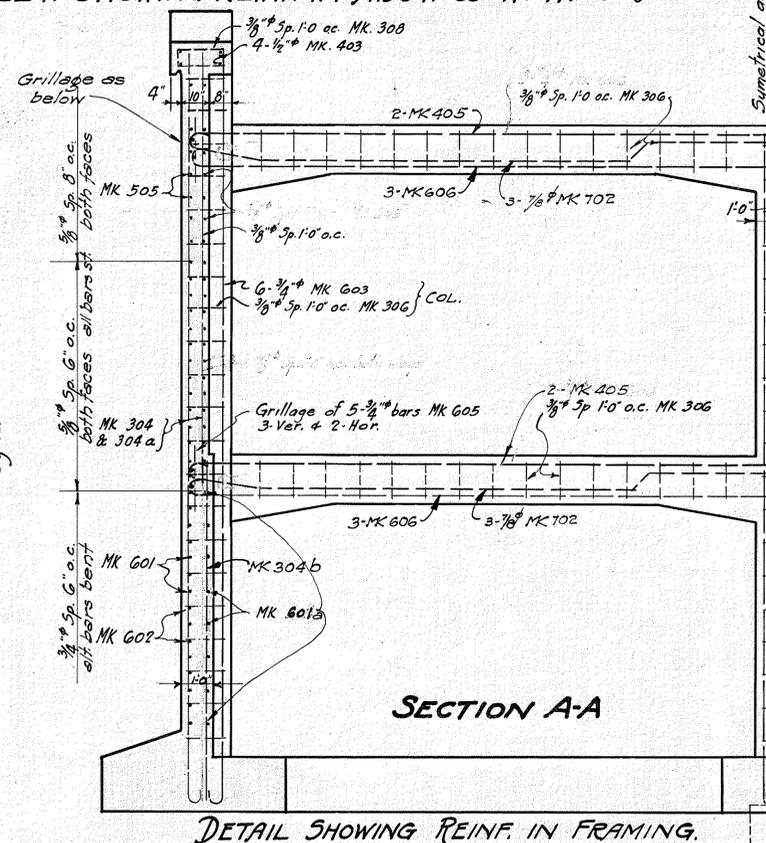
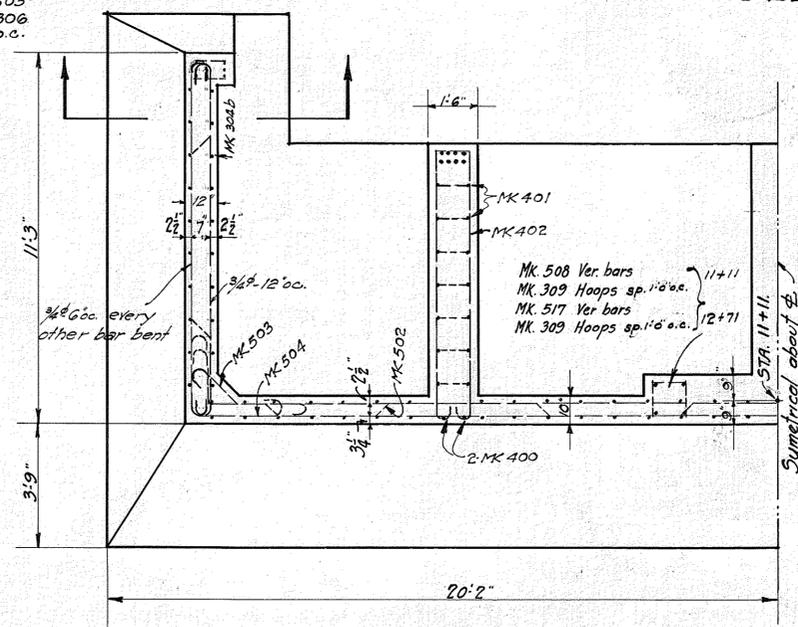
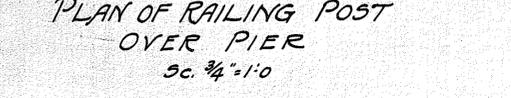
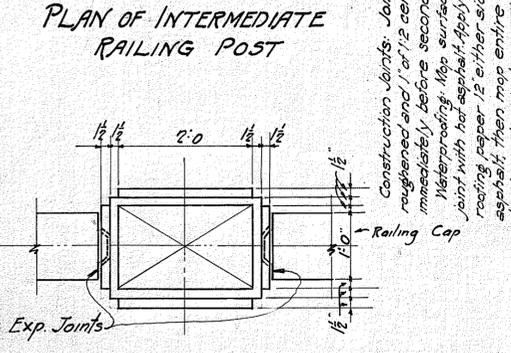
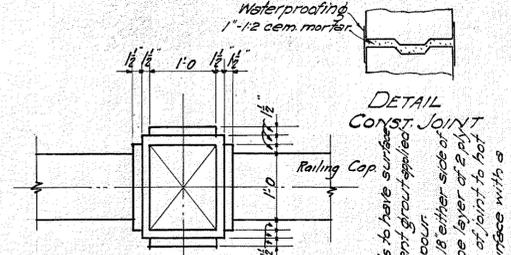
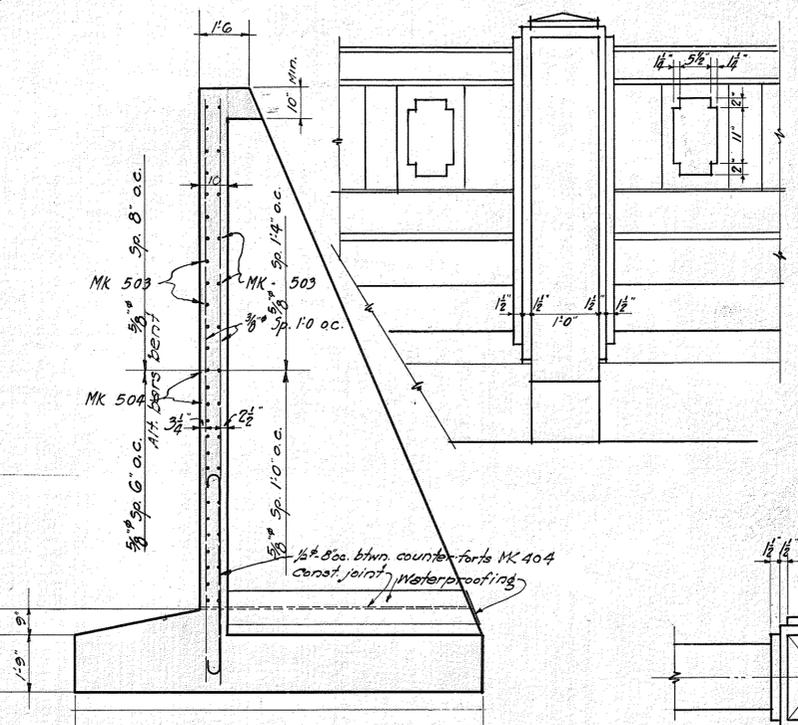
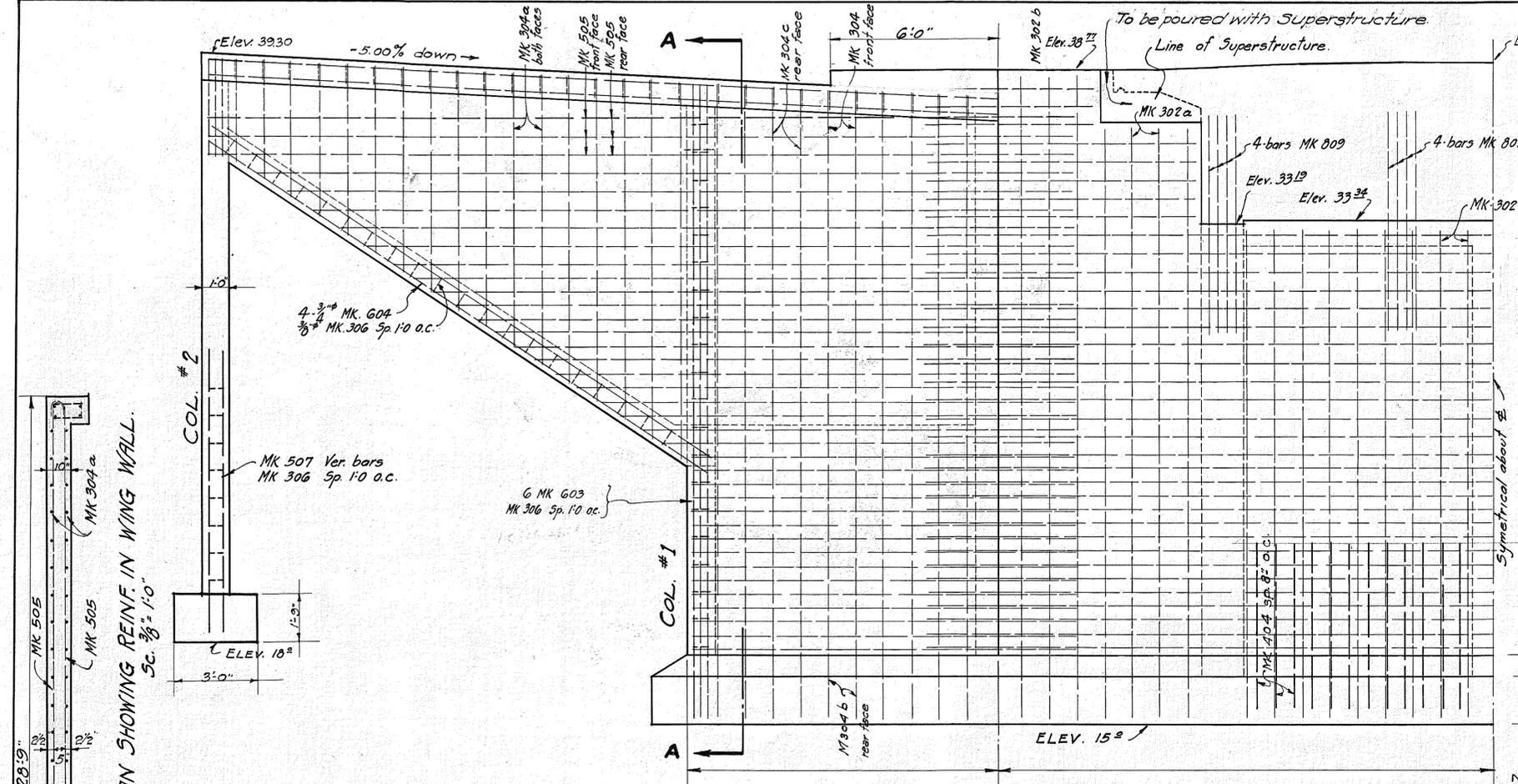
POAMOHO BRIDGE
NO 2 STA 11+11 TO STA. 12+71.
KAMEHAMEHA HIGHWAY N.R.H. NO 7-E.
NOV. 1933 SHEET NO 2 OF 10 SHEETS.

4305.8

ORIGINAL SURVEY PLOTTED BY: E.S.
DESIGNED BY: C.F.W.
NOTE BOOK QUANTITIES BY: C.F.W.
CHECKED BY: W.R.P.

DATE: Oct/33
REV: 1/33

STATE	NO. AT	FISCAL	SHEET	TOTAL
Hawaii	72	1933	9	20



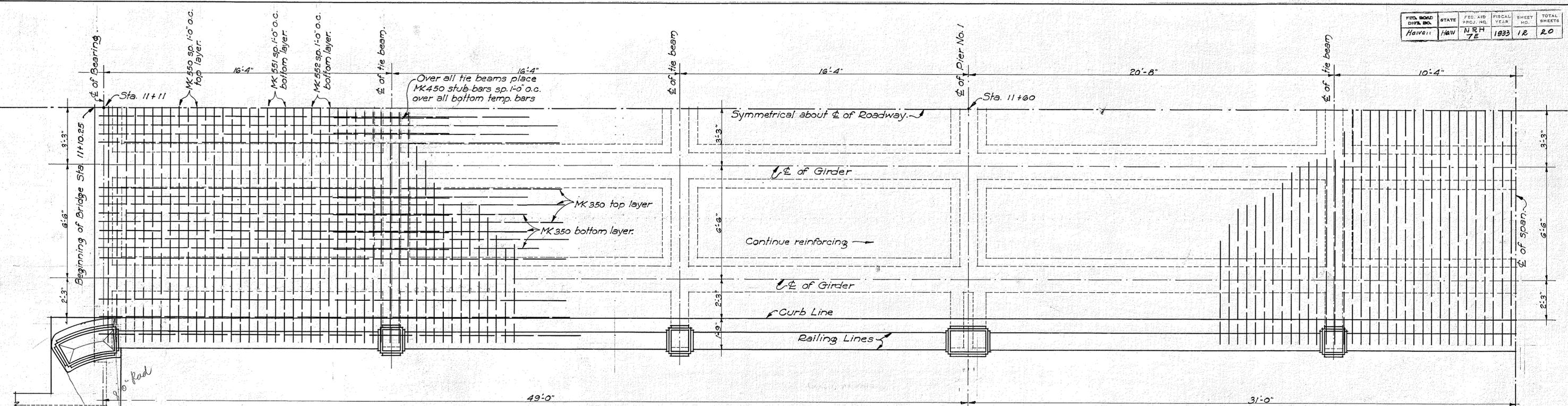
Abutment Sta. 11+11

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII.

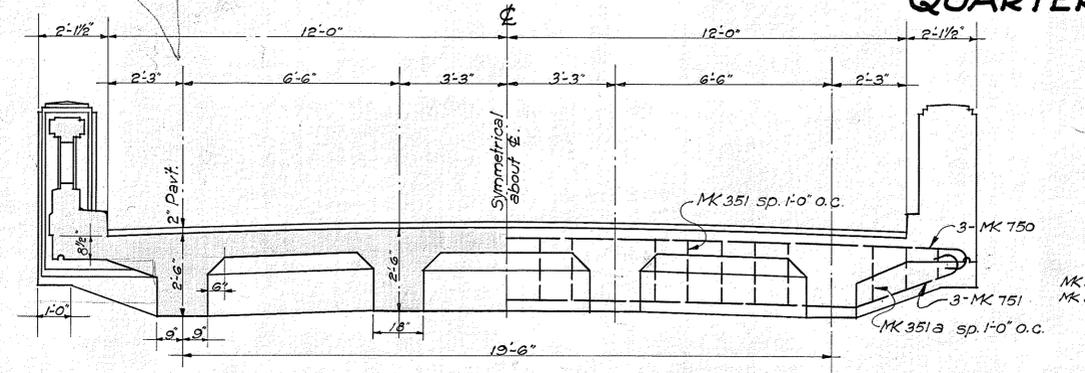
POAMOHO BRIDGE
NO 2 STA. 11+11 TO STA. 12+71
KAMEHAMEHA HIGHWAY N.R.H. NO 7-E.
NOV. 1933 SHEET NO 3 OF 10 SHEETS.

4305.9

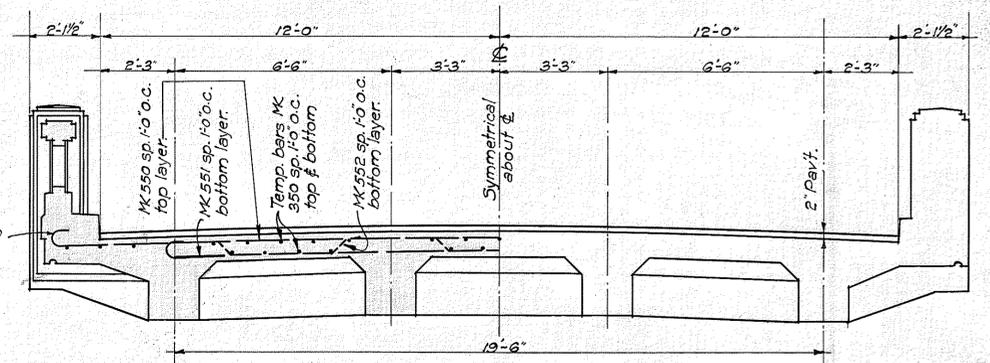
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	HAW	N.R.H. 7-E	1933	12	20



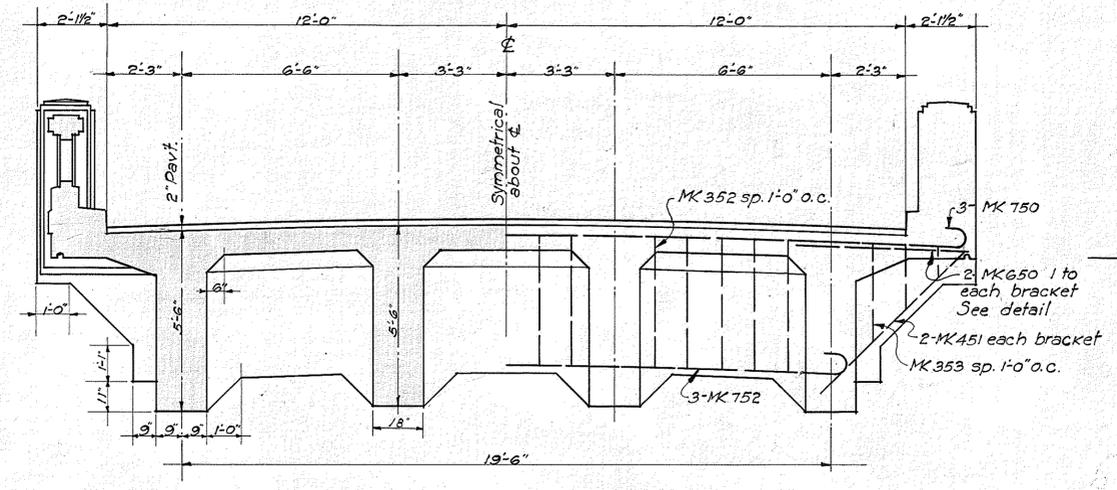
QUARTER DECK PLAN SHOWING REINFORCING.
3/8" Scale.



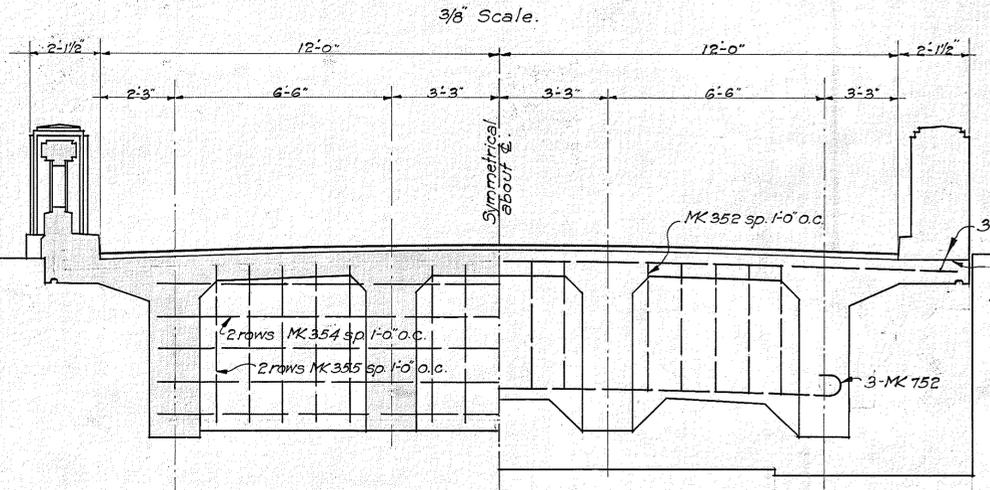
TIE BEAM REINFORCING.
3/8" Scale.



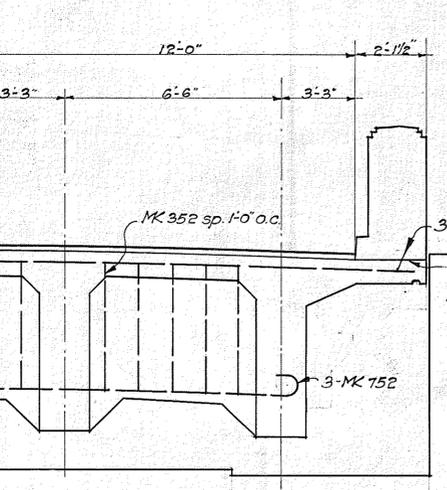
SLAB REINFORCING.
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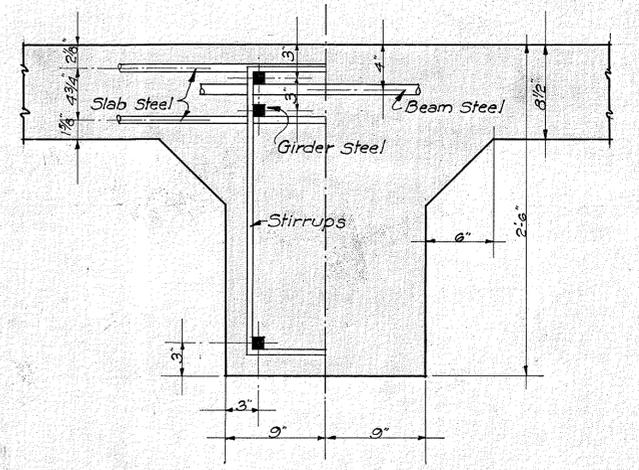
PIER TIE BEAM REINFORCING.
3/8" Scale.



HALF FIXED END BEAM REINFORCING.
3/8" Scale.



HALF EXPANSION END BEAM REINFORCING.
3/8" Scale.



SKETCH SHOWING PLACING OF REINFORCING.
3/8" Scale.

Expansion Joint: See Detail on Sheet No. 4305.13

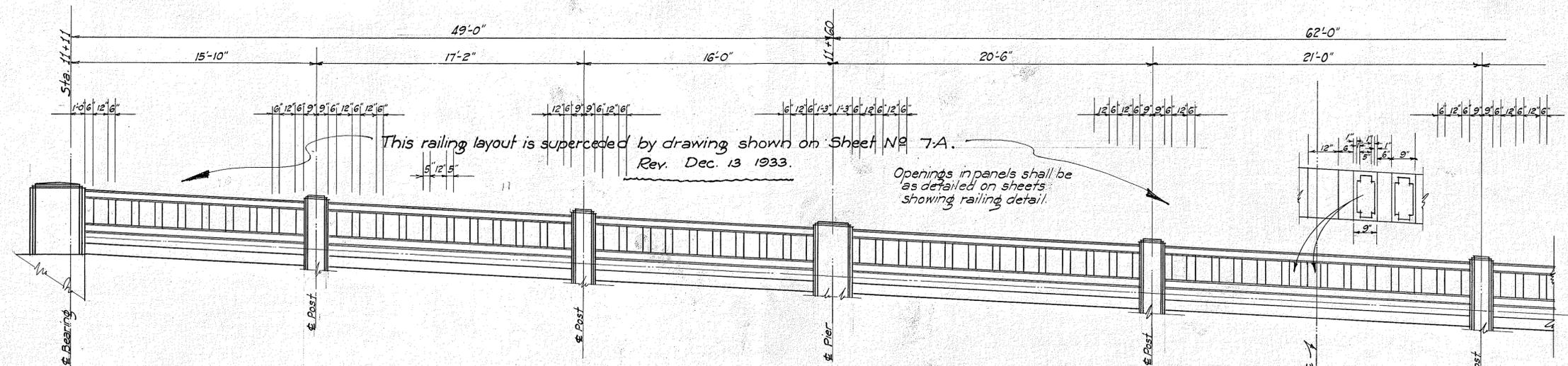
TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII.

POAMOHO BRIDGE
NO 2 STA. 11+11 TO STA. 12+71
KAMEHAMEHA HIGHWAY N.R.H. NO 7-E.
NOV. 1933. SHEET NO 6 OF 10 SHEETS.

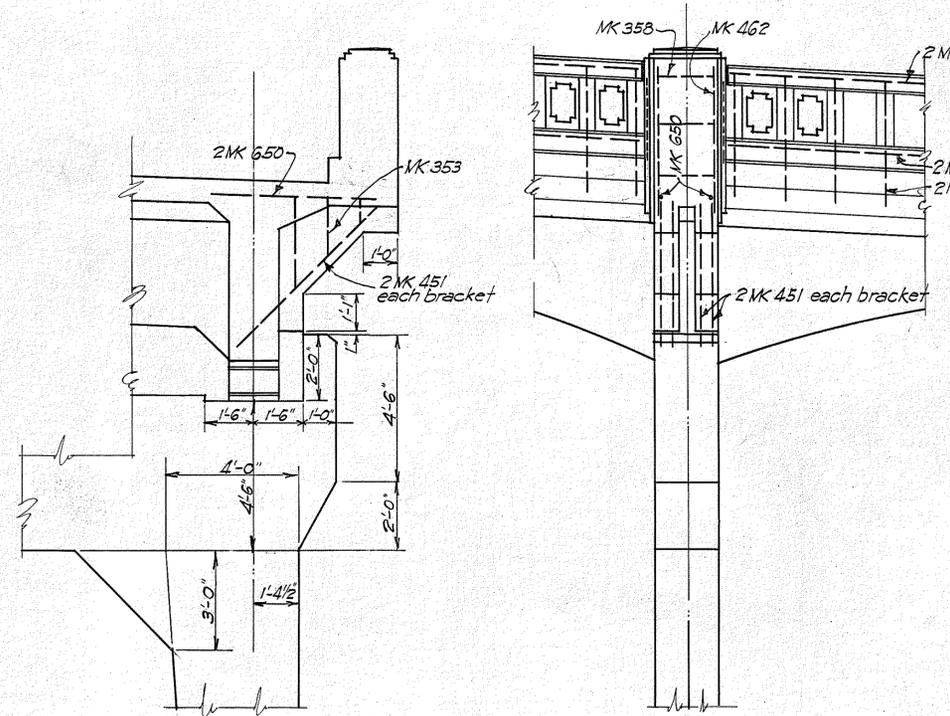
4305.12

DATE: 11/13/33
DESIGNED BY: M.C. ...
CHECKED BY: W.R.B.

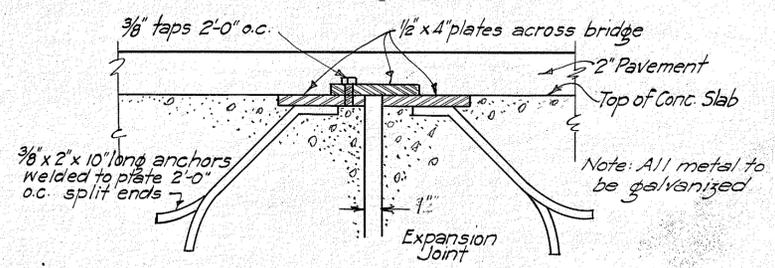
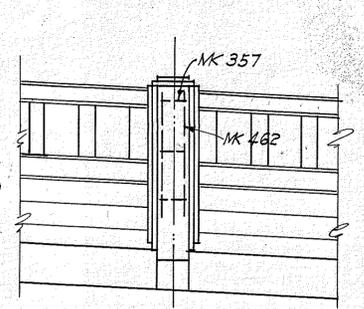
FED. ROAD DIST. NO.	STATE	FISCAL YEAR	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	N.R.H. 7-E	1933	73	20



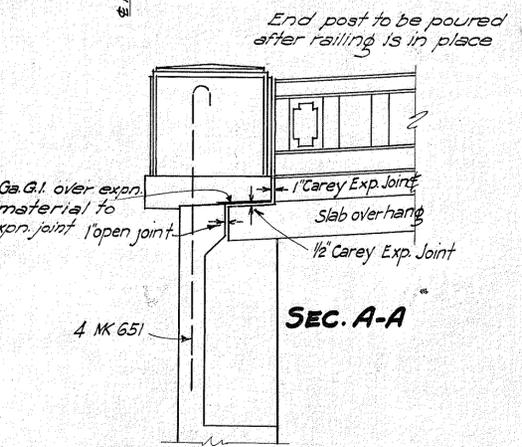
TYPICAL RAILING LAYOUT
1/4 Scale



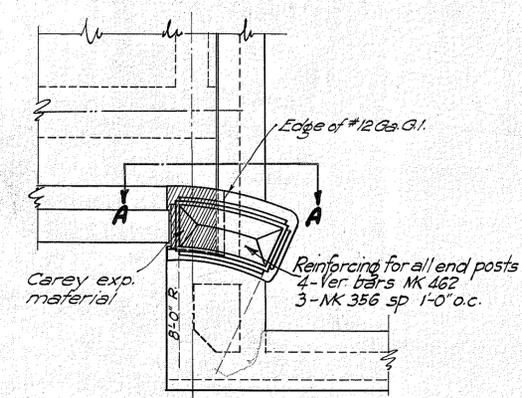
SEC. SHOWING TYPICAL PIER BRACKET REINFORCING
3/8 Scale



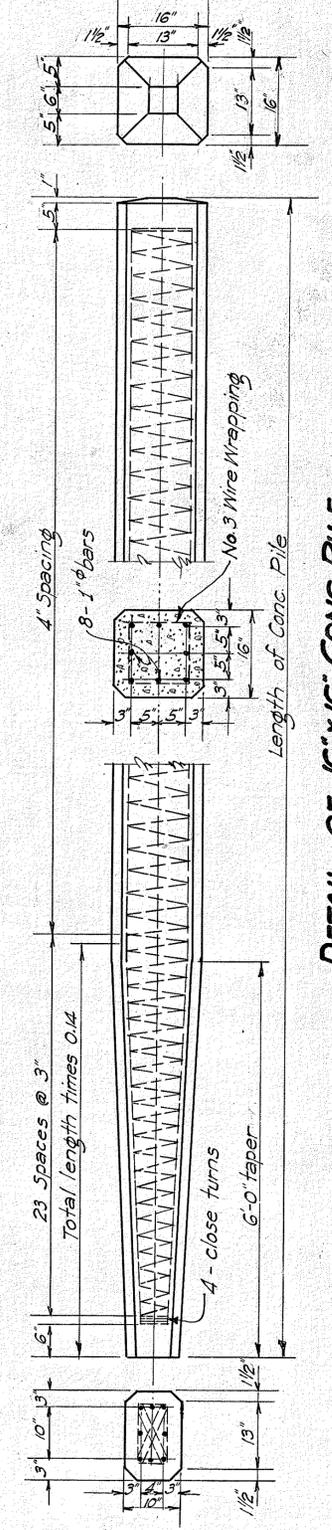
TYPICAL DETAIL FOR EXPANSION JOINTS
3 Scale



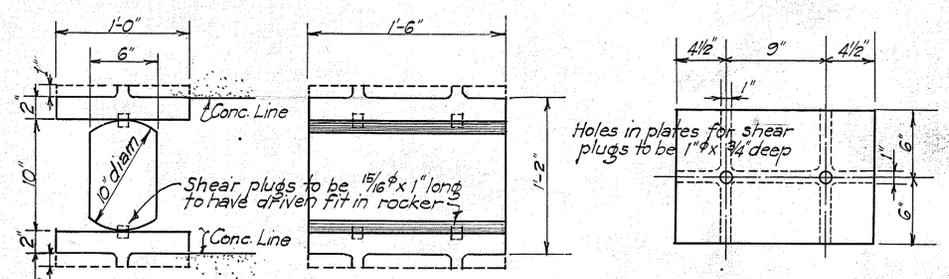
SEC. A-A



DETAIL OF EXP. JOINT AT END OF BRIDGE
3/8 Scale

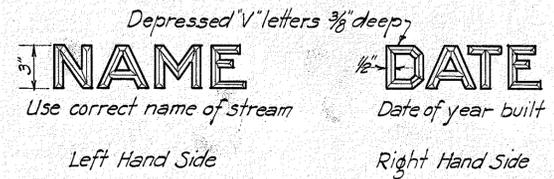


DETAIL OF 16" X 16" CONC. PILE
3/4 Scale



CAST STEEL ROCKER BEARING

12 Units required
3/8 Scale



DETAIL OF LETTERS & FIGURES AT BOTH APPROACHES

NOTE
Name of Stream to be placed in left end post panels & date in right end post panels on entering bridge, using standard block letters three inches in height

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

POAMOHO BRIDGE

NO. 2 STA. 11+11 TO STA. 12+71
KAMEHAMEHA HIGHWAY N.R.H. No 7-E

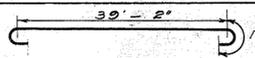
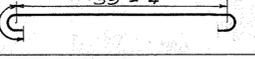
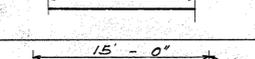
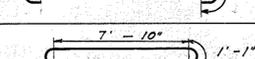
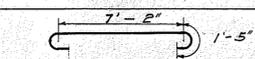
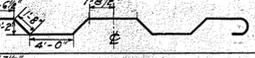
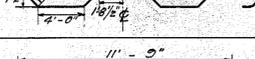
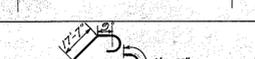
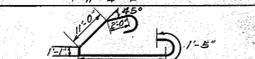
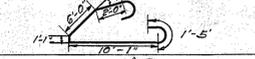
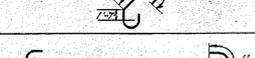
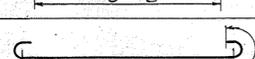
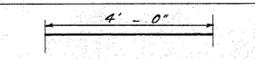
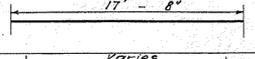
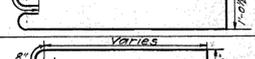
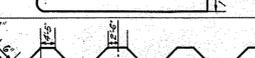
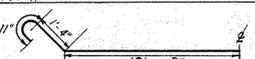
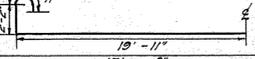
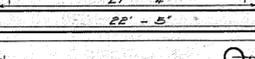
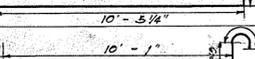
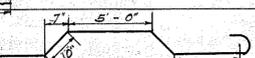
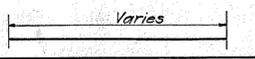
NOV. 1933 SHEET No 7 OF 10 SHEETS

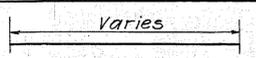
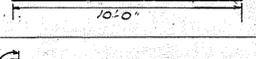
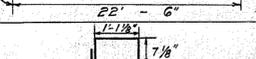
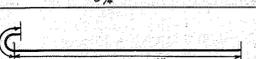
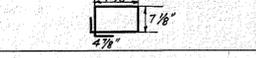
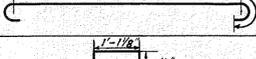
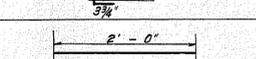
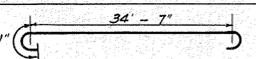
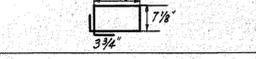
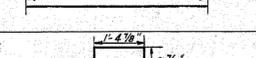
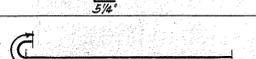
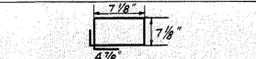
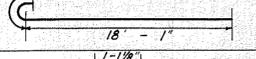
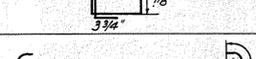
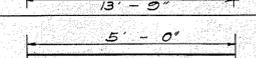
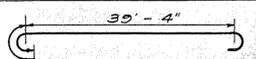
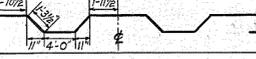
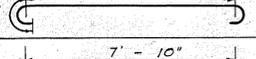
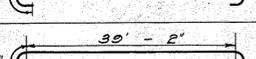
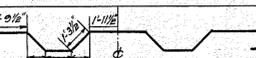
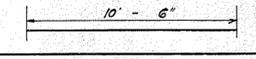
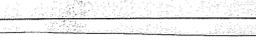
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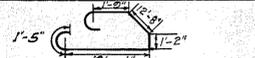
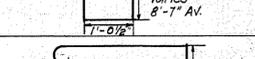
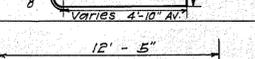
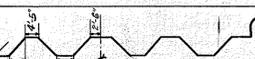
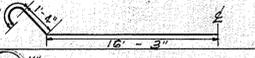
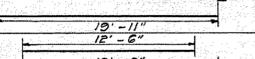
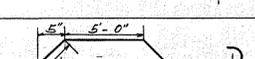
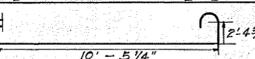
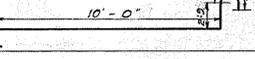
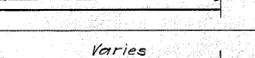
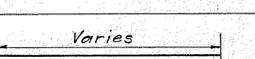
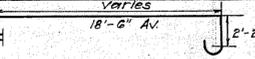
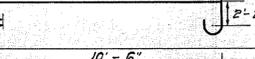
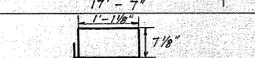
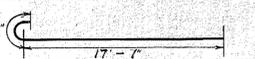
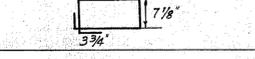
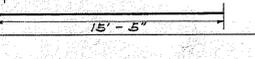
ORIGINAL SURVEY PLOTTED BY DATE
DESIGNED BY W. R. B. Oct. 1933
DRAWN BY C. E. M. Nov. 1933
CHECKED BY C. E. M.
NOTED BY C. E. M.
SUPERSEDED BY W. R. B.

STEEL SCHEDULE

FED. ROAD DIST. NO.	STATE	FISC. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Hawaii	N.R.H. 7-E	1933	14	20

M.K.	DESCRIPTION	LOCATION	SIZE	LENGTH	No. OF BARS IN EACH UNIT	No. OF UNITS	TOTAL No. OF BARS WANTED	TOTAL LENGTH	WEIGHT PER FOOT	TOTAL WEIGHT
700		Footings at Sta. 11+11	7/8" φ	41'-8"	Bot. 4 Top 4	1	8	333.28	2.07	689.89
500		"	5/8" φ	41'-2"	Bot. 7 Top 7	1	14	576.38	1.06	610.96
300		Top & Bot.	3/8" φ	5'-0"		42	42	210.00	0.38	79.80
800		"	1" φ	17'-10"	Bot. 20 Top 20	1	40	713.20	2.70	1925.64
600		Bottom	3/4" φ	10'-0"		12	12	120.00	1.52	182.40
801		Bottom	1" φ	10'-0"		24	24	240.00	2.70	648.00
701		Bottom	7/8" φ	43'-8"		3	3	136.98	2.07	271.13
501		Bottom	5/8" φ	43'-2"		3	3	129.51	1.06	137.28
301		Top	3/8" φ	11'-9"		29	29	340.75	0.38	129.48
802		Counterfort	1" φ	34'-0"		4	3	408.00	2.70	1101.60
803		"	1" φ	27'-0"		2	3	162.00	2.70	437.40
804		"	1" φ	22'-0"		2	3	132.00	2.70	356.40
805		"	1" φ	8'-0"		2	3	48.00	2.70	129.60
806		"	1" φ	6'-3"		2	3	37.50	2.70	101.25
807		"	1" φ	9'-3"		2	3	55.50	2.70	149.85
808		Grillage	1" φ	4'-0"		6	3	72.00	2.70	194.40
400		"	1/2" φ	17'-8"		2	3	105.96	0.68	72.05
401		Vert. Bars	1/2" φ	Varies 31'-4" Average		4	3	375.96	0.68	255.65
402		Horiz. Bars	1/2" φ	Varies 12'-0" Average		14	3	624.00	0.68	424.32
502		Abutment Front face bent	5/8" φ	40'-0"		13	1	520.00	1.06	551.20
503		Rear face str.	5/8" φ	37'-0"		14	1	518.00	1.06	549.08
504		Front face str.	5/8" φ	46'-0"		14	1	644.00	1.06	682.64
302		Vert. Bars	3/8" φ	17'-8"		36	1	635.76		241.59
302A			3/8" φ	21'-4"		8	1	170.64	0.38	64.84
302B			3/8" φ	22'-5"		6	1	134.52		51.12
601		Wing Wall Front face str.	3/4" φ	15'-0"		8	2	240.00	1.52	364.80
601A		Rear face str.	3/4" φ	15'-0"		8	2	240.00	1.52	364.80
602		Front face bent	3/4" φ	12'-16"		7	2	179.62	1.52	273.02
304		Front Vert. Bars	3/8" φ	Varies 22'-9" Average		10	2	455.00	0.38	172.90

M.K.	DESCRIPTION	LOCATION	SIZE	LENGTH	No. OF BARS IN EACH UNIT	No. OF UNITS	TOTAL No. OF BARS WANTED	TOTAL LENGTH	WEIGHT PER FOOT	TOTAL WEIGHT	
304A		Wing Walls Front & Rear Vert. Bars	3/8" φ	Varies 8'-6" Average		34	2	68	578.00	0.38	219.64
505		Front str. bars Rear "	5/8" φ	Varies 10'-0" Lin. # each W.W.		2		2032.00	1.06	2153.92	
304B		Rear face Vert.	3/8" φ	10'-0"		10	2	20	200.00	0.38	76.00
603		Wing Wall Col. #1 Vert. Bars	3/4" φ	23'-7"		6	2	12	282.96	1.52	430.10
306		"	3/8" φ	4'-0"		21	2	42	168.00	0.38	63.84
506		Free Standing Col. #1	5/8" φ	21'-0"		4	1	4	84.00	1.06	89.04
307		"	3/8" φ	2'-0"		19	1	19	38.00	0.38	14.44
604		Wing Wall Diag. Beam	3/4" φ	23'-4"		4	2	8	186.64	1.52	283.69
306		"	3/8" φ	4'-0"		20	2	40	160.00	0.38	60.80
605		Wing Wall & Beam Grillage	5/8" φ	2'-0"		5	2	10	20.00	1.52	30.40
606		Hor. Tie Beams	3/4" φ	36'-9"		3	3	9	330.75	1.52	502.74
306		"	3/8" φ	4'-0"		30	3	90	360.00	0.38	136.80
403		Cap of Wing Wall	1/2" φ	28'-6"		4	2	8	228.00	0.68	155.04
308		"	3/8" φ	4'-9"		27	2	54	256.50	0.38	97.47
507		Col. # 2	5/8" φ	19'-0"		4	1	4	76.00	1.06	80.56
307		"	3/8" φ	2'-0"		16	1	16	32.00	0.38	12.16
507		Wing Wall Col. # 2	5/8" φ	19'-0"		4	2	8	152.00	1.06	161.12
306		"	3/8" φ	4'-0"		16	2	32	128.00	0.38	48.64
810		Footings Abut. Sta. 12+71 Bottom & Top	1" φ	16'-7"	Bot. 20 Top 20	1	40	663.20	2.70	1790.64	
300		Top & Bot.	3/8" φ	5'-0"		42	1	42	210.00	0.38	79.80
500		Top & Bot.	5/8" φ	41'-2"	Bot. 7 Top 7	1	14	576.38	1.06	610.96	
510		Bottom	5/8" φ	42'-8"		3	1	3	127.98	1.06	135.66
801		Bottom	1" φ	10'-0"		24	1	24	240.00	2.70	648.00
600		Bottom	3/4" φ	10'-0"		12	1	12	120.00	1.52	182.40
700		Bottom & Top	7/8" φ	41'-8"	Bot. 2 Top 2	1	4	166.64	2.07	344.94	
710		Bottom	7/8" φ	43'-2"		2	1	2	86.34	2.07	178.72
310		Top	3/8" φ	10'-6"		29	1	29	304.50	0.38	115.71

M.K.	DESCRIPTION	LOCATION	SIZE	LENGTH	No. OF BARS IN EACH UNIT	No. OF UNITS	TOTAL No. OF BARS WANTED	TOTAL LENGTH	WEIGHT PER FOOT	TOTAL WEIGHT	
811		Counterfort Sta. 12+71	1" φ	28'-6"		4	3	12	342.00	2.70	923.40
812		"	1" φ	22'-0"		4	3	12	273.00	2.70	737.10
410		Vert. bars	1/2" φ	Varies 10'-6" Av.		7	3	21	409.50	0.68	278.46
411		Hor. bars	1/2" φ	Varies 12'-1" Av.		11	3	33	398.64	0.68	271.08
412		Vert. bars	1/2" φ	12'-5"		2	3	6	74.52	0.68	50.67
502		Abutment Sta. 12+71 Front face bent	5/8" φ	40'-0"		9	1	9	360.00	1.06	381.60
503		Rear face Hor. str.	5/8" φ	37'-0"		10	1	10	370.00	1.06	392.20
504		Front face Hor. str.	5/8" φ	46'-0"		10	1	10	460.00	1.06	487.60
311		Vert. bars	3/8" φ	12'-6"		24	1	24	300.00	0.38	114.00
311A		"	3/8" φ	19'-3"		6	1	6	115.50	0.38	43.89
602		Wing Wall Sta. 12+71 Front face bent	3/4" φ	13'-8"		4	2	8	109.28	1.52	166.11
601		Str. Hor. bars front	3/4" φ	15'-0"		5	2	10	150.00	1.52	228.00
601A		Str. Hor. bars rear	3/4" φ	15'-0"		8	2	16	240.00	1.52	364.80
311A		Vert. bars front & rear	3/8" φ	19'-3"		8	2	16	308.00	0.38	117.04
311B		Vert. bars front & rear	3/8" φ	Varies 18'-0" Av.		5	2	10	180.00	0.38	68.40
311C		Vert. bars front & rear	3/8" φ	Varies 8'-4" Av.		26	2	52	433.16	0.38	164.60
511		Hor. bars front face	5/8" φ	Varies 22'-6" Av.		15	2	30	675.00	1.06	715.50
512		Hor. bars front face	5/8" φ	29'-3"		4	2	8	234.00	1.06	248.04
513		Hor. Bars front face	5/8" φ	14'-6"		1	2	2	29.00	1.06	30.74
610		Wing Wall Col. #3 Vert. bars	3/4" φ	18'-8"		6	2	12	223.92	1.52	340.36
306		"	3/8" φ	4'-0"		16	2	32	128.00	0.38	48.64
514											

STEEL SCHEDULE

FED. ROAD DIST. NO.	STATE	FISC. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	N.R.H.T.E.	1933	18	20

M.K.	DESCRIPTION	LOCATION	SIZE	LENGTH	No. OF BARS IN EACH UNIT	No. OF UNITS	TOTAL No. OF BARS WANTED	TOTAL LENGTH	WEIGHT PER FOOT	TOTAL WEIGHT
307		Free Standing Col. # 3	3/8" φ	2'-0"	13	1	13	26.00	0.38	9.88
516		Free Standing Col. # 4	5/8" φ	15'-5"	4	1	4	61.68	1.06	65.38
307		"	3/8" φ	2'-0"	12	1	12	24.00	0.38	9.12
511a		Wing Wall Str. hor. rear bars	5/8" φ	Varies 17'-7" Av.	15	2	30	647.40	1.06	686.24
606		Tie Beam Hor.	3/4" φ	36'-9"	3	3	9	330.75	1.52	502.74
306		"	3/8" φ	4'-0"	30	3	90	360.00	0.38	136.80
611		Diagonal Tie Beam	3/4" φ	19'-0"	4	2	8	152.00	1.52	231.04
306		"	3/8" φ	4'-0"	17	2	34	136.00	0.38	51.68
413		Wing Wall Cap	1/2" φ	25'-6"	4	2	8	204.00	0.68	138.72
308		"	3/8" φ	4'-0"	23	2	46	218.50	0.38	83.03
417		End Curtain Wall Ver. bars	1/2" φ	14'-0"	59	1	59	826.00	0.68	561.68
414		Hor. bars	1/2" φ	35'-2"	4	1	4	140.68	0.68	95.66
415		Hor. bars	1/2" φ	29'-5"	3	1	3	88.26	0.68	60.02
313		Ver. bars	3/8" φ	7'-3"	38	1	38	275.50	0.38	104.69
314		Hor. bars	3/8" φ	35'-2"	12	1	12	422.04	0.38	160.38
416		"	1/2" φ	10'-0"	7	2	14	140.00	0.68	95.20
517		Abut. Col.	5/8" φ	12'-6"	4	2	8	100.00	1.06	106.00
309		"	3/8" φ	5'-0"	11	2	22	110.00	0.38	41.80
520		Footing Pier #1 Ptg.	5/8" φ	9'-10"	13	2	26	255.58	1.06	270.91
521		Ptg.	5/8" φ	7'-10"	17	2	34	266.22	1.06	282.19
720		Beam	7/8" φ	29'-10"	4	1	4	119.32	2.07	246.99
422		Beam	1/2" φ	9'-0"	9	1	9	81.00	0.68	55.08
820		Dowels	1" φ	9'-0"	8	2	16	144.00	3.44	495.36
821		Pier #1 Col.	1" φ	36'-10"	4	2	8	294.64	3.44	1013.56
822		Col.	1" φ	28'-0"	4	2	8	224.00	3.44	770.56
823		Col.	1" φ	17'-0"	4	2	8	136.00	3.44	467.84
824		Beam	1" φ	45'-9"	4	1	4	183.00	3.44	629.52

M.K.	DESCRIPTION	LOCATION	SIZE	LENGTH	No. OF BARS IN EACH UNIT	No. OF UNITS	TOTAL No. OF BARS WANTED	TOTAL LENGTH	WEIGHT PER FOOT	TOTAL WEIGHT
825		Pier #1 Beam	1" φ	28'-9"	4	1	4	115.00	3.44	395.60
826		Beam	1" φ	22'-10"	5	1	5	114.15	3.44	392.67
827		Beam	1" φ	20'-10"	5	1	5	104.15	3.44	358.27
828		Haunch	1" φ	14'-0"	4	2	8	112.00	3.44	385.28
829		Haunch	1" φ	12'-0"	3	2	6	72.00	3.44	247.68
423		Beam	1/2" φ	12'-0"	11	1	11	132.00	0.68	89.76
423A		Haunch	1/2" φ	Varies 73.0 Lin. ft. each haunch	13	2	26	146.00	0.68	99.28
423B		Col.	1/2" φ	Varies 9'-7" Av.	22	2	44	421.52	0.68	286.63
424		Curb	1/2" φ	14'-9"	2	2	4	59.00	0.68	40.12
320		Pier #1 Curb	3/8" φ	5'-0"	3	2	6	30.00	0.38	11.40
520		Pier #2 Footing	5/8" φ	9'-10"	13	2	26	255.58	1.06	270.91
521		Footing	5/8" φ	7'-10"	17	2	34	266.22	1.06	282.19
720		Footing	7/8" φ	29'-10"	4	1	4	119.32	2.07	246.99
422		Footing	1/2" φ	9'-0"	9	1	9	81.00	0.68	55.08
820		Dowels	1" φ	9'-0"	8	2	16	144.00	3.44	495.36
824		Pier #2 Pier	1" φ	45'-9"	4	1	4	183.00	3.44	629.52
825		Pier	1" φ	28'-9"	4	1	4	115.00	3.44	395.60
826		Beam	1" φ	22'-10"	5	1	5	114.15	3.44	392.67
827		Beam	1" φ	20'-10"	5	1	5	104.15	3.44	358.27
828		Haunch	1" φ	14'-0"	4	2	8	112.00	3.44	385.28
829		Haunch	1" φ	12'-0"	3	2	6	72.00	3.44	247.68
423		Beam	1/2" φ	12'-0"	11	1	11	132.00	0.68	89.76
423A		Haunch	1/2" φ	Varies 73.0 ft. each haunch	13	2	26	146.00	0.68	99.28
423C		Col.	1/2" φ	Varies 9'-10" Av.	19	2	38	373.54	0.68	254.01
424		Pier #2 Curb	1/2" φ	14'-9"	2	2	4	59.00	0.68	40.12
320		Curb	3/8" φ	5'-0"	3	2	6	30.00	0.38	11.40

M.K.	DESCRIPTION	LOCATION	SIZE	LENGTH	No. OF BARS IN EACH UNIT	No. OF UNITS	TOTAL No. OF BARS WANTED	TOTAL LENGTH	WEIGHT PER FOOT	TOTAL WEIGHT
830		Pier #2 Col.	1" φ	33'-4"	4	2	8	266.64	3.44	917.24
831		Col.	1" φ	24'-10"	4	2	8	198.64	3.44	683.32
828		Col.	1" φ	14'-0"	4	2	8	112.00	3.44	385.28
350		Slab Temp. bars	3/8" φ	160'-9"	33	1	33	5304.75	0.38	2015.81
550		Top str. bars	5/8" φ	28'-2"	161	1	161	4535.37	1.06	4807.49
551		Bottom str. bars	5/8" φ	21'-4"	161	1	161	3434.13	1.06	3640.18
552		Bottom bent bars	5/8" φ	29'-2"	160	1	160	4667.20	1.06	4947.23
450		(Stub bars) above bottom temp. bars only	1/2" φ	8'-0"	12	8	96	768.00	0.68	522.24
750		Int. Tie Beams Top	7/8" φ	28'-8"	3	6	18	515.88	2.07	1067.87
751		Bottom	7/8" φ	29'-6"	3	6	18	531.00	2.07	1099.17
351		normal str.	3/8" φ	5'-8"	15	6	90	509.40	0.38	193.57
351A		Varies 26'-6" per beam	3/8" φ	Varies 26'-6" per beam	6			159.00	0.38	60.42
750		Pier Tie Beams Top	7/8" φ	28'-8"	3	2	6	171.96	2.07	355.96
752		Bottom	7/8" φ	22'-4"	3	2	6	133.98	2.07	277.34
352		Normal Str.	3/8" φ	9'-9"	15	2	30	292.50	0.38	111.15
451		Bracket	1/2" φ	6'-0"	4	4	16	96.00	0.68	65.28
650		Bracket	3/4" φ	5'-0"	2	4	8	40.00	1.52	60.80
353		Bracket	3/8" φ	Varies 34'-0" each bracket	4			136.00	0.38	51.68
354		Fixed End Beam Hor. bars	3/8" φ	20'-6"	10	1	10	205.00	0.38	77.90
355		Ver. bars	3/8" φ	4'-9"	30	1	30	142.50	0.38	54.15
754		Exp. End Beam	7/8" φ	27'-9"	3	1	3	83.25	2.07	172.33
752		"	7/8" φ	22'-4"	3	1	3	66.99	2.07	138.67
352		"	3/8" φ	9'-9"	15	2	30	292.50	0.38	111.15

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

POAMOHO BRIDGE

NO. 9 STA. 11+11 TO STA. 12+71
KAMEHAMEHA HIGHWAY N.R.H. NO. T-E
Nov. 1933 SHEET NO. 9 OF 10 SHEETS

4305.15

ORIGINAL SURVEY PLATTED BY DATE
 PLAN DESIGNED BY W.E.B.
 DRAWN BY C.F.W.
 CHECKED BY C.F.W.
 NOTE BOOK QUANTITIES BY C.F.W.

