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

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

EXC = 285.4
EMB = 0
21.6
19.02
7+62±
S.E. = .33
¢ Rd.
Rail
G = 209
F = 0
EXC = 424.8
EMB = 0
20.5
18.64
7+00
¢ Rd.
Rail
G = 158
F = 0
S.E. = .15
EXC = 550.0
EMB = 0
17.3
17.95
6+00
S.E. = .12
¢ Rd.
Rail
G = 139
F = 0
EXC = 392.6
EMB = 0
17.4
EP
17.17
5+00
¢ Rd.
Rail
G = 73
F = 0
EXC = 201.9
EMB = 0
15.4
F
16.29
4+00
¢ Rd
Rail
G = 36
F = 0
EXC = 137.0
EMB = 3.7
14.2
F
15.36
3+00
¢ Rd.
Rail
G = 38
F = 2
EXC = 96.3
EMB = 63.0
12.2
14.43
2+00
¢ Rd
Rail
G = 14
F = 32
EXC = 48.2
EMB = 146.3
10.3
¢ Tr.
13.50
1+00
¢ Tr.
¢ Tr.
Rail
G = 12
F = 47
EXC = 25.9
EMB = 238.9
10.0
12.57
0+00
Rail
G = 2
F = 82

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	D.C. 39(A)	1941	14	50

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.14

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	D.C. 39-A(2)	1941	15	50

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

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

C=315
F=0
℄ Rd
SW
20.74
13+00
24.2
EXC=613.0
EMB=0
C=296
F=0
℄ Rd
SW
20.67
12+50
23.6
EXC=565.7
EMB=0
C=299
F=0
℄ Rd
SW
20.59
12+00
23.7
EXC=550.9
EMB=0
C=202
F=0
℄ Rd
20.51
11+50
22.9
EXC=463.9
EMB=0
C=151
F=0
℄ Rd
20.40
11+00
21.8
EXC=268.5
EMB=0
C=139
F=0
℄ Rd
Edge Road + Rd. to Camp
20.27
10+50
21.5
EXC=313.9
EMB=0
Rail
C=200
F=0
℄ Rd
20.10
10+00
22.3
EXC=340.7
EMB=0
Rail
C=168
F=0
℄ Rd
19.92
9+50
21.8
EXC=319.4
EMB=0
Rail
C=177
F=0
℄ Rd
19.69
9+00
21.6
EXC=327.8
EMB=0
Rail
C=171
F=0
℄ Rd
19.48
8+50
21.6
EXC=357.0
EMB=0
Rail
C=202
F=0
℄ Rd
19.22
8+00
21.5

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K & E CO. No. 345-3 MADE IN U.S.A. 33828-3

5088.15

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C 39 A(2)	1941	16	50

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

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

sw
C=0
F=168
21.47
8+00
17.7
℄ Rd
EXC=0
EMB=347.2
C=0
F=165
21.40
17+50
17.5
EXC=0
EMB=308.3
C=0
F=161
¾" Pipe
21.32
17+00
17.4
EXC=0
EMB=301.9
C=0
F=61
21.25
16+50
18.9
EXC=0
EMB=205.6
C=67
F=0
21.18
16+00
20.8
EXC=62.0
EMB=56.5
℄ Rd
C=148
F=0
21.11
15+50
22.2
1" Pipe
EXC=199.1
EMB=0
C=226
F=0
21.03
15+00
22.8
1" Pipe
EXC=346.3
EMB=0
C=294
F=0
20.96
14+50
23.1
EXC=435.2
EMB=0
¾" Pipe
C=292
F=0
20.89
14+00
23.7
EXC=496.3
EMB=0
C=347
F=0
20.81
13+50
24.5
EXC=591.7
EMB=0

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U.S.A.

50SS.16

FAP-39A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39 A(2)	1941	17	50

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

C = 14
F = 20
23.14
22.6
27+00
EXC = 111.1
EMB = 44.4
C = 0
F = 97
22.75
20.8
26+00
EXC = 25.9
EMB = 216.7
C = 0
F = 112
22.49
20.2
25+00
EXC = 0
EMB = 387.0
C = 0
F = 225
22.35
18.1
24+00
S.E. = .33
EXC = 0
EMB = 624.1
23+67.63 P.C.
EXC = 0
EMB = 970.4
C = 0
F = 299
22.20
16.9
23+00
S.E. = .20
C = 0
F = 296
22.05
16.3
22+00
EXC = 0
EMB = 1101.9
C = 0
F = 332
21.91
15.4
21+00
EXC = 0
EMB = 1163.0
C = 0
F = 407
21.76
14.3
20+00
EXC = 0
EMB = 1368.5
Normal Section
C = 0
F = 314
SW
1.0'
New ℄
21.69
15.4
19+50
EXC = 0
EMB = 667.6
C = 0
F = 253
2.5'
New ℄
SW
21.62
17.1
Ed
19+00
S.E. = .16
EXC = 0
EMB = 525.0
18+80.35 P.T.
C = 0
F = 207
4.5'
New ℄
℄
21.54
17.8
18+50
S.E. = .33
SW
Ec
EXC = 0
EMB = 499.7

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A.

5088.17

FAP-39A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39 A(2)	1941	18	50

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

C=
F=
C=
F=
C=136
F=2
C=236
F=0
C=433
F=1
C=333
F=0
C=178
F=0
C=46
F=4
Inv d
VOID
VOID
280
32+00
277
31+50
See next sheet for stations 31+50 and 32+00
276
26.59
31+00
272
26.01
30+50
279
25.44
30+00
278
24.97
29+50
264
24.51
29+00
242
23.74
28+00
Inv
Inv
Str
55
EXC=
EMB=
EXC=
EMB=
EXC=213.9
EMB=1.9
EXC=344.5
EMB=1.9
EXC=619.5
EMB=0.9
EXC=709.3
EMB=0.9
EXC=473.2
EMB=0
EXC=414.8
EMB=7.4

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U.S.A. 33828-3

5088.18

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	39 C N(2)	1941	19	50

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		

EXC=86.9
EMB=97.9
E.C.
℄ Rd.
27.1
29.40
33+00
24.41
C=153
F=161
EXC=118.9
EMB=105.3
E.C.
28.3
28.80
32+62.3
Inv't
23.99
C=211
F=149
EXC=115.6
EMB=126.1
23.0
29.08
32+79.8
℄ Str.
24.18
Inv't
E.C.
C=156
F=176
EXC=89.1
EMB=73.4
E.C.
28.7
28.62
32+50
℄ Rd.
23.85
E.C.
C=180
F=182
E.C.
EXC=234.3
EMB=169.5
Inv't
28.0
27.89
32+00
23.30
E.C.
Inv't
C=73
F=1
Stream Grade = +1.106%
EXC=135.5
EMB=0.0
Inv't
27.7
27.22
31+50
E.C.
Inv't
C=95
F=0

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. 33828-3

5088.19

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39 A(2)	1941	20	50

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

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

EXC=104.4
EMB=103.4
Inv't
32.4
33.35
35+50
27.17
C=131
F=186
EXC=242.6
EMB=367.6
31.8
32.56
Inv't
Inv't
35+00
26.62
C=131
F=211
EXC=290.8
EMB=350.0
31.5
Inv't
31.77
Inv't
34+50
26.07
C=183
F=167
EXC=338.0
EMB=355.5
30.3
30.98
Inv't
D.R.M.W.
D.R.M.W.
℄ Rd.
34+00
25.51
C=182
F=217
EXC=307.4
EMB=432.4
Inv't
29.7
30.19
33+50
D.R.M.W.
D.R.M.W.
24.96
C=150
F=250
EXC=166.9
EMB=244.4
28.9
29.66
33+17
℄ Rd
24.57
C=123
F=150

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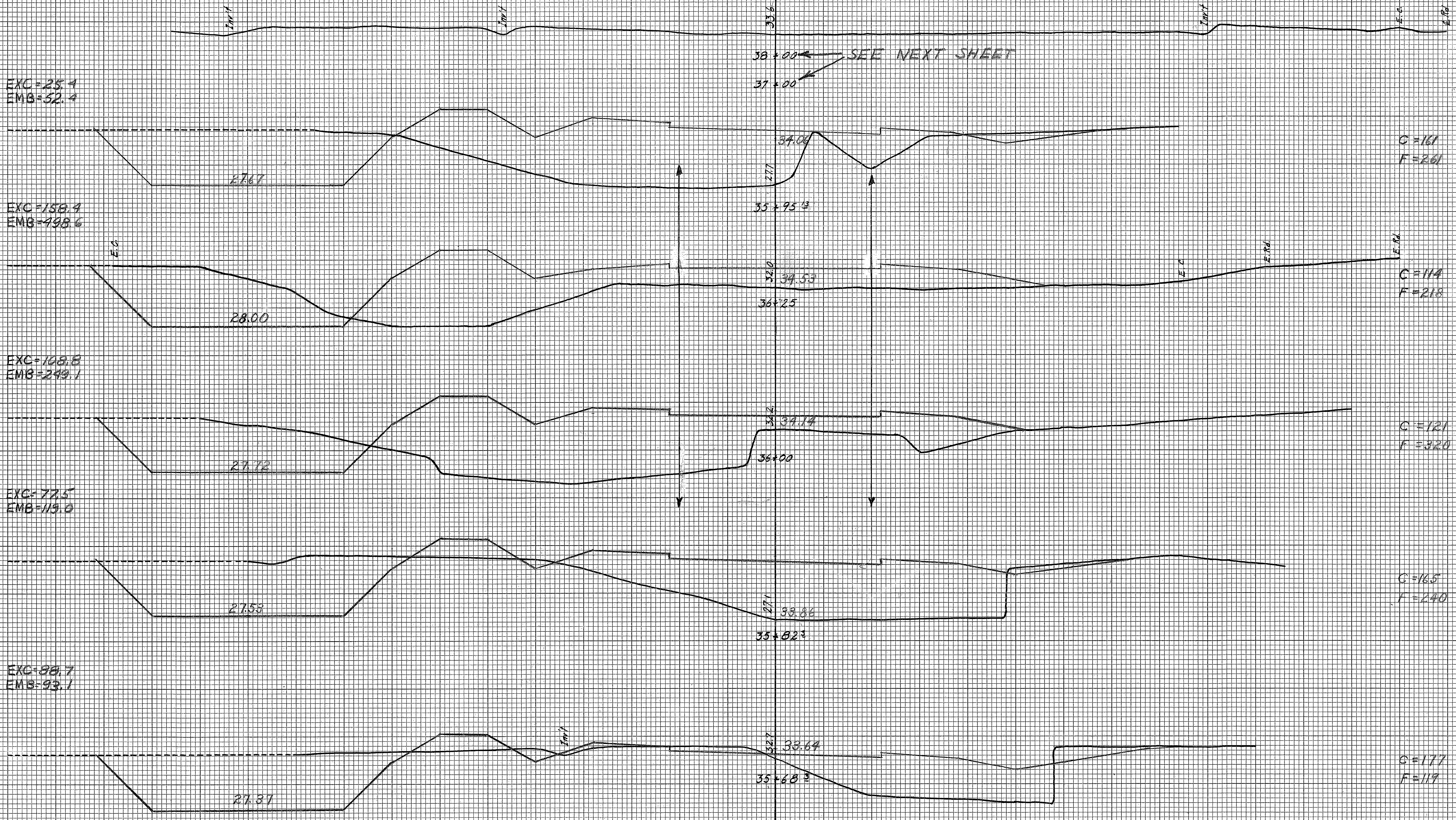
KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U.S.A. 33828-3

5088.20

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39 A 2	1941	21	50


Int'
Int'
33.6
Int'
E.c.
E.Rd
38+00
SEE NEXT SHEET
37+00
EXC=25.4
EMB=52.4
34.06
27.7
27.67
C=161
F=261
35+95 13
EXC=158.4
EMB=498.6
E.c.
32.0
34.53
28.00
36+25
E.c
E.Rd.
E.Rd.
C=114
F=218
EXC=108.8
EMB=249.1
32.2
34.14
36+00
27.72
C=121
F=320
EXC=77.5
EMB=119.0
27.1
33.86
27.53
35+82 3
C=165
F=240
EXC=88.7
EMB=93.1
Int'
32.7
33.64
35+68 3
27.37
C=177
F=119

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

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
NOTE BOOK TEMPLATE		
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. 33828-3

5088.21

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-A(2)	1941	22	50

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

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

C=0
F=241
37.33
34.7
39+00
EXC=0
EMB=354.3
C=0
F=130
37.41
33.6
38+00
EXC=0
EMB=779.6
C=0
F=141
35.72
32.6
37+00
EXC=0
EMB=594.4
EXC=
EMB=
C=
F=
32.0
36+25
EXC=
EMB=
C=
F=
32.2
36+00
EXC=
EMB=
C=
F=
27.7
35+95±
EXC=
EMB=
C=
F=
27.1
35+82±
EXC=
EMB=
C=
F=
32.7
35+68±
EXC=
EMB=
C=
F=
32.4
35+50

See 3 Preceding Sheets.

P10Λ

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	S.C. 39-A2	1941	23	50

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

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

C=1273
F=0
45.74
59.1
41+81
EXC = 929.6
EMB = 0
C=1443
F=0
44.41
56.9
41+50
EXC = 1387.0
EMB = 0
C=733
F=0
43.85
49.9
41+00
EXC = 1737.1
EMB = 0
C=224
F=11
42.64
44.1
40+50
EXC = 886.1
EMB = 10.2
C=102
F=143
41.48
38.2
40+00
EXC = 301.9
EMB = 142.6
C=0
F=247
40.15
34.6
39+39±
EXC = 114.9
EMB = 439.1

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KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.23

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-AQ	1941	24	50

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

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

C=0
F=494
55.43
45.4
45+00
EXC=0
EMB=989.9
C=0
F=209
53.77
49.6
44+50
MS
EXC=0
EMB=650.9
C=631
F=0
52.76 or
53.02
57.9
44+18.46
44+14.08
Eq
EXC=368.5
EMB=122.1
C=1128
F=0
51.26
66.0
43+66
EXC=1566.2
EMB=0
C=1832
F=0
49.73
72.5
43+16
EXC=2740.8
EMB=0
C=1537
F=0
47.35
64.8
42+33
EXC=5178.3
EMB=0
C=13[illegible]
F=0
46.45
62.1
42+00
EXC=1775.9
EMB=0

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K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.24

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39 A(2)	1941	25	50

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

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

C=281
F=0
70.68
74.3
49+50
EXC=433.3
EMB=0
C=371
F=0
68.99
73.3
49+00
EXC=603.7
EMB=0
C=445
F=0
67.29
73.0
48+50
EXC=755.6
EMB=0
C=443
F=0
65.61
71.2
48+00
EXC=822.2
EMB=0
C=316
F=0
63.91
68.0
47+50
EXC=758.3
EMB=0
C=302
F=0
62.95
66.7
47+21.8
EXC=354.1
EMB=0
C=172
F=18
62.21
62.6
47+00
EXC=191.4
EMB=19.4
C=9
F=336
60.52
52.8
46+50
MS
EXC=167.6
EMB=355.6
C=0
F=649
58.83
48.6
46+00
S.W.
EXC=8.3
EMB=912.1
C=0
F=575
MS
57.13
45.3
45+50
EXC=0
EMB=1133.4

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33628-3

5088.25

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	39 D.C. R(2)	1941	26	50

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

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

C = 433
F = 0
84.23
89.7
53+50
EXC = 793.5
EMB = 0
C = 406
F = 0
82.54
86.8
53+00
EXC = 776.9
EMB = 0
C = 310
F = 0
81.51
84.7
52+69.6
EXC = 403.1
EMB = 0
C = 136
F = 10
80.84
81.0
52+50
EXC = 161.9
EMB = 3.6
C = 133
F = 117
80.00
77.4
52+25
EXC = 124.6
EMB = 58.8
C = 132
F = 70
79.15
79.7
52+00
EXC = 122.7
EMB = 90.3
C = 157
F = 14
78.26
80.7
51+73.2
EXC = 140.8
EMB = 44.8
C = 171
F = 23
77.46
79.6
51+50
EXC = 144.0
EMB = 16.2
C = 114
F = 53
75.76
75.9
51+00
EXC = 263.9
EMB = 70.4
C = 140
F = 35
74.07
74.7
50+50
EXC = 235.2
EMB = 81.5
C = 187
F = 0
72.37
74.1
50+00
EXC = 302.8
EMB = 32.4

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. 33828-3

5088.26

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-A(4)	1941	27	50

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

C=0
F=425
99.47
91.1
58+00
EXC=0
EMB=753.7
C=0
F=498
97.78
87.9
57+50
EXC=0
EMB=854.6
C=0
F=528
96.08
86.0
57+00
EXC=0
EMB=950.0
C=0
F=388
94.37
86.2
56+50
EXC=0
EMB=848.2
C=0
F=193
92.70
88.0
56+00
EXC=0
EMB=538.0
C=81
F=0
91.85
92.2
55+75
EXC=37.5
EMB=89.4
C=309
F=0
91.00
94.3
55+50
EXC=180.6
EMB=0
C=369
F=0
89.31
94.6
55+00
EXC=627.8
EMB=0
C=311
F=0
87.63
91.9
54+50
EXC=629.6
EMB=0
C=424
F=0
85.92
91.4
54+00
EXC=680.6
EMB=0

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. 33828-3

5088.27

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	29-C(2)	1941	28	50

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

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

C=0 F=171
117.97
114.4
63+50
EXC=100.9 EMB=164.8
C=0 F=232
116.74
111.2
63+12
EXC=0 EMB=283.6
C=0 F=206
116.15
114.3
62+94
EXC=0 EMB=146.0
C=0 F=147
114.69
111.9
62+50
EXC=0 EMB=287.6
C=0 F=341
113.02
107.0
62+00
EXC=0 EMB=451.9
C=0 F=160
111.32
107.6
61+50
EXC=0 EMB=463.9
C=0 F=217
108.63
104.9
61+00
EXC=0 EMB=349.1
C=0 F=292
107.74
101.8
60+50
EXC=0 EMB=471.3
C=0 F=365
106.24
98.8
60+00
EXC=0 EMB=608.3
C=0 F=365
104.55
97.4
59+50
EXC=0 EMB=675.9
C=0 F=376
102.86
95.4
59+00
EXC=0 EMB=686.1
C=0 F=389
101.16
93.0
58+50
EXC=0 EMB=708.3

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. 33628-3

5088.28

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	37-C(20)	1941	29	50

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

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

C= 65
F= 65
127.07
125.0
66+50
EXC=161.1
EMB=60.2
C= 5
F=66
126.48
125.1
66+29.2
EXC=26.3
EMB=49.2
C=67
F=31
126.05
124.0
66+14.8
EXC=19.9
EMB=26.8
C=136
F=1
125.63
128.2
66+00
EXC=61.0
EMB=9.8
C=249
F=0
125.33
128.2
65+90
EXC=75.0
EMB=0.2
C=190
F=0
124.14
125.9
65+50
EXC=325.2
EMB=0
C=223
F=0
122.65
123.2
65+00
EXC=382.4
EMB=0
C=218
F=0
122.15
124.1
64+83.2
EXC=138.0
EMB=0
C=151
F=1
121.13
121.8
64+50
EXC=226.2
EMB=0.6
C=109
F=7
119.56
119.8
64+00
EXC=240.7
EMB=7.4

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. 33828-3

5088.29

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

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

EXC = 755.8
EMB = 0
146.4
143.70
73+23
C = 244
F = 0
EXC = 172.5
EMB = 0
144.4
143.19
73+00
C = 161
F = 0
EXC = 442.6
EMB = 0
141.0
140.98
72+00
C = 78
F = 0
EXC = 150.0
EMB = 87.0
136.8
138.72
71+00
C = 3
F = 47
EXC = 5.6
EMB = 299.2
134.0
136.33
70+00
C = 0
F = 114
EXC = 0
EMB = 226.9
132.0
135.10
69+50
C = 0
F = 131
EXC = 0
EMB = 295.4
130.2
133.83
69+00
C = 0
F = 188
EXC = 0
EMB = 351.9
128.4
132.53
68+50
C = 0
F = 192
EXC = 12.1
EMB = 225.9
129.6
131.21
68+00
C = 13
F = 52
EXC = 69.4
EMB = 57.4
130.5
129.86
67+50
C = 62
F = 10
EXC = 158.4
EMB = 9.3
128.9
128.47
67+00
C = 109
F = 0

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	39 R(2)	1941	30	50

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. 33828-3

5088.30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	[illegible]	1941	31	50

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

C = 0
F = 326
C = 73
F = 26
C = 2
F = 141
C = 3
F = 92
C = 15
F = 46
C = 74
F = 6
C = 167
F = 0
C = 205
F = 0
C = 253
F = 0
C = 271
F = 0
C = 286
F = 0
165.30
83+00
158.1
164.24
162.3
82+53?
163.04
159.5
82+00
160.85
158.5
81+00
158.63
157.1
80+00
156.42
156.5
79+00
154.22
155.6
78+00
152.01
154.3
77+00
149.80
152.7
76+00
147.60
150.5
75+00
145.39
148.5
74+00
EXC = 0
EMB = 1346.4
EXC = 62.5
EMB = 301.2
EXC = 74.7
EMB = 166.4
EXC = 9.3
EMB = 431.5
EXC = 33.3
EMB = 255.6
EXC = 164.9
EMB = 96.3
EXC = 446.3
EMB = 11.1
EXC = 688.9
EMB = 0
EXC = 848.2
EMB = 0
EXC = 970.4
EMB = 0
EXC = 1031.5
EMB = 0

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

MADE IN U. S. A. 29420

5088.31

FAP-39A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	D.C. 39 A(2)	1941	32	50

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

C=0
F=93
175.31
87+00
EXC=44.8
EMB=337.4
C=13
F=203
173.92
86+48±
EXC=12.4
EMB=282.9
C=0
F=178
173.31
86+25
EXC=5.6
EMB=165.1
C=0
F=167
173.10
86+17±
EXC=0
EMB=49.8
C=7
F=263
172.46
86+00
EXC=2.2
EMB=137.0
C=0
F=375
170.11
85+00
EXC=13.0
EMB=1551.8
C=0
F=609
169.65
84+61±
EXC=0
EMB=356.9
C=0
F=672
169.01
84+55±
EXC=0
EMB=615.3
C=0
F=558
168.10
84+43±
EXC=0
EMB=286.1
C=0
F=701
167.65
84+00
EXC=0
EMB=710.8
Edge
Edge RR
℄ RR
℄ Str
Str

5088.32

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. 33828-3

FAP-39A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	39-A(2)	1941	33	50

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

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

C=54
F=0
198.86
198.9
95+00
EXC=198.2
EMB=0
C=73
F=0
195.86
196.1
94+00
EXC=235.2
EMB=0
C=59
F=1
192.86
192.6
93+00
EXC=244.4
EMB=1.9
EXC=174.1
EMB=18.5
C=35
F=9
189.86
189.2
92+00
EXC=135.2
EMB=27.8
Edge
℄ Water Run
Edge
C=38
F=6
186.86
186.3
91+00
EXC=82.9
EMB=62.2
Top Edge
184.47
181.6
℄ W. Run
90+20±
C=18
F=36
EXC=16.0
EMB=29.0
183.1
183.86
90+00
C=25
F=42
EXC=109.3
EMB=133.3
℄ W. Run
180.91
179.5
89+00
C=34
F=30
EXC=125.9
EMB=220.4
178.06
176.4
88+00
C=34
F=89
EXC=48.4
EMB=189.6
℄ Str.
172.9
℄ W. Run
177.05
87+63±
C=38
F=193

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. 33828-3

5088.33

FAP - 39A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	39-A(2)	1941	34	50

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

107+00
232.93
235.7
C=249
F=0
EXC=940.7
EMB=0
106+00
230.63
232.6
C=119
F=0
EXC=681.5
EMB=0
105+00
228.17
228.9
C=109
F=0
EXC=422.2
EMB=0
104+00
225.55
225.7
C=80
F=0
EXC=350.0
EMB=0
103+00
222.78
222.3
C=40
F=1
EXC=222.2
EMB=1.9
102+00
219.86
219.1
C=28
F=13
EXC=125.9
EMB=25.9
101+00
216.86
215.7
C=21
F=23
EXC=90.7
EMB=66.7
100+00
213.86
212.6
C=10
F=35
EXC=57.4
EMB=107.4
99+00
210.86
210.3
C=26
F=2
EXC=66.7
EMB=68.5
98+00
207.86
208.8
C=124
F=0
EXC=277.8
EMB=3.7
97+00
204.86
204.9
C=64
F=0
EXC=348.2
EMB=0
96+00
201.86
201.7
C=53
F=0
EXC=216.7
EMB=0

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. 33025-3

5088.34

F.A.P.-39A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	D.C. 39-A(2)	1941	35	50

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

C=53
F=0
C=0
F=119
C=40
F=51
C=172
F=0
C=367
F=0
C=420
F=0
C=378
F=0
C=334
F=0
C=261
F=0
C=259
F=0
247.8
247.55
114+00
242.1
245.47
113+00
242.8
244.16
112+37
245.3
243.40
112+00
246.6
242.65
111+64.1
248.2
241.94
111+30
245.9
241.32
111+00
243.4
239.24
110+00
240.8
237.17
109+00
237.9
235.09
108+00
F
EXC=520.4
EMB=0
EXC=56.7
EMB=220.4
EXC=46.6
EMB=196.3
EXC=145.3
EMB=34.0
EXC=358.4
EMB=0
EXC=497.0
EMB=0
EXC=443.3
EMB=0
EXC=1318.5
EMB=0
EXC=1101.9
EMB=0
EXC=963.0
EMB=0

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. 33828-3

5088.35

F.A.P. - 39A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C 39-A(2)	1941	36	50

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

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

C=99
F=385
257.78
S.E.=.58
248.2
118+60
EXC=73.3
EMB=636.3
C=63
F=336
256.11
S.E.=.36
247.8
118+00
EXC=180.0
EMB=801.1
C=51
F=286
254.64
S.E.=.14
248.2
117+40
EXC=126.7
EMB=691.1
C=116
F=76
253.77
253.9
117+00
EXC=123.7
EMB=268.2
C=225
F=0
252.72
255.4
116+49
EXC=322.1
EMB=71.8
C=315
F=0
251.70
255.6
116+00
EXC=490.0
EMB=0
C=269
F=0
250.78
254.0
115+56
EXC=475.9
EMB=0
C=228
F=0
249.62
252.3
115+00
EXC=515.4
EMB=0
F
F

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. 33828-3

5088.36

F.A.P.-39 A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	D.C. 39-A(2)	1941	37	50

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

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

C=0
F=447
266.31
257.4
121+00
EXC=0
EMB=982.5
C=0
F=403
265.28
257.5
120+75
EXC=0
EMB=393.5
C=0
F=378
264.28
256.1
120+50
EXC=0
EMB=361.4
C=0
F=402
262.38
℄ 125
252.5
120+00
EXC=0
EMB=722.2
C=0
F=431
℄ 125
260.61
251.6
119+50
EXC=0
EMB=826.9
119+02.12 P.C.
C=0
F=474
258.98
℄ 125
248.1
119+00
S.E.=.72
EXC=0
EMB=933.5

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.

5088.37

F.A.P. - 39 A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	DC 39 A (2)	1941	38	50

C=0
F=805
C=0
F=817
C=0
F=816
C=0
F=675
C=0
F=727
C=0
F=653
C=0
F=614
457
281.00
268.7
124+00
279.69
264.6
123+75
278.38
262.8
457
123+50
275.75
263.9
123+00
273.20
259.9
122+50
270.76
258.6
122+00
268.41
258.8
121+50
EXC=52.7
EMB=590.2
EXC=0
EMB=750.9
EXC=0
EMB=756.0
EXC=0
EMB=1280.5
EXC=0
EMB=1298.1
EXC=0
EMB=1277.9
EXC=0
EMB=1173.2

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. 33825-3

50SS.38

F.A.P.- 39 A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-A(2)	1941	39	50

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 E.
DATE

F=0
C=178
F=0
C=1175
F=0
C=847
F=15
C=200
F=51
C=138
C=89
F=191
292.03
3072
126+10
290.45
2970
125+80.02
288.88
2940
125+50
286.25
2873
125+00
283.63
2846
124+50
282.68
2816
124+32
EXC=318.2
EMB=0
EXC=1250.8
EMB=0
EXC=1068.5
EMB=0
EXC=969.5
EMB=13.9
EXC=313.0
EMB=61.1
EXC=75.7
EMB=80.7
℄ Sta.
℄ Sta.
℄ Sta.
℄ Sta.
℄ Sta.

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. 33828-3

5088.39

FAP - 39 A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	39-A(2)	1941	40	50

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

C=4
F=86
304.11
302.4
127+50
EXC=31.5
EMB=158.3
C=36
F=69
301.77
300.8
128+00
EXC=37.0
EMB=143.5
F=32
C=104
299.32
299.6
MS
127+50
EXC=129.6
EMB=93.5
F=0
C=203
296.75
298.0
127+00
MS
EXC=284.3
EMB=29.6
F=0
C=571
294.13
297.6
126+50
EXC=716.7
EMB=0
F=0
C=1277
292.39
298.0
126+17
EXC=1129.3
EMB=0

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.40

F.A.P. - 39A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	U.S. 39 A (2)	1941	41	50

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

F=48
C=94
320.3
319.91
133+00
S.E.=.57
103
EXC=272.2
EMB=105.6
132+57.99 P.T. S.E.=.72
F=18
C=100
319.5
318.62
132+50
EXC=179.7
EMB=61.1
F=5
C=142
318.8
317.21
132+00
EXC=224.1
EMB=21.3
F=28
C=83
315.8
315.69
131+50
MS
EXC=208.4
EMB=30.6
F=38
C=61
313.5
314.04
131+00
EXC=133.4
EMB=61.1
F=52
C=68
311.7
312.29
130+50
EXC=119.5
EMB=83.4
F=99
C=32
MS
308.5
310.41
130+00
EXC=32.6
EMB=139.9
F=59
C=49
307.1
308.43
129+50
EXC=75.0
EMB=146.3
F=85
C=30
304.6
306.32
129+00
EXC=73.2
EMB=133.3
EXC=
EMB=

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.41

F.A.P. - 39 A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-A (2)	1941	42	50

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

C=9 F=185
C=15 F=117
C=19 F=95
C=22 F=85
C=17 F=79
C=19 F=65
C=28 F=31
C=53 F=19
325.73
322.0
141+00
326.34
323.7
140+00
326.61
324.4
139+00
326.51
324.7
138+00
326.08
323.8
137+00
325.23
323.4
136+00
323.72
323.0
135+00
134+58 NORMAL SECTION
322.15
321.9
134+00
SE = .21
Edge Road
F
℄ Road
Edge Road
Edge Road
EXC=16.7 EMB=855.6
EXC=44.4 EMB=559.3
EXC=63.0 EMB=392.6
EXC=75.9 EMB=333.3
EXC=72.2 EMB=303.7
EXC=66.7 EMB=266.7
EXC=97.0 EMB=177.8
EXC=150.0 EMB=74.1

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.42

F.A.P. - 39 A.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	DCT 39A(2)	1941	43	50

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

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

C=240
F=0
319.77
322.6
145+00
EXC=916.7
EMB=0
C=29
F=131
℄ Wtr. Run
Bank
321.78
319.6
144+00
℄ Wtr. Run
Edge Road
℄ Road
Edge Road
EXC=498.2
EMB=242.6
C=0
F=231
322.45
℄ Wtr. Run
316.3
143+62±
℄ Wtr. Run
℄ Wtr. Run
Edge Road
℄ Road
Edge Road
℄ Ditch
EXC=1.7
EMB=53.8
C=14
F=209
322.34
319.1
143+69
℄ Wtr. Run
Edge Road
℄ Road
Edge Road
℄ Ditch
EXC=24.7
EMB=195.2
C=0
F=224
℄ Wtr. Run
℄ Wtr. Run
322.64
316.4
143+51.8
℄ Wtr. Run
Edge Road
℄ Road
Edge Road
℄ Ditch
EXC=0
EMB=89.3
C=4
F=189
℄ Wtr. Run
322.73
318.3
143+45±
℄ Wtr. Run
Edge Road
℄ Road
Edge Road
℄ ditch
EXC=0.5
EMB=46.7
C=2
F=245
323.45
317.4
143+00
Edge Road
℄ Road
Edge Road
EXC=5.1
EMB=367.3
C=0
F=277
324.76
319.4
142+00
Edge Road
℄ Road
Edge Road
EXC=3.7
EMB=966.7

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.

5088.43

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Hav.	D.© 39-A(2)	1941	44	50

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

C=12
F=463
C=8
F=437
C=44
F=409
C=19
F=205
C=123
F=62
C=245
F=0
C=255
F=0
309.08
298.7
148+75
310.79
299.9
148+25
312.41
303.0
147+75
313.65
308.2
147+35
314.68
313.8
147+00
316.12
318.4
146+86.5
317.41
320.1
146+00
EXC=19.5
EMB=417.1
EXC=19.5
EMB=379.6
EXC=48.2
EMB=629.6
EXC=46.7
EMB=454.8
EXC=92.1
EMB=173.0
EXC=350.0
EMB=53.9
EXC=450.5
EMB=0

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.44

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-A2	1941	45	50

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

C=978
F=0
295.83
306.1
152+00
EXC=1800.0
EMB=0
C=770
F=0
298.11
307.6
151+50
EXC=1618.6
EMB=0
C=705
F=0
299.98
309.2
151+07.5
EXC=1160.9
EMB=0
C=264
F=14
302.40
304.7
150+50
EXC=1031.8
EMB=14.9
C=81
F=142
304.82
302.2
149+90
EXC=383.3
EMB=173.3
C=30
F=438
308.19
298.0
149+00
EXC=185.0
EMB=966.7

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. 33828-3

5088.45

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	S.E. 39A(1)	1941	46	50

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

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

In IC
C=2057
F=0
C=1898
F=0
C=1646
F=0
C=1302
F=0
C=966
F=0
286.00
304.3
154+00
287.64
307.3
153+67.22
288.50
305.5
153+50
291.00
303.4
153+00
293.46
304.7
152+50
EXC=3409.3
EMB=0
EXC=2400.8
EMB=0
EXC=1130.2
EMB=0
EXC=2729.6
EMB=0
EXC=2100.0
EMB=0

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KEUFFEL & ESSER CO., NEW YORK.
K & E CO. No. 345-3 MADE IN U.S.A. 35028-3

5088.46

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	DC 39-A(2)	1941	47	50

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

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

C=55
F=400
270.00
264.3
157+20
Edge Road
Edge Road
EXC=57.9
EMB=646.7
C=96
F=282
271.25
266.4
156+95
Ditch
Edge Road
Edge Road
EXC=69.9
EMB=315.7
C=233
F=177
273.50
274.1
156+50
Edge Road
Ditch
Edge Road
EXC=274.2
EMB=382.5
C=293
F=172
276.00
277.2
156+00
Ditch
Edge Road
EXC=497.1
EMB=323.2
C=501
F=0
278.50
284.7
155+50
C=870
F=0
281.00
290.4
155+00
EXC=735.2
EMB=159.3
C=1625
F=0
283.50
297.4
154+50
EXC=1269.4
EMB=0

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KEUFFEL & ESSER CO., NEW YORK.

K & E CO. No. 345-3 MADE IN U. S. A. 33828-3

5088.47

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTA SHEET
Hawaii	Haw	D.C. [illegible]-A(2)	1941	48	50

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

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

C=0
F=1170
257.30
237.8
159+34
EXC=0
EMB=1931.6
C=0
F=1153
260.10
240.5
159+18
EXC=0
EMB=659.3
C=0
F=1204
261.00
241.4
159+00
EXC=0
EMB=765.7
C=0
F=1163
Edge Road
Edge Road
263.50
245.5
158+50
EXC=0
EMB=2191.7
C=39
F=1070
Diversion Ditch
E Gutter
Edge Road
Pipe - Edge Road
266.00
250.4
158+00
EXC=36.1
EMB=2067.6
C=49
F=764
E Gutter
268.50
Edge Road
255.9
157+50
Edge Road
EXC=81.5
EMB=1683.2

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. 33828-3

5088.48

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	D.C. 39-A(2)	1934	49	50

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

C=205
F=0
233.69
166+00
235.9
Edge Road
F-Edge Road
EXC=677.8
EMB=0
C=274
F=0
235.92
165+00
238.7
Edge Road
F-Edge Road
EXC=887.0
EMB=0
C=204
F=0
238.77
164+00
240.9
Edge Road
Edge Road
EXC=885.2
EMB=0
C=25
F=109
242.23
163+00
244.1
Edge Road
Edge Road
EXC=424.1
EMB=201.9
C=0
F=334
246.31
162+00
239.5
Edge Road
Edge Road
EXC=46.3
EMB=220.4
C=0
F=555
Edge Road
Edge Road
℄ Gutter
251.00
161+00
239.7
EXC=0
EMB=1646.3
C=0
F=994
256.00
160+00
238.8
EXC=0
EMB=2568.6
C=0
F=1374
45°
257.20
159+75
237.0
EXC=0
EMB=1096.3

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. 33828-3

5088.49

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	[illegible]	1941	50	50

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

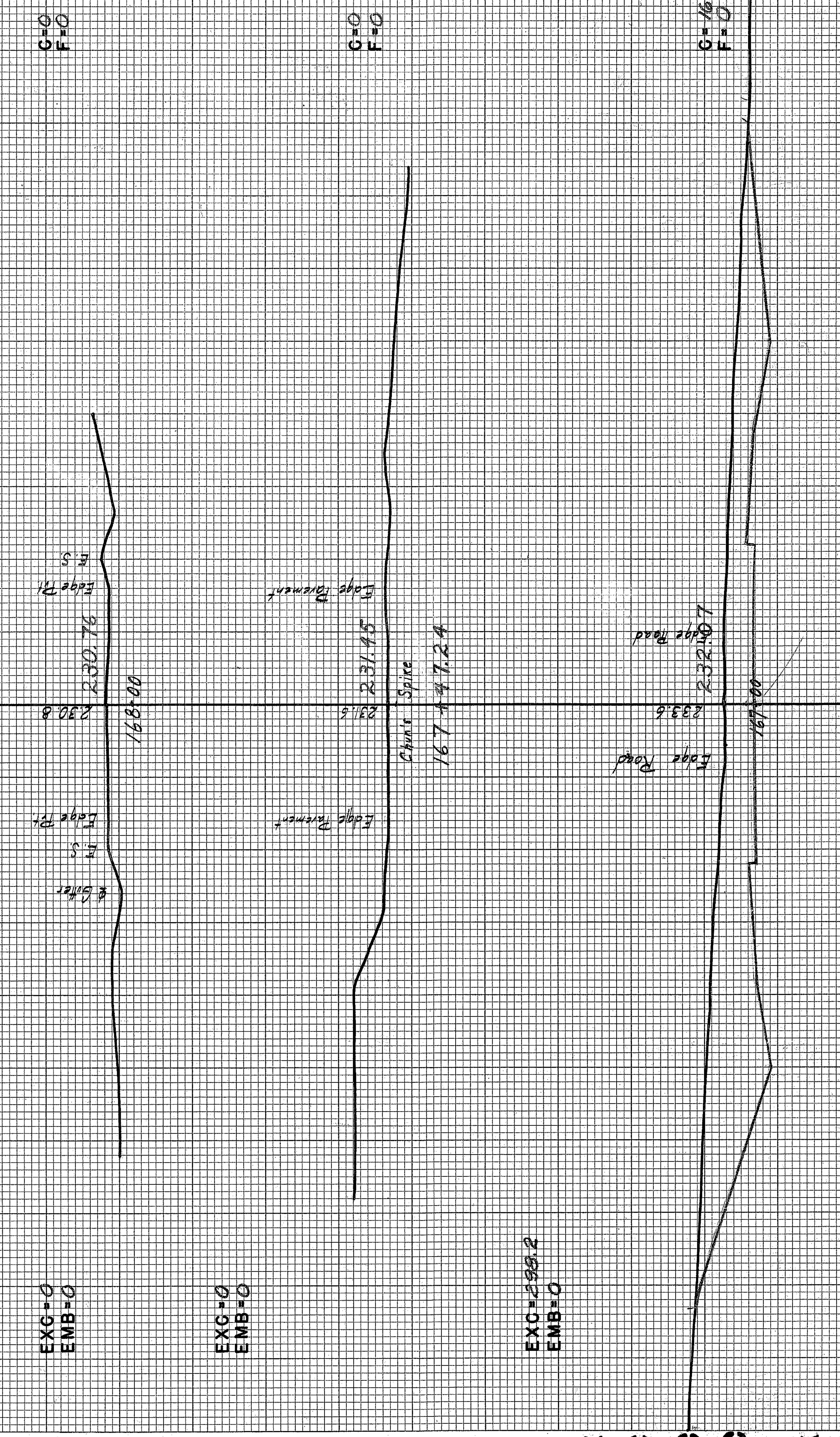
C=0
F=0
C=0
F=0
C=161
F=0
Edge Pt.
E.S.
230.76
230.8
168+00
Edge Pt.
E.S.
℄ Gutter
Edge Pavement
231.45
231.6
Chun's Spike
167+47.24
Edge Pavement
Edge Road
232.07
233.6
167+00
Edge Road
EXC=0
EMB=0
EXC=0
EMB=0
EXC=298.2
EMB=0

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. 33626-3

5088.50