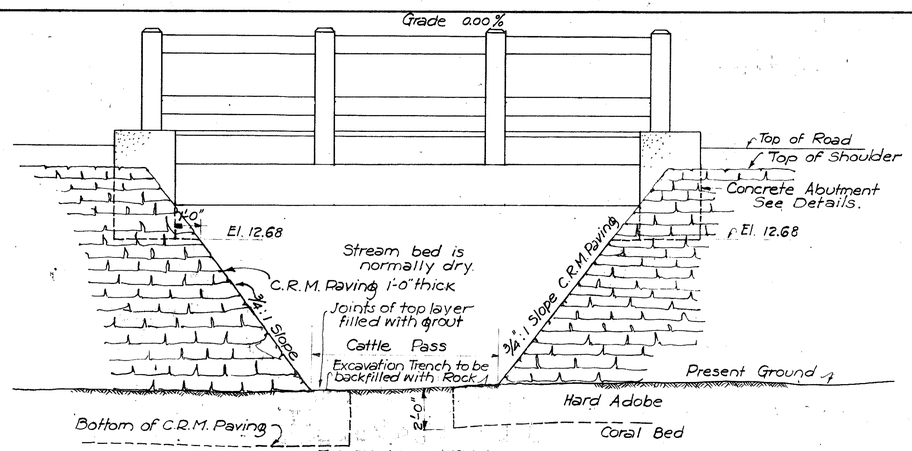
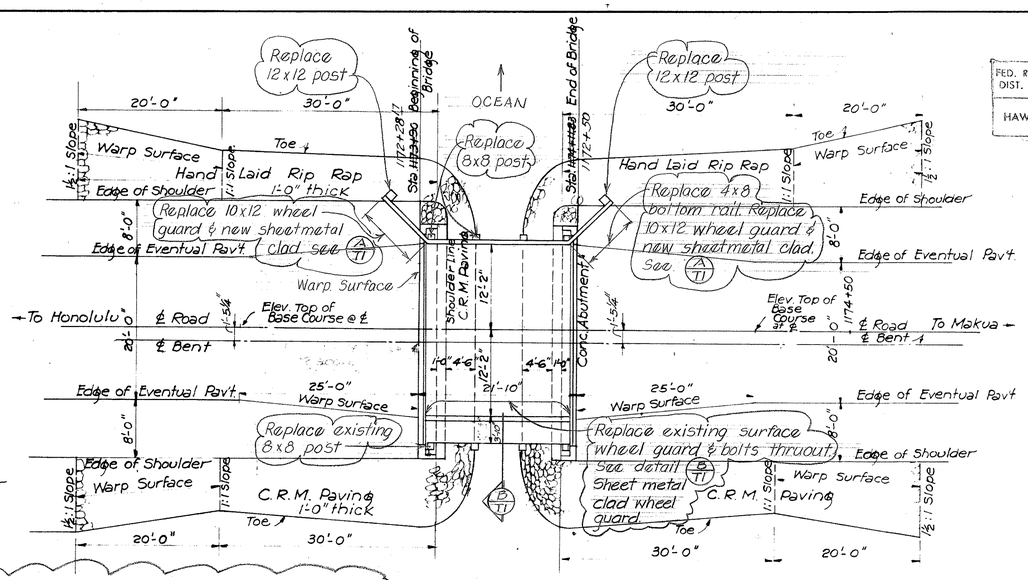
FED. ROAD DIST. NO.	STATE	FED AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
~~HAWAII~~	~~HAW.~~	~~X-BRZ-23.5~~	~~1971~~	~~6~~	~~17~~

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-0-01-72	1972	43	43

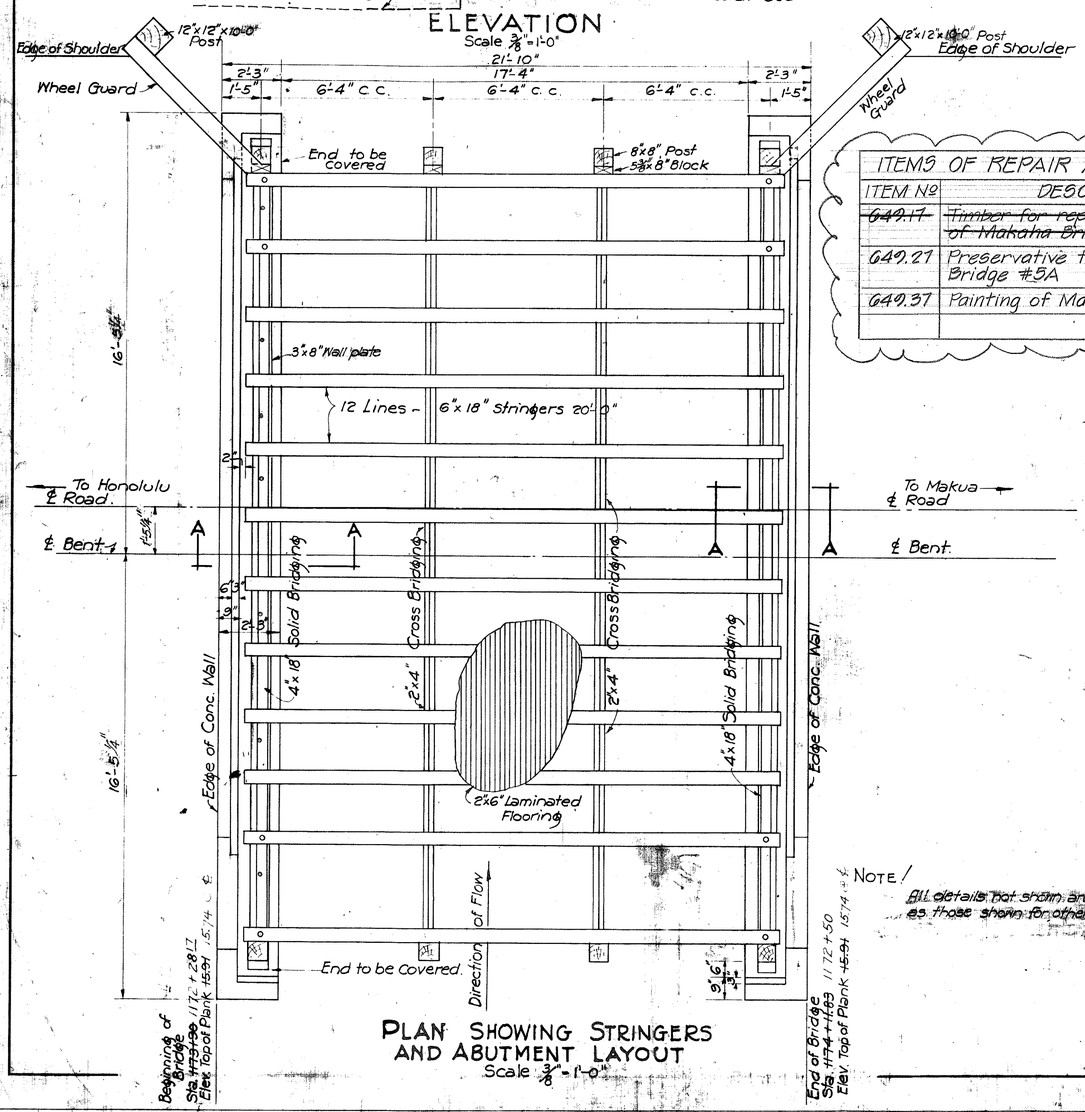


ELEVATION
Scale 3/8" = 1'-0"

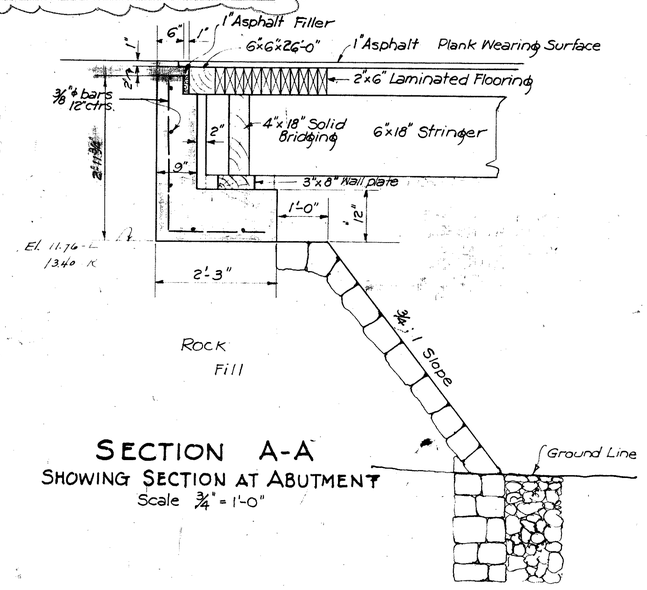


LAYOUT PLAN
Scale 1" = 10'-0"

ITEMS OF REPAIR AND ESTIMATED QUANTITIES			
ITEM Nº	DESCRIPTION	UNIT	QUANTITY
~~649.17~~	~~Timber for repair or rehabilitation of Makaha Bridge #5A~~	~~MFBM~~	~~0.56~~
649.21	Preservative treatment of Makaha Bridge #5A	L.S.	Lump Sum
649.37	Painting of Makaha Bridge #5A	L.S.	Lump Sum



PLAN SHOWING STRINGERS AND ABUTMENT LAYOUT
Scale 3/8" = 1'-0"



SECTION A-A
SHOWING SECTION AT ABUTMENT
Scale 3/4" = 1'-0"

NOTE!
All details not shown are same as those shown for other bridges

Note: Refer to typical detail sht. # T-1 for notes and additional details.

THIS DRAWING IS IN PART ORIGINAL CONTRACT PLANS OF EXISTING MAKAHA BRIDGE #5 FOR INFORMATION & GUIDANCE TO REPAIR WORKS.

TIMBER - BILL OF MATERIAL

MEMBER	No. REQ'D.	SIZE & LENGTH	KIND OF LUMBER	MILL WORK	FT. B.M.
		Douglas	Fir Coast Region		
Solid Bridging ◎	5	4"x18" x 10'-0"	No. 1 Dimension	S1E	300
Stringers	12	6"x18" x 20'-0"	1600# f structural beam & Stringers	Ends sloped to 1½"	2,160
Deck Starter	2	6" x 6" x 26'-0"	1600# f struct. joist & Plank	S1S1E	156
Decking (Floor)	145	2" x 6" x 26'-0"	"	S1S1E	3,770
Wheel Guard	1	8"x 8" x 22'-0"	1100# c struct. posts & timbers	S1S1E	117
Wheel Guard	1	10"x12"x20'-0"	" "	S1S1E	200
Guard Rail *	1	3"x 8" x 18'-0"	1600# f struct. joists & plank	S4S	36
Railing Post	* 4	8" x 8" x 12'-0"	1600# f struct. joist & Plank	S4S	256
Railing *	2	4"x 8" x 20'-0"	"	S4S	107
" *	2	3"x 8" x 20'-0"	"	S4S	80
Decking (Floor)	1	1"x 6" x 26'-0"	"	S1S1E	13
Guard Post *	2	12"x12" x 10'-0"	"	S4S	240
Guard Rail *	1	10"x 12" x 18'-0"	"	S4S	135
" " *	1	4"x 8" x 18'-0"	"	S4S	48
Sidewalk End Timber ◎	1	8"x 8" x 8'-0"	1100# c struct. Posts & Timbers	S1S1E	43
Sidewalk Joist Block ◎	1	8"x14" x 8'-0"	" "	S1E	75
Corner Blocking ◎	1	2"x 6" x 10'-0"	" "	S1E	10
Sidewalk Planking ◎	8	2"x 8" x 16'-0"	No. 1 Dimension	S1S	171
Cross Bridging ◎	4	2"x 4" x 16'-0"	"	Rough	86
Railing Post block	4	6"x 8" x 1'-5½"	1600# f struct. joist & Plank	S1S2E Sides 5¾" x 7¾"	24
Sidewalk Planking ◎	1	2"x 8" x 8'-0"	No. 1 Dimension	S1S	11
Wall Plate	4	3"x 8" x 16'-0"	1200# c struct. Posts & Timbers	S1S	128
			Total		8211

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

REHABILITATION & REPAIRS TO EXISTING MAKAHA #5A

PROJ. Nº HWY-0-01-72 NOV, 1971

SHEET Nº 1 OF 1 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DESIGNED BY M.R. Barrals	
	DRAWN BY M.S. Kawaguchi	1-76
NOTE BOOK	TRACED BY	
	DUPLICATED BY C.E. Wahlen	Sept. 76
No.	CHECKED BY C.F.W.	

43 of 43