

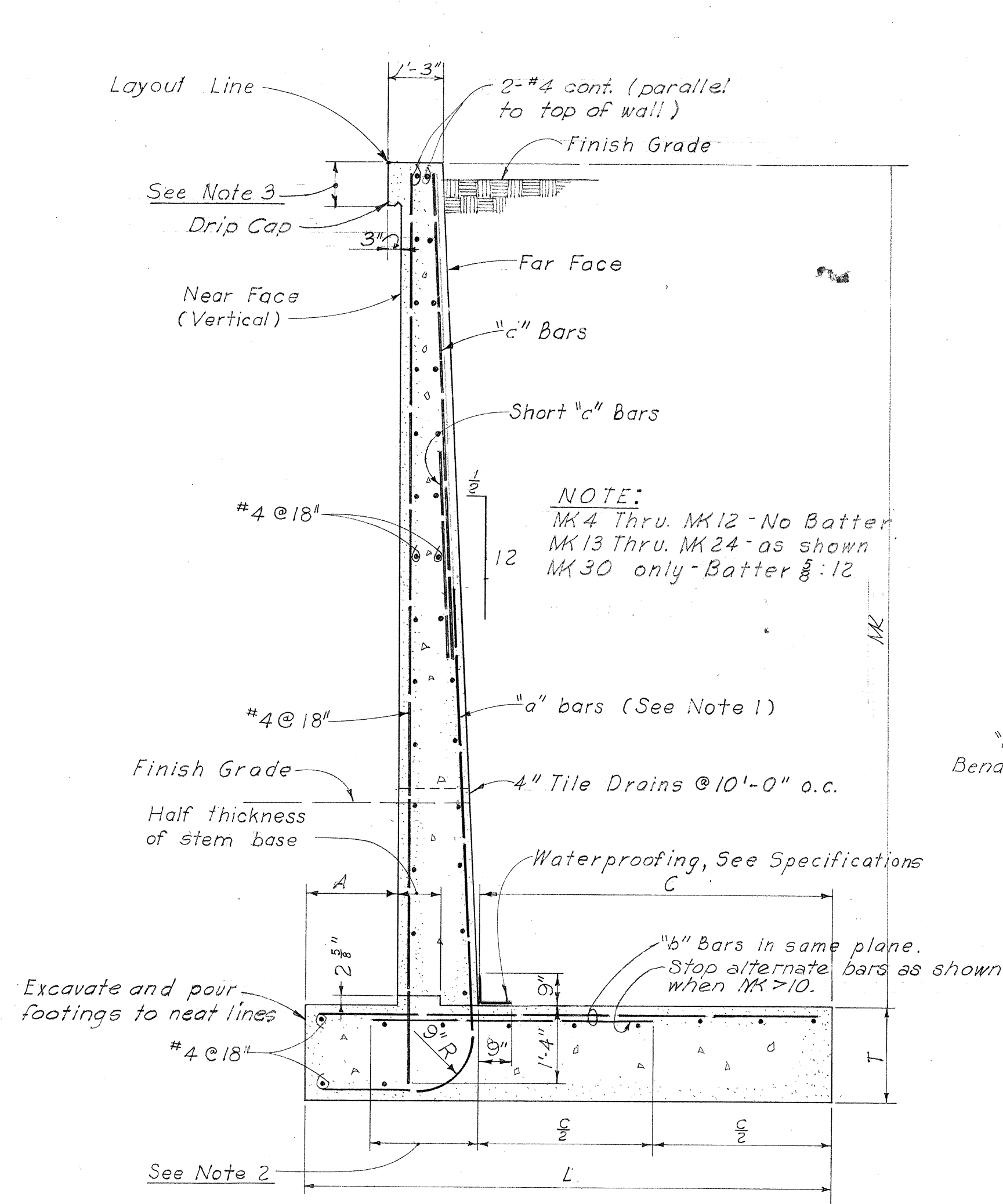
Note:

For detail of Retaining Wall with Aluminum Railing, see Standard Details of Aluminum Railing.

GENERAL NOTE

Except where detailed otherwise in the plans, all details on this sheet govern.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	100-0000	1960	31	77
		BU-072(2)	1960	50	118
		BU-065(10)	1960	78	115



NOTE 1:

Spacing given in schedule is at base of stem.

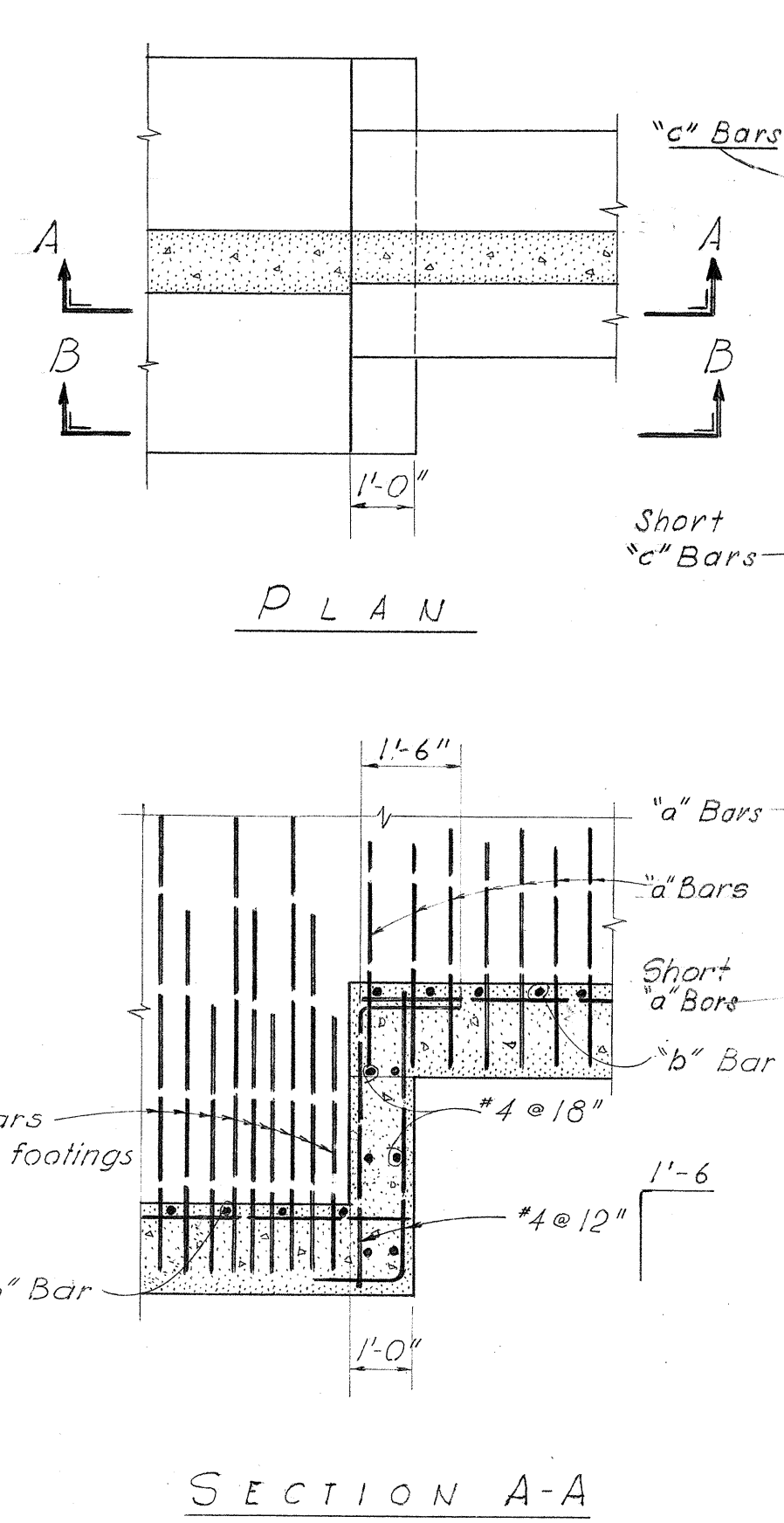
NOTE 2:

For MK-16' or less, extend all "b" Bars to toe.
For MK-17' and over, extend alternate "b" Bars 32 diameters.

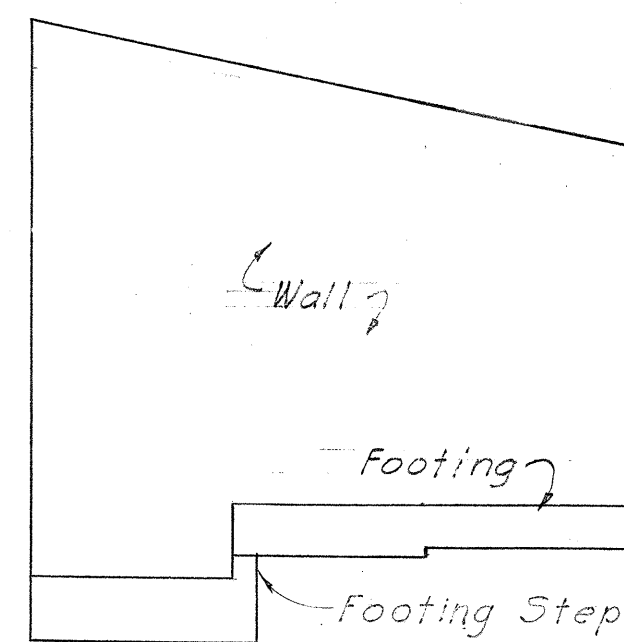
NOTE 3:

Height of Drip Cap Varies for Wing Walls. Pour to match structure Drip Cap unless otherwise shown.
Height for Retaining Wall Drip Cap = 1'-0" unless otherwise shown.

TYPE "T" WALL
TYPICAL SECTION

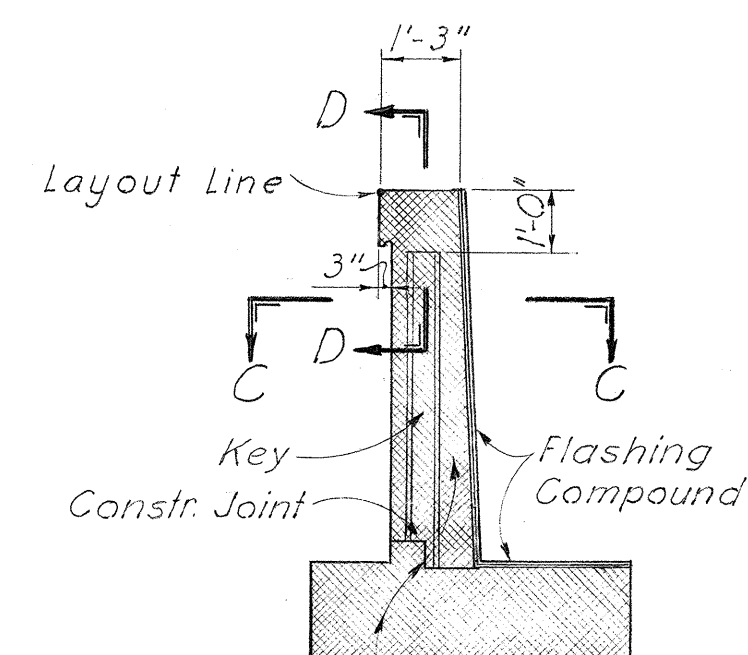
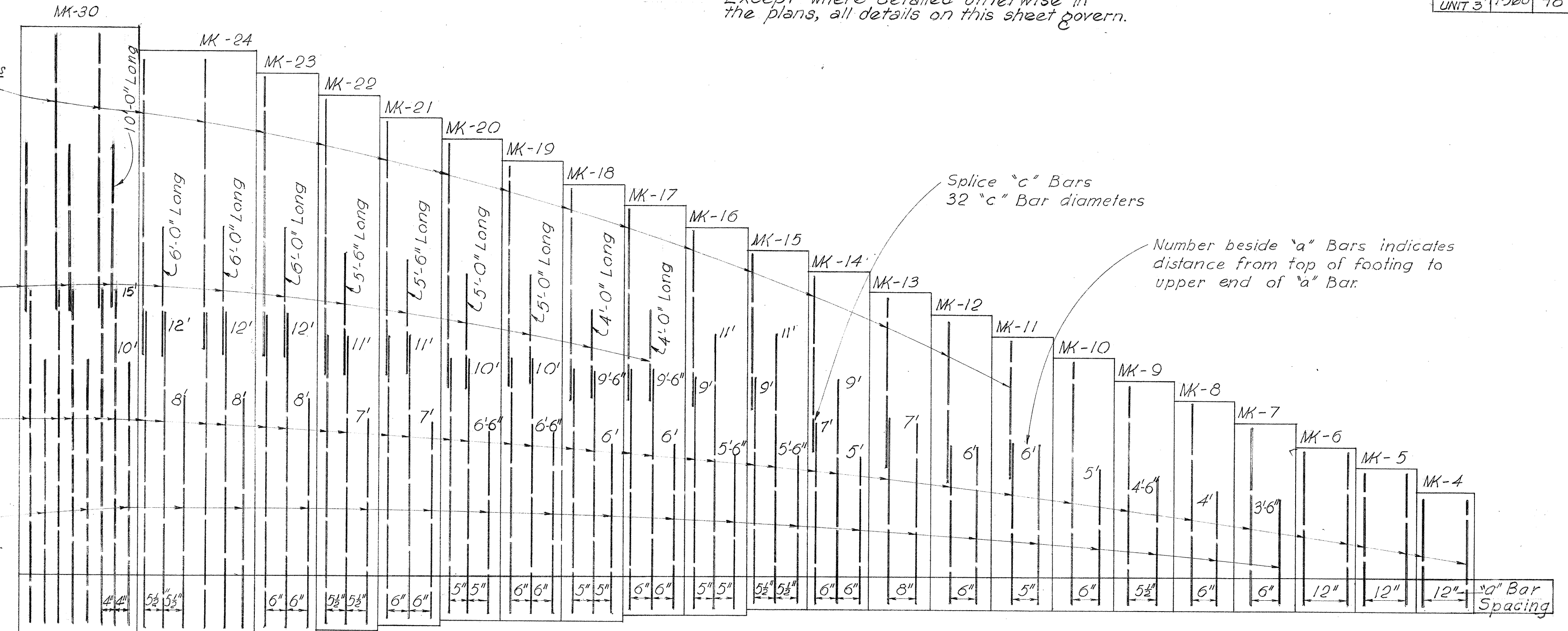


SECTION B-B

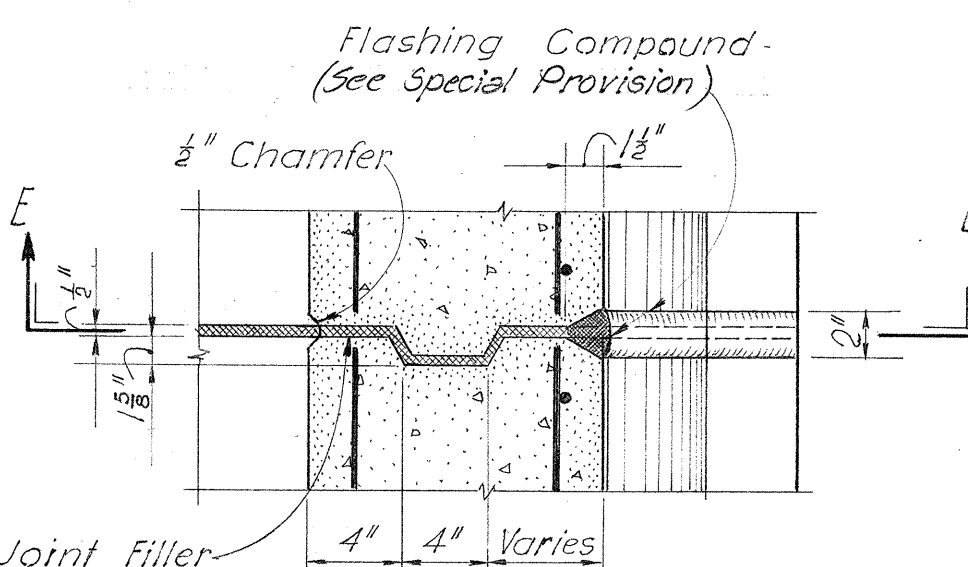


ELEVATION

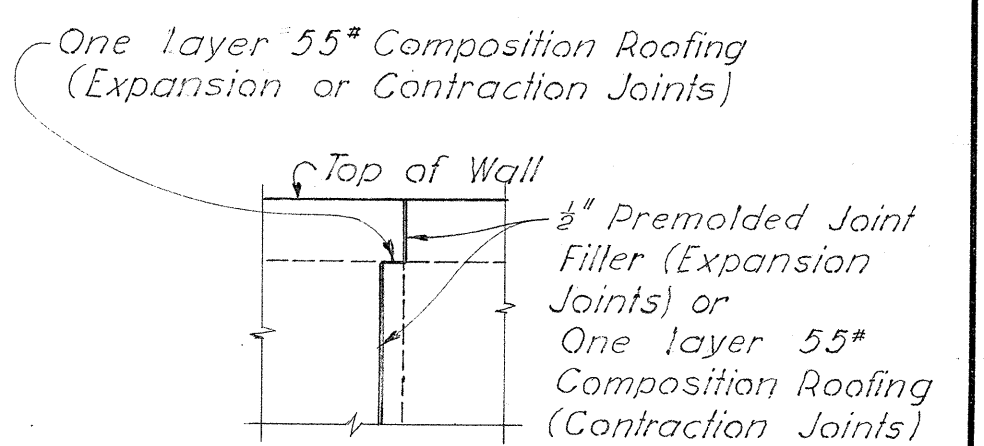
FOOTING STEP DETAILS



JOINT SECTIONAL ELEV. E-E



SECTION C-C



SECTION D-D

TYPICAL JOINT DETAILS

NOTE:

Contraction Joint detail is similar except that one Layer 55° Composition Roofing shall be used in place of Premolded Joint Filler, and the joint shall extend through the stem only.

REFERENCE DRAWINGS

RETAINING WALL DETAILS II
TYPICAL DETAILS AND GENERAL STRUCTURAL NOTES



MOFFATT, NICHOL & TAYLOR
Associated with
BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
RETAINING WALL DETAILS I
LUNALILO FREEWAY BU-072-(2) UNIT 4
MOANALUA ROAD US-S-0720(3) UNIT 3
MIDDLE STREET BU-065-1(1) UNIT 3

SHEET No. 1 OF 2 SHEETS

TYPE "T" WALL SCHEDULE

MK	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	30
A	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	15"	18"	21"	24"	24"	24"	27"	30"	33"	36"	39"	5'-3"
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"
T	14"	14"	14"	14"	14"	14"	14"	18"	18"	18"	18"	18"	21"	21"	24"	24"	24"	27"	30"	31"	33"	36"
"c" Bars *								4	4	4	4	4	4	4	4	5	5	6	6	7	7	7
"a" Bars **	3@12"	3@12"	4@12"	3@6"	4@6"	4@5 1/2"	5@6"	5@5"	6@6"	6@8"	6@6"	6@5 1/2"	6@5"	7@6"	7@5"	8@6"	8@5"	9@6"	9@5 1/2"	10@6"	10@5 1/2"	11@4"
"b" Bars	3@12"	3@12"	3@12"	3@12"	4@12"	5@11"	5@9"	5@10"	5@6"	6@6"	6@6"	6@5 1/2"	6@5"	7@6"	7@5"	8@6"	8@5"	9@6"	9@5 1/2"	10@6"	10@5 1/2"	11@6"

* See Reinforcing Diagram for reinforcing bar length and arrangement.

** Refer to Reinforcing Diagram for length and spacing of combined "a" and Short "a" Bars.

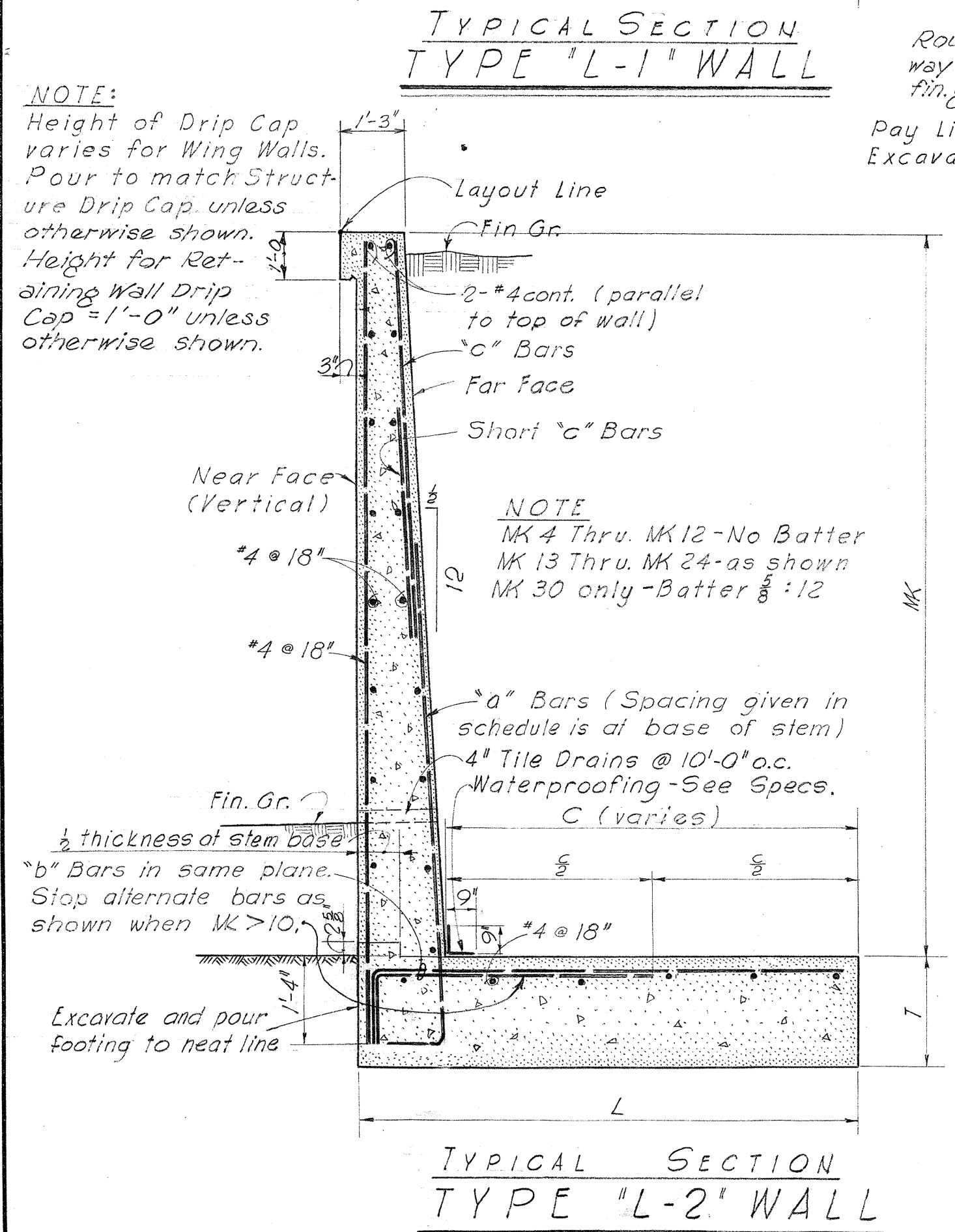
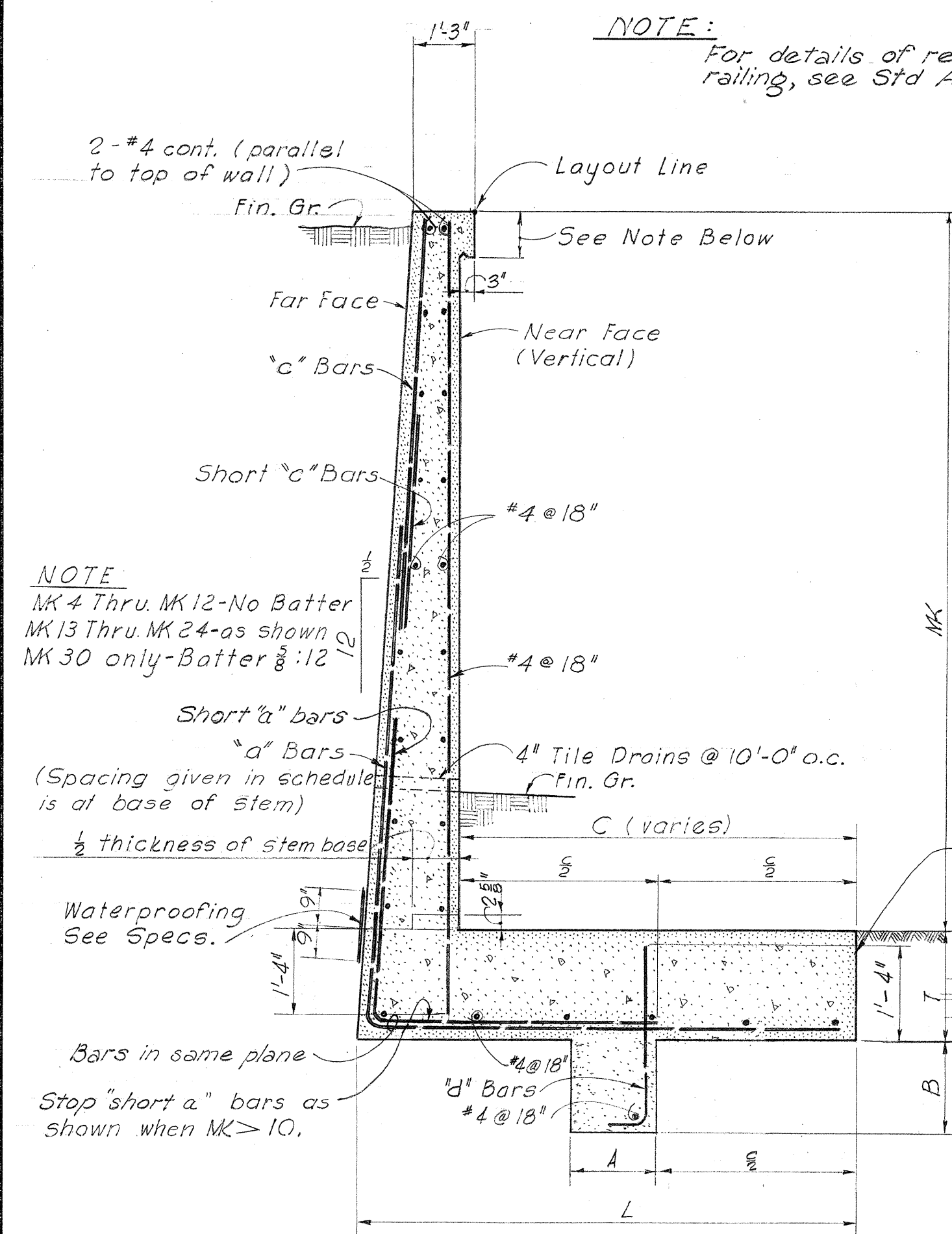
\$526.31

\$174.50

\$161.48

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW	100-000-000	1960	32	79
		BU-072-10	1960	51	118
		BU-065-10	1960	47	115

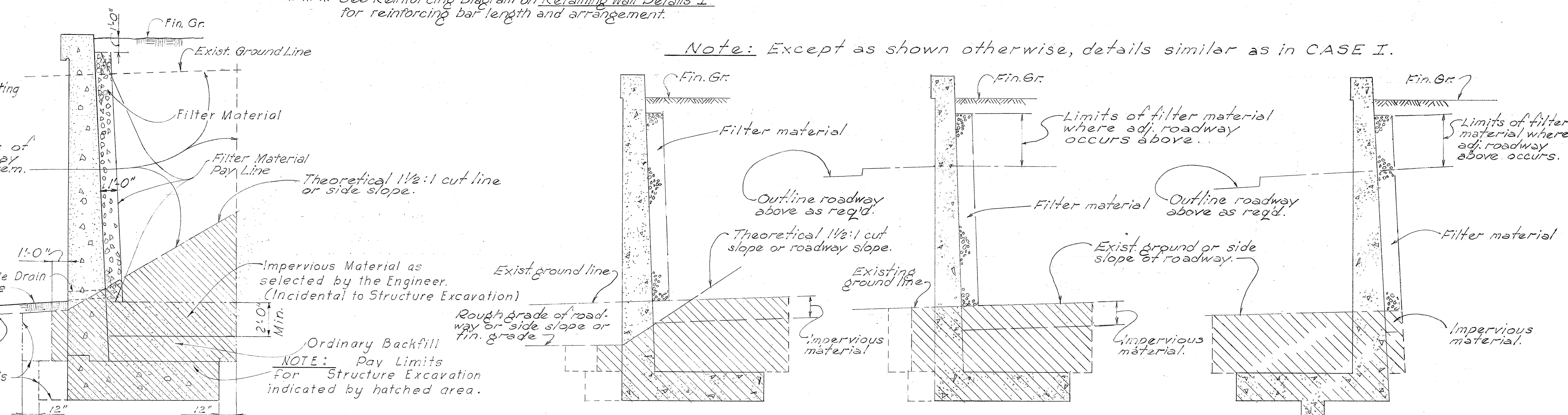
June 1960



TYPE "L-1" WALL SCHEDULE																		
MK	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
L	3.5'	4.5'	5.5'	6.5'	7.5'	8.0'	8.5'	9.5'	10.0'	10.5'	11.0'	12.0'	12.5'	13.5'	14.0'	15.0'	16.0'	17.5'
T	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"	18"	20"	22"	24"	24"	26"	28"	30"
A	12"	14"	14"	14"	14"	16"	16"	18"	20"	20"	20"	24"	24"	24"	24"	24"	24"	24"
B	12"	14"	14"	14"	14"	16"	16"	18"	20"	20"	20"	24"	24"	24"	26"	26"	28"	28"
"c" Bars	—	—	—	—	—	—	—	#4	#4	#4	#4	#4	#4	#4	#4	#5	#5	#6
"a" Bars	#3	#3	#4	#3	#4	#4	#5	#5	#6	#6	#6	#6	#6	#7	#7	#8	#8	#9
Short "a" Bars	—	—	—	#4	#4	#4	#5	#5	#6	#7	#7	#7	#7	#8	#8	#9	#9	#9
"d" Bars	#3@12"	#3@12"	#3@12"	#3@12"	#3@12"	#3@10"	#4@12"	#4@10"	#4@12"	#4@12"	#4@12"	#4@12"	#4@11"	#4@10"	#5@12"	#5@10"	#6@10"	#6@10"
Spacing of type "a" bars at base of stem (C. to C.)	12"	12"	12"	6"	6"	5½"	6"	5"	6"	8"	6"	5½"	5"	6"	5"	6"	5"	6"

*** See Reinforcing Diagram on Retaining Wall Details I for reinforcing bar length and arrangement.

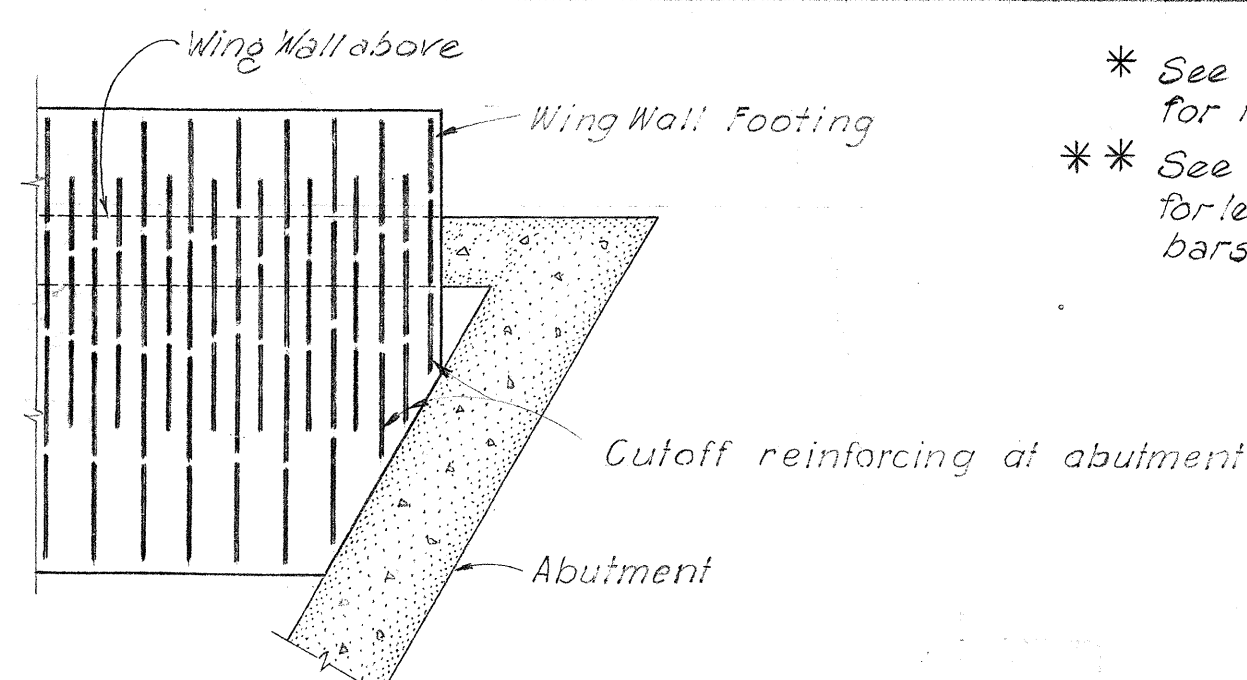
Note: Except as shown otherwise, details similar as in CASE I.



CASE I CASE II CASE III
TYPE "L-2" AND TYPE "T" WALLS
TYPICAL DETAILS OF LIMITS OF STRUCTURAL EXCAVATION

TYPE "L-2" WALL SCHEDULE

MK	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	3.5'	4.0'	4.5'	4.5'	5.0'	5.5'	6.0'	6.5'	7.5'	8.0'	9.0'	10.0'	11.0'	12.25'	13.5'	14.75'	16.0'
T	18"	18"	18"	18"	18"	18"	18"	18"	20"	20"	22"	22"	22"	24"	24"	24"	24"
"c" Bars *																	
"a" Bars **	#3@12"	#3@12"	#4@12"	#3@6"	#4@6"	#4@5 1/2"	#5@6"	#5@5"	#6@6"	#6@8"	#6@6"	#6@5 1/2"	#6@5"	#7@6"	#7@5"	#8@6"	#8@5"
"b" Bars	#3@12"	#3@12"	#4@12"	#3@6"	#4@6"	#4@5 1/2"	#5@6"	#5@5"	#6@6"	#6@8"	#6@6"	#6@5 1/2"	#6@5"	#9@6"	#8@5"	#9@6"	#8@5"



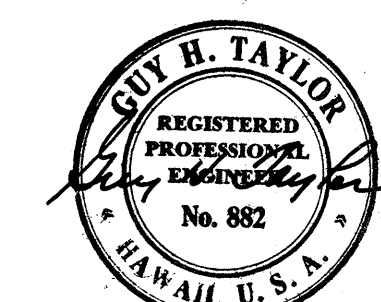
* See Reinforcing Diagram on Retaining Wall Details I for reinforcing bar length and arrangement.
** See Reinforcing Diagram on Retaining Wall Details I for length and spacing of combined "a" and Short "a" bars.

GENERAL NOTE

Except where detailed otherwise in the plans, all details on this sheet governs.

REFERENCE DRAWINGS

RETAINING WALL DETAILS I
TYPICAL DETAILS AND GENERAL
STRUCTURAL NOTES



MOFFATT, NICHOL & TAYLOR
Associated with
BELT, COLLINS & ASSOC., LTD.
Civil and Structural Engineers

HAWAII STATE HIGHWAY DEPARTMENT
STATE OF HAWAII
RETAINING WALL DETAILS II
LUNALILO FREEWAY BU-072-1(2) UNIT 4
MOANALUA ROAD US-S-0720(3) UNIT 3
MIDDLE STREET BU-065-1(1) UNIT 3

SHEET NO. 2 OF 2 SHEETS

\$526.32 \$174.51 \$161.49

