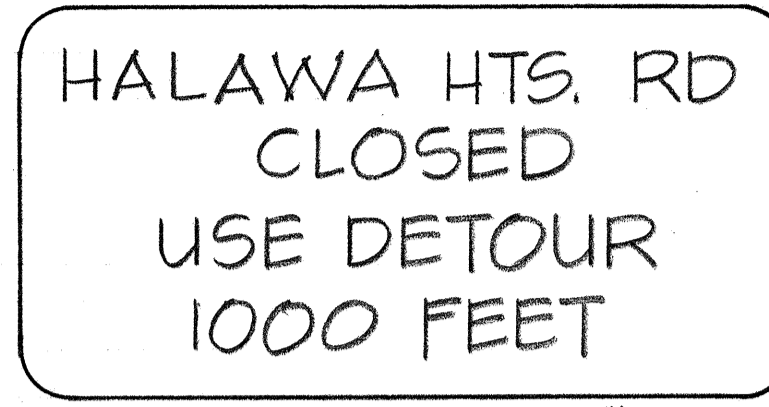


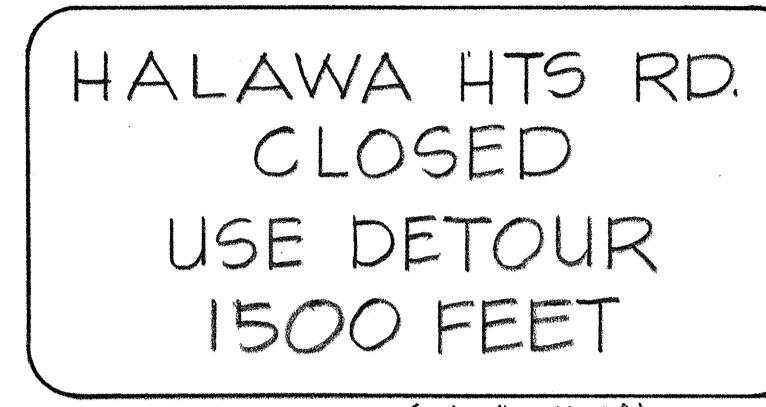
GENERAL NOTES FOR CONSTRUCTION, MAINTENANCE AND PROTECTION OF TRAFFIC, AND TEMPORARY SIGNING AND SIGNALIZATION:

- All service from existing utilities that are to remain or are to be relocated shall be maintained at all times unless special approval is obtained from the Engineer for the temporary discontinuation of service.
- Contractor is to maintain two lanes of traffic in both directions at all times on Moanalua Road. Exceptions must be approved by the Engineer. Contractor is to maintain at least one lane of traffic in each direction on all other existing roadways.
- The construction sequence as shown in the plans is to be considered a suggested method. The Contractor, with the approval of the Engineer, may adjust sequence and phasing.
- The construction indicated for any phase may be initiated in an earlier phase, and phases may overlap.
- All Detours (A thru E) are to remain in place upon the completion of project.
- All utilities, guard rail, lighting, signing, hydro-mulching and other related work within each individual construction phase shall be performed completely or to the extent necessary in such timely sequence as to preclude duplication of efforts (as re-excavation for installation of utilities) and hazardous roadside construction (as installation of guard rails or signs on roadways open to public traffic.)
- Scarifying and removal of pavement section and restoring ground, guard rails and other items to original condition, upon completion of the project shall be considered incidental to the construction.
- Unless noted otherwise, exact locations of signs, barricades and traffic drums shall be determined in the field by the Engineer.
- The shape, color, dimensions, symbols, wording, lettering and reflectorizing of all temporary warning, regulatory construction and maintenance signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways", dated June 1961 and the BPR Manual "Standard Highway Signs", dated September 1961, unless otherwise specified.
- All relocations of temporary warning, regulatory, construction and maintenance signs, posts, barricades and traffic drums during construction are to be considered incidental to construction.
- Contractor may substitute portable or temporary mountings for post mountings for construction and maintenance signs with the approval of the Engineer.
- The removal of existing traffic control devices and their replacement or relocation, if so called for in the plans, shall be considered incidental to construction, unless otherwise specified.
- The opening of Structure 10, Detours A and B, and Ramps G and H to traffic should be done simultaneously.
- Location of Interstate System Construction Identification Signs and Project Information signs shall be determined in the field by the Engineer.
- All painted pavement markings shown on sheets 2C through 7C are to be done by State forces.
- Contractor is responsible for maintaining all signs in good condition during life of project.

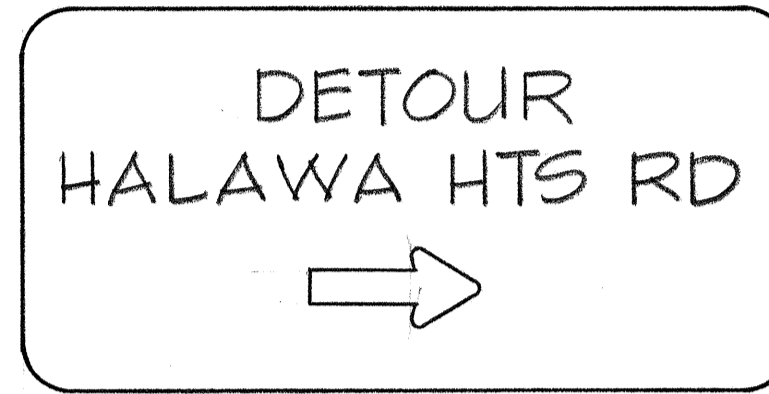
TEMPORARY DIRECTIONAL SIGNS:



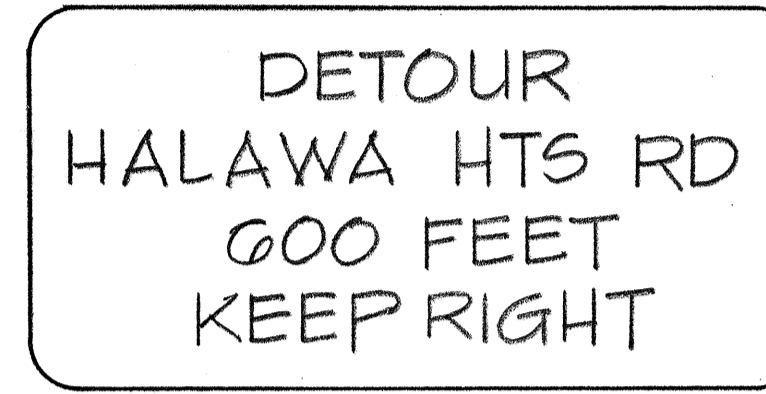
Sign T-1 (8'-0" x 4'-0")



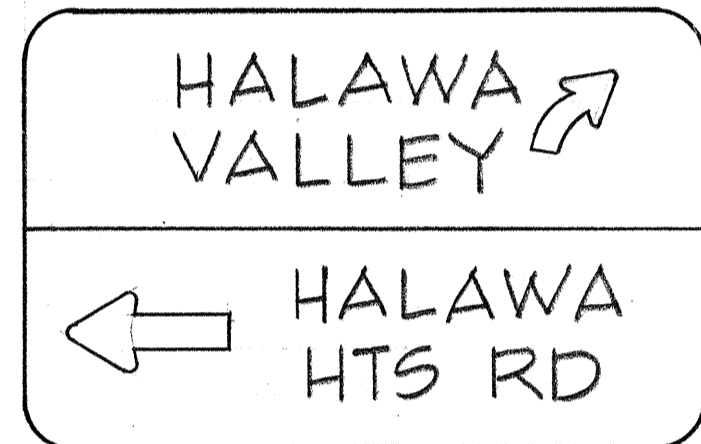
Sign T-2 (8'-0" x 4'-0")



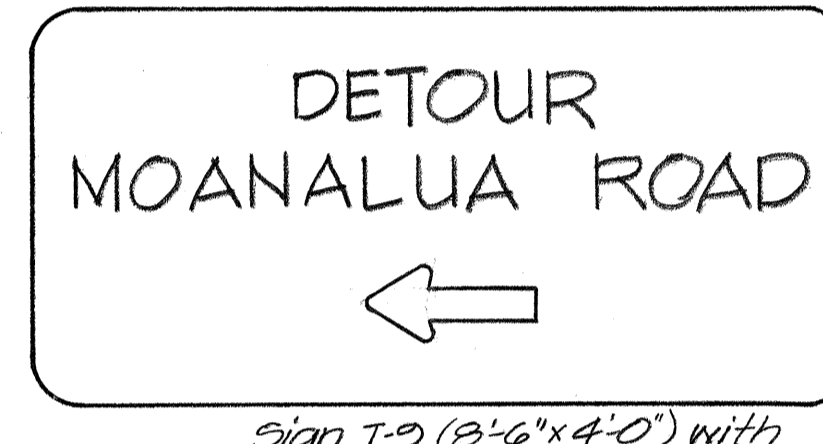
Sign T-3, T-4 & T-5 (8'-0" x 4'-0") with 20" x 11 1/4" Standard Arrow



Sign T-6 & T-7 (8'-0" x 4'-0")



Sign T-8 (6'-6" x 4'-6") with 20" x 11 1/4" & 10" x 5 1/2" Standard Arrows



Sign T-9 (8'-6" x 4'-0") with 20" x 11 1/4" Standard Arrow

NOTE:

Temporary Directional Signs T-1 through T-9 to be installed this project and covered with Polyethylene Sheeting. Upon the opening to traffic of Structure #10, Detours A and B, and Ramps G and H, Polyethylene Sheeting to be removed.

GENERAL NOTES:

- Exact location of temporary directional signs shall be determined in the field by the Engineer.
- Signs are to remain beyond completion of project.
- Design of Series "E" capital letters and digits and intercharacter spacing for line messages shall meet the requirements established by the Bureau of Public Roads, U.S. Department of Commerce, in its reference guide, "Standard Alphabets for Highway Signs", 1966 Edition. Revisions to sign panel layouts and/or dimensions shall be subject to the approval of the Engineer.
- Sign borders and corner radii for all sign faces detailed herein shall be 3/4 inch wide, and 4 inches respectively. Corners need not be trimmed.
- All signs shall have white reflectorized symbol messages and borders on a green reflectorized background.
- All letters shall be 6" upper case. Individual letters, numerals, symbols, and border shall be of: White reflective sheeting material.
- Mounting of signs to be at the Contractors option, subject to approval by the Engineer.
- Relocation of signs, if necessary, is to be incidental to construction.
- Mounting to be incidental to sign panels.
- All materials shall conform to those specified for Construction Identification Signs. Material used for sign panels to be 3/4" thick waterproof Fir Plywood. Contractor may submit alternative, subject to the approval of the Engineer.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(87):13	1970	75	244

SUMMARY OF TEMPORARY REGULATORY, WARNING, CONSTRUCTION AND MAINTENANCE SIGNS

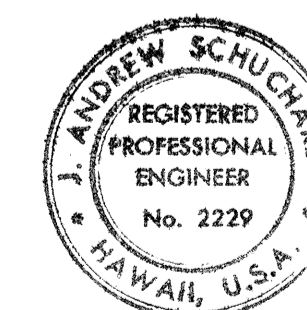
TYPE	MESSAGE	QUANTITY	
		W/POST	W/O POST
G 20-2	End Construction	2 *	
R 2-1(35)	Speed Limit 35	4	
R 2-5	Speed Zone Ahead	4	
R 10-3	Road Closed - Local Traffic Only		1
W1-4(R)	(Curved Arrow)	2	
W1-4(L)	(Curved Arrow)	1	
W1-6(L)	(Arrow)		1
W13-1(B)	15 M.P.H.		1
W13-1(35)	35 M.P.H.		4
W 20-1a	Road Construction 1500 ft.	4 *	
W 20-1b	Road Construction 1000 ft.	4 *	
W 20-1d	Road Construction Ahead	4 *	
W 20-2b	Detour 1000 ft.	4 *	
W 20-2d	Detour Ahead	4 *	
* Construction Sign			
TOTAL		38	7

SUMMARY OF TEMPORARY REGULATORY, WARNING, CONSTRUCTION AND MAINTENANCE SIGNS TO REMAIN UPON COMPLETION OF CONSTRUCTION (SEE SHEETS 1T THROUGH 3T)

TYPE	MESSAGE	QUANTITY	
		W/POST	W/O POST
R1-2-E	Yield	2	
R3-9(R)	(Merging Arrow)	1	
R3-10(R)	(Double Merging Arrow)	2	
R 4 T(R)	Keep Right	1	
R10-2	Road Closed		1
W1-2(L)	(Curved Arrow)	1	
W1-2(R)	(Curved Arrow)		1
W1-4(R)	(Curved Arrow)		1
W1-6(L)	(Arrow)	1	
W1-6(R)	(Arrow)	1	
W4-1E	Merging Traffic	1	1
W13-1(25)-E	25 M.P.H.		2
W13-3(25)	Exit 25 M.P.H.	1	1
TOTAL		11	7

SUMMARY OF MISCELLANEOUS ITEMS - ALL PHASES

ITEMS (to remain in place upon completion of construction)	QUANTITY
Relocated Painted Traffic Drums	88 Ea.
Class I Barricades (10'-0" long)	20 Ea.



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J. Andrew Schuchardt

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

GENERAL NOTES
TEMPORARY CONSTRUCTION
TEMPORARY DIRECTIONAL SIGNS
HALAWA INTERCHANGE
PROJECT NO I-HI-1(87):13

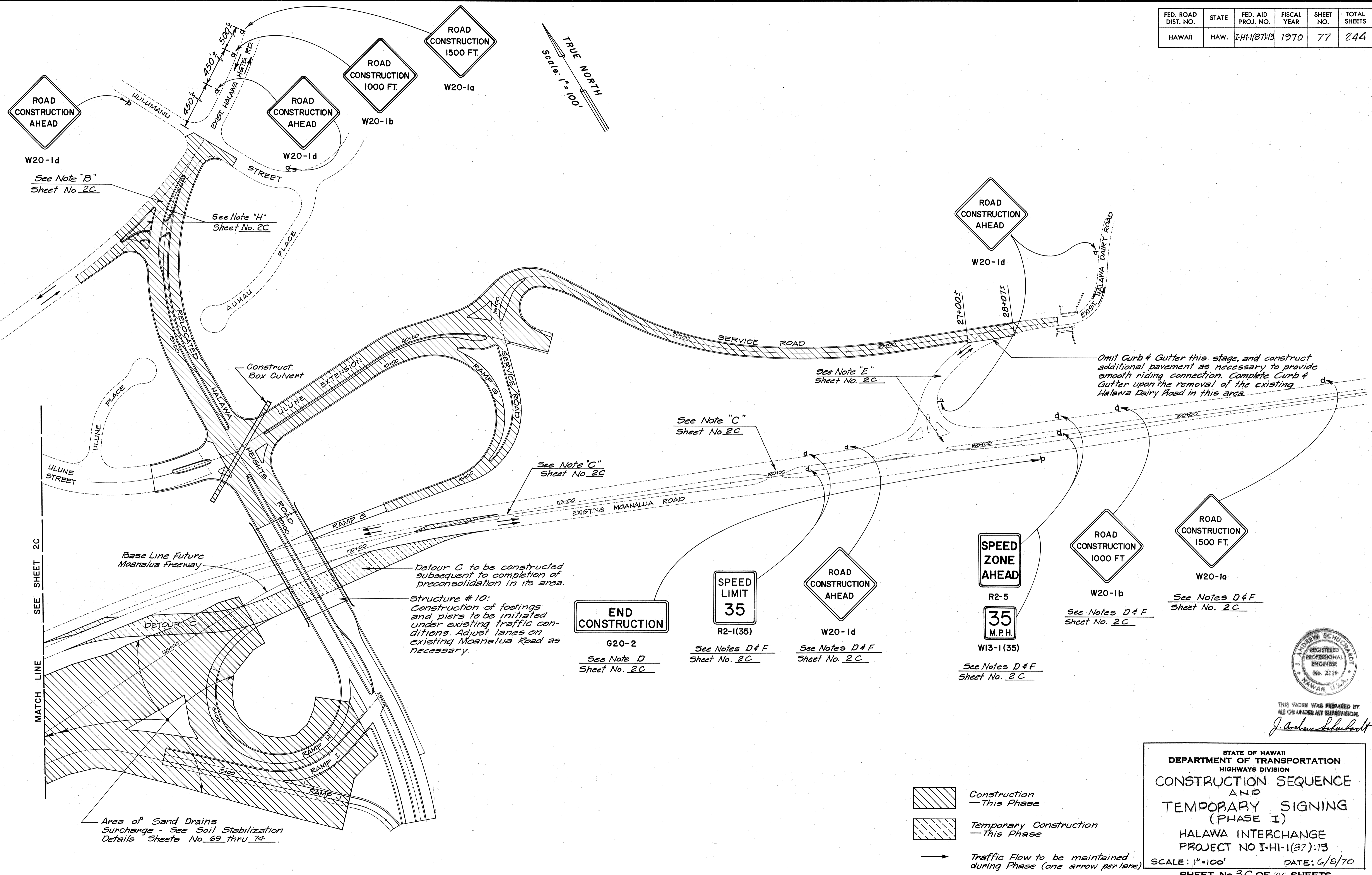
NO SCALE DATE: 6/8/70

SHEET No. 1C OF 10C SHEETS

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

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(87):13	1970	77	244

TRUE NORTH
Scale: 1"=100'



See Note "B"
Sheet No. 2C

See Note "H"
Sheet No. 2C

See Note "E"
Sheet No. 2C

Omit Curb & Gutter this stage, and construct additional pavement as necessary to provide smooth riding connection. Complete Curb & Gutter upon the removal of the existing Halawa Dairy Road in this area.

See Note "C"
Sheet No. 2C

See Note "C"
Sheet No. 2C

Detour C to be constructed subsequent to completion of preconsolidation in its area.

Structure #10: Construction of footings and piers to be initiated under existing traffic conditions. Adjust lanes on existing Moanalua Road as necessary.

Base Line Future Moanalua Freeway

Area of Sand Drains Surchage - See Soil Stabilization Details Sheets No. 69 thru 74

END CONSTRUCTION
G20-2
See Note D
Sheet No. 2C

SPEED LIMIT 35
R2-1(35)
See Notes D & F
Sheet No. 2C

ROAD CONSTRUCTION AHEAD
W20-1d
See Notes D & F
Sheet No. 2C

SPEED ZONE AHEAD
R2-5
35 M.P.H.
W13-1(35)
See Notes D & F
Sheet No. 2C

ROAD CONSTRUCTION 1000 FT.
W20-1b
See Notes D & F
Sheet No. 2C

ROAD CONSTRUCTION 1500 FT.
W20-1a
See Notes D & F
Sheet No. 2C

- Construction - This Phase
- Temporary Construction - This Phase
- Traffic Flow to be maintained during Phase (one arrow per lane)

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION SEQUENCE AND TEMPORARY SIGNING (PHASE I)
HALAWA INTERCHANGE
PROJECT NO. I-H-1(87):13
SCALE: 1"=100' DATE: 6/8/70
SHEET No. 3C OF 10C SHEETS

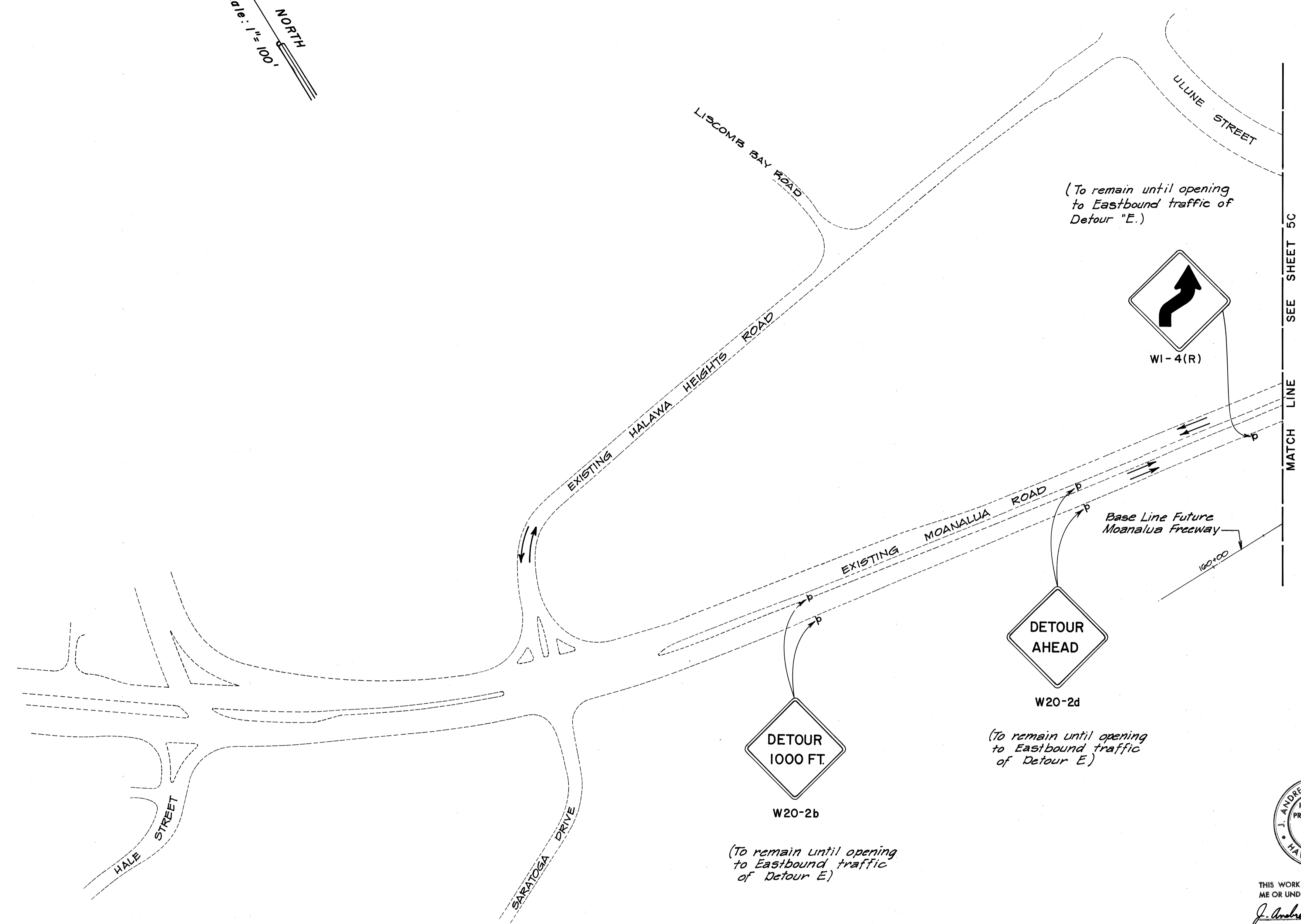


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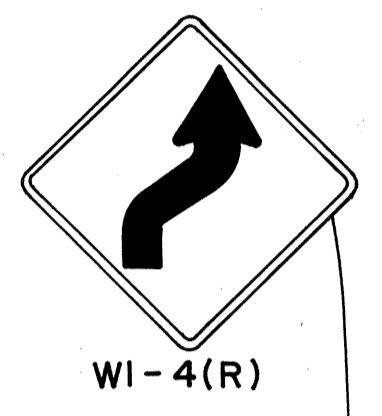
ORIGINAL PLAN	DATE
SURVEY PLOTTED BY	
TRACED BY	
DESIGNED BY	
CHECKED BY	
NO.	

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(87):13	1970	78	244

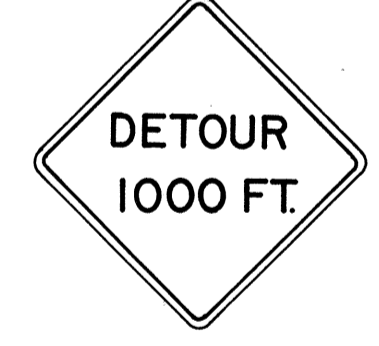
TRUE NORTH
Scale: 1" = 100'



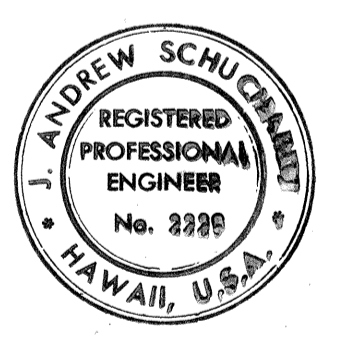
(To remain until opening to Eastbound traffic of Detour "E.")



(To remain until opening to Eastbound traffic of Detour E.)



(To remain until opening to Eastbound traffic of Detour E.)



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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
CONSTRUCTION SEQUENCE
AND
TEMPORARY SIGNING
(PHASE II)
HALAWA INTERCHANGE
PROJECT NO I-HI-1(87):13
SCALE: 1"=100' DATE: 6/8/70
SHEET No.4 C OF 100 SHEETS

→ Traffic Flow to be maintained during Phase (one arrow per lane)

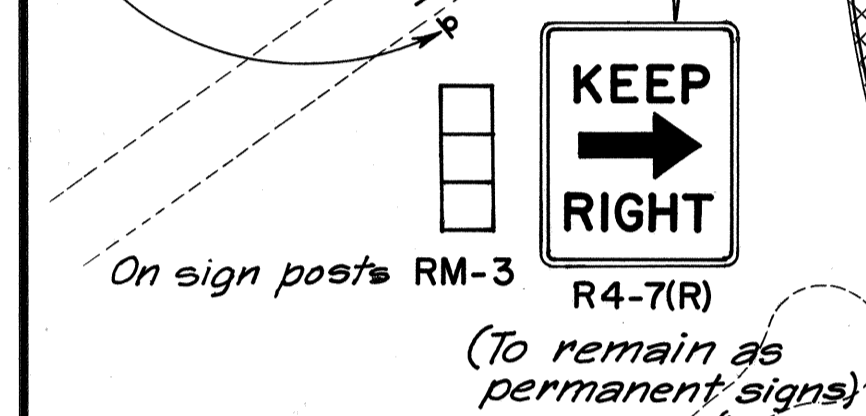
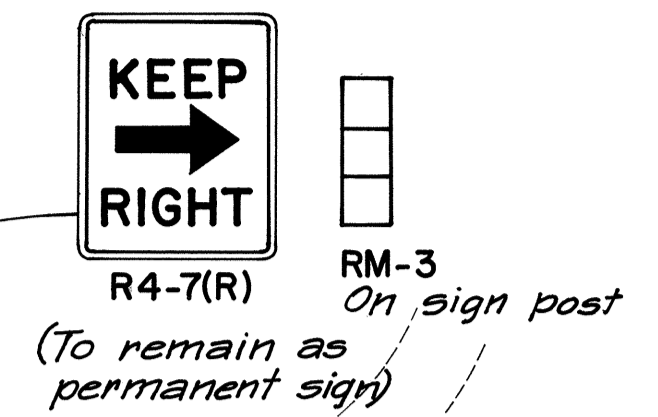
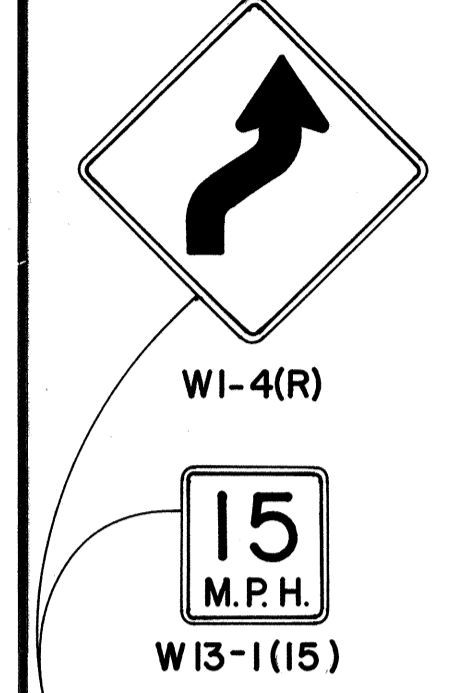
58

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(87)-13	1970	79	244

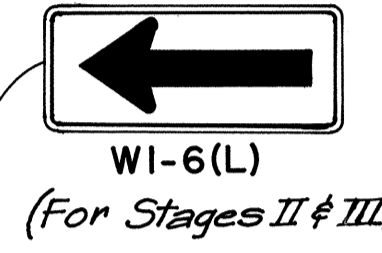
- SUGGESTED SUB-PHASING
1. Route Moanalua Road traffic to Detour C.
 2. Construct Mauka portion of structure #10.
 3. Construct Detour D.
 4. Route Westbound Moanalua Road traffic to Detour D.
 5. Construct Detour E.
 6. Route Eastbound Moanalua Road traffic to Detour E.

TRUE NORTH
Scale: 1"=100'

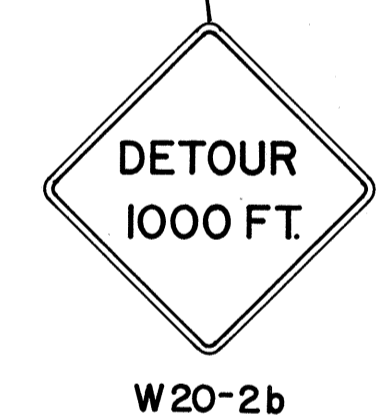
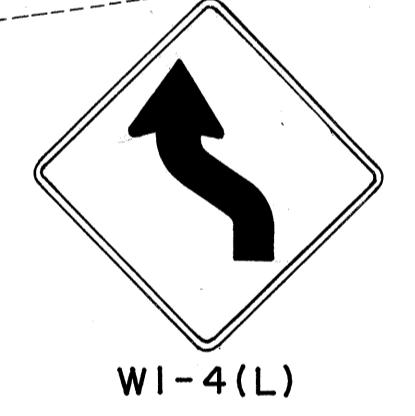
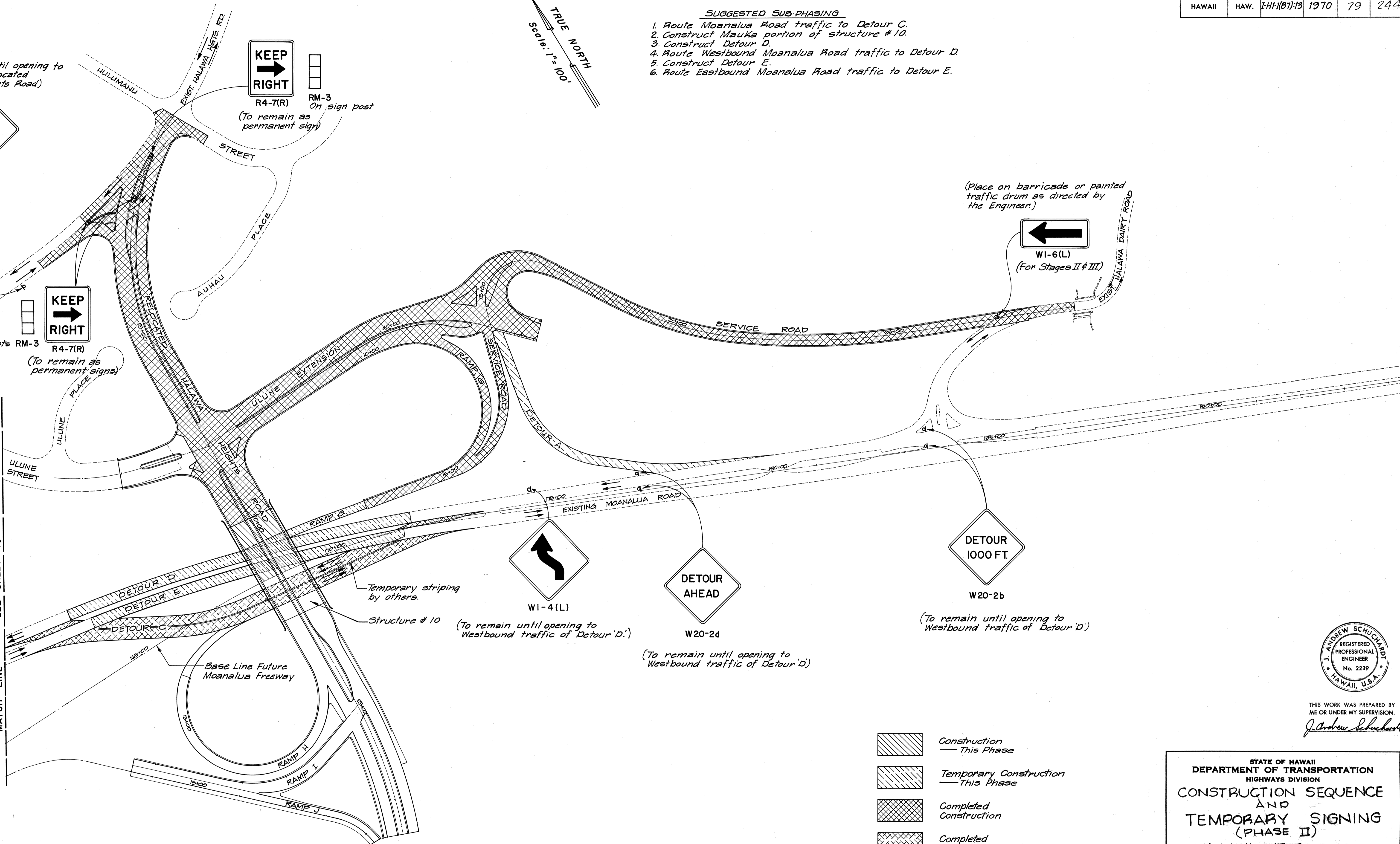
(To remain until opening to traffic of relocated Halawa Heights Road)



(Place on barricade or painted traffic drum as directed by the Engineer)



SEE SHEET 4C
MATCH LINE



(To remain until opening to Westbound traffic of Detour 'D')

(To remain until opening to Westbound traffic of Detour 'D')

- Construction — This Phase
- Temporary Construction — This Phase
- Completed Construction
- Completed Temporary Construction
- Traffic Flow to be maintained during Phase (one arrow per lane)

DATE	BY
DESIGNED BY	
CHECKED BY	
DATE	BY
DESIGNED BY	
CHECKED BY	
DATE	BY
DESIGNED BY	
CHECKED BY	



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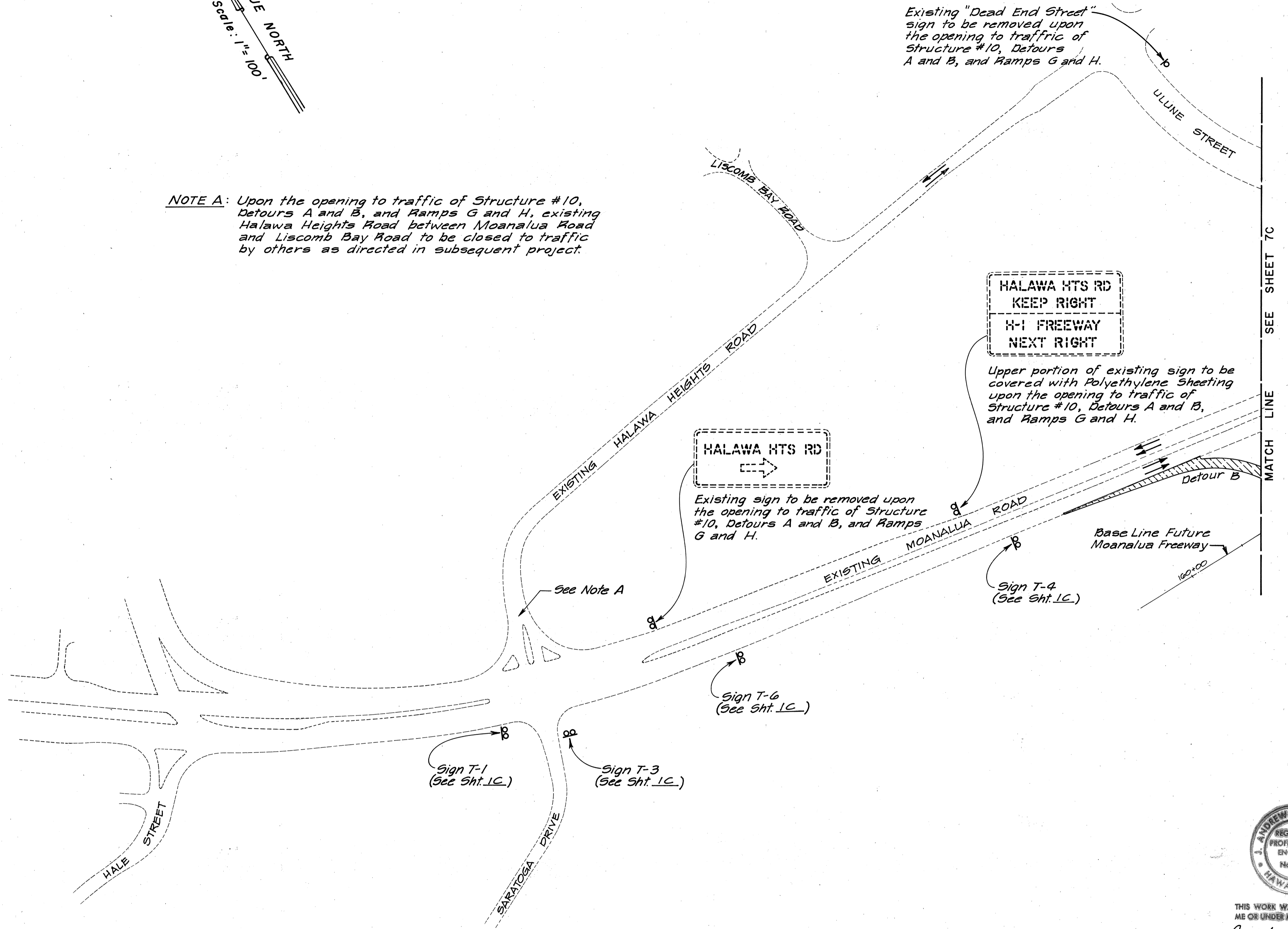
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION SEQUENCE
AND
TEMPORARY SIGNING
(PHASE II)
HALAWA INTERCHANGE
PROJECT NO I-HI-1(87)-13
SCALE: 1"=100' DATE: 6/8/70
SHEET No. 5 C OF 100 SHEETS

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(87):13	1970	80	244

TRUE NORTH
Scale: 1" = 100'

NOTE A: Upon the opening to traffic of Structure #10, Detours A and B, and Ramps G and H, existing Halawa Heights Road between Moanalua Road and Liscomb Bay Road to be closed to traffic by others as directed in subsequent project.

Existing "Dead End Street" sign to be removed upon the opening to traffic of Structure #10, Detours A and B, and Ramps G and H.



HALAWA HTS RD
KEEP RIGHT
H-1 FREEWAY
NEXT RIGHT

HALAWA HTS RD
→

Existing sign to be removed upon the opening to traffic of Structure #10, Detours A and B, and Ramps G and H.

Upper portion of existing sign to be covered with Polyethylene Sheeting upon the opening to traffic of Structure #10, Detours A and B, and Ramps G and H.

Sign T-4
(See Sht. 1C)

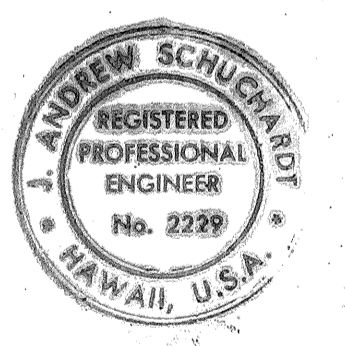
Sign T-6
(See Sht. 1C)

Sign T-1
(See Sht. 1C)

Sign T-3
(See Sht. 1C)

SEE SHEET 7C
MATCH LINE

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



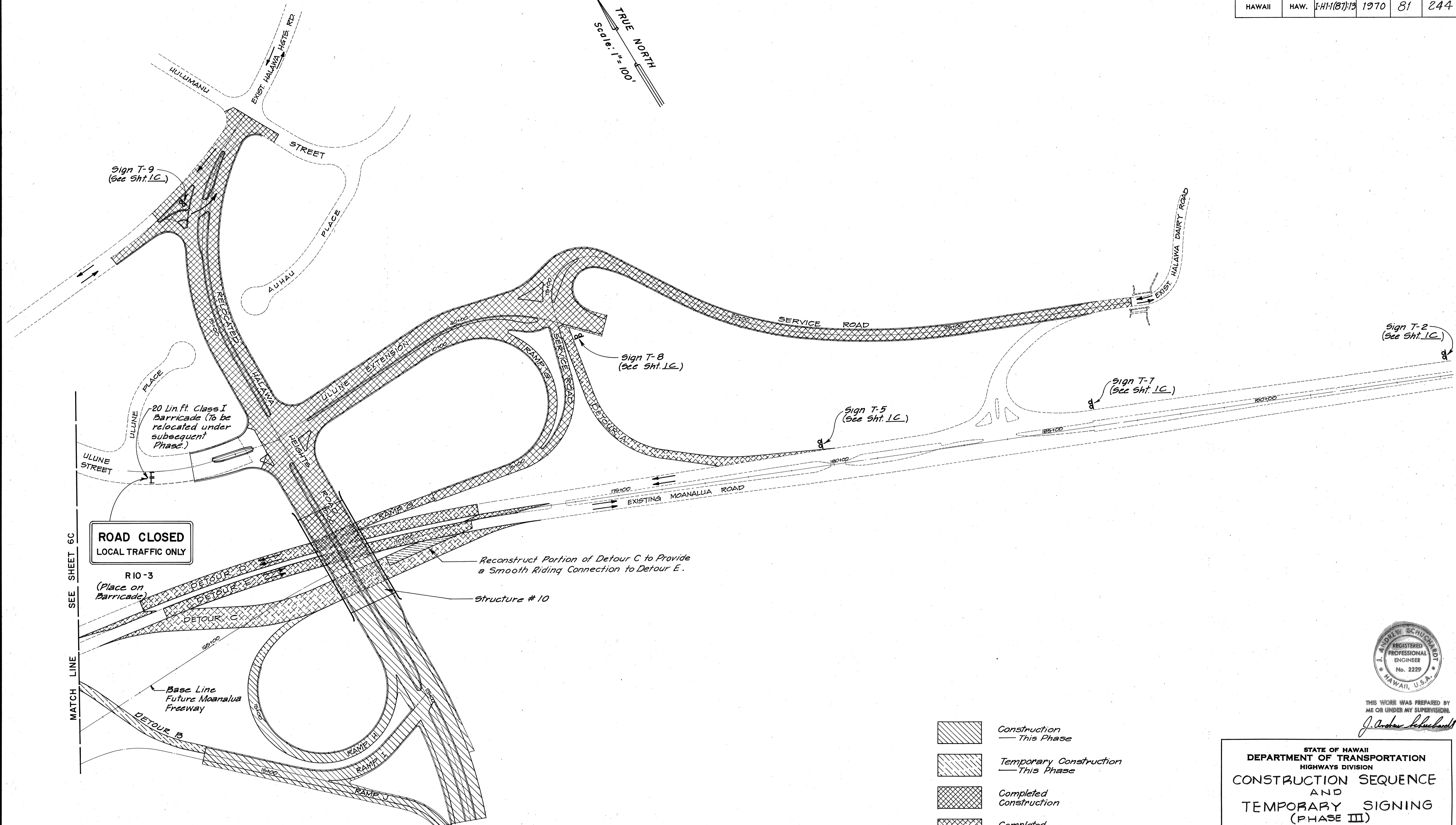
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Temporary Construction — This Phase
→ Traffic Flow to be maintained during Phase (one arrow per lane)




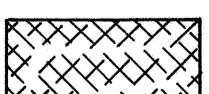
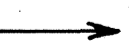
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION SEQUENCE
AND
TEMPORARY SIGNING
(PHASE III)
HALAWA INTERCHANGE
PROJECT NO I-HI-1(87):13
SCALE: 1" = 100' DATE: 6/8/70
SHEET No. 6 C OF 100 SHEETS

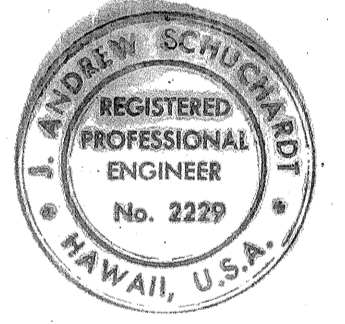
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(87):13	1970	81	244

TRUE NORTH
Scale: 1"=100'



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

-  Construction — This Phase
-  Temporary Construction — This Phase
-  Completed Construction
-  Completed Temporary Construction
-  Traffic Flow to be maintained during Phase (one arrow per lane)









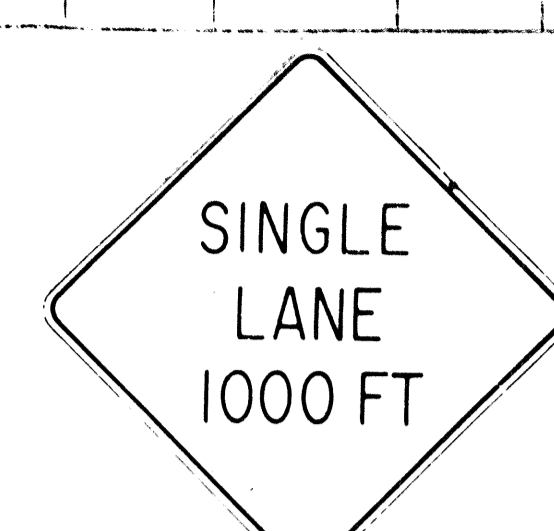











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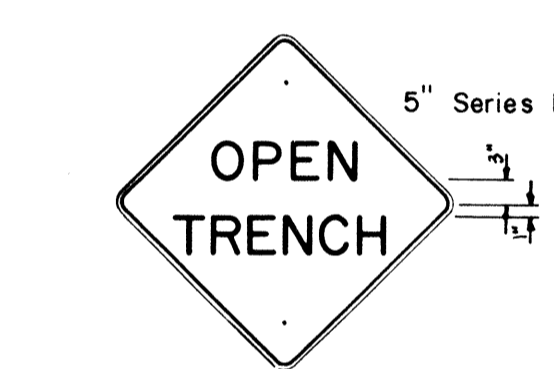
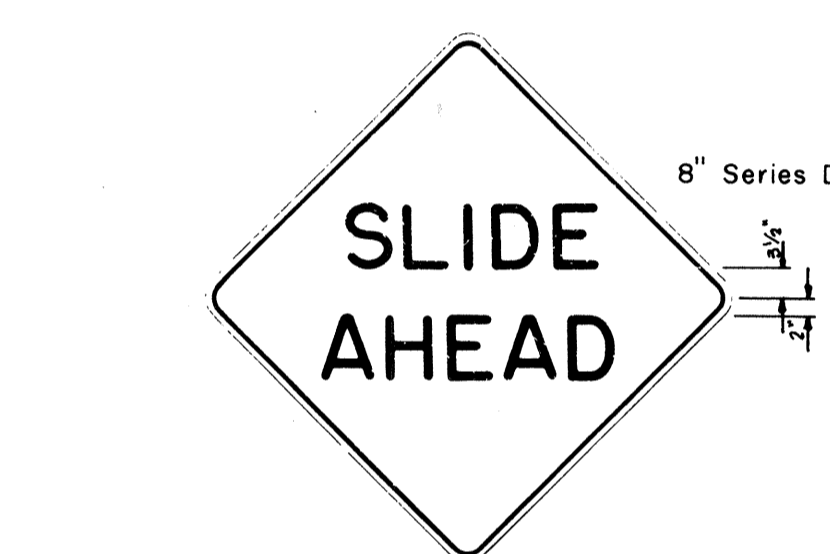

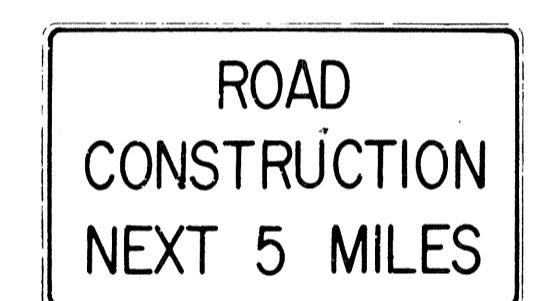
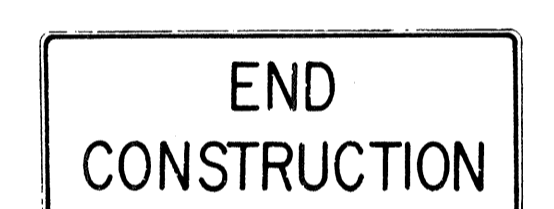
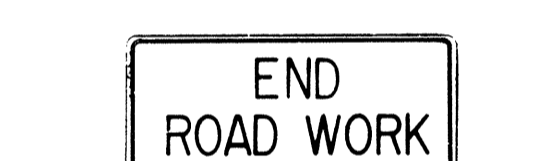

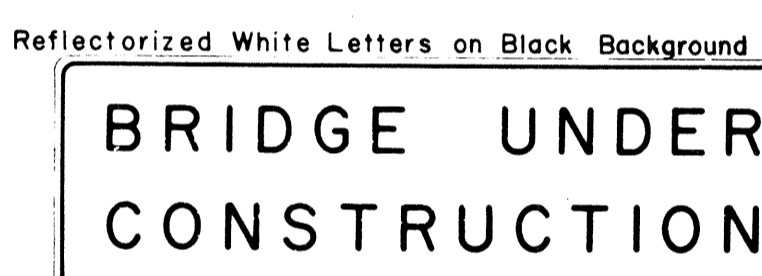
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
CONSTRUCTION SEQUENCE
AND
TEMPORARY SIGNING
(PHASE III)
HALAWA INTERCHANGE
PROJECT NO I-HI-1(87):13
SCALE: 1"=100' DATE: 6/8/70
SHEET No. 7C OF 10C SHEETS

PRINTED ON NO. 1000H CLEARPRINT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-H-1(B)-13	1970	82	244

 W7-2 48"x48"	 W8-7 30"x30"	 W14-1 30"x30"	 W20-1a 48"x48"	 W20-2d 48"x48"	 W20-3b 48"x48"	 W20-4d 48"x48"	 W20-5d(L) 48"x48"	 W20-6b 48"x48"
---	---	---	---	---	---	---	--	---

 W20-7c 48"x48"	 W21-1 30"x30"	 W21-2 24"x24"	 W21-3 36"x36"	 W21-4 30"x30"	 W21-5 30"x30"	 W21-6 30"x30"	 W22-1 30"x30"	 W22-2 30"x30"
---	--	---	--	--	--	--	--	--

 W22-3 30"x30"	 W22-4 48"x48"	 W22-5 48"x48"	 G20-1(5) 60"x36"	 G20-2 60"x24"	 G20-3 42"x18"	 M5-7(L) 48"x18"	 CW-1 96"x30"
---	---	---	--	--	--	--	--

- NOTE:
- The shape, color, dimensions, symbols, wording, lettering and reflectorization of all signs shall be in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways," dated June 1961 and the BPR manual "Standard Highway Signs," dated September 1961 unless otherwise specified.
 - All signs shall be reflectorized unless otherwise specified.
 - All signs shall have 3/8" bolt holes drilled at appropriate locations unless otherwise noted.
 - For W20 series signs, suffixes a,b,c and d are as follows a 1500 FT, b 1000 FT, c 500 FT and d AHEAD
 - (R) or (L) indicates right or left and shall be as shown on the plans.
 - Number in () indicates miles and shall be as shown on the plans.

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

APPROVAL RECOMMENDED:
Eiichi Tanaka
 TRAFFIC ENGINEER 12/29/69 DATE

APPROVED:
John S. ...
 ASSISTANT CHIEF, ENGINEERING 12-30-69 DATE

NO.	REVISION	APPROVED BY	DATE

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

STANDARD DETAILS
CONSTRUCTION SIGNS

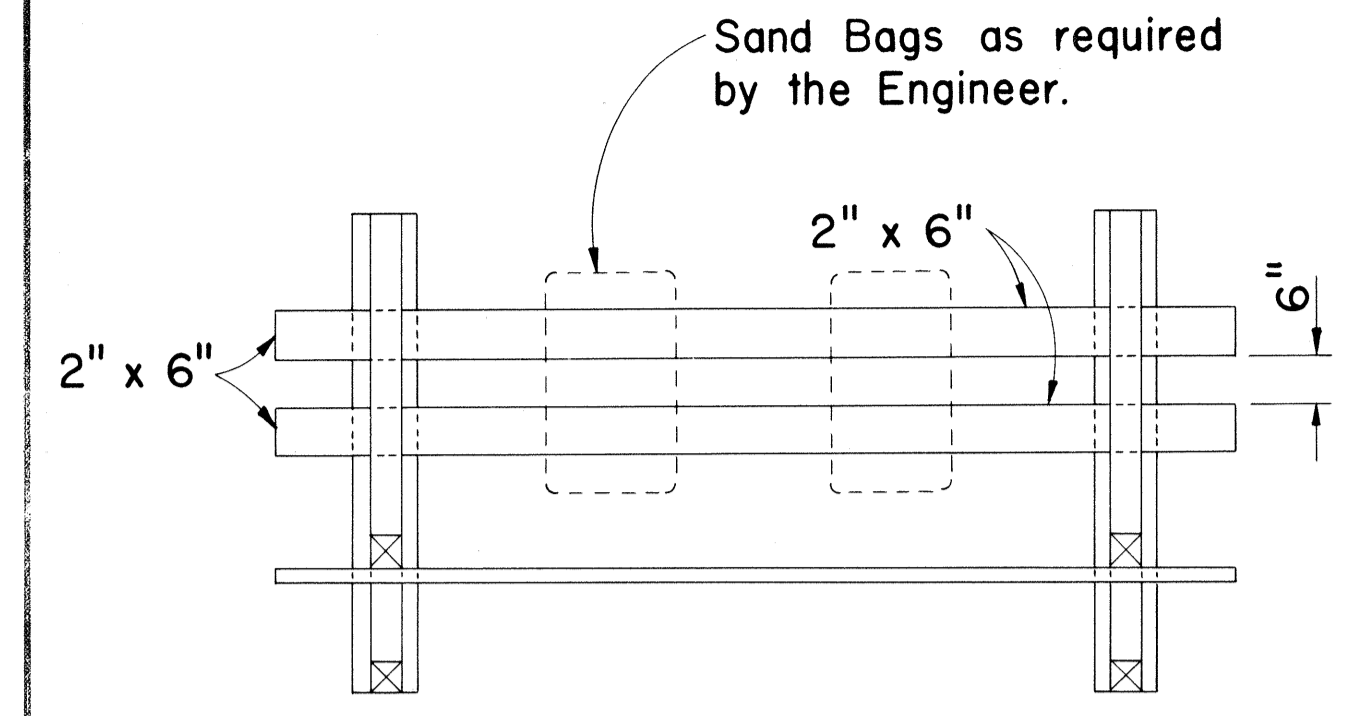
NOT TO SCALE

SHEET No. 82 OF 100 SHEETS DT 104

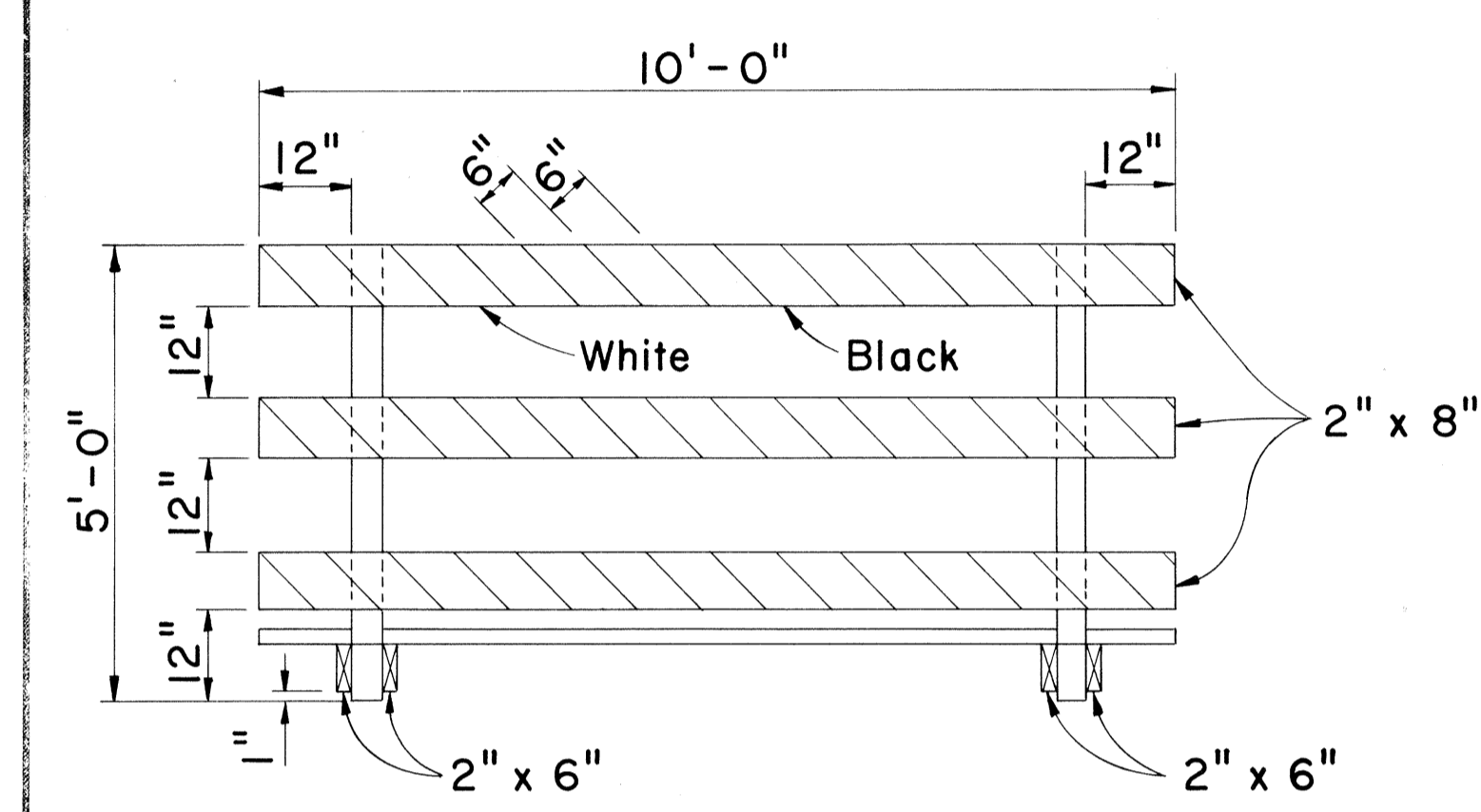
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	IHI-1(81)-13	1970	83	244

GENERAL NOTES

1. The Contractor shall construct, install and maintain the wood barricades at the locations shown on the Plans.
2. The permanent wood barricades shall be left in place or relocated upon completion of the project as ordered by the Engineer and are to become State property.



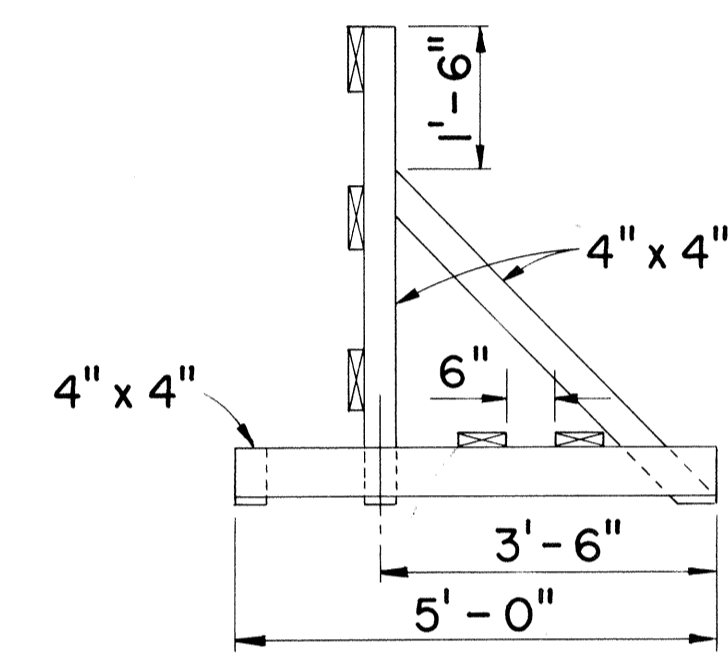
PLAN VIEW



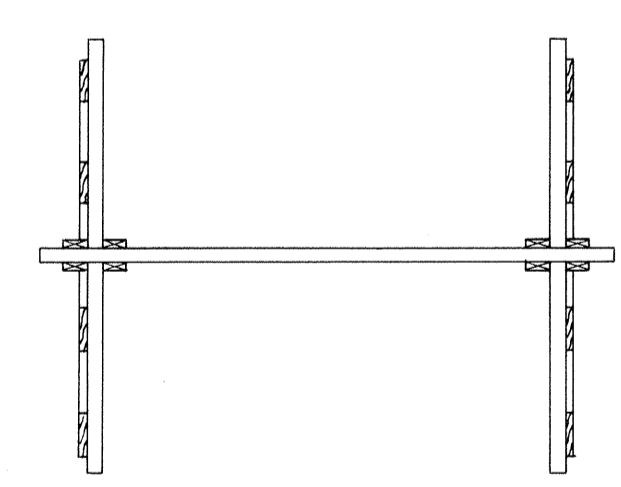
FRONT VIEW

CLASS I BARRICADE

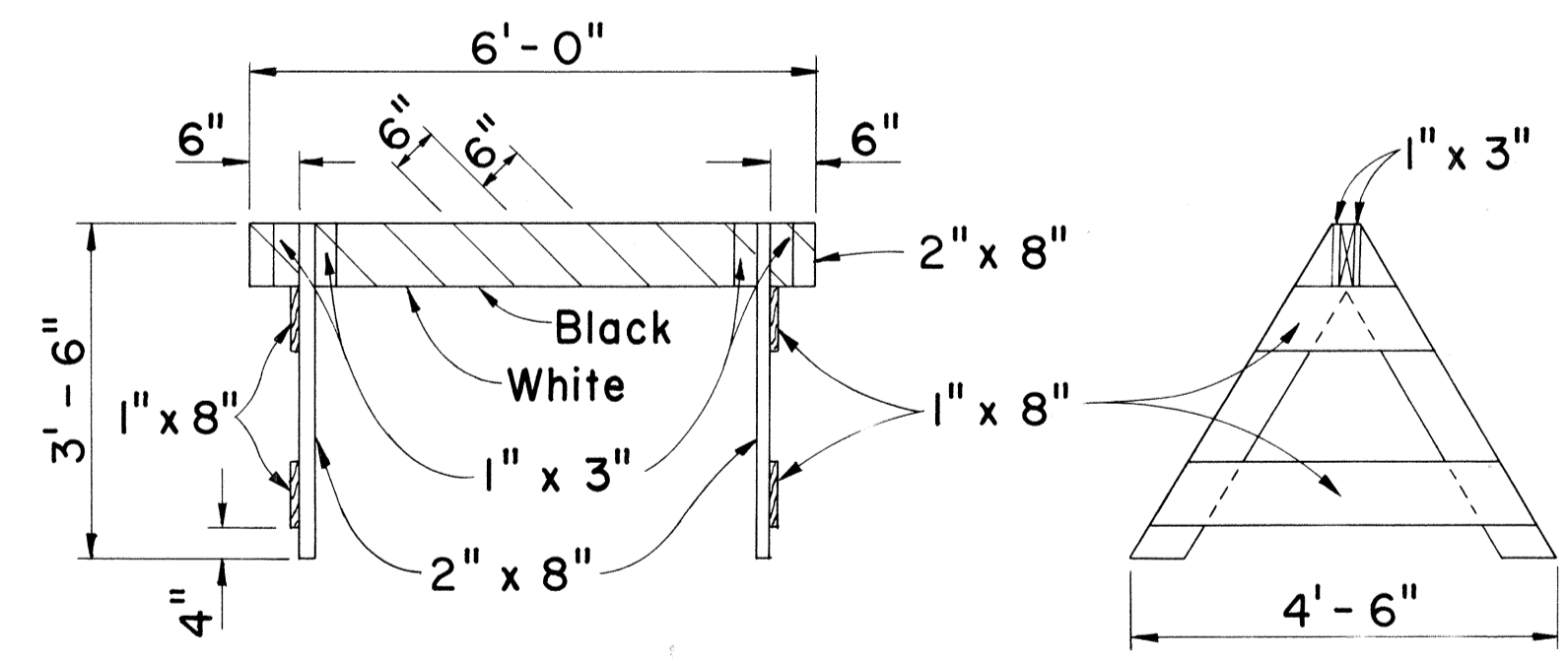
Scale: 1/2" = 1'-0"



END VIEW



PLAN VIEW

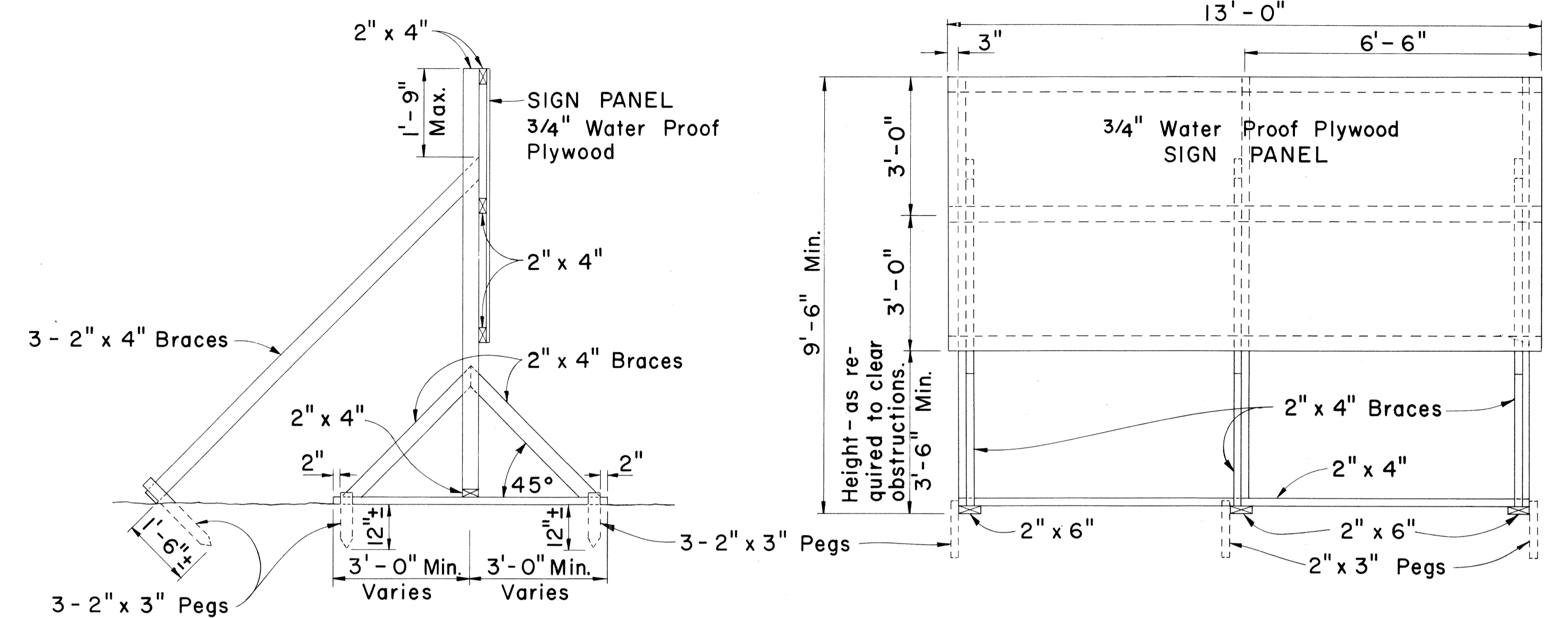


FRONT VIEW

END VIEW

CLASS II BARRICADE

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



SIDE VIEW

(SIGN FRAME ANCHORED IN GROUND)
Scale: 1/2" = 1'-0"

FRONT VIEW

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

GENERAL NOTES

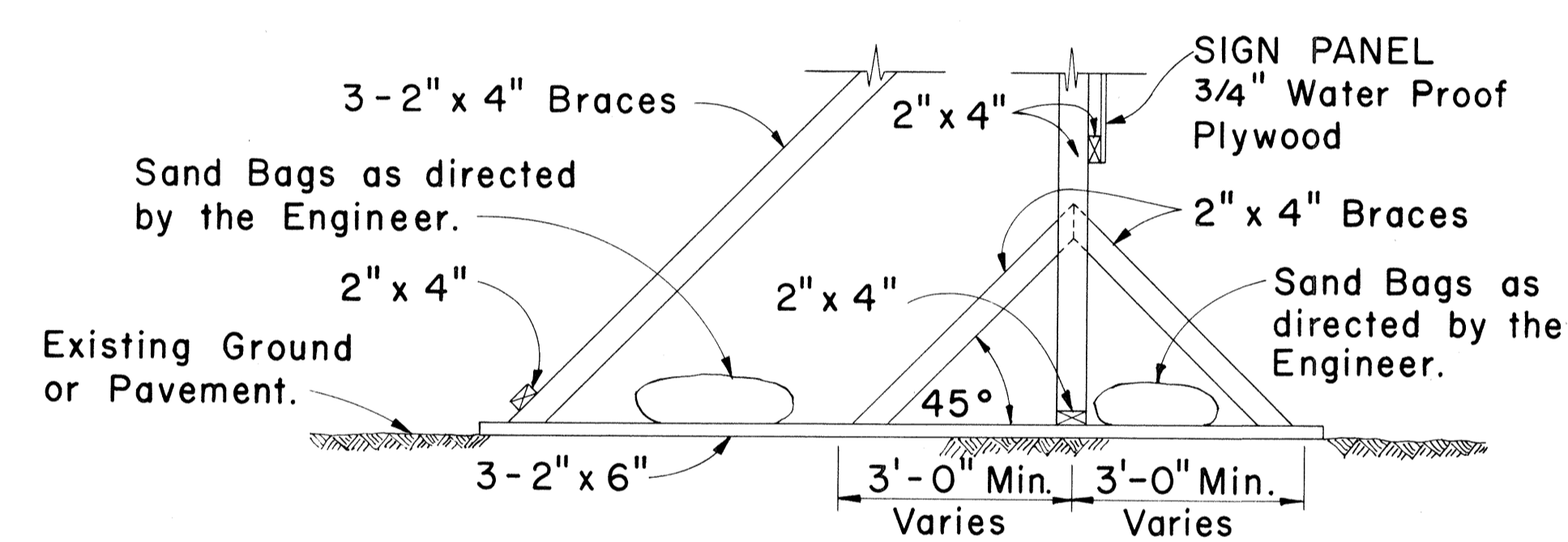
1. The sign legend shall be black on white background except for the Interstate Route marker which shall be as shown on the plan.
2. The Contractor shall construct, install and maintain the project signs at the locations shown on the Plans and as ordered by the Engineer.
3. Letters shall be Series "C" of the sizes shown on the Plan and shall conform with the "Standard Alphabet for Highway Signs", Bureau of Public Roads, 1966
4. The Contractor shall fill in the proper numerals in place of ciphers as ordered by the Engineer.

APPROVAL RECOMMENDED:

Eichi Tanaka 12/29/69
TRAFFIC ENGINEER DATE

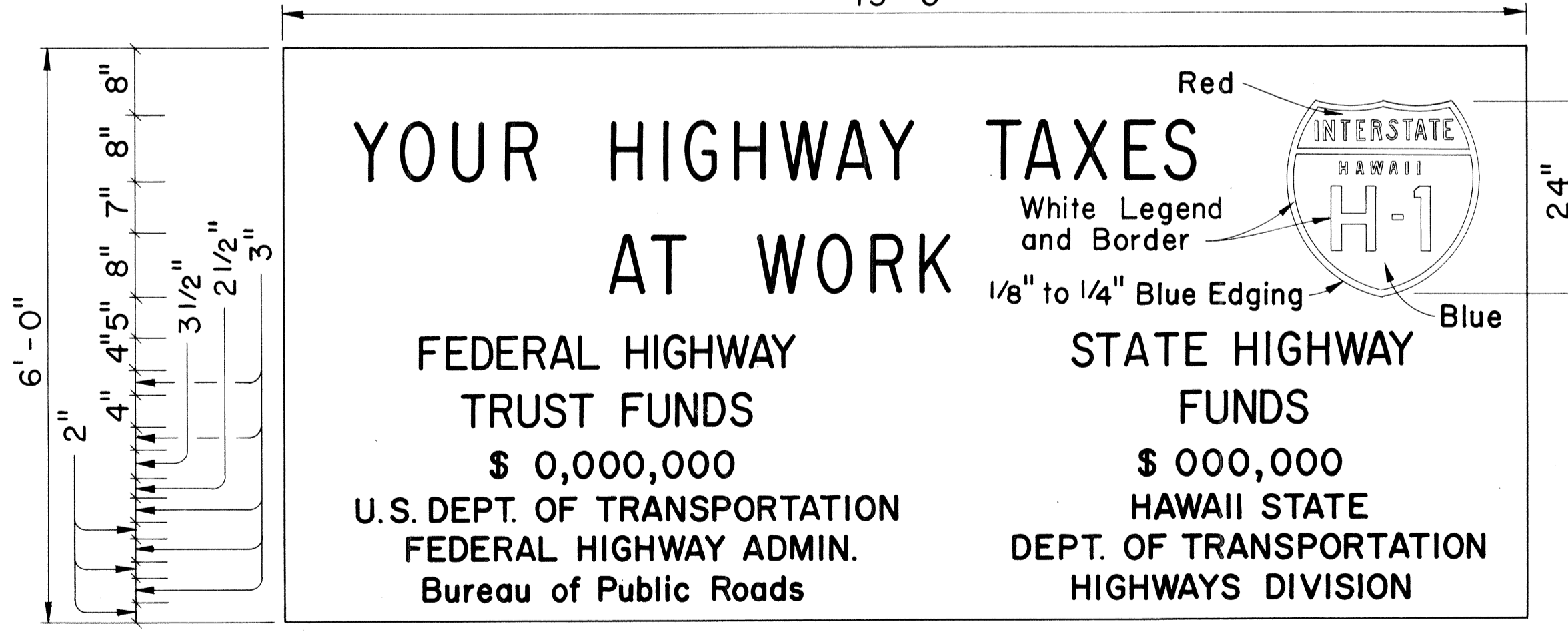
APPROVED:

Andrew J. Zelen 12-30-69
ASSISTANT CHIEF, ENGINEERING DATE



SIDE VIEW

(SIGN FRAME WEIGHTED DOWN)
Scale: 1/2" = 1'-0"



SIGN PANEL
Scale: 3/4" = 1'-0"

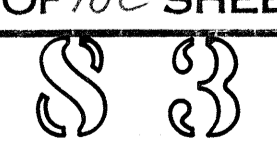
**INTERSTATE SYSTEM
CONSTRUCTION IDENTIFICATION SIGN**

Scale: As Shown

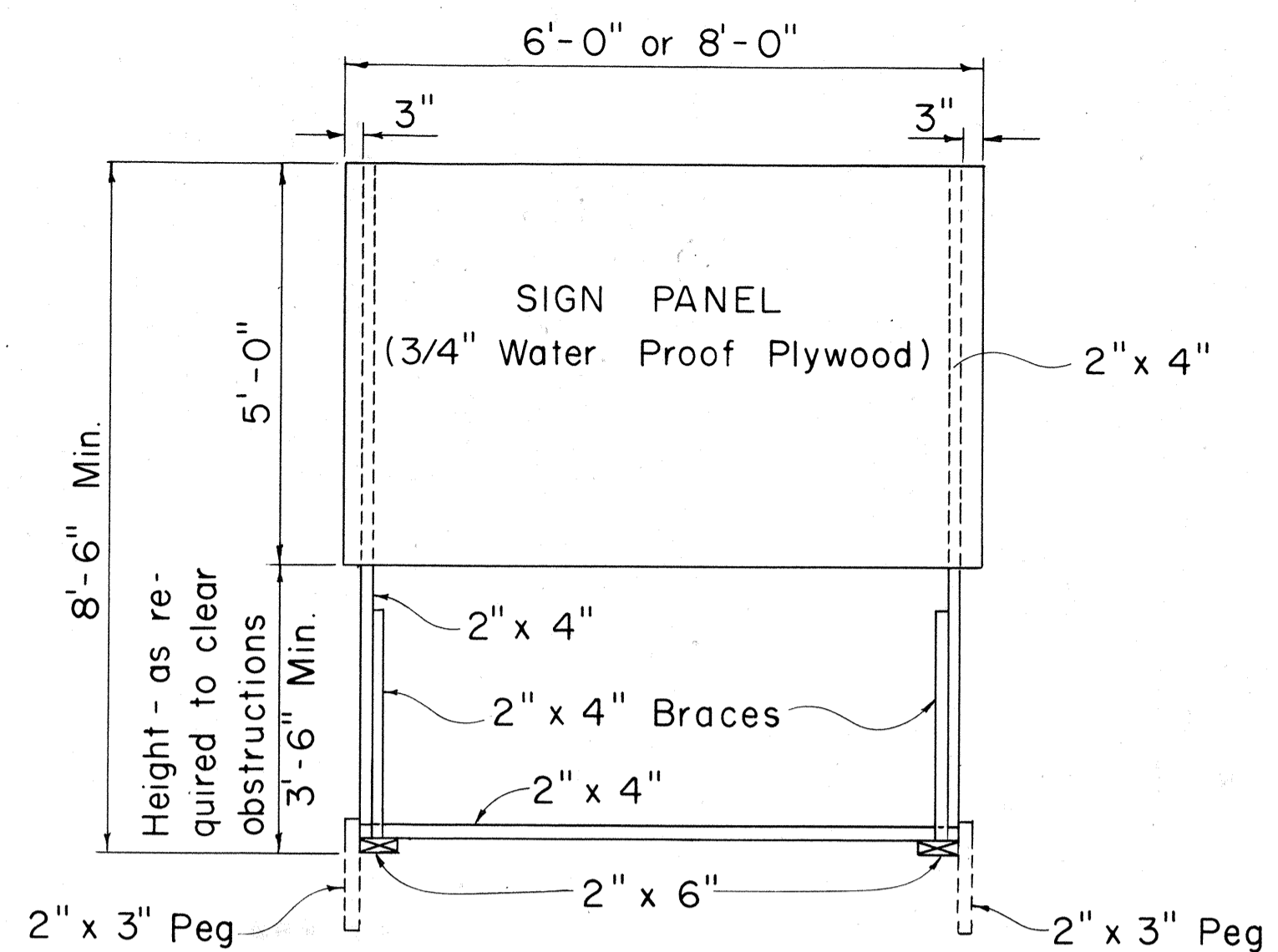
NO	REVISION	APPROVED BY	DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
TYPICAL DETAILS
CONSTRUCTION IDENTIFICATION SIGN
AND
WOOD BARRICADES
SCALE: As Shown DATE: 6/8/70
SHEET No. 9C OF 10C SHEETS DT 800

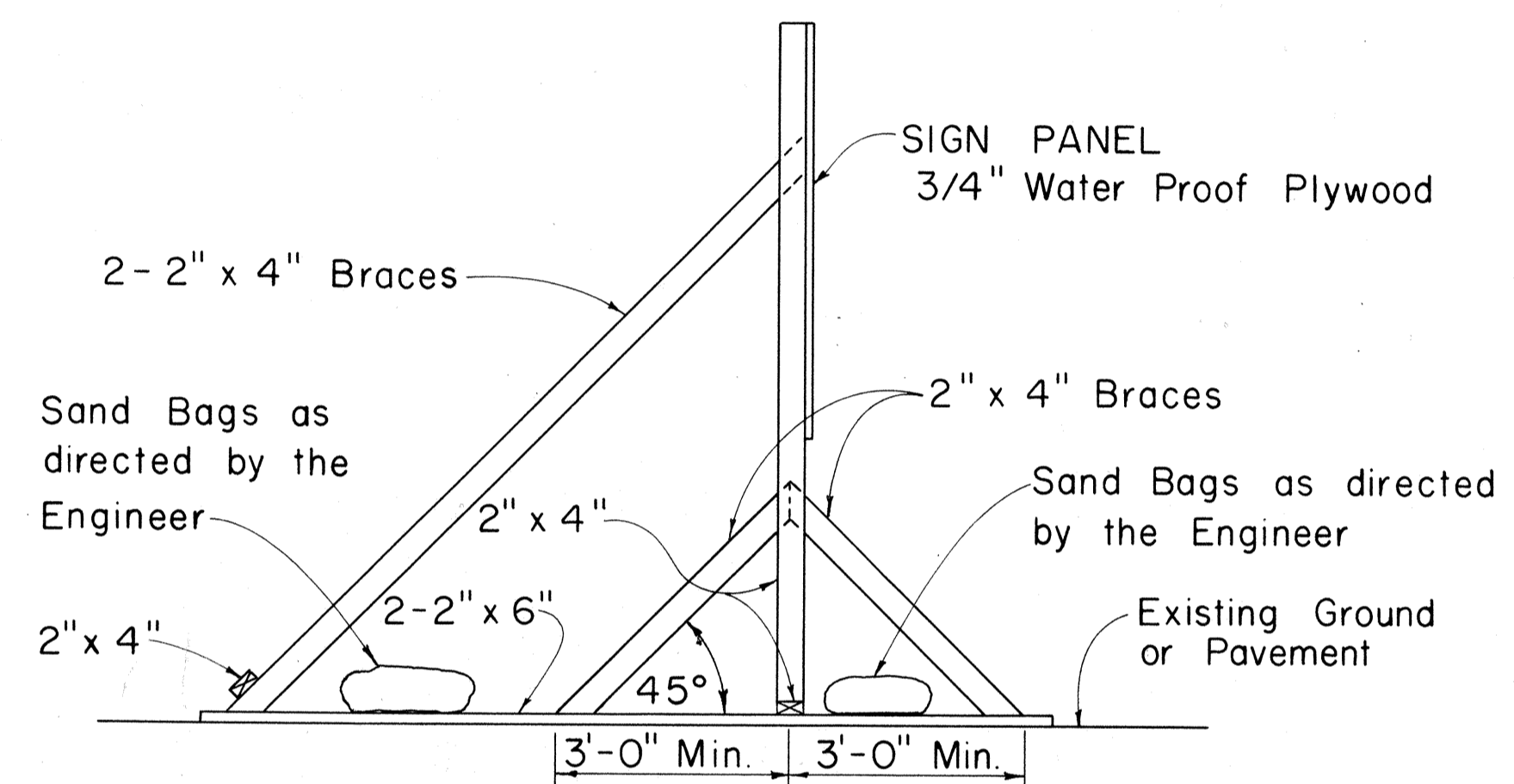
DATE: _____
DRAWN BY: _____
DESIGNED BY: _____
CHECKED BY: _____
NO. _____



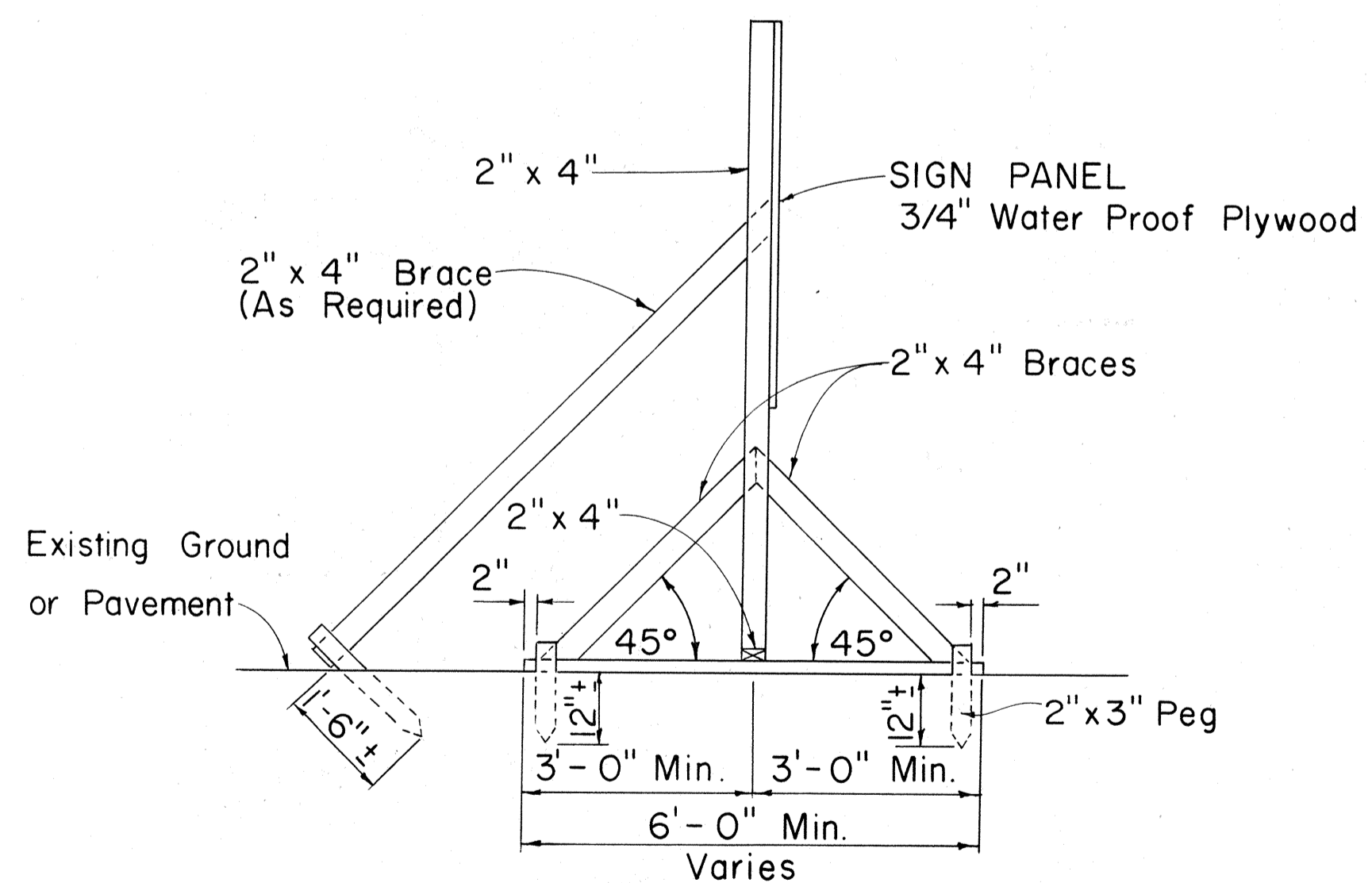
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	I-HI-1(87):13	1970	84	244



FRONT VIEW
Scale: 1/2" = 1'-0"

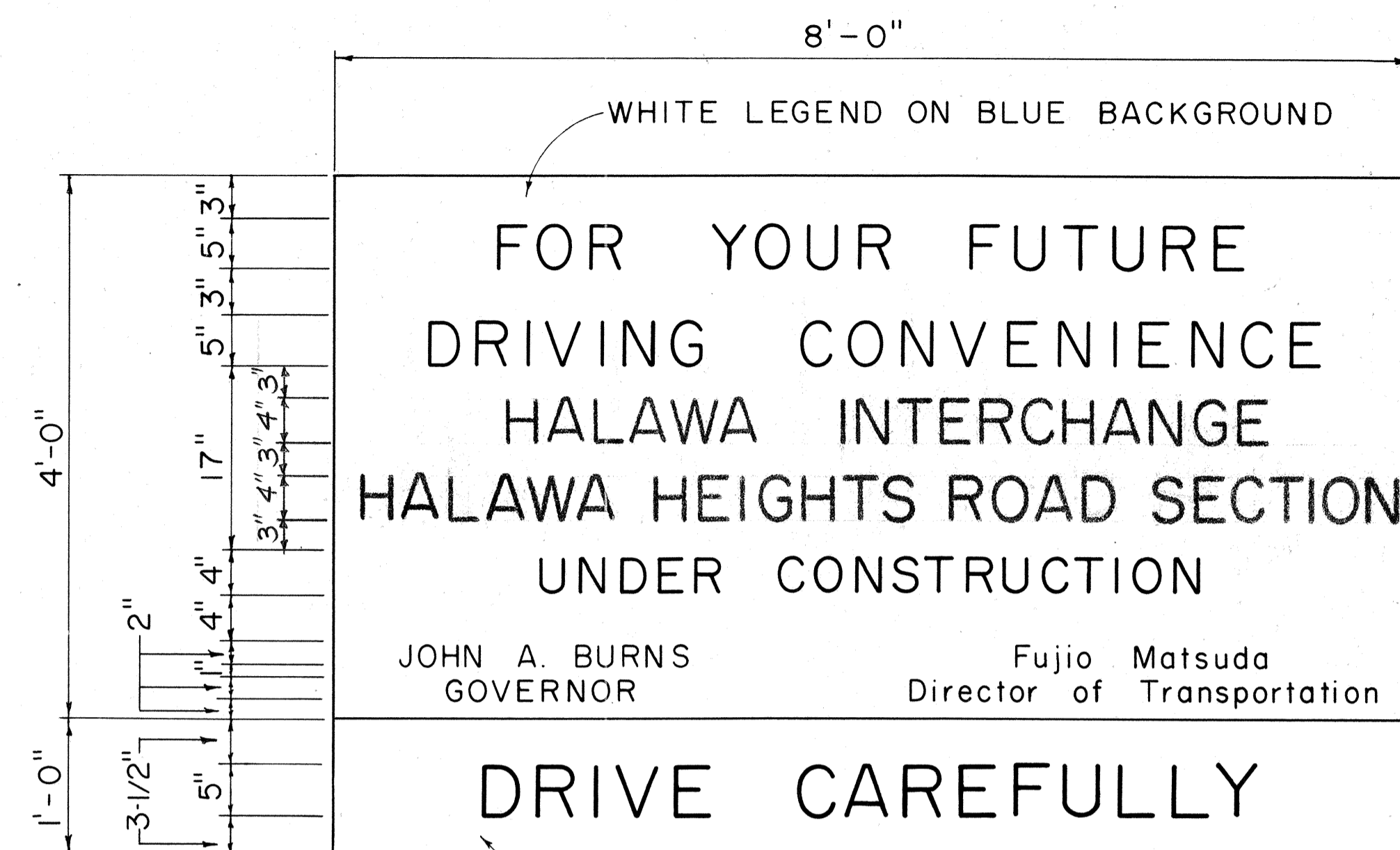


SIDE VIEW
(SIGN SUPPORT AND FRAME WEIGHTED DOWN)
Scale: 1/2" = 1'-0"



SIDE VIEW
(SIGN SUPPORT AND FRAME ANCHORED IN GROUND)
Scale: 1/2" = 1'-0"

SIGN SUPPORT AND FRAME
Scale: As Shown



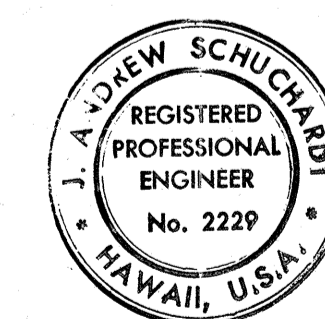
WHITE LEGEND ON BLUE BACKGROUND
BLACK LEGEND ON YELLOW BACKGROUND
USE SERIES "D" LETTERS

GENERAL NOTES

1. The sign panels will be constructed by the State and will be available to pick up by the Contractor from the State Highway Maintenance Yard.
2. The Contractor shall be responsible for the installation of the sign panels at the location of the sign panels as directed by the Engineer.
3. At the end of the project, the Contractor shall remove the sign panels and return them to the State Highway Maintenance Yard. The sign panels and frames shall be returned to the State Highway Maintenance Yard.

Refer To Standard Special Provisions - Section 690

DATE	.....
DESIGNED BY	.....
CHECKED BY	.....
NO.	.....



THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION.
J. Andrew Schuchardt

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

TYPICAL DETAILS

PROJECT INFORMATION SIGN
HALAWA INTERCHANGE
PROJECT NO I-HI-1(87):13
Scale: As Shown

SHEET No. 100 OF 100 SHEETS