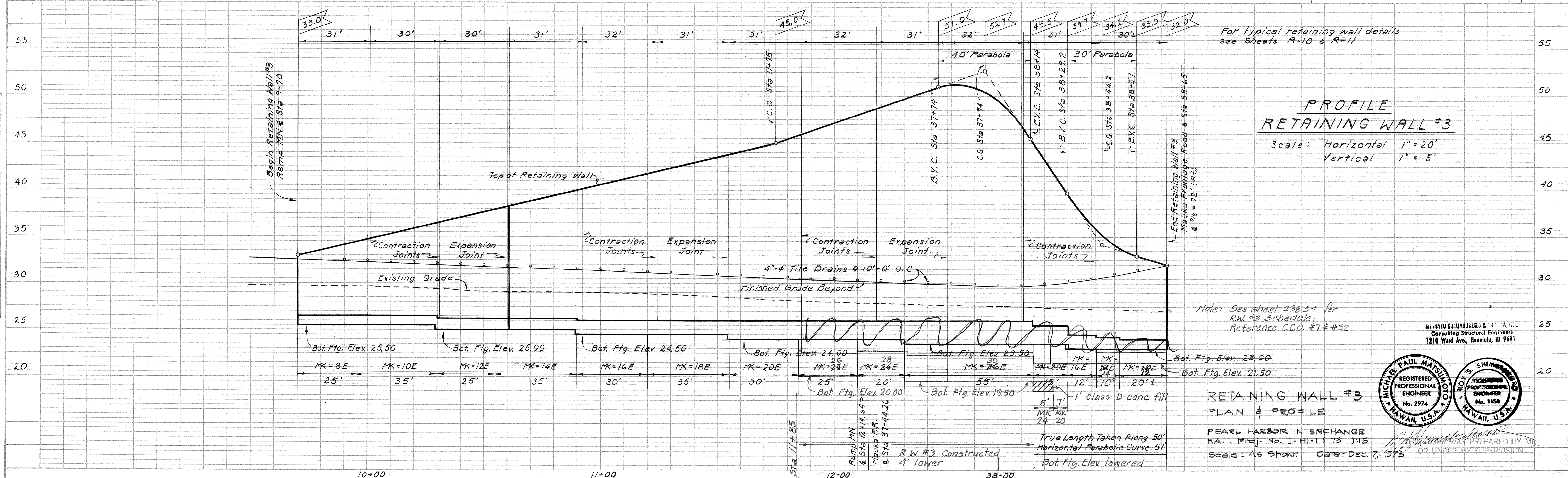
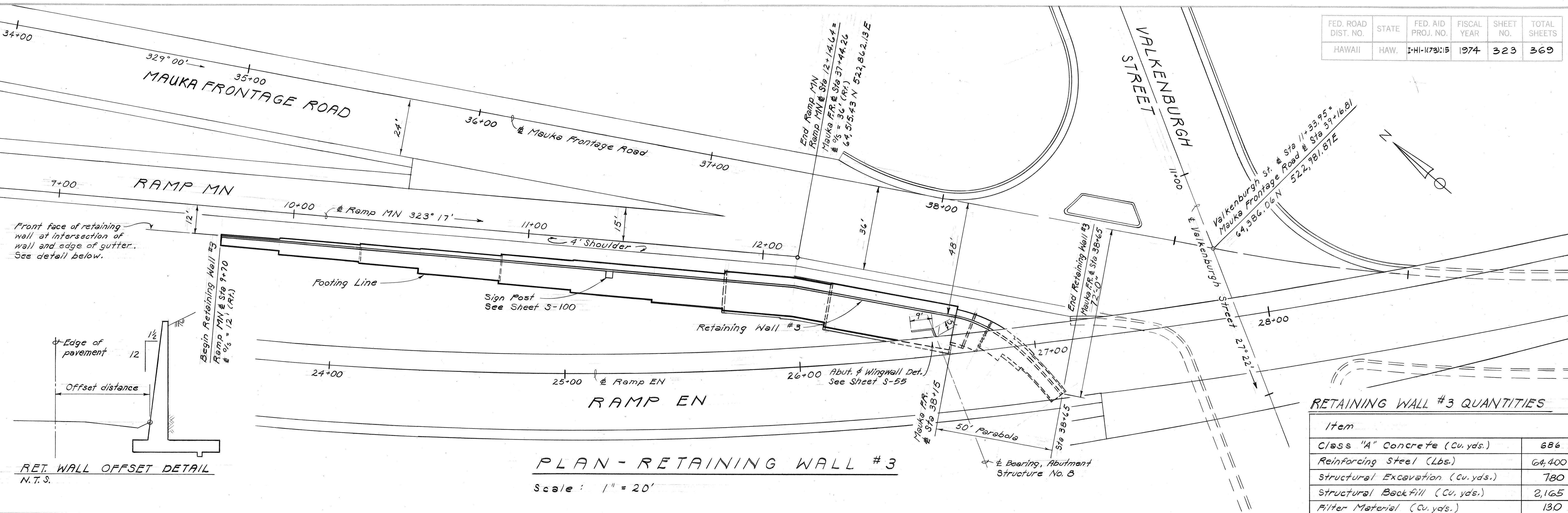


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73):15	1974	323	369

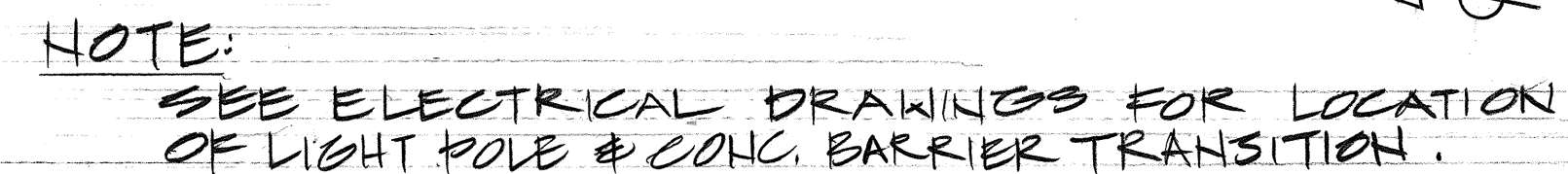
PLAN	DATE	BY	DATE	BY
SURVEYED				
NOTED				
NO.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
NOTED				
NO.				

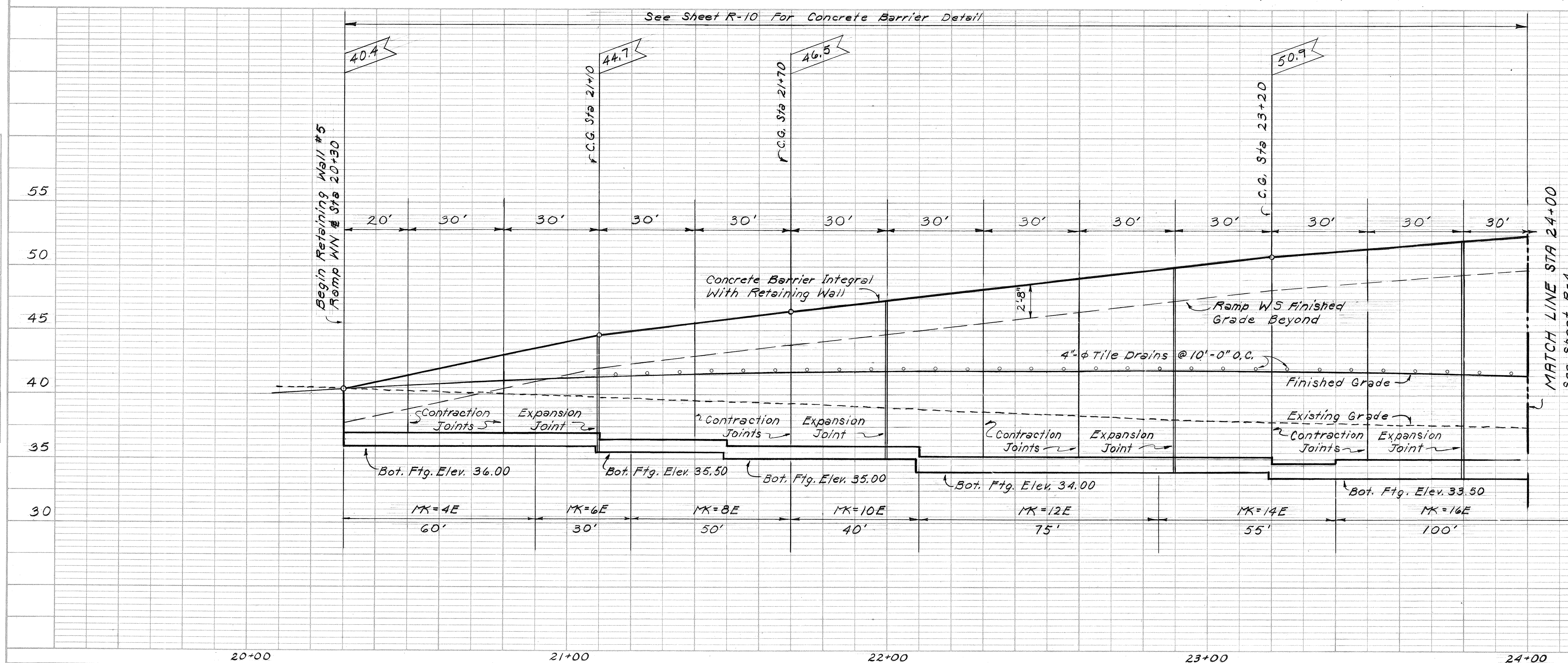


PLAN	SURVEYED	BY	DATE
	PLOTTED ALIGNMENT CHECKED RT. OF WAY CHECKED		
NOTE BOOK NO.			

PROFILE		BY	DATE
SURVIVED			
PLOTTED			
NOTE BOOK			
B.M.'S NOTED			
NO.			
STRUCTURE NOTAT'NS CH'KD			



Item	
Class "A" Concrete (Cu.yds.)	1,014
Reinforcing Steel (Lbs.)	87,570
Structural Excavation (Cu.yds.)	1,284
Structural Backfill (Cu.yds.)	2,806
Filter Material (Cu.yds.)	131

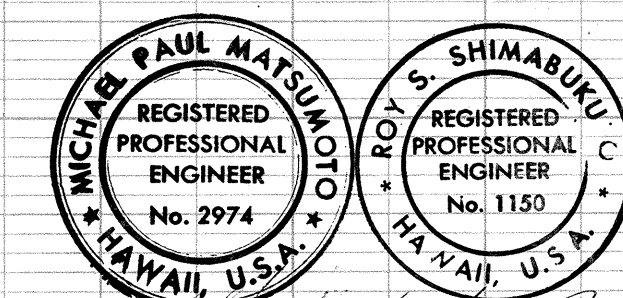


Scale:	Horizontal	1" = 20'
	Vertical	1" = 5'

RETAINING WALL # 5
PLAN & PROFILE

PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. I-41-1 (73):15
Scale: As Shown Date: Dec

SHIMAZU SHIMABUKURO & FUKUDA, INC.
Consulting Structural Engineers
1210 Ward Ave., Honolulu, HI 96813

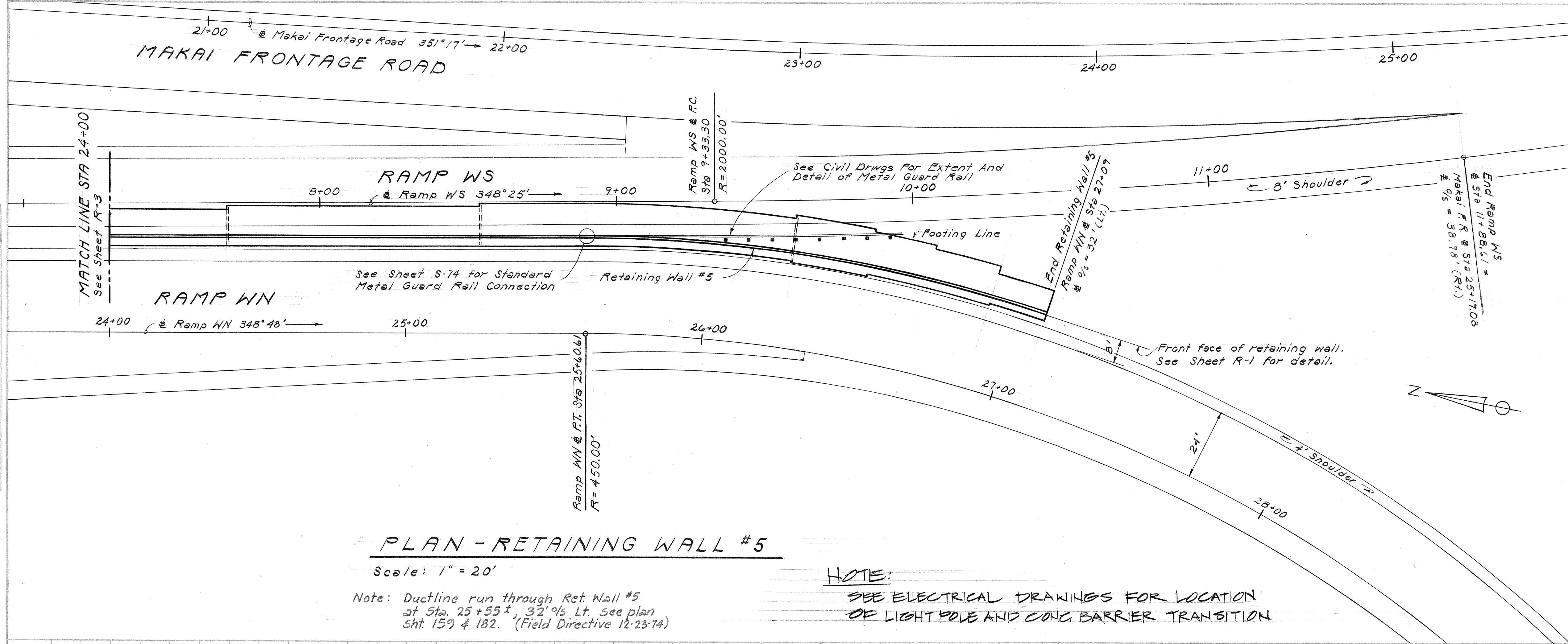


THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)15	1974	326	369

PLAN	DATE	BY	DATE	BY
SURVEYED				
DESIGNED				
CHECKED				
NOTE BOOK				
NO.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
DESIGNED				
CHECKED				
NOTE BOOK				
NO.				



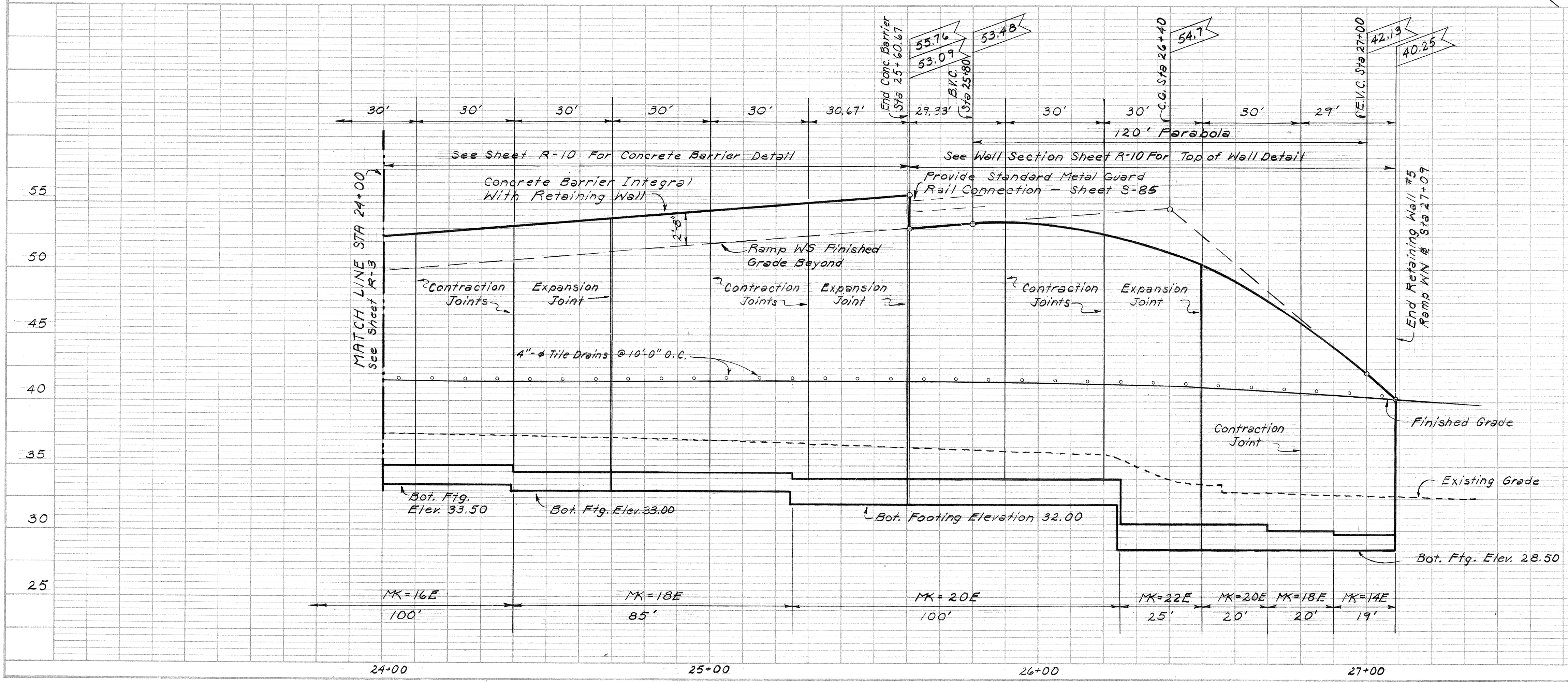
PLAN - RETAINING WALL #5

Scale: 1" = 20'

NOTE:

SEE ELECTRICAL DRAWINGS FOR LOCATION OF LIGHT POLE AND CONC BARRIER TRANSITION

DATE	ADDED	NOTE
7/1/73		

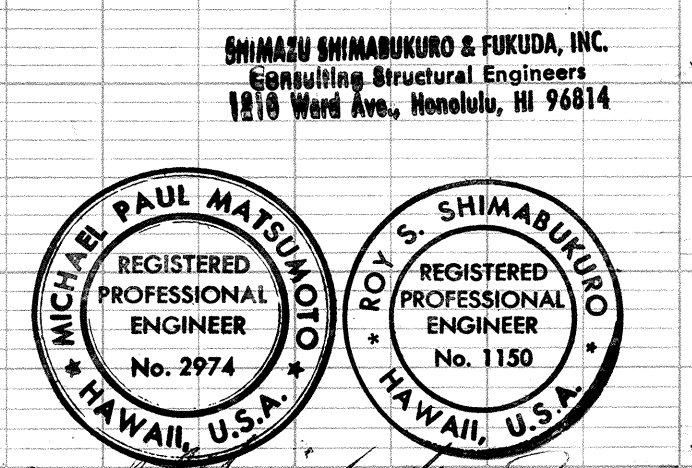


PROFILE RETAINING WALL #5

Scale: Horizontal 1" = 20'
Vertical 1" = 5'

RETAINING WALL #5 PLAN & PROFILE

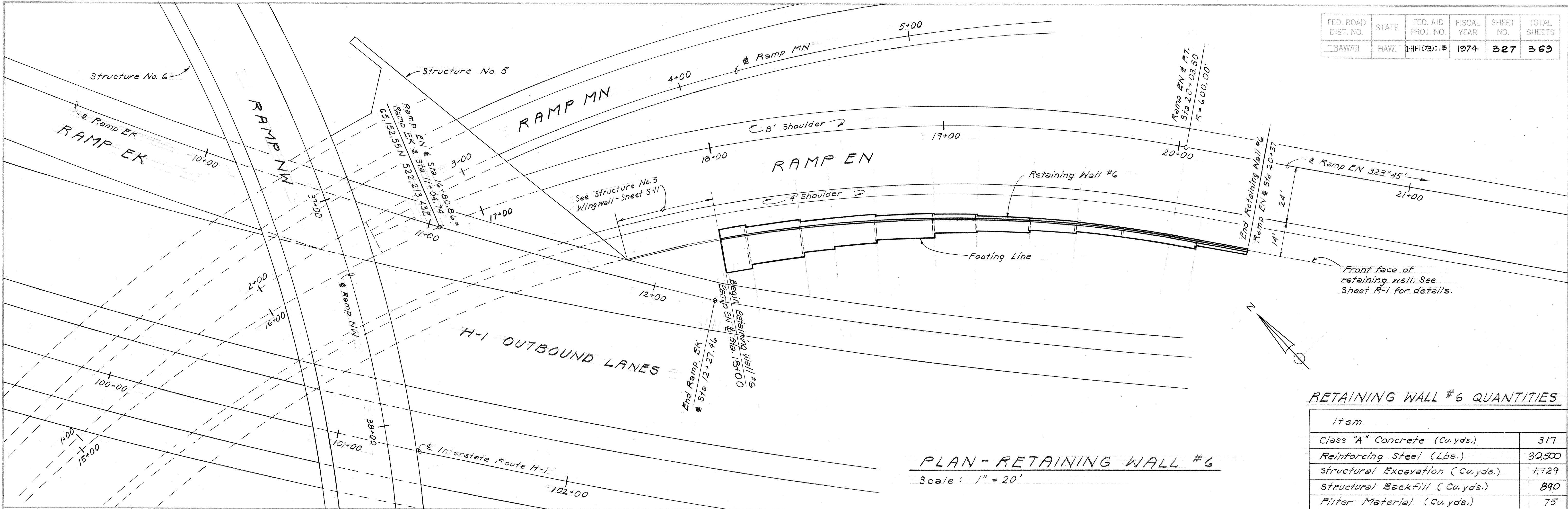
PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. I-HI-1(73)15
Scale: As Shown Date: Dec. 7, 1973
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1H1(73)1B	1974	327	369

PLAN	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTED				
STRUCTURE NOTATIONS CHKO				

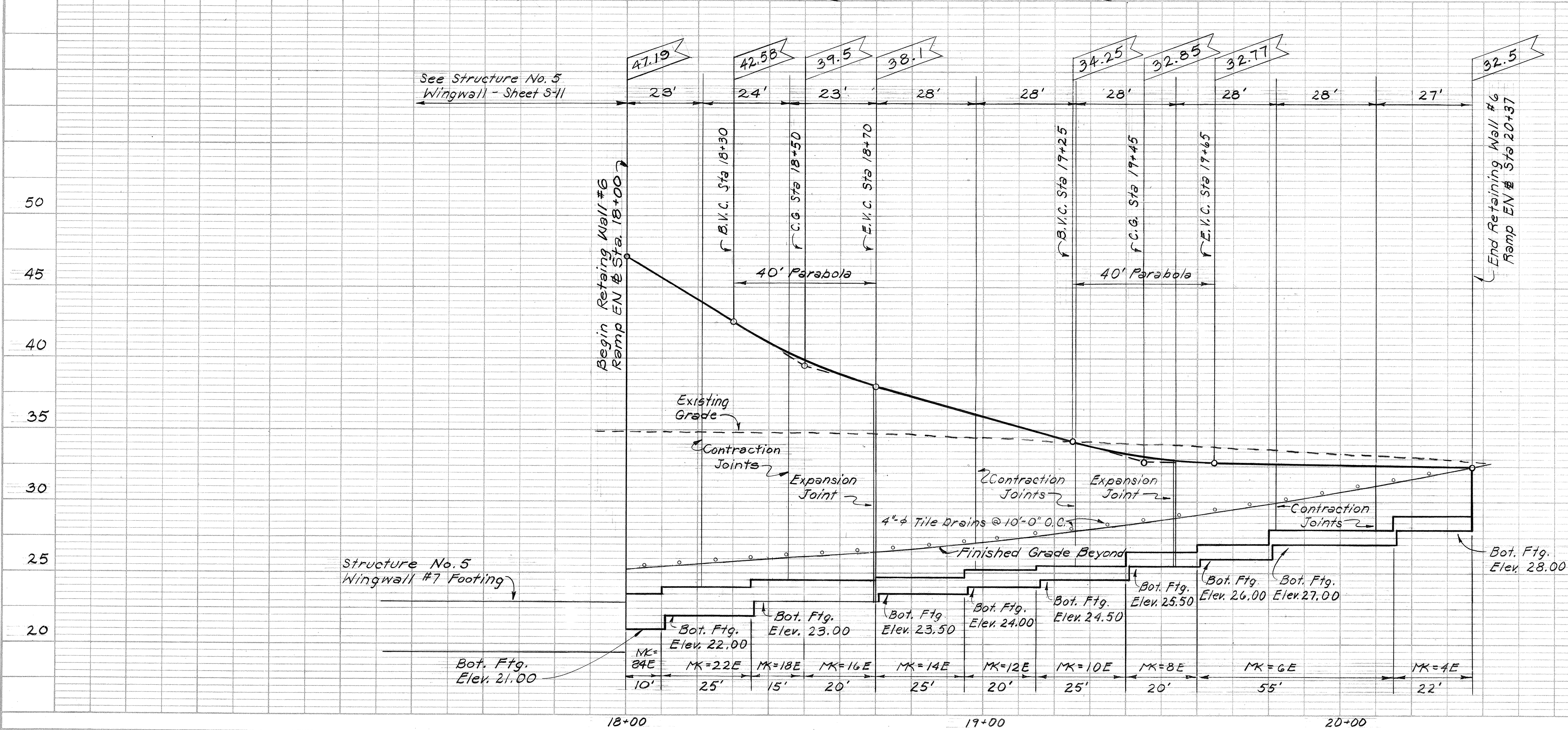
PROFILE	DATE	BY	DATE	BY
SURVEYED				
PLOTTED				
NOTED				
STRUCTURE NOTATIONS CHKO				



PLAN - RETAINING WALL #6
Scale: 1" = 20'

RETAINING WALL #6 QUANTITIES

Item	
Class "A" Concrete (Cu.yds.)	317
Reinforcing Steel (Lbs.)	30,500
Structural Excavation (Cu.yds.)	1,129
Structural Backfill (Cu.yds.)	890
Filter Material (Cu.yds.)	75



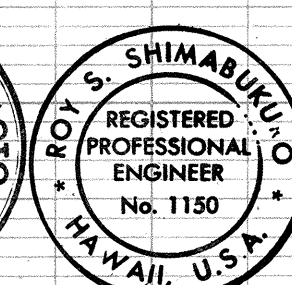
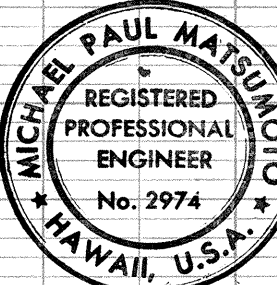
PROFILE
RETAINING WALL #6
Scale: Horizontal 1" = 20'
Vertical 1" = 5'

1/16/74 DATE
SHORTENED RETAINING WALL #6 REVISION

RETAINING WALL #6
PLAN & PROFILE

PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. I-H-1 (73)1B
Scale: As Shown Date: Dec. 7, 1973

SHIMAZU SHIMAZUKURO & SHIMAZU, INC.
Consulting Structural Engineers
1210 Ward Ave., Honolulu, HI 96814

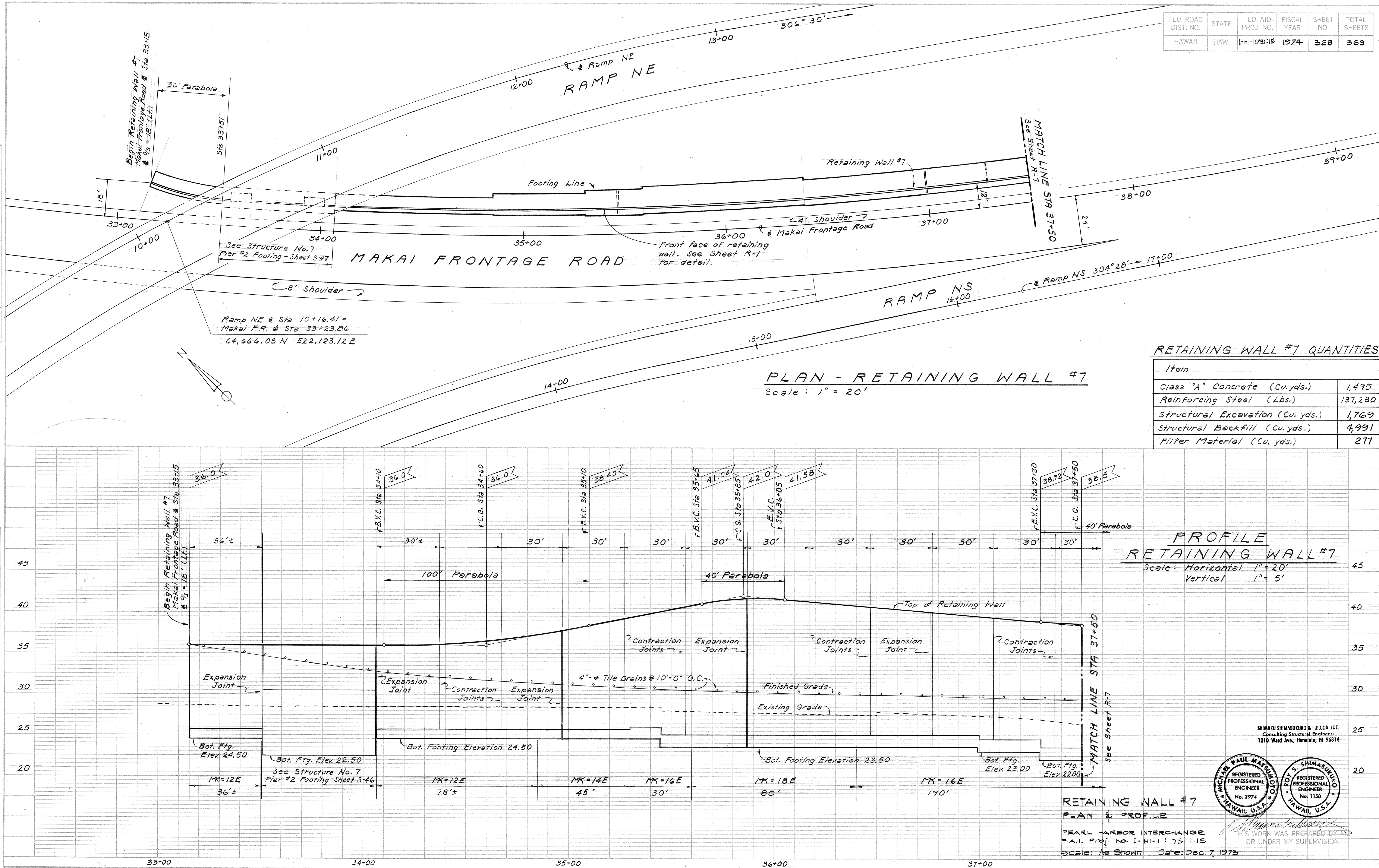


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OR UNDER MY SUPERVISION

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73)-15	1974	328	369

PLAN	DATE	BY	NO.
SURVEYED			
PLOTTED			
ALIGNMENT CHECKED			
RT OF WAY CHECKED			
NOTE BOOK			

PROFILE	DATE	BY	NO.
SURVEYED			
PLOTTED			
GRADES CHECKED			
STRUCTURE NOTATIONS CHK'D			
NOTE BOOK			



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-HI-1(73)-13	1974	329	369

H-1 INBOUND LANES

Ramp NE @ Sta 17+16.47 =
Valkenburgh St. @ Sta 13+78.98
64,168.45 N 522,849.24 E

VALKENBURGH STREET
@ Valkenburgh Street 27°22'

Valkenburgh St. @ Sta 14+45.36 =
Makai F.R. @ Sta 42+38.20
64,109.51 N 522,838.72 E

14+00 15+00 16+00 17+00 18+00 19+00
RAMP NE

MATCH LINE STA 37+50
See Sheet R-6

MAKAI FRONTAGE ROAD

Retaining Wall #7
Footing Line
Existing HTCO Ducts in conc. jacket.
4' Shoulder
Makai Frontage Road
40+00 Front face of retaining wall. See Sheet R-1 for detail.

75' Parabola
Deleted
Sta 41+00
End Retaining Wall #7
Makai F.R. @ Sta 41+75
@ 95 = 53' (Lt.)
53'

PLAN - RETAINING WALL #7

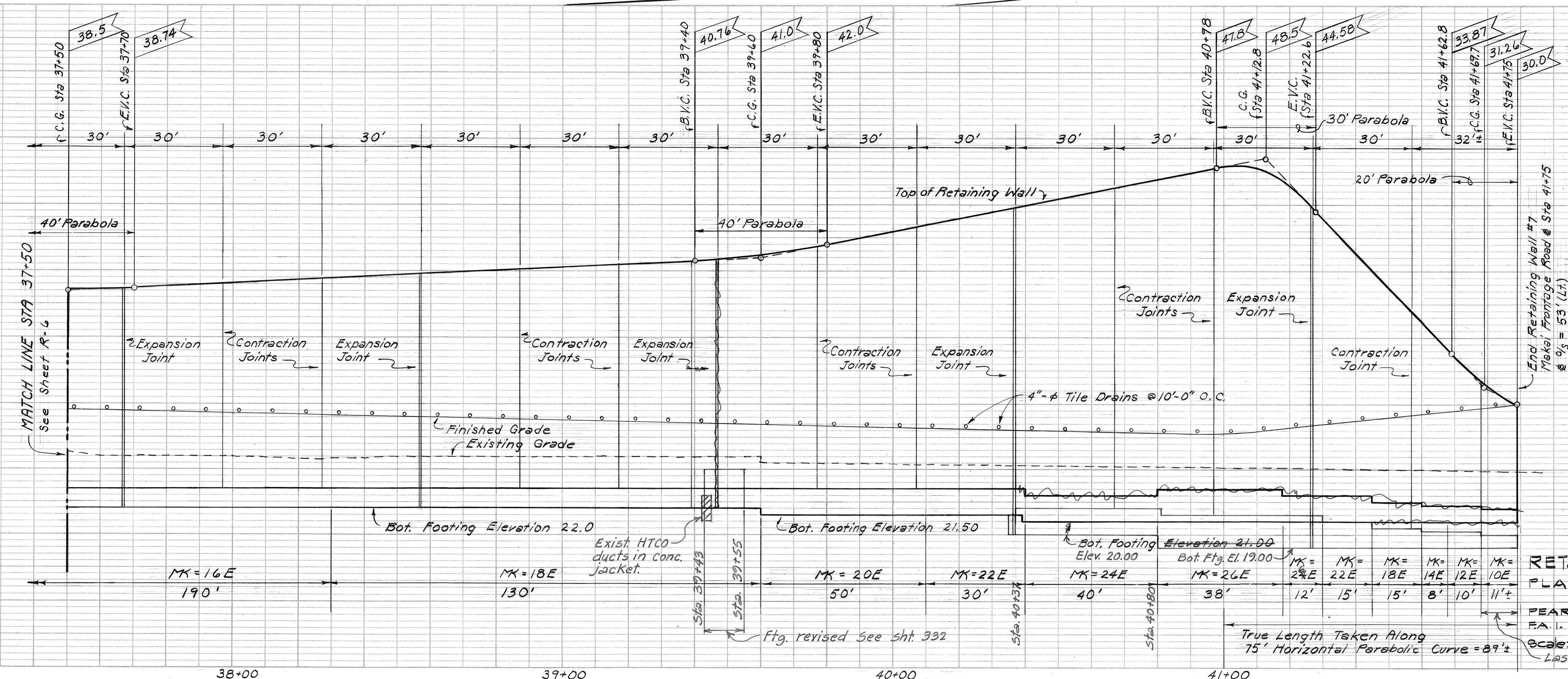
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Note: Reference C.C.O. #44, #46

PROFILE
RETAINING WALL #7

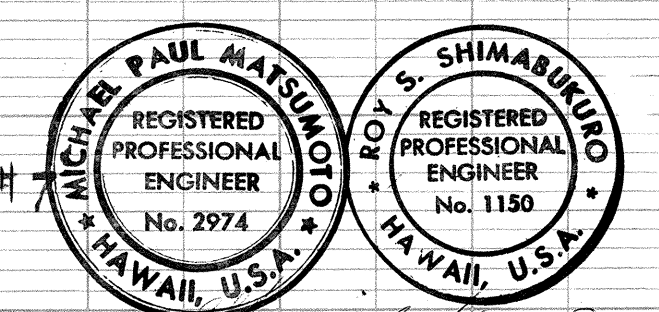
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Vertical 1" = 5'

Note: Reference C.C.O. #44, #46

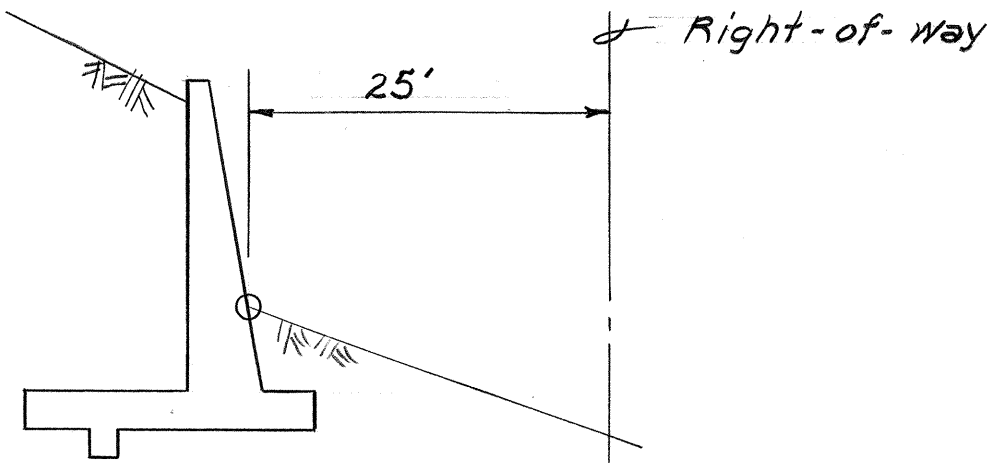


RETAINING WALL #7
PLAN & PROFILE

PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. 1-HI-1(73)-13
Scale: As Shown Date: Dec. 7, 1973
Last 11' of RW #7 deleted

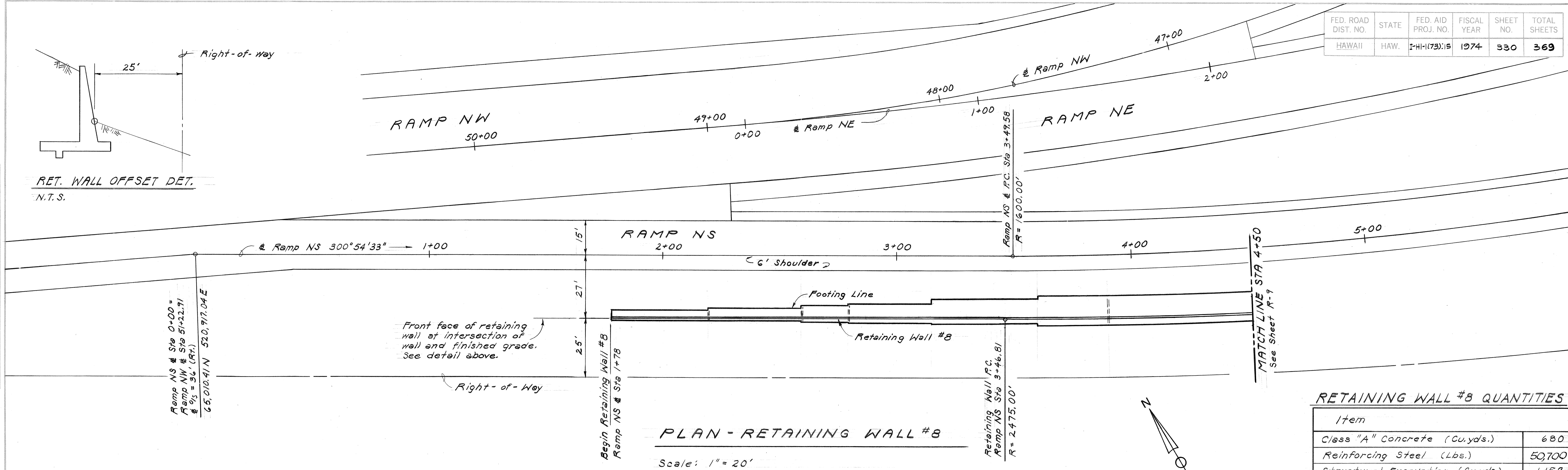


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(73):15	1974	330	369



RET. WALL OFFSET DET.
N.T.S.

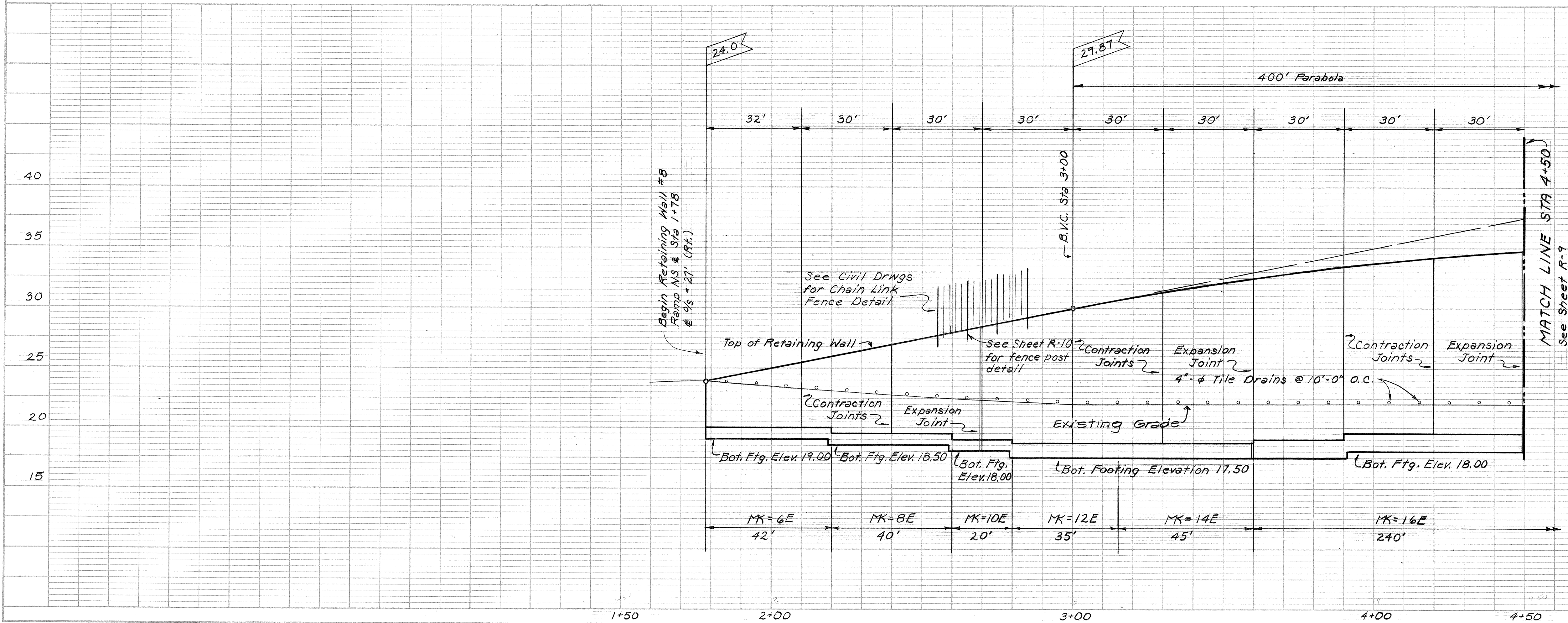
PLAN	DATE	BY
SURVEYED		
NOTE BOOK		
NO.		



RETAINING WALL #8 QUANTITIES

Item	
Class "A" Concrete (Cu.yds.)	680
Reinforcing Steel (Lbs.)	50,700
Structural Excavation (Cu.yds.)	1,153
Structural Backfill (Cu.yds.)	1,998
Filter Material (Cu.yds.)	149

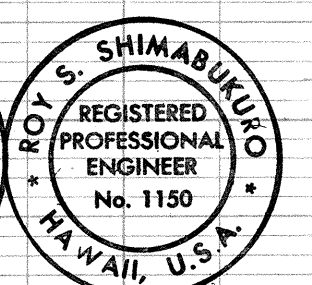
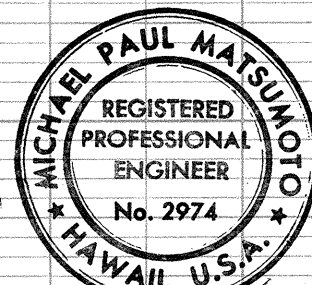
PROFILE	DATE	BY
SURVEYED		
NOTE BOOK		
NO.		



PROFILE
RETAINING WALL #8
Scale: Horizontal 1" = 20'
Vertical 1" = 5'

RETAINING WALL #8
PLAN & PROFILE

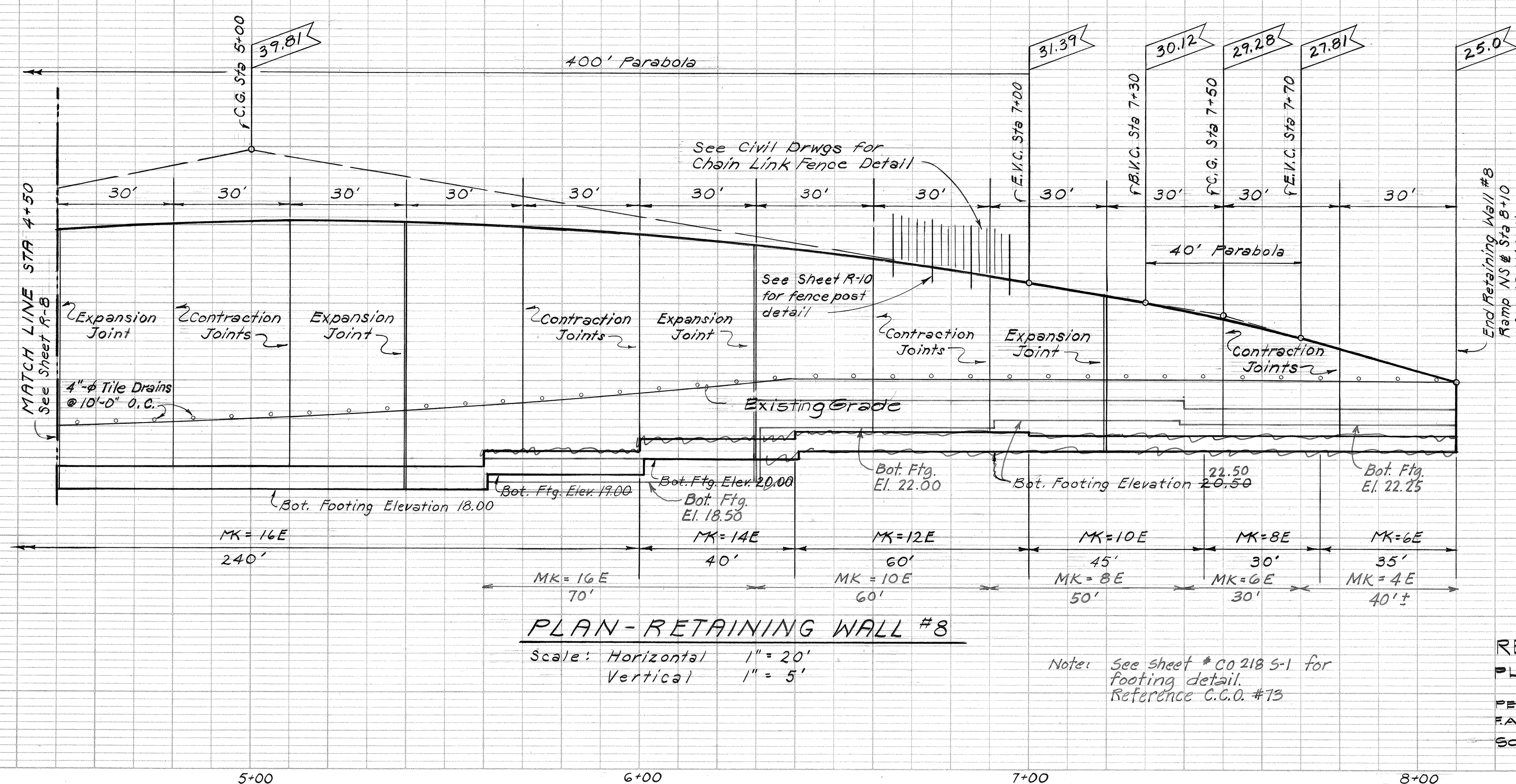
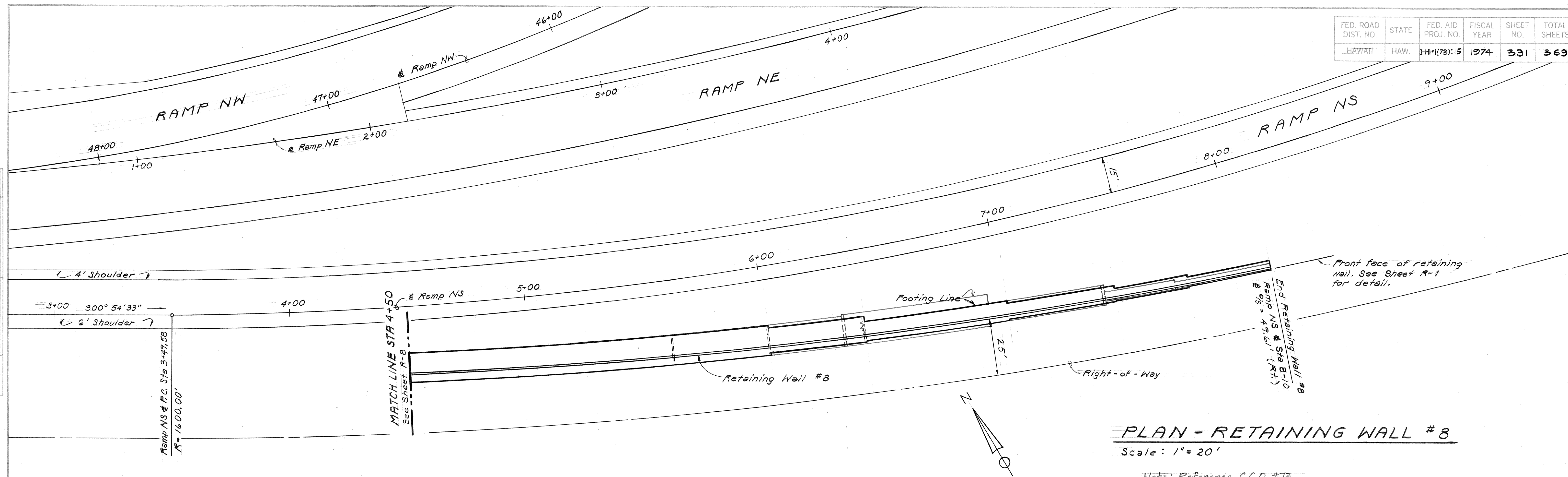
PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. 1 HI-1 (73) 2:15
Scale: AS SHOWN Date: DEC. 7, 1973



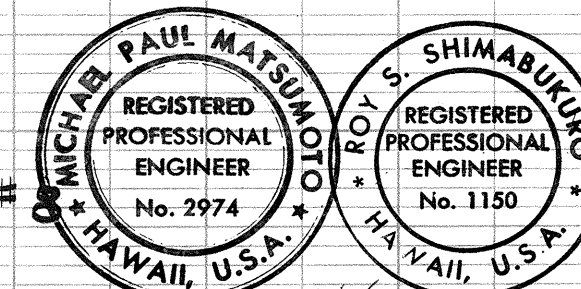
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	1-H1-1(73)-15	1974	331	369

PLAN	DATE	BY	DATE	BY
SURVEYED				
NOTED				
ALIGNED				
CHECKED				
NO.				

PROFILE	DATE	BY	DATE	BY
SURVEYED				
NOTED				
ALIGNED				
CHECKED				
NO.				

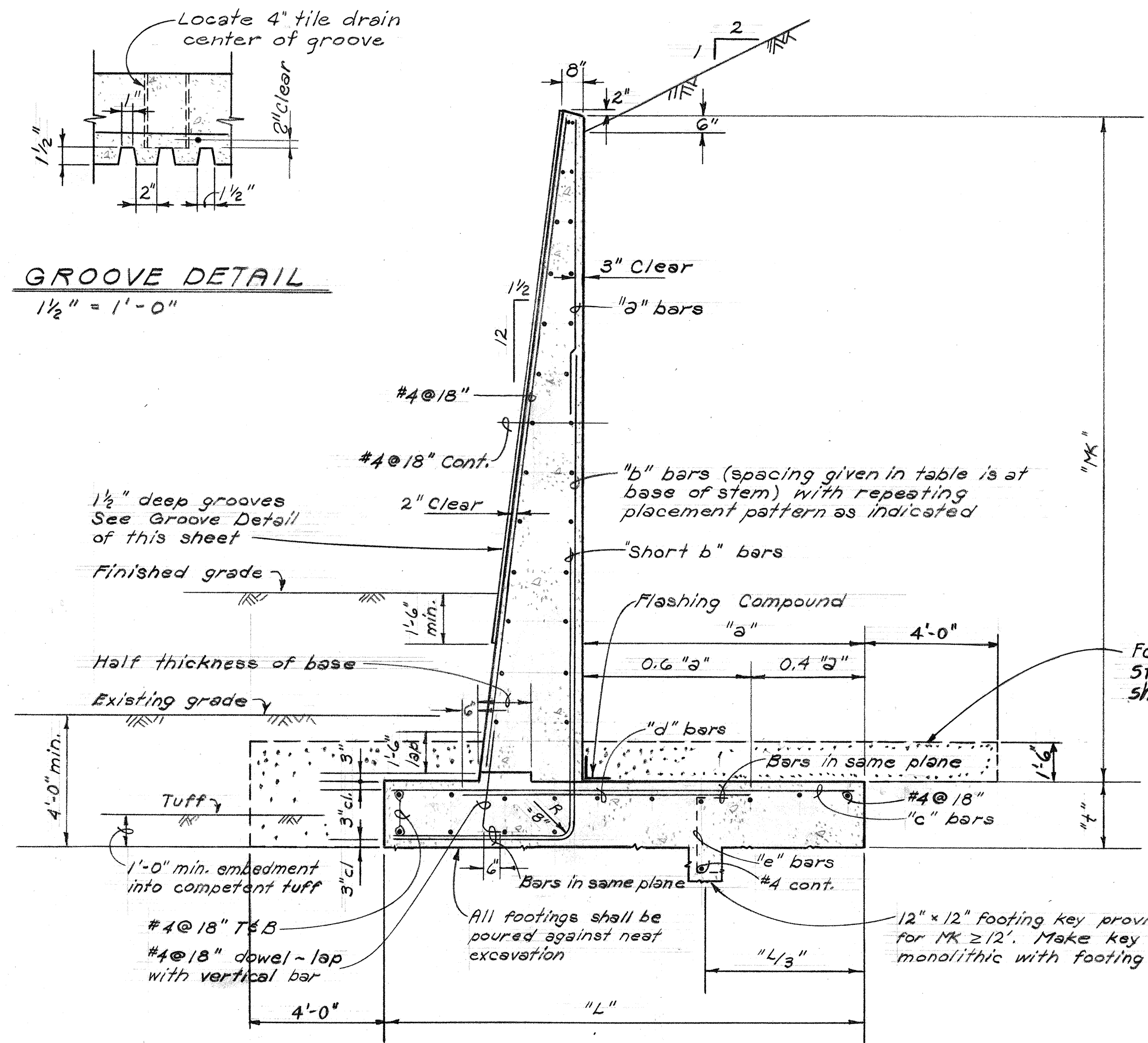


RETAINING WALL #8
PLAN & PROFILE
PEARL HARBOR INTERCHANGE
RAIL PROJ. NO. 1-H1-1(73)-15
Scale: As Shown Date: Dec. 7, 1973

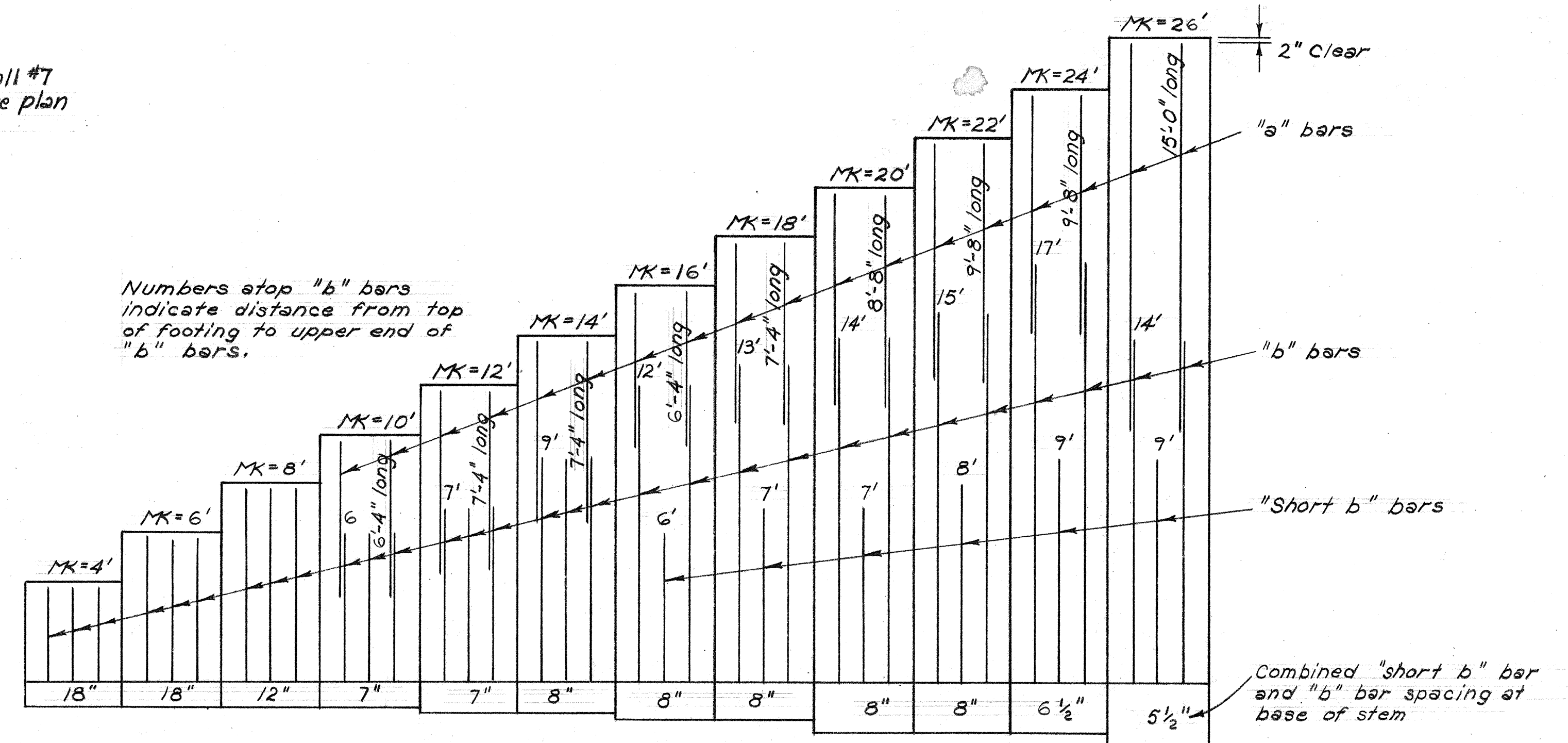


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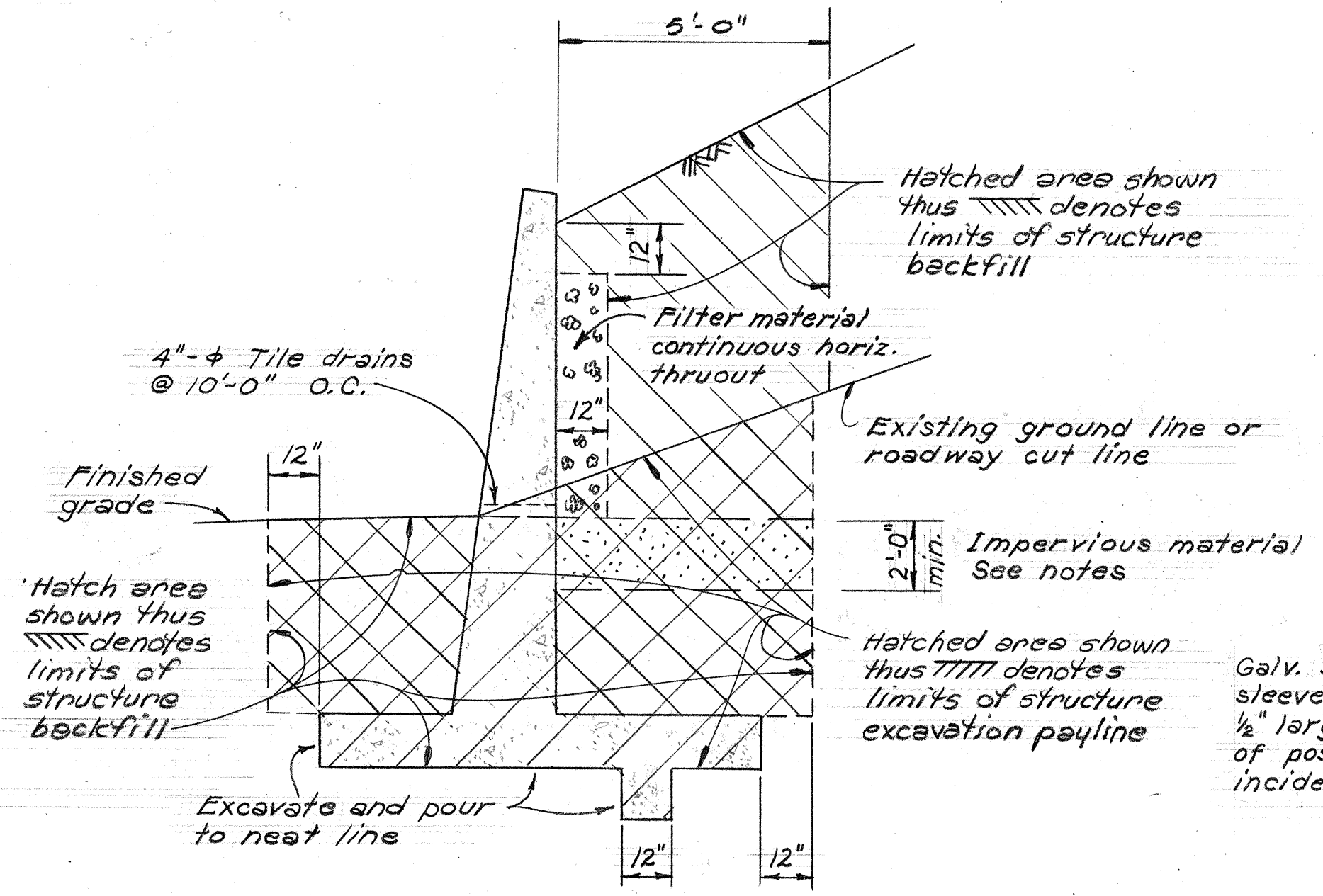


SCHEDULE OF DIMENSIONS AND REINFORCING STEEL												
Maximum "MK"	4'	6'	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'
"L"	2'-6"	4'-0"	5'-0"	7'-0"	8'-0"	10'-6"	12'-6"	13'-6"	14'-6"	16'-6"	16'-6"	18'-6"
"a"	0'-10"	2'-0"	2'-6"	3'-9"	4'-0"	6'-0"	7'-0"	8'-0"	8'-6"	9'-6"	9'-6"	10'-9"
"t"	1'-0"	1'-0"	1'-0"	1'-0"	1'-3"	1'-3"	1'-6"	1'-6"	2'-0"	2'-0"	2'-0"	2'-6"
"a" bars	—	—	—	#4@14"	#4@14"	#4@1"	#4@16"	#4@16"	#5@16"	#5@16"	#5@13"	#7@11"
"b" bars	#4@18"	#4@18"	#4@12"	#4@7"	#5@7"	#7@8"	#8@8"	#9@8"	#9@8"	#10@8"	#10@6 1/2"	#10@5 1/2"
"c" bars	#4@18"	#4@18"	#4@12"	#4@7"	#4@14"	#6@16"	#6@16"	#9@16"	#8@16"	#9@16"	#9@13"	#11@11"
"d" bars	—	—	—	—	#4@14"	#6@16"	#6@16"	#9@16"	#8@16"	#9@16"	#9@13"	#11@11"
"e" bars	—	—	—	—	#5@12"	#5@12"	#5@12"	#6@12"	#6@12"	#7@12"	#7@12"	#7@12"

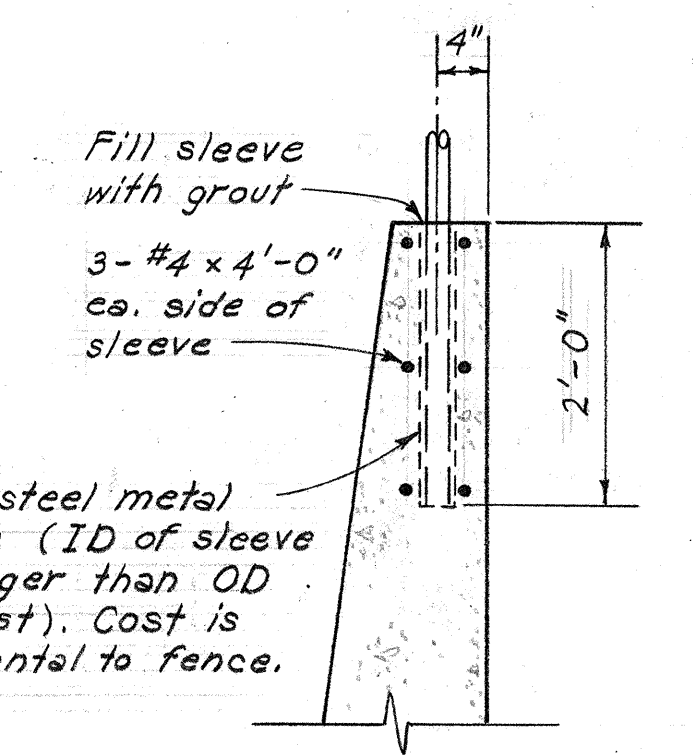


- Notes:**
- Hatched areas denote limits of structural excavation pay line. All other excavation shall be roadway excavation except as otherwise noted.
 - Impervious material as selected by the Engineer incidental to structural excavation. When "MK" is 2'-0" or less, all backfill below weep hole level shall be impervious material.
 - The subgrade upon which filter material is to be placed shall be made as impervious as possible by pneumatic tamping or other approved methods.
 - Impervious material shall be incidental to roadway excavation or imported borrow when used in embankment area.
 - Where applicable, the difference in height of backfill on each side of the wall shall not be greater than 3 feet during backfilling operation.

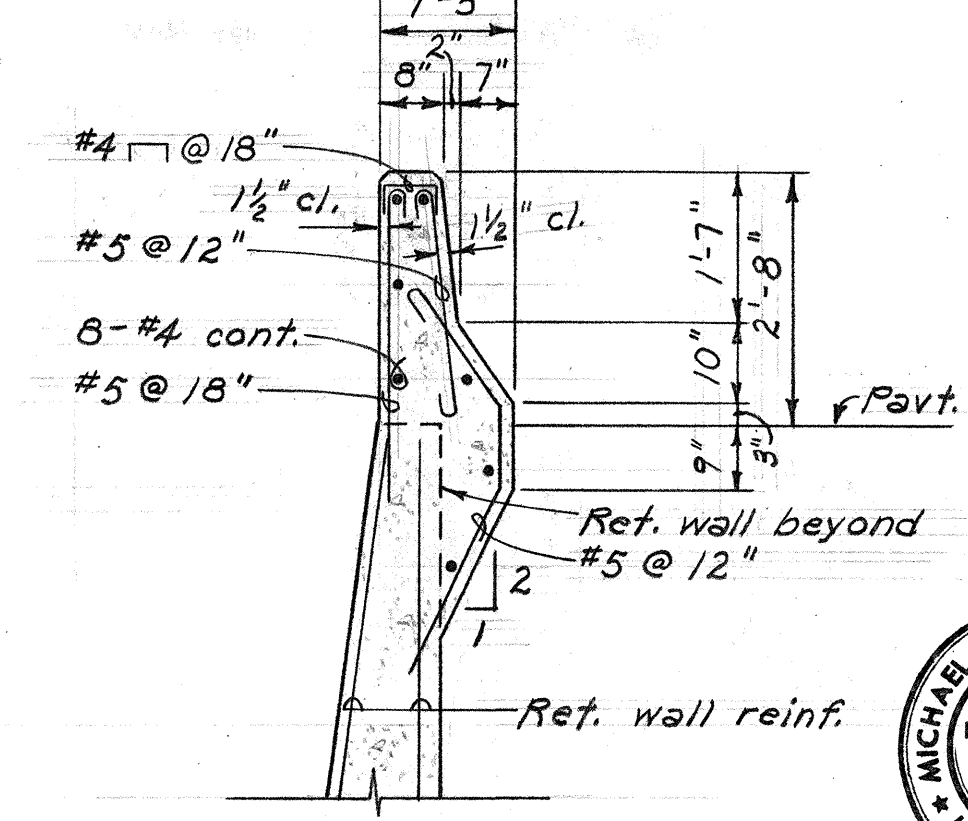
Reference Notes:
Refer to Drawing Sheet R-11 for expansion joint and footing step details.



STRUCTURAL EXCAVATION AND DRAINAGE DET.
ALSO STRUCTURAL BACKFILL
N.T.S.



FENCE POST DET.
N.T.S.



CONC. BARRIER AT RET. WALL #5
1/2" = 1'-0"

SHIMAZU SHIMABUKURO & TUKUHA, INC.
Consulting Structural Engineers
1210 Ward Ave., Honolulu, HI 96814

MICHAEL PAUL MATSUOKA
REGISTERED PROFESSIONAL ENGINEER
No. 2974
HAWAII, U.S.A.

SHIMABUKURO
REGISTERED PROFESSIONAL ENGINEER
No. 1280
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

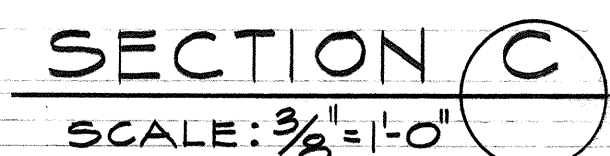
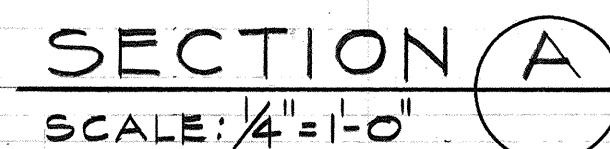
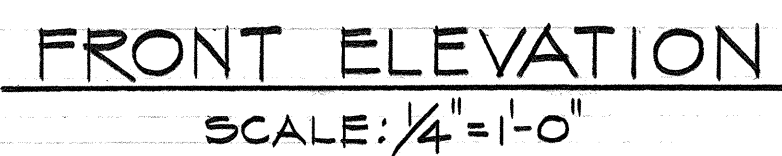
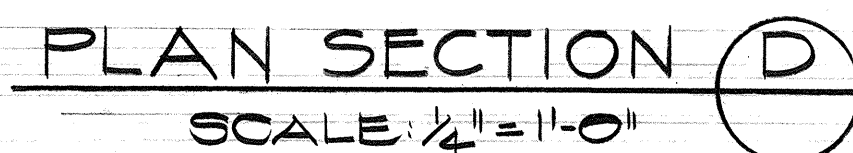
TYPICAL RETAINING WALL DETAIL

PEARL HARBOR INTERCHANGE
F.A.I. Proj. No. I-H-1(73)-15

Scale: As Shown Date: DEC. 7, 1973

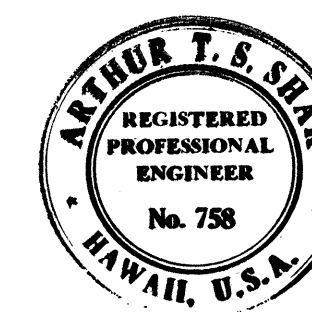
SHEET NO. R-10 OF 11 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY _____	DATE _____
NOTE BOOK	DRAWN BY _____	_____
	TRACED BY _____	_____
	DESIGNED BY _____	_____
	QUANTITIES BY _____	_____
NO. _____	CHECKED BY _____	_____



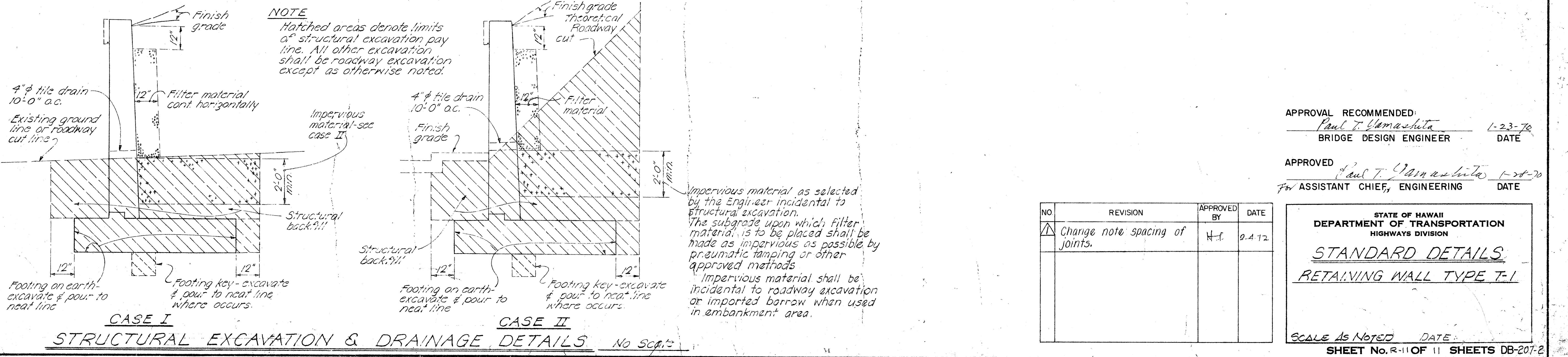
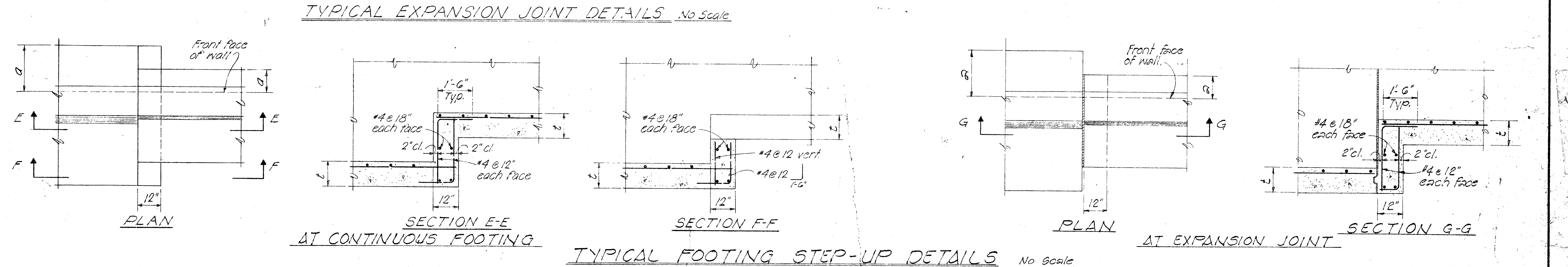
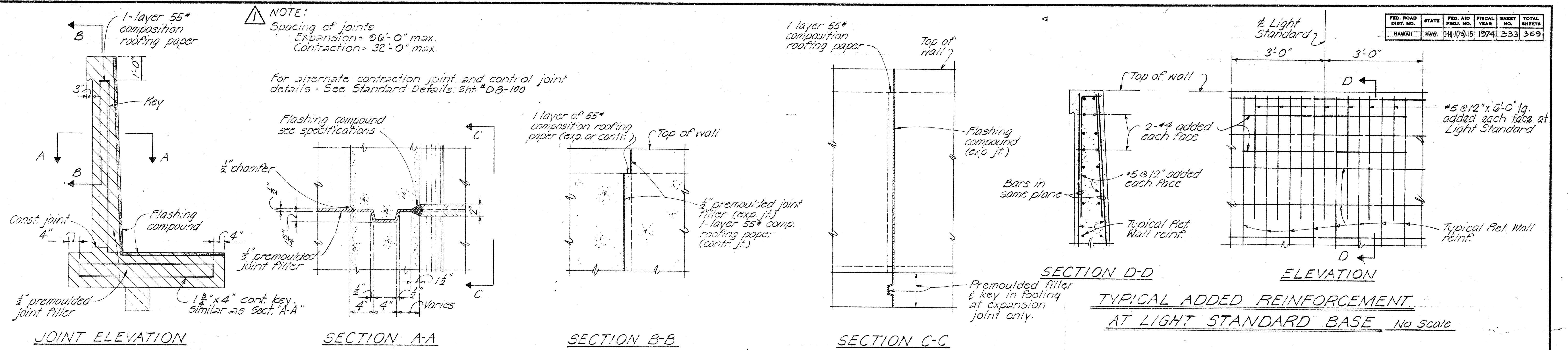
NOTE:

- 1.) **FOR DIMENSIONS & DETAILS (INCLUDING WEEP HOLES) NOT SHOWN REFER TO CONTRACT PLANS.**
2. **REINFORCEMENT SCHEDULE MAY BE MODIFIED BY THE ENGINEER TO UTILIZE EXISTING REBARS.**



Arthur J. Shak
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

C.O. 332 S-1



APPROVAL RECOMMENDED:
Paul T. Yamashita
BRIDGE DESIGN ENGINEER
1-23-76
DATE

APPROVED
Paul T. Yamashita
FOR ASSISTANT CHIEF, ENGINEERING
1-28-76
DATE

NO.	REVISION	APPROVED BY	DATE
1	Change note spacing of joints.	H.T.	2-4-72

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS
RETAINING WALL TYPE T-1

SCALE AS NOTED
DATE

SHEET NO. R-11 OF 11 SHEETS DB-207-2