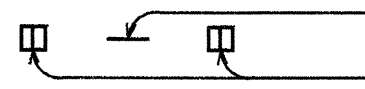
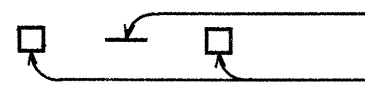











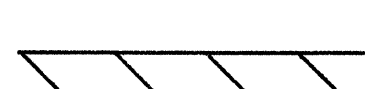
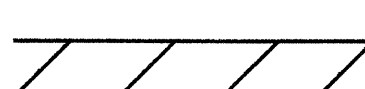





FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1999	55	75

LEGEND

-  4 each Type A Raised Pavement Markers
Type C Raised Pavement Markers @ 40'-0" o.c.
-  4 each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
-  8" White Stripe with Type C Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I or Thermoplastic Extrusion)
-  4" Double Solid Yellow with Type D Raised Pavement Markers @ 20'-0" o.c. (Tape, Type I)
-  4" Double Solid Yellow Stripes with Type H Raised Pavement Markers @ 20'-0" o.c. (Tape, Type II)
-  4" Yellow Edge Stripe with Type H Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II)
-  4" Double Solid White Stripes with Type C 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 C Raised Pavement Markers @ 20'-0" o.c.
4" White Stripe (Tape, Type I or Thermoplastic Extrusion)
-  4" or 8" White Edge Stripe with Type C Raised Pavement Markers @ 40'-0" o.c. (Tape, Type II or Thermoplastic Extrusion)
-  4" White Guide Lines (Tape, Type III or Thermoplastic Extrusion except for bus bays)
-  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 (Tape, Type III or Thermoplastic Extrusion)
-  Pavement Arrow (Tape, Type III or Thermoplastic Extrusion)
-  STOP Pavement Word (Tape, Type III or Thermoplastic Extrusion)
-  4 Each Type J Raised Pavement Markers
Type D Raised Pavement Markers @ 40'-0" o.c.
Type H 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 C Markers @ 40'-0" o.c. (Tape, Type III or 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. Final locations of all signs shall be approved by the Engineer prior to any installation work.
5. 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.
6. Final locations of all Stop Lines shall be approved by the Engineer prior to installation.
7. All pavement striping shall be as noted on the legend or plans.
8. 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.
9. Existing signs not shown on these plans shall remain as posted unless otherwise directed by the Engineer.
10. All signs required to be removed by the Contractor operation shall be reinstalled at the projection completion. The cost for this work shall be considered incidental to the various contract items.
11. Existing pavement markings disturbed by the Contractor operation shall be restriped at the project completion. The cost for this work shall be considered incidental to the various contract items.

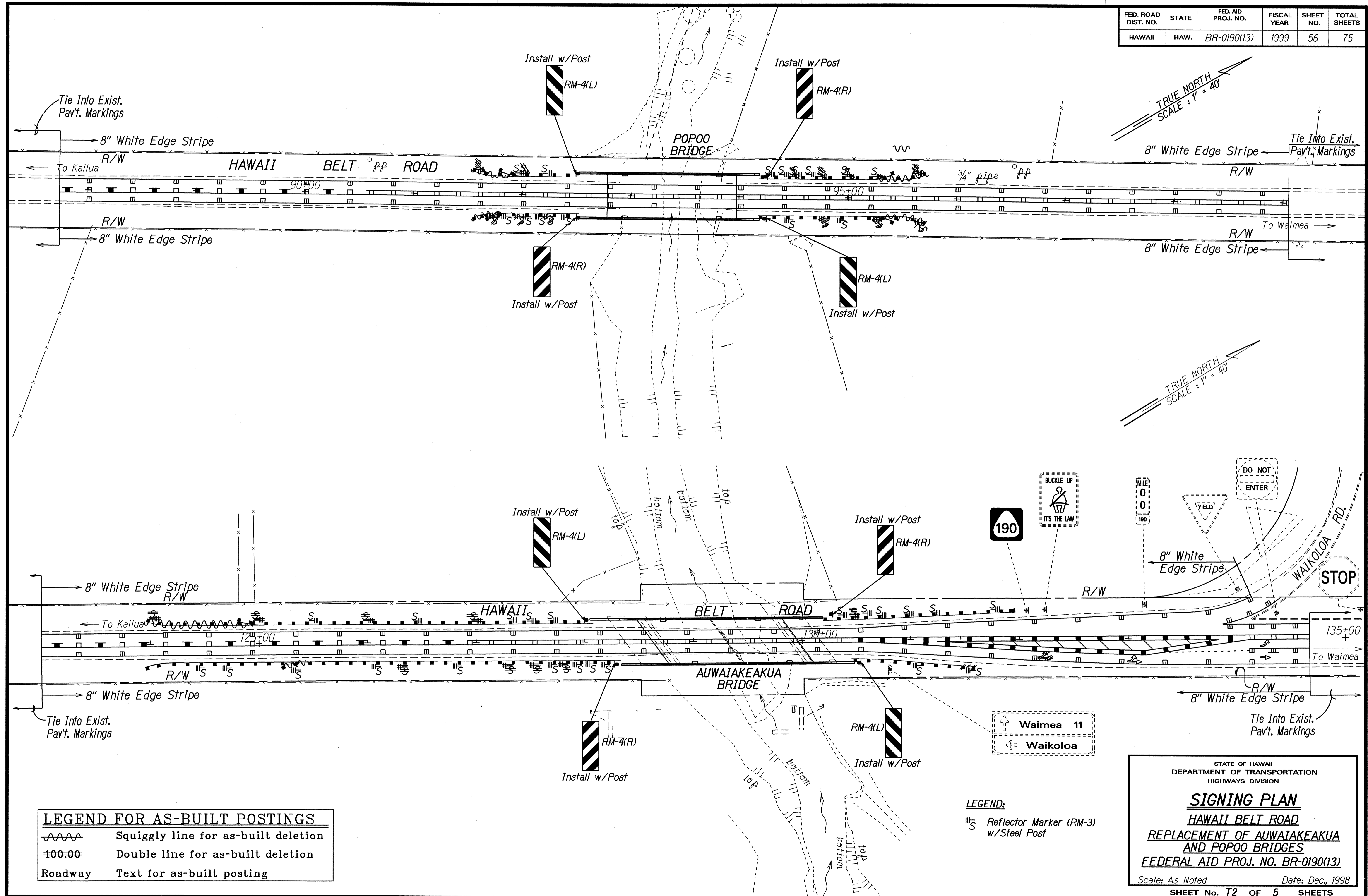
DATE	X
DESIGNED BY	CHRY. KISHI
CHECKED BY	CHRY. KISHI
QUANTITIES BY	CHRY. KISHI
TRACED BY	CHRY. KISHI
DRAWN BY	A. LEHALIJI
PLAN	
ORIGINAL	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PAVEMENT MARKING
LEGEND, DETAILS & NOTES

HAWAII BELT ROAD
Replacement of Auwaiakeakua & Popoo Bridges
Federal Aid Proj. No. BR-0190(13)
Scale: As Noted Date: Dec., 1998
SHEET No. 55 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1999	56	75



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING PLAN
HAWAII BELT ROAD
REPLACEMENT OF AUWAIAKEAKUA
AND POPOO BRIDGES
FEDERAL AID PROJ. NO. BR-0190(13)

Scale: As Noted Date: Dec., 1998
SHEET No. T2 OF 5 SHEETS

LEGEND FOR AS-BUILT POSTINGS

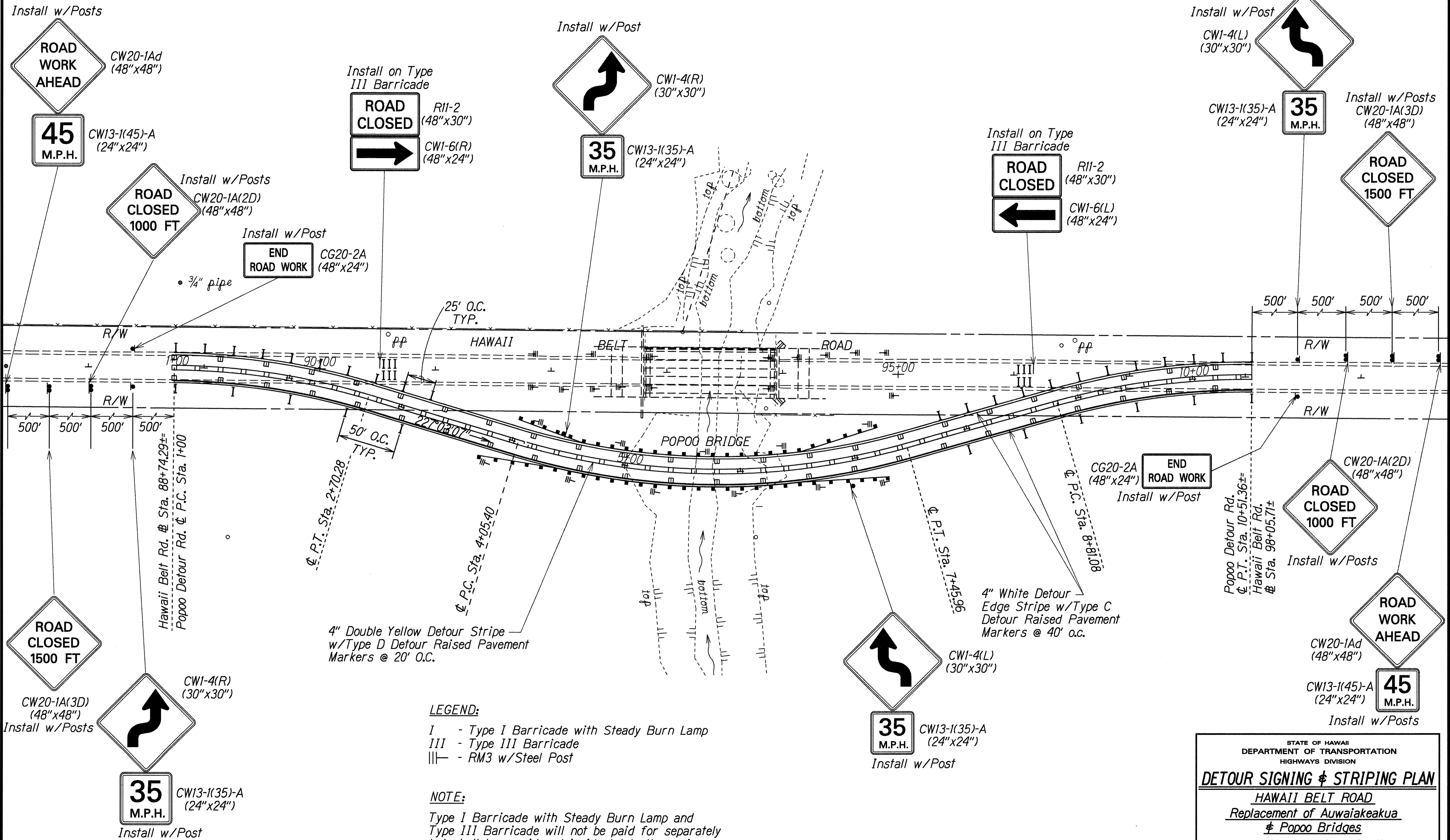
	Squiggly line for as-built deletion
	Double line for as-built deletion
Roadway	Text for as-built posting

DATE: _____
SURVEY PLOTTED BY: _____
PLAN DRAWN BY: M. Takahashi
NOTE BOOK: 142/may
QUANTITIES BY: _____
CHECKED BY: K. H. T. P. 3

AS-BUILT

56

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1999	57	75



DESIGNED BY	SAUL KAKEHI
CHECKED BY	LIBBY
DATE	X
ORIGINAL PLAN	
NOTES	
QUANTITIES	
BY	
NO.	

LEGEND:
 I - Type I Barricade with Steady Burn Lamp
 III - Type III Barricade
 ||| - RM3 w/Steel Post

NOTE:
 Type I Barricade with Steady Burn Lamp and Type III Barricade will not be paid for separately but shall be considered incidental to the various contract items.

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

DETOUR SIGNING & STRIPING PLAN

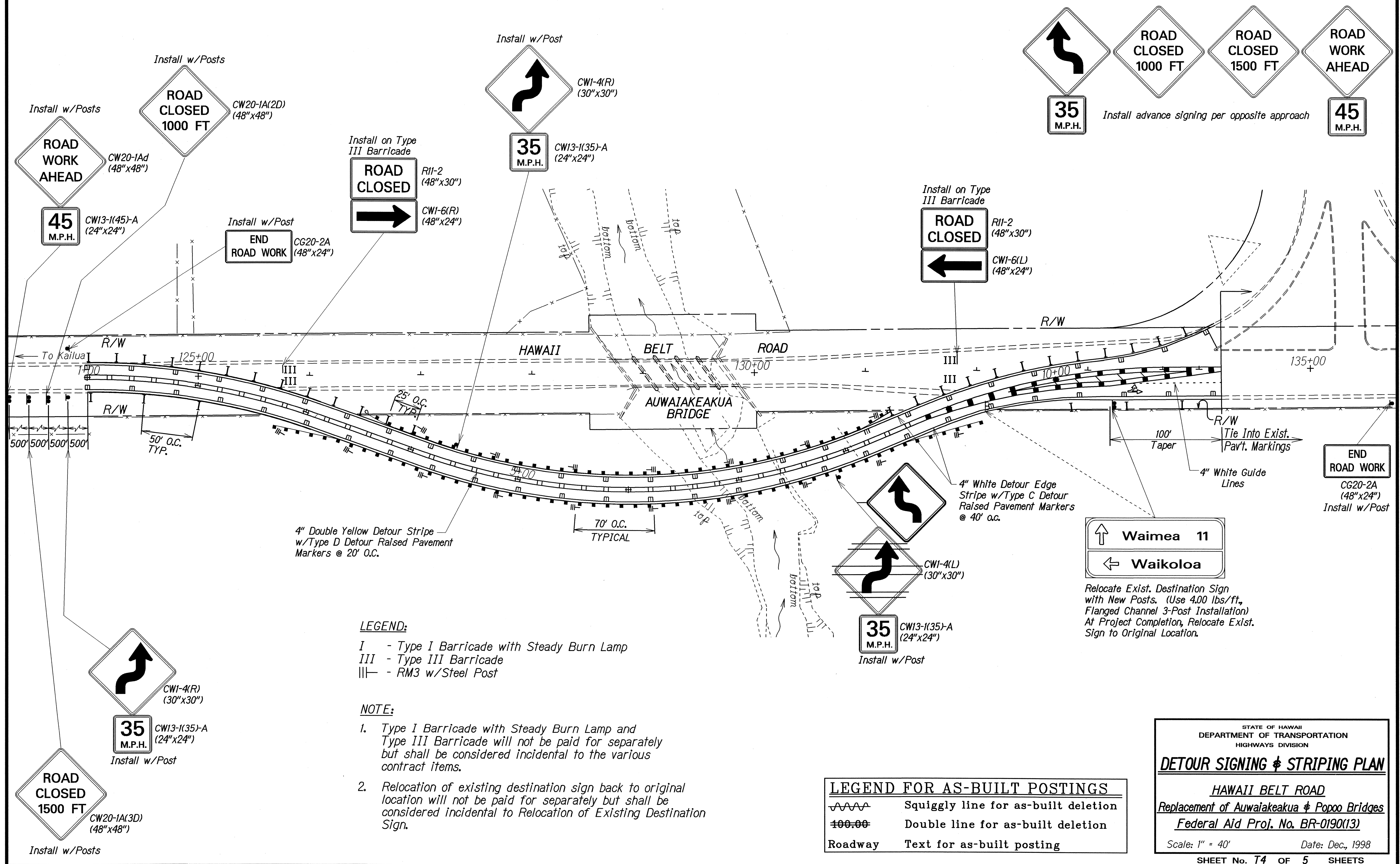
HAWAII BELT ROAD
 Replacement of Auwaiakeakua
 & Popoo Bridges

Federal Aid Proj. No. BR-0190(13)

Scale: 1" = 40' Date: Dec., 1998

SHEET No. T3 OF 5 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	BR-0190(13)	1999	58	75



SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO. 142 MAY	
NO. 142 MAY	

LEGEND:

- I - Type I Barricade with Steady Burn Lamp
- III - Type III Barricade
- ||| - RM3 w/Steel Post

NOTE:

1. Type I Barricade with Steady Burn Lamp and Type III Barricade will not be paid for separately but shall be considered incidental to the various contract items.
2. Relocation of existing destination sign back to original location will not be paid for separately but shall be considered incidental to Relocation of Existing Destination Sign.

LEGEND FOR AS-BUILT POSTINGS

- Squiggly line for as-built deletion
- Double line for as-built deletion
- Roadway Text for as-built posting

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DETOUR SIGNING & STRIPING PLAN

HAWAII BELT ROAD
Replacement of Auwaiakeakua & Popoo Bridges
Federal Aid Proj. No. BR-0190(13)




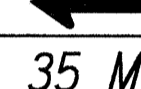
Scale: 1" = 40' Date: Dec., 1998

SHEET No. T4 OF 5 SHEETS

AS-BUILT

58

DETOUR PAVEMENT MARKING SUMMARY	
DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE C _____	100 EA.
TYPE D _____	87 EA.
TYPE H _____	28 EA.
TAPE	
4-INCH PAVEMENT STRIPE (WHITE) _____	4,140 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) _____	40 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	2,310 L.F.
PAVEMENT ARROW _____	1 EA.

CONSTRUCTION DETOUR SIGN SUMMARY				
SIGN NO.	MESSAGE	W/POST(S)	W/O POST	MOUNT ON TYPE III BARRICADE
R11-2	ROAD CLOSED			4
CW1-4(R)		4		
CW1-4(L)		4		
CW1-6(R)				2
CW1-6(L)				2
CW13-1(35)-A	35 M.P.H.		8	
CW20-1A(20)	ROAD CLOSED 1000 FT.	4		
CW20-1A(30)	ROAD CLOSED 1500 FT.	4		
TOTAL		16	8	8

PAVEMENT MARKING SUMMARY	
DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A _____	4 EA.
TYPE C _____	112 EA.
TYPE D _____	71 EA.
TYPE H _____	47 EA.
TYPE J _____	44 EA.
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	60 L.F.
4-INCH PAVEMENT STRIPE (YELLOW) _____	470 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	1,150 L.F.
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	3,980 L.F.
8-INCH PAVEMENT STRIPE (WHITE) _____	140 L.F.
12-INCH PAVEMENT STRIPE (YELLOW) _____	100 L.F.
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	720 L.F.
TAPE - TYPE III OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	100 L.F.
PAVEMENT ARROW _____	4 EA.

CONSTRUCTION SIGN SUMMARY			
SIGN NO.	MESSAGE	W/POSTS	W/O POST
CW13-1(45)-A	45 M.P.H.		4
CW20-1Ad	ROAD WORK AHEAD	4	
CG 20-2A	END ROAD WORK	4	
TOTAL		8	4

ORIGINAL PLAN
 SURVEY PLOTTED BY _____
 DRAWN BY U. Takahashi
 TRACED BY _____
 DESIGNED BY Geoff Kishighi
 10/2/99
 CHECKED BY _____
 N-KHBT/sum

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
TRAFFIC SUMMARIES
HAWAII BELT ROAD
 Replacement of Auwaikeakua & Popoo Bridges
 Federal Aid Proj. No. BR-0190(13)
 Date: Dec., 1998