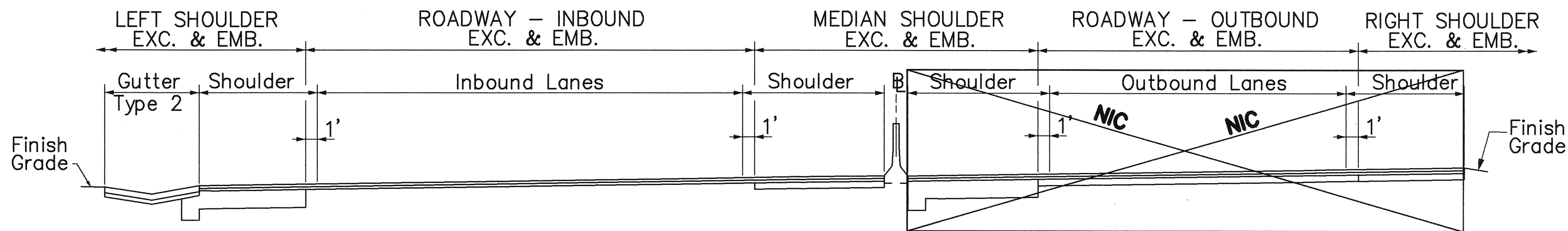
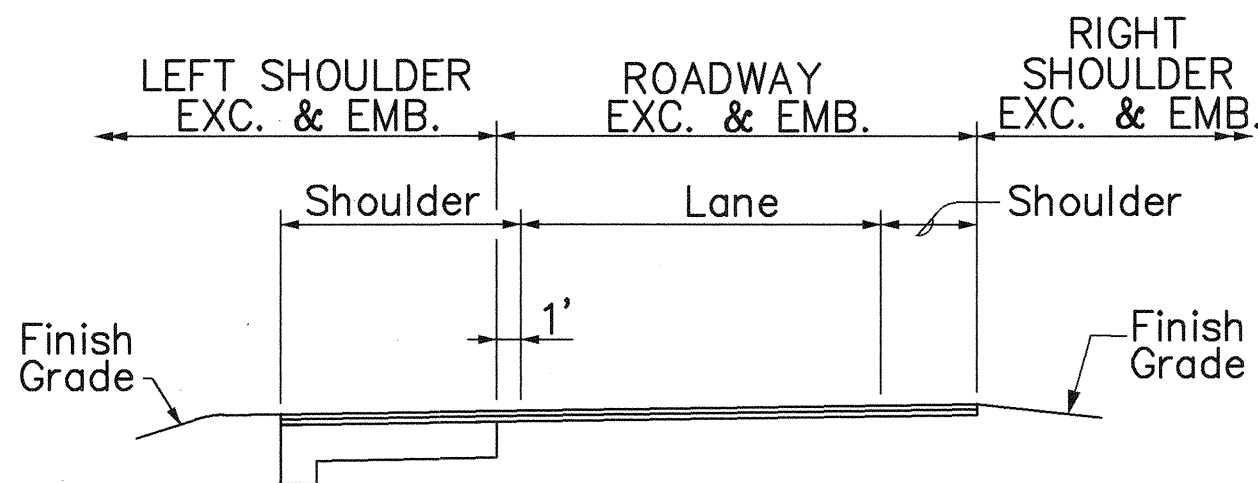


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	291	325



INTERSTATE ROUTE H-3



RAMPS ES & EW

NOTES:

- Shoulder Excavation & Embankment quantities include the fill or cut adjacent to the shoulder. Excavation for Gutter Type 2 is not included, and shall be paid for under Gutter Type 2.
- Existing conditions are taken from As-built information.

INTERSTATE ROUTE H-3

Station From	Station To	Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
ROADWAY						
252+33.06	257+50	OL-X	0	0	0	0
257+50	265+50	See H-3 Cross Sections			2470	3454
265+50	268+85	OL-X	0	0	0	0
268+85	269+03	A	23.8	0	16	0
LEFT SHOULDER						
252+33.06	257+50	3	15	0.5	287	10
257+50	265+50	---	Included in Roadway Quantity above			
265+50	266+30	3	15	1.5	44	4
266+30	269+19	3	15	0	161	0
MEDIAN SHOULDER						
252+33.06	257+50	1	6.9	0	132	0
257+50	265+50	---	Included in Roadway Quantity above			
265+50	269+03	1	6.9	0	90	0
SUBTOTAL - INTERSTATE ROUTE H-3					3200	3468

MOANALUA FREEWAY

Station		Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
From	To					
ROADWAY						
189+50	193+28	See MF Cross Sections			0	185
SUBTOTAL – MOANALUA FREEWAY					0	185

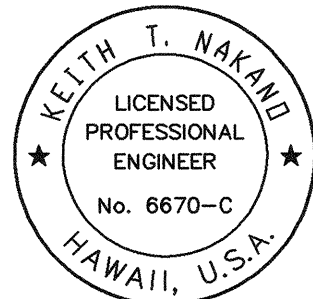
RAMP ES

Station From	Station To	Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
ROADWAY						
20+18	25+33	See Ramp ES Cross Sections			105	1950
33+40	33+50	A	8.3	0	3	0
33+50	47+07.53	OL-X	0	0	0	0
LEFT SHOULDER						
20+18	25+33	---	Included in Roadway Quantity above			
33+40	38+63.90	1	3.8	0.2	73	4
38+63.90	46+07.53	3	16.1	3.4	443	94
46+07.53	47+07.53	1	4.6	3.0	17	12
RIGHT SHOULDER						
20+18	25+33	---	Included in Roadway Quantity above			
33+50	47+07.53	---	0	0.2	0	10
SUBTOTAL - RAMP ES					641	2070

RAMP EW

Station From	Station To	Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
ROADWAY						
124+00	134+00	See Ramp EW Cross Sections			1183	856
134+00	136+82	OL-X	0	0	0	0
136+82	136+92	A	10	0	4	0
139+62	139+72	A	10	0	4	0
139+72	152+41	OL-X	0	0	0	0
LEFT SHOULDER						
124+00	134+00	---	Included in Roadway Quantity above			
134+00	136+92	3	9.8	5.6	106	61
139+62	152+33	3	11.3	0.2	532	9
RIGHT SHOULDER						
124+00	134+00	---	Included in Roadway Quantity above			
134+00	136+82	---	0	0.2	0	2
139+72	147+17.22	---	0	0.2	0	6
147+17.22	147+55	1 & 2	19.8	0.2	28	0
147+55	149+62.31	1	53	0.2	41	2
SUBTOTAL - RAMP EW					1898	936

DATE: _____
SURVEY PLOTTED BY: _____
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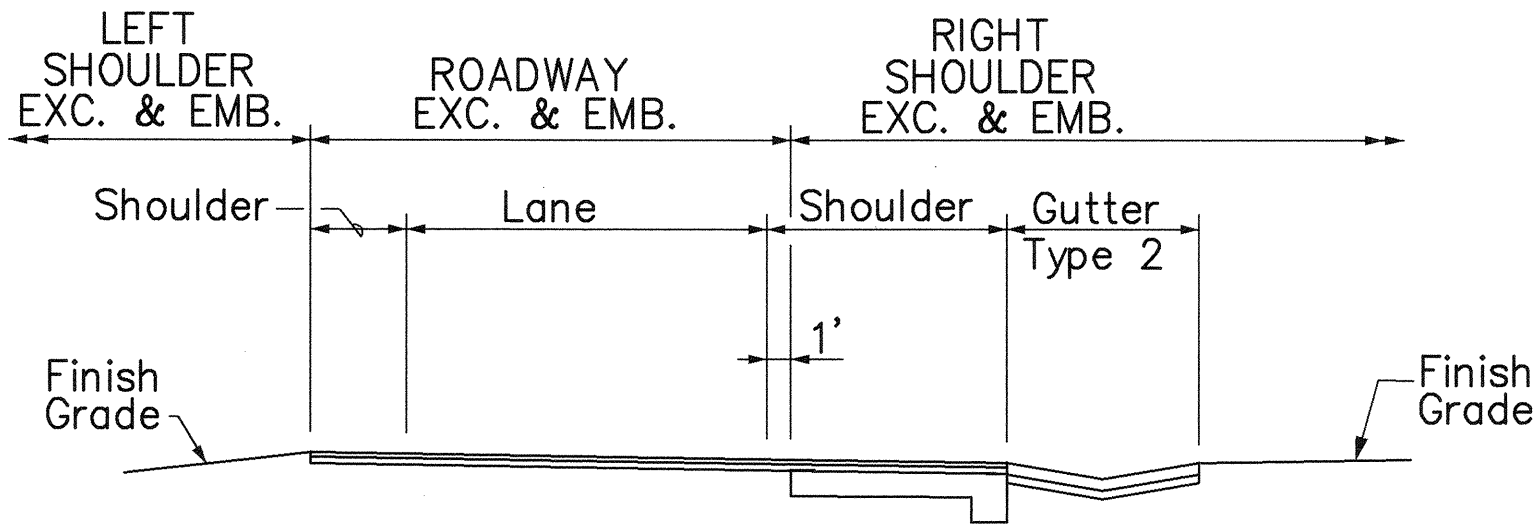
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXCAVATION & EMBANKMENT
SUMMARY SHEET

H-3 - HALAWA INTERCHANGE
INTERSTATE ROUTE H-3
FAIP NO. I-H3-1(74)

SCALE: NOT TO SCALE DATE: AUGUST 1994
SHEET NO. X-1 OF 22 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	292	325



RAMPS F, K & M

RAMP F

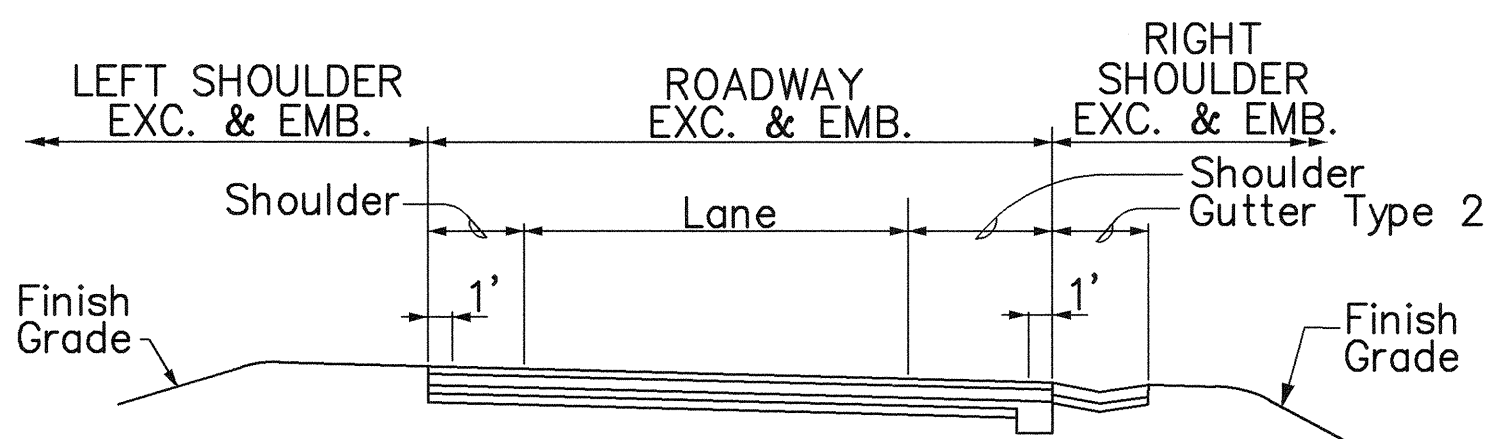
Station		Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
From	To					
ROADWAY						
12+59.92	14+36.02	A	7.5	0	49	0
14+36.02	28+00	See Ramp F Cross Sections			1259	970
LEFT SHOULDER						
12+70	14+36.02	---	0	0.2	0	1
14+36.02	28+00	---	Included in Roadway			Quantity above
RIGHT SHOULDER						
14+36.02	28+00	---	Included in Roadway			Quantity above
28+00	29+90	2	5	0	35	0
SUBTOTAL – RAMP F					1343	971

RAMP K

Station From	Station To	Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
ROADWAY						
10+00	13+00	See H-3 Cross Sections				
13+00	18+50	OL-X	0	0	0	0
18+50	20+00	A	8.3	0	46	0
20+00	22+39.05	OL-X	0	0	0	0
22+39.05	23+37	A	6.7	0	24	0
23+37	27+10	A	4.0	0	55	0
LEFT SHOULDER						
13+21.10	22+39.05	---	0	0.2	0	7
22+39.05	22+70	1&2	16	0	18	0
22+70	22+90	1	3.6	0	3	0
RIGHT SHOULDER						
10+00	13+00	---	Included in Roadway Quantity above			
13+00	13+50	3	15.8	0.3	30	1
13+50	27+77	3	9.7	0.3	513	16
SUBTOTAL - RAMP K					689	24

RAMP M

Station From	Station To	Pavement Type	Cut (Sq. Ft.)	Fill (Sq. Ft.)	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
ROADWAY						
19+55.24	21+58	OL-X	0	0	0	0
21+58	21+68	A	13.5	0	5	0
22+07	23+74.17	A	6	0	37	0
23+74.17	25+00	A	7.5	0	35	0
25+00	25+76.13	A	9.8	0	28	0
25+76.13	28+40	A	12	0	117	0
23+79	23+80.5	Underdrain	37	0	2	0
LEFT SHOULDER						
21+30.23	21+68	1	1.5	0	2	0
22+07	23+26	1	5.6	0	25	0
23+26	23+74.17	1&2	19	0	34	0
23+74.17	28+40	---	0	0.2	0	3
RIGHT SHOULDER						
19+55.24	21+68	3	11.6	0.2	91	2
22+07	25+76.13	3	11.6	0.2	159	3
25+76.13	26+57	1&2	15	0	45	0
26+57	28+00	1	2.6	0	14	0
SUBTOTAL - RAMP M					590	8



RAMP O

RAMP O

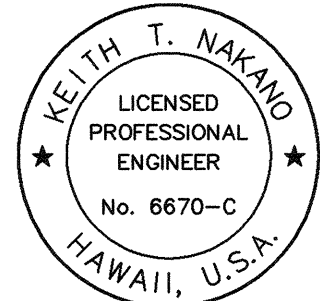
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ROADWAY						
10+71	14+45	See Ramp O Cross Sections			849	4334
15+42	21+42.73	A	31	0	685	0
Gore Area Between Moanalua Freeway and Ramp O					23	0
SUBTOTAL - RAMP O					1557	4334

EXCAVATION AND EMBANKMENT SUMMARY

	EXC. (Cu. Yds.)	EMB. (Cu. Yds.)
Interstate Route H-3	3200	3468
Moanalua Freeway	0	185
Ramp ES	641	2070
Ramp EW	1898	936
Ramp F	1343	971
Ramp K	689	24
Ramp M	590	8
Ramp O	1557	4334
TOTAL	9928	14241
ROUNDED TOTAL	10000	14250

NOTES:

- Shoulder Excavation & Embankment quantities include the fill or cut adjacent to the shoulder. Excavation for Gutter Type 2 is not included, and shall be paid for under Gutter Type 2.
- Existing conditions are taken from As-built information.



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11/10/95 Revised Ramp F Exc. and Emb. quantities.

Date Revision

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

EXCAVATION & EMBANKMENT
SUMMARY SHEET

H-3 - HALAWA INTERCHANGE
INTERSTATE ROUTE H-3
FAIP NO. I-H3-1(74)

SCALE: NOT TO SCALE DATE: AUGUST 1994

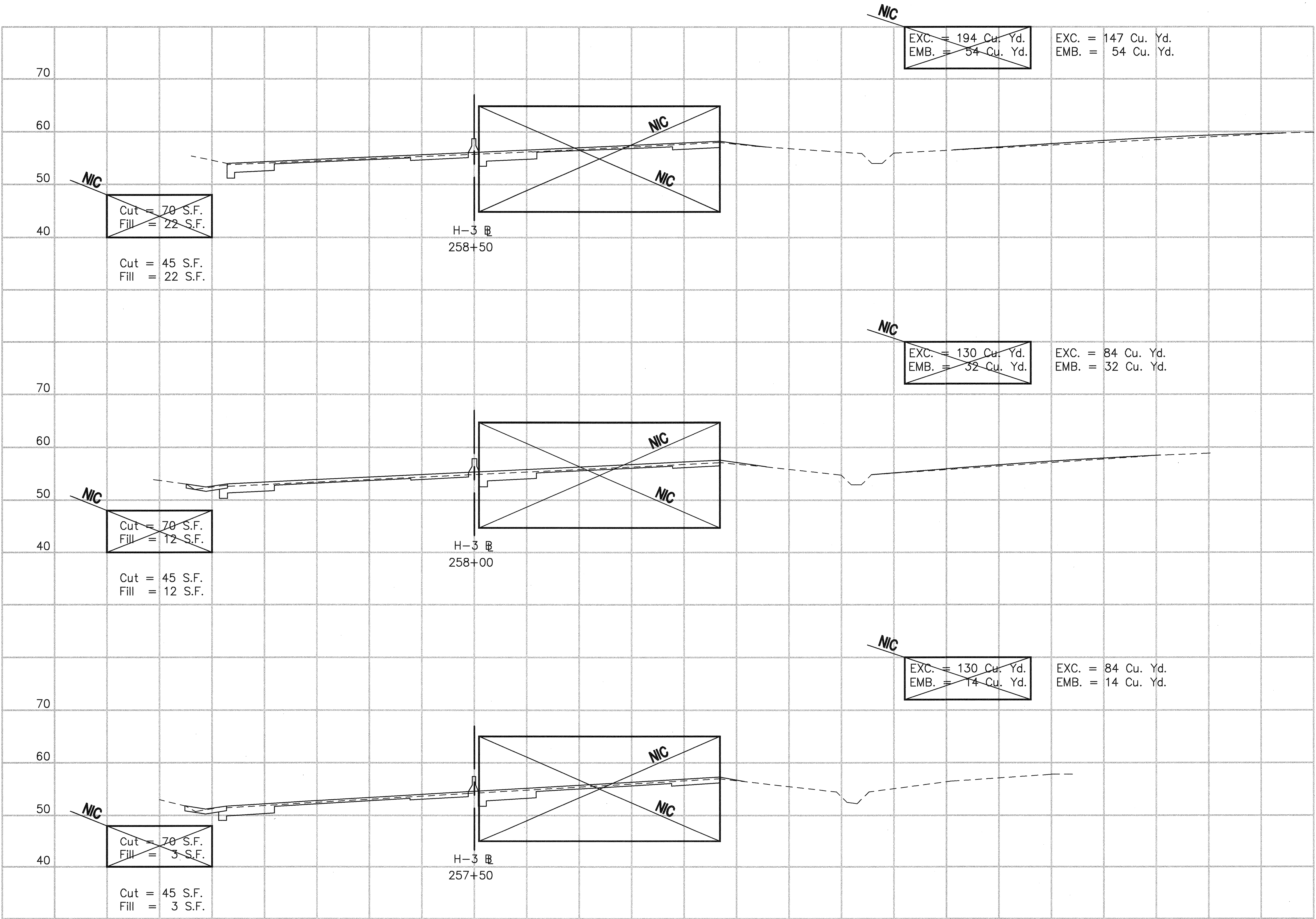
SHEET NO. X-2 OF 22 SHEETS

C.O. 292

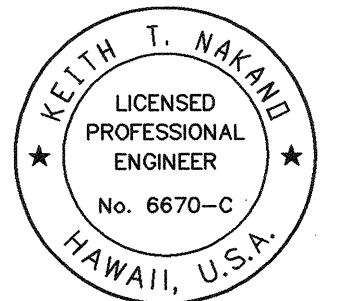
ORIGINAL PLAN
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
NOTE BOOK
DESIGNED BY
CHECKED BY
No.

CAD by J. Mimura, 95-52

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	293	325



Scale: Horiz. 1" = 10'
Vert. 1" = 10'

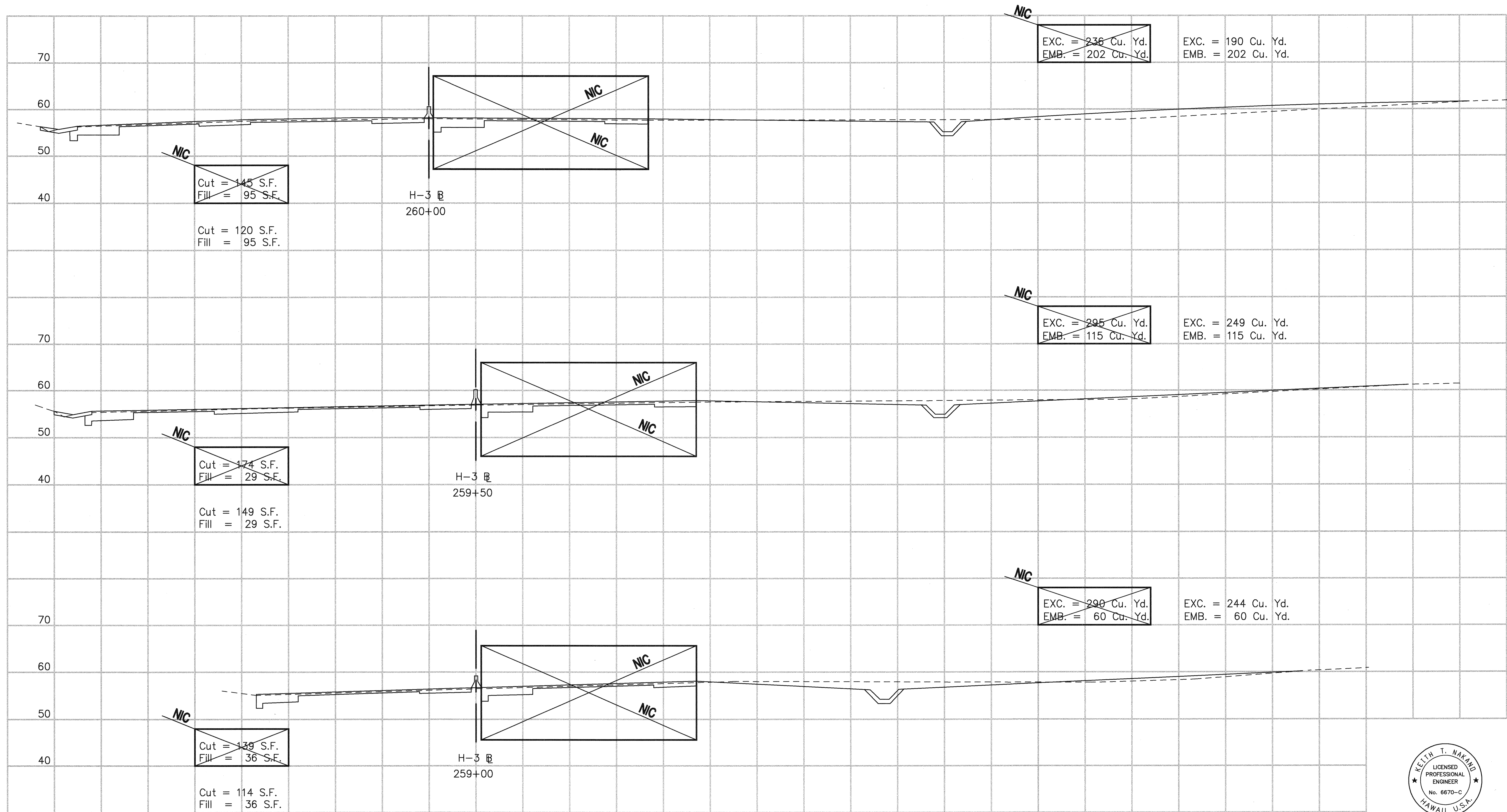


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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	294	325



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CAD by G.D. TRUONG, SS-52

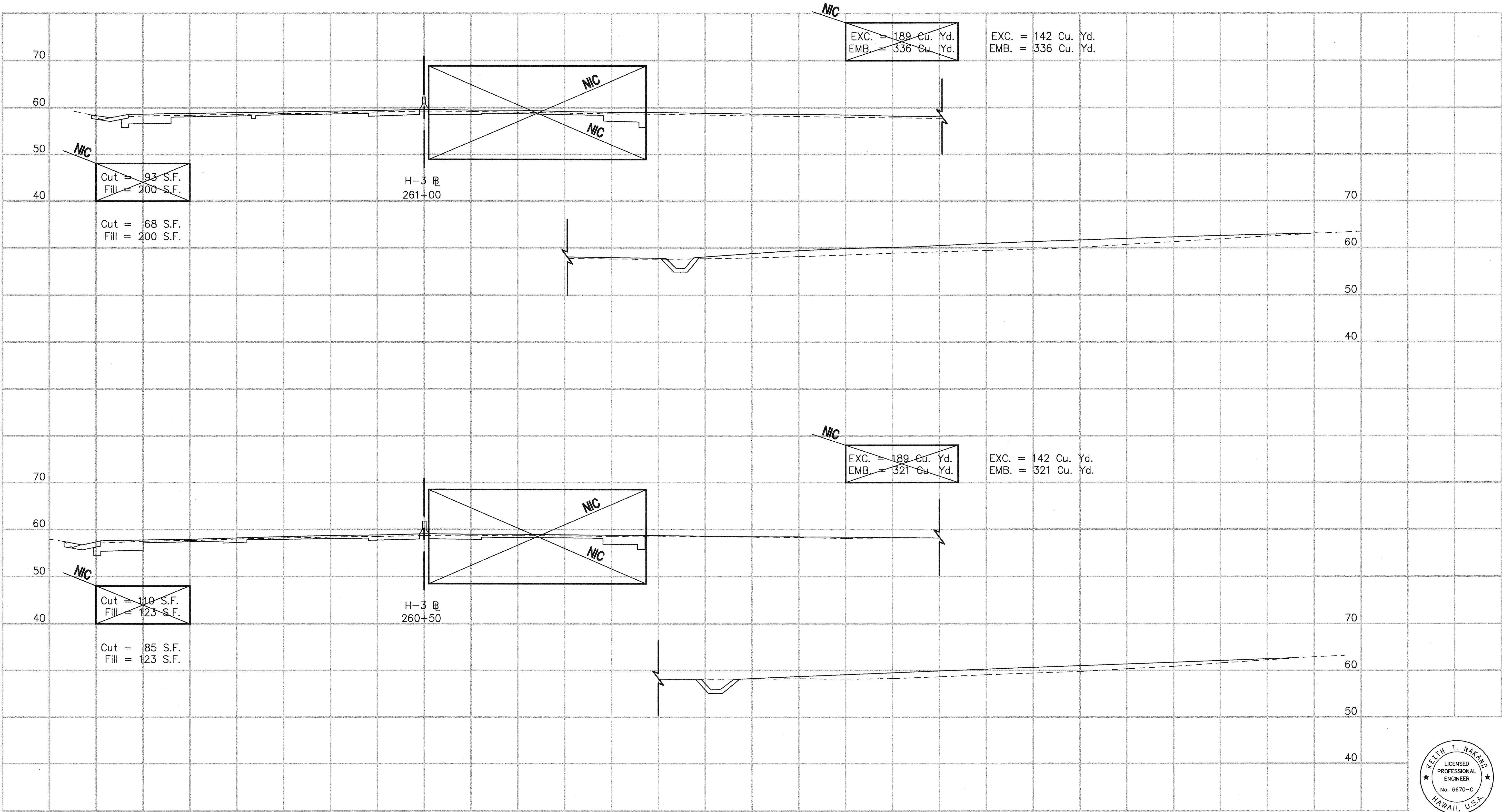
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Vert. 1" = 10'



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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	295	325

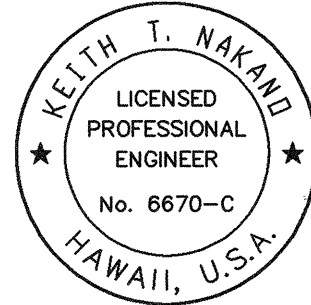


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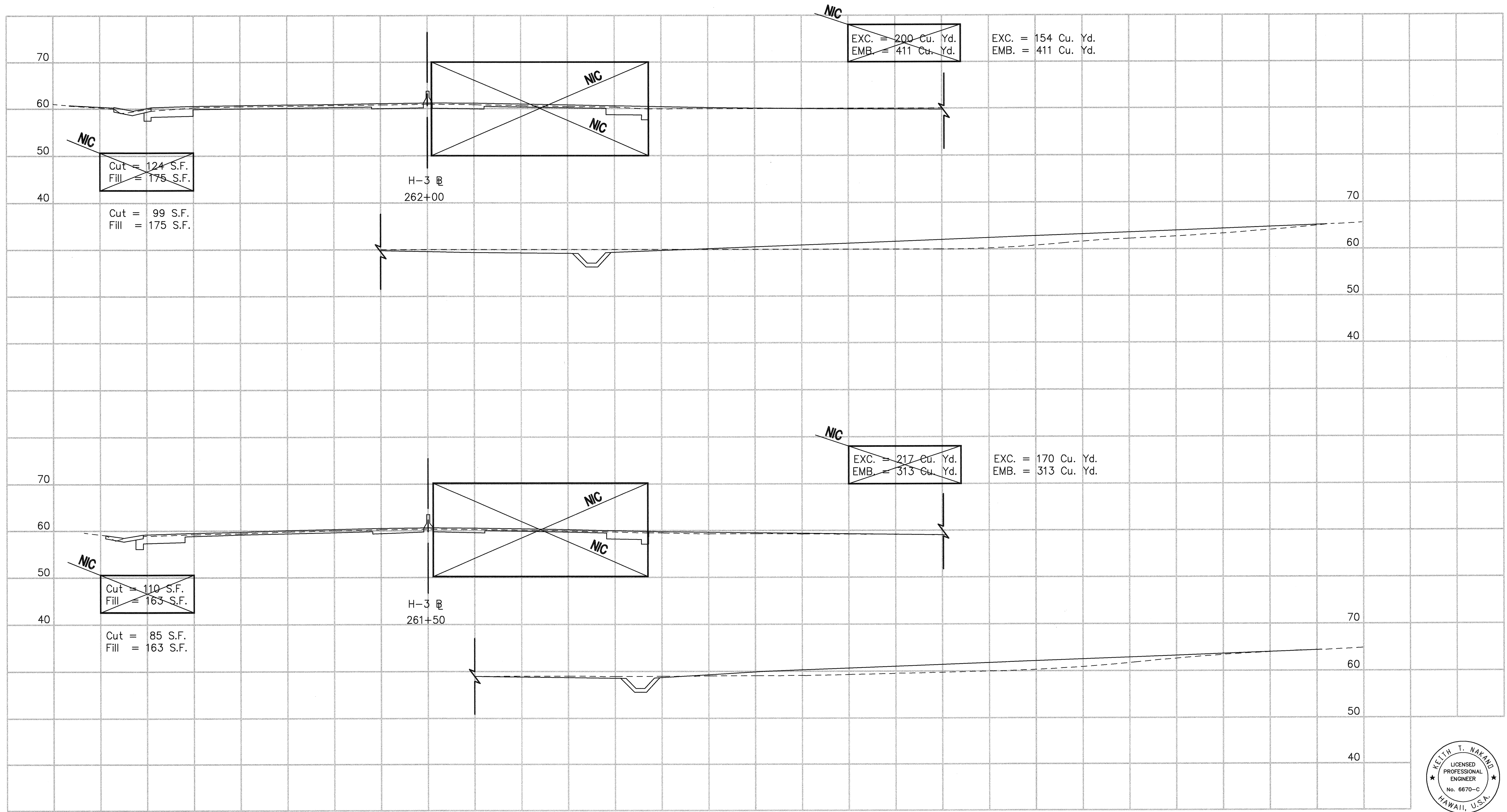
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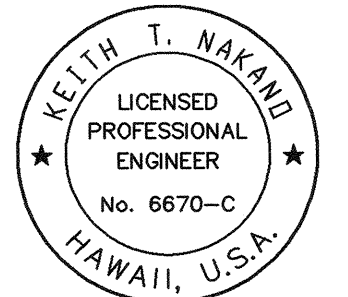
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	296	325



Scale: Horiz. 1" = 10'
Vert. 1" = 10'



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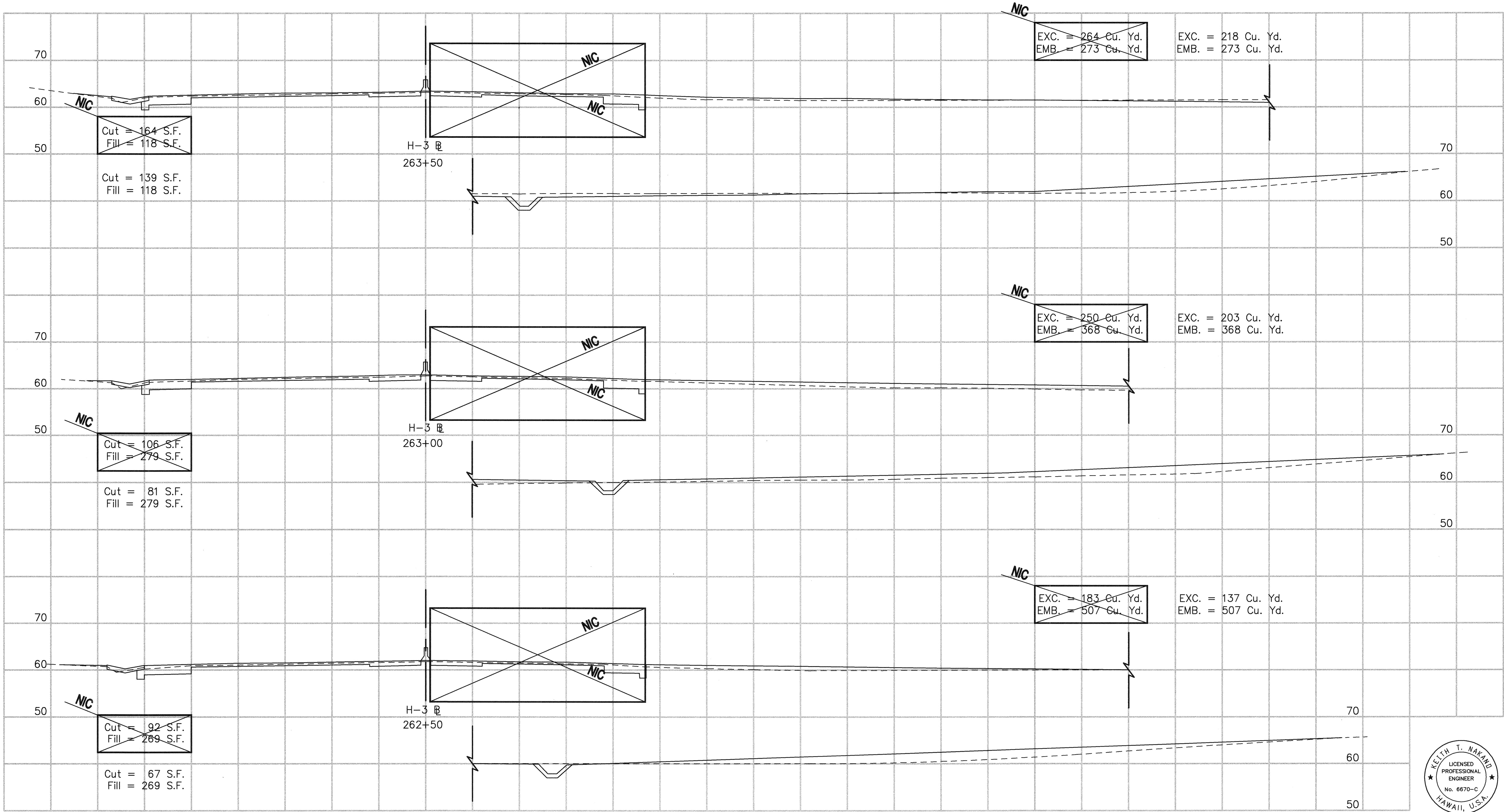
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SHEET NO. X-6 OF 22 SHEETS

ORIGINAL SURVEY PLOTTED BY _____ DATE _____
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	297	325



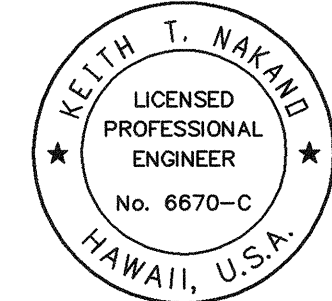
ORIGINAL
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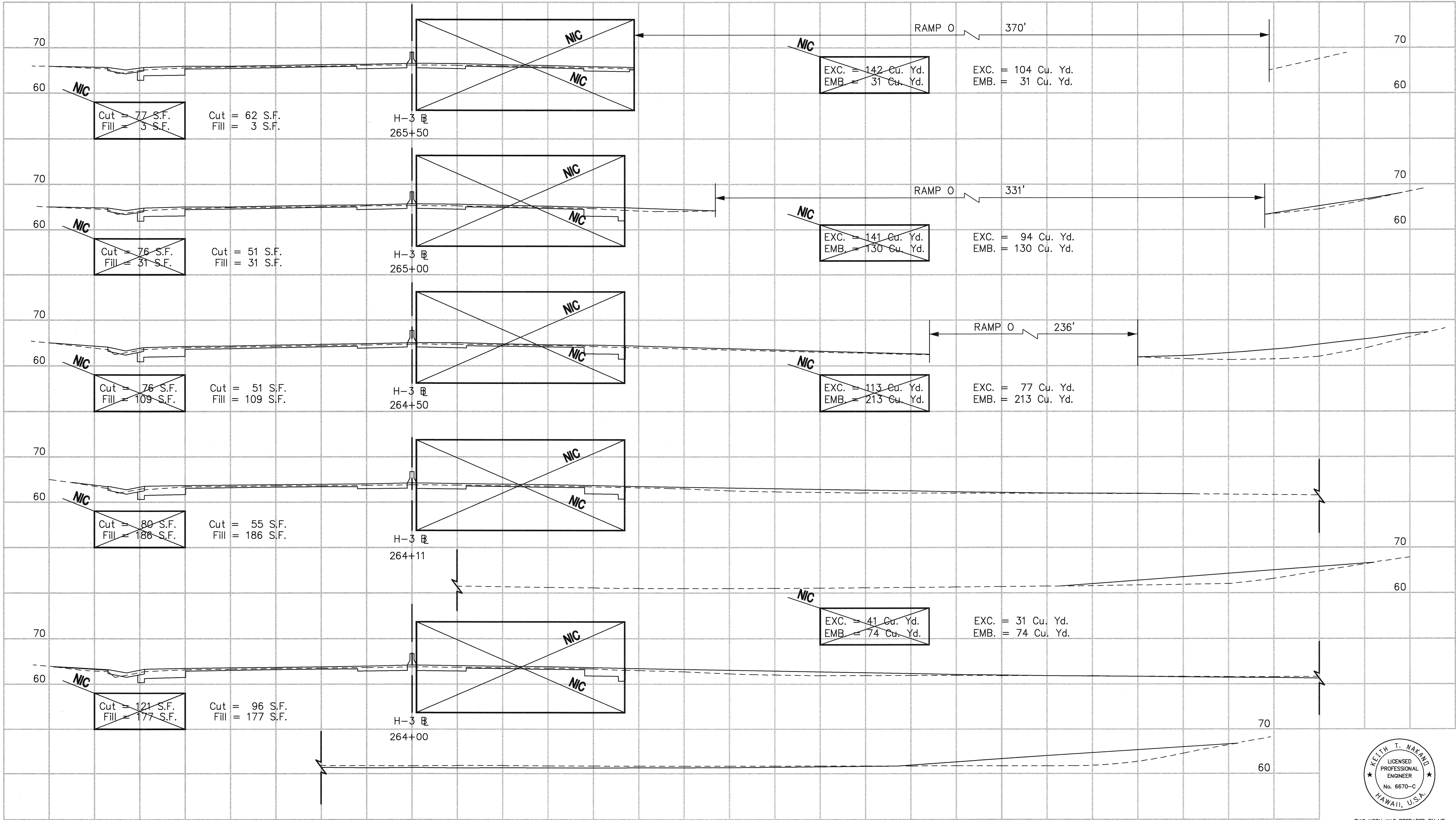
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	298	325

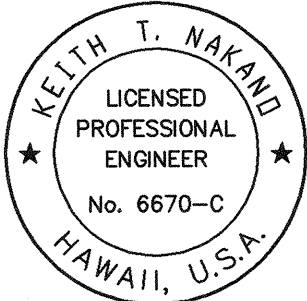


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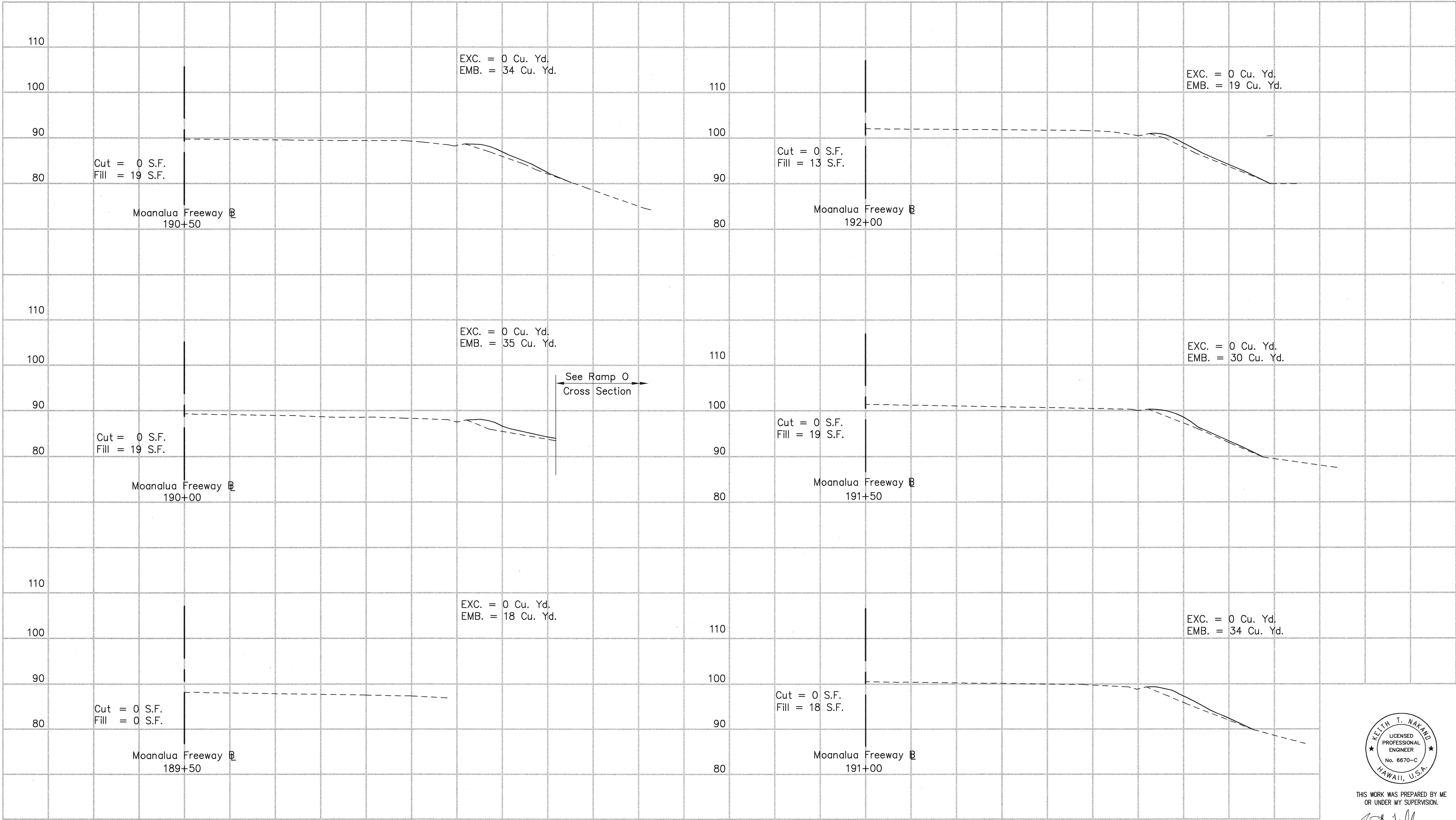
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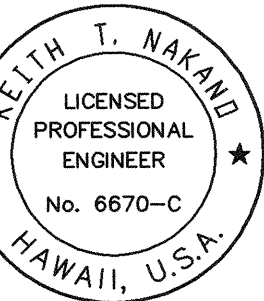
Keith T. Noland

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	299	325



Scale: Horiz. 1" = 10'
Vert. 1" = 10'

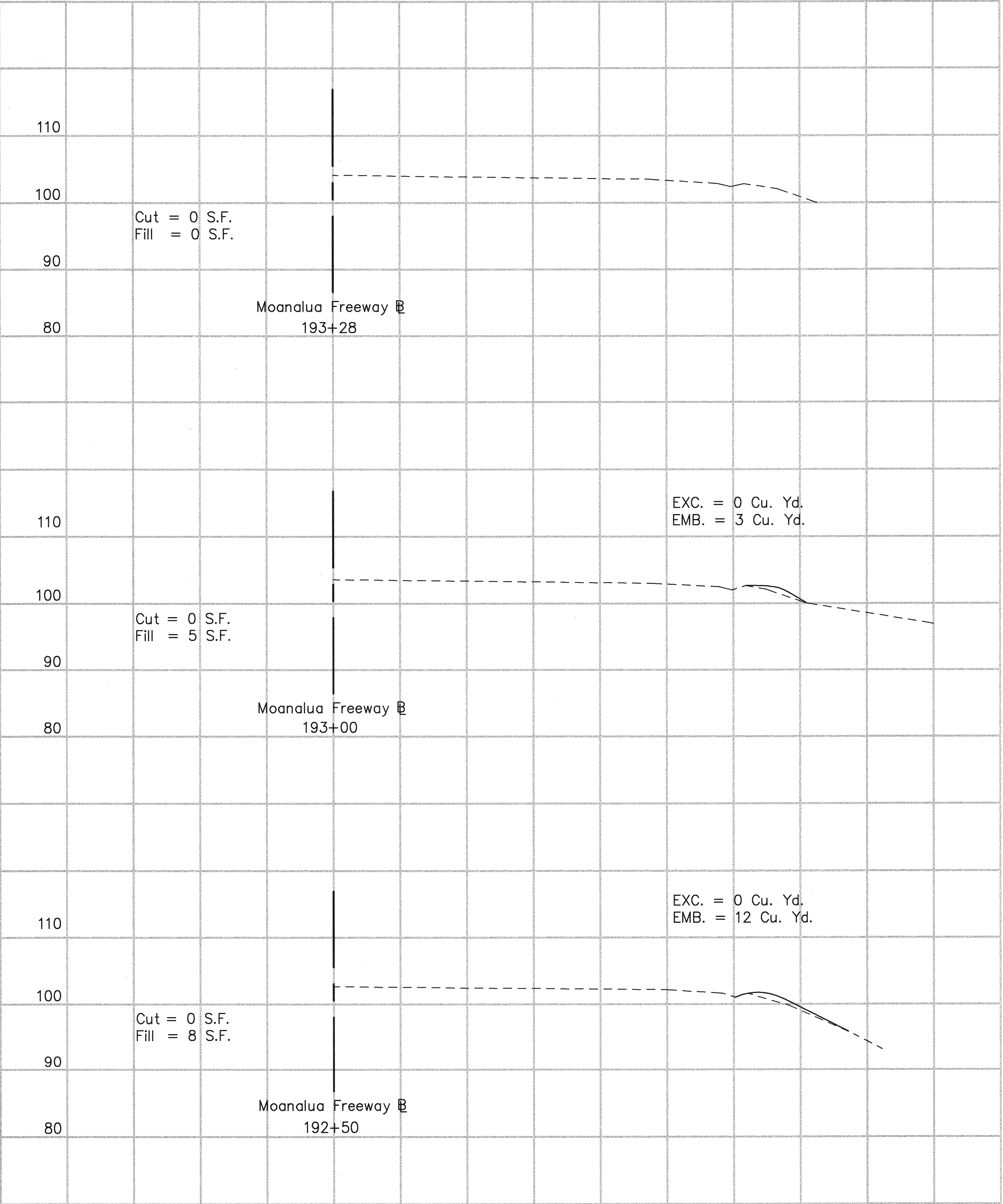
SHEET NO. X-9 OF 22 SHEETS



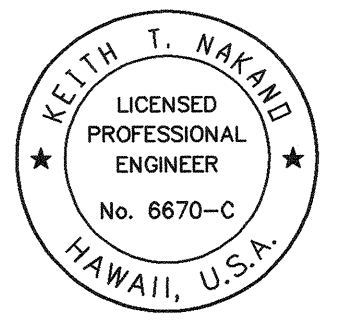
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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	300	325



Scale: Horiz. 1" = 10'
Vert. 1" = 10'

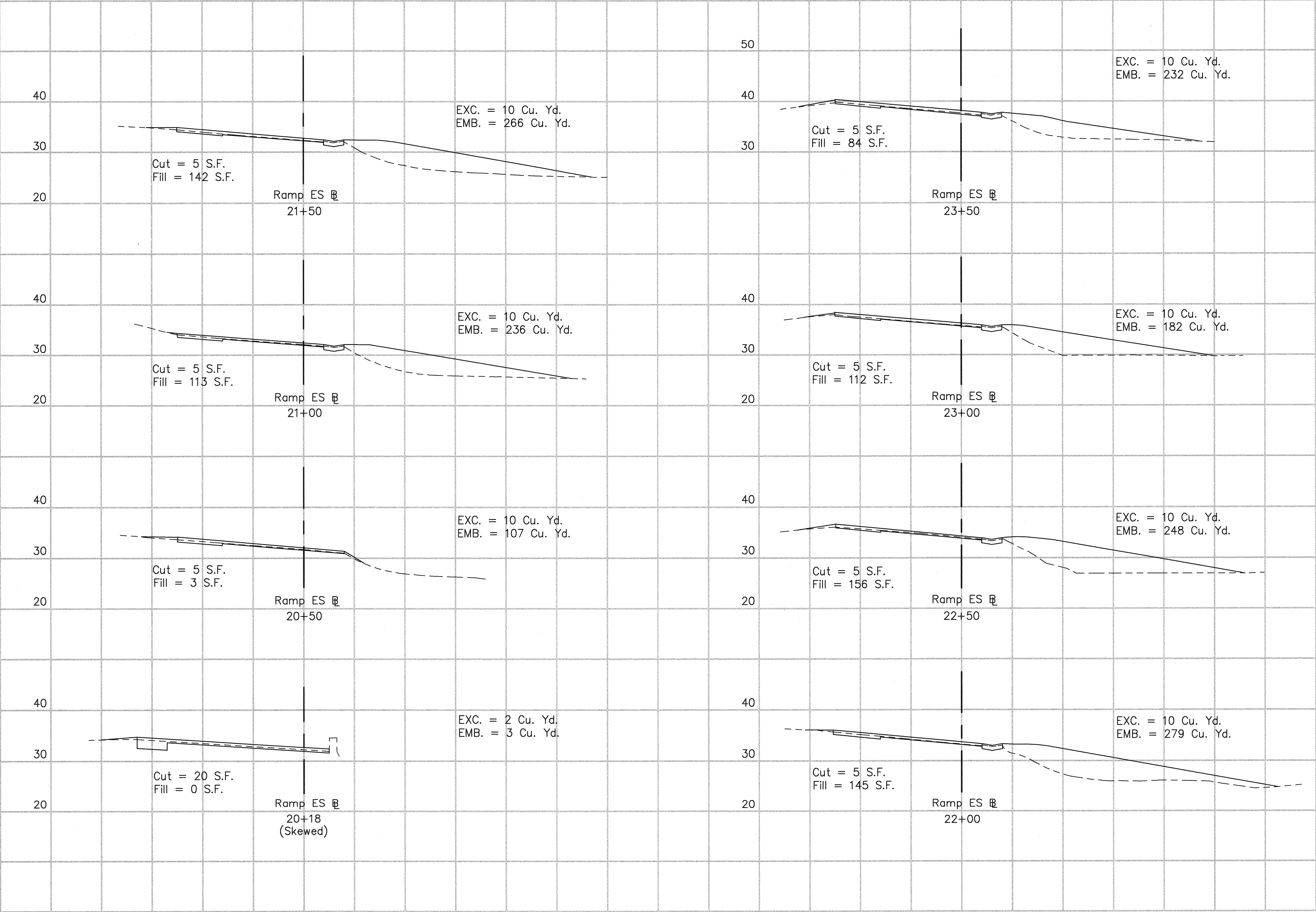


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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	301	325

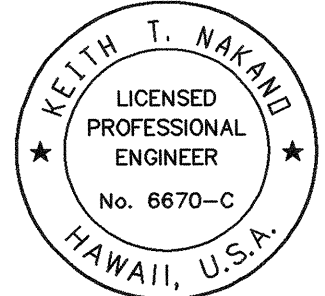


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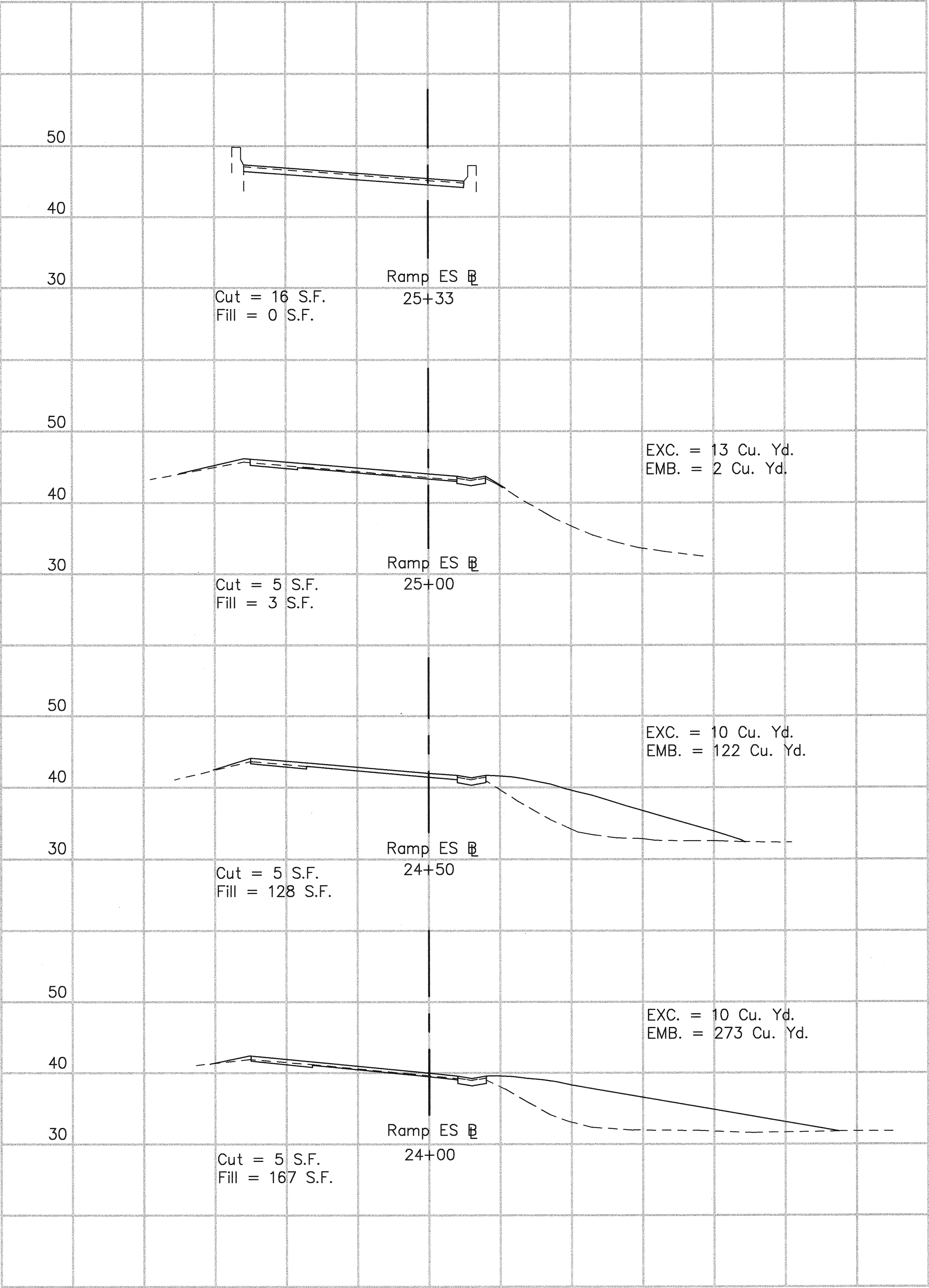
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Vert. 1" = 10'



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FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	302	325

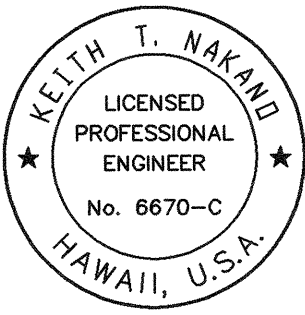


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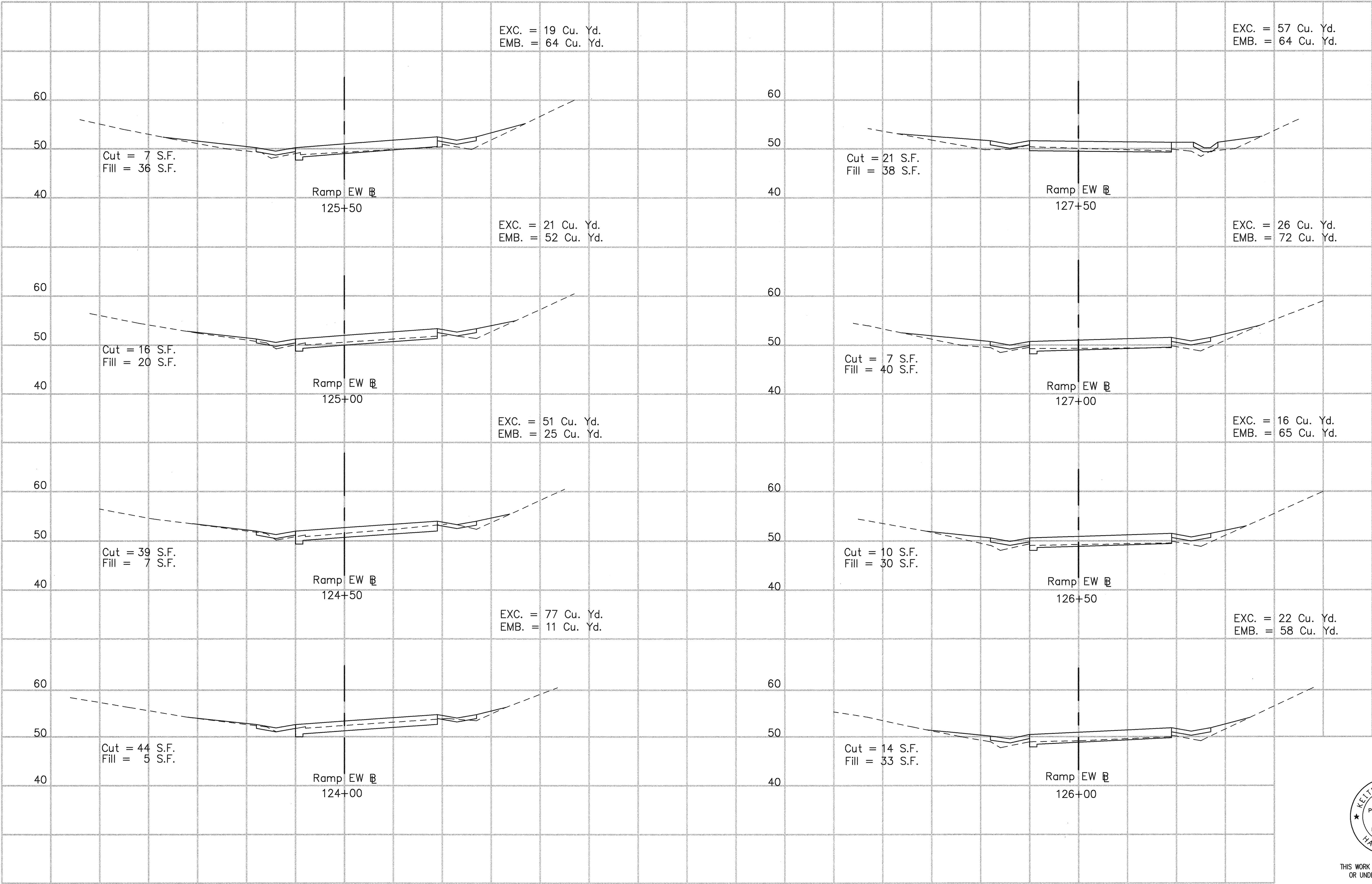
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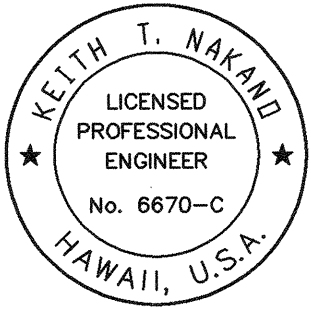
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HAWAII	HAW.	I-H3-1(74)	1993	303	325



ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	DESIGNED BY	
	CHECKED BY	
No.		

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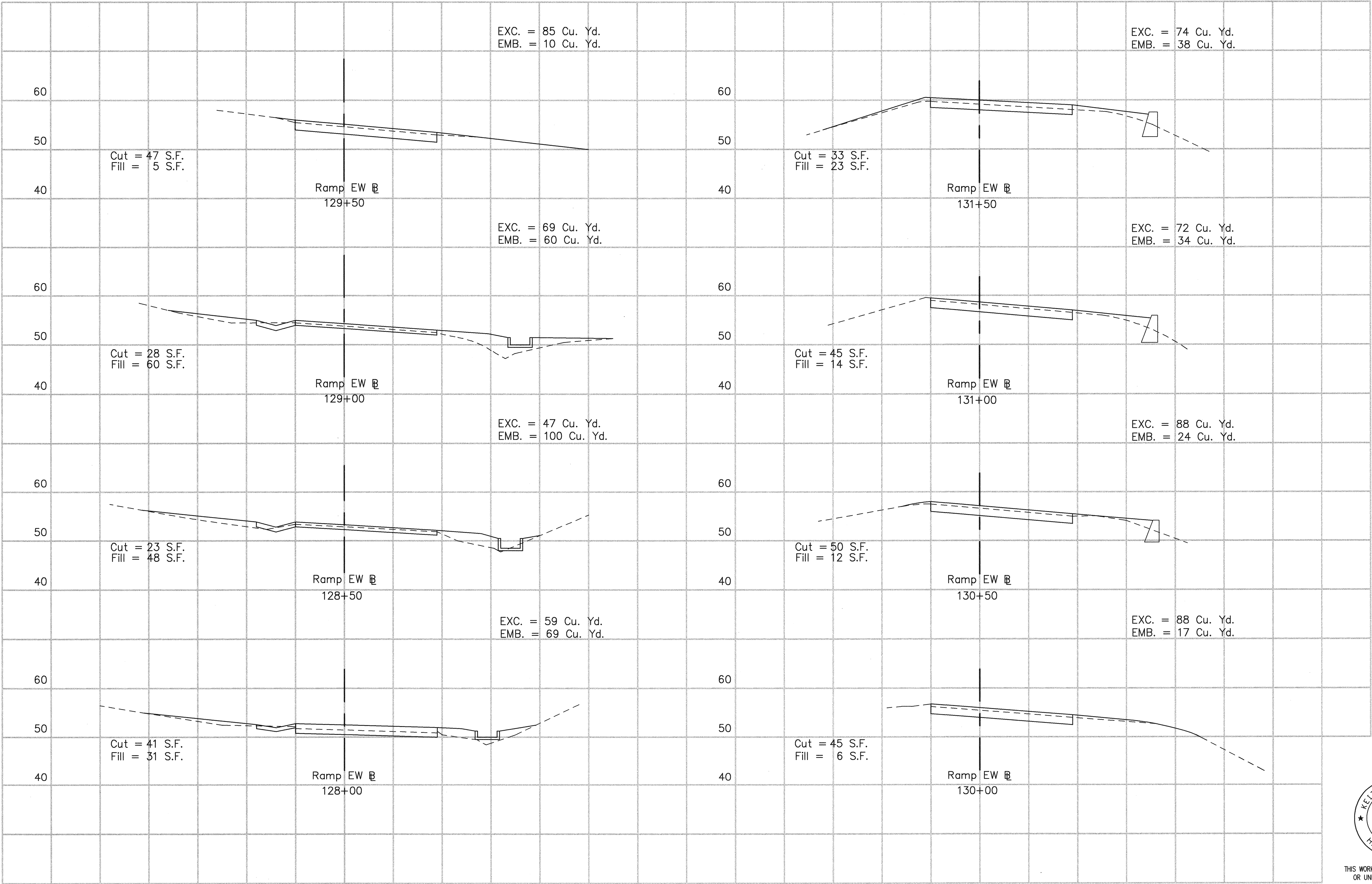
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Scale: Horiz. 1" = 10'
Vert. 1" = 10'

SHEET NO. X-13 OF 22 SHEETS

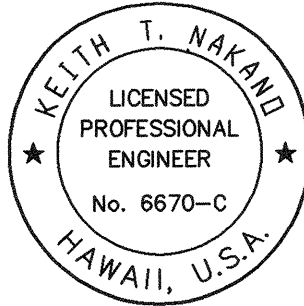
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	304	325



SURVEY PLOTTED BY _____ DATE _____
 DRAWN BY _____
 NOTE BOOK _____
 DESIGNED BY _____
 CHECKED BY _____
 No. _____

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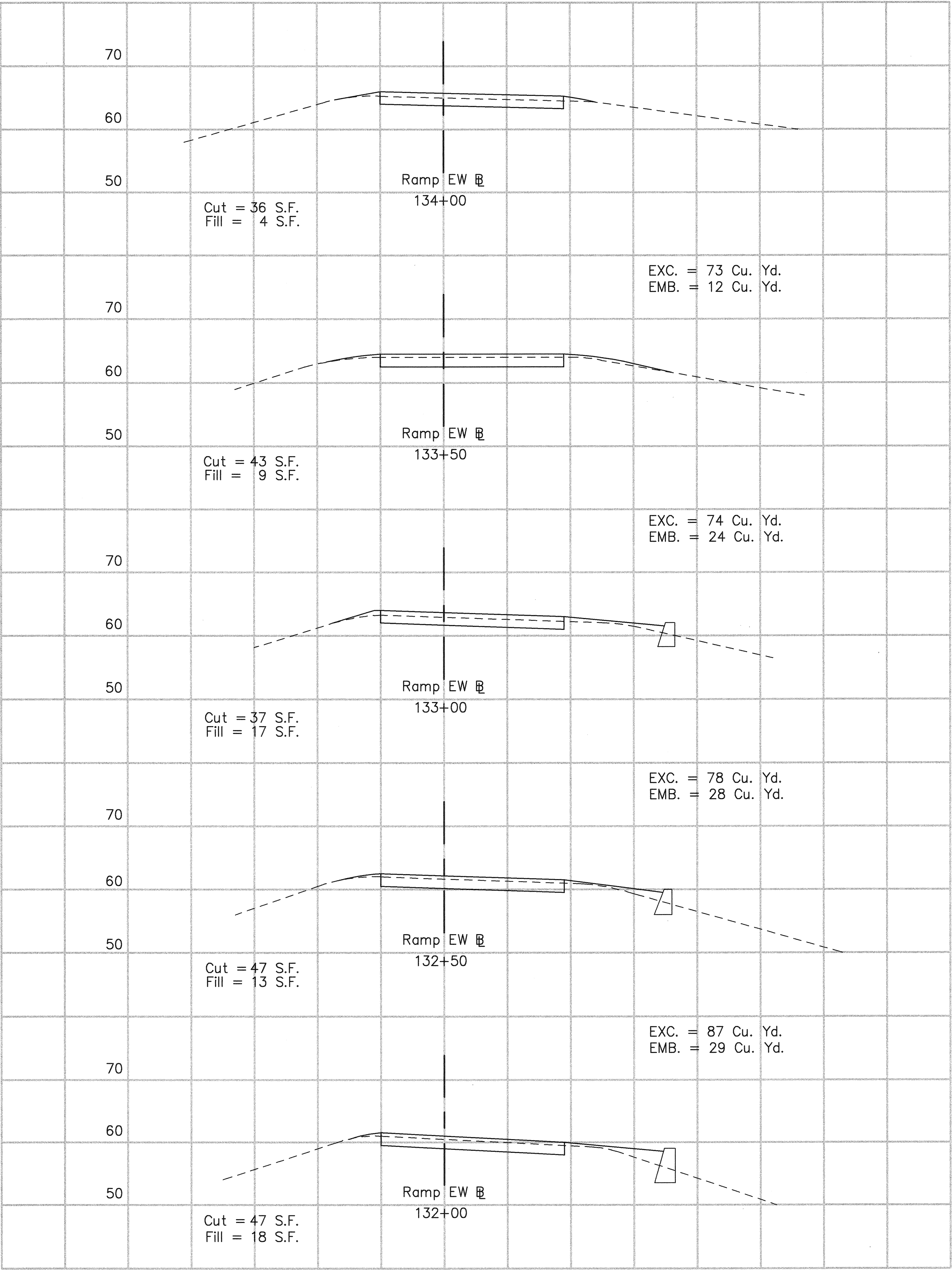


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Scale: Horiz. 1"= 10'
Vert. 1"= 10'

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	305	325

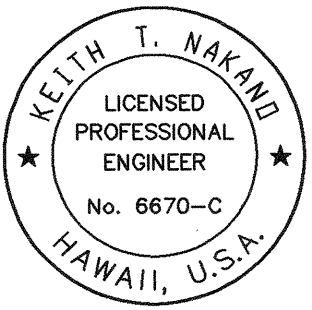


ORIGINAL PLAN
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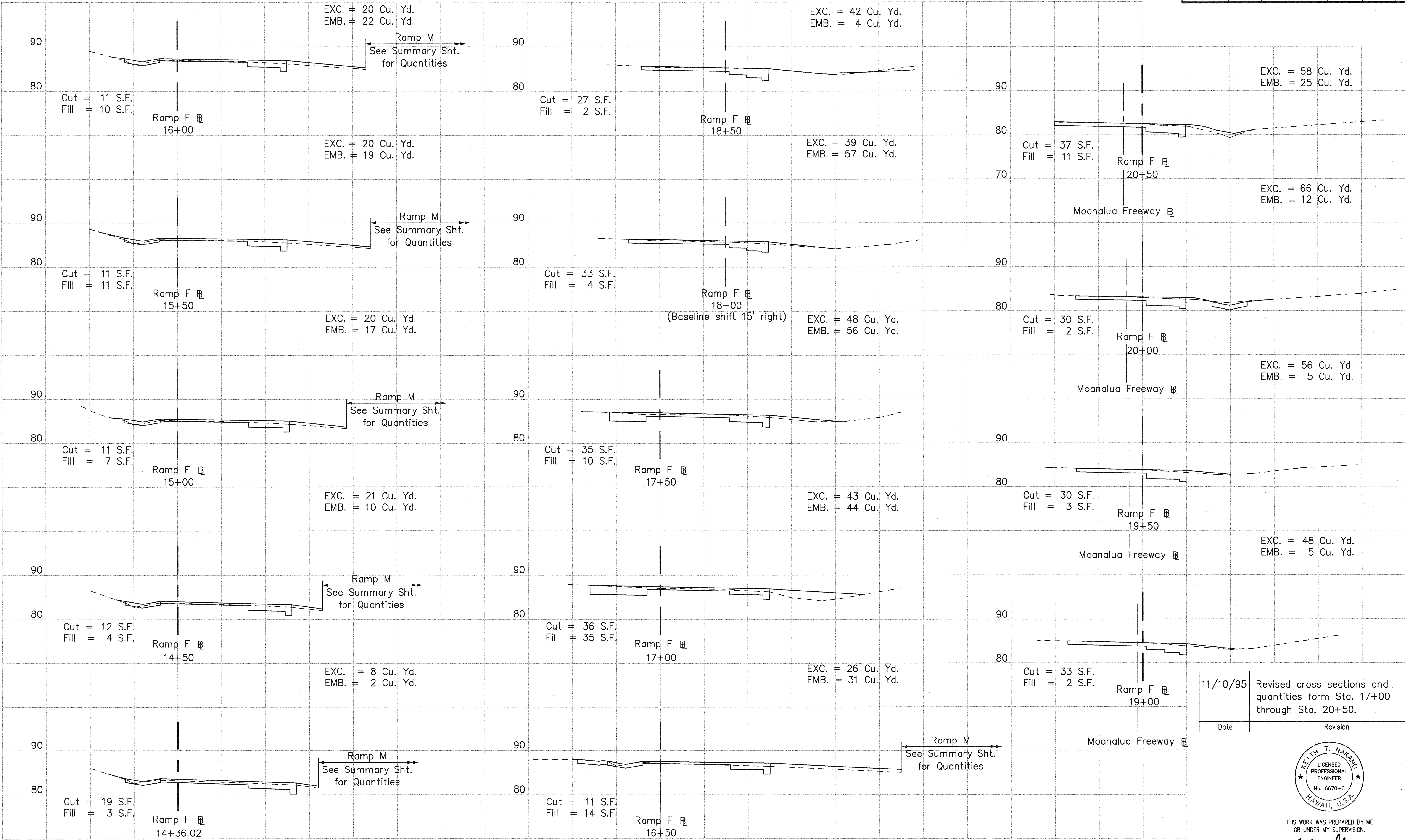
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OR UNDER MY SUPERVISION.

Keith T. Nakano

Scale: Horiz. 1" = 10'
Vert. 1" = 10'

SHEET NO. X-15 OF 22 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	306	325



11/10/95 Revised cross sections and quantities from Sta. 17+00 through Sta. 20+50.

Date Revision



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Keith T. Nakano

Scale: Horiz. 1"=10'
Vert. 1"=10'

SHEET NO. X-16 OF 22 SHEETS

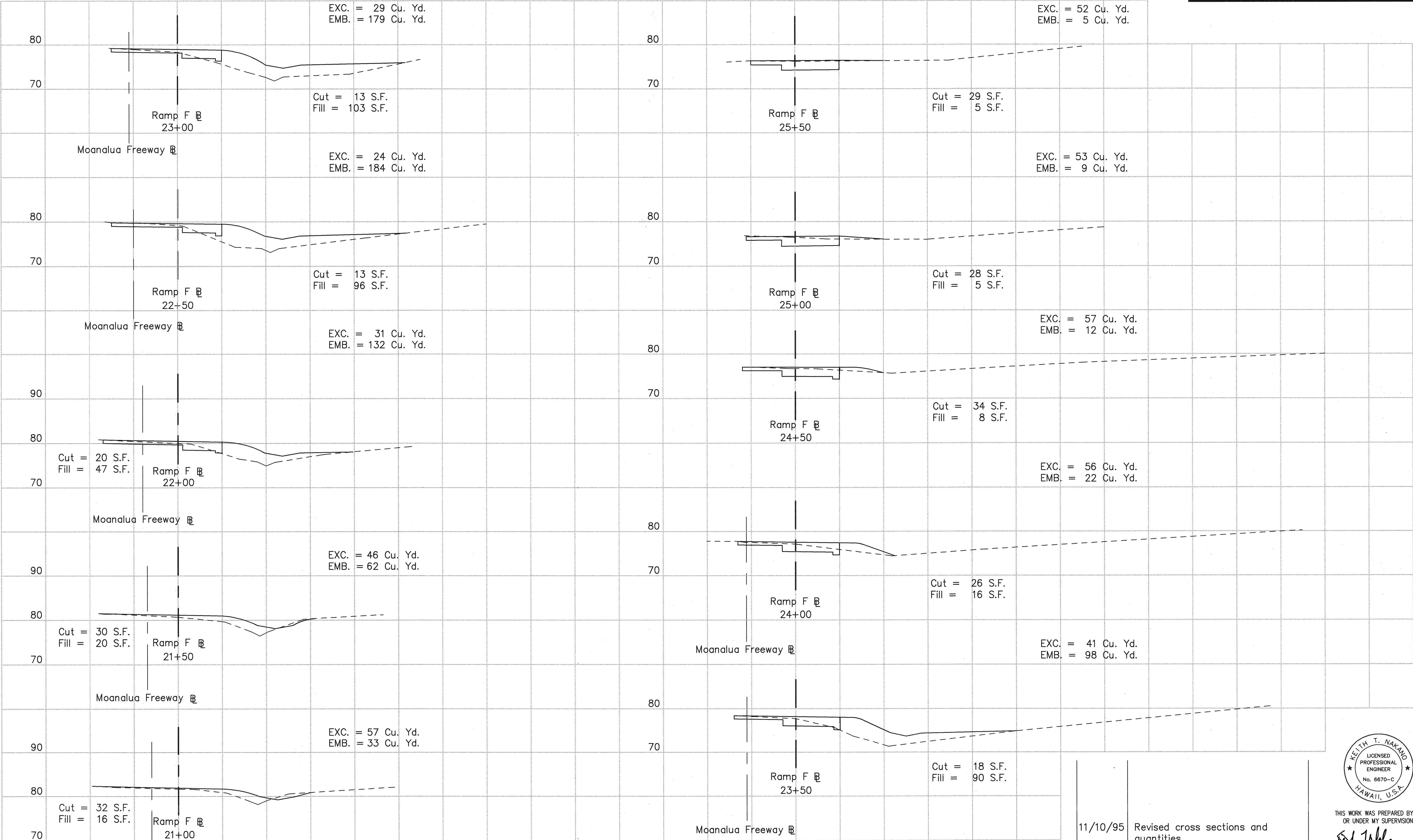
C.O. 306

ORIGINAL PLAN
DRAWN BY
NOTE BOOK
DESIGNED BY
QUANTITIES BY
CHECKED BY
No. _____

640 By J. Minura, 55-52

Last Saved: K:\HALAWA\F\F-XSEC1.dwg 11/10/95 at 10:22

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	307	325

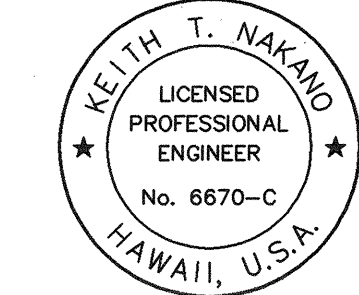


ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
DESIGNED BY		
CHECKED BY		
NO.		

11/13/95 at 10:43

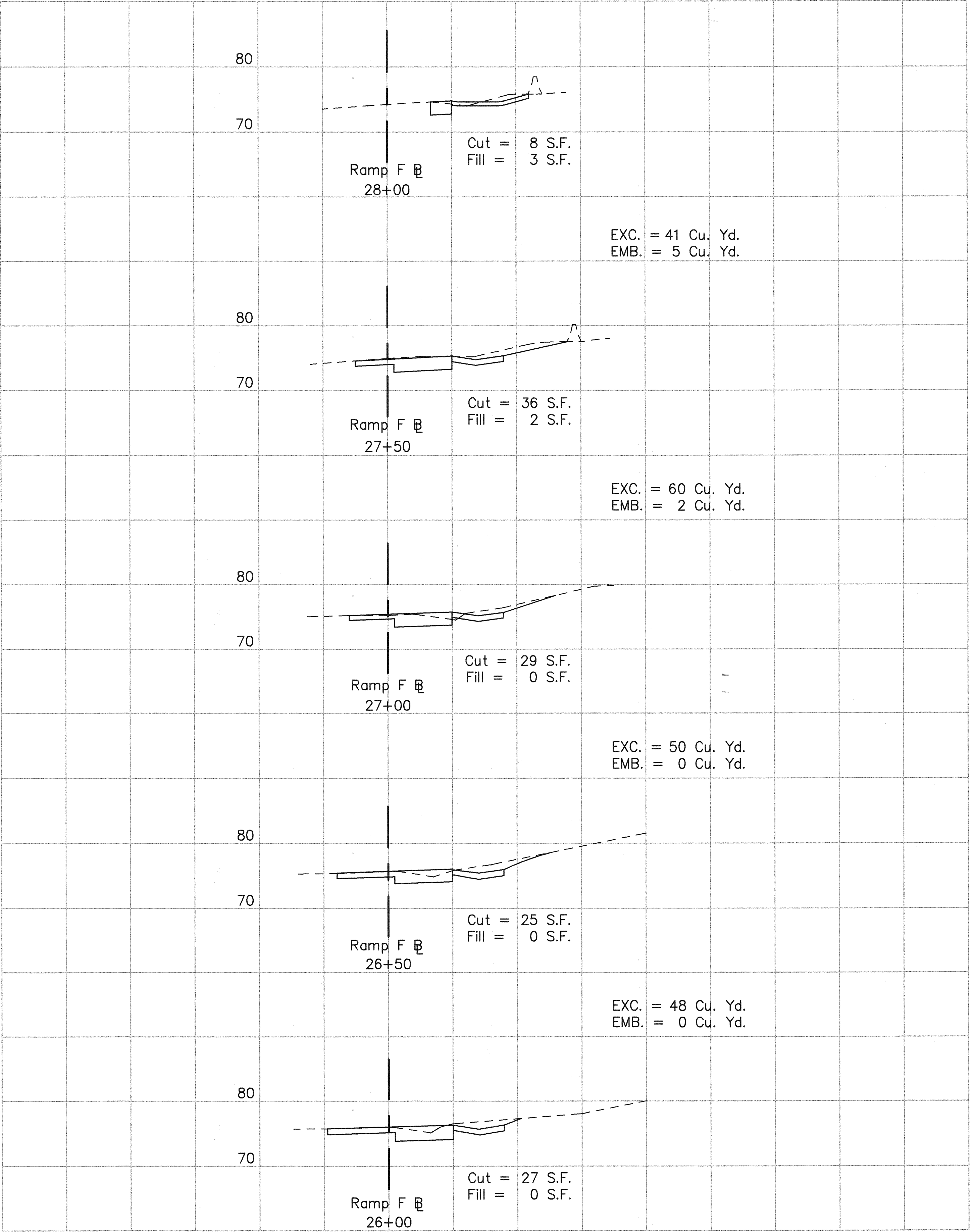
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Vert. 1"=10'

11/10/95 Revised cross sections and quantities.

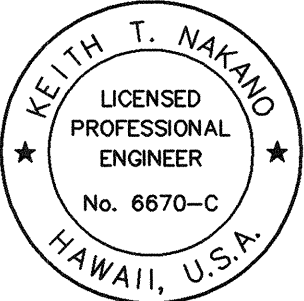


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OR UNDER MY SUPERVISION.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	308	325



11/10/95	Revised cross sections & quantities.
Date	Revision



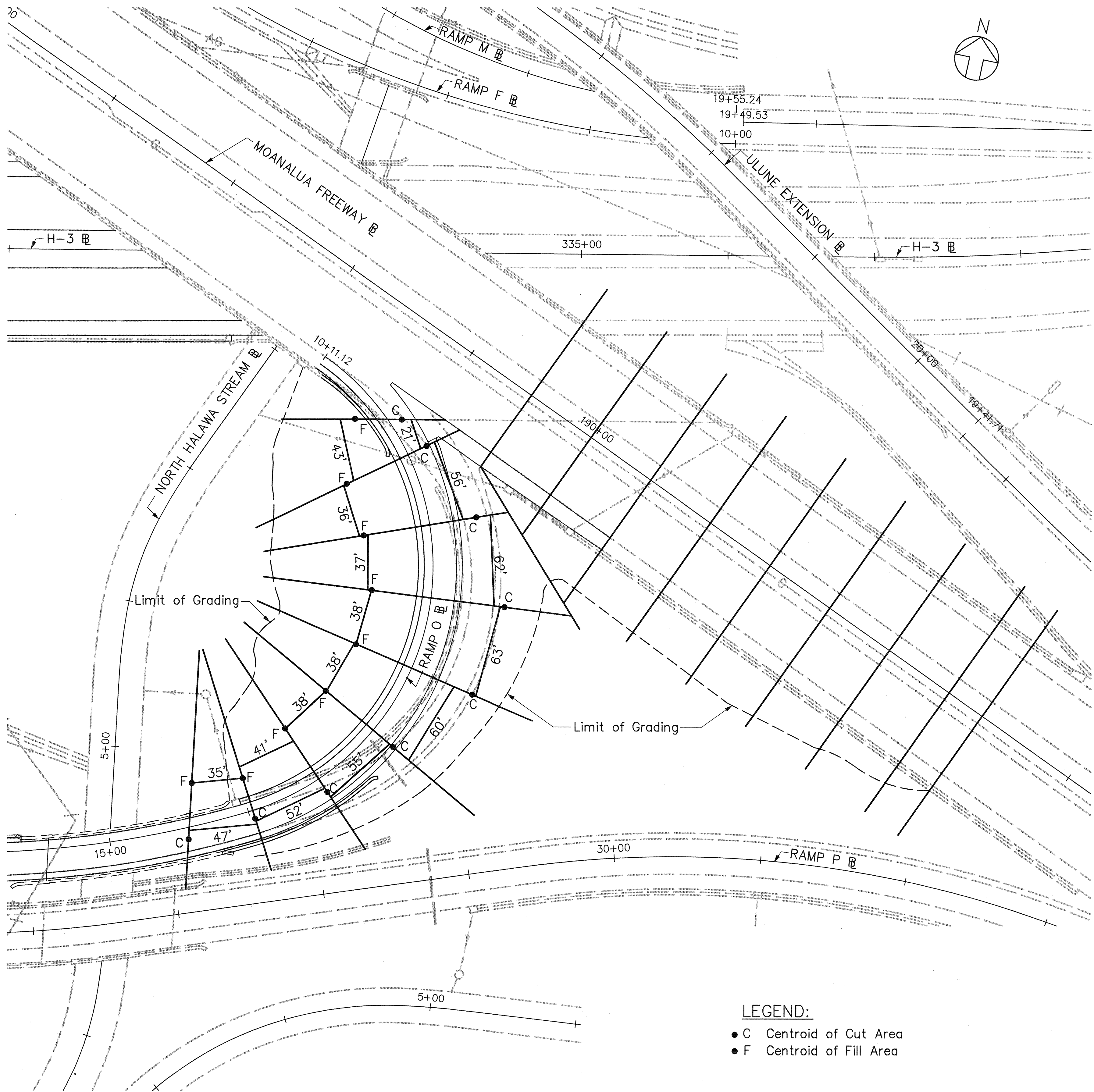
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

Keith T. Nakano

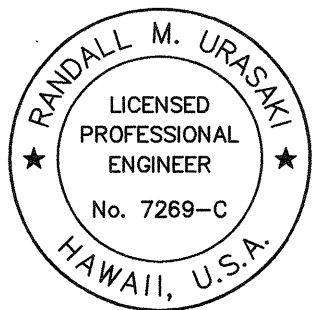
Scale: Horiz. 1"=10'
Vert. 1"=10'

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
No.	TRACED BY	
	QUANTITIES BY	
	CHECKED BY	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	309	325



- LEGEND:**
- C Centroid of Cut Area
 - F Centroid of Fill Area



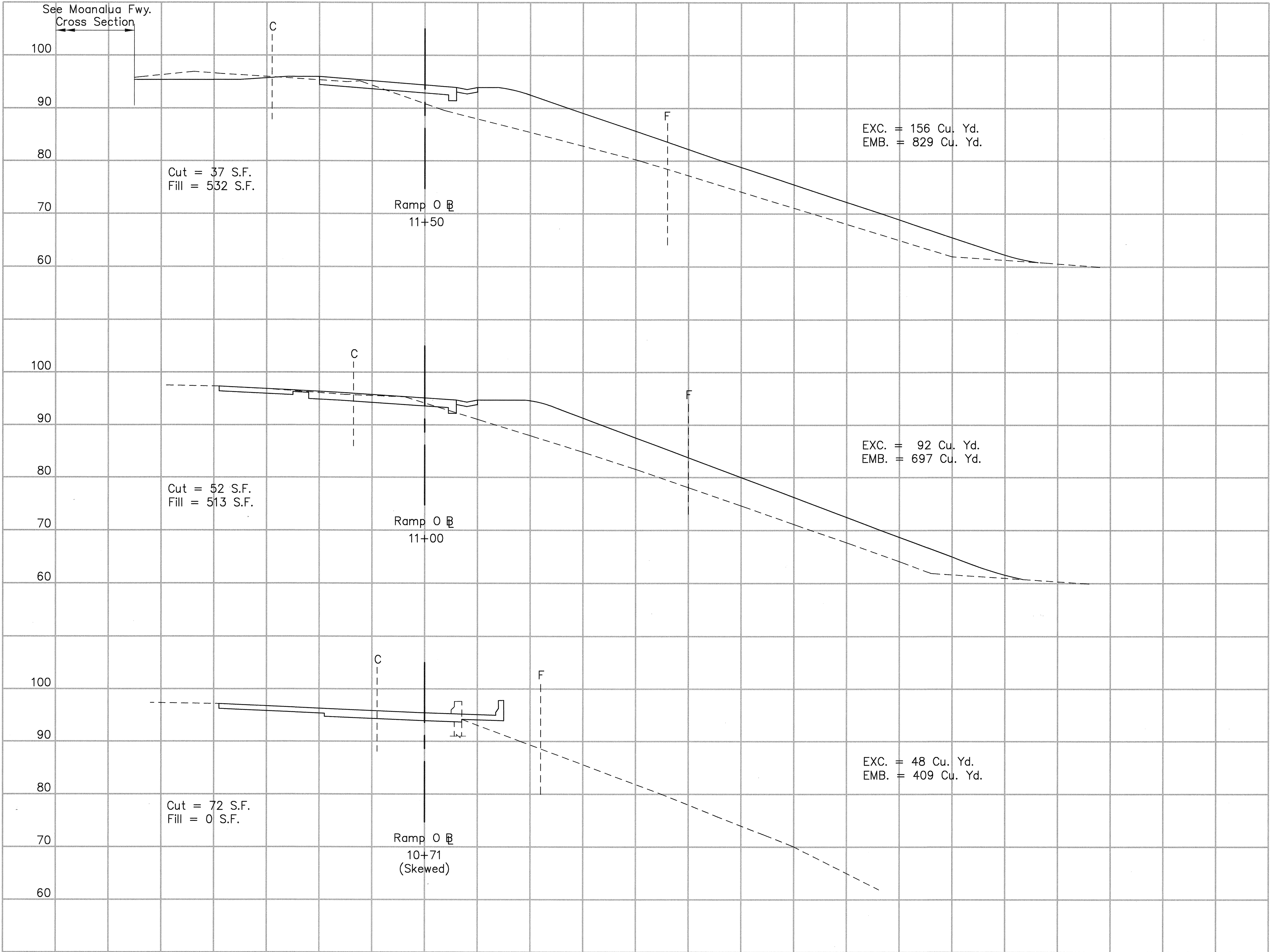
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.
Randall M. Urakami

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CROSS SECTION
KEY PLAN
MOANALUA FREEWAY & RAMP O
H-3 - HALAWA INTERCHANGE
INTERSTATE ROUTE H-3
FAIP NO. I-H3-1(74)
SCALE: 1" = 40' DATE: AUGUST 1994
SHEET NO. X-19 OF 22 SHEETS

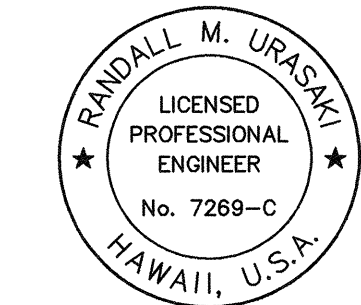
ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	
No. _____		

CAD by J. Minura, 95-52

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	310	325



Scale: Horiz. 1"= 10'
Vert. 1"= 10'



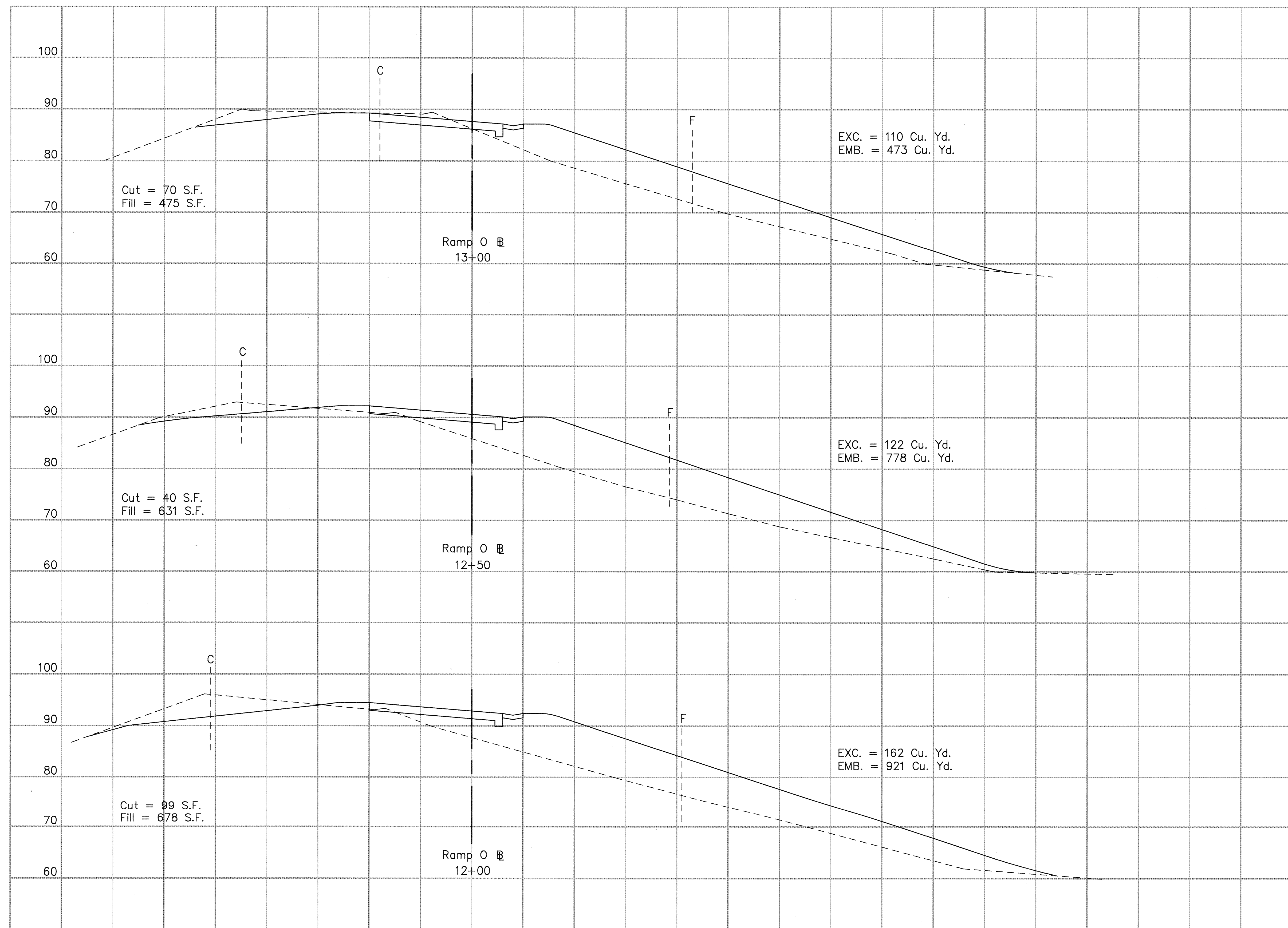
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OR UNDER MY SUPERVISION.

Randall M. Urashima

ORIGINAL
PLAN
DRAWN BY
DATE
NOTED BY
REVISIONS
QUANTITIES BY
CHECKED BY
No.

CAD by J. Mifuna, 95-52

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	311	325



LEGEND:

--- C --- Centroid of cut area. (F for fill)

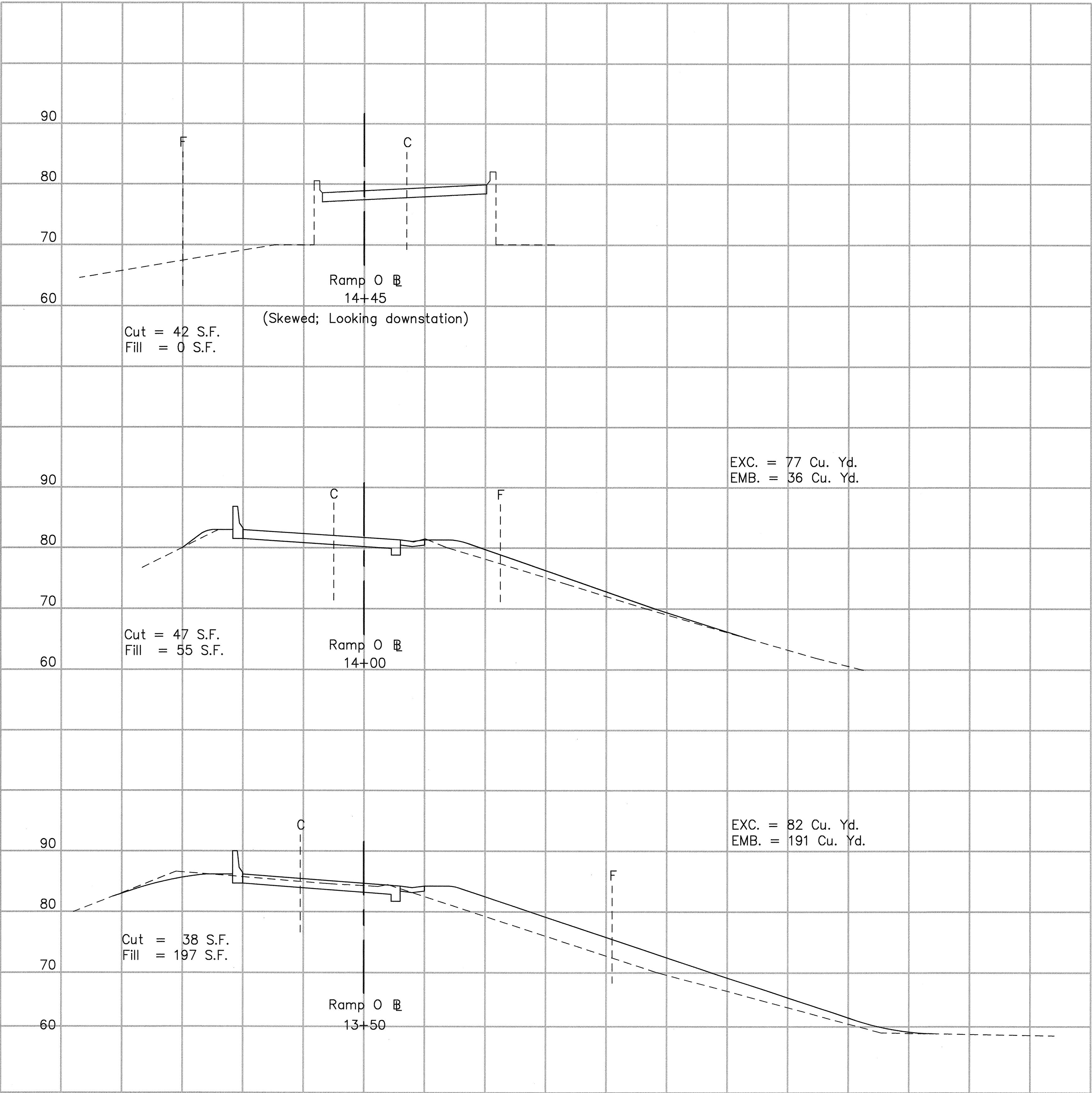


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OR UNDER MY SUPERVISION.

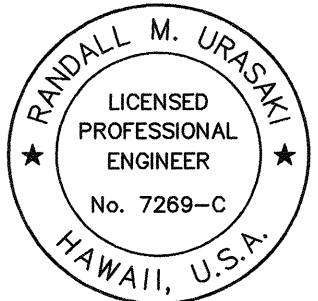
Randall M. Urasaki

Scale: Horiz. 1" = 10'
Vert. 1" = 10'

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H3-1(74)	1993	312	325



Scale: Horiz. 1"= 10'
Vert. 1"= 10'



THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION.

Randall M. Urasaki

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
NO.	