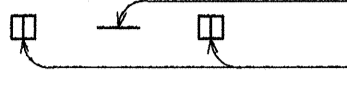
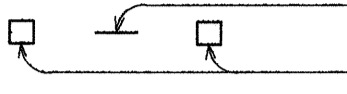
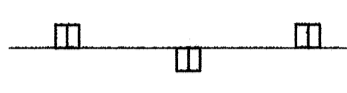
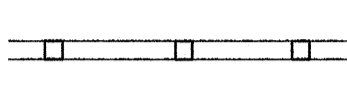





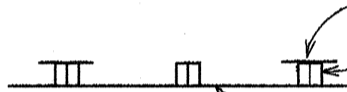


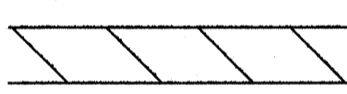
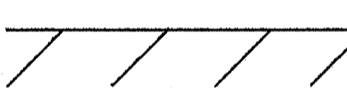

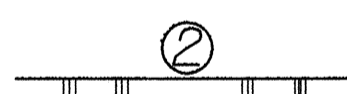



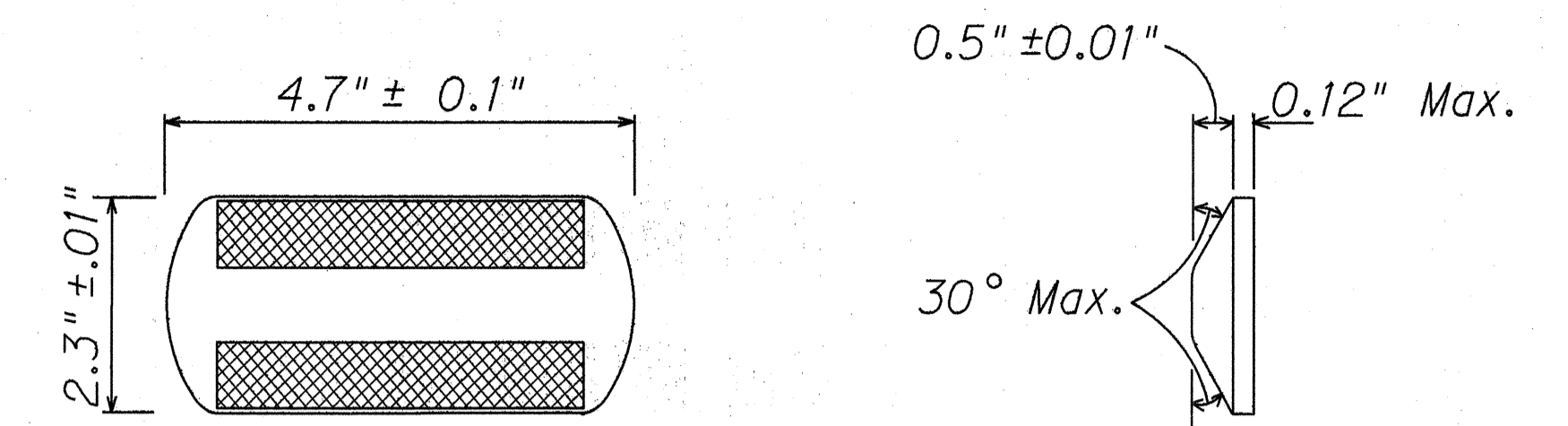
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-92M	1992	6	10

**LEGEND**

-  4 each Type A Raised Pavement Markers  
Type CL Raised Pavement Markers @ 40' - 0" o.c.
-  4 each Type J Raised Pavement Markers  
Type DL Raised Pavement Markers @ 40' - 0" o.c.
-  8" White Stripe with Type CL Raised Pavement Markers @ 20' - 0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow with Type DL Raised Pavement Markers @ 20' - 0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow Stripes with Type HL Raised Pavement Markers @ 20' - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" Yellow Edge Stripe with Type HL Raised Pavement Markers @ 40' - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" Double Solid White Stripes with Type CL Raised Pavement Markers @ 20' - 0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  Lane Change Restriction Marking  
4 each Type A Raised Pavement Markers  
Type CL Raised Pavement Markers @ 20' - 0" o.c.  
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
-  4" or 8" White Edge Stripe with Type CL Raised Pavement Markers @ 40' - 0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" White Guide Lines (Thermoplastic Extrusion)
-  Transverse Median Marking (Tape, Type II or Thermoplastic Extrusion)
-  Transverse Shoulder Marking (Tape, Type II or Thermoplastic Extrusion)
-  Channelizing Island or Deceleration Lane Gore (Tape, Type II or Thermoplastic Extrusion)
-  Crosswalk and Stop Line. All Stop Lines shall be 10' - 0" from Crosswalk unless otherwise noted. The circled number indicates the number of lanes for payment. (Thermoplastic Extrusion)
-  Pavement Arrow (Tape, Type I or Thermoplastic Extrusion)
-  Pavement Word (Tape, Type I or Thermoplastic Extrusion)
-  4 Each Type J Raised Pavement Markers  
Type DL Raised Pavement Markers @ 40' - 0" o.c.  
Type HL Raised Pavement Markers (Reflective Surface facing no-passing direction)  
4" Single Solid Yellow Stripe (Tape, Type I or Thermoplastic Extrusion)  
Extension of Edge Line, 4" Wide x 2' - 0" Long White Stripe @ 10' - 0" o.c. w/Type CL Markers @ 40' - 0" o.c. (Thermoplastic Extrusion)

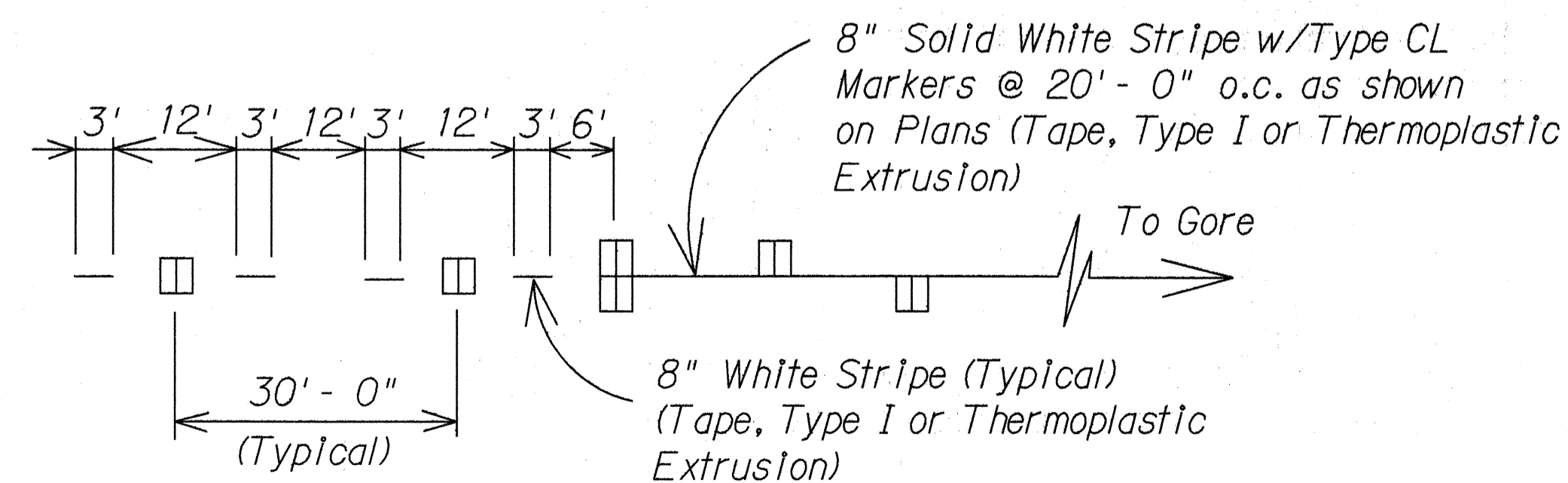
**NOTES**

1. Layout of pavement markings and striping shall be done by the Contractor and approved by the Engineer prior to any installation work.
2. Existing pavement markings not incorporated in the final traffic pattern shall be removed as directed by the Engineer. Costs shall be incidental to the various pavement marking items.
3. Raised pavement markers shall not be installed within crosswalks.
4. Details of Type C, Type D and Type H Markers on Standard Plan Nos. TE-30, TE-31 and TE-32 shall be deleted and replaced with details of Type CL, Type DL and Type HL Markers as shown on this sheet. All references to Type C, Type D and Type H Markers in the plans shall mean Type CL, Type DL and Type HL Markers.
5. Final locations of all signs shall be approved by the Engineer prior to any installation work.
6. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer. Removal and disposal of existing signs and/or posts as designated on these plans shall be incidental to the various signing items.
7. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
8. All pavement striping shall be as noted on the Legend or plans.
9. All preformed pavement marking tapes over existing pavement shall be applied with an approved primer as recommended by the tape manufacturer and as approved by the Engineer. The primer shall be allowed to dry to the tacky stage prior to tape application.



TYPE CL  
Red-Clear Reflective Marker  
or  
TYPE DL  
Two-Way Yellow Reflective Marker  
or  
TYPE HL  
One-Way Yellow Reflective Marker

**RAISED PAVEMENT MARKER DETAILS**  
Not to Scale

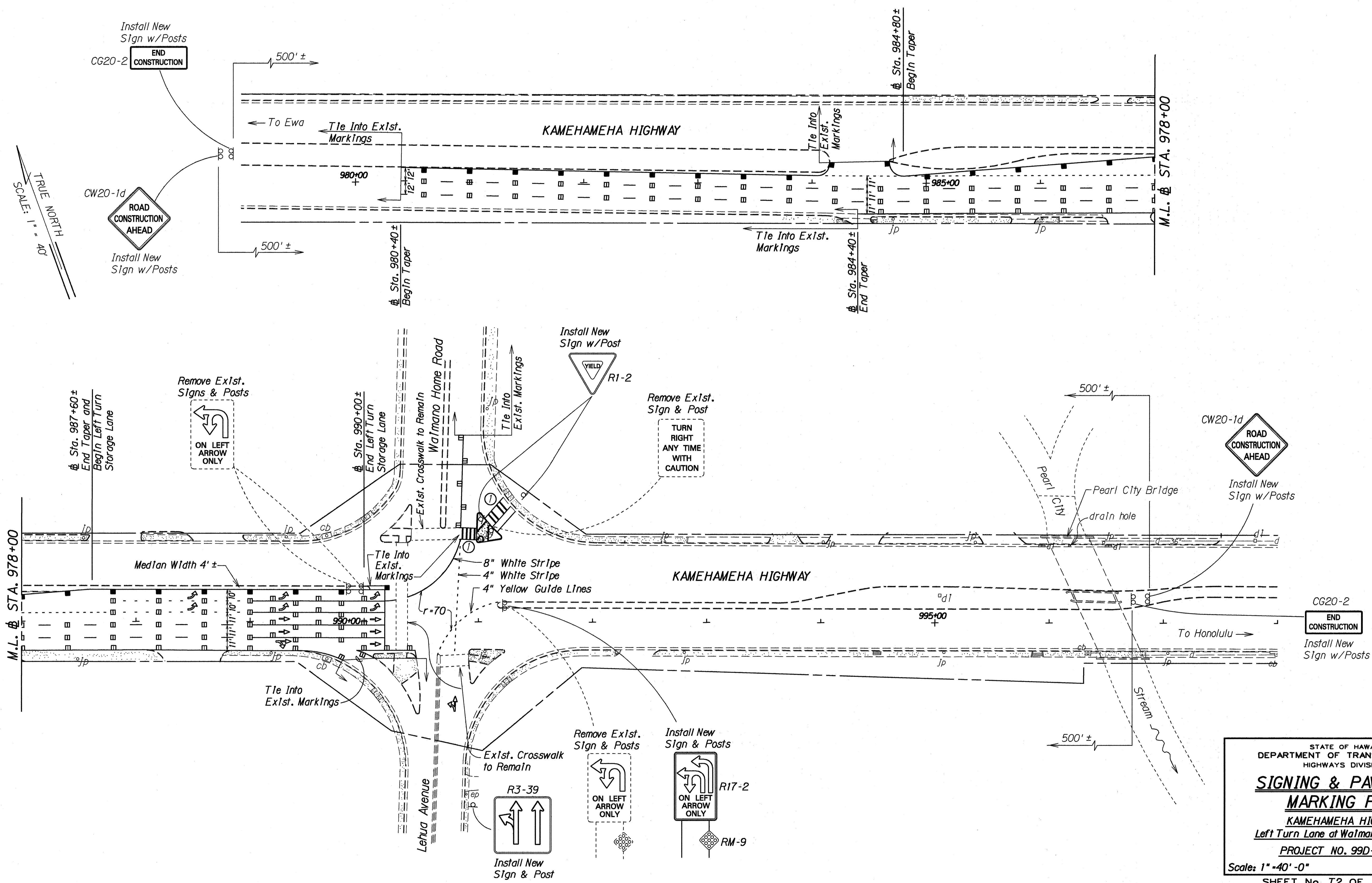


**LANE DROP MARKING**  
Not to Scale

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

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION  
**PAVEMENT MARKING**  
**LEGEND, DETAILS & NOTES**  
KAMEHAMEHA HIGHWAY  
Left Turn Lane at Waimano Home Road  
PROJECT NO. 99D-01-92M  
Not to scale Date: Nov, 1991  
SHEET No. 71 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-92M	1992	7	10



SURVEY PLOTTED BY	DATE
DESIGNED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
N.	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SIGNING & PAVEMENT MARKING PLAN**

KAMEHAMEHA HIGHWAY  
Left Turn Lane at Waimano Home Road

PROJECT NO. 99D-01-92M

Scale: 1" = 40' - 0"      Date: Nov., 1991

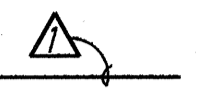

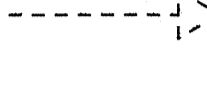

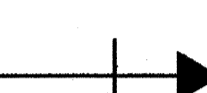
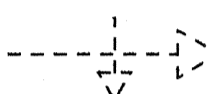

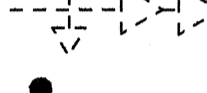


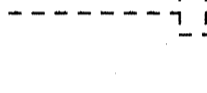
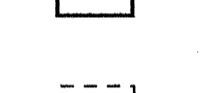
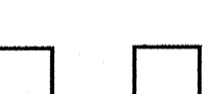
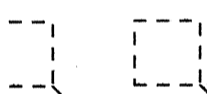


SHEET No. T2 OF 5 SHEETS

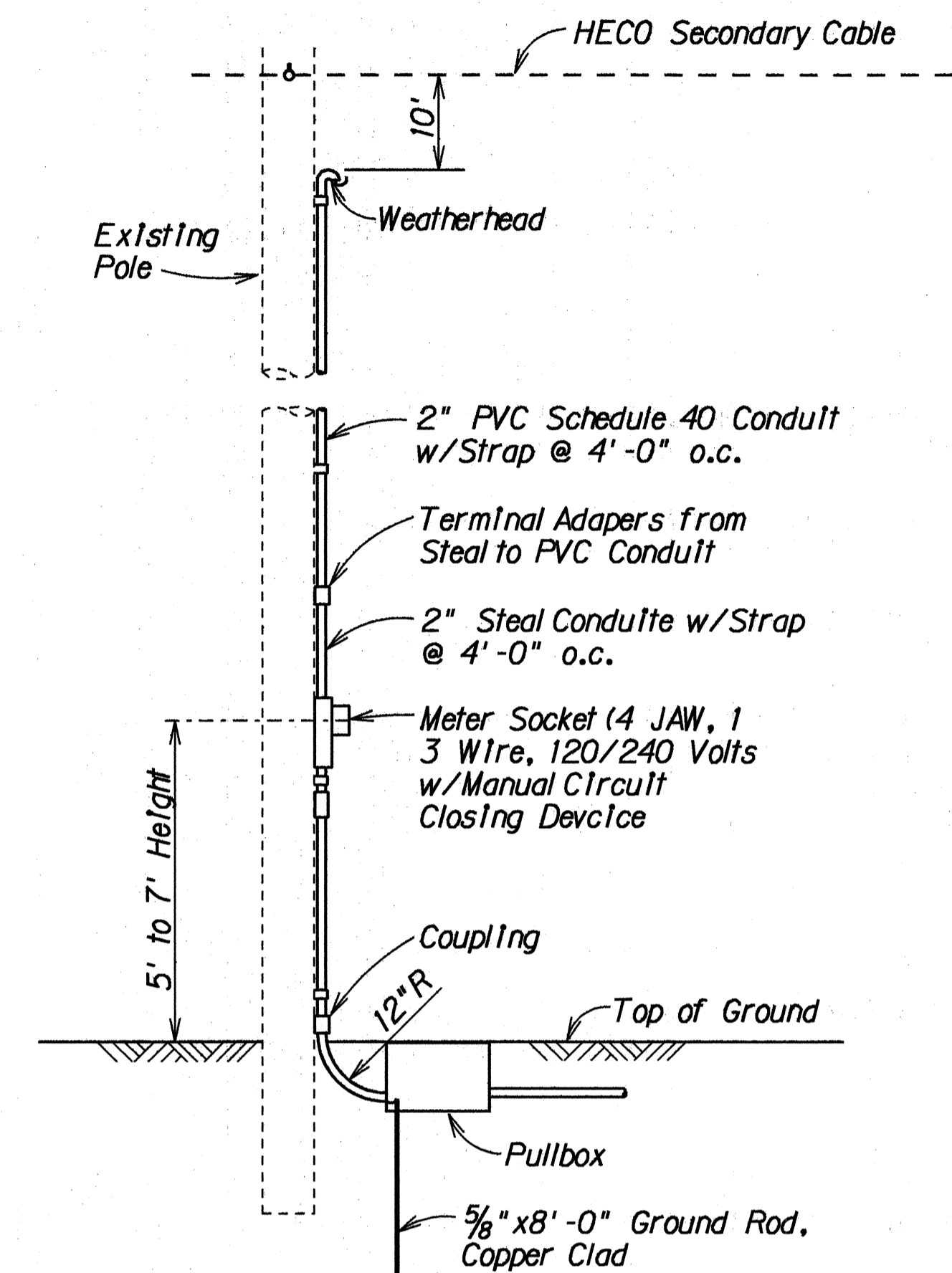
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-92M	1992	8	10

TRAFFIC SIGNAL NOTES

- All traffic signal controller equipment shall be completely wired in the cabinet and shall control the traffic signals as called for in the plans.
- The Contractor shall install each meter socket and 50 Amp. breaker on power pole as shown on the plans in accordance with HECO requirements. Meter shall be mounted between 5 feet and 7 feet above ground. Meter socket shall be 4-prong, complete with a manual circuit closing device.
- Existing traffic signal standards to be replaced shall be removed together with its respective footing. The Contractor may elect to remove only the top portion of the footing. In such cases, the Contractor shall ensure that the remaining footing shall be 6 inches below the existing ground. The Engineer will determine whether the removed standards shall be disposed of or salvaged. Costs shall be considered incidental to the various contract items.
- Exist conduits, cables and pullboxes not to be incorporated in the new traffic signal system shall remain in place unless otherwise noted on plans or directed by the Engineer.
- Locations of all new traffic signal equipment shall be staked out in the field by the Contractor for approval by the Engineer prior to construction and installation.
- All splicing shall be done in the pullboxes.
- The existing traffic signal system shall remain in operation until the new traffic signal system is put into service. The Contractor shall arrange his work accordingly and shall provide temporary relocations and wirings as necessary. Payment shall be considered incidental to the various contract items.
- Furnishing and installing controller barriers, risers on poles and conduit stubouts (pullboxes to edge of pavement) will not be paid for separately but shall be considered incidental to the various contract items.
- The Contractor shall clean and/or repair the existing traffic signal pullboxes to be used prior to installing conduits and cables. This work will not be paid for separately but shall be considered incidental to the various contract items.
- The existing controller foundation not to be incorporated in the final traffic signal system shall be removed in accordance with Section 202, Removal of Structure and Obstruction of the Standard Specifications. Costs shall be considered incidental to the various contract items.
- The Contractor shall notify the Traffic Signal Branch, Department of Transportation Services, City & County of Honolulu, 2 weeks prior to commencing any work on the traffic signal system.
- Department of Transportation Services, City & County of Honolulu, will assist the Engineer in construction inspection for the traffic signal system.
- A solid #8 bare copper wire shall be pulled with the traffic signal control cable for equipment ground. Cost shall be incidental to the installation of the control cable.

LEGEND

- C New Traffic Signal Controller
- C Existing Traffic Signal Controller
-  Traffic Signal Conduits and Cables
-  New 12" RYG Traffic Signal Head
-  Existing 12" RYG Traffic Signal Head
-  New 12" RY↑ Traffic Signal Head
-  Existing 12" RY↑ Traffic Signal Head
-  New 12" RY← Traffic Signal Head
-  Existing 12" RY← Traffic Signal Head
-  New 12" RY↑← Traffic Signal Head
-  Existing 12" RY↑← Traffic Signal Head
-  New Type II Traffic Signal Standard with 40'-0" Mast Arm and Traffic Signal Heads
-  New Pedestrian Signal Head
-  Existing Pedestrian Signal Head
-  New Type B Pullbox
-  Existing Type B Pullbox
-  New Loop Detector
-  Existing Loop Detector



SERVICE POLE DETAIL  
Not to Scale

DESIGNED BY	DATE
CHECKED BY	
APPROVED BY	
DATE	
NOTE BOOK	
QUANTITIES BY	
NO.	

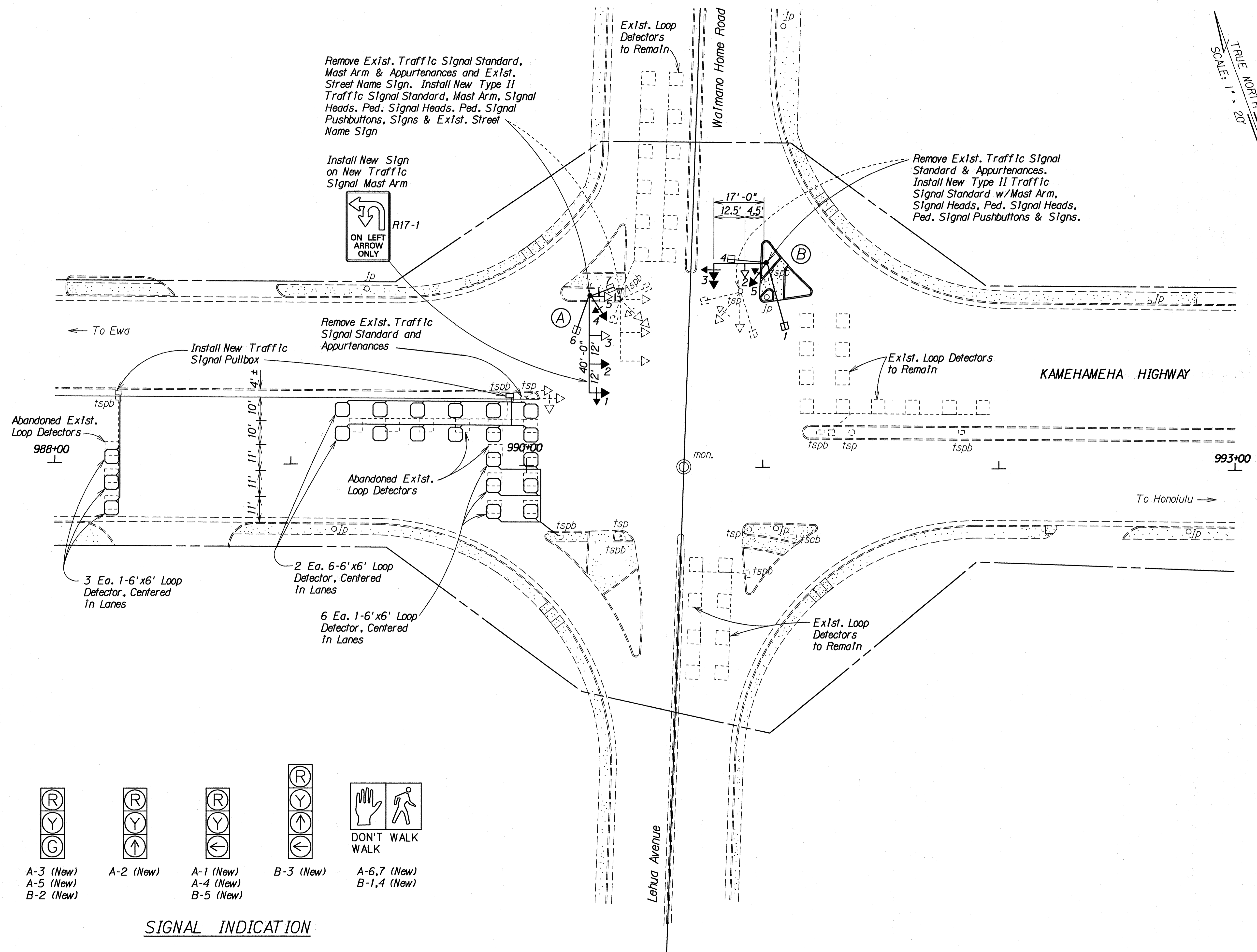
STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TRAFFIC SIGNAL  
LEGEND, DETAILS & NOTES**

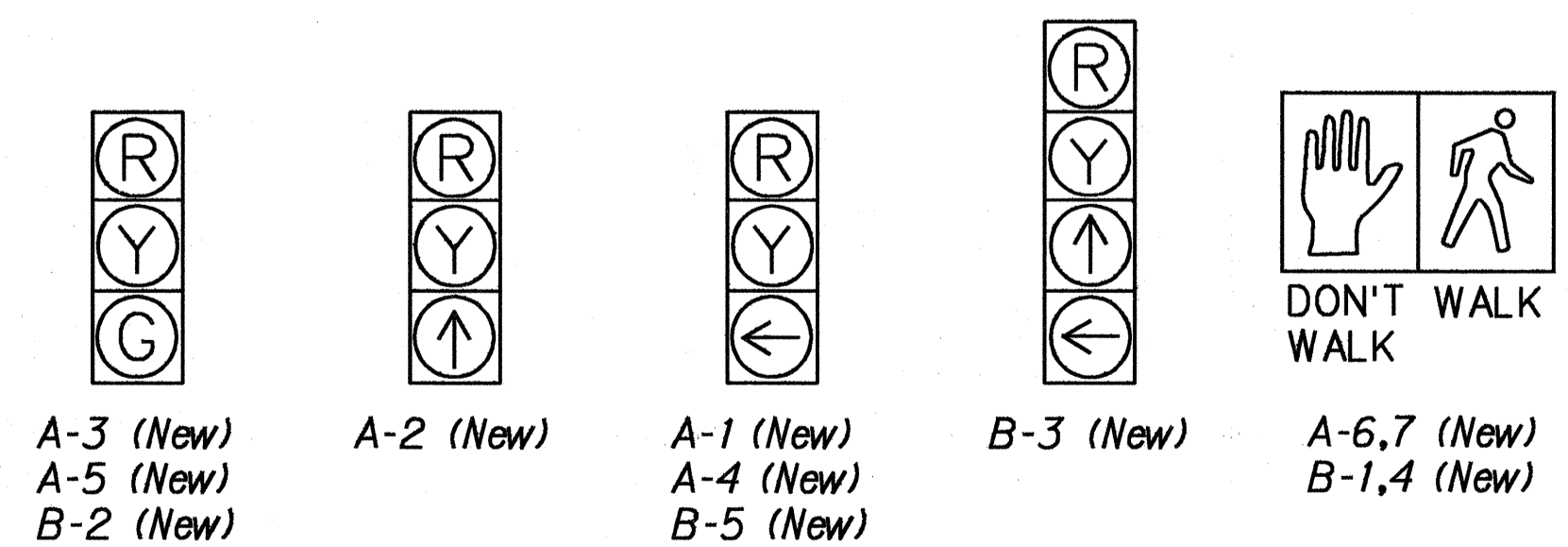
KAMEHAMEHA HIGHWAY  
Left Turn Lane at Waimano Home Road  
PROJECT NO. 99D-01-92M  
Scale: As shown Date: Nov., 1991  
SHEET No. 73 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-92M	1992	9	10

TRUE NORTH  
SCALE: 1" = 20'



SURVEY PLOTTED BY	DATE
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	



SIGNAL INDICATION

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**TRAFFIC SIGNAL PLAN**

KAMEHAMEHA HIGHWAY  
Left Turn Lane at Walmano Home Road

PROJECT NO. 99D-01-92M

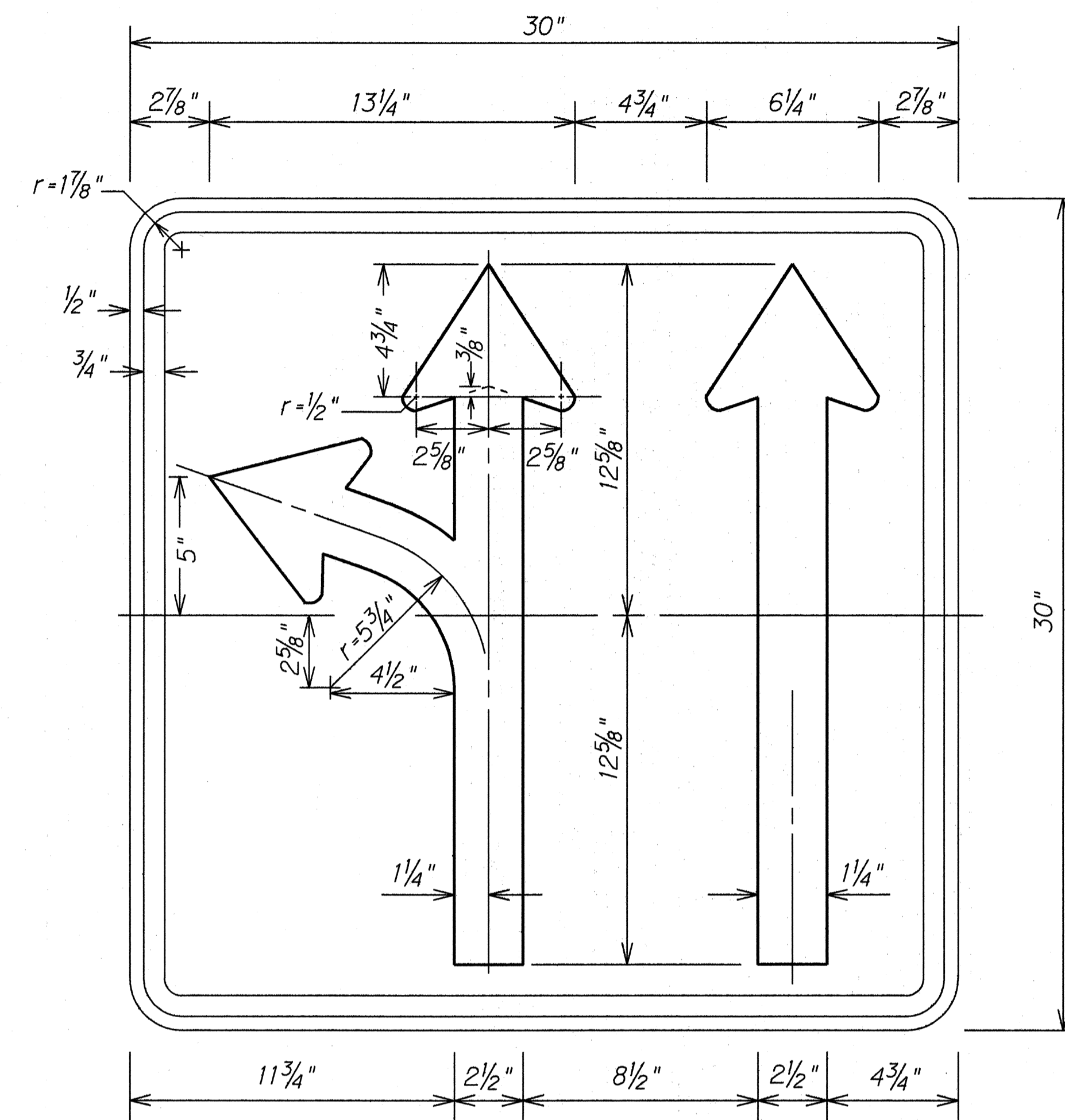
Scale: 1" = 20'-0" Date: Nov., 1991

SHEET No. 74 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99D-01-92M	1992	10	10

### PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
	PROJ. NO. 99D-01-92M
PAVEMENT MARKERS	
TYPE A _____	84 Each
TYPE CL _____	95 Each
TYPE HL _____	25 Each
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
8-INCH PAVEMENT STRIPE (WHITE) _____	640 L.F.
PAVEMENT ARROW _____	15 Each
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	540 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	730 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	90 L.F.
THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	830 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	140 L.F.
12-INCH PAVEMENT STRIPE (WHITE) _____	78 L.F.
CROSSWALK MARKINGS _____	2 Lane



R3-39  
Scale: 3" = 1'-0"

### CONSTRUCTION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	W/POSTS
CG20-2	Ⓜ STA. 975+40± MEDIAN	END CONSTRUCTION	1
CW20-1d	Ⓜ STA. 975+40± MEDIAN	ROAD CONSTRUCTION AHEAD	1
CG20-2	Ⓜ STA. 996+80 ± MEDIAN	END CONSTRUCTION	1
CW20-1d	Ⓜ STA. 996+80± MEDIAN	ROAD CONSTRUCTION AHEAD	1
TOTAL			4

### TRAFFIC SIGN SUMMARY

SIGN NO.	MESSAGE	QUANTITY	
		10 SQ. FT. OR LESS	W/O POST
R1-2	YIELD	2	
R3-39	↔↑	1	
R17-1	↙		1
R17-2	↘	1	
TOTAL		4	1

### REFLECTOR MARKER SUMMARY

TYPE	QUANTITY	
	W/O POST	
	YELLOW	WHITE
RM-9	1	

STATE OF HAWAII  
DEPARTMENT OF TRANSPORTATION  
HIGHWAYS DIVISION

**SUMMARIES  
AND SIGN DETAIL**

KAMEHAMEHA HIGHWAY  
Left Turn Lane at Waimano Home Road  
PROJECT NO. 99D-01-92M  
Scale: As shown      Date: Nov., 1991  
SHEET No. 75 OF 5 SHEETS

SURVEY PLOTTED BY \_\_\_\_\_ DATE \_\_\_\_\_  
 PLAN \_\_\_\_\_  
 ORIGINAL \_\_\_\_\_  
 NOTE BOOK \_\_\_\_\_  
 DESIGNED BY \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_  
 QUANTITY BY \_\_\_\_\_  
 No. \_\_\_\_\_