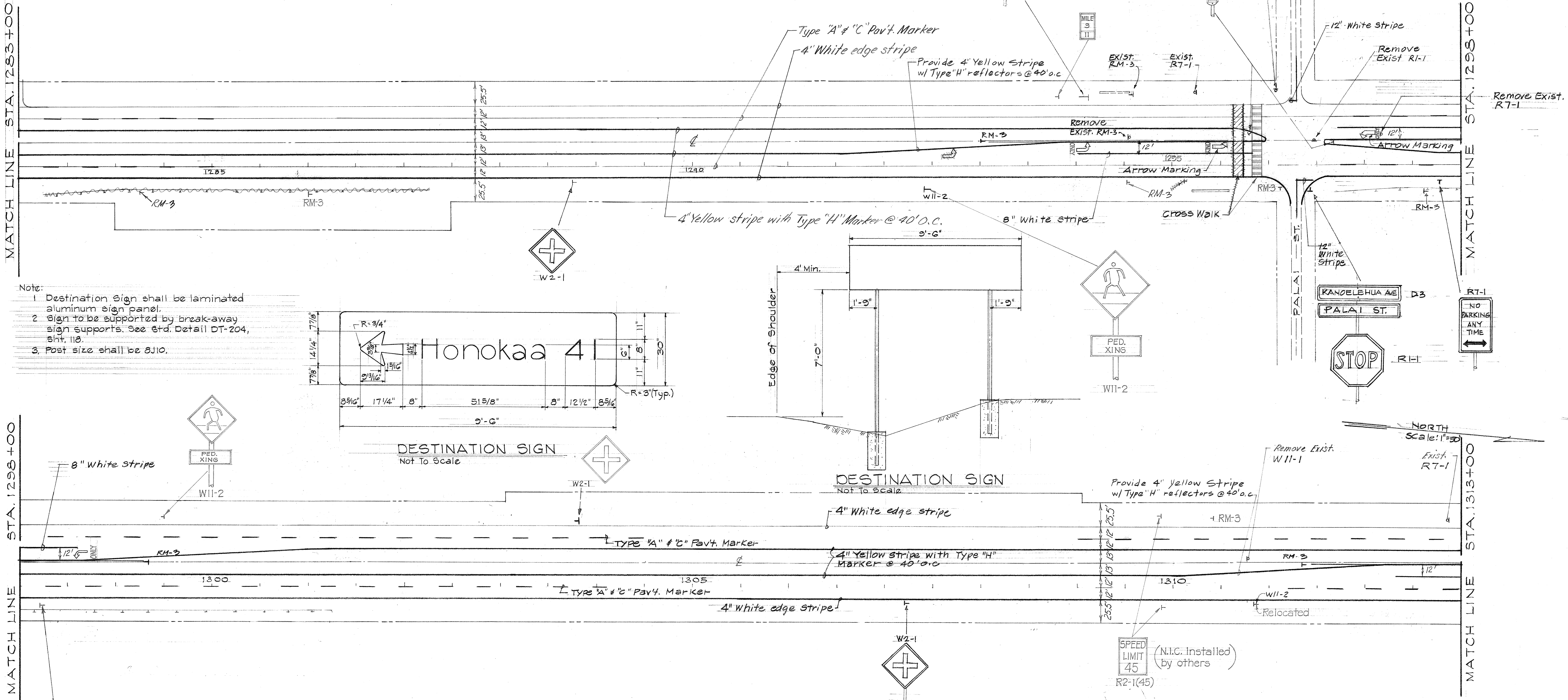


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-RF-011-2(13)	1975	43	126



SURVEY PLANNED BY	DATE
DRAWN BY	
CHECKED BY	
QUANTITIES BY	
NOTES BY	
NO.	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNS & MARKINGS

KAOHELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
Federal Aid Project No. F-RF-011-2(13)
Scale: As Shown

SHEET No. 2 OF 7 SHEETS



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Henry S. Hoshida
 Signature

See Sht. 45 for Traffic Notes.

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



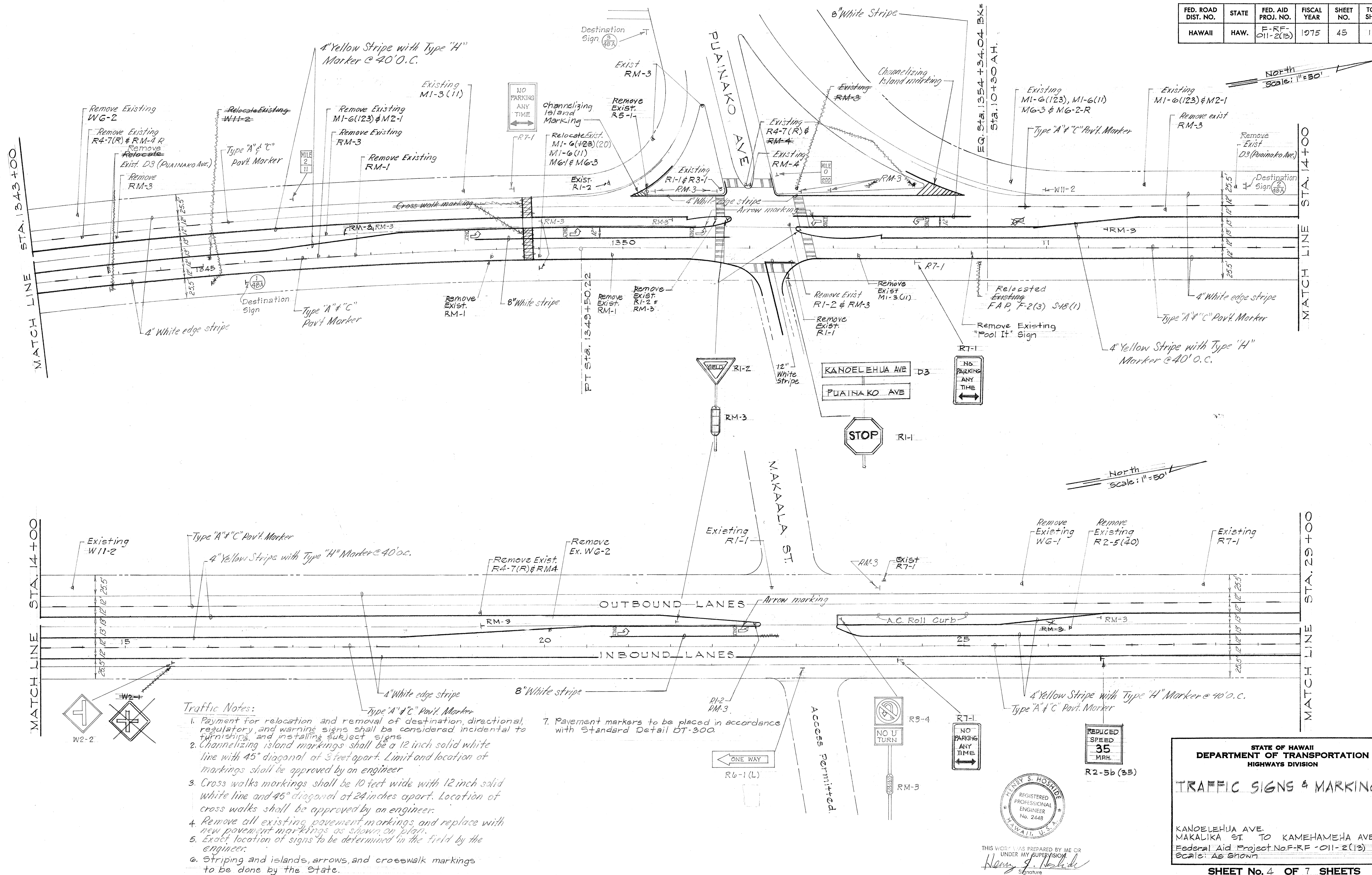
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNS & MARKINGS

KANOOLEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
Federal Aid Project No. F-RF-011-2(13)
Scale: As Shown

SHEET No. 3 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-RF-011-2(13)	1975	45	126



Traffic Notes:

1. Payment for relocation and removal of destination, directional, regulatory, and warning signs shall be considered incidental to furnishing, and installing, subject signs.
2. Channelizing island markings shall be a 12 inch solid white line with 45° diagonal at 3 feet apart. Limit and location of markings shall be approved by an engineer.
3. Cross walks markings shall be 10 feet wide with 12 inch solid white line and 45° diagonal at 24 inches apart. Location of cross walks shall be approved by an engineer.
4. Remove all existing pavement markings and replace with new pavement markings as shown on plan.
5. Exact location of signs to be determined in the field by the engineer.
6. Striping and islands, arrows, and crosswalk markings to be done by the State.
7. Pavement markers to be placed in accordance with Standard Detail BT-300.

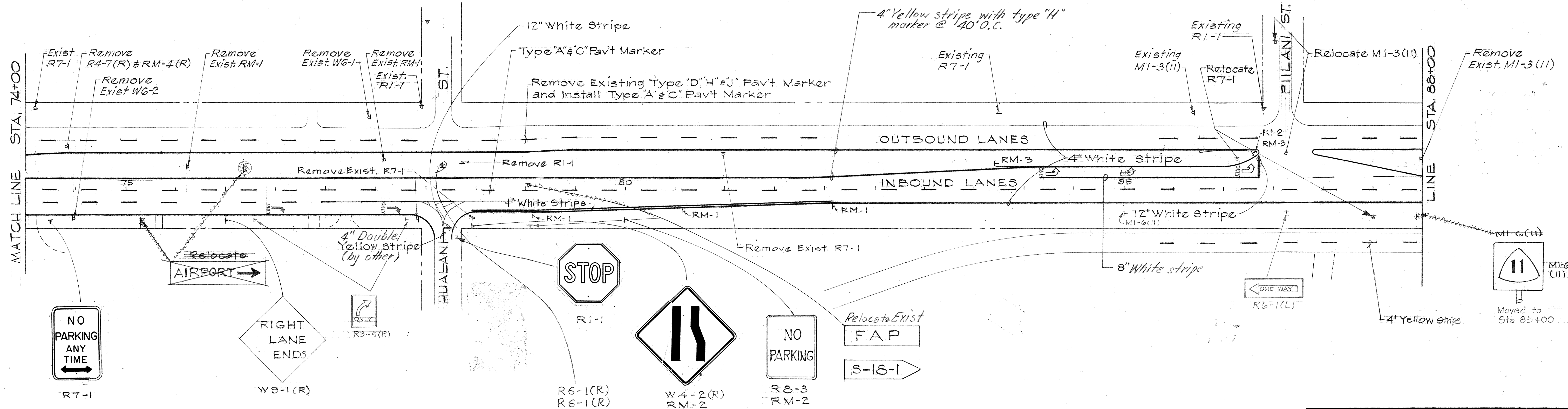
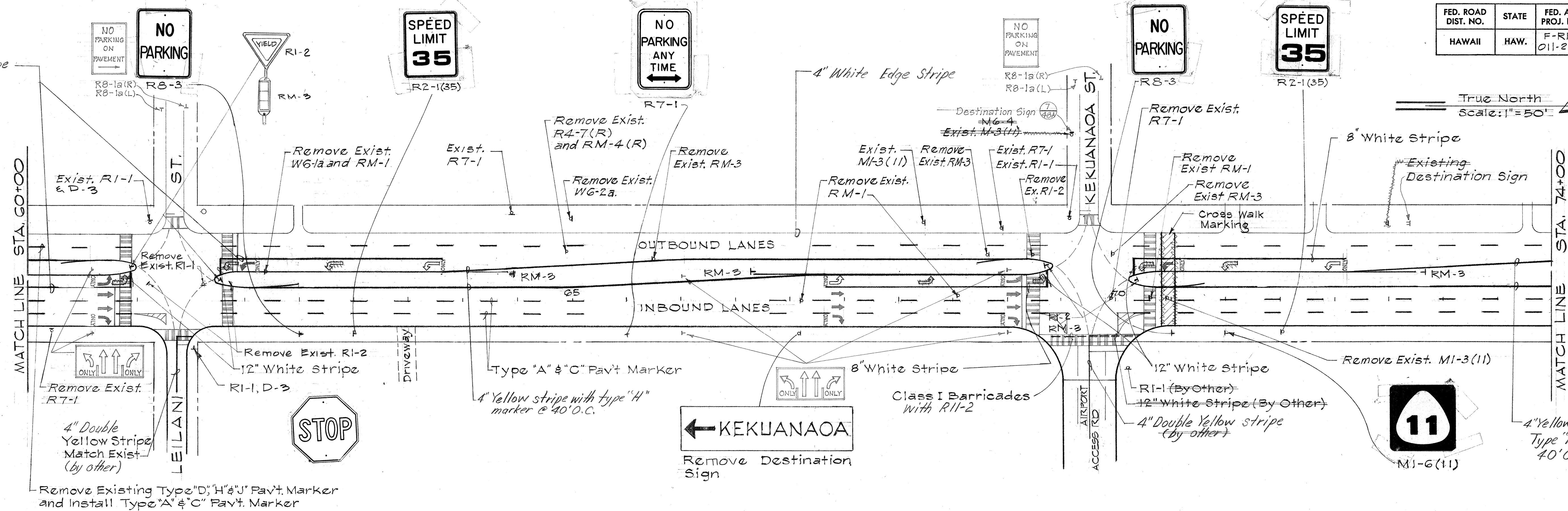
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TRAFFIC SIGNS & MARKINGS

KANOELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
Federal Aid Project No. F-RF-011-2(13)
Scale: As Shown

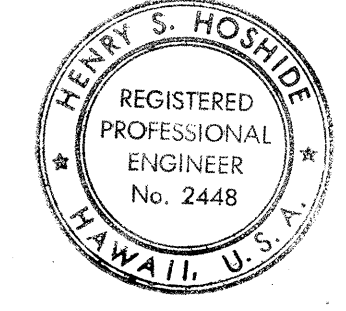
SHEET No. 4 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-RF-011-2(13)	1975	47	126



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

See Sht. 43 for Traffic Notes



THIS WORK WAS PREPARED BY ME
UNDER MY SUPERVISION
Henry S. Hoshide
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

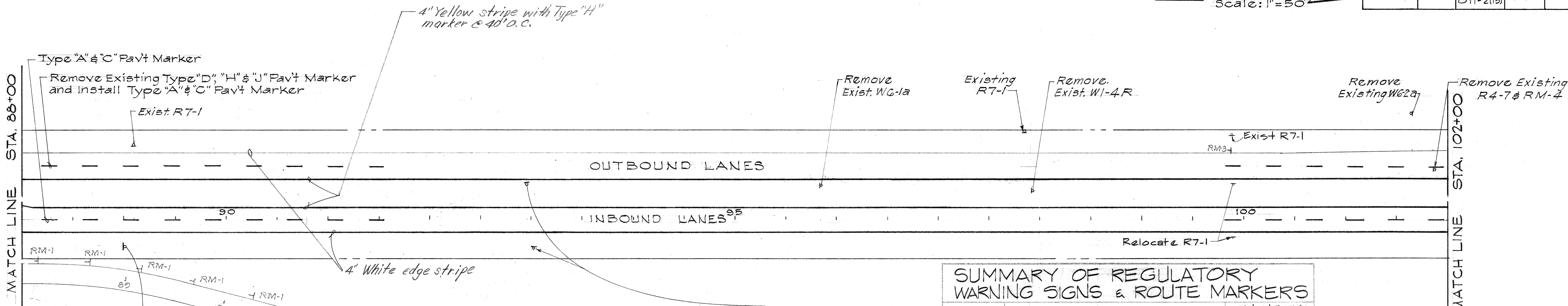
TRAFFIC SIGNS & MARKINGS

KANOEHUA AVE.
NAKALIKA ST. TO KAMEHAMEHA
Federal Aid Project No. F-RF-011-2(13)
Scale: As Shown

SHEET No. 6 OF 7 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-RF-011-2(13)	1975	48	126

True North
Scale: 1"=50'



SPEED LIMIT
35
R2-1(35)

SUMMARY OF REGULATORY WARNING SIGNS AND ROUTE MARKERS			
TYPE	DESCRIPTION	QUANTITY	
		W/ POST	% POST
W1-2a	Arrow Curving Left	1	
W1-6(L)	Large Arrow	1	
R11-4	Road Closed to Thru Traffic	1	

NO PARKING ANY TIME
Relocate R7-1

SUMMARY OF REGULATORY WARNING SIGNS & ROUTE MARKERS

TYPE	DESCRIPTION	QUANTITY	
		W/ POST	% POST
CW20-1a	ROAD CONSTRUCTION 1500 FT.	3	4
CW20-2a	DETOUR	3	
CW20-5a(R)	RIGHT LANE CLOSED 1500 FT.	1	
CM4-10(R)	DETOUR (RIGHT)	2	
CM4-10(L)	DETOUR (LEFT)	1	
CG20-2	END CONSTRUCTION	2	
RM-1	REFLECTOR (CLEAR)	12	1
RM-2	REFLECTOR (AMBER)	2	
RM-3	REFLECTOR (AMBER)	70	21
RM-4	REFLECTOR	0	1
R1-1	STOP	10	1
R1-2	YIELD	18	1
R2-1(35)	SPEED LIMIT	4	
R2-5b(35)	REDUCED SPEED	1	
R3-2	NO LEFT TURN	0	*
R3-4	NO U TURN	2	*
RG-1(L)	ONE WAY (LEFT)	3	2
RG-1(R)	ONE WAY (RIGHT)	6	2
R7-1	NO PARKING	12	
R8-3	NO PARKING	3	
R11-2	ROAD CLOSED	2	
W1-3(R)	REVERSE TURN (RIGHT)	1	2
W1-3(L)	REVERSE TURN (LEFT)	1	
W1-6(R)	LARGE ARROW	1	
W2-1	CROSS ROAD	6	3
W2-2	SIDE ROAD	3	2
W4-2(R)	ROAD TRANSITION	1	2
W6-3	TWO-WAY TRAFFIC	2	
W13-1(15)	ADVISORY SPEED PLATE	4	
W9-1(R)	RIGHT LANE ENDS	1	
M1-6(11)	STATE ROUTE MARKER	7	8
D3	STREET NAME	10	6
W11-2	PEDESTRIAN CROSSING	6	3
	GALV. STEEL POLES FOR DESTINATION SIGN	(2EA)	
	RELOCATE WARNING & REGULATORY SIGNING	*	2
	RELOCATE ROUTE & DESTINATION MARKERS	*	3

* No Payment for Relocated Signs

MISCELLANEOUS		
WOOD BARRICADE	1	
DESTINATION SIGN (HONOKAA)	24	SQ. FT.

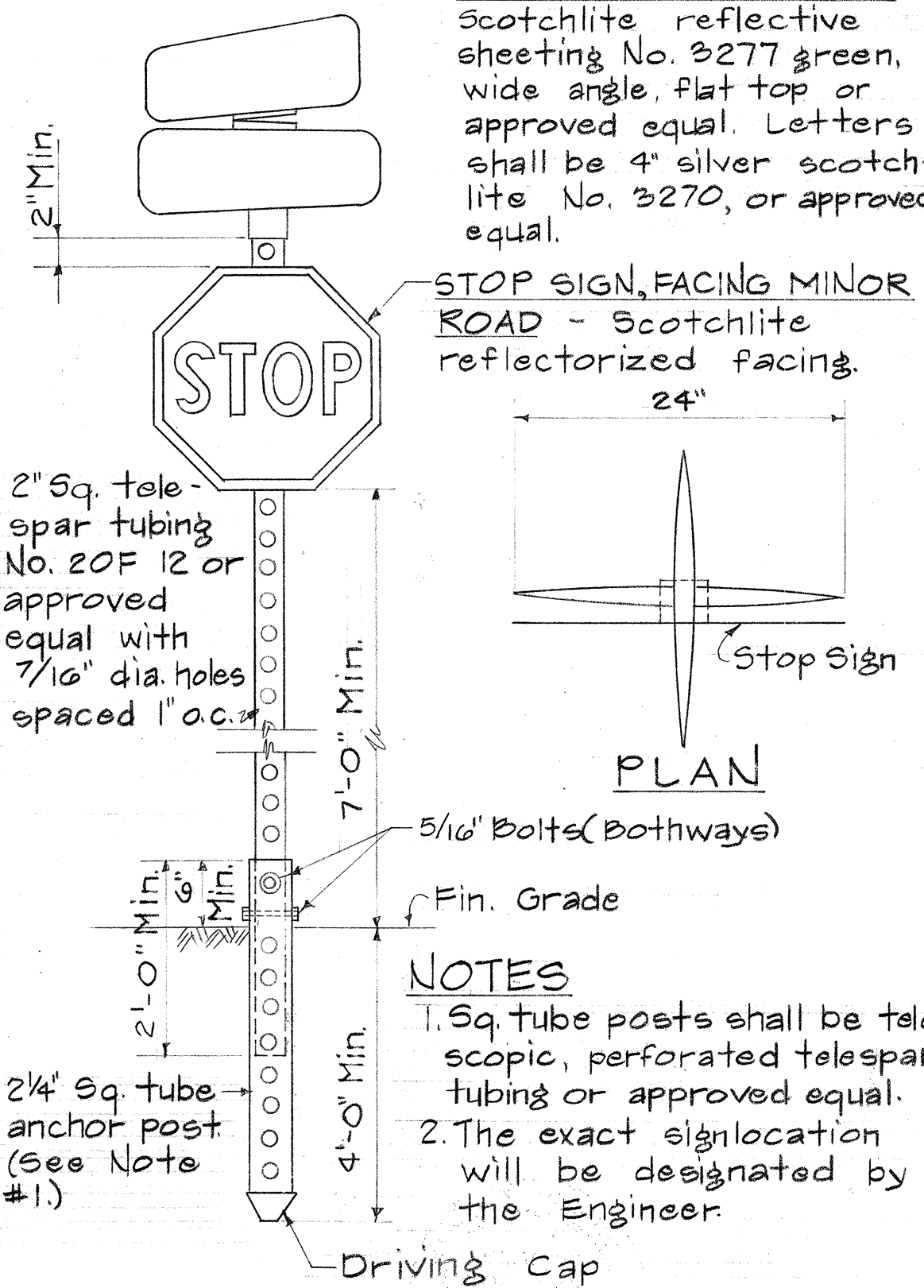
SUMMARY OF RAISED PAVEMENT MARKERS

TYPE	DESCRIPTION	QUANTITY EACH
A	NON-REFLECTIVE WHITE	6,210,583
C	RED-CLEAR REFLECTIVE	1,035,128
H	ONE-WAY YELLOW REFLECTIVE	245,961

NOTE: See Sht. 125 for additional sign summary.

STREET NAME PLATES
Scotchlite reflective sheeting No. 3277 green, wide angle, flat top or approved equal. Letters shall be 4" silver scotch-lite No. 3270, or approved equal.

STOP SIGN, FACING MINOR ROAD - Scotchlite reflectorized facing.



ELEVATION

STREET NAME & STOP SIGN DETAIL
Not to scale

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

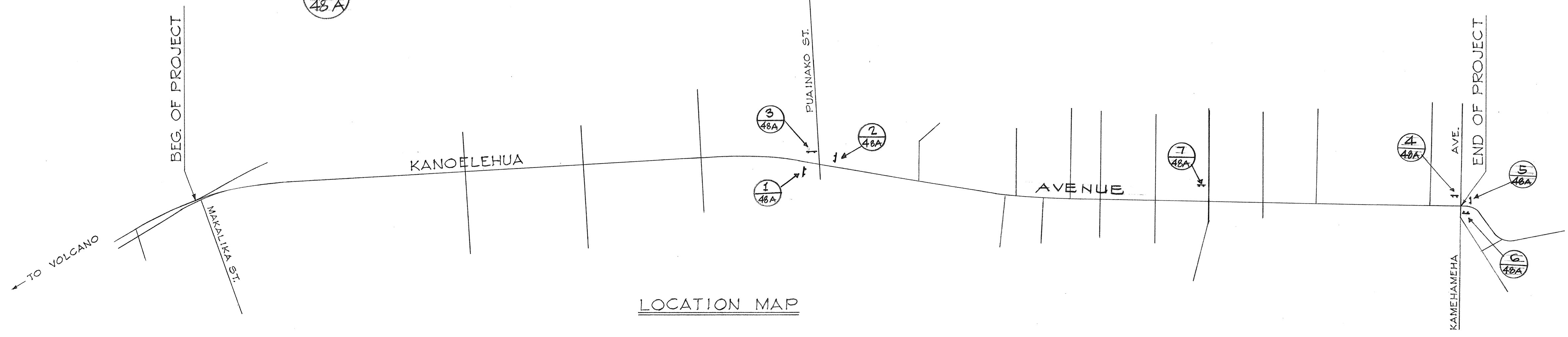
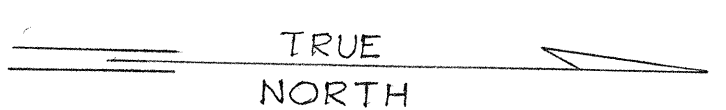
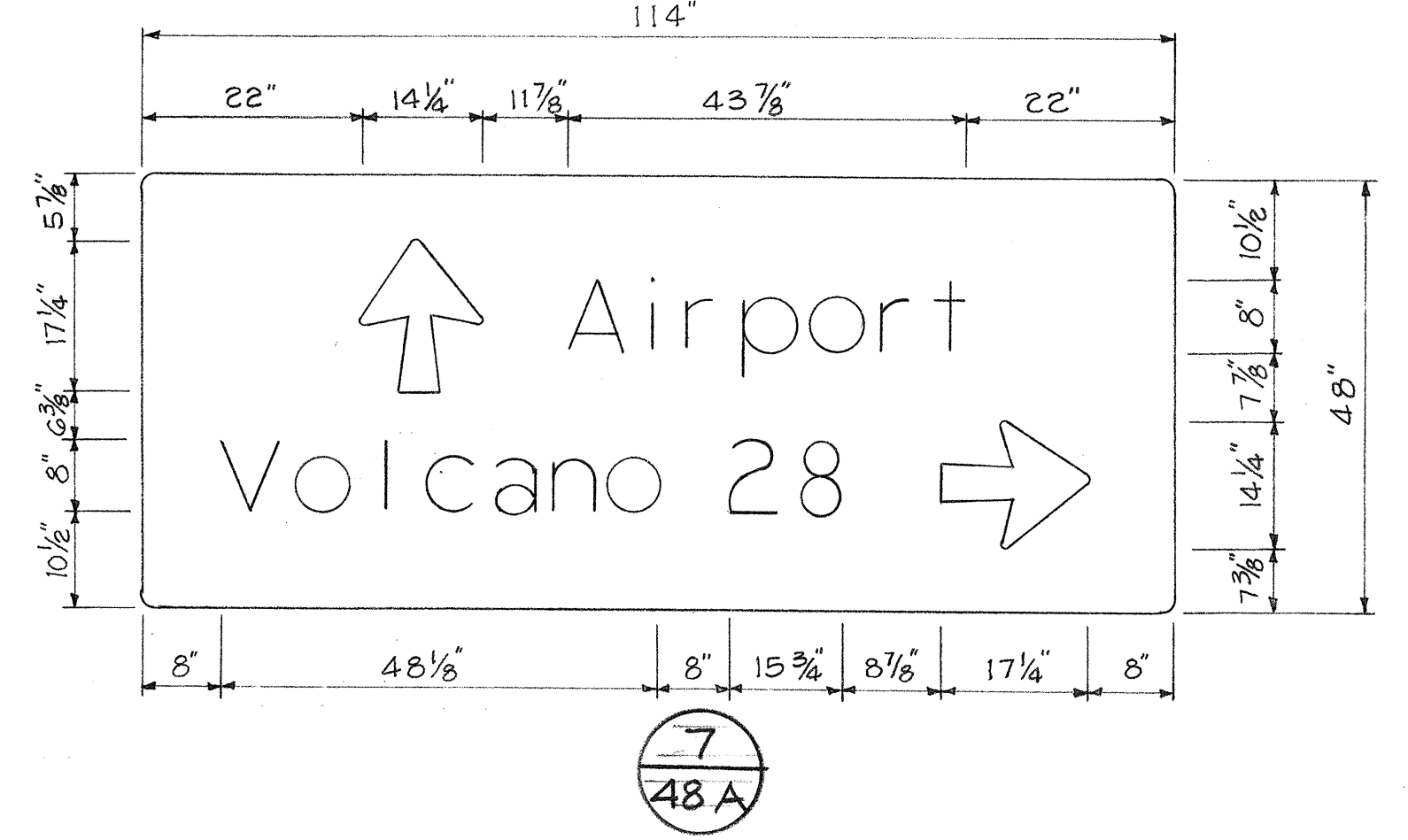
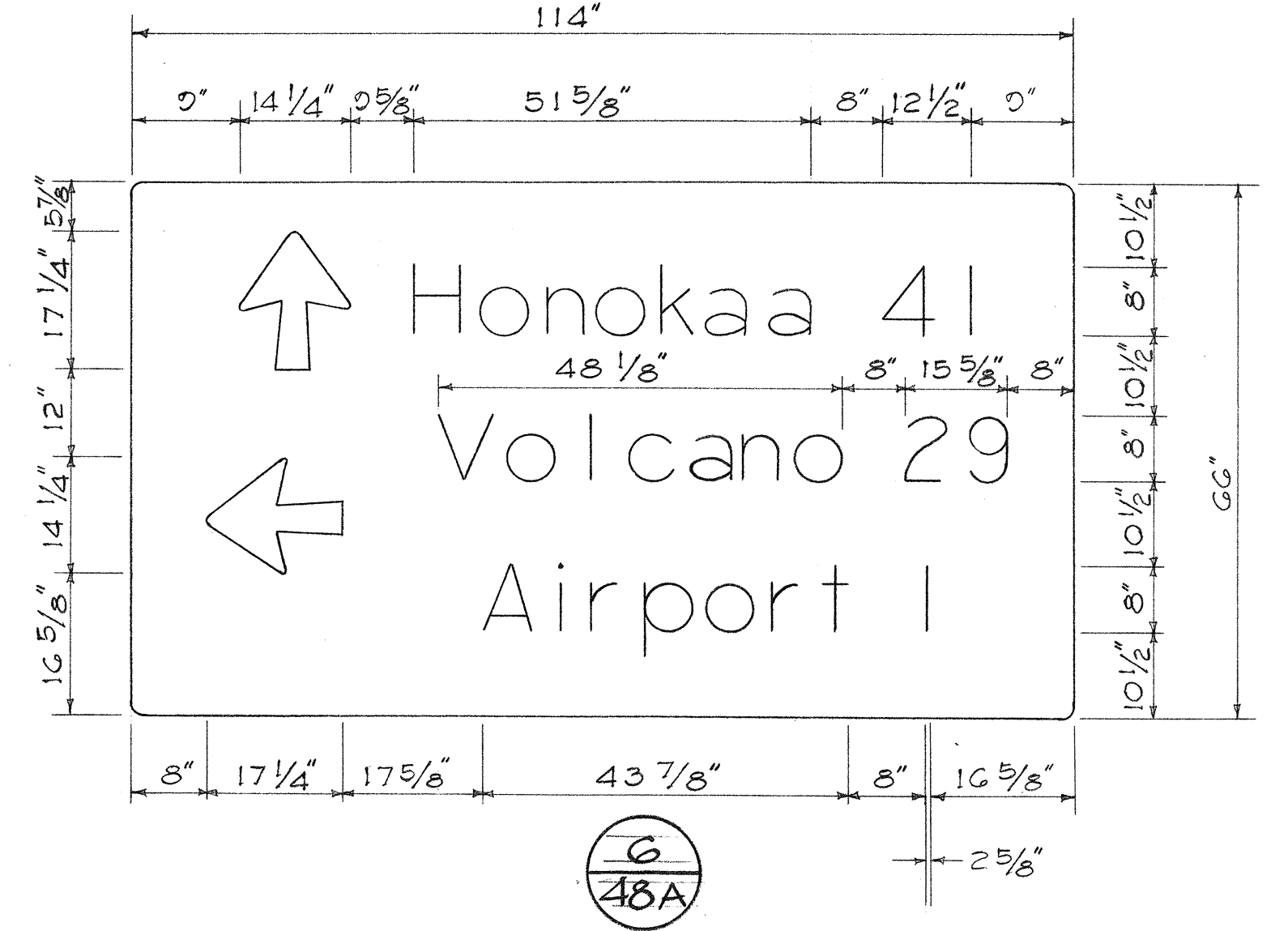
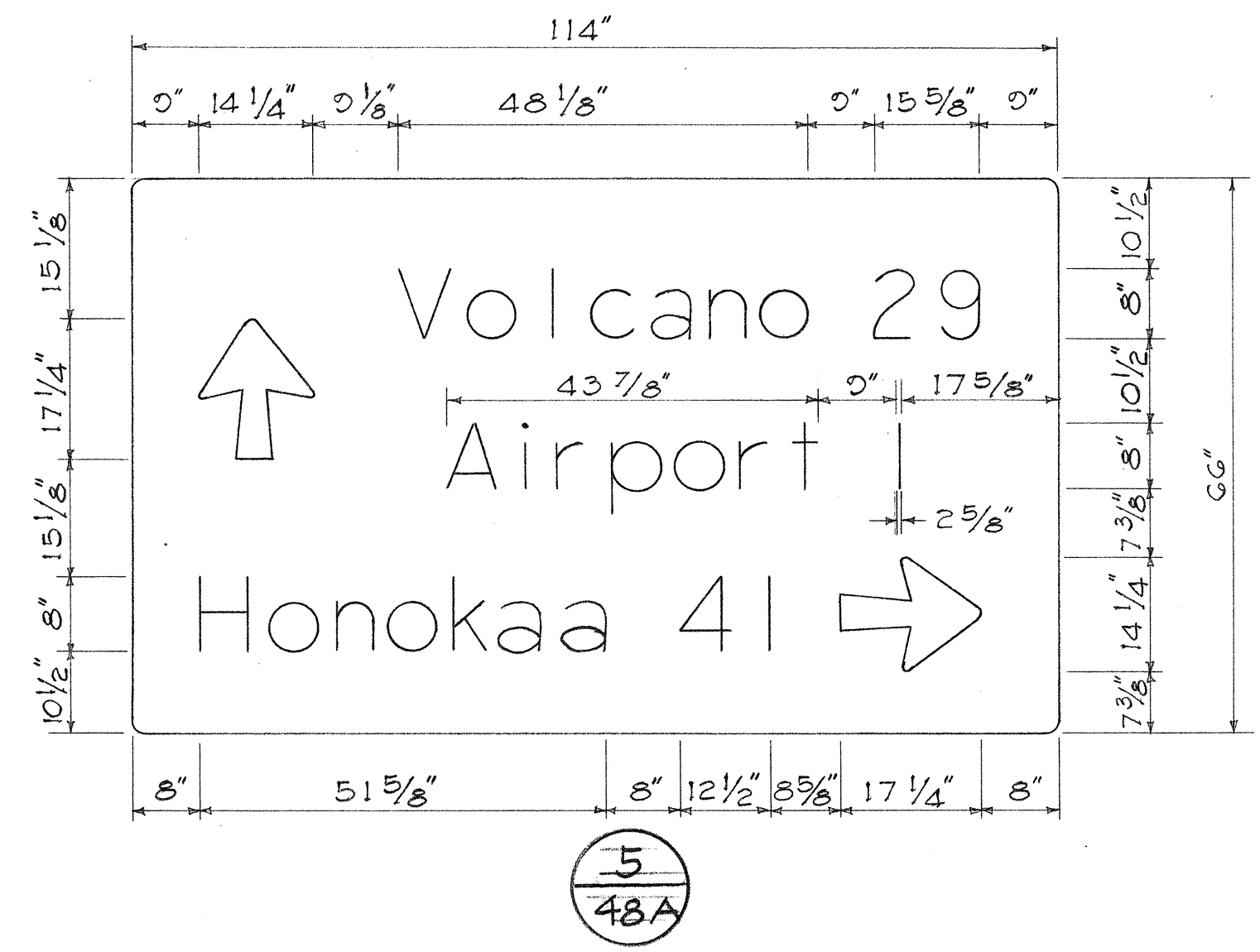
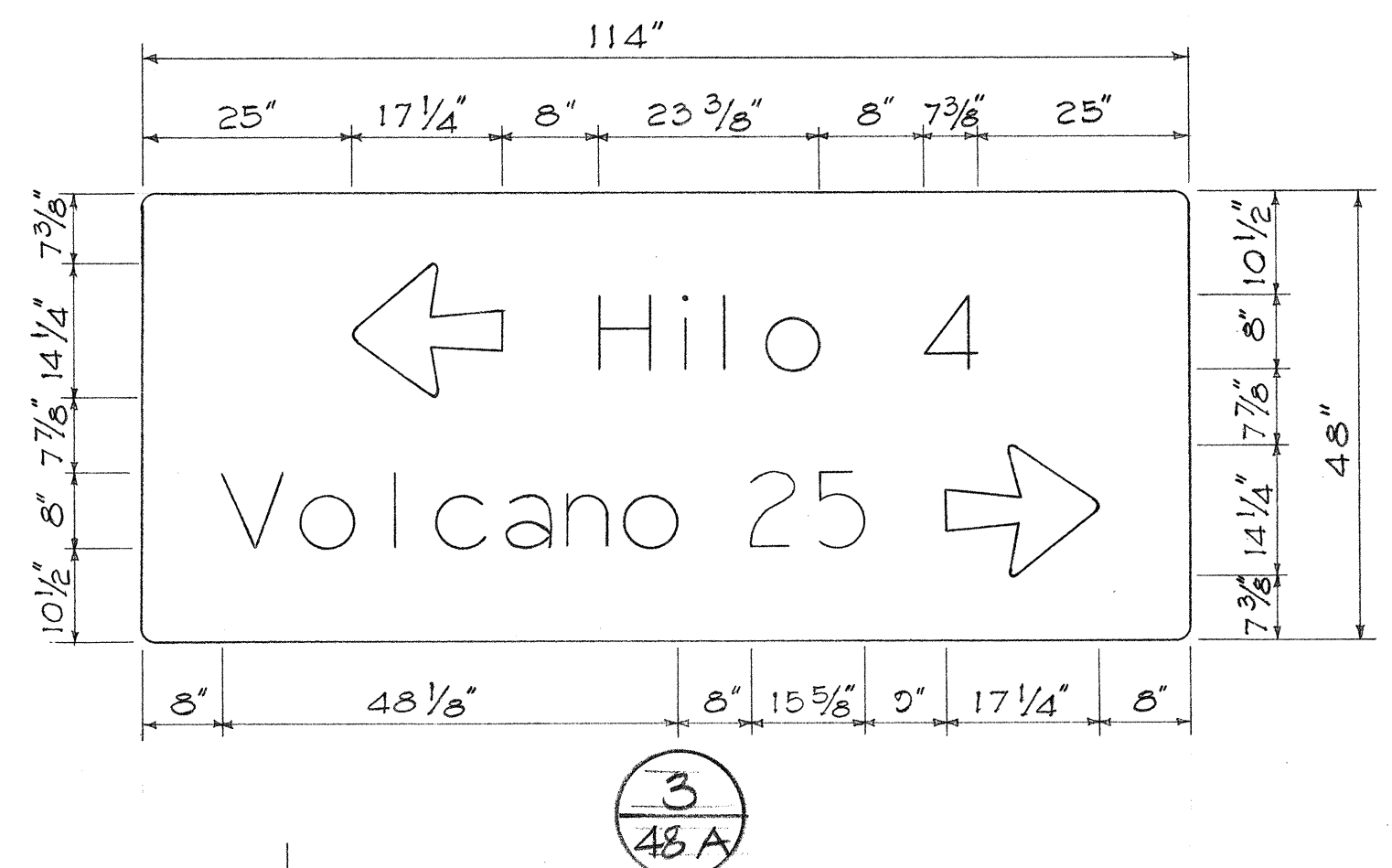
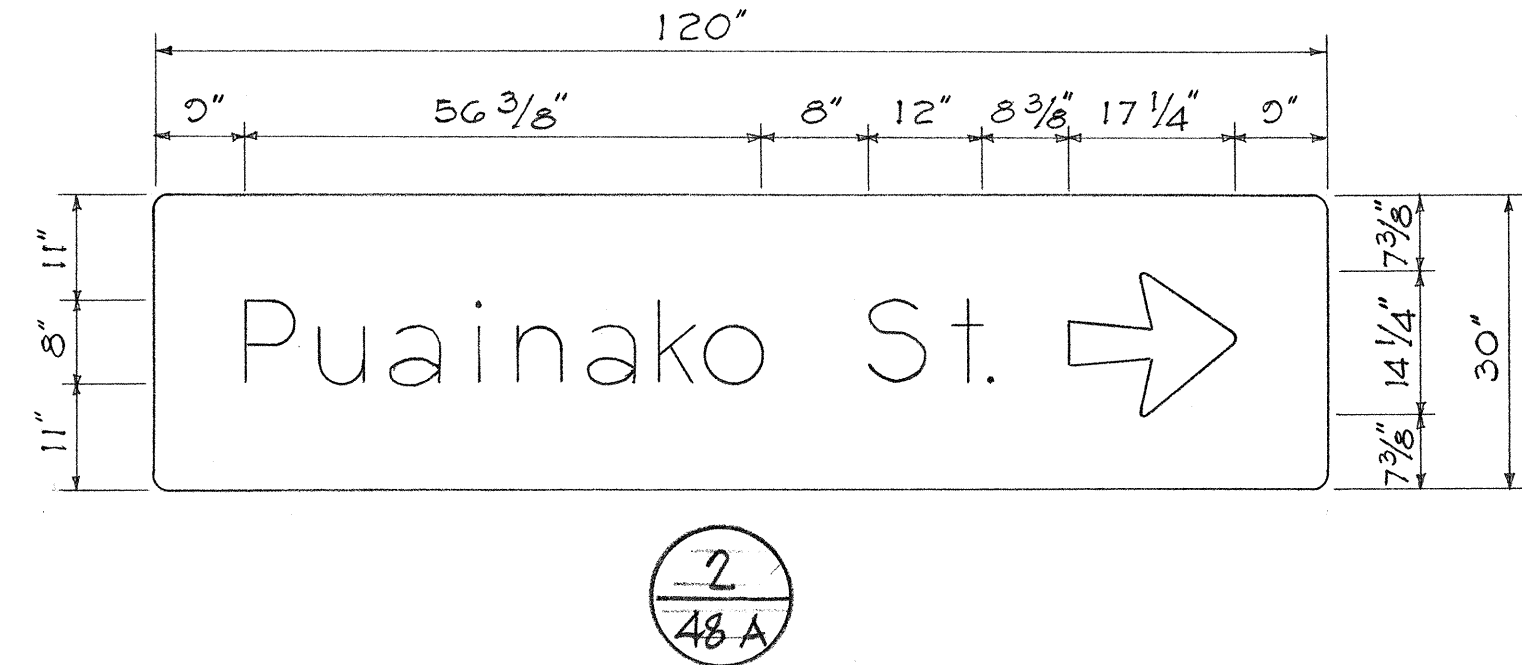
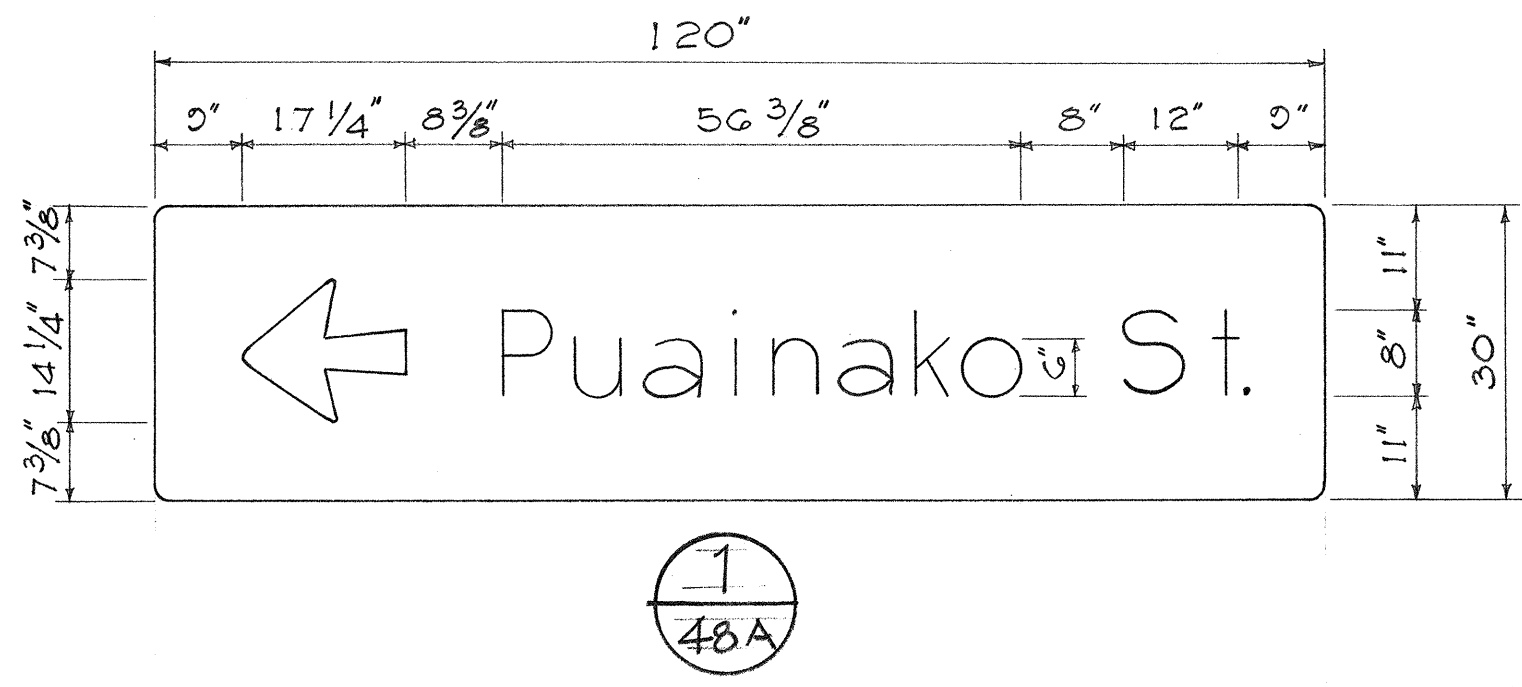
TRAFFIC SIGNS & MARKINGS

KANOELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
Federal Aid Project No. F-RF-011-2(13)
Scale: As Shown

SHEET No. 7 OF 7 SHEETS

DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
ORIGINAL PLAN	
NOTE BOOK	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	F-R-F 011-2(13)	1975	48A	126



DESIGNED BY	DATE
DRAWN BY	
CHECKED BY	
NOTED BY	
APPROVED BY	



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Henry S. Hoshida
Signature

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

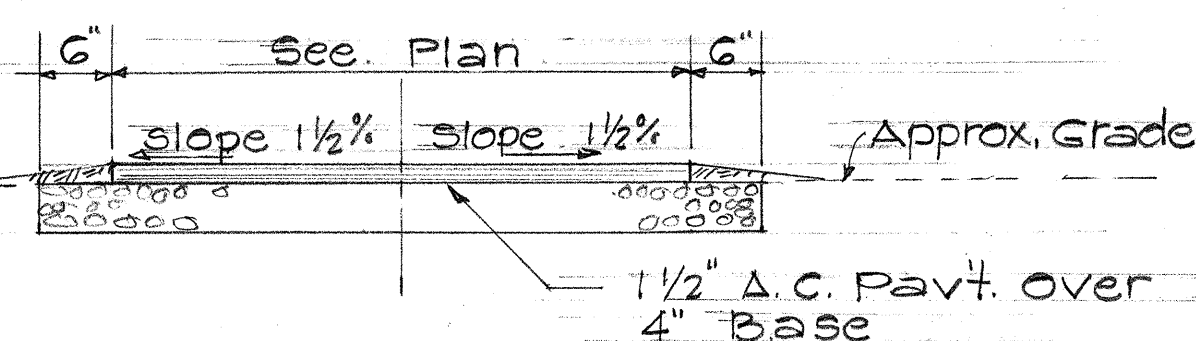
TRAFFIC SIGN AND MARKINGS

KANOELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
FEDERAL AID PROJ. NO. F-R-F-011-2(13)
Scale: Not to scale.

SHEET No. 48A OF 126 SHEETS

GENERAL NOTES

1. Detector loop pullbox and 1/4" steel conduit extending 6" beyond edge of pavement is under this contract. Conduit shall be threaded and capped. Pavement sawcut and traffic loop detectors will be installed by others and are shown for information only. (See Sht. 2)
2. Wheelchair ramp detail is shown on Sheet 3.
3. Pavement section for widening is shown Sheet 3.
4. Contractor shall provide a smooth connection to all driveways affected by widening.
5. Power poles indicated for relocation will be done by the Hawaii Electric Light Company. Contractor to coordinate his work to effect a smooth relocation.
6. During the course of constructing the widening, any damage to existing improvements, trees, shrubs shall be restored by the Contractor at no cost to the State. Restoration shall be equal to or better than the existing and as directed by the Engineer.
7. Traffic signal controller and master are not in contract.
8. Pavement, curbs and sidewalk shall be power saw cut to provide clean, solid, vertical joints. Cut, as much as possible, shall be made in a straight line. Asphaltic concrete shall be mix No. 5 and concrete for sidewalks and curb shall have a strength of 2500 p.s.i. at 28 days. For restored A.C. pavement, the finish surface shall be slightly humped not to exceed 3/8 inch. All other surfaces shall match the existing work.



TYPICAL A.C. WALK
SCALE: 3/4" = 1'-0"

TRAFFIC NOTES

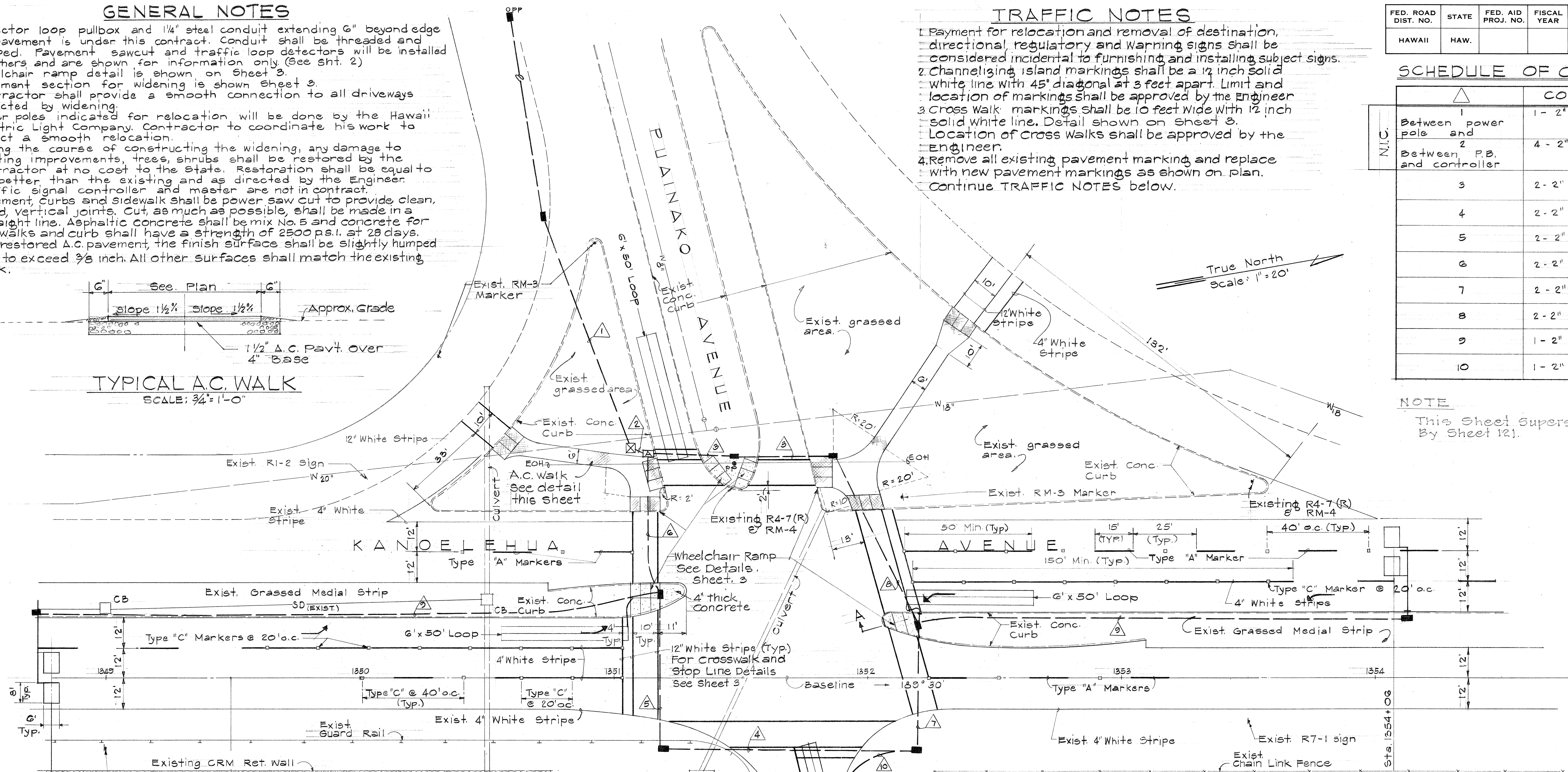
1. Payment for relocation and removal of destination, directional, regulatory and warning signs shall be considered incidental to furnishing and installing subject signs.
 2. Channelizing island markings shall be a 1/2 inch solid white line with 45° diagonal at 3 feet apart. Limit and location of markings shall be approved by the Engineer.
 3. Cross walk markings shall be 10 feet wide with 1/2 inch solid white line. Detail shown on Sheet 3.
 4. Remove all existing pavement marking and replace with new pavement markings as shown on plan.
- Continue TRAFFIC NOTES below.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				

SCHEDULE OF CONDUITS

N.C.	CONDUITS
1	Between power pole and
2	Between P.B. and controller
3	2 - 2" PVC
4	2 - 2" PVC
5	2 - 2" PVC
6	2 - 2" PVC
7	2 - 2" PVC
8	2 - 2" PVC
9	1 - 2" PVC
10	1 - 2" PVC

NOTE
This Sheet Superseded By Sheet 121.

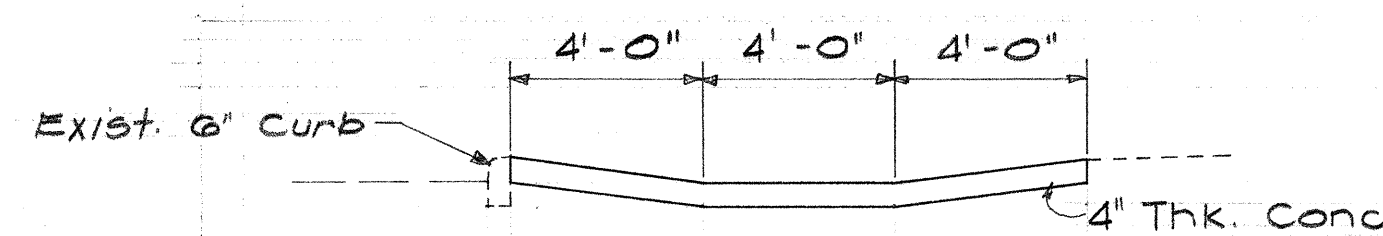


Continued TRAFFIC NOTES

5. Exact location of signs to be determined in the field by the Engineer.
6. Striping and islands, arrows, and crosswalk markings to be done by the State.
7. Pavement markers to be placed in accordance with Standard Detail DT-300.

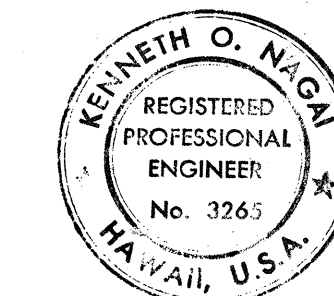
CONSTRUCTION NOTE

The existence of utilities and other improvements as shown on the plans are from the latest available information, but is not guaranteed as to the accuracy or the encountering of obstacles during the course of the work. The Contractor shall verify all said utilities and improvements and shall apprise his men of all possible hazardous encounters.



SECTION "A"
Scale: 1/4" = 1'-0"

- ☒ KANOELEHUA D3
- ☒ PUAINAKO RI-1
- ☒ New Type 'A' pull box - State std. Dwg. DT 401
- ☒ Traffic Signal Controller
- ☒ Traffic Signal Master
- ☒ Traffic Loop Detectors
- ☒ New A.C. Pavement Walk
- ☒ New Stripe and Markers
- ☒ New A.C. Pavement
- ☒ New Electrical Conduits - Size and No. as indicated in Schedule of Conduits. Concrete encased.
- ☒ New Type B pullbox - State Standard Dwg. DT 401



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

8/12/76 Installation of Traffic Signal Conduits, Pull Boxes, and Approaches

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PUAINAKO AVE. INTERSECTION IMPROVEMENTS

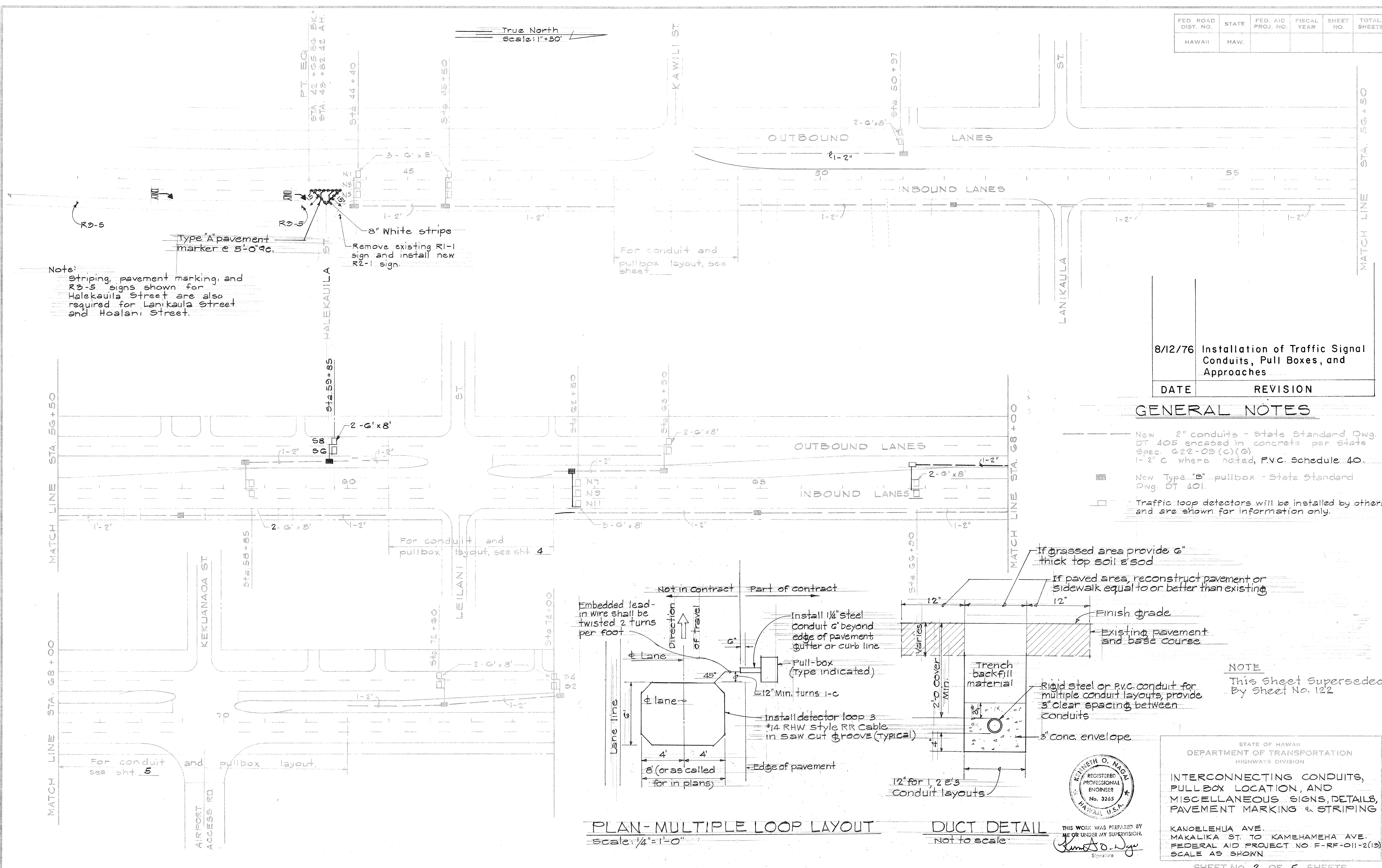
KANOELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
FEDERAL AID PROJECT NO. F-RF-011-2(13)
SCALE AS SHOWN

SHEET NO. 1 OF 5 SHEETS

C.O. 41813-1

SURVEY PLOTTED BY	DATE
DRAWN BY	
DESIGNED 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.				

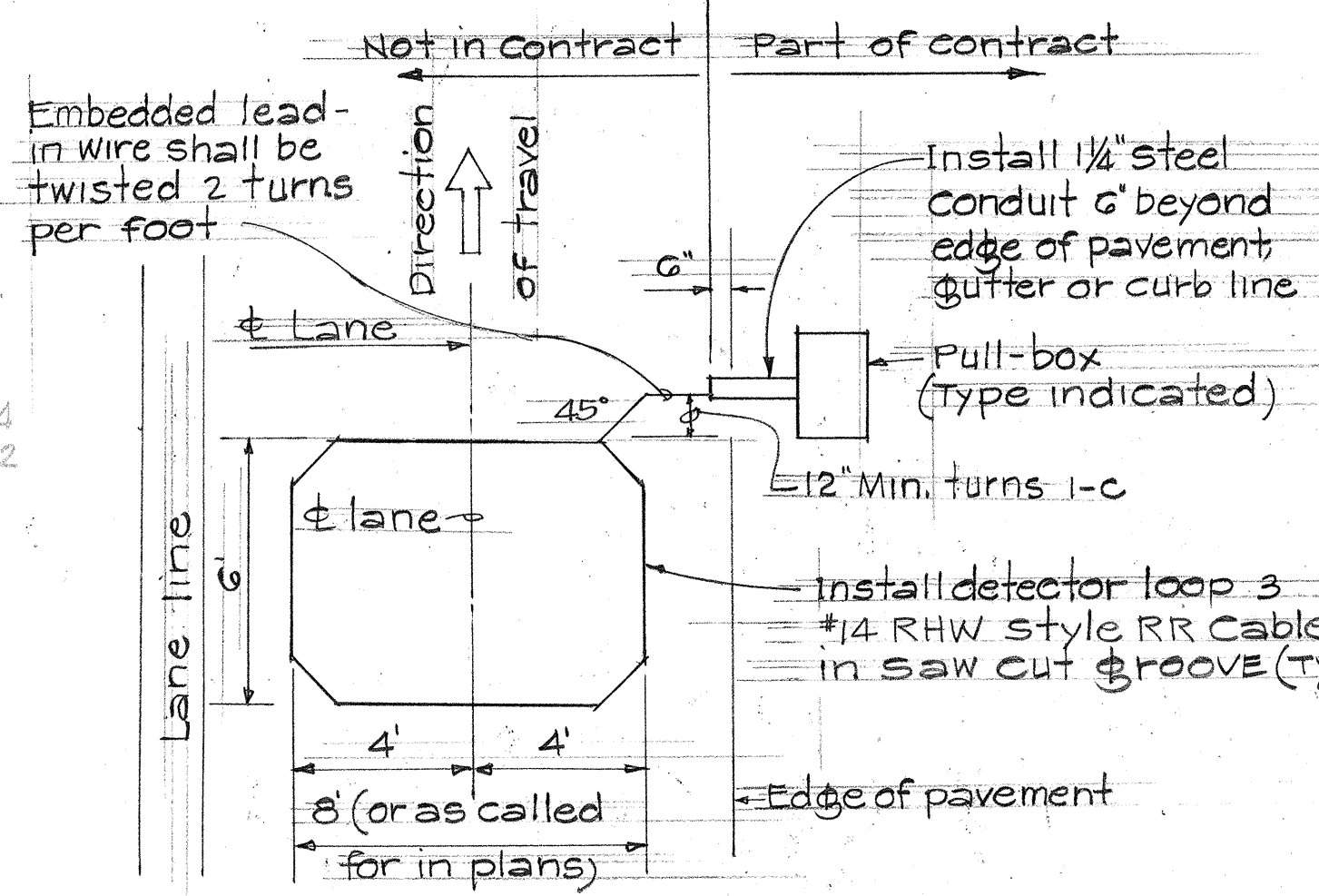


Note:
Striping, pavement marking, and R3-5 signs shown for Halekauila Street are also required for Lanikaula Street and Hoalani Street.

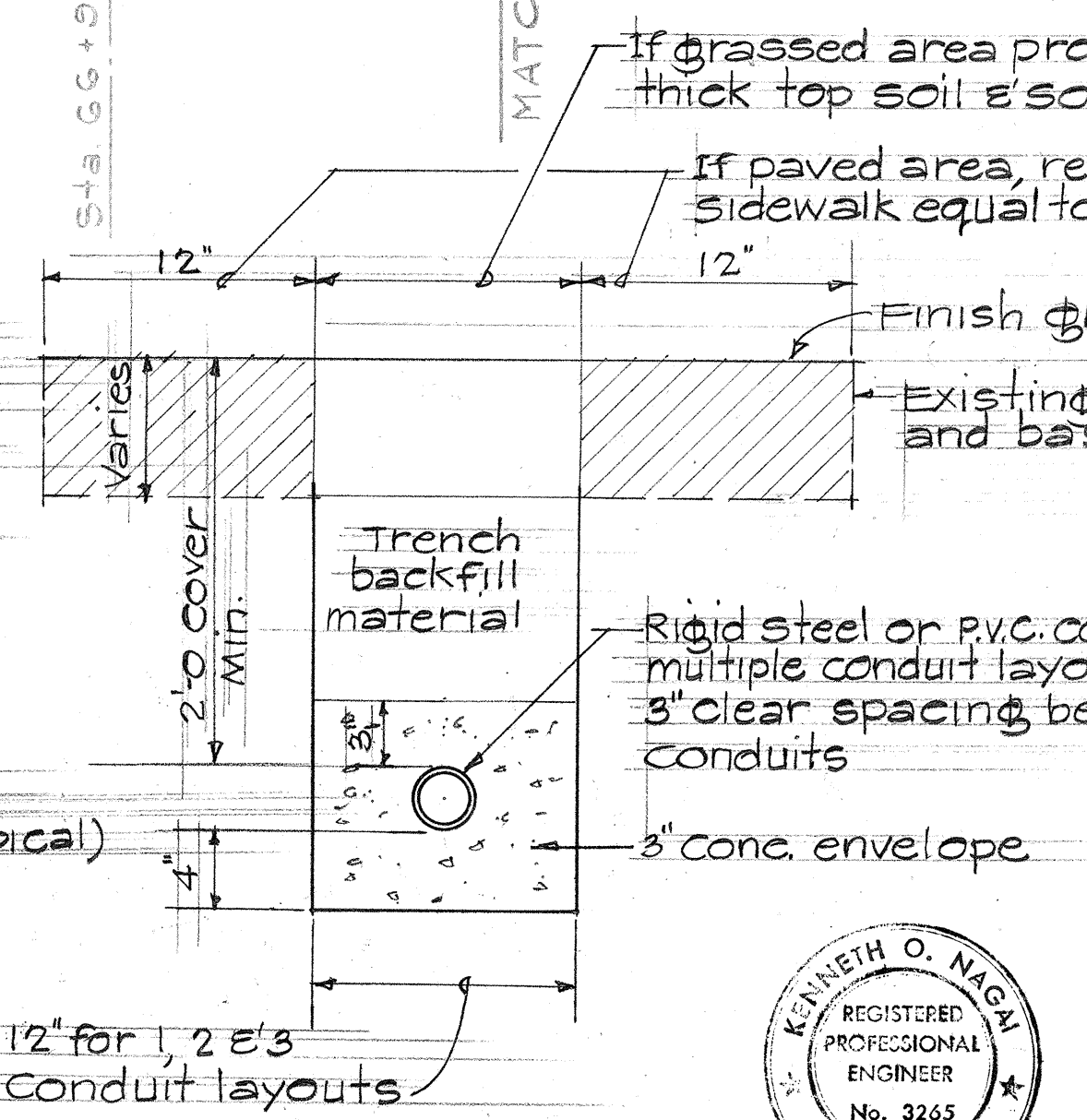
8/12/76	Installation of Traffic Signal Conduits, Pull Boxes, and Approaches
DATE	REVISION

GENERAL NOTES

- New 2" conduits - State Standard Dwg. DT 405 encased in concrete per State Spec. G22-03(c)(6) 1-2" where noted, P.V.C. Schedule 40.
- New Type "B" pullbox - State Standard Dwg. DT 401.
- Traffic loop detectors will be installed by others and are shown for information only.



PLAN-MULTIPLE LOOP LAYOUT
Scale: 1/4" = 1'-0"



DUCT DETAIL
Not to scale

KENNETH O. NIGM
REGISTERED PROFESSIONAL ENGINEER
No. 3265
HAWAII, U.S.A.
Signature

NOTE
This Sheet Superseded By Sheet No. 122

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
INTERCONNECTING CONDUITS,
PULL BOX LOCATION, AND
MISCELLANEOUS SIGNS, DETAILS,
PAVEMENT MARKING & STRIPING
KAOUELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
FEDERAL AID PROJECT NO. F-RF-011-2(19)
SCALE AS SHOWN
SHEET NO. 2 OF 5 SHEETS

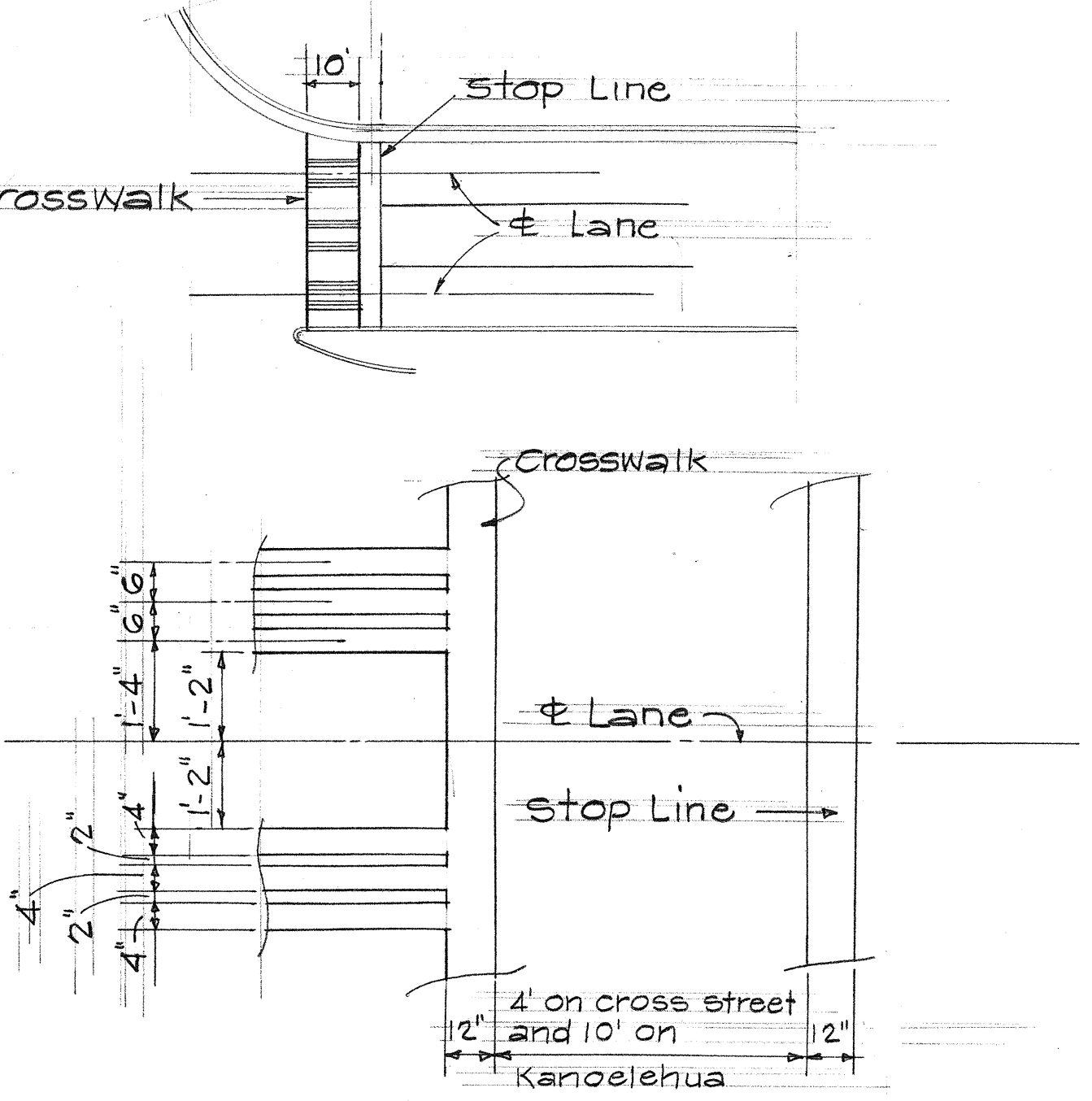
C. O. 41 S B - 2

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				

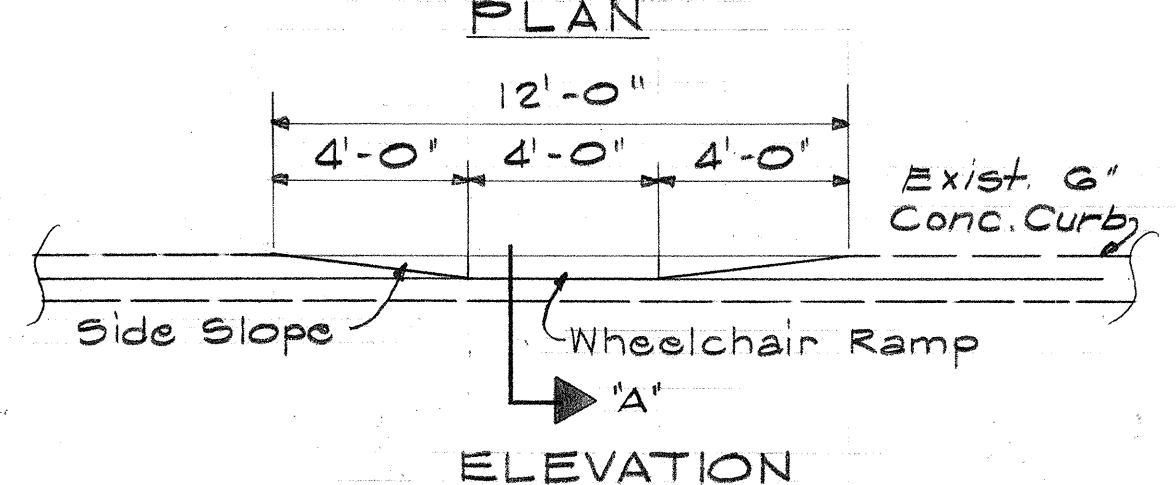
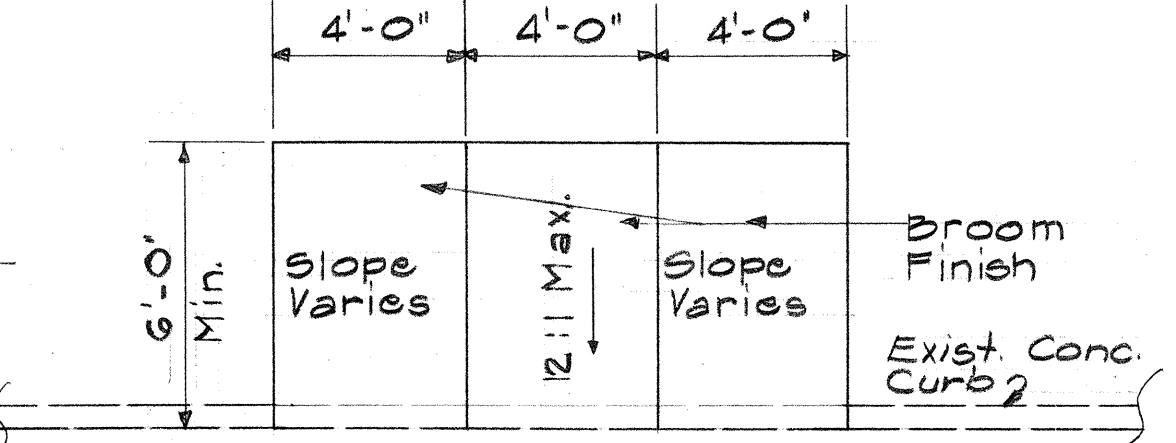
True North
Scale: 1"=20'

CURVE DATA

Curve No.	Δ	R	T	L
①	87-20-02	40	34.98	57.48
②	90-00-00	20	20.00	15.71
③	33-31-03	75	26.94	51.73
④	140-28-57	5	13.92	12.26



CROSSWALK & STOP LINE
NOT TO SCALE

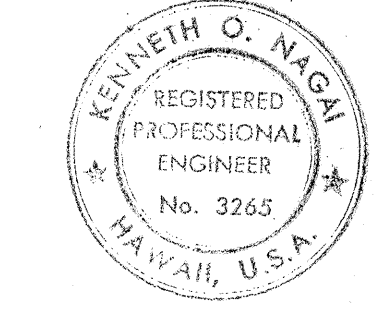


WHEELCHAIR RAMP DETAIL
Scale: 1/4"=1'-0"

SCHEDULE OF CONDUITS

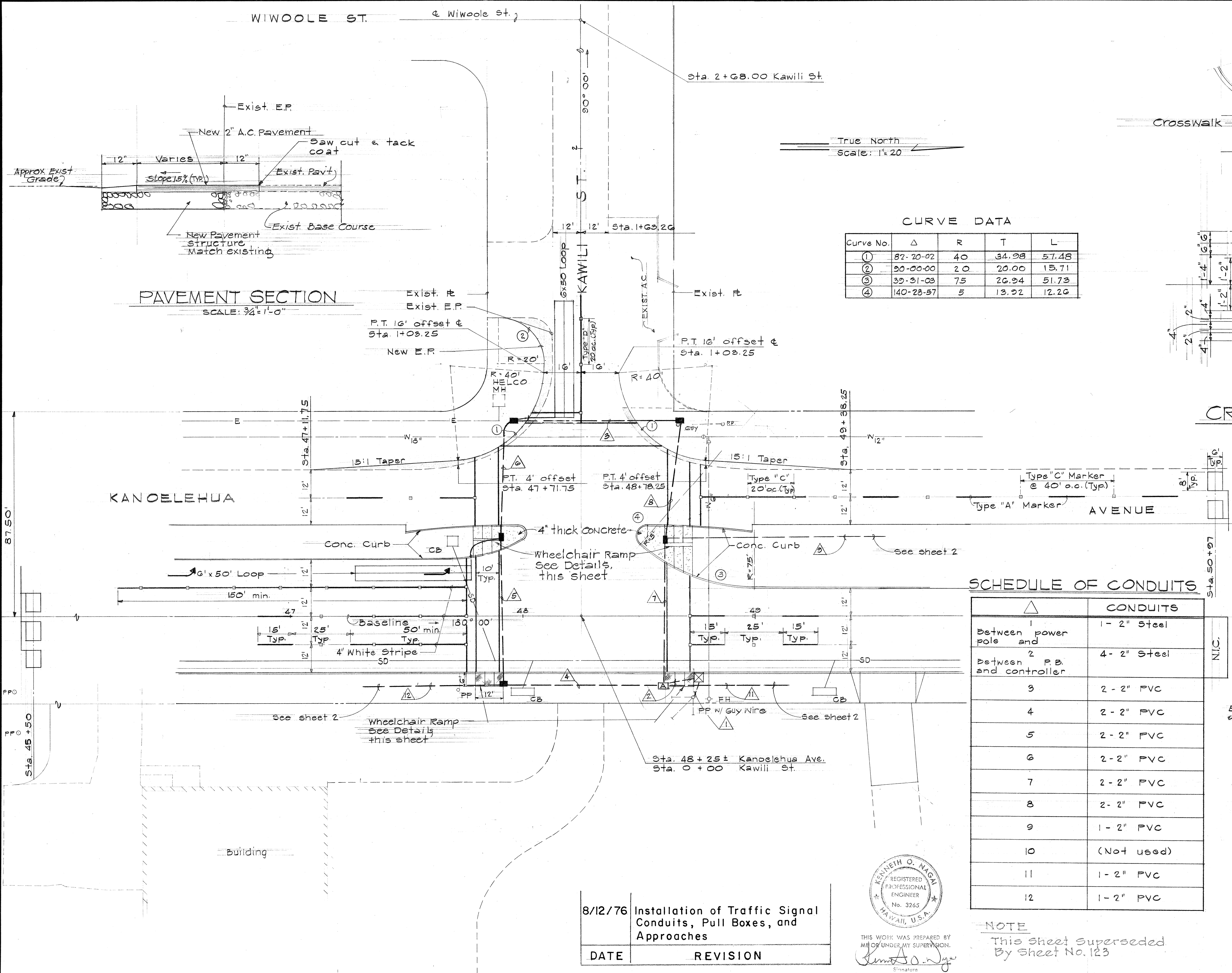
Δ	CONDUITS
Between 1 pole and 2	1- 2" Steel
Between 2 P.B. and controller	4- 2" Steel
3	2- 2" PVC
4	2- 2" PVC
5	2- 2" PVC
6	2- 2" PVC
7	2- 2" PVC
8	2- 2" PVC
9	1- 2" PVC
10	(Not used)
11	1- 2" PVC
12	1- 2" PVC

NOTE
This sheet Superseded By Sheet No. 123



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

8/12/76	Installation of Traffic Signal Conduits, Pull Boxes, and Approaches
DATE	REVISION



DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED 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.				

SCHEDULE OF CONDUITS

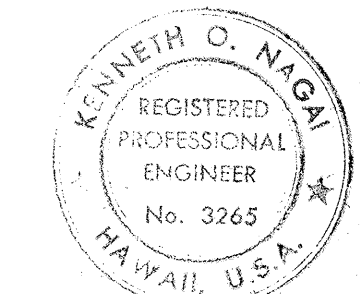
NIC	CONDUITS
	CONDUITS
1	Between power pole and
2	Between P.B. and controller
3	2 - 2" PVC
4	2 - 2" PVC
5	2 - 2" PVC
6	2 - 2" PVC
7	2 - 2" PVC
8	2 - 2" PVC
9	1 - 2" PVC
9A	1 - 2" PVC
10	1 - 2" PVC
11	1 - 2" PVC
12	2 - 2" PVC
13	3 - 2" Steel

8/12/76 Installation of Traffic Signal Conduits, Pull Boxes, and Approaches

DATE REVISION

See sheet 2

NOTE
This Sheet Superseded By Sheet No. 124



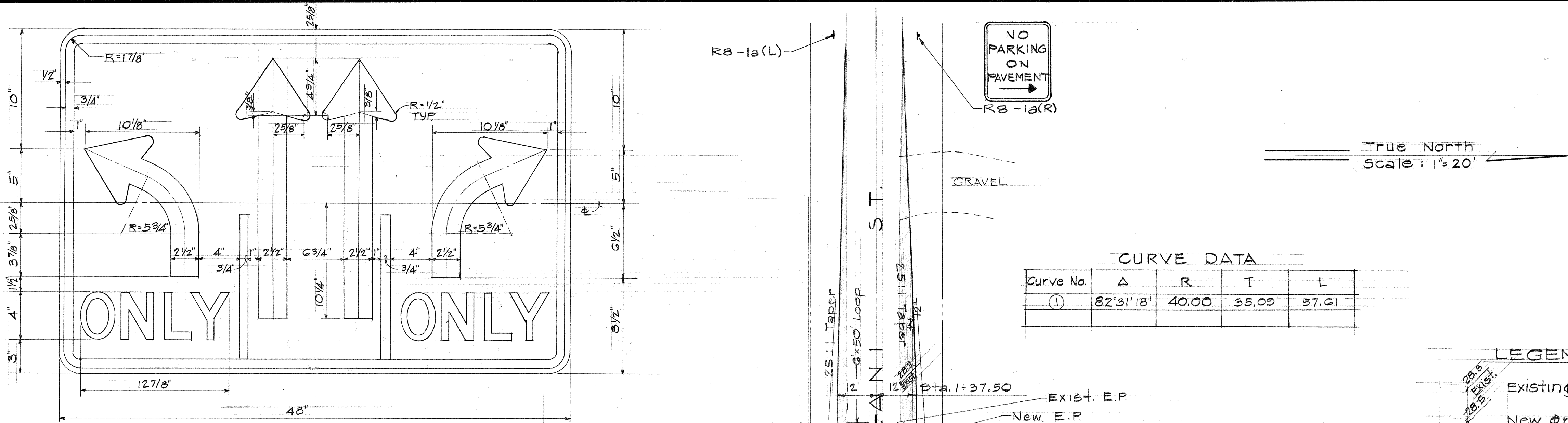
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature: Kanveih O. Ngai

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LEILANI STREET INTERSECTION IMPROVEMENT

KANOELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
FEDERAL AID PROJECT NO. F-RF-011-2(13)
SCALE AS SHOWN

SHEET NO. 4 OF 5 SHEETS



Black (non-refl.) legend and border on white refl. background.

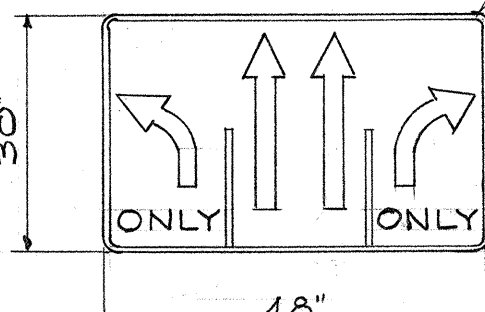
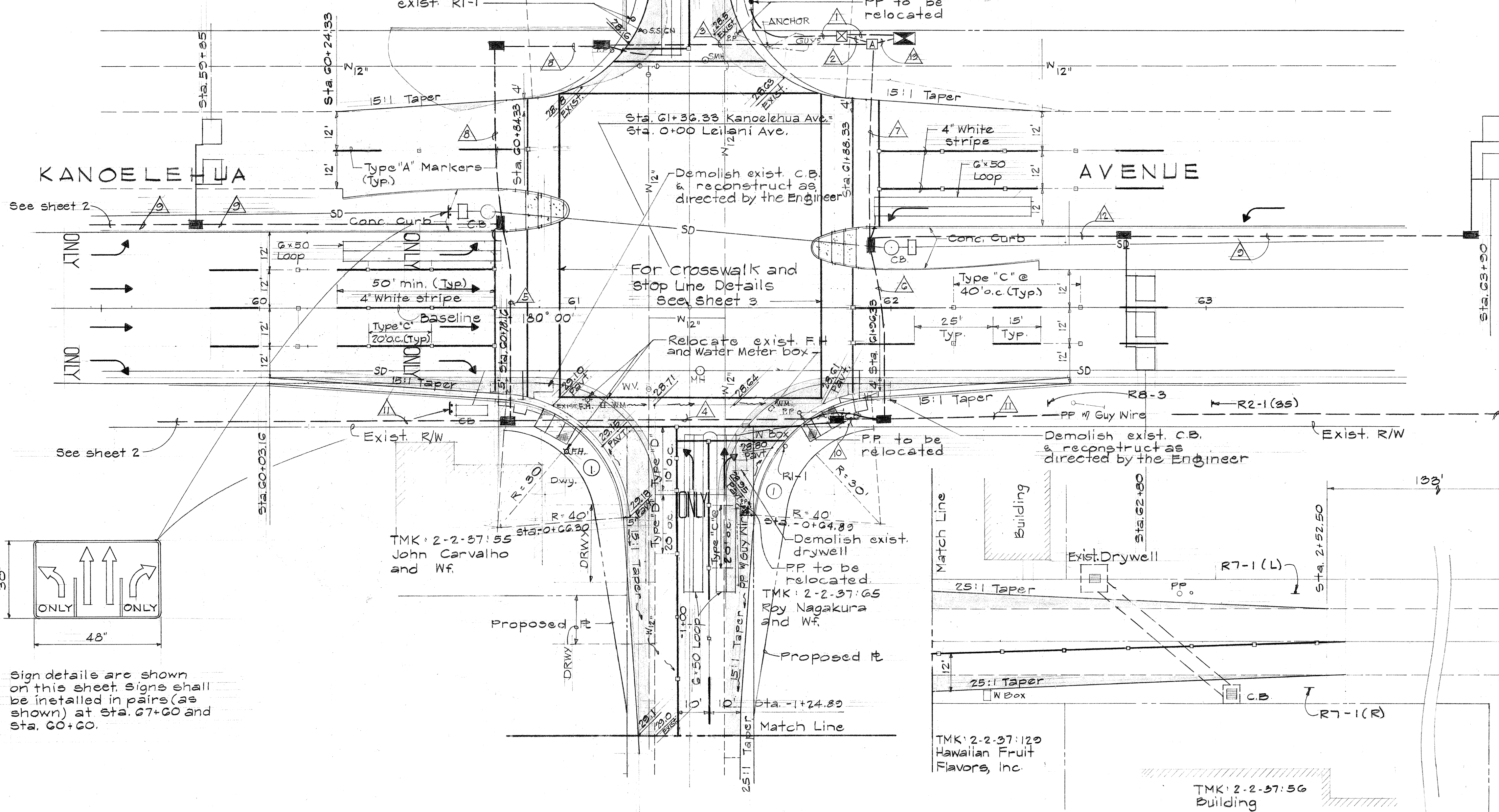
SIGN DETAIL

Not to scale

CURVE DATA				
Curve No.	Δ	R	T	L
①	82°31'18"	40.00	35.00	57.61

LEGEND

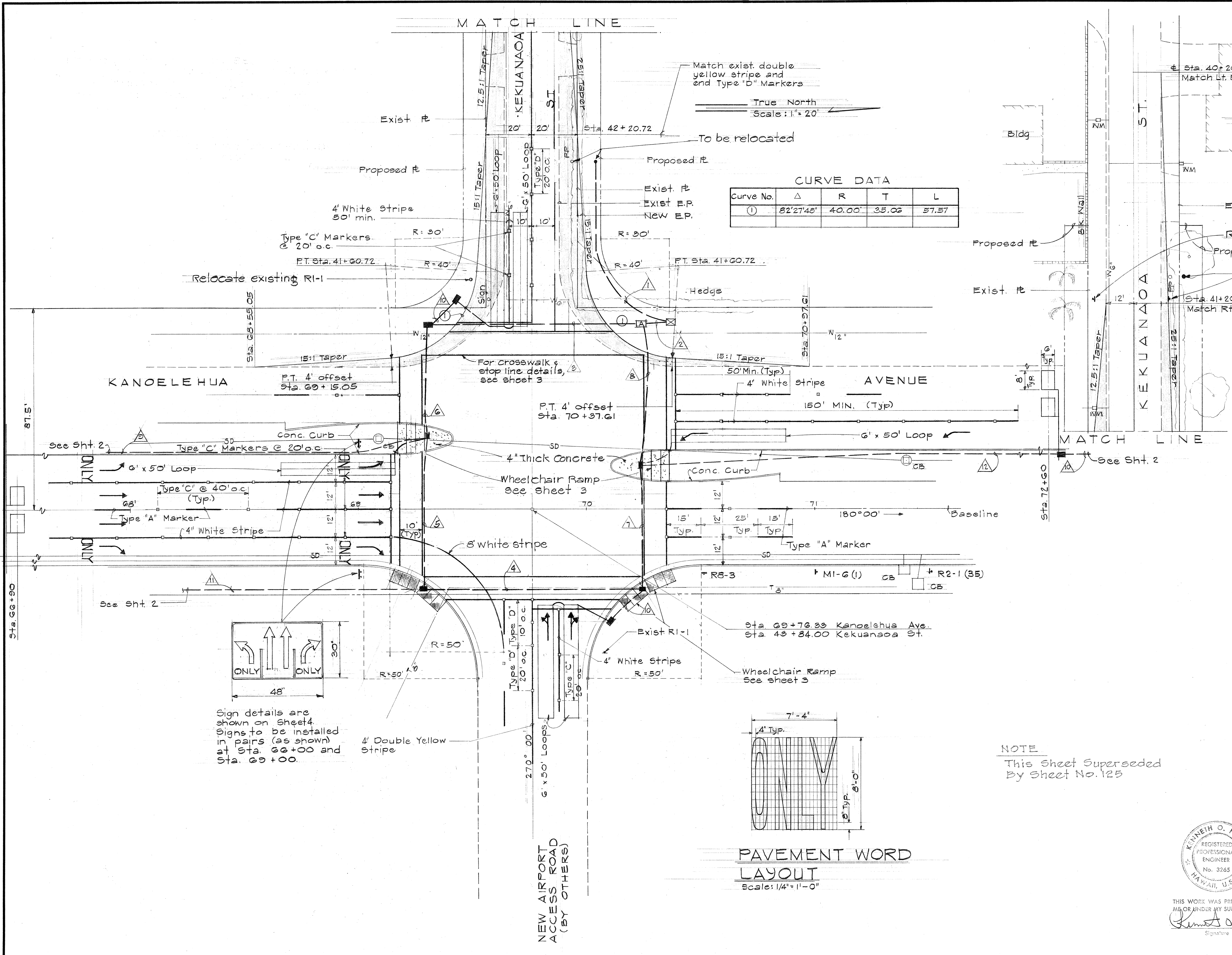
- Existing grade
- New grade
- Direction of surface drain



Sign details are shown on this sheet. Signs shall be installed in pairs (as shown) at Sta. 67+60 and Sta. 60+60.

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				

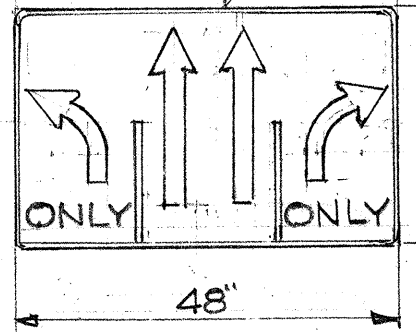


CURVE DATA

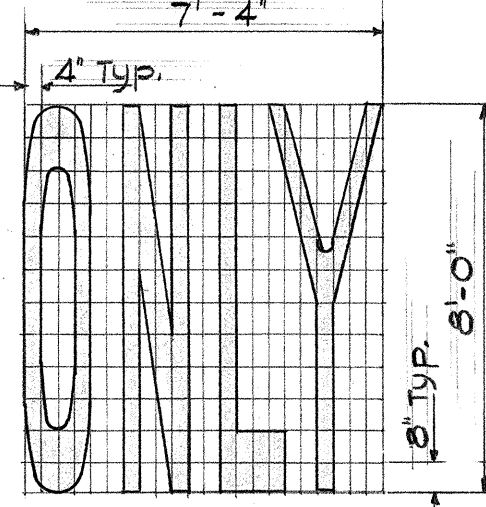
Curve No.	Δ	R	T	L
①	82°27'45"	40.00'	35.06'	57.57'

SCHEDULE OF CONDUITS

Δ	CONDUITS	N/C
Between 1 power pole and 2	1 - 2" Steel	N/C
Between 2 P.B. and controller	4 - 2" Steel	
3	2 - 2" PVC	
4	2 - 2" PVC	
5	2 - 2" PVC	
6	2 - 2" PVC	
7	2 - 2" PVC	
8	2 - 2" PVC	
9	1 - 2" PVC	
10	1 - 2" PVC	
11	1 - 2" PVC	
12	2 - 2" PVC	

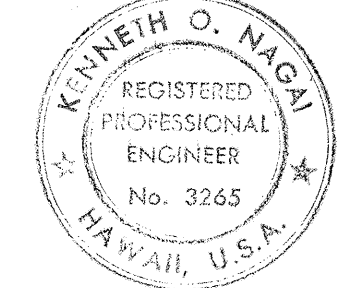


Sign details are shown on Sheet 4. Signs to be installed in pairs (as shown) at Sta. 68+00 and Sta. 69+00.



PAVEMENT WORD LAYOUT
Scale: 1/4" = 1' - 0"

NOTE
This Sheet Superseded By Sheet No. 125



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Kenneth O. Nagai
Signature

8/12/76 Installation of Traffic Signal Conduits, Pull Boxes, and Approaches

DATE REVISION

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KEKUANAOA STREET
INTERSECTION IMPROVEMENT

KANOELEHUA AVE.
MAKALIKA ST. TO KAMEHAMEHA AVE.
FEDERAL AID PROJECT NO. F-RF-011-2(12)
SCALE AS SHOWN

SHEET NO. 5 OF 5 SHEETS

C.O. 41813-5

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