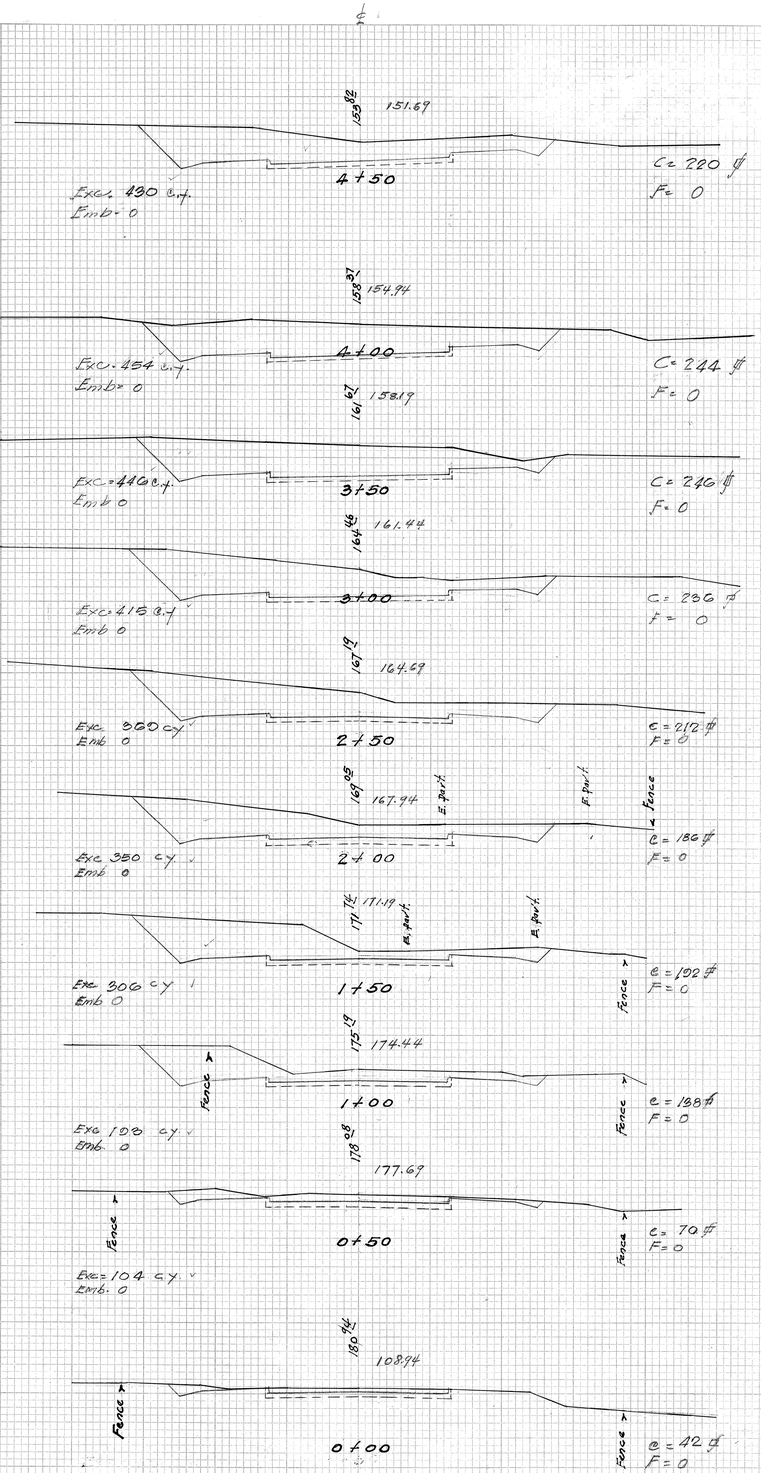
Sheet 1 of 11 Sheets

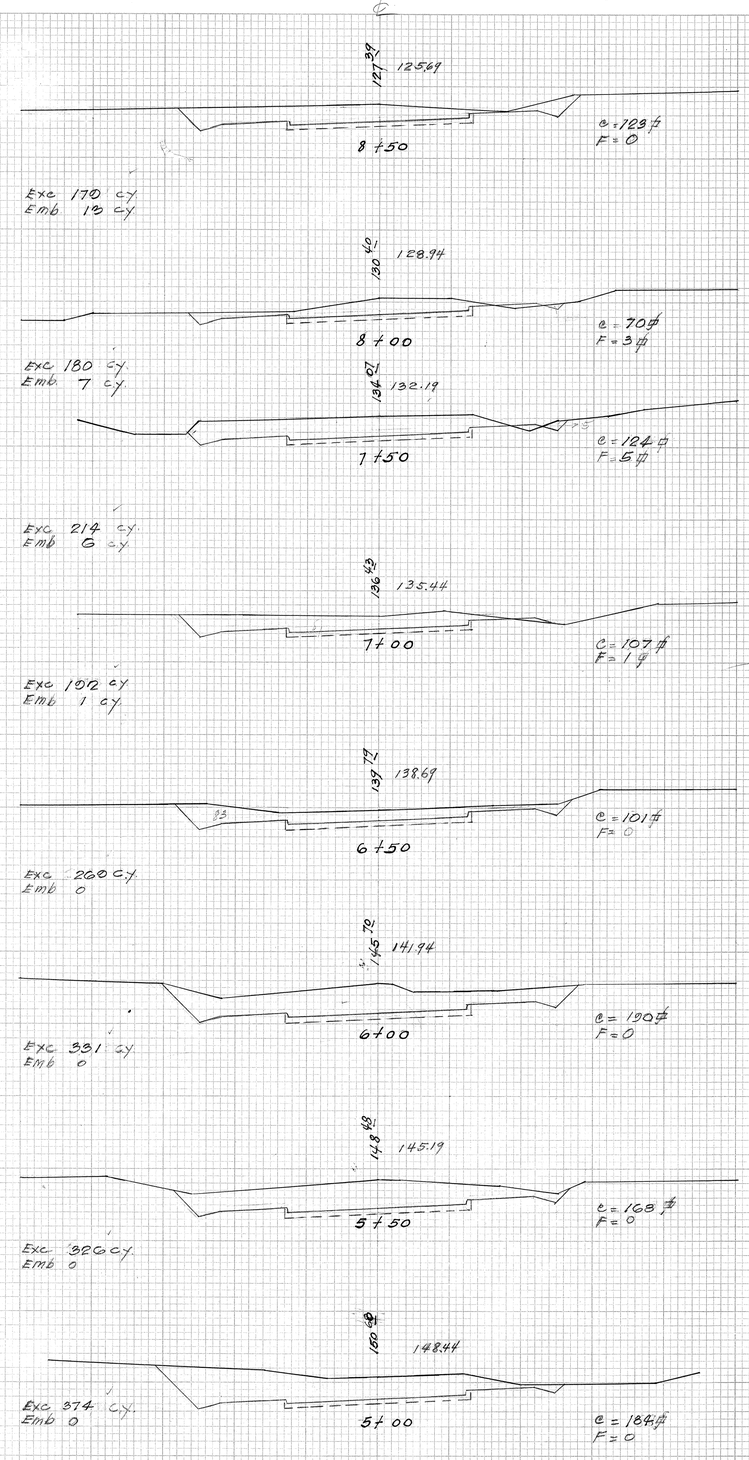
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	F 12(4)	1959	30	40

Rev. 3/20/59

FINAL SURVEY — DATE 8-21-57 — BY S.K. Matsuo — SURVEYED 2-15-52 to 2-25-52 — PLOTTED 2-26-52 — TRACED R.J. Arcel — CHECKED M. Sakamoto — AREAS — AREAS CHECKED — NOTE BOOK — NO.

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





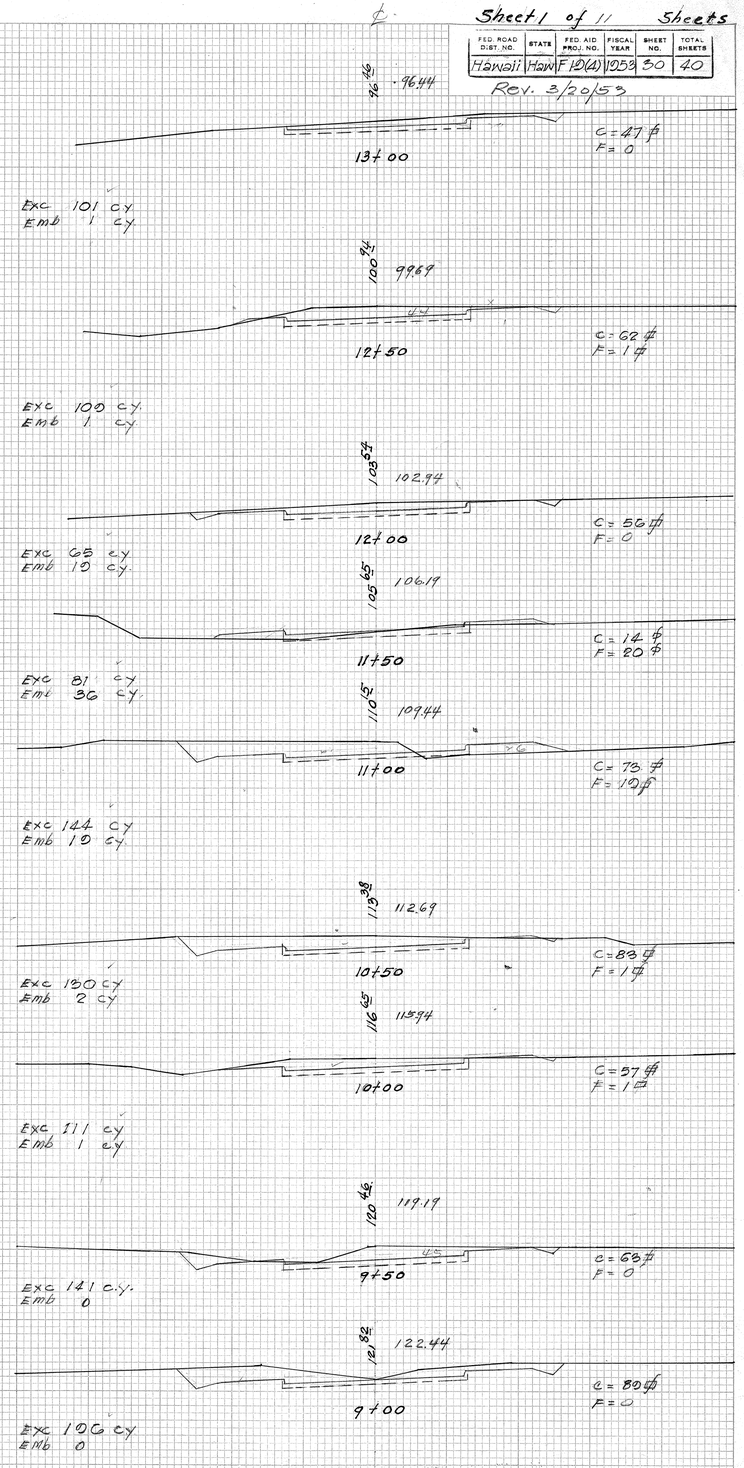


PLATE 3 - CROSS SECTION O.P.R.&R.E. STANDARD

KEUFFEL & ESSER CO., NEW YORK.

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

5605.30

Sheet 2 of 11 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Ham	F104(4)	1059	31	40

Rev. 3/20/59

FINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS, AREAS CHECKED, NOTE BOOK, NO. — BY — DATE: 2-4-52, 2-5-52, 2-7-52

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

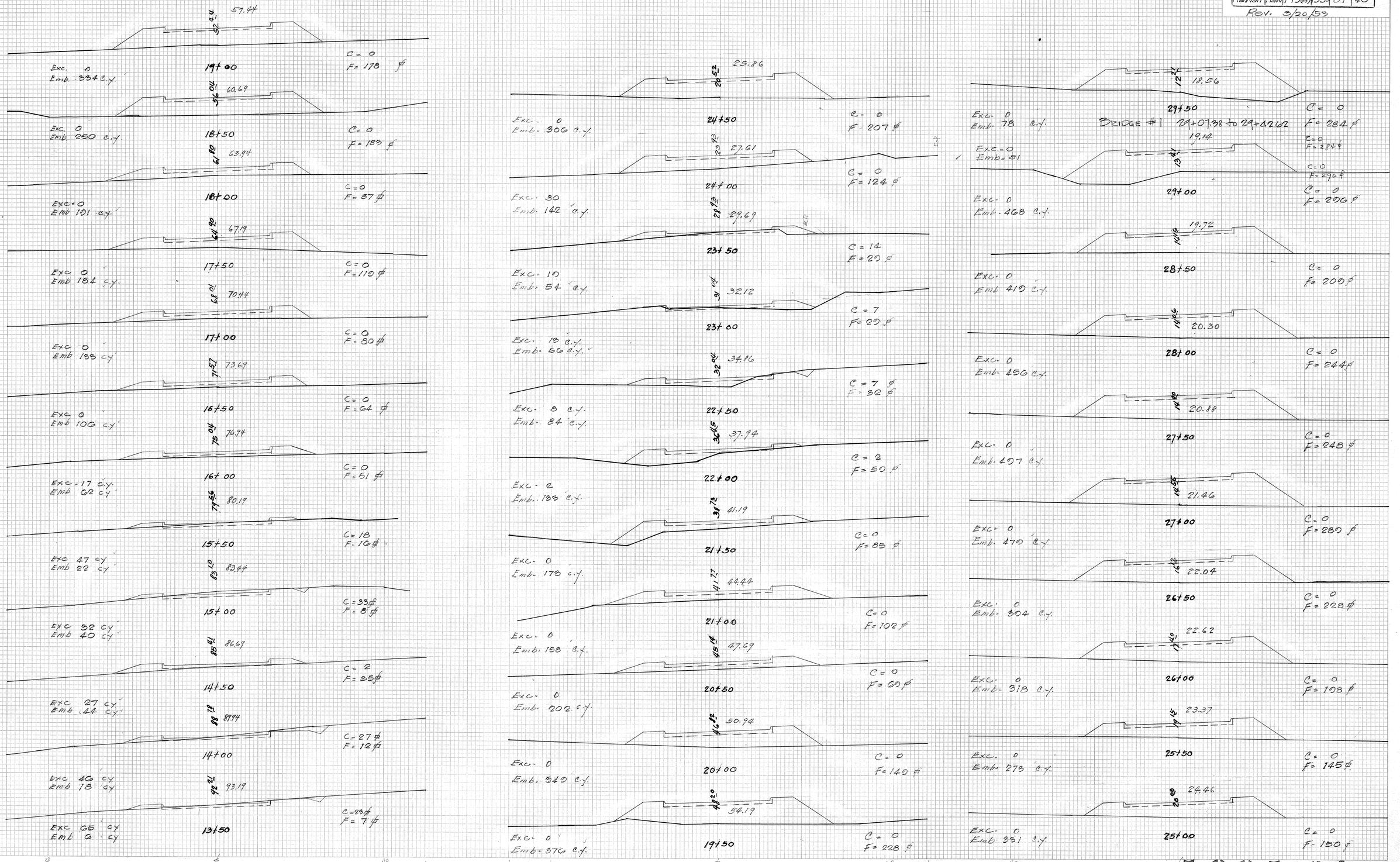


PLATE 3 - CROSS SECTION O.P.R.&R.E. STANLEY KEUFFEL & ESSER CO., NEW YORK.

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

5605.31

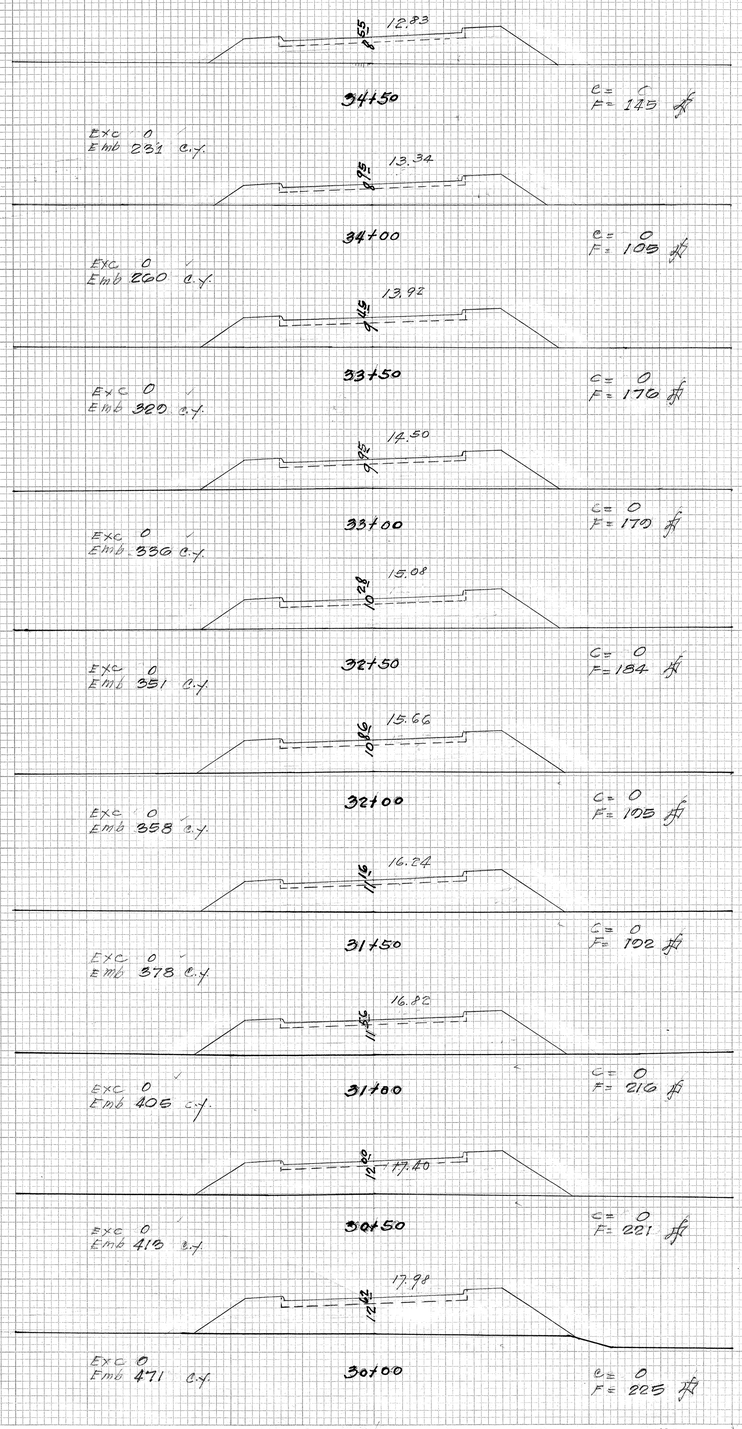
Sheet 3 of 11 Sheets

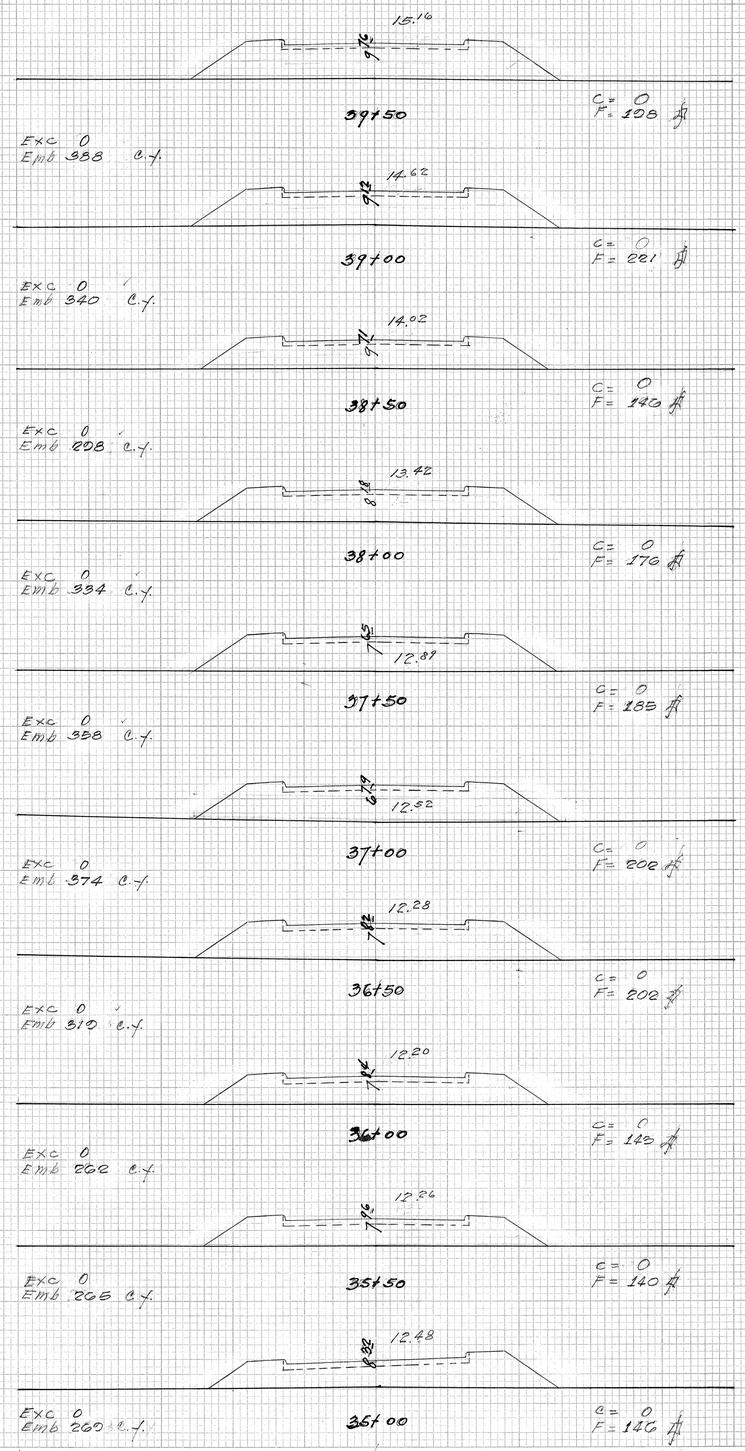
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Hawaii	F 10(4)	1952	32	40

Rev. 3/20/1952

FINAL SURVEY — SURVEYED 5-1948 EWB; PLOTTED 12-1-52; TRACED 12-2-52; NOTE BOOK —; NO. —; AREAS —; AREAS CHECKED M. Sakamoto P.E.; DATE 12-5-52; BY

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





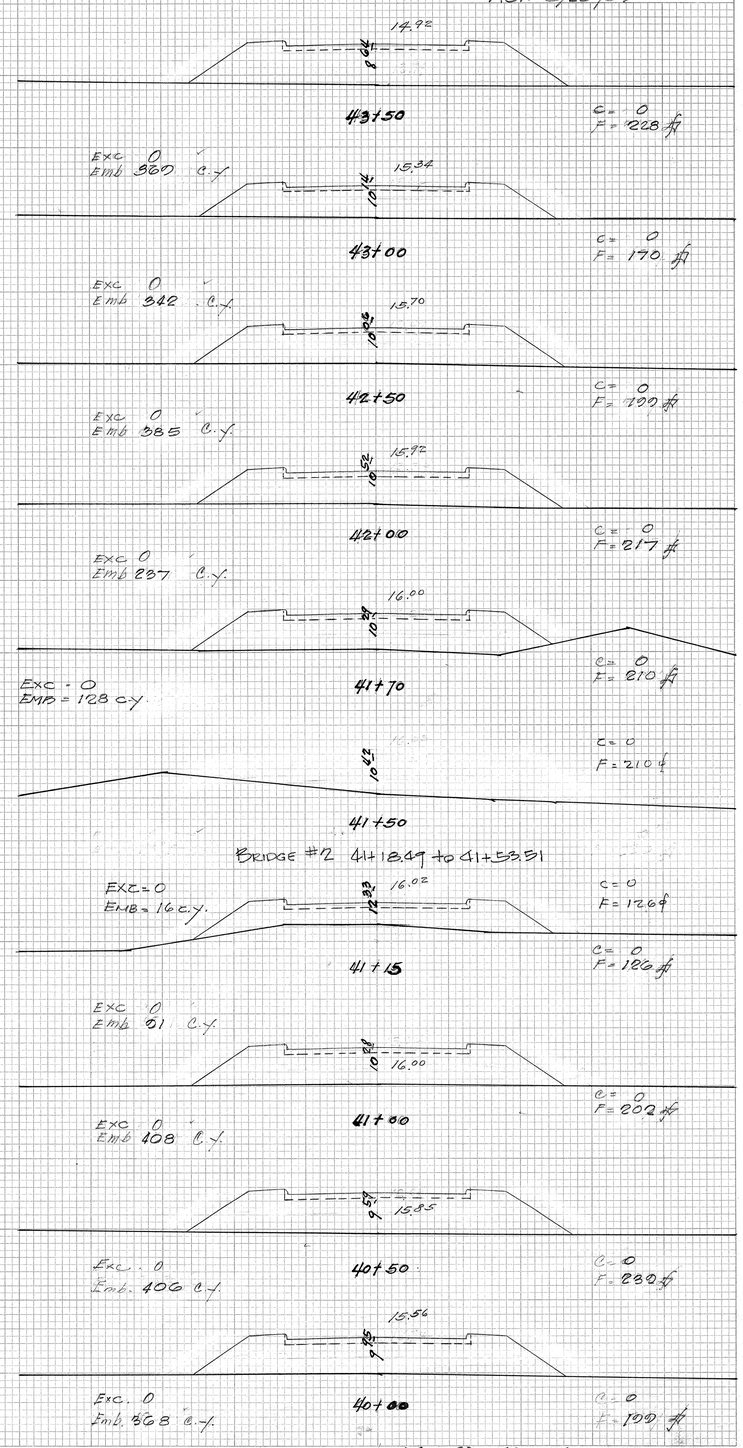


PLATE 3 - CROSS SECTION O.P.R.&R.E. STAMPED
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 348-3 MADE IN U. S. A.

5605.32

Sheet 4 of 11 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Ham	F1D(4)	1958	33	40

Rev. 3/20/59

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

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

11.34 13.23
48+50
C = 0
F = 20 ☐
Exc 0
Emb 57 C.Y.

11.88 12.98
48+00
C = 0
F = 83 ☐
Exc 0
Emb 82 C.Y.

10.78 12.84
47+50
C = 0
F = 56 ☐
Exc 0
Emb 150 C.Y.

9.79 12.80
47+00
C = 0
F = 106 ☐
Exc 0
Emb 214 C.Y.

8.87 12.86
46+50
C = 0.
F = 125 ☐
Exc 0
Emb 248 C.Y.

7.79 13.02
46+00
C = 0
F = 143 ☐
Exc 0
Emb 203 C.Y.

7.31 13.29
45+50
C = 0
F = 173 ☐
Exc 0
Emb 336 C.Y.

6.36 13.66
45+00
C = 0
F = 700 ☐
Exc 0
Emb 344 C.Y.

5.89 14.08
44+50
C = 0
F = 181 ☐
Exc 0
Emb 336 C.Y.

5.35 14.50
44+00
C = 0
F = 182 ☐
Exc 0
Emb 380 C.Y.

12.24 17.13
53+50
C = 73 / 63 ☐
F = 0
Exc 118 / 94 C.Y.
Emb 4 C.Y.

12.26 16.78
53+00
C = 52 / 39 ☐
F = 4 / 1 ☐
Exc 99 / 69 C.Y.
Emb 6 C.Y.

15.85 16.38
52+50
C = 49 / 36 ☐
F = 2 ☐
Exc 78 / 48 C.Y.
Emb 17 C.Y.

14.87 15.98
52+00
C = 29 / 16 ☐
F = 16 ☐
Exc 60 / 35 C.Y.
Emb 10 C.Y.

14.86 15.58
51+50
C = 36 / 23 ☐
F = 5 ☐
Exc 59 / 35 C.Y.
Emb 18 C.Y.

14.44 15.18
51+00
C = 28 / 15 ☐
F = 14 ☐
Exc 45 / 27 C.Y.
Emb 32 C.Y.

13.51 14.78
50+50
C = 21 / 8 ☐
F = 21 ☐
Exc 44 / 20 C.Y.
Emb 38 C.Y.

13.14 14.38
50+00
C = 27 / 14 ☐
F = 20 ☐
Exc 34 / 22 C.Y.
Emb 30 C.Y.

12.79 13.98
49+50
C = 10
F = 22 ☐
Exc 15 / 48 C.Y.
Emb 48 C.Y.

12.24 13.58
49+00
C = 6
F = 30 ☐
Exc 6 / 55 C.Y.
Emb 55 C.Y.

13.28 15.51
58+50
C = 0
F = 47 ☐
Exc 0
Emb 80 C.Y.

13.21 15.92
58+00
C = 0
F = 40 ☐
Exc 0
Emb 104 C.Y.

14.12 16.33
57+50
C = 0
F = 63 ☐
Exc 0
Emb 110 C.Y.

14.62 16.74
57+00
C = 0
F = 56 ☐
Exc 0
Emb 108 C.Y.

15.06 17.10
56+50
C = 0
F = 50 ☐
Exc 0
Emb 170 C.Y.

15.78 17.36
56+00
C = 0
F = 36 ☐
Exc 3
Emb 150 C.Y.

16.11 17.51
55+50
C = 3
F = 25 ☐
Exc 13 / 19 C.Y.
Emb 37 C.Y.

16.51 17.57
55+00
C = 11 / 4 ☐
F = 15 ☐
Exc 120 / 20 C.Y.
Emb 20 C.Y.

16.49 17.52
54+50
C = 11 / 4 ☐
F = 7 ☐
Exc 102 / 76 C.Y.
Emb 31 C.Y.

16.71 17.38
54+00
C = 0
F = 27 ☐
Exc 158 C.Y.
Emb 25 C.Y.

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.

No. 5605.33

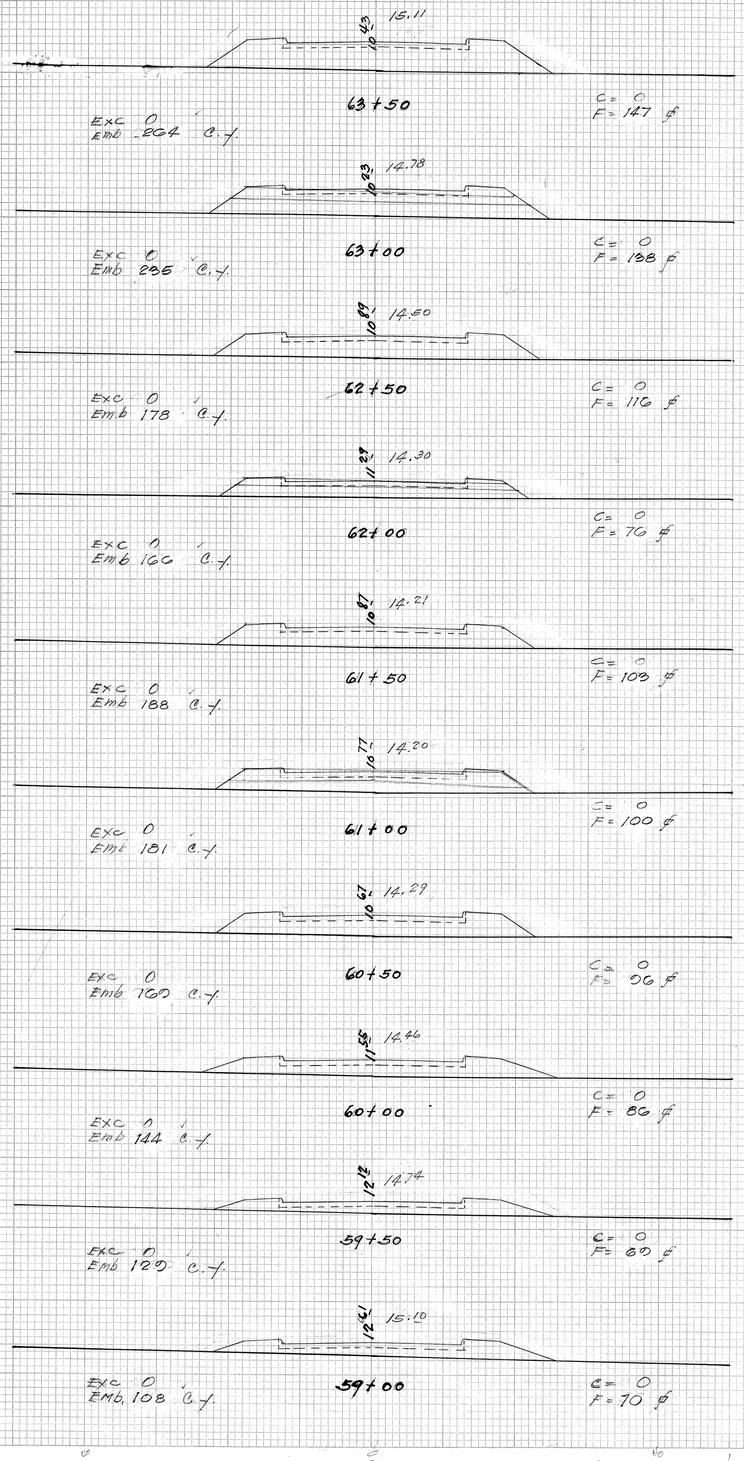
Sheet 5 of 11 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	SHEETS
Hawaii	HAW	F19(4)	1959	34	40

Rev. 3/20/53

FINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS, AREAS CHECKED, NOTE BOOK, NO. — BY — DATE 5/25/53

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



Exc 0
Emb 204 C.Y.

Exc 0
Emb 205 C.Y.

Exc 0
Emb 178 C.Y.

Exc 0
Emb 160 C.Y.

Exc 0
Emb 188 C.Y.

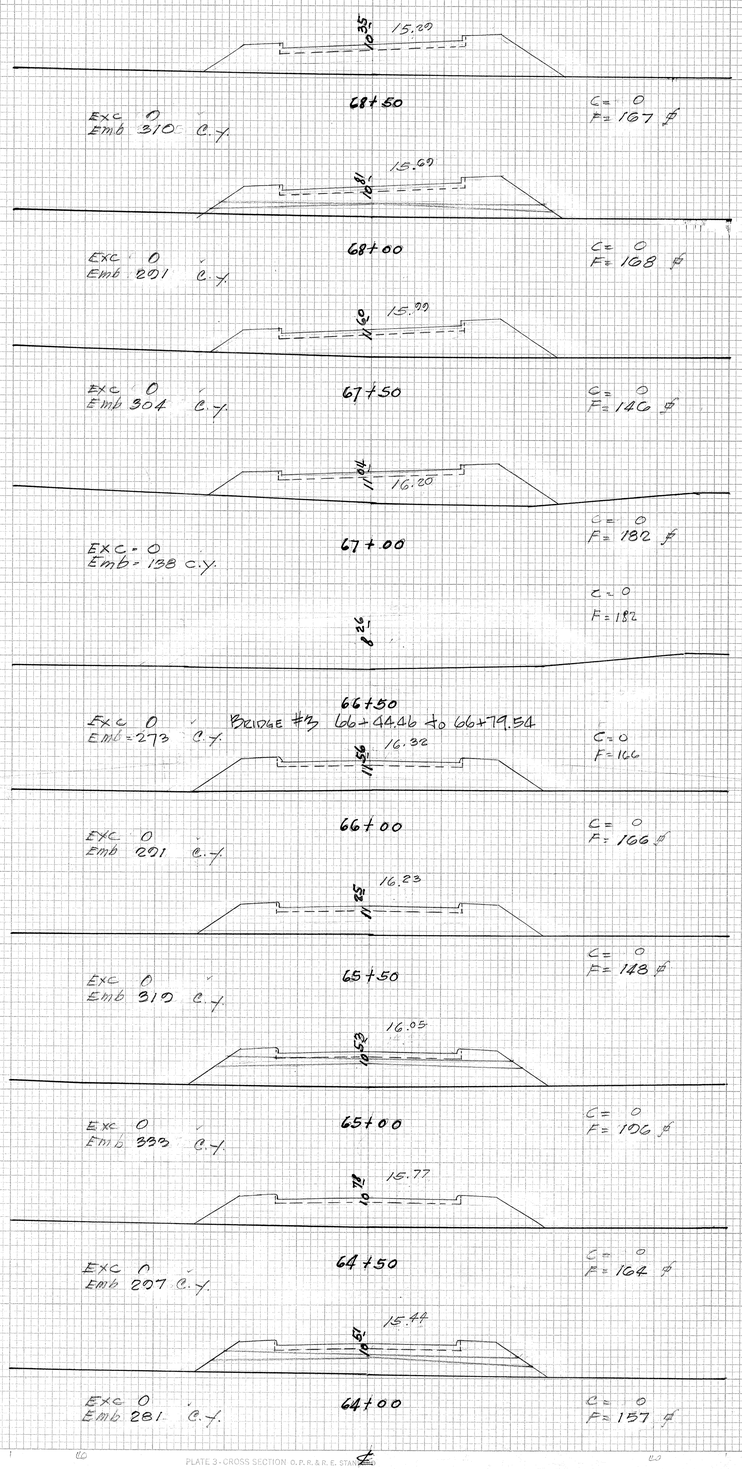
Exc 0
Emb 181 C.Y.

Exc 0
Emb 160 C.Y.

Exc 0
Emb 144 C.Y.

Exc 0
Emb 120 C.Y.

Exc 0
Emb 108 C.Y.



Exc 0
Emb 310 C.Y.

Exc 0
Emb 201 C.Y.

Exc 0
Emb 304 C.Y.

Exc - 0
Emb - 138 C.Y.

Exc 0 Bridge #3 66+44.46 to 66+79.54
Emb - 273 C.Y.

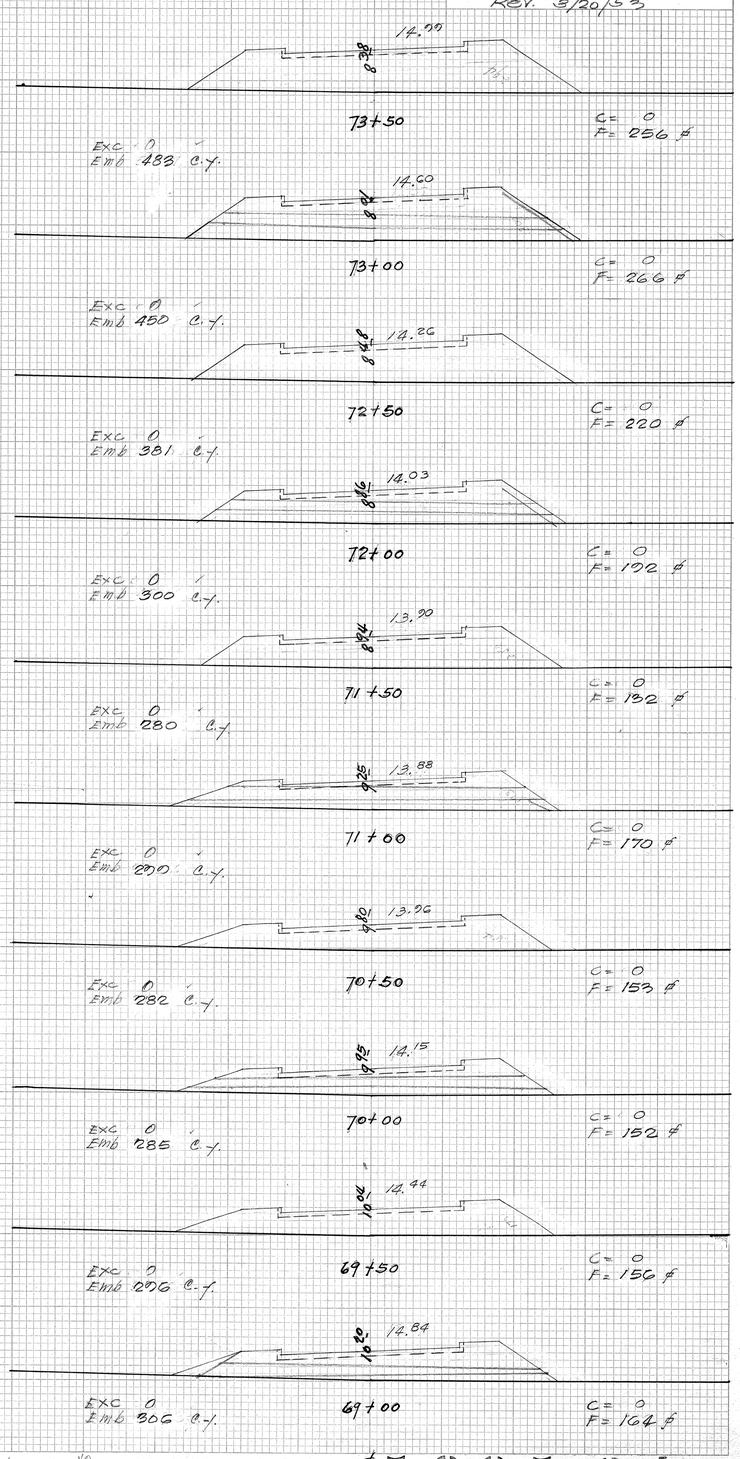
Exc 0
Emb 201 C.Y.

Exc 0
Emb 310 C.Y.

Exc 0
Emb 333 C.Y.

Exc 0
Emb 207 C.Y.

Exc 0
Emb 281 C.Y.



Exc 0
Emb 483 C.Y.

Exc 0
Emb 450 C.Y.

Exc 0
Emb 381 C.Y.

Exc 0
Emb 300 C.Y.

Exc 0
Emb 280 C.Y.

Exc 0
Emb 290 C.Y.

Exc 0
Emb 282 C.Y.

Exc 0
Emb 285 C.Y.

Exc 0
Emb 206 C.Y.

Exc 0
Emb 306 C.Y.

#5605.34

Sheet 6 of 11 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	F1D(4)	1958	35	40

Rev. 5/20/58

FINAL SURVEY — DATE 8-24-55 — BY S.K. Matsu — SURVEYED 8-24-55 — TEMPLATE 8-25-55 — NOTE BOOK 8-25-55 — AREAS — NO. — AREAS CHECKED M. Takamiya

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

Dash-line detour embankment
Excavated for widen Shoulders
& Flatten Slopes

78 + 50 — C = 43 ϕ, F = 103 ϕ
Exc 40 c.y.
Emb 423 c.y.

78 + 00 — C = 0, F = 354 ϕ
Exc 0
Emb 643 c.y.

77 + 50 — C = 0, F = 340 ϕ
Exc 0
Emb 646 c.y.

77 + 00 — C = 0, F = 358 ϕ
Exc 0
Emb 645 c.y.

76 + 50 — C = 0, F = 339 ϕ
Exc 0
Emb 614 c.y.

76 + 00 — C = 0, F = 324 ϕ
Exc 0
Emb 316 c.y.

75 + 67

BRIDGE #4 75+38.36 to 75+73.64

75 + 50 — C = 0, F = 277
Exc 0
Emb 294 c.y.

75 + 00 — C = 0, F = 277 ϕ
Exc 0
Emb 316 c.y.

74 + 50 — C = 0, F = 280 ϕ
Exc 0
Emb 311 c.y.

74 + 00 — C = 0, F = 272 ϕ
Exc 0
Emb 480 c.y.

89 + 50 — C = 0, F = 200 ϕ
Exc 0
Emb 305 c.y.

83 + 00 — C = 0, F = 185
Exc 0
Emb 356 c.y.

82 + 50 — C = 0, F = 200 ϕ
Exc 5 c.y.
Emb 300 c.y.

82 + 00 — C = 5, F = 134 ϕ
Exc ~~94~~ 94 c.y.
Emb 162 c.y.

81 + 50 — C = 06, F = 41
Exc ~~444~~ 444 ~~431~~ c.y.
Emb 38 c.y.

81 + 00 — C = ~~370~~ 384, F = 0
Exc ~~878~~ 904 c.y.
Emb 0

80 + 50 — C = ~~578~~ 592, F = 0
Exc ~~1130~~ 1165 c.y.
Emb 0

80 + 00 — C = ~~532~~ 547, F = 0
Exc ~~1141~~ 1167 c.y.
Emb 0

79 + 50 — C = ~~580~~ 594, F = 0
Exc ~~1006~~ 1031 c.y.
Emb 0

79 + 00 — C = ~~506~~ 520, F = 0
Exc ~~508~~ 521 c.y.
Emb 105 c.y.

88 + 50 — C = 5, F = 107 ϕ
Exc 5
Emb 82 c.y.

88 + 00 — C = 0, F = 40 ϕ
Exc 0
Emb 122 c.y.

87 + 50 — C = 0, F = 83 ϕ
Exc 0
Emb 171 c.y.

87 + 00 — C = 0, F = 102 ϕ
Exc 0
Emb 202 c.y.

86 + 50 — C = 0, F = 110
Exc 0
Emb 221 c.y.

86 + 00 — C = 0, F = 123 ϕ
Exc 0
Emb 248 c.y.

85 + 50 — C = 0, F = 145 ϕ
Exc 0
Emb 304 c.y.

85 + 00 — C = 0, F = 183
Exc 0
Emb 327 c.y.

84 + 50 — C = 0, F = 170 ϕ
Exc 0
Emb 324 c.y.

84 + 00 — C = 0, F = 180 ϕ
Exc 0
Emb 360 c.y.

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.

5605.35

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Ham	F-D(4)	1953	36	40

Rev. 3/20/53

FINAL SURVEY — SURVEYED, PLOTTED, TRACED, AREAS, AREAS CHECKED, NOTE BOOK, NO. — BY S.K. Nakata — DATE 8-27-52

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

Dash-Line Detour Embankment
Detour Embankment Excavated For Side Road Embankment & Slope For Drainage.

Dash-Line Detour Emb. This Excavated For Side Road Emb. & Slope For Drainage.

Sta 93+50 — Exc. 5 c.y. (was 18) — Emb. 37 c.y. — C = 0 (was 23) — F = 47 #
Sta 93+00 — Exc. 10 c.y. (was 56) — Emb. 31 c.y. — C = 5 (was 24) — F = 15 #
Sta 92+50 Ep ℄ — Exc. 30 c.y. (was 74) — Emb. 31 c.y. — C = 15 (was 37) — F = 18 #
Sta 92+00 — Exc. 50 c.y. (was 98) — Emb. 27 c.y. — C = 21 (was 43) — F = 16 #
Sta 91+50 — Exc. 45 c.y. (was 81) — Emb. 26 c.y. — C = 33 (was 52) — F = 13 #
Sta 91+00 — Exc. 38 c.y. (was 76) — Emb. 28 c.y. — C = 16 (was 35) — F = 16 #
Sta 90+50 — Exc. 38 c.y. (was 81) — Emb. 28 c.y. — C = 14 (was 47) — F = 14 #
Sta 90+00 — Exc. 22 c.y. (was 67) — Emb. 35 c.y. — C = 17 (was 41) — F = 16 #
Sta 89+50 — Exc. 22 c.y. (was 38) — Emb. 27 c.y. — C = 14 (was 31) — F = 22 #
Sta 89+00 — Exc. 14 c.y. — Emb. 34 c.y. — C = 10 — F = 18 #

Sta 98+50 — Exc. 37 c.y. (was 27) — Emb. 18 c.y. — C = 31 (was 40) — F = 0 #
Sta 98+00 — Exc. 51 c.y. (was 85) — Emb. 20 c.y. — C = 31 (was 54) — F = 10 #
Sta 97+50 — Exc. 56 c.y. (was 72) — Emb. 43 c.y. — C = 24 (was 47) — F = 12 #
Sta 97+00 — Exc. 21 c.y. (was 52) — Emb. 50 c.y. — C = 15 (was 31) — F = 34 #
Sta 96+50 — Exc. 42 — Emb. 48 c.y. — C = 8 (was 25) — F = 27 #
Sta 96+00 — Exc. 5 (was 47) — Emb. 52 c.y. — C = 5 (was 29) — F = 25 #
Sta 95+50 — Exc. 3 (was 53) — Emb. 55 c.y. — C = 0 (was 22) — F = 31 #
Sta 95+00 — Exc. 10 c.y. (was 76) — Emb. 47 c.y. — C = 8 (was 35) — F = 28 #
Sta 94+50 — Exc. 20 c.y. (was 55) — Emb. 20 c.y. — C = 8 (was 47) — F = 23 #
Sta 94+00 — Exc. 42 c.y. (was 78) — Emb. 51 c.y. — C = 13 (was 56) — F = 8 #

Sta 103+50 — Exc. 24 — Emb. 32 c.y. — C = 14 — F = 17 #
Sta 103+00 — Exc. 24 — Emb. 30 c.y. — C = 12 — F = 18 #
Sta 102+50 — Exc. 31 c.y. (was 42) — Emb. 31 c.y. — C = 14 — F = 24 #
Sta 102+00 — Exc. 66 c.y. (was 10) — Emb. 8 c.y. — C = 19 (was 21) — F = 0 #
Sta 101+50 — Exc. 69 c.y. (was 87) — Emb. 17 y — C = 22 (was 55) — F = 0
Sta 101+00 — Exc. 45 c.y. (was 77) — Emb. 27 c.y. — C = 22 (was 39) — F = 18 #
Sta 100+50 — Exc. 56 y (was 86) — Emb. 10 c.y. — C = 27 (was 44) — F = 8 #
Sta 100+00 — Exc. 58 c.y. (was 88) — Emb. 17 c.y. — C = 24 (was 49) — F = 3 #
Sta 99+50 — Exc. 54 c.y. (was 88) — Emb. 20 c.y. — C = 20 (was 46) — F = 15 #
Sta 99+00 — Exc. 56 c.y. (was 90) — Emb. 23 c.y. — C = 20 (was 48) — F = 16 #

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.

5605.36

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	HAW	(F)1(4)1958	37	40

Rev. 3/20/53

FINAL SURVEY — DATE 8-7-51 — BY S.K. Matsuo — SURVEYED — PLOTTED — CHECKED — NOTE BOOK — NO. — AREAS — AREAS CHECKED

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

LOAD DOMESTIC STATION

℄ 6+ 94.7

108+50

Exc 0
Emb 168 c.y.

C = 0
F = 96 ℄

℄ 9+ 9.34

108+00

Exc 0
Emb 168 c.y.

C = 0
F = 85 ℄

℄ 7+ 9.19

Side Rd.

107+50

Exc 0
Emb 166 c.y.

C = 0
F = 96 ℄

℄ 6+ 9.04

107+00

Exc 0
Emb 140 c.y.

C = 0
F = 88 ℄

℄ 5+ 8.89

106+50

Exc 0
Emb 122 c.y.

C = 0
F = 78 ℄

℄ 4+ 8.74

106+00

Exc 0
Emb 110 c.y.

C = 0
F = 68 ℄

℄ 3+ 8.59

105+50

Exc 0
Emb 97 c.y.

C = 0
F = 54 ℄

℄ 2+ 8.44

Fence

105+00

Exc 3
Emb 90 c.y.

C = 0
F = 51 ℄

℄ 1+ 8.29

104+50

Exc 16
Emb 71 c.y.

C = 3
F = 40 ℄

℄ 0+ 8.14

104+00

Exc 26
Emb 44 c.y.

C = 14
F = 31 ℄

℄ 7+ 8.89

Conc. Pavt.

113+50

Exc 0
Emb 180 c.y.

C = C
F = 74 ℄

℄ 6+ 9.04

Conc. Pavt.

113+00

Exc 0
Emb 180 c.y.

C = 0
F = 88 ℄

℄ 5+ 9.19

Conc. Pavt.

112+50

Exc 0
Emb 152 c.y.

C = 0
F = 81 ℄

℄ 4+ 9.34

Conc. Pavt.

112+00

Exc 0
Emb 167 c.y.

C = 0
F = 88 ℄

℄ 3+ 9.47

Conc. Pavt.

111+50

Exc 0
Emb 181 c.y.

C = 0
F = 97 ℄

℄ 2+ 9.56

Conc. Pavt.

111+00

Exc 0
Emb 180 c.y.

C = 0
F = 98 ℄

℄ 1+ 9.62

110+50

Exc 0
Emb 102 c.y.

C = 0
F = 106 ℄

℄ 0+ 9.64

1110+00

Exc 0
Emb 104 c.y.

C = 0
F = 101 ℄

℄ 9+ 9.62

109+50

Exc 0
Emb 174 c.y.

C = 0
F = 108 ℄

℄ 8+ 9.56

Side Rd.

109+00

Exc 0
Emb 163 c.y.

C = 0
F = 80 ℄

℄ 7+ 7.39

118+50

Exc 21
Emb 56 c.y.

C = 15 ~~6~~
F = 20 ℄

℄ 6+ 7.54

Fence

118+00

Exc 4
Emb 66 c.y.

C = 4
F = 31 ℄

℄ 5+ 7.69

Fence

117+50

Exc 0
Emb 64 c.y.

C = 0
F = 40 ℄

℄ 4+ 7.84

Fence

117+00

Exc 0
Emb 100 c.y.

C = 0
F = 61 ℄

℄ 3+ 7.99

Fence

116+50

Exc 0
Emb 108 c.y.

C = 0
F = 57 ℄

℄ 2+ 8.14

Fence

116+00

Exc 0
Emb 80 c.y.

C = 0
F = 56 ℄

℄ 1+ 8.29

Fence

115+50

Exc 0
Emb 84 c.y.

C = 0
F = 40 ℄

℄ 0+ 8.44

Fence

115+00

Exc 0
Emb 101 c.y.

C = 0
F = 51 ℄

℄ 9+ 8.59

Fence

114+50

Exc 0
Emb 108 c.y.

C = 0
F = 58 ℄

℄ 8+ 8.74

Conc. Pavt.

Fence

114+00

Exc 0
Emb 118 c.y.

C = 0
F = 53 ℄

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.

5605.37

Sheet 9 of 11 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	F19(2)	1958	38	40

Rev. 5/20/58

FINAL SURVEY — BY: S.K. MAKUA — DATE: 8-21-57
SURVEYED: 2-19-57 to 2-25-57
PLOTTED: M.P.
FIELD BOOK: —
AREAS: —
AREAS CHECKED: —
NOTE BOOK NO. —

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

105 — 7.39
123+50
Exc 127 ~~68~~ c.y.
Emb 13 c.y.
67 C=~~86~~ F=7#

96 — 7.24
123+00
Exc 116 ~~56~~ c.y.
Emb 18 c.y.
64 C=~~82~~ F=7#

91 — 7.09
122+50
Exc 102 ~~51~~ c.y.
Emb 18 c.y.
61 C=~~20~~ F=12#

68 — 6.94
122+00
Exc 100 ~~51~~ c.y.
Emb 12 c.y.
40 C=~~86~~ F=7#

42 — 6.83
121+50
Exc 113 ~~55~~ c.y.
Emb 13 c.y.
50 C=~~109~~ F=6#

36 — 6.79
121+00
Exc 110 ~~50~~ c.y.
Emb 14 c.y.
63 C=~~30~~ F=8#

35 — 6.83
120+50
Exc 94 ~~48~~ c.y.
Emb 15 c.y.
56 C=~~26~~ F=7#

36 — 6.94
120+00
Exc 71 ~~30~~ c.y.
Emb 22 c.y.
46 C=~~17~~ F=0#

30 — 7.09
119+50
Exc 52 ~~28~~
Emb 38 c.y.
31 C=~~15~~ F=15#

23 — 7.24
119+00
Exc 40 ~~15~~
Emb 51 c.y.
C=~~70~~ F=26#

44 — 8.89
128+50
Exc 15
Emb 72 c.y.
Fence
C=5 F=40#

46 — 8.74
128+00
Exc 22
Emb 60 c.y.
Fence
C=11 F=38#

39 — 8.59
127+50
Exc 31 ~~25~~
Emb 54 c.y.
Fence
C=18 F=27#

19 — 8.44
127+00
Exc 52 ~~28~~
Emb 55 c.y.
Fence
C=~~14~~ F=61#

22 — 8.29
126+50
Exc 52 ~~28~~
Emb 48 c.y.
Fence
C=46 F=28#

26 — 8.14
126+00
Exc 53 ~~20~~
Emb 44 c.y.
Fence
C=~~14~~ F=24#

29 — 7.99
125+50
Exc 62 ~~28~~ c.y.
Emb 34 c.y.
Fence
C=~~17~~ F=28#

35 — 7.84
125+00
Exc 94 ~~54~~ c.y.
Emb 17 c.y.
Fence
C=~~24~~ F=14#

34 — 7.69
124+50
Exc 103 ~~69~~ c.y.
Emb 6 c.y.
Fence
C=~~34~~ F=4#

17 — 7.54
124+00
Exc 106 ~~65~~ c.y.
Emb 8 c.y.
Fence
C=~~34~~ F=2#

66 — 10.24
133+00
Exc 0
Emb 122 c.y.
C=0 F=70#

72 — 10.09
132+50
Exc 0
Emb 191 c.y.
C=0 F=74#

75 — 9.94
132+00
Exc 0
Emb 114 c.y.
Fence
C=0 F=67#

81 — 9.79
131+50
Exc 0
Emb 101 c.y.
Fence
C=0 F=56#

90 — 9.64
131+00
Exc 0
Emb 90 c.y.
Fence
C=0 F=53#

97 — 9.49
130+50
Exc 0
Emb 105 c.y.
Fence
C=0 F=51#

98 — 9.34
130+00
Exc 0
Emb 92 c.y.
Fence
C=0 F=62#

95 — 9.19
129+50
Exc 3
Emb 67 c.y.
Fence
C=0 F=37#

96 — 9.04
129+00
Exc 7
Emb 60 c.y.
Fence
C=3 F=35#

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

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

5605.38

Sheet 10 of 11 Sheets

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Ham	F19(4)	1959	30	40

Rev. 3/20/59

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, NO. — BY S. K. Nakao 8-4-59; 8-5-59; 8-7-59; 8-10-59; DATE

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

Detour Excavated to Constr. Berm at End of Levee Sta 142+80 From Edge Shoulder to Top Levee.

Detour Excavated to Constr. Berm at End of Levee Sta 142+80 From Edge Shoulder to Top Levee.

Side Rd.

Side Rd.

Curve Marker

7.71 6.95
138+00
C = 110 #
F = 0 #
203
Exc 147 c.y.
Emb 0 c.y.

7.30 7.51
137+50
C = 100 #
F = 0 #
150
Exc 45 c.y.
Emb 0 c.y.

7.45 8.30
137+00
C = 0 #
F = 10 #
56
Exc 0 c.y.
Emb 40 c.y.

7.85 9.11
136+50
C = 0
F = 86 #
24
Exc 0
Emb 95 c.y.

7.95 9.74
136+00
C = 0
F = 67 #
Exc 0
Emb 137 c.y.

7.57 10.20
135+50
C = 0
F = 81 #
Exc 0
Emb 178 c.y.

7.54 10.49
135+00
C = 0
F = 111 #
Exc 0
Emb 200 c.y.

7.69 10.60
134+50
C = 0
F = 105 #
Exc 0
Emb 190 c.y.

7.70 10.54
134+00
C = 0
F = 100 #
Exc 0
Emb 176 c.y.

7.71 10.37
133+50
C = 0
F = 90 #
Exc 0
Emb 156 c.y.

7.30 10.26
143+00
C = 161 #
F = 0
258
Exc 210 c.y.
Emb 0

7.37 9.10
142+50
C = 105 #
F = 0
240
Exc 118 c.y.
Emb 0

7.71 7.96
142+00
C = 22 #
F = 0 #
111
Exc 60 c.y.
Emb 0

7.58 7.15
141+50
C = 45 #
F = 0
124
Exc 151 c.y.
Emb 0

7.60 6.66
141+00
C = 120 #
F = 0
168
Exc 278 c.y.
Emb 0

7.45 6.50
140+50
C = 175 #
F = 0 #
223
Exc 255 c.y.
Emb 0

5.53 6.50
140+00
C = 100 #
F = 0 #
143
Exc 185 c.y.
Emb 0 c.y.

5.18 6.50
139+50
C = 100 #
F = 0 #
Exc 194 c.y.
Emb 0 c.y.

5.43 6.50
139+00
C = 110 #
F = 0 #
Exc 264 c.y.
Emb 0 c.y.

7.54 6.62
138+50
C = 175 #
F = 0 #
Exc 264 c.y.
Emb 0 c.y.

8.08 9.55
148+00
C = 0
F = 44 #
Exc 0
Emb 132 c.y.

7.70 9.91
147+50
C = 0
F = 90 #
Exc 0
Emb 200 c.y.

7.39 10.41
147+00
C = 0
F = 117 #
Exc 0
Emb 210 c.y.

7.52 10.84
146+50
C = 0
F = 110 #
Exc 0
Emb 201 c.y.

7.62 11.27
146+00
C = 0
F = 123 #
C = 0
F = 107
Exc 0
Emb 223 c.y.

8.49 11.71
145+50
C = 0
F = 134 #
Exc 0
Emb 228 c.y.

9.09 12.00
145+00
C = 0
F = 112 #
Exc 0
Emb 176 c.y.

10.25 11.99
144+50
C = 0
F = 78 #
Exc 17
Emb 00 c.y.

11.06 11.70
144+00
C = 18
F = 20 #
Exc 80 c.y.
Emb 27 c.y.

11.54 11.12
143+50
C = 68 #
F = 0 #
Exc 184 c.y.
Emb 0 c.y.

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.

5605.39

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	F 191(4)	1953	40	40

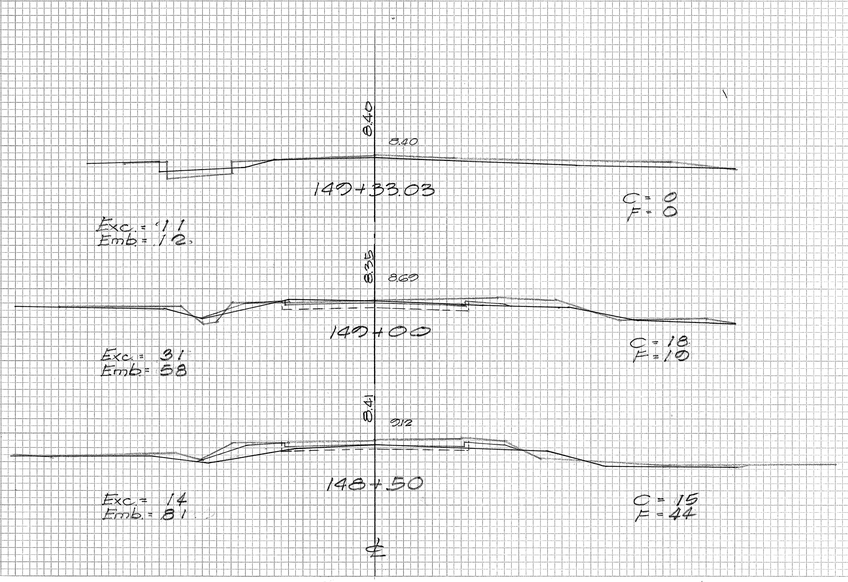
Rev. 3/20/53

FINAL SURVEY
NOTE BOOK
NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

ORIGINAL SURVEY
NOTE BOOK
NO.

	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		



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