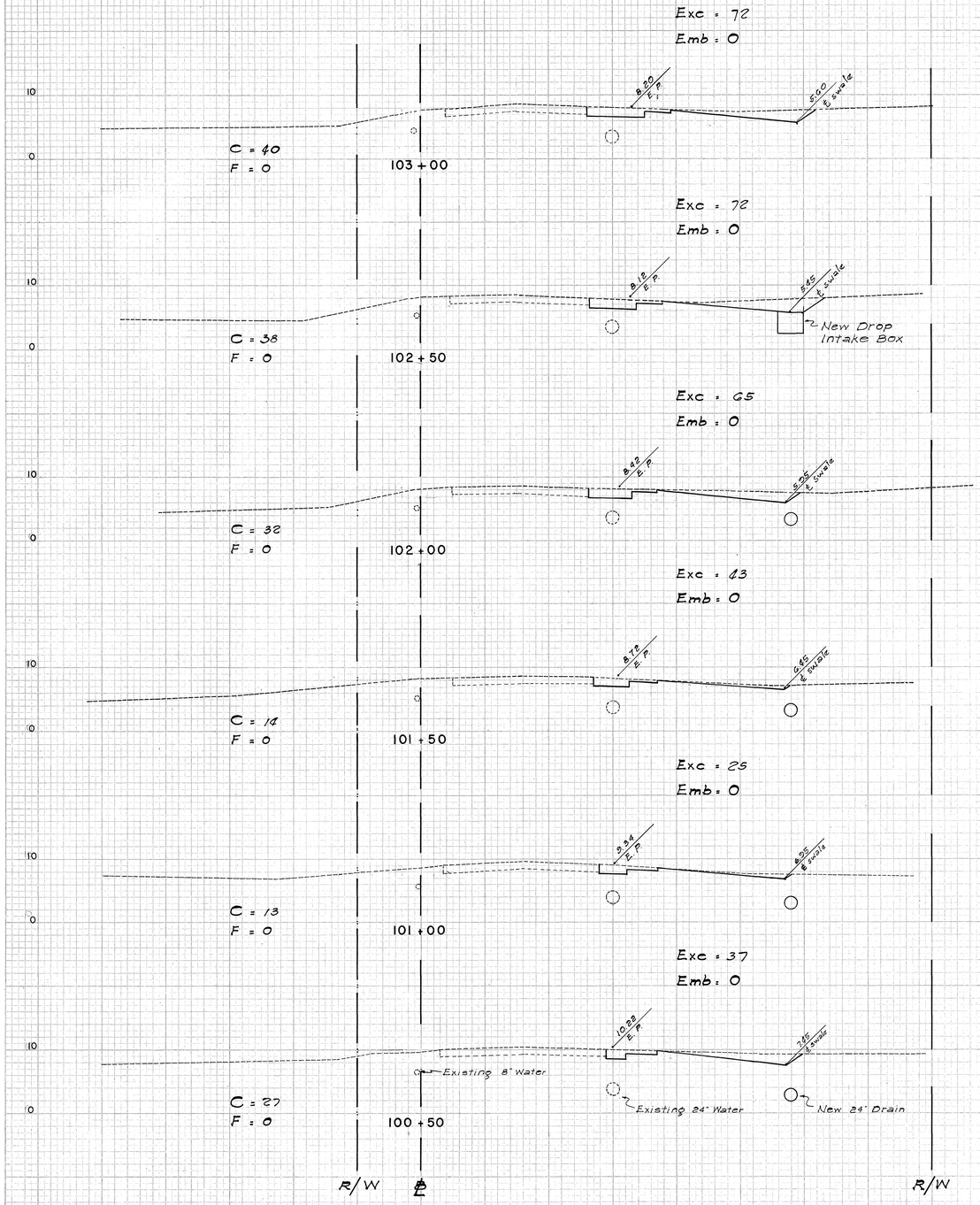
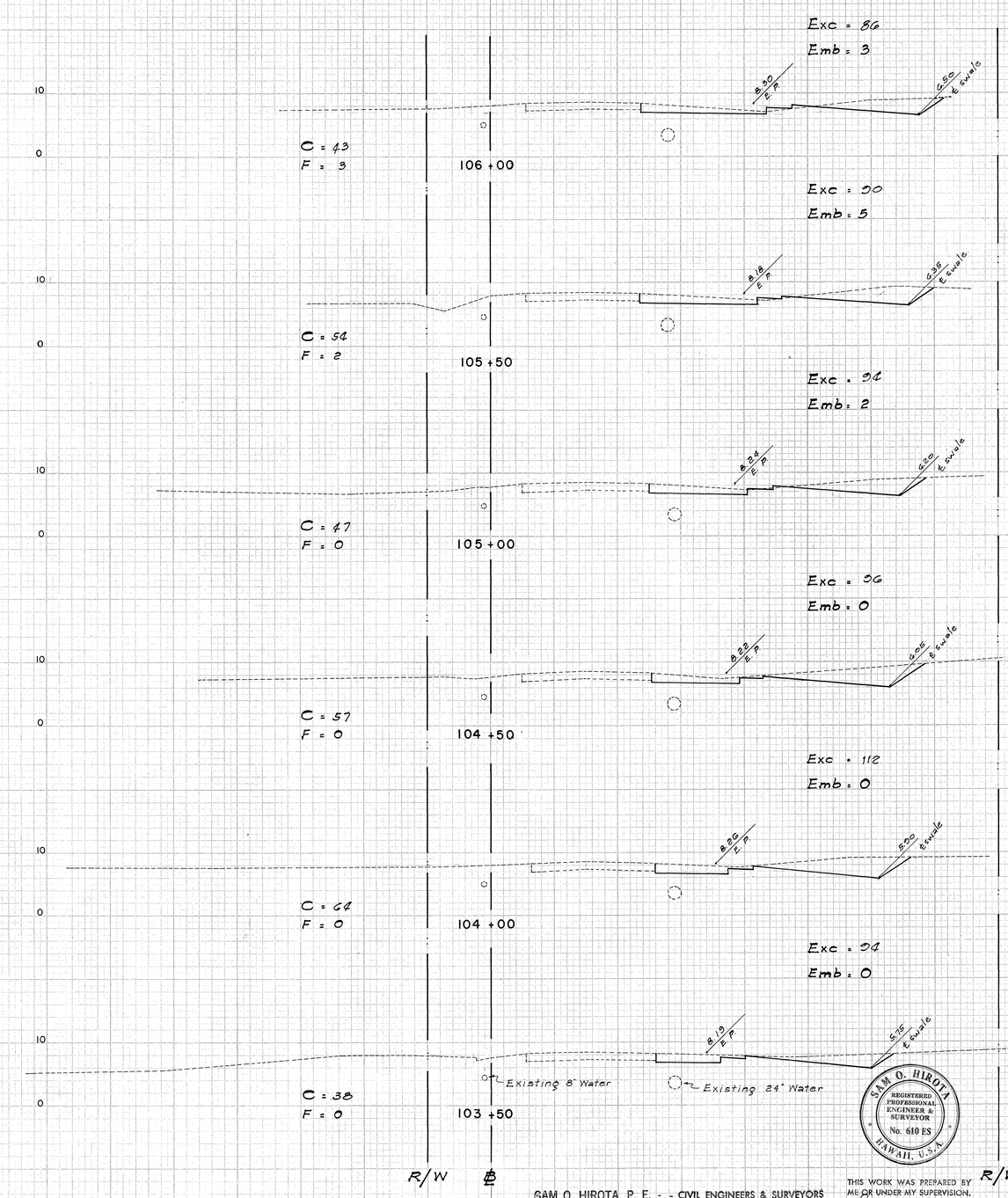
STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	69	95

PROJECT NO. B-900-01-64 UNIT II

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

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





SAM O. HIROTA
REGISTERED PROFESSIONAL ENGINEER & SURVEYOR
No. 610 ES
HAWAII, U.S.A.

SAM O. HIROTA, P. E. - - CIVIL ENGINEERS & SURVEYORS
547 HALEKAUWILA ST. • ROOM 204 • HONOLULU, HAWAII 96813

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Sam O. Hirota, P.E.

PLATE 3 - CROSS SECTION - A.P.W.A. & A.G.C. STANDARD
REUFFEL & ESSER CO., NEW YORK.

SHEET No 1 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	70	95

PROJECT NO. B-900-01-64 UNIT II

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

Exc = 122
Emb = 0
C = 66
F = 0
109 + 00
8.08 E.P.
7.60 ℄ Swale

Exc = 125
Emb = 0
C = 69
F = 0
108 + 50
7.91 E.P.
7.25 ℄ Swale

Exc = 138
Emb = 0
C = 80
F = 0
108 + 00
8.08 E.P.
7.10 ℄ Swale

Exc = 130
Emb = 0
C = 60
F = 0
107 + 50
8.16 E.P.
6.65 ℄ Swale

Exc = 118
Emb = 0
C = 67
F = 0
107 + 00
8.36 E.P.
6.80 ℄ Swale

Exc = 108
Emb = 0
C = 50
F = 0
106 + 50
8.33 E.P.
6.66 ℄ Swale
Existing 8" Water
Existing 24" Water

R/W ℄ R/W

Exc = 116
Emb = 3
C = 73
F = 2
112 + 00
7.80 E.P.
7.10 ℄ Swale

Exc = 112
Emb = 3
C = 48
F = 1
111 + 50
8.05 E.P.
7.55 ℄ Swale

Exc = 77
Emb = 1
C = 35
F = 0
111 + 00
8.14 E.P.
8.00 ℄ Swale

Exc = 105
Emb = 0
C = 78
F = 0
110 + 50
8.17 E.P.
7.65 ℄ Swale

Exc = 130
Emb = 0
C = 62
F = 0
110 + 00
8.28 E.P.
7.70 ℄ Swale

Exc = 115
Emb = 0
C = 66
F = 0
109 + 50
8.18 E.P.
7.05 ℄ Swale
Existing 8" Water
Existing 24" Water

R/W ℄ R/W

PLATE 3 CROSS SECTION A.P.R.A. & E. STANDARD
HEUPEL - ROSCO CO., NEW YORK

70

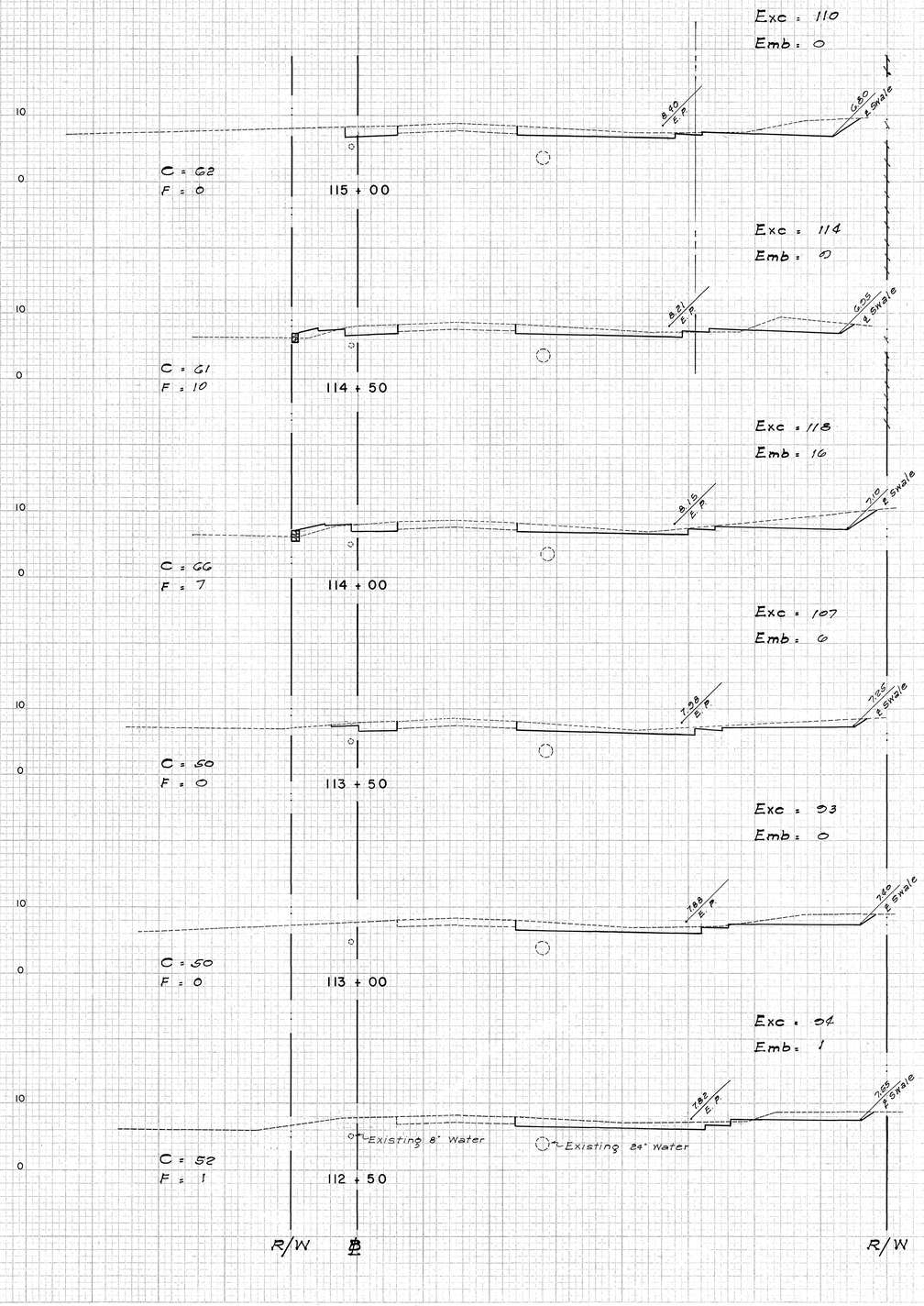
SHEET No. 2 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	71	95

PROJECT NO. B-900-01-64 UNIT II

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

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



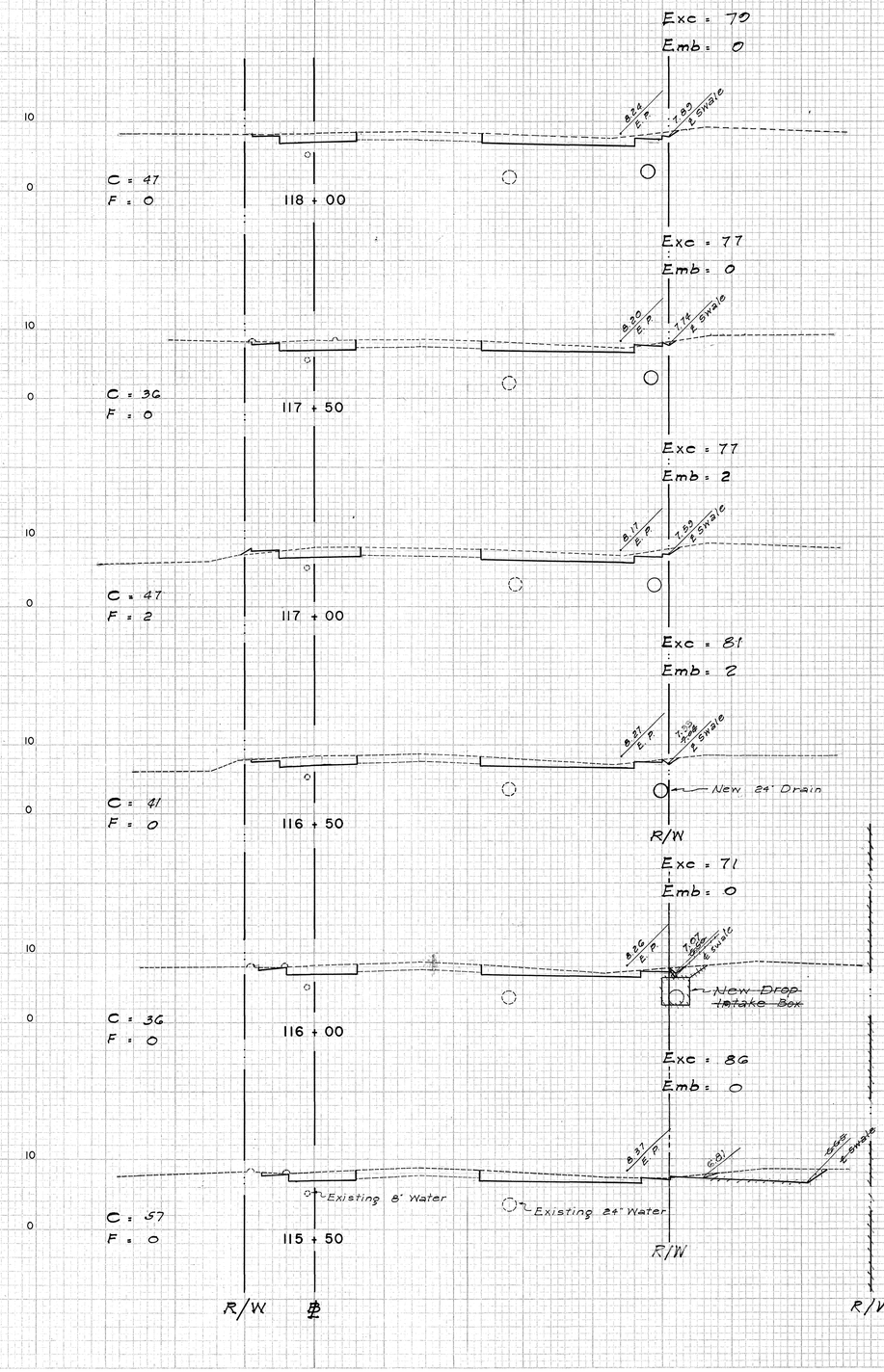


PLATE 2 CROSS SECTION U.S.P.R. S.B.E. STANDARD
HOWARD L. BOWEN CO., NEW YORK

71

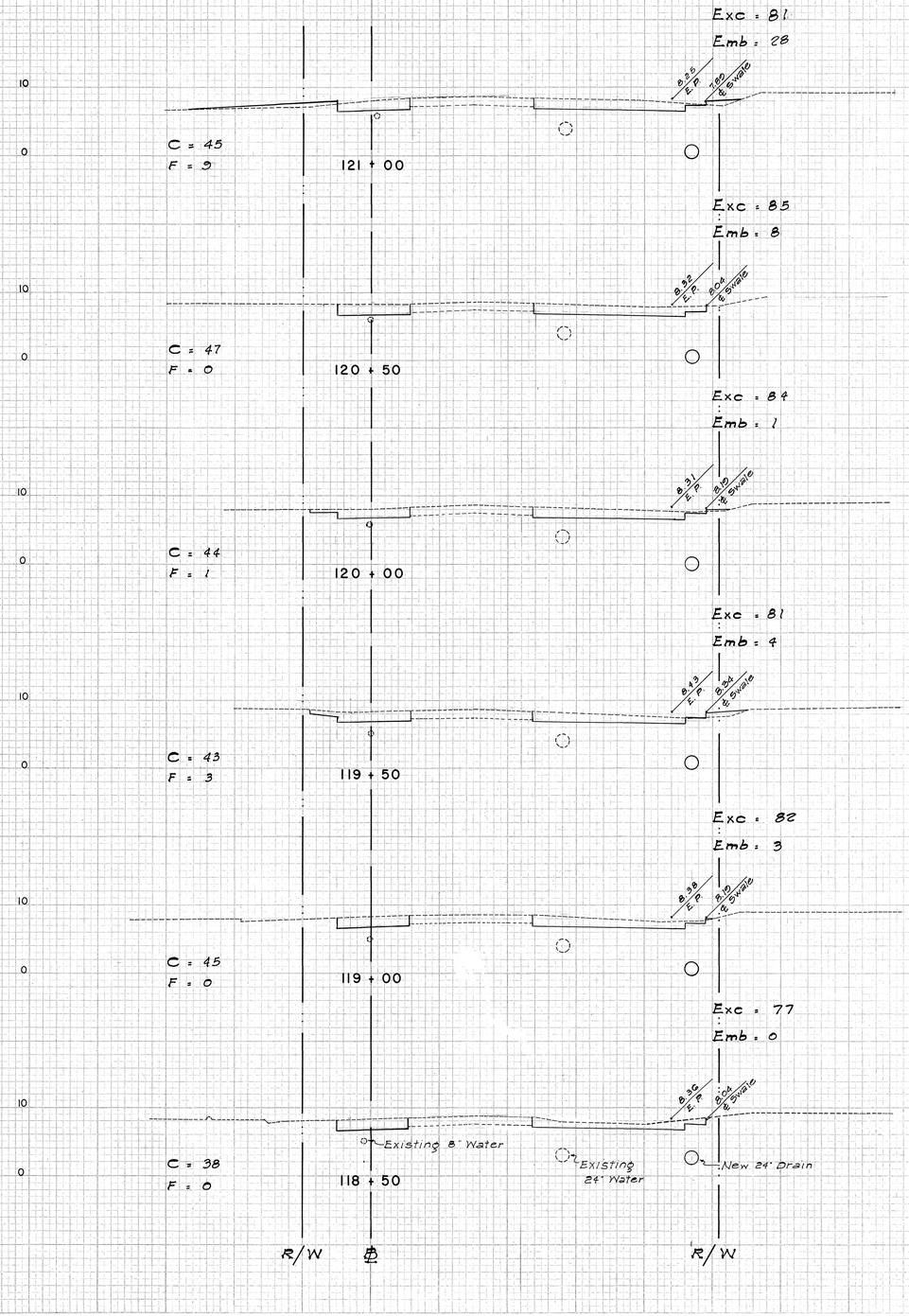
SHEET No 3 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	72	95

PROJECT NO. B-900-01-64 UNIT II

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

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



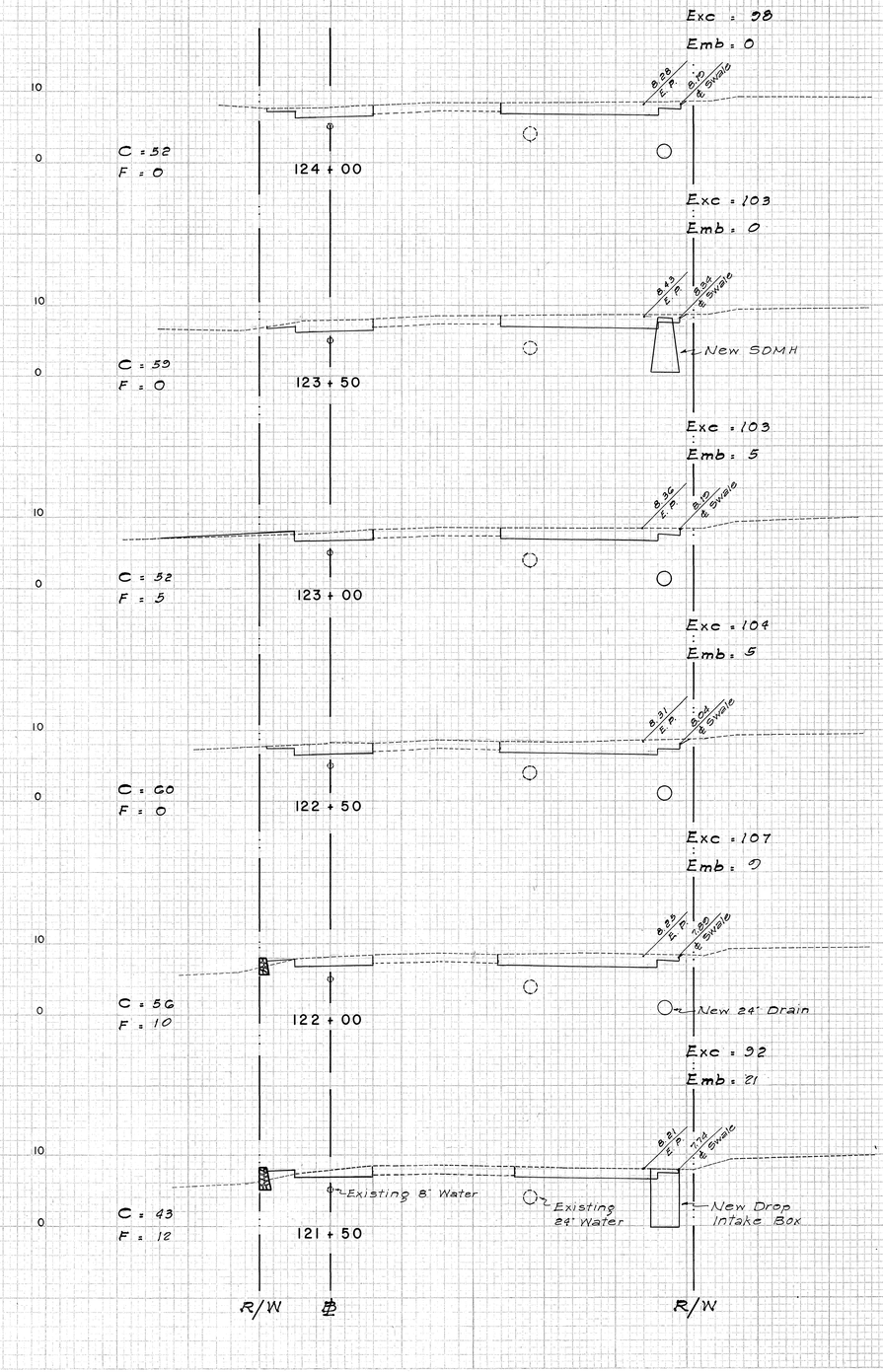


PLATE 3 CROSS SECTION O.P. U.S.P.R.E. STANDARD
HERRELL G. DESSER CO., HONOLULU

72

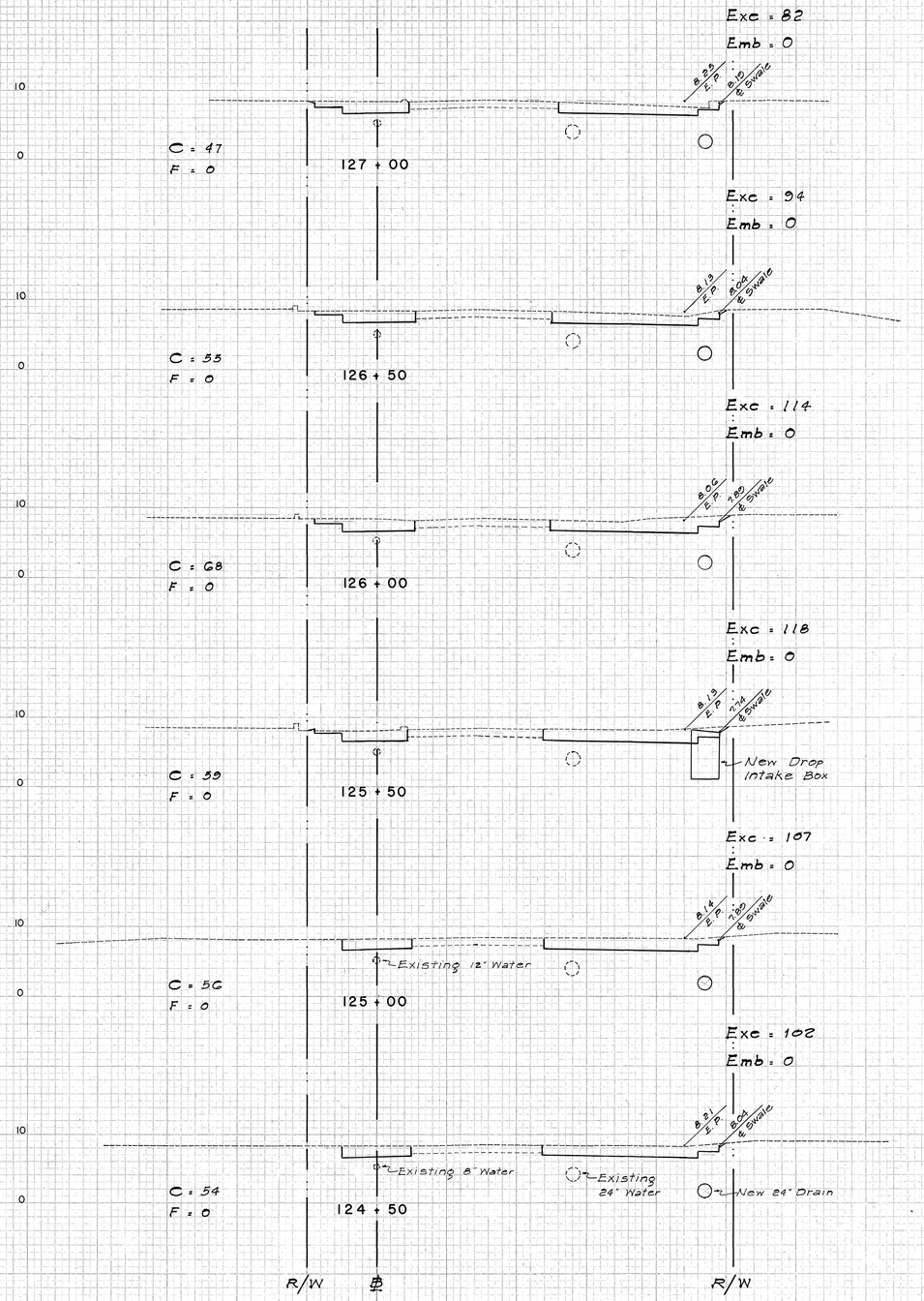
SHEET No. 4 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	73	95

PROJECT NO. B-900-01-64 UNIT II

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

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



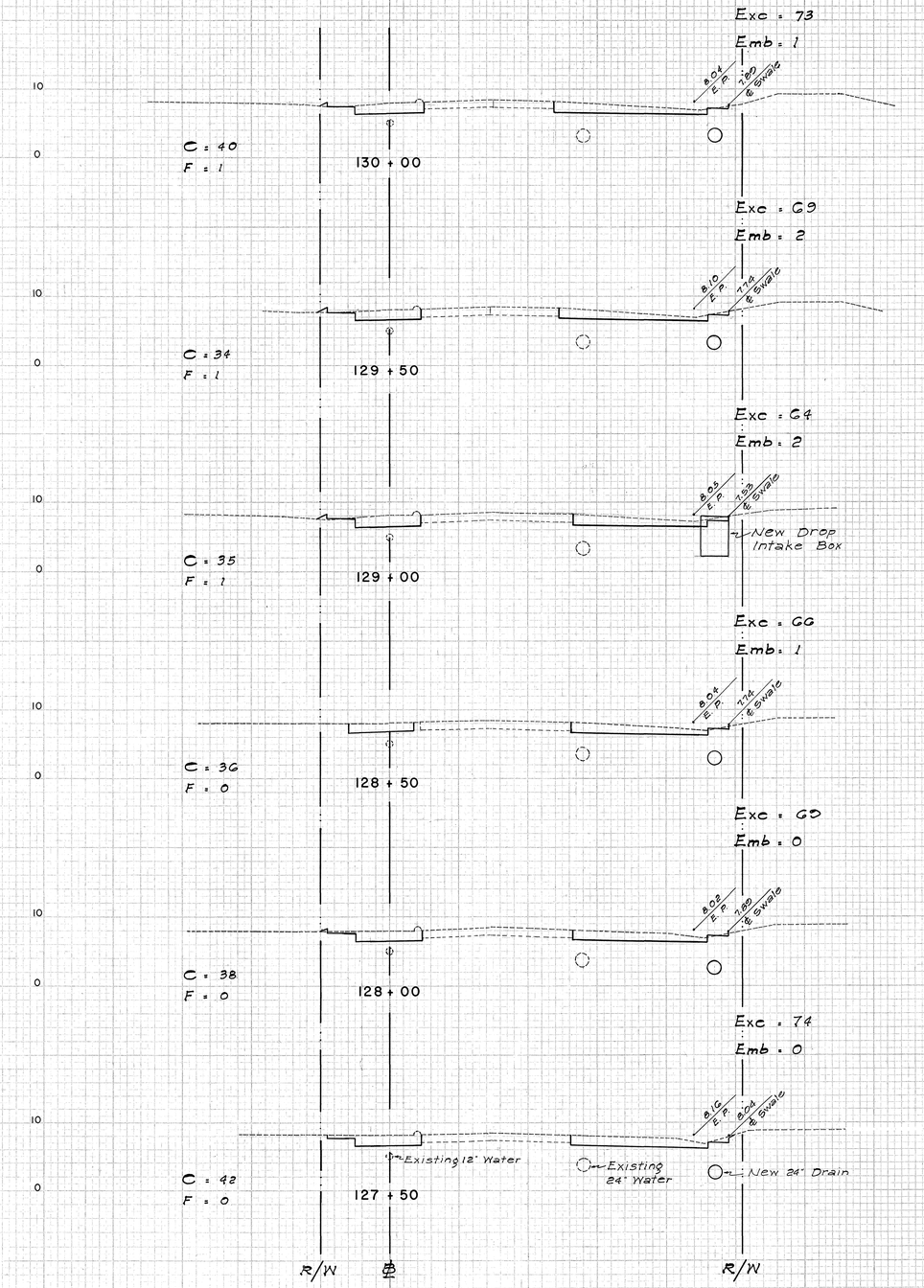


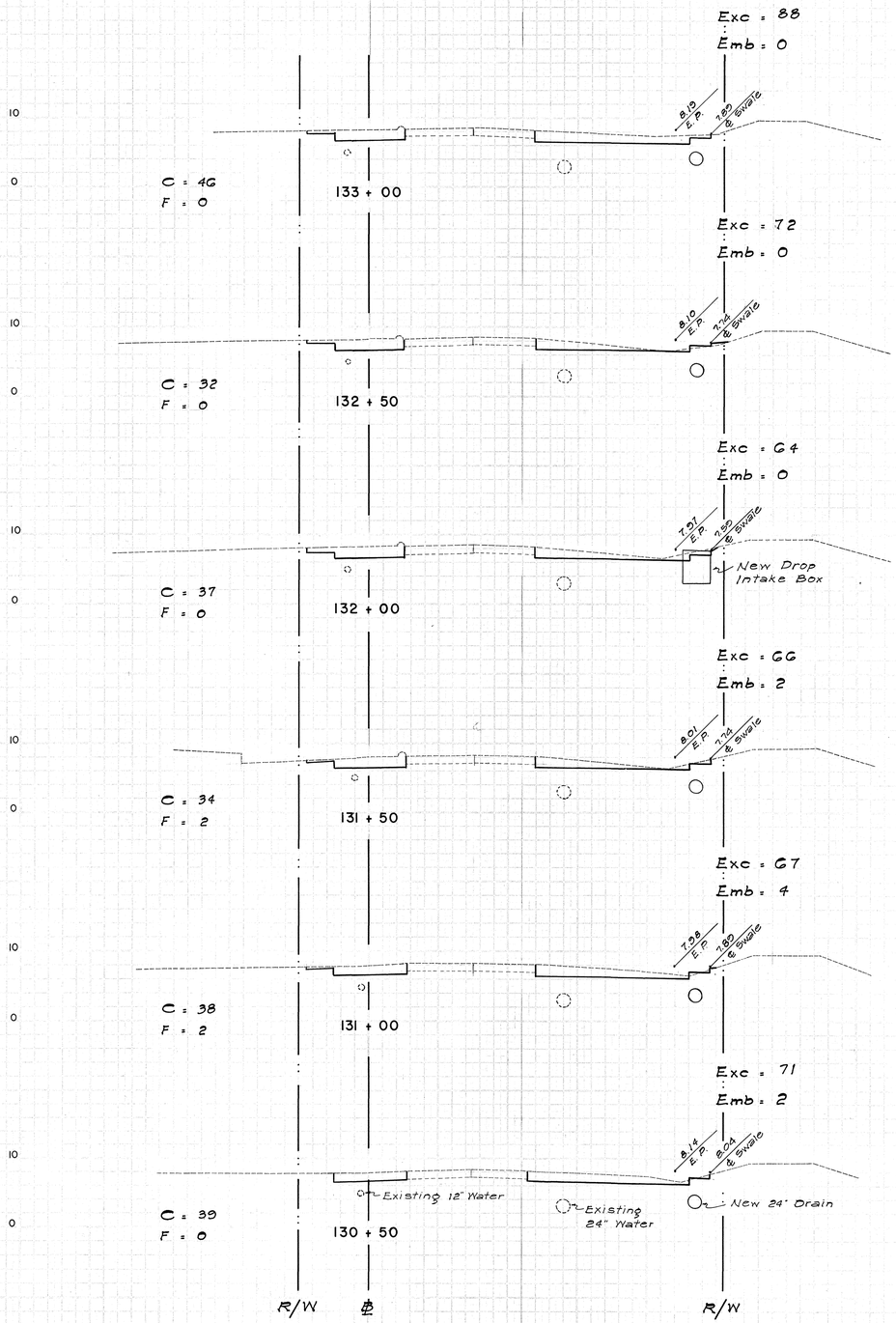
PLATE 3 - CROSS SECTION, O.P.R. & R.R.C. STANDARD
REUSTLE & ASSOCIATES, GLEN YORK

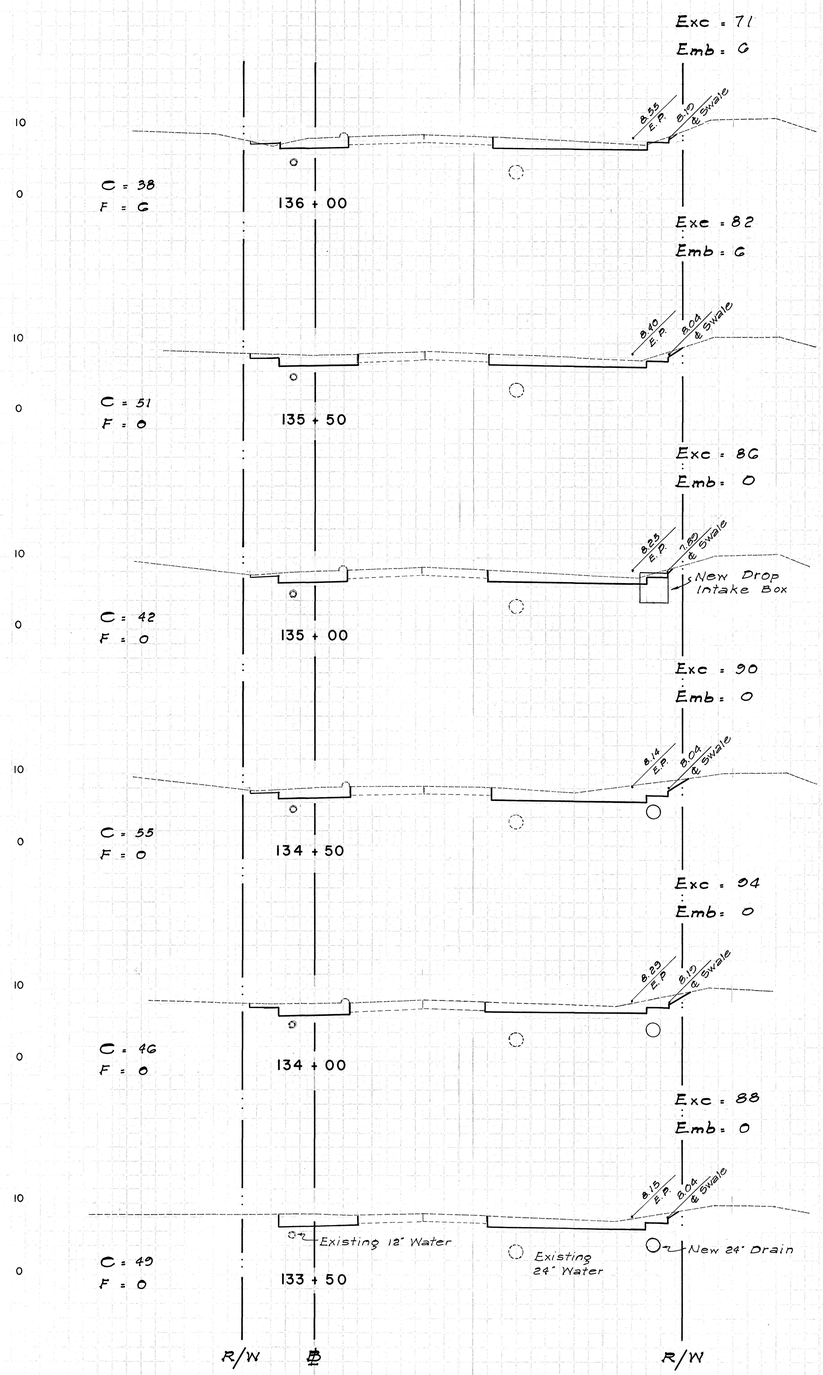
73

SHEET No. 5 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	74	95

PROJECT NO. 8-900-01-64 UNIT II





STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	75	95

PROJECT NO. 8-900-01-64 UNIT II

Exc = 139
Emb = 6
C = 82
F = 4
139 + 00
9.45 Ł P. 2.00 Ł Swale

Exc = 131
Emb = 8
C = 60
F = 5
138 + 50
9.31 Ł P. 8.04 Ł Swale

Exc = 105
Emb = 11
C = 53
F = 7
138 + 00
9.15 Ł P. 8.70 Ł Swale

Exc = 98
Emb = 12
C = 53
F = 6
137 + 50
9.06 Ł P. 8.04 Ł Swale

Exc = 77
Emb = 7
C = 30
F = 2
137 + 00
8.87 Ł P. 8.00 Ł Swale

Exc = 64
Emb = 2
C = 39
F = 0
136 + 50
8.70 Ł P. 8.54 Ł Swale
Existing 12" Water
Existing 24" Water

R/W Ł R/W

Exc = 138
Emb = 5
C = 72
F = 3
142 + 00
10.23 Ł P. 6.00 Ł Swale

Exc = 137
Emb = 3
C = 76
F = 0
141 + 50
10.13 Ł P. 9.64 Ł Swale

Exc = 141
Emb = 0
C = 76
F = 0
141 + 00
10.00 Ł P. 5.00 Ł Swale

Exc = 127
Emb = 3
C = 61
F = 3
140 + 50
9.90 Ł P. 0.04 Ł Swale

Exc = 118
Emb = 7
C = 66
F = 5
140 + 00
9.76 Ł P. 5.80 Ł Swale

Exc = 124
Emb = 7
C = 68
F = 3
139 + 50
9.60 Ł P. 6.04 Ł Swale
Existing 12" Water
Existing 24" Water

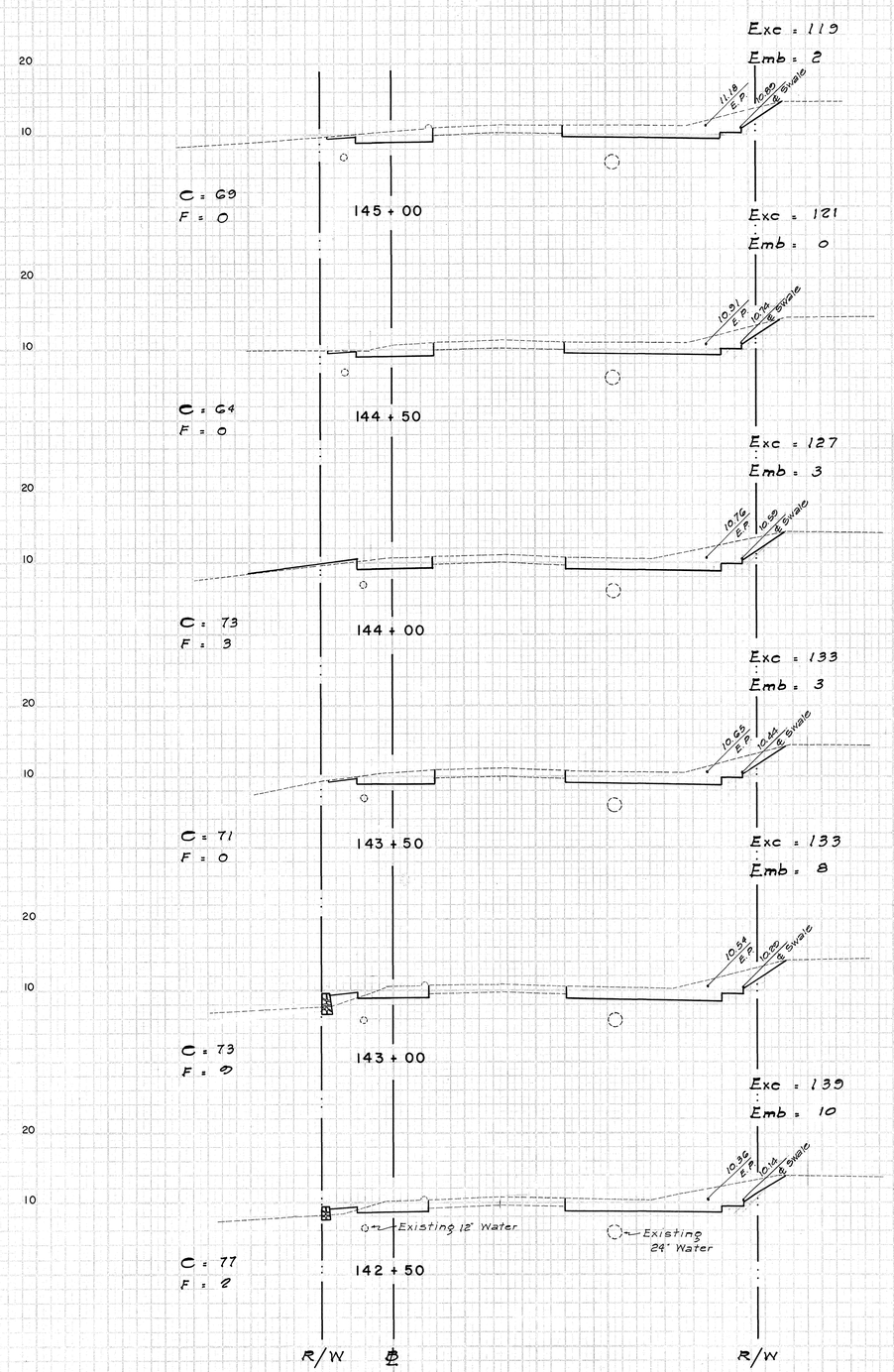
R/W Ł R/W

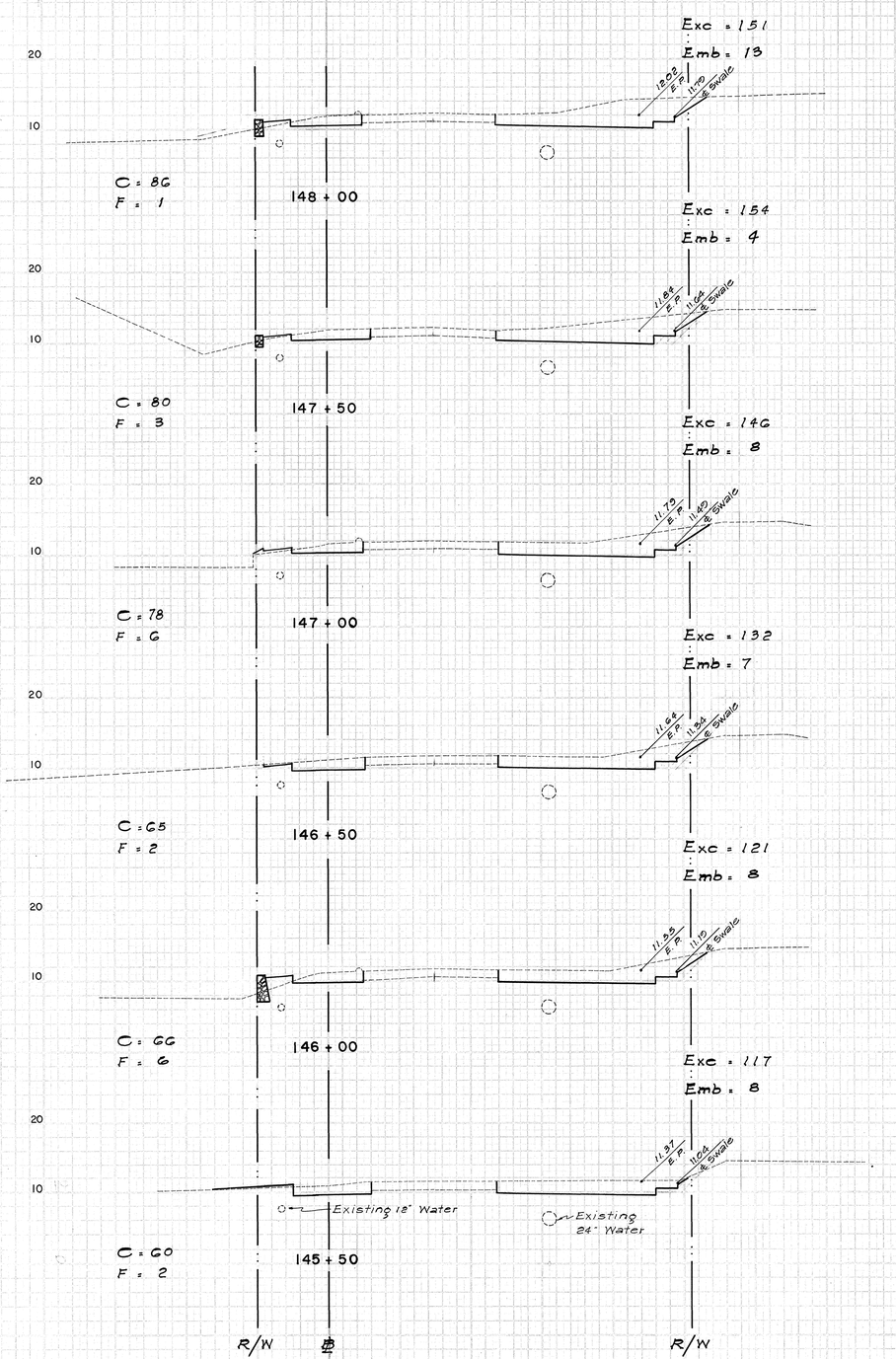
75

SHEET No. 7 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	76	95

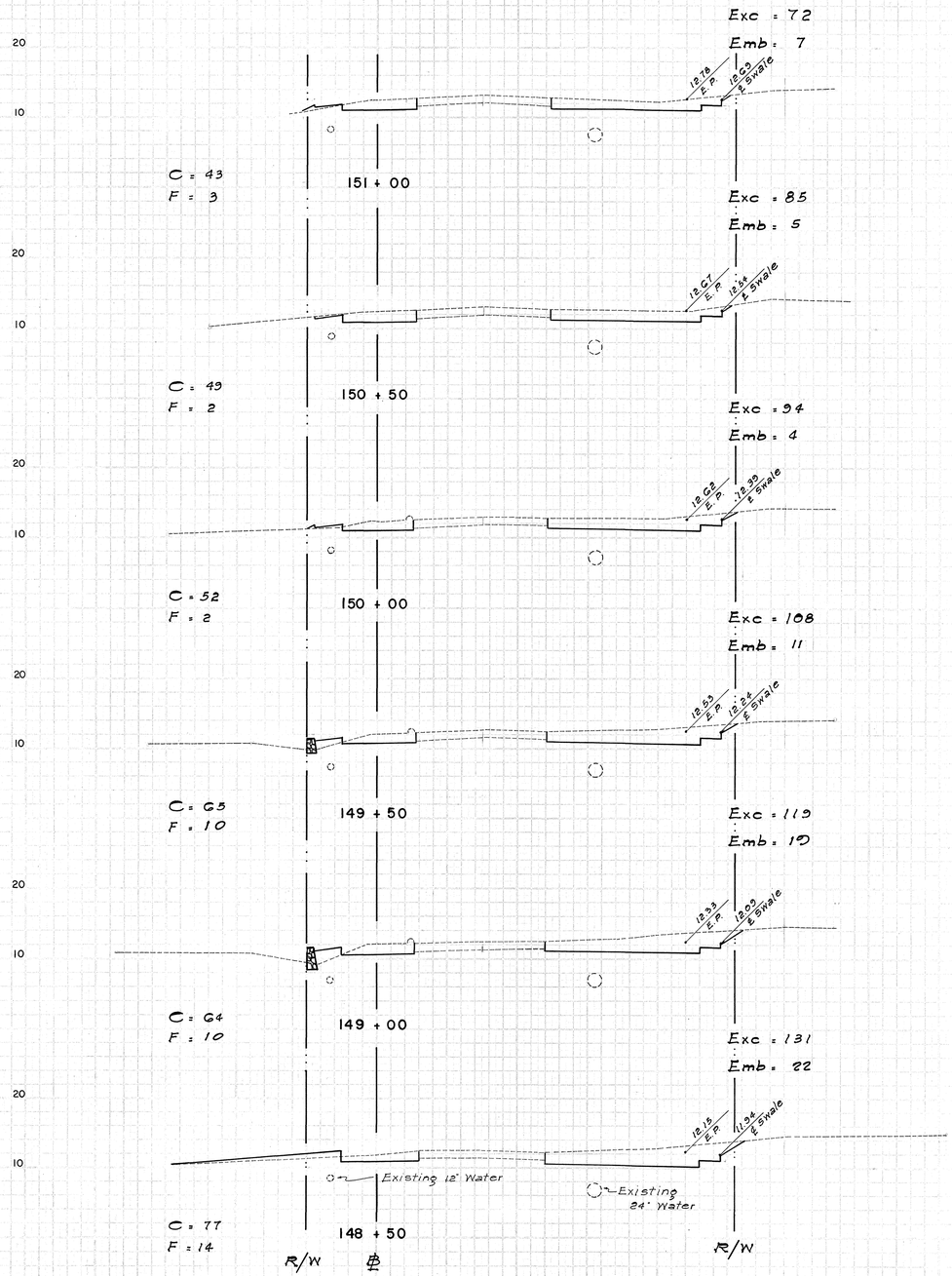
PROJECT NO. B-900-01-64 UNIT II

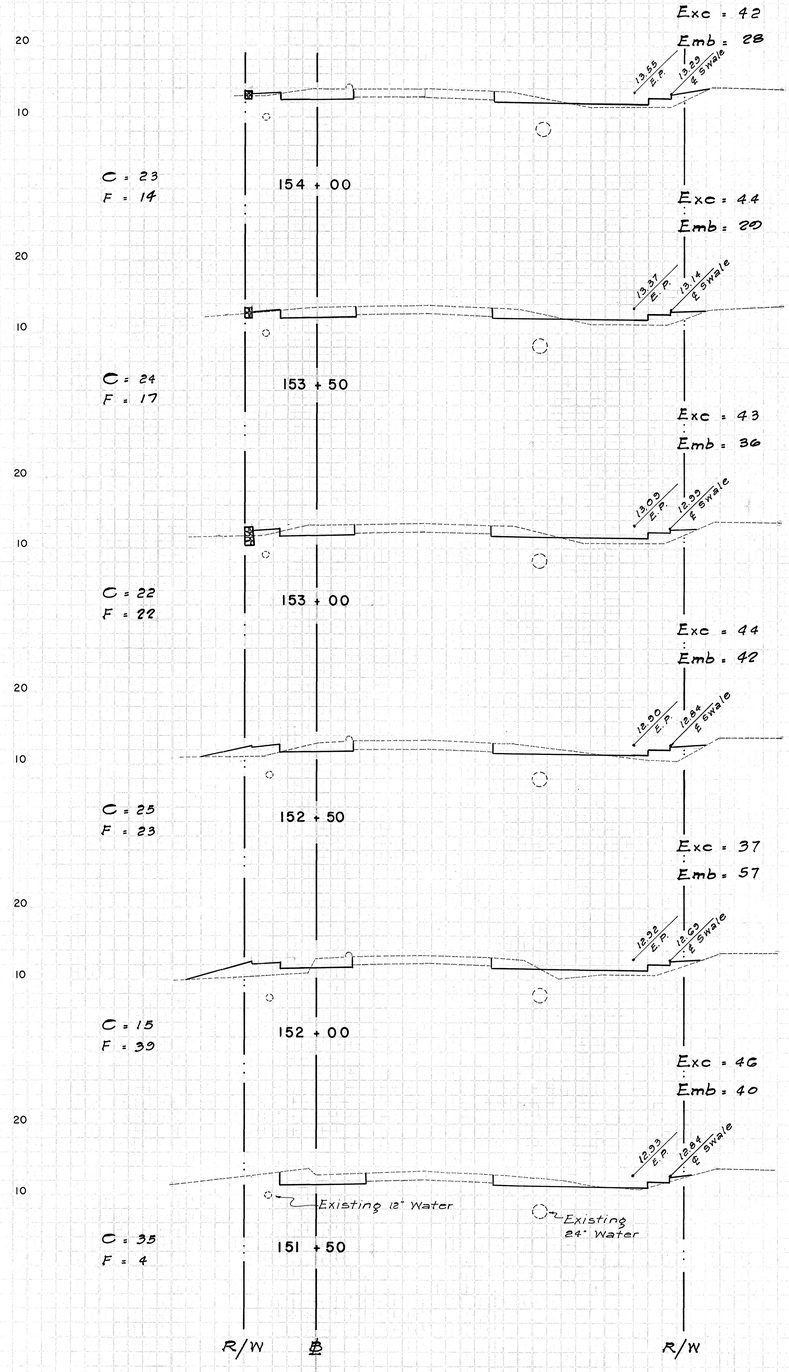




STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	77	95

PROJECT NO. B-900-01-64 UNIT II





77

SHEET No. 9 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	78	95

PROJECT NO. B-900-01-64 UNIT II

Exc = 99
Emb = 0
14.68 E.P.
13.74 ℄ Swale
C = 59
F = 0
157 + 50

Exc = 105
Emb = 0
14.58 E.P.
13.59 ℄ Swale
C = 54
F = 0
157 + 00

Exc = 93
Emb = 0
14.45 E.P.
13.44 ℄ Swale
C = 46
F = 0
156 + 50

Exc = 72
Emb = 25
14.33 E.P.
13.32 ℄ Swale
C = 32
F = 27
156 + 00

Exc = 30
Emb = 25
Box Culvert
C = 0
F = 0
155 + 50

Exc = 28
Emb = 8
13.83 E.P.
13.30 ℄ Swale
C = 30
F = 9
155 + 00

Exc = 49
Emb = 23
13.53 E.P.
13.44 ℄ Swale
Existing 12" Water
Existing 24" Water
R/W
℄
C = 23
F = 16
154 + 50

Exc = 70
Emb = 9
15.61 E.P.
14.64 ℄ Swale
C = 38
F = 3
160 + 50

Exc = 58
Emb = 9
15.40 E.P.
14.40 ℄ Swale
C = 25
F = 5
160 + 00

Exc = 58
Emb = 7
15.25 E.P.
14.24 ℄ Swale
C = 38
F = 3
159 + 50

Exc = 76
Emb = 4
15.13 E.P.
14.12 ℄ Swale
C = 44
F = 1
159 + 00

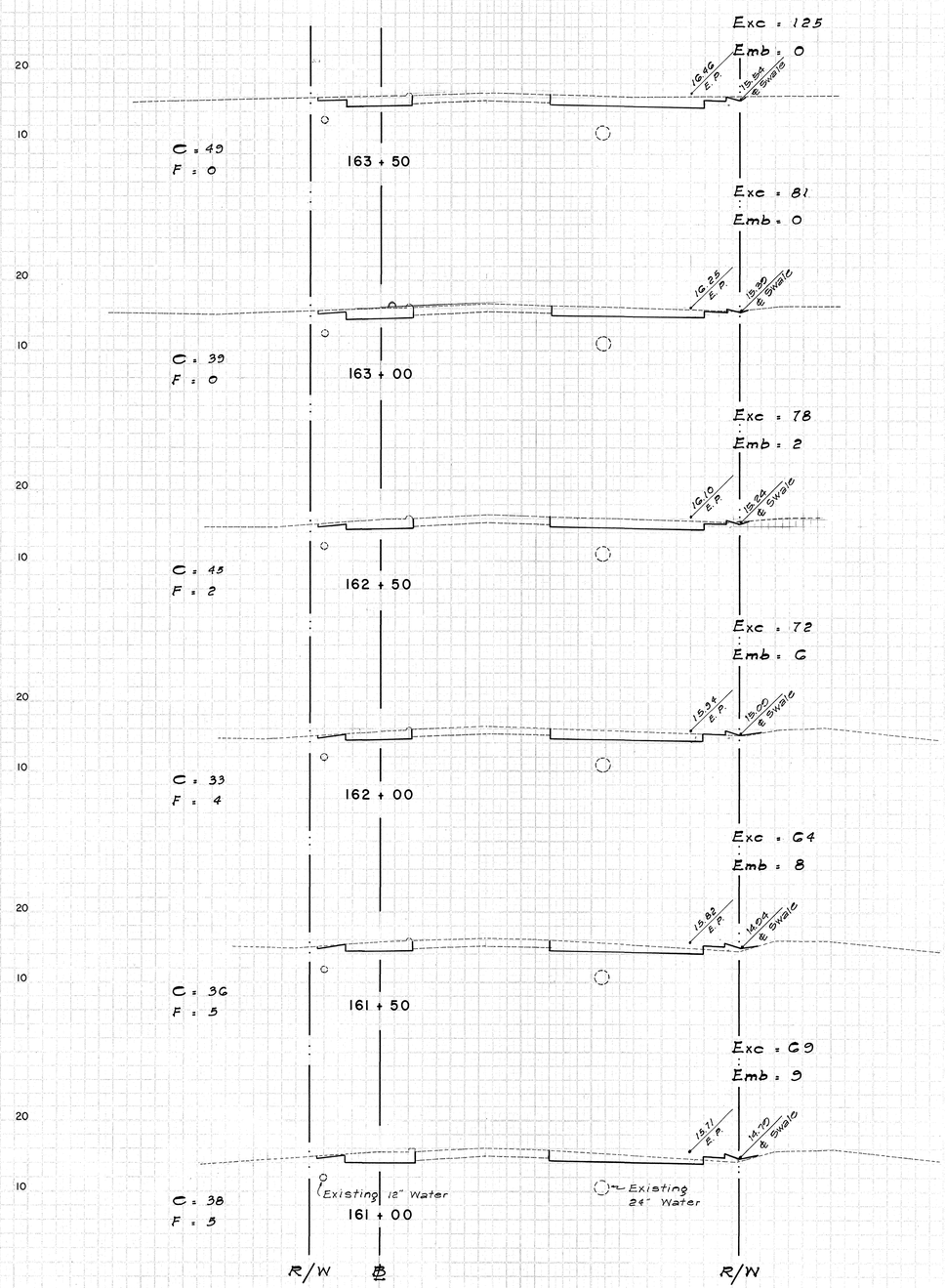
Exc = 81
Emb = 2
14.97 E.P.
14.04 ℄ Swale
C = 44
F = 1
158 + 50

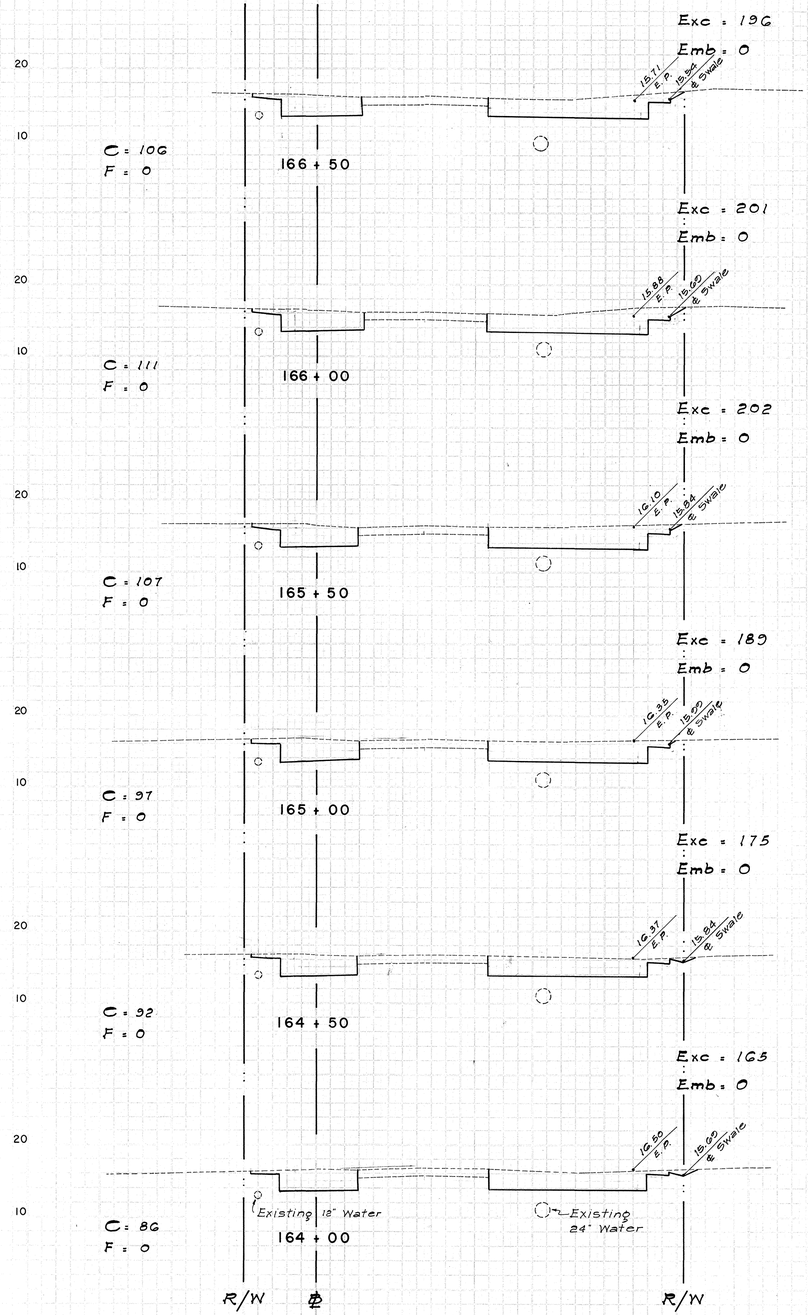
Exc = 85
Emb = 1
14.83 E.P.
13.80 ℄ Swale
Existing 12" Water
Existing 24" Water
C = 48
F = 0
158 + 00
R/W
℄
R/W

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	79	95

PROJECT NO. B-900-01-64 UNIT II

FINAL SURVEY — APPROVED / PLOTTED / TRANSMITTED / AREAS CHECKED / DATE / BY / NO.



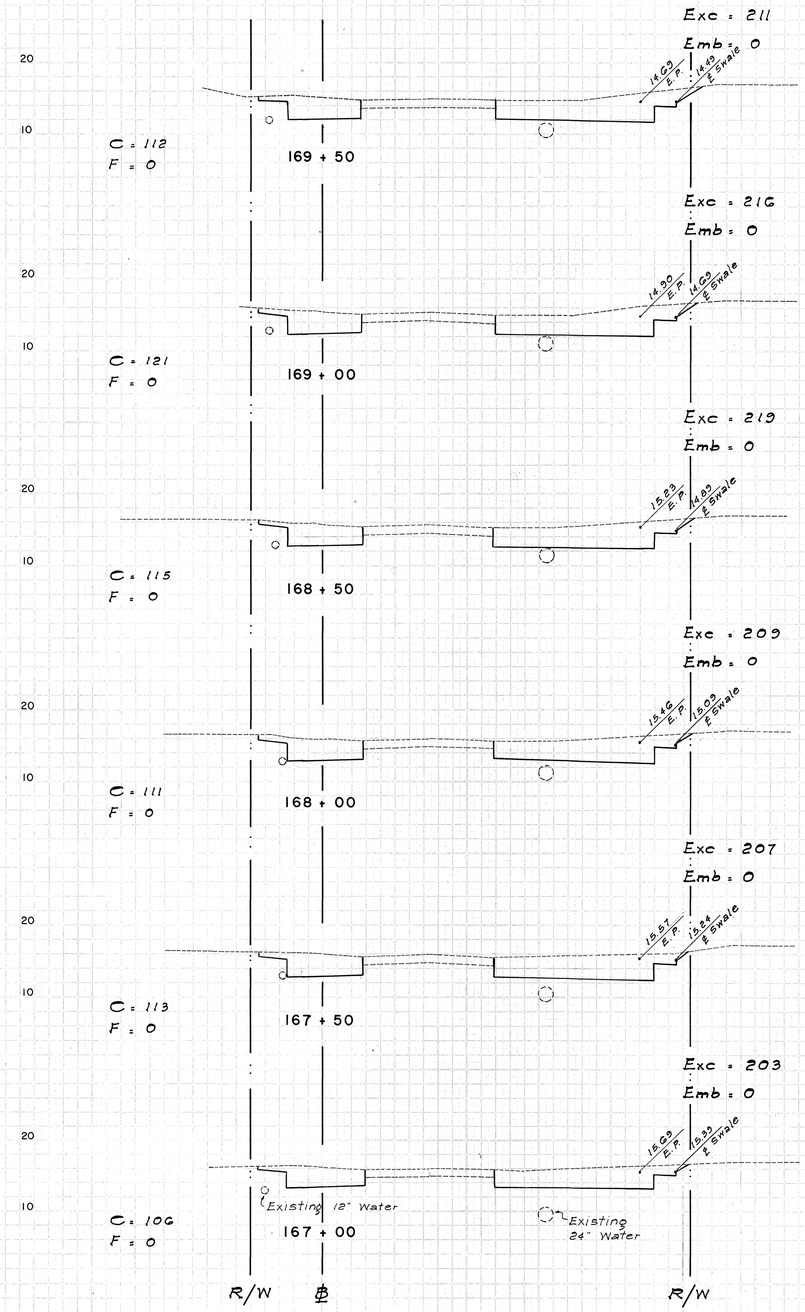


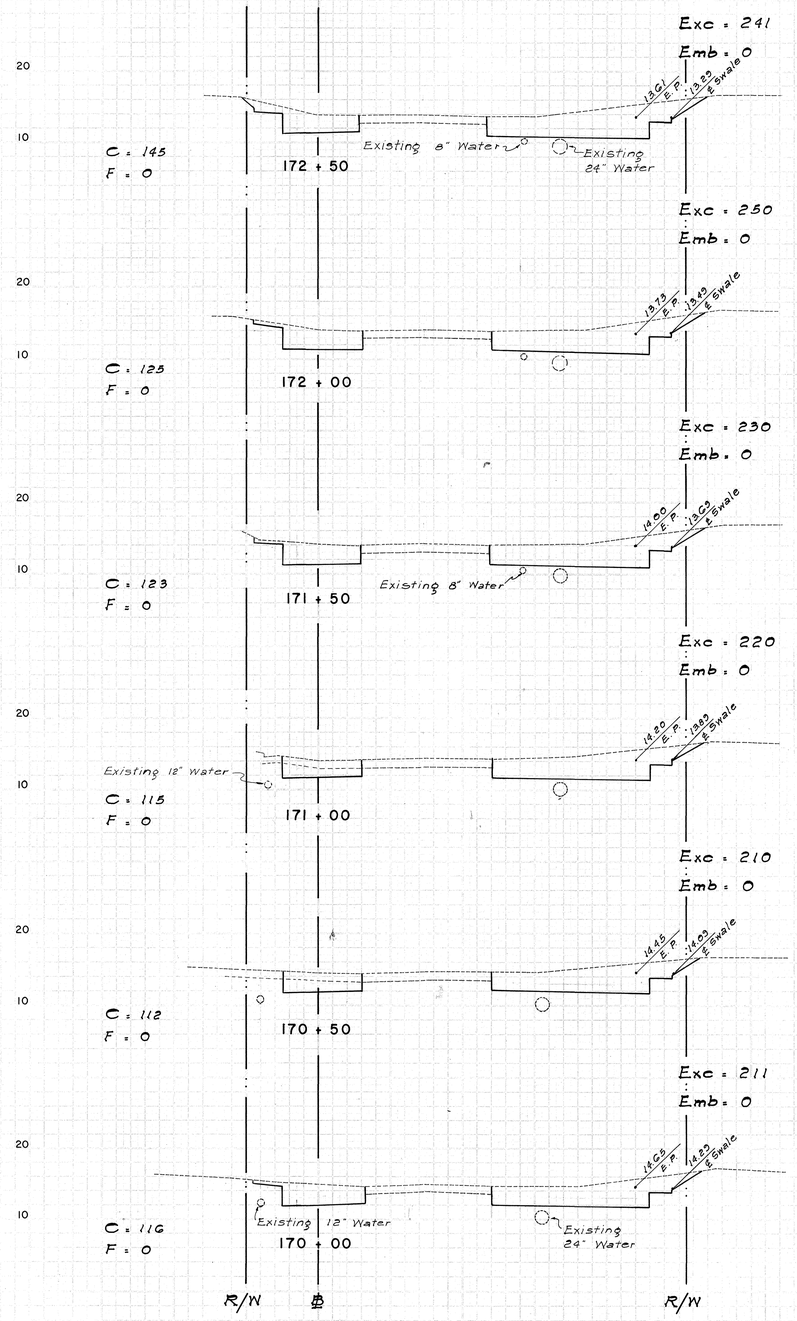
79

SHEET No 11 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	80	95

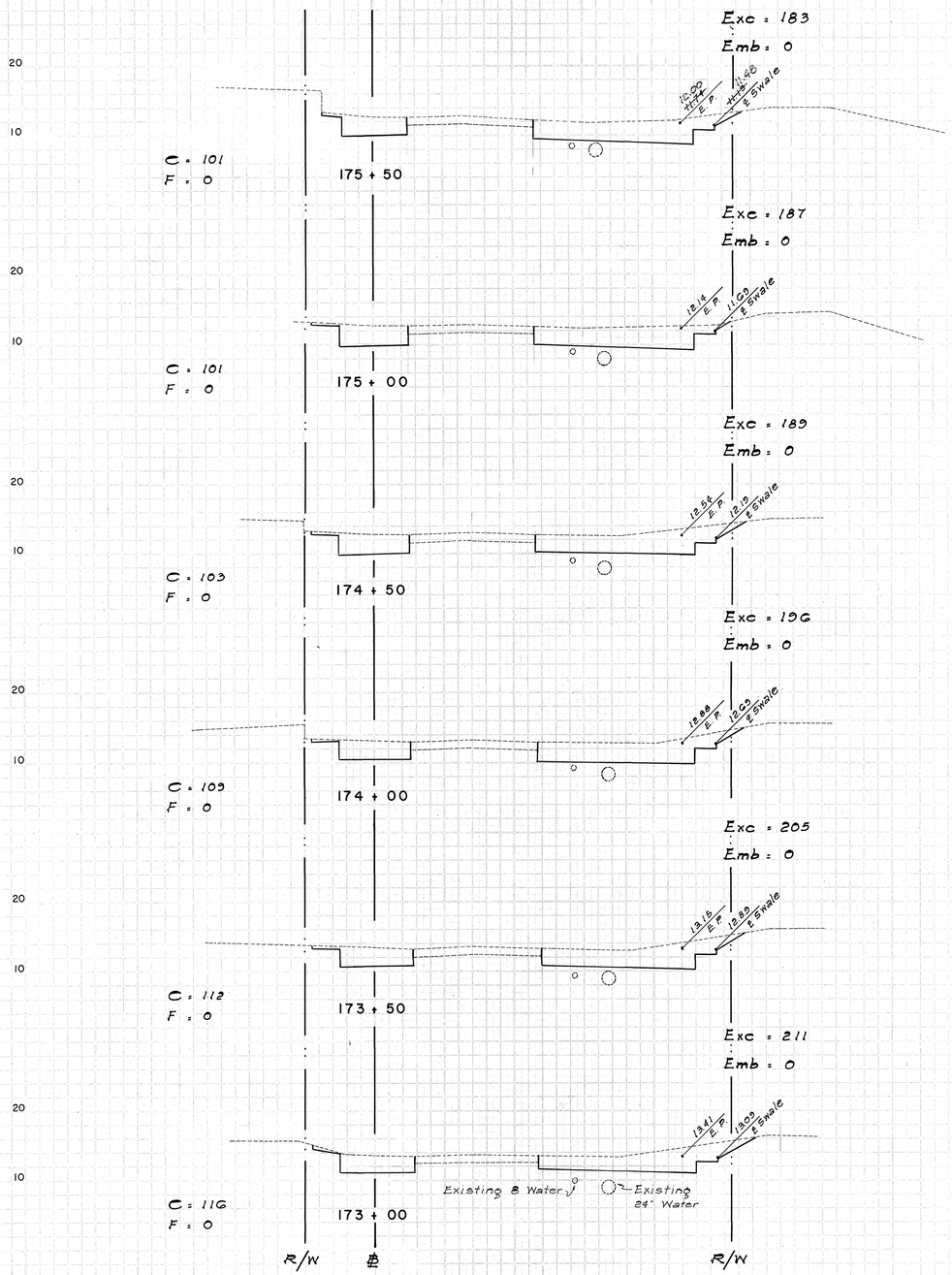
PROJECT NO. B-900-01-64 UNIT II

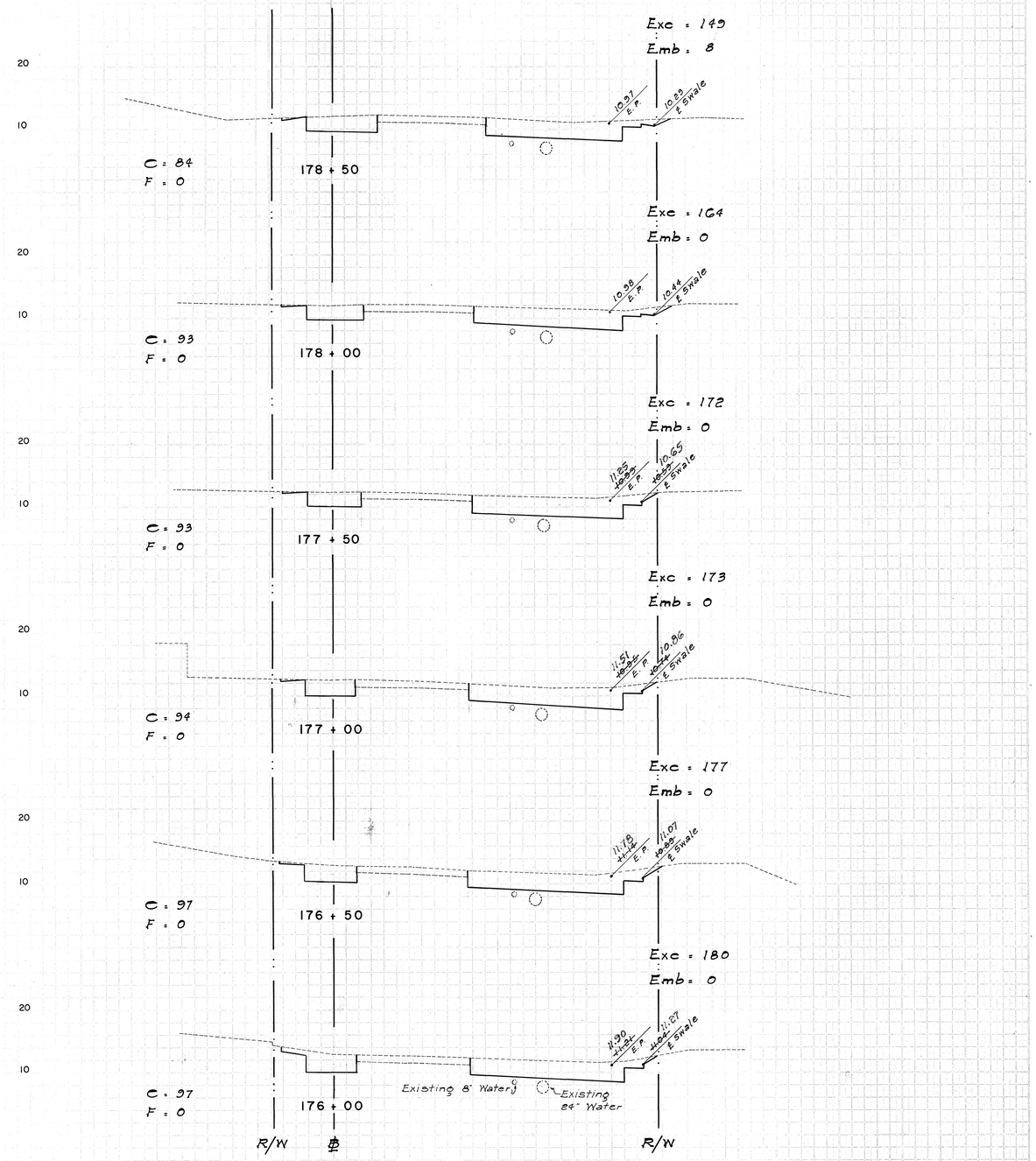




STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	81	95

PROJECT NO. B-900-01-64 UNIT II





SHEET No. 13 OF 14 SHEETS

STATE	FISCAL YEAR	SHEET NO.	TOTAL SHTS.
HAWAII	1968	82	95

PROJECT NO. B-900-01-64 UNIT II