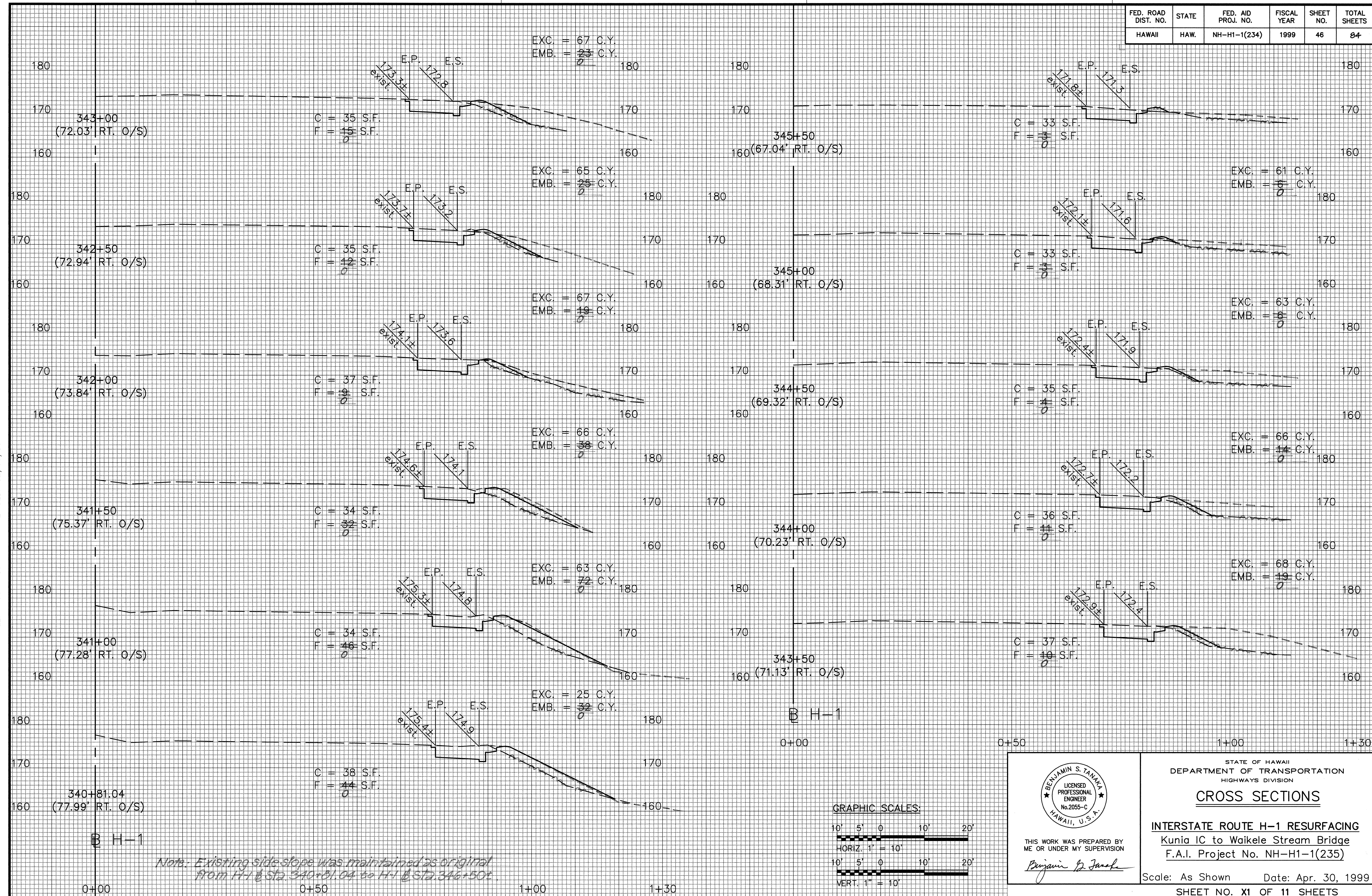


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	46	84

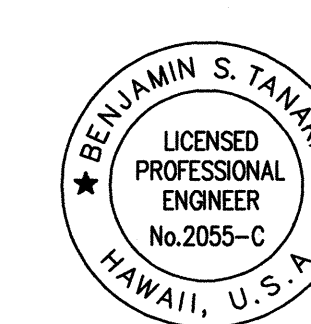
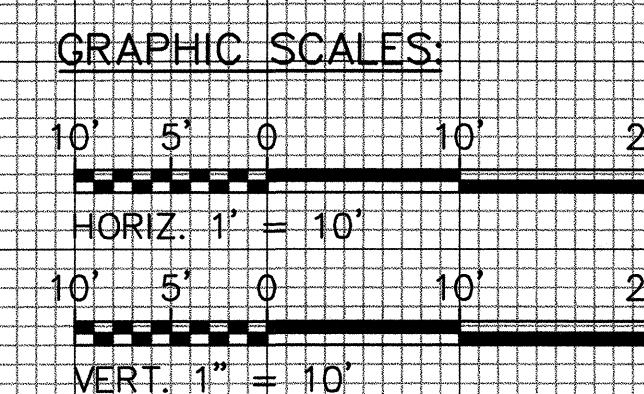


DATE: 2/01/99
 SCALE: 1" = 1'
 FILE: 9814-83

PM: BST
 OPER: SHA
 REVISED: 02/05/99

SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____

ORIGINAL PLAN: _____
 NOTEBOOK: _____
 No. _____



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STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

CROSS SECTIONS

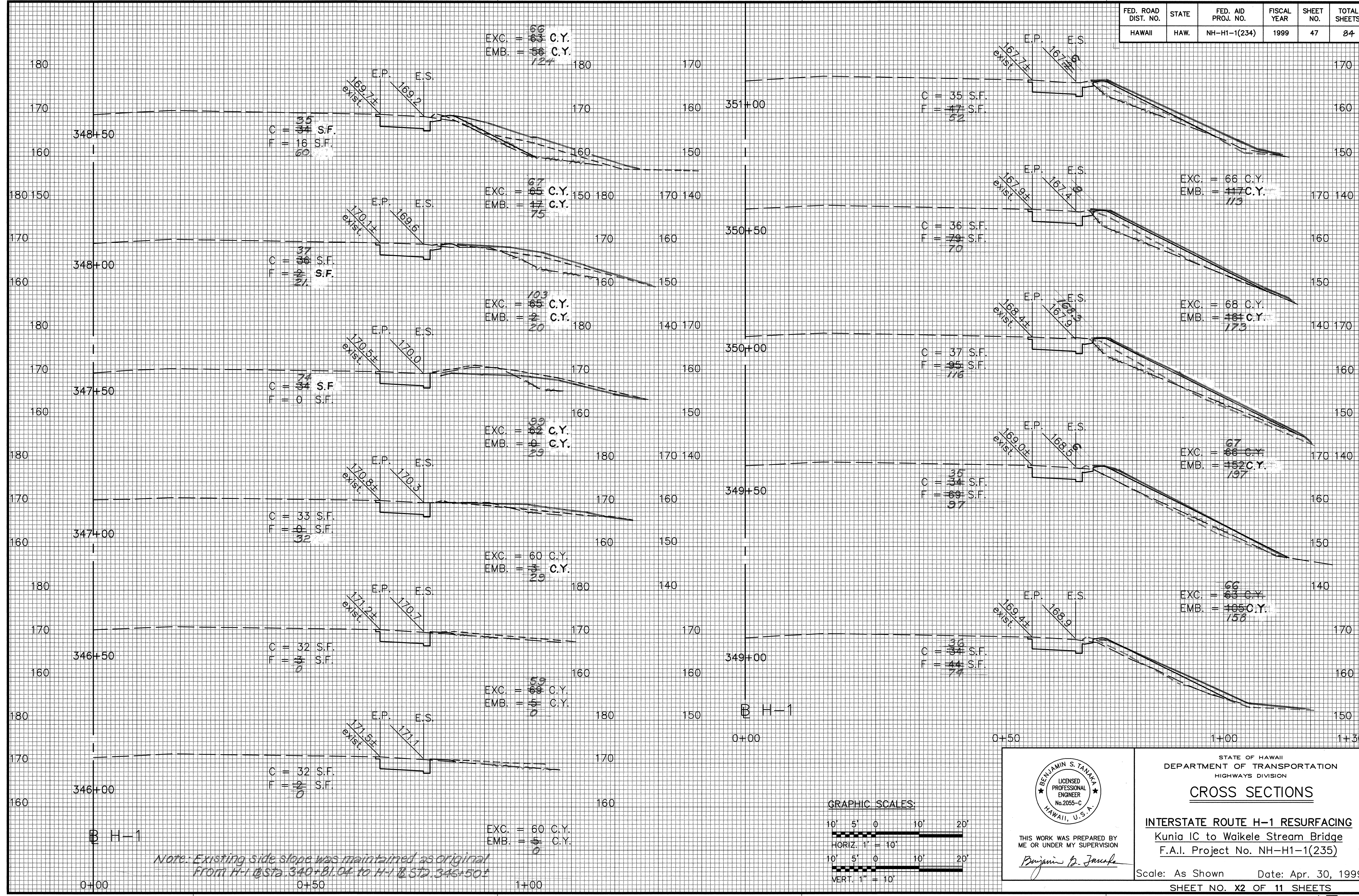
INTERSTATE ROUTE H-1 RESURFACING
 Kunia IC to Waikale Stream Bridge
 F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Apr. 30, 1999

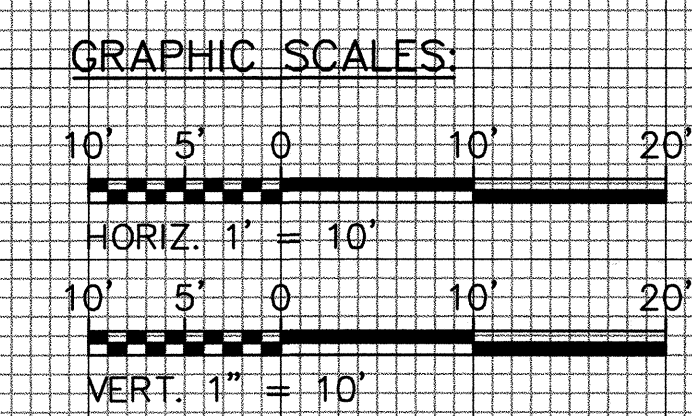
SHEET NO. X1 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	47	84



Note: Existing side slope was maintained as original from H-1 @ Sta. 340+81.04 to H-1 @ Sta. 346+50+



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waikale Stream Bridge
F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Apr. 30, 1999

SHEET NO. X2 OF 11 SHEETS

DATE: 2/01/99
SCALE: 1" = 10'
FILE: 9814-84

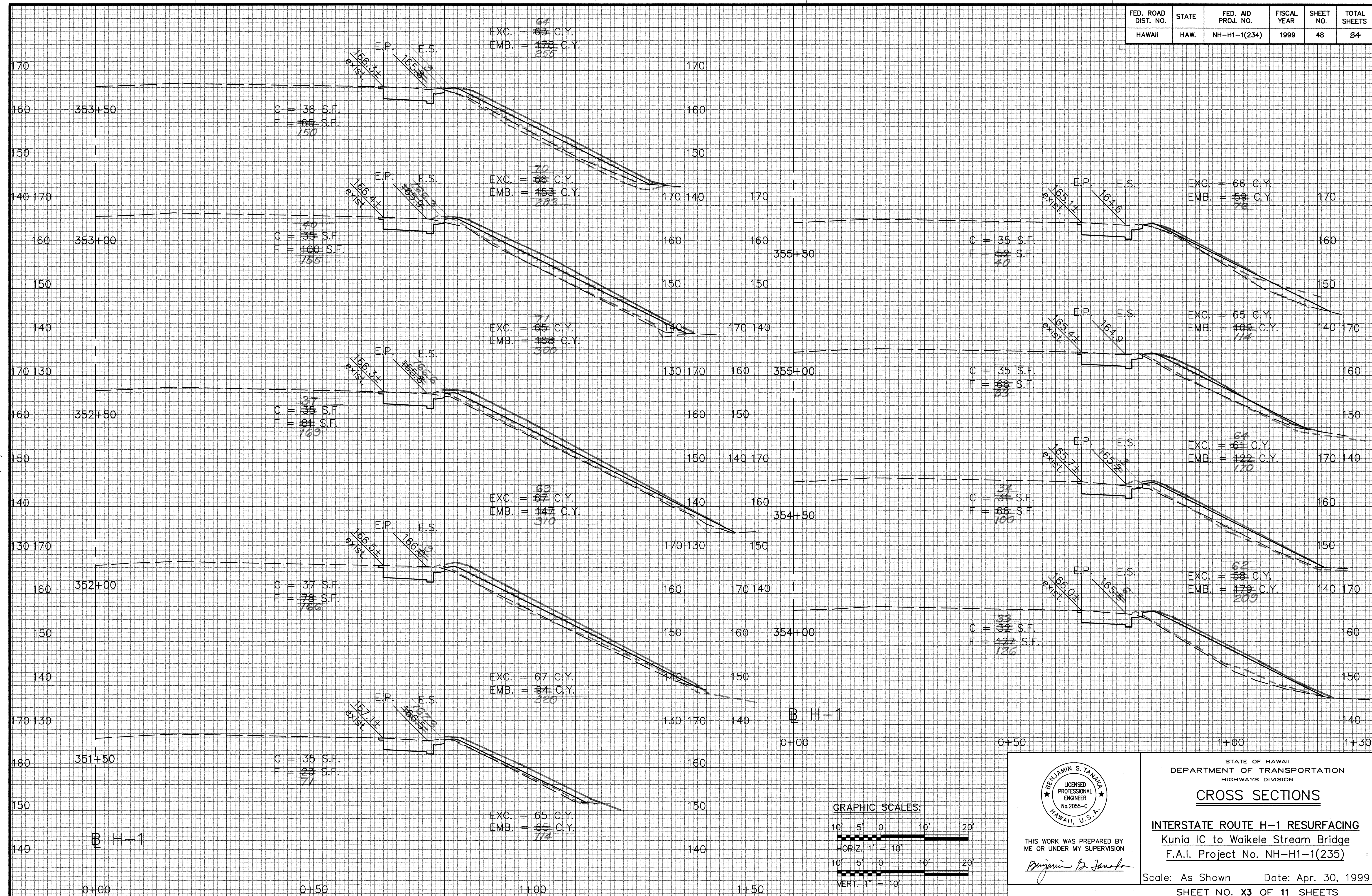
PM: BST
OPER: SHA
REVISED: 03/22/99

ORIGINAL PLAN
DESIGNED BY
CHECKED BY

NO.

"AS-BUILT"

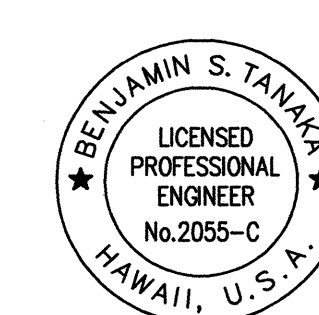
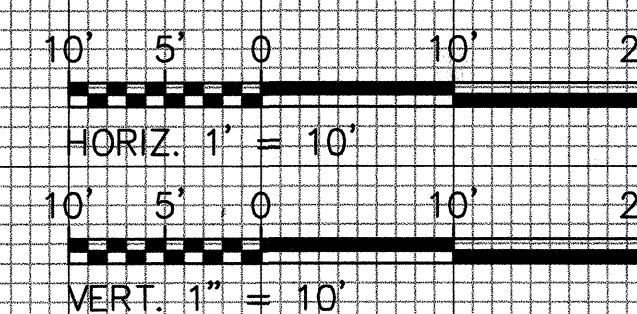
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	48	84



DATE: 2/01/99
SCALE: 1" = 10'
FILE: 9814-85

SURVEY PLOTTED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____

GRAPHIC SCALES:



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waikale Stream Bridge
F.A.I. Project No. NH-H1-1(235)

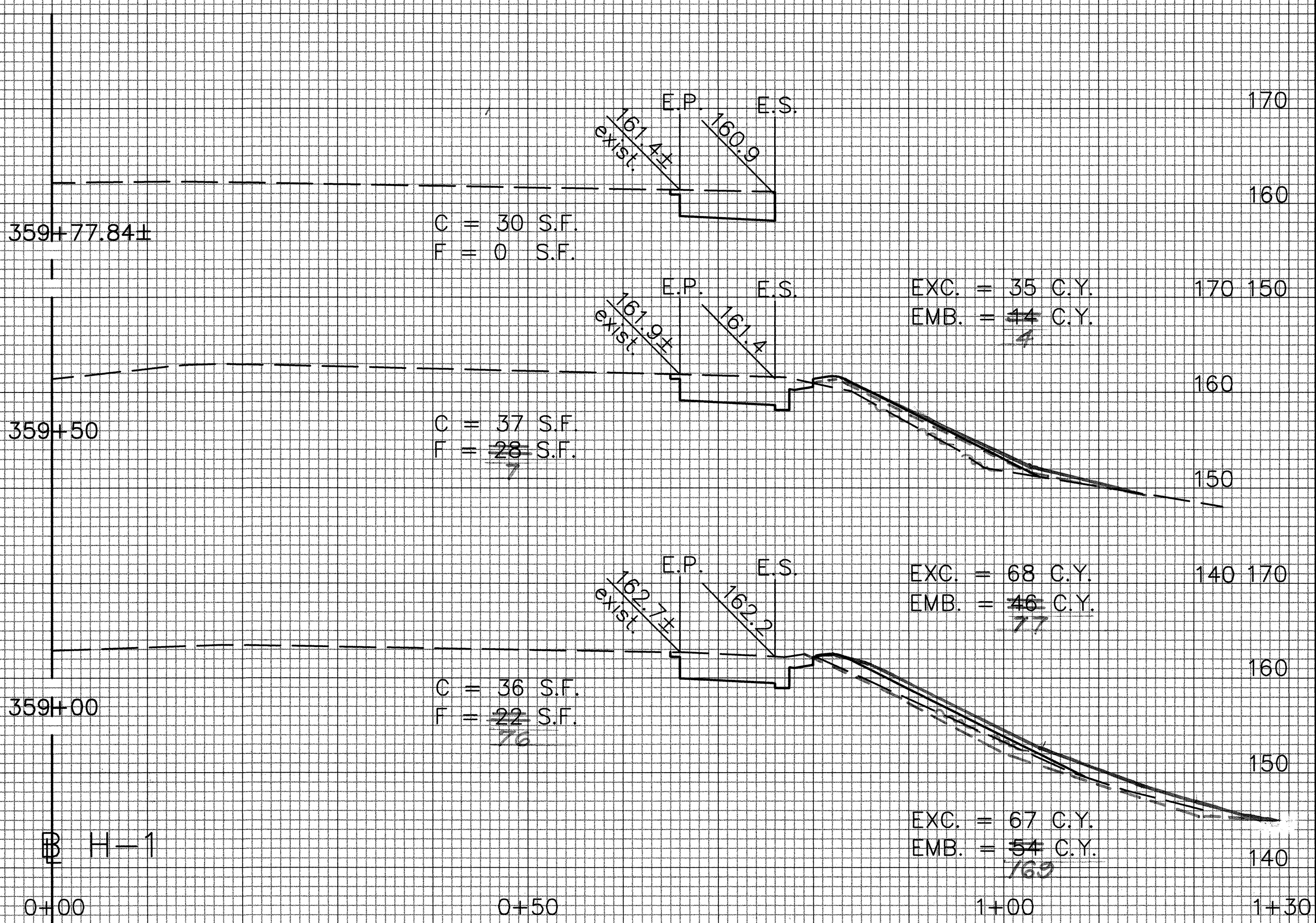
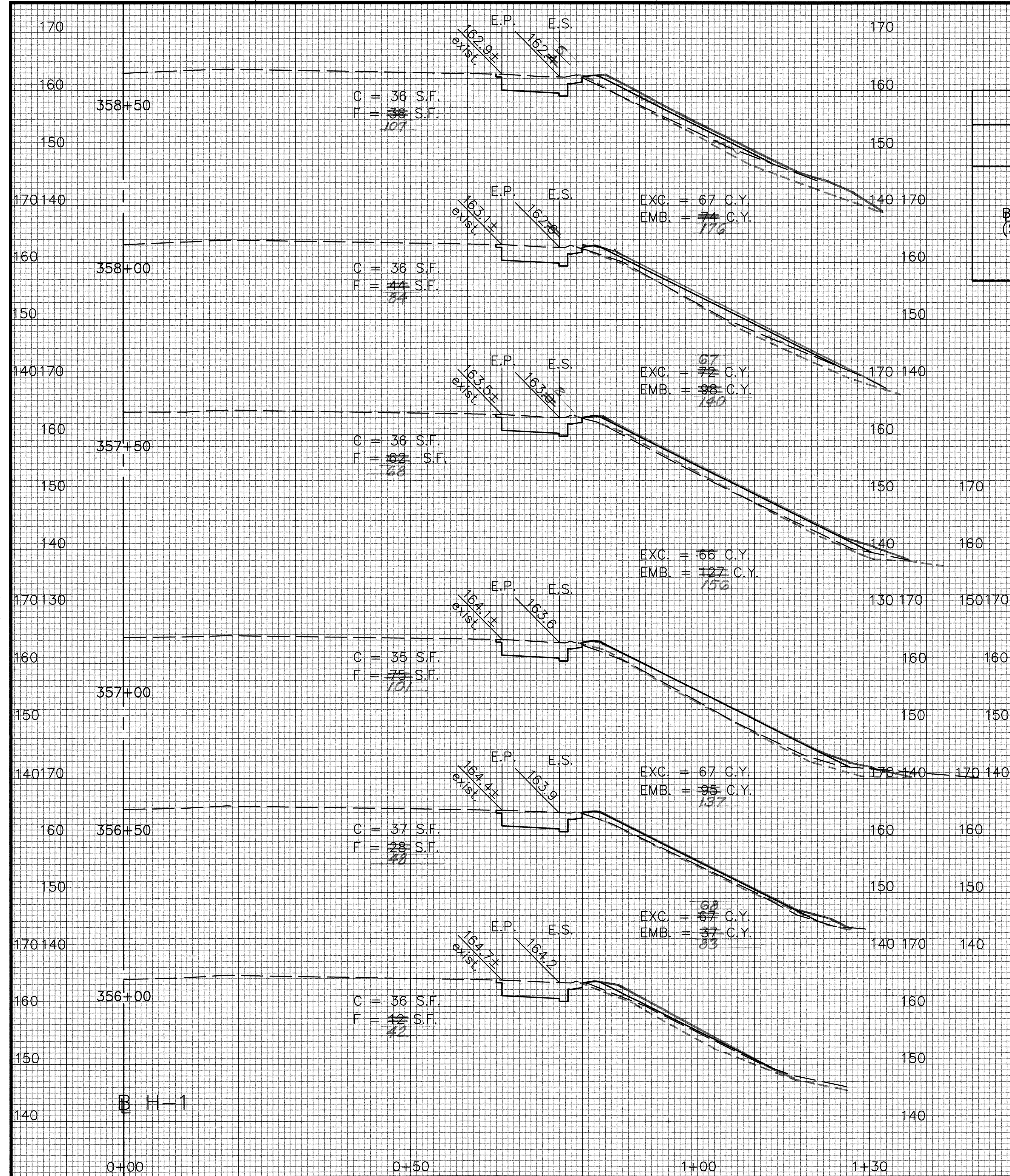
Scale: As Shown Date: Apr. 30, 1999

SHEET NO. X3 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	49	84

ESTIMATED EARTHWORK QUANTITIES		
LOCATION	EXCAVATION	EMBANKMENT
B H-1 I.B. STA. 340+81.04 TO 359+77.84± (SHOULDER WORK)	2,455 C.Y.	2,696 C.Y.

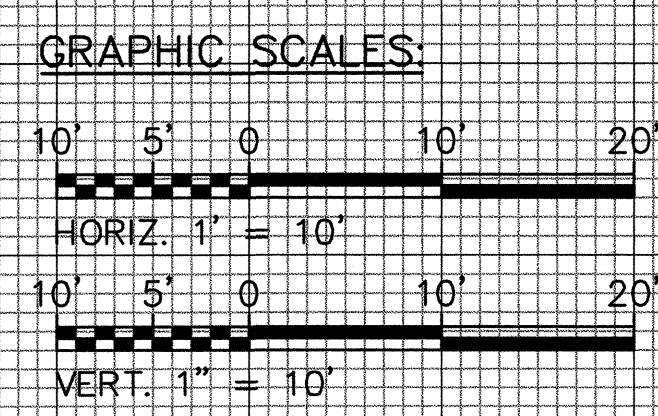


DATE: 2/01/99
SCALE: 1" = 10'
FILE: 9814-86

PM: BST
OPER: SHA
REVISED: 03/22/99

SURVEY PLOTTED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
QUANTITIES BY: _____
CHECKED BY: _____

ORIGINAL PLAN NO. _____
NOTEBOOK NO. _____



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HIGHWAYS DIVISION

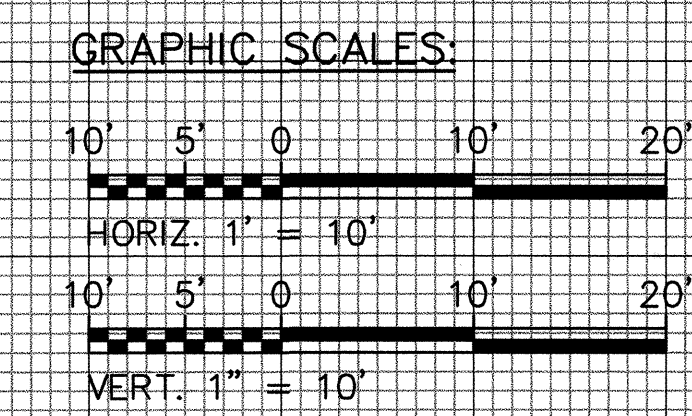
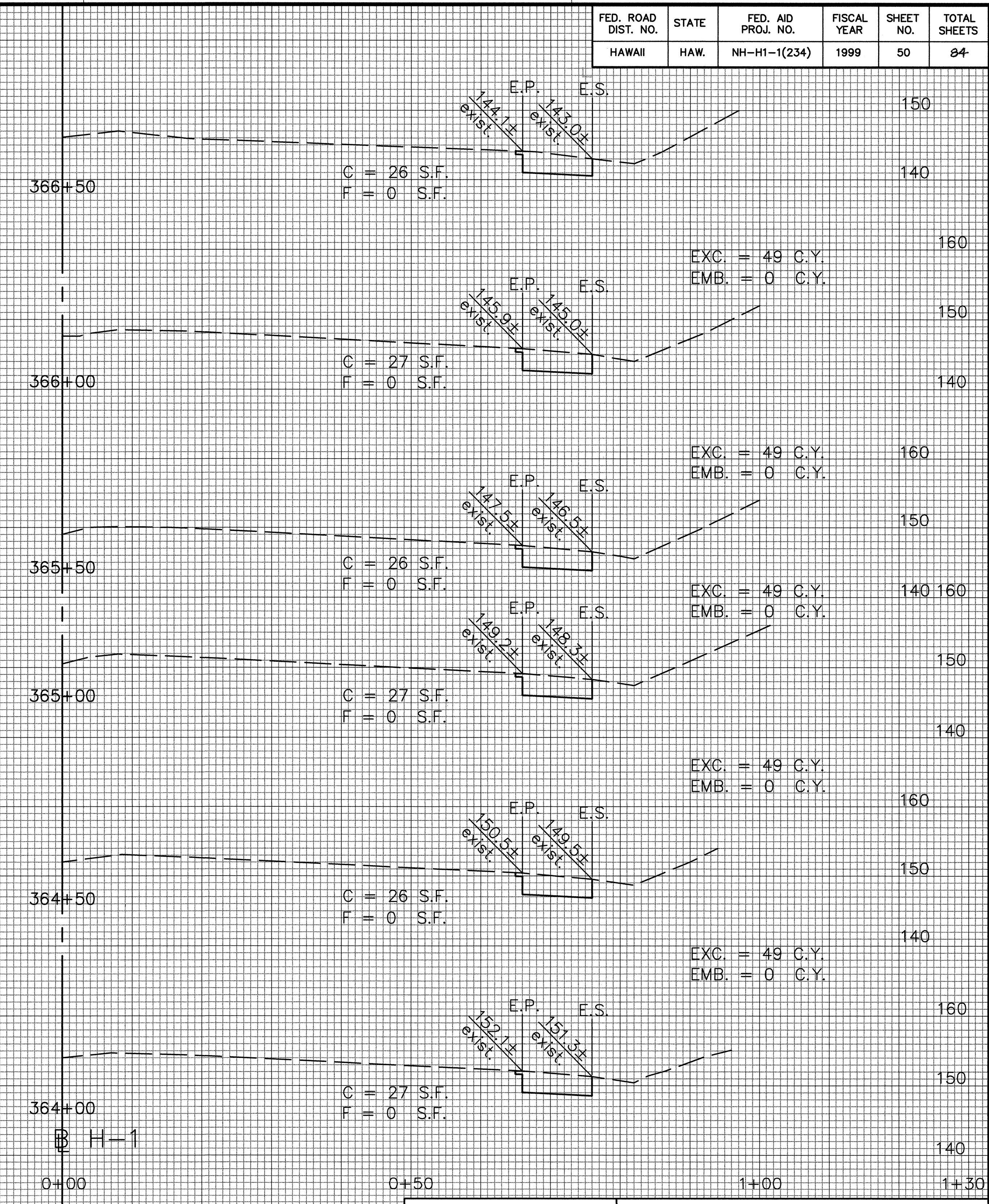
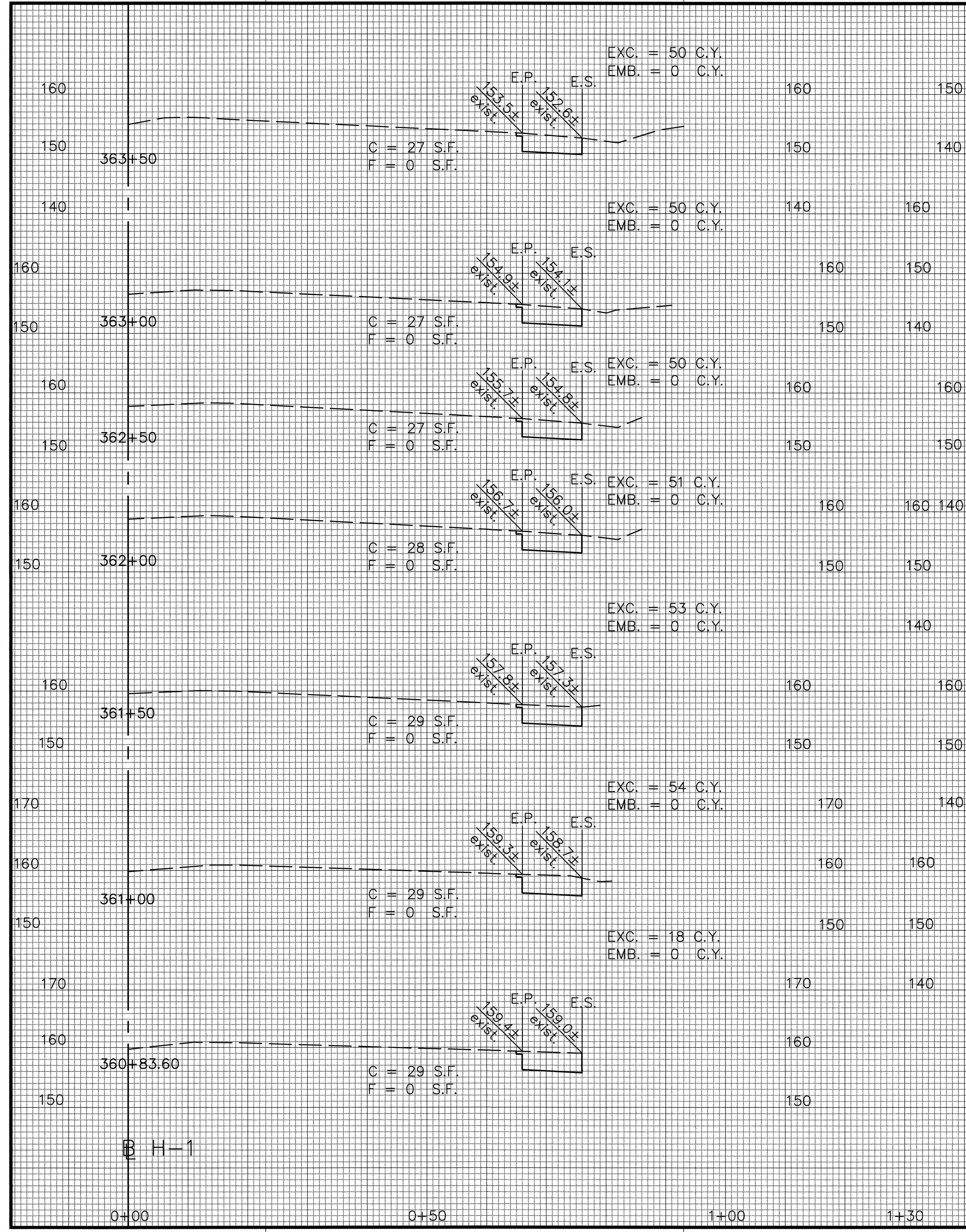
CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waikale Stream Bridge
F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Apr. 30, 1999
SHEET NO. X4 OF 11 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	50	84

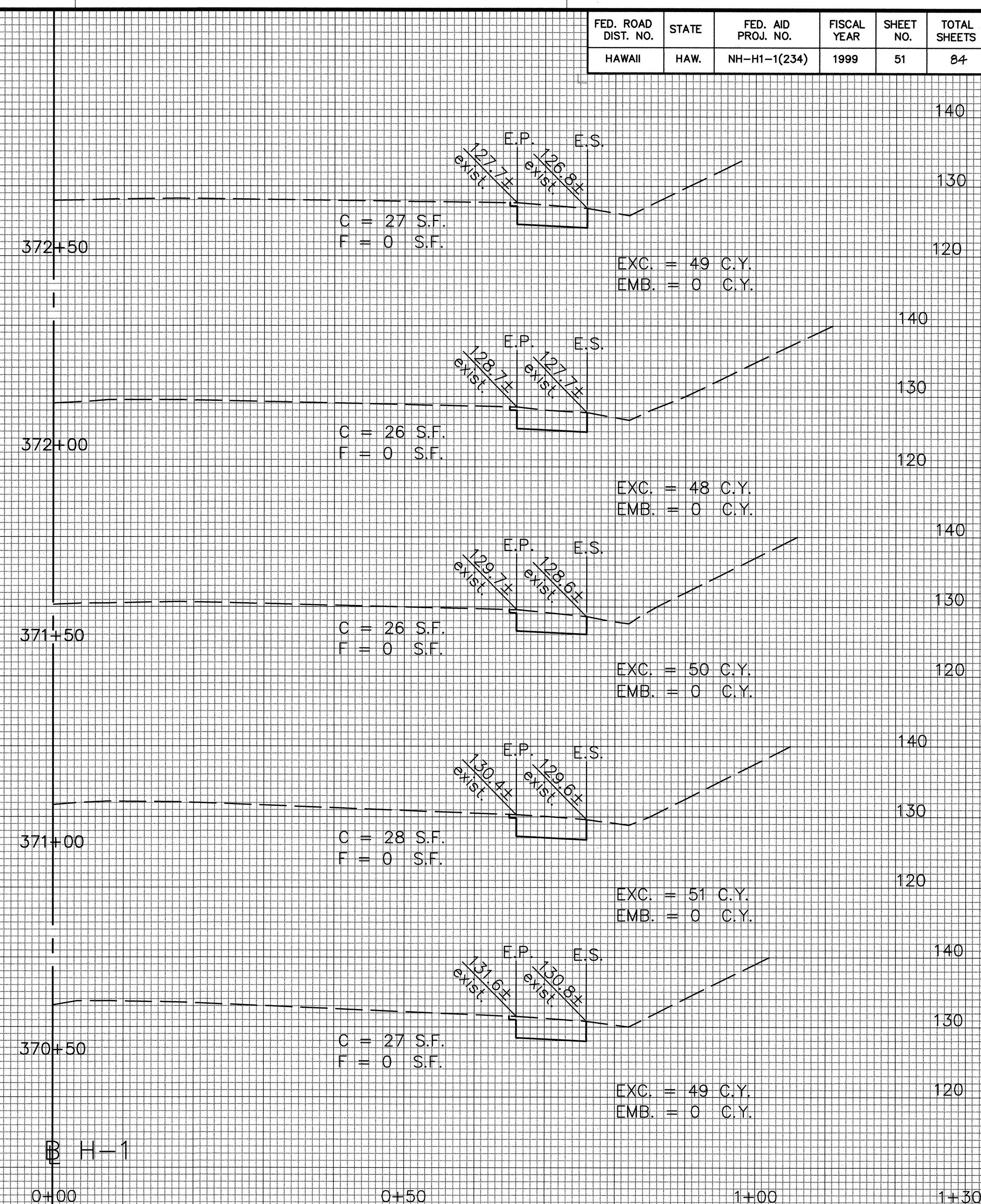
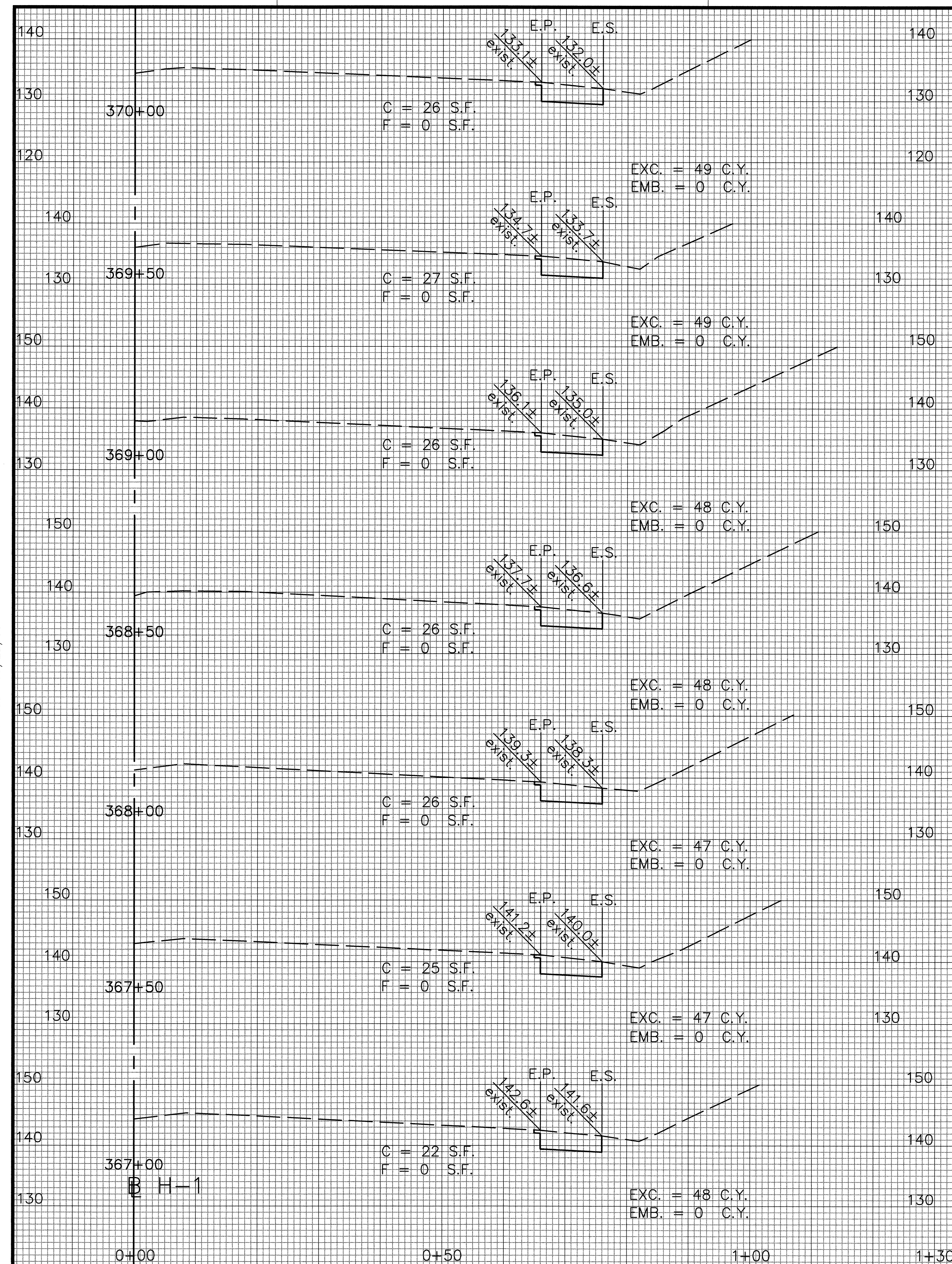


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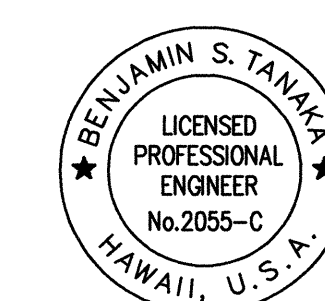
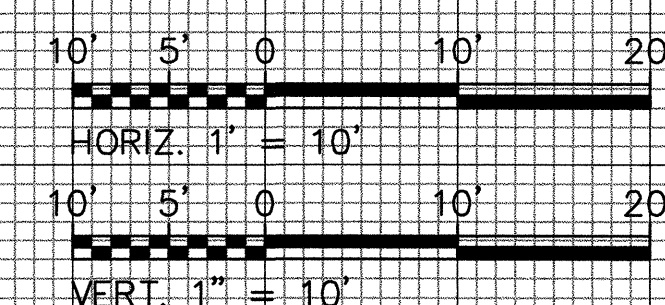
STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
CROSS SECTIONS
 INTERSTATE ROUTE H-1 RESURFACING
 Kunia IC to Waialeale Stream Bridge
 F.A.I. Project No. NH-H1-1(235)
 Scale: As Shown Date: Apr. 30, 1999
 SHEET NO. X5 OF 11 SHEETS

DATE: 2/01/99
 SCALE: 1" = 10'
 FILE: 9814-87
 PM: BST
 OPER: SHA
 REVISED: 03/22/99
 SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____
 ORIGINAL PLAN: _____
 NO. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	51	84



GRAPHIC SCALES:



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DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

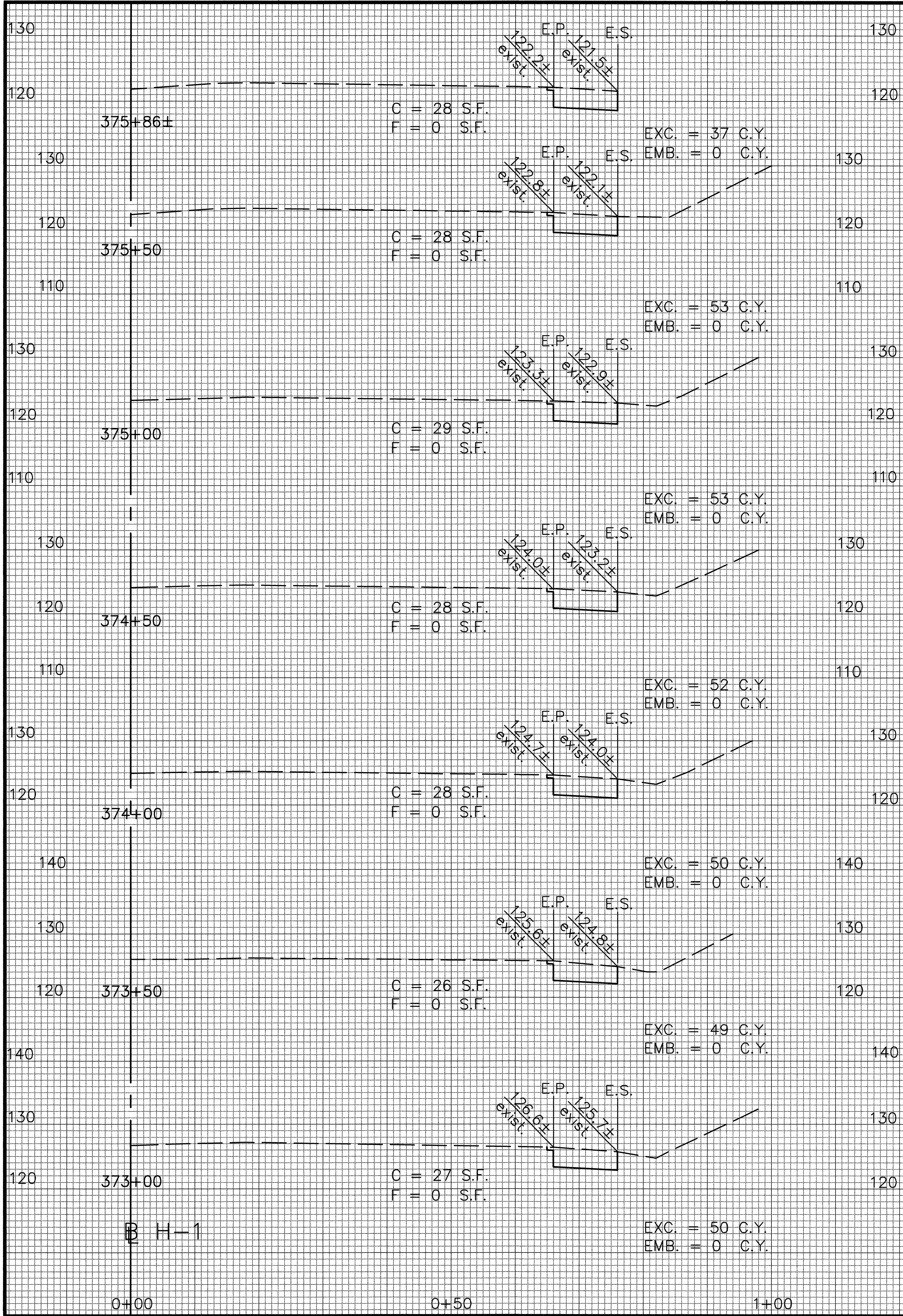
CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waialeale Stream Bridge
F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Apr. 30, 1999
SHEET NO. X6 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	52	84

ESTIMATED EARTHWORK QUANTITIES		
LOCATION	EXCAVATION	EMBANKMENT
B H-1 I.B. STA. 360+83.60 TO STA. 375+86± (SHOULDER WORK)	1,498 C.Y.	0 C.Y.

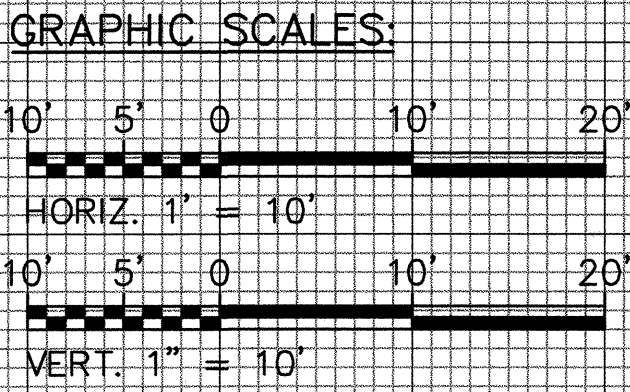


DATE: 2/01/99
 SCALE: 1" = 1'
 FILE: 9814-89

PM: BST
 OPER: SHA
 REVISED: 03/22/99

SURVEY PLOTTED BY: _____
 DRAWN BY: _____
 DESIGNED BY: _____
 CHECKED BY: _____

ORIGINAL PLAN _____
 NOTEBOOK _____
 No. _____



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Benjamin S. Tanker

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

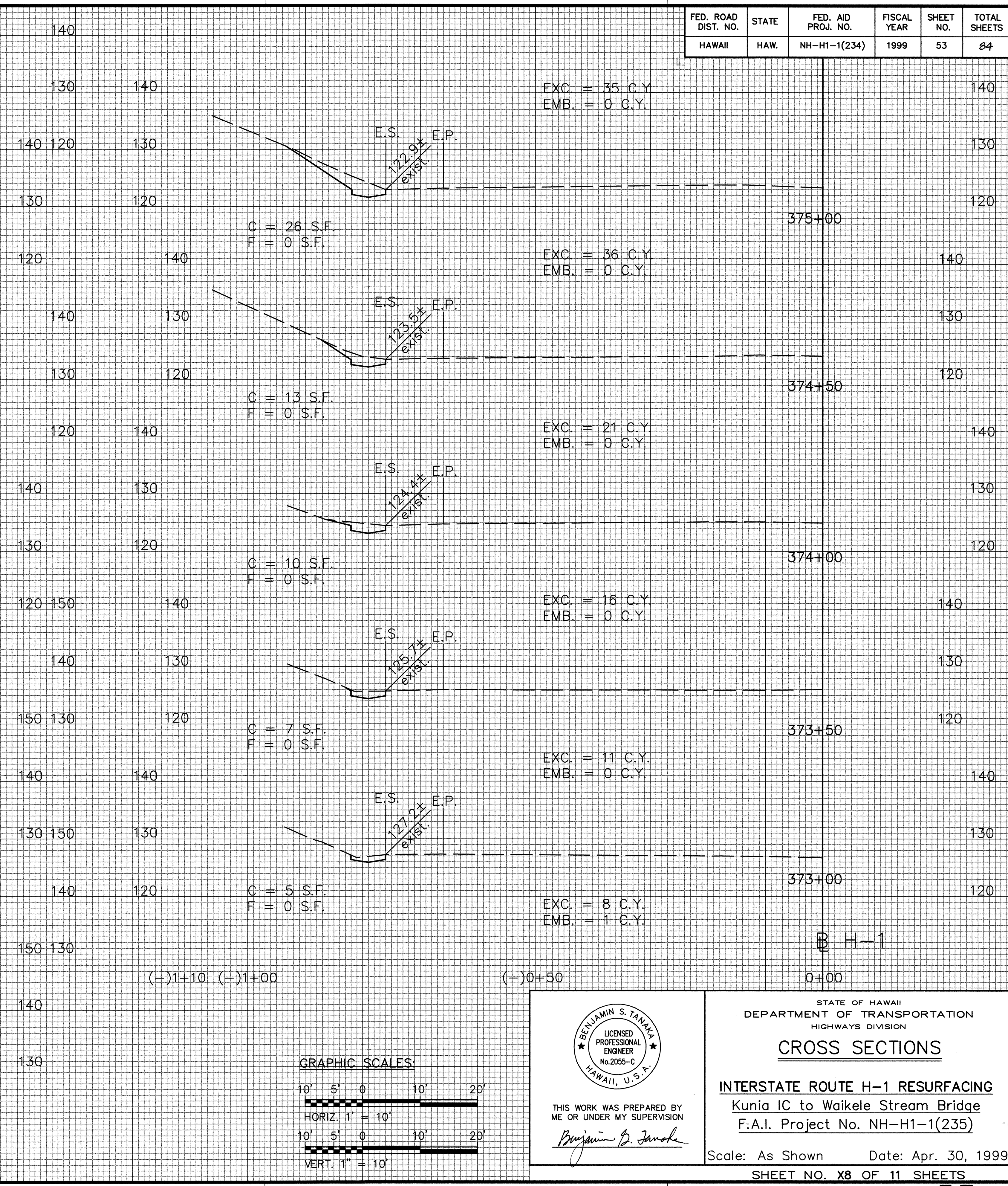
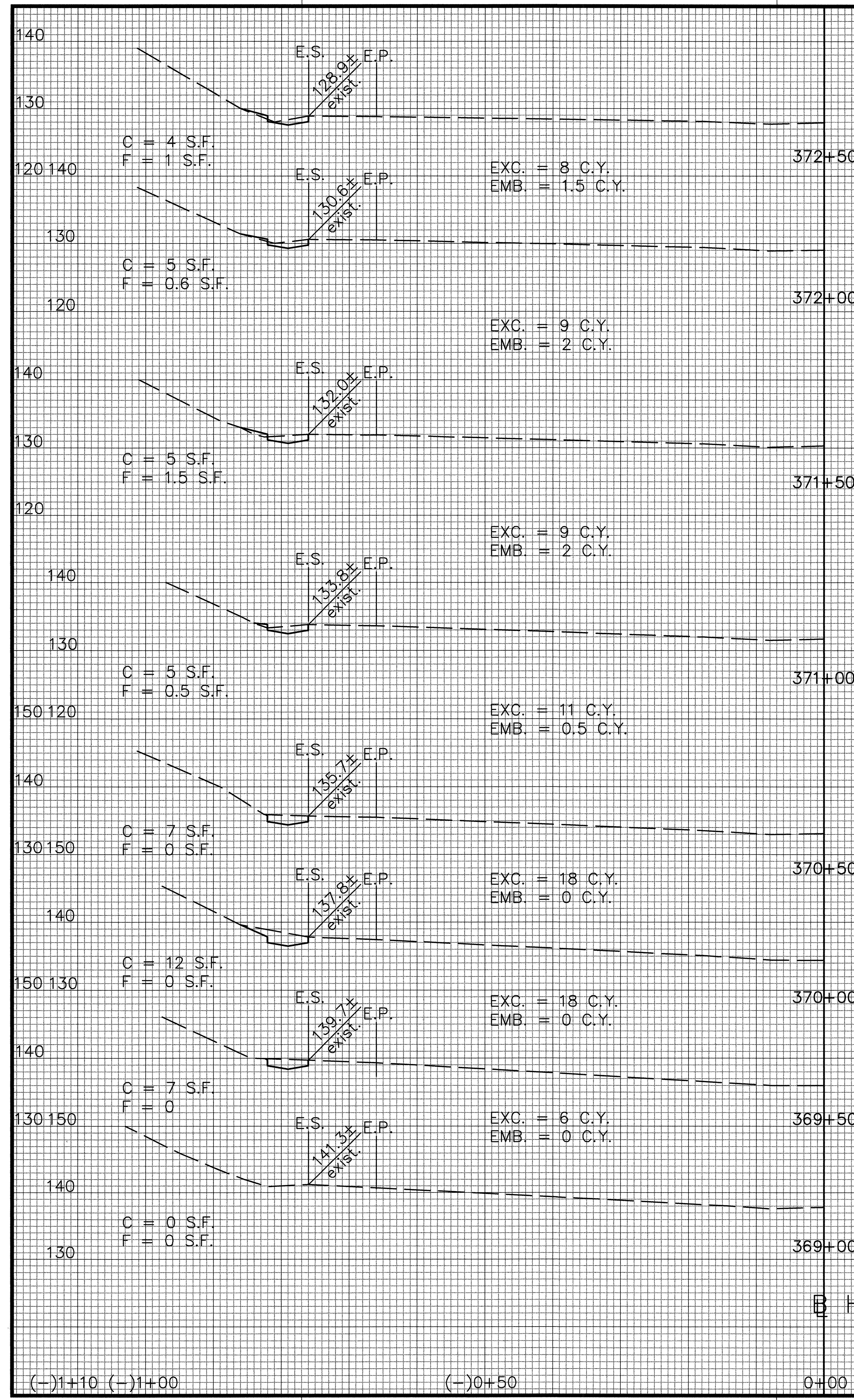
CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING
 Kunia IC to Waialeale Stream Bridge
 F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Apr. 30, 1999

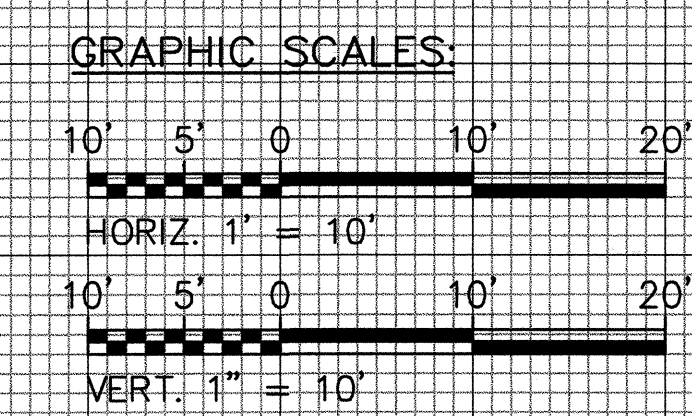
SHEET NO. X7 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	53	84



DATE: 2/01/99
SCALE: 1" = 10'
FILE: 9814-90

SURVEY PLOTTED BY: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____

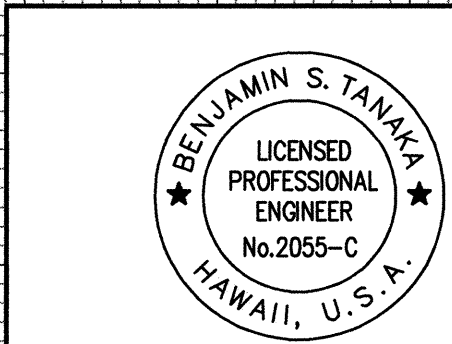
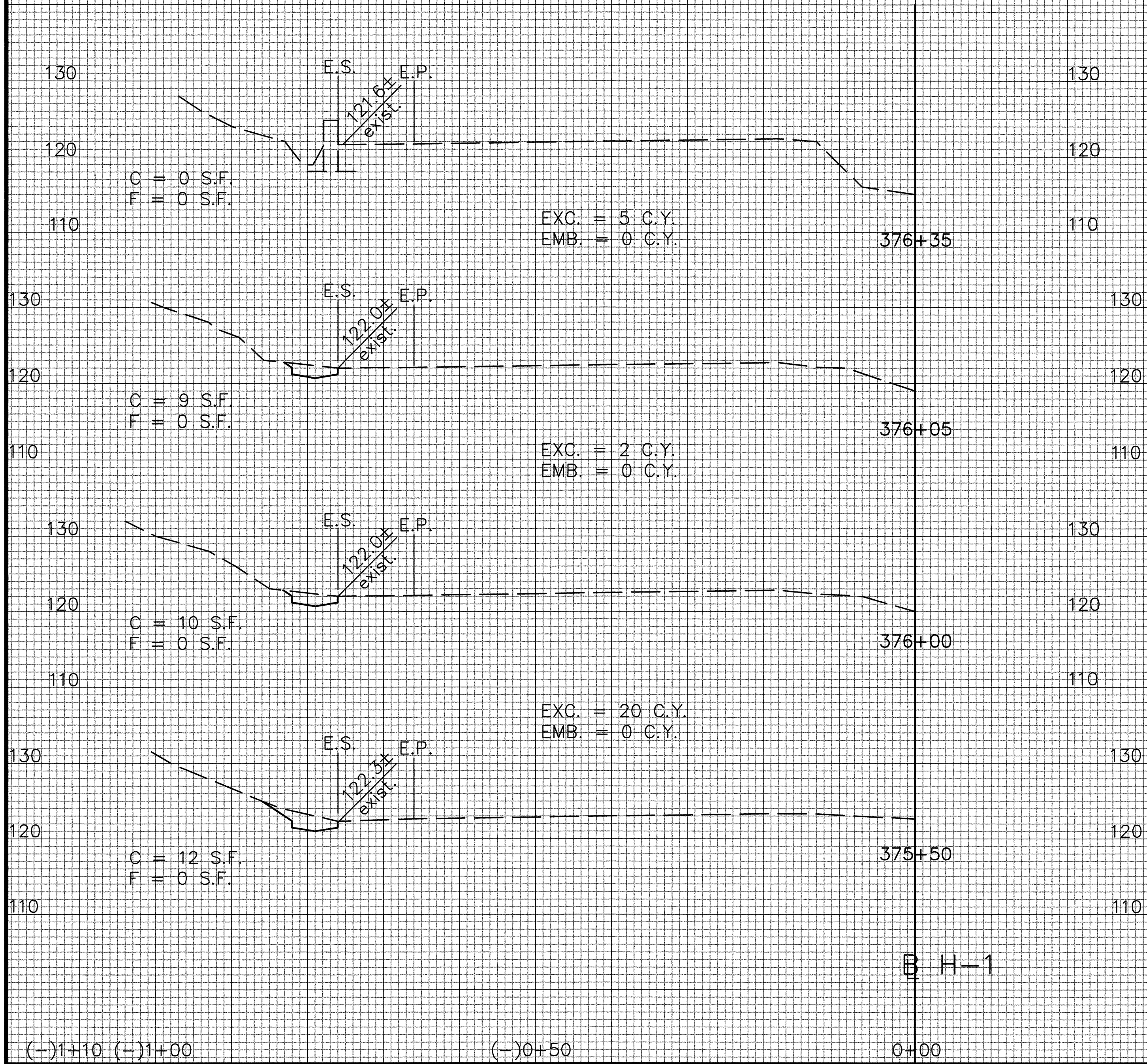


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Benjamin S. Tank
BENJAMIN S. TANK
LICENSED PROFESSIONAL ENGINEER
No. 2055-C
HAWAII, U.S.A.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CROSS SECTIONS
INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waialeale Stream Bridge
F.A.I. Project No. NH-H1-1(235)
Scale: As Shown Date: Apr. 30, 1999
SHEET NO. X8 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	54	84

ESTIMATED EARTHWORK QUANTITIES		
LOCATION	EXCAVATION	EMBANKMENT
B H-1 O.B. STA. 369+00 TO 376+25± (SHOULDER WORK)	273 C.Y.	7 C.Y.



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HIGHWAYS DIVISION

CROSS SECTIONS

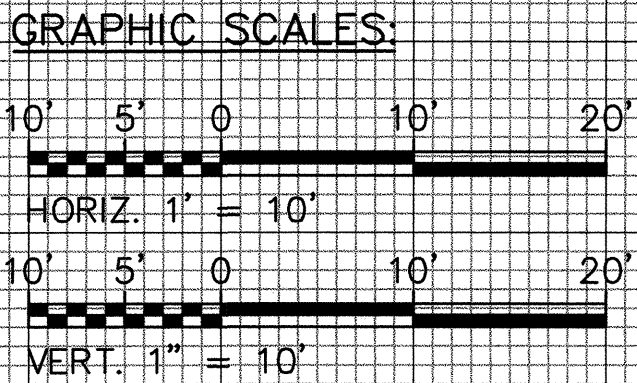
INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waialeale Stream Bridge
F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Apr. 30, 1999
SHEET NO. X9 OF 11 SHEETS

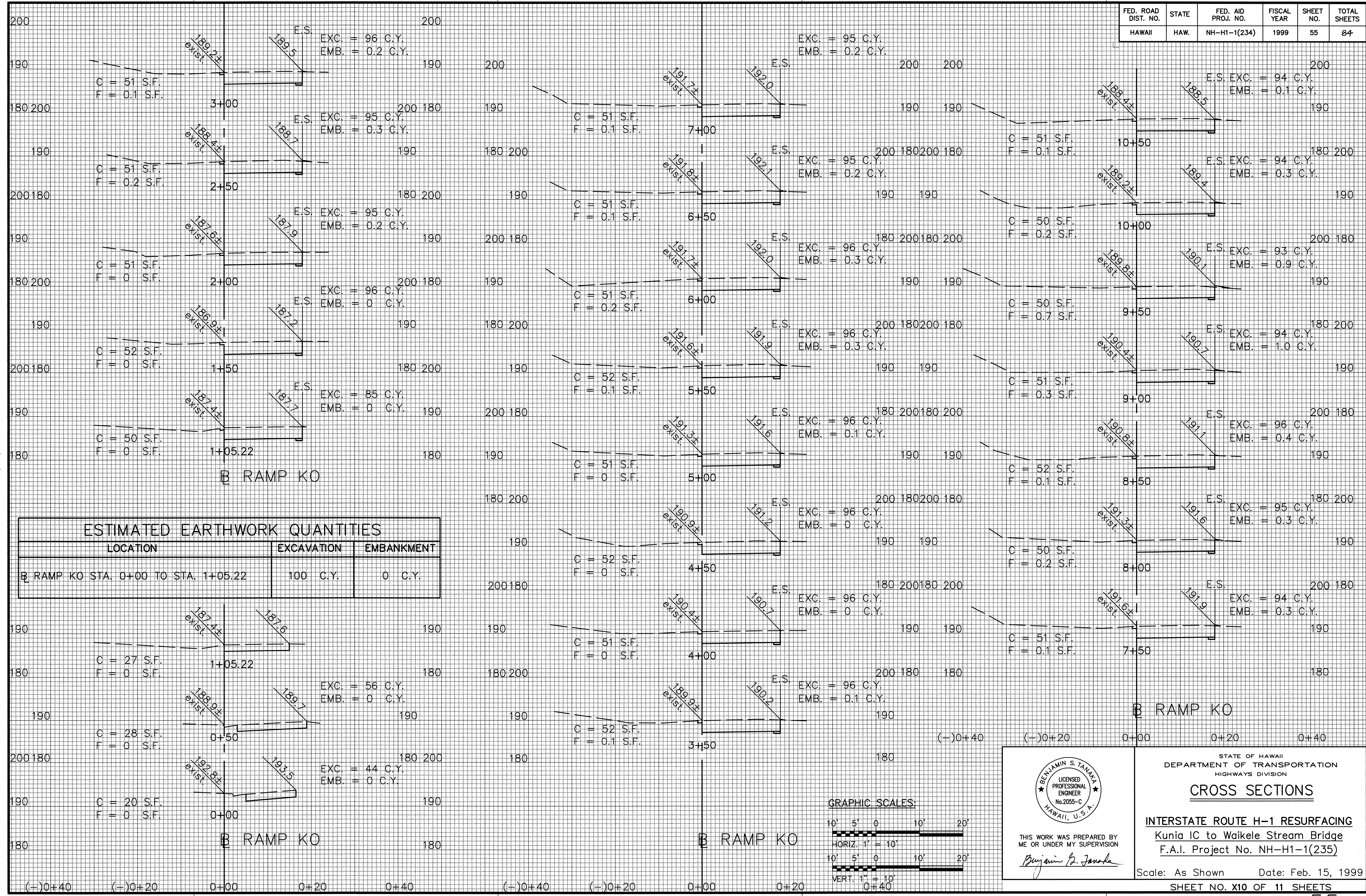
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	DESIGNED BY	
	QUANTITIES BY	
NOTEBOOK No.	CHECKED BY	

DATE: 2/01/99
SCALE: 1" = 10'
FILE: 9814-91

PM: BST
OPER: SHA
REVISED: 03/22/99



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	55	84



ESTIMATED EARTHWORK QUANTITIES		
LOCATION	EXCAVATION	EMBANKMENT
B RAMP KO STA. 0+00 TO STA. 1+05.22	100 C.Y.	0 C.Y.

DATE: 2/01/99

SCALE: 1" = 1'

FILE: 9814-92

PM: BST

OPER: SHA

REVISED: 03/22/99

SURVEY PLOTTED BY

DATE

DRAWN BY

DATE

DESIGNED BY

DATE

QUANTITIES BY

DATE

CHECKED BY

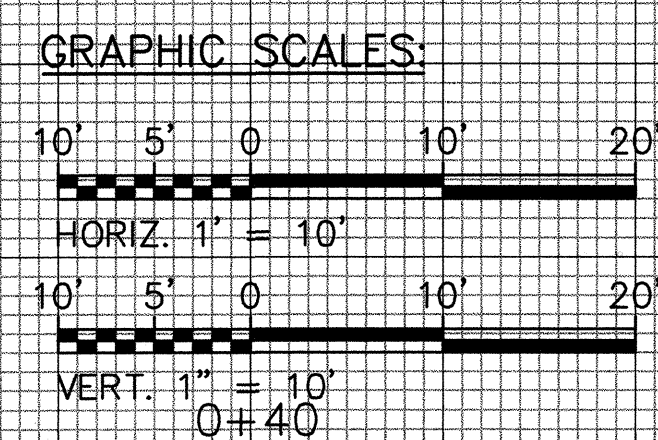
DATE

ORIGINAL PLAN

NO.

NOTEBOOK

NO.



BENJAMIN S. TANKA

LICENSED PROFESSIONAL ENGINEER

No. 2055-C

HAWAII, U.S.A.

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STATE OF HAWAII

DEPARTMENT OF TRANSPORTATION

HIGHWAYS DIVISION

CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING

Kunia IC to Waikale Stream Bridge

F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Feb. 15, 1999

SHEET NO. X10 OF 11 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-H1-1(234)	1999	56	84

ESTIMATED EARTHWORK QUANTITIES

LOCATION	EXCAVATION	EMBANKMENT
B RAMP KO STA. 0+00 TO STA. 1+05.22	100 C.Y.	0 C.Y.
B RAMP KO STA. 1+05.22 TO STA. 15+50	2,753 C.Y.	8 C.Y.
B RAMP KO STA. 15+50 TO STA. 16+00	74 C.Y.	0 C.Y.
TOTAL	2,927 C.Y.	8 C.Y.

ESTIMATED EARTHWORK QUANTITIES

LOCATION	EXCAVATION	EMBANKMENT
B RAMP KO STA. 15+50 TO STA. 16+00	74 C.Y.	0 C.Y.

TOTAL ESTIMATED EARTHWORK QUANTITIES

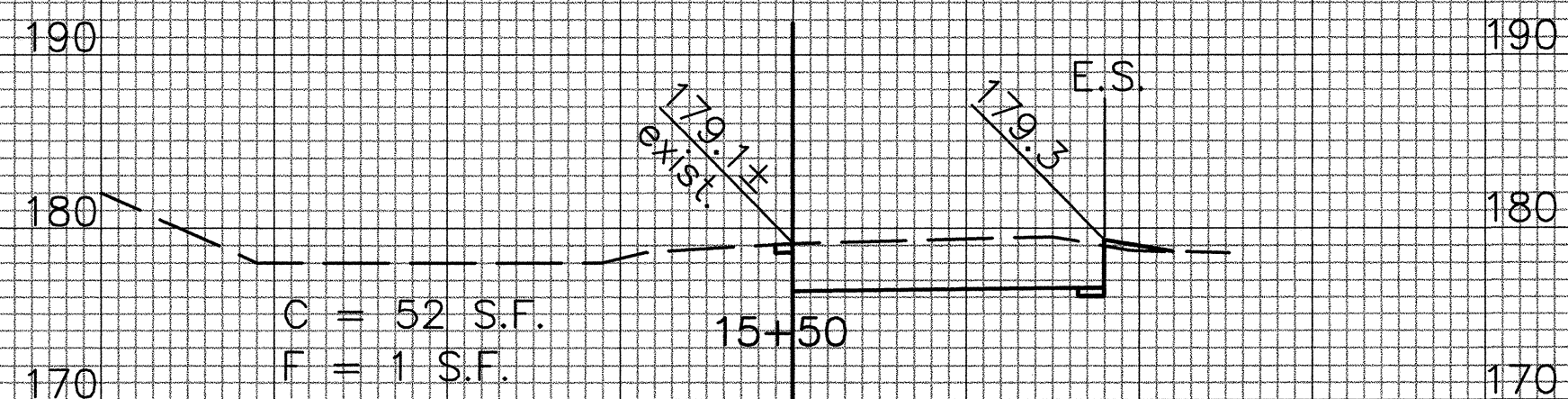
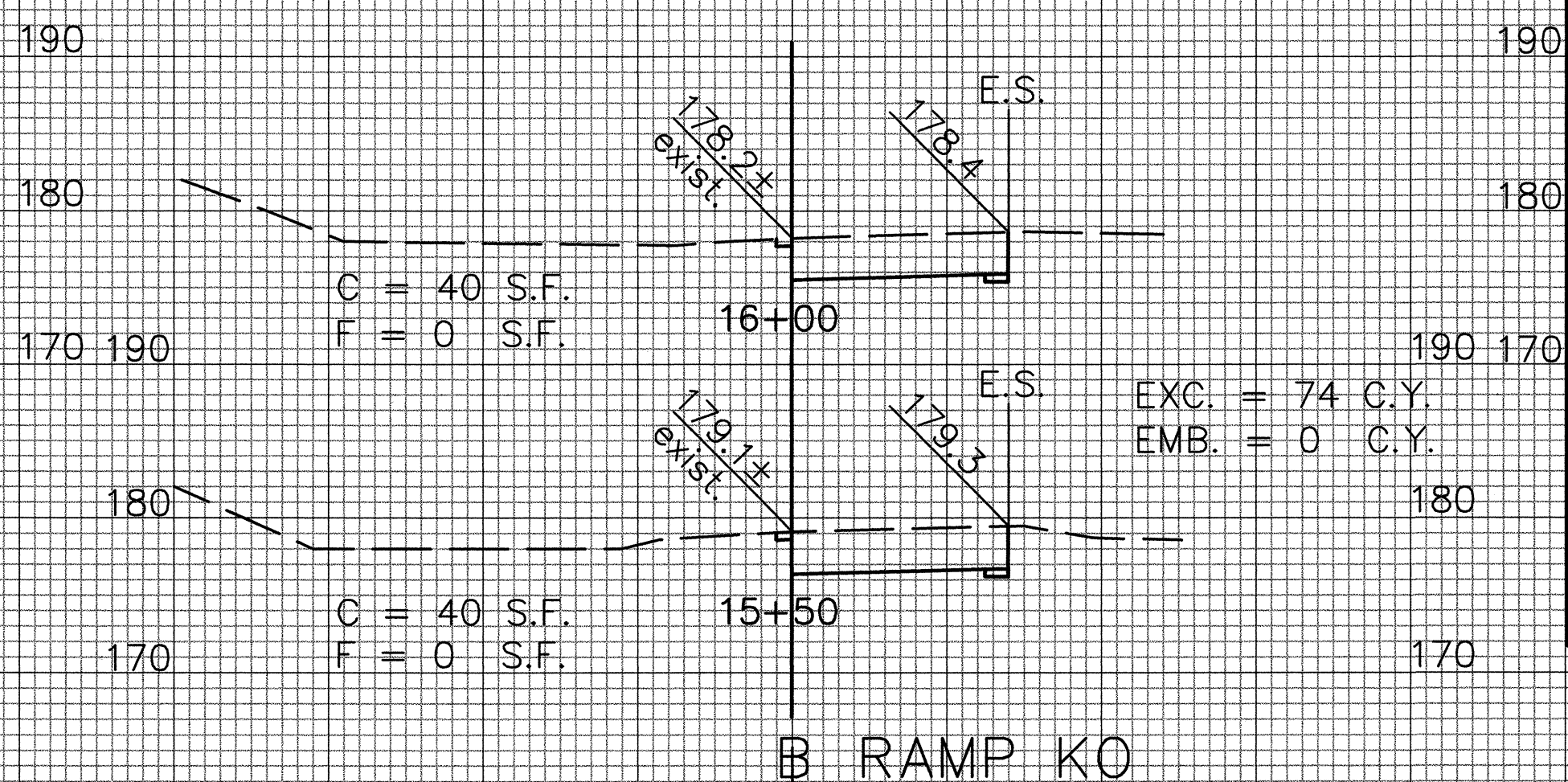
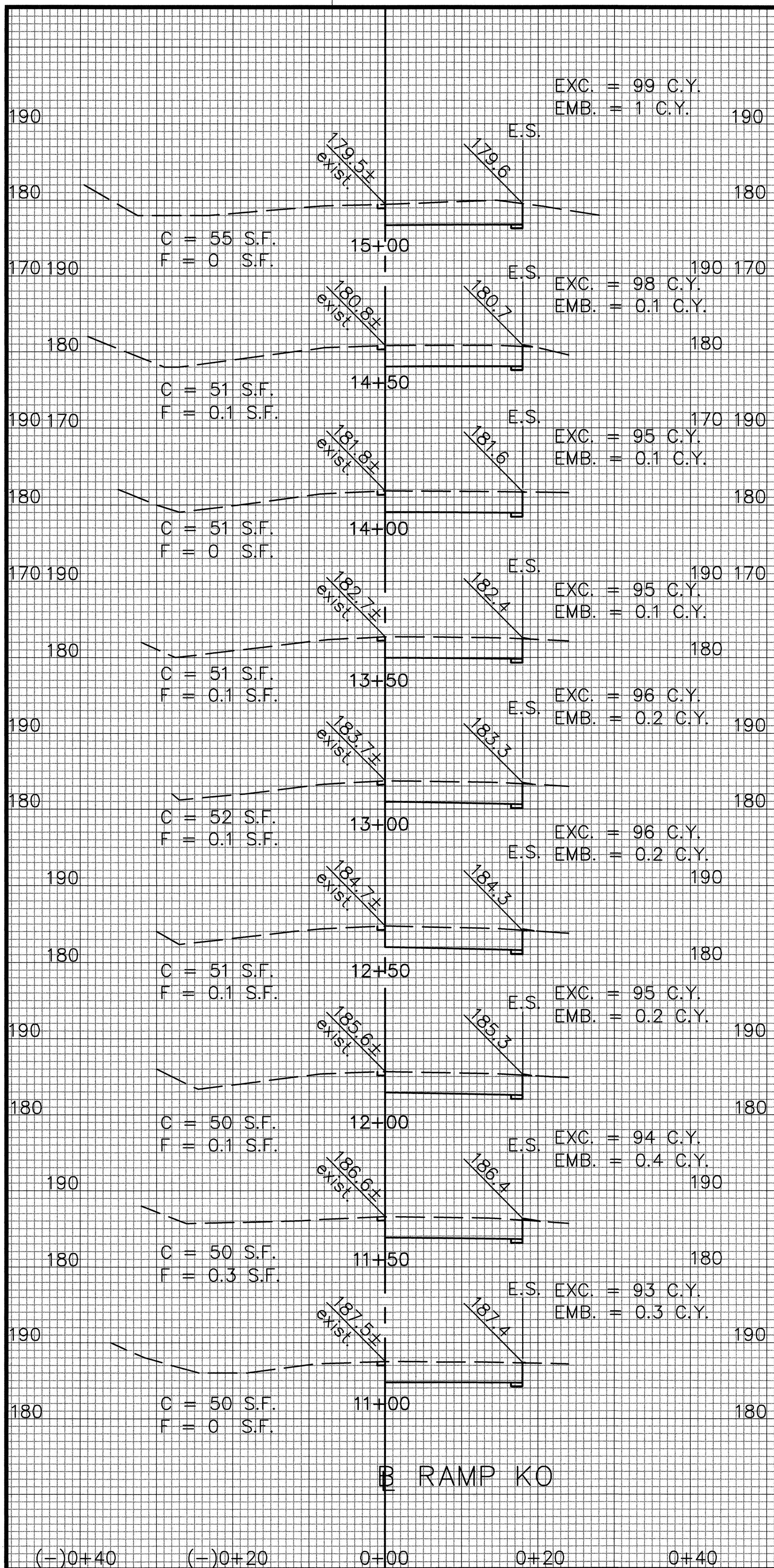
LOCATION	EXCAVATION	EMBANKMENT
B H-1 I.B. STA. 340+81.04 TO STA. 359+77.84± (SHOULDER WORK)	2,455 C.Y.	2,696 C.Y.
B H-1 O.B. STA. 360+83.60± TO STA. 375+86± (SHOULDER WORK)	1,498 C.Y.	0 C.Y.
B H-1 O.B. STA. 369+00 TO STA. 376+25± (SHOULDER WORK)	273 C.Y.	7 C.Y.
B RAMP KO STA. 0+00 TO STA. 16+00	2,927 C.Y.	8 C.Y.
TOTAL	7,153 C.Y.	2,711 C.Y.
Rounded to	7,200 C.Y.	2,700 C.Y.

ESTIMATED EARTHWORK QUANTITIES

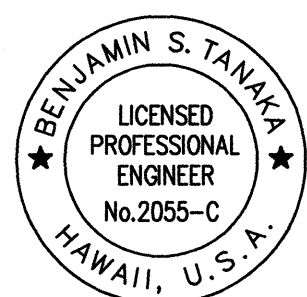
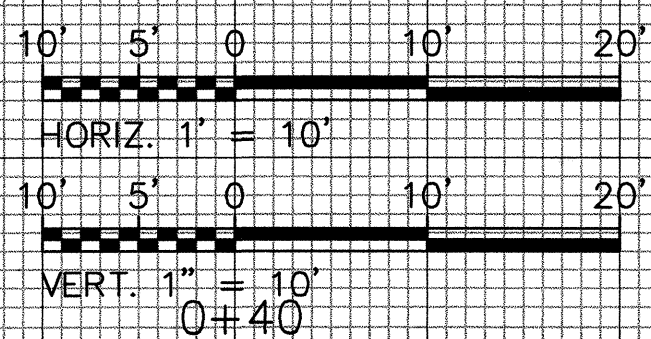
LOCATION	EXCAVATION	EMBANKMENT
B RAMP KO STA. 1+05.22 TO STA. 15+50	2,753 C.Y.	8 C.Y.

DATE: 2/01/99
SCALE: 1" = 10'
FILE: 9814-93

ORIGINAL PLAN
DRAWN BY
DESIGNED BY
CHECKED BY



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CROSS SECTIONS

INTERSTATE ROUTE H-1 RESURFACING
Kunia IC to Waialeale Stream Bridge
F.A.I. Project No. NH-H1-1(235)

Scale: As Shown Date: Feb. 15, 1999
SHEET NO. X11 OF 11 SHEETS