

**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 meter 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.

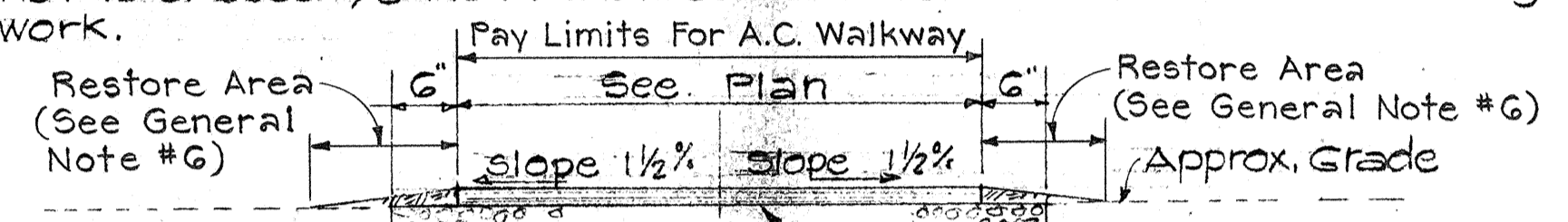
**TRAFFIC NOTES**

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. Location of cross walks shall be approved by the Engineer.
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.				

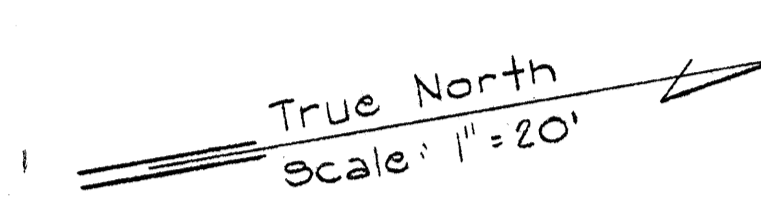
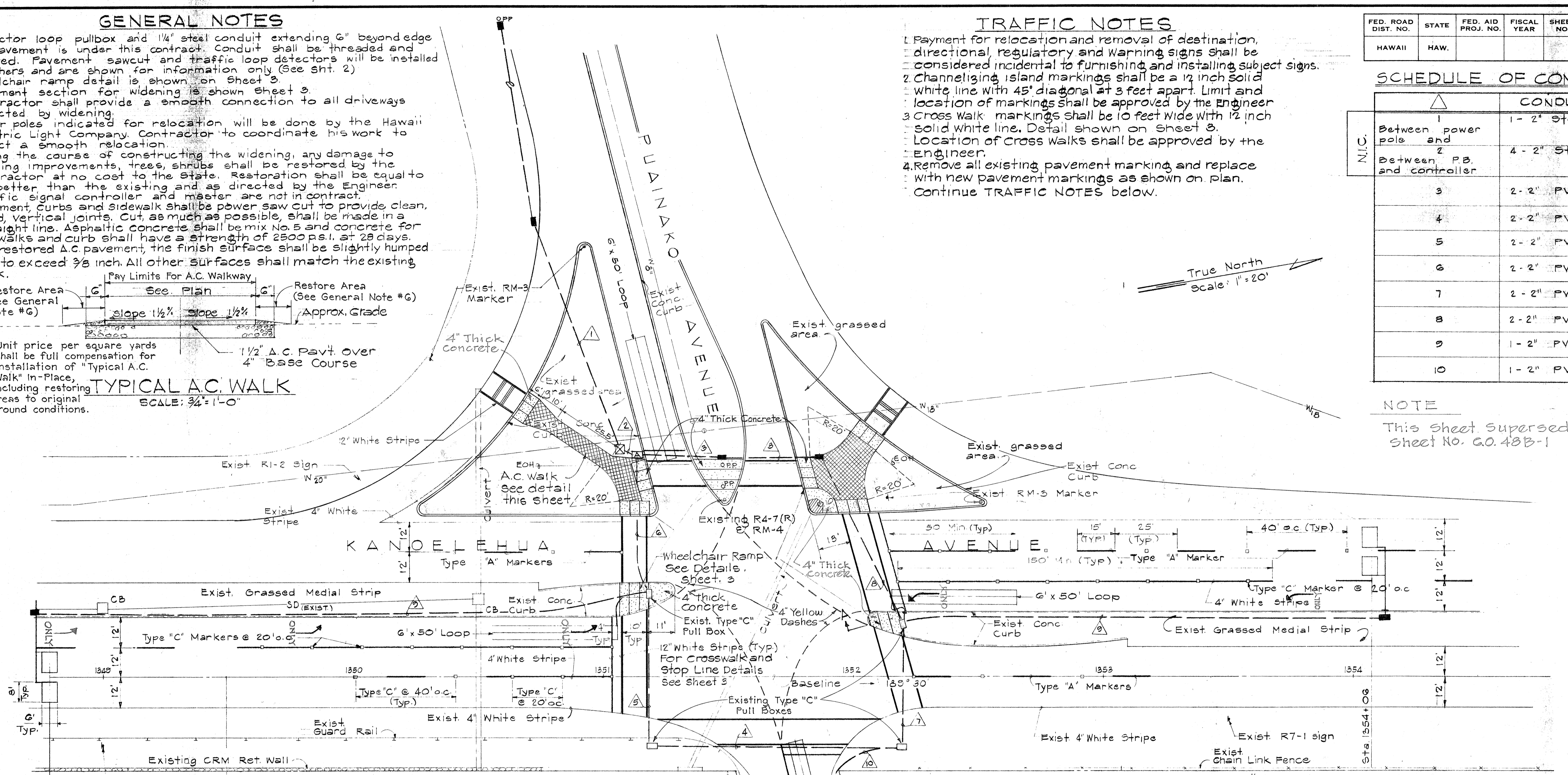
**SCHEDULE OF CONDUITS**

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



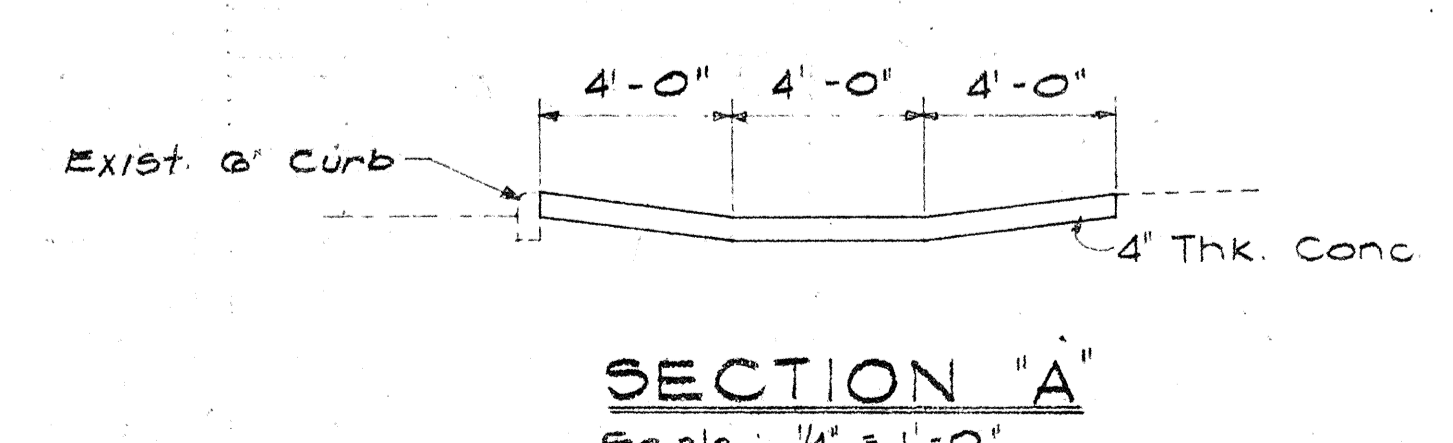
NOTE: Unit price per square yards shall be full compensation for installation of "Typical A.C. Walk" in-place, including restoring areas to original ground conditions.

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



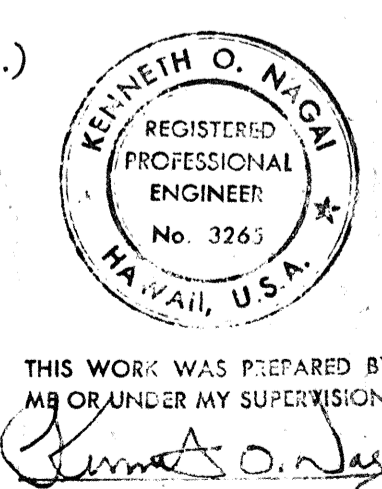
NOTE  
This sheet supersedes sheet No. G.O. 48B-1

- 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.



SEE STRUCTURE PROFILE BOOK #4, PG. 34 FOR THE LOCATION OF THE CONCRETE CURB MEDIAN AREAS.

KANOELEHUA D3	RI-1	New Type 'A' pull box - State Std. Dwg. DT 401
PUAINAKO D3	RI-1	Traffic Signal Controller (N.I.C.)
RI-1	RI-1	Traffic Signal Master (N.I.C.)
RI-1	RI-1	Traffic Loop Detectors (N.I.C.)
RI-1	RI-1	New A.C. Pavement Walk
RI-1	RI-1	New Stripe and Markers
RI-1	RI-1	New A.C. Pavement
RI-1	RI-1	New Electrical Conduits - Size and No. as indicated in Schedule of Conduits. Concrete encased. (See Sht. No. 2, Duct Detail)
RI-1	RI-1	New Type B pullbox - State Standard Dwg. DT 401

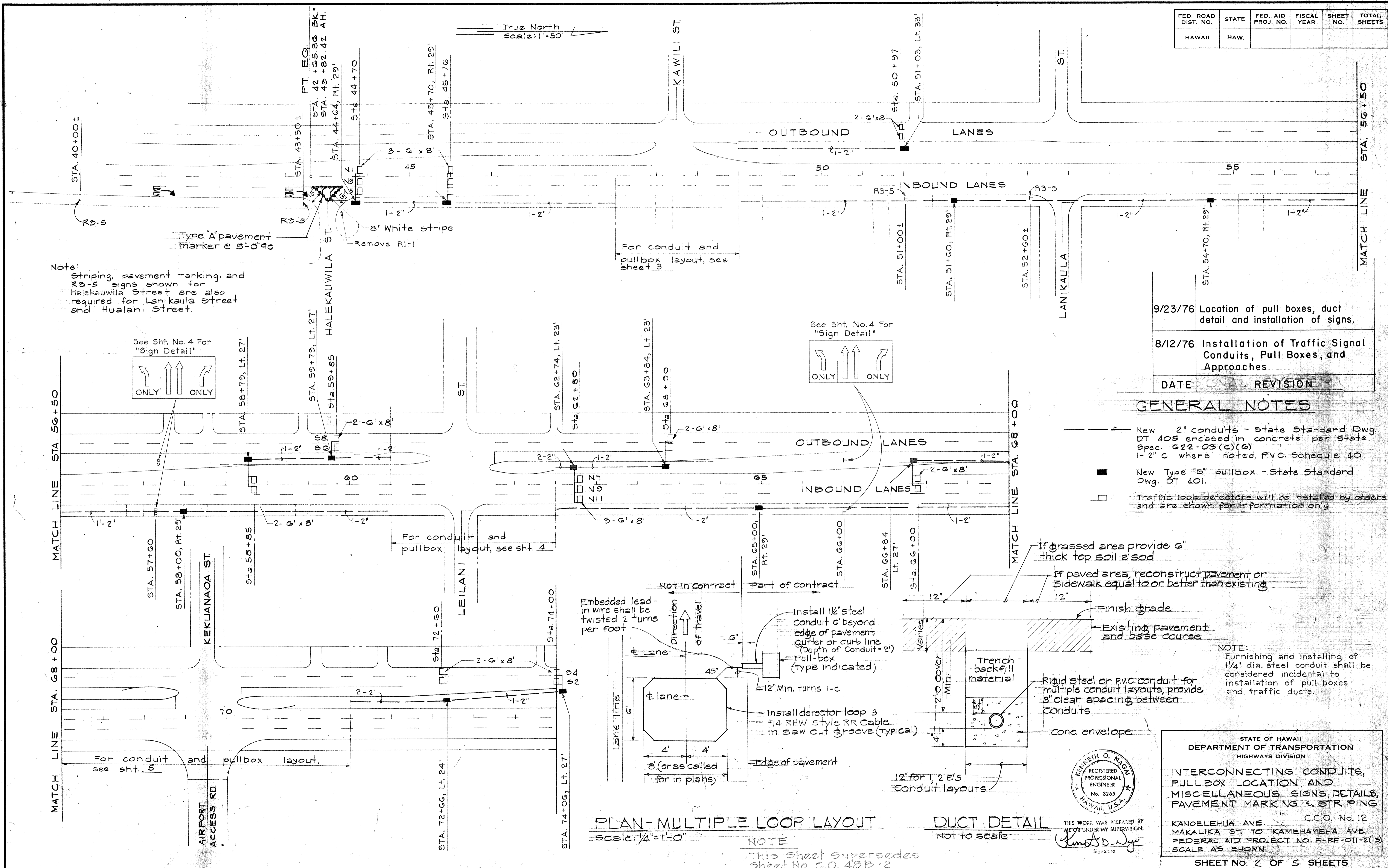


DATE	REVISION
9/23/76	Typical A.C. Walk, and Location Of Pull Boxes
8/12/76	Installation of Traffic Signal Conduits, Pull Boxes, and Approaches

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
PUAINAKO AVE. INTERSECTION IMPROVEMENTS  
"AS BUILT"  
C.C.O. No. 12  
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

DATE: \_\_\_\_\_  
SURVEY PLOTTED BY: \_\_\_\_\_  
DRAWN BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
ORIGINAL PLAN NO. \_\_\_\_\_  
NOTE BOOK NO. \_\_\_\_\_

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

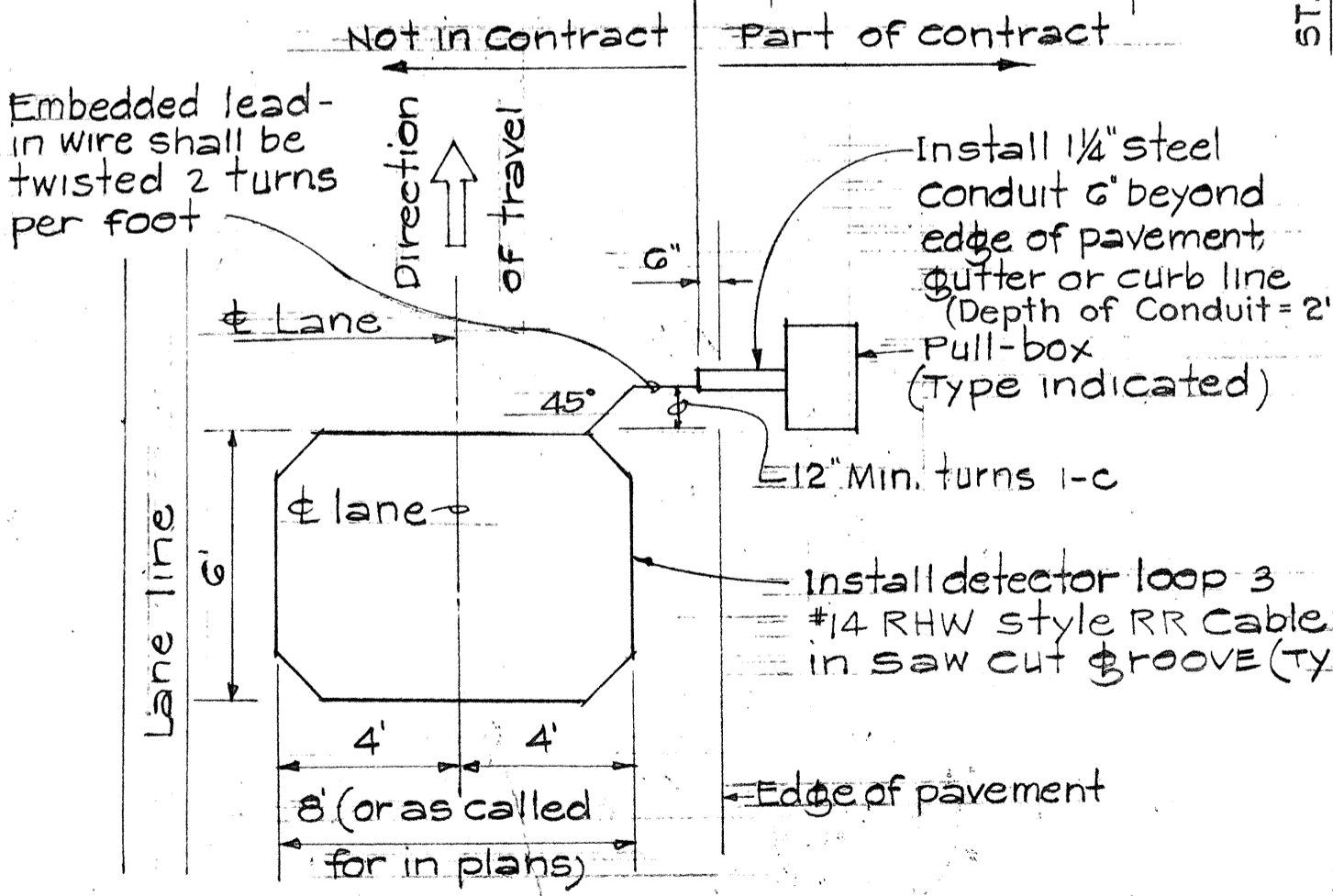


Note:  
 Striping, pavement marking, and R3-5 signs shown for Halekauwila Street are also required for Lanikaula Street and Hualani Street.

DATE	REVISION
9/23/76	Location of pull boxes, duct detail and installation of signs.
8/12/76	Installation of Traffic Signal Conduits, Pull Boxes, and Approaches

**GENERAL NOTES**

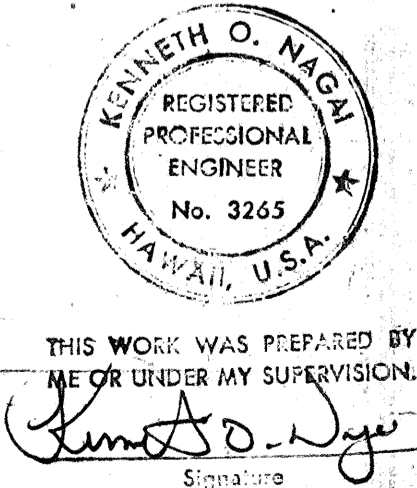
- New 2" conduits - state Standard Dwg. DT 405 encased in concrete per State Spec. G22-03 (C)(G) 1-2" C where noted, P.V.C. Schedule 40.
- New Type "B" pullbox - State Standard Dwg. DT 401.
- Traffic loop detectors will be installed by others and are shown for information only.



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

**DUCT DETAIL**  
 not to scale

NOTE  
 This sheet supersedes sheet No. C.O. 48B-2



STATE OF HAWAII  
 DEPARTMENT OF TRANSPORTATION  
 HIGHWAYS DIVISION

**INTERCONNECTING CONDUITS, PULL BOX LOCATION, AND MISCELLANEOUS SIGNS, DETAILS, PAVEMENT MARKING & STRIPING**

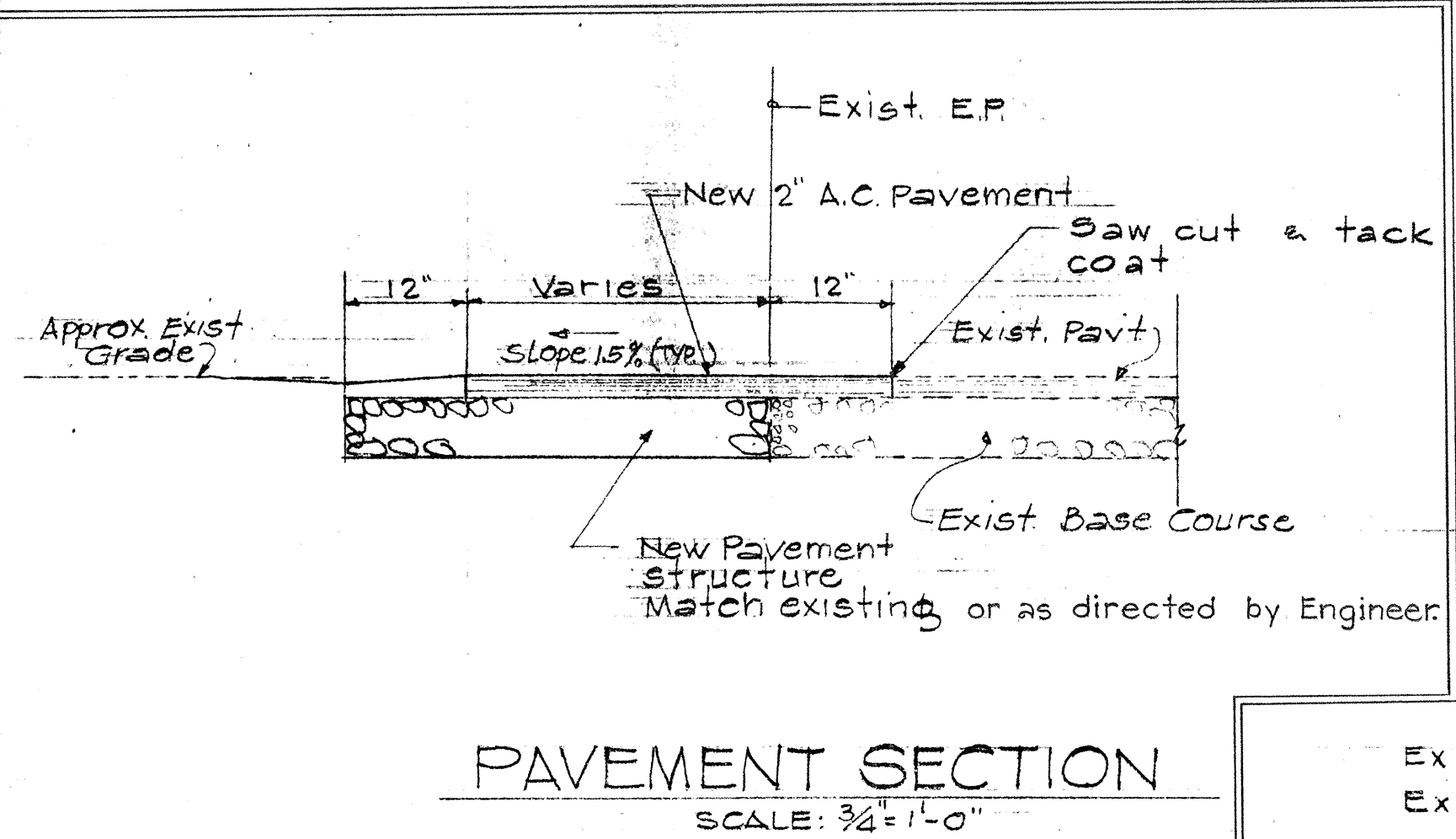
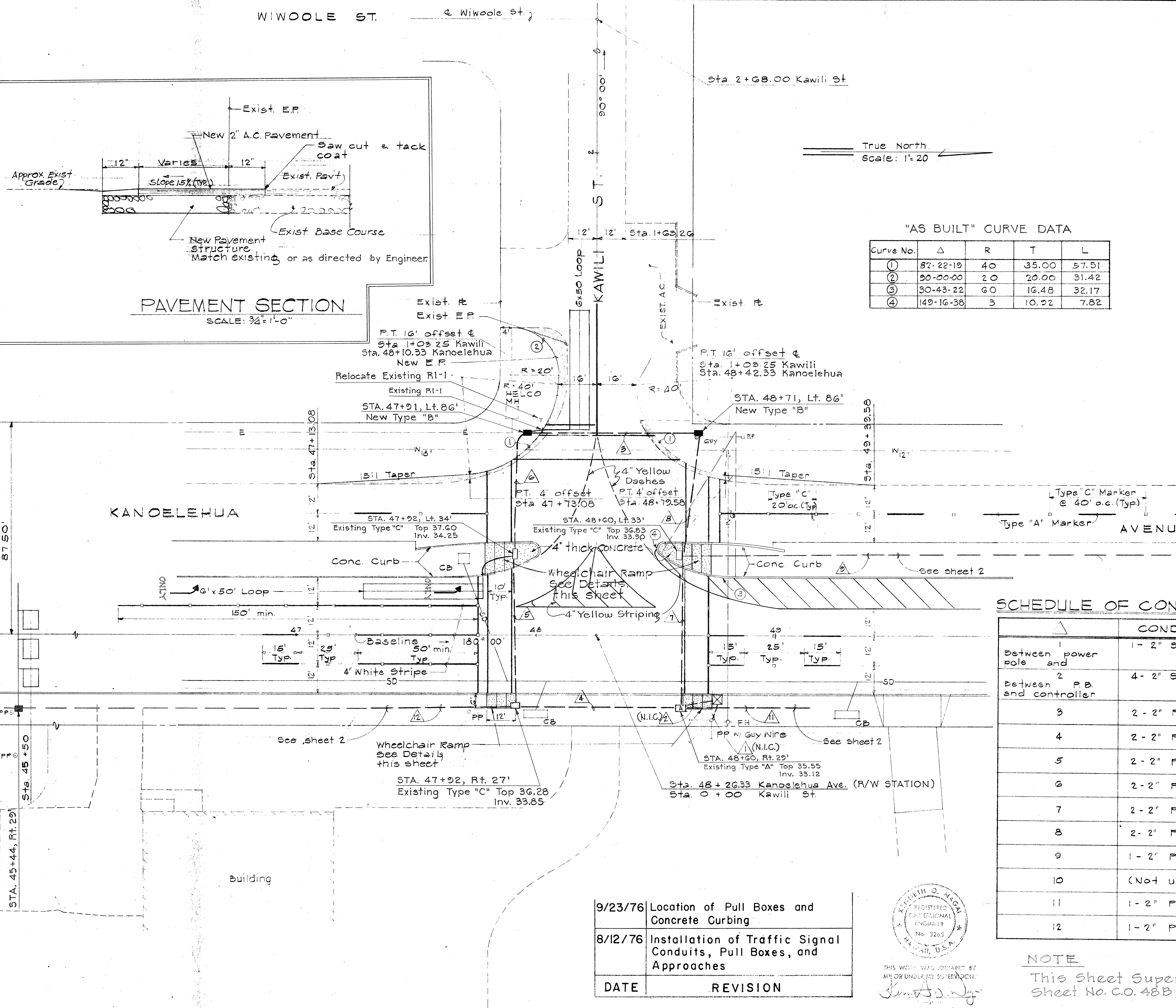
C.C.O. No. 12  
 MAKALIKA ST. TO KAMEHAMEHA AVE.  
 FEDERAL AID PROJECT NO. F-RF-C-11-2(13)  
 SCALE AS SHOWN

SHEET NO. 2 OF 5 SHEETS

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

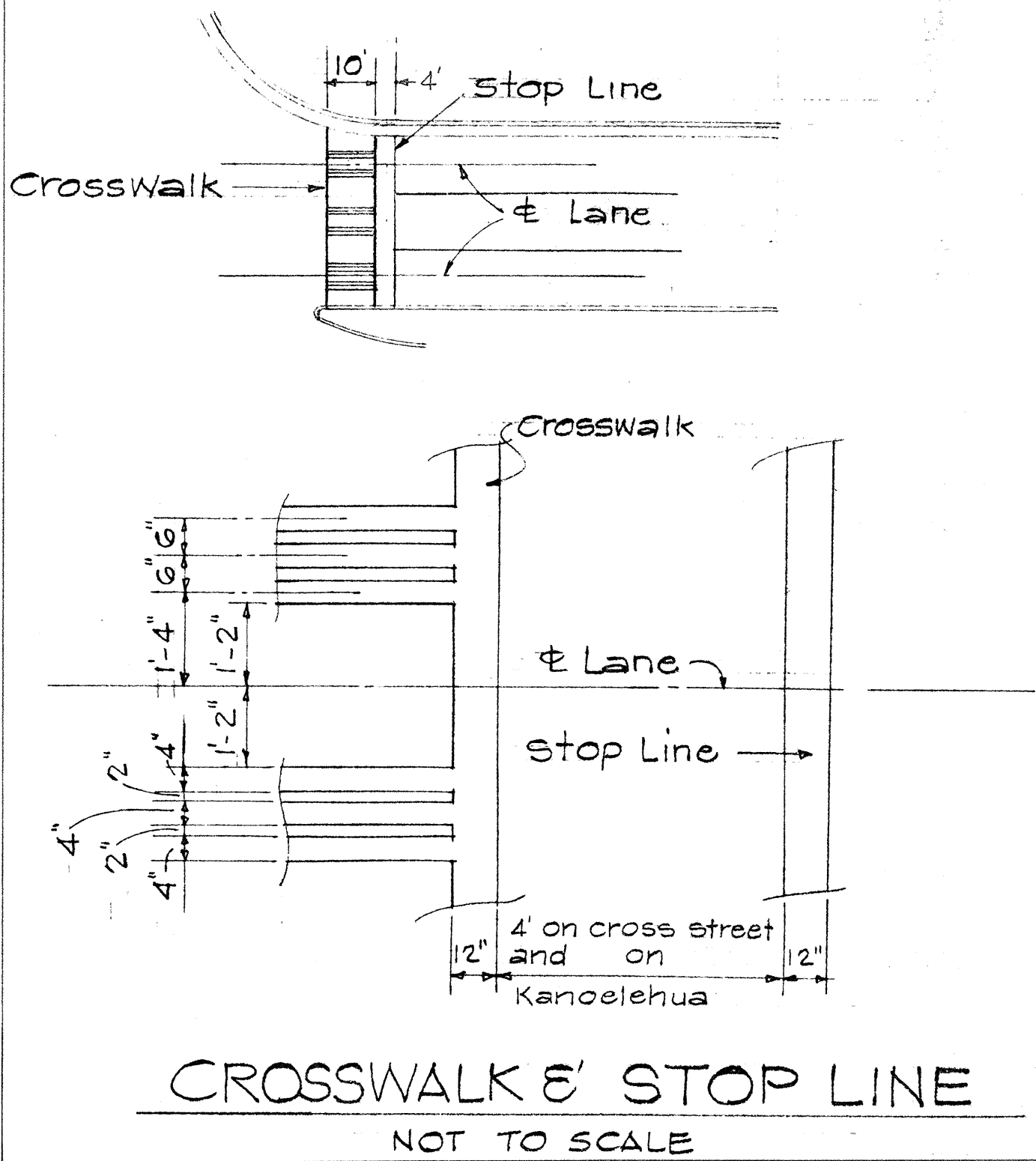
122 C.O. 48B-2

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



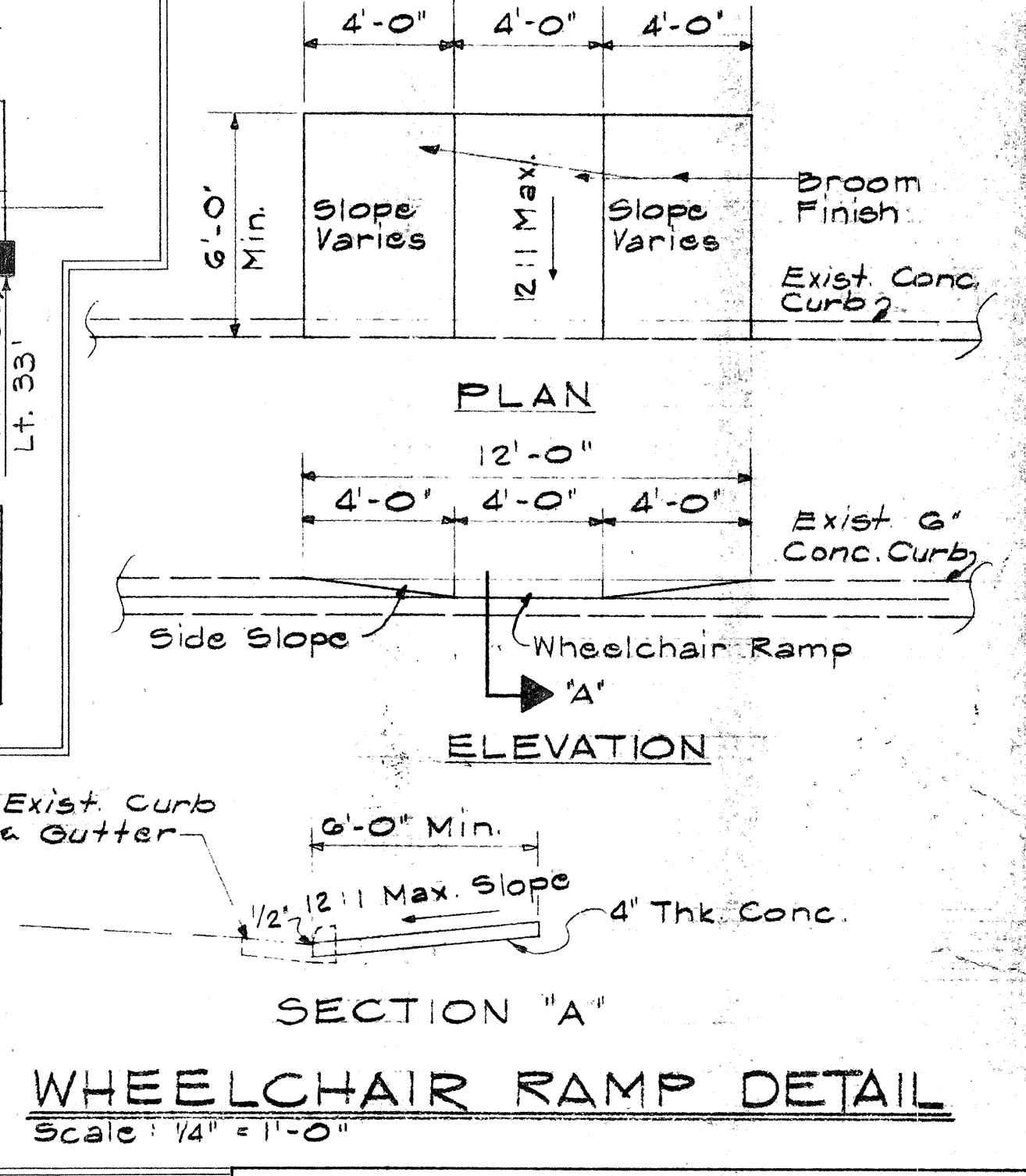
"AS BUILT" CURVE DATA

Curve No.	Δ	R	T	L
①	82-22-19	40	35.00	57.51
②	90-00-00	20	20.00	31.42
③	30-43-22	60	16.48	32.17
④	149-16-38	3	10.92	7.82

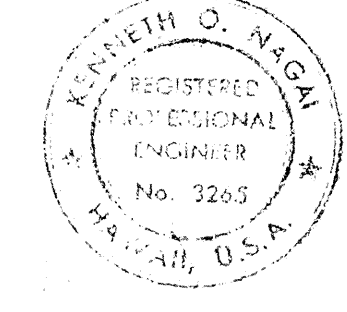


SCHEDULE OF CONDUITS

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



DATE	REVISION
9/23/76	Location of Pull Boxes and Concrete Curbing
8/12/76	Installation of Traffic Signal Conduits, Pull Boxes, and Approaches



NOTE  
This sheet supersedes sheet No. C.O. 48B-3

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**KAWILI STREET INTERSECTION IMPROVEMENTS AND MISCELLANEOUS DETAILS**  
C.C.O. No. 12  
KANOELEHUA AVE.  
MAKALIKA ST. TO KAMEHAMEHA AVE.  
FEDERAL AID PROJECT NO. F-RF-011-2(13)  
SCALE AS SHOWN  
SHEET NO. 3 OF 5 SHEETS

DATE \_\_\_\_\_  
SURVEY PLOTTED BY \_\_\_\_\_  
DRAWN BY \_\_\_\_\_  
DESIGNED BY \_\_\_\_\_  
CHECKED BY \_\_\_\_\_  
NO. \_\_\_\_\_

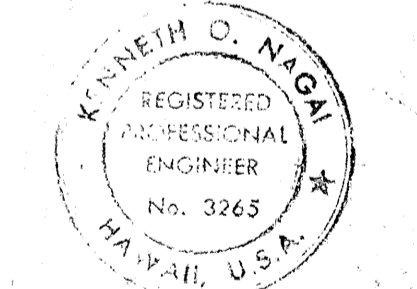
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				

**SCHEDULE OF CONDUITS**

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

DATE	REVISION
9/23/76	Location of Pull Boxes and Duct Lines
8/12/76	Installation of Traffic Signal Conduits, Pull Boxes, and Approaches

NOTE  
This Sheet Supersedes Sheet No. C.O. 48 B-4



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

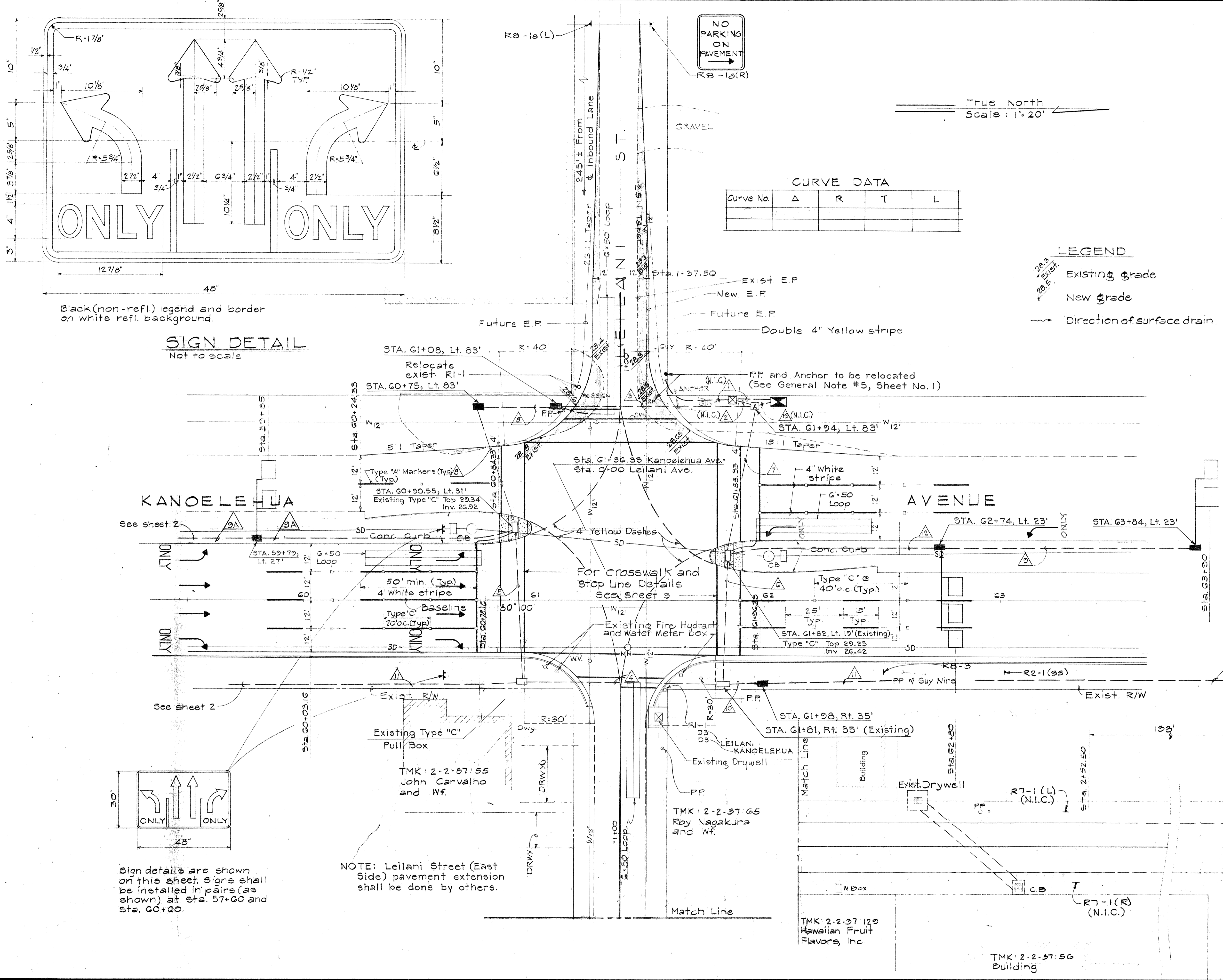
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**LEILANI STREET INTERSECTION IMPROVEMENT**

C.C.O. No. 12

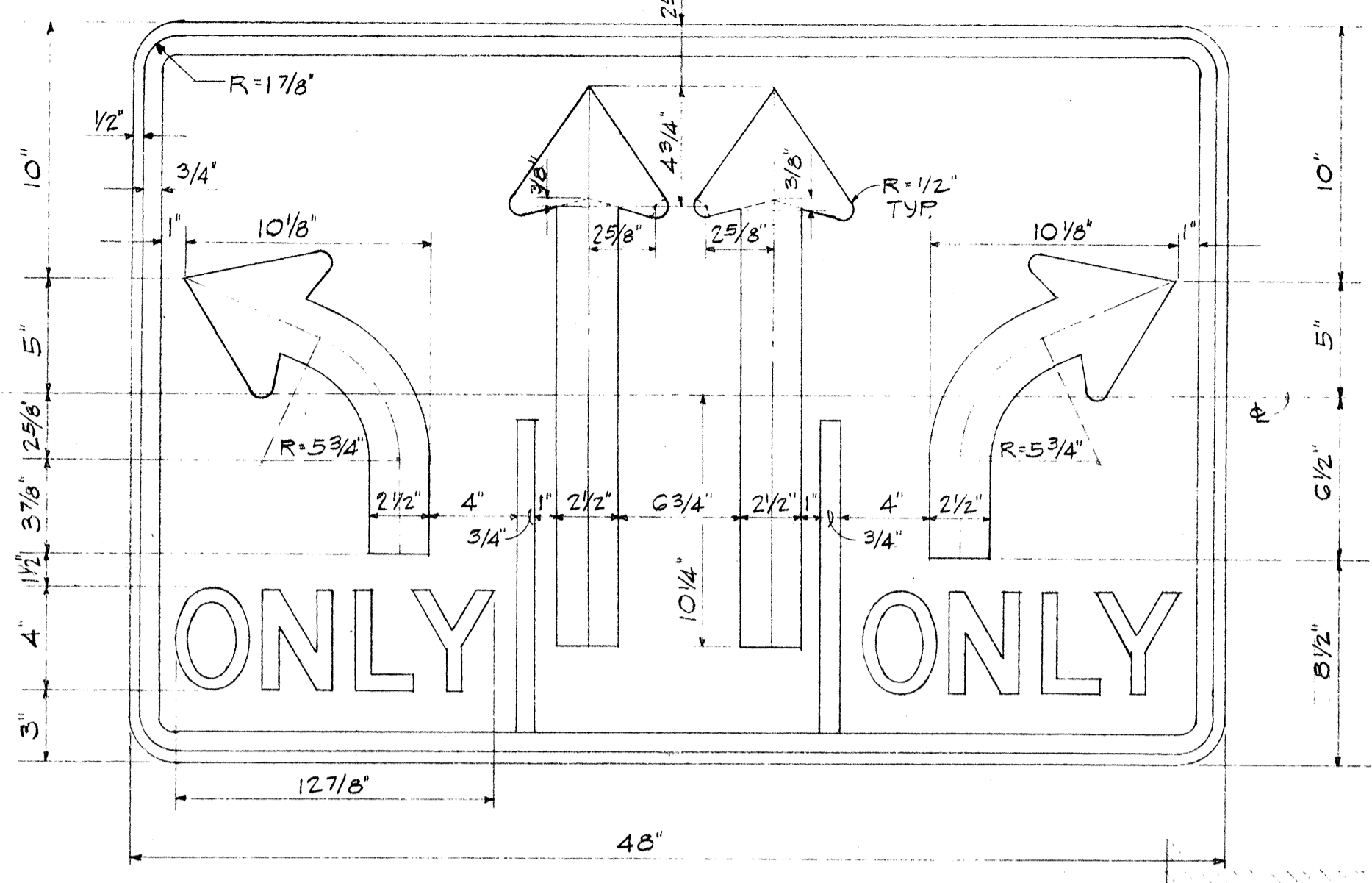
KANOELEHUA AVE.  
MAKALIKA ST. TO KAMEHAMEHA AVE.  
FEDERAL AID PROJECT NO. F-RF-011-2(13)  
SCALE AS SHOWN

SHEET NO. 4 OF 5 SHEETS



**CURVE DATA**

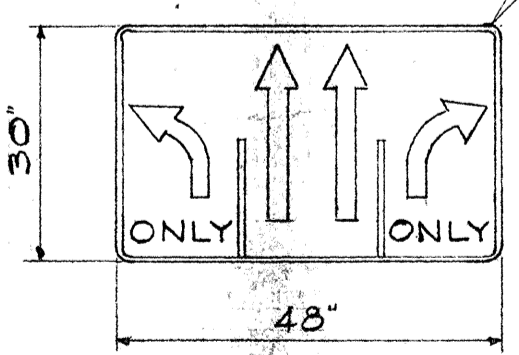
Curve No.	Δ	R	T	L



**SIGN DETAIL**  
Not to scale

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

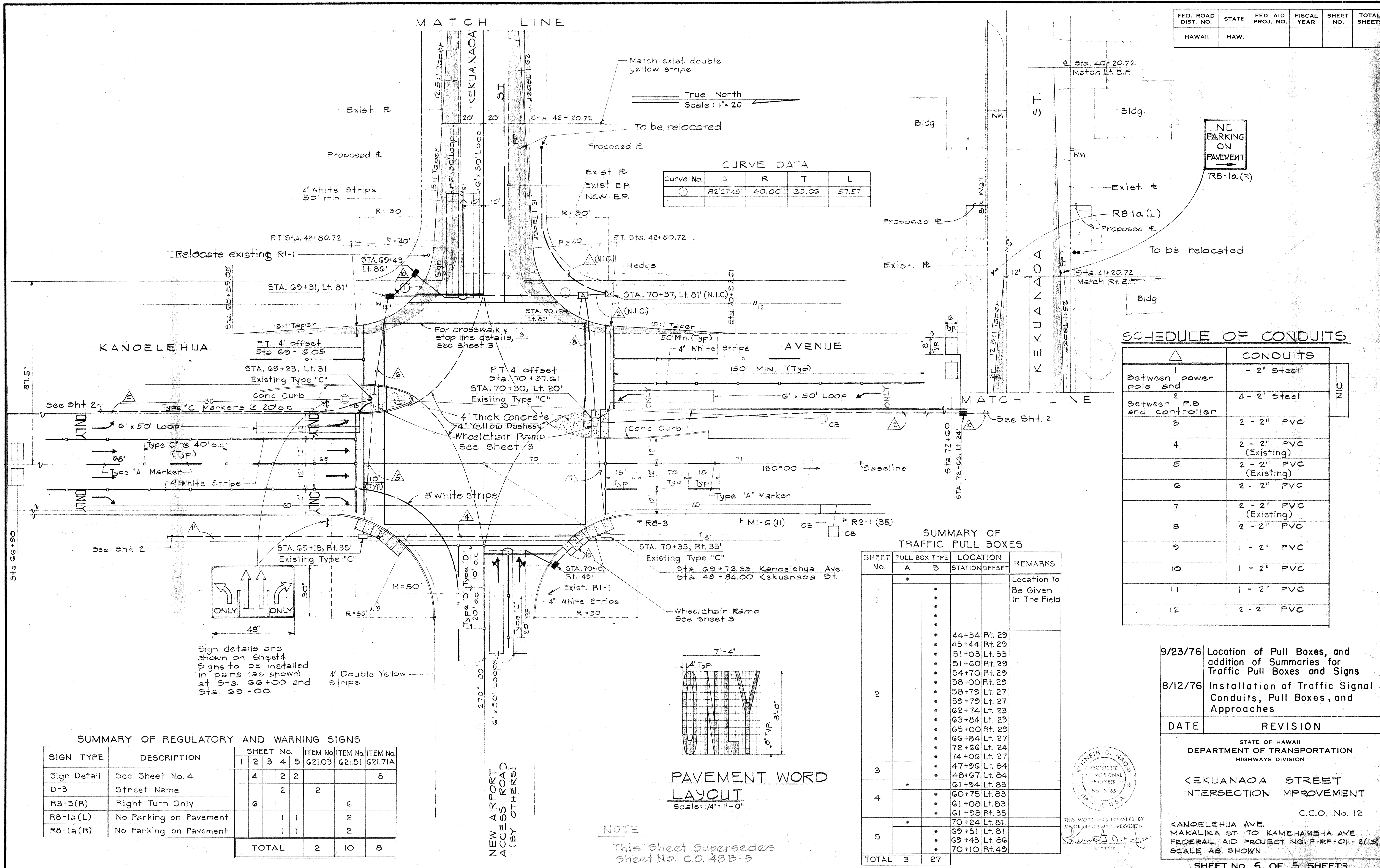
SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
NOTE BOOK	
CHECKED BY	
No.	



Sign details are shown on this sheet. Signs shall be installed in pairs (as shown) at Sta. 57+60 and Sta. 60+60.

NOTE: Leilani Street (East Side) pavement extension shall be done by others.

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°27'48"	40.00'	33.06'	57.57'

**SCHEDULE OF CONDUITS**

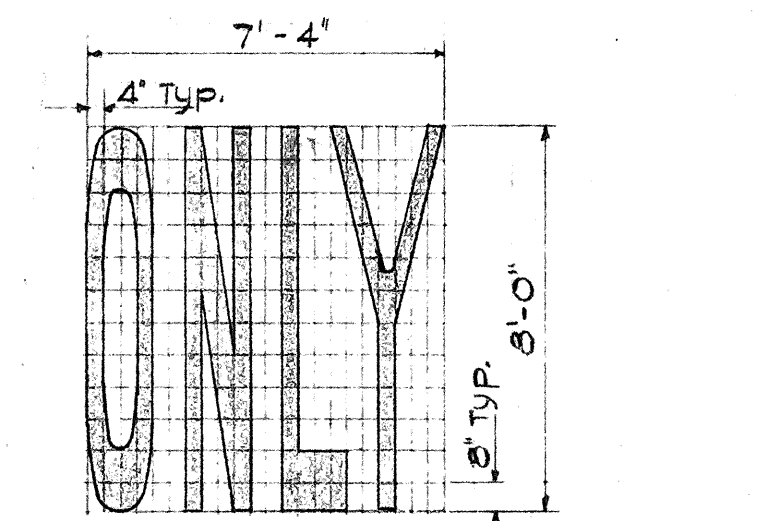
NO.	CONDUITS	NOTE
1	1 - 2" Steel	NIC
2	4 - 2" Steel	
3	2 - 2" PVC	
4	2 - 2" PVC (Existing)	
5	2 - 2" PVC (Existing)	
6	2 - 2" PVC	
7	2 - 2" PVC (Existing)	
8	2 - 2" PVC	
9	1 - 2" PVC	
10	1 - 2" PVC	
11	1 - 2" PVC	
12	2 - 2" PVC	

**SUMMARY OF TRAFFIC PULL BOXES**

SHEET No.	PULL BOX TYPE		LOCATION		REMARKS
	A	B	STATION	OFFSET	
1	•	•			Location To Be Given In The Field
2	•	•	44+34	Rt. 29	
	•	•	45+44	Rt. 29	
	•	•	51+03	Lt. 33	
	•	•	51+60	Rt. 29	
	•	•	54+70	Rt. 29	
	•	•	58+00	Rt. 29	
	•	•	58+79	Lt. 27	
	•	•	59+79	Lt. 27	
	•	•	62+74	Lt. 23	
	•	•	63+84	Lt. 23	
	•	•	65+00	Rt. 29	
	•	•	66+84	Lt. 27	
3	•	•	72+66	Lt. 24	
	•	•	74+06	Lt. 27	
	•	•	47+96	Lt. 84	
	•	•	48+67	Lt. 84	
4	•	•	61+94	Lt. 83	
	•	•	60+75	Lt. 83	
	•	•	61+08	Lt. 83	
5	•	•	61+28	Rt. 35	
	•	•	70+24	Lt. 81	
	•	•	69+31	Lt. 81	
	•	•	69+43	Lt. 86	
TOTAL	3	27			

**SUMMARY OF REGULATORY AND WARNING SIGNS**

SIGN TYPE	DESCRIPTION	SHEET No.					ITEM No. G21.03	ITEM No. G21.51	ITEM No. G21.71A
		1	2	3	4	5			
Sign Detail	See Sheet No. 4	4	2	2				8	
D-3	Street Name		2			2			
R3-5(R)	Right Turn Only	6					6		
R8-1a(L)	No Parking on Pavement			1	1		2		
R8-1a(R)	No Parking on Pavement			1	1		2		
TOTAL			2	10		8			



**NOTE**  
This sheet supersedes sheet No. C.O. 48B-5

9/23/76 Location of Pull Boxes, and addition of Summaries for Traffic Pull Boxes and Signs

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

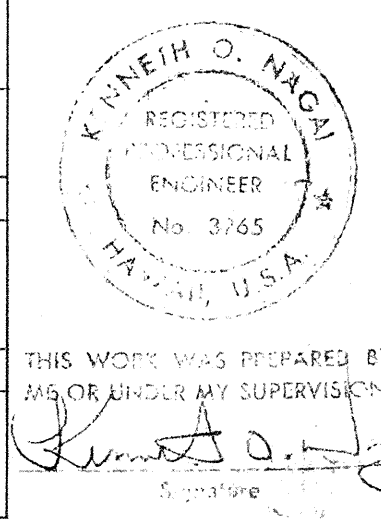
DATE REVISION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**KEKUANAOA STREET INTERSECTION IMPROVEMENT**

C.C.O. No. 12

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



SURVEY PLOTTED BY: DATE: \_\_\_\_\_  
 PLAN TRACED BY: \_\_\_\_\_  
 DESIGNED BY: \_\_\_\_\_  
 NOTE BOOK NO. \_\_\_\_\_  
 QUANTITIES BY: \_\_\_\_\_  
 CHECKED BY: \_\_\_\_\_  
 No. \_\_\_\_\_