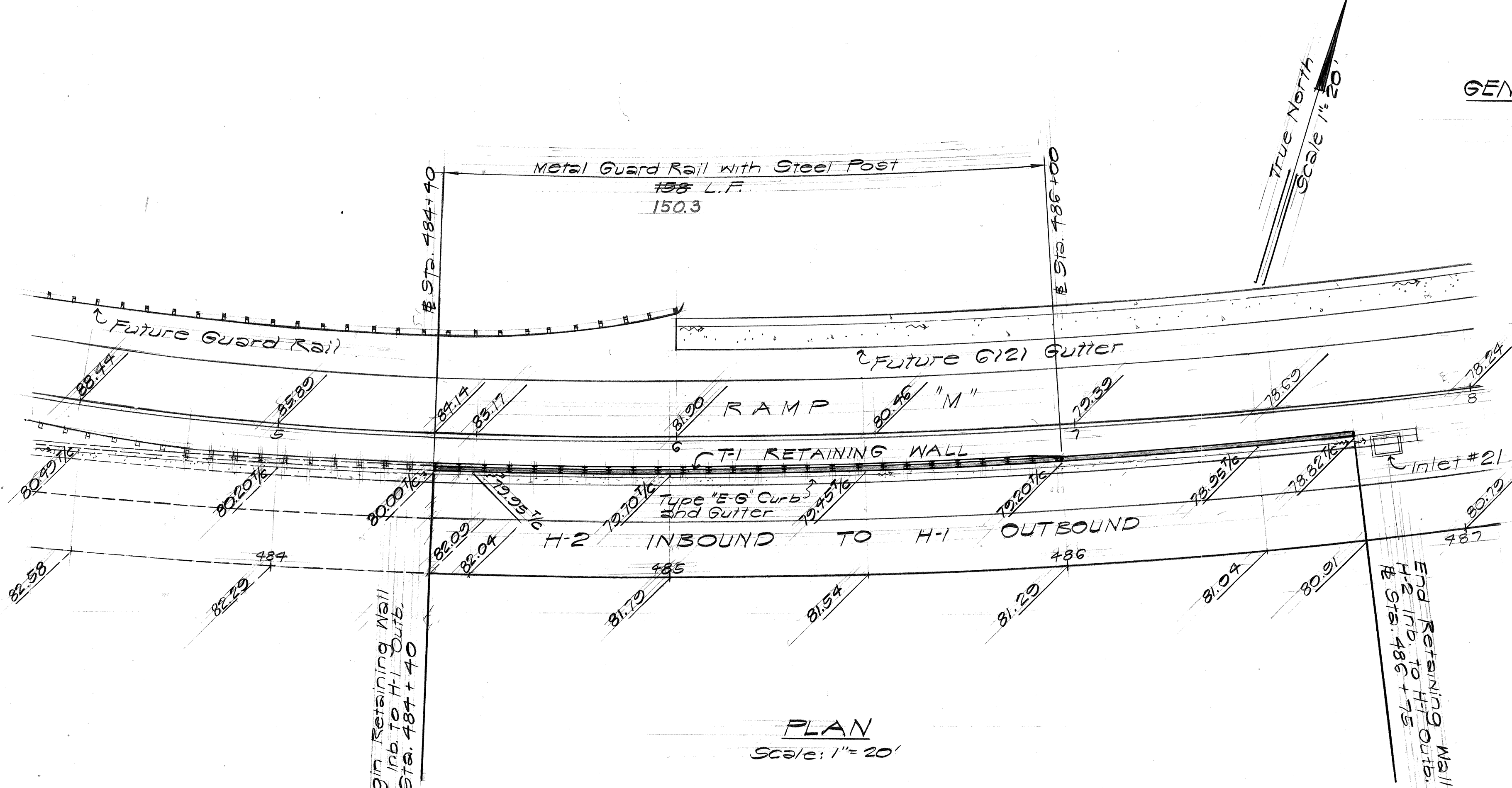


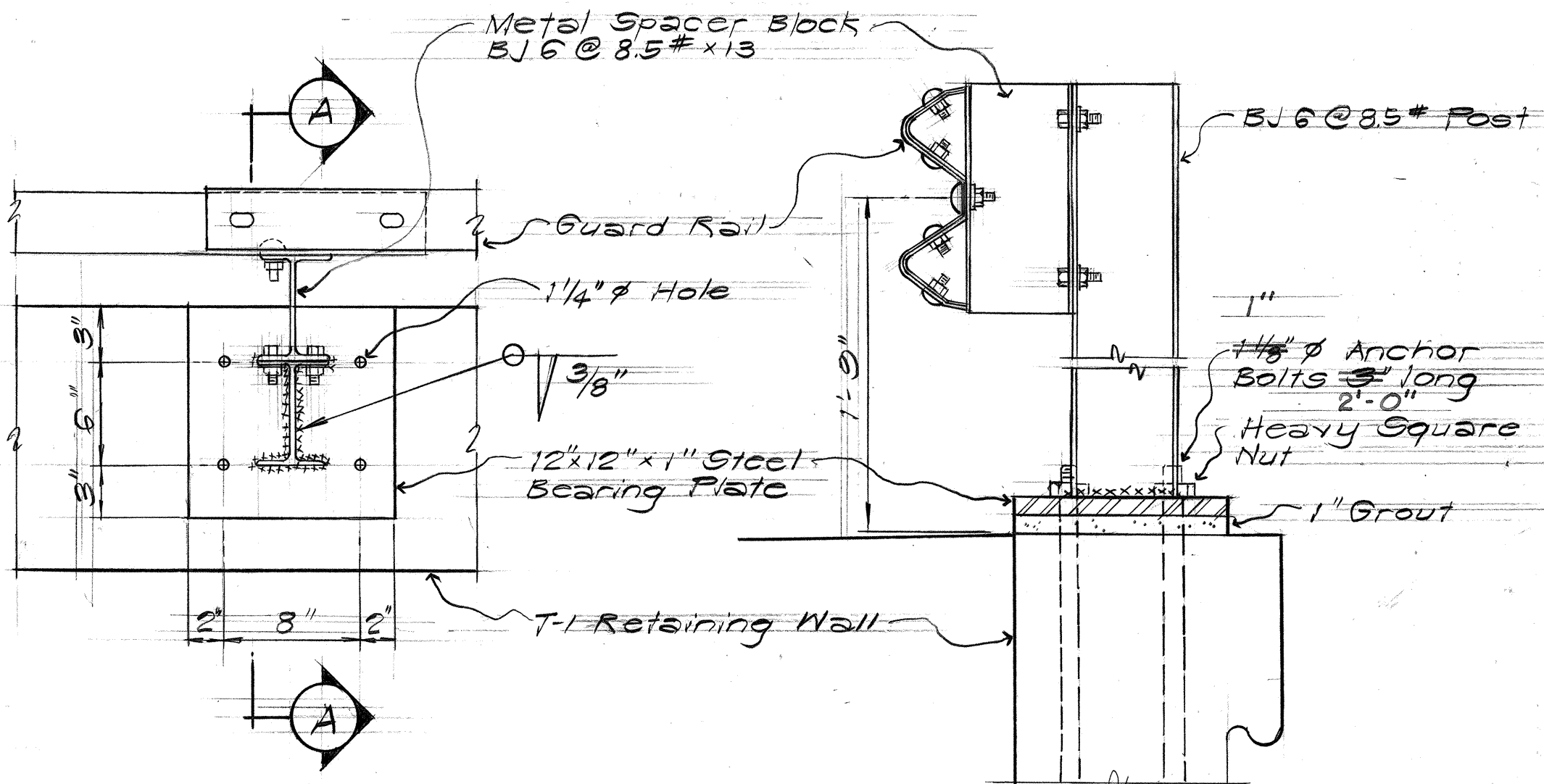
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IHI-1(75)8	1969	47	181

GENERAL NOTE:

1. Stations for Retaining Wall are based on H-2 Inbound to H-1 Outbound E.



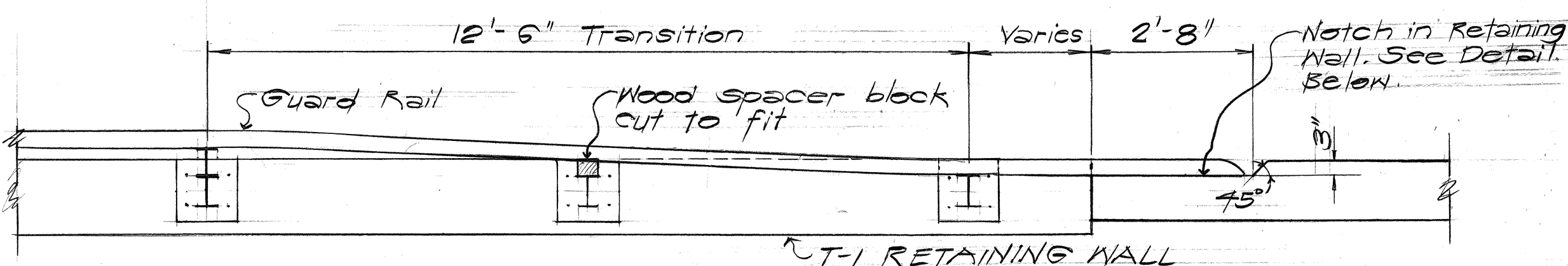
PLAN
Scale: 1" = 20'



PLAN SECTION "A-A"

METAL GUARD RAIL WITH STEEL POST

Scale: 1 1/2" = 1'-0"

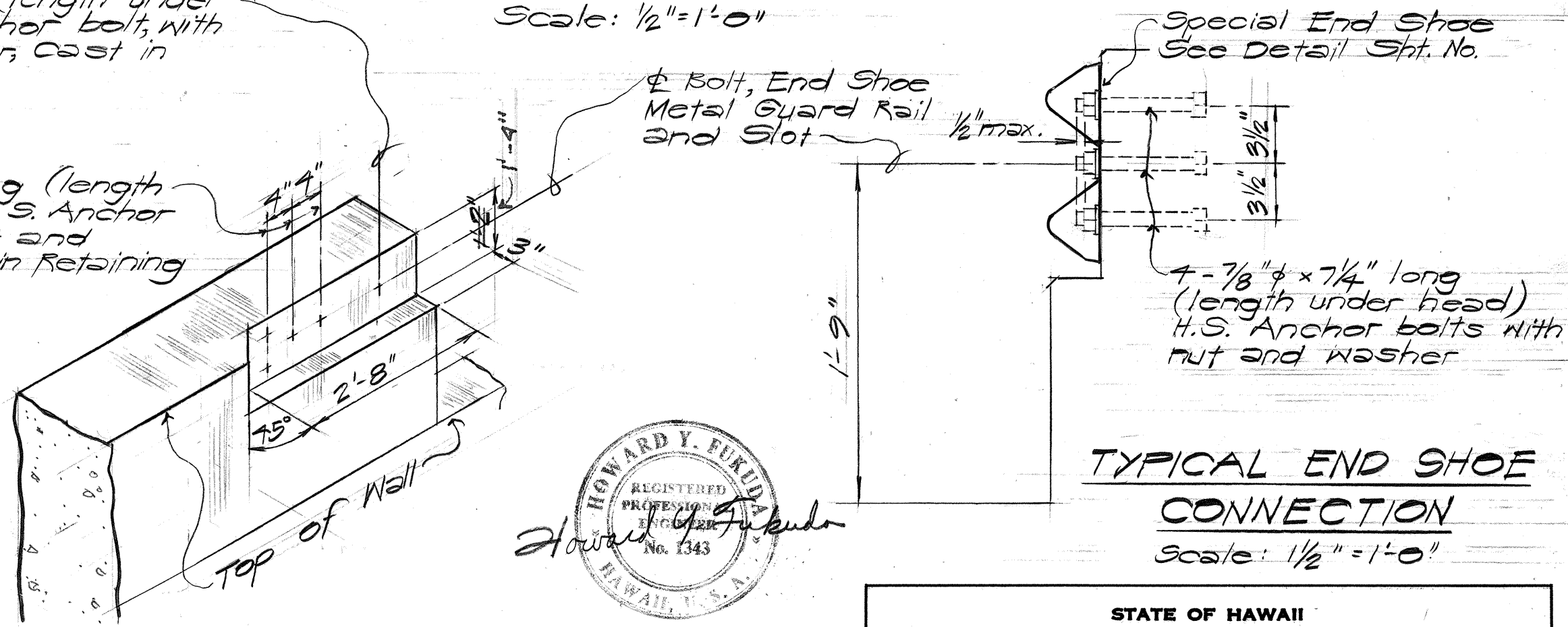


PLAN

Scale: 1/2" = 1'-0"

5/8" x 7/4" long (length under head) H.S. Anchor bolt, with nut and washer, cast in Retaining Wall.

7-7/8" x 7/4" long (length under head) H.S. Anchor bolts, with nut and washer, cast in Retaining Wall.



TYPICAL END SHOE CONNECTION

Scale: 1 1/2" = 1'-0"

DETAIL OF NOTCH IN RETAINING WALL

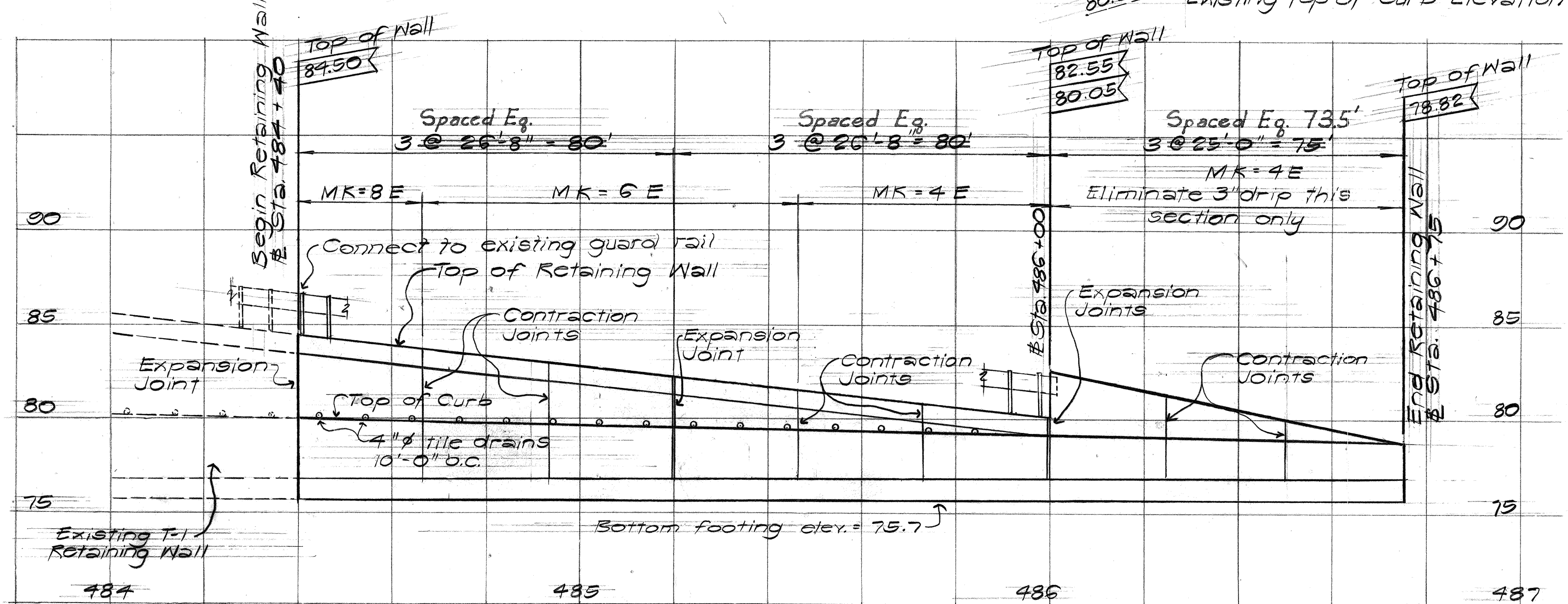
Not to Scale

RETAINING WALL ESTIMATED QUANTITIES

Structure Excavation	70 c.y.
Reinforcing Steel	3400 lbs.
Class "A" Concrete	65 c.y.
Filter Material	17 c.y.
Metal Guard Rail with Steel Post	158 L.F.

LEGEND:

- 80.00 Future Top of Pavement Elevation
- 80.00T/c Finish Top of Curb Elevation
- 80.00 Existing Top Pavement Elevation
- 80.00T/c Existing Top of Curb Elevation



PROFILE

Scales: Horiz. = 1" = 20'
Vert. = 1" = 5'

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

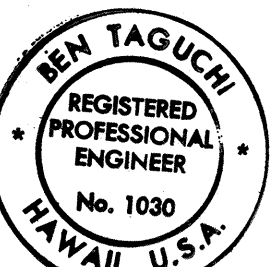
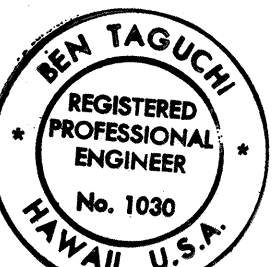
RETAINING WALL PLAN & PROFILE & DETAILS

WAIWA INTERCHANGE
F.A.I. Proj. No. I - HI - 1(75)8

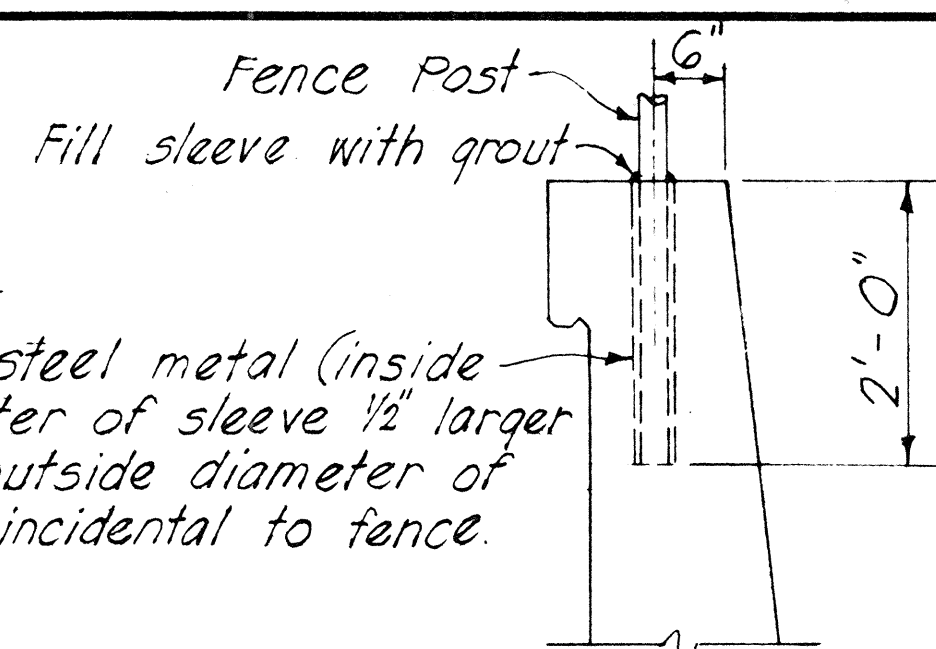
Scale: As shown Date: JUNE 1969

SHEET No. 1 OF 3 SHEETS

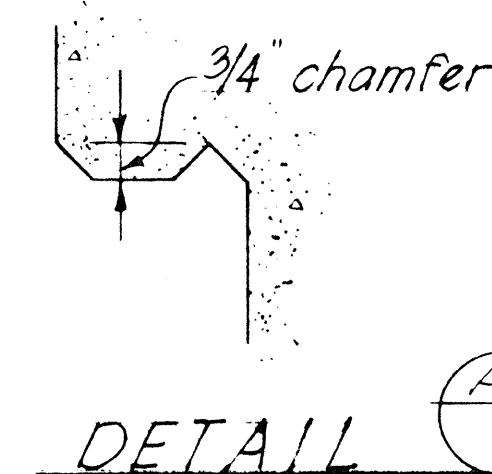
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.



Ben Taguchi



CHAIN LINK FENCE POST DETAIL

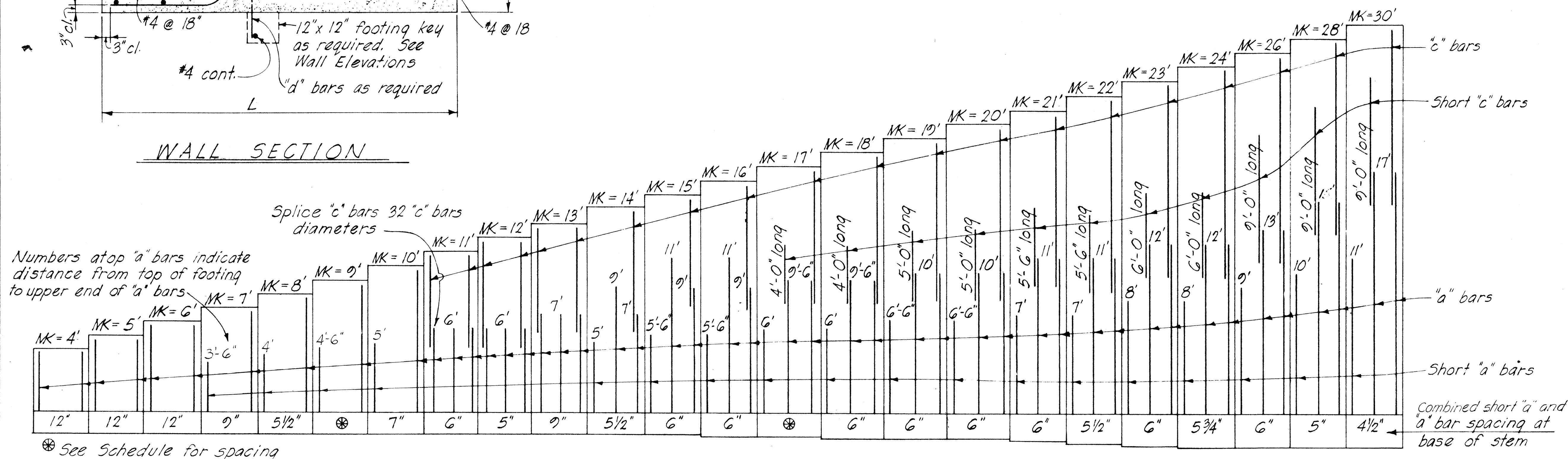


DETAIL

SCHEDULE OF DIMENSIONS AND REINFORCING STEEL																								
Maximum "M"	4E	5E	6E	7E	8E	9E	10E	11E	12E	13E	14E	15E	16E	17E	18E	19E	20E	21E	22E	23E	24E	26E	28E	30E
a	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	15"	18"	21"	24"	24"	24"	27"	30"	33"	36"	39"	54"	60"	72"
t	14"	14"	14"	14"	14"	14"	14"	18"	18"	18"	18"	18"	21"	21"	24"	24"	24"	27"	30"	31"	33"	36"	39"	42"
L	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'	6.0'	6.5'	7.0'	7.75'	8.25'	9.0'	9.75'	10.5'	11.5'	12.5'	13.5'	14.5'	15.25'	16.0'	18.0'	20.0'	21.0'
"a" bars	#3@12"	#3@12"	#4@12"	#4@9"	#4@5 1/2"	#5@7"	#6@7"	#6@6"	#6@5"	#7@9"	#6@5 1/2"	#7@6"	#8@6"	#8@5 3/4"	#9@6"	#9@6"	#10@6"	#10@6"	#10@5 1/2"	#10@6"	#10@5 3/4"	#11@6"	#11@5"	#11@4 1/2"
"b" bars	#3@12"	#3@12"	#3@12"	#3@9"	#4@11"	#4@7"	#5@7"	#5@6"	#5@5"	#7@9"	#6@5 1/2"	#7@6"	#8@6"	#7@5 3/4"	#8@6"	#9@6"	#10@6"	#10@6"	#10@5 1/2"	#10@6"	#10@5 3/4"	#11@6"	#11@5"	#11@4 1/2"
"c" bars								#4	#4	#4	#4	#4	#5	#5	#5	#6	#6	#6	#7	#7	#7	#7	#7	#7
"d" bars	#3@12"	#3@12"	#3@12"	#3@12"	#4@18"	#4@15"	#4@15"	#4@12"	#4@11"	#4@9"	#5@12"	#5@12"	#5@10"	#5@9"	#5@9"	#5@8"	#6@10"	#6@9"	#7@12"	#7@11"	#7@10"	#7@	#7@	#7@6"

Maximum "MK"	4R	5R	6R	7R	8R	9R	10R	11R	12R	13R	14R	15R	16R	17R	18R	19R	20R	21R	22R	23R	24R	26R	28R	30R
a	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	15"	18"	21"	21"	21"	21"	24"	24"	27"	30"	33"	39"	39"	51"
t	14"	14"	14"	14"	14"	14"	14"	18"	18"	18"	18"	18"	18"	18"	18"	21"	21"	21"	21"	24"	24"	27"	30"	36"
L	2.5'	3.0'	3.5'	4.0'	4.5'	5.0'	5.5'	6.0'	6.5'	6.75'	7.25'	7.75'	8.25'	8.75'	9.25'	9.75'	10.25'	10.5'	11.0'	11.5'	12.0'	13.0'	14.0'	15.0'
"a" bars	*3@12"	*3@12"	*4@12"	*4@9"	*4@5 1/2"	*5@6"	*6@7"	*6@6"	*6@5"	*7@9"	*6@5 1/2"	*7@6"	*8@6"	*8@6"	*9@6"	*9@6"	*10@6"	*10@6"	*10@5 1/2"	*10@6"	*10@5 3/4"	*11@6"	*11@5"	*11@4 1/2"
"b" bars	*3@12"	*3@12"	*3@12"	*3@9"	*4@11"	*4@6"	*5@7"	*5@6"	*5@5"	*7@9"	*6@5 1/2"	*7@6"	*7@6"	*8@6"	*9@6"	*9@6"	*10@6"	*10@6"	*10@5 1/2"	*10@6"	*10@5 3/4"	*10@6"	*10@5"	*9@4 1/2"
"c" bars								*4	*4	*4	*4	*4	*5	*5	*5	*6	*6	*6	*7	*7	*7	*7	*7	*7
"d" bars	*3@12"	*3@12"	*3@12"	*3@12"	*4@18"	*4@15"	*4@15"	*4@12"	*4@11"	*4@9"	*5@12"	*5@12"	*5@10"	*5@9"	*5@9"	*5@8"	*6@10"	*6@9"	*7@12"	*7@11"	*7@10"	*7@	*7@	*7@6"

WALL SECTION



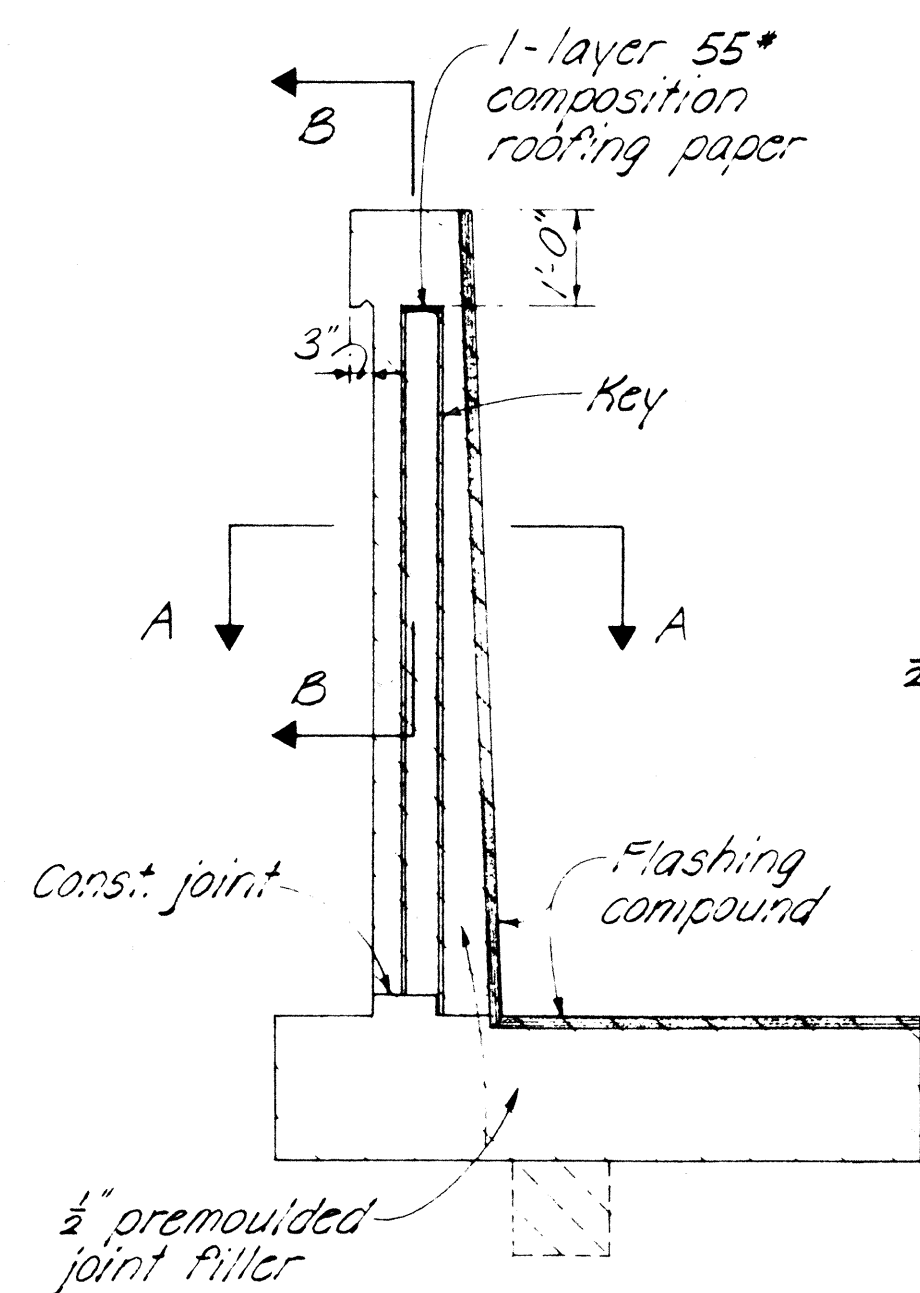
VERTICAL REINFORCING STEEL ARRANGEMENT

STANDARD DETAILS
RETAINING WALL TYPE T-1

SHEET No. 2 OF 3 SHEETS

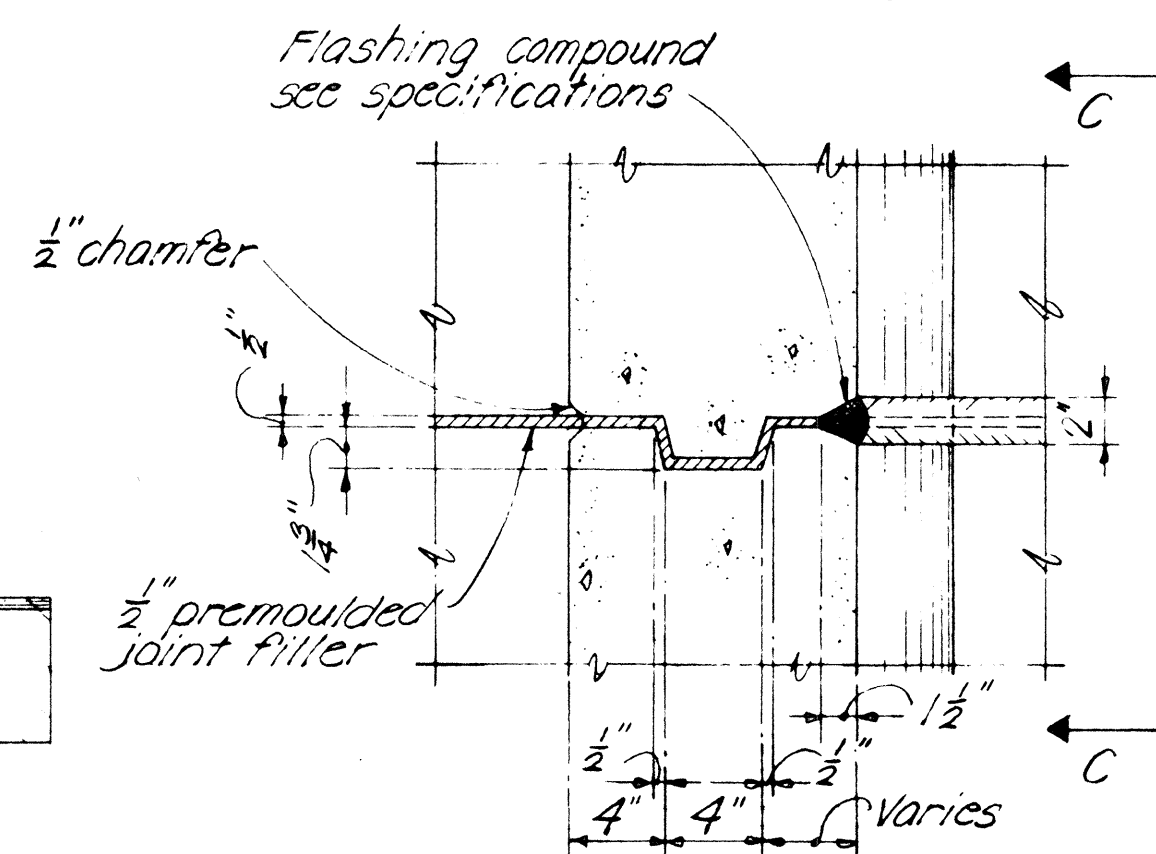
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HA-111-112-113	1969	49	181

June 1968
Set of 1963

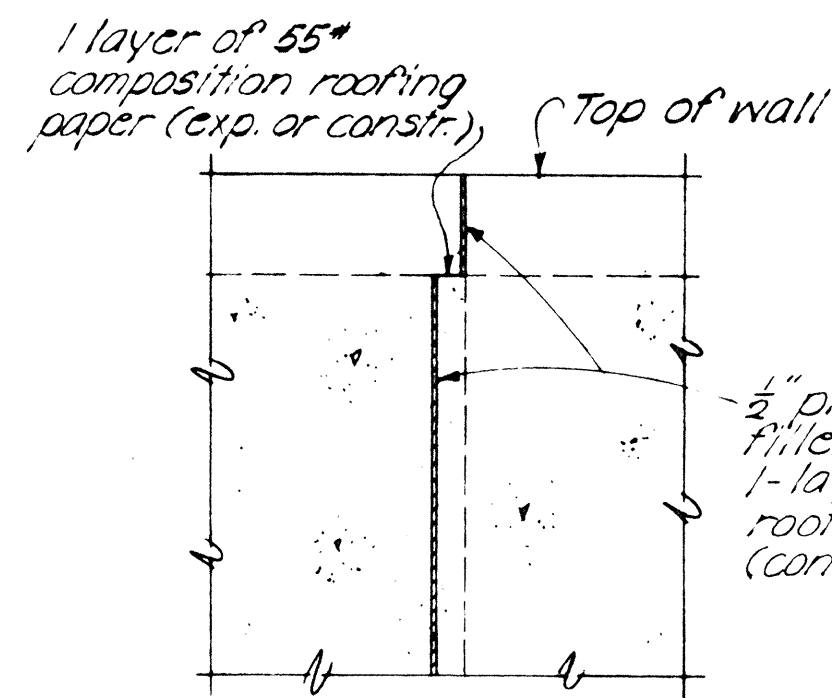


JOINT ELEVATION

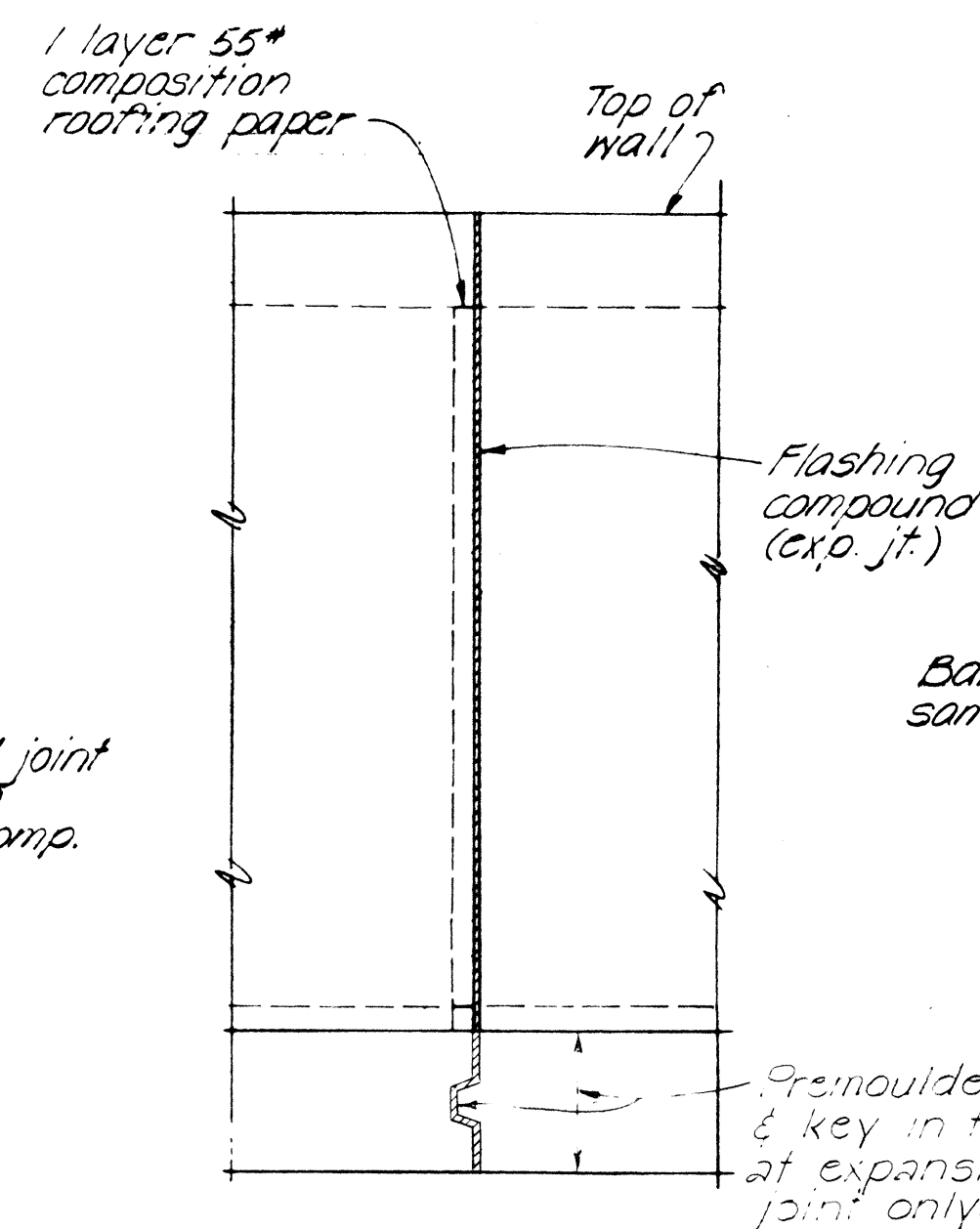
NOTE
Spacing of joints
Expansion = 90'-0" max
Contraction = 30'-0" max except where conc railing or curb occurs 26'-8" max (match with railing joint above.)
For alternate contraction joint and control joint details - See Standard Bridge Details



SECTION A-A

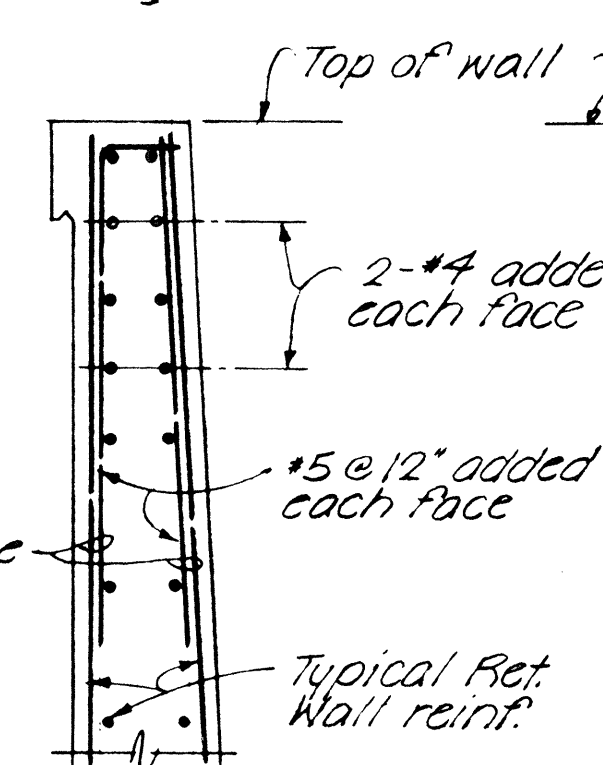


SECTION B-B

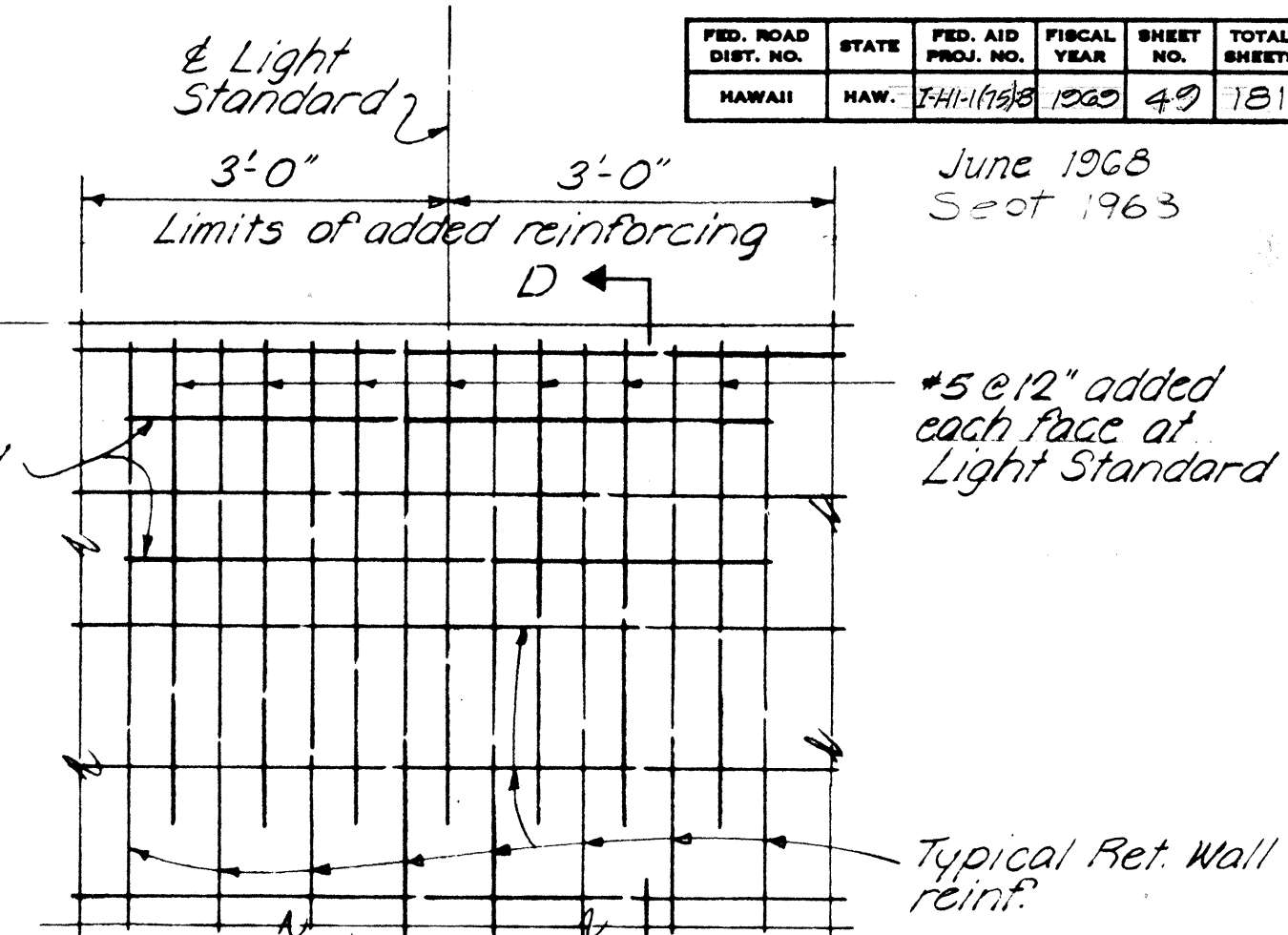


SECTION C-C

NOTE:
Limits of added reinf.
Height 0'-18" L = $\frac{h}{2}$
Height 19'-30" L = $\frac{h}{2} + 0'$

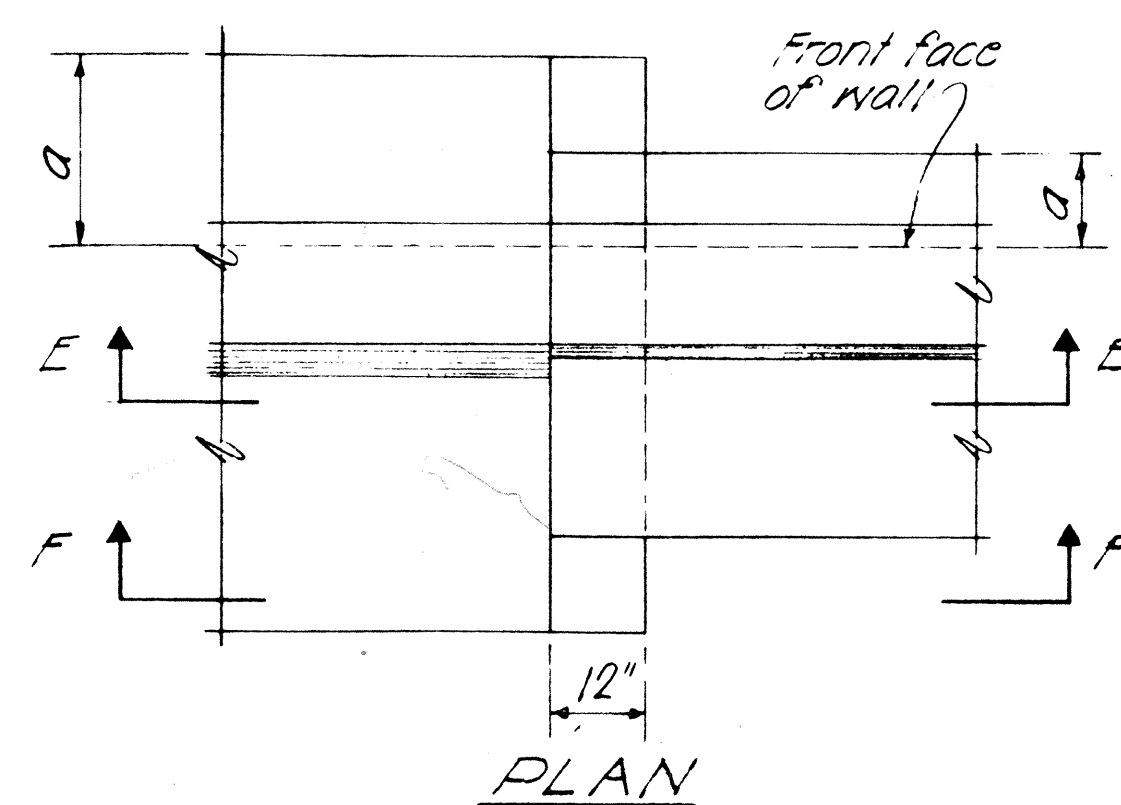


SECTION D-D

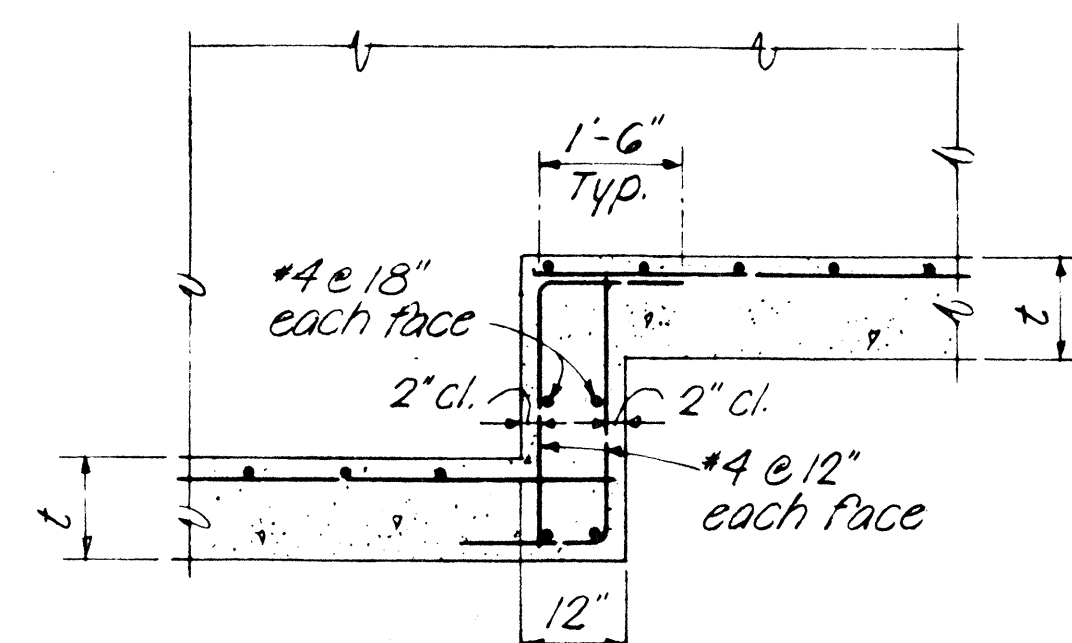


ELEVATION

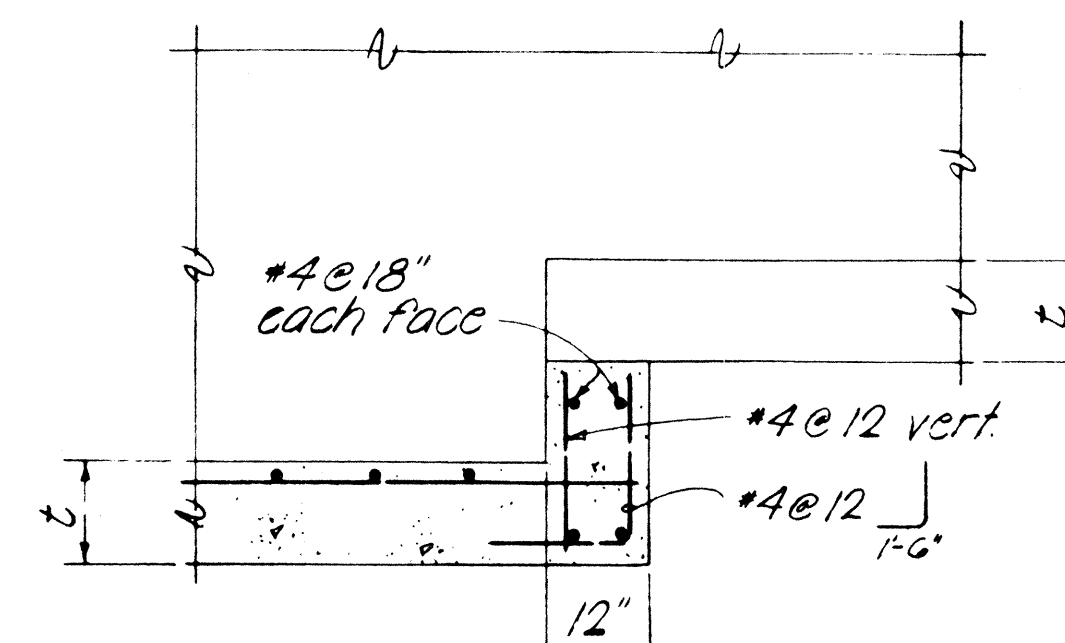
TYPICAL ADDED REINFORCEMENT
AT LIGHT STANDARD BASE No Scale



PLAN

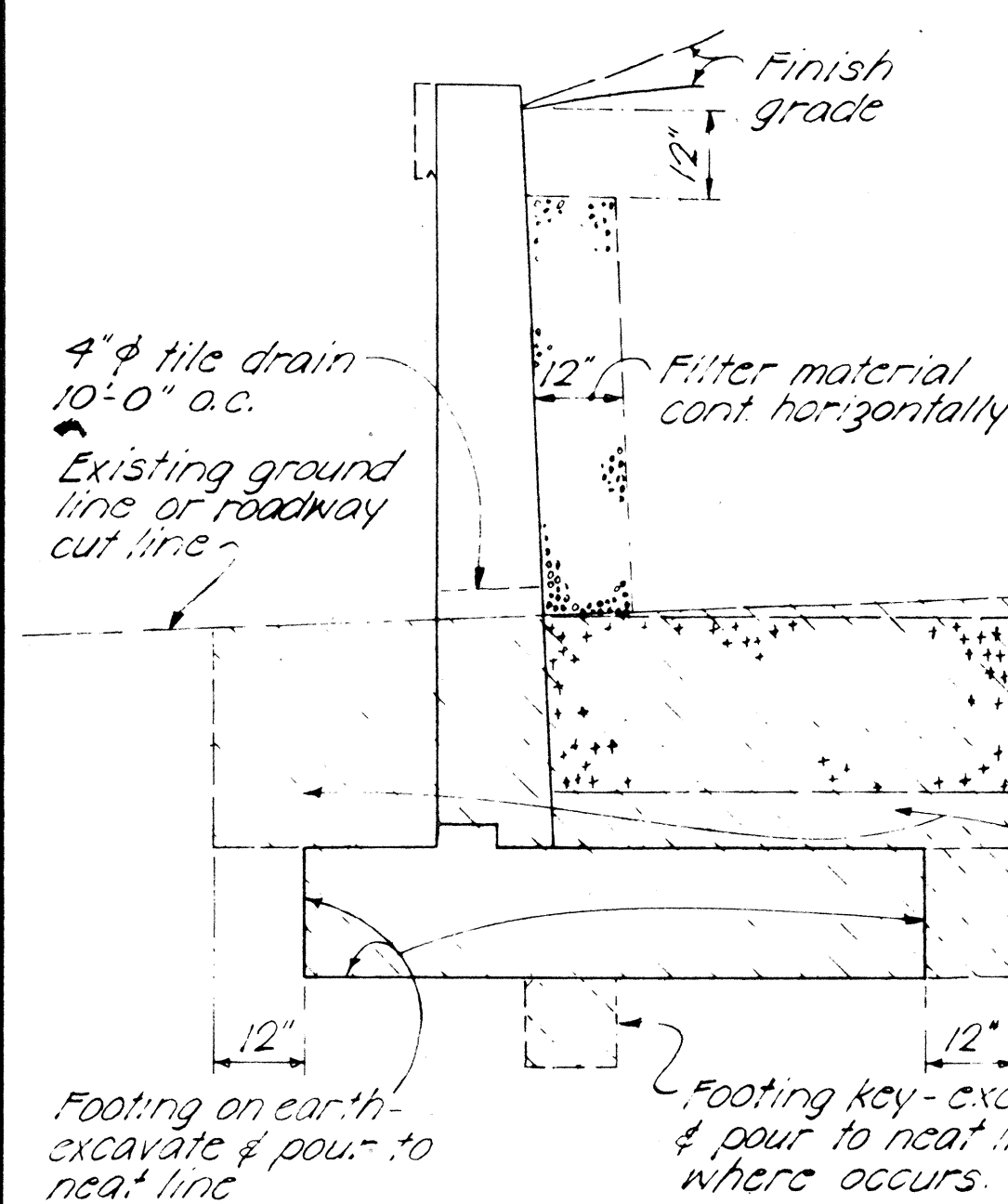


SECTION E-E



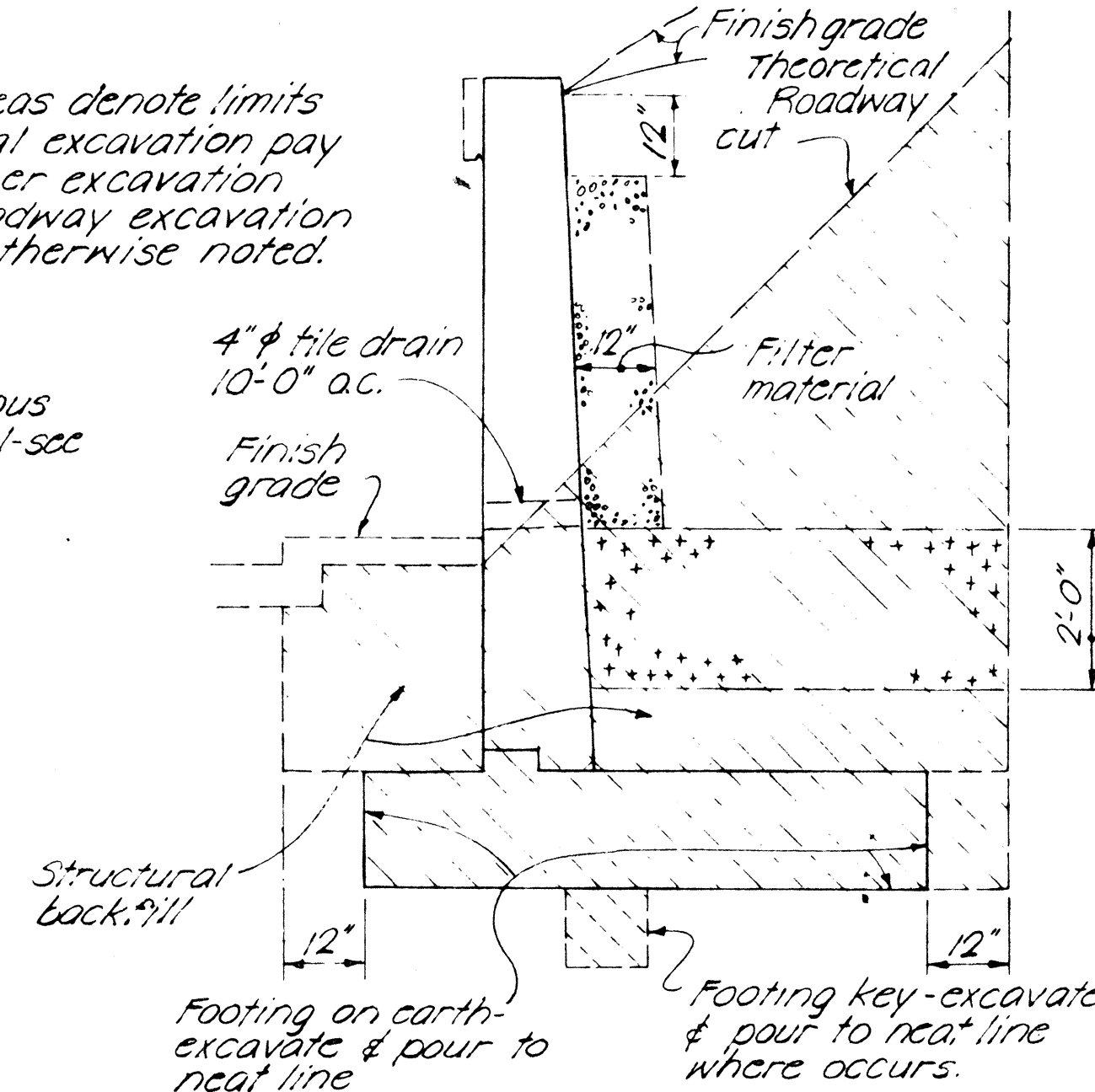
SECTION F-F

FOOTING STEP-UP DETAILS No Scale



CASE I

NOTE
Hatched areas denote limits of structural excavation pay line. All other excavation shall be roadway excavation except as otherwise noted.



CASE II

STRUCTURAL EXCAVATION & DRAINAGE DETAILS No Scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RETAINING WALL TYPE T-1

SCALE AS NOTED DATE: JUNE, 1969
SHEET No. 3 OF 3 SHEETS