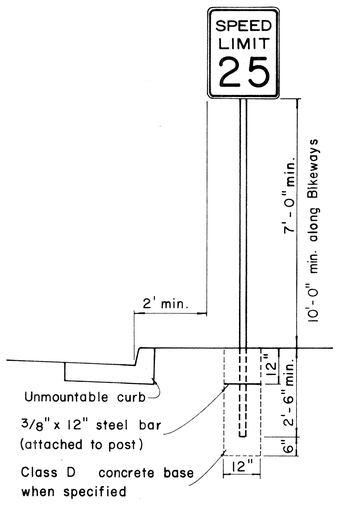
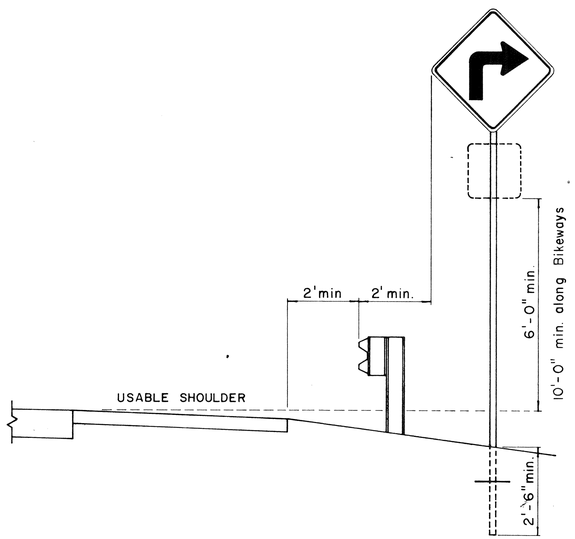
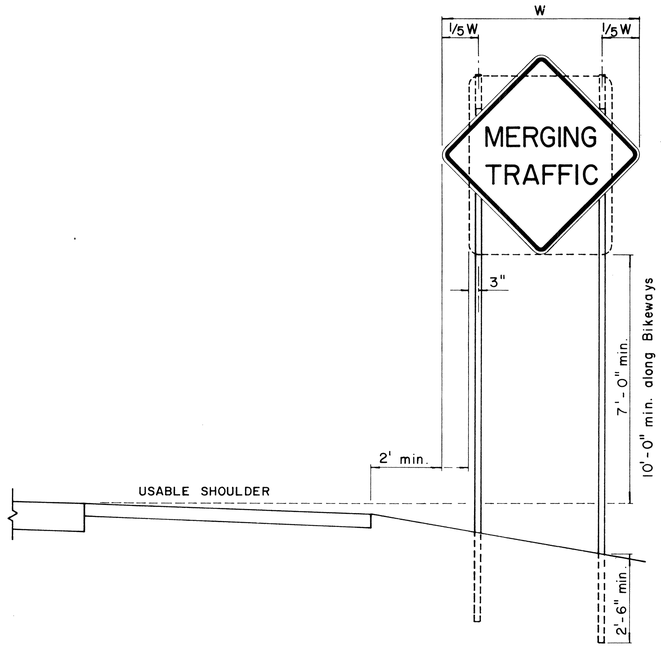
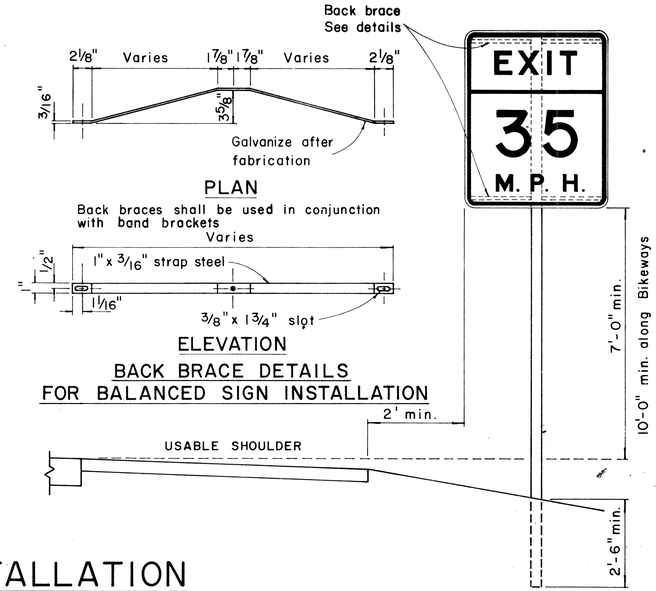

FED. ROAD DIST. NO. | STATE | PROJ. NO. | FISCAL YEAR | SHEET NO. | TOTAL SHEETS
HAWAII | HAW. | 3504-01-76 | 1977 | 5 | 11
Cast-In-Place Concrete Curb and Gutter
Construction Joint
Cast-In-Place Concrete Curb or Lava Rock Curb
2-1/2" ø Dowels 18" Long
Mortar Joints
Cast-In-Place Gutter Type 2A
PLAN
PLAN
Precast Concrete Curb or Lava Rock Curb
2-1/2" ø Dowels 18" Long
SECTION A-A
SECTION B-B
CAST-IN-PLACE CURB & GUTTER
CAST-IN-PLACE GUTTER
CONSTRUCTION JOINT DETAIL
Scale: 1" = 1'-0"
Asphalt Concrete
Finished Grade
CURB, TYPE 6
BITUMINOUS CURB
Scale: 1 1/2" = 1'-0"
3'-0"
1'-6" (See Note)
PLAN
ELEVATION
Curb Grade
NOTE: For curb returns use 1'-6" pre-cast concrete curbs.
SECTION C-C
CURB, TYPE 3D
PRE-CAST CONC. CURB
Scale: 1 1/2" = 1'-0"
A.C. Course
Aggregate Base
Aggregate Subbase
#4 Longitudinal Reinf. Bar
CURB, TYPE 2A
CURB & GUTTER, TYPE 2AG
S.E.
Cont'd. A.C. Course
CURB & GUTTER, TYPE 2AGM
Precast Concrete Curb or Lava Rock Curb
GUTTER, TYPE 2A
CURB, TYPE 2D
CURB & GUTTER, TYPE 2DG
GUTTER, TYPE 2G
CAST-IN-PLACE CONCRETE CURBS AND/OR GUTTERS
Scale: 1" = 1'-0"
APPROVAL RECOMMENDED:
HIGHWAY DESIGN ENGINEER
12-4-69
DATE
APPROVED:
ASSISTANT CHIEF, ENGINEERING
12-10-69
DATE
NO. | REVISION | APPROVED BY | DATE
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION
STANDARD DETAILS
TYPICAL DETAILS OF CURB AND/OR GUTTERS
Scale: As Shown
SHEET No. 1 OF 7 SHEETS
DD 609.1
ORIGINAL PLAN
NOTE BOOK
No.
SURVEY PLOTTED BY
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY
DATE

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	350A-01-76	1977	6	11

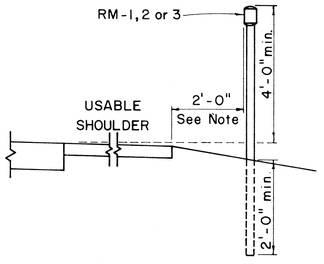




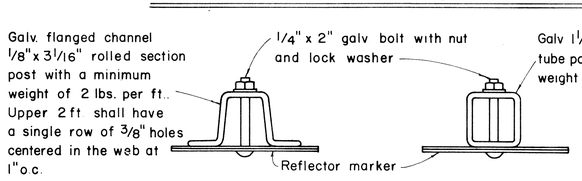




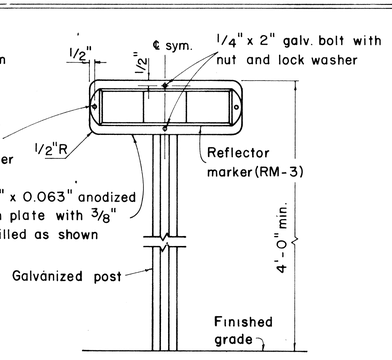
HEIGHT AND LATERAL LOCATION OF SIGNS - TYPICAL INSTALLATION



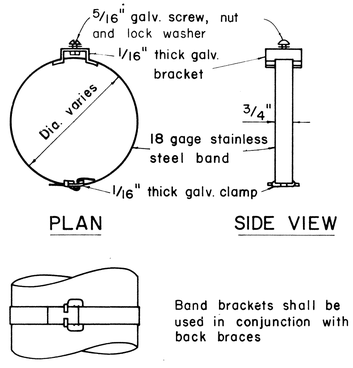
ROAD DELINEATOR



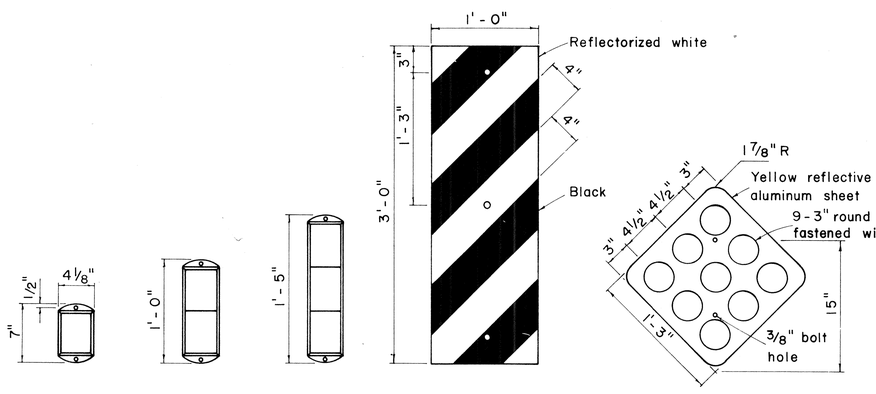
TYPICAL SECTION OF ROAD DELINEATOR



TYPICAL DETAIL
HORIZONTAL REFLECTOR MARKER
RM-3H



TYPICAL BAND BRACKET FOR
MOUNTING TRAFFIC SIGNS



REFLECTOR MARKERS

GENERAL NOTES:

1. Sign posts shall be 2" galv. standard pipe or 2" x 2" galv. sq. tube post.
2. Signs 48" and wider or larger than 10 sq. ft. in area shall be mounted on two 2" galv. standard pipe or two 2" x 2" galv. sq. tube post.
3. Signs shall be attached to post with 5/16" galv. bolts with nuts and 7/8" x 0.06 stainless steel washers with neoprene rubber gasket.
4. Sign posts shall extend 3 1/2" above sign where required for City and County street name signs.
5. Reflector markers RM-1, 2, 3 shall be glass sphere reflector markers with 4" x 5" reflector units (as shown) or plastic prismatic reflector markers with 3" diameter reflector units.
6. Clearance markers (RM-3, RM-4) shall be installed with the edge of the marker in line with the inner edge of the obstruction.
7. (R) or (L) indicates right or left and shall be as shown on the plans.

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 12/23/69 DATE

APPROVED:
[signature] — ASSISTANT CHIEF, ENGINEERING — 12-30-69 DATE

NO.	REVISION	APPROVED BY	DATE
1.	Revised Details.	H.C.	9-14-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS

MISCELLANEOUS SIGN DETAILS

Not to scale — March, 1968

SHEET No. 2 OF 7 SHEETS DT 100

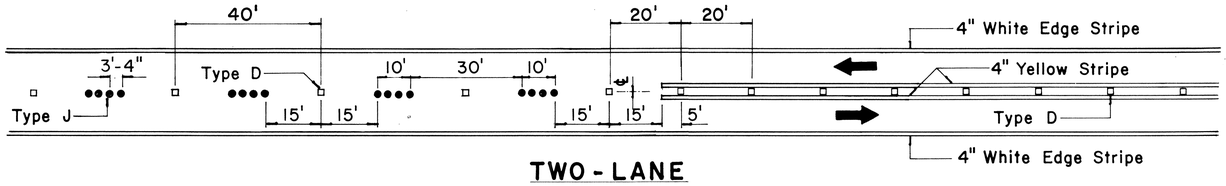
ORIGINAL PLAN | NOTE BOOK | SURVEY PLOTTED BY | DRAWN BY | TRACED BY | DESIGNED BY | QUANTITIES BY | CHECKED BY | DATE | No.

PRINTED ON NO. 1000H CLEARPRINT

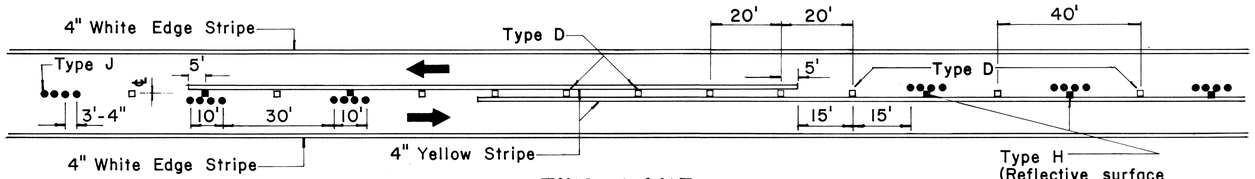
6

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	050A-01-76	1977	7	11

TWO - LANE

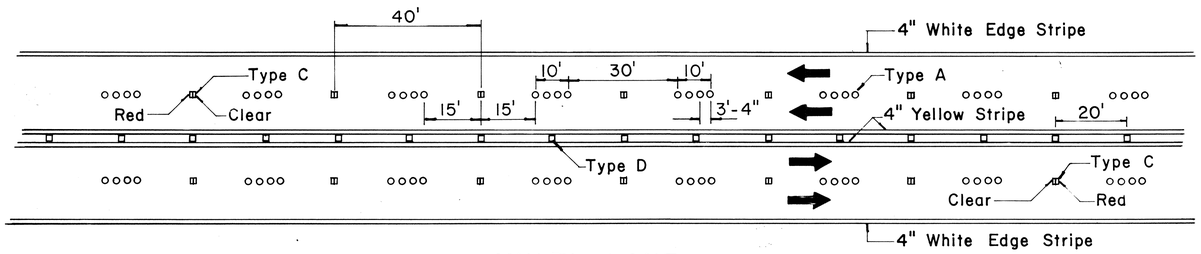


TWO - LANE
PASSING PERMITTED AND PASSING PROHIBITED



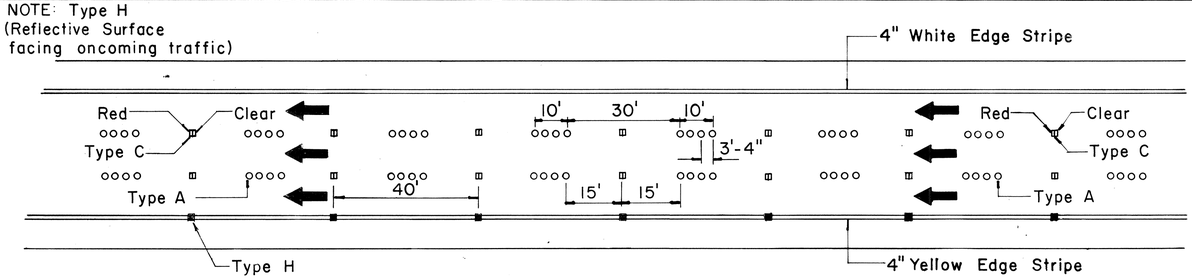
TWO - LANE
PASSING PROHIBITED ZONES

MULTI - LANE

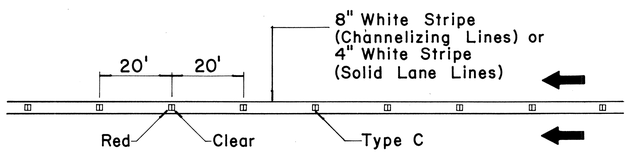


MULTI - LANE
LANE LINES AND CENTER LINE

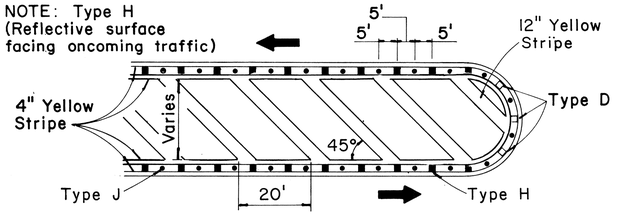
DIVIDED HIGHWAY AND FREEWAY



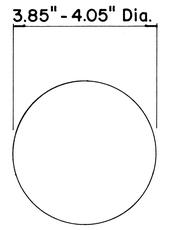
MISCELLANEOUS



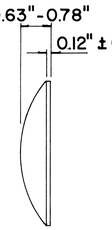
CHANNELIZING LINES OR SOLID LANE LINES

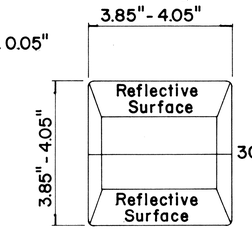


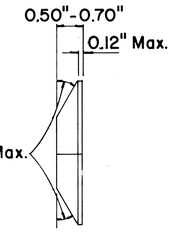
MEDIAN NOSE DELINEATION



TYPE A
NON - REFLECTIVE WHITE MARKER

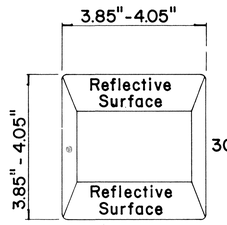


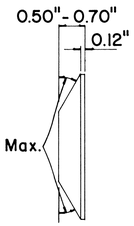




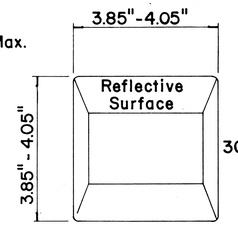
TYPE C
RED - CLEAR REFLECTIVE MARKER

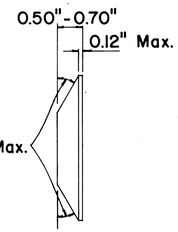
TYPE J
NON - REFLECTIVE YELLOW MARKER





TYPE D
TWO - WAY YELLOW REFLECTIVE MARKER





TYPE H
ONE - WAY YELLOW REFLECTIVE MARKER

GENERAL NOTES

1. Pavement marking and striping shall conform to the latest "Manual on Uniform Traffic Control Devices for Streets and Highways," and as amended.

2. Layout and installation of pavement marking and striping shall be done by the Contractor. The Contractor shall check the layouts with the Engineer prior to performing work.

LEGEND

- ○ Type A
- ⊞ Type C
- □ Type D
- ■ Type H
- ● Type J

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 11/18/71 DATE

APPROVED:
Hubert Yaterish — ASSISTANT CHIEF, ENGINEERING — 11/18/71 DATE

No.	REVISION	APPROVED BY	DATE
1	Add reflector marker in each line gap.	H.Y.	10-21-72
2	Revised General Notes.	HY	10-21-72
3	Change 4" white edge stripe to 4" solid yellow edge stripe to left edge of a travel path and Add Type H Reflector Marker.	H.Y.	5-22-74
4	Revised details, General Notes & Title Box.	HY.	7-18-77

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

STANDARD DETAILS
RAISED PAVEMENT MARKERS AND STRIPING

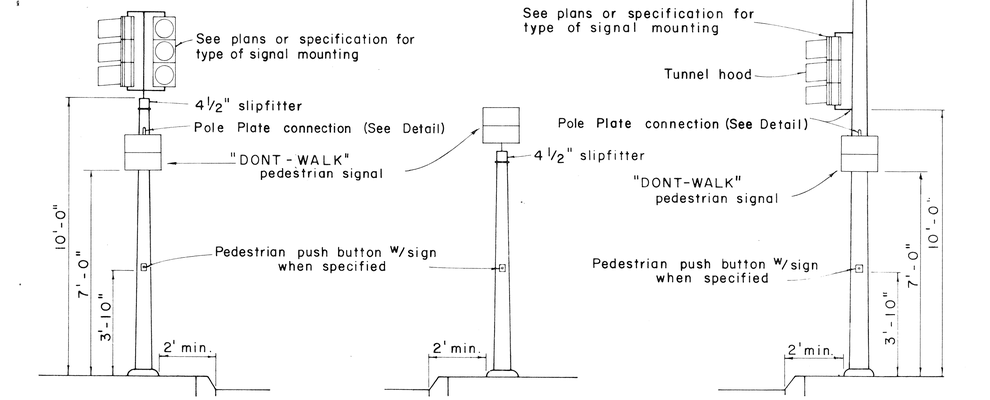
Not to Scale — October 1971

SHEET No. 5 OF 7 SHEETS DT 300

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

K&E IMPERIAL LA 3207

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	3802-01-76	1977	8	11

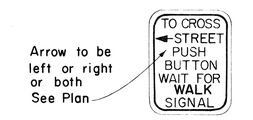


ON 10 - FOOT STANDARD

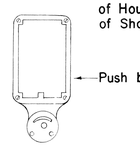
ON 8 - FOOT STANDARD WHEN SPECIFIED

ON MAST ARM OR SPAN WIRE STANDARD

TYPICAL EQUIPMENT MOUNTINGS

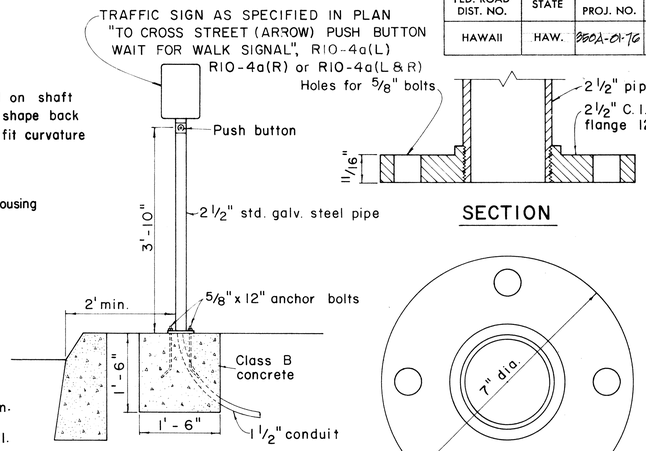


R10-4a(L) 5" x 7"

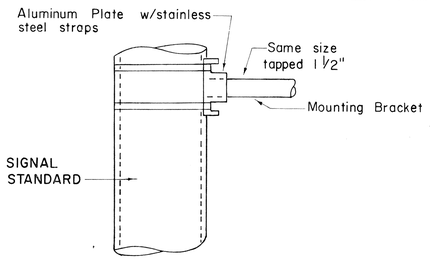


PEDESTRIAN PUSH BUTTON

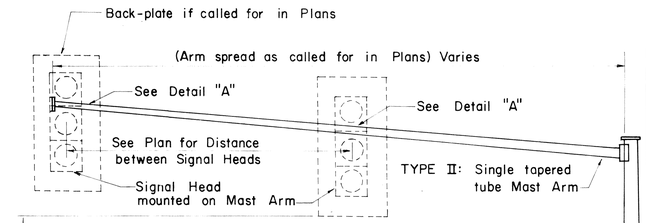
NOTE:
1. Conduits shall protrude 2" max. above finished surface of foundation.
2. Conduits shall slope away from pole foundation.
3. Post and base shall be painted with one coat of approved weather proof dark green enamel.



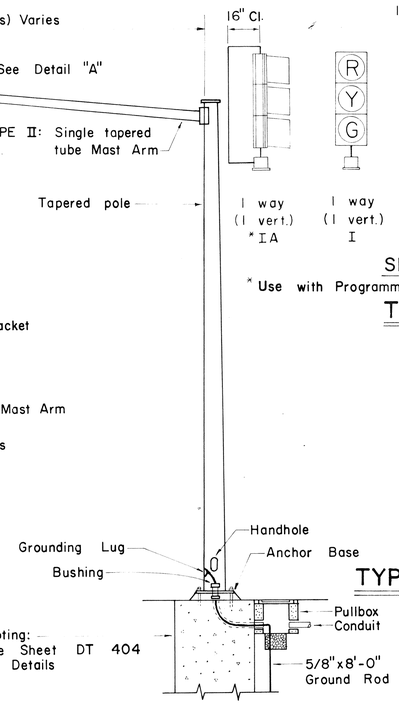
PEDESTRIAN PUSH BUTTON POST AND FOOTING

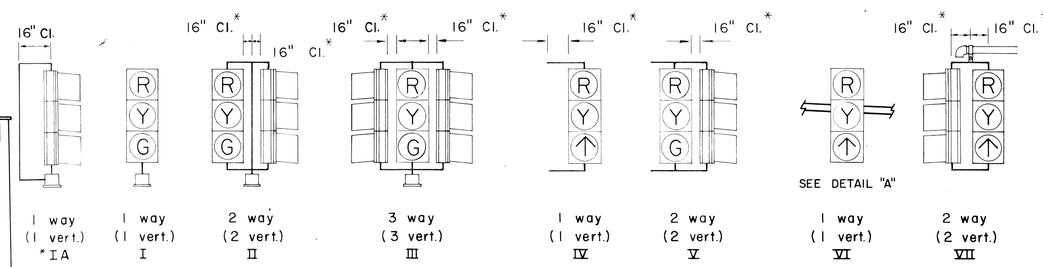


DETAIL OF POLE PLATE CONNECTIONS



DETAIL "A"





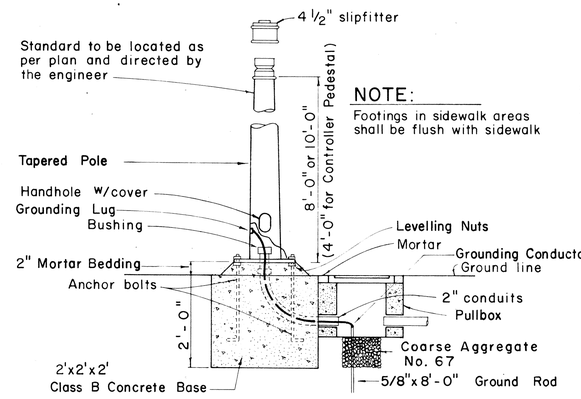
SLIPFITTER MOUNTINGS — BRACKET MOUNTINGS — MASTARM MOUNTINGS

* Use with Programmed Visibility Signal

TYPICAL VEHICULAR AND PEDESTRIAN SIGNAL MOUNTINGS

1 - Vertical 3 - Section | 1 - Vertical 3 - Section | 1 - Dont Walk Walk | 1 - Vertical 2 - Section

TYPICAL SIGNAL ARRANGEMENTS



TYPE I SIGNAL STANDARD OR CONTROLLER PEDESTAL AND FOOTING

TYPE II MAST ARM AND STANDARD

NO.	REVISION	APPROVED BY	DATE
1	Revise code nos. for Pedestrian Push Button signs.	H.T.	3/23/72
2	Revise Details of Traffic and Pedestrian Signals, Standards and Pedestrian Push Button and Signs.	H.T.	3/5/76
3	Revise signal indications.	H.T.	9/22/76

APPROVAL RECOMMENDED:

Eiichi Tanaka — TRAFFIC ENGINEER — 12/29/69 DATE

ASSISTANT CHIEF, ENGINEERING — 12/30/69 DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

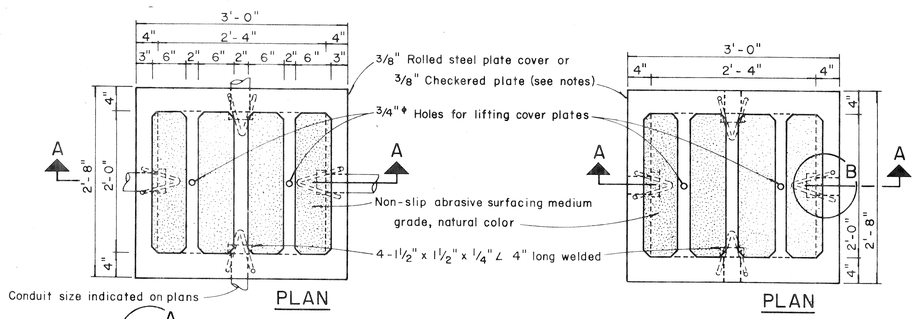
TRAFFIC SIGNAL SYSTEM

MISCELLANEOUS DETAILS

Not to Scale

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	050A-01-76	1077	0	11

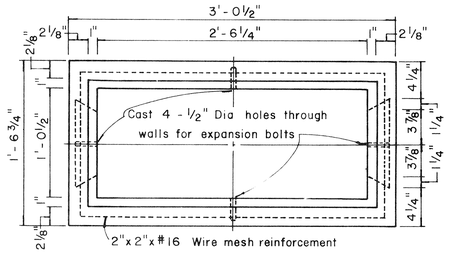


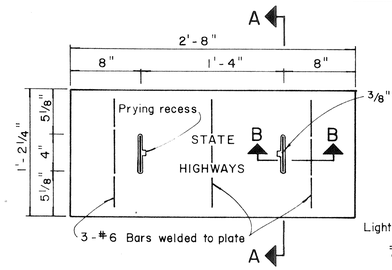
TYPE "A" PULLBOX CAST-IN-PLACE

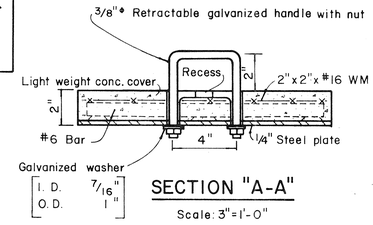
Scale: 1" = 1'-0"

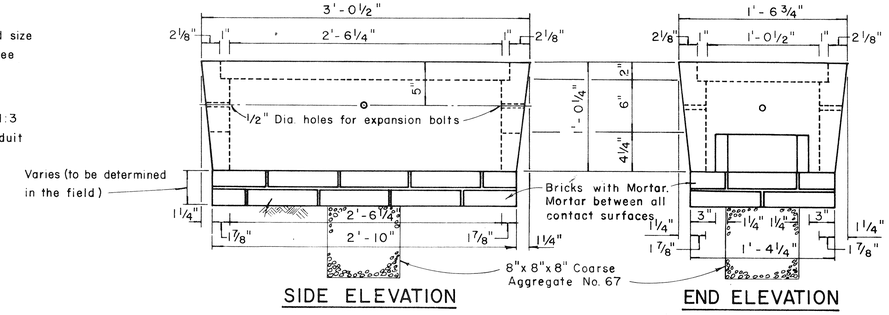
TYPE "A" PULLBOX PRECAST

Scale: 1" = 1'-0"



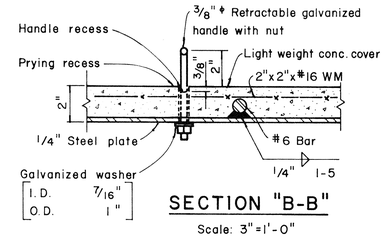


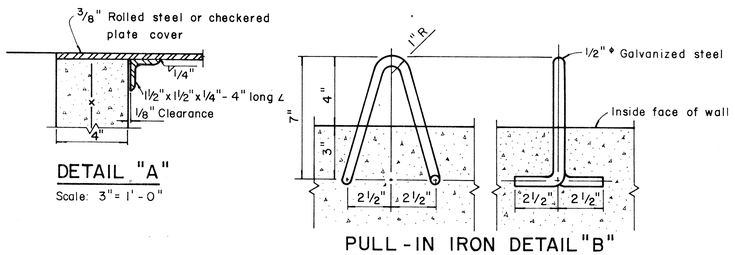




TYPE "C" PULLBOX

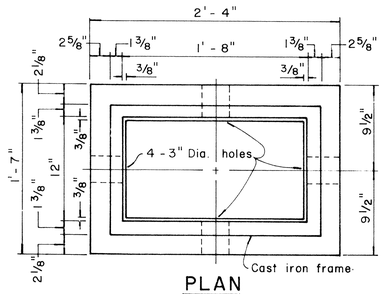
Scale: 1 1/2" = 1'-0"



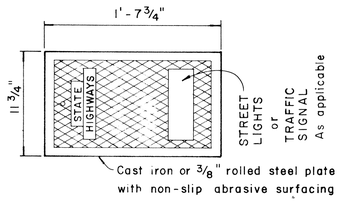


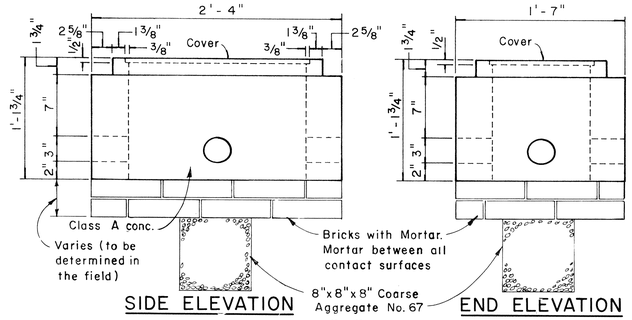
NOTES: (FOR TYPE "A" PULLBOX)

1. 3/8" Rolled steel plate cover with non-slip abrasive surfacing medium grade, natural color shall be used on all pullboxes located on sidewalk areas where pedestrians are walking.
2. 3/8" Checkered plate cover shall be used on all pullboxes located in median areas and other locations where there are no pedestrians walking.
3. Pull irons shall be placed opposite each conduit slot.
4. Covers on all pullboxes located in sidewalk areas shall be set flush with the concrete sidewalk.
5. Each pullbox shall have a pair of pull irons opposite each other for lifting purposes.



NOTE:
Steel rim shall be welded to bottom of steel cover if necessary so that top of cover and frame are flush





TYPE "B" PULLBOX

Scale: 1 1/2" = 1'-0"

NO.	REVISION	APPROVED BY	DATE
1	Revised Type B & C Pullbox details	H.T.	3-5-76

APPROVAL RECOMMENDED:
TRAFFIC ENGINEER — DATE

APPROVED:
ASSISTANT CHIEF, ENGINEERING — DATE 12-30-69

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

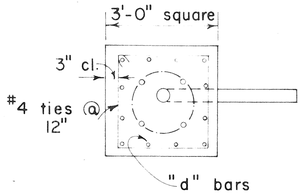
STANDARD DETAILS
PULLBOXES

Scale as noted — Date

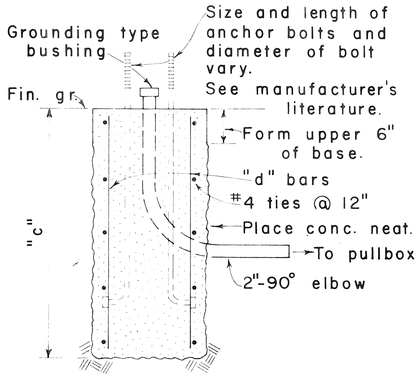
SHEET No. 5 OF 7 SHEETS DT 401

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

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	350A-01-76	1977	10	11



PLAN - SECTION

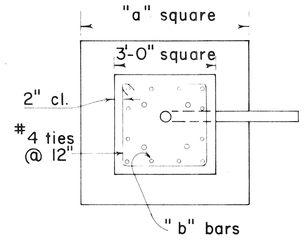


NOTE:
Concrete shall be Class B.

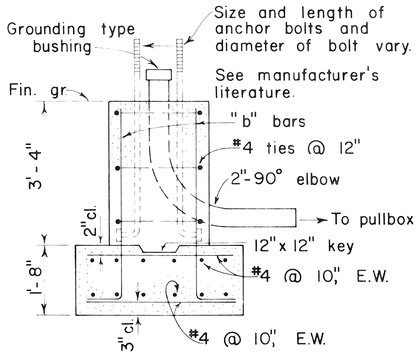
SECTION

MAST ARM LENGTH	"c"	"d" BARS
16'-18'	5'-0"	12-#6
20'	5'-6"	12-#6
25'	6'-0"	12-#6
30'	6'-6"	12-#6
35'	7'-0"	12-#8
40'	8'-0"	12-#8

TYPE II



PLAN - SECTION



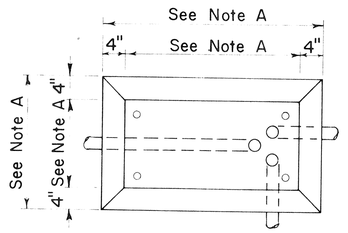
NOTE:
Concrete shall be Class B.

SECTION

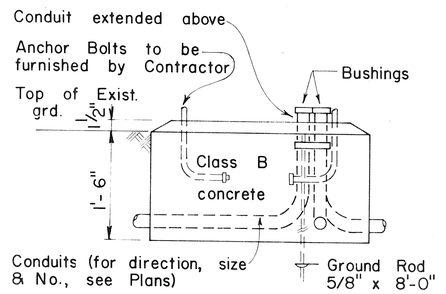
MAST ARM LENGTH	"a"	"b" BARS
16'-18'	5'-0"	12-#6
20'	5'-6"	12-#6
25'	6'-0"	12-#6
30'	6'-6"	12-#8
35'	6'-6"	12-#8
40'	7'-0"	12-#8

TYPE IIA

FOOTING FOR MAST ARM STANDARD



PLAN



ELEVATION

CONCRETE BASE FOR CONTROLLER CABINET

NOTES:

A. Dimensions to be determined by the size of the Controller Cabinet to be furnished under this Contract.

B. Details of Conduits, Anchor Bolts, etc., are approximate only. Exact details shall be secured by the Contractor from Manufacturer.

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 3/4/76 DATE

APPROVED:
Herbert R. Nishi — ASSISTANT CHIEF, ENGINEERING — 3-5-76 DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TRAFFIC SIGNAL SYSTEM
MISCELLANEOUS DETAILS

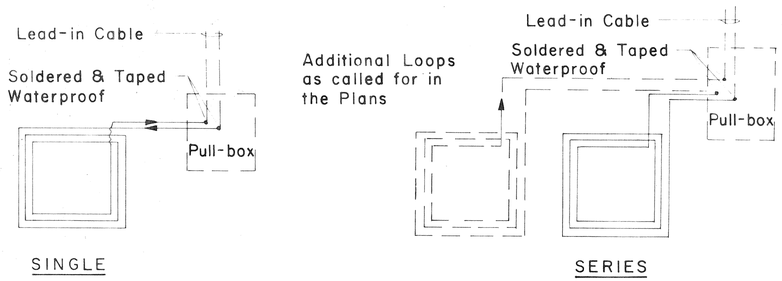
Not to Scale

SHEET No. 6 OF 7 SHEETS DT404

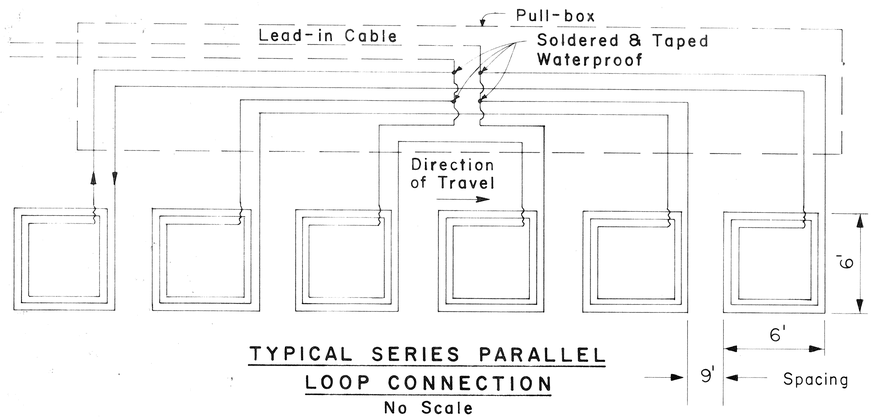
10

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

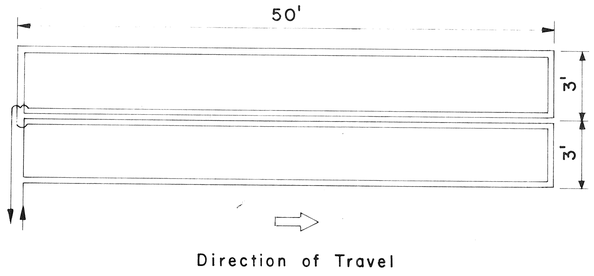
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	950A-01-76	1977	11	11



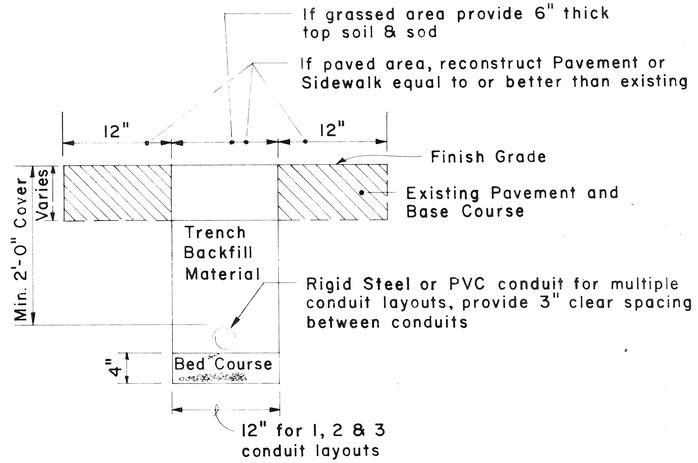
TYPICAL LOOP CONFIGURATIONS
No Scale



TYPICAL SERIES PARALLEL LOOP CONNECTION
No Scale



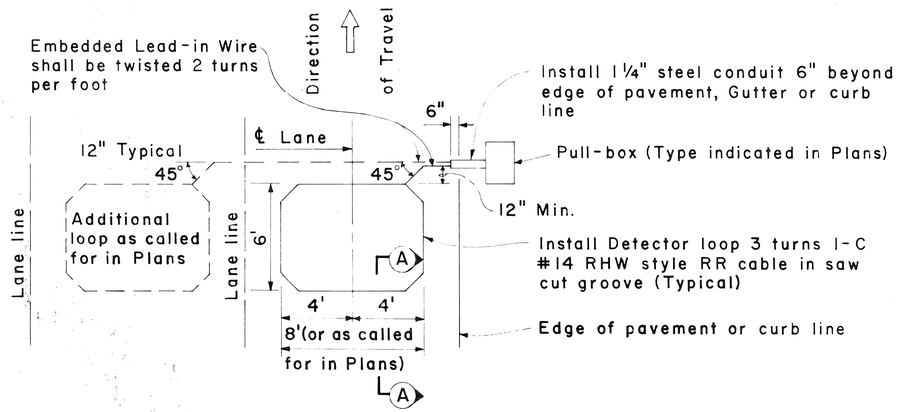
WIRING FOR 6' x 50' LOOP DETECTOR
No Scale



TYPICAL TRENCH SECTION FOR CONDUIT
Scale : 1 ½" = 1' - 0"

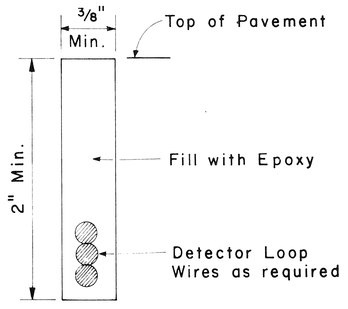
NOTE :

1. All conduits under roadways shall be steel or PVC schedule 80. All other conduits shall be steel or PVC schedule 40.



PLAN - MULTIPLE LOOP LAYOUT
Scale : ¼" = 1' - 0"

DETECTION LOOP
Scale : As Shown



Detector Loop Saw-Cut
SECTION A-A (TYPICAL)
No Scale

APPROVAL RECOMMENDED:
Eiichi Tanaka — TRAFFIC ENGINEER — 3/4/76 DATE

APPROVED:
Herbert R. Richards — ASSISTANT CHIEF, ENGINEERING — 3-5-76 DATE

NO.	REVISION	APPROVED BY	DATE
1	Add dimensions to Loop Configurations	H.T.	9-22-76

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
LAND TRANSPORTATION FACILITIES DIVISION

TRAFFIC SIGNAL SYSTEM MISCELLANEOUS DETAILS

Scale: As Noted

SHEET No. 7 OF 7 SHEETS DT 405

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

K-E