FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	5216(5)	1954	60	1/2

11-11-52

FINAL SURVEY — SURVEYED. PLOTTED. TEMPLATE. AREAS. AREAS CHECKED. NOTE BOOK. NO. BY DATE

ORIGINAL SURVEY — SURVEYED. PLOTTED. TEMPLATE. AREAS. AREAS CHECKED. NOTE BOOK. NO. BY DATE

84 +00
Exc = 44
Emb = 65
SM = 204
1088.5 | 1080.01 | ℄ INB'D. | ℄ Outb. | EP | EP
C = 132 / 12
F = 31
SM = 55

83 +00
Exc = 30
Emb = 7
SM = 167
1087.7 | 1088.68 | ℄ Outb. | EP | EP
C = 20 / 4
F = 0
SM = 35

82 +00
Exc = 31
Emb = 0
SM = 102
1088.5 | 1087.01 | ℄ Outb. | EP | EP
C = 20 / 13
F = 0
SM = 20

81 +00
Exc = 54
Emb = 0
SM = 37
1085.5 | 1084.89 | ℄ Outb. | EP | EP
C = 18 / 16
F = 0
SM = 0

80 +00
Exc = 44
Emb = 0
SM = 0
1085.7 | 1082.39 | ℄ Outb. | EP | EP
C = 12 / 9
F = 0
S.M. = 0

79 +00
Exc = 0
Emb = 0
S.M. 0
C = 0
F = 0
S.M. 0

78 +38.62

NOTE: Excavation, Embankment and Select Material quantities are based on Inbound Lanes Center Line Stations.

89 +00
Exc = 2,537
Emb = 0
SM = 192
1102 | 1100 | 1090.50 | ℄ INB'D. | ℄ Outb.
C = 1248 / 766
F = 0
SM = 52

88 +00
Exc = 1,731
Emb = 0
SM = 193
1102 | 1100 | 1092.08 | ℄ Outb. | EP
C = 743 / 604
F = 0
SM = 52

87 +00
Exc = 485
Emb = 91
SM = 96
1097.4 | 1092.65 | ℄ Outb. | EP
C = 365 / 334
F = 0
SM = 52

86 +50
Exc = 424
Emb = 326
SM = 198
1094.8 | 1092.61 | ℄ Outb. | EP | EP
C = 236 / 193
F = 98
SM = 52

85 +50
Exc = 89
Emb = 228
SM = 204
1091.41 | 1091.93 | ℄ Outb. | EP | EP
C = 125 / 36
F = 73
SM = 55

84 +50
Exc = 22
Emb = 70
SM = 102
1089.2 | 1091.14 | ℄ Outb. | EP | EP
C = 118 / 12
F = 45
SM = 55

NOTE:
Quantities shown on sheets 60 to 99 are approximate only. The Project Engineer shall verify all cross-sections and adjust the quantities for the various items accordingly.

PLATE 3 CROSS SECTION O. P. R. & R. E.
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY

5705.69

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	9216(5)	1954	70	112

FINAL SURVEY		BY	DATE
SURVEYED			
PLOTTED			
TEMPLATE			
AREAS			
NOTE BOOK			
NO.	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
SURVEYED			
PLOTTED			
TEMPLATE			
AREAS			
NOTE BOOK			
NO.	AREAS CHECKED		

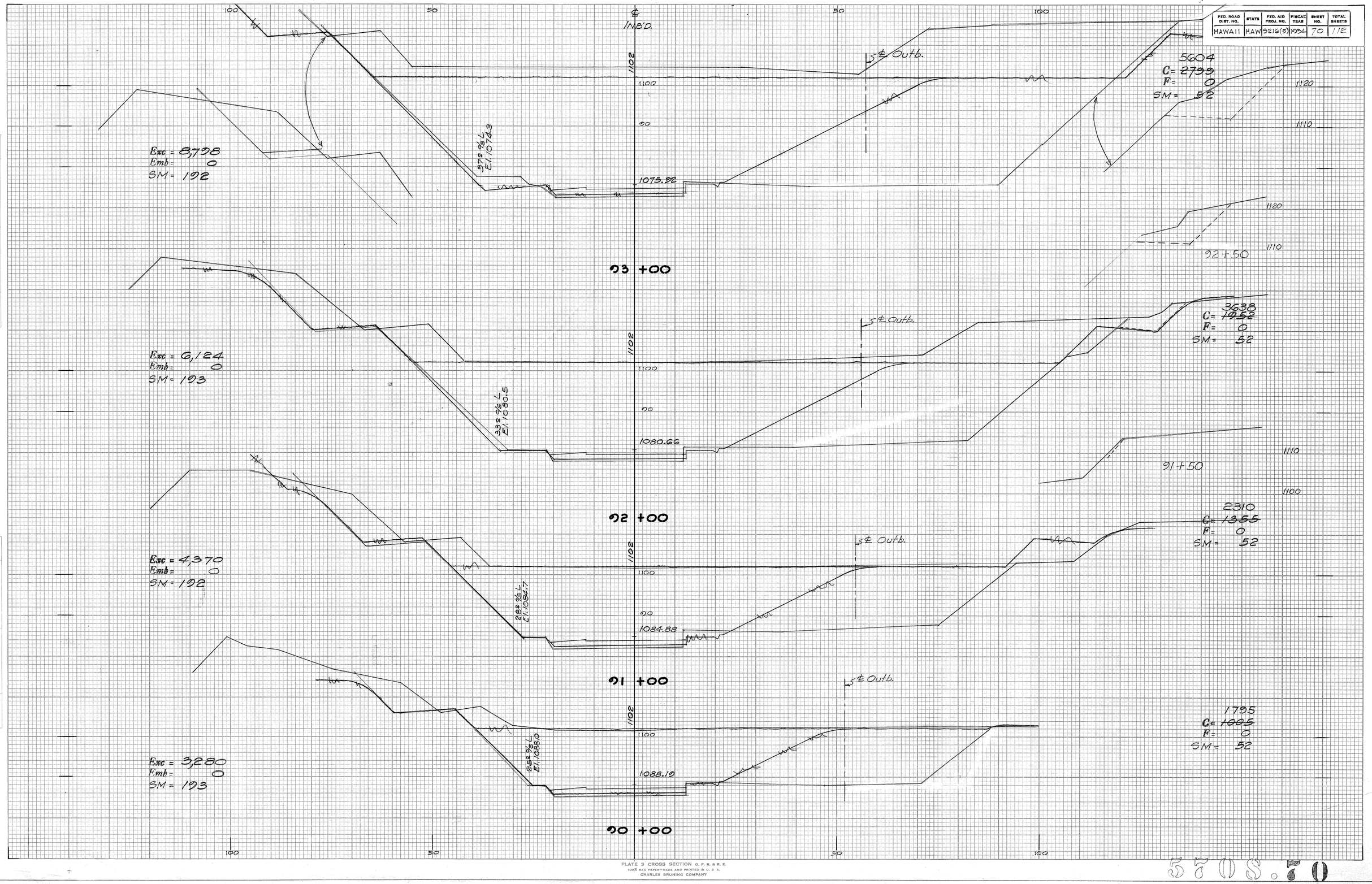


PLATE 3 CROSS SECTION O. P. R. & R. E.
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY

570.70

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	S216(5)	1954	71	112

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TYPED
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TYPED
AREAS
AREAS CHECKED
BY
DATE

95 +00

℄ INBD.

℄ Outb.

Sta 95+45
El. 1077.0

Sta 95+95
El. 1064.2

1063.16

Exc = 15,263
Emb = 0
SM = 205

6985
C = 4921
F = 0
SM = 62

Note: Taper bottom of Cut Slope from Sta 96+95 to Sta 95+95 between 94+00 to 95+00 on right side for Emergency Parking Lane. See Sht 54

94 +00

Conc. ditch

Sta 94+45
El. 1075.0

Sta 94+95
El. 1070.2

1060.48

Exc = 11,781
Emb = 0
SM = 193

6091
C = 3563
F = 0
SM = 52

94 +50

93 +50

PLATE 3 CROSS SECTION O. P. R. & R. E.
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY

57088.71

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	S216(5)	1954	72	112

FINAL SURVEY
SURVEYED
PLOTTED
CHECKED
NOTE BOOK
AREAS
AREAS CHECKED
NO.
BY
DATE

ORIGINAL SURVEY
SURVEYED
PLOTTED
CHECKED
NOTE BOOK
AREAS
AREAS CHECKED
NO.
BY
DATE

100 50 ℄ INBD. 50 100

96+50 to 96+92 { Exc = 4,660 / Emb = 0

C = 0 / F = 0 } { Back Cut 96+92

See Excavation Diagram Sheet 54

7821
C = ~~5992~~ / F = 0 } { 96+50 Forward Area

℄ Outb.

1102 1100 90 80 70

65 @ 2% L El. 1060.0

Exc = 12,038
Emb = 0
SM = 96

36@ 26 R El. 1054.3

1053.41

96+50 Back Area { 8406 / C = 6656 / F = 0 / SM = 52

PORTAL 1
96 + 50

℄ Outb.

1102 1100 90 80 70

Exc = 20,863
Emb = 0
SM = 211

61 @ 2% L El. 1079.0

36@ 2% R El. 1057.6

1056.66

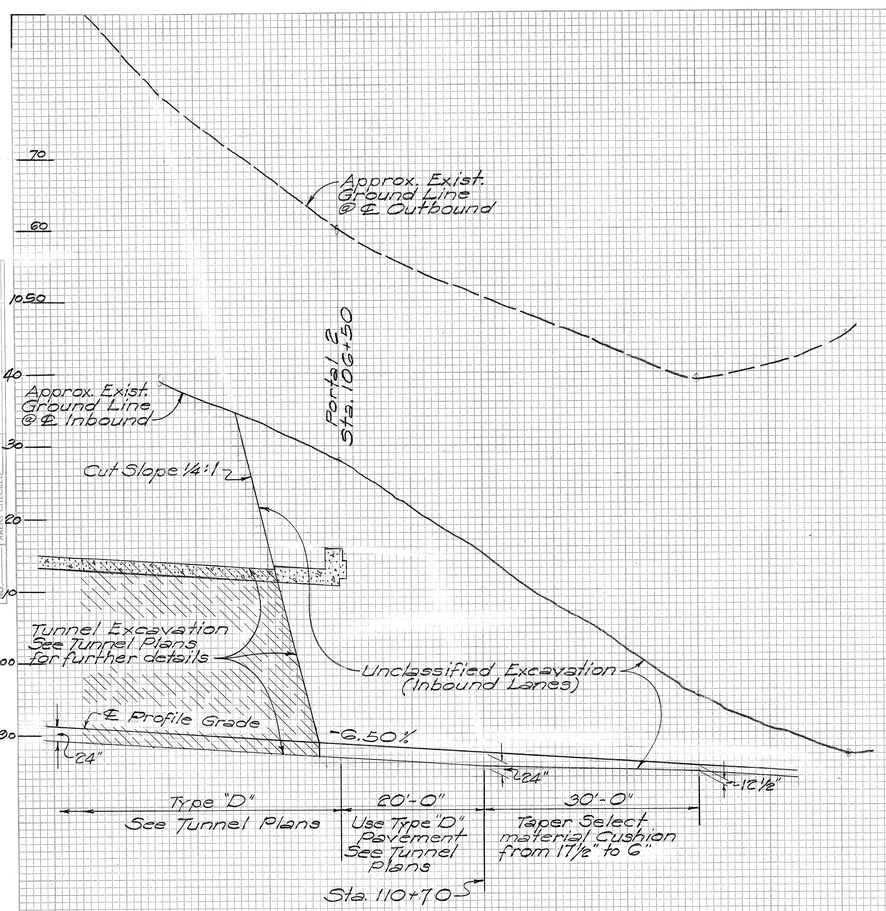
8121
C = ~~6315~~
F = 0
SM = 52

100 50 96 +00 50 100

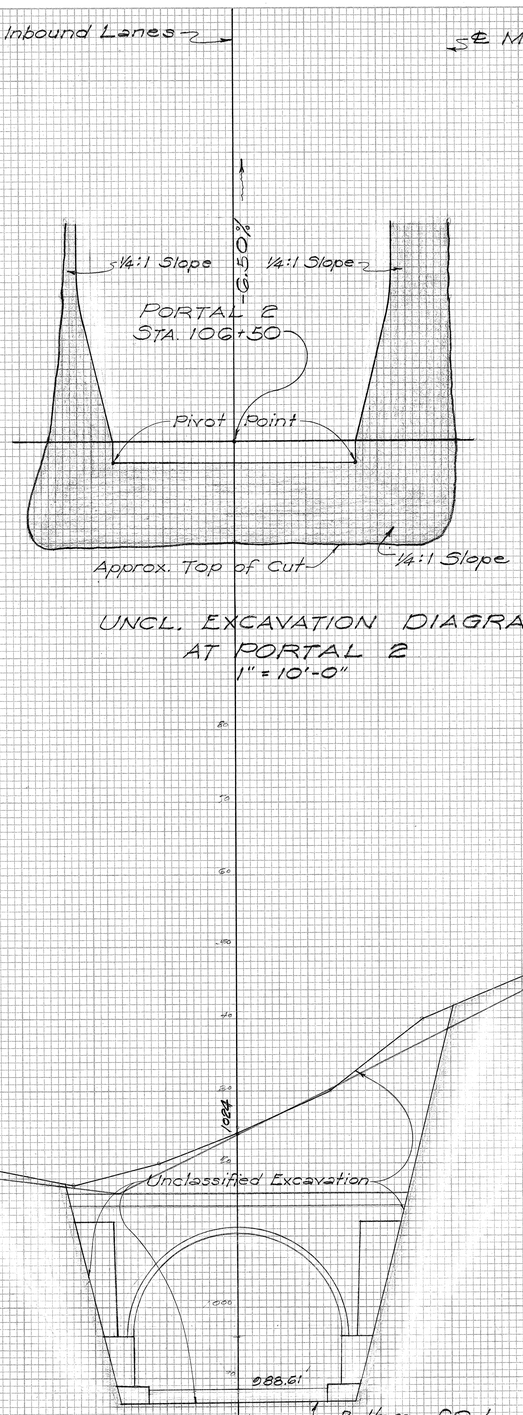
PLATE 3 CROSS SECTION U. P. R. & R. E.
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CHARLES BRUNING COMPANY

5708.72

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	...
HAWAII	HAW	S216(3)	1054	73	112



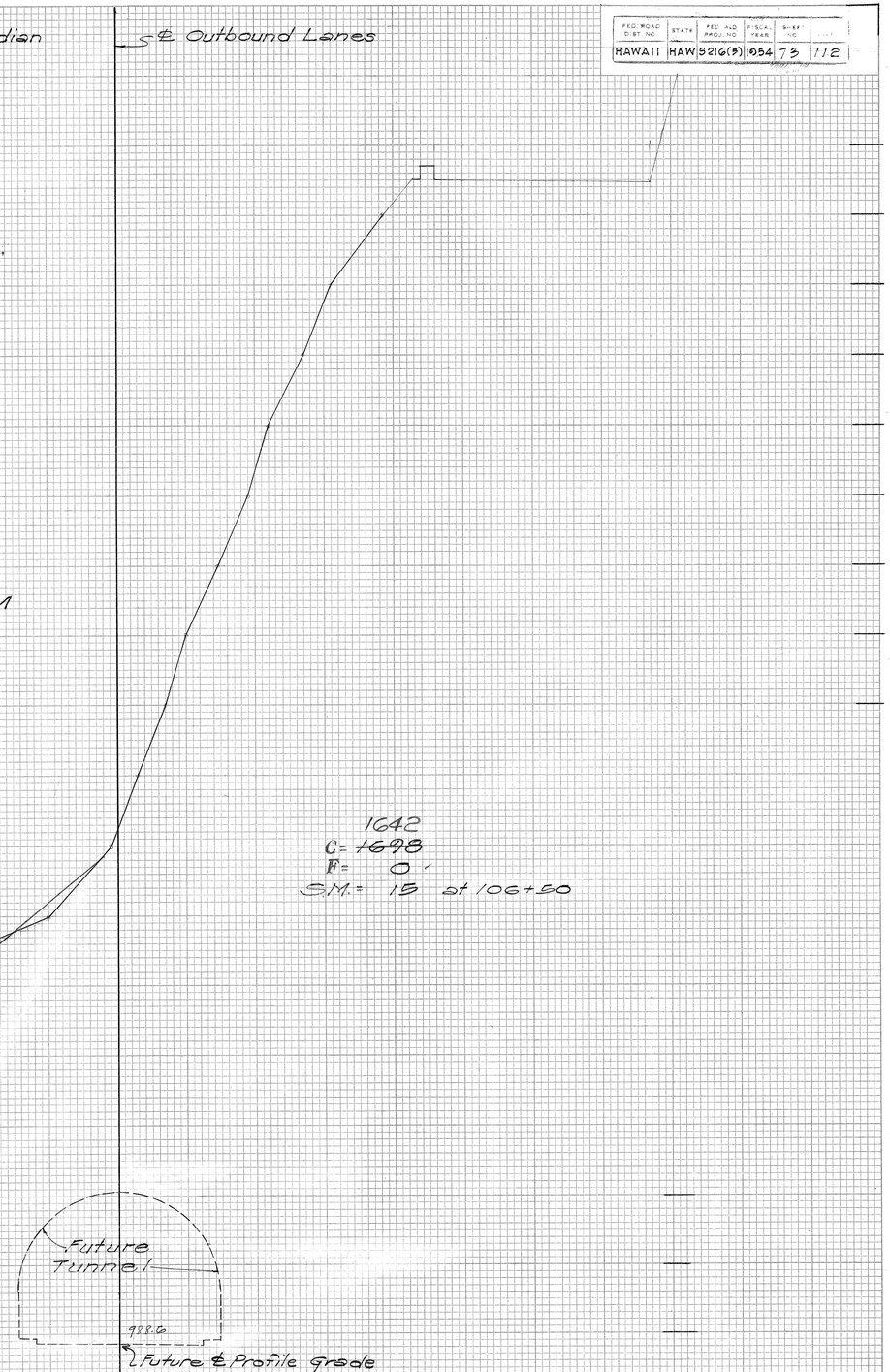
SECTION ALONG ℄ INBOUND LANES
1" = 10'-0"



UNCL. EXCAVATION DIAGRAM
AT PORTAL 2
1" = 10'-0"

Exc = 346
Emb = 0
} 106+36 to 106+47

106+47



1642
C = 1698
F = 0
S.M. = 15 at 106+50

C = 0
F = 0
} Back Cut 106+36 Inbound

PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

5708.73

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., DATE, BY

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., DATE, BY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	
HAWAII	HAW	5216(5)	1954	74	112

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

℄ Inbound Lanes

℄ Outbound Lanes

Match

Bottom of Cut

1011.3

Future Tunnel

1083.86

Bottom of Cut

1083.0

Future & Profile Grade

C = 387 F = 0 } { 107+20 Back Area Inbound

Exc = 374 Emb = 0 } { Outbound 107+12 to 107+20

C = 29.14 F = 0 SM 9 } { 107+20 Forward Area Inbound & Outbound

C = 2527 F = 0 } { 107+20 Back Area Outbound

C = 0 F = 0 } { Back Cut 107+12 Outbound

107 + 20

TOE CLIFF

Exc = 350 Emb = 0 S.M. = 8 } { Inbound 107+00 to 107+20

C = 517 ~~538~~ F = 0 S.M. = 12

Future Tunnel

985.12

Future & Profile Grade

Bottom of Cut

Exc 2214 Emb 0 S.M. = 25

107 + 00

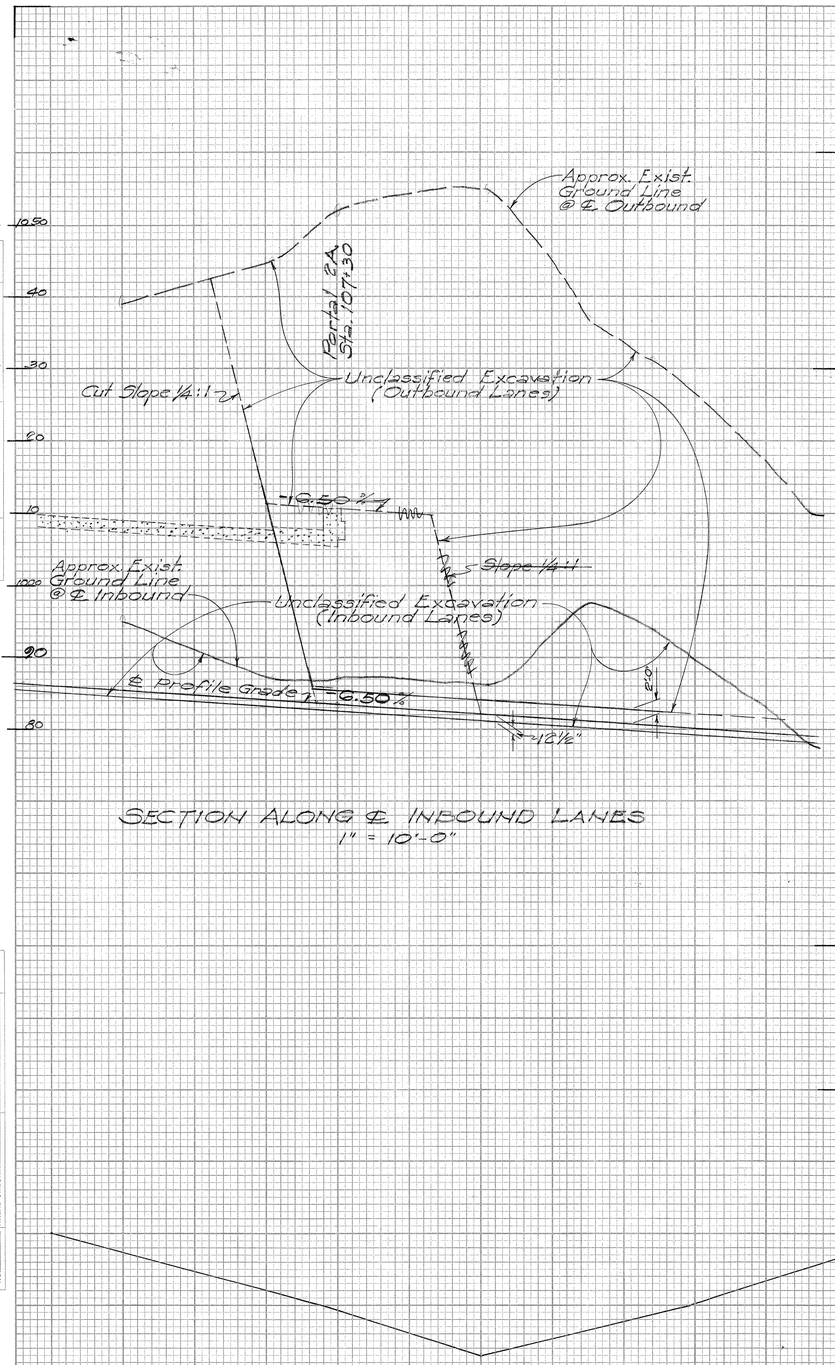
PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

570S.74

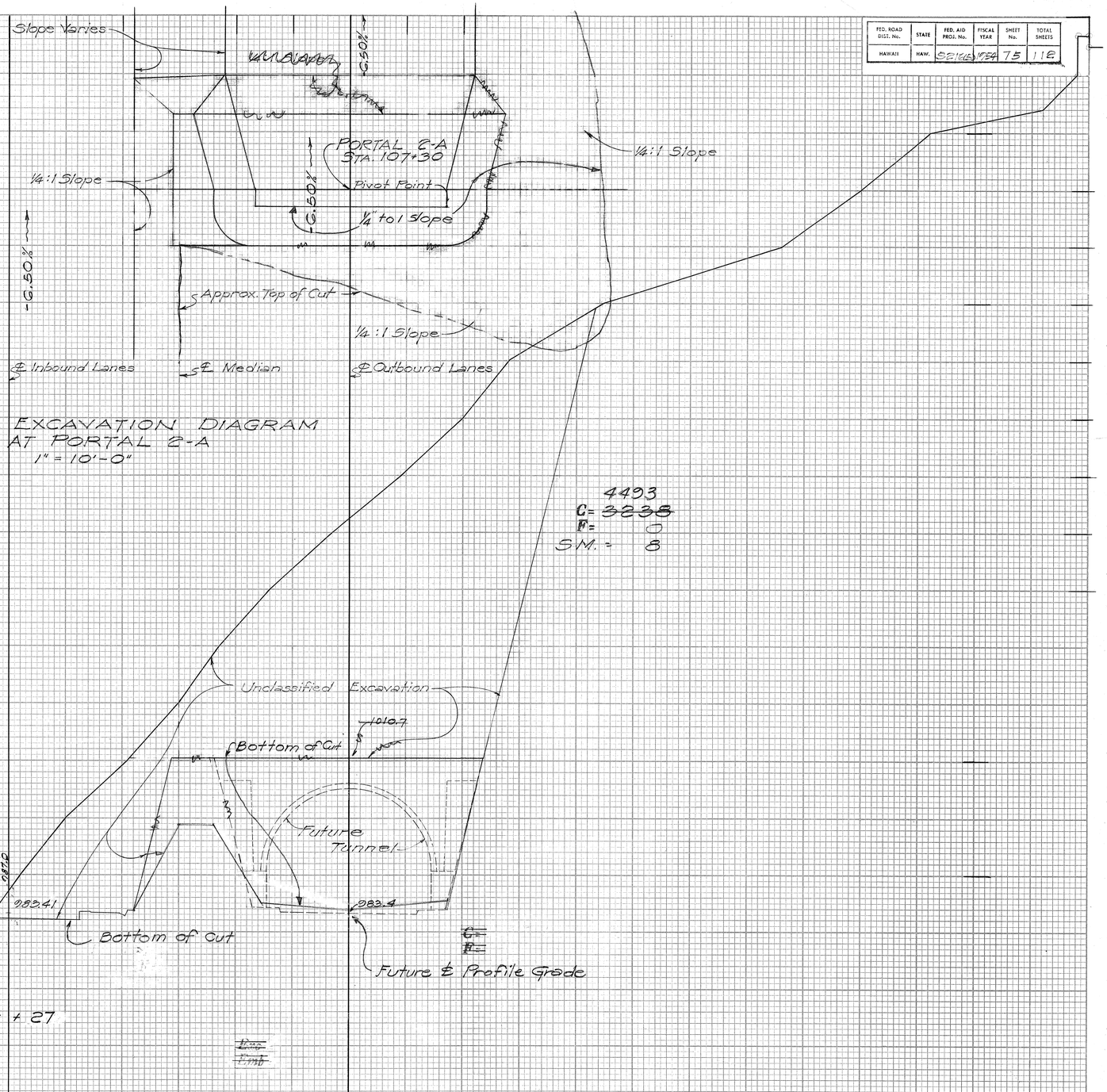
FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216(5)	1954	75	118

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

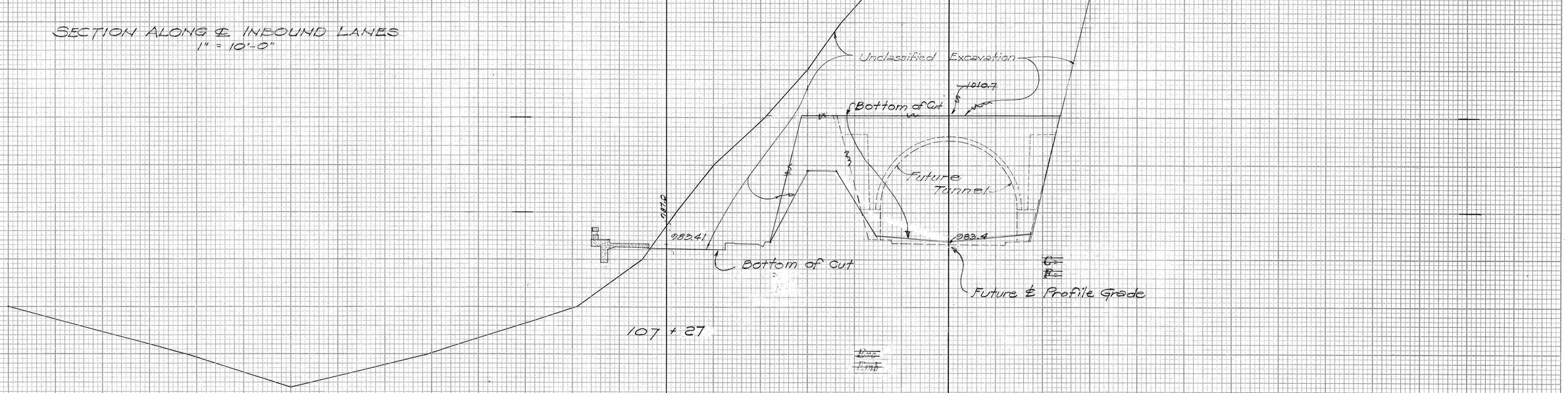


SECTION ALONG ℄ INBOUND LANES
1" = 10'-0"



UNCL. EXCAVATION DIAGRAM AT PORTAL 2-A
1" = 10'-0"

4493
C= 3238
F= 0
S.M. = 8



Exc = 797
Emb = 0
S.M. = 2

PLATE 3 CROSS SECTION O. P. R. & R. E.
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
CHARLES BRUNING COMPANY

5705.75

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	RF216(5)	1954	76	112

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

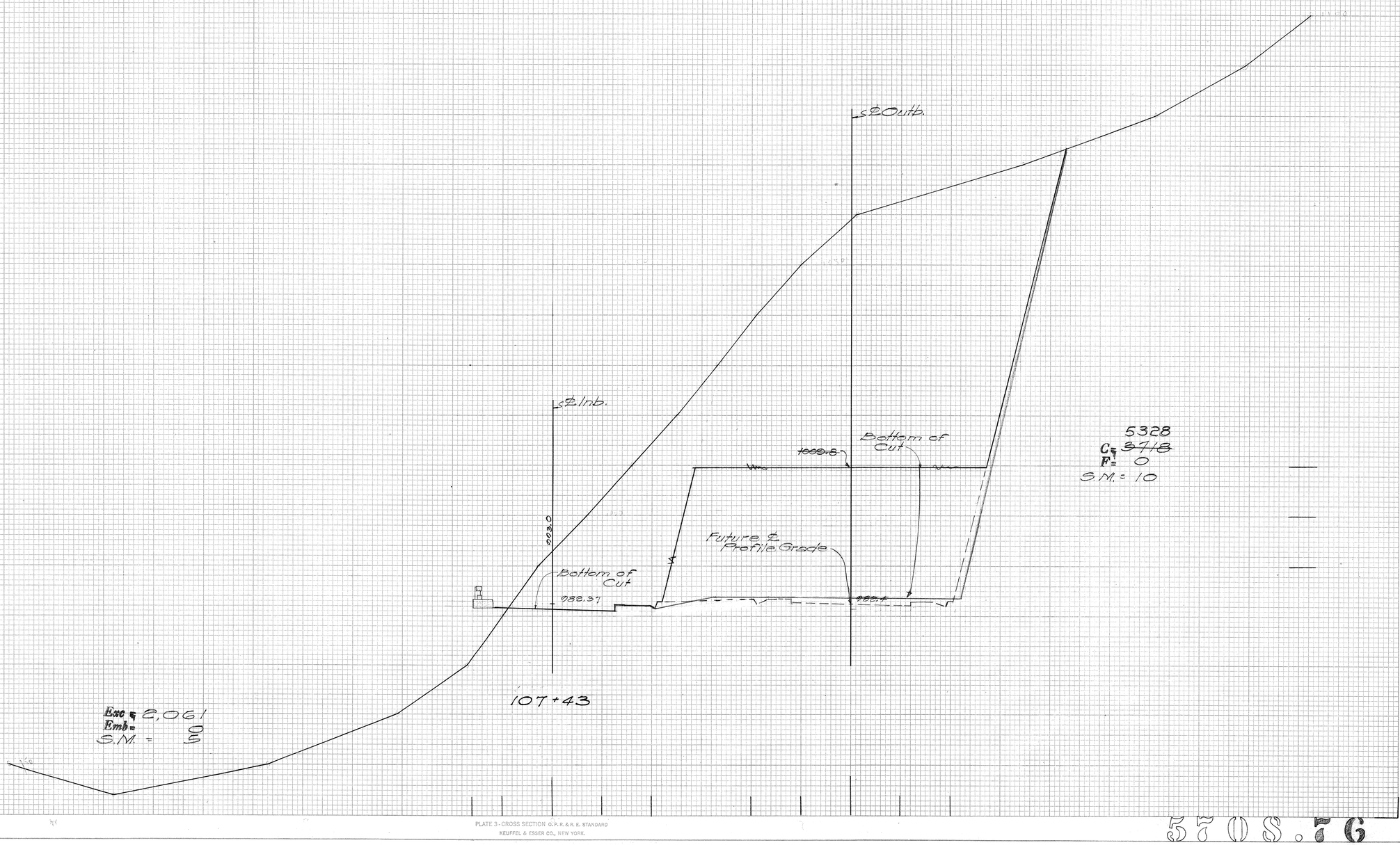


PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U. S. A. 63939

570 S. 76

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	9216(5)	1954	77	112

FINAL SURVEY — NOTE BOOK NO. ____ — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. ____ — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED — BY — DATE

℄ Inlb.

℄ Outb.

4443
C = 4412
F = 0
S.M. = 12

Future ℄ Profile Grade

Bottom of Cut

082.9

080.89'

080.9

107 + 65.74

Exc = 6,856
Emb = 9
S.M. = 7

5345
C = 5385
F = 0
S.M. = 12

Future ℄ Profile Grade

Bottom of Cut

082.9

081.91'

081.9

107 + 50

Exc = 1,180
Emb = 80
S.M. = 3

PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

57 OS. 77

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	9216(5)	1954	78	112

FINAL SURVEY
NOTE BOOK NO.
SURVEYED BY
PLOTTED DATE
TRACED
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED BY
PLOTTED DATE
TRACED
AREAS
AREAS CHECKED

℄ Inb.

℄ Outb.

Future ℄ Profile Grade

Bottom of Cut

978.94

981.1

979.1

2520
C = ~~2468~~
F = 0
S.M. = 3

107 + 95.74

Exc = 8,518
Emb = 0
S.M. = 6

Future ℄ Profile Grade

Bottom of Cut

980.35

982.4

980.4

3884
C = ~~3703~~
F = 0
S.M. = 11

Exc = 1,255
Emb = 0
S.M. = 4

107 + 74
Beg. Br.

PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

57 0S.7S

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	3216(5)	1054	70	112

ORIGINAL SURVEY — SURVEYED BY ____ DATE ____ PLOTTED ____ TEMPLATE ____ NOTE BOOK ____ AREAS ____ AREAS CHECKED ____ NO. ____

FINAL SURVEY — SURVEYED BY ____ DATE ____ PLOTTED ____ TEMPLATE ____ NOTE BOOK ____ AREAS ____ AREAS CHECKED ____ NO. ____

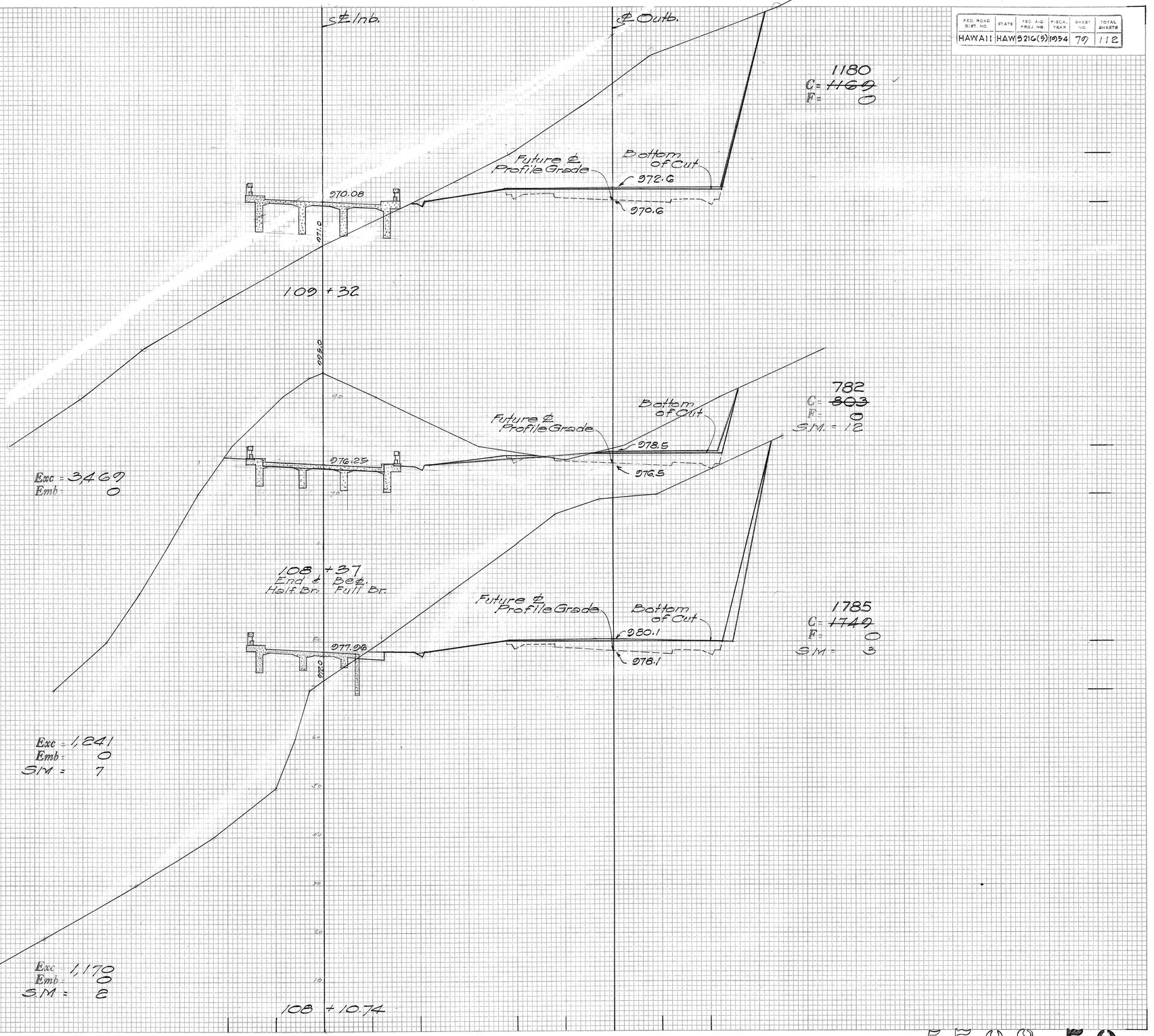


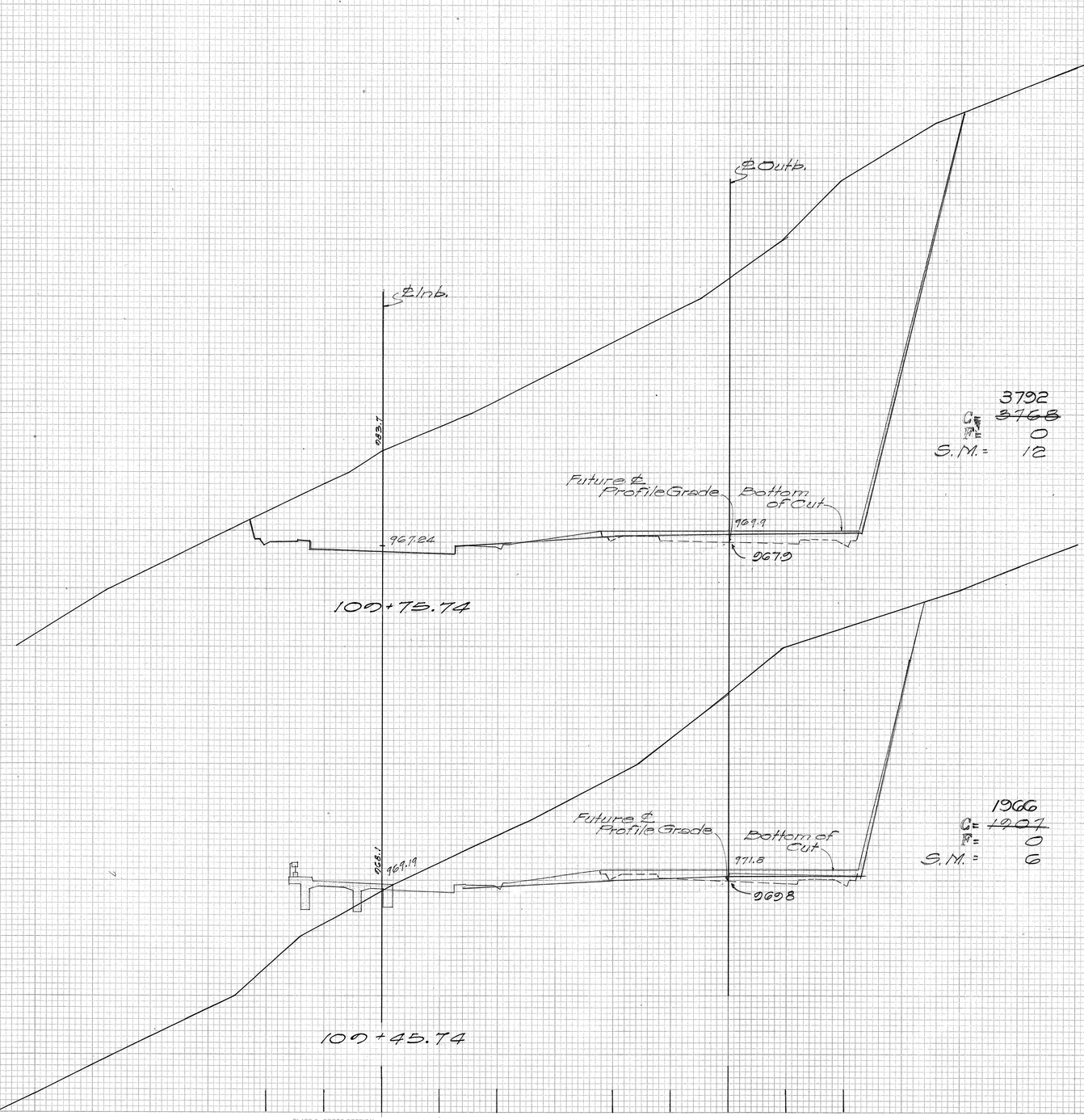
PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

5705.79

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S91G(9)	1954	80	112

FINAL SURVEY — SURVEYED, COMPUTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK — NO. — BY — DATE

ORIGINAL SURVEY — SURVEYED, COMPUTED, TEMPLATE, AREAS, AREAS CHECKED — NOTE BOOK — NO. — BY — DATE



3792
5768
C = 0
S.M. = 12

Exc = 3,153
Emb = 0
S.M. = 10

1966
C = +907
F = 0
S.M. = 6

Exc = 783
Emb = 0

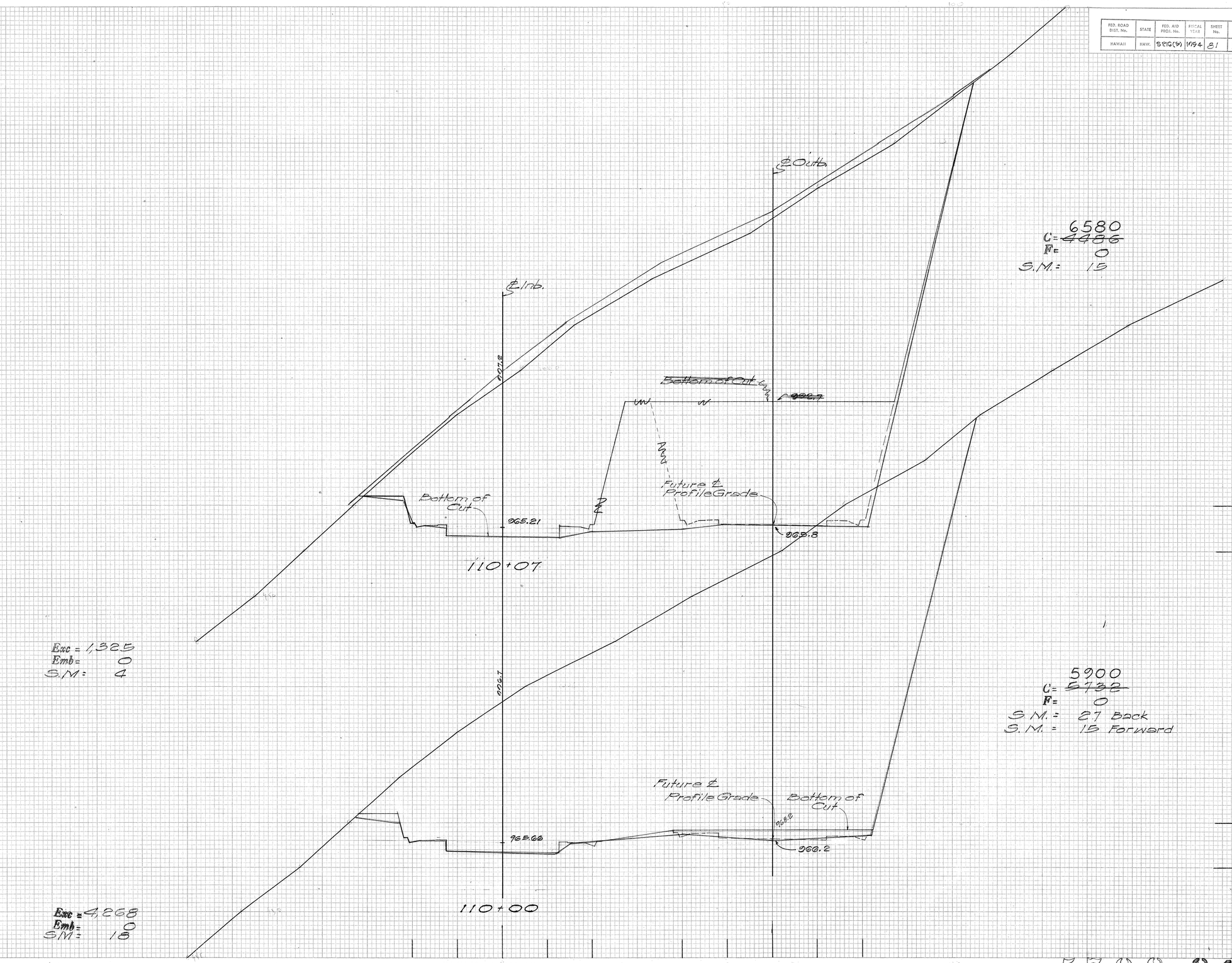
PLATE 3 - CROSS SECTION G.P.R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U.S.A. 63930

5708.80

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S-91G(9)	1954	81	112

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS CHECKED, NOTE BOOK, NO., BY, DATE



C = 6580
C = 4486
F = 0
S.M. = 15

Exc = 1,325
Emb = 0
S.M. = 4

C = 5900
C = 5738
F = 0
S.M. = 27 Back
S.M. = 15 Forward

Exc = 4,268
Emb = 0
S.M. = 18

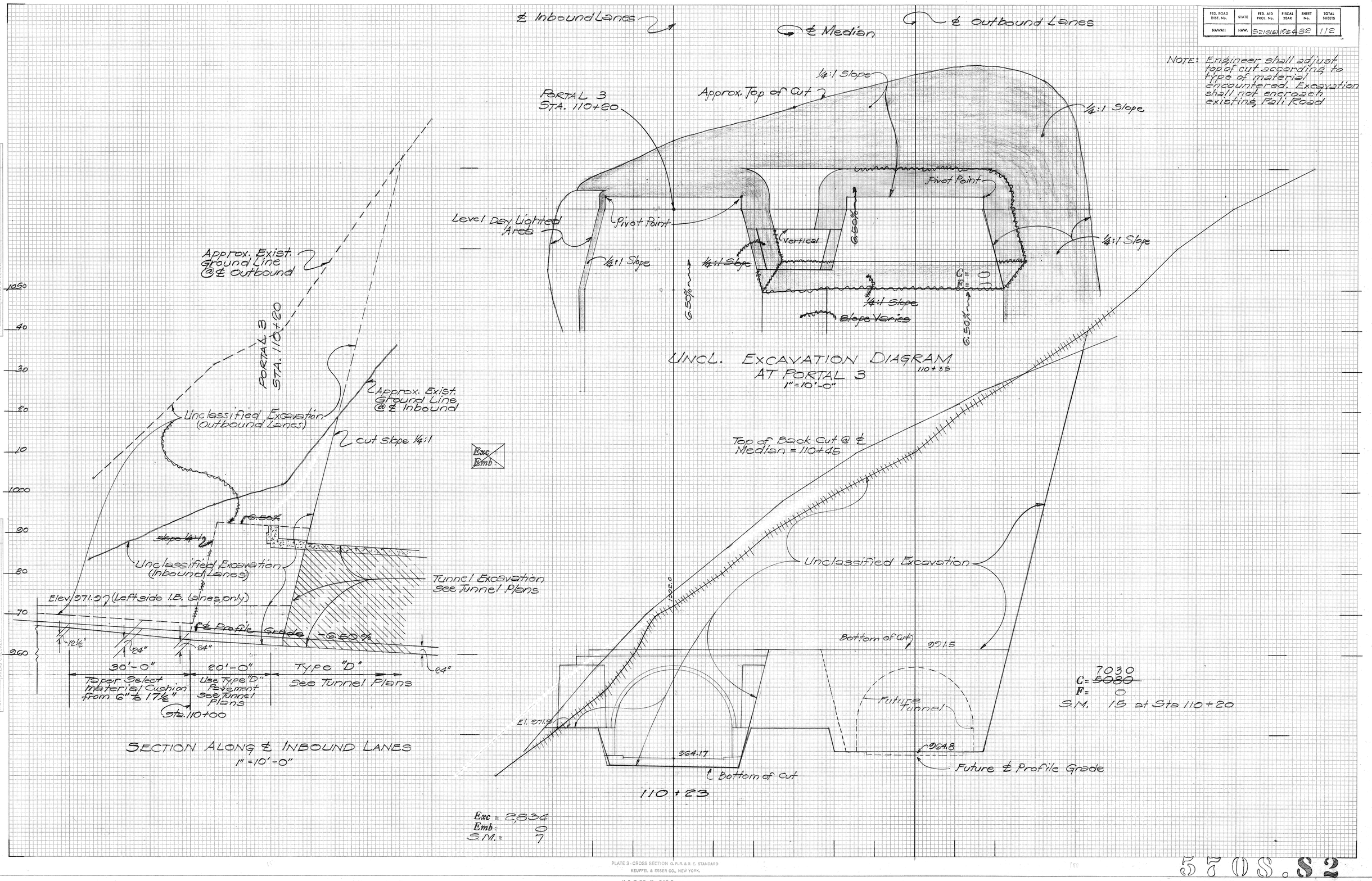
PLATE 3 - CROSS SECTION U.S.P.R.& R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 63020

570 S. 81

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S-2126(1)ES-4	32	112	

NOTE: Engineer shall adjust top of cut according to type of material encountered. Excavation shall not encroach existing Pali Road



FINAL SURVEY — SURVEYED BY ... PLOTTED ... TEMPLATE ... AREAS CHECKED ... NOTE BOOK ... NO. ... DATE ... BY

ORIGINAL SURVEY — SURVEYED BY ... PLOTTED ... TEMPLATE ... AREAS CHECKED ... NOTE BOOK ... NO. ... DATE ... BY

PLATE 3 - CROSS SECTION G. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 63035

570S.82

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S 216(5)	1964	53	112

FINAL SURVEY — SURVEYED BY ____ DATE ____ PLOTTED ____ TEMPLATE ____ NOTE BOOK ____ AREAS ____ NO. ____ AREAS CHECKED ____

ORIGINAL SURVEY — SURVEYED BY ____ DATE ____ PLOTTED ____ TEMPLATE ____ NOTE BOOK ____ AREAS ____ NO. ____ AREAS CHECKED ____

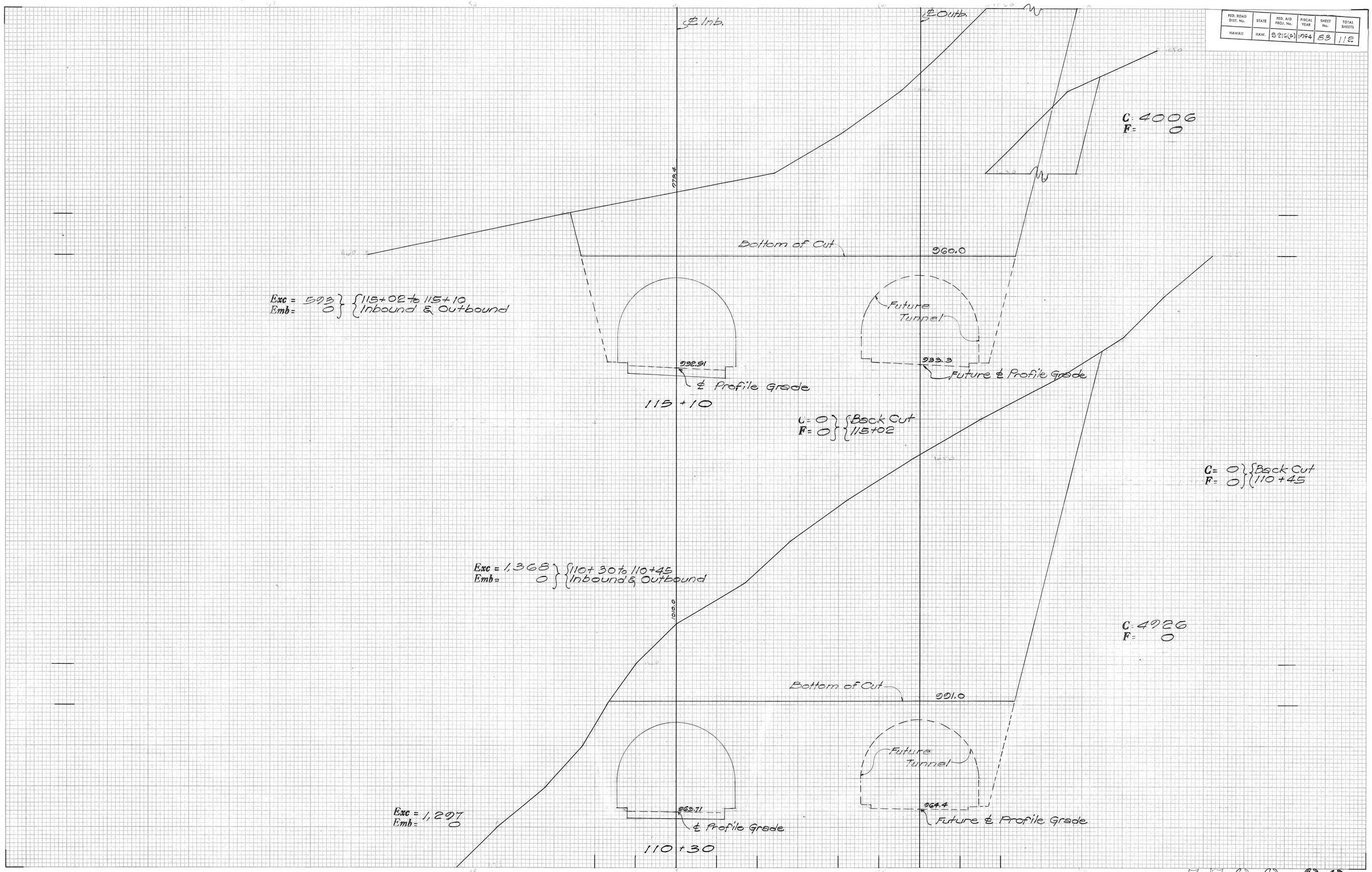


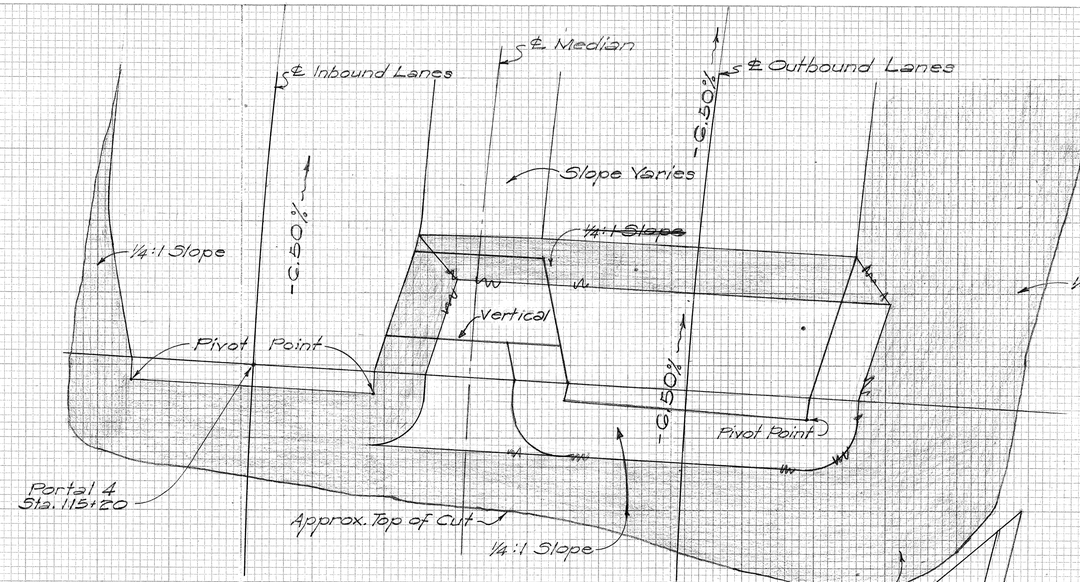
PLATE 3 - CROSS SECTION O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 63039

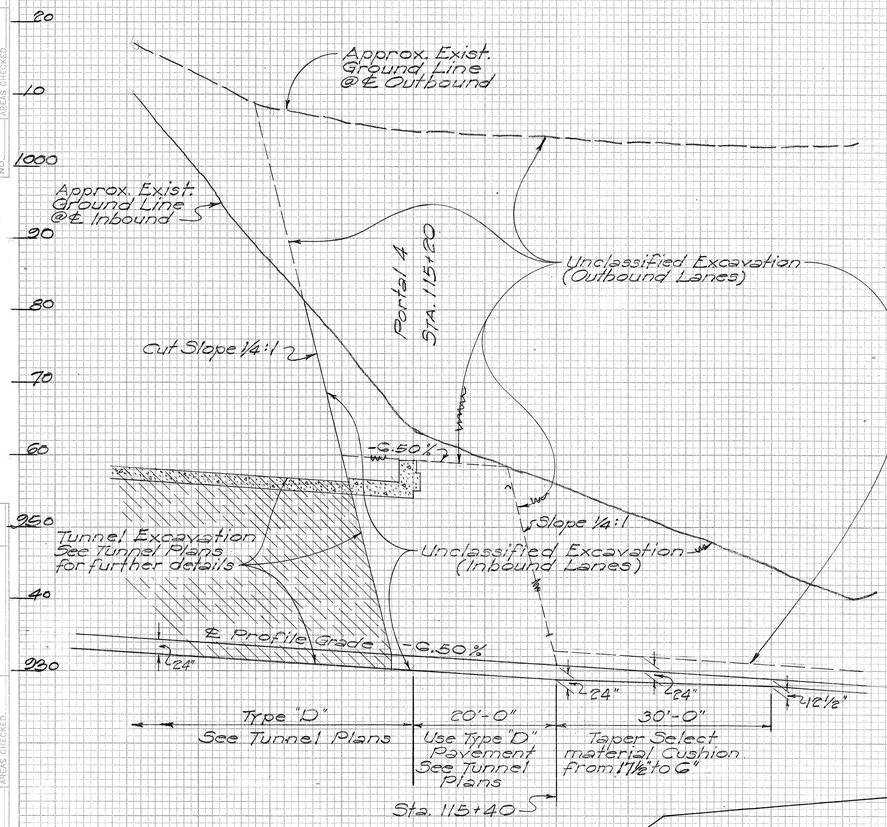
570S.83

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	[illegible]	1954	84	116

NOTE: Engineer shall adjust top of cut according to type of material encountered. Excavation shall not encroach existing Pali Road.

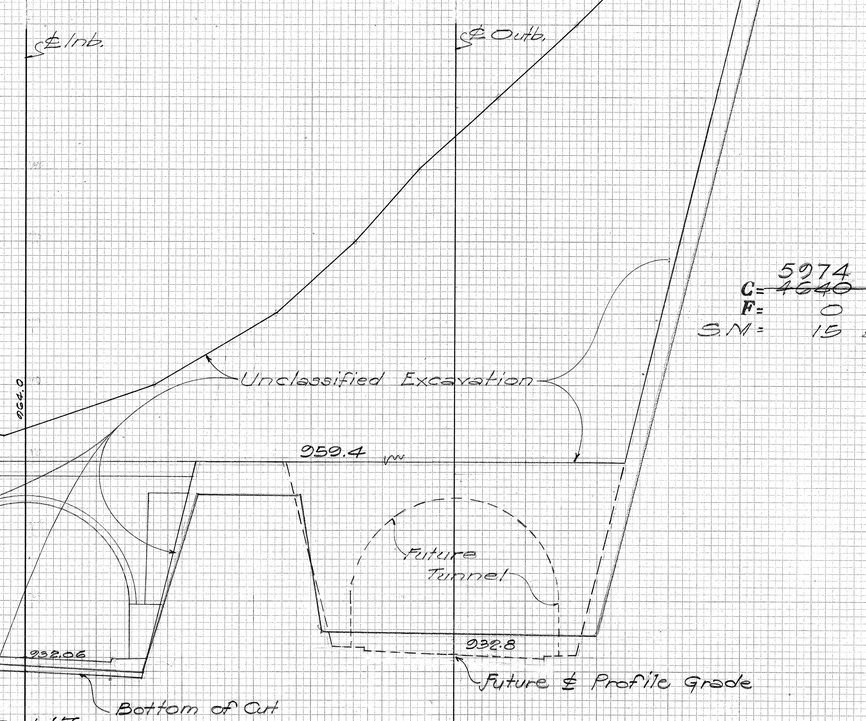


UNCL. EXCAVATION DIAGRAM AT PORTAL 4
1" = 10'-0"



SECTION ALONG ℄ INBOUND LANES
1" = 10'-0"

Exc = 1,121
Emb = 0



5074
C= 4640
F= 0
S.N = 15 at Sta. 115+20

570S.84

PLATE 3 - CROSS SECTION O.P.R.&R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 63029

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S21C(5)11994	85	118	

FINAL SURVEY — SURVEYED BY, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED BY, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

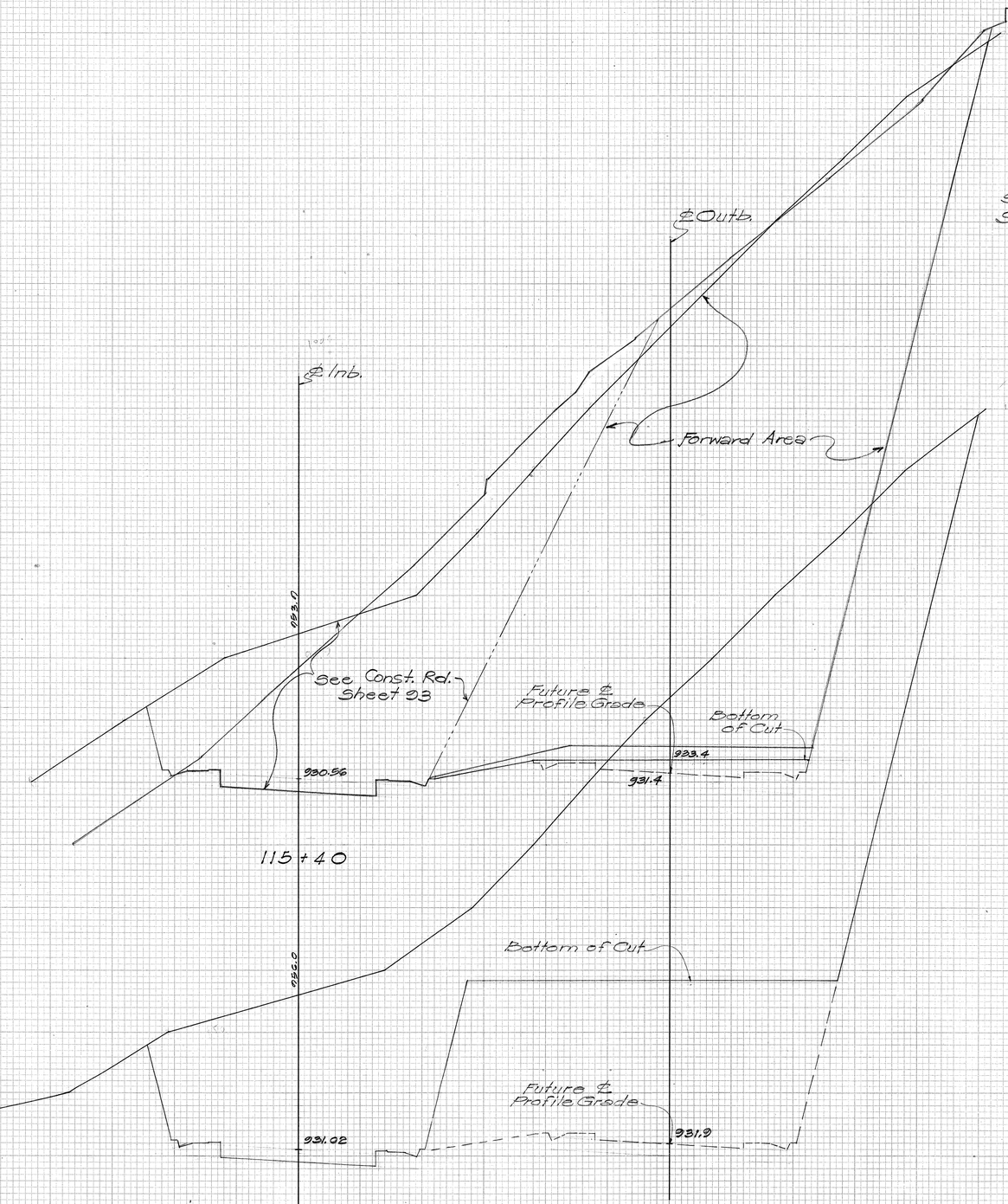


PLATE 3 - CROSS SECTION C.P.R. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 03938

570S.85

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	321G(5)	1954	86	112

FINAL SURVEY — NOTE BOOK: — NO.
SURVEYED — BY — DATE
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY — NOTE BOOK: — NO.
SURVEYED — BY — DATE
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

℄ Inb.

℄ Outb.

4650
4844
0

See Construction Road X-Section

Future Bottom of Cut

Bottom of Cut

931.1

927.90

920.1

Future Bottom of Cut

Waste Material

Normal Fill See Sheet No. 91

115+80.90

Exc = 3,530
Emb = 0

See Construction Road X-Section

Future Bottom of Cut

Bottom of Cut

932.2

930.2

920.20

Future Bottom of Cut

CDI at Sta. 115+65

5056
4687
0

NOTE:
For Typical Section of Waste Material, See Sheet No. 89

Waste Material

Exc = 3,587
Emb = 0

115+60.90

PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

570S.SG

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	S216(5)	1054	87	112

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRACED
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRACED
AREAS
AREAS CHECKED
BY
DATE

C=
F=

Exc = 3,224
Emb = 0

See Construction Road Cross Section

℄ Const. Rd

Bottom of Cut

930.0

Bottom of Future Cut

924.5

922.70

116+60.90

710
C= 730
F= 0

Exc = 6,271
Emb = 0

See Construction Rd. X-Section

℄ Const. Rd.

Bottom of Cut

Future Bottom of Cut

930.8

926.8

925.30

116+20.90

3350
C= ~~3622~~
F= 0

PLATE 3 - CROSS SECTION O. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

570S.87

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216(5)	1954	38	112

11-11-54

FINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 10 20 30 40 150 60 70 80 90 200

See Construction Road X-Section 7%

℄ Const. Rd.

℄ Outb.

℄ INBOUND

Future Bottom of Cut

C = 0
F = 0

914.90

Waste Material

Normal Fill See Sheet No. 98

8992

117+80.00

Exc = 0
Emb = 0

NOTE: For Typical Section of Waste Material, See Sheet No. 59

917.50

Waste Material

Normal Fill See Sheet No. 98

8991

℄ INBOUND

117+40.00

Exc = 47
Emb = 0

See Construction Road X-Section

℄ Outb.

℄ Const. Rd.

Future Bottom of Cut

C = 0
F = 0

See Construction Road X-Section

℄ Const. Rd.

Bottom of Cut

C = ~~63~~ 0
F = 0

920.10

Waste Material

Normal Fill See Sheet No. 91

8990

117+00.00

Exc = 587
Emb = 0

30 20 10 1000 90 80 70 60 50 40 30 20 10

PLATE 3 - CROSS SECTION O.D.P.R. & R. E. STANDARD

KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 63039

SHOS.SS

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216(5)	1954	80	112

11-1-54

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

℄ Out b.

℄ Const. Rd

See Construction Road X-Section

0.6 1.2

℄ Inb.

C=447 0
F= 0

Future Bottom of Cut

909.70

118+60.00

See Construction Road X-Section

℄ Outb.

Bottom of Cut

℄ Const. Rd

Exc = ~~405~~ 77
Emb = 0

℄ Inb.

0.6 1.2

912.30

Future Bottom of Cut

C= 104
F= 0

Waste Material

Normal Fill No. 96 See Sheet No. 96

118+20.00

Exc = 77
Emb = 0

NOTE
For Typical Section of Waste Material, See Sheet No. 59

50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 10 20 30 40 50

PLATE 2 CROSS SECTION U.S.B.R.&R.E. STANDARDS
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 63039

57 (50) S. 89

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	3216(5)	1954	90	112

11-1-54

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

8230

880.25

123+14

8250

NOT PART OF CONTRACT

903.34

119+28

C=
F=

See Construction Road X-Section

℄ Outb.

℄ Const. Rd.

8320

Bottom of Future Cut

907.10

C= 0
F= 0

119+00.90

Exc = 3570
Emb = 0

50 100

PLATE 3 - CROSS SECTION C. P. R. & R. E.
CLEARPRINT PAPER COMPANY, S. F. CAL.
No. 1000H-3

570S.90

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
	HAW.	S 612(5)	1954	01	116

NOTE:
For Typical Section of Waste Material See Sheet No. 30

FINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, AREAS, NO., BY, DATE, AREAS CHECKED

ORIGINAL SURVEY — SURVEYED, PLOTTED, NOTE BOOK, AREAS, NO., BY, DATE, AREAS CHECKED

Exc =
Emb =

Waste Material

Exc = 380
Emb = 910

Exc = 457
Emb = 1,207

Exc = 329
Emb = 1,197

Exc = 204
Emb = 627

Exc = 74
Emb = 148

℄ INB'D.

924.06
(Bench) C = 330
F = 894
116 + 40

925.36
(Bench) C = 605
F = 1,563
116 + 20

926.66
(Bench) C = 538
F = 1,938
116 + 00

927.96
(Bench) C = 350
F = 1,294
115 + 80

929.26
(Bench) C = 200
F = 400
115 + 60

C = 0
F = 0
115 + 40

Exc = 753
Emb = 8,231

Exc = 783
Emb = 1,319

Exc = 206
Emb = 517

℄ INB'D.

918.86
(Bench) C = 1,135
F = 13,907
117 + 20

920.16
(Bench) C = 898
F = 10,206
117 + 00

922.44
(Bench) C = 310
F = 1,086
116 + 65

NORMAL FILL
SCALE: HOR. = 20'
VERT. = 20'

570.91

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 52020

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216 (5)	1954	02	112

NOTE:
For Typical Section of Waste Material See Sheet No. 59

117 + 80

℄ INB'D.
914.06
C= 940 (Bench)
F= 11,184
Waste Material
Exc = 128
Emb = 8,076

117 + 60

℄ INB'D.
916.26
C= 1,025 (Bench)
F= 13,050
Waste Material
Exc = 788
Emb = 10,627

117 + 40

℄ INB'D.
917.56
C= 1,103 (Bench)
F= 15,643
Waste Material
Exc = 829
Emb = 10,944

118 + 30
C= 0
F= 0
Exc = 101
Emb = 322

118 + 20

℄ INB'D.
912.36
C= 545 (Bench)
F= 1,741
Waste Material
Exc = 520
Emb = 3,702

118 + 00

℄ INB'D.
913.66
C= 858 (Bench)
F= 8,254
Waste Material
Exc = 666
Emb = 7,199

NORMAL FILL

SCALE: HOR. = 20'
VERT. = 20'

570.92

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U. S. A. 63039

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO., BY, DATE

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	(S216(5))	1964	93	112

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

℄ CONSTRUCTION ROAD

930.35

115+75

C= 888
F= 0

Exc = 1,566
Emb= 0

930.10

115+40

C= 1,528
F= 0

Exc =
Emb =

℄ CONSTRUCTION ROAD

1/4"/Ft.

934.47

116+25

C= 2,131
F= 0

Exc = 1,532
Emb= 0

932.37

116+00

C= 1,179
F= 0

Exc = 957
Emb = 0

CONSTRUCTION ROAD

PLATE 3 CROSS SECTION D. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

570S.93

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S 816(5)	1954	94	112

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOK, AREAS, NO., AREAS CHECKED, BY, DATE

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOK, AREAS, NO., AREAS CHECKED, BY, DATE

℄ CONSTRUCTION ROAD

938.96

1/4"/ft.

936.64

116+75

Exc = 2,137
Emb = 0

116+50

Exc = 2,435
Emb = 0

C = 1,482
F = 0

C = 3,135
F = 0

℄ CONSTRUCTION ROAD

943.65

450

117+25

Exc = 373
Emb = 3

941.23

117+00

Exc = 906
Emb = 0

C = 331
F = 17

C = 495
F = 0

PLATE 3 CROSS SECTION C. P. R. & R. E. STANDARD
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EUGENE DIETZGEN CO.

5708.94

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	SEC(5)	1954	05	112

11-11-60

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

2 Wall

℄ CONSTRUCTION ROAD

1050

1000

951.0

948.71

C = 561
F = 0

117+75

1000

950

927.5

946.14

C = 479
F = 2

117+50

Exc = 481
Emb = 2

Exc = 374
Emb = 6

℄ CONSTRUCTION ROAD

1050

1000

952.8

954.07

C = 108
F = 50

118+35

2 Wall

1000

950

932.2

951.32

C = 253
F = 5

118+00

Exc = 234
Emb = 36

Exc = 377
Emb = 2

PLATE 3 CROSS SECTION D. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

570S.95

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216(5)	1954	96	112

11-11-54

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

118+75

℄ Construction Road

Exc = 2,568
Emb = 0

118+50

Exc = 1,358
Emb = 5

Exc = 131
Emb = 17

C = 365
F = 11

110+00

℄ Construction Road

Exc = 1,787
Emb = 0

Exc = 1,422
Emb = 0

OMIT

118+83

Exc = 785
Emb = 10

C = 2,731
F = 0

PLATE 3 CROSS SECTION C. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

570S.96

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216(5)	1954	97	112

FINAL SURVEY — SURVEYED BY; PLOTTED BY; NOTE BOOK; TEMPLATE AREAS; AREAS CHECKED; NO.; DATE; BY

ORIGINAL SURVEY — SURVEYED BY; PLOTTED BY; NOTE BOOK; TEMPLATE AREAS; AREAS CHECKED; NO.; DATE; BY

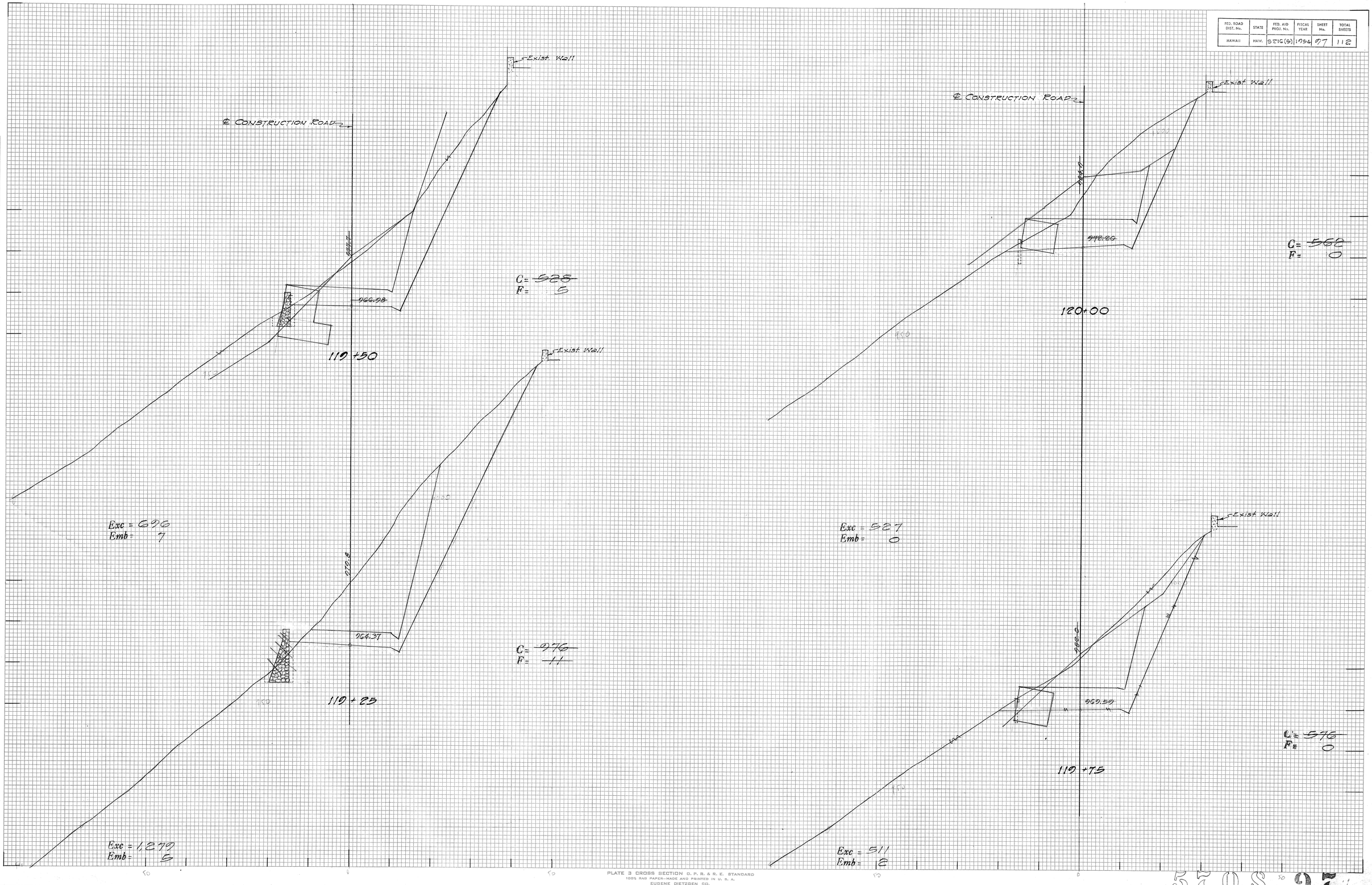


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EUGENE DIETZGEN CO.

570S.97

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	KAW.	S 21C(5)	1954	78	112

11-11-54

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

℄ CONSTRUCTION ROAD

5' Exist. Wall

~~979.66~~

~~977.6~~

120+50

C= ~~0~~
F= ~~212~~

Exc = ~~57~~
Fmb = 107

5' Exist. Wall

~~974.07~~

~~977.6~~

120+25

C= ~~124~~
F= ~~10~~

Exc = ~~318~~
Fmb = 0

℄ CONSTRUCTION ROAD

5' Exist. Wall

~~994.56~~

~~997.6~~

121+00

C= ~~68~~
F= ~~92~~

Exc = ~~79~~
Fmb = ~~55~~

5' Exist. Wall

~~991.21~~

~~997.6~~

120+75

C= ~~103~~
F= ~~92~~

Exc = ~~43~~
Fmb = 101

PLATE 3 CROSS SECTION C. P. R. & R. E. STANDARD
100% RAG PAPER-MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

57 OS.98

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	S216(5)	1954	99	112

FINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

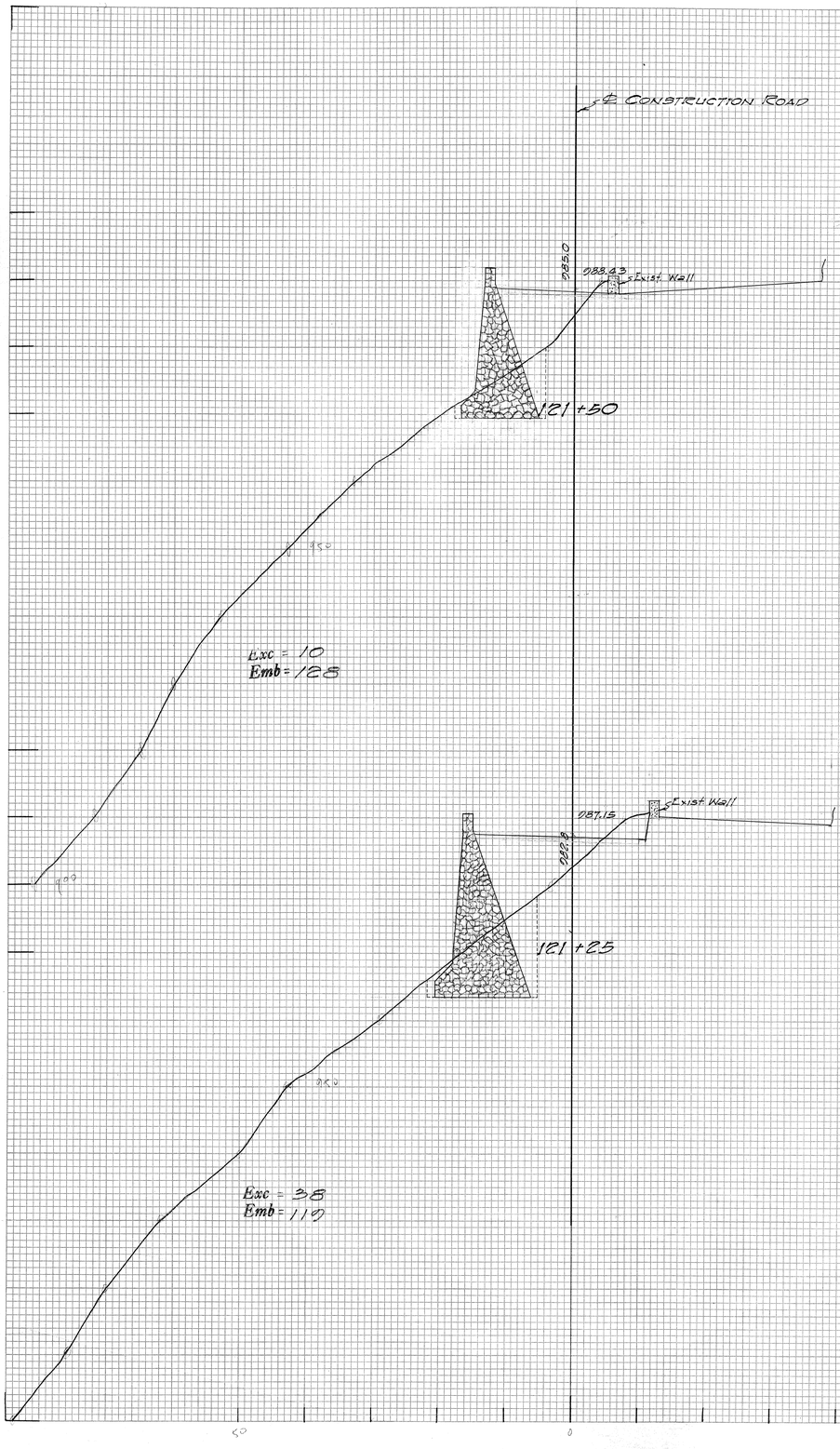


PLATE 3 CROSS SECTION C. P. R. & R. E. STANDARD
100% RAG PAPER—MADE AND PRINTED IN U. S. A.
EUGENE DIETZGEN CO.

570 S. 99