FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWADA-NRD	RAE	17	24	

FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOK, RECORD, AREAS CHECKED, DATE, BY

ORIGINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, NOTE BOOK, RECORD, AREAS CHECKED, DATE, BY — No. 2

Map Location 2
Page 1920

Edge Pave.

Top Ass. Slope

Exc 229
Emb - 0

49.5 — 46.36 — 72+00 — C-207 F-0

Diversion Ditch

46.3 — 46.26 — 71+50 — C-40 F-0

Exc 1452
Emb - 0

53.6 — C - F -
76+50

Top Slope

Inlet Siphon

53.3 — 46.49 — 76+00 — C-404 F-0

Exc 1331
Emb - 0

53.4 — C - F -
75+50

Exc
Emb -

53.2 — 46.62 — 75+00 — C-380 F-0

Exc 1207
Emb - 0

52.5 — C - F -
74+50

Exc
Emb -

52.6 — 46.64 — 74+00 — C-339 F-0

Exc 963
Emb - 0

51.4 — C - F -
73+50

Exc
Emb -

51.1 — 46.55 — 73+00 — C-313 F-0

Exc
Emb -

50.0 — 46.46 — 72+50 — C - F -

Exc
Emb -

53.5 — C - F -
80+50

Exc
Emb -

54.0 — 45.57 — 80+00 — C-452 F-0

Exc 1641
Emb - 0

53.7 — C - F -
79+50

Exc
Emb -

54.0 — 45.80 — 79+00 — C-434 F-0

Exc 1604
Emb -

54.0 — C - F -
78+50

Exc
Emb -

53.9 — 46.04 — 78+00 — C-432 F-0

Exc 1546
Emb -

53.6 — C - F -
77+50

Exc
Emb -

53.7 — 46.27 — 77+00 — C-403 F-0

P.C. Sta. 76+52.78
Curve Right S.E. = .031/A

Exc 1494
Emb - 0

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

MADE IN U. S. A.

5103.17

53-A (1)

STATE	DIST. NO.	STATE	ROUTE NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
FLORIDA		5103	5103-A	1968	1	

FINAL SURVEY — ORIGINAL SURVEY

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

P.C. = 76 + 52.09

Exc = 352.8 ✓
Emb = 111.5 ✓

72+00 — 46.36 — 72+60 — 48.6 — C = 161 F = 20

714+50 — 48.8

76+50 — 46.39 — 53.5 — C = 474 F = 0
Exc = 830 ✓
Emb = 0

76+00 — 46.49 — 54.4 — C = 428 F = 0
Exc = 746 ✓
Emb = 0

75+50 — 46.57 — 52.3 — C = 384 F = 0
Exc = 629 ✓
Emb = 0

75+00 — 46.62 — 52.0 — C = 360 F = 0
Exc = 639 ✓
Emb = 0

74+50 — 46.64 — 51.4 — C = 350 F = 0
Exc = 593 ✓
Emb = 0

74+00 — 46.64 — 51.1 — C = 341 F = 0
Exc = 567 ✓
Emb = 0

73+50 — 46.61 — 50.3 — C = 301 F = 0
Exc = 551 ✓
Emb = 0

73+00 — 46.55 — 49.1 — C = 234 F = 0
Exc = 476 ✓
Emb = 0

72+50 — 46.46 — 47.6 — C = 220 F = 0

80+50 — 45.45 — 53.6 — C = 527 F = 0
Exc = 1006 ✓
Emb = 0

80+00 — 45.57 — 54.2 — C = 559 F = 0
Exc = 961 ✓
Emb = 0

79+50 — 45.69 — 54.2 — C = 479 F = 0
Exc = 919 ✓
Emb = 0

79+00 — 45.80 — 54.2 — C = 513 F = 0
Exc = 919 ✓
Emb = 0

78+50 — 45.92 — 53.5 — C = 479 F = 0
Exc = 867 ✓
Emb = 0

78+00 — 46.04 — 53.1 — C = 457 F = 0
Exc = 866 ✓
Emb = 0

77+50 — 46.16 — 52.3 — C = 478 F = 0
Exc = 895 ✓
Emb = 0

77+00 — 46.27 — 51.7 — C = 489 F = 0
Exc = 892 ✓
Emb = 0

EXC = 16,760
EMB = 17

PLATE 3 — CROSS SECTION ◑ P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
MADE IN U. S. A. 20420

5103.17A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NR(1)	1942	18	24

44.39	338	85+00	C-0 F-540
44.51	342	84+50	C-0 F-528
44.63	356	84+00	C-0 F-448
44.75	406	83+50	C-0 F-169
44.86	454	83+00	C-29 F-3
44.98	467	82+50	C-110 F-0
45.10	472	82+00	C-277 F-0
45.22	482	81+50	C-368 F-0
45.33	490	81+00	C-414 F-0
45.45	537	80+50	C-484 F-0

Exc - 0
Emb - 989

Exc - 0
Emb - 904

Exc - 0
Emb - 571

Exc - 27
Emb - 159

Exc - 129
Emb - 3

Exc - 358
Emb - 0

Exc - 597
Emb - 0

Exc - 724
Emb - 0

Exc - 831
Emb - 0

Exc - 867
Emb - 0

48.61	459	89+50	C-0 F-115
47.32	484	89+00	C-0 F-149
46.25	412	88+50	C-0 F-201
45.41	404	88+00	C-0 F-188
44.80	403	87+54	C-0 F-190
44.35	376	87+00	C-0 F-314
44.15	355	86+50	C-0 F-417
44.16	348	86+00	C-0 F-480
44.28	344	85+50	C-0 F-495

Exc - 0
Emb - 244

Exc - 0
Emb - 324

Exc - 0
Emb - 360

Exc - 0
Emb - 322

Exc - 0
Emb - 504

Exc - 0
Emb - 677

Exc - 0
Emb - 831

P.T. Sta. 85+78.4

Exc - 0
Emb - 903

Exc - 0
Emb - 958

66.19	706	94+00	C-252 F-0
64.55	702	93+50	C-302 F-0
	688	93+15.42	
62.68	652	93+00	C-162 F-0
60.57	590	92+50	C-2 F-36
58.23	566	92+00	C-0 F-48
55.87	544	91+50	C-3 F-37
53.70	532	91+00	C-8 F-2
51.81	503	90+50	C-2 F-49
50.10	480	90+00	C-1 F-66

Exc - 513
Emb - 0

Exc - 430
Emb - 0

Exc -
Emb -

Exc - 152
Emb - 33

Exc - 2
Emb - 78

Exc - 3
Emb - 79

Exc - 10
Emb - 36

Exc - 9
Emb - 47

Exc - 3
Emb - 106

Exc - 1
Emb - 168

70.41	721	98+50	C-105 F-0
70.78	708	98+00	C-26 F-1
71.04	712	97+50	C-45 F-0
71.15	719	97+00	C-60 F-0
70.84	721	96+50	C-94 F-0
70.37	723	96+00	C-119 F-0
69.69	717	95+50	C-132 F-0
68.76	718	95+00	C-161 F-0
67.59	714	94+50	C-173 F-0

Exc - 121
Emb - 0

Exc - 66
Emb - 0

Exc - 97
Emb - 0

Exc - 143
Emb - 0

Exc - 197
Emb - 0

Exc - 232
Emb - 0

Exc - 271
Emb - 0

Exc - 309
Emb - 0

Exc - 394
Emb - 0

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. 33620-3

5103.18
53-A(2)
30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NEN	1942	18-A	24

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

ORIGINAL SURVEY — SURVEYED BY: K.K.K.; STAKED BY: F.S.K.; NOTE BOOK: 1; NO.: 1; DATE: 5-1-42; AREAS: G.F.Richards; AREAS CHECKED BY: G.F.Richards 5-22-42

Exc.=0
Emb=821
44.39
85+00
C=0
F=474

Exc.=0
Emb=854
44.51
84+50
C=0
F=448

Exc.=0
Emb=748
44.63
84+00
C=0
F=360

Exc.=79
Emb=95
98
44.75
83+50
C=0
F=103

Exc.=261
Emb=3
44.86
83+00
C=85
F=3

Exc.=498
Emb=0
44.98
82+50
C=197
F=0

Exc.=771
Emb=0
45.10
82+00
C=341
F=0

Exc.=919 c.y.
Emb=0
45.22
81+50
C=492
F=0

Exc.=952
Emb=0
45.33
81+00
C=501
F=0

Exc=0
Emb=43
48.61
89+50
C=0
F=34

Exc.=0
Emb=120
47.32
89+00
C=0
F=96

Exc=0
Emb=241
46.25
88+50
C=0
F=164

Exc=0
Emb=274
45.41
88+00
C=0
F=132

Exc=0
Emb=228
44.78
87+50
C=0
F=114

Exc=0
Emb=340
44.35
87+00
C=0
F=253

Exc=0
Emb=539
44.15
86+50
C=0
F=329

Exc=0
Emb=629
44.16
86+00
C=0
F=350

Exc=0
Emb 305
3.26
44.21
P.T. 85+77.51
C=0
F=383

Exc=0
Emb=406
44.28
85+50
C=0
F=413

Exc=516
Emb=0
67.59
94+50
C=316
F=0

Exc=630
Emb=0
66.19
94+00
C=364
F=0

Exc=680
Emb=0
64.55
93+50
C=370
F=0

Exc=428
Emb=0
63.36
93+17
C=331
F=0

Exc=183
Emb=0
62.68
93+00
C=251
F=0

Exc=266
Emb=7
60.57
92+50
C=25
F=8

Exc=32
Emb=22
58.23
92+00
C=10
F=16

Exc=78
Emb=6
55.87
91+50
C=25
F=6

Exc=68
Emb=6
53.70
91+00
C=59
F=0

Exc=13
Emb=18
51.81
90+50
C=14
F=7

Exc=0
Emb=0
50.10
90+00
C=0
F=12

Exc=453
Emb=0
70.04
99+00
C=249
F=0

Exc=414
Emb=0
70.41
98+50
C=198
F=0

Exc=239
Emb=6
70.78
98+00
C=60
F=7

Exc=141
Emb=6
71.02
97+50
C=96
F=0

Exc=207
Emb=0
71.15
97+00
C=131
F=0

Exc=279
Emb=0
70.84
96+50
C=170
F=0

Exc=350
Emb=0
70.37
96+00
C=208
F=0

Exc=405
Emb=0
69.69
95+50
C=229
F=0

Exc=435
Emb=0
68.76
95+00
C=241
F=0

PLATE 3—CROSS SECTION C. P. P. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
MADE IN U. S. A. 20420

5103.18A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW. DA-NR(1)	1942	19	24

DS

Exc = 299
Emb = 191
68.6
67.07
103+00
C = 13
F = 206

Exc = 708
Emb = 0
72.3
67.44
102+50
C = 310
F = 0

Exc = 766
Emb = 0
76.2
67.81
102+00
C = 455
F = 0

Exc = 616
Emb = 0
74.5
68.18
101+50
C = 372
F = 0

Exc = 510
Emb = 0
73.7
68.55
101+00
C = 293
F = 0

Exc = 429
Emb = 0
73.3
68.93
100+50
C = 258
F = 0

Exc = 351
Emb = 0
72.9
69.29
100+00
C = 205
F = 0

Exc = 305
Emb = 0
73.0
69.97
99+50
C = 174
F = 0

Exc = 241
Emb = 0
72.7
70.03
99+00
C = 155
F = 0

Exc = 0
Emb = 2561
67.63
46.4
105+50
C = 0
F = 1409

Exc = 0
Emb = 2496
67.14
46.5
105+00
C = 0
F = 1357

Exc = 0
Emb = 2419
66.83
46.3
104+50
C = 0
F = 1339

Exc = 0
Emb = 1894
66.72
47.1
104+00
C = 0
F = 1274

Exc = 12
Emb = 905
66.80
54.1
103+50
C = 0
F = 771

Exc = 17
Emb = 802
68.6
71.56
107+50
C = 18
F = 172

Exc = 0
Emb = 1705
70.28
58.9
107+00
C = 0
F = 694

Exc = 0
Emb = 2280
69.20
50.7
106+50
C = 0
F = 1147

Exc = 0
Emb = 2522
68.32
47.7
106+00
C = 0
F = 1315

Contents Page 2-3

ORIGINAL SURVEY — DATE — BY — SURVEYED — PLOTTED — FINAL RATE — NOTE BOOK — AREAS — AREAS CHECKED — NO. 22

FINAL SURVEY — DATE — BY — SURVEYED — PLOTTED — FINAL RATE — NOTE BOOK — AREAS — AREAS CHECKED — NO. 2

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

5103.19

53-A (3)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-WB1	1942	19A	24

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

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED: A.C.F. — PLOTTED: A.C.F. — TEMPLATE — AREAS — AREAS CHECKED: G.P. Revised — BY — DATE

Exc = 0
Emb = 1872
66.80
103+50
C=0
F=760

Exc = 37
Emb = 306
67.07
103+00
C=40
F=111

Exc = 344
Emb = 103
67.41
102+50
C=331
F=0

Exc = 761
Emb = 0
67.81
102+00
C=491
F=0

Exc = 862
Emb = 0
68.18
101+50
C=440
F=0

Exc = 731
Emb = 0
68.56
101+00
C=350
F=0

Exc = 605
Emb = 0
68.93
100+50
C=303
F=0

Exc = 502
Emb = 0
69.30
100+00
C=239
F=0

Exc = 444
Emb = 0
69.67
99+50
C=240
F=0

Exc = 0
Emb = 2494
67.63
105+50
C=0
F=1386

Exc = 0
Emb = 2567
67.14
105+00
C=0
F=1386

Exc = 0
Emb = 2519
66.23
104+50
C=0
F=1335

Exc = 0
Emb = 2405
66.72
104+00
C=0
F=1262

Exc = 165
Emb = 116
71.56
107+50
C=81
F=124

Exc = 81
Emb = 730
70.28
107+00
C=0
F=664

Exc = 0
Emb = 1680
69.20
106+50
C=0
F=1150

Exc = 0
Emb = 2275
68.32
106+00
C=0
F=1301

PLATE 3 — CROSS SECTION G. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
MADE IN U.S.A. 20420

5103.19A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.DAMR(1)	1942	20	24	

FINAL SURVEY — DATE / BY / SURVEYED / PLOTTED / TEMPLATE / NOTE BOOK / NO. 2, Map / CHECKED

Loose leaf pages 1-3

ORIGINAL SURVEY — DATE / BY / SURVEYED / PLOTTED / TEMPLATE / NOTE BOOK / NO. 2, Map / CHECKED

110+00 — 602 — 80.83 — C=0, F=1282 — Exc = 0, Emb = 1986

109+50 — 650 — 78.57 — C=0, F=863 — Exc = 0, Emb = 1086

109+00 — 697 — 76.53 — C=0, F=310 — Exc = 29, Emb = 304

108+50 — 744 — 74.69 — C=31, F=18 — Exc = 128, Emb = 17

108+00 — 746 — 73.01 — C=107, F=0 — Exc = 116, Emb = 159

112+50 — 976 — 94.83 — C=159, F=0 — Exc = 227, Emb = 0

112+00 — 927 — 91.69 — C=86, F=0 — Exc = 80, Emb = 194

111+50 — 884 — 88.69 — C=0, F=209 — Exc = 0, Emb = 1190

111+00 — 676 — 85.86 — C=0, F=1076 — Exc = 0, Emb = 2502

110+50 — 593 — 83.26 — C=0, F=1626 — Exc = 0, Emb = 2693

P.C. Sta. 110+00.31
Curve Right S.E. = 0.0

116+50 — 1185 — 122.86 — C=0, F=169 — Exc = 0, Emb = 194

116+00 — 1141 — 119.36 — C=0, F=40 — Exc = 69, Emb = 37

115+50 — 1098 — 115.86 — C=74, F=0 — Exc = 136, Emb = 0

P.T. Sta. 115+02.39

115+00 — 1054 — 112.36 — C=73, F=0 — Exc = 134, Emb = 0

114+50 — 1010 — 108.86 — C=72, F=0 — Exc = 183, Emb = 0

114+00 — 967 — 105.36 — C=126, F=0 — Exc = 276, Emb = 0

113+50 — 923 — 101.86 — C=172, F=0 — Exc = 356, Emb = 0

113+00 — 880 — 98.36 — C=213, F=0 — Exc = 344, Emb = 0

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

5103.20

53-A ④

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NE-1	1942	20A	24

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

ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED BY J.C.F. & J.K.K. — PLOTTED J.C.F. — TRACED J.C.F. — TEMPLATE J. Kimura — AREAS S. K. Kimura — AREAS CHECKED S. K. Kimura — DATE

Exc= 0
Emb= 2782 ✓
80.82
110 +00.31
C=0
F=1401

Exc= 0
Emb=3007 ✓
78.97
109+50
C=0
F=1826

Exc= 0 ✓
Emb= 2703 ✓
76.83
109+00
C=0
F=1093

Exc= 65 ✓
Emb= 1017 ✓
74.69
108+50
C=70
F=5

Exc=149 ✓
Emb= 6 ✓
72.01
108+00
C=91
F=1

Exc= 304 ✓
Emb= 0
92.83
112+50
C=170
F=0

Exc= 239 ✓
Emb= 0
91.69
112+00
C=88
F=0

Exc= 82 ✓
Emb= 254 ✓
88.69
111+50
C=0
F=274

Exc= 0 ✓
Emb= 965 ✓
85.23
111+00
C=0
F=768

Exc= 0
Emb=2196 ✓
82.23
110+50
C=0
F=1604

Exc.= 0
Emb.= 430 ✓
122.86
116+50
C=0
F=160

Exc.= 19 ✓
Emb= 184 ✓
119.36
116+00
C=21
F=39

Exc.= 105 ✓
Emb.= 40 ✓
115.86
115+50
C=92
F=4

Exc.= 157 ✓
Emb.= 4
112.36
P.T. 115+02.81
C=88
F.=0

Exc.= 118 ✓
Emb.= 7
108.86
114+50
C=39
F=7

Exc.= 101 ✓
Emb.= 9 ✓
105.36
114+00
C=76
F=3

Exc.= 240 ✓
Emb.= 3 ✓
101.86
113+50
C=183
F=0

Exc= 316 ✓
Emb= 0
98.36
113+00
C=158
F=0

PLATE 3—CROSS SECTION G. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
MADE IN U.S.A. 29420

5103.20A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DAN.R.(1)	1942	21	24

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

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

Sta. 120+00
P.C. Sta. 119+94.61
Curve Left S.E. = .083'/ft.

Sta.	Elev.	Exc	Emb	C	F
121+00	157.7	413	0	225	0
120+50	154.2	337	0	221	0
120+00	149.7	132	119	143	0
119+50	140.7	0	387	0	128
119+00	132.6	0	674	0	290
118+50	128.6	0	881	0	438
118+00	123.0	0	875	0	514
117+50	120.3	0	663	0	431
117+00	119.6	0	420	0	285
126+00	189.3	557	0	333	0
125+50	185.6	402	0	269	0
125+00	180.7	259	0	165	0
124+50	175.3	194	0	115	29
124+00	171.6	157	0	95	12
123+50	167.6	158	0	75	50
123+00	167.2	252	0	96	23
122+50	166.4	383	0	176	2
122+00	164.7	440	0	238	0
121+50	161.8	428	0	237	0
130+50	207.3	155	71	64	56
130+00	206.6	238	25	103	21
129+50	205.1	302	8	154	6
129+00	202.9	361	3	172	1
128+50	200.9	494	2	218	2
128+00	199.9	657	0	315	0
127+50	199.1	784	0	395	0
127+00	197.4	821	0	452	0
126+50	194.9	711	0	435	0
135+00	225.9	0	1544	0	862
134+50	221.4	0	1386	0	805
134+00	218.3	0	1237	0	692
133+50	215.7	0	1053	0	644
133+00	215.4	0	658	0	493
132+50	216.2	59	239	0	218
132+00	216.2	104	98	64	40
131+50	212.6	90	122	48	66
131+00	209.7	105	113	49	66

P.T. Sta. 131+10.34

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

5103.21

(5)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NH21	1942	21A	24

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

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

Exc=404 ✓
Emb=0
184.21
121+00
C=216
F=0

Exc=387 ✓
Emb=0
150.82
120+50
C=202
F=0

Exc=383 ✓
Emb=0
147.00
P.C. 119 + 84.88
C=116
F=0

Exc= 75 ✓
Emb= 55 ✓
142.86
119+50
C=0
F=85

Exc=0 ✓
Emb=419 ✓
140.36
119+00
C=0
F=362

Exc=0 ✓
Emb=706 ✓
136.86
118+50
C=0
F=375

Exc=0
Emb=875 ✓
133.36
118+00
C=0
F=450

Exc=0
Emb=918 ✓
129.86
117+50
C=0
F=442

Exc=0 ✓
Emb=691 ✓
126.36
117+00
C=0
F=304

181.47
125+52.72
C=240
F=0

Exc= 380 ✓
Emb= 21 ✓
178.61
125+00
C=149
F=22

Exc=208 ✓
Emb=80 ✓
175.82
124+50
C=76
F=64

Exc= 94 ✓
Emb=165 ✓
172.96
124+00
C=25
F=114

Exc=56 ✓
Emb=232 ✓
170.02
123+50
C=35
F=137

Exc=103 ✓
Emb=174 ✓
167.01
123+00
C=76
F=51

Exc=183 ✓
Emb=55 ✓
163.72
122+50
C=122
F=8

Exc=309 ✓
Emb=7 ✓
160.76
122+00
C=212
F=0

Exc=400 ✓
Emb=0
157.87
121+50
C=220
F=0

Exc= 369 ✓
Emb= 33 ✓
199.56
129+00
C=221
F=15

Exc= 433 ✓
Emb= 14 ✓
196.36
128+50
C=247
F=0

Exc= 479 ✓
Emb=0
194.36
128+00
C=270
F=0

Exc= 646 ✓
Emb=0
191.76
127+50
C=428
F=0

Exc= 842 841
Emb=0
189.16
127+00
C=480
F=0

Exc= 899 ✓
Emb=0
186.56
126+50
C=491
F=0

Exc= 782 ✓
Emb=0
183.96
126+00
C=354
F=0

Exc= 520 ✓
Emb= 0

Exc= 7 ✓
Emb= 656 ✓
220.62
132+50
C=7
F=221

Exc= 43 ✓
Emb= 291 ✓
217.26
132+00
C=39
F=93

Exc= 70 ✓
Emb= 171 ✓
214.02
131+50
C=37
F=92

Exc= 67 ✓
Emb= 175 ✓
210.89
131+00
C=35
F=97

Exc= 87 ✓
Emb= 157 ✓
207.63
130+50
C=59
F=72

Exc= 149 ✓
Emb= 100 ✓
204.37
130+00
C=102
F=36

Exc= 258 ✓
Emb= 53 ✓
201.27
129+50
C=177
F=21

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

MADE IN U. S. A. 2640

5103.21A

✓ DS.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NRU	1942	22	24

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

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

℄

Exc = 50
Emb = 91

282.0
283.16
140+50

C=30 (39) F=35 (39A)

Exc = 41
Emb = 180

277.0
279.16
140+00

C=24 (34) F=63 (64)

Exc = 27
Emb = 226

271.8
275.16
139+50

C=20 (18) F=131 (119)

Exc = 8
Emb = 247

266.7
271.16
139+00

C=9 (10) F=113 (106)

Exc = 0
Emb = 376

262.8
267.16
138+50

C=0 F=154 (171)

Exc = 0
Emb = 579

256.7
263.16
138+00

C=0 F=274 (278)

Exc = 0
Emb = 694

251.7
259.16
137+50

C=0 F=351 (359)

Exc = 0
Emb = 806

246.6
255.16
137+00

C=0 F=399 (395)

Exc = 0
Emb = 886

241.9
251.16
136+50

C=0 F=471 (479)

Exc = 0
Emb = 1056

237.7
247.16
136+00

C=0 F=486 (499)

Exc = 0
Emb = 1404

231.7
243.16
135+50

C=0 F=654 (649)

Exc = 0
Emb = 630

323.3
331.16
146+50

C=0 F=310 (308)

Exc = 0
Emb = 608

320.2
327.16
146+00

C=0 F=370 (374)

Exc = 0
Emb = 453

316.4
323.16
145+50

C=0 F=287 (278)

Exc = 7
Emb = 261

313.3
319.16
145+00

C=0 F=202 (193)

Exc = 44
Emb = 88

310.4
315.16
144+50

C=7 F=80 (74)

Exc = 102
Emb = 32

308.7
311.16
144+00

C=40 (41) F=5 (5)

Exc = 156
Emb = 19

306.1
307.16
143+50

C=70 (65) F=20 (37)

Exc = 285
Emb = 1

303.6
303.16
143+00

C=99 (96) F=1 (1)

Exc = 417
Emb = 0

300.3
299.16
142+50

C=209 (205) F=0

Exc = 436
Emb = 0

296.1
295.16
142+00

C=241 (251) F=0

Exc = 375
Emb = 0

291.2
291.16
141+50

C=230 (233) F=0

Exc = 190
Emb = 32

287.6
287.16
141+00

C=175 (173) F=0

Exc = 1222
Emb = 0

388.4
374.27
152+00

C=772 (774) F=0

Exc = 898
Emb = 0

381.1
370.48
151+50

C=548 (519) F=0

Exc = 623
Emb = 0

376.7
366.67
151+00

C=422 (427) F=0

Exc = 347
Emb = 0

368.4
362.82
150+50

C=251 (251) F=0

Exc = 173
Emb = 9

361.6
358.94
150+00

C=124 (121) F=0

Exc = 62
Emb = 48

356.6
355.04
149+50

C=63 (63) F=10 (11)

Exc = 10
Emb = 145

348.6
351.11
149+00

C=4 (5) F=42 (49)

Exc = 7
Emb = 277

341.2
347.15
148+50

C=7 (7) F=15 (19)

Exc = 5
Emb = 356

336.0
343.16
148+00

C=0 F=184 (192)

Exc = 10
Emb = 382

331.1
339.16
147+50

C=5 (5) F=200 (210)

Exc = 6
Emb = 484

326.5
335.16
147+00

C=6 (6) F=213 (218)

P.C. Sta. 149+90.21
Curve Left

Exc = 3159
Emb = 0

418.9
393.16
154+50

C=1638 (1627) F=0

Exc = 3049
Emb = 0

417.3
389.38
154+00

C=1774 (1771) F=0

Exc = 2505
Emb = 0

414.3
385.61
153+50

C=1519 (1514) F=0

Exc = 1944
Emb = 0

402.3
381.83
153+00

C=1184 (1178) F=0

Exc = 1563
Emb = 0

393.5
378.05
152+50

C=916 (917) F=0

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

80098 MADE IN U.S.A.

5103.22

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NR(1)	194	22A	74

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

Exc= 0
Emb= 8.17 ✓
251.16
135+50
C=0
F=459

Exc= 0
Emb= 891 ✓
247.16
136+00
C=0
F=504

Exc= 0
Emb= 1.035 ✓
243.16
135+50
C=0
F=614

Exc= 0
Emb= 12.72 ✓
239.16
135+00
C=0
F=760

Exc= 0
Emb= 1.417 ✓
235.22
134+50
C=0
F=771

Exc= 0 ✓
Emb= 1367
231.39
134+00
C=0
F=705

Exc= 0 ✓
Emb= 1220
227.68
133+50
C=0
F=613

Exc= 0 ✓
Emb= 1.019
224.09
133+00
C=0
F=487

Exc= 489 ✓
Emb=0
291.16
141+50
C=212
F=0

Exc= 475 ✓
Emb=0
287.16
141+00
C=256
F=0

Exc=115 ✓
Emb=70 ✓
279.45
140+35.83 P.O.T.
C=144
F=0

Exc= 28 ✓
Emb= 244 ✓
279.16
140+00
C=30
F=105

Exc= 6 ✓
Emb= 269 ✓
275.16
139+50
C=0
F=159

Exc= 6 ✓
Emb= 276 ✓
271.16
139+00
C=6
F=132

Exc= 0
Emb= 38.5 ✓
267.16
138+50
C=1
F=166

Exc= 0
Emb= 5.42 ✓
263.16
138+00
C=0
F=250

Exc= 0
Emb= 704 ✓
259.16
137+50
C=0
F=337

255.16
137+00
C=0
F=423

Exc= 0
Emb= 551 ✓
327.16
146+00
C=0
F=322

Exc= 0
Emb=424 ✓
323.16
145+50
C=0
F=273

Exc= 0
Emb=237 ✓
319.16
145+00
C=0
F=185

Exc= 66 ✓
Emb= 66 ✓
315.16
144+50
C=0
F=71

Exc=180 ✓
Emb=0
311.16
144+00
C=71
F=0

Exc=275 ✓
Emb=0
307.16
143+50
C=123
F=0

Exc=387 ✓
Emb=0
303.16
143+00
C=174
F=0

Exc=456 ✓
Emb=0
299.16
142+50
C=244
F=0

Exc=529 ✓
Emb=0
295.35
142+02.40
C=273
F=0

Exc= 997 ✓
Emb=0
366.67
151+50
C=653
F=0

Exc= 626 ✓
Emb= 7 ✓
362.82
151+00
C=424
F=0

Exc= 73 ✓
Emb= 4 ✓
358.94
150+50
C=252
F=8

Exc= 258 ✓
Emb= 34 ✓
358.25
150+00
149+91.21 P.C.
C=198
F=15

Exc=154 ✓
Emb=108 ✓
355.04
149+50
C=140
F=50

Exc=25 ✓
Emb=328 ✓
351.11
149+00
C=27
F=87

Exc= 0
Emb= 534 ✓
347.15
148+50
C=0
F=267

Exc= 0
Emb= 632 ✓
343.16
148+00
C=0
F=310

Exc= 0
Emb= 720 ✓
339.16
147+50
C=0
F=372

Exc= 0
Emb= 715 ✓
335.16
147+00
C=0
F=406

Exc= 0
Emb= 637 ✓
331.16
146+50
C=0
F=366

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

MADE IN U. S. A. 29420

5103.22A

W.O.S. to Sta. 168+50

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DA-NRU(1)	1942	23	24

FINAL SURVEY — SURVEYED BY — PLOTTED BY — NOTE BOOK — AREAS — AREAS CHECKED — DATE

ORIGINAL SURVEY — SURVEYED BY — PLOTTED BY — NOTE BOOK — AREAS — AREAS CHECKED — DATE

Exc = 951
Emb = 0
C=302 F=0
420.6
415.83
157+50
423.3
412.05
157+00

Exc = 1745
Emb = 0
C=725 F=0
425.9
408.27
156+50

Exc = 2552
Emb = 0
C=1160 F=0
426.5
404.50
156+00

Exc = 2990
Emb = 0
C=1596 F=0
423.9
400.72
155+50

Exc = 3025
Emb = 0
C=1633 F=0
420.9
396.94
155+00

Exc = 3030
Emb = 0
C=1634 F=0
P.C. Sta. 156+40.76
Curve Right S.E.=0.104
P.T. Sta. 154+99.37

Exc = 0
Emb = 474
453.61
C=0 F=123
451.0
449.83
162+00

Exc = 0
Emb = 722
C=0 F=389
443.3
446.05
161+50

Exc = 0
Emb = 1160
C=0 F=391
437.1
442.28
161+00

Exc = 0
Emb = 1869
C=0 F=862
428.9
438.50
160+50

Exc = 0
Emb = 1952
C=0 F=1156
422.4
434.72
160+00

Exc = 0
Emb = 1638
C=0 F=952
P.T. Sta. 159+55.64
421.0
430.94
159+50

Exc = 0
Emb = 1206
C=0 F=817
419.4
427.16
159+00

Exc = 7
Emb = 610
C=0 F=485
418.1
423.39
158+50

Exc = 151
Emb = 187
C=7 F=174
417.5
419.61
158+00

Exc = 424
Emb = 26
C=156 F=28
419.1

Exc = 150
Emb = 142
499.82
499.62
168+50

Exc = 229
Emb = 51
497.6
495.66
168+00

Exc = 110
Emb = 144
493.5
491.73
167+50

Exc = 0
Emb = 501
485.2
487.83
167+00

Exc = 0
Emb = 555
478.8
483.95
166+50

Exc = 0
Emb = 615
474.6
480.11
166+00

Exc = 0
Emb = 544
469.5
476.29
165+50

Exc = 0
Emb = 390
465.4
472.50
165+00

Exc = 0
Emb = 413
463.7
468.72
164+50

Exc = 0
Emb = 399
461.2
464.94
164+00

Exc = 0
Emb = 264
456.7
461.17
163+50

Exc = 0
Emb = 399
453.9
457.39
163+00

P.C. Sta. 162+71.24
Curve Right S.E.=0.104

C=30 F=119
532.6
535.61
173+00

C=132 F=34
Exc = 0 HLRR
Emb = 616
523.5
531.61
172+50

C=115 F=21
Exc = 0 HLRR
Emb = 1017
516.7
527.61
172+00

C=4 F=134
Exc = 0 HLRR
Emb = 1172
512.8
523.61
171+50

C=0 F=262
519.61
171+00

C=0 F=279
Exc = 0 HLRR
Emb = 1084
509.9
519.61
171+00

C=0 F=320
Exc = 0 HLRR
Emb = 942
507.0
515.61
170+50

C=0 F=344
511.61
170+00

C=0 F=244
Exc = 0 HLRR
Emb = 831
506.8
511.61
170+00

C=0 F=177
507.61
169+50

C=0 F=269
Exc = 1 HLRR
Emb = 785
500.8
507.61
169+50

C=0 F=162
503.61
169+00

Exc = 9 HLRR
Emb = 688
498.1
503.61
169+00

Exc = 36
Emb = 406

C=0 F=205
C=0 F=460
C=0 F=638
C=0 F=628
C=0 F=543
C=0 F=474
C=0 F=424
C=1 F=424
C=9 F=319

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
30018 MADE IN U. S. A.

5103.23

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-HR1	1962	23A	24

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

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

Exc = 3773 ✓
Emb = 0
387.38
C = 2220
F = 0
154 +00
Exc = 4040 ✓
Emb = 0

Exc = 1773 ✓
Emb = 0
402.83
C = 2143
F = 0
155 +70
Exc = 1229 ✓
Emb = 0
385.61
153 +50
Exc = 3283 ✓
Emb = 0

381.83
C = 1403
F = 0
155 +50
Exc = 3178
Emb = 0
400.72
C = 1544
F = 0
156 +00
Exc = 1773 ✓
Emb = 0

Exc = 2183 ✓
Emb = 0 ✓
378.05
C = 955
F = 0
152 +50
Exc = 1745 ✓
Emb = 3 ✓
374.27
C = 930
F = 3
152 +00
Exc = 1488 ✓
Emb = 3 ✓
370.48
C = 677
F = 0
151 +50
Exc = 1232 ✓
Emb = 0

P.T. 154 +00.36
Exc = 3248 ✓
Emb = 0 ✓
393.16
C = 1856
F = 0
154 +50
Exc = 1698
Emb = 0

Exc = 411 ✓
Emb = 0
156 +50
407.59
C = 1201
F = 0
156 +40.07 P.C.
Exc = 2083 ✓
Emb = 0

Exc = 1687 c.y. ✓
Emb = 0
157 +00
412.05
C = 566
F = 0
159 +50
Exc = 0
Emb = 1183 ✓

Exc = 0
Emb = 1230 ✓
161 +00
438.50
C = 1856
F = 0
160 +50
Exc = 0
Emb = 1438 1623
433.72
C = 0
F = 865
160 +00
Exc = 0
Emb = 1496 c.y. ✓
430.94
C = 1201
F = 0
159 +50
Exc = 0
Emb = 1183 ✓

Exc = 0
Emb = 796 c.y. ✓
150 +00
427.16
C = 0
F = 552
158 +50
Exc = 68 c.y. ✓
Emb = 331 ✓
423.39
C = 0
F = 307
158 +00
Exc = 383 ✓
Emb = 46 ✓
419.61
C = 73
F = 50
157 +50
Exc = 840 c.y. ✓
Emb = 0
418.83
C = 341
F = 0

Exc = 0
Emb = 209 ✓
163 +00
457.39
C = 0
F = 163
162 +50
Exc = 0
Emb = 438 ✓
453.61
C = 0
F = 63
162 +00
Exc = 0
Emb = 814 ✓
449.83
C = 0
F = 116
161 +50
Exc = 0
Emb = 1120 ✓
446.05
C = 0
F = 324
161 +00
Exc = 0
Emb = 1230 ✓
442.28
C = 0
F = 677
160 +50
Exc = 0
Emb = 1438 1623
438.50
C = 0
F = 865
160 +00
Exc = 0
Emb = 1496 c.y. ✓
434.72
C = 0
F = 888
159 +50
Exc = 0
Emb = 1183 ✓
430.94
C = 0
F = 728

PLATE 3—CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
MADE IN U. S. A. 29420

5103.23A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWDM-NRU		1942	24	24

P.T. Sta. = 177+67.66

177+50 — 581.7 — 566.99 — 568.13 — 569.27 — C = 849, F = 0 — Exc = 1489, Emb = 0

177+00 — 577.9 — 564.35 — 565.39 — 566.43 — C = 759, F = 0 — Exc = 1289, Emb = 0

176+50 — 573.5 — 561.22 — 562.36 — 563.15 — C = 633, F = 0 — Exc = 1122, Emb = 0

Exc = 786, Emb = 0

176+00 — 569.3 — 557.91 — 559.05 — 560.19 — C = 579, F = 0 — Exc = 1166, Emb = 0

Exc = 919, Emb = 0

P.C. Sta. 175+66.23
Curve Left S.E. = 0.104

175+50 — 566.8 — 554.33 — 555.47 — 556.61 — C = 680, F = 0 — Exc = 1194, Emb = 0

Exc = 1022, Emb = 0

175+00 — 562.5 — 550.76 — 551.61 — 552.46 — C = 610, F = 0 — Exc = 815, Emb = 0

Exc = 1306, Emb = 0

174+50 — 552.6 — 547.04 — 547.61 — 548.18 — C = 270, F = 0 — Exc = 250, Emb = 120

Exc = 1702, Emb = 0

174+00 — 540.4 — 543.33 — 543.61 — 543.89 — C = 0, F = 130 — Exc = 0, Emb = 306

Exc = 1867, Emb = 0

173+50 — 535.5 — 539.61

C = 0, F = 201

Exc = 0, Emb = 376

Exc = 1729, Emb = 0

180+00 — 585.1 — 577.69

C = 534, F = 0 — Exc = 71, Emb = 124

Exc = 76, Emb = 126

℄ Drive to Warehouse

179+50 — 586.1 — 576.33

C = 570, F = 0

179+00 — 581.4 — 574.69 — 574.97

C = 840, F = 0 — Exc = 44, Emb = 64

178+50 — 587.1 — 572.79 — 573.86

C = 998, F = 0 — Exc = 93, Emb = 9

178+00 — 584.8 — 569.74 — 570.59 — 571.44

C = 1018, F = 0

Exc = 444, Emb = 0

184+50 — 579.4 — 580.74

C = 117, F = 17

184+00 — 579.0 — 580.64

C = 63, F = 23

183+50 — 577.8 — 580.54

C = 32, F = 57

Exc = 88, Emb = 74

183+00 — 577.2 — 580.45

C = 45, F = 77

Exc = 71, Emb = 124

182+50 — 577.4 — 580.35

Exc = 96, Emb = 302

End of Project DA-NR-1
Sta 182+00

182+00 — 579.0 — 580.25

C = 10, F = 10

Exc = 272, Emb = 130

C = 37, F = 59

181+75 — 580.0 — 580.01

C = 90, F = 0

Exc = 333, Emb = 35

℄ Entrance to Hospital

181+50 — 581.0 — 580.01

Exc = 266, Emb = 23

186+50 — 574.2 — 582.86

C = 0, F = 216

Exc = 0, Emb = 494

186+00 — 576.5 — 581.79

C = 704, F = 110

185+50 — 578.3 — 581.12

C = 190, F = 30

185+00 — 579.3 — 580.83

C = 170, F = 8

187+50 — 574.2 — 586.14

C = 0, F = 400

187+00 — 573.9 — 584.30

C = 0, F = 318

Exc = 0, Emb = 665

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

5103.24

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWN	DA-NR1	1964	24A	24

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

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

Hand Laid Riprap

503.61 — 1:1 — 1:1 — 503.54

169 +00

Exc = 43 ✓
Emb = 334 ✓

500.07 — 1½:1 — 499.9

C = 3
F = 212

168 +55.66 P.T.

C = 49
F = 135

Exc = 220 ✓
Emb = ~~340~~ 176

498.66 — 498.1

C = 164
F = 36

168 +00

Exc = 289 ✓
Emb = 68 ✓

491.73 — 492.8

C = 148
F = 37

167 +50

Exc = 141 ✓
Emb = 156 ✓

487.22 — 486.4

C = 4
F = 131

167 +00

Exc = 4 ✓
Emb = 351 ✓

483.95 — 483.5

C = 0
F = 218

166 +50

Exc = 0
Emb = 466 ✓

480.11 — 479.2

C = 0
F = 255

166 +00

Exc = 0
Emb = 534 ✓

476.29 — 475.2

C = 0
F = 302

165 +50

Exc = 0
Emb = 629 ✓

472.60 — 472.1

C = 0
F = 357

165 +00

Exc = 0
Emb = 557 ✓

468.72 — 468.2

C = 0
F = 246

164 +50

Exc = 0
Emb = 399 ✓

464.92 — 464.9

C = 0
F = 180

164 +00

Exc = 0
Emb = 388 ✓

461.17 — 459.4

C = 0
F = 233

163 +50

Exc = 0
Emb = 367 ✓

165 +50

531.61 — 527.1

172 +50

C = 0
F = 340

Exc = 0
Emb = 854 ✓

527.61 — 527.1

1½:1

172 +00

C = 0
F = 582

Exc = 0
Emb = 1051 ✓

523.61 — 523.1

171 +50

C = 0
F = 553

Exc = 0
Emb = 978 ✓

519.61 — 519.1

171 +00

C = 0
F = 503

Exc = 0
Emb = 825 ✓

515.61 — 515.1

170 +50

C = 0
F = 388

Exc = 0
Emb = 688 ✓

511.61 — 511.6

170 +00

C = 0
F = 355

Exc = 0
Emb = 658 ✓

507.61 — 507.1

169 +50

C = 0
F = 356

Exc = 3 ✓
Emb = 581 ✓

546.8 — 175 +50 — 555.61

C = 1006
F = 0

Exc = 1854
Emb = 0

544.1 — 175 +00 — 551.61

C = 996
F = 0

Exc = 1342 ✓
Emb = 0

544.1 — 174 +50 — 547.61

C = 453
F = 0

Exc = 419
Emb = 90

543.1 — 174 +00 — 543.61

C = 0
F = 97

Exc = 0
Emb = 252 ✓

539.1 — 173 +50 — 539.61

C = 0
F = 175

Exc = 0
Emb = 297 ✓

535.1 — 173 +00 — 535.61

1½:1

C = 0
F = 146

Exc = 0
Emb = 480 ✓

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

MADE IN U. S. A. 29420

5103.24A

FED. RD. DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAWAII	DA-NEI	1964	24B	24

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

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

New ℄ — 582.61 — Reservoir — C=606 F=0 — 180+00

Exc=1307 Emb=0 — 179+00 — New ℄ — 579.61 — Reservoir — C=797 F=0 — 178+50

Exc=1645 Emb=0 — 178+50 — 575.61 — Reservoir — C=980 F=0 — 178+00

Exc=1695 Emb=0 — 178+00 — New ℄ — 571.61 — Reservoir — C=851 F=0 — 177+50

Exc=1664 Emb=0 — 177+50 — New ℄ — 567.40 — C=858 F=0 — 176+97.42 P.T. (old)

Exc=1384 Emb=0 — 176+50 — 563.61 — C=745 F=0 — 176+00

Exc=1626 Emb=0 — 176+00 — New ℄ — 559.61 — C=750 F=0 — 175+50

Exc=19 Emb=829 — 181+50 — New ℄ — 595.61 — C=20 F=422 — 181+00

Exc=8 Emb=632 — 181+00 — New ℄ — 590.98 — C=0 F=403 — 180+50

Exc=87 Emb=398 — 180+50 — New ℄ — 587.18 — C=85 F=150 — 180+00

Exc=166 Emb=149 — 180+00 — New ℄ — 583.61 — C=94 F=11 — 179+50

Exc= Emb= — 184+00 — ℄ — 582.61 — C=0 F=201 — 183+50

Exc=0 Emb=517 — 183+50 — ℄ — 589.61 — C=0 F=357 — 183+00

Exc=0 Emb=766 — 183+00 — ℄ — 590.18 — C=0 F=470 — 182+50

Exc=0 Emb=1131 — 182+50 — ℄ — 591.61 — C=0 F=752 — 182+00

Exc=0 Emb=1485 — 182+00 — ℄ — 591.61 — C=0 F=852 — 181+50

Exc=10 Emb=1244

PLATE 3—CROSS SECTION O. P. R. & R. E. STANDARD
KEUFFEL & ESSER CO., NEW YORK.
MADE IN U. S. A. 29420

5103.24B

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NR(1)	1964	24C	74

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

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

583.67
574.7
C=297
F=94
C=11
186+59
Exc = 710
Emb= 87

584.43
574.9
C=403
186+09
C=56
Exc = 895

585.79
Pipe
578.7
C=434
185+59
C=74
Exc= 703

586.79
577.1
C=251
185+09
Exc= 315
Emb= 35

587.61
577.4
C= 27
F= 32
184+50
Exc= 25
Emb= 216

587.83
576.6
C=76
F=315
188+59
Exc= 264
Emb= 486

585.92
575.2
C=209
F=210
188+09
Exc = 338
Emb = 361

584.58
574.2
C= 156
F= 180
187+59
Exc = 373
Emb = 303

582.91
574.1
C= 247
F= 147
187+09
Exc = 514
Emb = 223

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. 345-3

5103.24C

(11)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	DA-NRI	1964	44D	74

℄

613.19
STAKE Ref.
612.7
Pipe
Pipe
END 193+09 PROJ.
C= 44
F= 0
Exc= 56
Emb= 40
603.05
197 +00

598.61
520.5
Pipe
190 +59
C= 6
F=164
Exc= 28
Emb= 306

609.64
Driveway to Hospital
611.2
192 +59
C= 16
F= 43
Exc= 83
Emb= 85
608.61
196+50

595.86
592.7
Pipe
190 +09
C= 24
F=166
Exc= 76
Emb= 388

606.86
604.1
Pipe
192 +09
C= 74
F 49
Exc= 69
Emb= 132
603.57
196+00

593.11
592.5
Pipe
189 +59
C= 58
F=253
Exc= 76
Emb = 595

604.11
603.8
Pipe
101 +59
C= 3
F= 94
Exc= 20
Emb= 203
603.0
195+00

590.26
589.5
Pipe
189 +09
C= 23
F=325
Exc = 92
Emb = 593

601.36
599.3
101 +09
C= 19
F=125
Exc= 25
Emb= 266
600.3
623.07
194+09

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

MADE IN U.S.A. 20400

5103.24D