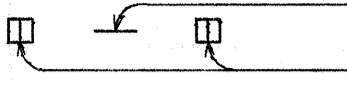
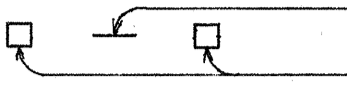
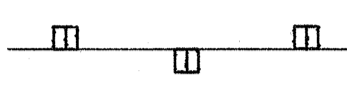
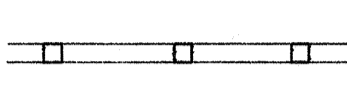





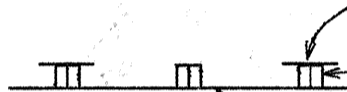
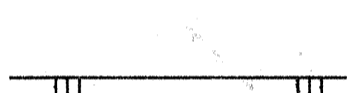

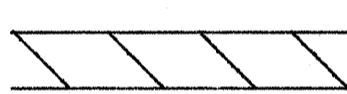
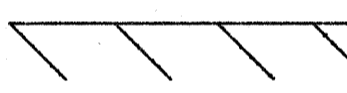

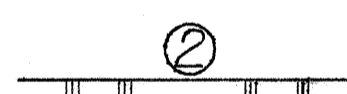





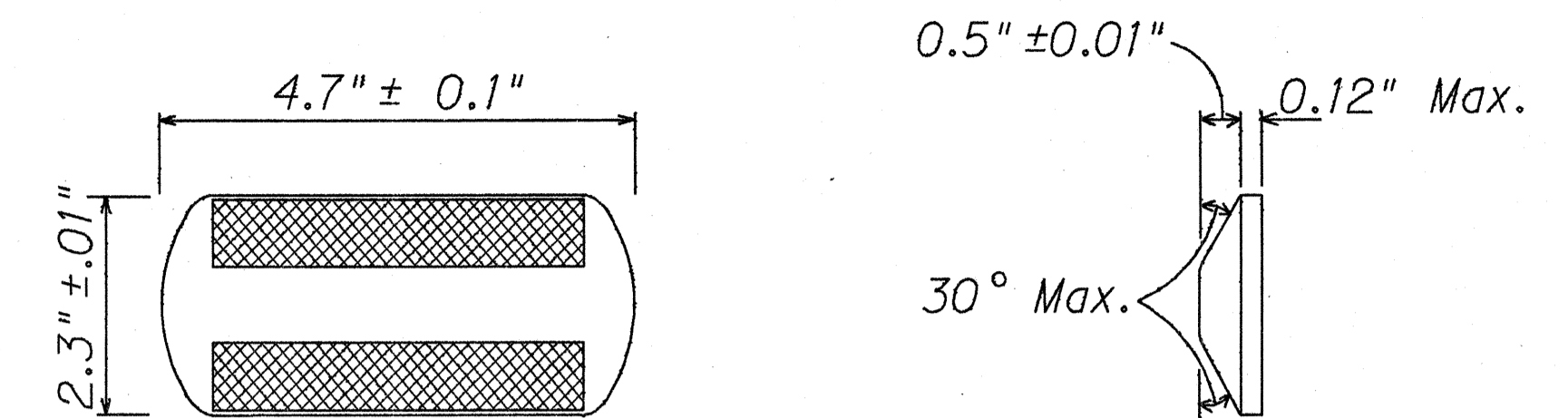
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-90M	1990	15	27

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 at 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. (Tape, Type I or Thermoplastic Extrusion)

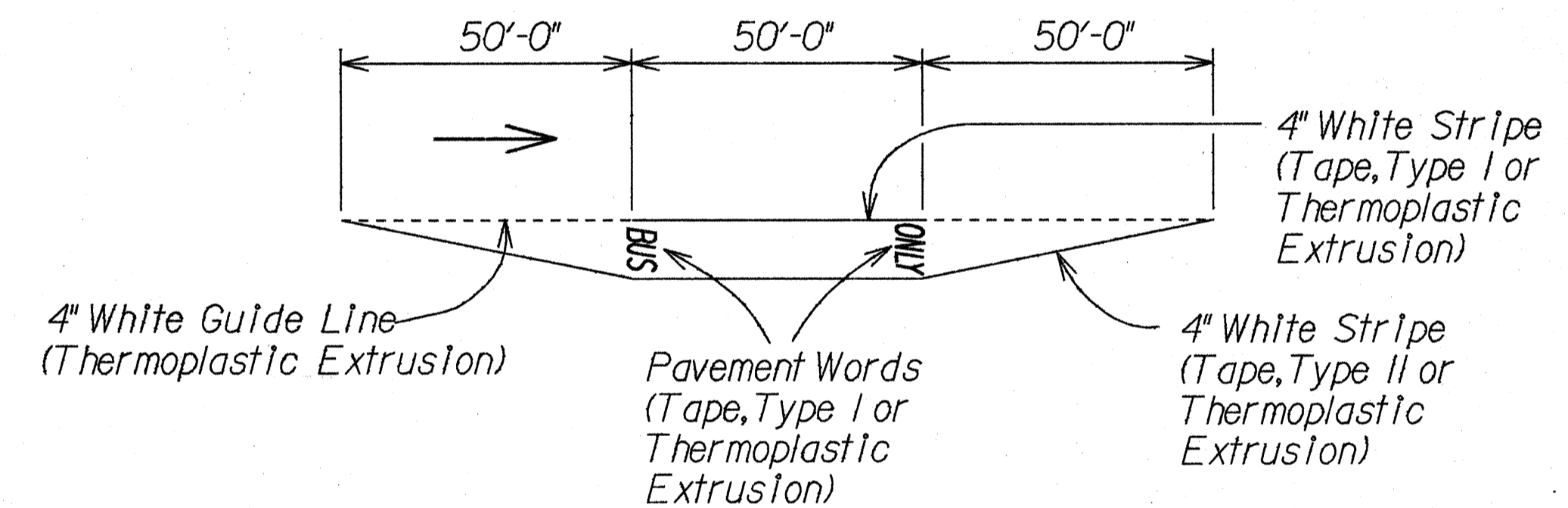
NOTES

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. 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.

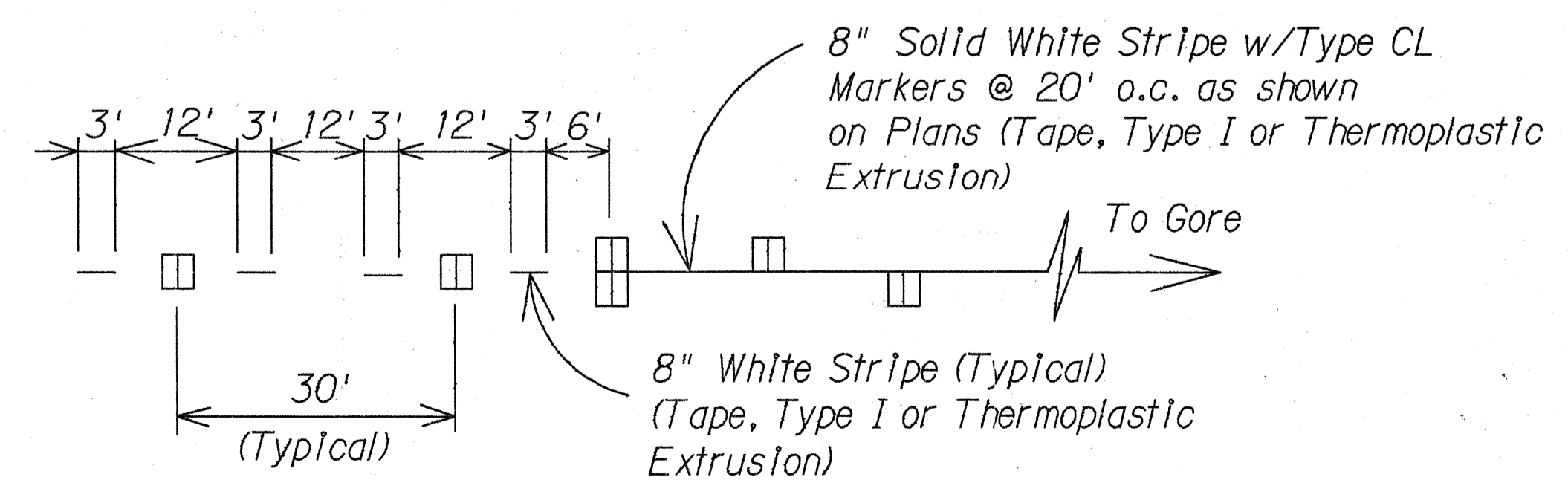


TYPE CL
Red-Clear Reflective Marker
or
TYPE DL
Two-Way Yellow Reflective Marker
or
TYPE HL
One-Way Yellow Reflective Marker

RAISED PAVEMENT MARKER DETAILS
Not to Scale



TYPICAL BUS BAY STRIPING
Not to Scale



LANE DROP MARKING
Not to Scale

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

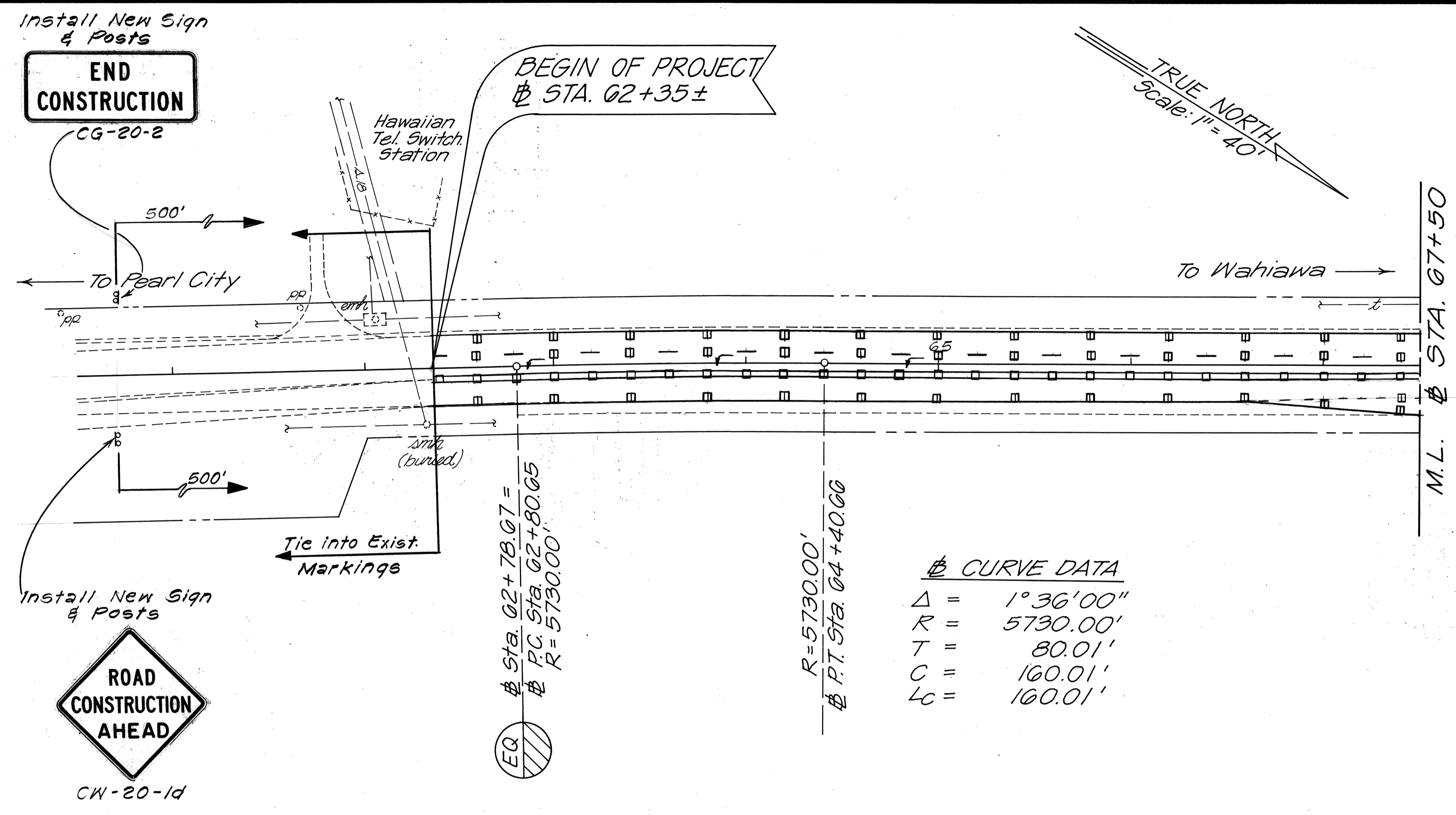
**PAVEMENT MARKING
LEGEND, DETAILS & NOTES**

KAMEHAMEHA HIGHWAY RESURFACING
WAIPIO UKA ST. TO WAIKALANI DR.
PROJECT NO. 99C-01-90M

Scale: Not to Scale Date: Apr 11 1990

SHEET No. 11 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-90M	1990	16	28



CURVE DATA

Δ	=	1° 36' 00"
R	=	5730.00'
T	=	80.01'
C	=	160.01'
Lc	=	160.01'

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

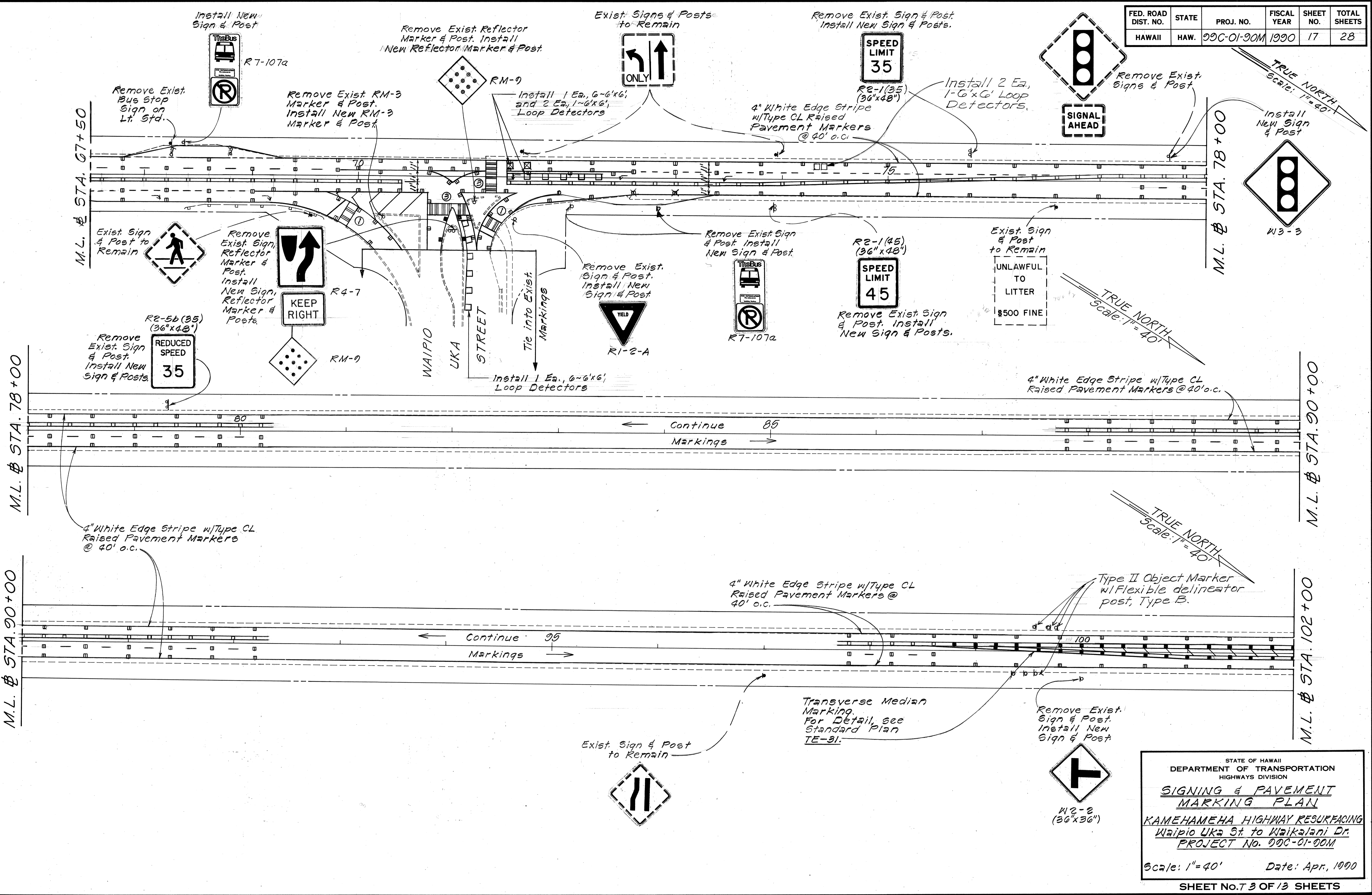
**SIGNING & PAVEMENT
MARKING PLAN**

KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St. to Waikalani Dr.
PROJECT No. 99C-01-90M

Scale: 1" = 40' Date: Apr., 1990

SHEET No. 16 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	00C-01-00M	1990	17	28



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING PLAN

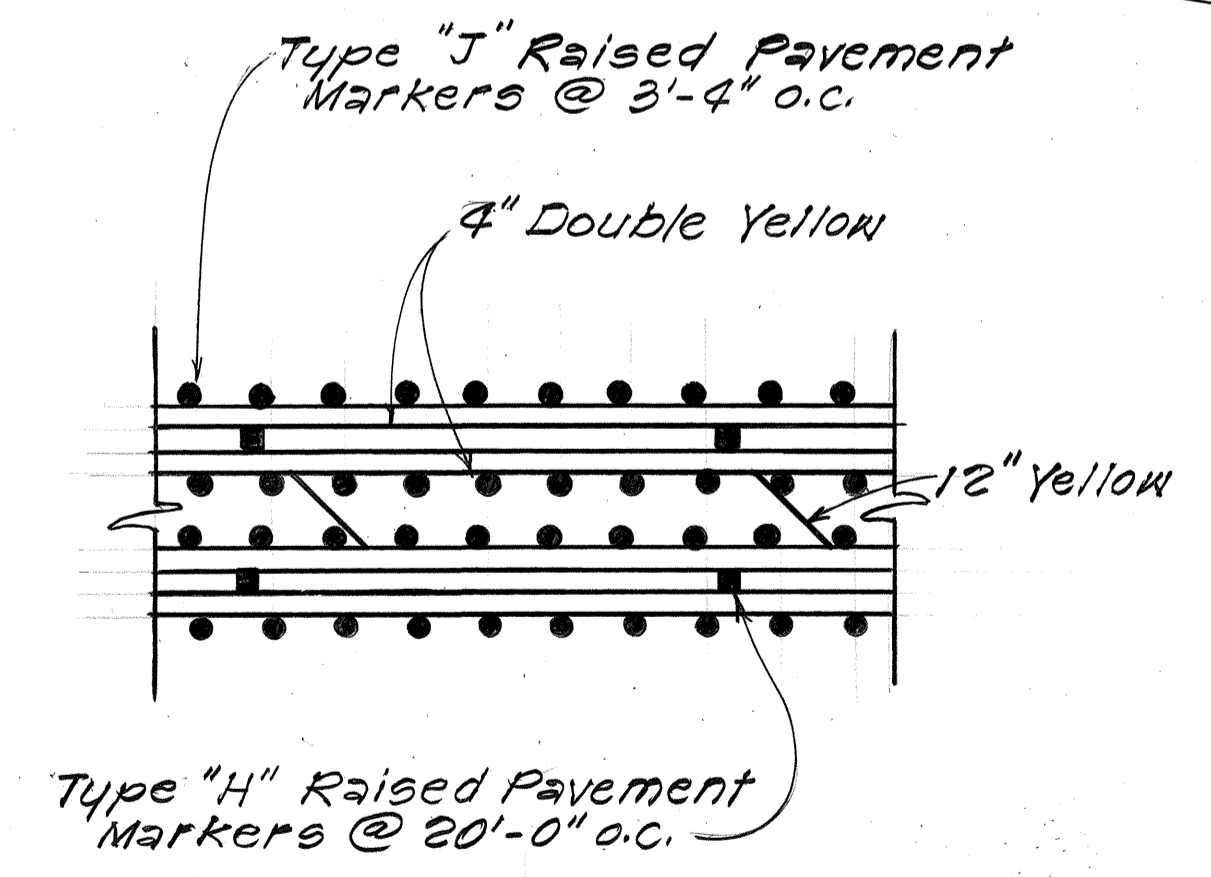
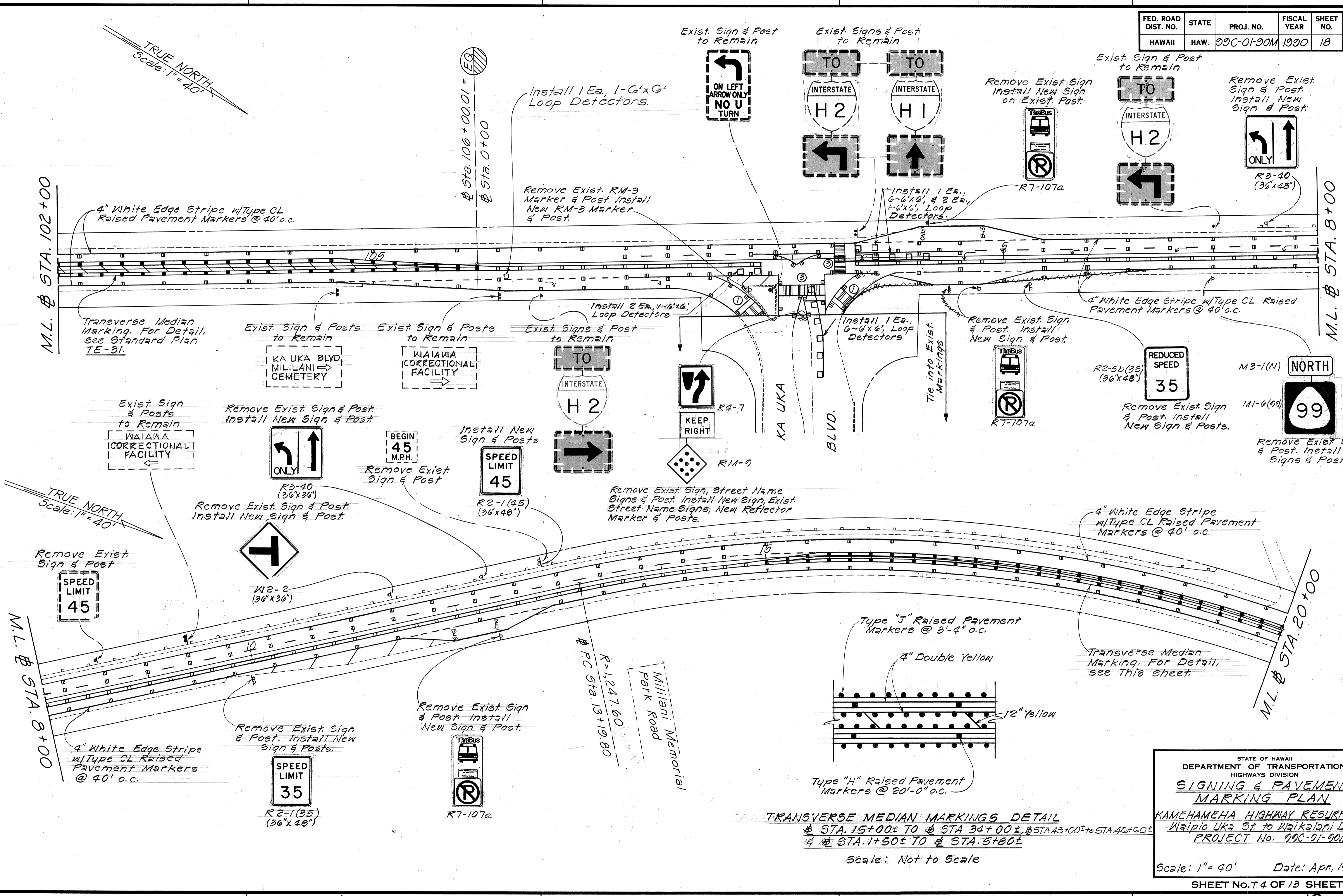
KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St to Waikalani Dr.
PROJECT No. 00C-01-00M

Scale: 1"=40' Date: Apr, 1990

SHEET No. 7 3 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-90M	1990	18	28

TRUE NORTH
Scale: 1" = 40'



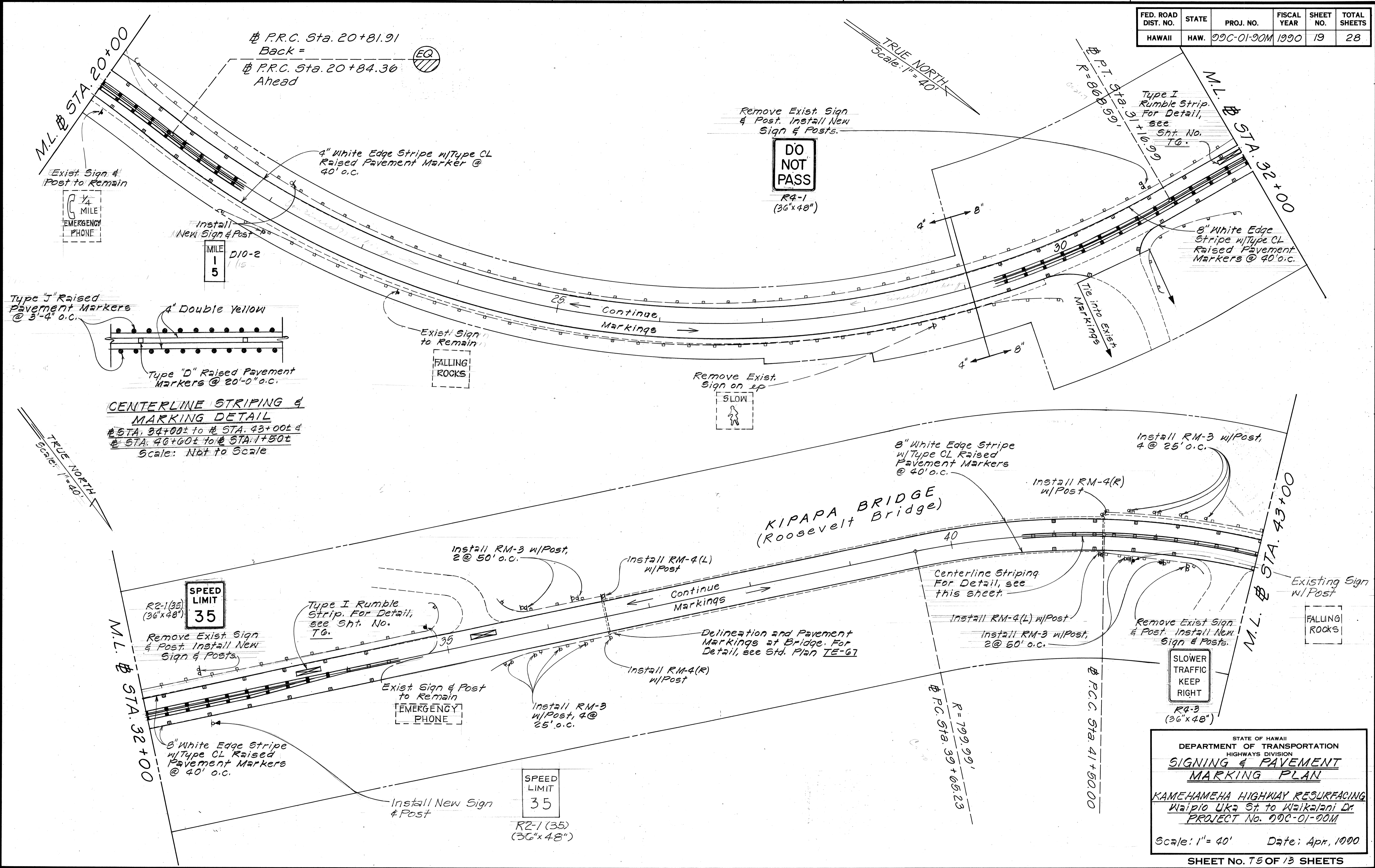
DATE	
SURVEY PLOTTED BY	
DRAWN BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
NO.	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING & PAVEMENT MARKING PLAN
 KAMEHAMEHA HIGHWAY RESURFACING
 Waipio UKA St. to Waikalani Dr.
 PROJECT No. 99C-01-90M
 Scale: 1" = 40' Date: Apr, 1990
 SHEET No. 7 4 OF 13 SHEETS

D-5-2

D-5-2

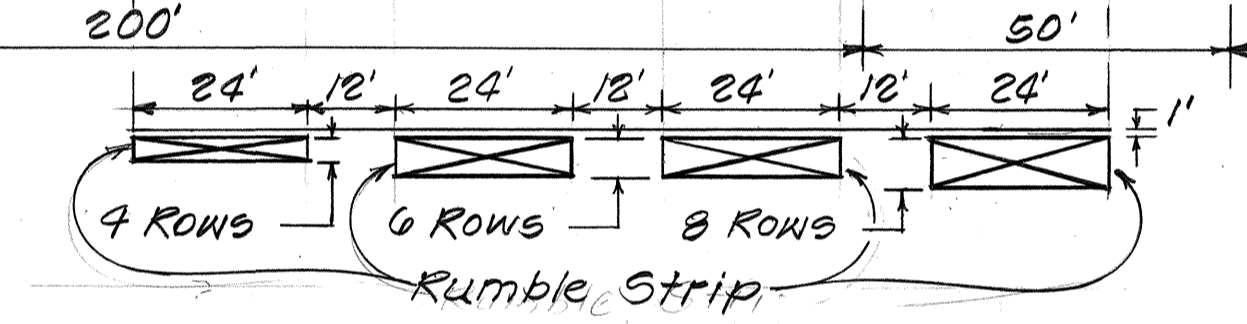
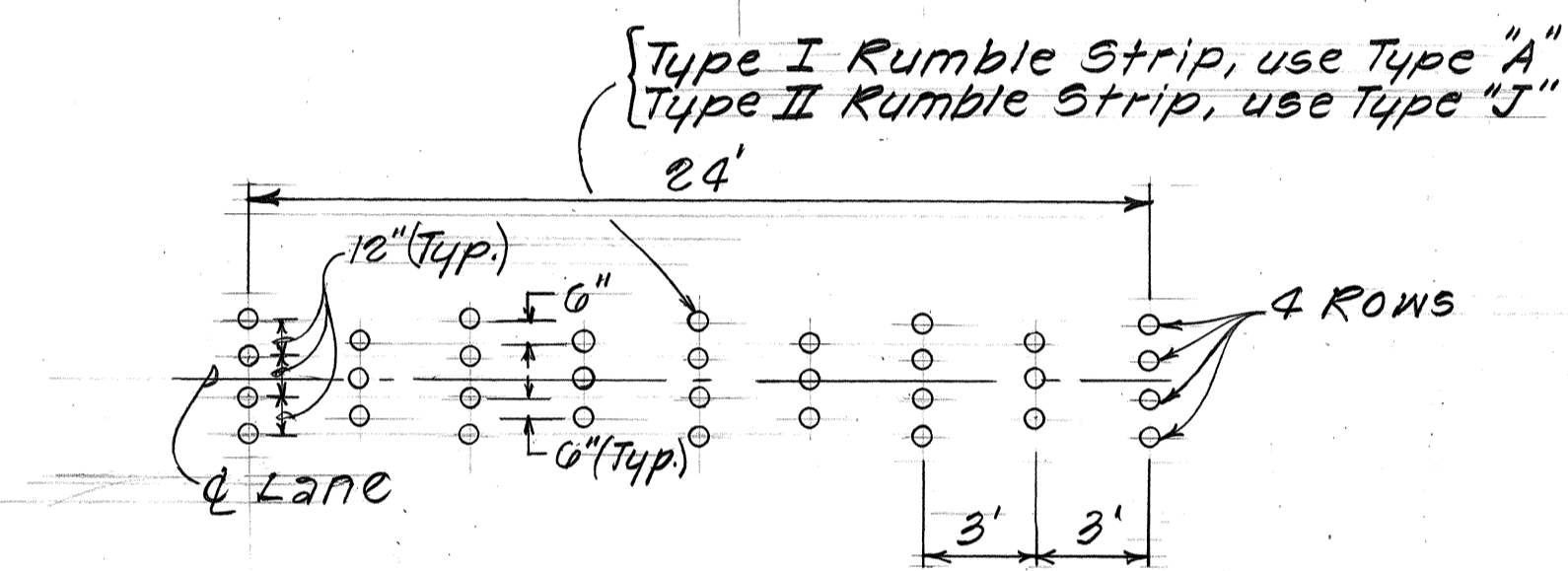
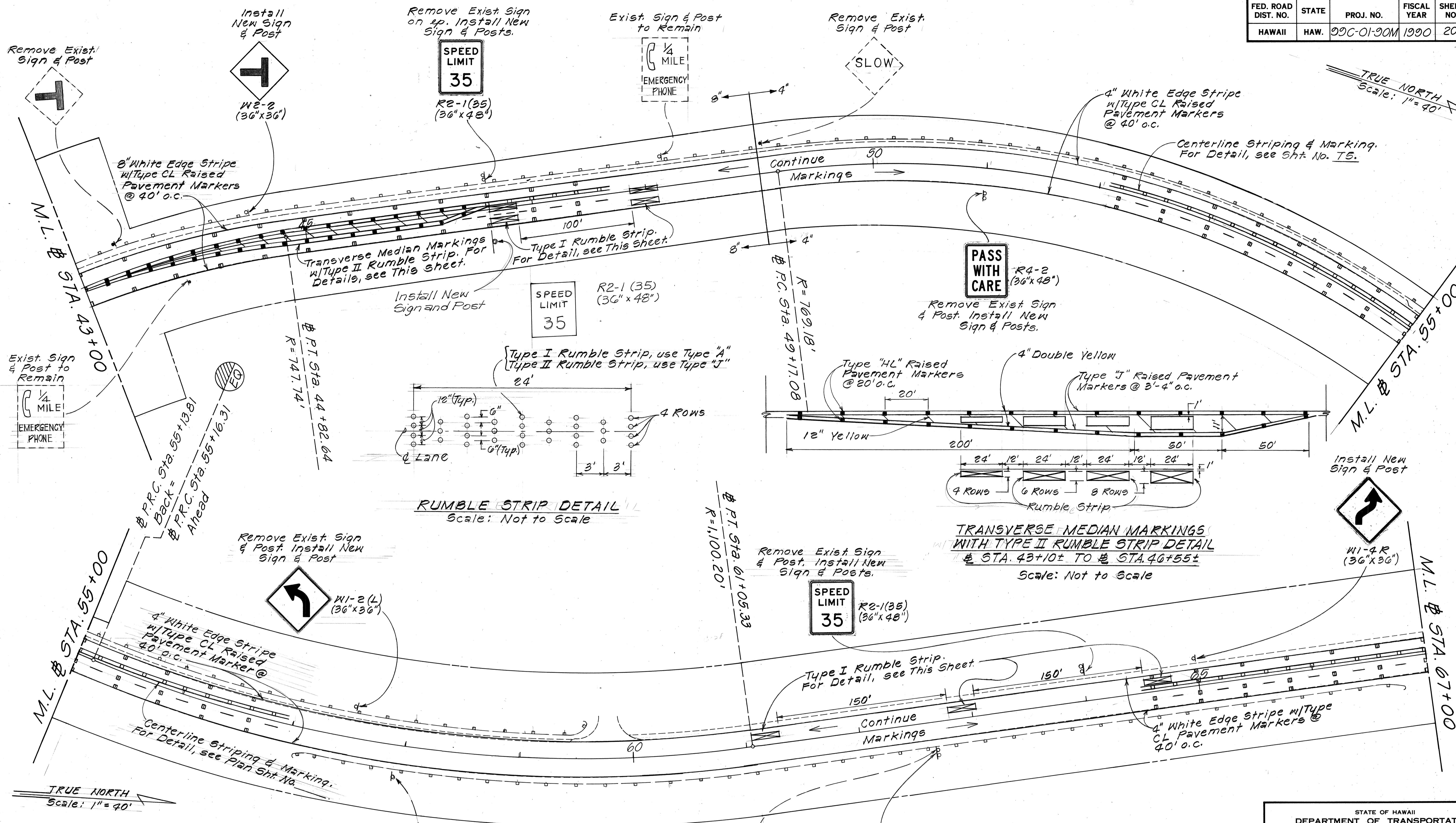
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	09C-01-00M	1990	19	28



SURVEY PLOTTED BY	DATE
DESIGNED BY	
TRACED BY	
DESIGNED BY	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
SIGNING & PAVEMENT MARKING PLAN
 KAMEHAMEHA HIGHWAY RESURFACING
 Waipio Uka St. to Waikalani Dr.
 PROJECT No. 09C-01-00M
 Scale: 1" = 40' Date: Apr, 1990
 SHEET No. 75 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	09C-01-90M	1990	20	28



DATE	_____
DESIGNED BY	_____
CHECKED BY	_____
NO.	_____

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

SIGNING & PAVEMENT MARKING PLAN

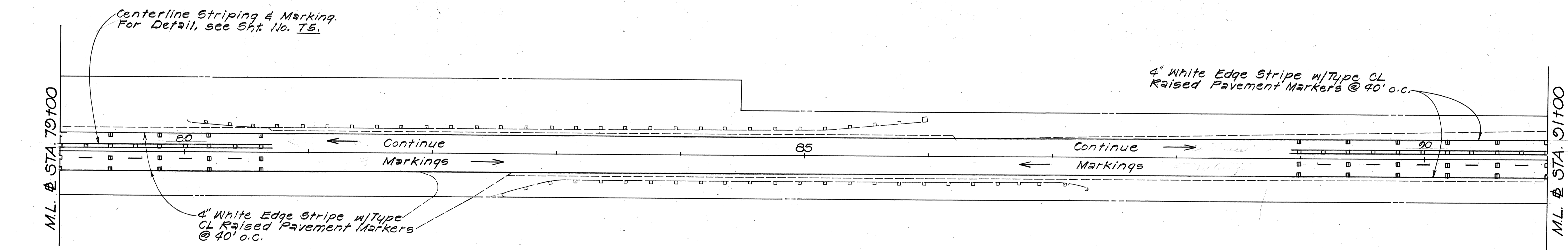
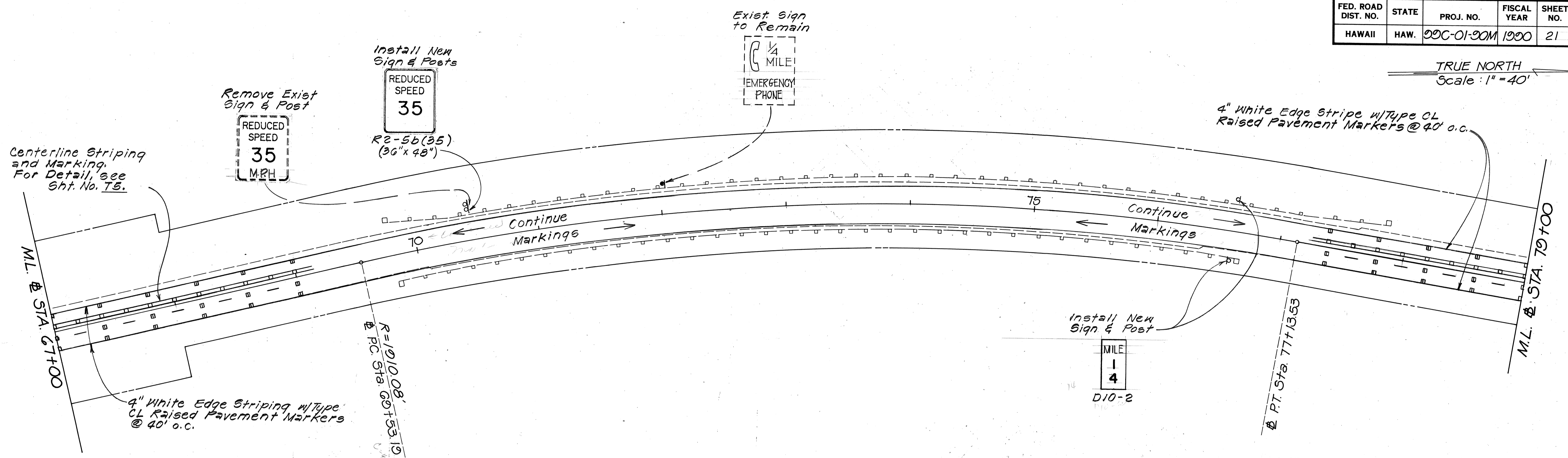
KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St. to Waikalani Dr.
PROJECT No. 09C-01-90M

Scale: 1" = 40' Date: Apr, 1990

SHEET No. 76 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	00C-01-90M	1990	21	28

TRUE NORTH
Scale: 1" = 40'



TRUE NORTH
Scale: 1" = 40'

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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

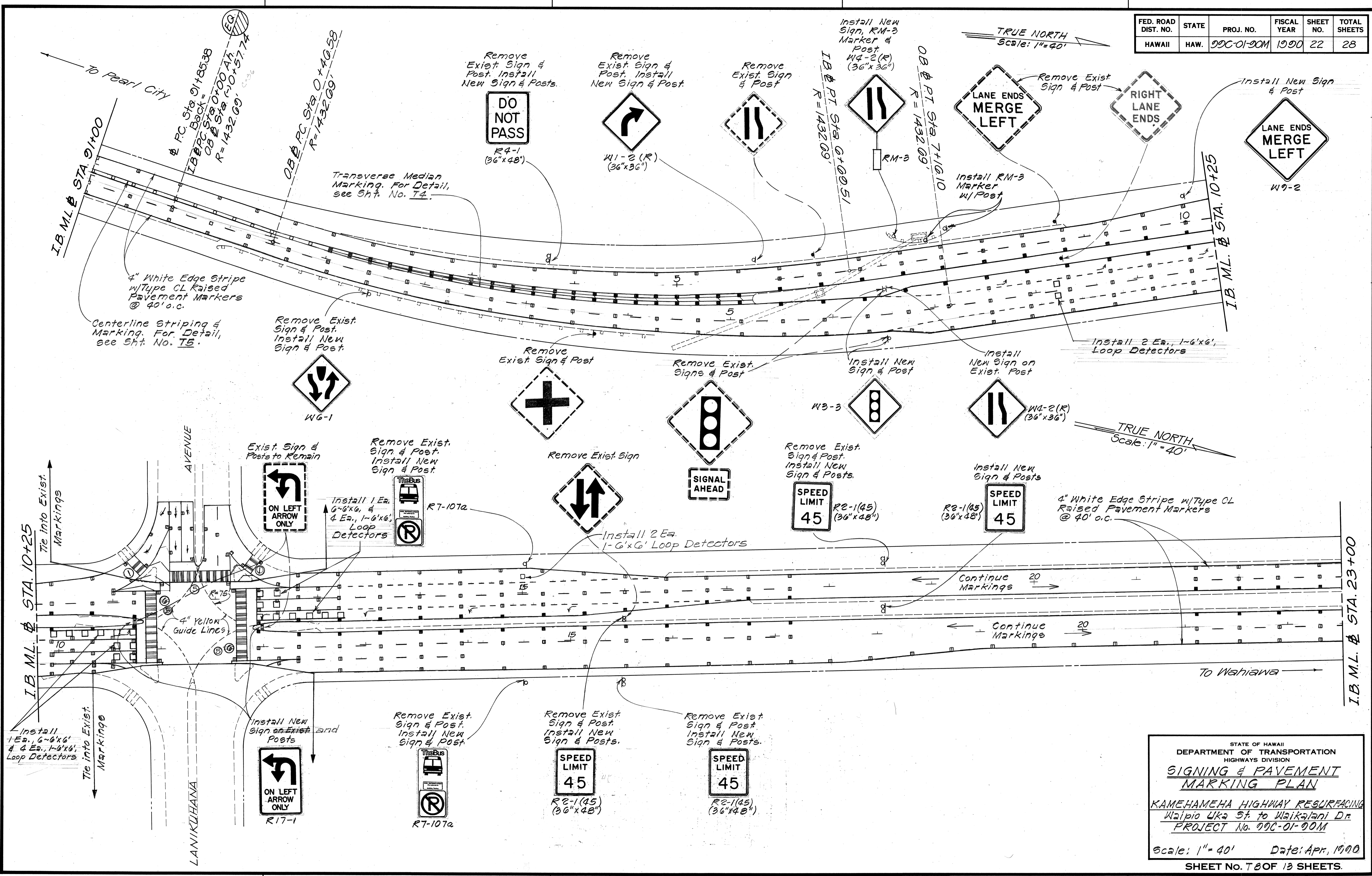
SIGNING & PAYEMENT MARKING PLAN

KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St. to Waikalani Dr
PROJECT No. 00C-01-90M

Scale: 1" = 40' Date: Apr, 1990

SHEET No. 77 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-00M	1990	22	28



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

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

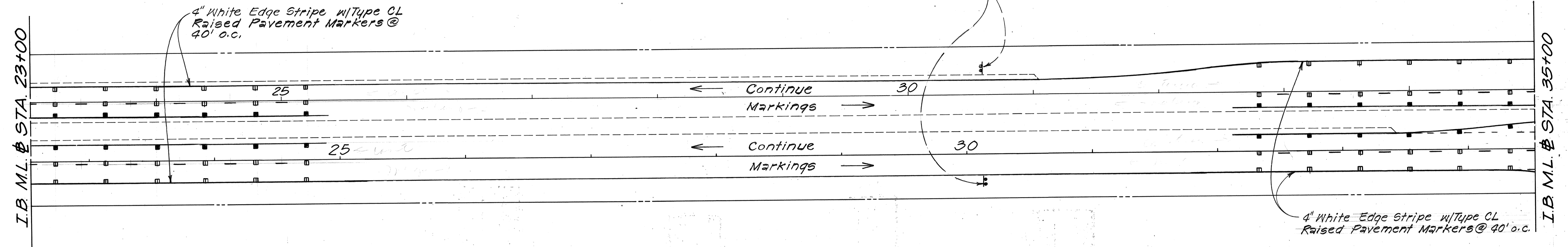
SIGNING & PAVEMENT MARKING PLAN

KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St. to Waikalani Dr.
PROJECT No. 99C-01-00M

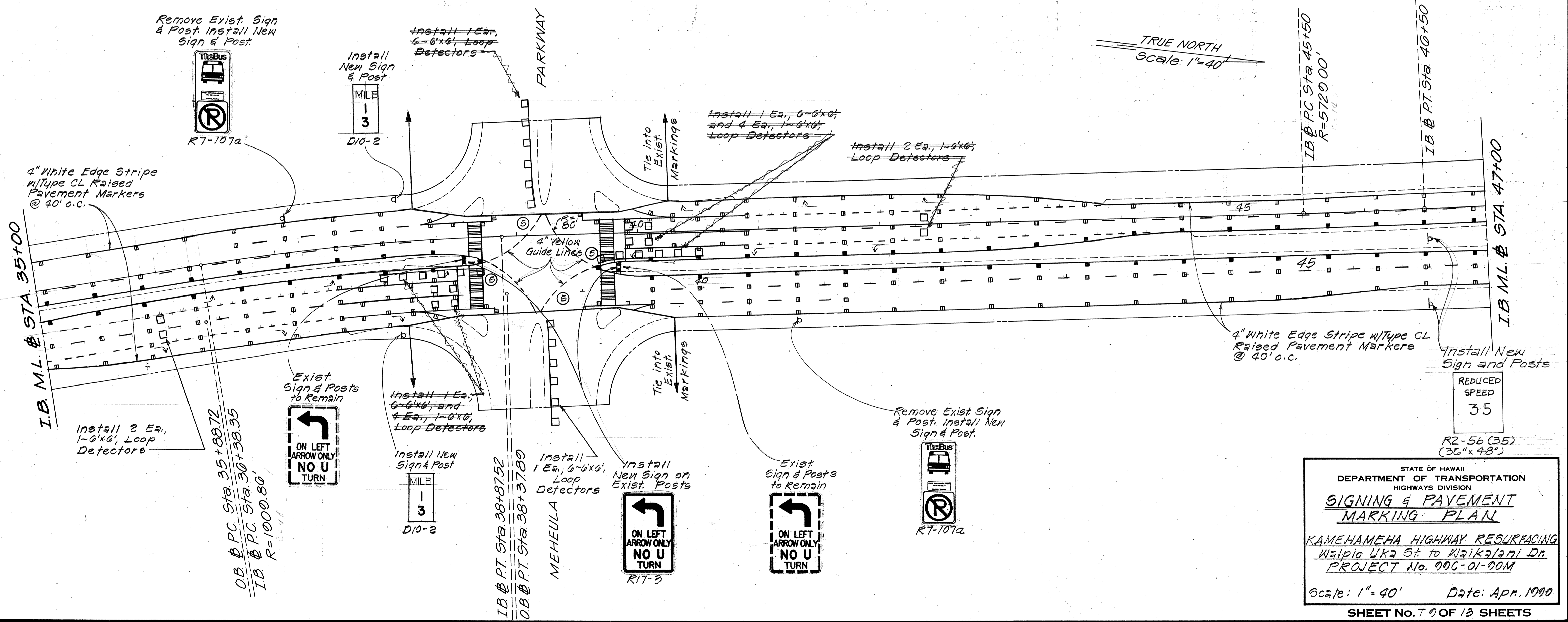
Scale: 1" = 40' Date: Apr, 1990
SHEET No. 7 OF 13 SHEETS.

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	00C-01-00M	1000	23	28

TRUE NORTH
Scale: 1"=40'



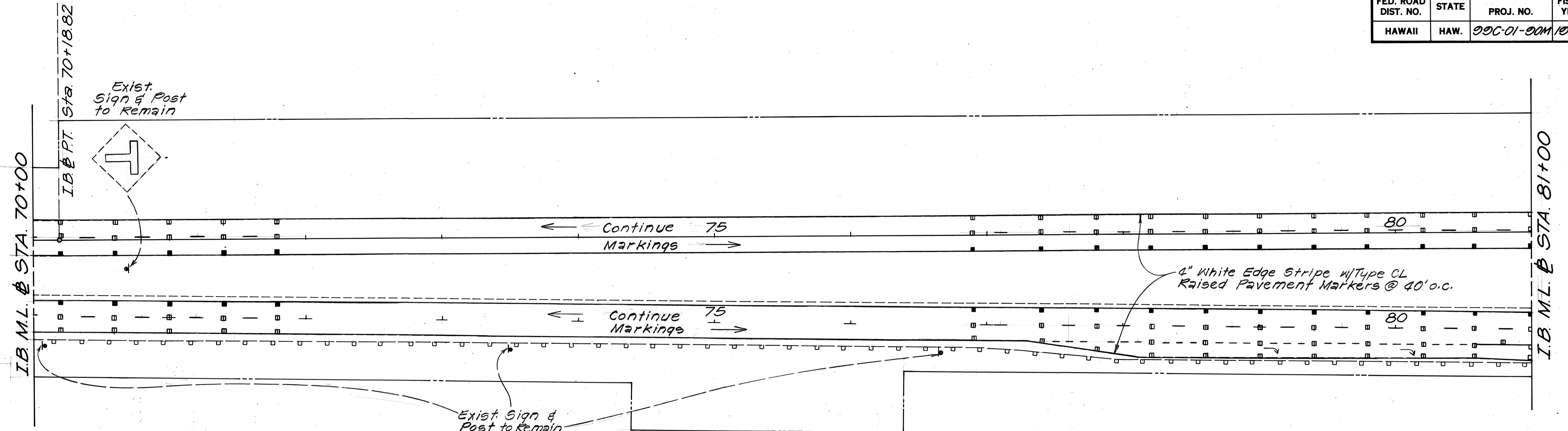
TRUE NORTH
Scale: 1"=40'



ORIGINAL PLAN	DATE
DESIGNED BY	
TRACED BY	
NOTE BOOK	
QUANTITIES BY	
CHECKED BY	

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SIGNING & PAVEMENT MARKING PLAN
KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St. to Waikalanani Dr.
PROJECT No. 00C-01-00M
Scale: 1"=40' Date: Apr. 1990
SHEET No. 7 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	DDC-01-00M	1000	25	28

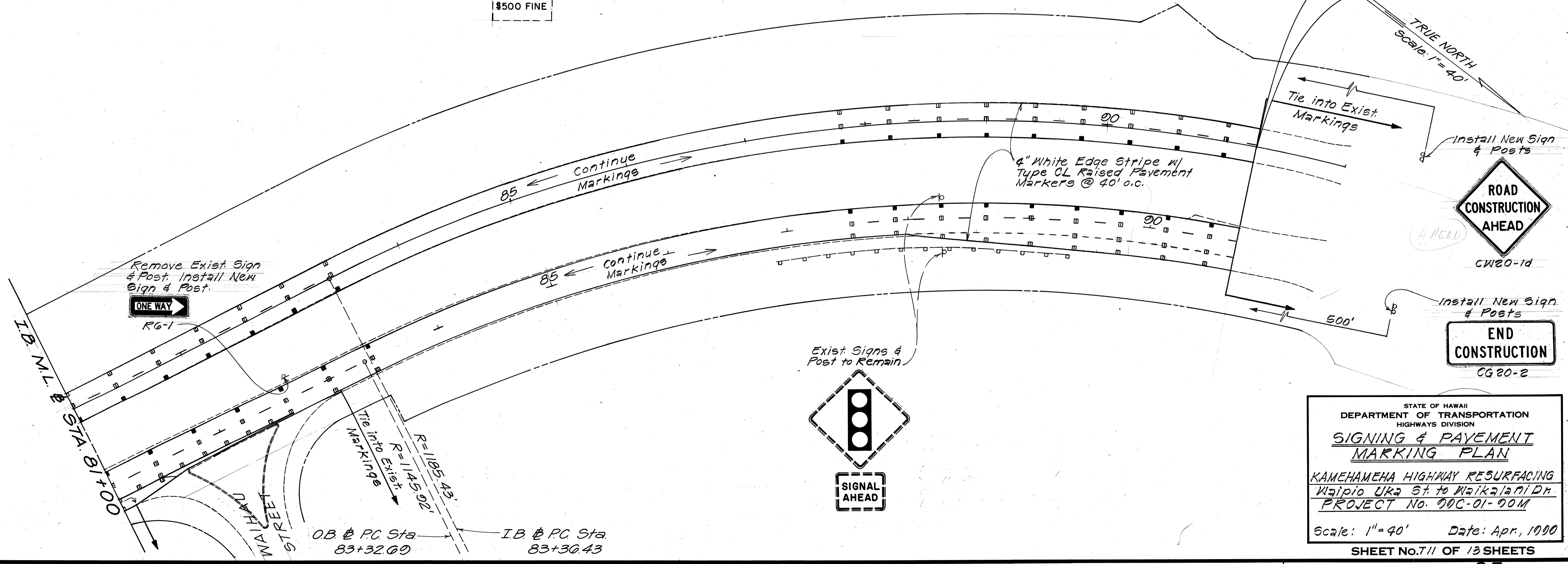


TRUE NORTH
Scale: 1" = 40'

Exist Sign & Post to Remain
UNLAWFUL TO LITTER
\$500 FINE

END OF PROJECT
I.B. @ P.O.C. STA. 01+25

TRUE NORTH
Scale: 1" = 40'



Remove Exist. Sign & Post, Install New Sign & Post.
ONE WAY
RG-1

Exist Signs & Post to Remain
SIGNAL AHEAD

Install New Sign & Posts
ROAD CONSTRUCTION AHEAD
CW20-1d

Install New Sign & Posts
END CONSTRUCTION
CG20-2

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
SIGNING & PAYEMENT MARKING PLAN
KAMEHAMEHA HIGHWAY RESURFACING
Waipio Uka St to Waikalani Dr
PROJECT No. DDC-01-00M
Scale: 1" = 40' Date: Apr, 1000
SHEET No. 711 OF 13 SHEETS

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

TRAFFIC SIGN SUMMARY

SIGN NO.	MESSAGE	QUANTITY			
		10 SQ. FT. OR LESS		GREATER THAN 10 SQ. FT.	
		W/POST	W/O POST	W/POSTS	W/O POST
R1-2-A	YIELD	1			
R2-1(35X36"X48")	SPEED LIMIT 35			11	2
R2-1(45X36"X48")	SPEED LIMIT 45			9	
R2-5(35X36"X48")	REDUCED SPEED 35			3	
R3-4(36"X36"X36"X30")	NO U TURN			2	
R3-4(36"X36")	ONLY ↯	2			
R4-1(36"X48")	DO NOT PASS			2	
R4-2(36"X48")	PASS WITH CARE			1	
R4-3(36"X48")	SLOWER TRAFFIC KEEP RIGHT			1	
R4-7 (36"X48"X36"X30")	KEEP RIGHT			2	
R6-1(R)	ONE WAY RIGHT	1			
R7-107a	NO PARKING- BUS STOP	12			
R9-3a	NO PEDESTRIAN CROSSING		2		
R9-3(L)	USE CROSSWALK →		1		
R9-3(R)	USE CROSSWALK ←		1		
R17-1	↯ ON LEFT ARROW ONLY			4	
R17-3	↯ ON LEFT ARROW ONLY- NO U TURN			2	
W1-2(LX36"X36")	↯	1			
W1-2(RX36"X36")	↯	1			
W1-4(RX36"X36")	↯	1			
W2-2(36"X36")	⊥	3			
W3-3	SIGNAL AHEAD	4			
W4-2(RX36"X36")	⊥	1	1		
W6-1	DIVIDED HIGHWAY			1	
W9-2(L)	LANE ENDS- MERGE LEFT	1			
TOTAL		28	5	38	2

PAVEMENT MARKING SUMMARY

DESCRIPTION	QUANTITY
PAVEMENT MARKERS	
TYPE A _____	2720 EACH
TYPE CL _____	2110 EACH
TYPE DL _____	540 EACH
TYPE HL _____	770 EACH
TYPE J _____	6790 EACH
TAPE - TYPE I OR THERMOPLASTIC EXTRUSION	
8-INCH PAVEMENT STRIPE (WHITE) _____	2290 LF
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	8300 LF
PAVEMENT ARROW _____	47 LF
PAVEMENT WORD _____	5 LF
TAPE - TYPE II OR THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	40000 LF
4-INCH PAVEMENT STRIPE (YELLOW) _____	15660 LF
8-INCH PAVEMENT STRIPE (WHITE) _____	6230 LF
12-INCH PAVEMENT STRIPE (WHITE) _____	280 LF
12-INCH PAVEMENT STRIPE (YELLOW) _____	1090 LF
DOUBLE 4-INCH PAVEMENT STRIPE (YELLOW) _____	6830 LF
THERMOPLASTIC EXTRUSION	
4-INCH PAVEMENT STRIPE (WHITE) _____	5970 LF
4-INCH PAVEMENT STRIPE (YELLOW) _____	1080 LF
12-INCH PAVEMENT STRIPE (WHITE) _____	450 LF
CROSSWALK MARKINGS _____	63 LANES

SURVEY PLOTTED BY _____ DATE _____
 PLAN _____
 DESIGNED BY _____
 NOTE BOOK _____
 QUANTITIES BY _____
 CHECKED BY _____

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION
MISCELLANEOUS SUMMARIES
 KAMEHAMEHA HIGHWAY RESURFACING
 WAIPIO UKA ST. TO WAIKALANI DR.
 PROJECT NO. 99C-01-90M
 Date: April 1990
 SHEET No. 112 OF 13 SHEETS

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	99C-01-90M	1990	27	28

CONSTRUCTION SIGN SUMMARY

SIGN NO.	LOCATION	MESSAGE	W/POST	W/O POST
CG20-2	⊕ STA. 62+50 LT.	END CONSTRUCTION	1	
CG20-1d	⊕ STA. 62+50 RT.	ROAD CONSTRUCTION	1	
CG20-2	⊕ STA. 96+25 RT.	END CONSTRUCTION	1	
CG20-1d	⊕ STA. 96+25 LT.	ROAD CONSTRUCTION	1	
TOTAL			4	

MILEPOST MARKER SUMMARY

MILE POST NO.	LOCATION	QUANTITY W/POST
15	⊕ STA. 22+10 ± LT./RT.	2
14	⊕ STA. 76+62 ± LT./RT.	2
13	⊕ STA. 38+00 ± LT./RT.	2
TOTAL		6

REFLECTOR MARKER SUMMARY

TYPE	QUANTITY		
	W/O POST	W/FLEX-IBLE POST	W/STEEL POST
RM-2	80		
RM-3	2	1	13
RM-4(L)			2
RM-4(R)			2
RM-9	2	1	
TOTAL	84	2	17

ROUTE MARKER ASSEMBLY

LOCATION	QUANTITY TYPE A
⊕ STA. 7+00 RT.	1
TOTAL	1

OBJECT MARKER SUMMARY

TYPE	QUANTITY	
	W/O POST	W/FLEX-IBLE POST
TYPE II OBJECT MARKER	200	6
TOTAL	200	6

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

MISCELLANEOUS SUMMARIES
KAMEHAMEHA HIGHWAY RESURFACING
WAIPIO UKA ST. TO WAIKALANI DR.
PROJECT NO. 99C-01-90M
Date: Apr 11 1990

SHEET No. 113 OF 13 SHEETS

SURVEY PLATTED BY _____ DATE _____
 DRAWN BY _____
 DESIGNED BY _____
 QUANTITIES BY _____
 CHECKED BY _____
 ORIGINAL PLAN _____
 NOTE BOOK _____
 No. _____

