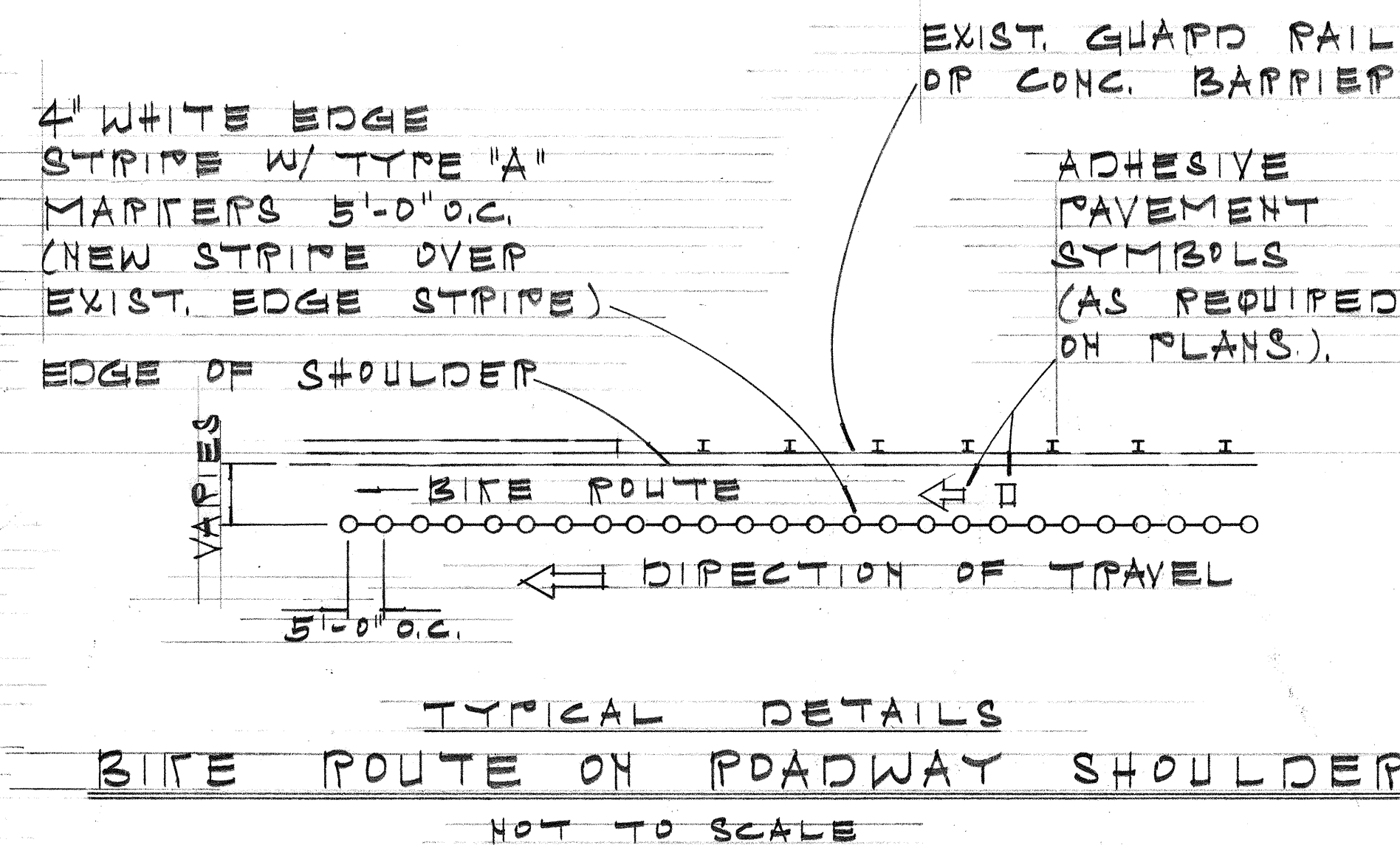
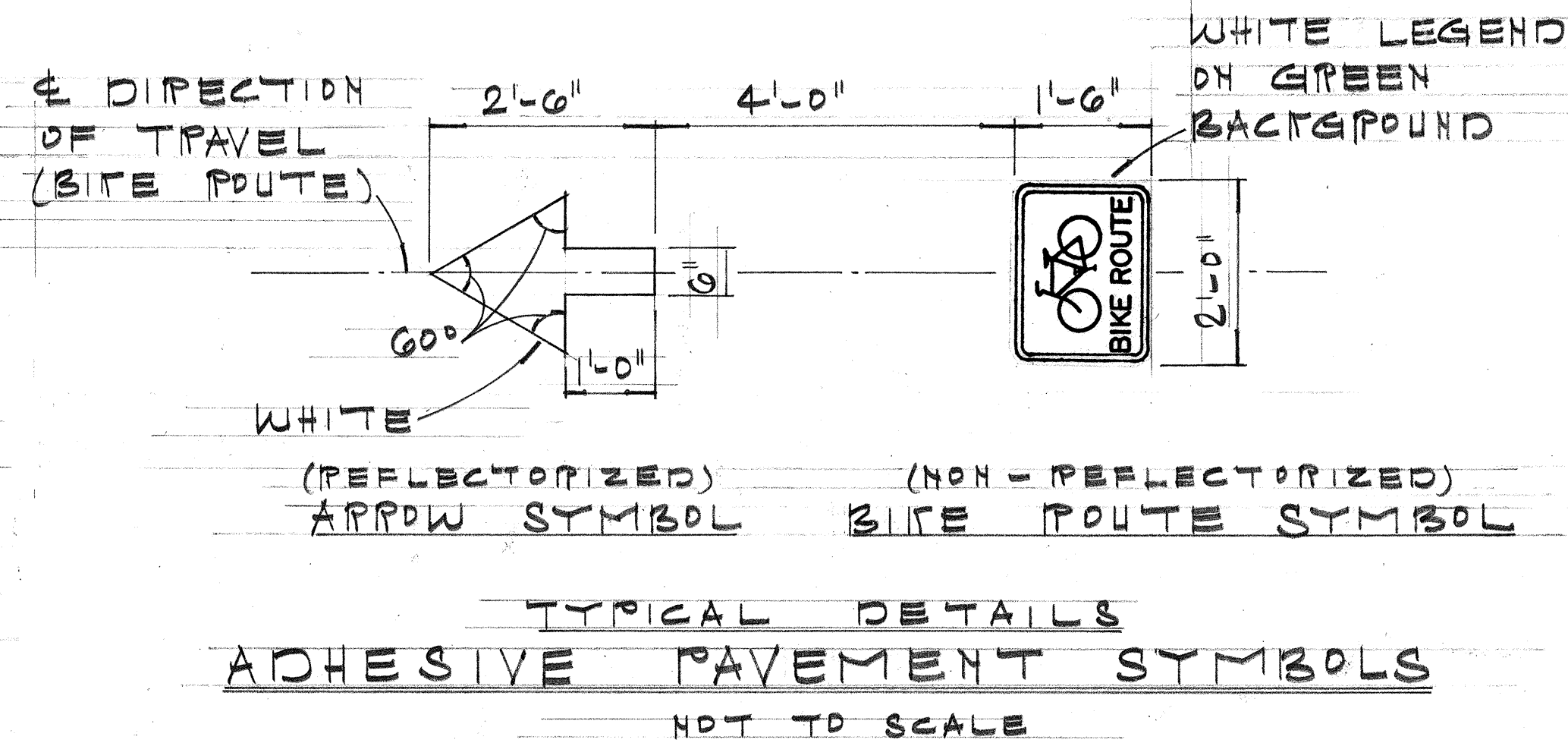


SURVEY PLOTTED BY	DATE
DRAWN BY	
TRACED BY	
QUANTITIES BY	
CHECKED BY	
ORIGINAL PLAN	
NOTE BOOK	
No.	

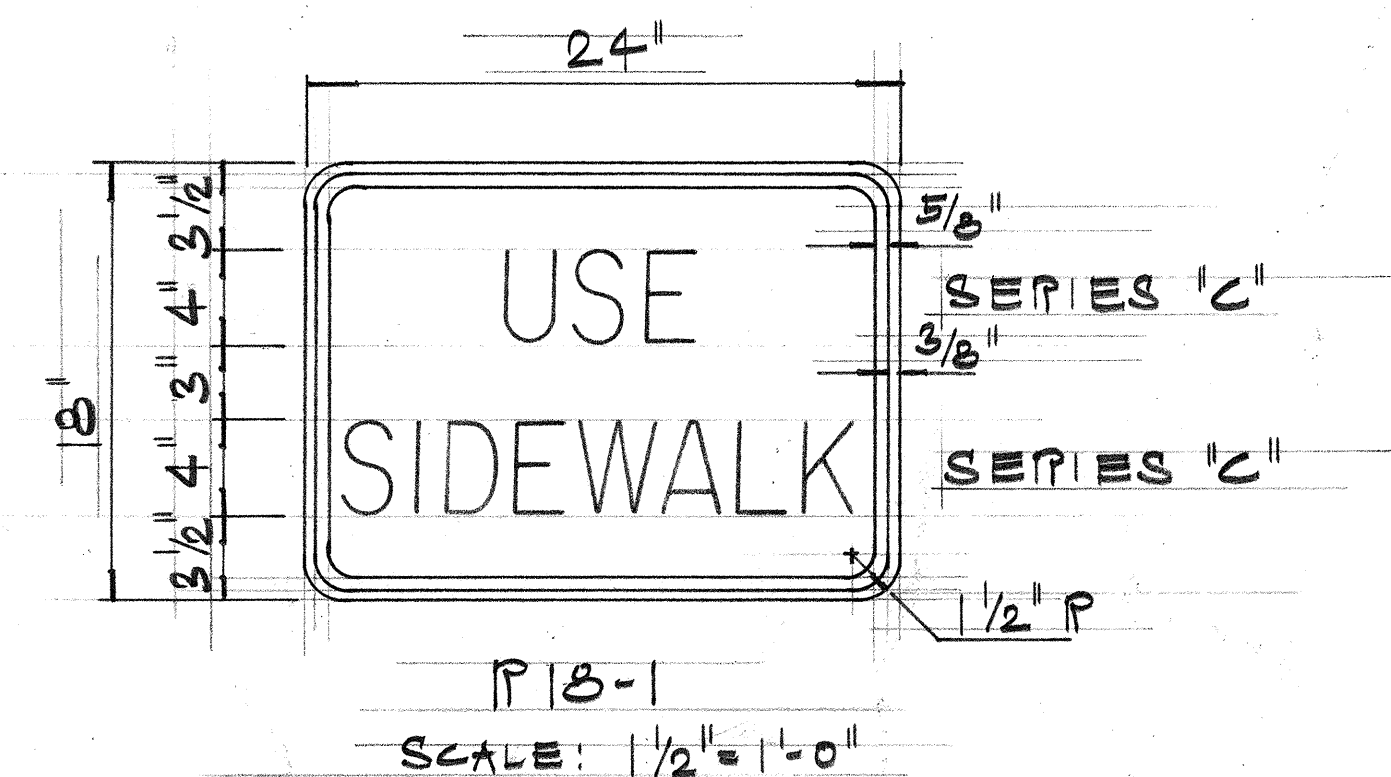
GENERAL NOTES:

1. THE EXACT LOCATIONS OF WHEEL CHAIR RAMPS SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER.
2. THE CONTRACTOR SHALL SWEEP BIKE ROUTE & REMOVE ALL DEBRIS (INCLUDING LOOSE GRAVEL) FROM PROJECT. ALL COSTS SHALL BE INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.
3. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE PHYSICAL OBSTRUCTIONS 2'-0" ON EITHER SIDE OF & 10'-0" ABOVE THE BIKE LANE. ALL COSTS SHALL BE INCIDENTAL TO THE VARIOUS CONTRACT ITEMS.
4. PAVEMENT MARKINGS SHALL CONFORM TO THE F.H.W.A. "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS & HIGHWAYS", 1971, & AS SHOWN ON THE PLANS.
5. LAYOUT OF PAVEMENT MARKINGS, STRIPING & SYMBOLS SHALL BE DONE BY THE CONTRACTOR. PRIOR TO PERFORMING WORK, CONTRACTOR SHALL CHECK LAYOUTS WITH THE ENGINEER.
6. ADHESIVE PAVEMENT SYMBOLS SHALL BE PLACED ON PAVEMENTS THAT ARE CLEAN, CONTINUOUS (FREE OF CRACKS, CONSTRUCTION JOINTS, SCORING), FLAT & EVEN.
7. CONTRACTOR SHALL VERIFY LAYOUTS OF NEW SIDEWALKS WITH THE ENGINEER.
8. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND STRUCTURES, UTILITY LINES & MILITARY LINES.



TRAFFIC SIGN SUMMARY			
TYPE	DESCRIPTION	QUANTITY	
		W/ POST	W/O POST
P18-1	USE SIDEWALK		6
W11-1	BIKE KING	6	
D11-1 & D11-3(L)	(BIKE ROUTE) (←) ASSEMBLY	1	
D11-1	BIKE ROUTE	19	3
D11-7	↑		87
D11-8(R)	→		3
D11-8(L)	←		34

FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	902-02-75	1976	4	10



NOTE:

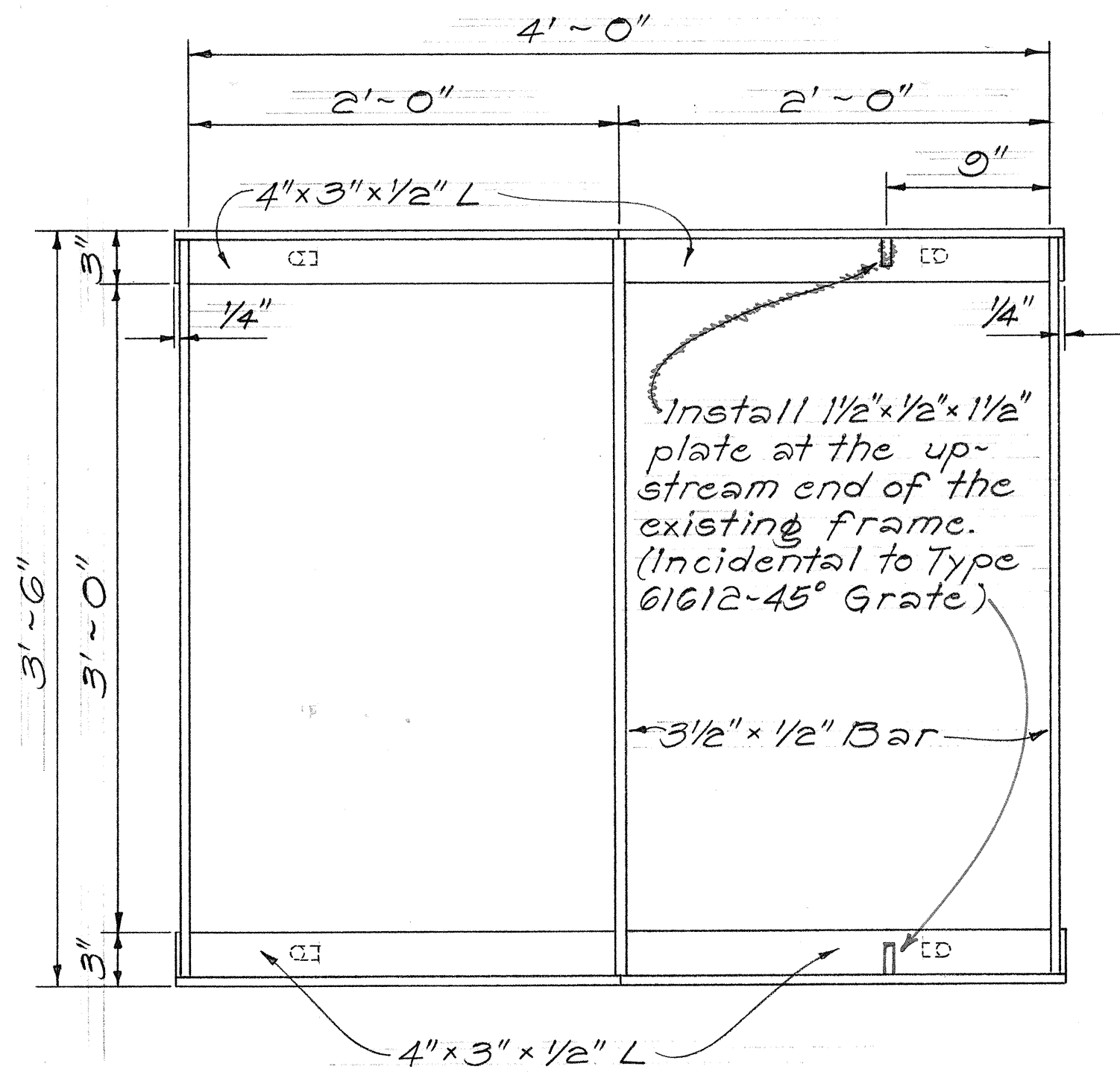
1. SIGN DETAILS SHALL CONFORM TO F.H.W.A. PUBLICATIONS, "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS & HIGHWAYS", 1971, & "STANDARD HIGHWAY SIGNS", 1972.
2. USE BLACK LEGEND ON WHITE REFLECTORIZED BACKGROUND.
3. DRILL 3/8" φ BOLT HOLES AT APPROPRIATE LOCATIONS.

PAVEMENT MARKING SUMMARY

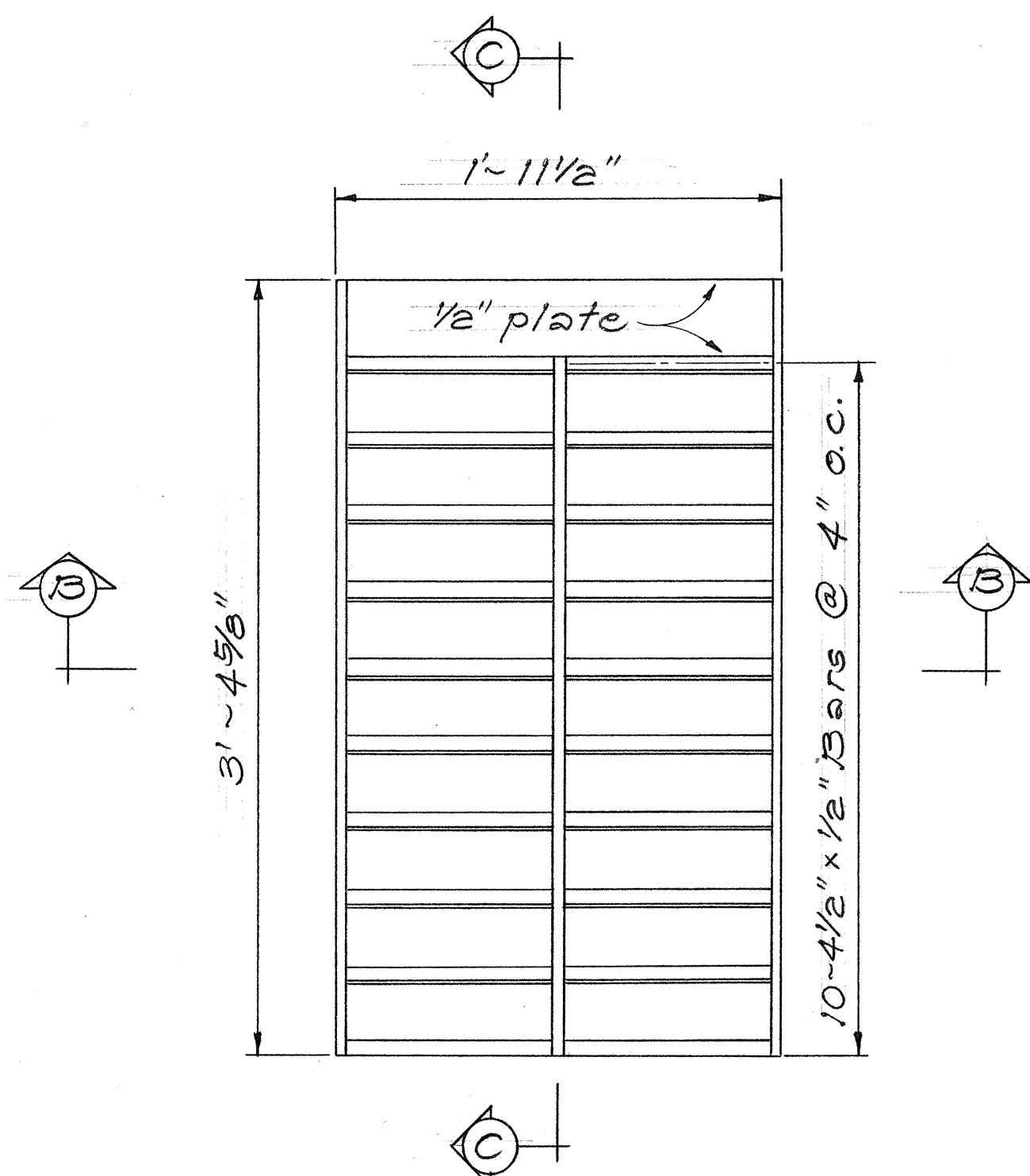
ITEM NO.	DESCRIPTION	QUANTITY
629.10	TYPE 'A' RAISED PAVEMENT MRP.	870 EA. 883
642.11	BIKE ROUTE (ADHES. SYMBOL)	11 EA.
642.12	ARROW (ADHES. SYMBOL)	11 EA.
642.01	PAVEMENT STRIPING	4350 L.F. 4419

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION	
SCHEDULES & MISCELLANEOUS DETAILS	
KAMEHAMEHA HWY. MAHALA GATE TO HALAWA GATE PROJ. NO. 902-02-75 SCALE: AS SHOWN FEB. 1976	
SHEET NO. 4 OF 10 SHEETS	

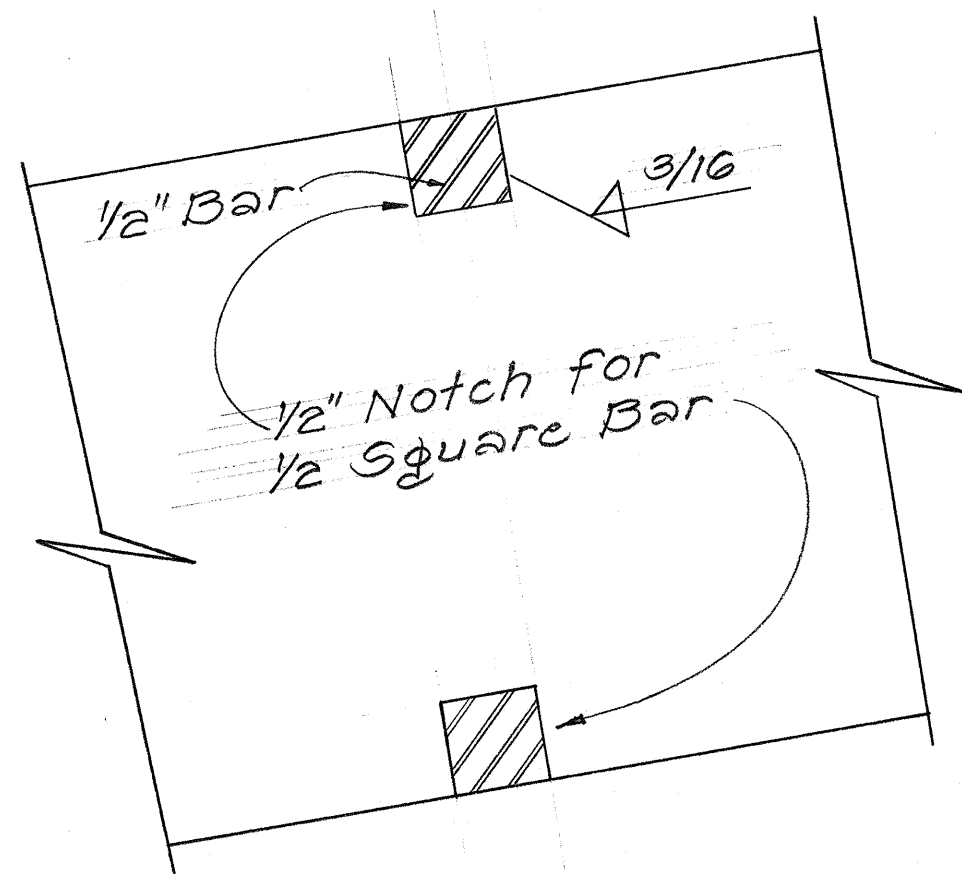
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	906-02-15	1976	5	10



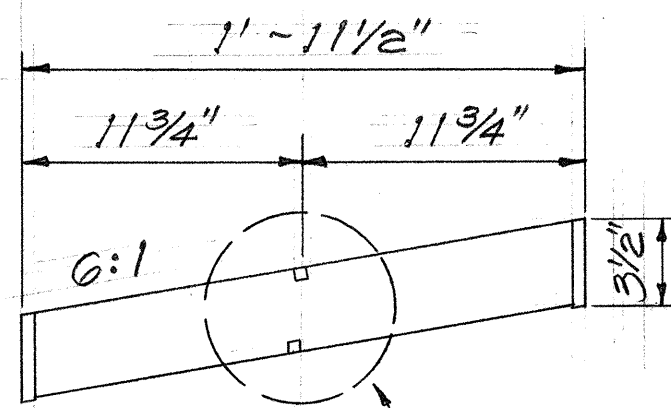
PLAN
Scale: 1/2" = 1'-0"



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

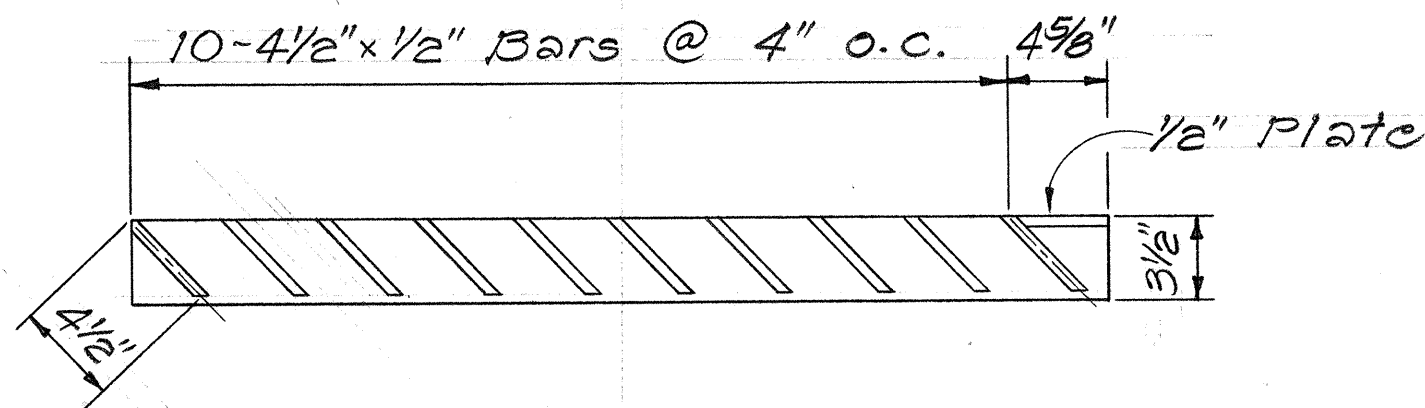


GRATE
Scale: Full Size



See Enlarged Detail to the Left.

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



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

DETAILS OF TYPE 61612-45° STEEL GRATES
Scale: As Shown

ESTIMATED QUANTITIES				
ITEM NO.		604.	604.	
		239	299	
UNIT		Ea.	Ea.	
TYPE	STATION	Type 61612-45° Steel Grates	Removing, Cleaning and Returning 61612 Steel Grates to 727 Koko St, Hon.	
Type 61612-45° Steel Grate	217+85 Lt.	1	1	
"	220+25 Lt.	1	1	
"	242+54 Lt.	1	1	
"	246+73 Lt.	1	1	
"	249+50 Lt.	1	1	

GENERAL NOTES:

- Grates shall be hot dip galvanized after fabrication, see specification.
- All welds 3/8" unless otherwise noted.
- The Grate materials shall conform to the specifications of ASTM Designation Structural Steel A283, Grade D and the Standard Specifications.
- Remove existing grates on right side of C.D1 and install Type 61612-45° grates in its place or as ordered by the Engineer.
- Remove, clean & return 61614 Steel Grate to 727 Koko St. Honolulu.

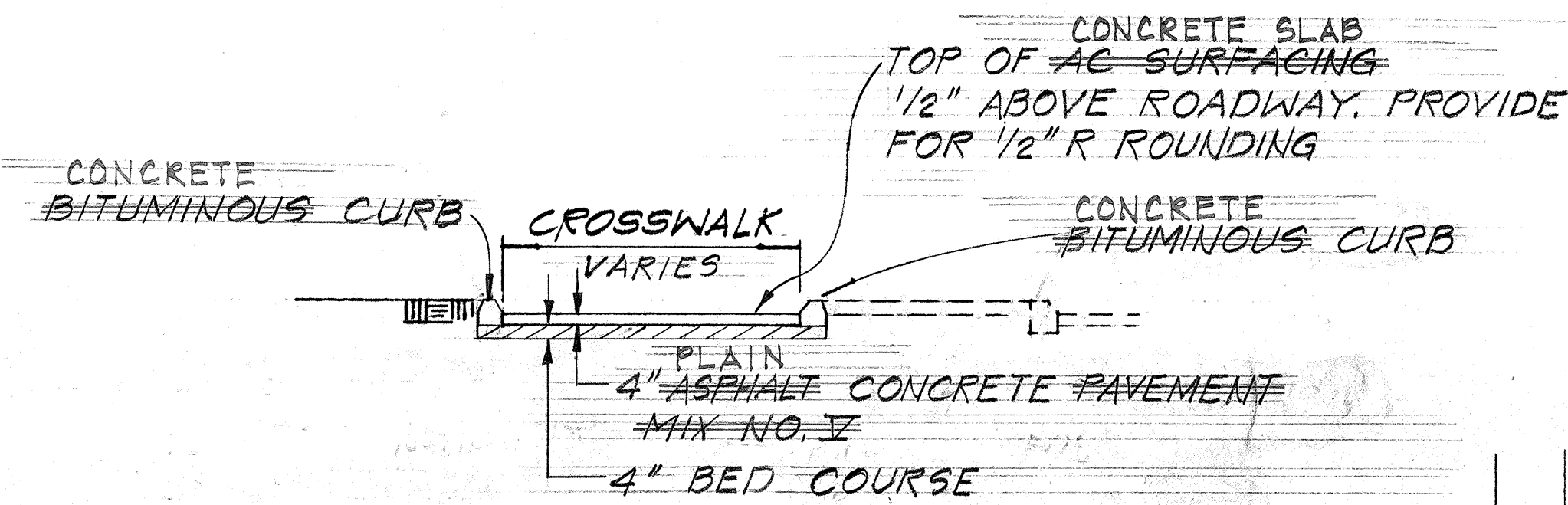
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DRAINAGE DETAILS

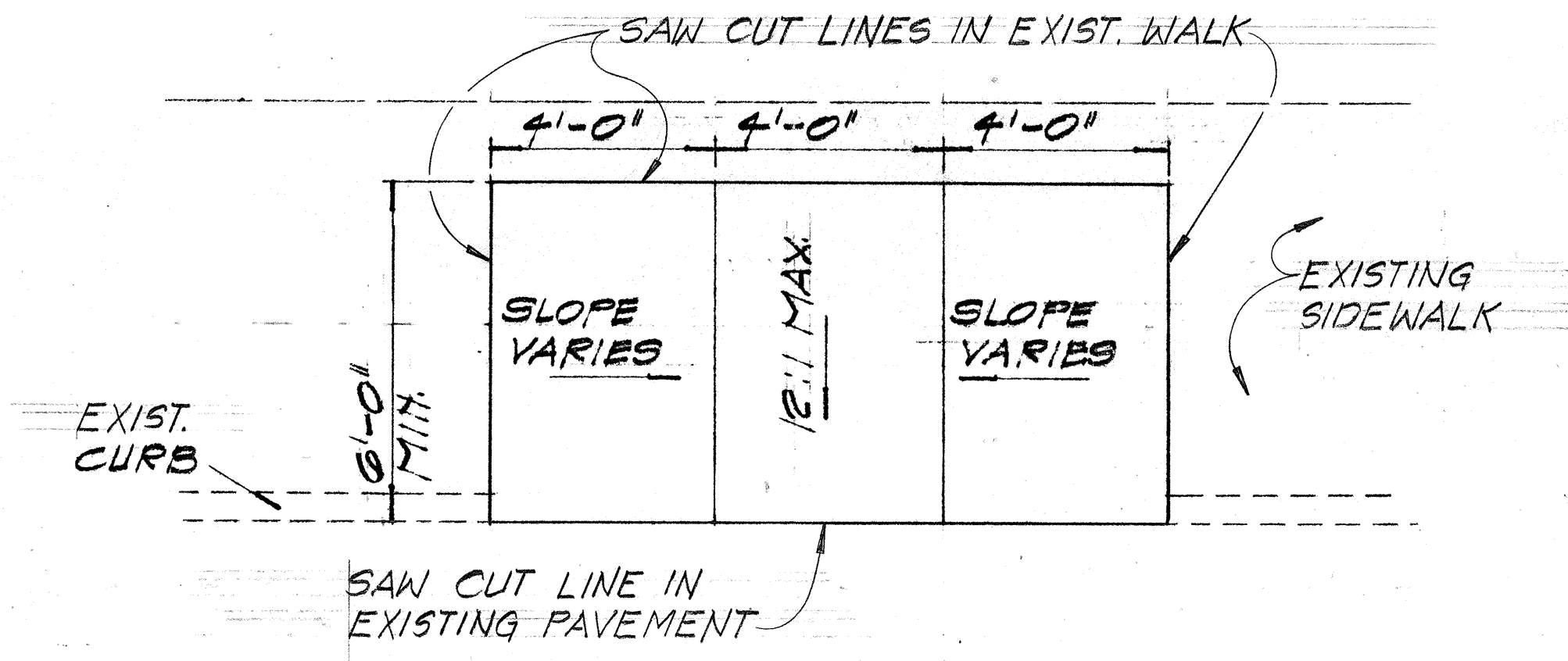
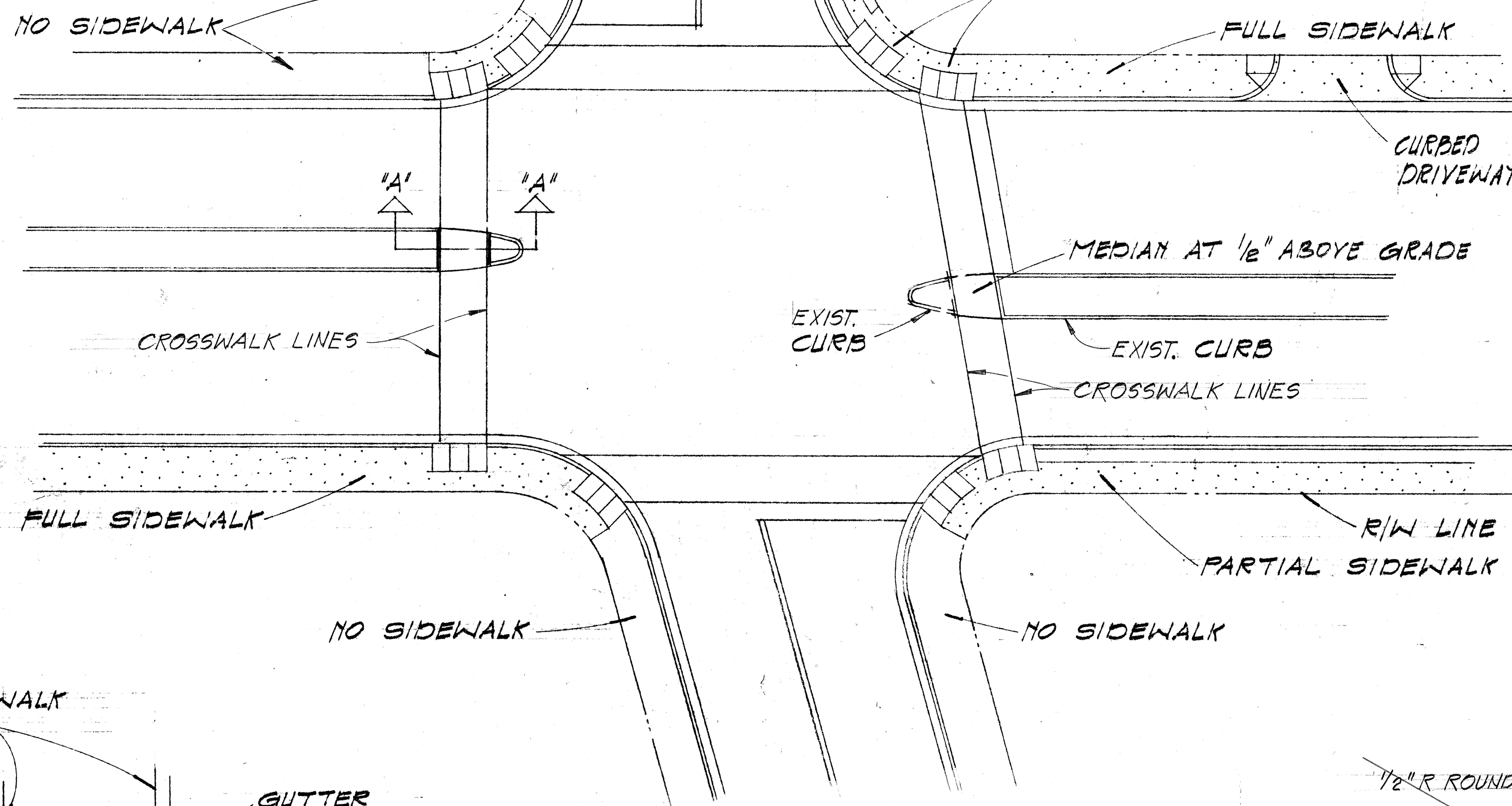
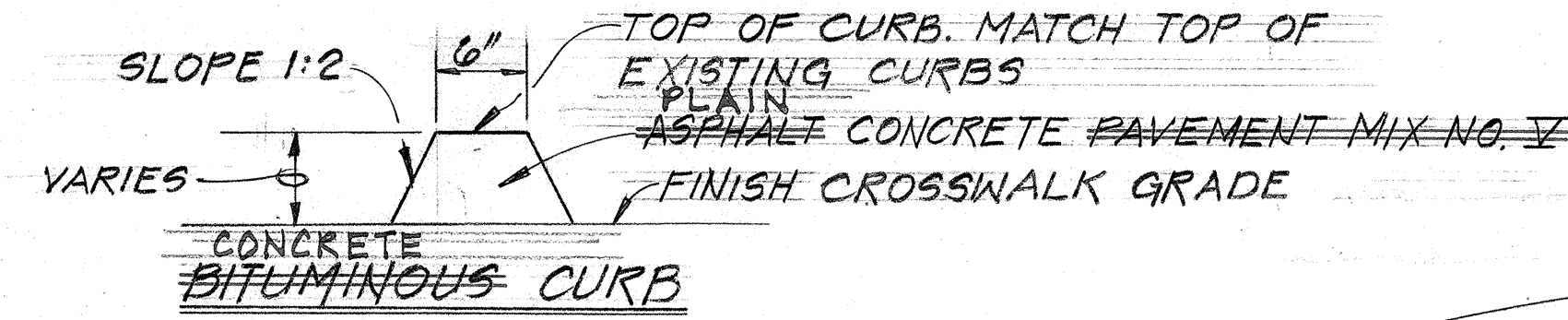
TYPE 61612-45°
STEEL GRATE

Scale: As Noted Date: FEB. 1976

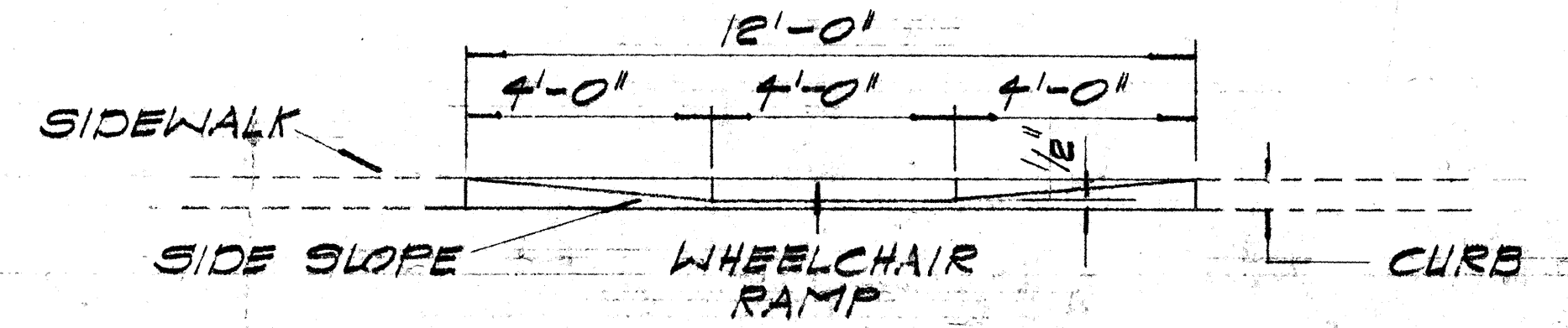
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	906-02-13	1976	6	10



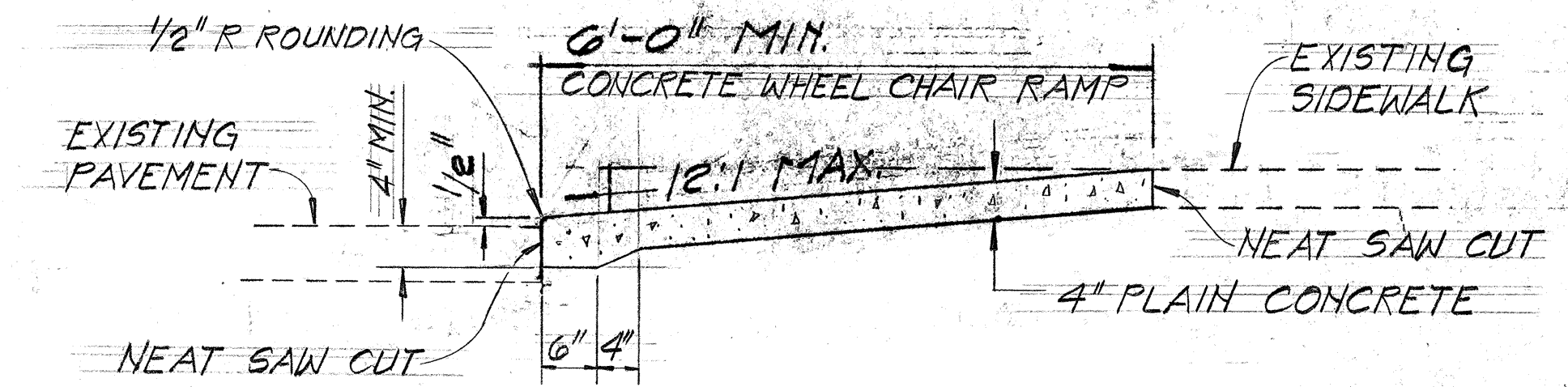
SECTION "A-A"
SCALE: 1" = 5'



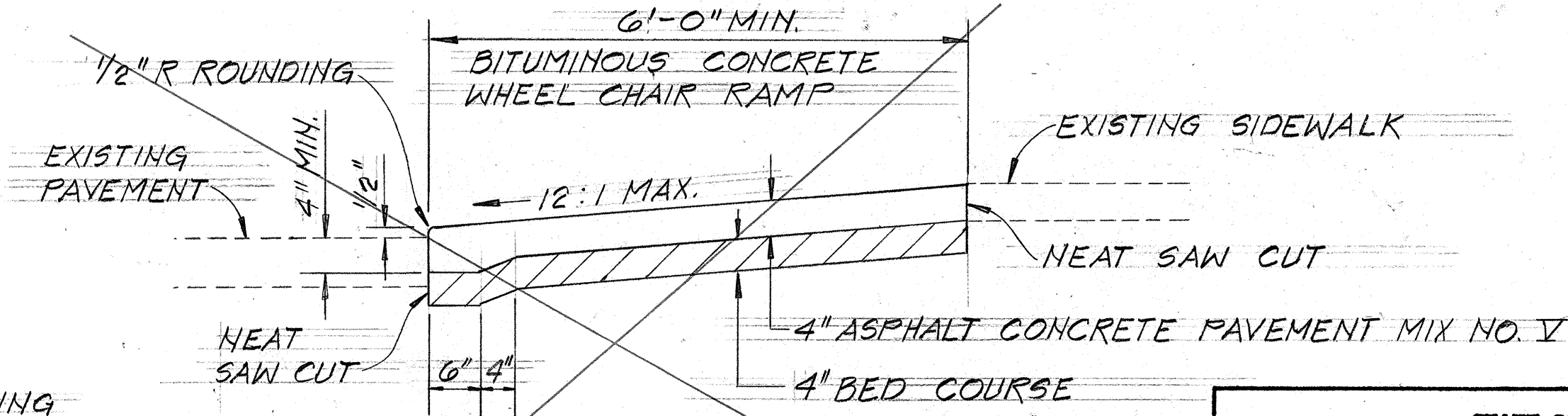
PLAN
SCALE: 3/8" = 1'-0"



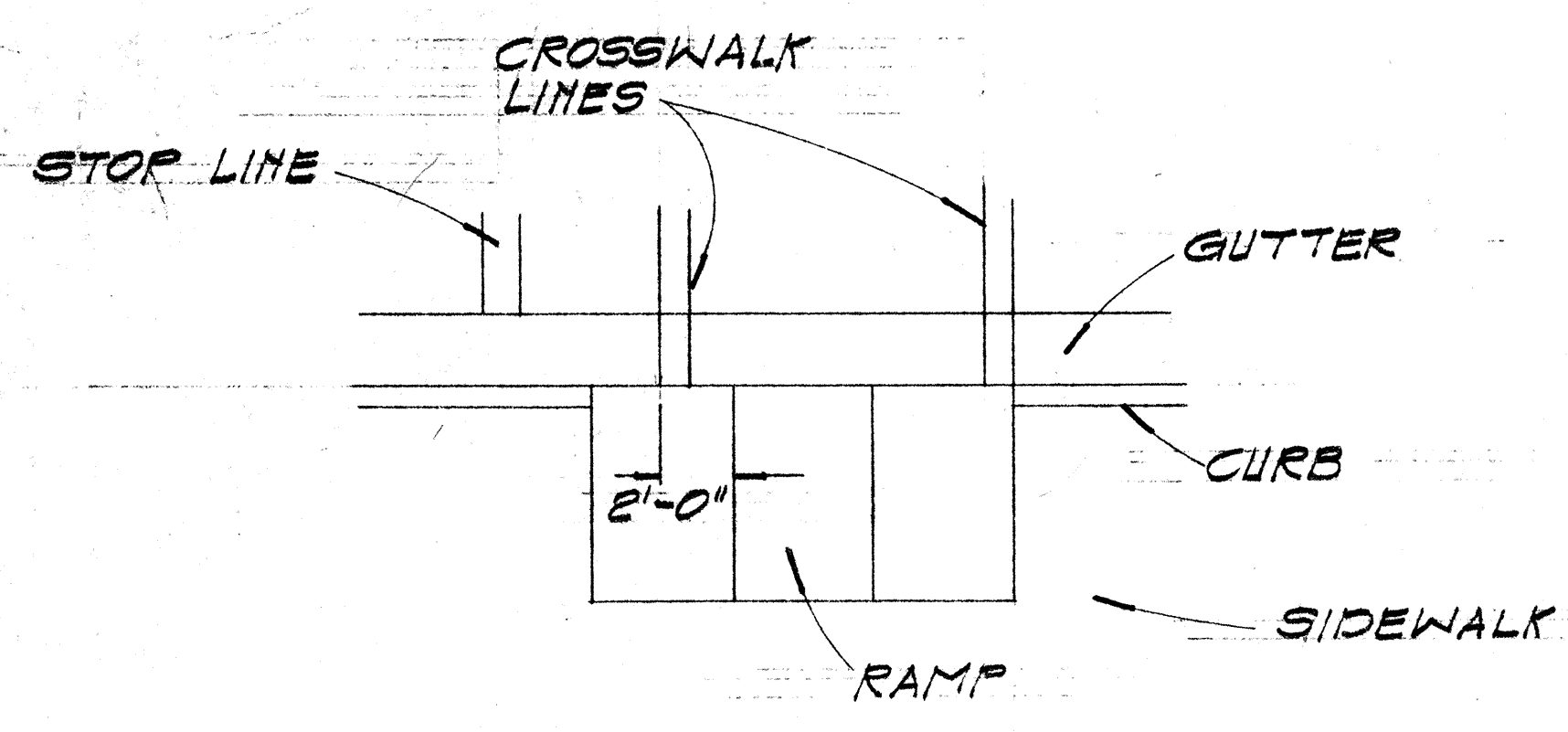
ELEVATION
SCALE: 3/8" = 1'-0"



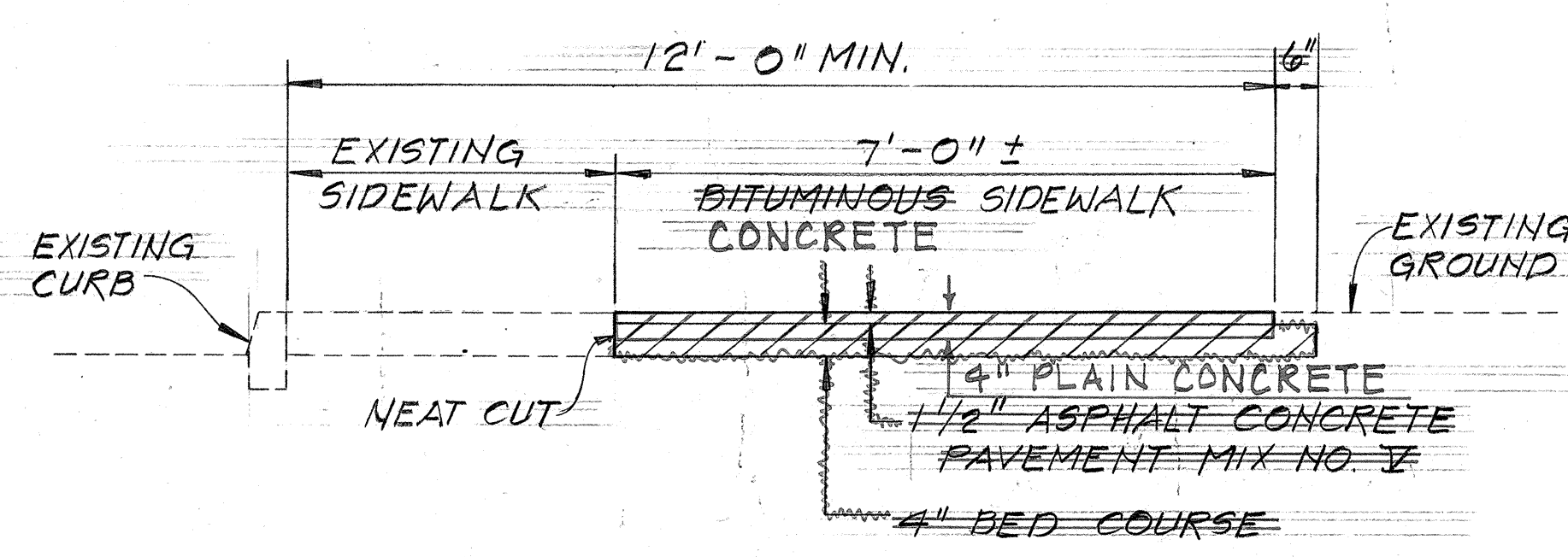
TYPICAL SECTION - CONCRETE
WHEEL CHAIR RAMP
SCALE: 3/4" = 1'-0"



DELETED
TYPICAL SECTION - BITUMINOUS
CONCRETE WHEEL CHAIR RAMP
SCALE: 3/4" = 1'-0"



TYPICAL INSTALLATION
AT CROSSWALKS
SCALE: 1" = 5'



TYPICAL SECTION - WIDENING
OF EXISTING SIDEWALK
SCALE: 1/2" = 1'-0"

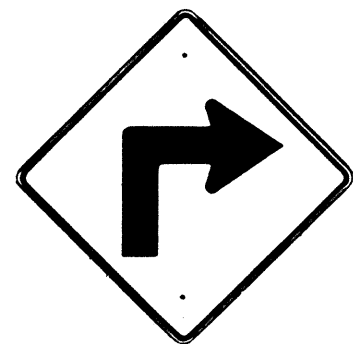
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL INSTALLATION
OF
WHEEL CHAIR RAMPS

SCALE: AS SHOWN FEB. 1976
SHEET No. 6 OF 10 SHEETS

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

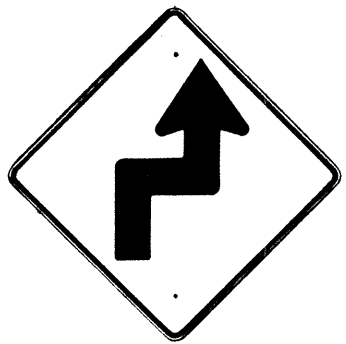
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII *	HAW.	90C-02-15	1976	9	10



W1-1(R) 30"x30"
W1-1(R)-A 48"x48"



W1-2(R) 30"x30"
W1-2(R)-A 48"x48"



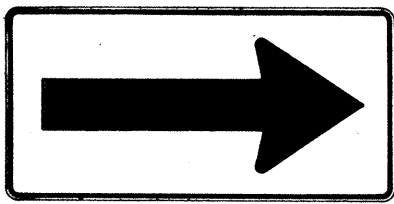
W1-3(R) 30"x30"
W1-3(R)-A 48"x48"



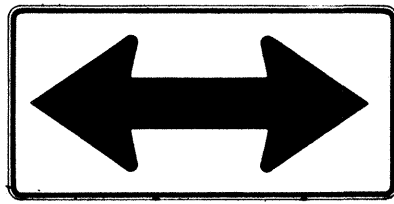
W1-4(R) 30"x30"
W1-4(R)-A 48"x48"



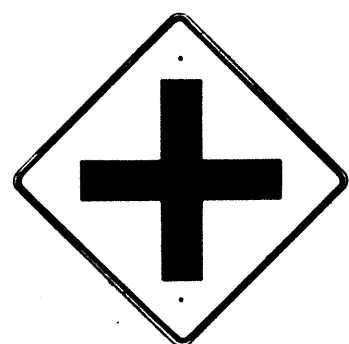
W1-5(R) 30"x30"
W1-5(R)-A 48"x48"



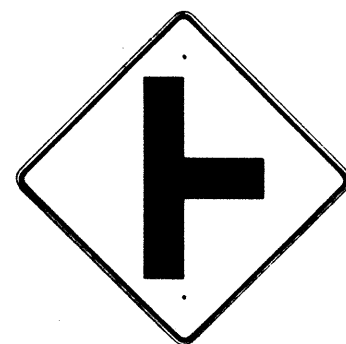
W1-6 48"x24"



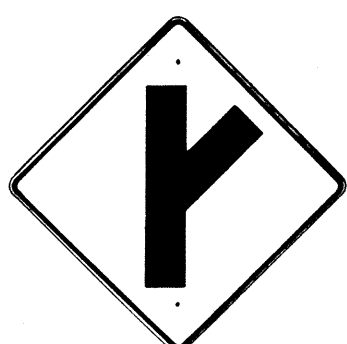
W1-7 48"x24"



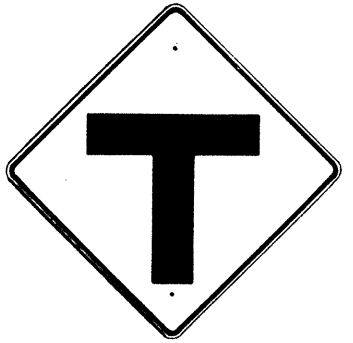
W2-1 30"x30"
W2-1-A 48"x48"



W2-2 30"x30"
W2-2-A 48"x48"



W2-3(R) 30"x30"
W2-3(R)-A 48"x48"



W2-4 30"x30"
W2-4-A 48"x48"



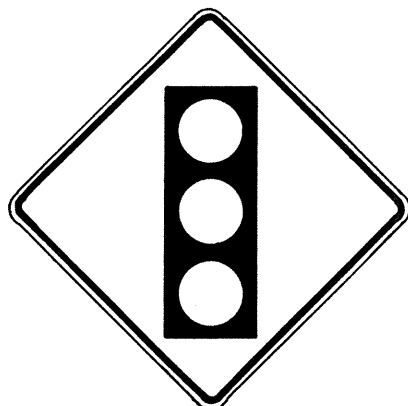
W2-5 30"x30"
W2-5-A 48"x48"



W3-1 30"x30"
W3-1-A 36"x36"



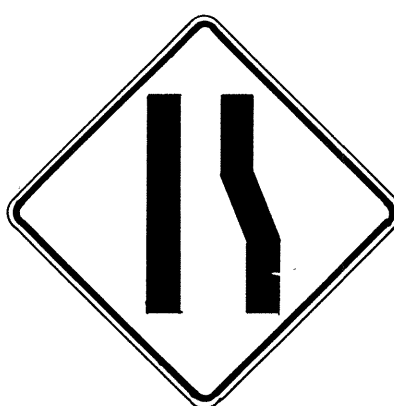
W3-2 30"x30"
W3-2-A 36"x36"



SIGNAL
AHEAD
W3-3 36"x36"
24"x18"



MERGE
W4-1(R) 30"x30"
24"x18"
W4-1(R)-A 48"x48"
24"x18"



W4-2(R) 36"x36"
W4-2(R)-A 48"x48"



W5-1 36"x36"



W5-2 30"x30"
W5-2-A 36"x36"



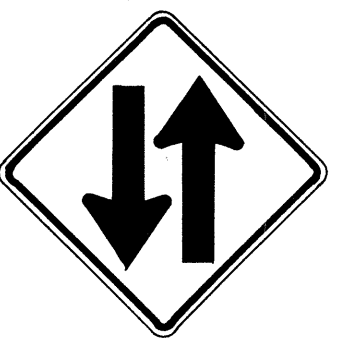
W5-3 36"x36"



DIVIDED
HIGHWAY
W6-1 36"x36"
24"x18"



DIVIDED
HIGHWAY
ENDS
W6-2 36"x36"
24"x18"



TWO WAY
TRAFFIC
W6-3 30"x30"
24"x18"
W6-3-A 36"x36"
24"x18"
W6-3-B 48"x48"
24"x18"



HILL
W7-1 30"x30"
24"x18"
W7-1-A 36"x36"
24"x18"



USE LOW
GEAR
W7-2 24"x18"



BUMP
W8-1 30"x30"
W8-1-A 36"x36"



DIP
W8-2 30"x30"
W8-2-A 36"x36"



PAVEMENT
ENDS
W8-3 30"x30"
W8-3-A 36"x36"



SOFT
SHOULDER
W8-4 30"x30"
W8-4-A 36"x36"



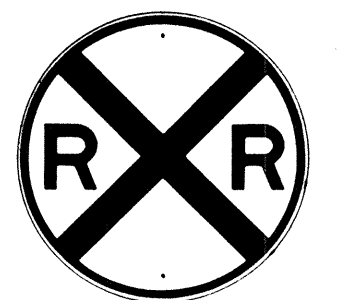
SLIPPERY
WHEN WET
W8-5 30"x30"
24"x18"
W8-5-A 36"x36"
24"x18"



RIGHT
LANE
ENDS
W9-1(R) 30"x30"
W9-1(R)-A 36"x36"
W9-1(R)-B 48"x48"



LANE ENDS
MERGE
LEFT
W9-2(L) 36"x36"
W9-2(L)-A 48"x48"



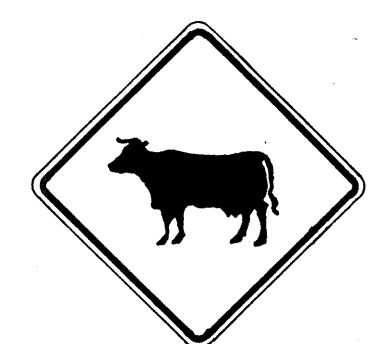
W10-1 36" Diameter



BIKE
XING
W11-1 30"x30"
24"x18"
W11-1-A 36"x36"
24"x18"



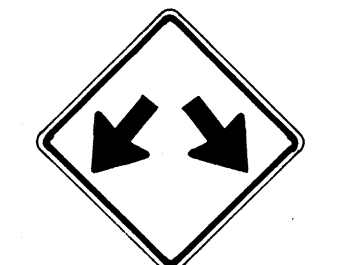
PED
XING
W11-2 30"x30"
24"x18"
W11-2-A 36"x36"
24"x18"



CATTLE
XING
W11-4 30"x30"
24"x18"
W11-4-A 36"x36"
24"x18"



FARM
MACHINERY
W11-5 30"x30"
24"x18"
W11-5-A 36"x36"
24"x18"



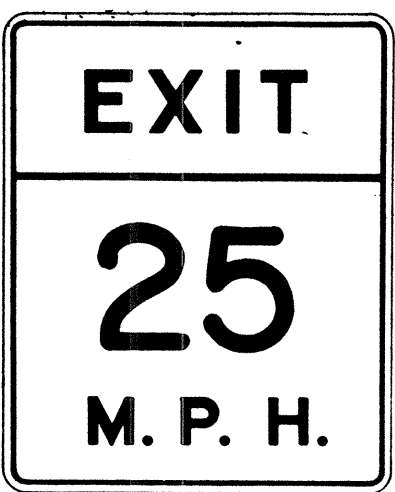
W12-1 24"x24"
W12-1-A 36"x36"
W12-1-B 48"x48"



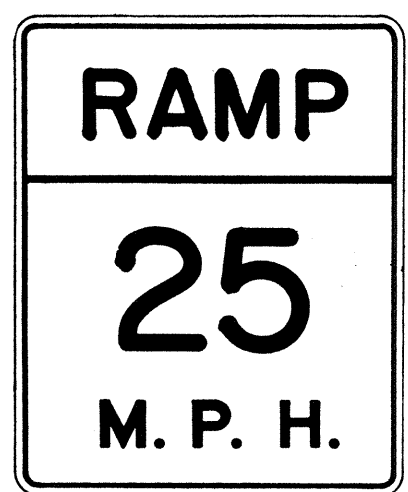
LOW
CLEARANCE
W12-2 (12'-6") 36"x36"
24"x18"



25
M.P.H.
W13-1(25) 18"x18"
W13-1(25)-A 24"x24"



W13-2(25) 48"x60"



W13-3(25) 48"x60"



W14-1 30"x30"



W14-3 36"x48" x 48"

GENERAL NOTES

- Sign details shall conform to the FHWA publications "Manual on Uniform Traffic Control Devices for Streets and Highways," 1971, and "Standard Highway Signs," 1972, and as amended.
- All warning signs shall be reflectorized unless otherwise specified.
- All warning signs shall have 3/8" bolt holes drilled at appropriate locations.
- Numerals in () indicates numerals to be inserted for sign message. (R) or (L) indicates right or left.
- Signs prefixed with "CW" on the plans shall indicate orange and black construction signs, reflectorized with high intensity reflective sheeting.

APPROVAL RECOMMENDED:
Eisaku Tanaka
TRAFFIC ENGINEER

3/17/72
DATE

APPROVED:
Walter D. Sisk
ASSISTANT CHIEF, ENGINEERING

3-20-72
DATE

NO.	REVISION	APPROVED BY	DATE
1	Supersedes Sht. DT 102 Approved 12-30-69	H.T.	3/20/72
2	Revised General Note 1	H.T.	10/16/72
3	Revised General Note 5	MH	9-16-75

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

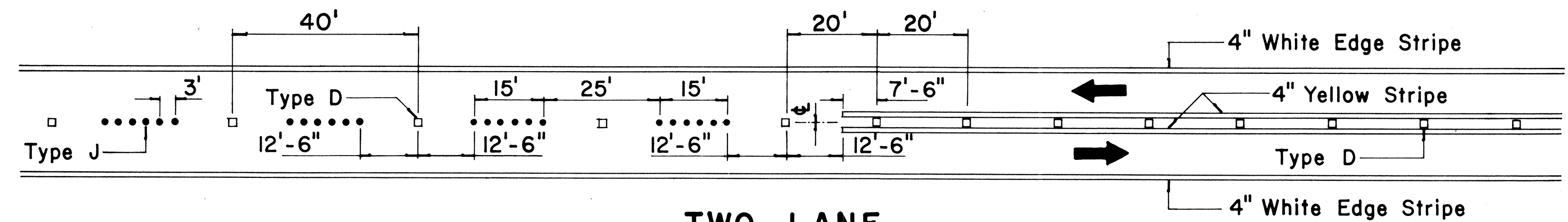
STANDARD DETAILS WARNING SIGNS

NOT TO SCALE

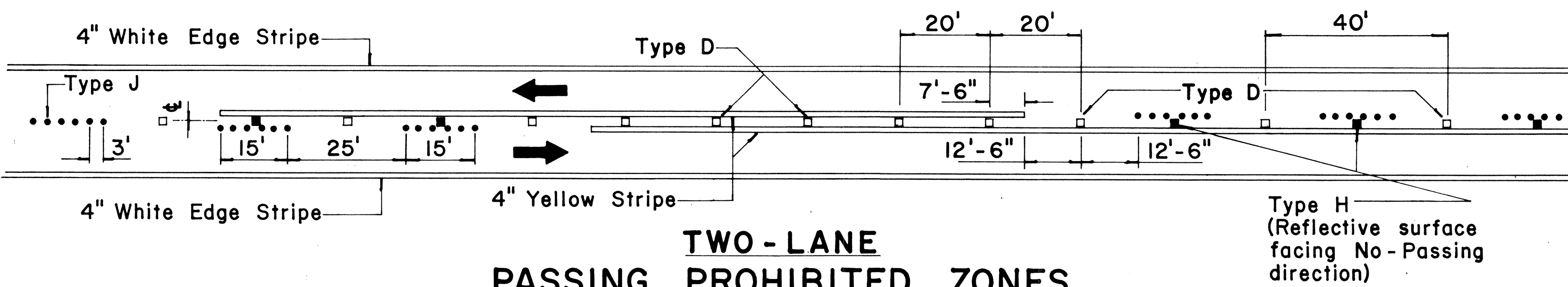
SHEET No. 9 OF 10 SHEETS DT 102

DATE	_____
SURVEY PLOTTED BY	_____
DRAWN BY	_____
NOTED BY	_____
CHECKED BY	_____
NO.	_____

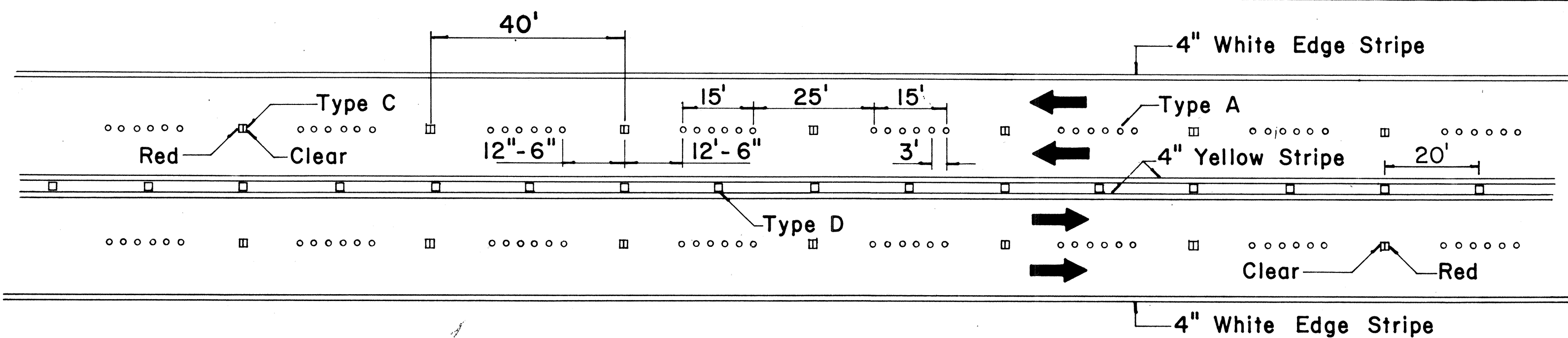
FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	906-02-15	1976	10	10



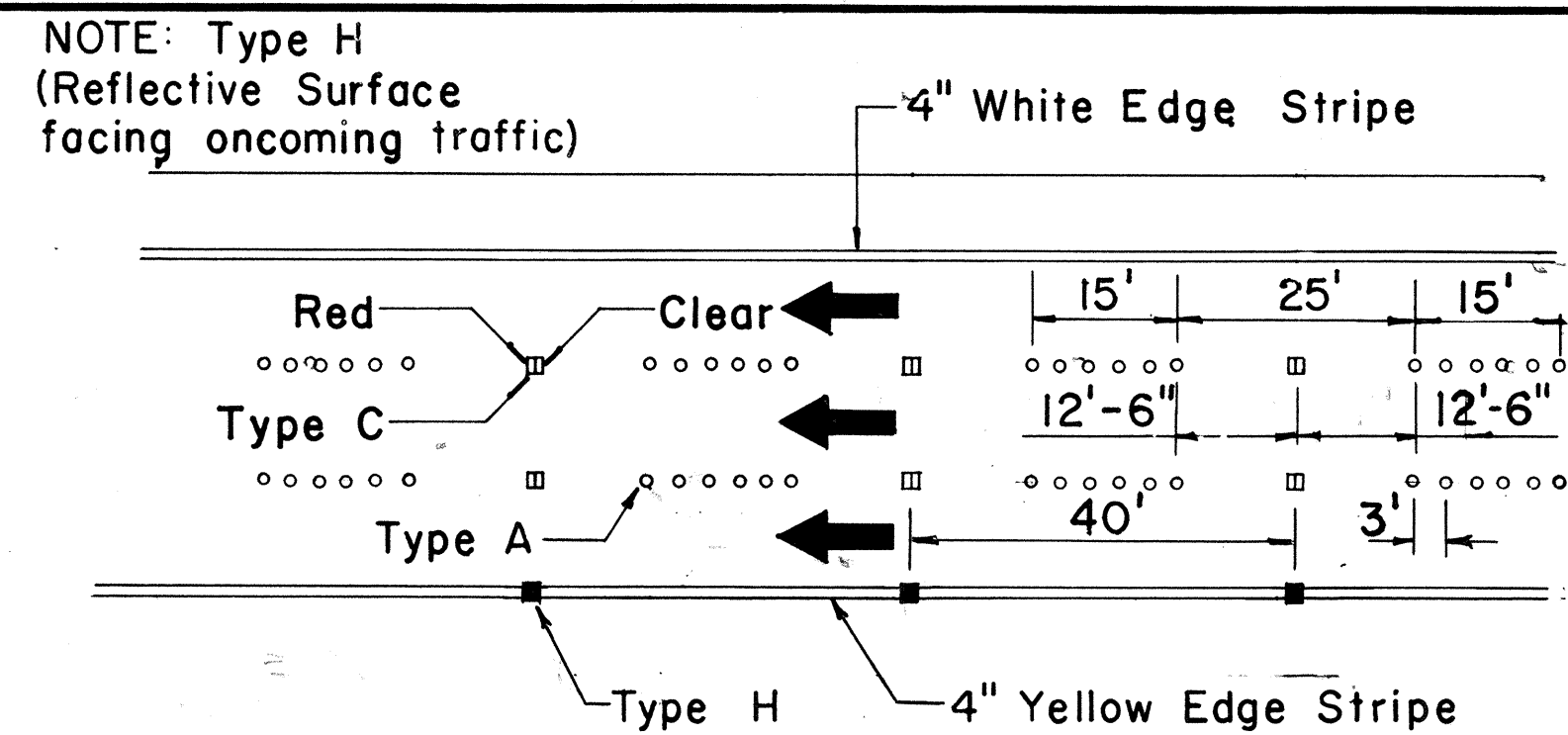
**TWO-LANE
PASSING PERMITTED AND PASSING PROHIBITED**



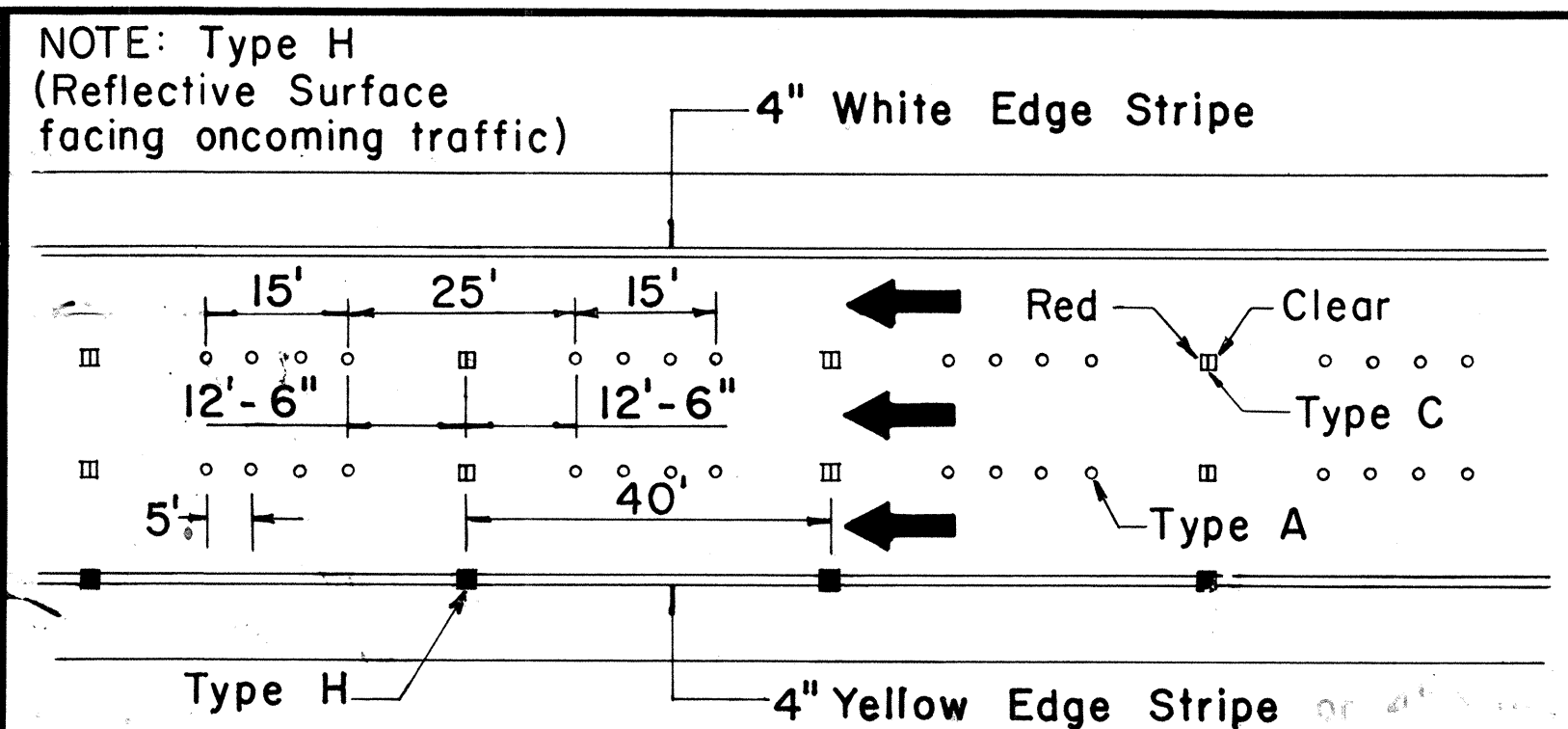
**TWO-LANE
PASSING PROHIBITED ZONES**



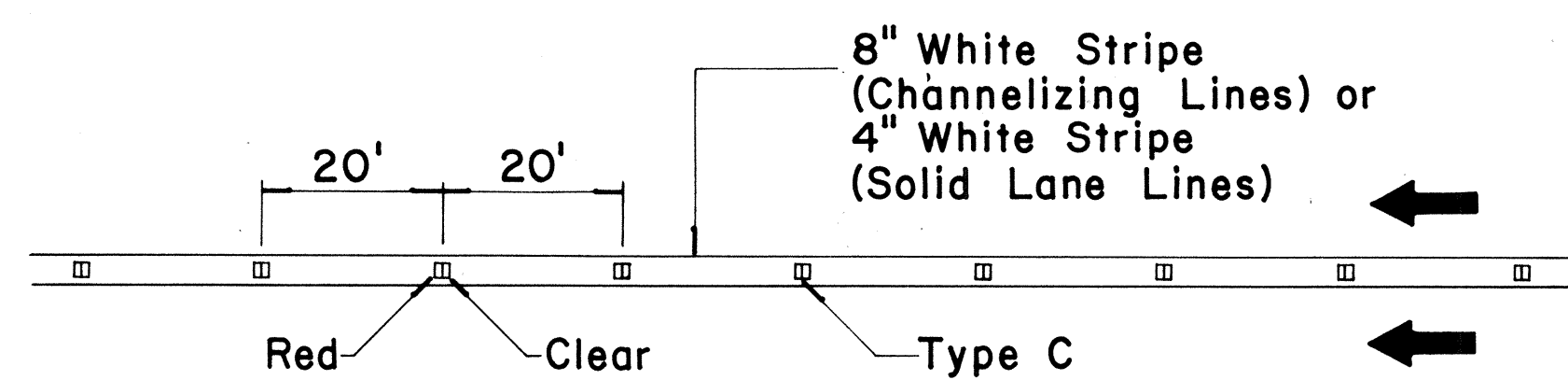
**MULTI-LANE
LANE LINES AND CENTER LINE**



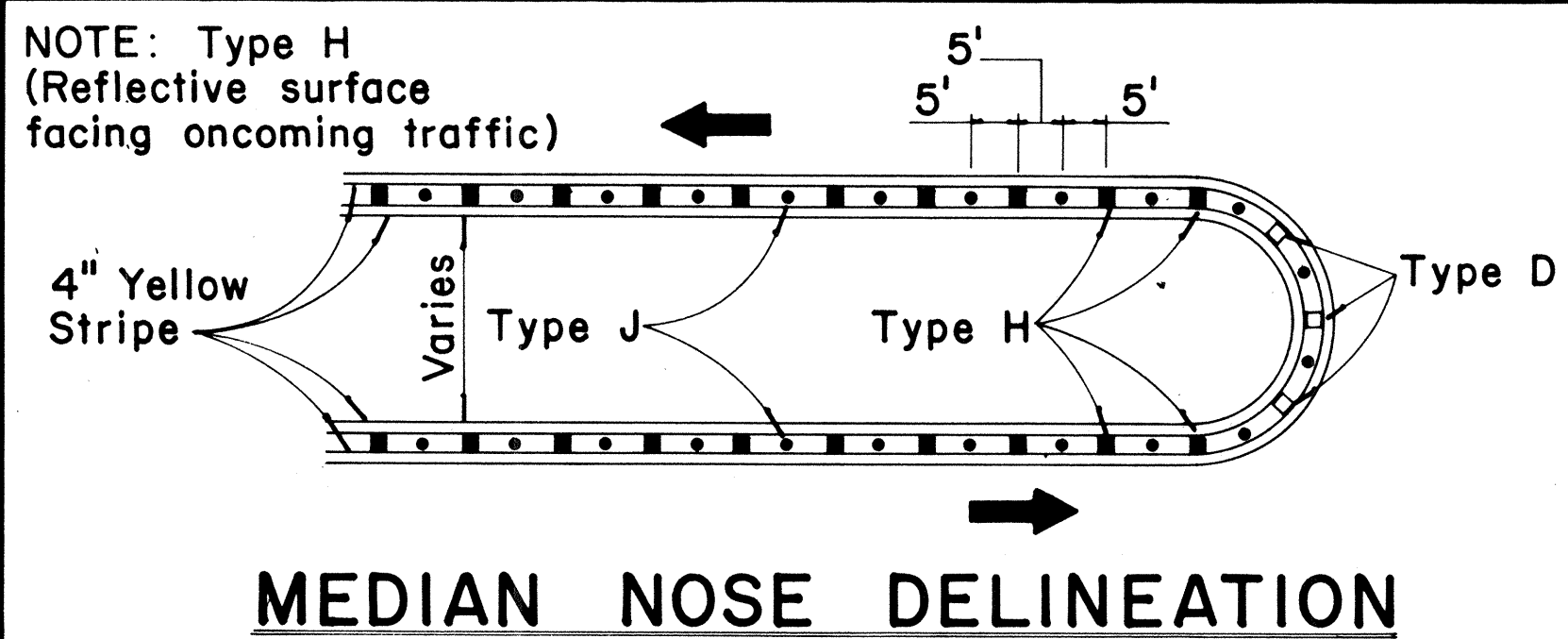
DIVIDED HIGHWAY LANE LINES



FREEWAY LANE LINES



**CHANNELIZING LINES
OR SOLID LANE LINES**



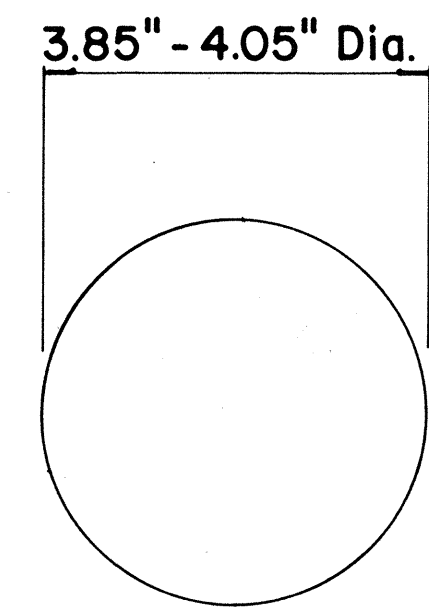
MEDIAN NOSE DELINEATION

TWO - LANE

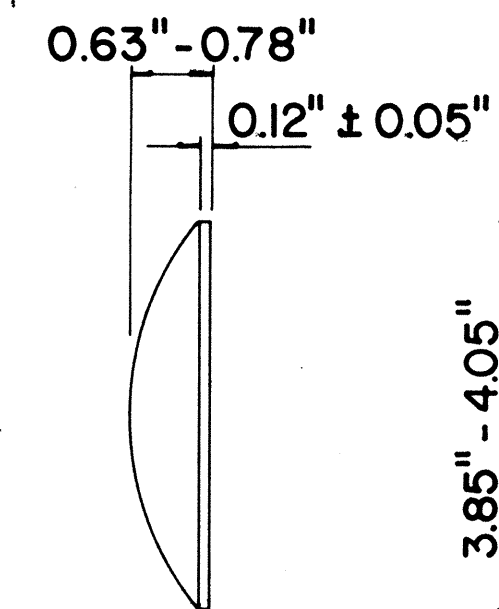
MULTI - LANE

**DIVIDED HIGHWAY
AND
FREEWAY**

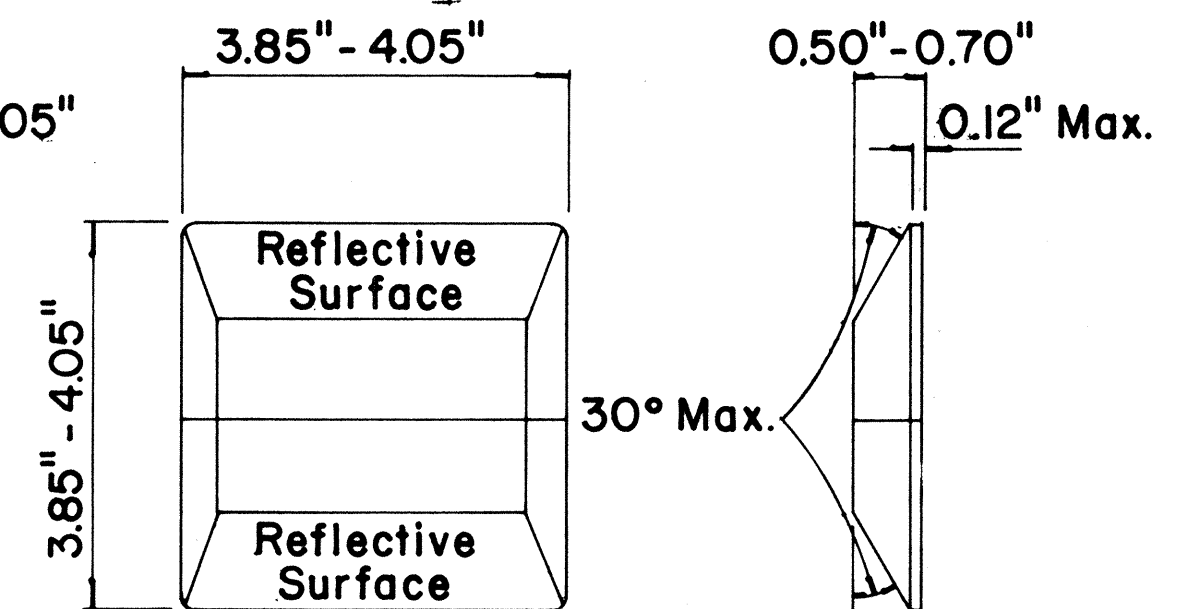
MISCELLANEOUS



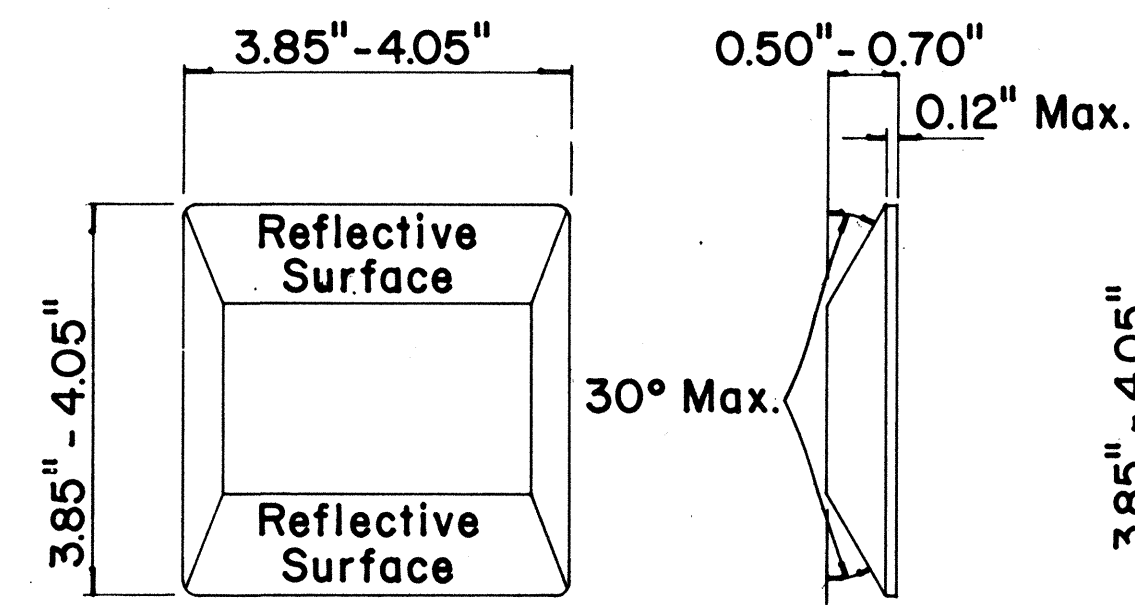
**TYPE A
NON-REFLECTIVE WHITE MARKER**



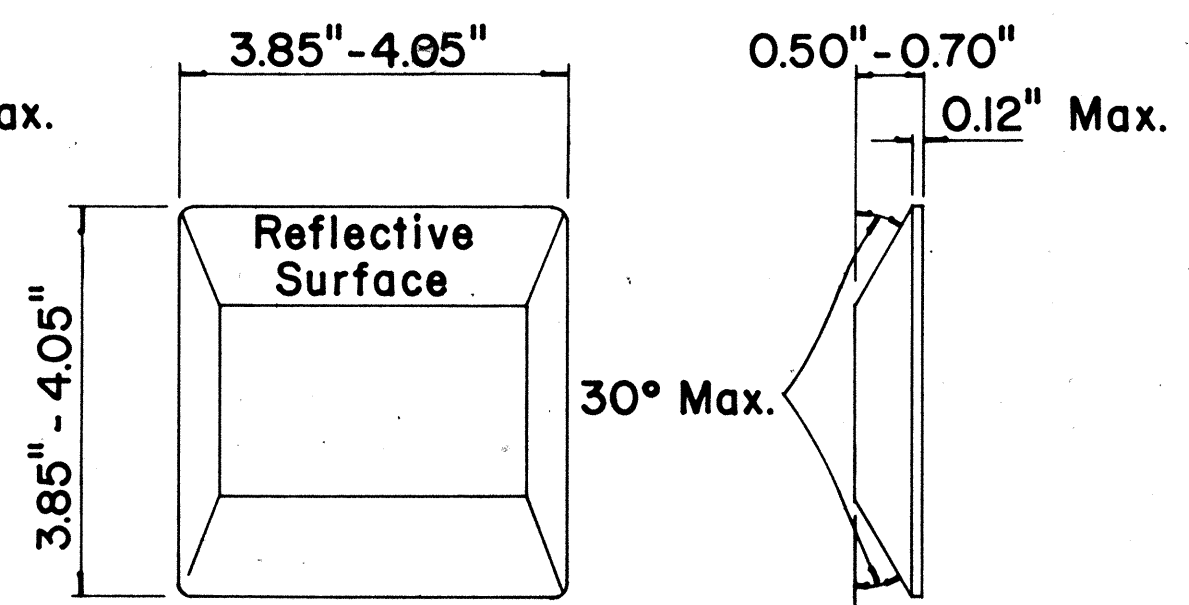
**TYPE J
NON-REFLECTIVE YELLOW MARKER**



**TYPE C
RED-CLEAR REFLECTIVE MARKER**



**TYPE D
TWO-WAY YELLOW REFLECTIVE MARKER**



**TYPE H
ONE-WAY YELLOW REFLECTIVE MARKER**

GENERAL NOTES

1. Painted stripes to be done by Contractor unless otherwise specified.

LEGEND

- Type A
- Type C
- Type D
- Type H
- Type J

APPROVAL RECOMMENDED:
E. J. Tanaka 11/18/71
TRAFFIC ENGINEER DATE

APPROVED:
Shirley S. Kish 11/18/71
ASSISTANT CHIEF, ENGINEERING DATE

No.	REVISION	APPROVED BY	DATE
1	Add reflector marker in each line gap.	H.T.	10-21-72
2	Revised General Notes.	H.T.	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.T.	5-22-74

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

STANDARD DETAILS RAISED PAVEMENT MARKERS

Not to Scale October 1971

SHEET No. 10 OF 10 SHEETS DT 300

DATE	11/18/71
SURVEY PLOTTED BY	...
DRAWN BY	...
TRACED BY	...
NOTED BY	...
CHECKED BY	...
ORIGINAL PLAN	...
NOTE BOOK	...
No.	...