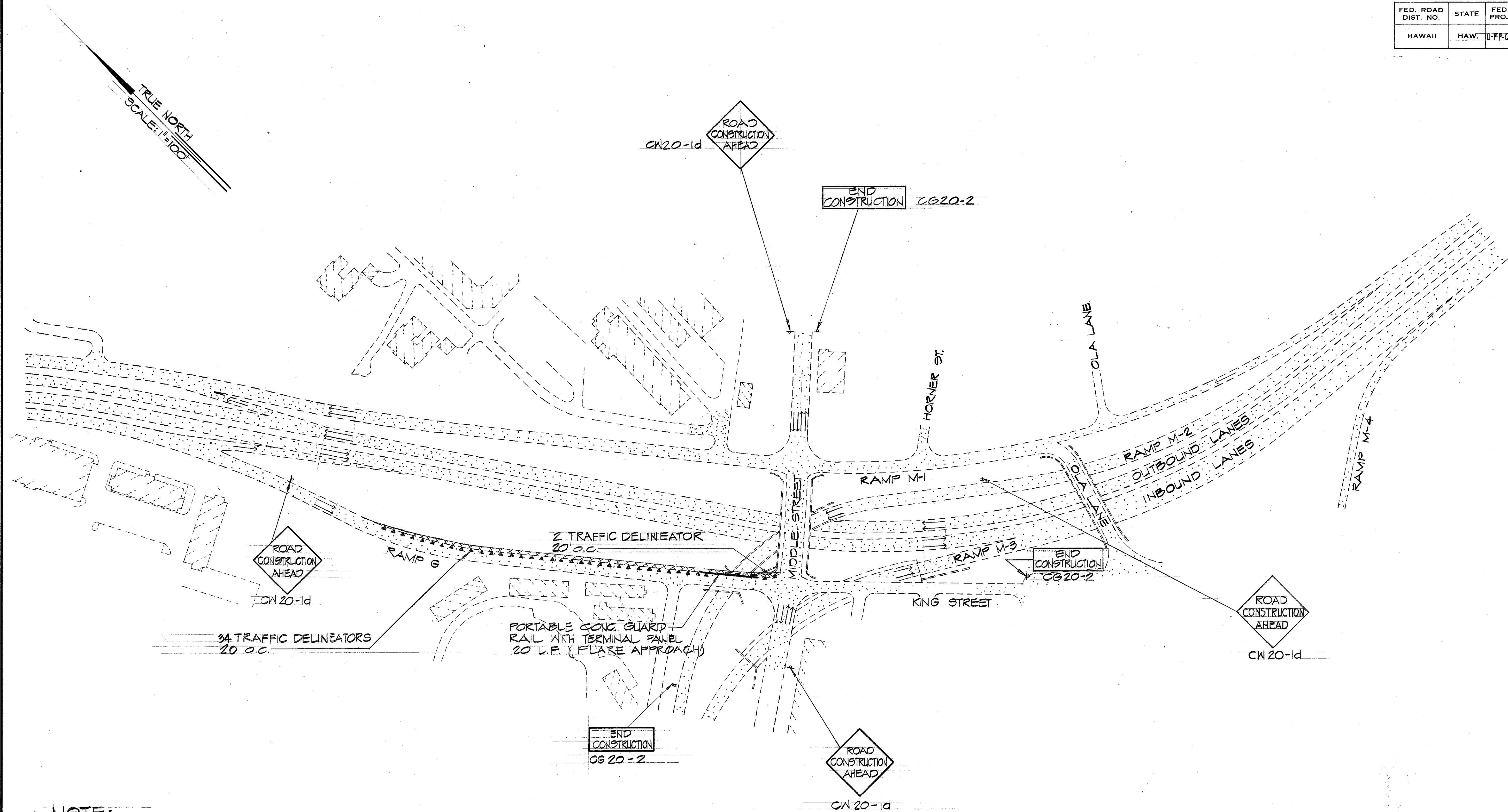


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-FF-078-1(6)	1976	41	142

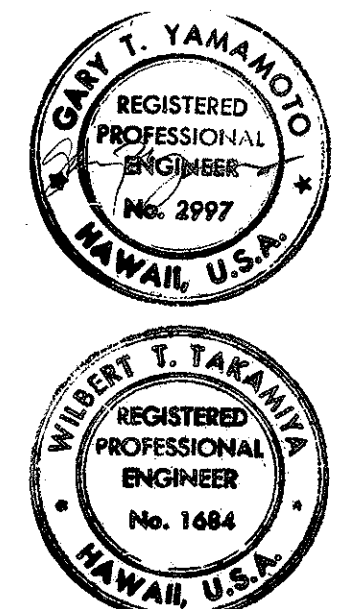


NOTE:
1. SEE SHEET 40 FOR LEGEND.

PLAN
SCALE: 1"=100'

DATE	_____
SURVEY PLOTTED BY	_____
ORIGINAL DRAWN BY	_____
DESIGNED BY	_____
NOTED BY	_____
CHECKED BY	_____
NO.	_____

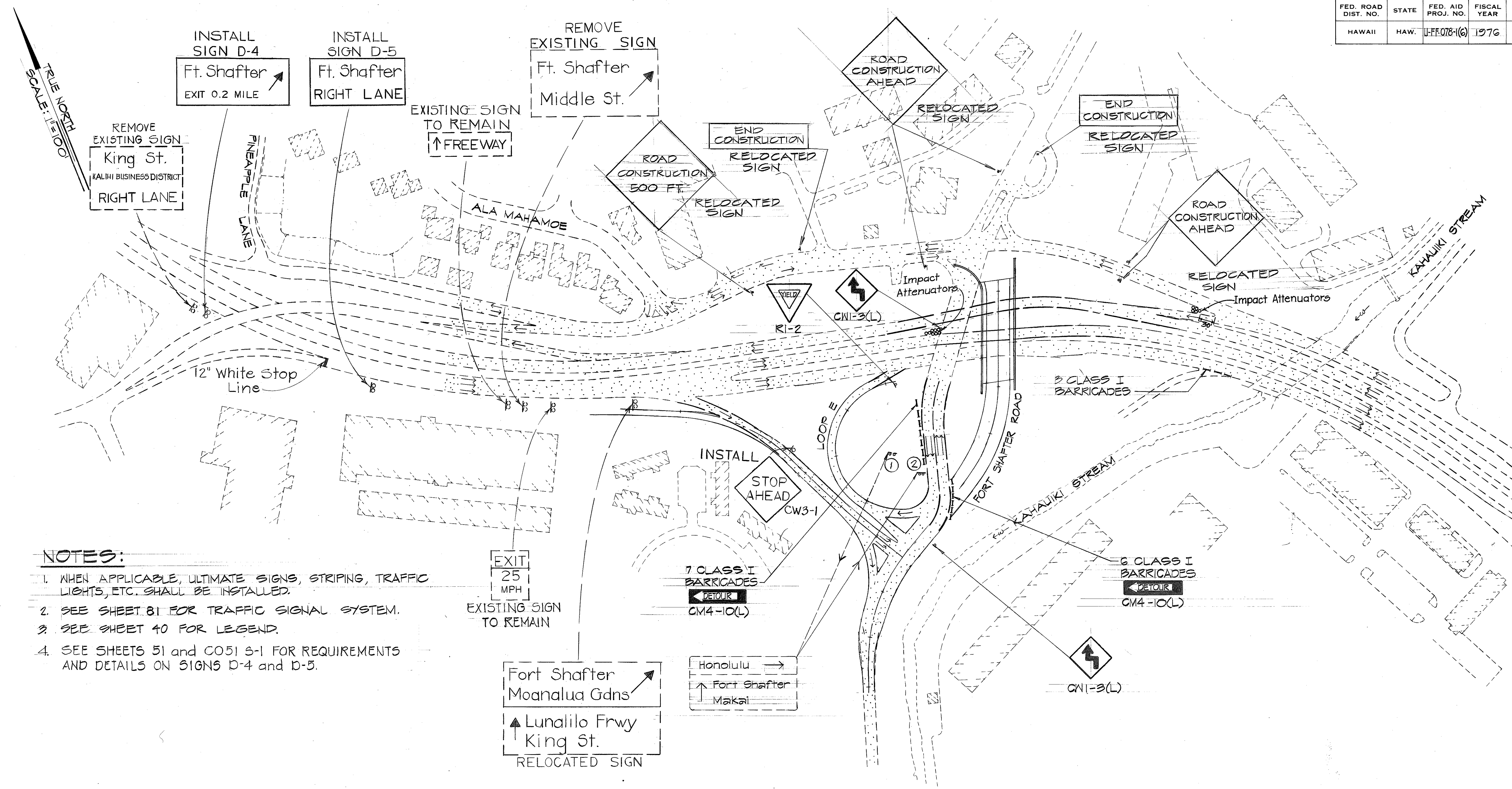
11/5/76	REVISED TUBULAR CONES TO TRAFFIC DELINEATORS
DATE	REVISION



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OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC ROUTING & PHASE CONSTRUCTION
PHASE IV
MOANALUA ROAD
PUUEOA I.C. TO MIDDLE ST.-UNIT I
FA. PROJ. NO. U-FF-078-1(6)
SCALE: AS SHOWN DATE: JUNE 25, 1976
SHEET NO. 2 OF 8 SHEETS

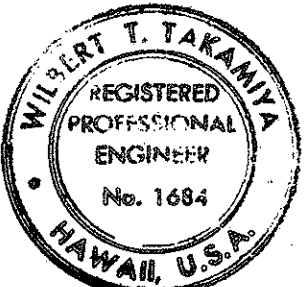
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-FF-078-1(6)	1976	42	142



NOTES:

1. WHEN APPLICABLE, ULTIMATE SIGNS, STRIPING, TRAFFIC LIGHTS, ETC. SHALL BE INSTALLED.
2. SEE SHEET 81 FOR TRAFFIC SIGNAL SYSTEM.
3. SEE SHEET 40 FOR LEGEND.
4. SEE SHEETS 51 and C051 S-1 FOR REQUIREMENTS AND DETAILS ON SIGNS D-4 and D-5.

PLAN
SCALE: 1"=100'



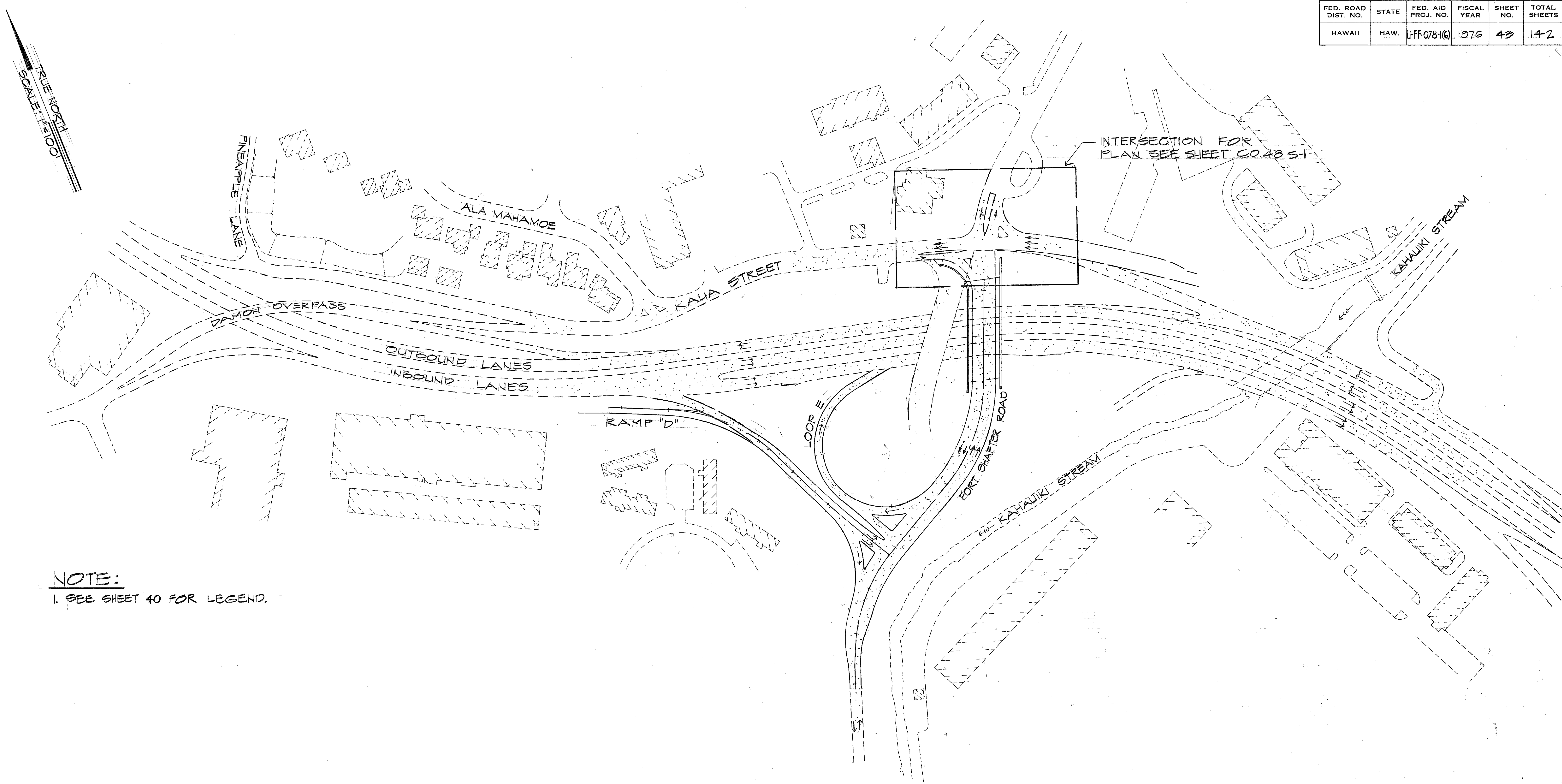
THIS WORK WAS PREPARED BY ME
OR UNDER MY SUPERVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC ROUTING & PHASE CONSTRUCTION
PHASE V
MOANALUA ROAD
PUULOA I.C. TO MIDDLE ST.-UNIT I
P.A. Proj. No. U-FF-078-1(6)
SCALE: AS SHOWN DATE: JUNE 25, 1976
SHEET NO. 3 OF 8 SHEETS

1/11/78	ADDED SIGNS
10/19/77	ADDED SIGNS
11/5/76	REVISED SHEET NO. NOTE 2
DATE	REVISION

SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
NOTED BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

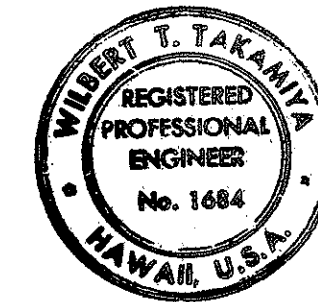
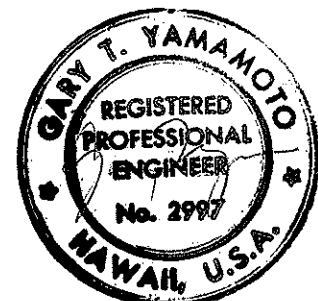
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-FF-078-1(6)	1976	43	142



NOTE:
1. SEE SHEET 40 FOR LEGEND.

PLAN
SCALE: 1"=100'

2/2/78	DELETED CLASS I BARRICADE & SIGN CWI-G AND ADDED CROSS REFERENCE
11/5/76	DELETED TUBULAR CONES REVISED LOCATION CWI-G
DATE	REVISION



WILBERT T. TAKAHIRA
HIS WORK WAS PREPARED BY ME
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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TRAFFIC ROUTING & PHASE CONSTRUCTION
PHASE VI

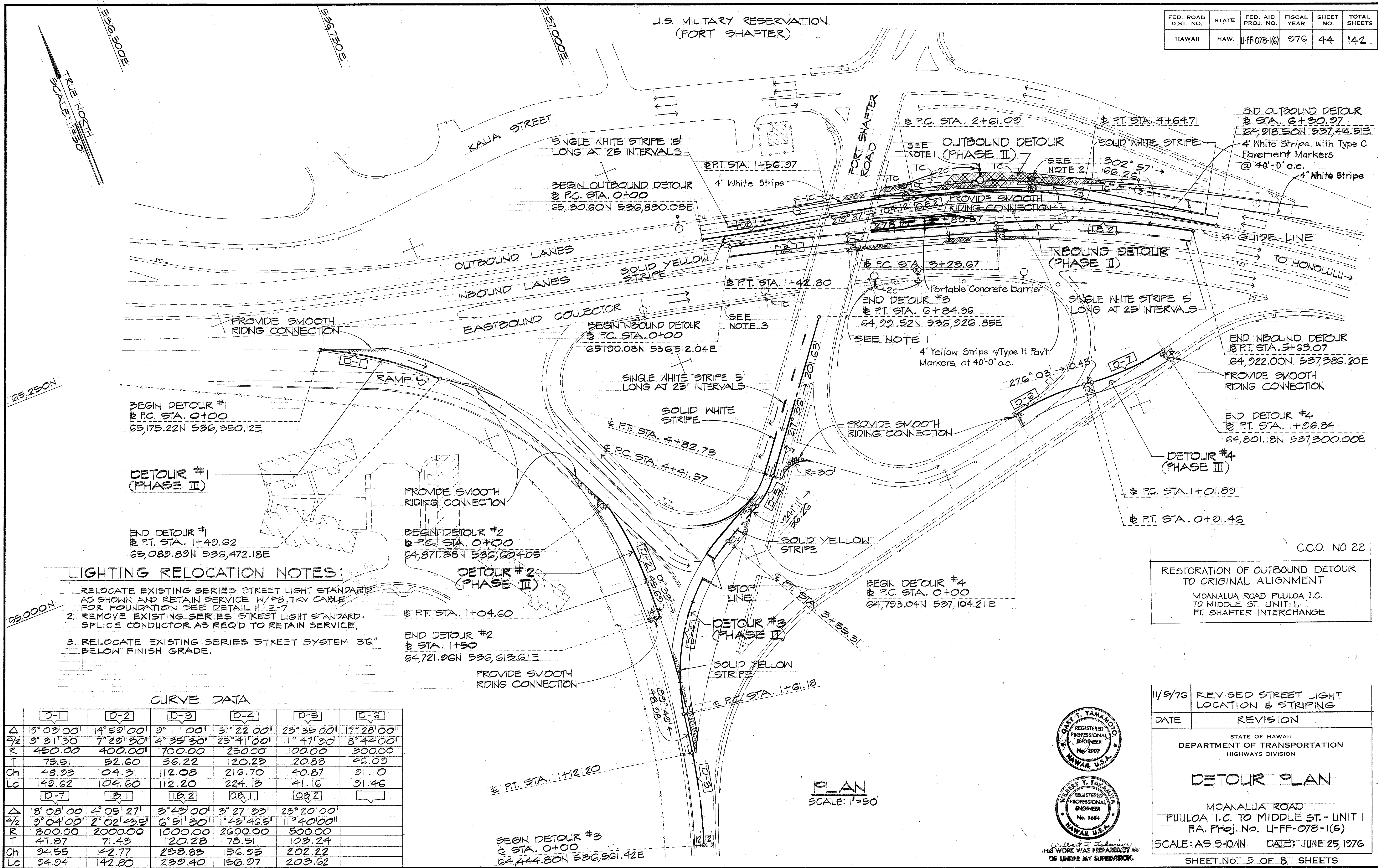
MOANALUA ROAD
PULLOA I.C. TO MIDDLE ST. - UNIT I
F.A. Proj. No. U-FF-078-1(6)
SCALE: AS SHOWN DATE: JUNE 25 1976

SHEET NO. 4 OF 8 SHEETS

C.O. ADD. 43

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-FF-078-1(6)	1976	44	142



LIGHTING RELOCATION NOTES:

1. RELOCATE EXISTING SERIES STREET LIGHT STANDARD AS SHOWN AND RETAIN SERVICE W/ #8, 1KV CABLE FOR FOUNDATION SEE DETAIL H-E-7
2. REMOVE EXISTING SERIES STREET LIGHT STANDARD. SPLICE CONDUCTOR AS REQD TO RETAIN SERVICE.
3. RELOCATE EXISTING SERIES STREET SYSTEM 36" BELOW FINISH GRADE.

CURVE DATA

	D-1	D-2	D-3	D-4	D-5	D-6
Δ	19° 03' 00"	14° 59' 00"	9° 11' 00"	51° 22' 00"	23° 39' 00"	17° 28' 00"
Δ/2	9° 31' 30"	7° 29' 30"	4° 35' 30"	25° 41' 00"	11° 49' 30"	8° 44' 00"
R	450.00	400.00	700.00	250.00	100.00	300.00
T	75.51	52.60	56.22	120.23	20.88	46.09
Ch	148.93	104.31	112.08	216.70	40.87	91.10
Lc	149.62	104.60	112.20	224.13	41.16	91.46
	D-7	D-8	D-9	D-10	D-11	
Δ	18° 08' 00"	4° 05' 27"	13° 43' 00"	3° 27' 33"	23° 20' 00"	
Δ/2	9° 04' 00"	2° 02' 43.5"	6° 51' 30"	1° 43' 46.5"	11° 40' 00"	
R	300.00	2000.00	1000.00	2600.00	500.00	
T	47.87	71.43	120.28	78.31	103.24	
Ch	94.55	142.77	238.83	156.95	202.22	
Lc	94.94	142.80	239.40	156.97	203.62	

RESTORATION OF OUTBOUND DETOUR TO ORIGINAL ALIGNMENT

MOANALUA ROAD PUULOA I.C. TO MIDDLE ST. UNIT-1, FT. SHAFTER INTERCHANGE

11/5/76 REVISED STREET LIGHT LOCATION & STRIPING

DATE REVISION

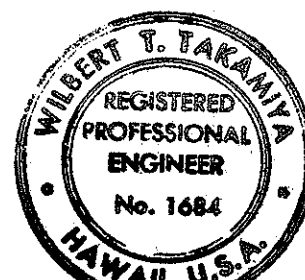
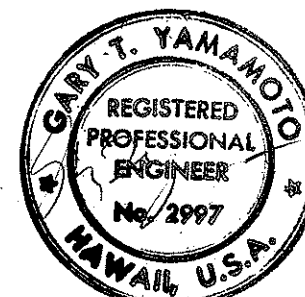
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR PLAN

MOANALUA ROAD
PUULOA I.C. TO MIDDLE ST. - UNIT 1
P.A. Proj. No. U-FF-078-1(6)

SCALE: AS SHOWN DATE: JUNE 25, 1976

SHEET NO. 5 OF 8 SHEETS



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

CURVE DATA

	D-1	D-2
Δ	44°38'00"	21°05'32"
42	22°10'00"	10°32'46"
R	100.00	300.00
T	41.05	55.05
Ch	75.95	100.82
Lc	77.90	110.44

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-FF-078-1(6)	1976	45	142

DETOUR SIGNING SUMMARY

TYPE	DESCRIPTION	PHASE II		PHASE III		PHASE IV		PHASE V		PHASE VI		TOTAL	
		W/P	W/O/P	W/P	W/O/P	W/P	W/O/P	W/P	W/O/P	W/P	W/O/P	W/P	W/O/P
R1-1	STOP		2									2	
R1-2	YIELD		1					1				2	
R3-2	NO LEFT TURN		1									1	
R11-2	ROAD CLOSED			3								3	
R2-1(35)	SPEED LIMIT 35		1									1	
CG 20-2	END CONSTRUCTION	2			3							5	
CM4-10(L)	DETOUR ←			1				2				3	
CM4-10(R)	DETOUR →			1								1	
CW20-1a	ROAD CONSTRUCTION 1500 FT	2										2	
CW20-1b	ROAD CONSTRUCTION 1000 FT	2										2	
CW20-1c	ROAD CONSTRUCTION 500 FT	2										2	
CW20-1d	ROAD CONSTRUCTION AHEAD	1			4							5	
CW20-2d	DETOUR AHEAD		1									1	
CW1-3(R)	↑		1									1	
CW1-3(L)	↓	1						2				3	
TOTAL		10	1	6	5	7		3	2			26	8
CLASS I	BARRICADE			19				16				35	
	TRAFFIC DELINEATOR	37		44	36			0				117	

NOTE:

- THE CONTRACTOR SHALL CONSTRUCT, INSTALL AND MAINTAIN THE SIGNS AT THE LOCATIONS SHOWN ON PLANS OR ORDERED BY THE ENGINEER.

2/2/78 DELETED CW1-6 & REVISED TOTAL
11/5/76 REVISED TOTAL

DATE REVISION

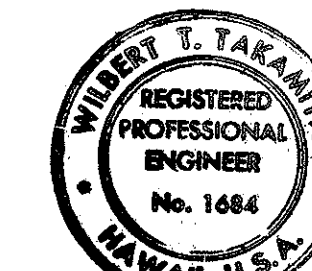
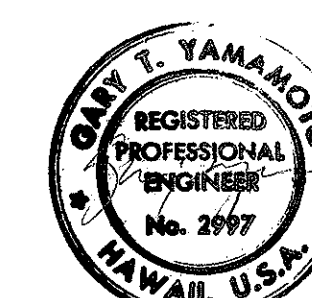
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR PLAN

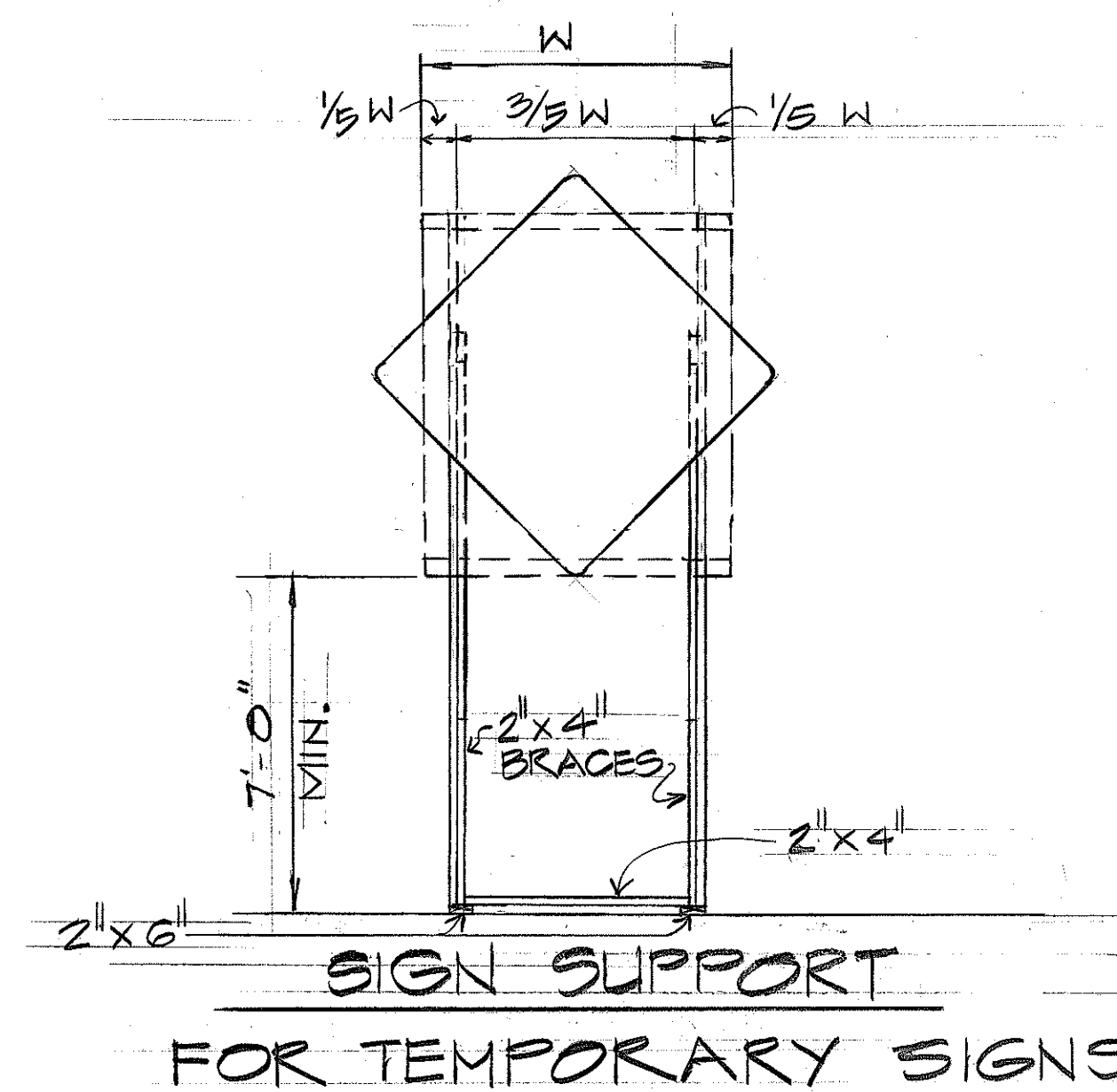
MOANALUA ROAD
PUULOA I.C. TO MIDDLE ST. - UNIT I
F.A. Proj. No. U-FF-078-1(6)

SCALE: AS SHOWN DATE: JUNE 25, 1976

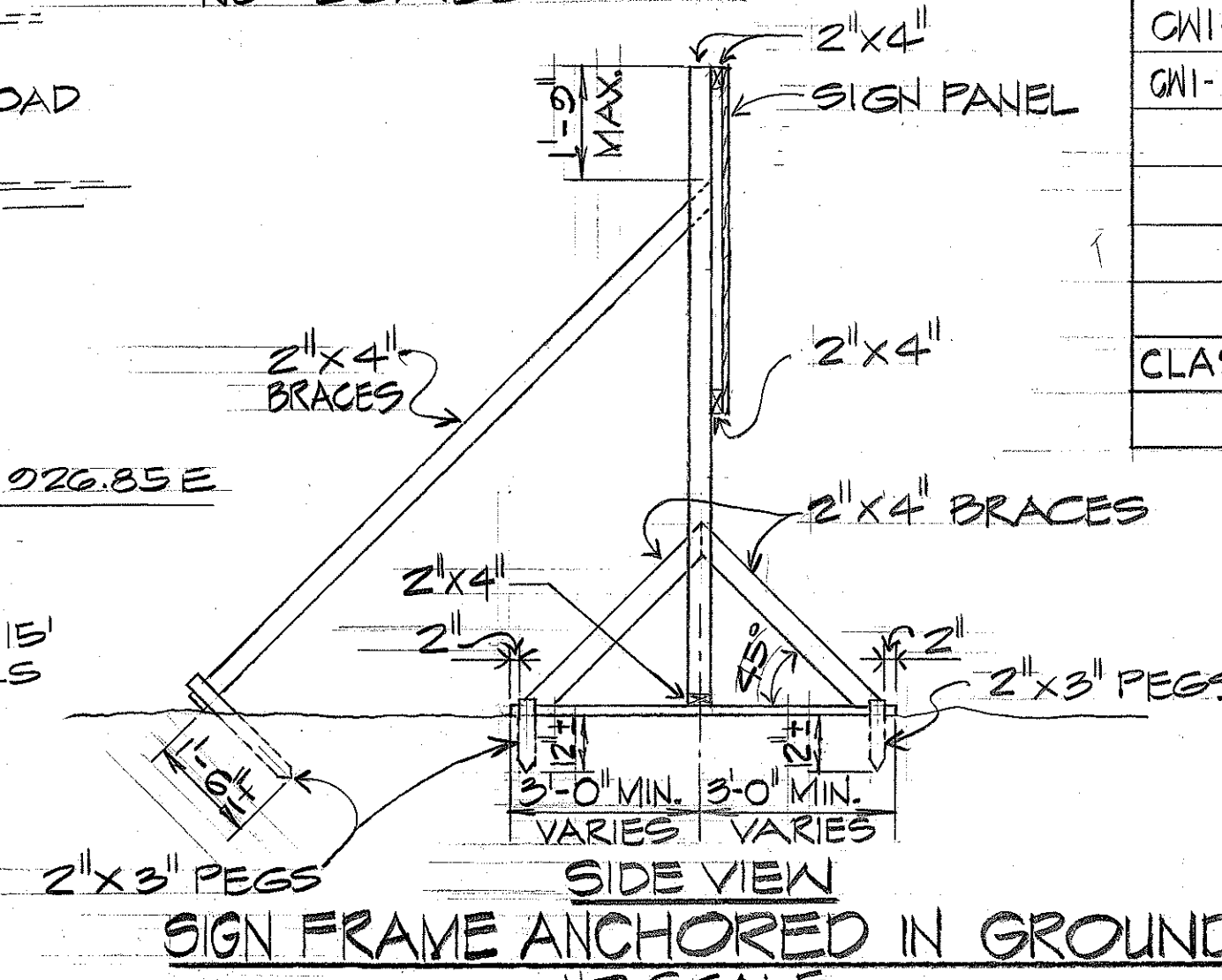
SHEET NO. 6 OF 8 SHEETS



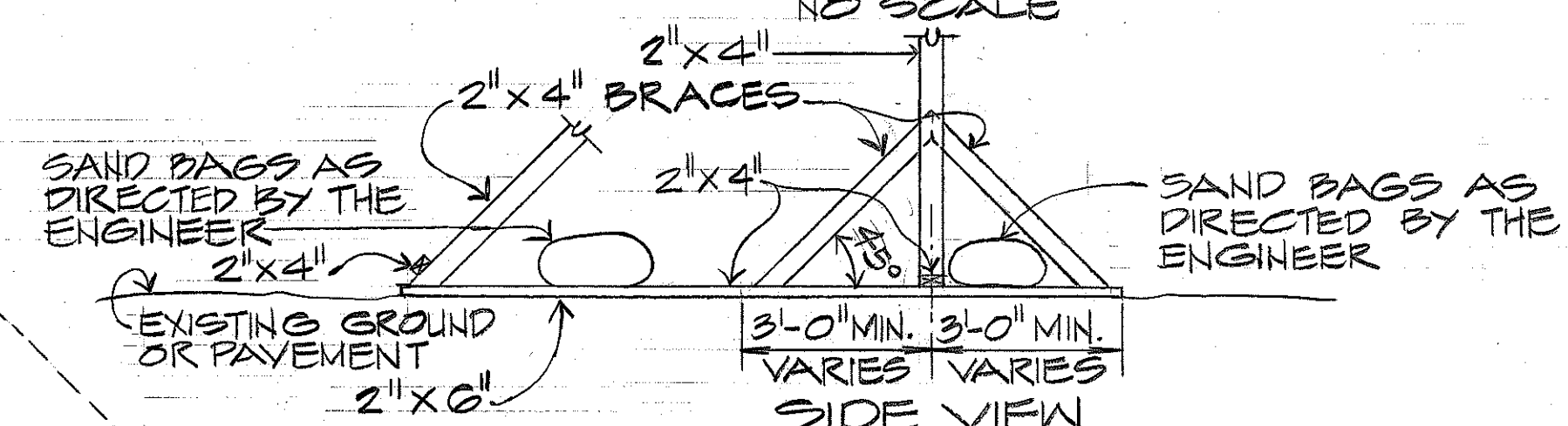
WILBERT T. YAMAMOTO
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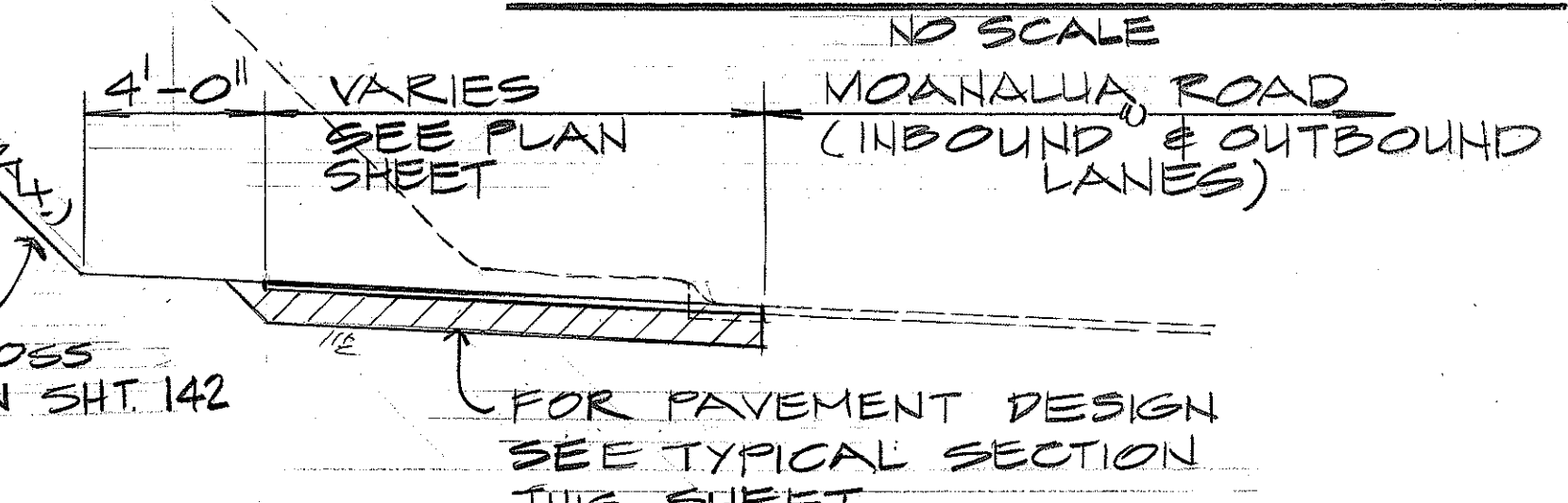
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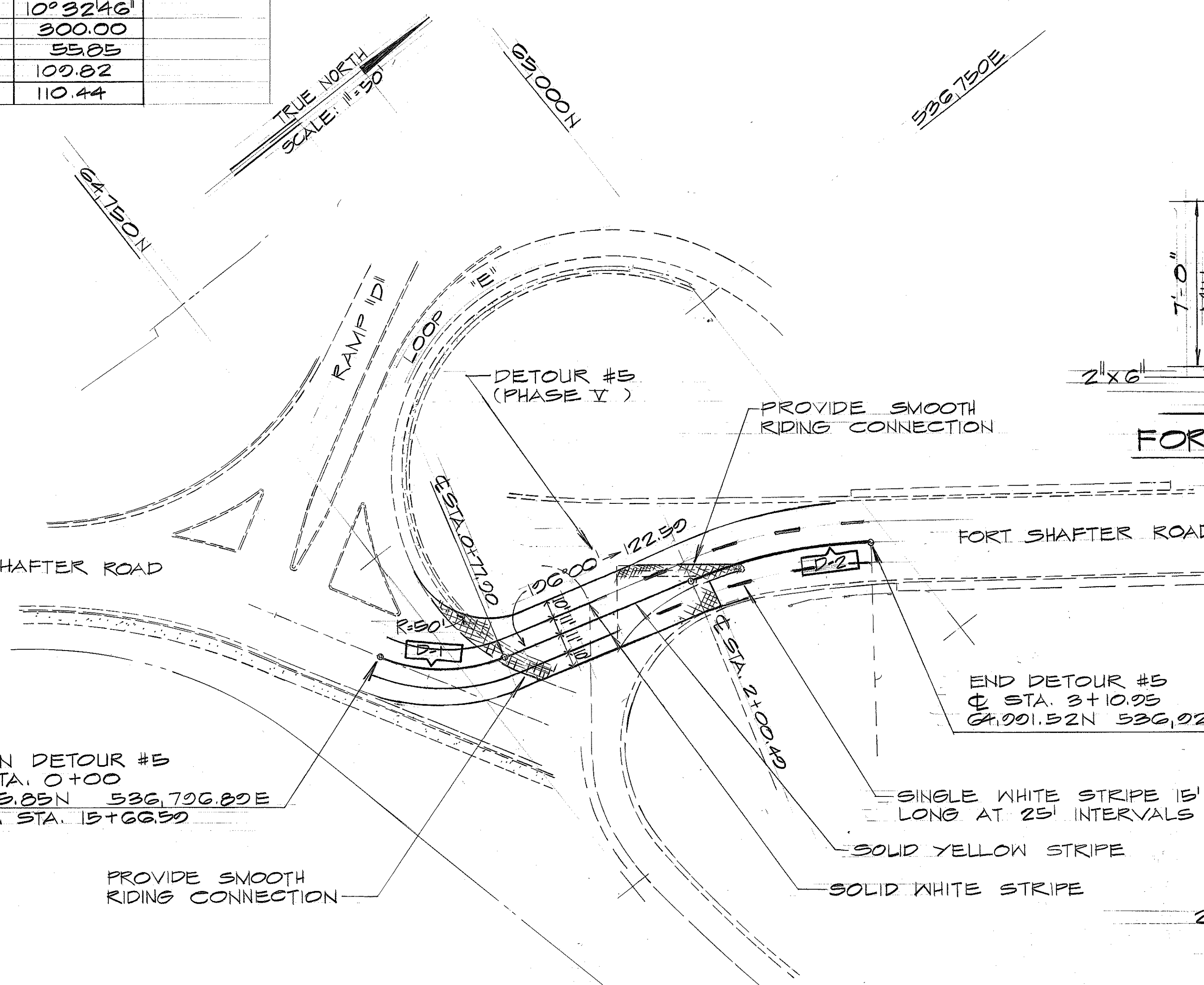
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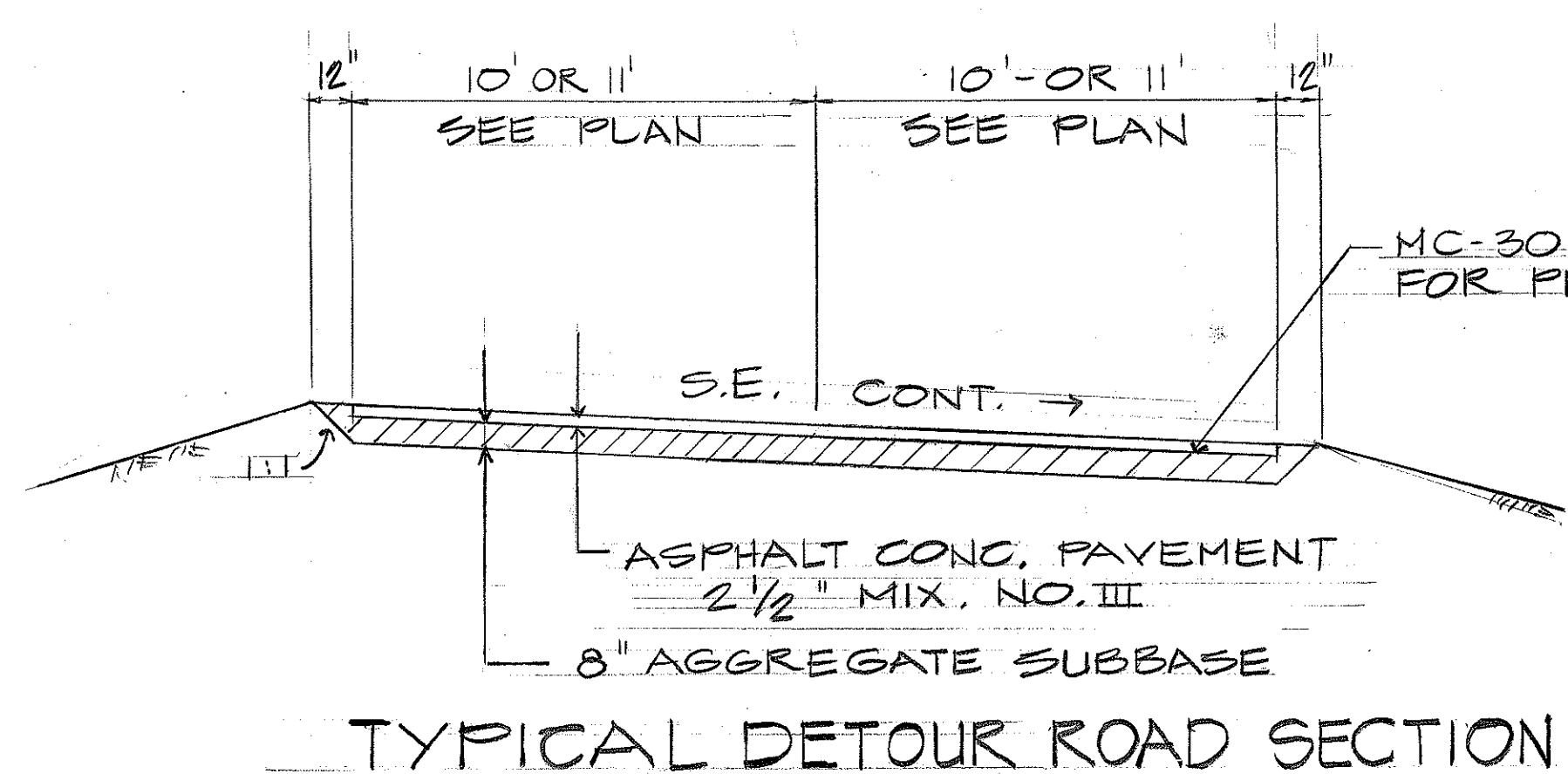


SCALE: 1/4" = 1'-0"



PLAN

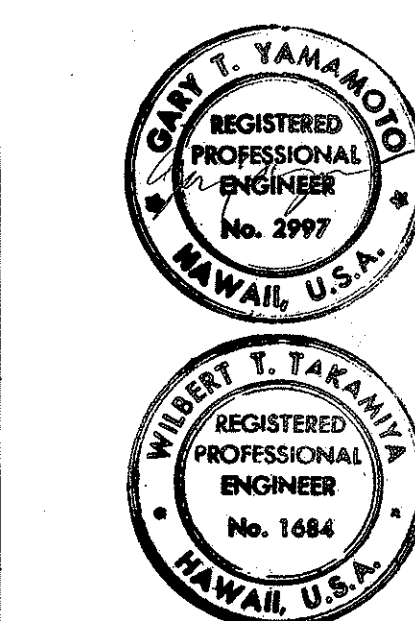
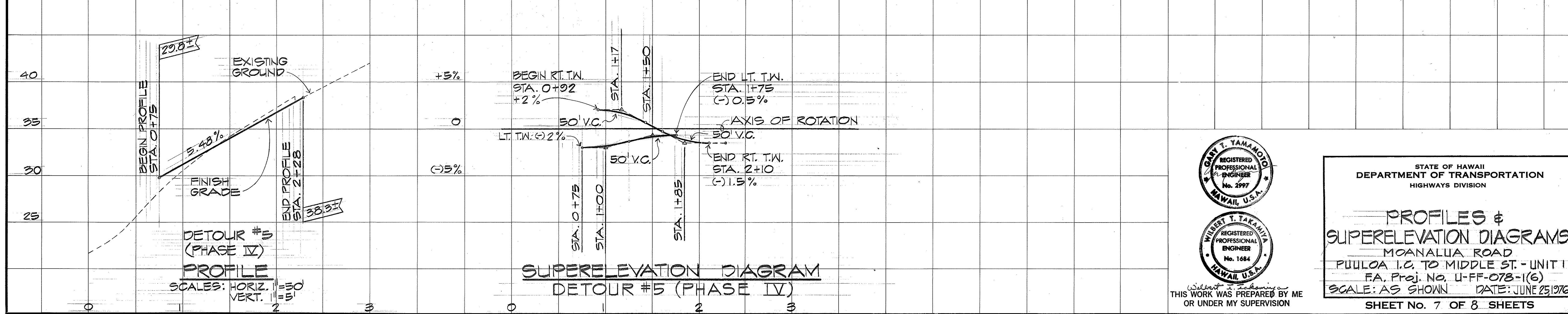
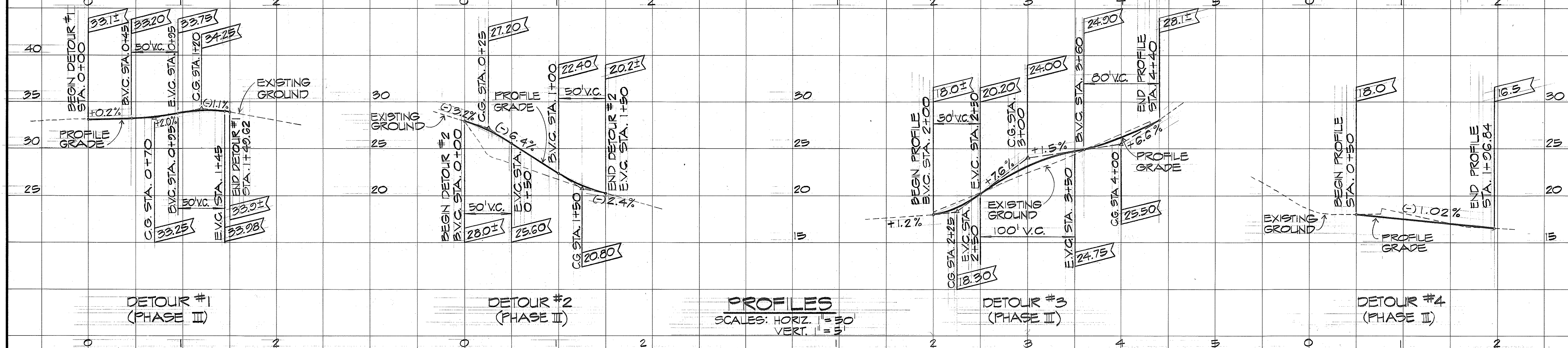
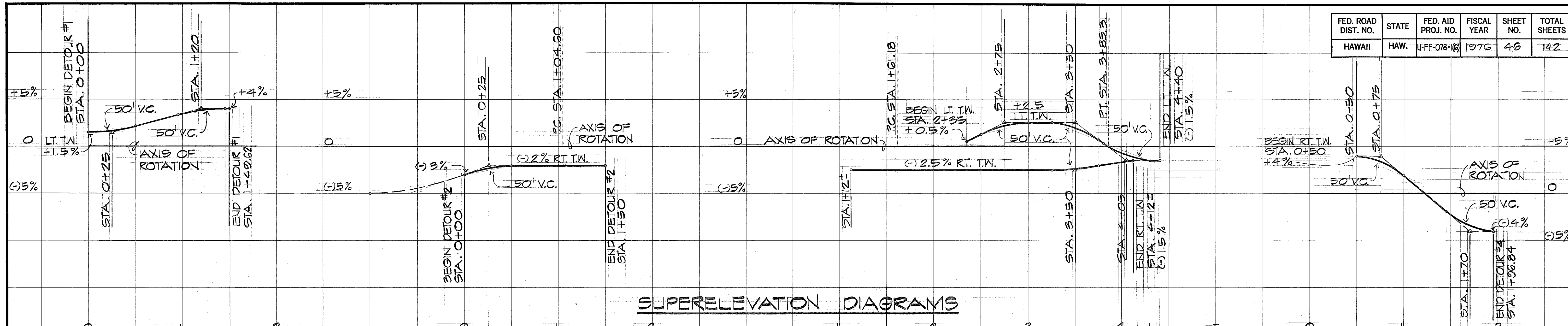
SCALE: 1" = 50'



SCALE: 1/4" = 1'-0"

SURVEY PLOTTED BY: _____ DATE: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NO. _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	U-FF-078-1(6)	1976	46	142

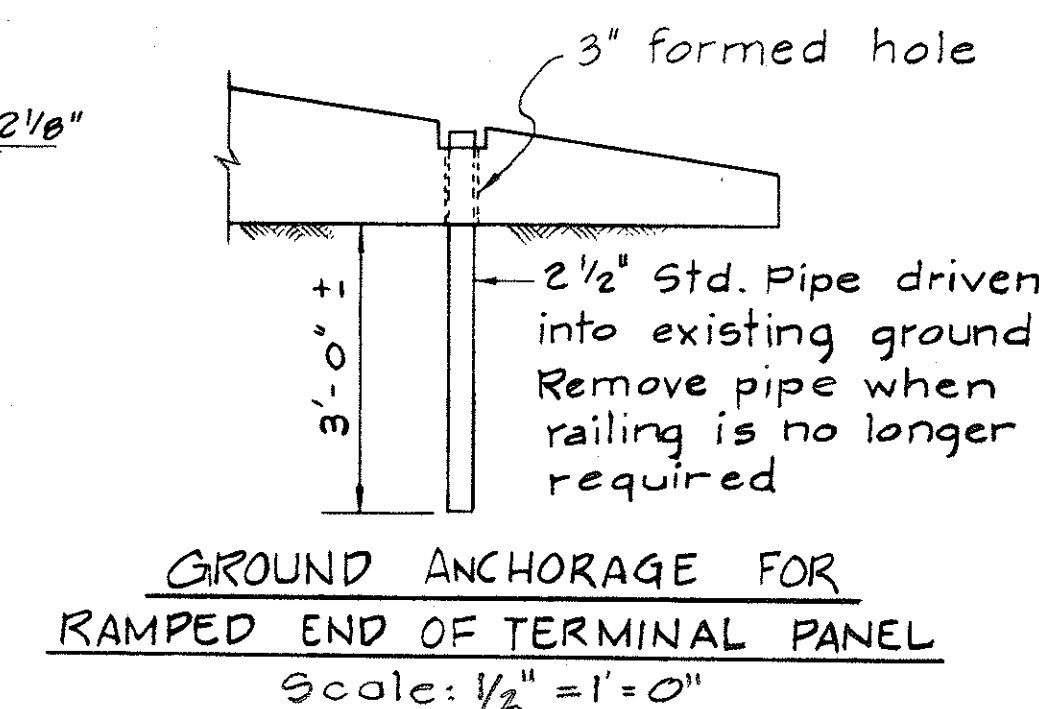
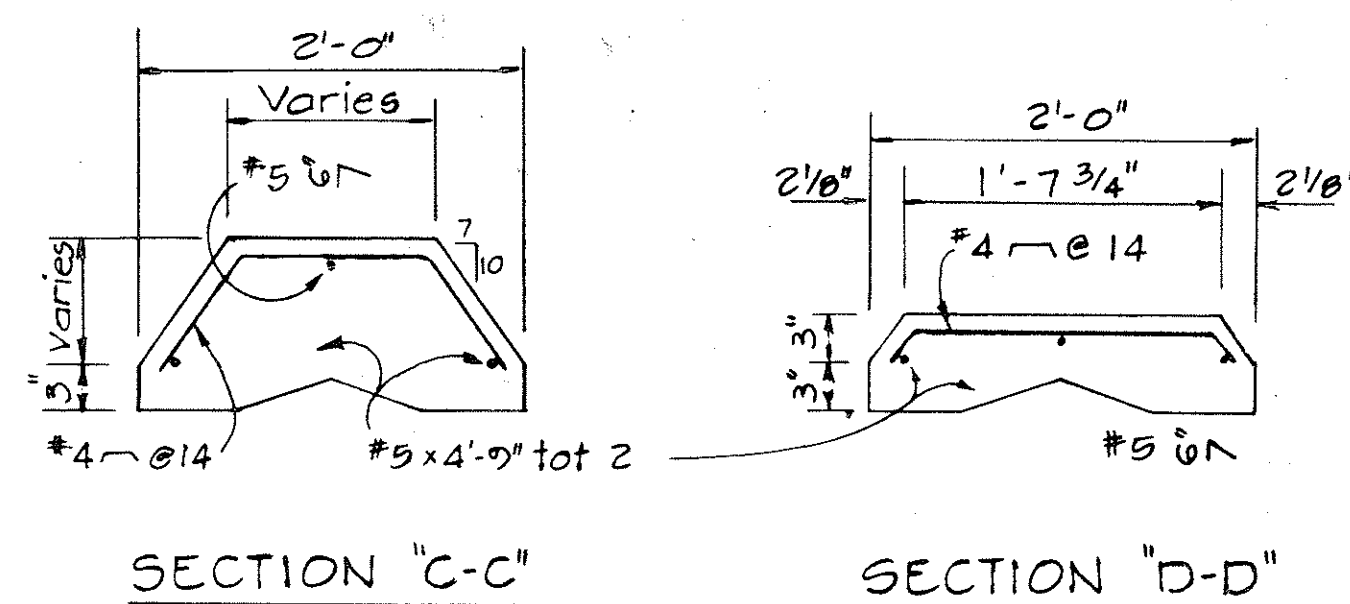
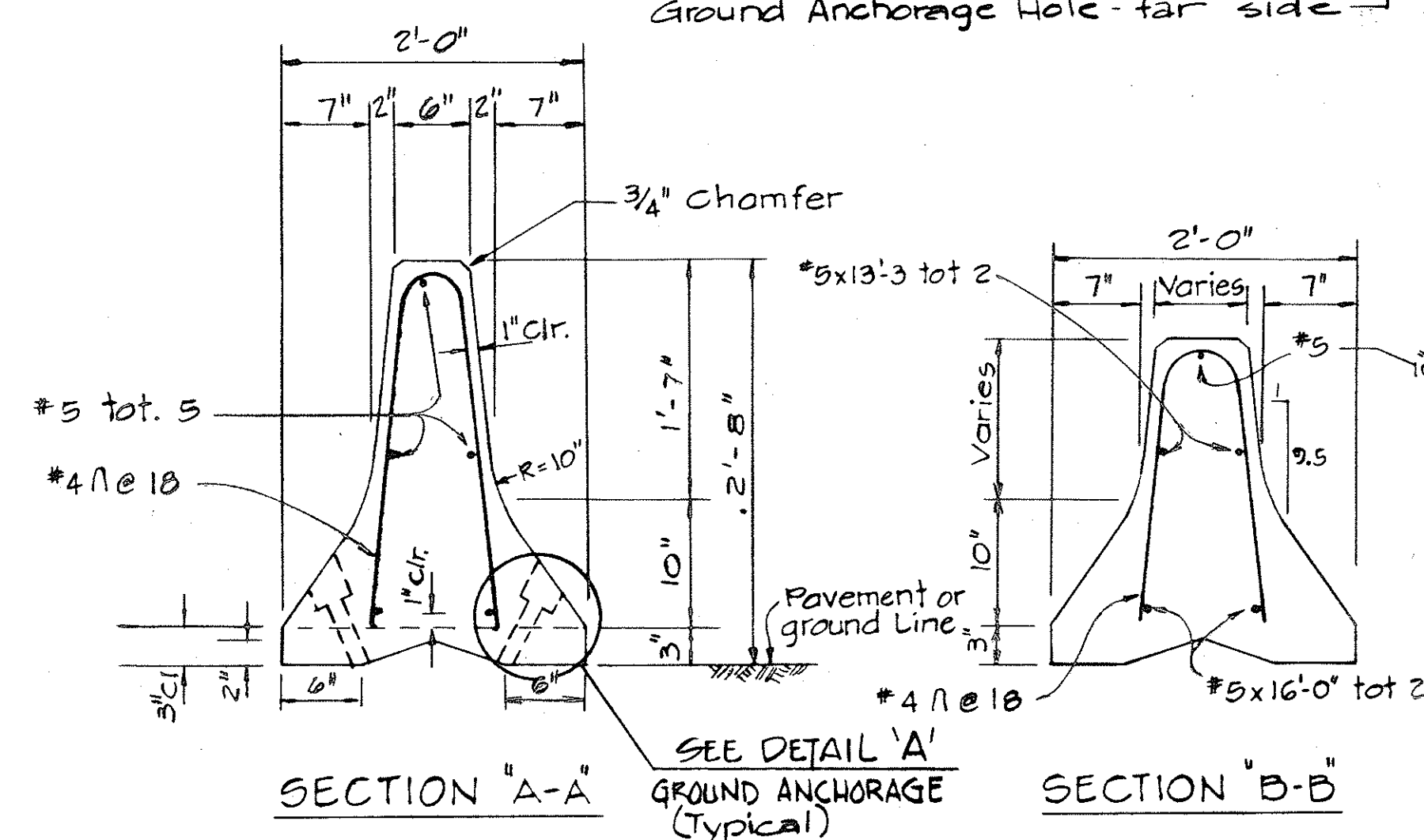
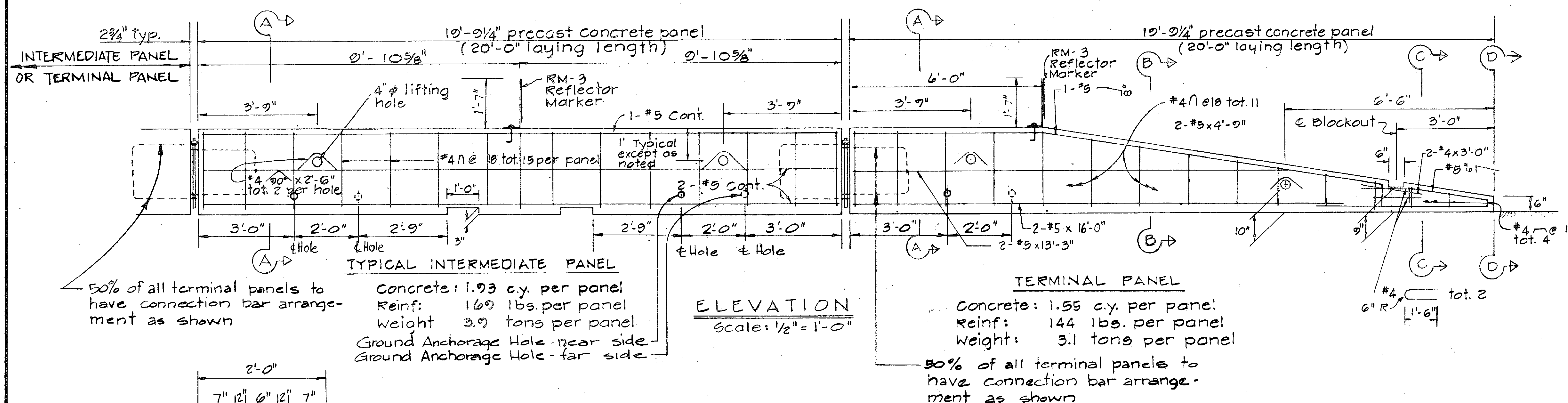


STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

PROFILES & SUPERELEVATION DIAGRAMS
 MOANALUA ROAD
 PUULOA I.C. TO MIDDLE ST. - UNIT 1
 FA. Proj. No. U-FF-078-1(6)
 SCALE: AS SHOWN DATE: JUNE 23/76

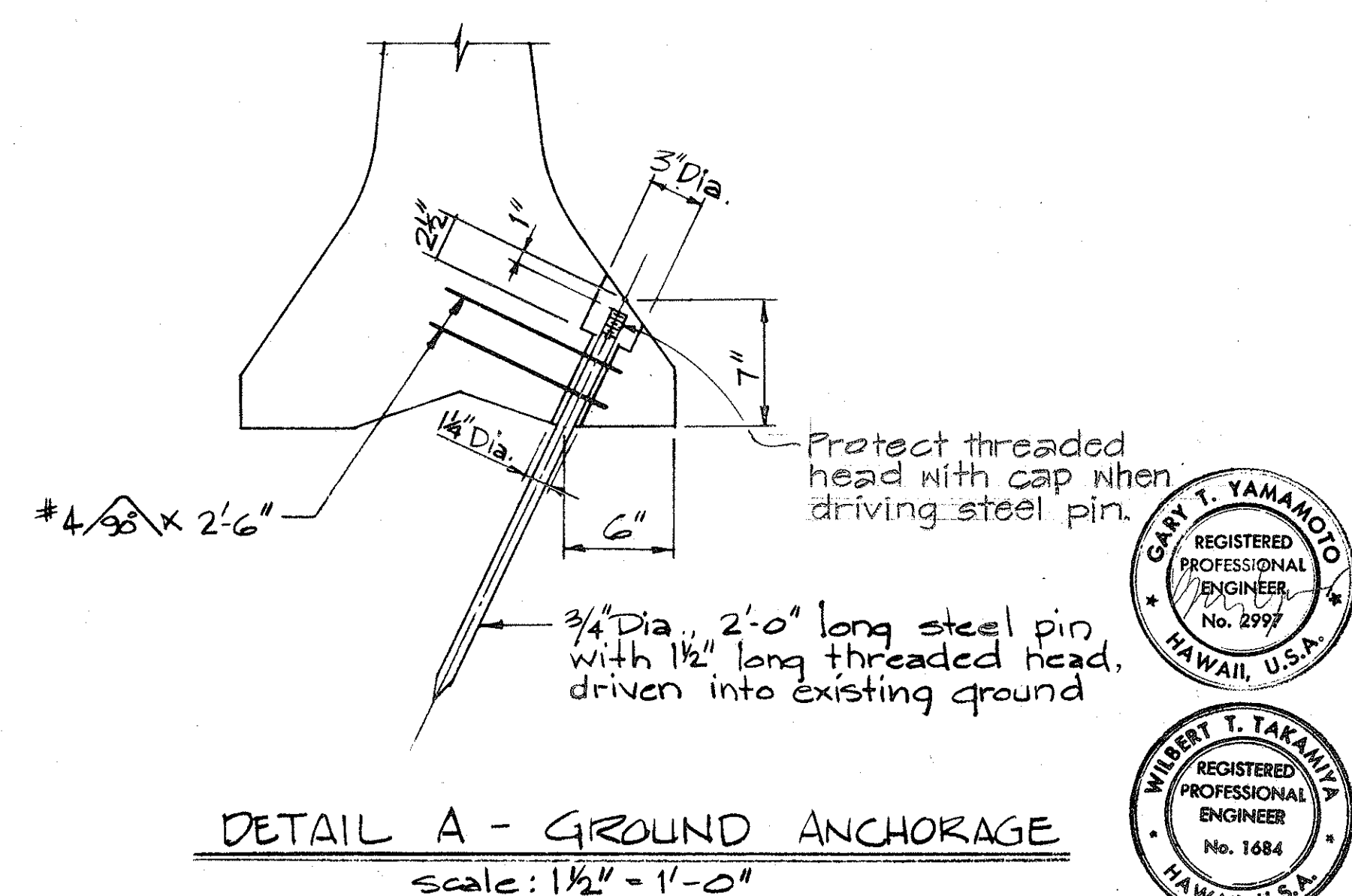
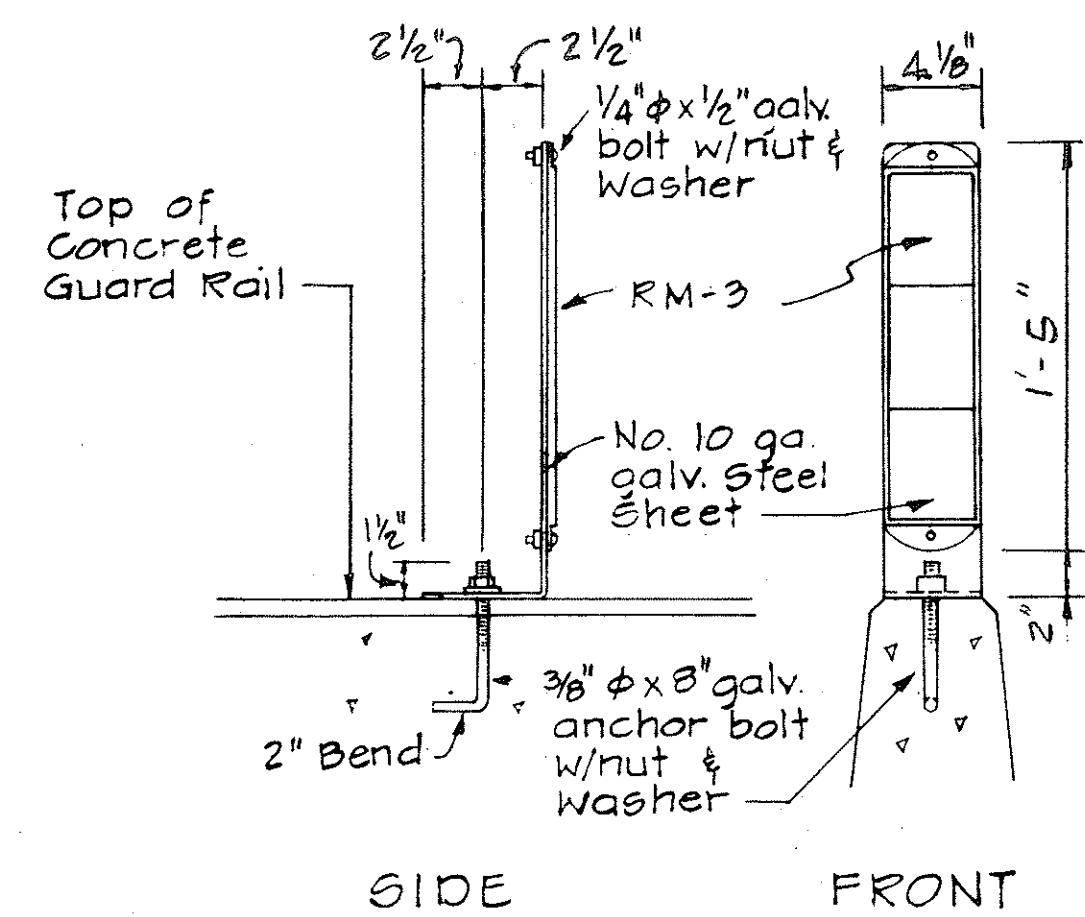
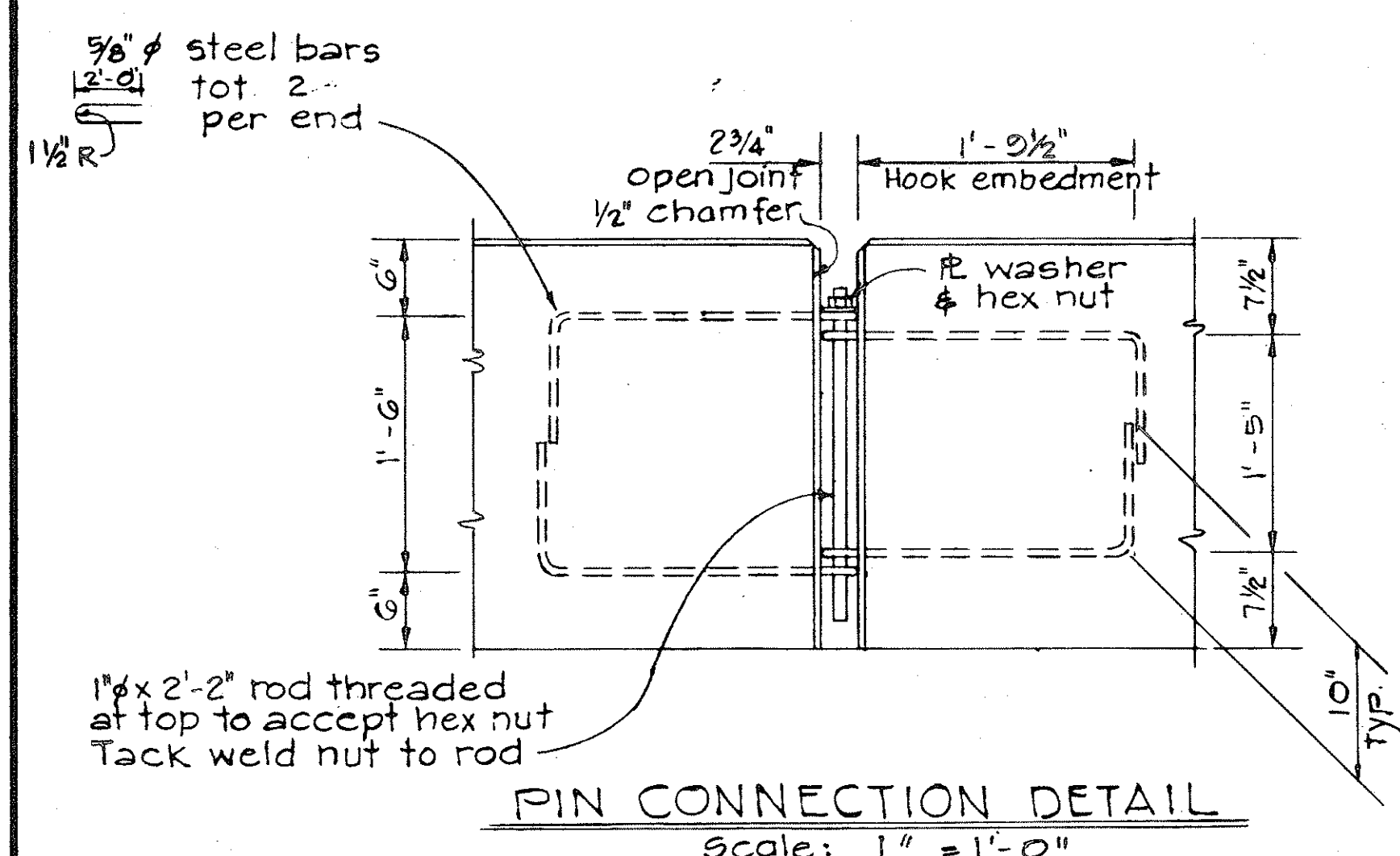
SHEET No. 7 OF 8 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	11FF-078-1(6)	1976	47	142

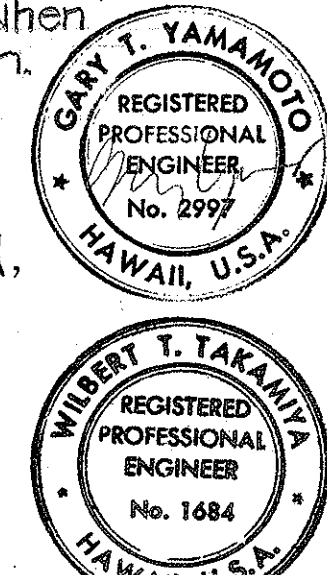


NOTES

- For details not shown in sections BB, C-C, & D-D, see Section A-A
- Reflector Marker shall not be paid for separately but shall be considered incidental to "Portable Concrete Guard Rail."
- Concrete shall be Class "A".
- All bolts to have cut washers unless otherwise noted.



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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PORTABLE CONCRETE GUARD RAIL TYPICAL DETAILS

Scale: As Noted Date: _____

SHEET No. 8 OF 8 SHEETS