FED. ROAD DIST NO	STATE	FED AID PROJ. NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
Hawaii	Haw.	SH- FAP 9-A(4)	1941	14A	25

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

Revised July, 1942

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

VOID

℄ of Medial Strip
24.1
1 + 60
Exc - 0
Emb 20⁴
24.2
1 + 10
Exc - 0
Emb 10.²
24.4
0 + 60
Exc + 0.²
Emb = 0.²
24.8
0 + 10
0 + 00
Connection of Relocated Railroad to Existing Railroad
1 + 75
Exc = 3³
Emb = 0
28.1
1 + 50
Exc 5⁴
Emb 0
27.7
1 + 25
Exc 3⁴
Emb 0
27.3
1 + 00
Exc 7⁴
Emb 0
27.0
0 + 50
Exc 7⁴
~~Emb~~ 0
℄ of Spur
27.1
Top of Railroad Bed
0 + 00
92 + 17⁵
Spur Equation
RELOCATED SPUR
℄ Medial Strip
23.2
57 + 50
EXC 97.²
EMB 40⁸
C = 60
F = 21
EXC 71³
EMB 132⁴
23.2
57 + 00
EXC 75⁹
EMB 39⁸
C = 45
F = 23
EXC 56⁵
EMB 156⁵
23.2
56 + 50
EXC 75⁰
EMB 32⁴
C = 37
F = 20
EXC 54⁶
EMB 163⁰
23.3
56 + 00
EXC 65¹⁵
EMB 49⁴
C = 44
F = 15
EXC 50⁹
EMB 155⁶
23.4
55 + 50
EXC 46³
EMB 56⁵
C = 22
F = 38
EXC 61¹
EMB 196⁸
23.7
55 + 00
C = 28
F = 23
23.8
54 + 50
3 + 65
RR Equation
Exc 0
Emb 11¹
24.5
3 + 15
Exc = 0
Emb = 9³
24.0
2 + 65
Exc = 0
Emb = 37⁰

PLATE 7 CROSS SECTION O. P. R. & P. C. STANDARD
KEUFFEL & ESSER CO., NEW YORK
MADE IN U.S.A.

5091.14A

void

by D.S. [illegible]

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	SH - FAP 9-A(6)	1941	15A	25

Revised July, 1942

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

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

℄ Medial Strip
Reference Line 78 ft Left of ℄ R.R. Right-of-Way
℄ med.
23.43
Exc = ~~759^5~~ 816.0
Emb = ~~0^9~~ 0.9
C = ~~388~~ 441
F = ~~1~~ 1
61 + ~~89~~ 93
EXC 80^8
EMB 08^2
21.8
23.62
Exc = ~~794^0~~ 824.1
Emb = ~~0~~ 0
C = ~~449~~ 477
F = ~~0~~ 0
61 + 40 45
EXC 114^3
EMB 75^3
22.2
23.82
Exc = ~~698^7~~ 678.1
Emb = ~~0~~ 0
C = ~~426~~ 438
F = ~~0~~ 0
60 + ~~91~~ 96
EXC 121^6
EMB 65^3
22.3
24.00
Exc = ~~578^2~~ 602.8
Emb = ~~6^4~~ 0
C = ~~360~~ 364
F = ~~0~~ 0
60 + ~~43~~ 50
EXC 109^8
EMB 83^5
23.0
24.21
Exc = 421^0
Emb = 10^0
C = ~~278~~ 287
F = 7 0
59 + ~~94~~ 60+00
EXC 103^4
EMB 90^1
23.0
Exc = 271^1
Emb = 20^4
C = 186
F = 4
59 + 45
EXC 28^0
EMB 85^3
23.2
Exc = 159^7
Emb = 44^5
C = 119
F = 19
58 + 97
EXC 73^5
EMB 94^4
23.1
Exc = 106^7
Emb = 50^7
C = 57
F = 30
58 + 48
EXC 74^4
EMB 98^9
23.2
Exc = 38^7
Emb = 12^2
C = 63
F = 27
58 + 00
EXC 33^1
EMB 30^1
23.5
Exc = 88^1
Emb = 24^6
C = 76
F = 17
P.C. 57 + 84.97
EXC 70^7
EMB 73^8
Exc = ~~50^3~~ 274.8
Emb = ~~111^4~~ 145.9
C = ~~20~~ 80
F = ~~50~~ 45
67 + 00
EXC 53^5
EMB 199^6
21.8
Exc = ~~50^3~~ 130.5
Emb = ~~59^8~~ 55.7
C = ~~26~~ 94
F = ~~52~~ 47
~~66 + 41.01 P.T.~~
66 + 14.71
EXC 31^7
EMB 121^4
21.6
23.01
Exc = ~~106^2~~ 190.6
Emb = ~~52^6~~ 50.5
C = ~~48~~ 98
F = ~~36~~ 35
65 + 78
EXC 48^1
EMB 155^2
21.2
22.90
Exc = ~~105^8~~ 204.6
Emb = ~~40^9~~ 46.2
C = ~~69~~ 121
F = ~~22~~ 23
65 + ~~29~~ 31
EXC 60^8
EMB 149^1
21.7
22.84
Exc = ~~90^7~~ 177.8
Emb = ~~49^0~~ 50.7
C = ~~50~~ 100
F = ~~24~~ 27
64 + 81
EXC 61^7
EMB 149^7
21.5
22.87
Exc = ~~83^5~~ 169.7
Emb = ~~58^3~~ 57.2
C = ~~50~~ 100
F = ~~30~~ 30
64 + ~~32~~ 33
EXC 64^8
EMB 145^4
21.8
22.85
Exc = ~~87^1~~ 167.8
Emb = ~~58^7~~ 52.0
C = ~~42~~ 87
F = ~~33~~ 33
63 + ~~83~~ 84
EXC 71^7
EMB 124^3
21.2
22.73
Exc = ~~281^3~~ 349.3
Emb = ~~29^9~~ 25.4
C = ~~56~~ 110
F = ~~33~~ 28
63 + ~~35~~ 38
EXC 84^4
EMB 110^7
22.1
23.06
Exc = ~~605^2~~ 638.2
Emb = ~~0~~ 0
C = ~~254~~ 275
F = ~~0~~ 0
62 + ~~86~~ 89
EXC 81^4
EMB 91^2
22.0
23.14
Exc = ~~712^0~~ 785.8
Emb = ~~0^9~~ 0.9
C = ~~413~~ 443
F = ~~0~~ 0
62 + ~~37~~ 41
EXC 67^1
EMB 97^1
22.1

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

KEUFFEL & ESSER CO., NEW YORK

39008 MADE IN U.S.A.

5091.15

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	SH- FAP 9-A(6)	1941	16A	25

℄ of Medial Strip
Reference Line
26.46
22.6
EXC ~~132^{4}~~ 202.8
EMB ~~2^{8}~~ 2.8
C = ~~62~~ 96
F = ~~2~~ 2
72 + 00
EXC 8^{3}
EMB 146^{3}
26.34
23.0
71 + 50
EXC ~~138^{9}~~ 206.5
EMB ~~3^{7}~~ 3.7
C = ~~81~~ 123
F = ~~1~~ 1
EXC 8^{3}
EMB 213^{9}
26.23
22.6
71 + 00
EXC ~~132^{4}~~ 194.4
EMB ~~10^{2}~~ 9.3
C = ~~69~~ 100
F = ~~3~~ 3
EXC 17^{6}
EMB 233^{3}
26.11
23.0
70 + 50
EXC ~~129^{6}~~ 192.6
EMB ~~17^{6}~~ 14.8
C = ~~74~~ 110
F = ~~8~~ 7
EXC 19^{4}
EMB 159^{3}
26.00
22.4
70 + 00
EXC ~~108^{3}~~ 178.7
EMB ~~21^{3}~~ 17.6
C = ~~66~~ 98
F = ~~11~~ 9
EXC 7^{4}
EMB 176^{3}
25.88
22.2
69 + 50
EXC ~~75^{0}~~ 145.4
EMB ~~38^{9}~~ 29.6
C = ~~51~~ 95
F = ~~12~~ 10
EXC 13^{0}
EMB 192^{6}
25.62
22.4
69 + 00
EXC ~~50^{0}~~ 107.4
EMB ~~66^{1}~~ 31.9
C = ~~30~~ 62
F = ~~30~~ 22
EXC 17^{6}
EMB 208^{3}
25.34
22.2
68 + 50
EXC ~~42^{6}~~ 110.2
EMB ~~71^{3}~~ 54.6
C = ~~24~~ 54
F = ~~42~~ 34
EXC 21^{3}
EMB 216^{1}
25.06
21.3
68 + 00
EXC ~~57^{4}~~ 132.4
EMB ~~50^{0}~~ 42.6
C = ~~22~~ 65
F = ~~35~~ 25
EXC 28^{1}
EMB 222^{2}
24.78
21.3
67 + 50
EXC ~~55^{6}~~ 146.3
EMB ~~63^{9}~~ 61.1
C = ~~40~~ 78
F = ~~19~~ 21
EXC 35^{2}
EMB 212^{0}
27.61
23.7
77 + 00
EXC ~~132^{4}~~ 209.3
EMB ~~3^{7}~~ 2.8
C = ~~87~~ 126
F = ~~0~~ 0
EXC 4^{6}
EMB 213^{1}
27.50
23.8
76 + 50
EXC ~~135^{2}~~ 204.6
EMB ~~4^{6}~~ 3.7
C = ~~56~~ 100
F = ~~4~~ 3
EXC 5^{3}
EMB 197^{1}
27.38
23.5
76 + 00
EXC ~~157^{4}~~ 225.0
EMB ~~3^{7}~~ 2.8
C = ~~90~~ 121
F = ~~1~~ 1
EXC 5^{3}
EMB 155^{6}
27.27
23.7
75 + 50
EXC ~~182^{4}~~ 244.4
EMB ~~3^{7}~~ 2.8
C = ~~80~~ 122
F = ~~3~~ 2
EXC 17^{6}
EMB 147^{2}
27.15
23.3
75 + 00
EXC ~~160^{2}~~ 213.9
EMB ~~6^{5}~~ 6.5
C = ~~117~~ 142
F = ~~1~~ 1
EXC 26^{2}
EMB 125^{0}
27.04
23.4
74 + 50
EXC ~~87^{9}~~ 142.6
EMB ~~22^{2}~~ 15.7
C = ~~56~~ 89
F = ~~6~~ 6
EXC 13^{2}
EMB 132^{4}
26.92
23.1
74 + 00
EXC ~~69^{4}~~ 115.7
EMB ~~36^{1}~~ 25.9
C = ~~39~~ 65
F = ~~18~~ 11
EXC 0^{2}
EMB 163^{0}
26.81
22.0
73 + 50
EXC ~~75^{9}~~ 127.8
EMB ~~31^{5}~~ 27.8
C = ~~36~~ 60
F = ~~21~~ 17
EXC 6^{5}
EMB 165^{1}
26.69
23.0
73 + 00
EXC ~~97^{2}~~ 154.6
EMB ~~20^{4}~~ 19.4
C = ~~46~~ 71
F = ~~13~~ 13
EXC 13^{9}
EMB 160^{2}
26.58
23.0
72 + 50
EXC ~~112^{1}~~ 171.3
EMB ~~10^{2}~~ 9.3
C = ~~59~~ 89
F = ~~9~~ 1
EXC 7^{1}
EMB 172^{2}

FINAL SURVEY

NOTE BOOK

NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

DATE

BY

Revised July 1962

ORIGINAL SURVEY

NOTE BOOK

NO.

SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

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

5091.16A

℄ Medial Strip
Reference Line
78 Ft. Left of ℄ R.R.
Hawaii Haw SM- FAP 9-A(6) 1941 17A 25
FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
BY
DATE
Revised July 1942
ORIGINAL SURVEY
28.60
24.3
Exc = ~~13.2~~ 50.9
Emb = ~~106.5~~ 79.6
C = ~~7~~ 25
F = ~~65~~ 51
82+00
Exc 10.5
Emb 225.0
28.54
25.0
Exc = ~~9.2~~ 31.5
Emb = ~~119.5~~ 87.0
C = ~~8~~ 30
F = ~~50~~ 35
81+50
Exc 10.7
Emb 229.6
28.46
24.0
Exc = ~~7.2~~ 32.7
Emb = ~~160.2~~ 121.3
C = ~~8~~ 4
F = ~~79~~ 59
81+00
Exc 0
Emb 255.6
28.38
24.2
Exc = ~~0.2~~ 0
Emb = ~~189.8~~ 150.0
C = ~~0~~ 0
F = ~~94~~ 72
80+50
Exc 0
Emb 242.6
28.28
24.0
Exc ~~0.2~~ 13.0
Emb ~~186.1~~ 147.2
C = ~~0~~ 0
F = ~~111~~ 90
80+00
Exc 0
Emb 240.1
28.19
24.2
Exc = ~~0.2~~ 16.7
Emb = ~~149.1~~ 109.3
C = ~~1~~ 14
F = ~~90~~ 69
79+50
Exc 0
Emb 221.3
28.07
24.3
Exc = ~~0.2~~ 13.9
Emb = ~~118.5~~ 77.7
C = ~~0~~ 4
F = ~~71~~ 49
79+00
Exc 0
Emb 216.7
27.96
24.0
Exc ~~15.8~~ 47.2
Emb ~~74.1~~ 43.5
C = ~~1~~ 11
F = ~~57~~ 36
78+50
Exc 0
Emb 238.0
27.84
23.5
Exc = ~~50.0~~ 101.9
Emb = ~~30.6~~ 17.6
C = ~~16~~ 40
F = ~~23~~ 11
78+00
Exc 0
Emb 201.9
27.73
24.0
Exc = ~~115.8~~ 181.5
Emb = ~~9.2~~ 7.4
C = ~~38~~ 70
F = ~~16~~ 8
77+50
Exc 0
Emb 184.3
28.76
25.5
Exc = ~~31.5~~ 90.7
Emb = ~~58.4~~ 39.8
C = ~~23~~ 63
F = ~~29~~ 18
87+00
EXC 39.8
EMB 148.5
28.79
25.5
Exc = ~~26.2~~ 75.9
Emb = ~~59.3~~ 45.4
C = ~~11~~ 35
F = ~~34~~ 25
86+50
EXC 33.3
EMB 150.5
28.80
25.0
Exc = ~~41.7~~ 106.5
Emb = ~~53.7~~ 41.7
C = ~~18~~ 47
F = ~~30~~ 24
86+00
EXC 27.9
EMB 154.6
28.80
25.2
Exc = ~~43.5~~ 103.7
Emb = ~~58.4~~ 41.7
C = ~~27~~ 68
F = ~~28~~ 21
85+50
EXC 26.2
EMB 107.4
28.80
24.8
Exc = ~~26.2~~ 69.4
Emb = ~~68.5~~ 43.5
C = ~~20~~ 44
F = ~~35~~ 24
85+00
EXC 13.9
EMB 122.7
28.80
25.1
Exc = ~~15.8~~ 59.3
Emb = ~~72.2~~ 42.6
C = ~~9~~ 31
F = ~~39~~ 23
84+50
EXC 9.3
EMB 103.5
28.77
24.6
Exc = ~~13.9~~ 52.8
Emb = ~~72.2~~ 42.6
C = ~~8~~ 33
F = ~~39~~ 23
84+00
EXC 3.7
EMB 113.9
28.75
24.8
Exc = ~~12.9~~ 45.4
Emb = ~~74.1~~ 43.5
C = ~~7~~ 24
F = ~~39~~ 23
83+50
EXC 3.7
Emb 216.7
28.70
24.6
Exc = ~~11.1~~ 41.7
Emb = ~~81.5~~ 54.6
C = ~~7~~ 25
F = ~~41~~ 24
83+00
Exc 3.7
Emb 201.9
28.66
25.0
Exc = ~~11.1~~ 41.7
Emb = ~~103.7~~ 79.6
C = ~~5~~ 20
F = ~~47~~ 35
82+50
EXC 3.7
Emb 216.7

PLATE 5 CROSS SECTION C.P. & R.E. STANDARD
KEUFFEL & ESSER CO., NEW YORK
MADE IN U.S.A.

5091.17A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	SH-FAP 9-A(6)	1941	18A	25

℄ Medial Strip
Reference Line 78 ft. Left of ℄ R.R.
28.05
26.7
Exc = ~~273.2~~ 351.8
Emb = ~~7.4~~ 7.4
C = ~~116~~ 159
F = ~~8~~ 8
92+00
EXC 122.5
EMB 63.9
28.15
26.5
Exc = ~~278.7~~ 365.7
Emb = ~~0~~ 0
C = ~~179~~ 221
F = ~~0~~ 0
91+50
EXC 121.3
EMB 67.6
28.25
26.2
Exc = ~~204.7~~ 282.4
Emb = ~~0~~ 0
C = ~~122~~ 174
F = ~~0~~ 0
91+00
EXC 112.0
EMB 69.4
28.30
26.7
Exc = ~~185.2~~ 245.4
Emb = ~~1.9~~ 1.9
C = ~~99~~ 131
F = ~~0~~ 0
90+50
EXC 106.5
EMB 75.0
28.43
26.7
Exc = ~~188.9~~ 252.8
Emb = ~~6.5~~ 6.5
C = ~~101~~ 134
F = ~~2~~ 2
90+00
EXC 95.4
EMB 84.3
28.51
26.0
Exc = ~~161.1~~ 230.6
Emb = ~~9.3~~ 9.3
C = ~~103~~ 139
F = ~~5~~ 5
89+50
EXC 85.8
EMB 88.0
28.58
26.0
Exc = ~~116.7~~ 187.0
Emb = ~~16.7~~ 14.8
C = ~~71~~ 110
F = ~~5~~ 5
89+00
EXC 78.7
EMB 102.8
28.64
25.2
Exc = ~~93.5~~ 158.9
Emb = ~~35.2~~ 28.7
C = ~~55~~ 92
F = ~~13~~ 11
88+50
EXC 64.8
EMB 120.4
28.68
25.8
Exc = ~~81.5~~ 135.2
Emb = ~~42.6~~ 31.5
C = ~~46~~ 79
F = ~~25~~ 20
88+00
EXC 55.6
EMB 124.1
28.74
25.2
Exc = ~~60.2~~ 120.4
Emb = ~~46.3~~ 29.6
C = ~~42~~ 67
F = ~~21~~ 14
87+50
EXC 39.8
EMB 141.7
27.23
24.9
Exc = ~~52.8~~ 92.6
Emb = ~~62.0~~ 36.1
C = ~~15~~ 29
F = ~~42~~ 23
97+00
EXC 103.7
EMB 125.0
27.25
25.3
Exc = ~~81.5~~ 150.0
Emb = ~~40.8~~ 26.9
C = ~~42~~ 71
F = ~~26~~ 16
96+50
EXC 110.2
EMB 81.2
27.30
25.3
Exc = ~~110.2~~ 181.9
Emb = ~~20.4~~ 12.9
C = ~~46~~ 91
F = ~~18~~ 13
96+00
EXC 132.4
EMB 62.0
27.36
25.6
Exc = ~~153.7~~ 216.7
Emb = ~~4.7~~ 1.9
C = ~~73~~ 113
F = ~~4~~ 2
95+50
EXC 113.9
EMB 73.2
27.45
25.5
Exc = ~~202.8~~ 259.3
Emb = ~~0.2~~ 0
C = ~~93~~ 121
F = ~~1~~ 1
95+00
EXC 100.2
EMB 71.3
27.55
25.7
Exc = ~~209.3~~ 276.9
Emb = ~~1.2~~ 0
C = ~~126~~ 159
F = ~~0~~ 0
94+50
EXC 132.4
EMB 51.3
27.65
25.8
Exc = ~~177.8~~ 250.0
Emb = ~~3.7~~ 0.9
C = ~~100~~ 140
F = ~~2~~ 0
94+00
EXC 152.8
EMB 38.0
27.75
25.2
Exc = ~~156.5~~ 221.3
Emb = ~~25.0~~ 23.1
C = ~~92~~ 120
F = ~~2~~ 1
93+50
EXC 152.8
EMB 42.0
27.85
25.3
Exc = ~~163.9~~ 222.2
Emb = ~~34.3~~ 32.4
C = ~~77~~ 109
F = ~~26~~ 24
93+00
EXC 130.6
EMB 51.9
27.95
Exc = ~~200.0~~ 268.5
Emb = ~~17.6~~ 17.6
C = ~~100~~ 131
F = ~~11~~ 11
92+50
EXC 117.6
EMB 55.6

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

Revised July 1942

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

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

5091.18A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	SN- FAP 9-A(6)	1941	19A	25

℄ of Medial Strip
Reference Line
78 ft Left of ℄ R.R.
28·25
25.2
EXC ~~6^5~~ 1.3
EMB ~~262^1~~ 225.0
C = ~~3~~ 4
F = ~~147~~ 127
102+00
EXC 26^9
EMB 257^4
28·08
24.8
EXC ~~5^6~~ 1.3
EMB ~~250^9~~ 213.9
C = ~~4~~ 5
F = ~~136~~ 116
101+50
EXC 32^4
EMB 252^8
27·90
24.5
EXC ~~4^7~~ 1.3
EMB ~~212^9~~ 175.9
C = ~~2~~ 4
F = ~~135~~ 115
101+00
EXC 47^7
EMB 235^2
27·74
24.6
EXC ~~5^6~~ 1.3
EMB ~~178^7~~ 141.7
C = ~~3~~ 5
F = ~~95~~ 75
100+50
EXC 51^4
EMB 222^2
27·60
24.3
EXC ~~9^3~~ 12.0
EMB ~~166^7~~ 129.6
C = ~~3~~ 4
F = ~~98~~ 78
100+00
EXC 75^3
EMB 203^1
27·48
24.8
EXC ~~12^1~~ 15.7
EMB ~~141^7~~ 104.6
C = ~~7~~ 9
F = ~~82~~ 62
99+50
EXC 83^3
EMB 190^7
27·38
24.6
EXC ~~9^3~~ 13.0
EMB ~~133^4~~ 96.3
C = ~~6~~ 8
F = ~~71~~ 51
99+00
EXC 89^8
EMB 190^7
27·31
25.0
EXC ~~6^5~~ 10.2
EMB ~~140^8~~ 103.7
C = ~~4~~ 6
F = ~~73~~ 53
98+50
EXC 93^5
EMB 189^8
27·26
24.7
EXC ~~5^6~~ 9.3
EMB ~~160^2~~ 123.1
C = ~~3~~ 5
F = ~~79~~ 59
98+00
EXC 93^5
EMB 166^7
27·24
25.0
EXC ~~16^7~~ 31.5
EMB ~~125^2~~ 89.8
C = ~~3~~ 5
F = ~~94~~ 74
97+50
EXC 101^3
EMB 144^4
30·00
27.2
EXC ~~412^9~~ 518.5
EMB ~~2^8~~ 2.8
C = ~~229~~ 283
F = ~~2~~ 2
107+00
EXC 138^2
EMB 50^0
29·83
27.2
EXC ~~345^4~~ 450.0
EMB ~~2^8~~ 1.9
C = ~~217~~ 275
F = ~~1~~ 1
106+50
EXC 133^3
EMB 50^0
29·63
27.0
EXC ~~239^8~~ 345.4
EMB ~~9^3~~ 7.4
C = ~~156~~ 211
F = ~~2~~ 1
106+00
EXC 110^2
EMB 82^4
29·48
27.1
EXC ~~136^1~~ 242.6
EMB ~~15^8~~ 12.0
C = ~~103~~ 162
F = ~~8~~ 7
105+50
EXC 83^3
EMB 123^2
29·30
26.7
EXC ~~50^0~~ 117.6
EMB ~~30^6~~ 17.6
C = ~~44~~ 100
F = ~~9~~ 6
105+00
EXC 78^1
EMB 135^2
29·13
25.7
EXC ~~10^2~~ 26.9
EMB ~~96^3~~ 66.7
C = ~~10~~ 27
F = ~~24~~ 13
104+50
EXC 60^2
EMB 174^1
28·95
26.0
EXC ~~2^8~~ 3.7
EMB ~~174^1~~ 134.3
C = ~~1~~ 2
F = ~~80~~ 59
104+00
EXC 38^9
EMB 230^6
28·78
24.9
EXC 3^7 4.6
EMB 237^9 199.1
C = ~~2~~ 2
F = ~~108~~ 86
103+50
EXC 23^2
EMB 213^2
28·60
24.7
EXC ~~3^7~~ 4.6
EMB ~~271^3~~ 234.3
C = ~~2~~ 3
F = ~~149~~ 129
103+00
EXC 18^6
EMB 268^5
28·43
24.9
EXC ~~4^7~~ 5.6
EMB ~~269^5~~ 232.4
C = ~~2~~ 2
F = ~~144~~ 124
102+50
EXC 27^8
EMB 243^5

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

Revised July 1942

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

PLATE 3 CROSS SECTION C. P. R. & R. [illegible] STANDARD
KEUFFEL & ESSER CO. NEW YORK
[illegible] MADE IN U. S. A.

5091.19A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw	SN-FAP 9-A(6)	1941	120A	25

℄ Medial Strip
Reference Line 78 ft Left of ℄ R.R.
Revised July, 1942
FINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
DATE
BY
ORIGINAL SURVEY
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
NOTE BOOK
NO.
30.10
27.0
Exc = ~~138^{9}~~ 213.0
Emb = ~~15^{8}~~ 10.2
C = ~~49~~ 82
F = ~~12~~ 7
112 + 00
EXC 175^{0}
EMB 63^{0}
30.20
Exc = ~~275^{2}~~ 358.3
Emb = ~~5^{6}~~ 4.6
C = ~~101~~ 148
F = ~~5~~ 4
111 + 50
EXC 224^{1}
EMB 27^{0}
30.30
27.5
Exc = ~~483^{3}~~ 565.7
Emb = ~~0^{9}~~ 0.9
C = ~~197~~ 239
F = ~~1~~ 1
111 + 00
EXC 220^{4}
EMB 15^{2}
30.39
27.2
Exc = ~~663^{0}~~ 749.1
Emb = ~~0~~ 0
C = ~~325~~ 372
F = ~~0~~ 0
110 + 50
EXC 263^{0}
EMB 11^{1}
30.43
Exc = ~~757^{4}~~ 834.3
Emb = ~~0~~ 0
C = ~~391~~ 437
F = ~~0~~ 0
110 + 00
EXC 263^{0}
EMB 15^{7}
30.45
Exc = ~~769^{4}~~ 841.7
Emb = ~~0~~ 0
C = ~~427~~ 464
F = ~~0~~ 0
109 + 50
EXC 260^{2}
EMB 24^{0}
30.42
28.3
Exc = ~~637^{2}~~ 772.2
Emb = ~~0~~ 0
C = ~~404~~ 445
F = ~~0~~ 0
109 + 00
EXC 233^{3}
EMB 25^{0}
30.38
28.0
Exc = ~~626^{9}~~ 686.1
Emb = ~~0~~ 0
C = ~~349~~ 389
F = ~~0~~ 0
108 + 50
EXC 195^{4}
EMB 25^{9}
30.28
28.1
Exc = ~~537^{1}~~ 597.2
Emb = ~~7^{9}~~ 0.9
C = ~~328~~ 352
F = ~~0~~ 0
108 + 00
EXC 163^{7}
EMB 37^{5}
30.16
28.1
Exc = ~~445^{3}~~ 535.2
Emb = ~~37~~ 2.8
C = ~~252~~ 293
F = ~~2~~ 1
107 + 50
EXC 156^{5}
EMB 50^{9}
29.10
27.8
Exc = ~~126^{9}~~ 212.0
Emb = ~~12^{1}~~ 9.3
C = ~~70~~ 116
F = ~~7~~ 5
117 + 00
EXC 173^{7}
EMB 94^{4}
29.20
28.2
116 + 50
Exc = ~~107^{4}~~ 188.9
Emb = ~~23^{2}~~ 13.9
C = ~~67~~ 113
F = ~~6~~ 5
EXC 170^{4}
EMB 117^{6}
29.30
27.9
116 + 00
Exc = ~~70^{4}~~ 130.6
Emb = ~~46^{3}~~ 32.4
C = ~~49~~ 91
F = ~~19~~ 10
EXC 176^{9}
EMB 132^{4}
29.40
28.2
115 + 50
Exc = ~~49^{1}~~ 105.6
Emb = ~~53^{7}~~ 46.3
C = ~~27~~ 50
F = ~~31~~ 25
EXC 181^{5}
EMB 133^{3}
29.50
28.1
Exc = ~~63^{0}~~ 129.6
Emb = ~~42^{6}~~ 35.2
C = ~~26~~ 64
F = ~~27~~ 25
115 + 00
EXC 175^{9}
EMB 138^{0}
29.60
28.6
114 + 50
Exc = ~~72^{2}~~ 121.3
Emb = ~~46^{3}~~ 35.2
C = ~~42~~ 76
F = ~~19~~ 13
EXC 184^{3}
EMB 139^{8}
29.70
28.5
Exc = ~~47^{2}~~ 100.0
Emb = ~~63^{9}~~ 52.8
C = ~~36~~ 55
F = ~~31~~ 25
114 + 00
EXC 184^{3}
EMB 138^{0}
29.80
29.0
Exc = ~~37^{9}~~ 95.4
Emb = ~~65^{8}~~ 56.5
C = ~~15~~ 53
F = ~~38~~ 32
113 + 50
EXC 191^{7}
EMB 129^{6}
29.90
29.1
Exc = ~~51^{9}~~ 100.0
Emb = ~~56^{5}~~ 47.2
C = ~~26~~ 50
F = ~~33~~ 29
113 + 00
EXC 189^{8}
EMB 123^{8}
30.00
29.1
Exc = ~~73^{2}~~ 129.6
Emb = ~~37^{0}~~ 26.9
C = ~~30~~ 58
F = ~~28~~ 22
112 + 50
EXC 172^{2}
EMB 107^{4}

5091.20A

Fed. Road Dist. No.	State	Fed. Aid Proj. No.	Fiscal Year	Sheet No.	Total Sheets
Hawaii	Haw.	SN-FAP 9-A(6)	1941	21A	25

Revised Sept. 1942
Revised July, 1942

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

℄ Medial Strip
Reference Line 78 Ft Left ℄ R.R.
27.83
25.9
122 + 00
Exc ~~550.9~~ 614.8
Emb = ~~0~~ 0
C = ~~289~~ 325
F = ~~0~~ 0
EXC 230.9
EMB 25.3
28.03
26.3
121 + 50
Exc ~~547.2~~ 611.1
Emb = ~~0~~ 0
C = ~~306~~ 339
F = ~~0~~ 0
EXC 220.1
EMB 26.2
28.20
26.3
121 + 00
Exc ~~514.3~~ 579.6
Emb = ~~0~~ 0
C = ~~285~~ 321
F = ~~0~~ 0
EXC 200.8
EMB 26.9
28.36
26.8
120 + 50
Exc ~~432.4~~ 500.9
Emb = ~~0~~ 0
C = ~~271~~ 305
F = ~~0~~ 0
EXC 202.8
EMB 28.1
28.49
26.8
120 + 00
Exc ~~388.9~~ 456.5
Emb = ~~0~~ 0
C = ~~196~~ 236
F = ~~0~~ 0
EXC 204.6
EMB 83.2
28.60
27.3
119 + 50
Exc ~~364.8~~ 428.7
Emb = ~~0~~ 0
C = ~~224~~ 257
F = ~~0~~ 0
EXC 181.5
EMB 25.9
28.70
27.1
119 + 00
Exc = ~~275.2~~ 380.0
Emb = ~~0.2~~ 0.9
C = ~~170~~ 206
F = ~~0~~ 0
EXC 165.4
EMB 38.0
28.80
27.3
118 + 50
Exc ~~201.9~~ 261.1
Emb = ~~2.8~~ 2.8
C = ~~128~~ 159
F = ~~1~~ 1
EXC 170.4
EMB 43.5
28.90
27.7
118 + 00
Exc ~~134.3~~ 183.3
Emb = ~~9.3~~ 8.3
C = ~~90~~ 123
F = ~~2~~ 2
EXC 166.7
EMB 67.6
29.00
27.3
117 + 50
Exc = ~~115.8~~ 176.9
Emb = ~~13.9~~ 11.1
C = ~~55~~ 75
F = ~~8~~ 7
EXC 168.5
EMB 88.9
25.54
23.8
127 + 00
Exc = ~~17.6~~ 56.5
Emb = ~~79.6~~ 59.3
C = ~~16~~ 42
F = ~~32~~ 23
EXC 151.2
EMB 183.3
25.77
24.0
126 + 50
Exc = ~~2.8~~ 17.6
Emb = ~~124.2~~ 97.2
C = ~~3~~ 19
F = ~~54~~ 41
EXC 144.4
EMB 166.2
26.00
24.2
126 + 00
Exc = ~~0.3~~ 0
Emb = ~~136.1~~ 110.2
C = ~~0~~ 0
F = ~~80~~ 64
EXC 136.1
EMB 146.3
26.23
24.7
125 + 50
Exc = ~~11.1~~ 41.7
Emb = ~~92.6~~ 72.2
C = ~~0~~ 0
F = ~~67~~ 55
EXC 142.9
EMB 107.4
26.46
24.6
125 + 00
Exc = ~~108.4~~ 182.3
Emb = ~~33.3~~ 24.1
C = ~~12~~ 45
F = ~~33~~ 23
EXC 146.3
EMB 69.4
26.69
24.9
124 + 50
Exc = ~~258.4~~ 326.8
Emb = ~~3.7~~ 2.7
C = ~~105~~ 159
F = ~~3~~ 3
EXC 160.2
EMB 50.0
26.92
25.2
124 + 00
Exc = ~~388.9~~ 446.3
Emb = ~~0.2~~ 0.9
C = ~~174~~ 200
F = ~~1~~ 1
EXC 183.3
EMB 43.5
27.15
25.0
123 + 50
Exc = ~~479.6~~ 551.8
Emb = ~~0.9~~ 0
C = ~~246~~ 282
F = ~~0~~ 0
EXC 200.5
EMB 30.6
27.38
25.2
123 + 00
Exc = ~~541.2~~ 612.0
Emb = ~~0~~ 0
C = ~~272~~ 314
F = ~~0~~ 0
EXC 218.5
EMB 25.9
27.61
25.6
122 + 50
Exc = ~~557.4~~ 622.2
Emb = ~~0~~ 0
C = ~~313~~ 347
F = ~~0~~ 0
EXC 224.1
EMB 25.9

PLATE CROSS SECTION R.R. & R.R. STANDARD
KEUFFEL & ESSER CO. NEW YORK

5091.21A

FED ROAD DIST NO	STATE	FED AID PROJ NO	FISCAL YEAR	SHEET NO	TOTAL SHEETS
HAWAII	HAW	SN- FAP 9-A(b)	1941	22A	25

D.S.
℄ of Medial Strip
Reference Line 78 Ft Left of ℄ RR
23.24
21.2
Exc = 301.8
Emb = 7.9
C = 165
F = 1
132 + 00
EXC 166^{1}
EMB 52^{8}
23.47
21.6
Exc = 252.8
Emb = 7.4
C = 123 161
F = 1
131 + 50
EXC 148^{2}
EMB 81^{5}
23.70
21.8
Exc = 166.7
Emb = 20.4
C = 112
F = 7
131 + 00
EXC 143^{5}
EMB 137^{0}
23.93
22.5
Exc = 72.2
Emb = 72.2
C = 58 67
F = 15
130 + 50
EXC 144^{4}
EMB 231^{5}
24.16
22.5
Exc 10.2
Emb 162.0
C = 2 10
F = 78 63
130 + 00
EXC 142^{6}
EMB 247^{2}
24.39
22.8
Exc 51.9
Emb 126.9
C = 1
F = 129 112
129 + 50
EXC 143^{5}
EMB 175^{0}
24.62
22.8
Exc = 158.3
Emb = 34.3
C = 55
F = 21 25
129 + 00
EXC 141^{7}
EMB 129^{6}
24.85
23.2
Exc = 165.7
Emb = 27.8
C = 78 116
F = 12
128 + 50
EXC 131^{5}
EMB 120^{4}
25.08
23.3
Exc = 100.9
Emb = 38.9
C = 56 63
F = 22 18
128 + 00
EXC 131^{5}
EMB 136^{1}
25.31
23.8
Exc = 81.5
Emb = 43.5
C = 15 46
F = 25 24
127 + 50
EXC 140^{1}
EMB 175^{0}
20.94
19.2
Exc = 400.0
Emb = 0
C = 200
F = 0
137 + 00
EXC 162^{0}
EMB 36^{1}
21.17
19.9
Exc = 437.0
Emb = 0
C = 232
F = 0
136 + 50
EXC 158^{3}
EMB 42^{6}
21.40
19.7
Exc = 439.8
Emb = 0
C = 240
F = 0
136 + 00
EXC 151^{4}
EMB 41^{7}
21.63
20.1
Exc = 418.5
Emb = 0.9
C = 235
F = 0
135 + 50
EXC 162^{0}
EMB 48^{2}
21.86
20.0
Exc = 404.6
Emb = 1.9
C = 217
F = 1
135 + 00
EXC 163^{0}
EMB 55^{6}
22.09
20.6
Exc = 409.3
Emb = 0.9
C = 220
F = 1
134 + 50
EXC 160^{2}
EMB 54^{6}
22.32
20.2
Exc = 409.3
Emb = 0
C = 222
F = 0
134 + 00
EXC 165^{7}
EMB 55^{6}
22.55
20.4
Exc = 416.7
Emb = 0
C = 220
F = 0
133 + 50
EXC 183^{3}
EMB 50^{0}
22.78
21.1
Exc = 423.1
Emb = 0
C = 230
F = 0
133 + 00
EXC 177^{8}
EMB 42^{1}
23.01
21.4
Exc = 313.0
Emb = 0.9
C = 227
F = 0
132 + 50
EXC 172^{2}
EMB 47^{2}

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

Revised July, 1942
Sept. 1942

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

CROSS SECTION O.P.R. & R.R. STANDARD
KEUFFEL & ESSER CO., NEW YORK
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5091.22A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	F.S.A. YEAR	SHEET NO.	TOTAL SHEETS
Hawaii	Haw.	SN- FAP 9-A(6)	1941	23A	25

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

Revised July, 1942
Sept. 1942

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

℄ of Medial Strip
℄ of R.R. Right-of-Way
℄ of Old Pearl Harbor Road Extension
17.0
19.33
140 + 50
Exc = 191.7
Emb = 15.7
C =
F =
136
0
Exc 116^{7}
Emb 96^{3}
EXC - 0
EMB - 816^{2}
15.7
19.56
18.3
18.37
140 + 00
Exc 118^{5}
Emb 96^{3}
Exc = 65.7
Emb = 90.7
C =
F =
71
17
16.4
19.79
EXC - 0
EMB - 761^{2}
139 + 50
Exc 108^{3}
Emb 80^{6}
Exc = 64.8
Emb = 89.8
C =
F =
0
81
16.7
20.02
18.7
18.88
139 + 00
Exc 104^{6}
Emb 72^{2}
Exc = 201.9
Emb = 20.4
C =
F =
70
16
18.5
20.25
EXC - 0
EMB - 524^{1}
138 + 50
Exc 124^{1}
Emb 56^{5}
Exc = 275.0
Emb = 5.6
C =
F =
147
6
19.1
20.48
19.8
19.39
138 + 00
138 + 00
Exc 130^{6}
Emb 48^{2}
Exc = 335.5
Emb = 0
C = 120
F = 0
150
0
19.5
20.71
EXC - 0
EMB - 396^{3}
137 + 50
Exc 143^{5}
Emb 34^{3}
Exc = 377.8
Emb = 0
C =
F =
208
0
19.5
19.72
137 + 00
EXC - 47^{7}
EMB - 89^{8}
20.0
19.87
136 + 50
Profile of ℄ Road
EXC - 43^{5}
EMB - 0^{2}
20.2
19.90
136 + 00
Beginning of Old Pearl Harbor Road Extension

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5091.23A

FED. ROAD DIV. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET	TOTAL SHEETS
HAWAII	HAW	SN- FAP 9-A(6)	1941	24 A	25

Revised July 1942
Sept 1942

℄ of Medial Strip
℄ of R.R. Right-of-Way
℄ of Old Pearl Harbor Road Extension
15.5
Exc - 227.8
Emb - 8.3
C = 116
F = 2
145 +50
EXC - 0
EMB - 472^{2}
15.1
16.0
15.80
Exc - 162.6
Emb - 7.3
C = 70 130
F = 7 7
145 +00
15.5 17.41
Exc - 190.4
Emb - 72.5
C = 35 136
F = 5
144 +67 END OF PROJECT
Exc 44^{1}
Emb 11^{6}
15.2 17.42
144 +50
Exc - 269.4
Emb - 3.7
C = 34 151
F = 3 3
Exc 173^{2}
Emb 41^{2}
EXC - 0
EMB - 370^{2}
15.6 17.72
16.5
16.31
Exc - 250.0
Emb - 3.7
C = 140
F = 1
144 +00
Exc 173^{3}
Emb 55^{4}
16.0 17.95
143 +50
Exc - 215.7
Emb - 19.4
C = 52 130
F = 3 3
Exc 111^{1}
Emb 69^{4}
EXC - 0
EMB - 424^{1}
15.5 18.18
17.0
16.82
Exc - 164.7
Emb - 24.3
C = 50 103
F = 10 18
143 +00
Exc 96^{3}
Emb 89^{8}
15.0 18.41
142 +50
Exc - 120.4
Emb - 29.8
C = 37 75
F = 22 19
Exc 92^{6}
Emb 97^{2}
EXC - 0
EMB - 688^{2}
15.5 18.64
17.4
17.34
142 +00
Exc - 122.2
Emb - 34.3
C = 55
F = 24
Exc 100^{9}
Emb 95^{4}
15.7 18.87
Exc - 147.2
Emb - 27.8
141 +50
C = 36 77
F = 13
Exc 105^{6}
Emb 92^{6}
EXC - 0
EMB - 807^{4}
16.1 19.10
18.0
17.85
Exc - 201.6
Emb - 75.7
C = 82
F = 17 17
141 +00
Exc 108^{3}
Emb 81^{5}
FINAL SURVEY NOTE BOOK NO.
ORIGINAL SURVEY NOTE BOOK NO.

5091.24A

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW	SN- FAP 9-A(6)	1941	25	25

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

℄ of R.R. Right-of-Way
℄ of Old Pearl Harbor Road Extension
15.0
150 + 00
C-0
F-0
13.6
13.6
149 + 48
End of Old Pearl Harbor Road Extension
C-0
F-2
13.6
13.75
149 + 00
C-0
F-72
14.2
14.26
148 + 00
C-0
F-97
14.8
14.77
147 + 00
C-0
F-108
15.3
15.28
146 + 00
C-0
F-112

EXC - 0
EMB - 82³

EXC - 0
EMB - 313²

EXC - 0
EMB - 453⁷

EXC - 0
EMB - 555⁶

PLATE 3 - CROSS SECTION O. P. R. & R. E. STANDARD
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5091.25