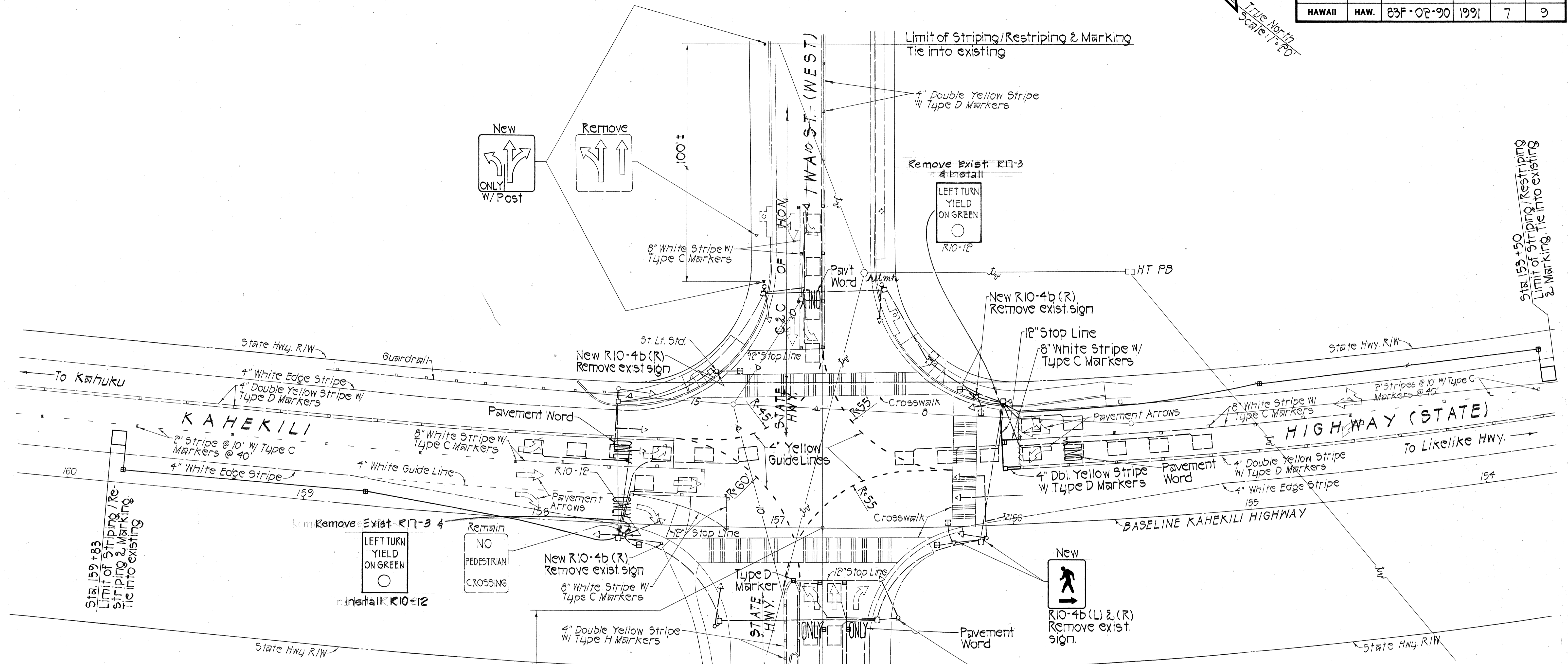


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83F-02-90	1991	7	9

TRUE NORTH
Scale: 1"=20'



- LEGEND FOR PAVEMENT STRIPES & MARKERS**
- Existing Raised Pavement Markers
 - Existing Striping
 - Type A Raised Pavement Marker
 - Type C Raised Pavement Marker @ 40'o.c.
 - 8" White Stripe w/ Type C Raised Pavement Markers @ 20'o.c. (Tape, Type I or Thermoplastic Extrusion)
 - 4" Double Solid Yellow Stripe w/ Type D Raised Pavement Markers @ 20'o.c. (Tape, Type I or Thermoplastic Extrusion)
 - 4" Yellow Edge Stripe w/ Type H Raised Pavement Markers @ 40'o.c. (Tape, Type II or Thermoplastic Extrusion)
 - 4" White Edge Stripe (Tape, Type II or Thermoplastic Extrusion)
 - 4" White or Yellow Guide Line (Thermoplastic Extrusion)
 - Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
 - Crosswalk and Stop Line (Thermoplastic Extrusion)
 - Pavement Arrow (Tape, Type II or Thermoplastic Extrusion)
 - Existing Pavement Arrow
 - Existing Striping to be removed
 - Existing Raised Pavement Markers to be removed
 - ONLY Pavement Word (Tape, Type I or Thermoplastic Extrusion)

NOTE:
The following shall not be measured separately for payment but shall be incidental to various of work:
a. Painting of Type 6 Curb.
b. Removal of pavement stripes & raised markers.
c. Removal of signs, posts and footings.

PLAN
Scale: 1"=20'

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

DATE	REVISION
7/19/91	Remove Exist. R17-3 & Install New R17-3 Sign on T.S. Standard

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PAVEMENT STRIPING/MARKING & SIGNING PLAN
KAHEKILI HIGHWAY TRAFFIC SIGNALS
AT HUI IWA STREET (WEST)
PROJECT NO. 83F-02-90

SCALE: AS NOTED DATE: JUNE 1990
SHEET NO. 7 OF 9 SHEETS

SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

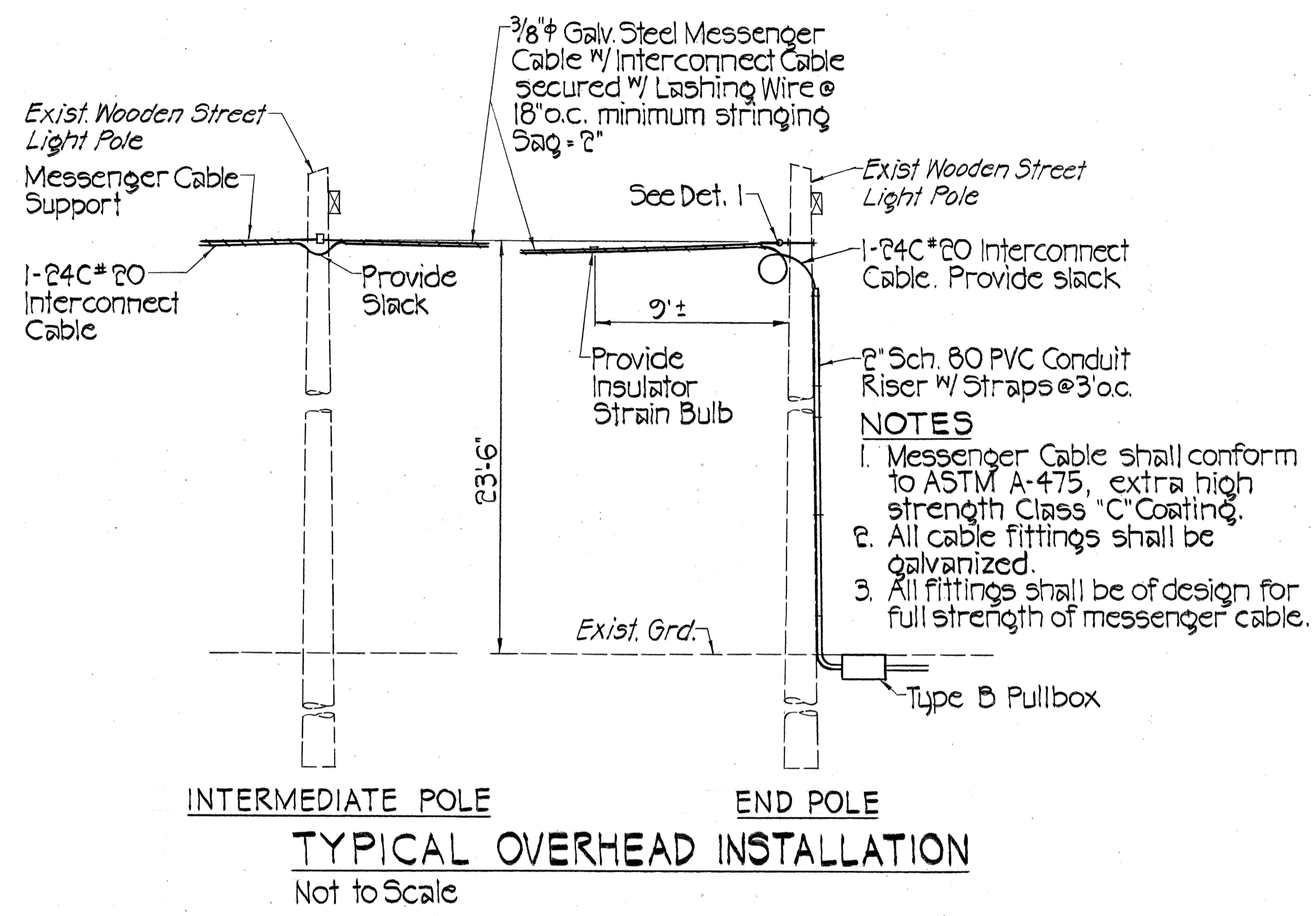
HAROLD I. YOSHIZAKI
REGISTERED PROFESSIONAL ENGINEER
No. 2091-C
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Harold I. Yoshizaki

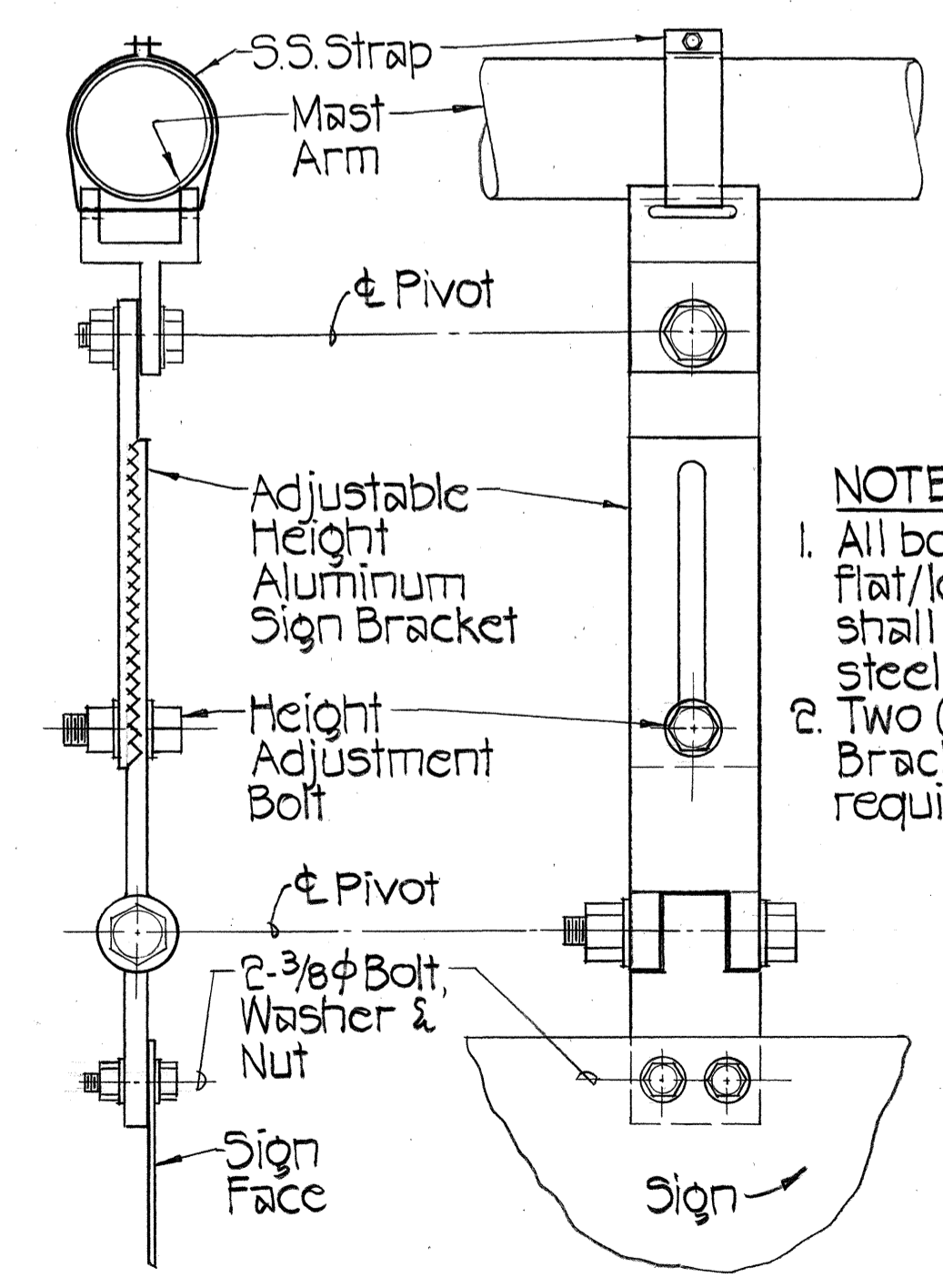
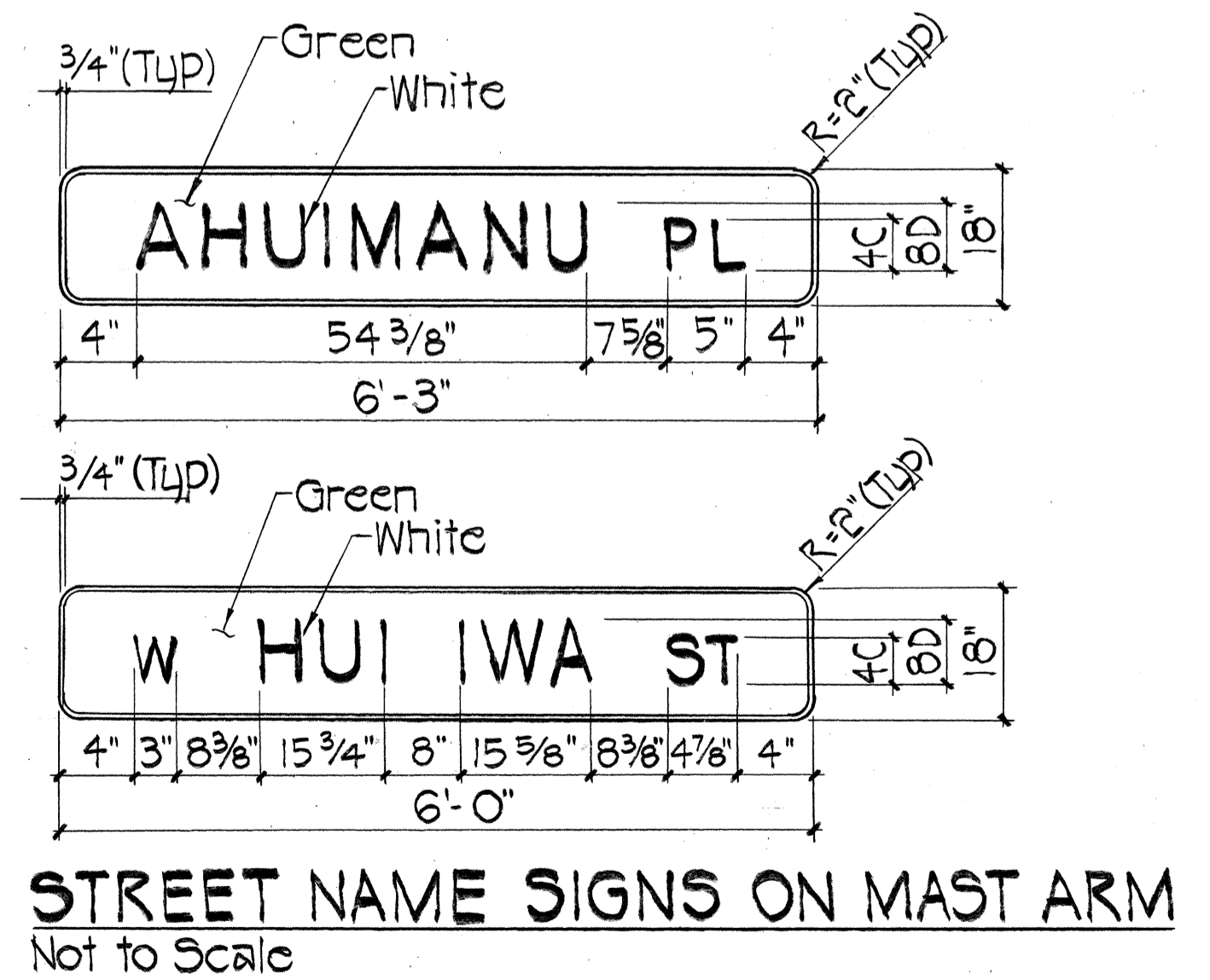
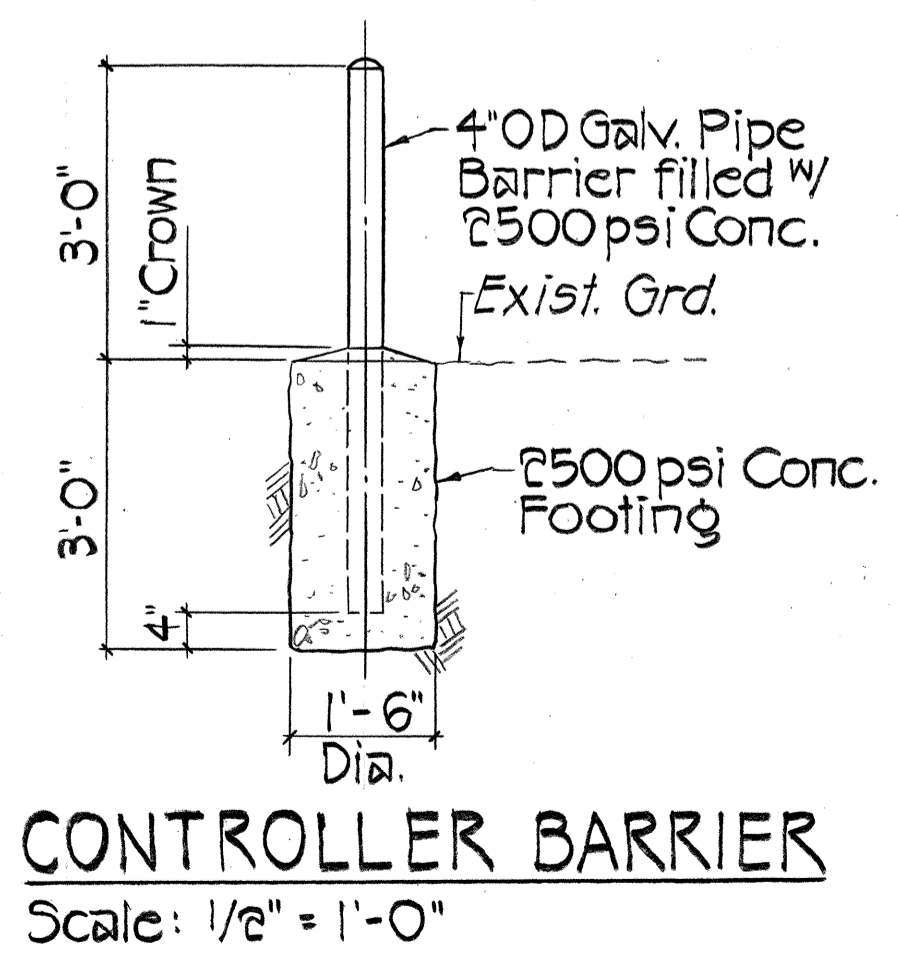
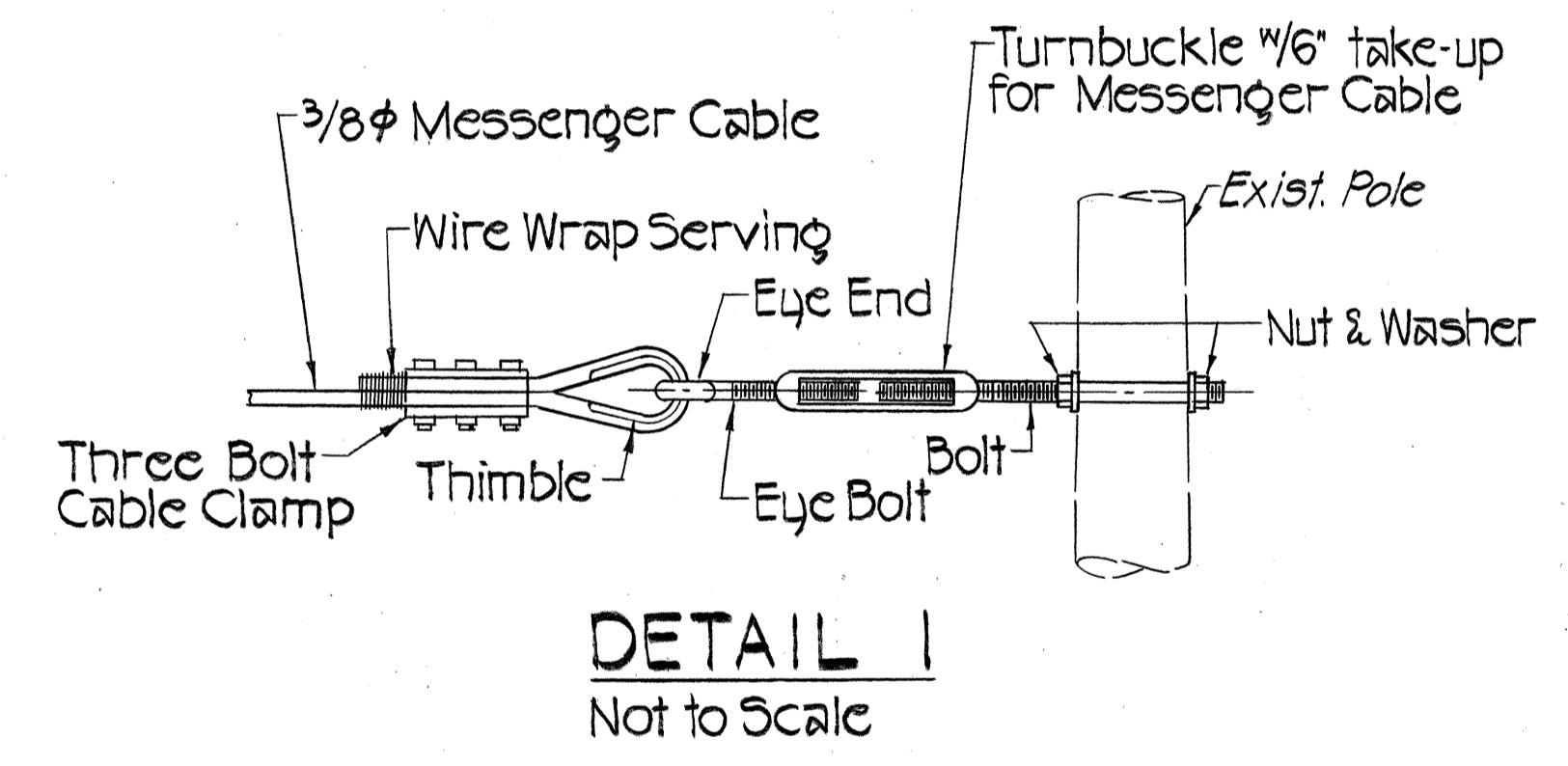
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83F-02-90	1991	8	9

B W S NOTES

1. Unless otherwise specified, all materials and construction of water system facilities and appurtenances shall be in accordance with the "Standard Specifications for Road and Bridge Construction," dated 1985, as amended, of the Highways Division, Department of Transportation and the City & County of Honolulu Board of Water Supply "Water System Standards," Volume I, dated 1985, and the "Approved Material List and Standard Details for Water System Construction," Volume II, dated 1985 and all subsequent amendments and additions.
2. All plans approved by the Board of Water Supply are base solely on the adequacy of the water supply. All other features of the water system, such as lines, grades, fittings, etc. and drainage and other features of improvements shall not be the responsibility of the Board of Water Supply.
3. The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the water system.
4. The existence and location of underground utilities and structures as shown on the plans are from the latest available data but is not guaranteed as to the accuracy or the encountering of other obstacles during the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utilities. The Contractor shall verify all existing service laterals and connections that are affected by this project, whether or not shown on the plan prior to commencing with any work and shall not assume that where no services shown none exists.
5. Reapproval shall be required if this project is not under construction within a period of two (2) years.
6. Maintain 3'-0" min. horizontal clear separation between street light/traffic signal standards (including any modular units) and the nearest water line system. Contractor shall field verify for any conflict at each street light/traffic signal standard location. Where conflicts occur, the Contractor shall coordinate with the Project Engineer to revise the street light/traffic signal standard to provide the required clearances at no cost to the Board of Water Supply.
7. At the electrical/signal duct line water crossings, adjust all electrical/signal duct line elevation to maintain 6" vertical clear separation from all water lines (12" clear for all electrical/signal duct line structures larger than 18") at no cost to the BWS.
8. Maintain 3'-0" min. horizontal clear separation between all water line systems and nearest electrical/signal duct lines paralleling the water system at no cost to the BWS.



INTERMEDIATE POLE END POLE
TYPICAL OVERHEAD INSTALLATION
Not to Scale



- NOTES:**
1. All bolts, nuts and flat/lock washers shall be stainless steel.
 2. Two (2) Mounting Brackets per sign required.

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

HAROLD I. YOSHIZAKI
REGISTERED PROFESSIONAL ENGINEER
No. 2091-C
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Harold I. Yoshizaki
SHIMABUKURO, ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

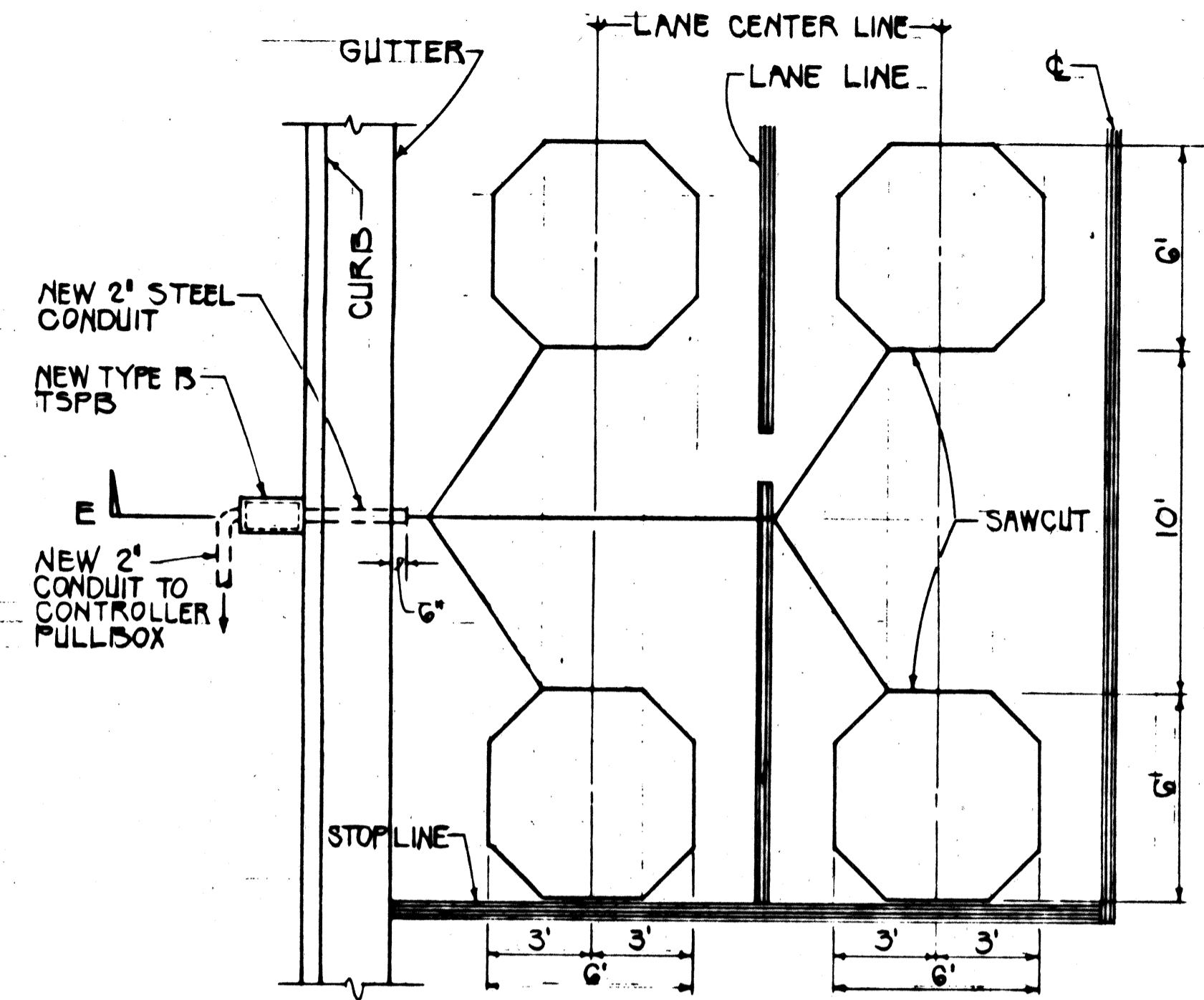
NOTES & MISCELLANEOUS DETAILS

KAHEKILI HIGHWAY TRAFFIC SIGNALS
PROJECT NO. 83F-02-90

SCALE: AS NOTED DATE: OCTOBER 1990

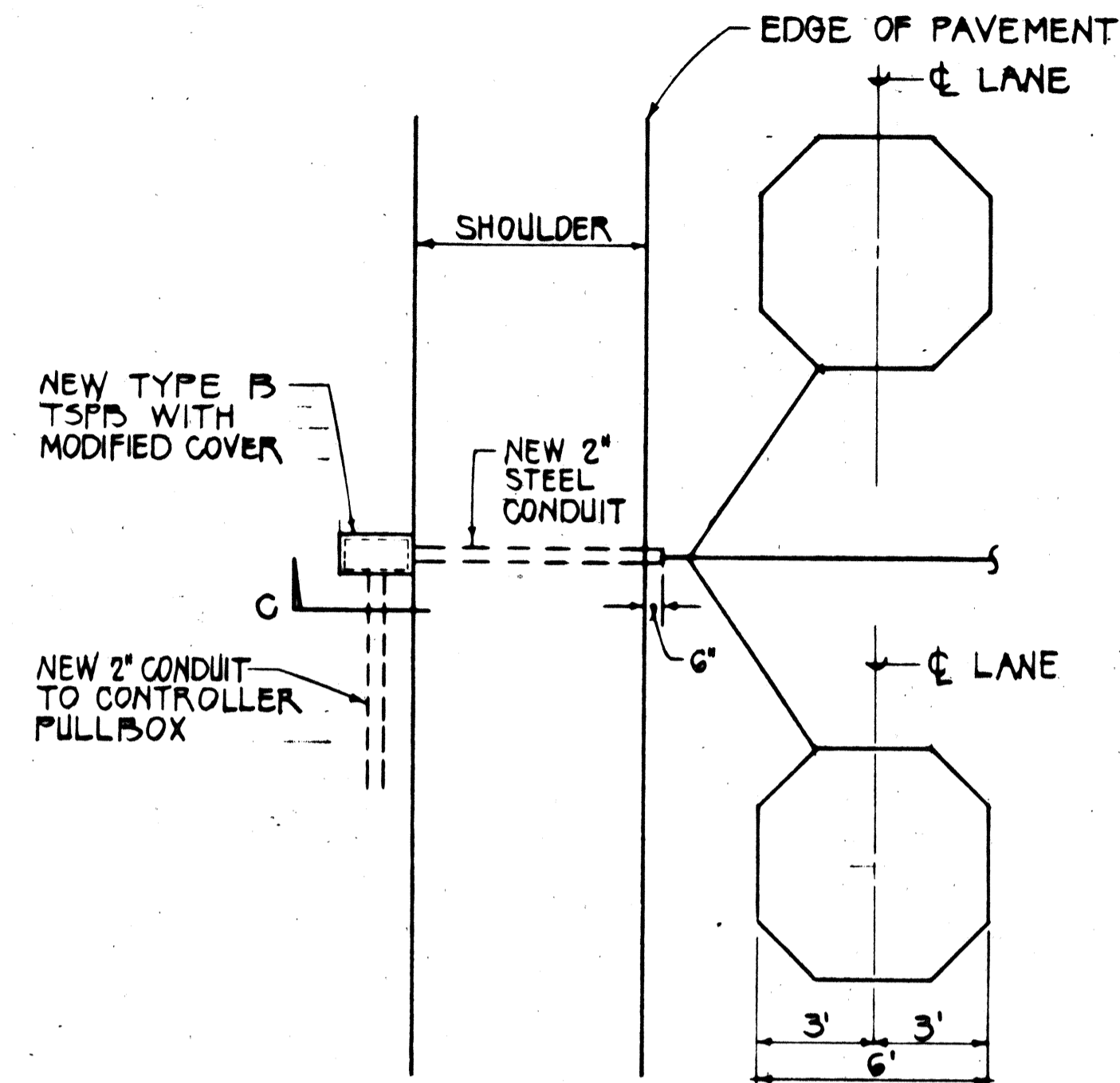
SHEET No. 1 OF 1 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	83F-02-90	1991	9	9

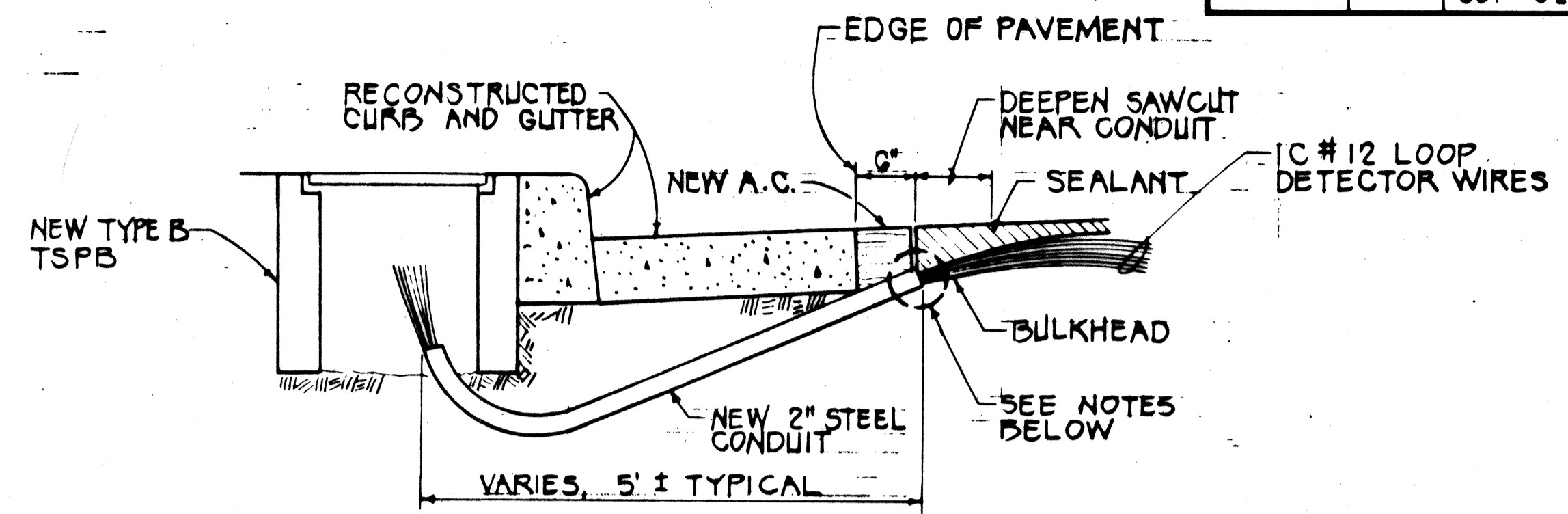


NOTE: ADD ONE PAIR OF LOOPS FOR EACH ADDITIONAL LANE

TYPICAL LAYOUT AT STOPLINES
SCALE: 1/4" = 1'-0"

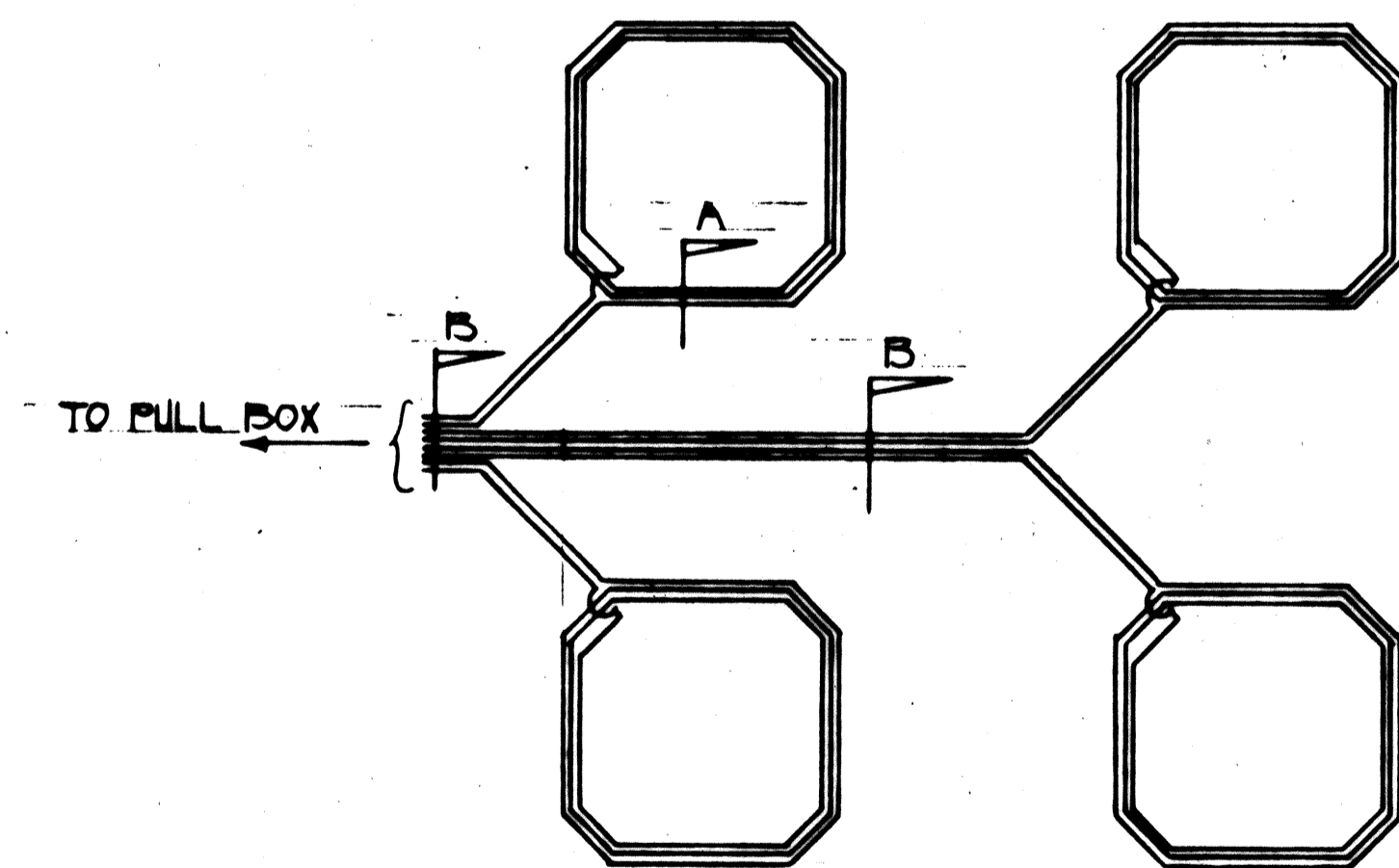


TYPICAL LAYOUT AT SHOULDER AREAS
SCALE: 1/4" = 1'-0"

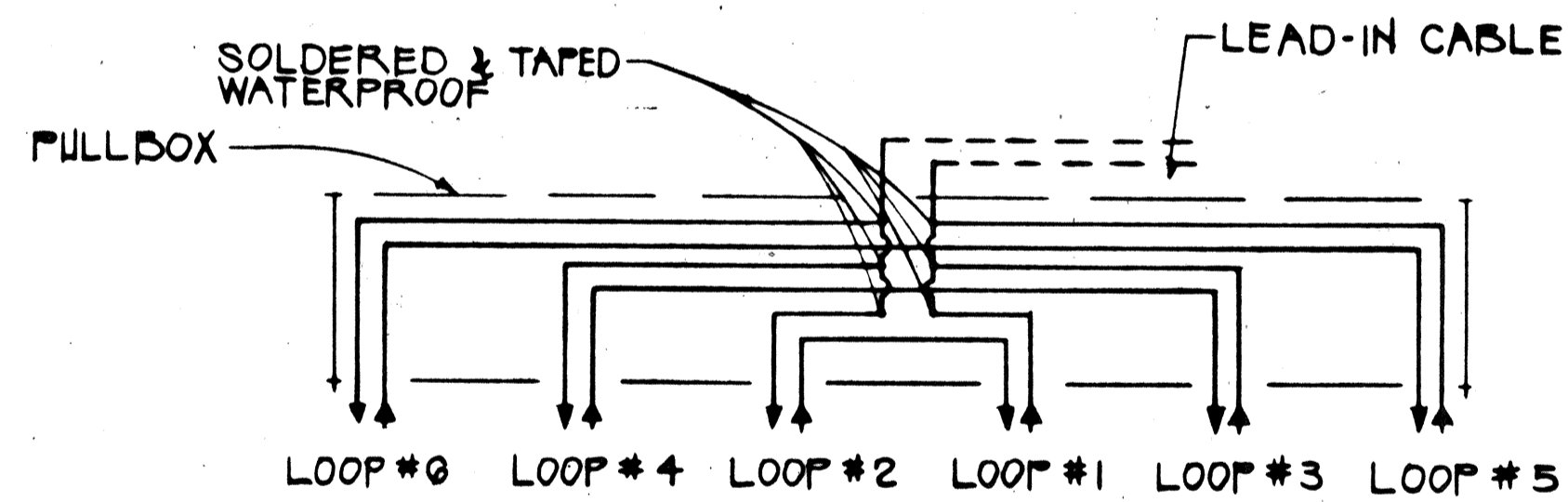


- NOTES:
1. SEAL ROADWAY END OF CONDUIT AFTER INSTALLATION OF CONDUCTORS.
 2. INSTALL BULKHEAD ACROSS CONDUIT TRENCH.
 3. PLACE APPROVED SEALANT IN SAWCUT
 4. BACKFILL OVER CONDUIT WITH NEW A.C.
 5. RECONSTRUCT CURB AND GUTTER AS REQUIRED.

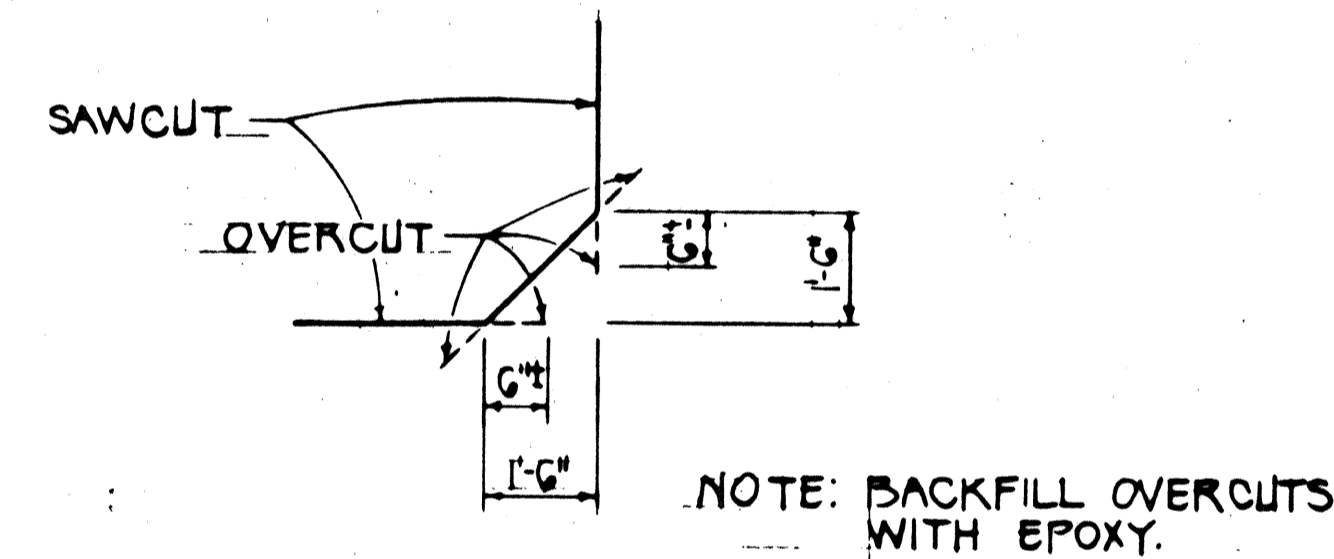
SECTION E
NOT TO SCALE



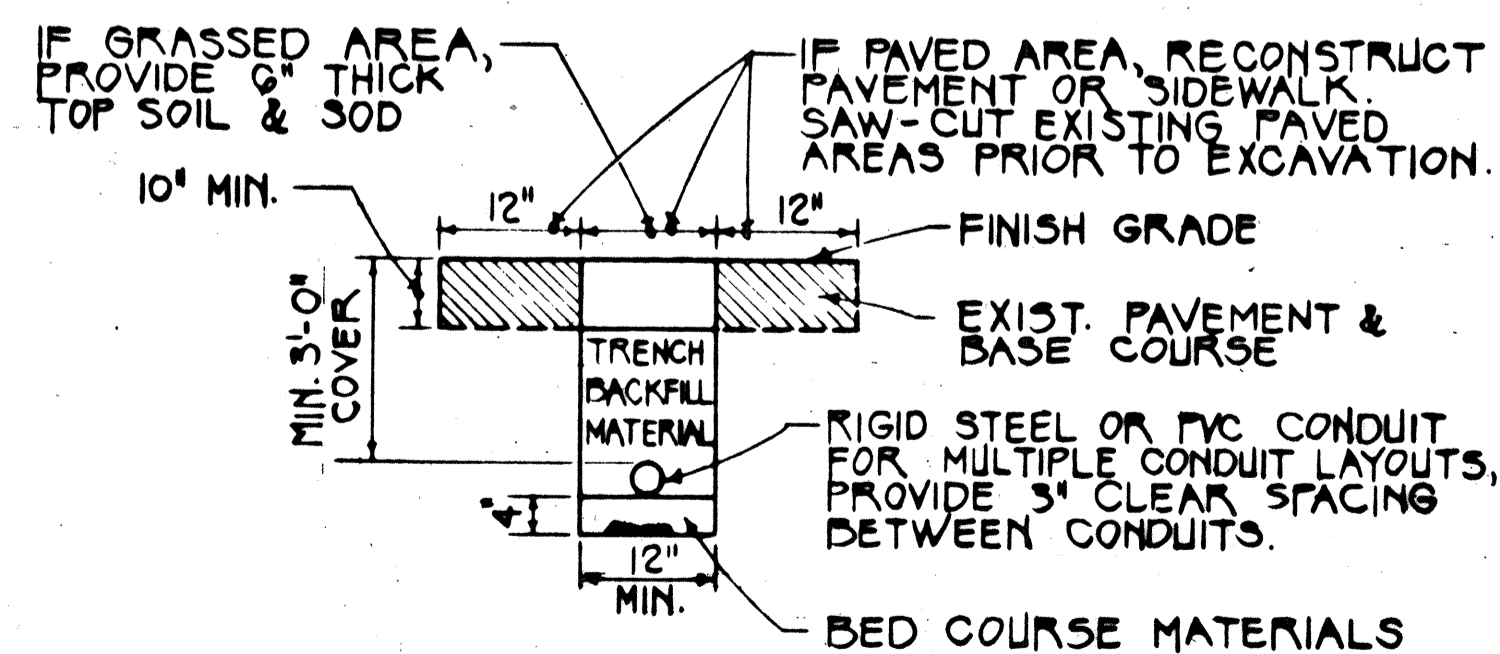
WIRING DIAGRAM
NOT TO SCALE



DETAIL "A"
TYPICAL SERIES - PARALLEL LOOP CONNECTION

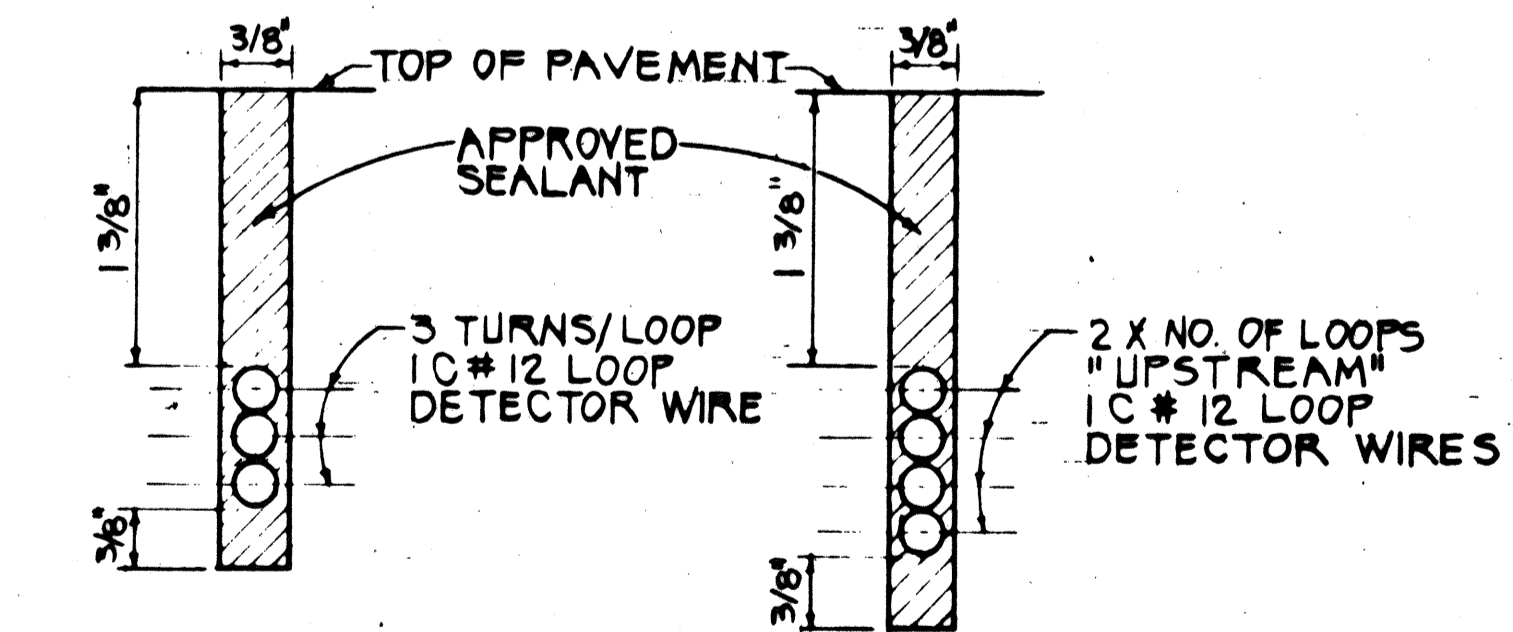


DETAIL OF SAWCUT AT CORNERS
NOT TO SCALE



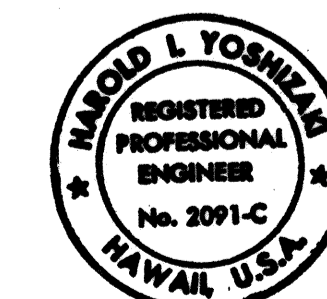
SECTION C
NOT TO SCALE

NOTE: ALL CONDUITS UNDER ROADWAYS SHALL BE STEEL OR PVC SCHEDULE 80.



SECTION A
NOT TO SCALE

SECTION B
NOT TO SCALE



SHIMAMURA, ENDO & YOSHIZAKI, INC.
1126 12th Avenue
Honolulu, Hawaii 96816

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Harold L. Yoshizaki

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

LOOP DETECTOR DETAILS

KAHEKILI HIGHWAY TRAFFIC SIGNALS

PROJECT NO. 83F-02-90
SCALE: AS NOTED DATE: OCTOBER 1990
SHEET NO. 1 OF 1 SHEETS

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