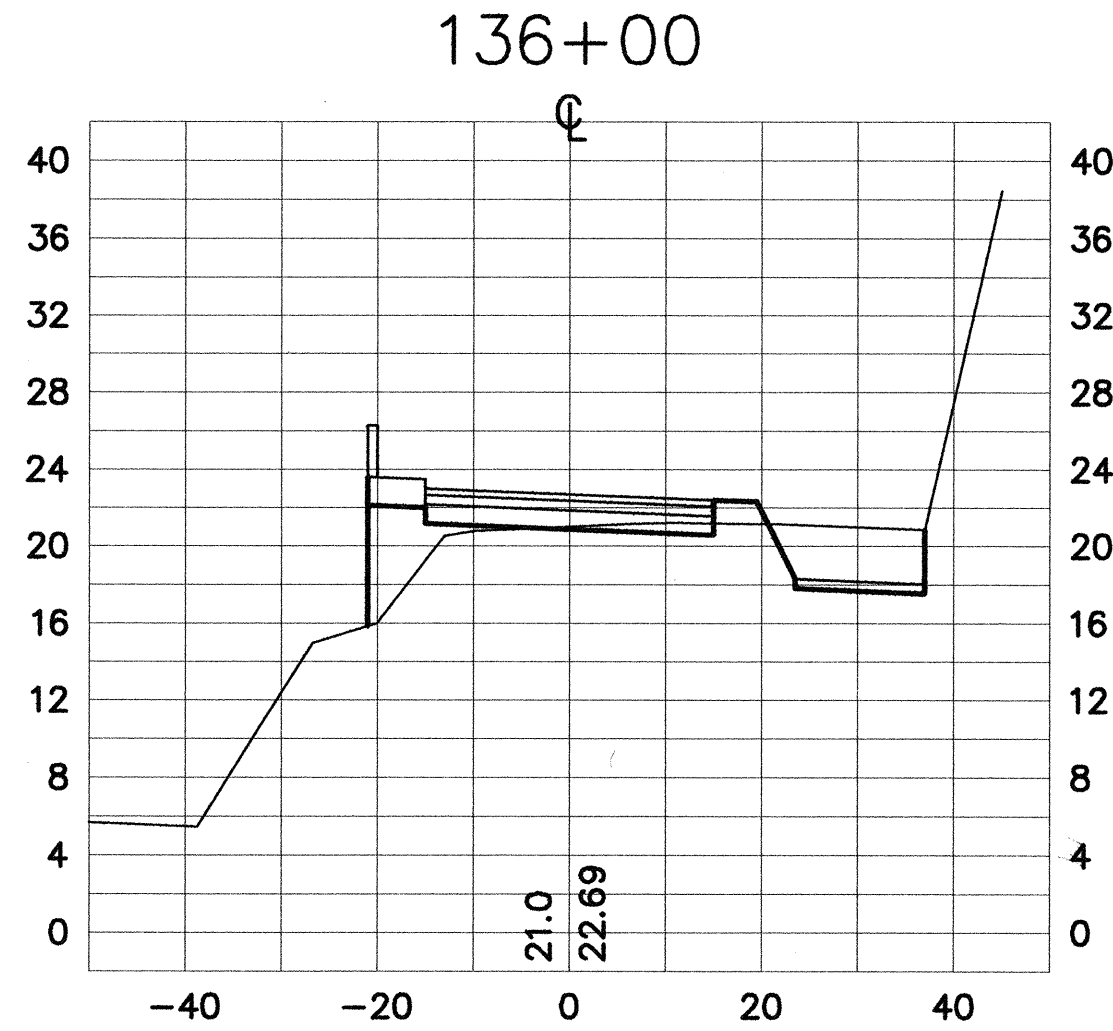
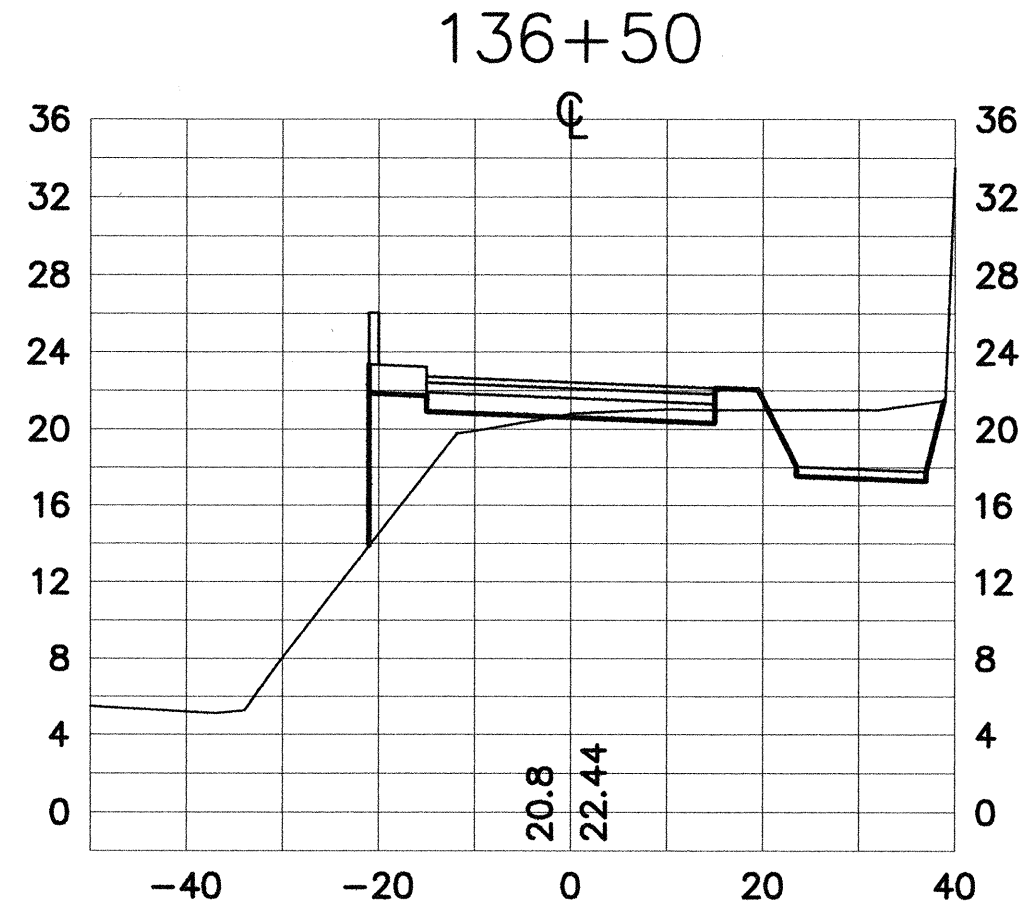
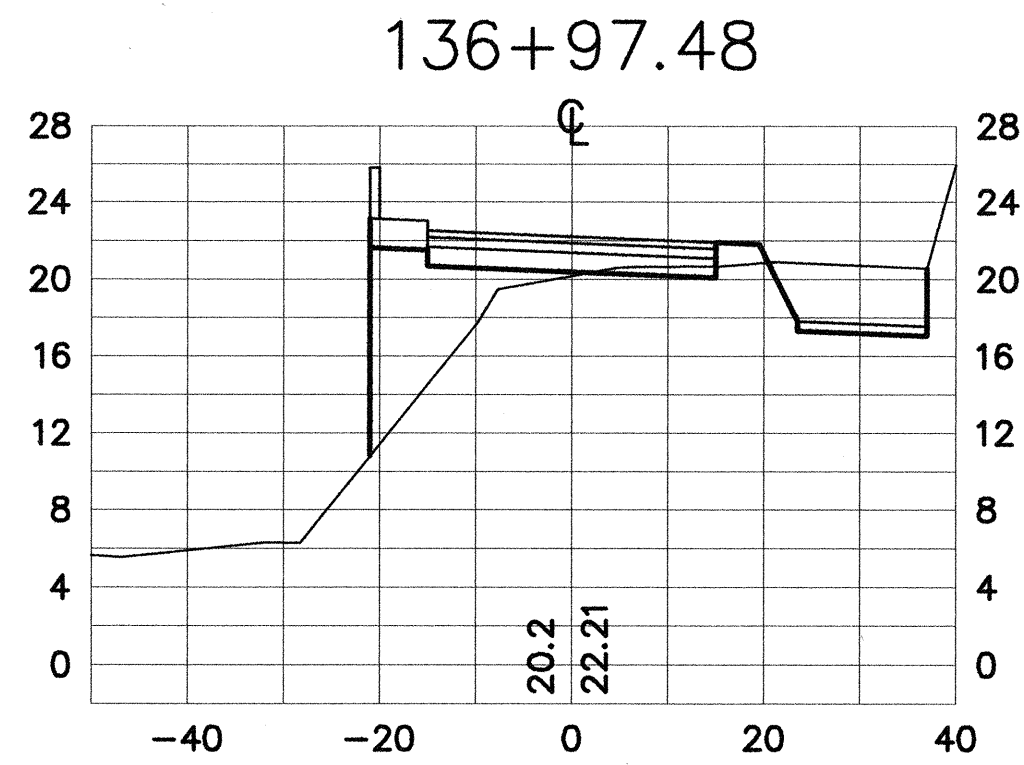
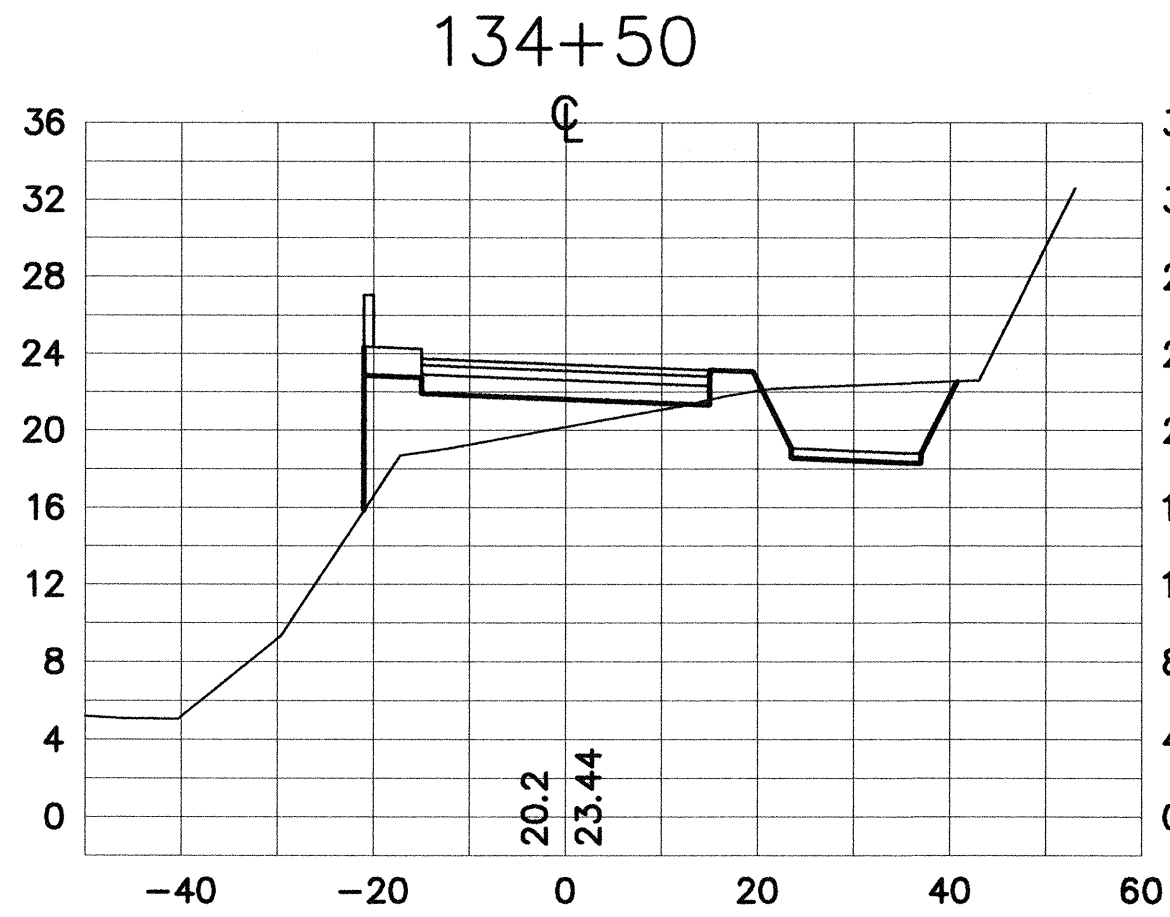
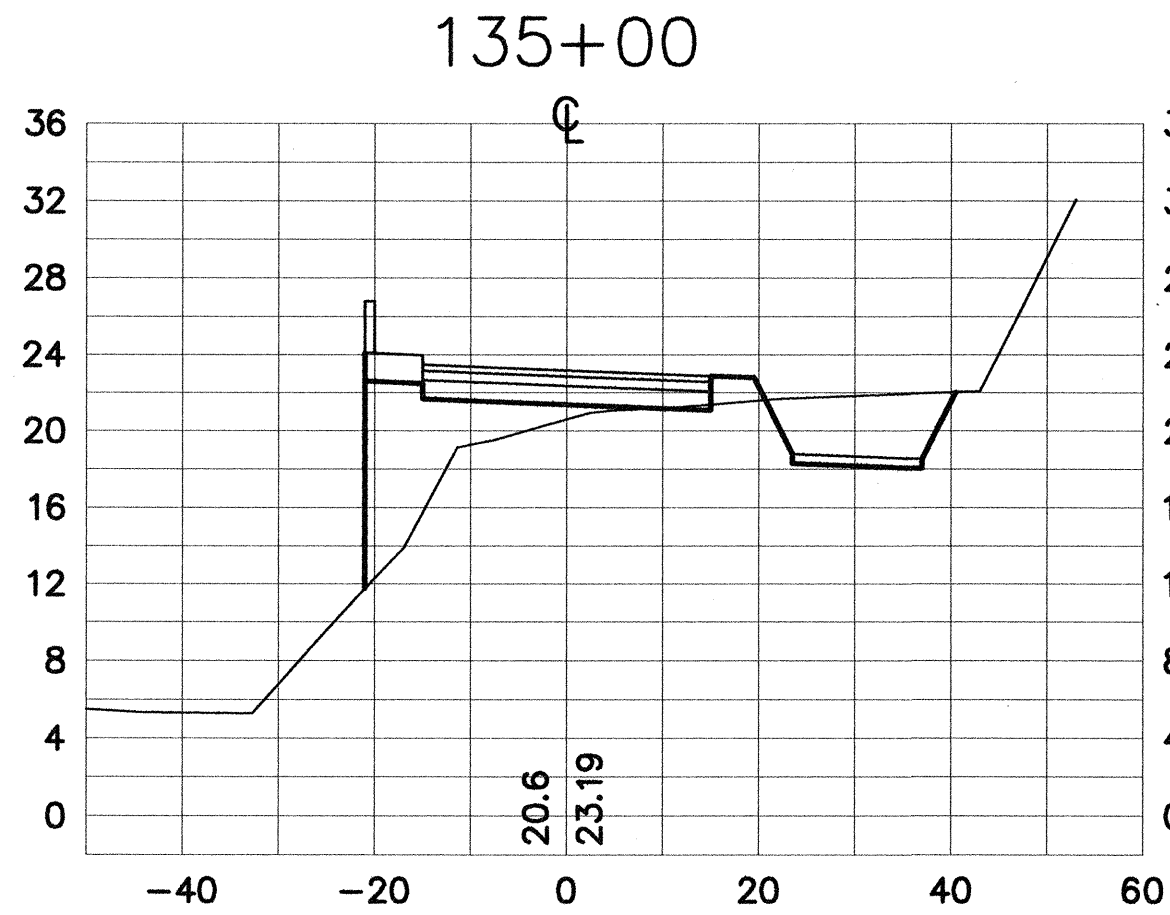
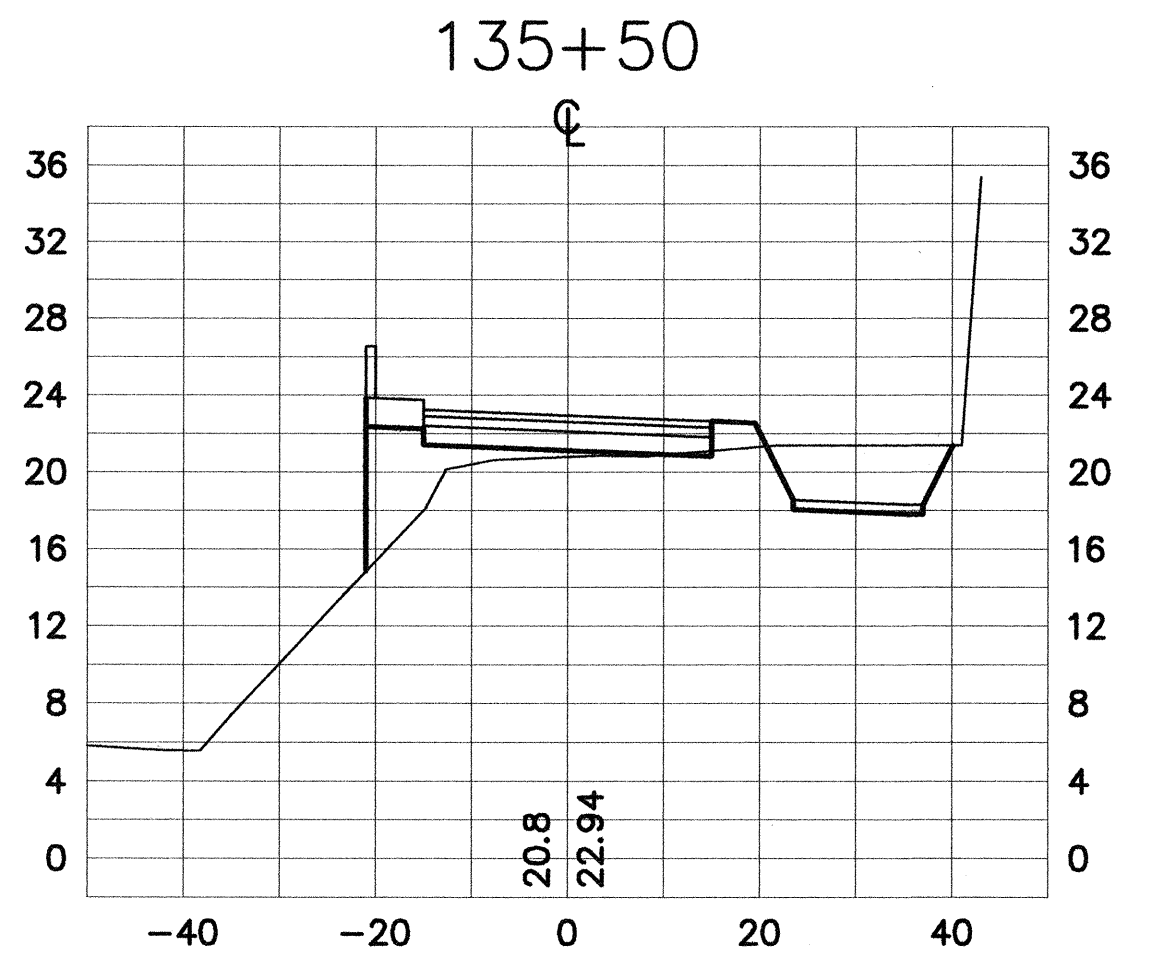
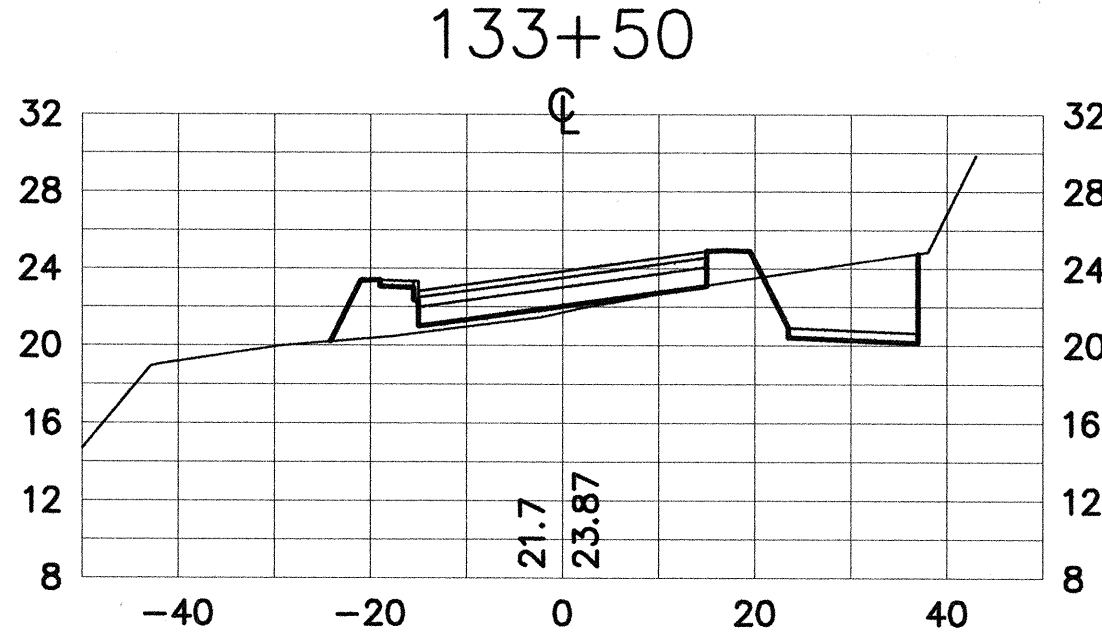
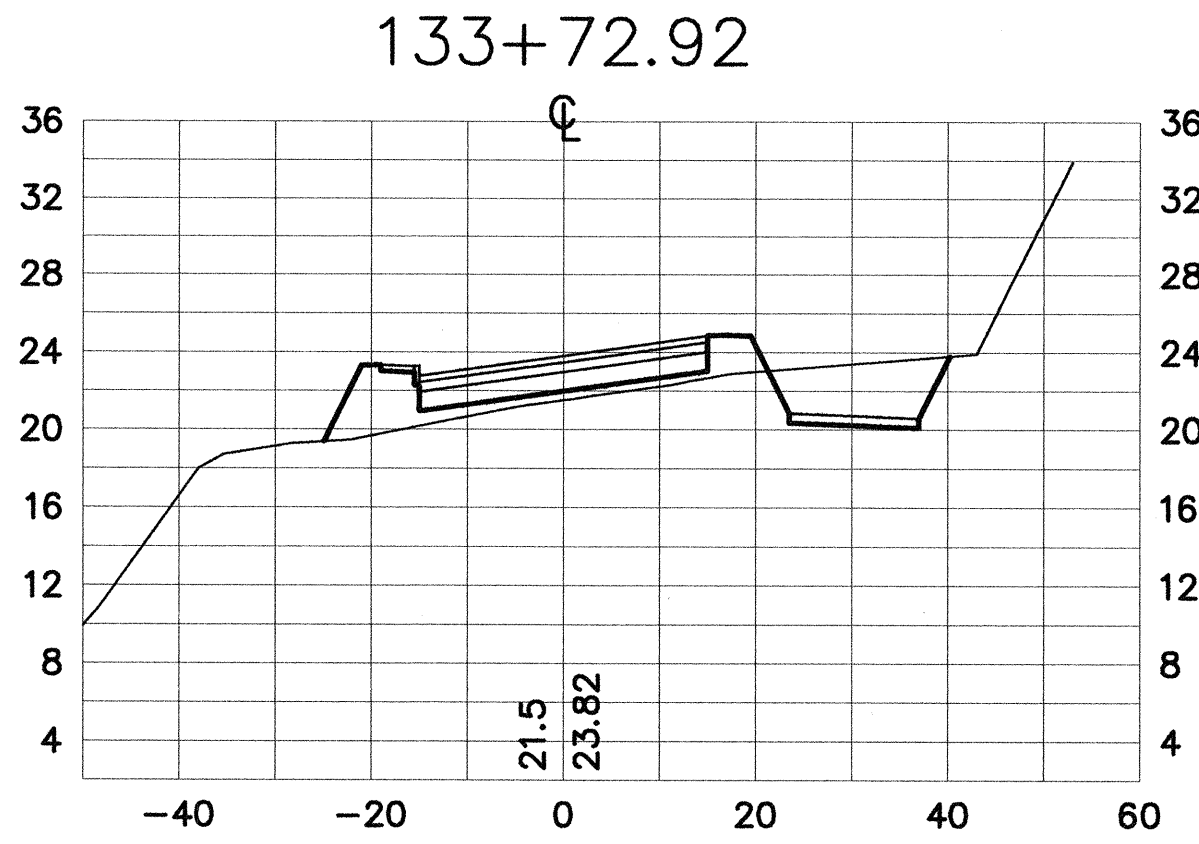
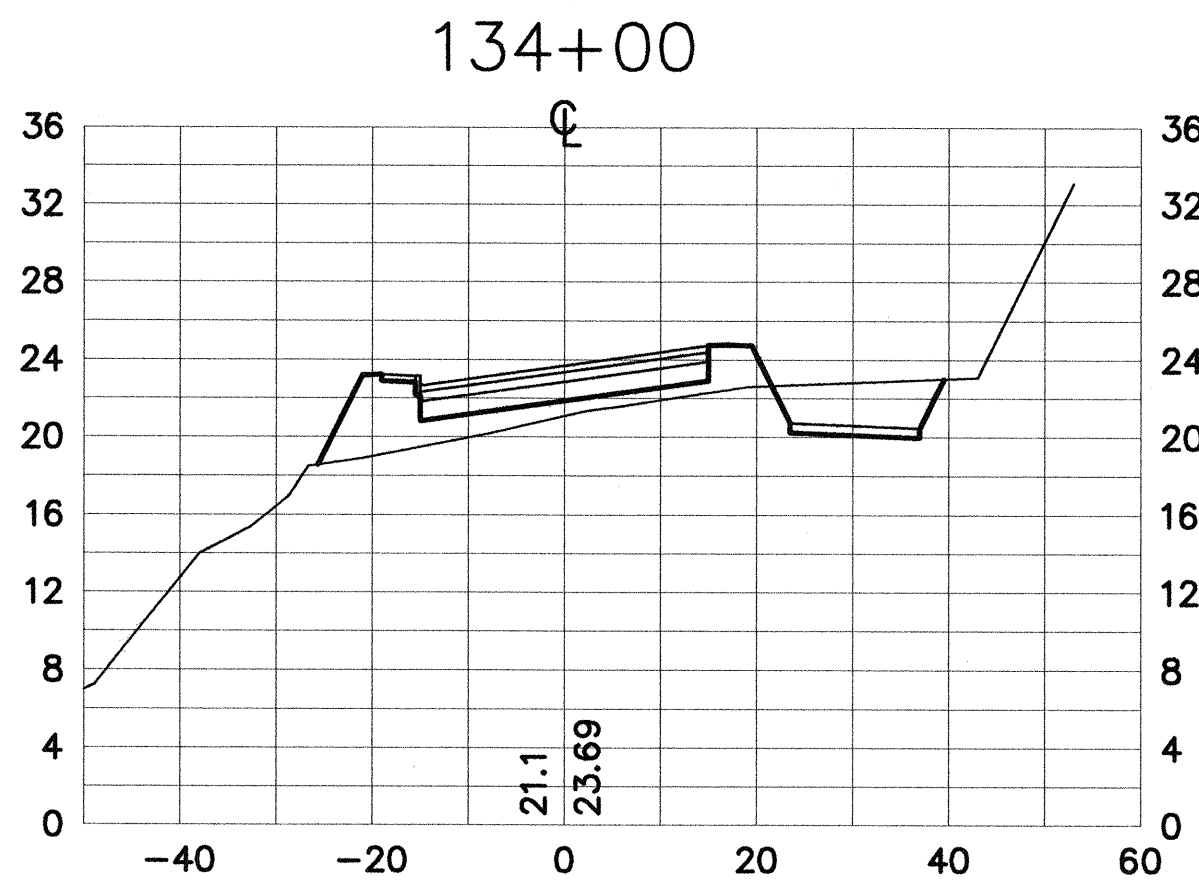
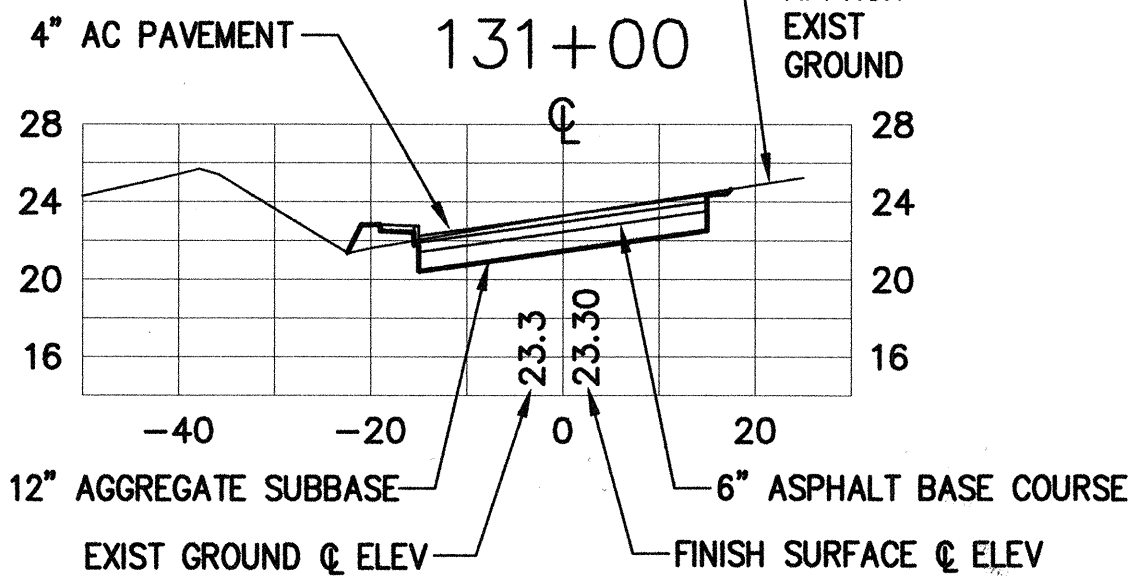
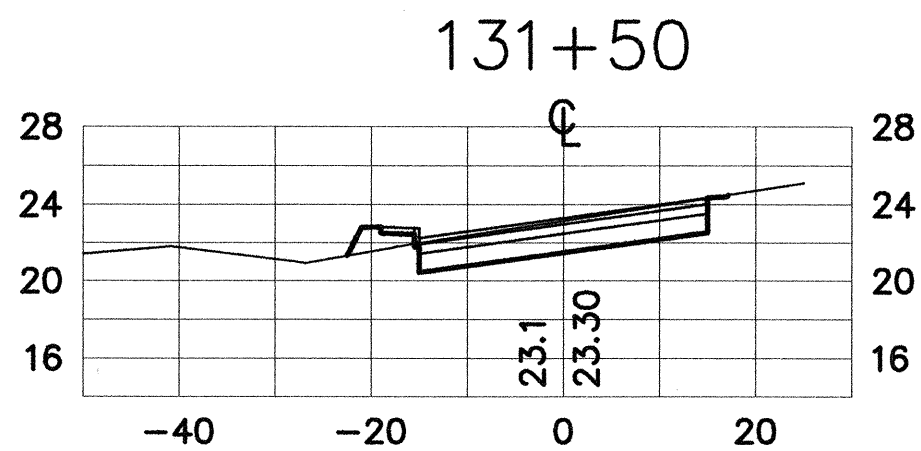
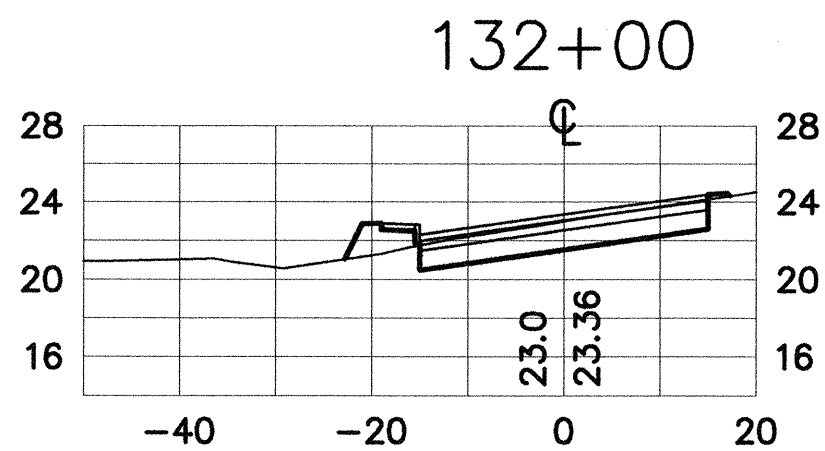
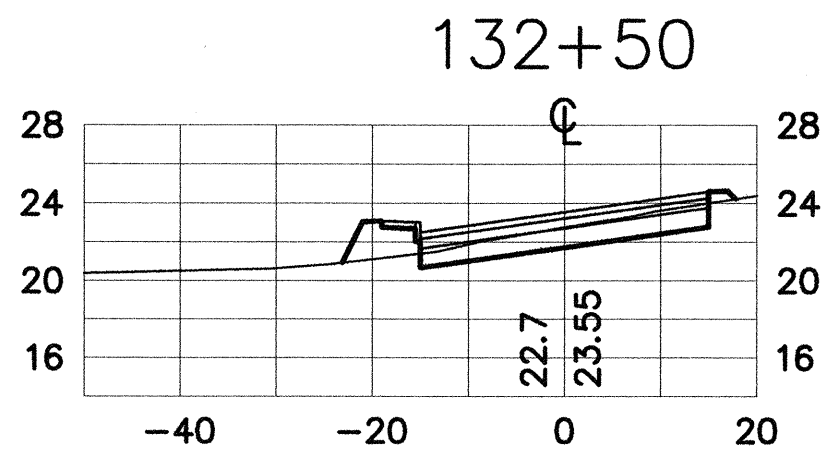
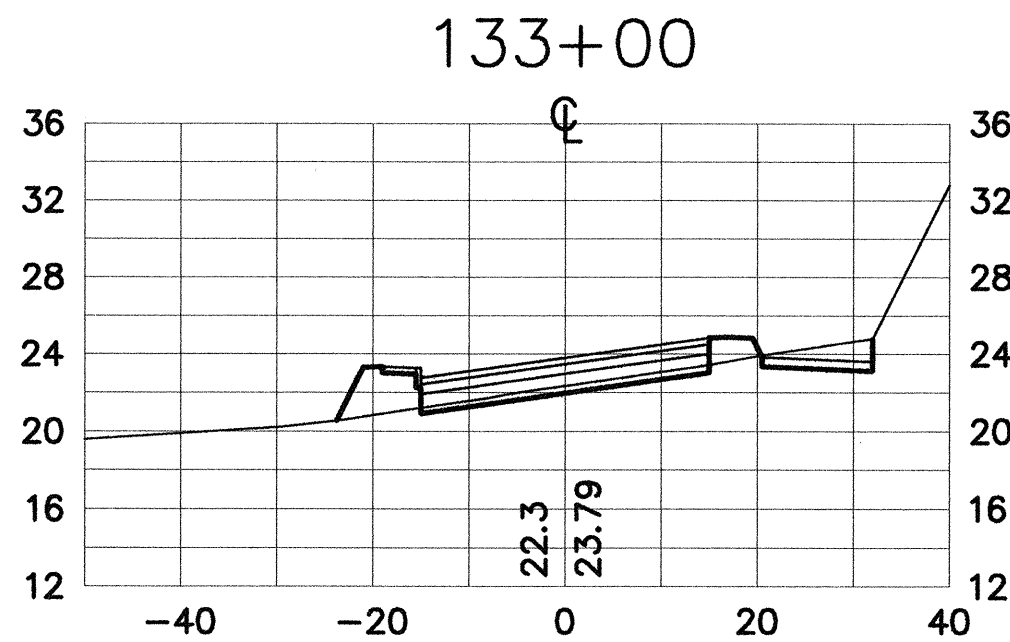
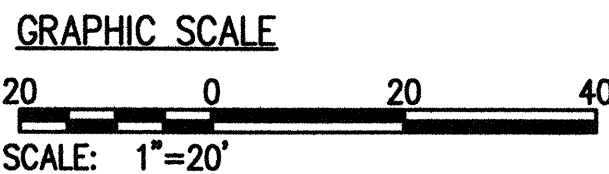


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	STP-083-1(45)	2000	18	39

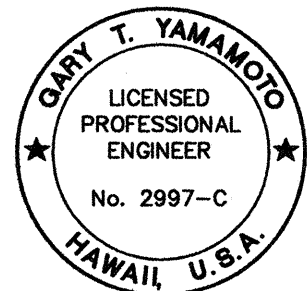


CROSS SECTIONS SCALE: HORIZ 1"=20' VERT 1"=10'



SURVEY PLOTTED BY	DATE
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DESIGNED BY	
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NOTE BOOK	
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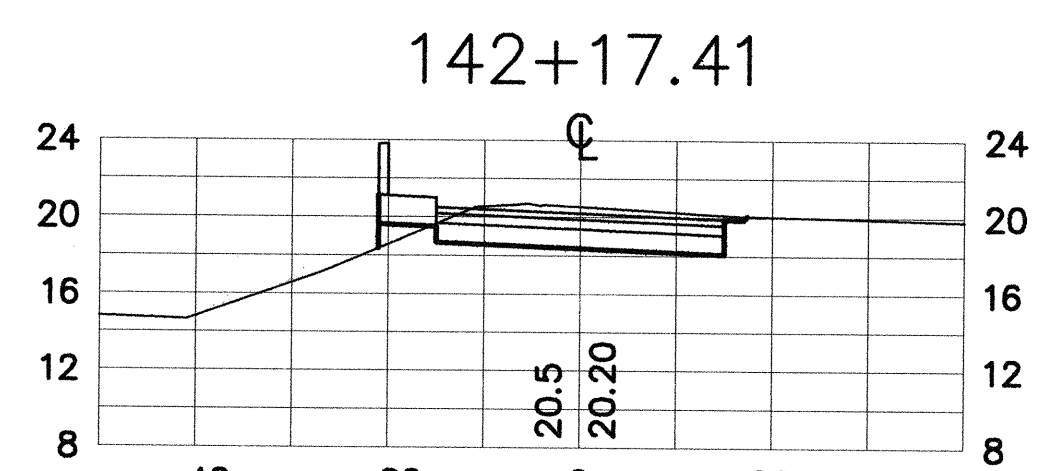
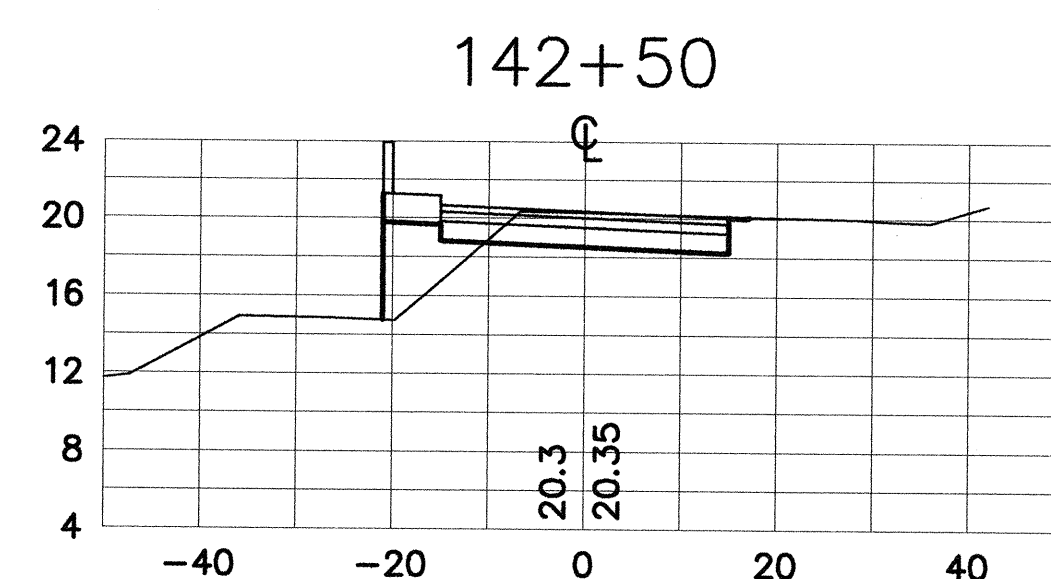
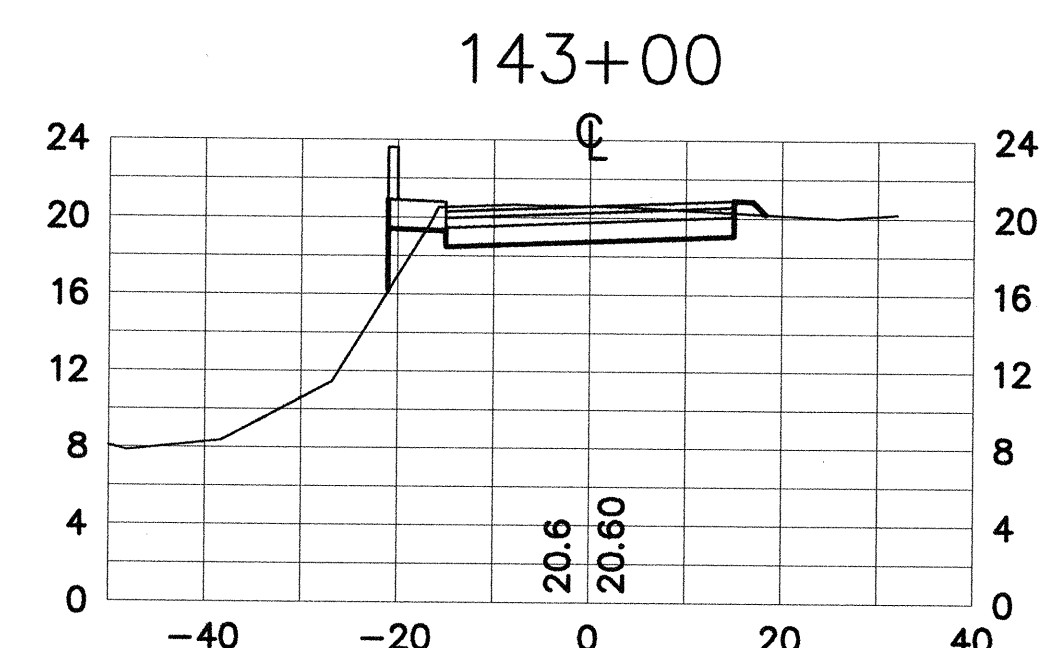
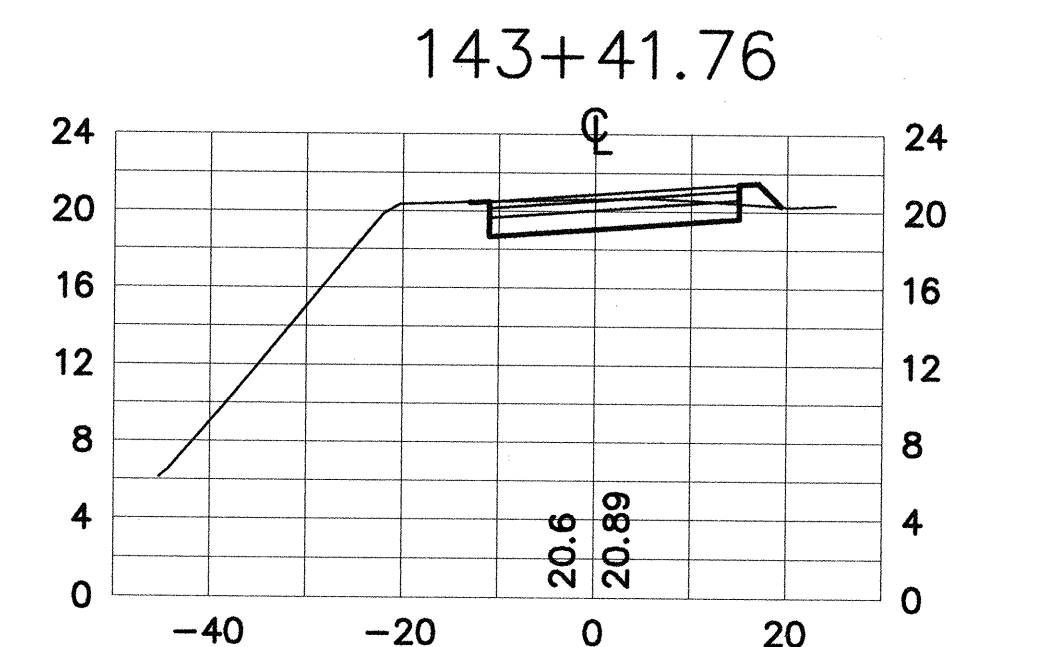
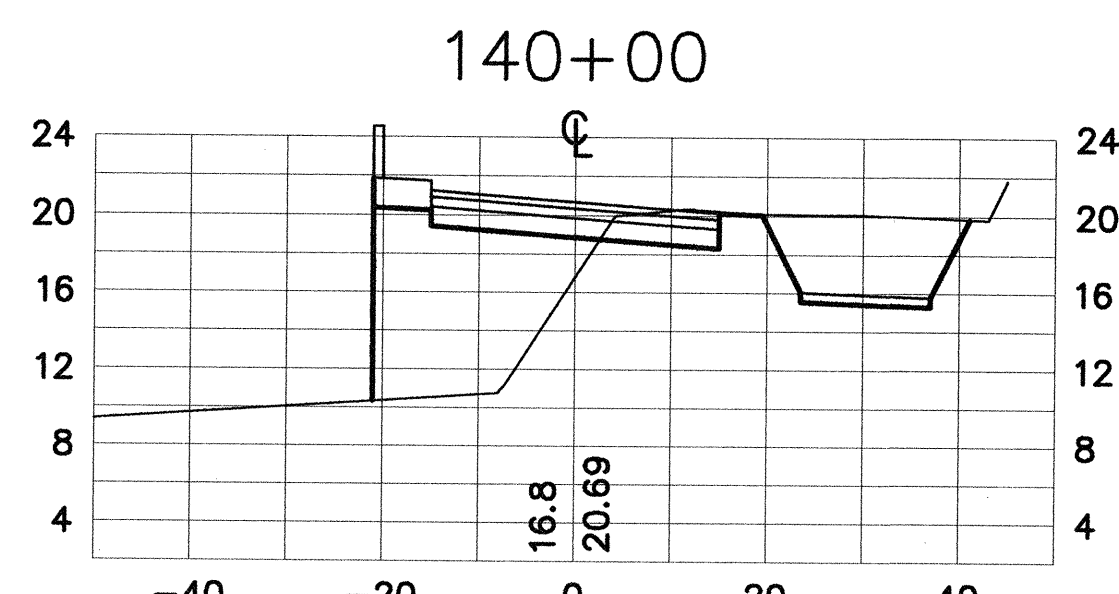
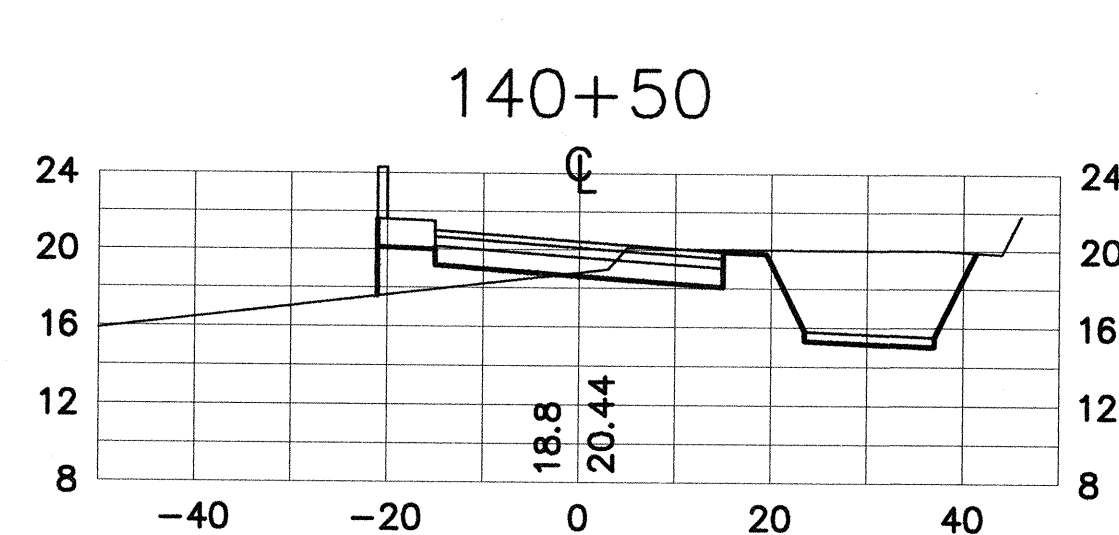
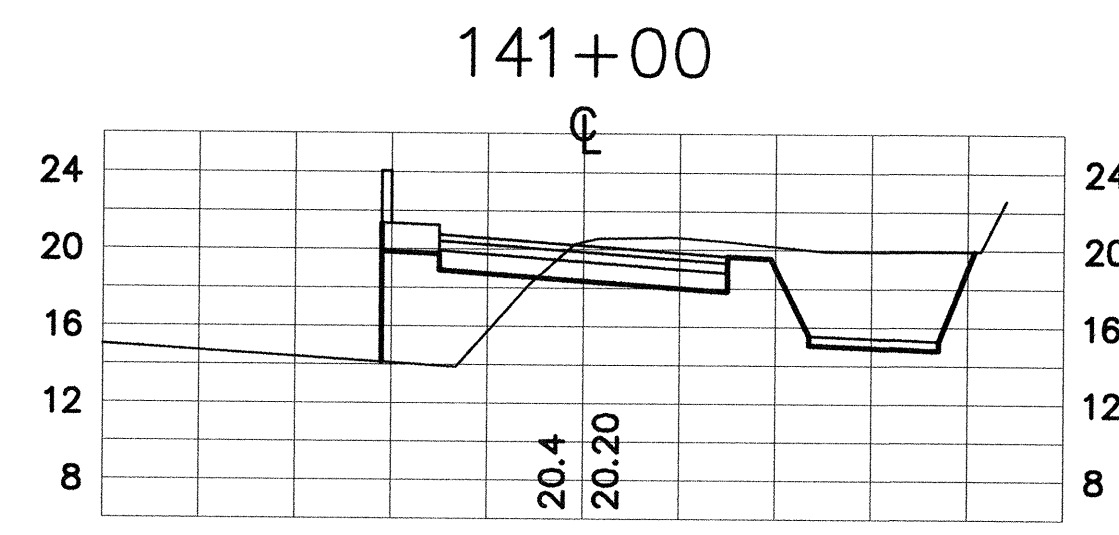
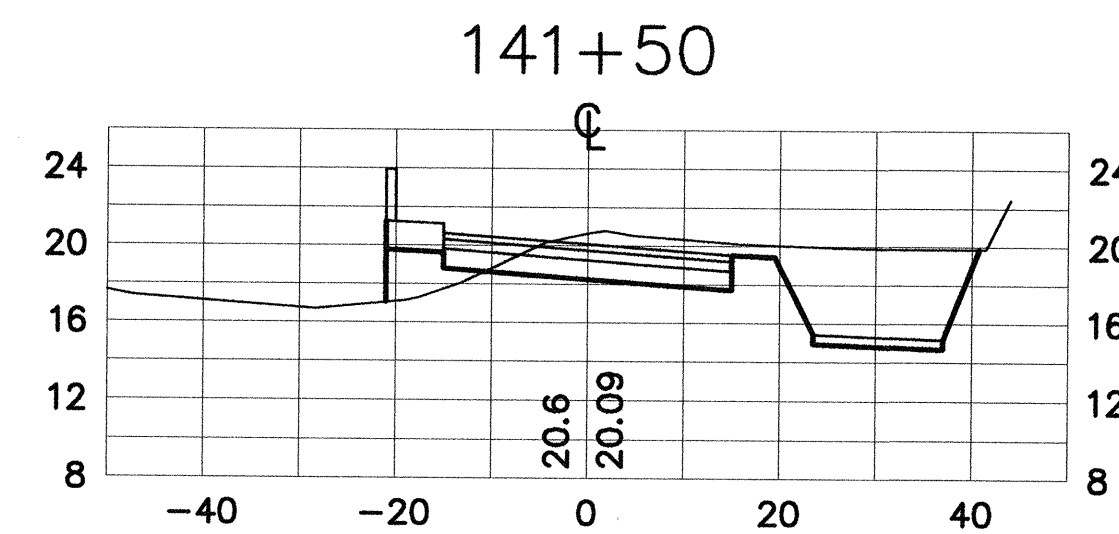
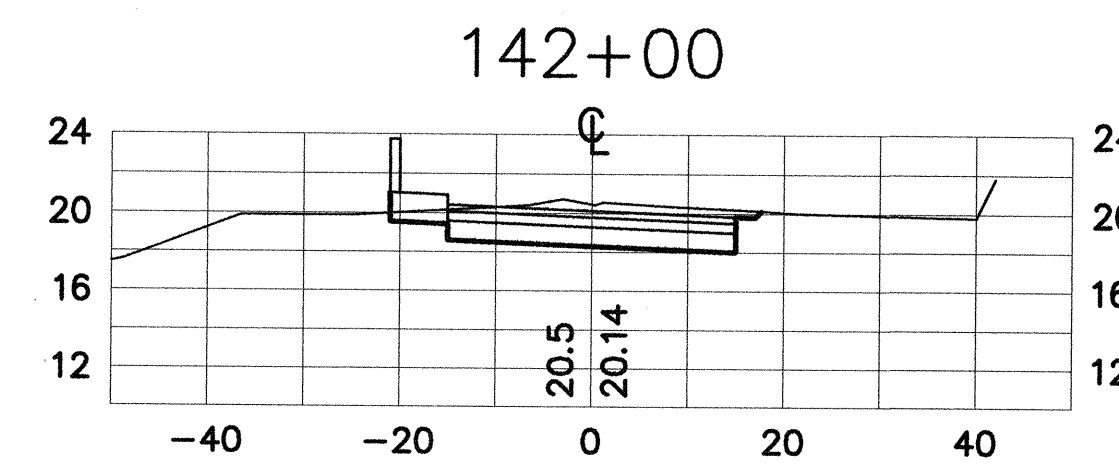
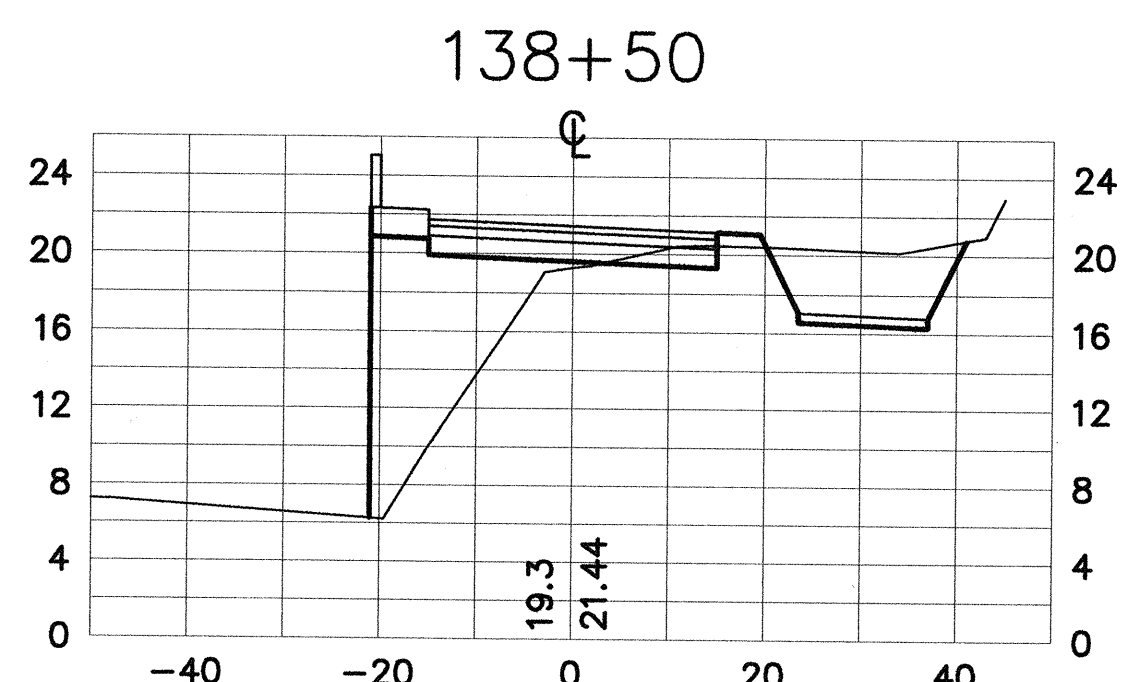
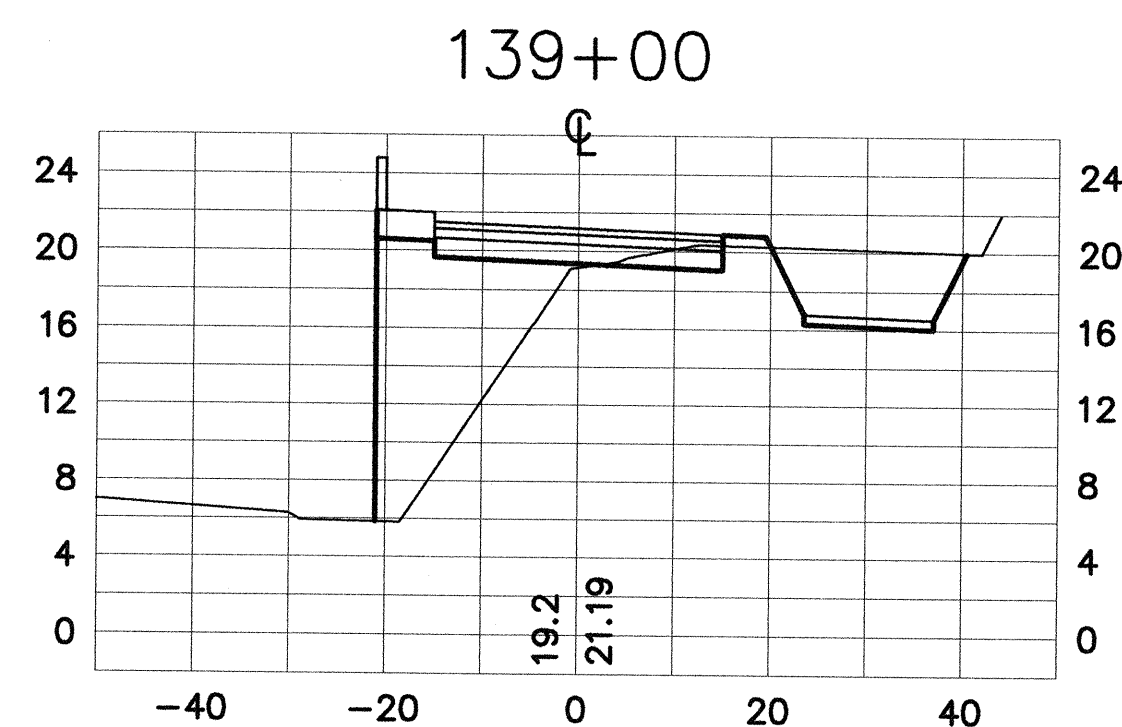
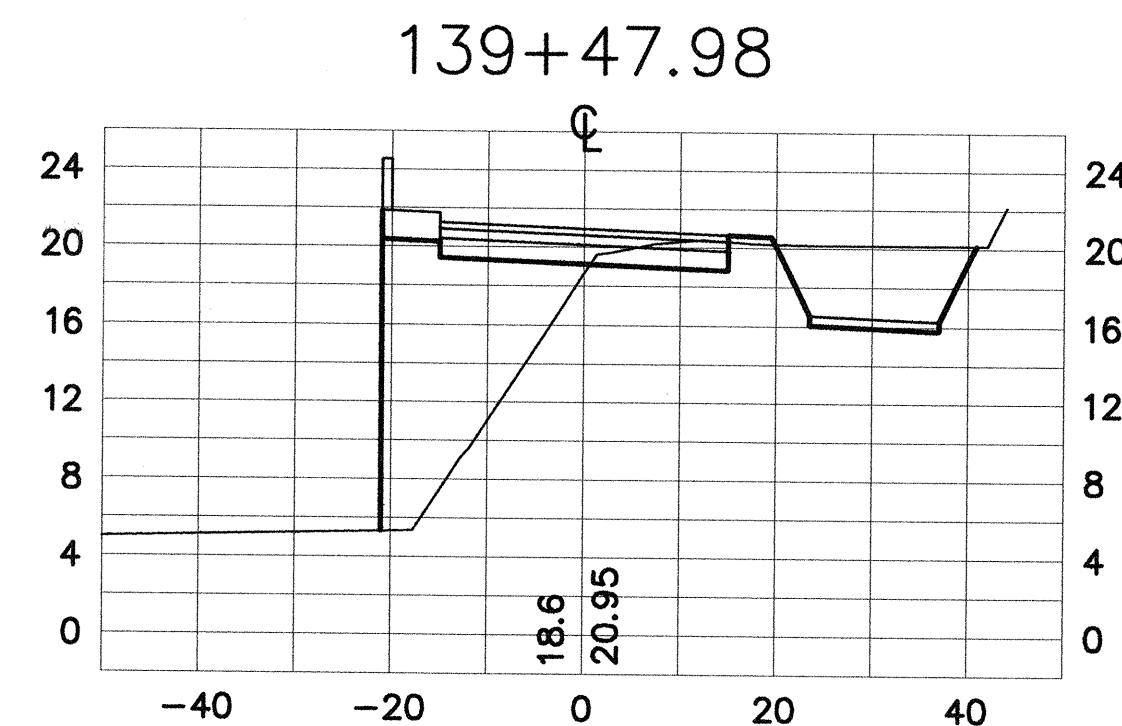
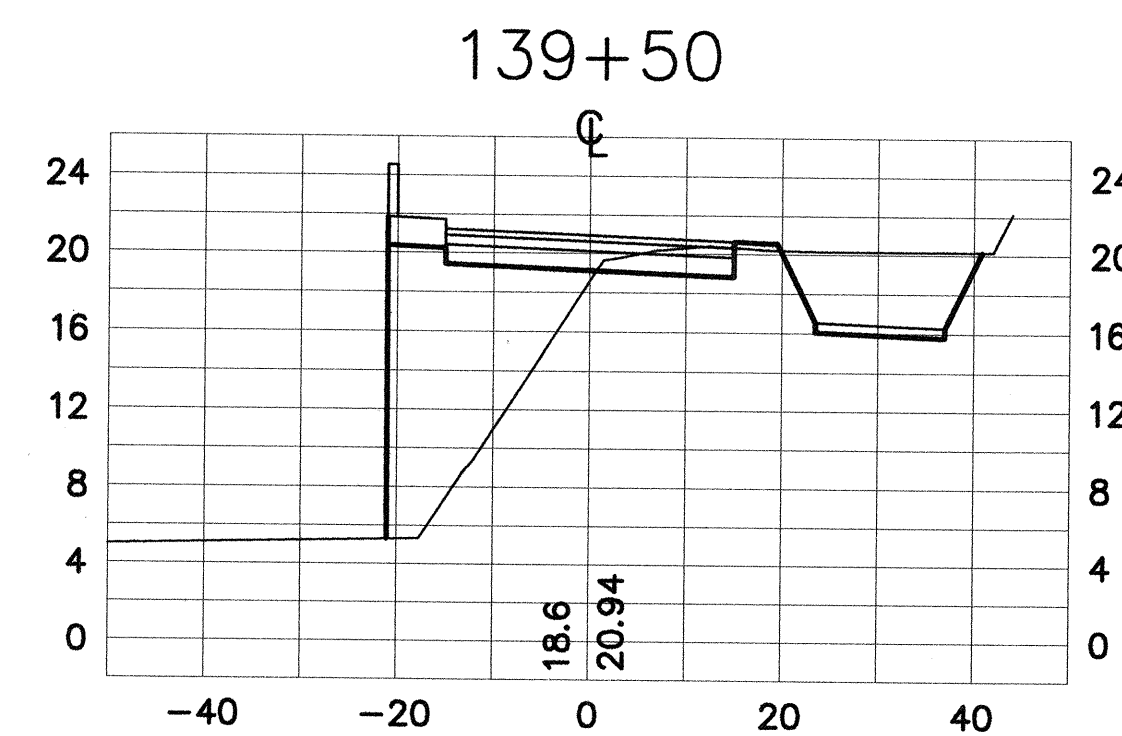
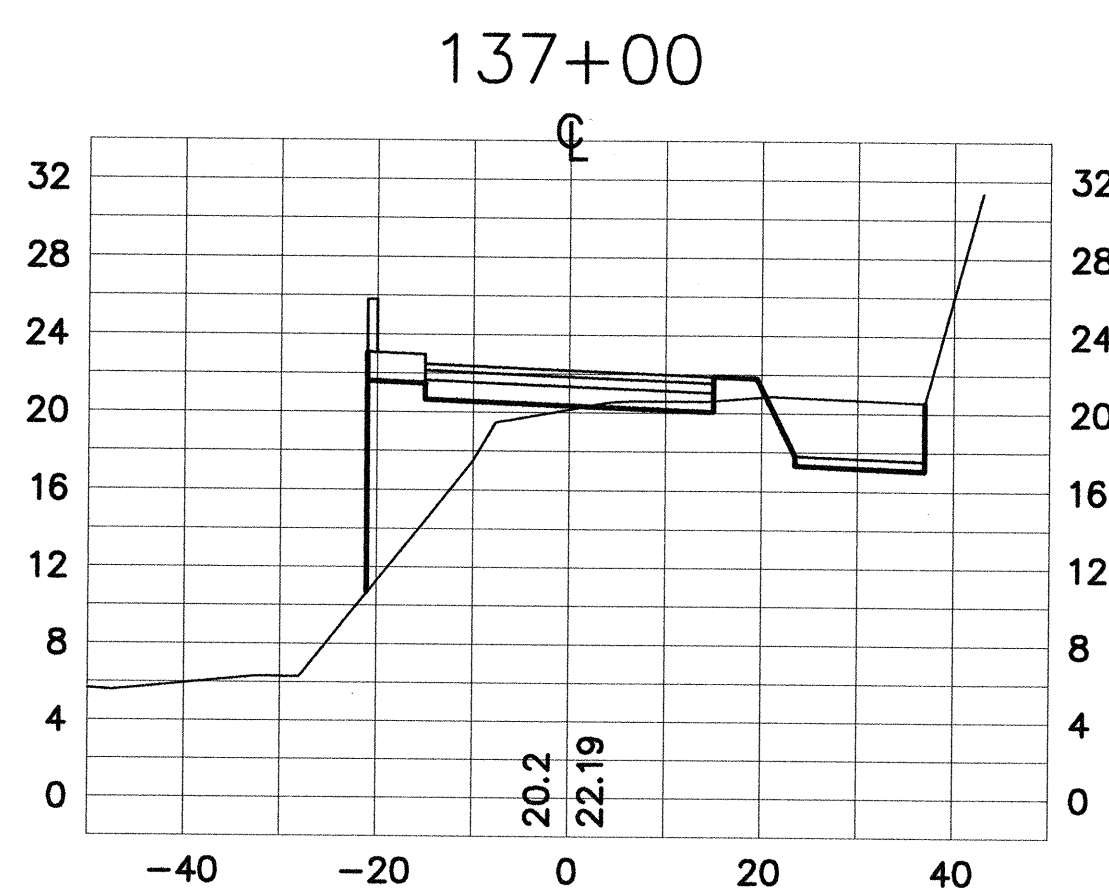
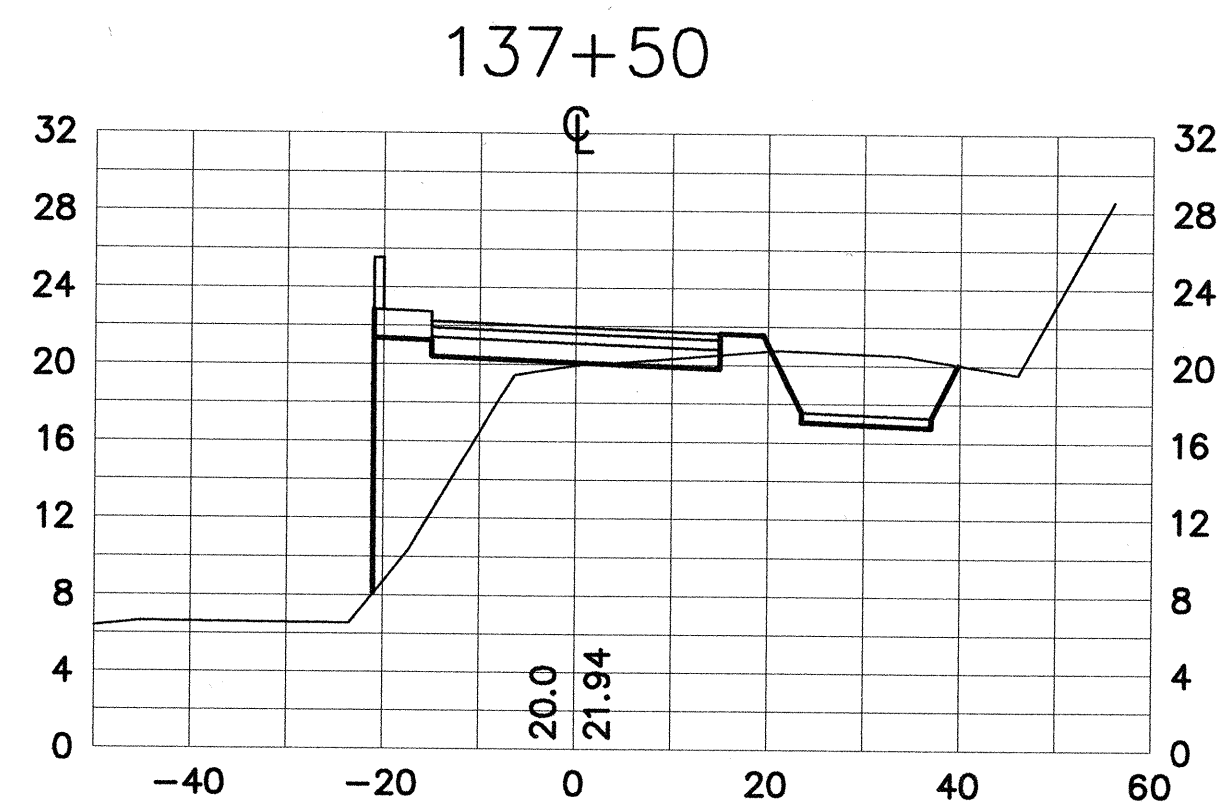
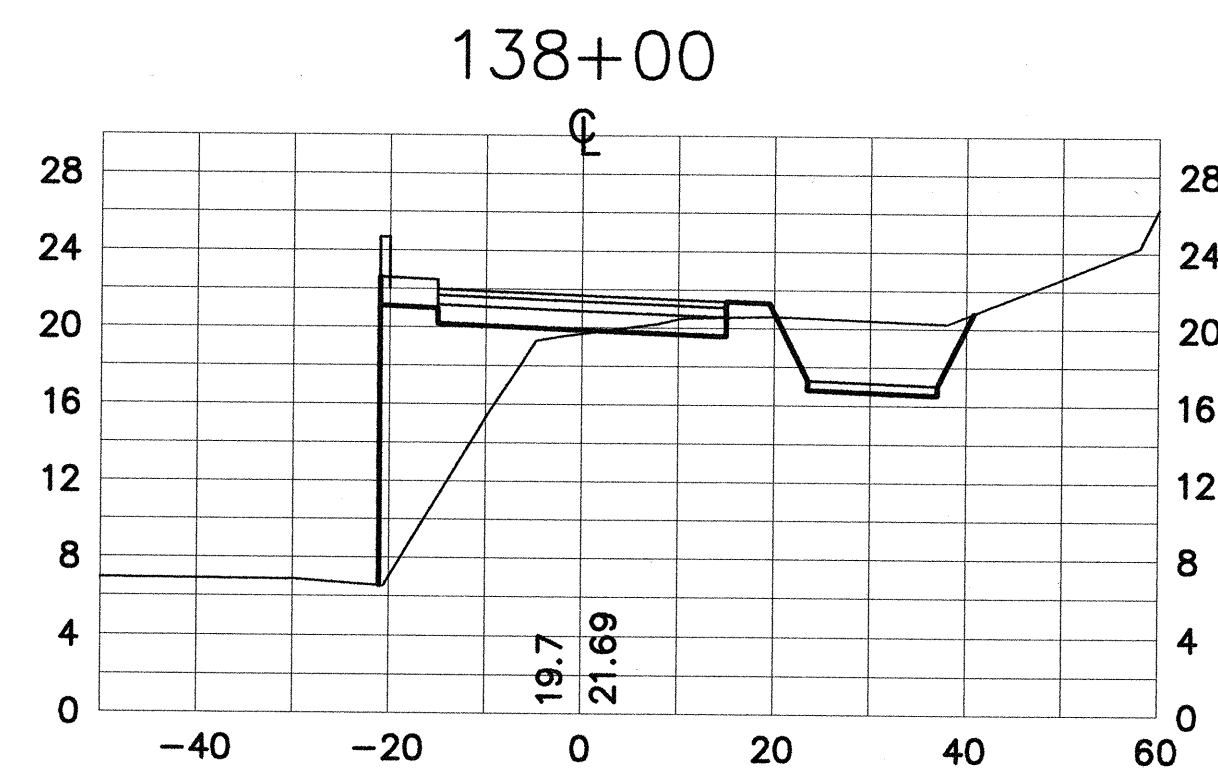


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ME OR UNDER MY SUPERVISION.

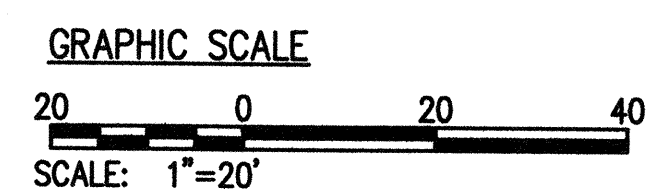
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
CROSS SECTIONS
KAMEHAMEHA HIGHWAY WAIMEA BAY EMERGENCY ROCKFALL REMEDIATION
FEDERAL-AID PROJECT NO. STP-083-1(45)
Scale: As Shown Date: April 2000
SHEET No. 18 OF 39 SHEETS

“AS-BUILT”

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	STP-083-1(45)	2000	19	39



CROSS SECTIONS SCALE: HORIZ 1"=20' VERT 1"=10'



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

EARTH TECH

700 Bishop Street, Suite 900
Honolulu, HI 96813

CARY T. YAMAMOTO
LICENSED PROFESSIONAL ENGINEER
No. 2997-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CROSS SECTIONS

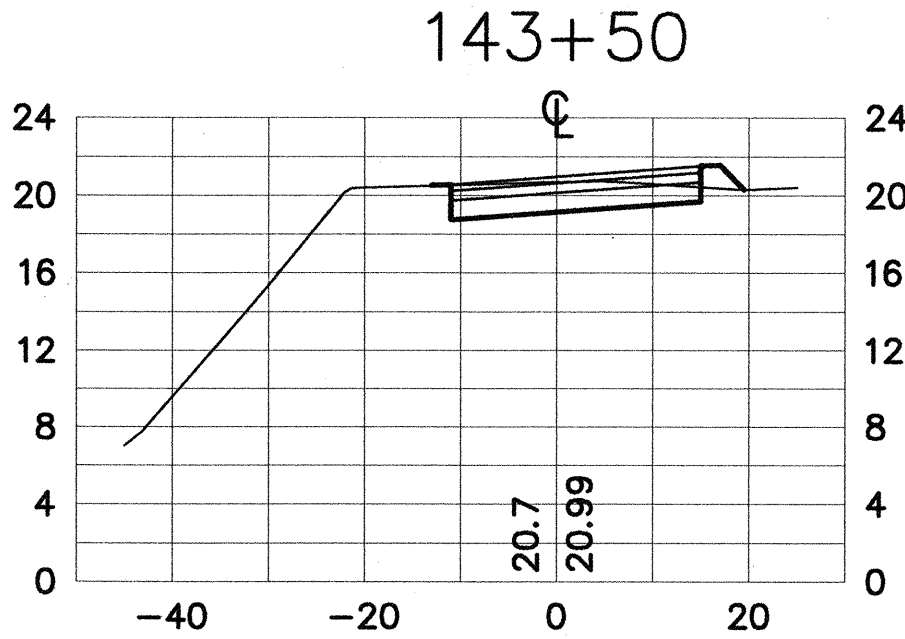
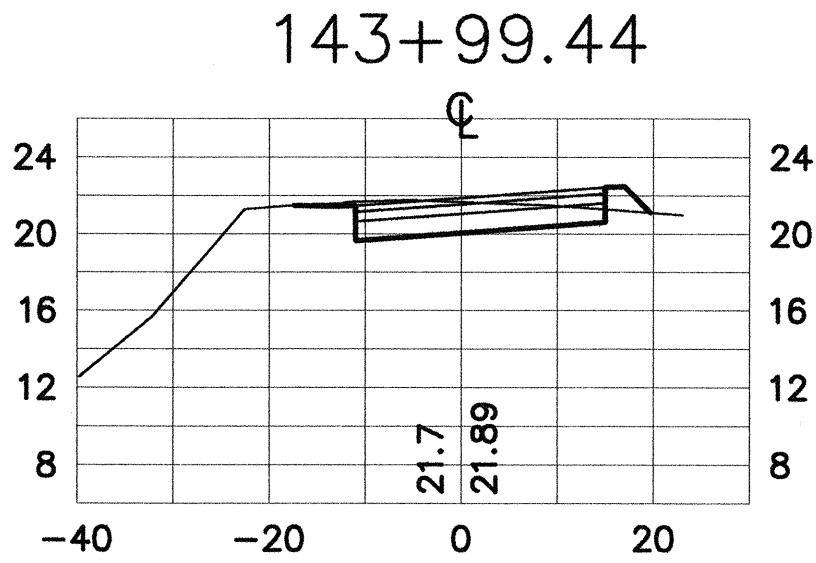
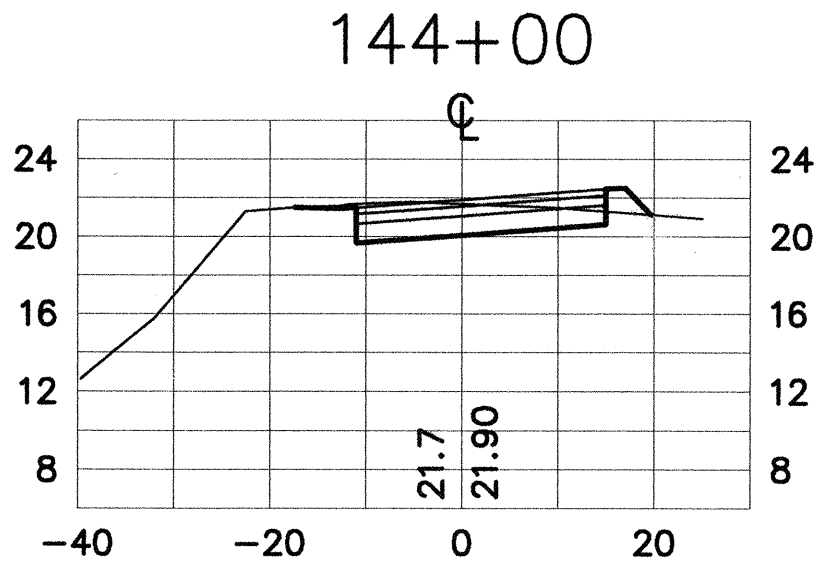
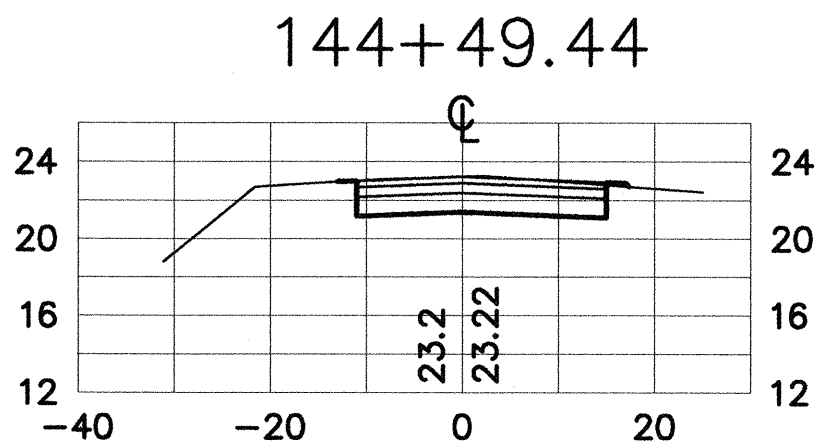
KAMEHAMEHA HIGHWAY
WAIMEA BAY
EMERGENCY ROCKFALL REMEDIATION

FEDERAL-AID PROJECT NO. STP-083-1(45)
Scale: As Shown Date: April 2000

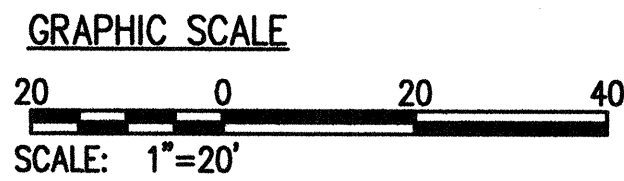
SHEET No. 19 OF 39 SHEETS

"AS-BUILT"

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	STP-083-1(45)	2000	C.O.20	39

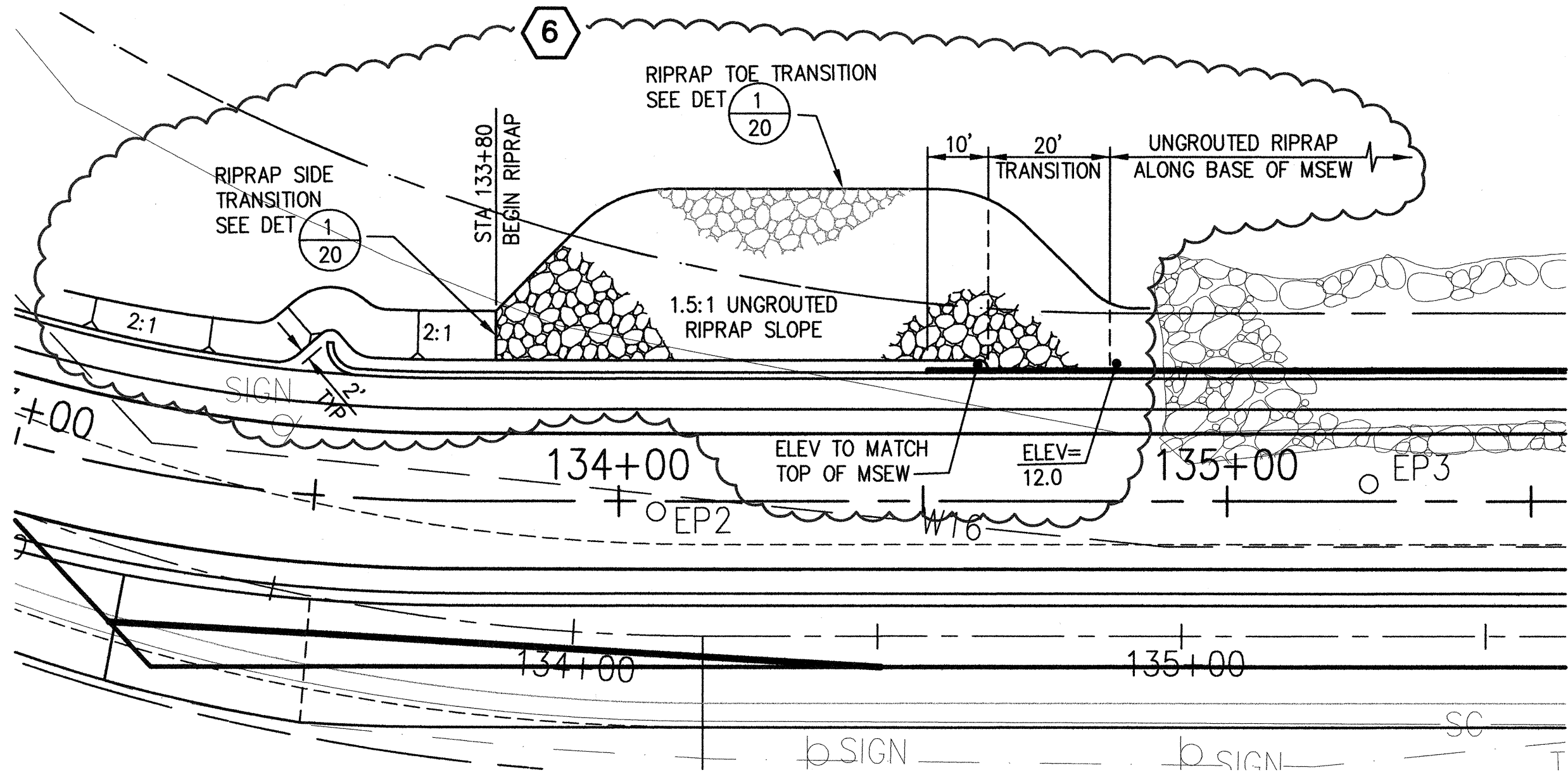
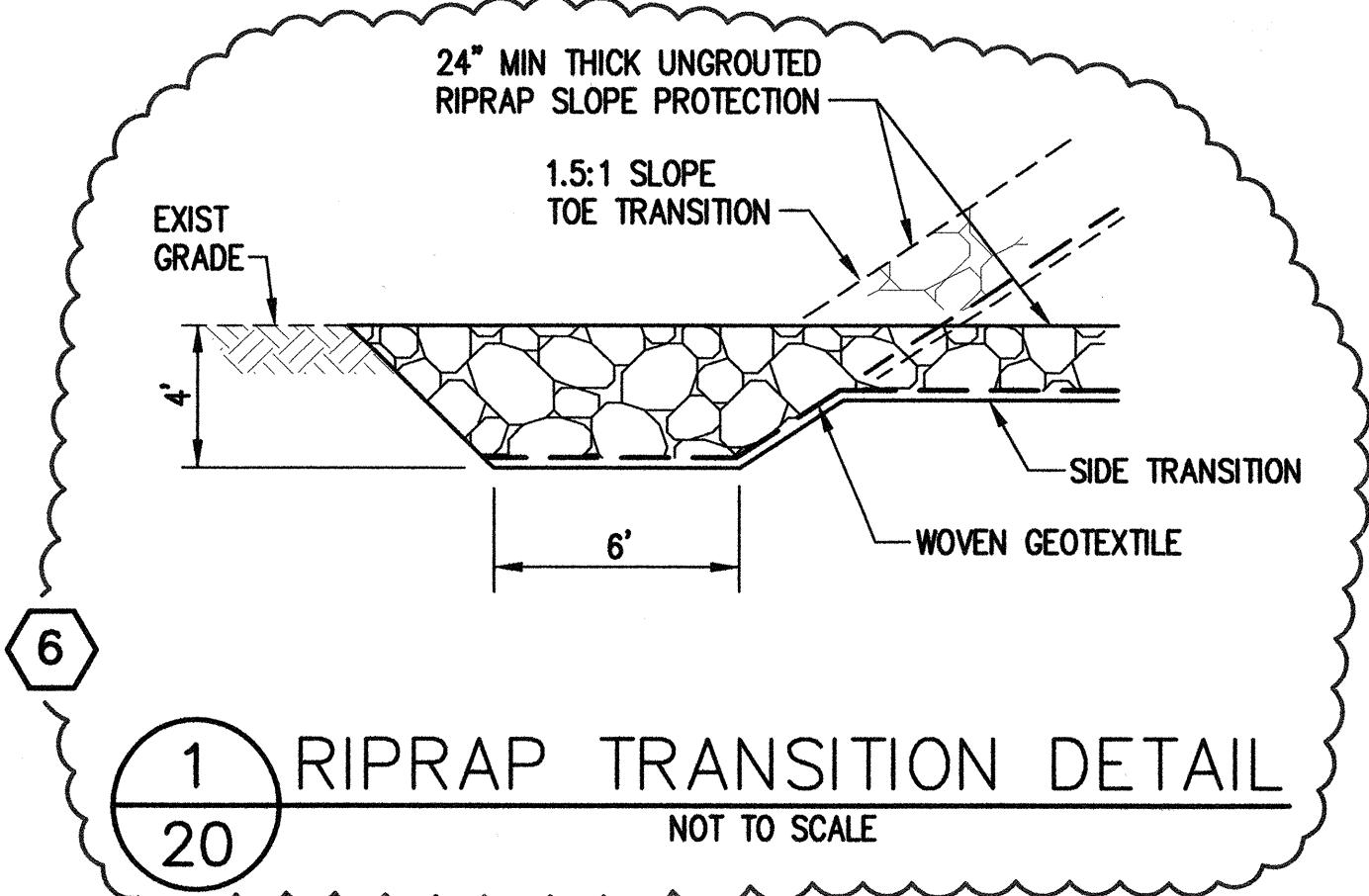


STATION	AREAS Square Feet		VOLUMES Cubic Yards		CUMULATIVE VOLUMES Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
131+00	54.43	5.56	97.03	9.93	97.03	9.93
131+50	50.20	5.96	86.74	12.71	183.77	22.63
132+00	43.35	8.73	68.59	18.65	252.36	41.28
132+50	30.50	12.68	114.97	30.42	367.33	71.70
133+00	87.61	21.69	148.67	52.31	516.00	124.01
133+50	57.89	36.57	51.09	36.74	567.09	160.75
133+72.92	50.50	52.27	46.35	62.16	613.44	222.91
134+00	41.93	71.69	98.93	155.27	712.37	378.18
134+50	64.92	96.00	115.99	179.56	828.36	557.75
135+00	60.35	97.93	107.94	169.63	936.30	727.38
135+50	56.22	85.27	103.25	118.41	1039.55	845.78
136+00	55.29	42.61	110.95	115.35	1150.51	961.13
136+50	64.54	81.97	107.29	152.47	1257.79	1113.60
136+97.48	57.47	91.44	5.38	8.56	1263.18	1122.16
137+00	57.30	92.61	111.92	190.19	1375.09	1312.35
137+50	62.86	113.39	122.81	223.15	1497.91	1535.50
138+00	68.99	128.33	132.35	254.60	1630.26	1790.10
138+50	73.11	147.45	137.87	291.18	1768.14	2081.28
139+00	74.93	167.94	144.89	311.02	1913.03	2392.30
139+47.98	87.22	183.09	6.25	14.01	1919.28	2406.31
139+50	87.58	183.86	165.12	329.41	2084.40	2735.72
140+00	98.63	164.78	181.70	188.59	2266.11	2924.31
140+50	106.20	34.32	212.23	113.97	2478.34	3038.28
141+00	132.25	85.62	245.31	101.82	2723.65	3140.11
141+50	142.11	21.41	190.48	20.11	2914.13	3160.22
142+00	67.04	0.00	41.23	3.54	2955.36	3163.76
142+17.41	60.92	10.82	62.39	26.94	3017.74	3190.70
142+50	42.45	33.80	89.93	47.33	3107.67	3238.03
143+00	54.68	17.31	71.37	16.08	3179.04	3254.11
143+41.76	37.61	3.48	11.34	1.16	3190.38	3255.27
143+50	36.61	3.84	69.00	7.63	3259.39	3262.90
143+99.44	38.75	4.19	0.80	0.09	3260.19	3262.99
144+00	38.74	4.19	78.97	4.13	3339.16	3267.12
144+49.44	47.51	0.32	0.00	0.00	3339.16	3267.12



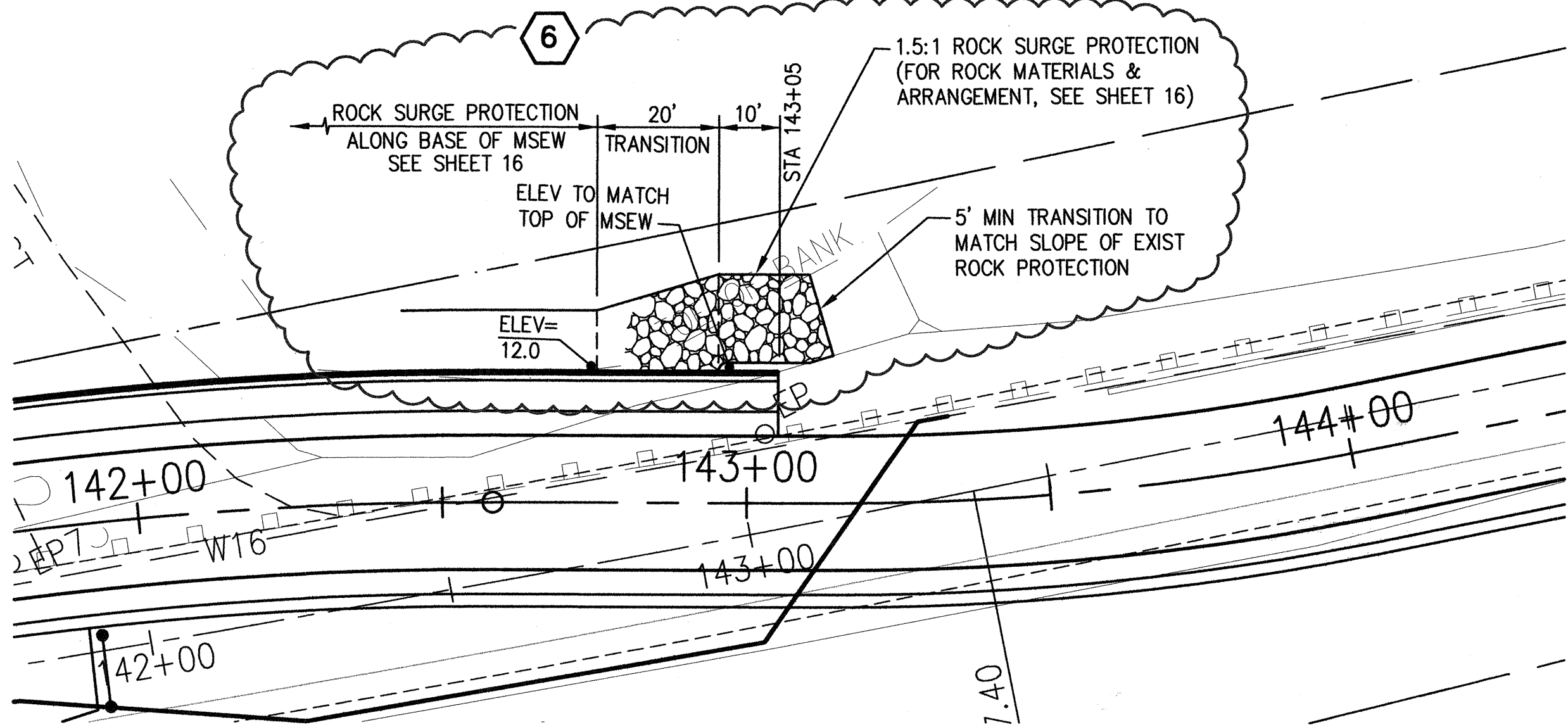
CROSS SECTIONS

SCALE: HORIZ 1"=20'
VERT 1"=10'



SLOPE PROTECTION TRANSITION AT END OF MSEW

SCALE: 1"=20'

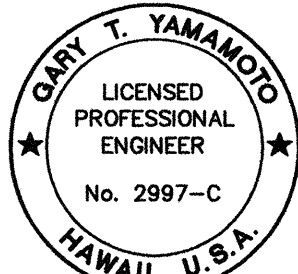


SLOPE PROTECTION TRANSITION AT END OF MSEW

SCALE: 1"=20'

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

EARTH TECH
700 Bishop Street, Suite 900
Honolulu, HI 96813



5-16-00	REVISION	6
DATE	REVISION	

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

CROSS SECTIONS

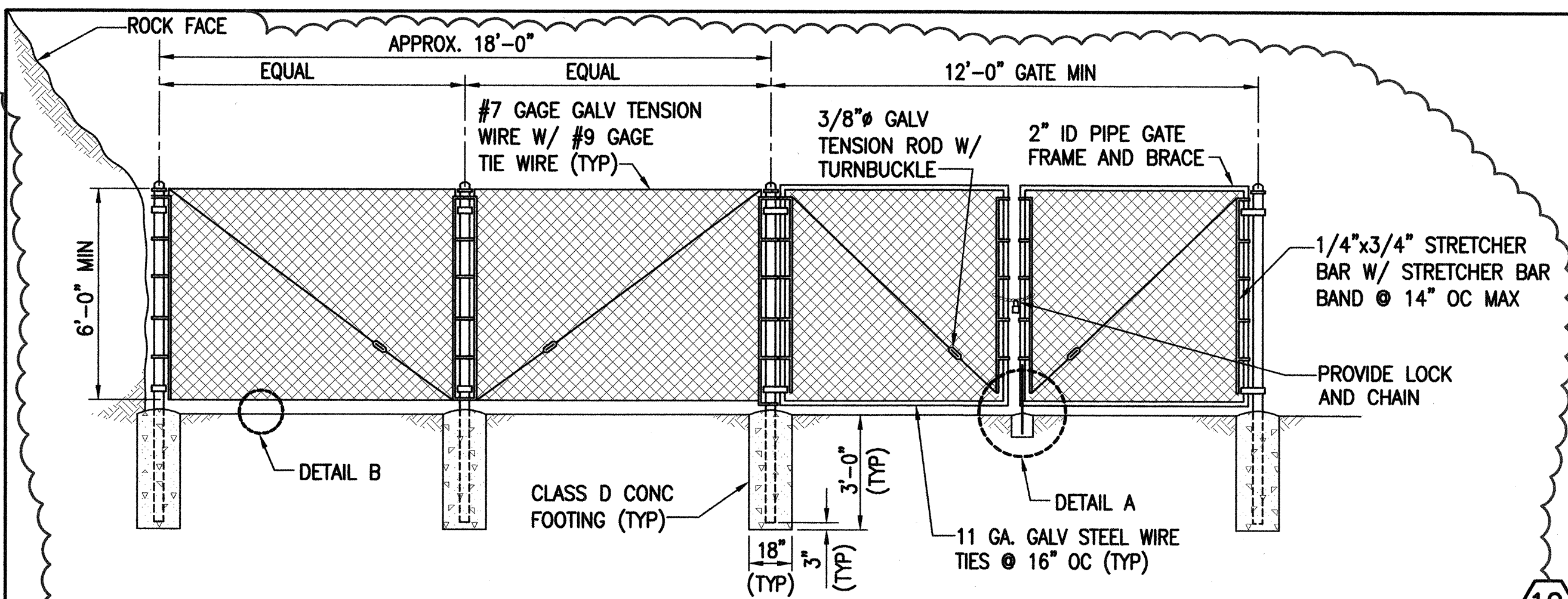
KAMEHAMEHA HIGHWAY
WAIMEA BAY
EMERGENCY ROCKFALL REMEDIATION

FEDERAL-AID PROJECT NO. STP-083-1(45)
Scale: As Shown Date: April 2000
SHEET No. 20 OF 39 SHEETS

AS-BUILT

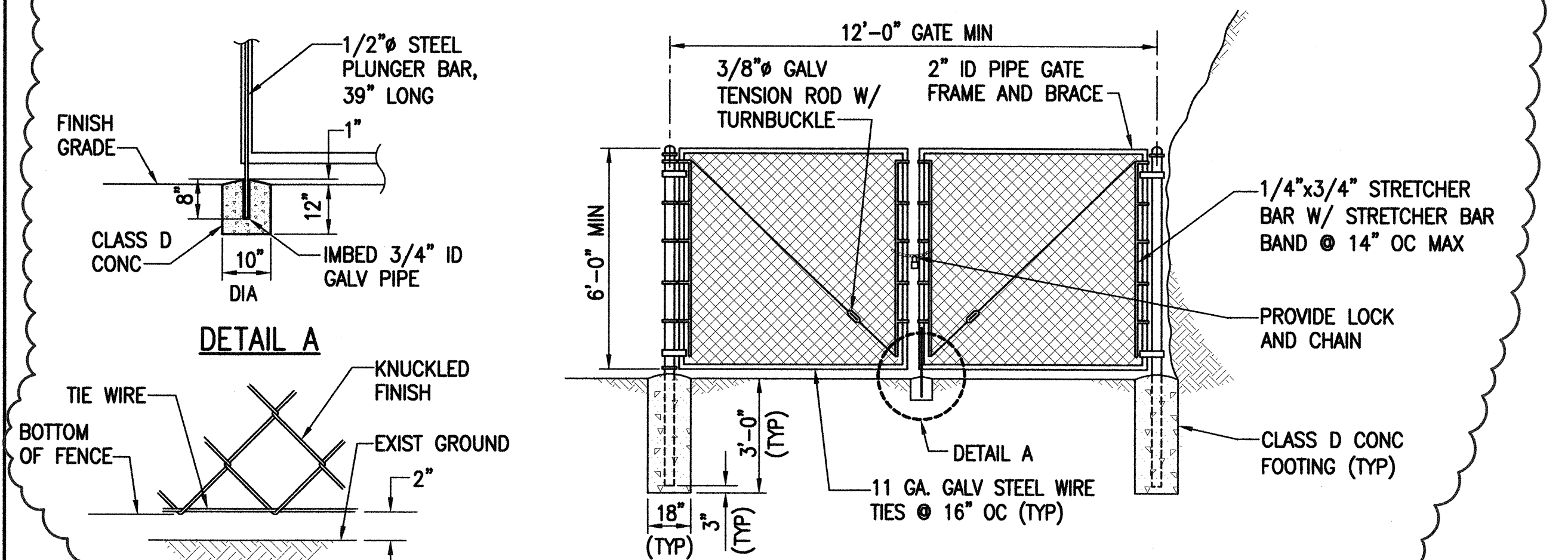
C.O. 20

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
OAHU	HAW.	STP-083-1(45)	2000	C.O. 20 S-1	39



DOUBLE SWING GATE DETAIL - PUPUKEA

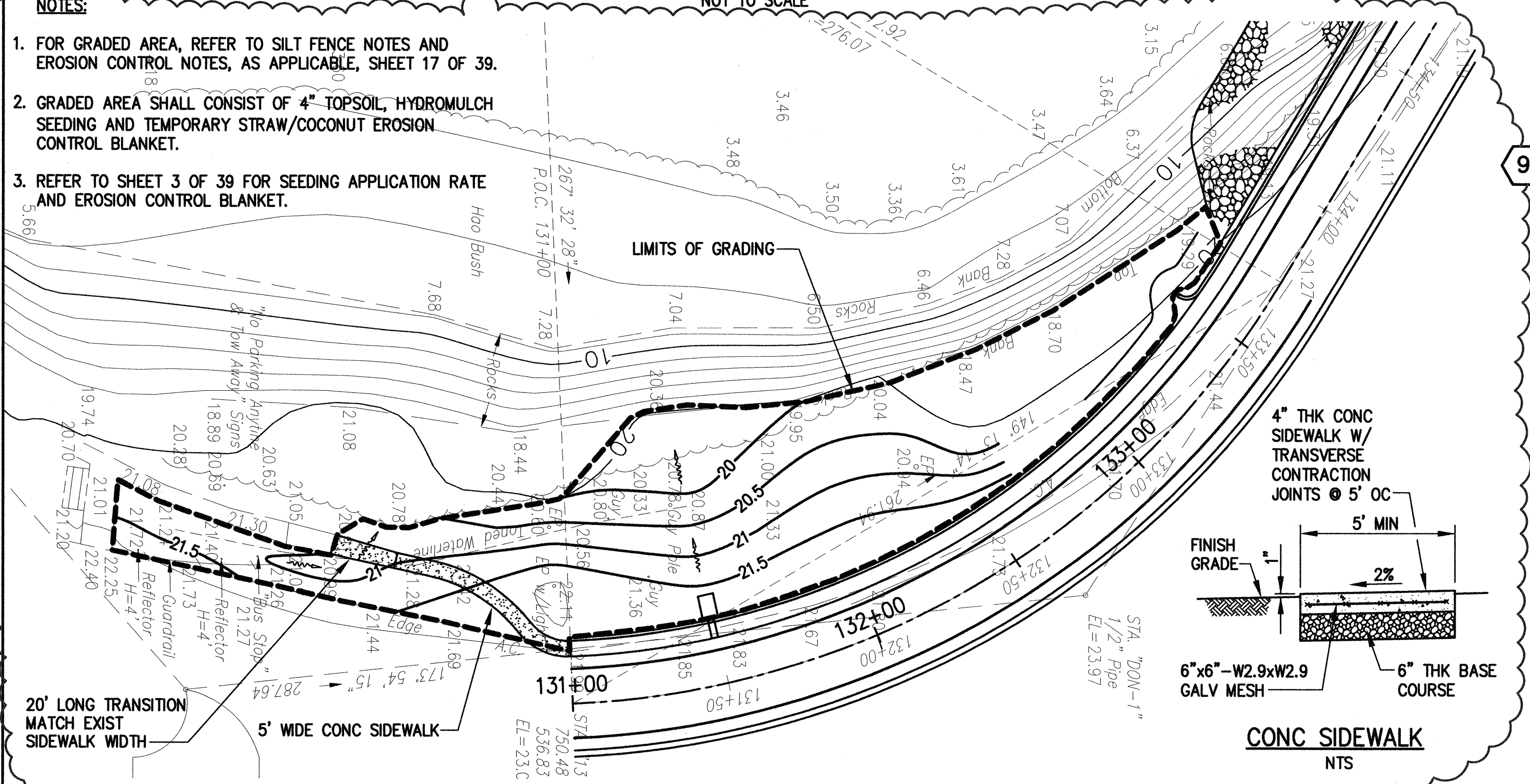
NOT TO SCALE



DOUBLE SWING GATE DETAIL - HALEIWA

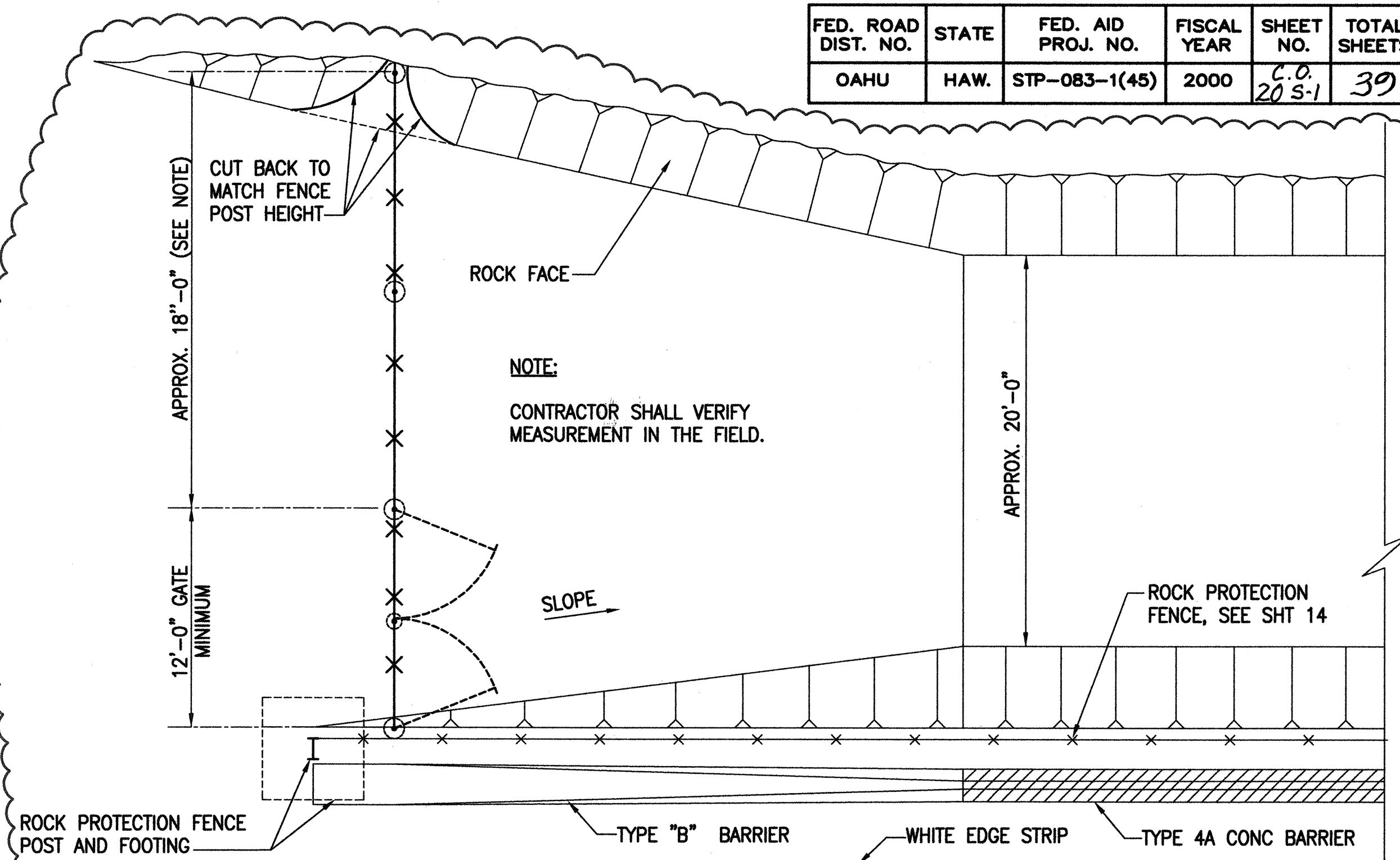
NOT TO SCALE

- NOTES:**
- FOR GRADED AREA, REFER TO SILT FENCE NOTES AND EROSION CONTROL NOTES, AS APPLICABLE, SHEET 17 OF 39.
 - GRADED AREA SHALL CONSIST OF 4" TOPSOIL, HYDROMULCH SEEDING AND TEMPORARY STRAW/COCONUT EROSION CONTROL BLANKET.
 - REFER TO SHEET 3 OF 39 FOR SEEDING APPLICATION RATE AND EROSION CONTROL BLANKET.



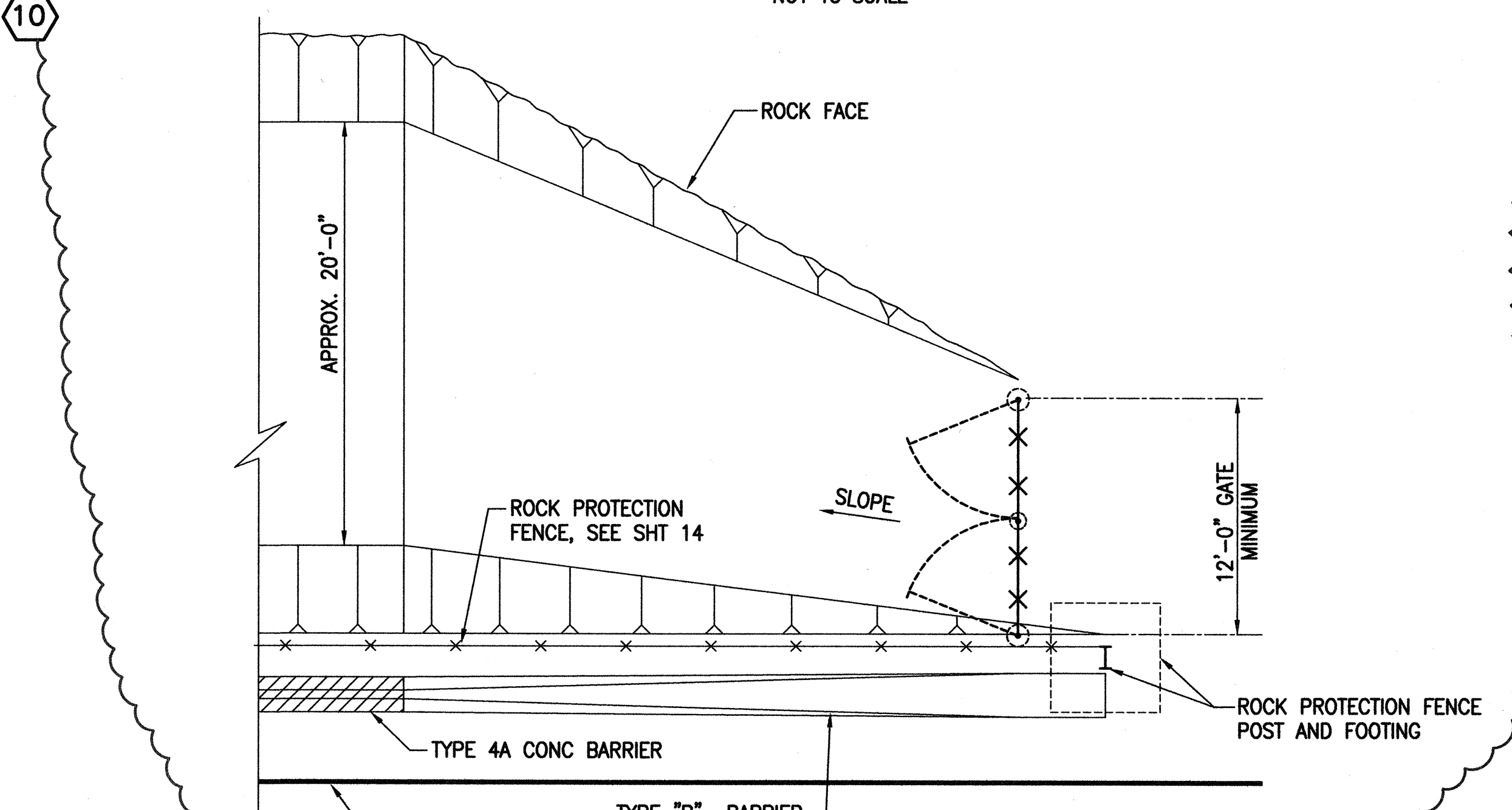
EROSION CONTROL AND LANDSCAPE PLAN

SCALE: 1"=30'



SERVICE GATE PLAN - PUPUKEA

NOT TO SCALE

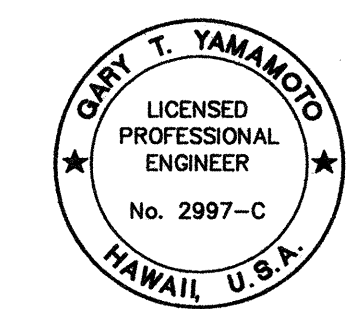


SERVICE GATE PLAN - HALEIWA

NOT TO SCALE

DATE	SURVEY PLOTTED BY
DATE	DRAWN BY
DATE	DESIGNED BY
DATE	CHECKED BY
DATE	NOTED BY

EARTH TECH
700 Bishop Street, Suite 900
Honolulu, HI 96813



6-9-00	REVISION	10
6-9-00	REVISION	9
DATE	REVISION	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETAILS

**KAMEHAMEHA HIGHWAY
WAIMEA BAY**

EMERGENCY ROCKFALL REMEDIATION

FEDERAL-AID PROJECT NO. STP-083-1(45)
Scale: As Shown Date: April 2000
SHEET No. 20A OF 39 SHEETS

"AS-BUILT"

C.O. 20 S-1